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PeopleSoft Deployment Packages for Update Images Installation (PeopleSoft PeopleTools 8.55)

July 2016

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PeopleSoft Deployment Packages for Update Images Installation (PeopleSoft PeopleTools 8.55)
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Contents

Preface

- About this Documentation 7**
- Understanding this Documentation 7
- Audience 7
- Typographical Conventions 7
- Products 9
- Related Information 9
- Comments and Suggestions 10

Chapter 1

- Prerequisites 11**
- Reviewing Hardware Requirements 11
 - Reviewing Hardware Requirements for Oracle VirtualBox 11
 - Reviewing Hardware Requirements on Microsoft Windows 13
 - Reviewing Hardware Requirements on Oracle Linux 14
- Reviewing Software Requirements 14
 - Reviewing Software Requirements on Microsoft Windows 14
 - Reviewing Software Requirements on Oracle Linux 15

Chapter 2

- Deploying the PeopleSoft Application Deployment Packages 17**
- Obtaining the PeopleSoft Application DPKs 17
- Deploying the VirtualBox Update Image 20
 - Setting Up Oracle SES with the VirtualBox VM 20
 - Setting Up the VirtualBox VM Using the DPK Setup Script 20
 - Using the VirtualBox Shell to Set up the PeopleSoft Virtual Machine 31
- Deploying the Native OS Update Image 51
 - Understanding the PeopleSoft Application DPK Setup Script 51
 - Setting Up the PeopleSoft Virtual Machine on a Microsoft Windows Host Using the PeopleSoft Application DPK Setup Script 53
 - Setting Up the PeopleSoft Virtual Machine on a Linux Host Using the PeopleSoft Application DPK Setup Script 58
 - Obtaining Operating System Packages Required for Puppet 64
- Using the Samba Shared Drive Folders 64
 - Understanding Samba and File System Access 64

Accessing the Samba Shared Drive Folders on the PeopleSoft Virtual Machine 65
 Deploying the PeopleTools Client in Update Manager Mode 66

Chapter 3

Using and Maintaining the PeopleSoft Environment 73
 Using the PeopleSoft Installation 73
 Reviewing the PeopleSoft Environment 73
 Reviewing the File System and Users 74
 Managing PeopleTools Domains with PSADMIN 77
 Changing the Access for PI_HOME 77
 Using COBOL 78
 Removing a Deployed PeopleSoft Environment 79
 Understanding the Removal Process 79
 Using the DPK Setup Script to Remove the PeopleSoft Environment 79
 Using Puppet to Remove the PeopleSoft Environment 80
 Troubleshooting the Removal Process 81
 Applying CPUs, POCs, and IDDAAs 82
 Understanding CPUs, POCs, and IDDAAs 82
 Prerequisites 83
 Using the DPK Setup Script to Apply Fixes 83
 Completing Post-Deployment Activities 84

Appendix A

Using the PeopleSoft Deployment Packages in Oracle VM 3.1 and Later 85
 Understanding the Support for PeopleSoft Deployment Packages in Oracle VM 3.1 and Later 85
 Prerequisites 86
 Using the PeopleSoft Shell OVA to Create a Linux VM 86
 Importing the OVA File to Oracle VM 87
 Creating a Template from the OVA File 89
 Editing the Template in Oracle VM 91
 Creating a VM from the New Template 95
 Starting the VM and Setting Up the PeopleSoft Environment 96

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, PeopleSoft applications, or Oracle® VM VirtualBox.

Audience

This documentation is intended for individuals responsible for deploying the PeopleSoft Deployment Packages for Oracle's PeopleSoft application Update Images. You should have a basic understanding of virtual machines. You should have a basic understanding of the PeopleSoft system.

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.

Convention	Description
<i>Italics</i>	<p>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:</p> <p>Enter the letter <i>O</i>.</p> <p>Italics are also used to indicate user-supplied information. For example, the term <i>domain</i> is used as a placeholder for the actual domain name in the user's environment. When two such placeholders are used together, they may be set apart with angle brackets. For example, the path <code><PS_CFG_HOME>/appserv/<domain></code> includes two placeholders that require user-supplied information.</p>
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	<p>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.</p> <p>Cross-references under the heading <i>See Also</i> refer you to additional documentation that has more information regarding the subject.</p>
⇒ (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.
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.

Convention	Description
<i>Warning!</i> 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® Database
- Oracle® Enterprise Manager
- Oracle® Tuxedo
- Oracle VM VirtualBox®
- Oracle® WebLogic Server
- Oracle's PeopleSoft Application Designer
- Oracle's PeopleSoft Customer Relationship Management (CRM)
- Oracle's PeopleSoft Enterprise Learning Management (ELM)
- Oracle's PeopleSoft Financial Management (part of FSCM)
- Oracle's PeopleSoft Human Capital Management (HCM)
- Oracle's PeopleSoft Interaction Hub
- Oracle's PeopleSoft PeopleTools
- Oracle's PeopleSoft Process Scheduler
- Oracle's PeopleSoft Supply Chain Management (part of FSCM)
- Oracle® Secure Enterprise Search

See <http://www.oracle.com/applications/peoplesoft-enterprise.html> for a list of Oracle's PeopleSoft products.

Related Information

You can find several sources of reference information about PeopleSoft PeopleTools and your particular PeopleSoft application. You can access the current release of online help for PeopleSoft PeopleTools and PeopleSoft applications at the PeopleSoft Online Help site (formerly Hosted PeopleBooks). You can also find installation guides and other information by searching for the product name and release number on My Oracle Support.

- Understanding PeopleSoft Deployment Packages for Update Images. This documentation discusses some of the concepts and more advanced topics for the use of the PeopleSoft deployment packages.
- PeopleSoft PeopleTools 8.55 Deployment Packages Installation. This document includes advanced information for using the PeopleSoft deployment packages.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, PeopleSoft PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2.

- Oracle PeopleSoft Online Help. This page includes links to the most recent documentation for PeopleSoft

PeopleTools and PeopleSoft applications.

See Oracle PeopleSoft Online Help, <http://www.peoplesoftonlinehelp.com>.

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

See Oracle PeopleSoft Online Help, <http://www.peoplesoftonlinehelp.com>.

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

To locate documentation on My Oracle Support, search for the title and select PeopleSoft Enterprise to refine the search results.

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

- PeopleTools Installation for your database platform for the current release. This documentation provides instructions for installing PeopleSoft PeopleTools using the traditional method.

See My Oracle Support, (search for title).

- Installation guide for your PeopleSoft application. Search My Oracle Support for the application-specific installation instructions.

- 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 PeopleSoft Online Help, <http://www.peoplesoftonlinehelp.com>.

- PeopleTools Mid-Tier Deployment Best Practices. This white paper explains the PeopleSoft Homes (for example *PS_APP_HOME*) introduced since the PeopleSoft PeopleTools 8.50 release.

See PeopleTools Mid-Tier Deployment Best Practices, My Oracle Support, Doc ID 1448479.1.

For information on Oracle Secure Enterprise Search (SES), see the following documentation:

See Oracle Secure Enterprise Search Documentation 11g Release 2 (11.2.2.2), http://docs.oracle.com/cd/E35215_01/index.htm.

- Oracle Secure Enterprise Search Administrator's Guide
- Oracle Secure Enterprise Search Installation and Upgrade Guide for Linux x86 (64-Bit)

Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like changed about our documentation, PeopleSoft Online Help, 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

Task 1-1: Reviewing Hardware Requirements

This section discusses:

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

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

This section describes the hardware requirements for deploying the PeopleSoft Deployment Packages 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 sometimes 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. VirtualBox is used to set up a VM to host the server components of the PeopleSoft environment. Even though VirtualBox can run on any supported hardware platform, keep in mind that a PeopleSoft installation also requires a Microsoft Windows machine on which you install the PeopleTools client utilities. If the VirtualBox is hosted on a Windows machine, it is possible to use the same machine as the VirtualBox appliance host and the PeopleSoft Microsoft Windows client, but this is not required.

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

See VirtualBox documentation for information on supported platforms. Oracle VM VirtualBox, <https://www.virtualbox.org>.

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:* 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. 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.

While VirtualBox is available for many operating systems, Oracle's PeopleSoft certifies only VirtualBox on the Microsoft Windows platform.

However, you may use other operating systems as you like. While Oracle does not test or certify the DPKs with VirtualBox on non-Microsoft Windows platforms, if you are able to successfully import the DPK files, boot the PI, complete the setup process and access the PeopleSoft application login (PIA), then we expect that the PeopleSoft Update Manager application should function normally.

If you do run into issues in importing the DPK files, booting the PI, completing the setup process, or getting to the PeopleSoft application login using a VirtualBox installation on another operating system, we suggest that you attempt the same process either using VirtualBox on Microsoft Windows or one of the documented procedures on a supported ("bare-metal") Microsoft Windows or Linux operating system.

See My Oracle Support, Certifications.

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

See Tech Update - Mainstream Support for Windows Server 2008, 2008 R2 Winds Down, My Oracle Support, Doc ID 1924632.1.

- *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 will 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.

- *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 size may vary depending upon the specific virtual appliance.

VirtualBox supports the ability to take snapshots of a running appliance, and use them to return to a previous state if your virtual appliance becomes corrupted in any way. You should plan for the space needed for

snapshots when allocating storage for your virtual appliance.

See the information on snapshots in *Oracle VM VirtualBox User Manual*, "First Steps."

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.

- About 75 GB for the virtual appliance archive (.OVA) after extraction.
- *Network*: The default installation of the PeopleSoft VirtualBox appliance sets up a "host-only" 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.

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

You can install the PeopleSoft Deployment Packages directly on a system running a Microsoft Windows operating system (sometimes called "bare-metal" installation). The PeopleSoft DPKs are certified to run on those Microsoft Windows operating systems that are certified for PeopleSoft PeopleTools 8.55. The Microsoft Windows system can be a physical computer 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 on any supported Microsoft Windows host, bare-metal or virtual.

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

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

See My Oracle Support, Certifications.

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

See Tech Update - Mainstream Support for Windows Server 2008, 2008 R2 Winds Down, My Oracle Support, Doc ID 1924632.1.

- *RAM (Memory)*: A minimum of 8 GB RAM is required to run a complete (full tier) 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.

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

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

You can install the PeopleSoft Deployment Packages directly on a system running an Oracle Linux operating system (sometimes called "bare-metal" installation). The PeopleSoft DPKs are certified to run on those Oracle Linux operating systems that are certified for PeopleSoft PeopleTools 8.55. The Linux system can be a physical computer or a virtual machine.

- *Host computer:* The PeopleSoft DPKs can be deployed on any supported Linux host, bare-metal or virtual. The PeopleSoft DPKs can also be deployed on Oracle Exalogic Elastic Cloud.
If you deploy on a virtual host computer, you are responsible for provisioning the virtual machine before beginning the deployment.
- *Host operating system:* The host operating system must be 64-bit platform certified by Oracle for PeopleSoft systems.
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 complete (full tier) PeopleSoft environment.
See "Preparing to Deploy," Understanding PeopleSoft Components.
- *Disk space:* The disk space requirements vary depending upon the type of environment you set up.
See "Preparing to Deploy," Understanding PeopleSoft Components.
 - 25–35 GB free disk space for the downloaded zip files
You may remove these files after you have successfully initialized your virtual machine.
 - 100 GB free disk space is required to deploy and set up a full tier PeopleSoft environment.
See My Oracle Support, Certifications.

Task 1-2: Reviewing Software Requirements

This section discusses:

- Reviewing Software Requirements on Microsoft Windows
- Reviewing Software Requirements on Oracle 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
- Secure shell client
You will need a secure shell (SSH) client, for example PuTTY, to log in to the virtual machine after initialization.
- You have the option to use VirtualBox to deploy a PeopleSoft environment from the DPKs. Before deploying, you must install Oracle VM VirtualBox.

Note. 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>.

- Windows Powershell™ (version 2.0 is the minimum)

If you use the PeopleSoft DPK setup script to deploy, either with Oracle VirtualBox, or on a Microsoft Windows machine, you need Windows Powershell.

See "Deploying the PeopleSoft Deployment Packages."

- Puppet software

In most cases, the Puppet software will be installed by the DPKs. In some scenarios it may be necessary for you to install it directly. If necessary, you can download the software from the Puppet Labs Web site at www.puppetlabs.com.

See *Understanding the PeopleSoft Deployment Packages for Update Images*.

These are the minimum requirements for the software versions associated with using Puppet with the PeopleSoft DPKs:

- Puppet 3.7.4
- Hiera 1.3.4
- Facter 2.3.0
- Ruby 2.0.0p481 (2014-05-08) [x64-mingw32]
- Operating system packages required for Puppet

The Puppet software used for the DPK deployment is dependent on certain OS-level packages, which may not be present in the delivered DPKs. In this case, you can use the information in the DPK setup log file to determine which packages are needed. It is the responsibility of the user to obtain and install the required packages.

Note. This applies to the deployment of the Native OS DPKs.

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

- Web Browser

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

The PeopleSoft 9.2 Update Images are built on PeopleSoft PeopleTools 8.55. When using PeopleSoft Update Manager you must use require a web browser certified for PeopleTools 8.55.

See My Oracle Support, Certifications.

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

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

- You must have root access to install the PeopleSoft DPKs.
- If you are installing the PeopleSoft DPKs on Oracle Linux 6 or 7 with Unbreakable Enterprise Kernel (UEK), apply the latest UEK kernel from the Oracle YUM repository at <http://public-yum.oracle.com/index.html>.
- Puppet software

In most cases, the Puppet software will be installed by the DPKs. In some scenarios it may be necessary for

you to install it directly. If necessary, you can download the software from the Puppet Labs Web site at www.puppetlabs.com.

See *Understanding the PeopleSoft Deployment Packages for Update Images*.

These are the minimum requirements for the software versions associated with using Puppet with the PeopleSoft DPKs:

- Puppet 3.7.4
- Hiera 1.3.4
- Facter 2.4.4
- Ruby 1.8.7 (2013-06-27 patchlevel 374) [x86_64-linux]
- Operating system packages required for Puppet

The Puppet software used for the DPK deployment is dependent on certain OS-level packages, which may not be present in the delivered DPKs. In this case, you can use the information in the DPK setup log file to determine which packages are needed. It is the responsibility of the user to obtain and install the required packages.

Note. This applies to the deployment of the Native OS DPKs.

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

Chapter 2

Deploying the PeopleSoft Application Deployment Packages

This chapter discusses:

- Obtaining the PeopleSoft Application DPKs
- Deploying the VirtualBox Update Image
- Deploying the Native OS Update Image
- Using the Samba Shared Drive Folders
- Deploying the PeopleTools Client in Update Manager Mode

Task 2-1: Obtaining the PeopleSoft Application DPKs

The PeopleSoft application 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 PI for your PeopleSoft application.

The page includes links to PeopleSoft Update Manager documentation, as well as links to the individual PIs.

2. 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 and the zip files after extraction:

Downloaded Zip Files	Files After Extraction*	Description
Filename_1of15.zip	The setup folder and other files	Setup ("bootstrap") DPK
Filename_2of15.zip	PT-DPK-LNX-8.55.xx-1of2.zip	PeopleTools server, Part 1
Filename_3of15.zip	PT-DPK-LNX-8.55.xx-2of2.zip	PeopleTools server, Part 2
Filename_4of15.zip	PTC-DPK-WIN8.53.xx-1of1.zip	PeopleTools Client for 8.53
Filename_5of15.zip	PTC-DPK-WIN8.54.xx-1of1.zip	PeopleTools Client for 8.54
Filename_6of15.zip	PTC-DPK-WIN8.55.xx-1of1.zip	PeopleTools Client for 8.55
Filename_7of15.zip	ODC-DPK-WIN-12.1.0.2-xxxxxx-1of1.zip	Oracle Database client
Filename_8of15.zip	ODS-DPK-LNX-12.1.0.2-xxxxxx-1of1.zip	Oracle Database server
Filename_9of15.zip	APP-DPK-LNX-HCM92-8.55.xx-1of2.zip	PeopleSoft Application DPK, Part 1
Filename_10of15.zip	APP-DPK-LNX-HCM92-8.55.xx-2of2.zip	PeopleSoft Application DPK, Part 2
Filename_11of15.zip	VBOX_8_55_xxxxxx_SHELL.ova	VirtualBox Shell**
Filename_12of15.zip	SES_11.2.2.2_BP4_xxxxxx.tgz1of4	Oracle SES**
Filename_12of15.zip	SES_11.2.2.2_BP4_xxxxxx.tgz2of4	Oracle SES**
Filename_14of15.zip	SES_11.2.2.2_BP4_xxxxxx.tgz3of4	Oracle SES**
Filename_15of15.zip	SES_11.2.2.2_BP4_xxxxxx.tgz4of4	Oracle SES**

* The filenames will vary depending upon the date posted or the associated release and patch.

** The VirtualBox Shell OVA and Oracle SES DPKs are available for VirtualBox DPKs. They are not included for the Native OS DPKs for Microsoft Windows and Linux.

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

<Product_Name>-920-UPD-<Update Image Number>-<Operating_System>-#ofn.zip

For example:

HCM-920-UPD-016-LNX_1of10.zip

HCM-920-UPD-016-LNX_2of10.zip

...

HCM-920-UPD-016-LNX_10of10.zip

The files names are comprised of the following parts:

- *<Product_Name>* 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 Interaction Hub	IH
PeopleSoft Human Capital Management	HCM

- *<Update Image Number>* is the PI image number, such as 016.
 - *<Operating_System>* is 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.
3. 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 use the DPK setup script to deploy the VirtualBox DPK, and you want to use Oracle SES, the DPK setup script also assembles the archives for Oracle SES into a single VMDK.
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.
If you import the VirtualBox shell OVA directly into Oracle VirtualBox, and you want to use Oracle SES, you must also combine the extracted Oracle SES files into a single VMDK.
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](#).

Task 2-2: Deploying the VirtualBox Update Image

This section discusses:

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

Setting Up Oracle SES with the VirtualBox VM

The VirtualBox Update Images include multiple zip files containing VMDK parts for Oracle SES. The way that you set up Oracle SES depends upon how you choose to deploy the VirtualBox Update Image.

- If you set up the VirtualBox VM using the DPK setup script, the DPK setup strip extracts and assembles the multiple parts into a single SES VMDK.
- If you use the VirtualBox shell to set up the PeopleSoft environment, you must first extract and assemble the parts manually.

Task 2-2-1: 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 PUM or Demo purpose 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, Oracle SES, 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. A full setup of a PeopleSoft environment (database tier, mid-tier and Oracle SES) takes about 120 GB of disk space.

See "Prerequisites," Reviewing Hardware Requirements.

- You have downloaded all of the required DPKs and saved them in a location referred to as *DPK_INSTALL*. For this task, download the Virtual Box DPKs. In the examples below, *DPK_INSTALL* is D:\dpc\PI.
See Obtaining the PeopleSoft Application DPKs.
-

Note. After the DPK setup script extracts the downloaded zip files, it will delete the original zip files in *DPK_INSTALL*. If you want to save the original zip files, make a backup copy in a different 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.1ofn.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 Windows PowerShell window; for example:
 - a. Select Start, and navigate to Windows PowerShell.
 - b. Right-click and select Run as Administrator.
3. Go to the *DPK_INSTALL\setup* directory and run the script using the following command:

```
./psft-dpk-setup.ps1
```

Note. If the script fails to launch with an error such as "File cannot be loaded because the execution of scripts is disabled on this system," you must modify the Microsoft Windows execution policy by running the command `Set-ExecutionPolicy Unrestricted`.

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:

```
Extracting the Zip File FILENAME-1of15.zip:           [ OK ]
Extracting the Zip File FILENAME-2of15.zip:           [ OK ]
...
Extracting the Zip File FILENAME-15of15.zip:          [ 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 D:\dpk\PI 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.

- If the Oracle SES related files are present, you see a prompt asking whether you want to set up a demo environment.

```
Found PeopleSoft SES VMDK TGZ file parts in the DPK folder
D:\dpk\PI. If the VM is setup as a PeopleSoft Demo environment
```

```
we can automate the process of adding it to the VM.
```

```
Do you want to add the SES VMDK Disk to the VM? [Y|n]
```

If you answer *y* (yes), the DPK setup script will assemble the TGZ file parts.

```
Assembling SES VMDK TGZ Split Files into a Single VMDK TGZ file: [ =>
OK ]
```

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 Host: [WARNING]
```

```
VirtualBox software is not installed on the 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 Host: [ OK ]
Checking if VirtualBox Machine Folder has enough space: [FAILED]
```

```
There is not enough free space on the Drive D. The PeopleSoft
enviroment setup requires about 120GB of free space. Please
make sure the Drive D 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 Host: [ OK ]
Checking if VirtualBox Machine Folder has enough space: [ OK ]
Checking if VirtualBox Manager is Running on the Host: [ OK ]
Stopping all Instances of VirtualBox Manager on the 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 is Available to Import: [WARNING]
```

```
No PeopleSoft VirtualBox appliance (OVA) found in the DPK folder
```

D:\dpk\PI. 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 is Available to Import: [WARNING]
```

```
Found 2 PeopleSoft VirtualBox appliances (OVA) in the DPK folder
D:\dpk\PI. 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_55_150830_SHELL.ova]
in the DPK folder D:\dpk\PI. We can automate the process of importing
this appliance into VirtualBox if VirtualBox software is installed
on the Host.
```

```
Do you want to Import the PeopleSoft Appliance into VirtualBox? [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 is already imported: [ OK ]
Importing the PeopleSoft Appliance into VirtualBox: [ 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
```

```
Setting Up Host-Only Network Adapter for the VM:          [ OK ]
Setting Up the Shared Folder C:\psft on the VM:          [ OK ]
```

8. If you answered yes to the earlier question Do you want to add the SES VMDK Disk to the VM? [Y|n], you see the following message:

```
Extracting SES VMDK Disk from the SES TGZ File:          [ OK ]
```

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

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

```
Adding SES VMDK Disk to the VM:                          [ OK ]
```

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

The PeopleSoft environment setup in a VirtualBox is complete.
Access the launched VM to continue with the PeopleSoft environment initialization process.

10. Specify a 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.
```

11. 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).

12. (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.

13. 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.<domainname>` will be assigned.
- The hostname must be 30 characters or less.

14. 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
  IP address:      192.168.1.103
  Netmask:        255.255.255.0
  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

```

15. 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.

16. 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.

Preparing the VirtualBox VM for PeopleSoft Environment:

```

Checking if Directory /home is writable:

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        [ OK ]
Copying PeopleSoft Puppet Modules:                            [ OK ]
Updating the Puppet Hiera YAML Files:                          [ OK ]
Updating the Puppet Site File for the VM:                      [ OK ]

Checking if SES VMDK Disk is Added to the VM:                 [ OK ]

```

17. Enter a name for the database, such as HCM92.

The database name must start with a letter, have only UPPERCASE letters, include only alphanumeric characters, and be no more than 8 characters in length.

Press ENTER to accept the default, PSFTDB.

```

Enter the name of the database. Please ensure that the database
name starts with a letter and includes only alphanumeric characters
and is no more than 8 characters in length [PSFTDB]:

```

18. Enter the PeopleSoft Connect ID, following the guidelines in the prompt.

Press ENTER to accept the default, people.

```

Enter the name of PeopleSoft Connect ID. Please ensure that the
id includes only alphanumeric characters and is no more than 8
in length [people]:

```

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

The password must be between 6 and 8 characters in length, and cannot contain any spaces, quotes, or dashes.

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

Enter the PeopleSoft Connect ID Password. Please ensure that the password does not contain any spaces and quote characters and is at least 6 and no more than 8 characters in length:

Re-Enter the PeopleSoft Connect ID Password:

20. Enter the Application Server Domain Connection Password.

The Application Server Domain Connection Password is required for a successful connection between the Application Server and the PeopleSoft Pure Internet Architecture. Ensure that the password meets the requirements given in the prompt. The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter the Application Server Domain Connection Password. Please ensure that the password does not contain any spaces and quote characters and is at least 8 and no more than 30 characters in length:

Re-Enter the Application Server Domain Connection Password:

21. 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. There is no default password.

Enter a new WebLogic Server Admin Password. Please ensure that the password has at least 8 characters with at least one number or a special characters:

Re-Enter the new WebLogic Server Admin 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]:

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

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

23. If you want to continue running the initialization script interactively, answer *y* (yes) to the following prompt, and continue with the next step.

If you want to set up your environment manually using the Puppet modules, answer *n* (no). The initialization stops, and the VM windows closes.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

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

24. 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:

```
Setting Up System Settings: [ OK ]
Deploying HCM Application Component: [ OK ]
Deploying PeopleTools Components: [ OK ]
Deploying Oracle Database Server: [ OK ]
Setting Up PeopleSoft Users Profile: [ OK ]
.
.
```

```
.
Starting PeopleSoft Domains:                [ OK ]
Configuring Post-Boot PeopleSoft Environment: [ OK ]

Template Configuration Disabled.

Starting OSWatcher:                          [ OK ]
```

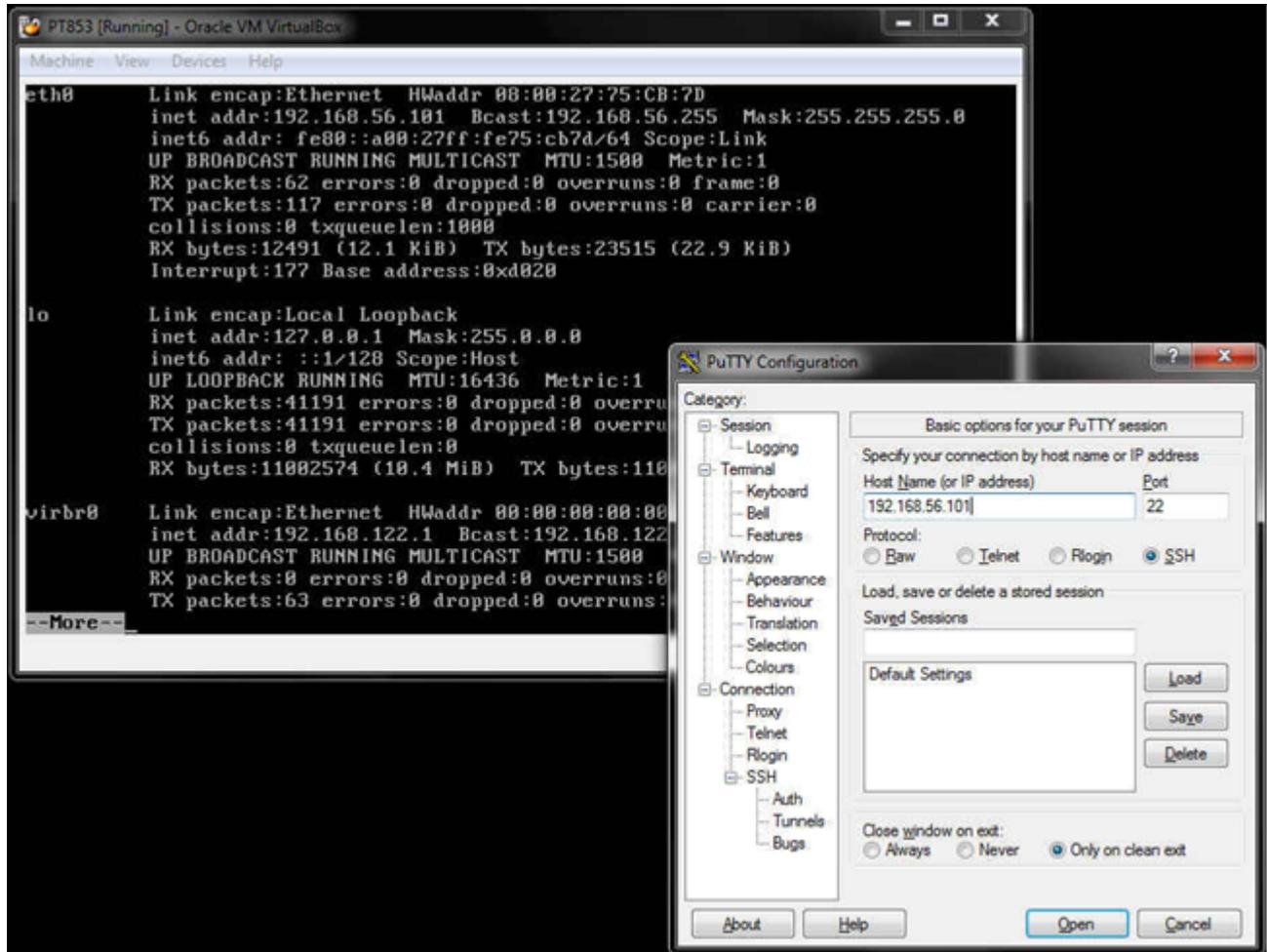
25. The login prompt appears.

The PeopleSoft runtime environment is available for use.

See [Using and Maintaining the PeopleSoft Environment](#).

26. 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. The IP address can be identified using the Linux command `ifconfig`.



Connecting to the virtual appliance with PuTTY Client

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.

27. To copy the log file for the deployment from the virtual machine to the Microsoft Windows host:
- 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.
 - 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`.
 - Copy the file to the Microsoft Windows host using FTP or SCP.

Task 2-2-2: 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 Virtual Box 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 Virtual Box DPKs.

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

Include the following considerations when preparing for the initialization process:

- Default or manual configuration

After extracting the DPKs, you are given the option to exit the process and complete the configuration manually using Puppet files. Use the manual configuration if you want to change installation locations and so on.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

- Networking 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."

- User IDs and passwords

The process does not include any default passwords. You must provide passwords for the UNIX root ID, the PeopleSoft Connect ID, and the Application Server Domain Connection. The requirements for the passwords are given by the prompts.

To extract the DPKs and initialize the virtual machine:

- Save all of the zip files in a directory on the same machine as VirtualBox.
- 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 Application DPKs.

- If you are using Oracle SES, combine the individual files.

The downloaded files include multiple zip files for Oracle SES. After you extract the zip files, you must

combine the multiple .vmdk files into a single .vmdk file before beginning the process to import the VirtualBox shell. The names for the files that you extract will vary; in this example, <Version> refers to the Oracle SES version and patch number.

- a. In a command prompt, go to *DPK_INSTALL* and run the following command:

```
copy /b SES_<Version>.tgz1of4+SES_<Version>.tgz2of4+SES_=>
<Version>.tgz3of4+SES_<Version>.tgz4of4 SES_<Version>.tgz
```

Note. There is a space before the final combined .tgz name.

- b. Extract the SES VMDK from the tgz file.

Use 7zip, which is included in the downloaded files, or another tool that is compatible with your system and able to extract the files from the tgz file.

```
7z e SES_<Version>.tgz
```

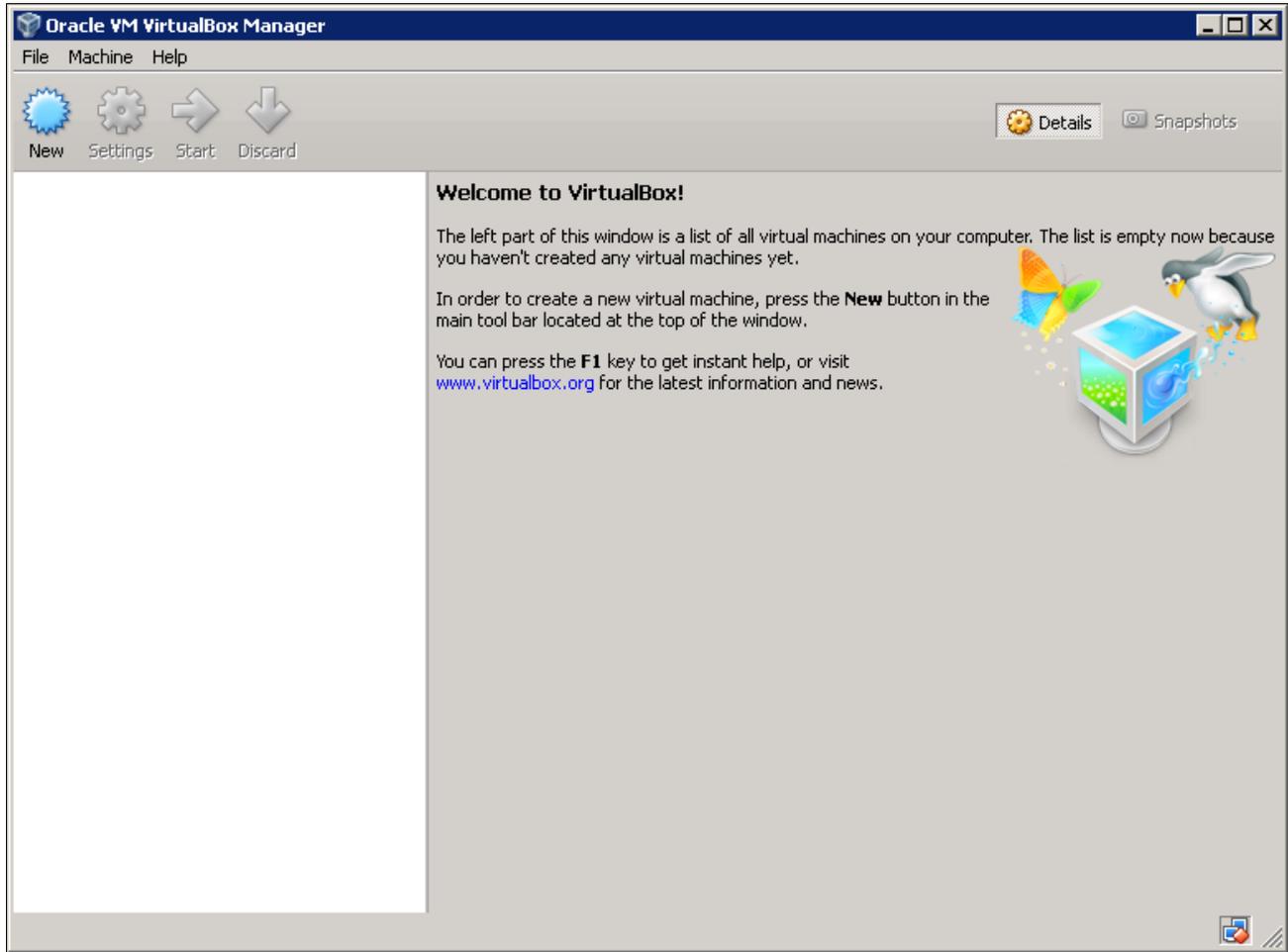
This will create SES_<Version>.tar file in the same directory.

- c. Run the following command to extract the SES VMDK file, or use another tool to extract the file:

```
7z x SES_<Version>.tar
```

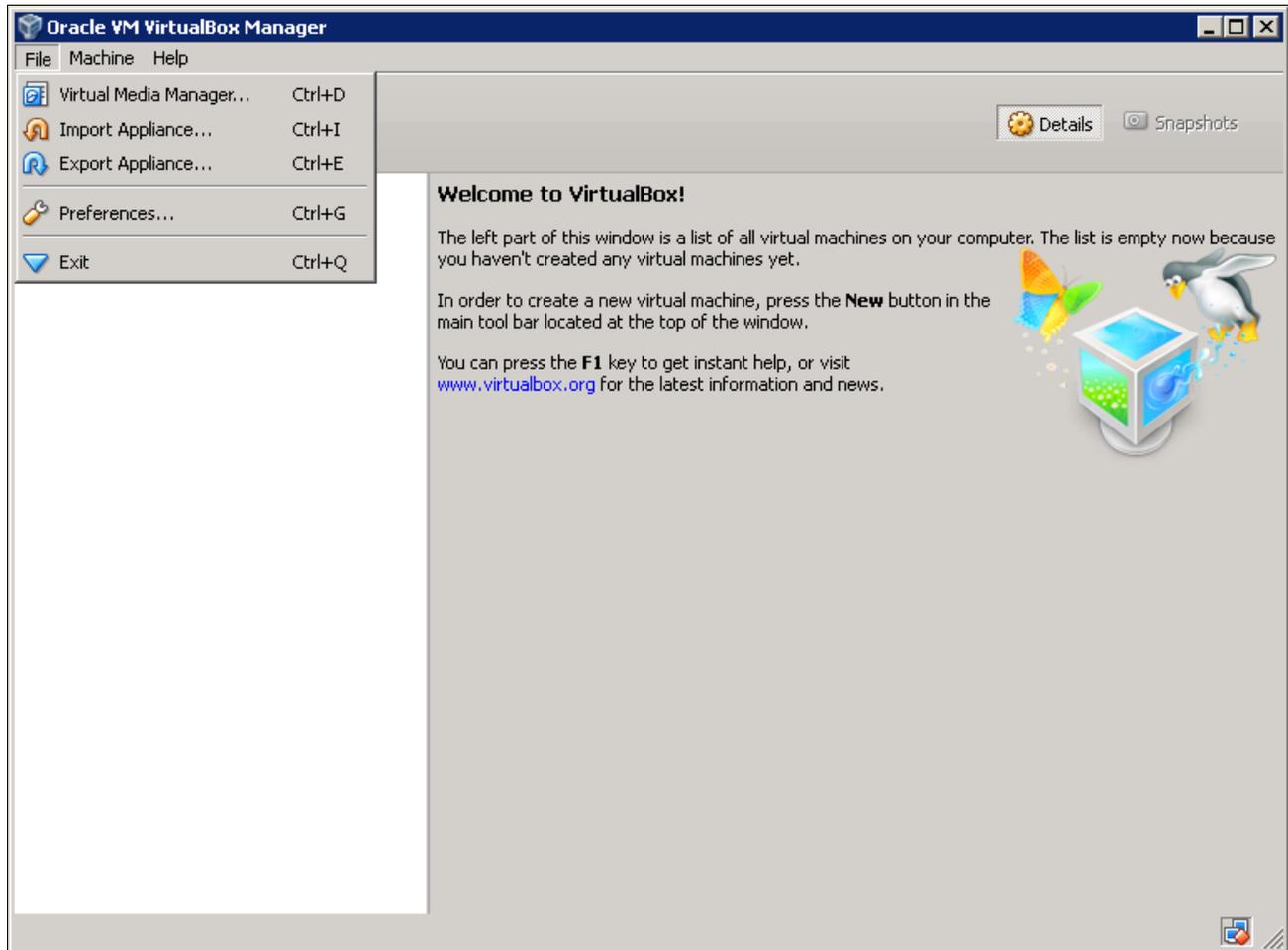
4. Start VirtualBox.

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

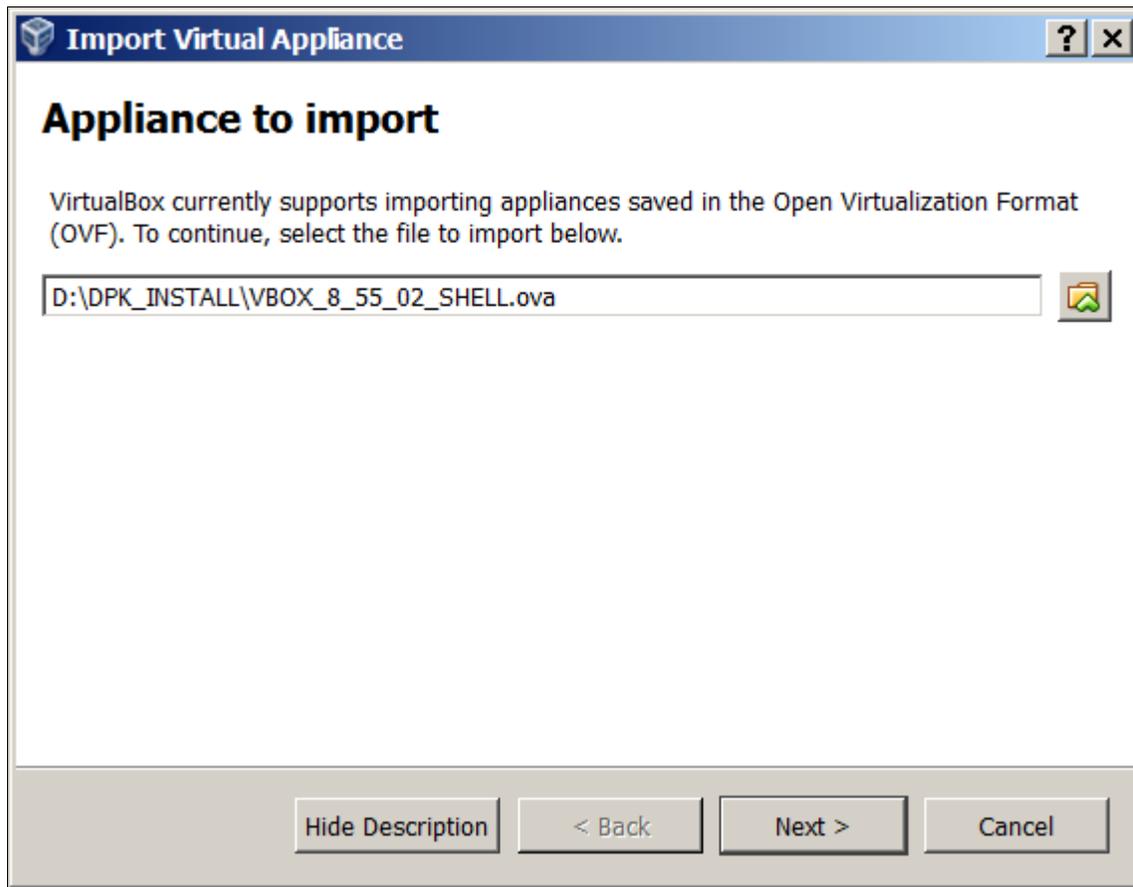
5. Select File, Import Appliance, as shown in this example.



File, Import Appliance menu in the Oracle VirtualBox Manager window

- Browse to the location where you saved the PeopleSoft VirtualBox shell.

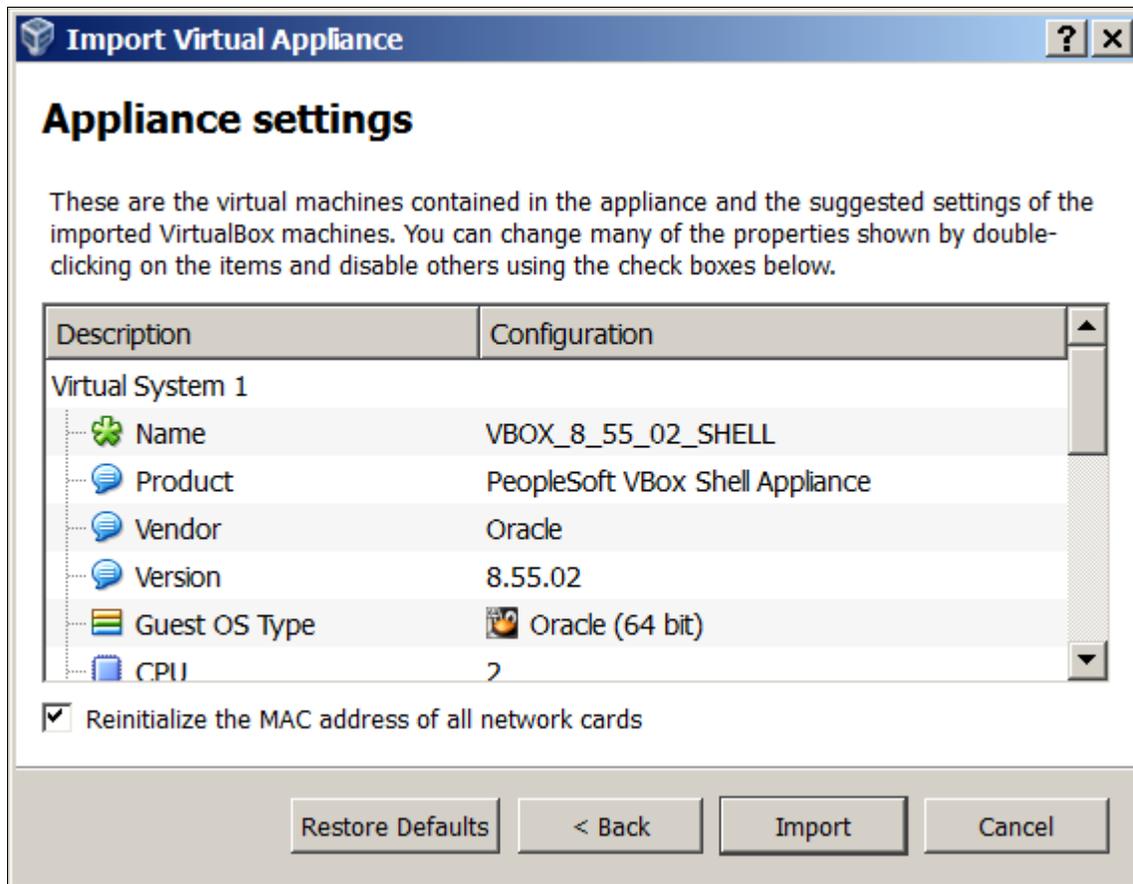
In this example the shell is named VBOX_8_55_02_SHELL.ova.



Appliance to import window

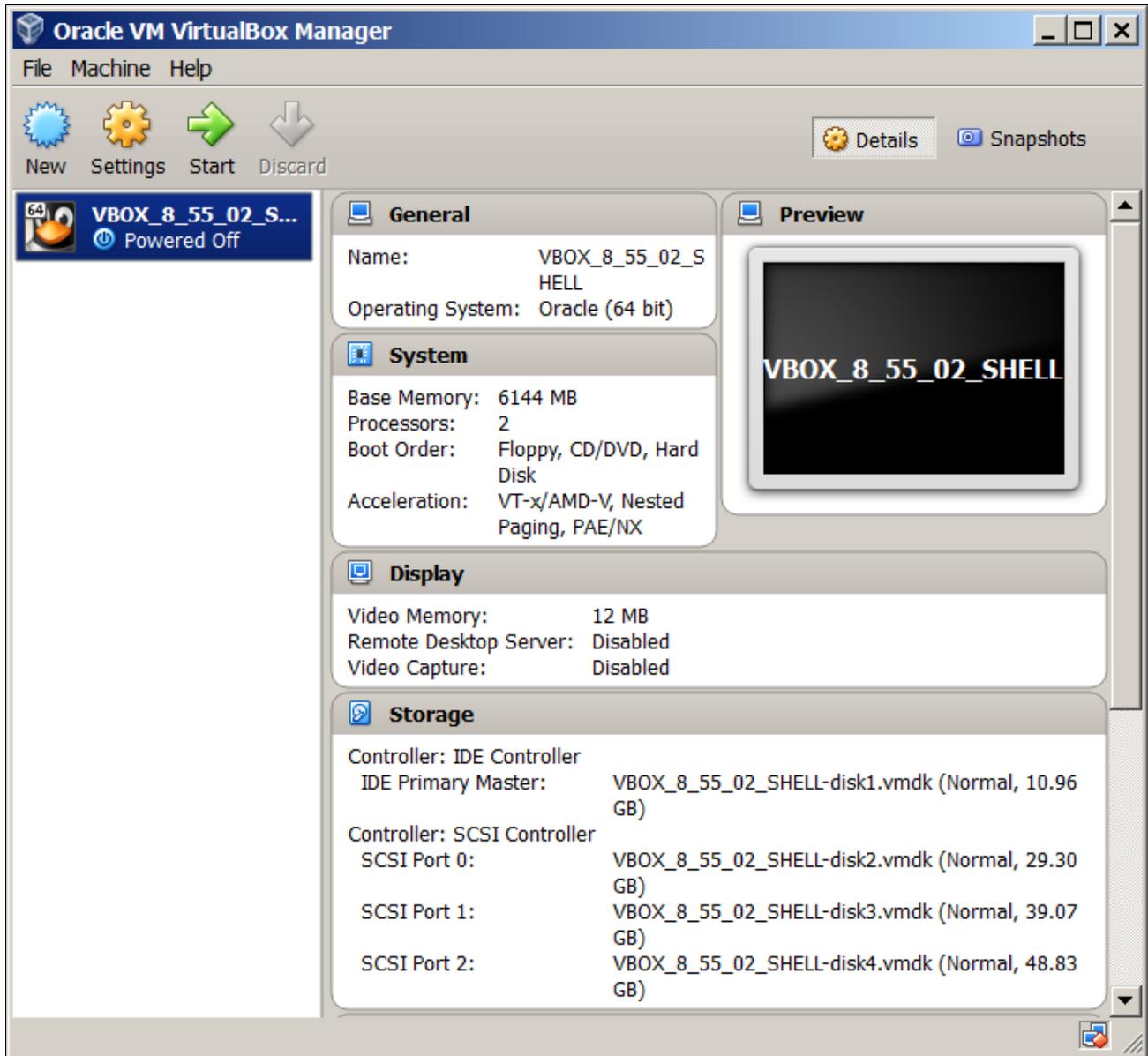
- Click Next.

8. Click Import.



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, as shown in this example.

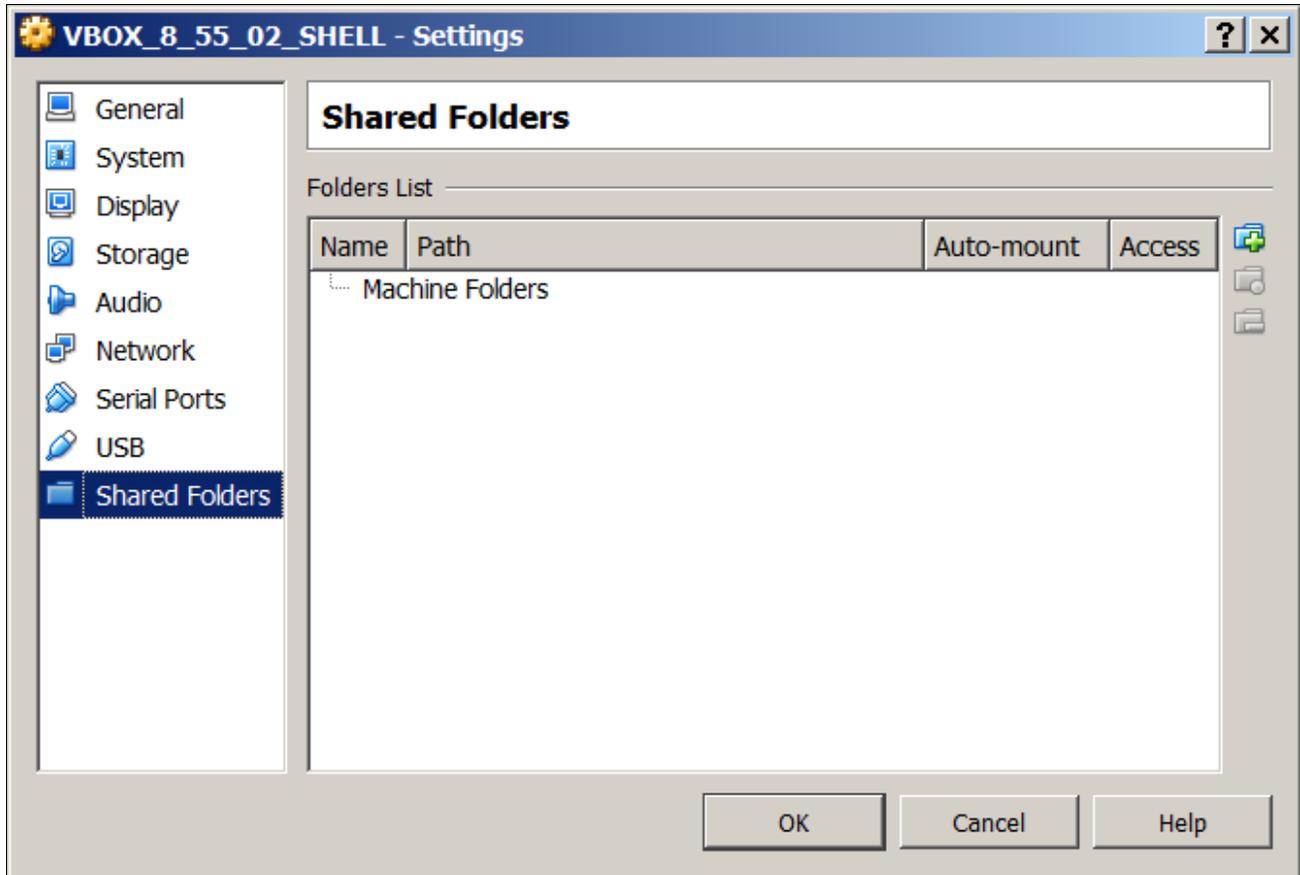


VirtualBox Shell Powered off

9. Click Settings.

10. On the Settings window, select Shared Folders.

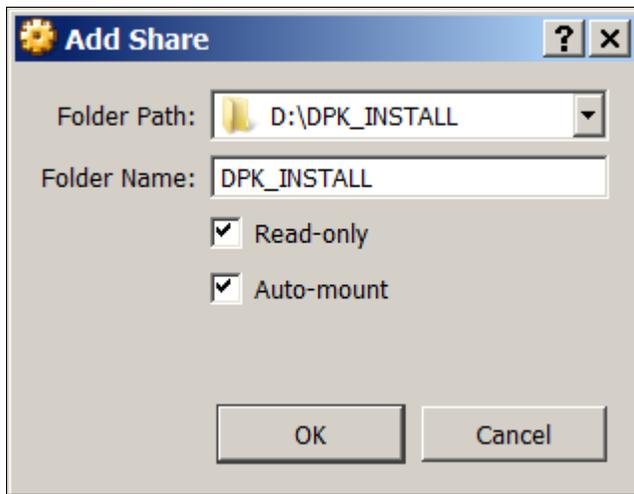
The Oracle VirtualBox Manager shared folders are used to access file systems existing on the Microsoft Windows host machine. They should not be confused with the Samba shared folders discussed later in this documentation, which allow the Microsoft Windows host machine to view files on the Linux VM.



Shared Folders window

11. Click the add shared folder button (with the green plus sign) in the top right-hand border of the window.

12. Specify the location where you saved the zip files in the Add Share dialog box, as shown in this example.

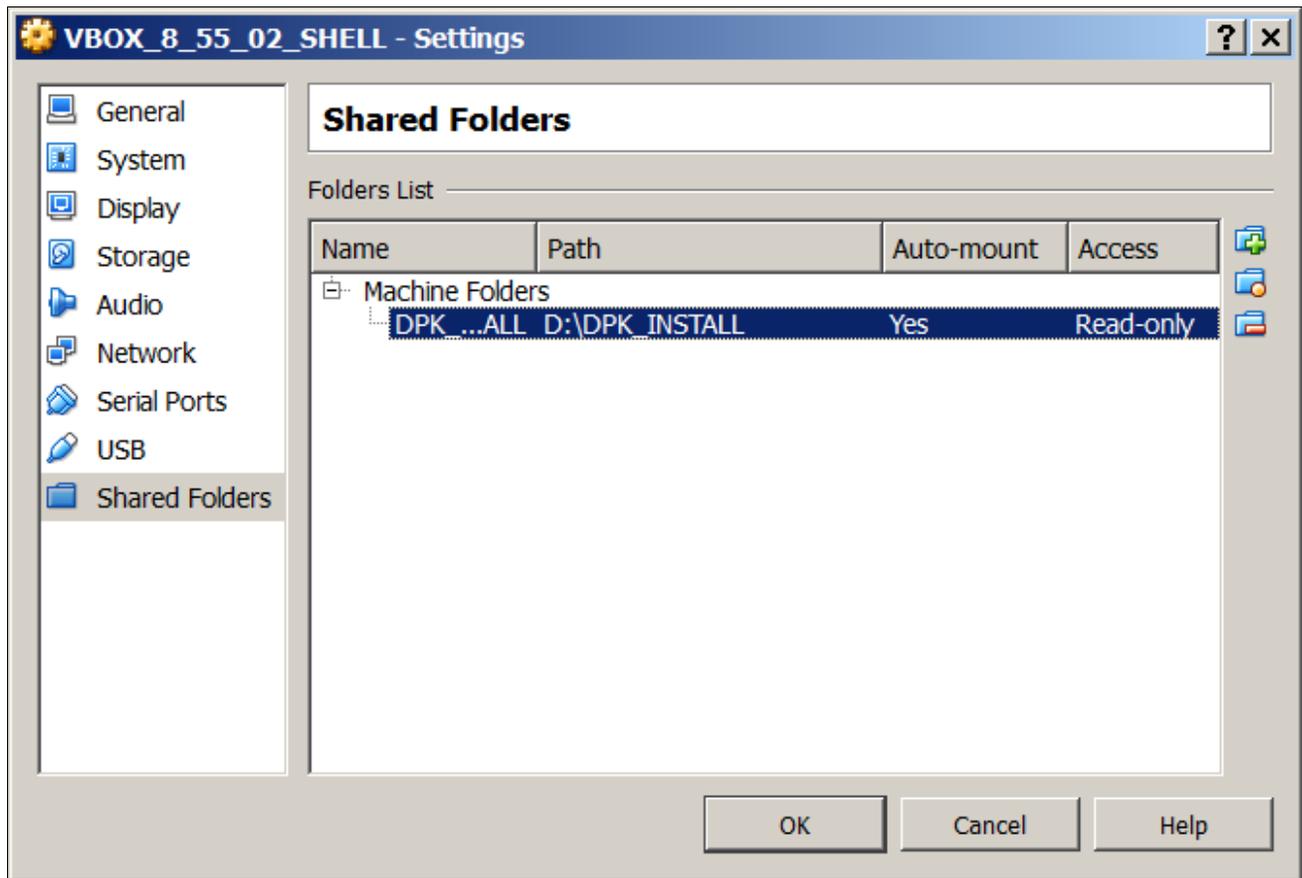


Add Share dialog box

- For Folder Path, enter or browse to the *DPK_INSTALL* folder, D:\DPK_INSTALL in this example.
- Enter a descriptive name, DPK_INSTALL in this example, for the share folder in the Folder Name field.
- Select the Read-only and Auto-mount options.

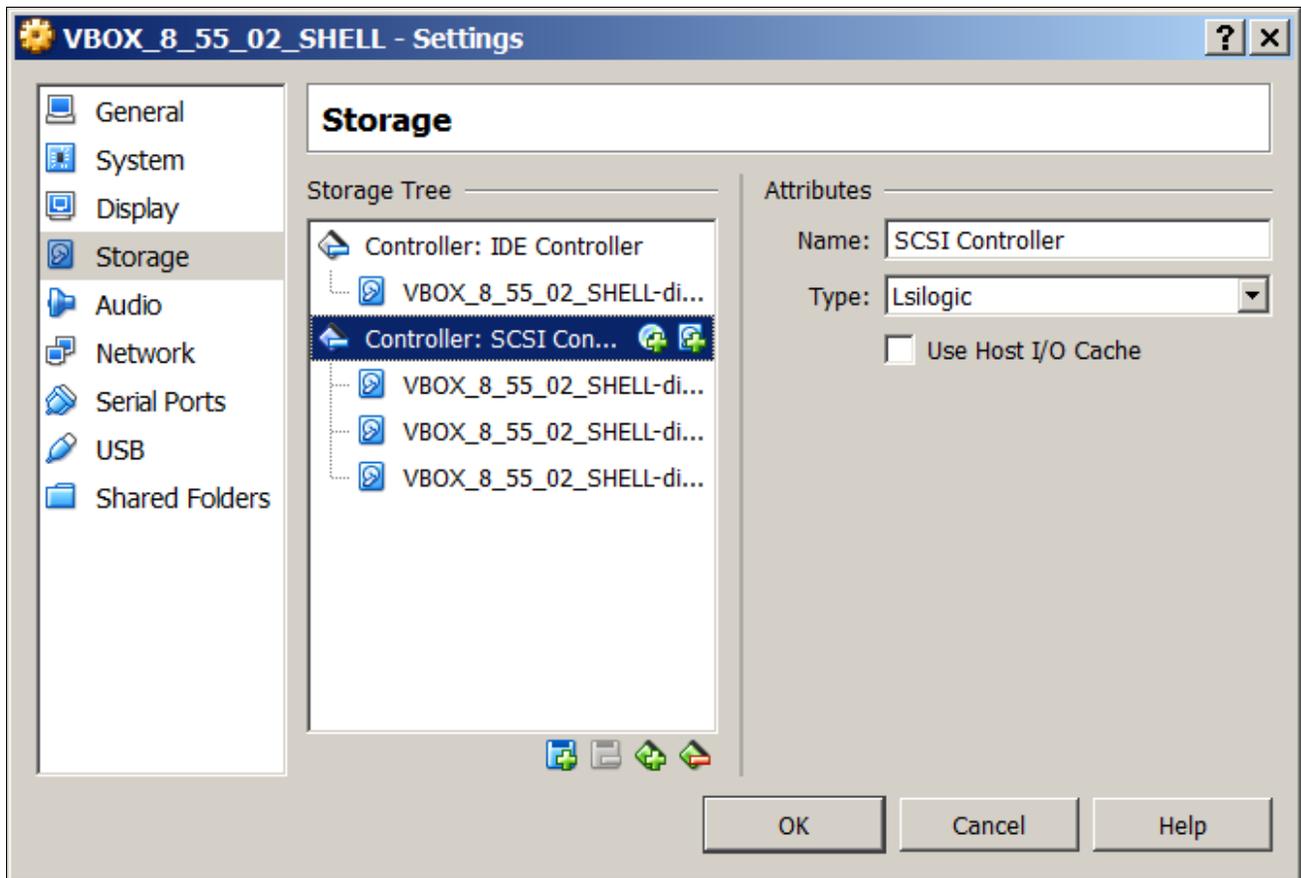
13. Click OK.

The selected folder is included in the folder list.



Shared Folders window with folder added

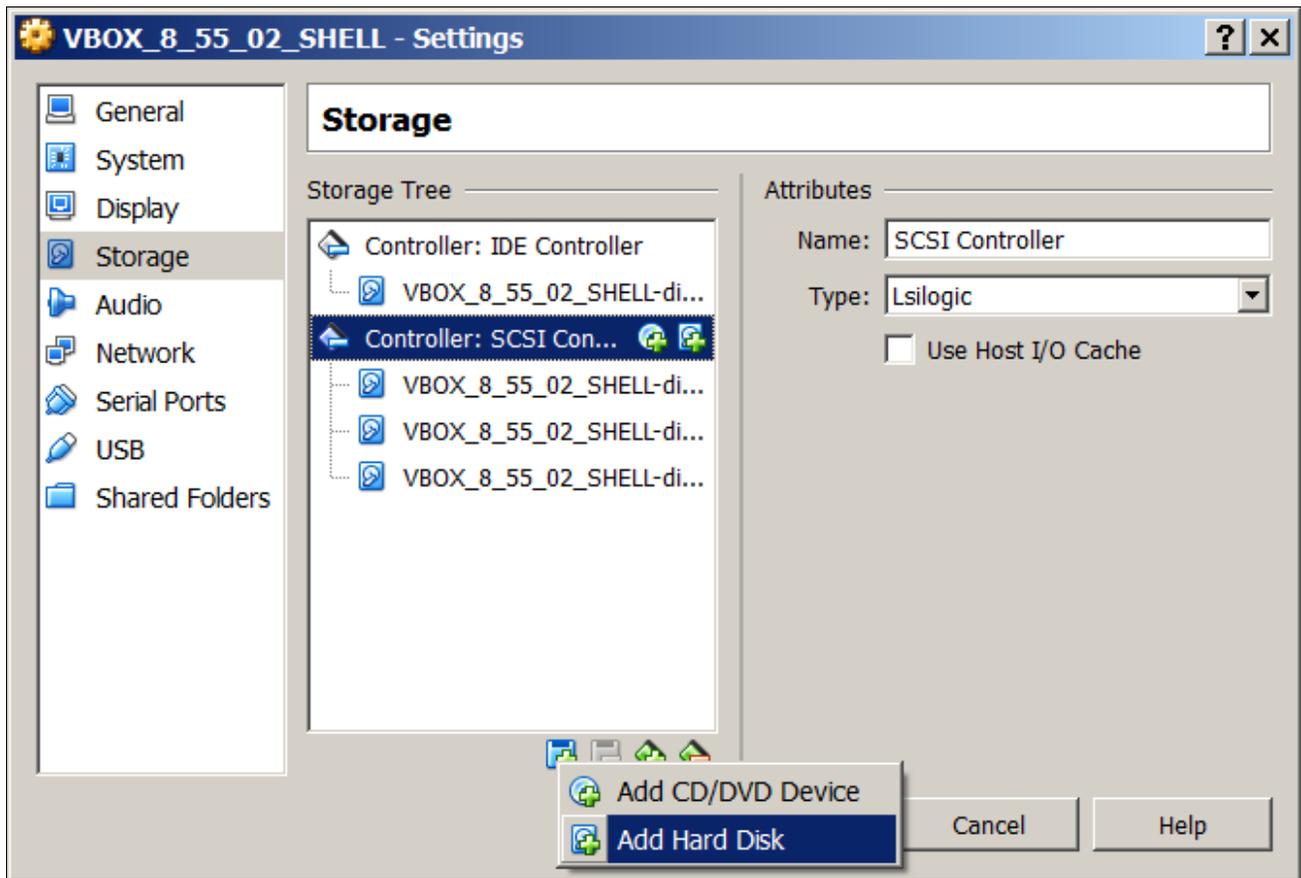
14. If you want to set up Oracle SES, select Storage.



Storage window

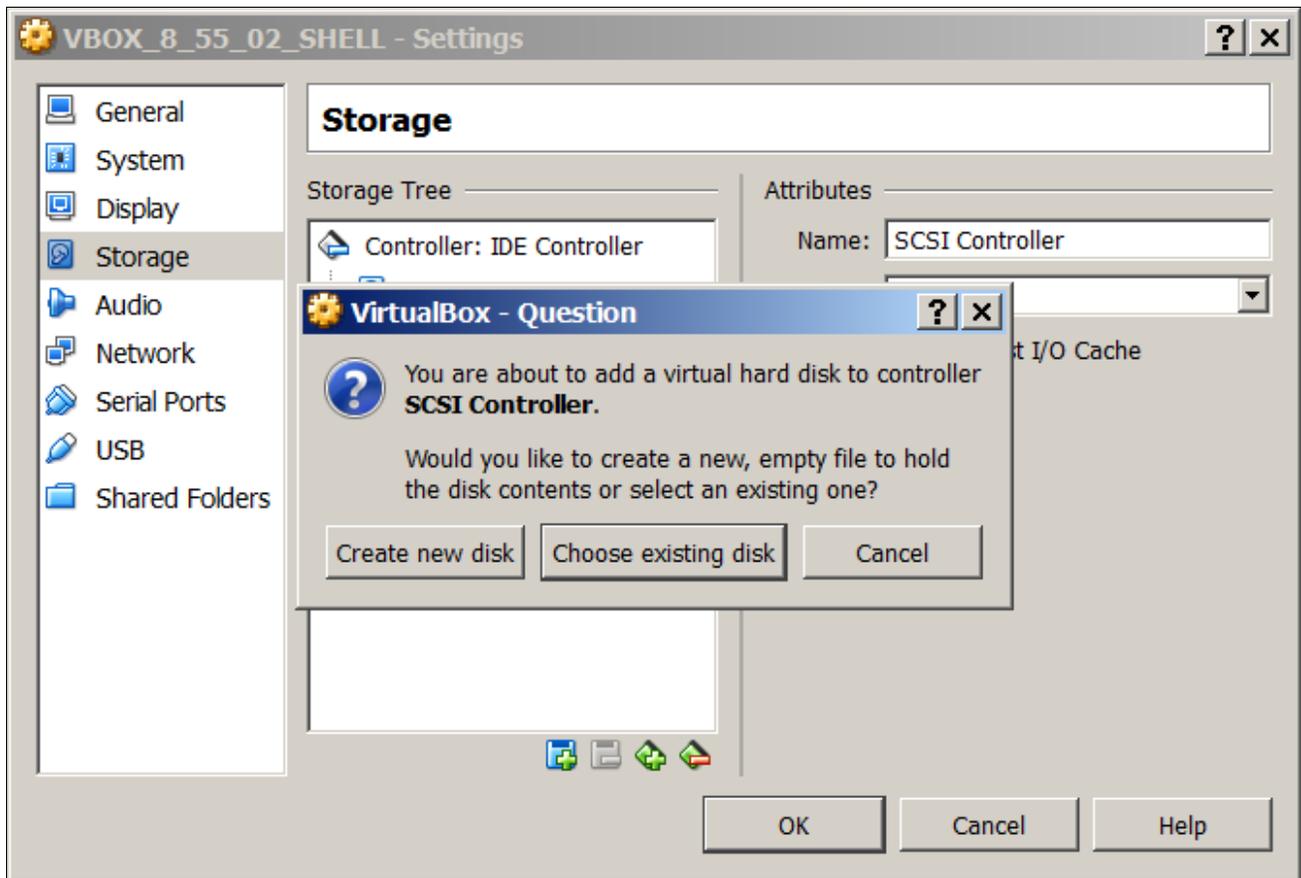
15. Highlight Controller: SCSI Controller in the Storage Tree list.

Click the Add Hard Disk icon below the list, and select Add Hard Disk.



Storage window: Add Hard Disk

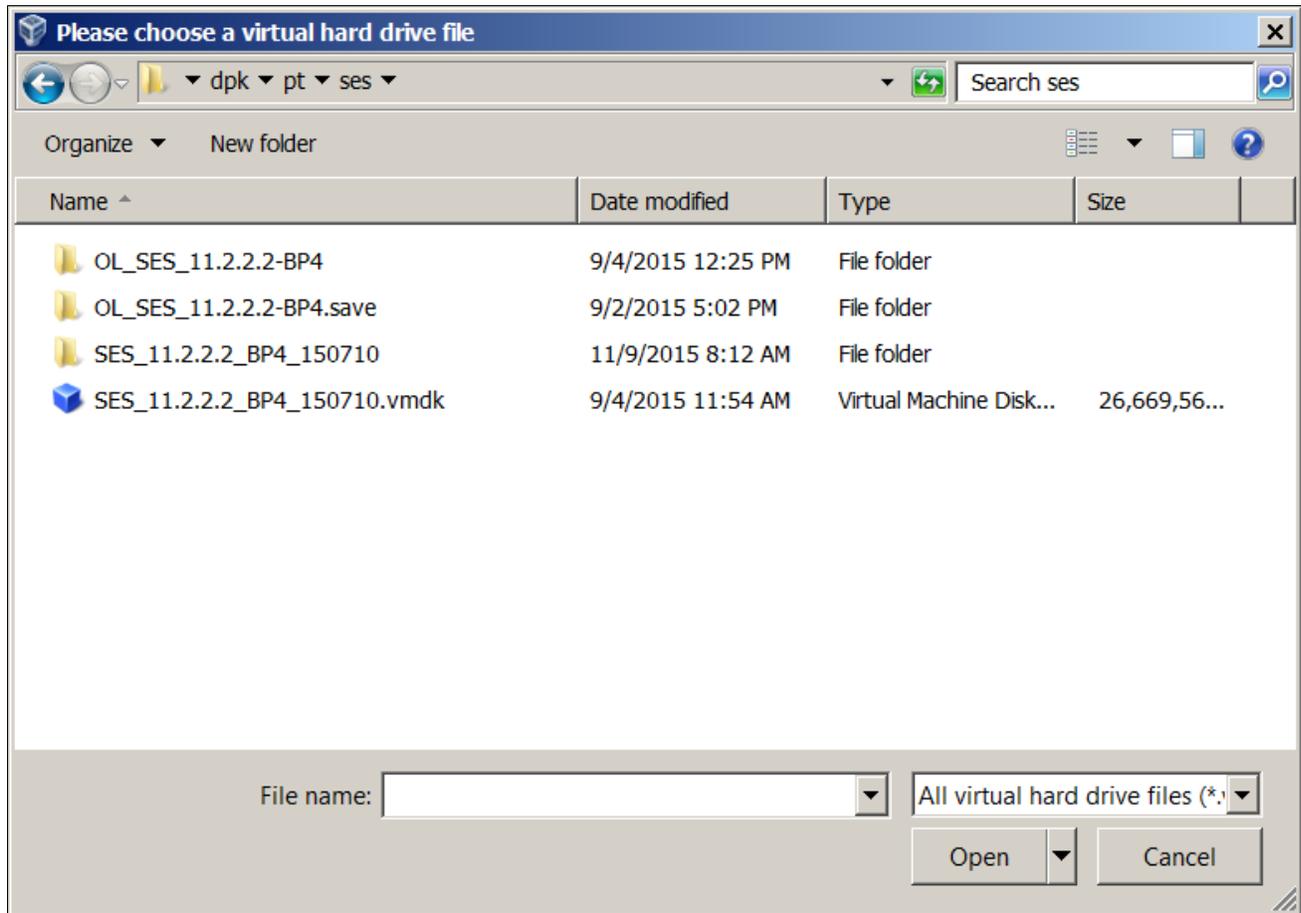
16. On the VirtualBox - Question dialog box, click Choose existing disk:



VirtualBox - Question dialog box

17. Browse to the location with the combined SES VMDK disks, SES_11.2.2.2_BP4_150710.vmdk in this example, and then click Open.

Close the Settings window to proceed.



Choose SES VMDK file

18. 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: [ OK ]
Starting SMB services [ OK ]
.
.
Starting sshd: [ OK ]
```

19. Specify a 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.
```

20. 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).

21. (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.

22. 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.<domainname>` will be assigned.
- The hostname must be 30 characters or less.

23. 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
  IP address: 192.168.1.103
  Netmask: 255.255.255.0
  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

```

24. 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.

25. 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.

Preparing the VirtualBox VM for PeopleSoft Environment:

Checking if Directory /home is writable:

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]

Extracting the Oracle Database Client DPK Archive: [OK]

Extracting the 8.53 Tools Client DPK Archive: [OK]

Extracting the 8.54 Tools Client DPK Archive: [OK]

Extracting the 8.55 Tools Client DPK Archive: [OK]

Checking if SES VMDK Disk is added to the VM: [OK]

Mounting the SES VMDK Disk on the VM: [OK]

The initialization process sets up the PeopleSoft Puppet file system.

Setting up Puppet on the VM:

Generating Hiera-Eyaml Puppet Backend Encryption Keys [OK]

Copying PeopleSoft Puppet Modules: [OK]

```
Updating the Puppet Hiera YAML Files:           [ OK ]
Updating the Puppet Site File for the VM:       [ OK ]
```

26. Enter a name for the database, such as HCM92.

The database name must start with a letter, have only UPPERCASE letters, include only alphanumeric characters, and be no more than 8 characters in length. Press ENTER to accept the default, PSFTDB.

```
Enter the name of the database. Please ensure that the database
name starts with a letter and includes only alphanumeric characters
and is no more than 8 characters in length [PSFTDB]:
```

27. Enter the PeopleSoft Connect ID.

The Connect ID must include only alphanumeric characters and be less than 8 characters in length. Press ENTER to accept the default, people.

```
Enter the name of PeopleSoft Connect ID. Please ensure that the
id includes only alphanumeric characters and is no more than 8
in length [people]:
```

28. Enter a password for the PeopleSoft Connect ID, and enter again on the next line.

The password must be between 6 and 8 characters in length. It must not contain any spaces, dashes, or quote characters. The password is not visible as you type, and the window does not display masking characters. There is no default password.

```
Enter the PeopleSoft Connect ID Password. Please ensure that the
password does not contain any spaces and quote characters and is
at least 6 and no more than 8 characters in length:
Re-Enter the PeopleSoft Connect ID Password:
```

29. Enter the Application Server Domain Connection Password.

The Application Server Domain Connection Password is required for a successful connection between the Application Server and the PeopleSoft Pure Internet Architecture. The password must be between 8 and 30 characters in length. It must not contain any spaces or quote (") characters. The password is not visible as you type, and the window does not display masking characters. There is no default password.

```
Enter the Application Server Domain Connection Password. Please
ensure that the password does not contain any spaces and quote
characters and is at least 8 and no more than 30 characters in
length:
Re-Enter the Application Server Domain Connection Password:
```

30. Enter the Oracle WebLogic Server Admin Password.

The password must be at least 8 characters in length, with at least one number or a special character, such as a pound sign (#). The password is not visible as you type, and the window does not display masking characters. There is no default password.

```
Enter a new WebLogic Server Admin Password. Please ensure that
the password has at least 8 characters with at least one number
or a special characters:
Re-Enter the new WebLogic Server Admin Password:
```

31. If you want to configure Oracle SES, answer y (yes) to the following prompt:

```
The SES VMDK Disk is Mounted on this VM. Do you wish to setup
SES on this VM? [y|n]:
```

32. If you are setting up Oracle SES, enter a password for the SES Admin.

Enter a new SES Admin Password. Please ensure that the password is minimum of 8 and maximum of 30 alpha numeric characters. Oracle recommends that the password should contain at least one lowercase letter, one uppercase letter and one digit:
Re-Enter the new SES Admin Password:

33. 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]

34. If you want to continue running the initialization script interactively, answer *y* (yes) to the following prompt, and continue with the next step.

If you want to set up your environment manually using the Puppet modules, answer *n* (no). The initialization stops, and the VM windows closes.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

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

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

35. 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:

```
Setting Up System Settings: [ OK ]
Deploying HCM Application Component: [ OK ]
Deploying PeopleTools Components: [ OK ]
Deploying Oracle Database Server: [ OK ]
Setting Up PeopleSoft Users Profile: [ OK ]
.
.
.
Starting PeopleSoft Domains: [ OK ]
Configuring Post-Boot PeopleSoft Environment: [ OK ]
```

The initialization of PeopleSoft HCM fulltier environment is successful

```
Template configuration disabled.
Starting OSWatcher: [ OK ]
```

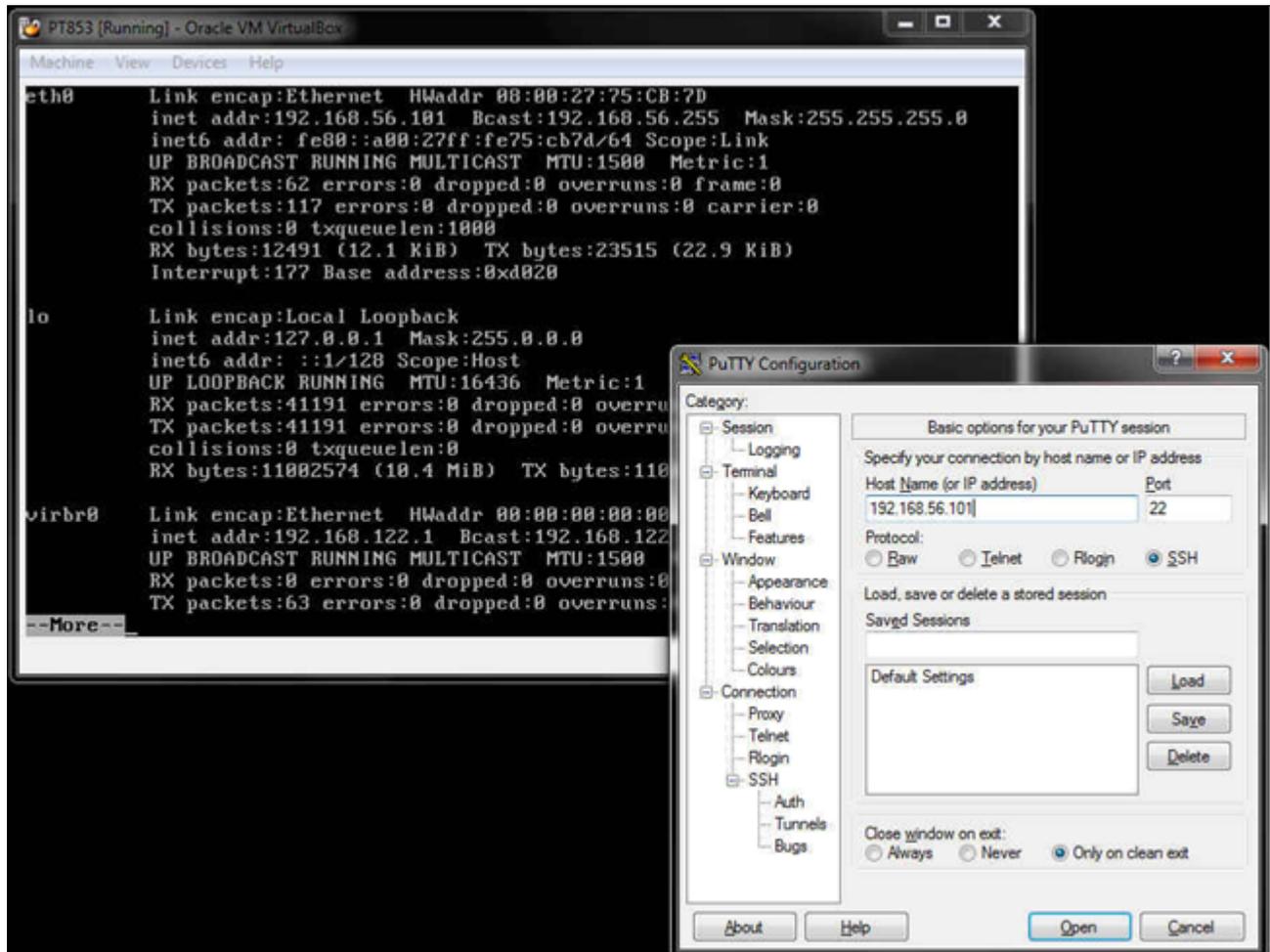
36. The login prompt appears.

The PeopleSoft runtime environment is available for use.

See Using and Maintaining the PeopleSoft Environment.

37. 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. The IP address can be identified using the Linux command `ifconfig`.



Connecting to the virtual appliance with PuTTY Client

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.

38. 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`.

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

Task 2-3: Deploying the Native OS Update Image

This section discusses:

- Understanding the PeopleSoft Application DPK Setup Script
- 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
- Obtaining Operating System Packages Required for Puppet

Understanding the PeopleSoft Application DPK Setup Script

The PeopleSoft application DPK setup script alleviates the installation process by automating most of the manual tasks in using DPKs to set up a PeopleSoft environment on a Linux or Microsoft Windows host — virtual or bare-metal. The DPK setup script is found in the first zip file (*Filename.1ofn.zip*) in the group of DPK zip files you download from My Oracle Support for the PeopleSoft Native OS Update Images.

After you extract the first DPK zip file, you see two scripts, a Microsoft Windows PowerShell™ script (`psft-dpk-setup.ps1`) and a Linux or UNIX shell script (`psft-dpk-setup.sh`). To deploy a PeopleSoft environment, run the script (Windows PowerShell or UNIX shell script), pertinent to the host operating system (OS) platform on which the DPK setup script is invoked. The script is an interactive script that detects the downloaded DPKs and verifies that they are correct. It also prompts the user for input, including database name and passwords, and once that information is gathered, will set up a complete functional PeopleSoft environment.

The following table lists the options you can use on Microsoft Windows or Linux with the DPK setup script.

Note. The script options require a single dash on Microsoft Windows, and two dashes on Linux.

Deployment	Command on Microsoft Windows	Command on Linux
Perform the following <ul style="list-style-type: none"> Deploy and set up the domains for the mid-tier components (Application Server, web server, Process Scheduler and Oracle database client). Install the required software, including Oracle Tuxedo, Oracle WebLogic, Oracle database server, and Oracle database client. Install the <i>PS_HOME</i>, <i>PS_APP_HOME</i>, and <i>PI_HOME</i> directories. Set up a PeopleSoft application database 	<pre>./psft-dpk-setup.ps1</pre> or <pre>./psft-dpk-setup.ps1 --> env_type fulltier</pre>	<pre>./psft-dpk-setup.sh</pre> or <pre>./psft-dpk-setup.sh --> env_type fulltier</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.ps1 --> dpk_src_dir <full_> path of the DPKs></pre>	<pre>./psft-dpk-setup.sh --> dpk_src_dir <full_> path of the DPKs></pre>
Remove a deployed environment. See "Using and Maintaining the PeopleSoft Environment," Removing a Deployed PeopleSoft Environment.	<pre>./psft-dpk-setup.ps1 --> cleanup</pre>	<pre>./psft-dpk-setup.sh --> cleanup</pre>

Include the following decisions in preparing for the initialization process:

- Install Oracle SES

Oracle Secure Enterprise Search (SES) is the search engine on which the PeopleSoft Search Framework relies. When deploying the DPKs for the Native OS Update Images on Microsoft Windows or Linux, you must first install and configure Oracle SES in the traditional way. The DPK setup script includes a prompt for information about SES.

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

- Default or manual configuration

After extracting the DPKs, you are given the option to exit the process and complete the configuration manually using Puppet files. Use the manual configuration if you want to change installation locations and so on.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

- User IDs and passwords

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

Task 2-3-1: 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 Application DPKs.

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

- There is at least 100 GB available space on the host for the full-tier PeopleSoft environment.
- You have created the base directory for the deployment, which is needed to extract and deploy the components. The scripts displays a default name for the base directory, *C:\psft*, but will not create the directory if it does not exist.
- 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.

1. Extract the first zip file (*Filename.1ofn.zip*) in the same directory, *DPK_INSTALL*.

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 Windows PowerShell window; for example:
 - a. Select Start, and navigate to Windows PowerShell.
 - b. Right-click and select Run as Administrator.
3. Run the script *DPK_INSTALL/setup/psft-dpk-setup.ps1*.

```
./psft-dpk-setup.ps1
```

Note. If the script fails to launch with an error such as "File cannot be loaded because the execution of scripts is disabled on this system," you must modify the Microsoft Windows execution policy by running the command `Set-ExecutionPolicy Unrestricted`.

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].

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

Starting the PeopleSoft Environment Setup Process:

```
Extracting the Zip File FILENAME-1of10.zip:           [ OK ]
Extracting the Zip File FILENAME-2of10.zip:           [ OK ]
...
```

```
Extracting the Zip File FILENAME-10of10.zip:          [ OK ]
```

5. Specify whether to install the Puppet software if necessary at the next prompt.

The script verifies if Puppet software is installed on the host. If not, answer *y* (yes) to install the Puppet software and *n* to abort the PeopleSoft environment setup process. The default action (if nothing is entered at the prompt) is to install the software.

If there is any error during the Puppet software installation, the script aborts the setup process. Review the log file in *DPK_INSTALL/setup* for the errors. If there are missing operating system packages, you will need to carry out additional steps.

See Obtaining Operating System Packages Required for Puppet.

```
Verifying if Puppet Software is Installed on the Host:
```

```
Puppet Software is not installed on the Host. If this Host is
used to setup a PeopleSoft environment, Puppet Software should
be Installed.
```

```
Do you want to proceed with the Puppet Installation? [Y|n]: y
```

```
Installing Puppet Software on the Host:              [ OK ]
```

The script verifies if the DPKs are available in *DPK_INSTALL*, and aborts with the message [FAILED] if they are not.

```
Preparing the Windows Host for PeopleSoft Environment:
```

```
Checking if PeopleSoft DPKs are Present in the Folder: [ OK ]
```

6. 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.

Note. If there is no base directory available, the script exits with an error message.

The PeopleSoft base folder is used to extract the PeopleSoft DPKs as well as for deploying PeopleSoft Components. This folder should be accessible on the host, has write permission, and has enough free space.

```
Please Enter the PeopleSoft Base Folder [C:\psft]:
Are you happy with your answer? [Y|n|q]:
```

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

Note. A full setup of a PeopleSoft environment (database tier and mid-tier) requires about 100 GB of disk space.

```
Checking if Folder C:\psft has Enough Space:         [ OK ]
```

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

- *BASE_DIR*\dpk

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

- *BASE_DIR*\pt

The script uses this directory to deploy PeopleSoft PeopleTools, PeopleSoft application, and mid-tier software.

- *BASE_DIR*\db

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

7. Review the status messages as the script validates the files found in the base folder.

If any of the validations fail, the PeopleSoft environment setup is aborted.

If the DPK setup script was run using the `-env_type`, the script carries out only those validations that are relevant to the type passed. For example, for `-env_type midtier`, only validations appropriate for the mid-tier components are done.

```
Validating the PeopleSoft DPKs in the Folder:
Validating the PeopleSoft Application DPK:           [ OK ]
Validating the PeopleSoft PeopleTools DPK:          [ OK ]
Validating the Oracle Database Server DPK:          [ OK ]
Validating the PeopleSoft PeopleTools Client DPK:   [ OK ]
Validating the Manifest Information in DPKs:        [ OK ]
```

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

```
Extracting the DPK Archives in the Host:
Extracting the Oracle Database Server DPK Archive:   [ OK ]
Extracting the PeopleSoft PeopleTools DPK Archives: [ OK ]
Extracting the PeopleSoft HCM Application DPK Archives: [ OK ]

Extracting the Oracle Database Client DPK Archive:  [ OK ]
Extracting the 8.53 Tools Client DPK Archive:       [ OK ]
Extracting the 8.54 Tools Client DPK Archive:       [ OK ]
Extracting the 8.55 Tools Client DPK Archive:       [ OK ]
```

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 (`C:\ProgramData\PuppetLabs\Puppet/etc`) and updates the YAML files to reflect the type of PeopleSoft environment setup.

```
Setting up Puppet on the Host:
Copying PeopleSoft Puppet Modules:                   [ OK ]
Updating the Puppet Hiera YAML Files:                 [ OK ]
Updating the Role in Puppet Site File for the Host:   [ OK ]
```

The next steps vary depending on the type of PeopleSoft environment setup (full tier, mid-tier or database tier).

10. Enter a name for the database, such as HCM92.

The database name must start with a letter, have only UPPERCASE letters, include only alphanumeric characters, and be no more than 8 characters in length.

Press ENTER to accept the default, HR85501.

```
Enter the name of the database. Please ensure that the database
name starts with a letter and includes only alphanumeric characters
and is no more than 8 characters in length [HR85501]: HCM92
```

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

Press ENTER to accept the default, people.

Enter the name of PeopleSoft Connect ID. Please ensure that the id includes only alphanumeric characters and is no more than 8 in length [people]:

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

The password must be between 6 and 8 characters in length, and cannot contain any spaces, quotes, or dashes.

The window displays masking characters as you type the password. There is no default password.

Enter the PeopleSoft Connect ID Password. Please ensure that the password does not contain any spaces and quote characters and is at least 6 and no more than 8 characters in length:

Re-Enter the PeopleSoft Connect ID Password:

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

The window displays 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 the Application Server Domain Connection Password. Please ensure that the password (if provided) does not contain any spaces and quote characters and is at least 8 and no more than 30 characters in length:

Re-Enter the Application Server Domain Connection Password:

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

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

Enter a new WebLogic Server Admin Password. Please ensure that the password has at least 8 characters with at least uppercase, one number or a special character:

Re-Enter the new WebLogic Server Admin Password:

15. Enter *y* (yes) at the following prompt, if you want to connect and configure this full tier environment to an Oracle SES system running on a different host, or enter *n* to not configure SES:

Do you wish to configure SES on this Host? [y|N]:

Note. You supply configuration information for Oracle SES later in the setup.

16. 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]:

17. If you answered *yes* when asked earlier whether to configure Oracle SES on the host, you see prompts requesting configuration information.

If you configure Oracle SES, the information that you supply is used to set up connectivity between Oracle SES and the PeopleSoft system as well as to configure Oracle SES search indices.

For information on setting up Oracle SES for a PeopleSoft installation, see the chapter "Configuring

Integration Between PeopleSoft PeopleTools and Oracle SES" in the PeopleTools installation guide for your database platform.

- a. Enter *y* (yes) to the following prompt if you want to configure Oracle SES, or answer *n* (no) to continue:
Do you wish to configure SES on this Host? [y|N]:
- b. Enter the Oracle SES server host name, listening port, and enter the administrator password two times, at the following prompt:
Enter the hostname for the SES server:
Enter the port number for the SES server [7777]:
Enter the admin password for the SES server:
Re-Enter the admin password for the SES server:
- c. Enter the proxy identity user, and enter the proxy password two times at the following prompt:
Enter the proxy identity to run a search query:
Enter the proxy identity password to run a search query:
Re-Enter the proxy identity password to run a search query:
- d. Enter the call-back user, and enter the proxy password two times at the following prompt:
Enter the PeopleSoft callback username for the SES server:
Enter the PeopleSoft callback user password for the SES server:
Re-Enter the PeopleSoft callback user password for the SES server:
- e. Enter the host and port for the Integration Broker Gateway at the following prompt:
Enter the hostname for the Integration Broker Gateway [example.com]:
Enter the port for the Integration Broker Gateway [8000]:

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

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

19. If you want to continue running the initialization script interactively, 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.

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

The next steps vary depending on the type of PeopleSoft environment setup (full tier, mid-tier or database tier).

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

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

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

```
Starting the Default Initialization of PeopleSoft Environment:
```

```
Deploying Application Components:                [ OK ]
Deploying PeopleTools Components:               [ OK ]
Deploying Oracle Database Server:               [ OK ]
```

```
Setting up PeopleSoft OS Users Environment:          [ OK ]
Setting up PeopleSoft Database:                     [ FAILED]
```

The initialization of PeopleSoft environment failed.
Check the log file C:\psft\setup\psft-dpk-setup.ps1.log for the errors.
After correcting the errors, you can directly run the Puppet apply
command to continue with the initialization process.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

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

```
Starting the Default Initialization of PeopleSoft Environment:
```

```
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:           [ OK ]
Setting up PeopleSoft PIA Domain:                   [ OK ]
Configuring Pre-Boot PeopleSoft Environment:       [ OK ]
Starting PeopleSoft Domains:                        [ OK ]
Configuring Post-Boot PeopleSoft Environment:      [ OK ]
```

The initialization of PeopleSoft fulltier environment is successful.

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

Task 2-3-2: Setting Up the PeopleSoft Virtual Machine on a Linux Host Using the PeopleSoft Application DPK Setup Script

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 folder.

- There is at least 100 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.
 - You have created a base directory with writeable permission for extracting and deploying the components. The script display a default name for the base directory, but will not create it if it does not exist.
 - The user running the script *must have root permission*.
1. Extract the first zip file (*Filename.1ofn.zip*) in the same directory, *DPK_INSTALL*.

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.

- Open a command prompt as a user with root access, and run the script *DPK_INSTALL/setup/psft-dpk-setup.sh*; for example:

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

- Wait while the script locates the valid PeopleSoft zip files and extracts them.

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

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

```
Starting the PeopleSoft Environment Setup Process:
```

```
Extracting the Zip File FILENAME-1of10.zip:           [ OK ]
Extracting the Zip File FILENAME-2of10.zip:           [ OK ]
...
Extracting the Zip File FILENAME-10of10.zip:          [ OK ]
```

- Specify whether to install the Puppet software if necessary at the next prompt.

The script verifies if Puppet software is installed on the host. If not, answer *y* (yes) to install the Puppet software and *n* to abort the PeopleSoft environment setup process. The default action (if nothing is entered at the prompt) is to install the software.

If there is any error during the Puppet software installation, the script aborts the setup process. Review the log file in *DPK_INSTALL/setup*. If there are missing operating system packages, you will need to carry out additional steps.

See **Obtaining Operating System Packages Required for Puppet**.

```
Verifying if Puppet Software is Installed on the Host:
```

```
Puppet Software is not installed on the Host. If this Host is
used to setup a PeopleSoft environment, Puppet Software should
be Installed.
```

```
Do you want to proceed with the Puppet Installation? [Y|n]:
```

```
Installing Puppet Software on the Host:                 [ OK ]
```

The script verifies if the DPKs are available in *DPK_INSTALL*, and aborts with the message [FAILED] if they are not.

```
Preparing the OracleLinux VM for PeopleSoft Environment:
```

```
Checking if PeopleSoft DPKs are Present in the Filesystem: [ OK ]
```

- 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. The directory */cs1/psft* is used in this example:

```
PeopleSoft base Filesystem is used to extract the PeopleSoft DPKs as
well as for deploying PeopleSoft Components. This Filesystem should
```

be accessible on the VM and must have write permission, and should have enough free space.

```
Please Enter the PeopleSoft Base Filesystem [/opt/oracle/psft]: /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. A full setup of a PeopleSoft environment (database, mid-tier, and Oracle SES) takes about 100 GB of disk space.

```
Checking if PeopleSoft Base Filesystem has Enough Free Space: [ OK ]
```

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

- *BASE_DIR*/dpk

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

- *BASE_DIR*/pt

The script uses this directory to deploy PeopleSoft PeopleTools and PeopleSoft application components.

- *BASE_DIR*/db

The script uses this directory to deploy Oracle database server and deploy the PeopleSoft database data files. It also uses this directory to set up Oracle inventory if there is no inventory present on the host.

6. If the default home directory is not writable, enter a new location 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. The script checks if the default home directory for the PeopleSoft users (/home) is writable. If not, it will prompt the user to enter a new location to be used for creating the home directories for these local users.

```
Checking if Default User Home Directory /home is Writable: [FAILED]
```

The PeopleSoft environment setup creates local users on the VM. The default Home directory for these users is /home. Please ensure this directory is writable or provide a new directory on the VM that is writable.

```
Please Enter a directory on the VM that is writable [/home]: /ds1
Are you happy with your answer? [y|n|q]:
```

If the /home directory is writable, no response is required.

```
Checking if Default User Home Directory /home is Writable: [ OK ]
```

7. Review the status messages as the script validates the files found in the shared folder.

If any of the validations fail, the PeopleSoft environment setup is aborted.

If the DPK setup script was run using the `--env_type`, the script carries out only those validations that are relevant to the type passed. For example, for `--env_type midtier`, only validations appropriate for the mid-tier components are done.

```
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 PeopleSoft PeopleTools Client DPK:    [ OK ]
Validating the Manifest Information in DPKs:         [ OK ]

```

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

```

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 ]
Extracting the PeopleSoft PeopleTools HCM DPK Archives: [ OK ]

```

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

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

```

Setting up Puppet on the VM:
Generating Hiera-Eyaml Puppet Backend Encryption Keys: [ OK ]
Copying PeopleSoft Puppet Modules:                     [ OK ]
Updating the Puppet Hiera YAML Files:                   [ OK ]
Updating the Role in Puppet Site File for the VM:       [ OK ]
Applying Linux customizations to Puppet Hiera YAML Files: [ OK ]

```

The next steps vary depending on the type of PeopleSoft environment setup (full tier, mid-tier or database tier).

10. Enter a name for the database, such as HCM92.

The database name must start with a letter, have only UPPERCASE letters, include only alphanumeric characters, and be no more than 8 characters in length.

Press ENTER to accept the default, PSFTDB.

```

Enter the name of the database. Please ensure that the database
name starts with a letter and includes only alphanumeric characters
and is no more than 8 characters in length [PSFTDB]: HCM92

```

11. Enter the PeopleSoft connect ID name, following the guidelines in the prompt.

Press ENTER to accept the default, people.

```

Enter the name of PeopleSoft Connect ID. Please ensure that the
id includes only alphanumeric characters and is no more than 8
in length [people]:

```

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

The password must be between 6 and 8 characters in length, and cannot contain any spaces, quotes, or dashes.

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

```

Enter the PeopleSoft Connect ID Password. Please ensure that the
password does not contain any spaces and quote characters and is
at least 6 and no more than 8 characters in length:
Re-Enter the PeopleSoft Connect ID Password:

```

13. 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 the Application Server Domain Connection Password. Please ensure that the password (if provided) does not contain any spaces and quote characters and is at least 8 and no more than 30 characters in length:

Re-Enter the Application Server Domain Connection Password:

14. 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. There is no default password.

Enter a new WebLogic Server Admin Password. Please ensure that the password has at least 8 characters with at least one number or a special characters:

Re-Enter the new WebLogic Server Admin Password:

15. Enter *y* (yes) to the following prompt if you want to connect and configure this full tier environment to an Oracle SES system running on a different host, or enter *n* (no) to continue without configuring Oracle SES.

Note. You supply configuration information for Oracle SES later in the setup process.

Do you wish to configure SES on this Host? [y|N]:

16. 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]:

17. If you answered *yes* when asked earlier whether to configure Oracle SES on the host, you see prompts requesting configuration information.

If you configure Oracle SES, the information that you supply is used to set up connectivity between Oracle SES and the PeopleSoft system as well as to configure Oracle SES search indices.

For information on setting up Oracle SES for a PeopleSoft installation, see the chapter "Configuring Integration Between PeopleSoft PeopleTools and Oracle SES" in the PeopleTools installation guide for your database platform.

a. Enter *y* (yes) to the following prompt if you want to configure Oracle SES, or enter *n* (no) to continue:

Do you wish to configure SES on this Host? [y|N]:

b. Enter the Oracle SES server host name, listening port, and enter the administrator password two times, at the following prompt:

Enter the hostname for the SES server:

Enter the port number for the SES server [7777]:

Enter the admin password for the SES server:

Re-Enter the admin password for the SES server:

c. Enter the proxy identity user, and enter the proxy password two times at the following prompt:

Enter the proxy identity to run a search query:

Enter the proxy identity password to run a search query:

Re-Enter the proxy identity password to run a search query:

- d. Enter the call-back user, and enter the proxy password two times at the following prompt:

```
Enter the PeopleSoft callback username for the SES server:
Enter the PeopleSoft callback user password for the SES server:
Re-Enter the PeopleSoft callback user password for the SES server:
```

- e. Enter the host and port for the Integration Broker Gateway at the following prompt:

```
Enter the hostname for the Integration Broker Gateway [example.com]:
Enter the port for the Integration Broker Gateway [8000]:
```

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

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

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

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

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

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

```
Starting the Default Initialization of PeopleSoft Environment:
```

```
Deploying Application Components:                          [ OK ]
Deploying PeopleTools Components:                         [ OK ]
Deploying Oracle Database Server:                         [ OK ]
Setting up PeopleSoft OS Users Environment:               [ OK ]
Setting up PeopleSoft Database:                           [FAILED]
```

The initialization of PeopleSoft environment failed.

Check the log file /opt/oracle/psft/setup/psft-dpk-setup.log<date> for⇒ the errors.

After correcting the errors, you can directly run the Puppet apply command to continue with the initialization process.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

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

```
Starting the Default Initialization of PeopleSoft Environment:
```

```
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:                 [ OK ]
Setting up PeopleSoft PIA Domain:                        [ OK ]
Configuring Pre-Boot PeopleSoft Environment:              [ OK ]
Starting PeopleSoft Domains:                              [ OK ]
Configuring Post-Boot PeopleSoft Environment:              [ OK ]
```

The initialization of PeopleSoft fulltier environment is successful.

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

Task 2-3-3: Obtaining Operating System Packages Required for Puppet

The Puppet software used for the DPK deployment is dependent on certain OS-level packages, which may not be present in the delivered DPKs. In this case, you can use the information in the log file generated when you run the DPK setup script to determine which packages are needed. It is the responsibility of the user to obtain and install the required packages.

This is a one-time requirement, for a specific Puppet version, the first time the host is set up. If you are using a virtual Microsoft Windows or Linux OS, depending upon your organization's standards, you can add the missing packages to the standard OS from which you instantiate VMs, or create a custom OS image and re-use it later.

1. If you are using a virtual OS platform, create a new VM instance.
2. Use the DPK setup script, `psft-dpk-setup.ps1` (Microsoft Windows), or `psft-dpk-setup.sh` (Linux) to deploy on the host.
3. Review the deployment log file in `DPK_INSTALL\setup`.

The log file will list any missing OS packages.

4. Remove the PeopleSoft environment created by the DPK deployment, using `psft-dpk-setup.ps1 -cleanup` (Microsoft Windows) or `psft-dpk-setup.sh --cleanup` (Linux).

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

5. If you are using a virtual OS platform, recreate the VM instance.
6. Obtain and load the missing OS packages on the new OS instance.
7. Rerun the DPK setup script.

The log file should not list any missing packages.

Task 2-4: Using the Samba Shared Drive Folders

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 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 on just 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 `/opt/oracle/psft/pt/` 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 local Oracle Linux directories on the virtual machine, and the shared drive folders that are made available:

Local Oracle Linux Directory	Shared Drive Folder	Description
<code>/opt/oracle/psft/pt/tools_client</code>	<code>tools_client</code>	This directory includes installation software for all current PeopleTools client versions, and the Oracle database client.
<code>/opt/oracle/psft/db/pi_home</code>	<code>pi_home</code>	Change Assistant file repository

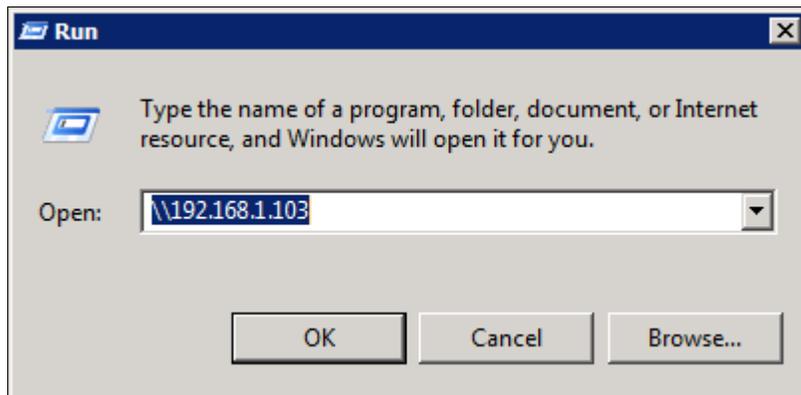
See *PeopleTools: Change Assistant and Update Manager*, "Configuring the Microsoft Windows Client Running Change Assistant" for more information on selecting the appropriate client installations for your environment.

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.

Task 2-4-1: 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:

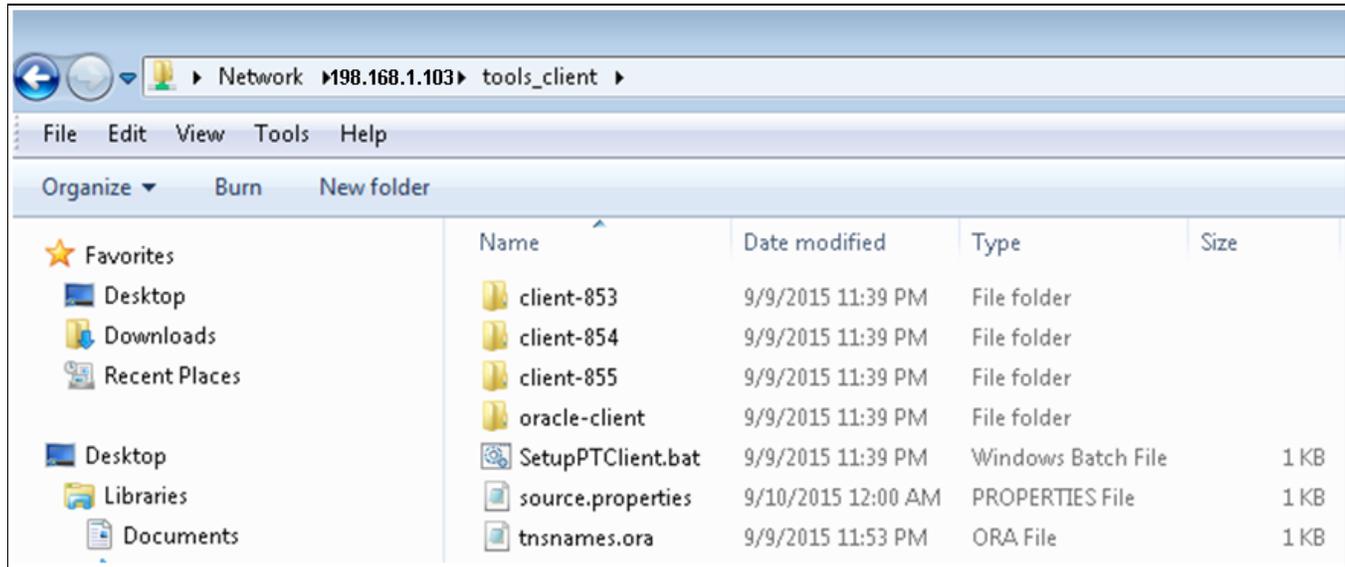


Microsoft Windows Run dialog box with IP address

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 following example shows the `tools_client` share drive in a Windows Explorer window. The share drive includes the `SetupPTClient.bat` script, `tnsnames.ora` and `source.properties` files, and folders for `client-853`, `client-854`, `client-855`, and `client-855`.



The `tools_client` shared drive folder

On Microsoft Windows 7 (64-bit) operating systems there are 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 the following procedure describes a workaround which may be used to gain access. You should check with your network administrator before attempting to implement this workaround. An alternative to this workaround would be to use SFTP to copy the shared folder contents to local folders on your machine.

1. Select Start, Run, and enter `regedit.exe` to open the Microsoft Windows registry.
2. Locate this folder:
`HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\LanmanWorkstation\Parameters`
3. For the subkey `RequireSecuritySignature`, change the value from 1 to 0.
4. Reboot the machine.

Task 2-5: Deploying the PeopleTools Client 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.

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 deployment can be used, for example, to install Change Assistant without carrying out a full deployment.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, PeopleSoft PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2.

This section assumes that:

- You downloaded the PeopleSoft DPKs to a location known 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.

If you deployed on a Linux operating system, either using VirtualBox or using the DPK setup script, the PeopleSoft virtual machine setup 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* folder 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*.

To set up the PeopleTools Client DPK:

1. Verify that the Microsoft Windows folders options are set to show known file extensions.

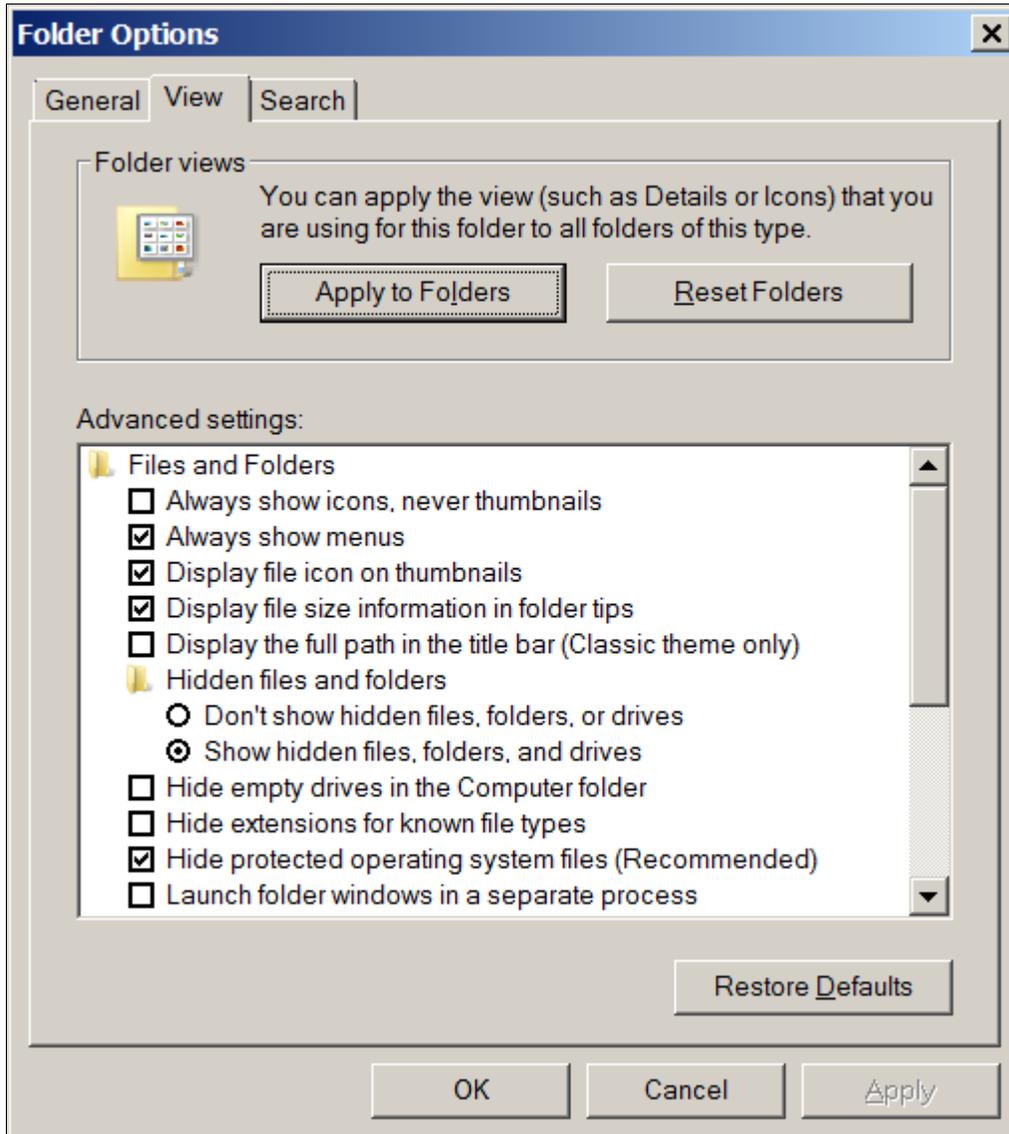
Hidden file extensions may interfere with the script. To show file extensions, for example:

- a. Open Windows Explorer and select Tools, Folder Options.

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

- b. On the Folder Options dialog box, select the View tab.

- c. Verify that the check box for Hide extensions for known file types is not selected, as shown in this example:



Folder Options dialog box: View tab

- d. Click OK to close the box.
- Open a command prompt, running as administrator.
 - 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 C:\psft\pt\tools-client folder. 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 folder includes the following:

- client-853

The client-853 folder includes a Readme file, a manifest with version information, archives, and scripts for deployment of the PeopleSoft PeopleTools 8.53 client home folder.

- client-854

The client-854 folder includes a Readme file, a manifest with version information, archives, and scripts for deployment of the PeopleSoft PeopleTools 8.54 client home folder.

- client-855

The client-855 folder includes a Readme file, a manifest with version information, archives, and scripts for deployment of the PeopleSoft PeopleTools 8.55 client home folder.

- oracle-client

The oracle-client folder includes a Readme file, a manifest with version information, archives, and scripts for deployment of the Oracle 12c database client home folder.

- SetupPTClient.bat — Interactive script that installs the PeopleSoft PeopleTools components such as Application Designer and Change Assistant.

You supply information such as the PeopleSoft PeopleTools release and the RDBMS platform.

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

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

- 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 tnsnames.ora entry with the one described here, you must change this setting in order for your PeopleTools or Change Assistant clients to connect to the PUM source database within the 12c database server. For example:

```

HCMDB =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP) (HOST = server1.example.com) (PORT ==>
1522))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = HCMDB)
    )
  )

```

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:

```
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.

- The setup script deploys to drive C:\ by default. Beginning with PeopleSoft PeopleTools 8.55.04, to deploy to a different drive, you can use the option `-d <drive>`:

```
SetupPTClient.bat -d E
```

This option installs all specified software (such as Change Assistant), installation and temporary directories, and log files to the specified drive, E:\ in this example. The drive can be any valid local or

mapped shared drive.

- To enable logging, include the option `-l`:
`SetupPTClient.bat -l`

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]: y
```

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 8.55 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 8.53.10, select option *1*, 8.53.24.

Note. Oracle recommends that you install the PeopleTools client tools from the installation folders 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, 8.54.14. Choose the release/patch for your target environment.

```
Setting up the Target PeopleTools client deployment.
Please select a Target client to deploy:
1. 8.53.24
2. 8.54.14
3. 8.55.01
```

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

```
Target Tools Version: 8.54.14
```

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. DB2 for LUW
3. Microsoft SQL Server
4. 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 8.55.01
Deploying Target PeopleTools 8.55.01 Client in C:\PT8.55.01_Client
Validating compatible Oracle DB Client for Source PeopleTools 8.55.01
Deploying Source PeopleTools 8.55.01 Client in C:\PT8.55.01_Client
Installing Change Assistant for PeopleTools 8.55.01 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 12c database client for the source (PI)
The setup process determines whether a 64-bit Oracle 12c database client is present on the Microsoft Windows client machine for connectivity to the source database. If not, the setup process installs it.
- Oracle 12c 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. PeopleSoft PeopleTools 8.55 and 8.54 require a 64-bit Oracle 12c database client installation. PeopleSoft PeopleTools 8.53 requires the 32-bit Oracle 12c database client. If the correct Oracle database client is not present, the setup process installs it.
- PeopleSoft PeopleTools Client for the source (PI).
The source client tools are installed in C:\PT<release_number>_Client, where <release_number> refers to the PeopleSoft PeopleTools release and patch; for example, C:\PT8.55.02_Client.
- PeopleSoft PeopleTools Client for the target.
The source client tools are installed in C:\PT<release_number>_Client, where <release_number> refers to the PeopleSoft PeopleTools release and patch; for example, C:\PT8.54.14_Client.
- Change Assistant installation
Change Assistant is installed in C:\Program Files\PeopleSoft\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

Using and Maintaining the PeopleSoft Environment

This chapter discusses:

- Using the PeopleSoft Installation
- Using COBOL
- Removing a Deployed PeopleSoft Environment
- Applying CPUs, POCs, and IDDAAs
- Completing Post-Deployment Activities

Task 3-1: Using the PeopleSoft Installation

This section discusses:

- Reviewing the PeopleSoft Environment
- Reviewing the File System and Users
- Managing PeopleTools Domains with PSADMIN
- Changing the Access for PI_HOME

Reviewing the PeopleSoft Environment

After you complete the initialization of the virtual machine the PeopleSoft installation will be available. This section includes brief information to help you work with the PeopleSoft environment. For detailed definitions, and information on working with the components in a PeopleSoft installation, see the PeopleSoft documentation referenced earlier.

The specific components that comprise your environment, such as the database platform that your target database runs on, and the release/patch level of your database client, will impact the way you set up your installation. Remember to review *PeopleTools: Change Assistant and Update Manager* for information on configuring the PeopleSoft installation when carrying out a PeopleSoft application update before you carry out the procedures in this chapter.

See "About this Documentation," Related Information.

Reviewing the File System and Users

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	The binary installation files are placed into a secure <i>ps_home</i> < <i>peopletools_patch_version</i> > directory, where < <i>peopletools_patch_version</i> > is the full release, for example 8.55.01.	<ul style="list-style-type: none"> On Linux, /opt/oracle/psft/pt/<i>ps_home</i><<i>peopletools_patch_version</i>> For example, /opt/oracle/psft/pt/<i>ps_home</i>8.55.01. On Microsoft Windows, C:\psft\pt\<i>ps_home</i><<i>peopletools_patch_version</i>> For example, C:\psft\pt\ps_home8.55.01 	This directory can only be written to by the PeopleSoft administrator, psadm1.
PS_CFG_HOME	The Application Server and Process Scheduler server configuration files are placed into a <i>PS_CFG_HOME</i> directory named < <i>peopletools_major_version</i> >, where < <i>peopletools_major_version</i> > does not include patch numbers; for example, 8.55.	<ul style="list-style-type: none"> On Linux, /home/psadm2/psft/pt/<<i>peopletools_major_version</i>> On Microsoft Windows, C:\%USERPROFILE%\psft\pt/<<i>peopletools_major_version</i>> For example, if the USERPROFILE environment variable is C:\Users\username, the location is C:\Users\username\psft\pt\8.55. 	This directory is owned by psadm2.
PS_APP_HOME	The PeopleSoft application installation files are located in the <i>ps_app_home</i> directory.	<ul style="list-style-type: none"> On Linux, /opt/oracle/psft/ps_app_home On Microsoft Windows, C:\psft\pt\ps_app_home 	This directory can only be written to by psadm3.

Directory	Description	Default Location	Access
PI_HOME	<p>This is the file repository that Change Assistant uses when you define a Change Package in PeopleSoft Update Manager.</p> <p>Note. The directory contents will be accessed by Change Assistant. Manual changes are not recommended.</p>	<ul style="list-style-type: none"> On Linux, /opt/oracle/psft/ptdb/pi_home On Microsoft Windows, C:\psft\pt\pi_home 	<p>This directory requires read access for Change Packages, and read and write access to apply PeopleSoft Release Patchsets (PRPs).</p> <p>To apply PeopleSoft Release Patchsets (PRPs), use the instructions in the section Changing the Access for PI_HOME to change the access to read/write and disable guest login.</p>
ORACLE_HOME (Oracle RDBMS software)	<p>This includes the Oracle RDBMS database server and client connectivity software, including the SQL*Plus program.</p> <p>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.</p> <p>Note. The database listener for the RDBMS hosting the PeopleSoft PeopleTools tables is 1522.</p>	<ul style="list-style-type: none"> On Linux, /opt/oracle/psft/db/oracle-server On Microsoft Windows, C:\psft\db\oracle-server 	<p>This directory is owned by user oracle.</p>
Oracle WebLogic	<p>This includes the installation files for the Oracle WebLogic web server.</p>	<ul style="list-style-type: none"> On Linux, /opt/oracle/psft/pt/bea/wlserver On Microsoft Windows, C:\psft\pt\bea\wlserver 	
Oracle Tuxedo	<p>This includes the installation files for Oracle Tuxedo.</p>	<ul style="list-style-type: none"> On Linux, /opt/oracle/psft/pt/bea/tuxedo On Microsoft Windows, C:\psft\pt\bea\tuxedo 	

Directory	Description	Default Location	Access
PeopleSoft database files (on Oracle RDBMS)	This includes the Oracle database files and tables for the PeopleSoft application.	<ul style="list-style-type: none"> On Linux, /opt/oracle/db/oradata On Microsoft Windows, C:\psft\pt\db\oradata 	<p>The owner of the database tables is oracle and its group is oinstall.</p> <p>Note. This is different from the users for the PeopleSoft installation and configuration.</p>
Other directories	The rest of the environment, outside <i>PS_HOME</i> and <i>PS_CFG_HOME</i> . The file system ownership and permissions are similar to typical Oracle Linux and Microsoft Windows installations.	NA	These directories are owned by root on Linux OS.

The deployed configuration includes the default users and default passwords described in the following table.

Important! All default, non-root passwords are set to expire immediately. On the first login of one of the non-root users, the system will prompt you to provide new passwords. This applies to the passwords in the following table except SYSADM and root.

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 password 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	Role Definition
psadm1	Oradmin (the first character is the number zero)	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)	The PeopleTools domain user who creates and configures the Application Server domain, Process Scheduler (batch server) domain, and the PIA. This user cannot write to <i>PS_HOME</i> , but has read-execute access.

User Name	Default Password	Role Definition
psadm3	Oradmin (the first character is the number zero)	The PeopleSoft installation administrator who owns <i>PS_APP_HOME</i> .
sesadmin	Oradmin (the first character is the number zero)	The SES administrator user. This is the user who owns the SES directories. This applies to the VirtualBox deployment.
SYSADM	SYSADM	The Oracle access ID and password. Use this to log in to the database in 2-tier mode.
oracle	oracle	The Oracle Database Server user name.
root	There is no default password for root. The password is specified during the startup procedure.	The root user for the virtual machine.

See Also

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

PeopleTools Installation for Oracle, "Configuring Integration Between PeopleSoft PeopleTools and Oracle SES"

Task 3-1-1: Managing PeopleTools Domains with PSADMIN

Use the PSADMIN utility to manage any of the PIA, Application Server, or Process Scheduler domains. You must first sign in with the PeopleTools domain user psadm2, described in the section *Reviewing the File System and Users*. When you sign in as the PeopleTools domain user, the psconfig.sh script is automatically invoked through the user's profile. This is referred to as sourcing the psconfig.sh script. This ensures that all of the required environment variables are set prior to working with PSADMIN. You can perform all the usual administrative options for PIA, Application Server, and Process Scheduler domains using PSADMIN. You may reconfigure the existing domains, shut them down, restart them and create additional domains if necessary. The environment as delivered has however been sufficiently configured to perform many of the activities for which this virtual machine has been created.

See Also

PeopleTools: System and Server Administration, "Using the PSADMIN Utility"

Task 3-1-2: Changing the Access for PI_HOME

If you are applying PeopleSoft Release Patchsets (PRPs), use these instructions to enable user/password login, and to change the access level to read and write.

1. Using Secure Shell (SSH) log in to the virtual appliance as the root user.
2. Stop the Samba server by running the command `/etc/init.d/smb stop`.

3. In the command prompt window, run the command `smbpasswd -a psadm3`.
4. Enter the psadm3 user's UNIX password at this prompt:

```
New SMB password:  
Retype new SMB password:
```

Note. Upon successful completion, you should see the message "Added user psadm3."

5. Change directory to `/etc/samba` by running the command `cd /etc/samba`.
6. Back up the file `/etc/samba/smb.conf`; for example:

```
cp /etc/samba/smb.conf /etc/samba/smbconf.bkup
```

7. Open the file `/etc/samba/smb.conf` file in an editor.
8. Go to the section `[pi_home]` and make the following changes:

- Change from "writeable = no" to "writeable = yes".
- Add the line "guest ok = no"
- Add the line "valid users = psadm3"

9. Review the changes in these examples:

Before:

```
[pi_home]  
path = /opt/oracle/psft/ptdb/pi_home  
writeable = no  
available = yes
```

After:

```
[pi_home]  
path = /opt/oracle/psft/ptdb/pi_home  
writeable = yes  
available = yes  
guest ok = no  
valid users = psadm3
```

10. Save the file.
11. Restart the Samba server by running the command `/etc/init.d/smb start`.
12. After you complete these steps, in order to access the `pi_home` shared drive folder, you will be required to provide the user name, `psadm3`, and the password for that user, configured in the preceding steps.

Task 3-2: Using COBOL

If you plan to use any PeopleSoft applications that require COBOL, see the information on obtaining, installing, compiling and running Micro Focus Server Express COBOL in the PeopleTools installation documentation.

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

See Also

PeopleTools Installation for Oracle for the current release, "Installing and Compiling COBOL on UNIX"
PeopleSoft Enterprise Frequently Asked Questions About PeopleSoft and COBOL Compilers, My Oracle Support, Document 747059.1

Task 3-3: Removing a Deployed PeopleSoft Environment

This section discusses:

- Understanding the Removal Process
- Using the DPK Setup Script to Remove the PeopleSoft Environment
- Using Puppet to Remove the PeopleSoft Environment
- Troubleshooting the Removal Process

Task 3-3-1: 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 or PeopleSoft application patch requires that an existing environment be cleaned up and a new one created. The cleanup process described here conducts an orderly shutdown and removal of all the configured runtime domains — Application Server, Process Scheduler, and PIA domains. And if the environment is set up as full tier, the cleanup process also stops, unplugs, and removes the PeopleSoft database and the container database respectively. Additionally, it will remove all the deployed components. The PeopleSoft environment can be cleaned up either using the PeopleSoft DPK setup script or manually.

Note. The Puppet software that is installed by the DPK setup script is not removed by the cleanup process.

Task 3-3-2: Using the DPK Setup Script to Remove the PeopleSoft Environment

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

1. Open a Windows PowerShell window; for example:
 - Select Start, and navigate to Windows PowerShell.
 - Right-click and select Run as Administrator.
2. Go to `DPK_INSTALL\setup` and run the following command:

```
./psft-dpk-setup.ps1 -cleanup
```

Note. The `cleanup` option requires a single dash on Microsoft Windows.

3. Review the cleanup log file in `DPK_INSTALL\setup`.

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

1. Open a command prompt.
2. Go to `DPK_INSTALL\setup` and run the following command:

```
sh psft-dpk-setup.sh --cleanup
```

Note. The `cleanup` option requires a double dash on Linux.

3. Review the cleanup log file in `DPK_INSTALL\setup`.

The DPK setup script displays [SUCCESS] for each step of the process, and [FAILED] if any of the steps are not successful. After completing these steps, verify that the DPK installation directories (`BASE_DIR` and its sub-directories) have been cleared. If anything remains, 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 Troubleshooting the Removal Process.

Task 3-3-3: Using Puppet to Remove the PeopleSoft Environment

Use the `puppet apply` command to remove the PeopleSoft environment manually. When you run the `puppet apply site.pp --debug --trace` command, the debug and trace messages appear in the command prompt. If you want to save them as a file, see the Puppet Labs documentation for the correct options.

See Puppet Labs Documentation, <http://docs.puppetlabs.com>.

To remove the environment manually on Microsoft Windows:

1. Open the file `C:\ProgramData\PuppetLabs\puppet\etc\data\defaults.yaml` in a text editor, such as Notepad.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Using the Puppet Hiera YAML Files for Customization."

If the `C:\ProgramData\PuppetLabs` folder is not visible when you view your folder system in Windows Explorer, change the folder options; for example:

- a. In Windows Explorer, select Tools, Folder options.
 - b. Select the View tab.
 - c. Select the option Show hidden files, folders, and drives.
2. Change the value of the `ensure` attribute from `present` to `absent`.
 3. Open a command prompt.
 4. If the Puppet environment is not set, run the following command (optional):

```
C:\>"Program Files\Puppet Labs\Puppet\bin\puppet_shell.bat"
```
 5. Change directory to the `C:\ProgramData\PuppetLabs\puppet\etc\manifests` folder.
 6. Run the following command:

```
puppet apply site.pp --debug --trace
```

Note. Both options require double dashes.

To remove the environment manually on Linux:

1. Open the file `/etc/puppet/data/defaults.yaml` in a text editor, such as `vi`.
See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Using the Puppet Hiera YAML Files for Customization."
2. Change the value of the `ensure` attribute from `present` to `absent`.
3. Open a command prompt.
4. Change directory to the `/etc/puppet/manifests` directory.

5. Run the following command:

```
puppet apply site.pp --debug --trace
```

Note. Both options require double dashes.

Task 3-3-4: Troubleshooting the Removal Process

This section includes advanced steps to be used only if the previous procedures in this section failed. 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.ps1 -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 Services.
2. Stop the services OracleService CBD<Database Name> and OracleOraDB12cHomeTNSListener by highlighting the names, right-clicking and selecting Stop.
3. Open a command prompt, running as administrator, and remove the two services with the commands:


```
sc delete OracleService CDB<Database Name>
sc delete OracleOraDB12cHomeTNSListener
```
4. In the Services window, stop ORACLE ProcMGR V12.1.3.0.0_VS2012 and TListen 12.1.3.0.0_VS2012(Port3050) by highlighting the names, right-clicking and selecting Stop.
5. In the Services window, right-click each of the services in step 4, select Properties, and copy the correct service name (rather than the alias).
6. Open a command prompt and remove the two preceding services with the command:


```
sc delete <service_name>
```
7. Open the Microsoft Windows registry; for example, select Start, Run, and enter regedit.
8. 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_OraDB12cHome (C:\psft\db by default)
 - KEY_OraTux1213Home (C:\psft\pt\bea\tuxedo by default)
 - KEY_OraWL1213Home (C:\psft\pt\bea by default)
9. In the Registry Editor, locate the HKLM\SOFTWARE\ORACLE\TUXEDO folder.

Select the 12.1.3.0.0_VS2012 key and verify that it contains references to the DPK installation locations in *BASE_DIR* (C:\psft\pt\bea\tuxedo by default).

10. In the Registry Editor, only for the keys from step 8 and 9 that reference the DPK installation locations, right-click and select Delete.
11. Close the Registry Editor window.
12. Open the file C:\Program Files\Oracle\Inventory\ContentsXML\inventory.xml in a text editor.
13. Locate the three lines that reference the DPK deployment:


```
<HOME NAME="OraWL1213Home" LOC="C:/psft/pt/bea" TYPE="O" IDX="16"/>
  <HOME NAME="OraTux1213Home" LOC="C:\psft\pt\bea\tuxedo" TYPE="O" IDX=>
  "17"/>
  <HOME NAME="OraDB12cHome" LOC="C:\psft\db\oracle-server\12.1.0.2" TYPE=>
  "O"
  IDX="18"/>
```
14. Delete only the lines referencing the DPK deployment, and save the file.
15. Remove everything under the *BASE_DIR* folder (C:\psft\db, C:\psft\dpk, and C:\psft\pt).

Note. You may get a message that some of the file names are too big for the recycle bin. Click OK to accept.

16. Remove C:\User*<username>*\psft\pt\8.55 (PS_CFG_HOME).

Task 3-4: Applying CPUs, POCs, and IDDAs

This section discusses:

- Understanding CPUs, POCs, and IDDAs
- Prerequisites
- Using the DPK Setup Script to Apply Fixes

Understanding CPUs, POCs, and IDDAs

This section describes how to use the DPK setup script to apply fixes to a new PeopleSoft environment that was deployed using PeopleSoft DPKs. The types of fixes that can be applied include the following:

- **Critical Patch Update (CPU)**
 These critical patches must be applied to each Oracle product used with the PeopleSoft installations, including Oracle WebLogic, Oracle Tuxedo, Oracle Database server, and Oracle Database client. Oracle releases CPUs quarterly.
 See Critical Patch Updates, Security Alerts and Third Party Bulletin, <http://www.oracle.com/technetwork/topics/security/alerts-086861.html>.
- **Instrumented Development Diagnostic Aid (IDDA)**
 Instruments designed to collect information about the customer environment to help with debugging a problem. IDDAs are typically provided in zip file format.
- **Proof of Concept (POC)**
 A delivery method for severe customer issues that is typically designed to be a workaround for a specific issue, to be used until the customer can install the next official patch. POCs are typically provided in a zip file format.

Note. This feature is supported only for new environments. It is not supported for existing environments.

Prerequisites

To use this procedure, your environment must fulfill the following requirements:

- The procedure applies only to an environment that was newly deployed using the DPKs for PeopleSoft PeopleTools 8.55.06 and later patch releases.
- The procedure applies only to mid-tier environments on Linux operating systems.

Task 3-4-1: Using the DPK Setup Script to Apply Fixes

To apply fixes (CPUs, POCs, and IDDA):

1. Place the zip files for the fixes that you want to apply into a single directory, referred to here as <FIXES_DIR>.
2. Create a file named psft_patches.yaml and place it in the same directory, <FIXES_DIR>.

The psft_patches.yaml file contains the information about the patches of each component to be applied.

This is a sample psft_patches.yaml file for Oracle WebLogic, Oracle Tuxedo, and Oracle Database patches:

```
---
weblogic_patches:
  patch_file: /u01/app/oracle/product/dpk/patches/p21983457_121300_⇒
Generic.zip

tuxedo_patches:
  patch_file: /u01/app/oracle/product/dpk/patches/p22389246_121300_⇒
Linux-x86-64.zip

oracle_server_patches:
  patch_file: /u01/app/oracle/product/dpk/patches/p22191659_121020_⇒
Linux-x86-64.zip
```

Use the following criteria in creating psft_patches.yaml:

- Begin the file with three dashes (- - -).
- Include an entry for each CPU, POC, or IDDA.
- Use the indentation given in the sample above.
- For each component, the patch_file entry should include the complete path and full name of the zip file in <FIXES_DIR>:

```
<COMPONENT_NAME>
  patch_file: <FIXES_DIR>/<ZIP_FILE_NAME>
```

In the patch_file entry for Oracle WebLogic in the example above, <FIXES_DIR> is /u01/app/oracle/product/dpk/patches, and <ZIP_FILE_NAME> for the Oracle WebLogic patch is p21983457_121300_Generic.zip.

3. Run the DPK setup script with the option --patches_dir and the directory containing the patch zip files; for example:

```
sh ./psft-dpk-setup.sh --patches_dir <FIXES_DIR>
```

4. View the DPK setup script log to verify that the fixes were applied.

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

Search the file for the fix file number.

Task 3-5: 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 *PeopleTools Installation for Oracle*, "Setting Up Process Scheduler on UNIX."
- Make additional configuration changes to the configured mid-tier components, such as changing 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, http://download.oracle.com/peopletools/documents/Securing_PSFT_App_Environment_May2010%20v4.pdf.
- 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

Using the PeopleSoft Deployment Packages in Oracle VM 3.1 and Later

This appendix discusses:

- Understanding the Support for PeopleSoft Deployment Packages in Oracle VM 3.1 and Later
- Prerequisites
- Using the PeopleSoft Shell OVA to Create a Linux VM
- Starting the VM and Setting Up the PeopleSoft Environment

Understanding the Support for PeopleSoft Deployment Packages in Oracle VM 3.1 and Later

The previous chapters of this document discuss deploying the PeopleSoft Deployment Packages (DPKs) in a VirtualBox as well as on Linux and Microsoft Windows hosts ("bare-metal" and virtual). This appendix describes the steps required to use the PeopleSoft VirtualBox DPKs in Oracle VM 3.1 and later. Oracle VM is an enterprise-class server virtualization solution comprised of Oracle VM Server for x86, Oracle VM Server for SPARC, and Oracle VM Manager.

Note. This supplementary information may be used if you choose to use Oracle VM 3.1 or later to host the PeopleSoft environments using the DPKs. Note that this information is provided as a courtesy and has not undergone Oracle's normal testing processes. For information on the hosts that are certified for the PeopleSoft DPKs, see the Prerequisites section of this documentation.

Oracle VM has the advantage of being designed for enterprise-class deployment. However, in considering this type of deployment, keep in mind that when setting up the PeopleSoft environment in Oracle VM, there are differences in the network security. For example, it is possible to deploy a PeopleSoft environment on VirtualBox with a host-only configuration, and install PeopleSoft Change Assistant and other PeopleSoft PeopleTools client tools on the Microsoft Windows OS system on the same physical machine. This type of host-only security is not available with Oracle VM. By its very nature a virtual machine that is running on Oracle VM is only accessible over a virtual network. This has implications around security of the OS, users, network access, and so on.

Note. This process will not work in versions of Oracle VM before Oracle VM 3.1. While it may be possible to use the PeopleSoft VirtualBox shell OVA in earlier versions of Oracle VM, the functional experience would be very different.

Using a PeopleSoft VirtualBox shell OVA in Oracle VM includes the following high-level procedures:

1. Import the PeopleSoft shell OVA file to Oracle VM.
2. Create a Linux VM template from the OVA.
3. Configure the template.

4. Create a VM from the template.
5. Start the VM in Oracle VM.
6. Set up the PeopleSoft environment.

See Also

Oracle® VM User's Guide for Release 3.1.1, Oracle VM Release 3.1.1 Documentation, http://docs.oracle.com/cd/E27300_01/

Oracle Virtualization Web site, <http://www.oracle.com/virtualization>

Prerequisites

This section assumes that you have installed Oracle VM 3.1 or later.

You may have already obtained the PeopleSoft VirtualBox DPKs, including the shell OVA, from My Oracle Support. If not, use these steps to locate the PeopleSoft VirtualBox DPKs for the PeopleSoft Update Images (PIs):

1. Go to the PeopleSoft Update Manager Home Page in My Oracle Support and locate the home page for your PeopleSoft application.

The home pages include links to the current PeopleSoft Update Images (PIs.)

2. Select the link for the VirtualBox DPK to access the DPKs in the Patches & Updates area.
-

Note. Alternatively, you can search in My Oracle Support Patches and Updates for your PeopleSoft application. Select the VirtualBox (Generic Platform) patch.

3. Download the DPK zip files.

The PeopleSoft Update Images are comprised of 15 DPK zip files; for example, HCM-920-UPD-016-OVA_#of15.zip. Download the first eleven files, *Filename_1of15.zip* to *Filename_11of15.zip*. The PeopleSoft VirtualBox shell OVA is zip file *Filename_11of15.zip*. The last four zip files contain files for Oracle SES. This procedure does not support using Oracle SES.

4. Extract (unzip) *Filename_11of15.zip* to obtain the PeopleSoft VirtualBox shell OVA file; for example, VBOX_8_55_XXXXXX_SHELL.ova (XXXXXX represents a date stamp).
5. Place the OVA file on an HTTP or FTP server from which Oracle VM Manager can import it.

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

Task A-1: Using the PeopleSoft Shell OVA to Create a Linux VM

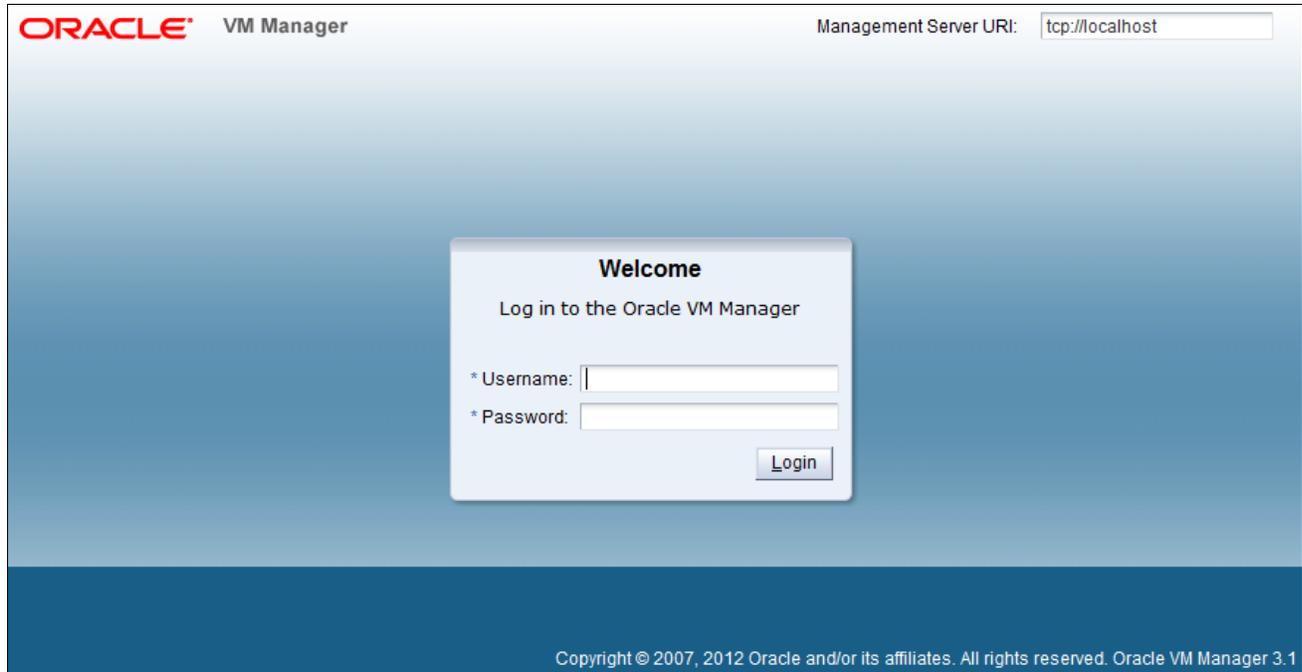
This section discusses:

- Importing the OVA File to Oracle VM
- Creating a Template from the OVA File
- Editing the Template in Oracle VM
- Creating a VM from the New Template

Task A-1-1: Importing the OVA File to Oracle VM

To import the OVA file into Oracle VM Manager:

1. Log in to Oracle VM Manager, as shown in this example.

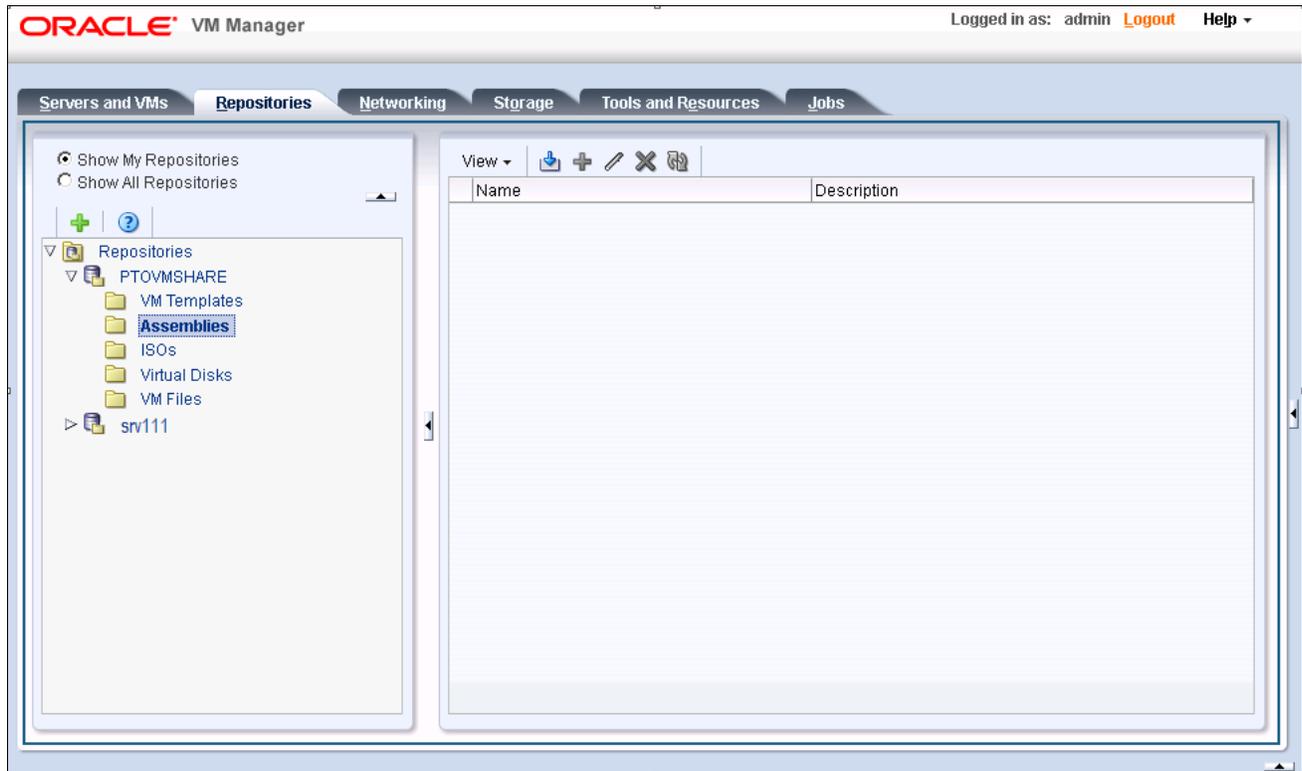


Oracle VM Manager Log in window

2. Select the Repositories page.
3. Select the repository into which you want to import the OVA.

4. Highlight Assemblies in the repository tree, and click Import VM assembly (the green plus sign above the repository tree).

In this example, the PTOVMSHARE repository tree is expanded, and the Assemblies folder is highlighted.



Oracle VM Manager Repositories page

5. In the Import VM Assembly dialog box, enter the following information:



Import VM Assembly dialog box

- *Server*: Select the Oracle VM server from the drop-down list to use to import the file. In the example the server is srv222.
- *VM Assembly download location*: Enter the URL, including the file name, for the OVA file that you placed in the FTP or HTTP server.
This example shows an FTP server location. In the example, the location is ftp://testora:testora@xmpl.com//data1/ora/export/FSDMO-853-11.ova. Replace the name used in the example with the correct name for your environment.
- Click OK to import the OVA file.

See *Oracle® VM User's Guide for Release 3.1.1*, "Virtual Machine Resources."

Task A-1-2: Creating a Template from the OVA File

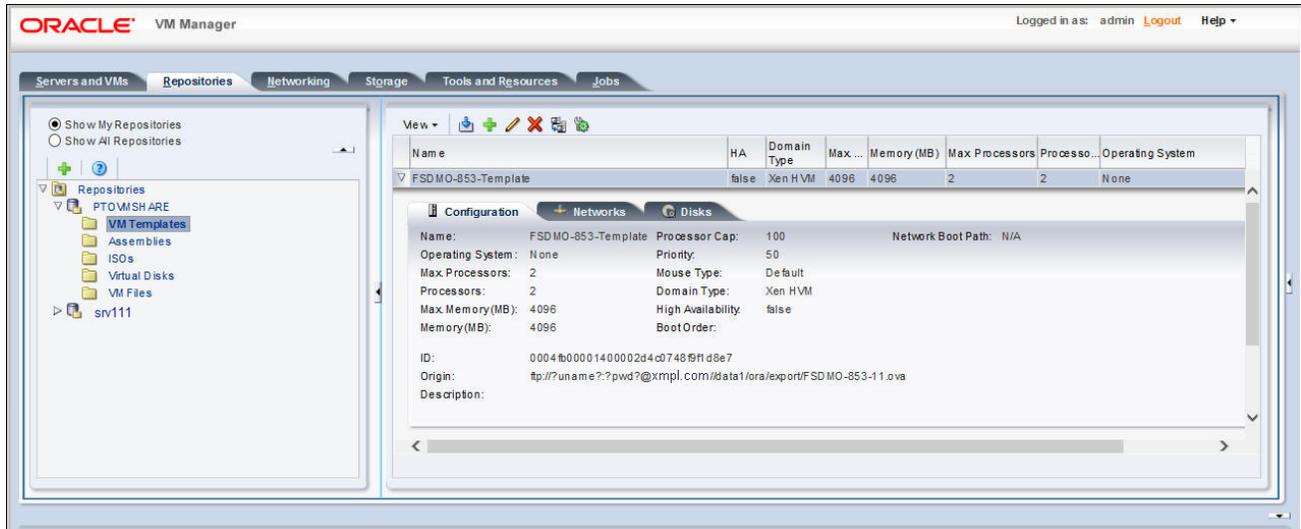
To create a virtual machine template from the OVA:

1. In Oracle VM Manager, select the Repositories page.
2. Select the repository that contains the imported OVA.
3. Highlight Assemblies in the repository tree, and Create VM Template (the green plus sign icon).
4. In the Create VM Template dialog box, enter the following information:
 - *Assembly Virtual Machines*: Specify the virtual machine in the assembly from which to create a template, which in this case is the imported OVA.
 - *VM Template Name*: Provide a name for the template.
 - *Description*: Provide an optional description.
5. Click OK to create the template.

The template is created in the same repository where the OVA file was located.

- Highlight the template name in the management pane on the right, and select the Configuration page.

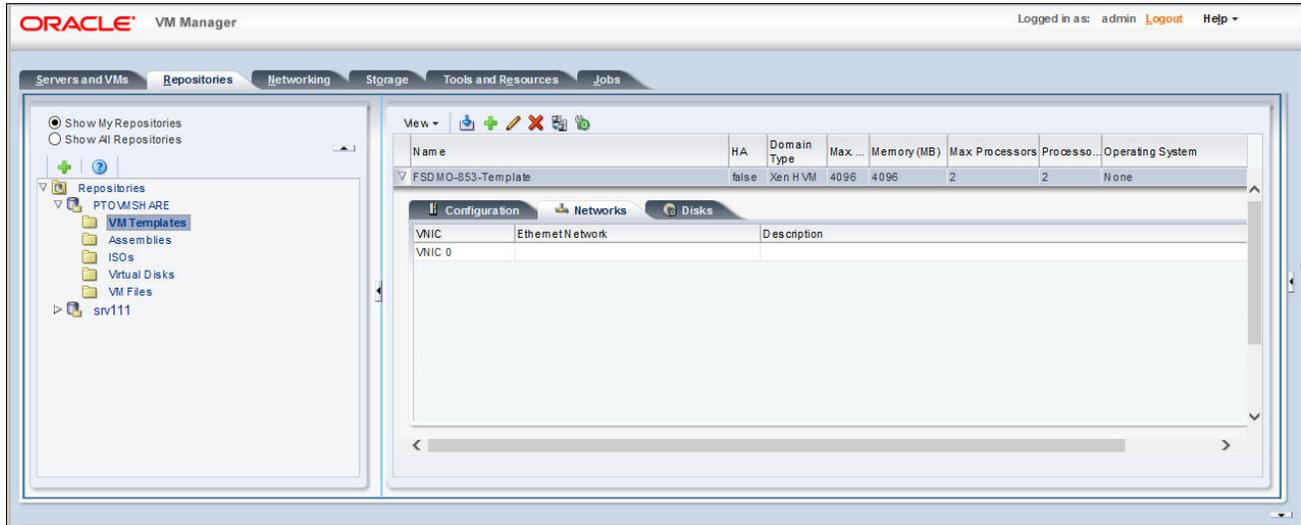
After importing and creating a template, you can verify that it is available in the repository by reviewing the information on the Configuration page, as seen in this example. The Configuration page includes information such as template name, number of processors, amount of memory, and domain type.



Oracle VM Manager Repositories page with the Configuration page for the imported template

7. Review the information on the Networks page, as seen in this example.

At this point, the Networks information indicates that there is no virtual network associated with the template. The virtual network is assigned in the following section, Editing the Template in Oracle VM.



Oracle VM Manager Repositories page with the Networks page for the imported template

Task A-1-3: Editing the Template in Oracle VM

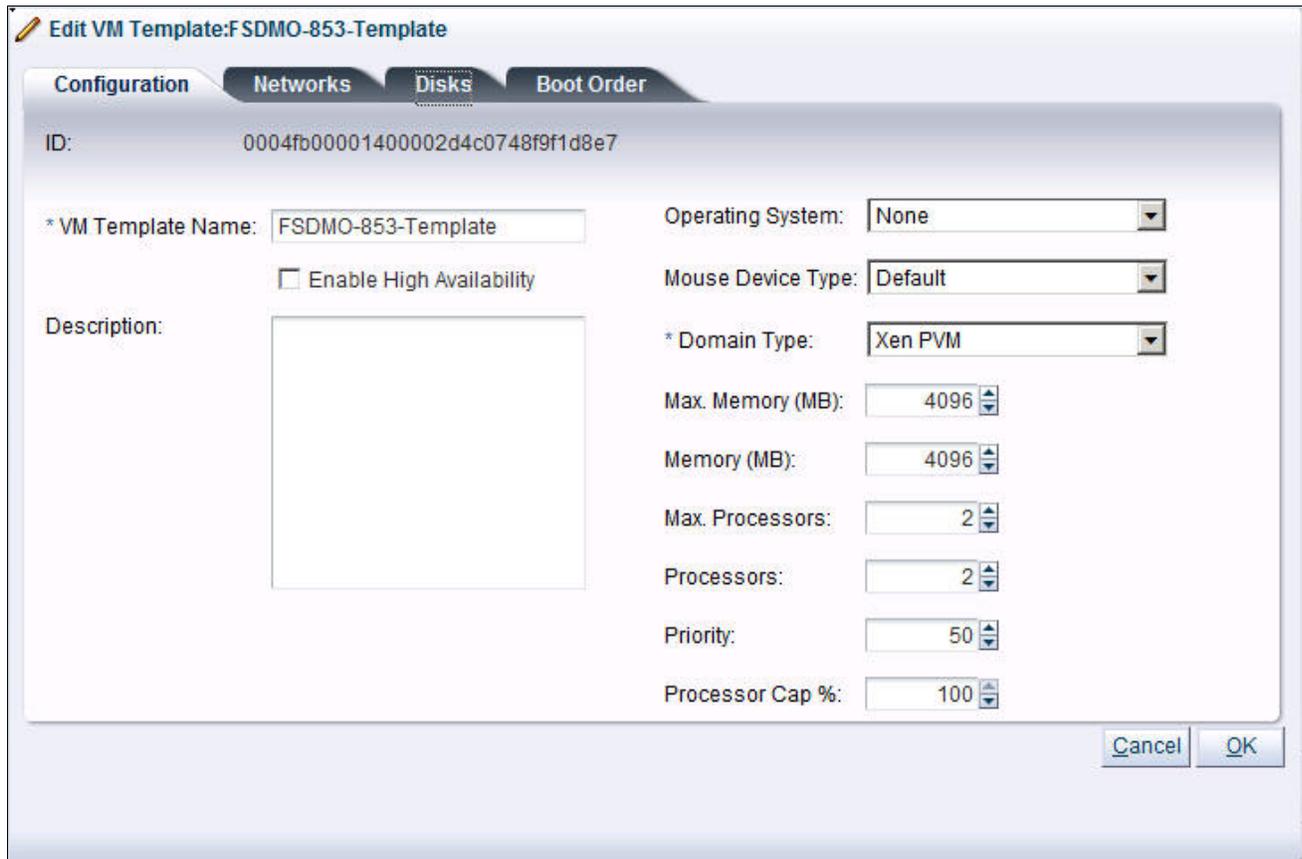
You must make minor modifications to the default settings before you can create VMs. This section assumes that the template is open in Oracle VM Manager.

Note. This is similar to making changes in the Settings window of the Oracle VM VirtualBox Manager.

To edit the template:

1. In Oracle VM Manager, on the Repositories page, highlight the template and click the pencil icon to edit.
2. On the Edit VM *Template_Name* dialog box, select the Configuration page.

3. Change the Domain Type from Xen HVM, for hardware virtualized, to Xen PVM, for paravirtualized, as shown in this example.



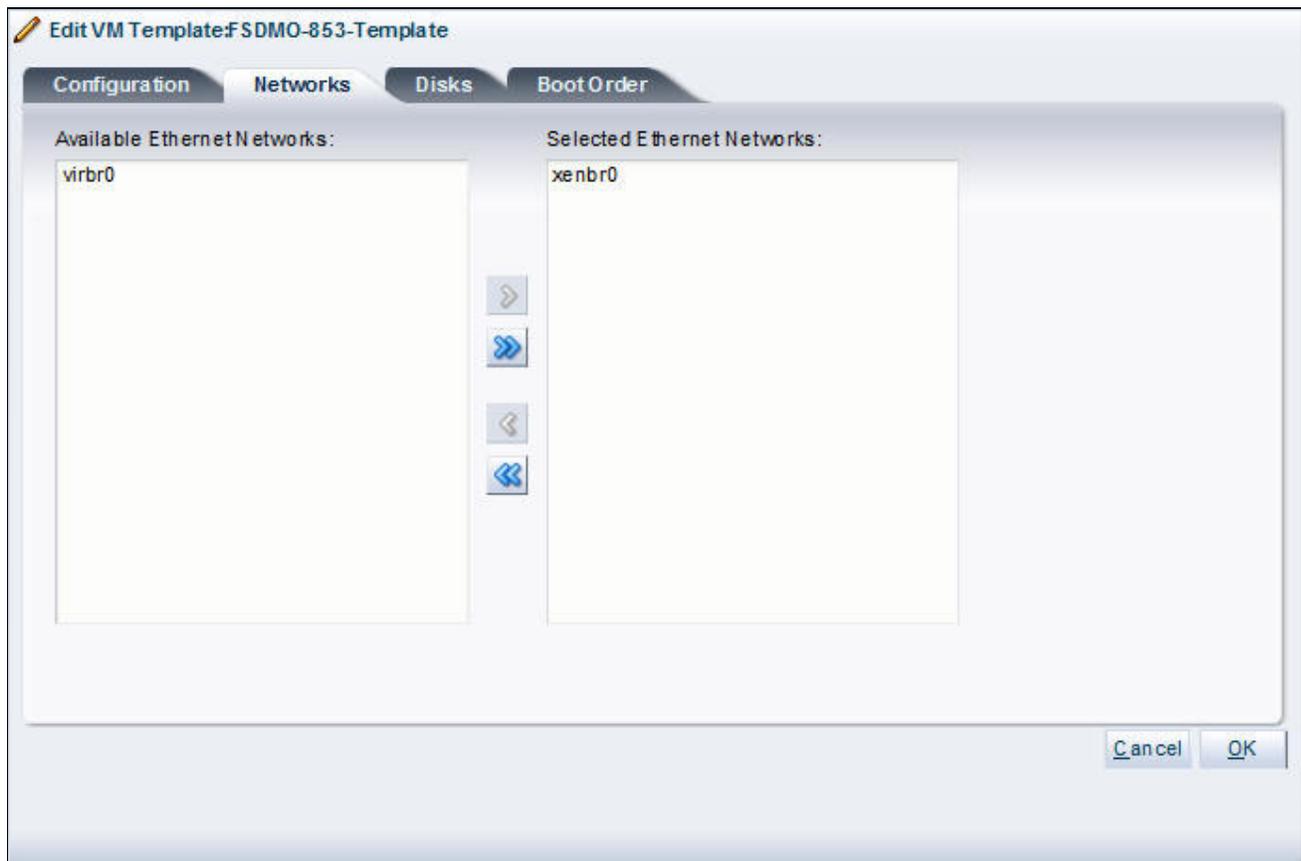
Edit VM Template dialog box: Configuration page

4. Select the Networks page.

5. Select a network from the Available Ethernet Networks list, and move it to the Selected Ethernet Networks list.

This assigns a virtual network to the VM. In this example, the xenbr0 network is shown in the Selected Ethernet Networks list.

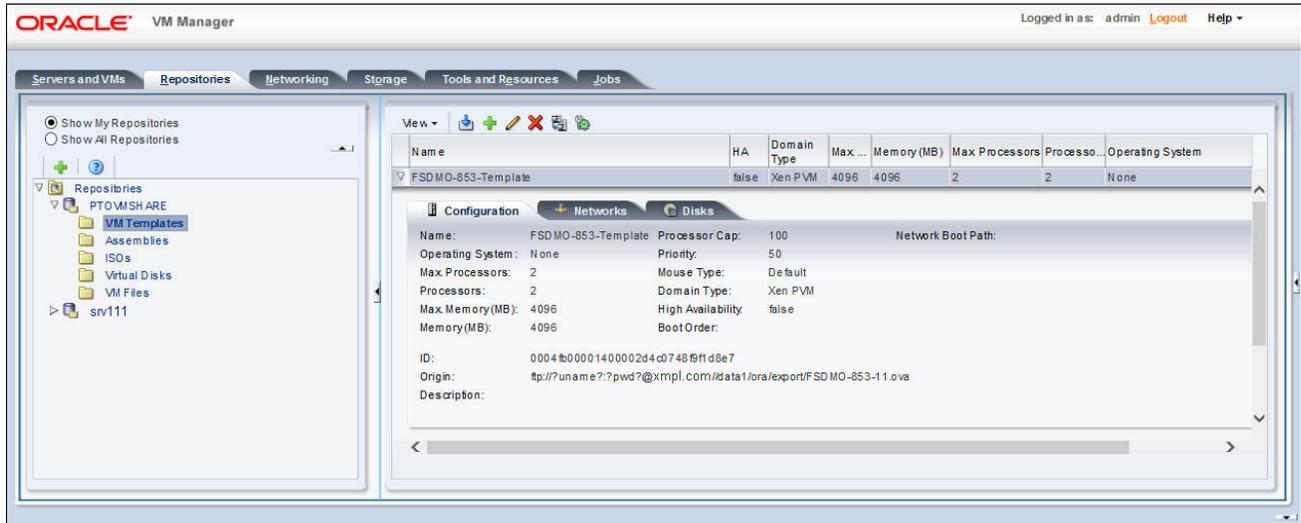
Note. You will need to do this before VMs created from the template will work. This step can in fact be deferred until the VM is being created but by doing it at this point, every VM you subsequently create from this template will work without modifying any settings.



Edit VM Template dialog box: Networks page

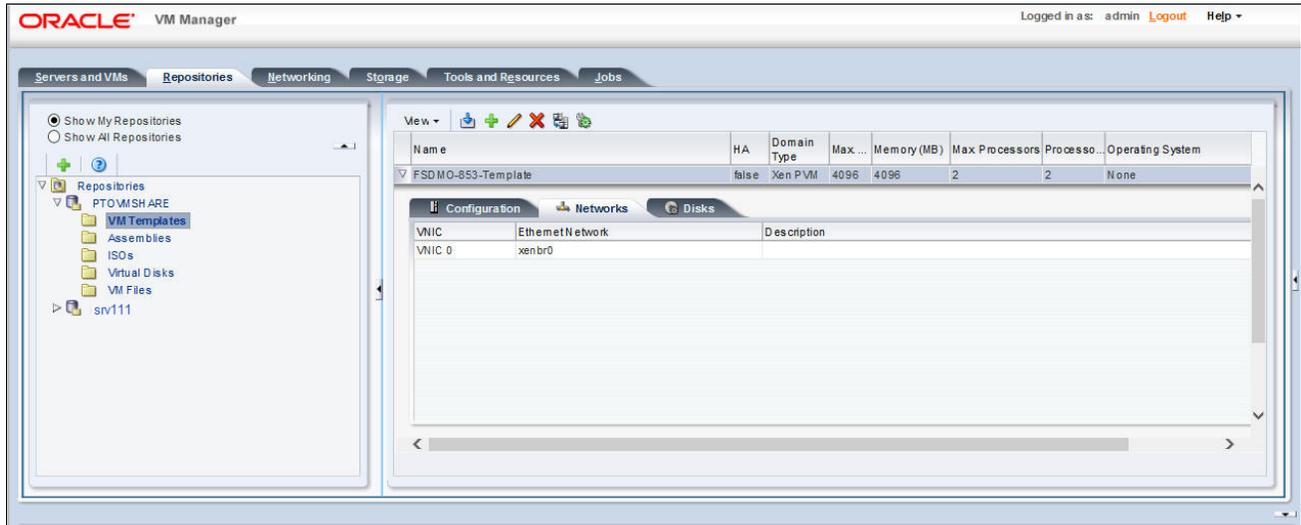
6. Click OK to save the changes.

7. In the management pane of the Repositories page, select the Configuration page and verify that the Domain Type is Xen PVM.



Oracle VM Manager Repositories page with Configuration page for the edited template

8. In the management pane of the Repositories page, select the Networks page and verify that the Ethernet Network is the one that you specified, xenbr0 in this example.



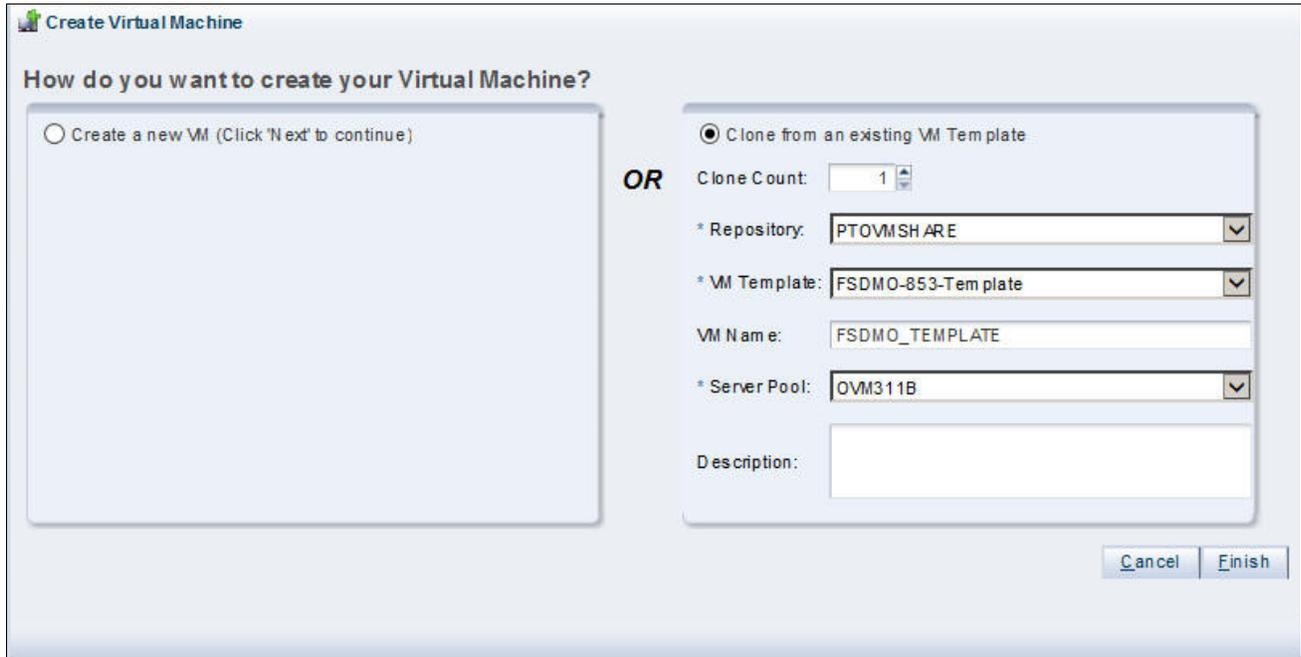
Oracle VM Manager Repositories page with Networks page for the edited template

Task A-1-4: Creating a VM from the New Template

To create a VM from the template you created from the OVA:

1. In Oracle VM Manager, select the Servers and VMs page.
2. Click the Create VM icon.

- On the Create Virtual Machine dialog box, select the Clone from an existing VM Template option, and specify the following parameters:



Create Virtual Machine dialog box

- Repository*: Select the repository in which to create the virtual machine configuration files. In the example the repository is PTOVMSHARE.
- VM Template*: Specify the template to use to create the virtual machines. In the example, the VM template is FSDMO-853-Template. Replace the name used in the example with the correct name for your situation.
- VM Name*: Enter a name for the template. In the example, the VM name is FSDMO_TEMPLATE.
- Server Pool*: Specify the server pool in which to deploy the virtual machines. In the example, the server pool is OVM311B.

- Click Finish to return to the Servers and VMs page.

See *Oracle® VM User's Guide for Release 3.1.1*, "Creating a Virtual Machine."

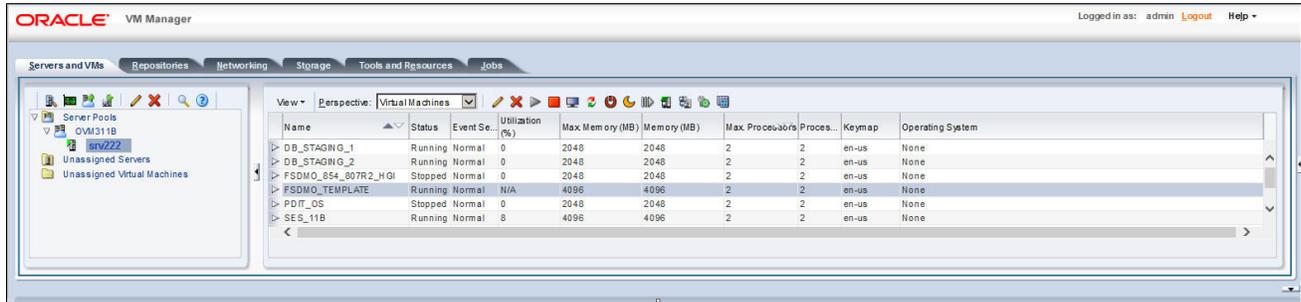
Task A-2: Starting the VM and Setting Up the PeopleSoft Environment

In this section you start the VM that you created in the previous section, and then use the PeopleSoft DPK setup scrip to set up the PeopleSoft environment using the DPK zip files that you obtained in the Prerequisites section.

To start the VM and set up the PeopleSoft environment:

- In Oracle VM Manager, on the Servers and VMs page, select the server in which the virtual machine resides in the Server Pools folder.

2. Select the virtual machine in the management pane on the right, and click the start icon (green triangle). Wait until you see the status "Running" as in this example for the VM FSDMO_TEMPLATE, before continuing.



Oracle VM Manager Servers and VMs page showing template status

3. Click the Launch Console icon (browser) to begin the initialization process.

You see initialization messages for the virtual machine similar to the following. Some of the messages have been omitted for brevity:

```
Changing password for user root.
New UNIX password:
Retype new UNIX password:
passwd: all authentication tokens updated successfully.
```

.
.

.

```
Verifying if Puppet Software is Installed on the Host:      [ OK ]
Verifying if Hiera-Eyaml Backend is Installed on the Host:  [ OK ]
```

Preparing the OracleLinux VM for PeopleSoft Environment:

4. If you would like to set up the PeopleSoft environment at a later time, enter *q* (quit) at the following prompt: The host needs access to the PeopleSoft DPKs to setup a PeopleSoft environment.

You may provide a filesystem that is already accessible to this host. Alternatively, you can provide details to mount a filesystem from an external location.

1. File system location already accessible to the host.
 2. Mount external file system location.
- q*. Abort the initialization process.

Enter 1, 2, or *q*(uit): **q**
The PeopleSoft environment initialization will abort.

To set up the PeopleSoft environment later, after exiting:

- a. Access the VM using SSH.
- b. Use SFTP to download all of the remaining PeopleSoft DPK zip files (Filename_1of15.zip through Filename_10of15.zip) from the host into the /opt/oracle/psft/dpk directory on the VM.

- c. Change directory (cd) into /opt/oracle/psft/dpk/setup directory.
- d. Extract the setup DPK (Filename_1of15.zip) in the /opt/oracle/psft/dpk directory.
The extraction creates a setup directory and various files.
- e. Run the script /opt/oracle/psft/dpk/setup/psft-dpk-setup.sh; for example:
sh ./psft-dpk-setup.sh

5. If you want to set up the PeopleSoft environment at this time, when you see the following prompt, *first* open a separate SSH session to the VM.

The host needs access to the PeopleSoft DPKs to setup a PeopleSoft environment.

You may provide a filesystem that is already accessible to this host. Alternatively, you can provide details to mount a filesystem from an external location.

- 1. File system location already accessible to the host.
 - 2. Mount external file system location.
 - q. Abort the initialization process.
- Enter 1, 2, or q(uit):

- a. In the separate SSH session, use SFTP to download all of the remaining PeopleSoft DPK zip files (Filename_1of15.zip through Filename_10of15.zip) from the host into the /opt/oracle/psft/dpk directory on the VM.
- b. In the first SSH session, specify *1. File system location already accessible to the host*, at the prompt above.
- c. Enter /opt/oracle/psft/dpk at the following prompt:
Enter the full path of the PeopleSoft DPKs directory:

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

Preparing the VirtualBox VM for PeopleSoft Environment:

Checking if Directory /home is writable:

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 ]

Extracting the Oracle Database Client DPK Archive:    [ OK ]
Extracting the 8.53 Tools Client DPK Archive:        [ OK ]
Extracting the 8.54 Tools Client DPK Archive:        [ OK ]
Extracting the 8.55 Tools Client 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 [ OK ]
Copying PeopleSoft Puppet Modules:                  [ OK ]
Updating the Puppet Hiera YAML Files:                [ OK ]
Updating the Puppet Site File for the VM:            [ OK ]

```

7. Enter a name for the database, such as HCM92.

The database name must start with a letter, have only UPPERCASE letters, include only alphanumeric characters, and be no more than 8 characters in length. Press ENTER to accept the default, PSFTDB.

Enter the name of the database. Please ensure that the database name starts with a letter and includes only alphanumeric characters and is no more than 8 characters in length [PSFTDB]:

8. Enter the PeopleSoft Connect ID.

The Connect ID must include only alphanumeric characters and be less than 8 characters in length. Press ENTER to accept the default, people.

Enter the name of PeopleSoft Connect ID. Please ensure that the id includes only alphanumeric characters and is no more than 8 in length [people]:

9. Enter a password for the PeopleSoft Connect ID, and enter again on the next line.

The password must be between 6 and 8 characters in length. It must not contain any spaces, dashes, or quote characters. The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter the PeopleSoft Connect ID Password. Please ensure that the password does not contain any spaces and quote characters and is at least 6 and no more than 8 characters in length:
Re-Enter the PeopleSoft Connect ID Password:

10. Enter the Application Server Domain Connection Password.

The Application Server Domain Connection Password is required for a successful connection between the Application Server and the PeopleSoft Pure Internet Architecture. The password must be between 8 and 30 characters in length. It must not contain any spaces or quote (") characters. The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter the Application Server Domain Connection Password. Please ensure that the password does not contain any spaces and quote characters and is at least 8 and no more than 30 characters in length:
Re-Enter the Application Server Domain Connection Password:

11. Enter the Oracle WebLogic Server Admin Password.

The password must be at least 8 characters in length, with at least one number or a special character, such as a pound sign (#). The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter a new WebLogic Server Admin Password. Please ensure that the password has at least 8 characters with at least one number or a special characters:

Re-Enter the new WebLogic Server Admin Password:

12. Answer *n* (no) to the following prompt:

Using the SES VMDK is not supported with this Linux host/VM setup.

The SES VMDK Disk is Mounted on this VM. Do you wish to setup SES on this VM? [y|n]:

13. 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]

14. If you want to continue running the initialization script interactively, answer *y* (yes) to the following prompt, and continue with the next step.

If you want to set up your environment manually using the Puppet modules, answer *n* (no). The initialization stops, and the VM windows closes.

See *PeopleSoft PeopleTools 8.55 Deployment Packages Installation*, "Customizing a PeopleSoft Environment."

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

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

15. 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:

```
Setting Up System Settings: [ OK ]
Deploying HCM Application Component: [ OK ]
Deploying PeopleTools Components: [ OK ]
Deploying Oracle Database Server: [ OK ]
Setting Up PeopleSoft Users Profile: [ OK ]
.
.
.
Starting PeopleSoft Domains: [ OK ]
```

Configuring Post-Boot PeopleSoft Environment: [OK]

The initialization of PeopleSoft HCM fulltier environment is successful

Template configuration disabled.

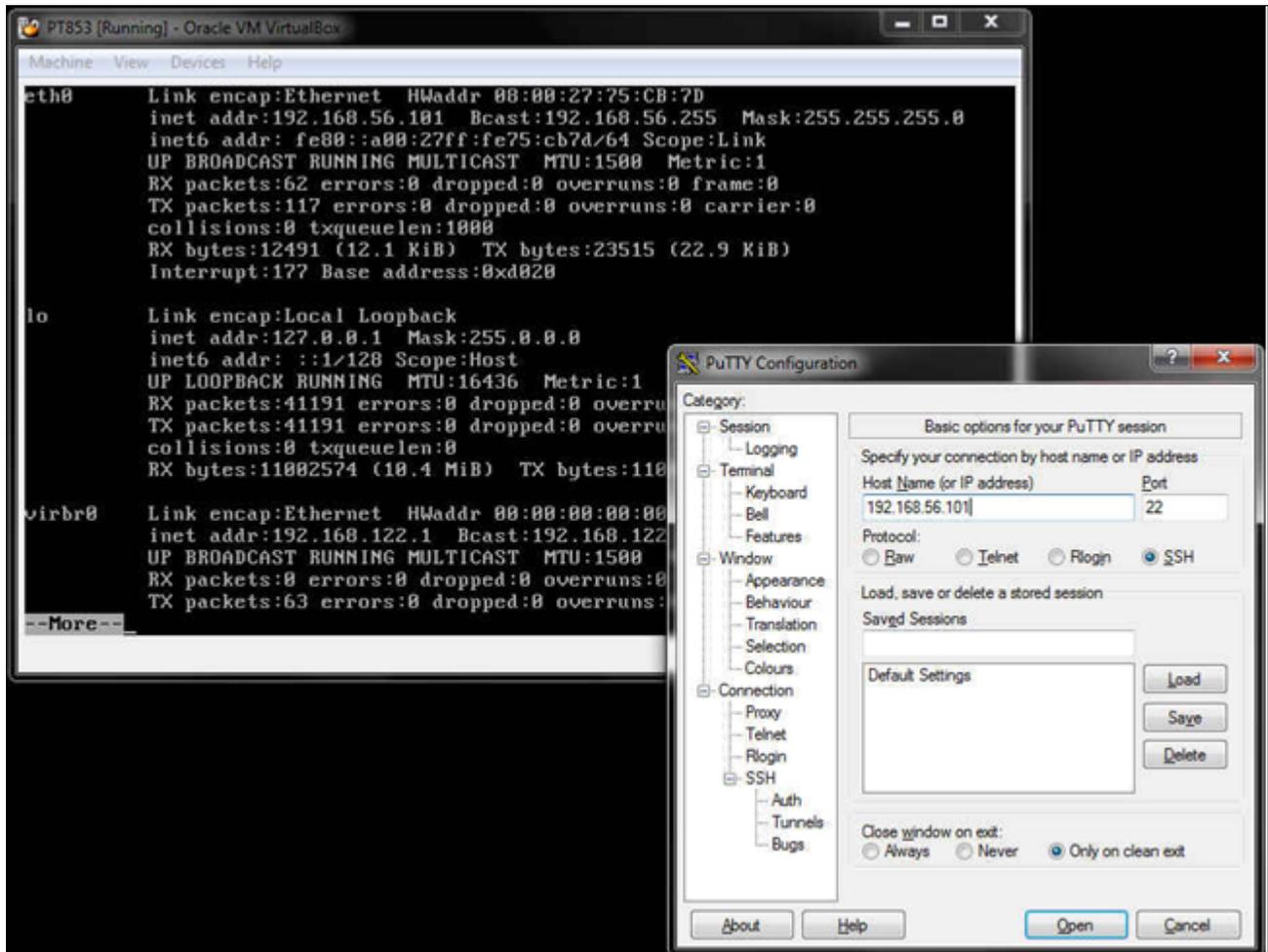
Starting OSWatcher: [OK]

16. The login prompt appears.

The PeopleSoft runtime environment is available for use.

17. 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. The IP address can be identified using the Linux command `ifconfig`.



Connecting to the virtual appliance with PuTTY Client

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.

