

Solution-in-a-Box: Best Practices for Deploying PeopleSoft Applications using PeopleSoft Cloud Architecture on Oracle Database Appliance

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Introduction

Oracle's PeopleSoft applications are designed to address the most complex business requirements and provide comprehensive business and industry solutions, enabling organizations to increase productivity, accelerate business performance and provide a lower cost of ownership.


Oracle Database Appliance (ODA) is an Oracle engineered system, consisting of hardware and software, designed to simplify the deployment, maintenance and support of high availability Oracle Database and Oracle E-Business Suite Application Tier solutions.

Oracle's PeopleSoft Cloud Architecture is a set of features and products that will enable PeopleSoft customers to experience the benefits of software deployment on cloud - rapid provisioning (including cloning), automated patching, and dynamic scaling to name a few - regardless of underlying infrastructure. These capabilities will improve the deployment and lifecycle management of PeopleSoft environments, regardless of whether customers are running in a public, private, or hybrid cloud, as well as traditional on-premise installation.

This white paper is a practical guide for system architects or PeopleSoft Application DBAs planning a PeopleSoft implementation on Oracle Database Appliance (ODA). This paper provides guidance for using the Oracle Linux VM Templates and PeopleSoft deployment packages (DPKs) to reduce the time required to install and deploy PeopleTools middle tier. The instructions and recommendations provided in this document incorporate best practices for PeopleSoft applications and ODA. With some customization, Oracle Linux VM Templates and PeopleSoft DPKs can be used to deploy PeopleSoft applications on ODA in a high availability (HA) configuration. The information in this paper is applicable to PeopleSoft PeopleTools 8.55 and later.

Structure of This White Paper

This white paper explains how you can accelerate the deployment of your PeopleSoft system on ODA. Underpinning this solution are the Oracle Linux VM templates and PeopleSoft DPKs that are developed and maintained by the Oracle Linux and PeopleSoft teams. The solution architecture takes advantage of ODA Virtualized Platform and optimizes the use of onboard storage to take best advantage of the resources and bandwidth available within the platform. By following the best practices described in this document, you can decrease the cost of managing your PeopleSoft application environment substantially, and start from a proven reference environment. This document outlines the process of implementing and configuring a PeopleSoft system on an Oracle Real



Application Cluster database, with PeopleSoft application servers and PeopleSoft Pure Internet Architecture (PIA) servers running on different virtual machines (VMs).

Related Materials

This paper is not a general introduction to PeopleSoft applications, Oracle RAC Databases, or ODA. You need to be familiar with the ODA documentation and, in particular, the ODA Virtualized Platform documentation. Further information about ODA is available at:

[Oracle Database Appliance Documentation](#)

For an overview of the Oracle VM Templates for Linux see [Oracle VM Templates for Linux](#).

The following documentation available on the [PeopleSoft Online Help](#) site discusses many of the fundamental concepts that are related to PeopleSoft PeopleTools:

[PeopleTools: Getting Started with PeopleTools](#)

[PeopleTools: System and Server Administration](#)

Overview

This section summarizes some of the key points of the Oracle Database Appliance Virtualized Platform Deployment Architecture that will make it easier to understand the installation procedure in this paper.

Reviewing the ODA Virtualized Platform Deployment Architecture

Oracle Database Appliance Virtualized Platform is based on Oracle VM and it enables customers to quickly deploy both database and application workloads in a single virtualized appliance platform. The virtualization feature of ODA is leveraged for deploying the PeopleSoft system on ODA as a solution-in-a-box. ODA also provides the capabilities to optionally configure a “shared VM repository” that enables high availability for PeopleSoft application VMs.

Figure 1 shows the system architecture for a PeopleSoft deployment on ODA. This illustrates an ODA machine which is enabled as a virtualized platform running two nodes, and which is configured with an Oracle RAC database.

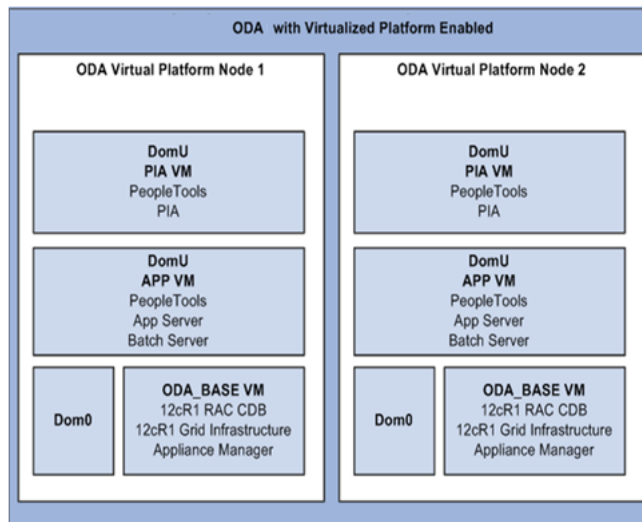


Figure 1 : System architecture of a PeopleSoft deployment on ODA Virtualized Platform.

The system architecture includes these components (beginning at the bottom of the diagram):

- » **DOM0:** Domain 0 is the administrative domain that resides on each ODA server node.
- » **ODA_BASE:** ODA_BASE is a “privileged domain” within the ODA virtualized platform. This domain runs the databases and is configured and sized to support database workloads. The size of the ODA_BASE domain is determined by the required assignment of physical CPU cores and memory to this domain. The other application workloads are isolated from this domain.
- » **APP VM:** APP VMs are user domains or DomUs. These domains host middle-tier products, such as Oracle WebLogic Server, or application-specific functionality. The APP VMs in the above system architecture diagram host PeopleSoft PeopleTools, the PeopleSoft application server, and PeopleSoft Batch Server.
- » **PIA VM:** The PIA VM is a user domain and hosts the PeopleSoft Pure Internet Architecture domain functionality, which handles online user page requests and web services through the Integration Gateway.

The following diagram shows the logical flow of PeopleSoft application architecture components on ODA. The diagram includes the typical components of PeopleSoft application architecture on ODA in a high availability environment. The diagram includes components that are deployed on the ODA base and components on the guest VMs. This diagram also shows a relationship between PIA servers deployed on ODA, a software load balancer, and client browsers outside the ODA environment.

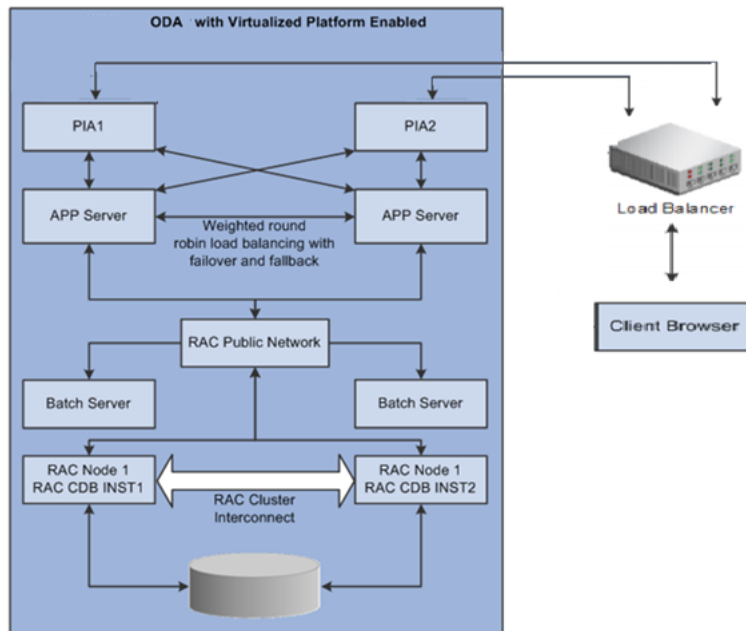


Figure 2 : Logical architecture of a PeopleSoft deployment on ODA Virtualized platform

The components described on the Logical architecture shown in the diagram include the following:

- » Load Balancer: Client used to connect to load balancer servers, and then route the request to PIA servers.
- » PIA1 and PIA2: Two PIA servers based on Oracle WebLogic, which access the PeopleSoft application servers, which use Oracle Tuxedo.
- » APP Servers: The Oracle Tuxedo application servers are configured with weighted round robin load balancing with failover and fallback.
- » Batch Servers: The Process Schedulers support the PeopleSoft application environment.
- » RAC SCAN Network: The batch server and application server accessing the Oracle RAC database using the Oracle RAC SCAN network.
- » RAC Nodes: The Oracle RAC nodes are configured as RAC clusters, and access the database storage.

The physical servers include the following software:

Dom0 Management Domain

- » Oracle Appliance Kit (OAK) Version 12.1.2.10.0
- » Oracle VM Server 3.2.11

ODA_BASE Virtual Machine

- » Special privileged user domain for database instances
- » Oracle Linux 6.8
- » Oracle Real Application Clusters (RAC) 12c Release 1 Database
- » Automatic Storage Management (ASM) 12c Release 1
- » Oracle Grid Infrastructure 12c Release 1

Oracle Linux Virtual Machine

- » Oracle Linux 6.6 64 bit



Oracle PeopleSoft PeopleTools DPKs

- » PeopleSoft PeopleTools 8.55.08 Application Server
- » PeopleSoft PeopleTools 8.55.08 PeopleSoft Pure Internet Architecture (PIA)
- » Oracle Tuxedo 12.1.3.0.0 RP037
- » Oracle Database client 12.1.0.2
- » Oracle WebLogic 12.1.3

Design - Planning Your Environment

For the planning and designing process, you need to understand your organization's business process and determine whether to deploy customized PeopleSoft VM templates on Oracle Database Appliance. Deploying PeopleSoft DPKs with Oracle Linux VM templates on Oracle Database Appliance helps you to achieve the following:

- » Simplify complex deployment processes to minimize errors and speed progress
- » Increase agility to quickly scale up and down the infrastructure as required
- » Reduce IT costs by speeding up deployments
- » Enhance application availability and simplify disaster recovery

When planning your PeopleSoft deployment on Oracle Database Appliance Virtualized Platform you should take into account many of the same considerations that are applicable to conventional environments. Following well-established standards reduces application ownership costs by implementing proven and well-documented procedures.

An important part of the planning phase is identifying the additional configuration and customization tasks that are needed for the Oracle Linux VM templates and PeopleSoft DPKs. Some examples of design considerations include:

- » Security
- » Networking
- » Capacity Planning
- » High Availability
- » Load Balancing
- » Disaster Recovery
- » VM Configuration
- » Application Configuration

Understanding PeopleSoft Cloud Architecture

Oracle's PeopleSoft Cloud Architecture is a set of features and products that will enable PeopleSoft customers to experience the benefits of software deployment on cloud — rapid provisioning (including cloning), automated patching, and dynamic scaling to name a few — regardless of underlying infrastructure. These capabilities will improve the deployment and lifecycle management of PeopleSoft environments, regardless of whether customers are running in a public, private, or hybrid cloud, as well as traditional on-premise installation.

This architecture is available starting with PeopleTools 8.55 and the introduction of the new Deployment Framework. This new delivery mechanism provided for PeopleTools using Linux and Windows operating systems. PeopleSoft People Tools 8.55 utilizes Deployment Packages, which contain all the software created by PeopleSoft as well as the required components pre-installed and fully patched, along with a deployment and configuration automation system.

Understanding PeopleSoft DPKs

Beginning with PeopleSoft PeopleTools 8.55, you have the option to install and configure PeopleSoft instances using PeopleSoft DPKs. DPKs allow fast deployment of PeopleSoft environments on both physical hardware (“bare metal”) platforms and virtual platforms. DPKs enable users to skip the time-consuming manual steps associated with the following processes:

- » Gathering the necessary installation programs
- » Installing third-party products such as Oracle Tuxedo and WebLogic and the latest patches (CPUs)
- » Installing Application Home (PS_APP_HOME)
- » Installing both PeopleTools and the PeopleTools patch binaries
- » Configuring the PeopleSoft domains

Using the new DPK method to create a PeopleSoft PeopleTools middle-tier environment consisting of an Application Server, a Process Scheduler, and a PeopleSoft Internet Architecture (PIA) domain typically takes less than an hour. This process previously took days for each new environment created. The streamlined approach allows for dynamic scaling and quick patching. Rapid creation of middle-tier components allows customers to optimize hardware resources by creating middle-tier virtual machines (VMs) on demand. These VMs can be removed to free up hardware resources when not in use, yet be quickly recreated as needed.

Note: Beginning with PeopleSoft PeopleTools 8.55, PeopleSoft PeopleTools updates are now delivered with DPKs; PeopleSoft OVM templates will no longer be offered. One significant difference is that DPKs do not deliver an operating system. Instead, DPKs offer an automated installation on supported operating systems that are provisioned on a choice of infrastructure – bare metal, popular virtualization platforms such as OVM, VMware, Hyper-V or IaaS providers. Using DPKs, you have the flexibility to customize the configuration to match the purpose of the environment you need.

Oracle PeopleSoft Deployment on Oracle Database Appliance

Traditionally, a new installation and deployment of Oracle PeopleSoft applications involves a team of business analysts, system architects, and database and system administrators, to jointly plan and prepare the deployment, design the platform architecture, procure hardware and software, deploy the systems and customize the PeopleSoft applications. Furthermore, features such as high availability (HA), load balancing, and so on, must be configured across components to ensure their interoperability and compatibility. This process can be very time and resource consuming. Use of Oracle’s pre-tested Linux VM Templates and PeopleSoft DPKs, with Oracle Database Appliance, as part of your deployment strategy can substantially reduce the deployment effort.

Table 1 outlines the procedures involved in a typical deployment of a PeopleSoft environment on Oracle Database Appliance Virtualized Platform.

Deployment Stage	Procedure
Stage 1	<ul style="list-style-type: none">• Set up Oracle Database Appliance Virtualized Platform• Set up Shared Repository on Oracle Database Appliance.
Stage 2	<ul style="list-style-type: none">• Download the Linux VM template<ul style="list-style-type: none">○ Import the Linux VM template in Oracle Database Appliance



	<ul style="list-style-type: none">○ Configure the template○ Create and configure the VM• Download PeopleSoft PeopleTools DPKs○ Install and configure DPKs on Linux VM• Set up the PeopleSoft Application Database• Save VM as a template and call it "PeopleSoft VM Template".○ Customize the VM○ Clean up the VM• Create and configure VMs from the customized template• Configure the PeopleSoft Application Server and Batch Server on Oracle Database Appliance• Configure PeopleSoft Pure Internet Architecture on Oracle Database Appliance• Complete additional setup
Stage 3	<ul style="list-style-type: none">• Perform load testing• Set up Disaster Recovery site
Stage 4	<ul style="list-style-type: none">• Apply patches and maintenance packs• Maintain the VM template

Table 1: Typical PeopleSoft deployment procedures on Oracle Database Appliance Virtualized platform

Deploying Oracle PeopleSoft Applications on Oracle Database Appliance Virtualized Platform

This section lists the necessary steps to deploy PeopleSoft DPK with Oracle Database 12c Release 1 on Oracle Database Appliance 12.1.2.10 (or later).

Task 1: Setting Up the Oracle Database Appliance Virtualized Platform

Before the PeopleSoft DPK is deployed the Oracle Database Appliance Virtualized Platform setup must be completed.

1. Follow the Oracle Database Appliance Virtualized Platform Setup instructions on the Oracle Database Appliance [Setup Poster](#) to set up the ODA.

It is not necessary to deploy a database during the appliance setup. Clear the Create Initial Database check box on the Database Information page of the Appliance Manager.

2. Calculate the space requirements for the PeopleSoft VM templates and VMs created using PeopleSoft DPKs before the deployment.

Consider the space requirements for PeopleSoft application software such as PeopleSoft Human Capital Management (HCM) or PeopleSoft Financial and Supply Chain Management (FSCM), or any other software used, when calculating the total space requirement for PeopleSoft VM templates and VMs.

Table 2 lists typical space requirements for PeopleSoft VM templates, but these requirements may vary based on the deployment criteria for each environment.

TABLE 2: PEOPLESOFT TEMPLATE AND VM SPACE REQUIREMENTS

PeopleSoft Template and VMs	Typical Disk Space Requirements
Oracle PeopleSoft PeopleTools VM Template	50 GB
Oracle PeopleSoft PeopleTools APP VM (2VMs)	50 GB × 2 = 100 GB
Oracle PeopleSoft PeopleTools PIA VM (2VMs)	50 GB × 2 = 100 GB
<i>Total Space Required</i>	<i>250 GB</i>

3. Log in as the root user on node 1 and create a 300 GB shared repository, which will be used to host the VMs, using the following commands:

```
# oakcli create repo psoftrepo -dg data -size 300  
  
# oakcli show repo psoftrepo -node 0  
  
# oakcli show repo psoftrepo -node 1
```

4. Download ODA RDBMS End use bundle.

The Oracle Database Appliance team releases RDBMS Clone Bundles for each ODA version. Download the RDBMS patch bundle from My Oracle Support, unpack and deploy on ODA.

See Oracle Database Appliance – 12.1.2.10 and 2.x Supported ODA Versions and Known Issues, My Oracle Support, My Oracle Support, Doc ID 888888.1.

Task 2: Downloading the Linux VM Template

The procedures described here use the Oracle Linux VM Template to build a PeopleSoft PeopleTools 8.55 VM template using Peoplesoft DPKs. To obtain the Linux VM templates:

1. Log in to Oracle Software Delivery Cloud, <https://edelivery.oracle.com>.
2. For Filter Products by, select the option Linux/OVM/VMs.
3. Enter “Oracle VM Templates for Oracle Linux” in the Search by text box.
4. Select *x86-64* from the Select Platform drop-down list.
5. Click Continue.
6. Verify that the check box for “Oracle VM Templates for Oracle Linux 6.0.0.0.0 for x86 64 bit” is selected, and click Continue.
7. Read and accept the Oracle terms and restrictions, and then click Continue.
8. Download the Linux 6 update <X> template, where <X> is the update number.

For example, the Linux 6 update 6 VM Template was used during development of this paper.

9. Save the templates on ODA under */OVS/staging*

Note: You can check the certification details on My Oracle Support, support.oracle.com under the Certification tab.

Task 3: Importing the Linux VM Template

Import the Linux VM templates and create VMs, as follows:

1. Execute the following command from ODA_BASE:

```
# oakcli import vmtemplate OL6U6 -assembly  
/OVS/staging/OVM_OL6U6_x86_64_PVM.ova -repo psoftrepo -node 0
```

2. Check the template with the following command:

```
# oakcli show vmtemplate
```

3. Execute the following command to set up the required network configuration:

```
# oakcli configure vmtemplate OL6U6 -network "['type=netfront,bridge=net1']"
```

4. Clone the VM from the LINUX VM template on Oracle Database Appliance Virtualized platform with the following command:

```
# oakcli clone vm PSFT_PT_855_VM -vmtemplate OL6U6 -repo psoftrepo -node 0
```

5. Create the vdisk of size 50G:

```
# oakcli create vdisk PT_VDISK_1 -repo psoftrepo -size 50G -type local -sparse
```

6. Assign the vdisk to PSFT_PT_855_VM.

You can use the attached vdisk to store PeopleTools home (*PS_HOME*).

```
# oakcli modify vm PSFT_PT_855_VM -attachvdisk pt_vdisk_1
```

7. Start the PeopleSoft VM on Oracle Database Appliance with the following command:

```
# oakcli start vm PSFT_PT_855_VM
```

8. Provide the required input to configure the network stack and root password.

Table 3 lists the hostname used for configuring the PeopleSoft VM. Use the IP Address column in the table to note the IPs in your environment.

TABLE 3: VM NAME AND IP DETAIL

VM Name	IP Address	Hostname
PSFT_PT_855_VM	xx.xxx.xx.xxx	ps-v1.us.oracle.com

9. To set up the environment:

- » Format the newly added vdisk and mount it on */opt/oracle/psft*
- » Set up the firewall rules and SELINUX as per your requirement.
- » Set up the yum repository to install custom packages and any other packages during the PeopleSoft setup. For details, please review the software requirement section in [PeopleSoft PeopleTools 8.55 Deployment Packages Installation](#) on the PeopleSoft Documentation Portal.

10. Review the status of the setup steps.

Task 4: Downloading the PeopleSoft DPKs

The procedures described here use the Oracle PeopleSoft for PeopleSoft PeopleTools 8.55 DPKs. To obtain the PeopleSoft DPKs:

1. Create a shared Oracle Automatic Storage Management Cluster File System (ACFS) mount point */cloudfs* of size 100G on ODA_BASE.

For creating an ACFS mount point, see ODA (Oracle Database Appliance): [How to Setup ACFS Post Deploy](#), My Oracle Support, Doc ID 1435019.1, for information.

2. Log in to My Oracle Support, <https://support.oracle.com>

3. Select the Patches & Update tab.

4. Select Product or Family (Advanced) under Patch Search, and provide the following details:

- » Product: PeopleSoft Enterprise PT PeopleTools
- » Release: PeopleTools 8.55
- » Platform: Linux x86-64

5. Click Search.

6. Download the latest PeopleSoft PeopleTools DPKs and stage them under /cloudfs/DPK_INSTALL.

We used 8.55.08 Peoplesoft PeopleTools DPK for our setup.

Note: Review the installation guide. This file includes all the installation instructions you need before moving to the next task in this documentation.

Task 5: Installing and Configuring the PeopleSoft DPKs

Download the PeopleSoft PeopleTools DPKs and install PeopleSoft PeopleTools, Oracle Tuxedo, Oracle Web Logic, and Oracle database client, without setting up the mid-tier domains. We will create a gold VM template of installed software.

1. Export the ACFS mount point to ps-v1.us.oracle.com as NFS mount point.

Export PS_APP_HOME in .bashrc on ps-v1.us.oracle.com as root user.

2. The downloaded PeopleSoft PeopleTools DPKs are in the format PEOPLETOOLS-<Operating_System>-<Release>-#ofn.zip. Unzip the first downloaded zip file, that is, PEOPLETOOLS-<Operating_System>-<Release>-1ofn.zip.

3. Change the directory to /cloudfs/DPK_INSTALL/setup folder and execute the following:

```
# ./psft-dpk-setup.ps1 -env_type midtier -deploy_only -deploy_type
```

There are many options available for installation and configuration of PeopleTools. For more information, see the Deploying the PeopleSoft PeopleTools Deployment Packages section in [PeopleSoft PeopleTools 8.55 Deployment Packages Installation](#) on the PeopleSoft Documentation Portal.

Task 6: Installing PeopleSoft Application Software on Oracle Database Appliance

Before beginning the PeopleSoft application database setup, obtain and install the PeopleSoft applications on ODA_BASE. For this setup, we downloaded PeopleSoft Human Capital Management (HCM) 9.2 installation software zip files from the Oracle Software Delivery Cloud portal.

Execute the following steps to install PeopleSoft HCM 9.2 Application database on ODA:

1. Log in to the Oracle Software Delivery Cloud at edelivery.oracle.com.

2. Download PeopleSoft HCM and stage them on ODA_BASE node1 under /cloudfs.


3. Install PeopleSoft application files as an oracle user.

It is good to keep separate *PS_APP_HOME* directories for PeopleSoft HCM and FSCM. For example, install PeopleSoft HCM under /cloudfs/psft/hcm92 and PeopleSoft FSCM under /cloudfs/psft/fsm92.

4. Export the *PS_HOME* mount point of ps-v1.us.oracle.com as an NFS mount pointing to ODA_BASE.

It is a good idea to use the same path for the *PS_HOME* mount point on ODA_BASE as was used on ps-v1.us.oracle.com. The oracle user should have read, write, and execute permission on *PS_HOME*. For more details on using PeopleSoft mid-tier deployment, see [PeopleTools: Mid Tier Deployment Best Practices](#), My Oracle Support, Doc ID 1448479.1.

Task 7: Creating PeopleSoft Application Database on Oracle Database Appliance



On ODA, it is recommended to first create an empty Oracle RAC-enabled database using the Oracle Appliance Manager command `oakcli`, and then use the PeopleSoft PeopleTools set to complete the installation of the PeopleTools schemas, and application schemas. The PeopleTools setup scripts use file system path names in the tablespace creation SQL statements. When instructed to edit these scripts, you will need to modify them to point to correct paths.

See [PeopleTools Installation for Oracle](#), My Oracle Support, Doc ID 2068525.1.

Since there is no existing PeopleSoft application database configured in the PeopleSoft PeopleTools DPK, you must complete the setup for the PeopleSoft application database on ODA.

For more details on creating PeopleSoft Application Database on ODA, see Installing PeopleSoft Application Software on Oracle Database Appliance section in [Solution-in-a-box: Best practices for deploying PeopleSoft Applications on Oracle Database Appliance](#).

Task 8: Customizing the PeopleSoft VM Template

The PeopleSoft VM template can be customized by making changes to the VM created from Oracle Linux VM template and PeopleSoft PeopleTools DPKs. Create and configure these VMs: PS_APP_1, PS_APP_2, PS_PIA_1, and PS_PIA_2 VMs. Change the template and VM name according to your current setup.

For details, see the section “Customizing the PeopleSoft VM Template” in the [Solution-in-a-Box: Best practices for deploying PeopleSoft Applications on Oracle Database Appliance Virtualized Platform](#).

Note: You need to specify vdisk location to include it in a template.

Task 9: Configuring PeopleSoft Application Server VMs on Oracle Database Appliance

The preceding tasks cloned the VMs from the gold template and configured the network stack. In this task we configure PeopleSoft application server and batch server on PS_APP_1 and PS_APP_2 VMs.

Execute the following steps to create and set up the PeopleSoft application server domain on Oracle Database Appliance:

1. Log in to PS_APP_1 and PS_APP_2 as psadm2 user to create application server domain HCMDOM for PeopleSoft application database HCM92.
2. Set the environment variables.

For details, see the task Setting Environment Variables, in [PeopleTools 8.55 Installation for Oracle](#), chapter “Configuring the Application Server on UNIX.”

3. Edit `/etc/tnsnames.ora` and add entries for HCM92 and FSM92 pluggable databases.
4. Check the database connectivity.
5. Execute the following command:

```
# psadmin
```

6. To create PeopleSoft application server domain, provide required input when prompted.

Provide the correct values in the Quick-configure menu under the Settings column for DBNAME, UserId, UserPwd, ConnectPswd, WSL Port, JSL Port, JRAD Port. Also, select features you want to enable or disable under the Features column.

See the chapter “Configuring the Application Server on UNIX” in [PeopleTools 8.55 Installation for Oracle](#).

7. Start PeopleSoft application server domain HCMDOM for HCM92 PeopleSoft application database using the PSADMIN utility.

Task 10: Configuring PeopleSoft Process Scheduler on Oracle Database Appliance

PeopleSoft Process Scheduler is a centralized tool that enables application developers, system administrators, and application users to manage PeopleSoft batch processes.

A Master Scheduler enables load balancing of workloads by automatically routing requests to available Process Scheduler servers, which ensures that you maintain optimal processing at all times. In addition, an active Master Scheduler manages and controls all Process Scheduler server domains that are on the same PeopleSoft database. You need to execute the following steps as psadm2 user.

Execute the following steps to create and set up PeopleSoft Process Scheduler domains on ODA:

1. Log in to PS_APP_1 as psadm2 user to create Master Process Scheduler domain HCMPRSCM for HCM92 PeopleSoft Application Database.

2. Set the environment variables.

See the task [Setting Up Your Environment in PeopleTools 8.55 Installation for Oracle](#), chapter “Setting Up Process Scheduler on UNIX.”

3. Check the database connectivity.

4. Execute following command to start the PSADMIN utility and create a PeopleSoft Process Scheduler domain:

```
# psadmin
```

5. Provide required input when prompted.

Provide the correct values in the Quick-configure menu under Settings column for DBNAME, PrcsServer, UserId, UserPswd, ConnectPswd, Log/Output Dir, SQRBIN, DomainConnectPswd. Also, enable Master Process Scheduler under Features column. You can enable or disable features under Features column.

6. Start the Process Scheduler domain HCMPRCSM for PeopleSoft HCM92 PeopleSoft application database using the PSADMIN utility.

Provide the correct values in the Quick-configure menu under Settings column for DBNAME, PrcsServer, UserId, UserPswd, ConnectPswd, Log/Output Dir, SQRBIN, DomainConnectPswd. Also, enable Master Process Scheduler under Features column. You can enable or disable features under Features column.

See the chapter “Setting Up Process Scheduler on UNIX” in [PeopleTools 8.55 Installation for Oracle](#).

7. Log in to PS_APP_2 as psadm2 user to create normal Process Schedulers HCMPRCS for HCM92 PeopleSoft application databases, and execute steps 1 to 6.

For this step, do not enable the Master Scheduler option in the Quick-configure menu Features column.

Task 11: Configuring PeopleSoft Pure Internet Architecture VMs on Oracle Database Appliance

This section configures Oracle PeopleSoft Pure Internet Architecture (PIA) on PS_PIA_1 and PS_PIA_2 VMs.

The setup in this documentation uses a Single Server Domain configuration. If you want to create a multi-server domain installation, refer to the [Solution-in-a-Box: Best practices for deploying PeopleSoft Applications on Oracle Database Appliance Virtualized Platform](#).

Execute the following steps to create and set up PIA Single Server domain on ODA:

1. Log in to PS_PIA_1 and PS_PIA_2 VM as a psadm2 user and create the HCMPIA PIA domain.

2. Change directory to \$PS_HOME/setup/PsMpPIAInstall and execute following command:

```
# setup.sh -tempdir /tmp
```

3. Provide required input when prompted, as follows:

- » Select Oracle Weblogic Server for installation type.
- » Specify a domain name.
- » Select Single Server Domain for the domain type.

See the chapter “Setting Up the PeopleSoft Pure Internet Architecture in Console Mode” section in [PeopleTools 8.55 Installation on Oracle](#).

4. Start the PeopleSoft HCMPIA PIA domain using the PSADMIN utility.

Task 12: Configuring Load Balancing for Application Server

The application server can also be used in load balancing and failover configuration. We have two application servers that are running on PS_APP_1 and PS_APP_2. We need to add failover and load balancing information in PIA configuration files, as follows:

1. Log in to PS_PIA_1 and PS_PIA_2 as psadm2 user and enable load balancing for the HCMDOM APP domain.
2. Open the file `$PIA_HOME/applications/peoplesoft/PORTAL.war/WEB-INF/psftdocs/ps/configuration.properties` for editing.

`$PIA_HOME` refers to the installation location for the PIA domain. Replace `$PIA_HOME` with the value for your environment.

3. Add the following line in the file to enable weighted load balancing and failover on PS_PIA_1 and PS_PIA_2 VMs:

```
psserver=psapp-v1.us.oracle.com:9000#1,psapp-v2.us.oracle.com:9000#1
```

4. Ensure that all the participating PIA instances have the same session cookie name.

To change the cookie value, open the file

`$PIA_HOME/webserv/$PIA_Domain_Name/applications/peoplesoft/PORTAL.war/WEB-INF/weblogic.xml` for editing and modify the value for `<cookie-name>`.

Replace `$PIA_HOME` and `$PIA_Domain_Name` with the values for your environment.

5. Restart the PIA Domain.



Documentation Resources

[PeopleTools 8.55 Installation on Oracle.](#)

[PeopleSoft Oracle Virtual Machine Templates Development and Customization Guide, My Oracle Support, Doc ID 1385319.1.](#)

[Oracle VM Templates for PeopleSoft White Paper, My Oracle Support, Doc ID 956177.1.](#)

[Oracle Database Appliance Documentation](#)

[Solution-in-a-box: Best practices for deploying PeopleSoft Applications on Oracle Database Appliance](#)

Oracle PeopleSoft Red Paper: Information in this white paper was developed in conjunction with use of the products specified and is limited in application to those specific hardware and software products and levels.







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SOLUTION-IN-A-BOX: BEST PRACTICES FOR DEPLOYING PEOPLESFT APPLICATIONS USING PEOPLESFT CLOUD ARCHITECTURE ON ORACLE DATABASE APPLIANCE
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