
PeopleSoft Cloud Manager Image 04

May 2017

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Contents

- Preface: Preface..... v**
- Understanding the PeopleSoft Online Help and PeopleBooks..... v
- PeopleSoft Hosted Online Help..... v
- Locally Installed Help..... v
- Downloadable PeopleBook PDF Files..... v
- Common Help Documentation..... vi
- Field and Control Definitions..... vi
- Typographical Conventions..... vi
- ISO Country and Currency Codes..... vii
- Region and Industry Identifiers..... vii
- Translations and Embedded Help..... viii
- Using and Managing the PeopleSoft Online Help..... viii
- Contact Us..... viii
- Follow Us..... viii
- Chapter 1: Getting Started with PeopleSoft Cloud Manager..... 11**
- Understanding PeopleSoft Cloud Manager..... 11
- Chapter 2: Setting Up PeopleSoft Cloud Manager..... 15**
- Configuring Cloud Manager..... 15
- Pages Used to Configure Cloud Manager..... 15
- Cloud Manager Settings Tile..... 15
- Cloud Manager Settings Page..... 18
- Cloud Manager Settings – VM Size Page..... 24
- Cloud Manager Settings – Manage PUM Connections Page..... 25
- User Configuration for Cloud Manager..... 25
- My Settings Tile..... 25
- My Settings Page..... 26
- Chapter 3: Provisioning Environment in PeopleSoft Cloud Manager..... 29**
- Managing Repository..... 29
- Pages Used to Manage Cloud Manager Repository as an Administrator..... 29
- Repository Tile..... 30
- My Downloads Page..... 30
- Download Subscriptions Page..... 32
- Download History Page..... 33
- Logs Page..... 34
- Subscribing Channels using the Cloud Manager Repository..... 35
- Expanding File Server Capacity..... 36
- Managing Topology..... 38
- Pages Used to Manage Topology as an Administrator..... 38
- Topology Tile..... 38
- Topology Page..... 39
- Topology Definition Page..... 40
- Managing Template..... 44
- Pages Used to Manage Environment Template Tile as a PeopleSoft Administrator..... 44
- Environment Template Tile..... 45
- Environment Template Page..... 45
- Environment Template – General Details Page..... 46

Environment Template – Select Topology Page.....	47
Environment Template – Define Security Page.....	49
Environment Template – Summary Page.....	50
Managing Environments.....	52
Pages Used to Manage Environments Tile as an Administrator.....	52
Environments Tile.....	53
Environments Page.....	53
Create Environment Page.....	55
Environment Details Page.....	57
Health Check Page.....	59
Manage PUM Connections Page.....	59
Apply PeopleTools Patch Page.....	61
Manage Attributes Page.....	61
Logs Page.....	62
Clone to Template.....	63
Chapter 4: Using the Lift and Shift Process to Migrate On-Premise Environments to Oracle Cloud.....	65
Understanding the Lift and Shift Process.....	65
Understanding the Minimum Requirements for the Lift and Shift Process.....	66
Using the Lift Process to Migrate an Environment to the Oracle Cloud.....	66
Pages Used to Migrate the Environment to Oracle Cloud.....	67
Lift and Shift Tile.....	67
Lift and Shift Page.....	67
Preparing the Lift Process.....	68
Running the Lift Process.....	70
Using the Shift Process to Provision the Migrated Environment from the Oracle Cloud.....	75
Pages Used to Provision the Migrated Environment from the Oracle Cloud.....	76
Lift and Shift — Create Environment Wizard.....	76
Lift and Shift – Advanced Options Page.....	77
Lift and Shift – Custom Attributes Page.....	78
Lift and Shift – Review and Submit Page.....	81
Chapter 5: Enabling Selective Adoption in Cloud Manager.....	83
Enabling Selective Adoption in Cloud Manager.....	83
Chapter 6: Updating Cloud Manager.....	87
Applying Updates to Cloud Manager.....	87
Chapter 7: Cloud Manager Logs.....	95
Understanding PeopleSoft Cloud Manager Logs.....	95
Chapter 8: Backing Up and Restoring Cloud Manager.....	101
Understanding Cloud Manager Backup and Restore.....	101

Preface

Understanding the PeopleSoft Online Help and PeopleBooks

The PeopleSoft Online Help is a website that enables you to view all help content for PeopleSoft Applications and PeopleTools. The help provides standard navigation and full-text searching, as well as context-sensitive online help for PeopleSoft users.

PeopleSoft Hosted Online Help

You access the PeopleSoft Online Help on Oracle's PeopleSoft Hosted Online Help website, which enables you to access the full help website and context-sensitive help directly from an Oracle hosted server. The hosted online help is updated on a regular schedule, ensuring that you have access to the most current documentation. This reduces the need to view separate documentation posts for application maintenance on My Oracle Support, because that documentation is now incorporated into the hosted website content. The Hosted Online Help website is available in English only.

Note: Only the most current release of hosted online help is updated regularly. After a new release is posted, previous releases remain available but are no longer updated.

Locally Installed Help

If your organization has firewall restrictions that prevent you from using the Hosted Online Help website, you can install the PeopleSoft Online Help locally. If you install the help locally, you have more control over which documents users can access and you can include links to your organization's custom documentation on help pages.

In addition, if you locally install the PeopleSoft Online Help, you can use any search engine for full-text searching. Your installation documentation includes instructions about how to set up Elasticsearch for full-text searching. See *PeopleTools Installation* for your database platform, "Installing PeopleSoft Online Help." If you do not use Elasticsearch, see the documentation for your chosen search engine.

Note: See [Oracle Support Document 2205540.2 \(PeopleTools Elasticsearch Home Page\)](#) for more information on using Elasticsearch with PeopleSoft.

Note: Before users can access the search engine on a locally installed help website, you must enable the Search field. For instructions, go to your locally installed PeopleSoft Online Help site and select About This Help, Managing Locally Installed PeopleSoft Online Help, Enabling the Search Button and Field in the Contents sidebar.

Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format. The content in the PeopleBook PDFs is the same as the content in the PeopleSoft Online Help, but it has a different structure and it does not include the interactive navigation features that are available in the online help.

Common Help Documentation

Common help documentation contains information that applies to multiple applications. The two main types of common help are:

- Application Fundamentals
- Using PeopleSoft Applications

Most product families provide a set of application fundamentals help topics that discuss essential information about the setup and design of your system. This information applies to many or all applications in the PeopleSoft product family. Whether you are implementing a single application, some combination of applications within the product family, or the entire product family, you should be familiar with the contents of the appropriate application fundamentals help. They provide the starting points for fundamental implementation tasks.

In addition, the *PeopleTools: Applications User's Guide* introduces you to the various elements of the PeopleSoft Pure Internet Architecture. It also explains how to use the navigational hierarchy, components, and pages to perform basic functions as you navigate through the system. While your application or implementation may differ, the topics in this user's guide provide general information about using PeopleSoft Applications.

Field and Control Definitions

PeopleSoft documentation includes definitions for most fields and controls that appear on application pages. These definitions describe how to use a field or control, where populated values come from, the effects of selecting certain values, and so on. If a field or control is not defined, then it either requires no additional explanation or is documented in a common elements section earlier in the documentation. For example, the Date field rarely requires additional explanation and may not be defined in the documentation for some pages.

Typographical Conventions

The following table describes the typographical conventions that are used in the online help.

<i>Typographical Convention</i>	<i>Description</i>
Key+Key	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For Alt+W, hold down the Alt key while you press the W key.
... (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe ().
[] (square brackets)	Indicate optional items in PeopleCode syntax.

Typographical Convention	Description
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.
=>	This continuation character has been inserted at the end of a line of code that has been wrapped at the page margin. The code should be viewed or entered as a single, continuous line of code without the continuation character.

ISO Country and Currency Codes

PeopleSoft Online Help topics use International Organization for Standardization (ISO) country and currency codes to identify country-specific information and monetary amounts.

ISO country codes may appear as country identifiers, and ISO currency codes may appear as currency identifiers in your PeopleSoft documentation. Reference to an ISO country code in your documentation does not imply that your application includes every ISO country code. The following example is a country-specific heading: "(FRA) Hiring an Employee."

The PeopleSoft Currency Code table (CURRENCY_CD_TBL) contains sample currency code data. The Currency Code table is based on ISO Standard 4217, "Codes for the representation of currencies," and also relies on ISO country codes in the Country table (COUNTRY_TBL). The navigation to the pages where you maintain currency code and country information depends on which PeopleSoft applications you are using. To access the pages for maintaining the Currency Code and Country tables, consult the online help for your applications for more information.

Region and Industry Identifiers

Information that applies only to a specific region or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in the PeopleSoft Online Help:

- Asia Pacific
- Europe
- Latin America
- North America

Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in the PeopleSoft Online Help:

- USF (U.S. Federal)
- E&G (Education and Government)

Translations and Embedded Help

PeopleSoft 9.2 software applications include translated embedded help. With the 9.2 release, PeopleSoft aligns with the other Oracle applications by focusing our translation efforts on embedded help. We are not planning to translate our traditional online help and PeopleBooks documentation. Instead we offer very direct translated help at crucial spots within our application through our embedded help widgets. Additionally, we have a one-to-one mapping of application and help translations, meaning that the software and embedded help translation footprint is identical—something we were never able to accomplish in the past.

Using and Managing the PeopleSoft Online Help

Click the Help link in the universal navigation header of any page in the PeopleSoft Online Help to see information on the following topics:

- What's new in the PeopleSoft Online Help.
- PeopleSoft Online Help accessibility.
- Accessing, navigating, and searching the PeopleSoft Online Help.
- Managing a locally installed PeopleSoft Online Help website.

Contact Us

Send your suggestions to PSOFT-INFODEV_US@ORACLE.COM. Please include release numbers for the PeopleTools and applications that you are using.

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Chapter 1

Getting Started with PeopleSoft Cloud Manager

Understanding PeopleSoft Cloud Manager

PeopleSoft Cloud Manager is an orchestration framework to provision and manage PeopleSoft environments on Oracle Cloud. The PeopleSoft Cloud Manager can help creating task specific environments that can last as long as the task is needed. PeopleSoft Cloud Manager will enable you to focus more on business and less on infrastructure management by taking away all the complexities involved in acquiring and managing the infrastructure to run PeopleSoft on Oracle Cloud.

The PeopleSoft Cloud Manager is an application available on the Oracle Cloud Marketplace. Any existing PeopleSoft customer can use it by taking advantage of the Oracle Cloud Service resources.

Common Abbreviations

<i>Term</i>	<i>Description</i>
DPK	PeopleSoft Deployment Packages
PCM	PeopleSoft Cloud Manager
PI	PeopleSoft Image
PRP	PeopleSoft Release Patchset
PUM	PeopleSoft Update Manager

Minimum Requirements for PeopleSoft Cloud Manager

Listed below are the minimum requirements for installing PeopleSoft Cloud Manager.

- Minimum Apps version is 9.2.
- Minimum PeopleTools version is 8.55.12. For provisioning COBOL and Elasticsearch the minimum tools version is 8.55.13.
- Minimum shape of Cloud Manager is oc1m.
- Minimum file server capacity is 250 GB.

PeopleSoft Cloud Manager – An Overview

Cloud Manager provides a framework for customers to provision and administer life cycle of PeopleSoft environments on Oracle Cloud. Cloud Manager brings in the agility to rapidly bring up PeopleSoft environments on demand, based on your infrastructure requirements.

Features of Cloud Manager

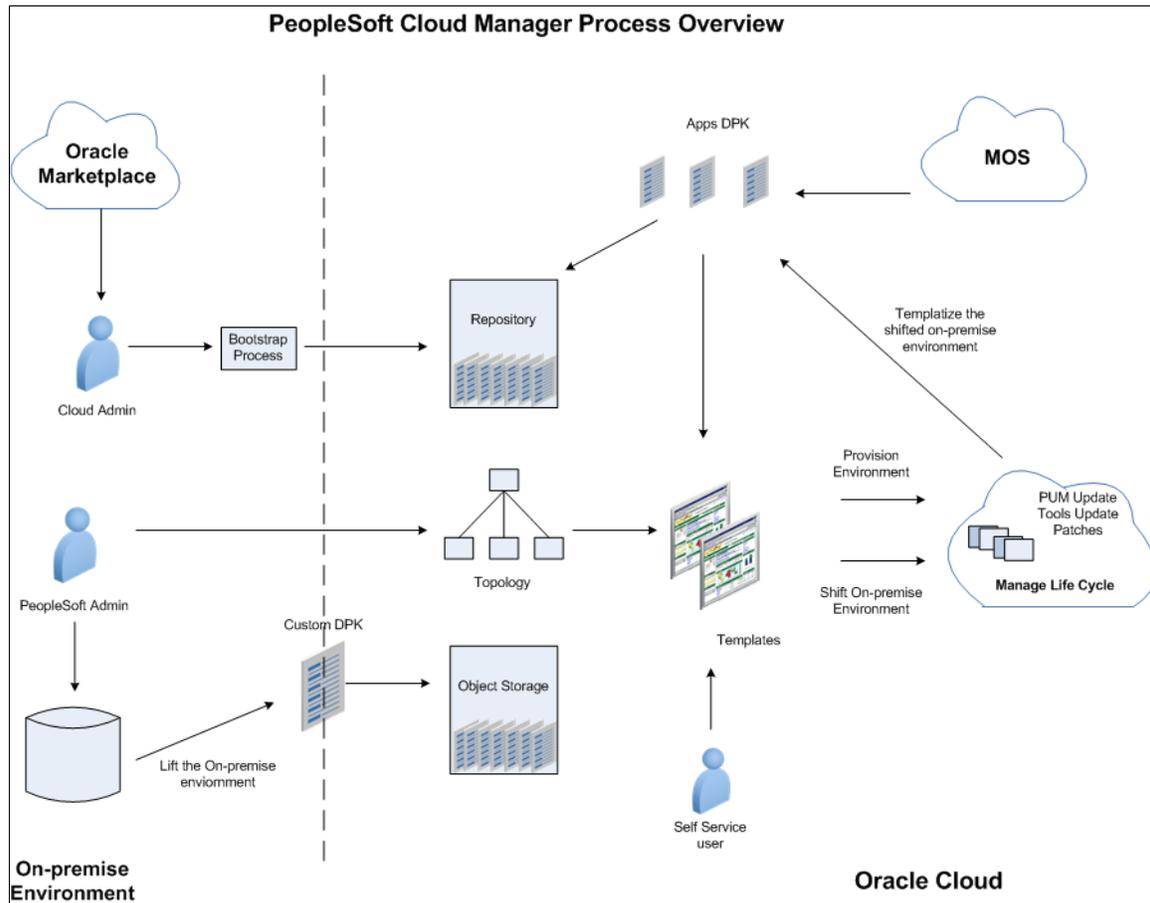
- Provision PeopleSoft environments on Oracle Compute Cloud and Oracle Database Cloud Services
- Orchestrated deployment of PeopleSoft 9.2 Applications on Oracle Cloud.
- Subscription model to auto download application PIs and PRPs.
- Automated migration of on-premise environment to Oracle Cloud.
- Create repeatable deployment templates.
- Self service provisioning of PeopleSoft environments.
- Fully automated deployment which is immune to manual errors and process delays.
- Manage multiple environments from a single page.
- Perform on-demand health checks on environments.
- Enable application lifecycle management in Oracle Cloud.
- Clone environments by creating templates from running instances.
- Access to log files through UI for easy troubleshooting.

PeopleSoft Cloud Manager – Process Flow

This diagram illustrates the overall process involved in creating environments and migrating them to Oracle Cloud.

Image: PeopleSoft Cloud Manager Process Overview

This diagram illustrates the process flow of the PeopleSoft Cloud Manager process.



The process of using Cloud Manager to create, deploy, and manage PeopleSoft environments on the Oracle Cloud are explained in the following topics:

- [Configuring Cloud Manager](#)
- [User Configuration for Cloud Manager](#)
- [Managing Repository](#)
- [Managing Topology](#)
- [Managing Template](#)
- [Managing Environments](#)
- [Understanding the Lift and Shift Process](#)
- [Understanding PeopleSoft Cloud Manager Logs](#)

Chapter 2

Setting Up PeopleSoft Cloud Manager

Configuring Cloud Manager

The steps involved in Cloud Manager Configuration are:

- Configure Cloud Manager Settings tile.
- Configure My Settings tile.

The above mentioned steps are very important to get started using Cloud Manager. User need to configure Oracle Cloud Credentials and REST Endpoints, MOS credentials, Operating System Images, Cobol license, etc. These are detailed in Cloud Manager Settings.

For details on Cloud Manager installation, refer PeopleSoft Cloud Manager Installation Guide.

Pages Used to Configure Cloud Manager

<i>Page Name</i>	<i>Definition Page</i>	<i>Usage</i>
<u>Cloud Manager Settings Tile</u>	ECL_CMCONFIG_FL_GBL (CREF for the tile)	To access Cloud Manager Settings page.
<u>Cloud Manager Settings Page</u>	ECL_CMCONFIG_FL	To change the system settings as per requirement.
<u>Cloud Manager Settings – VM Size Page</u>	ECL_SET_SIZE_FL	To map VM Size to a Shape in Oracle Public Sector Cloud.
<u>Cloud Manager Settings – Manage PUM Connections Page</u>	ECL_CMUPDATE_FL	To configure a PUM sources for updating Cloud Manager application.
<u>My Settings Tile</u>	ECL_INFO_HOME_FL_GBL (CREF for the tile)	To access My Settings page.
<u>My Settings Page</u>	ECL_INFO_HOME_FL	To enter or edit the public SSH key.

Cloud Manager Settings Tile

Use the Cloud Manager Settings tile (ECL_CMCONFIG_FL_GBL) to access the Cloud Manager Settings page.

Note: Only Cloud Manager Administrator can view this tile on the Cloud Manager home page.

Navigation

The Cloud Manager Settings tile is delivered as part of the Cloud Manager home page.

Image: Cloud Manager Settings Tile

This example illustrates the Cloud Manager Settings tile.



Determining REST Endpoint from the Zone Selector

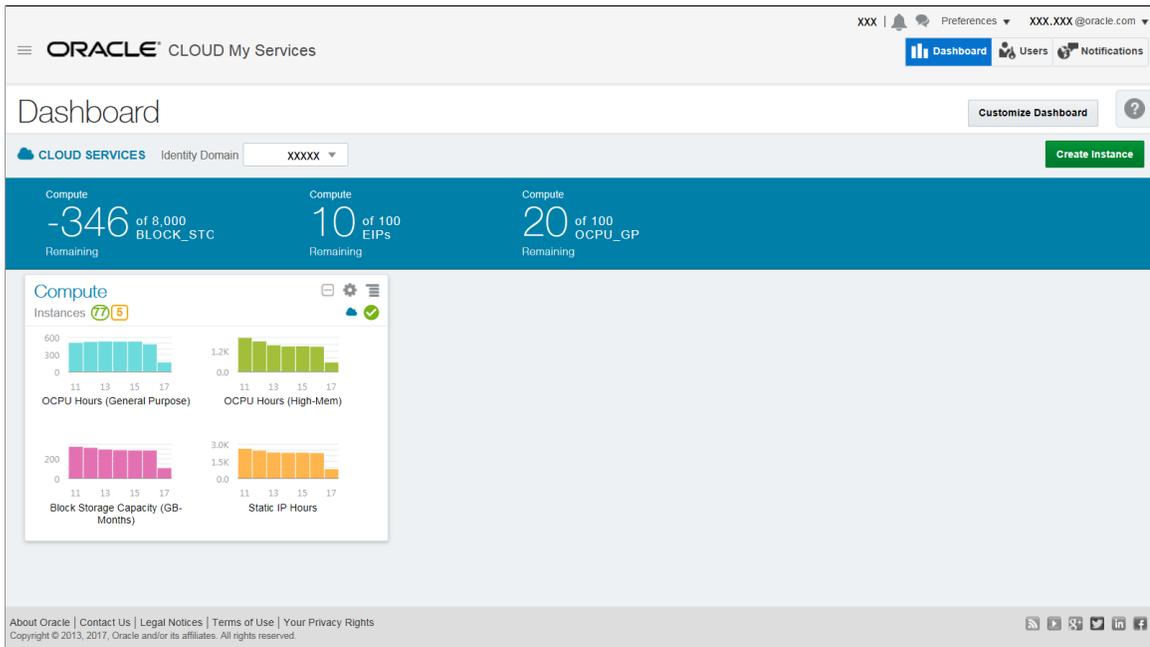
User can also determine REST endpoint from the zone selector on which Cloud Manager is created.

Perform the following steps to determine REST endpoint from zone selector.

1. Access Oracle Cloud Services.
2. Select Traditional Cloud Account.
3. Select the required Data Center.
4. Click My Services link.
5. Enter your identity domain.
6. Enter your Cloud credentials. Oracle My Services page is displayed as shown.

Image: Oracle Cloud My Services page

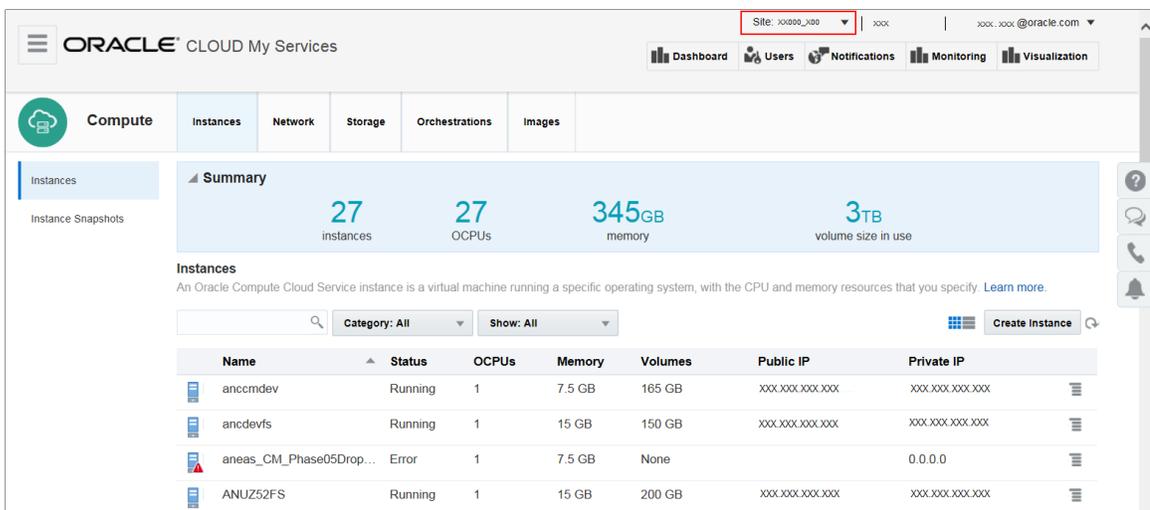
Oracle Cloud My Services page



7. Click Compute.
8. Click Open Service Console button to view the service details. You can see the site as US006_XXX as shown below.

Image: Oracle Cloud My Services Page — Service Details

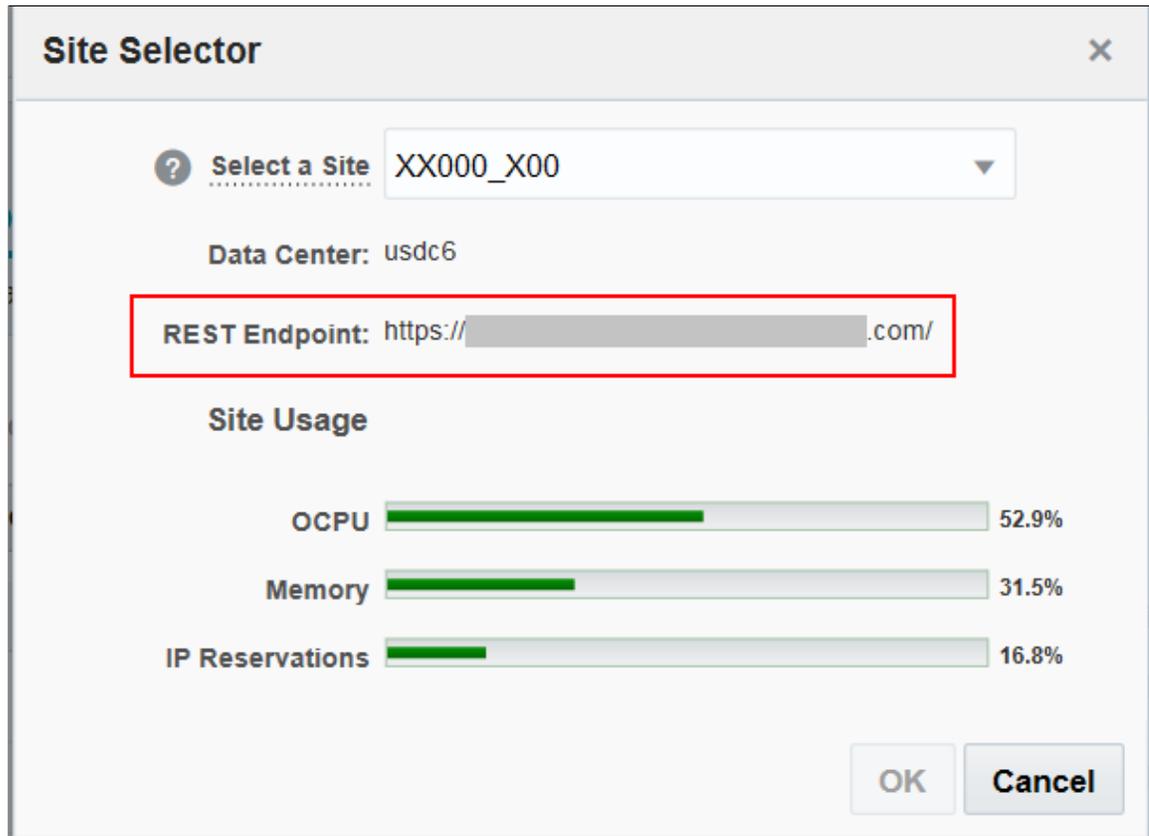
Oracle Cloud My Services Page — Service Details



9. Click on the Site as displayed. The Site Selector modal window is displayed where you can find the REST Endpoint as shown.

Image: Site Selector Modal Window

Site Selector Modal Window



Note: User must ensure to select REST endpoint of the site where Cloud Manager is deployed. The site here should be same where Cloud Manager is installed.

Cloud Manager Settings Page

Use the Cloud Manager Settings page (ECL_CMCONFIG_FL) to change the system settings as per the requirement.

Navigation

Click the Cloud Manager Settings tile on the delivered Cloud Manager Fluid home page. Cloud Manager Settings page is displayed. By default, the details that were provided during Cloud Manager bootstrap process are displayed.

Image: (Tablet) Cloud Manager Settings Page (1 of 2)

This example illustrates the fields and controls on the Cloud Manager Settings page.

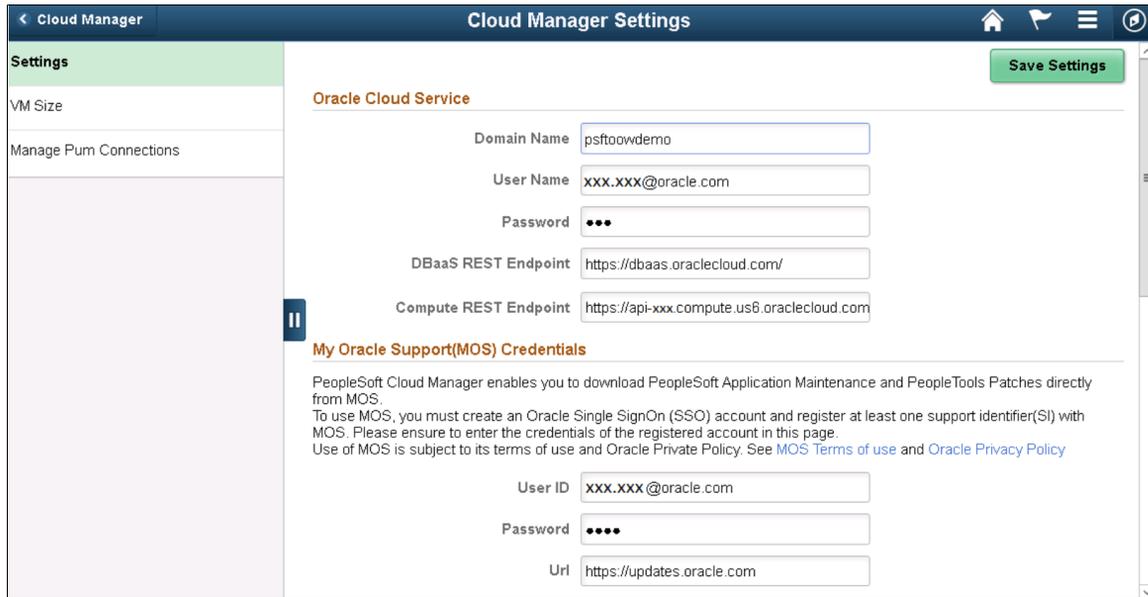
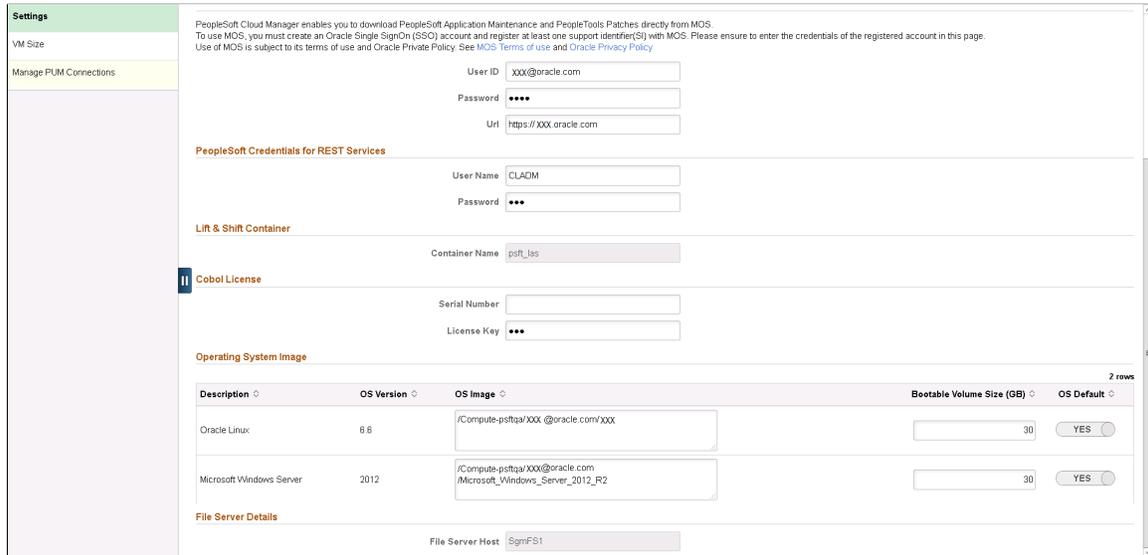


Image: (Tablet) Cloud Manager Settings Page (2 of 2)

This example illustrates the fields and controls on the Cloud Manager Settings page.



Only Cloud Manager Administrator is allowed to change the system settings under this page.

Various sections available in the Cloud Manager Settings page are:

- Oracle Cloud Service.
- My Oracle Support (MOS) Credentials.
- PeopleSoft Credentials for REST Services.
- Lift and Shift Container.

- Cobol License.
- Operating System Image.
- File Server Details

Click Save Settings to save the details.

Oracle Cloud Service

This section refers to the Oracle Cloud Identity Domain and credentials to access Oracle Cloud Compute and Database Cloud Service. In this section you need to define the REST endpoints of the Oracle Cloud Services.

Image: Oracle Cloud Service

This example illustrates the fields and controls on the Oracle Cloud Service section.

Domain Name	Enter your Oracle Cloud Service Identity Domain. Length of Environment name and identity domain name should not exceed 25 characters.
User Name	Enter your Oracle Cloud Service account ID.
Password	Enter the password for your Oracle Cloud Service account.
<hr/>	
	Note: Currently, you are not allowed to enter special characters such as ‘ ‘ “ \# in the Password field.
<hr/>	
DBaaS REST Endpoint	Enter the REST API endpoint URL for Oracle Database Cloud Service. You can find the DBaaS REST Endpoint in My Services dashboard for your identity domain or on the Oracle Database Cloud Service Details page.
Compute REST Endpoint	Enter the REST API endpoint URL of Oracle Cloud Service. . You can find the REST endpoint on the Service Details page for your Identity Domain, or on the Instance Details page.

My Oracle Support (MOS) Credentials

This refers to My Oracle Support (MOS) username and password inputs. Using this credential, Cloud Manager downloads the required updates, PIs and PRPs from MOS. Please ensure to read the MOS License information and click the links to read about the My Oracle Support terms of use and privacy policy.

Image: My Oracle Support (MOS) Credentials

This example illustrates the fields and controls on the Oracle Cloud Service section.

My Oracle Support(MOS) Credentials

PeopleSoft Cloud Manager enables you to download PeopleSoft Application Maintenance and PeopleTools Patches directly from MOS.
 To use MOS, you must create an Oracle Single SignOn (SSO) account and register at least one support identifier(SI) with MOS. Please ensure to enter the credentials of the registered account in this page.
 Use of MOS is subject to its terms of use and Oracle Private Policy. See [MOS Terms of use](#) and [Oracle Privacy Policy](#)

User ID

Password

Url

- User ID Enter the user ID for your My Oracle Support account.
- Password Enter the password for your My Oracle Support account.
- URL Enter the URL: https://updates.oracle.com

Note: Read the MOS License information. Click the links to understand My Oracle Support terms of use and privacy policy.

PeopleSoft Credentials for REST Services

REST services are standard IB REST services available in the Cloud Manager instance. These REST services are used internally by Cloud Manager modules to send/receive the results of long-running, asynchronous activities.

Image: PeopleSoft Credentials for REST Services

This example illustrates the fields and controls on the PeopleSoft Credentials for REST Services section.

PeopleSoft Credentials for REST Services

User Name

Password

- User Name Enter the delivered Cloud Manager Administrator user name.
- Password Enter the delivered Cloud Manager Administrator password.

Note: You can't edit the user name and password.

Lift and Shift Container

This section refers to the Oracle Cloud Storage Container name in which the lifted DPKs (Lifted DPK means migrated environment from your on premise environment through Lift process.) are stored. It is from this container that the list of lifted environments are displayed on the Lift and Shift page.

Image: Lift and Shift Container

This example illustrates the fields and controls on the Lift and Shift Container section.

The screenshot shows a form titled "Lift & Shift Container". Below the title is a text input field labeled "Container Name" containing the text "psft_las".

Container Name Displays the container name for information. The user is not allowed to edit the container name in the current version of Cloud Manager

Cobol License

Use this section to provide COBOL license details. COBOL installation is enabled on the topology by selecting COBOL field value as 'Yes' in the Features section of Edit Node modal window. For details on topology, see [Managing Topology](#).

Note: Oracle is the exclusive reseller of the Micro Focus COBOL compiler for use with PeopleSoft applications. Contact your Oracle sales representative for a license.

Image: COBOL license

This example illustrates the fields and controls on the Cobol License section.

The screenshot shows a form titled "Cobol License". It contains two text input fields: "Serial Number" and "License Key". The "License Key" field is currently masked with three black dots.

Serial Number Enter your COBOL serial number. For example, PEOPLESOFT-XXXXXX.

License Key Enter your COBOL license key. For example, 010xx xxxxx xxxxx xxxxx xxxx xLA.

Operating System Image

This refers to OS images in Oracle Cloud that CM uses to provision VMs during environment creation. For details on how windows image gets the path from Oracle Cloud console, refer the Cloud Manager Installation Guide.

Image: Operating System Image

This example illustrates the fields and controls on the Operating System Image section.

Description	OS Version	OS Image	Bootable Volume Size (GB)	OS Default
Oracle Linux	6.6	/Compute-psftqa/XXX_@oracle.com/XXX	30	YES
Microsoft Windows Server	2012	/Compute-psftqa/XXX@oracle.com /Microsoft_Windows_Server_2012_R2	30	YES

Description

Operating system description.

OS Version

Version of operating system. The OS image for Cloud Manager is available from Market Place. Customers can download into their image list and configure it here.

OS Image

OS images in Oracle Cloud.

Bootable Volume Size (GB)

The virtual boot volume that will be used to boot the VM instance. The size of the bootable volume must be at least 5% higher than the size of the machine image that you are associating with the storage volume. The size of the machine image is the “Uncompressed Size”. For example, suppose the compressed size of the machine image is 1 GB, but the uncompressed size might be 15 GB. In this case, the boot volume size must be 5% more than 15 GB.

OS Default

If Os Default filed is set to 'Yes', the corresponding images will be used for environment provisioning. Currently, this feature is not implemented.

Enter information about operating system images that Cloud Manager will access, if available.

To obtain image information from the Images page, perform the following:

1. Sign in to Oracle Cloud, <https://cloud.oracle.com>.
2. On the Compute card, click the Actions menu and select Open Service Console.
3. Select the Images tab.
4. Hover over the image name to see the image URL.

If you already have an instance created out of an image, then perform the following:

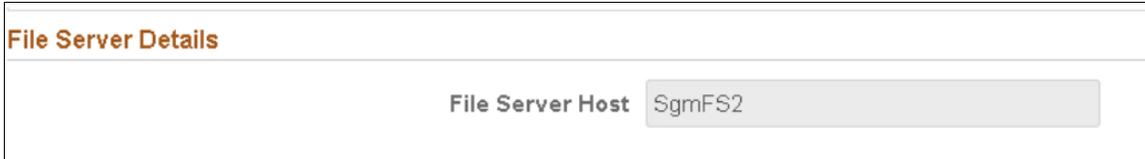
1. Select the Instances tab.
2. Click the Menu icon for the instance and select View.
3. On the Instances Overview page, the Image URL is included in the Information section.

File Server Details

Displays the file server host name.

Image: File Server Details

This example illustrates the fields and controls on the File Server Details section.



Cloud Manager Settings – VM Size Page

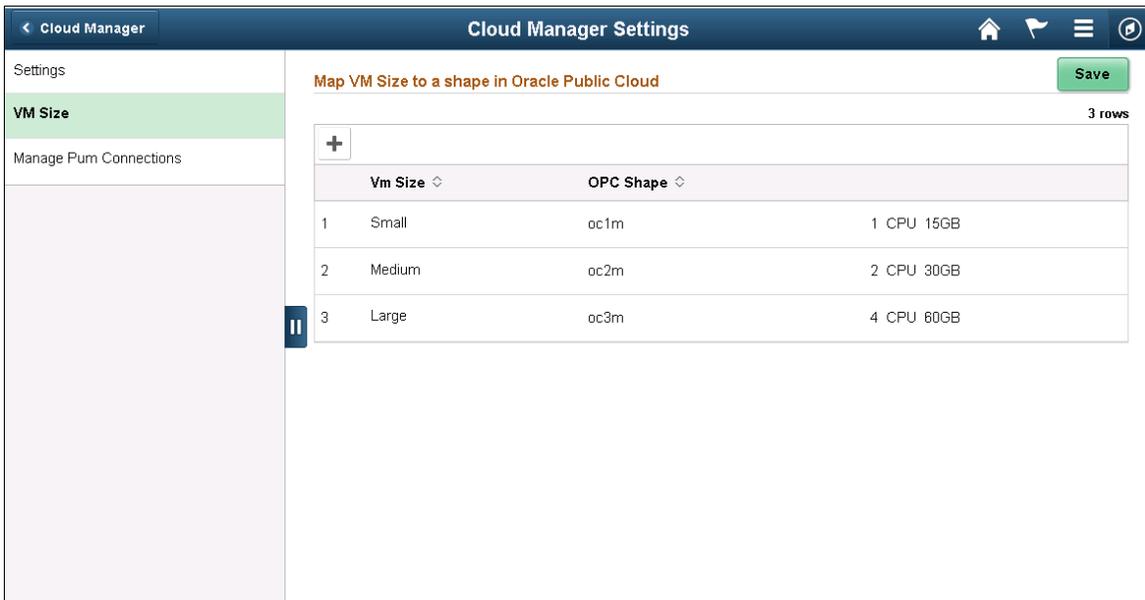
Use Cloud Manager Settings – VM Size page (ECL_SET_SIZE_FL) to map the VM Size to a Shape in Oracle Cloud.

Navigation

Click the Cloud Manager Settings tile on the delivered Cloud Manager Fluid home page. Cloud Manager Settings page is displayed. On the Cloud Manager Settings page, click the VM size link displayed on the left panel.

Image: (Tablet) Cloud Manager Settings – VM Size Page

This example illustrates the fields and controls on the Cloud Manager Settings – VM Size page for the tablet.



VM Size

Enter the VM Size. VM Size is used to select the shape of the image while creating a topology. You can provide any name, but the default ones represent the size.

OPC Shape

Shape in Oracle Cloud.

- + Click this button to add new VM size and map it to Oracle Cloud shape.
- Save Click this button to save the details on Cloud Manager Settings – VM Size page.

Cloud Manager Settings – Manage PUM Connections Page

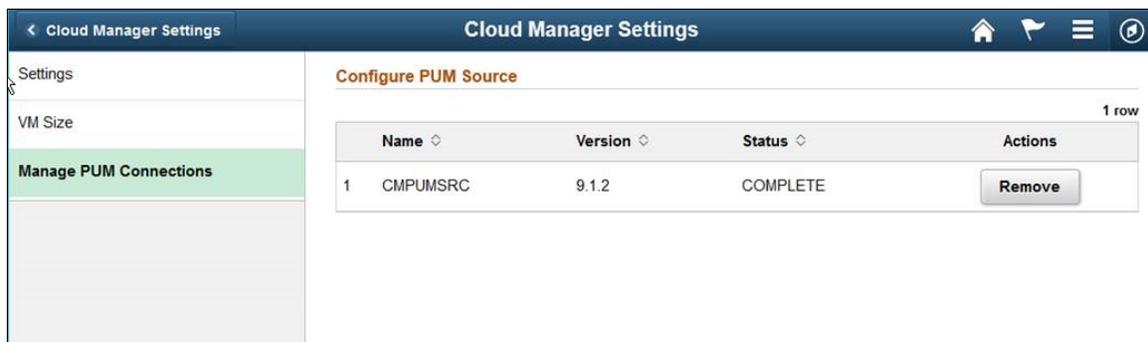
Use Cloud Manager Settings – Manage PUM Connections page (ECL_CMUPDATE_FL) to configure a PUM sources for updating Cloud Manager application. For details on updating cloud manager, see Applying Updates to Cloud Manager.

Navigation

Click the Cloud Manager Settings tile on the delivered Cloud Manager Fluid home page. Cloud Manager Settings page is displayed. On the Cloud Manager Settings page, click the Manage PUM Connections link displayed on the left panel.

Image: (Tablet) Cloud Manager Settings – Manage PUM Connections Page

This example illustrates the fields and controls on the Cloud Manager Settings – Manage PUM Connections page listing a configured environment for the tablet.



A Cloud administrator, has to first create an IH PI environment using the Cloud Manager. After creating the environment, it will be available on this page as a potential PUM source as shown:

Cloud administrator can now go ahead with the regular selective adoption method to update CM.

User Configuration for Cloud Manager

This section describes the configurations that need to be done for setting up a Cloud Manager instance.

My Settings Tile

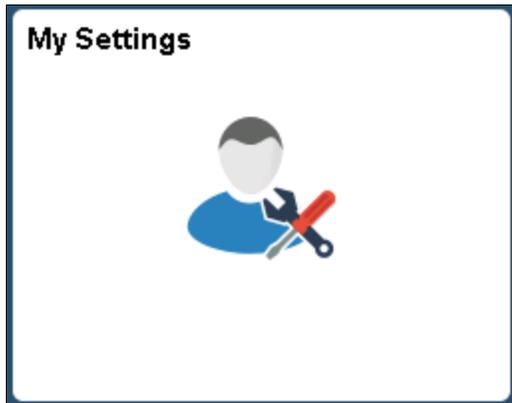
Use the My Settings tile (ECL_INFO_HOME_FL_GBL) to access My Settings page.

Navigation

My Settings tile is delivered as part of the Cloud Manager home page.

Image: My Settings tile

This example illustrates the My Settings tile.



My Settings Page

Use the My Settings page (ECL_INFO_HOME_FL) to enter or edit the public SSH key. The SSH key provided here can be used to input user's own SSH keys or any administrators SSH keys to help manage or troubleshoot issues by connecting over SSH.

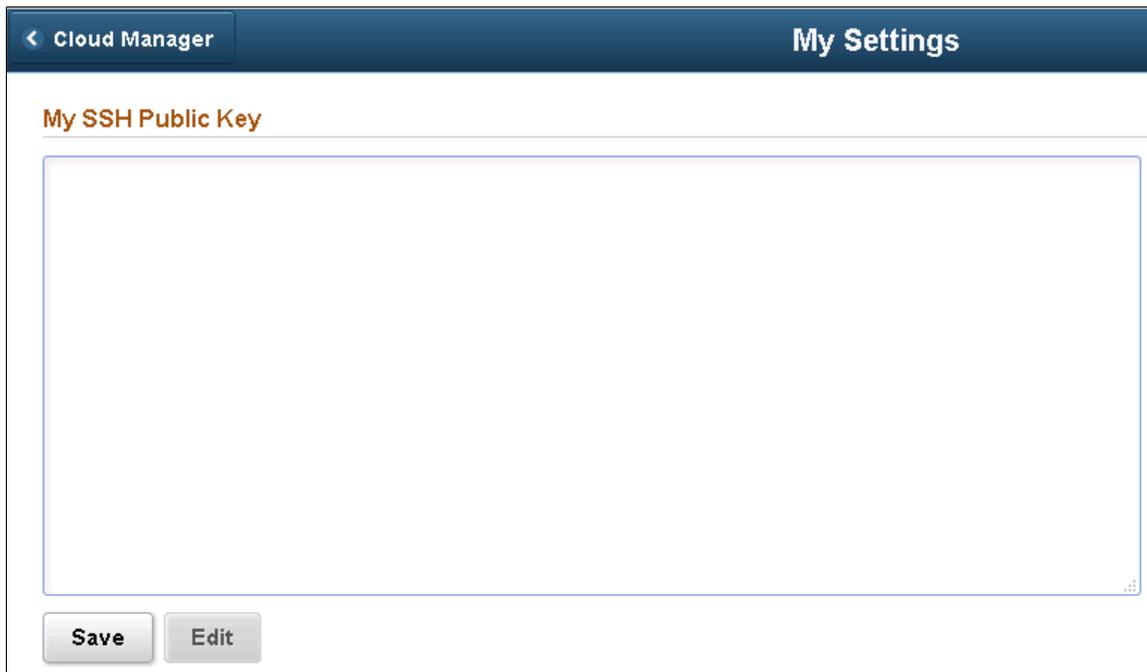
Note: The SSH key will be auto injected into all environments that will be created by the user after adding this key here.

Navigation

Click the My Settings tile on the delivered Cloud Manager Fluid home page. The My Settings page is displayed.

Image: My Settings page

This example illustrates the fields and controls on the My Settings page for the tablet.



My SSH Public Key

Enter the SSH public key value.

Click Save to save the details.

Note: To edit existing key details, click the Edit button and replace the text; then click Save.

Provisioning Environment in PeopleSoft Cloud Manager

Managing Repository

Cloud Manager provides an easy way to automatically download and manage PeopleSoft Application Update Images (PIs), PeopleSoft Release Patchsets (PRPs), PeopleTools Product Patches and PeopleSoft Custom Images. Cloud Manager uses file server created during bootstrap as a nfs repository to store downloaded artifacts from MOS. To streamline and automate downloads of various PeopleSoft application images and PRPs, Cloud Manager has introduced the new concept of Subscription Channels. Each PeopleSoft application has an associated Channel, which an administrator can choose to subscribe in order to download the latest PIs and PRPs for that particular PeopleSoft application. Cloud Manager is delivered with channels for PeopleSoft applications, which are available after you complete the installation and configuration. An administrator can subscribe to multiple channels and download all necessary PIs and PRPs that his organization needs.

Cloud Manager uses an application called Download Manager to download updates from MOS, which is invoked through process scheduler in asynchronous mode, every-time a channel is subscribed.

On the Repository tile, Administrators can:

- Subscribe to release channels for latest PeopleSoft application updates.
- Manage downloaded PeopleSoft Images and PRPs.

Pages Used to Manage Cloud Manager Repository as an Administrator

Page Name	Definition Page	Usage
<u>Repository Tile</u>	ECL_REPOSITORY_FL_GBL (CREF for tile)	To access the various features such as, Channel Subscriptions and Download History, and functions such as, downloading logs and deleting downloads.
<u>My Downloads Page</u>	ECL_REPO_AMYDLS_FL	To view the PRPs and PIs downloaded. New entries are added as soon as new artifacts are downloaded.
<u>Download Subscriptions Page</u>	ECL_REPO_BCHNL_FL	To create download channels and subscribe them to initiate downloads. You can also use predefined download channels to initiate downloads.
<u>Download History Page</u>	ECL_REPO_BDLHIS_FL	To view the history of downloads, say PIs and PRPs downloaded.

Page Name	Definition Page	Usage
<u>Logs Page</u>	ECL_REPO_MLOG_FL	To view the download manager logs.

Repository Tile

Use the Repository tile to access the following features and functions:

- View downloaded artifacts
- Channel subscriptions
- Download history
- Download logs
- Filter and delete downloads

Navigation

The Repository tile (ECL_REPOSITORY_FL_GBL) is delivered as part of the Cloud Manager home page.

Image: Repository Tile

This example illustrates the Repository Tile.



My Downloads Page

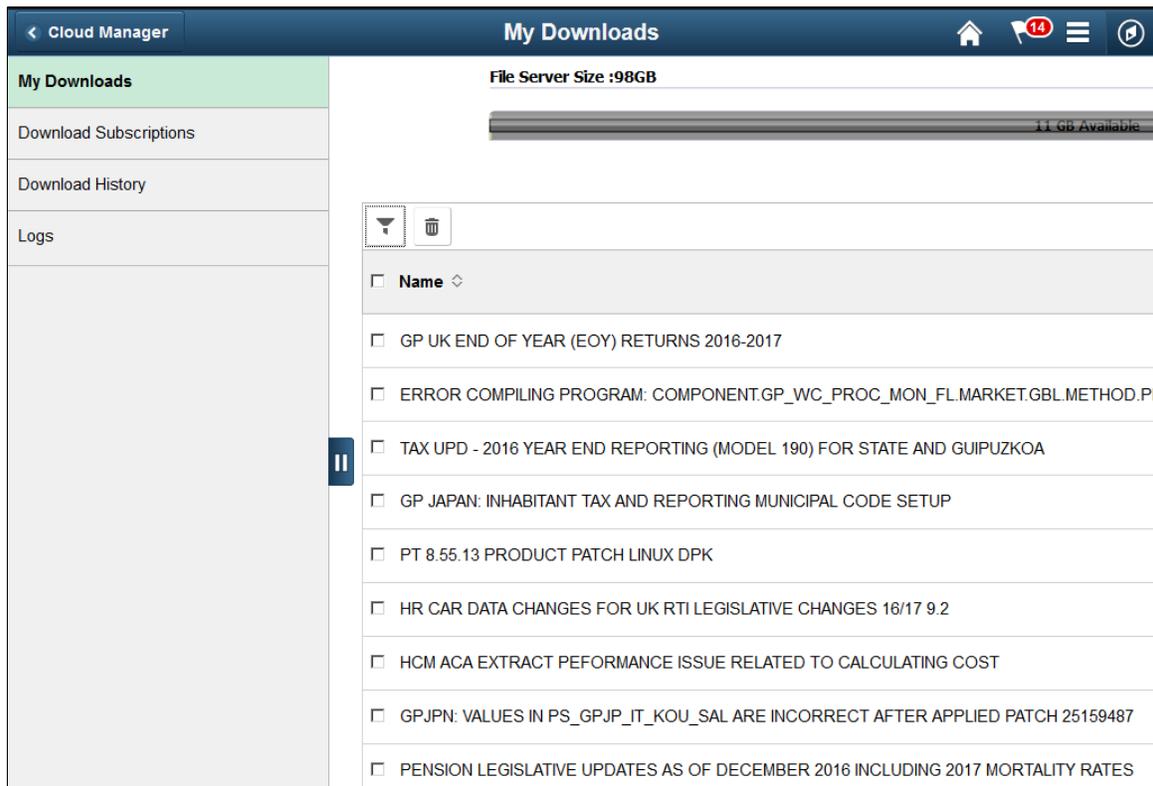
Use the My Downloads page (ECL_REPO_AMYDLS_FL) to view the artifacts downloaded. New entries are added as soon as new artifacts are downloaded.

Navigation

Click the Repository tile on the delivered Cloud Manager Fluid home page. My Downloads page is displayed by default.

Image: My Downloads page

This example illustrates the fields and controls on the My Downloads page.



Note: Clicking on an item in the My Downloads page, displays additional details of the downloaded artifact.



Use the Filter icon to refine the search results based on search criteria.



Use the Delete icon to delete downloaded PIs and PRPs. Select the check box corresponding to the row you want to delete, and then click Delete button.

File Server Size

File Server capacity is a graphical display of the space available on the file server. You can manually increase the file server size as per requirement. .

Name

Name of the downloaded artifact.

Type

Indicates the artifact type such as PI, PRP, Custom Image, and the like.

Product

Indicates the PeopleSoft application product pillar.

Release

Indicates the PeopleSoft application release.

Version

Indicates the application PI version.

Platform	Indicates the Operating System platform such as Linux, windows.
Size	Total size of the PI or PRP.

Download Subscriptions Page

Use the Download Subscriptions page (ECL_REPO_BCHNL_FL) to create download channels and subscribe to them to initiate downloads.

Note: Cloud Manager delivers default channels and those channels are available in the unsubscribed list of Download Subscriptions page.

Navigation

Click the Repository tile on the delivered Cloud Manager Fluid home page. Select the Download Subscriptions tab in the left panel of the Cloud Manager home page.

Image: Download Subscriptions page

This example illustrates the fields and controls on the Download Subscriptions page.

Channel Name	Description	New Updates	Product	Release	Platform	Source
Tools_855_Linux	PeopleSoft PeopleTools 8.55 Linux		Tools	8.55	Linux	MOS
HCM_92_Linux	PeopleSoft HCM 9.2 Linux		HCM	9.2	Linux	MOS



To subscribe or unsubscribe channel, click the Related Actions button corresponding to channel name. If you select Subscribe option, Cloud Manager starts monitoring for any new PIs or PRPs and downloads them from My Oracle Support. If you select the Unsubscribe option, Cloud Manager will no longer monitor or download latest PIs or PRPs.

When a release channel is subscribed, cloud manager invokes download manager application which connects to MOS and downloads latest updates for the release channel. Please note that artifacts like Update Images are larger in size and takes few hours to download. User can view the status of active downloads from Download History page.

+

Click the + button to create a channel. For details on creating channels, see [Download Subscriptions Page](#).

Subscribed tab

Use this tab to view a list of subscribed channels.

Unsubscribed tab

Use this tab to view a list of unsubscribed channels. By default, newly created download channels are listed under the Unsubscribed tab.

Downloading PeopleTools Patches

Cloud Manager can download previous PeopleTools patch releases for PeopleTools channel. But for Application channels, only latest patches get downloaded.

In case of Tools channel subscription, you are presented with a modal window for selecting the patch version you want to download.

Navigation

Click Unsubscribed tab. Select any Tools channel. Click the Related Options menu and select Subscribe.

Image: Download Filter Modal Window

This example illustrates the fields and controls in Download Filter modal window.

Enter the required product patch version in the Minimum Product Patch Number field. For example, if user enters 11 in this field, then CM will download tools patches 8.55.11, 8.55.12, 8.55.13 upto latest.

Download History Page

Use the Download History page (ECL_REPO_BDLHIS_FL) to view the history of downloads.

Note: The entries in Download History page are updated in every three minutes. Clicking on an entry in the Download History page, will show the current state of the download channel (that is, the list of files already downloaded, list of files in the download queue and those that are currently downloading).

Navigation

Click the Repository tile on the delivered Cloud Manager Fluid home page. Select the Download History tab in the left panel of the Cloud Manager home page.

Image: Download History page

This example illustrates the fields and controls on the Download History page.

Channel Name	Updates	Start Time	End Time
Tools_855_Linux	0	12/19/16 3:53AM	12/19/16 3:53AM
HCM_92_Linux	17	12/19/16 3:53AM	12/19/16 5:37AM

Channel Name

Name of the download channel.

Updates	Number of updates downloaded.
Start Time and End Time	Indicates the time when downloads are started/finished for the release channel.

Logs Page

Use the Logs page (ECL_REPO_MLOG_FL) to view the download logs corresponding to the subscribed channels. It displays download logs for all the files that get downloaded.

Navigation

Click the Repository tile on the delivered Cloud Manager Fluid home page. Select the Logs tab in the left panel of the Cloud Manager home page.

Image: Logs Page

This example illustrates the fields and controls on the Logs page.



Action	The related actions performed on the environment.
Log	Log of the related action performed.
Channel Name	Name of the subscribed channel.
Log File	Log files are generated when a file gets downloaded for a particular channel. Select an appropriate log file in this field.
Number of Lines to Display	Indicates how many lines of the selected log file need to be displayed.
Search String	Used to search for specific keywords in the log file. When user inputs a keyword, such as "ERROR" as an example, then only those lines are displayed which has an Error string in it. Here, only the specified number of lines are displayed.
Regex Search	Enables advanced searching, where a user can provide Unix style regular expressions.
Fetch Logs	Click this button to fetch log data based on the input provided by the user in the Logs page.
Log Data	Data from the logs.

Subscribing Channels using the Cloud Manager Repository

This section details the process flow for subscribing channels using the Cloud Manager Repository.

Note: Cloud Manager has a process scheduler recurring job defined, which invokes download manager for all the subscribed release channels, once every week. This will make sure that latest updates for all the subscribed release channels are download once every week, without any user interaction.

Prerequisites

The administrator needs to define My Oracle Support credentials prior to subscribing channels using the Cloud Manager Repository. For this, perform the following:

1. Select the Cloud Manager Settings tile.
2. Edit the value in the User ID field and My Oracle Support password field in the My Oracle Support (MOS) Credentials section, as per requirement.
3. Click Save Settings to save the details.
For details on the Cloud Manager settings, see [Cloud Manager Settings Tile](#).

Note: This is a one-time setup.

Perform the following steps to subscribe channels using the Cloud Manager Repository tile:

1. Click the Repository home page available on the Cloud Manager home page.
2. Select Download Subscriptions on the left panel. The Download Subscriptions page is displayed.
3. Click Unsubscribed.
4. To subscribe to the release channel, perform the following:
 - a. Click the Related Actions button corresponding to channel name.
 - b. Select Subscribe action. If there are any new updates, then the system starts downloading the new updates.
5. To create a channel, perform the following:

Note: If no channels are available by default, you need to create channels first followed by the subscribing channels procedure.

- a. Click on the '+' button to create a channel. The Create Channel modal window is displayed as shown.

Image: Create Channel modal window

This example illustrates the fields and control of the Create Channel modal window.

- b. Enter the Channel name and corresponding description.
- c. Select the Product name, release name and platform from the drop-down list.
- d. Select MOS from the Source field.
- e. Click Done to create the channel.

Note: Downloading PIs and PRPs for a download channel, consumes time depending on the size of the artifacts. The status of the download can be viewed by clicking 'New Updates' on the Download Subscriptions page and also on the Download history page by clicking on the corresponding entry.

Expanding File Server Capacity

You can manually increase the file server size (using Logical Volumes).

Several steps in this process require you to access the file server through SSH. You can login to the file server by following the steps mentioned below:

1. Login into CM through SSH.
2. Find the CM SSH key in the CM VM (/home/psadm2/psft/data/cloud/OPChome/<OPC domain>/<OPC user id>.SSH).
3. Login to the File Server VM via SSH as "OPC" user using the private key found in the previous step

Note: Use the sudo command to run administrative tasks.

If an existing file server is attached to a CM instance provisioned later, this login will not work. In such case, you need to add your personal public key to the file server manually after provisioning the file server for the first time

To manually increase the file server size, perform the following:

1. Bring the file system offline.

- SSH into CM VM. Please note the name of the device which is mounted on /cm_psft_dpks(example: dev/xdvc), you will require this name in a later step) and then unmount it.

```
umount /cm_psft_dpks
```

- SSH into the File Server VM and stop the NFS service and SMB service:

```
/sbin/service nfs stop
```

```
/sbin/service smb stop
```

- In File Server VM , unmount the storage disk.

```
umount /u01/app/oracle/product
```

2. Expand the Disk

- Login to Oracle Compute Cloud Service Console.
- Navigate to File Server instance, view instance details, and note down the name of the storage disk which is attached to the File Server.

3. Navigate to Storage section, identify the disk associated with the file server (found in previous step).

4. Click Update.

5. Select the required size.

6. Click Update to increase its size.

7. Expand the File System

In File Server VM, run the following commands to expand the file system in the attached disk.

```
e2fsck -f /dev/<device name>
```

```
resize2fs /dev/<device name>
```

<device name> is the device name of the mount in the File Server, for example: dev, xvdb.

8. Bring the File System Online

- In File Server VM , mount the expanded disk again with command:

```
mount -a
```

- In File Server VM, verify the new size with:

```
df -h /u01/app/oracle/product
```

- In File Server VM , start NFS service and SMB service (which you had stopped in the previous step):

```
/sbin/service nfs start
```

```
/sbin/service smb start
```

- In Cloud Manager VM , re-mount the File Server share with the following command :

```
mount -a
```

Managing Topology

Topology defines the infrastructure layout that will be created on Oracle Cloud by the Cloud Manager. Essentially, a topology defines a set of nodes, which is an abstraction of a virtual machine. While defining a node, you can set the values for node attributes like OS, VM Size in terms of OCPU and memory, disk capacity, and PeopleSoft components to be installed.

The PeopleSoft administrators create Topologies for PeopleSoft applications as per their organization requirements. By default, the Cloud Manager is delivered with the following topologies:

- Lift and Shift
- Lift and Shift - DBAAS

Note: Users are not allowed to delete lift and shift topologies that are used for lift and shift process.

Pages Used to Manage Topology as an Administrator

<i>Page Name</i>	<i>Definition Name</i>	<i>Usage</i>
Topology Tile	ECL_TOPOLOGY_FL	To access the Topology landing page.
Topology Page	ECL_TOPO_COMP_FL	To create new topologies, edit or clone existing topologies.

Topology Tile

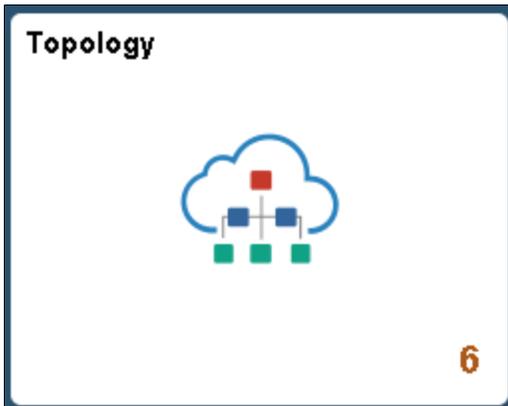
Use the Topology tile to access the Topology landing page.

Navigation

The Topology tile is delivered as part of the Cloud Manager home page.

Image: Topology Tile

This example illustrates the Topology Tile.



Topology Page

Use the Topology page (ECL_TOPOLOGY_FL), to perform the following:

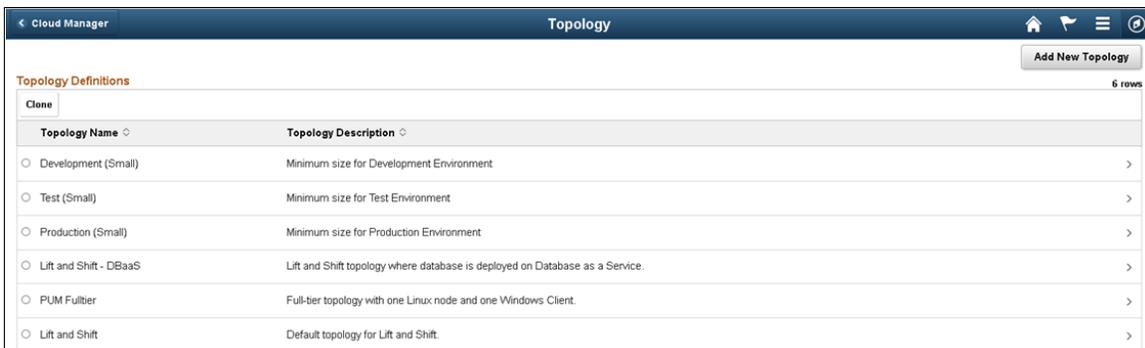
- Create new topology
- Edit existing topology
- Clone existing topology
- Delete existing topology

Navigation

Click the Topology tile on the delivered Cloud Manager Fluid home page. The Topology page is displayed.

Image: Topology Page

This example illustrates the fields and controls on the Topology page.



Topology Name

Name of the topology.

Topology Description

Meaningful description for the topology.

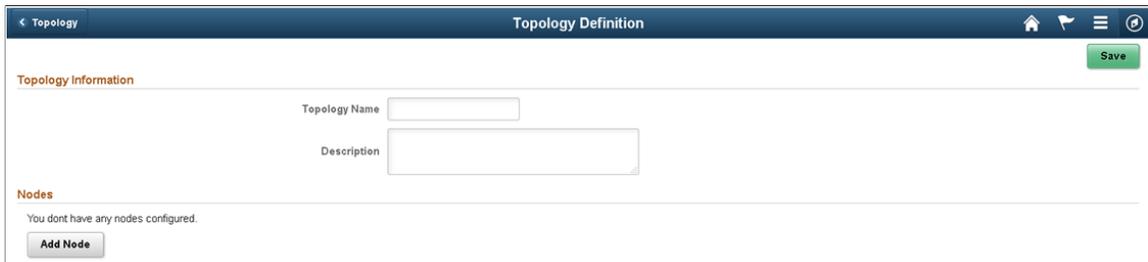
Topology Definition Page

Use the Topology Definition page (ECL_TOPO_COMP_FL) to create a new topology.

1. Click the Add New Topology button available on the top right corner of Topology landing page. This displays the Topology Definition page.

Image: Topology Definition page

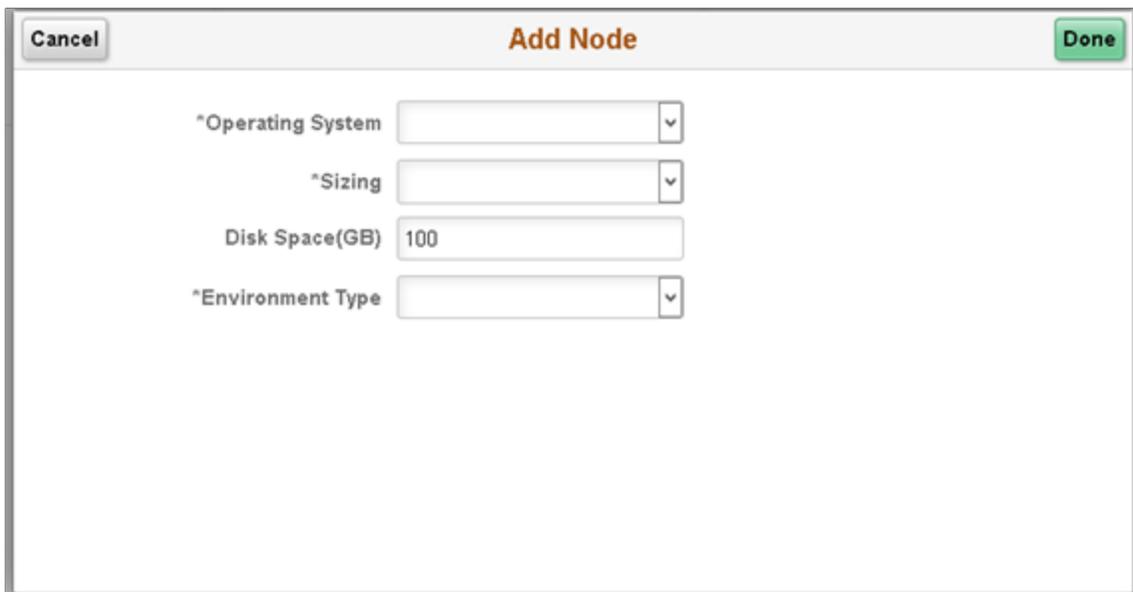
This example illustrates the fields and controls on the Topology Definition page.



2. Enter the topology name and corresponding description.
3. Click Add Node button to create a node. This displays the Add Node modal window. Use the Add Node modal window to set the values for node attributes like OS, sizing parameter, disk to be attached, and the PeopleSoft component to be installed.

Image: Add Node modal window

This example illustrates the fields and controls on the Add Node modal window.



Operating System

Select the operating system (Linux or Windows) used to create the topology.

Sizing

Select Small, Medium or High as per requirement. These sizes are mapped to Oracle Cloud shapes. The mappings can be viewed/modified on CM Settings page — VM Size.

Disk Space (GB)	<p>Select the amount of disk space attached to the machine. By default, the value '100' is displayed.</p> <hr/> <p>Note: Assume that if the lifted DPK is K size, then the disk size should be 2.5 times K.</p> <hr/>
Environment Type	<p>Select the PeopleSoft software components to be deployed on the node. Different environment types available are:</p> <ul style="list-style-type: none"> • Database Tier: Deploys the PeopleSoft database on a node. • Database as a Service: Deploys the PeopleSoft database on Oracle DBAAS. • Elasticsearch Server: Sets up Elasticsearch (ES) on the node. <hr/> <p>Note: ES node configuration is automatically done by Cloud Manager. For information on how to deploy and configure Elasticsearch refer Elasticsearch Home Page on My Oracle Support (Doc ID 2205540.2).</p> <hr/> <ul style="list-style-type: none"> • Full Tier: Deploys Database, Appserver, Webserver and Process Scheduler on the node. • Middle Tier: Deploys Appserver, Webserver and Process Scheduler on the node. • PeopleSoft Client: Deploys windows client components on the node. <p>The above mentioned options are displayed based on the Operating System that is selected.</p> <hr/> <p>Note: For applying PeopleTools patch to an environment, it is mandatory to have a PeopleSoft client defined in the topology used to deploy the environment.</p> <hr/>

4. Click Save to save the details.

Validation Rules for Topology

The following are the set of current validation rules for topology:

If there is a full tier node, then you:

- Cannot have another full tier node.
- Cannot have a mid-tier node.
- Cannot have a database node.

- Cannot have a database.(Database as a Service) node.

If there is a mid-tier node, then you:

- Cannot have another mid-tier node.
- Cannot have a full tier node.
- Must have either a database DBAAS node or a database node.

If there is a database node, then you:

- Cannot have another database node.
- Cannot have a DBAAS node.
- Cannot have a full tier node.

If there is a DBaaS node, then you:

- Cannot have another DBaaS node.
- Cannot have database node.
- Cannot have a full tier node.

Apart from this, user must have a Windows Client Node in all the above mentioned cases and an optional Elasticsearch Server Node.

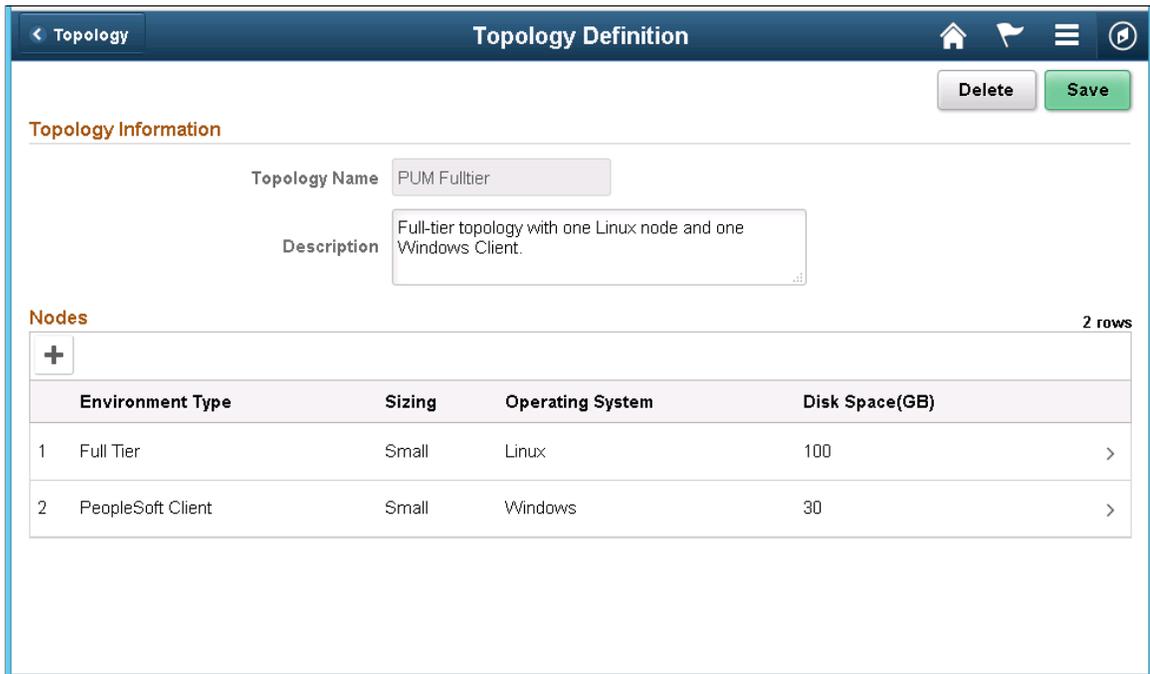
Editing Existing Topology

To edit an existing topology, perform the following:

1. Click on any existing topology in the Topology page. This displays the Topology Definition page of the topology which you want to edit.

Image: Topology Definition – Edit Page

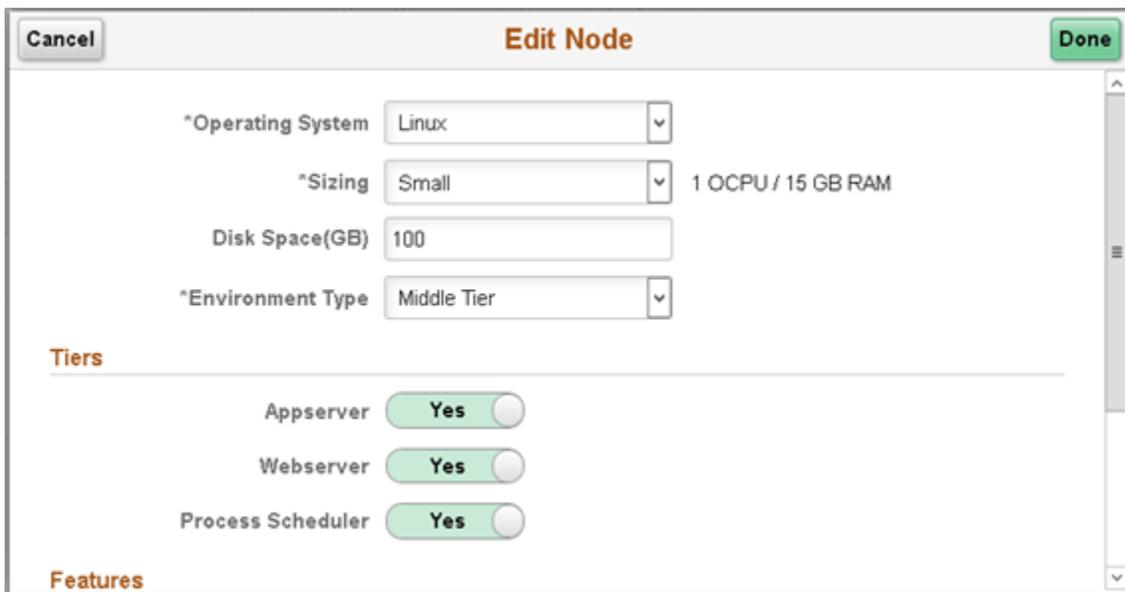
This example illustrates the fields and controls on the Topology Definition – Edit Page.



2. You can edit the description, if required.
3. Click + to add new nodes.
4. To edit any node attribute value, click on any node row. This displays the Edit Node modal window.

Image: Edit Node modal window

This example illustrates the fields and controls on the Edit Node modal window.



Note: Currently, you cannot disable any of the tiers on the middle tier node.

5. Click Save to save the edited details.
6. To delete the topology, click Delete.

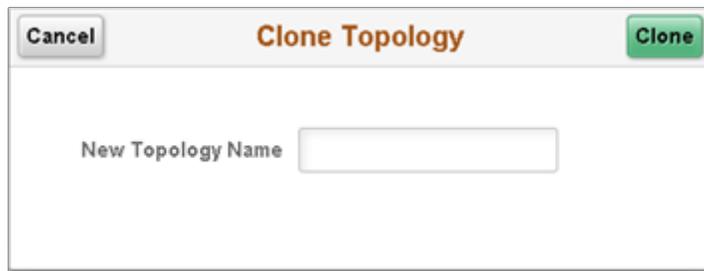
Cloning Existing Topology

To clone an existing topology, perform the following:

1. Select the radio button corresponding to a topology that you want to clone.
2. Click Clone button in the Topology page. This displays the Clone Topology modal window.

Image: Clone Topology modal window

This example illustrates the fields and controls on the Clone Topology modal window.



3. Enter a new topology name and click Clone. The new topology is added to the topology list.

Managing Template

An environment template is a repeatable blueprint that is used to deploy PeopleSoft environments using Cloud Manager. A template defines the topology to be used when deploying PeopleSoft application DPK, which gets downloaded to the Repository. A template also defines environment attributes to enable streamlined deployments. Access to Templates can be managed by defining security attributes of the template.

Pages Used to Manage Environment Template Tile as a PeopleSoft Administrator

<i>Page Name</i>	<i>Definition Name</i>	<i>Usage</i>
Environment Template Tile	ECL_TEMPLATE_LP_FL_GBL (This is the CREF for the tile.)	To access the Environment Template landing page.

Page Name	Definition Name	Usage
<u>Environment Template Page</u>	ECL_TEMPLATE_FL	To perform the following: <ul style="list-style-type: none"> • Create a new template. • Edit, delete, and clone an existing template.
<u>Environment Template – General Details Page</u>	ECL_TEMPL_GEN_FL	To enter the template name, description, and selecting a database.
<u>Environment Template – Select Topology Page</u>	ECL_TEMPL_TOP_FL	To select the topology that you have already defined.
<u>Environment Template – Define Security Page</u>	ECL_TEMPL_SEC_FL	To associate zones in which the environment is created and the roles that have access to the template.
<u>Environment Template – Summary Page</u>	ECL_TEMPL_REV_FL	Displays the summary of the environment template that the user is about to create.

Environment Template Tile

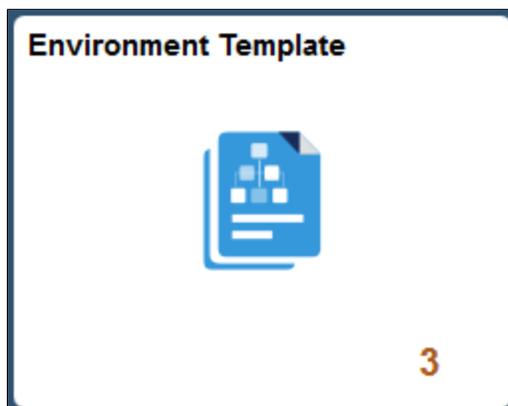
Use the Environment Template tile to access Environment Template landing page.

Navigation

The Environment Template tile is delivered as part of the Cloud Manager home page.

Image: Environment Template Tile

This example illustrates the Environment Template Tile.



Environment Template Page

Use the Environment Template page to create a new template and edit/delete/clone an existing template.

Navigation

Click the Environment Template tile on the delivered Cloud Manager Fluid home page. Environment Template page is displayed by default.

Image: Environment Template Page

This example illustrates the fields and controls on the Environment Template Page.

Template Name	Database	Default Topology	Description
<input type="radio"/> CLONE20JAN	DBAAS5PM PSPDB 20170120-172314	DBAASPROV	
<input type="radio"/> DBAAS_PRO	PEOPLESOFT HCM UPDATE IMAGE 9.2.020 - NATIVE OS	DBAASPROV	
<input type="radio"/> Lift and Shift		Lift and Shift	This template is used during the Shift process, in which a

Note: Lift And Shift template is the default template displayed in the Environment Template page with no database associated with it .

Template Name	Name of the template.
Database	Indicates the PeopleSoft application DPK that gets installed when the template is deployed.
Default Topology	Default topology associated with the template.
Description	Meaningful description of the template.

Creating a Template

Use the Environment Template wizard to create a new template using a step by step guided process.

By default the create template guided process involves the following steps:

- Entering general details.
- Selecting topologies.
- Defining security.
- Submitting the details.

Environment Template – General Details Page

Use the Environment Template – General Details page to enter the template name, description, and selecting a database.

Navigation

Click the Add New Template button on the Environment Template landing page.

Image: Environment Template – General Details page

This example illustrates the fields and controls on the Environment Template – General Details page.

Name	Name of the template which you want to create.
Description	Meaningful description of the template.
Database	Select a PeopleSoft application DPK from the list of DPKs available in the Repository.

Environment Template – Select Topology Page

Use the Environment Template – Select Topology page to select the topology that you have already defined. You may edit the default attributes associated with the selected topology.

By configuring Custom attributes, an administrator can configure environment settings that will be deployed by default. This enables streamlining deployments for self-service users.

Navigation

Click Next in the Environment Template — General Details page or

Click step 2, Select Topology, at the top of the page to navigate to the Environment Template – Select Topology page in the guided process.

Image: Environment Template – Select Topology page

This example illustrates the fields and controls on the Environment Template – Select Topology page.

Default Topology

Users can mark one of the topology associated with the template as the default topology. During the environment creation process using a template, you can override this default topology and select any other topology associated with that template. If you don't want to override, then the default topology will get used automatically.

Note: Please ensure to select the topology under Override Topology Section and then continue Creating the Template.

Topology Name

Select the required topology that you want to include in the template.

Note: While selecting a topology, the custom attributes associated with the selected topology is displayed. It is possible to override the default attributes based on the requirements.

Adding New Topologies

1. Click + to add more topologies. A new row of empty fields appears below the existing record. You can configure the fields based on the requirements.
2. Expand the Custom Attributes block.
3. Select the required topology. This displays the custom attributes corresponding to the selected topology as shown.

Image: Creating New Topology

This example illustrates the Environment Template — Select Topology page.

The screenshot shows the 'Environment Template' page in a guided process. The current step is 'Select Topology', which is highlighted with a green circle and a green checkmark. The page contains a table with two rows of topology options. The first row is 'Lift and Shift' and the second row is 'PUM Fulltier'. Below the table, there is a section for 'Custom Attributes' with a dropdown menu set to 'Lift and Shift' and an 'Edit Custom Attributes' button. Below this, there are three expandable sections: 'Middle Tier', 'Database Tier', and 'PeopleSoft Client'.

Default Topology	Topology Name		
<input type="checkbox"/>	Lift and Shift	<input type="text"/>	+ -
<input checked="" type="checkbox"/>	PUM Fulltier	<input type="text"/>	+ -

▼ Custom Attributes

Topology:

- ▶ Middle Tier
- ▶ Database Tier
- ▶ PeopleSoft Client

4. Enter the required attributes and click Next.

Note: Cloud manager allows users to add customization during template creation under Edit Custom Attributes section. This customization can be added only to middle tier, database tier, or full tier. The customization will be available to users when they select this template. This facilitates the user to define custom attribute values for the environment being deployed.

Environment Template – Define Security Page

Use the Environment Template – Define Security page to associate the zone in which the environment is created and the role that will have access to the template.

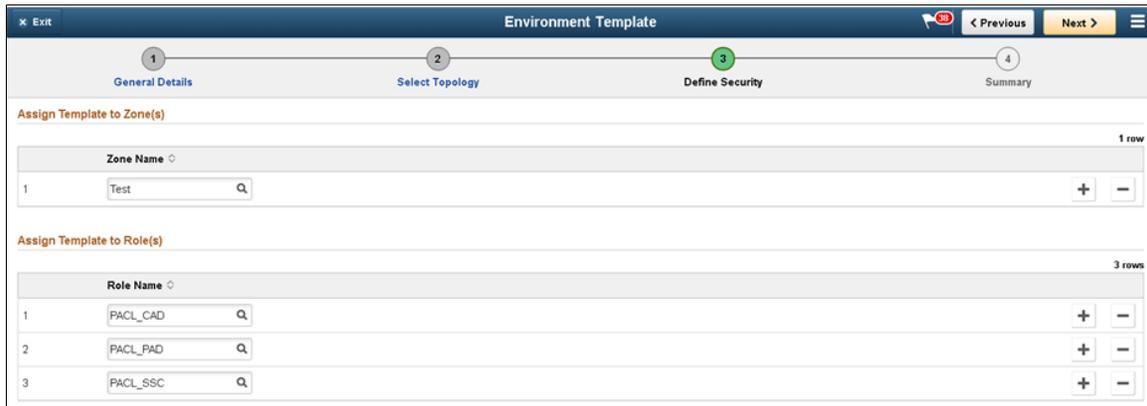
Navigation

Click Next, or

Click step 3, Define Security, at the top of the page to navigate to the Environment Template – Define Security page in the guided process.

Image: Environment Template – Define Security Page

This example illustrates the fields and controls on the Environment Template – Define Security Page.



Zone Name Indicates the zone in which the environment is created.

Role Name Indicates the roles that have access to the template for creating environments. Only the users belonging to the role specified will be able to access the template while creating environment.

The delivered Cloud Manager roles are:

- Cloud Administrator (PACL_CAD)
- Cloud PeopleSoft Administrator (PACL_PAD)
- Self-Service User (PACL_SSC)

Environment Template – Summary Page

Use the Environment Template – Summary page (ECL_TEMPL_REV_FL) to review and submit the template details.

Navigation

- Click Next.
- Click step 4, Summary, at the top of the page to navigate to the Environment Template – Define Security page in the guided process.

Image: Environment Template – Summary Page

This example illustrates the fields and controls on the Environment Template – Summary page.

The details provided in all the pages in the Environment Template wizard is displayed here.

Submit Click this button to submit the details for template creation.

Edit/Delete/Clone an Existing Template

User can edit, delete or clone the existing templates using the Environment Template landing page.

- To edit an existing template details, click a row and modify the details as per requirement.
- To delete an existing template, select the radio button corresponding to the template which you want to delete and click the Delete button. Users cannot delete a template, if it is already used for defining an environment.
- To clone an existing template, select the radio button corresponding to the template which you want to clone and click the Clone button available on the Environment Template landing page. The Clone Template modal window is displayed, wherein you can enter the new template name and click the Clone button. The new template is added to the template list.

Default Environment Templates

There will be a set of default templates available out of the box after installing Cloud Manager. They are:

- Lift and Shift
- Lift and Shift – DbaaS

These are sample templates that an administrator can reuse to clone and modify, to suit their organization standards. Currently, sample templates are available for development, test and production.

A default template for Lift and Shift is also available which is used during shifting environment by default. This Lift and Shift template and its associated topology must be modified such that it is suitable for the environment being shifted. The Lift and shift topology is fixed in terms of number of nodes, but

the shape and disk space parameters can be modified. For any environment to be provisioned in CM, administrator creates a template and a user uses that template to provision. In case of Lift and Shift, a default template is provided out of the box and there is no need to create any templates. When an administrator does a 'Create Environment' on Lift and Shift page, the process automatically chooses the default Lift and Shift template. This Lift and Shift template must be modified to suit the environment being shifted. For more details, see [Understanding the Lift and Shift Process](#).

Managing Environments

Cloud Manager provisions PeopleSoft environments on-demand with just a few clicks. The entire provisioning process is automated. At the end of provisioning, a ready-to-use environment is available within a short time. The environments can be created by a three step process:

1. Create Topology
2. Create Template
3. Create Environment

Note: Prior to creating an environment, ensure that the required DPKs are already downloaded in the Repository.

An administrator defines a template for creating an environment. The topology is encapsulated inside the template. Users can select a template, override topologies, change any attributes, if needed and provision PeopleSoft environments on demand.

Users are allowed to perform actions on a running environment, such as stop, view details, create new template from it, and so on. For details, see the Actions on the Environment section under the [Create Environment Page](#).

Note: Also, you must ensure to tune the servers, database, and PeopleSoft system for optimum performance once the deployment is completed.

Pages Used to Manage Environments Tile as an Administrator

<i>Page Name</i>	<i>Definition Name</i>	<i>Usage</i>
Environments Tile	ECL_ENVPROV_FL_GBL (CREF for tile)	To access the Environments landing page.
Environments Page	ECL_ENVPRO_FL	To access the Environments landing page.
Create Environment Page	ECL_ENV_ADD_SCF	To create a new environment.
Environment Details Page	ECL_ENV_DET_FL	To access more details of the environment from one location.
Health Check Page	ECL_ENV_HEALT_FL	To view the health status of the environment.

Page Name	Definition Name	Usage
<u>Manage PUM Connections Page</u>	ECL_SA_MANAGEPM_FL	To manage PUM connections.
<u>Apply PeopleTools Patch Page</u>	ECL_ENV_PTCHUPD_FL	For applying latest patches.
<u>Manage Attributes Page</u>	ECL_ENV_RESET_FL	To update Cloud Manager with environment attributes, if a user modifies it outside Cloud Manager.
<u>Logs Page</u>	ECL_ESEARCH_FL	To view logs of all operations such as create, delete, actions performed on the environment, and the like.

Environments Tile

Use Environments tile (ECL_ENVPROV_FL_GBL) to access the Environments landing page.

Navigation

The the Environments tile is delivered as part of the Cloud Manager home page.

Image: Environments tile

This example illustrates the Environments tile.



Environments Page

Use the Environments page (ECL_ENVPRO_FL) to access the Environments landing page.

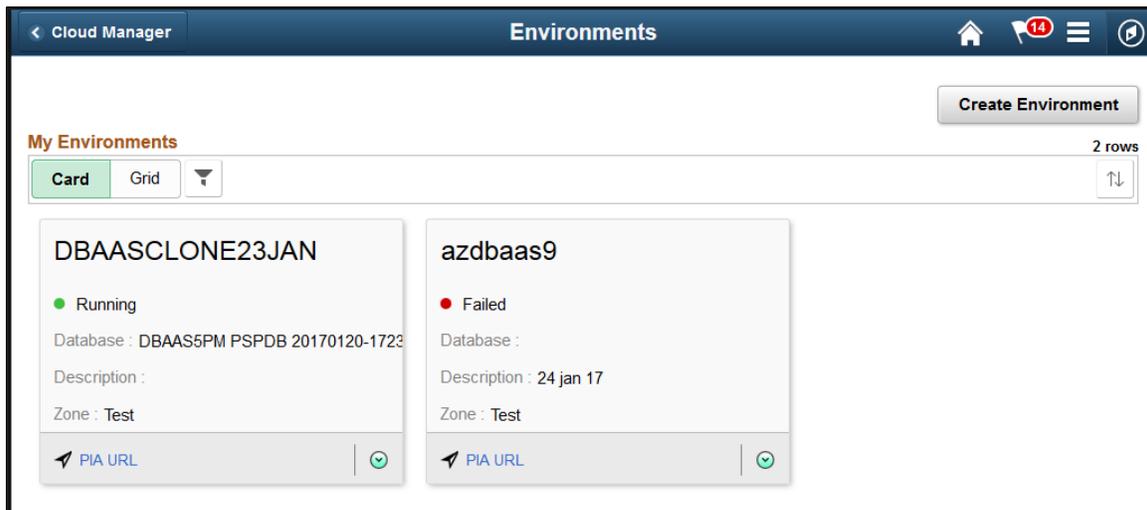
Note: If PeopleSoft client node is not defined in an environment as part of its topology, then Environments page is not displayed.

Navigation

Click the Environment tile on the delivered Cloud Manager Fluid home page. The Environments page is displayed.

Image: Environments Page – Card View

This example illustrates the fields and controls on the Environments Page – Card View.



Name

Name of the environment.

Note: Length of Environment name and identity domain name should not exceed 25 characters.

Status

Status of the environment.

The different statuses associated with the environment are:

- Initiating – Environment provisioning is getting initiated.
- Provisioning – Environment is getting provisioned.
- Failed – The last action performed on the environment failed.
- Stopping – Environment is stopping.
- Starting – Environment is starting.
- Running – Environment is running.
- Suspended – Environment is suspended. This status is displayed only when you perform Clone to Template operation on the environment.
- Deleting – Environment is getting deleted.
- Applying PeopleTools Patch – PeopleTools patch is being applied on the environment.

Description

Meaningful description of the environment.

Zone

Zone in which the environment is deployed.

PIA URL	Indicates the URL used to connect to the provisioned environment.
Create Environment button	Click this button to access the Create Environment page, where you can create new environments.
Related Actions button	Click this button to perform different actions for managing the environment as a whole. For details, see the Actions on the Environment section under the Create Environment Page .

Create Environment Page

Use the Create Environment page (ECL_ENV_ADD_SCF) to create a new environment.

Navigation

Click the Create Environment button on the Environments landing page.

Image: Create Environment page

This example illustrates the fields and controls on the Create Environment page.

Environment Name

Name of the environment that you want to create.

Note: Length of environment name and identity domain name must not exceed 25 characters.

Description

Meaningful description for the environment that you want to create.

Template Name

Select a template and the zone. On selecting the template, zone options are automatically displayed.

For details on templates, see the Creating a Template section under [Environment Template Page](#).

Creating an Environment

To create an environment:

1. Enter the required environment attributes and credentials.
2. Click Done to start environment provisioning.

Note: It is possible to enable custom YAML for application server or web server configuration. While creating a new environment, you can input custom YAML under Advanced ,Customization YAML.This facilitates the user to define custom attribute values for the environment being deployed.

Alternately, you can override the default topology and environment attributes while environment provisioning.

The default database operator id for each PeopleSoft PUM instance is listed below:

- For HCM, default database operator id is PS
- For FSCM, default database operator id is VP1
- For CRM, default database operator id is VP1
- For ELM, default database operator id is PS
- For IH, default database operator id is VP1
- For CS, default database operator id is PS

Overriding Default Topology and Attributes

If you want to override default topology and attributes, perform the following:

1. Select Yes in Override Topology field.

Image: Create Environment — Override Topology field

This example illustrates the fields and controls on the Create Environment — Override Topology field.

The screenshot shows the 'Create Environment' dialog box with the following fields and controls:

- Environment Name:** IH
- Description:** UI for IH
- Template Name:** HCMPUMFT
- Zone:** Development
- Topology Section:**
 - Override Topology:** A radio button control set to 'No' (highlighted with a red box).
 - Topology:** PUM Fulltier (dropdown menu)
 - Description:** Full-tier topology with one Linux node and one Windows Client.
- Environment Attributes Section:**
 - Full Tier:** (dropdown menu)
 - Credentials:** (dropdown menu)

The dialog box has a 'Cancel' button on the top left and a 'Done' button on the top right. The bottom right corner indicates '12 rows'.

2. Select an appropriate Topology. Corresponding description is displayed in the below text area.
3. Input the required environment attributes. The different attributes are:

- Middle Tier: Middle Tier is the VM where application server domain, process scheduler domain, and the web server domain are installed
 - Database Tier: Database tier is the VM where the database (non-DbaaS) is installed for the new PSFT system.
 - PeopleSoft Client: PeopleSoft Client is the VM where PeopleTools client (for example, pside) and change assistant are pre-installed
4. Enter the PeopleSoft Client credentials and other required attributes.

Some custom attributes are displayed based on the selected topology nodes. If you select an elastic search node, then you need to provide a couple of input parameters and passwords. Currently, if you are using the ES DPK setup script for installing Elasticsearch, then system will not prompt for the admin and proxy usernames. Therefore, it is always esadmin and people for admin and proxy respectively. Password must be of at least 9 characters long and contain a numeric and one uppercase letter. Special characters are not accepted.

5. Click Done to start environment provisioning.

Note: Please ensure to tune the servers, database, and PeopleSoft system for optimum performance once the deployment is completed. Also, you need to select the topology under Override Topology Section and continue Creating the Template.

Actions on the Environment

You can perform a variety of actions on the environment by using the Related Actions button corresponding to each environment. The actions can be:

- Details: Select this option to view environment details and to perform additional actions on the environment such as performing a health check, applying a PeopleTools patch, viewing logs, and managing PUM connections.
- Start: Select this option to start all MT domains.
- Stop: Select this option to stop all MT domains.
- Delete: Select this option to remove the environment.
- Clone to Template: Select this option to create a point-in-time copy of the environment in the form of DPKs out of the running environment and to automatically generate a template that can be used for provisioning again.

Environment Details Page

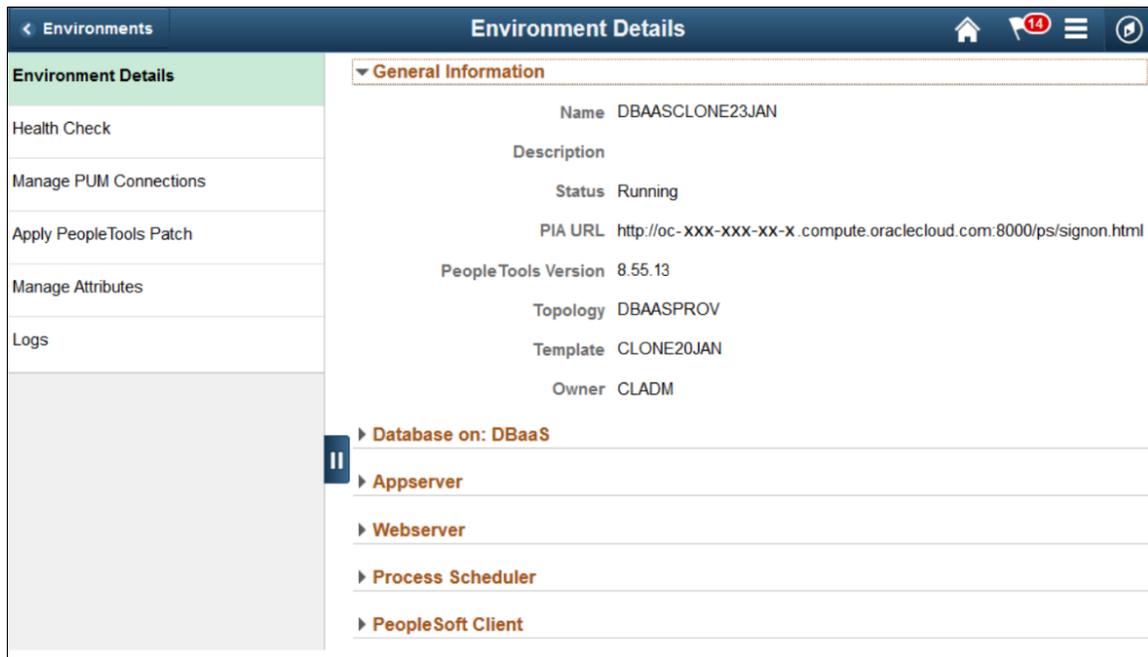
The Environment Details page (ECL_ENV_DET_FL) is a navigation collection that enables administrators to access more details of the environment from one location. It also enables the user to perform additional actions that can be performed on the environment such as performing a health check, applying a PeopleTools patch, viewing logs, and managing PUM connections.

Navigation

Click the Related Actions button corresponding to the environment. Select Details. The Environment Details page is displayed.

Image: Environments Details Page

Environments Details Page



General Information

The General Information section displays the general environment details such as name, status, PIA URL, PeopleTools version, and so on.

Database on: Compute

This section provides details of the database server of the deployed PeopleSoft application environment. The PeopleSoft applications refers to Oracle PeopleSoft products such as PeopleSoft Customer Relationship Management (CRM), PeopleSoft Enterprise Learning Management (ELM), PeopleSoft Financials and Supply Chain Management (FSCM), PeopleSoft Human Capital Management (HCM), and PeopleSoft Interaction Hub.

Database on: DBaaS

same as above

Appserver

This section provides details of the application server component of the deployed PeopleSoft application environment. The application server acts as the business logic engine of the PeopleSoft system.

Webserver

This section provides details of the web server component of the deployed PeopleSoft application environment.

Process Scheduler

This section provides details of the process scheduler component of the deployed PeopleSoft application environment.

The Process Scheduler is responsible for processing scheduled tasks or jobs that typically do not happen during the course of a user's browser request.

PeopleSoft Client

This section provides details of the Windows Client of the deployed PeopleSoft application environment. This is the Microsoft Windows virtual machine on which PeopleSoft Application Designer and PeopleSoft Change Assistant will be installed.

Note: To access PSIDE (PeopleSoft Application Designer) and Change Assistant applications for this environment, you need to remotely login to desktop using the IP address or hostnames provided under the PeopleSoft Client section.

Health Check Page

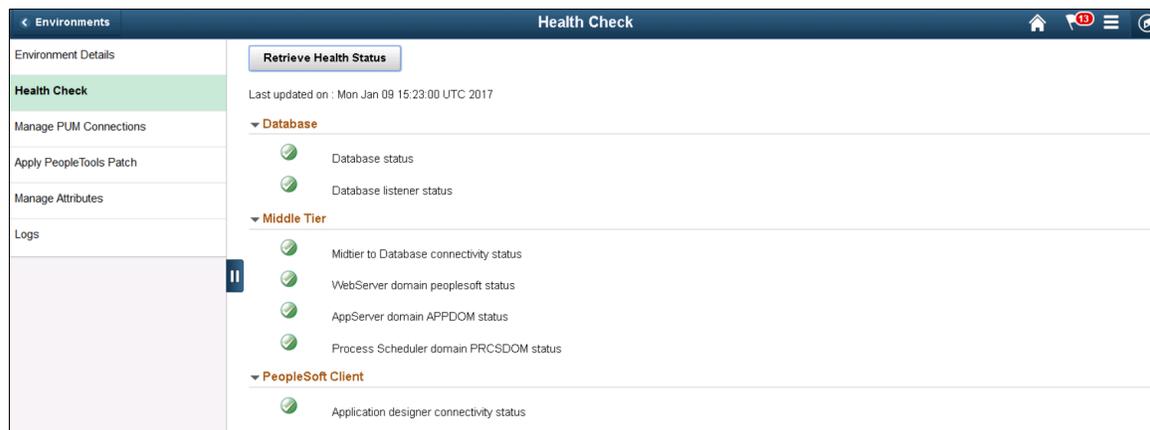
Use the Health Check page (ECL_ENV_HEALT_FL) to view or retrieve latest health status of the environment.

Navigation

Click the Health Check link available on the left panel of the Environment Details page. The Health Check page is displayed in the right panel.

Image: Health Check Page

This example illustrates the fields and controls on the Health Check Page.



Retrieve Health Status button

Click this button to run a health check on the environment. It will take a few minutes to complete health check and a notification will be shown when it is complete.

Manage PUM Connections Page

Use the Manage PUM Connections page (ECL_SA_MANAGEPM_FL) for setting up environments for selective adoption. This page appears only for environments that were deployed using a PeopleSoft Update Image and has a PeopleSoft Client (Windows Client) as part of the environment. This environment can act as a PUM Source environment. You can manage target databases for the PUM

Source from this page, which will add or remove specified target databases to the PUM source environments. After adding target databases, administrators can use the PIA URL shown on this page to access PUM Dashboard to define change packages. To create and apply change packages, access Change Assistant that is installed on the PeopleSoft client. To access Change Assistant, use remote desktop (RDP) to Windows Client.

Navigation

Click the Manage PUM Connections link available on the left panel of the Environment Details page. The Manage PUM Connections page is displayed in the right panel.

Image: Manage PUM Connections Page

This example illustrates the fields and controls on the Manage PUM Connections Page.



Adding Target Databases

To add a target database which you want to update, perform the following:

1. Click Add target button available in the Target Databases section. This displays the Select Target modal window as shown.

Image: Select Target modal window

This example illustrates the fields and controls on the Select Target modal window.



2. Select the required target environment.
3. Click Add. This action starts the ‘Add Target’ and ‘Upload to PUM Source’ functionality. The status is displayed as either In progress, Complete or Failed.

Apply PeopleTools Patch Page

Use the Apply PeopleTools Patch page (ECL_ENV_PTCHUPD_FL) for applying latest PeopleTools patches.

Note: For applying PeopleTools patch, please ensure that the corresponding environment has a Windows client.

Navigation

Click the Apply PeopleTools Patch link available on the left panel of the Environment Details page. The Apply PeopleTools Patch page is displayed in the right panel.

Image: Apply PeopleTools Patch Page

This example illustrates the fields and controls on the Apply PeopleTools Patch Page.



Select a Patch to Apply

Select an appropriate PeopleTools patch to be applied on the target environment.

Apply

Click this button to apply the changes.

Note: Ensure that the latest PeopleTools patch is already downloaded and available in the Repository.

Manage Attributes Page

Use the Manage Attributes page (ECL_ENV_RESET_FL) to update Cloud Manager with environment attributes, if a user modifies it outside Cloud Manager. Users may change passwords or any environment attribute on the environment directly after provisioning it in Cloud Manager. In such cases, Cloud Manager will not be able to manage it. The Manage Attributes page enables users to update those changed attributes in Cloud Manager.

Note: After updating environment attributes on this page, it is recommended to run a health check to ensure the settings are right and the environment is accessible and running.

Navigation

Click the Manage Attributes link available on the left panel of the Environment Details page. The Manage Attributes page is displayed in the right panel.

Image: Manage Attributes page

This example illustrates the fields and controls on the Manage Attributes page.



Logs Page

Use the Logs page (ECL_ESEARCH_FL) to view the logs for all actions that are performed on the environment.

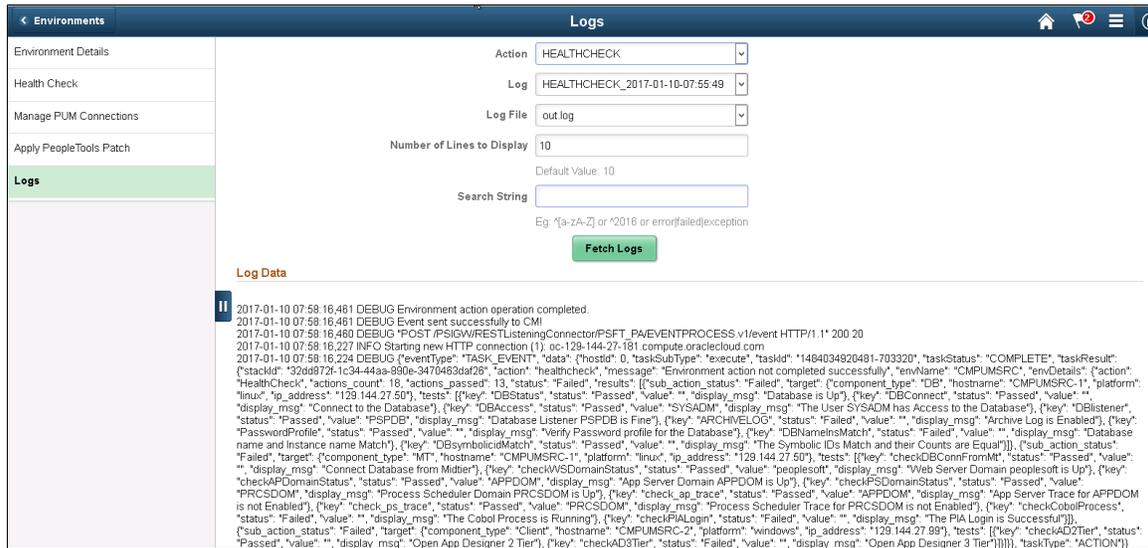
Note: The contents of the log files are displayed in reverse (latest first) order.

Navigation

Click the Logs link available on the left panel of the Environment Details page. The Logs page is displayed in the right panel.

Image: Logs Page

This example illustrates the fields and controls on the Logs Page.



Clone to Template

The Clone to Template process creates a point-in-time copy of the environment in DPK format and saves it in the repository. Using the same DPKs a new environment template is created and saved under Templates. The environment used for cloning is taken offline and is unusable during the clone to template process.

Note: Ensure that sufficient disk space is available on Cloud Manager Repository (File Server) based on the size of the environment that is being cloned to a template.

To clone to template, perform the following:

1. Click the Related Actions button corresponding to the environment you want to clone. Select the Clone to Template option. This displays the Clone to Template modal window.

Image: Clone to Template modal window

This example illustrates the fields and controls on the Clone to Template modal window.



2. Enter the new template name.

3. Click Clone.

Note: When the user clicks Clone button, the environment goes into the Suspended state.

After successful completion of the clone to template process, the new template is available under Environment Template. This template can then be modified to suit the needs by adding a topology, specify custom attributes and add user roles. This new template can then be used to deploy a new environment which is a clone of the environment that was used for 'clone to template'.

The template name generated after the cloning process will be in the format as mentioned below:

<UserInputFor Template Name> <Database Name> <data in YYYYDDMM-mmHHss>

For example, if the template name specified by the user is CLONETEMPL and the database name is PSDBD and Clone to Template process is initiated on 17th Jan 2017 at 3:18 PM, then the template name is displayed as "CLONETEMPL PSDBD 20170117-151847".

Chapter 4

Using the Lift and Shift Process to Migrate On-Premise Environments to Oracle Cloud

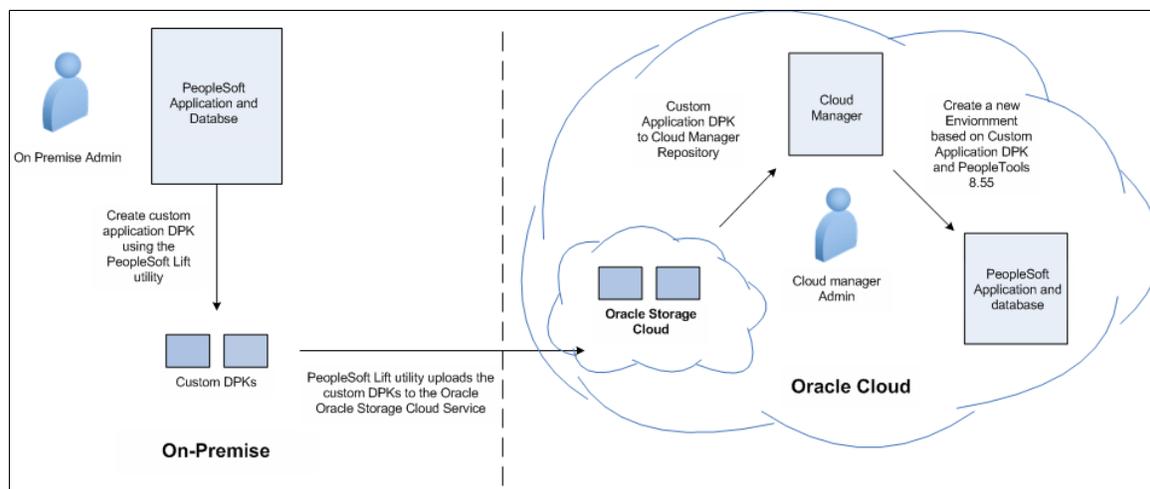
Understanding the Lift and Shift Process

Lift and shift in Cloud Manager enables, automated migration of on-premise PeopleSoft environments to Oracle Cloud. Migration to Cloud is achieved in two step:

- Lift: Using the lift utility provided in Cloud Manager, PeopleSoft Application environment data (for example, PS_APP_HOME, PS_CUST_HOME) and PeopleSoft Oracle database is packed into DPK format and uploaded to Oracle Storage Cloud.
- Shift: Cloud Manager downloads the lifted DPKs and creates a new environment on Oracle Cloud. Once shifted, customer can use the Oracle Cloud to further manage, scale up/down or clone these environments.

Image: Lift and Shift Process

Overview of the Lift and Shift process



One of the most complex and difficult processes is migrating an environment from on-premise into the Cloud. A customer will download Lift software from the Cloud Manager and run it on an on-premise environment to create and upload customer application DPKs to the Oracle Cloud Service. Then using Cloud Manager, they use the customer application DPK to create a running application environment intact with all the customizations that have done on-premise. It is a two-step process that simplifies days of laborious tasks. The lift and shift process is helpful to migrate many of your different environments to the Oracle Cloud. Use it for demo, development, test, and training environments. Once an environment has been lifted, you can provision as many separate instances as you need.

To migrate a PeopleSoft environment from on-premise to Oracle Cloud using Cloud Manager, it must be on Linux (OEL/RHEL), running application version 9.2 or above, database must be Oracle 12c and PeopleTools version 8.55 or above.

Understanding the Minimum Requirements for the Lift and Shift Process

The following are some of the considerations which users need to plan before migrating environments to Oracle Cloud:

- Supported Oracle versions are 11g and 12c.
- If you do not want to make application access public, other alternatives like VPN must be evaluated.
- If you do not want your web sites to be public, you will have to work with the Cloud team to figure out alternatives. (For example, VPN.)
- All third party integration will need to be manually reviewed and set up.
- If the lifted environment requires COBOL, then it must be manually installed and configured after Cloud Manager shifts the environment.
- Users may have to get new certificates for SSL and SFTP support.
- The minimum PeopleTools version should be PeopleTools 8.55.12.
- The Minimum PeopleSoft applications version should be PeopleSoft 9.2
- Lift and Shift is supported only on Linux environments. Any OS specific customizations will not be lifted and must be manually re-configured on the shifted environment.
- Any application specific software/installations/configurations will need to be manually configured.
- Lift of non-unicode Database is not supported for this release.
- Lift of RAC Database is not supported for this release.
- Lift of TDE enabled Database .mine is not supported for this release.
- Lift should be performed on a Linux system with Python 2.7.9 set as default for Python.
- When performing Remote Lift and connecting to the remote machine with a password, please ensure not to have special characters such as `*? [] ' " \# ; & () | ^ < >` new-line space and tab in the password.

Using the Lift Process to Migrate an Environment to the Oracle Cloud

Use the Lift process to migrate your on-premise PeopleSoft environment to the Oracle Cloud.

Pages Used to Migrate the Environment to Oracle Cloud

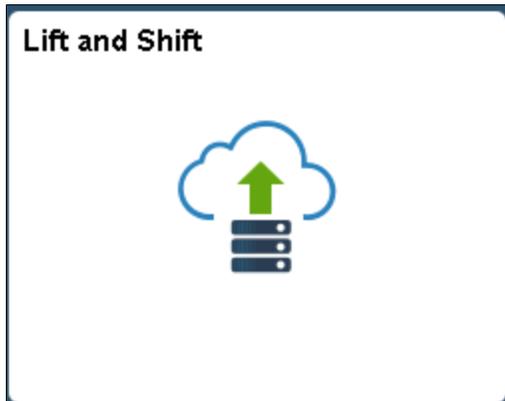
Page Name	Definition Name	Usage
<u>Lift and Shift Tile</u>	ECL_LAS_HOME_FL_GBL (CREF for the tile)	To access Lift and Shift landing page.
<u>Lift and Shift Page</u>	ECL_LAS_HOME_FL	The landing page containing the lift utility and the lifted containers.

Lift and Shift Tile

Use the Lift and Shift tile (ECL_LAS_HOME_FL_GBL) to access Lift and Shift landing page. The Lift and Shift tile is delivered as part of the Cloud Manager home page.

Image: Lift and Shift Tile

Lift and Shift tile



Lift and Shift Page

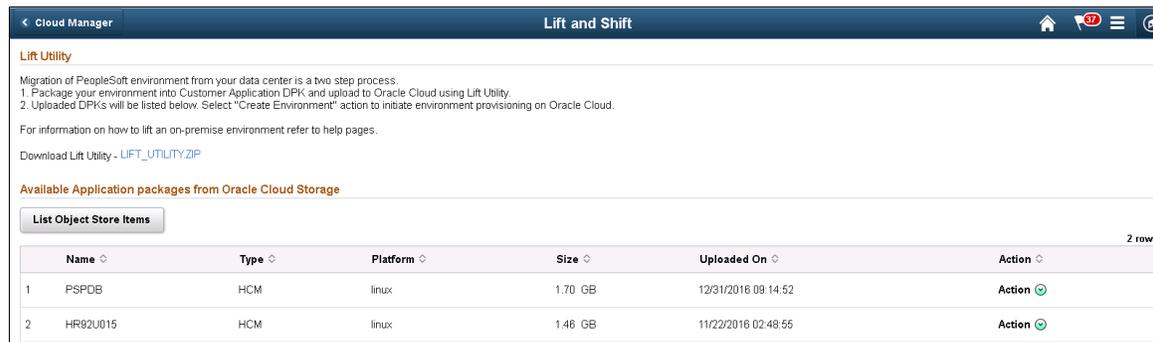
Use the Lift and Shift landing page (ECL_LAS_HOME_FL_GBL) to view and access the lifted environments (uploaded customer DPKs in Oracle Cloud for Cloud Manager).

Navigation

Click the Lift and Shift tile on the delivered Cloud Manager Fluid Home page. The Lift and Shift page is displayed.

Image: Lift and Shift page

This example illustrates the fields and controls on the Lift and Shift page.



Name	Type	Platform	Size	Uploaded On	Action	
1	PSPDB	HCM	linux	1.70 GB	12/31/2016 09:14:52	Action
2	HR92U015	HCM	linux	1.46 GB	11/22/2018 02:48:55	Action

Name

Name of the lifted environment

Type

Shows the PeopleSoft application product pillar.

Platform

Indicates the Operating System platform.

Size

Total size of the lifted DPKs.

Note: Assume that if the lifted DPK is K size, then the disk size should be 2.5 times K.

Uploaded On

The date and time on which the DPKs were uploaded in Oracle Cloud.

List Object Store Items

Click this button to refresh the lifted application list and make it current.

Action

Use this button to perform a variety of related actions, such as viewing the details of each of the lifted DPKs, provisioning a new environment, and to delete a lifted DPK.

Preparing the Lift Process

The lift utility provided in Cloud Manager, lifts the application tier (middle tier) and database tier independently and packages them into separate DPKs. Prepare the database and middle tier instances as suggested below:

Lift should be performed on a Linux system with Python2.7.9 set as default for python.

For APP Lift

APP Lift means lifting of the middle tier or application instance (this is essentially the instance where the PeopleSoft Application Server/Process Scheduler is hosted) are running.

1. Lift can be performed on the APP instance itself (Local Lift) or remotely from another instance that has access to the APP instance (Remote Lift).

Note: Local Lift is recommended.

2. If Lift is performed remotely, the connection from the remote Linux instance to the APP instance can be established using SSH Key (recommended) or Password.

Note: In case of using the Password, Please ensure the “expect” utility (version 5.43.0) is available on the Linux instance (where the lift utility will be run) under the location “/usr/bin/expect”. You can choose to install the same using any package manager “for example, yum install expect expectk”.

3. Ensure to use only the PeopleSoft Admin Owner user (for example, psadm3) to perform APP Lift.
4. Ensure to have sufficient enough free disk space for APP Lift (based on PS_APP_HOME and PS_CUST_HOME size). A minimum disk space of 10GB is required.
5. Ensure the user running the lift utility has permission to create files/directories at the user's home directory, Destination directory where the DPKs are saved, “/tmp” and PS_APP_HOME PS_CUST_HOME directory.

For DB Lift

DB Lift means lifting of the Database Tier instance. This is the instance where the PeopleSoft Oracle Database is running.

Note: It is recommended to bring the database patch level of the on-premise environment equivalent to that of the database patch level of the Oracle Database Cloud Service and then attempt the Lift and Shift. If the patch levels are different, then Cloud Manager will try to either rollback or update the patch. It is possible that there could be some incompatibilities during lift and shift due to rollbacks or updates. Users will then need to manually verify and rectify it.

1. Lift can be performed on the DB instance (Local Lift) itself or remotely from another instance that has access to the DB instance (Remote Lift).

Note: Local Lift is recommended.

2. If Lift is performed remotely, the connection from the remote Linux instance to the DB instance can be established using SSH Key (recommended) or Password.

Note: In case of using the Password, please ensure the “expect” utility (version 5.43.0) is available on the (APP/DB) Linux instance under the location “/usr/bin/expect”. You can choose to install the same using any package manager (for example, “yum install expect expectk”).

3. Ensure to use only the Database Owner user (for example, Oracle) to perform DB Lift.
4. Ensure to have sufficient free disk space for DB Lift based on DB size. A minimum disk space of 75 GB is required.
5. The supported Oracle versions are "11.2.0.3.0", "11.2.0.4.0", "12.1.0.1.0", and “12.1.0.2.0”.

Note: Oracle 12c (Container DB) is recommended with latest SQL patches installed. Currently, lift of non-unicode database is not supported

6. The PeopleSoft Database instance should be on Oracle 12c. If the PeopleSoft environment is on Oracle 11g environment, you must download the ODS-DPK-LNX-12.1.0.2-160718-1of1.zip on the DB instance and keep the path of this file handy (as the script will prompt for this files path).

Note: The “ODS-DPK-LNX-12.1.0.2-160718-1of1.zip” file can be copied from Cloud Manager VM. This zip file is located at /opt/oracle/psft/dpk/ODS-DPK-LNX-12.1.0.2-160718-1of1.zip. Users can use any scp client to download from Cloud Manager VM.

7. Ensure to take the back up of your Database environment before performing DB Lift. Optionally, it is recommended to use a clone of the environment for lift operation if the environment being lifted needs to be available during the process.
8. Ensure to back up the ORACLE_HOME.

Note: Lift utility install patches (patch 25588295) on the lifted environment. During lift process the ORACLE Database will be shut down.

9. Ensure that the user running the lift utility has permission to create files/directories at the user's home directory, destination directory where the DPKs are saved, “/tmp”, and ORACLE_HOME directory.

Running the Lift Process

This topic discusses about one step lift automation procedures. The one step lift automation enables a customer to migrate the customers PeopleSoft Application (MidTier/Application Tier) server and Database server tiers environment to the Oracle Cloud (OPCOracle Cloud). In order to perform this activity, the customer needs to follow the below steps:

1. Download lift utility from the Lift and Shift page. For this, perform the following:
 - a. Navigate to the Lift and Shift tile.
 - b. Copy the “PSFT_OSL_BOOTSTRAP.zip” utility to the target machine to perform lift.

Note: If you have updated Cloud Manager with PRP (find PRP name/number), then please SSH to Cloud Manager VM and delete the stale zip file from /tmp/PSFT_OSL_BOOTSTRAP.zip.

2. Navigate to the below folder after extracting the “PSFT_OSL_BOOTSTRAP.zip. **cd <PSFT_OSL_BOOTSTRAP>/setup**
3. For Linux, run the “sh psft-osl.sh” command to perform lift.
4. Select one of the following options when prompted:
 - a. Local Lift
 - b. Remote Lift

Local lift refers to running the lift utility on the (same) node where PeopleSoft environment components (app/web/db servers) are running. Remote lift refers to running the lift utility from a different node which has APP/DB owner access to PeopleSoft environment components (app/web/db servers).

Note: Access as “psadm” user for Application Server and “oracle” user for Database Server.

The script will perform a basic validation to check whether the lift is being triggered with all the necessary packages needed to perform one step lift.

5. In Local Lift, you have to lift the APP and DB environments separately. Kindly ensure to repeat the below flow on both APP and DB Instances.
 - a. Choose any one of the below options:
 - Create and save DPK in APP/DB environment.
 - Create and upload the DPK to Oracle Storage Cloud.
 - b. If the option to upload the DPK to Oracle Storage Cloud, then the script prompts the user to input the Oracle Cloud account credentials as mentioned shown below in order to upload the DPK once created:
 - Oracle Cloud Username
 - Oracle Cloud Password
 - Oracle Cloud Domain Name
 - c. If you want to migrate the PeopleSoft Application instance. Enter “Y” to proceed; else enter “N” to Lift the DB instance or “Q” to quit:

To create the PeopleSoft App Server DPK, you need to provide the database name and destination directory.

Note: If the utility is unable to fetch the data from the environment (for example, `app_type/oracle_home`), it will probe the user to input the same.

- d. If you want to migrate the PeopleSoft DB instance. Enter “Y” to proceed; else enter “N” or “Q” to quit:

To create the PeopleSoft Database DPK, you need to provide the container database name (If the database is an Oracle 12c Container DB, else leave it blank), pluggable database name and destination directory.

Note: If the utility is unable to fetch the data from the environment, it will probe the user to input the same.

The script verifies the Oracle version (on the machine where the DB is being lifted). If the Oracle version is Oracle 12c (recommended), the script continues. If the Oracle version is Oracle 11g, then the script prompts to ask for the path where the “ODS-DPK-LNX-12.1.0.2-160718-1of1.zip” file is located. The “ODS-DPK-LNX-12.1.0.2-160718-1of1.zip” file can be copied from Cloud Manager VM. This zip file is located at `/opt/oracle/psft/dpk/ODS-DPK-LNX-12.1.0.2-160718-1of1.zip`. Users can use any scp client to download from Cloud Manager VM.

- e. The script will then display the details captured from the user and prompts for the user’s confirmation to proceed. The utility allows the user to modify the above listed inputs, if required.

Image: Local One Step Lift — Details

This example provides the details captured from the user and prompts for the user's confirmation to proceed.

```

=====PeopleSoft One Step Lift=====
dbsrvr0
  username      oracle
  app_db_name   HRxxxxxx
  app_type     HCM
  sshkey
  oracle_home  /u01/app/oracle/product/11.2.0.x/db_1
  hostname     xxx.us.oracle.com
  env_type     db
  oracle_dpk_loc /lift
  db_name      HRxxxxxx
  dest_dir     /lift/migration/db_HCM_HRxxxxxx
  cdb_name
  is_db_pdb    NO
=====
Please verify the above details and confirm: (Y/N)
Enter "Q" to exit: Y

```

f. The entire remote execution is logged into `psft_session_<session_name>_<seccion_count>_<PID>.log` file, where 'n' stands for the number of remote executions triggered.

g. The output APP and DB DPK files that get created and uploaded are named in the format shown below:

— For Application DPK: APP-DPK-<platform>-<app_type>-<db_name>-1of2.zip (ex: APP-DPK-LNX-HCM-DBHCM-1of2.zip)

— For Database DPK: APP-DPK-<platform>-<app_type>-<db_name>-2of2.zip (ex: APP-DPK-LNX-HCM-DBHCM-2of2.zip)

The Lifted DPKs created are available in the destination directory. If you performs creating and uploading the DPK process, then the uploaded DPKs are available in the Lift and Shift page of Cloud Manager and on Oracle Storage Cloud as well.

Note: Ensure to run the Local Lift steps on both PeopleSoft APP and DB instance.

6. To perform Remote Lift, follow the steps below:

Note: In Remote Lift you can lift either the APP or DB, or Both (APP and DB) environments in parallel. When performing Remote Lift and connecting to the remote machine with a password. Please ensure not to have special characters such as `*? [] ' " \ # ; & () | ^ < >` new-line space and tab in the password.

a. You need to choose any one of the below options:

—Create DPK in APP/DB environment.

—Create and upload the DPK (APP/DB environment) to Oracle Storage Cloud.

- b. If the option to upload the DPK to Oracle Storage Cloud is selected then the script prompts the user to input Oracle Cloud account credentials as shown below in order to upload the DPK once created:

— Oracle Cloud username

—Oracle Cloud password

— Oracle Cloud domain name

- c. If you want to migrate the PeopleSoft Application instance. Enter “Y” to proceed; else enter “N” to Lift the DB instance or “Q” to quit:

Enter the host name, user name, and SSH key or password to establish a connection to the Application instance.

To create the PeopleSoft Application Server DPK, you need to provide database name and destination directory.

Note: If the utility is unable to fetch the data from the environment, it will probe the user to input the same.

- d. If you want to migrate the PeopleSoft DB instance. Enter “Y” to proceed; else enter “N” or “Q” to quit.

To create the PeopleSoft Database DPK, you need to provide the container database name (If the database is an Oracle 12c Container DB, else leave it blank), pluggable database name and destination directory.

Note: If the utility is unable to fetch the data from the environment, it will probe the user to input the same.

- e. The script verifies the Oracle version (on the machine where the DB is being lifted). If the Oracle version is Oracle 12c (recommended), the script continues. If the Oracle version is Oracle 11g, then the script prompts to ask for the path where the “ODS-DPK-LNX-12.1.0.2-160718-1of1.zip” file is located.

Note: The “ODS-DPK-LNX-12.1.0.2-160718-1of1.zip” file can be copied from Cloud Manager VM. This zip file is located at /opt/oracle/psft/dpk/ODS-DPK-LNX-12.1.0.2-160718-1of1.zip. Users can use any scp client to download from Cloud Manager VM.

- f. The script will then display the details captured from the user and prompts for the user’s confirmation to proceed, (the script allows the user to modify the above listed inputs, if required).

Image: Remote One Step Lift — Details

This example provides the details captured from the user and prompts for the user's confirmation to proceed.

```

=====PeopleSoft One Step Lift=====
dbsrvr0
  username      oracle
  app_db_name   HRxxxxxx
  app_type     HCM
  sshkey
  oracle_home  /u01/app/oracle/product/11.2.0.x/db_1
  hostname     xxx.oracle.com
  env_type     db
  oracle_dpk_loc /lift
  db_name      HRxxxxxx
  dest_dir     /lift/migration/db_HCM_HRxxxxxx
  cdb_name
  is_db_pdb    NO
=====
Please verify the above details and confirm: (Y/N)
Enter "Q" to exit: Y

```

- g. The entire remote execution is logged into psft_session_<session_name>_<seccion_count>_<PID>.log file, where n stands for the number of remote executions triggered.
- h. The output APP and DB DPK files that get created and uploaded will be named in the format shown below:

For Application DPK: APP-DPK-<platform>-<app_type>-<db_name>-1of2.zip (ex: APP-DPK-LNX-HCM-DBHCM-1of2.zip)

For Database DPK: APP-DPK-<platform>-<app_type>-<db_name>-2of2.zip (ex: APP-DPK-LNX-HCM-DBHCM-2of2.zip)

The Lifted DPKs created are available in the destination directory. If you have selected the option to create and upload DPKs, Then the uploaded DPKs are available in the Lift and Shift page of Cloud Manager and on Oracle Storage Cloud as well.

7. To upload the lifted APP/DB DPKs to Oracle Storage Cloud, perform the following:

If you have selected to upload the DPKs later (5.a.i or 6.a.i) in the above lift process, then perform the following steps to upload the Lifted DPKs to Oracle Storage Cloud and make it available in Cloud Manager:

- a. Navigate to the “<PSFT_OSL_BOOTSTRAP>” and change directory to <PSFT_OSL_BOOTSTRAP>/migration/las
- b. Run the below two utilities sequentially for both APP and DB DPKs.

Invoke the “upload_opc_silent_install.py” to upload the DPK created from the above step onto the container in Oracle Storage Cloud.

```
<python2.7.9> upload_opc_silent_install.py -u <user> -d <domain> -c psft_las -s
<source_dir> -t <target_dir> -p <password>
```

Invoke the “psft_dpk_cm.py” to capture and upload the Metadata information of the created DPK in the Oracle Storage Cloud.

```
<python2.7.9> python psft_dpk_cm.py -u <user> -d <domain> -c psft_las -s
<source_dir> -f <dpk_ini_file> -p <password>
```

-u <user>	Oracle Cloud username
-d <domain>	Oracle Cloud Identity Domain
-s <source_dir>	The destination directory where the DPK is saved. Ensure to have only the DPKs are inside the destination directory.
-t <target_dir>	linux/<app_type>/<app_db_name> where app_type stands for application type - [HCM, FSCM, ELS, ELM, CRM] and app_db_name is the name of the Database.
-c psft_las	The Oracle Storage Cloud container name. You are not allowed to edit the name.
-f <dpk_ini_file>	An ini file is created capturing the necessary information to create the DPK. This file is available under <PSFT_ OSL_BOOTSTRAP>/migration/las/ on the environment being lifted.
-p <password>	Oracle Cloud password.

Using the Shift Process to Provision the Migrated Environment from the Oracle Cloud

Use the Shift process to deploy packaged environment in Oracle Cloud.

Prerequisites

- The lift and shift topology must be modified with the required size and disk capacity of the database and middle-tier nodes. If shifting to DBaaS, then modify Lift and Shift - DBaaS topology.

Note: The disk space of the database node must be configured based on the size of the lifted database. The recommended disk space on the database node is atleast 2.5 times the lifted database size.

- During the Shift process, Cloud Manager can update the PeopleTools version of the lifted environment. To update PeopleTools during shift, ensure to have the required PeopleTools DPK already downloaded and available in the repository.
- The Shift process, makes use of the latest PI for the application type. For example, if your lifted environment is a HCM environment, then make sure you have the latest HCM PI downloaded in your repository.
- The database operator Ids used during shift operation should have specific permissions to perform various actions. The permissions are listed below:
 1. For ACM — ACM administrator
 2. For IB — Integration administrator
 3. For ES — Search Administrator, Search Server, Search Developer
 4. For Process Scheduler, PeopleSoft Administrator, ProcessSchedulerAdmin, ReportDistAdmin
 5. For Portal — PeopleTools, Portal Administrator

Pages Used to Provision the Migrated Environment from the Oracle Cloud

Page Name	Definition Name	Usage
<u>Lift and Shift — Create Environment Wizard</u>	ECL_LAS_GENERAL_FL	Use the Lift and Shift – Create Environment wizard to perform shift operation by means of a guided process.
<u>Lift and Shift – Advanced Options Page</u>	ECL_LAS_ADV_FL	Use Lift and Shift – Advanced Options page for defining target database details.
<u>Lift and Shift – Custom Attributes Page</u>	ECL_LAS_CUSTATR_FL	Use Lift and Shift – Custom Attributes page for defining the custom attributes as per the lifted environment.
<u>Lift and Shift – Review and Submit Page</u>	ECL_LAS_REVIEW_FL	Use Lift and Shift – Review and Submit page to review and submit the entered environment details.

Lift and Shift — Create Environment Wizard

Use the Lift and Shift – Create Environment wizard (ECL_LAS_GENERAL_FL) to perform shift operation by means of a guided process. Shift operation facilitates provisioning a new environment using lifted DPKs.

In Lift and Shift provisioning user can:

- Select the desired topology based on DB on Oracle Cloud (Compute or DBaaS)
- Modify the sizing and disk space

Note: Before doing the shift provisioning (Create Environment” using a lifted DPK), user must verify the Lift and Shift topology; you need to ensure to select the right topology based on the choice of database to be created on Compute or on DBaaS. Along with that you to verify the sizing and disk space based upon the lifted DPK size and desired environment, a minimum allocations should be provided. For database node you need to provide a size equivalent to 2.5 x of actual lifted DPK size (not zipped).

Navigation

Click the Related Action button corresponding to the lifted application. Select Create Environment option. By default, the Lift and Shift - General Details page is displayed.

Image: (Tablet) Lift and Shift - General Details Page

This example illustrates the fields and controls on the Lift and Shift - General Details page for the tablet.

Environment Name

Enter the name of the environment which you want to create.

Note: Length of environment name and identity domain name should not exceed 25 characters.

Description

Enter a meaningful description for the environment.

Template Name

Displays the default template to be attached with the environment.

Zone

Select the zone on which the environment is created.

Lift and Shift – Advanced Options Page

Use the Lift and Shift – Advanced Options page (ECL_LAS_ADV_FL) for defining target database details.

Navigation

Click step 2 or Advanced Options, at the top of the page to navigate to the Advanced Options page in the guided process.

Image: (Tablet) Lift and Shift – Advanced Options Page

This example illustrates the fields and controls on the Lift and Shift – Advanced Options page for the tablet.

The screenshot shows the 'Lift and Shift' application interface. At the top, there is a navigation bar with 'Exit', 'Lift and Shift', a notification icon with '14', and buttons for '< Previous' and 'Next >'. Below the navigation bar is a progress indicator with four steps: 1. General, 2. Advanced Options (highlighted with a green circle), 3. Custom Attributes, and 4. Review and Submit. The main content area is titled 'Advanced Options' and contains the following fields:

- Source Database: PSPDB
- Target Database On: Compute
- Target People Tools Version: PeopleTools 8.55.13

Select the target database and PeopleTools version to be applied on the environment.

Lift and Shift – Custom Attributes Page

Use Lift and Shift – Custom Attributes page (ECL_LAS_CUSTATR_FL) for defining the custom attributes as per the lifted environment.

Navigation

Click step 3 or Custom Attributes, at the top of the page to navigate to the Custom Attributes page in the guided process.

Image: (Tablet) Lift and Shift – Custom Attributes Page (1 of 3)

This example illustrates the fields and controls on the Lift and Shift – Custom Attributes page for the tablet.

The screenshot shows the 'Lift and Shift' application interface. At the top, there is a navigation bar with 'Exit', 'Lift and Shift', a notification icon with '14', and buttons for '< Previous' and 'Next >'. Below the navigation bar is a progress indicator with four steps: 1. General, 2. Advanced Options, 3. Custom Attributes (highlighted with a green circle), and 4. Review and Submit. The main content area is titled 'Custom Attributes' and contains the following sections:

- Environment Attributes
 - Middle Tier
 - Credentials
 - Other Attributes
 - Advanced
 - Database Tier
 - Credentials
 - Other Attributes
 - Advanced
 - PeopleSoft Client
 - Credentials
 - Other Attributes
 - Advanced

Image: (Tablet) Lift and Shift – Custom Attributes Page (2 of 3)

This example illustrates the fields and controls on the Lift and Shift – Custom Attributes page for the tablet.

The screenshot shows the 'Lift and Shift' application interface on a tablet. At the top, there is a navigation bar with 'Exit', 'Lift and Shift', a notification icon with '14', and 'Previous' and 'Next' buttons. Below this is a progress bar with four steps: 1. General, 2. Advanced Options, 3. Custom Attributes (highlighted with a green circle), and 4. Review and Submit. The main content area is divided into sections: 'Advanced' (collapsed), 'Database Tier' (expanded), and 'Credentials' (expanded). The 'Credentials' section contains a table with 7 rows of input fields for various database-related attributes.

7 rows	
Name	Value
1 Database Operator Id	<input type="text" value="PS"/>
2 Database Operator Password	<input type="text"/>
3 Database Connect Id	<input type="text" value="people"/>
4 Database Connect Password	<input type="text"/>
5 Database Access Id	<input type="text" value="SYSADM"/>
6 Database Access Password	<input type="text"/>
7 Database Administrator Password	<input type="text"/>

Image: (Tablet) Lift and Shift – Custom Attributes Page (3 of 3)

This example illustrates the fields and controls on the Lift and Shift – Custom Attributes page for the tablet.

The screenshot shows the 'Custom Attributes' page for a tablet. The page is divided into four tabs: General (1), Advanced Options (2), Custom Attributes (3), and Review and Submit (4). The 'Custom Attributes' tab is active. It contains a table with four rows: 'Database Connect Password', 'Database Access Id' (with value 'SYSADM'), 'Database Access Password', and 'Database Administrator Password'. Below this table are expandable sections for 'Other Attributes' and 'Advanced'. A 'PeopleSoft Client' section is expanded, showing a 'Credentials' table with one row: 'Windows Administrator Password'.

Database Operator Id

Unique identifier of the database operator.

The default database operator id for each PeopleSoft application is listed below:

- For HCM, default database operator id is PS
- For FSCM, default database operator id is VP1
- For CRM, default database operator id is VP1
- For ELM, default database operator id is PS
- For IH, default database operator id is VP1.
- For CS, default database operator id is PS

Database Operator Password

Password of database operator.

Database Connect Id

Unique id used to connect to the specified database.

Database Connect Password

Password for connecting to the database.

Database Access Id

Unique id used to access the database.

Database Access Password Password used for accessing the database.

Database Administrator Password Password of database administrator.

Enter the custom attributes as per the lifted on-premise environment. It is recommended that the custom attribute values entered on this page match the on-premise configuration. For example, the Character Set and National Character Set attributes must be configured with values same as the on-premise database configuration.

Image: Character set section

This example illustrates the DBaaS character set field.



The image shows a screenshot of a web form. On the left, there is a label '5 DBaaS Charset'. To the right of this label is a text input field containing the value 'AL32UTF8'.

Note: The database character set to be used for Shift operation are AL32UTF8 and National Character Set AL16UTF16. Possible values of National Character Set when character set is AL32UTF8 are AL16UTF16 and UTF8. There can be multiple possible values of character set such as UTF8 WE8ISO8859P15. If shifting to DBaaS, you need to modify the character sets based on the database selected.

If the customer is using the Cloud Manager UI to initiate a DBCS Shift; the “DBaaS Charset” and “DBaaS National Charset” configuration (under Database Tier section) should match with the “Charset” and “National Charset” of the Database environment where the DB Lift operation is performed.

If there is any mismatch in the Charset data the DBCS shift will fail.

To find the Charset and National Charset information from the lifted environment, run the below SQL commands on the DB (lifted) environment.

```
select VALUE from nls_database_parameters where parameter='NLS_CHARACTERSET';
select VALUE from nls_database_parameters where parameter='NLS_NCHAR_CHARACTERSET';
```

Output:

```
SQL> SELECT value$ FROM sys.props$ WHERE name = 'NLS_CHARACTERSET' ;
```

```
VALUE$
```

```
AL32UTF8
```

```
SQL> SELECT value$ FROM sys.props$ WHERE name = 'NLS_NCHAR_CHARACTERSET';
```

```
VALUE$
```

```
UTF8
```

Lift and Shift – Review and Submit Page

Use the Lift and Shift – Review and Submit page (ECL_LAS_CUSTATR_FL) to review and submit the entered environment details.

Navigation

Click step 4 or Review and Submit, at the top of the page to navigate to the Review and Submit page in the guided process.

Image: (Tablet) Lift and Shift – Review and Submit Page

This example illustrates the fields and controls on the Lift and Shift – Review and Submit page for the tablet.

Name	Value
1 Weblogic Administrator Username	system
2 Weblogic Administrator Password	

Weblogic Administrator Username	User id for administering the PIA Web Logic server
HTTP PIA Port	The WebLogic http port number for PIA.
HTTPS PIA Port	The WebLogic https (ssl) port number for PIA.
WLS Port	The Workstation Listener port in the application server.
Jolt Port	Port number for Jolt listener on the app server.
Database is RAC	Whether Real Application Cluster is enabled or not
Customization YAML	Optional YAML data for advanced customization
Database Connect Id	Connect Id for the database.

Click the Submit button to initiate the creation of lifted environment in Oracle Cloud based on the details provided.

Once the environment is ready, you are able to view it under the Environments tile. For details, see [Environments Tile](#).

Enabling Selective Adoption in Cloud Manager

Enabling Selective Adoption in Cloud Manager

Cloud Manager enables customers to take advantage of Selective Adoption by:

- Quickly creating PUM environments in Oracle Cloud.
- Automating configuration of target databases in PUM source.

Once target databases are configured, standard procedure should be followed to apply updates to target environments. For details on the selective adoption process, refer [Selective Adoption](#).

Creating PUM Environments

To create a new PUM source environment using Cloud Manager, perform the following:

As a PeopleSoft administrator:

1. Ensure the latest required PI is downloaded in the repository.
2. Create a new environment template using the latest downloaded PI and PUM topology.
3. Enable user access to the newly created PUM source environment template.

As a Self-Service user or an administrator who wants to create PUM source environment:

1. Click the Create Environment button on the Environments landing page.
2. Enter the required environment attributes inputs.
3. Select the PUM source environment template to deploy.
4. Click Done.

For details, see the [Environment Details Page](#).

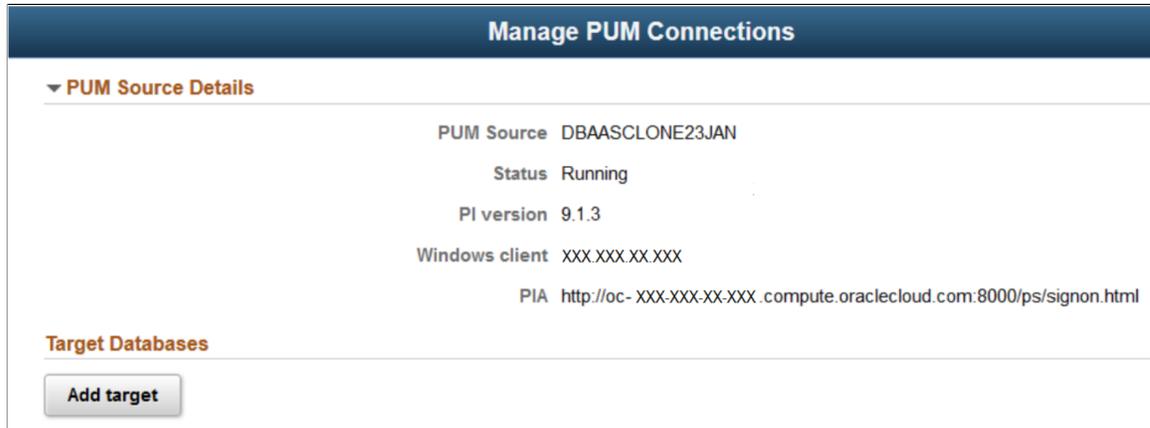
Adding Targets to PUM source

1. Click the Environments tile available on the Cloud Manager home page. After the PUM source environment is deployed and is in running state, add target database to PUM Source by performing the following:
2. Click the Related Actions button corresponding to the PUM source environment.
3. Navigate to Environment Details page.

4. Select Manage PUM Connections link available on the left panel of Environment Details page. The Manage PUM Connections page is displayed as shown.

Image: Manage PUM Connections page

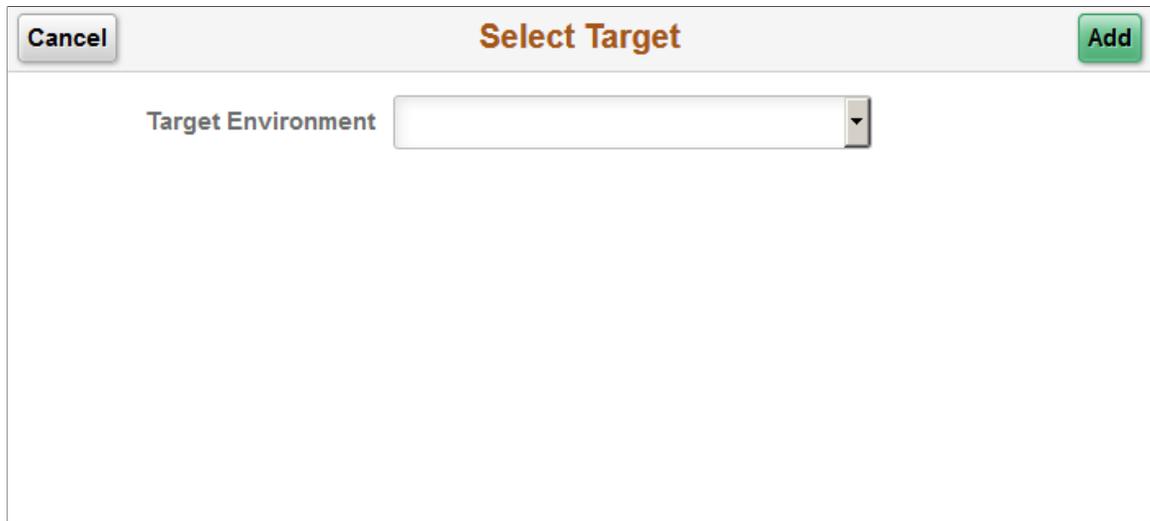
This example illustrates the fields and controls on the Manage PUM Connections page.



5. Click Add target button to add any environment of same application type as that of PUM Source. This displays a modal window for selecting a target database as shown.

Image: Select Target modal window

This example illustrates the fields and controls on the Select Target modal window.



6. Select a target environment.
7. Click Add button to add the target database.

Adding the target database takes a few minutes to complete. The target database is configured on the Change Assistant and target database information is uploaded to the PUM source database. The status is displayed as either In Progress, when the job to add target is running. After successfully adding the target the status shows as Complete or Failed (if job fails).

Accessing Change Assistant in Windows Client

Using the Change Assistant and the PUM source PIA, change package can be defined, created and applied to target environments.

To access Change Assistant, perform the following:

1. Determine the IP address or hostname of the PeopleSoft Client that was deployed as part of the PUM source environment from the Environment Details page.

The IP address and Oracle Cloud Name is displayed in PeopleSoft Client section of the Environment Details page.

Image: Environment Details page

This example illustrates the fields and controls on the Environment Details page.



2. Connect to the Windows Client using remote desktop connection.
3. Copy PRPs to Windows Client To apply PRPs to PUM Source environment, user needs to copy the downloaded PRPs from the file repository to the Windows Client VM. All downloaded PRPs are accessible to Windows Client VM as a samba share. To access the PRP share on the Windows VM, perform the following:
 - RDP to Windows Client VM
 - Connect to the samba share using `\\<File_Server_IP>\PRP`.
 - Copy the required PRPs to `D:\psft\pum_download` directory on the Windows Client.
 - Using Change Assistant apply the copied PRPs to the PUM Source environment.
4. Follow the standard selective adoption procedures by:
 - Applying PRPs to PUM Source environment

- Define Change Package by connecting to the PUM source database
- Create and apply change package

For details on selective adoption, refer [Selective Adoption](#)

Updating Cloud Manager

Applying Updates to Cloud Manager

This topic discusses the steps involved in updating PeopleSoft Cloud Manager.

1. Deploy IH PUM Source.

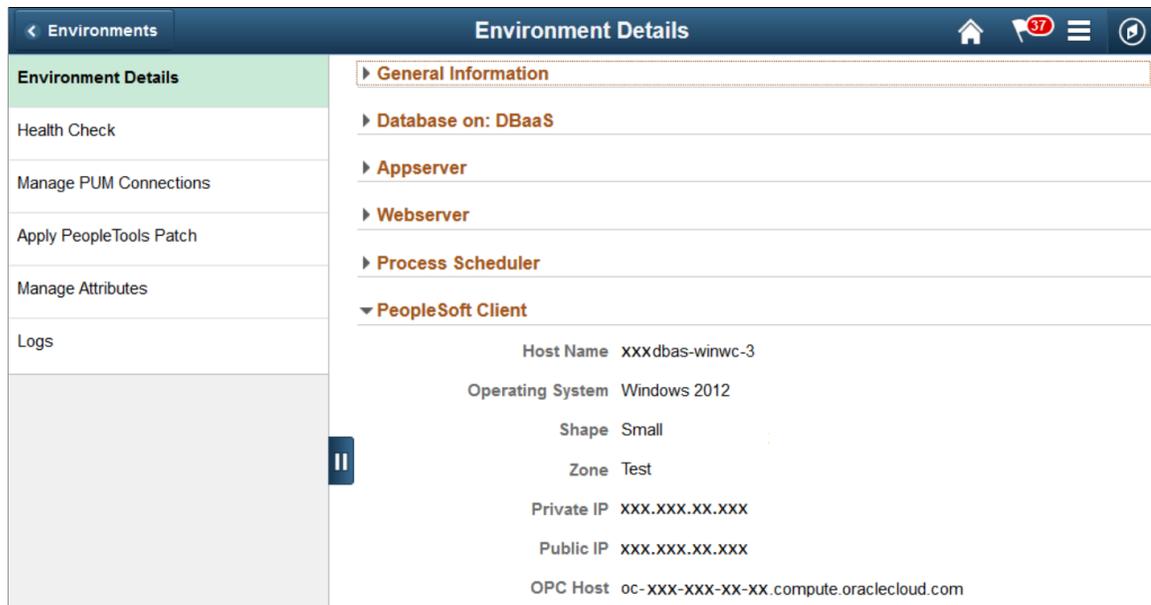
To deploy an IH PI environment using Cloud Manager, perform the following.

- a. Subscribe to the IH 9.1 download channel.
- b. Create a template to deploy the PeopleSoft Interaction Hub 9.1 database on a PUM topology.

Windows Client IP can be determined by going into the Environment Details page and looking at PeopleSoft Client section.

Image: Environment Details page

This example illustrates the fields and controls on the Environment Details page.



2. Configure IH PUM Source in Cloud Manager Settings

- a. Login to Cloud Manager as CLADM user.
- b. Navigate to Cloud Manager Settings, Update Settings. You can view the provisioned IH PUM Source in the list of available PUM source databases. Click 'Configure' to add Cloud Manager as a target to the PUM Source. This step will add Cloud Manager as a target database in the PUM Source's Change Assistant and also upload the target information to the PUM Source database.

Image: Cloud Manager Settings — Update Settings

This example illustrates the fields and controls on the Cloud Manager Settings — Update Settings page.

Name	Version	Status	Actions
1	CMPUMSRC	9.1.3	Not Configured Remove

- c. On successful completion of configuration, you will see the below status.

Image: Cloud Manager Settings - Status

This example illustrates the fields and controls on the Cloud Manager Settings page.

Name	Version	Status	Actions
1	CMPUMSRC	9.1.X	COMPLETE Remove

You should now see the PUM Source configuration when you launch Change Assistant on the Windows client.

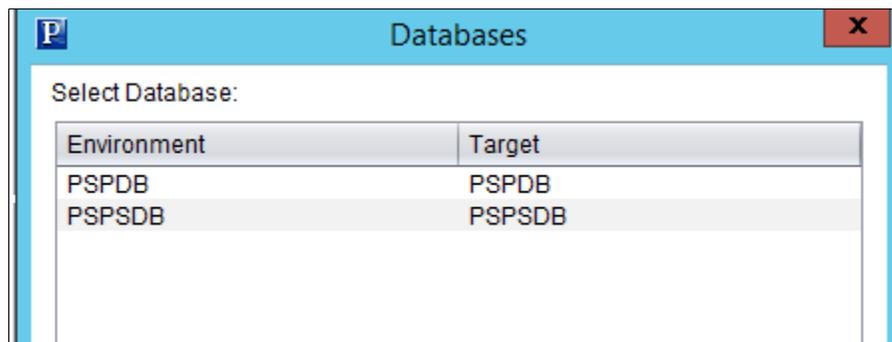
Note: Ensure that both the source and target databases are added in Change Assistant.

3. Verifying Source and Target database in Change Assistant
 - a. Navigate to the file.
 - b. Open databases. You should now see the PUM Source configuration when you launch Change Assistant on the Windows client.

Note: The PUM Source configuration when you launch Change Assistant on the Windows client.

Image: Databases window

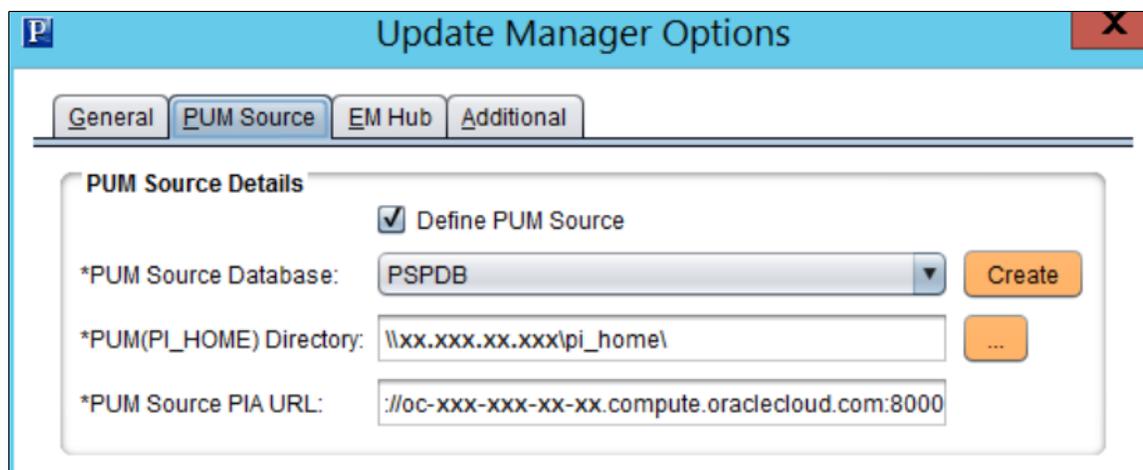
This example illustrates the fields and controls on the Databases window.



- c. Navigate to the PUM Source tab. You should see the PUM Source defined and configured as shown below.

Image: Update Manager Options window

This example illustrates the fields and controls on the Update Manager Options window.



4. Backup Cloud Manager

Ensure to take a Cloud Manager backup before applying any updates.

- Stop application domains and PeopleSoft domains.
- cd to /opt/oracle/psft/pt/ps_app_home/cloud/cm_backup
- Invoke backup script - 'sh cm_backup.sh -n <backup name>'

For details on backup, see section on backup and restore: [Understanding Cloud Manager Backup and Restore](#)

5. Manually remove jar files after applying change packages which updates jar files under PS_APP_HOME.

- Remove the file `originalfile_1_com.peoplesoft.pa.cl.jar` (if it exists) from the directory `$PS_APP_HOME/appserv/classes/`
- Remove the file `originalfile_1_com.peoplesoft.pa.cl.jar` (if it exists) from the directory `$PS_APP_HOME/class/`

6. Modify PI HOME share permissions on PUM Source.

By default, the PI HOME share on PUM Source is read-only. You can verify this by accessing the PI HOME (`\\<PUM SRC IP>\pi_home`) on the Windows client (that was deployed using PUM topology) and trying to create a folder in it. Cloud Manager PRPs need to update files on PI HOME, hence you must modify the share permissions.

```
[opc@c6e65e ~]$ sudo su - psadm2
```

```
[psadm2@c6e65e ~]$ ssh -i /home/psadm2/psft/data/cloud/opchome/psftoowdemo/xxx@oracle.com/.ssh/id_key_xxx opc@CMPUMSRC-1
```

```
[opc@cmpumsrc-1 ~]$
```

Set SMB password for user psadm3.

```
[opc@cmpumsrc-1 ~]$ sudo smbpasswd psadm3
```

New SMB password:

Retype new SMB password:

```
[opc@cmpumsrc-1 ~]$ sudo vi /etc/samba/smb.conf
```

Ensure the following section is changed as below:

```
[pi_home]
```

```
path = /u01/app/oracle/product/pt/pi_home
```

```
writable = yes
```

```
available = yes
```

```
guest ok = no
```

```
valid users = psadm3
```

```
[opc@cmpumsrc-1 ~]$ sudo service smb restart
```

```
Shutting down SMB services: [ OK ]
```

```
Starting SMB services: [ OK ]
```

```
[opc@cmpumsrc-1 ~]$
```

Note: Check if PI HOME is accessible in read-write mode on the Windows client.

7. Apply PRPs to IH PUM Source.

Copy all PRPs to be applied to the Windows Client under location D:\psft\pum_download. Launch Change Assistant and navigate to Apply PeopleSoft Release Patchset in Tools tab.

PRPs must be copied from the file server share.

- a. Identify the private IP address of file server on the Instances tab, in Oracle Compute Cloud Service console.
- b. Logon to the Windows Client of the environment.
- c. Access \\<file_server_ip>\prp
- d. Copy the required PRPs onto D:\psft\pum_download.

Note: The Apply PeopleSoft Release Patchset link is enabled only if source is configured correctly.

8. Start PSEMAgent on target Cloud Manager.

- a. Change ownership of PSEMAgent dir from psadm1 to psadm3.

```
[psadm3@c6e65e ~]$ cd /opt/oracle/psft/pt/ps_home8.55.11/PSEMAgent/
```

```
[psadm3@c6e65e PSEMAgent]$ ll
```

```
total 44
```

```
-rw-r--r-- 1 psadm3 appinst 23728 Jan  6 08:46 APPSRV.LOG
```

```
-rw-r--r-- 1 psadm3 appinst  2221 Jan  5 11:22 MyAgent.log
```

```
-rwxr-xr-x 1 psadm3 appinst  2742 Sep 11  2015 StartAgent.sh
```

```
-rwxr-xr-x 1 psadm3 appinst  2426 Sep 11  2015 StopAgent.sh
```

```
drwxr-xr-x 8 psadm3 appinst  4096 Jan  6 05:11 envmetadata
```

```
drwxr-xr-x 2 psadm3 appinst  4096 Sep 23 06:11 lib
```

- b. Configure the agent configuration properties file - /opt/oracle/psft/pt/ps_home8.55.xx/PSEMAgent/envmetadata/config/configuration.properties.

Note: In the above mentioned location, 'xx' denotes the PeopleTools version used in Cloud Manager.

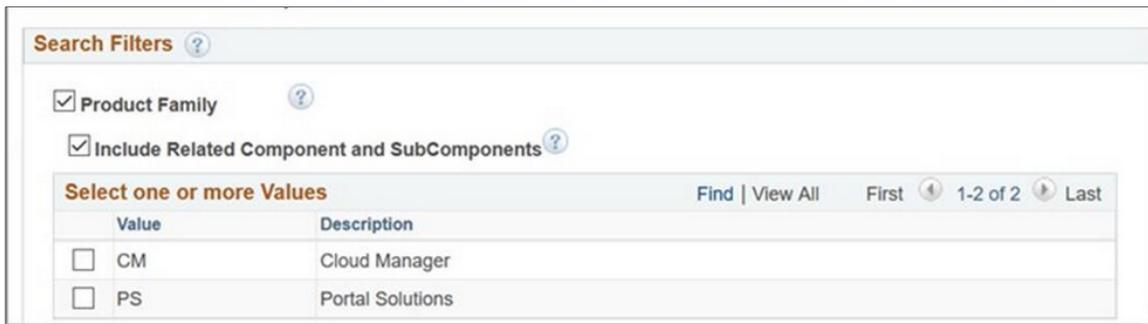
- c. Export PS_APP_HOME before starting agent. Export PS_APP_HOME=/opt/oracle/psft/pt/ps_app_home.
- d. Start PSEMAgent using user psadm3.
 - Login to CM instance using SSH.

- Navigate to `/opt/oracle/psft/pt/ps_home8.55.12/PSEMAgent/envmetadata/config`.
 - Edit the `configuration.properties`.
9. Define Change Package using IH PUM PIA. You can also filter "Search by Product Family" and choose "CM" while defining change package.

Note: While defining the change package, it is recommended to search by Product Family and select CM to include all fixes delivered for Cloud Manager.

Image: Search by Product Family

Search by Product Family



10. Create Change Package using Change Assistant.
11. Apply Change Package using Change Assistant.
12. Run the script for MMC package updates in Cloud Manager to ensure the following tasks:
 - Reset home page
 - Re-active services
 - Cleanup old jar files
 - Synch code with File Server
 - Restart the domains

To execute the post update utility script for MMC package updates in Cloud Manager, perform the following steps:

- Login to Cloud Manager VM.
- Change to root user `$su bash`.
- Change directory to `/opt/oracle/psft/pt/ps_app_home/cloud`.
- Execute the `cm_update_customization.sh` script.

```
$su bash
$cd /opt/oracle/psft/pt/ps_app_home/cloud/scripts [$PS_APP_HOME/cloud/scripts]
$sh cm_update_customization.sh
```

Image: Sampe Output

This example illustrates a sample output after executing the post utility script.

```
[root@df5748 scripts]# sh cm_update_customization.sh
Cloud Manager Updation Started..
Updating Cloud Manager Settings:           [ OK ]
File Server updation:                     [ OK ]
Cleaning up files:                        [ OK ]
Restarting PRCS domain:                   [ OK ]
Restarting APPSERV domain:                [ OK ]
Cloud Manager Updation Completed.
```

13. Verify changes on Target Cloud Manager.

You need to manually verify the modifications done on the target Cloud Manager.

For more details on Change Assistant configurations, refer Change Assistant and Update Manager topic in PeopleTools

Related Links

[Manage PUM Connections Page](#)

Chapter 7

Cloud Manager Logs

Understanding PeopleSoft Cloud Manager Logs

This section helps you understand the PeopleSoft Cloud Manager logs. The topics discussed in this section includes:

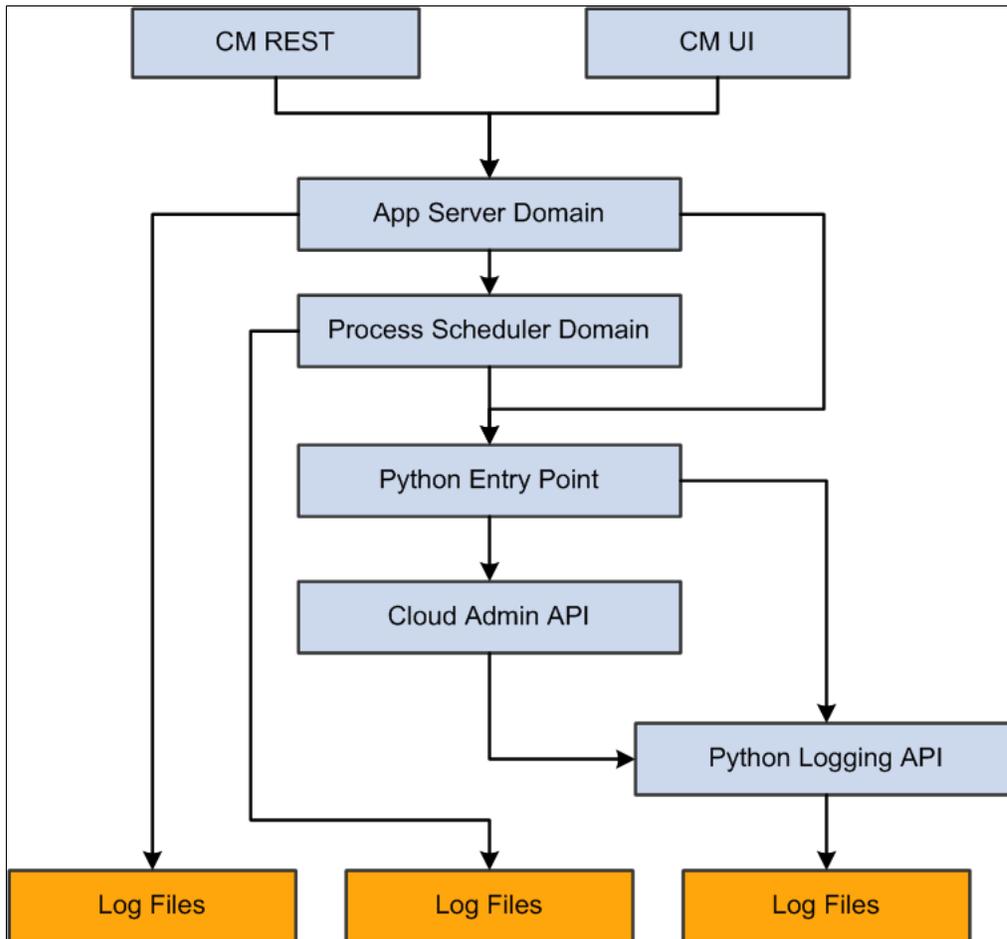
- Types of Logs
- Log Levels
- Changing Log Levels

Types of Logs

Logs contain useful information for analyzing any environment related issues or failures that may occur in the system.

Image: Logging Process Overview in Cloud Manager

The flow diagram below illustrates an overview of logging process in Cloud Manager.



Different type of logs are:

- Python Logs
- Environment Action Logs
- Download Manager Logs
- App Server Domain Logs
- Process Scheduler Domain Logs
- Puppet Logs in Provisioned VMs

Different logs are correlated using the folder naming convention which are described in the following sections.

- Python Logs: Most cloud-related activities in Cloud Manager ultimately result in the invocation of Python wrapper scripts that invoke Cloud Admin code.
- Environment Action Logs: All Python logs related to PeopleSoft environments will be under the following folder:<CM Python Log Root>/envs/

All Python logs related to a particular environment <env name> will be under: <CM Python Log Root>/envs/<env name>. The path of <CM Python Log Root> is /home/psadm2/psft/data/cloud/cmlogs.

All Python logs related to the action <Type> on the environment denoted by <env name> will be under: <CM Python Log Root>/envs/<env name>/<Type>_TimeStamp

The action type can be:

- CREATE
 - REMOVE
 - ACTIONS (Start, Stop, and so on)
 - ADD_TARGET
 - UPGRADE
 - BACKUP
 - RESTORE
 - CLONE
 - REFRESH
- Download Manager Logs: Log files generated by the download manager are available in the following folder: <CM Python Log Root>/dm/

Note: A contextual logs UI that can be accessed from the environment details page is available in Cloud Manager for administrator and end users while debugging issues in their environments.

Since the number of folders and files under cmlogs will grow over time, an archiving process for older files is there in Cloud Manager.

- App Server Domain Logs: App Server Domain logs are written in the default app server domain logs directory. \$PS_CFG_HOME/appserv/APPDOM/LOGS
- Puppet Logs in Provisioned VMs:
 - Linux: Logon into the provisioned VM using "opc" account with ssh. You should use the private key corresponding to the public key provided in the My Settings page, or use the Cloud Manager administrative key available in the Cloud Manager VM.

For details on My Settings page, see [My Settings Page](#).

The log files can be found at: /home/opc/cloud/admin/scripts/cloud_setup_psft.log

- Windows: Log into Windows VM as administrator. The log files can be found at: C:\cloud_setup_psft.txt

Log Levels

The different log levels that can be configured by the customer are:

- Critical
- Error
- Warning
- Debug

Note: Logging formats and levels are controlled using Python Logging configuration.

Attribute name	Format	Description
asctime	%(asctime)s	Human-readable time when the LogRecord was created. By default this is of the form '2003-07-08 16:49:45,896' (the numbers after the comma are millisecond portion of the time).
created	%(created)f	Time when the LogRecord was created (as returned by time.time()).
filename	%(filename)s	Filename portion of pathname.
funcName	%(funcName)s	Name of function containing the logging call.
levelname	%(levelname)s	Text logging level for the message ('DEBUG', 'INFO', 'WARNING', 'ERROR', 'CRITICAL').
levelno	%(levelno)s	Numeric logging level for the message (DEBUG, INFO, WARNING, ERROR, CRITICAL).
lineno	%(lineno)d	Source line number where the logging call was issued (if available).
message	%(message)s	The logged message, computed as msg % args. This is set when Formatter.format() is invoked.
module	%(module)s	Module (name portion of filename).
msecs	%(msecs)d	Millisecond portion of the time when the LogRecord was created.
name	%(name)s	Name of the logger used to log the call.
pathname	%(pathname)s	Full pathname of the source file where the logging call was issued (if available).
process	%(process)d	Process ID (if available).
processName	%(processName)s	Process name (if available).
relativeCreated	%(relativeCreated)d	Time in milliseconds when the LogRecord was created, relative to the time the logging module was loaded.

Attribute name	Format	Description
thread	%(thread)d	Thread ID (if available).
threadName	%(threadName)s	Thread name (if available).

LogRecord contains all the information pertinent to the event being logged.

```
class logging.LogRecord(name, level, pathname, lineno, msg, args, exc_info, func=None)
```

Parameters are detailed below:

- name – The name of the logger used to log the event represented by this LogRecord.

Note: This name will always have this value, even though it may be emitted by a handler attached to a different (ancestor) logger.

- level – The numeric level of the logging event (one of DEBUG, INFO etc.)

Note: This is converted to two attributes of the LogRecord: levelno for the numeric value and levelname for the corresponding level name.

- pathname – The full pathname of the source file where the logging call was made.
- lineno – The line number in the source file where the logging call was made.
- msg – The event description message, possibly a format string with placeholders for variable data.
- args – Variable data to merge into the msg argument to obtain the event description.
- exc_info – An exception tuple with the current exception information, or None if no exception information is available.
- func – The name of the function or method from which the logging call was invoked.

Note: Configurable Log Root: /home/psadm2/psft/data/cloud/cmlogs will be the Cloud Manager Python Log Root.

Changing Log Levels

The customer will be able to edit a single configuration file to set the log level.

The default logging level is “info”. To customize it to another level, modify the following entry in the file `$PS_APP_HOME/cloud/pca_init.py` `logging_level = info`

Note: You do not need to restart the domains after the changing the log levels.

Backing Up and Restoring Cloud Manager

Understanding Cloud Manager Backup and Restore

Cloud Manager delivers a utility to backup and restore Cloud Manager data and necessary configuration. It is a command line utility available in the Cloud Manager image. The backup files are uploaded to Oracle Storage Cloud and when restoring is retrieved from it. The backup and restore utility does a cold backup and hence requires Cloud Manager domains to be shutdown manually. Ensure that there are no running jobs in Cloud Manager before shutting down Cloud Manager domains. Use PSADMIN utility to gracefully shutdown Cloud Manager domains.

Pre requisites

Below are the pre requisites prior to backup and restore of Cloud Manager.

1. APP, WEB and PRCS domains to be shutdown manually.
2. Ensure enough space is available on the Cloud Manager VM.

Backup Process

The Backup process in Cloud Manager backs up PS_APP_HOME and Database (PDB). These backups are loaded to the Oracle Cloud storage.

In Cloud Manager, the back up operation is performed by means of a command line utility, similar to a backup utility.

To perform backup operation, follow the steps below:

1. Login to a Cloud Manager instance via SSH.
2. Change directory to `cd /opt/oracle/psft/pt/ps_app_home/cloud/cm_backup sh cm_backup.sh -n <backup_name>`
3. Launch backup utility and follow the prompts.

Example for Cloud Manager Backup

```
[opc@adf99a cm_backup]$ sh cm_backup.sh -n dec16_01
```

```
Cloud Manager Backup files will be...! ** Warning **: Before taking a backup, you must shutdown application and process scheduler domains. Ensure there are no running jobs or new jobs getting submitted by users before shutting down the domains. If you backup while jobs are running or interrupt a backup process, then it might lead to an inconsistent backup. Restoring an inconsistent backup will make Cloud Manager unstable Would you like to proceed? [y|N]: y
```

Cloud Manager Backup files will be uploaded to Oracle Cloud Storage. Please provide Oracle Cloud credentials below:

Enter Oracle Cloud User Name: xyz@xxx.com

Enter Oracle Cloud Password: xxx

Re-Enter Oracle Cloud Password: xxx

Enter Oracle Cloud Domain Name: xxxxxx

Validating Oracle Cloud credentials... Login Success!!!

Backing up database... This will take a few minutes. Please wait...

DB Backup complete.

Backing up Midtier... This will take a few minutes. Please wait...

Mid tier backup complete.

Uploading Contents of folder /tmp/dec16_01 to Oracle Cloud Storage...

Upload Success.

Removing the local backup folder /tmp/dec16_01.

Cloud Manager backup completed successfully. Detailed logs can be found under /tmp/cm_backup_20161216_055212.log

Restore Process

The Restore operation retrieves backups from the Oracle Cloud Storage.

To perform a restore operation, follow the steps below:

1. Login to a Cloud Manager instance via SSH.
2. Change directory to `cd /opt/oracle/psft/pt/ps_app_home/cloud/cm_backup ..`
3. Launch restore utility and follow the prompts.

Example for Cloud Manager Restore

```
[opc@ef6b5a cm_backup]$ ./sh cm_restore.sh
```

**** Warning ****: Restore operation overwrites existing data from selected backup. Do not stop or close session when restore is in progress. This will lead to an inconsistent restore and make Cloud Manager unusable.

Would you like to proceed? [y|N]: y

Cloud Manager Backup files will be downloaded from Oracle Cloud Storage. Please provide Oracle Cloud credentials below.

Enter Oracle Cloud User Name: xyz@xxx.com

Enter Oracle Cloud Password: xxx

Re-Enter Oracle Cloud Password: xxx

Enter Oracle Cloud Domain Name: xxxxxx

Validating Oracle Cloud credentials...

Login Success!!!

Listing available Cloud Manager backups

1. dec09_gpachaiy_backup

2. dec13_1

3. dec14_01

4. dec15_01

5. dec16_01

6. nov15bkup

7. nov15bkup2

8. nov15bkup3

9. nov15bkup4

10. nov15bkup5

11. nov15bkup6

12. nov1_backup1

13. nov1_backup2

14. nov1_backup4

15. nov8final

16. postupdate1nov

17. preupdate1nov

18. preupdate7nov

19. preupdate8nov

20. preupdate8nov_new

q. Quit

Please select backup to restore [1-9,q]: 5

Restoring selected backup 'dec16_01'

Creating temporary folder /tmp/dec16_01

Downloading /tmp/dec16_01/CLONEPDB.tgz

Downloading /tmp/dec16_01/PS_APP_HOME.tgz

Downloading /tmp/dec16_01/psft_configuration.yaml

Restoring database... This will take a few minutes. Please wait...

DB restore complete.

Restoring Midtier... This will take a few minutes. Please wait...

PS_APP_HOME

/opt/oracle/psft/pt/ps_app_home

Midtier restore complete.

Starting App server, Process Scheduler and PIA...

Deleting temp folder /tmp/dec16_01

Cloud Manager restore completed successfully. Detailed logs can be found under /tmp/cm_restore_20161216_064900.log