# Spotlight on

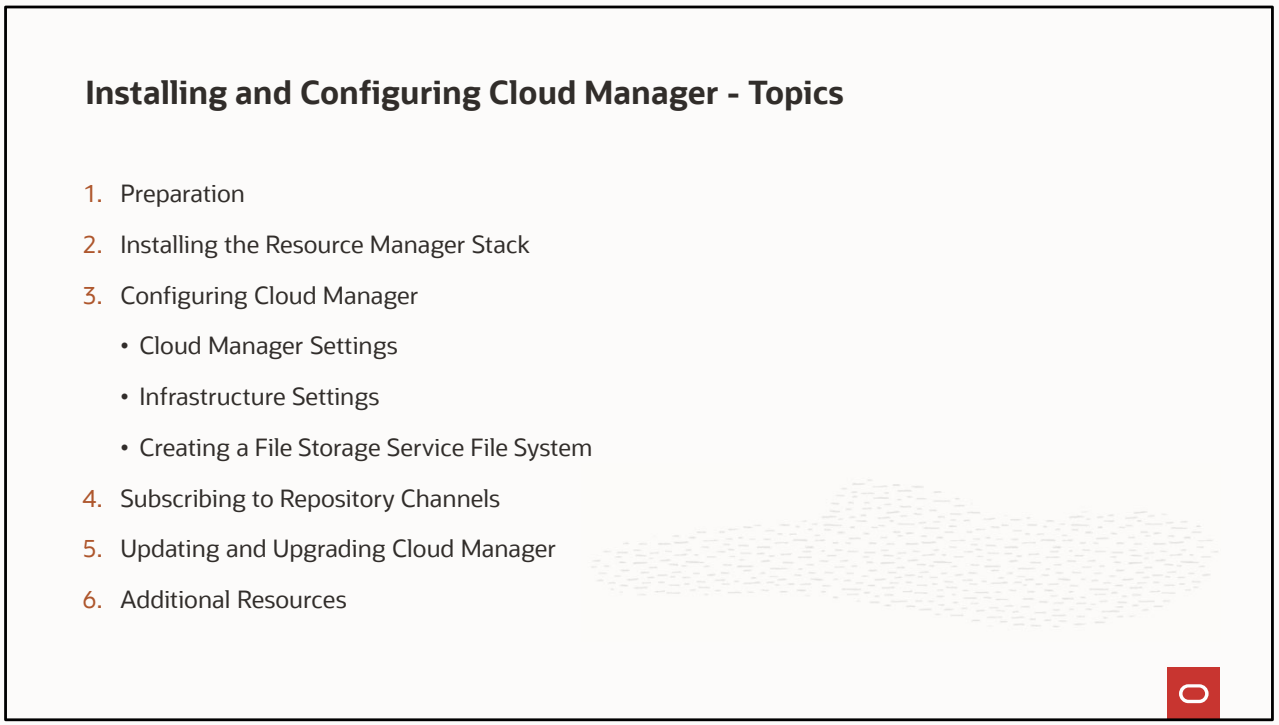
## Installing and Configuring Cloud Manager


PeopleSoft Cloud Manager is an orchestration tool to provision and manage PeopleSoft environments on Oracle Cloud Infrastructure (OCI).

This video discusses installing and configuring PeopleSoft Cloud Manager on Oracle Cloud Infrastructure.

Check out the Spotlight Series page on the PeopleSoft Information Portal for other videos in the series.

This PeopleSoft Spotlight Series for Cloud Manager is based on Image 18.




We will begin by reviewing the installation requirements. We will describe the two types of keys needed.

We will create a vault in the OCI console to hold the necessary passwords.

Then we will use a Resource Manager stack to install the Cloud Manager instance in the OCI console. The deployment gives you the option to create a Virtual Cloud Network, or VCN, and a bastion host for accessing internal subnet, or you can use an existing VCN.

After we determine that the installation is complete, we configure Cloud Manager settings, and create a File Storage service file system for the repository.

Then we can subscribe to channels to download the artifacts we need.

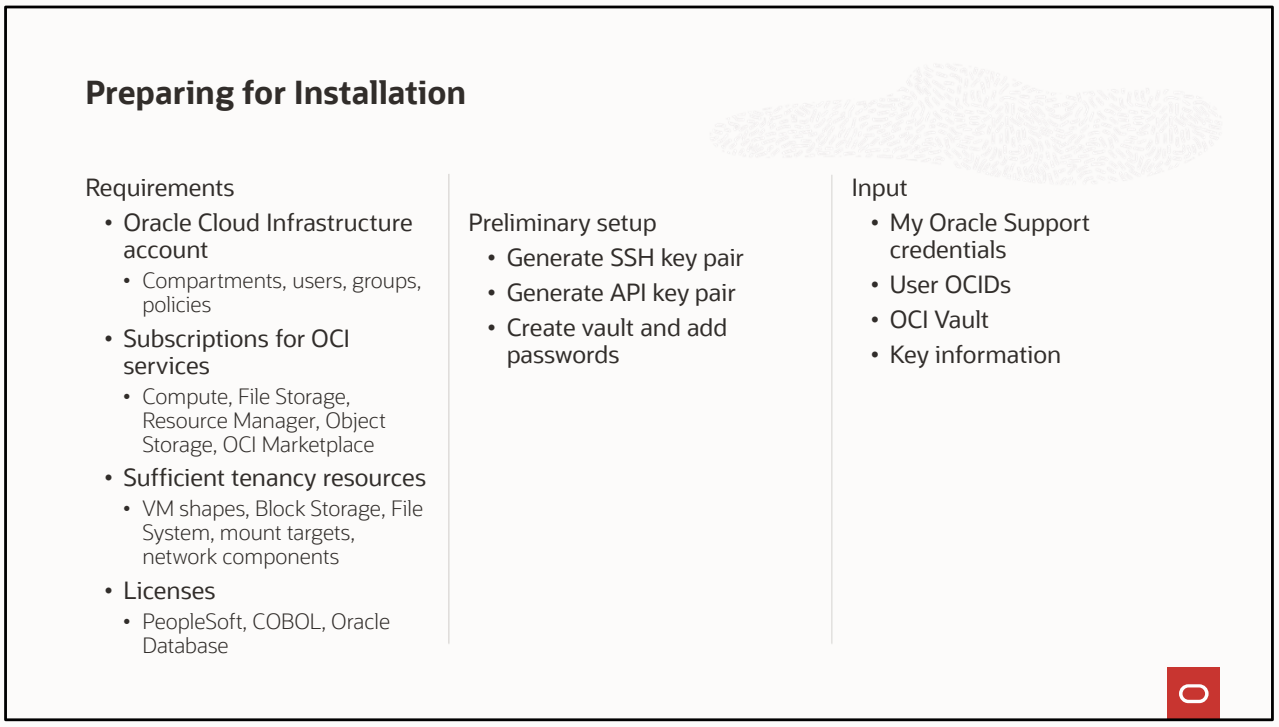
We finish with an overview of updating and upgrading Cloud Manager, and a list of additional resources.

## Installing and Configuring Cloud Manager - Topics

1. **Preparation**
2. Installing the Resource Manager Stack
3. Configuring Cloud Manager
   - Cloud Manager Settings
   - Infrastructure Settings
   - Creating a File Storage Service File System
4. Subscribe to Repository Channels
5. Update and Upgrade Cloud Manager
6. Additional Resources



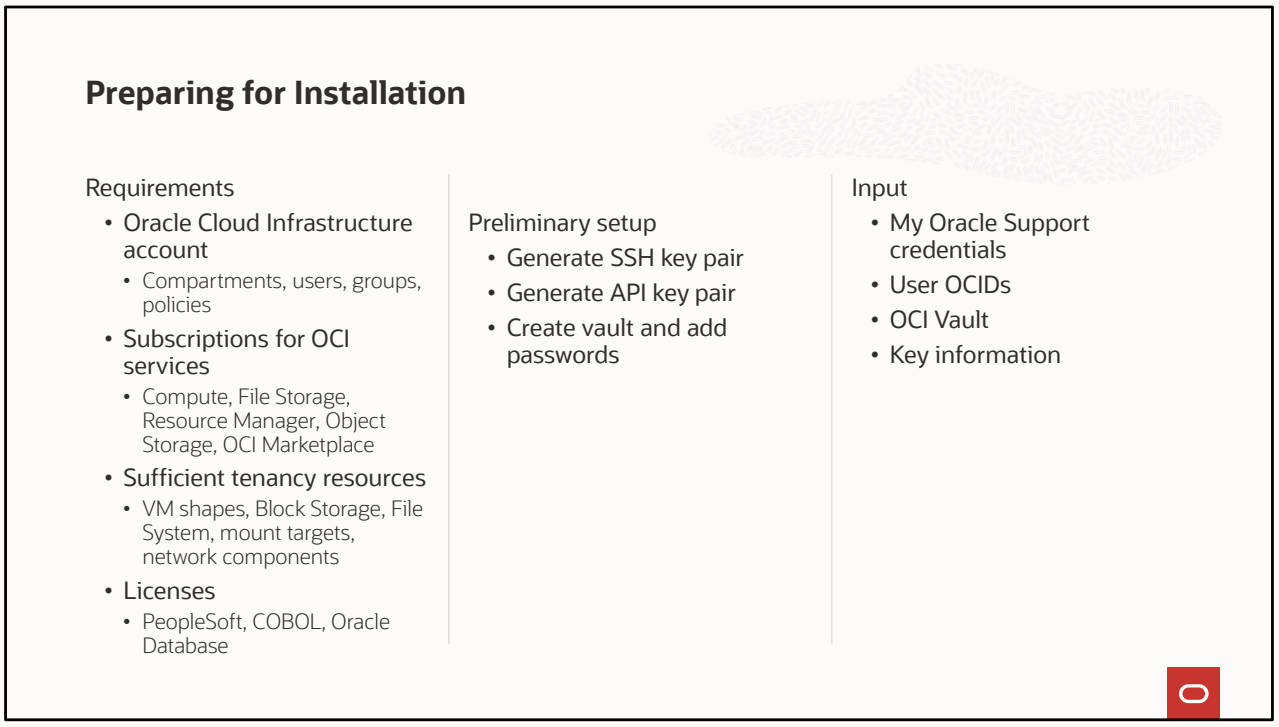
To prepare for the installation,  review the requirements for Installing Cloud Manager in Oracle Cloud Infrastructure.




You will need an Oracle Cloud Infrastructure account with administrative user access. The administrative user is responsible for setting up user accounts, groups, and compartments. The administrative user assigns policies, which enable users to perform necessary tasks.

The OCI account needs subscriptions to services including Compute, File Storage Service, Resource Manager, Object Storage, and access to the OCI Marketplace.

Your tenancy must have sufficient resources for entities such as VM shapes, block storage, file systems, mount targets, and network components. You can check on the resources in the OCI console by selecting Governance & Administration, then Limits, Quotas, and Usage.




To install and use -Cloud Manager, you must generate an SSH key pair and an API key pair.

The SSH private and public key pair is used to provide secure shell connection to an instance.

You will input the public key when you fill out the form for the Resource Manager stack.

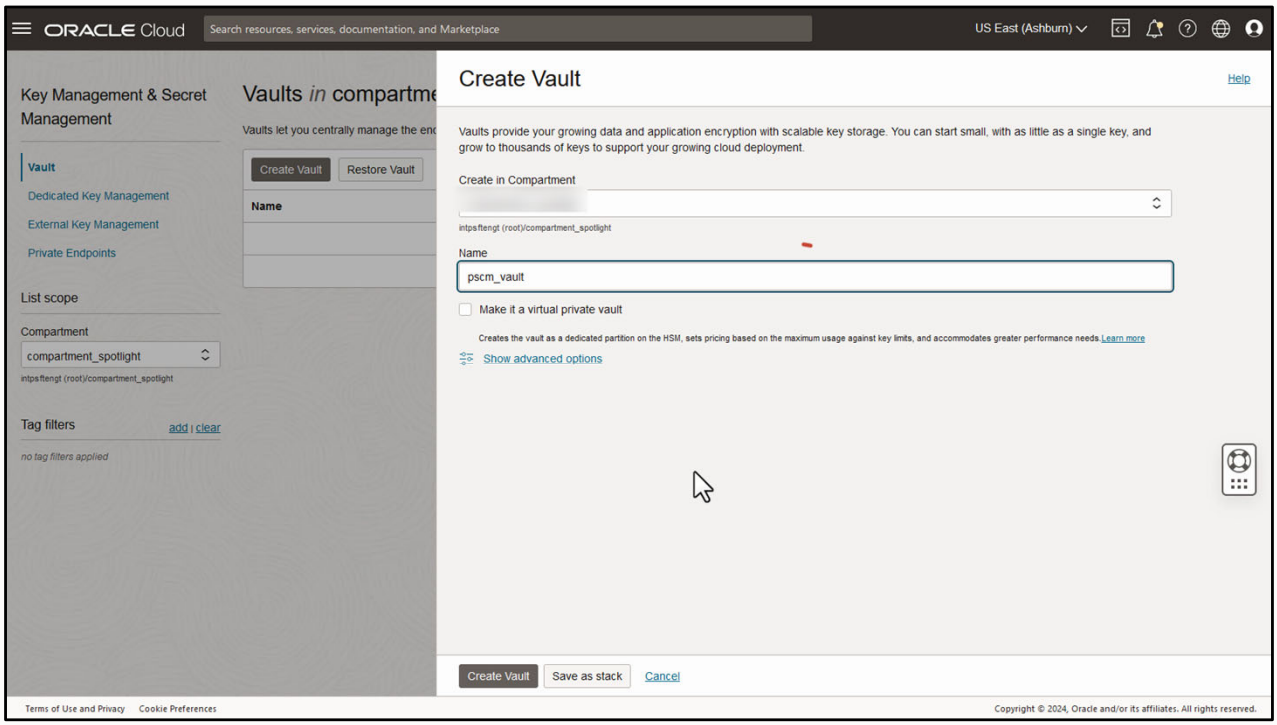
Use the private key for secure shell, or SSH, connection to the Cloud Manager Compute instance, for example, when you check the log file status.

In addition to the SSH key pair, you need an API signing key pair for authentication to OCI when Cloud Manager submits API requests.

The Cloud Manager installation requires a public and private RSA key pair in PEM format, with at least 2048 bits. You will enter the public API key on the page for the User in the OCI console.

You also enter it in the Resource Manager stack form.

The OCI documentation includes instructions on generating these key pairs.




You must use OCI Vault secrets to specify the passwords when using the Resource Manager stack to install PeopleSoft Cloud Manager.

OCI Vault is a secure password storage mechanism which you use to manage encryption keys and secrets. You input your passwords as secrets.

In the OCI console, select Identity and Security, then Vault, and click create Vault.

Select the compartment and provide a vault name.

Then create a master encryption key.

Choose a protection mode and select an encryption key algorithm.

Create a vault secret to hold each password. Select the encryption key and enter the password text in the secret contents field. If you use the Plain-text template, you can select the Show Base64 conversion switch to view the encrypted version.

To see a list of the password requirements for the installation, see the tutorials Install the PeopleSoft Cloud Manager Stack with Resource Manager and Create Vault Resources for Password Management for PeopleSoft Cloud Manager.

## Preparing for Installation

Requirements

- Oracle Cloud Infrastructure account
  - Compartments, users, groups, policies
- Subscriptions for OCI services
  - Compute, File Storage, Resource Manager, Object Storage, OCI Marketplace
- Sufficient tenancy resources
  - VM shapes, Block Storage, File System, mount targets, network components
- Licenses
  - PeopleSoft, COBOL, Oracle Database

Preliminary setup

- Generate SSH key pair
- Generate API key pair
- Create vault and add passwords

Input

- My Oracle Support credentials
- User OCIDs
- OCI Vault
- Key information

You will need to provide user OCIDs, OCI vault, SSH and API keys during the installation.

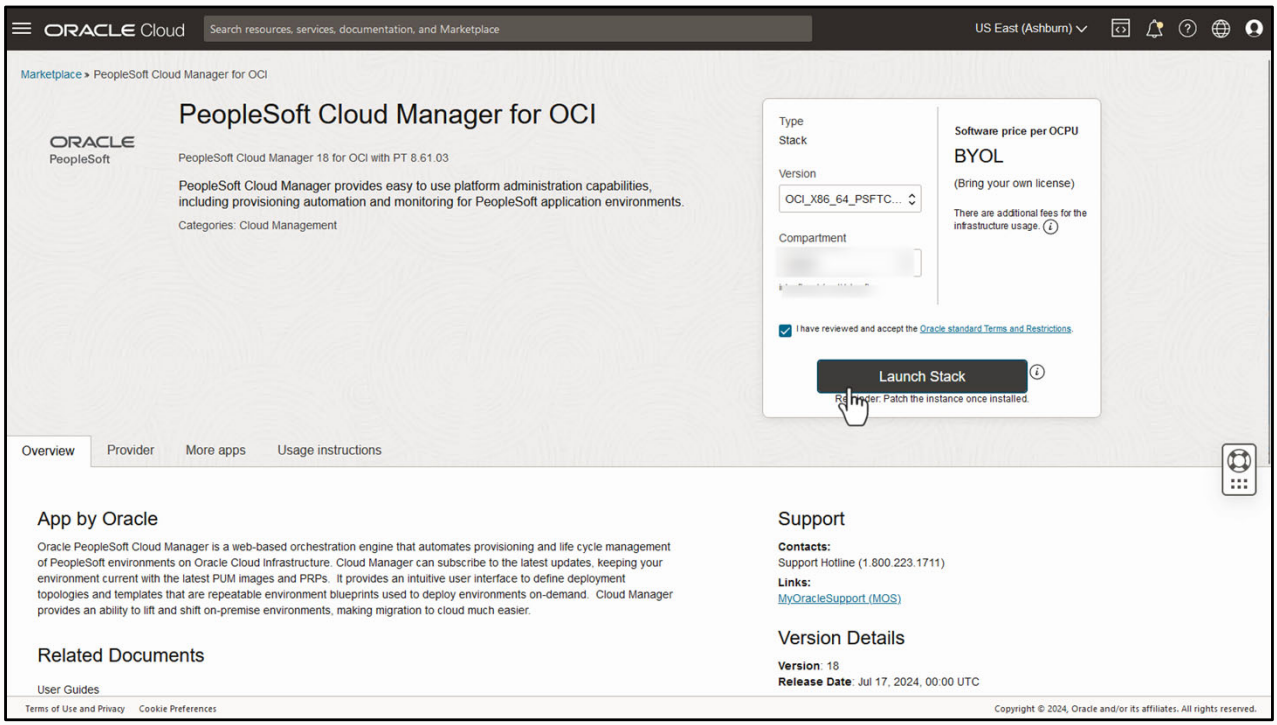
You need a My Oracle Support account to download PeopleSoft images, PRPs, PeopleTools patches, and other items to the repository.

## Installing and Configuring Cloud Manager - Topics

1. Preparation
2. **Installing the Resource Manager Stack**
3. Configuring Cloud Manager
   - Cloud Manager Settings
   - Infrastructure Settings
   - Creating a File Storage Service File System
4. Subscribing to Repository Channels
5. Updating and Upgrading Cloud Manager
6. Additional Resources

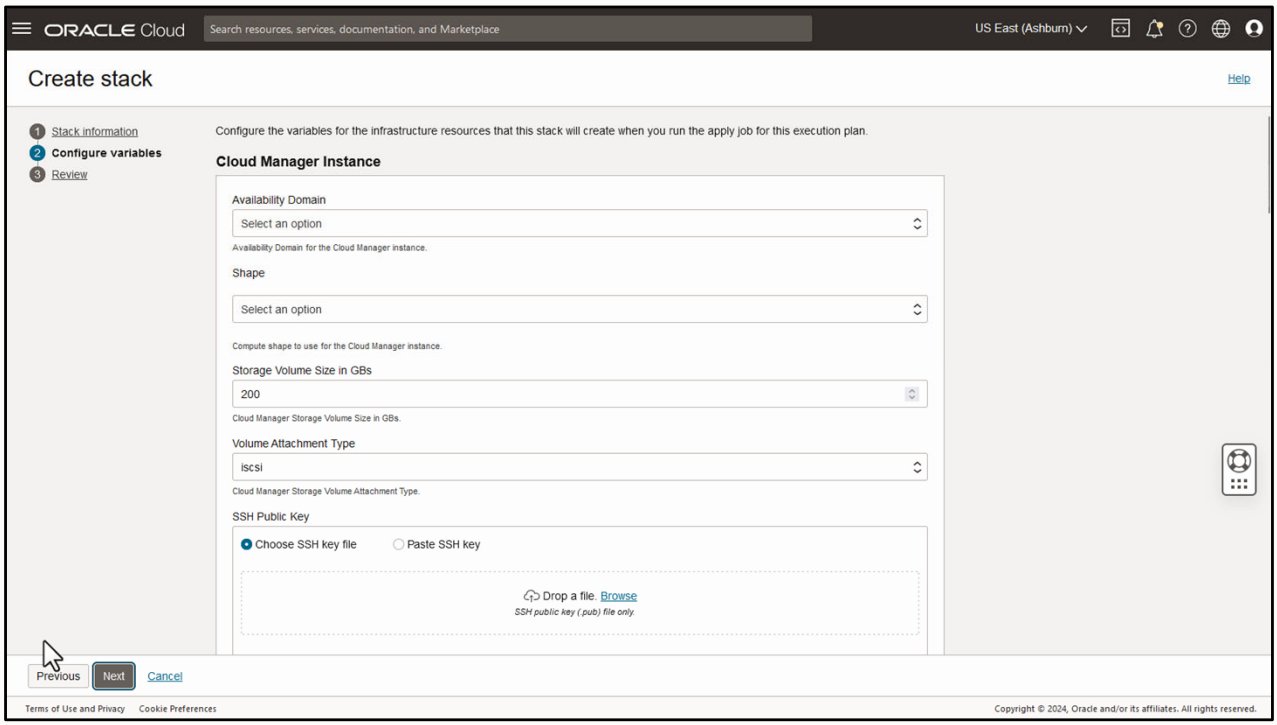


Now you are ready to install Cloud Manager.




Go to the OCI console, and select Marketplace > All Applications, and search for PeopleSoft Cloud Manager.

After selecting the compartment for the installation, and accepting the Oracle terms, click Launch Stack, which brings you to the Resource Manager form.

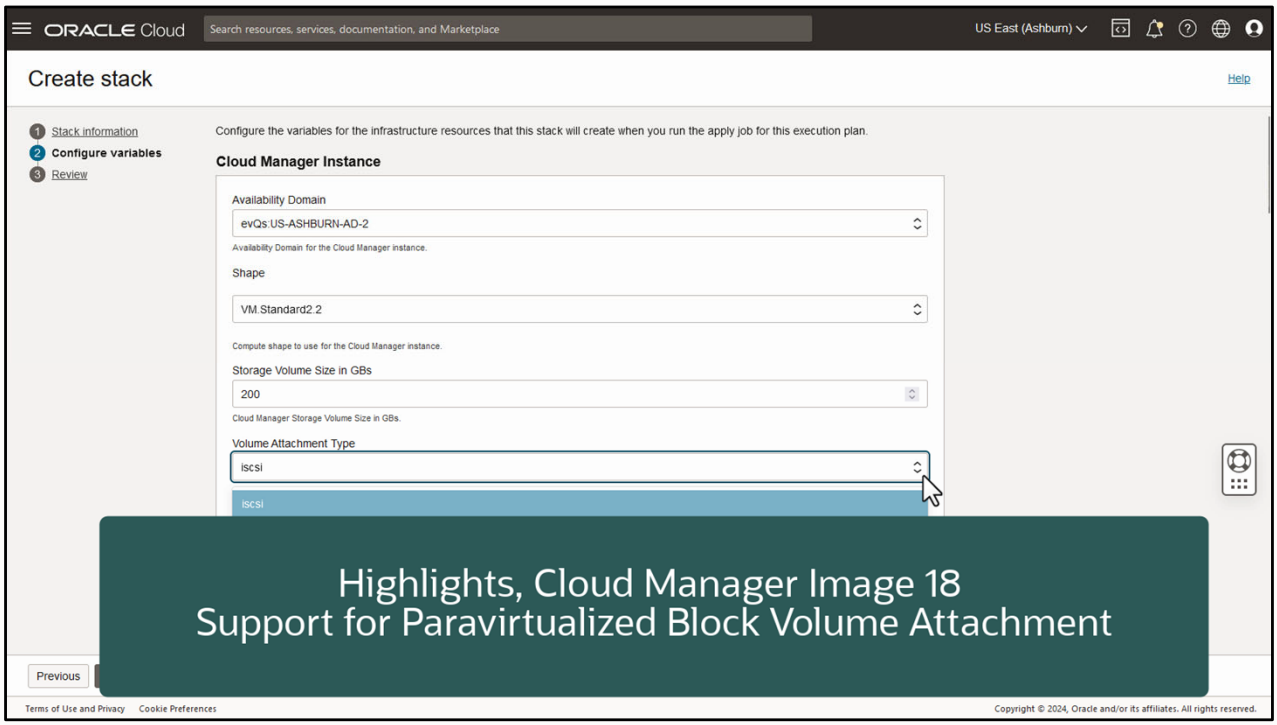



We install Cloud Manger using a Resource Manager stack.

Resource Manager is an OCI service that allows you to specify infrastructure in a configuration file. The Resource Manager stack is a template that references the Cloud Manager image, and comes with a form where you input passwords, OCI credentials, and networking information.

Accept the default name, confirm the compartment, and then click Next.

We select an availability domain that has sufficient resources, a shape and volume size.

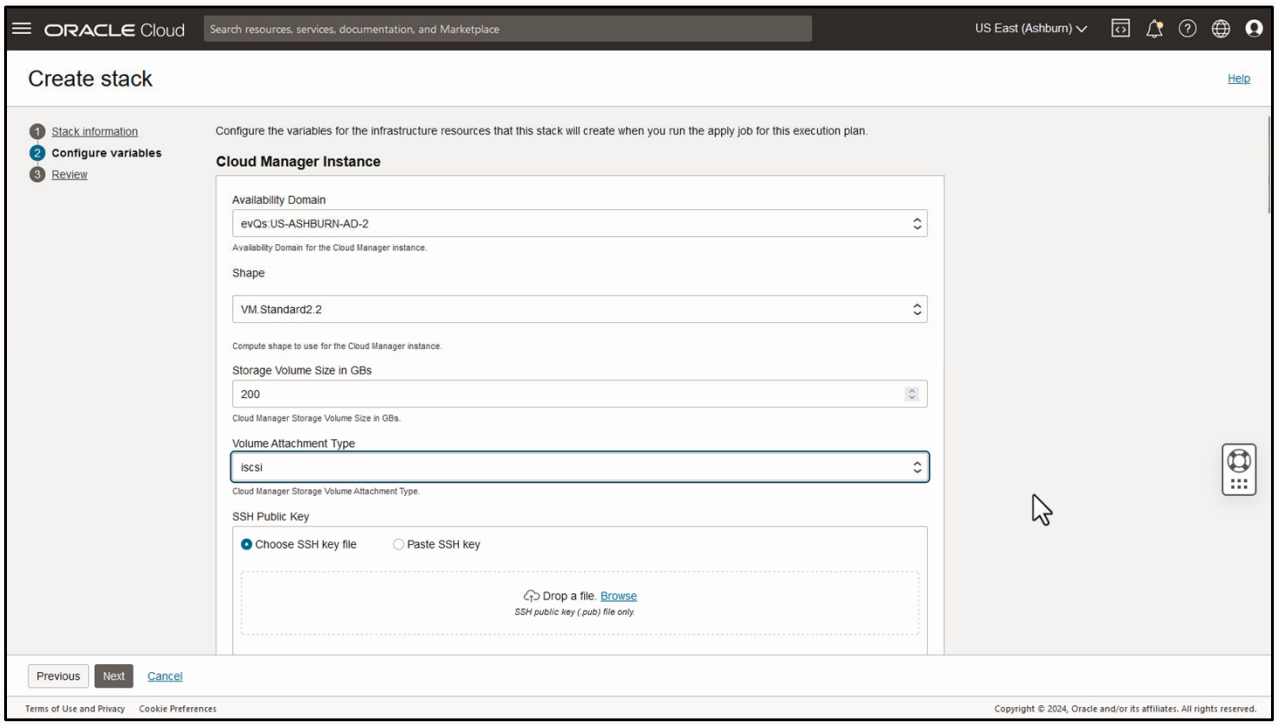



This image adds support for paravirtualized block volume attachments to the existing support for iSCSI.

Paravirtualized volume attachments are block volumes that have native operating system support and don't need an iSCSI initiator and attachment

The support for paravirtualized block volume attachments was described in the highlights video for Cloud Manager Image 18.

For the purposes of this demonstration. we select iSCSI.

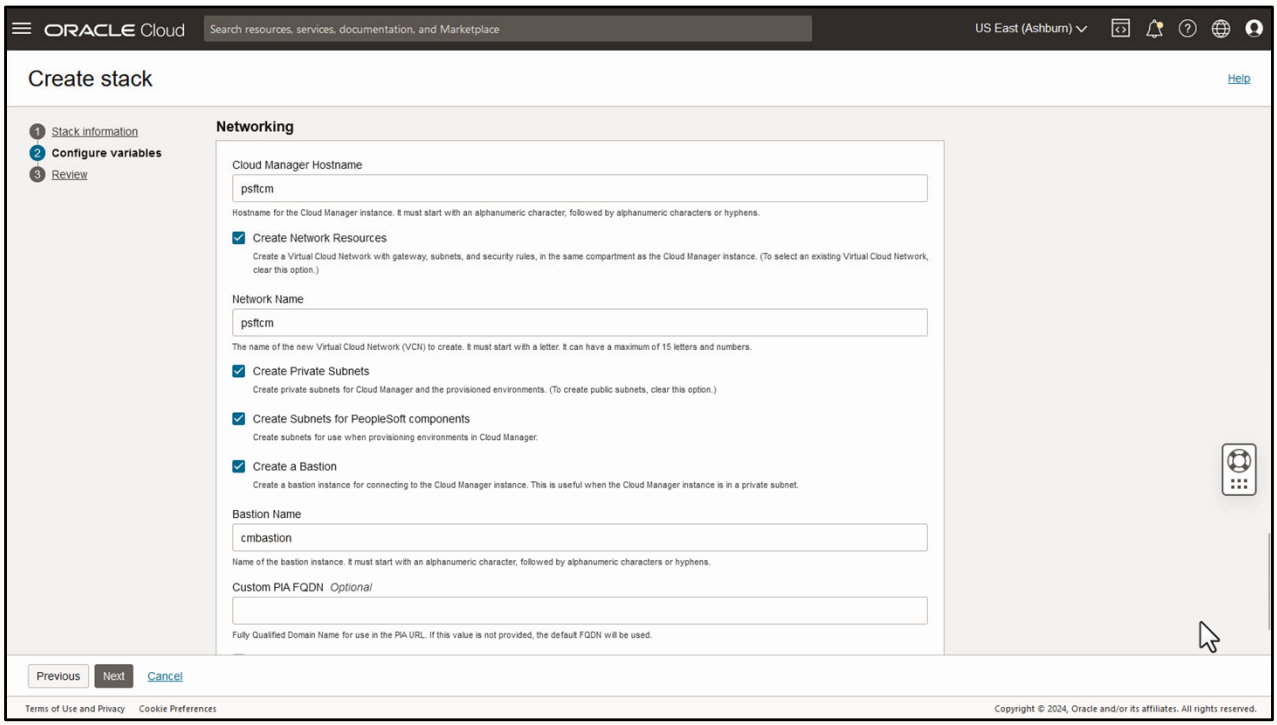



Now paste in the SSH key you created as part of the preparation.
We also paste the text for our API private key, and its passphrase.

We choose our tenancy home region, and accept the default name for the Cloud Manager database.

To specify the password, select the vault we previously created, and then select the vault secret that contains each password.

For the purposes of this demonstration, we leave the My Oracle support user ID and password blank. We will enter them when we configure Cloud Manager. specify the password, select the vault we previously created, and then select the vault secret that contains each password.




The Cloud Manager installation requires a Virtual Cloud Network, or VCN, with subnets, gateways, route tables, and security lists.

The stack includes options to create a VCN, to select public or private subnets, and to create separate subnets for PeopleSoft components.

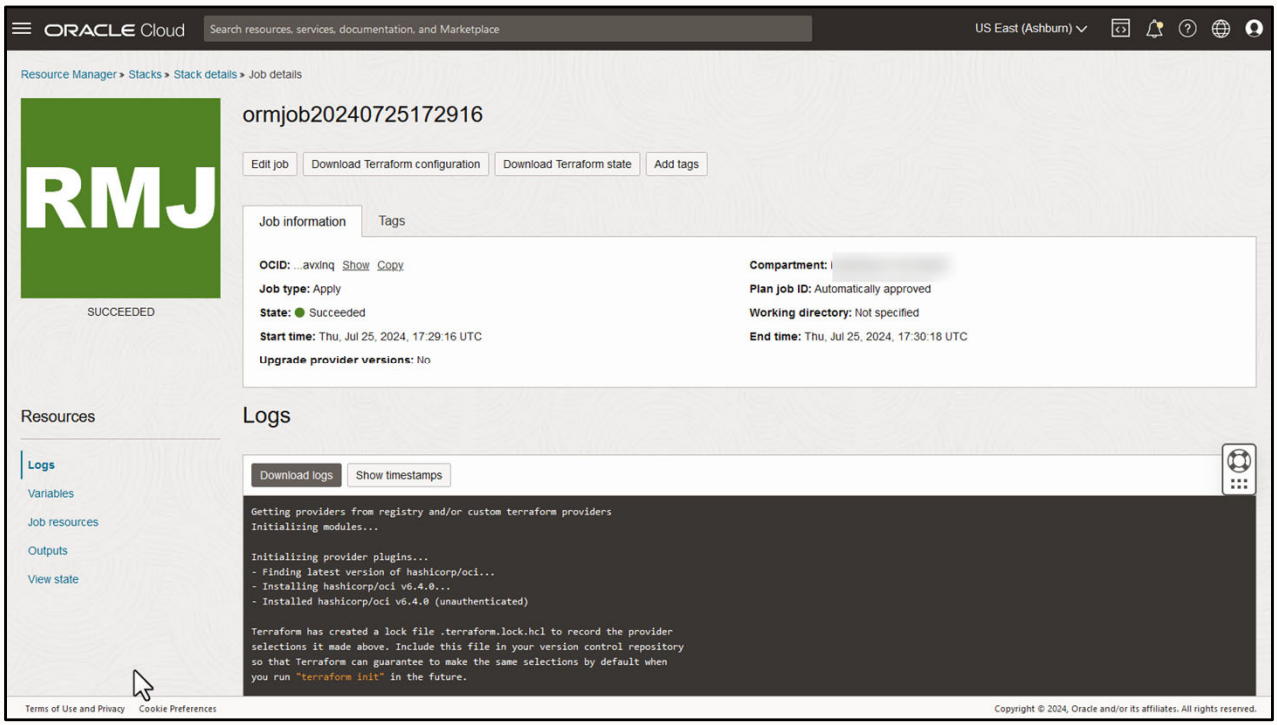
If you create a new VCN, you can view details about the networking components by expanding the advanced network section.

For this demonstration we will use an existing VCN.

We do not select the option to create a bastion. The bastion provides an authenticated user over the internet access into private subnets. For the purposes of this video we will use a previously-created bastion.

After you review the configuration, select Run apply to indicate that you want to begin the Resource Manager job immediately, then click Create.

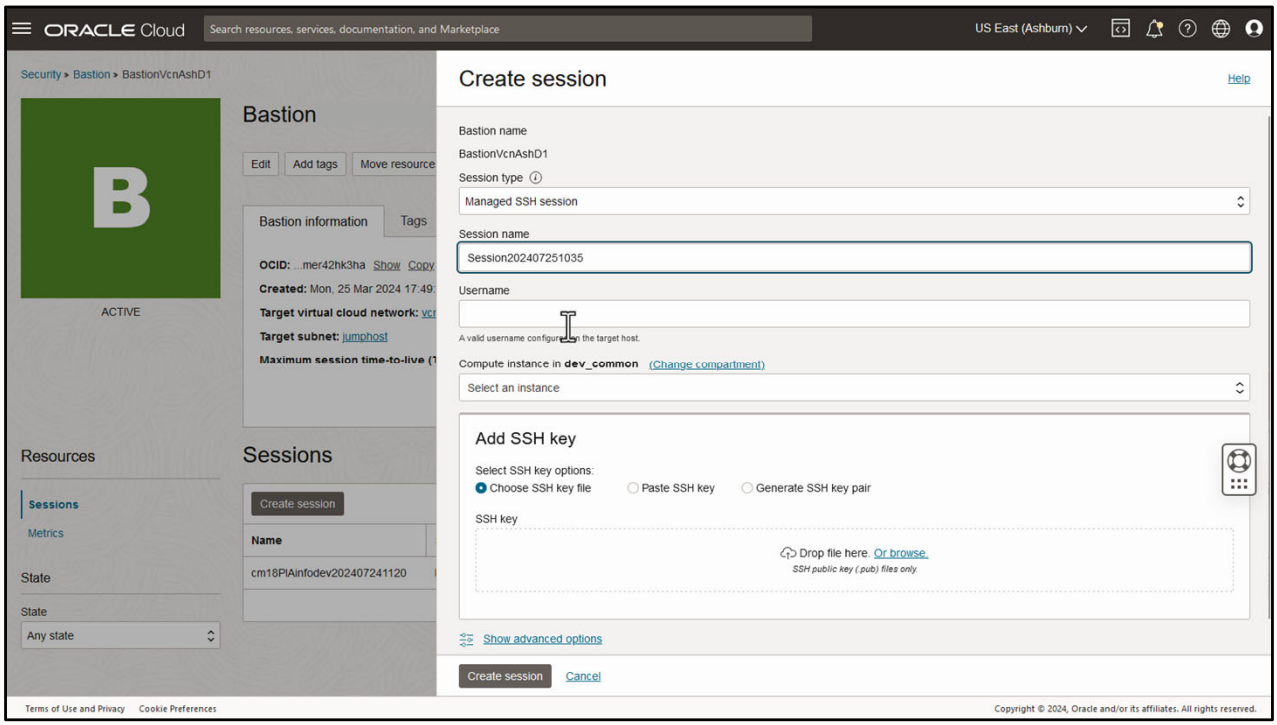
You are taken to the details page for the Resource Manager stack.




The installation is not complete when the status shows as Succeeded.

The Resource Manager job has deployed our OCI resources, but the Cloud Manager installation is a separate step that is automatically started on our new OCI compute instance. To verify the Cloud Manager installation, we can view the installation logs on the instance.

We can use the information shown in the logs field on the stack details page to sign into the VM for the instance and check the deployment progress in the log file.




Because we set up the instance with private subnets and a bastion, we need to create a bastion session for SSH access to the instance.

Obtain the bastion name and use the OCI instructions to create a session for SSH access, which we did outside of this video.

Copy the SSH command and use it to log into the Cloud Manager instance. For this demonstration we used a Git Bash shell.

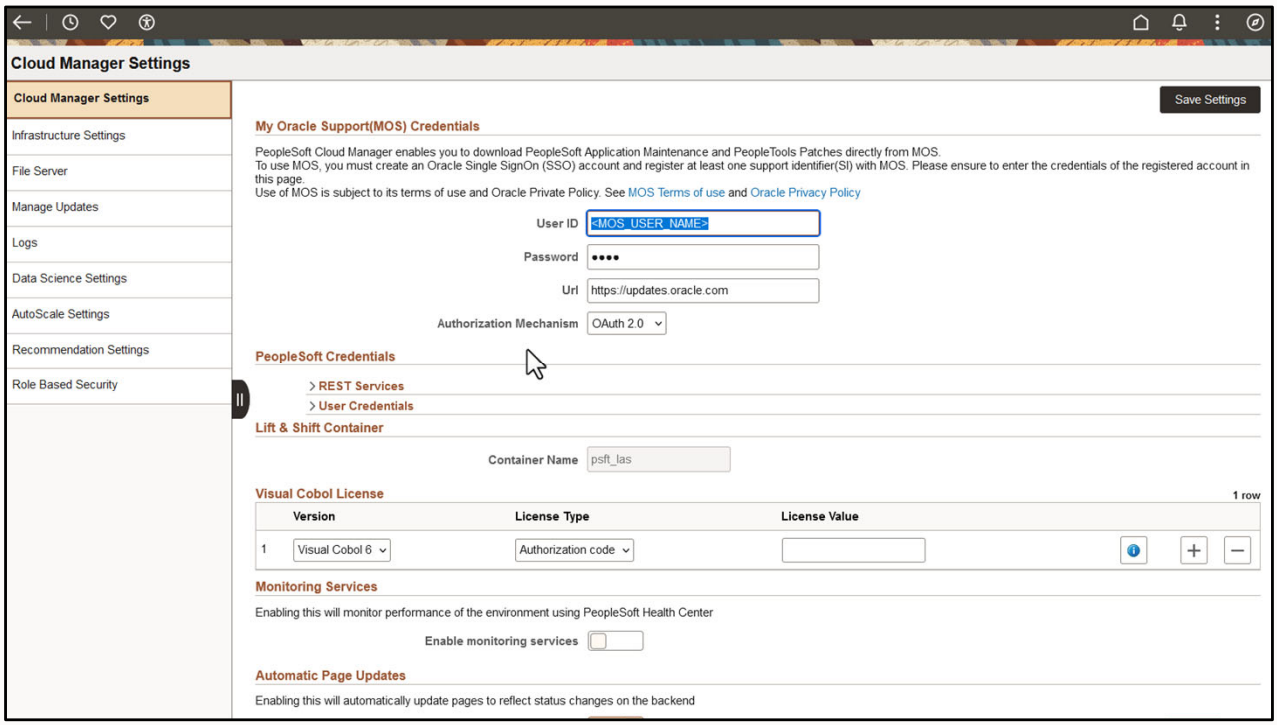
View the deployment progress in /home/opc/bootstrap/CloudManagerStatus.log.

When the deployment is complete, the log file displays the message “Cloud manager installed successfully,” and the PIA URL.

## Installing and Configuring Cloud Manager - Topics

1. Preparation
2. Installing the Resource Manager Stack
3. **Configuring Cloud Manager**
   - **Cloud Manager Settings**
   - **Infrastructure Settings**
   - **Creating a File Storage Service File System**
4. Subscribing to Repository Channels
5. Updating and Upgrading Cloud Manager
6. Additional Resources

Now we configure the Cloud Manager settings, Infrastructure Settings, and create a file system.




To access PIA, we use another command from the bastion and enter it in the Git Bash window. We also change our browser settings to allow access.

Enter the PIA URL in a browser and select the Cloud Manager Settings tile.

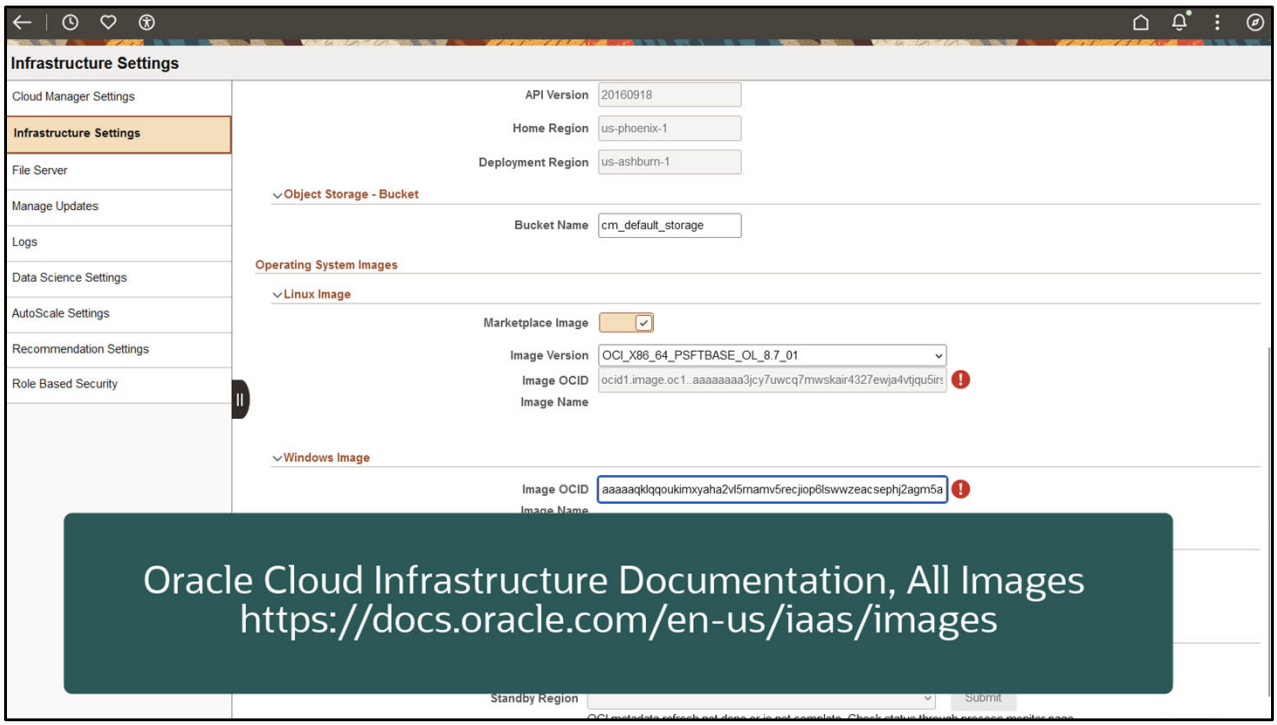
Enter the user ID and password for a user with a My Oracle Support Account. We also could have done this when filling out the Resource Manager form.

You can choose between Basic Authentication or OAuth 2.0. We recommend OAuth 2.0.

If you want to provision environments with COBOL, you will use this section to specify the license information.

You can select Monitoring Services to enable performance monitoring of the environment using PeopleSoft Health Center.

Automatic Page Updates is enabled to reflect backend status changes without reloading pages.




On the Infrastructure Settings page, the information at the top came from the entries on the Resource Manager stack form and from the OCI account.

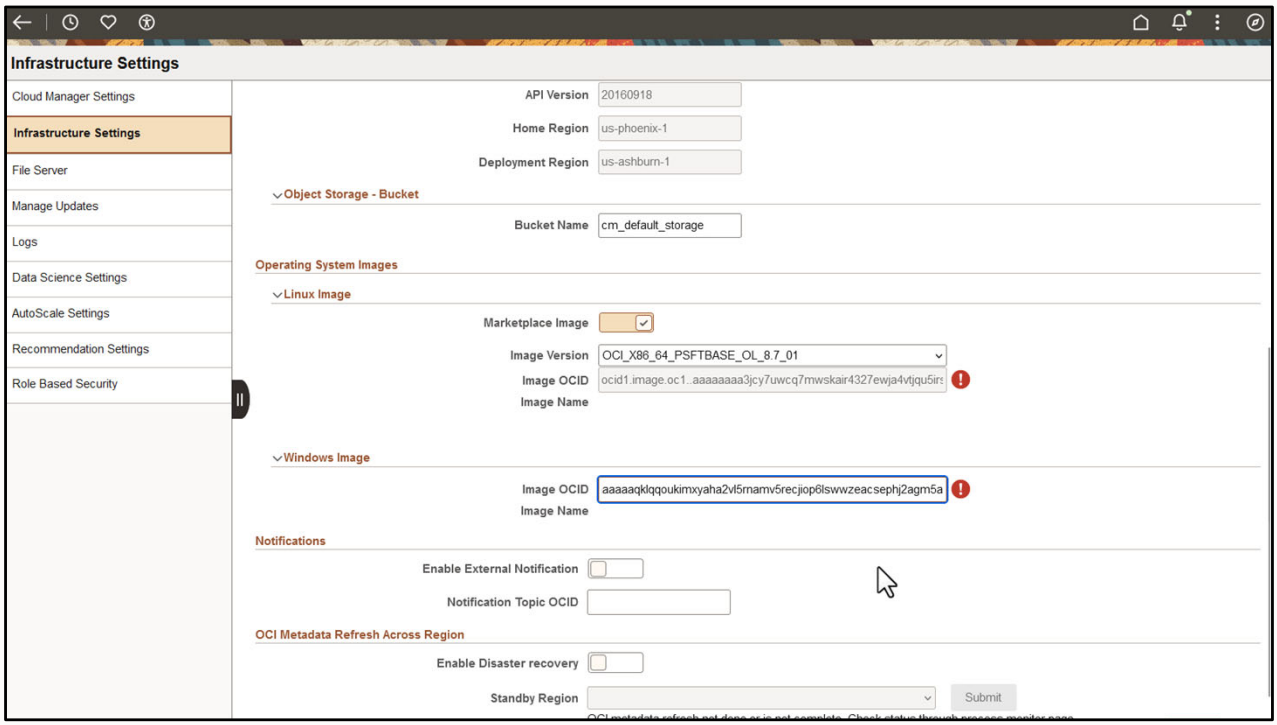
In the operating systems area, select a Marketplace image for Linux. This Linux image will be used for the provisioned environments.

The Microsoft Windows image will be used to host PeopleSoft client tools such as Change Assistant and Application Designer in your provisioned environments.

Specify the OCID for one of the Microsoft Windows versions that is supported for your PeopleTools release.

You can find the OCIDs for Oracle platform images for Microsoft Windows in the OCI online help.

You can also use custom Linux and Windows images. For the purposes of this demonstration we are using a custom Windows image.




The Notifications setting allows users to receive email notifications. The Cloud Manager administrator must set up a Notification topic and specified user emails in the OCI console.

The OCI metadata setting is used with disaster recovery.

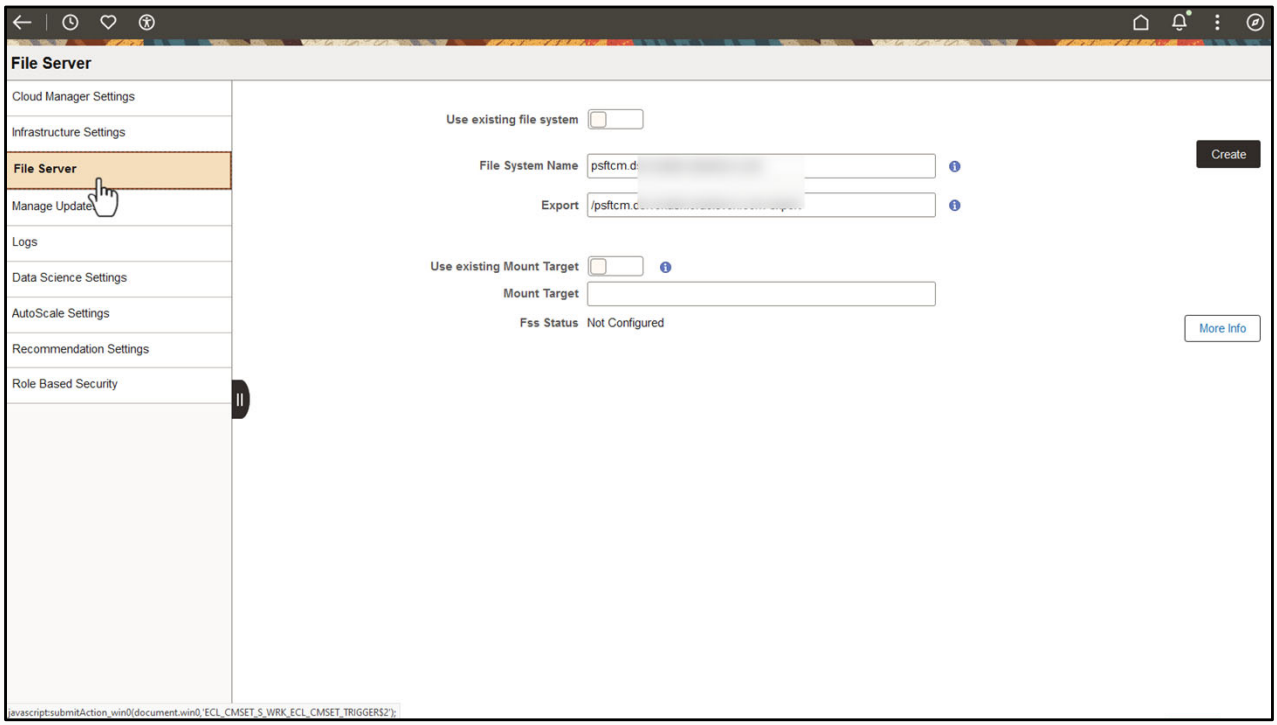
Set up Disaster Recovery to replicate an application instance in another region to ensure higher availability of the instance through switchover.

See OCI Disaster Recovery Service Support in the Image 16 highlights video

We don't change either setting.

Save the page, and then refresh the OCI metadata.

After refreshing the page and waiting a few minutes, the green check marks indicate that the data has been refreshed.




Next we set up a file server to use with the Repository to automatically download and store updates from My Oracle Support.

The file system page has options to allow you to create a new file system and new mount target, a new file system on an existing mount target, or reuse an existing file system.

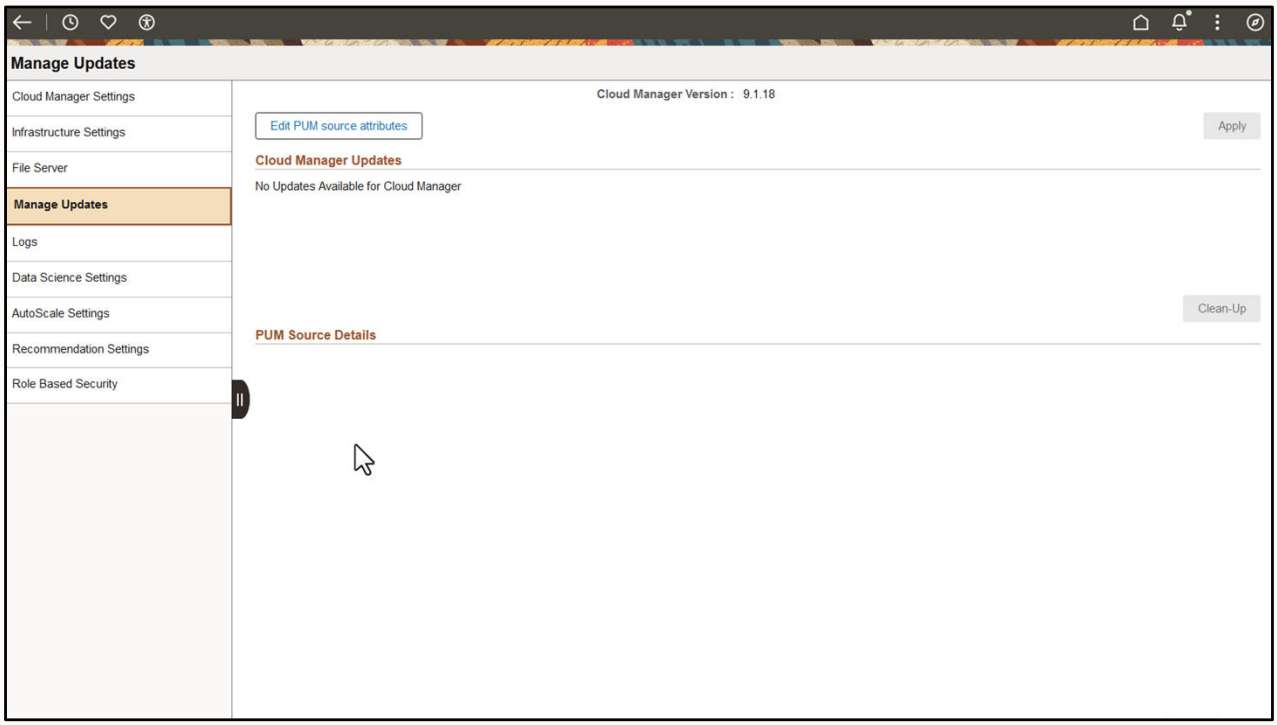
For the purposes of this demonstration we create a new file system using an existing mount point.

We accept the default names, which are based on the Cloud Manager instance name and domain.

Click Create.

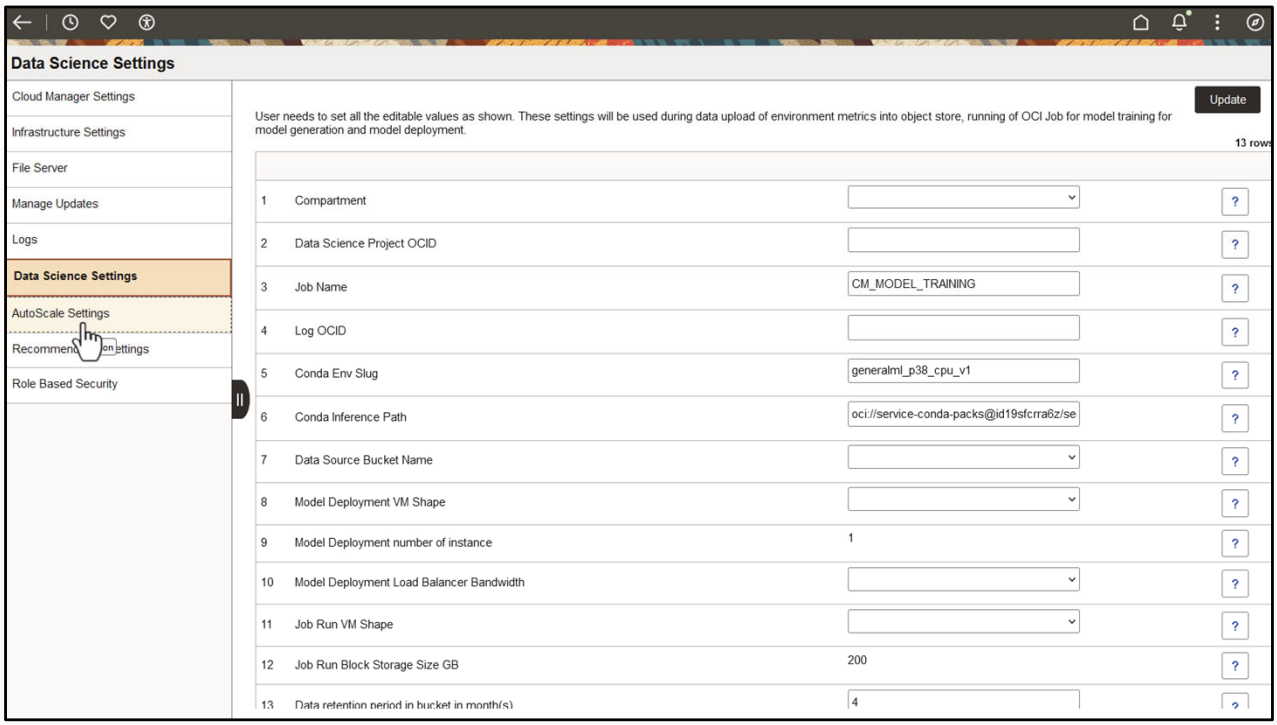
Click More Info to review the status of the steps to create and mount the file system.

When the file system is ready after a few minutes, the status changes to FSS configured.




Let's review some of the features for working with the Cloud Manager instance.

Use the Manage Updates page to apply updates for the Cloud Manager instance, which are available through PeopleSoft Release Patchsets, or PRPs, and through the Interaction Hub Update Image.




In case there are any problems when working with the Cloud Manager setup, you can check the Logs page.

The values on the Data Science Settings page are required for the Auto Scaling feature.

Use the settings on the Auto Scale page to control the duration of notifications for monitoring and scaling.

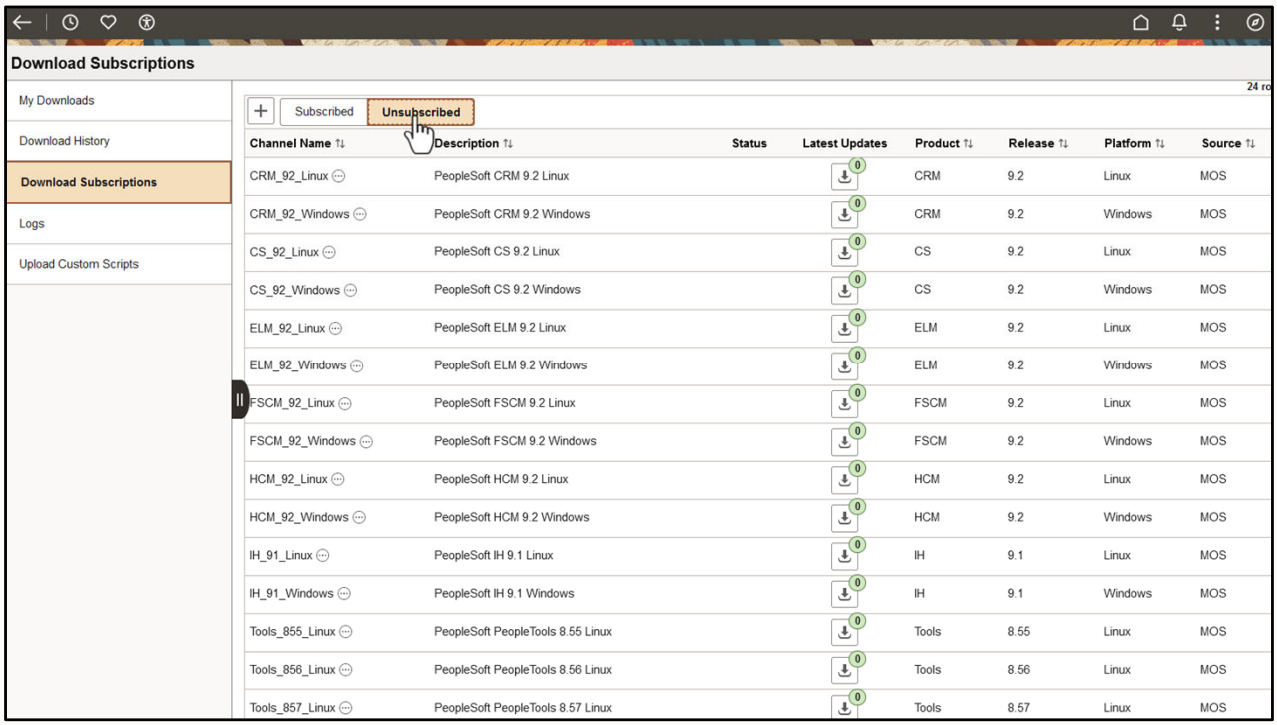
Use the options on the Recommendation Settings page to enable recommendations for midtier scaling and infrastructure CPU. Receiving recommendations works only for environments with tags.

Use the Role Based Security page to delegate access, using PeopleSoft roles and permissions, to a group of users on environments that are logically grouped using tags.

## Installing and Configuring Cloud Manager - Topics

1. Preparation
2. Installing the Resource Manager Stack
3. Configuring Cloud Manager
   - Cloud Manager Settings
   - Infrastructure Settings
   - Create a File Storage Service File System
4. **Subscribing to Repository Channels**
5. Updating and Upgrading Cloud Manager
6. Additional Resources

To get ready to provision environments, we need to set up the repository.




Use the repository to choose the types of artifacts to download from My Oracle Support into the Cloud Manager Repository. The items you can download include PeopleSoft Update images, PeopleTools patches, PRPs, custom scripts, and other objects.

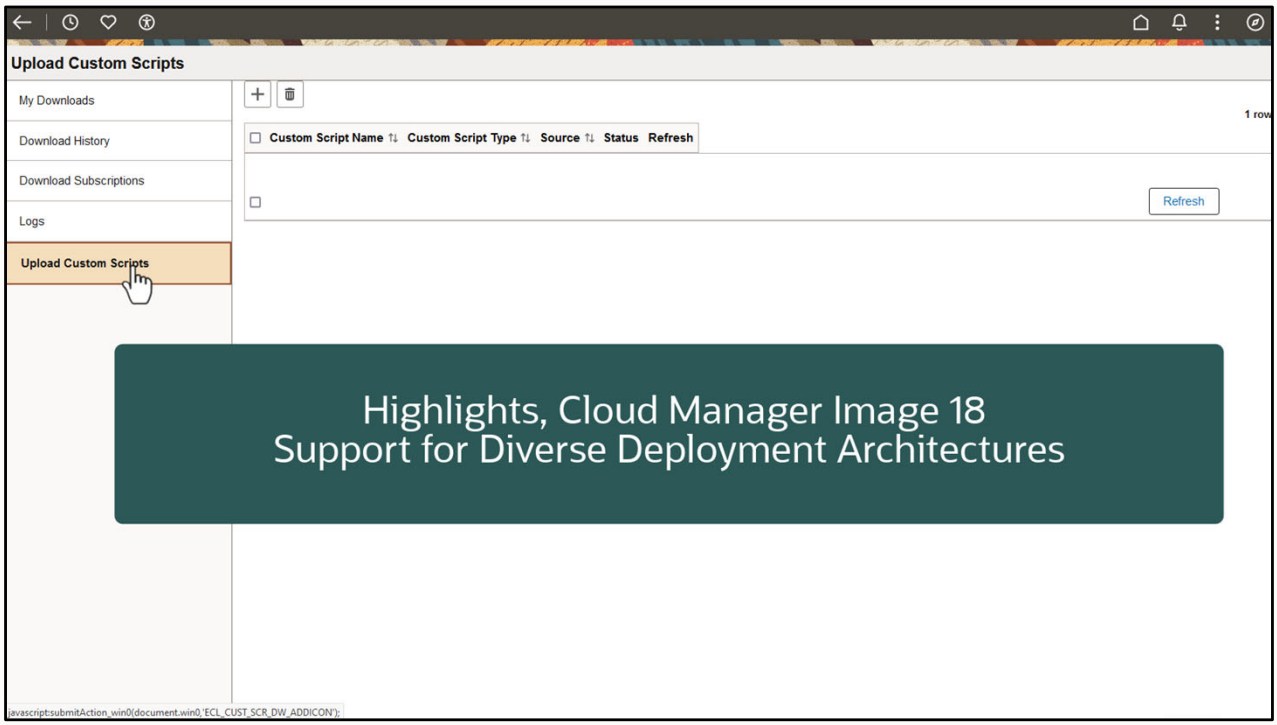
Go to Repository, Download Subscriptions.

The Unsubscribed page lists the available channels. Subscribe to channels for Interaction Hub, which is required for Cloud Manager self-updates, and to HCM.

Subscribe to PeopleTools 8.61, and do not enter a minimum product patch number. This will download only the latest PeopleTools 8.61 patches from My Oracle Support.

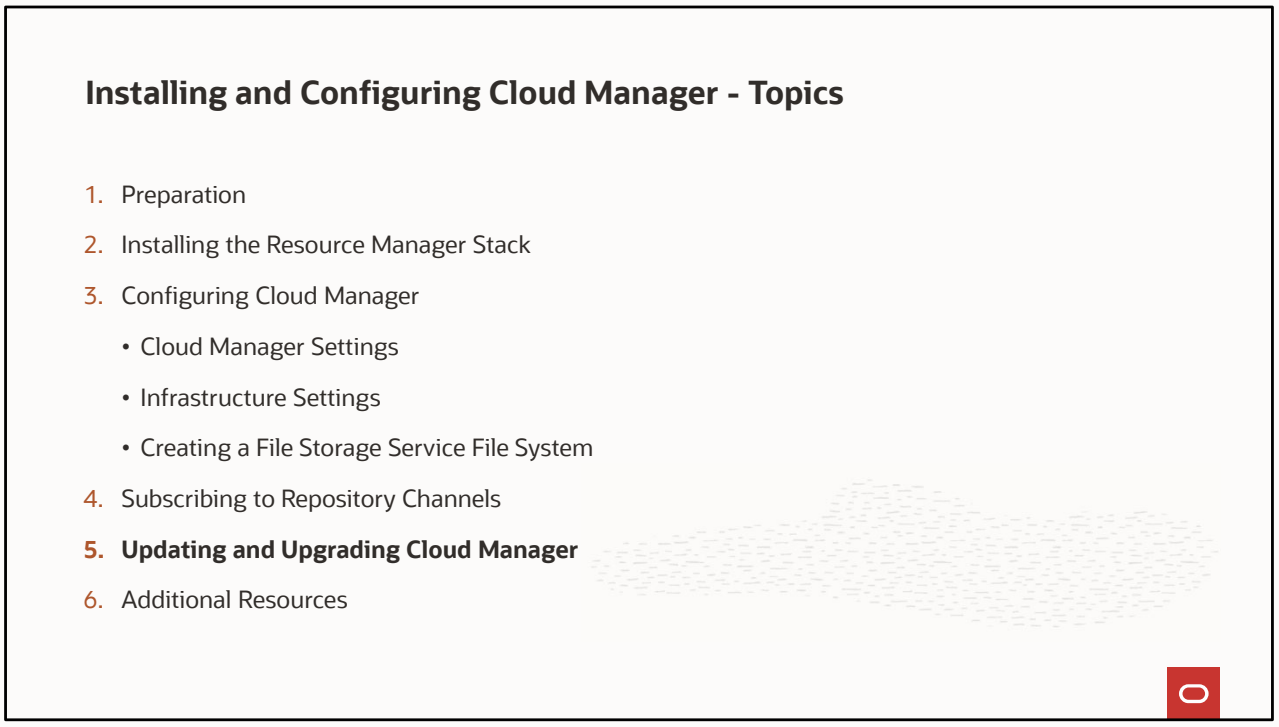
Go to the Logs page to follow the progress.

When the icons for the channels display a green check mark, you can view the Update Images, PRPs, and any other artifacts downloaded on the My Downloads page.




The Using Orchestration Manager video later in this series demonstrates using the Upload Custom Scripts page.

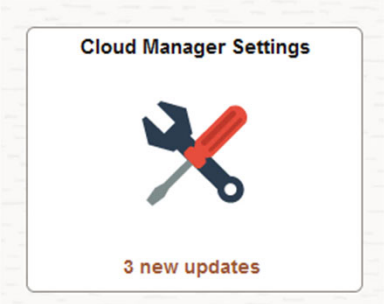
This is also covered in Support for Diverse Deployment Architectures in the Image 18 highlights video.



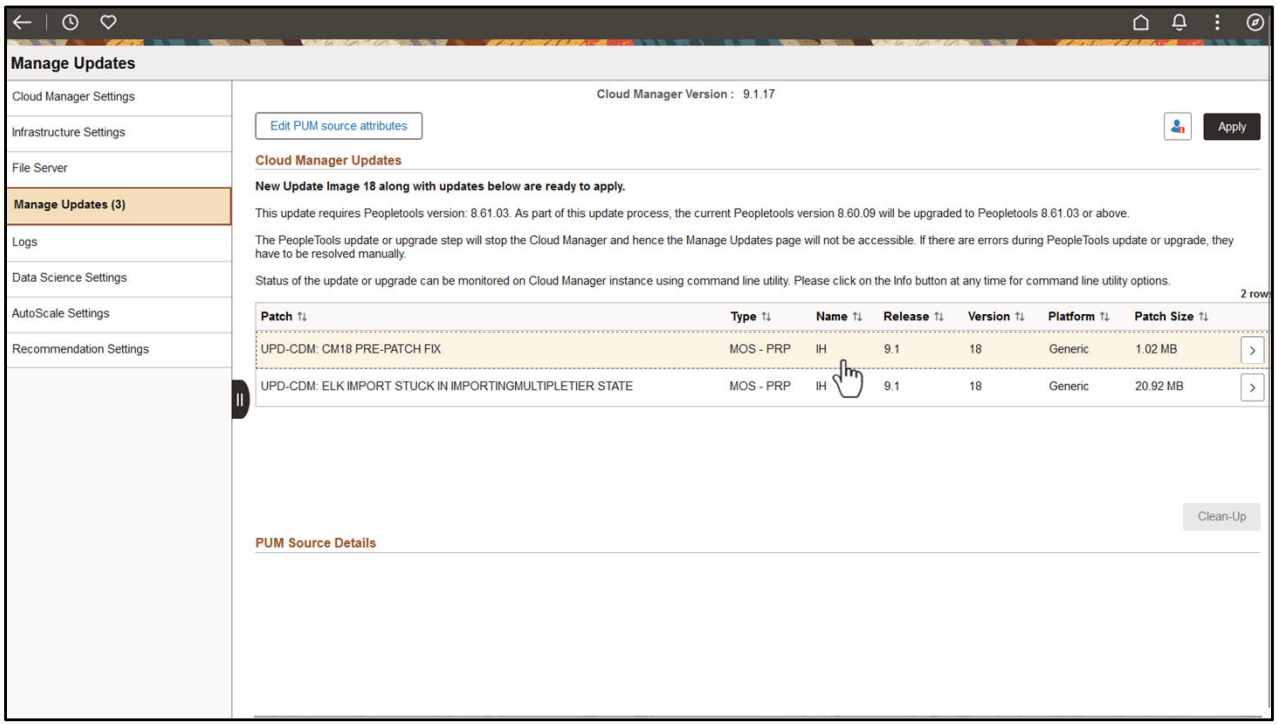

Updating and upgrading Cloud Manager was covered in the spotlight video, Keeping Cloud Manager Current, which was part of the series developed for Cloud Manager Image 11. This topic briefly discusses the differences since that spotlight video was posted.

## Updating and Upgrading Cloud Manager
Overview

- Automatically apply updates using Manage Updates
  - Apply PRPs
  - Upgrade to latest Cloud Manager Image
- Manually upgrade from N-2 or N-3 to the latest image
- Upgrade using the command line utility




Cloud Manager updates are provided as part of Interaction Hub Update Images. Updates can be applied using an automated method or manually. When updates are available a notification appears on the Cloud Manager Settings tile.




Automatic updates using the Manage Updates page was demonstrated in the previous spotlight series. One change on the page is that the Package Details link is no longer shown on the Manage Updates page. Instead, the available PRPs are shown, and you can select the right arrow to review the details.

## Updating and Upgrading Cloud Manager
Overview

- Automatically apply updates using Manage Updates
  - Apply PRPs
  - Upgrade to latest Cloud Manager Image
- Manually upgrade from N-2 or N-3 to the latest image
- Upgrade using the command line utility

```
$PS_APP_HOME/cloud/post_upgrade_script.sh
```

The second change to the process is that running a post-upgrade shell script is required after the Cloud Manager upgrade is complete.

After running post_upgrade_script.sh as the root user, you must restart the PeopleSoft domains and refresh the OCI metadata.

This script is not required when applying PRPs to Cloud Manager.

## Updating and Upgrading Cloud Manager
Overview

- Automatically apply updates using Manage Updates
  - Apply PRPs
  - Upgrade to latest Cloud Manager Image
- Manually upgrade from N-2 or N-3 to the latest image
- Upgrade using the command line utility

You can use the Manage Updates page to automatically update Cloud Manager from the previous, or N minus one version, to the latest version.

To update to the latest version from versions 2 or 3 images prior, that is N -2 or N -3, you upgrade the PeopleTools version to the version required by the latest Cloud Manager image. Then you use the PeopleSoft Update Manager, or PUM, selective updates process to upgrade the Cloud Manager instance to the latest image. The process requires several tasks, which are covered in the Cloud Manager documentation.

For earlier Cloud Manager images, and in cases of problems, you can also use the command line utility.

## Installing and Configuring Cloud Manager - Topics

1. Preparation
2. Installing the Resource Manager Stack
3. Configuring Cloud Manager
   - Cloud Manager Settings
   - Infrastructure Settings
   - Creating a File Storage Service File System
4. Subscribing to Repository Channels
5. Updating and Upgrading Cloud Manager
6. **Additional Resources**

Here are some useful resources.


You can download the Companion Slides, with images and notes from this video, from the Oracle Learning Library.

See the PeopleSoft Cloud Manager home page on My Oracle Support for additional information.

You can find the highlights videos referenced in this spotlight on the PeopleSoft Cloud Manager page on the PeopleSoft Information Portal. Use the link at the top of the page to See all PeopleSoft Cloud Manager videos.

You can also find the version of this spotlight developed for Cloud Manager Image 11 in the Cloud Manager section of the Spotlight Series page, which is also on the PeopleSoft Information Portal. The video includes several demonstrations that were not included here.

See the PeopleSoft blog for timely updates.

Go to the Oracle Cloud Infrastructure documentation for information about OCI compute.


ORACLE
Copyright © 2024 Oracle Corporation