Technical Report

Administering Cloud Manager

Cloud Manager 3.5

NetApp
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Updating Cloud Manager

You can update Cloud Manager to the latest version or with a patch that NetApp personnel shared with you.

Enabling automatic updates

Cloud Manager can automatically update itself to the latest maintenance or minor release whenever a new version is available. This ensures that you are running the latest version.

About this task

Cloud Manager automatically updates at 12:00 midnight if no operations are running.

Steps

1. In the upper right of the Cloud Manager console, click the task drop-down list, and then select **Settings**.
2. Select the checkbox under Automatic Cloud Manager Updates and then click **Save**.

Updating Cloud Manager to the latest version

You should enable automatic updates to Cloud Manager, but you can always do a manual update directly from the web console. Cloud Manager obtains the software update from a NetApp-owned S3 bucket in AWS.

Before you begin

You should have reviewed what is new in the release to identify new requirements and changes in support.

About this task

The software update takes a few minutes. Cloud Manager will not be available during the update.

Steps

1. Check whether a new version is available by looking at the lower-right corner of the console:

   [Screen shot: Shows the New version available link that is available from the lower-right hand corner of the Cloud Manager web console.]

2. If a new version is available, click **Timeline** to determine whether any tasks are in progress.

   If any tasks are in progress, wait for them to finish before you proceed to the next step.

3. In the lower-right of the console, click **New version available**.
4. On the Cloud Manager Software Update page, click **Update** next to the version that you want.
5. Complete the confirmation dialog box, and then click **OK**:

a. Keep the option to download a backup because you can use it to restore your Cloud Manager configuration, if necessary.

b. Read the terms and conditions, and then select the **I read and approve the terms and conditions (EULA)** check box.

6. When prompted, save the Cloud Manager backup.

Result

Cloud Manager starts the update process. You can log in to the console after a few minutes.

Updating Cloud Manager with a patch

If NetApp shared a patch with you, you can update Cloud Manager with the supplied patch directly from the Cloud Manager web console.

About this task

The patch update typically takes a few minutes. Cloud Manager will not be available during the update.

Steps

1. In the upper-right hand corner of the Cloud Manager console, click the task drop-down list, and then select **Update**.
2. Click the link to update Cloud Manager with the supplied patch.

   [Screen shot: Shows the link to update Cloud Manager with a patch.]

3. Complete the confirmation dialog box and then click **OK**:

   a. Keep the option to download a backup enabled because you can use it to restore your Cloud Manager configuration, if necessary.

   b. Read the terms and conditions and then select the **I read and approve the terms and conditions (EULA)** check box.

4. Select the patch that you were provided.
5. When prompted, save the Cloud Manager backup.

Result

Cloud Manager applies the patch. You can log in to the console after a few minutes.

Backing up and restoring Cloud Manager

Cloud Manager enables you to back up and restore its database to protect your configuration and troubleshoot issues.

Backing up Cloud Manager

It is a good practice to back up the Cloud Manager database on a periodic basis. If you experience problems, you can restore Cloud Manager from a previous backup.

Steps

1. In the upper right of the Cloud Manager console, click the task drop-down list, and then select **Tools**.
2. Click **Backup**.

   [Screen shot: Shows the Backup button in the Tools page.]

3. When prompted, save the backup file to a secure location so that you can retrieve it when needed.

Restoring Cloud Manager from a backup

Restoring Cloud Manager from a backup replaces existing data with the data from the backup.

Steps

1. In the upper-right hand corner of the Cloud Manager console, click the task drop-down list, and then select **Tools**.
2. Click **Restore**.
3. Click **OK** to confirm.
4. Select the backup.

Result

Cloud Manager restores the database from the backup file.

Removing Cloud Volumes ONTAP working environments

The Cloud Manager Admin can remove a Cloud Volumes ONTAP working environment to move it to another system or to troubleshoot discovery issues.

About this task

Removing a Cloud Volumes ONTAP working environment removes it from Cloud Manager. It does not delete the Cloud Volumes ONTAP system. You can later rediscover the working environment.

Removing a working environment from Cloud Manager enables you to do the following:

- Rediscover it in another tenant
- Rediscover it from another Cloud Manager system
- Rediscover it if you had problems during the initial discovery

Steps

1. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then select **Tools**.
2. From the Tools page, click **Launch**.

3. Select the Cloud Volumes ONTAP working environment that you want to remove.
4. On the Review and Approve page, click **Go**.

Result

Cloud Manager removes the working environment. Users can rediscover this working environment from the Working Environments page at any time.

Editing user accounts

You can modify user accounts in Cloud Manager by changing the cloud permissions associated with the account, enabling and disabling the notification report, and by changing the S3 cost bucket for detailed billing reports.

About this task

Password and user information must be changed in NetApp Cloud Central.

Steps

1. In the upper-right corner of the Cloud Manager console, click the user icon, and then select **View Users**.
2. Select the menu icon at the end of the row and click **Edit User**.

   [Screen shot: Shows the menu to edit a user account. The menu is located next to the user name.]

3. In the User Settings page, modify the user account.

Configuring Cloud Manager to use a proxy server

When you first deploy Cloud Manager, it prompts you to enter a proxy server if the system does not have internet access. You can also manually enter and modify the proxy from Cloud Manager's settings.

About this task

If your corporate policies dictate that you use a proxy server for all HTTP communication to the internet, then you must configure Cloud Manager to use that proxy server. The proxy server can be in the cloud or in your network.

When you configure Cloud Manager to use a proxy server, Cloud Manager, Cloud Volumes ONTAP, and the HA mediator all use the proxy server.

Steps

1. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then select **Settings**.
2. Under HTTP Proxy, enter the server using the syntax http://*address:port*, specify a user name and password if basic authentication is required for the server, and then click **Save**.

Cloud Manager does not support passwords that include the @ character.

Result

After you specify the proxy server, new Cloud Volumes ONTAP systems are automatically configured to use the proxy server when sending AutoSupport messages. If you do not specify the proxy server before users create Cloud Volumes ONTAP systems, then they must use System Manager to manually set the proxy server in the AutoSupport options for each system.

Managing encryption settings for Cloud Volumes ONTAP

You might need to periodically manage Cloud Manager encryption settings to ensure that Cloud Volumes ONTAP systems in AWS can communicate with key managers.

Data-at-rest encryption provided by Cloud Volumes ONTAP is no longer supported when launching new Cloud Volumes ONTAP systems in AWS. Existing systems that use this feature are still supported. See What's new in Cloud Manager for more details.

Renewing the Cloud Manager intermediate CA certificate

You must renew the Cloud Manager certificate before it expires; otherwise, Cloud Manager cannot sign client certificates for Cloud Volumes ONTAP.

About this task

If you renew the Cloud Manager intermediate CA certificate, Cloud Manager uses the renewed certificate to generate client certificates for *new* Cloud Volumes ONTAP systems. You can renew client certificates for *existing* Cloud Volumes ONTAP systems from the working environment.

Steps

1. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then click **Encryption Setup**.
2. In the Intermediate CA tab, click **Renew Intermediate CA**.
3. Click **Generate CSR**.
4. Use the CSR to submit a certificate request to a CA.

   The intermediate CA certificate must use the Privacy Enhanced Mail (PEM) Base-64 encoded X.509 format.

5. Copy the contents of the signed certificate and paste it in the Cloud Manager certificate field.
6. Click **Install Cloud Manager Certificate**.

Managing available key managers and CA certificates

You can modify the key managers and key manager CA certificates that Cloud Manager users can use with their Cloud Volumes ONTAP systems. For example, you can add a new key manager that is available in your environment and you can add a new CA certificate, if a previous certificate expired.

About this task

The changes that you make from the Encryption Setup page affect only new Cloud Volumes ONTAP systems. Changes to existing Cloud Volumes ONTAP systems must be made from the working environment.

Steps

1. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then click **Encryption Setup**.
2. Click **Key Manager**.
3. Manage your key managers as necessary:

Action	Steps
Change the KMIP port for communicating with key managers	Modify the port and then click **Save**. The port change affects only new Cloud Volumes ONTAP systems. To change the port for an existing Cloud Volumes ONTAP system, connect to the CLI and then run the security key-manager setup command.
Add a new key manager	Click Add, enter details about the key manager, and then click Add again. This action does not add the key manager to existing Cloud Volumes ONTAP systems. You must add the key manager from the working environment, if necessary.
Edit the details for a key manager	Select the menu icon next to the key manager, click Edit, modify the details, and then click Save. Any changes affect only new Cloud Volumes ONTAP systems that will use this key manager. To apply this change to existing Cloud Volumes ONTAP systems, go to the working environment, remove the key manager, and then add it back.
Delete an existing key manager	Select the menu icon next to the key manager, click **Delete**, and then click **Delete** again. If you delete a key manager, you cannot configure Cloud Volumes ONTAP systems to use it. Existing systems that are using this key manager can continue to use it.

4. Manage the key managers' CA certificates as necessary:

Action	Steps
Add a new certificate	Click **Add**, paste the certificate, and then click **Add** again.
View a certificate	Select the menu icon next to the key manager and click **View**.
Delete a certificate	Select the menu icon next to the certificate, click **Delete**, and then click **Delete** again. If you delete a certificate, you cannot configure Cloud Volumes ONTAP systems to use it. Existing systems that are using the certificate can continue to use it.

Renewing the Cloud Manager HTTPS certificate

You should renew the Cloud Manager HTTPS certificate before it expires to ensure secure access to the Cloud Manager web console. If you do not renew the certificate before it expires, a warning appears when users access the web console using HTTPS.

Steps

1. In the upper right of the Cloud Manager console, click the task drop-down list, and then select **HTTPS Setup**.

   Details about the Cloud Manager certificate displays, including the expiration date.

2. Click **Renew HTTPS Certificate** and follow the steps to generate a CSR or install your own CA-signed certificate.

Result

Cloud Manager uses the new CA-signed certificate to provide secure HTTPS access.

Uninstalling Cloud Manager

Cloud Manager includes an uninstallation script that you can use to uninstall the software to troubleshoot issues or to permanently remove the software from the host.

Steps

1. If you are going to reinstall Cloud Manager, back up the database before you uninstall the software:

   a. In the upper-right corner of the Cloud Manager console, click the task drop-down list, and then select **Tools**.

   b. Click **Backup** and save the backup file to your local machine.

2. From the Linux host, run the uninstallation script:

/opt/application/netapp/cloudmanager/bin/uninstall.sh [silent]

silent runs the script without prompting you for confirmation.