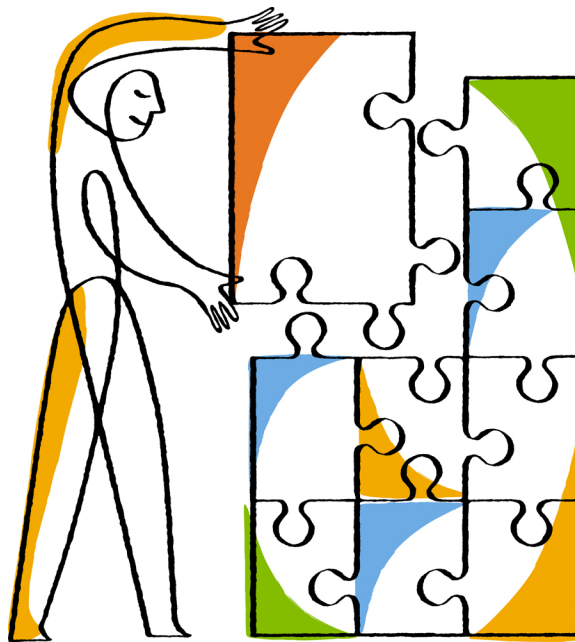




NetApp®

OnCommand® Cloud Manager 2.1

Release Notes



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Product overview

OnCommand Cloud Manager provides an enterprise-level standard for setting up and managing hybrid cloud storage environments built on clustered Data ONTAP. You can use Cloud Manager to launch and manage Cloud ONTAP instances in Amazon Web Services (AWS) and to replicate data across your hybrid cloud.

Management of Cloud ONTAP for AWS

Cloud Manager enables you to manage Cloud ONTAP systems as follows:

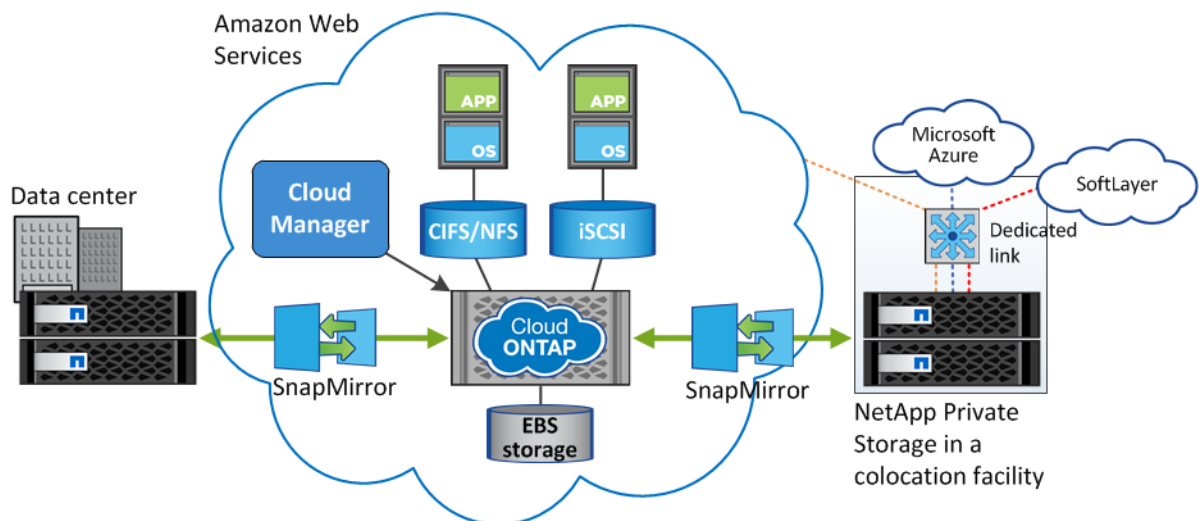
- Deploy Cloud ONTAP systems in approximately 25 minutes
- Set up Cloud ONTAP for data-at-rest encryption
- Provision NFS and CIFS storage using a simplified provisioning wizard
- Replicate data to and from the cloud
- Upgrade Cloud ONTAP systems to the latest version using an automated process
- Monitor AWS storage and compute charges associated with Cloud ONTAP systems

Data replication across your hybrid cloud

Cloud Manager can discover Data ONTAP clusters in your on-premises environment, and clusters that belong to a NetApp Private Storage for Cloud configuration in AWS, Microsoft Azure, and SoftLayer. Discovering these clusters enables you to easily replicate data across your hybrid cloud environment: between on-premises Data ONTAP clusters, Cloud ONTAP systems, and NetApp Private Storage for Cloud configurations.

Where to deploy Cloud Manager

Cloud Manager can run in AWS or in your network. The following image shows Cloud Manager running in AWS and managing a Cloud ONTAP system and data replication to and from Data ONTAP clusters:



New in this release

OnCommand Cloud Manager 2.1 includes several new features and enhancements.

Cloud Manager now supported on Linux, instead of Windows Server

Cloud Manager must now be installed on hosts running Red Hat Enterprise Linux 7.1. Windows Server is no longer supported. The [OnCommand Cloud Manager 2.1 Installation and Setup Guide](#) describes host requirements and instructions for migrating from Windows to Linux.

Cloud ONTAP 8.3.2 RC1 support

Cloud Manager can now launch Cloud ONTAP 8.3.2 RC1 instances. For the latest information about supported Cloud ONTAP versions, see the [NetApp Interoperability Matrix Tool](#).

CIFS support

You can now create CIFS volumes and shares for Cloud ONTAP and for Data ONTAP clusters.

For additional details, see the [OnCommand Cloud Manager 2.1 Storage Management Guide](#).

Data replication for long-term retention

You can now use the Data Replication wizard to replicate data from a volume to another system for long-term retention. Cloud Manager uses SnapVault technology to replicate specific Snapshot copies to a destination volume and typically retains them for longer than you would on the source volume.

If needed, you can choose both SnapVault and SnapMirror to provide long-term retention and disaster recovery.

For additional details, see the [OnCommand Cloud Manager 2.1 Storage Management Guide](#).

Ability to choose the default disk size for Cloud ONTAP instances

You can now choose the default size for the EBS disks in Cloud ONTAP aggregates when you launch a new instance. Releases prior to Cloud Manager 2.1 used 500 GB disks in aggregates by default.

Cloud Manager uses the default disk size for the initial aggregate and for any additional aggregates that it creates when you use the simple provisioning option (the new volume icon). You can create aggregates that use an EBS disk size different than the default by using the advanced allocation option.

For additional details, see the [OnCommand Cloud Manager 2.1 Storage Management Guide](#).

Automatic shut down and restarts of Cloud ONTAP instances

To help you manage AWS costs, Cloud Manager can now shut down and restart Cloud ONTAP instances based on a schedule that you define. You can schedule shutdowns every weekday and every weekend at a specific time, for a specific duration.

For example, you can schedule Cloud Manager to shut down an instance every weekday at 11:00 p.m. for six hours. Cloud Manager would then restart the instance every weekday at 5:00 a.m.

For additional details, see the [OnCommand Cloud Manager 2.1 Storage Management Guide](#).

CA-signed HTTPS certificates for secure access

By default, Cloud Manager uses a self-signed certificate for HTTPS access to the web console. Starting in the 2.1 release, you can now install an HTTPS certificate signed by a certificate authority (CA), which provides better security protection than a self-signed certificate.

For additional details, see the [OnCommand Cloud Manager 2.1 Administration Guide](#).

Cloud Manager API reorganization

The Cloud Manager APIs were reorganized for ease of use. If you are currently using the APIs, you should review the API documentation to see if you need to change your API requests. A link to the API documentation is available in the lower-right section of the Cloud Manager console.

Additional features and enhancements

- You can now launch Cloud ONTAP instances using the m4.xlarge and m4.2xlarge instance types, depending on the Cloud ONTAP configuration.
For additional details, see the [Cloud ONTAP 8.3.2 for Amazon Web Services Release Notes](#).
- You can now edit volumes.
- You can now restore data from a Snapshot copy to a new volume.
- You can now set the maximum rate at which data can be replicated between systems.
- You can now modify the Storage Virtual Machine (SVM) name of Cloud ONTAP systems.

Related information

[Find the Release Notes for your version of Cloud ONTAP](#)

Upgrade notes

Upgrade notes describe new requirements and changes in support between the last release of the product and this one, including any deprecated features. Review this information carefully before upgrading to the new release. See the NetApp Interoperability Matrix (IMT) for supported configurations and the product user documentation for complete system requirements.

NetApp Support instance no longer launched by Cloud Manager

Cloud Manager no longer launches the NetApp Support instance in a VPC. Note the following about the features that the instance provided:

- The NetApp Support instance was the default location for Cloud ONTAP configuration backups. Cloud ONTAP now sends configuration backups to the Cloud Manager host. Under the guidance of NetApp technical support, you can use the backups to restore the configuration of a Cloud ONTAP instance.
- The NetApp Support instance included recovery tools that NetApp technical support uses to troubleshoot and repair problems with Cloud ONTAP instances.
NetApp technical support might still use these recovery tools but they must be manually installed.

After you upgrade to Cloud Manager 2.1, you should configure existing Cloud ONTAP instances to send configuration backups to Cloud Manager. You can then terminate the NetApp Support instance because it is no longer needed. For help, see the upgrade instructions in the [OnCommand Cloud Manager 2.1 Installation and Setup Guide](#).

Network connection setup for NetApp Private Storage for AWS was removed

You can no longer use Cloud Manager to create a NetApp Private Storage for AWS working environment, which established a network connection between a Data ONTAP cluster in an AWS colocation facility and an AWS Direct Connect.

Note: Cloud Manager can still discover and manage Data ONTAP clusters that are already set up in a NetApp Private Storage for Cloud configuration.

IAM user policy changes introduced in Cloud Manager 1.1

The Cloud Manager Identity and Access Management (IAM) user policy was updated for the Cloud Manager 1.1 release to include new AWS actions and to change resource permissions. If you are currently using Cloud Manager 1.0 or 1.0.1, you should update your IAM user policy before you update to this Cloud Manager release.

NetApp OnCommand Cloud Manager: AWS IAM Policy

The updated policy includes the following new AWS actions:

“ec2:DescribeRegions”

Cloud Manager uses this EC2 action to display a list of available AWS regions.

“iam:GetUser”

Cloud Manager uses this IAM action to validate AWS credentials.

The Cloud Manager IAM user policy was also updated to include tags that minimize the resources to which IAM users have permissions.

Updating Cloud Manager to this version

Because Cloud Manager 2.1 is supported on Linux only, you cannot directly upgrade from a previous release. You must set up Cloud Manager 2.1 on a new host, import your existing configuration, and then remove your previous Cloud Manager configuration. You should also set Cloud Manager as the cluster configuration backup target for all Cloud ONTAP instances.

See the *OnCommand Cloud Manager 2.1 Installation and Setup Guide* for instructions.

Verifying support for your configuration in the IMT

You can use the NetApp Interoperability Matrix (IMT) to verify product support for your configuration before you install this release.

Steps

1. Access the IMT.
NetApp Interoperability Matrix Tool
2. If **OnCommand Cloud Manager** is not the selected Storage Solution, click **Change** and select it under the **Cloud Suite** category.



3. In the **Component Explorer** pane, select each component you want to verify and click **Add** when prompted.

When you add an item, incompatible items are grayed out.

Tip: Select the parent of a set of components to select all of its children.

4. When you are satisfied with your choices, click **Show Results**.

The IMT lists each supported configuration.

5. You can:

- Scroll across a configuration to view the supported components and any notes or alerts for the configuration.
- Click the configuration name to display complete information for supported components, including support history and NetApp policies and guidelines for the selected Storage Solution category.

6. If no results are returned for your configuration, use the feedback wizard to report the problem to NetApp:

- a. Click **Feedback** in the upper right corner of the IMT.
- b. Select **I cannot find my configuration**, then click **Next**.
- c. Choose **OnCommand Cloud Manager** in the **Solution** drop-down list, then type your comments and click **Submit**.

Known limitations

Known limitations identify platforms, devices, or functions that are not supported by this release of the product, or that do not interoperate correctly with it. Review these limitations carefully.

Longer AWS resource IDs have not been qualified with Cloud ONTAP instances

AWS has announced longer resource IDs for instances, reservations, volumes, and snapshots starting in 2016. NetApp has not qualified Cloud ONTAP instances with these longer resource IDs. If you are an AWS user who needs to launch new Cloud ONTAP instances, you should not opt-in to use the longer IDs until NetApp has completed testing.

[*Amazon Web Services \(AWS\): EC2 & EBS Resource IDs Coming in 2016*](#)

Changing the cluster name or node name of Cloud ONTAP systems is not supported

Cloud Manager cannot properly manage a Cloud ONTAP system if you change the cluster name or node name of the system.

Changing the SVM name of Cloud ONTAP systems using another management tool is not supported

You can change the Storage Virtual Machine (SVM) name of a Cloud ONTAP system from Cloud Manager. You should not change the SVM name using a different management tool (for example, the CLI). If you do, then Cloud Manager cannot properly manage the system until you change the SVM name from Cloud Manager.

Cloud Manager does not verify IP addresses of key managers

When you add a key manager to Cloud Manager, it does not verify the IP address that you entered because Cloud Manager does not communicate with key managers. If the IP address is incorrect, you are notified later when you try to create a Cloud ONTAP working environment. Be sure to verify key manager IP addresses after you enter them.

IAM Power User Access policy is not supported with Cloud Manager

AWS provides a Power User Access policy template in the IAM console. This policy is not supported with Cloud Manager because it does not allow IAM actions. The “iam:GetUser” action is now required for all users starting in Cloud Manager 1.1.

You should use the Cloud Manager IAM policy to provide the required permissions.

[*NetApp OnCommand Cloud Manager: AWS IAM Policy*](#)

Cloud Manager does not set up iSCSI volumes

When you create a volume in Cloud Manager, you can choose the NFS or CIFS protocol. You must use OnCommand System Manager to create a volume for iSCSI.

EC2 instance name changes do not change Cloud ONTAP working environment names or cluster names

If you change the name of a Cloud ONTAP instance from the AWS EC2 console, the Cloud ONTAP working environment name and the Cloud ONTAP cluster name do not change.

Known issues

There are no known issues in this release.

Where to get help and find more information

You can get help and find more information by going to the NetApp Support Site and the NetApp Community forums.

- [*NetApp Support*](#)
Access troubleshooting tools, product documentation, and technical support assistance.
- [*NetApp Cloud ONTAP Support*](#)
Access support resources to get help and troubleshoot issues with Cloud ONTAP.
- [*NetApp Community: Hybrid Cloud*](#)
Connect with peers, ask questions, exchange ideas, find resources, and share best practices.
- [*NetApp Cloud ONTAP Resources*](#)
Access additional documentation and videos for Cloud Manager and Cloud ONTAP.

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