



OnCommand® Cloud Manager 2.2

Release Notes

March 2016 | 215-10910_A0_ur001
doccomments@netapp.com

Contents

Product overview	4
New in this release	5
Fixed issues	6
Upgrade notes	6
Known limitations	8
Known issues	9
Where to get help and find more information	10
Copyright information	11
Trademark information	12
How to send comments about documentation and receive update notifications	13

Product overview

OnCommand Cloud Manager provides simplified management of cloud storage environments built on NetApp. You can use Cloud Manager to manage data across your hybrid cloud, which includes full control of Cloud ONTAP systems, or you can simply provision volumes and let Cloud Manager handle the rest.

When you set up Cloud Manager, you can choose between two management views: the Storage System View and the Volume View.

Storage System View

You can use Cloud Manager in this view to have full control of Cloud ONTAP systems:

- Configure and launch Cloud ONTAP instances in Amazon Web Services (AWS)
- Provision NFS and CIFS storage
- Replicate data across a hybrid cloud environment: between on-premises Data ONTAP clusters, Cloud ONTAP systems, and NetApp Private Storage for Cloud configurations
- Manage Cloud ONTAP systems as needed, which includes capacity allocation decisions, simplified upgrades, cost monitoring, and several other tasks

Volume View

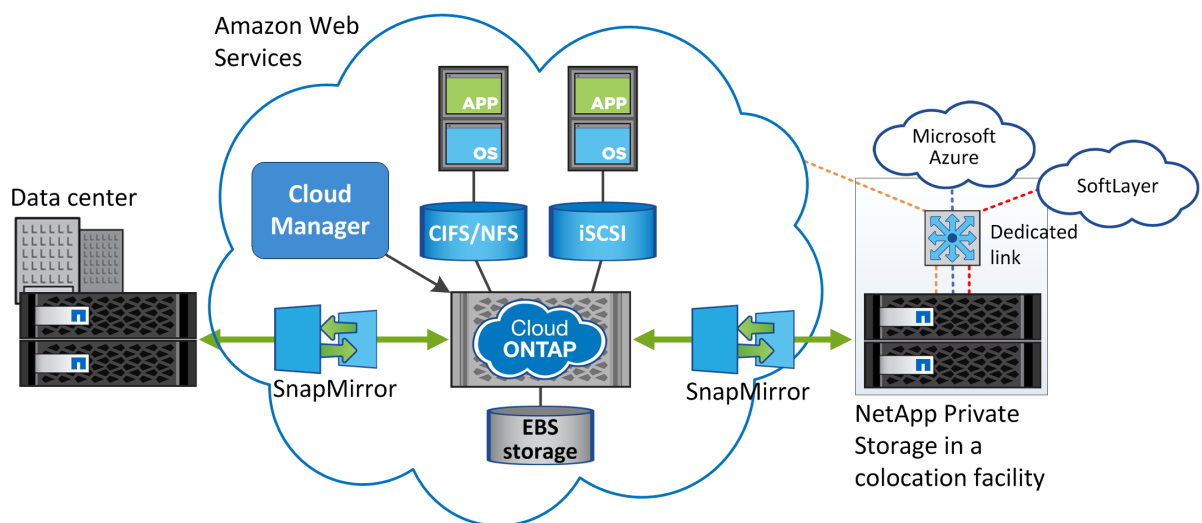
The Volume View enables you to simply specify the NFS volume that you need and then Cloud Manager handles the rest: it deploys Cloud ONTAP systems as needed and it automatically makes capacity allocation decisions as volumes grow. This view gives you the benefits of enterprise-class storage in the cloud with very little storage management.

Where to deploy Cloud Manager

Cloud Manager can run in AWS or in your network. Cloud Manager must run in the AWS GovCloud (US) region if you want to launch Cloud ONTAP instances in AWS GovCloud (US).

Note: The Volume View is not supported in the AWS GovCloud (US) region.

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 2.2 includes several new features and enhancements.

New Volume View

When you set up Cloud Manager, you can now choose between the Storage System View and the Volume View:

Storage System View

This view provides full control of Cloud ONTAP systems. This is the same view available in previous versions of Cloud Manager.

Volume View

This view enables you to simply specify the NFS volume that you need and then Cloud Manager handles the rest: it deploys Cloud ONTAP systems as needed and it automatically makes capacity allocation decisions as volumes grow. This view gives you the benefits of enterprise-class storage in the cloud with very little storage management.

Although you can switch between the views after you set up Cloud Manager, those instances should be rare because a single view should meet your needs.

Support for the AWS GovCloud (US) region

Starting with Cloud Manager 2.2 and Cloud ONTAP 8.3.2, you can launch Cloud Manager and Cloud ONTAP BYOL instances in the AWS GovCloud (US) region. The [OnCommand Cloud Manager 2.2 Installation and Setup Guide for Storage System Management](#) describes how to launch Cloud Manager in the AWS GovCloud (US) region.

See [Known limitations](#) on page 8 to review limitations with the AWS GovCloud (US) region.

Support for the Asia Pacific (Seoul) region

You can now launch Cloud Manager and Cloud ONTAP instances in the Asia Pacific (Seoul) region.

Automation of storage capacity decisions

Cloud Manager can now make storage capacity decisions for you. When you set the capacity management mode to automatic, Cloud Manager automatically purchases new AWS disks for Cloud ONTAP instances when more capacity is needed, deletes unused collections of disks (aggregates), and moves volumes between aggregates, as needed. When set to manual, Cloud Manager displays Action Required messages that prompt users to approve these actions.

The automatic mode is always enabled in the Volume View. You can choose which mode to use in the Storage System View.

Note: The capacity management mode is set to manual when you update Cloud Manager to 2.2.

For information about changing the capacity management mode, see the [OnCommand Cloud Manager 2.2 Administration Guide](#).

Cloud ONTAP write speed

You can now choose a write speed for Cloud ONTAP instances. The write speed can be either normal or high. All Cloud ONTAP instances that you launched in previous releases of Cloud Manager use the normal setting. See the [OnCommand Cloud Manager 2.2 Storage System Management Guide](#) to understand the differences between the normal and high settings and the risks and recommendations when using high write speed.

Additional features and enhancements

- The operating system for the Cloud Manager AMI is now Red Hat Enterprise Linux 7.2 (HVM).
- You can now initiate immediate updates of the destination volume in a data replication relationship.
- A new Support Dashboard consolidates support-related information in a single page.
- Cloud Manager supports changes to the names of Cloud ONTAP clusters, Storage Virtual Machines (SVMs), nodes, and aggregates when made from the Cloud ONTAP CLI or OnCommand System Manager.
- Cloud Manager displays additional Action Required messages when the capacity management mode is set to manual.
To avoid capacity issues, Cloud Manager prompts you to move volumes between aggregates and to change the license for a Cloud ONTAP instance, which increases the EBS raw capacity limit.

Related information

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

Fixed issues

It is a good practice to review the known issues fixed in a new release before upgrading to it.

Bug ID	Description
975507	A Cloud ONTAP system can panic if Cloud Manager does not move Cloud ONTAP disks to the spare state before it detaches an EBS volume.

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.

IAM user policy changes required

The Cloud Manager Identity and Access Management (IAM) user policy was updated for the 2.2 release.

The “ec2:ModifyVolumeAttribute” action is now required. Cloud Manager uses this action to set “AutoEnableIO” to **on** for each EBS volume, which keeps a volume online even if Amazon EBS determines that the volume is potentially inconsistent. Cloud ONTAP can correct the inconsistency by replaying data from nonvolatile RAM (NVRAM).

In addition, the following actions were removed because they are no longer required:

- “cloudformation:DescribeStackResources”
- “cloudformation:GetTemplate”
- “ec2:DescribeInstanceAttribute”
- “iam:GetUser”

You should update your IAM user policy before you update to this Cloud Manager release.

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

Changes to web browser requirements

- The minimum required version of Google Chrome is now 45.
- The minimum required version of Mozilla Firefox is now 40.

For the full list of supported web browser versions, see the [NetApp Interoperability Matrix Tool](#).

Updating Cloud Manager to this release

You can update Cloud Manager from 2.1 to 2.2 directly from Cloud Manager by clicking the **New version available** notification or by going to the Software Update page.

For Cloud Manager 2.0 or earlier, you cannot directly upgrade because Cloud Manager is now supported on Linux only.

See the [OnCommand Cloud Manager 2.2 Installation and Setup Guide for Storage System Management](#) for detailed instructions about how to update Cloud Manager to this release.

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.

Limitations with the AWS GovCloud (US) region

- Cloud Manager must be deployed in the AWS GovCloud (US) region if you want to launch Cloud ONTAP instances in the AWS GovCloud (US) region.
- The Cloud ONTAP pay-as-you-go AMI is not supported in the AWS GovCloud (US) region.
- M4 instances are not supported in the AWS GovCloud (US) region at this time.
See the AWS documentation for the latest information about supported EC2 instance types.
- When deployed in the AWS GovCloud (US) region, Cloud Manager cannot discover Data ONTAP clusters in a NetApp Private Storage for Microsoft Azure configuration or a NetApp Private Storage for SoftLayer configuration.

Volume View limitations

- Cloud Manager does not launch Cloud ONTAP BYOL instances in the Volume View.
- The Volume View is not supported in the AWS GovCloud (US) region.
- Cloud ONTAP encryption is not available in the Volume View.

Note: All instances use Amazon EBS encryption.

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.

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.

Copyright information

Copyright © 1994–2016 NetApp, Inc. All rights reserved. Printed in the U.S.

No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark information

NetApp, the NetApp logo, Go Further, Faster, AltaVault, ASUP, AutoSupport, Campaign Express, Cloud ONTAP, Clustered Data ONTAP, Customer Fitness, Data ONTAP, DataMotion, Fitness, Flash Accel, Flash Cache, Flash Pool, FlashRay, FlexArray, FlexCache, FlexClone, FlexPod, FlexScale, FlexShare, FlexVol, FPolicy, GetSuccessful, LockVault, Manage ONTAP, Mars, MetroCluster, MultiStore, NetApp Insight, OnCommand, ONTAP, ONTAPI, RAID DP, RAID-TEC, SANtricity, SecureShare, Simplicity, Simulate ONTAP, Snap Creator, SnapCenter, SnapCopy, SnapDrive, SnapIntegrator, SnapLock, SnapManager, SnapMirror, SnapMover, SnapProtect, SnapRestore, Snapshot, SnapValidator, SnapVault, StorageGRID, Tech OnTap, Unbound Cloud, and WAFL and other names are trademarks or registered trademarks of NetApp, Inc., in the United States, and/or other countries. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such. A current list of NetApp trademarks is available on the web at <http://www.netapp.com/us/legal/netapptmlist.aspx>.

How to send comments about documentation and receive update notifications

You can help us to improve the quality of our documentation by sending us your feedback. You can receive automatic notification when production-level (GA/FCS) documentation is initially released or important changes are made to existing production-level documents.

If you have suggestions for improving this document, send us your comments by email to doccomments@netapp.com. To help us direct your comments to the correct division, include in the subject line the product name, version, and operating system.

If you want to be notified automatically when production-level documentation is released or important changes are made to existing production-level documents, follow Twitter account @NetAppDoc.

You can also contact us in the following ways:

- NetApp, Inc., 495 East Java Drive, Sunnyvale, CA 94089 U.S.
- Telephone: +1 (408) 822-6000
- Fax: +1 (408) 822-4501
- Support telephone: +1 (888) 463-8277