



Solution Brief

OnCommand Cloud Manager

Simplifying your hybrid cloud data management

Key Benefits

- Streamlines the deployment, management, and tracking of your enterprise-class NetApp® ONTAP® 9 storage resources in or near the public cloud
- Offers centralized management for multiple cloud providers and storage tiers based on ONTAP
- Enables IT administrators to manage their hybrid cloud data fabric

The Challenge

The prominence of the public cloud in today's IT ecosystem has brought new challenges to administrators and architects. For many, the decision to use the cloud has already been made, often by directive. But now come the bigger questions about what, when, and how to use it. Which applications should we run in the cloud? When should we move them there? How do we get our data there?

These are rarely all-or-nothing decisions. Applications and data will reside in your data center and cloud environments in a true hybrid fashion. In this hybrid cloud environment, data is at the center. It is the only thing of lasting value. It is the thing that needs to be shared and integrated across the hybrid cloud to deliver business value. It is the thing that needs to be secured, protected, and managed.

In particular, customers need to control what happens to their data—no matter where it is. Although they can outsource infrastructure and applications to the cloud, they can never outsource the responsibility they have for their business data. Customers have spent years controlling and aligning the appropriate levels of data performance, protection, and security in the data center to support their applications. Now, as they seek to pull in a mix of public cloud resources for infrastructure and apps, they need to maintain control of their data in this new hybrid cloud.

Today's hybrid cloud world consists of a whole range of isolated, incompatible data silos. Every cloud provider has created service value, but each has the same discussion with the enterprise: Rewrite your applications so that they work on my cloud. Put your applications and your data in my cloud.

What you need is an easy way to connect your disparate environments and the data within those clouds into one well-woven, seamless, integrated entity. This capability allows you to replace today's world of non-interoperable clouds with a single, cohesive data environment called a data fabric, enabling you to control your data no matter where it is.

OnCommand Cloud Manager

NetApp OnCommand® Cloud Manager provides management for your ONTAP hybrid cloud storage environment, including the ONTAP Cloud storage service and All Flash FAS (AFF) and FAS storage systems. OnCommand Cloud Manager brings together your data fabric with a single management interface independent of your data location. It eases the day-to-day requirements of your ONTAP Cloud, including configuring, provisioning, and monitoring each of your active virtual and hardware storage nodes.

OnCommand Cloud Manager also is the deployment environment for ONTAP Cloud, offering a point-and-click installation and automatically selecting and assigning resources to each instance. When you deploy ONTAP Cloud, Cloud Manager uses your Amazon Web Services (AWS) credentials to select the EC2 virtual machine and the EBS storage necessary to run the instance of your choice. With visibility into the actual

resources consumed by each instance, Cloud Manager monitors and tracks cloud resource utilization, which you can later use in assessing your environment.

Cloud Manager offers a volume view mode that provides a simple interface for NetApp managed AWS storage. Volume view abstracts the storage infrastructure and lets you choose which volumes you require for your application. Cloud Manager then creates the appropriate infrastructure behind the volume to operate as you've defined. You don't need to know the ins and outs of storage—you just need to know what volumes your application requires.

If you are a registered NetApp customer, you can go to the NetApp Support site and download OnCommand Cloud Manager to deploy in your data center. The software provides you with the flexibility you need to manage each of your cloud environments from a central location.

Cloud Manager key features

- Simplifies configuration and deployment of ONTAP Cloud
- Provides a central point of control for all data fabric-connected instances
- Automates data movement between your premises and the cloud
- Offers data security choice through NetApp managed encryption
- Provides ONTAP Cloud resource cost monitoring and, when combined with OnCommand Insight, can monitor your entire hybrid storage environment
- Eases license, entitlement, and upgrade management
- Enables nondisruptive migration between ONTAP Cloud licenses
- Facilitates hybrid environments that include NetApp AFF, FAS, and ONTAP Cloud

Managing your hybrid cloud storage environment

Hyperscale cloud providers offer many functions, including infrastructure as a service, that provide customers with raw server and storage resources to use as they see fit. For the storage, management should be performed in a way that resolves your key concerns and that best resembles how you manage your data on the premises. Cloud Manager provides the interface that ties your hybrid cloud storage together.

Addressing Resource Cost

To help you determine the infrastructure that best fits your application and economic needs, NetApp offers a wide variety of options from which to choose. These options range from on-premises storage systems to cloud storage, with both

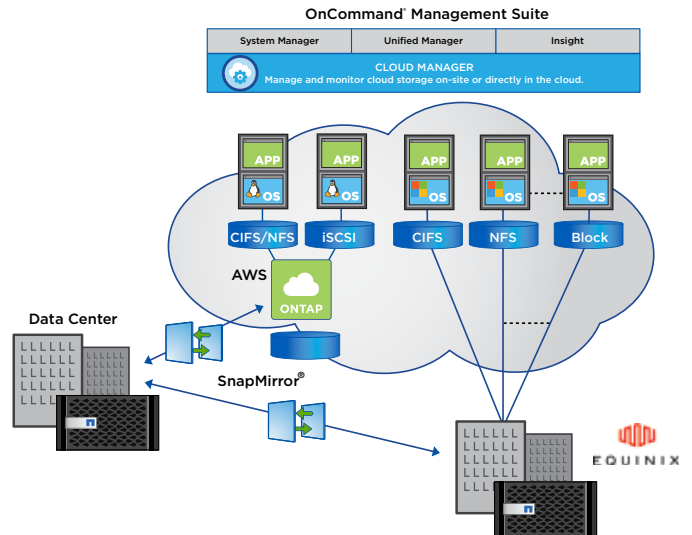


Figure 1) Data management in the hybrid cloud.

near-the-cloud FAS systems or in-the-cloud storage with ONTAP Cloud. NetApp simplifies the deployment of your environment with Cloud Manager, whether it is an ONTAP Cloud environment for which you pay by the hour, a longer-term subscription deployment, or your purchased NetApp Private Storage (NPS) solution. Table 1 provides application pattern guidelines to help you choose which one of these models to use.

ONTAP Cloud takes performance to the next level by tracking your cloud storage resource usage to help you better determine where your application and data should reside. Cloud Manager, combined with OnCommand Insight, provides a complete monitoring environment across your hybrid cloud data fabric for both your on-premises and cloud storage. These tools track the usage and cost structure of each location to fully gauge the cost-effectiveness of your environment. Does your usage pattern on the premises point out an application that could be more cost-effectively moved to the cloud? Are you running applications on cloud resources that are more stable and should be moved to NPS or on the premises? NetApp OnCommand management tools help answer these questions for you.

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

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