The Challenge
Managing complex storage
Data is recognized by CIOs as their most valuable asset, because data is used to drive productivity, innovation, and business success. Many IT organizations are also seeking ways to monetize assets by offering infrastructure as a service. However, specialized storage personnel are becoming increasingly difficult to find. Instead, organizations have IT generalists managing their entire infrastructure.

The traditional approach to managing application servers, networking, and storage infrastructure—typically with different vendor-provided tools—creates difficulty in managing complex infrastructures. With the ability to integrate existing management solutions within a unified view of all storage assets, IT can streamline storage management activities while extending the value of their existing infrastructure investments.

The Solution
OnCommand API Services simplify management
NetApp’s vision for the future of data management is to create a Data Fabric that spans your entire IT landscape. The Data Fabric enabled by NetApp takes the worry and complexity out of managing and maintaining control of data across private and public cloud resources. With this Data Fabric approach to data management, you achieve:

- Freedom of choice in managing your data
- The ability to move your data seamlessly from flash to disk to cloud while maintaining control of the data
- Faster responsiveness to internal and external customers with automation and integration

NetApp® OnCommand® API Services help IT organizations address today’s complex IT management challenges. Using representational state transfer (REST) APIs, you can integrate disparate software tools to simplify how you manage your on-premises and cloud storage. IT organizations gain a view of the entire infrastructure with a single tool and can continue using their vendor-provided tools as needed to troubleshoot issues with specific infrastructure components. Use OnCommand API Services to:

- Integrate storage monitoring and reporting into one management interface.
- View inventory objects, configuration, and events collectively.
- Pull essential operational and performance metrics to take action.
- Provision storage based on performance and service level requirements.

Key Benefits
Simplify Storage Management in Complex Environments
- Integrate storage monitoring, reporting, and data protection
- View inventory, configuration, and events collectively
- Obtain operational and performance metrics to take action
- Leverage advanced service-level objective (SLO) management capabilities
Included with NetApp ONTAP® software, it collects data from OnCommand Unified Manager and OnCommand Performance Manager to provide active monitoring and reporting of your ONTAP environment:

- Get simplified integration through one programmable interface.
- Choose how you manage complex data environments.
- Address custom storage-management needs of complex storage environments.
- View all your key metrics and statuses on your preferred dashboard.
- Automate storage provisioning based on needs.

**Flexibility and choice**

OnCommand API Services let you pull performance metrics from OnCommand Performance Manager and retrieve operational metrics such as capacity and utilization from OnCommand Unified Manager. Using these three products together, you can gather information about configuration, inventory, and provisioning for a holistic view of your NetApp storage. REST APIs allow you to integrate this information within the management console of choice. REST is a simple communication architecture that is commonly used in web-based and network-based services. NetApp uses REST APIs to provide flexibility and choice for integrating with third-party or custom management applications. If you prefer to continue to use your own management application for managing your data center, OnCommand API Services let you integrate and pull NetApp storage information quickly and safely.

**Integrate data protection services**

NetApp AltaVault™ securely backs up data to any cloud at up to 90% less cost compared to on-premises solutions. With AltaVault, you have the power to tap into cloud economics while preserving investments in existing backup infrastructure and meeting backup and recovery SLAs.

OnCommand API Services are now integrated with AltaVault, providing you with the ability to integrate data protection services for backup to cloud into a single management console.

In addition, you can choose a premium OnCommand API Services package for advanced capabilities, including:

- NetApp SnapCenter®, a unified, scalable platform for application-consistent data protection and clone management, available as a free download for NetApp customers. It simplifies backup, restore, and clone lifecycle management with application-integrated workflows.
- Integrated SLO management and custom service-catalog capabilities. Enables cloud orchestrators to leverage SLO-based API’s.

**Who can benefit**

Large enterprises and IT service providers face the biggest challenges around growth and data management complexity. That is why these types of businesses are seeking automation and orchestration solutions to improve IT agility, reliability, and service delivery. In addition, if your organization is using OpenStack, you can use these REST interfaces for monitoring and managing your NetApp storage.

**Learn More**

NetApp OnCommand API Services are part of the OnCommand management software portfolio. To learn more about the management portfolio, including API Services, go to [www.netapp.com/oncommand](http://www.netapp.com/oncommand). Explore the OnCommand product community, including OnCommand discussions, articles, and resources, at [http://www.netapp.com/oncommand_community](http://www.netapp.com/oncommand_community).

**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.

[www.netapp.com](http://www.netapp.com)