NetApp®

Executive Summary

Clustered Data ONTAP Delivers Foundation for Software-defined Storage

KEY BENEFITS

Clustered Data ONTAP® helps deliver on the promise of software-defined storage today, increasing IT agility and speeding delivery of services to application owners and development teams.

The proven NetApp® storage operating system drives greater efficiency and advances transformation of the data center:

- Only storage software to abstract data access and services from pooled hardware resources for SAN and NAS
- Supports broadest range of hardware (NetApp unified and optimized, third-party, commodity, cloud)
- Accelerates workflow automation with the most comprehensive suite of application integrations and open programmable APIs

From Data Center to IT Service Delivery Center

Organizations need their IT teams to move ever more quickly to keep pace with the changing needs of business. Traditional data centers, with infrastructure silos built around applications, limit responsiveness. Companies struggle with routine IT downtime, spiraling costs, performance challenges, and growing complexity as their operations scale.

Solving this problem requires an IT infrastructure built for agility, one capable of instantly delivering new services, projects, and capacity while keeping costs down. That's the promise of the software-defined data center (SDDC). This emerging architecture and set of technologies are designed to increase IT agility and speed delivery of services to application owners and development teams.

The SDDC model represents the next logical extension of virtualization and cloud approaches. It features three core tenets:

- Resources are defined in software.
- Provisioning is based on policy/service levels.

- Technology runs on a broad range of hardware platforms.

Software-defined storage (SDS) is one of the four SDDC components, as well as software-defined compute, network, and security.

NetApp innovation in our clustered Data ONTAP storage operating system helps customers benefit from SDS today as they make progress in transforming their data centers into IT service delivery centers.

SDS Benefits

NetApp views SDS as a positive development for customers who've embraced virtualization and cloud solutions. The SDS approach provides benefits across the organization, including:

- Autonomy for application owners
  - Instantly deploy new applications and services
  - Dynamically respond to shifts in demand
- Responsiveness for IT teams
  - Provision based on priority and service level
  - Automate using policy-based security and delegation

- Flexibility for purchase decision makers
  - Deploy on platform of choice
  - Extend capabilities of existing assets

SDS with Clustered Data ONTAP

NetApp gives customers a number of advantages over other storage providers when it comes to SDS.

Provision based on service levels

NetApp is the only storage provider that supports this capability today across both SAN and NAS using virtualized storage services. At the heart of this is our Storage Virtual Machine technology, which enables data access and services to be separated from the underlying hardware. This abstraction allows for storage resources to be assigned and reassigned based on the needs of the application over the course of its lifecycle.

Deploy on platform of choice

Hardware diversity is in our nature, and clustered Data ONTAP can operate on a broad range of multivendor hardware. This contributes to Data ONTAP being recognized as the world's #1 branded storage OS*. Deploying clustered Data ONTAP on the NetApp unified and optimized FAS platform, whether solely as storage or as part of a FlexPod® integrated stack, delivers continuous data access, proven efficiency, and seamless scalability.

Data ONTAP also runs on third-party storage arrays through our V-Series product. Data ONTAP Edge provides SDS functionality for commodity disks in servers deployed at branch locations. Customers can consume Data ONTAP in the cloud through NetApp Private Storage for Amazon Web Services.
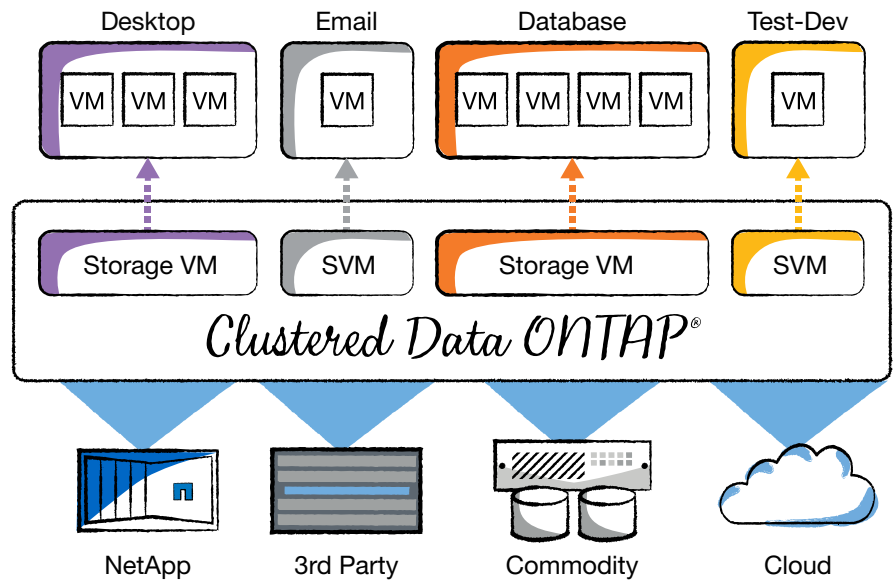

Figure 1) NetApp Storage Virtual Machines do for storage what server virtualization did for servers: break down the physical barriers that bind data to specific hardware.

Deliver services without compromise

To satisfy their users, application owners and development teams need to be more responsive to change. They need a solution that drives storage services closer to the application and provides greater workflow automation. Clustered Data ONTAP excels in these two areas with programmable APIs and deep technical integrations with leading offerings from Cisco, Microsoft, VMware, SAP, Oracle, OpenStack, Citrix, Red Hat, and more.

Realize the Promise

Take the next step in your data center transformation by choosing clustered Data ONTAP as your SDS foundation.

Help your organization to achieve greater IT agility, increased operational and resource efficiency, and faster delivery of services to your application owners.

* Source: IDC Worldwide Quarterly Disk Storage Systems Tracker Q4 2012, March 2013.

About NetApp

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate business breakthroughs. Discover our passion for helping companies around the world go further, faster at *www.netapp.com*.

Go further, faster®

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