

MARKET NOTE

NetApp's Compelling Vision from the Company's 2018 Insight Conference in Las Vegas

Chris Kanthan

Andrew Smith

Ashish Nadkarni

EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: NetApp Insight Conference 2018

This IDC Market Note reviews the highlights from the annual NetApp Insight conference held in Las Vegas from October 22 to 24, 2018. This year's event had over 5,000 attendees, including NetApp customers and partners. NetApp made numerous product announcements and laid out a data-driven vision for its enterprise customers. Rather than being merely a storage array vendor, NetApp aims to be a data management company that integrates data end to end, from the edge to the core to the cloud. Flash arrays, NVMe, persistent memory, hybrid cloud and multicloud, Kubernetes, and hyperconverged systems are some of the key components in NetApp's technology arsenal.

Key Takeaways

- Data is the new currency and every enterprise must adopt and leverage data-driven strategies to create new business models, revenue, and customer experience.
- Hybrid cloud and multicloud will be the de facto architecture in the software-defined datacenter. Enterprises will need modern tools to manage their 3rd Platform and unify their data at the edge, the core, and the cloud.
- Speed is the new scale. Enterprises must quickly adopt disruptive technologies to maintain a competitive advantage.
- NetApp has a compelling vision and a robust portfolio of products — flash arrays, NVMe technology, server-side persistent memory, hyperconverged systems, single software to manage private and public clouds, and much more — to translate the vision into action.

Source: IDC, 2018

IN THIS MARKET NOTE

At NetApp Insight 2018, NetApp announced many new products and services. However, more importantly, NetApp laid out a convincing vision that can guide enterprise customers through the journey of digital transformation. NetApp's offerings are not point solutions that address discrete problems; instead, the company's entire portfolio of software, hardware, and services effectively stitch together various components of the data fabric that integrate customers' data at the edge, the core, and the cloud.

IDC'S POINT OF VIEW

Introduction

NetApp invited its customers and partners to the annual Insight conference, and the response was enthusiastic. Over 5,000 NetApp customers and partners attended the three-day event in Las Vegas. This document examines some of the keynote speeches and product announcements and NetApp's vision to help enterprise customers navigate the 3rd Platform.

George Kurian Keynote Speech

George Kurian, CEO of NetApp, kicked off NetApp Insight with a keynote speech that revealed how businesses can thrive and succeed in the digital, data-centric world. The overarching theme was that enterprises must adopt a data-driven strategy and leverage the hybrid, multicloud architecture.

According to an IDC-NetApp survey, enterprises that have adopted digital transformation have seen their profitability go up three times and operational efficiency six times. Kurian listed four cornerstones of this digital transformation that enterprises must focus on:

- IT transformation
- Realization that "speed is the new scale"
- Hybrid, multicloud as the preferred architecture
- Modern, agile data strategy

To transform digitally, enterprises should first modernize their IT with data-centric hardware and software solutions that include flash arrays, private and public clouds, new DevOps solutions such as containers and Kubernetes, and smart data management tools. Next, Kurian emphasized that speed is the new scale. "With traditional businesses, scale was the competitive advantage," he said. "But in the digital world, speed replaces scale." Furthermore, hybrid, multicloud is the dominant and de facto IT architecture now. Enterprises must adopt the best practices of such an architecture and leverage cloud-centric innovations such as microservices, containers, Kubernetes, and Istio. Finally, Kurian advised enterprises to build a data strategy that shifts away from silos in datacenters to data fabrics that provide a catalog of consistent data services across private and public clouds.

There were many other interesting speakers at Insight 2018. Futurist Gerd Leonhard succinctly described the emerging technologies when he said, "Data is the new oil, AI is the new electricity, and IoT is the new nervous system." Kate Swanborg, VP at DreamWorks, talked about how her company embraced the cloud-centric model and uses NetApp HCI as the private cloud for movie production.

MAX Data

MAX Data is a server-side software that uses persistent memory to accelerate workloads and achieve extremely high performance. MAX Data tiers data from the persistent memory to NetApp's all-flash storage arrays. NetApp's nonvolatile memory of choice in the future will be Intel's DC Optane persistent memory, which comes in the form of DIMM modules and offers the best of both worlds – they are much faster than flash SSD drives and are much cheaper than DRAM memory modules. Until then, MAX Data supports NVDIMM-N and DRAM.

MAX Data will leverage Intel's Optane DIMMs that can scale up to more than 3 TB of persistent memory per server-CPU socket. MAX Data is the outcome of NetApp's acquisition of Plexistor and doesn't require any rewriting of the applications.

Cloud Volumes

Cloud Volumes has a lot of new features, services, and partnerships in 2018. NetApp Cloud Volumes extends NetApp's file storage to the hybrid, multicloud environment. Cloud Volumes provides a single pane of glass and is integrated with the biggest hyperscalers – AWS, Azure, and GCP – and can be deployed in seconds. SnapMirror, SnapVault, and Cloud Sync can also be used to replicate and sync data between public clouds. Azure NetApp Files is an enterprise-grade file service that is directly available on the Microsoft Azure cloud platform.

NetApp HCI

NetApp wants people to think of HCI not as hyperconverged infrastructure but as hybrid cloud infrastructure. NetApp wants its customers to use the HCI as a private cloud and integrate it with the public clouds using Cloud Volumes and other Data Fabric tools. NetApp announced a new validated plug-in architecture that greatly simplifies deployment and orchestration of containers using RedHat's OpenShift and NetApp's HCI. This will help DevOps teams accelerate the CI/CD pipeline and quickly build, deploy, and scale applications with Linux containers, Kubernetes, and NetApp Trident. New options in the NetApp HCI portfolio include the H410C and H610C compute nodes, both of which take advantage of Intel's newer Skylake processors. H610S is a new storage expansion node with 12 NVMe SSDs and can be nondisruptively added to NetApp HCI or NetApp SolidFire cluster.

ONTAP 9.5

Some of the new features included in ONTAP 9.5 are:

- **Synchronous replication:** Synchronous SnapMirror enables disaster recovery protection with zero data loss between systems situated at different sites, using either an IP or a Fibre Channel connection.
- **FlexCache:** It delivers scale-out performance for read-intensive workloads and greatly enhances remote/WAN data access. It achieves low read latency by caching only the "hot" frequently accessed data, rather than entire volumes or files.
- **Metrocluster over IP (MCC IP):** New enhancements include support for additional AFF and FAS systems as well as extended distances up to 700 km.
- **Multipath storage failover:** It is for NVMe-over-FC with Asynchronous Namespace Access (ANA).
- **FlexGroup:** FlexGroup enhancements include data tiering to the cloud with FabricPool, quota management, and data protection scalability.

- **FabricPool:** It automatically tiers cold data from expensive SSD's to low-cost object storage, now supports end-to-end encryption key management using NetApp Volume Encryption (NVE).
- **NetApp Data Availability Services:** This cloud-resident application orchestrates NetApp ONTAP data movement from primary to secondary to Amazon AWS' S3.

StorageGRID

NetApp also introduced a new StorageGRID appliance to its object storage portfolio. StorageGRID appliances are purpose-built hardware for enterprise object workloads. The new StorageGRID SG6060 model adds flash storage, along with increases in CPU and memory to accelerate object storage workloads such as IoT, AI, machine learning, and advanced analytics. SG6060 is ideal for handling high-performance, high-concurrency, small-object workloads and is perfectly suited to be positioned with FabricPool for S3-based on-premise object storage. The SG6060 dedicates two 800GB SSD's for metadata caching and 58 near-line SAS drives with choice of 4TB, 8TB, 10TB FDE, or 12TB drives for efficient object storage.

NetApp Kubernetes Service

NKS is a management solution for infrastructure and container workloads. NKS dramatically simplifies deployment of Kubernetes clusters to clouds – AWS, Azure, GCP, NetApp's HCI, and others. Based on the platform from NetApp's recent acquisition of StackPointCloud, NKS provides a single control plane to create and manage Kubernetes clusters on the clouds. Customers can also deploy a cluster along with a combination of pre-installed Kubernetes-native solutions, including Istio, Gitlab, and NetApp's own Trident. On some of the cloud providers, there is also an option to Nvidia's Tesla GPUs to support AI/ML workloads.

NetApp's Continued Push into Cloud Data Management and Protection

We anticipate cloud-based storage management and protection solutions to drive the growth of the storage and device management market in 2018, which will be the first year of growth in this market in three years. To capitalize on this trend, NetApp outlined a go-to-market strategy that includes elements of Active IQ, Cloud Insights, OnCommand Insight, and emerging solutions like SaaS Backup. NetApp plans to leverage its install base of storage systems and proven record of protecting and managing petabytes of user data in order to deliver more advanced cloud storage services.

Performance Guarantee

As a part of the Data Visionary Loyalty Program, NetApp is offering a rather unique and almost unprecedented latency guarantee with select all-flash A-Series systems. NetApp will guarantee consistent latency of 500µs 99% of the time for customers' most demanding workloads.

Opportunities and Recommendations

Overall, NetApp Insight was quite a successful event that got many raving reviews from customers, partners, bloggers, and the media. NetApp's goal is to establish itself as a data authority and a data management company. Based on its new products and messaging – data-driven enterprises, hybrid cloud, flash arrays, and data fabric – IDC believes that the coming fiscal year will be quite profitable if NetApp executes its vision flawlessly.

LEARN MORE

Synopsis

This IDC Market Note provides IDC's viewpoint on the NetApp Insight conference, which was held in Las Vegas from October 22 to 24, 2018. NetApp's product announcements and overall strategy are analyzed in this document.

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Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-community.com
www.idc.com

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