# REPORT REPRINT

# Nexenta courts DevOps with free storage platform for containers

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The new NexentaEdge DevOps Edition gives customers a free, scale-out storage platform for next-generation containerized applications. Will the software-defined storage specialist's new platform edition have an impact on the developing container storage space?

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Over the last few years, Nexenta has aggressively expanded its software-defined storage portfolio, beyond the more traditional ZFS-based NexentaStor platform it has been selling for many years now. Introduced in May 2015, NextentaEdge provided the vendor with a scale-out block and object-storage platform. The new NexentaEdge DevOps Edition is a free product, which is designed to provide persistent storage for containers and cloud environments. The vendor has also recently added a new management platform known as NexentaFusion.

## THE 451 TAKE

Nexenta's aggressive platform expansion strategy can help the vendor expand its reach not only in the traditional storage market, but also in next-generation cloud and container deployments. While integrated storage appliances that rigidly package software and hardware will not disappear anytime soon, there is a growing opportunity for software-defined storage (SDS) players to expand in emerging spaces, such as analytics and container storage, where the use of commodity hardware is more common for early adopters. The NexentaEdge DevOps Edition should be attractive for early adopters that know they need enterprise storage capabilities, but do not have the desire or budget to add conventional storage systems and administrators. NexentaFusion should improve system management both for traditional infrastructure professionals and DevOps.

## CONTEXT

Santa Clara, California-based Nexenta was founded in 2005 and currently has a headcount of around 200. The company is led by Chairman and CEO Tarkan Maner, who previously held executive roles at Dell, Wyse Technology, CA and IBM.

The company has over 6,000 customers and over 1,700 PB of storage under management. It claims it is focusing on growing its capacity footprint with larger deals and less of a focus on adding customers. The ZFS-based NexentaStor platform continues to be the leading product for the vendor, although its NexentaEdge scale-out storage is clearly the product of the future and should surpass NexentaStor in sales and capacity under management in the future.

Nexenta has taken in over $110m in VC funding. Its last round was in April 2015 for $29m from Sierra Ventures.

## STRATEGY

Nexenta has no shortage of partnerships with vendors, such as WD, Micron, Supermicro, Dell-EMC, Lenovo, Wipro and VMware. These partnerships are crucial because they provide Nexenta with multiple paths to market, which is important due to the rising competition in the SDS space.

Although Nexenta does not sell hardware directly to customers, it continues to work with systems partners to create integrated offerings that simplify and accelerate storage deployments. An example of this was launched in April when Nexenta teamed up with Micron and Supermicro to create a scale-out all-flash offering known as the Micron Accelerated NexentaEdge Solution, which is part the newly introduced Micron Accelerated Solutions program.

The Micron Accelerated NexentaEdge Solution is based on the vendor's NexentaEdge platform and starts with configurations of 5 nodes, with each individual node capable of delivering 75,000 random-read 8KB IOPS and 20,000 mixed read/write 8KB IOPS. A 10 Gig Ethernet switch is used to cluster the nodes together and is upgradable to 40GB Ethernet. Each cluster node has 10 Micron M510DC enterprise SATA SSDs and will support future expansion with Non-Volatile-Memory-Express acceleration. The system is designed to handle cloud workloads with support for OpenStack, VMware and containers.

## PRODUCTS

With the introduction of the NexentaEdge DevOps Edition, the vendor has made a free, container-optimized version of NexentaEdge available for customers on the Docker Hub for configurations up to 4 nodes in size and up to 10TB of allocated capacity.

The NexentaEdge DevOps Edition is fully integrated with Docker Swarm, Docker Unified Control Plane and Kubernetes container management frameworks. To simplify things for container customers, all of the Nexenta storage services are managed using standard Docker tools. A Docker Volume plug-in is also available to automatically provision storage for new applications. The platform can deliver storage over block, file and object protocols. The Nexenta storage stack is deployed as containers running on physical or virtual hosts.

In October, the company unveiled the new NexentaFusion management platform and launched it with an enterprise and community edition. In addition to providing a single pane of glass for managing storage assets, NexentaFusion includes predictive analytics tools to optimize storage availability, performance and utilization. To simplify day-to-day storage management and provisioning, the NexentaFusion interface has simplified workflows for key tasks, such as file-system creation, snapshot scheduling and other data protection management tasks. The NexentaStor perpetual license, which has pricing starting at $0.25 per GB, includes NexentaFusion.

## COMPETITION

The SDS market continues to be highly competitive, with vendors such as IBM, NetApp, EMC-Dell, HPE, and Red Hat (with Ceph and Gluster), building out their software portfolios and marketing their offerings more aggressively. A large group of startups, including Datera, Hedvig, FalconStor, DataCore Software, Zadara Storage and Formation Data Systems, are also looking to disrupt the array market. In our Voice of The Enterprise 2016 Storage and Vendor Evaluations survey, 36% of the respondents have already implemented SDS, while 18.4% were considering implementing it or are in trials, which shows there is potential for growth going forward.

Despite the fact that VMware's VSAN is a competitor for Nexenta in the SDS space for block storage, Nexenta is able to provide complementary file services that can leverage storage from a VMware VSAN cluster with its NexentaConnect product. This product has been on the market since 2015, and with the usage of NAS file services increasing in cloud environments, Nexenta will be facing more competition from vendors such as SoftNAS and NetApp.

In the all-flash array space, Nexenta goes to market with NexentaStor and NexentaEdge systems, with the Edge targeted for scale-out and cloud use cases. All of the major storage vendors have all-flash arrays at this point, and there are a number of flash storage specialists in the field, including Pure Storage, Kaminario and Violin Memory. In addition, there are a growing number of new innovators in the market including E8 Storage, Mangstor, Pavilion Data Systems, Kazan Networks, Excelero and Apeiron Data Systems, which are targeting next-generation high-performance use cases.

Looking at the storage-for-containers market beyond many of the previously mentioned vendors, there are several players in the market, including Portworx, ClusterHQ, Robin Systems, Coho Data and StorageOS.

## SWOT ANALYSIS

### STRENGTHS
Nexenta was an early pioneer in software-defined storage and has built up its storage platform to address traditional and next generation use cases for physical, virtual and container environments.

### WEAKNESSES
The company is still relatively small compared with the traditional storage array players it is looking to displace.

### OPPORTUNITIES
The container, analytics and cloud environments that Nexenta is going after are target-rich and could be disrupted. Nexenta has built up a strong group of partners that can expand its reach, while providing customers with the ability to choose from a wide variety of hardware and services partners.

### THREATS
Competition in the SDS space is growing both from emerging startups and more importantly from established storage vendors looking to maintain their hold on customers.