REPORT REPRINT

VAST Data expands into persistent container storage

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The fast-growing storage specialist shows no signs of a slowing down after its debut a year ago, when multiple customers spent over $1m on their first purchases. The addition of the new Container Storage Interface will allow VAST's Universal Storage architecture to work with Kubernetes and Red Hat Open Shift.

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Introduction

VAST Data had one of the most memorable debuts in recent years, coming out of stealth with multiple customers spending over $1m in their first purchases. The addition of the new Container Storage Interface (CSI) will allow VAST's Universal Storage architecture to work with Kubernetes and Red Hat Open Shift, which is vital for participation in the fast-growing cloud-native ecosystem.

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VAST continues to champion its solid-state Universal Storage system as a hard-drive killer, and the momentum the vendor has generated is starting to make waves. The appeal of diskless storage continues to intensify as customers seek to free themselves from the inconsistent performance and reliability issues that come with spinning media. The company made a wise decision to build an architecture that is diametrically opposite of the established systems that came before it. VAST isn't chasing after tier one workloads – which typically run on block storage and require capabilities such as replication – that have been the 'golden goose' workloads for the established storage giants. Instead, the vendor wisely focused on next-generation workloads such as log analytics and deep learning. These workloads require massive scalability and high performance and are not a natural fit for legacy storage controller architectures. Although VAST is going against the grain, with the increasing importance of next-generation workloads, the vendor still has a lot of room to grow. The addition of the CSI support and the new RDMA acceleration for NFS will likely broaden the appeal of Universal Storage.

Details

VAST says it is currently not looking for additional funding to add to it $80m total, although it continues to get investment offers. The company has a headcount of 130 compared to 80 at launch, and it plans to grow its engineering and sales teams. The vendor has a few dozen customers after gaining early traction in a handful of challenging vertical markets including life sciences, financial services, content creation/distribution and high-performance computing (HPC). Average deal size is still $1m, although that is expected to get smaller since some new customers are purchasing lab systems at $200,000-300,000 before investing in a large production system.

The company's new CSI plug-in allows container orchestration platforms such as Kubernetes to provision storage volumes from a VAST system. The vendor is adding features at a rapid pace, with this CSI addition in January coming on the heels of the optional RDMA acceleration for NFS enhancement, which was announced as part of the Universal Storage version 2.0 launch last September. The RDMA acceleration for NFS is being used by VAST customers with high-bandwidth use cases such as deep learning applications and to provide storage for HPC. VAST says this new feature is allowing its storage to displace rival scale-out NAS systems, which use parallel file systems.

Asymmetric cluster expansion was another key part of the version 2.0 launch, and it allows customers to scale up performance and capacity independently. This is an extremely important capability because it eliminates the need to upgrade systems or go through painful data migrations when performance or capacity requirements increase. The version 2.0 launch also introduced VAST's snapshot engine, which allows customers to take snapshots without compromising performance because it does not require the copying of data or metadata.