Nominated Company: **Avere Systems**

Nomination Title: **Avere FXT Series Edge Filers**

Avere FXT Series Edge filers are the first-ever solution to bring the benefits of performance tiering and scale-out clustering to any NAS environment.

By separating performance scaling from capacity scaling, Avere FXT Series Edge filers improve performance, scalability and agility while driving down costs.

Cloud storage is attractive because it promises to deliver lower costs through a consolidated and centrally managed architecture. To date, however, cloud storage has been impractical for many applications because the high-latency WAN connection between the cloud provider and the cloud user has resulted in poor performance.

The Avere FXT Series enables cloud storage for NAS applications demanding moderate to high performance by caching active data on FXT clusters at the edge near the user, eliminating the latency of the WAN.

Avere FXT Series Edge filers:

- provide instant access to business-critical applications from anywhere,
- cut storage costs by more than half,
- and improve application performance regardless of storage capacity.

They enable customers to achieve:

- -global file access independent of where data is stored,
- -unlimited performance scaling for applications,
- -and dramatic cost savings in both capital and operating expenses.

Challenge

Traditional NAS solutions have created four major pain-points:

1. Over-provisioning of disk drives is expensive and wastes power and space.
2. Scaling performance is difficult and comes with expensive upgrades, more disks, and application downtime.
3. There is no simple way to provide global data access.
4. NAS sprawl, which results from scaling limitations, highly complicates management.

Solution

Avere optimizes NAS by separating performance scaling from capacity scaling and more effectively delivers both. The FXT Series provides the NAS optimization features needed to address the above challenges:

1. Dynamic tiering places data on the optimal storage media and dramatically reduces costs.
2. Scale-out clustering delivers linear performance scaling.
3. WAN caching provides global data access and enables building a NAS cloud.

4. Virtualization and visibility enable managing all NAS devices as a single logical pool.

Reduce Costs

Avere solutions are highly efficient and typically require 80% less total equipment than traditional NAS. For existing NAS deployments, the FXT Series enables administrators to dramatically increase the performance of their systems without adding storage. For new deployments, the FXT Series enables administrators to meet their performance requirements with the highest possible storage density using low-cost, high-capacity SATA drives.

Scale Performance

Avere supports up to 50 FXT nodes per cluster and linearly scales to millions of ops/sec performance and tens of GB/sec throughput. The FXT cluster takes ownership of heavily accessed files from the Core filer and accelerates all operations to those files including reads, writes, and metadata operations. Allocation algorithms running on the FXT cluster constantly monitor data access patterns and actively manage data placement to increase performance, distribute workload in the cluster, and minimize accesses to the Core filers.

Market Differentiators

Avere is a disruptive technology to data centre environments using NAS and HDDs. You can add an Avere appliance to improve performance, which means you no longer have to keep buying disk to improve performance. However, Avere could also be used to improve performance in an environment with storage from one of these vendors, and the Avere appliance would work harmoniously with the other vendor's hardware. It is therefore fair to say that Avere competes with storage vendors in terms of price/performance, and can be viewed as a disruptive technology in the NAS storage space.

Avere Helps Digital Domain Productions Make Movies in the Cloud:

Digital Domain Productions, which has delivered visuals for more than 80 movies including Titanic and Apollo 13, has used Avere to improve cloud performance by 25,000%. Digital Domain utilizes render nodes co-located in Las Vegas to access data stored at its locations in Los Angeles, San Francisco and Vancouver and turn it into media frames. However, without Avere's FXT products, the latency introduced by accessing data across such vast geographical distances could have derailed Digital Domain's efforts to leverage the co-location's space and power benefits.

"We couldn't do this without Avere in the picture," said Mike Thompson, Sr. Systems Engineer of Digital Domain. "The WAN latency would have killed the applications' IOPS to the filers. We simply wouldn't have been able to render frames remotely. In order to grow, we would have been forced to increase our data center footprint in cities with much higher costs for space and power."

Avere Breaks Latest VDI Benchmark Record

Results of Avere's latest virtual desktop infrastructure (VDI) show that Avere's Edge filer delivers the highest density of IOPS per data centre rack unit for a VDI workload. Using the independent benchmarking tool Login Virtual Session Indexer (Login VSI) heavy workload, Avere achieves the lowest price per desktop with a benchmarked heavy workload of $11 per VDI IOP. With this

unprecedented density of 4,250 IOPS/Rack Unit, VDI deployments can be sized down to require minimal rack space.

Avere Demonstrates Blazing Fast Cloud Storage Results in Latest Benchmark Test for Enterprise Applications

In 2013 Avere Systems, a leader in network-attached storage (NAS) optimization, achieved record SPECsfs2008 NFS results for the second time in two years with its Edge filer, continuing to beat out solutions from EMC and NetApp. Benchmark testing proves Avere's edge-core architecture delivers unparalleled application performance to any NAS environment, including those where the storage is located across a long geographic distance from the end-users, with up to an 80% reduction in cost and footprint in comparison to legacy NAS solutions.

Why nominee should win

Avere FXT Series Edge filers enable businesses to:

- Accelerate performance of current NAS servers to bolster performance of demanding applications
- Preserve investment in the existing NAS infrastructure by dramatically extending its useful lifespan
- Enable the use of less expensive NAS servers and lower-cost, higher capacity SATA drives to expand capacity without sacrificing performance
- Save money in the following areas by decreasing the number of expensive NAS servers and disk shelves:
  - Cost per terabyte
  - Power
  - Cooling
  - Rack space
- Pay only for the performance needed, with the option to scale performance in the future