

Customer

- On-demand content provider

Industry

- Media & Entertainment

Use Case

- Post-production of 4K/8K videos
- Transformation of on-demand content

Challenge

- Needed to deliver content in a variety of formats
- Growth of 4K/8K post-production workflows
- Needed to support multiple mediums
- Backups interrupted production
- Growth stymied by existing SAN

Solution

- Replaced complex SAN with Pavilion HFA
- Snapshots provide instant & space-saving copies of media for backup & transcoding

Results

- 25X reduction in TCO CapEx
- 20X reduction in footprint
- Increased number of 4K/8K videos produced
- Linear scalability of compute and storage

Accelerate Media and Entertainment Projects

This client is a real-time content provider of multiple 4K and 8K videos for a world-wide consumer base. Not only was the volume of post-production workflows increasing but they needed to produce videos in a variety of different formats and mediums as their audience location and consumption devices have become more diverse.

This client used SAN-based storage for multiple editing workstations. The customer found that their workflows grow in complexity daily and their time-to-market window continues to shrink. As such, they required a new approach that enabled them to scale performance and bandwidth elastically. They were concerned that their SAN did not have the performance necessary to do more 4K and 8K post-production operations, so a change was needed.

Composed By Pavilion Powered By StorNext

The client looked at installing NVMe SSDs into their existing SAN, but found that doing so did not unlock the parallel performance provided by an NVMe SSD. Since the client used StorNext on top of their SAN, Pavilion setup a StorNext 6 environment and used the Frametest utility to demonstrate to the customer that the Pavilion Hyperparallel Flash Array (HFA) combined with StorNext provided the performance their applications need. Pavilion demonstrated playing back, ingesting, and capturing multiple 4K and 8K streams at multiple hundreds of frames per second with a bandwidth of nearly 30GB/s.

The client found the Pavilion HFA's use of NVMe-oF gave them the same parallel performance as local NVMe SSDs. The Pavilion HFA also gave them the same functionality they had with their SAN including thin-provisioning, snapshots/clones, framework integration, encryption, performance monitoring, multi-pathing, and 24/7 proactive cloud-based support.

The Pavilion Data NVMe Storage Platform delivers up to 90 GB/s throughput, 40µs of latency, and 1.1 PB of storage in a compact 4U form factor. It is the industry's first hyperparallel flash array that unlocks the parallel performance of NVMe.

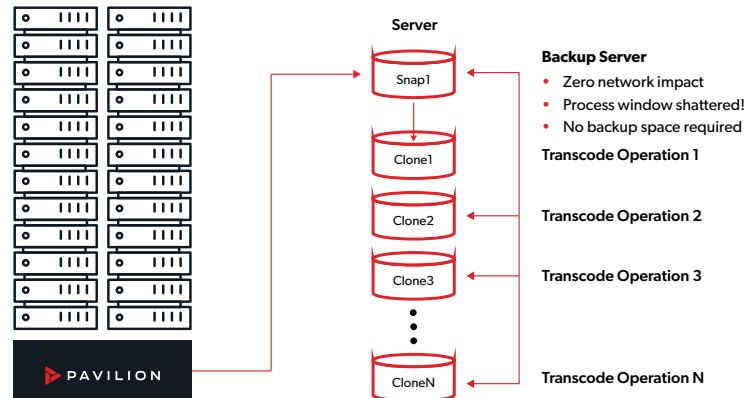
Combining the Pavilion HFA with StorNext enabled the customer to optimize the ingest and retrieval of large and small files with ultra-high performance, consistent video playback, improved storage utilization, enhanced global collaboration, and reduced production costs.

The ability to make clones directly from snapshots accelerated transcoding operations and eased completion headaches. The client found that expanding their SAN for equivalent performance would cost 25 times more than the Pavilion HFA, they also found that the Pavilion HFA used 95% less rack space. So the customer replaced their SAN with the Pavilion HFA. It gave them the bandwidth needed to process assets from additional sources, improving their production workflow. They also found that the Pavilion HFA enhanced their latency-sensitive video workflows.

We have to pause our video workflows for backup operations. Our SAN does not provide the capability to perform backup and transcode the additional video formats our customers need. Pavilion boosted workflow performance, while its zero-impact snapshots and clones met our backup requirements and enabled us to simultaneously transcode our media.

Hardware Engineering Architect

The client used the Pavilion HFA's zero-footprint snapshots and clones to make multiple instant and transparent copies of their workflow. They shared the snapshot with their existing backup solution and presented clones of the snapshot to accelerate multiple transcoding operations. This allowed their backup and transcoding processes to operate in parallel, speeding operations. Their SAN-based solution delayed backup and transcoding, impacting 4K and 8K post-production operations.



Summary

By using the Pavilion Data NVMe Storage Platform with StorNext 6, this real-time content provider transformed their production of 4K and 8K videos. They were able to respond to their customer's request to have the content now, in a variety of different formats, and multiple delivery mediums.

Pavilion worked closely with the client to assure a smooth transition from their legacy SAN environment and provides them with high performance, low latency, and gave them a linear price and capacity scalability. The client found that the Pavilion HFA is ideal for media operations. Its OpenChoice feature future-proofed their storage solution and saved them production cost by letting them redeploy existing or purchase new NVMe SSDs as their expansion needs arise.

Operations staff also found that the Pavilion HFA's SAN-like management for snapshots, clones, and thin provisioning aligned to the processes they had implemented for the SAN

Find Out More

The Pavilion HFA is defining the future of composable disaggregated NVMe-oF. Our system is an ideal part of a complete Media and Entertainment workflow. Our expertise is in simplifying and optimizing NVMe to make the impossible, possible. Taking the infrastructure to the next level, requires the "Midas touch" of local, proven experts. When storage is business-critical, there's no substitute for the guaranteed performance, functionality, high availability, and professional software support of a Pavilion HFA. We partner with leading organizations to design, implement and deliver a complete solution tailored to the environment. Contact us today to get in touch with our talented extended teams of professionals.