



Benefits

- Improved SQL Server application performance by over 10%
- The customer was able to recover 30% of their CPU utilization by moving to the Pavilion platform
- Reduced their storage management costs by as much as 50%
- Dramatically simplified the process of scaling storage

Wall Street Hedge Fund Addresses Highly Competitive Transactions with SQL Server for Windows

Leading Investment firm with \$20B+ in Assets Under Management takes advantage of Pavilion Performance, Ultra-low Latency, and Affordability with NVMe-oF RoCE to accelerate application performance when speed to decision making is critical.

A major wall street hedge fund is working to reinvent the future of finance by revolutionizing how data is used to shape thinking. To meet this goal, they needed to refresh their storage.

This customer had a significant existing infrastructure based on a direct attached storage (DAS) environment, consisting of JBOF (Just a Bunch Of Flash) storage connected to a Microsoft SQL Server platform. The DAS solution in use was originally selected due to their need for extreme performance with their SQL Server data analytic applications.

While the DAS solution initially met their performance requirements, they found that it limited their ability to scale over time, required significant resources to manage, and consumed too many CPU cycles. Each JBOF created an island of storage, and the problem grew worse each time they expanded. In an industry where time to decision making is critical, they needed a solution that could deliver the performance they needed, while still enabling them to grow their business.

Finally, there was a desire to migrate from their legacy, DAS model to a next generation data center with an NVMe-oF architecture. The goal of this migration was to achieve greater overall operational efficiency.

Part of the reason for the migration to a next generation DC NVMe-oF architecture was that they wanted to develop an Enterprise Operational design vs the legacy DAS model that was inefficient creating a lower storage utilization and high management costs (hence higher costs operationally).

The Pavilion HyperParallel Data Platform™

To meet their performance needs they chose the Pavilion HyperParallel Data Platform which allows them to disaggregate their storage to a shared solution. They are taking advantage of NVMe-oF/RoCE to get better performance than their DAS implementation could deliver while reducing management costs.

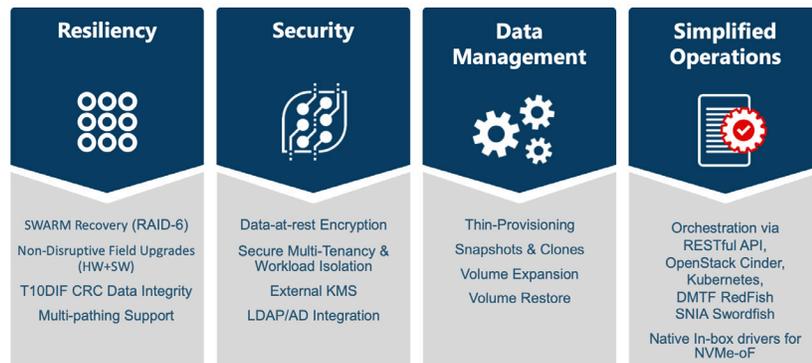
Uniquely capable of delivering consistent, predictable high performance and ultra-low latency for block, file, and object workloads simultaneously, the Pavilion HyperParallel Data Platform provides industry leading performance, density, scalability, and flexibility. With over 2 PB of capacity per array and able to deliver 120GB/s of throughput, 20M IOPS, and as little as 25µs of latency measured at the host, the Pavilion HyperParallel Data Platform offers unmatched performance and capacity density in each 4RU system.

“Pavilion is a trusted advisor and innovator helping us build for the future through sustained competitive advantage”, said the customer.

Powered by Pavilion HyperOS™

Designed for the most demanding environments, Pavilion HyperOS combines enterprise class management, security, and data protection features with a highly intuitive GUI to ensure maximum availability and ease of use. An API driven approach ensures that the Pavilion HyperParallel Flash Array integrates easily within the datacenter. Designed from the ground up for NVMe and NVMe-oF, the Pavilion HyperOS enables the Pavilion HyperParallel Flash Array to deliver unmatched storage performance without the cost and complexity of traditional storage arrays.

Enterprise Grade Data Management



Results

Given the need for performance that could meet or exceed that of DAS, the Pavilion HyperParallel Data Platform was the only solution that could allow the customer to disaggregate their storage, while still meeting the demand for ultra-low latency and high throughput.

By moving to the Pavilion HyperParallel Data Platform, they were able to improve the overall performance of their storage, which accelerated the time to resolution for their analytics applications. Overall their SQL Server application performance improved by over 10%.

In addition to the overall performance increase, the customer was able to recover 30% of their CPU utilization by moving to the Pavilion platform. These compute cycles, which had been consumed by managing their DAS based storage, are now available for application processing.

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As a result of moving from a DAS environment to the Pavilion platform, the hedge fund was able to reduce their storage management costs by as much as 50%, while dramatically simplifying the process of scaling storage.