

NVMe-oF Storage for Federal Governments

Accelerating digital transformation

Delivering new insights with speed, agility, & no-compromise

Facial recognition, event correlation, and high-fidelity surveillance consume volumes of information. This information is a strategic asset for governments., but much of this information is in storage islands, and extracting it with DAS, SAN, or legacy all-flash arrays is problematic. As the industry’s first NVMe-oF storage array, the Pavilion Hyperparallel Flash Array (HFA) is the core of a flash-based data center and accelerates these operations.

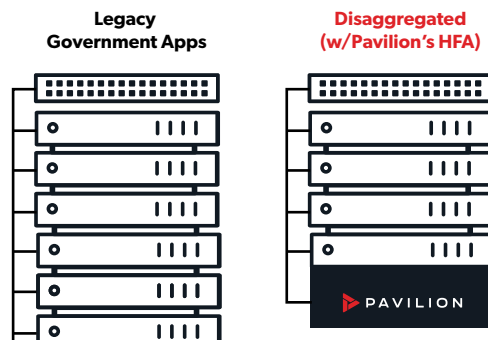
The Pavilion HFA frees up constrained government resources by reducing storage overprovisioning, accommodating storage growth, and accelerating time to results. It enables government IT to spend less time analyzing data, letting them focus on more important tasks that benefit their constituents. Pavilion Data makes the impossible, possible with seamless integration into architectures like IBM’s Spectrum Scale™ and by leveraging NVMe-oF into a system designed for NVMe SSDs from the ground up. The Pavilion HFA scales to over a petabyte of data, provides ultra-high performance, ultra-low latency, linear scalability, reliability, security, and it uses NVMe SSDs., making it ideal for government applications.

The Pavilion Hyperparallel Flash Array

The Pavilion HFA’s architecture unlocks the power of NVMe SSDs to enhance the performance of latency-sensitive applications, using a compact 4U form factor. Its enterprise features speed common operations like backup, its Web GUI makes it simple to manage, and continuous operations ensure data is available when needed.

Pavilion is a GDPR-compliant storage innovator that is leading the way in government transformation. Whether it is a logical evolution of a VMware-based environment to improve storage utilization, shatter backup windows, or a wholesale replacement of the customer experience with MongoDB, MariaDB, Cassandra or AeroSpike, the Pavilion HFA with NVMe-oF provides unprecedented performance, availability and versatility to future-proof your applications as you bring new services and efficiencies to your constituents.

The Pavilion HFA enables a government agency to implement a Composable, Disaggregated Infrastructure (CDI) where applications are virtualized or containerize and readily available. This means that compute, network, and storage resources all scale independently to meet a diverse set of application requirements.



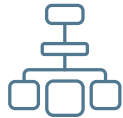
Benefits

- Reduce storage by 75%
- Petabyte scalability, high-performance, low-latency, and linear scaling maximizes data center efficiency
- Enterprise design and data integrity validation ensure reliable access to data
- Protect your data and your business. Meet evolving requirements for data security and compliance
- Easy migration from legacy systems that use fibre channel
- Rack scale/CDI management via Web GUI, vCenter, Kubernetes, RESTful API, OpenStack, DTMF/Redfish, and Swordfish

Benefits of Disaggregation

The Pavilion HFA provides high performance and low latency to government applications.

Scalable & Flexible



Provide up to 1.1 Petabytes, 90GB/s throughput, 20M IOPS, and 40µs of latency to applications using NVMe/RDMA (Ethernet or IB), NVMe/TCP, iSCSI, and NFS. NVMe/TCP enables blade servers to use NVMe-oF without having to change infrastructure. iSCSI enables legacy FC-based applications to get the benefits of NVMe technology. The Pavilion HFA enables the application to increase performance and capacity linearly without impacting on-going operations.

Reduce the amount of raw flash storage needed by up to 3X, saving 50% on CapEx compared to DAS SSDs in terms of \$/GB/sec. The Pavilion HFA is the one platform for all your environments. No wasted capacity, no time spent messing with volume managers or file systems. Just set and forget.

Fast & Dense



The Pavilion HFA lets government applications analyze terabytes of structured and unstructured data over 20 times faster than a DAS NVMe SSD. It is also ideal for multi-purpose test and DevOps environments letting them seamlessly expand to rack-scale.

Disaggregating high-speed flash storage from each server in a rack eliminates the requirement to dedicate CPU resources to managing local SSDs or using servers designed for DAS storage. This increases the compute density of a rack by up to 2X and gives more CPU resources to applications, enabling quicker time to results.

No custom software needs to be installed on server nodes, enabling applications to take full advantage of host processing resources as well as simplifying deployment complexity.

Safe & Secure



Protect SSDs with RAID-6 erasure coding. Rebuild a failed SSD transparently and return to protection 12X faster than a DAS or an AFA. The Pavilion HFA ensures that the failure of an SSD does not impact data availability.

The Pavilion HFA uses a zero-footprint snapshot with consistency group features that speeds backup and disaster recovery operations. Its self-healing bit-rot support ensures that a backup gets uncorrupted data, while its FIPS-compliant data at rest encryption keeps data secure without impacting performance.

Enterprise Strength & Flexible Management



Get 24/7 proactive support, end-to-end data integrity, modular chassis, mixed file size performance, enterprise services, and redundancy throughout the storage array. The Pavilion HFA gives applications full speed data services with no compromises. No tuning or extra fees required.

Use the Pavilion Web GUI to manage storage, or integrate with various frameworks, including: vCenter, Kubernetes, RESTful API, OpenStack, DTMF/Redfish, Swordfish, and more.

Economical



NVMe storage is the largest cost of an application. Why squander the most expensive storage in your data center? Pavilion's OpenChoice storage does not lock you in to a vendor. Use NVMe SSDs that have the performance, endurance, capacity, and technology you need for all applications, leveraging existing suppliers or purchasing new NVMe SSDs from Pavilion.

The Pavilion HFA's thin provisioning reduces TCO also. The Pavilion array only allocates physical space as the application requires/consumes it. No wasted capacity, no time spent messing with volume managers or file systems. Just set and forget.

Find Out More

Pavilion is defining the future of disaggregated NVMe-oF. Government applications will be disrupted by the Pavilion HFA and its unprecedented availability, performance and versatility to future-proof the storage infrastructure.

Our expertise is in simplifying and optimizing NVMe to make the impossible, possible. When storage is business-critical, there's no substitute for the guaranteed performance, functionality, high availability, and OpenChoice support of a Pavilion NVMe-oF storage array. Use the Pavilion Hyperparallel Flash Array with its NVMe over fabrics support and make better decisions, faster! Contact us to learn more.