

NVMe-oF Storage for Banking

Accelerate banking with no-compromises

In seeking to serve changing needs of their global customers, banks face a diverse and complex set of challenges, plus they struggling to navigate internal, federal, and local regulatory requirements. At the heart of this is how banks can transform their business models to respond and stay relevant. Consumers expect that real time banking services are available in multiple formats. They demand instant gratification, either in branch or on-line, for quicker transaction processing credit card approvals, and faster transactions. Banks have to deal with analyzing these transactions for fraudulent activity and regulatory increases.

In response, banks are increasing analysis of their structured and unstructured data, and need to speed time to results. They are also mandated to reduce costs, and storage resources is one of the largest costs in a data center, so it needs to be economical as well as future proofed.

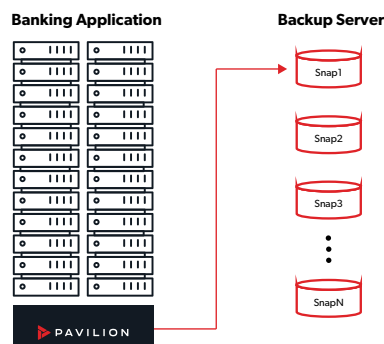
Reduce storage over provisioning, accommodate storage growth, consolidate applications, accelerate time to results, and reduce TCO by disaggregating this storage with the Pavilion Hyperparallel Flash Array (HFA). It is the industry's first NVMe oF storage array. It scales to over a petabyte of data, provides ultra-high performance, and ultra-low latency, to banking applications, and uses NVMe SSDs.

Direct attached storage and legacy all-flash arrays can't analyze this data quickly enough to provide an unrivaled customer experience. NVMe-oF has crossed the chasm and offers the performance, reliability, security, and manageability, and user experience that banks need with no compromises to risk.

The Pavilion Hyperparallel Flash Array

The Pavilion HFA delivers never before seen NVMe performance (90 GB/s throughput, 40µs of latency, and 20M IOPS) and density (1.1 Petabyte) in a compact 4U form factor. It provides banking applications with the performance of locally attached NVMe SSDs, enabling banking organizations to move to a Composable, Disaggregated Infrastructure (CDI) infrastructure, where application resources are readily available. The Pavilion HFA uses NVMe SSDs and supports multiple block and file protocols with NVMe-oF/RDMA, NVMe-oF/TCP, iSCSI, and NFS.

The Pavilion HFA requires no proprietary software to be installed on a server farm and uses standard NVMe, NVMe-oF, Ethernet, and InfiniBand drivers, freeing up host resources for processing and reducing deployment risk.



Benefits

- Increases density 2X
- Reduces storage deployed by 75% and storage TCO by half
- Petabyte scalability, high-performance, low-latency, and linear scaling maximizes data center efficiency
- Protects your data and your business. Meets evolving requirements for data security and compliance
- Concurrent block & file protocols for deployment flexibility
- Enterprise design and data integrity validation ensure reliable access to data
- Management via Web GUI, vCenter, Kubernetes, RESTful API, OpenStack, DTMF/ Redfish, and Swordfish

Benefits of Disaggregation

The Pavilion HFA delivers high performance and low latency to banking applications.

Scalable & Flexible



Provide up to 1.1 Petabytes using NVMe-oF, iSCSI, or NFS. Grow performance and capacity linearly without impacting on-going operations.

Fast & Dense



Get an extremely good banking experience by processing information faster using an ultra-high performance and ultra-low latency storage array. Search data 25 times quicker than with a DAS NVMe SSD, speeding time to results.

Disaggregating flash storage from each server in a rack no longer requires dedicating resources to managing local SSDs. Using servers that don't have to support DAS storage can double the compute density of a rack. No custom software needs to be installed on application servers, enabling them to take full advantage of host processing resources and reduce risk.

Safe & Secure



Protect the SSDs with RAID-6 erasure coding. Its "Swarm Recovery" rebuilds a failed SSD 10X quicker than DAS or an AFA. Get self-healing bit-rot support for data, to assure every process gets uncorrupted data.

Security is a must for banking organizations. Pavilion uses a FIPS-compliant data at rest encryption and ensures the always-on encryption does not impact performance. Meeting government compliance requirements is a fundamental part of the system design. Use consistent snapshots, encrypt those snapshots, and use standard backup and restore utilities with the confidence that banking data is safe and secure.

The failure of an SSD, data corruption, or data exposure does not impact banking operations.

Enterprise Strength & Support



Get end-to-end data integrity, a robust and modular chassis, and redundancy throughout the storage array to protect your banking applications as infrastructures grow. All features come in-the-box, including thin provisioning, snapshots, clones, data at rest encryption and more.

Don't let support concerns prevent the deployment of banking applications. Pavilion provides 24/7 proactive support and acts as an extension of your IT organization for all applications.

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

Block & File



Banks have a lot of data, but much of it resides in silos. Unify the silos, driving collaboration across block and file data. Simultaneously use NVMe/RDMA, NVMe/TCP, iSCSI, and NFS for all your application needs.

Economical & Global



NVMe SSDs are the most expensive components of an application cluster, why not reduce them? Scale down flash storage deployed by 2-3X, and save 50% over DAS in terms of \$/GB/sec. No wasted capacity, no time spent messing with volume managers or file systems. Just set and forget.

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 your applications, leveraging existing suppliers or purchasing new NVMe SSDs from Pavilion. With the Pavilion HFA you won't waste SSD space. It only allocates physical space as the application requires/consumes it. Save TCO by having no wasted capacity and no time spent messing with volume managers or file systems.

Find Out More

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

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 Storage™ 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.