



Solution Brief

NetApp and Broadcom Modern SAN Cloud-Connected Flash Solution

Oracle and SUSE NetApp Verified Architecture

Key Benefits:

Mission-critical workloads on cloud-connected converged networks

An industry-leading solution architecture that delivers:

- Highest application performance
- Future-proofed enterprise SAN environment
- Enterprise-grade disaster recovery capabilities
- Improved customer experiences

The Challenge

Modernize Your Enterprise SAN with End-to-End NVMe and Instantly See 40% Performance Improvement with a Self-Funding Investment

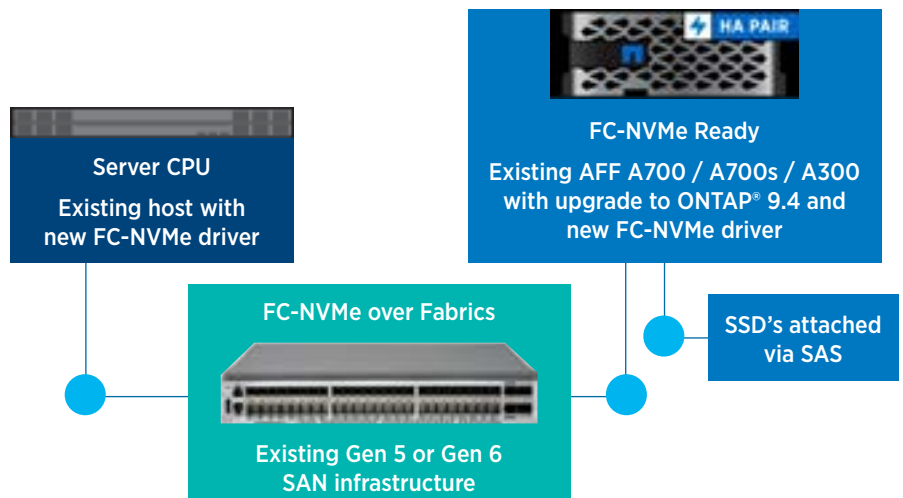
According to IDC, 50% of the Forbes Global 2000 companies will soon see most of their business depend on their ability to create digitally enhanced products, services, and experiences. Data is the lifeblood of future-thinking companies, but for many, their current IT infrastructure isn't up to the task. The growing stress on the entire IT infrastructure to manage this overload of data interferes with its ability to quickly capitalize on the inherent value of the data.

The Broadcom NetApp Modern SAN NVMe Architecture Solution

This NetApp® Verified Architecture (NVA) solution is a collaboration between NetApp and Broadcom's Brocade and Emulex divisions. Together, they developed the industry's first end-to-end enterprise NVMe architecture. The solution is based on NetApp and Broadcom's industry-leading SAN architecture with next-generation NVMe-based storage and fabrics. It's designed to meet the low-latency, high-bandwidth SLA requirements of mission-critical high-performance databases and artificial intelligence and machine learning enterprise applications.

A Future-Proofed Enterprise Architecture

This solution, composed of Brocade Gen 6 Fibre Channel (FC) Switches, Emulex Gen 6 HBAs, and NetApp AFF 32Gb storage systems, is a predesigned, best-practice configuration that is built on SAN NVMe/FC by using the latest NetApp and Broadcom technologies.



NetApp AFF A700 or A700s



Emulex Gen 6 FC HBA's by Broadcom



32Gb / 2-port
and
32Gb / 4-port



Brocade G620: Gen6 FC, 1U 64 ports

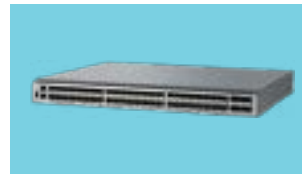


Figure 2) Hardware configuration

Solution Benefits

- Save 50% in database licensing costs
- Save 80% to 90% in data center floor space
- Save 50% to 90% in power and cooling costs
- Save 50% to 80% in labor costs

Reasons to Modernize Your SAN with NetApp and Broadcom

- **Digitally transform critical business applications.** Enable the next generation of your critical applications, ready for analytics, artificial intelligence, and machine learning capabilities.
- **Harness the power of the hybrid cloud.** Cloud-enable your IT services to get the benefits of on-premises storage with the flexibility of public cloud.
- **Get a best-in-class solution for enterprise SAN.** Strengthen your competitive advantage by partnering with the fastest-growing flash, SAN, fabric, and host bus adapter (HBA) leaders.
- **Significantly simplify operations.** Improve IT responsiveness by simplifying your SAN management while ensuring predictable performance and reducing labor costs by 50% to 80%.
- **Reduce costs through physical consolidation.** Reduce data center floor space by 80% to 90% and reduce power and cooling by 50% to 90%. Combine complicated multifabric legacy FC SAN switches into a simpler, modern architecture with fewer but faster components.
- **Increase license and CPU productivity.** Consolidate (including both containerization and virtualization) to ensure maximum utilization of your existing compute infrastructure and CPU-licensed software.
- **Future-proof your SAN environment.** Adopt disruptive performance and technology advancements nondisruptively when you're ready.
- **Rapidly deliver core IT services.** Take advantage of an open platform that supports leading DevOps toolsets to vastly reduce your time-to-value ratio for development.

- **Don't compromise on availability.** Get 99.9999% availability and enterprise-grade disaster recovery capabilities.
- **Improve the customer experience.** Accelerate performance, enable instant application cloning, and facilitate granular data recovery to improve your customers' experience.
- **Get next-generation enterprise data management.** Bring the value of industry-leading innovation together with enterprise availability to deliver the next generation of your SAN environment.

Learn More

- <https://partner-connect.netapp.com/us/partner-directory/brocade-a-broadcom-inc-company>
- www.broadcom.com/company/oem-partners/fibre-channel-networking/netapp
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- <https://www.netapp.com/us/forms/webcast-ondemand/demanding-workloads-demand-nvme.aspx>
- <https://fieldportal.netapp.com/content/813308>
- <https://www.netapp.com/us/media/nva-1126-design.pdf>

About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit www.netapp.com. #DataDriven