

Reasons to Introduce NVMe over Fabrics

Optimize your SAN

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NVMe over Fabrics (NVMe-oF) provides a scalable enterprise solution for all flash storage networking environments using the NVMe protocol from the server to the SAN, through the storage array.

1 Purpose built protocol

Non-volatile Memory express (NVMe) is a protocol that was designed to replace the SCSI protocol and allows end users to get the maximum benefit from Solid State Drives (SSDs). Today, the NVMe protocol is widely used in HBAs, servers and storage systems. All 16- and 32Gb Connectrix switches support NVMe over Fabrics (NVMe-oF) with no hardware upgrades.

2 Lower latency with higher throughput

NVMe as a protocol, provides lower latency than the legacy SCSI-Fibre Channel Protocol (FCP). NVMe also provides higher throughput due to its multi-queue (MQ) architecture.

3 Flexibility to mix SCSI-FCP traffic with FC-NVMe traffic

NVMe over Fabrics (NVMe-oF) enables the NVMe protocol to transfer data between host and storage over a fabric (e.g., Fibre Channel or Ethernet). Running the NVMe-oF protocol while using a Fibre Channel fabric, commonly referred to as "FC-NVMe", provides seamless adoption into an existing legacy Fibre Channel SAN environment. FC-NVMe can coexist alongside of SCSI-FCP traffic.

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4 | Performance boost for your all flash storage environment

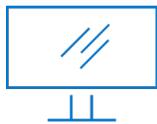
End-to-end NVMe means the NVMe protocol is used within the server, across a SAN (using NVMe-oF) to the front end of the storage and then within the storage system itself. The NVMe protocol can help realize the potential performance boost when using NVMe based storage. Although the storage itself is largely responsible for this performance boost, the NVMe protocol plays an important role by allowing IO Parallelism using Multiple Queues. Also, the protocol is relatively lightweight when compared to SCSI. In other words, given the same footprint, NVMe allows your SAN to deliver more throughput to end users.

5 | Speed matters! Consider upgrading your high value storage workload environment to end-to-end 32Gb/s Fibre Channel

The key to your success in transitioning to end-to-end NVMe is the speed of your SAN. For best results, you should consider upgrading your business-critical infrastructure to end-to-end 32Gb/s Fibre Channel. End-to-end NVMe over Fabric is now available with 32Gb/s Fibre Channel HBAs, Dell EMC servers, Connectrix 32Gb/s models and with Dell EMC storage.

Can't decide? Get a free SAN Health assessment!

To help make your decision about FC-NVME, please consider our free SAN Health and network assessment. This assessment can help you identify the best Connectrix SAN option for your business.



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