

Reasons to Introduce NVMe over Fabrics

Optimize your SAN with NVMe/FC

5

NVMe over Fibre Channel (NVMe/FC) provides a scalable enterprise solution for all flash storage networking environments using the NVMe protocol and Fibre Channel as the transport 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. Connectrix switches support NVMe over Fibre Channel (NVMe/FC) with no hardware upgrades.

2 Lower latency with higher throughput

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

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

NVMe over Fabrics 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 "NVMe/FC", provides seamless adoption into an existing legacy Fibre Channel SAN environment. NVMe/FC can coexist alongside of Fibre Channel Protocol (FCP) SCSI traffic.

5

Reasons to Introduce NVMe over Fabrics

4 | Performance boost for your all flash storage environment

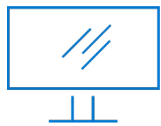
End-to-end NVMe means the NVMe protocol is used within the server, across a Fibre Channel SAN (NVMe/FC) to the front end of the storage and then within the backend storage system. The NVMe protocol can help realize the potential performance boost when using NVMe based storage. Although the storage itself 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/FC 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 NVMe

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 including servers, HBAs, switches and storage arrays.

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

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



[Learn More](#) about
Connectrix solutions



[Contact a Dell EMC Expert](#)