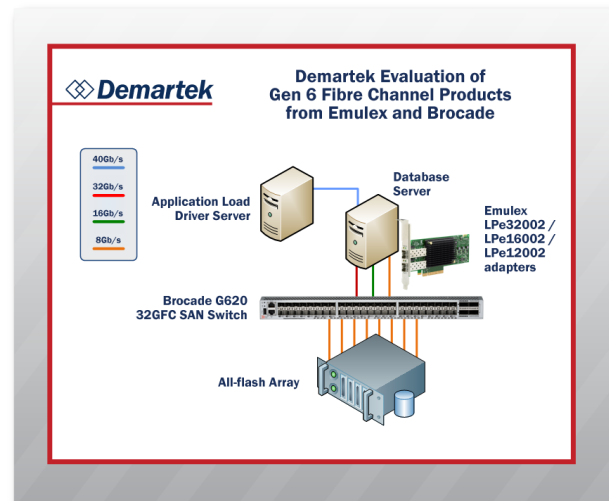# Gen 6 Fibre Channel Evaluation of Products from Emulex and Brocade

Gen 6 Fibre Channel provides new speeds and features for enterprise datacenters.
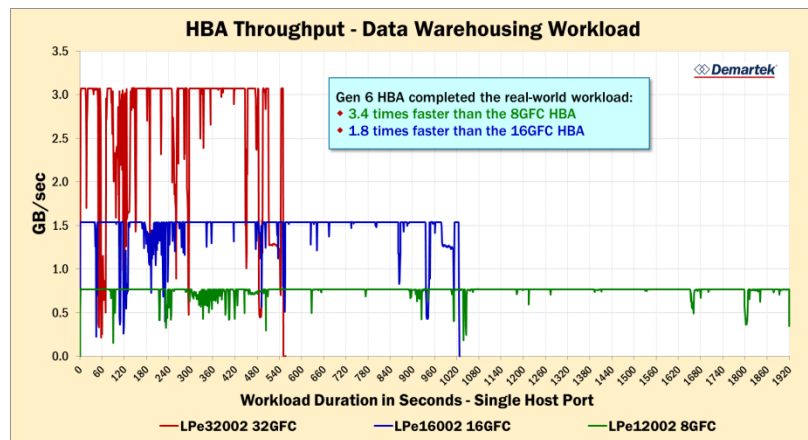
Executive Summary

Large enterprises choose Fibre Channel (FC) storage networking because of its proven performance, reliability and scalability for mission-critical workloads. Enterprise datacenters are increasingly turning to solid-state (flash) storage to improve storage performance, and they most frequently select Fibre Channel as the host interface to meet their flash storage requirements. In many cases, however, deploying solid-state storage moves the performance bottleneck to the storage network.

Demartek gained early access to the newest Gen 6 (32GFC) products from Emulex and Brocade and subjected them to a series of SQL Server data warehousing application and other tests.
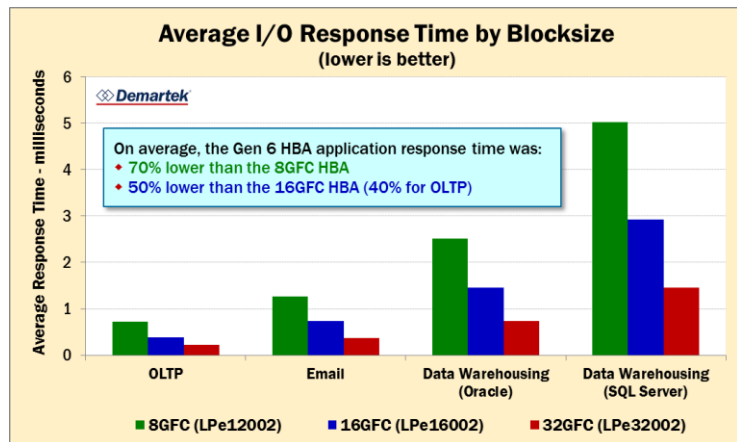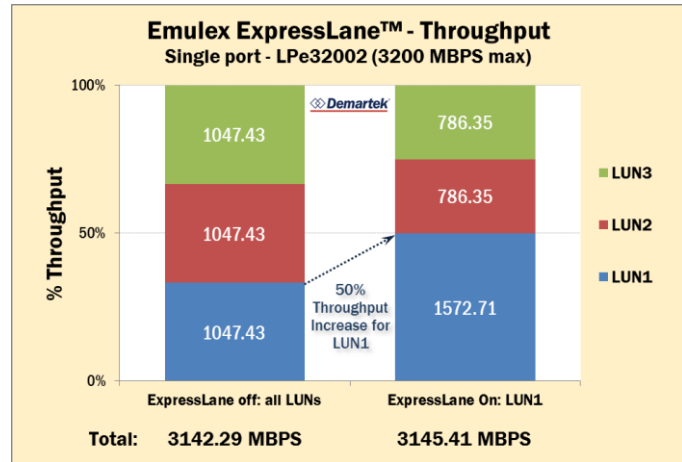

Key Findings

◆ Gen 6 products from Emulex and Brocade provide the powerful combination that can be used today to accelerate applications even with existing 8GFC and 16GFC storage arrays.

◆ The Emulex LPe32002 (32GFC) HBA reduced Microsoft SQL Server 2014 data warehouse workload query time by almost half compared to 16GFC and reduced it to a quarter compared to 8GFC connected servers.

◆ Latency was reduced by half for both target and initiator when compared to the LPe16002 (Gen5) HBA.

◆ The Emulex ExpressLane feature offers a prioritized write path through application servers and SAN fabrics for critical applications to more effectively use high performance tiered storage assets.

◆ Advanced features developed in conjunction with Brocade accelerate deployment and simplify support that integrates with Brocade Fabric Vision™.

◆ The Emulex LPe32000 series of adapters provides an easy upgrade path from previous generations of Fibre Channel (4GFC/8GFC) with forward/backward compatibility– using the same connectors, management, and cabling.

◆ In a separate test of the Emulex adapters, we observed substantial reductions in I/O response time as measured by the host server for the various application workloads, based on their block sizes.

More Information

To get additional information, please visit the following:

◆ **Emulex website:**
http://www.avagotech.com/company/blog/high-speed-networks-and-gen-6-fibre-channel-go-together

◆ **The complete report:**
http://www.demartek.com/Demartek_Emulex_LPe32000_Gen6_FC_Evaluation_2016-03.html