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Are There Eight Reasons to Move to 8Gb/s Now?

As most of you know, Fibre Channel transitions have typically been driven by the availability of target devices such as redundant array of independent disks (RAID), tape and virtual tape libraries (VTLs). The transitions to 8Gb will be different. Let's face it, we "marketing pukers" (my engineers tell me that is the best name for my species) are always looking for angles to sell, position and describe our value proposition to our markets. In 2009, it seems that the market reality and the hype curve are converging for 8Gb/s Fibre Channel - so here are my top eight reasons to move to 8Gb/s in 2009.

1 Intel® Xeon® 5500 processors - This is the first generation of processors from Intel designed with server virtualization in mind. The use of PCI Express 2.0, Intel Virtualization Technology for Directed I/O (VT-d) in virtualized server environments, Message-Signaled Interrupts eXtended (MSI-X) and Intel QuickPath Interconnect (QPI) technology for bandwidth intensive applications are built to leverage the performance of 8Gb/s Fibre Channel.

2 The Generation Gap - The reality is that not all data centers are built with generations of products that were purchased, built and designed together. The move to 8Gb/s Fibre Channel is also about avoiding a generational gap in your data center. Why run a system loaded-up with Xeon 5500 processors with a 4Gb/s Fibre Channel card not built to maximize and leverage your other investments? It would be like adding too much horse power to a car without also upgrading the transmission, brakes, tires and suspension. You will never be able to realize the benefits of the power.

3 Consolidation and Budget Cuts - This is not another attempt at deriving return on investment (ROI) rationalizations or green guilt. It is about doing more with less. If you move to 8Gb/s Fibre Channel now, you can use fewer Host Bus Adapters (HBAs) and switches to connect your servers, blades and clusters to storage. In the end, this will save on power, cooling, cables and rack space, which is great, but for the bottom-line folks out there, you also get more juice with less of a squeeze. It's that simple.

4 Resistance Is Futile - You know this transition is coming, and if you don't move now, you could be taking the risk of being stuck with out-of-date gear, services issues and end-of-life issues before your new server reaches its end-of-life. No one wants to spend the time to upgrade HBAs in the field, and it is much better to make the move now.

5 Virtualization Aggregation - According to IDC, the number of virtual machines (VMs) per server is expected to triple with the roll-out of Xeon 5500 processors. This means you will need three times the I/O performance, and if you know you are going to need it over the lifecycle of your new computer processing units (CPUs), it will cost less in the end to move to 8Gb/s Fibre Channel now rather than upgrading later.

6 Business Continuity and Service Level Agreements - When it comes to business continuity and Service Level Agreements (SLAs), less time spent moving data is a big win. Moving to 8Gb/s Fibre Channel reduces back-up and data migration windows, which provides greater availability of business applications, and helps to improve productivity and the organization's bottom line.

7 Investment Protection - 8Gb/s Fibre Channel is backward-compatible with 2Gb/s and 4Gb/s Fibre Channel. This means you can choose 8Gb/s now for your future while also protecting the past. Emulex HBAs are fully backward compatible with your 2 and 4Gb/s Fibre Channel installed base and feature one common driver across all Emulex HBAs.

8 The Target Devices Are Shipping - Finally, the targets are shipping from HP, EMC, NetApp and many others. They are not really the drivers this time, but they help complete the story and provide a nice symmetry to the implementation.

In the technology business, hype curves are often many years ahead of reality, and for 8Gb/s Fibre Channel, this was also true. But now, in 2009, the time for 8Gb/s Fibre Channel to transition into the realm of reality has arrived.



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