

HP Launches 8 Gb Solution for SMBs

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Abstract: HP has teamed with QLogic to deliver a pre-packaged 8 Gb Fibre Channel (FC) SAN for SMBs. This high performance solution was designed to be easy to deploy, configure and manage—which should help drive the adoption of virtualization services as well as greatly reducing backup windows in the SMB market.

Overview

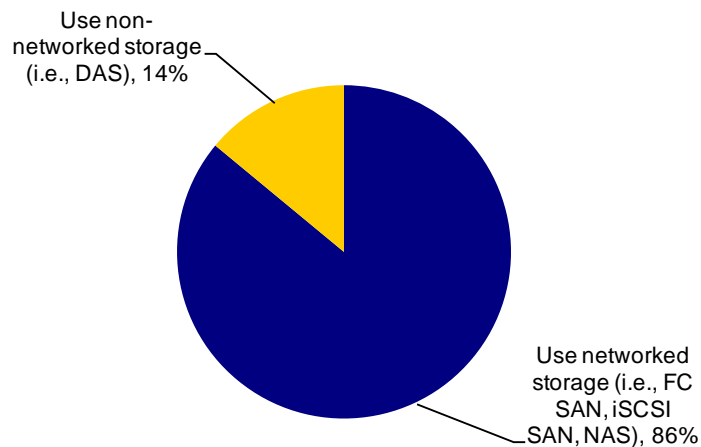
In order for any business to remain competitive, its IT department must respond to changing market dynamics quickly. Applications have to be developed faster, so companies are leveraging service oriented architectures (SOA) while building out composite applications to accelerate time to market. Rich Web 2.0 applications provide new collaboration opportunities for startups as well as traditional brick and mortar companies. Addressing market needs go hand-in-hand with application features and functionality, but time-to-market is always a given.

While IT labors to meet new business and application needs, they are often held back by an IT Achilles Heel: current data center infrastructure isn't capable of supporting these applications and organizations often need to adopt new technologies to accommodate them. Virtualization is a prime example of a technology that is driving data center transformation. With virtualization, server and storage services provide numerous benefits including greater availability, data mobility, faster provisioning times and greater scale and utilization—all while promoting greener IT.

While virtualized server and storage domains deliver great value in the data center, they require ubiquitous connectivity to maximize that value; thus most server virtualization deployments leverage networked storage. In a survey of 365 current server virtualization users in the SMB and enterprise market, ESG Research¹ found that 86% were using networked storage to support their environment (see Figure 1).

FIGURE 1. STORAGE ENVIRONMENTS SUPPORTING VIRTUALIZED SERVER DEPLOYMENTS

Current use of networked and non-networked storage to support virtual server environments. (Percent of respondents, N = 365)



Source: Enterprise Strategy Group, 2007

¹ ESG Research Report: *The Impact of Server Virtualization on Storage*, December 2007

Networked storage doesn't really describe what's going on here. ESG also found that of those organizations embracing networked storage, more than half (54%) had selected a Fibre Channel SAN for connectivity. Why Fibre Channel? The reason most often cited for selecting FC was that it offered the highest performance. This makes sense since server virtualization users are running 5, 10 or even 20 applications per physical server—driving the need for higher server to storage throughput. High performance Fibre Channel will also play an important role in reducing disk to disk backup windows when 8 Gb storage target support is available.

HP has integrated QLogic technology into a SMB solution

While server virtualization and Fibre Channel SANs form the nucleus of a scalable IT solution, many small organizations don't have the time or resources to integrate their own custom solutions. HP recognized this shortcoming and has wrapped QLogic technology with HP intellectual property to provide an affordable, high performance, end-to-end solution for the SMB market. HP is delivering this solution as the StorageWorks 8Gb Simple SAN Connection Kit, a package containing all the software, hardware and instructions needed to quickly and easily create a high performance 8 Gb SAN to support EVA and MSA environments. What makes this kit unique?

- **Deployment and management simplicity.** HP has a long history of supplying proven solutions to the SMB market and understands that SMB's place a high priority on ease-of-use. As such, this solution features simple deployment, a step by step process that leverages a wizard-based graphical user interface (GUI), and a detailed Quick Start Guide. Delivered with software that auto discovers all supported components from the HBA to the array, configuration and ongoing management tasks are greatly simplified. Given that an SMB may have only one or a just a few resources available for the management of an entire environment, having a single interface reduces confusion and accelerates troubleshooting.
- **Technology built to scale.** As storage continues to grow at a rapid pace and new applications require higher throughput, high performance 8 Gb FC will help to alleviate bottlenecks and provide additional room for growth. Inter-switch links (ISL) that provide 8 Gb service provide critical bandwidth for expansion or secondary sites while advanced services offering application QoS further enhance the functionality of this solution.
- **Advanced "virtualization ready" support.** Recognizing the need that SMB's will want to have highly virtualized environments, this solution provides several advanced features that will deliver additional value when supported by server virtualization vendors. These features include dynamic provisioning without restrictions on zoning and LUN masking, support for N_Port Identification Virtualization (NPIV)—which allows a single physical port to be assigned multiple, unique virtual ports—and security features that protect individual data paths.

HP plans to deliver this solution through its extensive channel program, providing an upgrade path for existing SMB customers with HP storage and/or servers. This also creates a new market opportunity for small organizations to future proof their storage network environment in anticipation of server virtualization deployments.

The Bottom Line

Virtualization services are changing the face of today's data center. Individual islands of information are being consolidated and networked to enable high availability, stronger business continuity and improved disaster recovery. These requirements aren't exclusive to the enterprise, but SMB organizations can only benefit if server virtualization and the associated storage are delivered in easy-to-deploy and manage solutions.

Do SMB organizations really need an 8 Gb storage network? Previous upgrades from 1 to 2 Gb and 2 to 4 Gb were done mainly as simple technology refreshes. Users might as well have the latest and greatest and customers could always take advantage of 8 Gb ISLs—a traffic aggregation point. While this same aggregation is taking place at the server level, virtualization services will be driving 5, 10 or 20 applications and creating bottlenecks even at 4 Gb speeds. With virtualization on the horizon, deploying 8 Gb HBA and switch technology today will future proof the environment while delivering fully backward compatibility for existing infrastructure.

HP leveraged its years of experience and solution-focused software with a QLogic technology platform to deliver a high performance FC SAN solution closely tied to HP's midrange and entry storage arrays (EVA and MSA). This has the potential to be very successful if HP can educate and train its hundred thousand plus channel partners on the benefits of this solution. If HP and its partners can provide additional services to accelerate the adoption of server virtualization with SMB customers, the ability to deliver an entire package would be compelling to a time- and resource-constrained SMB market. If HP can identify SMB customers with future requirements to deploy high performance server virtualization technology, the HP offering provides them with a turnkey affordable solution.