

HP® Dual Port 10GbE Server Adapter Enhances HP VirtualSystem VS1 for VMware®

Three market-leading companies deliver virtualization as a plug-and-play solution

At a Glance

Deploying virtualization solutions is now easier with pre-tested, pre-configured solutions from market-leading companies Emulex, HP and VMware. With HP VirtualSystem VS1 for VMware (HP VS1 for VMware), data center managers can now reduce their deployment time while achieving optimum performance for their critical business needs.

Products

- HP Dual Port 10GbE Server Adapter (based on Emulex OneConnect™ technology)
- HP ProLiant DL380 G7 rack server
- VMware vSphere 5

HP VirtualSystem VS1 for VMware (HP VS1 for VMware) is a pre-configured, HP factory integrated solution that greatly simplifies virtualization by enabling you to virtualize your enterprise with essentially plug-and-play technology. Based on HP ProLiant DL380 G7 rack servers with VMware vSphere 5 and vCenter,™ HP VS1 for VMware is an ideal balance of performance, scalability and expandability. The HP Dual Port 10GbE Server Adapter enhances HP VS1 for VMware by providing leading-edge connectivity and great value for virtualized environments.

As an option card for the HP DL380 rack servers, the HP Dual Port 10GbE Server Adapters provide:

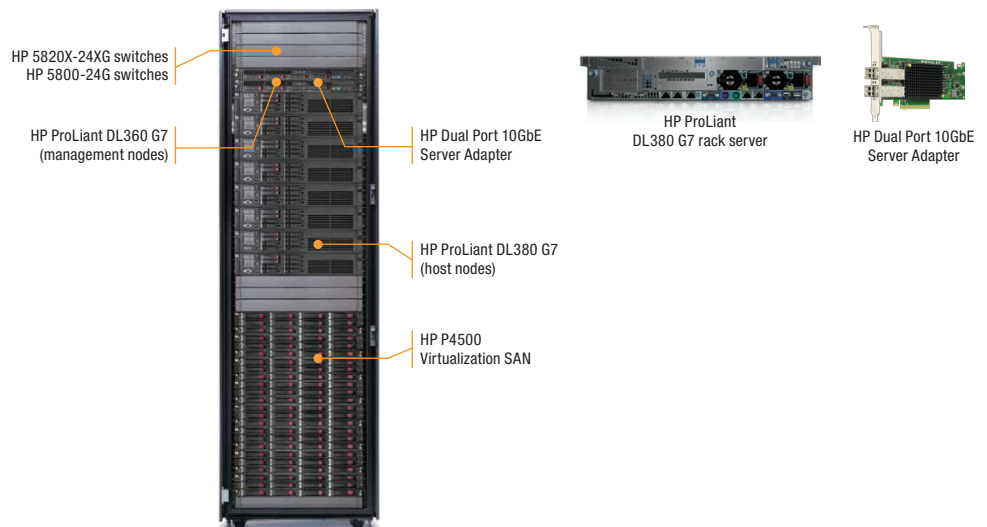
- High performance offload for TCP/IP, TCP/IP Offload Engine (TOE), iSCSI and Fibre Channel over Ethernet (FCoE) protocols over a common 10GbE network infrastructure*
- Low power usage and reduced costs for energy and cooling

Solution Details

The HP dual port 10GbE network adapter is based on the Emulex OneConnect Universal Converged Network Adapter (UCNA) technology. These adapters support TCP/IP and FCoE or accelerated iSCSI connectivity with high performance protocol offloads that optimize server efficiency and maximize server virtualization ratios.

Included in this solution is the HP P4500 G2 SAN Solution, optimized for virtual servers, which includes an upgrade kit to connect to a 10GbE iSCSI network. Emulex provides the 10GbE PCIe network interface card (NIC) option card included in this upgrade kit. This solution allows you to scale capacity and performance without incurring downtime or performance bottlenecks. Moreover, Emulex OneConnect UCNA technology fully supports HP's FlexFabric Converged Infrastructure, a next-generation, highly scalable data center fabric architecture and a technology layer in the HP Converged Infrastructure architecture.

HP VS1 for VMware takes virtualization and storage to the next level, with a pre-configured, HP factory integrated solution.



* HP VS1 for VMware is available for iSCSI

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Solution Benefits

When you deploy HP VS1 for VMware with the HP Dual Port 10GbE Server Adapter, you get the following benefits:

Benefit	HP VS1 for VMware	HP Dual Port 10GbE Server Adapter (NC552SFP)
Superior performance	Optimized for maximizing VMware performance, agility and efficiency; pre-installed VMware vSphere 5 and vCenter continues to set the standard in virtualization, delivering better application performance and availability for all business-critical applications	Full 20Gbps bidirectional Ethernet bandwidth per port; Single Root I/O Virtualization (SR-IOV) support improves I/O performance with virtual server deployments; protocol offloads support vEngine™ technology that enables I/O for more virtual machines per server
Simple deployment	Complete, easy-to-order virtualized infrastructure; rapid installation; unified support	Reduce hardware requirements and save up to 30% on adapter cards, switch ports and cables for network and storage traffic
Secure transmission	Applications have continuous data availability in the event of a disk, controller, storage node, power, network or site failure	End-to-end data protection with hardware parity, CRC, ECC and other advanced error checking and correcting
Optimized solution	Pre-configured for a wide range of needs; performance tested for typical workloads; exceptional power and cooling efficiency; HP integrated management enables you to manage your entire HP VS1 for VMware solution, including servers, storage and networking	Reduce the number of adapter cards and switches, resulting in savings up to 40% for power and cooling; one management console for network and storage adapters (HP Insight Control suite with enhanced Integrated Lights-Out 3 (iLO 3) remote management and centralized enterprise I/O management with Emulex OneCommand™ Manager)
Flexible options	<p>Customizable ordering and simple upgrade options; scale up and/or out to handle future growth; HP TippingPoint options:</p> <ul style="list-style-type: none"> · Complete set of security solutions that address today's sophisticated security threats at the perimeter and interior of your business · VMware vShield:™ excellent data protection that integrates with HP TippingPoint security solutions 	Full support for TCP hardware offloads, including TOE; uses the same 10GbE infrastructure as other HP CNAs that are based on OneConnect, enabling simplified version management and testing based on common NIC drivers, common firmware and boot code, consistent NIC teaming and consistent TCP offload support
It Just Works!	Emulex has supplied products to HP customers for over 14 years and across ten generations of products and platforms with backward compatibility; backed by HP leadership in physical and virtualized IT and experience with VMware; built by HP Factory Express; custom integrated with your environment by HP Technical Services consulting	Backed by field-proven HP and Emulex reliability and support; leveraging ten generations of advanced, field-proven Fibre Channel host bus adapter (HBA) technology, HP 10GbE network adapters are based on the Emulex OneConnect architecture and meet the robust interoperability and reliability requirements of corporate data centers

Conclusion

The Emulex OneConnect family of 10GbE UCNAs leads the industry with fast performance and flexible connectivity. The HP NC552SFP, based on the OneConnect 10GbE UCNA product platform, is a 10GbE PCIe NIC option adapter for HP ProLiant rack servers. HP VS1 for VMware combines the HP NC552SFP, HP ProLiant DL380 rack server and VMware vSphere 5 to create a new standard for data center virtualization with industry-leading I/O capacity and throughput and support for the greatest number of virtual machines.



vmware®



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