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# **News Advisory**

# HP and Intel Drive New Possibilities for the Software-defined Data Center

Software-defined storage combats server sprawl and drives up virtualization efficiency, no storage expertise required

PALO ALTO, Calif., Sept. 23, 2014 — HP today announced that HP StoreVirtual Virtual Storage Appliance (VSA) software is now available at no cost to customers purchasing servers based on the latest generation Intel<sup>®</sup> Xeon<sup>®</sup> Processor technology, including all models of HP ProLiant Generation 9 (Gen9) Server.

Data center virtualization is the single fastest growing infrastructure technology trend,<sup>1</sup> but realizing its intended benefits—particularly as infrastructure scales—remains a major challenge. This is particularly true of small and midsize businesses (SMBs) and enterprise remote and branch offices (ROBOs), which typically lack budget and expertise to deploy and manage shared storage to increase virtualization efficiency. As a result, these customers need innovative ways to increase IT efficiency and agility using existing staff and equipment, particularly as their application and data management needs grow.

To address this, HP has expanded its commitment to providing cost-optimized storage for the Software-defined Data Center (SDDC) by integrating HP StoreVirtual VSA software into HP ProLiant Server firmware and collaborating with Intel® to drive software-defined storage (SDS) adoption. Through this program, over the next 12 months HP and Intel will distribute more than X Exabytes of SDS capacity at no additional charge to Xeon®-based server customers. In addition, new high-capacity HP D3000 Disk Enclosures with 12 Gb SAS interconnects provide the simplest and most efficient way for HP server customers to support virtualized infrastructure growth via low-cost, high-performance capacity that provides an antidote to server sprawl.

"Lack of shared storage is the most common roadblock to virtualization success," said David Scott, senior vice president and general manager, HP Storage. "However, deploying shared storage no longer requires a dedicated appliance. High-performance, multi-core Intel<sup>®</sup> Xeon<sup>®</sup> Processor technology within HP ProLiant Servers allows small sites to use HP StoreVirtual VSA

<sup>&</sup>lt;sup>1</sup> Taneja Group, "Protocol Choices for Storage in the Virtual Infrastructure", June 2014.

software to serve applications and run data services on the same hardware, now with XX percent more/less YY."

"Intel processors are the smart choice for a software-defined world," said Intel Exec, title. "Purpose-built to support the agile, efficient data center, the latest generation of Intel<sup>®</sup> Xeon<sup>®</sup> Processors provide the optimal platform for delivering intelligent storage while meeting compute and networking needs across the software-defined data center."

#### "One-Click SAN" gives SMBs and ROBOs a simple path to virtualization efficiency

To date, HP has distributed over 3 Exabytes of SDS in the form of more than 1 million VSA licenses. The new HP ProLiant Intelligent Provisioning feature makes deploying 1TB of fully functional shared storage as simple as checking a box during HP ProLiant Server installation and setup. Doing so provides new HP ProLiant Gen8 and Gen9 customers with a "One-Click SAN" in just minutes, complete with virtualized servers and shared storage. This gives budget-constrained organizations the ability to increase virtualization efficiency by deploying shared storage without additional expense, equipment, or storage expertise.

Once provisioned, HP StoreVirtual VSA protects virtualization efficiency by supporting all x86based servers as well as hypervisor-attached external storage platforms. This allows SMBs and ROBOs to transform capacity trapped in individual hardware silos into hypervisor-agnostic shared storage that can scale to 1.6PB with the purchase of additional VSA capacity licenses. With this solution, customers can reduce the cost of deploying resilient shared storage by up to 80 percent and physical footprint by 50 percent as compared to deploying dedicated storage hardware.<sup>2</sup>

#### Increasing hardware utilization prevents costly server sprawl

To meet growing business demands, HP customers can take advantage of the ultra low-cost capacity provided by HP D3000 Disk Enclosures to simply and cost-effectively scale HP ProLiant, HP BladeSystem, and HP MSA Storage to support SDS without server sprawl. [Can we quantify how this solution combats server sprawl? i.e. the footprint savings of using enclosures instead of purchasing additional physical servers and/or arrays?].

With modern host interfaces and X percent greater throughput, HP D3000 Disk Enclosures provide a modular platform for scaling virtual infrastructure with no storage expertise required. Support for 12 Gb SAS doubles transfer rate<sup>3</sup> and provides investment protection as the industry moves towards this standard. The resulting solution offers simple setup, configuration, and administration of shared storage using familiar and common HP ProLiant management tools. Capacity expansions and hardware maintenance become simpler via the use of HP SmartDrive carriers, which support a single set of common drives between D3000

<sup>&</sup>lt;sup>2</sup> HP StoreVirtual VSA CapEx and OpEx compared to traditional 2 server cluster plus dedicated dual controller array and FC network.

<sup>&</sup>lt;sup>3</sup> Compared to 6Gb solutions.

enclosures and HP ProLiant Gen8 and Gen9 Servers. [Placeholder for additional 12 Gb end-toend benefits].

## When it comes to the Software-defined Data Center, it's what's inside that counts

HP is the only server vendor to include SDS at no additional charge with the purchase of its servers. Through joint effort with Intel<sup>®</sup> and a new HP direct reseller partner program, HP has extended this offer to all customers purchasing servers based on the latest generation of Xeon<sup>®</sup> Processor technology, regardless of vendor.

The multi-core technology and superior performance of Intel® Xeon® technology is a key enabling technology for the software-defined data center. Thanks to improvements built into the latest generation of Intel processors, HP ProLiant Gen9 Servers deliver [50 percent greater performance or some other metric from Load DynamiX testing]. Intel® Xeon® support for increased performance, faster encryption, and DDR4 memory enable HP ProLiant Gen9 Servers to deliver greater VM density, 9-14 percent greater throughput, and support storage scalability without sacrificing performance. Intel® Platform Storage Extensions and the Intel® Intelligent Storage Acceleration Library (ISA-L) deliver additional benefits that maximize utilization of available processor cores to drive virtualized infrastructure efficiency in the SDDC.

"As virtualization has become ubiquitous, our customers need flexible and open options for coping with increasing workload diversity and unknown future demands," said XYZ person at SHI. "With VSA software and Xeon-based servers, HP and Intel take the worry out of converging applications and data services on the same hardware to drive the virtualization efficiency in a manner ideally suited to small and midsize environments."

# Pricing and availability<sup>(x)</sup>

- HP ProLiant Gen8 and Gen9 Servers are currently available worldwide starting at XXX.
- HP D3000 Disk Enclosures are currently available worldwide starting at XXX.
- The 1TB HP StoreVirtual VSA software license downloadable at [URL] at no charge.

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[Footnotes to be converted to Endnotes upon finalization]

[Trademarks statement]

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