

Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304

hp.com

## From Zero to Profits in 15 Minutes with HP Hyper-Converged Appliance for VMware vSphere

Virtualization continues to be the fastest growing infrastructure trend<sup>(2)</sup>, but the complexity of building a traditional virtualization infrastructure from individual components is fueling a 33% compound annual growth rate (CAGR) in the integrated systems market, which IDC estimates will grow from \$5.4 billion in 2013 to \$14.3 billion by 2017<sup>(3)</sup>.

HP is leveraging its industry leading expertise and ability to integrate existing its first offering in the rapidly growing hyper-converged infrastructure market; a turnkey system that combines the industry's leading software-defined storage and x86 computing platforms<sup>(1)</sup> with robust VMware vSphere<sup>™</sup> integration and wizard-driven startup to enable complete deployment of virtualized compute and storage infrastructure in under 15 minutes.

Virtualization continues to be the fastest growing infrastructure trend<sup>(2)</sup>, but the complexity of building a traditional virtualization infrastructure from individual components is fueling a 33% compound annual growth rate (CAGR) in the integrated systems market, which IDC estimates will grow from \$5.4 billion in

2013 to \$14.3 billion by 2017<sup>(3)</sup>. Hyper-converged systems are part of this trend and represent the next wave of converged infrastructure as midsize customers and enterprise remote and branch offices (ROBOs) look to accelerate time to value; in fact, the hyper-converged system market is expected to grow 2.5x in 2014.

To meet this demand, HP is introducing the StoreVirtual HC2400 and HC2410 Hyper-Converged Systems as the first of a new family within the HP StoreVirtual portfolio. The new hyper-converged system line-up sits alongside two other HP StoreVirtual families: the software-defined Virtual Storage Appliances (VSAs) and the StoreVirtual 4000 appliance family. The hyper-converged appliance family differs from these existing StoreVirtual product lines in that they offer a single platform that combines compute, storage, hypervisor and management capabilities into a single, service-oriented and scale-out infrastructure resource. However, all three families offer 100 percent shared data services, including replication, federation and transparent site failover—an industry-first for the Software-Defined Data Center (SDDC).

"Small and midsize enterprises are looking for foolproof, right-sized solutions that can deliver the benefits of converged infrastructure with absolute simplicity and accelerated time-to-value," said David Scott, senior vice president and general manager, Storage, HP. "The HC2400 is a software-defined data center in a box based on end-to-end HP innovation."

"Something about the business opportunity," said Somebody Important, important title, Avnet. "And how it's going to make everyone a lot of money."

## Deep hypervisor integration and best practice design accelerates deployment

The knowledge and time required to discreetly manage servers, hypervisors, and storage is a barrier that has prevented many organizations from realizing the benefits of server virtualization. The HP StoreVirtual HC2400 is designed from the ground up to simplify infrastructure deployment to support virtualized, business-critical apps and virtual desktops.

In minutes, customers can be ready to load virtual machines on a single device that incorporates fully clustered, highly available servers and storage with an all-inclusive, enterprise-class feature set. The system is pre-sized for either numbers of users, transactions-per-second, virtual desktops, or virtual servers. The HC2400 arrives pre-configured and features a quick start wizard that only requires X clicks and entry of IP addresses, credentials, and VMware vSphere license information to get up and running.

Centralized management of compute, storage, and virtual machines from inside VMware vCenter Server<sup>™</sup> assures that an IT generalist can manage the entire virtual infrastructure from a single interface without any specialized server, storage or virtualization expertise. Once the cluster-aware startup wizard completes, administrators are able to:

- Provision virtual machines directly from VMware vCenter Server
- Access pre-configured dashboards to visualize system health and performance
- Use optional VMware vCenter Operations Manager (vCOPS) for VM-level insight
- Manage all hyper-converged systems and traditional virtual server systems across all sites from a single console
- Replicate from one hyper-converged system to another, or to a low-cost server/VSA combination for flexible disaster recovery

## Hyper-convergence with built-in performance and resiliency

A traditional siloed infrastructure forces customers to go through major upgrades as they outgrow systems. In addition, many midsized customers are forced to trade affordability for the high availability and flash storage capabilities they need for critical applications.

The HP StoreVirtual HC2400 family of Hyper-Converged Systems provides scaleout flexibility to handle changing workloads while enabling linear scaling of compute and storage resources. The solution features four individually serviceable compute nodes in a 2U chassis. Each node is configured with:

- 20 CPU cores @ 2.8GHz and 256GB RAM per node
- 2x 400GB Solid State Drives, 4 x 1.2TB SAS Disk Drives (HC2410)
- 6 x 1.2TB SAS Disk Drives (HC2400)

- VMware vSphere x.x
- StoreVirtual VSA software
- OneView for VMware vSphere
- OneView InstantON
- Factory installation of all software

Customers have a choice between the HC2410, a hybrid, auto-tiering model with SAS and SSD capacity to serve performance- and latency-sensitive workloads, and the HC2400, an all-SAS model to meet larger capacity requirements at a lower cost per capacity. HC2400 appliances can be clustered together up to 32 nodes to pool capacity and performance capabilities. Multiple clusters can be managed from the same console, and adding systems to the cluster is quick and easy, with each additional system seamlessly adding the power of four servers and associated storage.

With over 1 million HP StoreVirtual software-defined storage license distributions, millions of virtual machines running on HP ProLiant Servers, and over 30,000 HP OneView for VMware vCenter downloads, customers can be confident that this new virtualization platform builds on proven virtualization expertise<sup>(4)</sup>.

Unlike less mature virtual hyper-converged solutions, the HC2400 includes a rich set of data services as standard capabilities in every system. To address the need for constant application access, the HC2400 features stretch cluster capabilities that support business continuity by keeping applications online during appliance, rack-level, or site-wide outages. The HC2400 is built on HP StoreVirtual technology certified by VMware as a vSphere Metro Storage Cluster (vMSC) solution and integrated with VMware vCenter Site Recovery Manager for transparent multi-site high availability and workload mobility. Automated, sub-volume auto-tiering, thin provisioning, and space reclamation provide storage efficiency and help lower data storage costs without sacrificing performance.

To provide flexibility to meet changing business needs, data volumes can be non-disruptively replicated and migrated from one HC2400 to another—or to

any x86-based server running any major hypervisor and HP StoreVirtual VSA using built-in HP Peer Motion.

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

• The HP StoreVirtual HC2400 and HC2410 Hyper-Converged Systems will be available worldwide in December 2014.