Reduce complexity in the virtualized data center

Server virtualization with HPE Software-Defined Storage

The right environment for software-defined storage

A healthy business relies on data. And you do not need a statistician to tell you that the data you deal with is big and growing. Many organizations have transitioned to virtualized environments to handle data growth. That is a smart move. With shrinking resources and unpredictable workloads, the benefits of virtualizing applications are undeniable. What is missing is the same storage efficiency that your company realizes with virtual servers.

Although the concept is simple, when it comes to deployment and device management, a virtualized data center can be complicated, challenging even the most experienced IT staff. Businesses today need a flexible, easy-to-manage solution that can address these challenges, a virtualized, scale-out storage architecture that helps you stay on top of growth, efficiency, and budget demands. One approach that’s rapidly gaining acceptance is to minimize the hardware footprint in your data center, filling server bays with high capacity storage drives. This option is not only economical, it sets up an ideal environment for the use of software-defined storage (SDS).

What is software-defined storage?
SDS is storage functionality not delivered in a specific chassis—it is delivered as software. Instead of deploying storage-specific hardware, you can consolidate virtual machines (VMs) onto the same servers as your applications. This easy-to-deploy storage solution converges applications and data on the same platform to reduce your hardware footprint by half without losing any required storage functionality.1

IT resource challenges

Data will continue to grow. How do you size storage to stay ahead?

Budgets are tight. How can you deploy the most cost-effective storage?

Data protection is necessary. How can you ensure data is safe from disaster?

Management is already complex. How can you simplify your infrastructure?
Open platform SDS solutions let you:
- Scale-out storage on demand as needs arise
- Increase utilization of servers and storage
- Protect data better with inherent disaster recovery capabilities
- Reduce SAN administration expertise requirements
- Manage your storage infrastructure through a simple, hypervisor-integrated solution
- Reduce your investment in new storage technologies by 80 percent
- Save up to 60 percent in energy costs compared to physical storage arrays

Converged performance

**HPE StoreVirtual VSA**
StoreVirtual VSA is a virtual storage appliance, an agile, scalable solution designed to unlock the full benefits of server virtualization. It transforms internal or direct-attached storage into a fully featured shared storage array without the cost and complexity of traditional storage. Open platform technology means StoreVirtual VSA can run on most x86-based hardware—providing you with investment protection, whether you deploy it on older equipment that you are ready to repurpose, or on new equipment to create an efficient, centrally managed storage solution.

StoreVirtual VSA sets up enterprise-level SAN functionality inside your server, delivering rich data services without dedicated storage hardware. Tight storage management integration with VMware® and Microsoft® ensures easy deployment and data management from vSphere or Hyper-V servers.

StoreVirtual VSA's unique scale-out architecture lets you add storage capacity on the fly without compromising performance while its built-in high availability and disaster recovery features enhance business continuity for the entire server environment.

**HPE Hyper Converged 200**
Leveraging the power of software-defined technology to tightly integrate compute, network, storage, and management resources, Hyper Converged 200 appliances include everything you need in a 2U chassis. Proven HPE ProLiant and StoreVirtual VSA technologies converge in this hyper-converged appliance to yield compute density and efficiency for scale-out workloads. This simple, pre-configured system is a software-defined data center (SDDC) in a box, which can be deployed in as little as 15 minutes.

Centralized management of compute, storage, and VMs from inside VMware vCenter Server assures that an IT generalist can manage the entire virtual infrastructure from a single interface.

**Backing up your data**
HPE SDS shared storage arrays do not preclude data protection solutions—in fact, they are tightly integrated.

HPE StoreOnce VSA is a virtual backup and deduplication appliance, excellent for backing up a smaller site or moving data from remote sites to a centralized data center. With HPE StoreOnce Catalyst, deduplicated data can be moved seamlessly across the enterprise without the need to rehydrate, and all data movement is controlled by your backup application from a single console.

Veeam Backup and Replication software is tightly integrated with StoreVirtual VSA and provides built-in, enterprise-class data protection. Veeam adds a level of intelligence into StoreOnce VSA snapshots that deliver:
- Simple configuration
- Fast granular recovery
- Near continuous data protection
- Automated backup verification

The Veeam and HPE solution provides a multi-tiered recovery strategy to meet any service-level agreement (SLA) requirement.

Learn more at hpe.com/storage/sds

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1, 2, 3 Based on HPE internal comparative analysis of publicly available data from major competitors, August 2013

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