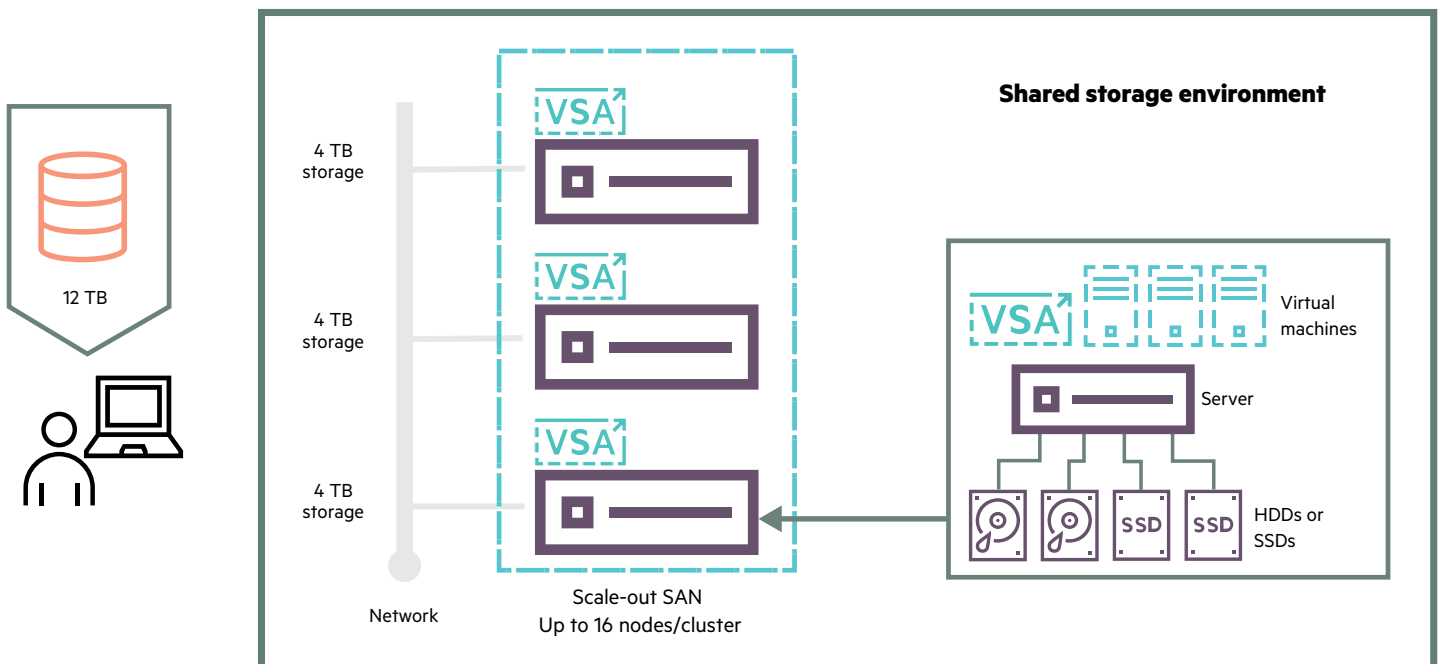


Create a simple virtual storage array with HPE StoreVirtual VSA

Blueprint 3: Fault-tolerant shared storage for virtualized environments



Target customer

Businesses focused on:

- Server and storage consolidation
- Simplified infrastructure management
- Cost reduction
- Migration to virtualized environment with pay-as-you-grow storage

Capacity range

- 12 TB to 64 TB¹
- Upgradable for up to 800 TB

Software-defined storage products

- HPE StoreVirtual Virtual Storage Array (VSA)

Challenges with storage siloes

Physical systems have clear limitations in capacity and adaptability, posing challenges for IT administrators in environments with limited data center space and fluctuating workloads. Server virtualization, the creation of virtual rather than physical servers, addresses these limitations by allowing multiple operating systems and applications to run on a single host. Yet in spite of the widespread implementation of virtual machines (VMs), storage often remains siloed in physical devices, which can be difficult to manage and scale.

SDS blueprint for creating a virtual storage array

IT managers who take advantage of their virtualized infrastructures for data storage stand to gain enormously from software-defined efficiency, flexibility, and scalability. Install HPE StoreVirtual VSA on three or more servers, and leverage your current VMware vSphere®, Microsoft® Hyper-V, or Linux® KVM hypervisors to create VMs. StoreVirtual VSA transforms available disk capacity into a fully featured, shared storage array inside your servers without the cost, complexity, or increased data center footprint of traditional storage. Cluster the

¹ Actual usable capacity may vary

Resources

[HPE StoreVirtual VSA design and configuration guide](#)

[User Support Community Forum for VSA](#)

Solution briefs

[Reduce complexity in the virtualized data center: Server virtualization with HPE software-defined storage](#)

[Consolidate servers and storage at remote locations with HPE SDS: Fault-tolerant software-defined storage](#)

[Boost enterprise application performance with HPE SDS: Avoid downtime and overprovisioning of Microsoft applications](#)

[Scaling up performance and VDI management with HPE SDS: Streamline virtual desktop environments](#)

[Simple cloud storage deployment and management: HPE Storage for OpenStack cloud environments](#)

Product information

Servers

[HPE ProLiant Tower Servers](#)

[HPE Rack Servers](#)

[HPE BladeSystem](#)

Storage

[HPE StoreVirtual VSA Software QuickSpecs](#)

Hyper-converged appliances

[HPE Hyper-converged Systems](#)

Applications

[VMware® virtualization software](#)

[QuickSpecs](#)

[Microsoft Windows Server 2012 R2](#)

[QuickSpecs](#)

^{2,3} Based on HP (now Hewlett Packard Enterprise) internal comparative analysis of publicly available data from major competitors, January 2015

disks together, and you have a fault-tolerant server and storage environment, which provides intelligent data services such as data protection, replication, and thin provisioning.

Your shared storage system allows you to:

- Reduce your investment in new storage technologies by up to 80 percent²
- Save up to 60 percent in energy costs compared to physical storage arrays³
- Manage servers, storage, and networking through a single console
- Protect data better with inherent disaster recovery capabilities
- Scale-out storage on demand as needs arise

Open platform technology means StoreVirtual VSA can run on most x86-based hardware—providing 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.

Example configuration

This simple blueprint can be configured using the components listed below. Your environment and workload may require a modified set of components.

Storage software

- One three-pack software license: HPE StoreVirtual VSA 2014 Software 4TB 3 Pack 3-year E-LTU (TC484AAE)
- HPE StoreVirtual VSA software (version 12.5 or higher)
- HPE StoreVirtual Centralized Management Console (CMC)
- VMs to support storage capacity

Hardware

Three x86 industry-standard servers, each including (minimum requirements):

- Two virtual CPUs with 2 GHz
- 4 GB memory
- One or more disk drives (HDD, SSD, or a combination)

CONFIGURATION OPTIONS

VMware vSphere	VMware vSphere 5.0 update 1 and higher, vSphere 5.1, vSphere 5.5, and vSphere 6.0
Microsoft Hyper-V	Microsoft Windows Server® 2008, 2008 R2, 2012, and 2012 R2 Datacenter Edition Reseller Option Kit licenses
Linux KVM	Linux CentOS 6.6, 6.7, 7.0, Red Hat® Enterprise Linux 6.6, 6.7, 7.0, Ubuntu 14.04
Scale-out storage	For increased VSA storage capacity, select from the following software licenses: <ul style="list-style-type: none">• HPE StoreVirtual VSA 2014 Software 4TB 3 Pack 3-year E-LTU (TC484AAE)• HPE StoreVirtual VSA 2014 Software 10TB 3-year E-LTU (TC486AAE)• HPE StoreVirtual VSA 2014 Software 10TB 500 Pack 3-year E-LTU (TC497AAE)• HPE StoreVirtual VSA 2014 Software 50TB 3-year E-LTU (TC499AAE) Additional multi-packs, five-year licenses, and license upgrade kits also available. Contact your sales representative or refer to HPE StoreVirtual VSA software QuickSpecs for details.

Learn more at
hpe.com/storage/sds



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