HP StoreVirtual VSA Software



Virtual arrays for virtual servers

HP StoreVirtual VSA transforms your server's internal or directattached storage into a fully-featured shared storage array without the cost and complexity associated with dedicated storage. StoreVirtual VSA is a virtual storage appliance optimized for VMware vSphere and Microsoft Hyper-V environments. It creates a virtual array within your application server and scales as storage needs evolve. The ability to use internal storage within your environment greatly increases storage utilization, and eliminates the costs and complexity associated with dedicated external storage. The unique scaleout architecture offers the ability to add storage capacity on-the-fly without compromising performance. Its built-in high availability and disaster recovery features ensure business continuity for the entire virtual environment. A straightforward and simple management console allows the administrator to manage all StoreVirtual products, physical and virtual, regardless of their physical location.

Key features and benefits

Transform your internal storage into a shared resource

- Enjoy all the benefits of traditional SAN storage without a physical SAN. StoreVirtual VSA allows you to build enterprise level SAN functionality into your server infrastructure to deliver lower cost of ownership and superior ease of management.
- Give new life to your existing servers by virtualizing your environment and using StoreVirtual VSA to convert disks in your servers into a new tier of storage.
- Use StoreVirtual VSA with solid-state drives (SSDs) to provide a high-performance storage solution in your environment. You can create an all-flash tier with VSA for maximum performance or use HP StoreVirtual Adaptive Optimization to automatically migrate only the data that needs the best performance to SSD.
- Provide the dedicated performance required for your primary site, and deliver fully featured shared storage and disaster recovery for your remote sites with StoreVirtual VSA.
- With tens of thousands of systems deployed in production, HP StoreVirtual VSA is the solution trusted by Fortune 500 companies and small businesses alike to deliver enterprise storage features without a SAN.



Affordable enterprise functionality with comprehensive feature set

- Network RAID stripes and protects multiple copies of data across a cluster of storage nodes, eliminating any single point of failure in the StoreVirtual VSA array. Applications have continuous data availability in the event of a disk, controller, storage node, power, network, or site failure.
- Create availability zones within your environment across racks, rooms, buildings, and cities
 and provide seamless application high availability with transparent failover and failback
 across zones—all automatically.
- Scale-out storage architecture allows the consolidation of internal and external disks into a pool of shared storage. All available capacity and performance is aggregated and accessible to every volume in the cluster. As storage needs grow, StoreVirtual VSA can scale out while remaining online.
- Reservationless snapshots and thin provisioning allocate space only as data is written without requiring pre-allocation of storage, raising the overall storage utilization and efficiency of the virtual environment. Snapshots create thinly provisioned, instant point-in-time backups of data on a per-volume basis.
- StoreVirtual VSA is tightly integrated with storage management functions of VMware and Microsoft applications. For example, the Remote Copy feature enables centralized backup and disaster recovery on a per-volume basis and leverages application integrated snapshots for faster recovery.

Scale from few servers to multiple sites and from virtual to physical arrays

- Add more internal storage capacity to the cluster by simply adding servers with StoreVirtual VSA installed. No external SAN required: Create shared storage out of internal or external disk capacity (DAS, SAN; FC or iSCSI).
- Start with a few servers and grow company-wide to remote/branch offices. Deploy and manage easily on any vSphere or Hyper-V server locally or from a remote location. Use the simple and quick wizard driven installation or scriptable installs for automated repeatable deployments.
- Simplified management: All StoreVirtual VSA nodes in your environment, onsite, or across multiple sites, are managed from the Centralized Management Console (CMC) for simple, easy-to-manage storage. The CMC features a simple, built-in best practice analyzer and easy-to-use update process.
- Avoid up front storage costs by using VSA on existing disk storage today; then move to a
 physical LeftHand array as your storage needs evolve. StoreVirtual VSA seamlessly migrates
 all data to any LeftHand array with Peer Motion functionality.
- Maximize storage utilization by deploying high-performance physical arrays at the main site and cost-effective virtual appliances at remote sites. Use plug-ins for VMware vCenter and Microsoft Systems Center to centrally administer both VMs and storage.

HP StoreVirtual VSA software

Technical specifications Hardware support Runs on all HP ProLiant or third-party servers and c-Class server blades certified with VMware ESX or Microsoft Hyper-V Warranty standard statement 3-year HP software support standard; 9x5 business hours phone support (software technical support and software product and documentation updates)

h18000.www1.hp.com/products/quickspecs/13255_div/13255_div.pdf

The total package—solution value statements

QuickSpecs

- Gain the benefits of a SAN without requiring a physical SAN infrastructure as StoreVirtual VSA turns hypervisor attached storage into a virtual iSCSI storage.
- Take advantage of advanced hypervisor features such as VMware vMotion and Microsoft Live Migration, which require shared storage.
- Enables a disaster recovery solution for remote or branch offices that do not have budget, space, or power for a traditional SAN.

HP Financial Services

Customize your IT lifecycle management, from acquisition of new IT, management of existing assets, and removal of unneeded equipment. hp.com/go/hpfinancialservices

The total package—software

- Deploy easily and control using a simple management console
- Choose your own hardware run on any server certified with VMware vSphere or Microsoft Hyper-V
- Scale storage by clustering disks in multiple servers into a single pool of storage
- Maximize performance benefit from flash with Adaptive Optimization auto-tiering feature
- Replicate data synchronously across disks for beyond-the-box availability with Network RAID
- Asynchronous replication provides business continuity for remote sites
- Application Integrated snapshot capability for data protection with no reservation pool
- Thin provisioning for efficient storage utilization

The total package—service

Service and support, HP Care Pack, and warranty information services included with the product HP StoreVirtual VSA includes three-year HP Software Support, standard 9x5 business hours phone support (software technical support and software product and documentation updates), and a 90-day media replacement-only warranty. Including software updates and comprehensive support enhances the performance and availability of your software. Experienced Response Center engineers provide trustworthy advice on issues such as software features and use, problem diagnosis and resolution, and software defect identification.

Software licensing terms

License keys enable all features of the HP StoreVirtual VSA, including storage clustering, managed snapshots, and remote copy. Keys are required for each individual VSA instance.

HP Services

HP Storage Services: offering reliability, flexibility, and value—just like your storage
HP Storage Services offers a full spectrum of customer care, from technology support
to complex migrations to completely managed services. HP Factory Express provides
customization, integration and deployment services for turnkey solutions. HP Education offers
flexible, comprehensive training on storage networking, disk storage systems, and storage
software to help your IT staff get the most out of your investments. And HP Financial solutions
extend innovative financing and asset management programs to cost-effectively buy, manage
and eventually retire your older equipment.

Choose from a rich portfolio of services to make the most of HP Storage, so you can move with confidence to take full advantage of the broadest, most advanced portfolio in the industry.

Discover, plan, and design, understand your options and build it right from day one:

- HP Storage Efficiency Analysis
- HP Storage Impact Analysis Service
- HP Storage Modernization Service

Deploy and integrate, increase uptime and decrease risk as you free up your resources:

- HP P4000 SAN Solution Installation and Startup Service
- HP P4800 G2 SAN Solution for BladeSystems Installation and Startup Services
- HP P4000 SAN/iQ Central Management Console Installation and Startup Service
- HP P4000 SAN/iQ Update Service (via HP Proactive Select menu)
- HP Performance and Capacity Assessment for P4000 (via HP Proactive Select menu)
- HP StoreVirtual 4000 Storage Installation and Startup Service
- HP StoreVirtual Software Installation and Startup Service
- HP StoreVirtual Central Management Console Installation and Startup Service

Service and support

HP Factory Express

HP Factory Express provides customization and deployment services along with your storage and server purchases. You can customize hardware to your exact specifications in the factory—helping speed deployment.

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Customer technical training

Gain the skills you need with ExpertOne training and certification from HP. With HP Converged Storage training, you will accelerate your technology transition, improve operational performance, and get the best return on your HP investment. Our training is available when and where you need it, through flexible delivery options, and a global training opportunity. hp.com/learn/storage

- HP StoreVirtual Update Service (via HP Proactive Select menu)
- HP Performance and Capacity Assessment for StoreVirtual (via HP Proactive Select menu)
- HP SAN Assessment Service (via HP Proactive Select menu)
- HP Storage Data Migration Services
- HP Storage and Data Consultant Residency Service
- HP Proactive Select

Operate and support, meet service level agreements (SLAs) with the right support level. Choose from three levels of operate and support care:

- Optimized Care— delivers the highest levels of performance and stability through deployment and proactive management practices
 HP Proactive Care 24x7—Plus, 20 credits per year
 Additional options: HP Proactive Care Personalized Support (once per each new Proactive Care support environment), HP Personalized Support Additional Day, and an additional 10 HP Proactive Select credits per year
- Standard Care—maintains high level of uptime, along with expert help to cut the cost and complexity of implementation and support:
 HP Proactive Care 24x7—Plus, 10 credits per year
 Additional options: HP Proactive Care Personalized Support (once per each new Proactive Care support environment), HP Personalized Support Additional Day, and an additional 10 HP Proactive Select credits per year
- Basic Care—Minimum recommended support Support Plus 24— Plus, 10 credits per year Additional options: 10 Proactive Select Credits per year

Only HP brings together deep expertise, proactive and business critical support and a strong partner network—plus a full set of infrastructure services designed to power a Converged Infrastructure.

For more information visit hp.com/services/storage

Convert your Microsoft or VMware server into a virtual array and benefit from high availability of data with HP StoreVirtual VSA Software.

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