

# HP StoreOnce Backup



Learn about how HP StoreOnce Backup systems offer your data the “insurance” it needs.

HP StoreOnce Backup is the only federated deduplication solution to provide leading disk-based backup for the full spectrum of IT environments—from small, remote sites to large enterprises. Are you finding that high data growth is causing challenges to backing up or restoring data quickly? Are your remote offices left unprotected or at risk? Is your data protection environment complex and costly? HP StoreOnce Backup systems with StoreOnce Catalyst software provide a consistent, high-performance scale-out backup architecture that spans the entire enterprise.

Now you can reduce the amount of backup data you need to store by 95 percent—guaranteed and choose between powerful dedicated appliances for larger offices and data centers, and flexible VMware virtual machines for smaller and remote offices. Industry leading backup and restore speeds mean that you can meet shrinking backup windows and recovery SLAs. Plus, with HP StoreOnce as the industry’s only federated deduplication technology, you can dedupe anywhere you need and control the movement of dehydrated data across the enterprise using your backup application.

Seamlessly integrating with your current backup applications, StoreOnce Backup provides flexible integration for NAS, SAN, and virtualized environments.

## Key features and benefits

### Industry-leading, Scale-out architecture and price performance to match enterprise requirements

- Scale-out, Scale Up architecture allows you to pay as you grow. Choose capacity points available through virtual backup solutions or dedicated appliances that start small and allow you to add in virtual capacity, shelves or nodes as needed.
- With a portfolio of products to suit all requirements from small remote offices to enterprise data centers with centralized monitoring through StoreOnce Enterprise Manager.
- For enterprise data centers the StoreOnce 6500 scales from 120 TB raw (72 TB usable) to 2240 TB raw (1728 TB usable).
- For mid-size data centers or regional offices choose from StoreOnce 4500 or 4700 and scale from 24 TB raw (16 TB usable) to 192 TB raw (160 TB usable), or the StoreOnce 4900 to scale from 60 TB raw (36 TB usable) to 560 TB raw (432 TB usable).
- For small and remote offices choose the StoreOnce VSA VMware virtual appliance to scale between 1 and 10 TBs, or the entry level StoreOnce 2700 appliance for 8 TB raw (5.5 TB usable).

### **Federated deduplication across the enterprise with a single deduplication technology—StoreOnce**

- Deduplicate anywhere—at the application source or at the backup server or at the target appliance. Deduplicate where it makes sense for your business, not where technology vendors' limitations mandate.
- Save time and money by moving data around the enterprise in its deduplicated state.
- HP StoreOnce delivers a unified solution for seamless data movement across the enterprise; with cost-effective virtual backup machines ideal for smaller remote offices, high-performance dedicated appliances for larger sites, and highly scalable, powerful systems for your data center.
- Federated deduplication is available across the HP StoreOnce Backup portfolio—including dedicated appliances, virtual backup solutions, and on media servers and application servers with HP Data Protector, Symantec NetBackup and Backup Exec software through OST, Oracle RMAN, and BridgeHead Software.
- All HP StoreOnce Backup systems are built with RAID protection and available with HP StoreOnce Security Pack delivering data-at-rest encryption and secure deletion of data to prevent unauthorized access to data on lost, stolen or discarded disks configurable by data store.

### **Backup within your window with our industry leading backup and restore performance**

- StoreOnce offers a broad range of superior price/performance points to meet backup windows across the enterprise.
- Up to 139 TB/hour backup speeds at the high-end, with StoreOnce 6500 and StoreOnce Catalyst.
- Up to 22 TB/hour with StoreOnce 4900, 22 TB/hour with StoreOnce 4700, and up to 9.9 TB/hour with StoreOnce 4500 and StoreOnce Catalyst up to 3.7 TB/hour with StoreOnce 2700 and up to 0.5 TB/hour for StoreOnce VSA with StoreOnce Catalyst.
- HP StoreOnce Backup also delivers rapid restore and uniquely states restore speeds. On StoreOnce 4900 and 6500 the restore speed can be up to 119 percent of the backup speed.

### **Automated, efficient backup and disaster recovery operations with StoreOnce catalyst**

- Manage backup and disaster recovery operations from a single pane of glass with StoreOnce Catalyst.
- Implement disaster recovery plans that were not previously feasible due to lack of multi-site capabilities, cost of bandwidth and time.
- One-to-many disaster recovery moves data simultaneously from one site to many sites.
- Cascaded disaster recovery moves data sequentially from one site to any number of other sites.
- Alerting and trending in StoreOnce Enterprise Manager to enable backup capacity management.

## Technical specifications



### HP StoreOnce Backup

<b>Hardware appliance</b>	Supported
<b>Drive description</b>	(560) LFF SAS Maximum, depending on model
<b>Drive type</b>	4 TB 6G 7.2K LFF Dual-port MDL SAS 2 TB 3G 7.2K LFF Dual-port MDL SAS 1 TB 3G 7.2K LFF Dual-port MDL SAS 500 GB 3G 7.2K LFF SATA Supported, depending on model
<b>Capacity</b>	5.5 TB usable entry level, up to a maximum of 1.7 PB usable depending on model
<b>Transfer rate</b>	Up to 139 TB/hr Maximum, depending on model
<b>Deduplication</b>	HP StoreOnce federated deduplication
<b>Storage expansion options</b>	StoreOnce upgrade kits and expansion modules are available for all HP StoreOnce productions (except StoreOnce 2700)—scalability is dependent on model
<b>Host interface</b>	10GbE Ports per controller and 8 Gb Fibre Channel Ports per controller and 1GbE Ports per controller 1GbE vNIC Ports per controller Host interface type and number of ports per controller is dependent on model.
<b>RAID support</b>	Hardware RAID 6 (RAID 5 with StoreOnce 2700 only)
<b>Replication support</b>	Yes—HP StoreOnce Replication, HP StoreOnce Catalyst
<b>Target for backup applications</b>	StoreOnce Catalyst, Virtual Tape Library (iSCSI, FC) and NAS (CIFS/NFS)
<b>Tape devices emulated</b>	HP LTO-2/LTO-3/LTO-4/LTO-5 Ultrium Tape Drives in MSL2024 Tape Library, MSL4048 Tape Library, HP D2D generic library with HP D2D generic tape library
<b>Number of Virtual Tape Libraries and NAS Targets</b>	(384) Maximum, depending on model
<b>Number of Virtual Tape Cartridges Emulated</b>	(6294156) Maximum, depending on model
<b>Maximum number of source appliances</b>	(384) per target device
<b>Form factor</b>	19" rack. Height depends on model
<b>Warranty (parts-labor-onsite)</b>	1:1:1

## Technical specifications (continued)



### StoreOnce VSA 10 TB 3-year LTU

<b>Model differentiator</b>	VMware Virtual appliance LTU
<b>Virtual appliance</b>	Yes
<b>Drive description</b>	Provisioned from host resources
<b>Drive type</b>	Provisioned from host resources
<b>Capacity</b>	Scalable from 1 TB usable to 10 TB usable in 1 TB increments
<b>Transfer rate</b>	Up to 500 GB/hr depending on VSA configuration and host resources
<b>Deduplication</b>	HP StoreOnce federated deduplication
<b>Storage expansion options</b>	Add capacity in 1 TB increments to maximum 10 TB
<b>Host interface</b>	1GbE vNIC Minimum
<b>RAID support</b>	Depending on VMware environment
<b>Replication support</b>	HP StoreOnce Replication and HP StoreOnce Catalyst
<b>Target for backup applications</b>	StoreOnce Catalyst, Virtual Tape Library (iSCSI) and CIFS
<b>Number of Virtual Tape Libraries and NAS Targets</b>	4
<b>Number of Virtual Tape Cartridges emulated</b>	396 Maximum
<b>Maximum number of source appliances</b>	1
<b>Form factor</b>	VMware virtual appliance
<b>Warranty (parts-labor-onsite)</b>	3 years business hours phone support
<b>What is in the box</b>	HP StoreOnce VSA to enable up to 10 TB of disk storage. Includes: StoreOnce Catalyst license, Replication license, Paper delivery of license key entitlement, 3 year HP support

## The total package

### Data replication

Replication, licensed by target, is available for the HP StoreOnce Backup systems to provide centralized data protection and disaster recovery for remote offices. HP StoreOnce Catalyst, the most efficient backup interface, simplifies the management and enhances the efficiency of data movement across the enterprise. For more information on licensing replication for the HP StoreOnce Backup system visit the product's Q&A page at [hp.com/go/storeonce](http://hp.com/go/storeonce).

### Scalable upgrades

HP StoreOnce Backup systems match growing data volumes:

- The StoreOnce VSA has a 3 year license to use. Renewal needed at the end of this term. It enables up to 10 TB of usable capacity.
- HP StoreOnce 4500—start with 24 TB raw (16 TB usable) and expand to 48 TB raw (36 TB usable)
- HP StoreOnce 4700—start with 24 TB raw (20 TB usable) and expand to 192 TB raw (160 TB usable)
- HP StoreOnce 4900—start with 60 TB raw (36 TB usable) and expand to 560 TB raw (432 TB usable)
- HP StoreOnce 6500—start with 120 TB raw (72 TB usable) and expand to 2240 TB raw (1728 TB usable)

### End-to-end IP SAN storage solution

When combined with HP StoreOnce Backup systems, users can create an affordable end-to-end IP SAN storage solution that is both easy to implement and easy to maintain. From entry-level solutions for a remote or branch office to mid-range solutions that scale for multiple sites, HP StoreOnce Backup systems provide the right balance of affordability, manageability, and reliability to handle the data protection needs of your HP StoreVirtual Scalable SAN solution.

### HP Data Protector Software

HP Data Protector is backup and disaster recovery software enabling reliable, efficient data protection. Reducing backup and recovery complexity and cost, by protecting virtual and physical machines and business applications with management from a central console. Sophisticated multi-site reporting validates the backup and restore processes and can be used with HP StoreOnce Backup systems replication capability. Centralized management and flexible licensing structure can reduce the cost of ownership by up to 70 percent relative to other backup and recovery applications. [hp.com/go/dataprotector](http://hp.com/go/dataprotector)

### Periodic copy to HP Tape for archive

The StoreOnce Backup systems are excellent solutions for regular and daily backup; there is no longer any need to store daily incremental backups on tape. However, HP still recommends periodic copy to tape as the most cost-effective, energy efficient and robust solution for long-term archival of data to meet regulatory requirements or off-site storage for disaster recovery where data replication is not an option copy to tape is executed using the backup and recovery management software such as HP Data Protector. For more information visit [hp.com/go/tape](http://hp.com/go/tape).



### HP Storage Quick ROI Tool

Take five minutes to calculate the potential three year cost savings and ROI of migrating from your current storage to the newest HP storage and backup systems. Create migration scenarios from your existing infrastructure to HP StoreOnce Backup (information protection).

## HP Services

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 Backup Recovery Efficiency Analysis
- HP Backup Recovery Impact Analysis
- HP Backup Recovery Modernization

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

- HP StoreOnce Backup System Installation and Startup
- HP StoreOnce Data Replication Solution Service
- HP StoreOnce Catalyst Solution Service
- HP StoreOnce Health Check
- HP Storage Data Migration Services
- HP Storage and Data Consultant Residency Service
- HP StoreOnce single node Catalyst startup 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:

### For HP StoreOnce (2000 series, 4000 series Backup System)

- **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
  - HP Support Plus 24, plus, 10 Proactive Select Credits per year
  - Additional options—10 HP Proactive Select credits per year

### For HP StoreOnce B6200 and 6500

- **Optimized Care**—Delivers the highest levels of performance and stability through deployment and proactive management practices
  - HP three-year, six-hour HP Proactive Care Call to Repair, plus 80 HP Proactive Select credits for the first 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 three-year, four-hour HP Proactive Care 24x7, plus 80 HP Proactive Select credits for the first 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
  - HP three-year, four-hour HP Proactive Care 24x7, plus 10 HP Proactive Select 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

If none of our support recommendations meet your needs, we can tailor a service solution for your unique support requirements. 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](http://hp.com/services/storage).



## QuickSpecs

## 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. [hp.com/go/factoryexpress](http://hp.com/go/factoryexpress)

## 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 capability. [hp.com/learn/storage](http://hp.com/learn/storage)



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