Data sheet

HP StoreOnce Backup

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

6:26 minutes

Watch this video to know how HP StoreOnce, working with HP Data Protector software, adds a new dimension to data protection in the enterprise.

1:21 minutes

Watch how the superior backup and restore performance helps you complete your backup and restore data in time.

The first federated deduplication solution to provide leading disk-based backup for the full spectrum of IT environments—from small, remote sites to large enterprises.

HP StoreOnce Backup systems reduce the amount of backup data you need to store by up to 95 percent[1], so with our scale-out architecture you can pay-as-you-grow to retain up to 10 petabytes of data. They provide automated backup and disaster recovery (DR) operations with all the features you'd expect from disk backup, and some you can only get from HP. HP StoreOnce Catalyst is a backup and recovery optimized interface that delivers industry-leading backup speeds of up to 100 TB/hour to meet shrinking backup windows, plus federated deduplication to enable backup data deduplication at the most efficient location. Choose between powerful dedicated appliances for larger offices and data centers, and flexible VMware virtual appliance for smaller and remote offices. With HP's single StoreOnce deduplication technology, managing the movement of data across the enterprise has never been easier. Seamlessly integrating with your current backup applications, StoreOnce Backup provides flexible integration for both SAN and virtualized environments.

Key features and benefits

Federated deduplication across the enterprise with a single deduplication technology-StoreOnce

Deduplicate at the application source, at the backup server, or at the target appliance—where it makes sense for your business, not where technology vendors' limitations mandate—and store the deduplicated data in dedicated HP StoreOnce appliance or a HP StoreOnce VSA.

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, VMware virtual appliance, and on media servers and application servers with HP Data Protector and Symantec NetBackup and Backup Exec software through OST. Save time and money by moving data around the enterprise in its deduplicated state.

[1] HP StoreOnce Dedupe Ratio Testing, October 2012.

Industry-leading, scale-out architecture with greater resilience

Scale-out architecture allows you to pay as you grow. Choose capacity points available through VMware virtual appliance or dedicated appliances that start small and allow you to add in virtual capacity, shelves or nodes as needed.

With a range of native capacity points to suit enterprise wide requirements: from large-scale 768 TB raw (512 TB usable) in the data center, to 96 TB raw (76 TB usable) for mid-size regional offices, and down to 1 TB for small and remote offices.

Add capacity and performance online with no need for additional planned downtime.

With StoreOnce VSA, backup service providers can rapidly stand-up or retire up to 10 TB of capacity per VSA to meet changing customer requirements.

Autonomic failover—HP StoreOnce B6200 uniquely delivers industry-leading availability with no single point of failure. If a node fails, its companion node picks up the load and the backup continues without any operator involvement. All StoreOnce Backup systems are built with RAID protection.

Backup within your Window with our industry-leading backup performance

A broad range of superior price/performance points to meet backup windows across the enterprise. Up to 100 TB/hour backup speeds at the high-end, with price/performance points down to the 500 GB/hr for the StoreOnce VSA using StoreOnce Catalyst.

Up to 40 TB/hour backup speeds when used as a VTL target.

Up to 32 TB/hour industry-leading restore speeds.

Available as purpose built backup appliances or flexible virtual appliance running in a VMware environment with centralized monitoring through StoreOnce Enterprise Manager.

1:17 minutes

Watch how the scale-out architecture makes your life easy when you need to expand a single backup system—from 48 TB to 768 TB—without taking your system offline.

1:08 minutes

Watch how federated deduplication can help increase the efficiency of your dedupe process, so you can move your data more securely from one location to another without deduplicating it.

1:45 minutes

Watch to find out how the autonomic restart feature—the only one of its kind in the industry—can help you make backup failure a thing of the past.[2]

[2] "The Emergence of a New Generation of Deduplication Solutions: Comparing HP StoreOnce vs. EMC Data Domain," Edison Group, Inc., November 2011.

Automated, efficient backup and disaster recovery operations with StoreOnce Catalyst

Manage backup and DR operations from a single pane of glass with StoreOnce Catalyst management and control enabled through the backup application.

Implement remote office DR plans that were not previously feasible due to lack of multi-site capabilities with HP Data Protector, Symantec NetBackup, and Backup Exec, as well as cost of bandwidth and time.

One-to-many capability allows data to move simultaneously from one site to many sites for comprehensive DR plans at a branch, regional or worldwide level.

Alerting and trending in StoreOnce Enterprise Manager to enable backup capacity management.

Technical specifications

HP StoreOnce Backup

Drive description	Up to 384 LFF SAS, depending on model
Drive type	2 TB 3G 7.2K LFF Dual-port MDL SAS
	1 TB 3G 7.2K LFF Dual-port MDL SAS
	1 TB 3G 7.2K SATA depending on model
Capacity	Starts at 48 TB up to a maximum of 768 TB, depending on model
Transfer rate	Up to 100 TB/hr maximum, depending on model
Deduplication	HP StoreOnce deduplication
Storage expansion options	HP StoreOnce upgrade kits, depending on model
Host interface	Up to 10GbE (16) ports per controller and 8Gb Fibre Channel (16) ports per controller
	Up to 1GbE (16) ports per controller
	Depending on model

Technical specifications (continued)

RAID support	RAID 6 or RAID 5, depending on model
Replication support	Low bandwidth replication
Target for backup applications	HP StoreOnce Catalyst, Virtual Tape Library, and NAS (CIFS/NFS)
Tape devices emulated	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 generic tape library
Number of Virtual Tape Libraries and NAS Targets	384 maximum, depending on model
Number of Virtual Tape Cartridges emulated	6294156 maximum, depending on model
Maximum number of source appliances	Up to 384 per target device, depending on model
Replication support	Licensed by target available from hp.com/go/storeonce
Warranty (parts-labor-onsite)	1/1/1 or 1/1/0, depending on model

HP StoreOnce VSA 10 TB Backup

Model differentiator	Virtual appliance running vSphere 5.0 or later
Drive description	Supported drives dependent on VMware environment
Drive type	0 included, (1) vDisk per TB of usable capacity supported
Capacity	Supports up to 10 TB (configured in 1 TB increments) in a VMware virtual appliance
Transfer rate	500 GB/hr maximum supported; depending on VSA configuration
Deduplication	HP StoreOnce deduplication
Storage expansion options	Dependent on VMware environment
Host interface	1GbE vNIC (2) ports per controller minimum supported
Replication support	Replication license included
Target for backup applications	HP StoreOnce Catalyst, Virtual Tape Library and NAS (CIFS only)
Number of Virtual Tape Libraries and NAS Targets	4
Number of Virtual Tape Cartridges emulated	768 maximum, depending on VMware environment
Maximum number of source appliances	1
Form factor	Dependent upon VMware environment
Warranty (parts-labor-onsite)	HP warrants only that the software media will be free of physical defects for a period of ninety (90) days from delivery.

The total package

Integrated solutions with HP ProLiant Servers and HP Storage products offer reduced time to startup and simplify your infrastructure. By purchasing them together, you can take advantage of common development principles that drive tighter integration in future technologies. Run with confidence, knowing your unified system consists of servers and storage that have been configured and tested to meet your capacity, connectivity, and design requirements.

HP ProLiant server solutions share common management tools with HP Storage products (e.g., SIM) and thus reduce the time and energy it takes to manage your IT infrastructure. HP remote diagnostics can monitor the overall IT environment and react quickly to potential problems before they result in application down time. With a single contact for your servers and storage, support problems can be resolved without confusion surrounding multiple hardware suppliers. Available factory integrated, HP servers and storage can be delivered together, racked, and configured to your specifications. For more information visit hp.com/go/factoryexpress.

Data replication

Replication, is available for the StoreOnce Backup systems to provide centralized data protection and DR for remote offices. Replication can either be through standard interfaces such as VTL, NAS (CIFS/NFS) or via StoreOnce Catalyst. StoreOnce Catalyst integrated with HP Data Protector and Symantec backup applications, simplifies the management and enhances the efficiency of data movement around the enterprise.

For more information on licensing replication for the StoreOnce Backup system, visit the product's Q&A page at hp.com/go/storeonce.

Software

HP Data Protector software

HP Data Protector is a 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 StoreOnce Backup systems. hp.com/go/dataprotector

Hardware

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 DR 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.

Get the support you need

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 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 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

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

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).

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

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

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

Learn more at
hp.com/go/storeonce