

HP StoreAll Storage

Tame and mine your content explosion.



HP StoreAll 9320 Storage
Configurable appliance



HP StoreAll 9730 Storage
Hyperscale appliance



HP StoreAll 9300 Storage
Gateway

Are you faced with a hard-to-manage content explosion? The exponential growth of unstructured data is expected to change the IT landscape and increase infrastructure costs. In such a scenario, it can be difficult to manage your data, let alone extract business value from it. To regain control over your data, you need a storage solution that scales affordably and seamlessly.

Unstructured data often holds extremely valuable business information. But extracting the value, while controlling for cost, complexity, and time is quite a daunting challenge. HP StoreAll Storage is hyperscale, harnessed, instant, and economic storage purposely designed for large scale enterprise information and industry-specific archives, content depots, and cloud object solutions. The platform includes HP StoreAll Express Query, a breakthrough embedded metadata database technology created by HP Labs, the company's central research arm, that allows organizations to locate files and perform file system analytics up to 100,000 times faster than previous file system search methods.¹

HP StoreAll Storage can massively scale to billions of files and objects without the limitations or complexity of a traditional NAS system. Centralized management allows the administrator to manage not just terabytes, but multipetabyte environments at the highest density possible. There are several features that can help bring structure to unstructured data, such as custom metadata tagging, data retention policies and write-once-read-many (WORM), and autonomic protection for data durability. A key strength of StoreAll lies in Express Query, a feature that enables you to extract value by finding files more quickly and cost effectively than traditional methods. You can scale down costs of storing data over time with policy-based tiering and a modular architecture, which can also accommodate unprecedented capacity growth. HP StoreAll Storage is the ideal platform to simplify archiving, accelerate analysis, and consolidate object and file-based data.

¹ Based on HP internal comparison of traditional file system scans versus HP StoreAll Express Query. HP Express Query took 1.434 seconds to complete. The previous find command took 151,278.706 seconds to complete.

Key features and benefits

Massive scalability without complexity

- Scale out to 16 petabytes of unstructured data and up to 1024 nodes in a single global namespace.
- Converge file and object storage within a single massively scalable platform and with full flexibility to configure file or object access model on a per-share basis.
- Manage your data via a single user interface to reduce complexity.

Structure for unstructured data

- Add meaning and value to your data with custom metadata attributes using the integrated HP StoreAll Express Query metadata database.
- Drive corporate compliance for your organization with data retention policies and WORM file immutability.
- Increase durability of your data with multiple levels of local and remote, hardware and software-based autonomic protection.

Ultra-fast search and value extraction at petabyte scale

- Find files and generate file system analytics using HP StoreAll Express Query more quickly than traditional methods, and without the cost and complexity of an external database.
- Combine with HP Autonomy Consolidated Archive—a market-leading meaning-based solution to drive records management, eDiscovery, and compliance initiatives directly from archived data.

Scale down costs of storing data over time

- Reduce your ongoing storage costs while optimizing utilization with transparent and autonomic policy-based data tiering.
- Expand storage capacity and performance flexibly with the modular “pay-as-you-grow” scale-out architecture and support for the mixing of models in a single cluster.
- Leverage the rich set of all-inclusive data services that provide data protection, retention, mobility, and management.

Series technical specifications

Drive description	560 LFF midline (MDL) SAS or 298 SFF enterprise (ENT) SAS maximum depending on model
Capacity	7.2 TB starting to 1.7 PB maximum depending on model; scalable to 16 PB in a single cluster or namespace
Supported protocols	NFS, CIFS and SMB, HTTP and HTTPS, WebDAV, REST API (File and Object), FTP and FTPS, NDMP, ICAP
Supported operating systems	Microsoft® Windows®, Linux, UNIX®, Apple OS X, and other operating systems
Availability	No single point of failure architecture with redundant hot-plug power and cooling, mirrored hot-plug OS disks, redundant bonded NICs, active-active RAID controllers with mirrored cache, redundant disk enclosure I/O modules, RAID 5 or 6 data storage layouts with hot-plug disks and global spares, segmented file system, constant validation, snapshots, and continuous remote replication
Warranty (parts-labor-onsite)	3-year parts, 3-year labor, and 3-year onsite

Product technical specifications

Model	HP StoreAll 9320 1GbE Storage Node Pair	HP StoreAll 9320 10GbE Storage Node Pair
Model differentiator	Highly available pair of nodes for 1GbE network deployments	Highly available pair of nodes for 10GbE network deployments
Drive type	(2) 300 GB 6G 10K SFF Dual-port ENT SAS for the pre-installed OS	(2) 300 GB 6G 10K SFF Dual-port ENT SAS for the pre-installed OS
Maximum raw capacity	0 TB included 576 TB maximum	0 TB included 576 TB maximum
Number of capacity blocks	(0) included	(0) included
Storage expansion options	Maximum (12) SFF 10K ENT SAS Capacity Blocks or (8) LFF 7.2K MDL SAS Capacity Blocks supported	Maximum (12) SFF 10K ENT SAS Capacity Blocks or (8) LFF 7.2K MDL SAS Capacity Blocks supported
Storage controllers	(2) HP SC08Ge HBA	(2) HP SC08Ge HBA
RAID support	RAID 5 for SFF 10K ENT SAS Capacity Blocks, RAID 6 for LFF 7.2K MDL SAS Capacity Blocks	RAID 5 for SFF 10K ENT SAS Capacity Blocks, RAID 6 for LFF 7.2K MDL SAS Capacity Blocks
Processor	(2) Intel® Xeon® Quad Core E5620 (2.4GHz) Standard	(2) Intel Xeon Quad Core E5620 (2.4GHz) Standard
Form factor	4U + capacity blocks	4U + capacity blocks

Model	HP StoreAll 9730 140TB 2TB 7.2K LFF MDL 6Gb Storage Couplet	HP StoreAll 9730 210TB 3TB 7.2K LFF MDL 6Gb Storage Couplet
Model differentiator	Highly available pair of nodes combined with dense 140 TB capacity block	Highly available pair of nodes combined with dense 210 TB capacity block
Drive type	(2) 300 GB 6G 10K SFF Dual-port ENT SAS for the pre-installed OS (70) 2 TB 6G 7.2K LFF MDL SAS for data	(2) 300 GB 6G 10K SFF Dual-port ENT SAS for pre-installed OS (70) 3 TB 6G 7.2K LFF MDL SAS for data
Maximum raw capacity	140 TB included 1.1 PB maximum	210 TB raw included 1.7 PB maximum
Number of capacity blocks	(1) included	(1) included
Storage expansion options	None	None
Storage controllers	(2) p1210m controller	(2) p1210m controller
RAID support	RAID 6	RAID 6
Processor	(2) Intel Xeon Quad Core E5620 (2.4GHz) Standard	(2) Intel Xeon Quad Core E5620 (2.4GHz) Standard
Form factor	5U + node pair blades	5U + node pair blades

Product technical specifications

Model	HP StoreAll 9300 1GbE Gateway	HP StoreAll 9300 10GbE/IB Gateway
Model differentiator	File archiving and object storage services over 1GbE network for SANs	File archiving and object storage services over 10GbE or InfiniBand network for SANs
Drive type	(2) 300 GB 6G 10K SFF Dual-port ENT SAS for the pre-installed OS	(2) 300 GB 6G 10K SFF Dual-port ENT SAS for the pre-installed OS
Storage expansion options	Attach to HP 3PAR StoreServ and select EVA and XP Storage	Attach to HP 3PAR StoreServ and select EVA and XP Storage
Front-side network connectivity	(4) 1GbE ports for client network connectivity (4) 1GbE ports for optional secondary network connectivity	(2) 1GbE or (2) IB ports for client network connectivity (4) 1GbE ports for optional secondary network connectivity
Storage controllers	Minimum 1, maximum 2 HBA or iSCSI network adapter supported. Supported controllers include: HP SC08Ge HBA HP SC08e 6Gb SAS HBA HP 82Q 8Gb Dual Port PCI-e FC HBA HP NC364T PCIe 4Pt Gigabit Server Adptr HP NC550SFP Dual Port 10GbE Server Adptr	Minimum 1, maximum 2 HBA or iSCSI network adapter supported. Supported controllers include: HP SC08Ge HBA HP SC08e 6Gb SAS HBA HP 82Q 8Gb Dual Port PCI-e FC HBA HP NC364T PCIe 4Pt Gigabit Server Adptr HP NC550SFP Dual Port 10GbE Server Adptr
Processor	(2) Intel Xeon Quad Core E5620 (2.4GHz) Standard	(2) Intel Xeon Quad Core E5620 (2.4GHz) Standard
Form factor	2U	2U

For more details, see product QuickSpecs at http://h18000.www1.hp.com/products/quickspecs/13467_div/13467_div.pdf

The total package— solution	<ul style="list-style-type: none"> • Massively scale, without complexity to billions of files and objects, 16 petabytes, and 1024 nodes in a single namespace with centralized management. • Bring structure to unstructured data with custom metadata attributes, data retention policies, and autonomic protection for data durability. • Use HP StoreAll Express Query to extract value by finding files more quickly and cost effectively than traditional methods. • Scale down costs of storing data over time with policy-based tiering and a modular pay-as-you-grow architecture. 	Optional
The total package— software	<p>HP StoreAll OS includes as standard, a rich set of data services optimized for enterprise information and industry-specific archives, content depots, and cloud storage solutions. The all-inclusive data services include: data protection via snapshots and constant validation, data retention via WORM file immutability and policies, data mobility via tiering and continuous remote replication, and data management via HP StoreAll Express Query and quotas.</p> <p>HP StoreAll OS includes as standard, a rich set of access models optimized for enterprise information and industry-specific archives, content depots, and cloud storage solutions. The all-inclusive access models include: NFS, CIFS and SMB, HTTP and HTTPS, WebDAV, REST API, FTP and FTPS, NDMP and ICAP protocols. Plus, object for converged file and object storage in a single platform that can be configured on a per share basis and used concurrently.</p>	Included
The total package— hardware	<p>HP StoreAll Storage product family, built on industry-leading ProLiant DNA, includes:</p> <ul style="list-style-type: none"> • HP StoreAll 9730 Storage, which provides massive capacity with the highest density. • HP StoreAll 9320 Storage, which provides the highest configuration flexibility to achieve a balance of capabilities. • HP StoreAll 9300 Gateway Storage, which provides file archive and object services for select HP arrays. 	Optional

Support services

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. Visit hp.com/go/factoryexpress.

Customer technical training

We offer a variety of training courses on storage software, networking, archiving, and disk storage systems. Our classes are available in many delivery modalities—from traditional instructor-led courses at one of our 80 training centers worldwide to online and onsite training. Visit hp.com/learn/storage.

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programs to help you acquire, manage, and ultimately retire your HP solutions. Visit hp.com/go/hpfinancialservices.

HP Technology Services

Tap into the HP support services advantage, backed by the strategic and technical know-how of our consulting experts—for a single source solution that makes the most of your investments. Depending on your individual support requirements, choose from three levels of care that cover the entire lifecycle to better address your needs:

Optimized Care

Delivers best performance and stability through deployment and proactive management practices. Optimized care includes:

- HP Enterprise NAS Implementation Service
- Proactive Care 24x7, plus 30 credits per year
- **Additional option:** 3 years of HP Storage Proactive Care Personalized Support, 3 years of HP Storage Personalized Support Additional Day Service, and 3 years of Proactive Select 30 Credit Service
- **Advanced support:**
 - Integration—Data migration services, data residency services
 - Discovery Services—Storage efficiency services
 - Planning Services—Storage impact analysis
 - Designing Services—Storage modernization service, storage cloud design service

Standard Care

Maintain high level of uptime, along with expert help to cut the cost and complexity of implementation and support. Standard Care includes:

- HP Enterprise NAS Implementation Service
- Proactive Care 24x7, plus 20 credits per year
- **Additional option:** 3 years of HP Storage Proactive Care Personalized Support, 3 years of HP Storage Personalized Support Additional Day Service, and 3 years of Proactive Select 30 Credit Service
- **Advanced support:**
 - Integration—Data Migration Services, Data Residency Services
 - Discovery Services—Storage Efficiency Services
 - Planning Services—Storage Impact Analysis
 - Designing Services—Storage Modernization Service, Storage Cloud Design Service

Basic Care

Minimum recommended support. Basic Care includes:

- HP Enterprise NAS Implementation Service
- Proactive Care 24x7, plus 20 credits per year
- **Additional option:** 3 years of HP Storage Proactive Care Personalized Support, 3 years of HP Storage Personalized Support Additional Day Service, and 3 years of Proactive Select 30 Credit Service

Advanced support:

- Integration—Data Migration Services, Data Residency Services
- Discovery Services—Storage Efficiency Services
- Planning Services—Storage Impact Analysis
- Designing Services—Storage Modernization Service, Storage Cloud Design Service

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.

Learn more

For more information about storage solutions from HP, visit hp.com/go/storage

To learn how you can tame your content explosion and mine it for valuable information, please visit hp.com/go/StoreAll

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