

Innovative Storage Solutions for Modern Hybrid-Cloud IT

Hyper-Scalable File and Object Storage Clusters

Seagate + OSNexus scale-out solutions offer comprehensive file and object storage supporting major protocols, including S3, NFS, and SMB across major OS platforms. These solutions also provide native direct file system access for HPC and other high-performance use cases.

Common Use Cases

- Big data storage for AI/ML and analytics
- Large scale backup and archive
- Content delivery networks
- Multi-tenant object storage
- HPC/high-performance file and object storage

Advanced Systems Platform

To enable hyper-scalability, Seagate + OSNexus systems use Seagate Exos 2U24 AP integrated compute and storage servers built with flash storage to boost metadata and write performance through write logging. When used in conjunction with Seagate Exos CORVAULT™ storage systems, hard drive storage is virtualized into less logical devices—leading to a 4:1 reduction in media managed by the cluster. This further reduces CPU and RAM requirements and provides a 1:4 boost in scalability to over 100PB per cluster. Savings in computing and RAM requirements make this platform up to 50% more energy efficient (1x AMD 7292P CPU @120W versus 2x AMD 7542 CPUs @310W) than other options, helping reduce CO2 emissions in data centers.

Simplify Storage Management with Storage Grid Technology

The Seagate-integrated QuantaStor solution incorporates storage grid technology, enabling users to combine appliances across public and private clouds and manage everything as one. This simplifies storage management at scale without needing extra software.

Secure

Advanced security features include end-to-end encryption, immutable snapshots, file immutability/WORM support, advanced RBAC capabilities, KMIP integration, MFA/2FA, SSO, and compliance to major security standards, including NIST 800-53/171, FIPS 140-2, GDPR, HIPAA, and CIJS.

Ultra-High Durability

Combining the hardware erasure-coding of Exos CORVAULT (16k+2m) with the software erasure-coding within the QuantaStor scale-out cluster delivers ultra-high durability and ultra-low maintenance. With software-based scale-out solutions, IT managers are often concerned about network load during drive rebuilds and its impact on performance. The importance of rebuild speed is further challenged by new technologies, such as HAMR, increasing hard drive capacities to 50TB and beyond. Exos CORVAULT tackles this problem with its ADAPT technology, returning a system to full health in minutes—not hours—regardless of media capacity. Plus, integrated software erasure coding adds a second layer of protection against simultaneous system outages, with fault tolerance spanning across all nodes in the cluster. Together, ADAPT and integrated software erasure code delivers industry-leading durability of up to 14x 9s using 16k+2m hardware EC layered over 8k+3m software EC.

Unified 24x7 Global Support

All systems include global 24x7 support provided by a unified OSNexus and Seagate support team, ensuring both hardware and software related escalations are handled through a single support desk for fast, efficient assistance pre/post-deployment.

Recommended Products

- Seagate Exos AP 2U24 All Flash Array
- 2 × Seagate Exos CORVAULT 5U84
- OSNexus QuantaStor





Innovative Storage Solutions for Modern Hybrid-Cloud IT

Scale-Up Hybrid NAS/
SAN Storage Solutions with
Seagate Exos® CORVAULT™

When combined with the OSNexus QuantaStor platform, Seagate's scale-up hybrid storage systems provide highly available file and block storage to meet demanding workloads that require cost-effective, high-density, and high-performance storage.

Unified File and Block Storage

With full support for NFS v3 and v4, SMB v2 and v3, iSCSI, and NVMeoF, the Seagate + OSNexus system provides a versatile platform for meeting the requirements of diverse workloads. All storage is thin-provisioned, so file or block storage can be allocated from the same pool without needing to pre-reserve space for snapshots. Plus, features like immutability (WORM) and immutable snapshots protect against ransomware and other cyber attacks.

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Common Use Cases

- Disk-to-disk backup and archive (Veeam and Commvault)
- Higher education user home directories
- Big data storage for AI/ML, analytics, and IOT data
- High-density, general-purpose NAS servers
- CCTV video surveillance storage



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High-Performance All-Flash Solutions for Mission-Critical Workloads

Seagate + OSNexus scale-up all-flash integrated storage server solutions are ideal for mission-critical use cases, including databases, virtualization, VDI, transcoding, and media editing. These solutions are built on the Seagate Exos® AP 2U24 integrated storage and compute platform with dual-controllers for high-availability and Exos E Storage Expansion from Seagate.

Common Use Cases

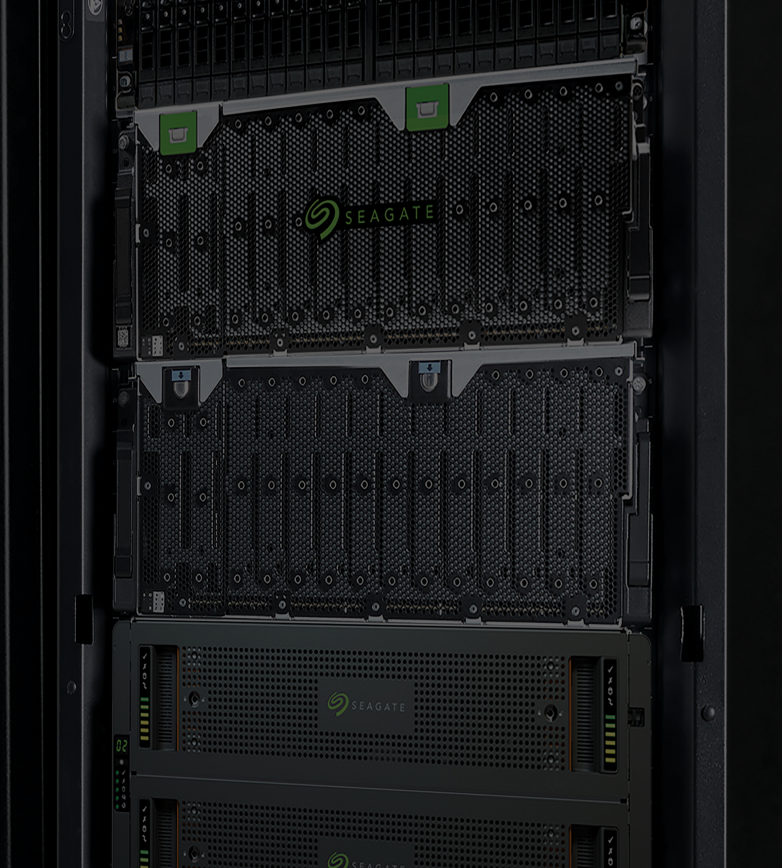
- High-performance storage for server virtualization (VMware ESXi, Hyper-V, and XenServer)
- High-performance storage for VDI
- High-performance storage for database and OLTP storage
- High-performance storage for media editing and playback

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High Performance

This solution provides over 250K IOPS with 24x SSDs and 500K IOPS with 48x SSDs. These systems come with the Seagate-integrated QuantaStor storage platform, including three or five years of global 24/7 Gold Support. Systems easily expand to over 1PB per cluster with additional Exos E 2U24 & 5U84 expansion units.

Secure

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