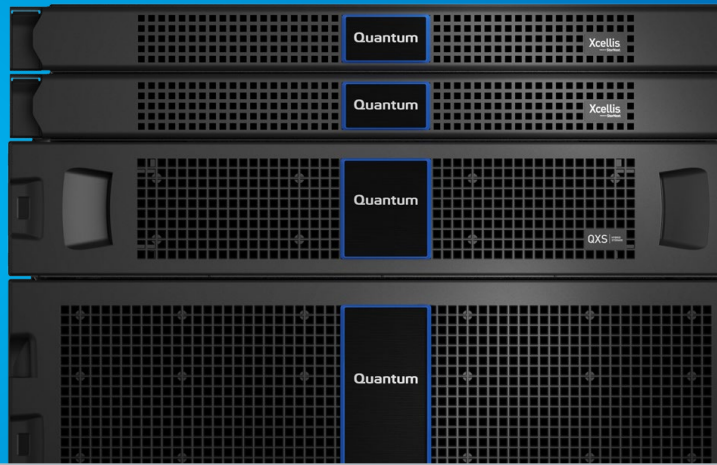


Quantum®

Xcellis Scale-out NAS



> DATASHEET

Unified Unstructured Data at Scale

High-value workflows—where the data is the product or the basis for the organization's strategic decisions—tend to have similar requirements and similar challenges. Internet of Things (IoT), life sciences, manufacturing design, media & entertainment, video surveillance, and enterprise high-performance computing (HPC) users are outgrowing traditional enterprise scale-out NAS. As a result, they are looking for storage solutions that not only have the management capabilities and robust features of enterprise NAS, but can also cost-effectively scale performance and capacity.

Xcellis® Scale-out NAS is the first storage solution to deliver on all fronts.

PERFORMANCE AND SCALE

Grow Xcellis Scale-out NAS performance and capacity together or independently from 10s of terabytes to 100s of petabytes and up to terabytes per second of performance. A single Xcellis Scale-out NAS client can achieve over 3x the performance of competing scale-out offerings, and some configuration options can deliver the same performance and capacity as an enterprise NAS for as little as 1/10th the cost.

ADVANCED FEATURES AND FLEXIBLE MANAGEMENT

Along with simple installation and setup—in as little as 30 minutes—modern administrative single-screen manageability provides in-depth monitoring, alerting and management functions, as well as rapid scanning and search capabilities that tame large data repositories. Xcellis Scale-out NAS is designed to integrate with the highest performance Ethernet networks through SMB and NFS interfaces, and offers the flexibility to also support higher-performance clients in the same converged solution.

LIFECYCLE, LOCATION, AND COST MANAGEMENT

Xcellis Scale-out NAS leverages more than 15 years of data management experience built into the StorNext® shared storage and data management platform. With automated management of the entire data lifecycle—including multi-tier, multi-site, and multi-cloud—Xcellis Scale-out NAS delivers cost-effective scaling across every dimension.

Multi-tier: Tier among primary, active object storage archive, deep tape archive, and public cloud for cost reduction and data protection.

Multi-site and multi-cloud: Tier among private and/or public clouds for collaboration, hybrid workflows, backup, and disaster recovery.

ARTIFICIAL INTELLIGENCE DATA ENHANCEMENT

Customers can create more value with new data—or re-monetize existing data—using Xcellis artificial intelligence (AI) data enhancement capabilities. Xcellis Scale-out NAS—the only Scale-out NAS with integrated AI for on-premise data—enables the active interrogation of data such as events, objects or faces, words and sentiments along multiple axes to automatically generate new, custom metadata, opening new possibilities for queries, searches, and analyses.

UNIFIED ARCHITECTURE

Xcellis Scale-out NAS is powered by the StorNext shared parallel file system, a high-performance solution with a long track record of success in data-intensive environments. StorNext creates a unified view of all file data—on premise and in private or public cloud—simplifying and speeding data access, tiering, protection, and management.

With multi-protocol support, Xcellis Scale-out NAS offers a variety of options for data access including NFS, SMB and native file system clients over Ethernet, as well as higher performance connectivity options with iSCSI and Fibre Channel.

FEATURES & BENEFITS

Flexible Scaling With Maximum Performance

Scale up or out to maximize performance, capacity, and cost.

- 3x to 10x faster performance than enterprise NAS
- Up to 12 GB/sec per client
- Up to 1 million IOPS per node

Unified Access and Management

- Converged block and file
- Unified data view for access, multi-site, and multi-cloud
- All NAS administration and data management policy functions accessible via intuitive UI

Add Performance and Capacity Independently

- Add drives or arrays to scale out capacity
- Add nodes to scale out client access
- Add active object storage archive
- Add deep tape archive
- Add public cloud

Enterprise-Class Capabilities

- Automated tiering
- Hybrid cloud
- Data protection
- AI data enhancement

Extensive Ecosystem

- Certified with all major backup packages
- Broad software partnerships
- Tier to Quantum, commodity, or heterogeneous hardware

Support for All-IP Infrastructure

With its industry-leading performance and unmatched scalability, Xcellis Scale-out NAS supports the most demanding collaborative media workflows and eases content creators' migration to IP-based infrastructure.

POWERED BY **StorNext®**

> **LEARN MORE:**
www.quantum.com/xcellisscaleoutnas

TECHNICAL SPECIFICATIONS

SYSTEM

Workflow Director Nodes	Dual rack servers Redundant power supplies Dual six-core high-performance Intel E5 v3 CPUs
Shared Storage Arrays	Quantum QXS™-3 and QXS-4 series storage arrays Dual redundant high-performance controllers Available in 2U12, 2U24, and 4U56 options
Storage Support	Supports Quantum QXS storage for combined metadata and data options; Quantum or 3rd-party storage for user data*

*Third-party user data storage requires dedicated Quantum QXS metadata storage.

LICENSING

NAS Connectivity License	Enables connection of SMB and NFS clients directly to Xcellis; does not require per-client licensing
Optional StorNext LAN Gateway License	Enables connection of StorNext LAN clients directly to Xcellis; does not require per-client licensing
Included StorNext Software	StorNext High Availability License Option, 10 SAN clients available to the user for any OS type, 1 embedded SAN client for each Xcellis Workflow Director node, and a Distributed Data Mover license (for the secondary node)





CONNECTIVITY OPTIONS

Onboard Ethernet	Quad 1 GbE for service, management, and metadata networks
Additional Ethernet	Up to two additional NICs for StorNext LAN, NAS, public cloud, and Lattus™ or other object storage connections Choose from quad 1 GbE, dual 10 GbE, or dual 40 GbE 10 GbE in Optical, Twinax, or 10GBBase-T
Optional InfiniBand	Up to two additional NICs for dual QSFP FDR Infiniband connectivity
Fibre Channel	Quad 16 Gb Optical, Dual 16 Gb Optical, or Quad 8 Gb Optical
Client Protocol Support	StorNext SAN, StorNext LAN, SMB 1 (CIFS), SMB 2, SMB 3, NFS v3, NFS v4 Active Directory, OpenLDAP, RESTful API
Client Support	Linux, Mac OS X, Windows, AIX







MULTI-TIER OPTIONS

Cloud Storage	The FlexTier™ feature of StorNext Storage Manager provides support for customer-owned public cloud accounts in Amazon AWS including S3, S3 Infrequent Access, Glacier, GovCloud, and C2S; Microsoft Azure Locally Redundant Storage (LRS), Zone Redundant Storage (ZRS), Geographically Redundant Storage (GRS), Read-Access Geographically Redundant Storage (RA-GRS); or Google S3 Cloud services (see compatibility document for details)
Object Storage	Quantum Lattus low-latency, massively scalable object storage Support for third-party object storage using StorNext Storage Manager (see compatibility document for details)
Tape Archive	StorNext AEL500, StorNext AEL6000 tape archive Scalar i3/i6 tape libraries 3rd-party tape archive systems also supported

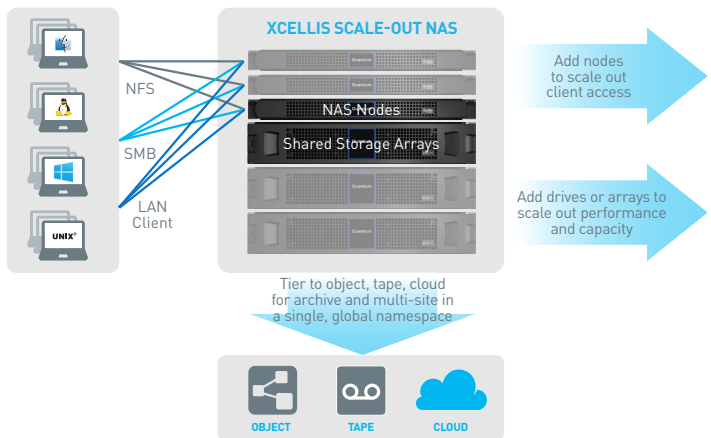
XCELLIS STORAGE ARRAYS

				
Usage	Combined user data and metadata	Combined user data and metadata	Dedicated metadata	Combined user data and metadata
HDD/SSD Capacity Options (Raw)	48 TB, 72 TB, and 96 TB per chassis	48 TB, 72 TB, 96 TB per chassis	2.4 TB, 4.8 TB, 9.6 TB, 10.8 TB, 19.2 TB, 21.6 TB	224 TB, 336 TB, 448 TB
RAID Array to Expansion Ratio	Up to three expansions per RAID Array	Up to seven expansions per RAID Array	RAID Array only	Up to three expansions per RAID Array

XCELLIS SCALE-OUT NAS—FLEXIBLE CONFIGURATIONS

All-Flash	Hybrid	Entry-Level
 5U, High Performance	 5U, Mixed Workflows	 3U
 7U, High Performance	 6U, Mixed Workflows	 5U

XCELLIS SCALE-OUT NAS ARCHITECTURE



All performance specifications are based on pre-release testing and are subject to change based on GA hardware performance testing CQ4 2017.

Figure 1: Scale performance and capacity independently with Xcellis Scale-out NAS architecture.

ABOUT QUANTUM

Quantum is a leading expert in scale-out tiered storage, archive, and data protection, providing solutions for capturing, sharing, and preserving digital assets over the entire data lifecycle. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. Quantum's end-to-end, tiered storage foundation enables customers to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at www.quantum.com/customerstories.