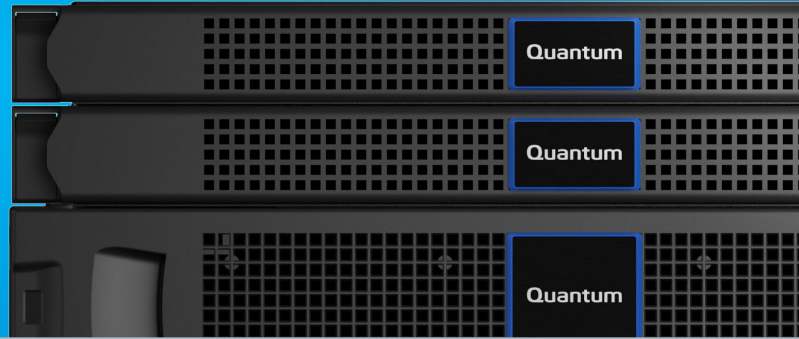


# Quantum®

## Xcellis

### Scale-out & Workflow Storage



#### > DATASHEET

## High-Performance, Massively Scalable Primary Storage

Most organizations that work with large amounts of unstructured data are familiar with the causes of their pain—large files, even larger data sets, more collaborators, shorter deadlines, nearly constant upgrades—but far less obvious is a way to address the situation. The ideal solution would be a storage system flexible enough to be right-sized for any workflow. One that is scalable enough to keep up with growing demands without performance degradation. A system collaborative enough to provide access, regardless of geographic location or performance requirements. And finally, efficient enough to do all this and stay on budget. Quantum Xcellis® scale-out workflow storage is precisely that.

#### CONVERGED ARCHITECTURE

Xcellis optimizes workflow and shared access by combining functions that were formerly provided by separate components into a compact and energy-saving solution. Xcellis manages high-speed disk for everything from small teams to the most demanding workflows, multi-protocol scale-out NAS and SAN client access, single-pane-of-glass management and monitoring, and policy-driven data movement to low-cost storage such as cloud, object storage, and tape. Xcellis maximizes operational and workflow efficiency, and reduces the cost of data storage.

#### CONTINUOUS SCALABILITY

Other scalable storage systems require additional system acceleration units or compute-heavy expansion nodes in order to scale. These units increase the cost and network complexity of scaling. Xcellis provides unparalleled flexibility by enabling nodes and storage arrays to be scaled up or out independently, so every dollar invested pays off in more capacity and greater

bandwidth. Plus, the initial investment in Xcellis is protected, eliminating forklift upgrades in order to scale.

#### UNIFIED ACCESS

Demanding workflows have spawned an increased need for collaboration and expanded teams. By combining both the ease of scale-out NAS connectivity and SAN performance, Xcellis extends collaboration to the broadest range of users. This provides the right level of performance to the right people, improves collaboration, and simplifies deployments and workflows.

#### EFFICIENCY AND ENABLEMENT

Xcellis reduces or eliminates the need to maintain multiple storage systems, the network traffic to move data between them, and the time and headcount to manage them. By using converged storage and access, organizations can scale their storage system more efficiently by maximizing their investment to benefit all connected users.

#### DYNAMIC APPLICATION ENVIRONMENT

Xcellis has the unique capability of supporting applications running on the Workflow Director as virtual machines (VMs) using a feature called the Dynamic Application Environment. With numerous supported applications, users can deploy, launch, and operate artificial intelligence data enhancement, media management, WAN acceleration, and other third-party applications without the need for additional server hardware or networking infrastructure.

Xcellis optimizes workflows, accelerates time to insight, and empowers organizations to do more with their data.

## FEATURES & BENEFITS

#### Efficient, converged architecture

Combines compute, client access, and storage to create an efficient and powerful core of a workflow storage solution. Supports third-party workflow applications as virtual machines for flexible and cost-effective deployment.

#### Flexible continuous scalability

Add client nodes and storage arrays independently to scale from the smallest configurations to the largest with no forklift upgrades or extra accelerators.

#### Multi-protocol access built in

Optimizes workflow efficiency and data access by enabling all clients access to the same data regardless of protocol, on a scale-out NAS or SAN.

#### Massive scalability

Support for billions of files across up to 64 virtual file systems. Virtually unlimited capacity. Scale to hundreds of petabytes. Extend scalability even further using cloud, object storage, or tape.

#### Powered by StorNext®

Xcellis is designed to get the most out of StorNext, advanced data management for high-performance, multi-tier, shared storage.

#### StorNext Connect management tool

Built-in deployment, management, monitoring, and reporting for multiple systems from a single interface.

POWERED BY **StorNext®**

> LEARN MORE:  
[www.quantum.com/xcellis](http://www.quantum.com/xcellis)

# TECHNICAL SPECIFICATIONS

## SYSTEM

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

\*3rd-party user data storage requires dedicated Quantum QXS metadata storage.

## LICENSING

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

## CONNECTIVITY OPTIONS

<b>Onboard Ethernet</b>	Quad 1 Gb for service, management, and metadata networks
<b>Optional Ethernet</b>	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
<b>Optional InfiniBand</b>	Up to two additional NICs for dual QSFP FDR Infiniband connectivity
<b>Fibre Channel</b>	Quad 16 Gb Optical, Dual 16 Gb Optical, or Quad 8 Gb Optical
<b>Client Protocol Support</b>	StorNext SAN, StorNext LAN, SMB 1 (CIFS), SMB 2, SMB 3, NFS v3, NFS v4 Active Directory, OpenLDAP, RESTful API
<b>Client Support</b>	Linux, Mac OS X, Windows, AIX (see compatibility document for details)

## MULTI-TIER OPTIONS

<b>Cloud Storage</b>	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)
<b>Object Storage</b>	Quantum Lattus low-latency, massively scalable object storage Support for third-party object storage using StorNext Storage Manager (see compatibility document for details)
<b>Tape Archive</b>	StorNext AEL500, StorNext AEL6000 tape archive Scalar i3/i6 tape libraries 3rd-party tape archive systems also supported

## XCELLIS STORAGE ARRAYS





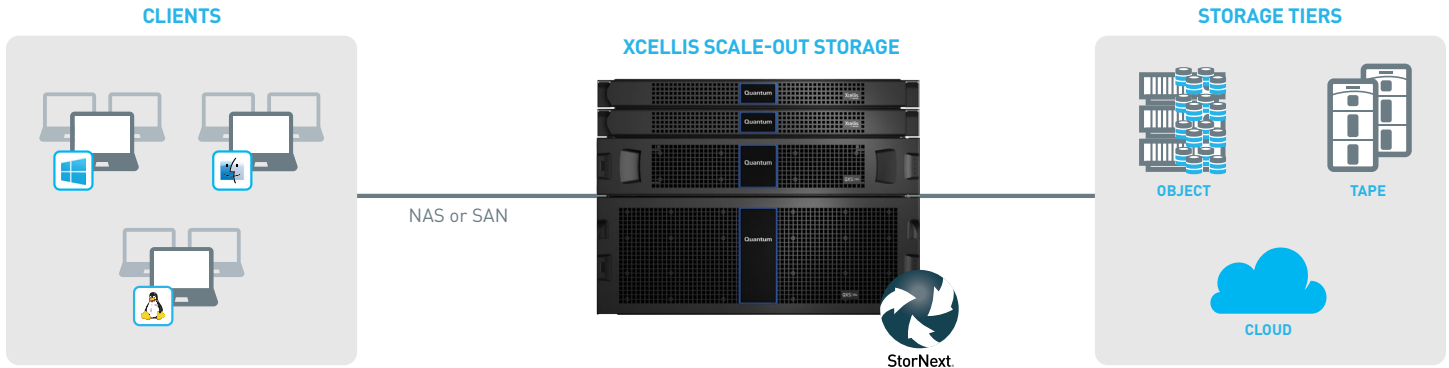
	 QXS-312	 QXS-412	 QXS-324/424	 QXS-456
<b>Usage</b>	Combined user data and metadata	Combined user data and metadata	Dedicated metadata	Combined user data and metadata
<b>Capacity Options (Raw)</b>	48 TB, 72 TB, and 96 TB per chassis	48 TB, 72 TB, 96 TB per chassis	2.4 TB, 4.8 TB, 9.6 TB, 10.8 TB, 19.2 TB, 21.6 TB	224 TB, 336 TB, 448 TB
<b>RAID Array to Expansion Ratio</b>	Up to three expansions per RAID Array	Up to three expansions per RAID Array	RAID Array only	Up to three expansions per RAID Array
<b>Drive Type</b>	3.5-in LFF HDD or SSD Drives	3.5-in LFF HDD or SSD Drives	2.5-in SFF HDD or SSD Drives	3.5-in LFF HDD or SSD Drives

Fig. 1: Xcellis scale-out storage integrates seamlessly into your workflow with the performance and data management capabilities needed for high-value and data-intensive workloads.



## 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](http://www.quantum.com/customerstories).