Quantum®
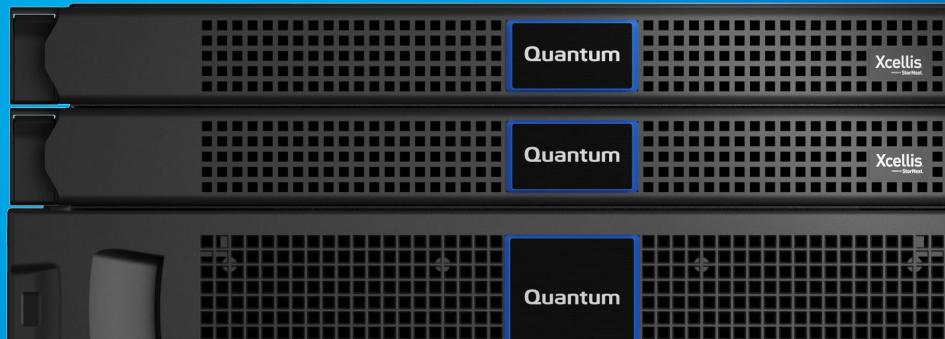
Xcellis
Workflow Storage

High-Performance, Massively Scalable Primary Storage

Most organizations that work with large amounts of 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 large data workflow. One that is scalable enough to keep up with growing demands without performance degradation. A system collaborative enough to provide access, regardless of performance requirements. And finally, efficient enough to do all this and stay on budget. Quantum Xcellis™ workflow storage is just that.

CONVERGED ARCHITECTURE

Xcellis optimizes workflow and shared access by combining functions that were formerly provided by separate components into a compact, space- and energy-saving solution. Xcellis manages high-speed disk for the most demanding workflows, multi-protocol SAN and LAN client access, single-pane-of-glass management and monitoring, and automatic data movement to low-cost storage such as cloud, object, 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 scales simply by adding storage arrays 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 SAN performance and the ease of NAS connectivity, 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 leveraging every dollar spent to benefit all connected users.

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.

Flexible continuous scalability
Add storage arrays 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 SAN or on a LAN.

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.

Flexible connectivity options
16Gb FC, 8Gb FC, 1Gb Ethernet, and 10Gb Ethernet.

Powered by StorNext® 5
Xcellis is designed to get the most out of StorNext 5, the industry's best data management system 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**®

SYSTEM

Workflow Director Nodes	Dual rack servers Redundant power supplies Dual six-core high-performance Intel E5 v3 CPUs
Workflow Director Storage	Quantum QXS-4 Dual redundant high-performance controllers Quad 16Gb Fibre Channel per controller (eight ports total) 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*

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

LICENSING

Included StorNext Software	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)
Optional NAS Connectivity License	Allows connection of SMB and NFS clients directly to Xcellis; does not require per-client licensing
Optional StorNext LAN Gateway License	Allows connection of StorNext LAN clients directly to Xcellis; does not require per-client licensing

CONNECTIVITY OPTIONS

Fibre Channel	Dual 16Gb Optical or Quad 8Gb Optical
Onboard Ethernet	Quad 1Gb for service, management, and metadata networks
Optional Ethernet	Up to two additional NICs for StorNext LAN, NAS, Q-Cloud™, and Lattus™ connections Choose from quad 1GbE or dual 10GbE 10GbE in Optical or Twinax
Client Protocol Support	StorNext SAN, StorNext LAN, SMB 1 (CIFS), SMB 2, SMB 3, NFS v3, Active Directory, OpenLDAP, RESTful API
Client Support	Linux, Mac OS X, Windows, AIX (see compatibility document for details)

MULTI-TIER OPTIONS

Extended Online	Quantum Lattus-M low-latency, massively scalable object storage
Tape Archive	StorNext AEL500, StorNext AEL6000 tape archive 3rd-party tape archive systems also supported
Cloud Storage	Q-Cloud Archive simple access cloud storage Q-Cloud Vault long-term deep-archive cloud storage

XCELLIS STORAGE NODES

	QXS-412	QXS-424	QXS-456
Usage	Combined user data and metadata	Dedicated metadata	Combined user data and metadata
Capacity Options (Raw)	48TB, 72TB per chassis	4.8TB, 9.6TB, 19.2TB	224TB, 336TB
RAID Array to Expansion Ratio	Up to seven expansions per RAID Array	RAID Array only	Up to three expansions per RAID Array
Drive Type	3.5" 7200 RPM NL-SAS	2.5" SSD	3.5" 7200 RPM NL-SAS

ENVIRONMENTAL

	Xcellis Workflow Director Node (per node, two nodes per Workflow Director)	QXS-412	QXS-424	QXS-456
Rack Height	1U	2U	2U	4U
Height	1.68" (4.28 cm)	3.43" (8.71 cm)	3.5" (8.9 cm)	7" (17.8 cm)
Width	18.98" (48.32 cm)	18.99" (48.24 cm)	17.6" (44.7 cm)	17.6" (44.7 cm)
Depth	27.57" (70.05 cm)	20.46" (51.9 cm)	20.57" (52.25 cm)	36" (91.44 cm)
Max Weight	37.3 lb (16.9 kg)	78.2 lb (35.5 kg)	57.32 lb (26 kg)	210 lb (95.3 kg)
Watts	295	465	436	1200
BTU	1007	1587	1488	4095

To learn more about Quantum Xcellis, please visit www.quantum.com/xcellis

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