Xcellis Scale-out NAS for All-IP Workflows

The migration to all-IP workflows now touches every part of the media workflow. What started as a ripple a few years ago with the move from discrete, server-based devices in machine rooms to software applications running in data centers is now a wave. From live production to processing, playout, and distribution, the IP transformation allows media companies to exploit new levels of interoperability between applications, bring greater efficiency to their workflows, and gain unmatched business agility.
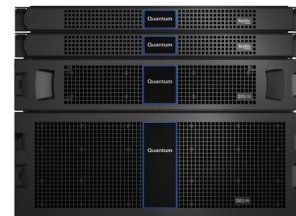
Storage is an essential element of this new approach. High-resolution, high-volume IP media workflows demand extreme performance and scalability from the underlying storage infrastructure. To meet this challenge content creators have traditionally had to choose between expensive, high-throughput SAN solutions and more affordable but lower-bandwidth NAS offerings.

The days of having to compromise on your storage to gain the benefits of IP workflows are now over, thanks to the Xcellis® Scale-out NAS solution from Quantum.

INTRODUCING XCELLIS SCALE-OUT NAS

Xcellis stands alone as the first and only scale-out NAS storage solution to deliver the uncompromising performance *and* scalability—previously available only in a SAN—required for demanding all-IP workflows such as uncompressed 4K post production. High-speed Ethernet connectivity over SMB, NFS or high-performance, IP-based native client enables blazing fast performance. System setup is simple and uncomplicated. Best of all, these benefits are available without the high costs associated with Fibre Channel infrastructure.

Like all Xcellis appliances, the Xcellis Scale-out NAS system is powered by StorNext®, Quantum's shared storage and data management platform. StorNext supports a broad ecosystem that includes more than 75 partner applications, including ingest, media asset management, editing, visual effects and transcoding systems. Leveraging more than 15 years of data management experience built into StorNext software, the Xcellis NAS brings unmatched performance and scalability to collaborative workflows, easing the transition to IP-based infrastructure.

SOLUTION BENEFITS

Increased Productivity
- Performance and capacity can be scaled out independently for reduced costs and increased flexibility
- Unified, shared access to content boosts productivity and collaboration regardless of location
- Intuitive GUI for easy deployment and management
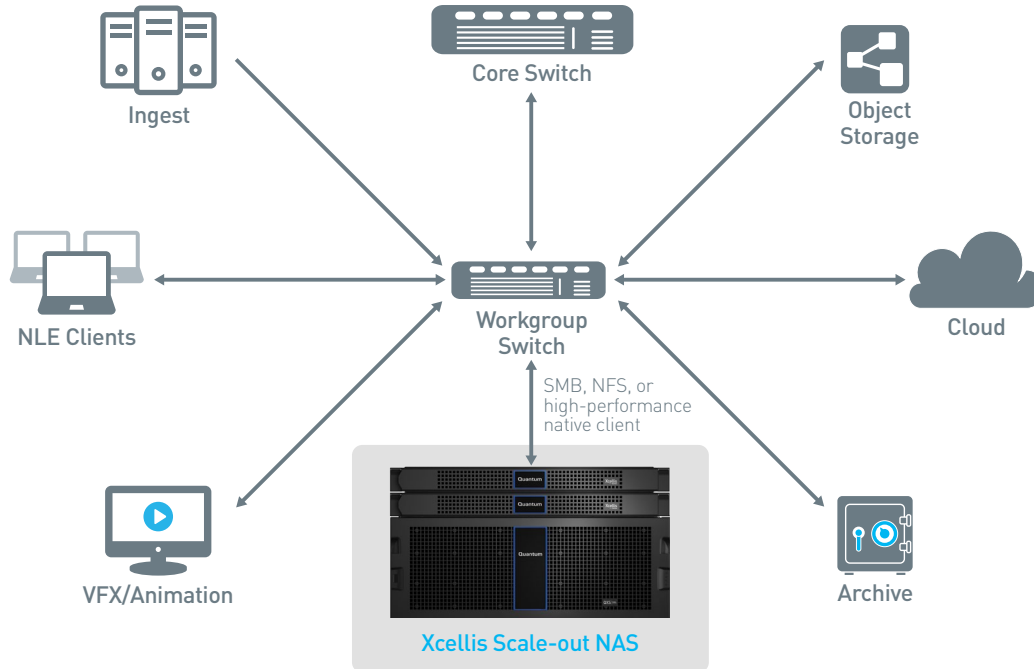
Extreme Scaling of Performance & Capacity
- Up to three times better performance than the market's next-best NAS offering
- Scales to hundreds of petabytes in capacity and more than a terabyte per second in performance
- All-flash configurations and high-speed LAN clients available for most-demanding applications

Advanced Data Management
- Automated, policy-based tiering between SSD, disk, tape, object storage and cloud
- Advanced file replication and data protection capabilities for optimized business continuity

Low Cost
- Xcellis Workflow Extender nodes and storage arrays can be scaled out independently for reduced costs
- Costs a fraction of comparable SAN solutions with the same capacity
- Converged architecture saves space and power

Xcellis Scale-Out NAS in the IP Workflow

Ingest

Core Switch

Object Storage

NLE Clients

Workgroup Switch

Cloud

SMB, NFS, or high-performance native client

VFX/Animation

Xcellis Scale-out NAS

Archive

WHY XCELLIS SCALE-OUT NAS?

Migrating from a Fibre Channel SAN to an IP-based NAS solution built around Xcellis is more affordable than you might think. The math is simple: upgrading to an 8- or 16-Gb fiber backbone can cost up to three times more than a comparable Ethernet fabric. An Xcellis NAS solution supports dual 40-GbE connectivity, with 50- and 100-GbE speeds on the horizon. With that level of throughput, typical IT departments can implement fully functional office networks but also take on responsibility for production storage and networks through a single IP infrastructure.

Xcellis Scale-out NAS combines high-performance IP connectivity with the option of an iSCSI or 16-Gb fiber backend and the industry's fastest file system, StorNext. StorNext provides multi-client access across all major operating systems, something no other storage vendor can deliver, so your team can create content on its platform of choice. The unique Xcellis NAS implementation enables the system to reach Fibre Channel speeds for demanding use cases such as collaborative uncompressed 4K editing and real-time visual effects creation.

Scalability is a hallmark of all Xcellis systems, and the Xcellis Scale-out NAS solution is no exception. Capacity and performance can scale together or independently, from tens of terabytes to hundreds of petabytes and multiple terabytes per second of performance. Users can opt for 40-GbE throughput to clients via Xcellis Workflow Extender nodes, with each node capable of speeds up to 4.8 GB/sec. In fact, a single cluster can accommodate 16 nodes, delivering a maximum of up to 8,000 connections and 77 GB/sec of throughput. Some configuration options can even deliver the same performance and capacity as a comparable SAN for as little as one-tenth the cost. Up to 16 nodes can be utilized in a single system, and sophisticated load balancing among nodes assures performance preservation in even the most demanding environments.

All-IP infrastructure is the future of media production. The Xcellis Scale-out NAS solution from Quantum simplifies your ability to get there—without compromise—and take advantage of its many benefits.

Quantum®

www.quantum.com
800-677-6268

SB00181A-v01   Mar 2018