

# STORNEXT SHARED STORAGE FILE SYSTEM



## DATASHEET

### FEATURES & BENEFITS

#### Connectivity Options

Clients can connect via Fibre Channel, iSCSI, iSER/RDMA, and IB.

#### Scalable Performance

Parallel access across macOS, Windows, and Linux.

#### High Storage Services Performance

Up to 23 GB per second on a single stream, sub-millisecond latency across 2,500 parallel streams, supports 6,500 concurrent streams.

#### Flexible Software-Defined Architecture

Deployment options align with application workflow requirements. Adjust performance tier per working data set.

#### Automate Data Lifecycle Management

Fluid movement of data from high-performance tiers to nearline tier ensuring data security, integrity, and accessibility throughout its lifecycle.

#### Ecosystem Integration and Support with Open APIs

StorNext is a POSIX-compliant file system with a standard set of APIs and a broad ecosystem of integrated and certified applications.

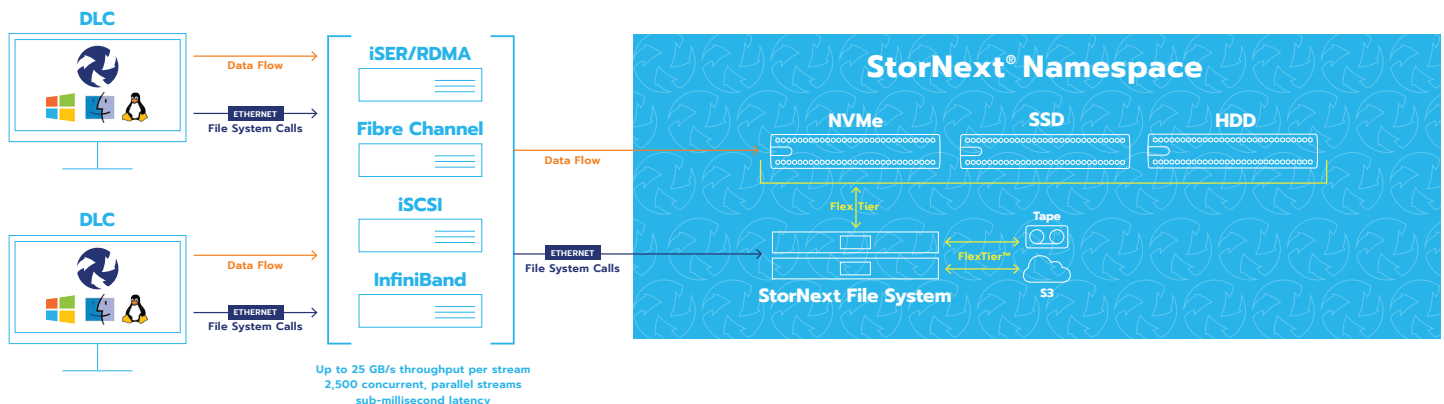
## Meeting the Challenge of Unstructured Data Growth

Unstructured data growth is far outpacing storage budgets, driven by larger resolutions, larger file sizes of video and digital imagery generated for business and entertainment content, scientific research, machine learning, and other high-tempo applications. This data is exponentially bigger than traditional databases—and given the sheer volume and velocity of incoming data—traditional storage solutions can't keep up.

Quantum StorNext® is a shared storage software platform—a high-speed file system that can span different types of storage in a single namespace with integrated data lifecycle management—that is ideally suited for large video files, digital imagery, and other forms of unstructured data. StorNext is used by large broadcasters, studios, and post-production houses for their collaborative video workflows; it is used by government agencies around the world to study the planet; and used by scientific research organizations to store, protect, and archive research data.

StorNext enables these companies to accelerate their workflows, dramatically shorten the time needed to produce results, and address the gap between data growth and budgets by managing data across the entire lifecycle.

## BROADEST RANGE OF CONNECTIVITY OPTIONS



LEARN MORE:

[www.quantum.com/stornext](http://www.quantum.com/stornext)

## STORNEXT SOLUTION

StorNext delivers full data lifecycle management from data creation to the end. As data moves across storage media, from NVMe or SSD to HDD, tape, or cloud, StorNext provides continuous access. For performance-sensitive applications, StorNext leverages iSER/RDMA or IB direct to storage connections for up to 23 GB/s single stream throughput. The storage media can be NVMe or SSD Flash for sub-millisecond latency. Thousands of parallel streams are supported to maximize data ingest and streaming. Once data no longer has performance demands, it is automatically, per policy, placed on lower-cost storage.

If data requires preservation over time, it can be copied or moved to Quantum LTO supported tape libraries, ActiveScale™ object store on premise, or S3 in the public cloud. Data placed in object storage or S3 in the cloud is self-describing with vast benefits: leverage applications in analytics directly against data in the cloud, facilitate collaboration across departments or organizations, and protect data assets from infrastructure obsolescence or vendor lock-in.

## TOP FILE SYSTEM USE CASES

### High-Performance Computing

- High data volume ingests
- Latency-sensitive workflows

### Data Streaming

- Parallel streaming to multiple clients

### Artificial Intelligence

- Large data sets to train AI

### Data Analytics

- Stream data through AI algorithms to derive results or action

## INDUSTRY-LEADING FEATURES

Clients and Connectivity	
<b>StorNext Client</b>	Allows users and applications to connect over Ethernet, Fibre Channel, or InfiniBand (IB) networks where the lowest latencies and highest performance access is required. Supports macOS, Windows, and Linux.
<b>Client Connections</b>	Leverages FC, iSCSI, iSER/RDMA, and IB to deliver the right level of performance and value.
Data Services	
<b>FlexTier™</b>	Move and copy files and folders between primary and secondary storage, all within a single namespace.
<b>FlexSync™</b>	A simple high-performance tool for creating local or remote replicas.
<b>File System Pools</b>	Create primary volumes with multiple classes of media for optimized performance at no additional cost.
<b>Client Access Control</b>	Secure access to data by locking which machines may access a file, directory, or file system.
<b>QoS</b>	Control bandwidth allocation to clients based on needs and priorities.
<b>Quotas</b>	Report on and control file system capacity allocation by user, group, and project.
Software Management	
<b>Web GUI</b>	Simple management of your StorNext File System environment and devices.
<b>Cloud Analytics</b>	Monitor system health anytime, anywhere from a secure cloud-based portal.
<b>Web API and CLI</b>	Modern, secure programming interface for connecting applications to StorNext; automate commonly performed tasks with a rich set of CLI commands.
<b>Administration Roles</b>	Granular control and delegation of administrative functionality.
<b>Access Controls</b>	Active Directory, LDAP, and Apple Open Directory supported.
<b>Self-Describing Objects</b>	Store data in S3, on premise or cloud, with separate metadata and data paths, enabling data access independent of StorNext.
File System	
<b>Storage Allocation</b>	Patented, intelligent storage allocation techniques to determine where to place files on storage.
<b>Metadata Management</b>	StorNext's unique approach to metadata management helps to maximize performance and provides for advanced data management capabilities.
<b>Scalable Namespace</b>	StorNext supports billions of files.

## CONCLUSION

If you are struggling with storage service delays, if your applications are lagging due to lack of performance, if you are struggling to keep up with processing and storing unstructured data, the StorNext File System platform helps you design your ideal storage workflow. StorNext's unique combination of high performance, scalability, and comprehensive lifecycle management capabilities meets the requirements of the most demanding workloads.



Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter – so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit [www.quantum.com](http://www.quantum.com).

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