

DATASHEET

STORNEXT FILE SYSTEM



INCREASE PRODUCTIVITY AND REDUCE TIME TO CRITICAL BUSINESS INSIGHTS WITH STORNEXT® FILE SYSTEM. STORNEXT ARCHITECTURE DELIVERS THE NECESSARY PERFORMANCE TO GET YOUR BUSINESS MOVING FORWARD.

First, there was a monolithic storage system that addressed the majority of applications' needs for storage performance and capacity. Then came virtualization with demands for storage diversification. Today, organizations are seeking solutions that address their specific IT challenges and enable them to drive a competitive advantage. StorNext File System is a software platform architected to manage unstructured data through its lifecycle, delivering the required balance of high performance, scalability, data protection and preservation, and cost.

Other systems may deliver throughput performance, but not across thousands of parallel streams at sub-millisecond latency. Other systems can deliver capacity, but not the ability to dynamically move data to the media with the most appropriate mix of performance and cost. Other systems offer long-term retention in lower-cost storage, but not the ability to automate data movement and ensure integrity, resiliency, and accessibility on premise or in the cloud.

FEATURES & BENEFITS

Connectivity Options

Client can connect via FC, 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.

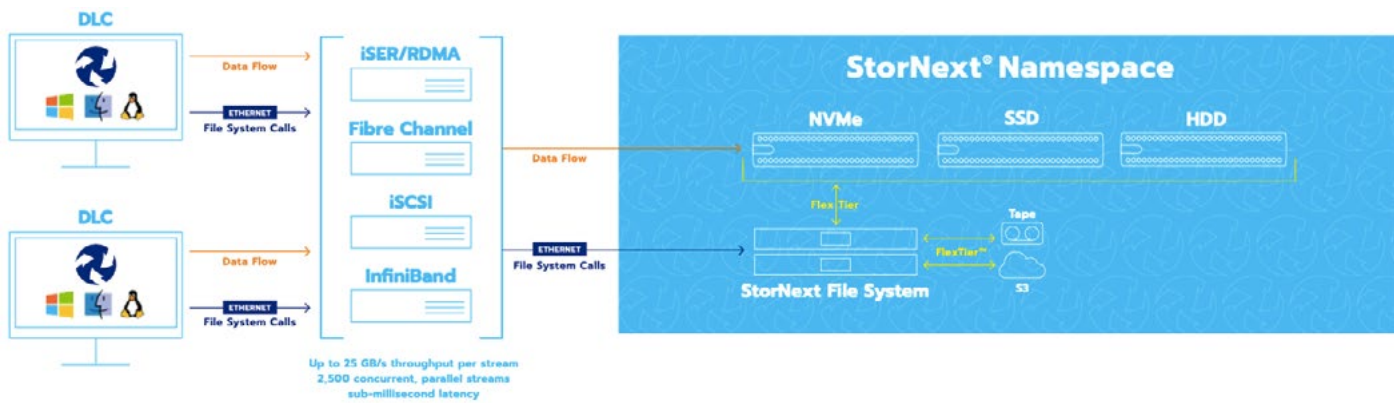
Automate Data Lifecycle Management

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.

BROADEST RANGE OF CONNECTIVITY OPTIONS



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

StorNext Client	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.
Client Connections	Leverages FC, iSCSI, iSER/RDMA, and IB to deliver the right level of performance and value.

Data Services

FlexTier™	Move and copy files and folders between primary and secondary storage, all within a single namespace.
FlexSync™	A simple high-performance tool for creating local or remote replicas.
File System Pools	Create primary volumes with multiple classes of media for optimized performance at no additional cost.
Client Access Control	Secure access to data by locking which machines may access a file, directory, or file system.
QoS	Control bandwidth allocation to clients based on needs and priorities.
Quotas	Report on and control file system capacity allocation by user, group, and project.

Software Management

Web GUI	Simple management of your StorNext File System environment and devices.
Cloud Analytics	Monitor system health anytime, anywhere from a secure cloud-based portal.
Web API and CLI	Modern, secure programming interface for connecting applications to StorNext; automate commonly performed tasks with a rich set of CLI commands.
Administration Roles	Granular control and delegation of administrative functionality.
Access Controls	Active Directory, LDAP, and Apple Open Directory supported.
Self-Describing Objects	Store data in S3, on premise or cloud, with separate metadata and data paths, enabling data access independent of StorNext.

File System

Storage Allocation	Patented, intelligent storage allocation techniques to determine where to place files on storage.
Metadata Management	StorNext's unique approach to metadata management helps to maximize performance and provides for advanced data management capabilities.
Scalable Namespace	StorNext supports up to 6 billion files.

CONCLUSION

If you are experiencing 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 can make a difference. StorNext's unique combination of high performance, scalability, and comprehensive lifecycle management capabilities meets the requirements of the most demanding workloads.