



Sun StorageTek™ QFS

Improving Time to Results

Highlights

- Improves time to results for collaborative work with large data sets
- Enables multiple heterogeneous servers to read and write to a high performance, common shared file system
- Allows you to tune file access to your application for extreme read and write performance
- Reduces storage management costs by providing simple file system management and file system consolidation
- Dramatically reduces storage costs using optional Sun StorageTek Storage Archive Manager software to provide automated, policy-driven data management



Sun StorageTek™ QFS software provides high-performance, heterogeneous shared access to data over a storage area network (SAN). StorageTek QFS technology is ideal in collaborative environments where large volumes of data require shared access. It allows data to be written and accessed at device-rated speeds, providing superior application I/O rates. It supports hundreds of heterogeneous systems directly sharing access to data. And it provides heterogeneous file sharing using NFS, CIFS, Apple Filing Protocol, FTP, and Samba.

High-performance collaborative work

StorageTek QFS software provides users across the enterprise with shared access to the same large files or data sets simultaneously, speeding time to market or time to project completion. Up to 128 systems running StorageTek QFS technology can have shared access to the same data while maintaining file integrity.

Ingest or access large data sets quickly

StorageTek QFS software allows movement of large files or data sets into the file system very quickly and permits single or multiple users, or applications, to have rapid shared access to that data. With optional StorageTek Storage Archive Manager software, StorageTek QFS technology transfers processed data to lower cost, high-volume storage tiers.

What's more, StorageTek QFS technology delivers performance that matches that of direct access to raw devices and scales linearly as hardware is added.

It also stores metadata (information about files) separately from data, improving high performance RAID cache utilization, reducing access latency, and enabling mirroring of metadata cost effectively.

Plus, StorageTek QFS software features built-in striping volume management, which allows multiple I/O streams to write in parallel across multiple disk systems for increased bandwidth to sequential I/O applications. And it enables volumes to scale up to four petabytes in size.

High-performance tuning of file system

To meet specific demands of applications such as large sequential I/O or small-file random access, StorageTek QFS software can be tuned to maximize the performance of data access. Direct I/O enables data to be read or written directly to and from disk for improved database and random file-access performance. The ability to set either a single disk access unit (DAU) size between 16 KB and 64 MB, a or dual DAUs of 4 KB/16 KB, 4 KB/32 KB, or 4 KB/64 KB, permits the tuning of overall file system performance for improved performance for millions of small files in a system and large systems with ultra large files.

Storage devices can be striped individually or in device groups, so files can be written to and read from a specific device group. This delivers better, and more predictable, performance to specific applications.

StorageTek QFS software also supports building long-term compliance-enabled file systems by providing WORM file management features that include setting file retention periods, ensuring file immutability, and managing files after expiration.

Database and Solaris™ Cluster support

The shared StorageTek QFS file system structure provides excellent performance and scalability for an Oracle RAC solution, and Solaris™ Cluster can be added to this solution for high availability. StorageTek QFS software also lowers TCO by dramatically reducing database administration workload in clustered environments over native RAC implementations.

Solaris Cluster support of StorageTek QFS high availability allows users to automate failover of a StorageTek QFS standalone file system, improving data availability.

Reduce storage costs

A Web-based management portal enables administrators to remotely and securely manage multiple StorageTek QFS servers, reducing management cost and complexity, while StorageTek QFS helps enable better resource utilization through file consolidation into fewer file systems.

In traditional environments, large volumes of enterprise data are spread across many file systems, causing performance bottlenecks, administrator headaches, and maintenance cost overhead. With StorageTek QFS technology, administrators can consolidate files across the enterprise in a common file system and manage

it centrally. Users and mission-critical applications can share the same files and access large volumes of enterprise data, with no performance degradation. This gives administrators more control of the storage environment, lowering TCO and improving the return on their storage investments.

To further protect and manage data created in a shared access environment, StorageTek QFS software works in conjunction with StorageTek Storage Archive Manager (SAM) software to reduce storage costs and complexity by automating data management and movement across tiered storage, based on its business value over time.

Engage the storage experts

Sun StorageTek service professionals help you address storage challenges by delivering integrated services and solutions that optimize and manage storage performance over the life of your data. Our recognized, world-class service and customer care give you confidence that your technology investment is protected and that your business can become more responsive to change. We can help you pinpoint opportunities to reduce costs, mitigate business risk, and better leverage information assets. Our consulting and managed services offer clear and simple solution choices that address your regulatory-compliance, storage-growth, resource-management, and scalability challenges. Covering more than 125 countries, upward of 2100 dedicated storage service professionals can help you gain and sustain measurable results with the reliability and flexibility you require.

Learn More

Get the inside story on the trends and technologies shaping the future of computing by signing up for the Sun Inner Circle program. You'll receive a monthly newsletter packed with information, plus access to a wealth of resources. Register today at sun.com/joinic.

Go with a storage leader

Choosing the right file system is critical to your business operations. Sun StorageTek QFS software optimizes the data path across your infrastructure and enables the convergence of NAS and SAN technologies. What's more, it provides a high-performance, shareable file system, allowing organizations to consolidate, share, and protect business information while delivering maximum scalability, quality of service, data management, and throughput for the most diverse data-intensive applications.