

NEXSAN'S HYBRID STORAGE PROVIDES SPEED & EFFICIENCY FOR DTS

Data Transfer Solutions (DTS) needed to securely and cost-efficiently integrate data from mobile collection units, which demand both high performance and storage capacity. DTS selected the Nexsan NST5000 for its speed and efficiency.



CASESTUDY

CUSTOMER OVERVIEW

Data Transfer Solutions (DTS) is a leader in asset management, Geographic Information Systems (GIS), and transportation planning. Across a wide range of industries, disciplines, and government agencies, the DTS team helps clients digitize their operations, improving efficiency and agility in the competitive global marketplace.

BUSINESS SITUATION

DTS recognized that in order to enhance productivity it needed to improve access to the information collected by consolidating the highly distributed data from its mobile collection systems into a single repository. This would also allow its Mobile Asset Collection (MAC) team to more efficiently manage and maintain the integrity of the data. The company operates a number of survey vehicles, each equipped with several cameras, GPS and Light Detection and Ranging (LiDAR) technologies and laser pavement scanning systems to collect information about right-of-way assets, pavement condition and sewage/storm-water features.

DTS selected the NST5310 Hybrid Storage system to unify its distributed storage environment. The organization has roughly 30 full-time users in the office with up to 15 additional temporary workers on hand to perform data extraction and analysis as government contracts require. They are an entirely Windows-based office, and all users connect to the NST5310 by way of CIFS shares. The NST5310 storage system currently holds 40TB with the ability to expand up to 720TB of capacity. The system has been deployed with SATA drives and is primarily used as the central storage vault for the MAC team. Once stored on the NST5310, data is moved to work stations for processing and extraction. The finished data is then returned to the Nexsan system.

"The data, both raw and processed, takes up huge amounts of space," commented Ryan Francoforte, an asset management Project Manager with Data Transfer Solutions. "We needed a way to deal with this situation, but within a narrow budget. Essentially, we needed to get maximum TBs per dollar in a redundant environment while offering very high performance."

// We knew that the Nexsan storage system would give DTS the full range of capabilities, reliable performance and storage density needed at an affordable price."

DOUG COLE

OWNER, LH COMPUTER SYSTEMS



ENVIRONMENT

- 40TB of data
- NST5310
- Nexsan E-Series™ underlying storage

NEXSAN NST5000 BENEFITS

- FASTier™ acceleration technology uses a modest amount of solid-state to greatly enhance overall storage performance
- Enterprise-class reliability and fault tolerance
- NFS/CIFS shared folders
- Snapshots
- Synchronous/Asynchronous Replication
- Quotas and thin provisioning
- SSD accelerated NL-SAS, SAS and SATA drives
- Active Directory and LDAP integration

NEXSAN NST5000 DELIVERS

- Exceptional Performance and Capacity - FASTier™ acceleration technology greatly enhances random I/O performance for virtual and cloud environments. The NST5000 eliminates difficult performance vs. capacity trade-offs that characterize flash-only storage.
- Streamlined Setup and Management – A revolutionary GUI streamlines setup and management, and has been designed to deploy in under 15 minutes.
- Ease-of-Use – The management console boasts some of the most advanced ease-of-use functionality in a Hybrid Storage system.
- Operational Efficiency – Delivers industry-leading storage density and power management with up to 3X the density at up to 85% energy savings.
- Affordability – NST5000 delivers leading cost-per-IOP and leading cost-per-TB.

NEXSAN NST5310

Initially, DTS tried out systems from a number of storage vendors with disappointing results. The platforms were either unreliable, too expensive or lacking in features critical to DTS operations. One system from a large storage vendor actually proved disruptive within their data management architecture.

“The other vendor’s system literally consumed and destroyed our data when we tried to use thin provisioning to expand its volume,” according to Francoforte. “Following the disaster, the provider’s support services proved almost non-existent. Conversely, we needed only two calls with Nexsan support during the installation of NST5310 to consult on configuration changes. Both calls were very quick and we’ve had no issues since,” he added.

“We knew that the Nexsan system would give DTS the full range of capabilities, reliable performance and storage density needed at an affordable price,” Doug Cole, Owner, LH Computer Systems.

The NST5000 is Nexsan’s family of Hybrid Storage systems that have been purpose-built for organizations that need high performance and enterprise-class features at a price they can afford. The NST5000 boasts a robust feature set including FASTier™ acceleration technology that leverages solid-state to accelerate the underlying SATA/SAS for up to 10X performance over traditional storage. It also offers the key features DTS required, including snapshots, replication, quotas/thin provisioning, no single point-of-failure configuration and much more. The storage system provides virtualized, online capacity expansion so administrators can add capacity as needed without any disruption to users or applications.

RESULTS

The NST5000 proved almost effortless to configure and has required no maintenance since being deployed. It has been reliably accessed from the company’s network users since day one of installation, providing blazing fast access to data as required. The system has allowed the MAC team to gather data into a single repository for more effective management while increasing productivity of the entire operation.

“Now our MAC team knows exactly where the data is, rather than having to search across multiple storage silos,” Francoforte commented.

CASESTUDY