

Nexsan 10 Minute Case Study



Nexsan Storage Optimizes Virtual Operating Environment for The Clark Enersen Partners

Quick Summary

Mounting storage requirements were driving the need for design firm The Clark Enersen Partners to consolidate its data and achieve greater information availability. With two locations and a dynamically growing 6.5TB of data to protect, the company needed a storage solution that could grow with it on the fly, while providing simplified management and supporting the company's disaster recovery initiatives. After selecting a combined solution from Nexsan, composed of iSCSI SANs - two SASBeasts® and dual Nexsan iSeries™ 200i, The Clark Enersen Partners is now ready for continued growth while benefiting from enterprise-class features to optimize its new virtual infrastructure.



ENVIRONMENT

- Two iSeries (200i) iSCSI SAN appliances and two Nexsan SASBeast tiered storage systems, dual controller with 28 x 600GB SAS drives and 14 x 2TB SATA drives per chassis.
- Nexsan storage systems are configured as a stretched cluster/metrocluster split between two server rooms across the campus.
- Complete storage mirroring and active-active failover is provided by the Nexsan iSeries layer.
- 6 Dell servers are connected by iSCSI to the Nexsan storage environment.
- The Dell servers form a VMware ESX 4 cluster with three nodes per server room, currently running 60 Virtual machines
- VMware provides physical host, virtual machine/application failover
- The storage environment supports an open source Picture Archiving and Communications System (PACS)

BENEFITS

- Purpose-built storage for virtualized environments
- Enterprise-class reliability and performance to meet the most stringent business requirements
- High-density storage with 42 disks per 4U of space
- AutoMAID® energy saving technology for up to 60% energy savings without compromising performance
- Easy installation and simplified management over Fibre Channel and iSCSI

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Cory Pierce, IT manager, The Clark Enersen Partners

CUSTOMER OVERVIEW

Founded in 1946, The Clark Enersen Partners is a design firm that specializes in architecture, engineering and landscape design. Through its design work, The Clark Enersen Partners has been a major influence in defining the character of the built and natural environment in its communities with work that is timeless and provides lasting value. Today, the company has offices in Nebraska, Missouri, and Kansas.

BUSINESS CHALLENGE: CONSOLIDATE MOUNTING STORAGE VOLUMES FOR GREATER STORAGE EFFICIENCY AND MANAGEABILITY

The Clark Enersen Partners generates volumes of large image files for its design, engineering, and drafting clients. As a result, storage requirements were increasing as project sizes continued to grow. From content ranging from email data and customer correspondence to project-related data, the regional design firm needed to centralize its applications and storage to simplify management and minimize costs.

“Probably my biggest challenge as an IT manager is dealing with ever-growing file sizes which can drive up storage requirements significantly,” said Cory Pierce, IT manager, The Clark Enersen Partners. “But in addition to scalability issues that arise from



NEXSAN iSERIES ADVANTAGE

- **Full-featured iSCSI SAN.** Nexsan iSeries is a turn-key IP SAN solution with features like virtualization, snapshots, replication, mirroring, data migration and more
- **Storage Virtualization.** Optimize storage utilization and management by creating volumes to meet the specific needs of different applications within the same system
- **Easy-to-Use.** Automated management eliminates time consuming administrative tasks. Deploy a complete SAN in minutes instead of hours
- **Highly Available.** Multi-path, multi-access architecture provides continuous data access; fully redundant and hot swappable components
- **Energy Efficient.** Industry leading energy efficiency delivers up to 60% power savings without performance compromise with AutoMAID® green technology
- **High Density.** With a storage subsystem that delivers 42 Disks in 4U of space, Nexsan iSeries optimizes data center space management

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SOLUTION: EXPANDABLE, RELIABLE STORAGE SOLUTIONS FROM NEXSAN

The Clark Enersen Partners performed a number of product comparisons to test scalability and functionality. Ultimately, the company selected a combination of two Nexsan SASBeast storage systems, each with 6TB of storage capacity, and dual Nexsan iSeries 200i SANs.

“In our research, Nexsan demonstrated the ability to meet our criteria,” said Pierce. “The systems have features that other companies just don’t have. Specifically, with Nexsan we are able to expand at a future date without buying another chassis and making a huge expenditure. That functionality was the piece that really sold me. Nexsan met every expectation I had.”

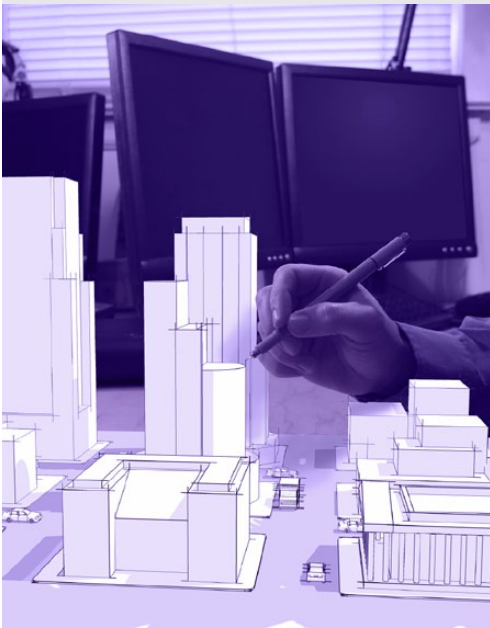
The Clark Enersen Group has deployed a Nexsan SASBeast at both of its office locations, one in the Lincoln office and one in Kansas City. The dual iSeries 200i SANs are running in cluster mode to allow for failover and high availability.

“The iSeries gives us the ability to do snapshots and replication through a central interface so we can ritualize our DR processes,” said Pierce. “With the iSeries, I really think Nexsan has put itself right in the forefront, leaping ahead of what other vendors are providing because Nexsan once again offers the flexibility to add additional storage on the fly.”

RESULTS: ENTERPRISE-CLASS FEATURES AND INSTALLATION SIMPLICITY GREATLY IMPROVE STORAGE MANAGEABILITY

After deploying the Nexsan systems, The Clark Enersen Partners have been impressed with the systems’ performance and reliability along with Nexsan’s customer service responsiveness. As a result, the company has seen a strong return on investment and increased storage manageability.

“The Nexsan systems were not hard to install,” said Pierce. “In fact, the simplicity started right from the beginning. I’ve never seen other companies package their products the way Nexsan does



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to make sure that when you get the device it’s in proper working order. And when I call Nexsan, I always talk to a person. Nexsan has even called me before possible issues arise because its staff can look ahead at what I’m dealing with and be proactive. So I felt pretty secure with the reliability and the quality of the Nexsan product.”

Once the Nexsan systems were up and running, the design firm was also impressed by the enterprise-class features it received. The biggest advantages for the firm included:

- **Low-Cost Scalability** – The Clark Enersen Partners can scale capacity without having to purchase additional storage systems.
- **High Performance** – Now data and logs can be placed on separate physical RAID sets within the same system, optimizing database performance. SAN controllers are independent and active/active.
- **Complete Storage Services** – All storage services are embedded onto the Nexsan iSeries for simplified operation, including virtualization, snapshots, replication, mirroring, and data migration.
- **Storage Virtualization** – The design firm can eliminate storage waste by creating thousands of custom volumes that precisely address the needs of individual applications.

"The Nexsan devices have allowed us to get enterprise-class features at a cost we can afford," said Pierce. "We now have some pretty invaluable tools to manage our data back end with snapshots, mirroring, and replication. This gives us the offsite storage we needed for disaster recovery and high availability. The assured data protection we now have is very important for us."

ABOUT THE CLARK ENERSEN PARTNERS

For more information on The Clark Enersen Partners, visit www.clarkenersen.com and www.scienceandresearchdesign.com

Presented by Nexsan

About Nexsan

Nexsan Corporation is a leading provider of energy-efficient, long-term storage systems. Nexsan delivers secure storage appliances and modular, capacity-optimized disk-storage systems for a broad range of applications including fixed content storage and archiving, email, medical imaging, compliance and litigation support, disk-based backup, digital video security, and rich media.

Nexsan's solutions are the choice of small and medium-sized companies as well as large global enterprises and major governmental agencies around the world who are seeking cost-correct, high density storage solutions. Founded in 1999 and based in Thousand, Oaks, Calif., Nexsan sells its products exclusively through a select global network of VARs, OEMs and system integrators. For more information, please see the company's website at www.nexsan.com.



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