

Nexsan 10 Minute Case Study



Westinghouse Electric Company Achieves Five Years of 100% Uptime Using Nexsan

Quick Summary

Westinghouse Electric Company was facing exponentially increasing storage costs and complexity as the innovative nuclear engineering organization struggled to find more effective ways to reliably store more than 450 TB of data in its collective data centers. To solve this problem, the company selected long-term bulk storage systems from Nexsan. After five years in use, the Nexsan systems have not only cost-effectively delivered superior reliability, density and simplified management for Westinghouse, they have also provided 100% uptime without any data loss.





ENVIRONMENT

- Over 450 TB of data for Unix/Linux based storage
- Two Nexsan SATABoy® storage systems
- Ten Nexsan SATABeast® storage systems
- Solaris 10 file servers

NEXSAN LONG-TERM STORAGE SYSTEM BENEFITS

- 100% uptime without data loss
- Purpose-built, high-density systems for bulk storage applications
- Enterprise-class performance and reliability to satisfy demanding business requirements
- Seamless scalability to meet capacity demands
- Fibre Channel and iSCSI connectivity for flexible deployment and multiple workloads on a single, small array

CUSTOMER OVERVIEW

Westinghouse Electric Company provides fuel, services, technology, plant design and equipment for the commercial utilities throughout the world. More than 50 years ago, the company helped build the first nuclear power plants in the U.S. Today, Westinghouse technology is the basis for approximately one-half of the world's operating nuclear plants, including 60 percent of those in the U.S. Based in Cranberry Township, Pennsylvania; the company has approximately 15,000 employees.

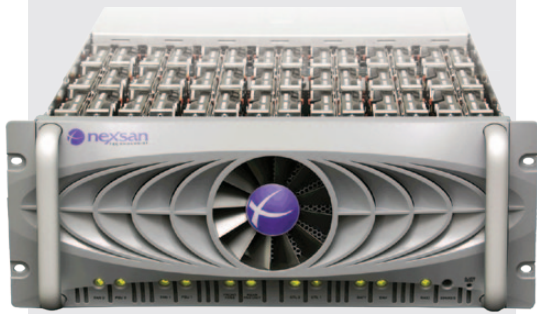
Westinghouse's engineering group generates mission-critical data as it works to design and construct some of the world's most innovative new nuclear power plants. This active development process produces exponentially increasing volumes of unstructured engineering file data; the company's various data centers are currently responsible for more than 450 TB of data.

BUSINESS CHALLENGE: REDUCE STORAGE COST AND COMPLEXITY WHILE ENSURING RELIABLE UPTIME

Five years ago, the Westinghouse IT organization faced the daunting challenge of finding an inexpensive and reliable way of storing its massive volume of data. Because the existing storage solution was complex to manage and expensive to maintain, expanding it as the company's data storage requirements continued to explode was not practical. So when the service contract for the existing storage solution expired, the Westinghouse IT organization began to search for alternatives.

SOLUTION: EFFICIENT, LONG-TERM NEXSAN STORAGE SOLUTIONS

Because the initial deployment of Nexsan systems at Westinghouse was so successful, the company subsequently installed two Nexsan SATABoy systems and ten SATABeast systems in its various data centers. The Nexsan systems serve as backend storage for Westinghouse's Solaris 10 server. The SATABoy storage systems are connected to the server via iSCSI while the SATABeast systems connect through 4-Gbps Fibre Channel



SATABEAST BENEFITS FOR WESTINGHOUSE

- **High Performance.** SATABeast offers access to data up to 500X faster than tape libraries and 20X faster than other MAID systems.
- **High reliability.** SATABeast offers fully redundant and individually hot-swappable active components (RAID controllers, fans, power supplies and disks). Further, it offers industry leading system reliability with innovative design in vibration reduction and cooling;
- **“Single pane of glass” management.** SATABeast supports management in one, central location through a simplified management console without the need for special agents or capacity keys.
- **Highly efficient storage for data mining and processing.** SATABeast provides industry leading density - up to 42 TB in only 4U. With higher density, there are fewer fans, power supplies and RAID controllers to support which ultimately delivers reduced operating cost through power and space efficiencies. SATABeast comes standard with AutoMAID® energy saving technology that reduces power consumption and cooling without penalizing storage performance.

RESULTS: NEXSAN STORAGE SYSTEMS DELIVER LOSS-FREE RELIABILITY

Since their initial installation five years ago, the Nexsan systems have delivered superior performance, reliability and availability for Westinghouse. In fact, the company has enjoyed 100% uptime without any data loss.

Nexsan’s efficiently architected storage systems deliver the following advantages for Westinghouse:

- **High-Density Storage** – Designed from the ground up to set new standards for high capacity, Nexsan storage systems deliver industry leading performance and cost-effectiveness in a scalable disk solution. The SATABeast systems offer an impressive density of 42 disks in 4U, which optimizes space in Westinghouse’s data center.
- **Exceptional Performance** – The SATABeast and SATABoy storage systems are high-performance RAID solutions built around the latest high-capacity SATA disk drives.
- **Assured High Reliability** – The SATABeast and SATABoy systems offer fully redundant and individually hot-swappable active components (RAID controllers, fans, power supplies, and disks). They also offer industry leading system reliability with innovative vibration reduction and cooling design.

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 that are seeking cost-correct, high-density storage solutions. Founded in 1999 and based in Thousand Oaks, California, 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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