

CUSTOMER CASE STUDY

OVERVIEW

Brookhaven National Laboratory is a multi-program national laboratory that conducts scientific research in the fields of physical, biomedical, and environmental sciences.

BACKUP APPLICATION

EMC[®] NetWorker[®]

KEY BENEFITS

- Forty percent reduction in full backup time
- Nearly instantaneous file retrieval

Brookhaven National Laboratory Cuts Backup and Restore Time with SEPATON VTL

When Brookhaven National Laboratory needed a faster, more efficient way to backup growing data volumes and improve recovery times, they implemented a SEPATON[®] S2100[®]-ES2 data protection appliance. The SEPATON solution delivered the performance and scalability they needed. The system also eliminated time-consuming tape management tasks, saving significant administration time.



“Because the SEPATON system is an appliance, it contained everything we needed to back up and recover data and it arrived fully configured to work with our software. The system was up and running in an hour.”

Andrew Ferguson
Manager, Enterprise Operations
Brookhaven National Laboratory

Established in 1947, Brookhaven National Laboratory is a multi-program national laboratory operated by Brookhaven Science Associates for the U.S. Department of Energy. It conducts research in the physical, biomedical, and environmental sciences, as well as in energy technologies and national security. Its mission is to produce excellent science and advanced technology with the cooperation, support, and involvement of scientific and local communities. Brookhaven National Lab also builds and operates major scientific facilities available to university, industry and government researchers. Six Nobel Prizes have been awarded for discoveries associated with the Lab.

THE ENVIRONMENT

To support its efforts, the Lab manages nearly 4 TB of administrative data using a wide variety of business applications and sophisticated database-driven technologies. This data includes payroll information, purchasing and financial records, email, administrative database content, and end-user home directories.

To protect this data, IT staff were using physical tape backup technology and EMC NetWorker backup software. The process of performing weekly full backups of users' home directories alone was taking more than 12 hours.

Recovering files was also time-consuming and cumbersome. End users in need of a recovered file had to wait for more than an hour for a file to be physically moved to tape drives for backup. Brookhaven IT staff knew that these issues would continue to worsen over time as their data volume continued to grow and their end user demand for data availability continued to increase. They set out to implement a significantly more efficient backup and recovery solution.

THE CHALLENGE

Brookhaven IT staff looked for a data protection solution that would dramatically reduce their backup and recovery times without adding complexity to their environment. They wanted a solution that would fit seamlessly into their existing architecture without requiring

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changes to their backup application or to policies and procedures.

In addition, the solution would have to scale both capacity and performance easily in order to support the Lab's administrative and scientific data requirements over time.

THE SOLUTION

The Lab purchased a SEPATON S2100-ES2 virtual tape library (VTL) to meet its data protection requirements. Brookhaven initially deployed the VTL to back up and recover administrative data and then expanded its implementation to include the protection of mission-critical scientific data.

"The SEPATON VTL offered two primary advantages," explained Andrew Ferguson, Manager, Enterprise Operations, Brookhaven National Laboratory. "First, because the SEPATON system is an appliance, it contained everything we needed to back up and recover data and it arrived fully configured to work with our software. The system was up and running in an hour. Second, the SEPATON roadmap goes beyond just VTL. Their applications, such as DeltaStor® and DeltaRemote™ promise to dramatically improve and simplify our data protection."

"It truly was plug-and-play. So far, we have been unable to move enough data to the SEPATON appliance to make it break a sweat."

Andrew Ferguson
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THE RESULTS

The Brookhaven IT staff were impressed with how easily the S2100 adapted to their SAN Fibre Channel environment and how seamlessly it worked their EMC NetWorker backup/recovery software. "It truly was plug-and-play. So far, we have been unable to move enough data to the SEPATON appliance to make it break a sweat," said Ferguson.

The S2100-ES2 has enabled Brookhaven to reduce its backup time by 40 percent. The SEPATON VTL also dramatically reduced the time required to retrieve files. With it, IT staff can instantaneously query the S2100 for the files required. There is no time wasted physically moving tapes. As a result, files are retrieved in a matter of minutes.