How Cisco IT Deployed a SAN for ERP Data Storage

Cisco Multilayer Director Switch improves storage usage, system management, and provisioning speed for ERP data storage.

BUSINESS BENEFITS

- Improved data availability
- Lower capital and management costs
- Simplified storage management
- Better network performance and speed
- Enhanced data security and integrity

Two Cisco MDS 9509 switches provided 67 percent more port capacity than the previous SAN infrastructure, with no disruption to the hosted applications.

Cisco Systems® maintains a rapidly growing data infrastructure as its data storage resources doubled in size every year, reaching over 2 Petabytes in 2004. In the mid-1990s, 90 percent of data resided on direct attached storage, hard drives directly attached to each server.. Through the early 2000s, Cisco® migrated to storage area networks (SANs), which allowed storage resources to be pooled into a large shared storage facility, improving overall storage utilization and reducing costs. This case study explores the changes in storage hardware technology that can adequately support the intensive storage needs of a large company, offered through a network-based storage architecture. The migration began with the deployment of the first Cisco MDS 9000 Series multilayer switches for enterprise resource planning (ERP) and data warehousing business functions in Research Triangle Park, North Carolina.

As a result of the size of the business functions within Cisco, it was challenging to build a SAN large enough to support an entire business function. For example, providing storage for the ERP business function within Cisco would require more than 400 ports. Using 64-port director-class switches and two storage subsystems, the SAN would rely on a complex and difficult-to-manage architecture. Typically, the more complex the solution, the higher the support costs. Cisco IT did not have the staff to build and support a SAN with this degree of complexity.

The Cisco IT storage group chose the Cisco MDS 9509 Multilayer Director Switch. The Cisco MDS 9509 switch provides up to 224 Fibre Channel ports in a single chassis, resulting in a SAN that is simple enough to manage and large enough to support the ERP environment.

Cisco MDS 9509 technology advances consolidation of storage across all business functions .

Currently, the Cisco ERP Oracle 11i environment is now better positioned for growth than ever before. Virtual SANs (VSANs) are used for additional network security. Storage management has been consolidated with the SAN islands, and specific tasks, such as storage provisioning within the new Cisco MDS 9509 SAN, are accomplished with greater flexibility. Servers and storage devices can be added as needed, without the additional expense and lead-time associated with the installation of an additional Fibre Channel switch.

Case Study: http://www.cisco.com/en/US/about/ciscoitatwork/case_studies/storage_networking_dl3.html

FOR MORE INFORMATION

To read the entire case study or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT www.cisco.com/go/ciscoit

NOTE

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