

How Cisco Multilayer Director Switch Operates with Other SAN Switches During SAN Migration

Cisco Multilayer Director Switch offers safe migration path from other vendor SAN switches.

BUSINESS BENEFITS

- Reduce capital costs
- Improve resource utilization
- Simplify management
- Improve uptime and network security
- Free data-center floor space

“When we took out one core switch, the host didn’t blink and the clients didn’t even notice.”

– Dave Angulo, Program Manager, Cisco Systems

Cisco Systems® IT has long been a proponent of storage area networks (SANs) over the less efficient and more complex direct-attached storage (DAS)-based networks. The majority of early Cisco® SAN efforts used the McDATA Enterprise Director 6064 switch at the core and McDATA Sphereon 3032 switches at the edge. This case study describes how Cisco IT replaced the McDATA switches with Cisco MDS 9500 Series Multilayer Director switches, which offer better scalability, higher performance, and virtual SAN (VSAN) capabilities.

Cisco engineers were worried that a complete, one-time migration of an entire SAN to the new Cisco MDS 9500 Series Multilayer Director would be expensive and difficult. Gradual migration would

require interoperating Cisco MDS switches with McDATA SAN switches for months. This strategy carried some risk because McDATA and Cisco switches were not certified to work together and feature compatibility was unknown. However, Cisco IT project leaders believed that the slow migration was necessary in order to replicate the migration path that a typical Cisco customer might follow—what Cisco learned from the experience would be valuable to its customers.

The cutover required Cisco IT to configure the Cisco MDS 9509 Multilayer Director switches, disconnect the McDATA core switches from the storage array and edge switches, and, finally, reconnect the storage array and McDATA edge switches to the new core Cisco MDS switches.

To make the changeover without disruption, Cisco IT storage administrators built an operating template that saved time during configuration. When it was time to deploy the second Cisco MDS 9509 Multilayer Director switch, IT took advantage of a unique feature of Cisco MDS 9000 Series multilayer switches—the ability to export configuration information to a text file, edit it for the second switch on a PC, and then import the edited configuration file back to the switch. Edge switches were replaced months later without disruption.

The Cisco engineering SAN ran flawlessly in interoperability mode. With the migration now complete, the higher port density of the Cisco MDS 9509 Multilayer Director switch—32 ports per blade and up to 224 ports per Fibre Channel—is helping to reduce costs, improve utilization, and free data-center floor space.

Migrating to Cisco switches can be done gradually and without network interruption.

Case Study:

http://www.cisco.com/en/US/about/ciscoitwork/case_studies/storage_networking_dl2.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

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