

# Technology Report: Modular Arrays

# S T O R A G E

Managing the information that drives the enterprise

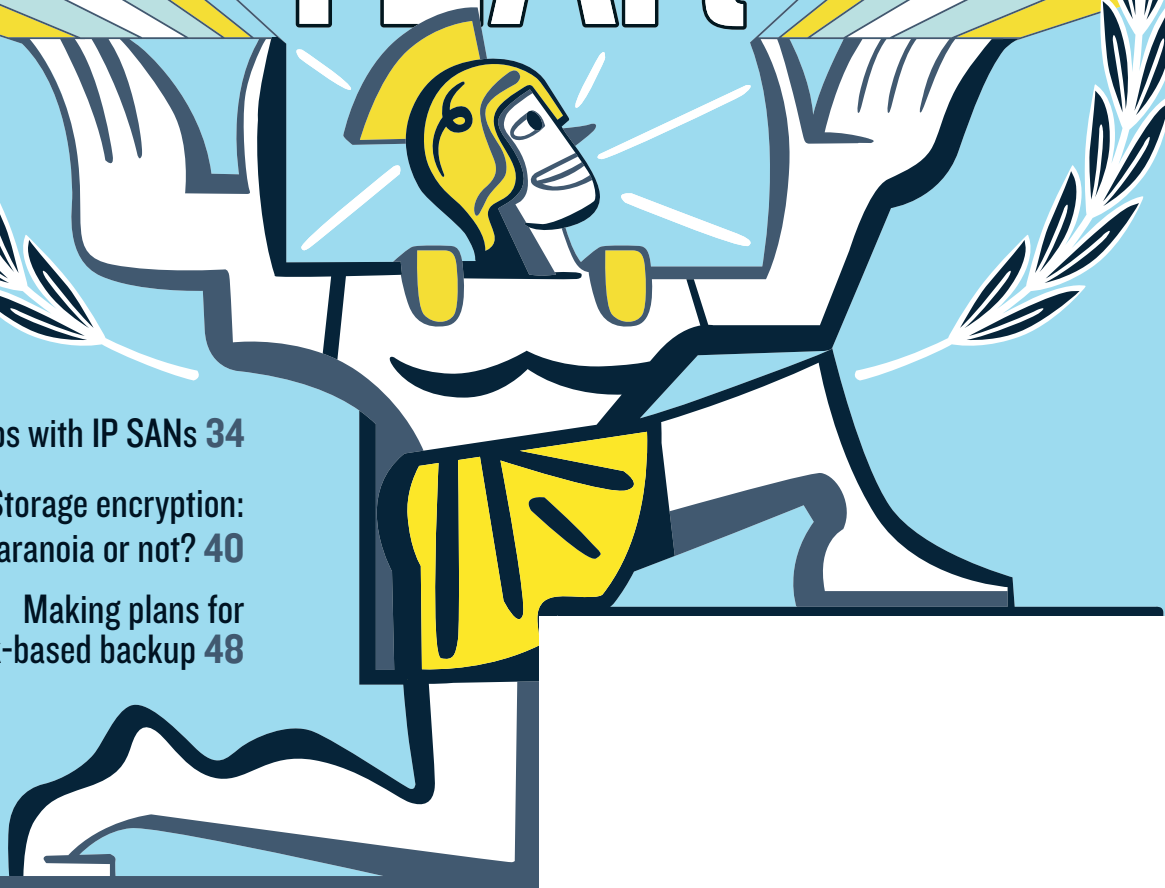
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# NETWORKING EQUIPMENT

## GOLD: CISCO MDS 9509

CISCO SYSTEMS INC.'s MDS 9509 has raised the bar for director-class switches. The MDS 9509 is playing a leading role in bringing intelligence to the storage fabric with virtual storage area networks (VSANs), security, advanced traffic management and unified SAN management. In addition, the Cisco MDS 9509 provides multi-protocol integration and an open platform for embedding intelligent storage services such as network-hosted virtualization.

Cisco has championed VSANs as one way to consolidate SAN islands onto a single physical SAN, while still partitioning them as completely separate logical entities. VSANs provide all the security and fabric services of traditional SANs, yet give organizations the flexibility to easily move and isolate resources from one VSAN to another, which can simplify management.

In addition to VSANs, the Cisco MDS 9509 provides an open platform for hosting storage services such as network-based virtualization and replication. The switch supports all the major security



Cisco MDS 9509 is paving the way with VSANs.

standards including RADIUS authentication, Simple Network Management Protocol Version 3, Secure Shell Protocol, Secure File Transfer Protocol and FC Security Protocol, as well as hardware-enforced zoning, LUN zoning, read-only zones and ACLs.

In storage, things don't always go as planned. To help isolate and solve problems, the Cisco MDS 9509 has an impressive number of diagnostic features such as Switch Port Analyzer and Cisco Fabric Analyzer, which allow a user to remotely and nondisruptively diagnose fabric events. These tools significantly decrease the time to install, reconfigure and maintain a storage network. Other helpful debugging tools such as FC Ping, FC Trace Route and an extensive set of debug commands further help analyze and fix network problems.

Other nice-to-have bells and whistles include full redundancy of all major components, up to 224 2Gb/s and 1Gb/s auto-sensing FC ports and ties to other leading storage company products via an open API.

## CISCO SYSTEMS



<http://www.cisco.com/go/storage networking>

