

Cisco MDS 9124 Ups the Ante in Fabric Switches

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Since its entry into the Fibre Channel switching market in 2002, Cisco has rapidly taken share from its rivals to become the market share leader at the high end of the market. To date, Cisco has competed primarily in the director-class category while competitors Brocade and McData have offered end to end product lines from directors down to 8-port fabric switches. With the release of Cisco's MDS 9124, an 8-port switch expandable to 24 ports, Cisco has extended its MDS line to fully compete on both ends of the switch spectrum. The company has also upped the ante by bringing director-class capabilities down to the 8 and 16 port fabric switch segment.

Taneja Group views the MDS 9124 as a significant greenfield opportunity for Cisco to create an end-to-end reach in the very active fibre channel switch space. The MDS 9124 targets two primary segments: SMBs and the enterprise. The value proposition to SMBs is a simple and affordable way to create secure, available, and flexible SANs off a single switch. In the enterprise, the 9124 acts as a fully integrated edge switch in the data center, as well as enabling single-switch SANs in departments and workgroups.

Director-Class Capabilities in an 8-Port Switch

The MDS 9124 comes with Virtual SAN (VSAN), which allows 9124 users to create up to 16 SANs per single switch. Each VSAN can be zoned as a typical SAN, complete with individual fabric services and management domains. The MDS 9124 also affords security, availability, and flexibility to these smaller SANs. Director-class switches provide these capabilities as a matter of course, but this is the first time these advanced features have appeared in an 8-port switch at no additional cost to the end user. Furthermore, Cisco has architected the MDS 9124 to be easy to use, particularly for administrators who lack specialized Fibre Channel knowledge and skills.

Security

Security features include encryption, authentication and access management, along with audit trails, password management, zoning, and physical switch port lockdowns. Even in organizations unfamiliar with Fibre Channel SANs, the 9124's security features protect against accidental and malicious attacks such as overwriting or spoofing.

Availability

Highly available, redundant switching infrastructure is crucial for mission-critical environments such as email and production databases. The 9124 includes a number of

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availability features, including non-disruptive software upgrades, self-healing SAN-OS software, fault isolation, and redundant management paths, as well as out-of-band Ethernet and in-band IP-over-Fibre Channel. The switch also comes with the option of dual power supplies, an industry first in this fabric switch class segment.

Flexibility

The MDS 9124 offers greater flexibility, allowing SMBs not be locked into a SAN that they will soon outgrow. Organizations can expand the MDS 9124 from 8 to 16 to 24 ports, and can also integrate the switch with Cisco's MDS 9500 and 9200 series switch platforms for even larger SANs. This means that when an SMB uses the MDS 9124 to create their SAN, the SAN will grow right along with them. The enterprise benefits from using the MDS 9124 as an edge switch in data center core-to-edge deployments serving ROBO (Remote Office / Branch Office).

Ease-of-Use

The switch is simple to use, which is particularly important to SMB customers. The MDS 9124 comes with a Quick Configuration Wizard, simplified management through the Cisco MDS 9000 family CLI, the Cisco Fabric Manager, and integration with third-party storage management tools. The Quick Configuration Wizard is particularly useful for administrators who are unfamiliar with Fibre Channel, since it abstracts the more esoteric concepts of World Wide Naming (WWN) and Fibre Channel zoning from the user interface.

Affordability

The switch is affordable, priced at an entry-level 8 ports with a pay-as-you-grow plan for 16 to 24 ports. Cisco offers all-in-one licensing for bundled features with no hidden charges.

The State of the Switch

The MDS 9124 underscores Cisco's rapid pursuit of the SMB market. This space has been Cisco's fastest growing in 2006, with over 94,000 new SMB customers and bookings of around \$2 billion thus far. The MDS 9124 reaches out to new SMB segments with an entry-level switch containing director-class features. Cisco also continues to engage its core enterprise MDS customers with an end-to-end switch product family for enterprise data center and departmental needs.

Cisco's primary competitors in the fabric switch space are Brocade and McData, who are in the middle of an arduous integration and product rationalization exercise. Brocade holds 2/3 market share in the overall fabric switch market, while Cisco is the market share leader in the high-end director-class segment. However, neither Brocade's nor McData's 8-port switches offer the MDS 9124's advanced feature set. QLogic has also entered the fabric switch model with a low cost switch option.

Taneja Group Opinion

The MDS 9124 introduction represents a frontal assault on Brocade and McData at a time when they are preoccupied with merger integration. The introduction of the MDS 9124 expands Cisco's reach into the SMB market as well as the enterprise edge, intensifying the battle for market share in the fabric switch market. MDS 9124 represents a differentiated offering that should curry interest from its target markets. Cisco should be able to grab market share if customers experience confusion around merged Brocade/McData product lines.

Cisco entered the Fibre Channel switch market in 2002, making a splash with director-class and feature-rich fabric switches. It is now expanding its market position with a scalable switch for the fast-growing SMB market as well as the popular core-to-edge enterprise architecture. Given Cisco's strong market reach and success in the director segment of the market, Taneja Group expects Cisco to gain ground against well-entrenched competitors as the company penetrates deeper into the popular fabric switch market.

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