Cisco Data Center 3.0

Connectrix MDS 9148
Good Things in a New, Small Package

Bob Nusbaum, Product Line Manager
Pressures on Storage Teams: Large and Small

- Increasing SAN access
  - Today: Server virtualization
  - Going forward: Unified fabric
- Faster time-to-service/limited teams
- Continual storage growth

IT teams (of all sizes) must address evolving data center trends
Connectrix MDS 9148
More Performance and Value, For More Data Centers

- High performance plus resiliency
  - Industry-leading 8G FC port density
  - Highly scalable, resilient, and secure architecture (NX-OS)

- Flexibility for growth and virtualization
  - Pay-as-you-grow: start with 16, 32 or full 48 ports—add 8 port increments
  - Enables virtual machine-aware SANs

- Lowest price with enterprise-class capabilities
  - Most cost-effective switch in industry
  - Full features plus functionality at no extra license costs

Shipping from EMC since April 16, 2010
Performance Plus Reliability for Smaller SANs

Connectrix MDS 9148 Fabric Switch

Industry-leading Performance/Density
- 48 line rate ports in 1 rack unit (RU)–768G in 1RU**
- Lowest power consumption equals greener SANs

Enterprise-class Reliability
- Single, proven data center OS supporting millions of LAN and SAN ports
- Non-disruptive software upgrades
- Self-healing equals minimize SAN disruptions
- Physical reliability: dual power plus fans

NX-OS 5.0
(MDS family, Nexus, UCS Fabric Interconnects)

Ideal solution for mid-market and departmental deployments
Flexibility for Growth and Virtualization

- Pay-as-you-grow scalability
  16 → 32 → 48 x 8G ports
- Enables mid-market customers to leverage enterprise-class capabilities

Virtual Machine (VM) Aware SANs

- Map VM clusters to VSANs
- Quality of Service (QoS) per VM
- VM mobility with security
Flexibility for Future Business Growth

- Storage consolidation
- Common backup
- Simplified management

Departmental / Remote office / Entry-level SAN

- Storage consolidation
- Common backup
- Simplified management

Mid-market Edge/Core SAN

- Scalability
- Security
- Consistent operations
Lowest Price SAN Switch
Enterprise-Class Capabilities at No Extra Cost

MDS 9148: Availability, security, and flexibility features are bundled with hardware at no charge
“Cisco FlexAttach (in combination with the Cisco 9148) saves time and money as it increases efficiency and reduces risk, allowing server administrators to manage server attachment to the SAN without needing to engage SAN administrators or make any changes to SAN configuration.”

Tony Palmer, ESG Senior Engineer.
Cisco Fibre Channel Solutions
Comprehensive 8G End-to-End Portfolio

- Seamless end-to-end FC connectivity
  Server–access layer–SAN
- Unified OS plus management
  Seamless interoperability/feature consistency

UCS B-series

New

6100 with 8G FC

UCS C-series
with FC HBAs

Connectrix MDS 9148

Connectrix MDS 9500 series

FC Array

FC Hosts

8G FC

Nexus 5000

8G FC

FCoE Hosts

New

8G FC

New

FCoE
## Cisco MDS 9148: Case Study

<table>
<thead>
<tr>
<th>Business Needs</th>
<th>Customer Results</th>
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<tbody>
<tr>
<td>Consolidation of several city departments such as: emergency, police, administrative, etc.</td>
<td>“Performance and flexibility are two key aspects we look for in a SAN switch as we consolidate our storage infrastructure. Full fabric features as well as high 8 Gbps per port performance of the MDS 9148 is ideal to accommodate our bandwidth intensive virtualized server environment.”</td>
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<tr>
<td>Highly virtualized environment</td>
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<tr>
<td>Reduce power/space/cooling needs, while simplifying operations</td>
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<tr>
<td>Security, compliance requirements</td>
<td>- Samnang In, IT Analyst, City of St Paul, MN</td>
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EMC / EMC Channel Partner Endorsement

“The high performance, flexibility, and the cost-effective price makes it an ideal storage solution offering to our customers.”

Raphael Meyerowitz, Presidio Networked Solutions

“The Cisco MDS 9148 provides flexibility, scalability, and enterprise class features at a low cost, making it an ideal departmental/enterprise SAN solution offering for our customers.”

Steve Culbreth, Evolving Solutions

“The MDS 9148 complements Cisco’s 8Gbps FC strategy in multiple platforms by providing a high performance, enterprise-class SAN switch at a lower cost point.”

Mario G Brum II, GreenPages

“The high performance 8Gpbs Fibre Channel speeds, scalability features, and ease of management are ideal for entry level to mid size SAN deployments.”

Deirdre Wassell, EMC
Connectrix MDS 9148
EMC Channel Partner Advantages

- Adds to broad Cisco Data Center portfolio for EMC partners
- Connectrix MDS 9148 is easy to sell and differentiate:
  - Quick configuration wizard for provisioning
  - No hidden licenses
- Generous reward programs for partners:
  - EMC Partners via Cisco Data Center Advantage Incentive Program (DCAIP)
Cisco and EMC: Transforming to the Virtualized Data Center

Learn more: [www.cisco.com/go/datacenter](http://www.cisco.com/go/datacenter)
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