

# IT Services Provider Protects SAN Investment, Expands Capabilities

Customer Case Study



EVERY chooses Cisco MDS 9710 Multilayer Directors to adapt easily to emerging and future customer demands.

## EXECUTIVE SUMMARY

### Customer Name:

EVERY AS

**Location:** Oslo, Norway

**Employees:** 10,000

### Business Challenge:

- Meet increasing demand for high performance
- Keep SAN infrastructure as simple as possible
- Minimize management requirements

### Network Solution:

- Cisco MDS 9710 Multilayer Directors
- Cisco Data Center Network Management
- Cisco Network Optimization Service

### Business Results:

- Gained high, predictable performance
- Retained high reliability while increasing scalability
- Protected SAN switching investment

## Business Challenge

EVERY AS provides IT services to businesses, financial institutions, national public-sector entities, municipalities, and health authorities in Norway and other Nordic countries. As the country's largest provider, EVERY's success is all about driving profitable growth while minimizing operational costs. Its storage area networking (SAN) environment has to consistently deliver high throughput and nonstop operation.

And it has done exactly that since 2004, when EVERY began using Cisco® MDS 9506 and 9509 Series Multilayer Directors. In the years that followed, EVERY's IT team upgraded those initial systems to Cisco MDS 9513 Series Multilayer Directors to accommodate the increasing port utilization created by escalating application and storage requirements.

Today, EVERY's virtualization deployments are expanding rapidly. More compute power places high demands on SAN switches. Customers are deploying more applications, many with higher-than-ever storage demands. When the IT team's internal customers suddenly need more capacity, the SAN team must be ready.

EVERY plans to consolidate numerous data centers to three, one of which is now under construction. The requirements are straightforward. EVERY needed 16-Gbps Fibre Channel connectivity without oversubscription. Continued high reliability was non-negotiable. The system had to support switching for petabytes of storage. And it had to be easy to manage. EVERY's team is small and must support 12 petabytes of storage on more than 100 storage arrays.

"We like to keep our infrastructure simple, because soon each administrator will be responsible for approximately 800 terabytes of storage," says Jo Marius Pedersen, SAN administrator for EVERY. "We wanted to continue with Cisco, because we've had outstanding reliability. We performed a field trial of Cisco MDS 9710 Multilayer Director switches, and it was easy. It was like testing one of our 9500 switches, just supercharged, which was exactly what we hoped for."



**“We’ve had impressive uptime numbers since we started using Cisco MDS 9500 Series solutions. The systems let us adapt easily to changing needs. Over the years, we have upgraded line cards, crossbars, and supervisor modules when needed, not entire systems. It has been great investment protection. We are expecting the same with the Cisco MDS 9710 platform.”**

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Jo Marius Pedersen  
SAN Administrator



As a result, EVRY chose Cisco MDS 9710 Multilayer Director switches as the next step forward for its SAN core. The new systems were delivered and are supported by Cisco storage partner EMC.

### Network Solution

Several existing EVRY data centers rely on dual Cisco MDS 9500 Series Fibre Channel fabrics. Each SAN fabric includes 18 Cisco Multilayer Director switches. Four new Cisco MDS 9710 switches have been added to these fabrics with plans for expansion.

The Cisco MDS 9710 Multilayer Directors layer a comprehensive set of intelligent features onto a high-performance, protocol-independent switch fabric. They share the same operating system and management interface with other Cisco data center switches, so they are easy to integrate. As a result, EVRY maintains a unified fabric with high-performance Fibre Channel connections.

The new Cisco MDS 9710 systems feature up to 384 ports of 16-Gbps Fibre Channel switching. Switching power delivers 16-Gbps line-rate, nonblocking, predictable performance across all traffic conditions for every port in the chassis. The Cisco MDS 9710 also supports high availability. All major components are redundant, including the fabric card. Nondisruptive software upgrades and stateful failover let EVRY keep customers’ services up and running, no matter what.

The new systems exceed EVRY’s VSAN requirements. They deliver integrated hardware-based VSAN features, for high performance, simpler management, and flexibility. EVRY also uses Cisco Prime™ Data Center Network Manager (DCNM) for managing its SAN switches.

“We really like the graphical user interface and enhanced display features,” says Pedersen. “It’s easy to see fabric health and other attributes at a glance.”

EVRY also uses Cisco Network Optimization Service to augment its operations. “The SAN team knows our environment,” says Pedersen, “and they’re onsite when we need them for upgrades or changes, which makes things a lot easier. We have a great relationship, and they enable us to scale our staff capabilities more effectively.”

### Business Results

The Cisco MDS 9710 delivers the high performance that EVRY needs today, with the scalability to grow, no matter how unpredictable customers’ needs become. The new systems can deliver up to 24 Tbps of Fibre Channel switching bandwidth. With this kind of scalability, EVRY has the flexibility to support growing customer deployments with high database processing requirements. EVRY’s SAN team was already comfortable with Cisco equipment and management tools, so learning the capabilities of the new systems was easy. And managing them is easy with the Cisco DCNM graphical interface.

“From a management perspective, the Cisco MDS 9710 is almost identical to the familiar Cisco MDS 9500 Series,” says Pedersen. “With the line rate cards, we don’t have to designate ports or worry about port groups. Similarity to our existing systems saves time and minimizes new training requirements.”

The Cisco MDS 9710 gives EVRY the flexibility that it will need to easily meet future requirements without disrupting the installed infrastructure, cable plant, or IT processes.

**PRODUCT LIST**

- Cisco MDS 9710 Multilayer Directors
- Cisco Network Optimization Service
- Cisco Prime Data Center Network Manager

**Next Steps**

Keeping things simple pays off for EVERY's SAN team. And the Cisco MDS switches combine simplicity with power and reliability for the future.

"We've had impressive uptime numbers since we started using Cisco MDS 9500 Series solutions," says Pedersen. "The systems let us adapt easily to changing needs. Over the years, we have upgraded line cards, crossbars and supervisor modules when needed. It has been great investment protection. We are expecting the same with the Cisco MDS 9710 platform."

**For More Information**

To find out more about Cisco Multilayer Director Switches, visit [www.cisco.com/en/US/products/ps5990/index.html](http://www.cisco.com/en/US/products/ps5990/index.html).

To learn more about EVERY, visit [www.evry.com](http://www.evry.com).

This customer story is based on information provided by EVERY and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

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