

Local Government Centralizes Storage to Reduce Costs

City of St. Paul implemented MDS 9148 switch and Compellent storage area network.

EXECUTIVE SUMMARY

CITY OF ST. PAUL, MINNESOTA

- Local Government
- St. Paul, Minnesota
- 3500 Employees

CHALLENGE

- Reduce data center costs
- Scale to meet growing storage requirements
- Simplify management of police video

SOLUTION

- Cisco MDS 9148 Multilayer Fabric Switch
- Compellent Storage Center

RESULTS

- Increased storage utilization by consolidating departmental storage
- Tripled port capacity while paying only for ports enabled
- Avoided need to separately back up surveillance video

Challenge

The city of St. Paul, Minnesota is home to more than 272,000 citizens. The IT team contributes to the city's economic health by striving to keep operational costs low. This effort frees up funds for public safety, education, and other government services that help attract residents and businesses.

To increase data center efficiency, the city is virtualizing its physical servers and centralizing storage for all departments. "Our goals are to reduce data center capital and operational costs citywide, and also become more agile when departments request new services," says Samnang In, system analyst with the city of St. Paul.

Previously, the city had a Fibre Channel SAN plus direct-attach storage housing a total of 25 terabytes. As the SAN warranty neared expiration, the IT team decided to reevaluate its storage and storage access solutions.

New city initiatives had changed storage requirements. For example, continuing virtualization efforts would increase the number of ports needed to connect servers to the SAN. And even more ports and storage capacity would be required as the St. Paul police department began capturing video using in-car cameras, a new program to help support successful prosecutions and to defend the city from unwarranted lawsuits. "We also wanted the flexibility to use any storage protocol, especially iSCSI " says In.

Solution

The city of St. Paul found a reliable, multiprotocol storage solution in a Cisco® MDS 9148 Multilayer Fabric Switch and Compellent SAN. "We liked the fact that the Cisco and Compellent Cisco solutions have been tested together, and the Cisco MDS 9148 is economical, because we pay only for the ports we enable," In says. The city currently has enabled 16 of the 48 line-rate 8-Gbps ports. The switch currently connects to servers operating Microsoft SQL Server, and will later also connect to Oracle database and email servers.

The city of St. Paul IT staff easily learned to manage the Cisco MDS 9148 switch, because the NX-OS operating system is similar to the Cisco IOS® Software they already use to manage Cisco Catalyst® switches. To configure the switch, a staff member used the web-based wizard, which provided prompts to enable or disable particular ports. Ease of management is especially appealing for the city's lean IT department because most staff members are generalists, managing servers, storage, LANs, and the storage area network.

“The Cisco MDS 9148 Switch is reliable, cost-effective, and easy to learn and manage.”

—Samnang In, System Analyst, City of St. Paul, Minnesota

Results

“The Cisco MDS 9148 Switch is reliable, affordable, and easy to learn and manage,” says In. The immediate benefit of the Cisco and Compellent solutions is minimizing the city’s storage costs. “The Cisco MDS 9148 switch provides as many ports as three 16-port switches, and yet we don’t have to pay for ports until we need them,” In says. In turn, the Compellent SAN is cost-effective, because it provides three different disk speeds, and automatically moves the most frequently accessed data to the fastest drives.

The Cisco and Compellent solution is also reducing management overhead for the police department’s evidentiary video. “If we hadn’t implemented centralized storage, the police department would have used direct-attach storage that required separate backup,” In says. “Using the Cisco MDS 9148 and Compellent SAN increases utilization while also enabling the police to take advantage of centralized backup.”

PRODUCT LIST

- Cisco MDS 9148 Multilayer Fabric Switch
- Cisco Catalyst 6500 Switches
- Compellent Storage Center

For More Information

To find out more about Cisco MDS 9100 Series Multilayer Fabric Switches, visit: <http://www.cisco.com/go/mds>.

To find out more about Compellent SAN solutions, visit: <http://www.compellent.com>.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (100206)