Medical Center Gains Suite of Collaboration and Wireless Capabilities

Cisco Services helps Swedish Medical Center deploy advanced collaboration solutions and future-proof its network.

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EXECUTIVE SUMMARY

Swedish Medical Center
Seattle, Washington, United States

CHALLENGE
- Anticipate and deliver technology capabilities to meet clinical and administrative needs
- Enhance collaboration and save valuable staff time
- Make the network infrastructure ready for future needs

SOLUTION
- Cisco Advanced Services and Cisco SMARTnet Service

RESULTS
- Conducted a media and video-readiness assessment and prepared network infrastructure for future Cisco TelePresence and video implementation
- Smoothly deployed Cisco Unified MeetingPlace pilot
- Implemented suite of collaboration and wireless capabilities that support staff across all Swedish locations

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Challenge

Founded in 1910, Swedish Medical Center has grown to become the largest nonprofit healthcare provider in the greater Seattle area. It has been consistently named among the area's best hospitals, with three hospital locations in Seattle, a freestanding emergency room and specialty center in Issaquah, and a network of 12 primary care clinics. As the hospital has grown to multiple locations, its IT organization has continuously anticipated which capabilities would be required to support its medical mission.

The hospital had long relied on its Cisco® networking infrastructure, steadily building on this foundation over time. In 2004, Swedish Medical Center was opening a standalone emergency medical center, and Jeff Lester, the network and voice manager for Swedish, had been evaluating voice solutions for the new facility, which was expected to need 200 phones.

"We weighed the decision to purchase a PBX or implement unified communications solutions for the first time," says Lester. "We sought a third-party recommendation for IP voice and wireless solutions and the recommendation was for Cisco solutions. We accepted the recommendation and put an infrastructure in place that we could build on to meet future needs."

By 2008, Swedish had grown to cover 17 locations and many staff members routinely traveled between facilities for meetings. Several departments had begun to use commercial audio conferencing solutions to help reduce the amount of travel time required, and it became clear to Lester that Swedish was ready to progress beyond IP voice and wireless communication to video applications that would provide users with advanced collaboration capabilities. The hospital required a broader assessment of its collaboration needs, as well as consultation for determining the best direction to take for meeting its current and future collaboration goals.

The hospital's IT team was already working with Cisco on several hardware and licensing purchases and was in the process of negotiating its Cisco SMARTnet® Service agreement. Part of the three-year agreement included a Cisco Advanced Services engagement, so Swedish engaged them for assistance with identifying and implementing its new collaboration solution.

> "Our philosophy is to always build on our foundation, and with a Cisco infrastructure as our platform, we can continue to put in place the capabilities that Swedish needs to remain a leader."
> **– Peter Hoelzl, Supervisor Network Engineering, Swedish Medical Center**

Solution

Swedish chose Cisco Unified MeetingPlace®, which would enable it to integrate collaboration with its existing Microsoft Outlook environment. A data center move and upgrade in 2006 had resulted in a powerful network platform that was ready to accommodate a Cisco Unified MeetingPlace pilot project. The network provides a Layer 3 infrastructure, including a redundant core with four 10-Gbps uplinks to the distribution layer and WAN. Layer 2 links between the access and distribution layers provide 20-Gbps capacity to each switch at the access layer. The data center infrastructure includes the Cisco ACE Application Control Engine Module for Cisco Catalyst® 6500 Series Switches, which provides load balancing and higher application availability.

Cisco Advanced Services set about implementing Unified MeetingPlace and verifying network-readiness for a future Cisco TelePresence™ deployment. Cisco Advanced Services has been instrumental in implementing a smooth pilot project of Unified MeetingPlace and will complete the pilot through full deployment. The team also provided quality-of-service (QoS) design and recommendations as it tested Swedish's network and assessed its readiness for Cisco TelePresence.

"Cisco Advanced Services has been extremely helpful with our Cisco Unified MeetingPlace integration and is continuing to help us ensure that our network platform will be ready to deploy Cisco TelePresence when we are ready," says Lester. "The team is really top-notch."

The hospital had standardized its approach to Cisco Unified Communications and Unified Wireless deployments. Each new location is surveyed for IP voice, wireless coverage, and location-based services. For example, the new Swedish Orthopedic Institute relies on its Cisco Unified Communications and wireless infrastructure to support Vocera hands-free devices as part of the clinical staff's daily workflow. The Vocera device connects to the Unified Messaging system and a directory through middleware to help staff locate physicians, nurses, or other assistance. Swedish Medical Center has deployed at least 1500 wireless access points across its locations.

Cisco Unified Contact Center Express solutions are used for gathering statistics that are used in Swedish's remote clinics. Swedish also replaced all of the 900-MHz wireless phones used by its transport teams with Cisco Unified IP 7921 phones.

"We also rely on our Cisco SMARTnet Service to provide us with peace of mind," says Peter Hoelzl, supervisor of Swedish's network engineering. "With so much relying on our network, it is critical to know that we will receive fast resolution of anything that might happen unexpectedly."

Results

The Cisco network platform is powering important clinical and administrative capabilities. Wireless workstations-on-wheels are used by physicians and caregivers to access patient information from the hospital's new electronic medical record application. The workstations can be at the bedside for secure, instant access to patient data while providing care. The wireless network also supports data collection and alerts from oximeters, which are used to measure blood oxygen levels.

Cisco Unified MeetingPlace is used by 50 people in a collaboration pilot project and is expected to expand to include video conferencing functionality to support internal collaboration.

"Our infrastructure is ready to receive Cisco TelePresence capabilities next, so that when we are ready, the implementation should be fairly quick," says Hoelzl. "Our philosophy is to always build on our foundation, and with a Cisco infrastructure as our platform, we can continue to put in place the capabilities that Swedish needs to remain a leader."

For More Information

To find out more about Cisco Services, visit: www.cisco.com/go/services.

To learn more about Swedish Medical Center, visit www.swedish.org.

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