



THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

LOCATION:
*Lake Forest, Illinois,
United States*

YEAR:
2006

STATUS:
Laureate

CATEGORY:
*Government and
Non-Profit Organizations*

NOMINATING COMPANY:
F5

ORGANIZATION:

Lake Forest Hospital

PROJECT NAME:

High Availability and Secure, Remote Access for
Hospital Single Enterprise Network

Summary

Reliable, fast, and secure access to applications on the network is important in any business, but rarely as critical as it is in a hospital environment. Immediate access to the right information and consulting resources literally can be the difference between life and death, and certainly is vital to the health and well-being of patients and their families. Lake Forest Hospital Foundation selected equipment from F5 Networks to keep its network infrastructure accessible and secure. F5 solutions give doctors and other medical and administrative personnel efficient, 24/7 access to applications and information on the hospital's single enterprise network from their offices, homes or other remote sites. At the same time, F5 solutions support compliance with federally-mandated policies such as the Health Insurance Portability and Accountability Act (HIPAA) by securing the personal information of the patients the hospital serves. Solutions from F5 have helped the hospital deliver better care to its patients, protect private information and limit liability, and lower management costs.

Introductory Overview

Lake Forest Hospital Foundation is among the nation's premier medical care providers, delivering state-of-the-art, people centered healthcare and medical treatment from its location in the north shore area of Chicago.

The hospital has a single enterprise network that supports its medical-related and administrative applications, as well as the providing the infrastructure for critical equipment including OBLink fetal monitoring systems, x-ray and mammography equipment, and even security cameras and time clocks. To deliver quality, people-centered care, hospital personnel rely heavily on applications such as Dictaphone for documentation, eCare from Nebo Systems for Electronic Data Interchange (EDI), and third-party application service providers Scheduling.com for scheduling and Picture Archive Communications System (PACS) for image archiving.

The challenge is to "externalize" internal applications and provide medical and administrative personnel reliable and secure access to network applications from any location. Additionally, like



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any business, the hospital is concerned with controlling overhead costs and improving administrative efficiency.

Lake Forest Hospital chose F5's FirePass SSL VPN to keep its network applications safe, reliable and fast.

Benefits

Remote Access

For Lake Forest Hospital, remote access is a key component in delivering the high quality medical care patients deserve and expect. Lake Forest doctors and other medical personnel are thrilled with how F5's FirePass SSL VPN solution has made it easier to do their job providing innovative, state-of-the-art medical treatment and compassionate care to patients and their loved ones. For example, instead of making a trip to the hospital at 2 AM, a doctor can access the network from home via FirePass and see the latest information and images generated by the hospital's OBLink and PACS systems and consult immediately with nursing staff on site. The F5 solution also enables doctors to share medical images real-time and consult with physicians at other hospitals nationwide. This is technology that serves the needs of the patient by enabling medical personnel to provide the highest quality treatment in the most caring and compassionate way possible.

The F5 FirePass remote access solution has provided business-related benefits as well. It has made it possible for the hospital to lower overhead and utilize expensive office space more efficiently by hiring transcriptionists who want the flexibility of working remotely. Additionally, building engineers can log into FirePass, bring up the system tool for the building management system, and adjust a variety of factors such as pool and room temperature from virtually anywhere.

Network Security

F5's FirePass allows the hospital to maintain its "best practice" security policy, guaranteeing privacy-sensitive applications are delivered in a manner that complies with HIPAA mandates. The hospital literally cannot afford to compromise on the security of its patients' medical information.

The Importance of Technology

To ensure that medical and administrative personnel have remote, secure, and highly available access to applications, Lake Forest Hospital relies on F5's FirePass SSL VPN. It provides employees with a simple, expedient, and secure way to access medical support and business applications from any remote location via a standard web browser. With FirePass, there is no need for client-side software installation, saving thousands of dollars in management costs and enabling a hassle-free connection to the hospital network from any computer at any location.

Lake Forest network engineers can easily integrate FirePass with the existing active directory, and create policies granting application access based on user identification and privilege for time-saving user authentication management. "We are really pleased with the functionality of FirePass and how easy it is in terms of supporting our end users," said Manfred "I love the flexibility of it because we're always running into people saying, 'I want to do this', and with FirePass, we rarely



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have had to tell them we can't."

Originality

Lake Forest Hospital is one of the first in its industry to provide employees with anywhere, any-time access to applications on the network. Implementing ubiquitous network access supports the hospital's philosophy of pioneering the use of any technology or tool available that will help improve the quality of life for its patients and their loved ones.

Many hospital employees access the network through public wireless networks using PDAs and other handheld devices not owned by the hospital. With SSL VPN technology there's no need to install software on the client machine, so users can access applications from any Web-enabled device from any location at any time. The hospital's IT staff doesn't need to touch these devices; easing the provisioning and support burden. "FirePass has been awesome in terms of minimizing support," said Manfred. "We don't have to get involved in supporting the personal equipment of employees that need remote access and there have been minimal client-side issues to contend with."

While this wide-open access is a huge benefit to users and the patients they are serving, the IT staff has to make sure that network security is not an issue. F5's FirePass delivers the granular control necessary to ensure that patient information stays private and the hospital's applications and network infrastructure are protected. "With FirePass, we're able to authorize certain people to access certain sections of the network, so we're limiting exposure and still giving people the tools they need to do the job," said Manfred.

Success

Currently approximately 100 people -- half of the hospital's remote users -- rely on FirePass. Based on the success of the project to date, hospital management expects the demand for secure remote access to skyrocket

Difficulty

There are always objections to change -- even if it's an improvement -- because people are comfortable and familiar with the old way of doing things. Accessing network applications via FirePass is a simple and straightforward process, but did require some training. "The medical and administrative staff is busy, so we needed to persuade them that it was worth a little time and effort to learn the new access method," said Manfred. "If there had been problems, they would have lost faith in the solution immediately. But they quickly realized that FirePass made it easier for them to do their jobs. Now they love it."