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Southern Illinois Healthcare Relies On FirePass SSL For Easy-To-Use Remote Access While Meeting Strict Regulatory and Security Compliance Measures

Industry:

Healthcare

Challenges:

- Deliver secure, reliable remote access for employees, technology vendors, physicians
- Reduce high TCO common to IPsec VPN solutions
- Improve scalability

Solution:

F5's FirePass SSL VPN

Benefits:

- Improved worker satisfaction and productivity/efficiency gains
- Improved interface makes routine tasks efficient and straight-forward to perform
- Fast and easy technical setup/configuration (less than one hour)
- Trouble free maintenance and guaranteed availability
- Meets HIPPA compliance standards

Overview

The people of Southern Illinois Healthcare (SIH), a not-for-profit health care system, are dedicated to promoting the health and well being of all of the people in the communities they serve. Their mission is guided by their values: compassion, collaboration, quality, stewardship, integrity and respect. Over 2,000 employees, along with physicians and volunteers, are working together to achieve their mission and ensure that the health care needs of those they serve are met by treating patients in SIH facilities, by offering services in rural clinics, by collaborating with some of America's best hospitals and by improving the quality of life in their communities with their charitable community benefit programs.

Challenge

SIH needed to provide secure remote access to employees, physicians, and technology vendors. Employees needed to work from home or while traveling on business. IT staff required the ability to provide emergency support or assistance outside of normal business hours. Patient care provider and physician offices located throughout the regional area needed to connect to clinical systems such as radiology imaging, patient records, or medical billing.

And technology vendors needed to remotely monitor, maintain, or remediate technical problems on servers they have been contracted to support.

Prior to F5's FirePass SSL VPN solution, SIH was using a client-based Cisco VPN. This required each remote PC to have the Cisco client application installed on it and required detailed configuration settings to be made by a staff technician, before a connection was possible. Although well suited for site-to-site connections and even manageable for a small number of user-to-site connections, this approach was logistically difficult and expensive to implement on the scale SIH ultimately needed.

SIH required a manageable VPN solution with extremely fast implementation, high scalability, robust security, and lower total cost of ownership than traditional IPsec VPN solutions for the majority of their user-to-site connections.

Initially, in addition to F5's FirePass SSL VPN, two of the other leading SSL VPN products (at that time found published in the Gartner Magic Quadrant) were also evaluated for a period of 30 days in SIH's live network environment. Appliances were racked and configured as if they were





production devices, and subjected to a number of remote access tests designed to measure their performance, interface ease of use, reliability, and depth of features, among other attributes. A criteria list of approximately twenty items was used to assess and rank each of these three products according to policies most important to SIH, and its present remote access initiatives.

Solution

Sebastian Sullivan, M.B.A., Security Specialist for the IT Compliance & Quality Assurance Department of Southern Illinois Healthcare, originally served as Project Manager for the organization's SSL VPN implementation. However, since the FirePass system went live, Sebastian, in addition to his day-to-day information security responsibilities, now handles Remote Access Administration for SIH.

According to Sullivan, the FirePass product was ultimately selected over competing products they evaluated on the basis of the following merits:

- The lowest TCO comparative to other offerings.
- Most flexible and scalable licensing model based on "maximum allowed concurrent user volume" versus "total raw number of accounts."
- Superior F5 Networks sales, technical support, and an aggressive stance toward implementing new features and product improvements based on emerging industry/customer needs.

"F5 interactively pursues customer feedback on an ongoing basis and applies product enhancements and innovations more aggressively than we viewed competitors doing at the time," said Sullivan. "Post sale, we have been contacted by F5 many

times, directly assessing the quality of support service delivered and seeking feedback on new features that would be useful in our vertical industry of healthcare, compliance needs under HIPAA, as well as achieving successful integration of medical applications like AGFA Web1000 radiology imaging."

- Intuitive easy to use administrative interface makes routine tasks efficient and straight forward to perform. With FirePass, accessing features is easy and can be achieved according to the style and preferences of the Administrator.

"The administrative interface had a dramatically shorter learning curve than competing products, which makes training of backup staff easier and cost effective," said Sullivan.

- Incredibly fast and easy technical setup/configuration (less than one hour) with no field support calls required.

"When the appliance arrived," said Sullivan, "our Manager of Technical Support had the device out of the box and configured in about thirty minutes without the need for support calls or factory assistance. The other appliances we evaluated required field engineers to do the initial setup."

- Wide range of optional features (such as built in web terminal emulation and secure remote desktop control) activated on demand through real time e-licensing.

"The great thing about FirePass," Sullivan stated, "is that it offers out-of-the-box support for legacy terminal emulation, with no need for installation of end user client terminal emulation software or requiring licensing overhead. Because we still have many legacy

terminal based applications running on AS400 and UNIX server environments, having a robust web based terminal emulator available to remote users was a positive feature."

- Support for truly transparent failover, enabling trouble free maintenance and guaranteed availability. With FirePass, failover to a secondary appliance is seamless. If SIH needed to perform maintenance on one unit, the secondary unit provided immediate remote access upon primary device shutdown.

"In the healthcare industry, high availability and redundancy are critical aspects to providing sustained information access," said Sullivan. "FirePass SSL VPN enabled us to achieve that with no complex procedures required for downing a device."

- Aggressive end-point security features such as the virtual keyboard, firewall and anti-virus end point inspectors, as well as audit reporting capabilities "helped make the product stand out," added Sullivan.

"The one aspect of FirePass we immediately recognized was its highly granular approach to granting resource access and the ability to regulate access based on security safeguards present on end systems like AV and firewall software," he said. "User actions in terms of accessing specific resources are tightly controlled and reported, and access is controlled based on the quality of remote PC security implementations. That helps us meet our own internal reporting as well as overall HIPAA compliance requirements."

The FirePass virtual keyboard feature has recently come into the spotlight for SIH, based on their



concerns over remote access from foreign countries where security standards on public PCs at Internet cafes or hotels may be less stringent than in the United States. The virtual keyboard is one more safeguard SIH can employ to protect against key logging on foreign systems.

Benefits To The Administrator

“Because my job focus is on information security, IT compliance, and quality assurance, the virtual keyboard, AV and firewall checker, cache cleaner, visual policy editor, and exportable logs/reports are all key features I find to be of critical value,” Sullivan stated.

In the context of day-to-day use, the highly intuitive administrative interface makes routine tasks extremely fast and easy to perform. Freedom from having to drill down a half dozen layers just to complete standard tasks greatly improves administrative efficiency and cuts down dramatically on service ticket times.

Sullivan added that “end users are pleased at just how fast their VPN requests get implemented, and that greatly helps IT maintain high customer satisfaction.”

Benefits To The User

According to Sullivan, users enjoy the fact that they can access the VPN from any computer that has Internet access and a standard web browser, whether it's their home PC, a hotel lobby PC, or even another workstation on SIH's internal network. The ability to login to the VPN using their Active Directory account credentials also makes users extremely happy – they no longer must remember yet another user name/password.

“The ability to remotely control their work PCs as if they were sitting directly in front of them has been a feature that has generated considerable excitement and relief for many of our users,” said

Sullivan. “Users like working with their normal Windows desktop with all applications and files exactly as they normally are, with no new interface or access methodology for them to learn.”

“Some users have even discovered that with FirePass, someone from one facility, floor or department can be physically at a different location on our internal network and easily jump on a web browser,” Sullivan said. “Through their personalized FirePass VPN page they can quickly take control of their primary desktop system to run programs, access local files or network drive shares, securely access their email messages or daily planner/scheduler, all without forcing the current user of the station to log-off. It provides users with a ‘roaming desktop’ that can be accessed from internal systems located throughout our various regional facilities.”

Benefits For Healthcare Compliance

From a compliance standpoint, FirePass allows SIH to tackle three key challenges, according to Sullivan:

- Tightly limit access to very specific information resources using the FirePass product's highly granular access permission methodology.
- Improve information security by facilitating the application of end-point security policies, performing automatic AV scanning of transferred files, and enforcing virtual keyboard access for designated out-of-country or public kiosk remote access users.
- Produce access reports that meet SIH's internal auditing and reporting needs, as well as those required under HIPAA.

Benefits To Healthcare Recipients

FirePass facilitates anytime/anywhere information access. This improves the efficiency, productivity, and accessibility for SIH employees who telecommute from home, who need access while traveling on business, or who need to rapidly respond to urgent situations while off the premises. In addition, FirePass enables IT staff to quickly and securely connect with the SIH information systems, and perform critical support or administrative actions remotely, as needed.

“The ability of our employees to work more efficiently, have direct access to information when it is needed, and to improve the quality of support for key systems, benefits healthcare recipients overall,” said Sullivan.

Business Benefits of FirePass

“In terms of business benefits, there have been overall savings in hourly technician time as well as lower travel expenses, because our Technical Support Department no longer needs to send an employee out to remote doctors' offices to install, configure, and pre-test a client based VPN,” said Sullivan. “Improved staff resource utilization further enables our technicians to use their finite time responding to other support issues.”

The other business benefit to using FirePass is SIH's ability to not just technically but administratively implement remote access accounts more rapidly, leading to greater throughput in overall VPN work order completions. Faster ticket turnaround times translate into happier IT customers, said Sullivan, and “those customers in turn will be able to use their remote access to improve the way they work, leading to improved worker satisfaction and productivity/efficiency gains as well.”

