Customer Case Study Series

Memorial Hermann: Improving Clinical Workflows With XyLoc

MEMORIAL® HERMANN

Memorial Hermann, the largest not-for-profit healthcare system in Texas, serves the greater Houston community through its nearly 20,000 employees, 11 hospitals, a vast network of affiliated physicians, and numerous specialty programs and services. A national leader in medical innovation, Memorial Hermann actively seeks out technologies that can help improve healthcare for the people of southeast Texas.

Like many health systems today, Memorial Hermann is rising to the challenge of improving patient care by streamlining clinical processes. This case study examines how XyLoc® — the full-time computer workstation security solution from Ensure Technologies™ — is helping Memorial Hermann to accomplish this.

THE CHALLENGE:
Streamline Clinical Application Access While Simplifying and Strengthening Security

An award-winning healthcare system, Memorial Hermann strives to deploy information technology as a strategic asset that improves patient care, increases clinical staff efficiency, and reduces costs. Yet in the dynamic environment of its busy medical facilities, reaching these objectives without adding new procedural burdens to end users or exposing new information security gaps is always a challenge.

The primary objective in this case was to speed access to frequently-used clinical computer applications for doctors and nurses by streamlining log-on and log-off procedures — without compromising security of patient information or other sensitive records. If done right, this would save tremendous time for clinical staff, increase their availability for patient interaction, boost patient and caregiver satisfaction, and even enhance patient information security (i.e., HIPAA compliance). Certainly a big win all around — but, how best to make it happen? To help turn this vision into reality, Memorial Hermann partnered with Set Solutions, Inc., a well established Houston-based integrator of network security and related solutions. Set Solutions played key roles during the project, providing support for technology evaluation, project management, high-level workflow and architecture planning, and training and deployment.
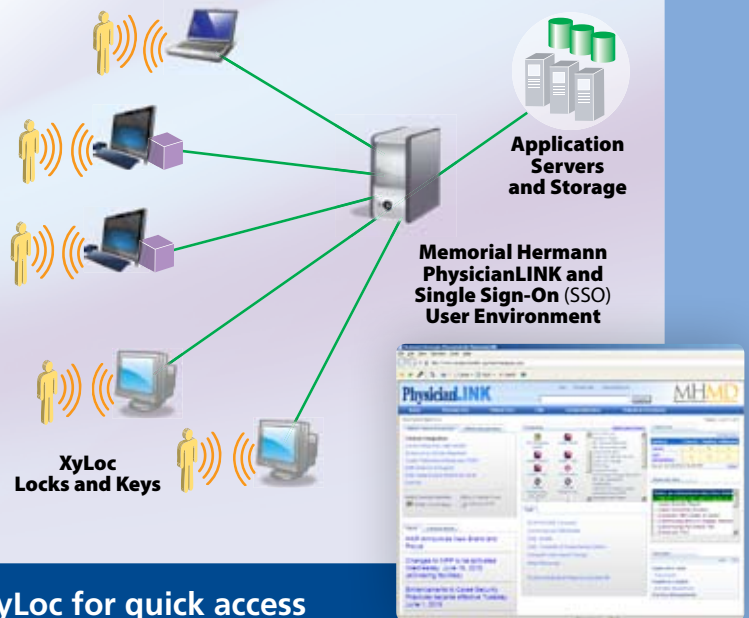
THE SOLUTION:
XyLoc *Active Proximity* Security

After evaluating a number of user authentication alternatives — including biometric and passive proximity systems — Memorial Hermann and Set Solutions selected XyLoc from Ensure Technologies. The XyLoc approach, with its patented 'walk-up' and 'walk-away' *active* proximity technology, offered the best means of accomplishing Memorial Hermann's goals without forcing cumbersome new procedures on busy doctors and nurses.

Ensure Technologies' SDK (software development kit) was also instrumental in the decision to choose XyLoc over other potential solutions. Memorial Hermann's existing single sign-on (SSO) web portal — PhysicianLINK™ — was a proven and well accepted component within their hospitals, and the Ensure SDK provided a flexible means for Memorial Hermann's IT team to smoothly integrate XyLoc authentication into their SSO and Windows® Active Directory® security framework. By choosing to integrate XyLoc into a familiar log-on environment, Memorial Hermann took an important step toward easing end-user adoption of the enhanced system. The IT group also leveraged the SDK to develop a custom utility for tuning the RF (radio frequency) sensitivity levels of each protected workstation, simplifying deployment across diverse hospital work locations.

XyLoc at Memorial Hermann

Application Servers and Storage

Memorial Hermann PhysicianLINK and Single Sign-On (SSO) User Environment

XyLoc Locks and Keys

> **Memorial Hermann leverages XyLoc for quick access to PhysicianLINK, their enterprise clinical portal for physicians.**

Memorial Hermann's clinical workstation security implementation combines XyLoc proximity automation with a simple 4-digit user PIN. A PIN is required only upon initial walk-up to a protected station, after a configurable walk-away grace period expires, and when a user roams from one workstation to another. This roaming capability — which includes an innovative 'hold for me' session-preserving user option — leverages Citrix® infrastructure with Hot Desktop to quickly restore a user session at a different location, providing increased levels of mobility, productivity, and convenience to caregivers.

Brian Beardmore, Memorial Hermann's IT Director of Campus Support Services, views the benefits of XyLoc from both the business and technical vantage points. "With XyLoc, we achieved the business objectives we had established for improving clinical workstation access and information security. And we did it in a technically elegant way that really leveraged and complemented our existing in-house IT environment and resources."

Key Solution Benefits

- **Improved medical staff productivity and workstation security**

- **Increased caregiver time available for patient interaction**

- **A more streamlined and satisfying work environment for clinicians**

THE RESULTS:
Faster Workstation Access and Better Security

XyLoc works seamlessly with Memorial Hermann's PhysicianLINK web portal and SSO service to simultaneously improve medical staff productivity and clinical workstation security. Doctors and nurses no longer need to remember to sign off of workstations when moving from one area to another — XyLoc does this automatically for them as they physically leave a protected workstation, and then quickly restores the user session when it detects the return of an authorized user within a configurable grace period. This automation translates into real time savings for clinicians, reducing log-on times from as much as 60+ seconds, to just a few seconds at most. For physicians and nurses who return frequently to the same station, the log-on time is reduced to essentially zero due to XyLoc's instant walk-up recognition and session restoration. A Memorial Hermann clinician who moves frequently between many patients and work areas can save as much as 30-45 minutes in a typical work day. This 'XyLoc effect' is significant for individual clinicians who experience the difference directly, and when multiplied across an entire department or hospital, results in tremendous time recovery that directly improves patient care.

One user who sees this benefit is Dr. Joseph Cali, a surgeon affiliated with Memorial Hermann Memorial City Medical Center and Memorial Hermann Katy Hospital. Dr. Cali, who also chairs the medical informatics committee at Memorial Hermann Memorial City, was one of the early drivers and advisors behind the project. He was a lead user of the XyLoc solution during its pilot phase at Memorial Hermann Katy, and continues to track and help guide its ongoing deployment.

While Dr. Cali appreciates the productivity gains he and his peers experience as a result of XyLoc, he also likes the enhanced security it provides. "XyLoc saves me valuable minutes every day, and that's obviously important. But it also rapidly and automatically closes down access to my user session and sensitive medical records when I leave a workstation, without requiring a manual log-off on my part. It's one less thing I have to think about while caring for my patients."

Not surprisingly, the word is getting out about XyLoc's benefits. Clinical staff members who have not yet been deployed with XyLoc are eagerly awaiting it, and those who already have it are promoting it further across Memorial Hermann.

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Brian Beardmore
IT Director of Campus Support Services

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Based on the initial success of XyLoc, Memorial Hermann intends to continue its deployment to other clinical areas and hospitals within the health system. It also plans to leverage the latest multi-function XyLoc badge design (XC-4H-B) to combine a XyLoc key, HID security (e.g., for medical facility door access), and clinician photo ID, fulfilling three identification requirements with a single badge. Memorial Hermann currently uses multiple generations of the XyLoc badge, and has found that the XC-4 design not only provides integrated functionality, but also delivers improved RF characteristics that boost overall performance.

While Memorial Hermann is certainly a big fan of its XyLoc solution, it also attributes part of its project success to careful planning and proactive communications with its clinical staff. The project team gained end-user input and proposed solution buy-in, educated its users about the project goals and phased deployment process, and defined an end-user support model to incorporate the new system and procedures.

Ultimately, this three-way collaboration between Memorial Hermann, Set Solutions, and Ensure Technologies has proven to be more than up to the challenge, and the team looks forward to continued successful deployments of XyLoc.

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Dr. Joseph Cali
Surgeon, Memorial Hermann

XyLoc at Memorial Hermann — simplifying security procedures for busy clinicians while enhancing patient information privacy.

About Set Solutions

For over 20 years, Set Solutions, Inc. — a full service provider of network security, secure remote access, and bandwidth management solutions — has been in the business of increasing business profitability and growth. The company offers a full portfolio of leading-edge secure access products and services, consistently delivered with a 'customer-first' commitment to value and success. Set Solutions projects focus on network optimization, investment protection, and security solutions based on solid business cases. For more information, visit **www.setsolutions.com**.

About Ensure Technologies

Founded in 1997 and headquartered in Ypsilanti, Michigan, Ensure Technologies is an innovative developer of intelligent security solutions designed to help customers meet security requirements with minimal impact on users. Ensure Technologies' award-winning XyLoc family of products provides workstation security with the convenience users appreciate. XyLoc products are used by over 150,000 users worldwide in many leading organizations in healthcare, financial services, government, manufacturing, and legal services. For more information, visit **www.ensuretech.com**.

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