Red River Case Study

HAMPTON VA MEDICAL CENTER ESTABLISHES SECURE, DEDICATED VETERAN'S SERVICE NETWORK (VSN) WITH RED RIVER

KEY BENEFITS

- Secure, Dedicated Veterans Service Network (VSN)
- Customized, End-to-End, Turnkey Solution
- Enhanced Patient Care and Satisfaction
- High Speed Internet and Expansive Bandwidth
- Extreme Flexibility and Scalability
- FIPS and HIPAA Compliance
- Ongoing 24/7/365 Support from U.S.-Based Network Operation Center

TECHNOLOGY

- Cisco 1600 Access Points
- Cisco 5508 Series Wireless Controllers
- Cisco Prime Infrastructure
  - Wired & Wireless Management System
  - Advanced Reporting and Network Metrics
  - Active Monitoring of Network Health
- Cisco 3750X & 2960 Series Switches
- Cisco Meraki MX Series Firewalls; MX400 (Core Site) & MX80 (Remote Sites)
  - Traffic Shaping and Application Management
  - Content Filtering & Intrusion Prevention
  - Site to Site VPN

CHALLENGE

Hampton VA Medical Center (VAMC) wanted to provide patients and guests in their primary and remote facilities with wireless access to the Internet. However, Hampton VAMC did not have a redundant network in place and adding systems or capabilities to their clinical network raised security concerns. Any solutions that are not FIPS 140-2-compliant could open them to security risks, potentially interfere with VA medical wireless systems and undermine both FIPS and HIPAA compliance. Without the internal IT resources and technical expertise to plan, deploy and maintain a separate network infrastructure, Hampton VAMC needed end-to-end support and a turnkey solution to deliver and maintain guest Wi-Fi across their facilities. The desired solution would grant highly secure guest wireless access while protecting clinical network integrity and ensuring compliance.

SOLUTION

Red River provided a complete turnkey solution for Hampton VAMC, establishing a dedicated Veterans Service Network (VSN) that covers several outlying facilities and can be centrally managed from the primary Hampton VA location. The protected, interactive network infrastructure provides secure Internet access to Veterans and their guests without compromising the security of the VAMC's medical wireless systems or burdening staff with maintenance and support tasks.

A Proven Approach with Expert Support

Red River's highly-certified networking, collaboration and security consultants worked closely with Hampton VAMC to determine their unique needs, scope current infrastructure and deliver all of the hardware, software and services required to install and maintain secure public wireless Internet access for patients and guests.

An initial site visit, wireless survey, security review, WLAN design and quality management plan preceded and streamlined the VSN implementation. Red River managed all on-site cabling, equipment installation, hardware and software integration. Red River provided complete coverage maps of the system design as well as the installation design and testing of the VSN solution for each individual site. Design for each individual site was based on the site survey conducted across all buildings and floors that were to receive wireless coverage.

Red River collaborated with the VAMC to prevent any potential interference with the clinical wireless network, customize the VSN to meet their requirements, enable content filtering and balance bandwidth. Red River also trained administrators and end-users and established ongoing Professional and Managed Services to simplify support and help the VAMC get the most from their VSN.

Technology

The new Cisco-based VSN integrates perfectly with Hampton VAMC's current clinical wireless system, which is also Cisco-based. New

Red River®

PARTNERS

Cisco Gold Partner

Cisco Master Unified Communications Partner

Cisco Master Security Partner

meraki

AT&T Partner Exchange℠

ABOUT HAMPTON VA MEDICAL CENTER

A leader in technology and innovation, Hampton VA Medical Center (VAMC) is a world-class healthcare facility providing services to Veterans in southeastern Virginia and northeastern North Carolina, including comprehensive primary and specialty care in medicine, surgery and psychiatry. Geographically positioned among one of the largest DoD active duty and military retiree populations in the United States, Hampton VAMC has seen a 7% increase among Veterans seeking VA care and recently opened a state-of-the-art Women's Clinic designed to provide gender-specific care under one roof. Learn more at www.hampton.va.gov.

ABOUT RED RIVER

Red River is a technology integrator committed to helping customers optimize business processes and maximize the value of technology investments. Widely regarded for our special focus on the U.S. government, Red River has developed a remarkable reputation for delivering technology solutions and services to military and civilian agencies and the companies that serve them. Our core values of hard work and honesty fuel our central mission to make IT personal.

For more information please call 800.769.3060 or visit www.redriver.com.

Cisco Access Points (APs) and Wireless LAN Controllers include leading-edge spectrum and clean-air technology that allow the two wireless networks to work together seamlessly and expand capabilities while avoiding any co-channel interference.

A Cisco Meraki's Layer-7 Next-Generation Firewall gives Hampton VAMC complete control over users, content and applications on the VSN, provides integrated intrusion detection and prevention, and delivers device-aware access controls to ensure the appropriate level of network access for patients and guests. The dedicated VSN also incorporates Cisco Meraki Content Filtering, which lets Hampton VAMC block specific types of content while still allowing patients and guests to enjoy the benefits of secure Wi-Fi Internet access from any device.

Partners

A longstanding Cisco Gold Certified partner and one of the few Cisco partners with Master-level certifications in both Collaboration and Security in the Federal space, Red River had the expertise to recommend and deliver advanced Cisco solutions designed to help Hampton VAMC utilize and extend their existing Cisco investments. Red River's Certified Meraki Networking Associates (CMNAs) were also on-hand to empower proactive security, control and collaboration across their network infrastructure.

While Hampton VAMC originally planned to secure an Internet Service Provider (ISP) themselves, they soon found the process too difficult and time consuming. Red River stepped in and resolved the issue by leveraging their AT&T partnership to provide Hampton VAMC with a proven ISP and high speed broadband for the VSN.

RESULTS

Red River provided an end-to-end, turnkey VSN solution for Hampton VAMC leveraging Cisco and Meraki equipment along with hierarchical design to maximize flexibility and control while alleviating on-going maintenance requirements. Moreover, while fully integrated with the VAMC's established wired and wireless medical networks, the VSN stands on its own without interfering with clinical systems or comprising medical network security and compliance. The VSN is also highly scalable, so the VAMC can easily extend and expand capabilities to include non-FIPS-compliant systems, such as Physical Access Control Systems (PACs), HVAC system management, Interactive Patient Television (IPTV), Computers on Wheels (CoWs), surveillance systems and more.

Understanding that each VA is unique, Red River customized the VSN solution to meet the specific needs and desires of Hampton VAMC, including designing a custom splash page that simplifies control across all of their facilities.

Red River not only provided all IT expertise, planning, labor and materials to establish the VSN and provide secure wireless Internet access for VA patients and guests, but also delivers long-term preventative maintenance service and 24/7/365-day user support from their Network Operations Center (NOC) in New Hampshire. In-depth quarterly and monthly management reports from the NOC further enhance visibility, allowing the VAMC to see how many users they are serving, the type of traffic used on the VSN and detailed bandwidth metrics to lower costs and ensure a positive user experience.