

Ensuring Security, Performance and HIPAA Accountability in Healthcare



The use of wireless devices and applications in medical centers has exploded, and is now critical to daily operations. The addition of voice and location-based technologies over existing wireless networks introduces the need for increased performance and requires unique tools to secure and tune the WLAN, all while protecting personal health information and documenting HIPAA compliance. Healthcare providers need to partner with a vendor that has unique expertise in both voice-over-IP and Wi-Fi specifically for healthcare organizations.

Design and Deliver WLANs to Meet Individual Facility Needs

No two facilities have exactly the same needs or challenges. Physical obstructions, the density of access points and requirements for client capacity are just a few factors affecting real-world performance.

AirMagnet Survey and AirMagnet Planner provide ideal starting points for planning and designing wireless LANs for optimal performance, security and compliance. They are the trusted tools for allowing IT staff to view the health of their network on a floor plan before deployment.

These tools not only predict the ideal quantity, placement and configuration of access points, but also validate those settings in a live RF environment using actual wireless performance metrics from your organization's users. The end result is a complete Wi-Fi "weather map" of all critical RF and end-user performance metrics. This ensures that the network is designed from the ground up to meet the precise needs of each facility's users and applications.

Deploy, Secure and Manage With Confidence

Wireless networks improve productivity and enable applications that were impractical in the days of tethered devices. Applications—including charting, medication management,

patient monitoring and RFID-based asset tracking within the facility—leverage wireless networks with the promise of streamlined processes and procedures.

Healthcare environments need the confidence that these applications will work as expected. However, the applications and the dynamic nature of the modern healthcare facility create unique issues that can affect the overall health of the network, affecting usability and security. Changes in physical surroundings, new equipment implementations, damage to wireless equipment, interference from wireless devices or malicious security behavior can all compromise a successful wireless deployment.

Only AirMagnet brings together the combination of WLAN planning and deployment, performance monitoring, spectrum analysis, security monitoring and detailed professional compliance reporting tools to meet all the wireless network needs of healthcare businesses.

Detect and Identify Sources of Interference

Healthcare facilities are among the most difficult sites in which to troubleshoot voice-over-WLAN issues. A dense concentration of high-tech devices, electrical interference and physical obstructions in the facility itself, such as lead-shielded x-ray rooms, can interfere with wireless communications.

Areas Where AirMagnet Helps Meet HIPAA Compliance Requirements

- 160.310: Provide records and compliance reports that ascertain ongoing compliance with administrative, physical and technical safeguards.
- 164.308(a)(1): Implement policies and procedures to prevent, detect, contain and correct security violations.
- 164.308(a)(8): Periodic technical and non-technical evaluations to establish the extent to which security policies meet protected health information (PHI) safeguard requirements.
- 164.312(b): Audit controls. Implement hardware, software and procedural mechanisms that record and examine activity information systems that contain or use electronic PHI.

IT departments can pinpoint the source of wireless interference with the AirMagnet Spectrum Analyzer. The IT-friendly user interface can identify whether interference is coming from microwave ovens, wireless cameras, Bluetooth devices or other sources, tracking the problem to its physical location for quick resolution.

Proactively Detect and Address Performance and Security Issues

Wireless networks are essential to efficient operations, but expose healthcare environments to threats and operational problems far different from those on wired networks. With rogue devices sidestepping the traditional perimeter protection model, untrusted wireless traffic could leave WLANs vulnerable. IT departments need to know that they are prepared to meet these challenges.

AirMagnet solutions enable healthcare organizations to centrally manage and troubleshoot global WLAN deployments, streamline security policies and actively diagnose and repair problems remotely. Offering the only suite of active WLAN diagnostic tools, AirMagnet Laptop Analyzer provides a comprehensive analysis of all wireless traffic, and includes a full compliance reporting engine, automatically mapping collected network information to compliance rules. AirMagnet Laptop Analyzer integrates with AirMagnet Spectrum Analyzer for simultaneous Layer 1 and Layer 2 Wi-Fi troubleshooting.

Additionally, AirMagnet Enterprise offers 24x7 performance and security monitoring with remote management, offering complete visibility and control over the wireless airspace. It identifies the root cause of hundreds of problems, explaining issues in detail and offering industry best practices to resolve or avoid the issue in the future. This not only contributes to more efficient, secure networks, but also reduces the time staff spend manually troubleshooting problems, freeing them to handle other tasks.

Automatically Generate Detailed HIPAA Compliance Reports

Demonstrating HIPAA compliance during a wireless LAN audit can be challenging. Each device must be evaluated for security, with the results documented for review.

AirMagnet relieves the burden of proof of HIPAA compliance with built-in reports spelling out specific HIPAA requirements and providing key documentation for use in an audit.

The Industry's Only Purpose-Built VoWLAN Analysis Tool

Voice-over-WLAN problems, such as disconnects, latency and jitter, can limit clinicians' ability to perform critical tasks. Yet identifying the source of the problem—device or WLAN?—can be difficult for IT staff to trace.

The AirMagnet VoFi Analyzer provides automated analysis and real-time quality scoring of all calls on the network—including fully encrypted wireless traffic—helping IT staff quickly identify and resolve issues. VoFi Analyzer enables IT professionals to view complete details of any call and roaming event for focused analysis and troubleshooting. The result is better call quality and reliability, improving workflow efficiencies throughout the medical center.

Visibility. Control. Security.

AirMagnet has enabled hundreds of healthcare facilities to confidently deploy, secure and centrally manage their wireless deployments through innovative planning, troubleshooting and monitoring solutions.

AirMagnet can:

- Proactively detect or stop hundreds of wireless LAN problems and security issues.
- Track and record all wireless devices and behavior in the medical environment.
- Proactively notify staff about evolving problems so they can respond before users are affected.
- Design and deliver WLANs to meet the unique physical, RF and application needs of each healthcare facility.
- Diagnose more than 60 types of wireless call problems to ensure user satisfaction with reliable, manageable voice-over-WLAN deployments.
- Detect and identify sources of interference that can impede network performance and degrade reliability.
- Automatically generate complete, detailed HIPAA compliance reports for all devices and sites.

Corporate Headquarters

830 E. Arques Avenue
Sunnyvale, CA 94085 - United States
Tel: +1.408.400.0200
Fax: +1.408.744.1250

www.airmagnet.com

EMEA Headquarters

St. Mary's Court, The Broadway, Amersham
Buckinghamshire, HP7 0UT - United Kingdom
Tel: +44.1494.582.023
Fax: +44.870.139.5156

