

Cisco Wireless LAN Planning and Design Service for Healthcare

Increase the accuracy, speed, and efficiency of deploying a wireless solution for mission-critical medical environments



Fulfill your vision for enhanced healthcare delivery with borderless mobility solutions that enable you to:

- Securely deploy rich media mobile collaboration tools
- Design security into how you access business-critical applications
- Scale connectivity to the growing number of diverse mobile devices
- Respond to new business challenges for wireless LAN network upgrades
- Speed migration using proven leading practices
- Lower operating costs through improved wireless LAN management
- Increase wireless LAN performance, management, and security

Meeting the Demand for Enhanced Healthcare Delivery

Excellent patient care requires careful coordination and secure, immediate access to people, information, and equipment anywhere, any time, using any device. Many healthcare organizations face rising costs and staff shortages as they cope with growing demand for healthcare services. Consequently, they are looking for collaborative communication solutions to increase responsiveness, eliminate unnecessary costs, and enable better decision making.

Mobility solutions from Cisco help optimize patient care and promote efficient clinical workflow. Caregivers need consistent connectivity to the clinical and scheduling systems to access patient records, enter orders, administer medications, and be notified of alarm events. However, implementation of complex, medical-grade collaborative systems that meet rigorous healthcare standards can be challenging. IT departments tasked with deployment often need help planning, designing, and building an integrated solution that meets their stringent requirements for mobile communications and can adapt to changing demands on staff and systems.

Enabling Medical-Grade Collaborative Communications

Cisco and our Wireless LAN Specialized Partners offer a broad portfolio of end-to-end services that help you develop strategies for deploying high-performance, reliable wireless networks that support business-critical healthcare solutions. These services can:

- Help protect patient privacy, meet regulatory requirements, and provide secure information access
- Enhance collaboration with innovative applications that transfer medical information across mobile devices, enabling faster, more informed decisions
- Provide integrated contextual information, such as location and temperature of supplies, to simplify workflow and improve patient care

Services help you smoothly integrate a variety of collaborative solutions while avoiding costly delays during implementation. These solutions include:

- **Voice and Video:** Create the dependability, performance, and security needed for critical Wi-Fi voice and video applications including support for phones and tablets
- **Guest Access:** Allow guests, vendors, and patients to access the Internet while keeping your internal network secure and easy to manage

- **Context-Aware:** Increase the accuracy, speed, and efficiency of your context-aware solution to locate users and track critical business assets on the network
- **Adaptive Wireless Intrusion Prevention Systems:** Protect your network from wireless threats with a solution designed to optimize RF coverage and performance

Creating a wireless network to support critical medical applications and increasing the efficiency and quality of patient care requires careful planning, detailed designs, and experienced deployment. The Cisco Wireless LAN Planning and Design Service helps you create a robust architecture for an effective, yet flexible healthcare solution that delivers continuous, secure access to collaborative medical systems and information. A carefully controlled deployment plan protects critical healthcare information and avoids downtime that could potentially affect the delivery of life-saving medical services.

The Cisco Wireless LAN Planning and Design Service for Healthcare offers seven capabilities that Cisco wireless experts have identified as essential for successful wireless deployments:

- **Wireless LAN architectural design:** Align your wireless architecture with your business objectives
- **Wireless LAN RF design:** Mitigate risk with a radio frequency (RF) design that addresses coverage and interference challenges
- **Wireless LAN detailed design:** Reduce expensive and time-consuming network redesign with a well-engineered design
- **Wireless LAN design validation:** Make certain that the design meets established criteria for performance, reliability, and security
- **Wireless LAN implementation:** Reduce deployment risk through ongoing support before, during, and after implementation
- **Wireless LAN deployment validation:** Validate that the wireless deployment meets service-level goals for availability, security, and reliability
- **Wireless LAN knowledge transfer:** Enhance staff skills for operating, optimizing, and managing enhanced wireless solution

Wireless LAN Architectural Design

Improve the reliability, security, management, and performance of your wireless network by first matching your business objectives to the technical requirements. Based on this understanding, our wireless LAN experts help you develop a custom, wireless LAN architecture design that meets the specialized needs for collaborative communication in a healthcare environment. This preparation, early in the solution lifecycle, helps reduce expensive rework later on and creates a strong, scalable foundation for growth and flexibility.

Wireless LAN RF Design

Healthcare services that rely on mobile voice and video solutions place increased demands on network performance, connection quality, coverage, and service reliability well beyond those of a typical wireless LAN deployment. The Cisco Wireless LAN RF Design service helps you build a solid RF infrastructure as the foundation for your wireless network, beginning with a comprehensive RF site survey followed by a detailed design, which includes recommendations for access point placement, power and channel settings, antenna selections, mounting, and cabling specifications.

Wireless LAN Detailed Design

A wireless LAN expert works with your staff to develop an implementation-ready detailed design for your new wireless solution. Helping to improve the speed and efficiency of technology migration and reduce deployment costs, this service helps you develop a highly available integrated network design that enables secure mobility services, provides high-performance rich media collaboration, and improves overall operating efficiency through tight integration of your wired and wireless networks.

Wireless LAN Design Validation

Prior to production deployment, Cisco wireless engineers work with your staff to validate that your detailed design meets business and technical requirements, including leading practices for wireless LAN security, management, and performance. Based on proven design methodologies, Cisco wireless experts guide and assist your team with the development of a design validation test plan and work to test the design in a lab or pilot environment. Through this process, mobility services, implementation procedures, configurations, and failure recovery methods are documented and validated to create a smooth migration to the production environment, avoiding costly delays and disruption.

Wireless LAN Implementation

Using sound deployment methodologies based on leading practices, Cisco wireless LAN engineers are able to efficiently and accurately deploy your wireless LAN healthcare solution. The Wireless LAN Implementation service helps you to develop detailed, site-specific plans for implementing your solution, including the procedures, configurations, and testing required to successfully deploy and commission the technology. Cisco wireless LAN engineers guide and assist your team before, during, and after deployment of Cisco wireless technology and mobility applications providing configuration support for wireless LAN security, wireless LAN network management, wireless LAN controllers, Cisco Mobility Services Engine (MSE), Cisco Wireless Control System, the 802.11x standard, Cisco CleanAir technology, and Cisco access points.

Wireless LAN Deployment Validation

By assessing the architecture, operational status, and security of newly implemented wireless LAN solution, Cisco can help validate that the wireless deployment meets your service-level goals for performance, security, and reliability. This service verifies that the wireless solution is operating in accordance with the design by reviewing the existing network, including detailed designs and device configurations, and collecting information needed to evaluate the overall wireless environment against leading practices. Providing both onsite and remote wireless LAN deployment validation, our team of specialists documents gaps between requirements and the existing wireless implementation providing recommendations for improvement.

Wireless LAN Knowledge Transfer

Prepare your staff to effectively design, deploy, manage, and optimize your Cisco wireless LAN solution with training and ongoing guidance throughout wireless LAN planning, design, and implementation activities.

Benefits

Cisco Wireless LAN Planning and Design Service for Healthcare helps you provide your healthcare organization with secure, reliable access to clinical, collaborative, and context-aware applications that optimize the efficiency and quality of patient care. Evolving the wired and wireless network into a true collaborative communications platform makes it easier to manage the increasing quantity and diversity of mobile devices, address security concerns, and create an open environment for the development of mobile healthcare services. Cisco and our specialized partners provide the expertise needed to deploy these new technologies using Cisco leading practices.

These services help you to:

- Improve the speed and efficiency of migration and reduce deployment costs by identifying and planning in advance for necessary infrastructure changes
- Provide secure mobile access to business-critical healthcare applications with an end-to-end wireless design that delivers high throughput and reliability
- Securely deploy collaboration tools with expert guidance on how best to support rich media applications such as voice and video
- Increase wireless performance, management, and security with a design that reduces the risk of unexpected downtime
- Lower operational expense by applying leading practices and proven methodologies for efficient performance and simplified wired and wireless network management
- Successfully scale connectivity to the proliferation of diverse mobile devices, including phones and tablets, with a next-generation wireless network design

Why Cisco Services

Realize the full business value of your technology investments more quickly with intelligent, customized services from Cisco and our partners. Backed by deep networking expertise and a broad ecosystem of partners, Cisco Services enable you to successfully plan, build, and run your network as a powerful business platform. Whether you are looking to quickly seize new opportunities to meet rising customer expectations, improve operational efficiency to lower costs, mitigate risk, or accelerate growth, we have a service that can help you.

For More Information

For more information about Cisco Wireless LAN Services, visit www.cisco.com/go/wirelesslanservices or contact your local account representative.

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