

## Cisco Wireless LAN Voice Planning and Design Service

Enhance the performance and reliability of the voice applications running on your wireless LAN infrastructure.



Achieve your vision for voice over wireless LAN with design expertise and leading practices from Cisco and our Wireless LAN Specialized Partners. Complementing your team, we help you to:

- Assess your environment's readiness to deliver secure wireless LAN access
- Manage your technical and applications requirements by proposing architectural options
- Configure your voice over wireless LAN solution
- Verify that your system is operating in accordance with the design

### Challenge

Businesses today are using voice over wireless LAN (VoWLAN) to give employees immediate access to the mission-critical applications and communications tools they need to do their jobs. By adding voice services to the Cisco® Unified Wireless Network, businesses can enable their voice communications systems with mobility and flexibility. Designed to complement a variety of voice clients, services optimize the network to deliver high-quality voice traffic that improves collaboration while creating opportunities to reduce costs.

Integrating the wireless LAN with Cisco's Unified Communications solution helps organizations meet the changing needs of an increasingly mobile, collaborative, and virtual workforce. By delivering a consistent mobile collaboration experience across wired and wireless networks, devices, and applications, organizations can reach new levels of productivity and responsiveness while decreasing corporate cell phone usage by offloading calls from the cellular network to a wireless LAN network while on campus.

### Solution

Cisco and our Wireless LAN Specialized Partners offer a broad portfolio of end-to-end services based on proven methodologies for planning, designing, implementing, operating, and optimizing the performance of a variety of secure voice and data wireless network solutions, technologies, and strategies. Wireless LAN experts can work with your business to design, build, and operate a voice system that is secure, yet highly available to designated users, and that offers the lowest possible total cost of ownership.

Experienced engineers can help you integrate your wireless voice solutions transparently with your wired networks. They help you reduce the complexity and any risks associated with voice implementation by providing proven tools, processes, and methodologies.

When architecting, designing, and deploying a wireless voice solution, it is critical to take into account business requirements, including current needs and future projections for the number of users and the applications the solution will need to support. The goal is to provide users convenient access to business applications and data while maintaining the high level of reliability to which voice users are accustomed.

The Cisco Wireless LAN Voice Planning and Design Service delivers an integrated solution that includes five components that Cisco has identified as essential for successful deployment of a secure wireless voice solution:

- Wireless LAN architecture design
- Wireless LAN network assessment
- Wireless LAN RF assessment
- Wireless LAN configuration and implementation
- Wireless LAN post deployment validation

### **Wireless LAN Architecture Design**

The first steps in deploying a secure wireless LAN solution are translating business application requirements into solution requirements and aligning those solution requirements to the multitude of technologies available. The Cisco Wireless LAN Architecture Design Service offers a comprehensive set of methodologies based on Cisco and industry best practices that help you manage your technical and applications requirements while providing various architectural options. Cisco builds upon the solution requirements established through the requirements assessment by translating them into a comprehensive voice service design.

### **Wireless LAN Network Assessment**

The Cisco Wireless LAN Network Assessment and Cisco Wireless LAN Performance Analysis services provide a comprehensive approach to assessing the architecture, performance, and security of your wireless network. These services are delivered by experts who draw on extensive experience in wireless network architecture design and RF engineering to help you prepare for business-critical mobility that relies on a high-performance wireless network. Supported by best-in-class tools, methodologies, and superior access to Cisco product engineers, these experts analyze how your network compares with Cisco leading practices and provide actionable recommendations to help improve wireless LAN network throughput, reliability, and security.

### **Wireless LAN RF Assessment**

The packet loss and jitter requirements of voice over IP and the increased mobility of VoWLAN handset users place demands on connection quality, coverage, and user expectations that are beyond those of a typical wireless LAN data deployment. This assessment helps you determine your environment's ability to deliver secure wireless LAN access in the desired coverage area. It helps you understand the current state of your network and future needs so you can make informed decisions about how to reliably predict coverage and call capacity and protect your wireless architecture. The assessment, which includes a site survey, enables Cisco to make recommendations for placement of access points, establishing their frequencies, antenna selections, and power and cabling specifications

### **Wireless LAN Voice Configuration and Implementation**

This activity provides onsite support to configure a voice over wireless LAN solution and wireless controllers, recommend device configuration, and integrate with your Cisco Unified Communications infrastructure. We work with you to help ensure the proper deployment based on Cisco leading practices and to validate accurate installation of software releases and updates. Implementation of the VoWLAN solution includes configuration of Call Admission Control (CAC) to help ensure quality of service (QoS), transparent mobility, and fast secure roaming over mobility groups and channel strategies to improve performance and user call experience.

## Wireless LAN Post Deployment Validation

This activity verifies that the system is operating in accordance with the design by surveying the RF environment, validating configurations, and reviewing general performance of the VoWLAN. In providing onsite and remote wireless LAN post deployment validation, our team of specialists assesses coverage, measures interference, evaluates overall wireless LAN network capacity, and makes recommendations for improvement to help ensure optimal performance.

## Benefits

Cisco Wireless LAN Voice Planning and Design Service helps you enhance the performance and reliability of the voice applications running on your wireless LAN by designing and implementing the system in alignment with your business requirements. In addition, this service helps you to:

- Improve productivity for your mobile employees by building a secure, scalable, optimized, and reliable VoWLAN that is completely integrated with the wired network
- Increase the accuracy, speed, and efficiency of your VoWLAN deployments by applying leading practice tools and processes
- Increase your network security, reliability, throughput, and performance by optimizing your infrastructure
- Reduce support calls to your IT staff by designing a wireless LAN architecture that reduces coverage holes and improves application performance
- Reduce network operations costs and enhance network reliability by identifying potential performance problems and making recommendations to proactively address them

## Why Cisco Services

Today, the network is a strategic platform in a world that demands better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with business needs and opportunities.

The unique Cisco Lifecycle approach to services defines the requisite activities at each phase of the network lifecycle to help ensure service excellence. With a collaborative delivery methodology that joins the forces of Cisco, our skilled network of partners, and our customers, we achieve the best results.

## Cisco and Partner Expertise: Better Together

Cisco engineers and Cisco Certified Partners are among the industry's elite in providing integrated, collaborative, adaptive solutions. Jointly with our partners, we form the largest collection of industry certified experts in the world supporting the most complex networks to meet and exceed the needs of our customers. Cisco teams can collaborate with partners to foster consistency and alignment with Cisco methodologies, tools, and leading practices.

## For More Information

For more information about Cisco Wireless LAN Services, visit [www.cisco.com/go/wirelesslanservices](http://www.cisco.com/go/wirelesslanservices) or contact your local account representative.

For more information about Cisco Wireless LAN products and solutions go to [www.cisco.com/go/wireless](http://www.cisco.com/go/wireless).

**Cisco Services.**  
Making Your Business  
Work Smarter.



**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV  
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)