Course Title: Implementing Cisco Unified Wireless Voice Networks

Course Code: C-IUWVN

Course Duration: 5 days

Who should attend

- System Engineers
- Network engineers
- Network administrators
- Network managers
- Network designers
- Project managers

Certifications

This course is part of the following Certifications:

- Cisco Certified Network Professional Wireless (CCNP WIRELESS)

Prerequisites

The knowledge and skills that a learner must have before attending this course are as follows:

- Interconnecting Cisco Networking Devices Part 1 (ICND1)
- Interconnecting Cisco Networking Devices Part 2 (ICND2)
- Implementing Cisco Unified Wireless Networking Essentials (IUWNE)

It is also recommended that learners considered for this training have a basic knowledge of the following:

- Cisco Lifecycle Services
- Wireless standards (IEEE)
- Wireless regulator environment (FCC, ETSI, and so on)
- Wireless certification organisation (Wi-Fi Alliance)

Course Objectives
The Implementing Cisco Unified Wireless Voice Networks (IUWVN) v1.0 course is a 5 day ILT course. The IUWVN course is designed to give students a firm understanding of how to integrate VoWLAN services into the WLAN and be able to implement VoWLAN, QoS, and high-bandwidth applications into the wireless network. The IUWVN training class reinforces the instruction by providing students with hands-on labs.

After completing this course the delegate will be able to:

- Implement QoS for Wireless Applications, both on the wired and on the wireless side
- Describe Voice Architecture and Voice over Wireless Specific Requirements
- Design and Implement Voice over Wireless LANs
- Implement Multicast Support Over Wireless networks

- Prepare the Wireless Network for Video and High-Bandwidth Applications

Course Content

Module 1: Implement QoS for Wireless Applications

- Identifying General Considerations for Wired and Wireless QoS
- Describing Wireless QoS Deployment Schemes
- Configuring the Controller and Cisco WCS for QoS
- Configuring the Controller and Cisco WCS for QoS
- Understanding Current Best Practice Guidelines

Module 2: Voice Over Wireless Architecture

- Describing the evolution of Voice Architecture
- Describing VoWLAN Call Flow
- Designing Wireless for Voice
- Verifying Voice Readiness

Module 3: Implement VoWLAN

- Describing Hardware and Software Requirements for VoIP
- Configuring a WLAN for Voice
- Configuring Infrastructure Devices for End-to-End Voice over Wireless
- Configuring Wireless Client Devices
- Troubleshooting VoWLAN

Module 4: Implement Multicast over Wireless

- Understanding General Multicast Concepts
- Describing Implications for Multicast in 802.11
- Configuring Multicast in a Wireless Network
- Troubleshooting Multicast in a Wireless Network

Module 5: Prepare the Wireless Network for Video and High-Bandwidth Applications

- Implementing QoS for Latency-Sensitive Applications
- Determining Bandwidth Requirements and Preparing the Controller for Video
- Describing Benefits of 802.11n for Video