



Deploying Wireless Services with the Cisco Catalyst 6500 WLSM

Length
1 day

Format
Lecture/lab

Track
Design/
Support

Version
1.0

Course Description

Wireless LANs (WLANs) are now critical for business. Organizations deploy WLANs to increase productivity, enhance collaboration, and improve responsiveness. The increasing demand for WLANs calls for a WLAN solution that can cost-effectively address critical security, deployment, and management issues.

In this course, you will learn how to use the Cisco Catalyst 6500 Wireless LAN Services Module (WLSM) to implement a distributed WLAN infrastructure using Layer 2 and Layer 3 roaming.

Who Should Attend

This course is designed for experienced Wireless Systems Engineers who need to design and implement WLAN services using the WLSM.

Recommended Prerequisites

- CCNP certification or equivalent experience
- Familiarity with the architecture of the Catalyst 6500 platform
- Intermediate-level knowledge of WLAN protocols and architecture
- Experience administering the Cisco Wireless LAN Solutions Engine (WLSE)

Related Training

- *Aironet Wireless LAN Fundamentals and Site Survey (AWFSS) v5.0*
- *Wireless LAN Solutions Engine (WLSE) v1.0*

CAT6K

Learning Objectives

After you complete this course, you will be able to:

- Identify the components and protocols used to implement a Distributed WLAN Solution architecture
- Describe the purpose and key features of the CiscoWorks WLSE
- Describe the power requirements for access points, including power-over-Ethernet considerations
- Explain the advantages of Layer 3 roaming compared to Layer 2 roaming
- Explain how the WLSM enables secure segmentation of wireless users
- Explain how ACLs and rate limiters can be used with the Supervisor Engine 720 to inspect, filter, and rate-limit wireless traffic
- Explain how the QoS features that are supported by the Supervisor Engine 720 can be used to improve performance of the wireless network
- Configure the WLSM and access points for layer 2 and layer 3 mobility



Learning
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Course Outline

Lesson 1: Introducing Wireless Services

- Cisco Integrated Wireless Network
- CiscoWorks WLSE Overview
- Distributed WLAN Solution Architecture Overview
- Components and Protocols
- Management Benefits
- Security Benefits
- Access Point Power Requirements

Lesson 2: Introducing Wireless LAN Services Module

- WLSM Features and Overview
- Layer 3 Roaming
- Secure Segmentation of Wireless Users
- Providing High Availability
- Inspecting, Filtering, and Rate-Limiting Wireless Traffic
- Quality of Service
- Performance and Scalability Considerations
- Initial Configuration Process
- Configuring the Access Points for Layer 2 Roaming

Lesson 3: Implementing Secure Campus-Wide Layer 3 Roaming

- GRE and mGRE Overview
- Implementing Fast Secure Roaming Tunnels
- Configuring DHCP Snooping

Lesson 4: Exploring Advanced Concepts

- Wireless Authentication and Encryption Protocols
- Employee Access with VPN
- Integrating the WLSM with the IPsec VPN Module
- Integrating the WLSM with the FWSM
- Integrating the WLSM with the IDSM
- Controlled Guest and Contractors Access
- Configuring High-Availability with HSRP
- Troubleshooting the WLSM

Course Labs

- Lab 1: Configuring the Supervisor 720 to communicate to the WLSM
- Lab 2: Configuring the WLSM in a Layer 2 Environment
- Lab 3: Implementing Layer 3 Roaming



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