Managing Cisco Wireless LANs v1.2 (WMNGI)

Modality: Virtual Classroom

Duration: 4 Days

CLC: 39 Units

About this course:

Cisco offers dynamic network management systems that provide centralized administration and management interfaces for wireless and wired solutions. The purpose of the WMNGI course is to prepare professionals to use the Cisco Unified Wireless Network (CUWN) network management products to configure, administer, manage, troubleshoot, and optimize the network.

Course Objective:

Upon completing this course, the learner will be able to meet these overall objectives:

- Explain how Cisco Unified Wireless Network management components help resolve today's network management challenges
- Describe how to configure Cisco Prime Infrastructure (PI)
- Configure components through the Configure tab and templates
- Configure the guest access feature set
- Integrate the Cisco PI and the MSE to provide location services and track mobile clients
- Configure the Connected Mobile Experiences solution
- Configure Bonjour Services and Application Visibility and Control (AVC) solutions for application and device support
- Utilize a recommended troubleshooting methodology and the various tools available to gather and assess system data to isolate various common PI failures
- Monitor wired devices, Cisco ISE, wireless controllers, APs, rogue APs, ad hoc events, and CleanAir heatmaps, charts, and reports

Audience:

The primary audience for this course is as follows:

- Network Administrators
- Network Engineers
- Channel Partners/Resellers, Customers, Employees
- System Engineers.

Prerequisite:

Completion of the current CUWN course or the elearning courses Defining Cisco Wireless LAN Essentials (WLE) and Introducing Cisco Prime Infrastructure (ICPI) is a required prerequisite prior to attending WMNGI. The learner should have a basic knowledge of the following:

- Basic networking principles
- Basic knowledge about RF
- General network management
- Cisco Lifecycle Services
- Basic knowledge about Cisco network solutions

Course Outline:

Module 1: Cisco Unified Wireless Network Management Solutions

- Lesson 1-1: Introducing Lifecycle Management
- Lesson 1-2: Introducing Cisco Prime Network Control System
- Lesson 1-3: Introducing Cisco Mobility Services Engine
- Lesson 1-4: Introducing Cisco Identity Services Engine

Module 2: Network Management System Configuration

- Lesson 2-1: Configuring High Availability and Firewall Rules for Cisco PI
- Lesson 2-2: Managing Administrative Users
- Lesson 2-3: Navigating Cisco PI
- Lesson 2-4: Using the Map Editor
- Lesson 2-5: Using the Planning Tool

Module 3: Component Configuration through Cisco PI

- Lesson 3-1: Configuring Components through Cisco PI Configure Tab
- Lesson 3-2: Working with Controller Templates and Switch Location Templates
- Lesson 3-3: Working with AP Configuration and Migration Templates
- Lesson 3-4: Setting up Auto-Provisioning and Scheduling Configuration Tasks

Module 4: Guest Access

- Lesson 4-1: Defining Guest Access Methods
- Lesson 4-2: Configuring Guest Access Features Through Cisco PI

Module 5: Mobility Services Engine

- Lesson 5-1: Configuring and Integrating the MSE
- Lesson 5-2: Configuring and Tuning Location Services
- Lesson 5-3: Tracking Mobile Clients
- Lesson 5-4: Supporting Location Services
- Lesson 5-5: Troubleshooting Context-Aware Services
- Lesson 5-6: Configuring Adaptive Wireless IPS

Module 6: Connected Mobile Experiences

- Lesson 6-1: Overview of CMX
- Lesson 6-2: Implementing CMX

- Lesson 6-3: Configuring Mobility Services Advertisement Protocol

Module 7: Application and Device Support

- Lesson 7-1: Overview of Bonjour Services
- Lesson 7-2: Overview of Application Visibility and Control (AVC)

Module 8: NCS Maintenance and Troubleshooting Tasks

- Lesson 8-1: Performing Maintenance Operations
- Lesson 8-2: Troubleshooting PI Operational Issues

Module 9: Network Monitoring and Troubleshooting

- Lesson 9-1: Monitoring and Troubleshooting the Network
- Lesson 9-2: Managing Network Performance

Lab Guides:

- Lab 2-1: Adding Users
- Lab 2-2: Customizing a Home Page
- Lab 2-3: Using the Map Editor
- Lab 2-4: Using the Planning Tool
- Lab 3-1: Adding and Configuring Controllers and APs Using Templates
- Lab 4-1: Configuring Guest Access via Cisco PI
- Lab 5-1: Configuring Location Services