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Implementing Cisco Enterprise Wireless Networks (ENWLSI) V2.0

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Implementing Cisco Enterprise Wireless Networks (ENWLSI) V2.0

Course Duration

5 Days

Course Price

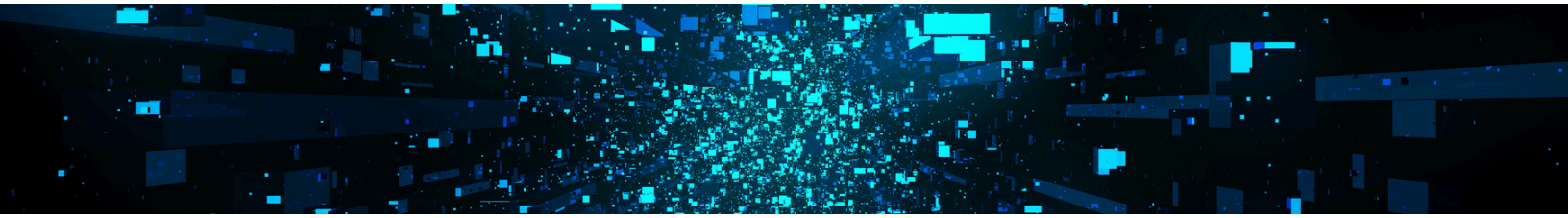
$4,295.00
43 CLCs

Methods of Delivery

In-Person ILT
Virtual ILT
Onsite ILT

About this Class

The Implementing Cisco Enterprise Wireless Networks (ENWLSI) training helps you implement network settings to provide a secure wireless network infrastructure and troubleshoot any related issues. The goal of this 5-day instructor-led training is to prepare you to secure and implement the wireless infrastructure, and use Cisco Identity Service Engine (ISE), Cisco Prime Infrastructure (PI), Cisco DNA Center, Cisco Spaces, and Cisco Connect Mobile Experience to monitor and troubleshoot network issues. This training provides you with hands-on labs to reinforce concepts including deploying Cisco Catalyst 9800 Wireless Controller Release IOS XE Bengaluru 17.6.3, Cisco Digital Network Architecture (DNA) Center Release 2.3.3, Cisco Prime Infrastructure Release 3.5, Cisco Spaces, Cisco CMX Release 10.5, features, and Cisco Identity Services Engine (ISE) Release 3.0. This training prepares you for the 300-430 ENWLSI: Implementing Cisco Enterprise Wireless Networks exam. If passed, you earn the Cisco Certified Specialist – Enterprise Wireless Implementation certification and satisfy the concentration exam requirement for the CCNP Enterprise certification. This training also earns you 40 Continuing Education (CE) credits toward recertification.



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How you will benefit

This class will help you:

- Gain the skills to secure the wireless infrastructure, implement the wireless infrastructure, and use Cisco Identity Service Engine (ISE), Cisco DNA Center, Cisco Prime Infrastructure (PI), Cisco Spaces, and Cisco Connected Mobile Experience (CMX) to monitor and troubleshoot network issues
- Get the knowledge for protocols, solutions, and designs to acquire professional-level and expert-level enterprise roles
- Earn 40 CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The job roles best suited to the material in this course are:

- Wireless Network Engineers
- Security Network Engineers
- Sales Engineers
- Wireless Network Technicians
- Test Engineers
- Network Designers
- Network Administrators
- Network Managers
- Midlevel Wireless Support Engineers
- Project Managers

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Objectives

After taking this course, you should be able to:

- Explain how to secure the wireless network infrastructure
- Access and navigate the remote lab
- Explain device administration
- Describe security best practices for administrative access to Cisco WLC
- Describe Cisco WLC configuration and overview for TACACS+
- Explain role-based access control in Cisco ISE
- Explain how to configure access to the access point
- Configure secure port access for the access points
- Implement the 802.1X authentication process
- Explain how to configure access points and Cisco ISE for the 802.1X authentication
- Describe how to monitor and troubleshoot a wireless network
- Describe access point joint issue troubleshooting
- Describe the tools for CAPWAP access point discovery, DTLS, and join issues troubleshooting
- Capture a successful AP authentication
- Describe how to monitor and manage the network for rogue devices and RF interferers on Cisco WLC and Cisco Prime Infrastructure
- Describe how to implement and add devices to Cisco Prime Infrastructure
- Describe how to add access points to maps and monitor wireless clients
- Explain reports and their functions in Cisco Prime Infrastructure
- Describe enhanced client information with Cisco ISE and location details with Cisco CMX
- Discover how to use Cisco Prime Infrastructure for network monitoring
- Explain how to observe wireless networks for rogue devices, add devices to, monitor radio frequency interferers, and integrate Cisco DNA Center with external resources

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Cont. Objectives

- Explain how to troubleshoot access point and WLC issues with Cisco DNA Center Assurance
- Explain enhanced network insights with Cisco AI Network Analytics
- Observe and learn how to use reports in Cisco DNA Center
- Explain how to implement AAA-Based wireless security on Cisco WLC and Cisco ISE
- Explain how to configure WLAN for 802.1X on Cisco WLC and wireless clients for 802.1X authentication
- Explain how to implement and configure AAA override on Cisco WLC and Cisco ISE
- Configure, understand, and perform FlexConnect authentication, identity-based networking, split tunneling, and AAA services on Cisco WLC
- Explain how to upgrade FlexConnect access points
- Describe how to configure OfficeExtend
- Implement guest access in the wireless network
- Explain how to implement central web authentication
- Describe how to configure Cisco WLC and Cisco ISE for Centralized Web Authentication
- Show Cisco WLC configuration for Guest Services
- Explain the basics, onboarding process of BYOD
- Explain how to configure Cisco ISE for BYOD in the wireless network
- Describe how to monitor and troubleshoot client connectivity on Cisco WLC and authentication issues
- Show how to capture successful client authentication by using Radioactive Trace and Cisco ISE
- Describe the issues that affect client performance
- Explain wireless coverage and capacity, how to enhance client performance, and troubleshoot client throughput and data rate issues

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Cont. Objectives

- Describe how to implement QoS in wireless networks
- Describe QoS In wireless networks, marking QoS, and traffic classifications
- Explain congestions in the wireless world
- Describe IEEE 802.11 QoS fundamentals and how to configure Cisco WLC to support voice traffic
- Show how to configure QoS in the wireless network for voice and video services
- Describe how to optimize wireless utilization with Cisco Aire Time Fairness, QoS profiles, and Cisco Fastlane
- Implement and configure multicast services, forwarding, and Cisco AVC in wireless networks and on Cisco WLC
- Implement multicast services
- Explain how to configure mDNS and Cisco Media Stream
- Describe Cisco DNA Center Service for Bonjour and Cisco Media Stream
- Explain the QoS troubleshooting process in the wireless network and on Cisco WLC
- Describe how to use AVC to identify issues
- Describe how to verify and troubleshoot mDNS and media stream on Cisco WLC
- Explain how to deploy Cisco Spaces and Cisco CMX
- Describe how to implement location-based services and the provided functionalities
- Describe how to design for location services, deploy Cisco Spaces and Cisco CMX, and integrate Cisco Spaces and Cisco XMC with Cisco DNA Center, and Cisco CMS with Cisco Prime Infrastructure
- Describe how to deploy and configure Cisco Hyperlocation
- Describe how to implement detect and locate services in Cisco Spaces
- Describe how to prepare maps for location services in Cisco DNA Center, implement, detect, and locate services on Cisco CMX, analytics services in Cisco Spaces, and on Cisco CMX

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Cont. Objectives

- Describe how to implement presence services on Cisco CMX
- Describe how to implement and configure guest services, monitor, detect, and run analytics on wireless clients, rouge devices, and interferers in Cisco Spaces and with Facebook on Cisco CMX
- Describe how to troubleshoot location accuracy

Prerequisites

Before taking this offering, you should have:

- WLFNDU or equivalent knowledge or Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) training

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Course Outline

Module 1: Secure the Wireless Network Infrastructure

Module 2: Monitor and Troubleshoot Wireless Network

Module 3: Monitor Wireless Networks with Cisco Prime Infrastructure

Module 4: Monitor Wireless Network with Cisco DNA Center

Module 5: Implementing 802.1X Authentication

Module 6: Configure Cisco FlexConnect

Module 7: Implement Guest Access

Module 8: Monitor and Troubleshoot Client Connectivity

Module9: Implement QoS in Wireless Network

Module 10: Implement Cisco AVC in Wireless Networks

Module 11: Implement Multicast Services

Module 12: Troubleshoot QoS

Module 13: Deploy Cisco Spaces and Cisco CMX

Module 14: Implement Location Services

Module 15: Monitor Wireless Network with Cisco Spaces and Cisco CMX

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Lab Outline

Lab 1: Lab Familiarization (Base Learning Lab)

Lab 2: Configure Secure Management Access for WLCs and APs

Lab 3: Capture a Successful AP Authentication

Lab 4: Network Monitoring with Cisco Prime Infrastructure

Lab 5: Add Network Devices to Cisco DNA Center

Lab 6: Integrate Cisco DNA Center with External Resources

Lab 7: Use Cisco DNA Center for Network Monitoring

Lab 8: Use Cisco DNA Center Reports

Lab 9: Configure Cisco WLC for AAA Services

Lab 10: Configure Cisco ISE for AAA Services

Lab 11: Configure AAA Services for Cisco FlexConnect

Lab 12: Configure Cisco WLC for Guest Services

Lab 13: Configure Cisco ISE for Guest Services

Lab 14: Configure BYOD in the Wireless Network

Lab 15: Capture Successful Client Authentication Using Radioactive Trace

Lab 16: Capture Successful Client Authentication Using Cisco ISE

Lab 17: Configure QoS in the Wireless Network for Voice and Video Services

Lab 18: Configure Cisco AVC in the Wireless Network