

Designing Cisco Enterprise Wireless Networks

DURATION: 5 DAYS

COURSE CODE: ENWLSD

FORMAT: LIVE/VIRTUAL

COURSE DESCRIPTION

The Designing Cisco Enterprise Wireless Networks (ENWLSD) v1.1 course gives you the knowledge you need to design Cisco® wireless networks. The course covers design specifics from scenario design concepts through the installation phase and into post-deployment validation.

This course, including the self-paced material, helps prepare you to take the exam, Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD), which leads to the new CCNP® Enterprise and Cisco Certified Specialist – Enterprise Wireless Design certifications.

This course will help you:

- Gain the knowledge you need to plan advanced designs of Cisco wireless products

- Qualify for professional-level job roles in wireless networking

- Prepare for the Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD) exam.

This course will help you prepare for the Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD) exam. This exam tests your knowledge of wireless network design, including site surveys, wired and wireless infrastructure, mobility, and WLAN high availability.

After you pass 300-425 ENWLSD:

- You earn the Cisco Certified Specialist – Enterprise Wireless Design certification.

- You satisfy the concentration requirement for the new CCNP Enterprise certification. To complete your CCNP Enterprise certification, pass the Enterprise core exam, Implementing Cisco Enterprise Network Core Technologies (300-401 ENCOR).

PREREQUISITES

Before taking this course, you should have:

- General knowledge of networks

- General knowledge of wireless networks

- Routing and switching knowledge

Either of the following combinations of Cisco courses can help you meet these prerequisites:

- Implementing Cisco Wireless Network Fundamentals (WIFUND) and Interconnecting Cisco Networking Devices, Part 1 (ICND1)

- Coming soon: Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) and Understanding Cisco Wireless Foundations (WLFNDU)

WHO SHOULD ATTEND

- Consulting systems engineer

- Network administrator

- Network engineer

- Network manager

- Sales engineer

- Systems engineer

- Technical solutions architect

- Wireless design engineer

- Wireless engineer

LEARNING OBJECTIVES

Describe and implement a Cisco-recommended structured design methodology

Describe and implement industry standards, amendments, certifications, and Requests For Comments (RFCs)

Describe and implement Cisco enhanced wireless features

Describe and implement the wireless design process

Describe and implement specific vertical designs

Describe and implement site survey processes

Describe and implement network validation processes

COURSE OUTLINE

1. Describing and Implementing a Structured Wireless Design Methodology

Importance of Planning Wireless Design with a Structured Methodology

Cisco Structured Design Model

Cisco Design Guides and Cisco Validated Designs for Wireless Networks

Role of the Project Manager When Designing Wireless Networks

2. Describing and Implementing Industry Protocols and Standards

Wireless Standards Bodies

Institute of Electrical and Electronics Engineers (IEEE) 802.11 Standard and Amendments

Wi-Fi Alliance (WFA) Certifications

Relevant Internet Engineering Task Force (IETF) Wireless RFCs

Practice Activity

3. Describing and Implementing Cisco Enhanced Wireless Features

Hardware and Software Choices for a Wireless Network Design

Cisco Infrastructure Settings for Wireless Network Design

Cisco Enhanced Wireless Features

4. Examining Cisco Mobility and Roaming

Mobility and Intercontroller Mobility in a Wireless Network

Optimize Client Roaming in a Wireless Network

Cisco Workgroup Bridge (WGB) and WGB Roaming in a Wireless Network

5. Describing and Implementing the Wireless Design Process

Overview of Wireless Design Process

Meet with the Customer to Discuss the Wireless Network Design

Customer Information Gathering for a Wireless Network Design

Design the Wireless Network

Deployment of the Wireless Network

Validation and Final Adjustments of the Wireless Network
Wireless Network Design Project Documents and Deliverables

6. Describing and Implementing Specific Vertical Designs

Designs for Wireless Applications

Wireless Network Design Within the Campus

Extend Wireless Networks to the Branch Sites

7. Examining Special Considerations in Advanced Wireless Designs

High-Density Designs in Wireless Networks

Introducing Location and Cisco Connected Mobile Experiences (CMX) Concepts

Design for Location

FastLocate and HyperLocation

Bridges and Mesh in a Wireless Network Design

Redundancy and High Availability in a Wireless Network

8. Describing and Implementing the Site Survey Processes

Site Survey Types

Special Arrangements Needed for Site Surveys

Safety Aspects to be Considered During Site Surveys

Site Survey Tools in Cisco Prime Infrastructure

Third-Party Site Survey Software and Hardware Tools

9. Describing and Implementing Wireless Network Validation Processes

Post-installation Wireless Network Validation

Making Post-installation Changes to a Wireless Network

Wireless Network Handoff to the Customer

Installation Report

DISCOVERY LABS

1: Use Cisco Prime Infrastructure as a Design Tool

2: Create a Predictive Site Survey with Ekahau Pro

3: Perform a Live Site Survey Using Access Point on a Stick (APoS)

4: Simulate a Post-installation Network Validation Survey