

Certified Wireless Design Professional (CWDP)

Course Summary

Description

The CWDP certification is a professional level wireless LAN certification for the CWNP Program.

The CWDP certification will advance your career by ensuring you have the skills to successfully design enterprise Wi-Fi networks for a variety of different applications, deployments, and environments, no matter which brand of Wi-Fi gear your organization deploys.

Topics

- WLAN Design Overview
- Requirements Analysis
- Designing for Clients and Applications
- Designing for Industry
- Vendor Selection Processes
- Radio Frequency Planning
- WLAN Hardware Selection
- Site Surveys
- Designing for Quality of Service
- Designing for Security
- Installation Testing, Validation and Troubleshooting

Prerequisites

Basic networking knowledge (OSI / IP). Basic network security concepts and wireless network administration CWNA or equivalent knowledge. To earn the CWDP certification, you must pass 2 exams: CWNA and CWDP.

Duration

Three days

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Course Outline

I. WLAN Design Overview

- A. Importance of Good Design
- B. Impact of Bad Design
- C. Design Process
- D. Design Skills
- E. Design Toolkit

II. Requirements Analysis

- A. Pre-Planning
- B. Customer Interaction
- C. Requirements Gathering
- D. Discovering Existing Systems
- E. Documenting the Environment
- F. Defining Constraints
- G. Creating Documentation

III. Designing for Clients and Applications

- A. Client Device Types
- B. Application Types
- C. Application-Specific Design
- D. High Density Design Issues

IV. Designing for Industry

- A. Standard Corporate Networks
- B. Industry-Specific Designs

V. Vendor Selection Processes

- A. Defining Vendor Issues
- B. Operational Planes
- C. Design Models
- D. Understanding Architectures

VI. Radio Frequency Planning

- A. RF Spectrum
- B. RF Behaviors
- C. Modulation and Coding Schemes
- D. RF Accessories
- E. Throughput Factors

VII. WLAN Hardware Selection

- A. Antennas
- B. 802.11n and Antennas
- C. Choosing APs
- D. Powering APs

VIII. Site Surveys

- A. Site Survey Tools
- B. Site Survey Preparation
- C. Predictive Site Surveys
- D. Manual Site Surveys
- E. Site Survey Principles and Processes

IX. Designing for Quality of Service

- A. Quality of Service (QoS) Overview
- B. QoS Application Points
- C. Roaming Support

X. Designing for Security

- A. Bad Security
- B. Authentication Solutions
- C. Encryption Solutions
- D. Security Best Practices
- E. Intrusion Prevention

XI. Installation Testing, Validation and Troubleshooting

- A. Network Health Status
- B. Troubleshooting and Validation Process
- C. Troubleshooting and Validation Tools
- D. Common Problems