



Enhanced Network Solutions Group

Systems Integration • Learning Solutions • CIO Consulting
Managed Outsourcing • Healthcare Solutions • Security Solutions

7224 Engle Road - Fort Wayne, IN 46804 - Phone: (260) 432-1364 - Fax: (260) 432.3168

IUWNE Implementing Cisco Unified Wireless Network Essentials

IUWNE Rev 05.11

5 days

Description

The goal of IUWNE v1.0 is to provide students with information and practice activities to prepare them to help design, install, configure, monitor and conduct basic troubleshooting tasks of a Cisco WLAN in SMB and Enterprise installations.

Prerequisites

- ICND1
- ICND2

Course Objectives

Candidates achieving the CCNA Voice certification should be capable of performing the following tasks:

- Describe wireless fundamentals, such as topologies, RF principles and math, antennae, spread spectrum technologies, frames and physics, wireless regulatory bodies, standards and certifications, and the non 802.11 wireless technologies and their impact
- Describe the Cisco Unified Wireless network basics and configure a Cisco Unified Wireless Network Controller and a Mobility Express Controller
- Describe and configure default OS wireless client configuration tools, use the Cisco Aironet Desktop Utility and Site Survey Utility, the Cisco Secure Services Client, and describe the CCX program
- Describe and configure wireless security
- Manage the wireless network from the Wireless Control System (WCS)
- Maintain and troubleshoot wireless networks

Course Outline

Module 1: Wireless Fundamentals

- Wireless Networks and Topologies
- Wireless LANs RF Principles
- Radio Frequency Mathematics
- Antennae
- Spread Spectrum Technologies Basics
- Wireless Regulatory Bodies, Standards and Certifications
- Examining Wireless Media Access
- Other Wireless Technologies and Their Impact
- Wireless Frame Journey: End-to-End
- Cisco Unified Wireless Network Architecture Basics

Module 2: Basic WLAN Installation

- Configure a Controller
- Discovering and Associating to a Controller
- Different AP Modes
- Roaming
- Managing the Network from the Controller
- Configuring and Migrating Stand-Alone Access Points
- Cisco Mobility Express Wireless Architecture



Advanced Infrastructure Solutions
Information Worker Solutions
Learning Solutions
Unified Communication Solutions





Enhanced Network Solutions Group

Systems Integration • Learning Solutions • CIO Consulting
Managed Outsourcing • Healthcare Solutions • Security Solutions

7224 Engle Road - Fort Wayne, IN 46804 - Phone: (260) 432-1364 - Fax: (260) 432.3168

Module 3: Wireless Clients

- Using Default OS Configuration Tool
- Cisco Aironet WLAN Client Adapter
- Cisco Secure Services Client
- Cisco Client Extension Program

Module 4: WLAN Security

- Wireless Security Framework and Components
- Establishing Basic IEEE 802.11 Security
- Centralizing the WLAN Authentication
- EAP Authentications
- Managing Authentication and Encryption with WPA and WPA2
- Configuring Security on Controllers and Clients

Module 5: WCS Administration

- WCS and Navigator
- Installing WCS
- Administering WCS
- Working with Controllers from WCS
- Working with Maps
- Monitoring the Network with WCS

Module 6: WLAN Maintenance and Troubleshooting

- Maintaining the System
- Design and Site Survey Considerations
- Using Troubleshooting Tools



Advanced Infrastructure Solutions
Information Worker Solutions
Learning Solutions
Unified Communication Solutions

