

# **Managing Enterprise Networks with Cisco Prime Infrastructure v3.7 (MENPI)**

**Modality: Virtual Classroom**

**Duration: 5 Days**

**CLC: 38 Units**

## **About this course;**

A successful communication network within an organization is the secret to the organizational success of every enterprise. Enterprise networks are the advanced structures that connect computers and other devices along with workgroup networks that contribute to greater data scope and easier access. The corporate network is another name of Enterprise network and Cisco Prime Infrastructure that offers the largest all in one network system consisting of wireless and wired network management, computers, apps, and users. A specific one-management mechanism guarantees the provisioning of Day 0 and 1 along with Day N monitoring, which is related between data and branch center. Through using Prime Infrastructure v3.0, the comprehensive 5 days training teaches participants the art of running a wireless and wired network with a full range of Cisco's.

Participants will be introduced to network control and troubleshooting issues that will aid in the primary infrastructure's Network Visibility and Controlling features. Participants will also undertake a full Cisco Prime Network Lifecycle to offer learners a sense of real-life circumstances, including site design, maps, software implementation, and system discovery results and also network troubleshooting and software problems.

A Cisco Certified Network Administrator's average salary is \$84,000 per annum.

## **Course Objectives:**

- Knowing and executing the deployment process associated with Cisco Prime Infrastructure
- Cisco Prime Network Management capabilities monitor and oversee
- Discovery of lifecycle architecture and pre-deployment activities
- Deploying Cisco Prime Infrastructure v3.1 as well as explaining the functionality of design, deployment capabilities, licensing, compliance, and security
- Outline the workplace functions and specific Cisco Prime attributes
- Usage of Prime Infrastructure to change a wide range of records along with executing techniques for isolating issues
- Carry out critical setup and exploration activities

- Use of different models and recognize their capabilities and procedures
- Create observational models and analyze the evaluation of health and results

## **Audience:**

The training is planned to promote the configuration, planning, troubleshooting, deployment, and management of cisco infrastructure via cisco prime infrastructure 3.0 primarily for managers and administrators in their related fields like field engineers, system engineers, network managers, security team leaders, technical service experts as well as general managers.

## **Prerequisites:**

- Sufficient knowledge of the CCNA-Wireless routes and CCNA Route & Switch
- Experience control of wireless and wired networks and their common terminologies
- Operational knowledge relevant to Network Control System, CiscoWorks, and Wireless Control System functionalities

## **Suggested prerequisites courses:**

- ICND1
- ICND2

## **Course Outline:**

### **Module 1**

- Lesson 1: Defining Network Management
- Lesson 2: Introducing Cisco Prime Infrastructure
- Lesson 3: Installing Cisco Prime Infrastructure
  - Hardware Challenge Lab 2: Review installation steps.
- Lesson 4: Getting Started with Cisco Prime Infrastructure.
  - Hardware Challenge Lab 3: Operate GUI, CLI, and, setup and operate CLI backups.
- Lesson 5: Configuring Initial Server Settings
  - Hardware Challenge Lab 4: Initial PI server configuration.

### **Module 2**

- Lesson 1: Populating the Network Inventory
  - Hardware Challenge Lab 5: Populate the network inventory.
- Lesson 2: Managing the Network Inventory
  - Hardware Challenge Lab 6: Manage the network Inventory
- Lesson 3: Managing Device Groups

- Hardware Challenge Lab 7: Manage groups
- Lesson 4: Managing the Network Inventory
  - Hardware Challenge Lab 8: Manage device software images.

### Module 3

- Lesson 1: Managing Wireless Maps
  - Hardware Challenge Lab 9: Manage wireless maps and discuss device naming conventions for auto generated maps.
- Lesson 2: Managing Network Topology Maps
  - Hardware Challenge Lab 10: Manage network topology maps.

### Module 4

- Lesson 1: Managing Virtual Domains
- Lesson 2: Managing Local User Authentication and Authorization
- Lesson 3: Managing Remote AAA Mode Settings.
  - Hardware Challenge Lab 11: Create a virtual domain and add an administrator.

### Module 5

- Lesson 1: Managing the Configuration Archive
  - Hardware Challenge Lab 12: Manage the configuration archive.
- Lesson 2: Managing Configuration Templates for Wired Devices.
  - Hardware Challenge Lab 13: Manage wired device templates
- Lesson 3: Managing Configurations for Wireless Devices
  - Hardware Challenge Lab 14: Manage wireless device configuration.
- Lesson 4: Using Plug and Play

### Module 6

- Lesson 1: Compliance Prerequisites
- Lesson 2: Compliance Policies
- Lesson 3: Compliance Audit and Fix Jobs
  - Hardware Challenge Lab 15: Prepare Compliance Policies and Profiles, Run an Audit Job, Review Audit output report, and, Correct Failures with a FIX job. Generate and review PSIRT, EoX, and Field Notice reports.

### Module 7

- Lesson 1: Deploying Converged Access Devices (3850XE and 3650XE) for wired and wireless devices.
  - Hardware Challenge Lab 16: Deploy a 3850 using the Converged Access Workflow.
- Lesson 2: Working with AVC, QoS, and IWAN Services.
  - Hardware Challenge Lab 17: Manage AVC and QOS services.
- Lesson 3: Deploying Cisco TrustSec Identity Services

### Module 8

- Lesson 1: Monitoring Devices and Interfaces
  - Hardware Challenge Lab 18: Monitor devices and interfaces.
- Lesson 2: Monitoring the Wireless Network
  - Hardware Challenge Lab 19: Monitor the wireless network.
- Lesson 3: Monitoring Applications
- Lesson 4: Monitor Clients and Users
  - Hardware Challenge Lab 20: Track clients, users, and applications.
- Lesson 5: Generating Reports
  - Hardware Challenge Lab 21: Generate reports

## Module 9

- Lesson 1: Managing the Server
- Lesson 2: Using Cisco Prime Infrastructure APIs.
  - Hardware Challenge Lab 22: Use the cURL utility to retrieve data using the PI 3.0 APIs.
- Lesson 3: Using Prime Infrastructure Operations Center

## Labs

Lab 2: Install and Activate Prime Infrastructure 3.0

Lab 3: Access Cisco Prime Infrastructure

Lab 4: Access Cisco Prime Infrastructure

Lab 5: Populate the Network Inventory

Lab 6: Manage the Network Inventory

Lab 7: Manage Groups

Lab 8: Manage Device Software Images

Lab 9: Manage Wireless Maps

Lab 10: Manage Network Topology Maps

Lab 11: Create a Virtual Domain and Add a User

Lab 12: Manage the Configuration Archive

Lab 13: Manage Wired Device Templates

Lab 14: Manage Wireless Device Configurations

Lab 15: Manage Compliance Features

Lab 16: Manage Converged Access Work Flow

Lab 17: Manage AVC and QoS

Lab 18: Monitor Devices and Interfaces

Lab 19: Monitor the Wireless Network

Lab 20: Track Clients, Users, and Applications

Lab 21: Generate Reports

Lab 22: Prime API Operation

Lab 23: Configure Operations Center