Managing Networks with Cisco Prime Infrastructure (NMENPI)

Module 1: Cisco Prime Infrastructure Overview

Introducing Cisco Prime Infrastructure

- Cisco Unified Access® Networks Management
- Cisco Prime Infrastructure Features and Benefits
- Deployment Options

Getting Started with Cisco Prime Infrastructure

- Cisco Prime Infrastructure GUI Overview
- CLI Interface Overview
- Configuring Initial Server Settings
- Configure Basic Server Settings

Introducing Cisco Prime Infrastructure Licenses

- License Basics
- Determining License Requirements
- Licensing Model Changes (3.0 and Higher)
- Managing Licenses in the GUI
- Management Token Option
- Smart Licensing
- License Troubleshooting

Module 2: Inventory Management and Reporting

Overall Process for Adding Devices to Inventory

- Credential Profiles
- Add Devices to the Inventory
- **Generating Reports**
- Report Basics
- Create a Report
- Composite Reports
- Saved Reports
- Custom Reports Feature
- Schedule Reports

Managing the Network Inventory

- View Network Inventory
- Edit Network Inventory
- Manage User-Defined Fields

Managing Groups

- Cisco Prime Infrastructure Groups and Subgroups
- Manage User-Defined Groups

Managing Network Device Software Images

- Device Software Management Overview
- Software Management Tasks

Module 3: Network Mapping

Managing Network Topology Maps

- Topology Map Overview
- View Devices in Topology Maps
- Edit Topology Maps
- Data Center Topology Maps

Managing Wireless Maps

- Wireless Technology Overview
- Cisco MSE Integration
- Wireless Site Maps Basics
- Configure Wireless Site Maps
- Optional Wireless Map Configuration Features

Module 4: Role-Based Access Control Managing Virtual Domains

- Introduction to Virtual Domains
- Root Domain
- User-Defined Virtual Domains

Managing User Authentication and Authorization

- View and Modify User Groups
- User Management
- Password Management
- User Monitoring

Managing Remote AAA Mode Settings

- Using External Authentication
- Using an SSO Server

Module 5: Configuration Management

Managing the Configuration Archive

- Archive Management Overview
- View Configuration Files
- Manage Archive Settings and Schedule

Managing Configurations for Wired Devices

- Modify Configurations for Individual Wired Devices
- Configuration Templates Overview
- Create or Use Configuration Templates
- Deploy a Template

Managing Configurations for Wireless Devices

- Wireless Devices Support
- Wireless Configuration Templates and Tools
- Modify Configurations for Individual Wireless Devices
- Create or Use Wireless Templates
- Configure with Wireless Technologies
- Additional Wireless Configuration Features

Configuring Plug and Play

- Plug and Play Overview
- Configure Plug and Play

• Verify the Activation Process

Module 6: Compliance Management

Performing Configuration Audits Using Compliance

- Compliance Audit Overview
- Create a Policy, Rules, and a Profile
- Run a Compliance Audit
- Evaluate the Audit Results

Running Reports to View Device Security Vulnerabilities

• PSIRT, EOX, and Field Notice Reports

Module 7: Services Management

Introducing Services

- What Are Services?
- Service Prerequisites

Deploying Cisco TrustSec® Identity Services

- Cisco TrustSec Overview
- Enable 802.1X on Devices for Authentication
- Generate a Cisco TrustSec Readiness Assessment Report

Introducing AVC Services

AVC Services Overview

Introducing Network Services and Router Virtual Containers

- Network Services and Router Virtual Containers Overview
- IWAN Enablement

Module 8: Network Monitoring

Exploring Monitoring Tools

- Monitoring Overview
- Dashboards and Dashlets
- Data Collection
- Policies
- Alarms and Events

Monitoring Wired Devices and Data Centers

- Monitor with Maps
- Monitor with Dashboards
- Monitor with Reports
- Monitor Compute Device Resources

Monitoring the Wireless Network

- Wireless Device Monitoring Overview
- Monitor with Wireless Dashboards and Dashlets
- Monitor with Wireless Maps
- Monitor with Wireless Reports
- Example Wireless Monitoring Tasks

Monitoring Applications

Application Monitoring Overview

- Monitor with Dashboards and Dashlets
- Monitor with Reports
- Business-Critical Application Health Monitoring

Monitoring Clients

- Client Monitoring Overview
- Monitor with Dashboards and Dashlets
- Client and User Monitoring Tool
- Monitor with Reports
- Client Troubleshooting
- Wireless Client Profiling

Module 9: System Administration

Monitoring System Health

• System Monitoring Dashboard

Monitoring Network Health

- Network Health Dashboard
- Network Health Configuration Options

Monitoring KPIs

- KPI Performance Graphs Overview
- Exporting or Printing Graph Data

• Reviewing Device or Interface 360° Views

- Managing the Server
- Logging
- CLI Commands for the Server
- Server Backup and Restore
- Software Updates

Introducing Operations Center for Large Deployments

- Operations Center Overview
- Activate Operations Center License
- SSO Configuration
- Adding Instances
- Operations Center Data Aggregation

Labs outline

- Lab 1: Access Cisco Prime Infrastructure
- Lab 2: Configure System Settings
- Lab 3: Credential Profiles
- Lab 4: Manually Add and Import Devices
- Lab 5: Add Devices with Quick Discoveries
- Lab 6: Generate Reports
- Lab 7: Manage the Network Inventory
- Lab 8: Manage Groups
- Lab 9: Manage Device Software Images
- Lab 10: Manage Network Topology Maps
- Lab 11: Manage Wireless Maps
- Lab 12: Create a Virtual Domain

- Lab 13: Add a User
- Lab 14: Add an ISE Server
- Lab 15: Manage the Configuration Archive
- Lab 16: View Wired Device Templates
- Lab 17: Create and Deploy Wired Device Templates
- Lab 18: Manage Wireless Device Configurations
- Lab 19: Plug and Play Configuration
- Lab 20: Manage Compliance Features
- Lab 21: Manage AVC and QoS
- Lab 22: Monitor Devices and Interfaces
- Lab 23: Monitor the Wireless Network
- Lab 24: Track Applications
- Lab 25: Track Clients
- Lab 26: Configure Operations Center