Training overview Cisco public

Configuring and Operating Cisco EPN Manager (EPNM100)

Description

The **Configuring and Operating Cisco EPN Manager (EPNM100)** training shows you how to create efficient and agile network management through automated device operations, fast provisioning install, network configuration, dashboard management, and device management using Cisco© Evolved Programmable Network (EPN) Manager. Through a combination of lessons and hands-on labs, you will learn to maximize the benefits of the Cisco EPN Manager as a simplified, flexible, and cost-effective end-to-end lifecycle management solution for network provisioning, and network assurance management for today's converging packet and optical multilayer networks.

This training also earns you 32 Continuing Education (CE) credits toward recertification.

How you'll benefit

This training will help you:

- Gain the knowledge and skills you need to improve network agility and operational efficiencies through automated device operations, fast provisioning, and proactive assurance management
- Learn how to create integrated, end-to-end management for the entire carrier network and support immediate use of multiple domains
- Acquire the ability to enhance business operations by automating provisioning of services to enable faster resolution of network issues by identifying affected circuits and virtual connections
- Earn 32 CE credits toward recertification

Who should enroll

- Cisco Integrators and Partners
- Network Operators
- Network Administrators
- Optical Network Administrators
- System Administrators
- System Integrators and Professional Services

Technology areas

Network Management

Objectives

- Describe Cisco EPN Manager's features and navigate the Cisco EPN Manager's user interface
- Understand the network inventory, topologies, and circuits
- Manage dashboards, alarms, and events
- Create and interpret reports
- Distinguish the system requirements for Cisco EPN Manager, and procedures for new installations, upgrades, licensing, and high availability
- Manage device groups and virtual domains
- Establish user accounts and their role-based access to EPN Manager's features and devices
- Configure and combine devices
- Perform backups and restores
- Manage data retention, purging, and software updates
- Monitor system health and performance
- Update and manage software images
- Archive, review, and restore configuration files
- Configure Quality of Service (QoS) actions and policies
- Configure devices using templates
- Perform compliance audits
- Configure monitoring policies
- Provision Carrier Ethernet services
- Provision Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) services
- Provision Circuit Emulation (CEM) services
- Provision an Optical Channel Network Connection (OCHNC) circuit
- Provision an Optical Channel Client Connection (OCHCC) circuit
- Provision an optical Media Channel Group with an OCHCC circuit
- Describe how Cisco EPN Manager can work with Cisco Network Services Orchestrator (NSO) to provide automated service provisioning

Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Network management experience including polling, syslogs, IP formation, ports, device access, credentials,
 Simple Network Management Protocol (SNMP), and Secure Shell (SSH)
- Basic understanding of network and device performance statistics
- Fundamental understanding of network alarms and events
- Experience with configuring network devices and provisioning services using a device's Command-Line Interface (CLI)
- Experience with configuring optical network devices and provisioning optical circuits using either TL1 (CLI) or the Cisco Transport Controller application

Outline

- Exploring Cisco EPN Manager
- Viewing Devices and Inventory
- Viewing Network Topologies and Circuits
- Using Dashboards
- Managing Alarms and Events
- Generating Reports
- Performing Basic Administration
- Adding Devices
- Backup and Restoring
- Performing System Maintenance
- Software Image Management (SWIM)
- Configuration Management
- Configuring QoS
- Configuring Devices with Templates
- Performing Compliance Management
- Monitoring with Policies
- Circuit and Video Conferencing (VC) Fundamentals
- Provisioning Carrier Ethernet Services
- Provisioning Cisco MPLS Traffic Engineering Services
- Provisioning Circuit Emulation Services
- Provisioning an OCHNC Circuit
- Provisioning an Optical OCHCC Circuit
- Provisioning a Media Channel Group with an OCHCC Circuit
- Introducing Cisco EPN Manager with Cisco NSO

Lab Outline

- Access and Navigation
- View Devices and Device Details
- View Maps, Topologies, and Circuits
- View and Customize Dashboards
- Manage Alarms and Events
- Generate Reports
- Basic Administration
- Add Devices to the Inventory
- Backups
- Basic Maintenance
- Software Image Management
- Configuration Management
- Configure QoS
- Configure Devices with Templates
- Compliance Management
- Monitor with Policies
- Provision a Carrier Ethernet Service

- Provision and MPLS Traffic Engineering Service
- Provision a Circuit Emulation Service
- Set Up, Provision, and Monitor an OCHNC Circuit
- Set Up, Provision, and Monitor a Media Channel with OCHCC

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