

# Operating Cisco EPN Manager (EPNM100) v4.0

## What you'll learn in this course

The **Configuring and Operating Cisco EPN Manager (EPNM100) v4.0** course 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.

## Course duration

- Instructor-led training: 4 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 4 days of web-based classes with hands-on lab practice

## How you'll benefit

This course 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

## Who should enroll

- Cisco integrators and partners
- Network operators
- Network administrators
- Optical network administrators
- System administrators
- System integrators and professional services

## How to enroll

### Instructor-led training

- Find a class with the [Cisco Learning Locator](#).
- Arrange training at your location through [Cisco Private Group Training](#).

## Technology areas

- Network management

## Course details

### Objectives

After taking this course, you should be able to:

- 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

To benefit fully from this course, you should have the following knowledge and skills:

- 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
  - Cisco EPN Manager Overview
  - Cisco EPN Manager Key Features
- Viewing Devices and Inventory
  - Device Types
  - View Devices
- Viewing Network Topologies and Circuits
  - Topology Map Basics
  - Change Information Displayed
- Using Dashboards
  - Dashboards Overview
  - Customize Dashboards
- Managing Alarms and Events
  - Alarms and Events Overview
  - View Alarms and Events
- Generating Reports
  - Report Fundamentals
  - Create and Schedule Reports
- Performing Basic Administration
  - Installation Basics
  - Perform Server Setup

- Adding Devices
  - Device Management Fundamentals
  - Add a Device Manually
- Backup and Restoring
  - Backup Fundamentals
  - Schedule a Backup
- Performing System Maintenance
  - Software Updates
  - Data Retention and Purging
- Software Image Management (SWIM)
  - Software Image Management Fundamentals
  - Setting Up Software Image Management
- Configuration Management
  - Configuration Management Fundamentals
  - Archive Setup
- Configuring QoS
  - QoS Basics
  - Create a Classification Profile
- Configuring Devices with Templates
  - Device Configuration Methods
  - Template Basics
- Performing Compliance Management
  - Compliance Audit Basics
  - Compliance Policy Basics
- Monitoring with Policies
  - Monitoring Policy Fundamentals
  - Edit a Monitoring Policy
- Circuit and Video Conferencing (VC) Fundamentals
  - Circuit Provisioning Basics
  - Supported Service Types
- Provisioning Carrier Ethernet Services
  - Provision a Carrier Ethernet Service
  - Verify a Service

- Provisioning Cisco MPLS Traffic Engineering Services
  - Cisco MPLS TE Service Basics
  - Provision a Cisco MPLS TE Service
- Provisioning Circuit Emulation Services
  - Circuit Emulation Services Basics
  - Provision a CEM Service
- Provisioning an OCHNC Circuit
  - OCHNC Circuit Basics
  - Set Up Devices for Circuit
- Provisioning an Optical OCHCC Circuit
  - OCHCC Circuit Basics
  - Set Up Devices for Circuit
- Provisioning a Media Channel Group with an OCHCC Circuit
  - Media Channel Group with OCHCC Basics
  - Provision a Media Channel Group
- Introducing Cisco EPN Manager with Cisco NSO
  - Cisco EPN Manager with Cisco NSO Basics

### 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



---


Americas Headquarters  
Cisco Systems, Inc.  
San Jose, CA

Asia Pacific Headquarters  
Cisco Systems (USA) Pte. Ltd.  
Singapore

Europe Headquarters  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

---

 Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Course content is dynamic and subject to change without notice.

© 2021 Cisco and/or its affiliates. All rights reserved.

EPNM100\_4-0 C22-743735-01 07/21