

# Cisco EPN Manager Network Administration - Optical



Cisco EPN Manager Network Administration - Optical is an instructor-led and lab-based course in which you learn to monitor, configure, and provision NCS 2000 and ONS optical network devices by using advanced Cisco EPN Manager features.

The Cisco Evolved Programmable Network (EPN) Manager is a simplified and cost-effective device operation, administration, network provisioning, and network assurance management solution for today's converging packet and optical multilayer networks. This all-in-one, next-generation product provides device management, network provisioning, and network assurance across core, edge, aggregation, and access networks. EPN Manager provides end-to-end network management of Carrier Ethernet, optical transport, and circuit emulation over packet networks. Built on a model-based architecture with content decoupled from the platform, it greatly improves agility in content delivery by using a common inventory and data model.

This course is designed for network administrators (tier 2 and 3 operators) who monitor and provision the optical network (NCS 2000 and ONS devices) by using Cisco EPN Manager.

Other courses in this series address general network operations and system administration, and include a complimentary Network Administration course for packet devices. The Operations course addresses key application read-only features. The System Administration course addresses installing and configuring EPN Manager.

## Duration

Instructor-Led Training (ILT) delivery: 1 day.

Virtual Instructor-Led Training (VILT) delivery: 4 sessions (Each session is 2 hours or less.)

## Target Audience

This course is designed for technical professionals who need to monitor or provision the network by using Cisco EPN Manager advanced functions.

Targeted roles include:

- Optical Network administrators (tier 2 and 3)
- System integrators and professional services

## Course Objectives

By the end of this course, you will be able to:

- Archive and restore TL1 database files.
- Update and manage optical devices' software images.
- Configure optical devices using the Detailed Device View.
- Provision optical network services.

## Course Prerequisites

Completion of the Cisco EPN Manager Operations course

## Recommended Prerequisites

Cisco recommends that you have the following prerequisite knowledge and skills:

- Network management experience (SNMP, polling, syslogs)
- Basic understanding of network and device performance statistics
- Basic understanding of network alarms and events
- Experience with configuring optical network devices and provisioning optical circuits using either TL1 (CLI) or the Cisco Transport Controller application

## Course Outline

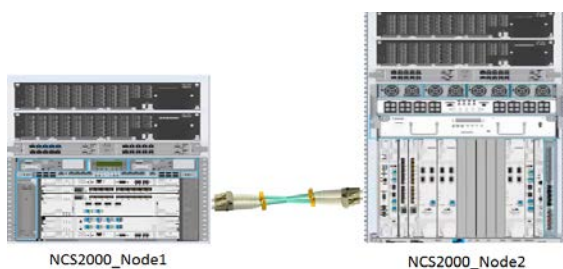
- Module 1: Configuration Management
  - Set up the configuration archive to collect unique versions of device configurations, define the number of versions that the system retains, and the archive retention period.
  - Label and deploy archived files by using configuration archive functions.
- Module 2: Software Image Management
  - Describe Software Image Management and create a repository of software images
  - Reliably deploy software images to managed devices
  - Roll back to a previous image
- Module 3: Configuring Devices
  - Configure optical TL1 devices by using Detailed Device View.
  - Recognize the optical provisioning features provided by Cisco EPN Manager.
  - Create a custom provisioning profile.
  - Provision an optical service by using a profile.
  - Assure that a service is provisioned and functioning properly.
  - Troubleshoot and monitor a service.
- Module 4: Lifecycle Management (Use Case)
  - Configure, monitor, and troubleshoot a service by using the skills that you learned.

## Lab Outline

- Lab 1: Configuration Management
  - Set configuration archive parameters that define file archiving schedules and time periods for archive retention.
  - Use features of configuration archive to label files.
  - Roll back a device's configuration to a previously archived configuration.
- Lab 2: Software Image Management
  - Define software image repository parameters.
  - Collect software images from devices and place them in the repository.
  - Schedule and run a job to deploy a software image to a device.
  - Roll back to the previous image.
- Lab 3: Configuring Devices
  - Configure an object on a single device.
  - Create a custom provisioning profile.
  - Provision an optical circuit.
  - Manage services by using Cisco EPN Manager features.
- Lab 6: Lifecycle Management Use Case
  - Configure a service.
  - Monitor a service.
  - Troubleshoot a service.

## Lab Topology

The lab guides are written generically to work with almost any topology that includes Cisco EPN Manager supported devices. In this course, you work with the following topologies and devices.



## Registration Email

Send your instructor-led Cisco EPN Manager training request to: [pdt-training@cisco.com](mailto:pdt-training@cisco.com).

For more information about Cisco EPN Manager training and access to free job aids and use case videos, visit the [EPN Manager Product Training](#) page.



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