



Configuring and Operating Cisco EPN Manager

Duration: 4 Days Course Code: EPNM100 Version: 3.0

Overview:

The Configuring and Operating Cisco EPN Manager course shows you how to install, provision, monitor, and maintain a packet and optical multilayer network using Cisco® Evolved Programmable Network (EPN) Manager. This course also covers configuration and compliance management, device configuration, and service management.

The Cisco EPN Manager is a simplified and cost-effective solution for device operation, administration, network provisioning, and network assurance management for today's converging packet and optical multilayer networks. It enables end-to-end lifecycle management across core, edge, aggregation, and access networks.

Target Audience:

Network Operators and Administrators who need to learn how to deploy Cisco EPN Manager and perform end-to-end network management of Carrier Ethernet, optical transport, and circuit emulation over packet networks.

Objectives:

- After completing this course you should be able to:
- Recognize the Cisco EPN Manager's features
- Access Cisco EPN Manager and understand user accounts (roles, virtual domains)
- Navigate the Cisco EPN Manager's user interface
- View the network inventory
- Monitor health and performance
- Manage alarms and events
- Generate reports
- Recognize the system requirements for Cisco EPN Manager, and procedures for new installations, upgrades, and high availability
- Manage licensing
- Configure the initial server settings and prepare the server for day-1 operations
- Establish initial device inventory and virtual domains
- Establish user accounts and their role-based access to EPN Manager's features and devices

- Configure monitoring policies and alarm and event preferences
- Manage backup and restore, data retention and purging, and software updates
- Tune and monitor a server's performance
- Archive, view, compare, and restore configuration files
- Update and manage software images
- Perform compliance audits
- Configure devices using templates
- Provision network services
- 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

Prerequisites:

Attendees should meet the following prerequisites:

 Network management experience (polling, syslogs, IP addressing, ports, device access, credentials, Simple Network Management Protocol [SNMP], Secure Shell [SSH])

Testing and Certification

Recommended as preparation for the following exams:

There are no exams currently aligned to this course

- Basic understanding of network and device performance statistics
- Basic understanding of network alarms and events
- Experience with manually configuring network devices and provisioning services using a device's Command-Line Interface (CLI)
- VMware experience with the installation of OVA files on virtual machines and/or ISO software on bare-metal machines
- Experience with configuring optical network devices and provisioning optical circuits using either TL1 (CLI) or the Cisco Transport Controller application

Content:

Introduction

- Service Provider Market Trends
- Cisco EPN Manager Overview

Getting Started

- Accessing Cisco EPN Manager
- Lesson Summary for "Accessing Cisco EPN Manager"
- Exploring the GUI
- Populating the Inventory

Network Views

- Viewing Device Inventory and Device Details
- Viewing the Topology

Network Monitoring

- Monitoring Dashboards
- Monitoring Policies Overview
- Exploring Alarms and Events
- Taking Action on Alarms and Events
- Exploring Reports
- Managing Reports

System Administration

- Pre-Installation Activities
- Installing Cisco EPN Manager
- Installing High Availability
- Post-Installation Activities
- Performing Server Setup Tasks
- Customizing Alarm and Event Preferences
- Managing Groups and Virtual Domains
- Managing User Accounts

Maintenance

- Backup and Restore
- Software Updates
- Data Retention and Purging
- Monitor and Tune Cisco EPN Manager

Configuration Management

- Setting Up Configuration Management
- Using Configuration Management

Software Image Management

- Software Image Management Basics
- Deploying Software Images

Device Configuration

- Cisco EPN Manager Configuration
- Configuring Devices by Using Templates
- Creating Custom Templates

Compliance Management

- Compliance Prerequisites
- Compliance Policies
- Compliance Audit and Fix Jobs

Carrier Ethernet Service Management

- Examining Provisioning Features
- Creating Customers and Custom Profiles
- Provisioning a Carrier Ethernet Service
- Verifying Services
- Monitoring and Troubleshooting Services

Optical Devices, Circuits, and Services

- Exploring Optical Provisioning Features
- Setting Up Configuration Management
- Using Configuration Management
- Configuring Optical Devices with Detailed Device View
- Creating Customers and Custom Profiles
- Provisioning a Service
- Assuring Services
- Monitoring and Troubleshooting Services

Labs

- Lab 1: Access and Navigation
- Lab 2: Populating the Inventory
- Lab 3: Viewing the Network
- Lab 4: Monitoring Dashboards
- Lab 5: Monitoring Policies
- Lab 6: Alarms and Events
- Lab 7: Reports
- Lab 8: OVA Installation Video
- Lab 9: Server Setup
- Lab 10: Customizing Alarm Preferences
- Lab 11: Managing Groups and Virtual Domains
- Lab 12: User Accounts
- Lab 13: Maintenance
- Lab 14: Configuration Management
- Lab 15: Software Image Management
- Lab 16: Configuring Devices
- Lab 17: Manage Compliance Features
- Lab 18: CE Service Provisioning
- Lab 19: Lifecycle Use Case
- Lab 20: Optical Custom Profile
- Lab 21: Provision Optical Circuits
- Lab 22: Monitor Optical Services

Further Information:

For More information, or to book your course, please call us on 0800/84.009 info@globalknowledge.be
www.globalknowledge.com/en-be/