

OPT200 - CISCO OPTICAL TECHNOLOGY INTERMEDIATE

Course Code: 3787

Learn the skills necessary to deploy a Cisco Optical Networking System (ONS) 15454 Multiservice Transport Platform (MSTP) network from installation to protection.

In this course, you will learn the skills necessary to deploy a Cisco Network Convergence System (NCS) 2000 Series network.

You will also learn how to perform node turnup. The course covers three shelf types, the Cisco ONS 15454 M12 Multiservice Transport Platform (MSTP), NCS 2006, and NCS 2002. You will learn how to deploy linear and ring dense-wavelength-division-multiplexing (DWDM) topologies. The course covers multiplexer-demultiplexer cards, Erbium-doped-fiber amplifier cards, Raman amplifiers, transponder cards, and the newest Cisco Any Rate muxponder cards and crossponder cards.

These cards are used in terminal, amplifier, and reconfigurable optical add-drop multiplexer (ROADM) node configurations. You configure wavelength-selective switch (WSS) linear and single-module ROADM (SMR) rings. This Optical Technical Training Intermediate course covers 10-gigabit unprotected circuits and 10-gigabit protection using Y-cable, optical channel transport unit-2 (OTU-2), and protection switch module (PSM) cards.

This course is eligible for 24 Continuing Education Credits (ILT Modality).

What You'll Learn

- Connect to a Cisco ONS 15454 MSTP chassis using Cisco Transport Controller (CTC)
- Identify Node configurations according to card population Provision DWDM circuits using the Cisco Transport Controller (CTC)
- Conduct performance monitoring, alarm verification, and fault isolation
- Provision M12 WSS in linear and M6 SMR nodes in ring topologies
- Configuration options for the any rate muxponder and crossponder
- Perform Raman amplifier initialization
- Isolate optical network issues

Who Needs to Attend

- Technical professionals who are responsible for installation, deployment, and maintenance of the Cisco ONS 15454 MSTP network
- Network operations, planners, and designers
- Network operations engineers

Prerequisites

- Basic knowledge of optical transport and protocols
- Basic knowledge of data network principles

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VIRTUAL CLASSROOM LIVE

\$3,000 USD

5 Day

Virtual Classroom Live Outline

1. CTC Operations
2. MSTP Topologies
3. Shelf and Card Installation
4. Fiber jumper installation
5. Linear Configurations
6. Node Turn-Up
7. Optical Channel Network Connection Circuits
8. Transponder and Optical Channel Client Connection Circuits
9. Multishelf
10. MSTP M6 SMR-Based Rings
11. 10-Gigabit Muxponder and Transponder Cards
12. 10-Gigabit with Y-Cable Protection
13. Alternative 10-GB Protection (PSM and OTU-2)
14. Any Rate Muxponder and Crossponder
15. Raman Amplifier
16. 40- and 100-Gigabit Transponder and Muxponder
17. Troubleshooting

Virtual Classroom Live Labs

Lab 1: System Setup and Login

Lab 2: Node Turn-Up

Lab 3: Creating Direct Circuits (OCHNC)

Lab 4: Creating Transponder Optical Client Circuits (OCHCC)

Lab 5: Configuring an SMR Ring

Lab 6: Installing 10-Gbps Transponder Cards with Y-Cable Protection

Lab 7: Alternate 10-Gigabit Protection (OTU-2 and PSM)

Lab 8: Any Rate Muxponder and Crossponder Options

Lab 9: Raman Amplifier

Lab 10: MSTP Troubleshooting

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