Cisco Optical Technology Intermediate (CPLL-OPT200)

Duration: 180 Days

The Cisco Optical Technology Intermediate (OPT200) training is designed to teach you the skills necessary to deploy the Cisco® Optical Networking System (ONS), 15454 Multiservice Transport Platform (MSTP), and Cisco Network Convergence System (NCS) 2000 Series Dense Wavelength-Division Multiplexing (DWDM) networks from installation to protection. Through a combination of lecture and hands-on experience, you will learn installation, configuration, circuit protection, maintenance, and basic troubleshooting using the Cisco Transport Controller for the Cisco ONS 15454 M6 and M12 shelves, and for the Cisco NCS 2016 shelf.

Additionally, in this training you will review DWDM terminology and components, explore available chassis and cards, and discuss hardware installation. You will learn to use the Cisco Transport Controller server software to connect to the nodes, perform network turn-up and circuit creation, and deploy linear and single-module ROADM (SMR) DWDM multishelf topologies. Using this software, you will also configure Raman amplifiers, Any Rate cards, and protected and unprotected circuits. The training covers a variety of card options: controllers, transponders, multiplexer-demultiplexer, add/drop, Raman amplifiers, and Cisco Any Rate muxponder cards. You will use the various cards to configure terminal, amplifier, mesh, split, Optical Service Channel (OSC) regenerator, and Reconfigurable Optical Add/Drop Multiplexing (ROADM) nodes. Finally, you will learn how to use many of the tools and features available with the Cisco Transport Controller to perform maintenance, testing, and basic troubleshooting of your optical network.

This training also earns you 24 Continuing Education (CE) credits toward recertification.

Skills You'll Learn:

- Deploy, maintain, test, and troubleshoot your optical network
- Explain Cisco DWDM platform basics, DWDM network topologies, and the Cisco
- DWDM network management software
- Expand and deepen your knowledge of optical networks and their maintenance
- Identify the uses of the Cisco Transport Controller
- Describe and utilize various optical network technologies

Learning Path Objectives:

- Describe Cisco DWDM platform basics
- Describe DWDM network topologies

- Describe the management software used for managing Cisco DWDM networks
- List the different hardware components of the Cisco ONS and Cisco NCS DWDM systems
- Provision nodes and circuits in a Cisco DWDM network
- Perform node and multishelf configurations
- Implement SMR-based rings
- Provision optical circuit protection mechanisms
- Configure Any Rate cards
- Describe the function of Raman amplifiers
- Perform basic maintenance and troubleshooting of a Cisco DWDM network