Hands-On

Advanced Services Cisco ONS 15454 MSTP Implementing DWDM from Installation to Protection Release 9.2 Version 1

Course Description

This course covers the Cisco ONS 15454 DWDM, a scalable and powerful optical platform. Which lowers the cost and increases the efficiency of DWDM and mixed DWDM/TDM networks. Students will learn how to operate, test and troubleshoot the Cisco ONS 15454 MSTP system. Students will complete a wide range of case studies covering many system features and functions.

This course will rely on the Cisco ONS 15454 user documentation for references to specific procedures.

Students Will Learn

- Describe The Basic Components, Features, And Functions Of The Cisco ONS 15454 DWDM System
- Describe DWDM Fundamentals
- Describe DWDM Test Equipment
- Describe Shelf Layout And Basic Components Of The ONS 15454 DWDM System
- List And Describe The Major Features And Benefits Of The Cisco ONS 15454 MSTP Data Cards
- Describe The Different ONS 15454 DWDM Topologies
- Install And Provision Common Control, Optical, And DWDM Cards
- Describe The IP Addressing And Common IP Connectivity Scenarios And Specific Solutions
- Perform System Setup And Login Use The Cisco Transport Controller Software
- Turn Up And Perform Optical Verification Of An ONS 15454 DWDM Node
- Describe And Create Optical Service Channel (OSC) Connections
- Describe Internal Connections And Provisionable Patchcords
- Describe Different DWDM Circuit Types Including Optical Channel Client Connections And Optical Trail Circuits
- Describe And Create Multishelf Configuration
- Describe ONS 15454 DWDM Protection Options
- Describe Basic ONS 15454 DWDM Troubleshooting
- And More...

Target Audience

This course is geared for Network professionals, Designers, Implementation staff, Network operations center personnel,

Support staff and anyone working with the responsibilities of the Cisco ONS 15454.

Prerequisites

Students shoould have the following understanding and experience in following areas
-SONET or SDH hierarchy and structure
-DWDM fundamentals
-Optical test equipment

Course Outline

- DWDM Fundamentals
- Safety
- Optical Fiber
- Fiber Cleaning
- Lab: Fiber Cleaning
- DWDM Test Equipment
- Lab: Optics and DWDM Technology Overview
- ONS 15454 MSTP Shelf Layout and Components
- ONS 15454 MSTP Documentation
- ONS 15454 MSTP Topologies
- ONS 15454 MSTP Shelf and Card Installation
- Lab: ONS 15454 MSTP Shelf and Card Installation
- ONS 15454 MSTP System Setup
- Lab: ONS 15454 MSTP System Setup and Login
- ONS 15454 MSTP MetroPlanner
- Lab: Create MetroPlanner Configurations
- ONS 15454 MSTP Node Turn Up
- ONS 15454 MSTP Linear Configurations
- ONS 15454 MSTP Node Turn Up
- Lab: ONS 15454 MSTP Node Turn Up
- ONS 15454 MSTP Node Optical Verification
- Lab: ONS 15454 MSTP Optical Verification
- ONS 15454 MSTP Network Connections
- Lab: Create ONS 15454 MSTP Network Connections
- ONS 15454 MSTP Circuits
- Lab: Create ONS 15454 MSTP Point-to-Point Circuits
- ONS 15454 MSTP Patch Cords and OCH Trail
- ONS 15454 MSTP OCH Trail
- ONS 15454 MSTP Linear Amplifier
- Lab: Configure an ONS 15454 MSTP Amplifier
- ONS 15454 MSTP Amplified OADM
- Lab: Configure an ONS 15454 MSTP Amplified OADM
- ONS 15454 MSTP Multishelf Configuration
- Lab: Configure an ONS 15454 MSTP Multishelf
- ONS 15454 MSTP Rings
- Lab: Configure an ONS 15454 MSTP Amplified Ring
- ONS 15454 MSTP Protection

- Lab: Configure ONS 15454 MSTP Fiber Protection
- ONS 15454 DWDM Muxponder and Transponder Cards
- Lab: Install ONS 15454 MSTP 10 Gbps Muxponder and Transponder Cards
- ONS 15454 MSTP Muxponder Cards for Data Services
- Lab: Install ONS 15454 MSTP MXP_MR_2.5G and MXP_MR_10DME Cards
- Lab: ONS 15454 MSTP Basic Troubleshooting
- Lab: Install ONS 15454 MSTP Ethernet Connections

Delivery Method

Instructor-Led with numerous Labs, Case Studies and Exercises.

Equipment Requirements
(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

4 Days