

Optical LAN Operations, Provisioning & Maintenance + Advanced Troubleshooting

OEM: Tellabs • Code: SL40-OPMAT-C

COURSE DESCRIPTION

This instructor-led course provides knowledge and skills needed to operate, provision, and maintain a Tellabs Optical LAN system. It also provides advanced troubleshooting procedures using fiber optic measurement and diagnostic tools. After an introduction to the Tellabs Optical LAN system and hardware functionality, students will learn how to provision the system to provide services as well as applications supported by the Tellabs Optical LAN system. Students will also learn tools and procedures for monitoring and maintaining the system. This course includes hands-on activities using Tellabs training lab equipment. It is designed to help students learn the concepts that have been presented and reinforce what they have learned.

AUDIENCE PROFILE

- This section doesn't contain any content.

PREREQUISITES

- Basic knowledge in Ethernet switching and routing; including VLAN concepts, IP/subnetting, basic QoS knowledge and the basic concepts of port security.

COURSE OBJECTIVES

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

- Identify the features and functionality of the Tellabs Optical LAN Access Solution
- Describe the network functionality of the Tellabs Optical LAN Access Solution
- Describe the common equipment associated with the Tellabs Optical LAN Access Solution series of equipment
- Perform provisioning procedures for the Tellabs Optical LAN voice and data services using the Tellabs Panorama PON Manager
- Perform equipment management and monitoring procedures using the Tellabs Panorama PON Manager
- Perform trouble clearing procedures of common problems
- Understand PON fiber optic topologies and communication processes
- Understand the terms, jargon, and measurements used in PON fiber optics
- Perform PON fiber optic testing and troubleshooting using modern techniques and tools.
- Understand and practice the standard guidelines for PON fiber optic installation, safety, and documentation.

Module 1: System Overview

- Product Features Overview
- Optical LAN Management Overview
- Applicable Technology

Module 2: System Equipment

- OLT Equipment
- Optical LAN ONT Equipment
- DC Power Rectifier & Power Distribution Units

Module 3: EMS Operations

- Navigate the Panorama PON Network Manager
- Add and configure the Network Element
- Configure links, ONTs, and Ports
- Panorama Overview
- NE Management

Module 4: Service Provisioning

- Create Customer Services
- Data Service Creation
- CLI Commands for Provisioning

Module 5: Maintenance

- Manage System Alarms and Status
- Perform OLT Field Maintenance
- Perform Maintenance Procedures
- Using the Alarms and Events View
- Using the Troubleshooting, Test, and Maintenance User's Guide
- Line Status
- Tellabs Optical LAN Craft Interface
- EMS Maintenance
- Creating Reports

Module 6: Advanced Troubleshooting

- Introduction to Fiber Optics
- Fiber Optic Jargon
- Tellabs Fiber Optic Components and Function
- Fiber Optic Cable Specifications

- Fiber handling and safety
- Fiber optic tests and procedures and standards
- Tools for testing
- Visual Inspection and cleaning
- Optical Power and Loss
- Troubleshooting power loss