

Course Name: I & M with Fluke Networks Frame Relay Assistant

Course Overview:

This course gives an overview of Frame Relay technology and standards as well as enables hands-on practice and exercises. It is designed to be a hands-on course on the Fluke Networks 660 Frame Relay Assistant test set. This is not a product specific course, but an intense training program on utilizing the test set as a tool to more efficiently test and maintain Frame Relay circuits and service. The class will also discuss Frame Relay fundamentals and teach the participant the proper parameters and measurements to ensure minimal down time and reliable service. All Frame Relay equipment interfaces and service parameters are also discussed.

Course Length: 2 days

Who should attend?

- Installers
- Technicians
- Engineers
- Managers & Supervisors
- Network Professionals

You will learn:

- How to set up, operate and interpret results on the Fluke Network 660 Series Frame Relay Installation Assistant.
- The differences between circuit switched and packet switched technologies
- How to test the physical layer circuit (DDS, T1, Serial) to verify operation
- Common Frame Relay service parameters
- How to differentiate between LMI, DLCE, CIR and DE in Frame Relay Service
- How to efficiently make connections to monitor Frame Relay circuits without interrupting service
- How to efficiently install and test new Frame Relay equipment and systems
- How to troubleshoot existing Frame Relay equipment and systems
- How to monitor live Frame Relay connections to verify proper operation

Prerequisites: None, however an Introduction to data technologies course is extremely helpful.

Course Fees:

- 2-day course at a TESSCO location \$950 per person
- 2-day course at your location \$6000 for up to 10 attendees

Customizable Course: Yes

Course Content:

Product Overview

- Hardware Overview
- Graphical Display
- Buttons
- Connectors
- Battery
- Cables

Industry Overview

- Trends
- Drivers

Packet-Based Technologies

- Overview
- Drivers
- Market
- Comparison to other technologies

OSI Model

- Purposes
- Layers
- LAN vs. WAN
- Packets, Frames, and Cells
- Addressing/Routing
- Point-to-Point and Layer 2

Frame Relay Overview

- Market
- Advantages
- Comparison to other technologies

Frame Relay Applications

Frame Relay Basics

- Frame format
- Interfaces
- Addressing (DLCI)
- Dealing with Congestion
- Link Management (LMI)
- Frame Relay Equipment
- Frame Relay Networks

Service Parameters

- CIR
- Bc
- Be
- Service Level Agreements (SLA)

Frame Relay Maintenance

- Testing concepts
- Common Problems
- Physical Layer Testing
- Verifying LMI
- In Service Monitoring
- Out-of-Service Testing
- Percent of reliability