



ExperTech 2.0: Metro Ethernet

PROGRAM OVERVIEW

The ExperTech 2.0 series is a library of CD-ROM or intranet-based products covering key communications topics. Seminar style presentations provide telecom professionals with easy access to the information they need. Topics are presented by Hill Associates instructors renowned for their technical expertise, industry experience, and outstanding presentation style.

Who would have imagined that when Ethernet was developed in the early 1970s, it would mature to be as fast as it has become, and it would be able to travel beyond 100 meters? Metro Ethernet technology plays an integral role in the telecom industry, eventually displacing older access options such as frame relay and ATM. Individuals in the industry must understand Metro Ethernet.

This course provides participants with an understanding of the basic concepts related to Metro Ethernet, beginning with a review of the Ethernet services market and Ethernet technology. It continues with a look at the Metro Ethernet Forum service specifications and attributes. Next, the course reviews the technologies used to implement Ethernet access in the metro and WAN core networks. The course concludes with a review of Ethernet as access to services and Ethernet as a service.

Metro Ethernet runs 1.9 hours, and includes audio, interactive elements, review slides, section knowledge checks and a final exam. The participant can expect to spend about twice this amount of time to complete the course.

This program has five primary objectives:

- Describe the components of Ethernet pertinent to Metro Ethernet
- Discuss the importance of Metro Ethernet in the networking market
- Describe the three service offerings for Metro Ethernet
- Explain two implementations of switched Ethernet services
- Explain two implementations of Ethernet point-to-point services

Specific topics can be developed, or packaged together to create unique and customizable curriculum. All of our standard titles are available for preview at our store (www.hill.com/store).

About Hill Associates

At Hill Associates, we excel at creating custom talent development programs.

Our experts help identify and assess your needs, and create training and educational programs that exactly meet those needs. Though we specialize in information technology, we've strengthened companies and organizations in a wide range of industries for over 25 years. Let us help you create a world-class talent development program that moves your business forward.

PROGRAM OUTLINE

Lesson 1: Ethernet Services Market

- Moving Ethernet from LAN to MAN to WAN
- Key players in the market
- Why carrier Ethernet?

Lesson 2: Ethernet Review

- A brief history of Ethernet
- Concepts and standards
- Hubbing and switching
- Virtual LANs
- The universal outlet

Lesson 3: Metro Ethernet Forum standards

- MEF service model components
- Metro Ethernet characteristics
- Ethernet in the metro market
- E-LAN and E-Line services
- Service attributes, traffic, and performance parameters
- Service multiplexing
- Class of service

Lesson 4: Ethernet Service Implementations

- Ethernet in carrier networks
- First mile access options (Native Ethernet, Ethernet over copper, Ethernet over SONET, Ethernet Passive Optical Network)
- Metro / WAN Ethernet options
- 802.1Q Framing, QinQ
- Trunking with 802.3ad link aggregation
- EVPNs in MPLS networks
- Virtual private wire and LAN services

Lesson 5: Ethernet Service Offerings

- Ethernet as access
- Ethernet metro access to a WAN service