



ExperTech 2.0: Introduction to DSL

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.

Many people rely on high-speed Internet access for work and personal use. Digital subscriber line (DSL) technologies provide high-speed Internet access using the existing telephone connection. Variations of the technologies are also used to deliver T-1 and PRI business services.

This course describes DSL technologies and how they can be deployed to provide higher speed access to networks and offload packet data from the public switched telephone network (PSTN). Topics include local loop qualification issues; ADSL and RADSL technologies; G.Lite and UADSL customer premises arrangements; HDSL and HDSL2; SDSL and G.SHDSL; VDSL and VDSL2; and DSLAM architectures.

Introduction to DSL runs 1.4 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 seven primary objectives:

- Provide definitions for key DSL terminology
- Identify various DSL services, and the relationships among them
- Discuss the ADSL family: ADSL/RADSL, G.Lite/UADSL
- Explain how HDSL/HDSL2 eases T-1/E-1 provisioning
- List and explain the benefits of VDSL
- Describe several issues/challenges with premises-based networks
- Explain the role and basic architecture of a DSLAM

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: DSL Overview

- Access issues and technologies
- Battle for the consumer
- Internet connectivity
- Analog loop characteristics
- Modern loop architecture
- The trouble with local loops
- The DSL family tree

Lesson 2: DSL Options

- Real world local loops
- DSL: analog or digital
- POTS with DSL
- The DSLAM

Lesson 3: Symmetrical DSLs

- HDSL as "repeaterless T-1"
- HDSL2
- SDSL and G.SHDSL
- HDSL4
- Summarizing symmetrical DSLs

Lesson 4: Asymmetrical DSLs

- ADSL / RADSL
- The RADSL edge
- Components of ADSL
- G.Lite and its components
- Summarizing asymmetrical DSLs

Lesson 5: VDSL

- Newer and better?
- VDSL Family
- VDSL: Future or not?

Lesson 6: Premises Issues

- The home LAN
- IP in the home and business
- Dealing with security