Learning Services

Cisco Training on Demand

Cisco ASR 901 Essentials (ASR901E)

Overview
The Cisco® ASR 901 Series Essentials Version 1.1 (ASR901E) Cisco Training on Demand course introduces you to the features and functions of the Cisco ASR 901 Series Aggregation Services Routers platform. Through a combination of lecture and hands-on labs, you acquire conceptual and practical knowledge of initial system configuration and major aspects of the platform. This training is based on Cisco IOS® Software Release 15.2(2) Service Node Group (SNG) for the 901.

You gain an understanding of the hardware functionality, software installation and features, systems architecture, OS interface, Layer 2 services, management features, and system troubleshooting and maintenance. You also learn how to configure Ethernet interfaces using the Cisco Ethernet Virtual Circuit command line interface (CLI) and how to configure T1/E1 controllers, and serial and multilink point-to-point (MLPPP) interfaces.

Interested in purchasing this course in volume at discounts for your company? Contact ctod-sales@cisco.com.

Duration
The ASR 901 Essentials Training on Demand course consists of 6 modules and 33 lessons, totaling more than 7 hours of video instruction along with 5 hands-on lab exercises.

Target Audience
This course is targeted primarily towards technical support personnel and system engineers who need to know how to implement 901 routers in their 3G or 4G mobile backhaul network environment.
Objectives
After completing this course, you should be able to:

- List and describe features, benefits, and functions of Cisco ASR 901 Series Aggregation Services Routers
- Describe each of the hardware components and perform hardware maintenance on the 901
- List and describe the architecture, features, and functions of the hardware elements of the fixed-configuration 901 router
- Explain the 901 operating system and functionality
- Install software on a 901 router
- Configure Ethernet interfaces on the 901 router using the Cisco Ethernet Virtual Circuit CLI
- Configure T1/E1 controllers and serial and MLPPP interfaces on the 901 router

Course Prerequisites
Before taking this course, you should have working knowledge and skills about the following:

- Cisco CCENT® certification or Interconnecting Cisco Networking Devices Part 1 (ICND1) training, or equivalent course or work experience
- Working experience and knowledge configuring Cisco devices using Cisco IOS Software
- Knowledge of Layer 2 IEEE switching and related protocols

Course Outline
- Module 1: Course Introduction
- Module 2: IP RAN Solution
- Module 3: Hardware Overview and Maintenance of the ASR 901
- Module 4: Software Overview and Configuration
- Module 5: Configuring Ethernet Interfaces on the Cisco ASR 901
- Module 6: Configuring TDM Interfaces on the Cisco ASR 901

Labs Outline
This course contains 5 hands-on virtual lab exercises. The topology for all labs is shown in Figure 1.

Figure 1. Topology for All Labs in ASR901E Course
The labs included in this course are:

- Lab 1: Logging into the System and Using the IOS CLI
- Lab 2: Installing Licenses and Performing Software Upgrades
- Lab 3: Configuring Ethernet Interfaces
- Lab 4: Configuring TDM Interfaces
- Lab 5: Configuring TDM Local Switching and Performing Loopback Testing

**Instructor: Joe Chapman**

Joe Chapman has more than 25 years of industry experience from the mundane to the complex. He’s been helping customers design, build, and maintain voice and data systems built on Cisco technology for 15 years. Despite having a Chicago street address, he spends most of his time traveling the United States and the world, where he helps bring complex concepts into clear focus for talented professionals looking to transform their careers.

**Supported Configurations**

Cisco Training on Demand videos are supported on PCs, Macs, and tablets using one of the following browsers, or later: Mozilla Firefox 30, Google Chrome 35, and Apple Safari 6. The labs are supported on PCs and Macs, but not on tablets.

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