CCNA 200-301: Volume 1

Days: 5

Prerequisites: Before attending this course, you should have basic computer literacy, basic PC operating system navigation skills, basic Internet usage skills, and basic knowledge of IP addresses.

Audience: This course is designed for entry-level professionals in networking roles such as: Entry-level Network Engineers, Entry-level Network Administrators, Entry-level Network Support Technicians, Entry-level Help Desk Technicians

Description: CCNA 200-301 Official Cert Guide, Volume 1 provides foundational knowledge to install, configure, and operate small- to medium-sized networks. Through hands-on labs, students will gain practical experience in networking essentials, IP addressing, routing protocols, and Ethernet LANs, preparing them for the CCNA 200-301 v1.1 certification exam.

Course Objectives

In this course, you will:

- Identify the components of a computer network and describe their characteristics

- Understand host-to-host communication models

- Configure switches and routers

- Implement VLANs and inter-VLAN routing

- Understand and configure IPv4 and IPv6 addressing

- Analyze and troubleshoot network issues

- Implement basic security configurations, such as Access Control Lists (ACLs)

OUTLINE:

PART I: INTRODUCTION TO NETWORKING

- Chapter 1: Introduction to TCP/IP Networking

- Chapter 2: Fundamentals of Ethernet LANs

- Chapter 3: Fundamentals of WANs and IP Routing

- Part I Review

PART II: IMPLEMENTING ETHERNET LANS

- Chapter 4: Using the Command-Line Interface

- Chapter 5: Analyzing Ethernet LAN Switching

- Chapter 6: Configuring Basic Switch Management

- Chapter 7: Configuring and Verifying Switch Interfaces

- Part II Review

PART III: IMPLEMENTING VLANS AND SPANNING TREE PROTOCOL (STP)

- Chapter 8: Implementing Ethernet Virtual LANs

- Chapter 9: Spanning Tree Protocol Concepts

- Chapter 10: RSTP and EtherChannel Configuration

- Part III Review

PART IV: IPV4 ADDRESSING

- Chapter 11: Perspectives on IPv4 Subnetting

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