

Implementing and Administering Cisco Solutions (CCNA)

Overview

The Cisco® Solutions: Implementation and administration (CCNS 200-301) course builds on you existing user-level knowledge and experience with computing and networking to provide you with the knowledge and skills expected of an entry-level network administrator.

It also addresses the content described in the exam objectives for the Certified Cisco Network Administrator (CCNA® 200-301). If you are pursuing a Cisco technical certification path, the CCNA 200-301 exam is your first step into the world of Cisco certification.

Course Objectives

In this course, you will implement and administer networks by using Cisco solutions. You will:

- Explain basic concepts related to networking.
- Configure switching.
- Configure IP addressing.
- Configure routing.
- Configure wireless connectivity.
- Configure IP network services.
- Explain basic network security concepts and practices.
- Explain the use of automation and programmability in network management tasks.
- Troubleshoot common network issues.

Duration

5 Days

Who Should Attend

You should also have intermediate knowledge of computing and networking concepts. Any type of technology or system administration training or certification or experience working in an IT environment is strongly recommended. For instance, other industry certifications such as CompTIA ITF+, CompTIA A+ or CompTIA Network+ may be especially helpful for students who are preparing for the CCNA200-301 exam.

Prerequisites

To ensure your success in this course, you should have experience with computer user skills, including the ability to complete tasks in a Microsoft Windows environment and the ability to search for and access information on the Internet. You can obtain this level of skill and knowledge by taking one of the following Logical Operations courses:

- Introduction to Personal Computers Using Microsoft Windows 10
- Using Microsoft Windows 10
- Microsoft Windows 10: Transition from Windows 7

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Course Topics

Module 1	Network Fundamentals • Topic A: Network Types • Topic B: Network Components • Topic C: Network Topologies • Topic D: Network Models • Topic E: Basic Networking Protocols • Topic F: Transmission Media and Connectors • Topic G: Introduction to Cisco Networks and Cisco IOS Commands
Module 2	Configuring Switching • Topic A: Switching Concepts • Topic B: Configure Basic Switch Operation • Topic C: Configure VLANs • Topic D: Configure Interswitch Connectivity
Module 3	Configuring IP Addressing • Topic A: Configure IPv4 Addresses • Topic B: Configure IPv4 Subnets • Topic C: Configure IPv6 Addresses • Topic D: Manage Network Addressing
Module 4	Configuring Routing • Topic A: Routing Basics • Topic B: Interpret Routing Tables • Topic C: Configure Static Routing • Topic D: Configure Dynamic Routing
Module 5	Configuring Wireless Connectivity • Topic A: Wireless LANs • Topic B: Manage WLAN Connections • Topic C: Configure Clients for WLAN Access

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Module 6	Configuring IP Network Services • Topic A: IP Network Services • Topic B: Configure DHCP • Topic C: Configure NAT • Topic D: Configure NTP • Topic E: Configure DNS • Topic F: Perform Network Management
Module 7	Security Fundamentals • Topic A: Security Concepts • Topic B: Manage Passwords • Topic C: Configure Layer 2 Security • Topic D: Configure Wireless Security • Topic E: Remote Access Security
Module 8	Automation and Programmability • Topic A: Automation, Network Management, and Device Management • Topic B: Controller-Based Networking and Software-Defined Networking • Topic C: Programmability Concepts
Module 9	Troubleshooting Network Issues • Topic A: Troubleshooting Methodologies • Topic B: Troubleshoot Interface and Cable Issues • Topic C: Troubleshoot Switching Issues • Topic D: Troubleshoot IPv4 and IPv6 Addressing Issues • Topic E: Troubleshoot Routing Issues • Topic F: Troubleshoot WLAN Issues • Topic G: Troubleshoot Network Services Issues • Topic H: Troubleshoot Network Management Issues • Topic I: Troubleshoot Security Issues