200-301 – CCNA – Cisco – Implementing and Administering Cisco Solutions (CCNA) v1.0

Implementing and Administering Cisco Solutions (CCNA) v1.0

Cisco 200-301 CCNA

About This Course:

- The **Implementing and Administering Cisco Solutions** (CCNA) v1.0 course gives you a broad range of fundamental knowledge for all IT careers. Through a combination of lecture, hands-on labs, and self-study, you will learn how to install, operate, configure, and verify basic IPv4 and IPv6 networks. The course covers configuring network components such as switches, routers, and wireless LAN controllers; managing network devices; and identifying basic security threats. The

course also gives you a foundation in network programmability, automation, and software-defined networking.This course helps you prepare to take the **200-301 Cisco® Certified Network Associate** (CCNA®) exam.

Course Goals/Skills:

- After taking this course, you should be able to:
    - Identify the components of a computer network and describe their basic characteristics
    - Understand the model of host-to-host communication
    - Describe the features and functions of the Cisco Internetwork Operating System (IOS®) software
    - Describe LANs and the role of switches within LANs
    - Describe Ethernet as the network access layer of TCP/IP and describe the operation of switches
    - Install a switch and perform the initial configuration
    - Describe the TCP/IP Internet layer, IPv4, its addressing scheme, and subnetting
    - Describe the TCP/IP Transport layer and Application layer
    - Explore functions of routing
    - Implement basic configuration on a Cisco router
    - Explain host-to-host communications across switches and routers
    - Identify and resolve common switched network

issues and common problems associated with IPv4 addressing

- Describe IPv6 main features and addresses, and configure and verify basic IPv6 connectivity
- Describe the operation, benefits, and limitations of static routing
- Describe, implement, and verify Virtual Local Area Networks (VLANs) and trunks
- Describe the application and configuration of inter-VLAN routing
- Explain the basics of dynamic routing protocols and describe components and terms of Open Shortest Path First (OSPF)
- Explain how Spanning Tree Protocol (STP) and Rapid Spanning Tree Protocol (RSTP) work
- Configure link aggregation using EtherChannel
- Describe the purpose of Layer 3 redundancy protocols
- Describe basic WAN and VPN concepts
- Describe the operation of Access Control Lists (ACLs) and their applications in the network
- Configure Internet access using Dynamic Host Configuration Protocol (DHCP) clients and explain and configure Network Address Translation (NAT) on Cisco routers
- Describe basic Quality of Service (QoS) concepts
- Describe the concepts of wireless networks, which types of wireless networks can be built, and how to use Wireless LAN Controllers (WLCs)
- Describe network and device architectures and introduce virtualization
- Introduce the concept of network

programmability and Software-Defined Networking (SDN) and describe smart network management solutions such as Cisco DNA Center™, Software-Defined Access (SD-Access), and Software-Defined Wide Area Network (SD-WAN)

- Configure basic IOS system monitoring tools
- Describe the management of Cisco devices
- Describe the current security threat landscape
- Describe threat defense technologies
- Implement a basic security configuration of the device management plane
- Implement basic steps to harden network devices

Audience:

- Entry-level network engineer
- Network administrator
- Network support technician
- Help desk technician

Course Format:

Attendance Course

Online(Live) Remote

Course language : English (English available as an option)

Learning materials: in electronic format (Learning materials are in English) included in the price with unlimited access.

Lab envinonment:each student has his own lab environment where the exercises are conducted, part of the course.

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Certificate for Completed Course

Course Duration:

- 5 working days (09:00 – 17:00)
- or
  40 hours training theory and practice in non-working hours lasting 4 weeks
  Saturday and Sunday 10:00 – 14:00, 14:00 – 18:00, 18:00 – 22:00
  Monday and Wednesday 19:00 – 23:00
  Tuesday and Thursday 19:00 – 23:00

Payments:

An application for an invoice is accepted at the time of enrollment in the respective course.

An invoice is issued within 7 days of confirming the payment.

Next Class:

- There are no upcoming events.

For more information, use the contact form.

We will contact you to confirm the dates.

Prerequisites:

- Before taking this course, you should have:
  - Basic computer literacy
  - Basic PC operating system navigation skills
  - Basic Internet usage skills
  - Basic IP address knowledge

  There are no formal prerequisites for CCNA certification, but you should make sure to have a good understanding of the exam topics.

The course prepares for the following certification levels:

- This course helps you prepare to take the **200-301 Cisco® Certified Network Associate (CCNA®) exam.** By passing this one exam, you earn CCNA certification.
- IT-Training.pro провежда изпити за сертификация. Може да се явите за своя изпит 200-301 при нас.