Course Ou

CCNA 200-301 Official



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   Here's what you get

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10. Post-Assessment

1. Course Objective

Prepare for the Cisco CCNA certification exam with the CCNA 200-301 Official Cert Guide. The CCNA course covers the CCNA 200-301 exam objectives and teaches you how to work with network fundamentals, network access, IP connectivity, IP services, security fundamentals, and automation and programmability. The course has the best CCNA exam practice questions, flashcards, and other interactive resources that will prepare you for the CCNA exam.

2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

3. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



4. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



5. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



6. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

7. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

8. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

9. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
    1. Best Postsecondary Learning Solution
- **2015**
    1. Best Education Solution

2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**
  1. Best Virtual Learning Solution
  2. Best Education Cloud-based Solution
  3. Best College and Career Readiness Solution
  4. Best Corporate / Workforce Learning Solution
  5. Best Postsecondary Learning Content Solution
  6. Best Postsecondary LMS or Learning Platform
  7. Best Learning Relationship Management Solution

- **2017**
  1. Best Overall Education Solution
  2. Best Student Assessment Solution
  3. Best Corporate/Workforce Learning Solution
  4. Best Higher Education LMS or Learning Platform

- **2018**
  1. Best Higher Education LMS or Learning Platform
  2. Best Instructional Solution in Other Curriculum Areas
  3. Best Learning Relationship Management Solution

- **2019**
  1. Best Virtual Learning Solution
  2. Best Content Authoring Development or Curation Solution
  3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

10. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

- About Cisco Certifications and CCNA
- Course Organization, Lessons, and Appendixes

Chapter 2: Introduction to TCP/IP Networking

- Perspectives on Networking
- TCP/IP Networking Model
- Data Encapsulation Terminology
- Review All the Key Topics

Chapter 3: Fundamentals of Ethernet LANs

- An Overview of LANs
- Building Physical Ethernet LANs with UTP
- Building Physical Ethernet LANs with Fiber
- Sending Data in Ethernet Networks
- Review All the Key Topics

Chapter 4: Fundamentals of WANs and IP Routing

- Wide-Area Networks
- IP Routing
- Other Network Layer Features
- Review All the Key Topics

Chapter 5: Using the Command-Line Interface

- Accessing the Cisco Catalyst Switch CLI
- Configuring Cisco IOS Software
- Command References
- Review All the Key Topics

Chapter 6: Analyzing Ethernet LAN Switching

- LAN Switching Concepts
- Verifying and Analyzing Ethernet Switching
- Command References
- Review All the Key Topics

Chapter 7: Configuring Basic Switch Management

- Securing the Switch CLI
- Enabling IPv4 for Remote Access
- Miscellaneous Settings Useful in the Lab
- Command References
- Review All the Key Topics

Chapter 8: Configuring and Verifying Switch Interfaces

- Configuring Switch Interfaces
- Analyzing Switch Interface Status and Statistics
- Command References
- Review All the Key Topics

Chapter 9: Implementing Ethernet Virtual LANs

- Virtual LAN Concepts
- VLAN and VLAN Trunking Configuration and Verification
- Troubleshooting VLANs and VLAN Trunks
- Command References
- Review All the Key Topics

Chapter 10: Spanning Tree Protocol Concepts

- STP and RSTP Basics
- Details Specific to STP (and Not RSTP)
- Rapid STP Concepts
- Review All the Key Topics

Chapter 11: RSTP and EtherChannel Configuration

- Understanding RSTP Through Configuration
- Configuring Layer 2 EtherChannel
- Command References
- Review All the Key Topics

Chapter 12: Perspectives on IPv4 Subnetting

- Introduction to Subnetting
- Analyze Subnetting and Addressing Needs
- Make Design Choices
- Plan the Implementation
- Review All the Key Topics

Chapter 13: Analyzing Classful IPv4 Networks

- Classful Network Concepts
- Practice with Classful Networks
- Review All the Key Topics

Chapter 14: Analyzing Subnet Masks

- Subnet Mask Conversion
- Identifying Subnet Design Choices Using Masks
- Review All the Key Topics

Chapter 15: Analyzing Existing Subnets

- Defining a Subnet
- Analyzing Existing Subnets: Binary
- Analyzing Existing Subnets: Decimal
- Practice Analyzing Existing Subnets
- Review All the Key Topics

Chapter 16: Operating Cisco Routers

- Installing Cisco Routers
- Enabling IPv4 Support on Cisco Router Interfaces
- Command References
- Review All the Key Topics

Chapter 17: Configuring IPv4 Addresses and Static Routes

- IP Routing
- Configuring IP Addresses and Connected Routes
- Configuring Static Routes
- IP Forwarding with the Longest Prefix Match
- Command References
- Review All the Key Topics

Chapter 18: IP Routing in the LAN

- VLAN Routing with Router 802.1Q Trunks
- VLAN Routing with Layer 3 Switch SVIs
- VLAN Routing with Layer 3 Switch Routed Ports
- Command References
- Review All the Key Topics

Chapter 19: Troubleshooting IPv4 Routing

- Problem Isolation Using the ping Command
- Problem Isolation Using the traceroute Command
- Telnet and SSH
- Review All the Key Topics

Chapter 20: Understanding OSPF Concepts

- Comparing Dynamic Routing Protocol Features
- OSPF Concepts and Operation
- OSPF Areas and LSAs
- Review All the Key Topics

Chapter 21: Implementing OSPF

- Implementing Single-Area OSPFv2
- Using OSPFv2 Interface Subcommands
- Additional OSPFv2 Features
- Command References
- Review All the Key Topics

Chapter 22: OSPF Network Types and Neighbors

- OSPF Network Types
- OSPF Neighbor Relationships
- Command References
- Review All the Key Topics

Chapter 23: Fundamentals of IP Version 6

- Introduction to IPv6
- IPv6 Addressing Formats and Conventions
- Review All the Key Topics

Chapter 24: IPv6 Addressing and Subnetting

- Global Unicast Addressing Concepts
- Unique Local Unicast Addresses
- Review All the Key Topics

Chapter 25: Implementing IPv6 Addressing on Routers

- Implementing Unicast IPv6 Addresses on Routers
- Special Addresses Used by Routers
- Command References
- Review All the Key Topics

Chapter 26: Implementing IPv6 Routing

- Connected and Local IPv6 Routes
- Static IPv6 Routes
- The Neighbor Discovery Protocol
- Command References
- Review All the Key Topics

Chapter 27: Fundamentals of Wireless Networks

- Comparing Wired and Wireless Networks
- Wireless LAN Topologies
- Other Wireless Topologies
- RF Overview
- Review All the Key Topics

Chapter 28: Analyzing Cisco Wireless Architectures

- Autonomous AP Architecture
- Cloud-based AP Architecture
- Split-MAC Architectures
- Comparing Wireless LAN Controller Deployments
- Review All the Key Topics

Chapter 29: Securing Wireless Networks

- Anatomy of a Secure Connection
- Wireless Client Authentication Methods
- Wireless Privacy and Integrity Methods
- WPA, WPA2, and WPA3

- Lesson Review
- Review All the Key Topics

Chapter 30: Building a Wireless LAN

- Connecting a Cisco AP
- Accessing a Cisco WLC
- Connecting a Cisco WLC
- Configuring a WLAN
- Review All the Key Topics

Chapter 31: Appendix A: Numeric Reference Tables

Chapter 32: Appendix B: Study Planner

Chapter 33: Appendix C: Topics from Previous Editions

- IPv4 Address Types
- Bandwidth and Clock Rate on Serial Interfaces
- Using traceroute to Isolate the Problem to Two Routers
- Troubleshooting Static IPv6 Routes
- Default Routes with SLAAC on Router Interfaces

Chapter 34: Appendix D: Analyzing Ethernet LAN Designs

- Analyzing Collision Domains and Broadcast Domains
- Analyzing Campus LAN Topologies
- Analyzing LAN Physical Standard Choices

Chapter 35: Appendix E: Subnet Design

- Choosing the Mask(s) to Meet Requirements
- Finding All Subnet IDs

Chapter 36: Appendix F: Practice for Appendix E: Subnet Design

- Mask Design Practice Problems
- Practice Finding All Subnet IDs

Chapter 37: Appendix G: Variable-Length Subnet Masks

- VLSM Concepts and Configuration
- Finding VLSM Overlaps
- Adding a New Subnet to an Existing VLSM Design

Chapter 38: Appendix H: Spanning Tree Protocol Implementation

- Implementing STP
- Implementing Optional STP Features
- Implementing RSTP
- Command References

Chapter 39: Appendix I: LAN Troubleshooting

- Troubleshooting STP
- Troubleshooting Layer 2 EtherChannel
- Analyzing the Switch Data Plane Forwarding
- Troubleshooting VLANs and VLAN Trunks

Chapter 40: Appendix J: Troubleshooting IPv4 Routing Protocols

- Perspectives on Troubleshooting Routing Protocol Problems
- Interfaces Enabled with a Routing Protocol
- Neighbor Relationships
- Command References

Chapter 41: Appendix K: Exam Topics Cross Reference

- CCNA 200-301 Exam Topic Order

- Course Lesson Order Versus CCNA 200-301 Exam Topics

Chapter 42: Introduction

- About Cisco Certifications and CCNA
- Course Organization, Lessons, and Appendixes

Chapter 43: Introduction to TCP/IP Transport and Applications

- TCP/IP Layer 4 Protocols: TCP and UDP
- TCP/IP Applications
- Review All the Key Topics

Chapter 44: Basic IPv4 Access Control Lists

- IPv4 Access Control List Basics
- Standard Numbered IPv4 ACLs
- Practice Applying Standard IP ACLs
- Command References
- Review All the Key Topics

Chapter 45: Advanced IPv4 Access Control Lists

- Extended Numbered IP Access Control Lists
- Named ACLs and ACL Editing
- Command References
- Review All the Key Topics

Chapter 46: Security Architectures

- Security Terminology
- Common Security Threats
- Controlling and Monitoring User Access
- Developing a Security Program to Educate Users
- Review All the Key Topics

Chapter 47: Securing Network Devices

- Securing IOS Passwords
- Firewalls and Intrusion Prevention Systems
- Command References
- Review All the Key Topics

Chapter 48: Implementing Switch Port Security

- Port Security Concepts and Configuration
- Port Security Violation Modes
- Command References
- Review All the Key Topics

Chapter 49: Implementing DHCP

- Dynamic Host Configuration Protocol
- Identifying Host IPv4 Settings
- Command References
- Review All the Key Topics

Chapter 50: DHCP Snooping and ARP Inspection

- DHCP Snooping
- Dynamic ARP Inspection
- Command References
- Review All the Key Topics

Chapter 51: Device Management Protocols

- System Message Logging (Syslog)

- Network Time Protocol (NTP)
- Analyzing Topology Using CDP and LLDP
- Command References
- Review All the Key Topics

Chapter 52: Network Address Translation

- Perspectives on IPv4 Address Scalability
- Network Address Translation Concepts
- NAT Configuration and Troubleshooting
- Command References
- Review All the Key Topics

Chapter 53: Quality of Service (QoS)

- Introduction to QoS
- Classification and Marking
- Queuing
- Shaping and Policing
- Congestion Avoidance
- Review All the Key Topics

Chapter 54: Miscellaneous IP Services

- First Hop Redundancy Protocol
- Simple Network Management Protocol
- FTP and TFTP
- Command References
- Review All the Key Topics

Chapter 55: LAN Architecture

- Analyzing Campus LAN Topologies
- Small Office/Home Office
- Power over Ethernet (PoE)
- Review All the Key Topics

Chapter 56: WAN Architecture

- Metro Ethernet
- Multiprotocol Label Switching (MPLS)
- Internet VPNs
- Review All the Key Topics

Chapter 57: Cloud Architecture

- Server Virtualization
- Cloud Computing Services
- WAN Traffic Paths to Reach Cloud Services
- Review All the Key Topics

Chapter 58: Introduction to Controller-Based Networking

- SDN and Controller-Based Networks
- Examples of Network Programmability and SDN
- Comparing Traditional Versus Controller-Based Networks
- Review All the Key Topics

Chapter 59: Cisco Software-Defined Access (SDA)

- SDA Fabric, Underlay, and Overlay
- DNA Center and SDA Operation
- DNA Center as a Network Management Platform
- Review All the Key Topics

Chapter 60: Understanding REST and JSON

- REST-Based APIs
- Data Serialization and JSON
- Review All the Key Topics

Chapter 61: Understanding Ansible, Puppet, and Chef

- Device Configuration Challenges and Solutions
- Ansible, Puppet, and Chef Basics
- Review All the Key Topics

Chapter 62: Appendix A: Numeric Reference Tables

Chapter 63: Appendix B: Topics from Previous Editions

- Cisco Device Hardening
- Implementing DHCP
- Troubleshooting with IPv4 ACLs
- Implementing HSRP
- Gateway Load Balancing Protocol (GLBP)
- Implementing Simple Network Management Protocol

- Analyzing LAN Physical Standard Choices
- Metro Ethernet
- MPLS VPNs

Chapter 64: Appendix C: Exam Topics Cross-Reference

- CCNA 200-301 Exam Topic Order
- Course Lessons, with Exam Topics Covered in Each

Chapter 65: Appendix D: Study Planner

Chapter 66: Appendix E: Previous Edition ICND1 Lesson 35: Managing IOS Files

- Managing Cisco IOS Images and Upgrades
- Password Recovery
- Managing Configuration Files
- Command References

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

20	02:45
VIDEOS	HOURS

11. Practice Test

Here's what you get

102	2	102
PRE-ASSESSMENTS QUESTIONS	FULL LENGTH TESTS	POST-ASSESSMENTS QUESTIONS

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

12. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

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