

uCertify

Course Outline

**CCNP Routing and Switching
ROUTE 300-101**



Lesson



Practice test

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Here's what you get

Features

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1. Course Objective

Prepare for the Cisco CCNP 300-101 certification exam with the CCNP Routing and Switching ROUTE 300-101 course. The course completely covers the Cisco 300-101 exam objectives and includes topics such as network principles, layer 2 technologies, layer 3 technologies, VPN technologies, infrastructure security, infrastructure services, and more. The course provides skills required for using advanced IP addressing and routing in implementing scalable and highly secure Cisco routers that are connected to LANs, WANs, and IPv6.

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. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

32
EXERCISES

4. 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.



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QUIZZES

5. 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.



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FLASHCARDS

6. 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.



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GLOSSARY OF
TERMS

7. 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.

8. 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.

9. 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 assignments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

10. 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 5 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

11. 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: CCNP Routing and Switching ROUTE 300-101 Official Cert Guide

Chapter 2: Introduction

- The CCNP ROUTE Exam
- CCNP ROUTE 300-101 Official Cert Guide

Chapter 3: Characteristics of Routing Protocols

- Routing Protocol Fundamentals
- Network Technology Fundamentals
- TCP/IP Fundamentals

- Network Migration Strategies
- Exam Preparation Tasks

Chapter 4: Remote Site Connectivity

- Remote Connectivity Overview
- MPLS VPN
- GRE
- DMVPN
- Multipoint GRE
- NHRP
- IPsec
- Exam Preparation Tasks

Chapter 5: IPv6 Review and RIPng

- Introduction to IP Version 6 Addressing
- Global Unicast Addressing, Routing, and Subnetting
- IPv6 Global Unicast Addresses Assignment
- Survey of IPv6 Addressing
- Configuring IPv6 Addresses on Cisco Routers

- RIP Next Generation (RIPng)
- Exam Preparation Tasks

Chapter 6: Fundamental EIGRP Concepts

- EIGRP Fundamentals
- EIGRP Neighborships
- Neighborship over WANs
- Exam Preparation Tasks

Chapter 7: Advanced EIGRP Concepts

- Building the EIGRP Topology Table
- Building the IP Routing Table
- Optimizing EIGRP Convergence
- Route Filtering
- Default Routes
- Exam Preparation Tasks

Chapter 8: EIGRP for IPv6 and Named EIGRP

- IPv6 Overview

- EIGRP for IPv6
- Named EIGRP
- Exam Preparation Tasks

Chapter 9: Fundamental OSPF Concepts

- OSPF Review
- OSPF Neighbors and Adjacencies on LANs
- OSPF Neighbors and Adjacencies on WANs
- Virtual Links
- Exam Preparation Tasks

Chapter 10: The OSPF Link-State Database

- LSAs and the OSPF Link-State Database
- The Database Exchange Process
- Choosing the Best OSPF Routes
- Exam Preparation Tasks

Chapter 11: Advanced OSPF Concepts

- Route Filtering

- Route Summarization
- Default Routes and Stub Areas
- OSPF Version 3
- Exam Preparation Tasks

Chapter 12: Route Redistribution

- Route Redistribution Basics
- Redistribution into EIGRP
- Redistribution into OSPF
- Redistribution with Route Maps and Distribute Lists
- Issues with Multiple Redistribution Points
- Exam Preparation Tasks

Chapter 13: Route Selection

- Cisco Express Forwarding
- Policy-Based Routing
- IP Service-Level Agreement
- VRF-Lite

- Exam Preparation Tasks

Chapter 14: Fundamentals of Internet Connectivity

- Provider-Assigned IPv4 Addresses
- NAT
- Exam Preparation Tasks

Chapter 15: Fundamental BGP Concepts

- The Basics of Internet Routing and Addressing
- Introduction to BGP
- Outbound Routing Toward the Internet
- External BGP for Enterprises
- Verifying the BGP Table
- Injecting Routes into BGP for Advertisement to the ISPs
- Exam Preparation Tasks

Chapter 16: Advanced BGP Concepts

- Internal BGP Between Internet-Connected Routers
- Avoiding Routing Loops When Forwarding Toward the Internet

- Route Filtering and Clearing BGP Peers
- BGP Path Attributes and Best-Path Algorithm
- Influencing an Enterprise's Outbound Routes
- Influencing an Enterprise's Inbound Routes with MED
- Exam Preparation Tasks

Chapter 17: IPv6 Internet Connectivity

- IPv6 Internet Connections
- BGP Support for IPv6
- Exam Preparation Tasks

Chapter 18: Fundamental Router Security Concepts

- Elements of a Router Security Policy
- Access Control Lists
- Management Plane Security
- Exam Preparation Tasks

Chapter 19: Routing Protocol Authentication

- Authentication Methods

- EIGRP Authentication
- OSPF Authentication
- BGP Authentication
- Exam Preparation Tasks

Chapter 20: Appendix A: Conversion Tables

Chapter 21: Appendix B: Glossary

Videos and How To

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

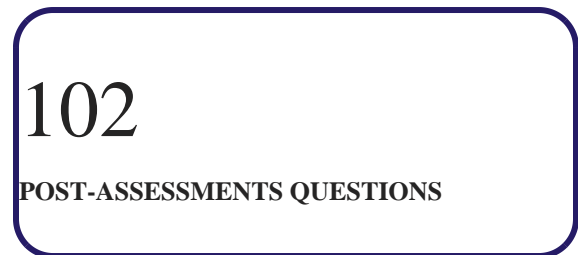
15
VIDEOS

06:23
HOURS

12. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

Here's what you get



Features

Full Remediation

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.

Learn, Test and Review Mode

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.

13. 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.

Have Any Query? We Are Happy To Help!

GET IN TOUCH:

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