Course Ou

CCNP Routing and Switchin
135



28 Mar 2024

Contents

1. Course Objective
2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons

   Syllabus

   Chapter 1: CCNP Routing and Switching TSHOOT 300-135 Official Cert Guide

   Chapter 2: Introduction

   Chapter 3: Introduction to Troubleshooting and Network Maintenance

   Chapter 4: Troubleshooting and Maintenance Tools

   Chapter 5: Troubleshooting Device Performance

   Chapter 6: Troubleshooting Layer 2 Trunks, VTP, and VLANs

   Chapter 7: Troubleshooting STP and Layer 2 EtherChannel

   Chapter 8: Troubleshooting Inter-VLAN Routing and Layer 3 EtherChannels

   Chapter 9: Troubleshooting Switch Security Features

   Chapter 10: Troubleshooting First-Hop Redundancy Protocols

   Chapter 11: Troubleshooting IPv4 Addressing and Addressing Technologies

   Chapter 12: Troubleshooting IPv6 Addressing and Addressing Technologies

   Chapter 13: Troubleshooting IPv4 and IPv6 ACLs and Prefix Lists

   Chapter 14: Troubleshooting Basic IPv4/IPv6 Routing and GRE Tunnels

   Chapter 15: Troubleshooting RIPv2 and RIPng

Chapter 16: Troubleshooting EIGRP
Chapter 17: Troubleshooting OSPF
Chapter 18: Troubleshooting Route Maps and Policy-Based Routing
Chapter 19: Troubleshooting Redistribution
Chapter 20: Troubleshooting BGP
Chapter 21: Troubleshooting Management Protocols and Tools
Chapter 22: Troubleshooting Management Access
Chapter 23: Additional Trouble Tickets
Chapter 24: Appendix: Glossary
Videos and How To
9. Practice Test
Here's what you get
Features
10. Post-Assessment

1. Course Objective

Prepare forthe Cisco CCNP 300-135 certification exam with the CCNP Routing and Switching TSHOOT 300-135 course. The course is very well-organized and completely coverdd the TSHOOT 300-135 exam objectives. The course helps to gain expertise in the tasks such as troubleshooting IPv4 and IPv6 addressing and addressing technologies, troubleshooting switch security features, troubleshooting EIGRP, OSPF, BGP, redistribution, trouble tickets, management access, and more.

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.

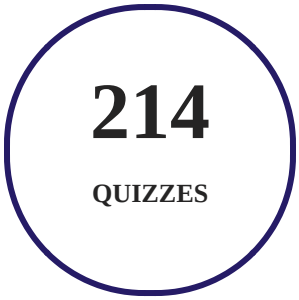
3. Exercises

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.



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.



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.



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.



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 assessments. 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 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

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 TSHOOT 300-135 Official Cert Guide

Chapter 2: Introduction

Chapter 3: Introduction to Troubleshooting and Network Maintenance

- Introduction to Troubleshooting
- Popular Troubleshooting Methods
- Introduction to Network Maintenance
- Common Maintenance Procedures
- The Troubleshooting and Network Maintenance Relationship
- Exam Preparation Tasks

Chapter 4: Troubleshooting and Maintenance Tools

- The Troubleshooting and Network Maintenance Toolkit
- Using Cisco IOS to Verify and Define the Problem
- Using Cisco IOS to Collect Information
- Collecting Information in Transit
- Using Tools to Document a Network
- Exam Preparation Tasks

Chapter 5: Troubleshooting Device Performance

- Troubleshooting Switch Performance Issues
- Troubleshooting Router Performance Issues
- Exam Preparation Tasks

Chapter 6: Troubleshooting Layer 2 Trunks, VTP, and VLANs

- Frame-Forwarding Process
- Troubleshooting Trunks
- Troubleshooting VTP
- Troubleshooting VLANs
- The MAC Address Table
- Layer 2 Trouble Tickets
- Exam Preparation Tasks

Chapter 7: Troubleshooting STP and Layer 2 EtherChannel

- Spanning Tree Protocol Overview
- Collecting Information About an STP Topology
- STP Troubleshooting Issues
- Troubleshooting STP Features
- STP Trouble Tickets
- Troubleshooting Layer 2 EtherChannel
- EtherChannel Trouble Tickets

- Exam Preparation Tasks

Chapter 8: Troubleshooting Inter-VLAN Routing and Layer 3 EtherChannels

- Troubleshooting a Router-on-a-Trunk/Stick
- Router-on-a-Trunk/Stick Trouble Tickets
- Troubleshooting Switched Virtual Interfaces
- SVI Trouble Tickets
- Troubleshooting Routed Ports
- Routed Ports Trouble Tickets
- Troubleshooting Layer 3 EtherChannel
- Layer 3 EtherChannel Trouble Tickets
- Exam Preparation Tasks

Chapter 9: Troubleshooting Switch Security Features

- Troubleshooting Port Security
- Port Security Trouble Tickets
- Troubleshooting Spoof-Prevention Features
- Spoof-Prevention Features Trouble Tickets
- Troubleshooting Access Control

- Exam Preparation Tasks

Chapter 10: Troubleshooting First-Hop Redundancy Protocols

- Troubleshooting HSRP
- HSRP Trouble Tickets
- Troubleshooting VRRP
- VRRP Trouble Tickets
- Troubleshooting GLBP
- GLBP Trouble Tickets
- Comparing HSRP, VRRP, and GLBP
- Exam Preparation Tasks

Chapter 11: Troubleshooting IPv4 Addressing and Addressing Technologies

- Troubleshooting IPv4 Addressing
- Troubleshooting DHCP for IPv4
- Troubleshooting NAT
- IPv4 Addressing and Addressing Technologies Trouble Tickets
- Exam Preparation Tasks

Chapter 12: Troubleshooting IPv6 Addressing and Addressing Technologies

- Troubleshooting IPv6 Addressing
- Troubleshooting IPv6 Address Assignment
- IPv6 Addressing Trouble Tickets
- Exam Preparation Tasks

Chapter 13: Troubleshooting IPv4 and IPv6 ACLs and Prefix Lists

- Troubleshooting IPv4 ACLs
- IPv4 ACL Trouble Tickets
- Troubleshooting IPv6 ACLs
- IPv6 ACL Trouble Tickets
- Troubleshooting Prefix Lists
- Prefix List Trouble Tickets
- Exam Preparation Tasks

Chapter 14: Troubleshooting Basic IPv4/IPv6 Routing and GRE Tunnels

- Packet-Forwarding Process
- Troubleshooting Routing Information Sources

- Troubleshooting Static Routes
- Static Routing Trouble Tickets
- Troubleshooting GRE Tunnels
- Exam Preparation Tasks

Chapter 15: Troubleshooting RIPv2 and RIPng

- Troubleshooting RIPv2
- Troubleshooting RIPng
- RIPv2 and RIPng Trouble Tickets
- Exam Preparation Tasks

Chapter 16: Troubleshooting EIGRP

- Troubleshooting EIGRP for IPv4
- EIGRP for IPv4 Trouble Tickets
- Troubleshooting EIGRP for IPv6
- EIGRP for IPv6 Trouble Tickets
- Troubleshooting Named EIGRP Configurations
- Named EIGRP Trouble Tickets
- Exam Preparation Tasks

Chapter 17: Troubleshooting OSPF

- Troubleshooting OSPFv2
- OSPFv2 Trouble Tickets
- Troubleshooting OSPFv3 for IPv6
- OSPFv3 Trouble Tickets
- Troubleshoot OSPFv3 Address Families
- OSPFv3 AF Trouble Tickets
- Exam Preparation Tasks

Chapter 18: Troubleshooting Route Maps and Policy-Based Routing

- Troubleshooting Route Maps
- Troubleshooting Policy-Based Routing
- Policy-Based Routing Trouble Tickets
- Exam Preparation Tasks

Chapter 19: Troubleshooting Redistribution

- Troubleshooting IPv4 and IPv6 Redistribution
- Redistribution Trouble Tickets

- Troubleshooting Advanced Redistribution Issues
- Exam Preparation Tasks

Chapter 20: Troubleshooting BGP

- Troubleshooting BGP Neighbor Adjacencies
- Troubleshooting BGP Routes
- Troubleshooting BGP Path Selection
- Troubleshooting BGP for IPv6
- BGP Trouble Tickets
- MP-BGP Trouble Tickets
- Exam Preparation Tasks

Chapter 21: Troubleshooting Management Protocols and Tools

- Management Protocols Troubleshooting
- Management Tools Troubleshooting
- Management Protocols and Tools Trouble Tickets
- Exam Preparation Tasks

Chapter 22: Troubleshooting Management Access

- Console and vty Access Troubleshooting
- Cisco IOS AAA Troubleshooting
- Management Access Trouble Tickets
- Exam Preparation Tasks

Chapter 23: Additional Trouble Tickets

- Introduction
- Trouble Ticket 1
- Suggested Solution
- Trouble Ticket 2
- Suggested Solution
- Trouble Ticket 3
- Suggested Solution
- Trouble Ticket 4
- Issue 1: Suggested Solution
- Issue 2: Suggested Solution
- Issue 3: Suggested Solution
- Issue 4: Suggested Solution

- Trouble Ticket 5
- Suggested Solution
- Trouble Ticket 6
- Suggested Solution
- Trouble Ticket 7
- Issue 1: Forgotten Enable Secret Password
- Issue 1: Suggested Solution
- Issue 2: An exec-timeout Parameter Set Too Low
- Issue 2: Suggested Solution
- Issue 3: ACL Misconfiguration
- Issue 3: Suggested Solution
- Trouble Ticket 8
- Suggested Solution
- Trouble Ticket 9
- Issue 1: Adjacency Between Routers R1 and R2
- Issue 1: Suggested Solution
- Issue 2: Adjacency Between Routers R2 and BB2

- Issue 2: Suggested Solution
- Issue 3: Adjacency Between Routers BB1 and BB2
- Issue 3: Suggested Solution
- Trouble Ticket 10
- Issue 1: Router R2 Not Load Balancing Between Routers BB1 and BB2
- Issue 1: Suggested Solution
- Issue 2: Backbone Routes Not Being Suppressed
- Issue 2: Suggested Solution

Chapter 24: Appendix: 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.

16	07:53
VIDEOS	HOURS

12. Practice Test

Here's what you get

101	2	115
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.

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.

GET IN TOUCH: