

Troubleshooting And Maintaining Cisco IP Networks - On Demand (TSHOOT 2.0)

Modality: On Demand

Duration: 32 Hours

CLC: 8 Units

About the course:

Increase your information on the equipment of Cisco and items with the offerings of e-learning from Cisco and Cisco's permitted learning agents. Courses of E-learning target a collection of the innovations of Cisco to set you up for the credential exams of Cisco, and to select the information of Cisco product. The offerings of e-learning are created to be attractive and cooperative for learners who like to study with their own minds.

Many Cisco Self-paced courses provide access to the workouts of the hands-on virtual lab, gives you the chance to try out troubleshooting and configuration on real platforms of Cisco.

Course Objective:

Learners will be able to perform the following upon finishing this course:

1. Define the troubleshooting methodologies and tools that are helpful to resolve and identify issues in complex enterprise networks
2. Define the TCP three-way handshake
3. Explain how the status of the interface can be interpreted
4. Describe the problems for non-functioning trunk link and network address translation
5. Troubleshoot error-disabled port state
6. Describe the methods of IPv6 address assignment
7. Troubleshoot routing loops
8. Troubleshoot LLDP and CDP, policy-based routing, VTP, and IP SLAs
9. Troubleshoot BGP and EIGRP for IPv6

Targeted Audience:

- Channel Partner
- Employee
- Customer

Prerequisites:

Implementing Cisco IP Routing (ROUTE) v2.0 and Implementing Cisco Switched Networks (SWITCH) v2.0 courses or equivalent knowledge and skills.

Course Outline:

Lesson 1. Tools and Methodologies of Troubleshooting

- Describing Troubleshooting Methodologies
- Using Troubleshooting Procedures
- Following Recommended Practices During Routine Network Maintenance
- Using Basic IOS Troubleshooting Tools
- Using Specialized Troubleshooting Tools

Lesson 2. Troubleshooting at SECHNIK Networking Ltd.

- Debrief of the each of the three Troubleshooting at SECHNIK Networking Ltd. Labs
- Troubleshooting issues with trunks, NAT, interfaces, IPv6, network layer connectivity, error-disabled ports, DHCP, passive interfaces

Lesson 3. Troubleshooting at TINC Garbage Disposal Ltd.

- Debrief of the each of the four Troubleshooting at TINC Garbage Disposal Ltd. Labs
- Troubleshooting issues with BGP neighborship, port security, VLANs, native VLAN, OSPF adjacency, management access, HSRP, routing sources, VRRP, EtherChannel, GLBP, DHCP snooping

Lesson 4. Troubleshooting at PILE Forensic Accounting Ltd.

- Debrief of the each of the five Troubleshooting at PILE Forensic Accounting Ltd. Labs
- Troubleshooting issues with EIGRP adjacency, BGP filtering and route selection, NTP, inter-VLAN routing, DNS, remote device management, EIGRP named configuration, EIGRP stub, default routes, management plane security.

Lesson 5. Troubleshooting at Bank of POLONA Ltd.

- Debrief of the each of the four Troubleshooting at POLONA Ltd. Labs.

- Troubleshooting issues with redistribution, FHRP tracking, IP SLA, EIGRP summarization, basic RIPng, ACLs, GRE tunnels, OSPF summarization, AAA, OSPF for IPv6, OSPF stub areas.

Lesson 6. Troubleshooting at RADULKO Transport Ltd.

- Debrief of the each of the four Troubleshooting at RADULKO Transport Ltd. Labs.
- Troubleshooting issues with STP, PBR, CDP, LLDP, VTP, EIGRP for IPv6, MP-BGP, and OSPFv3 address families

Lab Outline

The following discovery labs are included in this course:

- Discovery 1: Maintaining and Documenting a Network
- Discovery 2: Troubleshooting Connectivity

The following challenge labs are included in this course:

- Challenge 1: First Troubleshooting at SECHNIK Networking Ltd.
- Challenge 2: Second Troubleshooting at SECHNIK Networking Ltd.
- Challenge 3: Third Troubleshooting at SECHNIK Networking Ltd.
- Challenge 4: First Troubleshooting at TINC Garbage Disposal Ltd.
- Challenge 5: Second Troubleshooting at TINC Garbage Disposal Ltd.
- Challenge 6: Third Troubleshooting at TINC Garbage Disposal Ltd.
- Challenge 7: Fourth Troubleshooting at TINC Garbage Disposal Ltd.
- Challenge 8: First Troubleshooting at PILE Forensic Accounting Ltd.
- Challenge 9: Second Troubleshooting at PILE Forensic Accounting Ltd.
- Challenge 10: Third Troubleshooting at PILE Forensic Accounting Ltd.
- Challenge 11: Fourth Troubleshooting at PILE Forensic Accounting Ltd.
- Challenge 12: Fifth Troubleshooting at PILE Forensic Accounting Ltd.
- Challenge 13: First Troubleshooting at Bank of POLONA Ltd.
- Challenge 14: Second Troubleshooting at Bank of POLONA Ltd.
- Challenge 15: Third Troubleshooting at Bank of POLONA Ltd.
- Challenge 16: Fourth Troubleshooting at Bank of POLONA Ltd.
- Challenge 17: First Troubleshooting at RADULKO Transport Ltd.
- Challenge 18: Second Troubleshooting at RADULKO Transport Ltd.
- Challenge 19: Third Troubleshooting at RADULKO Transport Ltd.
- Challenge 20: Fourth Troubleshooting at RADULKO Transport Ltd.