Troubleshooting and Maintaining Cisco IP Networks

Code: TSHOOT-v2-0-SUB

URL: [View Online](#)

In this course, you will learn and practice techniques to monitor and troubleshoot routed and switched networks through extensive hands-on lab exercises. Troubleshooting methods, approaches, procedures, and tools are explored. A series of different organizations are introduced for each a set of troubleshooting scenarios that are presented. You will attempt to solve as many of the troubleshooting tickets as you can; the debrief includes review information that will help you further understand the specific issues raised in the scenarios.

Skills Gained

- Troubleshooting methods, approaches, and procedures

- Recommended network maintenance practices

- Using basic and specialized troubleshooting tools

- Troubleshooting:

- A redundant Internet gateway or redundant ISP fails to provide backup connectivity

- OSPF, EIGRP and BGP issues, including redistribution

- HSRP, VRRP, and GLBP issues

- EtherChannel issues

- Other issues including NTP, DNS, default routes, IP SLAs, AAA, and GRE

- When headquarters or branch clients are unable to access internal devices or the Internet

- When you are unable to connect to a network device using SSH or Telnet

- When devices are unable to acquire a DHCP-provided address

Who Can Benefit

- Network engineers and technicians

- Support engineers

- Systems engineers

- Network analysts

- Senior network administrators

- Anyone involved in implementing, verifying, and troubleshooting routed and switched enterprise networks

Prerequisites

- Taking ROUTE v2.0 and SWITCH v2.0 is highly recommended
- Knowledge of and experience with the implementation and verification of enterprise routing and switching technologies that includes:
- Layer 2 switching including VLANs, VLAN ACLs, and switch security
- Link aggregation protocols
- Various types of STP
- Inter-VLAN routing solutions
- First Hop Redundancy Protocols: HSRP, VRRP, and GLBP
- Branch office operations
- EIGRP and OSPF routing protocols
- Layer 3 path control
- Redistribution
- Internal and External BGP
- IPv4 and IPv6 networking

Course Details

Cisco Digital E-Learning benefits students in many ways, as it's:

- Effective: Covers every learning style, with HD instructor-led video, searchable transcripts, and full Student Guide textbook
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- Social media links, so students can share their progress on Facebook, LinkedIn, or Twitter

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