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## Troubleshooting and Maintaining Cisco IP Networks

DURATION: 5 DAYS

COURSE CODE: TSHOOT

FORMAT: LECTURE/LAB

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### COURSE DESCRIPTION

TSHOOT v2.0, 5 day ILT, includes major updates and follows an updated blueprint. However, note that this course does not cover all items listed on the blueprint. Some older topics have been removed or simplified, while several new IPv6 routing topics have been added. Course content has been adapted to Cisco IOS Software Release 15 and technically updated. Course also introduces new type of labs, called discovery labs. Discovery labs are instructor guided lab through which student explores new topics in an interactive way. All labs are developed only as virtual labs. To get the full course experience, you should cover everything, including Introduction, Discovery labs, Summary, and Module Self-Check.

### WHO SHOULD ATTEND

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

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### PREREQUISITES

Prior to attending this course, students should have the knowledge of and experience with the implementation and verification of enterprise routing and switching technologies as offered by the Implementing Cisco Switched Networks (SWITCH) v2.0 and Implementing Cisco IP Routing (ROUTE) v2.0 courses or equivalent skills and knowledge. This includes knowledge and experience of the following technologies: Layer 2 switching, VLANs, VLAN access control lists, port security, Switch security issues, Link aggregation protocols, STP, Inter-VLAN routing solutions, FHRPs, including HSRP, VRRP, and GLBP, Branch office operations, EIGRP, OSPF, Layer 3 path control, Redistribution, BGP, IPv6 Networking.

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### LEARNING OBJECTIVES

Describe the troubleshooting tools and methodologies that are used to identify and resolve issues in complex enterprise networks

Isolate and fix the network issues that your company, SECHNIK Networking Ltd., is facing

Isolate and fix the network issues that your customer, TINC Garbage Disposal Ltd., is facing

Isolate and fix the network issues that your customer, PILE Forensic Accounting Ltd., is facing

Isolate and fix the network issues that your customer, Bank of POLONA Ltd., is facing

Isolate and fix the network issues that your customer, RADULKO Transport Ltd., is facing

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## COURSE OUTLINE

### 1. Tools and Methodologies of Troubleshooting

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

### 2. Troubleshooting at SECHNIK Networking Ltd.

- Debrief of the First Troubleshooting at SECHNIK Networking Ltd
- Debrief of the Second Troubleshooting at SECHNIK Networking Ltd.
- Debrief of the Third Troubleshooting at SECHNIK Networking Ltd.

### 3. Troubleshooting at TINC Garbage Disposal Ltd.

- Debrief of the First Troubleshooting at TINC Garbage Disposal Ltd.
- Debrief of the Second Troubleshooting at TINC Garbage Disposal Ltd.
- Debrief of the Third Troubleshooting at TINC Garbage Disposal Ltd.
- Debrief of the Fourth Troubleshooting at TINC Garbage Disposal Ltd.

### 4. Troubleshooting at PILE Forensic Accounting Ltd.

- Debrief of the First Troubleshooting at PILE Forensic Accounting Ltd.
- Debrief of the Second Troubleshooting at PILE Forensic Accounting Ltd.
- Debrief of the Third Troubleshooting at PILE Forensic Accounting Ltd.
- Debrief of the Fourth Troubleshooting at PILE Forensic Accounting Ltd.
- Debrief of the Fifth Troubleshooting at PILE Forensic Accounting Ltd.

### 5. Troubleshooting at Bank of POLONA Ltd.

- Debrief of the First Troubleshooting at Bank of POLONA Ltd.
- Debrief of the Second Troubleshooting at Bank of POLONA Ltd.
- Debrief of the Third Troubleshooting at Bank of POLONA Ltd.
- Debrief of the Fourth Troubleshooting at Bank of POLONA Ltd.

### 6. Troubleshooting at RADULKO Transport Ltd.

- Debrief of the First Troubleshooting at RADULKO Transport Ltd.
- Debrief of the Second Troubleshooting at RADULKO Transport Ltd.

Debrief of the Third Troubleshooting at RADULKO Transport Ltd.

Debrief of the Fourth Troubleshooting at RADULKO Transport Ltd.

Implementing Device Hardening

Implementing Advance Security

## DISCOVERY LABS

1: Maintaining and Documenting a Network

2: Troubleshooting Connectivity