

TROUBLESHOOTING & MAINTAINING CISCO IP NETWORKS 2.0 (CI-TSHOOT)

Temario

This five day course is designed to provide professionals who work in complex network environments with the skills that they need to maintain their networks and to diagnose and resolve network problems quickly and effectively. The course will provide information about troubleshooting and maintaining particular technologies, as well as procedural and organizational aspects of the troubleshooting and maintenance process. A large part of the training will consist of practicing these skills and reinforcing the concepts by putting them to use in a controlled environment. At the end of the course, delegates will have increased their skill level and developed a set of best practices based on their own experiences and those of other delegates that they can then take back into their own

Pre-requisitos

- 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

Contenido

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

Troubleshooting at SECHNIK Networking Ltd.

- Challenge Lab 1: First Troubleshooting at SECHNIK Networking Ltd
- Debrief of the First Troubleshooting at SECHNIK Networking Ltd
- Challenge Lab 2: Second Troubleshooting at SECHNIK Networking Ltd
- Debrief of the Second Troubleshooting at SECHNIK Networking Ltd
- Challenge Lab 3: Third Troubleshooting at SECHNIK Networking Ltd
- Debrief of the Third Troubleshooting at SECHNIK Networking Ltd

Troubleshooting at TINC Garbage Disposal Ltd

- Challenge Lab 4: First Troubleshooting at TINC Garbage Disposal Ltd
- Debrief of the First Troubleshooting at TINC Garbage Disposal Ltd
- Challenge Lab 5: Second Troubleshooting TINC Garbage Disposal Ltd
- Debrief of the Second Troubleshooting at TINC Garbage Disposal Ltd
- Challenge Lab 6: Third Troubleshooting at TINC Garbage Disposal Ltd
- Debrief of the Third Troubleshooting at TINC Garbage Disposal Ltd
- Challenge Lab 7: Fourth Troubleshooting at TINC Garbage Disposal Ltd
- Debrief of the Fourth Troubleshooting at TINC Garbage Disposal Ltd

Troubleshooting at PILE Forensic Accounting Ltd

- Challenge Lab 8: First Troubleshooting at PILE Forensic Accounting Ltd
- Debrief of the First Troubleshooting at PILE Forensic Accounting Ltd
- Challenge Lab 9: Second Troubleshooting at PILE Forensic Accounting Ltd
- Debrief of the Second Troubleshooting at PILE Forensic Accounting Ltd
- Challenge Lab 10: Third Troubleshooting at PILE Forensic Accounting Ltd
- Debrief of the Third Troubleshooting at PILE Forensic Accounting Ltd
- Challenge Lab 11: Fourth Troubleshooting at PILE Forensic Accounting Ltd
- Debrief of the Fourth Troubleshooting at PILE Forensic Accounting Ltd
- Challenge Lab 12: Fifth Troubleshooting at PILE Forensic Accounting Ltd
- Debrief of the Fifth Troubleshooting at PILE Forensic Accounting Ltd

Troubleshooting at Bank of POLONA Ltd

- Challenge Lab 13: First Troubleshooting at Bank of POLONA Ltd
- Debrief of the First Troubleshooting at Bank of POLONA Ltd
- Challenge Lab 14: Second Troubleshooting at Bank of POLONA Ltd

- Debrief of the Second Troubleshooting at Bank of POLONA Ltd
- Challenge Lab 15: Third Troubleshooting at Bank of POLONA Ltd
- Debrief of the Third Troubleshooting at Bank of POLONA Ltd
- Challenge Lab 16: Fourth Troubleshooting Bank of POLONA Ltd
- Debrief of the Fourth Troubleshooting at Bank of POLONA Ltd

Troubleshooting at RADULKO Transport Ltd

- Challenge Lab 17: First Troubleshooting at RADULKO Transport Ltd
- Debrief of the First Troubleshooting at RADULKO Transport Ltd
- Challenge Lab 18: Second Troubleshooting at RADULKO Transport Ltd
- Debrief of the Second Troubleshooting at RADULKO Transport Ltd
- Challenge Lab 19: Third Troubleshooting at RADULKO Transport Ltd
- Debrief of the Third Troubleshooting at RADULKO Transport Ltd
- Challenge Lab 20: Fourth Troubleshooting RADULKO Transport Ltd
- Debrief of the Fourth Troubleshooting at RADULKO Transport Ltd

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- 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

Objetivos del curso

After you complete this course you will be able to:

- Describe the troubleshooting tools and methodologies that are used to identify and resolve issues in complex enterprise networks
- Practice maintenance procedures and fault resolution in switching-based environments
- Practice maintenance procedures and fault resolution in routing-based environments

- Practice maintenance procedures and fault resolution in a secure infrastructure
- Troubleshoot and maintain integrated, complex enterprise networks
- 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