

TSHOOT

Troubleshooting and Maintaining Cisco IP Networks



The course is designed to teach professionals who work in complex network environments 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. It also assists the network professional in preparing for Cisco CCNP® certification. This course is a component of the CCNP curriculum.

Course Contents

- Module 0: Curriculum Overview
- Module 1: Planning Maintenance for Complex Networks
- Module 2: Selecting Maintenance and Troubleshooting Tools and Applications
- Module 3: Planning Troubleshooting Processes for Complex Enterprise Networks
- Module 4: Maintaining and Troubleshooting Campus Switching-Based Problems
- Module 5: Maintaining and Troubleshooting Routing Based Solutions
- Module 6: Maintaining and Troubleshooting Network Security Solutions
- Module 7: Maintaining and Troubleshooting Integrated, Complex Enterprise Networks
- E-Learning TSHOOT-01: Troubleshooting Performance Problems on Switches
- E-Learning TSHOOT-02: Troubleshooting Wireless Connectivity
- E-Learning TSHOOT-03: Troubleshooting Voice over IP
- E-Learning TSHOOT-04: Troubleshooting Video
- E-Learning TSHOOT-05: Troubleshooting Multicast
- E-Learning TSHOOT-06: Troubleshooting NAT and PAT
- E-Learning TSHOOT-07: Troubleshooting DHCP
- E-Learning TSHOOT-08: Troubleshooting IPv6, OSPFv3, and RIPng

Knowledge Prerequisites

- Recommended:
- ROUTE - Implementing Cisco IP Routing
 - SWITCH - Implementing Cisco Switched Networks

Course Objectives

Upon completing this course, the student will be able to meet these overall objectives:

- Plan and document the most commonly performed maintenance functions in complex enterprise networks
- Develop a troubleshooting process to identify and resolve problems in complex enterprise networks
- Select tools that best support specific troubleshooting and maintenance processes in large, 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



Reservation and Registration

We will be glad to make a free and non-binding course reservation for you for the duration of two weeks. On www.experteach-benelux.com under *Registration*, you can conveniently make course reservations, registrations, and hotel reservations. Alternatively, call us under +31 (0)76 52 32 950.

For closed groups of participants, we can modify the course contents according to your requirements. Do not hesitate to contact us!



TSHOOT

5 days €2,490 exclusive of V.A.T.

Course date (dd.mm.yy)/Location

23.01.-27.01.12	Utrecht	23.04.-27.04.12	Brussels
20.02.-24.02.12	Brussels	04.06.-08.06.12	Utrecht
26.03.-30.03.12	Utrecht		

Up-to-date information: www.experteach-benelux.com TSHO



EXPERTeach



- 1. Planning Maintenance for Complex Networks**
 - 1.1. Applying Maintenance Methodologies
 - 1.2. Common Maintenance Processes and Procedures
 - 1.3. Network Maintenance Tools, Applications, and Resources
- 2. Planning Troubleshooting Processes for Complex Enterprise Networks**
 - 2.1. Lab 2-1 Debrief
 - 2.2. Applying Troubleshooting Methodologies
 - 2.3. Planning and Implementing Troubleshooting Procedures
 - 2.4. Integrating Troubleshooting into the Network Maintenance Process
- 3. Maintenance and Troubleshooting Tools and Applications**
 - 3.1. Assembling a Basic Diagnostic Toolkit Using Cisco IOS Software
 - 3.2. Using Specialized Maintenance and Troubleshooting Tools
 - 3.3. Lab 3-1 Debrief
- 4. Maintaining and Troubleshooting Campus Switching-Based Solutions**
 - 4.1. Troubleshooting VLANs
 - 4.2. Troubleshooting Spanning Tree
 - 4.3. Lab 4-1 Debrief
 - 4.4. Troubleshooting Switched Virtual Interfaces and Inter-VLAN Routing
 - 4.5. Troubleshooting FHRPs
 - 4.6. Lab 4-2 Debrief
 - 4.7. Troubleshooting Performance Problems on Switches
 - 4.8. References to Additional Campus Switching Technologies in E-Learning
- 5. Maintaining and Troubleshooting Routing-Based Solutions**
 - 5.1. Troubleshooting Network Layer Connectivity
 - 5.2. Troubleshooting EIGRP
 - 5.3. Lab 5-1 Debrief
 - 5.4. Troubleshooting OSPF
 - 5.5. Troubleshooting Route Redistribution
 - 5.6. Lab 5-2 Debrief
 - 5.7. Troubleshooting BGP
 - 5.8. Lab 5-3 Debrief
 - 5.9. Troubleshooting Performance Problems on Routers
 - 5.10. Lab 5-4 Debrief
- 5.11. References to Additional Troubleshooting on NAT and DHCP in E-Learning**
- 6. Maintaining and Troubleshooting Network Security Solutions**
 - 6.1. Troubleshooting Security Features
 - 6.2. Lab 6-1 Debrief
 - 6.3. Security Features Review
 - 6.4. Lab 6-2 Debrief
 - 6.5. References to Additional Security Troubleshooting in E-Learning
- 7. Maintaining and Troubleshooting Integrated, Complex Enterprise Networks**
 - 7.1. Troubleshooting Complex Environments
 - 7.2. Lab 7-1 Debrief



ExperTeach Benelux

Emmastraat 6d • 4th floor

4811 AG Breda

Phone +31 (0)76 52 32 950 • Fax +31 (0)76 52 32 959

info@exper teach-benelux.com • www.exper teach-benelux.com

© ExperTeach GmbH, all specifications made are exempted from liability.

Status 21.12.2011