

ASM Educational Center (ASM) Est. 1992

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TSHOOT v1.0 - Troubleshooting and Maintaining Cisco IP Networks



Course outline

Module 1: Planning Maintenance for Complex Networks

- Lesson 1: Applying Maintenance Methodologies
- Lesson 2: Common Maintenance Processes and Procedures
- Lesson 3: Network Maintenance Tools, Applications, and Resources

Module 2: Planning Troubleshooting Processes for Complex Enterprise Networks

- Lesson 1: Applying Troubleshooting Methodologies
- Lesson 2: Planning and Implementing Troubleshooting Procedures
- Lesson 3: Integrating Troubleshooting into the Network Maintenance Process

Module 3: Maintenance and Troubleshooting Tools and Applications

- Lesson 1: Assembling a Basic Diagnostic Toolkit Using Cisco IOS Software
- Lesson 2: Using Specialized Maintenance and Troubleshooting Tools

Module 4: Maintaining and Troubleshooting Campus Switching-Based Solutions

- Lesson 1: Troubleshooting VLANs
- Lesson 2: Troubleshooting Spanning Tree
- Lesson 3: Troubleshooting Switched Virtual Interfaces and Inter VLAN Routing
- Lesson 4: Troubleshooting FHRPs
- Lesson 5: Troubleshooting Performance Problems on Switches
- Lesson 6: References to Additional Campus Switching Technologies in E-Learning

Module 5: Maintaining and Troubleshooting Routing-Based Solutions

- Lesson 1: Troubleshooting Network Layer Connectivity
- Lesson 2: Troubleshooting EIGRP
- Lesson 3: Troubleshooting OSPF
- Lesson 4: Troubleshooting Route Redistribution
- Lesson 5: Troubleshooting BGP



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- Lesson 6: Troubleshooting Performance Problems on Routers
- Lesson 7: References to Additional Troubleshooting on NAT and DHCP in E-Learning

Module 6: Maintaining and Troubleshooting Network Security Solutions

- Lesson 1: Troubleshooting Security Features
- Lesson 2: Security Features Review
- Lesson 3: References to Additional Security Troubleshooting in E-Learning

Module 7: Maintaining and Troubleshooting Integrated, Complex Enterprise Networks

• Lesson 1: Troubleshooting Complex Environments

Lab Outline

- Lab 1-1: Lab Access
- Lab 2-1: Introduction to Troubleshooting
- Lab 3-1: Maintenance and Troubleshooting Tools
- Lab 4-1: Layer 2 Connectivity and Spanning Tree
- Lab 4-2: Layer 3 Switching and First-Hop Redundancy
- Lab 5-1: Layer 3 Connectivity and EIGRP
- Lab 5-2: OSPF and Route Redistribution
- Lab 5-3: Border Gateway Protocol
- Lab 5-4: Router Performance
- Lab 6-1: Introduction to Network Security
- Lab 6-2: Cisco IOS Security Features
- Lab 7-1: Troubleshooting Complex Environments