



# CCNP Pack

## Implementing Cisco IP Routing (ROUTE) 2.0

### Prerequisites

- CCNA

### Course Content

ROUTE v2.0 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.

### Course Objectives

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

- Describe routing protocols, different remote connectivity options and their impact on routing and implement RIPng
- Configure EIGRP in IPv4 and IPv6 environment
- Configure OSPF in IPv4 and IPv6 environment
- Implement route redistribution using filtering mechanisms
- Implement path control using policy based routing and IP SLA
- Implement enterprise Internet connectivity
- Secure Cisco routers according to best practices and configure authentication for routing protocols

### Course Outline

- Module 1: Basic Network and Routing Concepts
- Module 2: EIGRP Implementation
- Module 3: OSPF Implementation
- Module 4: Configuration of Redistribution
- Module 5: Path Control Implementation
- Module 6: Enterprise Internet Connectivity
- Module 7: Routers and Routing Protocol Hardening



## Implementing Cisco IP Switched Networks (SWITCH) 2.0

### Prerequisites

- CCNA

### Course Content

SWITCH 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.

### Course Objectives

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

- Describe the hierarchical campus structure, basic switch operation, use of SDM templates, PoE, and LLDP
- Implement VLANs, trunks, explain VTP, implement DHCP in IPv4 and IPv6 environment, and configure port aggregation
- Implement and optimize STP mechanism that best suits your network - PVSTP+, RPVSTP+, or MSTP
- Configure routing on a multilayer switch
- Configure NTP, SNMP, IP SLA, port mirroring, and verify StackWise and VSS operation
- Implement First Hop redundancy in IPv4 and IPv6 environments
- Secure campus network according to recommended practices

### Course Outline

- Module 1: Basic Concepts and Network Design
- Module 2: Campus Network Architecture
- Module 3: Spanning Tree Implementation
- Module 4: Configuring Inter-VLAN Routing
- Module 5: Implementing High Availability Networks
- Module 6: First Hop Redundancy Implementation
- Module 7: Campus Network Security



## Troubleshooting and Maintaining Cisco IP Networks (TSHOOT) 2.0

### Prerequisites

- Route & Switch

### Course Content

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.

### Course Objectives

Upon completing this course, the learner will be able to meet these overall 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

### Course Outline

- Module 1: Tools and Methodologies of Troubleshooting
- Module 2: Troubleshooting at SECHNIK Networking Ltd
- Module 3: Troubleshooting at TINC Garbage Disposal Ltd.
- Module 4: Troubleshooting at PILE Forensic Accounting Ltd
- Module 5: Troubleshooting at Bank of POLONA Ltd
- Module 6: Troubleshooting at RADULKO Transport Ltd