

ICND 2

Interconnecting Cisco Network Devices Part 2 v3.0

This course will students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows: • understanding of Quality of Service (QoS) elements and their applicability • how virtualized and cloud services will interact and impact enterprise networks • an overview of network programmability and the related controller types and tools that are available to support software defined network architectures A full suite of labs have been developed using the virtual IOS environment with flexible topologies that reinforce concepts with hands-on, guided discovery and challenge labs that align to each lesson module.

Course Contents

- Operate a medium-sized LAN with multiple switches
- Supporting VLANs, trunking, switch stacking, chassis aggregation and spanning tree protocols
- Troubleshoot IP connectivity
- Configure and troubleshoot EIGRP in IPv4 and IPv6 environments
- Define characteristics, functions and components of a WAN
- Describe SNMP, Syslog, and manage Cisco device configurations, IOS images and licenses
- Understand QoS, virtualization and cloud services, and network programmability related to WAN, access and core segments.

E-Book Each participant will receive the original course documentation from Cisco in English language as a Cisco E-Book.

Target Group

- Individuals seeking CCNA Routing and Switching certification
- Pre- and post-sales network engineers involved in installing and supporting enterprise branch office networks
- Entry-level network engineers, network administrators, network support technicians, and help desk technicians

Knowledge Prerequisites

- Understanding network fundamentals
- Implementing local area networks
- Implementing Internet connectivity
- Managing network devices
- Securing network devices
- Implementing basic IPv6 connectivity

Reservation and Registration

Reserve your course at the required date free of charge and in a non-binding way! We will reserve a place for you for the duration of 7 days. You can directly make this reservation, as well as a binding course booking on our Web site. Alternatively, you can simply call us under: + 49 06074 4868-0.

5 Days € 2,495 exclusive of V.A.T.

| Course Date/Location | Course language | German |
|----------------------|-----------------|----------------|
| 09/24-09/28/18 | München | 06/24-06/28/19 |
| 09/24-09/28/18 | Stuttgart | 06/24-06/28/19 |
| 09/24-09/28/18 | Wien | 07/01-07/05/19 |
| 10/08-10/12/18 | Frankfurt | 07/01-07/05/19 |
| 10/08-10/12/18 | Online | 07/15-07/19/19 |
| 10/22-10/26/18 | Berlin | 07/15-07/19/19 |
| 10/22-10/26/18 | Hamburg | 07/29-08/02/19 |
| 11/05-11/09/18 | Graz | 08/12-08/16/19 |
| 11/05-11/09/18 | München | 08/19-08/23/19 |
| 11/05-11/09/18 | Wien | 08/19-08/23/19 |
| 11/19-11/23/18 | Frankfurt | 08/19-08/23/19 |
| 11/19-11/23/18 | Frankfurt | 09/09-09/13/19 |
| 12/03-12/07/18 | Düsseldorf | 09/09-09/13/19 |
| 12/10-12/14/18 | Graz | 09/09-09/13/19 |
| 12/17-12/21/18 | München | 09/23-09/27/19 |
| 12/17-12/21/18 | Stuttgart | 09/23-09/27/19 |
| 12/17-12/21/18 | Ulm | 10/07-10/11/19 |
| 12/17-12/21/18 | Wien | 10/07-10/11/19 |
| 01/14-01/18/19 | Frankfurt | 10/07-10/11/19 |
| 01/14-01/18/19 | Online | 10/07-10/11/19 |
| 01/14-01/18/19 | Zürich | 10/21-10/25/19 |
| 01/21-01/25/19 | Berlin | 10/21-10/25/19 |
| 01/21-01/25/19 | Hamburg | 11/04-11/08/19 |
| 01/28-02/01/19 | München | 11/18-11/22/19 |
| 01/28-02/01/19 | Wien | 11/18-11/22/19 |
| 02/11-02/15/19 | Frankfurt | 12/02-12/06/19 |
| 02/25-03/01/19 | Düsseldorf | 12/02-12/06/19 |
| 03/11-03/15/19 | München | 12/02-12/06/19 |
| 03/11-03/15/19 | Stuttgart | 12/16-12/20/19 |
| 03/11-03/15/19 | Ulm | 12/16-12/20/19 |
| 03/11-03/15/19 | Wien | 01/13-01/17/20 |
| 03/25-03/29/19 | Frankfurt | 01/13-01/17/20 |
| 03/25-03/29/19 | Online | 01/20-01/24/20 |
| 03/25-03/29/19 | Zürich | 02/03-02/07/20 |
| 04/08-04/12/19 | Berlin | 02/17-02/21/20 |
| 04/08-04/12/19 | Hamburg | 02/17-02/21/20 |
| 04/23-04/26/19 | München | 02/17-02/21/20 |
| 04/23-04/26/19 | Wien | 02/17-02/21/20 |
| 05/06-05/10/19 | Frankfurt | 03/02-03/06/20 |
| 05/20-05/24/19 | Düsseldorf | 03/02-03/06/20 |
| 06/11-06/14/19 | München | 03/02-03/06/20 |
| 06/11-06/14/19 | Stuttgart | 03/16-03/20/20 |
| 06/11-06/14/19 | Ulm | 03/16-03/20/20 |
| 06/11-06/14/19 | Wien | 03/30-04/03/20 |
| 06/24-06/28/19 | Frankfurt | 03/30-04/03/20 |

Status 09/27/2018

ICN2



Table of Contents

ICND 2 – Interconnecting Cisco Network Devices Part 2 v3.0

Module 1: Implementing Scalable Medium-Sized Networks

Lesson 1: Troubleshooting VLAN Connectivity
Lesson 2: Building Redundant Switched Topologies
Lesson 3: Improving Redundant Switched Topologies with EtherChannel
Lesson 4: Understanding Layer 3 Redundancy

Module 2: Troubleshooting Basic Connectivity

Lesson 1: Troubleshooting IPv4 Network Connectivity
Lesson 2: Troubleshooting IPv6 Network Connectivity

Module 3: Implementing an EIGRP-Based Solution

Lesson 1: Implementing EIGRP
Lesson 2: Implementing EIGRP for IPv6
Lesson 3: Troubleshooting EIGRP

Module 4: Summary Challenge

Lesson 1: Implementing and Troubleshooting Scalable Medium-Sized Network -1
Lesson 2: Implementing and Troubleshooting Scalable Medium-Sized Network -2

Module 5: Implement a Scalable OSPF-Based Solution

Lesson 1: Understanding OSPF
Lesson 2: Implementing Multiarea OSPF IPv4
Lesson 3: Implementing OSPFv3 for IPv6
Lesson 4: Troubleshooting Multiarea OSPF

Module 6: Wide-Area Networks

Lesson 1: Understanding WAN Technologies
Lesson 2: Understanding Point-to-Point Protocols
Lesson 3: Configuring GRE Tunnels
Lesson 4: Configuring Single-Homed EBG

Module 7: Network Device Management

Lesson 1: Implementing Basic Network Device Management and Security
Lesson 2: Evolution of Intelligent Networks
Lesson 3: Introducing QoS

Module 8: Summary Challenge

Lesson 1: Implementing and Troubleshooting Scalable Multiarea Network -1
Lesson 2: Implementing and Troubleshooting Scalable Multiarea Network -2

Labs

Discovery 1: Troubleshoot VLANs and Trunks
Discovery 2: Configure Root Bridge and Analyze STP Topology
Discovery 3: Troubleshoot STP Issues
Discovery 4: Configure and Verify EtherChannel
Discovery 5: Configure and Verify HSRP
Discovery 6: Troubleshoot HSRP
Discovery 7: Use Troubleshooting Tools
Discovery 8: Configure and Verify IPv4 Extended Access Lists
Discovery 9: Troubleshoot IPv4 Network Connectivity
Discovery 10: Configure and Verify IPv6 Extended Access Lists
Discovery 12: Configure and Verify EIGRP
Discovery 13: Configure and Verify EIGRP for IPv6
Discovery 14: Troubleshoot EIGRP
Discovery 15: Configure and Verify Single-Area OSPF
Discovery 16: Configure and Verify Multiarea OSPF
Discovery 17: Configure and Verify OSPFv3
Discovery 18: Troubleshoot Multiarea OSPF
Discovery 19: Configure Serial Interface and PPP
Discovery 20: Configure and Verify MLP
Discovery 21: Configure and Verify PPPoE Client
Discovery 22: Configure and Verify GRE Tunnel
Discovery 23: Configure and Verify Single Homed EBG
Discovery 24: Configure External Authentication Using RADIUS and TACACS+
Discovery 25: Configure SNMP
Challenge 1: Troubleshooting VLANs and Trunks
Challenge 2: Building Redundant Switched Topologies
Challenge 3: Improving Redundant Switched Topologies with EtherChannel
Challenge 4: Implementing and Troubleshooting HSRP
Challenge 5: Troubleshooting IPv4 Connectivity
Challenge 6: Troubleshooting IPv6 Connectivity
Challenge 7: Implementing EIGRP
Challenge 8: Troubleshooting EIGRP
Challenge 9: Summary Challenge Lab : 1
Challenge 10: Summary Challenge Lab : 2
Challenge 11: Implementing Multiarea OSPF
Challenge 12: Implementing OSPFv3 for IPv6
Challenge 13: Troubleshooting OSPF
Challenge 14: Implementing WAN Using Point-to-Point Protocols
Challenge 15: Implementing GRE Tunnel
Challenge 16: Implementing Single-Homed EBG
Challenge 17: Implementing Device Management and

Security

Challenge 18: Summary Challenge Lab : 3
Challenge 19: Summary Challenge Lab : 4



ExperTech GmbH

Waldstraße 94 • D-63128 Dietzenbach • Phone +49 6074 4868-0 • Fax +49 6074 4868-109
info@expertech.de • www.expertech.de

