

ICND2 (CCNA) – Interconnecting Cisco Network Devices 2

(5 day Instructor-Led Course)

Course Description

This 5-days Cisco course builds on the foundation provided by ICND1 (Interconnecting Cisco Network Devices 1), providing a technical foundation for the rest of the Authorized Cisco curriculum. Whether your goal is to familiarize yourself with Cisco technology or to become a Cisco Certified Internetworking Expert, ICND1 and ICND2 are the place to start. This course not only delivers essential information needed to pass the CCNA certification exams, but it also includes comprehensive hands-on reinforcement to ensure that you add skills and not just knowledge. If you are new to Cisco, ICND2 prepares you for the tasks you will face on the job

Who Should Attend

This course is intended for:

- ICND2 is designed for those who have a firm background in data networking, have some hands-on experience with Cisco routers and switches, and are looking to increase their knowledge of installation, maintaining, and troubleshooting medium-sized switched and routed networks. We strongly recommend that other students start with ICND1.
- Network technicians who configure and support internetworks
- Individuals seeking CCNA certification

Prerequisites

In order to successfully complete this course, students should have:

- Interconnecting Cisco Network Devices 1 (ICND1) or comparable level of knowledge or experience

What You Will Accomplish

At the end of the course, students will be able to:

- Review how to configure and troubleshoot a switch and router in a small network environment
- Expand the switched network from a small to medium network environment
- Dangers of redundant switching
- Spanning Tree
- Concepts of VLANs and trunking
- Implementing VLSM
- Configure, verify, and troubleshoot OSPF
- Configure, verify, and troubleshoot EIGRP
- Determine when to use access control lists (ACLs)
- Configure, verify, and troubleshoot ACLs
- Configure NAT and PAT
- IPv6 addressing
- Configure PPP, CHAP, and PAP
- Frame Relay operation
- VPN solutions

What You Will Receive

Each student receives:

- ICND2 Official Exam Certification Guide, 2nd Edition (Cisco Press)
- ICND2 Exam Preparation CD

Certification Preparation

This course will prepare students for the Cisco Certified Network Associate Exam #640-816 (**ICND2**). This exam is available through our Authorized VUE Authorized Testing Center.

Follow-Up Courses

- CCNP Modules: BSCI, BCMSN, ISCW, ONT

Course Outline: Interconnecting Cisco Network Devices 2 (ICND2)	
<p>1. Small Network Implementation</p> <ul style="list-style-type: none"> ▪ Review Lab: Review of a Small Network Environment <p>2. Medium-Sized Switched Network Construction</p> <ul style="list-style-type: none"> ▪ Implementing VLANs and Trunks ▪ Improving Performance with Spanning Tree ▪ Routing Between VLANs ▪ Securing the Expanded Network ▪ Troubleshooting Switched Networks <p>3. Medium-Sized Routed Network Construction</p> <ul style="list-style-type: none"> ▪ Reviewing Routing Operations ▪ Implementing VLSM <p>4. Single Area OSPF Implementation</p> <ul style="list-style-type: none"> ▪ Implementing OSPF ▪ Troubleshooting OSPF 	<p>5. EIGRP Implementation</p> <ul style="list-style-type: none"> ▪ Implementing EIGRP ▪ Troubleshooting EIGRP <p>6. Access Control Lists (ACLs)</p> <ul style="list-style-type: none"> ▪ ACL Operation ▪ Configuring and Troubleshooting ACLs <p>7. Address Space Management</p> <ul style="list-style-type: none"> ▪ Scaling the Network with NAT and PAT ▪ Transitioning to IPv6 <p>8. LAN Extension into a WAN</p> <ul style="list-style-type: none"> ▪ Establishing a Point-to-Point WAN Connection with PPP ▪ Establishing a WAN Connection with Frame Relay ▪ Troubleshooting Frame Relay WANs ▪ Introducing VPN Solutions