



BUILDING TRAINING SOLUTIONS  
FOR THE IT WORLD

## Interconnecting Cisco Network Devices Part 2 (ICND2) Version 1.0 - Certified

**Days:** 5  
**Format:** Instructor-Led  
**Class Code:** ICND2  
**Certification Exams:** 640-816  
**Certification Track:** CCNA

### Recommended Course Sequence

Knowledge of prerequisites  
noted below.

*Course content is subject to change  
without notice.*

### Course Description:

This course focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small to medium-size branch office Enterprise network, including configuring several switches and routers, connecting to a WAN and implementing network security.

### Prerequisites:

Before attending this course, students must have completed:

- ICND1 - [Interconnecting Network Devices Part One](#)

### Delivery Method:

Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

### At Course Completion:

After completing this course, students will be able to:

- Review how to configure and troubleshoot a small network.
- Expand the switched network from a small LAN to a medium-sized LAN with multiple switches, supporting VLANs, trunking, and spanning tree.
- Describe routing concepts as they apply to a medium-sized network and discuss considerations when implementing routing on the network.
- Configure, verify, and troubleshoot OSPF.
- Configure, verify, and troubleshoot EIGRP.
- Determine how to apply ACLs based on network requirements, and to configure, verify, and troubleshoot ACLs on a medium-sized network.
- Describe when to use NAT or PAT on a medium-sized network, and configure NAT or PAT on routers.
- Identify and implement the appropriate WAN technology based on network requirements.

### Exam Description

The 640-816 Interconnecting Cisco Networking Devices Part 2 (ICND2) is the exam associated with the Cisco Certified Network Associate certification. Candidates can prepare for this exam by taking the Interconnecting Cisco Networking Devices Part 2 (ICND2) v1.0 course. This exam tests a candidate's knowledge and skills required to successfully install, operate, and troubleshoot a small to medium size enterprise branch network. The exam covers topics on VLSM and IPv6 addressing; extending switched networks with VLANs; configuring, verifying and troubleshooting VLANs; the VTP, RSTP, OSPF and EIGRP protocols; determining IP routes; managing IP traffic with access lists; NAT and DHCP; establishing point-to-point connections; and establishing Frame Relay connections.

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## Course Outline

Lessons
■ Module 1 - Small Network Implementation
■ Module 2 - Medium-Sized Switched Network Construction
■ Module 3 - Medium-Sized Routed Network Construction
■ Module 4 - Single Area OSPF Implementation
■ Module 5 - EIGRP Implementation
■ Module 6 - Access Control Lists
■ Module 7 - Address Space Management
■ Module 8 - LAN Extensionin to a WAN