Cisco Certification
ICND2 - Interconnecting Cisco Network Devices Part 2

Description:
This 5-day 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 Cisco Catalyst switches and Cisco routers, connecting to a WAN and implementing network security. This course is the second in a series preparing the learner for the CCNA certification exam.

Objectives:

- Review how to configure and troubleshoot a small network
- Expand a small-sized, switched 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 configure, verify, and troubleshoot ACLs on a medium-sized network
- Describe when to use and configure NAT or PAT on a medium-sized network and explain and configure IPv6 addressing on a Cisco router
- Identify and implement the appropriate WAN technology based on network requirements

Outline:

- Small Network Implementation
  - Introducing the Review Lab
- Medium-Sized Switched Network Construction
  - Implementing VLANs and Trunks
  - Optimizing Spanning Tree Performance
  - Routing Between VLANs
  - Securing the Expanded Network
  - Troubleshooting Switched Networks
• Medium-Sized Routed Network Construction
  o Reviewing Routing Operations
  o Implementing VLSM

• Single-Area OSPF Implementation
  o Implementing OSPF
  o Troubleshooting OSPF

• EIGRP Implementation
  o Implementing EIGRP
  o Troubleshooting EIGRP

• Access Control Lists
  o Introducing ACL Operation
  o Configuring and Troubleshooting ACLs

• Address Space Management
  o NAT and PAT
  o Transitioning to IPv6

• LAN Extension into a WAN
  o Introducing VPN Solutions
  o Establishing a Point-to-Point WAN Connection with PPP
  o Establishing a WAN Connection with Frame Relay
  o Troubleshooting Frame Relay WANs