



CCNA 640-801

Full Time Duration: 4 Days

Course Outline

Internet Working

- The Cisco Hierarchical Model
- Core/Distribution/Access
- OSI Reference Model/OSI Overview
- Application/Presentation/Session
- Transport/Network/Data Link/Physical
- Assembling and Cabling Cisco Devices
- Cabling the LAN and WAN/Console Connections
- Selecting Cisco Products/Cisco Hubs
- Cisco Routers/Cisco Switches

LAN Technologies

- Ethernet and IEEE 802.3
- Media Types and Bandwidth Support
- CSMA/CD, Half and Full Duplex
- Collision and Broadcast Domains
- Network Congestion and Segmentation
- Switching versus Routing

Switching Technologies

- Layer 2 Switching/Address Learning
- Forward/Filter Decision/Half and Full Duplex Ethernet
- Bridging Compared to LAN Switching/LAN Switch Types
- Spanning Tree

Configuring A Cisco IOS Device

- Operation of Cisco IOS
- Startup of a Cisco Router
- Software Exec/Keyboard Help
- Router Identification/Setting the Passwords
- Setting Banners/Saving Configurations
- Router Interfaces/Descriptions
- Verifying your Configuration

Internet Protocol

- DOD Stack
- IP Addressing
- Subnetting

Interconnecting Catalyst Switches

- Cisco Catalyst 1900 Switch
- Configuring the Catalyst 1900 Switch

Virtual LANs

- VLAN Concepts
- ISL/VTP/VLAN Configuration
- Guidelines/Configuration Steps

IP Routing

- Basic IP Routing
- Static Routing/Default Routing
- Dynamic Routing/RIP/IGRP/EIGRP/OSPF
- Variable Length Subnet Masks (VLSM)

Managing A Cisco Internetwork

- Managing IOS and Configuration Images
- Router Boot Sequence/Backing up the Cisco IOS
- Restoring the Cisco IOS/Backing up the Cisco Configuration
- Restoring the Cisco Configuration/Cisco Discovery Protocol
- Telnet/PING/Traceroute

Access-Lists

- IP/Standard/Wildcards
- Extended/Controlling VTY Access
- Named Access-lists/Access-list Configuration
- Verifying and Monitoring Access Lists
- IPX/Standard/Extended/Sap Filters

Cisco Wide Area Network Support

- WAN Overview/WAN Connection Types
- WAN Terms/Serial Standards
- WAN Protocols/ HDLC/ PPP
- LCP Configuration/PPP Authentication
- PAP/CHAP/Configuring PPP/Verifying PPP Configuration
- ISDN/ISDN Standards/ ISDN Components/ISDN Function and Reference Points
- ISDN Switch Types/Configuring ISDN BRI
- Dial-On-Demand Routing/ Configuring Legacy DDR
- Verifying Legacy DDR and ISDN Operation/Frame Relay
- Frame Relay Terminology/Frame Relay Signaling
- Inverse ARP and LMI/Configuring Frame Relay
- Static Mappings/Verifying Frame Relay
- Subinterfaces/Configuring Subinterfaces