Cisco Certified Network Associate

(200 -301)

Course Description:

Cisco Certified Network Associate (CCNA) is the
associate level Certification in Networking offered by Cisco. CCNA in Routing and Switching covers basics of Cisco Networking and routing switching technologies along with IP addressing schemes, routing basics, switching and WAN technologies. After completion of CCNA course, a candidate can easily install, configure and troubleshoot Cisco Routers and Switches for medium sized networks. After completion of CCNA R&S V3.0 200-301 Certification candidates can go for higher level of Cisco Courses like CCNP R&S and CCIE.

We are Best Institute for Cisco CCNA course Training in Pakistan. We provide CCNA course on real Cisco devices (Routers and Switches), with 24x7 Lab Facility. CCNA curriculum is designed as per CCNA Certification exam blueprints provided by Cisco.

Modes of Trainings Available:

Online Training
Class Room Training
Regular Classes Available
Weekend Classes Available

Course Outline

(200-301)

15% Network Fundamentals:

Sec. 1:
    i. Introduction to Network
    ii. Introduction to OSI Modal
    iii. Compare TCP/IP & OSI Modal

Sec. 2:
    i. Introduction to Topologies
    ii. Compare and contrast Network Topologies
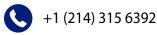   a. Star
    b. Mesh
    c. Hybrid
    iii. LAN, WAN intro

Sec. 3:
    i. Select the appropriate cabling type based on implementation requirements.

Sec. 4:
i. Introduction, configure, verify and troubleshoot IPV4 addressing & Subnetting.
ii. Compare and contrast IPV4 address types:
a. Unicast
b. Multicast
c. Broadcast

Sec. 5:
i. Describe the need for private IPV4 addressing:

21% LAN Switching Technologies:

Sec. 1:
i. Describe and verify switching concepts
a. Mac learning
b. Mac address table

Sec. 2:
i. Configure, verify & troubleshoot Vlans
a. Access ports (data & voice)
b. Default Vlan (Native)
ii. Configure, verify troubleshoot Interswitch connectivity
a. Trunk ports
b. Add & remove Vlans on a trunk

Sec. 3:
i. Configure, verify and troubleshoot protocols
a. STP mode (PVST + RPVST)
b. STP root bridge selection
ii. Configure & and verify Layer's Protocol
a. Cisco discovery protocol

23% Routing Technologies:

Sec. 1:
i. Describe the Routing concepts
a. Packet handling along the path through a network
b. Forwarding decision based on route lookup

Sec. 2:
i. Interpret the Components of Routing table
a. Prefix
b. Network Mask
c. Next hop
d. Metric
ii. Configure, verify, troubleshoot inter-Vlan routing
a. Routing on a stick
iii. Compare and contrast static Routing and dynamic routing

iv. Describe dynamic routing protocols
a. RIP
b. EIGRP
c. IGRP
d. OSPF

i. Describe the need for private IPV4 addressing:

21% WAN Technologies:

Sec. 1:

i. Introduction about WAN Technologies
ii. Configure, Verify and Troubleshoot PPPOE client side interfaces usinglocal.

10% Infrastructure Services:

Sec. 1:

i. Describe DNS look up operation
ii. Configure & verify DHCP on a Router
a. Server
b. Relay
c. Client
d. TFTP, and Gateway options

Sec. 2:

i. Configure, Verify, and Troubleshoot inside source
a. Static
b. Pool
c. PAT

11% Infrastructure Security:

i. Configure, Verify and Troubleshoot Port Security
Sec. 1: a. Static
b. Dynamic
c. Mac address
ii. Configure, Verify and Troubleshoot basic device hardening
a. Local Authentication
b. Secure password
c. Access to device
Source address
Telnet /SSH
d. Login banner

10% Infrastructure Management:

i. Configure and Verify device monitoring protocols
a. SNMP
b. Syslog