CCNA

- Introduction to networking
- IP Addressing
- Sub netting
- Sub netting
- OSI Reference Model
- IOS and CL
- Lab
- Static Routing
- Lab
- RIP
- Lab
- CDP and Telnet
- Lab
- WAN protocol
- Lab
- EIGRP
- Lab
- OSPF
- Lab
- Access List
- Lab
- NAT
- Lab
- Frame-relay
- Lab
- Switch operation and basic Configuration
- VLANs, VTP
- Lab
- Inter VLAN Routing
- Lab
- STP
- Introduction to wireless

- Introduction to IPv6
- Boot sequence and password recovery

Computer Networking

Course Pre-requisites:

Delegates should be experienced technical staffs who have a sound knowledge of PC Hardware and operating systems. Ideally they will have passed both A+ Certification Exams   or have equivalent knowledge.

Network Fundamentals

- Local Area Networks (LANs) & Wide Area Networks (WANs)
- Hosts, Workstations, and Servers
- Client Server Architectures

Physical Topologies including

- Bus
- Star
- Ring
- Mesh
- Wireless

Physical Media including

- Coaxial Cable (Thick net and Thin net)
- Twisted Pair
- Fiber Optic
- Connectivity Devices (Bridge, Router, Gateways, Modems, NICs, Hubs, Switches)

The OSI Model

- The Physical Layer
- The Data Link Layer
- The Network Layer
- The Transport Layer
- The Session Layer
- The Presentation Layer
- The Application Layer
- Networking Protocols (TCP/IP, IPX/SPX, NerBEUI, and AppleTalk)

TCP/IP

- Introducing TCP/IP
- Transmission Control Protocol (TCP)

- Internet Protocol (IP)
- Application Protocols
- Ports and Sockets
- Explaining IP addressing
- Name Resolution Methods:
- Internet Domain Organization
- Hosts
- DNS
- WINS
- Configuring TCP/IP on Windows Workstations

TCP/IP Utilities

- Address Resolution Protocol (ARP)
- Net stat & nbtstat
- FTP & Telnet
- Ping & tracer
- Winipcfg & ipconfig
- Nslookup

Network Operating Systems Novel Netware Features

- Novel Netware
- Novel Netware Architecture
- Novel Netware Versions
- Novel Netware Directory Services
- Novel Netware Client Software
- Windows NT
- Windows NT Features & NT Architecture
- Windows NT Versions
- Windows NT Directory Services
- Unix Flavors
- Linux, Solaris, UNIX
- Macintosh OS

Network Installation and Upgrades

- Before installing new hardware of software
- Network Components
- Course Content continued

Network Hardware Installation

- Network connectors
- Installing a NIC

Configuring Workstations and Using Installation Tools

- Configuring a Windows 9X & 2000 Clients
- Configuring a Netware Client
- Network Installation Tools

WAN and Remote Access

- Remote Access Connection Configurations Requirements

Remote Access Connection Methods

- Remote Access Connection Methods
- PSTN or POTS
- ISDN
- DSL
- T-Series
- ATM
- FDDI

Remote Access Protocols

- SLIP
- PPP
- PPTP
- RAS
- ICA

Network Access and Security

- Client Selection
- Managing User Accounts
- Passwords

Firewalls and Dodd Security Standards

- Firewalls
- Attacks and Defense
- Department of Defense Security Standards

Protecting Data and General Security Procedures

- Encryption
- Private Key Encryption
- Public Key Encryption
- Security Policies
- Fault Tolerance and Disaster Recovery.
- Assessing fault tolerance and disaster recovery needs.
- Power management issues