Course Training

Cisco Certificated Design Professional – CCDP (300-320 ARCH)

Course Content

This course is designed to give you advanced knowledge of network design using Cisco's SONA (Service Oriented Network Architecture) methodology. During the course, you'll discuss, design, and create advanced addressing and routing, security, data center, and IP multicast multi-layered enterprise architectures. This includes virtual private networking and wireless domains and it focuses on the design components of larger networks. The course will prepare you for the Cisco CCDP (Cisco Certified Design Professional) exams which you'll sit on the course.

Course Objectives

- After taking this course, you should be able to:
- Implement Scalable Routing Protocols
- Extend IP addresses – VLSM
- Describe OSPF in a Single Area
- Interconnect Multiple OSPF Areas
- Describe and Configure Enhanced IGRP
- Describe and Configure IS-IS
- Operate a Network Using Multiple Routing Protocols
- Optimize Routing Updates Operation
- Cisco IOS Features: Configure DHCP
- Configure Basic Border Gateway Protocol (BGP)
- Implement BGP In Scalable Networks
- Implement IP Multicasting
- Implement IPv6
- Overview of the Campus Network
- Configure VLANS and VTP
- Implement Spanning Tree Protocol (STP)
- Implement Rapid Spanning Tree Protocol (RSTP)
- Implement Multiple Instance of Spanning Tree Protocol
- Implement STP Security Mechanisms
- Implement Multilayer Switching
- Configure Layer 3 Redundancy with HSRP and VRRP
- Implement Wireless LANs

- Wireless LAN Technology and Standards
- Configure Switches to Support Voice over IP
- Understand Switch Security Issues
- Design advanced core enterprise networks
- Design campus Infrastructure using best practices

Course Prerequisite

- Valid Cisco CCDA and CCNA Routing and Switching Certification or a Cisco CCIE Certification in any track is required for achieving this certification.

Who should attend

- Design engineers
- Network consultants
- System engineers
- Individuals seeking CCDP and CCDE certification

Course Outline

- dentify the major desktop components and interfaces and their functions
- Differentiate the characteristics of Windows 9x/Me, Windows NT 4.0 Workstation, Windows 2000 Professional and Windows XP
- Identify the names, locations, purposes and contents of major system files
- Demonstrate the ability to use command-line functions and utilities to manage the operating system, including the proper syntax and switches
- Identify basic concepts and procedures for creating, viewing, and managing disks, directories and files
- Identify the major operating system utilities, their purpose, location and available switches
- Identify the procedures for installing Windows 9x/Me, Windows NT 4.0 Workstation, Windows 2000 Professional and Windows XP
- Identify steps to perform an operating system upgrade from Windows 9.x/ME, Windows NT 4.0 Workstation, Windows 2000 Professional and Windows XP
- Identify procedures for installing/adding a device, including loading, adding, and configuring device drivers and required software
- Identify procedures necessary to optimize the operating system and major operating system subsystems
- Recognize and interpret the meaning of common error codes and startup messages from the boot sequence and identify steps to correct the problems

- Recognize when to use common diagnostic utilities and tools. Given a diagnostic scenario involving one of these utilities or tools, select the appropriate steps needed to resolve the problem
- Recognize common operational and usability problems and determine how to resolve them
- Identify the networking capabilities of Windows. Given configuration parameters, configure the operating system to connect to a network
- Identify the basic Internet protocols and terminologies
- Identify procedures for establishing Internet connectivity. In a given scenario, configure the operating system to connect to and use Internet resources