

Cisco Certified Network Professional

Course Description:

CCNP R&S certification is a Professional level certification for candidates trying to wind up plainly guaranteed Routing and Switching advances equipped. After the culmination of CCNP Training, the candidate will have the capacity to design, execute, check and investigate neighborhood and wide-range undertaking Cisco networks. The CCNP R&S Certification preparing bundle comprises of preparing on three differed modules i.e. Course, SWITCH, and TSHOOT explained below:

Routing:

This preparation module covers top to bottom investigation and reasonable preparing about IP Routing. You will get with ideas like arranging, building and testing \safe LAN and WAN arrangements utilizing changed sorts and number of directing conventions like EIGRP, OSPF, BGP, IPV6 and so forth.

Switching:

This preparation module incorporates profound hypothetical and down to earth learning on arranging, building and executing venture exchanging arrangements with the assistance of exchanging innovations like VLAN, STP, VTP, RSTP, MSTP, EtherChannel, GLBP, HSRP, VRRP and so on.

TSHOOT:

In this module, the hopeful figures out how to investigate and keep up IP networks. This incorporates the use of mechanical yet appropriate ways to deal with investigate different systems.

Modes of Trainings Available:

Online Training Class Room Training Regular Classes Available Weekend Classes Available





Preparation:

Course Outline

How to Prepare For Cisco CCNP Enterprise

Routing Fundamentals:

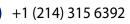
IPv4 Explained IPv4 Header Fields Introduction to ARP DHCP Server DHCP Relay Introduction to TCP and UDP ICMP Explained How to Configure Static Route on Cisco IOS Router Unicast Flooding Due To Asymmetric Routing

Redistribution:

Introduction to Redistribution Redistribution between RIP and EIGRP Redistribution between OSPF and RIP Redistribution Route Tagging Troubleshooting Metric Redistribution Troubleshooting AD Redistribution

OSPF:

Introduction to OSPF OSPF LSAs and LSDB Flooding OSPF Plain Text Authentication OSPF MD5 Authentication OSPF LSA Types OSPF Packets and Neighbor Discovery OSPF Router ID OSPF Passive Interface OSPF DR/BDR Election How to Configure OSPF Default Route







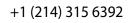
OSPF Hello and Dead Interval OSPF Summarization Introduction to OSPF Stub Areas How to Configure OSPF Stub Area How to Configure OSPF Totally Stub How to Configure OSPF NSSA (Not So Stubby) Area How to Configure OSPF Totally NSSA (Not So Stubby) Area OSPF Virtual Link OSPF LSA Type 3 Filtering OSPF LSA Type 5 Filtering OSPF Path Selection Explained OSPF Distribute-List Filtering OSPF v3 for IPv4

EIGRP:

Introduction to EIGRP **Basic EIGRP Configuration** EIGRP Packets EIGRP Neighbor Adjacency **EIGRP Static Neighbor EIGRP Neighbor and Topology Table EIGRP Unequal Load Balancing** How to Configure EIGRP Unequal Load Balancing **EIGRP K Values EIGRP K Values Configuration EIGRP Hold Time and Hello Packets EIGRP Summarization EIGRP Auto-Summary EIGRP** Authentication **EIGRP Default Network Route EIGRP Stub EIGRP Route-Map Filtering EIGRP Router ID**

Route Selection:

Administrative Distance CEF (Cisco Express Forwarding) PBR (Policy Based Routing)







BGP (Border Gateway Protocol):

Introduction to BGP How to Configure EBGP (External BGP) **EBGP** Multihop **IBGP** (Internal BGP) Explained **BGP Private and Public AS Numbers** How to Read the BGP Table How to Advertise Networks in BGP **BGP Auto-Summary IBGP Next Hop Self BGP Neighbor Adjacency States BGP Messages BGP Weight Attribute BGP Local Preference BGP AS Path and Prepending BGP** Origin Code **BGP MED (Metric) Attribute BGP Regular Expressions BGP Filtering With Regular Expressions BGP Soft Reconfiguration BGP Route Refresh Capability**

IPv6:

Introduction to IPv6 Shortening IPv6 Addresses How to Find the IPv6 Prefix IPv6 Address Types IPv6 Address Assignment Example How to Configure IPv6 Static Routing How to Configure IPv6 RIPNG How to Configure IPv6 EIGRP How to Configure IPv6 OSPF IPv6 Redistribution between RIPNG and OSPFv3 IPv6 Tunneling Over IPv4

Remote Site Connectivity and DHCP Client:

Introduction to NAT and PAT How to Configure Static NAT How to Configure Dynamic NAT How to Configure PAT GRE Tunneling





Router Security and Management:

Introduction to CDP (Cisco Discovery Protocol) **Standard Access-List Extended Access-List** SNMP Syslog NTP (Network Time Protocol)



