

دوره **CCIE R&S** سیسکو | **Cisco CCIE R&S**

دوره ۳۵۰-۰۰۱ CCIET آمادگی جهت شرکت در آزمون CCIE Routing and Switching

مروری بر دوره

- Confidently sit the **CCIE Routing and Switching Theory** ۳۵۰-۰۰۱ exam
- Detail the theory behind configuring complex Routing and Switching networks
- Demonstrate an enhanced knowledge of Cisco Routing & Switching technology and methodology

[دانلود نقشه راه سیسکو](#)

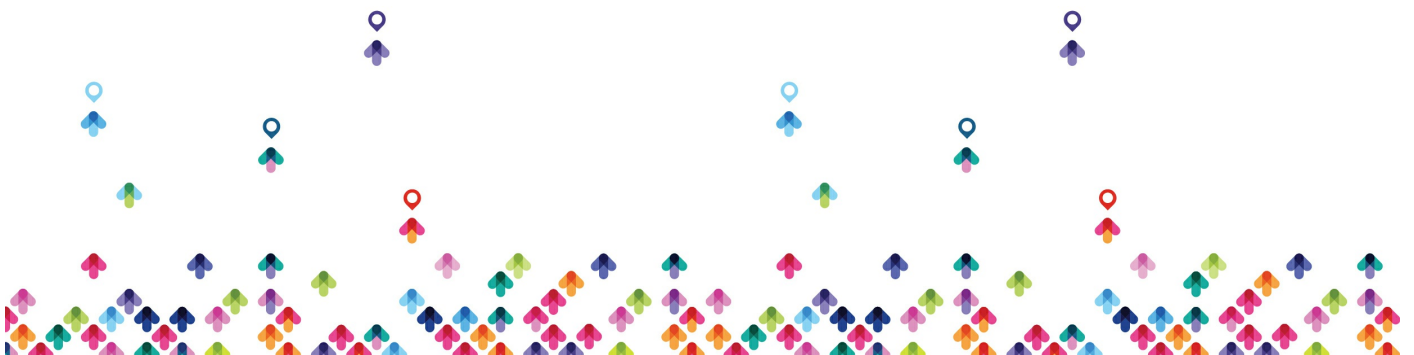
سرفصل ها

General Networking Theory and Routing Concepts:

- Link State and Distance Vector Protocols
- Split Horizons
- Summarisation
- Classful and a Classless routing protocol
- Routing decision criteria

Routing Information Base (RIB) and Routing Protocols Interaction:

- Administrative Distance



- Routing Table
- RIB and Forwarding Information Base Interaction

Redistribution:

- Redistribution between routing
- Troubleshooting Routing Loop

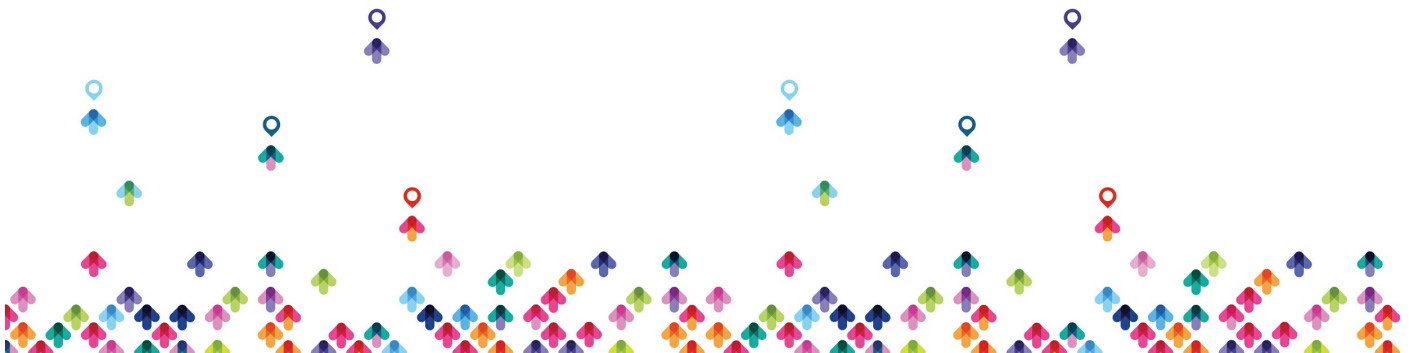
Bridging and LAN Switching line:

- Spanning Tree Protocols (STP)
- ۸۰۲.۱d
- ۸۰۲.۱W
- ۸۰۲.۱S
- Loopguard
- Rootguard
- Bridge Protocol Data Unit (BPDU) Guard
- Storm Control
- Rapid Spanning Tree Protocol (RSTP)
- Unicast flooring
- STP port roles, failure propagation and loopguard operation

Lan Switching:

- Trunks
- VLAN Trunking Protocol (VTP)
- administrative functions

Ethernet:



- Speed
- Duplex
- Etheret
- Fast Ethernet
- Gigabit Ethernet

Addressing:

- Subnetting
- Hot Standby Routing Protocol (HSRP)
- Gateway Load Balancing Protocol (GLBP)
- Virtual Router Redundancy Protocol
- Network Address Translation (NAT)

Services:

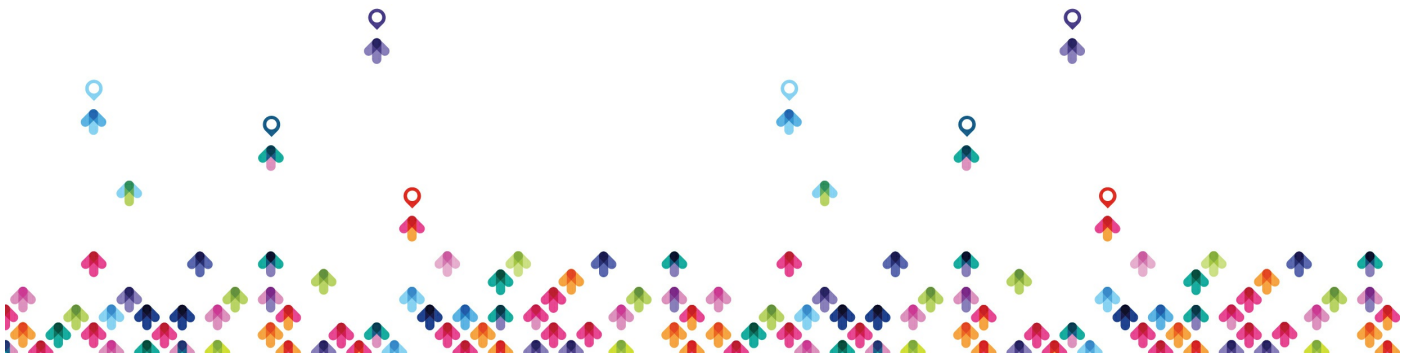
- Network Time Protocol (NTP)
- Dynamic Host Control Protocol (DHCP)
- Web Cache Communication Protocol (WCCP)

Network Management:

- Logging and Syslog

IP Routing OSPF:

- Standard OSPF area
- Stub area
- Totally stub area



- Not-so-stubby-area (NSSA)
- Totally NSSA
- Link State Advertisement (LSA) types
- Adjacency on a point-to-point and on a multi-access (broadcast)
- OSPF graceful restart Troubleshooting failing adjacency formation to fail
- Troubleshooting of external route installation in the RIB

BGP:

- Protocol on which BGP peers communicate
- Next Hop
- Peering
- Troubleshooting of BGP route that will not install in the routing tables

EIGRP:

- Best Path
- Loop free Paths
- EIGRP operations when alternate loop free path are available and when it is not available
- EIGRP queries
- Manual summarisation
- Auto-summarisation
- EIGRP Stubs
- Troubleshooting of EIGRP neighbour adjacencies

Policy Routing:



- Concept of policy routing

Modular QoS command-line (MQC) applied to:

- Network Based Application Recognition (NBAR)
- Class based weighted fair queuing (CBWFQ) Modified Deficit Round Robin (MDRR)
- Policing
- Shaping
- Marking
- Random Early Detection (RED)

WAN:

- Frame Delay
- Local Management Interface (LMI)
- Traffic Shaping
- HUB and Spoke routers
- Dynamic Multipoint VPN (DMVPN)
- DE

IP Multicast:

- Internet Group Management Protocols (IGMP) v2B. Group addresses
- Shared Trees
- Source Trees
- Protocol Independent Multicast (PIM) Mechanic
- PIM Sparse Mode



- Auto-RP
- Anycast RP

Security:

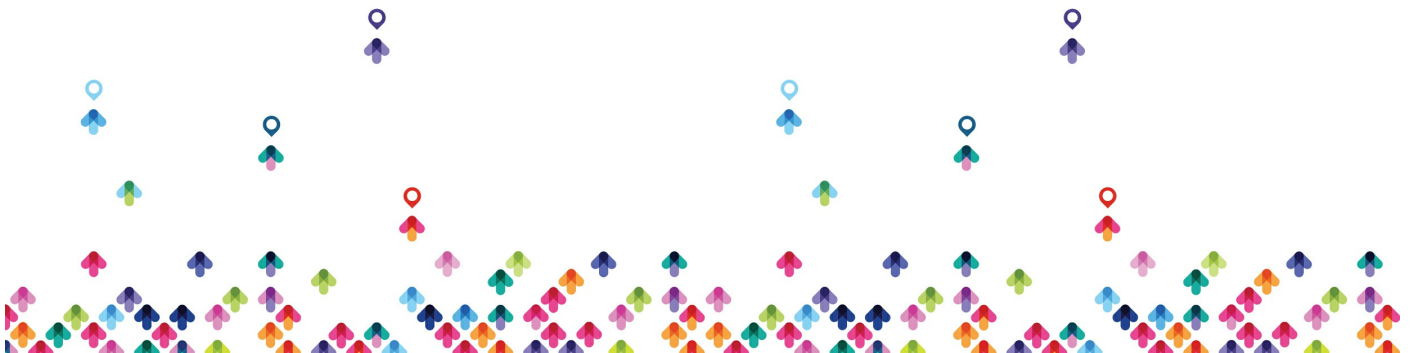
- Extended IP access lists
- Unicast Reverse Path Forwarding (uRPF)
- IP Source Guard
- Context Based Access Control (CBAC)

MPLS (New):

- Label Switching Router (LSR)
- Unicast Reverse Path Forwarding (uRPF)
- Route Descriptor
- Label Format
- Label imposition/disposition
- Label Distribution

IPv6 (New):

IPv6 Addressing and types
IPv6 Neighbor Discovery
Basic IPv6 functionality protocols
IPv6 Multicast and related Multicast protocols
Tunneling Techniques
OSPFv3



مخاطبان دوره

- The **CCIET ۳۵۰-۰۰۱** Cisco training course is aimed at anyone studying for the **CCIE Routing and Switching Theory** exam.

پیش نیازها

- Candidates attending the **CCIET ۳۵۰-۰۰۱** Cisco training course should hold valid CCNP and QoS prerequisite certifications.
- BGP is also recommended but is not essential.

