

CCNP Online Training Course Content

Cisco Certified Network Professional (CCNP®) certification validates the ability to plan, implement, verify and troubleshoot local and wide-area enterprise networks and work collaboratively with specialists on advanced security, voice, wireless and video solutions.

642-902 ROUTE Exam Topics:

Implement an EIGRP based solution, given a network design and a set of requirements

- Determine network resources needed for implementing EIGRP in a network
- Create an EIGRP implementation & Verification plan
- Configure & Verify an EIGRP routing solution was implemented properly using show and debug commands

- Document the verification results for an EIGRP implementation

Implement a multi-area OSPF Network, given a network design and a set of requirements

- Determine network resources needed for implementing OSPF on a network
- Create an OSPF implementation & Verification plan
- Configure & Verify OSPF routing solution was implemented properly using show and debug commands
- Document the verification results for an OSPF implementation plan

Implement an eBGP based solution, given a network design and a set of requirements

- Determine network resources needed for implementing eBGP on a network

- Create an eBGP implementation & Verification plan
- Configure & Verify eBGP routing solution was implemented properly using show and debug commands
- Document verification results for an eBGP implementation plan

Implement an IPv6 based solution, given a network design and a set of requirements

- Determine network resources needed for implementing IPv6 on a network
- Create an IPv6 implementation & Verification plan
- Configure IPv6 routing & IPv6 interoperation with IPv4
- Verify IPv6 solution was implemented properly using show and debug commands
- Document verification results for an IPv6 implementation plan

Implement an IPv4 or IPv6 based redistribution solution, given a network design and a set of requirements

- Create a redistribution implementation plan based upon the results from a redistribution analysis
- Create & configure a redistribution Solution & verification plan
- Verify that a redistribution was implemented
- Document results of a redistribution implementation and verification plan
- Identify the differences between implementing an IPv4 and IPv6 redistribution solution

Implement Layer 3 Path Control Solution

- Create a Layer 3 path control implementation plan based upon the results of the redistribution analysis
- Create & configure a Layer 3 path control verification plan

- Verify that a Layer 3 path control was implemented & document result
- Implement basic teleworker and branch services
- Describe & Configure basic broadband technologies
- Describe basic VPN technologies
- Configure GRE
- Describe branch access technologies

642-813 SWITCH Exam Topics:

Implement VLAN based solution, given a network design and a set of requirements

- Determine network resources needed for implementing a VLAN based solution on a network
- Create a VLAN based implementation & verification plan
- Configure switch-to-switch connectivity for the VLAN based solution

- Configure loop prevention & Access ports for the VLAN based solution
- Verify & document the results for the VLAN based solution was implemented properly using show and debug commands

Implement a Security Extension of a Layer 2 solution, given a network design and a set of requirements

- Determine network resources needed for implementing a Security solution
- Create a implementation & verification plan for the Security solution
- Configure general switch & port security features
- Configure private VLANs ,VACL & PACL
- Verify & document the Security based solution was implemented properly using show and debug commands

Implement Switch based Layer 3 services, given a network design and a set of requirements

- Determine network resources needed for implementing a Switch based Layer 3 solution
- Create an implementation plan for the Switch based Layer 3 solution
- Configure routing interfaces & Layer 3 Security
- Verify & Document the Switch based Layer 3 solution was implemented properly using show and debug commands

Prepare infrastructure to support advanced services

- Implement a Wireless Extension of a Layer 2 solution
- Implement a VoIP & video support solution

Implement High Availability, given a network design and a set of requirements

- Determine network resources needed for implementing High Availability on a network
- Create a High Availability implementation & verification plan
- Implement first hop & switch supervisor redundancy protocols
- Verify & document High Availability solution was implemented properly using show and debug commands

642-832 TSHOOT Exam Topics:

Maintain and monitor network performance

Troubleshoot Multi Protocol system networks

- Troubleshoot EIGRP, OSPF , eBGP & routing redistribution solution
- Troubleshoot a DHCP client and server solution
- Troubleshoot NAT, first hop & switch supervisor redundancy protocols

- Troubleshoot IPv6 routing , IPv6 and IPv4 interoperability
- Troubleshoot switch-to-switch connectivity & loop prevent for the VLAN based solution
- Troubleshoot loop prevention & Access Ports for the VLAN based solution
- Troubleshoot private VLANS, port security & switch security
- Troubleshoot ACLs,VACLs ,PACLs & switch virtual interfaces (SVIs)
- Troubleshoot configuration issues related to accessing the AAA server for authentication purposes & security issues related to IOS services (i.e.,finger, NTP, HTTP, FTP, RCP etc.)