CCNP

Cisco Certified Network Professional

CURRICULUM

» 300-101 ROUTE

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

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

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 plan
- Create an OSPF verification plan
- Configure OSPF routing
- Verify OSPF solution was implemented properly using show and debug commands
- Document results of OSPF implementation and verification 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 plan
- Create an eBGP verification plan
- Configure eBGP routing
- Verify eBGP solution was implemented properly using show and debug commands
- Document results of eBGP implementation and verification 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 plan
- Create an IPv6 verification plan
- Configure IPv6 routing
- Configure IPv6 interoperation with Ipv4
- Verify IPv6 solution was implemented properly using show and debug commands
- Document results of IPv6 implementation and verification 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 of the redistribution analysis
- Create a redistribution verification plan
- Configure a redistribution solution
- 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 a Layer 3 path control verification plan
- Configure Layer 3 path control
- Verify that a Layer 3 path control was implemented
- Document results of a Layer 3 path control implementation and verification plan
- Implement basic teleworker and branch services
- Describe broadband technologies
- Configure basic broadband connections
- Describe basic VPN technologies
- Configure GRE
- Describe branch access technologies

» 300-115 SWITCH
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 plan
- Create a VLAN based verification plan
- Configure switch-to-switch connectivity for the VLAN based solution
- Configure loop prevention for the VLAN based solution
- Configure Access Ports for the VLAN based solution
- Erify the VLAN based solution was implemented properly using show and debug commands
- Document results of VLAN implementation and verification

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 plan for the Security solution
- Create a verification plan for the Security solution
- Configure port security features
- Configure general switch security features
- Configure private VLANs Configure VACL and PACL
- Verify the Security based solution was implemented properly using show and debug commands
- Document results of Security implementation and verification

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
- Create a verification plan for the Switch based Layer 3 solution
- Configure routing interfaces Configure Layer 3 Security
- Verify the Switch based Layer 3 solution was implemented properly using show and debug commands
- Document results of Switch based Layer 3 implementation and verification

Prepare infrastructure to support advanced services

- Implement a Wireless Extension of a Layer 2 solution
- Implement a VoIP support solution
- Implement 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 plan
- Create a High Availability verification plan
- Implement first hop redundancy protocols
- Implement switch supervisor redundancy
- Verify High Availability solution was implemented properly using show and debug commands
- Document results of High Availability implementation and verification

» 300-135 TSHOOT

Maintain and monitor network performance

- Develop a plan to monitor and manage a network
- Perform network monitoring using IOS tools
- Perform routine IOS device maintenance
- Isolate sub-optimal internetwork operation at the correctly defined OSI Model layer

Troubleshoot Multi Protocol system networks

- Troubleshoot EIGRP
- Troubleshoot OSPF
- Troubleshoot eBGP
- Troubleshoot routing redistribution solution
- Troubleshoot a DHCP client and server solution
- Troubleshoot NAT
- Troubleshoot first hop redundancy protocols
- Troubleshoot IPv6 routing
- Troubleshoot IPv6 and IPv4 interoperability
- Troubleshoot switch-to-switch connectivity for the VLAN based solution
- Troubleshoot loop prevention for the VLAN based solution
- Troubleshoot Access Ports for the VLAN based solution
- Troubleshoot private VLANS
- Troubleshoot port security
- Troubleshoot general switch security
- Troubleshoot VACL and PACL
- Troubleshoot switch virtual interfaces (SVIs)
- Troubleshoot switch supervisor redundancy
- Troubleshoot switch support of advanced services (i.e., Wireless, VOIP and Video)
- Troubleshoot a VoIP support solution
- Troubleshoot a video support solution
- Troubleshoot Layer 3 Security
- Troubleshoot issues related to ACLs used to secure access to Cisco routers
- Troubleshoot configuration issues related to accessing the AAA server for authentication purposes
- Troubleshoot security issues related to IOS services (i.e.,finger, NTP, HTTP, FTP, RCP etc.)

DUCAT®
development | consultancy | training

E-mail: info@ducatindia.com
Visit us: www.ducatindia.com
www.facebook.com/ducateducation

NOIDA
A-43 & A-52, Sector-16,
Noida - 201301, (U.P .) INDIA
Ph. : 0120-4646464
Mb. : 09871055180

GURGAON
1808/2, 2nd floor old DLF ,
Near Honda Showroom,
Sec.-14, Gurgaon (Haryana)
Ph. : 0124-4219095-96-97-98
Mb. : 09873477222-333

GREATER NOIDA
F 205 Neelkanth Plaza Alpha 1
commercial Belt Opposite to Alpha
Metro Station Greater Noida
Ph. : 0120-4345190-91-92 to 97
Mb. :09899909738, 09899913475

GHAZIABAD
1, Anand Industrial Estate,
Near ITS College, Mohan Nagar ,
Ghaziabad (U.P .)
Ph.: 0120-4835400...98-99
Mb. : 09810831363 / 9818106660
: 08802288258 - 59-60

FARIDABAD
SCO-32, 1st Floor , Sec.-16,
Faridabad (HAR YANA)
Ph. : 0129-4150605-09
Mb. : 0981 1612707