

Implementing Cisco IP Switched Networks

Exam Code 300-115

Duration: 40 Hrs

1.0 Layer 2 Technologies

- 1.1 Configure and verify switch administration
 - 1.1.a SDM templates
 - 1.1.b Managing MAC address table
 - 1.1.c Troubleshoot Err-disable recovery
- 1.2 Configure and verify Layer 2 protocols
 - 1.2.a CDP, LLDP
 - 1.2.b UDLD
- 1.3 Configure and verify VLANs
 - 1.3.a Access ports
 - 1.3.b VLAN database
 - 1.3.c Normal, extended VLAN, voice VLAN
- 1.4 Configure and verify trunking
 - 1.4.a VTPv1, VTPv2, VTPv3, VTP pruning
 - 1.4.b dot1Q
 - 1.4.c Native VLAN
 - 1.4.d Manual pruning
- 1.5 Configure and verify EtherChannels
 - 1.5.a LACP, PAgP, manual
 - 1.5.b Layer 2, Layer 3
 - 1.5.c Load balancing
 - 1.5.d EtherChannel misconfiguration guard
- 1.6 Configure and verify spanning tree
 - 1.6.a PVST+, RPVST+, MST
 - 1.6.b Switch priority, port priority, path cost, STP timers
 - 1.6.c PortFast, BPDUguard, BPDUfilter
 - 1.6.d Loopguard and Rootguard
- 1.7 Configure and verify other LAN switching technologies
 - 1.7.a SPAN, RSPAN

1.8 Describe chassis virtualization and aggregation technologies

- 1.8.a Stackwise

2.0 Infrastructure Security

2.1 Configure and verify switch security features

- 2.1.a DHCP snooping
- 2.1.b IP Source Guard
- 2.1.c Dynamic ARP inspection
- 2.1.d Port security
- 2.1.e Private VLAN
- 2.1.f Storm control

2.2 Describe device security using Cisco IOS AAA with TACACS+ and RADIUS

- 2.2.a AAA with TACACS+ and RADIUS
- 2.2.b Local privilege authorization fallback

3.0 Infrastructure Services

3.1 Configure and verify first-hop redundancy protocols

- 3.1.a HSRP
- 3.1.b VRRP
- 3.1.c GLBP