



Cisco Certified Network Professional (CCNP) Switching

- **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
 - Verify 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

