

Fortigate Firewall

Syllabus

Firewall basics

- Describe the purpose of a firewall
- Explain Security Domains
- Design secure network using firewalls
- Explain the Firewall types
- Describe Proxy firewall
- Explain Stateful inspection firewall
- Explain Stateful inspection firewall
- Advantages of a next generation firewall

FortiGate Firewall

- Introduction to FortiGate firewall
- Compare firewall models
- Initial configurations
- Configure management interface of the firewall
- Build a network using FortiGate firewall
- Explain and configure interface types
- Configure OSPF on the firewall
- Configure default routing
- Explain and configure firewall policy
- Explain and configure object types
- Explain and configure NAT options
- Static NAT
- Dynamic NAT
- PAT
- Destination NAT
- Configure central SNAT
- Configure DNS server
- Explain and configure URL filtering options
- Explain and configure security zones
- Explain and configure virtual wire pair
- Explain and configure policy Routing
- Explain and demonstrate the difference between Profile based mode and policy-based mode
- Difference between Firewall policy and security policy

- Explain security fabric
- Explain denial of service attack
- Configure DOS policy
- Firewall authentication rules
- User scheduling
- Traffic shaping policy
- Configure backup and restore configurations
- Configure and modify system admin accounts
- Introduction to virtual domains (VDOMS)
- Explain Split-task VDOM mode and Multiple VDOM mode
- Configure Split-Task VDOM on the firewall
- Explain FSSO deployment and configuration
- LDAP and active directory integration
- Explain feature visibility on the firewall
- Explain flow-based inspection and proxy-based inspection
- Configure DHCP on Fortigate

Security Profiles

- AntiVirus
- DNS filter
- Application control
- IPS

VPN Options on Fortigate

- Explain VPN types and usage
- Explain tunnelling protocols
- Explain IPSec VPN concept
- Explain Authentication concepts, pre shared key vs digital certificate
- Explain encryption concepts and algorithms
- Explain Hashing concept and algorithms
- Configure Ipsec site to site VPN
- Explain public key infrastructure and certificate authority
- Introduction to SSL/TLS VPN
- Explain SSL/TLS handshake
- Explain Tunnel mode and web access mode
- Configure SSL remote access VPN

High availability on FortiGate

- Explain and configure Active/Standby HA

- Explain and configure Active/Active HA

SD WAN on FortiGate

- Explain Software Defined Networking
- Application Programming Interface
- Control plane and data plane
- Traditional network vs Software defined network
- Overlay and underlay networks
- SD Access vs SD WAN
- Explain SD WAN Interfaces
- Explain SD WAN Rules
- Configure SD-WAN to load balance traffic between multiple WAN links effectively