

# NSE 4 FortiGate

Duration: 4 Days

## COURSE OUTLINE

### Basic

- Introduction to Firewall Technologies.
- Introduction About Fortinet FortiGate.
- Install FortiGate Firewall On VMWare.
- FortiGate Firewall Dashboard.
- FortiGate Firewall Initial Working Lab.
- FortiGate Firewall Interfaces and Zones.
- Administrative Access in FortiGate Firewall.
- Configure DNS & DNS Server In FortiGate.
- FortiGate Firewall Policies Theory.
- MAC Address Based Policy in FortiGate Firewall.
- Local User Based Policy in FortiGate Firewall.
- IP Address Based Policy in FortiGate Firewall.
- Services and Schedule Based Policy in FortiGate.
- FortiGate Firewall DHCP Server Theory.
- FortiGate Firewall as DHCP Server Lab.
- FortiGate Firewall as DHCP Relay Lab.
- FortiGate Firewall Security Profile & FortiGuard.
- FortiGate Firewall Replacement Messages.
- Security Profile Antivirus Profile.
- Security Profile Web Filter Profile.
- Security Profile DNS Filter.
- Security Profile Application Control.
- Security Profile Intrusion Prevention.
- Security Profile File Filter.
- FortiGate Firewall Inspection Mode.
- Policy-Based Mode to Block Facebook App.
- Policy-Based Mode for Default Services.
- Configure and Verify IPv4 DoS Policy.
- Network Address Translation Theory.
- Policy, Source and Interface
- Source NAT, Central Secure NAT (SNAT).
- Destination NAT, Virtual IP in Security Policy.
- Destination NAT, Virtual IP with Central SNAT.
- Addresses Objects in FortiGate Firewall.
- Services Objects in FortiGate Firewall.
- Backup & Restore, Revision & Firmware Upgrade.

## NSE 4 FortiGate Infrastructure

### Routing

- Static, Default, Dynamic and Policy Route Theory.
- Configure & Verify Static & Default Route Lab.
- Configure and Verify Policy Routing Lab.
- Configure and Verify Dynamic Protocol RIP.
- Configure and Verify Dynamic Protocol OSPF.
- Configure and Verify Routing Redistribution.
- Configure and Verify Dynamic Protocol BGP.

### SD-WAN

- Introduction to SD-WAN
- SD-WAN Performance SLA
- SD-WAN Rules
- SD-WAN Diagnostics

### Virtual Domains (VDOMs)

- VDOM Concepts
- VDOM Administrators
- Configure & Verify Virtual Domains (VDOMs).
- VDOM Troubleshooting

### Layer 2 Switching

- Virtual Local Area Networks
- FortiGate Firewall Modes (Transparent).
- Configure and Verify VLAN and Zone Lab.
- Configure Redundant Interface in FortiGate.
- Configure Aggregate Interface in FortiGate.
- Configure Virtual Wire Pair in FortiGate.
- Software Switch
- Spanning Tree Protocol

### IPSec VPN

- Introduction to Internet Protocol Security IPSec.
- Policy-Based and Route-Based VPNs Theory.
- Site-to-Site IPSec Route-Based VPN Template Lab.
- Site-to-Site IPsec Route-Based VPN Custom Lab.
- Site-to-Site IPSec Policy-Based VPN Lab.
- Remote Access IPSec VPN Theory and Lab.

### Fortinet Single Sign-On (FSSO)

- FSSO Function and Deployment
- FSSO With Active Directory
- FortiGate Authentication With AD & Lab Setup
- Troubleshooting

#### High Availability (HA)

- High Availability (HA) Theory.
- High Availability HA Active-Passive Lab.
- High Availability HA Active-Active Lab.

#### Web Proxy

- Web Proxy Concepts
- Web Proxy Configuration
- Web Proxy Authentication and Authorization

#### Diagnostics

- General Diagnosis
- Debug Flow
- CPU and Memory
- Configure SNMP V1/V2 and SNMP V3 in FortiGate.
- Configure Syslog in FortiGate Firewall.
- Troubleshooting FortiGate Firewall.