



# CCIE

**Cisco Certified Internet Expert CCIE® Security Training Syllabus**



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### Module 1 - ASA Firewall

- Introduction & Overview of ASA Firewall
- Traffic Flow - Default ASA traffic flow, "To Traffic vs Through Traffic"
- To Traffic Control for Management Purpose
- Through Traffic Control via access-list
- ASA Management via Telnet and SSH Services
- ASA Management via https (ASDM)
- Static Routing
- Default Routing
- RIPv2
- EIGRP
- OSPF
- BGP
- Redistribution
- Introduction to NAT
- Source and Destination NAT
- Static NAT
- Dynamic NAT
- Static PAT
- Dynamic PAT
- Policy NAT Static / Manual NAT / Twice NAT
- Policy NAT Dynamic / Twice NAT
- Etherchannel/Port Channel configuration
- High Availability Stateless (Active Standby)
- High Availability Stateful (Active Standby)
- Security Context
- High Availability over Security Context
- Clustering
- IPsec Introduction
- IPsec IKEv1 Theory (Mainmode, Aggressive Mode & Quick Mode)
- IPsec IKEv1 Deployment on ASA-ASA, ASA-Router
- IPsec IKEv2 Theory
- IPsec IKEv2 Deployment on ASA-ASA, ASA-Router

## Module 2 - Firepower Appliances

- Introduction to Firepower Devices
- Installation of FMC, FTD and NGIPS
- Integrating FTD with FMC and NGIPS with FMC
- Licence deployment -URL Filtering & Malware
- User Management
- Introduction to Default Policies (Block, Intrusion and Network Discovery)
- Deploying IP Services to Interfaces and Deploying Security Zones
- Static Routing
- Default Routing
- RIPv2
- OSPF
- EIGRP
- BGP
- Policy Deployment for IP, TCP and UDP Services
- Static NAT
- Dynamic PAT
- Integrating 2 FTD's to FMC for HA
- Clustering
- S2S IPsec IKEv2 Deployment on FTD-FTD, ASA-FTD, FTD-Router
- NGIPS deployment and applying security Policies

## Module 3 - Identity Services Engine, AD and DNS

- Introduction to ISE
- TACACS and RADIUS technical differences
- ISE Installation
- Deploying Microsoft Server 2016 as DNS
- Active Directory Deployment (Microsoft Server 2016)
- Integrating ISE with Active Directory
- Identity Management
- Identity Source Sequences
- Default Password Policies
- Administration of Network Devices
- DACL
- DOT1X Authentication
- MAB Authentication
- End Point Identity
- Profiling
- Authorization Profiles
- Authentication Policies
- Authorization Policies

## **Module 4 - ZBFW, Flex VPN, Stealthwatch, FireAMP**

- Deploying Router as a ZBFW
- TCP SYN attack from Kali Linux
- L2TP over Flex VPN
- Syslog
- ARP access-list
- Introduction to Stealthwatch
- Installation of SMC
- Installation of FC
- Netflow & ICMP Throatling
- Introduction to FireAMP
- Installation of FireAMP
- Integrating FireAMP with FMC
- Installation of AMP connector on Windows PC
- Deploy Protect Policy

## **Module 5 – Anyconnect, SSL VPN & WSA**

- SSL full client VPN deployment via Anyconnect
- IPSec full client VPN deployment via Anyconnect
- SSL clientless VPN Deployment
- WSA Installation
- WSA Licence Deployment
- Integrating WSA with Active Directory
- Transparent Redirection
- Policy Deployment
- Introduction to DNAC
- Integrating ISE into DNAC
- Recap
- Q&A