TechyEdz Solutions

Training | Consulting | Developement | Outsourcing



Check Point Certified Security
Expert (CCSE)









Check Point Certified Security Expert (CCSE)

Course Overview:

In this course teaches how to build, modify, deploy and troubleshoot Check Point Security Systems on the GAiA operating system. Hands-on lab exercises teach how to debug firewall processes, optimize VPN performance and upgrade Management Servers. Check Point Certified Security Expert training will validate your understanding and skills necessary to configure and optimally manage Check Point Next Generation Firewalls. Hands-on lab exercises teach how to debug firewall processes, optimize VPN performance and upgrade Management Servers.

What you will Learn:

- Backup your Security Gateway and Management Server
- Build, test and troubleshoot a clustered Security Gateway
- Upgrade and troubleshoot a Management Server
- Configure and maintain security acceleration solutions
- Manage, test and optimize corporate VPN tunnels

4 Course Outline:

Check Point Firewall Infrastructure

- ➢ GUI Clients
- Management

Security Gateway User and Kernel Mode Processes

- CPC Core Process
- > FWM
- > FWD
- > CPWD
- Inbound and Outbound Packet Flow
- ➤ Inbound FW CTL Chain Modules
- Outbound Chain Modules

- > Columns in a Chain
- > Stateful Inspection

Kernel Tables

- Connections Table
- Connections Table Format

Check Point Firewall Key Features Packet Inspection Flow

- Policy Installation Flow
- Policy Installation Process
- ➤ Policy Installation Process Flow

Network Address Translation How NAT Works

- ➤ Hide NAT Process
- Security Servers
- ➤ How a Security Server Works
- Basic Firewall Administration
- Common Commands

FW Monitor

What is FW Monitor

Core CLI Elements of Firewall Administration

- Policy Management and Status
- Verification from the CLI
- Using cpinfo
- > Analyzing cpinfo
- Using fwctlpstat
- Using tcpdump

VRRP

VRRP vs ClusterXL

Clustering and Acceleration Clustering Terms

- ClusterXL
- Cluster Synchronization
- To Synchronize or Not to Synchronize

Maintenance Tasks and Tools

- Perform a Manual Failover of the
- > FW Cluster

Management HA

- > The Management High Availability Environment
- > Active vs. Standby
- ➤ What Data is Backed Up?
- Synchronization Modes
- Synchronization Status

SecureXL: Security Acceleration What SecureXL Does

- Packet Acceleration
- Session Rate Acceleration
- Masking the Source Port
- > Application Layer Protocol
- > Factors that Preclude Acceleration
- Factors that Preclude Templating

CoreXL: Multicore Acceleration

- Supported Platforms and Features
- Default Configuration
- Processing Core Allocation

Advanced VPN Concepts and Practices

- > IPsec
- ➤ Internet Key Exchange (IKE)
- ➤ IKE Key Exchange Process Phase 1/ Phase 2 Stages

Remote Access VPNs

- Connection Initiation
- ➤ Link Selection

Multiple Entry Point VPNs

- ➤ How Does MEP Work
- > Explicit MEP
- > Implicit MEP

Tunnel Management

- Permanent Tunnels
- > Tunnel Testing
- > Permanent-Tunnel Configuration

Troubleshooting

➤ VPN Encryption Issues

VPN Debug

- vpn debug Command >
- > vpn debug on | off
- vpn debug ikeon | ikeoff
- vpn Log Files
- vpn debug trunc
- > vpn Command
- > vpntu
- Comparing SAs

Prerequisites:

- Security Administration Course or CCSA certification (R80 Not R77)
- Windows Server, UNIX and networking skills and TCP/IP experience

- Certificate management and system administration
- Who Can attend:
- Expert users and resellers who need to perform advanced deployment configurations of Check Point Software Blades.
- Number of Hours: 40hrs
- Certification: Check Point Certified Security Expert (CCSE) R80.x
- **Key Features:**
- One to One Training
- ➤ Online Training
- > Fastrack & Normal Track
- > Resume Modification
- Mock Interviews
- Video Tutorials
- Materials
- ➤ Real Time Projects
- Virtual Live Experience
- Preparing for Certification