

Accelerated CCSE NGX

Course Objectives

Course Layout

Prerequisites

Exam-Number Note: 156-915.1

Revision Differences

Recommended Setup for Labs

Installing VPN-1 NGX and Upgrading

Objectives

Key Terms

Preinstallation Configuration

Distributed Installation

Upgrading To VPN-1 NGX

Upgrade Guidelines

Upgrade Order

Upgrade Export/Import

Upgrading via SmartUpdate

NGX Backward Compatibility

Supported Versions

Licensing VPN-1 NGX

Obtaining Licenses

Deploying Licenses

Upgrading Licenses to VPN-1 NGX

Licensing and Troubleshooting

Viewing Licenses in User Center

Viewing Licenses in SmartView Monitor

SmartCenter Server Pre-Upgrade Overview

Pre-Upgrade Verification-Tool Syntax

SmartCenter Server Upgrade

SmartCenter High Availability Upgrade

SecurePlatform Upgrade

Advanced Upgrade

Upgrading on Windows

Security Gateway Upgrade

Clustered-Deployment Upgrade

SmartUpdate Upgrade

Upgrading a Gateway Using SmartUpdate Upgrade

SecurePlatform R54, R55, and Later Upgrade

SecurePlatform NG FP2, FP3, or FP3 Edition 2 Upgrade

Upgrading Gateway on Windows

Lab 1: Upgrading NG with AI R55 to NGX

Lab 2: Upgrading NG with AI Security Gateway via SmartUpdate (Optional)

Lab 3: NGX Distributed Installation

Lab 4: Installing VPN-1 Pro Gateway on SecurePlatform Pro

Review

Review Questions

Review Answers

Advanced NGX Management Concepts

Objectives

Key Terms

Advanced Rule Base Functions

Object Cloning

Lab 5: Creating Objects Using Object Cloning

Database Revision Control and Policy Package Management

- Database Revision Control
- Policy Package Management

Lab 6: Using Database Revision Control
Review

- Review Questions
- Review Answers

Configuring Remote Access

- Objectives
- Key Terms

VPN-1 SecuRemote/SecureClient

- Using SecuRemote
- Configuring SecuRemote
- Rule Base Configuration

Configuring a Remote-Access VPN

- Configuring a Remote Access VPN Community
- Remote-Access Community Properties

Global Properties Settings

- Remote-Access Settings
- Client Authentication

Structure of a SecuRemote Connection

- Topology
- Authentication
- Key Exchange
- Connection
- Routing Considerations

Lab 7: Configuring Remote Access in an IKE VPN

Lab 8: Installing SecuRemote

Advanced Configurations

- Secure Domain Login
- Authentication by IP Address

SecuRemote Client

Lab 9: Using VPN-1 SecuRemote in an IKE VPN

The SecureClient GUI

- Authentication Screen
- SecureClient Settings Screen
- The Taskbar Menu

Enabling/Disabling Desktop Policies

- Retrieving Desktop Policies from Policy Servers

Obtaining Site Topology

- userc.C
- Overlapping VPN Domains

SecureClient Icon

Passwords

- Auto Local Logon
- Configuring Auto Local Logon
- Disabling Auto Local Logon

SecureClient Considerations

- Modifying Network Configuration
- Multiple Adapters
- SecureClient Files
- Upgrading SecureClient

SecureClient Diagnostics Tool

- Diagnostic Viewer
- Policy Viewer
- SmartView Tracker

Partial Topology Configuration

Connect Mode

- Connection Profiles

Office Mode

- Overview

- How Office Mode Works

- Office Mode by RADIUS Server

- DHCP Enhancements

- Office Mode per User

- Office Mode per Site

- Office Mode per IP Range

- Routing Considerations

Lab 10: Office Mode

Review

- Review Questions

- Review Answers

Monitoring Traffic and Connections

- Objectives

- Key Terms

SmartView Tracker

- SmartView Tracker Login

- Log Types

- SmartView Tracker Views

- Log-File Management

- Administrator Auditing

- Global Logging and Alerting

- Time Settings

Blocking Connections

- Terminating Active Connections

Lab 11: Blocking Intruder Connections

SmartView Monitor

- SmartView Monitor Login

- Key Features

- Monitoring Suspicious Activity Rules

- Monitoring Alerts

- Monitoring Gateways

- Monitoring Traffic or Counters

- Monitoring Tunnels

- Monitoring Remote Users

Lab 12: Setting Up Suspicious Activity Rule in SmartView Monitor

Lab 13: Checking Status in SmartView Monitor

Eventia Reporter

Report Types

- Eventia Reporter Standard Reports

- Eventia Reporter Express Reports

- Predefined Reports

Eventia Reporter Considerations

- Log-Consolidation Process

- Stand-Alone vs. Distributed Deployments

- Log Availability vs. Log Storage/Processing

- Log-Consolidation Considerations

- Report-Generation Considerations

Eventia Reporter Database Management

- Database Tuning

- Database-Configuration Modifications

- Database-Size Maintenance
- Backing Up
- Eventia Reporter Licensing
- Review
 - Review Questions
 - Review Answers

LDAP User Management with SmartDirectory

- Objectives
- Key Terms
- LDAP Servers
 - Introduction to Account Management
 - LDAP Features
 - Multiple LDAP Servers
- Integrating LDAP with VPN-1 NGX
 - Exporting Users
 - Using an Existing LDAP Server
- Managing LDAP Users
 - Organizational Units
 - Before Starting Account Management
 - Deleting an Object Tree
 - Defining Users
- LDAP and SmartDashboard Troubleshooting
 - LDAP Issues
 - Schema Checking
 - SmartDashboard Issues
 - NGX Issues
 - Important Debugging Tools
- Lab 14:** Configuring LDAP Authentication with SmartDirectory
- Review
 - Review Questions
 - Review Answers

Check Point QoS

- Objectives
- Key Terms
- Check Point QoS Overview
 - Check Point QoS Architecture
 - Check Point QoS Deployment Considerations
- Check Point QoS Policy
 - Check Point QoS Rule Base
 - QoS Action Properties
 - Bandwidth Allocation and Rules
- Differentiated Services
 - DiffServ Marks for IPSec Packets
 - Interaction between DiffServ Rules and Other Rules
- Low Latency Queuing
 - Low Latency Classes
 - Low Latency Class Priorities
 - When to Use Low Latency Queuing
- Advanced Features
 - Authenticated QoS
 - Citrix MetaFrame Support
 - Load Sharing
- Monitoring QoS Policy
 - SmartView Tracker

- SmartView Monitor
- Eventia Reporter
- Optimizing Check Point QoS
- Lab 15:** Configuring Check Point QoS Policy
- Review
 - Review Questions
 - Review Answers

High Availability and Clustering

- Objectives
- Key Terms
- Management High Availability
 - Primary vs. Secondary
 - Active vs. Standby
 - Restriction
 - Synchronization
- Lab 16:** Deploying Management HA
 - HA and ClusterXL
 - Key Elements
 - Restrictions
 - Load Sharing
 - Load Sharing Multicast Mode
 - Load Sharing Unicast Mode
 - How Pivot Mode Works
 - HA vs. Load Sharing
 - State Synchronization
 - Synchronization Modes
 - Selective Synchronization
 - Timing Issues
 - CPHA Commands
 - cphastart
 - cphastop
 - cphaprob
 - fw hastat
 - Debugging ClusterXL Issues
 - fw ctl pstat Sync Output
 - ClusterXL Configuration Issues
 - Modes of ClusterXL Supporting SecureXL
 - Crossover-Cable Support between Two Cluster Members
- Lab 17:** Deploying New Mode HA
- Lab 18:** Manual Failover (Optional)
- Lab 19:** Configuring Load Sharing Unicast (Pivot) Mode
- Lab 20:** Configuring Load Sharing Multicast Mode (Optional)
- Review
 - Review Questions
 - Review Answers