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# **CCSE** certification training

ALL-IN-ONE: EXAM INCLUDED IN PRICE

4 days (28 hours)

#### Presentation

The CCSE (Check Point Certified Security Expert) certification is an advanced reference in cybersecurity. It validates the skills needed to deploy, administer and troubleshoot complex environments based on Check Point R81.20 solutions.

Our CCSE training will enable you to master advanced security, multi-site VPNs, high availability, clustering and multi-domain management. Participants will be able to exploit advanced diagnostic tools, automate threat detection and implement robust business continuity strategies.

Thanks to a practical, step-by-step approach, you'll be able to secure critical infrastructures, effectively diagnose complex incidents and confidently prepare for the CCSE R81.20 exam.

This international certification is a real career springboard for advanced security professionals.

Like all our training courses, this one is based on the latest stable version of the Check Point ecosystem, and focuses on real-life situations.

## Objectives

- Deploy and administer advanced Check Point environments.
- Master the configuration of multi-site VPNs and Remote Access.
- Ensure high availability with ClusterXL and Load Sharing.
- Use Threat Prevention modules and HTTPS inspection.
- Diagnose and resolve complex incidents.
- Pass CCSE R81.20 certification.

## Target audience

- Cybersecurity engineers
- Experienced network administrators
- Advanced SOC analysts
- IT security consultants

## **Prerequisites**

- CCSA R81.x certification or equivalent Check Point experience
- Good command of TCP/IP networks and firewall concepts
- Knowledge of VPN and authentication

## CCSE training program

[Day 1 - Morning]

#### Introduction to CCSE and advanced reminders

- Introduction to CCSE certification and its positioning
- CCSA fundamentals: objects, policies, NAT, VPN
- New features and advanced functionalities R81.20
- Preparing the advanced lab environment
- Practical workshop: Setting up the CCSE environment.

### [Day 1 - Afternoon]

### Advanced security policy management

- Granular policies and advanced rules
- Multiple policies and distributed management
- Application control and threat prevention
- Policy optimization and auditing
- Practical workshop: Implementing complex rules.

### Advanced authentication and identity awareness

- Advanced AD/LDAP integration
- Multi-factor and federated authentication
- Identity and role-based rules
- User access analysis and troubleshooting
- Practical workshop: SSO configuration with Identity Awareness.

#### [Day 2 - Morning]

### Advanced NAT and network troubleshooting

- Advanced NAT scenarios and complex flows
- NAT collision management and limitations
- Troubleshooting with fw monitor, tcpdump, cpview
- Optimizing NAT performance
- Practical workshop: Analysis and resolution of a NAT incident.

### [Day 2 - Afternoon]

#### Log and event management

- Advanced use of SmartEvent and correlation
- Setting up dynamic alerts
- Customized reporting and regulatory compliance
- Integration with an external SIEM
- Practical workshop: Creating an advanced dashboard.

#### Advanced VPNs and secure architectures

- Advanced site-to-site VPNs: complex topologies
- VPN Remote Access with high availability
- Securing tunnels and troubleshooting
- Multi-vendor integration
- Practical workshop: Deploying a multi-site VPN.

## [Day 3 - Morning]

## High availability and advanced ClusterXL

- Advanced ClusterXL and Load Sharing modes
- Upgrade management with active cluster
- Troubleshooting state synchronization
- Resilience and service continuity
- Practical workshop: Incident simulation and failover validation.

### [Day 3 - Afternoon]

### Threat prevention and advanced protection

- Advanced configuration of IPS, Anti-Bot and AV modules
- Advanced HTTPS inspection
- Signature optimization and performance
- Automated threat analysis and response
- Practical workshop: Responding to an attack scenario.

#### Centralized and multi-domain administration

- Multi-Domain Security Management (MDM) concepts
- Advanced administrator management and permissions
- Migration and disaster recovery
- Advanced backup and restore
- Practical workshop: Complex multi-domain scenarios.

#### [Day 4 - Morning]

### Advanced troubleshooting and diagnostics

- Advanced troubleshooting methodology
- Tools: cpinfo, fw monitor, kernel debug
- Case studies: VPN, NAT, clustering and policies
- Implementation of a troubleshooting runbook
- Practical workshop: Multi-protocol troubleshooting.

### [Day 4 - Afternoon]

### Going live and sustainability

- Production hardening checklist
- Managing upgrades and Jumbos Hotfix
- Optimizing system performance
- Best practices in advanced monitoring
- Practical workshop: Simulated production run.

## CCSE certification preparation

- CCSE R81.20 exam structure and format
- Key topics and section weightings
- Revision strategies and mock tests
- Practical tips for the official exam
- Practical workshop: taking the mock exam + correction.

## Companies concerned

This course is aimed at both individuals and companies, large or small,

wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

## Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as enrolment is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

## Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

#### Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

### Certification

A certificate will be awarded to each trainee who completes the training course.