



# CheckPoint Firewall Syllabus

**Check Point**  
SOFTWARE TECHNOLOGIES LTD.

## General Information

### Description

Check Point Certified Security Administrator (CCSA) 2013 Certification validate your skills on the GAIa OS. 2013 edition features GAIa R76.

Step	Paper	Required Exam
1	CCSA	156-215.76

Note: Exam code states the version for which the training is given 156-215.**76** is for R76.

## Course Deliverables

### Classroom Training

Instructor led classroom training will be given. All classes are demonstration based. We don't teach just theory. We teach every concept using real-time case studies. All our classrooms are digital classrooms.

### Lab

Students can practice all the concepts taught in classrooms at our Lab facility. Each student will be given individual setup to practice the lab. They need not combine and do labs. Our lab coordinators will help you complete the lab workbooks if faced with difficulty while doing the labs.

### Books and workbooks

Students will be a given textbooks and workbooks for the course.

## Course Toipics

Heading	Topic
CheckPoint Firewall Installation	Standalone installation
	Distributed installation
	Primary and Secondary installation
	Rule base, Objects and Smart view tracker.

Heading	Topic
Network Address Translation	Configuring Hide mode or Dynamic NAT
	Configuring Static NAT
	Configuring Manual NAT

Heading	Topic
Cryptography	Symmetric Key Cryptography
	Asymmetric Key Cryptography
	Public Key Infrastructure, Public and Private Keys
	Encryption and Decryption
	Message Digest, Hashing Algorithm
	Digital Signature
	Authentication, Integrity and Non-repudiation
Diffie Helman Key exchange	

Heading	Topic
Authentication	Kerberos
	User Authentication
	Client Authentication
	Session Authentication
	Partially automatic/ Fully automatic authentication

Heading	Topic
CheckPoint Smart Defense	Tracking and alerting
	TCP/IP 3 way handshake
	SYN Defender
	SYN Relay
	Passive SYN Defender

Heading	Topic
VPN	VPN Fundamentals
	Creating VPN tunnels
	Internet Key Exchange (IKE)
	ISAKMP Phase 1 (SA Negotiation)
	IPSec Phase 2 (SA Negotiation)
	AH and ESP headers
	Site to Site VPN using Pre-shared secret
	Site to Site VPN using Certificate Authority
Site to Site VPN (Secure Remote)	

Heading	Topic
Content Security	Security Servers on the Firewall
	SMTP, HTTP and FTP traffic security
	The Content Vectoring Protocol (CVP Server)
	The URL Filtering Protocol (UFP Server)
	Filtering with UFP Server
	Filtering with CVP server

Heading	Topic
Miscellaneous	Light weight Directory Access Protocol
	Load Balancing algorithms
	Clustering of Firewall for Redundancy (Failover)