



Course name:	Check Point™ Security Engineering R77 (CCSE R77)
Course form:	Lectures/consultations and intensive lab training
Course description:	Check Point Security Engineering course provides hands-on training for building and configuring network using the Check Point Security Gateway Software Blade and Gaia. Attendants will configure Security Gateway in standalone and clustered deployments while implementing certificate-based and remote access VPNs using SmartConsole clients. They also learn how to perform advanced troubleshooting tasks on the firewall.
Length:	3 days
Prerequisites:	Persons attending this course should have general knowledge of TCP/IP, and working knowledge of Windows, UNIX, network technology and the internet.
Examination:	This course helps prepare for Check Point Certified Security Expert R77 exam # 156-315.77 . The exam contains 90 multiple-choice, scenario-based questions. A passing score is 70% or higher in 120 minutes. The exam is based on 80% course materials and 20% hands-on experience with Check Point products. Students should have at least 6 months experience with Check Point products before tackling it.
Course content:	<p>Advanced Upgrading</p> <ul style="list-style-type: none"> • Perform a backup of a Security Gateway and Management Server • Upgrade and troubleshoot a Management Server using database migration • Upgrade and troubleshoot a clustered Security Gateway deployment <p>Advanced Firewall</p> <ul style="list-style-type: none"> • Using knowledge of Security Gateway infrastructure, including chain modules, packet flow, and kernel tables, to describe how to perform debugs on firewall processes <p>Clustering and Acceleration</p> <ul style="list-style-type: none"> • Build, test and troubleshoot a ClusterXL Load Sharing deployment on an enterprise network. • Build, test and troubleshoot a ClusterXL High Availability deployment on an enterprise network. • Build, test and troubleshoot a management HA deployment on an enterprise network. • Configure, maintain and troubleshoot SecureXL and CoreXL acceleration solutions on the corporate network traffic to ensure noted performance enhancement on the firewall. • Build, test and troubleshoot a VRRP deployment on an enterprise network. <p>Advanced User Management</p> <ul style="list-style-type: none"> • Using an external user database such as LDAP, configure User Directory to incorporate user information for authentication services on the network. • Manage internal and external user access to resources for Remote Access or across a VPN • Troubleshoot user access issues found when implementing Identity Awareness <p>Advanced IPsec VPN and Remote Access</p> <ul style="list-style-type: none"> • Using our knowledge of fundamental VPN tunnel concepts, troubleshoot a site-to-site or certificate-based VPN on a corporate gateway using IKEView, VPN log files and command-line debug tools. • Optimize VPN performance and availability by using Link Selection and Multiple Entry Point solutions. • Manage and test corporate VPN tunnels to allow for greater monitoring and scalability with multiple tunnels defined in a community including

	<p>other VPN providers.</p> <p>Auditing and Reporting</p> <ul style="list-style-type: none"> • Create Events or use existing event definitions to generate reports on specific network traffic using SmartReporter and SmartEvent in order to provide industry compliance information to management. • Using your knowledge of SmartEvent architecture and module communication, troubleshoot report generation given command-line tools and debug-file information. <p>Lab Exercises Include</p> <ul style="list-style-type: none"> • Upgrading to Check Point R77 • Core CLI Elements of Firewall Administration • Migrating to a Clustering Solution • Configuring SmartDashBoard to Interface with Active Directory • Configure Site-to-Site VPNs with Third Party certificates • Remote Access with EndPoint Security VPN • SmartEvent and SmartReporter • Appendix - Clustering with VRRP • Appendix - In Place Upgrade to R77
Course date:	According to customer request
Course place:	Košice, Check Point ATC training center, Intas s.r.o., Stromova 10