



Check Point taps the power of virtualization to simplify security for private clouds

Looking for ways to reduce complexity and simplify network security in your private cloud? Need customized and finely tuned solutions to better protect your growing network needs? You are not alone. In fact, you are among the majority of today's IT professionals who are faced with the challenging task of managing complex securities in an ever growing and more demanding network environment.

The increasing complexity of network security and new threats combined with a slowing growth of IT budget drive the need for a solution that improves operational efficiency, optimizes security and lowers costs.

Network security consolidation has become a strategic trend for IT professionals to deliver more effective security at lower costs. By consolidating multiple security gateways in a single solution, both enterprises and service providers have the opportunity to optimize productivity and minimize the total cost of ownership (TCO).

Organizations can achieve an overall reduction in capital equipment costs (CapEx) as well as in operating costs (OpEx) by reducing the hardware investment and streamlining the management of securing large segmented networks and data centers. Service Providers have the opportunity to increase revenue by delivering new security services easily and efficiency to customers through their managed services.

OVERVIEW

Check Point Virtual Systems enable organizations to consolidate infrastructure by creating multiple virtualized security gateways on a single hardware device, delivering deep cost savings, seamless security and infrastructure consolidation. Based on proven virtualized security design and the extensible Software Blade Architecture, Virtual Systems provide best-in-class customized security protections to multiple networks and simplify enterprise-wide policy by creating tailored policies for each network.

Administrators can replicate conventional physical security gateways with Virtual Systems to deliver advanced protection to multiple networks and network segments. Up to 250 fully independent Virtual Systems can be supported on Check Point gateways or Open Servers, delivering scalability, availability and performance while dramatically reduce hardware investment, space requirements and maintenance costs.

KEY FEATURES

- Consolidate up to 250 gateways in a single device
- Software Blade Architecture
- GAI 64-bit operating system
- Separation of management duties
- Customized security policies per Virtual System
- Per Virtual System Monitoring of resource usage
- Linear scalability of up to 13 clustered gateways with VSLS technology
- Simple one-click conversion from physical to virtual
- Supported as software-only on Check Point Appliances or Open Servers and as pre-configured appliances

KEY BENEFITS

- Easily add virtual systems to any security gateway
- Out of the box complete solution with virtualized system appliances
- Reduce hardware cost and simplified network policy by consolidating multiple gateways into a single device
- Stronger performance and manageability enable enterprises to better leverage their investment
- More granularity and greater manageability with customizable policies per Virtual System
- Better usage-based resource planning with per Virtual System monitoring
- Boost performance with Multi-core CoreXL technology

SUPPORTED SOFTWARE BLADES

Firewall	✓
VPN	✓
Identity Awareness	✓
IPS	✓
Application Control	✓
URL Filtering	✓
Antivirus	✓
Anti-bot	✓
Mobile Access*	✓

* SSL VPN available in a future releases



Datasheet: Check Point Virtual Systems

The latest Check Point technologies ensure best performance for virtualized security; CoreXL technology utilizes multi-core processors to increase throughput, 64-bit GAiA OS provides over eight times more concurrent connections, and patented VSLs technology delivers unmatched performance scalability with up to 8 members per cluster.

PROVEN VIRTUAL SYSTEM TECHNOLOGY

For years, Check Point's Virtual Systems technology has been providing value and protection for enterprises and service providers. This proven technology enables organizations to segment their network while simplifying policy settings, consolidating multiple gateways into a hardware platform and providing savings on both capital equipment investments and going support and maintenance. The streamlined management of the virtualized gateways further improves the operational efficiency of a resource-challenged IT department.

SOFTWARE BLADE ARCHITECTURE SUPPORT

Supporting the latest Check Point Software Blade Architecture on every Virtual System, this solution delivers comprehensive protection to multiple networks. Administrators have the flexibility to configure any Software Blades with any security policy to any Virtual System.

CUSTOMIZABLE SECURITY POLICIES

Simplify complex network security policy with more granular and manageable one by creating tailored policies for each Virtual System. Customizing security policy base on requirements and minimizing the complexity create better security practice to meet the business needs.

STREAMLINED CENTRAL MANAGEMENT

Check Point Security Management and Multi-Domain Security Management solutions provide an effective tool for the administration of the Virtual Systems. Dedicated Virtual Systems for Web Security, Threat Prevention, Firewall, and Remote access enable separation of IT duties. Separate management per Virtual Systems and data segregation support cloud based security-as-a-service needs.

INTEGRATED VIRTUAL ROUTERS AND SWITCHES

Complete virtualization of network infrastructure allows easy deployment and configuration of network topology with simpler inter-VS communication. Save the costs of external network routers and switches. The integrated virtual routers, switches and links direct traffics to their intended destinations with higher efficiency.

HIGH PERFORMANCE

Along with the latest technology and the 64-bit GAiA OS, performance boosts for virtualized security deployments. Up to eight times more concurrent connection capacity, multi-gigabit-per-second performance for firewall and IPS

throughputs are just a few examples of the outstanding performance enhancements these Virtual Systems will have. Check Point CoreXL technology utilizes today's gateways' multi-core processors to accelerate traffic and increase throughput.

LINEAR SCALABILITY

Today's networks require flexibility and expandability to support the fast-evolving business needs. To meet this demanding business environment, Virtual Systems can be deployed on multiple gateways ensuring secure, resilient, multi-gigabit throughput. Virtual System Load Sharing (VSLs) distributes traffic load within a cluster, providing the ability to distribute virtual systems across multiple cluster members, without requiring any change to existing topology. Every addition of a cluster member effectively spreads the virtual system traffic load within the cluster, providing the benefits of throughput, concurrent connections, redundancy, cost efficiency, configuration simplicity, priority designation, and system scalability.

PER-VS RESOURCE MONITORING

Need to understand how your Virtual Systems are used to better plan your security resources or to create billable customer services? Granular resource monitoring of CPU and Memory for each Virtual System gives you the necessary insights to effectively plan for your network security resources, or to provide usage-based services to your customers.

Resource Control allows administrators to manage the processing load by guaranteeing that each virtual system will receive only the memory and CPU allocation it needs to deliver its functions. Resources not needed by one virtual system are automatically made available to other virtual systems. Administrators can also limit the CPU resource available to a lower-priority virtual system and assign more resources to mission-critical virtual systems.

IPV6 READY

Control and manage IPv4 and IPv6 networks with Software Blades security using the same rule base and objects for both IPv4 and IPv6. Ease the transition to IPv6 with dual stack IPv4 and IPv6 architecture, IPv6 in IPv4 (RFC4213) tunneling and NAT66 network address translation.

FLEXIBLE PACKAGING OPTIONS

Check Point Virtual Systems are offered either as a software-only option or in pre-configured bundles with Check Point Security Appliances and Software Blades, providing the flexibility and convenience for different deployment situations. The software only option allows customers to enable Virtual Systems from a physical system with an easy one-click conversion.



SPECIFICATIONS

Software Release	R75.40VS or later
Operating System	GAiA
Minimum Memory	2GB
Supported Technologies	CoreXL, ClusterXL, SSL Inspection

VIRTUAL SYSTEMS UPGRADE PACKAGES

SKU	Description	Supported Appliance
CPSB-VS-3, CPSB-VS-3 CPSB-VS-3, CPSB-VS-3-VSLS	3 Virtual Systems Package	2200, 4200, 4400, 4600, UTM-1 3070, Open Server (1 or 2 cores)
CPSB-VS-3, CPSB-VS-10 CPSB-VS-3, CPSB-VS-10-VSLS	10 Virtual Systems Package	4400, 4600, 4800, 12200, 12400, 12600, 21400, 21600, 21700, 61000, Power-1 9070, Power-1 11000, IAS, Open Server (4+ cores)
CPSB-VS-3, CPSB-VS-25 CPSB-VS-3, CPSB-VS-25-VSLS	25 Virtual Systems Package	4800, 12200, 12400, 12600, 21400, 21600, 21700, 61000, Power-1 9070, Power-1 11000, IAS, Open Server (4+ cores)
CPSB-VS-3, CPSB-VS-50 CPSB-VS-3, CPSB-VS-50-VSLS	50 Virtual Systems Package	12200, 12400, 12600, 21400, 21600, 21700, 61000, Power-1 9070, Power-1 11000, IP1280, IP2450, IAS, Open Server (4+ cores)

MAXIMUM VIRTUAL SYSTEMS

Supported Appliances	Appliance Memory (default/max) GB	Maximum VS Supported (with default appliance memory)	Maximum VS Supported (with max appliance memory)
2200	2 / 2	3	3
4200	4 / 4	3	3
4400	4 / 4	10	10
4600	4 / 4	10	10
4800	4 / 8	20	25
12200	4 / 12	20	50
12400	4 / 12	25	75
12600	6 / 12	75	150
21400	12 / 24	125	250
21600	16 / 32	150	250
21700	16 / 32	150	250
61000	12 / 24	125	250
UTM-1 3070	4 / 4	10	10
Power-1 5070	2 / 6	3	75
Power-1 9070	4 / 8	50	75
Power-1 11000	6 / 12	75	125
IP 1280	4 / 8	10	50
IP 2450	4 / 8	50	75



VIRTUAL SYSTEMS APPLIANCES

Pre-configured Virtual Systems bundled with Check Point Security Appliance, Virtual Systems and Software Blades. The Virtual System Appliances are available in single system and dual-system high-availability (VSL) configurations.

	4400 Single Unit	4400 VSL	4600 Single Unit	4600 VSL	4800 Single Unit	4800 VSL	12200 Single Unit	12200 VSL
Performance								
Firewall Throughput (Gbps)	5	9	9	16	11	20	15	27
VPN Throughput (Gbps)	1.2	2.1	1.5	2.7	2	3.6	2.5	4.5
Concurrent Sessions (M)	1.2	1.4	1.2	1.4	3.3 ¹	4 ¹	5 ¹	6 ¹
Network								
10/100/1000Base-T Ports (Def/Max)	8/12	16/24	8/12	16/24	8/16	16/32	8/16	16/32
10/100/1000Base-S SFP Ports (Def/Max)	0/4	0/8	0/4	0/8	0/4	0/8	0/4	0/8
10/100/1000Base-F SFP+ Ports (Def/Max)	N/A	N/A	N/A	N/A	0/2	0/4	0/4	0/8
Expansion Slots	1	2	1	2	1	2	1	2
Additional Features								
Software Edition	R75.40VS and later							
R67 VSX Option	No	No	No	No	No	No	Yes	Yes
Virtual Systems (Included/Maximum)	5/10	5/10	5/10	5/10	10/25	10/25	10/50	10/50
Physical								
Enclosure	1U	2U	1U	2U	1U	2U	1U	2U
Weight (lb.)	16.5	33.1	16.5	33.1	16.8	33.5	16.8	33.5
Power								
Dual, Hot-Swap PSU	No	No	No	No	Optional	Optional	Yes	Yes
Power Input	110-240VAC, 47-63Hz							
Max power Consumption (W)	90	180	90	180	140	280	121	242
DC Power Option ²	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Software Blades								
Included Software Blades	Firewall, VPN, Identity Awareness, Advanced Networking & Clustering, Mobile Access, IPS and Application Control							

¹ With memory upgrade and GAiA OS

² Via a Solution Center Request


VIRTUAL SYSTEMS APPLIANCES (Continued)

	12400 Single Unit	12400 VSLs	12600 Single Unit	12600 VSLs	21400 Single Unit	21400 VSLs	21600 Single Unit	21600 VSLs	21700 Single Unit	21700 VSLs
Performance										
Firewall Throughput (Gbps)	25	45	30	54	50	90	75	135	78	141
VPN Throughput (Gbps)	3.5	6	6	10.5	7	12.5	8.5	15	11	27
Concurrent Sessions (M)	5 ¹	6 ¹	5 ¹	6 ¹	10 ¹	12 ¹	13 ¹	15.6 ¹	13 ¹	15.6 ¹
Network										
10/100/1000Base-T Ports (Def/Max)	10/26	20/52	14/26	28/52	13/37	26/74	13/37	26/74	13/37	26/74
10/100/1000Base-S SFP Ports (Def/Max)	0/12	0/24	0/12	0/24	0/36	0/72	0/36	0/72	0/36	0/72
10/100/1000Base-F SFP+ Ports (Def/Max)	0/12	0/24	0/12	0/24	0/12	0/24	0/13	0/26	0/13	0/26
Expansion Slots	3	6	3	6	3	6	3	6	3	6
Additional Features										
Software Edition	R75.40VS and later									
R67 VSX Option	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Virtual Systems (Included/Maximum)	10/75	10/75	20/150	20/150	20/250	20/250	20/250	20/250	20/250	20/250
Physical										
Enclosure	2U	4U	2U	4U	2U	4U	2U	4U	2U	4U
Weight (lb.)	51.6	103.2	51.6	103.2	57.4	114.8	57.4	114.8	57.4	114.8
Power										
Dual, Hot-Swap PSU	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power Input	110-240VAC, 47-63Hz									
Max power Consumption (W)	132	264	220	440	449	898	449	898	489W	978W
DC Power Option ²	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Software Blades										
Included Software Blades	Firewall, VPN, Identity Awareness, Advanced Networking & Clustering, Mobile Access, IPS and Application Control									

¹ With memory upgrade and GAIA OS

² Via a Solution Center Request

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