Check Point®
SOFTWARE TECHNOLOGIES LTD.

VPN-1 Power VSX

Virtualized security with unmatched manageability for service providers

YOUR CHALLENGE

Today's service providers need to secure high-speed, mission-critical data centers or point-of-presence (POP) networks that consist of a number of smaller customer networks that require separate security protection. Typically, separate firewall, VPN, and attack-protection devices are deployed on each network segment. However, implementing and maintaining large numbers of separate security solutions is expensive and time consuming. Service providers are faced with the need to continually deploy security for new customers and manage a growing number of security devices for existing customers. In addition, service providers need to keep customer networks and data segregated within their own infrastructure, but at the same time service providers require a solution that allows them to centrally manage these networks efficiently and cost effectively.

OUR SOLUTION

VPN-1® Power VSX™ is a high-speed, multipolicy virtualized security solution designed for large-scale environments like data centers and POP networks. Based on the proven security of VPN-1® Power, VPN-1 Power VSX provides comprehensive protection to multiple networks within complex infrastructures, securely connects them to shared resources like the Internet and DMZs, and allows each of them to interact with each other safely, while providing centralized management. The VPN-1 Power VSX gateway enables organizations to create an advanced, virtual network of routers, switches, and VPN-1 gateways utilizing a single piece of hardware. This reduces the hardware investment and physical space needed to achieve security across the entire network by replacing and consolidating physical security and network devices. Only VPN-1 Power VSX provides a platform for highly scalable, virtualized network and security services that is easy to deploy and manage.

VPN-1 Power VSX is supported by SmartDefense™ Services, which maintain the most current preemptive security of the Check Point security infrastructure. To help you stay ahead of new threats and attacks, SmartDefense Services provide real-time updates and configuration advisories for defenses and security policies.

SCALABLE VIRTUALIZED ARCHITECTURE

VPN-1 Power VSX is composed of multiple virtualized security systems, each of which is a complete virtualized version of the market-leading VPN-1 gateway. Multiple virtual systems may be associated with a single physical interface on the gateway but remain completely separated from other virtual systems, maintaining a completely secure and private network environment. Up to 250 virtual systems can be deployed on a single VPN-1 Power VSX installation, providing a highly scalable virtual platform while reducing incremental hardware investment and space requirements.

PRODUCT DESCRIPTION

VPN-1® Power VSX™ is a virtualized security gateway that allows managed service providers to create up to 250 virtual systems—firewall, VPN, and intrusion prevention functionality within a virtual network environment—on a single hardware platform.
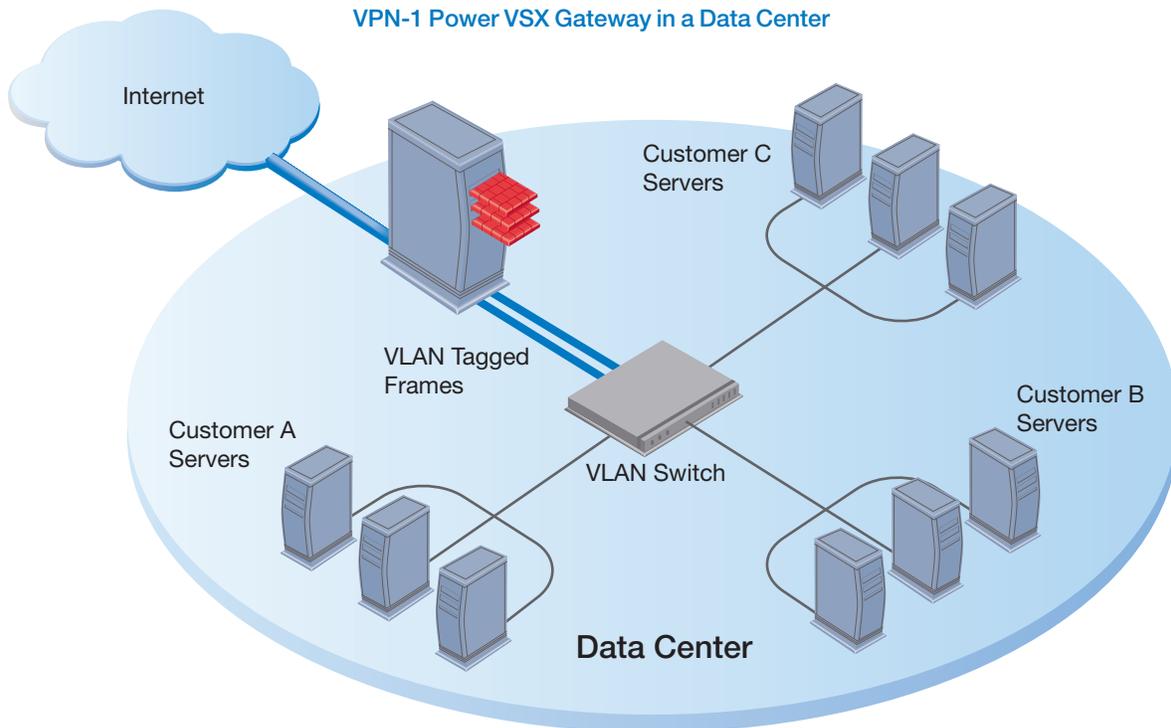
PRODUCT FEATURES

- Virtualized security, including firewall, VPN, and intrusion prevention
- Virtualized network environment
- Support for virtual systems in bridge mode to create transparent firewalls
- Clustering and wire-speed security for gigabit networks

PRODUCT BENEFITS

- Minimizes hardware investment
- Improves management efficiency
- Provides carrier-class availability and scalability
- Reduces physical space requirements
- Protects against new threats through SmartDefense Services

NGX™

The NGX platform delivers a unified security architecture for Check Point.

VPN-1 Power VSX Gateway in a Data Center

Internet

Customer C
Servers

VLAN Tagged
Frames

Customer A
Servers

VLAN Switch

Customer B
Servers

Data Center

VPN-1 Power VSX is a high-speed virtualized security solution designed for large-scale environments like data centers.

Virtualized network connectivity

VPN-1 Power VSX supports the creation of virtualized network components including routers, switches, cables, and routing protocols, providing complete control of the setup and configuration of the virtual network environment. With access to a virtualized network environment, service provider administrators can create virtualized implementations of familiar physical topologies and designs. In addition, VPN-1 Power VSX has the ability to host virtual systems running in either router or bridge mode. The ability to deploy virtual systems in bridge mode allows administrators to seamlessly add a virtual system to the network without reconfiguring network settings and topologies.
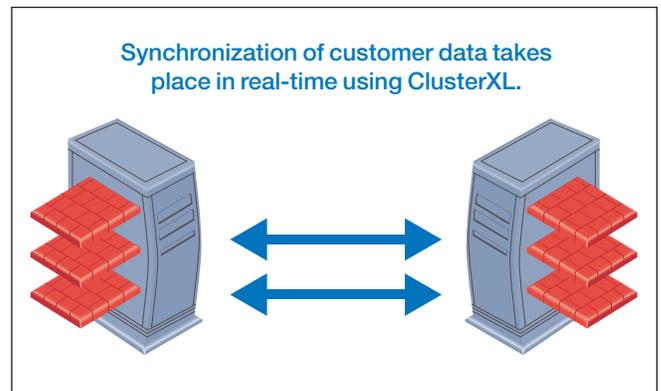
Wire-speed security

High-bandwidth service provider networks require high-performance gateways in order to support thousands of applications and users. To provide world-class security at wire speed, VPN-1 Power VSX can be deployed on multiple carrier-class platforms using Check Point's SecureXL™ performance technology, ensuring the delivery of secure, multigigabit throughput.

Nonstop security

Check Point's ClusterXL® technology enables service providers to configure VPN-1 Power VSX for nonstop security. As with clustering on a physical system, VPN-1 Power VSX clustering connects and synchronizes two or more VPN-1 Power VSX gateways so that if one fails another one immediately takes over its networking and security responsibilities. VPN-1 Power VSX provides seamless failover of connections and routing from one cluster member to another. It also includes graceful failover of VPN-1 Power VSX gateways in a dynamically routed environment to minimize network disruption. In bridge mode, individual virtual systems can failover to their virtual peers within the cluster. This level of high availability and resiliency promotes network-wide, nonstop, secure business operations at both the application and network levels.

Synchronization of customer data takes place in real-time using ClusterXL.

A cluster of VPN-1 Power VSX gateways delivers nonstop, wire-speed security.

Unparalleled protection

Enabling security for a wide range of network demands, VPN-1 Power VSX supports more than 150 predefined applications, services, and protocols out-of-the-box, as well as instant messaging, peer-to-peer applications, and VoIP.

In addition, VPN-1 Power VSX includes the same proven Check Point security technologies utilized in VPN-1 Power including Application Intelligence™ and SmartDefense, along with the ability to receive constant updates and protections from emerging threats with SmartDefense Services.

Secure remote access

Every service provider has a unique blend of requirements for remote access, depending on the needs of its customers, including the mix of applications to be accessed and the level of endpoint security and management control demanded. With the integrated VPN features of VPN-1 Power, VPN-1 Power VSX provides remote access flexibility, supporting multiple client options. Its SecuRemote® feature provides basic connectivity that is easy for the user requiring occasional remote access to IP applications. And VPN-1 Power VSX's SecureClient™ functionality provides a higher level of security by adding a centrally managed personal firewall.

These capabilities allow secure remote access to be made an integrated part of the overall security policy in a VLAN environment. All elements of the security policy, including access control, attack protection, and user authentication, are strictly enforced, ensuring the highest levels of security down to the remote user level.

EASY, EFFICIENT, CENTRALIZED ENTERPRISE MANAGEMENT

VPN-1 Power VSX is managed with Check Point's SmartCenter™ and Provider-1® management solutions. Both provide powerful tools for centrally configuring, managing, and monitoring multiple VPN-1 Power VSX gateways, virtual systems, and physical VPN-1 gateways. Based on Check Point's Security Management Architecture (SMART), these solutions deliver the flexibility of choosing the appropriate management solution based on their network requirements. Check Point's One-Click VPN technology also enables virtual systems to be added seamlessly to a VPN community. The new virtual system automatically inherits the appropriate properties and can immediately establish secure sessions with all other VPN community members within the enterprise network. Additional tools such as virtual system creation wizards and templates further streamline the process of deploying and configuring VPN-1 Power VSX.

VPN-1 Power VSX provides administrative controls that maximize the efficiency of its hardware platform. Resource controls ensure that the consumption of CPU resources by each virtual system is optimal for overall network security. They can limit the CPU time available to a lower-priority virtual system and assign more capacity to mission-critical virtual systems.

VPN-1 Power VSX Deployment — MSP Network
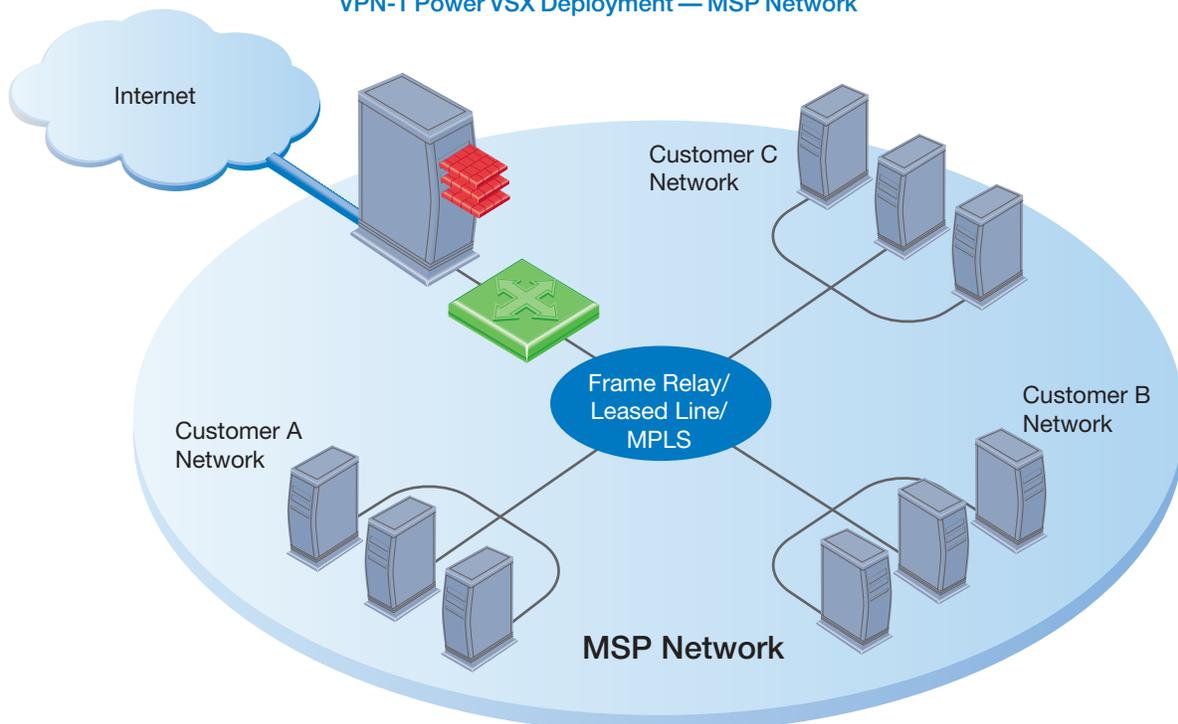
Managed service providers can use VPN-1 Power VSX to deploy security efficiently for new customers and manage growing security needs for existing customers.

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Lightweight Quality of Service enforcement provides the ability to assign optimal transmission characteristics to different classes of traffic. This reduces the need to build out costly network infrastructure while minimizing any congestion at the VPN-1 Power VSX gateway.

CUSTOMER-TO-CUSTOMER SECURE CONNECTIVITY

Secure customer-to-customer connectivity enables multiple virtual systems to be connected to shared resources like the Internet or to each other to enable secure communications between customer LAN segments.

OVERLAPPING IP SPACE SUPPORT

Some service providers may need to protect several customer networks that use the same local IP addressing scheme. VPN-1 Power VSX gateways support network address translation, enabling mapping of local IP addresses to one or more global external IP addresses. With this feature, service providers will not need to disrupt their customers' existing IP network.

SYSTEM REQUIREMENTS	
Platforms	Check Point SecurePlatform™, Crossbeam X Series, IBM BladeCenter (firewall module only)
Processor	Intel Pentium II 1GHz-plus or equivalent processor
Disk space	4 GB
Memory	256 MB
Network interfaces	Three minimum (four for a VPN-1 Power VSX cluster)
SmartDashboard™ platforms	Windows 2000/2003/XP/ME/98
Disk space	100 MB
Memory	256 MB
Remote access client platforms	Windows 2000/XP/2003, Macintosh, Linux
Disk space	20 MB
Memory	64 MB

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