Check Point
SOFTWARE TECHNOLOGIES LTD.

SOFTWARE BLADE ARCHITECTURE

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2015

TODAY'S SECURITY CHALLENGE

Protecting enterprises against today's constantly evolving threat environment has never been more challenging. Infrastructure, connectivity and performance requirements keep growing. New and varied threats are leading to more security vendors, point products and complexity, while IT teams are under increasing pressure to reduce costs and complexity, and do more with existing hardware and resources. The combination of these challenges has lead to ineffective approaches that are increasingly inefficient, costly and unsustainable.

As a result, organizations and IT teams are looking for a better solution—one that is more simple, flexible and secures the entire enterprise. This includes the freedom to add critical protection at the network or endpoint as needed, without worrying about performance, availability or forklift upgrades. It also means the ability to invest in security only as you need it, without having to introduce yet another security vendor, endpoint agent, or point appliance.

CHECK POINT 3D SECURITY

Check Point 3D Security redefines security as a 3-dimensional business process that combines policies, people and enforcement for stronger protection across all layers of security—including network, data and endpoints. To achieve the level of protection needed in the 21st century, security needs to grow from a collection of disparate technologies to an effective business process. With 3D Security, organizations can now implement a blueprint for security that goes beyond technology to ensure the integrity of all information security.

Check Point 3D Security enables organizations to redefine security by integrating the three dimensions shown in the graphic below into a business process.

CHECK POINT SOFTWARE BLADE ARCHITECTURE

As a key tool in creating true 3D Security, the Check Point Software Blade Architecture™ allows companies to enforce security policies while helping to educate users on those policies. The Software Blade architecture is the first and only security architecture that delivers total, flexible and manageable security to companies of any size.

WHAT IS A SOFTWARE BLADE?

A Software Blade is a security application or module such as a firewall, Virtual Private Network (VPN), Intrusion Prevention System (IPS), or Application Control to name a few, that is independent, modular and centrally managed. They allow organizations to customize a security configuration that targets the right mix of protection and investment. Software Blades can be quickly enabled and configured on any gateway or management system with a simple click of a mouse—no hardware, firmware or driver upgrades required. And as needs evolve, additional Software Blades can be easily activated to extend security to an existing configuration on the same security hardware.

ALL INCLUSIVE SECURITY PACKAGES

To address evolving security needs, Check Point offers Next Generation Security packages of Software Blades focused on specific customer requirements. Advanced Zero-Day Threat Prevention, Data Protection, Web Security and Next Generation Firewall technologies are key foundations for a robust 3D Security blueprint.

CHECK POINT 3D SECURITY

Policy

Policies that support business needs and transform security into a business process

People

Security that involves people in policy definition, education and incident remediation

Enforcement

Enforce, consolidate and control all layers of security—network, data, application, content and user

CHECK POINT SOFTWARE BLADES – KEY BENEFITS

BETTER SECURITY

A multi-layered solution and consolidated platform for enterprise security exercises a unique combination of integrated network and endpoint security, combined with the industry's most comprehensive anti-malware threat protection.

SIMPLICITY

Easy administration, total flexibility and simple security activation eliminates complexity and makes security easier to operate and manage.

MANAGEABILITY

One-click activation enables fast deployment of security services. Centralized Software Blade management increases productivity and efficiency.

TOTAL SECURITY

A comprehensive library of over thirty Software Blades delivers unrivaled security integration to allow the right level of security at all layers of the network.

LOWER TCO

Delivers better security, hardware extensibility and consolidation, while lowering TCO by up to 50% compared to traditional multi-vendor solutions.

MAXIMIZE PERFORMANCE

A complete range of performance options from 190 Megabits per second up to 1 Terabit per second ready appliances. Allows for provisioning of resources that maximizes service levels.

LOWER CARBON FOOTPRINT

Deliver green IT savings by allowing the consolidation of multiple point solutions into one integrated gateway that reduces rack space, cooling, cabling and power.

EXTEND YOUR SECURITY SOLUTION WITH A CLICK OF A MOUSE. EASILY ADD NEW SECURITY SOFTWARE BLADES WITH CHECK POINT'S FLEXIBLE, EASY-TO-USE MANAGEMENT CONSOLE.

ALL-INCLUSIVE SOFTWARE BLADE PACKAGES

Check Point offers five Software Blade packages for a complete and consolidated security solution for today's next generation needs. Choose one of the five Next Generation Software Blade Packages which are available on Check Point Appliances and open servers.

Next Generation Firewall: Networks and network access are changing. That's why the next generation firewall includes advanced technologies such as IPS, identity awareness and application control, as well as stateful firewall, to ensure only the traffic and applications you want get into your network.

Next Generation Threat Prevention (NGTP): Organizational threats no longer come in a single form. Multi-vector attacks are more common than ever and multiple technologies are needed to protect companies from those attacks. A multi-layered threat prevention strategy to defend against each threat vector must be put into place. Check Point combines these multiple technologies in the Next Generation Threat Prevention package protecting from Bots, eavesdropping, vulnerabilities, phishing, malware, and spam.

Next Generation Threat Extraction (NGTX): The new face of malware is fast and stealthy thanks to obfuscation tools that help attacks slip past the most sophisticated anti-malware solutions. Next Generation Threat Extraction combines the NGTP package set with CPU-level and OS-level sandbox capabilities to detect and block malware. While the file is run in a sandbox threat extraction reconstructs incoming documents to deliver zero malware documents in zero seconds.
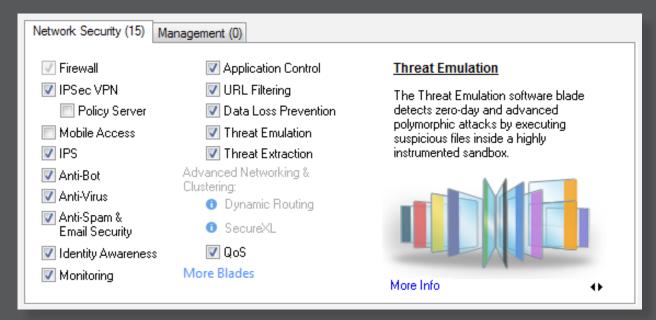
Secure Web Gateway (SWG): Embracing the current shift from simple URL filtering to comprehensive malware protection, the Check Point Next Generation Secure Web Gateway provides an intuitive solution that enables secure use of Web 2.0 with real time multi-layered protection against web-borne malware, largest application control coverage in the industry, intuitive centralized management, and essential end-user education functionality.

Next Generation Data Protection (NGDP): Data Protection solutions must encompass all facets of protecting content from getting into the wrong hands. Multiple technologies such as Data Loss Prevention (DLP), IPS, and Application Control must be used to ensure all potential data leaks are sealed. Check Point combines these technologies into a complete solution protecting against confidential data inadvertently leaving the organization.

HOW ARE CHECK POINT SOFTWARE BLADES DEPLOYED?

Software Blades can be deployed on Check Point appliances and open servers. New Software Blades can be easily added to your existing hardware platform by simply "turning on" their functionality in the Check Point centralized, easy-to-use management console. No additional hardware, firmware or drivers are necessary. This enables organizations to deploy security dynamically—as needed—with lower total cost of deployment.

Check Point Security Gateway SmartDashboard
The Firewall Software Blade is always included

PROTECT YOUR NETWORK FROM THREATS WITH A MULTI-LAYERED SECURITY APPROACH.

SELECT A GATEWAY SOLUTION THAT CAN GROW WITH YOUR BUSINESS

The **Check Point Firewall Software Blade** builds on the award-winning technology first offered in Check Point's FireWall-1 solution to provide the industry's strongest level of gateway security and identity awareness. Check Point's firewalls are trusted by 100% of the Fortune 100 and deployed by over 170,000 customers, and have demonstrated industry leadership and continued innovation since the introduction of FireWall-1 in 1994.

The **Check Point IPsec VPN Software Blade** provides secure connectivity to corporate networks for remote and mobile users, branch offices and business partners. The Software Blade integrates access control, authentication and encryption to guarantee the security of network connections over the public Internet.

The **Check Point Mobile Access Software Blade** provides simple and secure remote access to corporate applications over the Internet, via smartphones, tablets or laptops. The solution provides enterprise-grade remote access via SSL VPN for simple, safe and secure mobile connectivity to email, calendars, contacts and corporate applications.

The **Check Point Intrusion Prevention System (IPS) Software Blade** combines industry-leading IPS protection with breakthrough performance at a lower cost than traditional, stand-alone IPS solutions. The IPS Software Blade delivers complete and proactive intrusion prevention—all with the deployment and management advantages of a unified and extensible next-generation firewall solution.

The **Check Point Application Control Software Blade** provides the industry's strongest application security and identity control to organizations of all sizes. It enables IT teams to easily create granular policies—based on users or groups—to identify, block or limit usage of over 250,000 Web 2.0 applications and widgets.

The **Check Point Identity Awareness Software Blade** provides granular visibility of users, groups and machines, providing unmatched application and access control through the creation of accurate, identity-based policies. Centralized management and monitoring allows for policies to be managed from a single, unified console.

The **Check Point DLP Software Blade** combines technology and processes to revolutionize Data Loss Prevention (DLP), helping businesses to pre-emptively protect sensitive information from unintentional loss, educating users on proper data handling policies and empowering them to remediate incidents in real-time.

The **Check Point URL Filtering Software Blade** integrates with Application Control, allowing unified enforcement and management of all aspects of Web security. URL Filtering provides optimized Web security through full integration in the gateway to prevent bypass through external proxies; integration of policy enforcement with Application Control for full Web and Web 2.0 protection; and UserCheck empowers and educates users on Web usage policy in real time.

The **Check Point Anti-Bot Software Blade** detects bot-infected machines, prevents bot damages by blocking bot C&C communications, and is continually updated from ThreatCloud™, the first collaborative network to fight cybercrime.

GATEWAY SOFTWARE BLADES (CONTINUED)

The **Check Point Threat Emulation** prevents attacks from zero-day and undiscovered threats. The technology protects against vulnerabilities and malware variants in email attachments and file downloads by discovering malicious activity using advanced behavioral analysis of threats in virtual environments.

The **Check Point Threat Extraction Software Blade** eliminates malware contained in emailed and web-downloaded documents. Exploitable content including active content and various embedded objects are removed and files are reconstructed using known safe elements. Reconstructed files eliminate potential threats while providing zero malware documents with no delays.

The enhanced **Check Point Antivirus Software Blade** stops incoming malicious files. Using real-time virus signatures and anomaly-based protections from ThreatCloud™, the first collaborative network to fight cybercrime, the Antivirus Software Blade detects and blocks malware at the gateway before the user is affected.

The **Check Point Anti-Spam and Email Security Software Blade** provides comprehensive protection for an organization's messaging infrastructure. A multidimensional approach protects the email infrastructure, provides highly accurate spam protection, and defends organizations from a wide variety of virus and malware threats delivered within email. Continual updates assure that all threats are intercepted before they spread.

The **Check Point Advanced Networking and Clustering Software Blade** simplifies network security deployment and management within complex and highly utilized networks, while maximizing network performance and security in multi-Gbps environments. This blade is a combination of the Check Point Acceleration and Clustering Software Blade and the Advanced Networking Software Blade, which is ideal for high-end enterprise and datacenter environments where performance and availability are critical.

MANAGEMENT SOFTWARE BLADES

The **Check Point Network Policy Management Software Blade** provides comprehensive, centralized network security policy management for Check Point gateways and Software Blades, via SmartDashboard—a single, unified console that provides control over the most complex security deployments.

The **Check Point Endpoint Policy Management Software Blade** simplifies endpoint security management by unifying all endpoint security capabilities for PC & Mac in a single console. Monitor, manage, educate and enforce policy, from an at-a-glance dashboard down to user and machine details, all with a few clicks.

The **Check Point Next-Generation SmartEvent Software Blade** consolidates monitoring, logging, reporting and event analysis in a single console—to bring you comprehensive, easy-to-understand threat visibility. So, rather than drown in the deluge of data, your security team can focus their efforts on the critical threats.

The **Check Point Logging and Status Software Blade** transforms data into security intelligence with SmartLog, an advanced log analyzer that delivers split-second search results providing real-time visibility into billions of log records over multiple time periods and domains.

The **Check Point Compliance Software Blade** provides an integrated and fully automated security and compliance monitoring solution. The Compliance Software Blade enables continuous monitoring, strengthens regulatory compliance, maintains secure policy, and reduces audit time & costs.

The **Check Point SmartWorkflow Software Blade** provides a seamless and automated process for policy change management that helps administrators reduce errors and enhance compliance. Enforce a formal process for editing, reviewing, approving and auditing policy changes from a single console, for one-stop, total policy lifecycle management.

The **Check Point SmartProvisioning Software Blade** provides centralized administration and security provisioning of Check Point devices. Using profiles, administrators can automate device configuration and easily roll out changes to settings to multiple, geographically distributed devices, via a single security management console.

The **Check Point Monitoring Software Blade** presents a complete picture of network and security performance, enabling fast responses to changes in traffic patterns or security events. The Software Blade centrally monitors Check Point devices and alerts to changes to gateways, endpoints, tunnels, remote users and security activities.

The **Check Point Management Portal Software Blade** allows browser-based security management access to outside groups such as support staff or auditors, while maintaining centralized control of policy enforcement. View security policies, the status of all Check Point products and administrator activity as well as edit, create and modify internal users.

The **Check Point User Directory Software Blade** leverages LDAP servers to obtain identification and security information about network users, eliminating the risks associated with manually maintaining and synchronizing redundant data stores, and enabling centralized user management throughout the enterprise.

ENDPOINT SOFTWARE BLADES

The **Check Point Firewall & Compliance Check Software Blade** protects endpoints by controlling inbound and outbound traffic and ensuring policy compliance, with centralized management from a single console. Definable zones and security levels protect endpoint systems from unauthorized access. Integrated stealth technology makes endpoints invisible to attackers. This software blade is easily managed by unified Endpoint Security Management.

The **Check Point Full Disk Encryption Software Blade** provides automatic security for all information on endpoint hard drives, including user data, operating system files and temporary and erased files. For maximum data protection, multi-factor pre-boot authentication ensures user identity, while encryption prevents data loss from theft.

The **Check Point Media Encryption Software Blade** provides centrally-enforceable encryption of removable storage media such as USB flash drives, backup hard drives, CDs and DVDs, for maximum data protection. Port control enables management of all endpoint ports, plus centralized logging of port activity for auditing and compliance.

The **Check Point Remote Access VPN Software Blade** provides users with secure, seamless access to corporate networks and resources when traveling or working remotely. Privacy and integrity of sensitive information is ensured through multi-factor authentication, endpoint system compliance scanning and encryption of all transmitted data.

The **Check Point Anti-Malware & Application Control Software Blade** efficiently detects and removes malware from endpoints with a single scan. Viruses, spyware, keystroke loggers, Trojans and rootkits are identified using signatures, behavior blockers and heuristic analysis. Application control allows only approved programs to run on the endpoint. This software blade is easily managed by unified Endpoint Security Management.

The **Check Point Endpoint Threat Forensics Software Blade** identifies and mitigates threats before significant damage is done by monitoring files and the registry for suspicious processes and network activity.

Check Point Endpoint Anti-Bot Software Blade prevents damage at the endpoint by blocking bot communication to Command & Control (C&C) sites, securing sensitive information from being stolen or sent out of the organization.

Check Point Endpoint URL Filtering Software Blade gives users a safer web experience by controlling access to web sites by category, user, or group.

CENTRALLY MANAGED, COMPREHENSIVE ENDPOINT SECURITY WITH TRANSPARENT END-USER EXPERIENCE.

Contact Check Point now to discuss
Check Point Software Blade Architecture:

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1-650-628-2000

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