As more applications move to the cloud, business users increasingly rely on these applications to do their jobs. From virtual meetings to file-sharing to collaboration through tools like Skype, Slack, and Office 365, including voice and video traffic, they require consistent, high-quality bandwidth, all the time. For IT organizations that are managing remote and branch offices, it can be a challenge to accommodate these needs in a way that’s efficient, secure, and cost effective. For branch office users who are consuming more Wide-Area Network (WAN) bandwidth than ever, the user experience is often suboptimal. Traditional WAN architectures weren’t designed to support cloud and SaaS applications. WAN traffic is carried through expensive leased lines that drive up costs or unreliable public Internet lines that frustrate end users.

CHECK POINT VMWARE SD-WAN SOLUTION

Now there’s a better option. Software-Defined WAN (SD-WAN) enables enterprises to support application growth and simplify branch operations while streamlining access to cloud services and private data centers over both ordinary broadband Internet and private links, regardless of the transport mechanism. SD-WAN is critical for today’s hybrid cloud environments because it brings enterprise-level manageability, performance, and reliability across branch offices.

Private links backhauled to the data center can be secured in a hub and spoke model, but the local Internet breakout to the cloud is susceptible to cyber-attacks. Check Point secures these links with the same advanced threat prevention available in Check Point on-premises security gateways. Together VMware SD-WAN™ by VeloCloud® and Check Point jointly assure the performance and security of enterprise and cloud applications over the Internet and hybrid-WAN while dramatically simplifying deployments and reducing costs.

VMWARE SD-WAN BY VELOCLOUD

VMware SD-WAN by VeloCloud is an overlay solution between VMware SD-WAN Edge devices in distributed sites or data centers and cloud-hosted VMware SD-WAN Gateways. The overlay is independent of physical transport and providers, enabling unified control and visibility, business-level abstraction and incremental migration.

Key Benefits:

- **Assured application performance**: VMware SD-WAN Dynamic Multipath Optimization™ (DMPO) with application-aware, per-packet steering and on-demand remediation assures transport-independent performance for demanding, real-time applications.

- **Simplified WAN via business policy automation**: VMware SD-WAN can be deployed as zero-touch appliances, virtual appliances, or hosted as multi-tenant services platforms. Business-level policies enable one-click, policy-based service chaining of traffic, e.g. Check Point firewall insertion, to enterprise service hubs on the branch edge or in the cloud.
• **Managed cloud on-ramp**: VMware SD-WAN’s system of cloud gateways uniquely provides a managed cloud onramp. Unlike “best effort” direct branch-to-cloud alternatives, the full capabilities of VMware SD-WAN are deployed at the doorstep of cloud applications and provide optimized and secure connectivity to SaaS, IaaS and network or cloud security services.

**CHECK POINT INTEGRATED ADVANCED THREAT PREVENTION**

Check Point provides organizations of all sizes with integrated, advanced threat prevention, reducing complexity and lowering the total cost of ownership. Check Point protects SaaS, IaaS and now branch office assets from sophisticated threats with dynamic scalability, intelligent provisioning and consistent control across physical and virtual networks.

Unlike other solutions that only detect threats, Check Point also prevents threats. Check Point SandBlast Zero-Day Protection is a cloud-based sandboxing technology where files are quickly quarantined and inspected, running in a virtual sandbox to discover malicious behavior before they enter the network. SandBlast detects malware at the exploit phase, even before hackers can apply evasion techniques attempting to bypass the sandbox. This innovative solution combines cloud-based CPU-level inspection and OS-level sandboxing to prevent infection from the most dangerous exploits, and zero-day and targeted attacks.

The Check Point solution also includes IPS, Ant-Bot, and Antivirus to protect from known threats, Application Control and URL Filtering to enforce safe web use, and HTTPS inspection to prevent threats inside encrypted HTTPS channels.

Furthermore, Check Point is a fully consolidated and connected cyber security architecture protecting on premises, cloud and branch networks as well as endpoint and mobile devices from Advanced Persistent Threats. Threats identified on one device can be automatically propagated as an IoC (Indicator of Compromise) to protect branch, mobile and cloud-based assets from the same zero-day threat.
SD-WAN ENABLED NETWORK SECURITY SERVICE

Large organizations with thousands of small, geographically dispersed remote offices are faced with the challenge of securing their corporate network from attacks and monitoring/managing these offices in a simplified manner. They need to provide the same level of protection across all offices irrespective of whether they are inside or outside the confines of the corporate network perimeter. A cost-effective, easy to maintain solution that is always up to date with the latest security is needed.

Small Branch Office Solution

Branches and remote offices of an organization can benefit from the optimized connectivity offered by VMware SD-WAN from the remote site all the way to the VMware SD-WAN Gateways. VMware SD-WAN Gateways connect remote offices to the Check Point CloudGuard Connect, where they are able to leverage Check Point’s advanced threat prevention as a cloud-hosted service, protecting the network and their users from known and unknown threats. Network administrators can easily monitor and manage these sites from a central VMware SD-WAN Orchestrator.

CloudGuard Connect doesn’t burden IT staff with deploying or maintaining dedicated hardware and supports adding advanced threat prevention capabilities on top of existing VMware SD-WAN Edge deployments. With a simple and easy setup process, network traffic from the VMware SD-WAN Edge device is connected over a low latency GRE or IPsec tunnel to a primary cloud-hosted network security service at a near-by location.

A second connection provides redundancy. With cloud-hosted security, hardware or software updates are completely transparent, providing maintenance-free security for hundreds and thousands of physical devices, reducing overall CAPEX and OPEX costs.

Simplified central management provides an intuitive, simple on-boarding process, security policy configuration and monitoring. Powered by Check Point SmartEvent Security Operations Center (SOC) staff see the most important threats with a single view across the entire infrastructure. Take control of security events with real-time forensic and event investigation, compliance and reporting. Respond to security incidents immediately, reducing the time spent remediating incidents.

The Cloud Connection

VMware improves application performance by bringing users closer to the cloud with cloud-hosted VMware SD-WAN gateways. This also simplifies the Check Point CloudGuard Connect configuration where the packets flow from branch to VMware SD-WAN Gateway to Check Point CloudGuard Connect. In the Check Point web portal, administrators create just two VMware SD-WAN Gateway site objects instead of creating one site per branch. The close proximity of the cloud hosted VMware SD-WAN Gateways and CloudGuard Connect guarantees high bandwidth.
CHECK POINT CLOUDGUARD EDGE ON VMWARE SD-WAN SERVICES PLATFORM

Many customers prefer to have control of their data or must comply with regulations such as GDPR. Check Point CloudGuard Edge virtual machine (VM) on the VMware SD-WAN Edge provides customers with granular control of their security and data.

Service Providers and large enterprise customers can easily deploy CloudGuard Edge and manage security from corporate headquarters. Deploying a distributed firewall on SD-WAN CPE (Customer Premise Equipment) with the click of a button avoids truck rolls, costs and the inflexibility associated with a stack of physical appliances.

CloudGuard Edge is a lightweight virtual image of the Check Point Branch Office Security Gateway that has been available since 2013. The CloudGuard Edge small footprint requires only 1 GB of memory, 1 GB of disk storage and 1 CPU core.

One-click Provisioning

CloudGuard Edge security gateways are deployed with the click of a button in VMware SD-WAN Orchestrator. This tight integration reduces deployment time, effort, and costs. When CloudGuard Edge is deployed on VMware SD-WAN Edge devices, the virtual security gateway automatically powers up and is ready to be centrally managed and monitored by the customer’s Check Point Security Management. Power on the virtual security gateway to start protecting branch offices within a minute.

SUMMARY

Together, the integrated SD-WAN and Advanced Threat Prevention platform provides secure and optimized WAN connectivity over Internet links and hybrid WAN connections. By dramatically simplifying deployments and reducing costs, Check Point and VMware SD-WAN provide enterprises with an affordable and secure remote branch office security solution.

About Check Point

Check Point Software Technologies Ltd. is a leading provider of cyber security solutions to governments and corporate enterprises globally. Its solutions protect customers from cyber-attacks with an industry leading catch rate of malware, ransomware and other types of attacks. Check Point offers a multilevel security architecture that defends enterprises’ cloud, network and mobile device held information, plus the most comprehensive and intuitive one point of control security management system. Check Point protects over 100,000 organizations of all sizes. For more information, visit www.checkpoint.com.

About VMware SD-WAN by VeloCloud

VeloCloud, now part of VMware has been named a Leader in the 2018 Gartner Magic Quadrant for WAN Edge Infrastructure and placed furthest on Completeness of Vision. VMware SD-WAN™ by VeloCloud® simplifies branch WAN networking by automating deployment and improving performance over private, broadband Internet and LTE links for today’s increasingly distributed enterprises. VMware SD-WAN includes: a choice of public, private or hybrid cloud network for enterprise-grade connection to cloud and enterprise applications; branch office enterprise appliances and optional data center appliances; software-defined control and automation; and virtual services delivery. For more information, visit www.velocloud.com and follow the company on Twitter @VeloCloud.