PALO ALTO NETWORKS AND SILVER PEAK
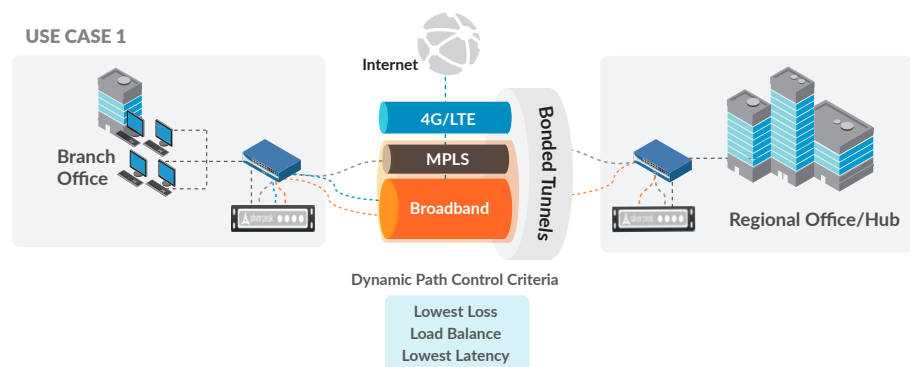
Software-Defined WAN

As the migration to cloud-hosted applications continues to accelerate, enterprise IT organizations must re-evaluate wide area networking requirements, including broadband connectivity options. Greater reliance on the internet, enabled by emerging software-defined WAN (SD-WAN) solutions, will redefine the economics of high-speed branch office connectivity. However, it also places demands on the need to segment and secure applications without compromise when utilizing broadband transport services. To reliably and securely incorporate broadband into the WAN transport mix, Palo Alto Networks® and Silver Peak™ Systems have partnered to protect branch offices from security threats when connecting users to applications, while keeping costs in check.

Highlights

- Easily and securely deploy new branch locations in minutes without disrupting current infrastructure

- Leverage lower-cost internet bandwidth without compromising on security

- Meet security and network needs for the branch office.

The Silver Peak Unity EdgeConnect SD-WAN solution enables geographically distributed enterprises to create secure and reliable virtual overlays to connect users to applications. These overlays have the flexibility to use any combination of underlying transport technologies without compromising network or application performance. By empowering customers to use broadband connections, Silver Peak EdgeConnect significantly reduces capital and operational expenses, enhances business agility and responsiveness, and accelerates time to value for new application deployments.

The Palo Alto Networks Next-Generation Security Platform was built from the ground up to safely enable applications and prevent known and unknown threats across the network, cloud and endpoints. Combined with Silver Peak EdgeConnect, the joint solution provides security for the branch office while addressing the networking needs of modern, dynamic, internet-based enterprise environments.

USE CASE #1: Branch office security with on-premises firewall and SD-WAN physical appliances.
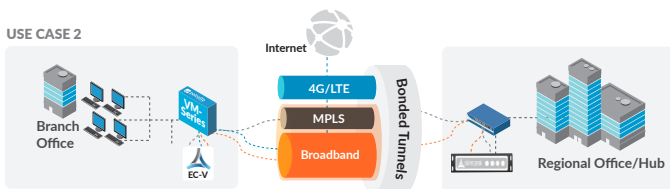
Challenge

Enable direct and secure hand-off of internet traffic from the branch.

Solution

Through the use of static route policies, the Silver Peak EdgeConnect SD-WAN solution automatically forwards all public internet traffic to a co-located Palo Alto Networks Next-Generation Firewall appliance.

Additional Benefits

By eliminating the backhaul of public internet traffic, direct hand-off conserves WAN bandwidth and expense, and improves application performance and SLAs to deliver a superior edge-to-edge user experience. Silver Peak EdgeConnect enables dynamic path control, traffic segmentation over secure branch-to-branch overlays, path conditioning, and WAN optimization in a single integrated solution. Co-location of the physical firewall at the branch enables secure hosting of services from the branch firewall DMZ.

USE CASE #2: Small branch office security integrating Silver Peak EdgeConnect virtual appliances with Palo Alto Networks VM-Series firewall on a virtualized/universal CPE.
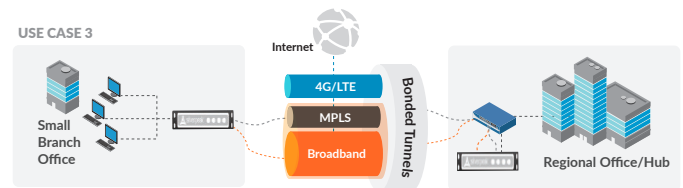
Challenge

Enable quick and easy deployment of secure branch access – particularly in smaller offices – where IT has neither the on-premises staff nor the resources to deploy dedicated physical appliances for security and WAN network functions.

Solution

Deploy virtual instances of the Silver Peak EdgeConnect SD-WAN solution and the Palo Alto Networks Next-Generation Firewall on white box server hardware using industry-standard virtualization software (ESXi™, Hyper-V®, KVM). Use policy-based and the hypervisor vSwitch to service chain all public internet traffic to the Palo Alto Networks virtual firewall.

Additional Benefits

Many IT planners will find that they can deploy this solution utilizing the server infrastructure that's already in place in the branch office, eliminating the requirement for incremental hardware capex and ongoing management. Employing a true zero-touch provisioning model with management and administration of the security and SD-WAN virtual appliances centralized at headquarters, this architecture maximizes the return on investment for the solution.

USE CASE #3: Small branch office security via backhaul to the remote (hub) firewall.

Challenge

Enable secure internet services from small offices that cannot justify an on-premises firewall.

Solution

Utilizing the secure, policy-based virtual overlays of the EdgeConnect SD-WAN solution to backhaul public internet traffic to/from the small branch office and the firewall in the regional/hub office.

Additional Benefits

This architecture simplifies migration to a local firewall (physical or virtual), as necessary.

About Silver Peak

Silver Peak is the global leader in broadband and hybrid WAN solutions. Silver Peak offers a high-performance SD-WAN solution that provides secure and reliable virtual overlays to connect users to applications with the flexibility to use any combination of underlying transport without compromising application performance. This results in greater business agility and lower costs. 2,300 globally distributed enterprises have deployed Silver Peak broadband and hybrid WAN solutions across 80 countries.

Learn more at **www.silver-peak.com**.

About Palo Alto Networks

Palo Alto Networks is the next-generation security company, leading a new era in cybersecurity by safely enabling applications and preventing cyber breaches for tens of thousands of organizations worldwide. Built with an innovative approach and highly differentiated cyberthreat prevention capabilities, our game-changing security platform delivers security far superior to legacy or point products, safely enables daily business operations, and protects an organization's most valuable assets.

Find out more at **www.paloaltonetworks.com**.