Growing concern over the interception of Internet traffic by governmental agencies is driving enterprises to revisit how they secure storage replication and other essential applications between locations. Conventional site-to-site virtual private networks (VPNs) protect data in-flight, but require extensive networking expertise to configure and do not address the performance challenges of delivering applications over distance.

Silver Peak Accelerated IPSec

Silver Peak software provides immense value by combining the best of site-to-site IPSec VPN security and wide area network (WAN) acceleration. Accelerated IPSec secures and improves the performance of data movement between data centers, branch offices and the cloud. With accelerated IPSec, enterprises benefit from:

- **Enterprise class security** provided through AES-256 encryption and SHA-1 authentication.
- **Accelerated site-to-site performance** that is as much as 98x faster than conventional VPNs.
- **Significant capital savings** by avoiding the purchase of additional VPN hardware.
- **Easy deployment** requiring no networking expertise or painstaking tunnel configuration.
- **Instant access** by download from the Silver Peak software marketplace.

Accelerated IPSec is included in all Silver Peak virtual and hardware appliances, and has been proven across thousands customers deployments.

Use Cases

Organizations can use Silver Peak’s accelerated IPSec for the most important initiatives, including:

- **Offsite Data Replication** – Storage managers can now easily secure and accelerate replication workloads to a disaster recovery facility.
- **Site-to-Site Security** – Network managers can protect and accelerate any enterprise application running between locations.
- **Server Consolidation** – Server teams can consolidate critical resources into the data center, reducing operating and capital costs, without exposing the company to theft or loss of critical data.

“Creating the IPSec tunnels with Silver Peak was easier and faster than on a router. It also gave us features beyond just VPN, such as WAN acceleration and SSL decryption.”

— Steve Borba, network security engineer at Citizens Business Bank
**Accelerated IPSec: The Fast, Easy and Secure Way to Deliver Applications Site-to-Site**

**Deployment**

Silver Peak software sits on the edge of the network, running as a virtual appliance in a host or as a physical appliance. Site-to-site traffic is accelerated and secured with AES, 256-bit encryption. Configuration and management of the IPSec infrastructure is simplified by Silver Peak’s management interface.

**IPSec VPN: Now As Fast and as Secure as Your LAN**

Silver Peak solves performance challenges of IPSec, enabling your applications to perform as well across a long distance IPSec VPN as they do within the local office:

- **Bandwidth** – Data deduplication eliminates repetitive data from the WAN, improving bandwidth utilization, lowering bandwidth costs, and maximizing application performance.

- **Network Congestion** – Real-time techniques reduce or eliminate packet loss and out-of-order packets common to Internet VPNs. Dynamic Path Control capabilities then provide additional value by dynamically selecting the path the least congestion or loss between locations. Advanced Quality of Service and traffic-shaping techniques prioritize applications and guarantee available network resources.

- **Delay** – Protocol acceleration techniques enable TCP and CIFS file transfers to perform better over distance. Real-time intelligence allows Silver Peak to select the path between locations with the least delay.

- **Packet Fragmentation** – Auto-MTU algorithms automatically determine the maximum Message Transfer Unit (MTU) that can be used for a path, preventing packet fragmentation, which often undermines IPSec performance.

---

“Silver Peak not only saved us from having to purchase separate VPN hardware and network monitoring equipment, but configuring VPNs was so much simpler than on our routers. We could just point-and-click on a management screen.”

— David Cooper, VP of Information Systems at Charlotte Metro Federal Credit Union

---

Replication traffic is accelerated and encrypted between locations.