

## VENDOR PROFILE

### Silver Peak: WAN Application Delivery Vendor Profile

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#### IDC OPINION

Silver Peak is a participant in the WAN application delivery market. The total worldwide market for WAN application delivery will reach \$670 million in 2006. By 2011, the market will reach \$920 million. Key findings in this study include:

- Silver Peak is a new player in the WAN application delivery segment of the application networking market. With its new product introductions in 2006, the company is further expanding its WAN performance capabilities.
- Silver Peak's market strategy targets those organizations with higher-capacity WAN connectivity where one or more WAN connections are 45Mbps and above. These customers have applications such as datacenter replication, network backup, and a high concentration of "knowledge workers" who require larger-capacity WAN connectivity between offices.
- Silver Peak's three-part product strategy of providing scalability, security, and the ability to accelerate any IP-based application is helping the company succeed.

#### IN THIS VENDOR PROFILE

This IDC Vendor Profile provides an overview of Silver Peak. Silver Peak is one of the market participants in the WAN application delivery market. This document considers what Silver Peak's opportunities and challenges are as it and other vendors attempt to capture the market opportunity for application networking.

#### SITUATION OVERVIEW

Speed is increasingly more critical for IT managers as they look to share applications from datacenter to datacenter (such as replication) and between datacenters and branch offices. Enterprises require a solution that enables them to centralize control and management of servers and storage while delivering LAN-like application performance to distributed sites. This need has prompted a flurry of activity from WAN application delivery vendors, especially those focused on optimization, to create high-performing products with scalable architecture.

The WAN optimization and application networking market will continue to grow as the following trends encourage investments from both enterprise and service providers:

- ☒ Deployment of mission-critical Web applications
- ☒ Data replication and backup between the datacenter and branch offices
- ☒ Increased importance of disaster recovery and datacenter redundancy (high capacity, datacenter to datacenter interconnect)
- ☒ Multilayered approach to security
- ☒ Control of Web traffic to meet corporate and regulatory requirements
- ☒ Management and maximization of available bandwidth
- ☒ Remote branch infrastructure consolidation

With these points in mind, Silver Peak is operating under a dual strategy of product differentiation and market positioning. The NX Series product line is designed to meet the properties of scalability, multipronged security, application transparency, and application breadth, and an array of management tools. The business strategy revolves around servicing highly distributed customers while remaining committed to deployments through a growing number of channel partners.

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## **Company Overview**

Founded in 2004, Silver Peak is a privately held company that develops network appliances for the centralization of control and management of remote offices. Silver Peak is headquartered in Santa Clara, California, and receives its funding from Benchmark Capital and Greylock Partners. The company employs approximately 80 employees in offices worldwide.

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## **Company Strategy**

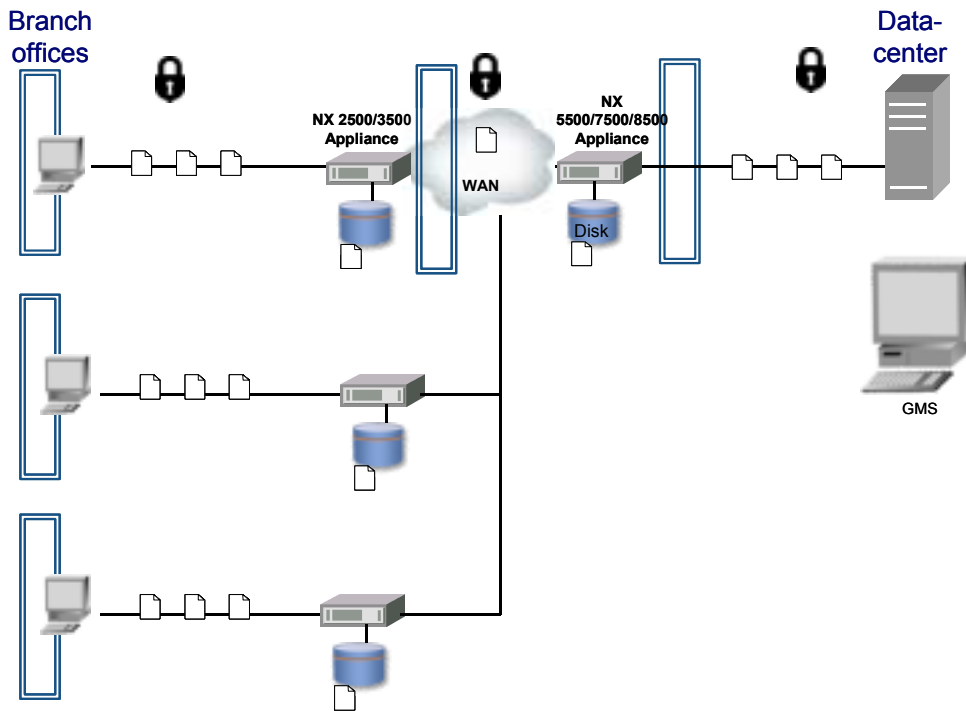
### ***Product Strategy***

Silver Peak's product strategy is to "enable the transition from tactical to strategic, large-scale WAN acceleration deployments." The company differentiates its product line based on system capacity, scalability, and security, and by operating on any IP-based traffic versus only TCP-based traffic.

With the introduction of the NX 8500 product in fall 2006, a single appliance that operates at up to 800Mbps when performing latency optimization and 500Mbps with all optimization features enabled, Silver Peak has further extended its offerings into the secure and scalable WAN application delivery market (see Figure 1).

**FIGURE 1**

Silver Peak Network



Source: Silver Peak, 2006

**Product/Service Offerings**

*Performance and Usability*

Silver Peak offers a family of scalable WAN acceleration appliances with throughput capacities ranging from 2Mbps to 500Mbps. The products are targeted to facilitate mid- to large-scale server and storage consolidation and datacenter replication and to improve application performance when branch office servers and storage are centralized.

NX Series appliances use Silver Peak's patent-pending data reduction technology, called Network Memory, to reduce the amount of data traversing the WAN-enabling LAN-like application performance. Silver Peak's data reduction, compression, and loss mitigation ("forward error correction") optimizations take place at the IP layer (Layer 3). Standards-compliant TCP enhancements mitigate the impact of latency on TCP-based applications. CIFS-based protocol optimizations mitigate the impact of latency on file services (such as Microsoft File Services) that use the CIFS protocol. Finally, application-based quality of service can be applied to any traffic type.

### *Application Transparency*

Silver Peak's data reduction technology, Network Memory, eliminates data that would otherwise traverse the WAN. Network Memory is a disk-based data reduction technique that operates at the IP level without inducing added latency. This provides data reduction for TCP, UDP streaming, and real-time applications. Applications that benefit from the data reduction technology include Citrix, VoIP, streaming video, and the multitude of custom developed, business-critical applications.

The NX Series appliances fit into an enterprise network, sitting between network resources and the WAN infrastructure that is used to connect them to remote users. Deployment of the NX Series requires no client, server, or application reconfiguration.

### *Security*

Silver Peak NX Series appliances protect locally stored and transmitted information by incorporating hardware-based, 128-bit Advanced Encryption Standard (AES) for data at rest and IPsec tunneling for data moving across the WAN.

### *Manageability and Control*

Silver Peak's Global Management System (GMS) is a platform for the deployment, management, and monitoring of a Silver Peak-enabled wide area network. GMS is designed to give IT managers visibility into aspects of application delivery across a distributed enterprise, including WAN performance statistics, application analysis, and tools for the configuration and management of Silver Peak NX Series appliances (see Table 1)

**TABLE 1**

## Silver Peak Product Offerings

	NX-2500	NX-3500	NX-5500	NX-7500	NX-8500
64-bit architecture	Branch office	Midsize office	Midsize datacenter	Large datacenter	Large datacenter
WAN capacity (all features and encryption)	2Mbps	10Mbps	50Mbps	155Mbps	500Mbps
WAN capacity (latency mitigation)	2Mbps	10Mbps	50Mbps	800Mbps	800Mbps
LAN side capacity	1Gbps	1Gbps	1Gbps	2Gbps	4Gbps
Local data store	250GB	500GB w/RAID	2TB w/RAID	2TB w/RAID	7TB w/RAID
Disk encryption	128-bit (AES) H/W acceleration	128-bit (AES) H/W acceleration	128-bit (AES) H/W acceleration	128-bit (AES) H/W acceleration	128-bit (AES) H/W acceleration
IPSec traffic encryption	128-bit (AES) H/W acceleration	128-bit (AES) H/W acceleration	128 bit (AES) H/W acceleration	128-bit (AES) H/W acceleration	128-bit (AES) H/W acceleration
Deployment	Inline Out of path	Inline Out of path	Inline Out of path	Inline Out of path	Inline Out of path
Redundant deployment/ clustering	VRRP 1:1,N+1,WCCP	VRRP 1:1,N+1,WCCP	VRRP 1:1,N+1,WCCP	VRRP 1:1,N+1,WCCP	VRRP 1:1,N+1,WCCP

Source: IDC and Silver Peak, 2006

### ***Business Strategy***

Silver Peak's management is focused on expanding deployments from the tactical to the strategic level in larger enterprises. The current strategy includes taking advantage of the products' scalability to create a strong foothold in the datacenter and, moving outward from there, using data replication and disaster recovery in the datacenter first, and then in the branch offices with the decentralized data. In this fashion, Silver Peak plans to become a vendor that can provide the customer's WAN optimization needs, from its centralized datacenter to its remote branches.

### **Partnerships**

Silver Peak operates with a 100% indirect sales strategy. As a result, the company currently has dozens of partners. These partners include regional VARs and storage or security VARs looking to expand their offerings. As of this writing, Silver Peak is also in discussions with several OEMs and managed service providers.

### **Geographic Coverage**

Silver Peak sales are primarily in North America and the United Kingdom, with expansion in mind for Asia and the remainder of Europe in 2007. The United States represents 70% of Silver Peak's total sales. Because the products are often bought by large corporations for global communications, Silver Peak estimates that 45% of unit product deployments are outside of the United States. The company also maintains global logistics in 16 countries while looking for further expansion in the Middle East and Africa within the next year.

### **Market Positioning**

Silver Peak is positioning itself to be the vendor of choice for enterprises with large network connections — typically DS3 to Gigabit datacenter links that interconnect multiple large datacenters or datacenters supporting 50Mbps and above in aggregated bandwidth from regional and branch offices. These companies require adequate bandwidth support for their data-rich applications that utilize databases and servers in the datacenter.

### **Target Markets**

Silver Peak has approximately 100 customers. The company is fine-tuning its target market to include distributed enterprises with over 500 employees and higher-capacity network interconnects

The company's current client base includes a wide range of industry verticals; however, the following industry segments account for more than 50% of Silver Peak's business: finance and related, legal, technology, healthcare, government, and manufacturing. Industry segments that generally have a larger concentration of "knowledge workers," such as finance, legal, and technology, are more in line with Silver Peak's offerings than segments with a high number of small branch locations, such as retail.

## **FUTURE OUTLOOK**

### **Challenges and Opportunities**

IDC believes that the future outlook for WAN application delivery, while positive, will be challenging as it will be necessary for the application to coexist with IT supplier strategies related to the remote branch, datacenter consolidation, and centralization and virtualization.

With respect to Silver Peak, IDC believes the company has the following major challenges:

- The ability to fully leverage its channel relationships to achieve the scale and economies of selling globally

- ☒ The ability to effectively position its products relative to Cisco, which will most likely be the installed networking vendor of choice at many of the large enterprise customers that Silver Peak is calling on
- ☒ Expansion into countries in Asia, the rest of Europe, and India, which will provide more geographic coverage and a larger customer base (Current pricing might be a challenge, however, for the developing countries in these areas.)

In terms of opportunities, Silver Peak has developed solutions to compete head-to-head in the WAN application delivery market. The WAN application delivery offered by the NX series, combined with the channel partnerships, provides for a potential niche in the high data volume, large enterprise space. The scalable and secure product architecture along with its application independence (performing optimizations at the IP layer instead of at the TCP and application layer) will help Silver Peak expand into large enterprises in markets such as financial services, legal, and software development organizations. The data reduction offered along with optimization across the WAN is important in applications where large amounts of data, such as in video and database applications, are transferred between the datacenter and remote users.

Additionally, IDC believes that Silver Peak could be an attractive acquisition target to the large networking and system vendors that are looking to round out their strategies for datacenter consolidation and supporting distributed multisite enterprise datacenters.

## **ESSENTIAL GUIDANCE**

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### **Advice for Silver Peak**

Silver Peak's sales strategy should focus on the following key trends:

- ☒ Find appropriate partnerships (This market is highly dependent on the intersection of IT, network, and telecommunication suppliers.)
- ☒ Expand geographically to address the need for WAN application delivery globally
- ☒ Leverage customer migration to next-generation video and VoIP
- ☒ Continue datacenter and branch office consolidation
- ☒ Enable storage replication
- ☒ Continue to work toward enabling IT organizations to taking ownership of an entire transaction or event (End-to-end visibility and control of the applications will provide the key to strategic deployments.)

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## Advice for Buyers

For end customers looking to invest in WAN application delivery tools, IDC believes that the following are critical deployment factors to evaluate:

- ☒ Understanding this technology relative to overall datacenter consolidation and storage/server virtualization initiatives
- ☒ Taking a holistic approach to assessing branch office application needs, including a comprehensive analysis of application types, bandwidth requirements, security, and latency sensitivity
- ☒ WAN application delivery products and technologies from installed networking vendor(s)
- ☒ Installed networking architecture, including MPLS deployments, security, and expected traffic flows between major datacenters, branch offices, and the Internet
- ☒ Analysis of how this technology fits into existing and future security policies

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### Related Research

- ☒ *WAN Application Delivery Enables IT to Achieve the Best at the Branch* (IDC #204234, November 2006)
- ☒ *Worldwide WAN Application Delivery 2006–2011 Forecast and Analysis* (IDC #204228, November 2006)
- ☒ *Citrix Purchases Orbital Data* (IDC #203065, August 2006)
- ☒ *Blue Coat to Acquire NetCache Business from Network Appliance* (IDC #202353, June 2006)
- ☒ *Worldwide Datacenter Layer 4–7 Switch 2006–2010 Forecast and Analysis* (IDC #201654, May 2006)
- ☒ *Application Networking News from Interop* (IDC #201641, May 2006)
- ☒ *Worldwide Datacenter Layer 4–7 Switch 2005 Vendor Shares* (IDC #201391, April 2006)
- ☒ *Blue Coat Systems Profile* (IDC #201145, April 2006)
- ☒ *Data Center of the Future* (IDC #06C4799, April 2006)
- ☒ *F5 Networks: An Application Networking Profile* (IDC #35084, March 2006)

- ☒ *Application Networking Taxonomy* (IDC #35075, March 2006)
- ☒ *Cisco Rolls Out Framework for the Enterprise: Service-Oriented Network Architecture* (IDC #34686, December 2005)
- ☒ *Cisco Announces a New Advanced Technology: Application Networking Services* (IDC #34568, December 2005)
- ☒ *Worldwide Content and Application Networking 1H05 Vendor Shares* (IDC #34394, November 2005)
- ☒ *Packeteer and Tacit Networks Forge Strategic Alliance* (IDC #34146, September 2005)
- ☒ *F5 Networks Acquires Swan Labs* (IDC #34131, September 2005)
- ☒ *Cisco's AON: Will It Take Hold?* (IDC #33684, July 2005)

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## **Definitions**

### ***Application Networking***

Application networking products make intelligent routing, security, and delivery decisions on the network traffic. This is achieved through a variety of technologies, including switching and proxies. Key among application networking product priorities is the need to provide a secure, reliable architecture to enterprise applications — in many instances, Web applications, but in all instances, applications that are running over TCP/IP. The products enable network policy specific to the applications running on the network. Today, the products are primarily deployed in the datacenter and at remote branch offices. In the future, the products will be deployed at other points in the network.

Application network infrastructure is deployed in the following form factors: blades, switches, software only, and appliances. The products tend to compete in three specific market segments: datacenter Layer 4–7 switches, WAN application delivery, and network integrated message routing. These categories are blurring as features in one market are being incorporated into others. Because of this consolidation of features, it is important to look at this market as a whole and in individual components.

### ***WAN Application Delivery***

The primary goal of WAN application delivery products is to optimize wide area network communications. This new market combines features previously considered as part of secure content and application delivery and WAN optimization — see *Application Networking Taxonomy* (IDC #35075, March 2006). Products in the WAN application delivery market must have the following features to be included in the market: compression of data streams, monitoring traffic flows, traffic prioritization, bandwidth optimization, and caching. These products are deployed at the branch and in the datacenter. As a result, in addition to providing bandwidth optimization and savings, they are enabling secure consolidation of file servers, emails, and print

services of these applications across the wide area network (WAN). Wide area file services (WAFS) products are included in this market. WAFS value proposition is in IT consolidation and streamlining branch operations. Many of the products also add secure Internet access (virus scanning, content filtering).

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