Silver Peak

Silver Peak NX-2500

A well-specified WAN optimisation appliance offering excellent WAN performance boosts

PC PRO RECOMMENDED

PERFORMANCE ★★★★★☆

FEATURES & DESIGN ★★★★★☆

VALUE FOR MONEY ★★★★★☆

OVERALL

OPTIMISATION APPLIANCE

PRICE
£6,149 exc VAT

SUPPLIER
Silver Peak Systems
+1 650 940 7900

INTERNET
www.silver-peak.co.uk

WARRANTY
1yr RTB

SPECIFICATIONS
1U rack chassis • Supermicro P8SCi motherboard • 3GHz Pentium 4 630 • 2GB ECC SDRAM • Western Digital SATA/150 hard disk • 2 x embedded Intel Gigabit • PCI fail-to-wire card • Linux kernel • HTTP interface

The WAN optimisation industry is rapidly becoming big business, as companies are finding that they can centralise their IT services and yet maintain a usable service level to remote offices. Formed in 2004, Silver Peak Systems focuses purely on WAN optimisation, and the NX-2500 represents the entry point of a family of three appliances.

Aimed at WAN links of up to 2Mb/sec, the NX-2500 comprises an all-Supermicro 1U rack-mount platform. This employs a PCI dual-port Gigabit card for network passthrough facilities should the appliance fail. In common with the Riverbed Steelhead 1010 (*see issue 135, p169*), it functions as a transparent proxy that intercepts and optimises all TCP traffic. Whereas the Steelhead use Riverbed's SDR (scaleable data referencing) and TA (transaction prediction) technologies, the NX-2500 counters this with Silver Peak's LIN (local instance networking). Essentially, LIN uses a combination of local storage, advanced pattern recognition, QoS and compression to reduce the amount of traffic flowing through a WAN connection.

A key feature is that the NX appliances can also deal with UDP data, allowing them to handle VoIP and other traffic such as the network file system common to Unix and Linux networks. It also optimises traffic from interactive applications such as Citrix and Microsoft's RDP. Forward error correction lends itself well to high-latency environments. This avoids TCP resets due to lost packets, as the appliance can recreate them.

During installation, you define a local IP address for each appliance, and management access can be isolated on a different subnet. The tidy web interface makes tunnel setup simple. All you need to know is the IP address of the appliance at the other end of the WAN link. ACLs determine what traffic is to be accelerated, and you can fine-tune these by assigning multiple applications to each one. Policies are then employed to assign ACLs to specific tunnels.

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For testing, we used a WAN simulator configured for a 2Mb/sec E1 WAN link with a 50ms latency. We placed an NX-2500 appliance on each side and at one end added a Windows Server 2003 system configured with IIS and FTP services plus hMailServer. At the other end, we connected a Windows XP client system and used a 4.7MB PowerPoint presentation to test a variety of scenarios.

Silver Peak's appliances also support UDP traffic, so they can even optimise data types like VoIP.

Without any tunnels in place, copying the file from server to client and back again took 26 seconds and 23 seconds respectively. As the appliances use compression, the first run through a tunnel took 5 seconds, and subsequent copies with the file now cached took 1.5 seconds in each direction. Again without optimisation, remotely opening the presentation at the client took 28 seconds, and saving a small modification to the server took 43 seconds. But, with optimisation in action and the file cached, these times were reduced to only 3 seconds and 3.5 seconds respectively. Mailing the file as an attachment from the client to the server with no optimisation took 33 seconds, and receiving the same file to the client took 60 seconds, while with the file cached both these times were cut to a mere 1.5 seconds.

The NX-2500 delivers impressive optimisation performance and is also easy to install and manage. It compares well with the competition, as it offers a good hardware specification and supports both TCP and UDP traffic, making it a lot more versatile. DAVE MITCHELL