Cirrus Networks

About Us

Cirrus Networks is a Perth-based IT systems integrator providing an independent, flexible approach to designing, building and managing IT infrastructure.

We focus on 3 areas of expertise:

Solutions: We offer a range of solutions to help your business become more streamlined, effective and cost efficient. Whether you want to improve your data management, make your infrastructure more efficient, move to the cloud or optimise your network's capability, Cirrus Networks has a solution to meet your needs.

Security: We provide advanced diagnostic, monitoring and protection services, to ensure your networks and data are fully compliant and protected from threats that can include viruses, spam, denial of service (DoS) attacks, direct hacking and many others.

Services: From technical consulting and project management, to maintenance and monitoring your infrastructure, Cirrus Networks delivers a range of IT services that help businesses achieve their strategic objectives in the most cost effective way possible. We provide tailored solutions, by understanding your organisation's strategic drivers, priorities and issues.

Case Study

Silver Peak data acceleration eases network strain for Lycopodium's remote regional sites

Perth-based engineering and project management consultancy Lycopodium has accelerated the speed of critical links between its data centre in Perth and a number of regional and international sites, using Silver Peak software.

With a virtualised network the key to delivering efficient use of resources around the company, hundreds-of-gigabytes (GB) of data flow through the Virtual Private Network (VPN) each day. CIO Andrew Macbeth found that significant delays in Microsoft file-based data replication (CIFS/SMB) were occurring, negatively affecting workflow and placing business continuity at risk.

Seeking a solution, Andrew called in Cirrus Networks who recommended that Silver Peak's software-based data acceleration solutions would resolve the issue and ensure the integrity of links and reduction of risk.

Data is replicated between all sites across the Wide Area Network (WAN) to ensure that everyone at Lycopodium, no matter how remote they are, has full access to corporate information and services. Links between the sites experience the usual issues caused by remote access and international distances, such as latency, jitter and packet loss.

In most cases Lycopodium has little or no option to extend bandwidth since most sites are already using the maximum link capacity available to each area. Andrew recognised that he would need to find a solution for application acceleration and speeding up data movement using the existing network infrastructure.

Andrew said: "The link between our main office and one remote international site in particular was causing significant data replication delays throughout the rest of the organisation. Ultimately this was leading to full link utilisation having to be performed overnight, taking a number of hours and delivering risk to the business."

The link in question offered 2 megabits-per-second (Mbps) of capacity with over 150 milliseconds (ms) of latency. Packet loss was running at 20 per cent, and spiking at 60 per cent during times of peak traffic.

Cirrus Networks chose Silver Peak's software-based WAN optimisation solutions, and helped Lycopodium to set up a proof-of-concept (PoC) to establish how much link acceleration could be achieved with full deployment.

Andrew added, "The evaluation process discovered almost immediately that there was significant latency and packet loss on the link, which Silver Peak's software substantially corrected. Testing performed within the non-intrusive PoC confirmed that the product was very suitable to our requirements and could counter the challenges of our network environment."

With help and guidance from Cirrus Networks and Silver Peak, Lycopodium staff implemented Silver Peak's VX software at the data centre and remote offices. Deploying the software solutions proved to be very simple, and was a solution that was easy to manage once fully deployed.

During the testing process, Andrew and his team purposely 'broke' the Windows copy between sites, then tested the process again.

"It was great to see the second attempt essentially start from where it first left off," added Andrew. "The Silver Peak application told Windows that all the previous data had already been sent via the cache. This checkpoint capability in transferring data is beneficial when it comes to links that can break mid-copy."

Implementing Silver Peak's WAN optimisation solutions has removed the issue of slow replication between the data centre and the multiple remote sites at Lycopodium. According to Andrew, there is an 80 per cent improvement in raw optimisation, while overall speed has increased by 33 per cent for all data. The performance of certain individual applications has been boosted by significantly more than 33 per cent, while cached data is now instant.

The Silver Peak setup has given Lycopodium's IT team ownership of the management and configuration of their solution, allowing them to have a more pro-active approach to data flow, as well as providing greater visibility into the company's remote networks.

"Ultimately, the fact that we have control over the management and configuration of the software delivers confidence in the software. Our replication issues have been resolved, and this gives us scope to expand and administer the environment." said Andrew.

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