

Nexans: The Evolution of a WAN

From bandwidth shaping to 'branch office in a box'

Sometimes, a solution to a problem creates new challenges. This was the situation faced by Nexans, as its WAN evolved to meet changing needs and corporate requirements over the past four years. Nexans' journey started with bandwidth shaping in 2005 in response to the requirement to maintain the existing bandwidth. Protocol acceleration brought competence centres closer together in 2006, while the implementation of a new WAN in 2008 ensured WAN performance without increasing bandwidth. Now, Nexans is testing solutions to create "branch offices in a box".

These network changes started off as responses to specific problems, but Nexans' WAN optimisation has now become a strategic vision to carry the company into the future.



Ignace Jacobs, ICT Manager, Nexans, presented this case at the BELTUG X-change on October 29, 2009

CHALLENGES

Ensuring WAN performance in a changing environment

With no on-site IT staff, backup difficulties and aging desktops, by 2005 Nexans' sales office in Schiedam (NL) needed a serious network redesign. To centralise the network, all desktop users in Schiedam were moved to Citrix servers located at the company's Buizingen (Belgium) site, as was the file server.

But as Ignace Jacobs explains, problems followed: "We couldn't upgrade our bandwidth, we couldn't synchronise and lock our files, and we had problems printing from Citrix to the Schiedam printers". Nexans implemented Packeteer, PeerSync and Thinprint to resolve the difficulties, but a conflict between the traffic shaping in Packeteer and the WAN's MPLS CoS reduced available bandwidth. The solution: implement one CoS for Schiedam.

In 2006, a new corporate IT policy came into effect: the Nexans Cabling Solutions Marketing and R&D competence centres in Basingstoke (UK) and Buizingen needed to "function as one", with near LAN speed and without affecting IPT. Nexans implemented Packeteer and PeerSync in Basingstoke, but PeerSync wasn't adapted to this use, and problems arose with the centralised backup and file locking. Nexans installed WAN Optimisation Controller Packeteer iShare, which, Ignace comments, "worked like a dream".

This case-study has been discussed at the BELTUG X-change of 29.10.2009

SOLUTIONS

“The WAN is not a static environment! You have to measure and keep measuring. And don’t just add bandwidth: optimise what is available and then use protocol acceleration”



Nexans is a worldwide leader in cables, cabling systems & related services and research & production. It serves three markets: infrastructure, industry and building materials, with an industrial presence in 39 countries and commercial activities worldwide. In Benelux, its IT team supports six sites across Belgium, the Netherlands and the UK, with 1600 employees, including 550 PC users.

No more bandwidth upgrades

Network demands were still changing, and in 2007, Nexans determined it was time for a new WAN, selecting BT as its partner and installing Ipanema. “We didn’t want to upgrade our bandwidth, but we did need to ensure performance of business applications with a flexible, centralised network management”, explains Ignace. “Plus, we added Video Conferencing over IP and mobile video conferencing to the requirements”.

Even now, the WAN continues to evolve. The need to move the file serving infrastructure to another site raised new questions on ensuring LAN-like access for users. Nexans’ vision is the ‘branch office in a box’. Cisco WAAS has been installed, and the company is testing VDI (virtual desktop infrastructure), as well as the protocols RDP versus PCoIP. “Local acceleration boxes means no more on-site servers”, Ignace clarifies. “Using Cisco WAAS, we have 80% less traffic on-line. We can cut chatter, especially from ‘chatty’ applications”.

LESSONS LEARNT

Coping with a dynamic environment

Ignace says that the key to WAN optimisation is making sure you know what is going on in your network all the time. “There will always be surprises in the type and amount of traffic”, he insists. “The WAN is not a static environment! You have to measure and keep measuring. And don’t just add bandwidth: optimise what is available and then use protocol acceleration”.

He does have some good news about the market: “It’s evolving at a tremendous speed, and there will be fewer players, making it be easier to choose a provider. This is important because you can’t do it on your own: you need a partner.”