

NOT-FOR-PROFIT UK HEALTHCARE PROVIDER GAINS SIGNIFICANTLY HIGHER NETWORK PERFORMANCE WITH RELIABLE, RESILIENT SD-WAN



Embarking on a cloud-first strategy, Nuffield Health wanted to integrate broadband services into the WAN transport mix in order to operate at 'cloud speed'

A leading not-for-profit healthcare provider, Nuffield Health was experiencing challenges with the impact its legacy MPLS WAN was having on the performance of its network. Since the company wanted to embark upon a cloud-first IT strategy, the company turned to SD-WAN.

Dan Morgan, IT Operations Director at Nuffield Health, explains, "As a not-for-profit healthcare organisation with sites located across the UK, our staff rely on data-critical applications to care for patients and our customers. We required a reliable WAN solution that would improve network performance and securely support our cloud-first IT strategy."

ROUTING TRAFFIC WITH APPLICATION-DRIVEN POLICIES

As an organisation with two data centres and around 20,000 users across more than 260 sites throughout the UK, Nuffield Health was finding that its legacy MPLS WAN was struggling to connect its users to business-critical cloud-based applications. These included Software-as-a-Service (SaaS) applications such as TrakCare for Electronic Medical Records and Office365, as well as Infrastructure-as-a-Service (IaaS) environments such as Microsoft Azure.

REQUIREMENTS

- Improve network performance to support a cloud-first IT strategy
- Intelligently route WAN traffic over the internet based on application-driven policies
- Enhance security by service chaining cloud-based, next-generation firewalls

SOLUTION

- Aruba EdgeConnect SD-WAN edge platform
- Aruba Boost WAN optimization performance pack
- Aruba Orchestrator centralized management console

OUTCOMES

- Reduced WAN traffic by 75 percent while increasing available bandwidth 4-6X
- Enabled cloud-first strategy, replacing MPLS with broadband
- Ensured that users have reliable access to business-critical SaaS and IaaS applications
- Improved network performance and quality of experience for end users
- Accelerated SD-WAN deployment, achieving a rate of 15-27 sites per week

Following a review of its WAN usage, Nuffield Health found that more than 60 percent of its WAN traffic was already being backhauled to the internet, rather than to its



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DAN MORGAN

IT Operations Director, Nuffield Health

two data centres, which was negatively impacting network performance.

As such, Nuffield Health turned to Aruba (formerly Silver Peak) through its partner, Ampito, a leading provider of technology solutions, for a WAN edge architecture that would intelligently and securely route WAN traffic over the internet based on application-driven policies, without degrading performance.

BRINGS HIGH PERFORMANCE AND CLOUD SECURITY

Nuffield Health selected the Aruba EdgeConnect SD-WAN edge platform for its high-performance and favourable cost, as well as its ability to support seamless service chaining with zScaler and Palo Alto Networks firewalls for intelligent internet breakout, which will improve SaaS application performance while keeping its branches secure.

The Aruba Orchestrator management console – included with the EdgeConnect platform – and zero-touch provisioning enabled a fast SD-WAN deployment. Indeed, the company installed SD-WAN at 189 sites in just four months. On average, it connected 15 sites per week, which peaked at 27 sites in one week.

Nuffield Health also deployed the optional Aruba Boost WAN optimization performance pack, which is unified on the EdgeConnect platform and can be used for specific sites if application performance degrades.

NETWORK INTELLIGENCE PROVES CRITICAL TO BUSINESS

With deployment of the Aruba SD-WAN, Nuffield Health is now able to run dual internet links to its sites, with some sites able to run on 4G LTE for connectivity until its fibre internet service is delivered. The company has reduced WAN traffic by up to 75 percent and saw a 4-6X increase in bandwidth.



Nuffield Health users now have access to business-critical SaaS and IaaS applications via the cloud and without impacting the performance of the network.

“We have been pleased with the positive impact on our network, and the speed of deployment was a massive bonus,” Morgan concludes. “We now have visibility and control into our network, meaning we can see how SaaS and IaaS is being used. This level of cloud intelligence is critical to our organisation as we continue to embrace new healthcare technologies available in the market.”