Dennis Eagle

Meraki SD WAN set to drive down site deployments costs for Dennis Eagle

FluidOne

DENNIS EAGLE

Case Study

Dennis Eagle wanted to simplify its network infrastructure to ease the deployment of new sites and reduce management costs. FluidOne designed a Meraki SD WAN infrastructure based on direct internet access and used 4G technology to accelerate the transition and provide business continuity throughout the 27-site installation. The new opex-based network meets all of Dennis Eagle's goals for the project, including comprehensive reporting tools that provide real time visibility of its network estate.

Client description

Dennis Eagle is a world leader in the design and manufacture of refuse collection vehicles, and is part of the Terberg RosRoca Group. The company produces refuse collecting bodies, chassis, and bin lifts, as well as providing entire vehicle solutions.

Dennis Eagle currently produces over 1,000 units per year for local authorities and private sector contractors in the UK. It also has a rapidly growing customer base in continental Europe, Scandinavia, Australia, and the USA.

Key Points

- Network refresh with Meraki SD WAN at cost neutral

- DIA circuits circa 30% faster

- Enhanced UX for 365 and Teams

Challenges

Company looks for new network to reduce cost and increase flexibility

In 2019, refuse truck manufacturer Dennis Eagle initiated a project to reduce the network and maintenance costs for its expanding UK estate. Cloud technologies were in use across the business and the company planned to consolidate its network management process with the introduction of SD-WAN technology and direct internet access.

"Our goals with this project were ease of deployment when taking over new sites, reducing the cost of implementation and increasing our flexibility," said Maciej Jozefiak, IT manager for Dennis Eagle UK.

MPLS not able to support agile working

Dennis Eagle had been using an FluidOne managed MPLS network which had served it well but increasing demand for Internet based applications and the need for more agile working meant it was no longer fast or flexible enough to support the business going forward.

"All of our Internet traffic was routed to Warwick [HQ] and back," said Maciej. **"We had a 100mb connection split between all sites. When the MPLS was first installed it was fine but as soon as we started working with apps like MS Teams and 365, the user experience wasn't good enough."**

"Part of our goal for increased flexibility was to simplify the network infrastructure so that we could perform more of the day-to-day management tasks ourselves; that wasn't really possible with the MPLS network," said Maciej.

Opex-based SD WAN infrastructure gets everyone onboard

A long-term, trusted supplier to the company, FluidOne was commissioned to design the new infrastructure for Dennis Eagle.

"We knew FluidOne could deliver the project and we liked the fact that FluidOne could offer an opex cost model as it means we don't have to pay for everything upfront; instead of purchasing all the devices we can pay a monthly fee so it was much easier to convince my directors of the value of this project," said Maciej.

FluidOne proposed the replacement of the existing MPLS network with direct Internet access (DIA) connectivity and the implementation of a secure SD WAN overlay network from Cisco Meraki.

"I had worked with Meraki before and Cisco was the biggest player in the network system so it made sense," said Maciej.

We wanted a solution that gave us autonomy to manage moves, adds and changes in our network in a more agile way. On speaking to our managed service provider, FluidOne, we agreed an approach in which we could leverage their 24x7x365 operations centre, and change-management governance while still giving us the ability to make a subset of changes. As the

incumbent Managed Services provider, FluidOne were also able to soft-switch circuits from MPLS to DIA, to avoid the cost and delay of new sites, and provide ongoing management of the underlay network.

The new infrastructure uses Cisco Meraki appliances at each site, and these cover WAN, LAN, WiFi and security functions.

4G used to accelerate transition pathway from MPLS to DIA

For Dennis Eagle, one of the major benefits of working on this project with FluidOne was its ability to leverage its carrier relationship to enable a transition pathway from MPLS to direct Internet access without the need to provision new lines. This innovative approach, which uses 4G technology to create an interim network, required only remote reconfiguration to enable a rapid and cost-effective rollout.

"It was still necessary to install the hardware at each site but rather than having to order 27 new circuits, FluidOne was able to just schedule the change to take place when it had an engineer onsite, then remotely configure the new network behind the scenes," said Maciej.

Meraki SD WAN starts delivering benefits from day-one

The project was completed in July 2021 and whilst it's early days, Dennis Eagle has already been able to realise some of the benefits of the new SD WAN infrastructure, such as the ability to make branch-related changes inhouse and faster deployment of new sites.

"It's important that we have FluidOne to manage the underlying network and address performance issues with the carrier," said Maciej. **"As we open new branches, the Meraki architecture will make it quicker and easier to deploy new sites. Previously, if we were adding a new site, several components were required; now it's just the Meraki Device and circuit, which FluidOne order, configure and install."**

The consolidation of firewalling, routing, switching and wireless access in a single appliance will also simplify the branch management process for Dennis Eagle as the entire process can be managed remotely.

In addition, Meraki's advanced security features, such as next generation intrusion prevention, malware protection and content filtering services, mean that security was not compromised by moving the network from MPLS to direct Internet access.

"Security is very important," said Maciej. **"We're no more or less exposed to attacks than other companies but it's important we do our best to prevent intrusion – Meraki is now part of our strategy."**

One of the features Maciej will be putting to good use is Meraki's real-time visibility and reporting capabilities.

"FluidOne is currently building Meraki integration with its bespoke helpdesk application and that will give us a comprehensive view of the network," said Maciej. **"But even before that integration, we've already got a better understanding of the situation and better visibility of the network."**

Finally, whilst not a primary goal of the project, a biproduct of implementing an SD WAN has been the flexibility to provide local breakout guest Wi-Fi services.

Results

New infrastructure has most impact on site deployment and user experience

"The greatest impact of the new network so far has been ease-of-implementation of new sites," said Maciej. **"Also, quick trouble shooting."**

By providing direct internet access at every site, the company is also reporting improved application performance.

"We use cloud apps like MS teams and 365 so by having direct internet access at each site, it's a better user experience," said Maciej. **"The SD WAN ensures the connectivity is fast, secure and reliable in a way that was not possible with MPLS."**

FluidOne still essential for managing underlying network

With the automation and flexibility afforded by a Meraki SD WAN, one might be forgiven for thinking that Dennis Eagle will no longer need the services of FluidOne but Maciej disagrees.

"Whilst the SD WAN can help simplify deployment and management, we still value 24x7 proactive monitoring, ITIL change control, design changes and running the underlying network," said Maciej. **"My team is limited; having FluidOne manage the network gives us the confidence that if something goes wrong, someone with specialist knowledge will be on hand around the clock to address it."**

FluidOne

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Our hybrid networks, enhanced by SD-WAN, blend carriers and technologies to optimise the price of every site, and minimise installation cost with zero touch deployment. We offer transparent pricing for peace of mind.

The fastest deployment
Our hybrid networks let you choose circuits that deliver fastest for each site, and our 4G WAN circuits offer 2 day delivery with seamless transition to permanent circuits.

The easiest migration
We can phase your migrations to suit you, minimising cost and hassle.

The best performance and uptime
Our advanced monitoring shows the whole application path, raise 95% of key issues proactively and allows detailed reporting and drill-down to show issues and long-term trends.

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