Stagecoach

Stagecoach shifts its cloud adoption strategy up a gear with Node4's Secure SD-WAN

Customer	Industry	Size
Stagecoach	Transportation	24,000 employees I 3 million passengers I 100 depots

The solution — Enhanced collaboration tools, improved resiliency, advanced network monitoring capabilities and a centralised security policy.

10x more bandwidth across every Stagecoach site
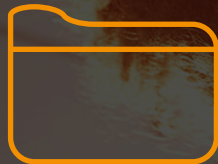
Enabling new collaboration technologies

Reduction in meeting costs

Increase in security, with more visibility and control over network traffic

> *Working with Node4 is revolutionising performance - we have much more bandwidth to carry out innovative and business-driving projects.*

The Customer

Stagecoach is one of the UK's best known public transport companies. It provides a mixture of bus, coach and tram services in London, Manchester, Liverpool, Newcastle, Hull, Sheffield, Oxford and Cambridge, as well as routes linking smaller locations. The company also runs megabus.com and jointly operates Scottish Citylink. Stagecoach is the UK's biggest bus and coach operator, with 24,000 employees serving three million passengers every day across 100 major UK bus depots.

The Challenge

Stagecoach's WAN was struggling to deliver on availability, bandwidth, security and integration. Like many companies, Stagecoach had put off a network upgrade because of the perceived amount of disruption it would cause. But the situation came to a head when the company committed itself to a cloud-first strategy, one that would enable more collaboration between sites and underpin the adoption of new SaaS solutions — including cloud-based bus and resource scheduling software. It was clear that the existing network could not provide long-term, reliable support for these plans — or the stability to migrate existing core systems to the cloud.

Stagecoach's IT team were particularly concerned about the lack of monitoring capabilities afforded to them by their existing network — and how that might play out as the company's cloud migration progressed. "As things stood, we had no way of knowing if or when a site was down, or if it was struggling for bandwidth," commented Graham Moore, Group Chief Information Officer at Stagecoach. "This led to completely avoidable downtime. We had to rely on staff at the impacted site to perform manual checks and alert us if there was an issue."

"We also wanted a solution that would improve our security posture," explained Graham. "Cybercriminals have become far savvier, and incidents of hacks and scams show no signs of slowing. That's why centrally managed security protocols and configurations were top of our requirement list."

The Solution

With their cloud adoption, communications and security strategy in place, Graham and his team began looking for a suitable WAN replacement. Both had worked with Node4 before and were confident in the company's ability to deliver IT network solutions to the transport and logistics sector. After completing their due diligence, they selected Node4's Secure SD-WAN for the upgrade project.

At the time of engaging Node4, Stagecoach had already started replacing its copper network infrastructure with high-capacity fibre. This would ultimately reduce the overall cost of bandwidth and enable Node4's SD-WAN to perform to its full potential — whether running on MPLS or internet-facing access circuits (or a combination of both).

Now, Stagecoach is successfully rolling out the project to connect all 240 of its sites to Node4's SD-WAN. "It's quite an aggressive rollout," admits Graham. "We're doing about three sites per day — and, if you've ever been involved with a countrywide IT rollout, you'll know that's a pretty impressive pace. We're at the halfway point now, and we're seeing great leaps forward in terms of network performance, resilience, security and visibility."

Graham takes up the story: "That resilience and the confidence Node4's SD-WAN inspires has done wonders for moving our cloud strategy forward. We've rolled out Office 365 and a bunch of collaborative tools to connect sites and homeworkers, plus some industry-specific SaaS solutions that help us manage routes, crew and vehicle scheduling and rostering. We just couldn't have contemplated something like that before."

The Result

Security

Once the project is completed later this year, each Stagecoach site will have a next-generation, centrally managed firewall. This will provide enhanced North and South protection (in and out of the network) as well as East and West (inter-site) protection. So, if one location is compromised, Stagecoach's security team can isolate it from the rest of the network and take the necessary remedial action.

Graham explains: "The ability to ramp up network security couldn't come at a better time. Lockdown triggered a spike in cybercriminal activity, but Node4's SD-WAN — in conjunction with our other security tools — has the power to face down those threats and provide greater protection at our network perimeters."

Reliability

Today, Stagecoach's IT team are much more proactive. Gone are the days when they have no direct insight into network problems. Although there are many potential reasons for a location to drop its WAN connection, the most common one used to be a primary link failure. Stagecoach's old WAN had some resiliency and would switch traffic to a secondary link.

Good in theory, but the secondary link could not support current traffic volumes — and it would either crash or run at an unacceptably slow speed. At that point, the site manager would be on the phone to Graham's team, wanting the problem sorted — and fast!

"This happened at our Peterborough site just after we'd connected it to Node4's SD-WAN," recalls Graham. "But the scenario couldn't have been more different. When the primary link failed — because of an issue over at BT — the system switched to its secondary link. We were able to centrally monitor and manage performance at the site to ensure there was no drop in connection speeds — which there weren't. BT fixed the issue a few days later, and no-one at the location even noticed!"

Speed & Connectivity

Sites connected to Node4's SD-WAN have seen an eight-fold bandwidth increase from 8Mbps to 60Mbps. This increase has come from fast fibre connectivity and the SD-WAN's capability to utilise both primary and secondary links for network traffic when necessary. Performance increases were also possible because Stagecoach's old WAN used to funnel all traffic through its HQ, so there was a giant bottleneck and a lot of latency. By contrast, Node4's SD-WAN provides local internet breakouts, which delivers greater performance at each location.

"Node4's SD-WAN has transformed the IT Team's reputation within the company. Nowhere is this more apparent than in the rollout of Microsoft Office 365 and Teams. Improving collaboration across the WAN and between sites was always part of our plan," Graham confirms. "But it came into its own as we responded to the increase in homeworking during the lockdowns. The business has pretty much survived the last 12 months on the back of our new network — and the ability to communicate with each other despite the challenges posed by a global pandemic. Who knows where we would be now if we hadn't started our Node4 rollout before COVID-19 hit."

Feedback

Summing up his views on the project, Graham remarks: "Before this project, IT was regarded as an overhead and — in some instances – a hindrance. Now we're known as enablers and a trusted partner. You can almost draw a line in the sand from the day that Node4's SD-WAN fired up, and see the change that occurred literally overnight. I know people throw the term 'transformative' around a lot when talking about IT projects, but this was 100% the case for us. There's no other word to describe it."

Graham concludes: "Anecdotally, the feedback from the guys at each site is kind of bitter-sweet. Now the network is running at full speed, they've lost that time they had to go make a cup of tea and have a spot of breakfast while waiting for their machines to connect. They tell us everything works better, everything works quicker, and they're much more efficient as a result. And, at the end of the day, that's exactly what we want to hear. Their biggest worry these days is that they'll have to make their round of toast in their own time!"

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