



Node4 helped Stagecoach rethink its **network strategy** to support **business growth** and **increased adoption of cloud-based technologies**.

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

The solution Replacing legacy WAN infrastructure with SD-WAN architecture, which can be easily deployed to new and existing sites.



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 Group is a leading multi-modal UK public transport company, with operations in England, Scotland and Wales. The Group operates bus, coach, rail, and tram services in regulated and deregulated markets. 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 needed to be able to support both business growth and its increased adoption of cloud-based technologies. This required a connectivity solution that could be easily deployed to existing and new sites. The need for a software-defined wide area network (SD-WAN) solution was clear to ensure Stagecoach could progress with its cloud-first strategy.

Its strategy includes a combination of software-as-a-service (SaaS) adoption and preparing core systems for the cloud, both of which require application routing control and extensive access to bandwidth.

Staying online is hugely important for Stagecoach, its employees and its customers, but using legacy infrastructure meant there was no way of automatically monitoring the entire estate. This resulted in the IT team having no visibility into knowing if or when a site was down, or if it was struggling for bandwidth. In turn, this could cause extended periods of downtime if not addressed, as the onsite teams had to manually check each site minute-by-minute and the IT support team would only find out about any downtime once they were notified.

“If the network goes down, we can't schedule buses or update customers on whether their bus is coming,” said Graham Moore, Group Chief Information Officer at Stagecoach. “It's of paramount importance in today's digitally-driven world that our customers using the app – which tells them when a bus is due to arrive – can expect this to be a reliable and consistent service. Because the app works on a national basis but takes a feed from every machine on every site and every bus, the network going down on one site removes the transitions of ticket data for those buses, leaving essential functions blind.”

Moore added: “We also needed to adapt quickly in the face of the COVID-19 pandemic, to be able to remain connected and collaborative from remote locations. We had only just rolled out Office 365 and not yet fully harnessed its capabilities. Implementing appropriate processes and technologies for effective remote collaboration was high on the Stagecoach agenda.”

The Solution

To drive forward its digital transformation plans, Stagecoach has replaced its legacy WAN infrastructure with a new SD-WAN based architecture provided by Node4.

Node4 was carefully selected based on bespoke design, extensive networking experience and being an early MSSP adopter of SD-WAN technology. Stagecoach has already begun to replace its current legacy copper network infrastructure and move to a high capacity fibre network across its 240 sites. This will reduce the overall cost of bandwidth. It will also allow Stagecoach to gain more control and capabilities, as the SD-WAN allows deployment across both MPLS and internet-facing access circuits, whilst optimising secure access.

“With so many sites to roll the SD-WAN technology out to, Node4 has been a huge help with ensuring the process is more efficient and effective on both sides. Our teams work in unison to come up with designs and configurations, and migration strategies so that everyone is fully versed in the process before we implement the tech,” commented Graham.

Node4 has also enabled Stagecoach to implement its full suite of Office 365 collaboration technology to ensure that amidst COVID-19 and beyond, remote staff can keep working with a successful line of communication.

Graham continued: “I have been a Node4 customer previously and they’re the right fit for Stagecoach because, while SLAs and contracts are great, what you need to know is that you have someone who is there when you need them – and the team at Node4 are always there. With Node4 we get to utilise the best technology that we need to progress our digital transformation plans, as well as a valued partnership rather than a typical supplier/customer relationship.”

The Result

There are three key areas where Stagecoach has and will continue to see benefits from working with Node4: collaboration, connectivity and security.

“The new network will give at least 10x more bandwidth across every Stagecoach site, from <2MB to dual links that are now on average 20MB each. This will improve working life significantly for depot employees – before, the network was so slow that employees would have to kill time making a cup of tea while the system tried to boot up,” stated Graham.

“Working with Node4 is revolutionising performance – we have much more bandwidth to carry out innovative and business-driving projects,” Graham continued. “The bandwidth also plays into cost optimisation, which is a key factor for the business. By enabling us to implement collaboration technologies we were previously lacking, we will see a significant reduction in travel costs.”

Security is another key component of the benefits Stagecoach will reap from the partnership, as IT teams will be able to look into network traffic more, understand what apps are using more bandwidth than others and give security the ability to block certain apps. Firewalls at the edge of every depot will be enabled for security around the perimeter, giving Stagecoach greater confidence and control.

Andrew Clark, Group Technology Senior Project Manager at Stagecoach, said: “I myself have worked with Node4 in the past and even though Node4 has grown since then to more than 300 people strong, the team we work with on a day-to-day basis still has the same Node4 feel. Node4 does what it says on the tin and the team has been open and honest from the get-go, which is refreshing from a supplier and partner. This consistency is hugely important to us at Stagecoach for the future of our digital transformation journey.

“We have a great working relationship with Node4 that is built on true partnership and ultimately works because both Stagecoach and Node4 are equally invested in delivering a world class solution for our customers. They want success for our business as much as we do.”