

Rail service delivers seamless tenant and domain migration.



Avanti West Coast securely migrates 4,000 users while keeping a critical train service running 24/7 using Quest migration solutions.

Avanti West Coast

Country: **United Kingdom**

Employees: **4,000**

Industry: **Transportation**

Website: **www.avantiwestcoast.co.uk**

Mergers, acquisitions and divestitures are a fact of life for organizations around the world today. Unfortunately, there's no magical "Rename" button you can push to instantly transform an IT environment to meet the new legal requirements. But FirstGroup and its constituent companies have found the next best thing: migration solutions from Quest. Using these solutions, they have successfully migrated over 11,000 users. It all began with the creation of Avanti West Coast.

Winning a rail franchise means a massive IT challenge.

Avanti West Coast is a train operating company that provides passenger services for a significant portion of the United Kingdom. It connects six of the UK's largest cities (London, Birmingham, Liverpool, Manchester, Glasgow and Edinburgh), which have a combined population of over 18 million.

About this case study

When FirstGroup and its partner took over a train franchise, they created Avanti West Coast. The new company's tech team needed to migrate the complex hybrid IT environment — without disrupting critical services for millions of people.

Solution

With Quest migration solutions, the tech team securely migrated 4,000 users, in the first of three migration projects by FirstGroup totaling 11,000 users. The team was able to preserve business continuity and meet a key requirement of delivering a united appearance to the external world right away.

Benefits

- Delivered a united appearance to the external world immediately
- Ensured seamless collaboration between users, regardless of migration status
- Provided granular options for moving groups and individuals
- Significantly reduced business risk and enabled continued 24/7 operations

Solutions at a glance

- [Microsoft Platform Management](#)

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Barj Duhra, Head of Technology Services and Support, Avanti West Coast

Avanti West Coast was created by FirstGroup and its partner Trenitalia to take over the West Coast Main Line from Virgin Trains, which had operated the line for the preceding two decades. Naturally, Virgin had established an extensive IT ecosystem to support the rail service, including both on-premises systems and services in the Microsoft cloud — and all of those systems were branded under the Virgin name, which is copyrighted.

When Avanti West Coast took over the line, the tech team needed to quickly remove the Virgin name from all the IT systems. “Almost overnight, we needed to be seen externally using the name Avanti West Coast,” explains Dave Stinton, technical solutions architect at Avanti West Coast. “For example, we had to immediately change all user email addresses from the format `username@virgintrains.co.uk` to use the Avanti vanity name instead.”

A controlled, granular migration is essential for business continuity.

At the same time, though, the team was acutely aware of the need to ensure that the critical and very busy train service stayed up and running 24/7. “We didn’t want to do a big-bang migration because we felt that involved far too much business risk,” notes Stinton. “Many of our users are in critical roles, so we needed to keep the impact of the migration as minimal as possible. For instance, we needed to keep email flowing from the old email system to the new email systems while we granularly migrated users across.”

Several factors made the project even more of a challenge. For one thing, some users had huge amounts of data, so they could not be migrated quickly. In addition, the workforce was geographically dispersed and exceptionally mobile. “We have two headquarters, buildings, one in Birmingham and one in London, but we have staff throughout the length and breadth of our train operating route, from London in the south up to Glasgow and Edinburgh in the north,” Stinton says. “In fact, about two-thirds of the staff are pretty much mobile: They’re on the trains, at the stations or remote. So, we needed the flexibility to migrate an individual user or a selected group of users in a controlled way that would not interfere with their ability to do their work.”

Moreover, the team needed to complete the migration under a tight timeline. “We were given nine months to do everything,” notes Barj Duhra, head of technology services and support at Avanti West Coast. “That’s a fairly short time to change 22 years’ worth of IT systems, while still keeping all the trains running.”

Quest solutions deliver power and flexibility.

The tech team understood that careful planning would be critical to success, so they sought advice from a trusted third-party firm they’d been using for some IT work. “We had six or seven technical heads in the room figuring out how we were going to do this. We had so many whiteboard sessions, but each time we came up with an approach, someone would say, ‘Oh, but you’ve forgotten about this system over here,’” recalls Stinton. “There are so many complexities in today’s joined-up cloud world, where everything is accessible to everybody whenever it needs to be.”

PRODUCTS AND SERVICES

Software

- On Demand Migration
- Migration Manager for Active Directory
- Secure Copy

“Even speaking to Microsoft, we couldn’t find an effective way of doing the migration — until we looked at the Quest solutions,” Duhra adds. “That’s when everything started falling into place for us. We saw how we could make it work from a technical perspective, and then we saw that the tools would also tick all our boxes for making the process easy for users as well.”

The tech team selected several Quest products. On Demand Migration is an easy-to-use SaaS solution for simple and secure migration of Microsoft 365 tenants running workloads like Exchange, OneDrive, SharePoint and Teams. An intuitive dashboard gives you complete visibility into your migration project so you can track progress in real time, all while ensuring users can continue to communicate and collaborate seamlessly throughout the project.

Plus, On Demand Migration integrates smoothly with other Quest Active Directory consolidation tools. You can easily plan and execute any migration scenario, from simple AD improvements to complete domain restructuring, and ensure that users maintain secure access to workstations, resources and email.

Secure Copy automates the migration of data, shares, printers and more, along with their critical metadata. It gives you the flexibility to control how data is migrated — and doesn’t require the use of agents or scripts. Moreover, Secure Copy dramatically shortens the time it takes to complete a migration compared to native tools.

A simple and secure migration

Even though the project involved a large and complex hybrid environment and a tight timeline, the IT team was able to deliver a seamless migration on schedule. Thanks to the Quest solutions, the team was able to work closely with their 4,000 users and migrate them based on their needs and preferences. “We loved using the Quest migration solutions because they allowed us to do so many things the way that we wanted to do them, rather than being forced down a particular route,” explains Stinton. “For example, while we could group certain users together based simply on job functions like driver or train manager, we also

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Avanti West Coast*

many individuals in unique roles. We were able to work with them and migrate them granularly, instead of simply dictating how the process would work. As a result, we were able to minimize the impact on them and on the business.”

In addition, the team was able to overcome the challenges presented by the inherently mobile nature of the transportation industry, compounded by the work-from-home situation required by the global pandemic. “To complete the project, we had to not only migrate each user’s account, but also physically update their equipment,” Duhra says. “We were able to engage with the department heads, understand the software and systems that rely on, and get their buy-in. For example, since everyone is using Teams, if you don’t migrate work groups together, they’ll have to turn to other communication channels, which would make it hard for them to collaborate. With the Quest solutions, we were able to ensure that everyone would be happy and productive in the new IT environment.”

Delivering a united presence to the outside world right away

One of the most important requirements of the migration was that the rail service needed to quickly be shown externally as “Avanti West Coast” instead of “Virgin Trains.” This presented a significant technical hurdle when it came to email. “Overnight, we had to change our vanity email domain from *virgintrains* to

avantiwestcoast — but we couldn't actually migrate 4,000 users that quickly," explains Stinton. "Since you can only have an email vanity name in one place at one time, we were facing the prospect of not being able to meet a key requirement of the project and having users continuing to send out email using the old vanity name."

Fortunately, it did not come to that. "The Quest solution was a godsend because it enabled us to immediately present a unified email presence to the external world. I can't even think how we could have fulfilled that requirement without it," Stinton says. "Messages from all users — on both the old and new email systems — automatically had the new company name because the tool rewrote all of the headers on the fly. Similarly, incoming email was automatically routed to the correct user, regardless of whether they had been migrated yet. It worked perfectly."

Reducing risk in multiple ways

Since Avanti West Coast needed to continue delivering exceptional rail service without interruption during the migration, the IT team was also pleased with how the Quest solutions reduced risk in multiple ways. "One of the key advantages of the Quest tool is that you can pre-stage a user and their data," notes Stinton. "For larger users, we were able to copy their data over and then simply perform minor delta copies for the next few days until we were ready to actually flip the switch and move the user from A to B. As a result, we were able to move all the users in a given group and then switch them over together in one go."

In addition, the Quest solutions make it easy to roll back any migration job that proves to be problematic. "Another great thing about the tool set is that if you migrate a user and something goes wrong, you can easily migrate them back again," Stinton says, "Obviously, in the main, we wouldn't want to do that. But it was nice to know that there was always that option to roll back a job if we weren't able to fix a problem."

More broadly, the Quest solutions gave the IT team confidence that they would be able to cope with any unexpected development. "I would definitely

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Derrick Heaton-Rue, Project Manager, Avanti West Coast

warn any migration team that however bad you think your data is, it's worse — you're going to find accounts and data you didn't know about," says Derrick Heaton-Rue, project manager at Avanti West Coast. "The beauty of the Quest tool set that because it's so granular, it can cope with just about any scenario. If you happen upon a brand-new thing you didn't know about, you're going to find a way to manage it. Instead of having to leave data or users behind, you'll be able to take it with you."

The successful Avanti West Coast migration was only the start of an ongoing partnership between FirstGroup and Quest. The company has already used the Quest migration solutions in two additional projects, migrating a total of 11,000 users, and the IT team plans to keep the tools at the ready for future migrations.

About Quest Software

Quest Software creates technology and solutions that build the foundation for enterprise AI. Focused on data management and governance, cybersecurity and platform modernization, Quest helps organizations address their most pressing challenges and make the promise of AI a reality. Around the globe, more than 45,000 companies including over 90% of the Fortune 500 count on Quest Software. For more information, visit www.quest.com or follow Quest Software on [X \(formerly Twitter\)](#) and [LinkedIn](#).