

Improving equality of opportunity for students across Yorkshire

Red Kite Learning Trust boosts standards at its 13 schools with Nviron-managed infrastructure based on Dell Technologies hardware.



Customer profile



Education | United Kingdom



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Adam Daly

Principal, Crawshaw Academy

Business needs

In 2018, a significant expansion revealed the difference in digital capabilities amongst the 13 schools at Red Kite Learning Trust. The Trust wanted a common managed infrastructure that would give all pupils and teachers access to better classroom technology.

Business results

- Improved equality of opportunity for 8,000 students across the Trust—all schools now operate on the latest technology.
- Teachers gain back lesson time with logins reduced from 20 minutes to 20 seconds.
- Best-performing schools can share good practices with others using the same environment.
- IT team saves time and ensures reliability with Nviron-managed services.
- Remote working is easier across the Trust, improving access to education during future lockdowns.
- Trust supports growth with modular IT infrastructure that new schools can easily plug into.
- Schools save money on licensing, support and travel time.

Solutions at a glance

- [Dell EMC VxRail G560 nodes](#)
- [Dell EMC PowerEdge R440 servers](#)
- [Dell EMC PowerSwitch S Series switches](#)
- [Dell EMC PowerProtect appliances](#)
- [Nviron-managed services](#)
- [Intel® Xeon® Scalable processors](#)

Red Kite Learning Trust (RKLТ) is a multi academy Trust of 13 schools in Leeds and Harrogate in Yorkshire, England. The Trust's three secondary schools, one all-through school and nine primary schools are home to 8,000 pupils and 1,300 staff in a wide range of communities. Dave Noble, Director of Operations, says, "The Trust has one of the best performing secondary schools in the country in Harrogate Grammar as well as having schools in some of the most socially deprived areas of Leeds, which have some of the highest level of special educational needs in the city. RKLТ is a truly, fully comprehensive MAT. Our ethos is to ensure excellence for all and equal access to outstanding educational provision in all our schools."

The Trust doubled in size in 2018 when it absorbed seven schools in Leeds. This expansion exposed the technological diversity across the Trust's schools. It was difficult for staff to share files between schools because they were running different applications on different systems. Plus, some schools had invested in technology, while others had not. Noble says, "Some schools were a decade ahead of others in the technology they had and consequently their ability to use it to improve outcomes."

Investing in innovation, not papering over the cracks

The Trust's leadership had explored the cost of upgrading the existing networks and infrastructure. "But we realised that we could invest the same money—£1.2 million—in innovation rather than maintaining the status quo," says Noble. "That way, we could build a common infrastructure that would aid collaboration and provide a solid technological foundation for all teachers and students. In effect, we could upgrade the train tracks the schools operate on to the best and latest technology, allowing high-performance end-user devices or trains to run on them."

Nviron-managed services seal the deal

At the Bett educational technology show, representatives from the Trust met with Nviron, a Dell Technologies Platinum Partner and education specialist. Nviron began with a strategic consultancy to review the status quo, explore options such as the cloud, and model the Trust's IT resource costs under various scenarios, as well as the relative risks of in-house versus outsourced management.



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£1.2 million directed towards innovation rather than upgrade of status quo.

login time down to around 20 seconds and restored their faith in classroom technology.” Schools are now also able to pursue bring-your-own-device strategies or one-to-one device programmes, with the confidence that Wi-Fi and underlying systems won’t impede learning.

Teaching groups can meet virtually to discuss their subjects and develop and share teaching materials more easily than before. This comes from simple improvements, like staff having the same version of software and a reliable back-end file-sharing infrastructure. Not only does this save time and money on travel costs, it means that the most experienced schools can share best practices across the Trust knowing that all schools have the resources to deliver the same in-class experience.

Nviron worked to develop a design based on Dell EMC VxRail G560 nodes, PowerSwitch S Series switches, and PowerProtect appliances—all featuring Intel® Xeon® Scalable processors. This is hosted in a Manchester data centre, with a replica backup location in Leeds, and managed by Nviron engineers with contractually agreed service levels to ensure consistent performance and availability to schools.

Each school also hosts a Dell EMC PowerEdge R440 server to run school-specific workloads such as access control, CCTV and cashless catering, as well as providing fast local file storage, which is then replicated to PowerProtect devices at the core sites.

David Burns, IT manager at Red Kite Learning Trust, says, “We were looking for a partnership, one that would help us as we grow and form part of our long-term strategy. When we talked to Nviron, it was clear that they understood our requirements and were committed to implementing something that met both our current and future needs. Scalability was an important factor and the modular nature of VxRail appealed to us. Data protection and governance are also important. Having all data and virtual machines backed up locally and in a central repository helps meet these requirements.”

All schools now operating in top gear

With a high-performing, common infrastructure, all teachers and pupils now have the same experience. Adam Daly, Principal at Crawshaw Academy in Pudsey, says, “Before, if a teacher needed to boot up a computer at the start of a class, it could take so long that they would lose half their lesson. We’ve cut teacher



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Network Services Lead,
Red Kite Learning Trust

More efficient teams, easier remote working

With VxRail featuring Intel® Xeon® Scalable processors and Intel® Optane™ SSDs and persistent memory, IT teams can deliver services 58 percent faster and are 60 percent more efficient. Until now, the Trust’s IT staff spent a lot of time troubleshooting issues. Now, Nviron takes care of the hardware and virtualization layer, while the Trust manages the virtual servers and applications, spinning up new services whenever they need them.

The Trust’s board signed off on the project in March 2020, just as the UK’s schools were closing due to the COVID-19 crisis. “The events of 2020 have proven our case,” says Daly. “The infrastructure we now have will put all our schools in a much better position to teach and learn remotely.”

Noble adds: “It’s a testament to the strength of our joint strategy that we had the confidence to proceed just as schools were shutting down at the start of a global pandemic. The Trust, Dell and Nviron worked together to deliver this on time and on budget in a COVID-safe way.”

Smoother road to expansion

The new infrastructure is due to be in place in all schools by late 2021. “The technology allows for easier scalability should other schools wish to join RKL in the future,” says Daly. “The Dell Technologies and Nviron infrastructure will help our approach and greatly simplify the onboarding process. New schools will be able to plug straight into our system.”

Noble has also identified significant savings by consolidating 13 sets of supplier relationships down to one. “We’ll save on licensing, support and application costs. We are currently evaluating these savings as we implement and migrate schools onto the new single network. Exactly how much remains to be evaluated. There is an ambition that ongoing IT service operational costs can be at least in line with levels prior to implementing the new solution but with a more resilient and secure network providing much improved end-user experiences.”

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