### DELLEMC

## Historic college embraces 21st-century learning

Stonyhurst College brings modern teaching and learning methods to students and staff with top-to-bottom IT refresh





Education

United Kingdom

### Organisation needs

Stonyhurst College needed an IT infrastructure that could support modern teaching and learning methods, as well as provide internet access to students, staff and commercial clients across the school's 30-acre site.

### Solutions at a glance

- Data Center Virtualization
- Enterprise and Client Support
- Financial Services
- Networking

### Organisation results

- Three months to replace school's entire IT infrastructure
- Students and staff get consistent WiFi coverage across campus
- Four-person IT team freed up to work on new cloud projects
- One-vendor relationship simplifies ongoing support



financing solution enables complete refresh



24x7

availability for 2 years and counting



Stonyhurst College was originally founded in Saint Omer, Belgium, in 1593, and relocated several times before finding its current site in Lancashire, England, in 1794. The school has a prestigious history, with alumni including three saints and seven archbishops, as well as presidents, prime ministers and celebrated figures from across the worlds of politics, the arts, sports and business. These include Sir Arthur Conan Doyle, author of the Sherlock Holmes stories, and Charles Carroll of Carrollton, who signed the U.S. Declaration of Independence.

The college must constantly evolve to keep up with the changing technology requirements of students and staff. When current Director of IT Paul Wilmore took on the role, he saw that the school's infrastructure required a complete overhaul to bring it up to modern standards. "Wireless coverage around our campus was patchy, and the rest of our networking equipment — including the switches, firewalls and servers — were at the end of their lifecycles," says Paul.

Stonyhurst College has a small IT team of four people looking after more than 1,000 users. Rather than tie up the team for years gradually replacing parts of the network, Paul thought that a new infrastructure was the best option. But he needed additional expertise to deliver the project on time and within budget.

Paul put the project out to tender, looking for a partner that could provide and install the necessary equipment and offer support. Nviron, a Dell EMC Platinum Partner that specialises in education, won the tender. Paul says, "Nviron was the best fit for the project for two reasons: it had the expertise we needed to deliver the transformation, and it could provide everything we needed through its partnership with Dell EMC."

# Three months to replace entire network

Most schools would choose the summer holidays to carry out this work, but Stonyhurst College has staff living on-site all year round, as well as summer schools and commercial partners that use the site. "We don't really have any downtime," says Paul, "so we replaced the whole IT network while lessons were happening." This was no small task because it involved re-cabling a Grade I listed building, installing a production and disaster-recovery server cluster, and deploying about 300 wireless access points. "The engineers from Nviron worked on several elements in parallel, and everything was completed in just three months," says Paul. "Work sometimes took place out of hours — for example, we transferred data onto the new virtual environment overnight. The upgrade was seamless for end users and they didn't experience any downtime."

The college uses a Dell EMC PowerEdge VRTX modular infrastructure platform, which contains Dell EMC PowerEdge blade servers that run 15 virtual machines (VMs) using Microsoft Hyper-V. This is replicated in another building, and Stonyhurst uses a Dell DR4100 disk backup appliance for its VMs. The environment had immediate benefits for Paul and his team. "We cut server deployment time by being able to create VMs on the fly," he says. "And scripting client deployments has reduced the time that takes by 15 minutes. Through the Dell EMC OpenManage Essentials console we can see the status of all hardware so we can focus on delivering services, not managing hardware."

The infrastructure is connected by a pair of Dell EMC Networking S4810 core switches and about 60 Dell EMC Networking N-Series edge switches. Two wireless controllers manage wireless access points to provide wireless internet coverage across the college's 30-acre site. Perimeter security comes from SonicWall.

### No news is good news

Does Paul get feedback from users about how much better the new coverage is? "Not really," he confesses. "People generally make a noise only if there's a problem, and I'm pleased to say that our environment has been stable and highly available for more than two years

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Paul Wilmore, Director of IT, Stonyhurst College

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now." As an independent school in a competitive market, Stonyhurst aims to attract the best and brightest young people from around the world, and its work with Nviron and Dell EMC is a vital part of this. Paul says, "Good WiFi coverage isn't even a selling point these days — it's a must-have. This transformation was vital to our continued success."

### More time for innovation

Paul says that one major benefit of the college's infrastructure transformation has been the time it frees up for IT staff to focus on new initiatives rather than fixing problems with old equipment. Support for the college's entire infrastructure is provided by Dell EMC, so the four-person in-house team just needs to remember one phone number. "We spend almost no time handling tickets for our Dell EMC infrastructure, which means we can concentrate on helping end users," says Paul. "We've put a lot of time into moving to the cloud, including transitioning to Microsoft Office 365, so we've been training our staff. We're also looking at migrating a lot of our on-site file storage to the cloud. This is something we wouldn't have had time to do before." Paul predicts that this move will significantly reduce the need for on-premises storage: "Each user will get one terabyte of online storage through Office 365, which we couldn't afford to offer on-premises."

# Financing gives project the green light

Such ambitious projects don't come with small price tags, but Stonyhurst College was able to finance the deal with a zero-interest finance plan through Dell Financial Services. This agreement allowed it to pay off the cost in instalments after work was completed. "We wouldn't have been able to get everything replaced at once without Dell Financial Services," says Paul. "We'd have been forced to do small elements of it each year. The leasing arrangement meant we got to where we wanted to be much quicker."

Paul concludes, "It's my job to deliver a 21st-century learning experience in a traditional environment so our pupils can benefit from the modern technology within our historical buildings. With Nviron and Dell EMC as partners, that's a lot easier to achieve."

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Paul Wilmore, Director of IT, Stonyhurst College



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