QUEEN MARGARET UNIVERSITY CREATES DYNAMIC LEARNING ENVIRONMENT FOR NEW GENERATION OF STUDENTS

The student experience is a key focus for all UK universities, with IT performance a key metric. Queen Margaret University created a more dynamic, mobile experience for students by implementing VMware Horizon 7. Simplified management of its device and application landscape also delivers the productivity gains to allow the IT team to focus on new services.

Queen Margaret University (QMU) is a UK university founded in 1875. It is situated on a purpose-built campus in Musselburgh, near Edinburgh, which opened in 2007. Home to students and staff, the award winning 35-acre site is billed as Scotland’s greenest university campus.

Challenge
It is no longer enough for universities to be judged on their academic qualities. In a competitive market, students are quite rightly seen as customers, and they expect excellent service.

Technology is part of this service. A typical student may bring with them multiple connected devices; they expect these devices to connect seamlessly, and for the university to create a modern, mobile and consistent digital environment.

“We’re a small campus and we’ve been more agile than most in keeping ahead of technology trends,” says Paul Davis, Technology Manager, Queen Margaret University. “We were one of the first universities in the UK to invest in thin clients. But technology doesn’t stand still. Hardware can soon look dated.”

QMU wanted to not only refresh its thin client hardware but to upgrade the entire user and device experience. “We wanted students to be able to access applications on their own devices, but we needed to manage these applications efficiently,” says Davis.

The upgrade is part of a broader investment in technology, he explains, spread over three years. Working with Dell EMC and VMware, QMU has overhauled its data center, creating a hyperconverged infrastructure (HCI) based on Dell EMC VxRail nodes, powered by VMware vSAN™. The complete solution also includes Dell EMC Data Domain and Dell EMC Avamar technology for backup and data deduplication and Dell EMC SourceOne for file archiving.

Davis says his department saw HCI as a fundamental building block if QMU wanted to deliver new digital services effectively and efficiently. He says any investment has to be viewed with cost and productivity savings in mind.
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Technology Manager
Queen Margaret University

Action
VMware Horizon 7 provides QMU end-users with access to all of their virtual desktops, applications, and online services from any device, anywhere and at any time. It enables QMU to provision virtual or remote desktops and applications through a single VDI and application virtualization platform to streamline management and easily entitle end-users.

“The Dell EMC and VMware partnership project has been a huge success,” says Davis. “It was always our intention to deepen this relationship.”

He describes the choice of Horizon 7 as a “no-brainer”.

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The solution was rolled out in September 2018 ready for the start of the new academic year. “We’re small enough that when we roll out something, we roll it out campus-wide,” says Davis. “We’ve also set up a desktop user group, including faculty and students, to listen to feedback and make adjustments as we go along.”

Impact
Today, QMU students can access three specialist applications from any personal device, or from QMU thin clients. Previously, if students wanted to access a particular application, they had to log on to a remote desktop session; now Horizon 7 lets them use the app on their own device.

“It feels like the application is installed on their own device,” says Davis. He is hopeful that this freedom is reflected in the university’s ratings in the next National Student Survey.

The desktop user group is testing performance of these three specialist applications, with a plan to publish more than 100 course-related applications eventually. “The feedback so far has been extremely positive,” says Davis. “Application performance is faster and more responsive.”

“Already there has been a significant impact on productivity,” Davis continues. “Having a single platform on which to manage desktops and applications has had a dramatic impact on QMU IT.

“It’s freeing my team up to be able to do other things. The legacy system that we were using was creaking at the seams and we were getting a lot of support incidents reported. There was a great deal of firefighting.

“We can quite clearly see the reduction in the number of incidents coming through now.”

His team is also able to make changes more quickly. Previously, the legacy solution meant work had to be carried out during the summer recess. “The functionality of Horizon 7 means we can do things on the fly very, very easily. Rather than taking a whole server offline every time we want to upgrade an application, we now use AppStacks to upgrade the ‘gold’ image. It’s saving us a tremendous amount of time already; imagine the difference when we get to 100-plus applications.”
The Horizon 7 solution works seamlessly with the VxRail appliances running VMware. QMU can simply add extra capacity when required and because of the modular nature of this hyperconverged architecture, QMU can scale easily by adding VxRail appliances when it needs extra capacity.

“The speed in which we are able to get Horizon 7 up and running was a real gain. We never want deployments to interrupt the teaching environment,” says Davis.

In addition, 80 staff have access to VDI, with a further 320 to be added. “We wanted to assess VDI among staff first before deciding whether to open it up to the student body,” Davis explains.

Looking Ahead
The next challenge, Davis continues, is network segmentation and a stronger security position. He expects this project to further extend the partnership with VMware.

“We’ll be redesigning the network to make it more secure and trustworthy. Part of that will be to split the different devices and different functionality, whether that’s student laptops or mobile payments in campus shops. Having segmentation at a virtual level, in the software-defined data center, is vital. VMware NSX® Data Center will help us do that.”

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