Enabling students to learn safely

By teaming with Citrix, The University of Sydney quickly created an online learning environment for students who were unable to return to campus locations to study.

We’ve all heard someone utter the phrase, “It turned my world upside down”. Almost never do we hear someone say that, in just seven days, an innovative IT team designed, procured, implemented, tested and rolled-out an enterprise global solution that set things right again. However, the IT team at The University of Sydney did exactly that in providing remote students with rapid-fire education alternatives.

The University of Sydney community comprised of over 80,000 students and staff who are based across its 22 locations, including campuses and teaching hospitals. During the start of the first semester 2020, bushfires, local flooding and the COVID-19 virus caused havoc for the university – so much so, that 20 percent of the student population was unable to return to campus locations for classes.

Connecting students and staff across the globe

The University of Sydney is committed to delivering a great student experience. As long-time partners of Citrix, the university’s IT team deployed an entire digital environment that enabled remote access to coursework, apps and data. Technologists on the ground in China then tested the system to ensure its viability. “The great thing about the Citrix platform is that we built it directly in the cloud,” explains Jordan Catling, Associate Director of Client Technology at The University of Sydney. “Our implementation took seven days and is entirely scalable.”

The idea was to address the immediate challenge first: to build capabilities for students, followed by providing tools for staff and faculty. The team’s goal was to provide a range of agile tools, while avoiding being prescriptive as to how those tools should be used. This would ultimately enable greater innovation. “We wanted to provide a secure, high-quality student experience by supporting the diverse ways in which different individuals consume information,” Jordan says. “Citrix is one of our most involved partners in that endeavor. We’ve been sitting side-by-side with Citrix since we knew we had a complex issue to solve,” Jordan continues.
The team has provided more than 100 course-specific applications and SaaS apps that students can access regardless of the type of device or location. The student experience is as good as – and sometimes better than – what a student would have when using locally installed apps on a physical computer.

Citrix empowers students in virtual labs and classrooms

Many of the statistical, scientific or technical apps that The University of Sydney students use put high computational demands on physical computers. Virtualization with Citrix allows the university to run these intensive apps in the cloud. “A physical computer might take up to two minutes to load one of our statistical programs,” Jordan clarifies. “Running it on the Citrix Cloud management platform, we can see responsiveness in 20 seconds.”

The university has now enabled student access to virtual labs, and, thanks to Citrix in combination with other tools such as Zoom, students can attend virtual classes.

The Citrix-based Virtual Research Desktop is a great example of a virtual lab that delivers high-powered resources so researchers can perform their work more easily. The Faculty of Medicine and Health provides students with healthcare-related tools regardless of the teaching hospitals in which they operate. Not only can students now access information easily in the hospitals, they can also rely on Citrix to complete coursework as they are in transit to and from various medical facilities.

Citrix content collaboration capabilities allow students and staff to securely share data. In the past, transmitting massive volumes of data slowed down the system and took up valuable space on servers. Citrix solved that problem.

Not only is The University of Sydney now enabling students to work from anywhere, on any device, at any time, it is also providing remote PC access. This is something that some staff find particularly appealing. Users are able to connect to their physical desktop computers via a Citrix Virtual agent – without actually needing to be on site.

Citrix provides significant benefits for the IT team

The University of Sydney IT team has realized a number of benefits from the new solution. First, Citrix makes it easier than ever before to onboard students and faculty. Computers can be configured from a single image in minutes. Then the team can provide an overlay using its cloud-based tools so that users can access other valuable digital tools they may need. Instead of physically installing a subset of hundreds of applications, the Citrix platform enables virtual access to software that staff and students might only occasionally need. What’s more, IT is able to ensure a consistent, familiar and high-quality experience with every interaction.

Perhaps most important, the IT team can rest easy knowing that data and applications are secure in the new digital environment. Data does not reside on the students’ devices. It lives in the data center. Additionally, Citrix technology has embedded security so access is strongly controlled and user context is governed by policies set by the IT team.

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The University of Sydney
Monitoring performance to ensure a consistently great experience

Citrix also helps IT gauge the consistency of the online staff and student experience. Using Citrix Analytics, IT can monitor performance in remote locations to determine if latency is an issue and adjust to make the user experience even better.

The university’s IT team implemented an underlying foundation of Citrix networking technology to ensure performance is consistently high. This is achieved by prioritizing and routing network traffic based on geography. The Citrix network capitalizes on the nearest available resources.

Forward-thinking goals

In implementing this solution, The University of Sydney’s IT team had several goals in mind that could serve the university now and in the future. The first was providing a set of flexible, robust, scalable tools that are natural to use and highly responsive. Second, the team wanted to provide its user base with great tools that encourage innovation, without being prescriptive in their use. Finally, the team clearly saw the value of establishing and maintaining business partnerships that enable the exchange of innovative ideas.

“With a focus on multidisciplinary research and teaching, The University of Sydney wanted to provide our staff and students with a broad set of tools that enable disciplinary depth as well as breadth,” Jordan summarizes. “The great thing about platforms like Citrix is that they are feature rich, flexible and scalable, so we can embrace leading-edge ways of educating students and researching complex global problems.”

Jordan Catling
Associate Director of Client Technology
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