Enhancing flexible study environments in Taiwan

The Chinese Culture University enhances the learning and teaching environment for students and staff with an end-to-end virtualized desktop solution that lowers costs by 20 percent

Business need

To enhance the flexibility of its study and teaching environment, the university wanted to deploy a virtual desktop infrastructure (VDI).

Solution

The university worked with Dell to deploy a VDI based on Dell servers, storage and networking, as well as Dell Wyse endpoints.

Benefits

- Provides innovative teaching and learning environment
- Helps students improve their academic achievements through better support
- Lowers total cost of ownership by 20 percent with end-to-end solution
- Raises the efficiency of IT personnel by 300 percent
- Establishes foundation for cost-effective development across the desktops

Solutions at a glance

- Cloud Client-Computing
- Data Center
- Consulting
- Enterprise and Client Deployment
- Enterprise Support

"We discovered the VDI solution provided by Dell was capable of playing full high-definition videos on YouTube while allowing users to multitask. Everything ran so smoothly it was just like operating on a physical machine."

Chen Hengsheng, Director, Center for Information and Communications, CCU

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University students today need fast access to a range of applications and the flexibility for anywhere and anytime learning. This is why higher education institutions are investing in virtual desktop infrastructures to drive academic achievement and student preparedness for the entering the workforce.

The Chinese Culture University (CCU) in Taiwan wanted to migrate its desktop environment to a virtual desktop infrastructure (VDI). The university, founded in 1962, includes 12 faculties, including literature, law, business, engineering, journalism and mass media. The high quality of its teaching is recognized and has earned the institution numerous grants for teaching excellence from the country's Ministry of Education.

The university has invested regularly in its IT infrastructure, standardizing on Dell in the process. The institution rolled out 2,000 Dell OptiPlex desktops in addition to implementing a Dell PowerEdge FX converged infrastructure and Dell Storage PS Series arrays. The Dell OptiPlex desktops performed well, but the university wanted to adopt a new client strategy.

Chen Hengsheng, Director at the Center for Information and Communications at CCU, explains, "The existing desktop environment only allowed the students to study in classrooms. We wanted to provide flexible, anywhere, and anytime learning. We also found managing a large number of desktops time-consuming, and costs were rising year after year."

A solution to meet the teaching policy development of the university
Stakeholders saw that universities across

Taiwan had built VDI environments on a wide range of solutions. Furthermore, many were unable to integrate the VDI environments with their own information systems, reducing the effectiveness of the solutions for students and staff. CCU ran a proof of concept for a Dell end-to-end solution, complete with Dell Wyse endpoints and a Dell-based back end. The university did the work with the support of Dell Consulting Services. Chen says, "We discovered the VDI solution provided by Dell was capable of playing full high-definition videos on YouTube while allowing users to multitask. Everything ran so smoothly it was just like operating on a physical machine."

Products & Services

Services

Dell Consulting Services

Dell Deployment Services

Dell Support Services
— Dell ProSupport

Hardware

Dell PowerEdge R730 servers with Intel® Xeon® processors

Dell Storage PS6210XS array

Dell Networking S4810 switches

Dell Wyse 3010 thin clients

Meeting the university's project timelines and budget

The university worked with Dell Deployment Services to implement the VDI. It installed a back-end solution based on six Dell PowerEdge R730 servers with Intel® Xeon® processors and one Dell Storage PS6210XS array. In addition, the university installed a Dell Networking S4810 switch to support the VDI. Says Chen, "Based on the high-quality services provided by Dell, we were confident in the performance of the VDI solution and the post-sales assistance from Dell ProSupport. During the installations, we found Dell Deployment Services to be very professional. Our Dell project manager maintained a deployment schedule to keep everything on track. Together, we delivered the project on time and within the budget."

Enabling access to learning resources at any time

The impact of the VDI solution has been significant on students and teachers. Both have gained an exceptional user experience using software that allows access to their virtual desktops from PCs, notebooks and tablet devices. Students and staff on campus use Dell Wyse 3010 thin clients running Windows Embedded to access their applications. Chen says, "Students can study just as effectively on and off campus with our Dell VDI solution. Indeed, Dell has helped us deliver a more effective desktop environment all around. Students can now work anywhere and anytime."

Increases IT efficiency by 300 percent and extends the lifecycles of endpoints

The university has made significant cost reductions as a result of the migration to a Dell VDI. For example, endpoint refresh cycles on campus are now six to eight years instead of three to five. Furthermore, the Wyse thin clients consume substantially less power. The great news for the IT team is that it can redirect resources away from the desktops to data center operations. Today, it takes just one administrator to manage the desktops when they needed three before. Comments Chen, "We increased the productivity of our IT administrators by 300 percent by moving to a Dell VDI."

Lowers the total cost of ownership (TCO) on desktops by 20 percent

Stakeholders have calculated an important reduction in TCO through the adoption of the Dell solution. They estimate a savings of 20 percent thanks to the reduction in maintenance and operating expenditure across the environment. Comments Chen, "We hope to build on our solution in the future with the support of Dell. We also hope to share our VDI experiences with other universities and together enhance the quality of higher education in Taiwan."

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