Transforming the campus through desktop virtualization

The University of Arkansas cuts support costs and enables access to applications anytime, anywhere and on any device with a Dell EMC virtual desktop infrastructure.

Business needs
The University of Arkansas needed to give students, staff and faculty unrestricted access to applications and it wanted to decrease the number of resources required to support campus labs.

Solutions at a glance

Client Solutions
- Dell Wyse 3030 LT thin clients
- Dell Wyse 3040 thin clients

Data Center
- Dell EMC PowerEdge R730 servers
- Dell EMC VMware vSAN storage

Business results
- Simplifies endpoint management, so IT support personnel can focus on more important tasks and projects
- Enables universal application access for students, staff and faculty
- Drives new IT initiatives and cross-campus partnerships

“We can more easily unlock new strategic goals and initiatives because of the Dell EMC virtualized environment we have. We now have a pool of resources to facilitate mobile application delivery, so launching new initiatives is faster.”

Jon Kelley
Associate Director of Enterprise Innovation,
University of Arkansas
Calling the University of Arkansas IT services team “busy” would be a significant understatement. The team is responsible for managing and configuring infrastructure, applications and IT services for more than 27,000 students and 5,000 faculty and administrative staff. “We have limited IT resources, so we are always trying to reprioritize our effort to match our focus, while continuously introducing innovation to campus,” says Stephen Herzig, director of enterprise systems for the university. “That means looking for new ways of maximizing our IT spending, lowering our support costs, creating more efficient ways of working, and finding new technologies to enhance the learning experience for students and faculty.”

Additionally, the IT staff must respond to increasing student demands for ubiquitous access to applications. “While many of our students want access to university applications on their personal devices, we also think about our students who need this access due to financial or situational barriers,” says Jon Kelley, associate director of enterprise innovation at the university. “We found it to be a challenge for certain applications in specific departments such as Architecture and Design. Students could access certain applications only in specific on-campus labs.” Because the IT team wanted to reduce endpoint management costs and make delivering services and applications easier and more flexible, it sought to deploy a virtualized IT environment. “There was a big drive on campus to expand access to meet our students where they are, and we wanted to find the right technology to support that,” says Kelley.

Transforming the campus through virtualization

The university’s IT department had already begun to implement a virtualized environment based on Dell EMC server and storage technologies. Following on the success of that implementation, the team decided to expand the environment with a Dell EMC virtualized desktop infrastructure (VDI) solution. “Dell EMC is familiar with our environment,” says Herzig. “When we present them with a business need, they quickly help us find a solution.”

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Stephen Herzig
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Working closely with Dell EMC, the university deployed a VDI environment based on Dell EMC PowerEdge R730 servers with NVIDIA GRID Tesla M10 cards and Dell EMC VMware Horizon View software, with VMware vSAN storage. The solution is delivered to several hundred Dell Wyse 3030 and 3040 thin clients, located in computer labs and other departments across campus. Herzig says, “The Dell Wyse 3030 and 3040 thin clients are very efficient and simple to manage compared to some of the other solutions we evaluated.”

Lowering support costs through simplified, centralized management

The university’s IT staff has simplified overall endpoint and application delivery management with the VDI solution, which eases the support burden. “We can roll out new services and applications faster with the Dell EMC VDI solution, and we can centrally manage the entire lab environment,” says Herzig. “As a result, our service desk spends a minimal amount of time and resources managing the lab workstations and troubleshooting issues. This gives the service desk more time to focus on face-to-face, hands-on help for students.”
Giving students unlimited access to applications on any device

Architecture and Design students — as well as a growing number of students in other departments — now can access learning applications from anywhere. “For our students, we are enabling application access on any device, anywhere, at any time through this virtualized environment,” says Herzig. “Instead of having to go to specific labs to use these applications, they can open the applications on their laptops, phones or tablets whether they’re on campus or not. That kind of flexibility is really going to transform access to learning resources at the university.”

Improving security and attracting new students and faculty

The university is improving its overall network security using its new VDI environment. “We have enhanced security because we can control devices more tightly now,” remarks Kelley. “We can quickly set things up via Group Policy and lock the environment down because of the non-persistent desktops we’ve rolled out. Also, there are no more individual machine updates. It’s now one and done for security updates.”

The new VDI environment is a compelling technology for new and potential students, researchers and faculty. “We’ve been pushing to deploy cutting-edge technology on our campus over the past few years, and the Dell EMC VDI solution is a big part of that,” says Herzig. “It is our hope that these new technology solutions become important factors for prospective students, researchers and faculty in choosing our university. That’s very exciting for us.”

Driving new IT initiatives

The university is delivering some new IT initiatives faster because of the simplified management and time savings the VDI solution enables. “We can more easily unlock new strategic goals and initiatives because of the Dell EMC virtualized environment we have,” says Kelley. “We now have a pool of resources to facilitate mobile application delivery, so launching new initiatives is faster.”

Additionally, the IT team has been able to form new partnerships across campus. “There is now a true technology partnership across campus that wasn’t as tight before,” says Herzig. “We are forming cross-functional teams on campus to tackle problems together. This began with the deployment of the centralized VDI environment.”

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