

TECHNOLOGY DRIVES SUCCESS FOR TOP UNIVERSITY

Leading Latin American university enhances IT performance for staff and students with Dell EMC servers and XtremIO



Education

Mexico

Business needs

- Give students anytime, anywhere access to IT, on any device
- Speed up services for students, professors and admin staff
- Ensure constant service uptime

Solutions at a glance

- [Dell EMC XtremIO All-Flash](#)
- [Dell EMC PowerEdge M1000E Blade Enclosure](#)
- [Dell EMC PowerEdge M630 server](#)

Business results

- Constant system availability
- Support for 2,000 concurrent users during student registration

Super-fast

Application performance



Innovative
hybrid-cloud delivery



Technology for world-class education

Information technology plays a key role in modern university life, impacting students' work and extra-curricular activities. Students' expectations for technology are also higher than ever, and they need to access the information and applications they use in real time, from anywhere, on any device. At the same time, professors need platforms and systems that can support their departmental, and research and teaching activities.

The University of the Americas Puebla (UDLAP), one of the top private schools in Mexico, offers a diverse range of professional degrees, masters degrees and PhD programs. The University was founded 76 years ago and is located on a 180-hectare campus in San Andres Cholula in Puebla. With 9,500 students and 750+ teaching staff (90 percent of whom are educated to PhD level), UDLAP is one of only seven universities in Latin America to be accredited by the Southern Association of Colleges and Schools. The University's mission is to educate students to become critical, creative, innovative professionals, with a deep social conscience and the skills needed to face the challenges of globalization.

Fernando Thompson de la Rosa, Director of IT at UDLAP, says, "To deliver a world-class education for our students, we need IT infrastructure that meets the needs of our digital world and our entire UDLAP community. For example, students now expect to access courses online on their PCs, while also looking at a digital library book on their tablet and consulting a research file on their phone. This requires infrastructure that is high-performing, always available and, above all, fast. The majority of our students are Millennials, so they're used to having real-time access to a range of applications. As an IT team, we need to offer our professors and students the best experience technology can offer, with all the tools they need to face the future."

"Technology also means that education can now transcend the classroom," continues Thompson. "Students and professors can stay in touch thanks to our collaboration tools, and a range of digital materials can be accessed from anywhere, reinforcing classroom learning. Added to all of

this, students now tend to connect with applications, rather than web pages, which puts even greater demands on our infrastructure. Our mission as an IT team is to meet these needs in a way that's timely, secure and fast."

As well as meeting the expectations of students and professors, IT supports administrative functions across the University. As a result, operations, finance, HR and a range of other areas benefit from IT tools and support, helping them function as efficiently as possible and enabling UDLAP to maintain its leadership position in the higher education sector in Latin America.

Super-fast, always-on services and servers

UDLAP is constantly evolving its IT environment to ensure that its IT services can rise to the challenges of modern university life. To maximize the performance of its critical academic and administrative applications, Thompson and his team decided to implement a Dell EMC XtremIO All-Flash storage solution with Dell EMC servers. "We run all of

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IT Director, UDLAP

our critical workloads on Dell EMC servers, and our storage platform is Dell EMC XtremIO. It's worth mentioning that Dell EMC is the only brand that's always been present in our data center," says Thompson. "When we evaluated the latest storage solutions, we saw that Dell EMC XtremIO could deliver major performance improvements for us, and we were excited to try it out in our live environment."

With XtremIO, the IT team has achieved major performance improvements that have positively impacted the entire UDLAP community. "The performance of our academic and administrative applications is incredible with XtremIO," says Thompson. "Processes that used to take hours now take minutes or even seconds, which means that technology is never a barrier to learning, or for the productivity of staff across the institution."

Technology: an extra player in the UDLAP American Football team

The vision of UDLAP is to be a leader in study programs, scientific activities, cultural programs and sports. For this reason, cultural and sporting life play a major role in the UDLAP experience and community.

Within these activities, UDLAP's American Football team the Aztecas won the college championship in 2016, and technology played a role in their historic victory. Working with team coach Erick Fisher, Thompson used specialist software running in XtremIO and on the Dell EMC servers to power video cameras overlooking the field. The coach was then able to monitor and analyse the position of all the players via his tablet in real time, ensuring they made the right moves in training. All training sessions and games are recorded in XtremIO, and Fisher and the team review all the plays after games. "At UDLAP, technology features in every single practice and football game – that's how seriously we take the application of technology," says Thompson.

More than 50% of students register for courses within three hours

At the start of the semester, UDLAP students log into the University's online registration system to choose their courses and timetables. With thousands of students logging in simultaneously, the previous system was negatively impacted by the huge demand, making response times slower and – on occasion – resulting in system failures that required students to start the whole registration process over again.

With the implementation of Dell EMC XtremIO, the inscription process has been improved significantly, allowing more than 2,000 students to carry out the registration process simultaneously. For the first time in UDLAP's history, more than half of the student community registered and chose their courses online in the first three hours after registration began. "With XtremIO, the system stayed up and running even when 2,000 students went online to register at the same time," says Thompson. "More than 5,000 students registered on the first day, and XtremIO wasn't even close to working at capacity. The excellent experience enjoyed by students was reflected in comments on UDLAP's social networks, where a large number of students congratulated the IT team. "We had excellent comments from students who used the system," says Thompson.

Scalability on demand for IT services

The modular architecture of Dell EMC XtremIO means that UDLAP can scale its IT services on demand, which is critical for staying at the forefront of technology and for meeting the needs of the UDLAP community over the coming years. "When acquiring new technologies, it's important to think about where you are going to be in five years," says Thompson. "This ensures that the solutions we

acquire today are able to scale and meet future demands. This is exactly the approach we took when we acquired Dell EMC XtremIO, which allows us to add disks as required to the rack we already have, depending on the needs of the institution. With XtremIO, we can double, or even triple, our storage capacity in a matter of days if necessary.”

Innovative hybrid-cloud delivery

Cloud infrastructure can deliver significant efficiencies in terms of resource utilization. To take full advantage, the UDLAP IT team has built a hybrid cloud in Dell EMC XtremIO that connects to a number of public clouds. One example of how these clouds are integrated is the Digital Evidence Portfolio application used by UDLAP students. With it, students can review their projects and homework in the XtremIO private cloud. From the same interface, they can also consult documents and course materials stored in the public cloud. While students click to access different applications, the back-end data could be stored in the XtremIO private cloud or in the public cloud – but the user experience is fast and seamless.

“With EMC XtremIO, it was simple to build and deploy our hybrid-cloud environment,” says Thompson. “Our in-house hosted apps now co-exist seamlessly with apps hosted in the public cloud, providing consistently excellent, seamless, transparent services for our end users. In addition, the environment applies the same strict security protocols to all applications – irrespective of whether they run on our private cloud or on public infrastructure – ensuring that all of our critical systems and data are protected at all times.”

e-Level: the key partner

e-Level was the key partner for UDLAP’s XtremIO migration. The e-Level team demonstrated an in-depth knowledge of UDLAP’s environments and infrastructure, and the demands of staff and students in the university environment.

“e-Level has accompanied us on our technology journey for many years, and they fully understand our needs,” Thompson adds. “Without doubt, we made the best decision in appointing e-Level as the integrator for this project.”

Dell EMC and UDLAP: more than a decade together

Dell EMC has always been present in the UDLAP infrastructure. “We’ve benefitted from the reliability and performance of Dell EMC solutions for more than 15 years,” says Thompson. “In the nine years I’ve been at UDLAP, we’ve never experienced unplanned downtime with a single piece of Dell EMC equipment.

“With Dell EMC at our side, we’re ready for the next generation of technologies that will further improve the teaching and learning experience at UDLAP.”



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