



### Executive Summary



**Virginio García, Systems Technician at the University of Murcia**

**Antonio Serna, Responsible of Classroom Free Access (ALAS) at the University of Murcia**

"With UDS Enterprise, deploying a classroom has been much simpler and homogeneous for us, IT can manage hundreds of machines from a centralized point"

- Client Name: University of Murcia
- Sector: Education
- Country: Spain
- Students: 34.404
- ASS: 1.122
- TRS: 2.424

### Access to computer rooms 24x7

Teacher responsibility, with adequate, practical and flexible academic offerings, in addition to strong support for research and innovation are hallmarks of the University of Murcia (UMU). In this line, one of the aspirations of the center was to bring university classrooms free access to students in a way to offer a replication of computer rooms accessible through any device, anytime and anywhere.

The IT university team had clear, from the beginning, that desktop virtualization (VDI) was the most appropriate tool to achieve this goal. "In 2009 we started to evaluate VDI solutions and immediately detected that UDS Enterprise suited 100% what we were looking for," explained Virginio García, a System Technician at the University of Murcia. "The possibility of deploying Windows and Linux desktops, integration with the CAS authentication system of the University of Murcia, and customizing the user interface with the corporate image were decisive in selecting this software," says the System Technician.

The project was launched in 2010, in 2013 it expanded the use of VDI to deploy physical classrooms and provide access to students for internships of their degree courses, or to pursue a class taught in the classroom at that time.

"Students gain a big advantage because they do not need to move to university facilities to access the applications they use on their qualifications," says Antonio Serna, Head of Classroom Open Access (ALAS) of the University of Murcia. More than 7.000 students use UDS Enterprise to access the service EVA of the University of Murcia, which brings the university inside student's homes.

In fact, prior to the implementation of VDI students had to travel to the physical center classrooms which was inconvenient for students. "These classrooms were managed by copying images, so deployment time employing IT staff was much higher; now deploy is much simpler and homogeneous for technical personnel who can manage hundreds of machines from a central point is classroom", says Serna, who also highlights the savings that have been made in equipment, because it allowed them to "reuse old PCs which had become obsolete."

Safety is another aspect that has improved dramatically with the implementation of desktop virtualization with UDS Enterprise. "Virtual desktops can have a single random password for each instance, adding a very important layer of security. In fact, even if a user discovers the password to a machine, he will not be able to enter other machines who are in the same network range", says the technician of the UMU.





### Benefits for all staff

In addition to students, ASS and TRS also enjoy the benefits of desktop virtualization in computer labs to access library resources and for various training courses. "They just have to request the technicians for the software they need and they easily deploy hundreds of terminals for them by just modifying a machine template and publishing a new version of the service," says García.

#### VDI INFRAESTRUCTURE

- ✓ **Broker:**  
UDS Enterprise
- ✓ **Hypervisor:**  
VMware vSphere
- ✓ **Connection Protocol:**  
RDP & HTML5
- ✓ **Authenticator:** CAS
- ✓ **VDI OS:** Windows & Linux
- ✓ **Servers:**  
More than 20 servers with more than 6TB of RAM
- ✓ **Storage:**  
1 SSD cabin dedicated to VDI with 23 TB

In total, the University of Murcia deploys about 15,000 virtual desktops per month, two-thirds are served from the physical classrooms Linux computers of the center, and the rest from different locations through devices and operating systems chosen by the students.

As for the VDI infrastructure of the UMU is formed by a vCenter where ESXi hypervisors are centralized, the CAS authenticator is integrated through a single-sign-on with the UDS Enterprise connections broker, and the RDP connection protocol connects to Windows desktop and Linux XRPD. In addition, to facilitate the adoption of BYOD (Bring Your Own Device) trend, UDS Enterprise allows access through HTML5 via smartphones and tablets.

“VDI with UDS Enterprise is an essential service for the entire university community”

The experience of the UMU with the UDS Enterprise team is "very good, whenever we had a need for the support we have had a quick and satisfactory response and the opportunity to participate in product roadmap is very interesting. In fact, from the university, we come up with ideas that should be implemented in future versions; nevertheless, software flexibility allows us to tailor new modules to our particular needs", says the System Technician.

In short, from the university center, they made a "very positive balance of the project", said Virginio García, since "it has been widely accepted by the university community, and has become an essential service for students, teachers, administrative staff and for IT, of course".

From this educational center, "we don't hesitate to recommend UDS Enterprise in educational environments, especially where large number of virtual desktops are to be deployed," says García.

The UMU plans to further advance the adoption of innovative technologies, the next step will be "test application virtualization with UDS Enterprise" concludes the technician of the UMU.



# UDS Enterprise

## University of Murcia Case Study

[www.udsenderprise.com](http://www.udsenderprise.com)

### Support and Professional Services

VirtualCable markets UDS Enterprise through a model description depending on the number of users, including NBD personalized support via email and product upgrades.

In addition, Virtual Cable offers professional services to install and configure Enterprise UDS and other virtualization technologies.

For more details, visit [www.udsenderprise.com](http://www.udsenderprise.com) or send us an email at [info@udsenderprise.com](mailto:info@udsenderprise.com)