



Success Story

SUSE Enterprise Storage

University of Valencia

To offer new, always-available digital services to its students and staff, the University of Valencia needed a smart, reliable and cost-efficient way to store and access huge amounts of data. By implementing SUSE Enterprise Storage™, powered by Ceph, the university has now achieved the flexibility and scalability required to manage terabytes of data, with full peace of mind that it will be able to keep up with any data surge in the future.



Overview

Founded in Valencia, Spain, in 1499, the University of Valencia is one of Spain's oldest and most prestigious higher education institutions. Offering a wide array of undergraduate and postgraduate courses that span from sciences to humanities, the university is also a leader in research—both nationally and internationally. The university has approximately 50,000 students and 6,000 members of staff—including professors and researchers.

Challenge

Universities around the world face ever-increasing demand for more and better online services—from enrolling to finding accommodation, and from student mentoring to career opportunities.

Students today are spoiled for choice of where and what to study, and tend to be attracted to academic institutions which

“SUSE Enterprise Storage, powered by Ceph, offers us a smarter, more affordable way to keep up with surging data demands in a highly scalable manner.”

ISRAEL RIBOT

System Engineer
University of Valencia

not only boast a prestigious history, but are also tech-savvy and forward-thinking.

As one of Spain's leading universities, the University of Valencia knows it must offer its students and staff the best possible experience, to foster knowledge and maintain its hard-won reputation.

Israel Ribot, System Engineer at the University of Valencia, said: “To provide the digital services that our students and staff require and expect in a reliable, timely fashion, we needed to be faster and more nimble. Our legacy storage systems were no longer suitable to support us with this goal.”

Solution

The University of Valencia was impressed by Ceph, an open source solution offering extremely scalable unified block, file and object storage on commodity hardware. To smooth the deployment and management of this new technology, and to gain enterprise-class support, the university chose SUSE Enterprise Storage, a software-defined storage solution powered by Ceph.

Israel Ribot said: “The SUSE® solution immediately stood out as the right one for our needs, due to its ease of deployment, flexibility and cost-efficiency. SUSE Enterprise Storage offers us a smarter, more affordable way to keep up with surging data demands.”



VNIVERSITAT
DE VALÈNCIA

University of Valencia at a Glance:

With 50,000 students and 6,000 staff, the University of Valencia is one of Spain's oldest and most prestigious academic institutions.

■ Industry and Location

Education, Spain

■ Products and Services

SUSE Enterprise Storage

■ Results

- + 40 percent cost savings enable university to allocate more funding to value-add projects
- + Three times faster than traditional storage, for enhanced service delivery
- + Helps attract more students and maintain leadership in Spain and abroad

“Thanks to SUSE, we are confident that we can keep serving users and applications reliably as data volumes continue to grow rapidly. In addition, we are able to offer innovative services that appeal to larger numbers of students, to help us maintain our prestigious position in Spain and abroad.”

ISRAEL RIBOT
System Engineer
University of Valencia

www.suse.com

SUSE Enterprise Storage gives the University of Valencia a single software-defined cluster that provides applications with unified block storage offering unlimited scalability from terabytes to petabytes. The solution delivers exceptionally high system resiliency and application availability through automated optimization and self-healing capabilities. This enables it to provide enterprise levels of robustness without the cost of enterprise-class hardware.

“We approached the implementation as a two-phase project, and will steadily add more capacity as we go along,” said Israel Ribot. “At present, the SUSE solution is deployed in our main data center, where we run 200 virtual machines and handle over 50 TB of data. Once phase two of the project is complete, we expect to be storing a much larger quantity of data.”

Results

With SUSE Enterprise Storage on Fujitsu hardware, the University of Valencia benefits from dramatically increased scalability and flexibility in storage, which in turn means that it can serve increasing internal demands for rapid and reliable access to huge amounts of data.

Comparative testing between SUSE Enterprise Storage and NFS revealed both higher and more consistent performance. Israel Ribot said: “For example, installing 30 virtual machines with NFS took 2.4 times longer than installing a single virtual machine. With SES, the same test took only 1.5 times longer. And as we scaled from 10 to 20 to 30 to 40 machines, the SUSE solution’s performance remained steady,

while the NFS performance degraded in a linear fashion.”

Thanks to the SUSE solution’s cost-effectiveness, the university has saved 40 percent in storage costs. Israel Ribot said: “By slashing expenses in data storage, we can invest more budget into new projects and services that attract increasing numbers of students, helping us to beat the competition.

“In particular, we have enabled the university to allocate more funding to its internationally acclaimed research projects, that help strengthen our reputation on a global scale.”

Additionally, the SUSE storage solution is three times faster than the traditional NAS storage previously used for virtualization by the university, which translates into faster and better delivery of digital services to students and staff. The university continues to develop its software-defined storage environment, having recently upgraded to the latest release: SUSE Enterprise Storage 5.

Israel Ribot concluded: “The SUSE solution is incredibly stable and robust, and we are looking forward to reaping even more benefits once phase two of our project is complete. Thanks to SUSE Enterprise Storage, we are confident that we can keep serving users and applications reliably as data volumes continue to grow rapidly. In addition, we are able to offer innovative services that appeal to larger numbers of students, to help us maintain our prestigious position in Spain and abroad.”



Contact your local SUSE Solutions Provider, or call SUSE at:

1 800 796 3700 U.S./Canada
1 801 861 4500 Worldwide

SUSE
1800 S. Novell Place
Provo, UT 84606

SUSE
Maxfeldstrasse 5
90409 Nuremberg
Germany

