

## Improved IT attracts students looking for access to the best resources

With over 22,000 students, 800 teaching staff and 800 visiting lecturers, the University of Westminster prides itself on the ability to offer the best resources to facilitate learning. Undergraduates make up 75 per cent of students and more than 5,000 are international students from over 150 countries. Westminster is in the top 15 of most popular UK universities for international students and continuing to attract over-seas students is an important business driver for the organisation.



### Managing technology, enabling business

The University recognises the importance of technology in delivering services and facilities to attract new students. Since selecting systems integrator, Esteem Systems, to work on an ambitious IT infrastructure-transformation project, The University of Westminster has :

- ▶ **Minimised power consumption and carbon footprint**
- ▶ **Reduced maintenance and support costs**
- ▶ **Improved disaster recovery with two data centres**
- ▶ **Improved performance and simplified IT management whilst minimising downtime**

### The University of Westminster

With three campuses in central London and one in Harrow, the University of Westminster can offer all the academic, cultural and career opportunities expected from an international educational institution in one of the world's most vibrant cities.

The University attracts over 22,000 undergraduates and postgraduates from 150 different nations, making it one of the most popular UK universities for international students. Westminster is the leading modern university in a number of research areas including art and design, electronic engineering and law. It has also achieved excellent QAA ratings for a wide range of courses, such as Arabic, building, communication and media, and politics.

### Opening a new chapter

The University of Westminster's storage and data requirements are immense due to an explosion of electronic learning and research resources such as databases, e-journals, webpages, exam papers and CD-ROMs.

Jesse Lewis, Principal Systems Development Officer at the University of Westminster, explains, "Universities are more like commercial businesses than ever before and so we are in a very competitive environment. A solid technology foundation means we can continue to grow and adapt to our changing needs as an organisation."

Before beginning to work with Esteem, processing power, data centre space, storage capacity and electricity consumption, were all key challenges for the University. It needed to scale its system support to meet the increasing demand for electronic and online resources, without putting any additional strain on core business applications, such as student records, HR and library resources.

"Not only did we need redundancy to meet our additional needs, we required a server infrastructure that would allow us to carry out regular maintenance without disrupting day to day needs. Our staff and students need to be able to focus on their work without worrying about a frustratingly slow system or worse, lost information and data," adds Jesse Lewis.

"We were very aware of green computing targets and how virtualisation would help us to meet these. By allowing us to reduce the physical amount of servers required, we would be able to reduce power consumption and minimise cooling equipment. It would also give us the opportunity for up-scaling in the future," says Jesse Lewis.

# UNIVERSITY OF A BETTER ENVIRONMENT WESTMINSTER



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## The right answer

The University put out a tender to find the best virtual technology available to meet its needs and, following stiff competition Esteem was awarded the contract. “Whilst all the competitors offered a VMware solution, Esteem stood out because of its heritage in the education sector and obvious understanding of how to meet our needs,” comments Lewis.

Esteem Systems has more than 25 years experience of working with organisations to improve their performance by aligning business objectives with the delivery of tailored IT services. In this time it has designed, implemented and managed IT solutions for many of the UK’s leading Universities and has delivered proven ROI.

## The prep work

Esteem was selected to work closely with the University’s IT team to mentor them on how to operate all aspects of the new infrastructure, enabling them to complete the project. Esteem invested time into bringing the University’s IT team up to speed on how to manage the new server estate, improve availability and IT processes, meaning University staff can now manage the new IT infrastructure in-house.

Jesse Lewis explains,

“We knew virtualisation would allow us to refresh hardware more easily because we’d tested it in a development environment and were sure of the benefits. Esteem was chosen for its expertise and ability to help replicate this success for real”.

## Services

- Capacity planning
- Consultancy
- Design
- Implementation

## Software

- VMware Server Virtualisation Technology
- DataCore SanMelody



## Seeing results

Working together, Esteem guided the University of Westminster staff through the process of building the new infrastructure using VMware virtualisation technology before migrating existing and additional virtual services over. Spread across two remote data centres (one in West London and one in Harrow), 18 servers are now supported using DataCore SanMelody to provide replication services in the event of disruption to one site.

Jesse Lewis continues, “Upgrading our IT performance through virtualisation has guaranteed us a significant return on server investment and a lower total cost of ownership. Every machine on the University network has already seen a performance increase in speed, which has been recognised by staff and students alike.”

Now, the University of Westminster is able to refresh its core business applications as necessary with greatly reduced downtime for staff and students. As demand changes, the University can modify and allocate resources quicker than before. Before the new infrastructure was built it would take the IT team several days to buy new hardware and configure it, now the IT team simply have to manage a simple re-boot and add memory to accommodate additional demands to the system.

The University can dedicate fixed resources to a chosen server when required and tailor a server’s processes through performance migration that is built into the system. Policies set within the software best utilise server capacity, for example, to schedule maintenance or updates when demand is light.

High availability of the new IT infrastructure means that in the event of physical server malfunction, all virtual servers automatically move to another physical server to prevent loss of data and downtime. The solution also provides the ability to drag and drop a running virtual server with no downtime from one host to another, which means that computer users can work without the knowledge that IT maintenance is taking place.