

“A complete infrastructure transformation in partnership with Servo has reduced operating cost and has created an outstanding platform for the future.”

ALAN BROADAWAY,
HEAD OF ICT, the University of Greenwich



Background

The University of Greenwich is home to a thriving community of over 30,000 students of all ages and 3000 staff. The university caters for a broad cross-section of students ranging from those from the local communities in south-east London and Kent to international students drawn from over 140 countries. The university has three campuses; Avery Hill, in the south-east London district of Eltham; Greenwich, in the historic London borough; and Medway, which is in Chatham Maritime, Kent.

The university traces its roots to 1890, when Britain's second polytechnic was opened near the Thames at Woolwich, and it was an innovator from the start. Over the years a range of specialist organisations have joined the institution, giving it diverse strengths in subjects such as teacher training, architecture, engineering and history.

A Compelling Need for Change

The University of Greenwich had tended to procure servers and storage on a project by project basis, with server provision being against a particular project need on a particular site. The university had approximately 50 servers on each site covering routine functions such as printing, backup etc, with other servers being located in specific schools. The number of servers was growing exponentially along with the administration overhead to support them. The utilisation of individual servers was low and there was an interesting mix of equipment from different vendors. The university was finding it difficult to provide sufficient storage to meet increasing demands, which meant users were turning to USB memory sticks and local hard drives to store their information. The ICT team were also supporting a number of email solutions, with a variety of clients, making it difficult to share files quickly and easily and deal with external email attachments. As a result, the university was also moving to exchange 2007 as part of a wider university strategy.

“Historically, we tended to provide a dedicated server and associated storage to meet each project need and had acquired equipment from a variety of manufacturers.”

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The university had data centres at all three sites, but the data centre at Avery Hill was limited in terms of power and cooling. The ICT team were finding it increasingly difficult to manage the servers, meet the demands for storage and provide a reliable backup service. The existing backup regime was not capable of coping with the proposed investments in Storage Area Networks and server virtualisation. This created the opportunity to standardise backup processes across the three university sites.



OVERVIEW

The Challenge

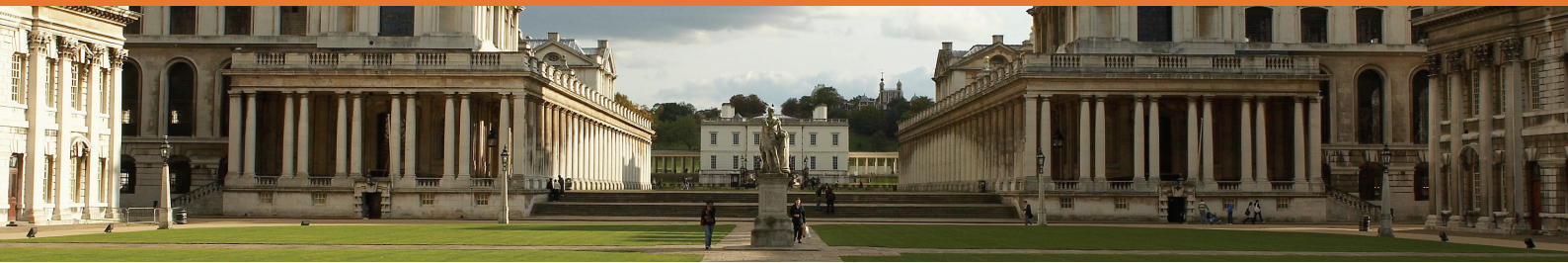
The University of Greenwich were seeing demand for infrastructure capacity, capability and flexibility growing. They were looking for a trusted partner to help them transform their infrastructure and tackle the diversity of ageing equipment that was increasingly difficult to manage.

The Solution

Servo partnered with the university to design and implement an integrated infrastructure solution across their three campuses bringing together server virtualisation, storage management and a fast backup solution.

The Benefits

Servo helped the university create a high availability infrastructure that enabled the dynamic allocation of IT resources. The solution was easier to manage and increased flexibility of both equipment and staff. It improved the service to both staff and students, whilst also reducing operating cost.



“We wanted to make a step change in our approach and Servo were able to support us in doing that”



the
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of
GREENWICH

A Total Solution Delivered in Partnership with Servo

The university worked with their procurement team to identify potential suppliers who could deliver a solution within national framework agreements. The intention was to find the solution that offered the best value for the University of Greenwich. Servo proposed server consolidation using HP Blade technology, with an HP Storage Area Network solution, using the same configuration on each site. They also proposed the HP Data Protector solution for backup. The HP equipment offered high availability, resilience and flexibility. In choosing Servo, the university considered the quality of their project management, the level of service they were able to offer and their willingness to act as a single point of support for the whole solution. Servo was also able to assist the university in virtualising the server estate and was backed by VMware.

The university is clear that the support for the implementation of the solution from both Servo and HP has been excellent, with a range of expertise from across Europe being available. In fact, at times, Servo has gone well beyond their contractual obligations to ensure issues are addressed and have provided a focal point to pull all the elements of the solution together, working closely with HP and other partners.

Major Benefits Fall into Place

The university acquired three large Storage Area Networks, with groups of disks replicated across sites, giving multiple access paths to specific data. The solution was implemented in a triangular configuration to give added resilience. Thus, if the exchange 2007 infrastructure hosted at Greenwich fails, the system can immediately be brought up at Medway. The university is also using dynamic allocation of resources between servers, with a cluster of HP Blades on each site. This has given the university a high availability infrastructure that supports the university's disaster recovery plan. In fact, the university has experienced 100% availability of the Storage Area Network since its implementation.

This project has delivered a solid infrastructure platform that can be built upon for the future. The three Storage Area

Networks are fully implemented and the university is looking to increase the capacity of the solution to support new applications.

The new backup regime is in place and is running in parallel with the old arrangements. The old backup system will be retired shortly. The university has implemented a virtual tape library, which speeds up the backup process by allowing the backup to be made to disk. The university is also able to carry out these backups during the working day, as they do not affect systems performance. The HP Data Protector solution has enabled the university to move to daily backups to disk, with weekly and monthly backups to tape that are held in separate off-site locations.

The successful implementation of the project has enabled the university to reduce the diversity of its equipment, which has allowed it to consolidate the skills of the staff that support the solution. This has enabled more staff to support the new solution and further consolidation will happen in the future. The greater standardisation of procedures achieved through the project means that staff are now able to work across all three sites. The university is looking to consolidate more applications on to the Storage Area Network and increase the use of server virtualisation.

The university has seen power consumption reduce, heat output reduce, the number of servers reduce and overall operating costs reduce. Power was becoming an increasingly important factor, with costs increasing significantly. This project has helped to halt that increase.

“This project has made a real difference to the staff and students of the university and provides an excellent platform for the future.”

Alan Broadaway,
Head of ICT, the University of Greenwich

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