



● Strategic storage deployment reducing operating costs ●

With demand for IT resources and services outstripping supply, the University of Greenwich was looking for a trusted technology partner for its IT infrastructure, to improve efficiency and reduce costs.

The University had around 50 servers at each site covering functions such as backup and print, with other servers in specific schools, and numbers were growing exponentially along with the administration overhead to support them. The University had procured servers and storage project-by-project to meet requirements on particular sites, leading to an interesting mix of equipment. Worse still, utilisation of servers was low. "We tended to provide a dedicated server and associated storage to meet each project need and had acquired equipment from a variety of manufacturers," says Alan Broadaway, Head of ICT, University of Greenwich.

One effect was that the University found it increasingly difficult to provide sufficient storage to meet demand, with users turning to memory sticks and local hard drives to store information. The ICT team was 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 also planned moving to Microsoft Exchange 2007 as part of a wider strategy.

"The complete infrastructure transformation in partnership with Daisy reduced operating costs and created an outstanding platform for the future."

Alan Broadaway – Head of ICT, University of Greenwich

How We Help

Client

Home to 23,000 students and 3,000 staff, the University of Greenwich in London caters for a broad cross-section of students drawn from local communities in South London and Kent to international students from over 140 countries.

Challenge

Demand for infrastructure capacity, capability and flexibility was rising fast. The University wanted a trusted partner to help transform its infrastructure and diverse range of ageing equipment that was becoming increasingly difficult to manage.

Solution

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

Benefits

IT services provided to staff and students improved while operating costs fell. The University has a high availability infrastructure that enables the dynamic allocation of IT resources; this solution is easier to manage and enables increased flexibility for equipment and staff alike.



With data centres at all three main sites, its facility at Avery Hill was particularly limited in terms of power and cooling, with ICT finding it increasingly difficult to manage servers, meet the demands for storage and provide reliable backup. The existing backup regime was not capable of coping with proposed investments in Storage Area Networks and server virtualisation, which created an opportunity to standardise backup processes across the three sites.

A best-value solution for Greenwich

The University worked with its procurement team to identify potential suppliers able to deliver a solution within national framework agreements, and one that offered best value. Daisy proposed server consolidation using HP Blade technology and a HP Storage Area Network, using the same configuration on each site, plus HP Data Protector for backup. This approach was proven to deliver high availability, resilience and flexibility. Daisy was ultimately chosen by the University based on its project management capability and ability to act as a single point of contact and support for the entire solution. Daisy could also take responsibility for virtualising the server estate using market-leading VMware technology. In the event, Daisy operated well beyond its contractual obligations to ensure all issues are addressed and resolved speedily, providing a focal point to integrate all elements of the solution, working closely with HP and other key partners.

Protecting data and applications: backup and disaster recovery

The University acquired three 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 for added resilience. The University is also using dynamic allocation of resources between servers, with a cluster of HP Blades on each site. This has delivered 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. With a new backup regime in place, the University also implemented a virtual tape library that speeds up the process by enabling the backup to be made to disk. Backups can now take place during the working day because they do not affect systems performance. Indeed, the new platform enabled the University to reduce the diversity of its equipment and so consolidate the skills of its support staff. At the same time, greater standardisation of procedures means that staff can now work across all three sites, with the University looking to consolidate more applications on to the Storage Area Network and increase the use of server virtualisation. And the benefits continue: power consumption reduced along with heat output as the number of servers fell, reducing energy costs and improving the energy efficiency of the estate, so having an impact on overall operating costs.

About The University of Greenwich

'On the doorstep of London and close to the cream of Kent', the University of Greenwich is home to a community of over 23,000 students of all ages. The University has three campuses: Avery Hill, Greenwich and Medway. It has invested millions of pounds on its three campuses, 1,200 programmes and first class research.