

Case Study

University Campus Suffolk (UCS)

»Fujitsu PRIMEFLEX® vShape’s key advantage is that it includes all the necessary elements so we didn’t have to cast around for components. Fujitsu plays to its own strengths in the hardware space while partnering with best-in-class software providers like VMware.«

Peter O’Rourke, Director of IT Services, University Campus Suffolk



The customer

UCS is a new kind of higher education institution that allows students to access the knowledge and resources of its two validating universities, the University of East Anglia and the University of Essex, as well as local colleges and the wider community. Teaching and research is underpinned by an academic infrastructure that includes many top Professors and Visiting Professors and UCS has achieved high rates of employability and increasingly strong National Student Survey outcomes. Since its foundation in 2007, student numbers have grown consistently to approximately 4,500 FTEs in 2011/12.

The challenge

UCS has embarked on an ambitious strategy to reduce the impact and footprint of IT, both financially and environmentally. The challenge started with a legacy data centre with a PUE (Power Usage Efficiency) of greater than 2, a collection of Blade Centres and a legacy of complex applications which weren’t adding up to the sum of the parts.

As a first step UCS took the radical step of building a new data centre, with a target PUE of 1.6, with an ambitious 70% reduction in square area, to set the tone for future projects. The next step was to size a replacement SAN infrastructure with a flexible, scalable solution from Fujitsu.

Summer 2012 was a busy time for UCS, as it moved all server equipment to the new data centre, a project which took a long time planning but was executed in less than 48 hours, with less than 24 hours downtime for the organisation.

UCS’s ambition did not end there though. UCS’ VISION 2020 projected growth in student numbers from 4,500 FTE’s to more than 10,000, meant that existing services had to be examined and if necessary rebuilt to handle the challenge, or face growing pains. To underpin ambitious growth plans UCS embarked on the third phase of the IT strategy: an ambitious virtualisation plan.

“Virtualisation was at the top of our agenda as it provides the ability to scale without needing a large physical footprint and makes maintenance a lot faster and simpler. The key was in finding the right partner to take us on the journey,” explains Peter O’Rourke, Director of IT Services, UCS. “We had already undertaken a comprehensive overhaul of our storage systems with Fujitsu so we were confident in its experience and abilities. Nevertheless, we entered into competitive dialogue with a number of vendors to ensure we had the right solution.”

The customer

Country: United Kingdom
 Industry: Education
 Founded: 2007
 Employees: 400
 Website: www.ucs.ac.uk



The challenge

UCS was faced with greatly reduced space in its new data centre, which, combined with aging legacy servers, led it to explore the possibility of implementing a virtualised server environment.

The solution

UCS selected Fujitsu PRIMEFLEX® vShape 100, a ‘virtualisation infrastructure-in-a-box’ package.

The benefit

- The vShape solution costs about 30% of the cost of a like-for-like physical hardware replacement
- Power consumption is reduced by 80% – saving money and reducing UCS’s carbon footprint
- Easier maintenance will minimise the burden on the IT support staff and free time to focus on more strategic objectives
- vShape brings best in class vendors together in one package but Fujitsu remains a single point of contact making support transparent and effective
- A subsequent phase of the project will reduce disaster recovery time to a matter of hours rather than the week it currently takes

UCS looked specifically at the new Fujitsu PRIMEFLEX® vShape solution and completely took it apart to test each individual component exhaustively. It became clear that it had the robustness and flexibility to act as the foundation of a new virtualised server platform.

“We wanted a long-term strategic relationship with a single vendor if at all possible so we really put Fujitsu through the mill to ensure it was the right fit. With vShape, Fujitsu demonstrated it would suit our agenda and meet our objectives,” adds John Herd, Head of IT Services, UCS. “It also complemented the DX ETERNUS storage system from Fujitsu that we had already deployed.”

The solution

With Fujitsu PRIMEFLEX® vShape, Fujitsu combines state-of-the-art server, storage and network technologies on a single system platform and validates them as reference architectures using industry-leading hypervisors, such as VMware. These complete, workload-optimized solutions are immediately ready to use, and enable organisations like UCS to accelerate their IT projects.

“vShape’s key advantage is that gives us, as clients, the opportunity to remove complexity where we don’t need it, allowing us to concentrate on serving the business,” comments Herd. “Their tight integration of components within the vShape package allows us to concentrate our efforts where they’re needed.”

The Fujitsu vShape 100 ‘virtualisation infrastructure-in-a-box’ package will also enable the rapid deployment of both applications and compute resource at the click of a button. Virtual machine applications and workloads can be moved to other virtual servers in the solution, keeping the applications running and removing the need for planned downtime.

When the project is complete, Fujitsu vShape will host the full range of services that a typical higher education institution offers, including student information, library, finance, and research systems.

The benefit

UCS intends to reduce the PUE from a planned PUE of 1.6, to below 1.2, representing a significant gain over the old data centre with an estimated PUE of greater than 2, reducing UCS’s impact on the environment and the bottom line.

There is also the small matter of removing four fully populated blade chassis and replacing them with 5 PRIMERGY servers, freeing up a significant amount of data centre space.

“One other advantage is that Fujitsu has partnered with leading vendors to create the solution but remains the single point of contact in the event of any problems,” says O’Rourke. “In my experience, you can spend an awful lot of time arguing among vendors as to who takes responsibility when something goes wrong. With vShape, we can talk to Fujitsu and resolve any incidents quickly.”

UCS isn’t going to stop there though. The next stage of the project will be to leverage the new virtual infrastructure to reduce disaster recovery to a matter of hours, rather than the week it currently takes.

Conclusion

With UCS well on its way to complete virtualisation, it is able to plan for other innovations, including a paperless application system, which will bring it in line with UCAS requirements.

“Virtualising our server environment with vShape is the beginning of a strategic partnership with Fujitsu which we are confident will last long into the future and will produce more innovations that reduce costs, increase performance and deliver better services.”

Contact

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