

Case Study

University Campus Suffolk (UCS)

»Our experience with Fujitsu CELSIUS M730 Workstation is completely different: they can handle the pressure, perform well under high loads and are almost completely silent, even when rendering very high quality 3D scenes. Put bluntly, we're impressed«

Chris Janes, Lecturer, Computer Games Design, University Campus Suffolk



The customer

University Campus Suffolk (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.

The challenge

The BA (Hons) Computer Games Design degree at UCS has developed a keen commercial edge, encouraging students to think about their future, post-graduation, in a multi-billion pound global industry, where success is measured in millions of games sales and billions in revenue.

Games designers and programmers know that their jobs depend on access to state of the art technology that is flexible enough to render high quality video, compile complex programmes and allow designers the space, and freedom, to create the next big craze in gaming.

"Before we migrated to the Fujitsu workstation platform, we were relying on a competitor's consumer desktop computers. Whilst these computers were well suited to the average gamer's bedroom, they really weren't up to the job that we needed them to do. Students were pushing the limits of the hardware, and frequently found that it was letting them down. Students were blunt with us: change the hardware, so that we can get creative," says Chris Janes, Lecturer, Computer Games Design.

The frustrations experienced by students were mirrored by frustrations from teaching staff and lab technicians. In a laboratory packed full of gaming PCs, noise levels frequently became intrusive, forcing lecturers, lab technicians and students to change the way they worked, to accommodate the noisy working environment. Heat output from the machines also frequently made the laboratory environment an uncomfortable place to work in.

"Whilst heat and noise isn't normally an issue in an average lab, gaming PCs are pushed to their limits, and whilst working at 100% any weaknesses will be revealed. In our case we found that the collective heat, noise and lack of performance of our existing PCs were driving students out of the labs, making it harder for them and us to organise coursework," said Chris Janes.

The customer

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



The challenge

University Campus Suffolk needed a high performance games design platform, capable of handling video and animation rendering, complex games engines, virtual testing platforms, at a competitive price point.

The solution

University Campus Suffolk selected the Fujitsu CELSIUS M730 workstation as their default workstation platform for designing computer games.

The benefit

- A price and performance competitive workstation platform
- Better classroom working environment thanks to best in class noise emissions
- The Intel Xeon E5 CPU brings workstation performance to games, expanding design horizons and performance capabilities
- Reliable performance means the workstations exceed student's expectations in the labs

The solution

Fujitsu and the UCS Games Design lecturers worked with each other to produce a price and performance conscious workstation specification, which met the needs of students and the departmental budgets.

Despite the need for a cost competitive workstation platform, the list of requirements was high. The workstation would have to run at least 3 virtual machine instances, allowing students to test single and multiplayer games, be capable of video rendering in Adobe Premiere Pro, able to render complex animations in 3D Studio Max, and handle the demands of the Unity and Unreal games engines – all at once.

"We pretty much threw down the gauntlet with Fujitsu, and waited for them to pick it up," said John Herd, Head of IT, "we didn't think that they could compete against mainstream games PC manufacturers with a workstation offer, but they delivered."

The solution was a CELSIUS M730 Workstation featuring an Intel Xeon E5 processor and an NVIDIA graphics card.

"Whilst the specification and price was good, of equal importance was near silent operation. All doubts about how quiet these workstations are were removed when we ran a loan workstation through its paces. You can barely hear the unit under standard load, and there's the merest whisper from it under heavy load," says Chris Janes.

The benefit

The CELSIUS M730 workstations were put to immediate use, following delivery, with UCS participating in the Global Games Jam, which is held across the globe in 72 countries, in 488 locations, attracting over 23,000 entrants. The Games Jam challenges entrants to design, code and deliver a working game within 48 hours. The tight time window left no margin for error, and poor workstation performance would make it much harder for designers to reach their goals, within such a tight time frame.

Products and services

- Fujitsu CELSIUS M730 Workstation

"The Fujitsu workstations had to work first time, twenty four hours a day. Mental exhaustion on the part of the entrants dictated their need for breaks; the hardware however could not fail," said Chris Janes, "the M730 Workstations took everything the students threw at them, and more, we're very impressed by Fujitsu's ability to deliver such a performant platform at this price point." At the end of the weekend's frenzied activity, 14 computer games had leapt from the designer's imagination, via the CELSIUS M730 Workstations, to reach a global audience of gamers, hungry for a new gaming experience.

Whilst the Games Jam is one of the annual highlights of the Games Design course, the M730 Workstations have another challenge to meet: being available 6 days a week, 14 hours a day, without a break, to service the demands of student designers and programmers. Chris Janes was impressed by the M730's capabilities, *"Every day we expect the Fujitsu workstations to smoothly integrate Photoshop, Adobe Premiere Pro, 3D Studio Max, plus the Unreal and Unity games engines, into a seamless experience for our students. We know that they'll throw far more at the hardware than it can manage, and in the past this has resulted in system crashes and a lot of downtime. Our experience with the Fujitsu CELSIUS M730 Workstation is completely different: they can handle the pressure, perform well under high loads and are almost completely silent, even when rendering very high quality 3D scenes. Put bluntly, we're impressed."*

Conclusion

With the new workstations underpinning the Games Design course at UCS, and a positive reception from students, as well as staff, UCS are keen to deploy even more Fujitsu workstations within the organisation.

"Fujitsu workstations have demonstrated their capabilities with aplomb, expanding horizons for the course. We are confident our partnership with Fujitsu will last long into the future and produce more innovations that reduce costs, increase performance and deliver better services."

About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Approximately 162,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. Fujitsu Limited (TSE: 6702) reported consolidated revenues of 4.8 trillion yen (US\$46 billion) for the fiscal year ended March 31, 2014. For more information, please see <http://www.fujitsu.com>

Contact

FUJITSU
Address: 22 Baker Street, London, W1U 3BW, UK
Phone: +44 (0) 870 242 7998
E-mail: askfujitsu@UK.fujitsu.com
Website: www.fujitsu.com/UK
2014-05-07

© 2014 Fujitsu and the Fujitsu logo are trademarks or registered trademarks of Fujitsu Limited in Japan and other countries. Other company, product and service names may be trademarks or registered trademarks of their respective owners. Technical data subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.