# Case Study Institute of Art, Design and Technology

» Fujitsu really goes the extra mile to provide the best, most reliable product with the service to support it. It's a global company with a personal touch and that makes doing business a pleasure « Colm Hennessy, Head of IT, Institute of Art, Design and Technology



# THE CUSTOMER

Country: Institute of Art, Design and Technology Industry: Education Founded: 1997 Number of employees: 200 Website: www.iadt.ie



# CHALLENGE

IADT needs to purchase over 100 high-end workstations every year to ensure that students studying animation, film, gaming and CGI modelling can experience the best, most professional computing power. However, it also wants to minimise its power usage.

# APPROACH

IADT has purchased over 1,200 Fujitsu workstations in 11 years, including the CELSIUS R920, which are used to run processorintensive applications including Autodesk, Maya, Nuke, 3D Studio Max and Mudbox.

# The customer

The Dun Laoghaire Institute of Art, Design and Technology (IADT) was founded in 1997 and currently has over 3,000 full time students and staff. Its core mission is to be the leading Irish educator for the knowledge, media and entertainment sectors – linking creativity, technology and enterprise. It strives to be at the forefront of teaching, research and innovation at the convergence of the arts, IT and business, and to contribute to Ireland's development as a creative knowledge economy.

The National Film School (NFS) at IADT was launched in November 2003. It is a professional centre of excellence that both reflects and influences practice in the film, animation, broadcasting and digital media industries by providing creative, technical and academic education of an international standard.

# The challenge

At the IADT, technology is fundamental to many of the courses on offer. From fine arts to film, graphic design, psychology, visual communications and beyond, they all rely to some extent on the availability of reliable, high performing workstations. This is particularly true of those studying animation, where the ability to render and edit complex graphics is critical.

"We need a huge number of high-end machines that are capable of handling industry-leading graphics and editing applications," explains Colm Hennessy, Head of IT, IADT. "We also aim to minimize energy consumption. When you have a lab with 45 workstations it costs a lot to run and enlarges our carbon footprint. We have a green agenda so balancing high performance with low energy consumption is key."

Back in 2002, IADT visited a conference which explored the environmental impact of technology. It was here that it was first introduced to Fujitsu's line of workstations. The Institute realised that these machines could offer the right combination of performance with low power usage.

"Fujitsu had brought out zero watt monitors and efficient power supplies. It was clearly ahead of the game when it came to energy technology but the workstations didn't compromise on performance either," adds Hennessy. "From that point we invited Fujitsu to tender on an annual basis and we have been using its workstations ever since."

#### THE BENEFIT

- Processing power has almost tripled in three years, enabling real-time rendering and making students more productive
- The power consumption of each workstation decreases annually, helping IADT reduce energy bills and its carbon footprint
- Reliable performance means the workstations can be in use 24/7 and rarely fail
- Fujitsu servers provide a virtualised environment for hosting standard office tools, email, file and print and the student record system

# The solution

IADT has purchased over 1,200 Fujitsu workstations over the years and currently has 400 in operation across twelve classrooms, including low-end models such as the M720 and W520 to the top of the range CELSIUS R920. The high-end dual processor CELSIUS R920 workstation achieves first-class benchmark results and is individually configurable for the most power hungry, 24/7 operating environments. Its best-in-class noise emissions of just 21 dB, and comprehensive ISV certifications ensure smooth application operation, while convenient cold plug access simplifies expansion.

"As a public body, we have to invite tenders every year and, every year, Fujitsu consistently wins out. We rotate the workstations through different subjects so the newest ones go to the most processor-intensive courses such as animation or gaming and older models get passed down to courses that use less processor intensive programmes such as business and psychology," continues Hennessy. "It is critical that our film, games and animation students can work on an industry-leading platform because that is what potential employers expect them to be familiar with. Fujitsu provides that platform."

Students use a variety of software, including Autodesk, Maya, Nuke, 3D Studio Max and Mudbox. These applications need optimal CPU and GPU ability to run smoothly and enable real-time CGI editing. NVIDIA Quadro graphics cards complement the dual core processing power provided by Fujitsu.

"The Fujitsu workstations can handle the most demanding applications without breaking a sweat. And we push them hard – at least 60% of the machines are in use constantly between 9am and 6pm while students working in modelling, animation and multimedia will use them between 8am and 10pm and have them rendering overnight," says Hennessy. "Despite these punishing schedules, we rarely experience failure. And when we do, Fujitsu is onsite promptly within the agreed SLA to solve the problem."

Fujitsu also provides IADT with PRIMERGY servers running Microsoft Hyper-V, which provides a virtualised environment for hosting standard office tools, email, file and print and the student record system.

#### PRODUCTS AND SERVICES

- Fujitsu workstations, including CELSIUS R920, R570 and M720
- Fujitsu PRIMERGY servers

# The benefit

The constantly evolving workstations provide students at IADT with best-inclass performance and the opportunity to work in the most productive manner. Rendering operations that might have taken up to a week previously can now be performed within hours. That's due to the fact that the processing power in each workstation has increased three-fold in the last three years.

"It's hugely important for efficiency and productivity. Thanks to the latest workstations, we've cut render times down to become practically instantaneous. That has a massive impact on how our students work," comments Hennessy. "It also has an effect on what they achieve. Our students have produced many award-winning short films and have gone on to succeed in Ireland's burgeoning film industry. That's partially down to the skills they hone on these workstations."

Power usage is also constantly decreasing, helping IADT reduce its energy bills and its environmental impact. And, because it purchases over 100 workstations each year, Fujitsu helps IADT manage its costs.

"Fujitsu helps in terms of where the cost breaks are which is vital when you are buying in the volumes we do," says Hennessy. "It really goes the extra mile to provide the best, most reliable product with the service to support it. It's a global company with a personal touch and that makes doing business a pleasure."

# Conclusion

With over 400 workstations currently in operation and a server environment provided by Fujitsu, IADT expects the partnership to continue long into the future. It is also considering deploying Fujitsu Plasmavision information screens across the campus.

"Fujitsu provides the platform for our students to succeed and gives us an experience as close as possible to a professional studio. That equips our students with the skills they need to thrive in a competitive industry."

# About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Over 170,000 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. For more information, please see http://www.fujitsu.com.

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