Case Study
Kennet School

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James Henderson, Network Manager, Kennet School

The customer

Country: United Kingdom
Industry: Education
Founded: 1957
Employees: 200
Website: www.kennetschool.co.uk

The challenge

Kennet School wanted to virtualise its desktop infrastructure and needed a reliable and flexible server platform to support the project.

The solution

Following an evaluation process, the school decided that Fujitsu offered the best price/performance ratio as well as being the only vendor to enable GPU integration.

The customer

Kennet School is an academy secondary school in Thatcham, Berkshire. In 2011, Kennet School was the highest achieving state school in West Berkshire according to contextual value added results and third-highest using five good GCSEs. The school has an annual income of just over £8.9 million and spends roughly £5,000 per student per year.
The school opened on 11 September 1957 as a secondary modern, before converting into a comprehensive in 1971 and finally changing to an academy on 1 April 2011. The school has over 2,000 pupils with 121 teachers and 78 non-teaching staff.

The challenge

For years Kennet School has been introducing virtual servers in a bid to lower costs and simplify management. As a natural progression, the school began to look at adding a virtual desktop infrastructure (VDI) to extend the benefits from the server room to its PC and laptop estate. This will create a pool of high spec computers which are accessible from anywhere and eliminate the need for costly technology refreshes.

"Virtualising our servers enabled us to reduce the number of physical servers from ten to three, giving us more rack capacity and freeing up resources to invest in VDI," explains James Henderson, Network Manager, Kennet School. "The idea was to create an entirely new greenfield site to support this infrastructure and that required a new server to support VDI for an initial 200 desktop devices."

Kennet School had three key criteria for the new hardware: cost, performance and scalability. It was also crucial that the server could accommodate graphics cards in order to support the higher end applications used by the media studies, technology and music departments.

"We looked at and tested a number of vendors, however the FUJITSU Server PRIMERGY CX400 was the stand out," adds Henderson. "Fujitsu gave a presentation and demonstrated how our VDI could look, that really sold us on the benefits."

The benefit

- Reliable and cost-effective support for virtualisation of 200 desktops
- Performance has improved while power consumption has been reduced, lowering the school's carbon footprint
- The ability to integrate graphics cards means the server will be able to handle processor-intensive applications such as Adobe Creative Suite, Corel Draw, Solid Works and XYZ 3D Printing software
- Centralisation makes management and application provisioning simple, reducing the burden on the IT team

Products and services

- FUJITSU Server PRIMERGY CX400

The solution

The FUJITSU Server PRIMERGY CX scale-out systems are the ideal basis for cloud, hyper-converged and high performance computing solutions, providing Kennet School with massive computing power for virtualised environments, complex calculations as well as consolidation and high-availability scenarios.

"We worked with a local IT partner on our exact requirements and spoke at length about what our desktop estate needed," says Henderson. "This enabled us to design and configure a Fujitsu server that could support the virtualisation process."

The final product is a three-node cluster facilitating 200 VDIs with the ability to scale up to support double that number.

The school also repackaged existing applications using ProfileUnity™, which enables a centralised User Environment Management for virtual and physical Windows desktops and includes advanced FlexApp Application Layering options. These applications include basic office productivity tools, Embarcadero Delphi, interactive whiteboards and a School Information Management System.

Kennet School then repurposed its existing desktops as thin clients with a view to replacing them with real thin clients in the coming year: "We wanted to get the most out of our existing infrastructure but clearly migrating to thin clients will be the next step," comments Henderson.

The benefit

The Fujitsu hardware platform now provides Kennet School with a reliable, cost-effective way to enable VDI across the organisation. Moreover, it is delivering much better performance while consuming less power, reducing the school's carbon footprint.

"The energy efficiency of the Fujitsu hardware is great and there has been a massive difference in performance in terms of latency and Input/Output," says Henderson. "Importantly, we will also be able to incorporate GPUs to handle the demands of processor-intensive applications such as Adobe Creative Suite, Corel Draw, Solid Works and XYZ 3D Printing software, which wouldn't typically lend themselves to virtualised desktops."

The school is also using Atlantis Computing to integrate innovative software with the Fujitsu hardware in a hyperconverged solution to fundamentally transform the agility and performance of storage.

"We've centralised everything which makes management much simpler and provisioning new applications easy," continues Henderson. "All in all, it has been a seamless transition to a VDI environment that can scale to meet our future needs."

Conclusion

With a robust, high-performing Fujitsu hardware in place, Kennet School is well placed to adapt to the changing needs of the education sector. It has been delighted by its first experience of Fujitsu hardware and is keen to extend the relationship to other areas.

"We have more than 30 existing servers from another vendor and we will definitely standardise on Fujitsu as they reach end of life," concludes Henderson. "Fujitsu has given us a flexible, cost-effective platform that can easily support our virtual desktops today and in the future.

"Fujitsu understands the needs of the education sector and has the experience we needed to create the perfect hardware solution for our VDI project."

James Henderson, Network Manager, Kennet School

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