



A leading independent school wanted help with storage and server capacity issues and Viadex offered a free audit. The audit diagnosed underlying and unexpected problems leading Viadex to design and implement a new virtualized environment, delivering significant savings in both the short and long term for the school.

VIADEX MAKES THE GRADE WITH A SCHOOL'S INNOVATIVE IT INFRASTRUCTURE

The independent day school for boys aged 10 to 18, has a reputation for academic excellence, wide-ranging extra curricular opportunities and outstanding pastoral care.

The school also has a worldwide reputation for music, and it also successfully nurtures sporting talent, with a number of pupils selected to compete at international level. The school is funded through legacy which provides outstanding facilities and an exceptionally extensive range of bursaries and scholarships, allowing boys from a wide variety of backgrounds to benefit.

Performance bottleneck

IT plays an essential part in the education of the pupils and every classroom has computing facilities. Each pupil and member of staff has a roaming IT profile, which means they can log on to their own personal account from any personal computer in the school.

However, despite the substantial investment the school had made in its IT infrastructure, there were problems. "It was taking up to ten minutes for pupils and staff to log on," says Geoff C., Network Manager, "which was completely unacceptable."

Over a period of time, Geoff engaged several different service providers to address the log on problem, but without success. As Geoff was considering how to resolve the problem, he was invited to attend a presentation on virtualisation, one of the new technology events held regularly by Viadex.

"I had been considering virtualization technology for a while," explains Geoff. "The Viadex event was very useful as it gave me the opportunity to hear key speakers from HP, VMware and Viadex. The technical expertise shown by Viadex was impressive, so I invited them in to see if they could help me."

Underlying problem

Geoff met with Viadex and asked for a quotation that covered a) migration of network to a virtual LAN, b) movement of the servers to a virtual environment; and c) the

Industry Education

Challenges

Staff and pupil log-on taking up to 10 minutes

Deliver an infrastructure that would support the school for at least three years within budget

Results

Very fast log on

Servers that were out of support life have been retired

Plans to retire more servers

Easier system management

Increase of personal disk space from 100MB to 800MB

upgrade of the Windows server software. He also explained the slow log on problem.

Viadex immediately began to investigate the problem and offered to carry out a review of Geoff's infrastructure and identify the cause free of charge. "A number of resellers had already looked at the issue, without coming up with a solution," says Geoff. "So I was sceptical to say the least. However, as Viadex were not going to charge me, I was happy to let them do the work." Viadex's senior technical specialists carried out a thorough investigation of how the school's servers and storage were configured. The results were not what Geoff expected. "We thought the response problem was due to a bottleneck on a server," he says. "In fact, Viadex's specialists proved that it was a disk input/output problem, not a processor overload."

A plan for the future

Viadex agreed to respond to Geoff's infrastructure upgrade requirements but went one stage further. "Viadex had a completely different attitude to other companies I had been dealing with," continues Geoff. "Its specialists really wanted to understand our issues, needs and pain points, so they could develop a solution that would meet our present and future requirements."

The solution Viadex put forward was a fully virtualised environment employing an HP BladeSystem with three energy-efficient HP ProLiant servers. For storage, Viadex recommended an HP StorageWorks Modular Smart Array with two types of disks – Serial Attached SCSI (SAS) for fast access to crucial data and lower cost Serial Advanced Technology Attachment (SATA) where speed was less critical.

This innovative solution would mean that the school would have ample capacity for several years and could add new virtual servers as needed, without the need for additional server hardware. It would also provide the school with an up-to-date, flexible, virtualised infrastructure.

Summer implementation

To avoid disruption to the teaching timetable, implementation of the new infrastructure had to be scheduled for the summer holidays. Even during the holidays, the IT systems at the school usually run continuously, so a planned break of a week was arranged for the upgrade.

All equipment was delivered to Viadex, where the systems were assembled, configured and thoroughly tested, which minimised the time needed at the school. Viadex's specialists then delivered the working systems to the school and carried out installation and connection on site. They also installed the operating systems and VMware, and upgraded applications such as Microsoft Exchange and Microsoft Windows, as well as installing and provisioning SQL.

In addition, Viadex specialists helped the school migrate its applications to the virtualized environment, providing essential knowledge transfer to the school's IT staff in the process. "Viadex's staff were extremely knowledgeable and the service they provided was excellent," says Geoff. "The implementation was completed comfortably in the limited time available and within budget."

Quick benefits

It is early days, but Geoff is already seeing benefits from the new infrastructure. "Some of our servers were getting old," he says. "We have been able to retire three servers already and we will retire more over the next twelve months. With the new storage, we have been able to increase each person's space allocation from 80MB to 800MB. And, of course, we have fixed the original problem – log on is now always a matter of seconds."

The school is pleased with the reliability of its new HP equipment and finds the virtualised environment much easier to manage, as the system automatically balances the workload across servers. An added bonus is that the configuration is inherently resilient to server or disc failure, and hardware can be quickly replaced or extended without impact to the users.

A dependable partner

With 12 servers and over 500 PCs to support with only three technical staff, the school depends heavily on the quality of support it receives from its IT partner. "Viadex continues to provide us with dependable technical advice and support. Its experts are able to monitor and fix problems with our systems remotely and are always highly responsive to our needs," reports Geoff. "We look forward to working with them in the future and have no hesitation in recommending them to our colleagues in the education sector."