

Virtualised Desktop Infrastructure solution utilising VMware View supported by Oracle Sun Ray thin client devices.



Moulton College

Goal

Moulton College wanted to replace the tradition PC based computing environment with one that was more sustainable, cost effective and flexible but still replicating the capabilities of a PC based environment as much as possible

Moulton College is one of the UK's leading educational establishments providing courses for Land Based, Construction and Furniture industries. The main campus is spread across 4 sites, comprises around 100 buildings with 3 satellite centres each with one or two buildings. The core of students are 16-19 with additional facilities for degree level and adult learning.

Background

In 2009 Moulton College embarked upon the construction of a new Learning Resource Centre – a purpose built facility designed to provide 200 learning spaces over two floors to support concurrent lectures in an open plan environment. This exciting new environment required cutting edge technology to make it a reality. To support this the college chose to implement Oracle's Sun Ray thin client devices backed by WMware's desktop virtualisation software.

CLIENT PROFILE

Sector:

Education

Population:

4000 pupils

500 staff

The Solution

The college's initial implementation of the WMware environment with another partner was not a success. This left them with a non-functioning environment on the threshold of a new term. It was at this point that the College turned to Cutter to provide them with a working virtualised desktop environment. Recognising that there was a significant amount of work to fix the WMware environment and with very limited time to establish an operational system Cutter decided to implement and interim Microsoft Terminal Services based system to provide core functionality and allow the college to commence the term with minimal disruption. This was started on a Friday afternoon and the system was operational on the Monday morning.

Having established an effective interim solution we then set about re-building the WMware environment. Working closely with the College's IT staff we rebuilt the WMware environment and were able to implement a seamless switch over a few months later.

The success of the solution with the IT team at the college, the students and the management team has meant that the initial deployment has expanded further with more Sun Ray devices added to the initial deployment and also in multiple remote locations.

Impact

Moulton's management team have expressed many benefits from using the virtualised desktop solution. From an IT function's perspective, management and maintenance time have been reduced with software updates being deployed centrally. There have been fewer hardware issues to deal with as a key advantage to this technology over PCs is that swapping out a thin client can be done in 2 minutes but non-technical staff. The college's IT team successfully deployed an IT suite in 45 minutes which would have taken a day with PC's including imaging and set up.

Energy costs have been reduced as the Sun Ray device draws a fraction of the energy used by a PC and, as no heat is generated, the college's air conditioning systems also use less power. Classrooms are much quieter as there are no computer cooling fans to disturb students.

The students notice very little performance difference between the thin clients and normal PCs which has made the implementation of new desktops devices simple and seamless.

Cost Savings

The full financial benefits to the college are still being calculated but the research house Gartner has suggested that the annual average 'total cost of ownership' of an office PC is between £2275-£3911 per unit due to software licensing, downtime, repairs, electricity and technician costs. In electricity costs alone for a deployment of 350 units, electricity savings are in the region of £12,000 per year with six figure capital expenditure savings from year 3 and forward. Over the lifetime of the thin clients it's reasonable to suggest six and seven figure savings in staff costs.

Challenges

Like many educational establishments
Moulton had a requirement for a certain
number of their desktop population to
have the capability to run multimedia
software packages. Whilst the Sun Ray
devices have an ever increasing
capability to run these high end software
packages we recognise the importance of
performance for users and
recommended that a number of high
specification PCs been retained to run
specialist CAD applications and video
analysis software.

"Cutter has always provided an exceptional service backed up with technical ability of the highest standard. They have an unprecedented ability to work with me as the customer to get the best out of our investment in virtualisation technologies both desktop and server."

Giles Batchelor, Network Development & Services Manager

Why Moulton College Chose Cutter

The college's initial attempts at introducing a thin client were in severe danger of failing to deliver the required functionality so Cutter was brought in to rescue the project and establish a functioning environment in extremely short time frame. By working with a partner with the technical excellence and flexible approach of Cutter, Moulton College got their functioning environment and were able to go forward with confidence to the implementation the full virtualised solution and smoothly manage the migration from the interim environment.

The Solution Today

Since implementation of the virtualised desktop environment in Moulton has expanded to now include over 400 Sun Ray 2s, and 35 Teradici based VMware View optimised thin clients with new clients deployed within administration and student locations.

Moulton has also completed their Windows XP to Windows 7 migration on the virtualised desktop environment over a couple of days during the Summer break of 2012.

The Future

In recent months Moulton approached Cutter to provide complete Virtual Environment support for their organisation including their server virtualisation system, underlying hypervisor and storage layers and to provide a third line support escalation for their on site team with issue resolution and capacity planning around their whole system.

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