Moulton
COLLEGE

Case Study

Moulton College deploys Praim Zero Clients to improve performance, IT efficiency and support

"We are a team of 4 people...we wouldn't be able to run and maintain the whole estate to a good standard and keep the experience of students as optimal as possible if we had all PCs out there"

Moulton College was founded in 1923 in Northamptonshire (UK) and specialises in sport, animal care, construction, land base agriculture and arboriculture. In addition to the main campus at Moulton there are 3 satellites campuses (vocational and skills academies) within a 20 mile radius. The college commercially farms over 485 hectares which are subject to the normal market forces of the agricultural industry as well as used extensively for teaching purposes.

Situation

- 4000 students
- 2000 end devices: zero clients, printers, tablets, IP Phones...
- 300 PCs to be replaced

Challenge

- Lowering maintenance
- Lowering management time
- Improving IT efficiency and simplicity
- Improving end device performance and overall user experience

Solution

- Praim P9002 zero client
- VMware Horizon View 6.1.1
- Teradici Management console

Results

- Improved end point management

- Drastically reduced the need for local maintenance and support tasks

- Improved students and faculties satisfaction by providing a stable and consistent high end solution

- Major energy savings by embracing green IT approach from the back end down to the end point

Physical PCs were a struggling technology and Virtual Desktop Infrastructure (VDI) was identified as the way to go.

When Giles Batchelor, Network Development & Services Manager, joined Moulton College 7 years ago there was a whole estate of 900 PCs struggling to keep up with the standards required by faculties and students. Moulton is committed to providing world class facilities and state of the art IT technology in which students can learn and grow but the small IT team, comprising Giles and 3 Senior Technicians, was struggling to provide the optimal support and service around daily IT management and maintenance issues.

The new expansion plan of the Learning Resource Centre (LRC) envisaged 200 new desktops for student access and IT suites. It was clear the potential maintenance and management overload that new PCs would have brought along. At this time, VDI was just coming out and this was the solution Giles and his team wanted to adopt: *"VDI offers a complete isolation of the individuals from the whole system compared to PCs and old Terminal Services and this is what we need to maximize IT efficiency and management".*

Giles Batchelor, Network Development & Services Manager at Moulton College

VMware was adopted as preferred solution.

At this point VDI was definitely identified as the new route ahead, but Giles and his team had to decide the preferred solution: *"To me if you talk virtualisation, VMware is the answer, they have been around very long time. I have used it before, it is ahead of the game in VDI, it's Windows-based to manage, is all GUI-based, it is great for administration and is reliable".*

The initial requirement grew quickly to 320 seats as other locations were involved besides the LRC. The adopted solution was VMware Horizon View in combination with Sun Ray thin clients via RDP. The solution seemed to work fine but soon both the end device and the protocol showed consistent limitations. *"We were experiencing performance issues with the Sun Ray solution, partly because of limitations in the underlying hardware and partly with the Sun Ray integration with the RDP protocol – the solution just didn't keep up with the expectation and requirements of both faculty and students".*

Moulton College student's room with Praim Zero Clients

We needed professionalism and technical knowledge to overcome problems.

In the Sun Ray world there are few companies that seriously distinguish themselves for first class expertise and flexible approach. Giles chose to work with Cutter Project Limited, one of the leading desktop virtualisation specialists. Cutter was chosen because of their world renowned expertise, their longevity and track record in the thin client market and were selected as the trusted professional services partner to look after the overall system, from the back end down to the end point devices. The expectations of the IT staff were quickly met. The new solution envisaged by Cutter introduced the high performing PCoIP protocol coupled with Praim zero clients technology. *"We have been through different manufacturers, based on availability, price, support and then Cutter introduced us to Praim. Praim thin clients look nice, they are cost effective and now we are putting more of them".* The zero clients exceeded all expectations satisfying both video and USB performance as well as introducing another essential piece to the overall puzzle, the centralized management console.

PCoIP and the zero client technology is the simplest way of doing things

when it comes to VMware Horizon View, there is no OS, no security updates and the management is very easy and reliable. Once you pick PCoIP zero client, is a matter of finding a good value for money solution in terms of price, warranty, support and delivery.
"Praim is very good at this. The team at Cutter were very keen to say how positive working with Praim is...they have a good relationship, active dialogue and the ability to resolve issues; which does count as well as the price. If Cutter says someone is easy to work with, it generally proves to be true. If issues come out this makes my life a lot easier, it is nice and valuable for a customer to deal with company that you can actually speak directly with..."

The Praim P9002 zero clients took quickly a large part of the overall end point estate.

The Sun Rays and PCs were in the region of 5 to 6 years old and were not providing the level of performance required by the college. The growth of zero clients in the estate was proportional to the growth of the VDI environment and thanks to such acceleration the benefits of the investment in the backend hardware and performance became more tangible for the IT staff.
There were also major benefits in terms of IT efficiency, maintenance and management. *"The centralized management is very simple, nice and straightforward... if you set your settings, they automatically go out to your devices and it just works. We plug devices in, we set their names up, they auto-discover, they are in the console and life is good".*

Green IT and sustainability is top priority.

As a college, Moulton, is very conscious of the value of IT sustainability. Fortunately, IT today can deliver significant benefits in terms of energy saving and green credentials. The Praim zero clients were a big step into green IT and sustainability with energy efficiency and power usage savings that are scalable and provide immediate returns. On average, a modern PC consumes around 90 watts of power whereas a Praim P9002 zero client requires only 5 watts at the peak of its performance, providing a staggering return on investment

(ROI) within 2 years of adoption and contributing to a more green world. Moulton's vision and strategy on sustainability goes even further. *"Yes, we moved to thin clients to save energy but we are also able to manage IT efficiency in there as well."* The team were able to optimize savings and returns of the end point estate using the power management tool within the centralized console. *"We have a lot of remote power down policies so the devices turn themselves down over night, and don't causes us issues or don't use power when there is no one there on site".* Power savings policies are also implemented through scripts within the VMware environment itself. *"We turn the number of desktops up and down at different time of the day (number of available desktops) to reduce the power the hypervisor is consuming when the desktops aren't needed".*

Moulton is an exemplary project when it comes to meeting faculty and students' needs from the IT solution.

High performance, quick support and efficient administration all achieved and also delivering savings and environment benefits.
"The end results are great. The whole college ecosystem is satisfied, complaints have been drastically reduced as well as time spent on maintenance. Accordingly, this translates into more time available to ensure everything runs flawlessly with less down time".

The plan for the future is to have as much IT environment running on zero clients as possible. Some of the IT suites are still equipped with physical PCs as people need CD-ROM drives or demanding software like CAD. *"Zero client make life easy in terms of management, provide a consistent experience and I want this consistency to be everywhere."*

Praim Thin & Zero Client Solutions

Zero Client P Series P9002e

Based on Teradici Tera2 technology, P9002e offers the highest performance on VMware enviroments thanks to the harware acceleration of PCoIP protocol. Praim P9002e is a green solution with a power consumption of 8 Watts and Power over Ethernet (PoE) option.

More information

Cutter Project Limited
The Cutter Group of companies is one of the world's leading suppliers of virtualised computing solutions. Our aim is to deliver cutting edge expertise in providing sustainable, cost-effective solutions and services delivering optimized performance of IT infrastructures. Headquartered in the UK, with subsidiaries in the Netherlands and Cyprus, the Group's reach is far and wide.

The Group has wide ranging experience across multiple sectors, with exceptional skills in providing solutions to education and both local and national government. We have a very strong reputation with a proven track record in delivery with over 40,000 desktops deployed and managed worldwide and an extensive and diverse range of virtualised server environments.

Cutter Project Limited - 18 Lynn Road - ELY CB6 1DA - Cambridgeshire - UK
T. +44 (0)20 8133 8180 - F. +44 (0)87 0478 1495
www.cutterproject.co.uk - info@cutterproject.co.uk

Praim Srl
Via Ezio Maccani 191 - I38121 Trento - Italy
T. +39 0461 420 517 - F. +39 0461 420 581
www.praim.com - info@praim.com