



HP solution lightens the load for IT Manager at Padua College

Overview

Located in Brisbane, Padua College is a Catholic boys' school with more than 1000 students in years five to twelve. Separate IT systems are run for the Primary campus (260 students) and for the Secondary campus (800 students). The College has just one staff member managing the IT requirements of the Secondary campus. The school IT systems previously ran on a standard network environment; individual PCs in classrooms with each machine running its own instance of software, resulting in a heavy maintenance burden. Things changed when the enterprising IT Manager gave Datacom, one of the largest Australasian-owned professional IT service providers, a call who in turn contacted HP.

Editorial contacts:

Brad Swiney
Hewlett-Packard
02 9022 7689
brad.swiney@hp.com

Stephanie Witts
Burson-Marsteller
02 9928 1505
stephanie.witts@bm.com

Hewlett-Packard
410 Concord Road
Rhodes NSW 2138
Australia
www.hp.com.au

Business challenges

The distributed nature of the schools IT resources meant that Greg Scott, the school's IT Manager, was constantly running all over the College to attend to computer issues. He would travel from classroom to classroom to fix problems with PCs or perform maintenance tasks. The PCs were often unintentionally damaged or disconnected in the boisterous environment of a boys' school, adding to his heavy workload.

Commenting on the challenge of IT management within the school, Scott said, "It was clear that the school was reaching an unacceptable total cost of ownership when it came to IT infrastructure. We were fast approaching critical mass as far as my workload was concerned, which meant that we either had to look at putting on an extra staff member or we had to introduce some alternative thinking."

Scott set a goal for the school, which would result in the centralisation of all IT functions and computer management.

How HP helped

In response to Datacom's call, HP recommended a remote client solution to centralise the management of IT infrastructure at the school. This involved replacing desktop PCs with thin client terminals. Thin clients hold minimal amounts of data at the user's terminal but depend on a server for processing activities and data storage. They are connected virtually to HP blade PCs that are located in a centralised data centre.

HP blade PCs perform like desktops and have the same capabilities but they are a fraction of the size and grouped together in a location, which is centralised within the customer site and remote to the user. They are housed in a blade enclosure, which is stored in a rack. HP blade PCs have a standard operating system where users are

assigned to a blade, and it becomes their PC during their working session. If a HP blade PC goes down, another picks up the working session, with virtually no interruption to the user.

“We investigated a few options – including Citrix – but it became clear with blade PCs that the benefits would add up and outweigh the PC style approach,” said Scott.

The decision was made to implement HP’s remote client solution at Padua College.

Working closely with HP and Datacom, Scott scoped out the blade PC infrastructure implementation requirements within the school. The team decided to adopt a two phased approach to implementation, replacing existing desktop PCs as they came to the end of their life.

In phase one of the rollout the school has installed 30 HP blade PCs which support 30 HP thin client terminals. Peak usage times and performance will be monitored and the 1:1 ratio of blades to thin clients may be altered in the next implementation phase.

The partnership between HP and Datacom was instrumental in ensuring that the implementation phase was as fast, efficient and effective as possible, and ensuring the best possible result for Scott and Padua College.

“HP and Datacom ensured the implementation was quick and problem free and I find them to be very responsive to my needs and requests,” Scott said. “Education has different requirements to business. For example, I wanted an automatic restart option on the blade PCs when students turn off their thin clients. This allows automatic reconfiguration of the blade PC to ensure a corruption free start for the next student. HP understood the specific requirements of the education sector and worked with me to develop a solution that met the specific needs of Padua College.”

HP ensured infrastructure scalability, which simplified the phase two roll out in July 2008. Funding for the phase two roll out was provided under the Australian Government National Secondary School Computer Fund. HP also provided hardware installation and management training for Scott, “The scalability of the infrastructure has meant that when I get my 160 extra blade PCs it will be a case of installing the chassis in the server racks, populating it with the blade PCs, dropping the new image onto them, and then putting the thin client terminals in the classrooms. It will be a relatively easy job.”

Value delivered

Padua College’s resource hungry applications, such as AutoCAD and Inventor, run faster on the HP blade PC system. “Other remote client solutions could not do this as successfully,” said Scott. “I looked at other thin client systems, but none had the HP driver behind them. Even in a low bandwidth environment we can still use our multimedia applications. We were concerned that the technology available from other vendors would not support higher bandwidth applications such as video.”

The HP blade PCs are centrally stored in the server room near Scott’s office, which means he can easily manage the system from his desk. This physical separation of the user from the functions of a PC is called desktop virtualisation.

The HP blade PCs host multiple independent user sessions. If a blade PC goes down,

the student can quickly be allocated another. Using the drag and drop method with imaging tools, Scott can easily deploy a new desktop image to any blade. Desktop virtualisation allows Scott to manage classroom activity centrally and to support students remotely.

It also saves Scott the effort of running all over the school every time there is a computer problem. "Now all I need to do in a classroom is change the odd mouse or keyboard."

Another benefit is the increased product lifecycle. HP blade PCs have extended the school's hardware life cycle to five years up from three years. The blade PCs are in a controlled air-conditioned environment and are rarely moved, resulting in less maintenance and longer life, as well as a lower total cost of ownership.

HP blade PCs are also energy efficient. They are so compact that 30 blades take up 6RU of a 42RU rack, resulting in energy and cost savings due to cooling a smaller area. A full 42RU rack can accommodate 280 blade PCs. The HP blade PC solution has also enhanced the security of information. All data is centrally stored on the network; no data is stored locally on the thin client terminals. If a thin client is removed from the desktop, it would prove useless.

HP thin clients have replaced PCs on the desktop, and have proven to be much more robust. With their solid construction and lack of moving parts, they are designed to withstand heavy usage, and there is less likelihood of damage in the classroom.

As for what happens next, Scott plans to provide remote access for the staff and students of Padua College. Computer processes that need to be completed at night could be started from Scott's home. Students who can't afford software could remotely use the school's software on its license. "The school's computers are currently under utilised, so we could leverage our current software installations for the benefit of students."

Summary

Industry: Education

Solution: 30 HP blade bc2500 PCs which support 30 Wi-Fi enabled HP t5730 thin client terminals

Software: AutoCAD, Inventor, and other multimedia applications

Challenge: Centralise computer management and reduce the total cost of ownership of IT infrastructure

Benefits: Centralised computer and IT infrastructure management resulting in reduced workload for the IT Manager, increased product lifecycle, energy efficiency, reduced total cost of ownership, reduced damage to IT equipment and enhanced data security

About Padua College: Padua College is a Catholic boys' school with more than 1000 students in years 5 to 12, located in Brisbane, Australia. The school operates as a faith community living out Gospel values and prides itself on emphasising the value of each individual and providing a relevant and personal education to all of its students.

About Datacom: Datacom is one of the largest Australasian-owned professional IT

service providers, with more than 2,000 blue-chip customers. Since entering Australia in 1992, Datacom has grown from its early technical contact centre focus to a full IT services supplier. Today, Datacom supports all aspects of its customers' technology needs including design, development, deployment and management of IT systems and infrastructure.

About HP: HP focuses on simplifying technology experiences for all of its customers – from individual consumers to the largest businesses. With a portfolio that spans printing, personal computing, software, services and IT infrastructure, HP is among the world's largest IT companies, with revenue totaling \$US110.4 billion for the four fiscal quarters ended April 30, 2008. More information about HP is available at www.hp.com.au.

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

8/2008