

## Newcastle College Group

*“VMware View has transformed our IT infrastructure and given us the control and centralized management capabilities we needed following a number of mergers and acquisitions. We now have a reliable, secure and resilient IT infrastructure in place which provides our end users with the flexibility they need to work wherever they work best. What could have been a time intensive, expensive, IT integration project has proved quick, pain free and, most importantly of all, has proved great value for money. Not only does our IT team now have a lot more time to concentrate on strategic projects to help drive the business forward, rather than worrying about maintenance issues, but we’ve actually saved ourselves over £7 million which is quite staggering.”*

— Neil Gow, Group IT Development Manager,  
Newcastle College Group

### KEY HIGHLIGHTS

#### Challenge

- To quickly deploy a standardized, centralized IT infrastructure following multiple acquisitions
- To reduce IT expenditure and support costs
- Enable increased and more effective remote working
- Improve security and availability
- Identify a reliable technology partner to work with us throughout the IT integration project

#### Solution

- VMware View centralises IT management and improved remote working capabilities
- VMware Infrastructure 3 consolidates server estate and provides high availability

## Newcastle College

Newcastle College Group is a £175m business which brings together over 40,000 learners, over 3,800 staff, across three divisions at over 100 sites, to form one of the largest educational, training, and employability organisations in the UK.

In the last two years Newcastle College Group has made acquisitions in the training and education sector, including Carter and Carter and TWL Training, which are now called The Intraining Group, and has also undergone a merger with Skelmersdale and Ormskirk College. The Newcastle College Groups IT team is now responsible for over 100 sites across the UK.

Following this period of rapid growth, Newcastle College Group found itself with a disparate array of IT infrastructure and systems located across the country. Many elements of the IT in the acquired organisations were significantly out of date and required a major overhaul to meet the Group’s high standards and to comply with their aim for a more centralised, standardized approach to the Group’s IT.

“We initially looked at creating one new IT domain for all the businesses and rolling out a traditional PC-based infrastructure, but the estimated costs for this were over £8 million,” explains Neil Gow, Group IT Development Manager at Newcastle College Group. “It would also have taken a huge amount of resource to manage such a significant roll out and we would have needed about 25 extra IT staff. In comparison, the desktop virtualization project we eventually opted for with VMware View cost us £800,000 and the deployment process was fast and straightforward to manage.”

It was not just the cost savings, however, that attracted Newcastle College Group to VMware. The group had already carried out a successful server virtualization project with VMware and saw the benefit of extending the technology to the desktop. “The seamless integration between VMware’s data centre and desktop virtualization technologies represented significant advantages over implementing other solutions.”

Newcastle College Group was also attracted to VMware View because its desktop virtualization technology provided the flexibility, resilience and centralised management that it was looking for. In 2009 it began deploying VMware View to over 1,000 staff across all the Group’s divisions.

“As a rapidly growing business, with locations across the country, it was vital for us to put in place a standardised, centralised IT infrastructure,” remarks Gow. “Calls to our IT support team have dropped by significantly because the majority of previous issues such as software upgrades or patches are managed centrally. We can now provision a desktop environment for a new joiner in a matter of minutes from our central hub, regardless of where the end user is situated. Not only does centralised management free up the IT team to spend more time on delivering more strategic projects within the business, it also improves worker productivity as any IT issues are fixed far more quickly.

Another result of the initial data centre virtualization project was the Group being able to demonstrate environmental savings, since it meant that it avoided installing almost 100 servers they would otherwise have needed. The desktop virtualization project also offered green benefits. Instead of the environmental impact of buying 1,000 new thin client terminals, Newcastle College Group was able to make green savings and avoid investing in hardware by simply refurbishing its older machines.

## KEY HIGHLIGHTS

## Results

- Over £7million cost avoidance
- Improved green credentials
- Greater control over desktop computing
- IT support time halved
- Enhanced security and availability

*“VMware View has helped us to reduce downtime, halved the time spent on solving IT issues, and improved our management and control of our IT infrastructure and usage. We’ve also been impressed with the high availability and levels of security that View has helped us achieve. Overall, it has provided us with agility as a business to react to both minor issues and major new projects quickly and effectively”*

— Neil Gow, Group IT Development Manager,  
Newcastle College Group

VMWARE VIRTUAL  
INFRASTRUCTURE AT WORK

## VMware at Work

- VMware Infrastructure 3
- VMware DRS
- VMware HA
- VMware vCenter
- VMware View

## Deployment Environment

- Dell R900 servers
- EMC CX4120 storage
- Fibre Channel

## Applications

- Windows XP Sp3
- Microsoft Office 2003/2007
- SQL development tools
- Adobe Photoshop
- Delphi
- Mind Manager
- Microsoft Project
- Various web based apps

Security has also improved as a result of the View implementation. One of the key advantages of its virtualised desktop infrastructure is that Newcastle College can focus less on the security of local PCs, as all applications and data are safeguarded within the data centre. The centralised management and seamless Active Directory integration offered by View also allows any security patches and upgrades to be deployed instantly across the organisation with minimum disruption to end users.

“One of the key benefits of View was that it was not only a secure solution in its own right, but that it easily integrated with our existing Symantec security technology. There was no need to re-train engineers in new technologies, or create new policies,” comments Gow. “We take our IT security very seriously, and are regularly audited by Ofsted. To ensure we meet the high levels of security required by an educational institution. When we were recently audited following the View deployment, we passed with flying colours.”

One of the goals Newcastle College Group set out to achieve with its desktop virtualization project was to improve remote access for its staff. Prior to View, very few staff could work remotely, after the deployment about 40% of staff work remotely. View provides reliable, fast and secure access to all the tools staff need to work effectively, from any location. “Feedback from end users has been excellent,” says Gow. “The number of people remote working has grown since we started using View; this has increased staff working flexibility and reduced our facilities costs. In addition, View has significantly improved our contingency and continuity capabilities.

Through tight integration with VMware Infrastructure 3, VMware View enables Newcastle College Group to simply extend the high availability, disaster recovery and business continuity features to the desktop. It can now back up desktops and data in the data centre to provide higher levels of availability to end users. As part of this, the Group uses VMware’s Distributed Resource Scheduler to continuously monitor utilization across resource pools and intelligently allocate available resources among virtual machines accordingly, meaning it can help avoid potential downtime and maintain high availability.

“We set ourselves strict SLAs with regards downtime and VMware has already helped us to deliver our initial target of 99.8% availability across the board,” says Gow

“Initially there was some scepticism from our developer teams in particular as to whether a virtualised desktop would be able to support their programming requirements and performance as a traditional IT infrastructure. However, since deployment, they have been won over and are impressed with the high quality display of graphic rich applications and tools such as Adobe Photoshop and Microsoft Project. View also delivers the speeds our developers need to work effectively with programmes such as Delphi. In fact, the speeds and graphic quality offered by the virtual desktop are so good that it is even used with streaming video such as BBC iPlayer!”

From a business perspective, VMware has also helped Newcastle College Group to compete more effectively for training contracts. “With the ability to provide desktop computing resources exactly where and when required we can develop course content much more quickly which is a great advantage when bidding for contracts.”

## Results

- Centralized desktop management improves business agility
- Significantly decrease in calls to IT helpdesk
- Remote working capabilities improved
- Significant hardware spend on thin clients and servers avoided
- Improvements in disaster recovery, IT availability and security

