



Case study

Education

VDI upgrade puts City of Westminster College at the top of the class



Improving VDI performance to near-PC levels ensures an optimised learning environment for students and staff within this college's state-of-the-art campus building

The customer

City of Westminster College (CWC) is located in central London and, through cutting-edge facilities and resources, it delivers a wide range of courses to some 7,000 full-time and part-time students each year, including both young people and adults.

The challenge

Performance and cost of the previously deployed VDI solution were increasingly problematic, and a refresh of the solution needed to be considered.

Lengthy combined logon and application start-up times of up to 4 minutes for both teachers and students, totalling 800 users across the campus, were negatively impacting the classroom environment. With IT used heavily in all classrooms, it is fundamental that IT performance must not impact on students' ability to access learning material.

Cost of the endpoint devices and lifetime for the existing VDI solution had driven CWC to evaluate whether to continue with VDI or buy a quantity of new PCs. The results of this evaluation and re-validation were that a refreshed VDI platform would be more cost effective, and also preferable due to environmental factors such as no air conditioning in classrooms, meaning that using thin clients was preferable to PCs.

The project had the challenge of needing to be completed out of term time, during the summer break. Furthermore, CWC's

expectation was that they would end up with a VDI platform that was near PC performance.

Xtravirt had been working with CWC since 2011, and although the refresh project was open to the market through it being a public educational organisation, due diligence demonstrated that Xtravirt would continue to be competitive and trusted for this project.

The solution

The project involved a side-by-side refresh and migration.

Xtravirt defined the project approach and methodology to meet the customer's needs, and then conducted a design review of the existing platform. The resulting refreshed platform design used the latest supported VMware software.

Existing storage was end of life, so was upgraded using Tintri and VMware ESX hypervisor to improve performance and take advantage of latest technology. The design had aligned the VDI platform with the new storage to provide a consistent, sustainable and more manageable configuration.

Success was proven by comparing the benchmarks established before the project, with the performance after the refresh. The challenge to reach near-PC performance with a VDI solution was met with positive metrics that surpassed CWC's highly optimistic expectations.

Project at a glance



Requirements

- Improve VDI system performance and user experience
- Upgrade platform including storage
- Achieve near-PC performance
- Complete project in critical out-of-term timescale

Solution

- Upgraded VMware vSphere® platform for 5.0 to 5.1
- Upgraded VMware View® from 5.01 to 5.2
- Updated two different storage solutions to modular, more agile Tintri VMstore™ T540
- Standardised and optimised entire VDI platform

Results

- Logon times reduced by 33% for staff and almost 70% for students
- Notable application performance improvement, near instantaneous for some apps
- Scalability by a further 43% of the existing desktop volume



Case study

Education

Consultant commentary

“The technology challenges being faced by City of Westminster College were reminiscent of many VDI deployments, with legacy storage under pressure from the demands of typically heavy write I/O from virtual desktops. After assessing various storage offerings with CWC IT staff, the final selection fit the requirements perfectly and has provided enormous benefits - storage IOPS and latency bottlenecks are now a thing of the past. Taking advantage of cutting edge technology has meant that virtual desktops are performing almost in parallel with physical desktops, and user experience has increased significantly leading to positive feedback - a typical make or break factor in a VDI project.”

Steven Dunne, Technical Consultant, Xtravirt

The results



- Reduction of logon times by 33% (from 90s to 60s) for staff, and by almost 70% (83s to 26s) for students
- Reduction of application start-up times by highly notable levels, such as by 85% (from 100s to 15s) for Macromedia® Dreamweaver® 8, and by more than 80% (85s to 15s) for Adobe® Photoshop® 7
- New environment able to scale by at least 43% from existing 700 to 1,000 desktops, and possibly even higher depending on use case and workload
- Technical team can handle higher levels of provisioning, power and maintenance operations concurrently, due to the VMware vCenter™ and View components implemented in the upgrade

About Xtravirt

Xtravirt is a leading, independent provider of enterprise virtualisation solutions. We deliver data centre, workspace and cloud transformational solutions to clients across public and private sectors, both in the UK and internationally.

Our consulting organisation is recognised globally for contributions to industry and community development which, combined with our astute management, methodology and proven track record, provide unsurpassed value to our customers.

Please visit our case study library at xtravirt.com where you can read more of our success stories.

For more information contact:

Xtravirt Limited
Riverbridge House
Guildford Road, Leatherhead
Surrey KT22 9AD

Email information@xtravirt.com

Tel +44 (0)800 4880 038

Web xtravirt.com