



The Westgate School: Technology Refresh Enhances Education Excellence

With a recent building expansion completed, The Westgate Secondary School required an upgraded infrastructure, modernising the schools technology environment and enhancing the facilities further. Technology integrator Krome Technologies supplied and installed a range of new equipment including a storage & backup solution, a virtualised server estate using VMware, desktop PCs, digital signage & SMART boards.

The Westgate School.

The Westgate School, based in Slough, provides secondary and sixth form education to around 930 full-time students, ranging in age from 11-19 years old.

Government statistics put the school among the best schools in the country in terms of academic progress and the high quality of teaching at the school has been publicly acknowledged on several occasions over recent years.

The school, originally founded in 1958, has recently expanded its facilities with a modern two storey technology building. This new building provides students with additional workshops, classrooms, new ICT suites and a business area on the first floor.

Delivering an enhanced learning environment.

Mr Chris Green, the IT Manager at The Westgate School, realised that to be able to technically accommodate the new facilities and deliver the enhanced learning environment envisaged by the school, their entire infrastructure would need to be reviewed.

“The main part of the schools project initiative was to enhance the learning environment for all of the students,” says Mr Green. “It was my responsibility to ensure that the students not only had the smart new facilities to work from, but they also had the technology required to support their studies, whilst accommodating the schools expansion and infrastructure growth in the background.”

With the schools existing infrastructure equipment, consisting of 6 physical servers, running Windows 2003, along with a direct attached storage and backup solution, any expansion was limited and complicated. The schools storage utilisation was already at 80%, and simple routine management tasks such as backup and capacity expansion were proving to be difficult and time consuming. It was therefore decided that the complete server infrastructure was in need of update and modernisation, taking advantage of newer technologies such as virtualisation.

Westgate also wanted to install 182 new desktop PCs and screens in their new building, implement a range of SMART boards and digital signage throughout the school. Additionally upgrading their existing server, storage and backup infrastructure to stabilise the environment and accommodate the growth. It was also essential that the whole project was completed within a limited time period, ready for the new term to start in September.

Proven expertise.

Having successfully worked with Westgate on previous projects, Krome were one of three organisations invited to quote on the technology refresh.

With limited IT budget and a long list of requirements, Westgate wanted to be sure that they were not only choosing the right technologies, but the right integration partner, consequently the selection process took around 6 months. Krome were successfully chosen for the project based upon their proven experience in implementing similar solutions, and their high level vendor accreditations.

“Having worked with Krome previously, we have always been impressed with their technical ability and flexible working ethos. We needed to be confident that the chosen partner not only had the technical expertise, but were also prepared to deliver the solution within the stringent timescales required” ■■■■ Mr Chris Green, IT Manager.

Simple to manage, enterprise class solution.

The primary objective for the technology refresh was to implement a server & storage infrastructure that is capable of supporting the schools expansion, whilst having the ability to scale further in the future. With limited internal IT resource Mr Green wanted a low cost, high performing solution that required minimal management moving forward.

Krome implemented a consolidated virtualised server environment for Westgate School, replacing its 6 old servers with 2 new Dell servers, running VMware vSphere 4.0.

This new virtual environment now runs all of the schools critical applications including SIMS school management software, Equitrac print solution, cashless catering system, remote access facilities and Microsoft Exchange 2010, fully implemented by Krome as part of the project.

In combination with the virtualised server estate, Krome installed and configured two replicating Dell EqualLogic PS Series iSCSI Storage arrays. The Dell iSCSI SAN's provide simple, rapid integration with the schools IP network, and offer all inclusive built in functionality, simplifying the management and maximising availability.

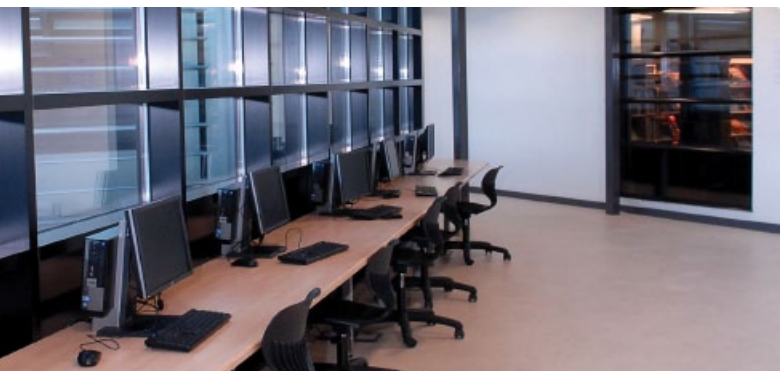
By combining VMware's High Availability technologies, along with Dell EqualLogic's inbuilt SAN replication functionality, the school now has a simple to manage, enterprise class level solution that improves overall efficiency, reduces ongoing hardware costs and protects their data against all eventualities. The replication to an offsite location gives the school unparalleled levels of data protection.

“We were impressed with the solution proposed by Krome, it offered the school an uncomplicated and easy to grow infrastructure, which was exactly what we had asked for,” states Mr Green.

“With the more efficient server utilisation along with a reduced hardware requirement the school will quickly see a return on investment; in fact, since the solution has been deployed we have already avoided the expense of two new servers.”

With the schools push on improvement, any money that can be saved can be reallocated to further school improvements.

“Improving efficiencies in my department has saved the school money, money that can now be utilised in other areas to improve the schools facilities further, that has to be a good thing,” explains Mr Green.



Dynamic learning.

As part of the overall project, Krome also installed 182 new Dell Desktop PCs and screens, 8 AMX Digital signage screens and 9 SMART boards.

The Interactive SMART boards combine the simplicity of a normal white board with the intelligence of a computer. The SMART board interactive white boards installed at The Westgate School allow the teachers to write, erase, move objects and control applications just by touching or writing on the interactive whiteboard surface.

“The feedback from the teaching staff has been very positive,” explains Mr Green. “The interactive SMART boards have proved to be incredibly simple to use and offer a much more dynamic style of teaching.”

Along with the SMART boards, Krome also installed and configured a digital signage solution from AMX which provides simple effective management of all of the schools multimedia signage equipment, into a time-saving and cost-cutting solution. The digital signage screens are being used to display key information in areas such as the schools reception, canteen and hallways.

The Krome consultants also configured Microsoft Windows 2008R2, installed Microsoft Exchange 2010, installed and configured Symantec Backup Exec, and migrated all of the schools existing data over to the new system. In addition to the above equipment, Krome also implemented a new HP Switch backbone for the network and a new UPS solution.

Overcoming the challenges.

With tight timescales in place along with access restraints to the school building, some challenges did arise throughout the project.

“Due to access restraints, the Krome consultants were working remotely in the evenings and weekends to ensure our project was completed on time, they also stayed on site late when site access was available”, explains Mr Green.

“Krome's attention to detail and excellent service levels have been paramount to the project's success.”

The entire project was completed in time for the students to return to school without disruption to their studies or learning environment.

Project summary.

Westgate School now have an up-to-date, stable and future-proof infrastructure that offers both the students and teachers an excellent, enhanced learning environment.

The new infrastructure has already proven to be a great investment, Mr Green states, “The Storage & Backup solution and the new UPS have proven themselves on several occasions already, providing us with a level of data protection that our previous system was just unable to do. We have also seen a reduction in cost from the improved IT efficiencies, something the school has been delighted with.”

If you would like to speak to one of the team about this case study, or require further information please contact us.

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