

Education Success Story: Stoke Park School

Stoke Park School and Community Technology College

Organisation Profile: Stoke Park School and Community Technology College

Organisation Type: Education

Location: West Midlands, UK

Website: www.stokepark.coventry.sch.uk

Organisation Size: 1,100 Pupils; 200 Staff

Locations: 1

IT Staff: 4

HC3™ Solution: 3 x HC3 Nodes (96GB RAM, 3 x Quad Core Intel CPUs, 6 x 1GbE NICs, 12 SATA drives)

Number of Servers in Environment: 14

Operating Systems: Windows 2008 R2
Windows 2012

Applications:

- Student Information Management System (SIMS)
- SharePoint
- SQL Server
- Active Directory
- Impero Remote Desktop

Situation: Replacing VMware 4.1 Environment with HC3

Virtualisation Requirements:

- ✓ Highly available VMs
- ✓ Simple-to-use system
- ✓ Scalable to match school's growth plans
- ✓ Affordable end-to-end solution

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- David Wells, Network Manager

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Fast Facts

Stoke Park School & Community Technology College is a mixed comprehensive inner city and multicultural school providing education primarily for students between the ages of 11 and 18. Stoke Park School found itself with an ageing virtualisation infrastructure running VMware 4.1 that required a licence upgrade within the year as well as additional storage in the environment. The school required a system that would provide the high availability and scalability already in place with their traditional VMware environment utilizing shared storage, but with simplicity that would allow for a smooth transition and no additional training. Based on the simplicity seen in implementing Scale Computing's storage only system in the initial VMware deployment, Stoke Park School selected Scale Computing's HC3, a hyperconverged infrastructure combining servers, storage and virtualisation in a single, easy-to-use and scalable platform. Stoke Park School recently received its ICT Mark, a nationally accredited scheme recognising technology excellence in UK educational institutions. This was achieved through a high quality strategy that the school implemented. Included in this strategy was a central storage solution that with the implementation of Scale's HC3 was installed within a day. This planned approach, supported by a dedicated, systematic implementation from engaged staff, ensured that ICT was delivered to all users.

Introduction

Stoke Park School & Community Technology College in Coventry is a mixed comprehensive inner city and multicultural school providing education primarily for students between the ages of 11 and 18. The school prides itself on being a community hub, increasingly running 24/7 environments for academic and residential purposes.

The growing computing workload now features a collaborative and flexible learning environment to accommodate a large community programme for adults, which includes basic foreign language teaching and a variety of NVQ classes such as Health and Social Care and Child Development.

Challenge:

Replacing VMware Environment - Maintaining High Availability and Scalability Without Introducing Complexity

With a staff of 200, it is one of the most oversubscribed schools in the city and accommodates in excess of 1,100 pupils each year. The IT staff of 4 supports an ageing virtualisation infrastructure that includes 14 virtual servers running on a handful of host servers with VMware acting as the hypervisor and Scale Computing storage nodes acting as shared storage.

With only a year left before a forced licencing upgrade by VMware and a need for additional storage, Stoke Park School searched for a replacement solution that would provide the features of high availability and scalability that they had grown accustomed to in their existing environment, but with added simplicity to avoid any unnecessary cost associated with the training of staff for implementation and ongoing management. The ultimate solution would need to be less expensive than the increase in licencing from VMware combined with the price for additional storage to scale out the existing environment.

Solution:

Hyper-converged Platform that Integrates Resources for Simplicity, High Availability and Scalability

Having been impressed with Scale Computing's storage system in its original virtualisation deployment, Stoke Park School again looked to Scale for a solution to replace its entire VMware environment with HC3 – a hyper-converged 'data centre-in-a-box' combining servers, storage and virtualisation into a single, highly available, easy-to-use and scalable platform.

"Having experienced other hypervisors, we knew that Scale's HC3 platform offered us a dependable simple system," said David Wells, Network Manager – Stoke Park School and Community Technology College.

SIMPLE: The simplicity inherent in the HC3 platform is evident in the setup through to the day-to-day management. By converging the infrastructure in the virtualised environment, Stoke Park School is now able to manage their entire stack from a single user interface accessible through any standard browser that supports HTML 5. Having been created specifically for the IT generalist or IT organisation with limited IT resources and budget, ease-of-use is a core tenant of the HC3 design. HC3 eliminated the complexity of separate storage and management within its VMware environment.

"The fact that virtualisation and storage are just built right into HC3 is fantastic. It reduces the amount of training required for IT staff and we can focus on other initiatives," he continued. **"Within an hour we were able to spin up VMs and have our applications up and running."**

AVAILABLE: Every virtual machine created on HC3 is automatically configured for high availability meaning that in the event of hardware failure, the VMs running on the failed node will failover to the remaining nodes in the cluster automatically. Similar to the availability in their VMware environment, but without the added complexity, Stoke Park School could rest assured that their applications are available for both staff and pupils.

Stoke Park School experienced an uncommon drive failure after implementing HC3, taking advantage of HC3 Protect™— automatically striping and mirroring data across the cluster protecting against drive and node failures. Without any downtime of the VMs, the drive was safely removed from the cluster and the data automatically copied to the remaining available space in the cluster without any user intervention. The school contacted Scale Computing's Technical Support team notifying them of the failure covered under the ScaleCare warranty and a drive was immediately shipped.

"I love that it [HC3] seamlessly handles failures automatically. That's the beauty of this platform," said David.

SCALABLE: HC3 allowed Stoke Park School to pay for what they needed on day one, knowing that the system would grow alongside their virtual environment and business needs in the future. With HC3, there are no upfront costs or licencing complexities. If they need to grow, they simply add more nodes. No rip and replace, no expensive complex systems, no headaches.

"We don't know what we'll need for future projects, nor do we have time to forecast. With HC3 we don't have to worry because growing our environment is as easy as adding nodes," added David.

With no virtualisation software to licence, no external storage to buy and the hypervisor built in to the system, HC3 radically simplifies the infrastructure needed to keep critical applications running. The architecture and user interface of HC3 makes the deployment and management of a highly available and scalable infrastructure as easy to manage as a single server.



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