

## Queen Elizabeth's Grammar School

Education

### Challenge

Infrastructure upgrade, virtualization, performance, and cost.

### Benefits

Simple to deploy, use and manage. Flexible and scalable. Hybrid storage pools.

### Solution

NexentaStor™ and VMware infrastructure

## BUSINESS OVERVIEW

Queen Elizabeth's Grammar School is a forward thinking co-educational selective school set in the heart of the historic market town of Faversham. With 874 pupils and more than 100 staff members, it is a highly successful educational community.

Alongside Queen Elizabeth Grammar School's innovative curriculum, it offers a broad range of additional opportunities for students to engage in beyond the classroom—promoting the values of respect and cooperation.

Placing high importance on developing interpersonal skills and qualities, alongside high academic success, the school offers outstanding student care and innovative, high quality teaching in a positive environment.

Today, the school continues a tradition of grammar school education in Faversham that dates back to 1527. With its high quality global education, the school offers extensive opportunities for students to achieve academically, socially, and personally.

## CHALLENGES

The school recently was struck with the common issue of effectively storing increasingly growing amounts of data. The school's aging Intel SAN storage solution was rapidly reaching capacity and, as a result, was slowing down and not providing the performance required.

As the in-house Intel solution was unsuitable for expansion, the school's IT Network Manager, Dave Munro, reached the decision that the storage infrastructure required an upgrade.

Under pressure to make the most out of the school's allocated IT budget, Mr. Munro enlisted the help of high performance computing specialists VA Technologies.

The aim was to find a flexible and reliable storage solution at a competitive price—one that would significantly upgrade the storage infrastructure, increase performance, and not overwhelm the IT staff with technical issues.

## System Configuration

### NexentaStor

- Two 12TB SANs providing 24TB raw storage capacity
- Three VMware host servers connected to SAN via 10Gb SFP+ direct attached cables (system acts as an ESXi data store using NFS)
- 2x OpenStor XE 4U Appliances
- DDRdrive SSD Acceleration PCI-E Cards

*"Nexenta's OpenStorage solution is a clear example of value for money. The solution provides us with enterprise-class features, including hybrid storage pooling, unlimited snapshots, deduplication, and thin provisioning but at half of the price of other traditional storage vendors. The impressive features set also is complimented by its flexibility, is extremely adaptable, and easily can grow with us in the future."*

**Dave Munro**

**IT Network Manager**

**Queen Elizabeth's Grammar School**



## SOLUTION OVERVIEW

After evaluating a range of solutions, Mr. Munro implemented two NexentaStor solutions with the advice and guidance provided by VA Technologies.

Two 12TB SANs provide the academy with a total of 24TB of raw storage capacity. NexentaStor is used to support the entire VMware infrastructure; the first SAN unit connects to three VMware host servers via fast 10Gb SFP+ direct attached cables.

This system acts as an ESXi data store using NFS, and the need for extra file servers also is eliminated as it directly provides CIFS shares. In addition, this unit snapshots data at regular intervals throughout the day, allowing data to be effectively recovered by the schools IT Department when required. The snapshots are synchronized with the second 12TB SAN, which is stored in a separate location on site, providing a comprehensive data protection structure.

## BUSINESS BENEFITS

By selecting Nexenta, Queen Elizabeth Grammar School has increased the speed and performance of its IT infrastructure dramatically. The Nexenta solution was significantly cheaper than any other storage solution, providing immediate savings and also positively impacting future growth costs. In fact, data storage costs have been reduced by about 50 percent.

Automated email alerts provided by the NexentaStor system, combined with its straightforward usability, means that the school has significantly reduced the amount of management time committed to storage concerns. This allows the staff to focus more of their time on non-storage related issues, thus providing more focus to student needs.

The initial advantages of the Open Source unified storage solution remain clear. The system is flexible and easily scalable, and the team at Queen Elizabeth's are confident that this flexibility will ensure that the overall benefits supplied by the storage solution.

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