



The Rochester Grammar School

The Rochester Grammar School is one of the country's top performing grammar schools. The ICT department maintains a local area network that serves 1,200 students and 150 staff with a total of 600 machines, and is available 24/7. Downtime is exceptionally rare. With students' files only getting bigger and funding for new hardware very limited, Network Manager Phil Finnemore was forced to think outside the box to address future storage issues ahead of time.

The challenge

The school network houses a large range of user-generated content on six of its nine servers. Some of this comprises video and audio storage, but the majority is Office-based documents used for day-to-day school work. Many of these files were extremely large. 'One of the main problems was that staff and students like to cut and paste large images straight from the web or import them from digital cameras without resizing them properly. I'd regularly see Word documents of 100Mb-plus.'

With no budget to increase capacity, Phil realised that the problem would soon start impacting users and looked for a way to save space. 'When I manually put together a file myself using best practices, I found I could reduce the size by up to 50 percent. But I knew I could never get staff and students to do the same.'

The solution

Realising that other people must have had the same problem, he searched online for solutions and came across NXPowerLite for File Servers. It was exactly what he had been looking for. 'When I tested it, it shrank my sample file down to a fifth of its original size.'

Before implementing NXPowerLite across the full network, Phil needed to make sure that it wouldn't adversely affect any of the students' files, many of which were required for ongoing coursework. After some initial tests, he optimised a number of documents and asked the school's IT coursework co-ordinator to compare before and after versions. 'He couldn't see any difference.'

Implementing the software fully was a fast and straightforward task after that. 'It was one of the easiest and quickest solutions I could have hoped for. I placed the order for the software on a Tuesday, was emailed the licence by the end of the day and had it installed by Thursday.' All in all, the process took no more than a week to complete, with the software running in the background and no downtime necessary.



Results

Running NXPowerLite on four of the school's content servers immediately saved 30Gb per server, with further savings elsewhere.

Full results	
Total storage capacity	2,300 Gb (2.3 Tb)
Space used	672 Gb
Files NXPowerLite can't work with	402 Gb
Files NXPowerLite can work with	270 Gb
Space saved by NXPowerLite	166 Gb
Reduction of current storage usage	24.70%
Reduction of files NXPowerLite can work with	61.48%

Much of the optimisation took place over the weekend, and when everyone came back no one noticed anything had changed. 'I've not had a single complaint from users – and a lot fewer people are constantly telling me they're out of space. The only thing they've asked is whether I'd increased capacity, since some of them realised they suddenly had much more space in their network accounts! Every time I run the software I regain another 200-300Mb per user.'

The benefits cascade down to backup, too. Whereas this previously took two days, it now only takes one day, and the result is just 1.6Tb of compressed data – a single digital tape, instead of two. This means the tape no longer has to be changed halfway through the process.

Phil also notes that the support from the company has been outstanding. 'We hadn't been able to run the software properly on one of our servers and it took a while to identify the issue at stake. Neuxpower didn't give up on us, and have now found the problem and updated the software to fix the issue completely. For a small company, they devoted a huge amount of time and effort to resolving the problem quickly.'



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Conclusions

By using NXPowerLite for File Servers, Phil was able to free up large amounts of space on the school's servers. This enables staff and students to continue using the network as they were before, uninterrupted, and without spending large amounts of money, implementing unpopular 'best practices' or requiring long periods of downtime. 'I've saved the school immense amounts of money and space, without a single complaint. If I had to describe NXPowerLite in one word, it would have to be "Impressive".'