

Caerphilly County Council

“NXPowerLite is excellent software for optimising files to dramatically reduce storage”

Neil Harvey, Server Support and Development Officer for Caerphilly County Council

Caerphilly County Borough Council maintains around 4,000 desktop computers, with a similar number of users. During extensive reorganisation 13 years ago the network was rebuilt from the ground up. Whilst this brought significant improvements and increased capacity, no restrictions were placed on users' allocations of space at the time.\

The challenge

Since the reorganisation, data on the network had grown in an uncontrolled manner. It was often unclear where certain files were stored and who their owners were. Neil Harvey, Server Support and Development Officer for the council, realised that the network drives were filling up fast. The immediate solution was to add more space, but this led to increased backup and retrieval times, and the growth and usability of the network became harder to maintain.

The long-term solution was to restructure the network and impose restrictions on users. 'While we were doing this, we found a large number of huge Word files, often 800 or 900 Megabytes. It turned out that a lot of them were just very short documents, perhaps only a couple of pages, but full of high-resolution images.'

NXPowerLite for File Servers

Neil found NXPowerLite when he began to research possible solutions. 'The underlying issue was that we couldn't tell who was responsible for filling up which drive. We had started to address that, but NXPowerLite was a useful answer in the interim since it allowed us to reclaim space. It gave us a bit of extra time to reorganise the permissions on the different folders.'

The process involved moving a lot of files around the network to the right places on the new servers, and the smaller files created by NXPowerLite made this more manageable. 'Historically we have had many file servers across many geographical sites due to slow network connections. By optimising the files prior to centralisation we were able to consolidate to far fewer servers and in a much more controlled manner.'

It also made backup an easier and faster task. 'On average, it reduced the total storage we needed to between 40 and 50 percent of the original amount – and that's counting all the files, not just the ones that NXPowerLite can work with.' Looking at the data currently optimised, Neil estimates backup times have fallen by 20 to 25 percent.

The council use Microsoft Office a lot, and have a program that automatically converts these documents to PDF. However, the application is fairly inefficient. 'We've saved about 60 percent of the space of those by using NXPowerLite.' A further 40 percent of space has been saved on a separate system which is used to track the progress of correspondence within the authority. Letters are generally uploaded as PDF, JPEG and other images files. 'That has noticeably improved the performance of the system.'

Overview of file optimization	
Total unstructured data	10TB
Number of file servers	16
File types NXPowerLite can work with	75-80%
Average file reduction	45%

Unexpected savings

A pleasant surprise for Neil has been the space savings on some of Caerphilly's application servers, which contain semi-structured data. 'We have a number of these systems within the authority and the files all tend to be very similar. They are often generated from templates, and have little in the way of images. So far I have been able to run NXPowerLite against three of these servers and have recovered from 15 to 50 percent of disk space. On at least two occasions this has meant that we have avoided the need to buy additional/replacement application servers.'

Working with Neuxpower

Caerphilly council is aiming to become a paperless organisation and its departments are gradually ensuring that all physical documents are scanned and kept on the network. This has created further problems, since the scanning application creates TIFF files by default, and these are not always compressed. 'The document management system is growing by around 5Gb every day.' The existing version of NXPowerLite didn't work on TIFFs, but Neil consulted with Neuxpower and found that they were planning to add this functionality with the next update. 'Neuxpower built a scan tool to find uncompressed TIFFs on the network. We're currently feeding back data to allow them to make the update more efficient.'

Neil says that the relationship with Neuxpower has been excellent, and the company has taken an active interest in how the software has worked for the council and whether there were any improvements they could make. 'We use a journalling service that runs in the background and checks which files have been altered before they're backed up. We've noticed that when NXPowerLite scans the files it triggers the journalling software, so more files are backed up than need to be.' Neil reported this back to Neuxpower, who immediately looked for a way to address this in the next update.

Lastly, Neil notes that there have been no compliance issues with using the software, which he ran past the council's legal team before rolling out NXPowerLite. Physically, the results look exactly the same to the naked eye – something that is critical when dealing with court documents. 'All in all, we've had good results with NXPowerLite. I'd be happy to recommend it to other councils.'