

The Cost of Downtime: How Traditional File Storage Flaws Drove SAS International to Enterprise File Services

SAS International is a U.K.-based designer and manufacturer of high-end metalwork, architectural ceilings and more. What started as a family-run business has evolved into a major enterprise with offices and projects across the globe. The company was looking to move away from its aging file servers, speed up access at remote offices and find an alternative to its expensive, time-consuming backup solution. After incurring a file system infrastructure problem at one location, SAS accelerated its search for an alternative and found that Nasuni was the only solution that met all its needs in one system.

Drivers

- Major file access delays at remote offices
- A costly file server crash at one location
- Increasing demand for mobile access and collaboration
- Traditional storage hardware running out of capacity

Requirements

- Extend fast file access to remote offices
- Enhance data protection and minimize RTO
- Reduce reliance on aging storage hardware
- Improve collaboration and mobile access

Nasuni Solution

- An integrated, cloud-native file system with unlimited capacity
- Built-in file protection with 15-min RTO
- High-performance distributed file access
- 50% reduction in data protection costs



SAS employs roughly 1,000 people spread across four U.K. locations, including its headquarters in Reading, and three additional offices, with one each in Australia, Ireland and Dubai. The company also has teams working on high-profile projects across the world, such as the new Muscat International Airport in Oman.

As a distributed organization, SAS was struggling with its aging and expensive file storage infrastructure. In some locations, unstructured data was growing so quickly that USB drives were plugged in to expand capacity. The company was relying on inefficient backup processes and tape drives to protect business-critical files. Since files were stored in central locations, then shared over WAN links, end users who were close to the source of those files enjoyed fast performance, but others experienced huge access delays. In short, the solutions that were supposed to store, protect and extend access to files were failing the company. “It wasn’t a situation we could continue with,” says James Greene, Director of IT for SAS. “It was too complex and convoluted.”

Upgrading an Aged File Storage Infrastructure

As SAS began exploring potential solutions, the IT group compiled a list of its requirements. The designers and architects on staff needed high-performance access. IT wanted to leverage cloud storage, get rid of their outdated protection systems and find a way to centrally manage storage at remote locations.

Yet this project wasn’t just about solving file problems. The IT group had a grander mandate from the company’s new leadership team. “We’re changing the way the company thinks about how we can really drive the efficiency in our business and become more agile,” Greene notes. Finding a solution that satisfied these larger company goals and the specific IT wish list proved difficult. When SAS evaluated a traditional cloud storage gateway, for example, the device was simply too large and expensive. Another potential system was problematic because IT could not estimate its monthly cost.



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Enhanced Protection with Continuous Versioning

The threat of an outage has been mitigated as well. Nasuni data protection is built on continuous versioning – changes are frequently streamed to the cloud, updating the gold copy of each file. If a minor or major disaster were to impact another SAS factory, IT would be able to restore access within 15 minutes.

Empowering Sales Through Mobile Access

One unexpected use case leverages Nasuni’s mobile access. In the past, to prepare for pitch meetings, designers would send potential renderings to SAS salespeople, who would then carry these drawings on their laptops. If any questions or suggestions arose, the sales team would not be able to adjust these renderings on-site. Instead, they’d have to schedule a follow-up meeting.

IT wants designers to be able to remotely edit those renderings, then send them back to the sales team while the meeting is still in progress. SAS tested an enterprise file sync and share solution, but the lack of IT control and questionable security strategy turned them off. With Nasuni, IT will maintain control and security while enabling the design and sales teams to work collaboratively over large distances.

Cutting Costs and Simplifying IT

The switch to Nasuni gave IT the opportunity to reorganize its permissions and folder structures, and massively simplified the company’s storage infrastructure. Designed for files, Nasuni provides the key capabilities required for enterprise file sharing and collaboration. With Nasuni, SAS:

- Retired four tape drives
- Eliminated numerous Backup Exec licenses
- Cut data protection costs by 50%

While these savings, combined with the elimination of the threat of lost production days, were a large part of the reason SAS chose Nasuni, cost was still only one factor. “The benefits are much greater in terms of what we’re actually going to get from the system,” says Greene.

The Risk of Relying on Backup

Zones, the U.K.-based IT solutions and services provider, informed SAS about Nasuni, and the company was interested immediately. Soon thereafter, a virtual server at one location failed, taking out almost the entire storage platform. The core machines that support the company’s manufacturing efforts need that data to run.

SAS had a robust backup solution in place, but it was too slow. The servers were down, and the machines offline, for four days. Switching to Nasuni quickly became IT’s top priority.

Nasuni File Services

Now that SAS has moved its unstructured data to Nasuni, the company benefits from unlimited scale, continuous versioning, high-performance distributed access and centralized management. Greene has a background in legal IT, so he was familiar with the compliance and security concerns around the cloud. But Nasuni’s model, which encrypts all files with customer-controlled keys before they leave the company’s security perimeter, met his strict standards.

High-Performance Distributed Access

Active files remain in a local cache to ensure fast performance for the company’s designers at all locations, not just the main factory. But the gold copy of each file also resides in the cloud, so SAS designers can access and collaborate on the most recent version of a file from any location or device.