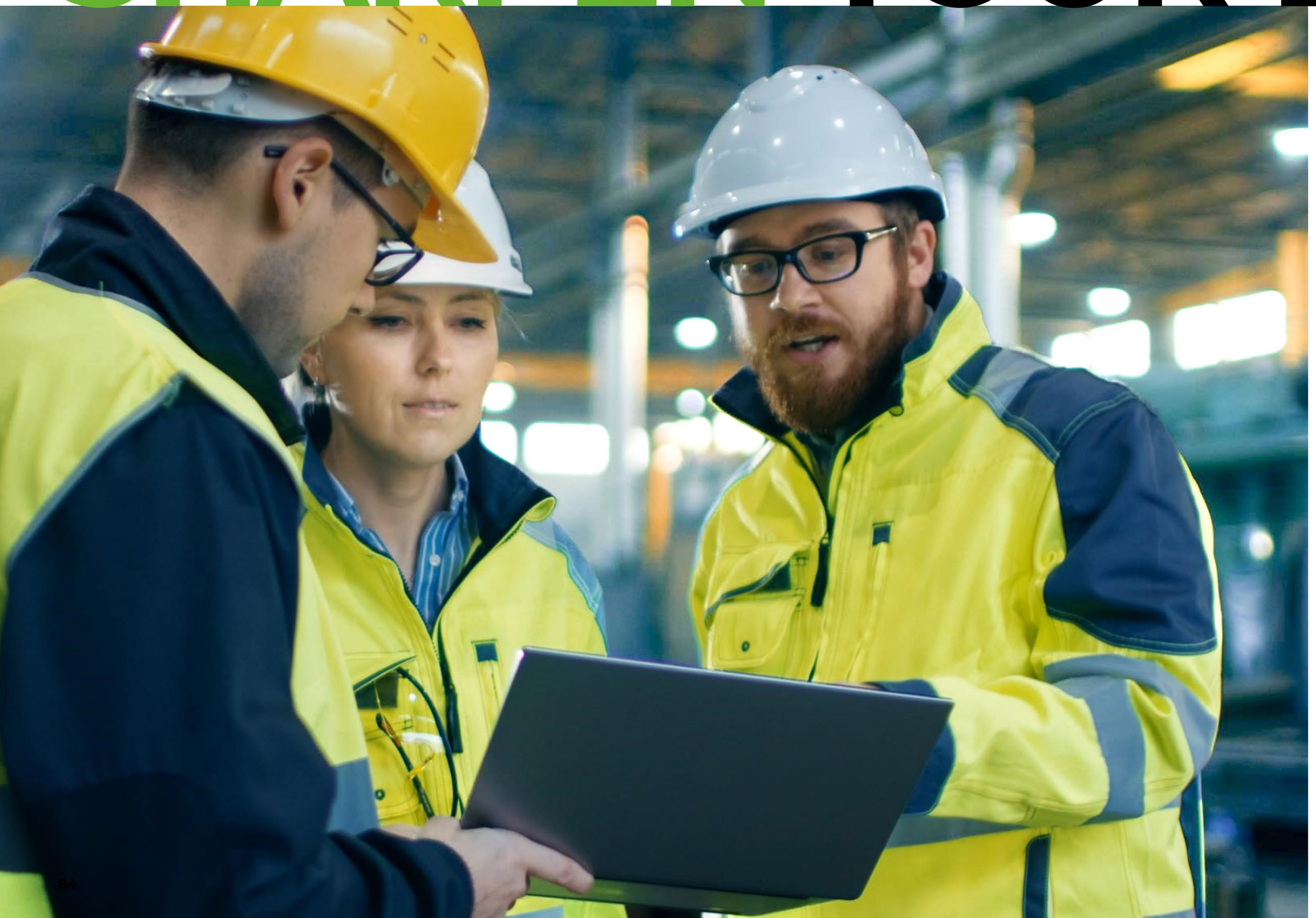
SHARPEN YOUR EDGE



How three manufacturing companies gained an edge by leveraging a hybrid cloud storage solution

By Ben Clark

At a typical global manufacturing company - ACME Industries as a hypothetical example - IT leaders find themselves at a crossroads, realizing the imperative need to overhaul their infrastructure for enhanced resilience.

Within the company's factory, PLM applications, IoT-connected machines, and smart factory tools continuously generate vast amounts of unstructured data. This data, essential for informed decision-making, must be stored, protected, shared, and archived effectively. However, ACME finds itself at odds with its existing traditional file storage infrastructure, including Windows File Servers, Network Attached Storage (NAS), backups, and more, which were not originally designed to handle the complexities of modern manufacturing.

Faced with these evolving challenges and recognizing the pressing needs for security, growth, and the efficient movement of critical data, ACME is now exploring solutions to transform its IT infrastructure.

The company is turning towards innovative hybrid cloud solutions, such as Nasuni, to scale operations efficiently, mitigate risks, optimize costs, and ensure fast performance wherever it is needed across the globe.

Why hybrid cloud storage?

The age of file storage silos has passed. Organizations cannot satisfy their end users and meet strategic business initiatives by relying on a file storage and data protection infrastructure designed around dozens of isolated technologies deployed at multiple factory locations. Cloud-only solutions create their own problems, as end users expect a level of performance that the cloud cannot always deliver.

Organizations worldwide are realizing the cost savings, efficiency gains, long-term scalability, and fast edge performance of a hybrid cloud file data platform. Hybrid cloud storage solutions that combine elements of on-premises systems with the many advantages of cloud are now an enterprise necessity. As IT infrastructure and operations teams transition from deploying hardware to providing data services, large manufacturing organizations have migrated tens of petabytes of globally distributed file data from local storage and into unified hybrid cloud storage.

The core appeal of hybrid cloud storage is simple. Enterprises want to maintain the familiarity and fast performance of traditional systems while taking advantage of the scale and cost efficiencies of the cloud. A well-architected hybrid cloud storage solution delivers an increasingly wide range of data services and capabilities that will help organizations do more with their unstructured data today and tomorrow, including data intelligence and insights derived via AI, cyber-resilience (with built-in ransomware prevention, detection, and recovery), compliance, lifecycle management, data mobility, and more.

> Sixty percent of I&O leaders will implement hybrid cloud file deployments by 2026
>
> - Gartner Research

Three ways hybrid cloud can benefit manufacturing companies

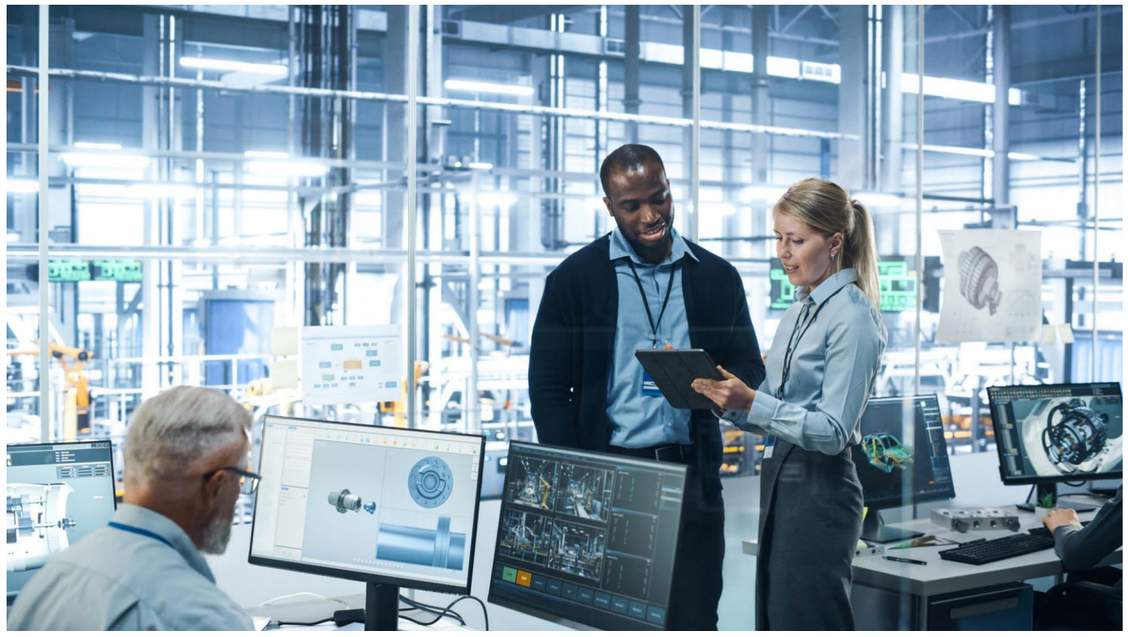
Consolidation

NAS consolidation is a critical step in an organizations' efforts to control costs and scale for digital transformation initiatives. Many organizations have evolved their local networked storage over time and across multiple locations, installing a variety of storage vendors, increasing capacity asynchronously, and patching together a host of management tools to help them secure, protect and share local file data across multiple sites.

With a hybrid cloud solution like Nasuni, organizations can consolidate, secure, and access all their files in one shared global file system and a single namespace. Nasuni uses the most scalable, durable, and lowest-cost type of cloud storage - object storage - to consolidate all file data. Your organization gains operational excellence and frees up IT resources for other pressing projects by not having to manage NAS, file servers, backup, etc.

- **Customer Spotlight: Jakob Müller Group**

Like many manufacturing leaders, Jakob Müller Group was relying on distributed



Windows File Servers to manage and share data across a distributed environment. Although this has been a typical approach in the industry, large file sizes and growing amounts of data have made such infrastructures increasingly inefficient and expensive to maintain.

The move to Nasuni represented both a modernization of the firm's infrastructure and a single solution to their varied concerns. Instead of ten Windows File Servers, backup software, and file synchronization solutions, Jakob Müller Group depends solely on the Nasuni File Data Platform. Virtual Nasuni Edge Appliances cache files locally at 14 locations around the world, yet all file data scales cost-effectively in Azure Blob Storage. Nasuni Continuous File Versioning® eliminated the need for separate backup, and Jakob Müller Group was able to reduce its backup storage footprint, cancel maintenance of a WORM storage volume, and drastically cut the cost of restoring data, resulting in a 33 percent reduction in annual costs.

Global collaboration

Manufacturing companies now employ several sites in the design, manufacturing, and service of their products. Traditional site-to-site implementations struggle to maintain performance levels as more sites are required to support a product's lifecycle.

With Nasuni, globally distributed engineering and manufacturing teams can now collaborate on all engineering files as if they were in the same office. Any changes made to a cached file in any location are compressed and encrypted on the local edge appliance. The versions are then propagated to object storage, where they are stored as immutable, read-only versions and synchronized to all other sites as needed. With S3 protocol support included, the propagation of large files is faster than ever. The result is increased productivity for the whole organization.

- **Customer Spotlight: Western Digital**

Western Digital, the disk manufacturer, chose Nasuni hybrid cloud storage as the file system for 10,000 engineers to work

efficiently together. The IT team wanted to implement a follow-the-sun collaboration and development model so that when work ended in one region, it could pick right up in another. Prior to Nasuni, this wasn't happening.

The engineers interact with the global file system as if it were any other traditional file system and focus on doing what they do best. "Among our engineering community, it has become absolutely life-changing," former VP of Global I&O Todd Stewart says. "The performance we're getting is just radically different from what we were seeing before. It just absolutely changes the way they work, and it has significantly improved their productivity."

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Security and ransomware

There is a reason manufacturing companies are among the most targeted industries for ransomware attacks. Manufacturing firms often store sensitive data, such as proprietary designs, production schedules, and customer information. Ransomware attackers specifically target such valuable assets, encrypting them and demanding a ransom for their release.

This underscores the importance of robust cybersecurity measures to prevent unauthorized access, regularly update software and firmware, and implement effective backup and recovery systems. A hybrid cloud file system allows for a single source of file data, that can be accessed securely globally, with built in back-up, access control, and ransomware protection capabilities.

- **Customer Spotlight: Ransomware Resilience**

A major European energy provider recognized the transformative potential of this new approach to data protection recently when it realized its existing infrastructure posed a risk to operations, as a ransomware attack could have taken one or several key locations offline. The company consolidated its file data in cloud object storage with a hybrid solution that provides fast access through virtual edge appliances and advanced ransomware protection, detection, and recovery services.

With Nasuni, it got a platform with a robust security model, as well as a highly effective and integrated solution for detecting, stopping, and recovering from ransomware. Nasuni's immutable snapshots are impervious to ransomware and are stored in object storage, so organizations can take them every few minutes for super-tight recovery points and store them forever for long-term data protection. Integrated Ransomware Protection adds real-time edge detection that is faster than waiting to analyze backups and detects all known ransomware variants, as well as zero-day attacks. After detection, the attack is stopped from spreading, and Nasuni's patented ransomware recovery process can then surgically restore PBs of data in seconds.

How does Nasuni make this possible?

The Nasuni File Data Platform provides organizations of all sizes with a hybrid cloud storage solution that goes far beyond what traditional infrastructure or other cloud providers can do. The Nasuni platform frees organizations from traditional NAS limitations, allowing them to scale their storage as needed, dramatically reduce risk, and lower operating expenses.

Nasuni is the leading hybrid cloud storage solution because it delivers fully on all three value pillars.

- Scalability - Nasuni delivers effortless scale. Organizations can provision SMB and NFS file shares on-demand in any location just by increasing their Nasuni and object storage subscription. Add any amount of capacity, support any number of users, and manage it all through a single pane of glass.
- Edge performance - high-speed read/write performance at the edge, whether your organizations edge is an on-premises data center, remote or branch office, or remote cloud region. Users and apps won't even notice Nasuni has replaced the legacy file servers because there is no change to existing workflows.
- Data security at the edge - unequaled data security with up to the minute recovery points, recovery of PBs of data in seconds, and integrated ransomware protection that detects attacks in real time, at the edge. Never have to think about backup or DR for file data again. ■

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Ben Clark is Sr. Product Marketing Manager at Nasuni, the leading hybrid cloud storage solution that powers business growth with effortless scalability, built-in security, and fast edge performance using a unique cloud-native architecture. The Nasuni File Data Platform delivers operational excellence by consolidating NAS and backup, eliminating data silos, and making management easy and flexible without changes to apps or workflows.