NASUNI

White Paper

6 Reasons to Accelerate Your 2019 Digital Transformation with a Global File System

Introduction

Organizations across the world have recognized that digital transformation can be accelerated with a smart cloud infrastructure strategy. In this white paper we look at 6 digital transformation priorities in 2019 and review how a global file system, based in Azure, can accelerate delivering on these priorities.

Unstructured data is a growing source of value – and risk if left unprotected. But traditional ways of storing and sharing, and protecting this data, especially across multiple locations, are not keeping up with the demand for lower cost, more efficient, and smarter infrastructure.

Azure Cloud Storage offers the ideal place to begin solving this problem. But pure cloud storage on its own is not a complete solution. What's needed is a platform for unstructured data that delivers the benefits of the cloud while offering new capabilities and accelerating digital transformation priorities. What's needed is a global file system.

Nasuni's UniFS® is a global file system that operates natively in Azure, allowing organizations to store, protect, synchronize, and collaborate on files at any scale, across any number of global offices. It's uniquely suited to support innovative digital transformation and cloud infrastructure projects. Read on and learn why so many dynamic organizations are choosing this solution today.

#1: Modernize Your Applications Now

Nasuni's global file system, UniFS®, was designed to preserve the way your applications work today while still extending all the benefits of cloud infrastructure to your organization. Application data is migrated to Azure Cloud Storage, but Nasuni's global file system caches frequently used files on physical or virtual edge appliances at each office. The edge appliances integrate with local AD or LDAP directories for secure access, and critical data remains local to the applications. This way, your end users still enjoy a familiar, high-performance experience. But all files and metadata scale cost-effectively in Azure Cloud Storage, not on those local appliances.

This combination of Azure Cloud Storage and Nasuni's global file system also creates a few other application-specific advantages, allowing enterprises to:

- **Globalize Application Data**: Typically, files are stored on local hardware and available only to applications on site. Nasuni globalizes all file data in Azure, making the most recent versions of files available to any app or location with the proper credentials. If an application is housed in your central location in Virginia, for example, Nasuni ensures that files uploaded to your branch office in New York or Los Angeles quickly become available to that app.
- **Lift and Shift Applications**: Instead of forcing IT to rewrite apps for the cloud or putting the application server in the cloud and having it reach out to distant sites to access data, Nasuni simplifies the process of modernizing legacy apps. Once application data is migrated to Azure, organizations can lift and shift their apps to the cloud. The apps are immediately local to the data in Azure.
- **Accelerate Application Development & Delivery**: With Nasuni's global file system, UniFS, new applications, software packages, or code can be developed and tested according to a follow-the-sun collaboration model. Since Nasuni and Azure make data available to multiple global locations, a new build developed in one spot can quickly be validated

by a QA team on the other side of the world. As one workday ends, another begins, and the dev cycle never slows.

#2: Get More Out of Your Current Cloud Credits

Many large organizations have made sizable commitments to Azure, so one of the first questions we hear is whether prospective customers can use their existing Azure Cloud Storage credits when they switch to Nasuni? The short answer is yes – Nasuni does allow organizations to use up their Azure quota. More generally, Nasuni is designed to ease your organization's digital transformation to cloud infrastructure. That applies to this question of Azure credits, but it also points to the core benefits of Nasuni's global file system.

API Group, Inc.

"One of the goals we set was to migrate to the Azure cloud as quickly as we could, but we were seeing that as years away. Then Nasuni entered the picture and it was instant cloud infrastructure. We were able to accelerate our

IT must move infrastructure to the cloud but maintain performance at the edge

While it is possible to migrate your unstructured data to the cloud without a global file system, your end users and their applications wouldn't be able to access those files in the same way. On the other hand, UniFS preserves the permissions, security, and performance of traditional Network-Attached Storage and other legacy storage systems. Applications and end users work the way they've always worked – in many cases our clients report improved performance, especially at remote and branch offices.

Proof Point: Digital Transformation Without the Pain

One Azure/Nasuni client, a global real estate giant, migrated all of its EMEA-region Windows file servers into Azure Cloud Storage over a four-month period. More than 100 offices now enjoy the limitless scale and cost benefits of Azure, while maintaining local performance and security with Nasuni. SMB and NFS protocol supports and permissions remain the same, but the firm now requires only one-fifth of the file storage hardware footprint at each site. File data is scaling cost-effectively in Azure instead.

#3: Prepare for Artificial Intelligence and Automation Initiatives

As IT environments rapidly evolve, organizations need to be ready to take advantage of exciting new tools. A global file system that operates natively within Azure Cloud Storage prepares your organization to derive the most functionality from the IT tools of today and tomorrow. Moving your files off local hardware and adopting cloud infrastructure with Azure Cloud Storage and Nasuni will prepare you for what's next, including:

Artificial Intelligence: Whether you're utilizing artificial intelligence (AI) or Machine Learning tools today or simply exploring the possibility for the future, having the

flexibility to consolidate data from different sources into one globally accessible volume is essential. Some organizations are looking to create regional data hubs as well, and the ability to position your data optimally around collection sources and analytical resources is key. Unstructured data is increasingly valuable to organizations, but tapping this value is possible if your file data is anchored to local data centers or distributed between legacy storage hardware in remote offices.

Automation: IT is shifting to software-defined everything. Compute and networking led the way, but storage has finally arrived. Software-defined storage has eliminated the more mundane operations having to do with scaling performance and protecting data. Soon these software-defined environments will be able to dynamically adapt to the needs of an organization. Yet organizations will only be ready to take advantage of these capabilities if their file data resides in the cloud.

Proof Point: Developing an AI Search Tool

One Nasuni client, a global architecture firm, has securely stored more than a million images in its object storage volume. The IT group pushed all these files through image recognition software, ran an intelligent tagging program on top of that, and then built in some search functionality. Today, the firm's architects and designers can quickly search its vast store of file data for insights as they work on or propose new projects. The firm's CIO credits his talented team, but he also notes that they have the cycles for this kind of innovation because the switch to Nasuni has taken so many mundane tasks off their plate.

#4: Re-focus IT Staff on Strategic Priorities vs. Overseeing Backup and DR Replication Systems

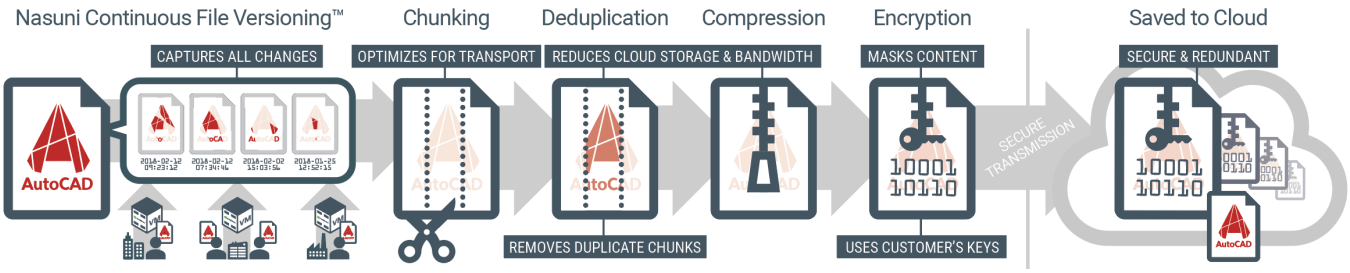
ESG

"I can't tell you how much easier it makes my life, not having to upgrade drives, migrate data, figure out what disk trays will cost, and figure out our backup needs." – Nasuni Client, as told to Enterprise

The kind of business intelligence work cited in the previous section isn't possible when your IT team is babysitting backups. In our experience, organizations that switch to cloud infrastructure with Nasuni and Azure solve the low-level problems that dominate so many cycles for the average enterprise IT group. These IT teams are no longer concerned with buying hardware, negotiating terms, managing facilities, provisioning servers, or restoring lost files from tapes. Thanks to Nasuni's global file system:

1. **Backup is Gone**: Although files are cached locally for fast access, Nasuni Continuous File Versioning™ securely maintains a "gold" copy of each file in Azure Cloud Storage. Since these gold copies are updated as changes are made, IT can easily restore access to recent versions of files in Azure after a data loss event or malicious attack. This eliminates the need for separate backups, tapes, or Disaster Recovery solutions, and simplifies the entire process of protecting your organization's valuable file data.

2. **Provisioning is Easier**: Adding capacity at any location or provisioning a newly acquired office no longer means buying and installing hardware – or negotiating price and service terms. With Nasuni, capacity can be added with a quick and easy phone call.
3. **Management is Remote**: The Nasuni Management Console allows IT to accomplish more from a distance, including provisioning capacity, changing permissions, and restoring lost files or file volumes.
4. **Support Calls Drop**: Organizations that switch from traditional storage and data protection to Nasuni report a significant reduction in file-related support calls.



Continuous versioning to the global file system eliminates the need for traditional backup and makes restores possible in minutes, not hours or days.

#5: Unify Data Silos

Digital transformation should allow you to leverage data more efficiently. This isn't possible when your file storage is distributed across dozens or even hundreds of offices. Nasuni's global file system eliminates this data silo problem by unifying all your islands of storage into one global namespace or single source of truth in Azure. Nasuni ensures that all file data and metadata, at all locations, scales in Azure Cloud Storage. Yet all sites, including remote and branch offices, still enjoy fast, cached access to frequently used file data through virtual or physical edge appliances.

This shift to a unified global namespace allows for unprecedented capabilities, including high-speed file synchronization across multiple locations, global collaboration, and global file locking. Our clients are changing global workflows, leveraging more talent in distant locations, accelerating time to market, and more.

Proof Point: Increased Productivity via Faster Collaboration

A global engineering firm that has designed or renovated several legendary sports venues was incurring project delays because end users in different locations were struggling to access critical design files over the WAN. Now that they've switched to Nasuni's global file system and Azure Cloud Storage, engineers at multiple

global locations all enjoy LAN-speed access to the same critical project files. These data silos have been unified into one global file system, and engineers can collaborate as if they're working in the same office.

#6. Self-Fund New Projects

Digital transformation is supposed to bring greater efficiency to internal processes and eliminate what used to be done manually. Nasuni actually delivers on that promise and delivers real cost savings to IT. The results are significant enough that IT can count on savings to help fund new initiatives. These savings come from a fundamentally new approach to file infrastructure and go beyond what an organization stands to gain by going to the cloud alone. They include:

Built-in Data Protection, Business Continuity & Disaster Recovery: The combination of Nasuni's global file system and the unlimited capacity of Azure Cloud Storage completely eliminate traditional backup and file disaster recovery solutions that typically require expensive replication. The result is a savings of up to 70% in savings on data protection infrastructure. Net effect is to not only save money on infrastructure but to vastly improve your business continuity with always-on file access.

Smaller Data Center Footprint: Nasuni's physical or virtual edge appliances only have to be big enough to store active data, which typically make up only about 20% of total file data. As a result, organizations that opt for a hybrid cloud implementation of Nasuni and Azure reduce their on-prem file storage footprint – and all the associated costs – by roughly 80%. Alternatively, you can completely eliminate data center footprint with an all-cloud configuration and put your edge appliances in Azure.

Intelligent File Archiving: As files age, Nasuni automatically reclassifies them as archive, lowering the annual cost associated with the data. Yet Nasuni still maintains a single volume for uniform access, so these files can easily be restored to the local cache when needed.

Proof Point: Dramatic Cost Reduction via Consolidation

In 2018, a construction giant was looking for a better way to store, protect, and share file data at 10 major locations, 20 mid-sized offices, and hundreds of job sites around the world. The firm quickly saw the cost benefits of Azure Cloud Storage and Nasuni: By consolidating multiple file storage, sharing, and data protection solutions into one global file system, the firm is going to save 80% on primary storage over the next five years – and free up much needed capital for business transformation.

"We were really looking to save money. Buying on-prem storage the traditional way is CapEx-intensive, and we'd still runout of capacity. We wanted to move to more of an operational expense model and take advantage of the cloud…Our file data is our most important business asset. To use Nasuni and Azure as a better way to store, share, protect, and manage our file data just made perfect sense."

Conclusion

This white paper has covered 6 reasons to accelerate your digital transformation with a global file system. In our partnership with Azure Cloud Storage, we're seeing firsthand how organizations across a variety of industries are modernizing applications, leveraging exciting new tools such as AI and Machine Learning, unifying disparate islands of storage, and dramatically reducing their costs. These advertising and media leaders, manufacturing giants, design firms, and construction conglomerates are using Nasuni's global file system to fundamentally change the way their business works – and how people inside and outside their organization view IT. This is true digital transformation, powered by only truly global file system.

Share this white paper with your colleagues, then explore the resources on Nasuni.com to learn more about the unique advantages of our cloud-native file system, UniFS, and how our customers are using the joint Azure/Nasuni solution to drive efficiency and productivity across their business.

About Nasuni

Nasuni delivers a single software platform to store, protect, synchronize, and collaborate on unstructured file data at scale. Nasuni Cloud File Services™, powered by the patented UniFS® global file system, leverages cloud storage to modernize primary NAS and file server storage; file archiving; backup; and disaster recovery, while offering transformational new capabilities for multi-site file collaboration. By combining the low cost, unlimited capacity, and durability of private or public cloud object storage with the high performance, security, and broad application compatibility of traditional disk-based file storage, the Nasuni subscription service improves workforce productivity, simplifies IT operations, and reduces IT costs. Nasuni operates globally from its worldwide headquarters in Boston, Mass., USA.

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