

Data Sheet

Nasuni

Modern Cloud File Storage

For enterprises frustrated by the cost and inefficiencies of traditional NAS infrastructures, Nasuni offers a file storage platform built for the cloud. Powered by the world's only global file system, Nasuni consolidates NAS and file server silos, delivering infinite scale, built-in backup, global file sharing, and local file server performance—all for significantly less than the cost of traditional file infrastructures.

Traditionally, silos of distributed file servers and NAS—along with associated data protection infrastructure—must be built in every office where users need to store and access files. By storing all enterprise files in an object storage-based global file system and caching just the active files and metadata on edge appliances wherever high-performance access is needed, Nasuni transforms file storage into a cloud-scale service.

Highlights

Consolidate NAS Footprint—Move infrastructure silos to the cloud, simplifying management; replace capacity planning with infinite scale; avoid cloud latency

Eliminate Traditional Backups—Eliminate file backup infrastructure and gain instant file recovery with continuous versioning

Share Files Globally—File sharing that combines local performance with cloud scale

Leverage Cloud Services—Enable AI & analytics with all files accessible through one global file system

Get Instant Disaster Recovery—Recover from disasters anywhere in minutes without separate infrastructure

Avoid Cloud “lock-in”—Choose your cloud and avoid ‘lock-in’.

Product Editions	Use Cases
Nasuni Essentials	Traditional NAS and File Server Replacement
	Modernize traditional NAS or file server infrastructure in a data center or single site. Consolidate unstructured data in cloud storage with a complete solution for file storage, access, backup, and disaster recovery (DR).
Nasuni Advanced	Multi-site NAS File Synchronization
	Modernize traditional NAS and file server silos in multiple sites. Consolidate and synchronize unstructured file data in cloud storage and offer a complete solution for file storage, access, backup, and disaster recovery (DR) with centralized management.
Nasuni Premium	Multi-site File Sharing and Global File Locking
	Everything you need to increase workforce productivity across multiple sites, accelerate cross-location workflows and collaborative applications, while reducing global file infrastructure costs and moving toward cloud transformation. Global file locking protects files from being overwritten.

Key Capabilities

Modern NAS Infrastructure

Nasuni eliminates the cost, complexity, and planning required to constantly refresh NAS devices and Windows and Mac file servers, as well as the cost and complexity of file backup and DR.

Nasuni stores all files and metadata in private or public cloud object storage. Thin Nasuni Edge Appliances cache just the frequently used files anywhere file servers and NAS are typically deployed, reducing the on-premises hardware footprint—and associated costs—by up to 80%.

With an average cache hit rate of nearly 99%, users enjoy LAN-speed access to group shares, project directories, and home drives without having to connect to cloud storage or pay egress fees. Each appliance is backed by the limitless capacity of cloud storage so users will never run out of space.

Nasuni supports file access through all major protocols, including SMB (CIFS), NFS, FTP/SFTP, and HTTPS.

With the power of the Nasuni Management Console (NMC), IT can deploy and manage a single-site or multi-site file infrastructure. The NMC centralizes capacity management, volume management, file recoveries, user access control, data migrations, file auditing, and synchronization all through a centralized, web-based console.

Modern File Backup

Nasuni Continuous File Versioning® technology takes data protection to the next level with next-generation snapshot technology that continuously sends the fragments of files that change to cloud object storage, where they are stored as their own immutable, read-only versions. The need for traditional file backup is eliminated, and RPOs and RTOs are significantly improved.

Instant Disaster Recovery

The same is true for disaster recovery (DR). All that is needed is power and a connection to geo-redundant object storage to begin rehydrating a Nasuni Edge Appliance. In less than 15 minutes, files will be cached and ready for access, eliminating the cost of dedicated DR sites typically needed to ensure business continuity.

Seamless Multi-Site File Sharing

Nasuni's multi-site file sharing capabilities reduce the cost and complexity of managing multiple NAS devices and Windows and Mac file servers by minimizing the need for private MPLS bandwidth, WAN acceleration, large

What problems does Nasuni solve?

Nasuni seamlessly solves the major headaches posed by inefficient, distributed on-premises file infrastructure, including:

- Unpredictable capacity growth and inefficient capacity allocation across sites
- Shrinking backup windows
- Unpredictable RPO and RTO's
- Slow or non-existent file sharing between data silos
- Lack of centralized management across multiple sites
- End-user dissatisfaction with file access or restore times
- Ongoing requirements to reduce cost and simplify
- The need for consistent data protection across multiple sites

file transfer, and replication technologies. Nasuni boosts the productivity of distributed teams by enabling them to seamlessly share and synchronize CAD, PLM, Adobe Creative Cloud files, multimedia, software builds, and other large file types across all locations, at any scale.

When used with public cloud storage, Nasuni uses high-speed internet links to securely propagate just the changes to active files from Nasuni Edge Appliances to cloud storage, and then to other edge appliances. Nasuni Global Volume Manager® aligns all changes from all locations by sequencing the file deltas in cloud storage, creating an immutable version history of all files that can be retrieved at any time. With every appliance kept consistently in sync, users globally will think they're working on one big, fast local file server. (Premium Edition only).

Nasuni Global File Lock®

Nasuni enables enterprises that rely on cross-functional teams to collaborate in near real-time on files across offices and time zones to improve productivity and efficiency.

Nasuni's patented Global File Lock capability ensures only one user anywhere in the world can make file changes at a time. Architected as a scalable cloud service with redundant lock servers and lock server failover built-in, Nasuni Global File Lock minimizes the data corruption—and productivity loss—caused by version conflict. (Premium Edition only)

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Multi-Cloud Agility

Nasuni integrates with Amazon S3, Azure Storage, and Google Cloud Storage, enabling all of the leading public cloud storage solutions to be used for NAS refresh, NAS consolidation, and global file sharing use cases. Customers can implement multi-cloud strategies based on their specific business or application requirements. Nasuni also supports multiple private cloud storage solutions, including NetApp StorageGRID, Nutanix Objects, IBM COS, Dell EMC ECS, Hitachi Vantara HCP, Cloudian Hyperstore, Pure Storage FlashBlade, Scality RING and more.

Data Analytics

The Nasuni Analytics Connector enables enterprises to turn unstructured data into big data. This feature converts file data stored by Nasuni as encrypted, proprietary objects in cloud storage into native object format, and writes the objects into a separate cloud storage account. With full access to all your file data in native object format, you can browse, copy, search, or apply analytics software, AI, machine learning and other data recognition tools such as AWS Rekognition and Macie.

Leverage All Your Unstructured Data

Nasuni integrates with key applications, data management tools, platforms and desktop environments to make managing your unstructured data even more seamless, and to enable you to extract the full value of your unstructured data. Using the NMC REST API, you can programmatically manage both your Nasuni environment, and automate critical business workflows for data governance and application integration. Some key integrations include:

Nasuni Ecosystem—Sample Environments					
Collaboration Software	Leading Search Software	Hypervisors and Hyperconverged Systems	VDI	Data Security	Big Data Analytics
Adobe	Acronis	AWS	Citrix	CyberArk	Amazon Athena
ArcGIS	Cloudfenna	Azure	Nutanix	STEALTHbits	Azure Data Lake
Autodesk	GrayMeta	Microsoft	VMware	Varonis	
Bentley Systems	Microsoft	Nutanix	Workspot		
Dassault Systems	NeoFinder	VMware			
Siemens	SearchBlox				
Nasuni					
Unstructured File Data					

What Does Nasuni Include?

The following are key components of the Nasuni platform:

- **Nasuni’s UniFS global file system** is the world’s only global file system designed to scale without limits inside object storage, and free of the capacity, volume, and file size constraints of device-based file systems.
- **Nasuni Edge Appliance** is software that can be downloaded onto virtual machines and deployed on your own virtual infrastructure, or, alternatively, pre-installed on Nasuni Edge Appliance hardware. Edge Appliance software performs 2 functions 1) cache and update active data and 2) transmit files and file changes to the cloud.
- **The Nasuni Management Console** provides central management of edge appliances, protocols, and shares for single or multiple sites.
- **The Nasuni Orchestration Center** performs file synchronization across all edge appliances and administers Global File Lock.

In addition to these core capabilities, the **Nasuni Analytics Connector** is available to enable movement of files into analytics, AI, BI and machine learning environments. Nasuni can be deployed entirely on-premises using private cloud object storage; as a hybrid cloud solution using public cloud object storage with on-premises Nasuni Edge Appliances, or entirely in the cloud using public cloud object storage with cloud-based, virtual edge appliances.

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Cloud Storage + Nasuni Platform = Modern Cloud File Storage

Nasuni leverages the durability, scalability availability, cost effectiveness, and limitless capacity of your private or public cloud object storage. Only by combining cloud storage with the full features of the Nasuni platform can companies modernize their traditional NAS and file server infrastructures.

Cloud Storage	Cloud Storage + Nasuni
Cloud: Durability, scalability, availability	UniFS File System —Nasuni’s UniFS global file system stores the authoritative “gold copy” of every file in cloud storage and provides a global namespace for all file data and metadata. Cloud-native design allows for unlimited number of files and file sizes.
	Edge Appliance Software —Software deployed on your own virtual machines or on Nasuni-branded hardware designed to: Cache frequently used files from your third-party cloud storage for high performance file access and transmit new files and file changes to your third-party on-premises or public cloud storage where they are stored as the “system of record.”
	AES Encryption —Encrypt files with customer-owned AES encryption keys before storing in object storage for security at rest/in transit and GDPR compliance.
	Compression and Deduplication —Reduce amount of object storage capacity needed to store all enterprise files by an average of 60%.
	Multi-Cloud Support —Unlimited capacity provided by connectors to public or private cloud object storage solutions including Amazon S3, Microsoft Azure Storage, Google Cloud Storage, Dell EMC ECS, Hitachi Content Platform, IBM Cloud Object Storage, and more.
	SMB (CIFS), NFS, FTP/SFTP, HTTPS Support —Access files through standard SMB (CIFS), NFS, FTP/SFTP, HTTPS file sharing protocols.
	Active Directory and LDAP Integration —Leverage existing authentication policies for secure, local file access.
	Multiple Locations —Deploy solution across unlimited locations and users (Advanced & Premium).
	Reduced Egress Charges —Minimize the need to retrieve data from public cloud storage using intelligent caching algorithms with hit rates of nearly 99%.
	Nasuni Management Console —Centralized capacity, volume management, plus access control and monitoring through Web-based management console.
	NMC REST API —Enables customers to programmatically manage their Nasuni environment, and to automate critical business workflows for data governance and application integration.
	Continuous File Versioning —Eliminate traditional file backup infrastructure, including tape, and disk to disk with continuous file versioning of every file to WORM format in the cloud with frequency set by IT.
	Rapid File Restore —Reduce file restore times from 24 hours or more and set file recovery times to minutes.
	Multi-Site File Synchronization —Ensure every user in every location is using the latest copy of every file; eliminate costs of remote access including WAN acceleration and file replication solutions (Advanced and Premium).
	Nasuni Global File Lock —Enable global file collaboration across multiple locations by ensuring only one author can write files at a time. Prevent data loss due to file version conflict; preserve distributed workflows (Premium).
	Rapid Disaster Recovery from any location —Deploy and rehydrate Edge Appliances in < 15 minutes. Make any location in the world that has power and cloud connectivity a DR site; eliminate costs of dedicated DR sites and replication bandwidth.
	Nasuni Analytics Connector —Read UniFS volumes and write temporary files in native object format to AWS S3 or Azure storage for use with cloud-based BI or analytical services.

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Comprehensive Protection

Nasuni protects your data in 8 important ways from creation to long term retention:

1. AES encryption with customer-controlled encryption keys
2. Neither Nasuni nor the cloud provider can “see” the data
3. Hardened Edge Appliances-only the management port can be opened
4. Nasuni Edge Appliances communicate only with cloud storage and Nasuni
5. Uncorruptible WORM file format for files and file change snapshots
6. Full integration with customers’ Active Directory and LDAP domains
7. Rapid software releases—new releases ensure the latest in data protection
8. Ransomware Mitigation to restore files before infection

Benefits of Modernizing Your File Infrastructure with Nasuni

- Eliminate inefficient capacity allocation across sites, NAS and file server refreshes
- Eliminate file backups and backup software maintenance, hardware, and media costs, as well as the operational costs of managing backups.
- Restore access to file data in minutes after malware, Ransomware, accidental deletions or major disasters
Enable file sharing across multi-site users easily
- Centralize management of multiple sites
- Restore user files in minutes
- Reduce infrastructure costs and simplify management
- Enable consistent data protection and DR strategy for multiple sites
- Eliminate dedicated DR sites and the associated costs of hardware, replication, and backup.
- Reduce MPLS, DFSR, and WAN acceleration costs needed for cross-office file access.
- Increase business productivity with multi-site file sharing and global file lock capabilities.
- Accelerate product time-to-market and project completion by streamlining product life cycle management (PLM), business information model (BIM), and creative workflows.
- Streamline integration of acquired companies by quickly ingesting new file data and giving acquired offices instant access to parent data.
- Enable remote workers

About Nasuni

Nasuni® is a file storage platform built for the cloud, powered by the world’s only global file system. Nasuni consolidates network attached storage (NAS) and file server silos in cloud storage, delivering infinite scale, built-in backup, global file sharing, and local file server performance, all at half the cost of traditional file infrastructures. Enterprise customers use the Nasuni software-as-a-service platform for NAS consolidation; backup and recovery modernization; multi-site file sharing; and rapid, infrastructure-free disaster recovery, while also serving as a foundation for data analytics and multi-cloud IT initiatives.

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Leading companies from a wide-array of industries rely on Nasuni to enhance workforce productivity, reduce IT cost and complexity, and maximize the business value of their unstructured data. Sectors served by Nasuni include consumer goods, manufacturing, creative services, engineering and construction, technology, pharmaceutical, oil and gas, financial services, and public sector agencies. Nasuni is based in Boston, Mass. USA. For more information, visit www.nasuni.com.