Data Sheet

Nasuni Cloud File Services™

The modern, cloud-based platform to store, protect, synchronize, and collaborate on files across all locations at scale.

Solution Overview

Nasuni® Cloud File Services™ enables organizations to store, protect, synchronize and collaborate on files across all locations at scale. Licensed as stand-alone or bundled services, the Nasuni platform modernizes primary and archive file storage, file backup, and disaster recovery, while offering advanced capabilities for multi-site file synchronization. It is also the first platform that automatically reduces costs as files age so data never has to be migrated again.

With Nasuni, IT gains a more scalable, affordable, manageable, and highly available file infrastructure that meets cloud-first objectives and eliminates tedious NAS migrations and forklift upgrades. End users gain limitless capacity for group shares, project directories, and home drives; LAN-speed access to files in any edge location; and fast recovery of files to any point in time.

What is Nasuni?

Nasuni Cloud File Services is a software-defined platform that leverages the low cost, scalability, and durability of private (on-premises) or public cloud object storage and Nasuni's cloud-based UniFS® global file system to transform file storage.

Just like device-based file systems were needed to make disk storage usable for storing files, Nasuni UniFS overcomes obstacles inherent in object storage related to latency, file retrieval, and organization to make object storage usable for storing files, with key features like:

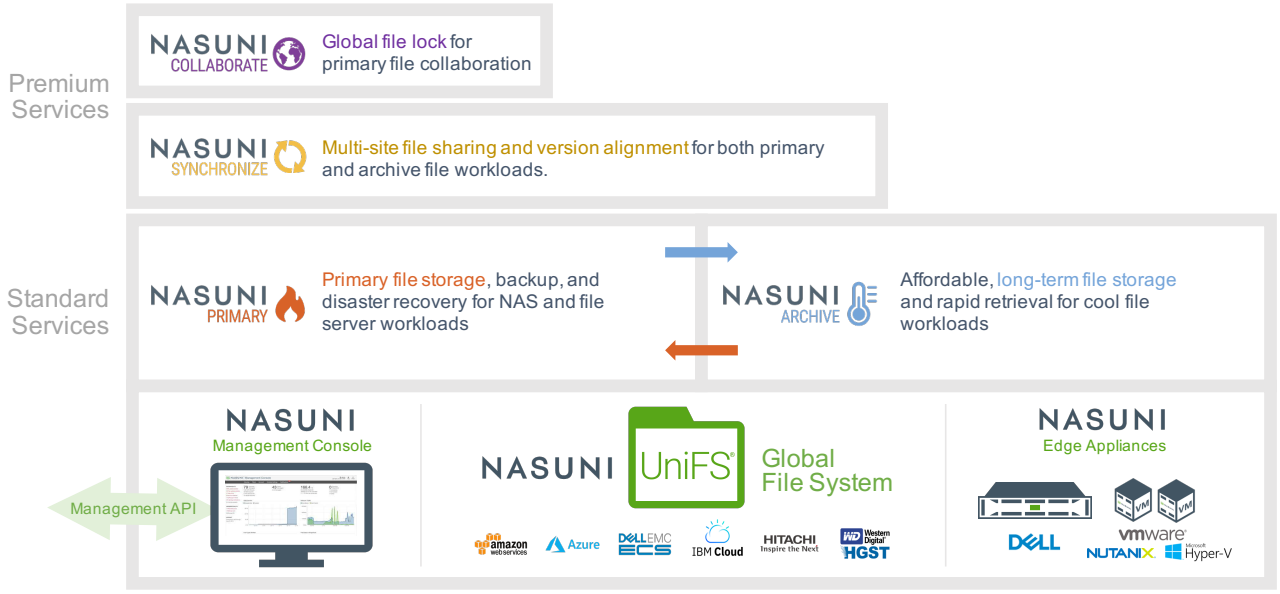
- Fast access to files in any edge location.
- Legacy application support, without app rewrites.
- Familiar hierarchical folder structure for fast search.
- Unified platform for primary and archive file storage that automatically reduces costs as files age.

NASUNI PRIMARY is primary file storage, backup, and disaster recovery for traditional NAS and file server workloads.

NASUNI ARCHIVE is affordable long-term file retention and rapid retrieval for cool file workloads.

NASUNI SYNCHRONIZE extends NASUNI PRIMARY and NASUNI ARCHIVE with seamless read and write access to files across any number of locations.

NASUNI COLLABORATE extends PRIMARY and SYNCHRONIZE with the ability to globally lock files.



Nasuni Cloud File Services includes Standard and Premium services that can be purchased bundled together or stand-alone.

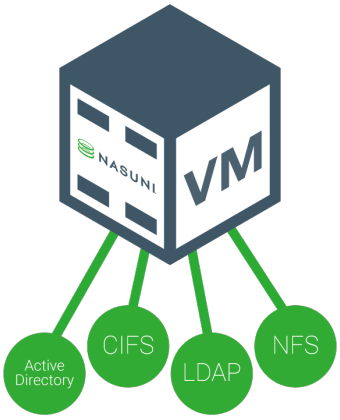
What are the Use Cases for Nasuni?

Primary NAS and File Server Consolidation

Nasuni eliminates the cost and complexity of refreshing NAS devices and Windows and Mac file servers, as well as the cost and complexity of file backup and DR.

The NASUNI PRIMARY service 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 an average of 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. Yet, with each appliance is backed by the limitless capacity of cloud storage, users will never run out of space.



Nasuni Edge Appliances support the same CIFS and NFS protocols as traditional file servers and NAS devices and integrate with Active Directory and LDAP, so existing drive mappings, scripts, and authentication policies can be leveraged.

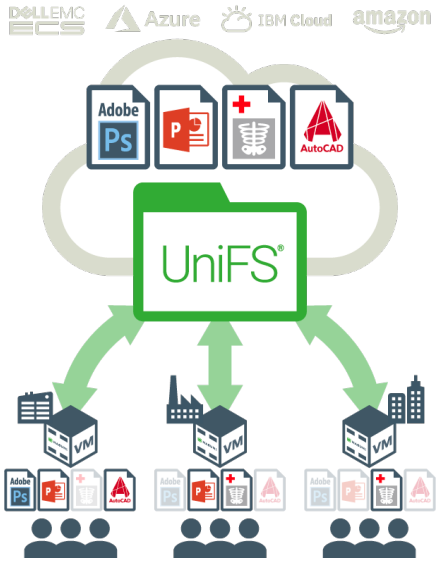
Nasuni Continuous File Versioning™ technology takes data protection to the next level with next-generation snapshot technology that continuously sends the fragments of files that change to cloud object storage, where they are stored as their own immutable versions. The need for file backup is eliminated,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

The same is true for disaster recovery. 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.

File Archiving

Nasuni offers long-term unstructured data retention, without the usual long wait times to retrieve archived files, or the typical archive costs, access restrictions, and hardware investments.

The NASUNI ARCHIVE service stores files as objects in private (on-premises) or public cloud object storage, while keeping them fully accessible as WORM files, with all the original permissions and metadata.



The Nasuni UniFS global file system archives files in private or public cloud object storage, while enabling them to be quickly recalled whenever needed for fast access.

Files can be recalled from object storage in seconds and accessed through virtual or physical Nasuni Edge Appliances, which cache actively used files. Users connect to edge appliances through CIFS and NFS protocols just like traditional NAS and file servers to access files at local LAN speeds.

Local copies of files are automatically cleared from the appliance cache over time as they age, leaving only the permanent, immutable “gold” copies in object storage.

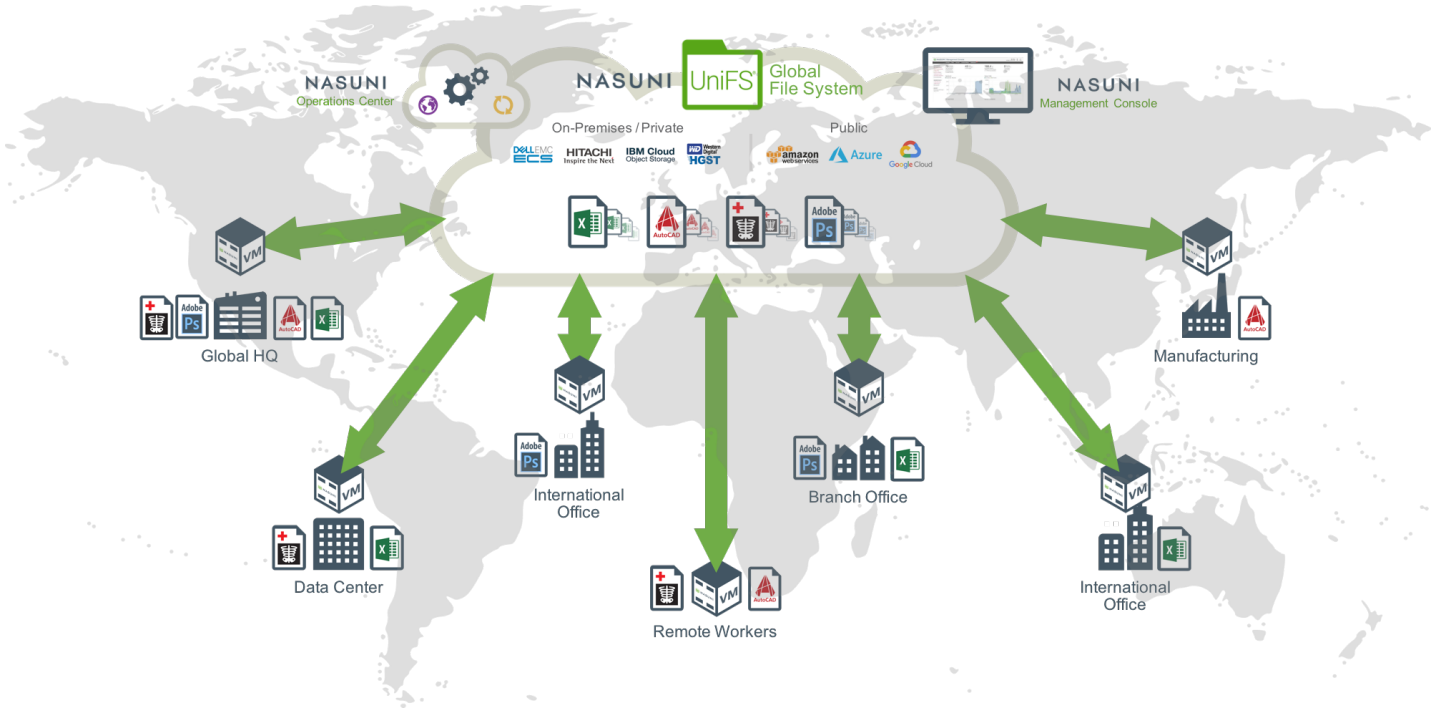
Nasuni automatically tracks when primary files become inactive and reclassifies them to the lower cost NASUNI ARCHIVE service. With all file data remaining in object storage, IT can optimize costs without ever having to migrate data again.

When combined with the NASUNI SYNCHRONIZE service, Nasuni provides the unique ability to seamlessly share the cloud-based archive across any number of sites.

Multi-Site File Synchronization

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

The NASUNI SYNCHRONIZE service added to the NASUNI PRIMARY service reduces the cost and complexity of managing multiple NAS devices and Windows and Mac file servers in multiple locations. It also eliminates the cost and complexity of file backup and disaster recovery in each of these locations, and minimizes the need for private MPLS bandwidth, WAN acceleration, large file transfer, and replication technologies.



Nasuni's cloud-based data orchestration service propagates file changes at high speed to every edge appliance, ensuring users in all locations are accessing the latest versions.

When paired with public cloud object storage, NASUNI SYNCHRONIZE uses high-speed internet links to securely propagate just the changes to active files from Nasuni edge appliances to object storage, and then to other edge appliances. Nasuni Global Volume Manager™ technology aligns all changes from all locations by sequencing the file deltas in object 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.

Global File Collaboration

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

The NASUNI COLLABORATE service adds Nasuni Global File Lock™ technology on top of the NASUNI SYNCHRONIZE and NASUNI PRIMARY services to ensure 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 COLLABORATE with Nasuni Global File Lock technology eliminates the data corruption – and productivity loss – caused by version conflict.

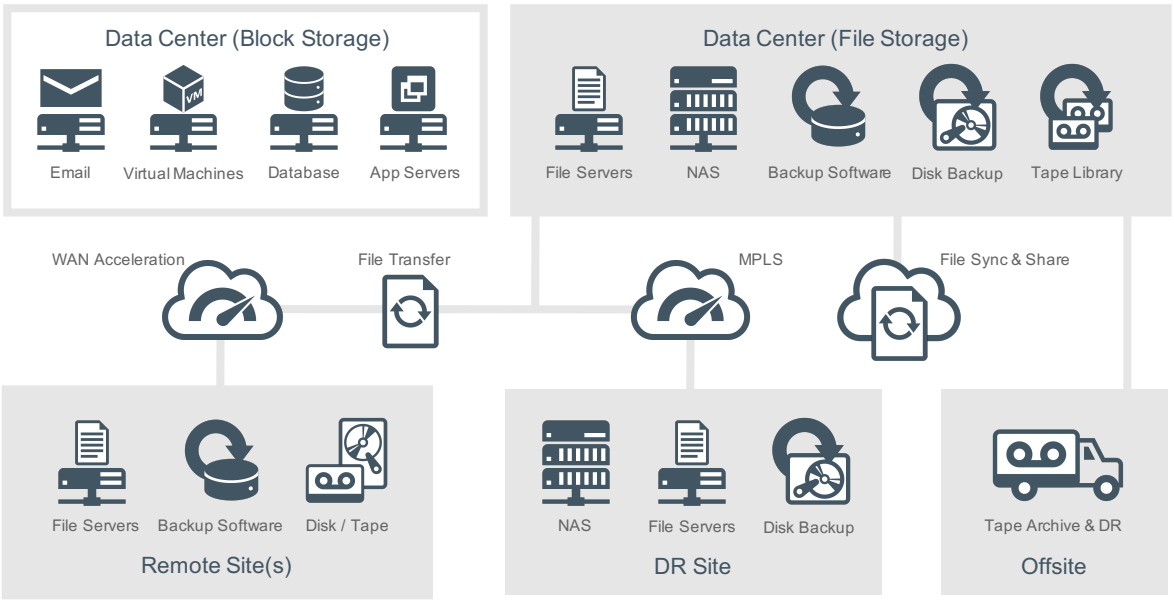
How Does Nasuni Unite the Best of Object Storage and File Storage?

Object storage can be the more scalable, cost-effective, and resilient alternative to legacy file storage. However, it needs a file system to exploit these advantages. UniFS – the first 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 – provides the capabilities needed to use object storage for traditional NAS, file server, and archiving workloads.

Azure, amazon web services, DELL EMC ECS, IBM Cloud, Hitachi Vantara, WD HGST	Azure, amazon web services, DELL EMC ECS, IBM Cloud, Hitachi Vantara, WD HGST + NASUNI
Object storage – Low cost and massively distributed with limitless scale.	**Object storage –** Low cost and massively distributed with limitless scale.
	File System – Store files and metadata natively in object storage, while presenting familiar hierarchical directory/folder structure to apps and users.
	Local Caching – Deploy Nasuni edge appliances in any location on-premises or in the cloud to cache actively used files from object storage. The virtual or physical edge appliances look like legacy file servers or NAS controllers, presenting shares via standard CIFS and NFS protocols for LAN-speed file access. Yet they require, on average, only 20% of the hardware resources.
	CIFS/NFS Support – Ensure compatibility with existing applications and scripts with support for CIFS and NFS file sharing protocols.
	Low Egress Charges – Minimize the need to retrieve data from public cloud storage using intelligent caching algorithms with hit rates of nearly 99%.
	Active Directory and LDAP Integration – Leverage existing authentication policies for secure, local file access.
	AES Encryption – Encrypt files with customer-owned AES encryption keys before storing in object storage for security at rest/in transit and GDPR compliance.
	Continuous File Versioning – Capture tiny fragments of files as they change and store unlimited version history for breakthrough RPO/RTO.
	Rapid Disaster Recovery – Restore fast access to files in any location that has a connection to object storage – typically in less than 15 minutes – without a dedicated DR site.
	Compression and Deduplication – Reduce amount of object storage capacity needed to store all enterprise files by an average of 60%.
	Multi-Site File Synchronization – Synchronize file fragments as they change across all locations at high-speed without using or impacting private WAN.
	Global Volume Manager – Coordinate file system changes on shared volumes across multiple locations based on date/time stamps.
	Centralized Management – Configure and monitor all appliances, volumes, shares, and protocols through Web-based management console.
	Global File Lock – Enable multi-site file collaboration without version conflict by allowing only one worldwide editor.
	Multi-Cloud Support – Map Nasuni Edge Appliances to object storage from different vendors to avoid lock-in or support a multi-cloud strategy.
	Flexible File Access – Access files anywhere through Windows, Android, iOS, and Web clients. Share links with internal and external users, with links set to expire after a specified time for more secure external user access.

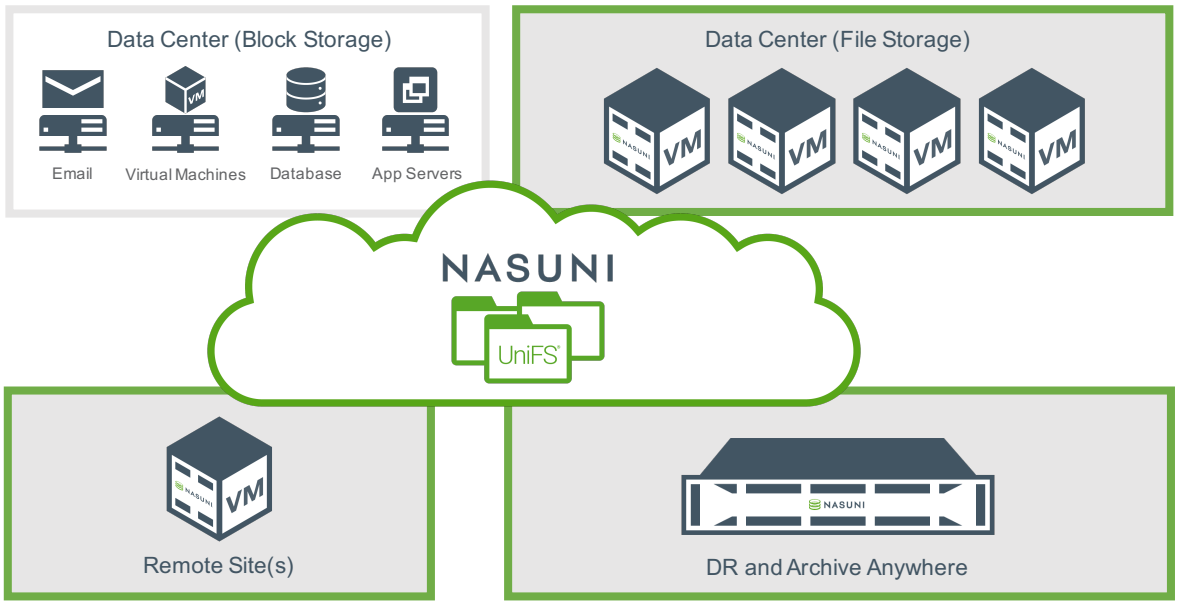
How is Nasuni Different than Traditional File Infrastructure?

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. Synchronizing files across offices requires even more cost and complexity and is often unattainable as the number of locations increase.



Before Nasuni - traditional file infrastructure is complex, costly, and difficult to scale

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.



After Nasuni – modern file infrastructure is cost-effective, simple, and infinitely scalable

NASUNI

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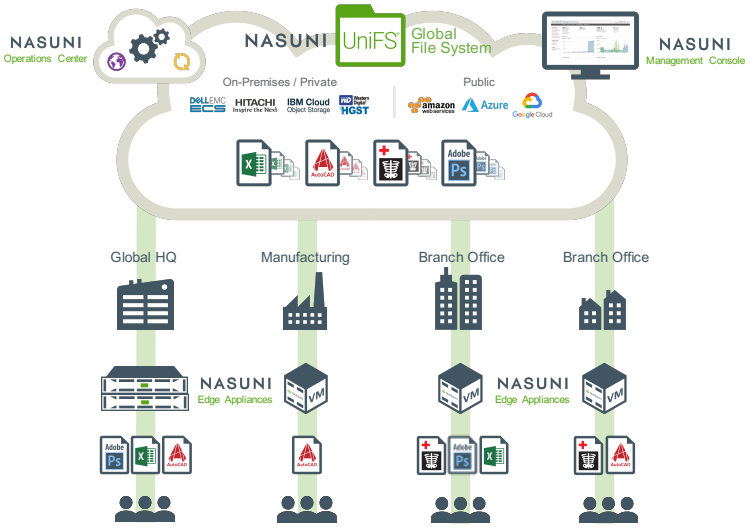
What Does Nasuni Include?

The Nasuni Cloud File Services platform includes everything needed to refresh NAS, file server, or archive storage in one location, or scale file storage to petabytes of capacity across any number of locations. The following are key components of the Nasuni platform:

- **The UniFS global file system** stores all files and metadata in private or public cloud object storage.
- **Nasuni Edge Appliances** cache active data in any location or in the cloud for high performance access.
- **The Nasuni Management Console** provides central management of edge appliances, protocols, and shares.
- **The Nasuni Operations Center** orchestrates file synchronization across all edge appliances and administers Global File Lock.

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.



Nasuni offers a cloud-first architecture that meets the file storage scalability needs of any enterprise.

How Does Nasuni Align Business and IT Objectives?

For Lines of Business

Nasuni boosts workforce productivity and ensures business continuity. Nasuni enables business users to:

- Access unlimited file storage capacity to drive positive business outcomes.
- Open critical application files and synchronize them across all locations with high performance.

- Shift workloads to different offices to take advantage of excess capacity, special expertise, or lower costs.
- 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.

For IT

Nasuni reduces file storage total cost of ownership by an average of 60%, while freeing administrators from the traditional pains of unstructured data management. Nasuni enables IT to:

- Comply with cloud-first and digital transformation objectives.
- Reduce on-premises file and archive storage and associated floor space, power and cooling up to 80%.
- Eliminate file backup software maintenance, hardware, and media costs, as well as the operational costs of managing backups.
- 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.
- Restore access to file data in minutes after malware, Ransomware, accidental deletions or major disasters.
- Simplify management of appliances, shares, volumes, and protocols.

About Nasuni

Nasuni provides the first multi-cloud platform that enables enterprises to store, protect, synchronize, and collaborate on unstructured file data as it transitions from actively used to inactive. Powered by Nasuni's patented UniFS® global file system, Nasuni Cloud File Services™ stores all files in private or public cloud object storage, caches active files wherever fast access is needed, and automatically correlates what customers pay with how they use their data. By eliminating the need for NAS, file server, backup, archiving, disaster recovery, and file synchronization solutions, Nasuni's consolidated platform improves workforce productivity, simplifies IT operations, and reduces IT costs. The world's largest companies in 12 industry sectors rely on Nasuni to maximize the business value of their file data and ensure business continuity. Nasuni operates globally from its worldwide headquarters in Boston and European office in London.

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