

Comparing Panzura to Nasuni













At Panzura, we're a solution for enterprise scale organizations frustrated by lack of security, visibility, and control into data. We de-risk your data challenges by helping you know where your data is, how it's growing, who is accessing it, how secure it is and how it's being used.







In this comparison, we take a look at complete cloud data management capabilities, how they work with each solution, and how the differences affect the way you can expect to operate.



Feature	Panzura	Nasuni	What it Means for You
Cloud Data Management			
Global Centralized Management			Panzura provides a centralized multi cloud management view. Nasuni provides a central management view, though their hub and spoke model means no full metadata catalog at the edge.
Global Data Services			Panzura Data Services is a complete cloud data monitoring and management platform. Holistic data governance provides actionable insights into every aspect of how data is being used, and includes ransomware monitoring, and smart provisioning. Deep search and environmental analytics drive admin productivity and simplify data management. Nasuni does not inherently have this capability, relying on cloud provider technology scripted into their APIs.
Cloud Data Protection and Security			
Active Global Disaster Recovery Architecture			Each Panzura node is a full active disaster recovery site, offering business continuity with sub-minute RPO. By contrast, if one Nasuni appliance goes down, active data not yet synced to the cloud is lost – it cannot be accessed or recovered from another location.
Global and Local High Availability			Panzura provides dedicated global and local high availability options on virtual machines. Cloud mirroring will automatically failover to a redundant cloud storage provider in the case of a failure of the primary provider, without disrupting any front-end file services. Nasuni does not offer built in HA locally or globally, or cloud mirroring.
Global Ransomware Resiliency			Panzura data writes are immutable, preventing data corruption and delivering ransomware resiliency with global sub-min RPO. Due to their data consistency constraints, Nasuni's ransom resiliency is per volume, rather than across the entire cloud file system.
Global Granular Read only Snapshots			Panzura's unlimited global read only snapshots can be configured hourly, daily, weekly, monthly and yearly. Each has an independent retention policy, so files, folders or the whole file system can quickly be restored to a given point in time. Nasuni's unlimited snapshots are per volume, not file system and their admin guide warns against configuring frequent snapshots as resource consumption degrades performance. They do not cache metadata for snapshot directories, causing navigation and listing of those directories to be slow.

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Air Gapped Solution Support			Panzura supports dark site architecture no inbound or outbound connections to from the domain. Nasuni's dependence on performing global file locking within own cloud environment requires public access to your environment. This limits their ability to service dark sites.
Military Grade Security			Panzura's military grade AES-256-CBC encryption for data at rest and TLS v1.2 for data in flight prevents third-party and malicious actors from accessing your data. The solution is FIPS 140-2 certified. Secure Erase makes it possible to delete a file or folder so that the contents cannot be restored, even using the most advanced technology available. Nasuni does not claim to be FIPS 140-2 certified. However, they use FIPS 140 2 encryption services on Self Encrypting Drives. They do not offer secure erasure.
Cloud Data Performance			
Global Performance Optimizations			Panzura performance optimizations include separating the metadata from data, compression and deduplication, multi level snapshots, parallel streaming to the cloud, no need for additional WAN accelerators and intelligent tiered read caching and prefetching automatic data movement based on user behavior analytics . Nasuni provides compression and deduplication but lacks the full metadata catalog at the edge that enables intelligent cache/prefetching for fast file access.
Accelerated Parallel Streaming			Panzura performs block level translation to object that accelerates parallel streams to the cloud, instead of a serial SMB/NFS stream. Nasuni only offers parallel streaming for fast cloud-edge access with their Premium offering.
Real time Global Data Consistency			Panzura's simultaneous 60 second data syncs to the cloud object store, and full metadata catalog at each node facilitating global file locking with peer-to-peer real time exchanges of new and changed data, result in immediate global data consistency for all nodes. This significantly reduces data risk. Nasuni syncs data serially every 5 minutes Essential, Advanced package or every 1 minute with File Accelerator AWS Premium level . The sync is tokenized for shared volumes, which results in extended sync times. Furthermore, a break in sequential sync results in loss of productivity and continues to be a data risk vulnerability.
Global Scalability			Panzura scales globally without impacting immediate global data consistency for existing or future users at any site. Because Nasuni syncs data serially, number of sites affects the time it takes to sync data to the authoritative data source to achieve consistency across sites.

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Hyperconverged Persistent Block Storage			Panzura's Cloud Block Store is an infinitely scalable, high performance persistent volume for containers and read cache for cloud native deployments. Nasuni doesn't offer a similar product.
Cloud Data Intelligence			
Global Search and Audit			Panzura Data Services finds any file with a powerful and lightning fast search portal that reaches across your entire cloud network and integrates seamlessly with CloudFS, as well as other file sources such as NetApp or Isilon. Nasuni doesn't inherently offer a similar product.
Global Intelligent Tiering and Prefetching			Panzura's SmartCache intelligently tracks and tiers hot, warm, and cold file block structures for faster file access. Auto pre-population automatically prefetches and pre-caches files based on ownership changes between nodes in a CloudFS to provide the fastest global collaboration. Nasuni lacks the full metadata catalog at the cloud edge that enables intelligent cache/prefetching for fast file access.
Global Real time Collaboration			Panzura's global file and byte-range locking automatically locks and releases in real time, allowing geographically distributed users to work collaboratively, without overwriting each other or creating multiple file versions. Nasuni doesn't enable global locking by default. This creates additional administrative burdens; you need to identify the files which require collaboration and keep track of them.
Cloud Native Microservices Enablement			Panzura Data Services turns unintelligible data strings into an easy-to-follow audit history for every single file, inherently enabling cloud-native artificial intelligence, and machine learning services to extract unstructured data for analytics and reports. Nasuni uses additional API coded with cloud native microservices to allow microservices to directly access object storage
Multi-Cloud Functionality			
Multi Cloud Interoperability and Mirroring			Panzura is interoperable with many cloud object store providers, both on premises and in the cloud. As organizations increasingly employ multiple clouds for storage, cloud mirroring helps by eliminating dependency on any one vendor. Nasuni is interoperable with many cloud object storage providers but lacks the functionality to replicate the complete file system to another cloud region.

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Cloud Data Accessibility and Efficiency			
In Line Compression			Panzura CloudFS uses a lossless compression algorithm to break each file into 128kb blocks – the most granular possible level. Each block is compressed in line, in memory, as it's created. Nasuni compresses data before it's encrypted and then sent to the cloud.
Global Deduplication			Panzura's interconnected global file system stops block-level duplication before data gets synced to the object store. Since only unique blocks across all sites are preserved by the file system, data is deduplicated at the 128kb block level before it is ever stored. Nasuni deduplicates at the chunk level, resulting in less efficient data storage.
Global Namespace			Panzura CloudFS is a true global filesystem, using a global namespace without the need to configure volumes, or restructure data to separate it into volumes. By contrast, Nasuni uses legacy based volume management. Volumes are either local or shared, and independent global namespaces can be created by sharing volumes.

This comparison has been compiled using the most up to date administration guide and architectural documentation available. Every effort has been made to ensure its accuracy, and it was last updated at the date shown below left.

This document is intended to provide a practical guide to key differences in approach, that affect the way that both solutions work in the real world, from making data available, to making it secure and easy to manage.

We trust you'll find it useful.