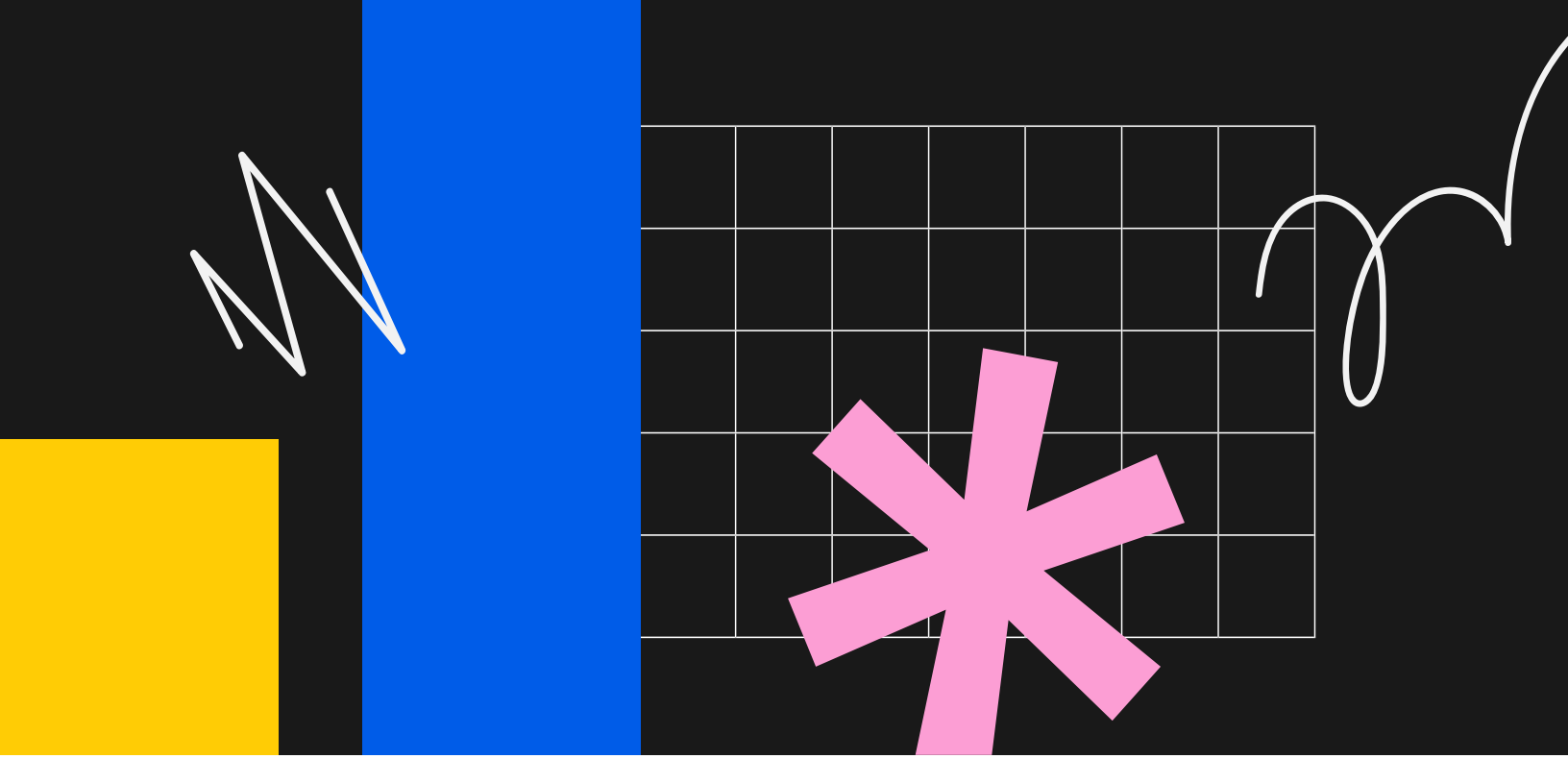

PANZURA

Comparing Panzura to Nasuni

Panzura and Nasuni both offer hybrid cloud storage and file services platforms that enable the modernization of legacy storage infrastructure. This allows organizations to consolidate file data, reduce storage volumes, move file data to the cloud, control cloud costs, and empower multi-site collaborative workflows. They also imbue data with ransomware resilience via immutable data, snapshots, and early detection to minimize disruption.

However, deeper exploration reveals differences in these two hybrid cloud file data approaches that affect the way they operate in the real world. These differences are especially apparent at scale and have profound implications for larger mid-market organizations as well as enterprises.

Ultimately, the solution that's right for your organization depends on your workloads, locations, and objectives. This comparison isn't intended to highlight every way in which these solutions differ but to serve as a guide to exploring how these differences impact the outcomes you can expect.

PANZURA

Strong capability
No capability
Limited capability

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-60 second 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 HA options on virtual machines as well as Instant Node, which allows a new node to boot up and take over in minutes. Cloud mirroring enables automatic failover in the event of primary cloud storage outage without disrupting front-end file services. Nasuni does not offer built-in HA locally or globally, or cloud mirroring.
Global Data Resiliency	✓	—	Panzura data writes are immutable, preventing data corruption and delivering resiliency against ransomware and other file data damage with global sub-60 second RPO. Due to their data consistency constraints, Nasuni's ransomware resiliency is per volume, rather than across the entire cloud file system.
Granular, Immutable Global 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 without data loss. 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.

PANZURA

Feature	Panzura	Nasuni	What it Means for You
Ransomware Detection and Interdiction	✓	✓	Panzura detects ransomware in near real-time and performs a non-disruptive interdiction by disabling affected user accounts followed by a comprehensive tracker for admins. Nasuni's speed and consistency of detection is limited by their hub and spoke architecture. On detection, the entire cache is flushed for all sites. They interdict at the location level, disrupting all users at that location. Their automatic restoration risks overwriting good data in the event of a false positive.
Dark Site Architecture	✓	✗	Panzura supports sites with no inbound or outbound connections to/from the domain. Nasuni's dependence on performing global file locking within their own cloud environment requires public access to your environment. This limits their ability to service highly secure sites.
Security and Encryption	✓	—	Panzura's military grade AES-256-CBC encryption for data at rest and TLS v1.3 for data in flight prevents third-party and malicious actors from accessing your data. The solution is FIPS 140-3 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 edge access with their Premium offering.
Real-time Global File Consistency	✓	—	With Panzura, every location simultaneously syncs new and changed data to the object store every 60 seconds, after deduplication. Each node has a full metadata catalog and facilitates global file locking with real-time peer-to-peer communication. This creates immediate global file consistency for all nodes, significantly reducing data risk. Nasuni syncs data serially every 5 minutes (Essential, Advanced package) or every 1 minute with File Accelerator (AWS Premium level), giving eventual consistency. The sync is tokenized for shared volumes, which results in extended sync times. A break in sequential sync results in loss of productivity and continues to be a data-risk vulnerability.

PANZURA

Feature	Panzura	Nasuni	What it Means for You
Global Scalability	✓	✓	Panzura scales globally without impacting immediate global data consistency for existing or future users at any site. Nasuni syncs data site-by-site, so the number of sites affects the time it takes to to achieve eventual data consistency.
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 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 all leading object store providers, both on-premises and in the cloud. As organizations increasingly employ multiple clouds for storage, cloud mirroring provides redundancy for storage and file operations, maintaining an identical set set in two different object stores that is updated in real-time. Nasuni is interoperable with many cloud object storage providers but lacks the functionality to replicate the complete file system to another cloud region.
Multi-Region Support	✓	✗	Panzura supports up to 4 object storage buckets across cloud provider regions, which are synced by the cloud providers, to overcome latency in outlying areas. Nasuni does not offer this functionality.

PANZURA

Feature	Panzura	Nasuni	What it Means for You
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 allows 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 larger chunk level, resulting in less efficient data storage.
Global Namespace	✓	—	Panzura CloudFS is a true global file system, 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.
Edge Capabilities			
Remote Access and File Sharing	✓	✓	Panzura empowers highly secure, performant remote access to CloudFS-managed files from any device as well as tightly controlled external file sharing. This keeps files protected by immutability, secured by immutable snapshots, and visible with a complete audit trail. Remote users have access via browser, desktop, and mobile apps. Nasuni Access Anywhere similarly extends file access to remote, mobile and external users.

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 hope you'll find it useful as you compare hybrid cloud storage and file services solutions, and look forward to answering any questions you may have.