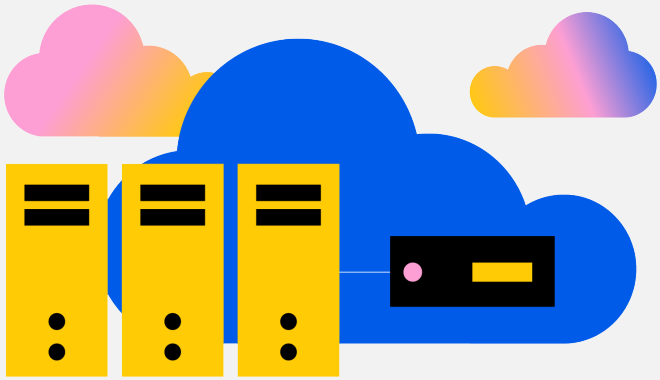
PANZURA

SOLUTION BRIEF

Consolidate NAS and File Shares

Standardize, optimize, and modernize storage while boosting resilience and performance.



Enterprises face an increasing need for scalable, secure, and performant unstructured file storage solutions. Traditional NAS architectures, often fragmented across multiple on-premises and cloud environments, create inefficiencies, security risks, and collaboration barriers.

Public cloud object storage is frequently seen as the answer, propelled by digital transformation initiatives that seek to leverage cloud services such as Microsoft 365. However, few solutions come close to providing performant file operations, particularly for organizations with multiple locations. Additionally, lift and shift data migrations can easily turn cloud storage into yet another data silo.

Migrating from fragmented storage systems to a hybrid cloud file services platform such as Panzura CloudFS, which is underpinned by a unified global file system, delivers the best of cloud flexibility and scalability alongside the performance of local storage. Additionally, CloudFS's cyberstorage capabilities offer organizations a powerful and cost-effective level of passive and proactive defense against data damage.

This consolidation reduces overall unstructured data volumes and slows their growth. It also strengthens resilience against ransomware, data exfiltration, and other cyber threats and also enables seamless, enterprise-wide collaboration on a global scale.

Challenges with Disparate Storage Systems

Data Silos and Redundancy: Enterprises with multiple NAS systems often experience data fragmentation, leading to significant duplication of files, which in turn adds to the rapid growth of unstructured data volumes. These inefficiencies increase management overhead and consume unnecessary storage space.

Security Vulnerabilities: Siloed NAS lacks unified security measures, making them prone to cyberattacks such as ransomware and insider threats.

Collaboration Limitations: Legacy NAS solutions do not provide effective cross-site collaboration, as on-premises storage lacks seamless file-sharing and synchronization capabilities across geographies. Simply migrating to cloud-based file storage loses essential collision-avoidance technology by way of file and range locking on applications such as Microsoft Word, Excel, Powerpoint, AutoCAD, Revit, and more. This creates significant file versioning problems as users can inadvertantly overwrite the work of others.

High Operational Complexity: Managing multiple NAS instances increases IT administrative overhead, requiring dedicated staff for monitoring, maintenance, and troubleshooting. Each NAS requires backup in accordance with the organization's policies, adding to overall storage inefficiency.

The Technical Benefits of the Panzura CloudFS Hybrid Cloud File Services Platform

Unified Namespace with Global Accessibility: CloudFS enables a single global namespace where all files can be accessed as though they were local, regardless of a user's geographic location.

Advanced Data Deduplication and Compression: Unlike traditional NAS, which often stores redundant data, CloudFS employs intelligent global deduplication and compression algorithms, significantly reducing storage footprint and optimizing performance.

Cyberstorage Capabilities: CloudFS incorporates measures outlined in the NIST Cybersecurity Framework (CSF), and AI-driven threat detection via Panzura Data Services, an intelligence and insights extension of the CloudFS platform, to proactively prevent cyber threats.

High-Performance Distributed File System: CloudFS utilizes a distributed architecture with built-in caching, supporting high-performance cloud and on-premises workloads while also ensuring low-latency access even for remote users.

Seamless Cloud Integration: Native integration with public and private cloud providers ensures easy scalability and compatibility with modern DevSecOps workflows, AI/LLM training, and global collaboration.

Cyberstorage: Immutable, Ransomware-Resistant Storage

With Gartner's concept of cyberstorage, CloudFS goes beyond traditional NAS by embedding advanced security features:

Ransomware Immunity: CloudFS employs immutable snapshots to ensure files can be quickly restored if encrypted by ransomware, with minimal data loss or downtime.

Data Exfiltration Prevention: Panzura Data Services' AI-driven monitoring detects anomalies in near real time and automatically restricts access to prevent unauthorized data leaks.

Role-Based Access Controls (RBAC) and Multi-Factor Authentication (MFA): CloudFS enforces strict authentication measures and role-based permissions to minimize insider threats.

Regulatory Compliance: Organizations handling sensitive data benefit from CloudFS' NIST FIPS 140-3 certification, which is required for certifications such as CMMC 2.0.

Cost Savings of NAS Consolidation

Migrating from siloed NAS environments to a single global file system offers substantial financial benefits across various areas:

Reduction in Storage Costs

- Optimized Storage Utilization: Eliminating redundant copies and inefficient data placement saves up to 50% in raw storage costs.

- Cloud-Optimized Tiering: CloudFS utilizes auto-tiering available in AWS and Azure to automatically move infrequently accessed data to cost-effective online cold storage, reducing overall expenses.

Lower Operational and Capital Expenditures

- Reduction in IT Labor Costs: Managing multiple NAS systems requires specialized IT personnel. By consolidating into CloudFS, storage administrators can focus on extracting value from unstructured data, rather than just managing the data.

- Simplified Maintenance and Updates: Panzura Data Services gives you complete visibility, always-on governance, and real-time metadata access, all from one unified data management dashboard. Invest in efficiency — and save thousands of IT hours as a result.

- Consolidation of On-Premises NAS Appliances: A single CloudFS deployment eliminates the need for multiple costly NAS appliances, potentially reducing capital expenditures (CAPEX) by 40-60%.

Minimized Downtime and Recovery Costs

- Instant Data Recovery: Traditional NAS environments require time-consuming recovery efforts in case of failures. CloudFS offers local HA, global HA and instant node high availability for on-premises or cloud-based CloudFS nodes, as well as instantaneous rollback of data using immutable snapshots, minimizing recovery-related downtime costs.

- Resilience Against Ransomware Attacks: Organizations spend millions in downtime costs due to ransomware incidents. CloudFS's cyberstorage model ensures almost zero downtime by proactively detecting data exfiltration and ransomware attacks, and interdicting them at the user level by disabling permissions to stop the activity and contain the damage. Then, administrators have a detailed tracker containing all comprehensive information about the attack, files and folders affected, and user accounts involved.

Case Study: Enterprise Savings with CloudFS

A multinational corporation in the highly regulated financial services sector consolidated NAS systems around the world into CloudFS. They realized:

70% reduction in overall unstructured data volume following deduplication.

100% data assurance with immutable data architecture and unchangeable snapshots.

60% reduction in IT overhead due to centralized management and self-service version restoration for users.

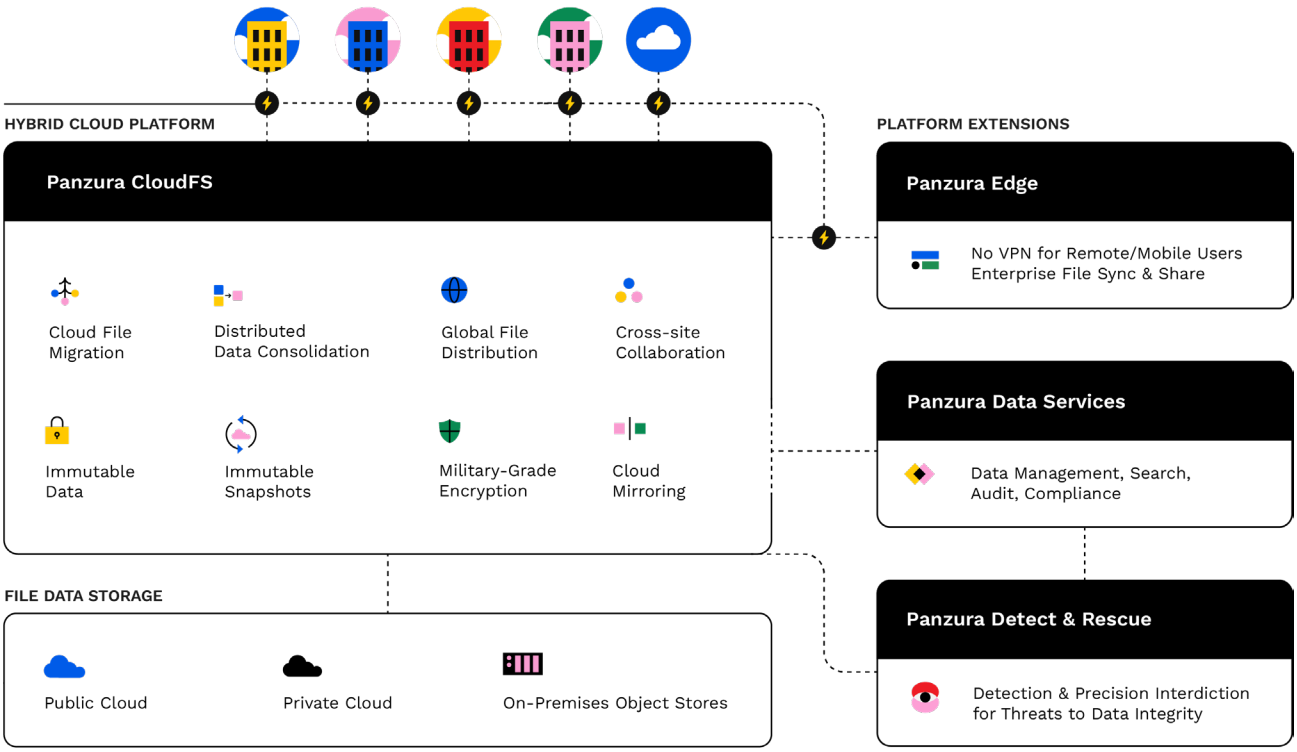
Highly available infrastructure with redundancy for all locations and cloud stores.

Zero ransomware-related data loss and rapid data restoration to minimize disruption.

40% total cost of ownership reduction compared with Azure Files and AWS FSx.

NAS consolidation via cyberstorage-enabled platforms such as CloudFS represents a significant evolutionary jump in enterprise storage, offering cost-effective scalability, global collaboration, and military-grade security.

Organizations seeking to optimize their storage architecture, mitigate cyber risks, and drive operational efficiencies should consider migrating to CloudFS. By doing so, enterprises can consolidate their file storage strategy while achieving significant cost savings and enhanced security resilience.



Panzura empowers today's digital-first organizations to do impossible things with file data, making them more agile, efficient, and productive. They trust Panzura to help them consolidate dispersed data, see and manage data in and out of the cloud, make it more cyber-resilient and AI-ready, and ensure it is available to people and processes where and when it's needed.

Discover how Panzura can fuel your success at **panzura.com.**