Panzura Freedom Archive™

Replace complex NAS systems with a single Panzura Freedom Filer to reduce or eliminate complex backup and DR processes.

Panzura Freedom Archive replaces expensive single site NAS systems with a hybrid cloud storage platform that combines data center performance with the economics, scalability, and durability of the cloud. Freedom Archive replaces your entire backup and archive infrastructure with a more resilient, automated solution. It provides business continuity because it appears to users like a local network drive, while storing all unstructured data in the cloud. Local performance is provided by high performance flash and advanced caching algorithms that ensure every application has the data it needs, when needed.

Highlights

- **Consolidate unstructured data to the cloud**
- **Eliminate expensive local NAS**
- **Accelerate file access time**
- **Eliminate backup and archive processes**
- **Power Active Archive workloads**

Replace Expensive, Single Site NAS

Local NAS systems and Windows filers are often tasked with storing the growing volume of unstructured data. Given the rate at which unstructured data is growing, continuing to buy, manage, and backup this data is complex and expensive. On-premise storage is no longer a viable option.

Traditional Active Archive

Traditional active archive solutions typically consist of a file system that sits on top of a tiered combination of high performance disk, capacity disk, and tape storage. All of the storage is always online and appears to the users to be a single data repository. While this would seem to be an ideal solution, the traditional on-premise storage has challenges related to affordability, scalability, availability, and management. A better solution is needed.

Cloud Storage

The only truly affordable and scalable solution for active archive workloads is to utilize cloud storage. It is simply not possible for on-premise storage to match the economics, scalability, and durability of the cloud. While this would seem to make the cloud a simple choice, there are still challenges relating to performance and application compatibility that must be addressed.

For active archive data to be useful, it needs to be more than just accessible – it needs to be accessible in a timely manner. The natural latency of the cloud, combined with the inherent performance limitations of object storage, would make cloud

storage impractical for active archive workloads without a solution like Panzura Freedom Archive.

Unprecedented Performance at Scale

Powered by the Panzura Cloud File System (PCFS), Freedom Archive delivers unprecedented performance at scale across multiple workloads. As users and workloads change over time, both physical and virtual instances of Freedom Archive can dynamically scale to meet the needs of the enterprise.

Administrators can take advantage of the "QoS for workloads" feature, which is unique to Panzura. With this feature, administrators can prioritize applications and guarantee that each user gets the performance they need, based on organizational requirements.

Expanded Data Center Workloads

Most enterprise applications have been written to use either SMB/CIFS or NFS protocols, making them impractical for the cloud. Panzura Freedom can completely replace local NAS systems by storing all data in the cloud while using intelligent caching to keep the most important data resident locally so that users have fast access to the data they need. With full support for the latest versions of SMB/CIFS for traditional file sharing and NFS protocols for engineering and design, simulation, imaging, and software development applications, the Freedom hybrid cloud platform can fully support your organization's applications while delivering the same or better performance than existing storage

Any Platform, Any Cloud

Enjoy total flexibility with your Freedom Archive. Every Freedom Family solution can be deployed on a physical Panzura Filer, as a virtual machine in your ESXi environment, or as an in-cloud instance running entirely as an Amazon AMI or Azure VHD.

Panzura also supports your choice of any public or private cloud object store, including AWS, Azure, Dell EMC, Virtustream, IBM COS, and more. With the flexibility to choose the public or private cloud of your choice, Panzura always keeps you in control of your data. Other vendors may try to resell you the cloud storage they buy for the same providers, arguing that it is easier to have one vendor. This puts your data at risk. If something should happen to the vendor that is re-selling you their cloud storage, then the cloud provider will not recognize you as the owner of your data and you could lose all of it. Panzura never puts your data at risk and always keeps it where it belongs, in your account and under your control.

Automated, Centralized Management

Setting up the Freedom Archive is simple and fast with a powerful wizard. An easy to use and intuitive GUI provides a single view of your storage environment. Customizable dashboards make sure that you are always up to date with the information that matters most to you. Email alerts and health checks keep administrators up to date on the status of their environment.

Cloud Data Protection to Simplify Backup, DR, and Archive

Freedom Archive dramatically simplifies data protection through a combination of advanced data protection technologies from Panzura and the innate durability of cloud storage. Every Freedom Filer stores all the snapshots you will ever need in the cloud. Snapshots are taken using redirect-on-write technology, so performance is never impacted.

In the event of an issue, unique, granular recovery from Panzura enables administrators to restore to a known good point in time, from a full file system all the way down to an individual file, quickly and easily. By restoring from a snapshot, administrators can easily achieve a near zero RPO.

Cloud providers architect their infrastructure to offer up to 13 9s of durability and can survive the failure of multiple data centers without data loss. This is far beyond what any private organization could reasonably build themselves.

By combining the durability of the cloud with Panzura data protection technologies, Freedom Archive can completely automate and replace your entire data backup, archive, replication, and disaster recovery infrastructure and processes with a simple, automated, and safe solution.

Panzura Freedom Archive

Feature	Benefit
Panzura Cloud File System	Immediately consistent file system that allows distributed users to share files in real time.
Local NAS	Makes cloud storage appear as local file storage. Every site can have real-time, read access to every other site without the need for expensive replication and networking technologies.
Cloud Backed Storage	Connect to the public or private cloud provider of your choice and use it as the authoritative copy for all files with up to 13 9s of durability.
Intelligent Caching	With 100% of data in the cloud, data is intelligently cached using advanced algorithms based on recency of creation and use. Pin data to cache for maximum control.
Flexibility of Deployment	Deploy on the public or private cloud provider of your choice on any combination of Panzura Freedom Filer, virtual machine, or in-cloud instance.
Deduplication and Compression	All data is deduplicated and compressed before being sent over the wire, reducing both network traffic and the amount of cloud storage consumed, further reducing costs.
Military Grade Security	The Freedom Family uses FIPS 140-2 compliant security with AES-256 bit encryption for protection of data at rest and TLS encryption for data in flight.
Snapshots	Panzura snapshots provide recovery of data by restoring to a known good point in time, on a per file basis. Panzura uses modern redirect-on-write snapshot technology which never impacts performance.
Extended Access Control Lists (ACLs)	Enable granular permissions-based file access.
Wizard Based Installation	Quickly and simply setup, configure, and customize filers to meet your specific needs with an easy to follow wizard.
Health Check	Validate system integrity at any time to be sure your entire system is always performing at optimum levels.
User IOPS Protection	"QoS for IOPS" provides predictable and consistent performance to meet the needs of users.
POSIX Protocol Support	Enjoy complete support for the latest protocol feature sets (SMB v3, NFS v4).
Hybrid Data Store Support	Total flexibility in media selection to match the needs of the organization.
API Based GUI	Flexible automation for programmatic configuration and analytics.
VMware Support	Full control of VMware tools (VM HA, VMotion) to best utilize resources with highest resiliency.
Secure Erase	Guarantee the security of your data with the strongest data erasure protection possible when you delete data in the cloud, short of physically destroying the drive the data was written on.