Panzura Solutions for Amazon Web Services

With Panzura Freedom NAS™ and Amazon Web Services (AWS), you can easily make the cloud an extension of your data center for both file storage and compute resources. Connecting your data center to AWS is simple. It takes just minutes to set up networking services and user authentication, letting you quickly provision both data and compute. You are able to bring the economics, scalability, and durability of the cloud along with data center performance to your existing file data and applications.

It works by using Amazon S3 as your central authoritative file storage and keeps active files synced on Panzura Freedom NAS at each site. With your files available in Amazon S3, you can also run any application or service in Amazon EC2 the same way you would in your data center with no rewrites. You can run things like virtual desktops, anti-virus scanning, indexing, or auditing in the cloud, saving you time and money compared to provisioning new servers in your own data center.

Panzura CloudFS helps you use Amazon Web Services to:

- Create a cloud-integrated data center – a seamless hybrid cloud that connects your infrastructure to AWS
- Take advantage of cloud economics by using AWS to extend your existing applications and infrastructure
- Simplify file/NAS storage and reduce storage costs by using the cloud to consolidate primary file storage, remote file servers, backups, tapes, and site-to-site replication
- Take advantage of cloud economics for your existing applications and avoid incremental hardware costs
- Provision applications from the cloud with one click, when you need them, where you need them

The Cloud-integrated Data Center

Panzura makes AWS look like it's just another part of your network – a cloud-integrated data center where the distinction between the cloud and your own data center is transparent to your users. Setup is simple, too. Network connectivity, file services, authentication, and even server provisioning for virtual desktops and applications is configured with a single click.

How it Works

The cloud-integrated data center is made possible by Panzura CloudFS™, the first enterprise file system purpose built for the cloud. CloudFS underpins the entire Freedom product line. Here's how it works.

Full POSIX Protocol Support

Freedom NAS delivers exceptional performance for data using both NFS and SMB protocols. NFS and SMB mount points are provided for full continuity with all business processes. Users and applications get the same or better performance than with on-premises storage with no changes to how they access data.

Figure 1: Panzura and AWS

Use Cases

Active Archive

Panzura Freedom stores data in AWS S3 for long term data archival. As data ages, it can be stored in either AWS S3 Standard or AWS S3 Infrequently Accessed (IA) for the right combination of accessibility and affordable storage.

Multi-site NAS

Replace local NAS and consolidate storage from every location on a global basis to AWS S3 for a single source of truth. Every site will have full access to their data and read only access to all data.

Real-time Cross-site Collaboration

The patented file locking in CloudFS works across all of your sites and the cloud. Users can collaborate confidently without worrying about accidentally overwriting files or waiting for files to replicate over the network.

Security

Achieve immediate regulatory compliance for off site, long term storage. FIPS 140-2 compliant security ensures that data is always encrypted at rest and in flight. Strong standards based authentication for file access keeps IT in control of data.

Mobile Access

Panzura Mobile natively integrates with Panzura Freedom NAS to eliminate separate enterprise file sync and share (EFSS) and NAS filer data islands so enterprises can securely access and collaborate on centralized data globally from any mobile device.

Replace Multiple Tiers of File Storage with the Cloud

When you deploy Freedom, Amazon S3 becomes your authoritative file storage. All of your file data is stored, backed up, archived, and protected in the cloud. You can simplify your infrastructure by eliminating primary storage, local backup servers, mirrored data, tape drives, and fees for offsite storage.

Run Your Existing Apps in the Cloud, On-Premises, or Both Without Changing Workflows

Once you've created a cloud-integrated data center, you can easily extend your existing apps into the cloud and run them on Amazon EC2. CloudFS gives you access to the same consistent file data from anywhere, including the cloud.

How Panzura and Amazon Web Services Helps You

Panzura enables you to run your applications in the cloud without being an expert in cloud computing. You can provision virtual desktops and applications in the cloud seamlessly, all connected to your corporate infrastructure. You can easily:

1. **Create a seamless hybrid cloud.** Panzura makes it possible to create a cloud-integrated data center – a seamless hybrid cloud that connects your infrastructure to AWS.
2. **Take advantage of cloud economics.** By using AWS to extend your data center, you avoid deploying expensive servers and storage that rarely get fully utilized. Reduce your costs up to 70% and your NAS/file infrastructure by 90%.
3. **Consolidate infrastructure from small sites to the cloud.** Since you can put applications and other services in a cloud region closest to each office, you can eliminate most of the local infrastructure at those offices.

Panzura brings the cloud to your data center without any changes to end-user workflows. Data is always immediately available and consistent in every data center as well the authoritative data source – Amazon S3.