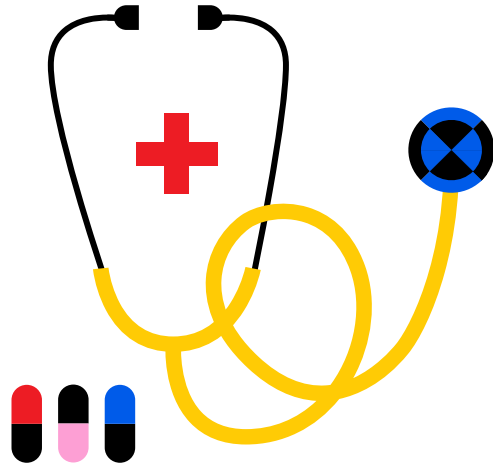




SOLUTION BRIEF

# Panzura for Healthcare and Life Sciences




Life-changing organizations trust Panzura to manage and protect critical data, enabling better patient outcomes and faster, smarter research.

Healthcare organizations have never been under more pressure to produce good patient and research outcomes. And, it's never been more difficult for them to manage, find, and make sense of the enormous volume of data being produced every minute of every day.

Data is being produced so quickly that just storing it all is straining resources, let alone being able to drive value from it. The file sizes of some of the most critical data not only consume significant storage space, they're also challenging to share across distances quickly.


When patient lives depend on files being available and immediately accessible, and overall outcomes are influenced by data analysis at scale, the pressure on IT teams to manage these enormous and sensitive data loads is immense.

Maintaining HIPAA compliance for regulated data, while protecting all data from



**Control storage costs while improving security**

- ✓ Consolidate data into a single view across the organization
- ✓ Reduce data volumes by removing redundant, duplicated data blocks
- ✓ Move workloads to the cloud without compromising performance
- ✓ Keep data encrypted and compliant with HIPAA and FIPS 140-2 compliance
- ✓ Protect data against damage and deletion with ransomware resilience



compromise or exposure in the face of increasing cyber threats, adds yet another layer of complexity.

Regardless of whether you choose to move to secure public cloud storage, or to create



a private cloud using on-premises object storage, securing, protecting and distributing data to the users who need it, requires a comprehensive data management approach.

In this solution brief, we'll outline how Panzura helps healthcare and life sciences organizations control data volumes, keep data secure and make it accessible anywhere, the instant it's required, and protect themselves against cyber threats such as ransomware, with a data management solution for the cloud age.

### **Consolidate, and Control Distributed Data**

While it's familiar and well understood by your IT teams, legacy on-premises storage was never designed to cope with the volume of data its now presented with. Purchasing additional storage, and renewing existing devices to keep them supported, is a relentless and expensive cycle that can barely keep ahead of actual storage requirements. Data distributed across multiple storage devices, and often across multiple locations, is

If I delete a file, I can easily restore from a snapshot, solving my backup requirements. I don't need to back the system up because it's backing itself up archiving the data and the snapshots to the cloud, where it's secure, protected and dispersed across datacenters. I also have the ability for our applications to leverage ICOS without the need to modify the applications.

**American College of Radiology**

prone to a significant amount of duplication as similar and sometimes almost identical files occupy storage space. In many cases, organizations replicate files across locations, to ensure they are available when required.

Further, machine-generated data from multiple devices in multiple locations are often stored in localized silos, because it's slow, difficult and expensive to move it into centralized storage. This limits its effectiveness by making it unavailable to artificial intelligence and machine learning applications that sit in the cloud.

Panzura CloudFS consolidates distributed data into a single, authoritative data set that is visible, and accessible, across the organization. CloudFS makes it possible, and easy to use



infinitely scaleable object storage to cost-effectively store escalating data volumes, as well as make them available across your entire organization.

### **Any Cloud Store**

Panzura is compatible with all leading public cloud stores such as AWS, Azure and Google Cloud, as well as on-premises object stores such as Cloudfian and IBM. That gives you the ability to select the storage that best fits your usage now, and the flexibility to make a different choice if and when your requirements change.

### **Minimize File Duplication**

CloudFS deduplicates redundant data before moving it to your chosen cloud or object store, allowing you to realize a significant reduction in your overall data footprint. CloudFS maintains this globally deduplicated data set at all times, checking for redundancies every time it moves data into your cloud storage.

### **Access Data in Real Time**

With CloudFS, all users in your organization work from the authoritative data set stored in your cloud or object store. No changes in workflows, or user behaviors are required – users interact with files in the same way they always have, and CloudFS provides them with a local-feeling file experience. In practice, that means even large medial imaging files, or video open quickly for any user, without download delays that are typically associated with remote storage.

### **Maintain File Consistency**

CloudFS makes files and file edits immediately visible everywhere, as soon as they are stored or saved. This real time file consistency, across every location in the global file network, means that users can rely on opening the authoritative patient file, complete with even the most recently made changes, at all times.

### **Seamlessly Moving Critical Applications to the Cloud**

With Panzura, there's no need to rewrite legacy applications to support your move to the cloud. CloudFS allows file-based applications to read and write data to the cloud, allowing you to move even your most critical workflows to data using cloud storage, without changing applications, or the way your users work.

### **Finding Files At Speed**

Panzura Data Services allows you to rapidly ingest and query billions of files from multiple sources, giving you a powerful search engine to find anything in just moments, regardless of where it's stored.



## **Keeping Data Protected**

CloudFS provides built in protection against accidental data deletion, or damage caused by malware or ransomware attacks, with a resilient data architecture. Data managed by CloudFS is stored in an immutable – Write Once, Read Many – format so that once it's in your object storage, it cannot be changed. New data created by file edits or new file creation are stored as new data blocks. No data is ever overwritten.

As a result, in the event of a ransomware attack, any encrypted files are stored as new data – leaving existing files untouched and allowing you to recover clean files within minutes, without losing data.

## **Restore Damaged, Encrypted or Lost Data in Minutes**

System snapshots are taken on a configurable frequency, recording the file system at that point in time. Additionally, snapshots are taken at every location in the CloudFS every 60 seconds. These provide the ability to restore any file to any point in time as required. CloudFS snapshots are read-only, so cannot be changed once captured, making them also impervious to ransomware encryption.

In the event of any file damage – whether caused accidentally or as part of a wider encryption attack such as a ransomware event – individual files, folders or the entire file system can be restored to a pristine state with no data loss, and minimal disruption.

## **Ensure Data Compliance**

Panzura keeps your data HIPAA compliant, and streamlining data management through intelligent deduplication and the introduction of a single authoritative data source allows IT teams to more easily control where data is stored, who has access, and to monitor that access.

FIPS 140-2 certification ensures data is securely encrypted in flight and at rest, making it unable to be read, in the event that it is intercepted.

## **Empowering High Availability**

CloudFS meets strict regulatory requirements for highly resilient, highly available file services. Every location in a global file system always has read access to data from every other location. Data is stored securely in the cloud and each location can read that data. In the event of a disaster in one location, every other location already has access to the data for immediate recovery.



## Panzura Lets You Work With Your Data, The Way That Works For You

Every part of Panzura's data management solution has been specifically and intentionally designed to let you put data at the fingertips of the people who need it, the moment they need it. All while keeping it secure, protected against threats, and compliant with regulations as well as internal mandates.

## Proven in the Most Demanding Environments

Panzura is designed to let you manage vast volumes of the most sensitive patient and medical data, making it available while keeping it secure and resilient to ransomware.

Should we talk?



**How Can We Help?**  
Let's get you the candid answers you're looking for.

**Email** [info@panzura.com](mailto:info@panzura.com)  
**Visit** [panzura.com](http://panzura.com)

