

**SOLUTION BRIEF**

# Panzura for Architecture, Engineering & Construction



Many of the world’s largest and most innovative firms trust Panzura for collaborative workflows across the globe.

IT requirements facing AEC firms have never been more challenging. As data volumes increase and data islands proliferate across the organization, the need for a complete data management approach becomes more urgent.

For many firms, data is being produced so quickly that simply storing it is straining resources. Making copies of that data – for backup, redundancy, and offsite storage to meet internal and external mandates can result in up to 5x replicas of the original data volume. The pressure on IT teams to manage these enormous and sensitive data loads, and finance teams to budget for storage, is immense.

Inability for people to work together across locations at a speed that allows them to be productive makes it difficult for firms to fully tap into the potential of their talent pool, hampering growth.

Protecting all data from exposure, damage or deletion in the face of increasing cyber



## Accelerate time to delivery while controlling storage costs

- ✓ Consolidate data into a single, deduplicated view across the organization
- ✓ Empower real time, high performance collaboration on Revit, AutoCAD and other files
- ✓ Avoid overwrites with immediate file locking that automatically works everywhere
- ✓ Boost performance with file changes that are immediately visible to every user
- ✓ Protect data against damage and deletion with ransomware resilience



threats adds yet another layer of risk and complexity.

Whether you choose to move to cloud storage or create a private cloud using on-

premises object storage, securing, protecting, and distributing data to the users who need it, when they need it, all fall under the responsibility of data management.

In this solution brief, we'll outline how Panzura helps architecture, engineering and construction firms solve data collaboration and productivity challenges with a cloud data management solution that actively empowers growth, now and into your future.

## **Remove the Stress of Sharing Files with Collaborators**

CloudFS is a file system that is sharable and accessible on a global scale – without replicating files – delivering the speed and performance you expect from a local solution. Renowned for allowing users to work on Revit and other AutoCAD files across sites in real time, CloudFS overcomes the latency and performance issues that plague distributed AEC teams attempting to work collaboratively.

As a multi-billion-dollar global engineering and design firm with over 30,000 employees and partners worldwide, speed and team productivity are critical to delivering world-class billion-dollar designs for our customers. With Panzura, we deployed one global cloud file system across all global sites, enabling engineers and designers to collaborate as one global team, dramatically increasing productivity and improving our bottom line.

**AFRY**

## **Consolidate Distributed Data**

Data distributed across multiple storage devices, and often across multiple locations, is prone to a significant amount of duplication, as similar and sometimes almost identical files occupy storage space. Multiple copies of the same file cause confusion among users about which version should be relied on as the authoritative copy, making collaboration and compliance difficult.

Storing data in the cloud is often seen as a solution to solve the data sprawl of duplication. While cloud storage presents a cost-effective pricing structure, simply lifting and shifting that data into the cloud replaces sets of on-premises data islands with a new data island that resides in the cloud.

Performance problems working with cloud-stored data, including higher latencies, coupled with storage inefficiencies and lack of visibility can quickly render a cloud move as ineffective. Panzura's global file system CloudFS consolidates distributed data into a single, authoritative data set that is visible, and accessible, across the entire organization.

### **Minimize Duplication**

CloudFS deduplicates redundant data before moving it to your chosen cloud or object store, providing significant reduction in your overall data footprint. CloudFS maintains the globally deduplicated data set at all times, checking for redundancies every time it moves data into your cloud storage. This global inline deduplication method runs advanced, inline block-level deduplication on any data in the object store, in order to remove blocks common across different files. This removes data redundancy across all locations, rather than just based on data seen by a single location. This results in driving down cloud storage and network capacity (and cost) consumed.

### **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 the performance of a local-feeling file experience.

Files open and save as quickly as if they were stored locally. File collaboration with the global-locking feature enables file edits in real-time, perfectly suited for AEC workflows.

### **Maintain Immediate File Consistency**

CloudFS is the fastest global file system on the planet, making file edits immediately visible everywhere, regardless of the number of locations you have, or how far apart they are. This real time file consistency, across every location in the global file network, means users can rely on working with the authoritative file, complete with any changes, at all times.

### **Empower Collaboration Using CAD Files**

CloudFS enables cross-site collaboration on AEC workflows in a way no other solution can.

Instantaneous, automatic file locking will lock down a file for editing the moment it's opened. AEC applications that support element or byte-range locking, such as Revit, AutoCAD, MicroStation, and others, CloudFS allows multiple users to work within the same file, without overwriting each other. It's the same file experience users have when they're sitting in the same office location, even when they're thousands of miles apart.

### **Enable High Performance Remote Work**

CloudFS works seamlessly with cloud VDI solutions to deliver the ultimate high performance file experience for all users, even if they're working remotely without a high speed internet connection.

### **Keep Data Protected**

CloudFS provides built-in protection against accidental data deletion, or damage caused by malware or ransomware attacks, with a resilient data architecture. Managed by CloudFS, data is stored in an immutable – Write Once, Read Many – format so that once it's in your object storage, it cannot be changed. Data created by file edits or file creation are stored as new data blocks, and CloudFS data is never overwritten. System and user level snapshots protect the file state for consistency, currency, and efficiency.

### **Restore Damaged or Lost Data**

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 including CAD files can be restored to a pristine state with no data loss, and minimal disruption.

Read-only system snapshots are taken on a scheduled basis, and record the file system at that point in time. Additionally, snapshots are taken at every site location in the CloudFS every 60 seconds. This provides the ability to restore any file to any point in time as required.

### **Ensure Data Compliance**

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, by design, delivers the level of high availability AEC organizations require to maintain a productive workforce. Each location in a global file system always has read access to data from every other location. Stored securely in the cloud, each location can read the authoritative data set. 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

Our solution is specifically and intentionally designed to let you manage, protect and work with the most challenging file types for AEC firms or any industry. With unmatched performance collaborating across sites, you deliver better, faster project outcomes.

## Proven in the Most Demanding Environments

CloudFS is designed for high performance at scale, and is used by some of the largest and most respected AEC firms on the planet.

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)

