

Video Surveillance

Video surveillance has become an accepted part of people's everyday lives. CCTV as well as dash and body cams have become so common that they largely go unnoticed by most people as they go about their day, fading into the background of our memories. The video that is being captured by those cameras however, does not simply fade away. That video is collected and stored, both for immediate retrieval when an event occurs that necessitates review, as well as for long term archive.

Storing, reviewing and saving that huge volume of video footage is a major challenge for many organizations. Managing and maintaining large amounts of data storage to retain video surveillance footage is not a primary goal for most IT departments. Further compounding the challenge is that depending on the industry, there may be legal requirements governing how long the footage must be stored.

The technology around capturing video has been well established. However, the methods of storing and retrieving that video are going through a tectonic shift, with a hybrid cloud solution emerging as the method of choice due to its affordable, scalable storage for large video files as well as quick access for on-demand review. Traditional video management software (VMS) systems are available from a wide range of vendors including Canon, Genetec, OnSSI, Verient, Avigilon, Smartvue, and more.

These vendors provide end-to-end environments that include cameras, a hardware and software platform, and a storage subsystem. Closed VMS systems are typically expensive and lock organizations into proprietary systems that, despite their costs, often do not meet the needs of the company. Open systems are gaining in popularity as they are becoming more prolific and offer greater flexibility to users. These open systems typically store video content on traditional

Benefits of the Panzura Freedom Archive for Surveillance Video:

- Active Archiving of surveillance video, caching active files needed by video management systems on high performance flash and storing inactive files on affordable object storage.
- **Deduplication and compression.** This means much more efficient storage and backup, more room for files, less data sent over your network, and best of all — lower cloud storage costs.
- **Intelligent caching.** Active data is cached on each Flash Cache, speeding up performance when users access data.
- **Cloud-backed with 11 nines of availability.** Panzura connects to a public or private cloud of your choice and uses it to store the authoritative copy of all your files.
- **Offsite protection without all the mess.** No more storing tapes or drives offsite. Panzura makes the cloud a single target for all archiving.
- **Extended access control lists (ACLs)** for granular permissions-based file access.
- **Security that three letter agencies trust.** Our customers include the U.S. Department of Justice and NIST, the organization that certifies FIPS. Why? Panzura is FIPS 140-2 certified with AES-256 bit encryption, so your data is secure at rest and in-flight, whether it's on a local Flash Cache or in the cloud.

enterprise storage systems. There are essentially three basic methods of storing this type of data. The first being some method of on premise storage, typically either a direct attach or a NAS solution. These on premise solutions offer fast access to captured video, offering an immediate response when data needs to be retrieved. While each of these types of storage have benefits, they also suffer from the same basic challenges – they are expensive both to acquire and manage, they do not scale easily, and they require a significant effort to backup and archive.



As an alternative, public cloud implementations can offer low cost, high capacity storage that can scale to meet the needs of any organization. Public clouds also offer backup and archive options that are beyond what most companies can perform internally. However, unlike on premise solutions, public cloud based options can introduce unacceptable performance delays as well as concerns over data security.

Offering a best of both worlds solution, the Panzura Freedom Archive is a hybrid cloud option that can solve each of these challenges. With a hybrid cloud, all data is written to public or private cloud storage of your choice. Since all data is stored in the cloud object storage, it is on affordable and highly scalable storage with redundancy and high availability. The key difference is that with the Panzura Freedom Archive, time sensitive video is cached locally for quick access. When an event occurs that requires fast access to video, it is immediately available from local high performance flash drives.

While there are legitimate security concerns with a generic public cloud offering, the Panzura Freedom Archive offers a highly secure alternative. The Freedom Archive offers military grade encryption that is FIPS 140-2 compliant to protect data both in flight and at rest. Encryption keys are stored separately from the data, so even if there were a breach, the video would remain unreadable.

Surveillance video has become a normal part of everyone's life, generally going unnoticed. With the Panzura Freedom Archive, companies can affordably store and save that footage as easily as it is captured.