Quantum

5 TECHNOLOGY OPTIONS TO ADDRESS LONG-TERM VIDEO RETENTION

Surveillance technology is the first line of defense when it comes to protecting life and property, as well as increasing operational efficiency. The video produced by surveillance systems has become an integral part of many organizations' operations with safety, as well as both legal and financial implications. Therefore, surveillance footage is now a mission critical organizational asset, which needs to be kept and secured for years, and in some cases, indefinitely. Here are 5 technologies to consider when creating a long-term retention strategy for surveillance video.

1 Traditional Primary Storage

Fast random-access storage technologies such as HDD, SSD, and NVMe found in external storage arrays, SAN (Storage Area Network), or NAS (Network Attach Storage) and Hyperconverged Infrastructure (HCI) are by far the quickest way to get immediate access to your video. Unfortunately, they are also the most expensive, so may not be appropriate if you need to retain video beyond 90 days. It is, however, necessary to have at least some amount of high-performance storage in any video repository for the video you need to access shortly after capture.

2 Offline Tape

For years, organizations used video tape as a cost-effective medium for long-term video storage. Over the past decade, the industry has started to use digital data tapes, such as LTO (Linear Tape Open), for that same function. With each LTO tape cartridge able to hold almost 2 years of video from a 1080p camera, they provide an economical storage option, as well as the ability to easily get video "offline" or "offsite". The downsides include managing those offline/offsite data tapes, so they aren't lost, as well as the additional delays in accessing video stored on those data tapes. Copying or archiving video to data tapes is an effective strategy for long-term retention of rarely accessed video.

3 Object Storage

In recent years, on premises object storage systems, sometimes referred to as an on premises private cloud, have become increasingly popular. They provide high performance, unparalleled scalability, and extreme protection. Object storage systems use erasure coding to protect video from corruption or component failure. Erasure coding provides higher levels of protection than RAID or a multi-copy approach. A primary benefit of these systems is storage efficiency. They provide higher protection levels than traditional approaches at a fraction of the storage overhead. More advanced object storage systems can distribute video across multiple locations, without sacrificing storage efficiency, to provide protection against the loss of a site.

4 Hybrid Cloud

In some cases, it is desirable to base a long-term retention strategy on a combination of on-premises and public cloud-based resources. Commonly, this is done with a robust networking infrastructure that can move large amounts of data between local and cloud-based resources for storage and/or processing. Public cloud can be inexpensive for smaller environments or shorter retention times, but it is typically not cost effective for large amounts of video stored for long periods of time. Public cloud providers often have egress fees, which make it expensive to access video that is archived in the cloud. Those egress fees, storage fees, and the cost associated with the networking infrastructure should be considered when basing a long-term video retention strategy on hybrid cloud.

5 Tiered Video Data Management

Tiered video management systems offer the flexibility to have various storage technologies managed under a single umbrella. They generally have a high-performance storage tier to store video upon initial capture and then tier or move the video off to a secondary tier consisting of less expensive bulk storage, such as Object Storage or a Tape Library. The advantage of these systems is that you can store video on the appropriate medium to meet a particular cost performance objective. Additionally, when using tape with tiered storage, tape media are under control of the storage management system, which greatly reduces the chance of them getting lost. Modern tiered video data management systems can store multiple copies of video in multiple locations that are managed and accessible through a single pane of glass.

Quantum is Your Partner for Long-Term Video Retention

Quantum has a comprehensive portfolio of products useful for long-term video retention. With Quantum's line of Scalar® Tape Libraries, ActiveScale™ Object Storage systems, and StorNext® File System for migrating video, you can be assured your video is safe for the long term, and at a budget point that meets your requirements. Let the experts at Quantum help you find the right answer for your long-term video retention. Contact your trusted Quantum authorized reseller, your Quantum representative directly, or visit our website at www.quantum.com/products.