

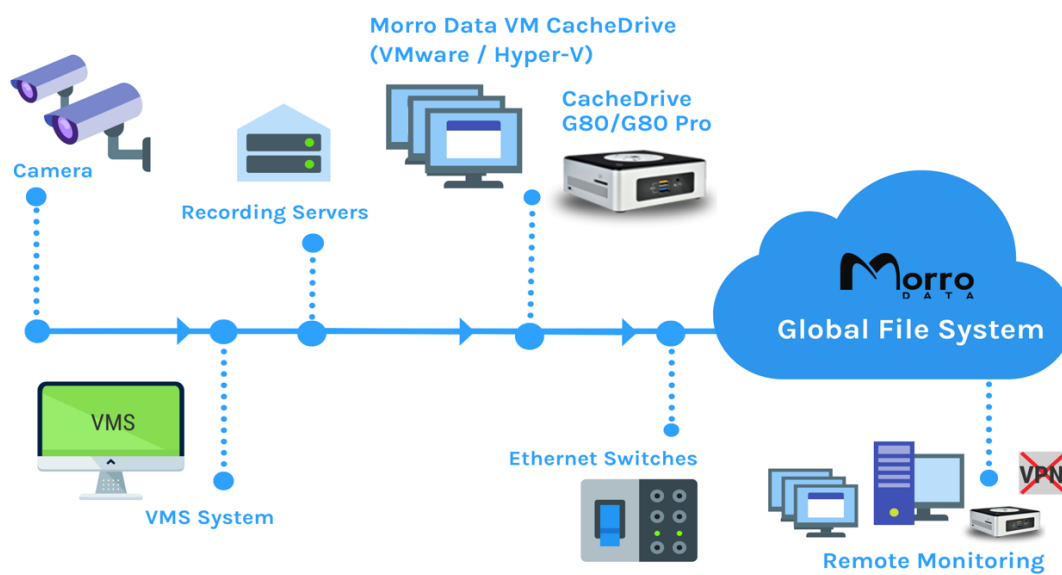
Morro Data CloudNAS for Video Surveillance

Hybrid Cloud Storage for Video Surveillance

Video surveillance storage methods are evolving; storing surveillance footage on direct-attached devices was at one point the norm. As technology changed, ethernet storage area network via iSCSI and network-attached storage (NAS) became the choice method. Coupled with longer data retention times which equates to higher on-premise storage costs, have triggered a new change. Video Surveillance applications have now begun to shift to the Cloud bringing huge benefits and challenges. This solution brief will cover some of the challenges and explain how Morro Data's Hybrid-Cloud architecture solves these challenges.

- ◆ **Safeguarding Security Footage** with AES 256 your files are encrypted both in transit and at rest.
- ◆ **Data Retrieval** file access is based on CacheDrive (location) and on/off premise.
- ◆ **Global File Locking** provides centralized storage with file locking across multiple locations.
- ◆ **Fast Cache** low latency CacheDrive gateways deployed on premises allow users to access files 100x faster than traditional cloud services.

VMS Workflow with Morro Data



Cloud Data Retrieval can cause delays. With CloudNAS, this problem is easily solved. All live data and historical camera feeds are centralized and accessible locally or remotely. Morro's CacheDrive gateway allows users to access files 100x faster than traditional cloud services. Thanks to Cache & Sync and cloud computing technology, the VMS quickly and efficiently access video footage without lengthy upload/download times. Most recently accessed files are cached locally, while the VMS application can promptly bring down older empty (metadata) files in the event of a security incident.

When it comes to safeguarding your surveillance footage, AES 256 encryption is supported on files in transit and at rest in the Cloud. CloudNAS supports Active Directory, Azure AD, or Morro Users Mode for user authentication, supporting most IT environments keeping your data safe! In the event of an incident delivering viewable content is made easy! When it comes to content delivery, Morro has you covered. Using the Morro Connect application or the web-based Morro Connect Manager (MCM), the VMS administrator and staff can share recently transcoded H.264/H.265 content with anyone from anywhere on the fly. To ensure data integrity, real-time file locking is managed by the cloud server. Files are first locked, synced to all CacheDrives, and unlocked. This prevents any conflicts and, most importantly, keeps your data safe. The global file system presents the latest version to all users while preserving the previous versions, removing the need for manual update management. Morro Audit tracks all file access for record-keeping in a searchable Cloud database in the event of user error or retrospective investigation.

The Benefits of Morro Data's Hybrid CloudNAS

The Power of the Cloud with Network-Attached Storage Performance



CacheDrive Fast

Morro CacheDrive offers is easy to deploy, offering up to 32TB of high-performance SSD/NVMe cache and up to 10GigE interconnect.



Long-Term Storage

With Morro Cloud Manager, you can easily manage recorded footage with archive share for the further access and download.



SaaS

Morro Data is a SaaS (Software as a Service). It's pay as you grow. Amazon S3, Azure, Backblaze, and Wasabi are supported.



Remote Access

Remote users can access the files with local CacheDrive or Virtual Appliance for VMware/Hyper-V on AWS/Azure.



Global File Sync

Data is synced in real time to all CacheDrive locations in Morro Global File System. Master Data is in the Cloud and versions are kept according to policy.



Low latency

Latency between application and storage significantly impacts user productivity. With CacheDrive, data latency is significantly reduced compared to direct cloud access.

How CacheDrive Works

Files are stored in the Cloud, cached in the gateway, and synced globally.

