

StorMagic ARQvault

THE FIRST ACTIVE INTELLIGENT REPOSITORY

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ARQvault is the first Active Intelligent Repository. Gather data anywhere, store it forever, and find it fast. Unique and important features of ARQvault include:

1. ARQvault is a collection of vaults creating a federated repository.

ARQvault software combines different and distributed storage resources into an integrated system shared across the network. Vaults consist of a server, storage, and ARQvault software.

2. ARQvault is active.

Secondary storage, such as LTO tape libraries

and Sony optical systems, cloud storage, and even offline storage are all an active part of the repository. ARQvault knows where all the data is and can actively seek, find, and retrieve any data in real time.

3. ARQvault is intelligent.

ARQvault uses policies to automatically move data to different storage tiers and creates low-resolution proxies of high-resolution video, audio, and image files for fast search, playback, and viewing. The use of metadata and customizable fields, and integration with analytics packages, provides for rich data analysis and discovery of new relationships and business assets.

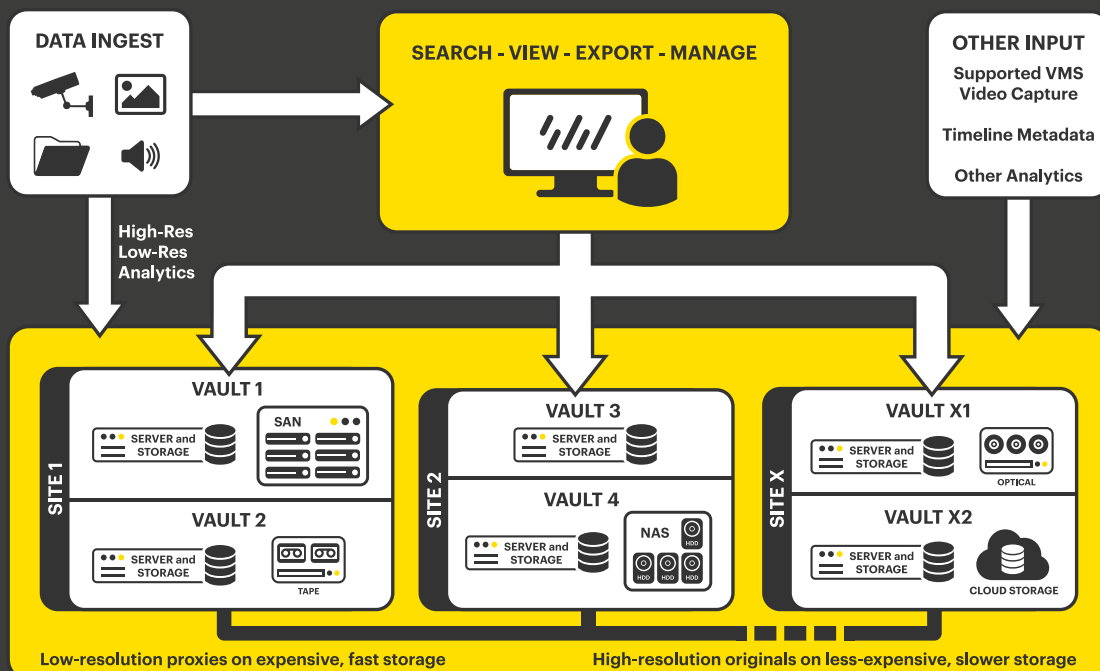


Fig 01: ARQvault architecture

ARQvault SOLUTIONS

ARQvault Video Surveillance

ARQvault Video Surveillance solutions consist of ARQvault and either the ARQvault VMS or VMS Connectors module.

- ARQvault VMS module** provides camera configuration, live viewing, video wall, specific third-party analytics integration, such as license plate and facial recognition, and more for a complete, full-featured video surveillance solution.
- ARQvault VMS Connectors module** is for customers that already have a front-end VMS system, such as those from Milestone, Exacq, and Qognify. ARQvault VMS Connectors integrates with these systems and provides all the management, policies, active automated tiering, and intelligent search capabilities, along with dramatically lower storage costs, provided by ARQvault.

ARQvault Digital Evidence Management

ARQvault Digital Evidence Management solutions are intended for law enforcement, transportation and delivery services, warehouses, retail, and commercial environments and consist of ARQvault and one or more of these modules:

- File Ingest module** allows users to ingest any type of file into ARQvault, such as mugshot, fingerprint, 911 audio, images, and other evidentiary files with manual and automatic metadata collection.
- In-Car module** is designed for police, delivery, and transportation organizations to capture and store video from in-vehicle cameras along with GPS data, automatic triggering and meta-tagging.
- Body Cam module** collects video captured from body-worn cameras and automatically downloads video when the device is docked.
- Interview Room module** is used in interview settings, or in any setting where in-room video and audio recording is desired, to easily record, meta-tag, and store conversations.

GATHER ANYWHERE.

Gather data from anywhere using any source, any server and any storage, and expand easily when needed.

Use any digital asset from any source	Easily ingest video, images, audio, and other files and data, such as .pdf, .doc, .xls, .txt and more.
No vendor lock-in	Runs on x86 or ARM servers and works with any type of storage: internal disk, flash, NAS, SAN, optical, tape, and cloud.
Provides complete architectural flexibility	Any site can have one or more vaults. Easy to scale – add additional ingest points to one to thousands of sites in any location at any time.

STORE FOREVER.

Store forever (if you want to) with secure, easy to manage, automated tiering. Gain complete control over data lifecycle management and dramatically lower storage costs.

Automated tiering: Optimize performance and reduce costs	Use policies to decide what data gets moved to lower cost storage tiers and when. Complete control over where data starts, how long it stays there, and when larger files, such as high-res video, move to more cost-effective tiers.
Three levels of access security	At the vault, storage, file levels. Integrates with Active Directory or local authentication with complete audit trail. Makes sure data is unaltered using a digital fingerprint (SHA-256) and provides chain-of-custody history.
Complete data lifecycle management	From birth to death. User interface offers managed flexibility in storing data. Easily export and share data: in-house, constituents, or third parties. Simplicity helps meet regulation, compliance, and legal requirements.

FIND FAST.

Find data fast and apply powerful search and analytics capabilities with intelligent search using rich metadata.

Intelligent search: Fast results no matter data location or age	Numerous search categories: where data stored, file attributes, access level, metadata that has been applied. Parallel search request to all vaults for fastest path to data. Quick results over slow networks using low-res proxies.
Metadata use throughout	Applied at ingest, used in tiering decisions, integrates with third-party analytics. Search and data use richer and more robust. Search metadata and content, such as video, audio, documents, and images. Metadata can be applied at file and timeline levels for deep file analytics. Enables advanced reporting and audit capabilities.
Data is always there	Distributed architecture with no single point of failure. Store, move, and retrieve data to/from any vault, anywhere. Data resiliency built in. Continues to operate if any component fails: data is always safe and available.



SYSTEM REQUIREMENTS

SERVER

<ul style="list-style-type: none"> 🔪 Windows Server 2008 R2 SP1 🔪 Windows Server 2012 R2 (64-bit) 🔪 Windows Server 2016 (64-bit) 	<ul style="list-style-type: none"> 🔪 Windows Server 2019 (64-bit) 🔪 Windows Server 2022 (64-bit)
Processor Requirements:	Intel Xeon® E3 3.10GHz or better
Recording Server:	Nvidia Graphics card
Hard Drive Requirements:	50 GB of available space to install and run the product. Additional space will be required based on video retention requirements
Memory Requirements:	16GB or more of RAM
RAID Recommendations:	OS RAID 1 (mirrored); Database RAID 1 (mirrored) (should not be on the same drive as the video cache); Data RAID 5 minimum (vault storage drive)

CLIENT

<ul style="list-style-type: none"> 🔪 Windows 7 Professional SP1 (32-bit and 64-bit) 🔪 Windows 8 (32-bit and 64-bit) 	<ul style="list-style-type: none"> 🔪 Windows 8.1 (32-bit and 64-bit) 🔪 Windows 10 (64-bit)
Processor Requirements:	Intel® Core i5 3.00 GHz or better
Hard Drive Requirements:	10 GB of available space to install and run the product. Additional space will be required based on video retention requirements
Memory Requirements:	8GB of RAM
RAID Recommendations:	OS RAID 1 (mirrored); Database RAID 1 (mirrored) (should not be on the same drive as the video cache); Data RAID 5 minimum (vault storage drive)

OTHER

Linux:	Available upon request
Network:	Multicast packet routing is required between all server and client machines

VAULT DISK SPACE

Disk-only:	Vault storage is required on all servers. In case of disk-only configurations, sufficient storage must be provided to store all original video for the required retention period	<ul style="list-style-type: none"> 🔪 Additional disk storage must be provided to store the low-resolution companion files and thumbnails, normally equal to 10% of the total digital data tape storage capacity. 🔪 Database Disk Storage Database storage requirements vary based on the amount of stored video and the use of metadata. 🔪 Each server has its own database which correlates to the video it is storing. As a guideline, every 16TB video storage requires 10 GB of disk storage as a minimum for the database.
Disk and Digital Data Tape:	In a mixed storage environment of disk and digital data tape, sufficient disk storage must be provided to store original video for period which it is required to be stored on disk	



ARCHITECTURAL HIGHLIGHTS

Consists of 1 to 1000s of vaults at 1 or more sites	<ul style="list-style-type: none">✔ Vaults consist of server, storage, ARQvault software.
Data ingested from any source	<ul style="list-style-type: none">✔ Video, audio, images, files.
Policy driven automated tiering	<ul style="list-style-type: none">✔ Determines where data goes, how long it is there, where it goes next.
Low-resolution proxy files created for ingested data	<ul style="list-style-type: none">✔ Take <10% storage space of original versions.✔ Originals moved to lower cost storage.✔ High-res versions always available.
Data is active on all storage tiers	<ul style="list-style-type: none">✔ Optical jukeboxes and tape libraries are active. Data can be retrieved immediately.
Parallel search requests sent to all vaults	<ul style="list-style-type: none">✔ Finds the fastest path to data.✔ Fast response on slow networks using low-res proxies
Data is secure, unaltered, always available	<ul style="list-style-type: none">✔ 3 levels of access security.✔ Digital fingerprint (SHA-256) and chain-of-custody history.✔ No single point of failure.

ARQvault SUPPORT

ARQvault Maintenance & Support provides organizations with access to StorMagic support resources, including product updates, knowledgebase access, and email support with our technical support staff. A summary is shown in the table below. More information on ARQvault Maintenance & Support can be found at stormagic.com/company/support.

Hours of operation	24 hours a day ¹ (7 days a week)
Length of service	1, 3 or 5 years
Product updates	Yes
Product upgrades	Yes
Access method	Email + Telephone (via platinum engagement form on support.stormagic.com)
Response method	Email + Telephone + WebEx
Maximum number of support administrators per contract	4
Response time	1 hour

¹ Global, 24x7 support for Severity 1 - Critical Down & Severity 2 Degraded issues

MORE INFORMATION

There are additional resources available covering ARQvault capabilities and features on the [StorMagic website](https://stormagic.com). Explore the [ARQvault solution brief](#) and the [ARQvault Video Surveillance solution brief](#) and [data sheet](#).

Test ARQvault in your environment free of charge. Simply download our fully functioning [free trial from the website](#).

If you have questions, or you would like a demo of ARQvault VMS contact the StorMagic team at sales@stormagic.com.

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