



Vigiles-NVR

ARQvault VMS Optimized Surveillance Appliances

Vigiles is a series of products optimized for ARQvault VMS from StorMagic®. These Network Video Recorder (NVR) appliances are control and archive platforms optimized for and preloaded with the ARQvault video management software (ARQvault VMS). The NVRs scale by camera count, video bandwidth and storage requirements. A system configuration tool, *Vigiles* Configurator, automatically generates an ordering part number based on the user's application specific requirements. These appliances are highly flexible and can accommodate up to 100 cameras and vault sizes up to 100 TB. The *Vigiles-NVR* products optimize system performance, database accommodation, storage configuration and ARQvault VMS camera and vault size licensing.

Vigiles-NVR's can be used as single site stand alone appliances or part of a multi-site ARQvault VMS installation where an authorized user can access, view and manage video in each distributed vault. Software installation and licensing are included so that each unit is ready to go out of the box. Onsite settings like camera focus, configuration and naming as well as policy settings are simple within the ARQvault VMS management tool.

Vigiles-NVR appliances come in three basic platforms. The V1200 series products are targeted for applications needing up to 75 Mbps of video processing. The V2200 series systems will be needed for installations requiring up to 180 Mbps of video bandwidth. And the V3200 series of enterprise class NVR's will process up to 320 Mbps. All platforms support vaults up to 100 TB and are available in Desktop or Rackmount footprints. Through the *Vigiles* Configurator a user will define the camera parameters, archive duration and NVR system requirements. The tool will provide the optimized solution for the application.

In green field installations or system upgrades, network surveillance systems like those offered by VNS are an excellent choice to meet end user's increasing demands from their security systems.

Applications and Features

Applications:

- Small Retail or Office
- Residential
- Storage facilities
- Cannabis outlets
- Home Construction
- Gated Community Entrance
- Day Care Centers
- Parking Facilities
- Apartment Complexes
- Mid-size Construction Sites
- Bank branch offices
- Managed Care Facilities
- Strip Mall Retail Centers
- Manufacturing Lines
- Self-storage Lots
- Office Buildings
- Reservoirs
- Airports
- Casinos
- Municipalities
- Correctional Facilities
- Shopping Centers
- Education campuses
- Hospitals
- Ports
- Large commercial buildings
- Financial institutions
- Sports complexes



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Features:

- Desktop or Rack Mount Footprint
- Intel® CPU Technology
- ARQvault VMS and licenses pre-installed
- Flexible vault size: 4 TB to 100 TB
- Support for up to 100 Cameras
- Camera system data rate up to 320 Mbps
- Microsoft Windows® Operating System
- Separate OS drive
- Three scalable platforms
- Provides flexible live-views and a massively scalable video wall. Is easy to use and manage
- Retrieves video fast and reduces network congestion
- Provides simple, yet powerful, intuitive search using metadata
- Retains video securely to meet retention, compliance, and legal requirements

Common Configurations:

- **V1205B-31610ZI**: 3.6 GHz Quad Core processor, 16 GB RAM, Desktop, 3-year ARQvault VMS licenses for 16 cameras and 10 TB vault, RAID 1 storage configuration and Windows IoT Operating System
- **V2205B-34840RX**: 3.3 GHz Hex Core processor, 32 GB RAM, Desktop, 3-year ARQvault VMS licenses for 48 cameras and 40 TB vault, RAID 5 storage configuration and Windows 10 Pro Operating System
- **V3205N-38080YK**: 2.4 GHz 16 Core processor, 64 GB RAM, Rackmount, 3-year ARQvault VMS licenses for 80 cameras and 80 TB vault, RAID 6 storage configuration and Windows 2019 Server Operating System





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ARQvault VMS from StorMagic

Vigiles combines proven hardware with a VMS installed in thousands of sites. While the appliances can be used as single site fully independent solutions, *Vigiles* can take full advantage of all the capabilities of the ARQvault VMS multi-site features. ARQvault VMS was purpose-built to manage video and other unstructured data. It uses the ARQvault Active Intelligent Repository (AIR) architecture, which is ideal for capturing, using, and retaining surveillance video. ARQvault VMS is an:

ACTIVE: All storage is an active part of the repository, which means all video is readily accessible. ARQvault VMS knows where all video is stored and actively seeks, finds, and retrieves any video in real time. Secondary storage, such as LTO tape libraries and Sony optical systems, and even offline storage are all an active part of the repository.

INTELLIGENT: ARQvault VMS uses policies to move video to different storage tiers and creates low-resolution proxies of high-resolution video 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.

REPOSITORY: ARQvault VMS is a collection of vaults creating a federated repository. It combines different and distributed storage resources into an integrated system shared across the network.

Features:

- Provides flexible live-views and a massively scalable video wall
- Is easy to use and manage
- Retrieves video fast and reduces network congestion
- Provides simple, yet powerful, intuitive search using metadata
- Retains video securely to meet retention, compliance, and legal requirements

ARQvault VMS provides the user the ability to capture, view, use, manage, retain and protect their video surveillance data with complete chain of custody compliance. Architected from the ground-up with storage management in mind, StorMagic ARQvault VMS uses a modified version of the Open Software Foundation (OSF) Distributed Computing Environment (DCE). The Management Console application allows users to set policies related to data services, cameras and metadata which can be static (camera name, department, location, etc), in-situ (analytics, point of sale, etc) or post event (timeline tagging). The Surveillance Video Manager is a desktop application that provides search, playback, and export for recorded video in the Repository. It provides a single-pane-of-glass view into the Repository. Regardless of the number of Vaults in the Repository, the number of separate sites, the number of copies, or the current location of the video, the end-user has a simple and easy-to-use application to access the recorded video stored in the Repository as if it were centralized

With a wide variety of flexible and automated policies and use of rich metadata, ARQvault VMS turns a video surveillance system from an insurance policy to a business asset.



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ARCHITECTURAL HIGHLIGHTS

Video capture from thousands of cameras or other VMS	Any ONVIF or RTSP-enabled IP camera. More than 5,300 certified cameras. Can use with Milestone, Exacq, or Qognify.
Live View and Video Wall	Full featured, massively scalable video wall. Highly configurable and customizable. Easy to use.
Consists of 1 to 1000s of vaults at 1 or more sites	Vaults consists of server, storage, ARQvault VMS software.
Policy driven automated tiering	Determines where video starts, how long it is there, where it goes next.
Video is active on all storage tiers	Optical jukeboxes and tape libraries are active. Video can be retrieved immediately.
Parallel search requests sent to all vaults	Finds the fastest path to video. Fast response on slow networks using low-res proxies.
Video is secure, unaltered, always available	3 levels of access security. Digital fingerprint (SHA-256) and chain-of-custody history. No single point of failure.

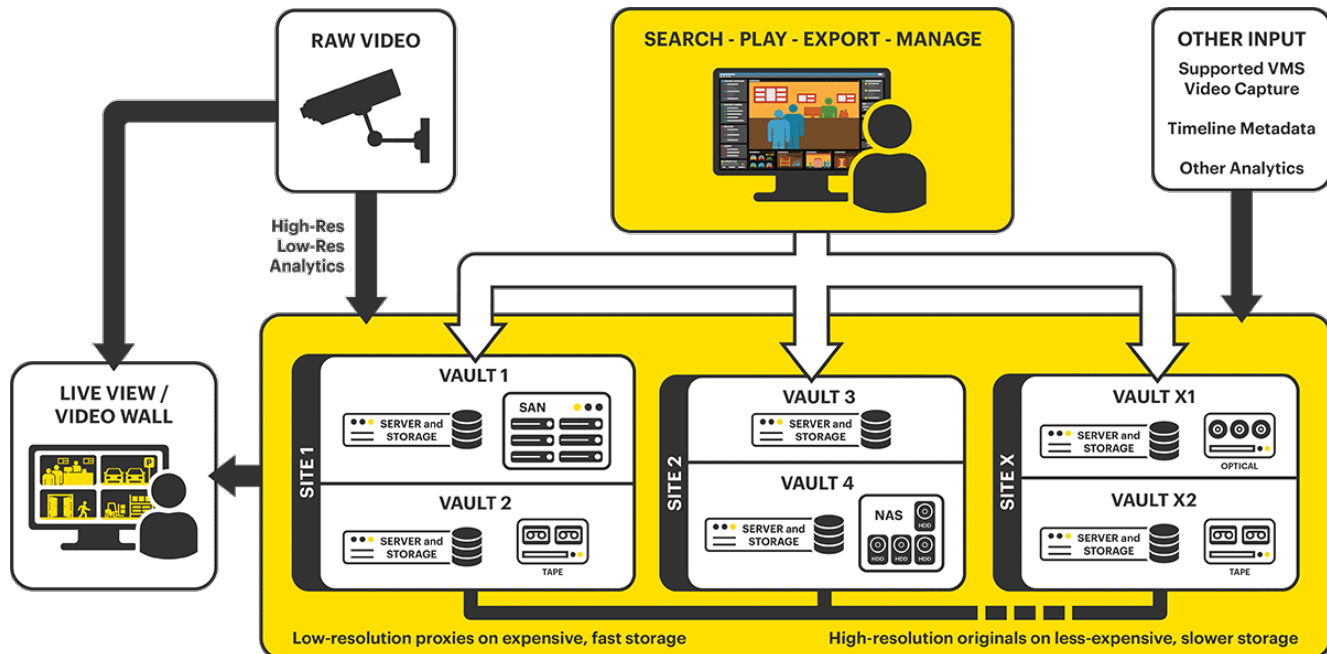


Fig 1 ARQvault Video Surveillance solution architecture

For more information on ARQvault VMS visit the StorMagic product page: <https://stormagic.com/arqvault/vms/>



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Specifications:

SUPPLIED ACCESSORIES

Power Cable (s)	1-3 USA Standard 117VAC, 3 prongs, 6ft
Keyboard	1 Basic Keyboard
Mouse	1 USB/PS2, Scroll Wheel, 3 Button
Restore	All original installation discs
Rail Kit	Rack mount systems only

V1200 SYSTEM

Processor	Intel® Quad Core
Internal Memory	16 GB DDR4 RAM 2666 MHz
Operating System	Windows IoT or Windows 10 Pro x64
Operating System Storage	500 GB M.2, 1 TB for Vaults larger than 50 TB
Video Archive Capacity	Up to 100 TB of SATA III Storage
RAID Level	None, 1, 5 or 6
Network Interface	2 Gigabit Ethernet RJ-45
Auxiliary Interfaces	USB 2.0 and 3.0 Ports
System Data Rate	Up 75 Mbps

V2200 SYSTEM

Processor	Intel® Hex Core
Internal Memory	32 GB DDR4 RAM 2666 MHz
Operating System	Windows IoT, Windows 10 Pro x64 or Windows 2019 Server w/5 CALS
Operating System Storage	500 GB M.2
Video Archive Capacity	Up to 100 TB of SATA III Storage
RAID Level	None, 1, 5 or 6
Network Interface	2 Gigabit Ethernet RJ-45
Auxiliary Interfaces	USB 2.0 and 3.0 Ports
System Data Rate	Up 180 Mbps

V3200 SYSTEM

Processor	Intel® 16-Core
Internal Memory	64 GB DDR4 RAM 3200 MHz
Operating System	Windows 10 Pro x64 or Windows 2019 Server
Operating System Storage	500 GB M.2, 1 TB for Vaults larger than 50 TB
Video Archive Capacity	Up to 100 TB of SATA III Storage
RAID Level	None, 1, 5 or 6
Network Interface	2 Gigabit Ethernet RJ-45
Auxiliary Interfaces	USB 2.0 and 3.0 Ports
System Data Rate	Up 300 Mbps

ENVIRONMENTAL

Operating	10° to 32° C (50° to 90° F), 8% to 80% (non-condensing)
Storage	-40° to 70° C (-40° to 158° F), 5 to 95% (non-condensing)



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PHYSICAL

CASE A

Form Factor	Mid-Tower Desktop with 2 Internal Storage Bays
Power Supply	500 Watt
Cooling	1 rear 120mm Fan
Dimensions	(HxWxD) 18.3 x 8.25 x 18.6 in. (465 x 210 x 472 mm)
Unit Weight (gross)	Approximately 30 lbs (9.1 kg.)

CASE B

Form Factor	Mid-Tower Desktop with 4 Hot Swappable Storage Bays
Power Supply	300 Watt
Cooling	1 x 120 mm
Dimensions	(HxWxD) 10.67 x 7.87 x 12.2 in. (270 x 200 x 310 mm)
Unit Weight (gross)	Approximately 40 lbs (18.1 kg.)

CASE C

Form Factor	Mid-Tower Desktop with 4 Hot Swappable Storage Bays
Power Supply	650 Watt 1+1 Redundant
Cooling	1 x 120 mm (Rear) & 2 x 120 mm (Middle) Fans
Dimensions	(HxWxD) 16.7 x 8.7 x 24.4 in. (425 x 220 x 620 mm)
Unit Weight (gross)	Approximately 50 lbs (22.7 kg.)

CASE K

Form Factor	2U Rack Mount with 2 Internal Storage Bays
Power Supply	400 Watt
Cooling	2x80mm (front) & 1x60mm, 2x40mm Fans (Rear)
Dimensions	(HxWxD) 3.5 x 19.4 x 16.6 in. (88 x 493 x 422 mm)
Unit Weight (gross)	Approximately 50 lbs (22.7 kg.)

CASE L

Form Factor	2U Rack Mount with 4 Hot Swappable Storage Bays
Power Supply	500 Watt
Cooling	4 x 80mm (front)
Dimensions	(HxWxD) 3.5 x 16.8 x 25.6 in. (89 x 426 x 650 mm)
Unit Weight (gross)	Approximately 60 lbs (27.3 kg.)

CASE M

Form Factor	2U Rack Mount with 4 Hot Swappable Storage Bays
Power Supply	650 Watt Redundant
Cooling	4 x 80mm (front)
Dimensions	(HxWxD) 3.5 x 16.8 x 25.6 in. (89 x 426 x 650 mm)
Unit Weight (gross)	Approximately 60 lbs (27.3 kg.)

CASE N

Form Factor	2U Rack Mount with 8 Hot Swappable Storage Bays
Power Supply	400 Watt
Cooling	3 x 80 mm Hot-Swappable Cooling Fans
Dimensions	(HxWxD) 3.42 x 17.24 x 21.94 in. (87 x 438 x 557 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)



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CASE O

Form Factor	2U Rack Mount with 8 Hot Swappable Storage Bays
Power Supply	500 Watt redundant
Cooling	3 x 80 mm Hot-Swappable Cooling Fans
Dimensions	(HxWxD) 3.42 x 17.24 x 21.94 in. (87 x 438 x 557 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)

CASE P

Form Factor	2U Rack Mount with 12 Hot Swappable Storage Bays
Power Supply	500 Watt Redundant
Cooling	3 x 80 mm Hot-Swappable Cooling Fans
Dimensions	(HxWxD) 3.42 x 17.24 x 21.94 in. (87 x 438 x 557 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)

CASE Q

Form Factor	3U Rack Mount with 16 Hot Swappable Storage Bays
Power Supply	875 Watt Redundant
Cooling	4 x 80mm Fans
Dimensions	(HxWxD) 5.2 x 17 x 27.8 in. (132 x 432 x 655.3 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)



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Part Numbering:

VNS Part numbers are 14 characters.

Platform:

- V1200: Entry Level Appliance
- V2200: Mid-Range Appliance
- V3200: Enterprise Appliance

Form Factor:

- A: Mid-Tower Desktop
- B: Small Hot-Swap Desktop
- C: Pedestal Desktop with Redundant Power Supply
- D: Workstation Desktop
- E: Workstation with Redundant PS
- F: High Density Workstation with Redundant PS
- K: 2U Rack Mount Chassis
- L: 2U Rack Mount with 6 Hot Swap Drives
- M: 2U Rack Mount w/ 6Hot Swap Drives & Redundant PS
- N: 2U Rack Mount w/8 Hot Swap
- O: 2U Rack Mount w/8 Hot Swap Drives & Redundant PS
- P: 2U Rack Mount w/12 Hot Swap Drives & Redundant PS
- Q: 3U Rack Mount w/16 Hot Swap Drives & Redundant PS

Subscription Duration: 1, 3, or 5

Number of Cameras: Quantity of cameras licensed (up to 100)

Vault Size: ARQvault licensed vault size in TB

RAID Status:

- S: No RAID
- R: RAID 5
- Y: RAID 6
- Z: RAID 1

Operating System:

- K: Windows 2019 Server
- X: Windows 10 Professional x64 Edition
- I: Windows IoT

Example:

V1205B-31210ZI: Entry level NVR in a Desktop case, 3-year subscription, 12 cameras, 10TB vault license configured as a RAID 1 with Windows 10 IoT.

