Wavestore Video Management Software (VMS) and Server/Storage Overview

It's never been easier to select the perfect Wavestore VMS solution for your application.

This guide will help you choose the correct level of Wavestore's VMS, as well as Wavestore's own NVRs and HVRs, providing options from general purpose surveillance through to fully integrated enterprise solutions.

1 Choose the required level of Wavestore VMS and quantity of camera channels required

2 Add any integration modules needed for operation with a host of third-party devices and sub-systems

3 If you would like to use Wavestore's own server and storage NVR/HVR solutions, please select the required unit from the back page

4 That's it! Technical support is free of charge and flexible Upgrade Bundles can be purchased at any time to keep your Wavestore solution up to date without the need to enter into a recurring contract

A full list of product options and pricing is available from our latest MSRP Product Guide. If you need any help, please contact your local Wavestore Authorised Distributor or get in contact with your local Wavestore office.

Choose your Wavestore VMS level

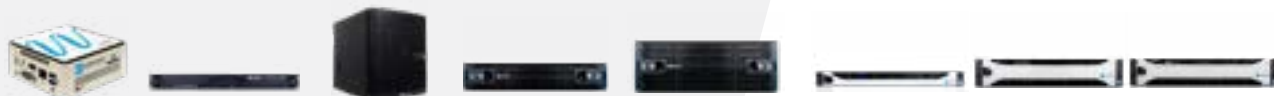| Version 6.16	Base	Premium	Enterprise	Ultimate
User Management				
Max cameras per deployment	Unlimited	Unlimited	Unlimited	Unlimited
Channel license type	Perpetual	Perpetual	Perpetual	Perpetual
Max cameras per individual server	32	128	254	254
Max concurrent WaveView & WaveView Mobile client connections per server	2	Unlimited	Unlimited	Unlimited
Max number of servers that can be accessed from a single client connection (Server Groups)	1	5	255	255
Video Management Software (VMS)				
Multiple languages supported	✓	✓	✓	✓
'Smart Search' retrospective motion search and on-server Video Motion Detection (VMD)	✓	✓	✓	✓
Multicast	✓	✓	✓	✓
IPv4 and IPv6 support	✓	✓	✓	✓
Unified multiple server health monitoring (within Server Group)	-	✓	✓	✓
Virtual Machine compatible (ESXi) via network or dongle licensing	-	-	✓	✓
LDAP / Active Directory support	-	-	✓	✓
Camera Integration				
IP, HD, 4K, Megapixel, Thermal, HD Analogue and Analogue camera integration	✓	✓	✓	✓
ONVIF Profile-S conformance	✓	✓	✓	✓
Automatic camera discovery and quick set up via Camera Groups feature	✓	✓	✓	✓
ONVIF audio talkback	✓	✓	✓	✓
H.265, H.264, MJPEG, MPEG-4, MxPEG (Mobotix), JPEG2000 video format support	✓	✓	✓	✓
Multi-sensor camera support	✓	✓	✓	✓
Analogue and HD Analogue encoder support	✓	✓	✓	✓
360° fisheye camera integration (including native Oncam and ImmerVision)	✓	✓	✓	✓
Very high Megapixel camera support (above 19MP)	-	Optional	Optional	✓
Metadata Engine				
Enables other third-party integrations and metadata search, including third-party event and EPoS transaction text search	-	✓	✓	✓
Third Party Integrations				
On-board camera motion detection & analytic Integration				
Via ONVIF pull-point and selected API integrations (please contact Wavestore for details)	✓	✓	✓	✓
Other Video Analytics (requiring Metadata Engine)				
People Counting, Crowd Monitoring, Heat Maps	-	Optional	Optional	Optional
Facial Recognition	-	Optional	Optional	Optional
Advanced motion detection	-	Optional	Optional	Optional
i-LIDS approved detection analytics	-	Optional	Optional	Optional
I/O Modules				
Modbus and Axis VAPIX I/O module compatibility	✓	✓	✓	✓
Text based analytics				
Electronic Point of Sale (EPoS) with enhanced text overlay capability	-	Optional	Optional	Optional
Automatic Number Plate Recognition (ANPR/LPR) with enhanced text overlay capability	-	Optional	Optional	Optional
Access Control				
Access Control systems	-	Optional	Optional	Optional
Intruder Detection & PIDS				
Intruder Detection & Optical Fibre Perimeter Intrusion Detection (PIDS) systems	-	Optional	Optional	Optional
Optex Redwall integration	-	✓	✓	✓
Infrared and White Lighting				
Intelligent IP LED lighting systems	-	Optional	Optional	Optional
Raytec infrared and white light integration	-	✓	✓	✓
Physical Security Information Management (PSIM)				
Command & Control systems	-	Optional	Optional	Optional
Identity Cloaking				
Video export compatibility with Facit Identity Cloaking (European GDPR compliant). Facit service not included	✓	✓	✓	✓
Audio				
Built-in camera, analogue capture, on-board server and other PC audio sub-systems	✓	✓	✓	✓
Remote Monitoring				
Remote monitoring and RVRCs	-	Optional	Optional	Optional
Asset Protection				
Asset tracking systems	-	Optional	Optional	Optional
Video Wall				
Wavestore video wall integration	-	✓	✓	✓
Datapath video wall integration	-	Optional	✓	✓
Specialist Integration				
Bespoke integration service for virtually any connectable device or sub-system	-	Optional	Optional	Optional

Version 6.16	Base	Premium	Enterprise	Ultimate
WaveView Client				
License-free WaveView client application compatible with Linux and Windows	✓	✓	✓	✓
Simultaneously display live and playback images on the same workspace	✓	✓	✓	✓
Configurable size, aspect ratio and position of camera layouts	✓	✓	✓	✓
User defined custom camera layouts	✓	✓	✓	✓
Re-order camera positions in the device tree	✓	✓	✓	✓
Multi-streaming (e.g. record high resolution streams while viewing low resolution streams)	✓	✓	✓	✓
3-Axis mouse or joystick support for PTZ camera control	✓	✓	✓	✓
Synchronised playback of multiple camera images	✓	✓	✓	✓
Client dewarping of any 360° fisheye cameras in live, playback and export with virtual camera views	✓	✓	✓	✓
Camera status summary screen	✓	✓	✓	✓
Interactive multilayer maps with camera/device status icons (stored and accessed from the recording server(s))	-	✓	✓	✓
Exporting video from the WaveView Client				
3-click evidential export of any recorded video	✓	✓	✓	✓
Export complete 360° video for full post-event analysis	✓	✓	✓	✓
Video annotations (Bookmarking)	✓	✓	✓	✓
Evidential video locking	✓	✓	✓	✓
Multiple simultaneous camera video export	✓	✓	✓	✓
Export to multiple video and audio formats (incl. wsb, avi, mp4, wmv, mov, h264, mkv, mjpeg)	✓	✓	✓	✓
WaveView Mobile Client				
License-free mobile client application for Android and iOS devices	✓	✓	✓	✓
WaveView Mobile support for privacy masks	✓	✓	✓	✓
WaveView Mobile support for multi-streaming	✓	✓	✓	✓
Recording Management				
Configurable recording schedules	✓	✓	✓	✓
Configurable multi-track recording per camera	✓	✓	✓	✓
Time-lapse recording function (recording i-frames only) with boost option on event	-	✓	✓	✓
Lip-sync audio recording	✓	✓	✓	✓
iSCSI support	✓	✓	✓	✓
Event-driven video switching	✓	✓	✓	✓
Failover capability	-	-	✓	✓
HDD Management				
Allocate physical HDDs to logical HDDs	✓	✓	✓	✓
Standard RAID capability (not HyperRAID) - up to RAID6 (N+2 redundancy), requires compatible RAID controller	-	✓	✓	✓
Wavestore HyperRAID capability - up to RAID6 (N+2 redundancy), requires compatible Host Bus Adapter	-	✓	✓	✓
Wavestore HyperRAID Plus capability - up to N+5 redundancy, requires compatible Host Bus Adapter	-	-	-	✓
EcoStore™ - Spin down of HDDs within HyperRAID arrays (N+2 to N+5) to save up to 80% energy and HDD wear	-	-	✓	✓
Search Engine				
Instantaneous retrieval of recorded video via playback slider	✓	✓	✓	✓
Global text search of operator event notes (Bookmarks)	✓	✓	✓	✓
Event/Alarm search and instant replay	-	✓	✓	✓
Comprehensive metadata text search tools	-	✓	✓	✓
Alarm and Event Management Engine				
Events managed in each individual server (no dedicated events server required)	✓	✓	✓	✓
Select a server to act as central event engine, to share events across all servers	-	-	✓	✓
User configurable event and alarm management	✓	✓	✓	✓
Customise event names and rules for individual connected devices	✓	✓	✓	✓
Configurable event email notifications	✓	✓	✓	✓
Manual and/or automatic digital output trigger	✓	✓	✓	✓
Flexible cause & effect rules engine	✓	✓	✓	✓
Live event stream	-	✓	✓	✓
Security				
VMS embedded within ultra-secure Linux Operating System (OS)	✓	✓	✓	✓
Ability to allow access from authorised IP addresses only	✓	✓	✓	✓
Configurable WaveView client software connection time-out	✓	✓	✓	✓
Pre-configured firewall protection	✓	✓	✓	✓
User privilege separation protecting against unauthorised administrator access	✓	✓	✓	✓
Up to 4096bit encryption	✓	✓	✓	✓
Use of strong password hashes protect against "man-in-the-middle" interception of data	✓	✓	✓	✓
Enforceable password policies with mix of letters, numbers and other characters	✓	✓	✓	✓
Updates				
Free sequential software upgrades included (within current version - v6.14 to v6.16 to v6.18 for example)	2 upgrades	2 upgrades	2 upgrades	8 upgrades
Upgrade Bundles for ongoing software version releases, provides six sequential upgrades	Optional	Optional	Optional	Optional
Easy upgrade to higher levels of software (e.g. Base to Premium, Premium to Enterprise, Enterprise to Ultimate)	✓	✓	✓	N/A

Wavestore NVR and HVR Overview

Features:	A-Series NVRs	E-Series NVRs & HVRs	PT-Series NVRs	V-Series NVRs	X-Series NVRs	WR-Series WR14 NVRs	WR-Series WR212 NVRs	WR-Series WR216 NVRs
Form factor	Desk or VESA monitor mount (supplied)	1U rackmount	Mini tower	2U rackmount	4U rackmount	1U rackmount	2U rackmount	2U rackmount
Max. IP channels (NVR version)	8	32	48	128	254	64	128	254
Max. IP channels (HVR version)	-	16	-	-	-	-	-	-
Max. analogue channels (HVR version)	-	16	-	-	-	-	-	-
Max. audio channels	8	32	48	128	254	64	128	254
Max. IP throughput	100 Mbits/s	300 Mbits/s	300Mbits/s	1200Mbits/s	1200Mbits/s - standard 1800Mbits/s - option 2400Mbits/s - option	300Mbits/s	600Mbits/s	1200Mbits/s
Operating System	Linux	Linux	Linux	Linux	Linux	Linux	Linux	Linux
Local WaveView client operation	Yes (up to 3Mbits/s)	Set-up only	Yes (up to 15Mbits/s)	Set-up only	Set-up only	Set-up only	Set-up only	Set-up only
Remote WaveView client operation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max. No. HDDs	1 x internal	2 x internal	4 x hot-swap	12 x hot-swap	24 x hot-swap	4 x hot-swap	12 x hot-swap	4 x internal & 12 x hot-swap (16 total)
Max. HDD capacity	2TB	20TB	40TB	120TB	240TB	40TB	120TB	160TB
HDD type	2.5" form factor	Surveillance grade - standard Enterprise grade - option	Surveillance grade - standard Enterprise grade - option	Surveillance grade - standard Enterprise grade - option	Surveillance grade - standard Enterprise grade - option	Enterprise grade	Enterprise grade	Enterprise grade
Typical video storage rate	100 FPS	600 FPS	600 FPS	1600 FPS	1600 FPS	600 FPS	1200 FPS	1200 FPS
Compression formats	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000	H.265, H.264, MJPEG, MPEG-4, MxPEG & JPEG2000
Wavestore VMS compatibility	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS	Compatible with all levels of Wavestore's VMS
Redundant PSU (dual)	-	-	-	Yes	Yes	Optional	Yes	Yes
RAID5/RAID6 (N+1/N+2) redundancy using MegaRAID	-	-	-	-	-	-	Yes	Yes
RAID5/RAID6 (N+1/N+2) redundancy using HyperRAID™	-	-	-	Yes	Yes	-	-	-
Up to N+5 redundancy using HyperRAID™ Plus	-	-	-	Yes	Yes	-	-	-
EcoStore™ compatible	-	-	-	Yes	Yes	-	-	-
Standard warranty	One-year back to base	Three-year back to base	Three-year back to base	Three-year back to base	Three-year back to base	Five years / Next business day on site	Five years / Next business day on site	Five years / Next business day on site
Extended warranty	-	Five-year option	Five-year option	Five-year option	Five-year option	-	-	-
On-site hardware support options	-	-	-	-	-	Four-hour mission critical on-site hardware support	Four-hour mission critical on-site hardware support	Four-hour mission critical on-site hardware support

The perfect match for Wavestore's VMS

Each Wavestore server/storage NVR and HVR has been specifically designed to operate with any level of Wavestore's VMS.

With a solution for virtually any application from general purpose surveillance to mission-critical installations with built-in redundancy, Wavestore's comprehensive range of NVRs and HVRs are available with flexible options to ensure the perfect unit for the job at hand.

Wavestore provides up to a full five-year warranty with next business day on-site support** to give complete peace of mind.

Visit **www.wavestore.com/hardware** for a full overview of Wavestore's NVR and HVR ranges.

**Model dependent, please see warranty section for details.
Specifications subject to change without notice, please check with your local Wavestore representative prior to ordering.