



VMS Pro

Client Software

The VMS Pro client software is designed to configure and manage the security equipment, including XVRs, NVRs, and IP cameras, in a unified and intuitive manner. It provides various functions including live view, video recording, video clip search and playback, and event and alarm receiving.

Key Functions

Live View

- Supports standard split-screen with up to 128 windows and wide split-screen with custom 8 × 8 windows.
- Supports split-screen customization.
- Supports live view through one or multiple fisheye cameras in fisheye Mode, and supports panoramic image, PTZ, AR dome camera, and cylinder modes.
- Supports intelligent linkage.
- Supports AI card push.
- Supports restoring the latest live view state after the client is restarted.
- Supports displaying or hiding the trigger information in live view.
- Supports different scales (original, stretched, 4:3, and 16:9) for displaying images in the preview window area.

Recording Setting

- Supports recording the main stream and sub stream for playback.
- Supports setting manual recording and schedule strategy.
- Supports continuous video recording, event video recording
- Supports customization of overwriting video files and deleting expired local video files.

Event Management

- Supports alarm sound customization.
- Supports displaying a subscribed event in real time in the event center on the client when the subscribed event is triggered.
- Supports popping up the live view and captured image when an alarm is reported.
- Supports receiving real-time events, such as face recognition events.
- Supports searching historical events by event type or event details.
- Supports exporting historical events in CSV format.
- Supports searching and downloading the captured images triggered by events and the videos triggered by events.
- Supports remote device configuration and AI scenario groups and event detection area settings.
- Supports configuring video events, intelligent analysis events

Recording Playback

- Supports remote playback.
- Supports synchronous playback of up to 16 split-screens.
- Supports real-time playback, normal playback, alarm input playback, event playback, and intelligent playback.
- Supports accurately locating the playback time.
- Supports skipping the video clips not focused during VCA playback.
- Supports filtered video clips and detected people or vehicles.
- Supports searching and exporting the captured event-triggered images by date and event type.
- Supports downloading the video files of the devices added through cloud P2P.
- Supports downloading the clipped video files.
- Provides a video player in the installation directory for viewing the downloaded video files.

- Supports searching for the recorded video files triggered by events, playing video files, and downloading video files.

Personnel Management

- Supports the management of personnel in different face recognition groups.
- Supports getting personal information from the added devices.
- Support importing and exporting personnel information and facial information.
- Supports collecting facial images through a third-party camera (USB camera or built-in camera in the computer).
- Supports viewing statistical data (including personnel and facial images) on clients and devices.

Vehicle Management

- Supports the management of license plates in different license plate recognition groups.
- Supports getting license plate information from the added devices.
- Supports importing and exporting license plate records and data.
- Supports collecting license plate images through a third-party camera (USB camera or built-in camera in the computer).
- Supports viewing statistical data (including license plate and vehicle management) on clients and devices.

Time and Attendance

- Supports setting the general rules on time and attendance.
- Supports setting different rules for different attendance scenarios, for example, single-shift scenarios, working-shift scenarios, and holiday scenarios.
- Supports customizing overtime duration and setting the corresponding working hours.

- Supports setting the schedules, shifts, and shift schedules flexibly and quickly.
- Supports setting multiple attendance sheets in one shift.
- Supports getting detailed attendance data from the management devices. The data involves sign-in, being late and leaving early, working, and working overtime.
- Supports multiple types of reports as required.
- Supports sending the original attendance data in CSV format.
- Supports counting the rest time as attendance time.
- Supports flexible weekend shift arrangements.
- Supports flexible schedules. In a flexible schedule, the days when the attendance time is not full are counted as absence days.

Security Control

- Supports adding areas as hot spots on an electronic map and watching the videos from the link cameras.

Network

- Supports cloud P2P devices.
- Supports adding devices by IP address, domain name, DDNS, and IP segment, and supports importing and exporting devices in batches.
- Supports using the Transport Layer Security (TLS) protocol to enable transmission encryption when adding devices.
- Supports searching for the activated online devices.
- Supports time synchronization by the NTP protocol from the client to the added devices.
- Supports checking the online users of devices.
- Supports the bidirectional audio and broadcast functions.
- Supports the applications in LAN and WAN.

PTZ Control

- Supports remote control, presetting, cruise, and mode setting of the PTZ.
- Supports the local menu on the control panel of the PTZ.
- Supports PTZ control of one-click cruise and one-click stop.
- Supports arming and tracking targets (human or vehicles).

Arming

- Supports transmission encryption when a private protocol is used for login.
- Supports upgrading device firmware after a new version is detected online.
- Supports importing and exporting device lists.
- Supports searching and backing up logs.
- Supports adding facial recognition devices.
- Supports remotely configuring the added devices.
- Supports adding the online devices registered on the cloud P2P after logging in to the cloud P2P.
- Supports creating a password to activate a new device.
- Supports resetting device passwords.
- Supports setting email information when activating a device and resetting the password of the device via emails.
- Supports hardware decoding of live view and playback.
- Supports downloading video files in RF, MP4 and AVI format to PCs.
- Supports user permission management.
- Supports the electronic map function, including adding, deleting, editing, viewing, zooming in/out, and moving electronic maps.
- Provides the topology management module to monitor the network health status of the connected devices.
- Provides the configuration wizards for access control, time, and attendance to help users quickly start working.
- Supports importing the events in CSV format (encrypted) for device access control to the client.

- Supports configuring the display format of the date and time of the client.
- Supports searching and analyzing the results of video and image capture tasks.
- Supports face image retrieval, human retrieval, and vehicle retrieval, and supports exporting relevant video files.

Specifications

Type		VMS Pro	
Database	Client database	SQLite (encrypted)	
	Third-party database	Microsoft®SQLServer®2008 and later, SQL lite 3.28.0 and later	
Supported languages		English, simplified Chinese, Russian, Italian, German, Polish, French, Spanish, Portuguese, traditional Chinese, and Japanese	
Customer	Arming	User	One super user and 50 sub users
		Electronic map	256
		Group	One custom group One default group
		Channel	Each group has 128 channels.
	Video	Live view	There are 128 live views on one screen.
		Auxiliary screen preview	There is one primary screen and three secondary screens for live view.
		Recording Playback	16 channels are played at a time.
		Simultaneous play	16 channels are played synchronously.
		Downloading	Downloading 16 files at a time is allowed.
	Access permission management	Face group	There can be at most 16 groups for a single device.
		License plate group	There can be at most 64 groups for a single device.
		Number of registered faces	There can be at most 5000 face images registered for a single device.
		Upper limit of the number of captured face images	There can be at most 1 million images for a single device.
		Face attendance data	The retention period of the attendance result and that of the original records depend on the hard disk capacity and the amount of data generated during the application.

System Requirements

*To achieve high stability and good performance, the following system requirements must be satisfied.

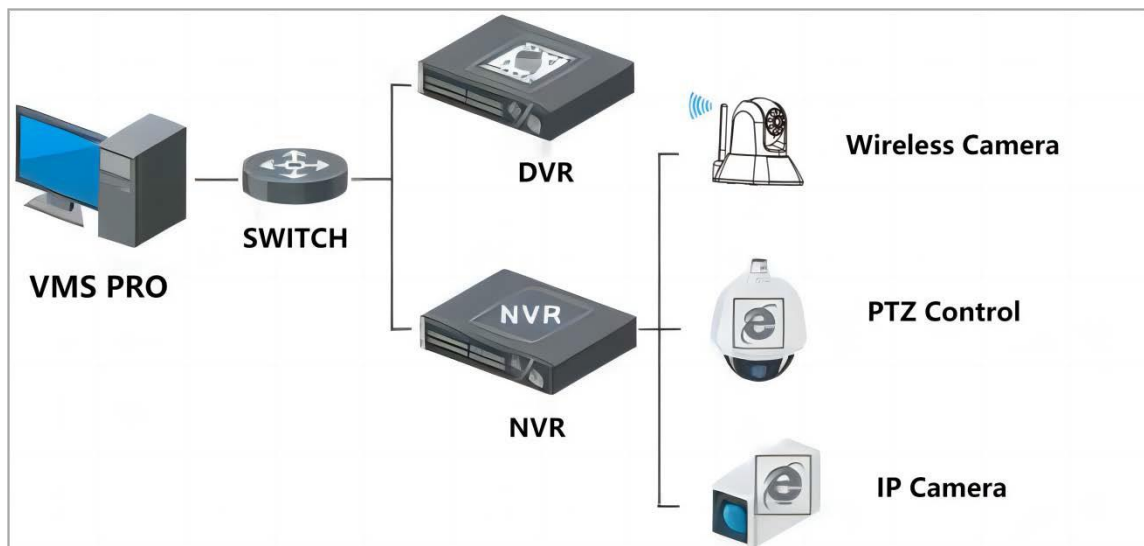
Item	Requirement
Operating system	Microsoft Windows 7, 10, 11, or later(32-bit or 64-bit)
CPU	Intel core i5 4590 @3.3GHz or higher
Memory	4 GB or larger
Resolution	1280 x 768 or higher

Live View of Performance

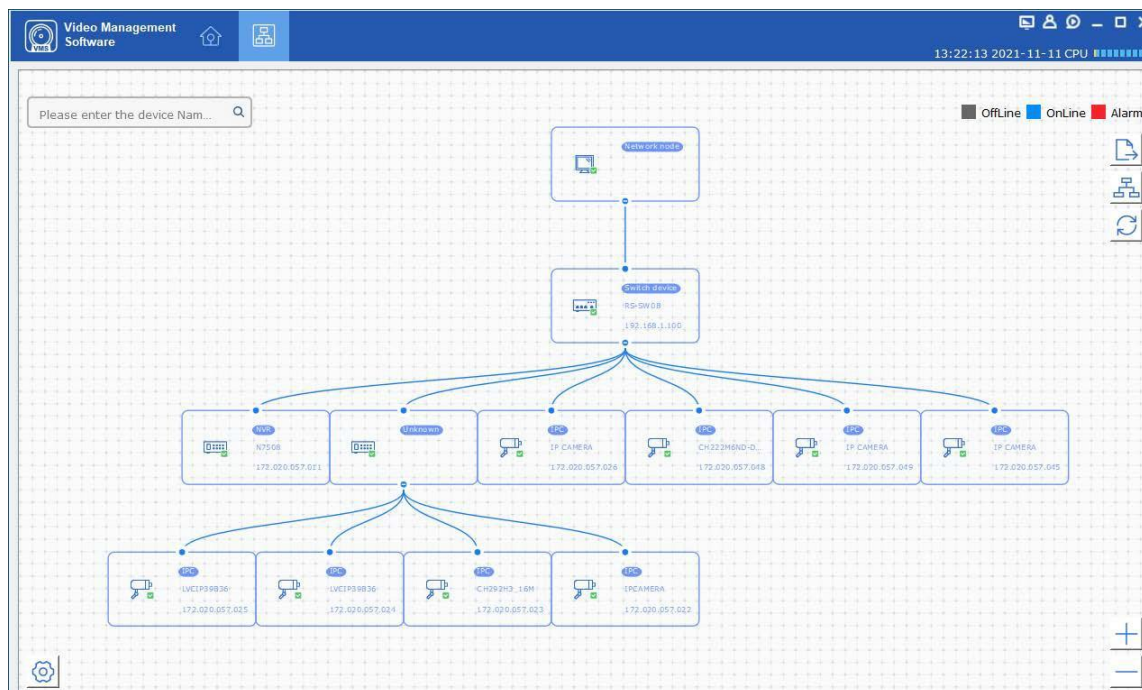
H.264											
Resolution	Bit rate (Mbps)	Frame rate (fps)	CPU: i3-7100@3.90GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i5-6500@3.6GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i7-10700k@4.8GHz Graphics card: GTX1050Ti Memory: 16 GB; Windows 10 (64-bit)		
			Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)
720P	1	30	17	38.5	807	15	40.6	645	25	23.1	1048.1
1080P	2	30	11	45.3	727	8	75.8	545.8	21	39.7	1368.1
5MP	4	30	5	92.1	648	3	65.7	465.5	10	59.8	1490
8MP	6	30	-	-	-	-	-	-	6	56.9	1172
H.265											
Resolution	Bit rate (Mbps)	Frame rate (fps)	CPU: i3-7100@3.90GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i5-6500@3.6GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i7-10700k@4.8GHz Graphics card: GTX1050Ti Memory: 16 GB; Windows 10 (64-bit)		
			Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)
720P	1	30	17	41.5	946	15	43.7	910.3	25	26.3	1516.5
1080P	2	30	11	58	961.6	8	82.6	1016	21	46.1	1832.6
5MP	4	30	5	92.3	1069	3	82.4	769	10	71	2311.9
8MP	6	30	-	-	-	-	-	-	6	85.6	1904
Resolution	Bit rate (Mbps)	Frame rate (fps)	CPU: i5-8400@2.8GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i7-12700F@4.9GHz Graphics card: GT730; Memory: 16GB; Windows 10 (64-bit)					
			Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)			
720P	1	30	20	33	1211.3	25	18.5	642.3			
1080P	2	30	18	27	1024	21	22.4	1292.6			
5MP	4	15	10	25	1121	10	24.6	1189.6			
8MP	6	7	3	11	774.3	6	26	1346.5			

H.264+											
Resolution	Bit rate (Mbps)	Frame rate (fps)	CPU: i3-7100@3.90GHz Graphics card: GT630; Memory: 8 GB; Windows 10 (64-bit)			CPU: i5-6500@3.6GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i7-10700k@4.8GHz Graphics card: GTX1050Ti Memory: 16 GB; Windows 10 (64-bit)		
			Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)
720P	1	30	17	37.1	807	15	41.6	633.1	25	30.6	1055
1080P	2	30	11	44.5	724.3	8	71.5	524.2	21	40.5	1370.3
5MP	4	30	5	90.5	638	3	60.5	465.9	10	54.4	1414.6
8MP	6	30	-	-	-	-	-	-	6	56.6	1087.4
H.265+											
Resolution	Bit rate (Mbps)	Frame rate (fps)	CPU: i3-7100@3.90GHz Graphics card: GT630; Memory: 8 GB; Windows 10 (64-bit)			CPU: i5-6500@3.6GHz Graphics card: GT730; Memory: 8 GB; Windows 10 (64-bit)			CPU: i7-10700k@4.8GHz Graphics card: GTX1050Ti Memory: 16 GB; Windows 10 (64-bit)		
			Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)	Number of channels	CPU (%)	Memory (MB)
720P	1	30	17	40.5	945	15	45.9	908.4	25	33	1611.7
1080P	2	30	11	56.3	963	8	83.9	1025	21	46.3	1835
5MP	4	30	5	91.6	1062	3	83.2	787.5	10	72.9	2319
8MP	6	30	-	-	-	-	-	-	6	86.4	1919

Video Security Topology

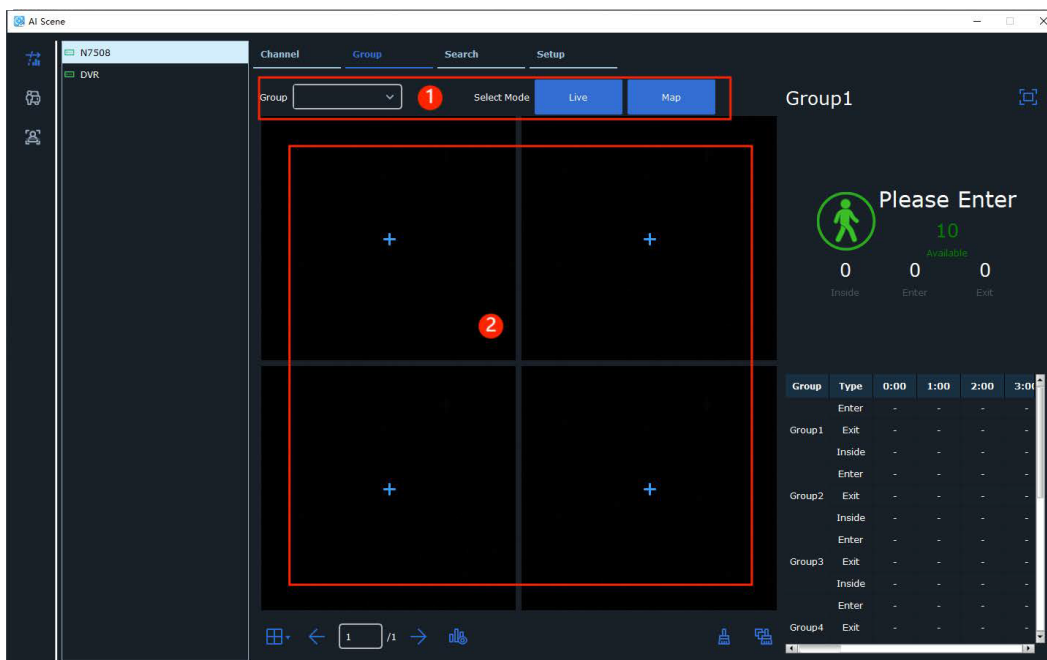


Topology Management of Thin Network Management Switches

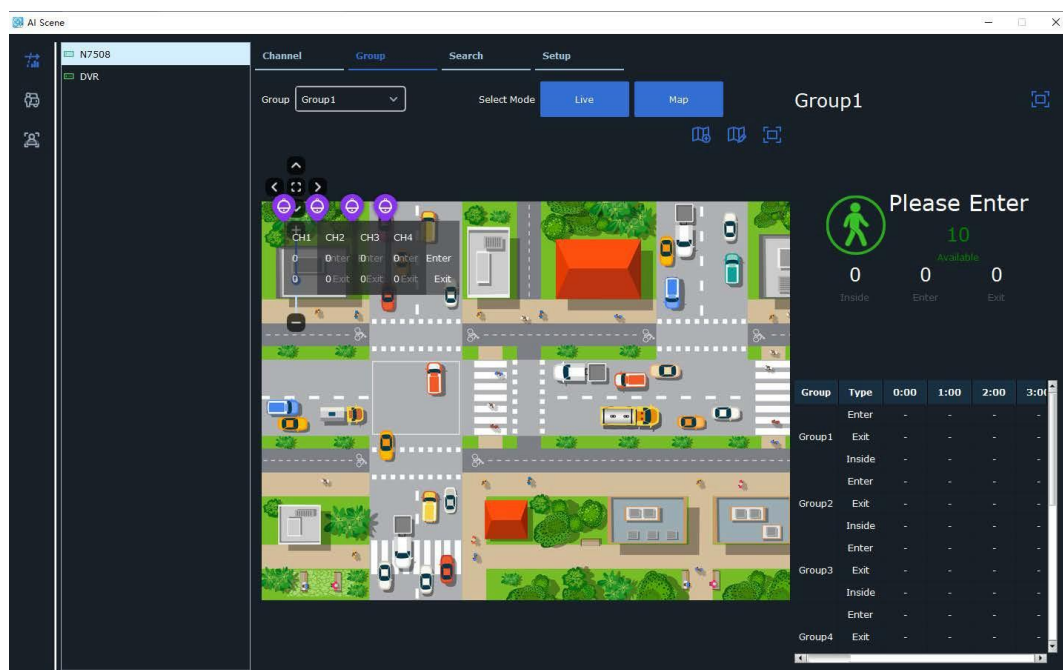


Intelligent Scenarios

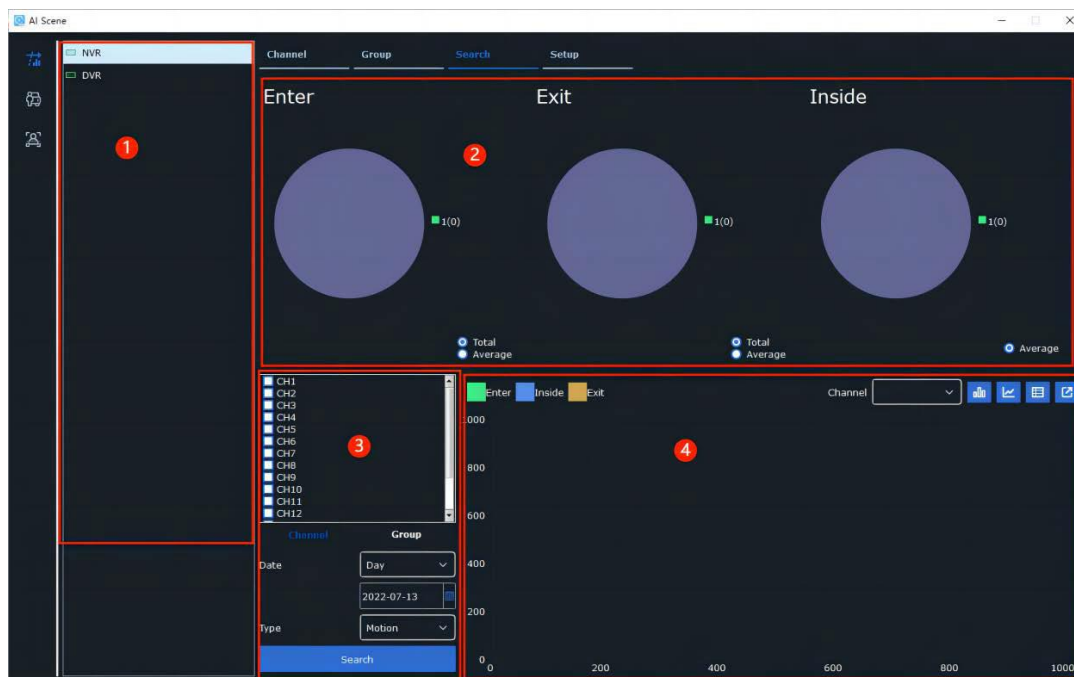
Cross Counting



Electronic Map Mode



Statistical Table



Face Attendance

