

VMS PRO

1.VMS Pro Introduction

1.1. VMS Pro Overview

Video Management Software (VMS) is used to manage several security monitoring devices. The VMS Pro client works with devices such as XVRs, NVRs, and IP cameras.

The software features include:

- Resetting the password.
- Supporting usage by multiple users.
- Adding a single device, devices in batches, and devices with different protocols.
- Configuring devices remotely.
- Viewing videos from multiple devices in real time and playing back the recordings.
- Supporting the cruise view of videos from multiple devices.
- Playing back recordings and viewing captured images remotely.
- Configuring various types of alarm detections.
- Configuring electronic maps so you can locate devices anytime to deploy and manage the devices easily.
- Querying and exporting logs.
- Supporting face recognition, human and vehicle recognition, and license plate recognition.
- Supporting intelligent configuration and attendance management.
- Supporting intelligent scene preview, search, and configuration.
- Supporting face recognition, license plate recognition, human and vehicle detection, perimeter intrusion detection, line crossing detection, cross counting, crowd density detection, queue length detection, and more.
- Importing and exporting device information files with one click.
- Managing files, and viewing images and videos separately.

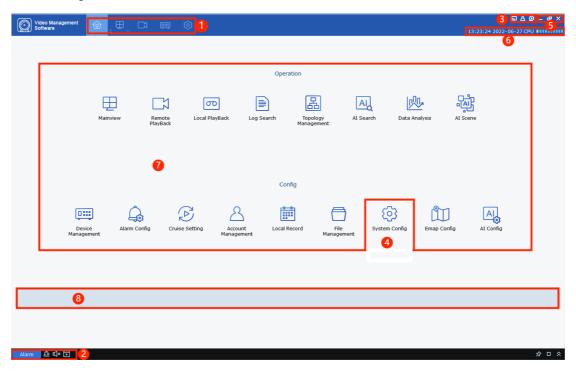
1.2. VMS Pro Running Configuration

The software configuration involves the operating system, CPU, memory, and graphics card.

- Operating system: Windows 7, Windows 10, Windows 11, macOS 11.6 or later
- CPU: Intel® Core™ i5-4590 @ 3.3 GHz or higher
- Memory: 4 GB or higher
- Graphics card: NVIDIA GT 730 or higher

1.3. VMS Pro Main Interface

The VMS Pro main interface is shown in the following figure. Each part is described in the table below the figure.



No.	Item	Description
1	Function tab Start and log into VMS Pro. On the main interface that you will find the supported functions. If you click a icon, you go to the function page.	
2	E v e n t management	Click or wor to mute or unmute the alarm prompt.
		Click or to deny or allow the alarm pop-up.
		Click to clear alarms.
		Click Alarm to view alarms. For more information, see Chapter 15 "Alarm Settings".

	User management	Click to set the resolution.
3		Click oto pop up the player.
		Click and select to lock the screen. Then a password is required to log into the system.
		Click and select to switch users.
		Click and select to view the software name and version number.
4	S y s t e m management	Click to go to the System Config page, where you can set the language, auto login and password to be remembered, file type and storage path, and alarm sound.
		Click to minimize the software window.
5	W i n d o w management	Click to maximize the software window.
3		Click or to restore the default window layout.
		Click × to exit the software.
6	System status	View the current system time, CPU usage, username, and login time.

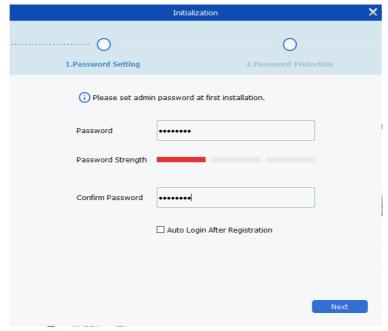
	Cunction list	The function list is divided into an operation area and a configuration area. The functions are described as follows. • Mainview Mainview: Connect cameras to the system to view videos in real time. When viewing a video, you can record the video locally, capture images, and use voice intercom, digital zoom, and cruise view. • Remote PlayBack Remote PlayBack: Select a date to view videos and images remotely, and cut and download them to local storage. • Local PlayBack: View recordings or export them from the client. • Log Search Log Search Log Search: Query and export logs from the client both locally and remotely. • File Management File Management: Search for local recordings and images. • Face Attendance Face Attendance: Set the attendance time to record people who enter and leave. • AI Scene AI Scene: Count the number of people who enter and leave a channel or group, and raise an alarm if the number reaches the limit. • Data Analysis Data Analysis: Conduct an analysis of the data from faces, humans and vehicles, cross counting, heat maps, and attendance. When you hover the cursor ove	 AI Search AI Search: Search for and compare faces, humans and vehicles, and repeat visitors. Specify relevant conditions and search for all faces that meet the conditions. Summarize the identities and merge visitors with a duplicate identity. Device Management Device Management: Add or remove device files, and manage device settings remotely. Alarm Config: Set the device alarm type, which can be motion, I/O, video loss, PIR, and intelligent. Cruise Setting: Set the cruise channels and devices. Account management: Add or delete sub-users, and modify sub-user permissions. Local Record Local Record: Specify a file storage path and set the recording plan. File Management: Manage recordings and images that are recorded manually. Emap Config: Place cameras on an electronic map so you can quickly know the location where something happens. AI config: Configure the device face library, settings, alarm, and attendance. r a function tab. the function
8 F	Function tip	description appears in that area in	

2. Registration and Login

2.1. Creating an Administrator Account

During your first login to VMS Pro, set the administrator password and security questions as prompted by the system. The password is used to log into the system, and the security questions are used to reset the password by answering the questions.

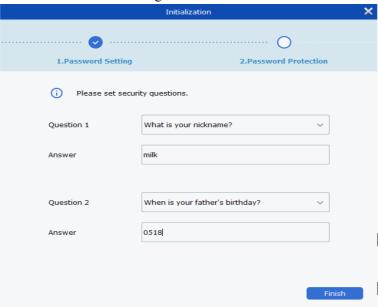
Step 1: Double-click **VMS Pro**. The **Initialization** screen is displayed, as shown in the following the figure:



Set the administrator password. The parameters are described in the following table:

Parameter	Description	
Password	Length: 8 to 32 characters without spaces; allowed: uppercase letters, lowercase letters, digits, and special characters.	
Password Strength	Password complexity. Red indicates that the password is not complex or secure, and green indicates that the password is complex and secure. Set a highly secure password as prompted by the password strength.	
Confirm Password	Ensure that the passwords are consistent.	
Auto Login After Registration	If selected, you log into the system automatically after registration. Otherwise, the login screen is displayed.	

- **Step 2:** Click **Next** after you set the password.
- **Step 3:** Select questions and enter the answers. If you forget your password, you can reset the password by answering the questions.
- Step 4: Then click Finish to save the settings.



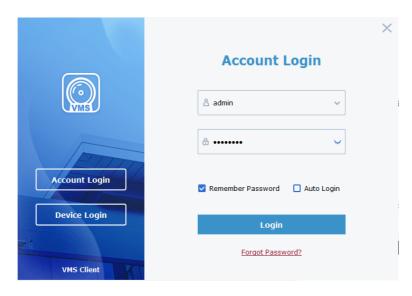
2.2. Logging into VMS Pro

1. After device initialization, enter the account and password to log into VMS Pro.

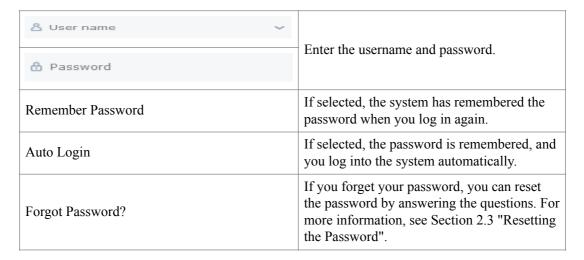


Step 1: Double-click VMS Pro

The login screen is displayed, as shown in the following figure:

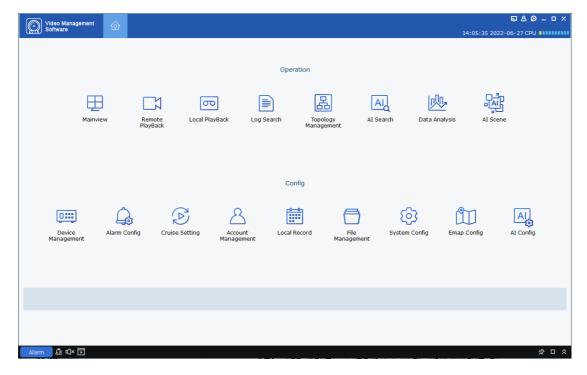


Step 2: Set parameters. The parameters are described in the following table:



Step 3: Click Login.

The system interface is displayed, as shown in the following figure:

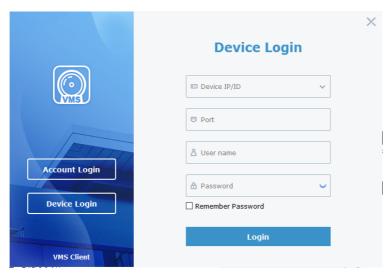


2. Log into VMS Pro through device login.



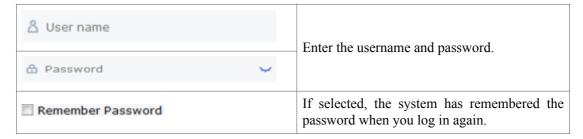
Step 1: Double-click VMS Pro

Step 2: After the login screen is displayed, click **Device Login** on the left. The device login screen is displayed, as shown in the following figure:

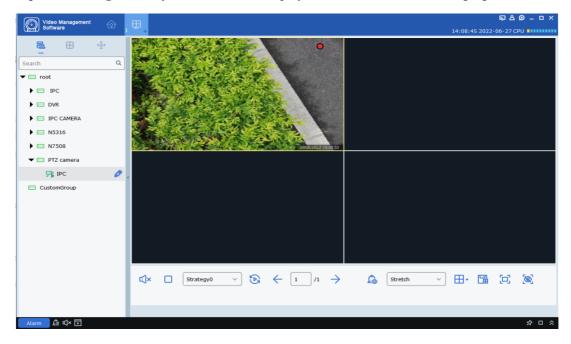


Step 3: Set parameters. The parameters are described in the following table:

Parameter	Description
□ Device IP/ID ✓	Enter the device IP/ID.
Client port	Enter the port number.



Step 4: Click Login. The system interface is displayed, as shown in the following figure:



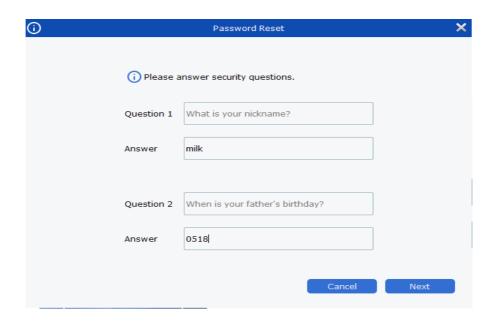
Note: For more information about device login, see Chapter 3 "Device Login".

2.3. Resetting the Password

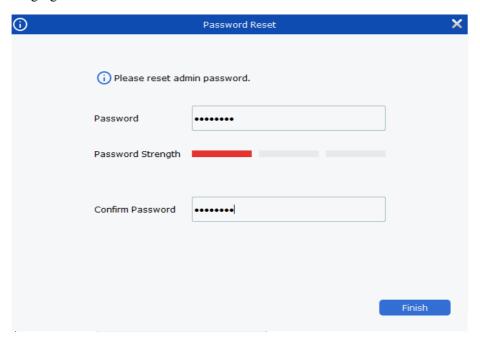
If you forget your password, you can reset the password by answering the questions.

Step 1: Double-click VMS Pro to go to the login screen.

Step 2: Click Forgot Password? The screen of password security questions is displayed, as shown in the following figure:



Step 3: Answer the questions and click **Next**. The password reset screen is displayed, as shown in the following figure:



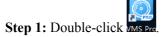
Step 4: Set the password. The parameters are described in the following table:

Parameter	Description		
Password	Length: 8 to 32 characters without spaces; allowed: uppercase letters, lowercase letters, digits, and special characters.		
Password Strength	Password security. Red indicates that the password is insecure, and green indicates that the password is secure.		
Confirm Password	Ensure that the passwords are consistent.		

Step 5: Click **Finish** to save the settings.

3.Device Login

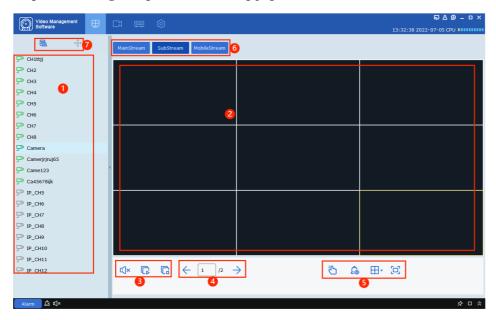
3.1. Device Login



Step 2: After the login screen is displayed, click **Device Login** on the left. The device login screen is displayed.

Step 3: Set parameters. The parameters are described in the following table.

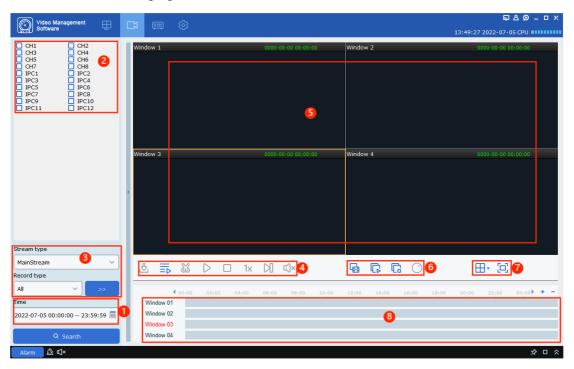
Step 4: Click Login to go to the following page:



No.	Item	Description
1	Device area	View all the devices bound with the current IP address.
2	Preview area	View the windows of devices if the devices are connected properly.
3	Control area	Control the play and stop of all windows.
4	Page switch area	Switch pages if there are multiple preview pages.
5	Screen area	Set the number of windows, full screen mode, manual alarm switch, and alarm display switch.
6	Stream area	Select a steam to play.
7	Switch area	Switch between the device tree and PTZ control.

3.2. Remote Recording Playback

Step 1: On the function tab, click **Remote Playback** to go to the remote recording playback page, as shown in the following figure:



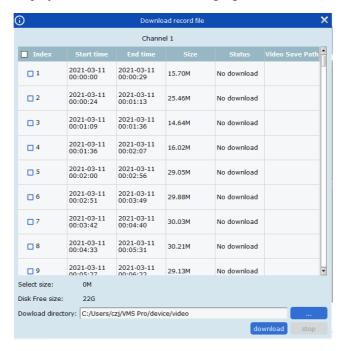
Each part is described in the following table:

No.	Item	Description		
1	Time	Select the time period for search.		
2	Channel area	Select the channel for playback.		
2	a 1	Select the recording type and stream type for search.		
3	Search area	Click Q Search		
		Control the recording playback and sound.		
		• Play back recordings of multiple channels synchronously.		
		• D: Start playing back a recording.		
	Playback control area	• 00: Pause recording playback.		
		Stop playing back a recording.		
4		• Move one frame forward when playing back a recording.		
		• ७ : Download a recording.		
		• 1x: Speed up or slow down a recording.		
		Click v to enable the sound, or click to adjust the sound volume.		

5	Recording playback area	View videos and split windows through multiple ways. When viewing a video, you can capture images, record the video, and use digital zoom. Capture: Select a video window that has enabled recording, and click or right-click to select capture to capture an image. Digital zoom: Click to zoom in the select area. Recording: Select a video window that has enabled recording, and click. Screenshot: Select a device window that has enabled recording, and click.
6	Video control area	☐: Play back recordings of multiple channels synchronously. ☐: Stop playing back recordings of all channels. ☐: Use the specific mode for fisheye devices. ☐ Intelligent Search.
7	Video window and display mode	Click to select the number of video windows. Click or right-click to select Fullscreen to enter full screen mode for a video window.
8	Time progress area	View the existing recording information.

3.3. Device Recording Download

Step 1: Select a video window that has enabled recording, and click in the playback control area. A dialog box is displayed, as shown in the following figure:



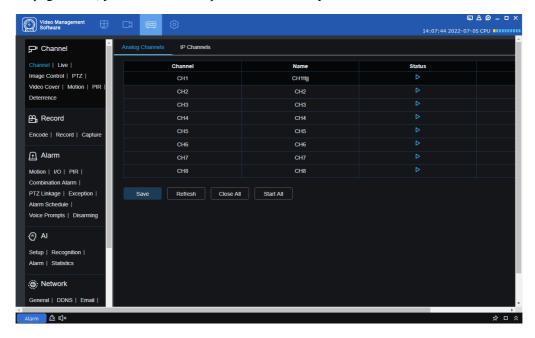
Step 2: Select the recording you want to download and specify the storage path.

Step 3: Click download.

Note: For information about System Config, see Chapter 19 "System Configuration".

3.4. Remote Settings

On the page below, you can set device parameters remotely.



3.5. System Configuration

On the function tab, click **System Config** to go to the system configuration page. For detailed operations, see Chapter 19 "System Configuration".

4. Device Management

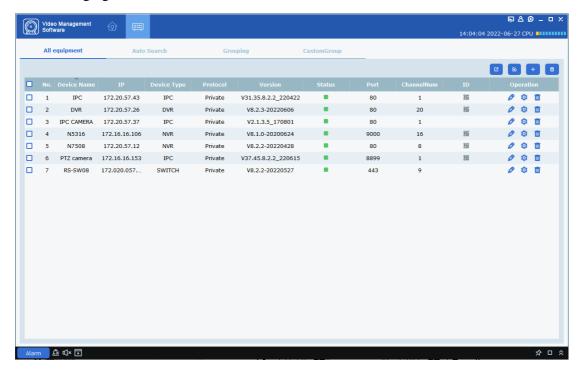
On VMS Pro, you can add devices (such as IP cameras, NVRs, and XVRs) through auto search, adding a single device, and adding devices in batches. After adding devices, you can configure and operate the devices remotely.

4.1. Adding Devices

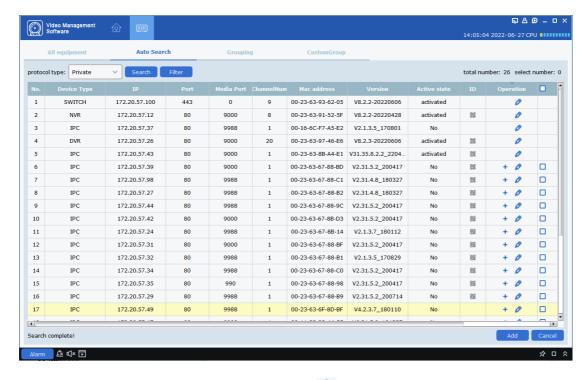
VMS Pro supports multiple ways to add devices. Choose a suitable method according to the number of devices to be added, network segment, and other factors.

1. Auto search is recommended when you need to add devices in batches and the devices are in the same network segment, or when you do not know the device IP address but know the network segment.

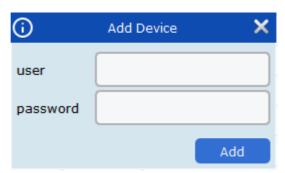
Step 1: On the devices page, click to go to the main menu. On the homepage, click **Device** Management in the configuration area. The device management page is displayed, as shown in the following figure:



Step 2: Click **Auto Search** on the device management page to go to the **Auto Search** page, as shown in the following figure:



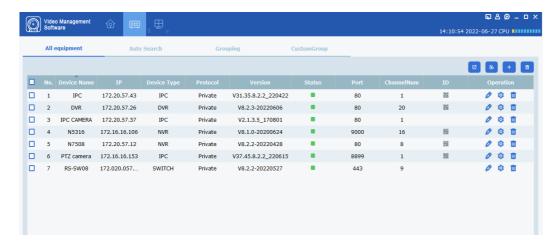
Step 3: Select the device you want to add, and click . Alternatively, select one or more devices and click Add in the lower right corner. A dialog box is displayed, as shown in the following figure:



Step 4: Enter the username and password of the device that has been logged into, and click **Add** to complete the operation.

The added devices are displayed, as shown in the following figure:

Note: The added devices are logged into through port 80 by default.



The supported operations on the page are shown in the following table:

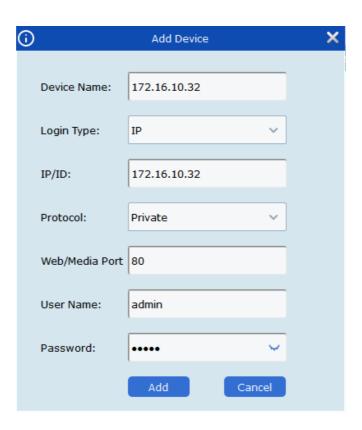
Icon	Description		
0	Click the icon. The Modify Device window appears, where you can modify device information, including the device name, login type, IP address or domain name, protocol, port, username, and password.		
•	Click the icon to go to the Device Remote Setting page, where you can configure the device recording channel, recording, network, alarm event, storage, system, among others.		
THE STATE OF THE S	Click the icon to delete the device.		
■, ■, □, and	Green: The device is connected properly. Red: Unactivated. You need to set the initial password. Yellow: The login information is incorrect or the account is locked. Gray: The device cannot be connected.		
and ©	Export or import device information. For detailed operations, see 3 "Add a device by importing the configuration file".		

Note: After you add devices, the **Auto Search** page remains open that you can continue to add devices. After you add devices, go to the device list to check whether the devices are online.

2. Add a device manually.

We recommend you add a device manually if you add a single device and know the device IP address or domain name.

Step 1: On the **Device Management** page, click . The **Add Device** window is displayed, as shown in the following figure:



Step 2: Set parameters. The parameters are described in the following table:

Parameter	Description	
Device Name	The device name. We recommend you name a device after the device monitoring area for maintenance.	
Login Type	The method to add the device. IP/Domain: Add the device through the device IP address or domain name.	
	• P2PID: Add the device through the device serial number.	
IP/ID	Set this parameter if you choose to add the device through the IP address or domain name. The device IP address or domain name. Set this parameter if you choose to add the device through P2PID. The device serial number.	
Protocol	Select a private protocol or other protocols.	
Web/Media Port	Enter a web or media port. If you log in using a web port, more functions are supported, including AI config and AI scene.	
User Name	The username to log into the device.	
Password	The password to log into the device.	

Step 3: Click Add to add the device.

Note: To cancel the addition, Click Cancel to exit the Add Device window.

After the device is added, it connects to VMS Pro automatically. Then the status is , otherwise, the status is .

3. Add a device by importing the configuration file.

Step 1: On the **Device Management** page, click . A dialog box is displayed.

Step 2: Select and open the device .xml file that is saved locally.

Step 3: Click **Open** to import the device.

Note: Use this method if the device was added before and the device configuration file was exported to local storage.

4.2. Modifying Device Information

Modify device information if the information (such as the username, password, and IP address or domain name) is incorrect.

Note: This section describes how to modify device information.

Step 1: On the Device Management page, click . The Modify Device window is displayed.

Step 2: Modify the device information.

①		Modify Device		×
Device I	Name: 1	72.16.10.32		
Login Ty	/pe: II	P	~	
IP:	1	72.16.10.32		
Protoco	l: P	rivate	~	
Port	8	0		
User Na	me: a	dmin		
Passwo	ord:	••••		
Login st	tatus: De	evice login successful		
		Modify Cance	el	

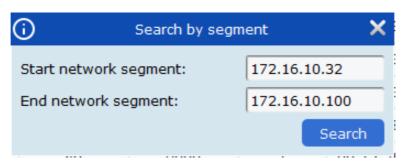
Step 3: Click **Modify** to save the changes.

4.3. Searching for Devices by Network Segment

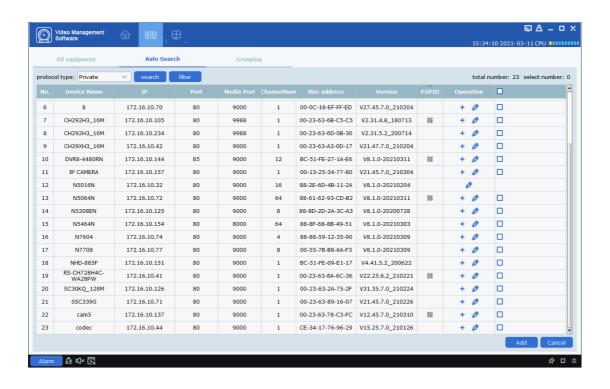
By setting a network segment, you can search for and find all devices in the network segment.

Step 1: On the Device Management page, click Auto Search. The auto search page appears.

Step 2: Click filter. The Search by segment dialog box is displayed, as shown in the following figure:

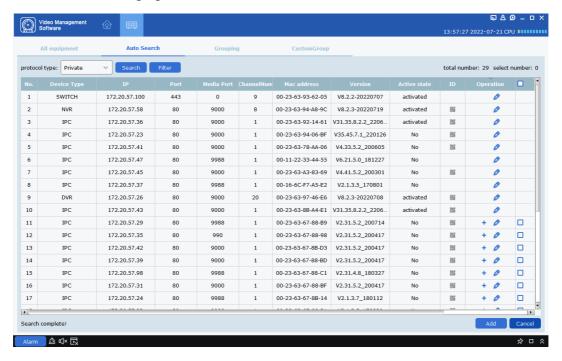


Step 3: Enter the network segment as needed and click **Search**. The search results are shown in the following figure:

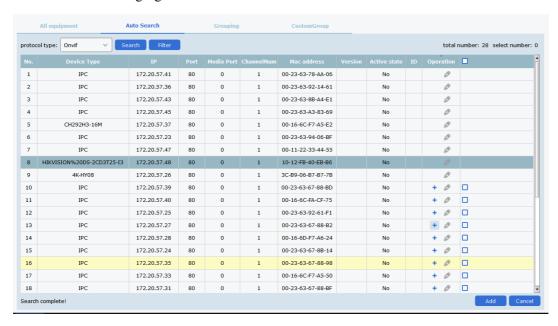


4.4. Searching for Devices by Protocol

Step 1: On the **Device Management** page, click **Auto Search**. The auto search page appears, as shown in the following figure:



Step 2: In the **protocol type: Private** drop-down list, select other protocols, such as the Onvif, Hikvision, Dahua protocol, and click **Search**. The search results are displayed, as shown in the following figure:



Step 3: Add the devices you need. For detailed operations, see Section 4.1 "Adding Devices".

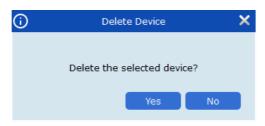
4.5. Deleting Devices

If you do not need to manage the added devices, delete them. You can delete a single device or delete devices in batches.

1. Delete a single device.

Step 1: On the Device Management page, find the device you want to delete, and click in next to it.

A dialog box is displayed, as shown in the following figure:



Step 2: Click Yes to delete the device.

Click No to cancel deletion.

2. Delete devices in batches.

Step 1: On the **Device Management** page, select the checkbox in front of the devices you want to delete.

Step 2: Click in the upper right corner. A dialog box is displayed.

Step 3: Click **Yes** to delete the selected devices.

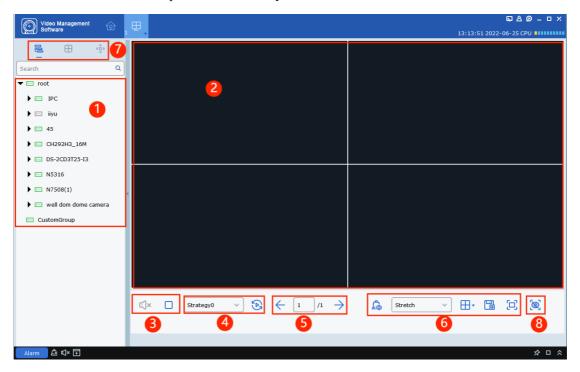
Click No to cancel deletion.

5.Preview

After you add devices on VMS Pro, you can go to the preview page to view videos in real time.

5.1. Interface Introduction

This section describes each part and function by area.



From the main menu, choose **Mainview** to go to the preview page. The functions on the preview page are described in the following table:

No.	Item	Description
1	Device tree	Groups are divided by default. Double-click to open a group, which contains the added devices. Drag a device or channel, or double-click a channel to preview the channel. Right-click to select a main stream, open or close all channels, start playback and intercom, and synchronize channel names.
2	Preview window area	View videos and split windows through multiple ways. When viewing a video, you can capture images, record the video, enable cruise view, use voice intercom, use digital zoom, and more. For detailed
3	Audio control area Control the sound and stop all windows.	
4	Cruise selection area	When cruise plans exist, you can select a cruise plan for this area to enable cruise.
5	Page switch area	When multiple pages exist on the preview page, you can switch pages.

6	Video ratio, window number setting, and view creation area	ice: Remove the alarm and recording identifiers from the preview window.	
		Stretch : Adjust the aspect ratio.	
		🗀: Display in full screen mode.	
		: Adjust the number of windows.	
		When multiple fixed devices are connected and you often need to preview their monitoring windows, you can enable the preview windows and save them as a view. Later, when you open the view, you preview the windows of the multiple devices. The created view is added to the view tab in the device list area. The view can also be added to cruise plans.	
7	List switch area	: Click the icon to go to the view tab and check custom views. :: Click the icon to go to the PTZ control tab to control devices through PTZ.	
8	Intelligent alarm display	Click to view the alarm prop-up in the sidebar and view intelligent alarms from the added devices on VMS Pro.	

5.2. Real-time Preview

View camera images in real time, record videos locally, capture images, use voice intercom, use digital zoom, and more.

1.Enable preview.

Use one of the following methods to enable preview:

- 1 Select a preview window, and double-click the desired device in the device list area.
- 1 Drag the desired device in the device list to the preview window.
- Right-click a device group, and select Open all ch to open the preview window of device channels.

Note: If you enable preview, you can also enable the preview of all cameras under the view.

2. Operate preview.

The supported operations in preview mode are shown in the following table:

1	Manual recording	Save a manual recording to local storage.	Select a video window that has enabled preview, and click in the window or right-click to select start recording. Click again or right-click to select stop record to stop recording. Note: To set the recording storage path, go to the configuration area and click System Config.
2	Manual capture	Capture an image manually.	Select a video window that has enabled preview, and click in the window or right-click to select capture to capture an image manually. Note: To set the image storage path, go to the configuration area and click System Config.

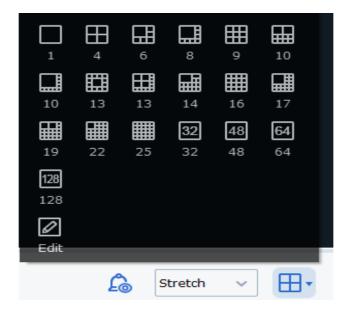
3	V o i c e intercom	Use voice intercom with connected devices.	Select a video window that has enabled preview, and click in the window or right-click to select start talk to start voice intercom. Click again or right-click to select stop talk to stop voice intercom. Note: Voice intercom is supported between the client and devices.	
4	Digital zoom	Zoom in the selected area in a video.	Select a video window that has enabled preview, and click in the window. Click the preview window and hold to select an area of interest, which can be zoomed in many times. Click again to close digital zoom.	
5	Add a tag	Add a time tag.	Select a video window that has enabled preview or playback, and click at the bottom of the window.	
			Channel CH1 Tag Time 03/01/2021 11:08:17 Tag Name Tag Save Cancel Open the live view or playback screen of a video, and click the button in the menu bar at the bottom of the screen to pop up the tag event confirmation menu.	

6	Quick playback	Quickly play back a recording 10 minutes ago before you view the recording currently.	Select a video window that has enabled preview, and click in the window to enter quick playback. Click to pause playback, click to enable or disable the sound, and click to exit playback and enter the preview page. You can also drag the progress bar to select the playback position.	
7	Close a window	None	Right-click the window you want to close, and select Stop preview	
8	Close all windows	None	Right-click a device group, and select Open all ch	
9	Full screen mode	Enter full screen mode for a specified window.	Select a video window that has enabled preview, and right-click to select Fullscreen, and double-click to open the window that needs full screen. Or, double-click to open the window that needs full screen and right-click to select Fullscreen to enter full	
10	Adjust window ratio	Adjust the aspect ratio.	In the lower right corner of the video window, select Stretch to adjust the window ratio.	
11	Select windows	Select the number of windows on a page.	In the lower right corner of the video window, select to set the number of windows.	

12	I m a g e adjustment	Adjust the brightness, contrast, saturation, and hue of a channel. And you can change the channel name, and set the date and time.	 Select a video window that has enabled preview, and click video setting. The Video setting dialog box is displayed. Adjust the image in Color as needed, adjust the hue in color and change the name in Name.
13	F i s h e y e View Mode	Only available for fisheye devices. The fisheye installation mode is related to the view mode. Different installation modes differ in view modes.	Select a video window that has enabled preview. Right-click to select Fisheye. Select a view mode you need based on the actual situation. For more information, see Chapter 9 "Fisheye View Mode".
14	Fisheye installation mode	Only available for fisheye devices. Select an installation mode based on the device installation. Fisheye installation modes include ceiling mounting), (wall mounting), and (ground mounting).	Select a video window that has enabled preview, and right-click to select Fisheye to enter fisheye mode. Select an installation mode based on the device installation. For more information, see Chapter 9 "Fisheye View Mode".
15	S w i t c h c h a n n e l stream type	The supported stream types include main stream, substream, and mobile stream.	Find a device channel, right-click to select the desired device, and select the stream type as needed.
16	Switch all channel stream types with one click	The supported stream types include main stream, substream, and mobile stream.	In a device group, right-click to select the desired device to switch all channel stream types to a stream type as needed with one click.

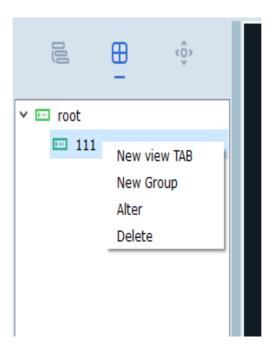
2. Adjust the number of monitoring windows

Click in the window setting area to adjust the number of view windows.



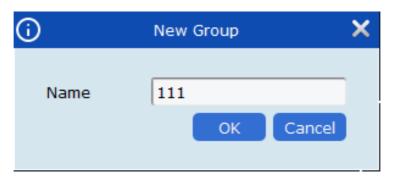
5.3. View Tab

On the preview page, click to go to the view page, where you can set and check custom views.



1. Add a group:

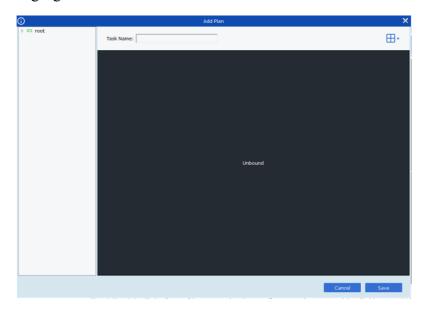
Right-click **root** on the view tab to open a menu. Only groups can be added from **root**. Click **New Group** as shown in the following figure:



Name the group and click **OK** to create the group.

2. Add a view tab:

In a custom group, right-click to select **New view TAB**. The view tab page is shown in the following figure:



Click in the upper right corner to select the split views you need. In the left device tree, select and drag a channel to the **Unbound** view area, which subsequently changes to Channel Name:Cameral1; Stream Type: Sub Stream; indicating a binding success. Right-click to select

Unbind to cancel the binding relationship.

Unbind All to cancel all binding relationships.

Set Main Stream to set the channel to main stream.

Set sub Stream to set the channel to substeam.

Set mobile Stream to set the channel to mobile stream.

Customize a name in Task Name: and click save to save the view tab.

3. Modify or delete a view tab:

On the view tab contents, select **Alter** to modify a view tab or group.

On the view tab contents, select **delete** to delete a view tab or group.

4. Switch the view tab preview:

After you add multiple view tabs, double-click a view tab to switch the preview quickly.

5.4. PTZ Control

1. PTZ page:

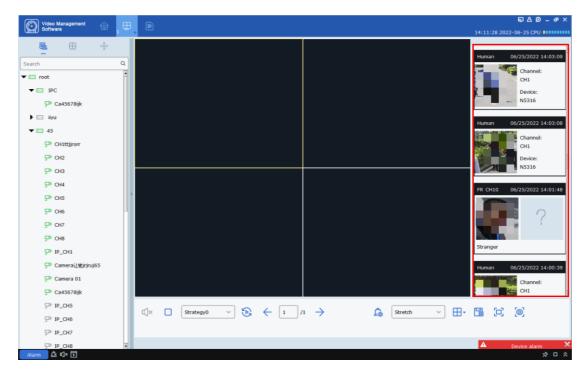
On the preview page, click of to go to the PTZ control plane. The functions supported by PTZ depend on the device.



No.	Item	Description
1	PTZ control plane	Select a PTZ window, and click to enable auto scans. Click the icon again to stop auto scans.
2	Adjust the zoom, focus, and iris.	+ Adjust the zoom and focus speed. Q + Adjust the zoom, focus, and iris.
3	Auto focus	AutoFocus: auto focus; Refresh: refresh an operation; default: restore default values.
4	Cruise	to delete a position, and click → to move to the position. Interval 3

5.5. Sidebar AI Alarm Images

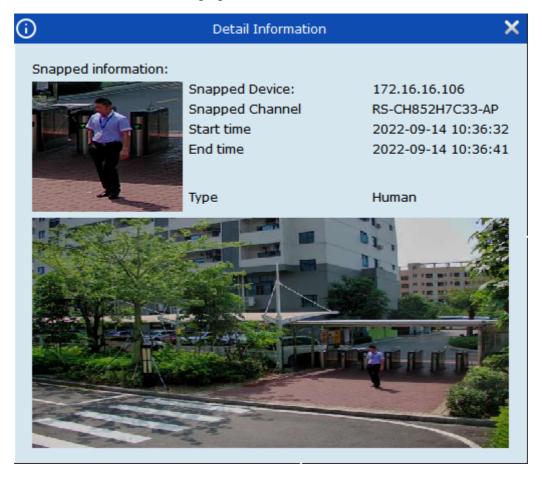
Click the intelligent alarm display button . Then alarm notifications from smart devices are displayed on the right side of the page.



Select an alarm event from the alarm notifications. Right-click to view the event information or play back the related recording.

Playback: Open the playback window to play back the recording.

Detail Information: See the following figure:



Snapped Device: the capture device

Snapped Channel: the capture channel

Start time: the alarm start time End time: the alarm end time

Type: the alarm type

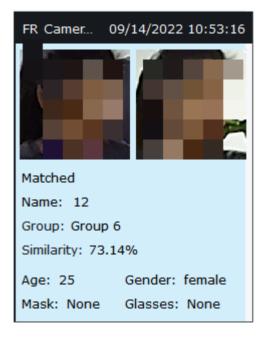
Face capture shows additional information about a person. If "unmatched" is shown on a captured image, no comparison images exist. The additional information includes gender, age, expression,

Gender Female
Age 23
Glasses Exist
Mask Exist
Expression Expressionless

and whether the person wears a face mask and glasses.

Right-click the image to add it to a face group if necessary.

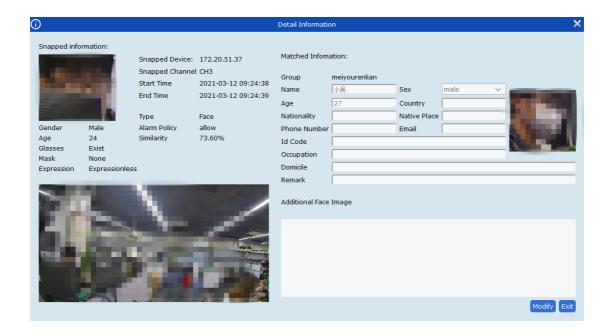
When a comparison image exists in the face group, the following figure appears:



Group and Similarity are shown.

Right-click the image to modify the face group information if necessary.

When you expand details, the detailed comparison appears, as shown in the following figure:

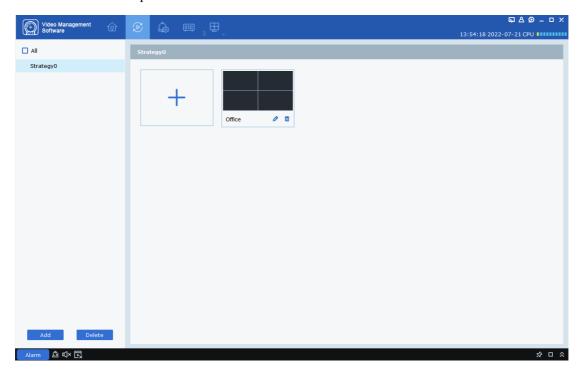


6.Cruise Settings

Realize the cruise of windows by configuring a cruise plan.

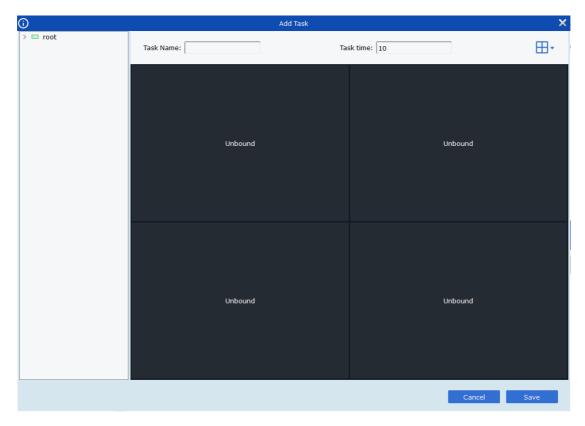
6.1. Configuring Cruise Plans

Step 1: From the main menu, choose **Cruise Setting** to go to the cruise settings page, as shown in the following figure.

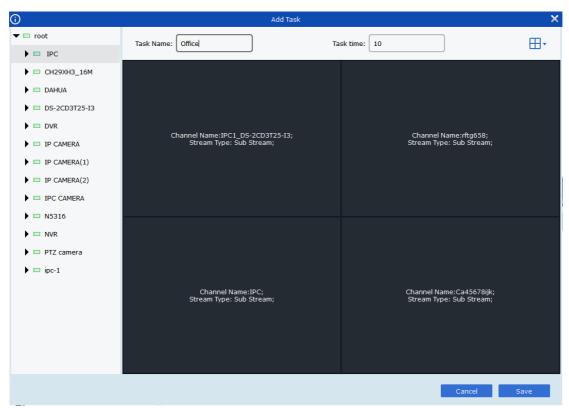


Step 2: Configure a task. You can configure multiple tasks.

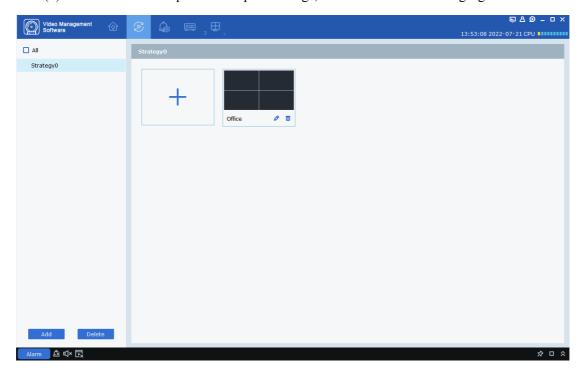
- (1) Click +. The **Add Task** page is displayed, as shown in the following figure.
- (2) Set **Task Name** and **Task Time**, and select the number of cruise windows in \bigoplus based on the actual situation.



(3) Drag device channels to the video window in a desired order. After the channels are bound, the following figure is shown:



(4) Click **Save** to complete cruise plan settings, as shown in the following figure:



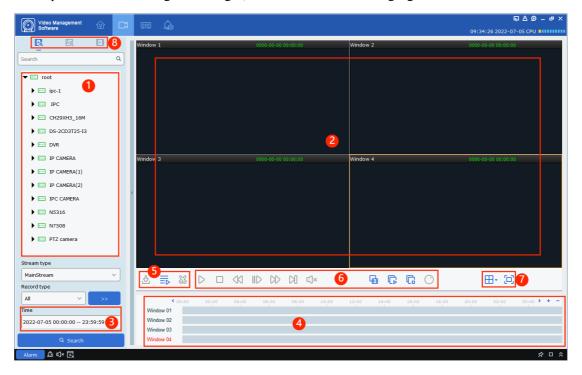
6.2. Starting Cruise

- **Step 1:** From the main menu, choose **Main Window** to go to the preview page.
- **Step 2:** Select a cruise plan such as strategy0 in the lower part of the page.
- Step 3: Click to start the cruise plan.

7. Remote Playback

7.1. Remote Playback Introduction

From the main menu, Choose **Remote Playback** to go to the playback page, where you can play and export device recordings and images, as shown in the following figure:



The functions on the page are described in the following table:

No.	Function	Description	Operation	
			Capture	Select a video window that has enabled recording, and click or right-click to select Capture to capture an image.
			Select a video window t	Select a video window that has enabled recording, and click .
			Stop playing	Select a video window that has enabled playback, and click or right-click to select Stop Play
	Playback	The area where a	Recording Select a video window that has enabled playback, and click oright-click to select Start record	
1	window	recording is played back. Ena Full	Enable fisheye	Select a video window that has enabled playback, and click or right-click to select Fisheye. Only available for devices that support the fisheye mode.
			Full screen mode	Click or right-click to select Fullscreen
			Add a tag	Click to add a tag in playback.
			Screenshot	Click to take a screenshot. To be specific, click and hold the left mouse button, and drag to select a part of the play area.
			Set query conditions for device recordings.	On the Devices tab, after you select a device or view, select recording or image query, and select a date. If recordings exist on that day, you can find a subscript in the lower right corner of the date. Then from Search Config Y, set the capture type, stream type, start time and

2	Query time	The time when a recording or image is recorded.		
			Set query conditions for device images.	

3	Time progress area	View the existing recording information.	 +: The accuracy of play progress bar becomes higher. -: The accuracy of play progress bar becomes lower. >: Move the progress bar to display the area. 	
		Play back, cut, or export recordings as needed.	Export device recordings.	See Section 7.3 "Exporting Device Recordings".
4	Download, sync play, and		Cut device recordings.	Drag the start point and end point in the progress bar to cut a recording.
	cut		Synchronous playback.	Select multiple channels, click the sync play button, and click play. Recordings of all channels can be played synchronously.
			₽ P	Play recordings of all channels.
			G	Stop playing back recordings of all channels.
		Control the recording playback and sound.	D	Start playing back a recording.
			4 3	Move recording playback backward.
			00	Pause recording playback.
5	Playback control bar			Stop playing back a recording.
	Control bai		DI	Move a frame forward when playing back a recording.
			DD	Fast forward the playback of a recording.
			Ľ	Enable or disable the sound.
				Use intelligent playback.
			0	Enter fisheye mode to play.
			IID	Slow down the playback of a recording.
6	6 Window control	window	⊞•	Select the desired display mode and the number of video windows.
				Select the full screen mode for a video window.
	Swite			Go to the recording playback page.
	play betv recordii		<u>₽</u>	Go to the image playback page, see Section 7.4 "Playing Back Device Images".

images.	-	
	8▶8	Go to the playback by tag page.

7.2. Playing Back Device Recordings

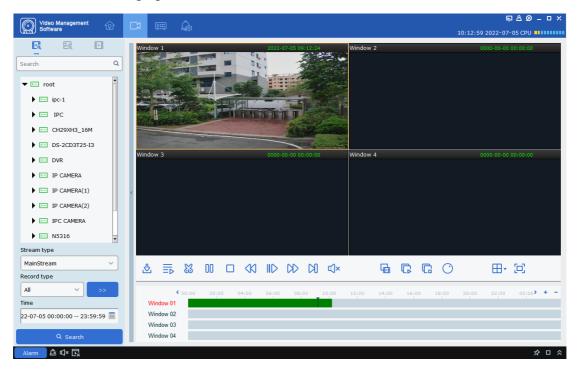
Prerequisites:

The selected device channel has a recording.

Procedure:

- **Step 1:** Select the tab on the **Remote Playback** page.
- Step 2: Select a device channel in device groups.
- **Step 3:** Set the query conditions for recordings.
- 1. Select the recording type, stream type, and data and time.
- 2. Click **Search**. Then the recording progress bar is shown in the time progress area.

Step 4: Select a window with a recording, and click . Then the recording starts playing back, as shown in the following figure:



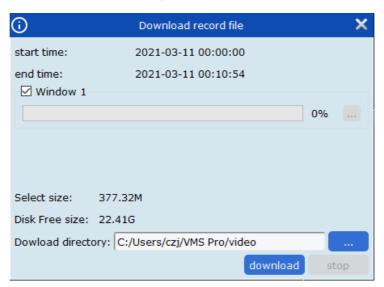
7.3. Export device recordings.

Prerequisites:

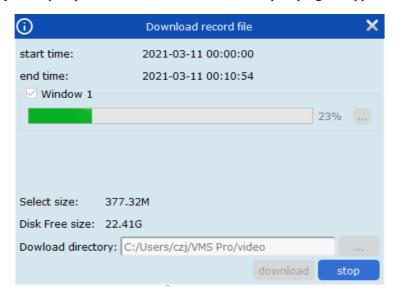
The selected device channel has a recording.

1. Cut and download a recording:

- **Step 1:** Select the tab on the **Remote Playback** page.
- **Step 2:** Select a device channel in device groups.
- **Step 3:** Set the query conditions for recordings.
- 1. Select the recording type, stream type, and data and time.
- 2. Click **Search**. Then the recording progress bar is shown in the time progress area.
- **Step 4:** Select a window with a recording, and click . Then the recording starts playing back.
- Step 5: Click and cut a part of the recording in the progress bar as needed, and click export the cut recording. A dialog box is displayed, as shown in the following figure:



Step 6: Specify the export path. Click **download**. Then the export progress appears.

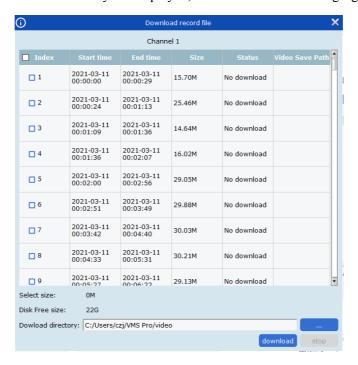


Step 7: After the cut recording is exported, close the window.

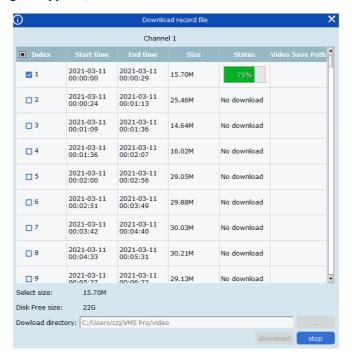
2. Download by recording file time:

- Step 1: Select the tab on the Remote Playback page.
- **Step 2:** Select a device channel in device groups.
- **Step 3:** Set the query conditions for recordings.
- 1. Select the recording type, stream type, and data and time.
- 2. Click **Search**. Then the recording progress bar is shown in the time progress area.

Step 4: Click a window with a recording, and click in the playback control tool bar. Then all recordings of the channel on that day are displayed, as shown in the following figure:



Step 5: Select recordings as needed by time period and specify the export path. Click **download**. Then the export progress appears, as shown in:



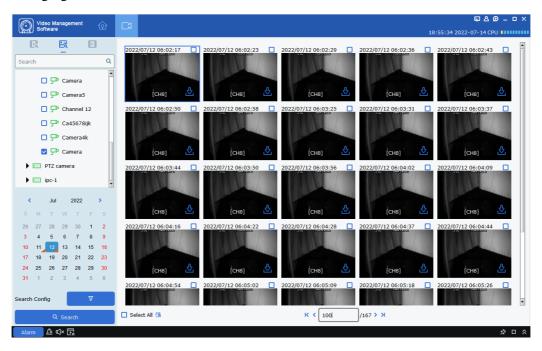
7.4. Playing Back Device Images

Prerequisites:

The selected device channel has a recording.

Procedure:

- Step 1: Select the tab on the Remote Playback page.
- **Step 2:** Select a device channel in device groups.
- Step 3: Set the query conditions for images in Search Config
- 1. Select the recording type, stream type, and data and time.
- 2. Click **Search**. The images are displayed on the right next to device groups, as shown in the following figure:

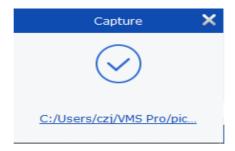


Step 4: Play back the images.

Click to switch pages.

7.5. Exporting Device Images

On the image playback page, click in the lower right corner of an image. After the image is exported, a dialog box is displayed, as shown in the following figure:



Also, you can select the checkbox in the upper right corner of an image.

Or, click Select All to select all images and click to save the images in batches.

Note: To set the image storage path, choose **System Config** on the main menu.

7.6. Playing Back Recordings Using Intelligent Search

Stop playing a recording, and click on the playback page to enter intelligent search. Only recordings of one channel can be played back if you use intelligent search. The time periods with recordings are marked blue in the timeline.



During playback, click the window and drag to select an area that needs search. Click for intelligent playback in the selected area.

Click to delete the area and click to exit intelligent playback.

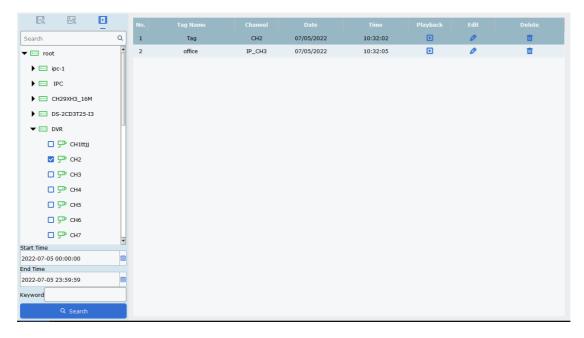
7.7. Playing Back Recordings Using Tags

Prerequisites:

A tag was added during preview or playback.

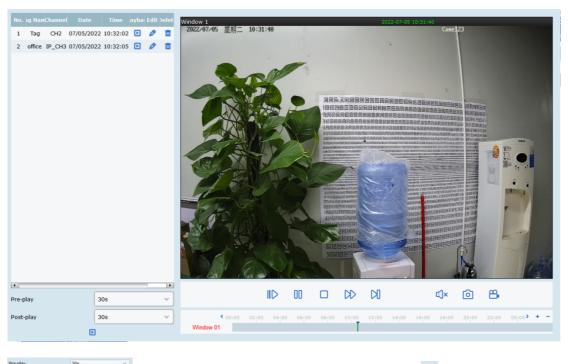
Procedure:

- Step 1: Select the tab on the Remote Playback page.
- Step 2: Select a device channel in device groups.
- **Step 3:** Select the time period, enter keywords, and click **Search**. All available tags are searched if you do not enter keywords.



The search results are displayed on the right, with each indicating a tag. The tags are shown in the form of a table.

Click to go to the playback page.



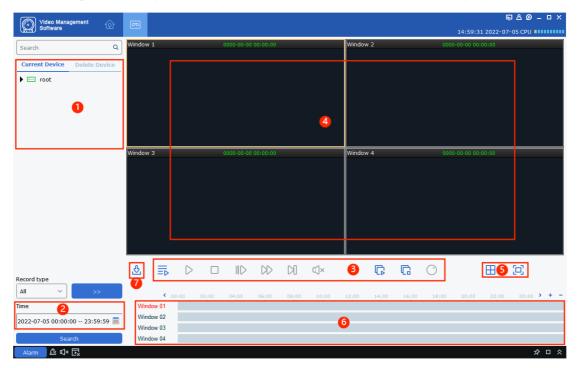
Set the pre-play time and post-pay time. And click to play playback

Click of to modify the tag name. Click to delete the tag.

8.Local Playback

8.1. Local Playback Introduction

From the main menu, choose **Local Playback** to go to the playback page, where you can play back and export recordings and images from the client, as shown in the following figure:



The functions on the page are described in the following table:

No.	Function	Description	Ope	ration				
1	Device tree	The device tree shows device groups and channels.	You o	You can select a current or deleted device.				
2	Query time	Query the time of a recording.	date can f	Select a device in the device tree, and select the date and time. If recordings exist on that day, you can find a subscript in the lower right corner of the date. Click Search .				
			≣	Play ba	ck recordings synchronously.			
			\triangleright	Start pl	aying back a recording.			
			00	Pause r	ecording playback.			
				Stop pla	aying back a recording.			
	Playback	Control the recording	N	Move a recording	frame forward when playing back a ng.			
3	Playback control bar	playback and	DD	Fast for	ward the playback of a recording.			
		sound.		Slow do	own the playback of a recording.			
				Start playing back recordings of all channels.				
			G	Stop pla	aying back recordings of all channels.			
			0	Enable	the fisheye mode.			
						Captu	are	Select a video window that has enabled playback, and click or right-click to select ocapture to capture an image.
			Digit	al zoom	Select a video window that has enabled playback, and click			
	Dlayback	The area	Stop	playing	Select a video window that has enabled playback, and click or right-click to select stop Play.			
4	Playback window	where a recording is played back.	Reco	rding	Select a video window that has enabled playback, and click or right-click to select Start record.			
			E n fishey	able ye	Select a video window that has enabled playback, and click or right-click to select Fisheye. Only available for devices that support the fisheye mode.			

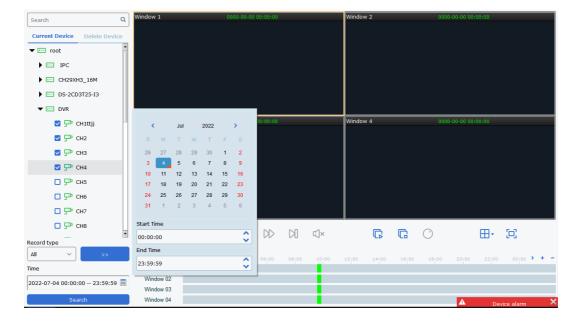
			Full screen mode	Click 🗀 o	or right-click to select
5	Window	window	⊞-		Select the desired display mode and the number of video windows.
	control display mode.		🗆 or 📮 Ful	llscreen	Select the full screen mode for a video window.
6	Time progress bar	View the existing recording information.	+/-: Zoom in	or out the pr	ogress bar.
7	Recording download	Download recordings locally.	Click 🕹: to go	to the file do	ownload page.

8.2. Local Recording Playback

Playback here refer to recording operations based on local recording plans, see Chapter 17 "Local Recording Plans". The following section describes how to play back local recordings.

Step 1: From the main menu, choose Local Playback to go to the local recording playback page.

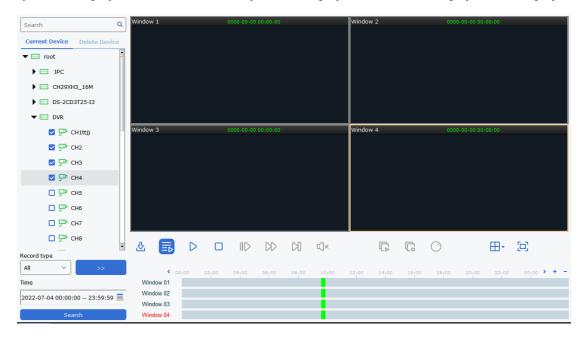
Step 2: In device groups, select a device as needed, set the date, and click **Search**. The search result can be viewed in the recording progress bar, as shown in the following figure:



Step 3: Click or to start playing back a recording, as shown in the following figure:



Note: Local recording playback is in asynchronous mode. To enable synchronous playback, click to enter the synchronous play mode, as shown in the following figure: After you enter the synchronous play mode, click to start synchronous play and click to stop synchronous play.



9. Fisheye View Mode

Only fisheye devices support setting the installation mode and view mode. The view modes and installation modes are described in the following table:

Parameter	Description		
View mode	The display mode of the current video. The original image mode is supported by default. The display mode depends on the installation mode, as shown below: 1. Ceiling mounting VR, cylinder, 1P, 1P+1, 1P+3, 1P+6, 1P+8, 1+3, 1+8, 2, 2P, 4. 2. Wall mounting VR, 1P, 1P+3, 1P+8, 1+3, 1+8, 4.		
Ceiling/ Wall/ Ground mounting	Original image	The original image that is not warped.	
C e i l i n g mounting	□ : 2	Two independent sub-images that support zoom and movement.	
	⊕: VR	VR mode. Double-click to enter VR mode. Images support zoom and movement.	
	: cylinder	Cylinder display mode. Drag the mouse up and down to switch the cylinder display mode to plane display.	
	⊞ : 4	Four independent sub-images that support zoom and movement.	
	○ : 2P	Two related 180° expanded rectangular images. The two subwindows form a 360° panorama anytime, also known as dual panorama. Both rectangular expanded images support moving the starting point leftward and rightward in an interconnected way.	
	C : 1P	360° expanded rectangular panorama that supports zoom and movement.	
Ceiling/ Ground mounting	(: 1P+1	360° expanded rectangular panorama+1 independent sub- image. The sub-image and sub-frame in the expanded panorama support zoom and movement. The expanded rectangular panorama does not support zoom and movement.	
	(h): 1P+3	360° expanded rectangular panorama+3 independent sub- images. The sub-image and sub-frame in the expanded panorama support zoom and movement. The expanded rectangular panorama does not support zoom and movement.	
	(#E: 1P+6	360° expanded rectangular panorama+6 independent sub- images. The sub-image and sub-frame in the expanded panorama support zoom and movement. The expanded rectangular panorama does not support zoom and movement.	

	F : 1P+8	360° expanded rectangular panorama+8 independent sub- images. The sub-image and sub-frame in the expanded panorama support zoom and movement. The expanded rectangular panorama does not support zoom and movement.
Parameter	Description	
Ceiling/ Ground	⊞ : 1+3	Original image +3 independent images. The sub-image and sub-frame in the original image support zoom and movement. The original image supports zoom.
mounting	1+8	Original image +8 independent images. The sub-image and sub-frame in the original image support zoom and movement. The original image supports zoom.
	⊕: VR	VR mode. Double-click to enter VR mode. Images support zoom and movement.
	□ : 1P	360° expanded rectangular panorama from left to right that changes the vertical viewing angle. Zoom and movement are not supported.
	⊞ : 4	Four independent sub-images that support zoom and movement.
W a l l	⊞ : 1P+3	360° expanded rectangular panorama+3 independent sub- images. The sub-image and sub-frame in the expanded panorama support zoom and movement. The expanded rectangular panorama that changes the vertical viewing angle. Zoom and movement are not supported.
mounting	: 1P+8	360° expanded rectangular panorama+8 independent sub- images. The sub-image and sub-frame in the expanded panorama support zoom and movement. The expanded rectangular panorama that changes the vertical viewing angle. Zoom and movement are not supported.
	1+3	Original image +3 independent images. The sub-image and sub-frame in the original image support zoom and movement. The original image supports zoom and movement.
	1+8	Original image +8 independent images. The sub-image and sub-frame in the original image support zoom and movement. The original image supports zoom and movement.

9.1. Entering Fisheye Mode in Live View

Step 1: In the preview window, click or right-click to select Fisheye to enter fisheye mode, as shown in the following figure:



The functions are described in the following table:

No.	Parameter	Description
1	Fisheye installation mode	Switch the fisheye installation mode.
2	Fisheye View Mode	Switch the fisheye view mode.
3	Live view	View the fisheye live view.

Step 2: Set the fisheye installation mode and view mode. Then you can control fisheye devices through PTZ.

9.2. Entering Fisheye Mode During Recording Playback

Click on the playback window to enter fisheye mode. For detailed operations, see Section 9.1 "Entering Fisheye Mode in Live View".

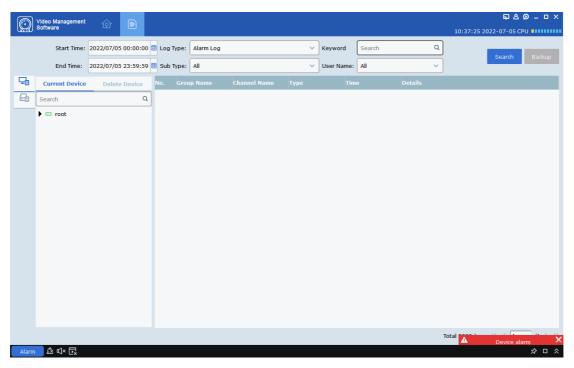


10.Log Query

Query and export logs from the client and devices.

10.1. Querying Client Logs

- Step 1: From the main menu, choose Log Search to go to the log search page.
- Step 2: Select 🛂 . The local client Local Log page is displayed.
- **Step 3:** Select a current or deleted device for search. Set the username, time, log type, and device as needed. Local client logs include alarm, system, and operation logs.
- **Step 4:** Click **Search**. The search results of client logs are displayed, as shown in the following figure:

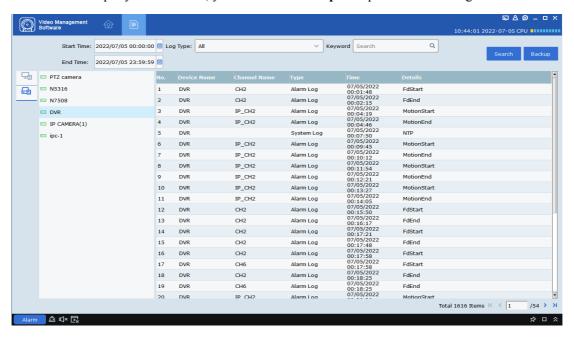


Note: After the query is successful, you can click **Backup** to export the client logs.

10.2. Querying Remote Device Logs

- Step 1: From the main menu, choose Log Search to go to the log search page.
- Step 2: Select . The remote device Remote Log page is displayed.
- **Step 3:** Set the time, log type, and device as needed. Remote device logs include system, configuration, alarm, user, record, storage, and intelligent logs.
- **Step 4:** Click **Search.** The search results of device logs are displayed, as shown in the following figure:

Note: After the query is successful, you can click Backup to export the device logs.



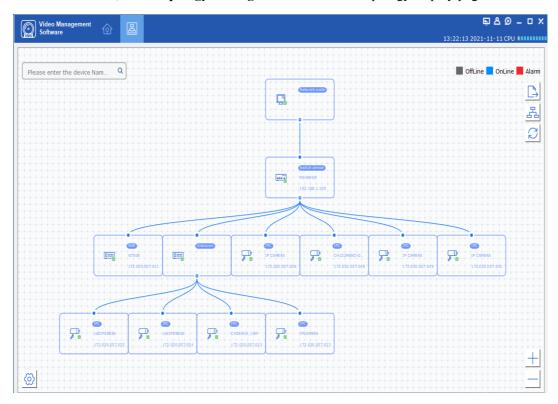
11. Topology Management

Manage intelligent network management PoE switches and display the switches in topology. To use this function, ensure that the switches are added to the client and that their status is online.

On the topology display page, you can view the topological relationships among the devices added to the client. Also, you can perform related configuration operations.

11.1.Related Operations

From the main menu, click **Topology Management** to enter the topology display page.



Interface introduction

- In the upper left corner, you can enter a device alias or IP address to view the corresponding topology.
- In the upper right corner, you can find the meaning of icon colors, export or refresh the topology, and view the path.
- In the lower right corner, you can zoom in or out the topology, or use your mouse wheel to zoom in or out.
- In the lower left corner, you can set the topology layer.

Note:

When you enter the topology page for the first time and the topology is not shown, click to refresh the page.

Description of related operations and icons

Action/Icon	Operation	Description
Double-click a device.	View the detailed device information.	View the device type, IP address, panel status, and port information.
Right-click a	View the device status.	For more information, go to the Device Status page.
device.	Handle alarms.	View alarms and events, and clear alarms.
	Perform remote configuration.	For more information, go to the Remote Config page.
	Modify the device name.	Modify the device name that is shown in the topology.
	Set as root node.	Set the device as root node in the topology.
	Upgrade devices.	Upgrade the NVRs, DVRs, and IP cameras connected to the switches in the VMS Pro system.
	Export the topology.	Select a path to export the current topology.
馫	View the path.	Select the IP camera and current device to view the path.
S	Refresh the topology.	Refresh the topology page.

11.2.Topology Settings

Procedure:

Click in the lower left corner of the page for simple topology configuration.

- Set the topology layers: 1-10;
- Click **OK** to save the settings.



Note:

After you change settings, click \mathcal{Z} to refresh and view the latest topology.

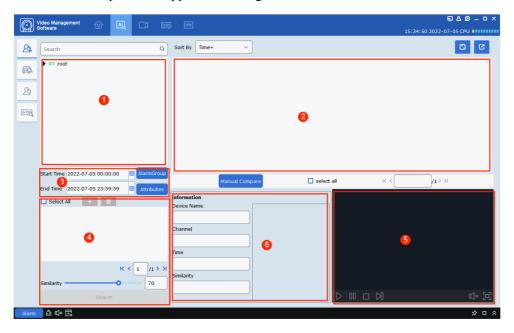
12.Intelligent Search

Intelligent search includes face search, human and vehicle search, and repeat visitor search. The face detection function supports detecting passersby in a specified area, capturing clear face images, recognizing the face features, and recognizing humans and vehicles.

12.1.Face Search

Step 1: From the main menu, choose **AI Search**. Then click **Face Search** to enter the face search page, as shown in the following figure:

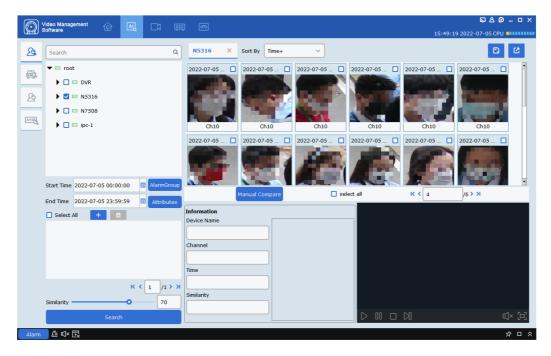
Note: The device is required to support face recognition.



Each part is described in the following table:

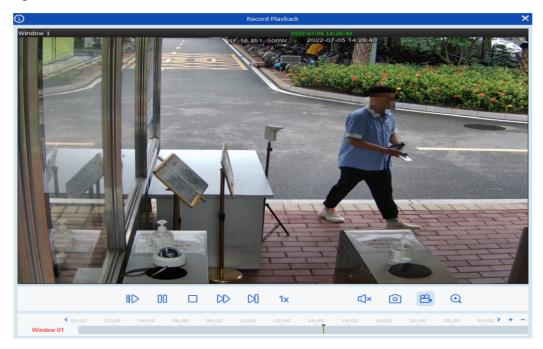
No.	Item	Description
1	Device tree	View the listed device channels.
2	Search result display area	View the images that are searched out based on settings.
3	Search setting area	Set the date, group, and attributes for search. The attributes include gender, age, face mask, glasses, and expression.
4	Comparison search area	Click to add a local or device image. Click Similarity to set similarity, and click for comparison search.
5	Recording playback area	From the search results, select a recording to play in the playback area.
6	Face information	View the face information from the database.

Step 2: Select a device channel and a face group, set the date, and click **Search**. The search results are displayed, as shown in the following figure:



Click to select an image from the device and click Manual Compare. Then the images with a similarity higher than the specified value will appear. Click one card to view the details below or play back the recording.

Step 3: Click an image of the recording you want to view, and click ▶ in the playback area to enter the recording playback page. Click ➡ to enter full screen mode, as shown in the following figure:



Search for images with an image

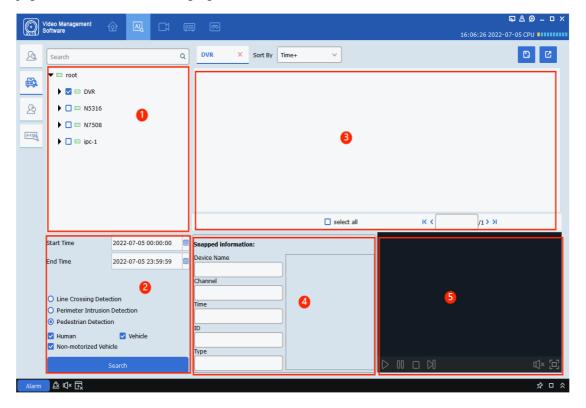
Step 1: From the main menu, choose **AI Search**. Then click **Face Search** to enter the face search page.

Step 2: Select a device channel and a face group, set the date, and click to add a face image. You can add a local image or select a device image. Set the similarity in

Similarity 80 %, and click Search. The images with a similarity higher than 80% will appear.

12.2. Human and Vehicle Search

On the **AI Search** page, click the human and vehicle search icon to enter the human and vehicle page, as shown in the following figure:



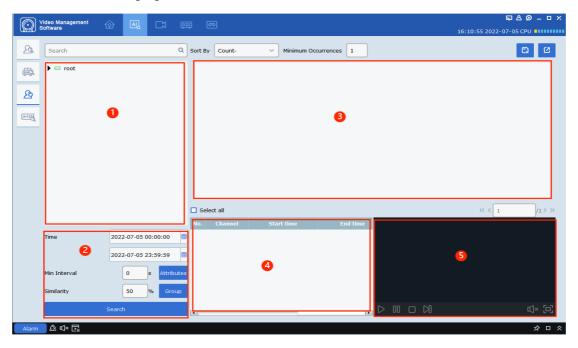
No.	Item	Description
1	Device tree	View the listed device channels.
2	Search setting area	Select the time range, human, vehicle, or non-motorized vehicle, and click Search .
3	Human and vehicle search display area	View the captures that are searched out based on the specified time range.
4	Device information display area	View the detailed device information.
5	Recording playback area	Play back recordings.

Step 1: Select a device or device group in the device tree.

- **Step 2:** Select the time range and human or vehicle below the device tree, and click **Search**.
- Step 3: The search results are displayed in the form of cards in the display area. Click a card to view the detailed device information below, and play back the recording in the playback area. Click the box in the upper right corner of a card, and click to export the information.

12.3. Repeat Visitor Search

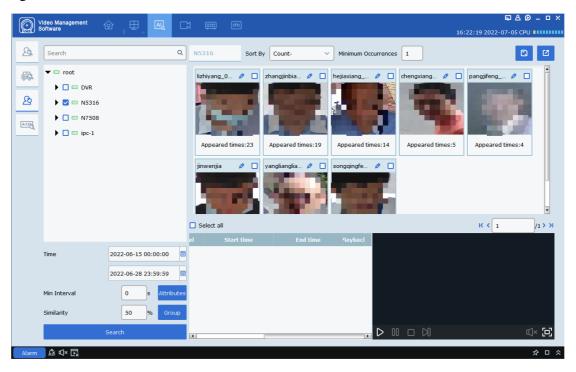
Step 1: On the **AI Search** page, click the repeat visitors icon to enter the repeat visitors page, as shown in the following figure:



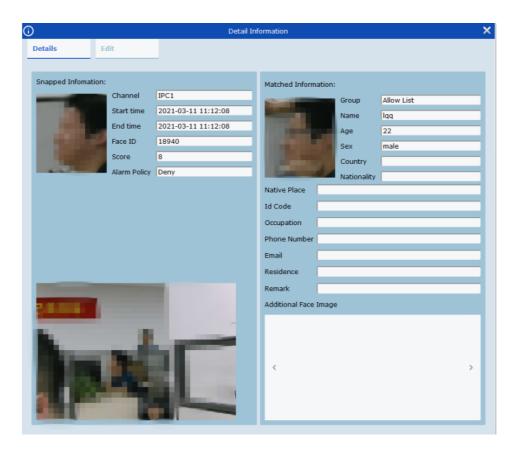
No.	Item	Description
1	Device tree	View the listed device channels.

2	Search setting area	Search for the number of times that a face appears by setting the time period, the minimum interval, and similarity. The attributes and group are used
		to filter search results.
3	Human search display area	View the profiles of people and the number of times people appear, which are searched out based on the specified time range.
4	Repeat visitor information display area	View the number of repeat visits, time, device channel that are displayed in the order of time.
5	Recording playback area	Select a recording in the repeat visitor information display area and play the recording in the playback area.

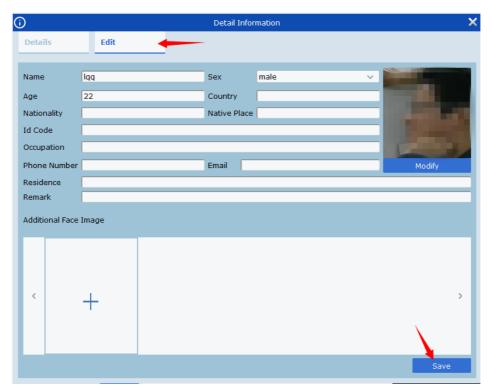
Step 2: Select a device or device group, set the time, minimum interval, and similarity. To query a person, select the group the person belongs to in Group. Click Attributes to select attributes if necessary and click Search, as shown in the following figure:



Step 3: The query results are displayed in the form of cards in the query display area. A card consists of the upper part, central part, and lower part. The lower part Appeared times: 16 shows the number of times the person appears. The central part shows the image recorded by the device. The upper part stranger shows the person name, and box. The name is first queried in the personnel information stored in the device. If the name does not exist, Stranger is displayed. Click to go to the detailed information page. If the repeat visitor information is stored in the device, the detailed information is displayed, as shown in the following figure:



If the person is a stranger, no information is displayed on the page. If you know the person, add the person information to the device or modify the information. Click **Edit** pointed by the arrow, as shown in the following figure:



After you enter the information, click **Save** pointed by the arrow in the above figure to save the information to the device.

To export the queried information, select the box in Stranger Or, click **Select All** below the images and click in the upper right corner.

Step 4: If you click a card, the information bar in the lower part shows the information each time the repeat visitor is captured.

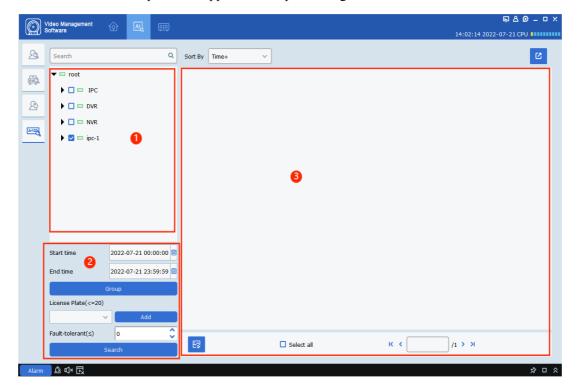
No.	Channel	Start Time	End Time	Playback
1	IPC3	2019-11-22 05:35:05	2019-11-22 05:35:06	D
2	IPC3	2019-11-22 05:35:47	2019-11-22 05:35:48	D
3	IPC3	2019-11-22 05:35:51	2019-11-22 05:35:52	D
1	IDCO	2019-11-22	2019-11-22	

The information bar shows the capture channel, start time and end time, and video playback in the order of capture time. Click in the **Playback** column if you want to play back the recording in the playback window next to the information bar. For information about playback operations, see Table 6-1.

12.4.License Plate Search

Step 1: On the AI Search page, click the License Plate Search icon to enter the license plate search page, as shown in the following figure:

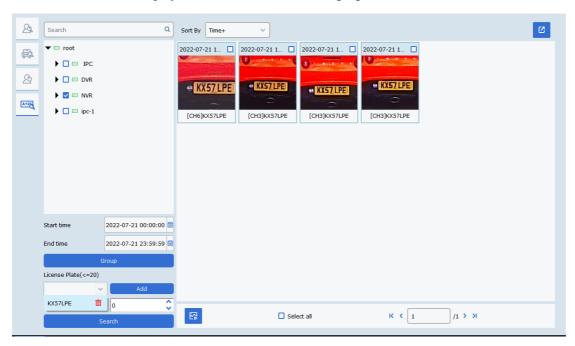
Note: The device is required to support license plate recognition.



Each part is described in the following table:

No.	Item	Description
1	Device tree	View the devices that support license plate recognition.
2	Search setting area	Set the date, group, license plate, and number of fault-tolerant characters for search.
3	Search result display area	View the license plates that are searched out based on settings.

Step 2: Select the device channel, date, and license plate group, and enter the license plate number you want to search. Then click **Add** to add the plate number to the search list, and click **Search**. The search results are displayed, as shown in the following figure:

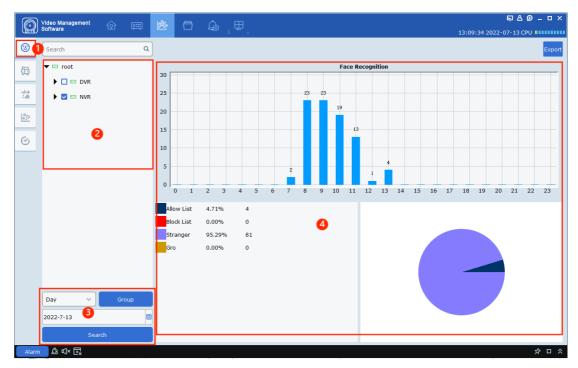


13.Data Analysis

From the main menu, click **Data Analysis** to go to the data analysis page. Data analysis involves five modules: face statistics, human and vehicle statistics, cross counting, heat map, and face attendance statistics.

13.1. Face Statistics

On the **Data Analysis** page, the face detection page is displayed by default, as shown in the following figure:



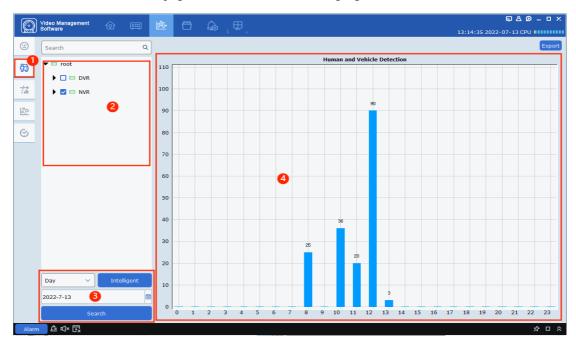
No.	Item	Description
1	Face detection statistics module	Click to enter the face detection statistics page.
2	Device tree	View device channels.
3	Search setting area	Set the date, time range, and group for search.
4	Result display area	A column chart or pie chart shows the search results.

Select a device, set the date, time range, and group, and click **Search**.

The search results are shown by a pie chart or column chart in the display area.

13.2. Human and Vehicle Statistics

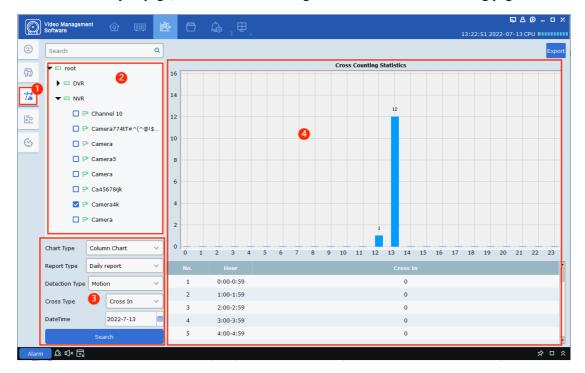
On the **Data Analysis** page, click the human and vehicle detection icon to enter the human and vehicle detection statistics page, as shown in the following figure:



No.	Item	Description
1	Face detection statistics module	Click to enter the human and vehicle detection statistics page.
2	Device tree	View device channels.
3	Search setting area	Set the date, time range, and group for search.
4	Result display area	A column chart or pie chart shows the search results.

13.3.Cross Counting

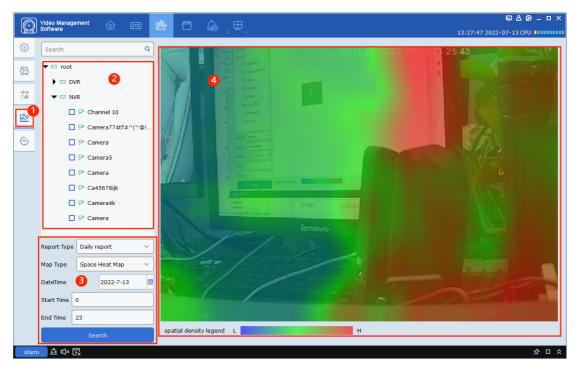
On the Data Analysis page, click the cross counting icon to enter the cross counting page.



No.	Item	Description
1	Cross counting module	Click to enter the cross counting page.
2	Device tree	View device channels.
3	Search setting area	Set the display type, which can be a column chart and line chart. Set the report type, detection type, cross counting type, and time for search.
4	Result display area	A column chart, line chart, or table shows the search results.

13.4.Heat Maps

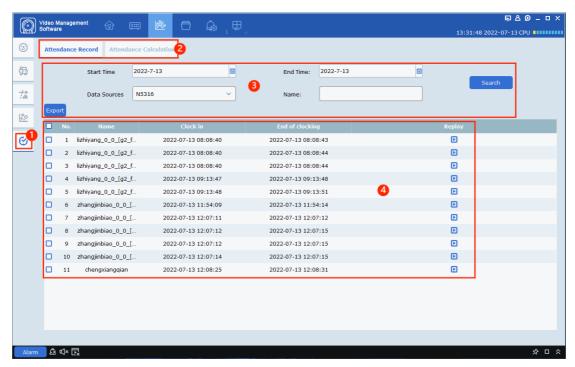
Heat maps display the activity degree in the camera monitoring area. On the **Data Analysis** page, click the heat map icon to enter the heat map page, as shown in the following figure:



No.	Item	Description
1	Heat map module	Click to enter the heat map page.
2	Device tree	View device channels.
3	Search setting area	Set the date, time range, detection type, and display mode for search. The space heat map is displayed in image mode, and the time heat map is displayed in a column chart. The heat degree value is shown.
4	Result display area	A column chart or image shows the search results.

13.5. Face Attendance Statistics

On the **Data Analysis** page, click to enter the attendance statistics page.



No.	Item	Description
1	Attendance statistics module	Click to enter the attendance statistics page.
2	Tab	Switch between the pages of attendance records and attendance calculations.
3	Search setting area	Select a device, and set the start time and end time for search.
4	Result display area	A table shows the search results.

Attendance records: Display the attendance start time and end time of everyone every time in the area covered by the device, and the related recording events.

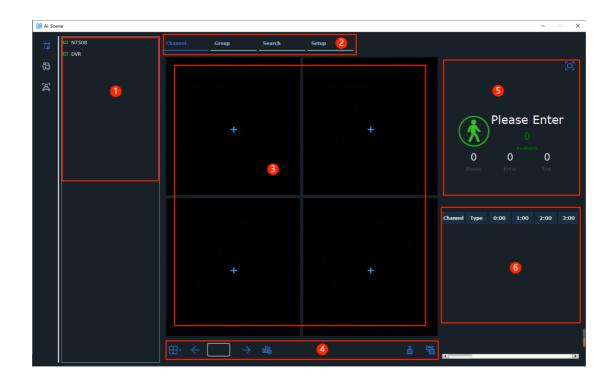
Attendance calculations: Calculate the attendance status of people base on the attendance rules set in attendance management.

14.Intelligent Scene

From the main menu, choose AI Scene to go to the AI scene page.

14.1.Cross Counting

On the AI scene page, click in to enter the cross counting scene, as shown in the following figure:

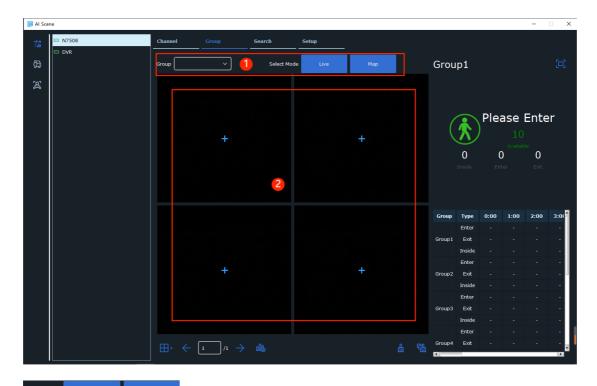


No.	Item	Description
1	Device tree	View and select devices.
2	Tab	Switch among the pages of channel preview, group preview, scene search, and configuration.

3	Preview area	Preview channel scene. During preview, you see the total number of people who are involved in the channel, who enter the channel, who leave the channel, and who stay in the channel respectively. If no channels are available, is shown in the center of each window. Click the icon to enter the settings page and add channels.
4	Function control area	Click to switch split views. The options are 1, 4, 6, 8, and 9. Switch split screen, Click to go to the previous page, Click to go to the next page. Or, enter a page number to go to the page. Click to control whether the number of channels is displayed or not. Select a channel and click, then the channel count is cleared. Click then the counts of all device channels are cleared.

5	Display area	View the number and status of the selected channels or groups. Normally, the icon is green if the number of people who stay in does not exceed the limit. The displayed number of allowed people is also green. And you can see Please Enter. However, the icon is red if the number of people who stay in exceeds the limit. The displayed number of allowed people is also red. And you can see Please Wait. In the display area, you can click to turn the area into full screen mode. If the display area is in full screen mode. Otherwise, the advertisements are played in turn. In this case, all numbers, icons, and text in the display area are shown on the right side of the screen, so you can view the specific numbers regarding the channel in real time. To exit full screen mode, right-click to exit. And, you return back to the original window.
6	Statistics display area	View the number of people who enter, leave, and stay in respectively in each hour within one day. If a number is 0, it is shown as –.

Click the **Group** tab to enter the group preview. The group preview is different from the channel preview. For channel preview, you can set the parameters of each channel. For group preview, you can only set the parameters of the whole group, and each channel only shows the number of people who enter and leave respectively. The group preview can be shown in map mode.



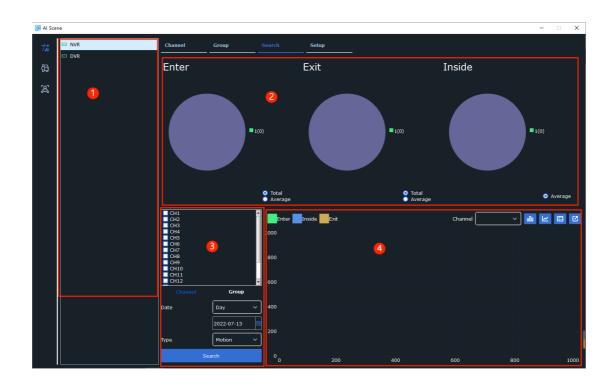
Set **Select Mode** to switch between modes. **Live** means the preview mode. **Map** means the map mode. Preview mode is the default one.

Click Map to enter map mode, as shown in the following figure:

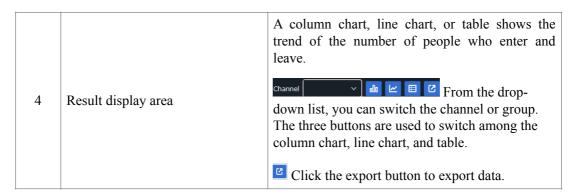


Click to add a map, click to modify the map, and click to enter full screen mode.

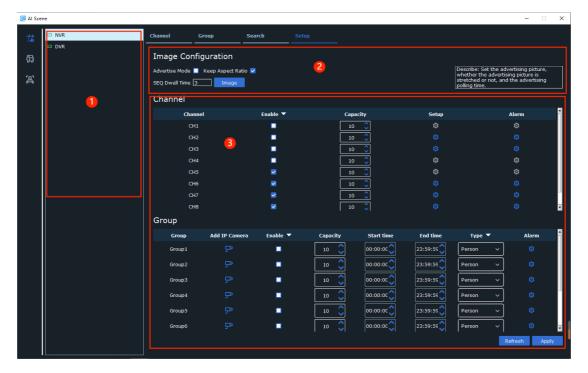
Click the **Search** tab to go to the cross counting page, as shown in the following figure:



No.	Item	Description
1	Device list	View the devices that support the cross counting scene.
2	Search display area	Pie charts show the total number and average number of people who enter, leave, and stay in respectively within a time period for each channel or group. Click Total of Average to toggle between the total and average number of people.
3	Search setting area	Set the channel or group, date, time period, and type for search.



On the AI scene page, choose Setup to enter the cross counting scene configuration page, as shown in the following figure:



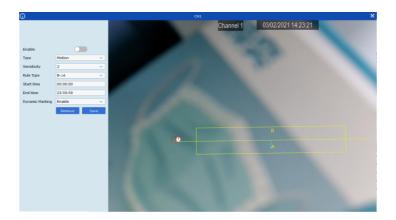
No.	Item	Description	
1	Device list	View the devices that support the cross counting scene.	
2	Advertisement configuration	Advertise Mode: Whether in advertising mode. Keep Aspect Ratio: Whether to keep the aspect ratio. SEQ Dwell Time: Indicates the polling time. Image button: Enter image management to add and delete advertisement images.	
3	Channel and group configuration	Channel configuration: One data item for one channel of a device. Channel: channel number; Enable: display or not; Capacity: Set the limit for the number of people who can enter and stay in. Setup: Set cross counting parameters. See Figure 15-7. Alarm: Set alarm output parameters. See Figure 15-8. Group configuration: A group can contain up to eight groups. Group: group number. Add IP Camera: Click to configure group channels. Enable: display or not; Capacity: Set the limit for the number of people who can enter and stay in. Start time and End time: Set the start time and end time. Type: Set the detection type, which can be human or vehicle. Alarm: Set alarm output parameters.	

Add and delete alarm images, as shown in the following figure:

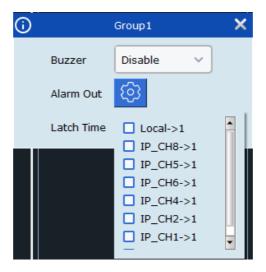


Click to add local images, and click to delete images. Up to 16 polling advertisement images can be added, and each image size cannot exceed 2 MB.

Configure cross counting channels, as shown in the following figure:



Set alarm output parameters, as shown in the following figure:



Buzzer: Whether to enable the buzzer.

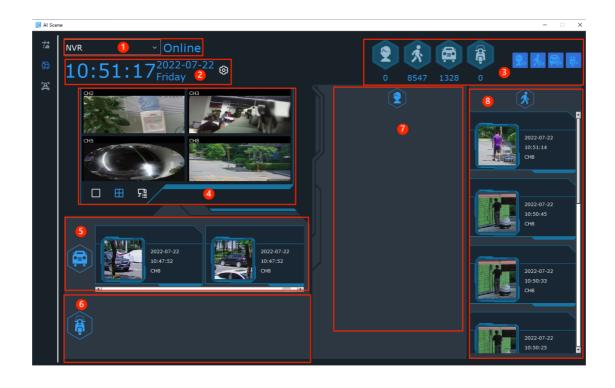
Alarm Out: alarm output. Local->1: local alarm output; IP CH1->1: front-end alarm output.

Latch Time: Duration:

Note: If a channel is selected for a group, the channel on the channel configuration list appears gray and cannot be enabled. Likewise, if a channel is selected on the channel configuration list, then the channel cannot be selected for a group. Also, the same channel cannot exist in two groups simultaneously.

14.2. Hybrid Detection

On the **AI scene** page, click to enter the hybrid detection scene, as shown in the following figure:

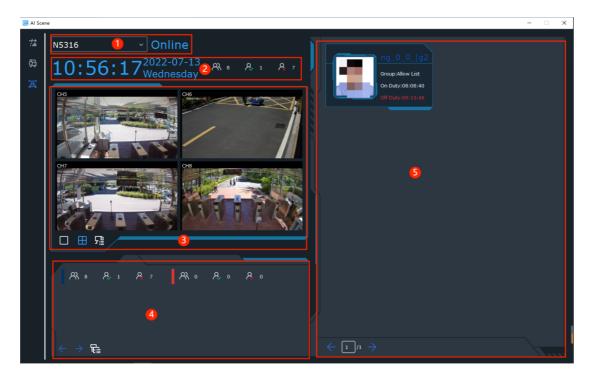


Each part is described in the following table:

No.	Item	Description	
1	Device name and status	In the drop-down list, you can switch devices. Online: the device is online; Offline: the device is offline.	
2	Time, statistics duration setting	View the current time, and set the statistics duration for the hybrid detection type.	
3	Capture statistics and control area display	View the detection types and accumulated capture data of the selected device in the specified duration. Click a type to control whether to hide or show the corresponding display area.	
4	Preview area	Live view window. Click to switch to a single channel preview, and click to switch to a four-channel preview. Click continuously to switch preview channels. Click to select the preview channels you need.	
5	Vehicle capture display area	View the captured vehicle images, capture time, and channel in real time.	
6	Non-motorized vehicle capture display area	View the captured non-motorized vehicle images, capture time, and channel in real time.	
7	Face capture display area	View the captured face images, capture time, and channel in real time.	
8	Passerby capture display area	View the captured passerby images, capture time, and channel in real time.	

14.3. Face Attendance

On the AI scene page, click is to enter the face attendance scene, as shown in the following figure:



Each part is described in the following table:

No.	Item	Description
1	Device name and status	Right-click to switch devices. When the device is online, Online in blue is shown. When the device is offline, Offline in red is shown.
2	Time, total number display area	View the current time, and the total number of people who should attend, who have attended, and who have not attended respectively.

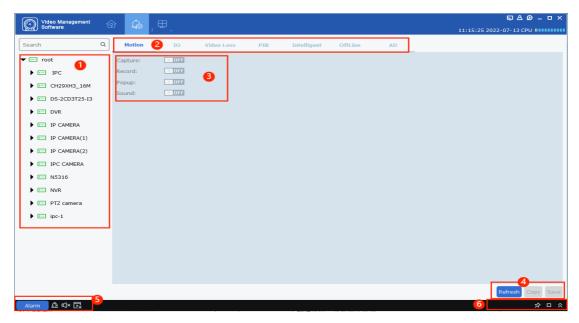
3	Preview area	Select a channel in view preview. Click to switch to a single channel preview. Click to switch to a four-channel preview, and click it again to switch pages. Click to open the channel selection window and select the preview channels you need.
4	Group attendance statistics area	View the number of people who should attend, who have attended, and who have not attended respectively in each face group on that day. Click to switch pages, and click to select a group for statistics.
5	Attendance information display area	View the information and attendance time of people who have attended. When the attendance time is marked white, the attendance is normal. When the attendance time is marked red, the attendance is abnormal. Click 1 /1 to switch pages

15. Alarm Settings

On the alarm settings page, you can set and switch on or off channel alarms.

15.1. Alarm Interface Introduction

From the main menu, choose **Alarm Config** to go to the alarm settings page, as shown in the following figure:



The functions on the page are described in the following table:

No.	Parameter	Description	
1	Device list	Open a device group and select a channel.	
2	Alarm type	The alarm type, with the following options: • Motion • I/O • Video Loss	
		PIRIntelligentOffline	
3	Alarm triggered operation	The triggered operation, with the following options: Capture Record Popup Sound	
4	Copy and save	Click Copy to copy the alarm triggered operations of the channel to another channel or device. Click Save to save the settings.	

5	Alarm Trigger Window, Pop- Up, And Sound	Click Alarm to open the alarm trigger pop-up, and click to delete the alarms in the alarm trigger pop-up. Click to enable the alarm sound, and click to disable the alarm sound. Click to allow the alarm pop-up, and click to deny the alarm pop-up.
6	Alarm thumbnail and alarm trigger window	Click, namely Enable/disable auto hide, to choose whether to hide the alarm thumbnail in the preview area. Click to zoom in the alarm trigger pop-up. Click to expand or collapse the alarm trigger pop-up.

15.2. Alarm Setting Operations

- **Step 1:** Select a device in the device list, and select a channel of the device.
- Step 2: Select an alarm type.
- Step 3: Switch on the alarm button under the alarm type, and select the options you need.
- Step 4: Click Save.
- **Step 5:** To apply the same alarm settings to another channel or device, click **Copy** and select the target channel on the displayed menu. Click **Confirm** to save the settings. (**Note**: The copy function takes effect only after you have saved the alarm trigger operations for a channel.)

15.3. Alarm Trigger Window, Pop-Up, And Sound

• Click Alarm in the lower left corner to open the alarm trigger window, as shown in the following figure:

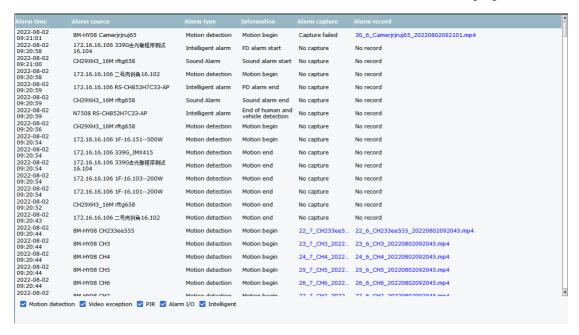


• In the alarm trigger window, you find:

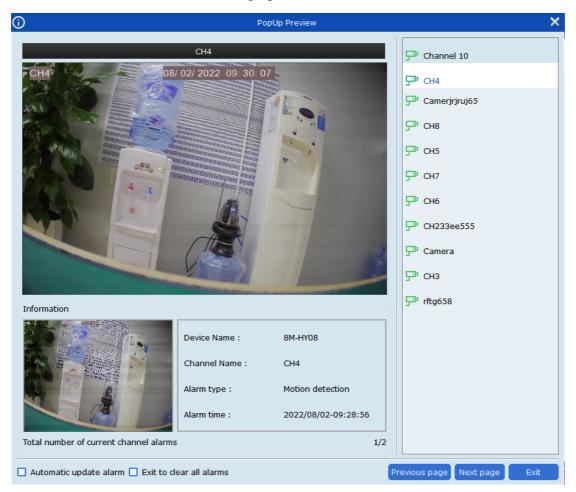
Alarm time, Alarm source, Alarm type, Information, Alarm capture, and Alarm record.

Select an alarm type in Motion detection Video exception PIR Alarm I/O Intelligent . Click an image or screenshot to view the details.

• Click to zoom in the alarm information window, as shown in the following figure:



• The device channels with alarm trigger operations are displayed, so you can view the alarms in real time, as shown in the following figure:



Automatic update alarm: If selected, the alarm channel is shown automatically on VMS Pro when a new alarm is triggered.

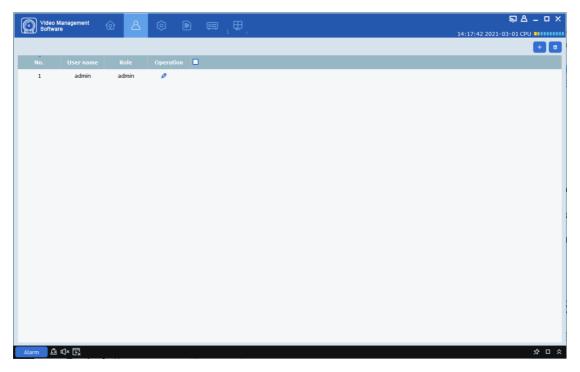
Exit to clear all alarms: If selected, all channel alarms are cleared after you exit the alarm page.

16.Account Management

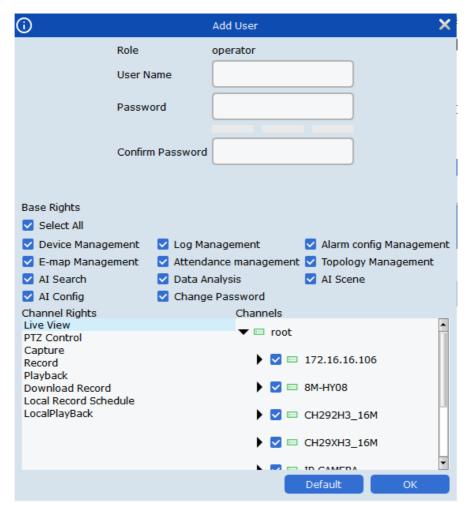
Add and delete users, and modify user permissions on the account management page.

16.1.Adding Users

Step 1: From the main menu, choose **Account Management** to enter the account management page, as shown in the following figure:



Step 2: Click in the upper right corner. A dialog box is displayed, as shown in the following figure:



The parameters are described in the following table:

Parameter	Description	
User Name	The only identifier of a user. The username is unique.	
Password	The user password and password confirmation. The	
Confirm Password	passwords must be consistent.	
	Set basic user permissions as needed. The permissions involve:	
	Device Management: Device Management	
	Log Management: Log Management	
	Alarm Config Management: Alarm configuration management	
Base Rights	E-map Management: Electronic map management	
· ·	Attendance Management: Attendance Management	
	Topology Management: Topology Management	
	AI search: Intelligent search; Data analysis: Data Analysis	
	AI Scene: Intelligent scene; AI config: Intelligent Configuration	

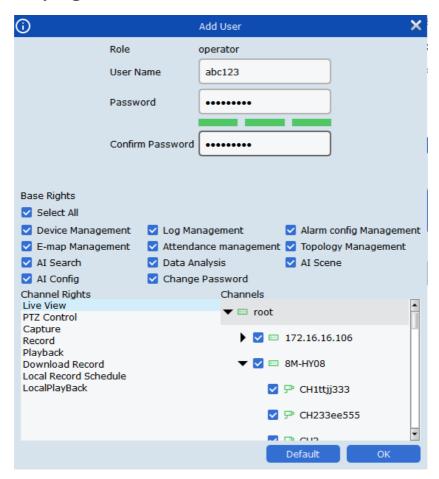
Step 3: Set channel permissions as needed. Select channels on the right for each permission. The parameters are described in the following table:

Parameter	Description
Live View	Real-time Preview
PTZ Control	PTZ Control
Capture	Capture
Record	Recording
Playback	Playback
Download Record	Export a recording
Local Record Schedule	Local recording plan
LocalPlayBack	Local Playback

Step 4: After settings, click **OK** to add the user. To restore default permissions, click **Default** before you click **OK**.

Note: The administrator has all rights. The rights cannot be modified or deleted. The permissions for the added users can be modified, and the users can be deleted.

16.2.Modifying Users



Step 1: Click next to the user you want to modify.

Step 2: On the page that appears, modify the user permissions, username, and password as needed.

Step 3: Click **OK** to save the modification.

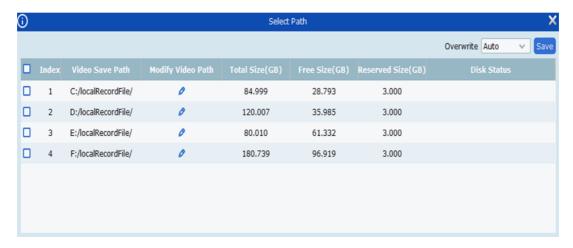
16.3.Deleting Users

Click next to the user you want to delete. A dialog box is displayed. Click **OK**. Alternatively, click the checkbox of multiple users you want to delete, and click in the upper right corner of the page to delete the users. Note that the super user cannot be deleted.

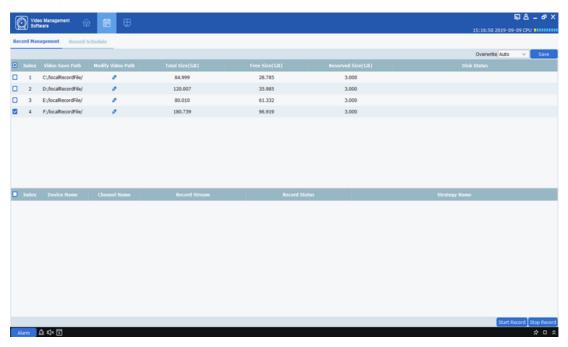
17.Local recording plan

This chapter describes how to configure local recording plans.

Step 1: From the main menu, choose **Local Record** to enter the recording plan path selection page, as shown in the following figure:

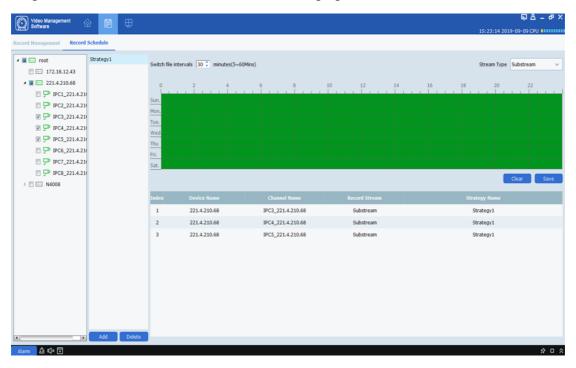


Step 2: Select a path and click **Save**. The local recording plan page is displayed, as shown in the following figure:

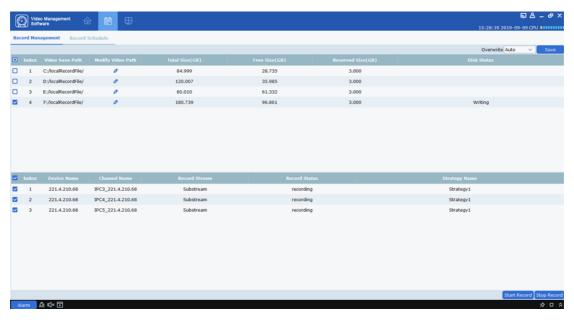


Step 3: Double-click the area to set Reserved Size (GB), click Overwrite in the upper right corner to overwrite the time, and click Save.

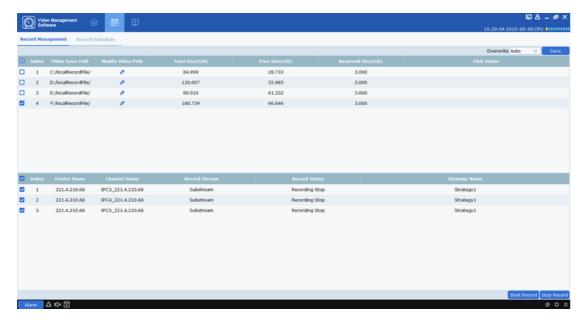
Step 4: Click **Record Schedule** to enter the recording plan settings page. In the device tree, select a device you need. Click and hold the left mouse button, and drag to set the specific record time in the grid area, and click **Save**, as shown in the following figure:



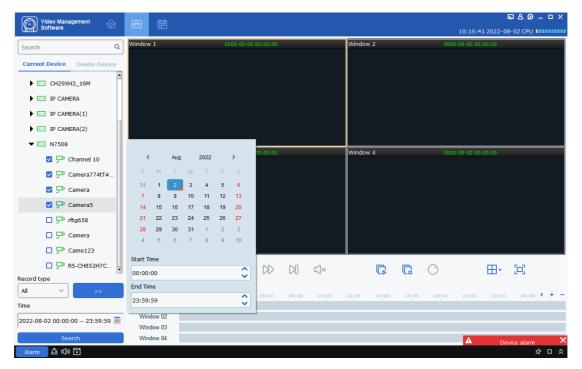
Step 5: After settings, go back to the **Record Management** page, select the checkbox of the device channel you need or select all channels, and click Start Record in the lower right corner to start recording. After recording starts, **Writing** appears in the **Disk Status** column, and **recording** appears in the **Record Status** column on the record management page, which means the disk is recording locally, as shown in the following figure:



Step 6: Click **Stop Record** in the lower right corner to stop local recording. Then **Writing** disappears from the **Disk Status** column, and **Recording Stop** appears in the **Record Status** column on the recording management page, as shown in the following figure:



Step 7: From the main menu, choose **Local Playback** to go to the local playback page. Select the channel, and find that the calendar marks the date with local recordings, as shown in the following figure:



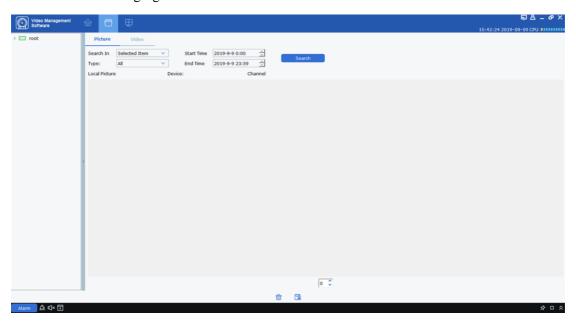
Step 8: For detailed operations about local playback, see Chapter 8 "Local Playback".

18. File Management

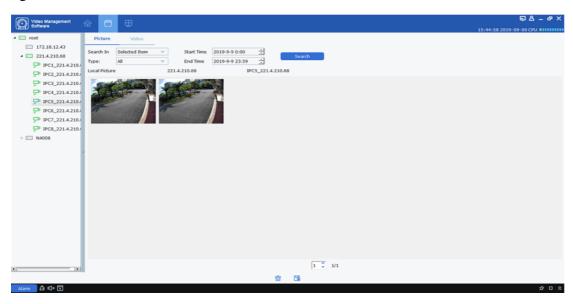
View and play back local recordings and images. The recordings and images include those recordings and captures in preview.

18.1. Playing Back and Exporting Local Images

Step 1: From the main menu, choose **File Management** to go to the file management page, as shown in the following figure:



Step 2: In device groups on the left, select the desired device channel, set the date and time, and click **Search** to search for images. The search results are displayed, as shown in the following figure:



Step 3: Double-click the image you want to view.

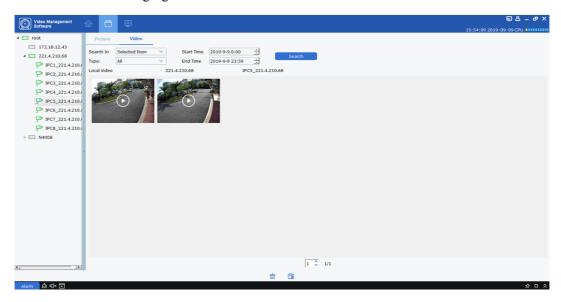
Note: Right-click the image and select Show in Explorer, then the folder that stores the image is

displayed. Right-click to select Deleted File to delete the image. The function is the same as at the bottom of the page. Right-click to select to export the image to another directory. The function is the same as at the bottom of the page.

18.2. Playing Back and Exporting Local Recordings

Step 1: From the main menu, choose **File Management** to go to the file management page. Then click **Video** to switch to the video page.

Step 2: In device groups on the left, select the desired device channel, set the date and time, and click **Search** to search for recordings. Recordings are displayed if they exist in the specified date, as shown in the following figure:



Step 3: Double-click the local recording you want to play back, then the recording starts playing, as shown in the following figure:



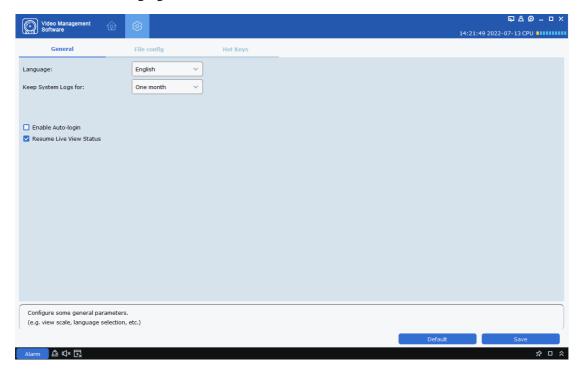
Note: Right-click the recording image and select Show in Explorer, the folder that stores the recording is displayed. Right-click to select to delete the recording. The function is the same as at the bottom of the page. Right-click to select to export the

recording to another directory. The function is the same as 🖫 at the bottom of the page.

19. System Configuration

Set the software system parameters, which involves general settings and file settings.

Step 1: From the main menu, choose **System Config** to go to the system configuration page, as shown in the following figure:



Step 2: Set system parameters. The parameters are described in the following table:

Parameter		Description
	Language	English is supported.
		The retention period of system logs:
General	Keep System Logs for	• One week
General		Half a monthOne month
	Enable Auto-Login	Enable auto login.
	Resume Live View Status	Restore live view.
	File type	The file storage type, with the following options:
		• rf
		• AVI
		• mp4
	Max File Size	The maximum file size, with the following options:
		• 1G
File config		• 2G
	Alarm when disk space is less thanMB	Set a value. When the disk space is lower than the value, an alarm is triggered. Select the checkbox and set the value.
	Path of Saved Pictures	Set the storage path of local images.
	Path of Saved Videos	Set the storage path of local recordings.
	Alarm Sound	Set the alarm sound of each alarm trigger type.

Hot Keys	Real play in full screen (enable full screen mode); Maintain (enable preview mode); Remote playback (enable remote playback) System config (open system settings); Alarm event (open alarms); Cruise Setting (open cruise settings); Device Management (open device management); Lockscreen (lock the screen) Switch user (switch users); Open/Close alarm sound (enable or disable the alarm sound) Local Record (open local	Use a hotkey to quickly enter a module, where you can double-click the hotkey in the latter part to change it.
	Local Record (open local recording)	

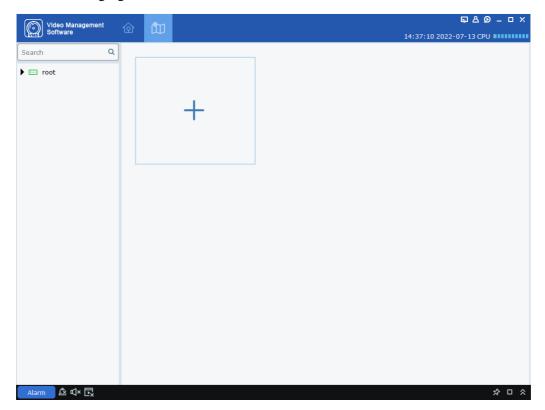
Step 3: Click Save to complete system settings.

20. Electronic Map Management

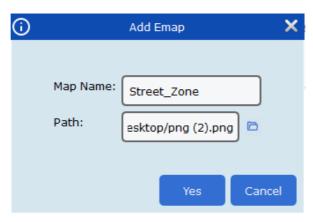
Using an electronic map, you can view the position where an alarm channel exists, and view the videos and alarms of the channel.

20.1.Adding Maps

Step 1: From the main menu, click **Emap Config** to go to the map configuration page, as shown in the following figure:



Step 2: Click + on the page. A map selection dialog box is displayed, as shown in the following figure:

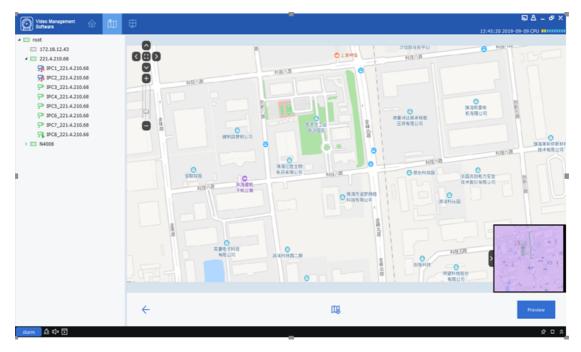


Step 3: Name the map and specify the map path.

Step 4: Click Yes to save.

20.2. Editing Maps

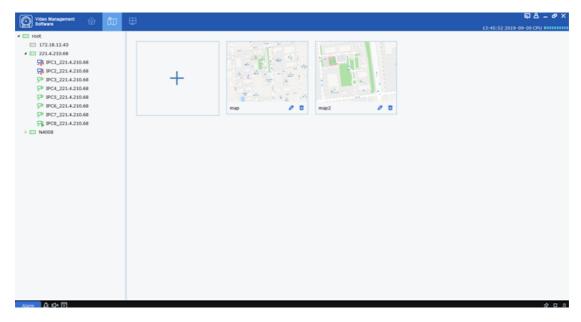
Double-click a map you want to edit to go to the edit page, as shown in the following figure:



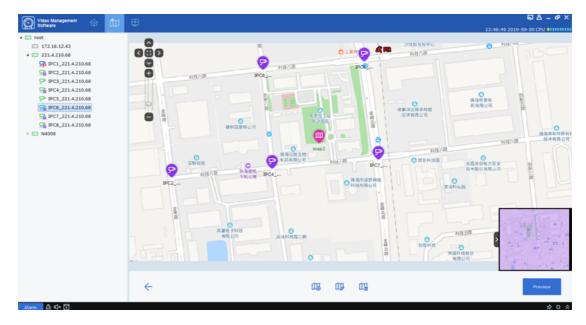
Step 1: In device groups on the left, drag the devices you need to specific positions on the map.

Step 2: Click to add hot areas on a map.

Note: To add hot areas, you need to add a new map.



Step 3: Add hot areas to the map, and drag the devices you need to specific positions on the map, as shown in the following figure:

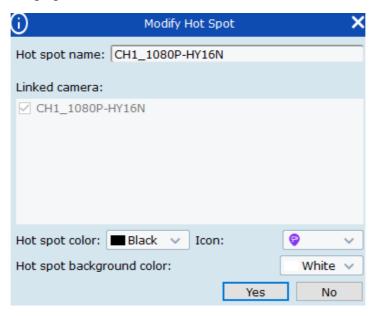


Note: Click **Preview** in the lower right corner to receive real-time alarms from devices. Double-click a device to view the device monitoring view.

Double-click the hot area icon to enter the hot area map. Click **Preview** in the lower right corner to receive real-time alarms from devices. Double-click a device to view the device monitoring view. Click to view clearly the alarms from devices on a map.

20.3. Modifying and Deleting Devices

1. Click a device icon, and double-click or click to enter the device modification page, as shown in the following figure:



Parameter description:

Hot spot name: The name of the camera spot

Linked camera: The related cameras

Hot spot color: The color of the camera spot

Icon: The icon of the camera spot

Hot spot background color: The background color of the camera spot name

2. Click a device icon, and click \blacksquare . The device deletion dialog box is displayed. Click **OK** to complete the deletion.

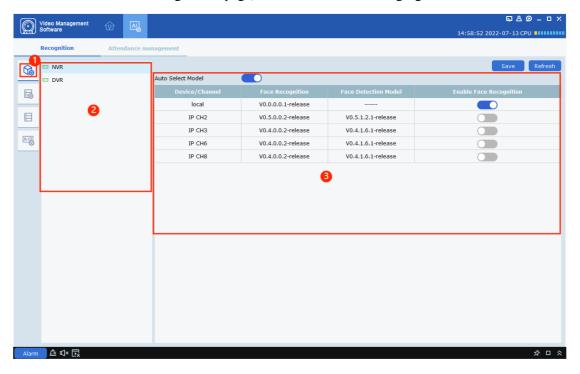
21.Intelligent Configuration

21.1.Recognition Management

On the **AI Config** page, click **Recognition** to open the face edit page. The page includes model configuration, face database management, database synchronization, and license plate management.

1. Model configuration

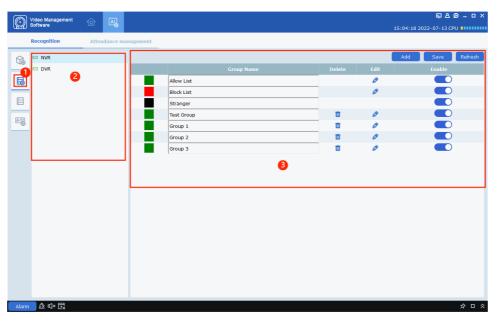
Manage face models and select various face calculation methods. Click the model configuration icon to enter the model configuration page, as shown in the following figure:



No.	Item	Description
1	Model management tab	Click to enter the model management page.
2	Device tree	View and select devices.
3	Model management area	Enter the page, and select a device to view the device model information. In which,
		local in the Device/Channel column indicates the device model.
		Ch1indicates the IP camera model. Only one model can be selected. If you have enabled Auto Select Model, you cannot select a model manually. After settings, click Save to save the selected model.
		Face Recognition: View the face recognition version.
		Face Detection Model: View the face detection model version.
		Save: Save changes.
		Refresh: Refresh data.

2. Face database management

Add and delete face groups, modify face group information. The face database management page is shown in the following figure:



No.	Item	Description
1	Face database management tab	Click to enter the face database management page.
2	Device tree	View and select devices.

Up to 16 face groups can be created for one device. Allow list, Block list, and Stranger are fixed and cannot be deleted.

Group Name: View the face group name which can be changed.

Delete: Delete a face group except for the three fixed groups.

Edit: Add, delete, and modify the images in a face group.

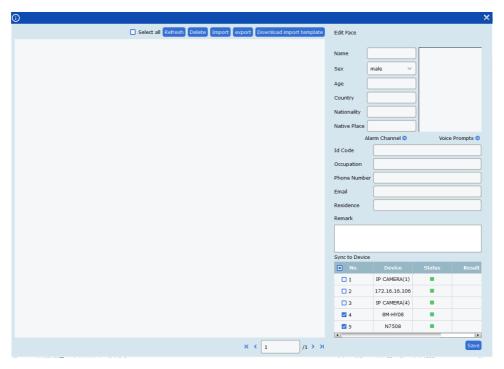
Enable: View the face group status.

Add: Add a face group.

Save: Save changes.

Refresh: Refresh data.

Add, delete, and edit face image information. Select a group and click on the enter the group setting page, as shown in the following figure:



Add face images: Click **Import**. The import method dialog box is displayed, as shown in the following figure:



Device Image: Search for face images captured by devices and import the images to a specific group.

Local Image: Select face images saved locally and import the images to a specific group.

Local Image Directory: Select a local directory that stores face images and import the images in batches to a specific group.

Export face images: Select face images in the current group, and click **Export**. Then select a local storage path to export the images to local storage.

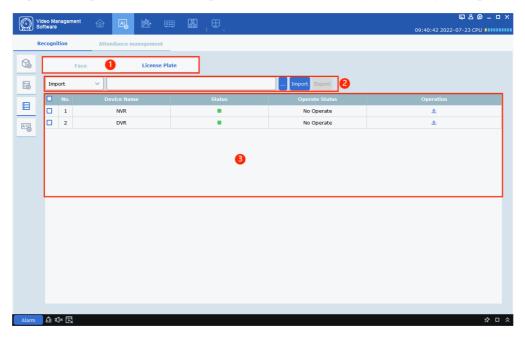
Download the import template: Click **Download import template**, and select a local storage path to download the import template to local storage. Edit images based on the description in the template file. Click **Local Image** to import .csv files to upload images and the related information in batches.

Delete face images: Select face images in the current group, and click **Delete** to delete the selected images.

Refresh: Click **Refresh** to refresh the current group.

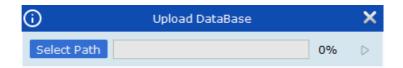
3. Database synchronization

Import and export face and license plate databases on the recognition management page.



No.	Item	Description
1	Database selection	Click to enter the face or license plate database page.
2	Import and export	Import and export databases, and select local storage paths.
3	Device list	View the devices that support database operation.

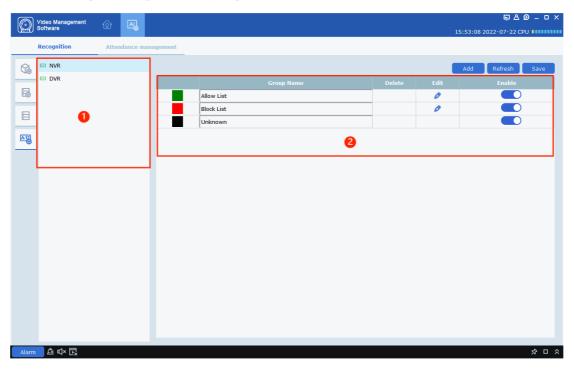
Import or export a database: Click . A dialog box is displayed.



Select a path and click . After the progress bar is full, the import or export succeeds.

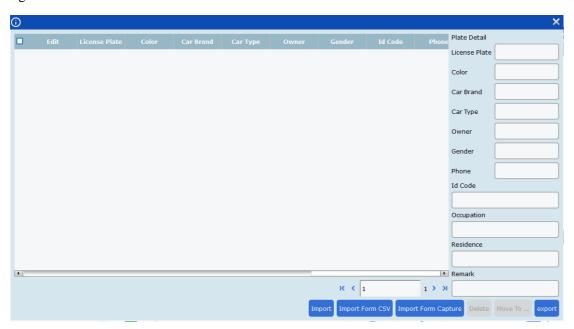
4. License plate management

On the **AI Config** page, click to enter the plate management page, where you can add and delete license plate groups and edit group information.

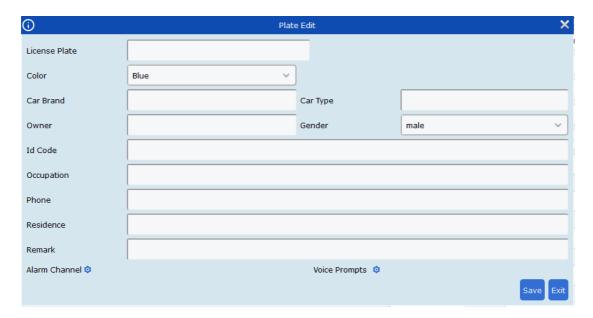


No.	Item	Description
1	Device tree	View and select devices.
2	License plate databased management area	Up to 64 license plate groups can be created for one device. Allow list , Block list , and Unknown are fixed and cannot be deleted.
		Group Name : View the license plate group name which can be changed.
		Delete : Delete a license plate group you created.
		Edit : Add, delete, and modify license plate information.
		Enable : View the license plate group status.
		Add: Add a license plate group.
		Save: Save changes.
		Refresh: Refresh data.

Select a group and click of to enter the license plate setting page, as shown in the following figure:



Click **Import**. The license plate information input page is displayed, as shown in the following figure:



Enter the relevant license plate information on the page, and set the corresponding audio and alarm channel.

Click **Export** and select a local storage path to export the license plate information from the current group. The file format is .csv.

Click **Import form CSV** and select a local .csv file to import vehicle information in batches.

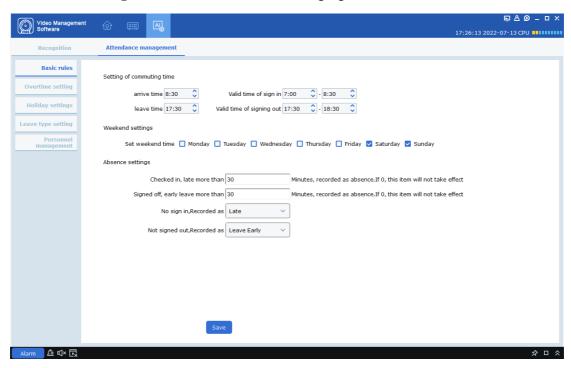
Click **Import form Capture**. On the page that appears, search for license plate images captured by devices. Select images from the search results, and edit and import the information.

Click **Move to** to move the selected license plate information to another group.

Click **Delete** to delete the selected license plate information.

21.2. Attendance Management

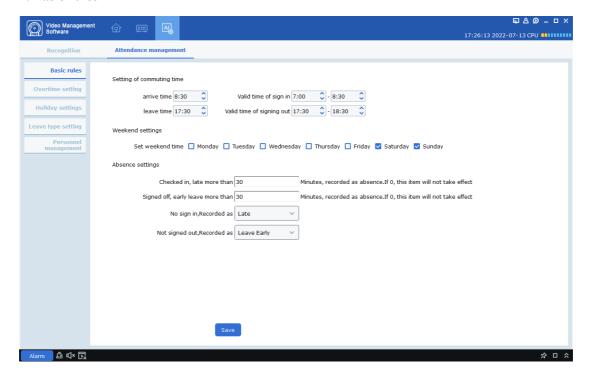
From the main menu, choose **AI Config** to go to the AI configuration page. Click **Attendance management**, as shown in the following figure.



The functions on the attendance management page are described in the following table:

Parameter	Description	
	The alarm setting type, with the following options:	
	Basic rules	
Alarm setting	Overtime setting	
type	Holiday settings	
	Leave type setting	
	Personnel management	

1. Basic rules

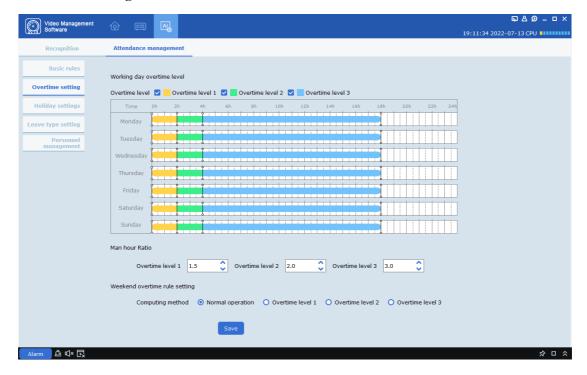


Setting of commuting time: Set office hours, and set valid time periods for clock-in and clock-out.

Weekend settings: Set weekend days. The days selected are days off.

Absence settings: Set absence. If a person has signed in and the late arrival time exceeds the office start hour by X minutes, the person is recorded absent. If a person has signed off and the early leave time exceeds the office end hour by X minutes, the person is recorded absent. For both cases, if the value is 0, the data is invalid. If sign-in or sign-out is not recorded, the value can be set to absent or early leave.

2. Overtime setting



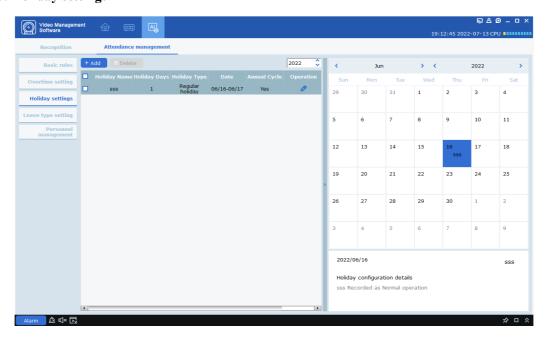
Working day overtime level: Working day overtime level. Three levels in total. If the checkbox of an overtime level is selected, the level is selected. Drag the color bar to set the time range of overtime levels.

Man hour Ratio: Man hour ratio. Set the man hour ratio for each overtime level. The overtime length is counted accordingly by the ratio.

Weekend overtime rule setting: Weekend overtime rule. Set the overtime level for weekend overtime. The overtime length is counted accordingly by the level.

Click Save to save the overtime rules to the system database.

3. Holiday settings



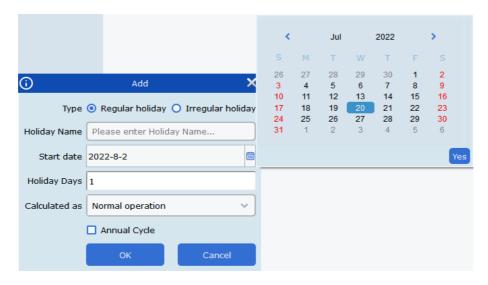
Set holiday or time off in lieu arrangements. The parameters are described in the following table:

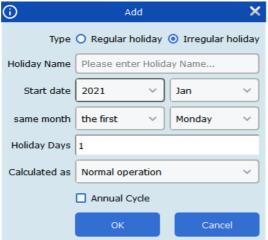
Parameter	Description
Holiday Name	Holiday name. The name is required. If left blank, you will be reminded.
Holiday Days	The number of holiday days
Holiday Type	The holiday type
Date	The holiday start date and end date
Annual Cycle	Cycled annually or not
Operation	Modify the set holiday

After you click + Add , the holiday settings appear, and you can select a holiday type. If you select Regular holiday , enter the holiday name, set the start time, enter the number of holiday days, select the overtime level, and select whether to cycle annually. If you select Irregular holiday , the method to set the date is different. As the holiday start date is different every year, you need to set the year, date, weekend, and day.

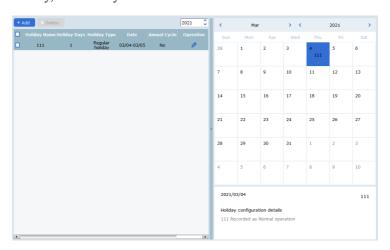
Click Delete to delete the holiday that has been added and selected.

Click to select a year on the calendar on the right side of the page.

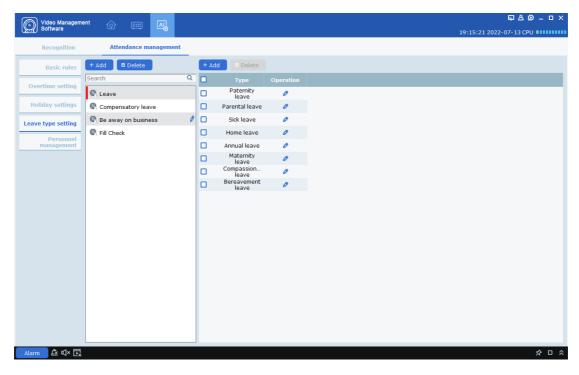




After you add a holiday, the holiday date is marked on the calendar.



4. Leave type setting



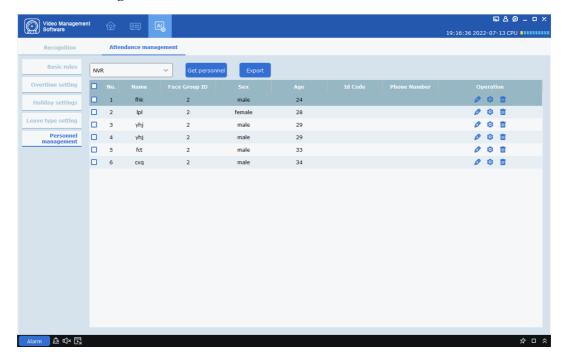
Classify holiday types. The categories are listed on the left, and the sub-categories are listed next to the categories. Read the types from and save the types to the local database.

Click + Add or Delete to add or delete a leave type.

Search for a category in search , and click . Then the sub-categories of the category are listed on the right side of the page.

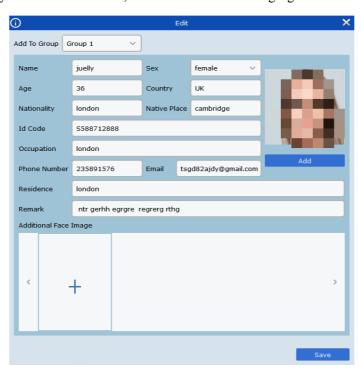
Click of a sub-category to modify it.

5. Personnel management



Select a device in Get personnel and click the button. Then the local database is queried, and the device face information is synchronized to VMS Pro. The information includes the name, face group ID, gender, age, ID code, contact, and more.

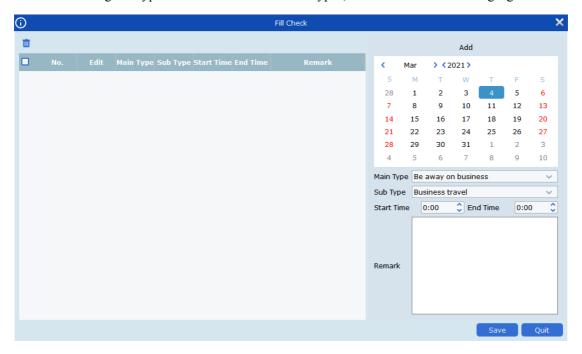
Click export to export the selected face information to local storage. In the **Operation** column, click to modify the face information, as shown in the following figure:



All the information listed can be modified. And you can upload multiple face images.

Click to delete the face information.

Click to add later sign-in for people who did not sign in due to business, leave, and time off in lieu. The later sign-in types are the same as the leave types, as shown in the following figure:





G.S.D GROUP INC