

# NVMS

## Lite

## User Manual

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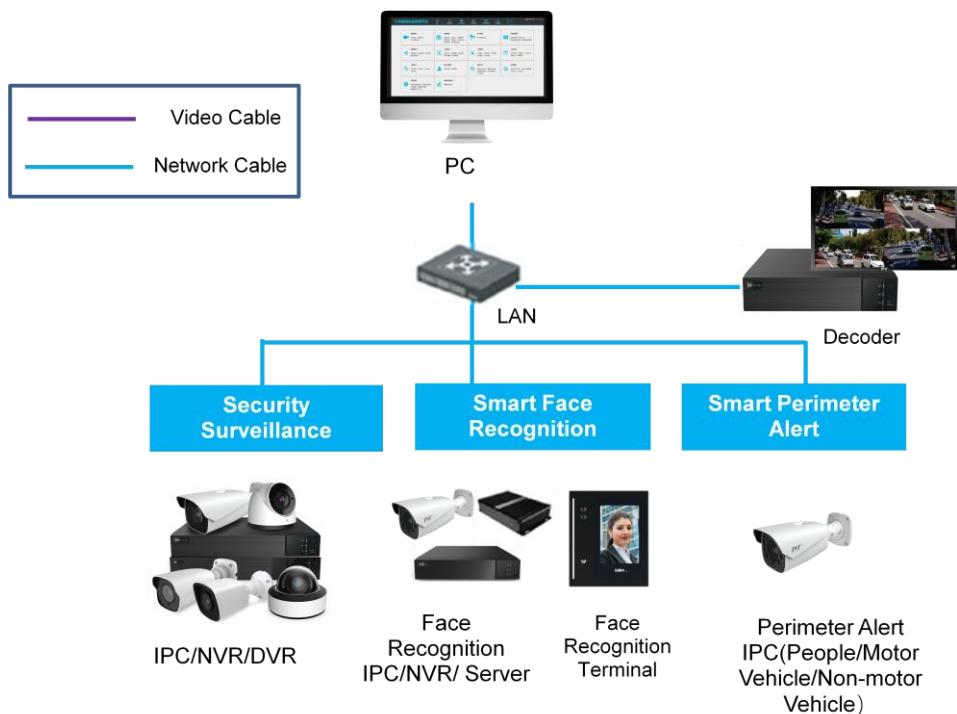
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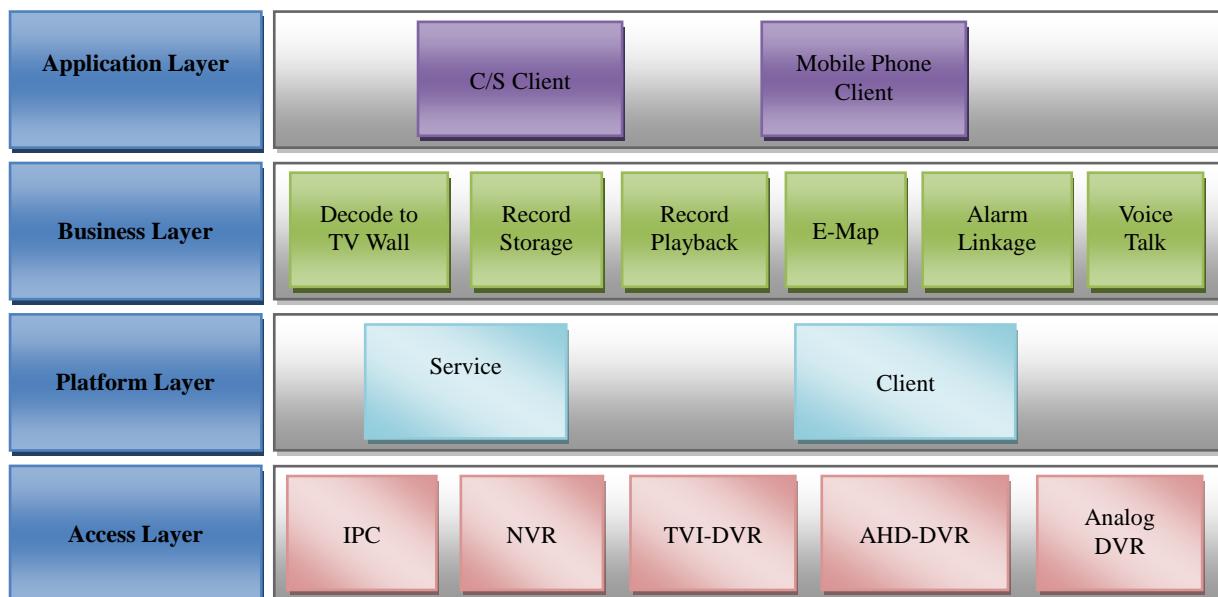
# 1 Introduction

## 1.1 Introduction

NVMS Lite is a security management software with the powerful capabilities of video surveillance management, real-time preview, recording storage, recording playback, recording downloads, alarm linkage, decoding on TV Wall and keyboard control. NVMS Lite can meet the various demands of small-sized projects and can be widely used in the video surveillance of industrial parks, education, banking, chain stores, buildings and transportation.

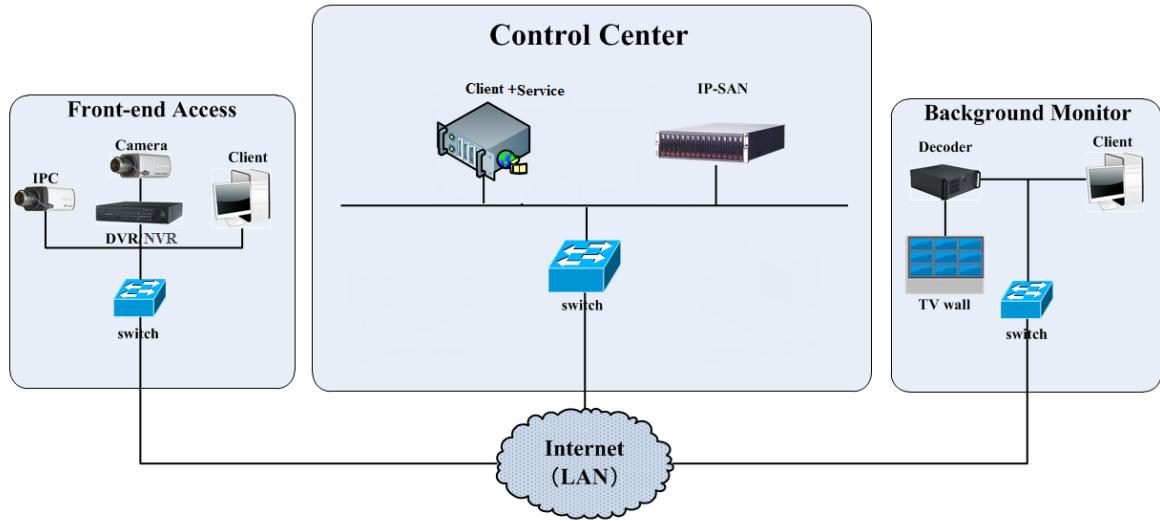


## 1.2 Software Architecture



## 1.3 System Components

### 1.3.1 System



### 1.3.2 Front-end Access

- Front-end devices include IPC, DVR and NVR.
- You need to connect monitor devices such as IPC, DVR and NVR to internet through hubs or routers accessed by Cat5 or Cat5e cables (less than 100 meters) or optical fiber.
- Run monitor client through local PC to configure the local video monitor, monitor devices and so on.

### 1.3.3 Background Monitor

- Background monitors include TV Wall, Monitor, etc.
- You can set up the real-time image of display devices, these display devices including TV-Wall (decoding images to show on the TV-Wall through video decoder), digital display screen and so on.
- Run monitor client through local PC to view, playback and remotely configure and manage the real-time video of front-end monitor devices.

### 1.3.4 Control Center

- Realize various services, such as, video transmission, recording, decoding on TV wall, etc.
- Add IP-SAN storage array to realize centralized storage.
- Connect servers and IP-SAN storage array to internet through switches.
- Set up IP addresses in accordance with the actual situation.

## 1.4 Version

Version	Max signal access
NVMS lite	256-ch video signals

## 2 Configuration Requirement

### 2.1 Software and Hardware Configuration Requirement

No.	NVMS components	Recommendation for hardware configuration	Recommendation for software configuration	Number
1	Server/Monitor Client	Inter(R) Core(TM) i5 7500 3.0GHz or above /16GB memory /1TSATA/ Gigabit NIC or AMD HD6570 or above, 512MB GDDR5 or above/500GB SATA/ Gigabit NIC	Windows 10 Professional/Ultimate	As needed

**Note:** Face recognition IPC configuration: the application scenes should be set as “Security Monitoring”, or the snapshot interval should be set more than 1s.

When all IPCs added to the platform perform face detection or comparison, the number of the captured pictures reported to the platform should not exceed 1,000 per minute.

The recommended 64-bit hardware configurations are as follows.

No.	NVMS components	Recommendation for hardware configuration	Recommendation for software configuration	Number
1	Monitor Client-64bit	Inter(R) Core(TM) i5 7500 3.0GHz or above /16GB DDR3/Intel HD Graphics 530 2GB or above/ NVIDIA GeForce GTX 1060 6GB or above, (multi-screen : 2GB GDDR5 memory) /500GB SATA/Gigabit NIC	Windows 10 Professional/Ultimate/Home 64bit	As needed

### 2.2 Requirement for Firewall

In order to ensure the network security, it is necessary for the system to set up a firewall. All monitor ports shall be opened on the installed servers. The open ports are as follows:

Server	Port Type	Port
Authentication Server	Internal Port	6003
Configuration Server	Internal Port	7002
Media Transfer Server	Internal Port	6006
	Auto Report Port	2009
Storage Server (windows version /IP-SAN)	Internal Port	6009
Alarm Server	Internal Port	6033
Intelligent Server	Internal Port	6069
TV Wall Server	Internal Port	6036

**Note:** The above-mentioned ports are the default internal ports of servers. If all these ports are modified, these open ports shall be modified accordingly in the firewall configuration.

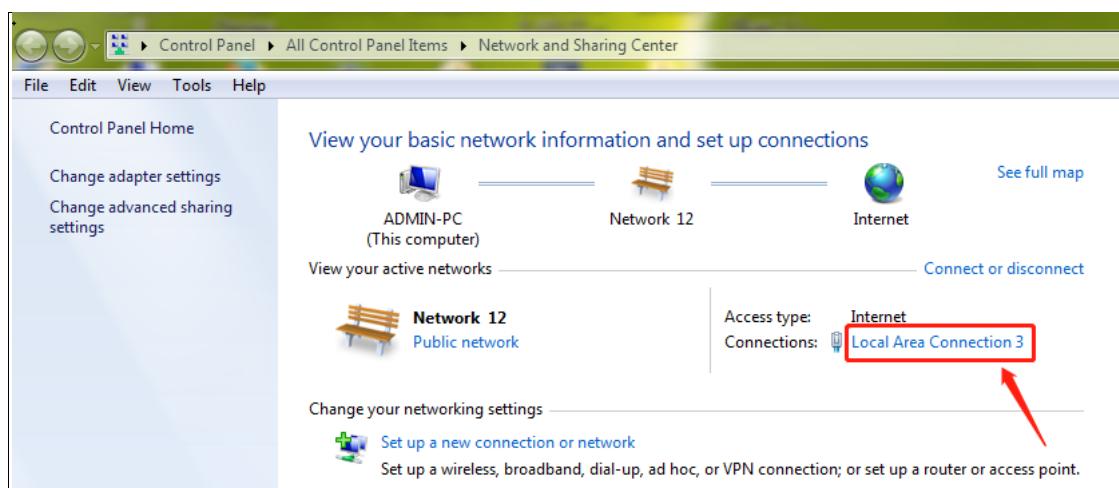
## 2.3 Checking Installation Environment

Item	Checkup Standard
Hardware	Check whether the hardware meets the standard required. (including CPU, memory, HDD, etc.)
Software	Check whether the software meets the standard required. (including the type and version of the operation system, NVMS version, etc.)
Front-end device	Check whether the device access is normal.
Firewall setup	Check whether those open ports of firewall meet the standard required.
Network	Check whether the networks of front-end devices and center equipments are normal.
TCP/IP config	Check whether the settings of IP address, subnet mask, gateway and DNS correct.

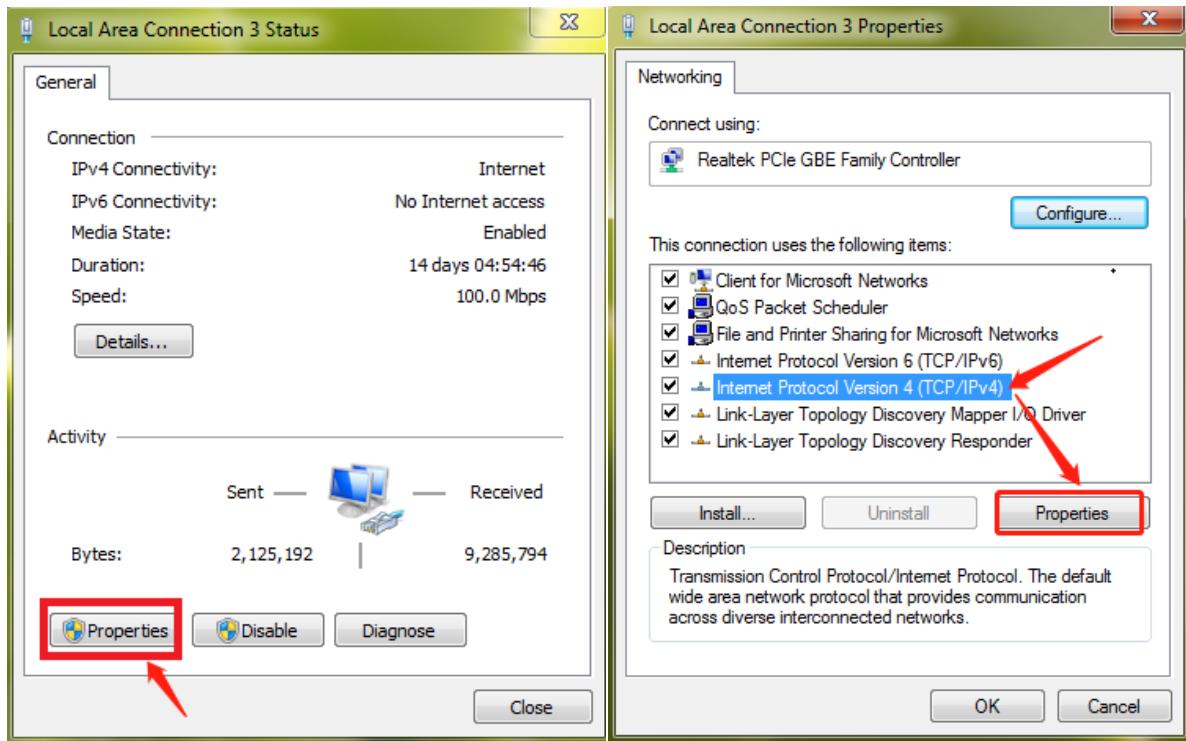
## 2.4 Configuring Server IP Address

The IP address of the server (computer) is the IP address of the platform. Please make sure the platform and other devices are connected to WAN/LAN. It is recommended that the platform and the devices that are about to be added to the platform are in the same local network segment. Here is how to set the server IP address:

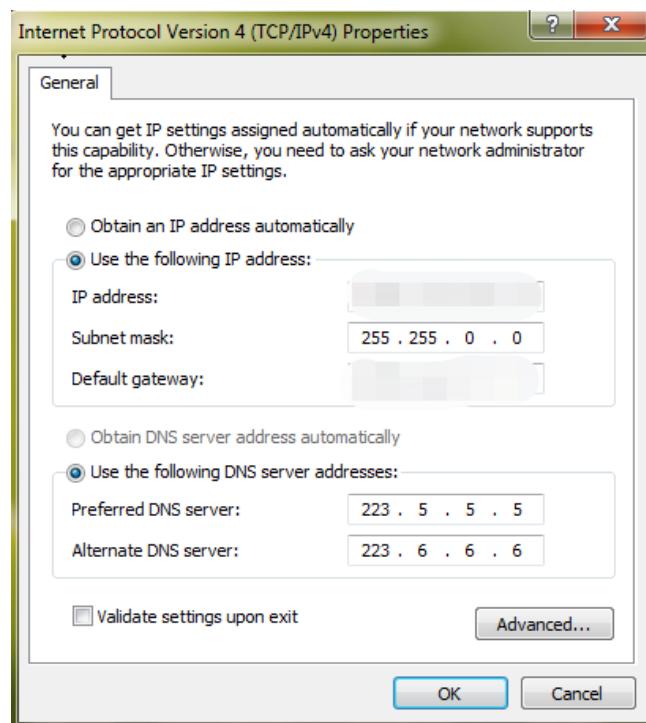
1. Connect the network cable to the server, power on and start the server.
2. Click  at the lower right corner of the computer desktop and then click “Open Network and Sharing Center” as shown below.



3. Click “Local Area Connection x” → “Properties”.
4. Select IPv6 or IPv4 according to the actual network environment. Here we take IPv4 as an example. Then click “Properties” of IPv4.



5. Select “Use the following IP address” and then configure the IP address, default gateway and DNS server addresses according to the actual network environment. After that, click [OK] to save the settings.



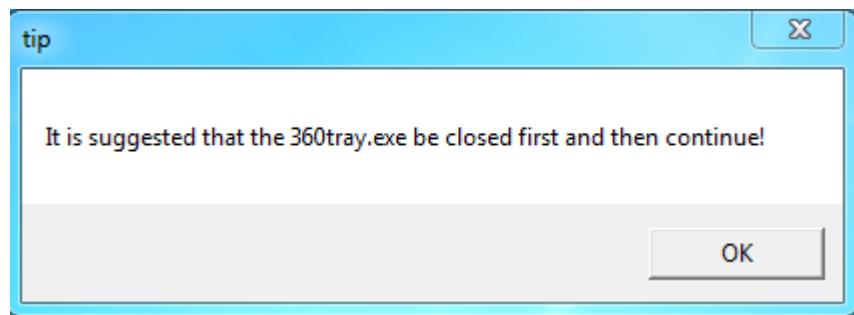
### 3 Install and Uninstall the Software

#### 3.1 Install the software

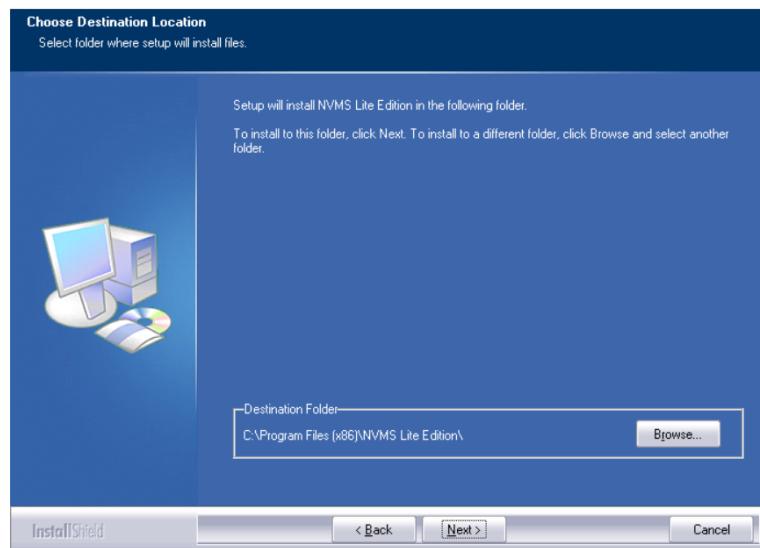
- 1) Double click “NVMS server.exe”. Select the UI language as needed.



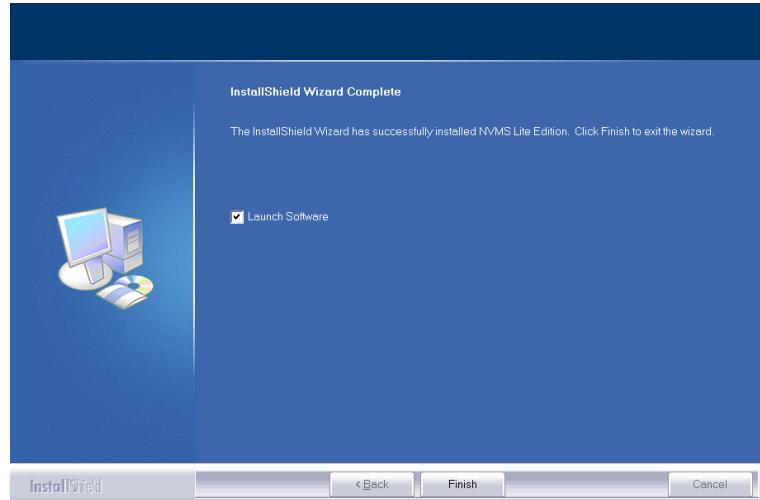
- 2) A tip will pop up to suggest you to close the antivirus software. If no prompt window appears, please skip this step.



- 3) Click “I accept the terms of the license agreement” and then click [Next].
- 4) Click [Browse]to select the installation location and then click [Next].



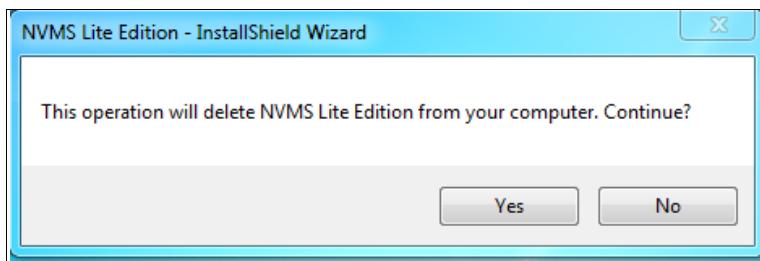
- 5) Check “Launch Software” as needed and then click [Finish].



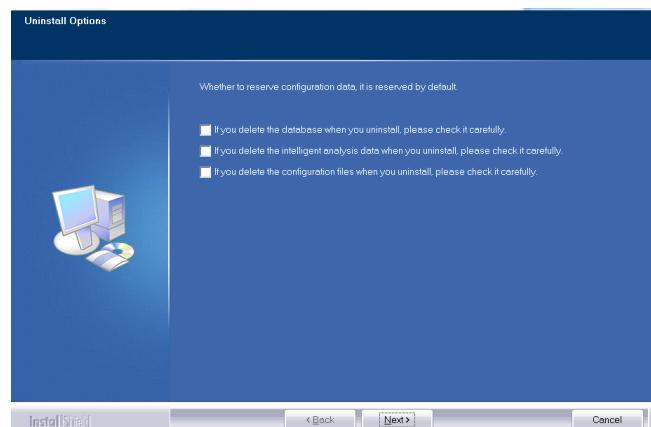
## 3.2 Uninstall Software

If the new version needs to be installed or there is no need to use this software, this software can be uninstalled. It is strongly recommended to back up the configuration data before installing the new version of NVMS.

Click "Start" → All Programs → NVMS Server → Uninstall to pop up the following wizard. Click "Yes" to confirm.



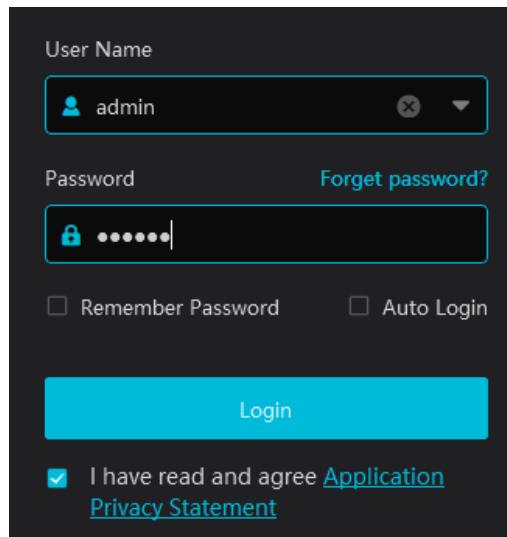
Select whether to delete the database, intelligent analysis data or configuration files as needed. Then clicking the "Finish" button ends the uninstallation.



## 4 Login

### 4.1 Login

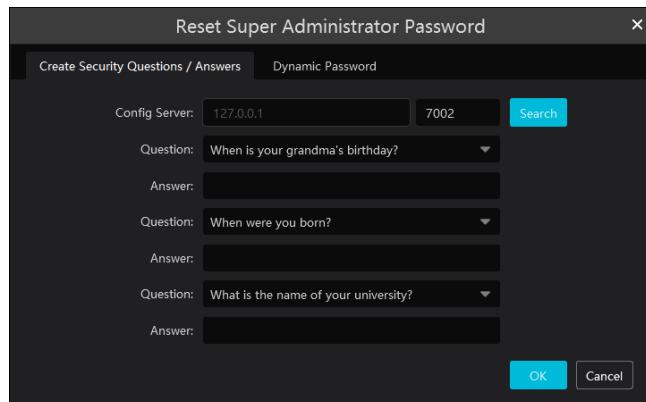
Double click the shortcut icon of “Monitor Client” to run the software as shown below.



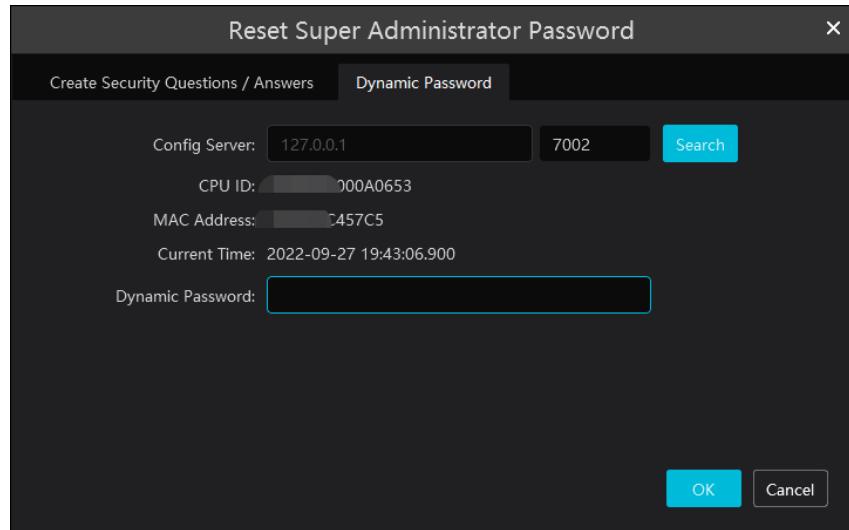
- ① Enter username and password (the default username is **admin**; the default password is **123456**).
- ② Check “Remember Password” or “Auto Login” as needed.
- ③ Click [Login].

If it is the first time for you to login, you should check “I have read and agree Application Privacy Statement”.

If you forget the password, please click “Forget password”. Then a small window will appear. You can reset the password by answering the pre-defined questions.

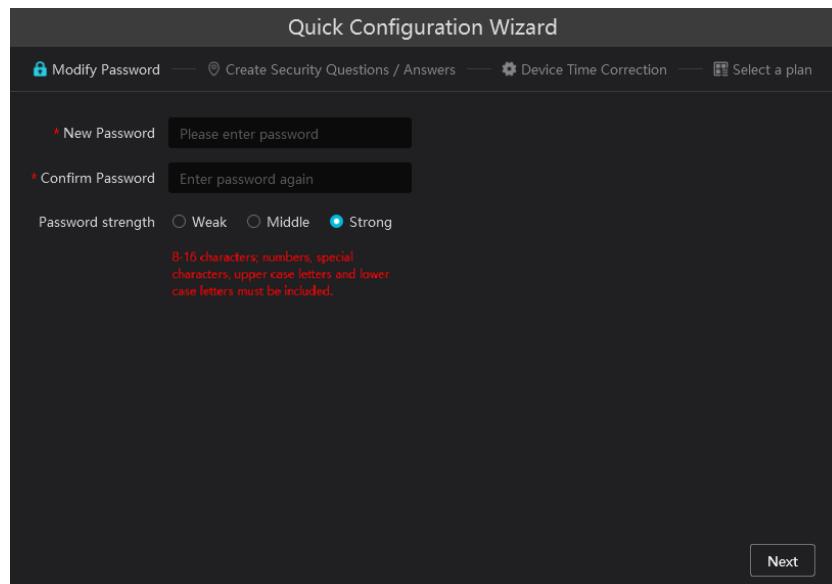


If you don't set or forget the security questions and answers, you can reset your password by dynamic password. Click “Reset password” and then click “Dynamic Password” to go to the dynamic password page. Search the CPU ID, MAC address and the current time and then send these information to the technical staff to get the dynamic password. Note that the management server and client must be installed in the same server, or the CPU ID, the current time and MAC address cannot be searched.



## 4.2 Quick Wizard Settings

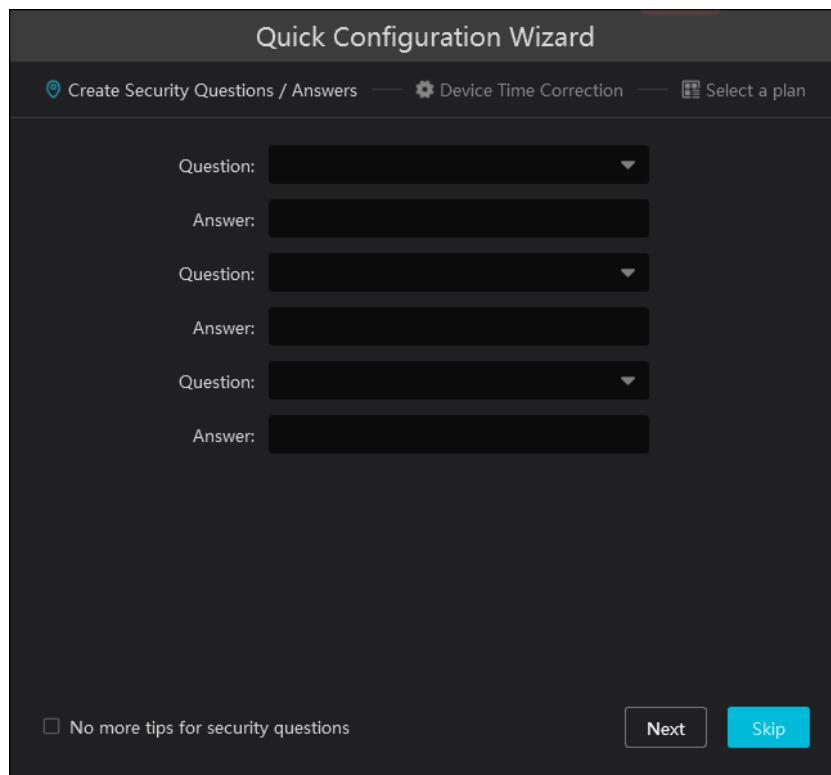
After you log in, the system will pop up a wizard and the password modification is required.



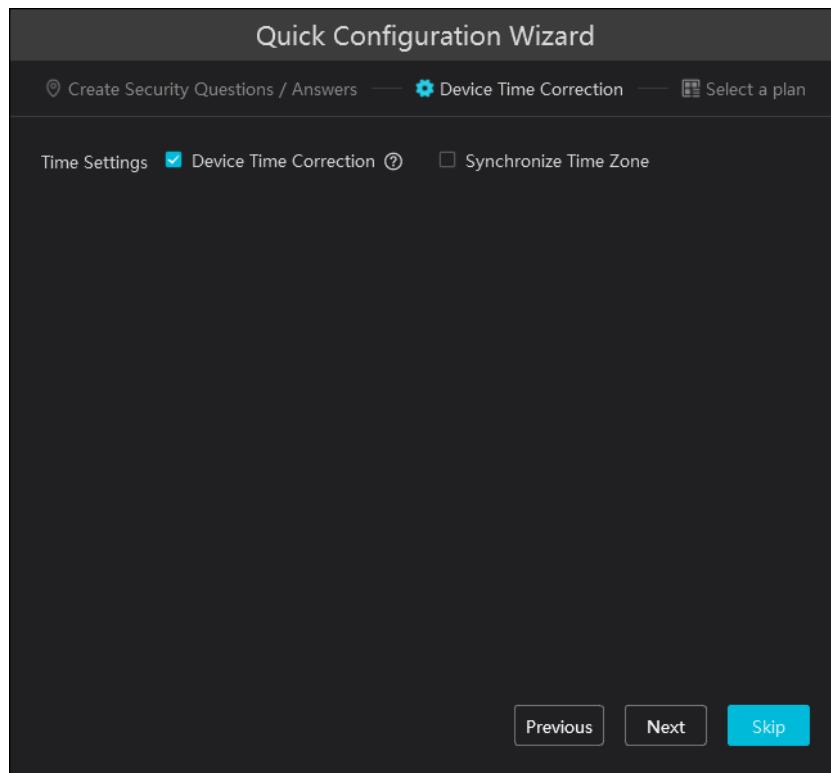
If this is the first time for you to log in, it is recommended to create security questions and answers.

It is important that you remember the answers for these questions or you will not be able to reset your password and be locked out.

Click "Skip" to skip the following wizard setup.

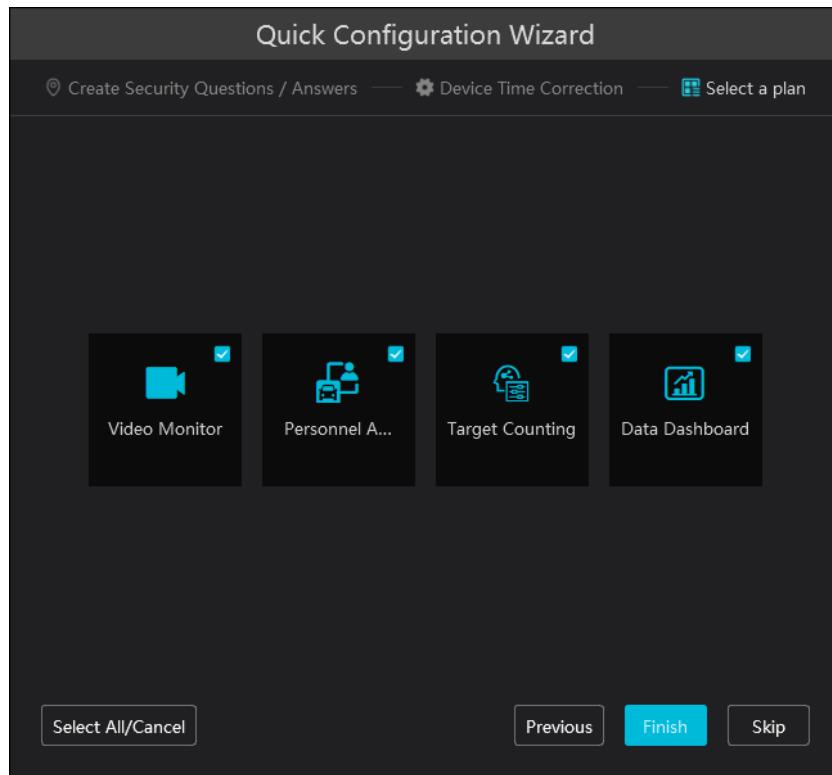


Click “Next”. This will bring you to the device time correction interface.



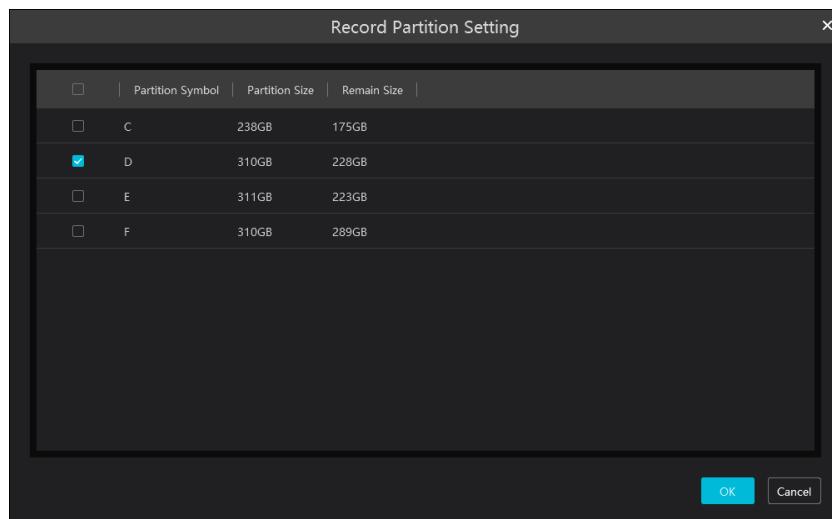
Click “Device Time Correction”. Then you can synchronize time zone.

Click “Next”. Then you can select the function display module in the home page.

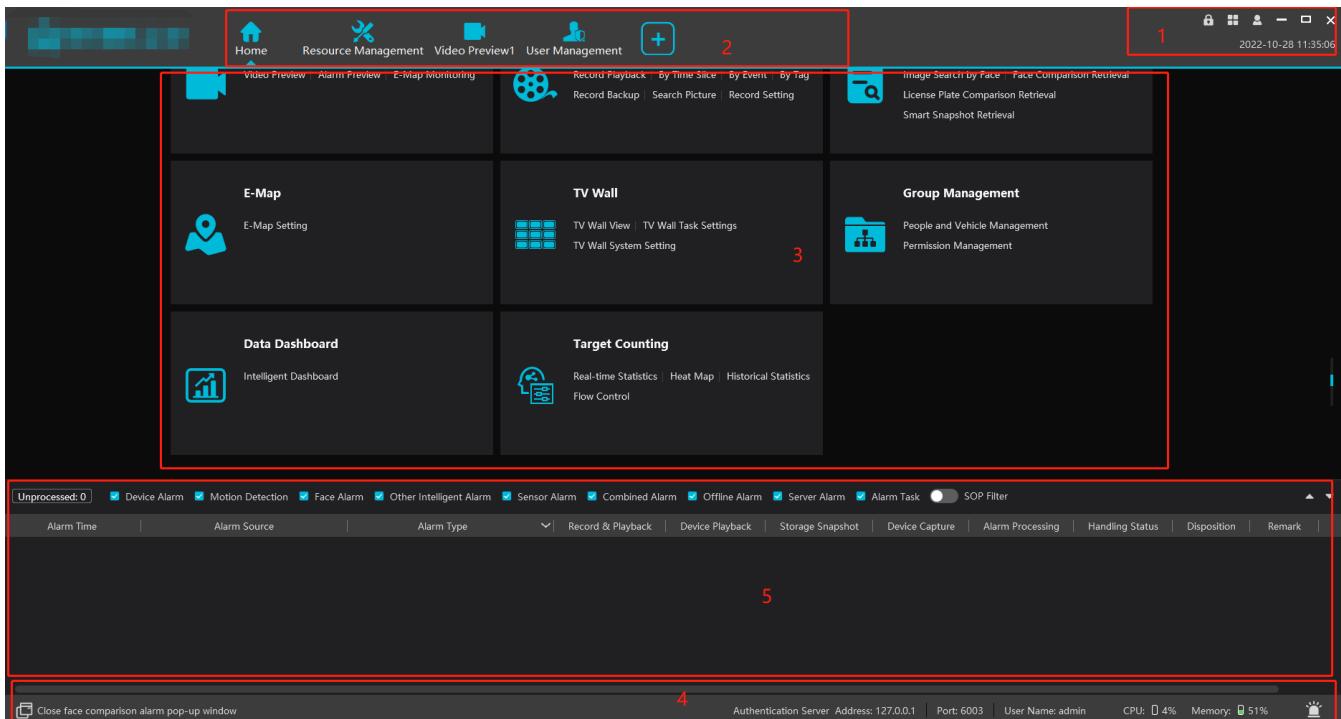


Click “Finish” to complete the wizard setup.

After that, a record partition setting box will pop up. Please check the record partition as needed.



### 4.3 Main Menu Interface Introduction



There are five parts in the main menu interface. The descriptions of each part are as shown below.

#### Menu Bar

No.	Description	No.	Description
1	Menu Bar	4	Status Bar
2	Tab Bar	5	Alarm Information Bar
3	Functional Areas		

#### Tab Bar

Menu	Description
	“Live View”, “Edit live view”
	Including “Switch User”, “Register”, “About”, “Switch Plan”, “Modify Password”, “User Manual” and “Skin”
	Click it to lock the operation page. Click “Unlock” and then enter the login password to unlock it.

#### Functional area

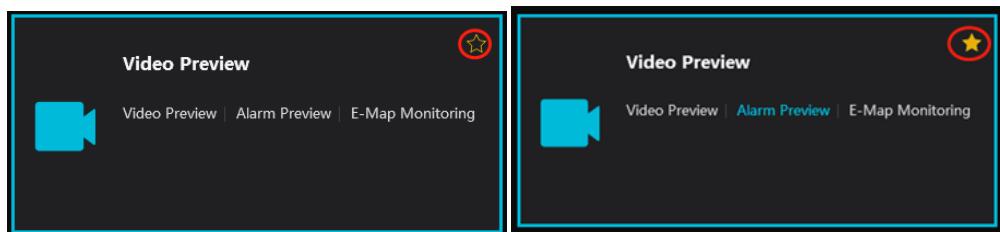
Menu	Description
<b>Video Preview</b>	To view live images and to record, snapshot and talk, etc.
<b>Record &amp; Playback</b>	To remotely play the local records or back up records.
<b>Search</b>	Including image search by face, face comparison retrieval, license plate comparison retrieval, smart snapshot retrieval and visitor record search.
<b>E-Map</b>	To manage and display maps, hot spots, etc.
<b>TV Wall Management</b>	To set TV wall and decoding videos on TV Walls
<b>Group Management</b>	To manage people and assign the access permission; To add vehicles
<b>Data Dashboard</b>	Smart display video window, device status, face comparison, human body temperature screening, E-map, etc.

<b>Target Counting</b>	To monitor and analyze people/vehicle flow in real time
<b>Resource Management</b>	To add, modify or delete areas, devices or servers.
<b>User Management</b>	To add, modify or delete user account and set permissions for these accounts.
<b>Alarm Center</b>	To set alarm linkage, schedule, SOP, E-mail, SIRA, alarm task and so on; To search alarm logs.
<b>Operation and Maintenance Management</b>	To search, export and maintain logs; To back up or restore configuration; To display device/server/record status
<b>Configuration</b>	To set record path, snapshot path, system startup and maintenance, overload, alarm view and so on.

Common use modules:

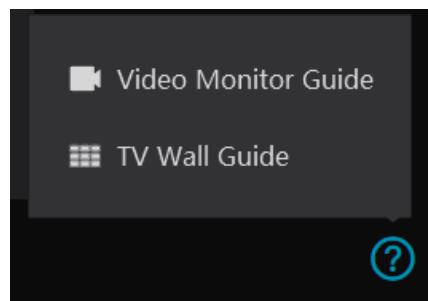
You can move the module which has a high using frequency to the top so that it is convenient to be used.

Place the cursor on the module you want to move to the frequent use module, and then a pentagram icon (★) will be displayed on the top right corner of the module. Click this icon to move. On the common use display area, click ★ to make the module return to its original place.



Wizard Settings:

On the bottom right corner of the functional area, click (?) to show the following wizard guide.



Other buttons:

Button	Description
—	Click it to hide the interface.
□	Click it to zoom in or out the interface.
×	Click to exit the software.
+	Click it to add the live view page.

	When the tab pages exceed the applicable numbers, this icon will display. Click it to view the hidden tabs.
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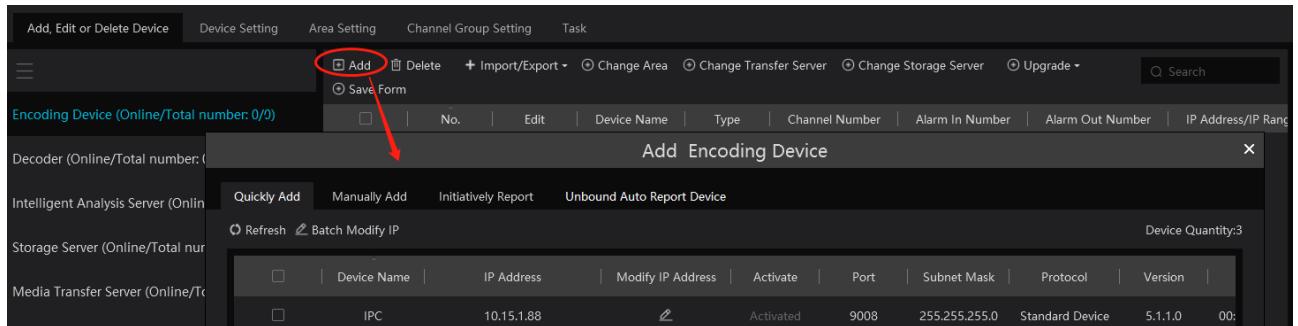
Common buttons:

Button	Description
	Click it to edit the item.
	Click it to delete the item.
	Check the camera and then click it to select
	Check the camera and then click it to remove
	Click it to add all items
	Click it to remove all selected items
	Click it to link to itself
	Expand menus
	Collapse menus

# 5 Device Management

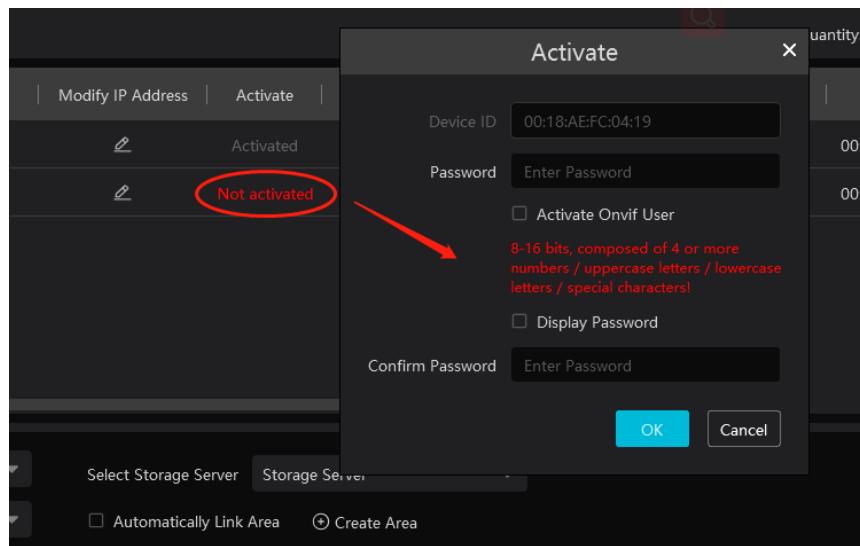
## 5.1 Add Encoding Device

In the main menu interface, click “Add, Edit or Delete Device” to go to the following interface as shown below.



In the adding encoding device interface, you can view the activated device or unactivated device. Click the “Activate” on the table header to sort.

Activation: click “Not activated” and then enter the password of the IPC according to the tip in the pop-up activation box. After successful activation, the IPC can be connected normally.



If “Activate Onvif user” is selected, the password of the IPC connected to the platform via Onvif protocol is the password you entered here.

Batch Activation: check the inactive devices and then click [Activate] to enter the password of the IPCs in the pop-up activation box. After successful activation, these IPCs can be connected normally.

Quickly Add	Manually Add	Initiatively Report	Unbound Auto Report Device	Device Quantity:3					
Refresh	Activate	Modify IP							
	Device Name	IP Address	Modify IP Address	Activate	Port	Subnet Mask	Protocol	Version	
<input type="checkbox"/>	Device Name	10.15.1.120		Activated	6036	255.255.255.0	Standard Device	1.4.7	00:
<input checked="" type="checkbox"/>	IPC	192.168.226.201		Not activated	9008	255.255.255.0	Standard Device	5.1.2.0	00:
<input checked="" type="checkbox"/>	IPC	192.168.226.201		Not activated	9008	255.255.255.0	Standard Device	5.1.2.0	00:

Then click “Add” to add devices. You can add multiply devices in this interface, such as face detection IPC, face recognition IPC/NVR, face recognition terminal, active deterrence IPC, ANPR camera, etc.

### 5.1.1 Quickly Add

Click [Refresh] to quickly search devices in the same local network as shown below. Check the device and allocate the transfer server, storage server, area for it. After that, click [OK].

Click “Default password” to set the default username and password of the devices from different manufacturers, such as Hikvision, Dahua, etc. The default username of the standard device is “admin” and the default password of the standard device is “123456”.

**Note:**

\* The default media transfer server and storage server can be selected when adding devices. Users can also create new media transfer server and storage server in advance (see Add Media Transfer Server and Add Storage Server).

\* Area must be set up before adding devices. Click [Add Area] to create an area (See Area Setting).

### 5.1.2 Manually Add

Add Encoding Device

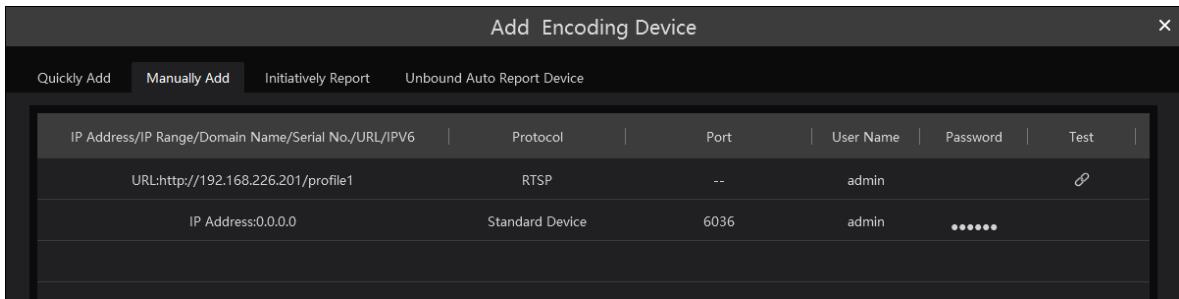
Quickly Add	Manually Add	Initiatively Report	Unbound Auto Report Device		
IP Address/IP Range/Domain Name/Serial No./URL/IPv6	Protocol	Port	User Name	Password	Test
IP Address <input type="button" value="▼"/>	<input type="text" value="192.0.0.0"/>	Standard Device	6036	admin	*****
<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;">Select Transfer Server</div> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;">Transfer Server</div> </div> <div style="flex: 1;"> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;">Select Storage Server</div> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;">Storage Server</div> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;">Select Area</div> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;">default area</div> </div> <div style="flex: 1;"> <input type="checkbox"/> Automatically Link Area           <input type="radio"/> Create Area         </div> </div> </div>					
<input type="button" value="Default Password"/> <input type="button" value="OK"/> <input type="button" value="Cancel"/>					

- ① Enter IP address/IP range/domain name/Serial No./URL/IPv6 address, username and password and choose protocol type.
- ② Click [Test] to test whether the device is connected successfully or not.
- ③ Select transfer server, storage server and area and then click [OK].

Devices can be added in batch by adding IP range.

If “URL” is selected, you shall add the device via RTSP protocol. Enter the URL, username and password of the device and then click

[Test] to test whether the device is connected successfully or not.



How to get a URL?

Here we take the IPC of our company for example. Log in to the web client of the IPC and then go to “Config”→“Network”→“RTSP” interface to configure RTSP.

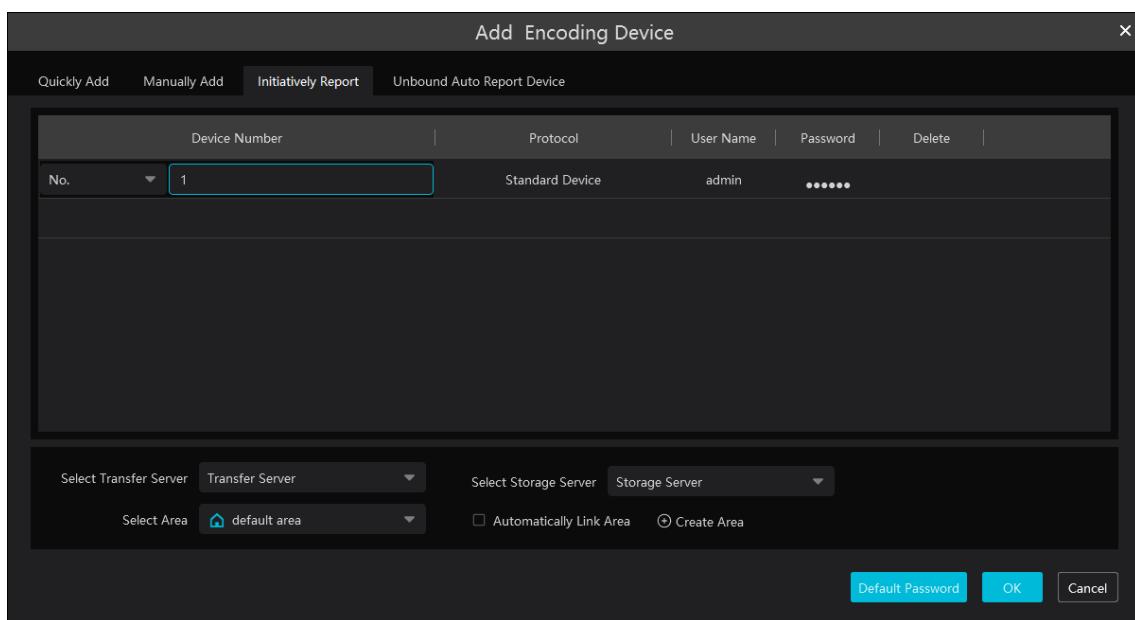
The default RTSP port is 554 and the URL format is “rtsp://IP or domain name:port/profile1”. For example:

rtsp://192.168.1.1:554/profile1. Profile1 stands for main stream; profile2 stands for sub stream; profile3 stands for the third stream.

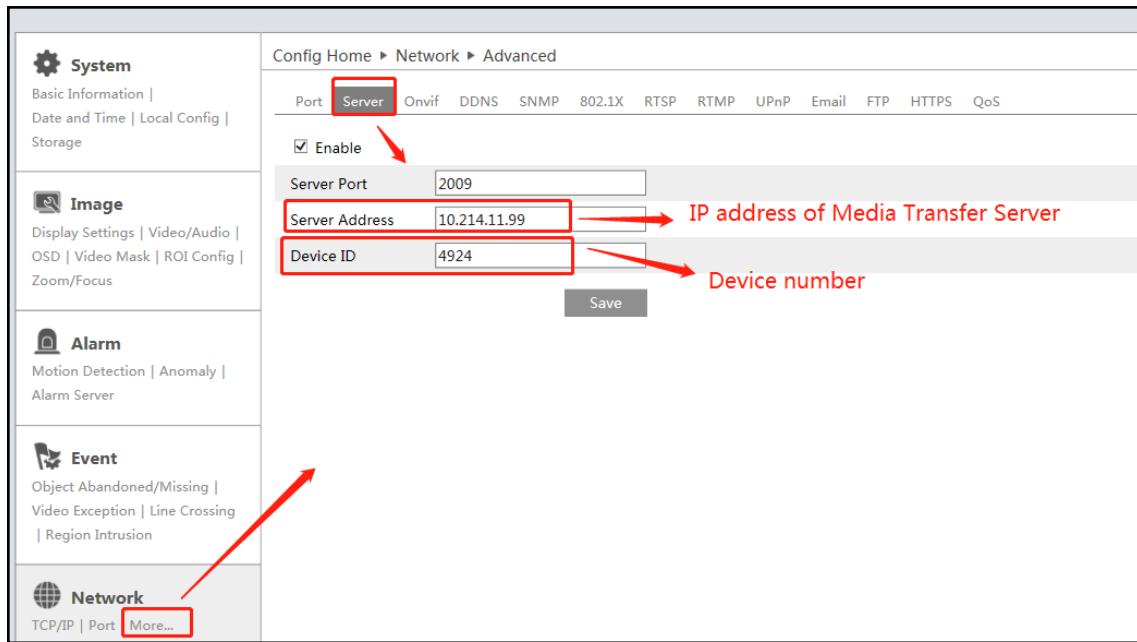
For the URL of a device from other companies, please consult their technical documentation.

### 5.1.3 Initiatively Report

Select the “Initiatively Report” Tab to see the following interface.



- ① Enter the device ID set in the DVR/NVR or IP camera and choose the protocol.
- If the DVR/NVR is needed to add, please go to Network→Platform Access interface of the DVR/NVR. Check “Enable”, enter the IP address and port (default 2009) of the NVMS and then set the device number of the DVR/NVR.
- If the IP camera is needed to add, please go to Network Configuration→Server Configuration of the IP camera. Check “Enable”, enter the IP address and port (default 2009) of the NVMS and then set the device number of the IP camera.

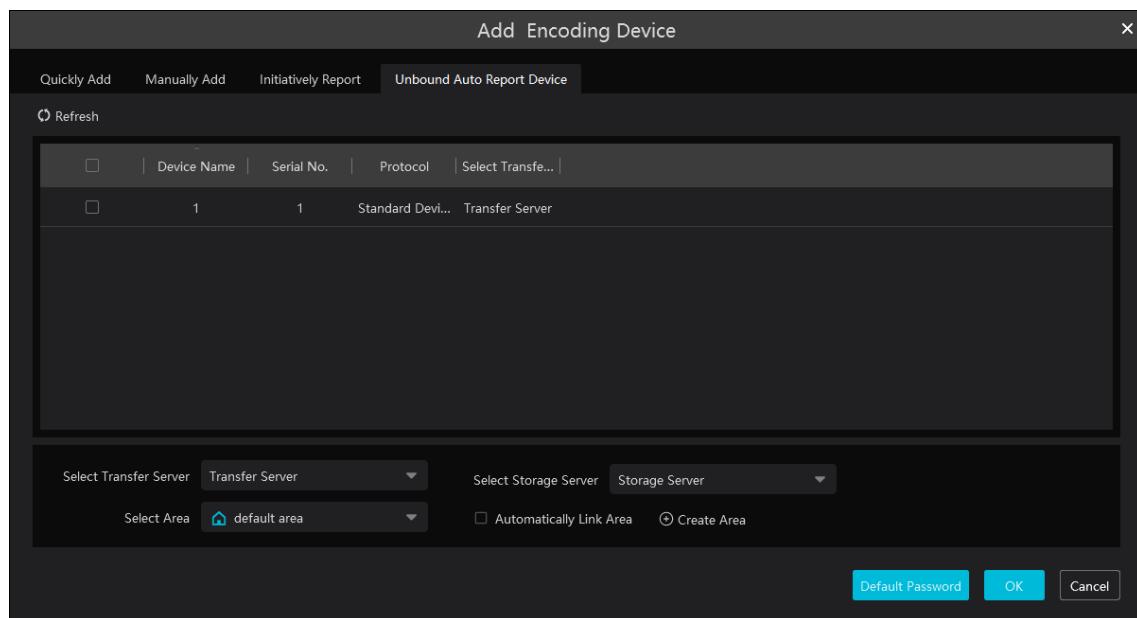


② Select the transfer server, storage server, area and then click [OK].

#### 5.1.4 Quickly Add Auto Report Device

For the auto report devices, you can go to the “Unbound Auto Report Device” interface to add them quickly.

**Note:** please fill out the auto report information in the NVR/IPC in advance and then the device information can be searched in the “Unbound Auto Report Device” interface.



## 5.2 Modify or Delete Device

After devices are added successfully, they will be listed as below.

Add, Edit or Delete Device		Device Setting		Area Setting		Channel Group Setting		Task	
<input type="checkbox"/> Add	<input type="checkbox"/> Delete	<input type="checkbox"/> Import/Export	<input type="checkbox"/> Change Area	<input type="checkbox"/> Change Transfer Server	<input type="checkbox"/> Change Storage Server	<input type="checkbox"/> Upgrade	<input type="checkbox"/> Save Form	<input type="checkbox"/> Search	
Encoding Device (Online/Total number: 1/1)									
Decoder (Online/Total number: 0/0)									
<input type="checkbox"/>	No.	Edit	Device Name	Type	Channel Number	Alarm In Number	Alarm Out Number	IP Address/IP Range	
<input type="checkbox"/>	1		Device Name	Standard D...	0	0	0	1	

The device channel number, alarm status, online status and record status can be viewed from the above table.

Click  to modify the device information.

Click  to delete the added device.

Select the desired devices and click [Delete] to delete multiple devices simultaneously.

## 5.3 Device Area Selection

Select one or more encoding devices and then click [Change Area] to modify the area of the selected devices.

Add, Edit or Delete Device		Device Setting		Area Setting		Channel Group Setting		Task	
<input type="checkbox"/> Add	<input type="checkbox"/> Delete	<input type="checkbox"/> Import/Export	<input checked="" type="radio"/> Change Area	<input type="checkbox"/> Change Transfer Server	<input type="checkbox"/> Change Storage Server	<input type="checkbox"/> Upgrade	<input type="checkbox"/> Save Form	<input type="checkbox"/> Search	
Encoding Device (Online/Total number: 1/1)									
Decoder (Online/Total number: 0/0)									
<input type="checkbox"/>	No.	Edit	Device Name	Type	Channel Number	Alarm In Number	Alarm Out Number	IP Address/IP Range	
<input type="checkbox"/>	1		Device Name	Standard D...	0	0	0	1	

## 5.4 Batch Import/Export

You can import multiple encoding devices (NVR/IPC) in different local network at a time. The setting steps are as follows:

1. Create an Excel file and then edit the device information as follows. Please copy the text of the first line.

	A	B	C	D	E
1	ip	port	protocol	userName	password
2	10.214.40.88	6036	standard device	admin	xxxx
3	10.214.40.89	6036	standard device	admin	xxxx
4	10.214.40.43	9008	standard device	admin	123456

Protocol: four protocols can be used here, including “Hikvision”, “standard device”, “Dahua” and “ONVIF”.

2. Save the file as “.cvs” or “.xlsx”.
3. Click Home→Resource Management→Add, Edit or Delete Device. Then click [Import/Export] to show a drop-down list. Click [Import] to import the file.

Add, Edit or Delete Device		Device Setting		Area Setting		Channel Group Setting		Task	
<input type="checkbox"/> Add	<input type="checkbox"/> Delete	<input type="checkbox"/> Import/Export	<input type="checkbox"/> Change Area	<input type="checkbox"/> Change Transfer Server	<input type="checkbox"/> Change Storage Server	<input type="checkbox"/> Upgrade	<input type="checkbox"/> Save Form	<input type="checkbox"/> Search	
Encoding Device (Online/Total number: 1/1)									
Decoder (Online/Total number: 0/0)									
<input type="checkbox"/>	No.	Edit	Device Name	Type	Channel Number	Alarm In Number	Alarm Out Number	IP Address/IP Range	
<input type="checkbox"/>	1		Device Name	Standard D...	6	26	1	1	

Export encoding devices: check the device you want to export and then click [Save Form] to export the device list.

The screenshot shows a software interface for managing devices. At the top, there are tabs for 'Add, Edit or Delete Device', 'Device Setting', 'Area Setting', 'Channel Group Setting', and 'Task'. Below these are buttons for 'Add', 'Delete', 'Import/Export', 'Change Area', 'Change Transfer Server', 'Change Storage Server', 'Upgrade', and 'Save Form'. A red box highlights the 'Upgrade' button. The main area displays 'Encoding Device (Online/Total number: 6/11)' and 'Decoder (Online/Total number: 0/0)'. Below this is a table with columns for 'No.', 'Edit', 'Device Name', 'Type', 'Channel Number', 'Alarm In Number', 'Alarm Out Number', and 'IP Address/ID'. The table shows one row for a 'Standard Device'.

## 5.5 Device Upgrade

In the “Add, Edit or Delete Device” interface, check the devices you want to upgrade and then click [Upgrade]. Select the upgrade type as needed.

The screenshot shows the same software interface as above, but the 'Upgrade' button is now highlighted. A dropdown menu is open, showing 'Batch Upgrade for IPC' and 'Batch Upgrade for NVR/DVR'.

**Note:** When multiple devices are upgraded simultaneously, the selected devices must be the same series.

## 5.6 Device Setting

Go to Home→Device Setting interface as shown below. In this interface, the parameters of the device can be set up.

The screenshot shows the 'Device Setting' interface for an 'IP Camera01'. The left sidebar lists 'Encoding Device' with a tree view of areas like 'default area', 'Device Name', 'IP Camera 02', 'IP Camera01', 'IP Camera01', 'IP97', 'IPC', and 'IPC'. The main area shows a live video feed of a hallway. At the top, there are tabs for 'OSD Setting', 'Image Setting', 'Stream Setting', 'Privacy Mask Setting', 'ROI Setting', 'Focusing Setting', 'Motion Detection', 'Motion Alarm Linkage', 'Exception Detection', and 'Face Detection'. Below the video feed, settings for 'Monitoring Point Name' (IP Camera01), 'Show OSD Name' (checked, horizontal position 277, vertical position 9197), 'Show Timestamp' (checked, horizontal position 7337, vertical position 10000), and buttons for 'Apply' and 'Copy To' are displayed.

Different devices have different menus. Please configure the device according to the corresponding user manual.

## 5.7 Area Setting

Go to Home→Area Setting interface as shown below.

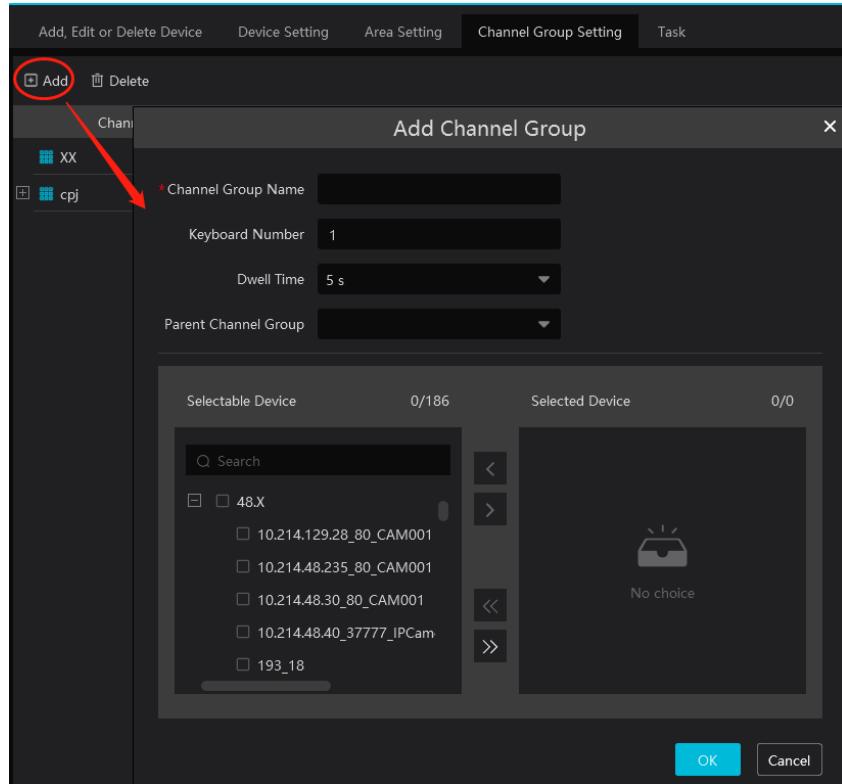
The screenshot shows the 'Area Setting' interface. At the top, there are buttons for 'Add' (highlighted with a red box) and 'Delete All Empty Area'. Below this is a table with columns for 'Area Name', 'Channel Number', 'Edit', and 'Delete'. The table lists areas: '48.X', '6036', '9008', 'POS', 'SD卡', 'Test', and 'IPC'. A red arrow points from the 'Add' button to a 'Create Area' dialog box. The dialog box has fields for 'Parent Area' (a dropdown menu) and 'Area Name' (a text input field with a red asterisk). At the bottom are 'OK' and 'Cancel' buttons.

Click [Add] to go to Area adding interface. Enter area name to create parent area. Then click [OK] to save the settings. To create sub area,

click [Add], choose the parent area, enter the area name and click [OK].

## 5.8 Channel Group Settings

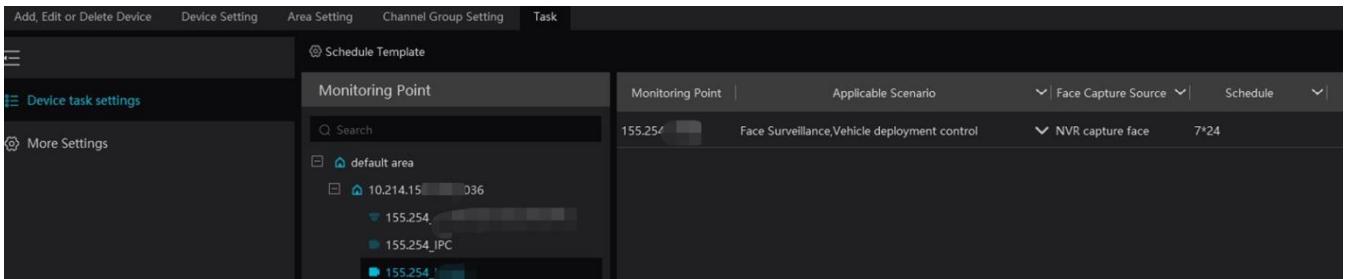
Go to Home→Resource Management→ Channel Group Setting interface as shown below.



- ① Click [Add].
- ② Enter channel group name, channel group and dwell time.
- ③ Select the parent channel group.
- ④ Add channels to the channel group. Check the desired channels and click to add channels; choose the selected channel and click to remove those channels; Click to add all channels; click to remove all selected channels. You can also enter the key words to search the channels and then select them.
- ⑤ Click [Ok] to save the settings.

## 5.9 Task Management

Set the face capture source, schedule and applicable scenario.

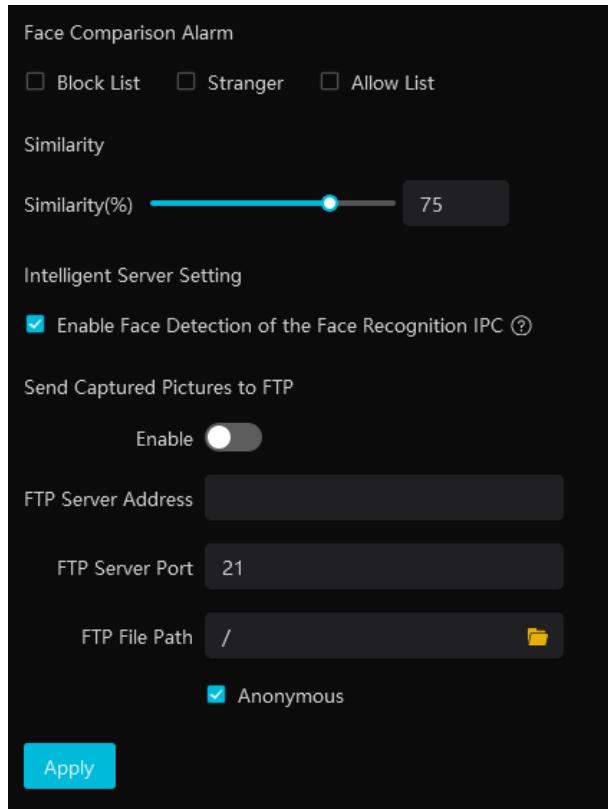


**Face Capture by IPC:** it is applicable to the face detection camera.

**Face Match by IPC:** it is applicable to the face recognition camera.

**Note:** Face recognition NVR, Temperature Reading Panel, Thermal network camera and IPC without face detection function cannot set task here.

More parameters about face comparison can be set by clicking [More Settings].



**Face Comparison Alarm:** Select face comparison alarm list. For example, “Allow List” is selected, when a person is detected and is successfully compared with the allow list, alarms will be triggered.

**Similarity:** Set the similarity of the face comparison.

**Intelligent Server Setting:** please check “Enable face detection of the face recognition IPC” as needed.

If checked, the intelligent server will get all face capture pictures of the IPC after you configure face comparison parameters and set the schedule for the IPC. All these face snapshots can be searched in the Search interface (Home→ Search).

If unchecked, the intelligent server will only get the matched face snapshots after you configure face comparison parameters and set the schedule for the IPC. Only the face snapshots successfully matched with the face database can be searched in the Search interface (Home→ Search).

**FTP Settings:** Send the captured pictures to FTP. Please set the corresponding parameters according to your FTP server.

## 6 Group Management

### 6.1 People Management

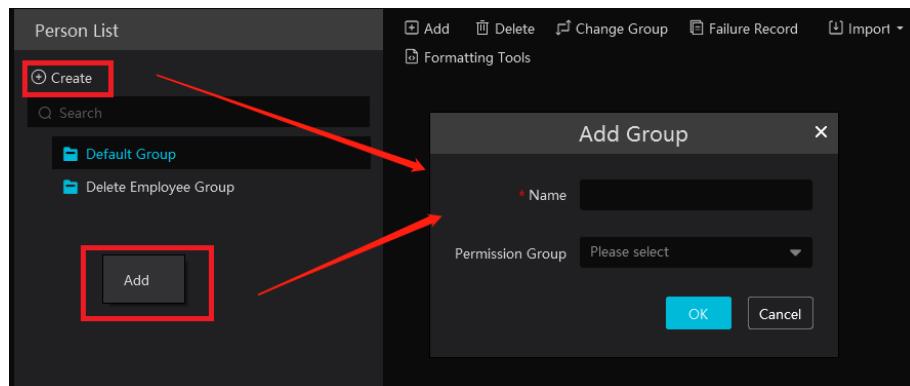
You can add group for two libraries—Person List and Block List.

Here taking “Add target to person list” for example

#### 6.1.1 Add Group

- Add the parent group

Go to Home→Group Management→People & Vehicle Management→Person List.



Click [Create] to add a group, or right click on the blank of the person list column and then click [Add] to add the group name.

**Note:** The added parent group name and face information under it will be synchronized to the face database of the NVR, but the sub group name will not be added to the NVR. The face information under the sub group will automatically be added to its parent group in the NVR. If the parent group fails to synchronize to the face database of the NVR, but the face information of sub group is successfully added to the NVR. Now, the face group name will be named “creation date-intelligent server IP-creation time (s)-list type-parent group name” as shown below.

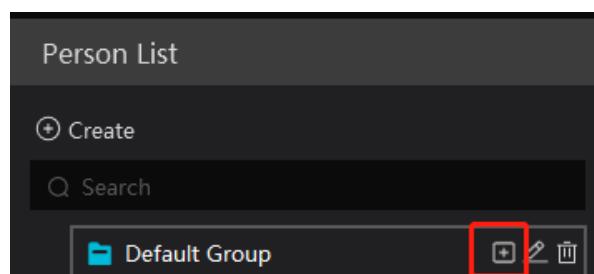
No.	Group
1	2022_4_21_10.214.200.200_32 (3853)
2	2022_4_22_10.214.200.111_1 (1128)
3	2022_4_22_192.168.52.214_47_White_default'0)

Group Name in NVR

For IPC, the added face information under person list and VIP list will be automatically added to the allow/white list of the IPC. The added face information under visitor list and block list will be synchronized to the corresponding list.

- Add the sub group:

Put the cursor on the parent group name and then you will see the follow buttons. Click “+” to add the sub group name. A maximum of 9 sub groups can be created.



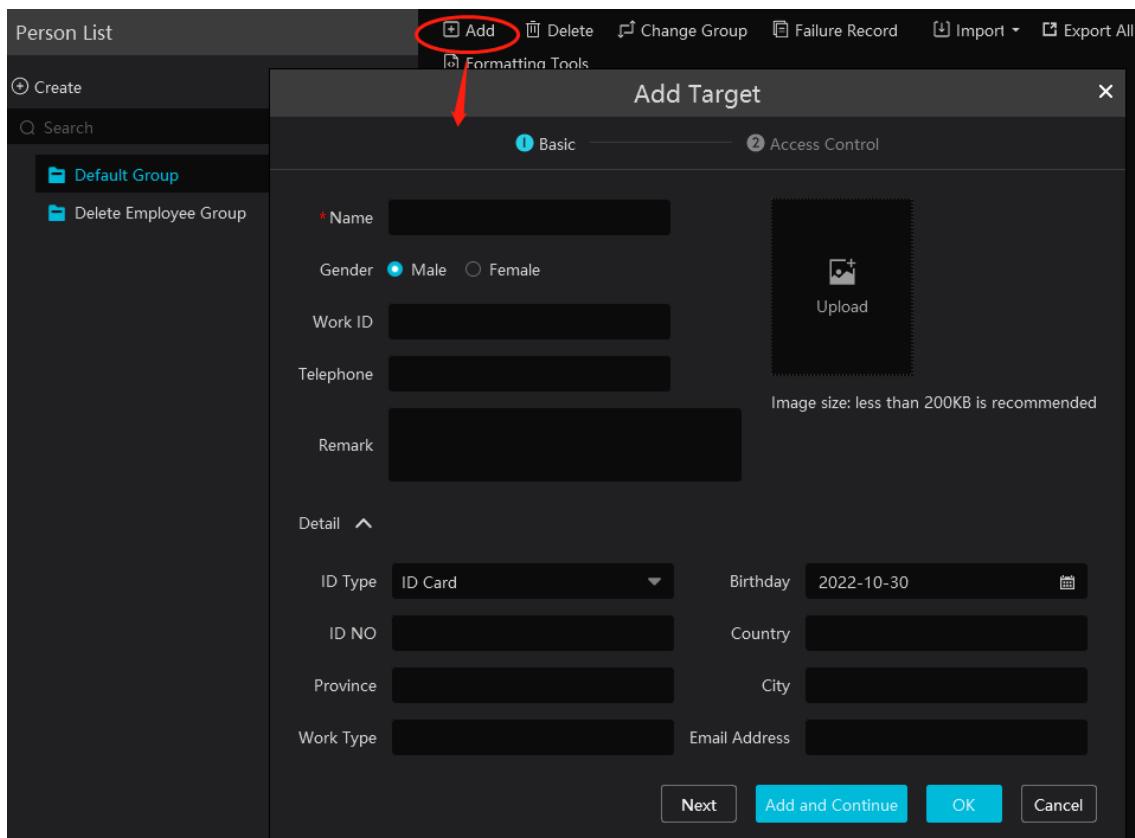
Click  to modify the group name and permission group; Click  to delete the group.

### 6.1.2 Add Target

You can add targets for two libraries—Person List, Block List.

- Add target one by one

Select the group name and then click [Add] to add the target information



Click **【Upload】** and select the face image saved in the local PC. Then fill out the corresponding information and click **[OK]** to save.

**Note:** the resolution of the face image shall be less than 200KB.

If the target is added to the group of the VIP, register date and VIP level shall be fill in.

- Batch Import

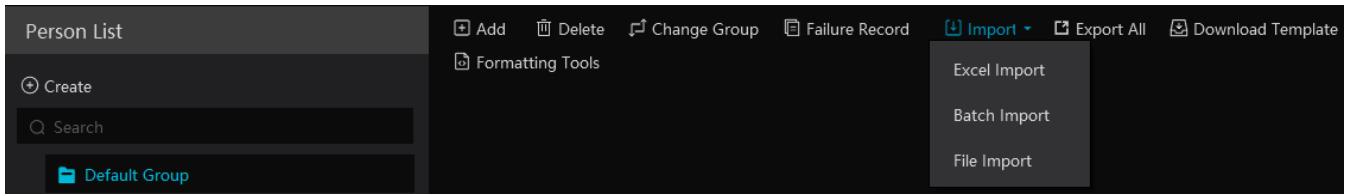
In the above interface, click **[Download Template]** to export an Excel template and then fill out the corresponding information in the table as shown below.

After that, create a file named “Image” and then put the face images under this file.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1.The marked red item is required; 2.When entering the phone number and certificate number, please add ' '; for example, 13500000000 is written as '13500000000'; 3.The date format is 2020-01-01; 4.The certificate number shall not exceed 20 digits; 5.The VIP level is general, medium and high;															
Name	Birth Date	Gender	ID Type	ID NO	Country	Province	City	Telephone	Remark	VIP Level	Registration Date	Department	Type of work	Staff Number	Picture address
Helen	2020-08-05	Female	ID Card	123	China	Sichuan	Chengdu	13500000000		High	2020-08-05	IT	engineer	011111	Helen.jpg
David	2020-08-05	Male	ID Card	12	China	Sichuan	Chengdu	13500000000		High	2020-08-05	IT	engineer	122222	David.jpg

Put the image file and the personal information file into the same directory.

Click **[Import] → [Excel Import]**



Click [Import] and then select “Batch import” to import face pictures in bulk, but the target information must be modified manually.

Click [Import] and then select “File import”. You can select whether to search the sub folder.

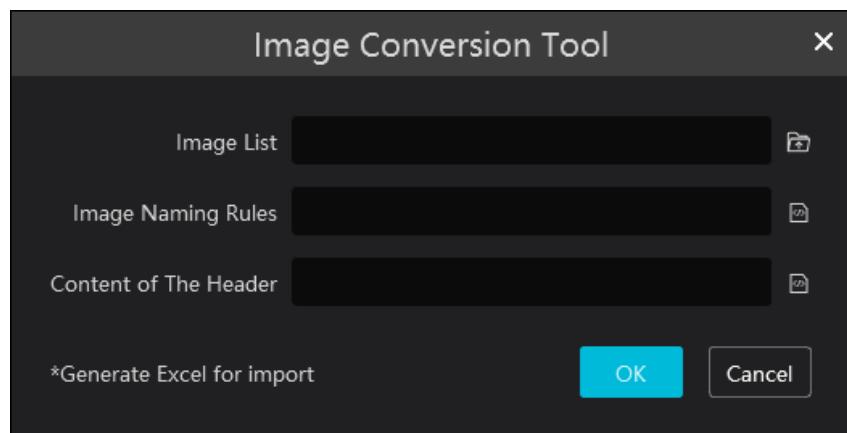
Search Subfolders: choose a folder including multiple subfolders and then all pictures in the folder and its subfolders will be imported.

Not Search Subfolders: the pictures in the folder will be imported, but the pictures in the subfolders will not be imported.

#### ➤ Convert images to an Excel

Multiple images also can be converted to an Excel. Then click “Import EXCEL” to add targets. The setting steps are as follows.

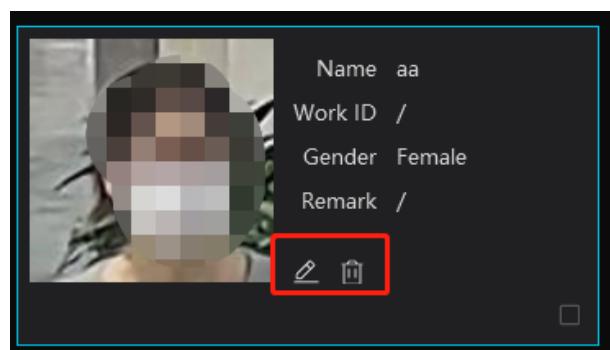
1. Name the face images (like David\_Male\_1989-01-03\_Engineer\_Group1), separating each field with “\_”.
2. Clicking on [Formatting tools] displays an image conversion box. Click to select the desired images.
3. Click respectively to set the image naming rules and content of the header.



#### Note:

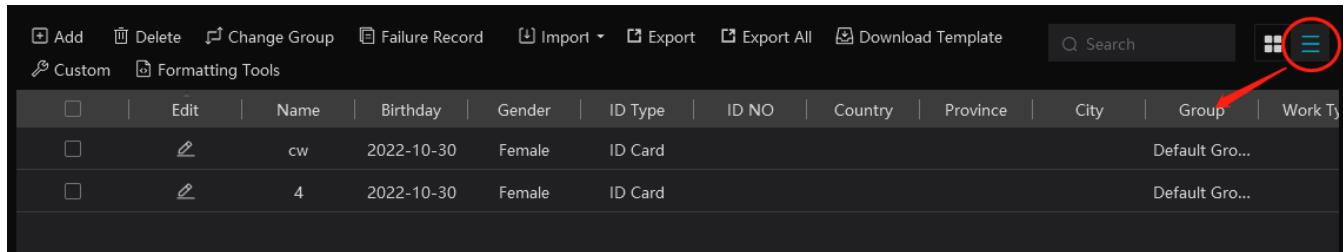
1. The naming sequence of each image selected must be the same. Please select the image naming rules in accordance with the sequential order of the name of the image.
2. The content of the header must contain those items of the image name and can be selected in any order.
3. The content of the header must contain name and group (face database), which can be entered in the image name in advance and also can be edited in the exported Excel.

#### ● Modify or Delete Target



After the target is added, click  to modify; click  to delete.

Click  to view the target list as shown below.



	Edit	Name	Birthday	Gender	ID Type	ID NO	Country	Province	City	Group	Work T
		cw	2022-10-30	Female	ID Card					Default Gro...	
		4	2022-10-30	Female	ID Card					Default Gro...	

Click “Custom” to customize the target display information.

Click “Change group” to change the group.

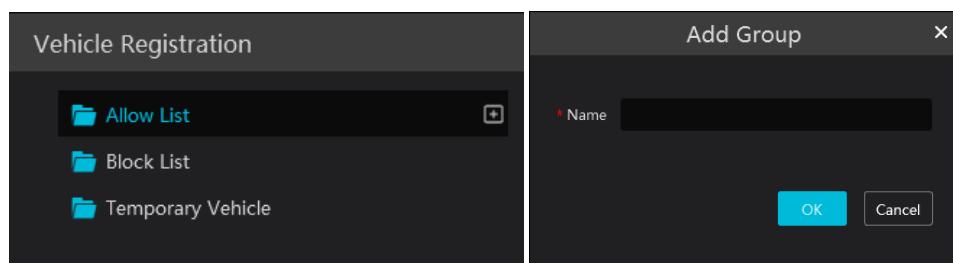
## 6.2 Vehicle Management

### 6.2.1 Add Vehicles

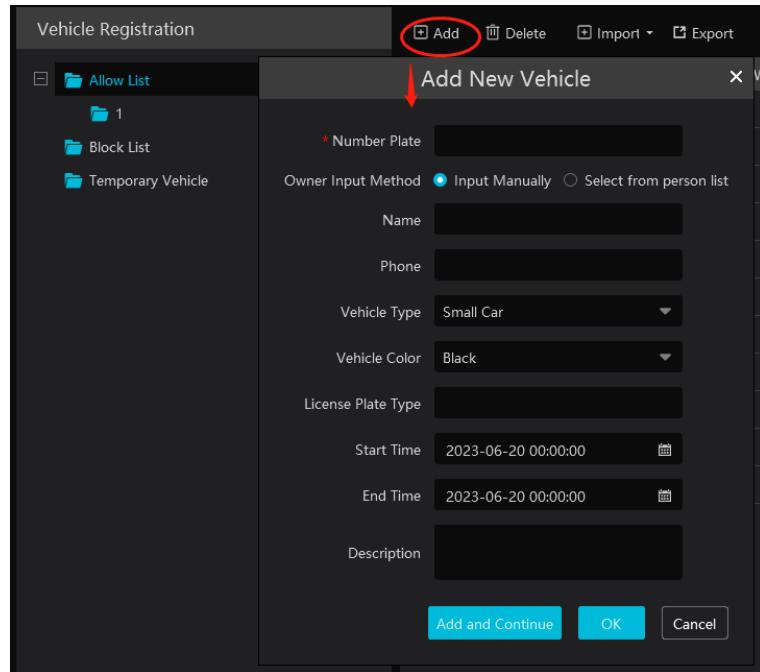
➤ Add vehicle groups for each vehicle list

Click  on the right of a vehicle list (Allow List/Block List/Temporary Vehicle) to add a vehicle group under the vehicle list as shown below.

**Note:** If you want to add vehicle groups under a vehicle list, you must enable license plate synchronization function by clicking Configuration→Server Configuration→System Setting first.

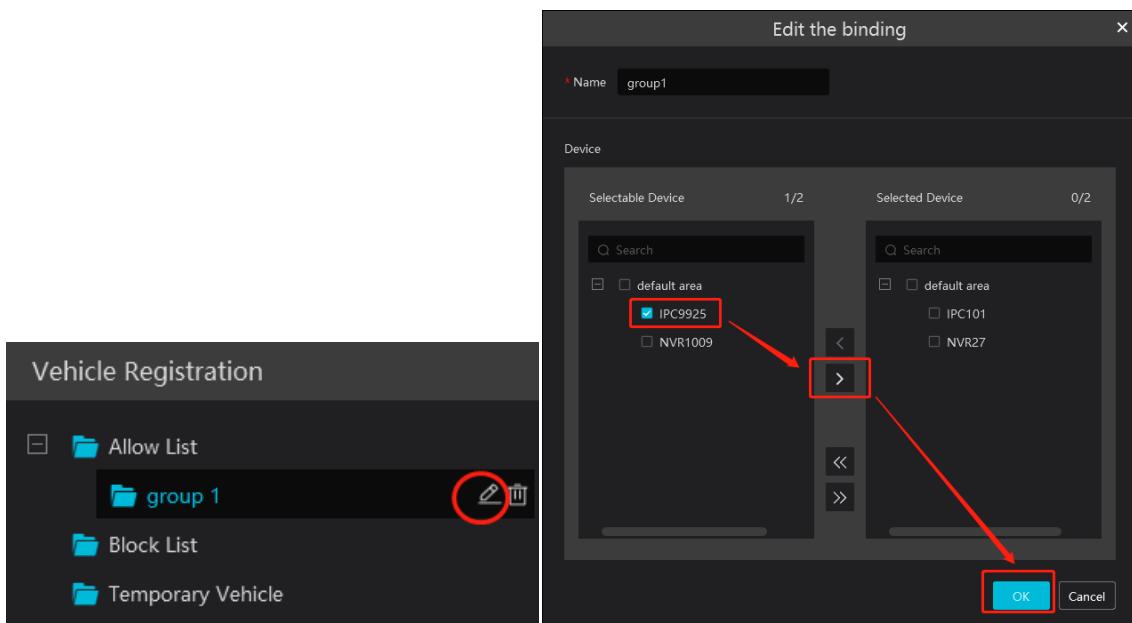


Select the desired vehicle list or vehicle group under a vehicle list and then click [Add] to add the relevant vehicle information.



➤ Binding devices for each vehicle group

Click  beside the group name to bind devices for this group. All vehicles under this group can be bound to the selected devices. After these devices are bound to this group, the vehicles you add later will automatically bind these devices.



## 6.2.2 View, Modify or Delete Vehicles

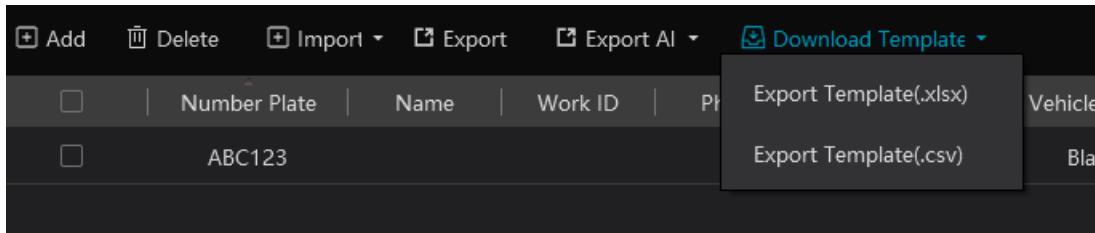
After you add the vehicle, you can view, modify or delete the vehicle information as needed.

Vehicle Registration									
<input type="checkbox"/> Add		<input type="checkbox"/> Delete		<input type="checkbox"/> Import		<input type="checkbox"/> Export		<input type="checkbox"/> Download Template	
		Number Plate		Name		Work ID		Phone	
<input type="checkbox"/>	ABC123							Small Car	Black
								 	

Select multiple vehicles and then click the [Delete] button to delete multiple vehicle information at once.

### 6.2.3 Import or Export Vehicles

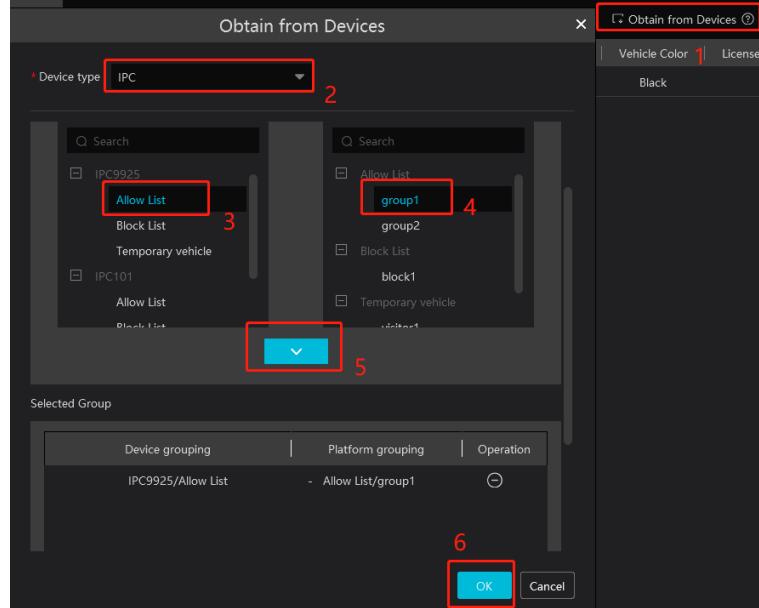
Click [Export Template]→Export Template(.xlsx/.csv) to export a template. Then fill out the relevant vehicle information.



After that, click [File import] to import the vehicle information. Click [Export] to export the added vehicle information.

You can also get vehicle information from license plate recognition cameras/NVRs. The setting steps are as follows.

1. Click “Obtain from Devices”.
2. Select the device type.
3. Select vehicle list (Allow List/Block List/Temporary List) of the LPR camera/NVR.
4. Select a vehicle group of the platform.
5. Click  to add.
6. Click “OK” to synchronize the vehicle list of the selected device to the corresponding groups of the platform.



**Note:** If you want to get license plate information from devices, you must enable license plate synchronization function by clicking Configuration→Server Configuration→System Setting first.

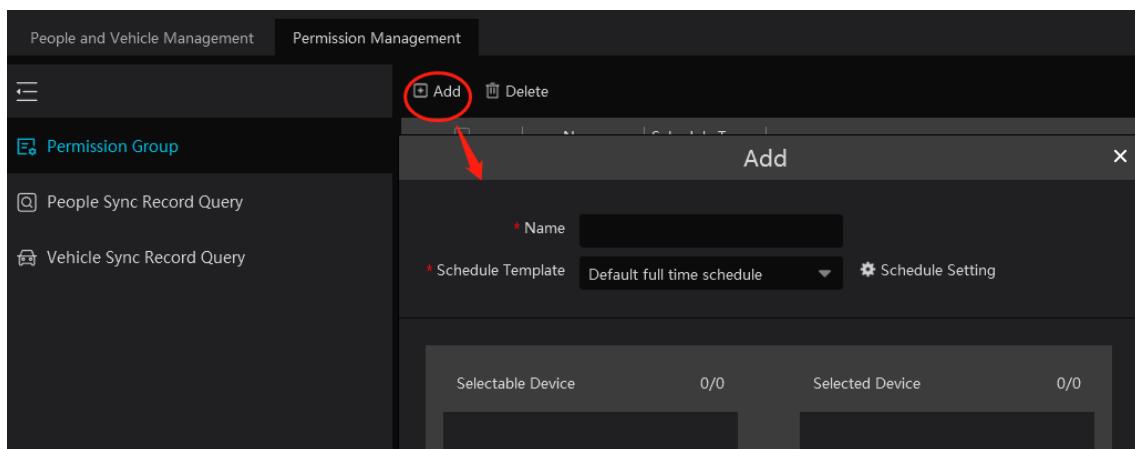
## 6.3 Permission Management

Click Home→People & Vehicle Management→Permission Management to go to the following interface.

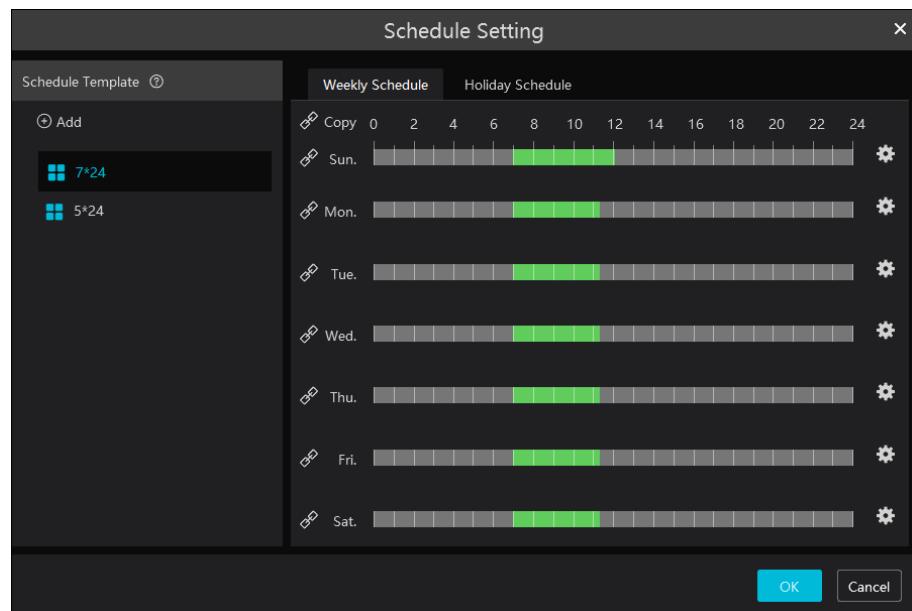
You can view the sync records or bind the camera to the group or people.

### ➤ Add Permission Group

In the permission group interface, click [Add] to add a permission group. Enter the name and set the schedule and devices as needed.



Click “Schedule Setting” to set the desired schedule. You can set weekly schedule and holiday schedule as needed.



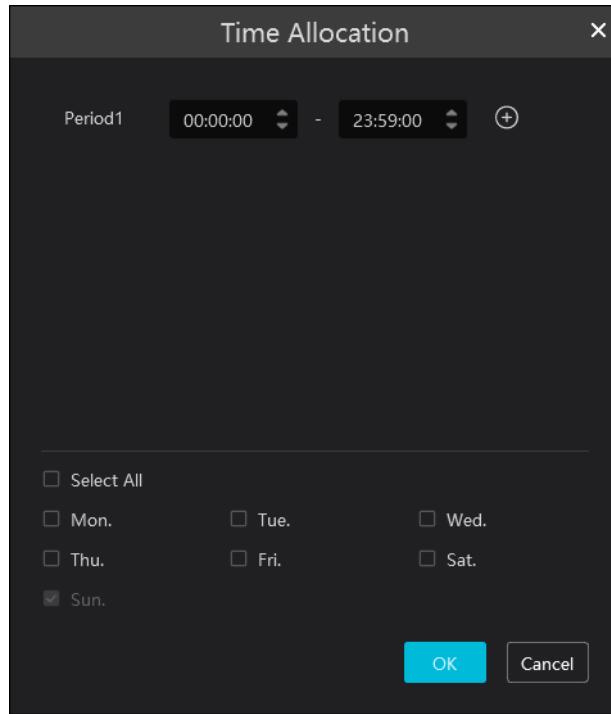
Click [Add] to add a new schedule template name. Double click the schedule name to modify it. Then you can select the schedule and set it as needed.

#### ● Weekly Schedule:

Set the scheduled time from Monday to Sunday for a single week. Each day is divided in one hour increments. Green means scheduled. Blank means unscheduled.

Add: Add the schedule for a special day. Drag the mouse to set the time on the timeline. Or click  to manually set the time period;

click  to add new time period.

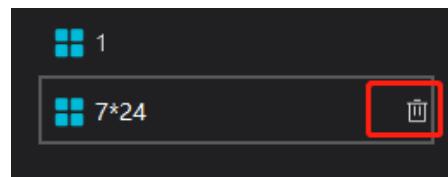


You can copy the above time period to other days by checking the relevant days. After that, click [OK] to save the settings.

Additionally, you can also copy the time period by clicking . For example, click in front of Sunday, Monday and Tuesday, and then drag the mouse on the timeline of one of them. After that, other days that enable will automatically copy the set time period. You can also click next to “Copy” and then drag the mouse on the timeline of one day, and then the other days of the week will automatically copy the set time period.

**Erase:** Drag the mouse on the scheduled time period to delete the set time.

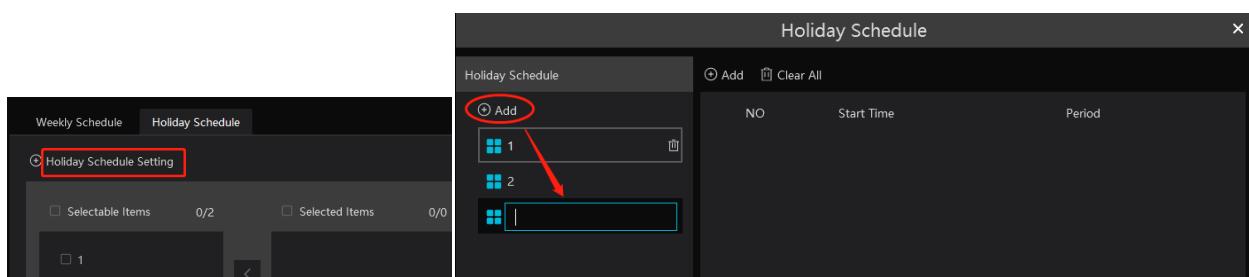
**Delete Schedule:** Put the cursor on the schedule name and then a deletion icon will appear. Click it to delete the schedule.



## ● Holiday Schedule

Set the scheduled time for a special day, such as a holiday.

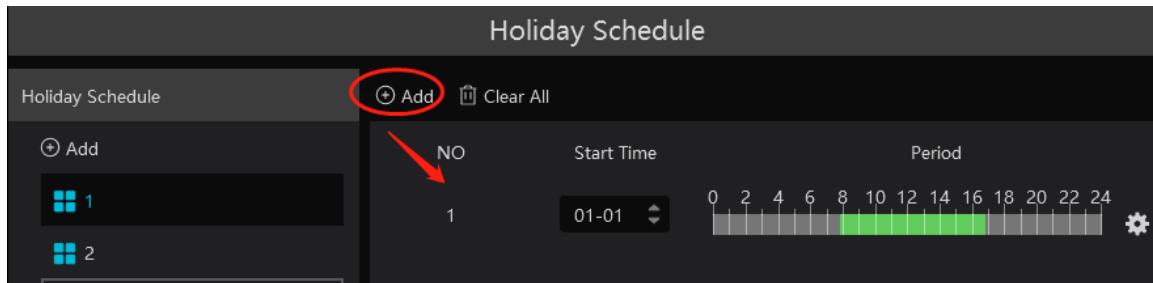
1. Click the “Holiday Schedule” tab to enter the holiday schedule page.



2. Click “Holiday Schedule Setting” to set holiday schedule. Click “Add” on the left panel to add a new holiday schedule. Enter the holiday schedule name as needed.
3. Select the holiday schedule. Click “Add” on the right panel to set date and time period.

Drag the mouse on the timeline to set the time period or click  to manually set the time period. Click “Clear” to clear all information of the current holiday schedule.

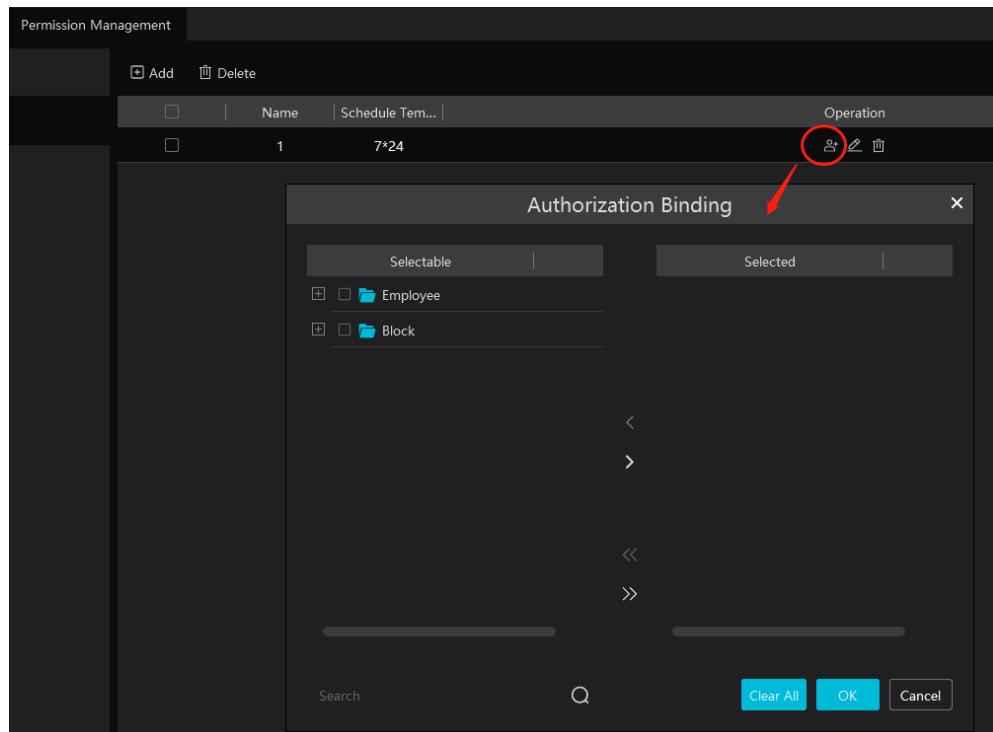
4. Click [OK] to save the settings.



**Note:** Holiday schedule takes priority over weekly schedule.

#### ➤ **Permission Binding**

 Click  to bind the group or person to the selected devices.



After the binding is complete, you can modify or delete the permission group as needed.

#### ➤ **People Sync Record Query**

Click “People Sync Record Query” to view the permission binding status of each person.

After the permission binding is complete, you can click  to delete the sync record here.

**Note:** 1. When the device is offline, the target synchronized to it cannot be deleted. Then you can delete the synchronization records here and then delete the target.

2. The added group or person must be bound with one or more cameras, or the face comparison result will not be gotten by the platform.

#### ➤ Vehicle Sync Record Query

Click “Vehicle Group” or “Device” to view the sync status of all vehicles under each vehicle group or device.

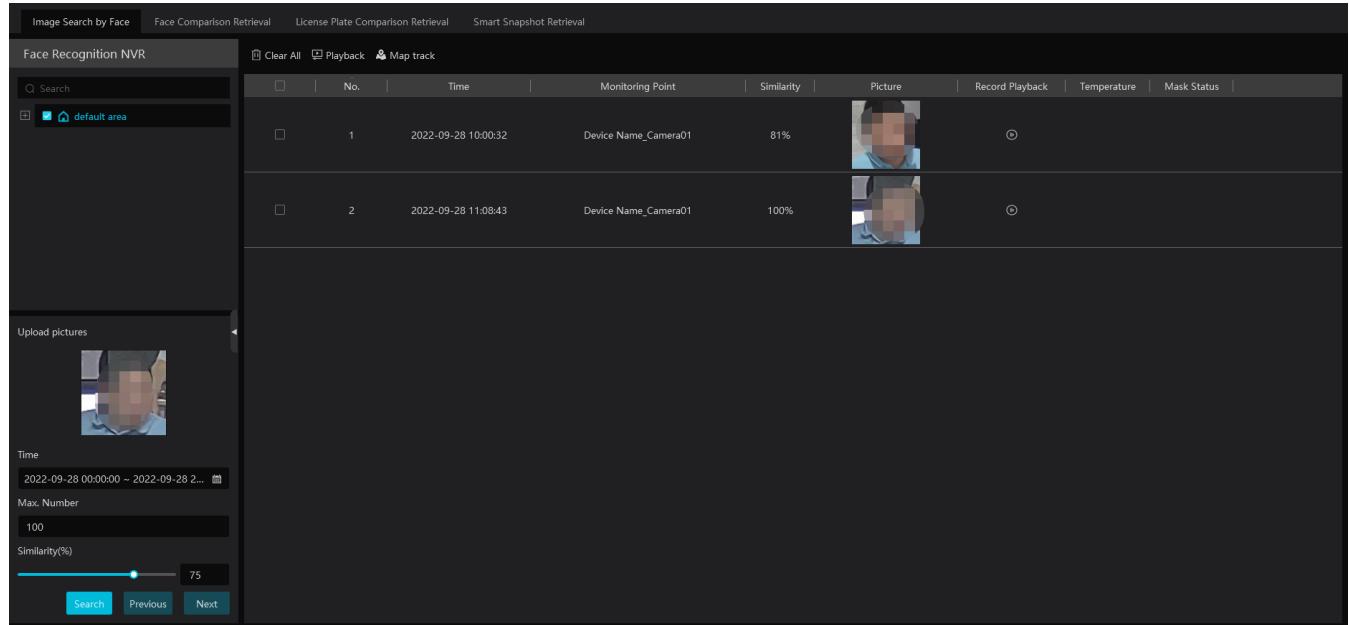
**Note:** If you want to view the vehicle sync records, you must enable license plate synchronization function by clicking Configuration→Server Configuration→System Setting first.

## 7 Search

### 7.1 Image Search by Face

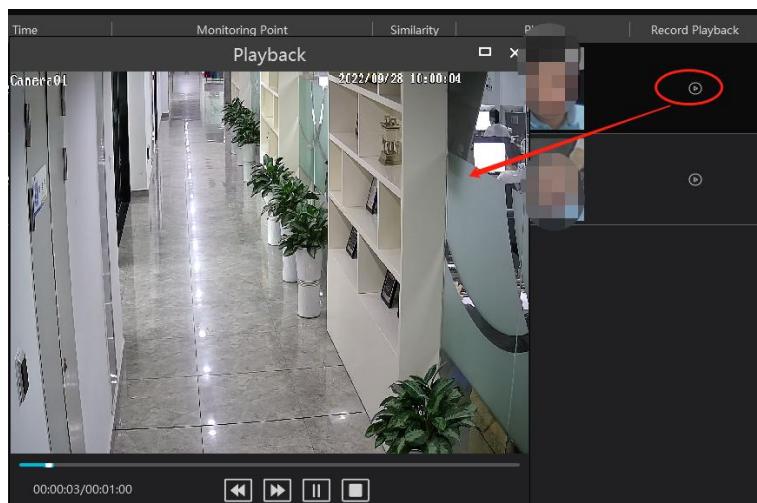
- ① Select a picture and picture source.
- ② Set the start time and the end time.
- ③ Set the maximum count and similarity.
- ④ Click [Search].

**Note:** Only face recognition NVRs added to this platform support this function.



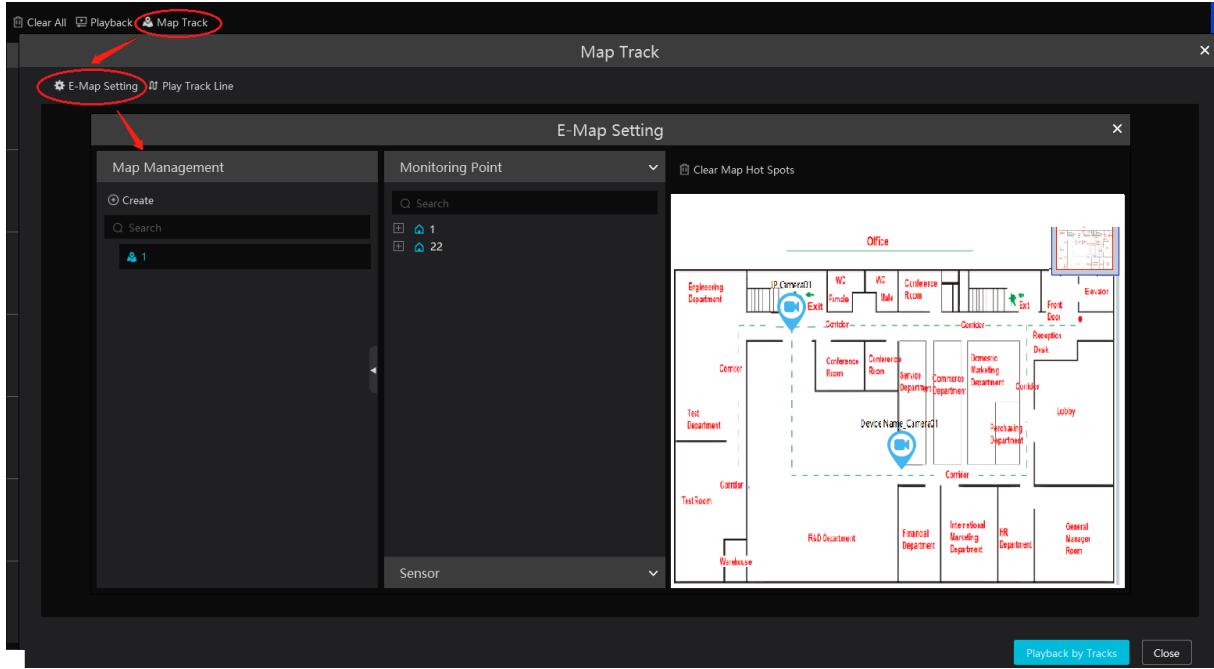
No.	Time	Monitoring Point	Similarity	Picture
1	2022-09-28 10:00:32	Device Name_Camera01	81%	
2	2022-09-28 11:08:43	Device Name_Camera01	100%	

Click  to play the record in a small window.



- E-Map Track View:

Create an E-map. You can create or delete an E-map in this interface. The hot spot can be added to the E-map too.



Play Track Line: Click this button to play the track line on a map.

Playback by Tracks: Click this button to play the track video.

## 7.2 Face Comparison Search

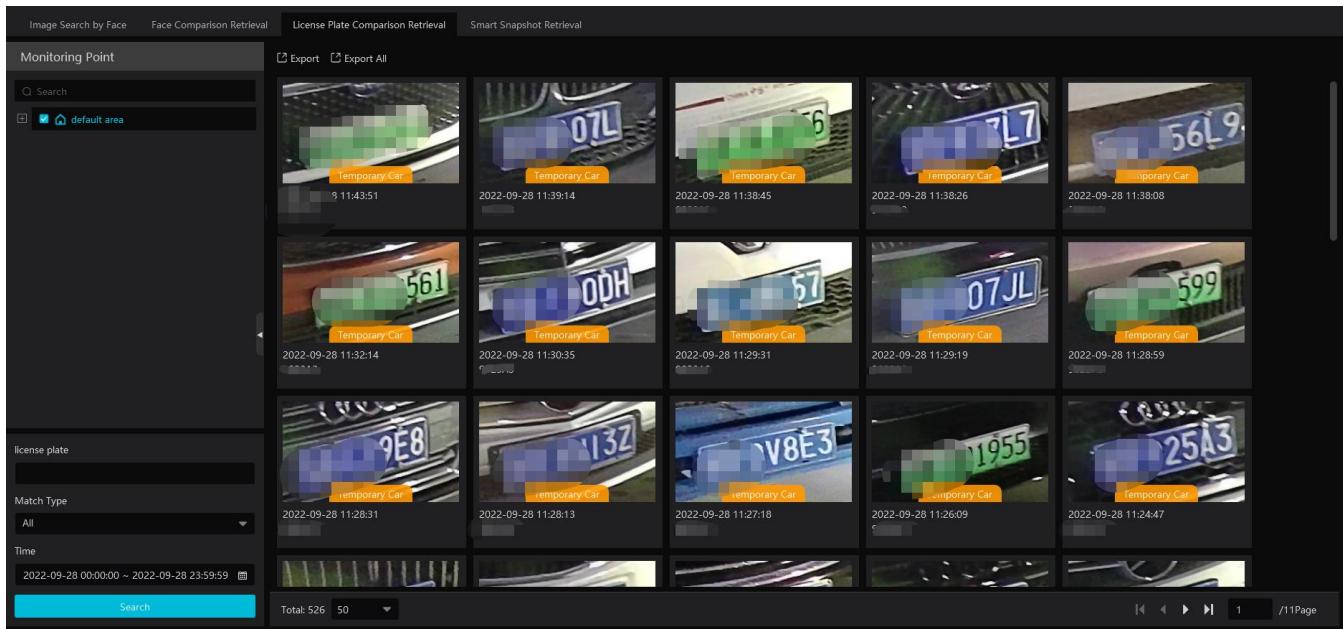
- ① Go to Search → Face comparison retrieval interface.
- ② Select the IPC and query method. Then select match type or target as needed.
- ③ Set the start and end time and then click [Search] to search the face pictures.

Result Index	Date	Device Name	Lib Name	Allow List (%)
1	2022-09-28 09:55:57	Device Name\_Camera01	Lib Name: Default Group	Allow List:89%
2	2022-09-28 09:55:53	Device Name\_Camera01	Lib Name: Default Group	Allow List:87%
3	2022-09-28 09:46:32	Device Name\_Camera01	Lib Name: Default Group	Allow List:76%
4	2022-09-28 09:46:32	Device Name\_Camera01	Lib Name: Default Group	Allow List:94%
5	2022-09-28 09:08:17	Device Name\_Camera01	Lib Name: Default Group	Allow List:100%
6	2022-09-28 09:07:29	Device Name\_Camera01	Lib Name: Default Group	Allow List:82%
7	2022-09-28 09:04:48	Device Name\_Camera01	Lib Name: Default Group	Allow List:80%
8	2022-09-28 09:03:53	Device Name\_Camera01	Lib Name: Default Group	Allow List:75%
9	2022-09-28 09:03:02	Device Name\_Camera01	Lib Name: 默认组	VIP:50%
10	2022-09-28 08:56:11	Device Name\_Camera01	Lib Name: Default Group	Allow List:89%
11	2022-09-28 08:53:18	Device Name\_Camera01	Lib Name: Default Group	Allow List:83%
12	2022-09-28 08:52:47	Device Name\_Camera01	Lib Name: Default Group	Allow List:83%
13	2022-09-28 08:41:12	Device Name\_Camera01	Lib Name: Default Group	Allow List:81%
14	2022-09-28 08:41:09	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%
15	2022-09-28 08:39:37	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%
16	2022-09-28 08:39:37	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%
17	2022-09-28 08:39:37	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%
18	2022-09-28 08:39:37	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%
19	2022-09-28 08:39:37	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%
20	2022-09-28 08:39:37	Device Name\_Camera01	Lib Name: Default Group	Allow List:78%

 At the bottom left is a 'Query method' section with 'Match Type' dropdown set to 'Compared Successfully'. Below this are 'Time' settings for '2022-09-28 00:00:00 ~ 2022-09-28 23:59:59'. At the bottom right are buttons for 'Search' and 'Total: 20'."/>

## 7.3 License Plate Comparison Search

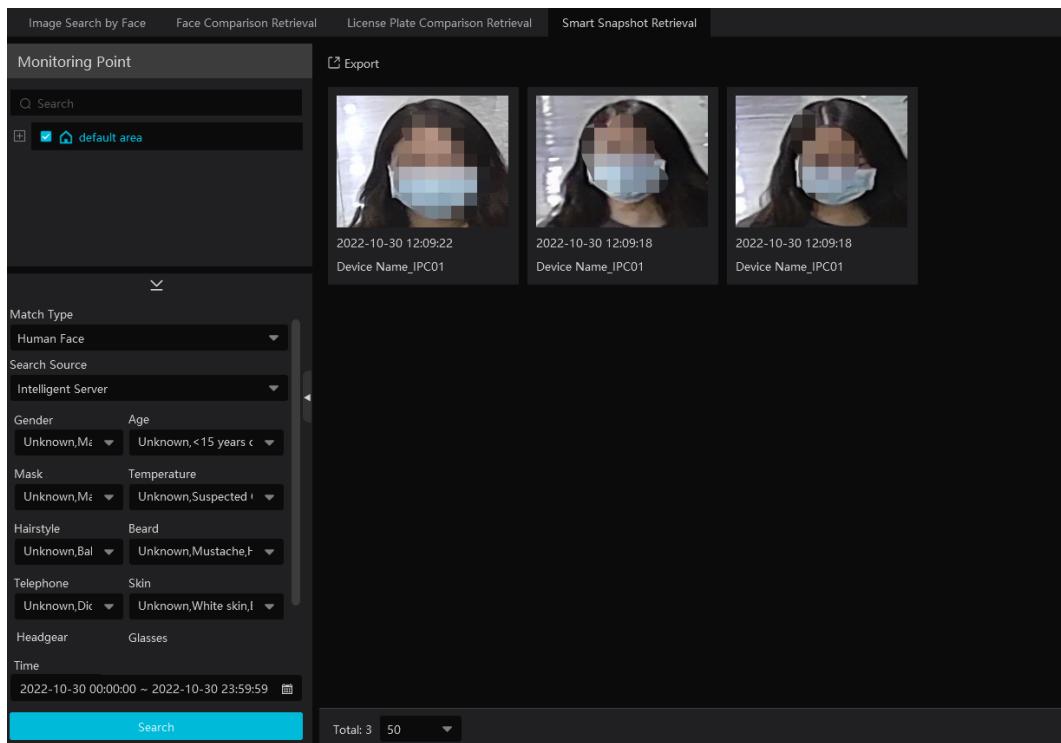
1. Select the camera.
2. Enter the license plate and select the match type.
3. Set the start time and end time.
4. Click [Search]



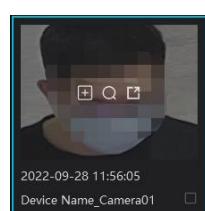
## 7.4 Smart Snapshot Search

The snapshot results from the intelligent server and face recognition devices can be searched. You can search the snapshots of human face, human body, motor vehicle and non-motor vehicle.

For example: Search faces from intelligent server



If the snapshot type is human face, put the cursor on the captured picture and then some shortcut buttons will be displayed.

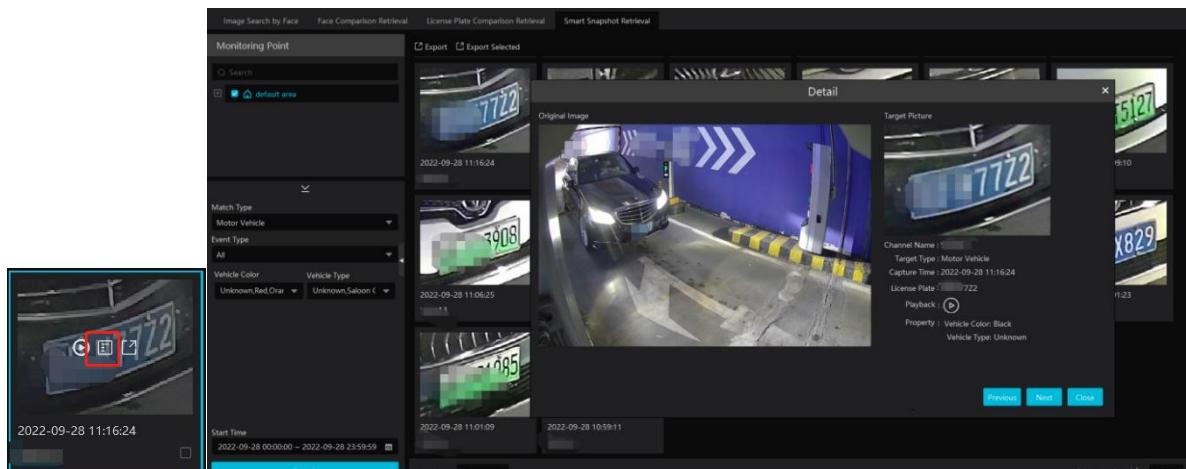


Click + to add the capture picture to the library. Select the library on the left and then fill out the information of this target. Click [OK] to add.

Put the cursor on the captured picture and then click  to quickly search images by this picture.

Put the cursor on the captured picture and then click  to quickly download the captured picture.

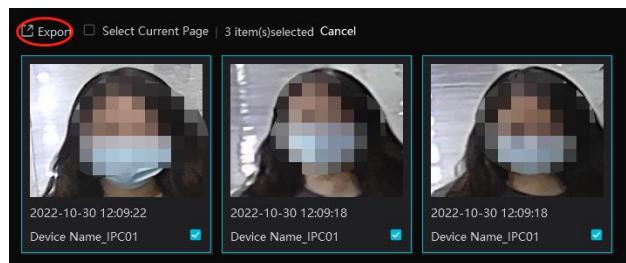
Search vehicles from intelligent server:



Click  to quickly skip to the playback interface and play the record.

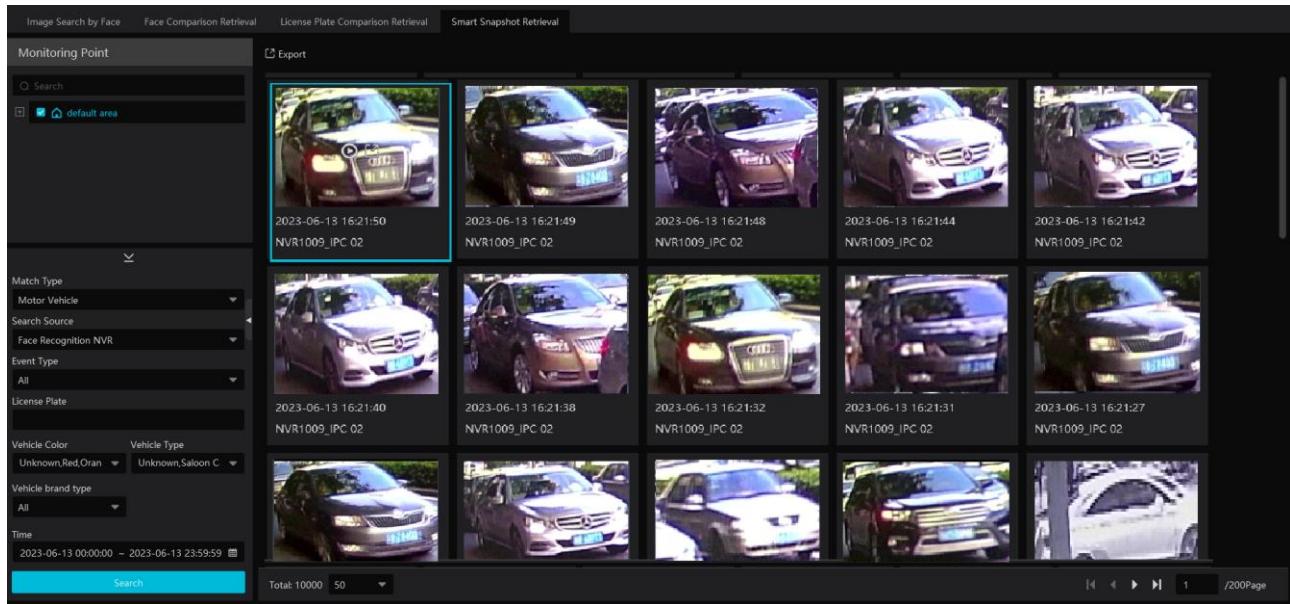
Click  to view the snapshot details, including the original image, target picture, snapshot type, snapshot time and so on.

Select the searched pictures as shown below and click [Export] to export the selected pictures.



You can also export all searched pictures in the current page once by checking “Select Current Page” and clicking [Export].

Search vehicles from face recognition NVR:

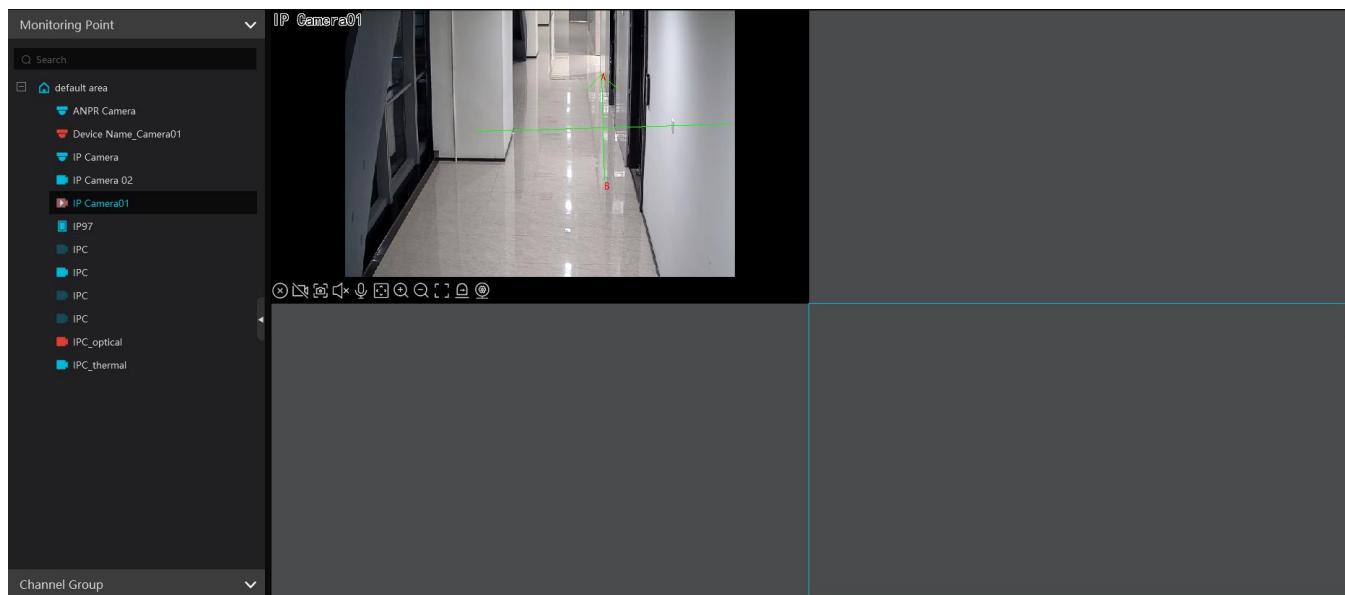


Click to play back the record in a small window; click to quickly download the captured picture.

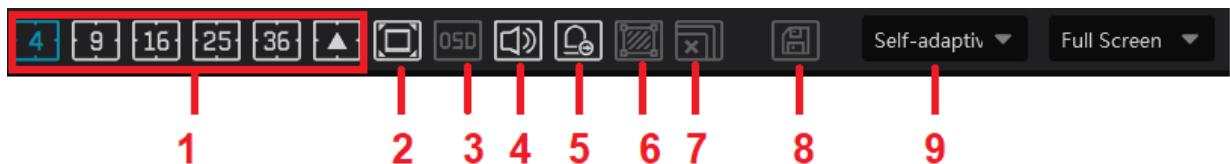
## 8 Live View

### 8.1 Live View

Go to Home→Video Preview interface as shown below.



The descriptions of the live view buttons are as follows.



NO.	Description	NO.	Description
1	Screen display mode; click  to view more screen display modes. Please select as needed.	6	Show/hide target tracking box
2	Full screen	7	Close all previews
3	Enable/disable OSD	8	Save the current view mode
4	Enable/disable broadcast	9	Choose the camera stream
5	Manual alarm output		

Channel stream: main stream, sub stream, third stream and self-adaptive stream can be optional. When the third stream is selected, the system will automatically switch to sub stream if the channel/camera doesn't support the third stream.

Toolbar on the display window:

Button	Description	Button	Description
	Close image		Zoom in
	Start/stop recording		Zoom out

	Enable/disable audio		Fit to window
	Snapshot		Manual alarm output
	PTZ control		Enable/disable talkback
	Monitoring point setting (camera setting)		Enable/disable channel talkback
	3D zoom in		

When the IPC under the DVR/NVR device has access to the channel, click to enable two-way audio between the DVR/NVR and the monitor client; click to enable two-way audio between the IPC and the monitor client.

Right-click button function:

Menu	Description	Menu	Description
<b>Close Channel</b>	Close image	<b>Start Talkback</b>	Enable/disable talkback
<b>Start Record</b>	Start/stop recording	<b>Channel Info.</b>	Display channel name, IP address and the current stream
<b>Instant Playback</b>	Click it to play back immediately	<b>Stream</b>	Choose video stream
<b>Audio ON</b>	Enable/disable audio	<b>Full Screen</b>	Display image in full screen
<b>PTZ Control</b>	Click it to show PTZ control panel	<b>Image Adjustment</b>	Set the image's brightness, saturation, contrast and so on
<b>Snapshot</b>	Capture images	<b>Manual Alarm Out</b>	Click it to select alarm output device and then trigger alarm out manually

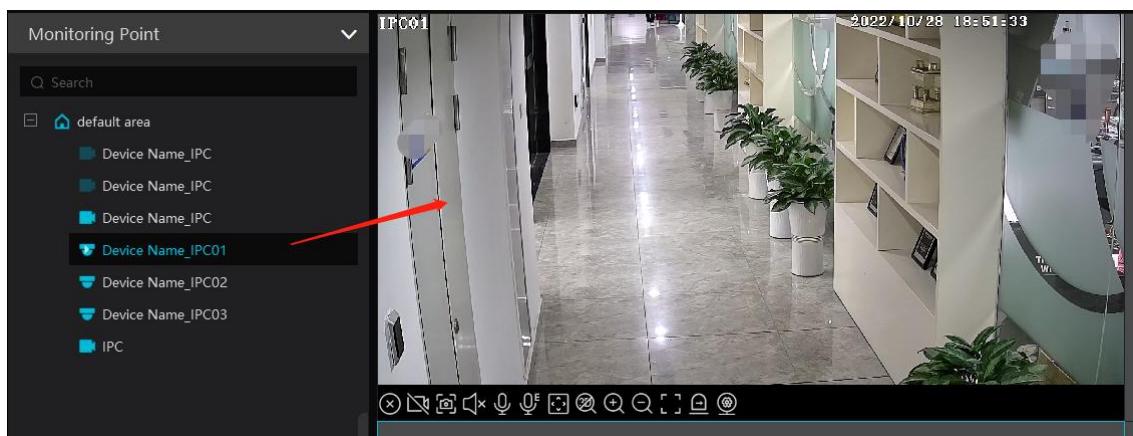
4:3/16:9/Original Size/Full Screen: screen display proportion; please select it as needed.

**Note:** the platform only can enable audio of one window. If the audio is enabled in one window, the audio in previous window will be disabled.

## Monitoring Point Viewing

### ● Start View

To start live view, please drag cameras from the list to the right display window or select a window and then double click the camera. The image can be dragged to any window at random.



### ● Stop View

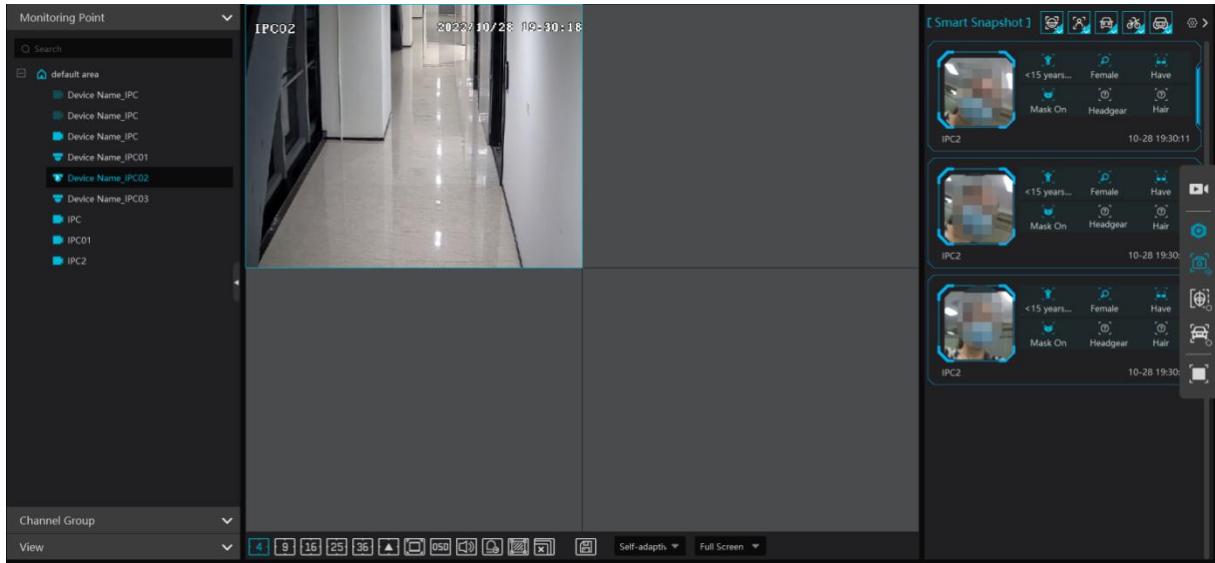
- ① Place the cursor on the live view window to display the menu toolbar and then click to stop viewing.
- ② Right click on the live view window and then select "Close Channel" to stop viewing.

③ Click  on the toolbar of the live view interface to stop all live view.

## 8.2 Smart View

In the live view interface, click  on the right of the interface. A menu bar will be shown on the interface as shown below. Then you can switch the preview mode between video preview and smart viewing mode.

Note: : it is a smart mode icon but not a functional button. You must click the smart display button under it to show the corresponding results.



The descriptions of the button on the right:

Button	Description	Button	Description
	Preview only mode		Smart mode icon
	Smart Snapshot: real-time display of snapshots, including face, human body, motor vehicle, non-motor vehicle and vehicle plate.		Face Comparison: Real-time display of face comparison results
	Plate Comparison: Real-time display of license plate comparison results		Full Screen under smart mode

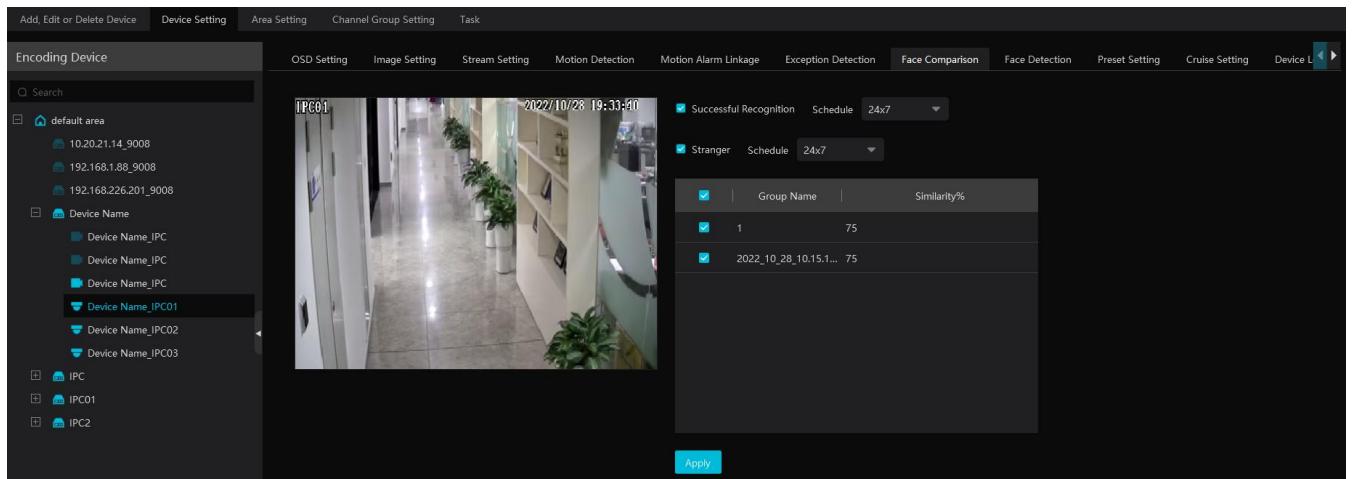
### 8.2.1 Face Comparison

If it is the first use of face comparison function, please configure it in the following order.

**Add face comparison device → Create a group → Add targets to the group → Set task → Real-time View → Search faces**

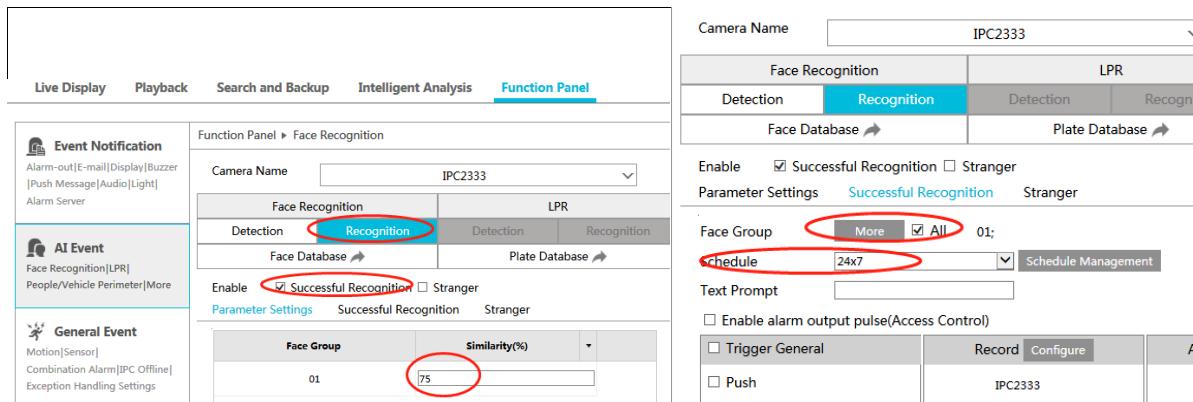
1. Go to Home → Resource Management → Add, Edit or Delete Device interface to add face recognition devices.
2. Create a group, add targets to the group and bind permission for them. Please refer to chapter 6 People & Vehicle Management for details.
3. Set the task for these added face comparison device. Refer to [Task Management](#) for details.

4. For the added NVR with face recognition function please set the face comparison parameters by entering Resource Management→Device Setting interface. Refer to the following interface.

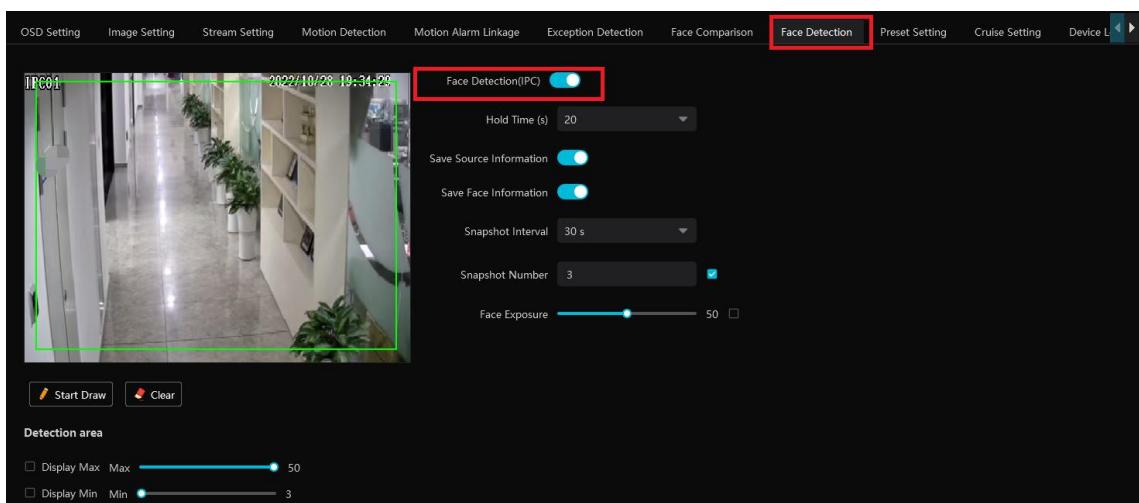


Please select “Successful Recognition” or “Stranger” as needed and then set the schedule separately. After that, check the group and set the similarity. Finally, save the settings by clicking [Apply].

If the face comparison settings cannot be set according to the above-mentioned way, you can log in the web client of the NVR and then configure face recognition to realize the auto report of the face match result as shown below.

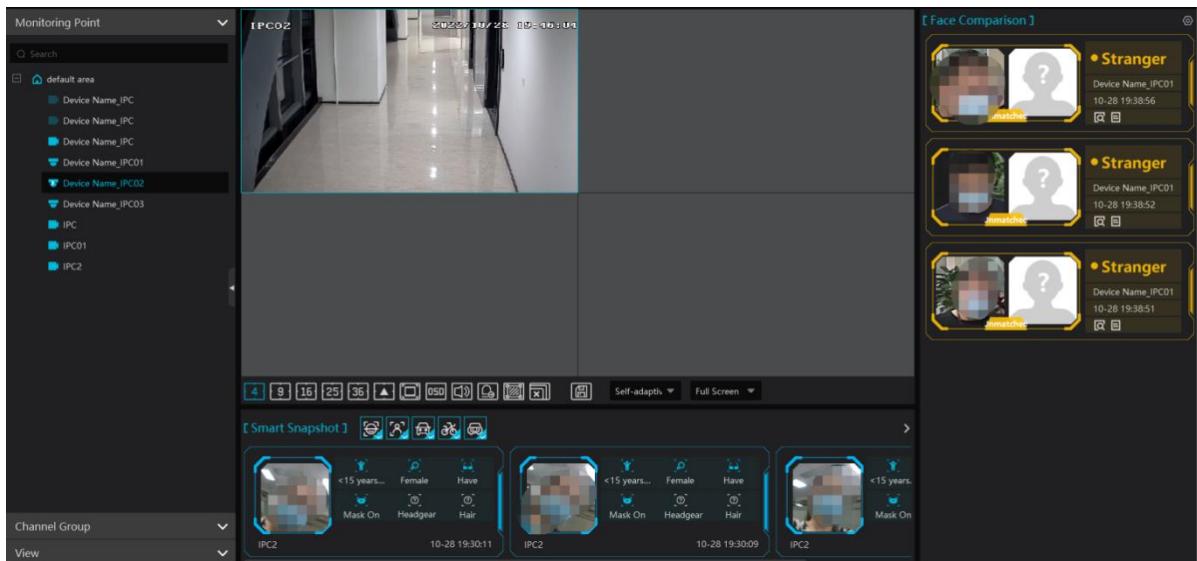


Additionally, please make sure the face detection function is enabled for the AI IPC (click Device Setting→Face Detection).

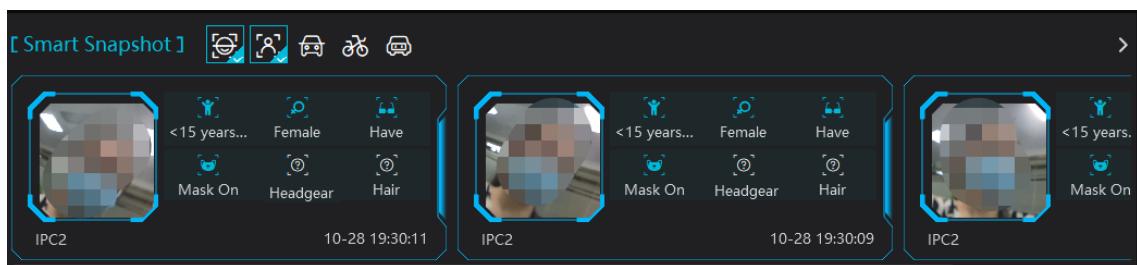


## ● View the real-time snapshot and comparison result

Face capture results can be pushed by the cameras with face detection function. Human body/motor vehicle/non-motor vehicle capture results can be pushed by the cameras with human/vehicle classification function. Face Comparison and license plate comparison result can be pushed after the face/license plate comparison is configured, even if the corresponding cameras are not playing in the live view interface.



In the smart snapshot area, click the corresponding icon (face/human body/motor vehicle/non-motor vehicle/plate) to filter the display of smart snapshots. Disable the selection and then the corresponding smart snapshots will not be displayed. Click button to quickly go to the smart snapshot retrieval interface.

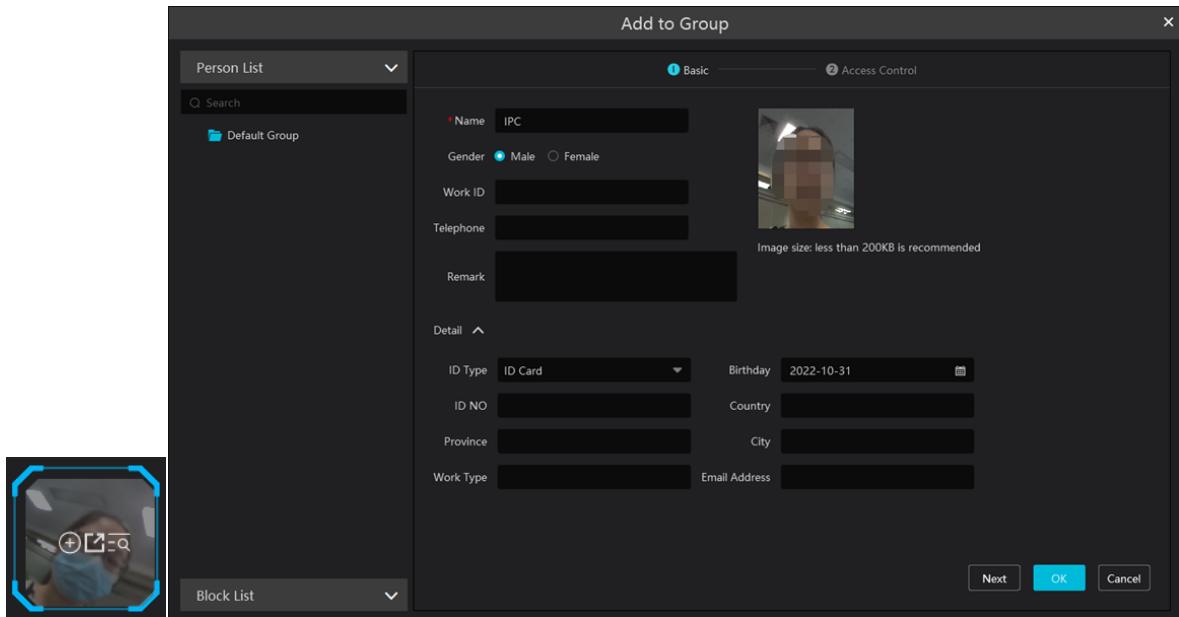


For attribute display settings, please refer to snapshot attribute settings for details.

**Note:** If you want to view the detailed attribute/feature information of the snapshot images, you should add the AI IPC with video metadata function and this function must be enabled first.

Quickly adding the detected target to the face database:

Put the cursor on the face snapshot and then click . The following window will pop up. Select the group and then fill out the relevant information to add.



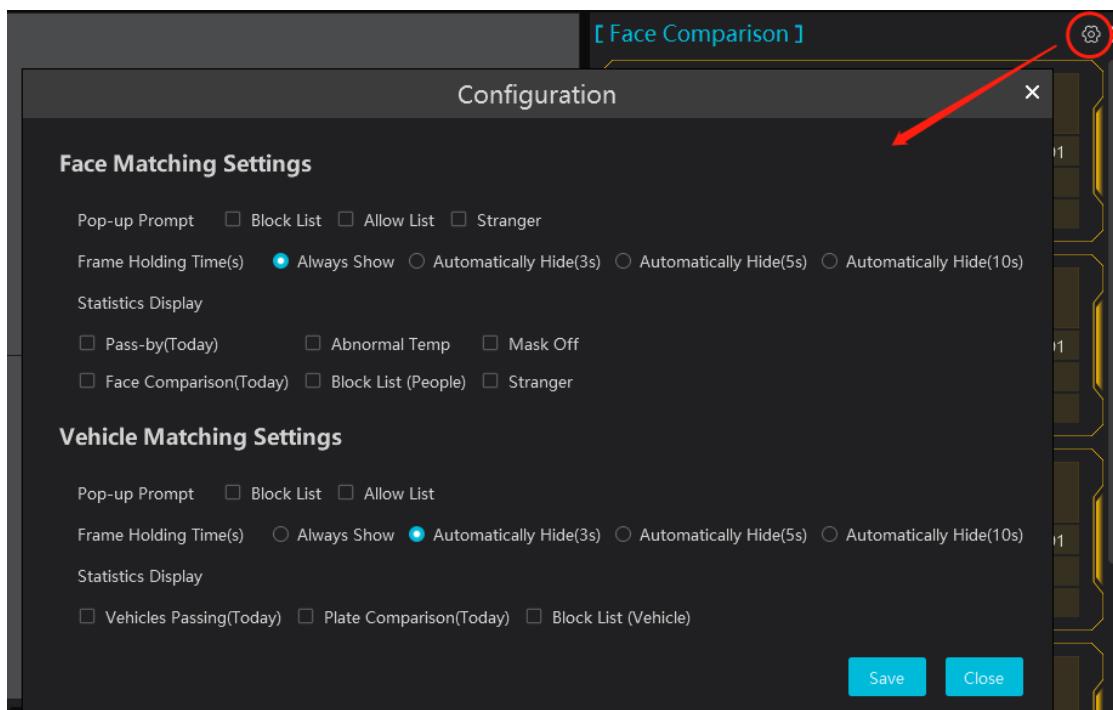
Click  to quickly skip to the image search by image interface.

The captured picture can be exported. Click  and then select the export path and then click [OK] to export

#### ● Face Comparison Display Settings

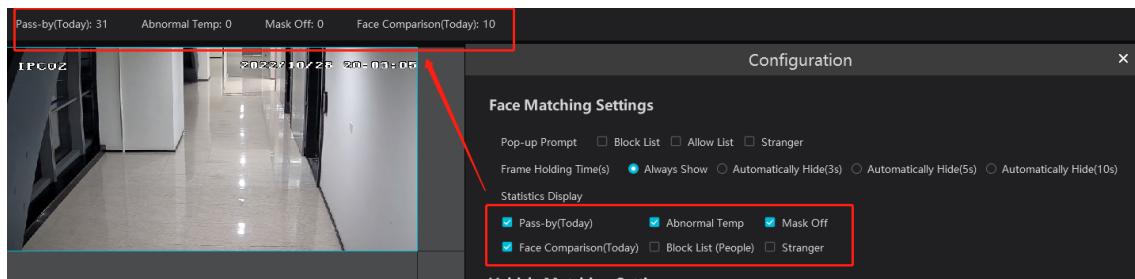
Click  on the right corner of the live interface to display the configuration window as shown below. One or more items can be selected.

Pop-up prompt: if enabled, the alarm box of the corresponding face comparison result will pop up. If disabled, the alarm box will not pop up.



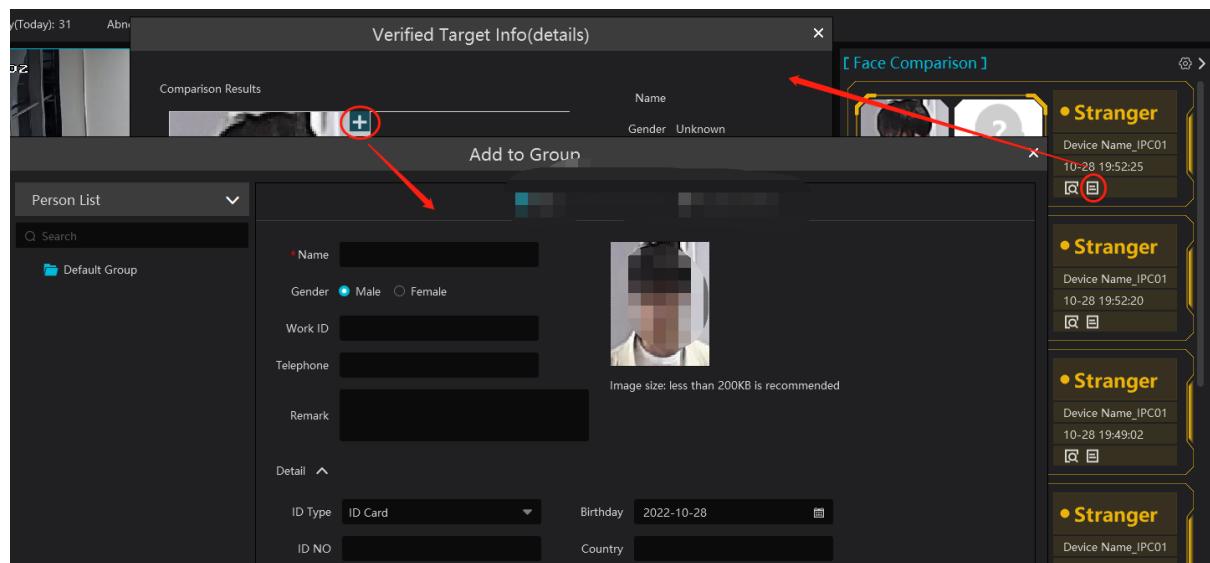
Frame Holding Time: select the alarm pop-up window holding time as needed.

Statistics display: If selected, the corresponding statistical information will be displayed on the top of the preview window.

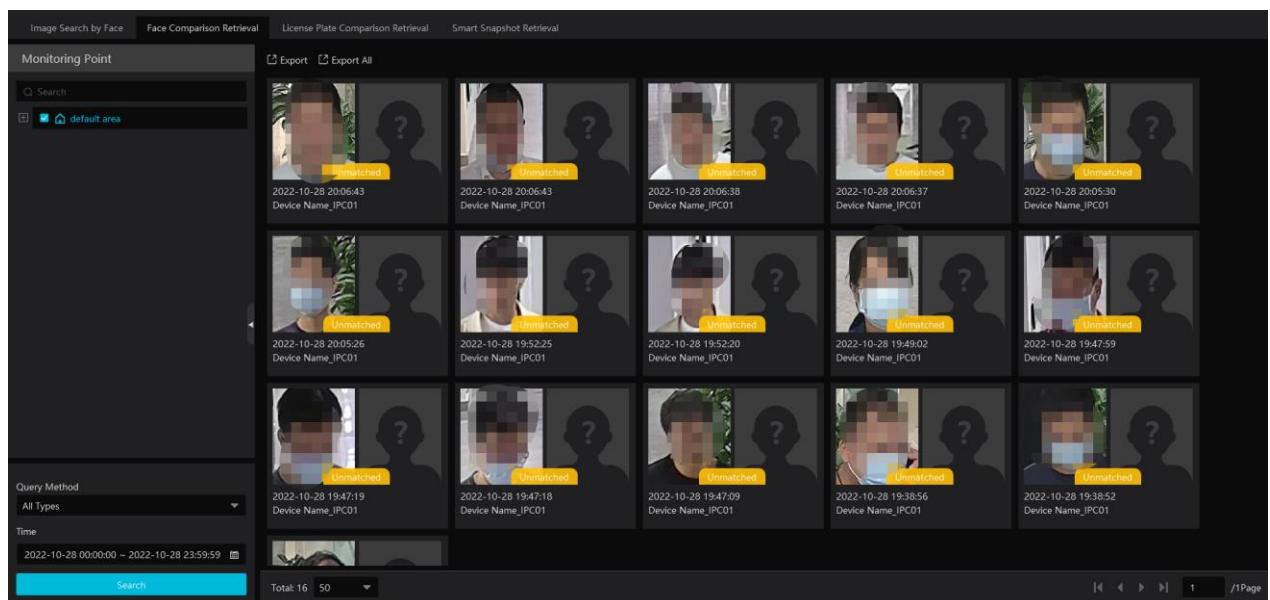


### ● Face Comparison Records

Click to view the face comparison details. Click to quickly add the captured face picture to the face database.



Click to quickly enter the face comparison retrieval interface. Select the camera and click [Search] to search the face comparison results.

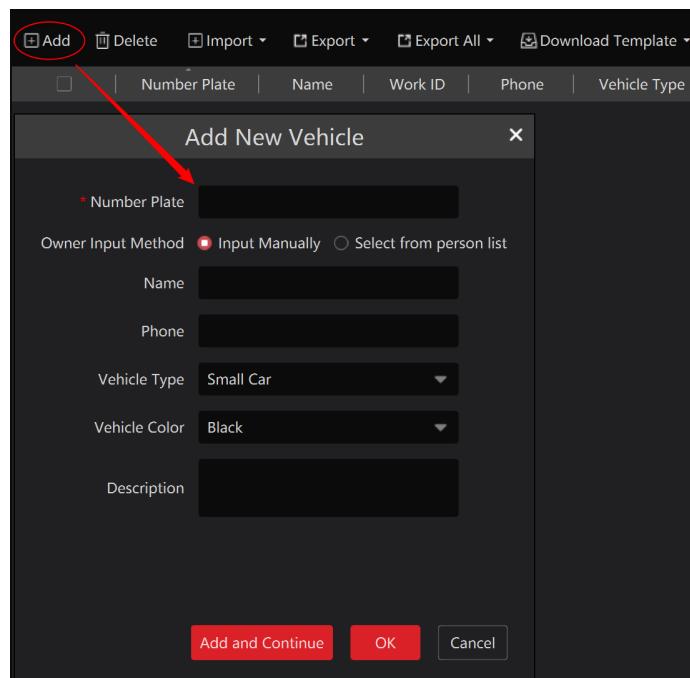


## 8.2.2 License Plate Comparison

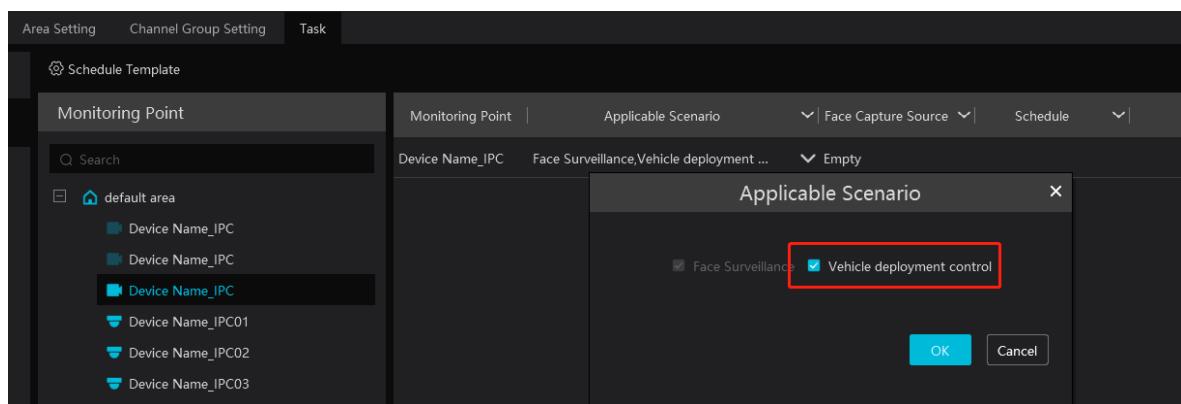
If this is the first time for you to set the license plate recognition function, please follow the procedures.

Enter Group Management → People & Vehicle Management → Vehicle Registration → Add Vehicles → Task Settings → View Real-time License Plate Comparison Results → Search License Plate Comparison Result

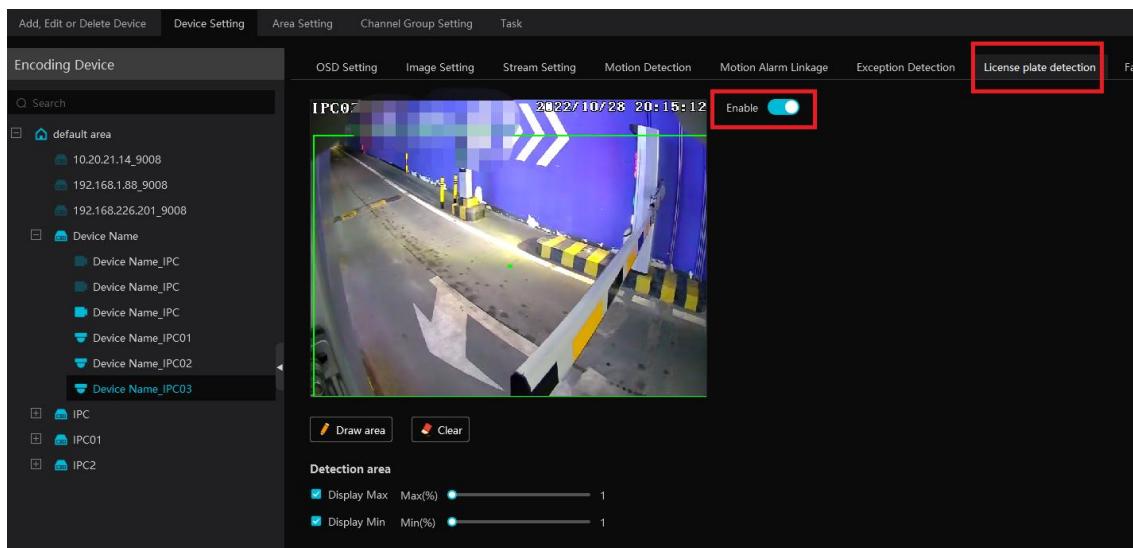
1. Go to People & Vehicle Management → Vehicle Registration interface. Click [Add] to add the vehicle information to Allow List or Block List.



2. Click the “Task” tab to setting license plate recognition task. Select the license plate recognition camera and then click applicable scenario. Select “Vehicle deployment control” and click “OK”.

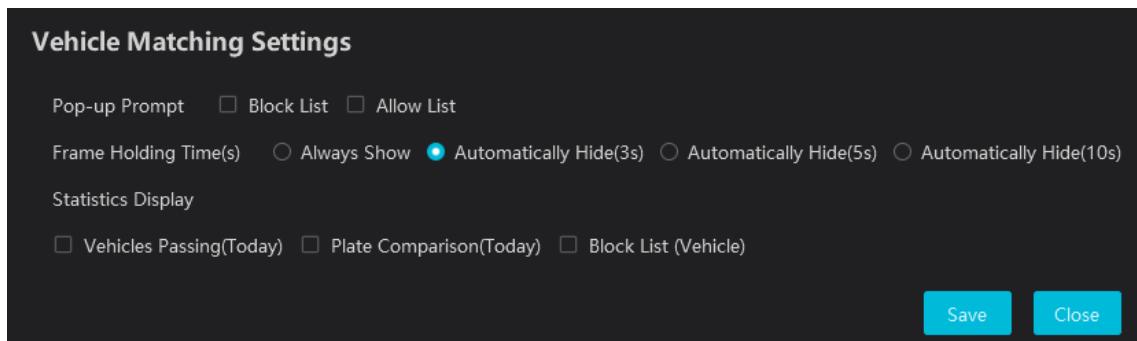


3. Ensure that the license plate recognition IPC has already enabled the license plate detection function.



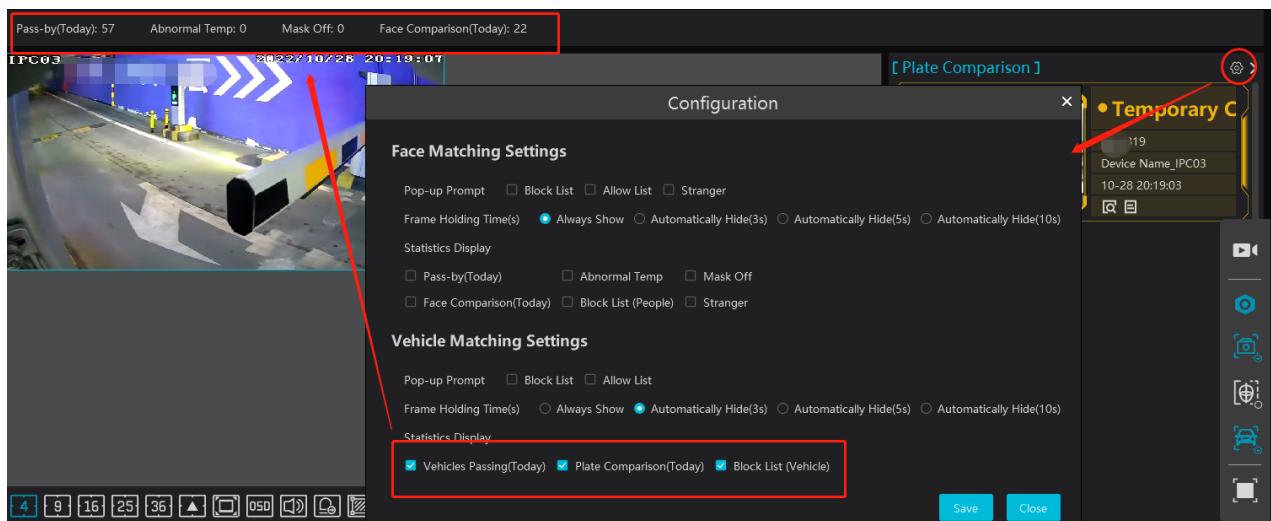
## ● License Plate Capture and Comparison Settings

Pop-up prompt: if enabled, the alarm box of the corresponding license plate comparison result will pop up. If disabled, the alarm box will not pop up.



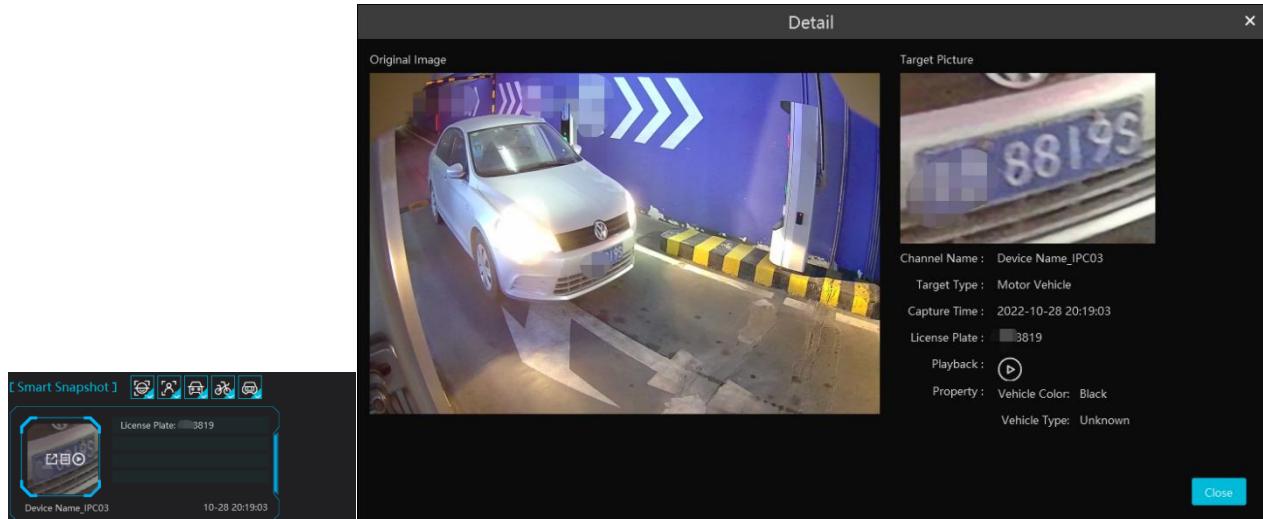
Frame Holding Time: select the alarm pop-up window holding time as needed.

Statistics display: If selected, the corresponding statistical information will be displayed on the top of the preview window.



## ● License Plate Capture Records

Click  to view the license plate capture details.

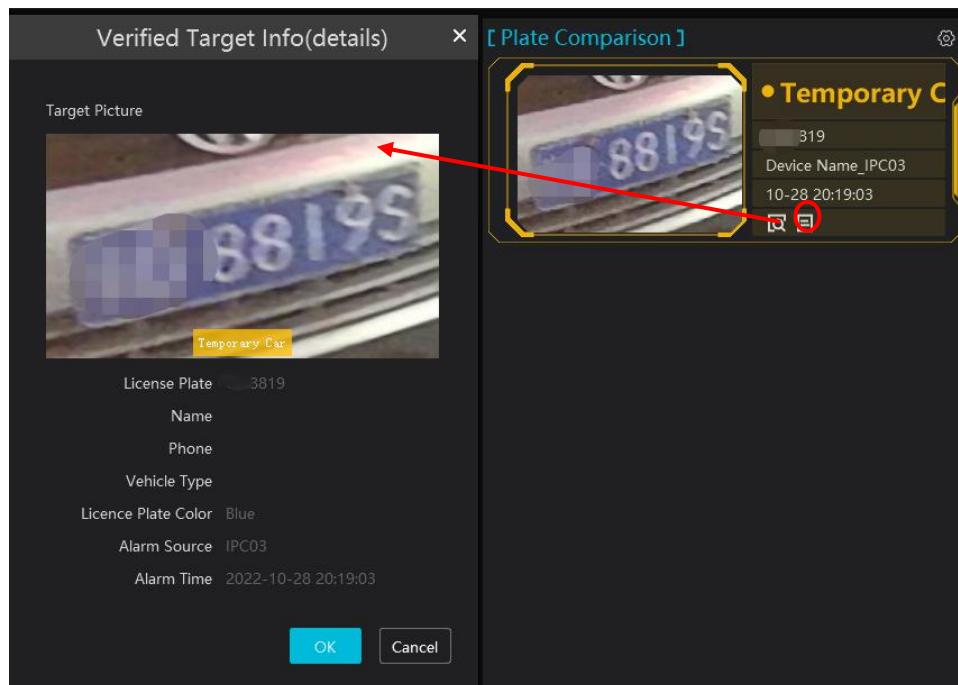


Click  to quickly go to the record playback interface.

**Note:** if you don't set the record schedule or record linkage is not configured for the corresponding events, no record will be searched after you enter the record playback interface.

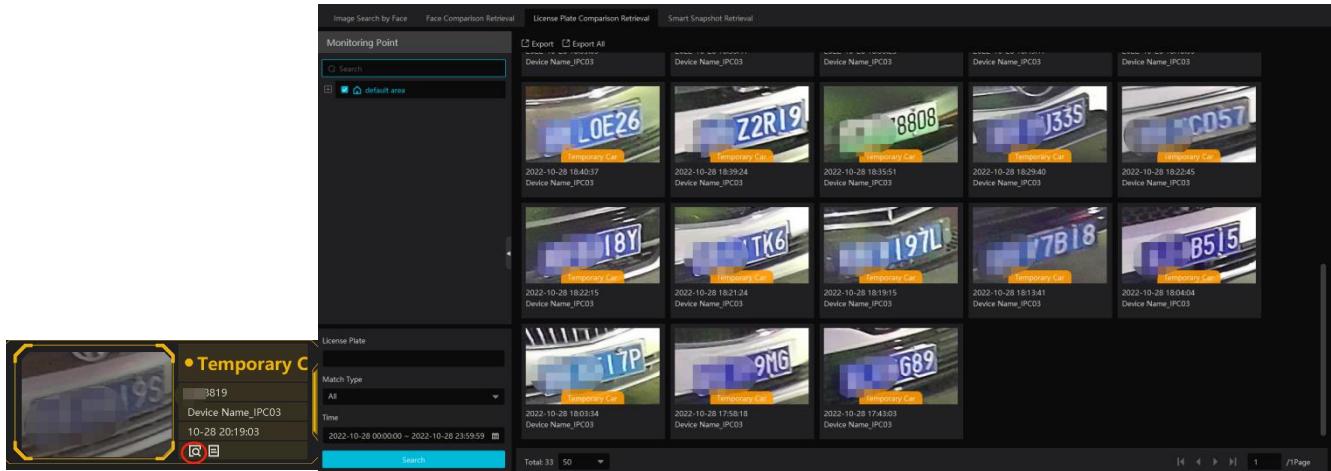
## ● License Plate Comparison Records

Click  to view the license plate comparison details.





Click to quickly enter the vehicle plate comparison interface. You can search the captured vehicle plate as needed.



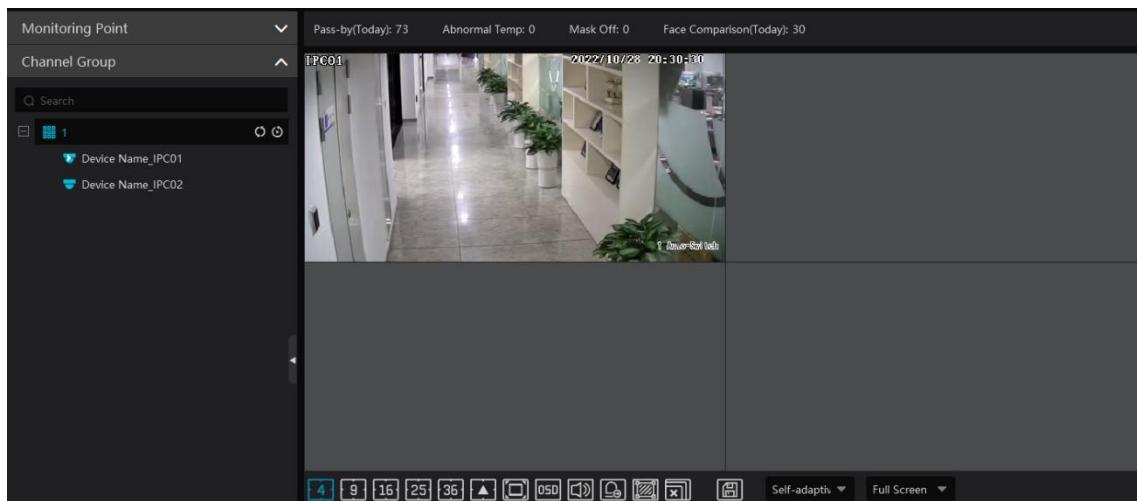
## 8.3 Channel Group View

### ➤ Channel Group Setting

Go to Home → Channel Group Setting interface to set the channel group (See [Channel Group Settings](#) section for details).

### ➤ Start Channel Group View

After the channel group is set successfully, go to live view interface as shown below.

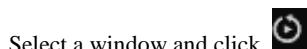


You can start the channel group view as follows.

1. Choose the screen display mode according to the channel number of the channel group. Select a window and then double click the channel group name to play all channels in the group.

2. In the current screen display mode, select a window and then click beside the channel group name to play all channels of the channel group in this window in sequence. (Put the cursor on the channel group name to display )

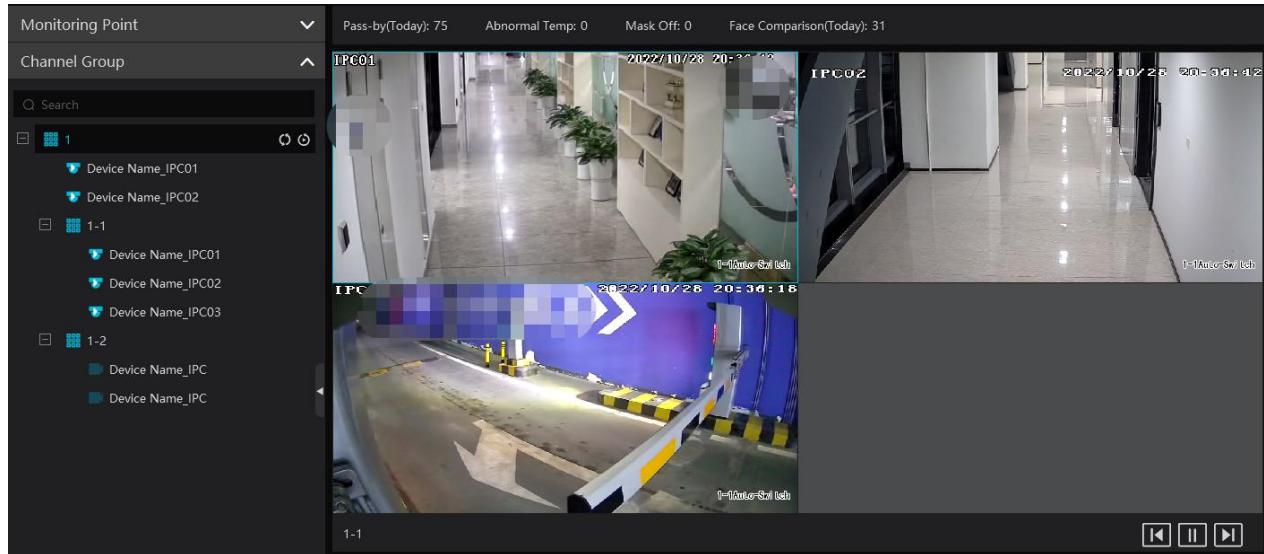
If there is only one sub channel group under the parent group, select a window and then click next to the parent group name to play all channels in the parent group and the sub channel group in the window in sequence.



Select a window and click  next to the sub channel group to play all channels of the sub channel group in this window in sequence.



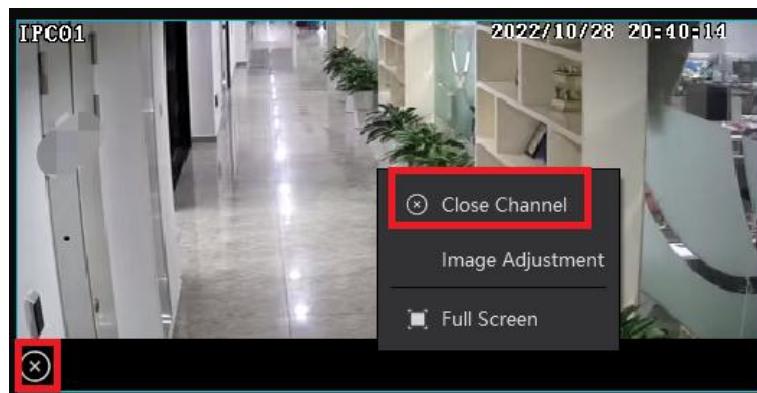
3. If there are several sub channel groups under the parent channel group, click  next to the parent group name and then all sub channel groups will play in sequence. The screen display mode will automatically adapt to the channels of the sub group.



Click  to play the previous sub channel group; click  to play next sub channel group; click  to stop auto switch among the sub channel groups.

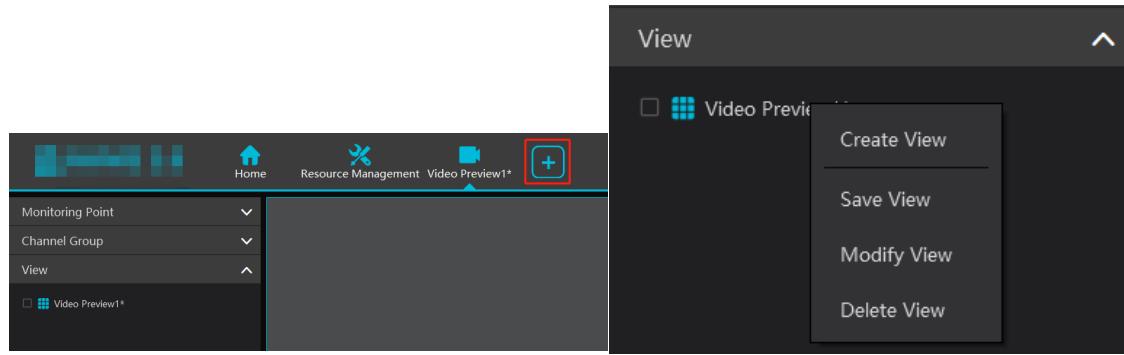
#### ➤ Stop Channel Group View

- ① Place the cursor on the auto-switch window and then click  to stop viewing.
- ② Right click the auto-switch window and then click “Close Channel” to stop viewing.
- ③ Click  on the toolbar of the live view interface to stop all live view.



## 8.4 Plan View

In the live view interface, select “View” on the left menu bar.



### ● Add View Plan

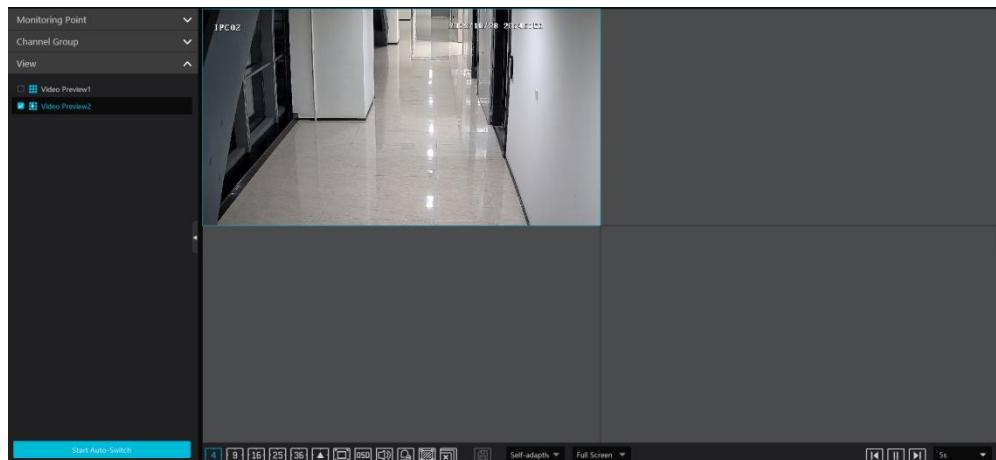
- ① Right click “Live View 1” and then select “Create View” or click  to add a new view plan. Clicking “Create View” to prompt an adding view window. Enter the view name and click [OK] to set view plan.
- ② Select screen display mode and then drag monitoring points or channel group to each window.
- ③ Click “View” on the left menu and then right click the newly added view name. Select “Save View” on the pop-up menu to save the view plan or click  on the live view interface to save the view plan. Double click view name to call the view plan.

### ● Modify or Delete View Plan

Select the added view and then right click to prompt a pop-up window. Select “Modify View” or “Delete View” to modify or delete the view plan.

### ● Start/stop auto-switch

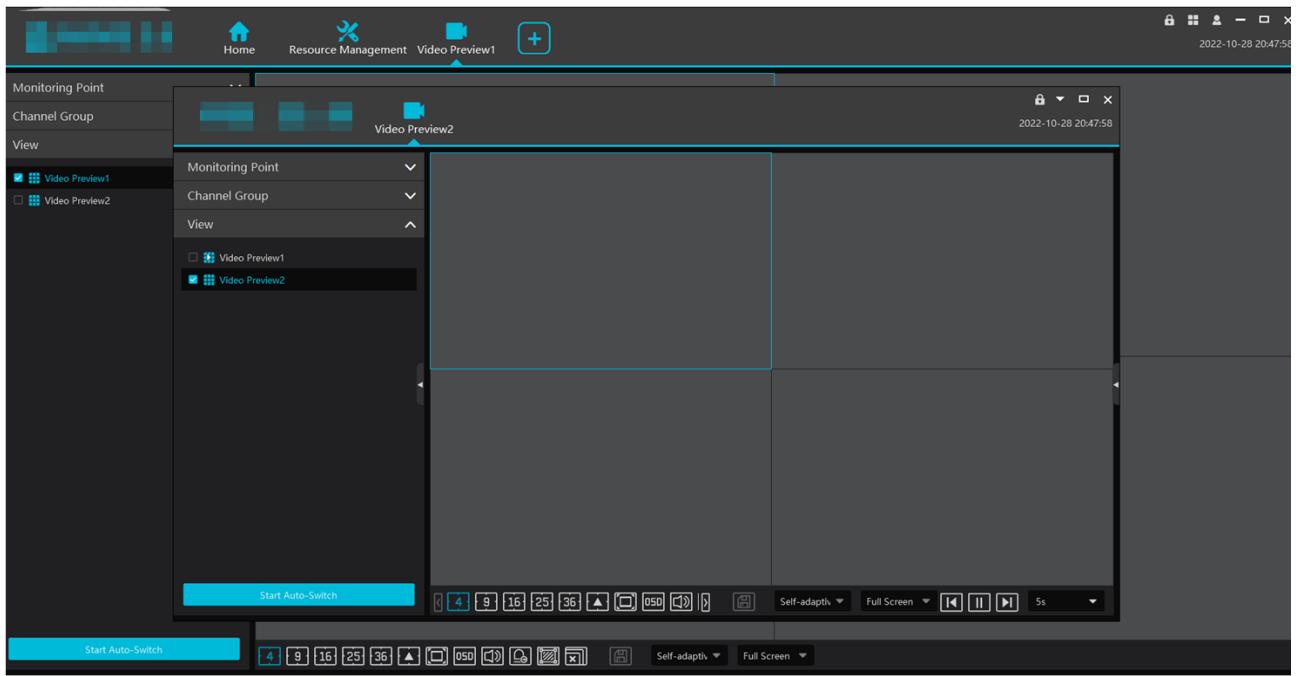
If multiple view plans saved, you can play these views in sequence.



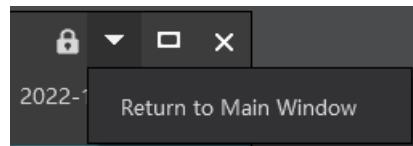
Enter the dwell time (5~3600s) and then click [Start auto-switch] to play these views in sequence. Click  to view the previous view; click  to view next view; click  to pause.

## 8.5 Multi-Screen View

In the video preview interface, multi-screen view can be realized by holding a tab and dragging it to other monitors (graphics card should support multi-screen output at the same time).



Click on the float window and select “Return to Main Window” to embed this tab in the main interface.



## 8.6 PTZ Control

Click or right click to select “PTZ Control” to enter PTZ control interface. The directions of PTZ, zoom, focus, Iris, preset, track and cruise can be controlled through PTZ control panel.

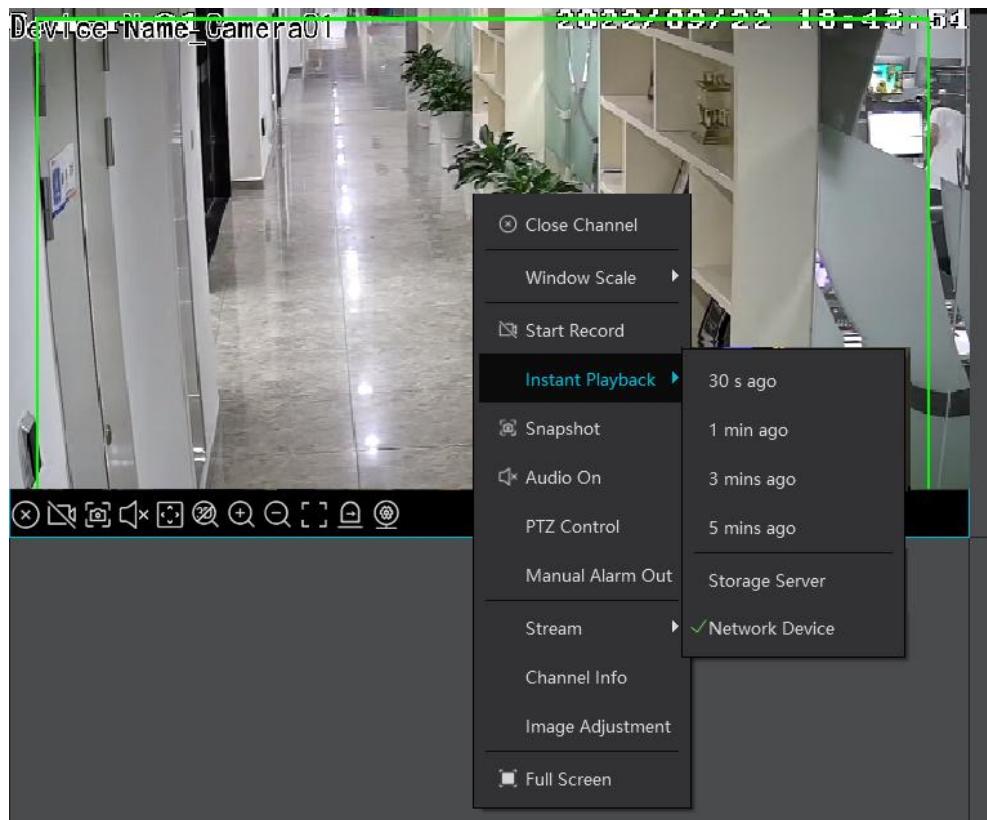




: Preset; : Cruise; : Trace

## 8.7 Instant Playback

In the live view interface, right click on a playing channel to select “Instant Playback” and then set the playback time to play the record instantly (the record of the channel in the past five minutes will be searched and played from the time that the record exists).



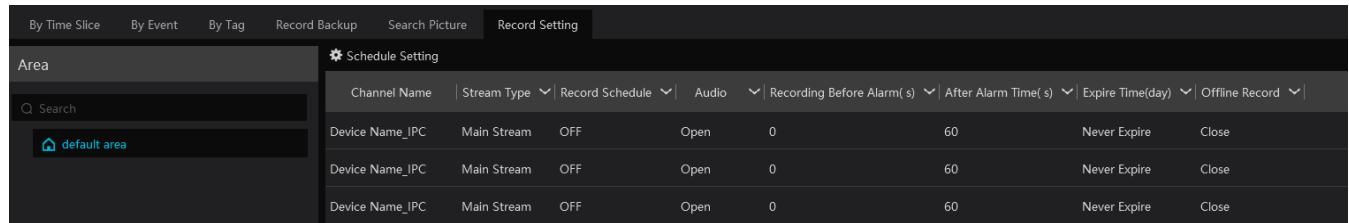
# 9 Record & Playback

## 9.1 Record Configuration

This device supports many recording types, such as manual recording, schedule recording, motion alarm recording, smart alarm recording, etc.

### 9.1.1 Schedule Recording

Go to Home→“Record Setting”.



Device Name_IPC	Main Stream	OFF	Open	0	60	Never Expire	Close
Device Name_IPC	Main Stream	OFF	Open	0	60	Never Expire	Close
Device Name_IPC	Main Stream	OFF	Open	0	60	Never Expire	Close

To set schedule recording, select the channel, stream type and schedule. Then Click [Apply] to save the settings.

**Recording Before Alarm:** set the time to record before the actual recording begins.

**After Alarm Time:** set the time to record after the actual recording is finished.

**Expire Time:** set the expiration time for recorded video. If the set date is overdue, the recorded data will be deleted automatically.

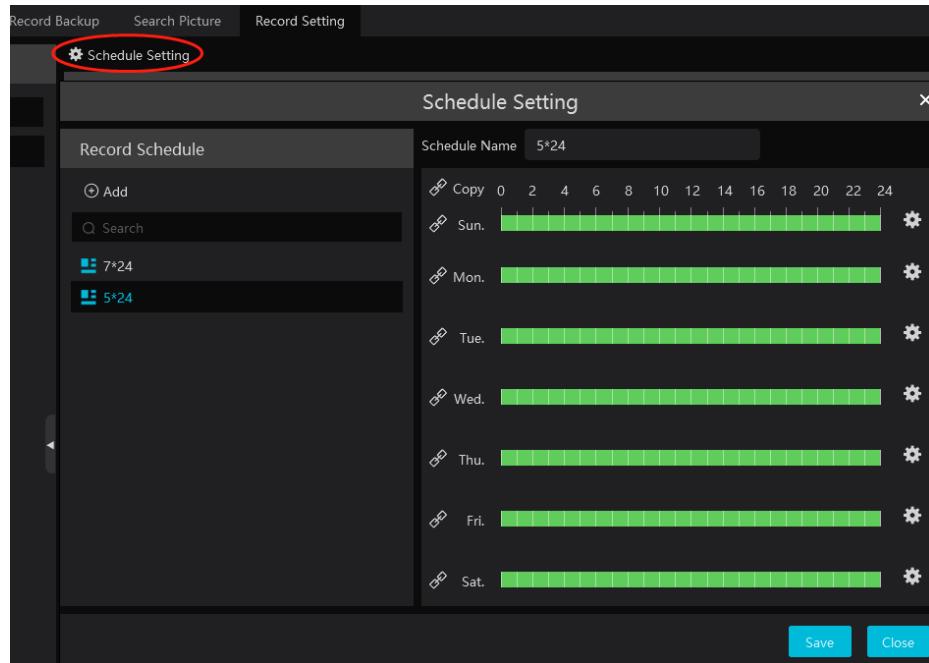
**Offline Record:** When the IPC/NVR is disconnected with the storage server, the IPC/NVR starts offline record. After the network is connected again, the offline record of IPC/NVR stored on the SD card or HDDs will automatically transfer to the storage server.

Note:

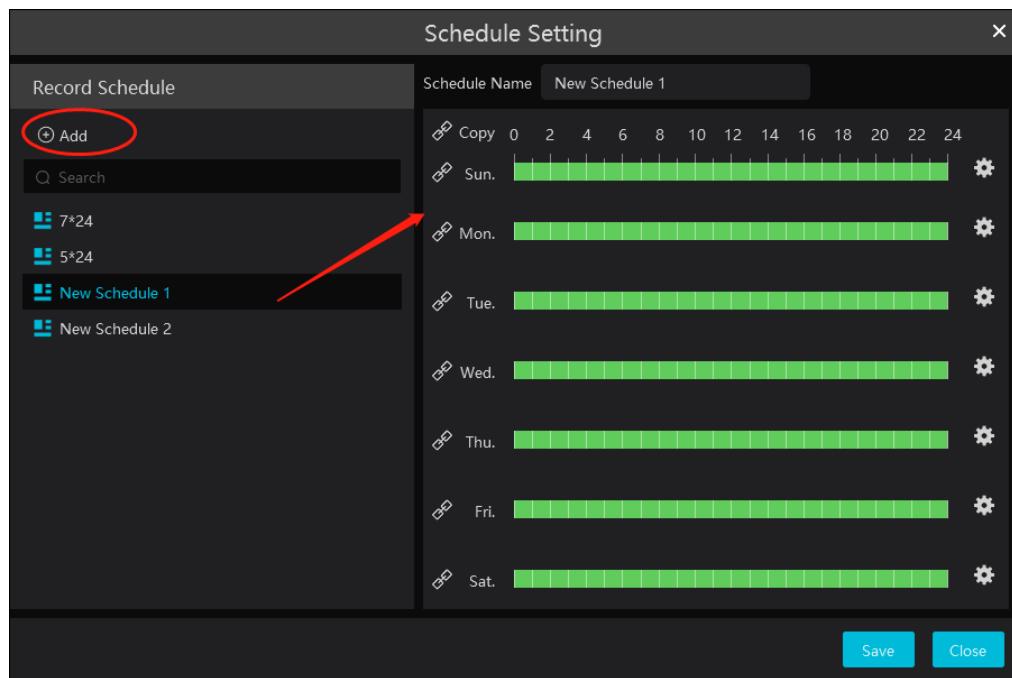
1. The time of the IPC/NVR must be the same as the storage server.
2. A maximum of 8 channels can simultaneously transfer the offline records to the storage server.
3. Due to the limit of the storage capacity, the previous records of the IPC may be overwritten if the disconnection time is too long so that only a part of records can be replenished.
4. Only support the most recent 12-hour record replenishment.

● To set schedule:

- ① Click the “Schedule Setting” tab to go to the following interface.



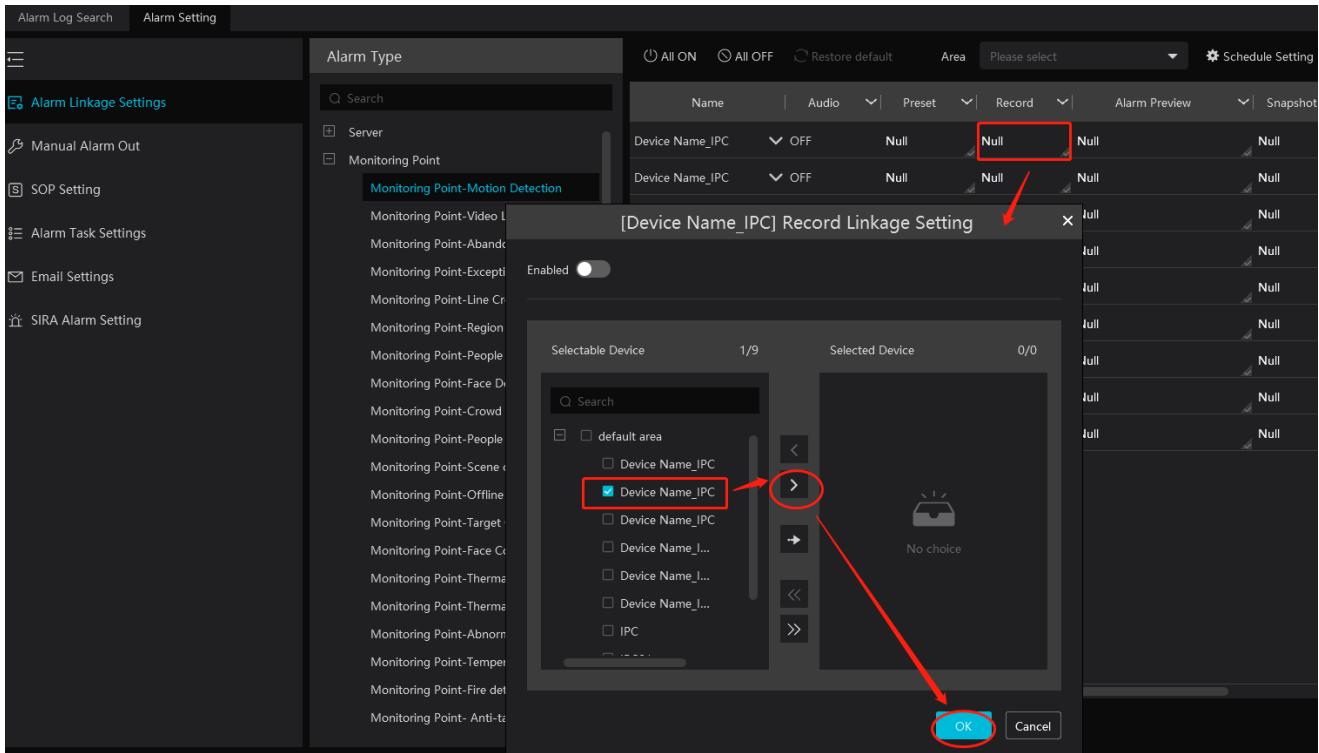
② Click [Add].



③ Enter the schedule name.  
 ④ Set the schedule. Drag the mouse on the timeline to add or erase the time period. Click  to manually set the time period. Put the cursor on the set schedule name and then a deletion icon will appear. Click it to delete the schedule.

### 9.1.2 Alarm Linkage Recording

① Go to Home→Device Setting interface. Select the desired device to enable and set schedules.  
 ② Go to Home→Alarm Center→Alarm Setting as shown below. Select alarm type, enable record, set linkage channel and set schedules.  
 ③ Click [Apply] to save the settings.

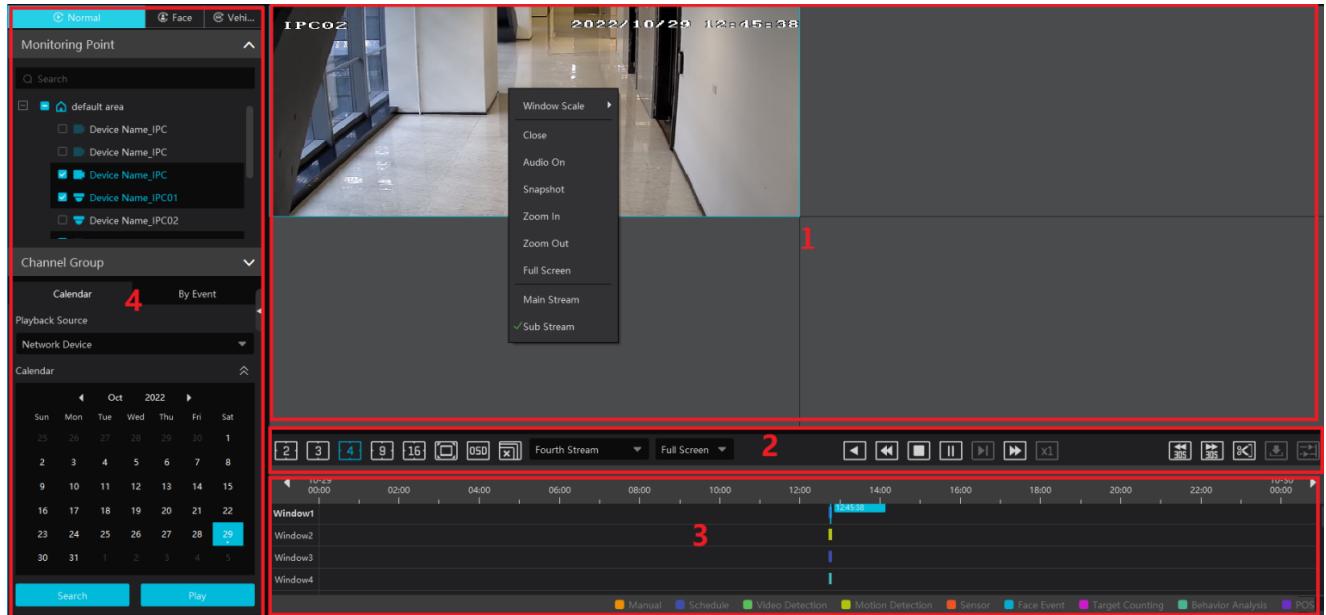


## 9.2 Record Playback

In the main menu interface, click “Record Playback” to go to record playback interface. Record files saved on the HDD/ SD card of the devices and storage server can be played.

There are three types of record playback: normal playback, smart playback by face, smart playback by license plate.

### 9.2.1 Normal Playback



Area Description

Area	Description	Area	Description
1	Playback area	3	Record timetable area
2	Toolbar	4	Time and event search area; resource area

## Toolbar on Playback Window

Button	Description	Button	Description
	Stop viewing		Zoom in
	Audio on/off		Zoom out
	Snapshot		Fit to window

## Button Descriptions of Area 2:

Button	Description
	Screen display mode button. 2/3/4/9/16 screen mode is optional.
	Full screen
	Enable or disable OSD
	Close all window viewing
	Rewind
	Low speed playback
	Stop
	Play/Pause
	Next frame. In the playback mode, click the pause button and then click this button to play frame by frame.
	Click it to select playback speed.
	Click it to play in normal speed.
	Forward 30s or backward 30s
	Click it to edit the start time and the end time of backup
	Download
	Synchronous/ Asynchronous Playback

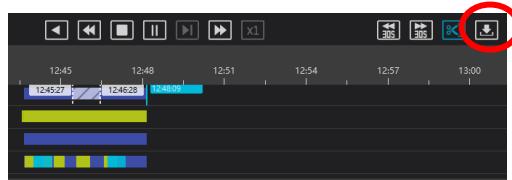
## Clip and backup:

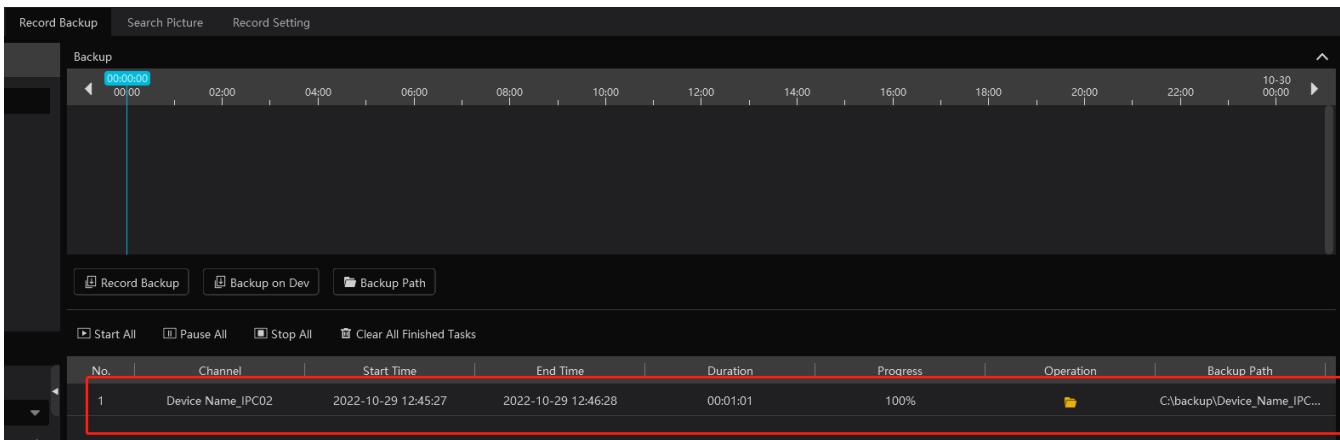


Click to enter the edition status. On the recorded timescale, select the start and the end time or right click on the timescale and then



select [Change backup time] to set the backup start time and end time. After that, click to enter the record backup interface to view the backup file list.





Right-click button menu

Menu	Description	Menu	Description
<b>Close</b>	Close viewing	<b>Zoom out</b>	Zoom out the current image
<b>Audio On/Off</b>	Audio on/off	<b>Full Screen</b>	Click to enter full screen mode
<b>Snapshot</b>	Snapshot	<b>Sub stream</b>	Switch to sub stream playing
<b>Zoom In</b>	Zoom in the current image		

Other buttons

Button	Description	Button	Description
	Add tag		Event list
	Backup		

Set record date, record type (for some devices, “Main Stream” can be selected to play the record, or the record will be played by sub stream if unselected) and the record playback source in the playback interface. Drag the camera on the right side to playback window for playing or double click a desired channel to play or click [Search] to search the record files and then click to play.

Playback record event type includes manual recording, schedule recording, video detection (exception detection, video loss, overshadowing detection), motion detection recording, sensor recording, behavior analysis (object abandoned/missing, line crossing detection, intrusion detection, people intrusion detection, crowd density) and so on.

In the timetable, different color bars stand for different record types. For instance, yellow bar stands for motion recording data; blue bar stands for schedule recording data; red bar stands for sensor record data, etc.

The time scale can be zoomed in by clicking and the time scale can be zoomed out by clicking . The time scale can be restored to 24 hours by clicking . When the time scale is zoomed in, drag the timeline to see the time spots.

**Synchronous Playback:** in a certain time, all channels play back its record at the same time together; if one channel has no record data at this time, this channel will wait.

Click on the toolbar in the playback interface to go to the synchronous playback interface. Please play the record according to the ways introduced as above. The record bar in synchronous mode is as below.

In synchronous mode, one camera can only have one playing window. All cameras' record information can be viewed at the same time.

When playing record file in synchronous mode or asynchronous mode, clicking or will be useless unless all the playback windows are closed.

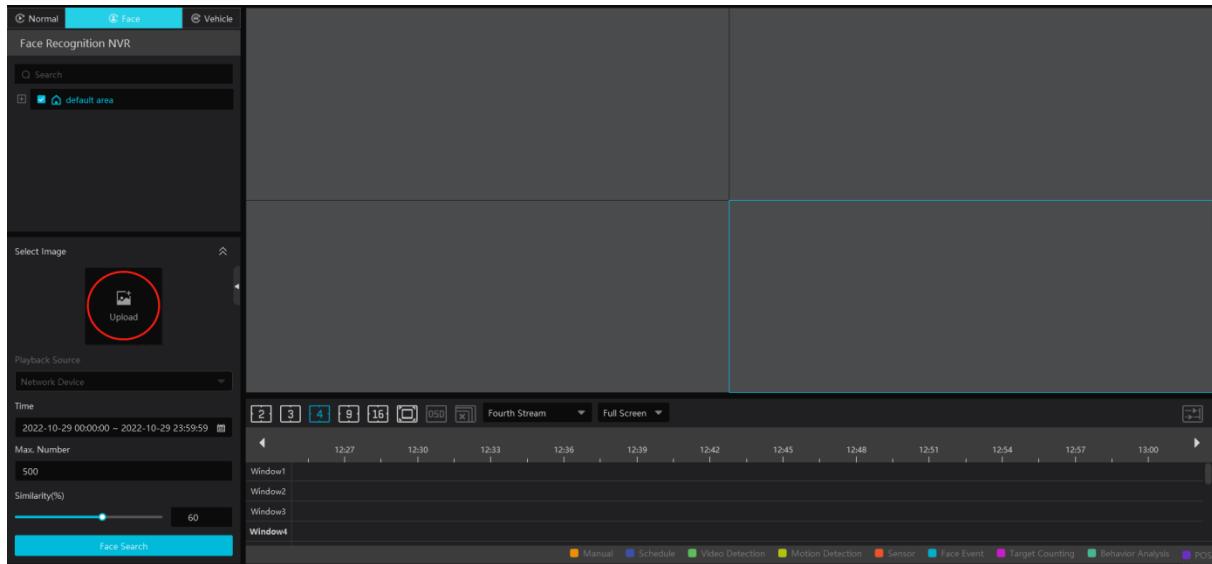
**Asynchronous Playback:** when playing some channels' record at the same time, each channel is independent from the others and each

channel's playback time is different.

Click  to go to the asynchronous playback interface as shown below. Please play the record according to the ways introduced as the above. The record bar in asynchronous mode is as below.

### 9.2.2 Smart Playback by Face

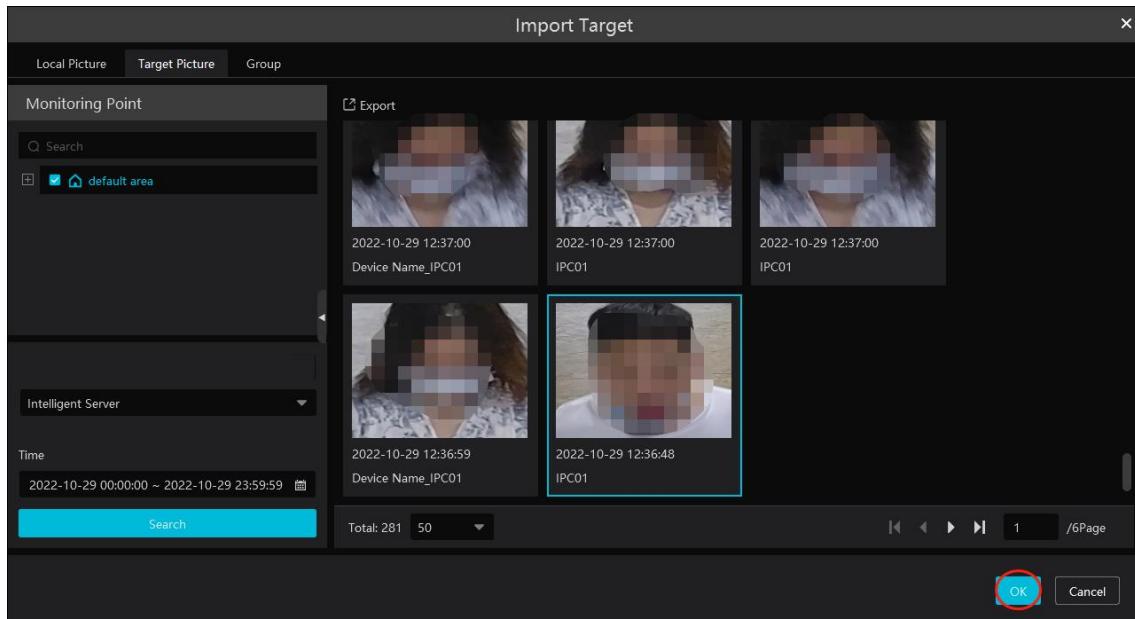
For the added face recognition NVR, you can play back by searching face.



Clicking on  enters the above interface. Select the face recognition NVR and then click "Upload" to add a face picture. You can add the face picture from local PC, target picture or group. After that set the start and end time, max. number and similarity and then click [Search] to search the records.

**Add a face picture from the local PC:** Click "Upload" to select the desired face picture in the local PC and then click [OK] to save the settings.

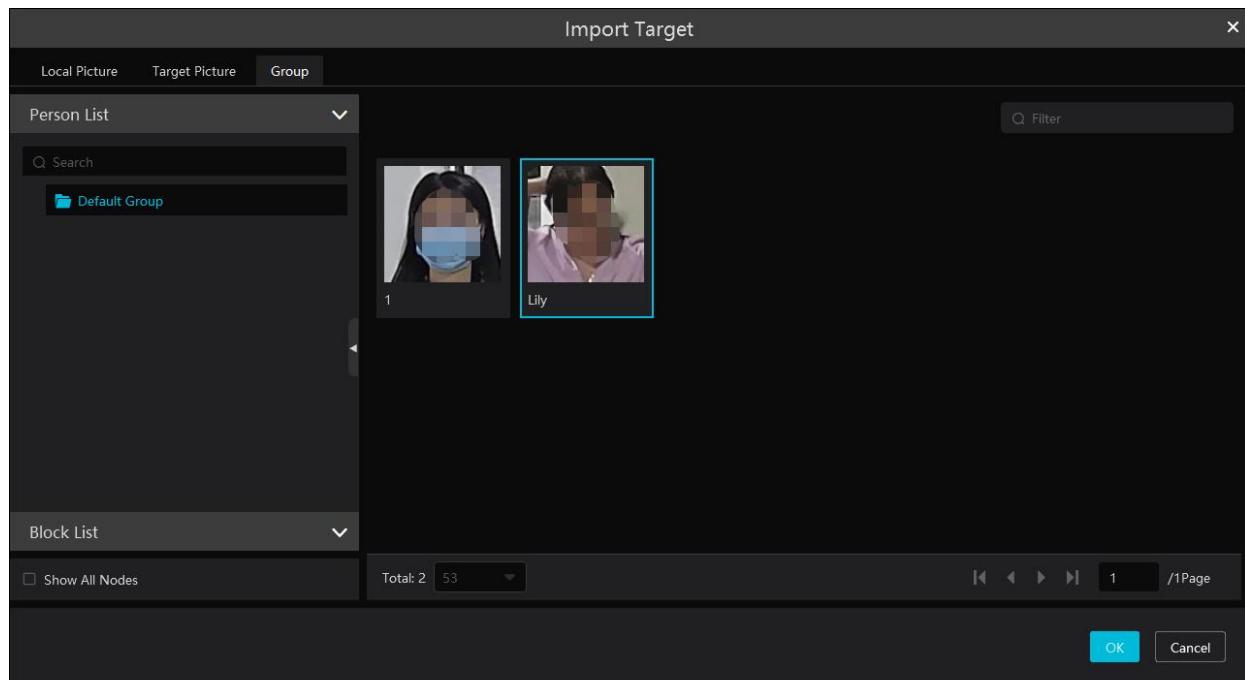
**Add a face picture from the target picture:** refer to the following picture.



Select cameras, search resource, query method and time to search targets. Then select the target and click [OK].

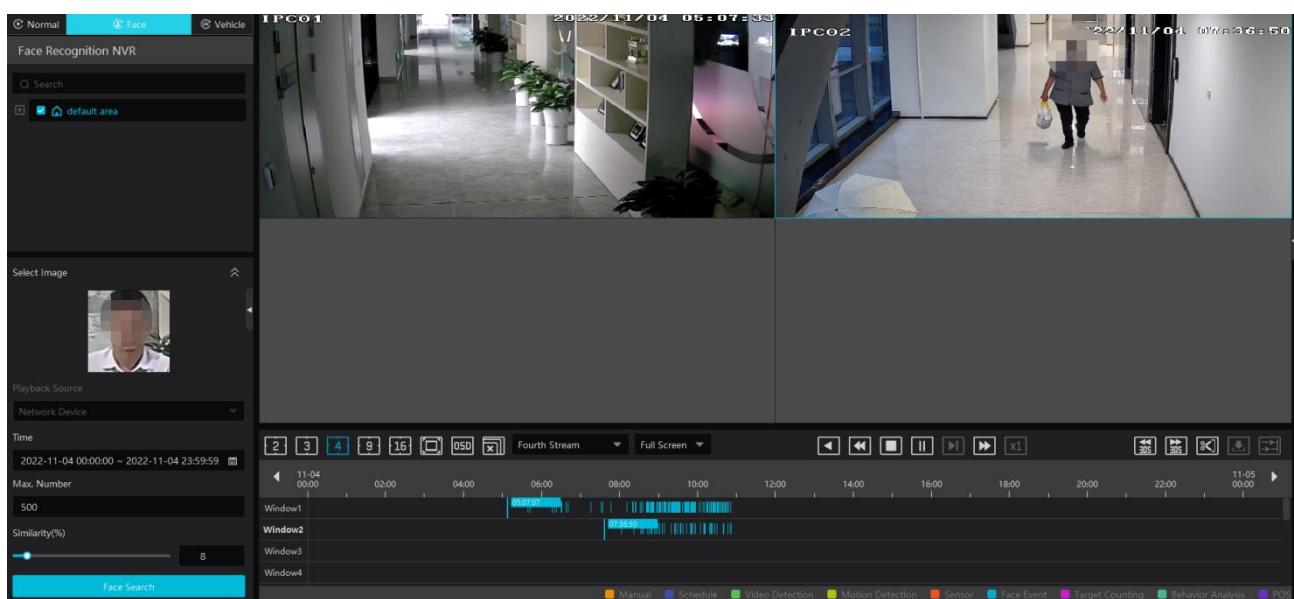
Add a face from the face database:

1. Click the “Group” tab.
2. Select the face picture from the person list.
3. Click [OK] to save the settings.



The picture must be added to the corresponding list in advance, or no picture can be searched. Refer to Chapter 6 Group Management for details.

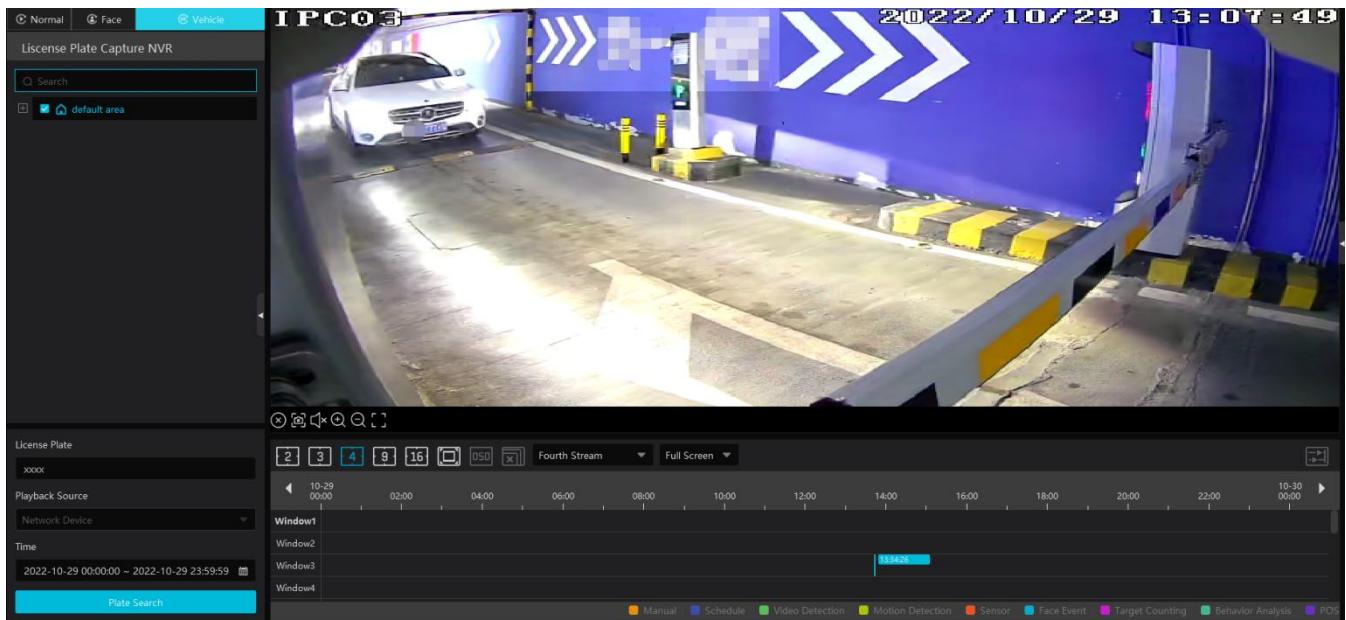
**Note:** The record source is from the HDD of the face recognition NVR. The comparison record of this person must exist in the HDD, or no record can be played.



### 9.2.3 Smart Playback by License Plate

The vehicle records can be searched from the NVR. The setting steps are as follows:

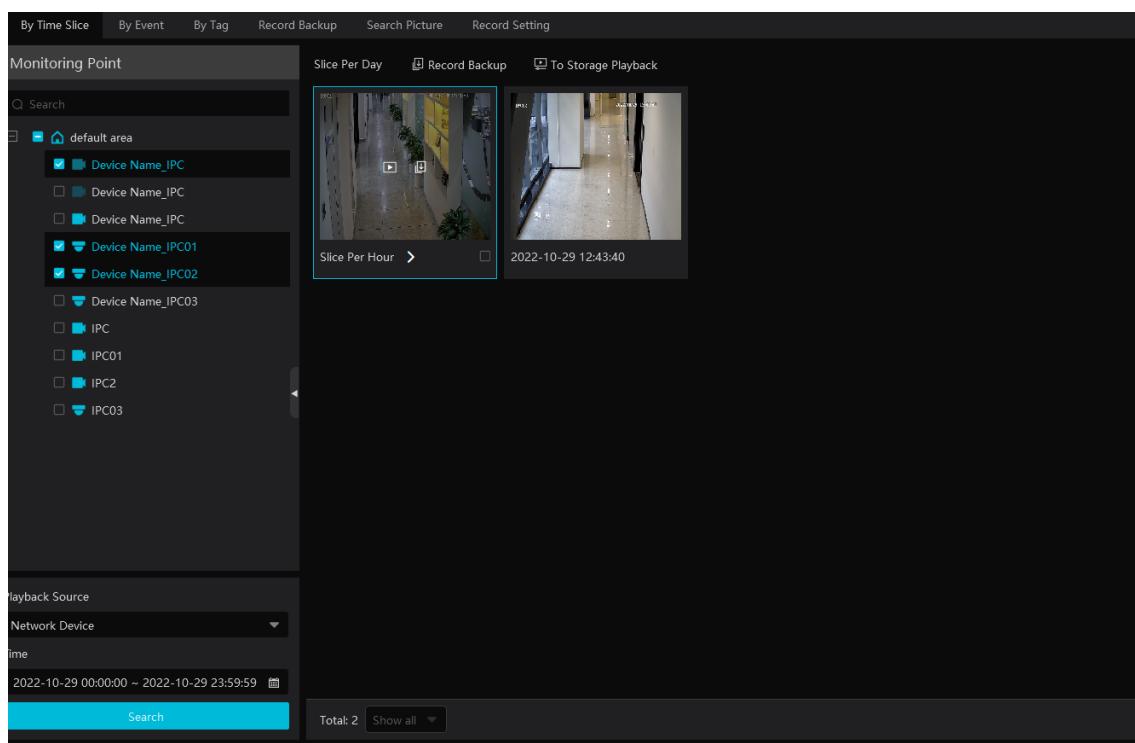
1. Select the NVR.
2. Enter the license plate number to select the plate from vehicle database of NVR.



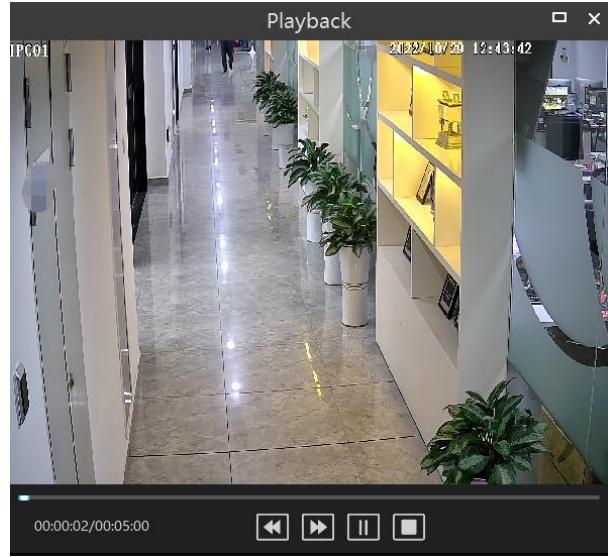
Network device: select the record source from the NVR.

### 9.2.4 Playback by Time Slice

- ① Go to Home→By Time Slice interface.
- ② Select channel (or monitoring point), set the start time and the end time, select the record source and then click [Search].



- ③ Click to play the record.



Click  button on the top right corner to play in full screen mode.

Double click the image to switch to slice search mode by day.

Double click an image to switch to slice search mode by 5 minutes.

Restart searching or click “Slice Per day” to return to the slice per day interface.

**Record Backup:** In the Search by Time Slice interface, select a time slice and then click “Record Backup” to back up the record file during this period quickly.

**To Storage Playback:** In the Search by Time Slice interface, select a time slice and then click “To Storage Playback” to play the record file in the storage playback interface.

## 9.2.5 Playback by Event

① Go to Home→ By Event interface.

② Select the desired monitoring point, set the record source, the start time and the end time and then check events.

No.	Name	Start Time	End Time	Duration	Type	Playback	Record Back...	Backup St...	Backup on Dev
1	Device Name_IPC	2022-10-29 13:47:24	2022-10-29 13:59:05	00:11:41	Motion Detection			<input checked="" type="checkbox"/>	
2	Device Name_IPC	2022-10-29 13:42:04	2022-10-29 13:42:44	00:00:40	Motion Detection			<input checked="" type="checkbox"/>	
3	Device Name_IPC	2022-10-29 13:10:12	2022-10-29 13:10:53	00:00:41	Motion Detection			<input checked="" type="checkbox"/>	
4	Device Name_IPC	2022-10-29 12:43:40	2022-10-29 13:59:05	01:15:25	Schedule			<input checked="" type="checkbox"/>	
5	Device Name_IPC01	2022-10-29 13:58:28	2022-10-29 13:58:53	00:00:25	Face Event			<input checked="" type="checkbox"/>	
6	Device Name_IPC01	2022-10-29 13:58:28	2022-10-29 13:59:05	00:00:37	Face Event			<input checked="" type="checkbox"/>	
7	Device Name_IPC01	2022-10-29 13:58:16	2022-10-29 13:58:52	00:00:36	Motion Detection			<input checked="" type="checkbox"/>	
8	Device Name_IPC01	2022-10-29 13:57:34	2022-10-29 13:57:52	00:00:18	Motion Detection			<input checked="" type="checkbox"/>	
9	Device Name_IPC01	2022-10-29 13:55:02	2022-10-29 13:55:55	00:00:53	Face Event			<input checked="" type="checkbox"/>	
10	Device Name_IPC01	2022-10-29 13:54:32	2022-10-29 13:56:16	00:01:44	Face Event			<input checked="" type="checkbox"/>	
11	Device Name_IPC01	2022-10-29 13:54:32	2022-10-29 13:54:50	00:00:18	Face Event			<input checked="" type="checkbox"/>	
12	Device Name_IPC01	2022-10-29 13:54:25	2022-10-29 13:55:56	00:01:31	Motion Detection			<input checked="" type="checkbox"/>	
13	Device Name_IPC01	2022-10-29 13:54:03	2022-10-29 13:54:22	00:00:19	Motion Detection			<input checked="" type="checkbox"/>	
14	Device Name_IPC01	2022-10-29 13:53:05	2022-10-29 13:53:40	00:00:35	Motion Detection			<input checked="" type="checkbox"/>	
15	Device Name_IPC01	2022-10-29 13:52:46	2022-10-29 13:53:24	00:00:38	Face Event			<input checked="" type="checkbox"/>	
16	Device Name_IPC01	2022-10-29 13:53:46	2022-10-29 13:53:46	00:00:00	Event Event			<input checked="" type="checkbox"/>	

Total: 102 50

③ Click [Search]. The searched record data will be listed. Click  to play the record; click  to back up the record data.

## 9.2.6 Playback by Tag

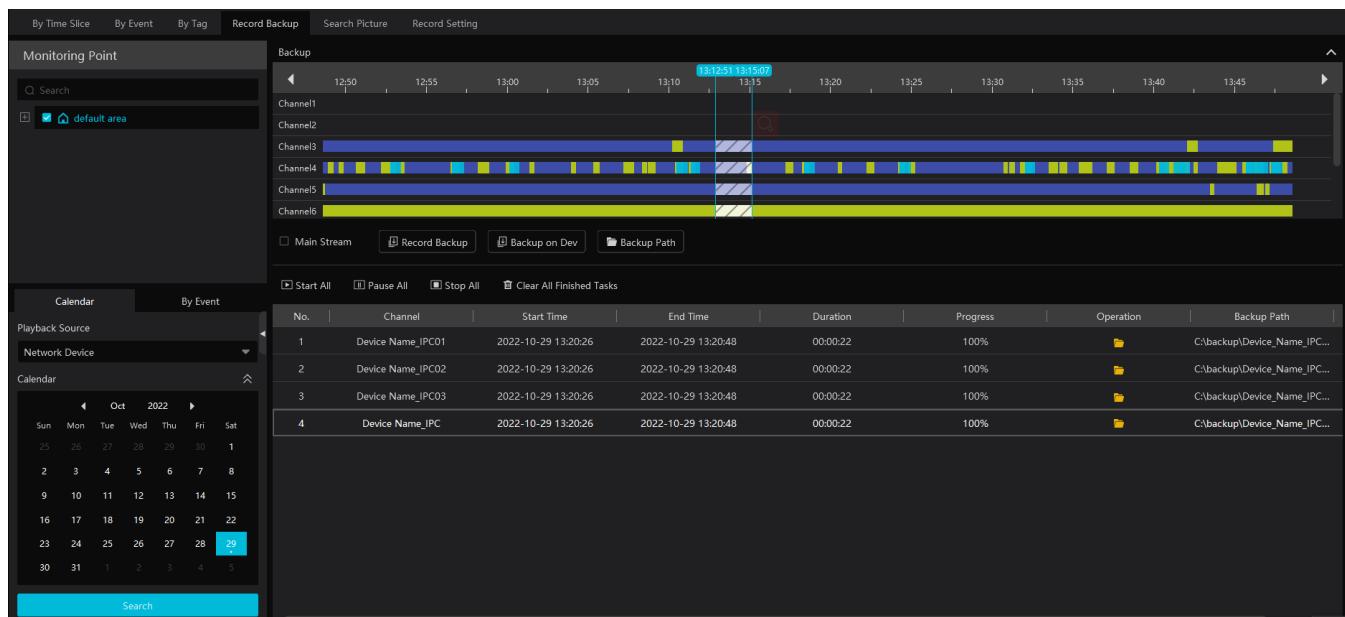
**Note:** The tag cannot be added to the record from the HDD of the NVR.

- ① Go to Home→Record Playback interface.
- ② Select a channel and put the cursor on the right center. Then a tag icon (★) will appear. Click this icon to add tag.
- ③ Go to Home→By Tag interface. Select the start time and click [Refresh] to search the added tags.
- ④ Click  in the playback column to play the record.

## 9.3 Record Backup

In the main menu interface, click “Record Backup” to go to the backup interface. The setting steps are as follows:

- ① Select the desired monitoring point.
- ② Get records from device or storage server.
- ③ Select date and event type.
- ④ Drag the mouse on the recorded time period to set the start time and the end time of backup. Then click [Record Backup].
- ⑤ The backup progress will be seen during backing up the record. Click  to pause; click  to stop backing up the record; Additionally, you can start/pause/stop all backup tasks or clear all finished tasks in this interface.

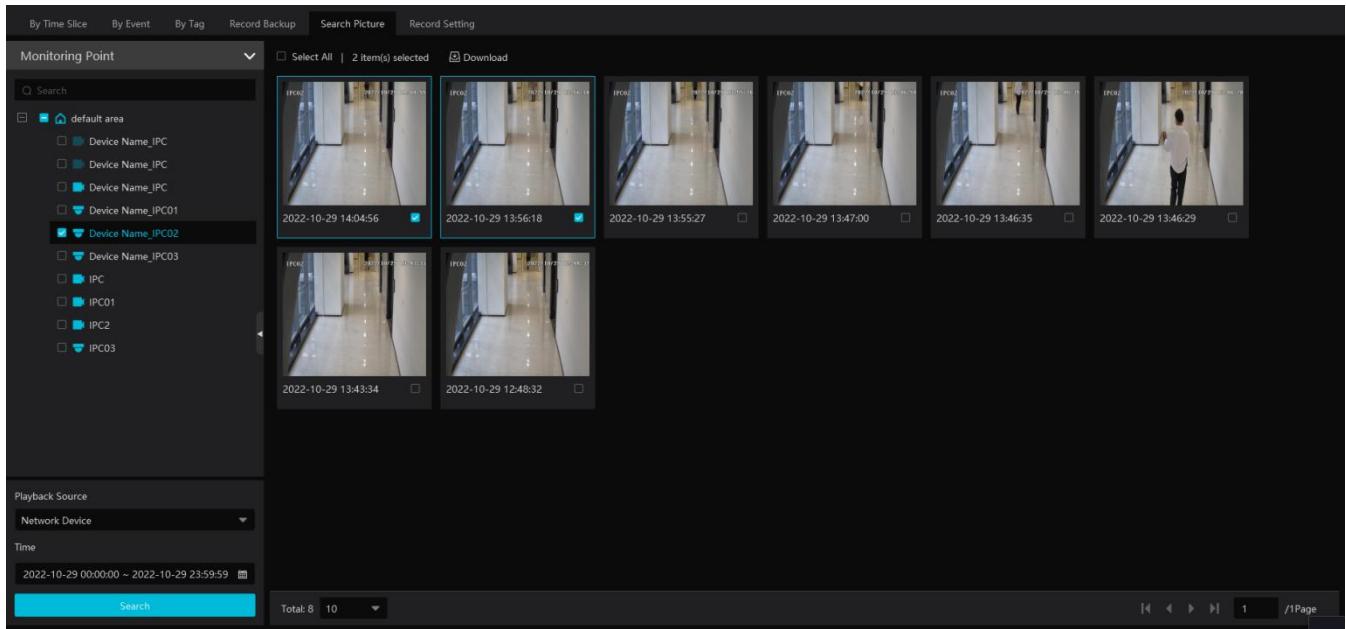


“Backup on device”: This function is applied to the added NVR devices. Search the record from the HDD of the NVR in this interface and then insert a USB storage device into the USB port of the NVR and then click this button. Then the recorded files will be backed up to the USB storage device remotely.

## 9.4 Search Picture

In this interface, pictures stored on the SD card /HDD or storage server can be searched and viewed.

**Note:** the searched pictures are the snapshots triggered by alarm events (like motion, sensor, smart event, etc.).



① Select the device and playback source.

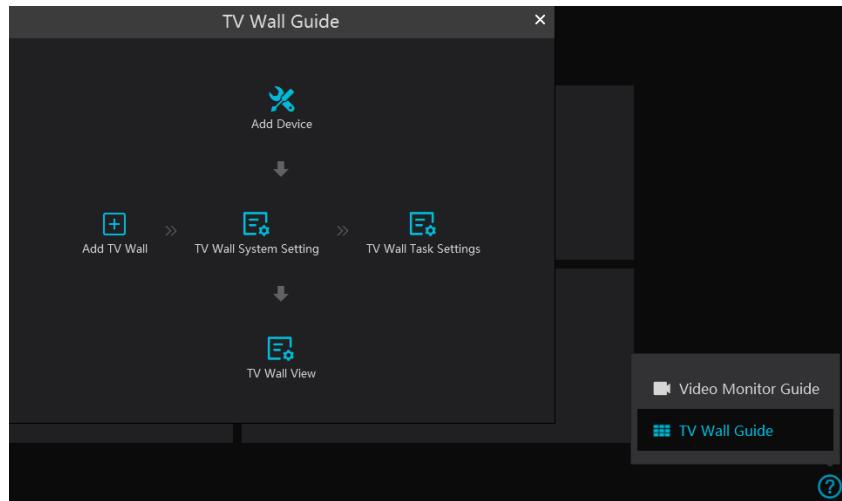
② Set the start time and the end time.

③ Click [Search]

Click the searched picture to zoom in. Click it again to return to its original size. Check the selected picture and click "Download" to export the selected pictures.

# 10 TV Wall

Click  at the bottom right corner and then select “TV Wall Guide” to quickly set the TV Wall as shown below.



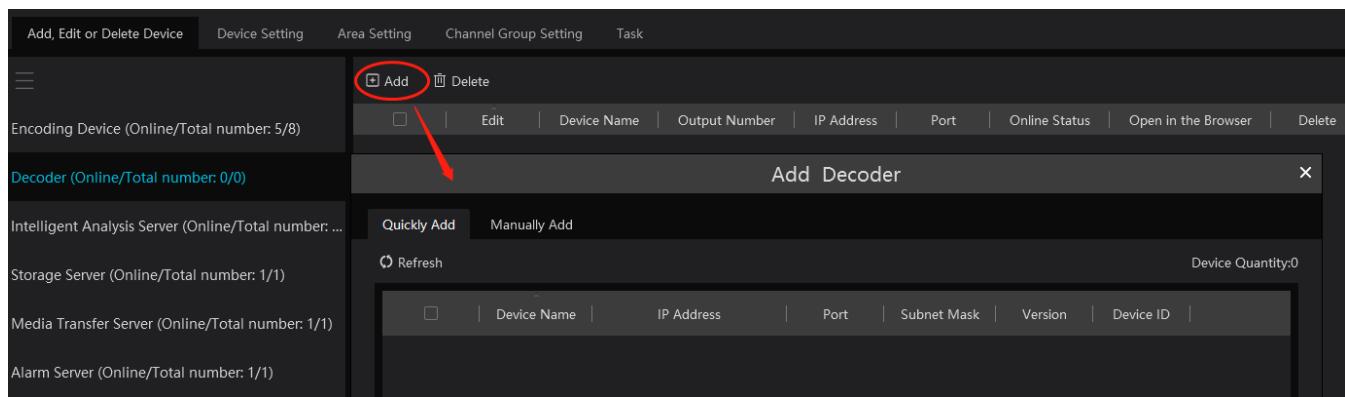
Please follow the guide in sequence to quickly set the TV Wall.

## 10.1 Add Devices

### 10.1.1 Add Decoder

Decoder is used to decode the video signal transmitted by the transfer server. The decoding output is a standard video signal. The decoder is necessary for decoding videos on the TV wall.

Go to Home→Add, Edit or Delete Device→Decoder interface.



The steps for adding decoders are the same as the setup for adding encoding devices (see Add Encoding Device for details).

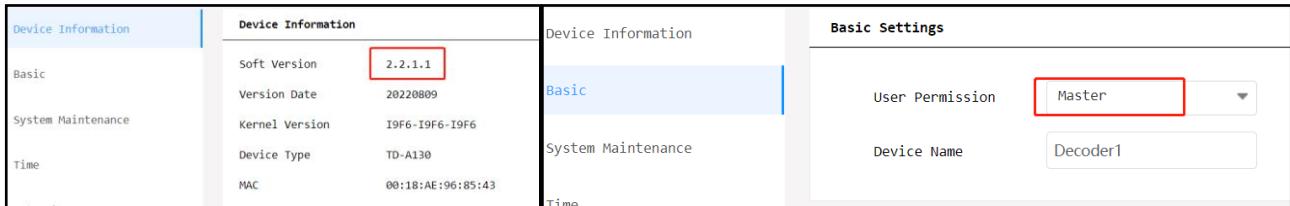
### 10.1.2 Create and Connect Decoder

The decoder which needs to be connected to the platform must be the master decoder and in platform mode. Note that the version of the decoder must be compatible with the platform, or the decoder cannot be connected to the platform.

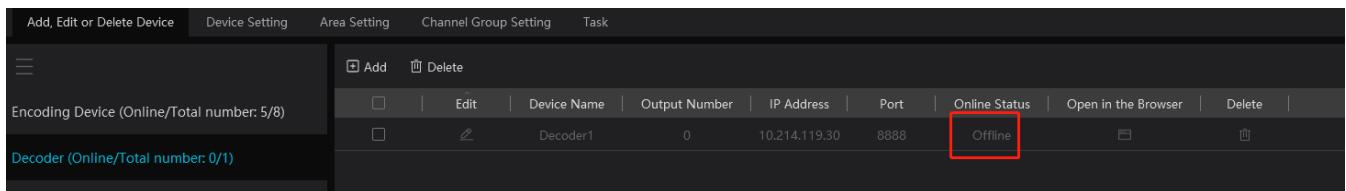
Login the web client of the decoder as shown below.

Go to Basic Settings→ System Settings to check the user permission and running mode of the decoder and make sure its user permission is

master and its running mode is platform. Then apply the settings and restart the decoder.



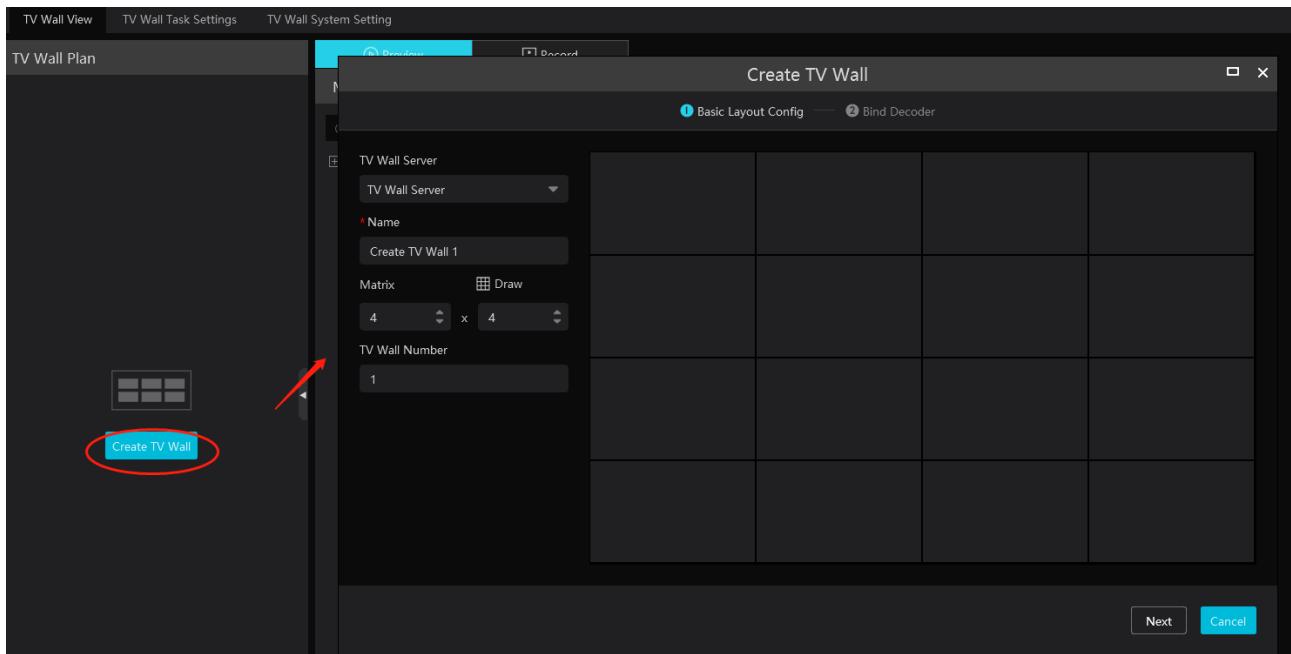
The decoder will not be online until it is bound to a TV wall. Please create a TV wall first and then bind the decoder to the TV wall. See chapter 12.3.1 for details.



## 10.2 Add TV Wall

### ◆ Create TV Wall

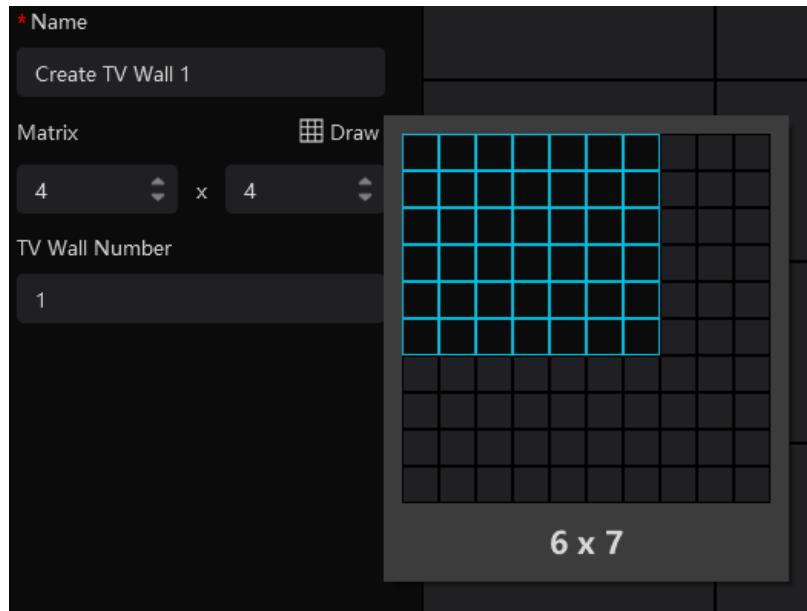
Go to Home → TV Wall → TV Wall View. Select a TV wall server and then click  to create a TV wall.



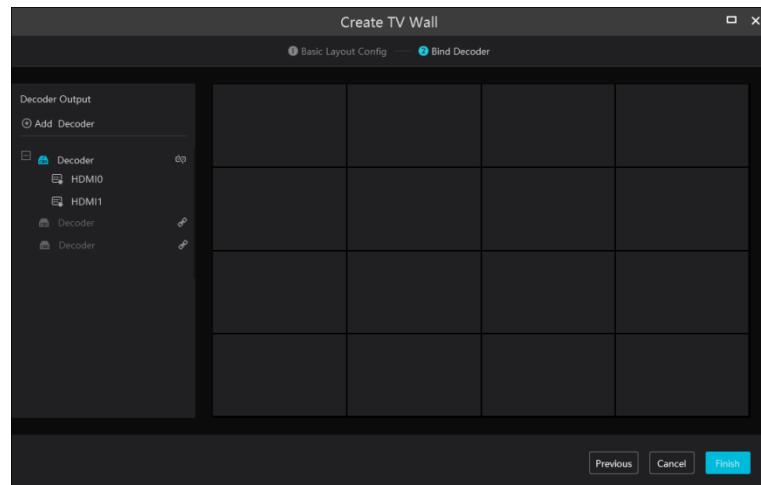
Select the TV wall server and then set the TV wall name, display matrix and TV wall number.

Note: The TV wall number cannot be used repeatedly.

Click [Draw] to draw the TV wall layout manually.

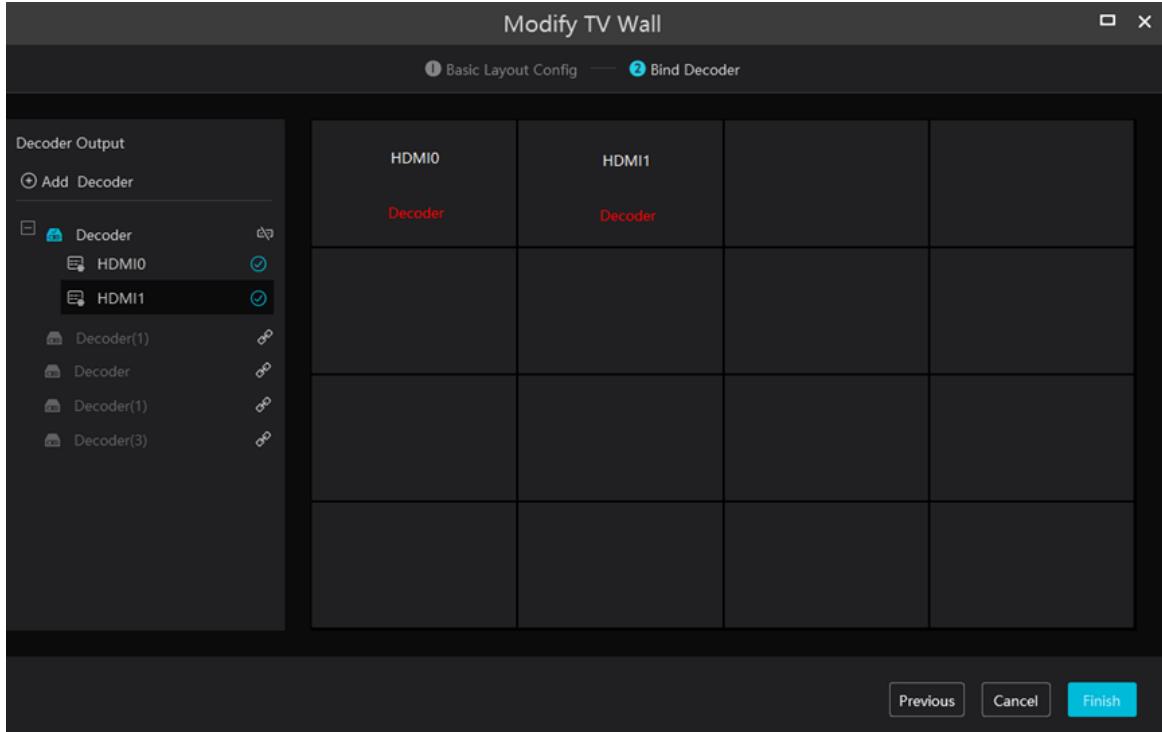


After that, click [Next] to bind decoders.



On the left list, click  to bind the decoder. If there are no decoder to bind, you can click  to quickly jump to the decoder adding interface and then add the decoder as needed. After you clicking , it needs several seconds to connect the decoder. After the decoder is connected, the output will be listed under the decoder name.

If you want to unbind the decode, click  behind the decoder name to unbind it.



Drag the output to the window to bind the output and the window. After that, click [Finish] to save the setting.

To change the output binding, select the TV wall and click , select to modify. Click to delete the TV wall.

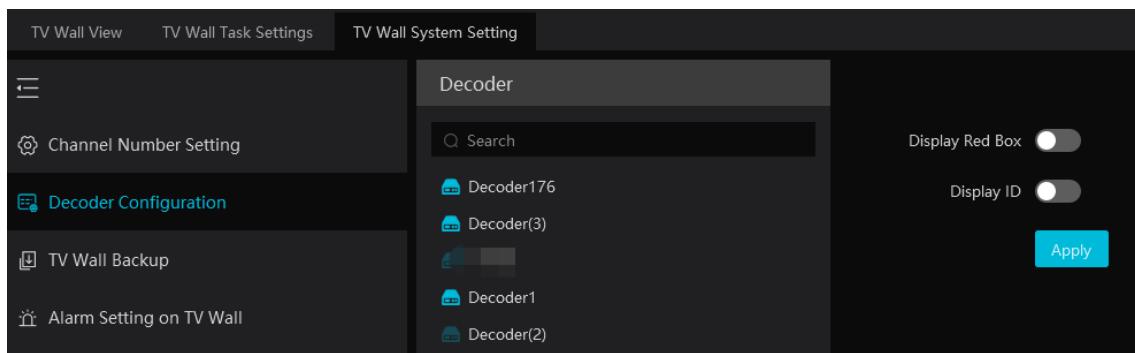
## 10.3 TV Wall System Settings

### 10.3.1 Channel Number Settings

Channel number configuration: set the channel number and make the channel convenient to be controlled by the network keyboard controller. Users can export these channel number in this interface.

TV Wall View			TV Wall Task Settings		TV Wall System Setting	
Channel Number Setting			Export Channel Number		Minimum Conflict-Free Channel Number: 1034	
Decoder Configuration			TV Wall Backup		Alarm Setting on TV Wall	
No.	Name	Channel Number	1	2	3	4
10	group->channel3	11	1	2	3	4
11	group->channel4	12	5	6	7	8
12	group->channel5	13	9	10	11	12
13	group->channel6	14	13	14	15	16
14	group->channel7	15	17	18	19	20
15	group->channel8	16	19	20	21	22
16	group->channel9	17	21	22	23	24
17	group->channel10	18	23	24	25	26
18	group->channel11	19	25	26	27	28
19	group->channel12	20	27	28	29	30
20	group->channel13	21				
21	group->channel14	22				
22	group->channel15	23				
23	group->channel16	24				
24	group->channel17	25				
25	group->channel18	26				
26	group->channel19	27				
27	group->channel20	28				
28	group->channel21	29				
29	group->channel22	30				

### 10.3.2 Decoder Setting



Display red box: when the decoding channel triggers alarm, a red box will show on the TV Wall.

Display ID: the channel ID will be shown on the channel decoded by the decoder

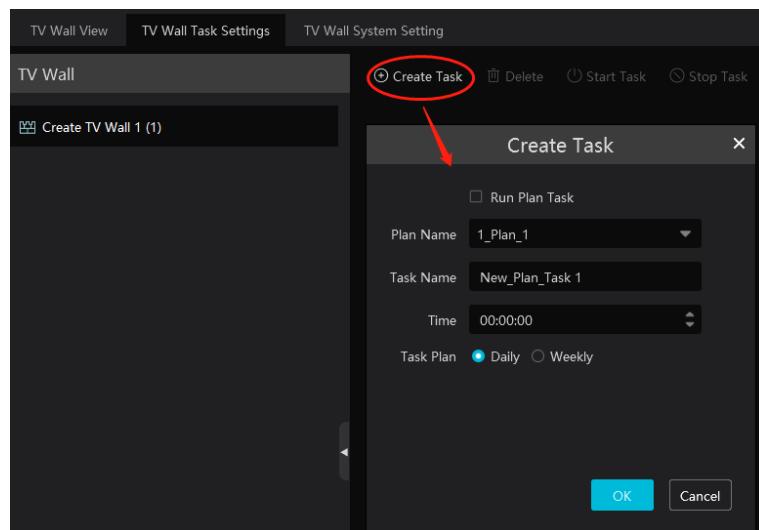
### 10.3.3 TV Wall Alarm Linkage Settings

Click “Alarm setting on wall” and then the alarm closing time can be set. If “Automatically closing alarm on Wall” is selected, you can set the time that TV wall alarm automatically turns off. The alarm preview window will automatically turn off the alarm linkage video according to the set time until next alarm is triggered. If not selected, you need to close the alarm preview window manually.

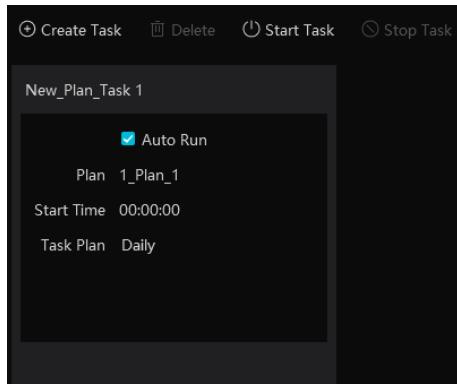
## 10.4 TV Wall Task Setting

Go to Home→TV Wall Management→Task Setting. Select the TV wall you want to set tasks. Then click “Create Task”.

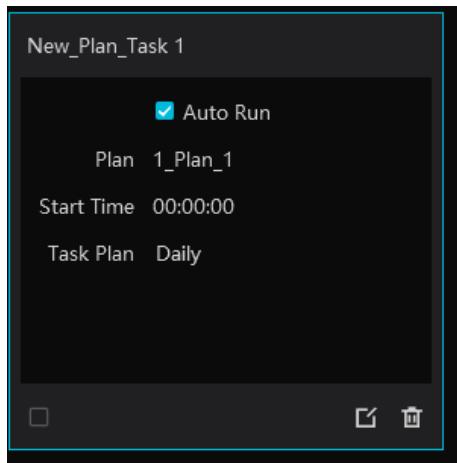
Select plan name, enter task name, set run time and enable plan task.



Click “Start Task” to start the task. Click “Stop Task” to stop this task.

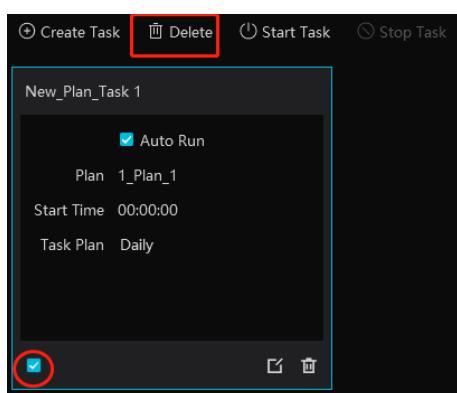


#### Modify or delete task



Click or to modify or delete the task.

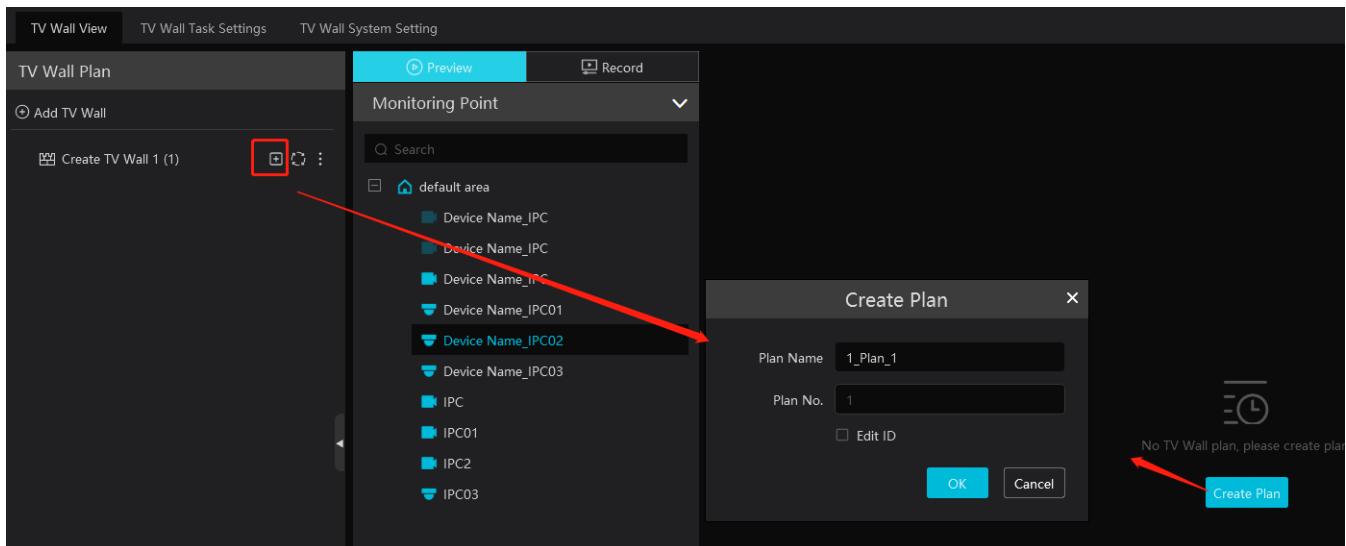
Check the task under the TV wall and then click [Delete] to delete the task as shown below.



## 10.5 Video Preview

- ◆ Create a plan

Click beside the TV wall name or click [Create Plan] to create a new plan for the created TV wall.

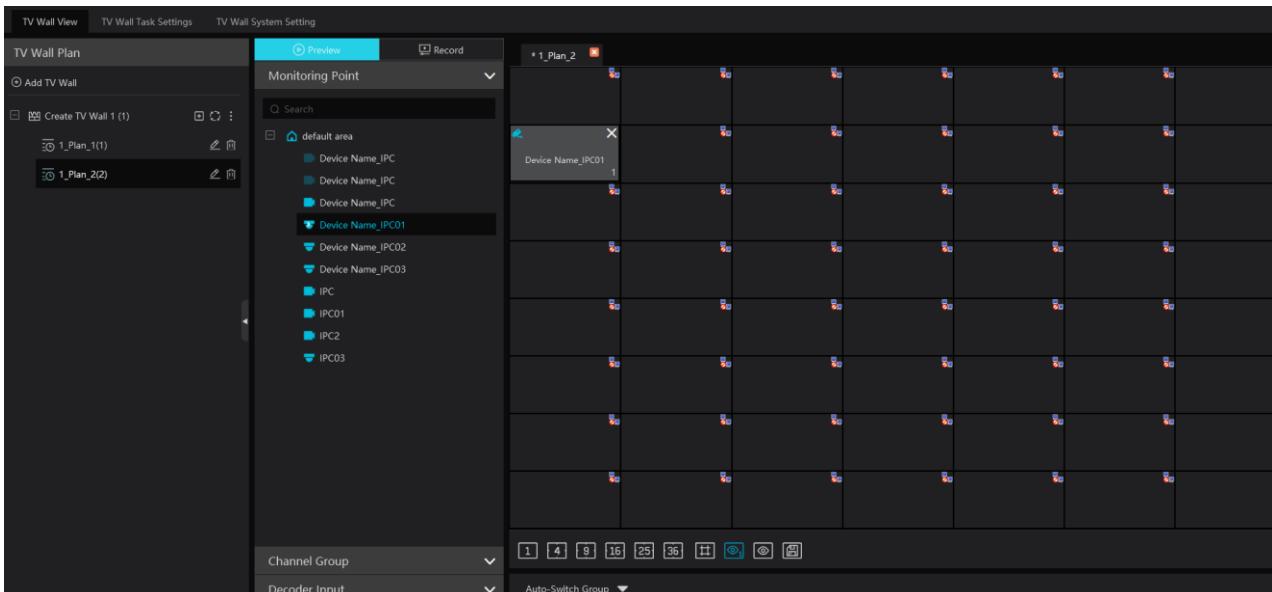


Double click the plan name to show the plan.

Drag the monitoring points to the corresponding window respectively to decode image. Then click to save the plan.

#### ◆ Configure Plan

Double click the set plan to display on the left window as shown below. Drag the monitoring point to the window to play.

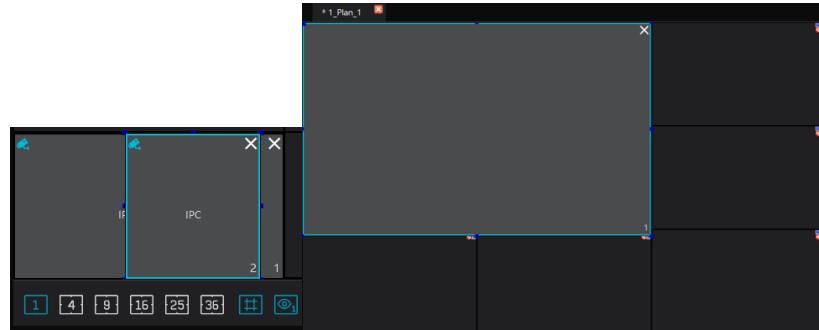


#### ◆ Toolbar Menu



1. Screen mode: 1\4\9\16\25\36 screen mode is optional.
2. Open Window: Click this icon and then drag on a window to open a window on it. The window can be dragged to anywhere on the big window. Click the opened widow and then drag the blue side of the window to zoom in/out it.

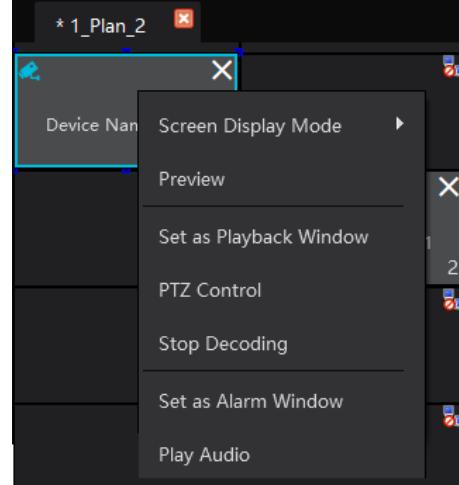
Click this icon again to stop opening other windows.



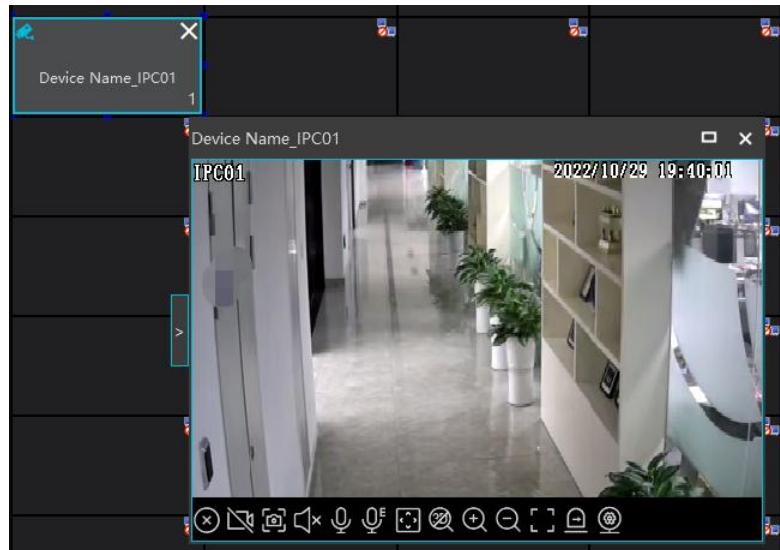
3. Show/hide ID: show or hide all ID number (including all channel numbers of the multi-screen display window).
4. Show/hide window ID: show or hide the ID number of all windows (Note that the channel numbers of the multi-screen display window are not displayed).
5. Click [Save] to save the current plan.

Select a window assigned a monitoring point and then press the right mouse and drag to another window to copy monitoring point to it.

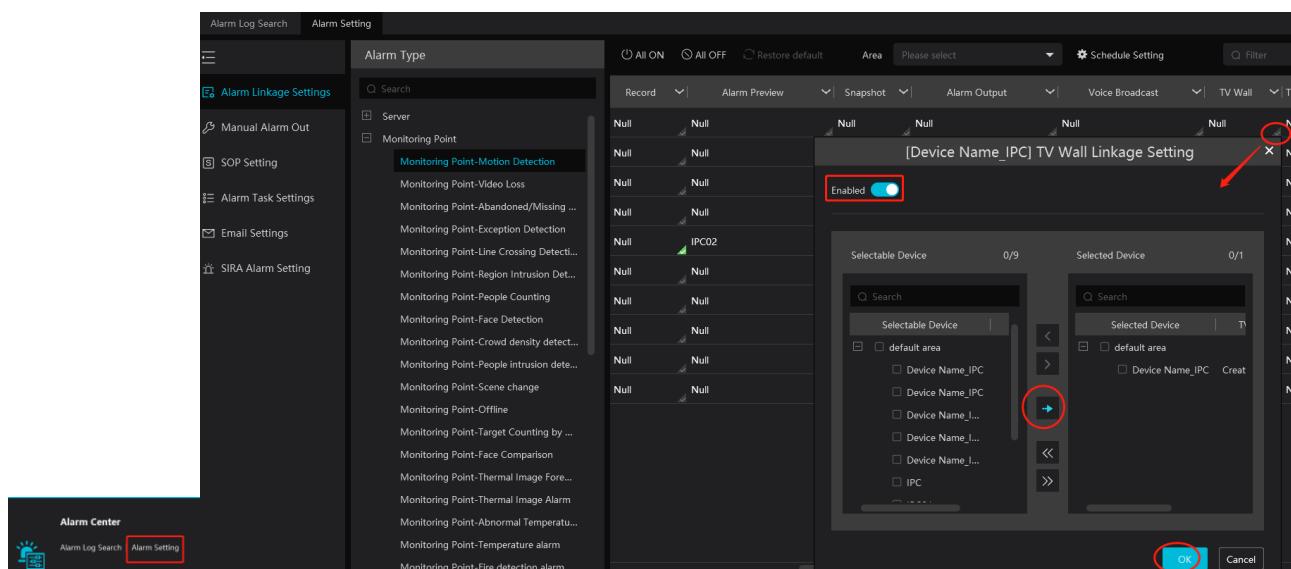
◆ Right-click Menu



1. Screen display mode: 1\4\9\16\25\36 screen mode is optional.
2. Preview: click it to view the video.



3. Save as Alarm Window: click it to save the current window as an alarm window. The alarm linkage image will be displayed in this window. Go to Home→ Alarm Center→Alarm Setting interface. Select TV wall linkage item to set alarm linkage.



4. Set as Playback Window: when decoding images, click this menu to play the records of the current channel (the record source is the current record source).

5. PTZ Control: click this menu to prompt a PTZ control panel of the current decoding window. Direction control, zooming and focusing, Iris control, speed, preset, track and cruise calling can be operated through this control panel.

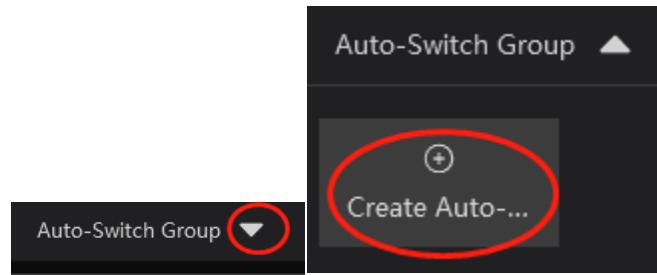
6. Stop Decoding: click it to stop decoding the current image.

7. Play audio: click it to play live audio. Click “Stop audio” to stop playing.

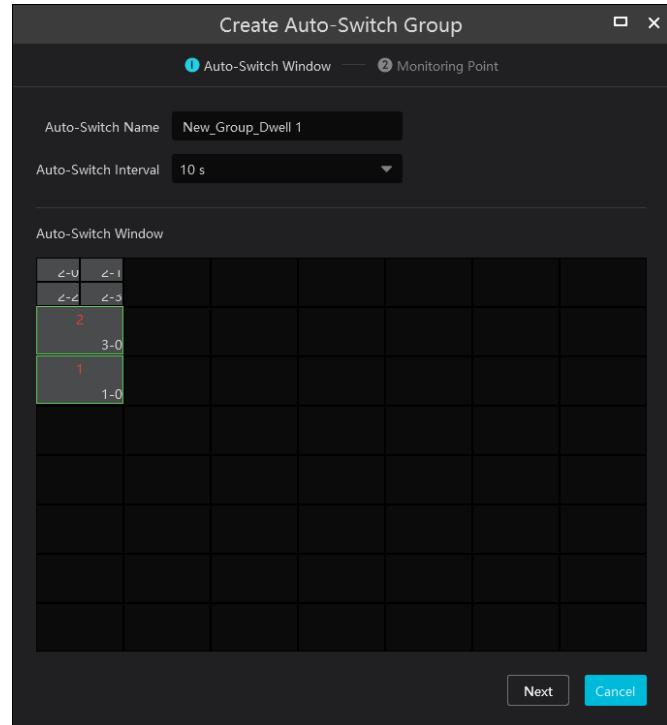
#### ◆ Auto-Switch Group

1. Create Auto-Switch Group

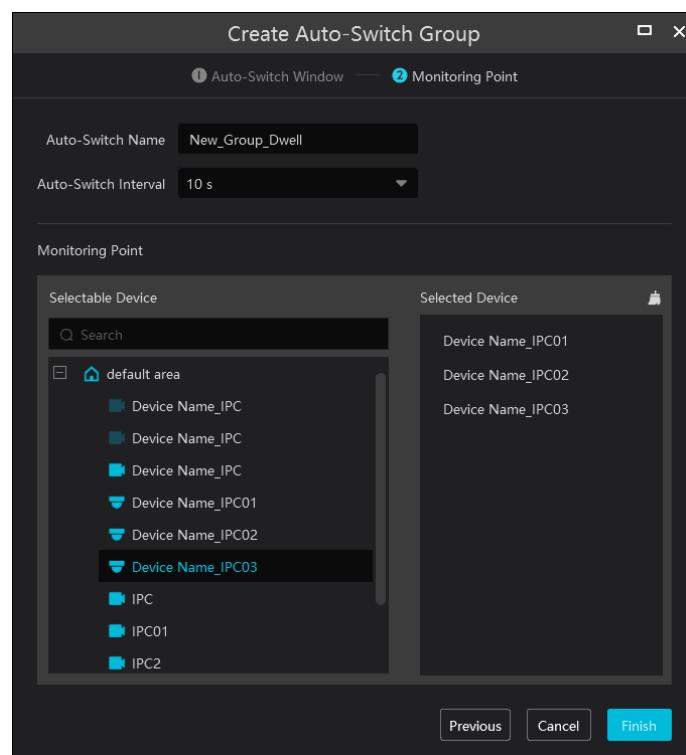
① Click Auto-Switch Group under the screen and then click to create auto-switch group.



② Select “Auto-Switch Window” to select the window group.

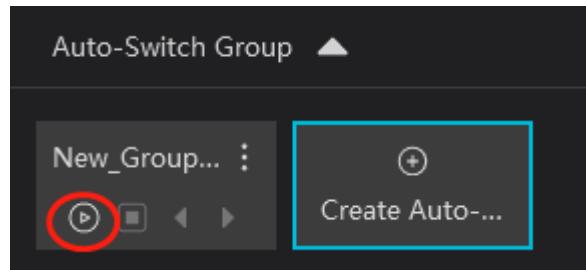


③ Click [Next] to select the auto-switch channel group.



④ Enter auto-switch name and dwell time.

2. Execute auto-switch



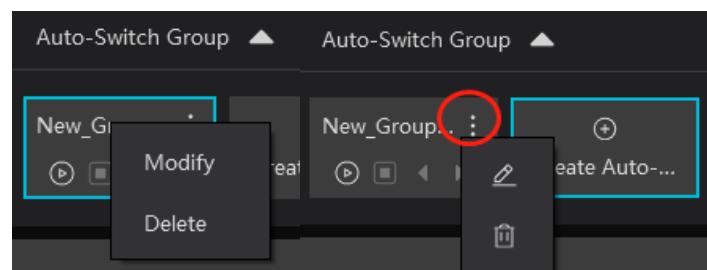
Click to execute auto-switch. The specified channel images will be played in the specified windows in sequence.

Click to stop playing the current auto-switch group.

3. Modify or delete auto-switch

Right click on the auto-switch group name and select Modify or Delete to modify or delete the auto-switch.

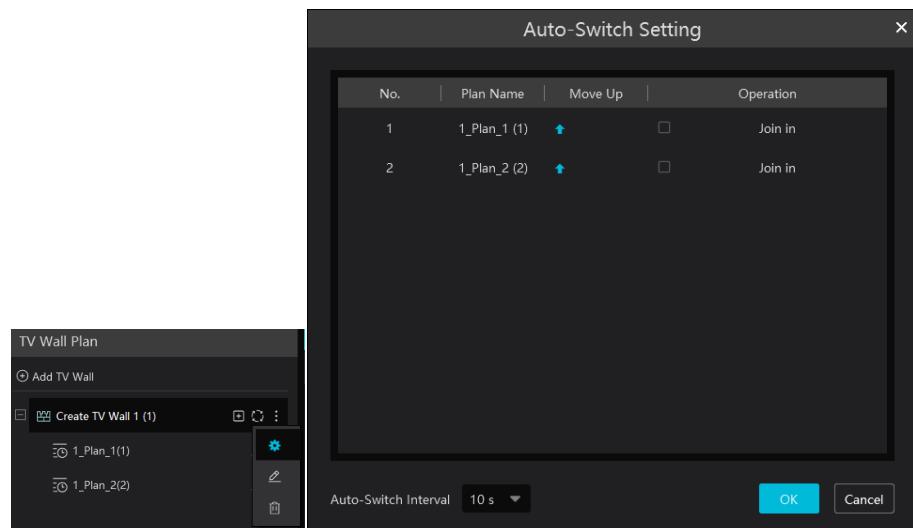
Or click and then select the corresponding icon to modify or delete the auto-switch.



◆ Auto-switch plan

1. Create auto-switch plan

Click behind the TV wall plan name and then click to set the auto-switch. Click “Join in” to select the plan. Then set dwell time and click [OK].



2. Start/stop auto-switch



Click  behind the TV wall name to start auto-switch plan. Click  to stop the auto-switch.

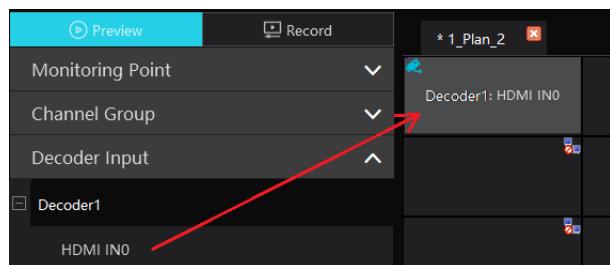
### 3. Modify auto-switch plan

Click  again to modify the auto-switch plan.

**Note:** If the current auto-switch plan needs to modify, please stop it first.

## 10.5.1 Decoder Input

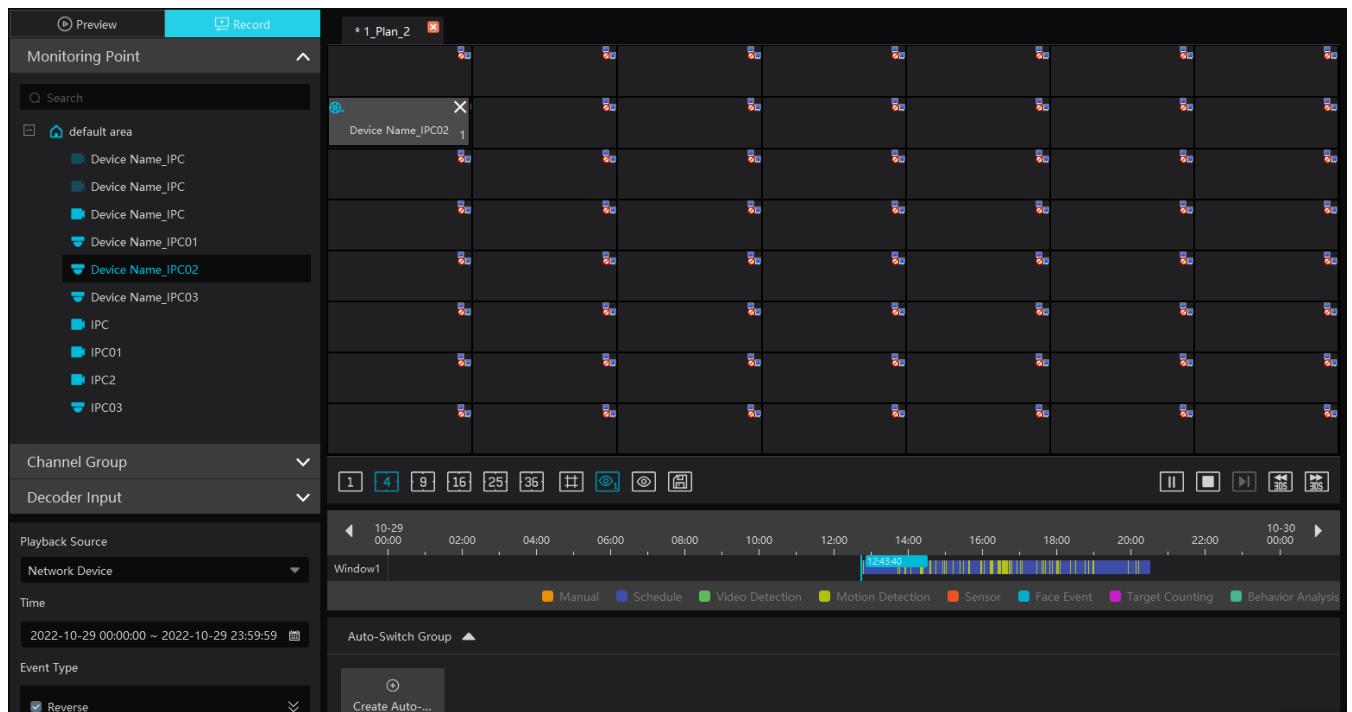
Go to Home→TV Wall Management→Decoding on TV Wall→Decoder Input. Drag an input to a window to execute decoding.



## 10.5.2 Playback

### ◆ Playback on TV Wall

Click “Record”, select playback source and time, check the alarm events and then drag the cameras (or channels) to a window to search and play the records.



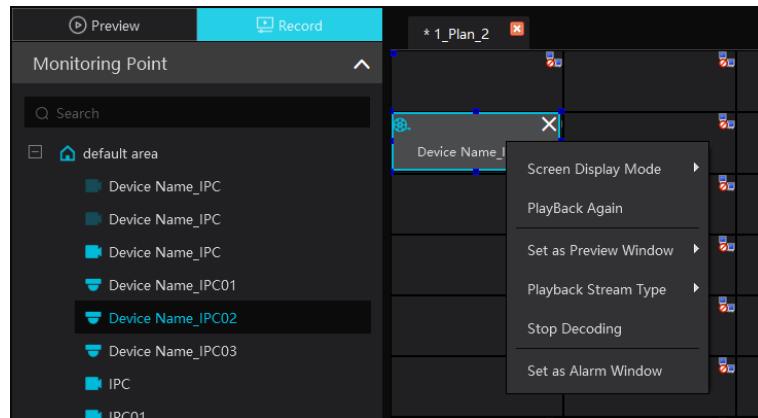
### ◆ Playing control



During playback, the record can be controlled by the above buttons.

**Note:** The frame rate per second will be the same as the set frame rate of the device (Home→Device Setting→Stream Setting→Frame Rate).

## ◆ Right-click menu



1. Screen Display Mode: 1\4\9\16\25\36 screen mode is optional
2. Save as an alarm window: click it to set the current window as an alarm window. The alarm linkage image will play in this window. Please go to Alarm Center→Alarm Setting interface. Select the alarm type, link the TV wall and set the schedule first.
3. Save as preview window: the current camera or the historical camera is optional. If the current camera is selected, the window will display the live video of the current camera in the record page. If the historical camera is selected, the window will display the live video of the camera decoded in this window last time.
4. Playback stream type: main stream or sub stream is selectable.
5. Stop decoding

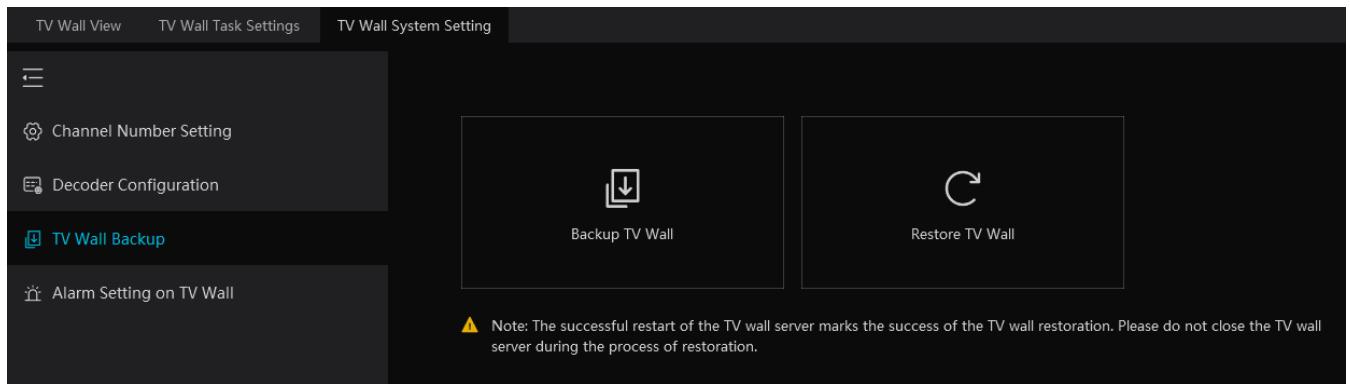
The following picture is an example of TV Wall.



## 10.6 TV Wall Backup

When importing the former system configuration files to the new version, the TV wall configuration file will not be imported together. So you need to import the TV wall configuration file separately.

Click [Backup TV Wall] in the last version to back up the TV wall configuration files. Then click [Restore TV wall] in the new version to restore it.



# 11 Alarm Management

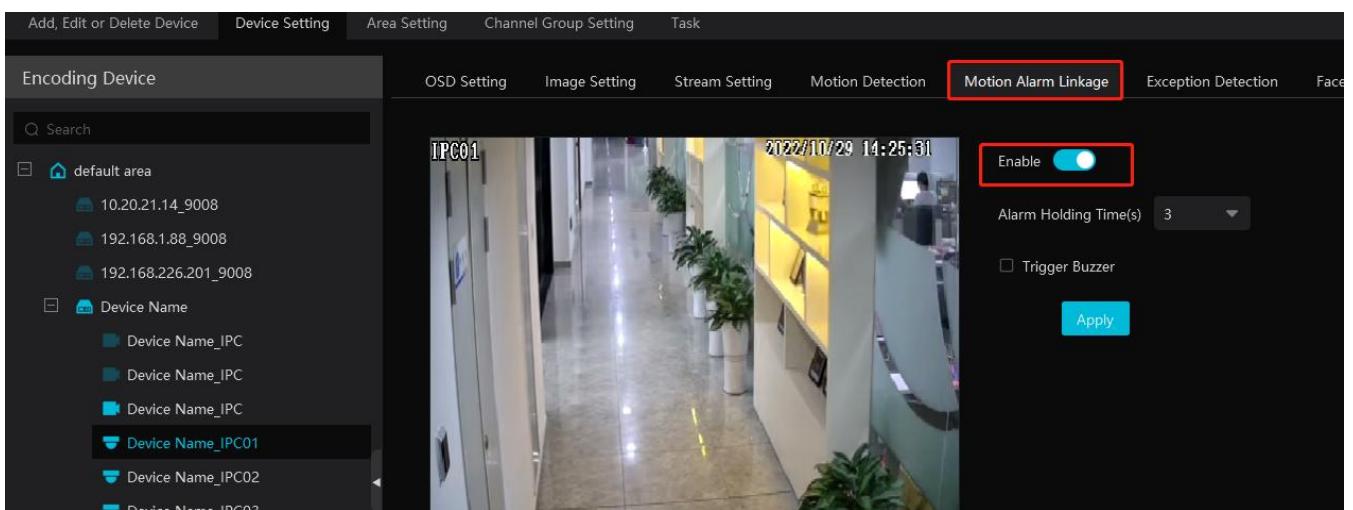
## 11.1 Alarm Server Configuration

Alarm server is in charge of receiving and recording alarm information of connected devices and then sending the alarm information to the relevant user terminal system or devices in accordance with prior alarm settings. There is a default alarm server.

Go to Home→Add, Edit or Delete Device →Alarm Server interface to view the online status of the alarm server. If it is not online, please check its network connection.

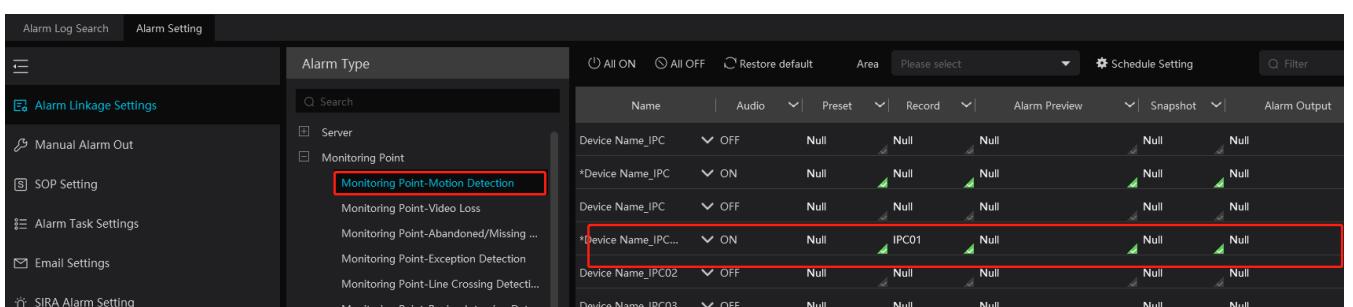
## 11.2 Alarm Configuration

① Go to Home→Device Setting interface.



Select the desired device to enable alarms (refer to the user manual of the corresponding device for the detailed settings).

② Go to Home→Alarm Center→Alarm Linkage interface.



Select area, alarm type and then enable alarm linkages.

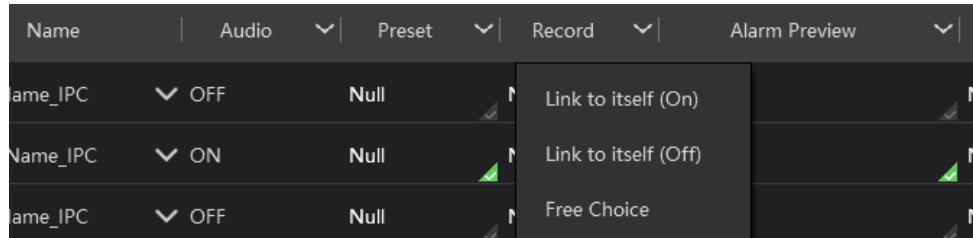
All ON: enable all alarm linkages of the current alarm type and area (schedule excluded).

All OFF: disable all alarm linkages of the current alarm type and area (schedule excluded).

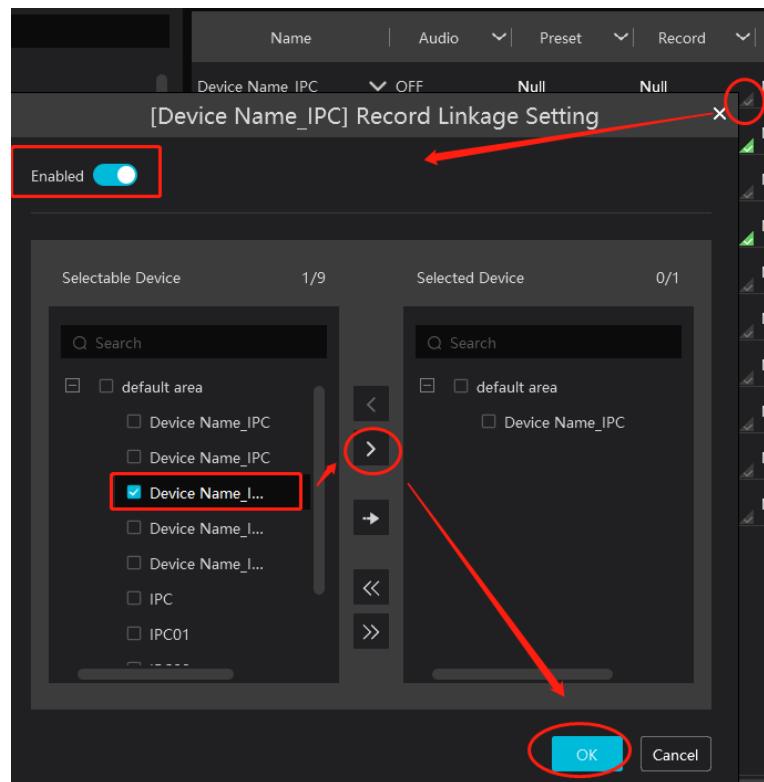
Select beside the device name and select “ON” to enable all alarm linkages of the device (schedule excluded).

*Device Name_IPC...	ON	Null	IPC01	Null
Device Name_I	ON	Null	Null	Null
Device Name_I	OFF	Null	Null	Null

Select  beside the title (like record) to enable record linkage of all devices (schedule excluded). Select “Link to itself (On)” to quickly select the camera itself as the record camera.



The alarm linkage settings of PTZ control, record, alarm view, snapshot, alarm output and TV Wall are the same with each other. Here take record linkage for example to introduce the setting steps.



Check the selectable channel and click > to select the channel; check the selected channel and click < to remove this channel; click >> to select all channels; click << to remove all selected channel. After the channels are selected, check “On” and then click [OK] to save the settings.

**Note:** Before checking voice broadcast, please upload the voice first (See chapter 20.7 Audio Uploading for details).

Before checking Email, please set the sender’s email address and the recipient address first (See chapter 10.5 Email Settings for details).

Before checking SOP, please set the SOP first (See chapter 10.3 SOP Settings for details)

③ Set alarm schedule. Select the schedule of the desired device. 7\*24 or 5\*24 is the default schedule. Other schedules need to be set in advance. Click the “Schedule Setting” tab to set (See Schedule Recording→To set schedule for details).

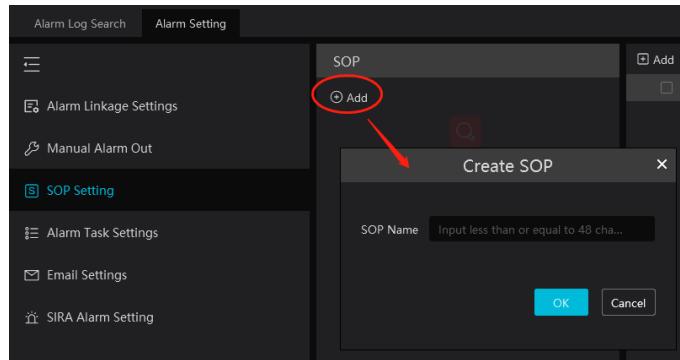
**Note:** 1. For the alarm linkage items related to face recognition, you can set them separately, including face comparison alarm linkage, stranger alarm linkage, block list alarm linkage, visitor alarm linkage and VIP alarm linkage.

2. For the combined alarm of DVR/NVR, you can configure the alarm linkage items in the platform. If the combined alarm is set after the NVR/DVR is added to the platform, the platform cannot automatically receive the combined alarm data. Please reboot or reconnect your NVR/DVR and then the platform will display this device under the alarm type of “Encoding device-combined alarm”.

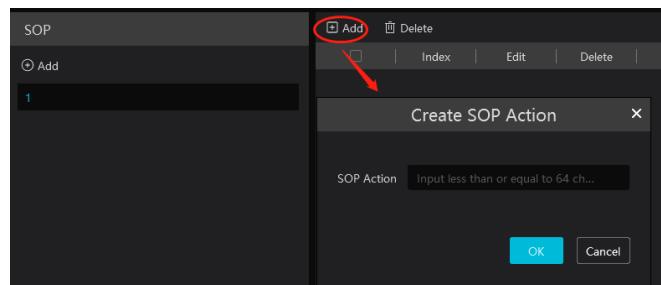
## 11.3 SOP Settings

Click the “SOP Setting” tab in the alarm center interface to go to the following interface as shown below.

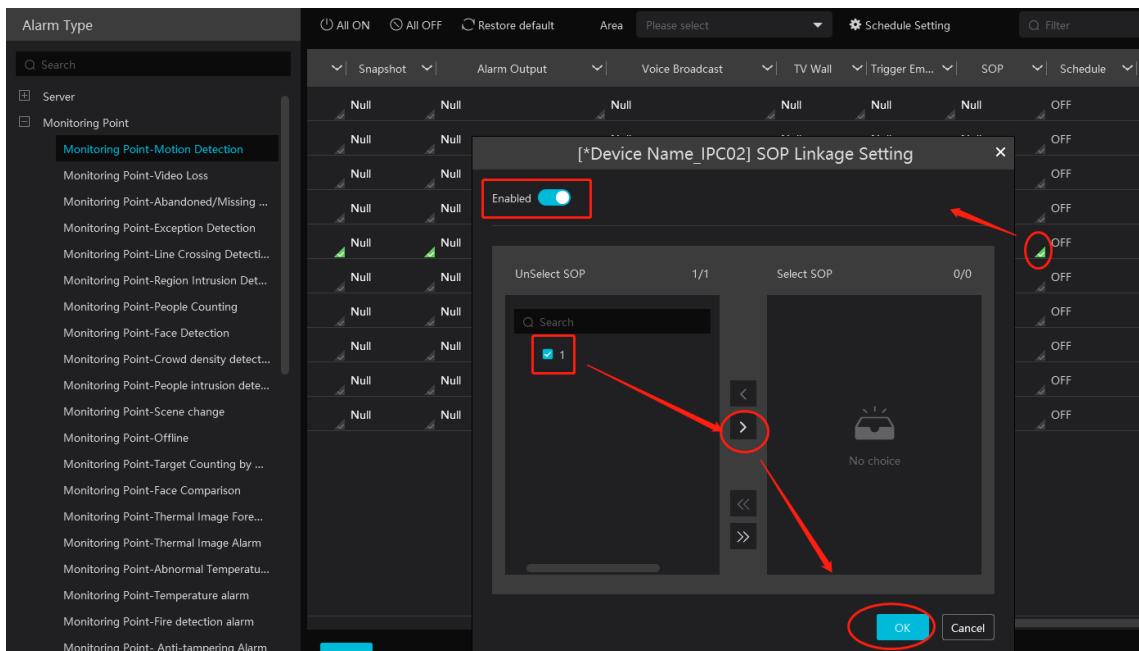
1. Click  to add a SOP name.



2. Click  to create a SOP action.

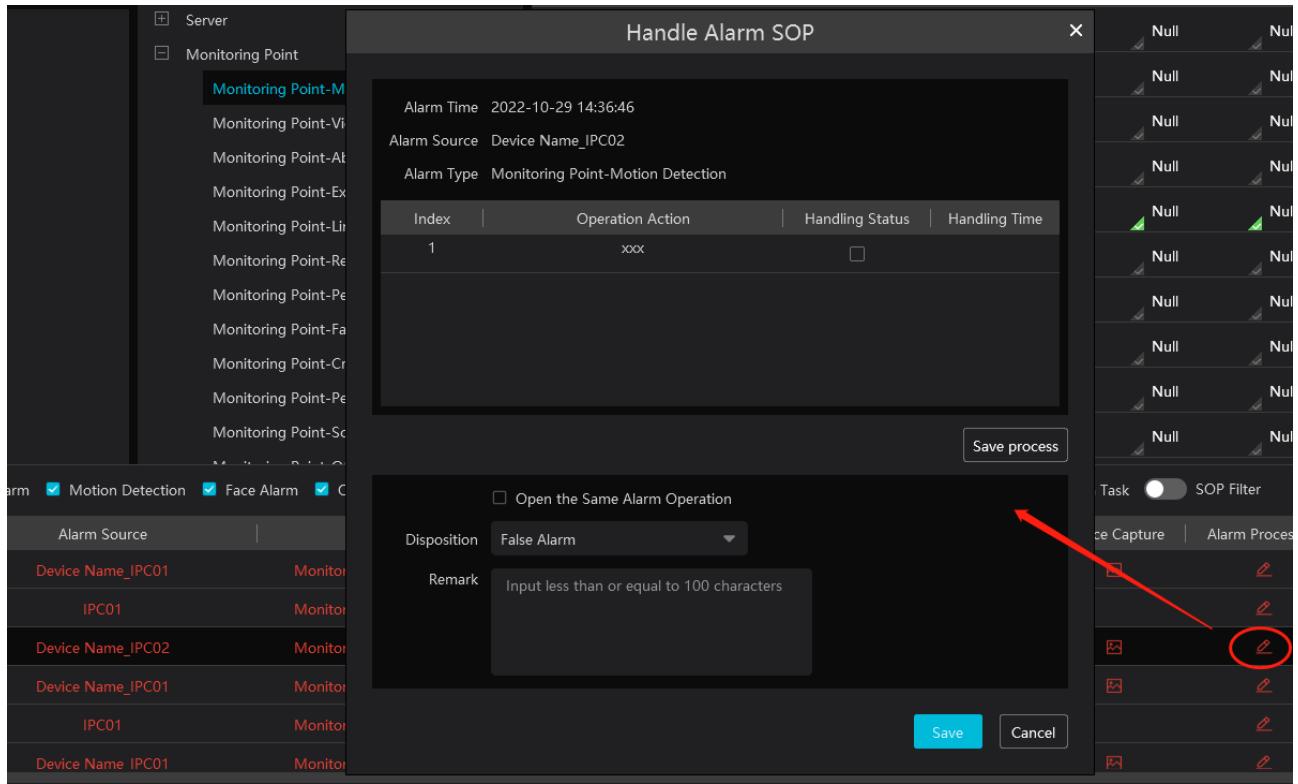


3. In the alarm linkage settings interface, select the alarm event and enable SOP of the relevant device.



4. Click  to extend the alarm list.
5. Click  to handle the alarm. Select the SOP action and then click “Save Process”. After that, choose disposition and enter remark as needed.

The disposition includes: False alarm, true alarm, customer test, technical event, service test.



After the alarm is processed, the alarm handling status and disposition will be shown as below.

2022-10-29 14:38:40	Device Name_IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Processed	False Alarm
2022-10-29 14:38:40	IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2022-10-29 14:36:46	Device Name_IPC02	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2022-10-29 14:36:31	Device Name_IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2022-10-29 14:36:31	IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

If “SOP Filter” is enabled, the alarm events of the channel set the SOP will be listed.

If “Alarm Preview” is set for the monitoring point, select the corresponding alarm items and then right click to choose “Alarm Preview” to jump to the alarm preview interface.

2022-10-29 14:38:40	IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Processed	False Alarm
2022-10-29 14:36:46	Device Name_IPC02	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2022-10-29 14:36:31	Device Name_IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2022-10-29 14:36:31	IPC01	Monitoring Point-Motion Detection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

## 11.4 Alarm Task Settings

In this interface, you can set the leaving alarm task.

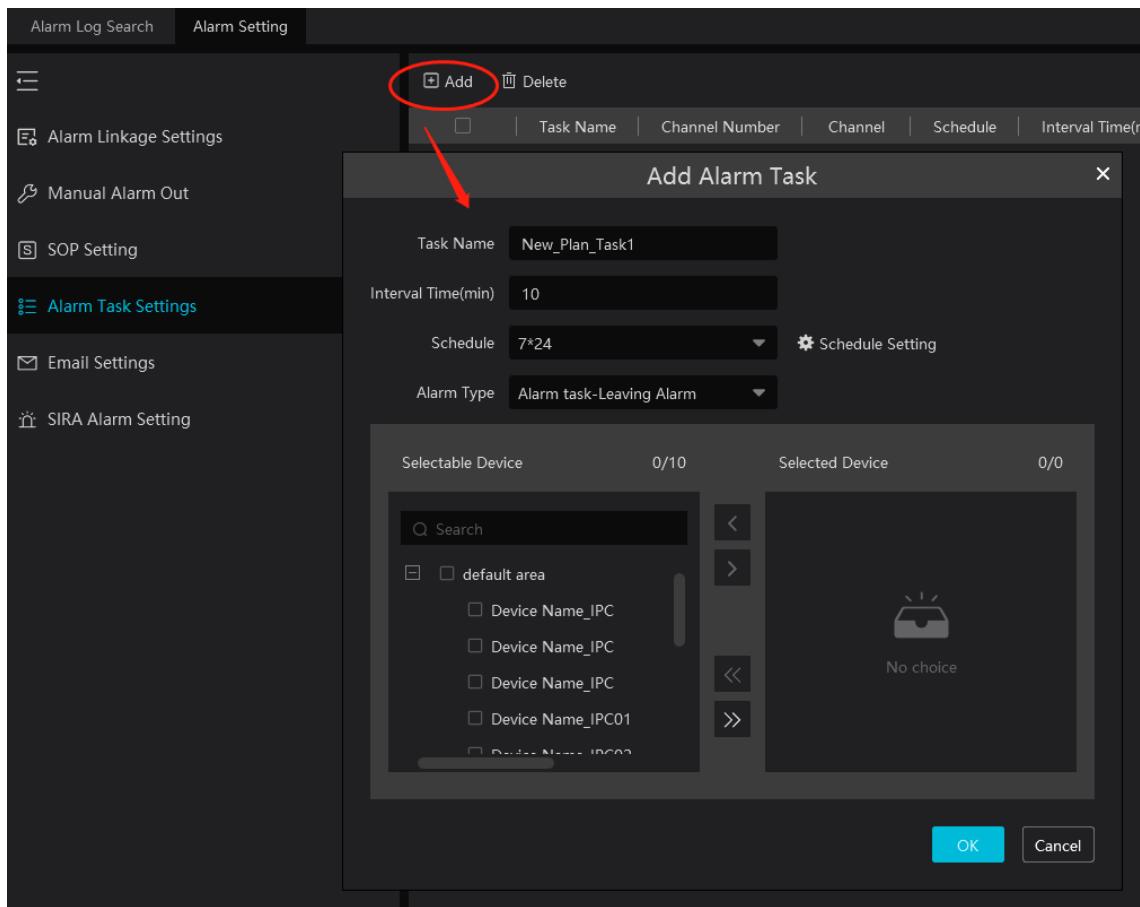
Leaving alarm: When someone leaves the predefined area and doesn't come back within the set time duration, the system will perform alarm linkages.

To set a leaving alarm task:

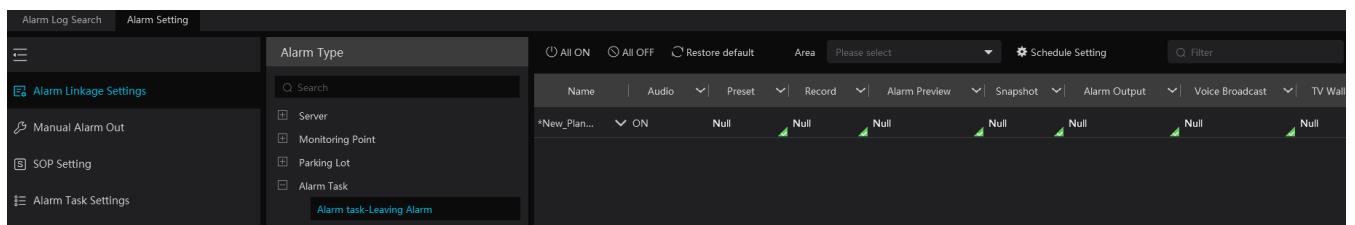
1. Enter the Alarm Task Setting interface.
2. Click [Add] to add the alarm task.

Set the task name, interval time, schedule and choose the camera.

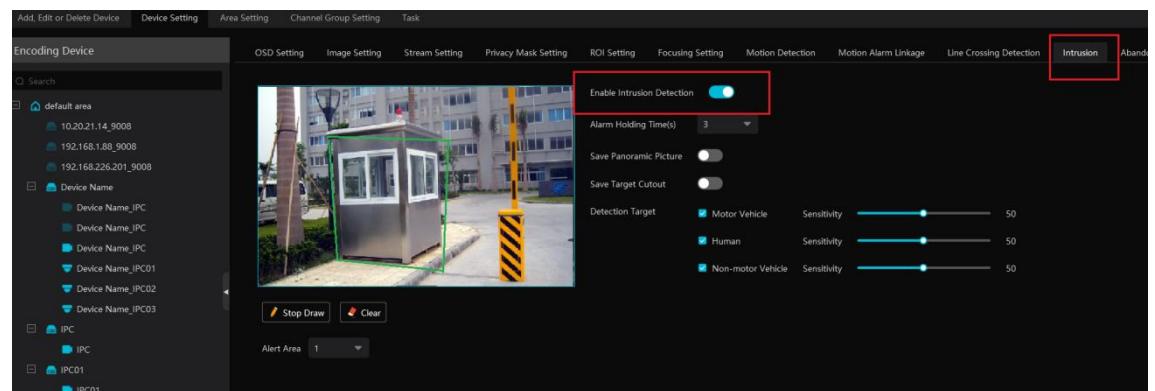
Multiple cameras can be added to an alarm task.



3. Set the alarm linkage items. In the alarm linkage settings interface, select the alarm type as “Alarm task-Leaving Alarm”. Then enable the desired alarm linkage (like “Alarm preview”) and set the schedule.



4. Go to the Device Setting interface to enable Intrusion and set the detected area.



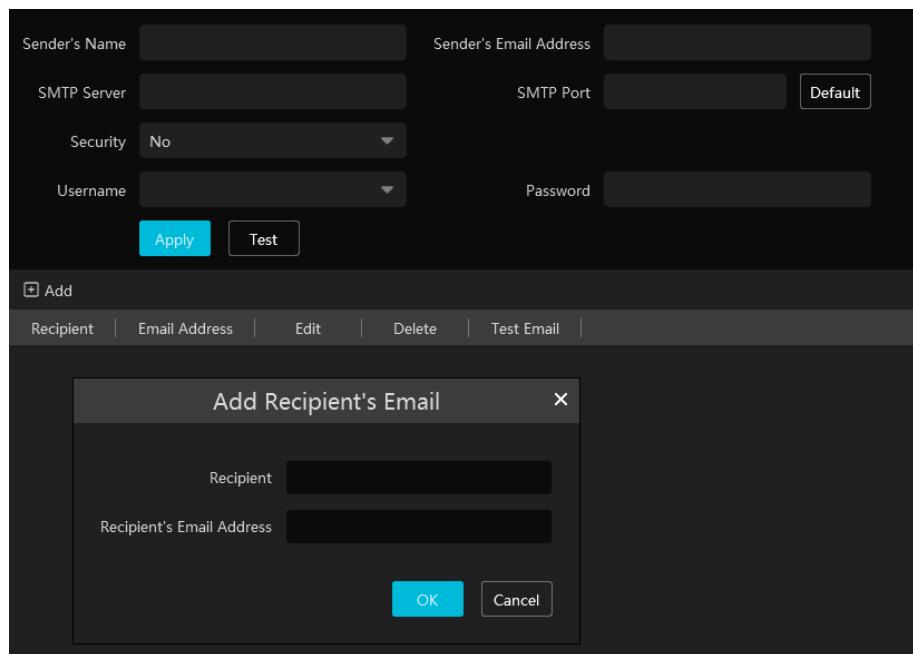
**Note:**

1. The selected camera must support and enable intrusion function, or leaving alarm will not take effect. If the camera supports vehicle/people classification, please check “Human” as the detection target.
2. After the leaving alarm task is set and intrusion is enabled for the camera, when someone enters the predefined area and stays there, this person will be judged as “ON Duty” so that leaving alarm will not be triggered and the intrusion alarm will not be displayed on the alarm list; but when this person leaves and doesn’t return within the set time duration (interval time) or no one appears in the set time duration, leaving alarm will be triggered.

## 11.5 Email Settings

Alarm information can be received by the specified Email address if the Email parameters have been set in advance.

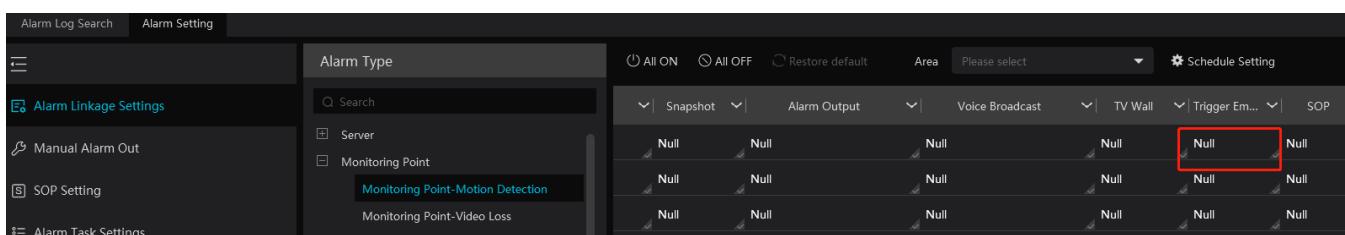
Click Home→Alarm Center→Email Setting to go to the following interface. Add the sender and recipient's email information here.



In the sender's Email information area, fill out the corresponding information and then click “Apply” to save the settings.

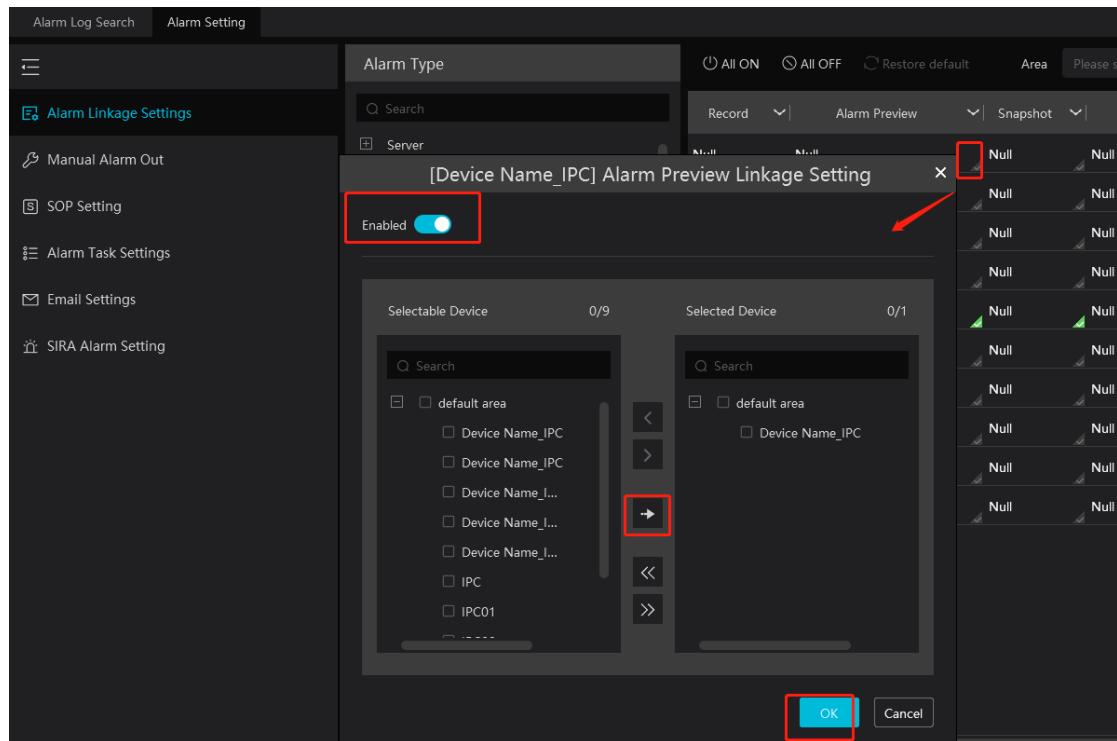
Clicking on the [Add] button adds the recipient information.

After that, in the alarm linkage setting interface, you can trigger Email.

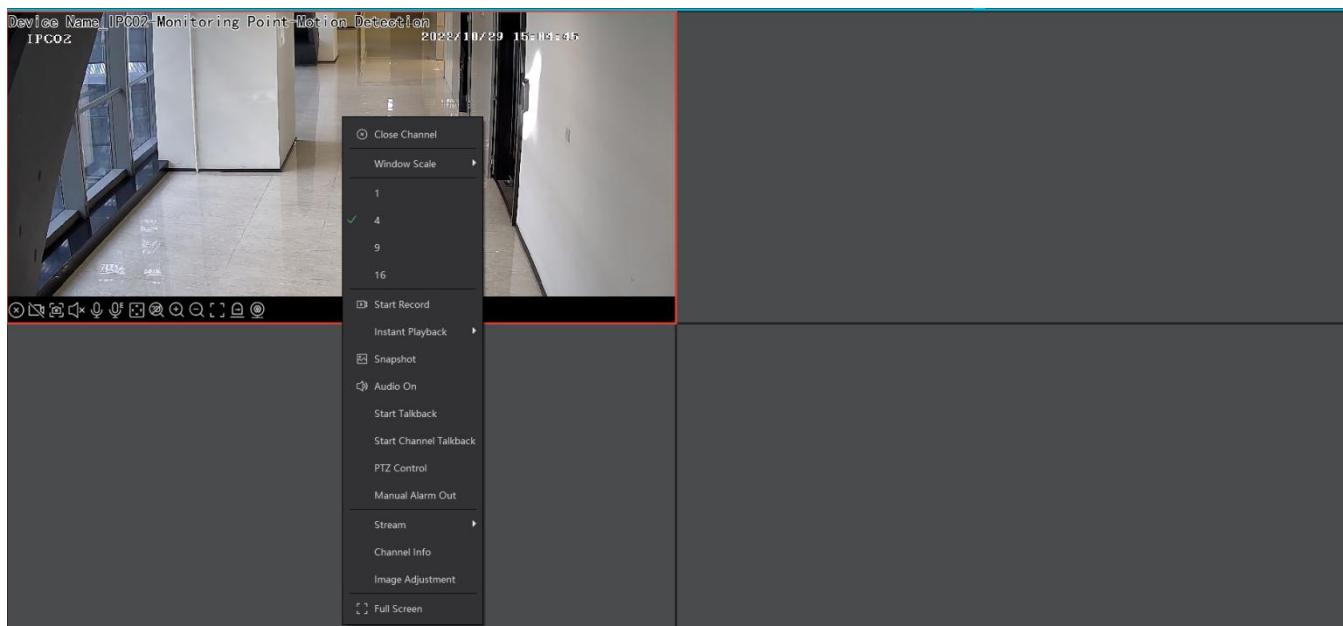


## 11.6 Alarm View

Having set the alarm preview linkage and the schedule, the alarm view window will prompt when an alarm is triggered.



In the alarm preview interface, you can select multi-screen display mode by right clicking on the preview window as shown below.



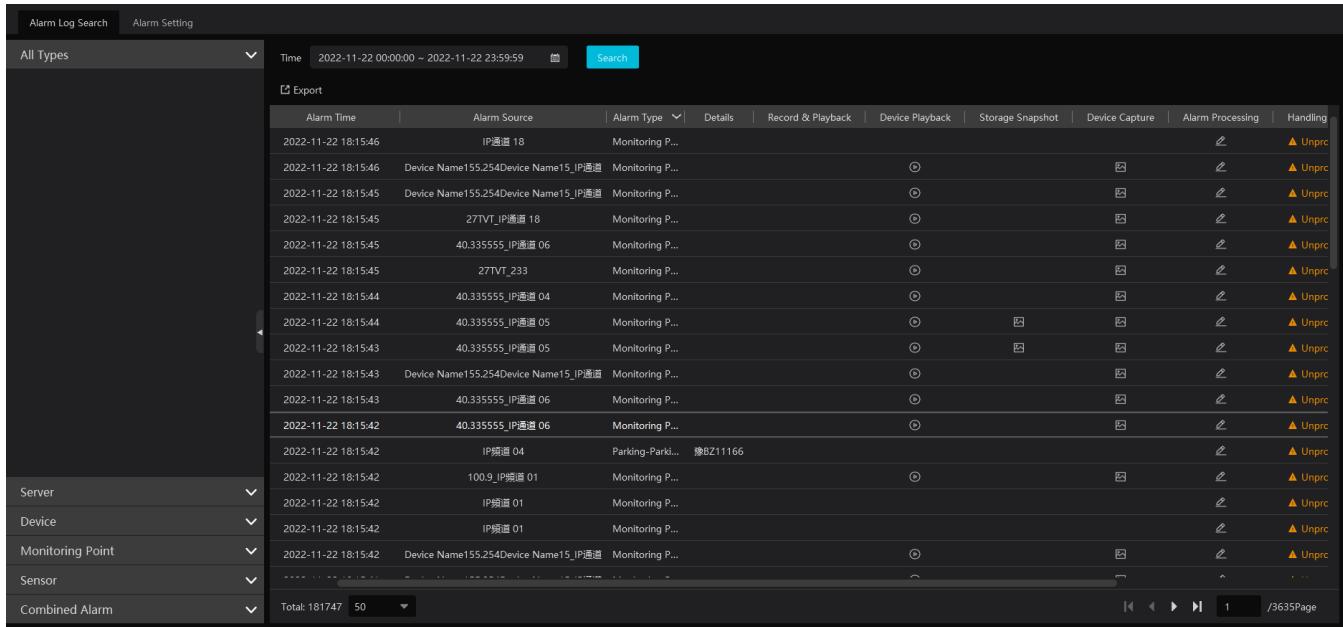
Click  on the bottom right corner to expand the alarm list as shown above. Hover the cursor on the top of the alarm list and then a bidirectional arrow will appear. Drag the alarm list up or down to extend or shrink the alarm list.

Click  or  to play the record or captured images.

Right clicking on an alarm item displays a menu as shown below. Click “Alarm Preview” to jump to the alarm preview interface.

Alarm Time	Alarm Source	Alarm Type	Record & Playback	Device Playback	Storage Snapshot	Device Capture	Alarm Processing	Handling Status	Disposition	Remark
2022-10-29 14:38:40	Device Name_IPC01	Monitoring Point-Motion Detection								
2022-10-29 14:38:40	IPC01	Monitoring Point-Motion Detection								
2022-10-29 14:36:46	Device Name_IPC02	Monitoring Point-Motion Detection					Alarm Preview	Processed	False Alarm	
2022-10-29 14:36:31	Device Name_IPC01	Monitoring Point-Motion Detection								
2022-10-29 14:36:31	IPC01	Monitoring Point-Motion Detection								
2022-10-29 14:35:56	Device Name_IPC01	Monitoring Point-Motion Detection								

## 11.7 Alarm Log



Alarm Log Search | Alarm Setting

All Types

Time: 2022-11-22 00:00:00 ~ 2022-11-22 23:59:59 |

Export

Alarm Time	Alarm Source	Alarm Type	Details	Record & Playback	Device Playback	Storage Snapshot	Device Capture	Alarm Processing	Handling
2022-11-22 18:15:46	IP通道 18	Monitoring P...							▲ Unprc
2022-11-22 18:15:46	Device Name155.254Device Name15_IP通道	Monitoring P...							▲ Unprc
2022-11-22 18:15:45	Device Name155.254Device Name15_IP通道	Monitoring P...							▲ Unprc
2022-11-22 18:15:45	27TVT_IP通道 18	Monitoring P...							▲ Unprc
2022-11-22 18:15:45	40.335555_IP通道 06	Monitoring P...							▲ Unprc
2022-11-22 18:15:45	27TVT_233	Monitoring P...							▲ Unprc
2022-11-22 18:15:44	40.335555_IP通道 04	Monitoring P...							▲ Unprc
2022-11-22 18:15:44	40.335555_IP通道 05	Monitoring P...							▲ Unprc
2022-11-22 18:15:43	40.335555_IP通道 05	Monitoring P...							▲ Unprc
2022-11-22 18:15:43	Device Name155.254Device Name15_IP通道	Monitoring P...							▲ Unprc
2022-11-22 18:15:43	40.335555_IP通道 06	Monitoring P...							▲ Unprc
2022-11-22 18:15:42	40.335555_IP通道 06	Monitoring P...							▲ Unprc
2022-11-22 18:15:42	IP频道 04	Parking-Parki...	豫B211166						▲ Unprc
2022-11-22 18:15:42	100.9_IP频道 01	Monitoring P...							▲ Unprc
2022-11-22 18:15:42	IP频道 01	Monitoring P...							▲ Unprc
2022-11-22 18:15:42	IP频道 01	Monitoring P...							▲ Unprc
2022-11-22 18:15:42	Device Name155.254Device Name15_IP通道	Monitoring P...							▲ Unprc

Server

Device

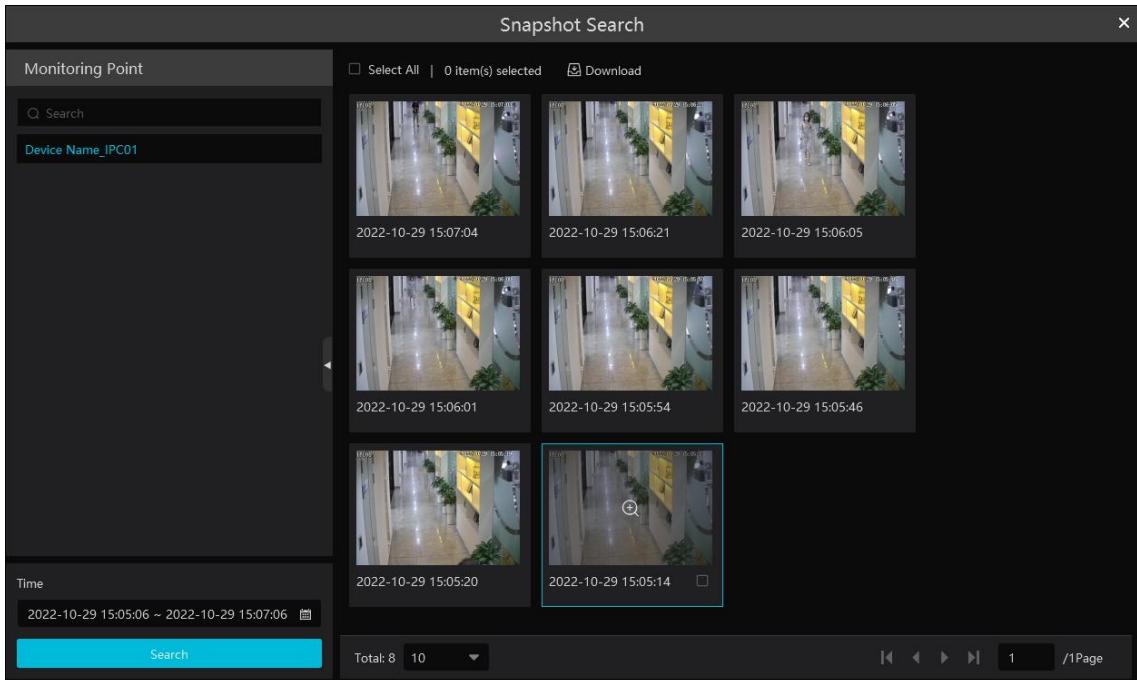
Monitoring Point

Sensor

Combined Alarm

Total: 181747 | 50 | /3635Page

Click  to play the record; click  to open the snapshot search window as shown below.



Snapshot Search

Monitoring Point

Device Name\_IPC01

Search

Select All | 0 item(s) selected

Download

2022-10-29 15:07:04 | 2022-10-29 15:06:21 | 2022-10-29 15:06:05

2022-10-29 15:06:01 | 2022-10-29 15:05:54 | 2022-10-29 15:05:46

2022-10-29 15:05:20 | 2022-10-29 15:05:14

Time: 2022-10-29 15:05:06 ~ 2022-10-29 15:07:06

Search

Total: 8 | 10 | /1Page

Check the searched image and then click “Download” at the bottom of the interface to download this picture.

## 11.8 Manual Alarm Out

Click “Manual Alarm Out” tab to go to the following interface.



Select the camera, set the alarm holding time and then click [Trigger] to manually trigger the alarm out of the camera; click [Clear] to manually turn off the alarm out of the camera.

## 11.9 SIRA Alarm Settings

You can connect the Web Service of SIRA via the alarm server of the platform. After it is connected, the data of the alarm server, including video loss, network disconnection, disk full, disk error, online/offline information of the storage server, will be sent to the web service.

<input checked="" type="checkbox"/> Enable
No. 123456
Service address wstest.videoguard.ae
Port 80
Protocol VIDEO GUIARD
Send heartbeat <input checked="" type="checkbox"/>
Time interval [s] 300
<input type="button" value="Test"/> <input type="button" value="Apply"/>

Please fill out the above information according to the corresponding information of the Web Service. After it is tested successfully, click “Apply” to save the settings.

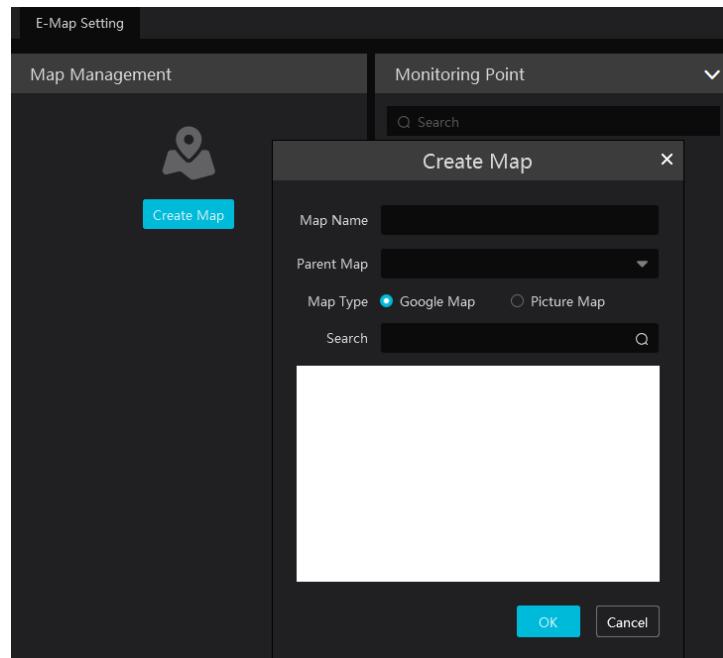
# 12 E-Map

The e-map service is used to store the e-map information of the system. The client landing anywhere can share the same e-map.

## 12.1 E-Map Settings

### 12.1.1 Create E-Map

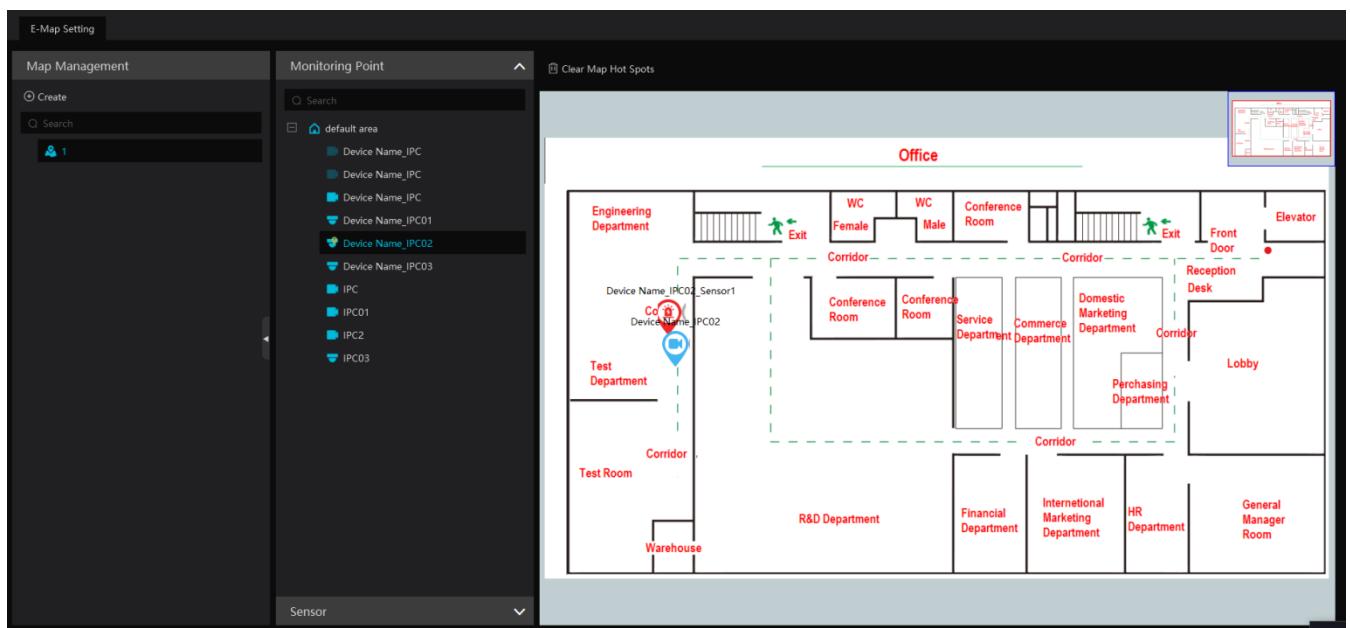
Go to Home→E-Map Setting interface. Click [Create Map] to create a map.



Enter E-map name, select parent e-map and map type. Then click [OK] to save the settings.

### 12.1.2 Add Hotspot

The hotspots include monitoring points and sensors. Drag a hotspot to the corresponding area on the map as shown below.



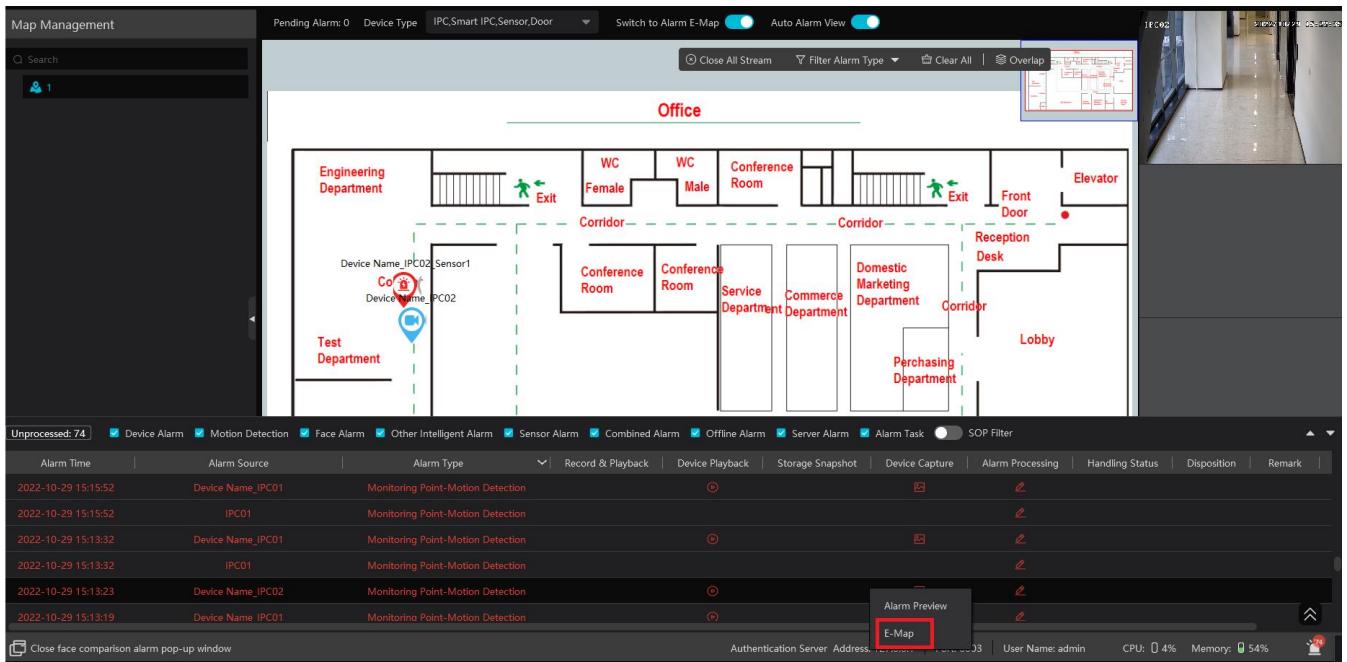
Put the cursor on the map name and then some icons will appear. Click  to add its sub map. Click  to modify the map name and

change its parent map.



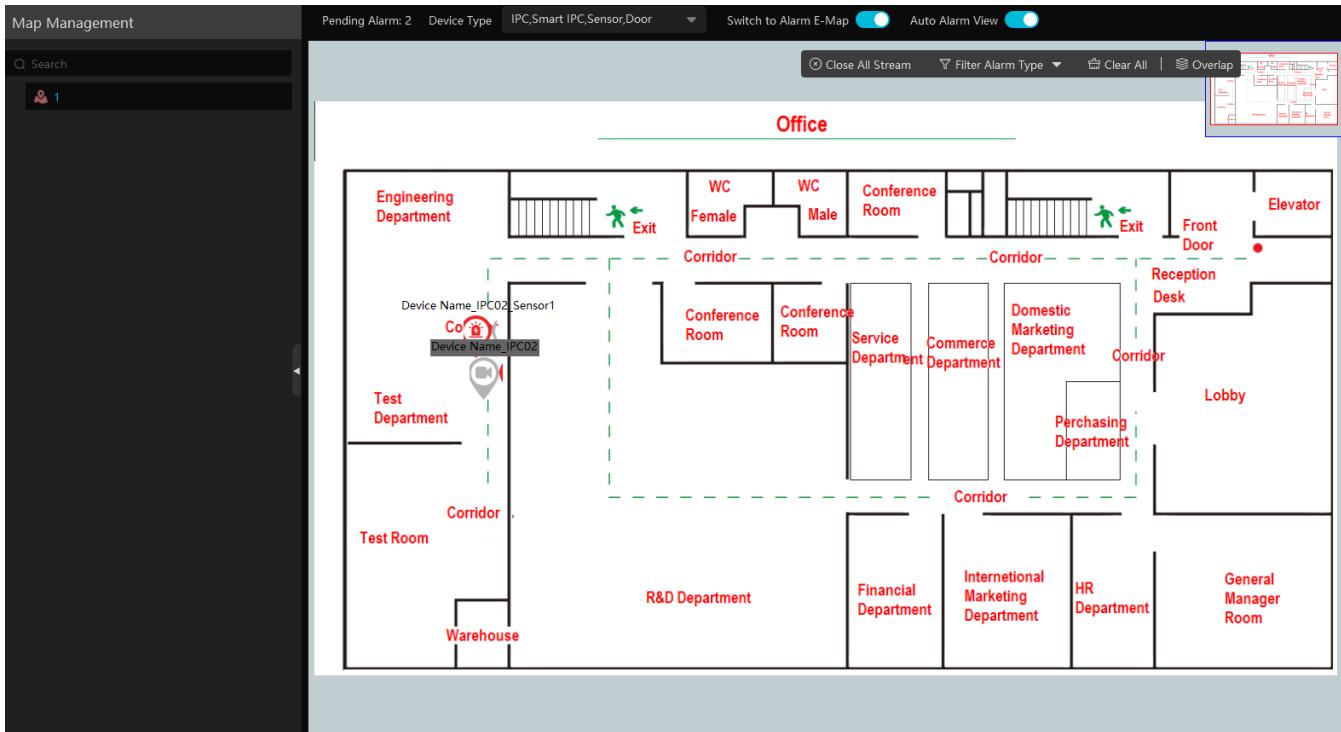
Click to delete the added map.

Click at the bottom of the interface and then right click on hotspot alarm item. Select “E-Map” to quickly skip to E-map monitoring interface.



### 12.1.3 E-Map Monitoring

Go to Home→E-Map Monitoring interface. Select a window on the right and then double click the monitoring point to view the real-time image.



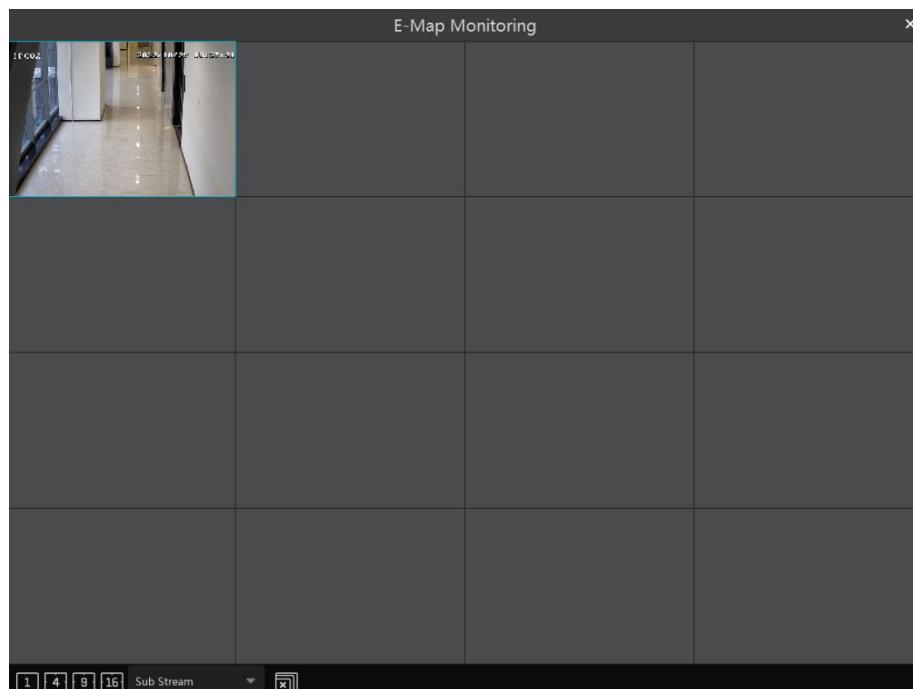
**Switch to Alarm EMap:** if enabled, tem will automatically switch to the E-map on which the alarm occurs.

**Auto Alarm View:** if enabled, the monitoring video will automatically pop up on the right window when an alarm is triggered.

Put the cursor on the preview window (right panel) and then a toolbar will display. Clicking on closes the preview. Click “Close All Stream” to stop all previews. The preview window will be overlaid on the map by clicking “Overlap”.

In addition, click [Filter Alarm Type] to filter the alarm type.

If multiple cameras need to play, you can drag the window on the right panel to the right. Then an independent monitoring interface will display. You can choose the screen display mode as needed.



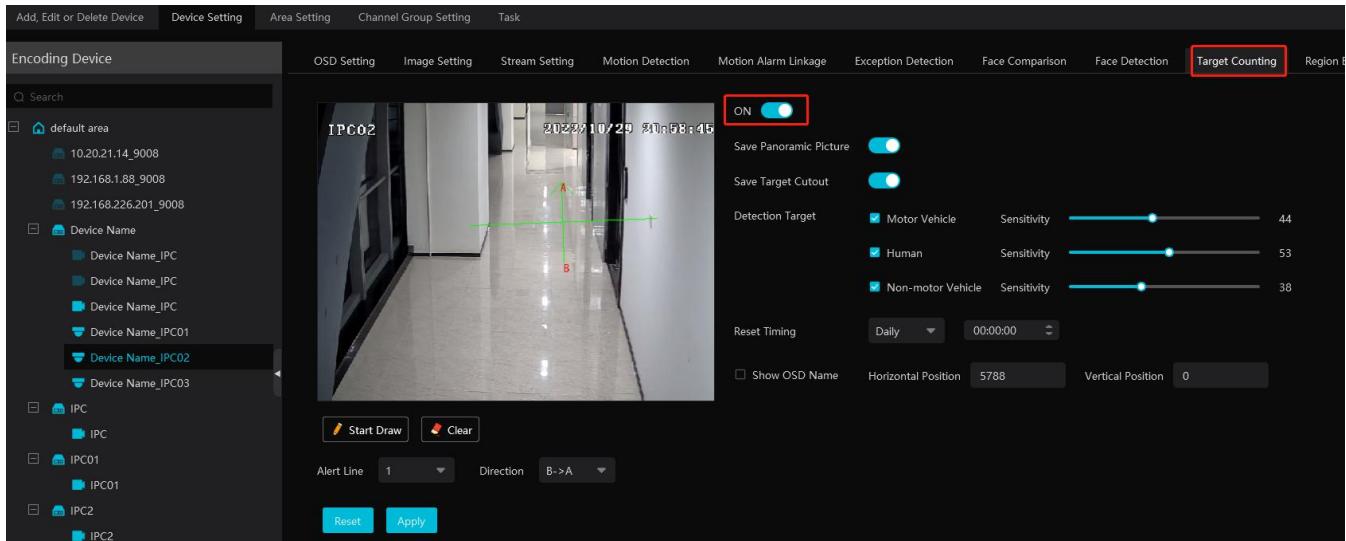
# 13 Target Counting

## 13.1 Task Management

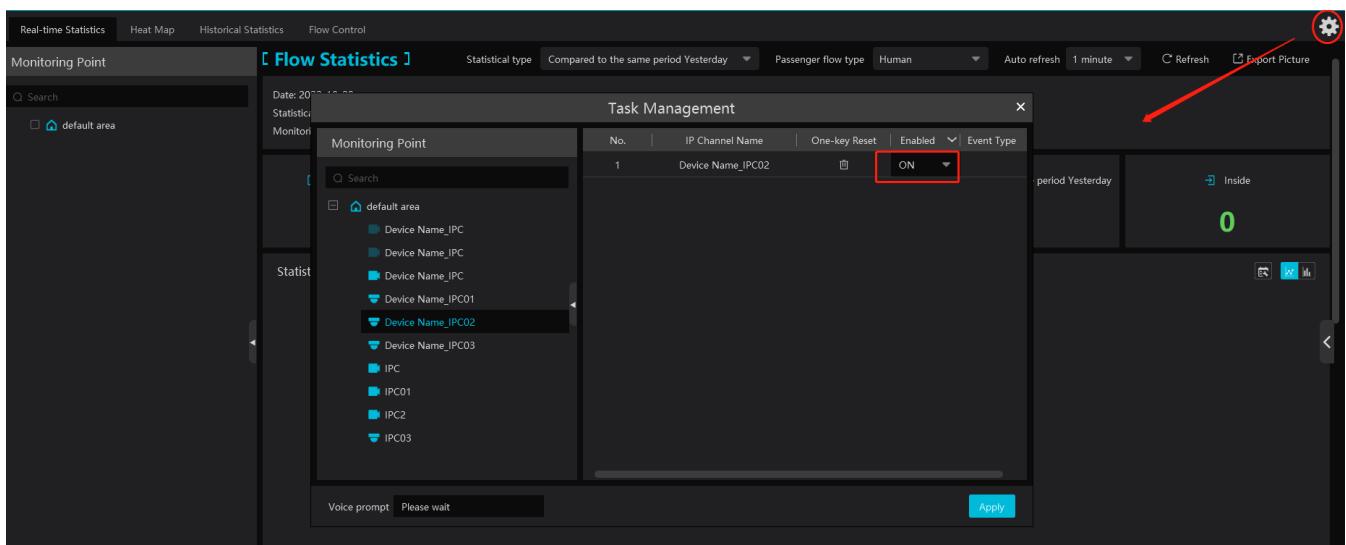
1. Enable “Target Counting” function of the IPC.

**Note:** the added camera must enable target counting function.

IPC with Target Counting function



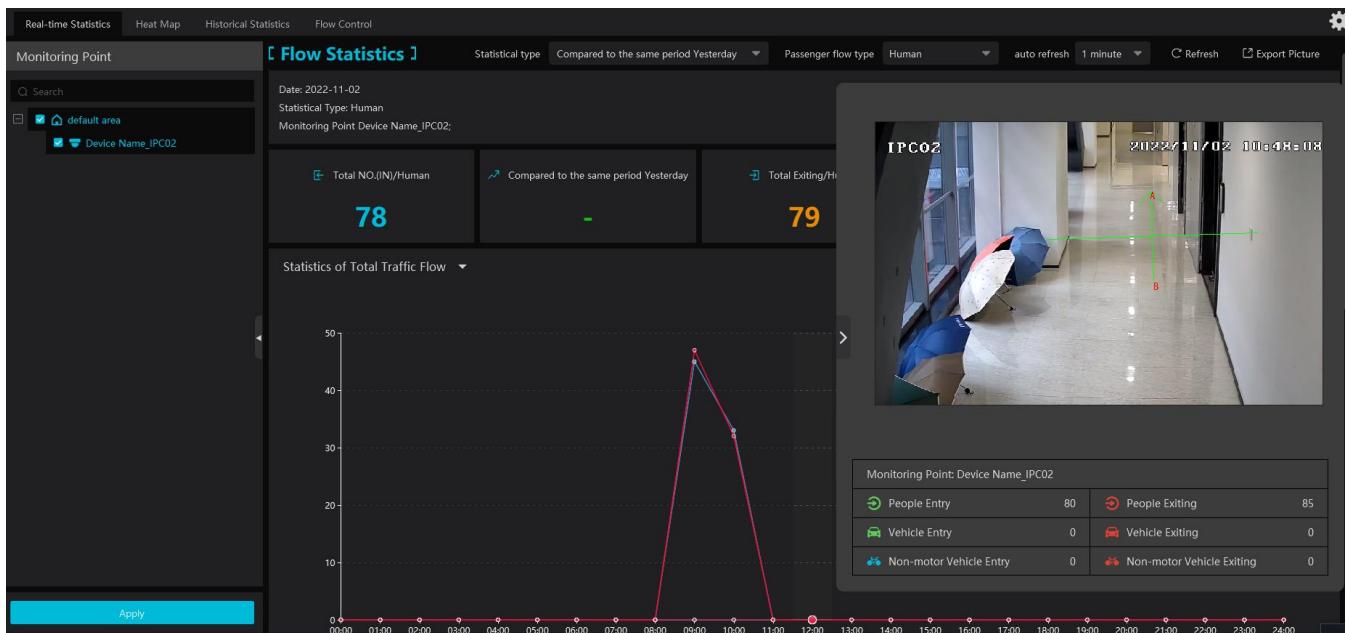
2. Go to Home→Target Counting interface. Clicking on enters the following interface. Select the camera with the target counting function and then enable it. After that, click [Apply] to save the settings.



## 13.2 Real-time Statistics

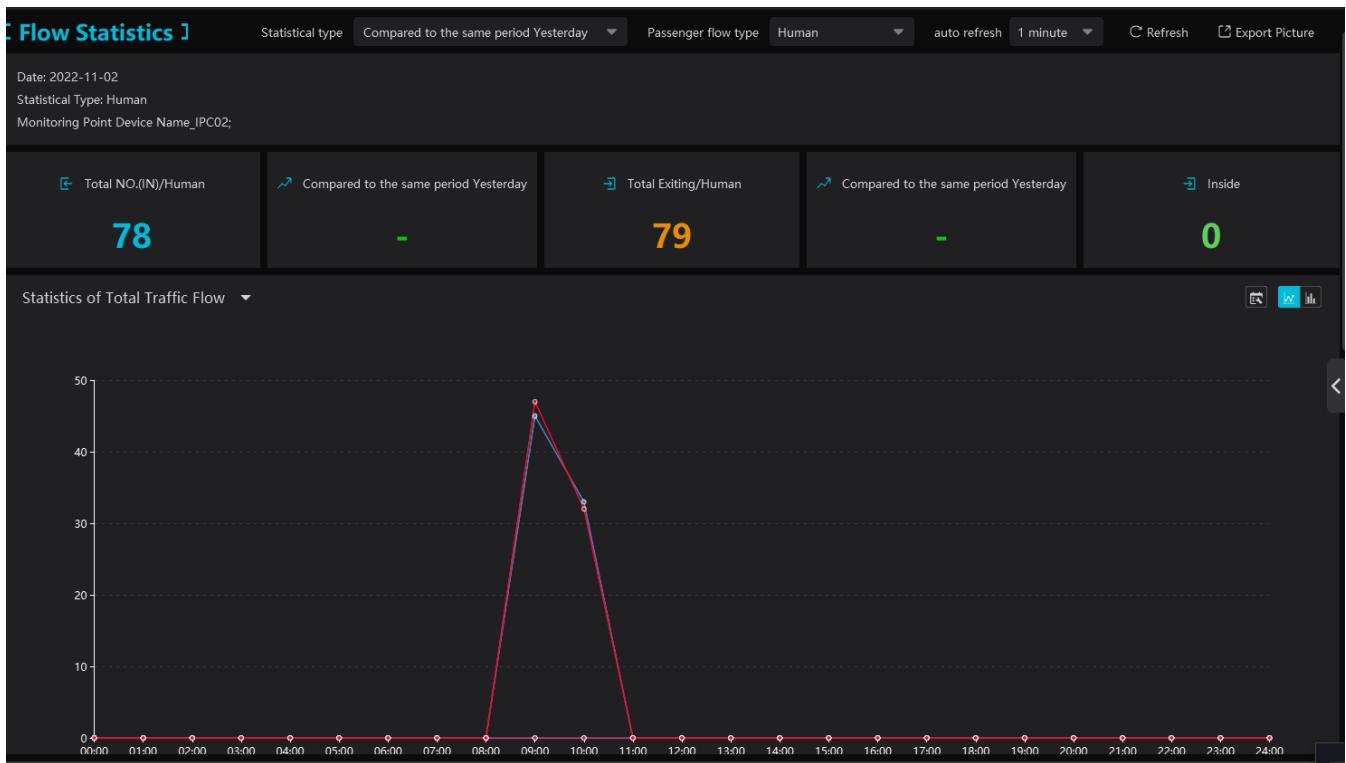
Go to Home→Target Counting→Real-time Statistics. Double click the camera with the target counting function to view the live image. The camera will automatically count the number of people/motor vehicle/non-motor vehicle crossing the predefined line and the system will automatically analyze the traffic flow trends.

Before view the statistics, please go to Home→Resource Management→Device Setting→Target Counting interface to set the alert line, entrance/exit, detection target, etc.



Please select the type as needed to view the flow trend. Click Refresh to refresh the current statistics.

Set the auto refresh interval: The system will automatically refresh the statistics at regular intervals.



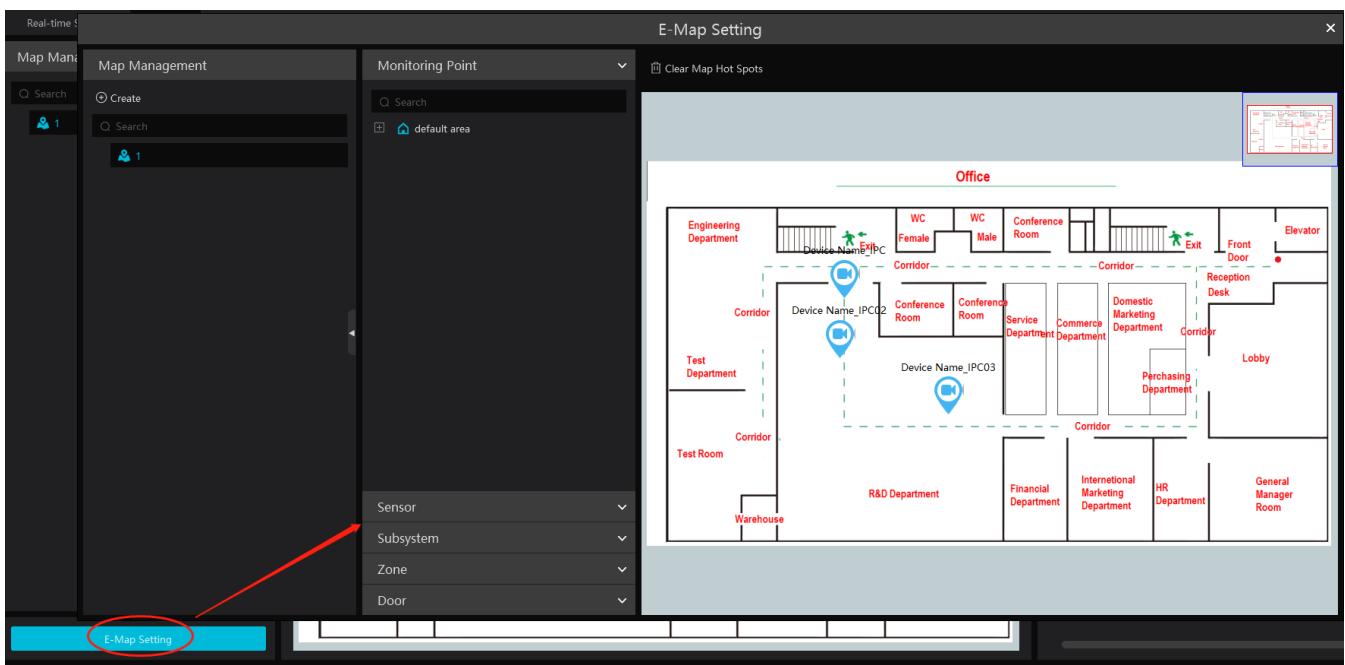
In the above interface, you can view the statistics of people/vehicles entering or exiting. Scroll down to view the traffic flow statistics via pie charts and tables.



### 13.3 Heat Map

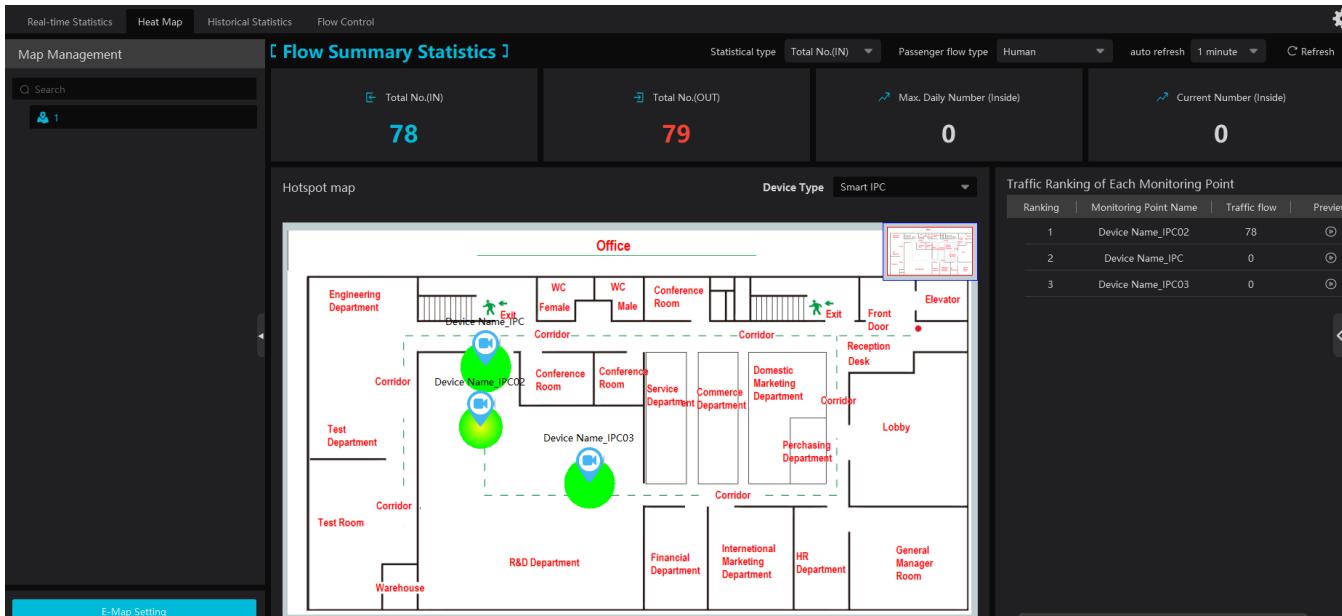
Go to Home→Target Counting→Heat Map interface.

Please create a map first.



Drag the camera with the target counting function to the specified area.

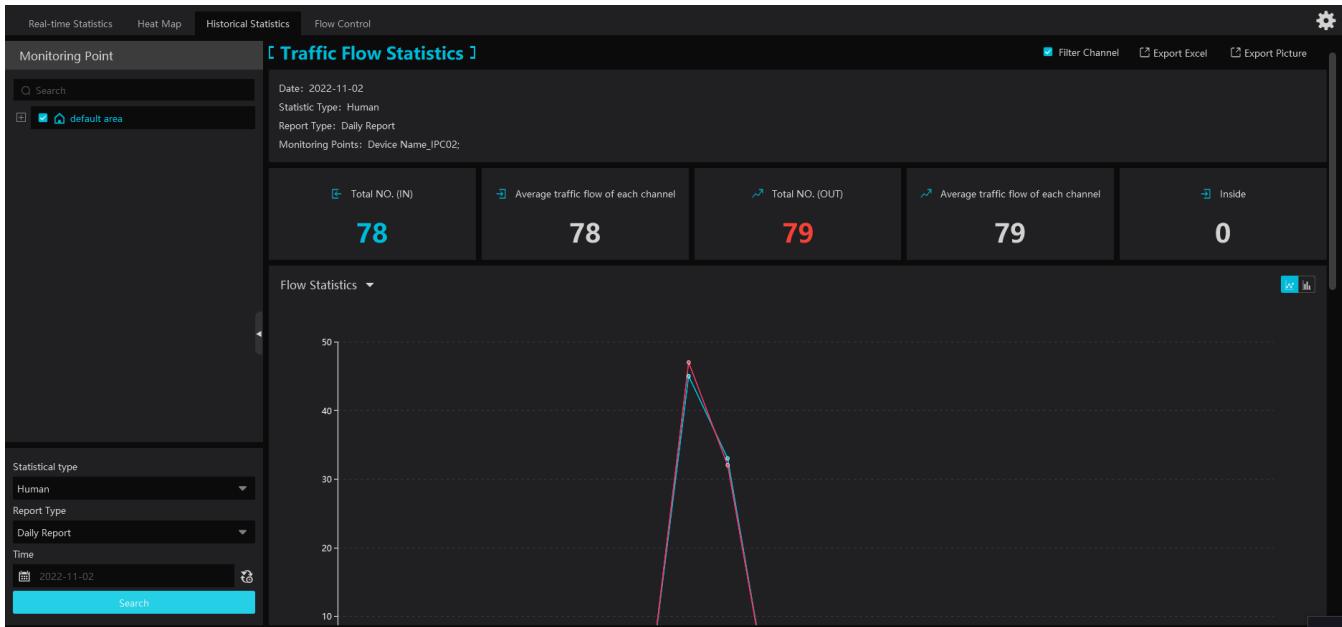
Put the cursor on the camera icon and then you will see the detailed flow statistics.



The deeper the red color is, the more targets (human/vehicle) gather there.

## 13.4 Historical Statistics

Go to Home→Target Counting→Historical Statistics. In this interface, the statistic results in a long period of time can be searched which can be shown in the table or curve chart. Additionally, the statistics of different targets can be viewed here.

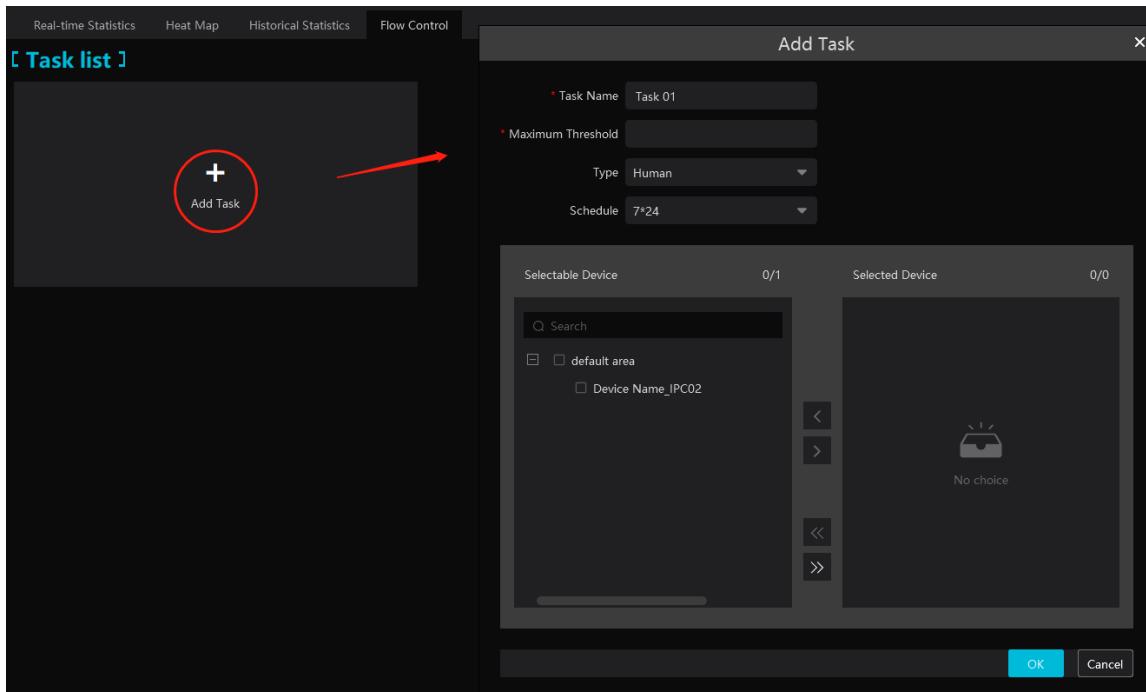


## 13.5 Flow Control

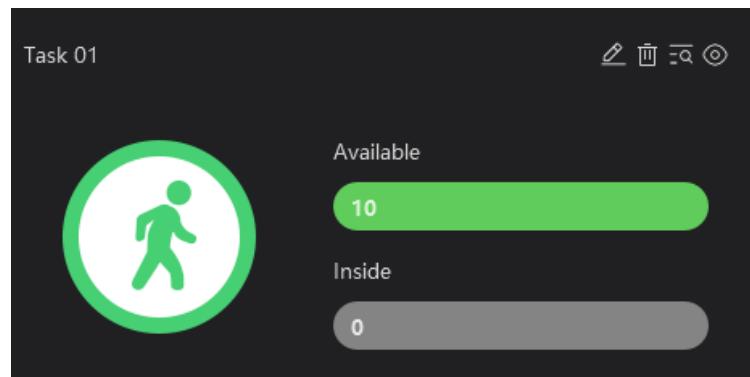
Flow Control: Control the people/vehicles entering or exiting in a specified area to avoid overcrowding. When the people/vehicles stay in the specified area exceeds the threshold, the alarm will be triggered and no entry icon will display.

Click Home→Target Counting→Flow Control to enter the following interface.

Click to add a task. Multiple tasks can be added as needed.

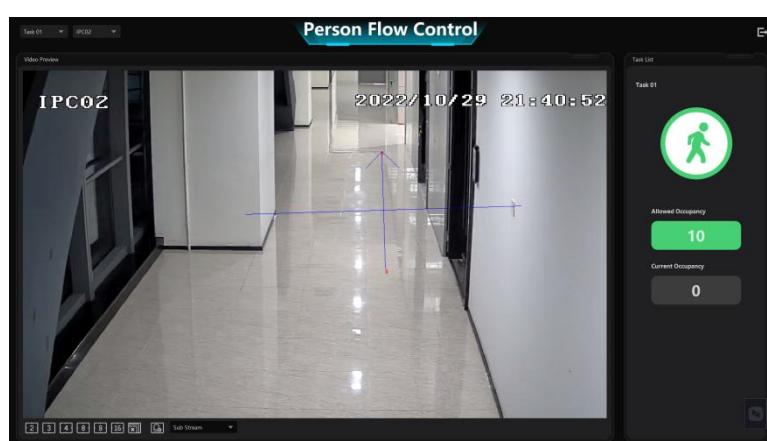


Then the available number and inside number can be viewed as below.

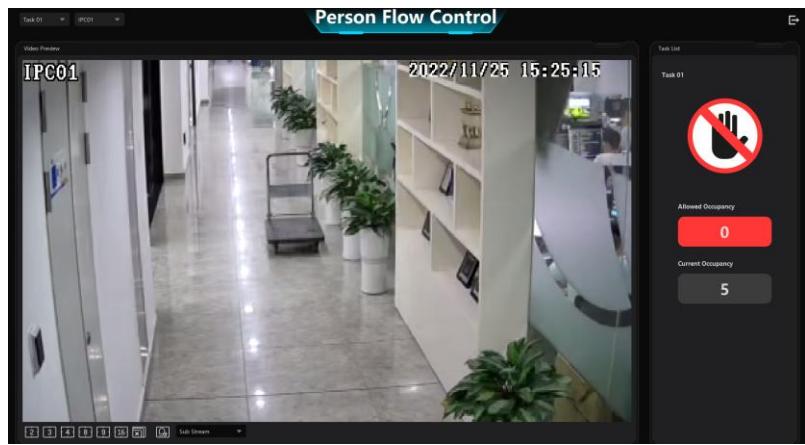


Click to view the quantities of the people/vehicles entry and exiting.

Click to enter the flow control preview interface.



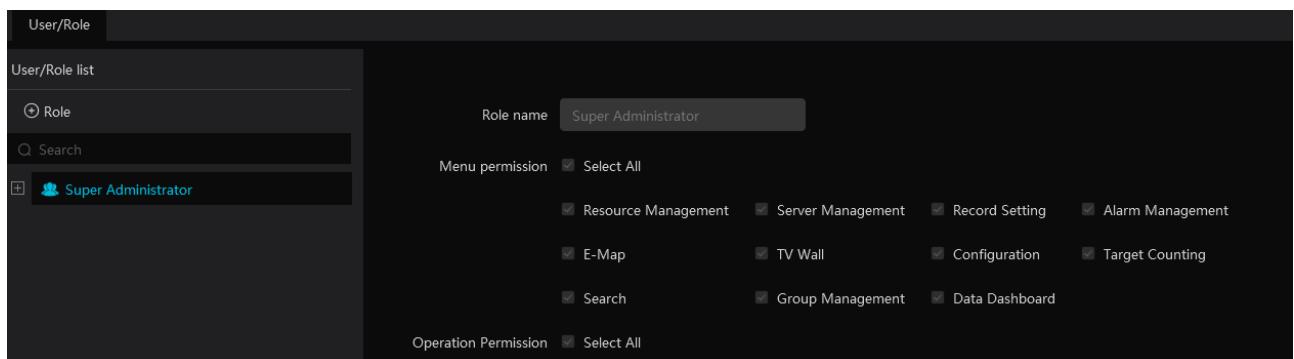
In the above interface, you can switch the camera and view the image. Multiple channels also can be viewed in the same time by selecting multi-channel display mode. When the people/vehicles inside exceed the threshold, the icon will turn red.



Click on  exits the current page.

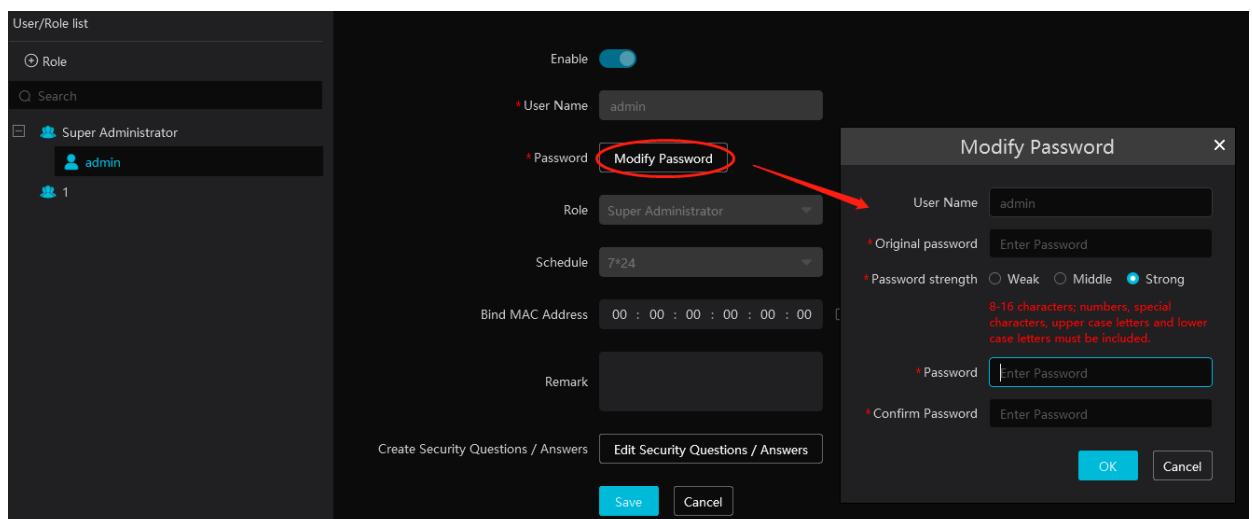
## 14 User Management

Go to Home→User/Role as shown below.



There is a default super administrator by default. The username is admin; the default password is 123456. The super administrator cannot be deleted.

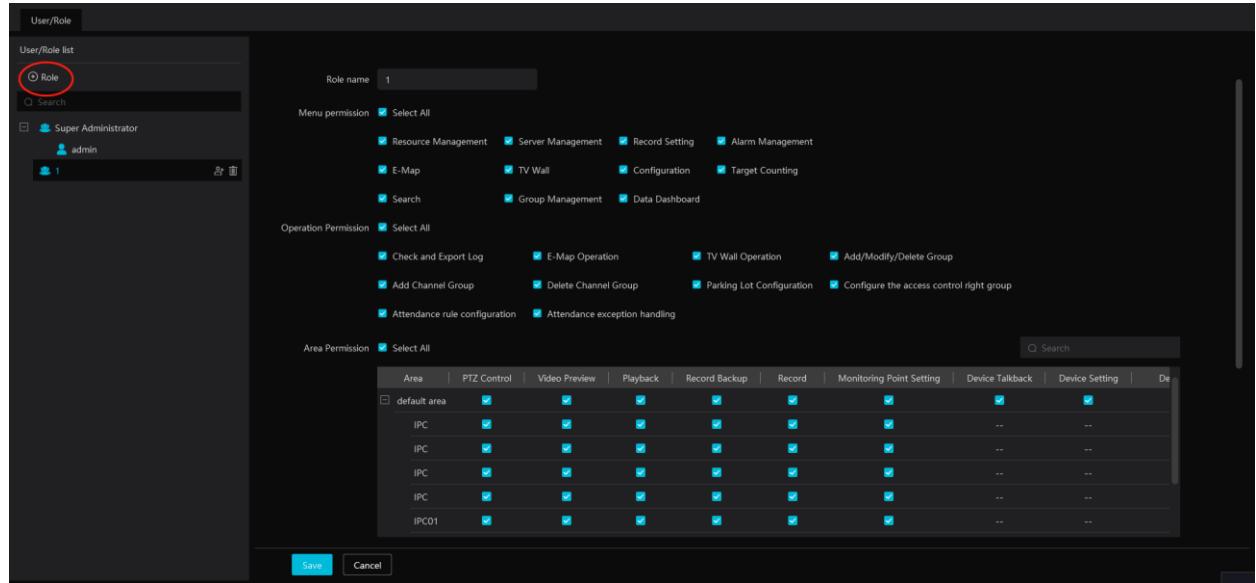
Modify the password of the super administrator:



If it is the first time for you to log in, please select the super admin user and then click [Edit Security Questions/Answers] to set the questions and answers. It is very important to reset the password if you forget your password.

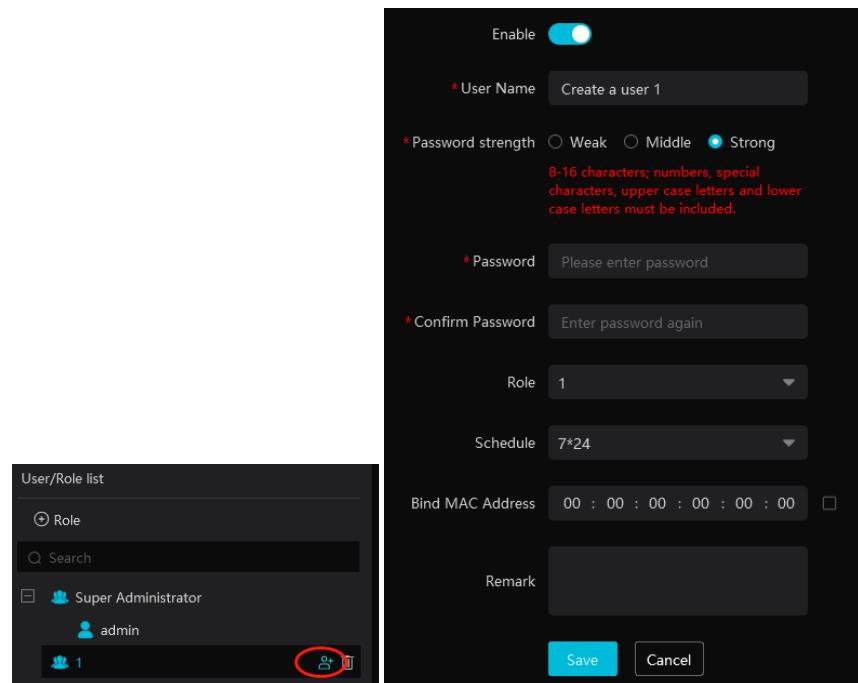
Select the super administrator and then click [Edit Security Questions/Answers] to modify the questions and answers as needed after verifying the username and password.

Click "Role" to pop up the following interface.



Enter the role name and then check the permission as needed.

Put the cursor on the added role. Two icons will appear. Click  to add a user.



After the user is added under the role, put the cursor on the user name. Then a deletion icon will appear. Click it to delete the added user.

# 15 Operation and Maintenance Management

## 15.1 Check and Export Log

Go to Home→Operation and Maintenance Management.

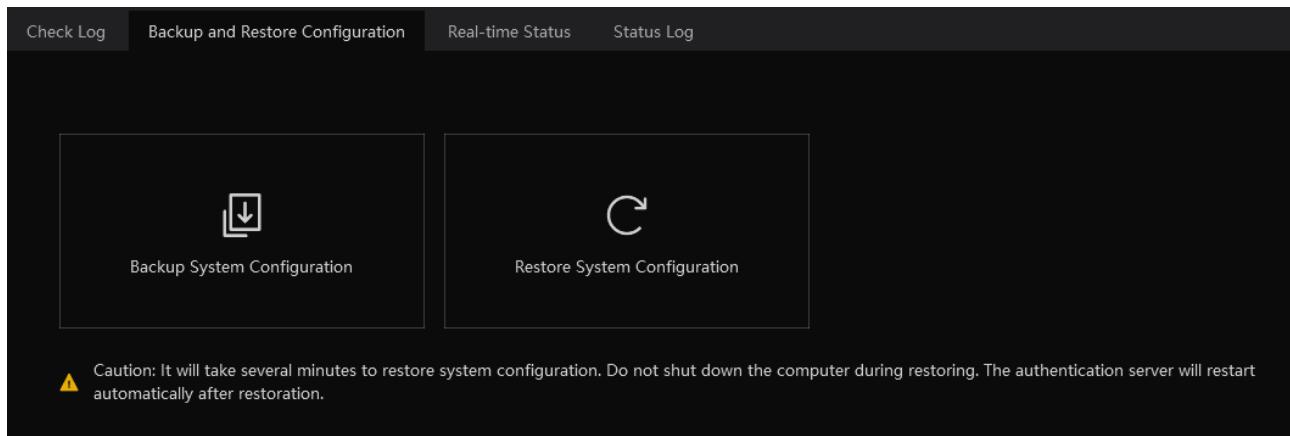
Click the “Check and Export Log” tab as shown below. All types of logs can be searched and exported here.

No.	Main Type	Record Time	Node Name	Sub Type	User Name	User Address	Details	Record & Playback	Device Playback	Storage Snap
1	Operation Log	2022-10-29 22:03:40	Client	Login/Logout	admin	admin 127.0.0.1 C02...	Login			
2	Operation Log	2022-10-29 22:03:13	Client	Login/Logout	admin	admin 127.0.0.1 C02...	Logout			
3	Log Configuration	2022-10-29 21:53:30	Client	User Parameter	admin		Edit Permission Group,Name:1			
4	Log Configuration	2022-10-29 21:53:07	Client	User Parameter	admin		Edit Permission Group,Name...			
5	Log Configuration	2022-10-29 21:52:48	Client	User Parameter	admin		Edit Permission Group,Name...			

Select the log type, set the start time and the end time and then click [Search] to search logs. After the logs are searched, click [Export] to export these logs.

## 15.2 Backup and Restore Configuration

Go to Home→Operation and Maintenance Management. Click “Backup and Restore Configuration” to go to the following interface.



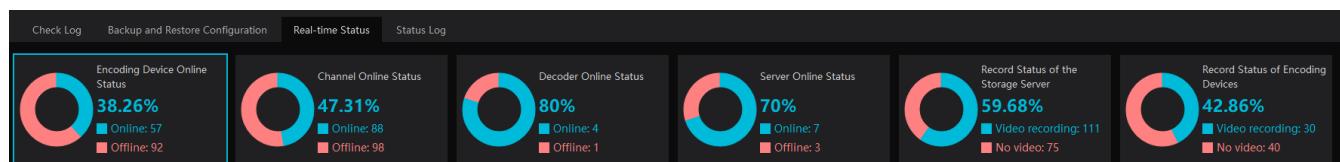
You can import the former system configuration files to the new version. Click [Backup System Configuration] in the last version to backup the system configuration files. Additionally, TV wall configuration also can be backed up as needed. Then click [Restore System Configuration] in the new version to restore the system configuration.

For TV Wall configuration restoration, you need to go to Home→TV Wall Management→TV Wall System Setting→TV Wall Backup interface and then restore TV Wall configuration by clicking [Restore TV Wall].

## 15.3 Viewing Online Status

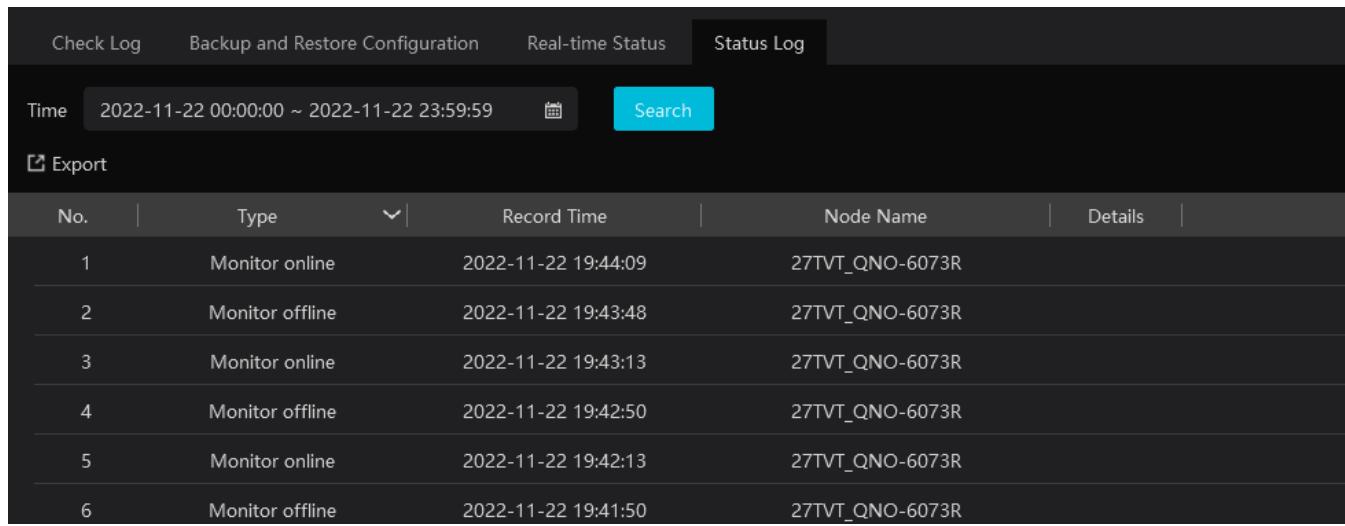
Go to Home→Operation and Maintenance Management→Online Status interface.

You can view the online status of encoding device, decoders, alarm host and storage servers and the record status of the storage server and encoding devices.



## 15.4 Viewing Status Log

Go to Home→Operation and Maintenance Management→Status Log interface.



The screenshot shows the 'Status Log' interface with the following layout and data:

- Header:** Check Log, Backup and Restore Configuration, Real-time Status, Status Log (highlighted in blue).
- Search Bar:** Time (2022-11-22 00:00:00 ~ 2022-11-22 23:59:59), a calendar icon, and a Search button.
- Export Button:** An 'Export' button with a file icon.
- Table:** A data table with columns: No., Type, Record Time, Node Name, and Details (partially visible).

No.	Type	Record Time	Node Name	Details
1	Monitor online	2022-11-22 19:44:09	27TVT_QNO-6073R	
2	Monitor offline	2022-11-22 19:43:48	27TVT_QNO-6073R	
3	Monitor online	2022-11-22 19:43:13	27TVT_QNO-6073R	
4	Monitor offline	2022-11-22 19:42:50	27TVT_QNO-6073R	
5	Monitor online	2022-11-22 19:42:13	27TVT_QNO-6073R	
6	Monitor offline	2022-11-22 19:41:50	27TVT_QNO-6073R	

In this interface, record status, online or offline status of servers and monitor client can be viewed.

Set the start time and the end time and then click [Search] to search status logs.

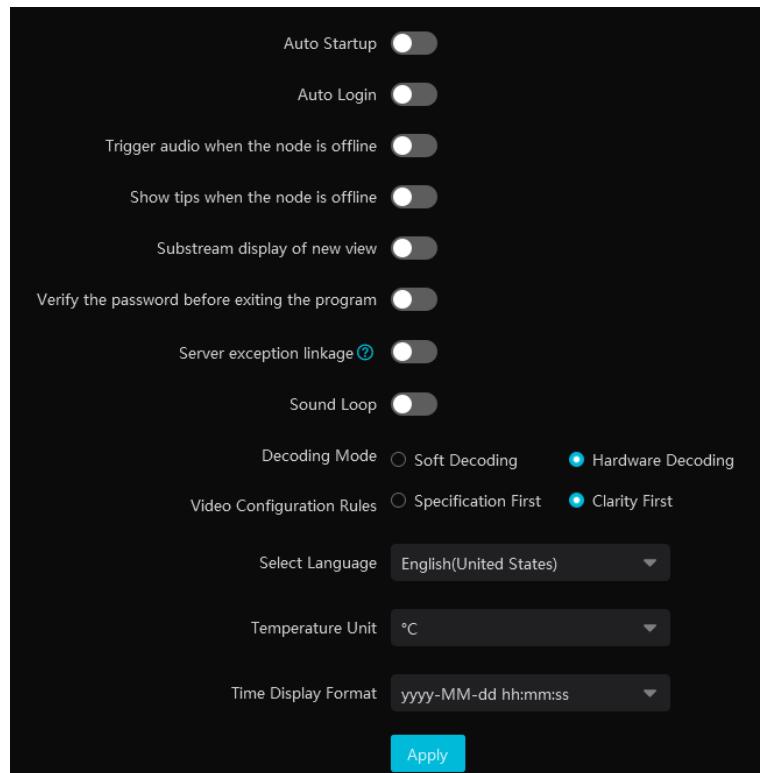
The searched logs can be exported by clicking [Export].

# 16 Configuration

## 16.1 Local Configuration

### 16.1.1 Basic Settings

Go to Home → Configuration → Local Configuration



Auto Startup: if enabled, the system will automatically start when the computer starts.

Auto Login: if enabled the system will automatically log in when running this software next time.

Trigger audio when the node is offline: if enabled, the system will trigger audio when there is node offline.

Show tips when the node is offline: if enabled, the system will pop up tips when there is node offline.

Substream display of new view: if enabled, the new view will be displayed at substream.

Verify the password before exiting the program: if enabled, you shall enter the password before exiting the program.

Server exception Linkage: if enabled, the system will skip to real-time status interface when the server error occurs.

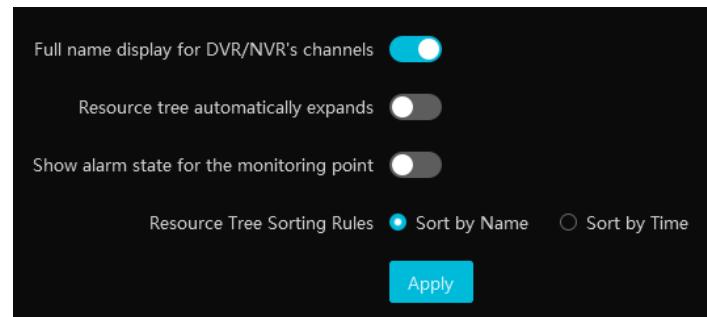
Sound Loop: If enabled, the alarm sound will be repeated continuously.

Decoding Mode: Soft decoding or hardware decoding is optional. When the graphics card doesn't support hardware decoding, please select "Soft Decoding" and the video decoding will be taken over by CPU.

Temperature Unit: °C or °F can be selected

In this interface, you can also set video configuration rules, language, time display format and so on.

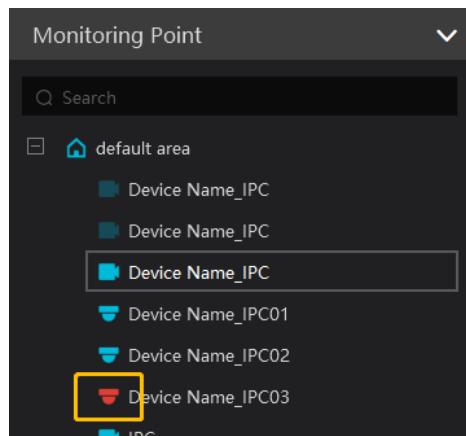
### 16.1.2 Resource Tree Settings



Full name display for DVR/NVR's channels: if enabled, the DVR/NVR's channel name listed in the resource tree will show the DVR/NVR name and the channel name. If disabled, only the channel name is shown.

Resource tree automatically expands: please enable as needed.

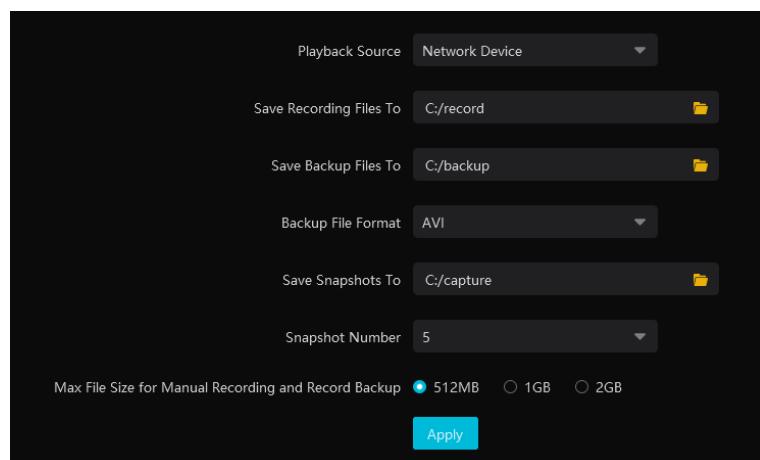
Show alarm state for the monitoring point: if enabled, the alarm state will be displayed in the monitoring point list as shown below.



In addition, you can also select the resource tree sorting rules as needed.

### 16.1.3 Record and Snapshot Settings

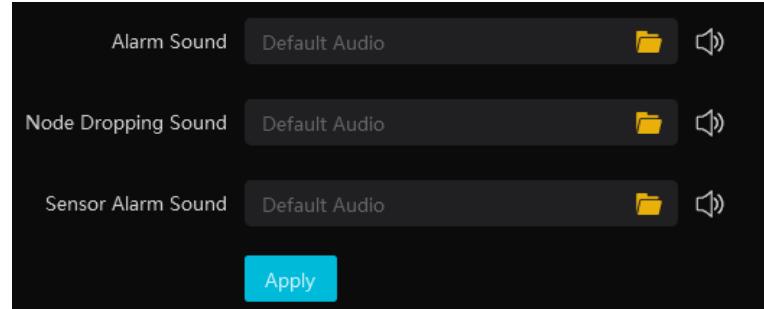
Go to Home→ Configuration.



In this interface, the storage path of recording files, backup files and snapshots, backup file format, snapshot number and max file size for manual recording and record backup can be set up here.

### 16.1.4 Alarm Sound Settings

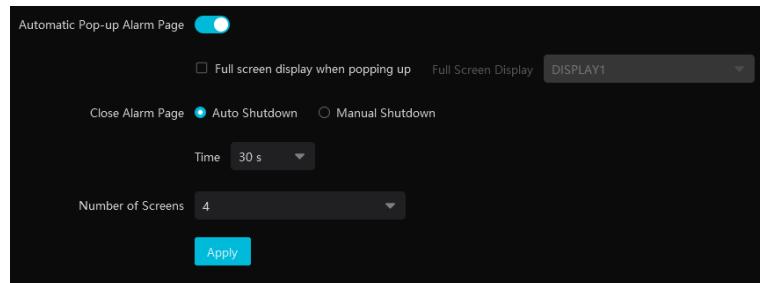
Go to Home→ Configuration→Local Configuration →Alarm Sound Setting



In the alarm audio setting interface, click to upload the local alarm sound, node dropped sound and sensor alarm sound. After these sounds are uploaded, click to listen

### 16.1.5 Alarm View Settings

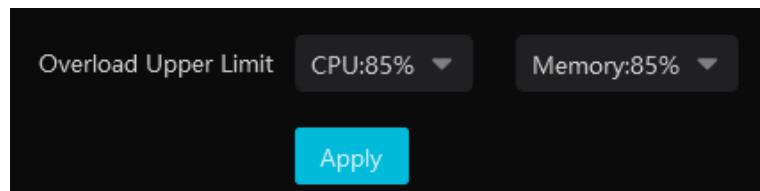
Go to Home→ Configuration→Alarm View Setting.



In this interface, users can enable “Automatic Pop-up Alarm Page” or “Full Screen Display when Popping up”, set “automatically /manually close alarm page” and select the number of screens (1/4/6/19 optional).

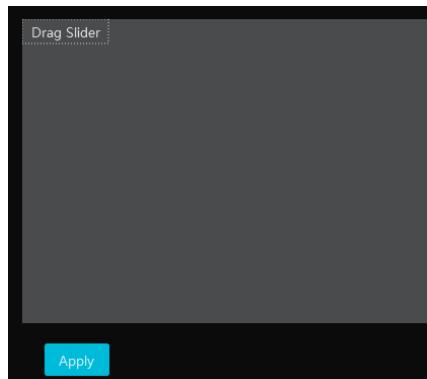
### 16.1.6 Overload Settings

This system supports CPU and memory overload protection. When the system overloads, the monitor client will restrict the new live view and playback operation and the overload tip will prompt. Go to Home→ Configuration→Overload Setting. Select the overload upper limit and then click [Apply] to save the settings.



### 16.1.7 OSD Position Configuration

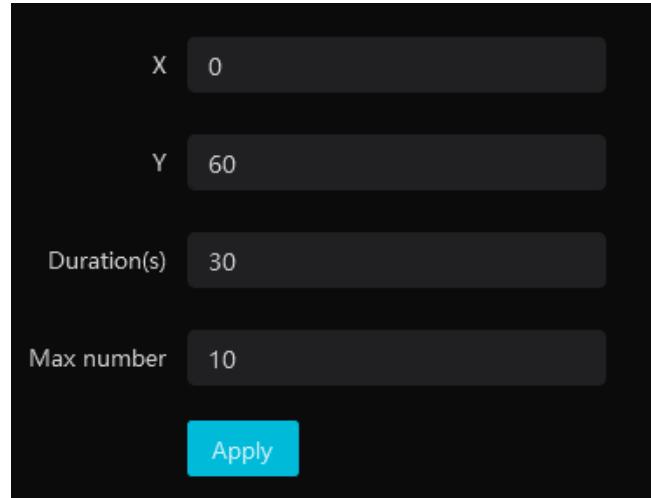
Click Home→ Configuration→OSD Position Config to go to the following interface.



Drag the slider to the position you want to show the OSD and then click “Apply” to save the settings.

### 16.1.8 POS information Settings

Go to Home→Configuration→POS Config interface as shown below. In this interface, you can set the position, display time and quantity of the POS information.



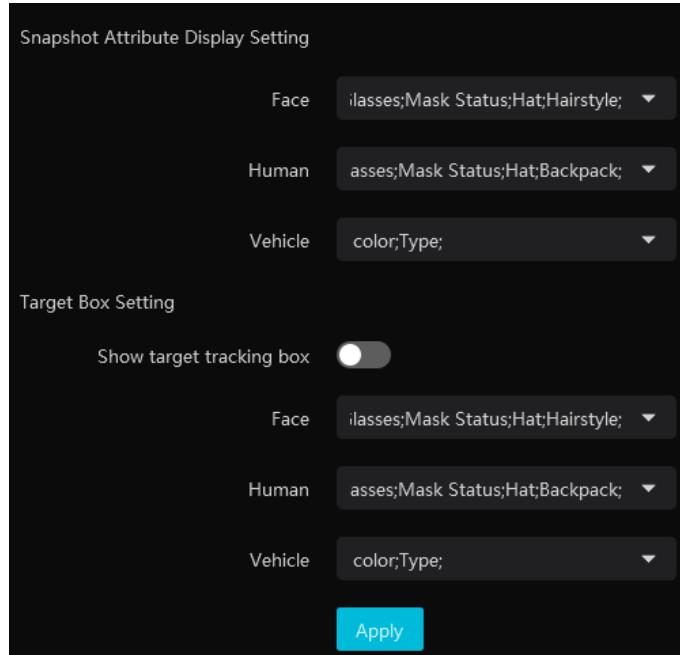
Note: The video files with POS information saved as DAT format can be played with DatPlayer and the POS information will be shown on the screen.

### 16.1.9 Snapshot Attribute Display Settings

Go to Home→Configuration→Local Configuration→Snapshot Attribute Display Setting interface as shown below.

The snapshot attribute display and target box display can be set here.

Snapshot attribute display setting: you can set the attributes of face, human and vehicle. Please select the corresponding attributes/features as needed. The attributes of smart snapshot picture will be shown accordingly.



Face attributes/features:

Including gender, age, mask status, temperature, hat, hairstyle, beard, glasses, telephone, skin, a maximum of 6 features can be shown in the smart snapshot area.

Human attributes/features:

Including gender, age, hat, glasses, mask status, glasses, backpack, shoulder bag, upper clothing color, lower clothing color, upper clothing type, lower clothing type, dress/skirt, a maximum of 6 features can be shown in the smart snapshot area.

Vehicle attributes/features:

Including color, type, one or two attributes can be displayed in the smart snapshot area.

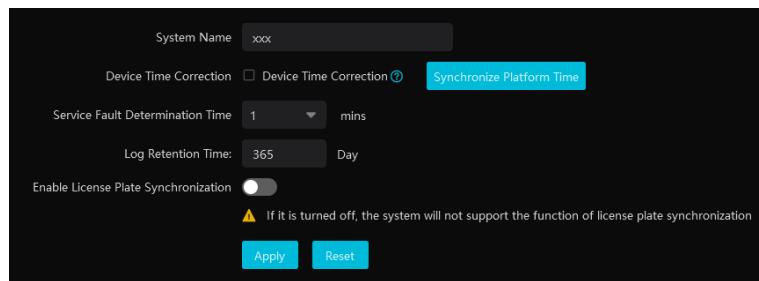
Target tracking box:

If enabled, the target tracking box will be shown on the preview/playback window which is playing the video of the IPC enabled the video metadata function.

## 16.2 Server Configuration

### 16.2.1 System Settings

Click Home→ Configuration→Server Configuration→System Setting to go to the following interface.



System Name: Set the platform display name.

Choose “Device Time Correction” and “Synchronize Time Zone” and then click [Synchronize Platform Time] to synchronize the device times with the time of the platform.

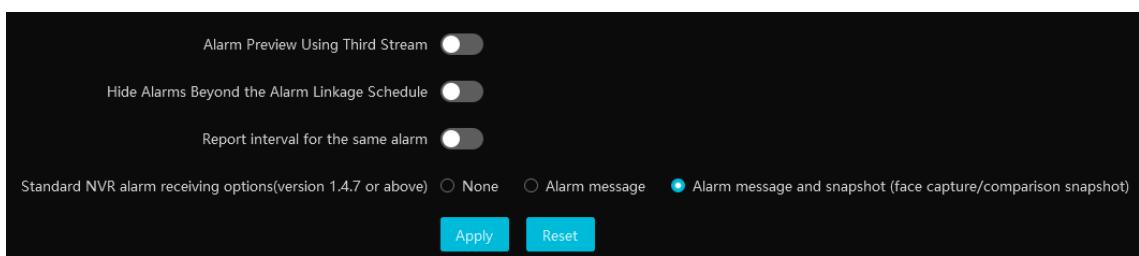
Service fault determination time: set the failure duration time. When the server failure exceeds this period of time, it will be determined as “Offline”. The spare server will take over.

Log Retention Time: set the log storage time.

Enable License Plate Synchronization: if enabled, you can use the relevant license plate synchronization functions. See the tips shown in the interface for details.

### 16.2.2 Alarm Settings

Click Home→Configuration→Server Configuration→Alarm Setting to go to the following interface.



In this interface, you can enable “Alarm preview using third stream”.

Hide alarms beyond the alarm linkage schedule: Alarms will not be viewed beyond the alarm linkage schedule.

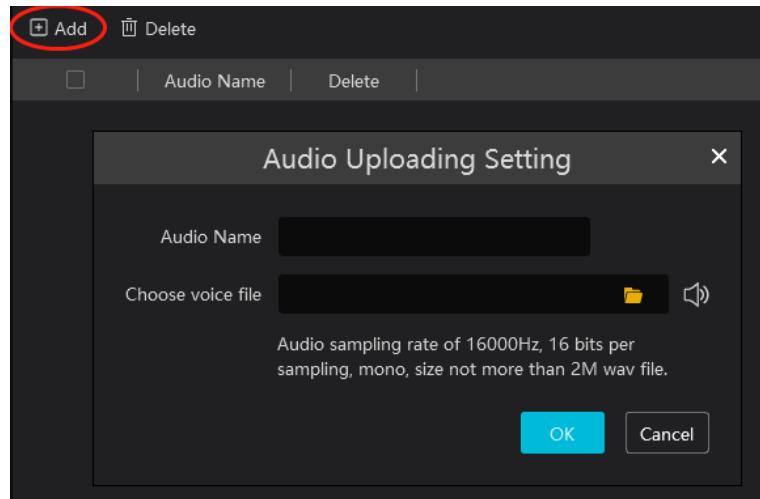
Enable and set the same alarm reporting interval and its linked alarm type. After that, the alarm type will automatically report according to the set interval.

Standard NVR alarm receiving options: please select to receive alarm information or snapshot and alarm information of NVR as needed.

### 16.2.3 Audio Uploading Settings

Go to Home→ Configuration→Server Configuration→Audio Uploading Setting.

Click [Add] to bring the following box.

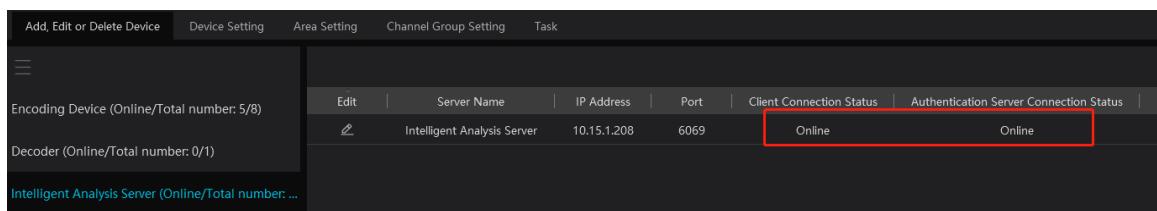


Click to choose the audio file and then enter the audio name. Click [OK] to save this audio. After the audio is uploaded successfully, you can listen to it.

# 17 Data Dashboard

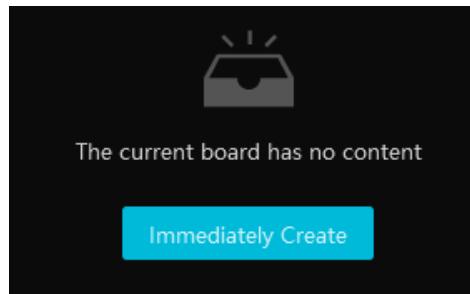
Before opening the data dashboard, please make sure the intelligent server is online.

Go to Home→Resource Management→Intelligent Analysis Server interface. There is a default intelligent server and make sure it is online.

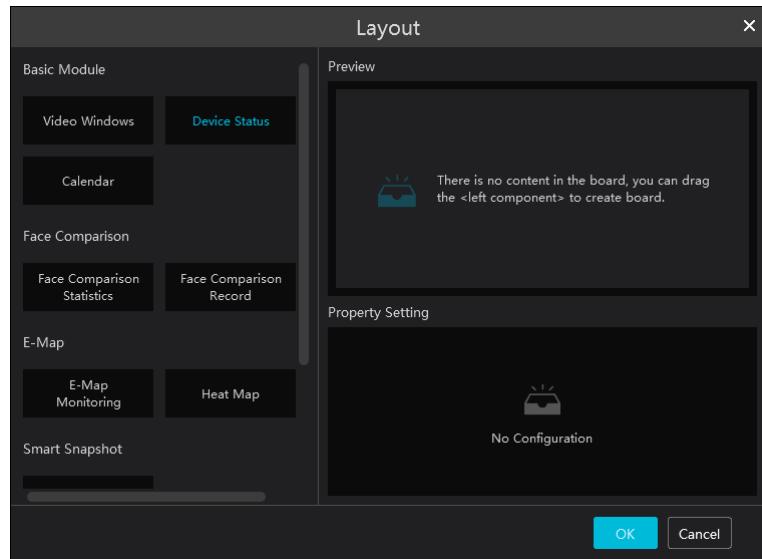


## 17.1 Create Intelligent Dashboard

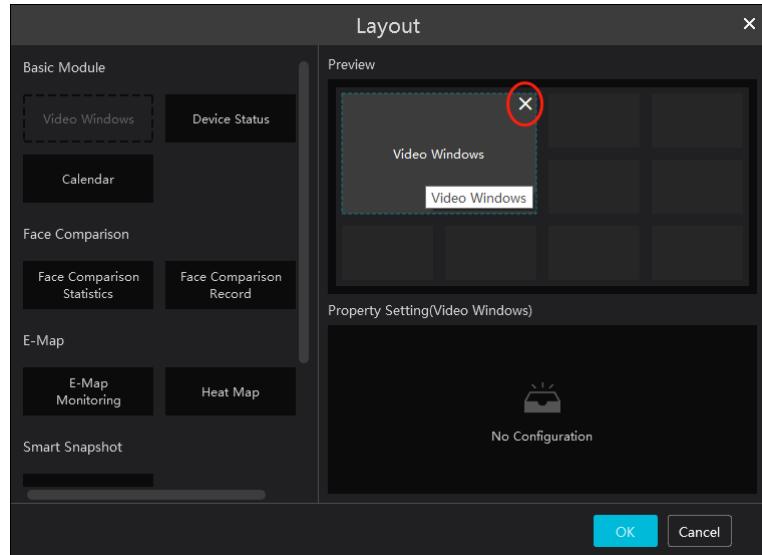
Go to Home→Intelligent Dashboard.



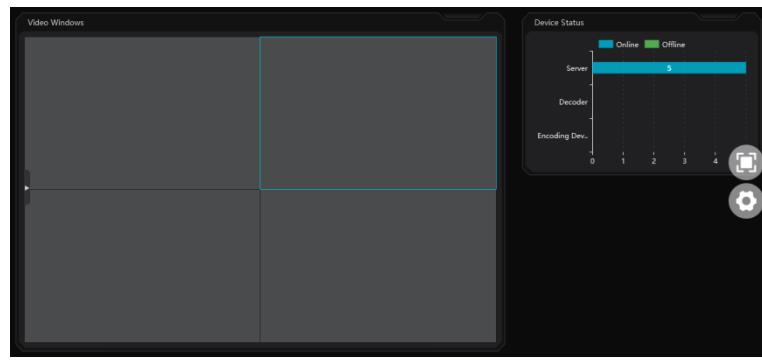
Click [Immediately Create] to create the layout of the data dashboard. Drag the module you want to display to the right preview window as needed. After that, click [OK] to save the settings.



Hover the cursor onto the module in the preview window and then you will see a deletion button (X). Click it to remove the module from the preview window.

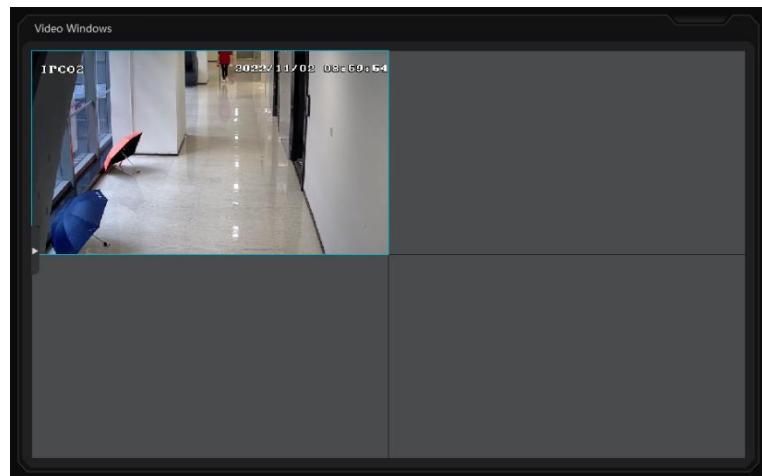


After the data dashboard is created, click  to display it in full screen mode. Click  or ESC to exit the full screen mode. Click  to set the layout of the dashboard.

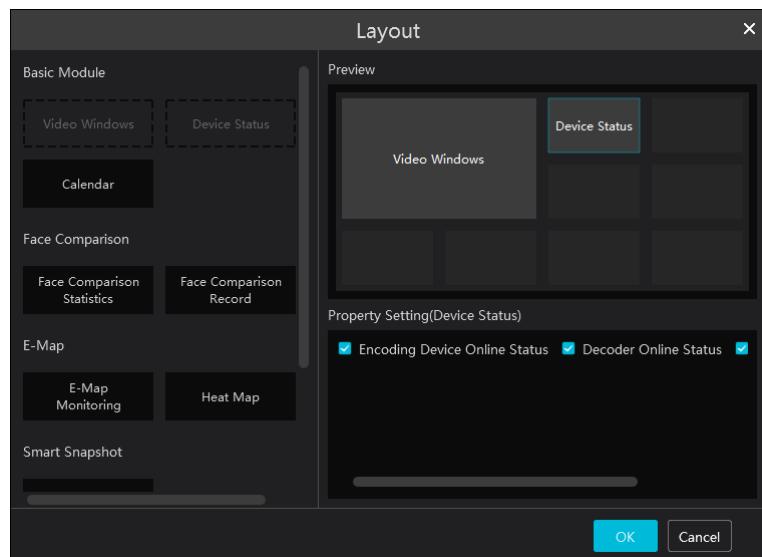


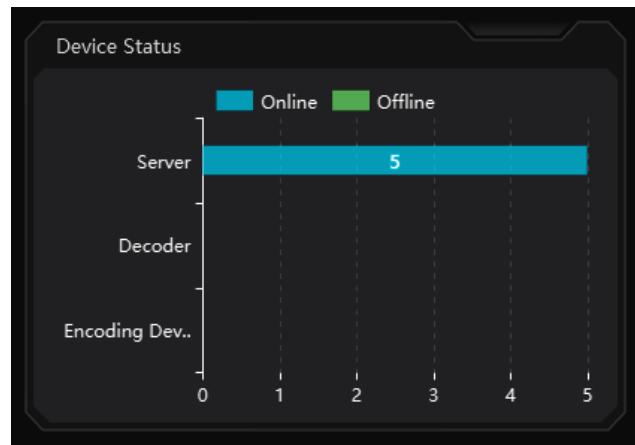
## 17.2 Basic Module

Video window supports 4-screen display mode. Click  to extend the monitoring points. Drag the camera to the preview window or double click the camera to play the video. You can drag the playing window to other windows.



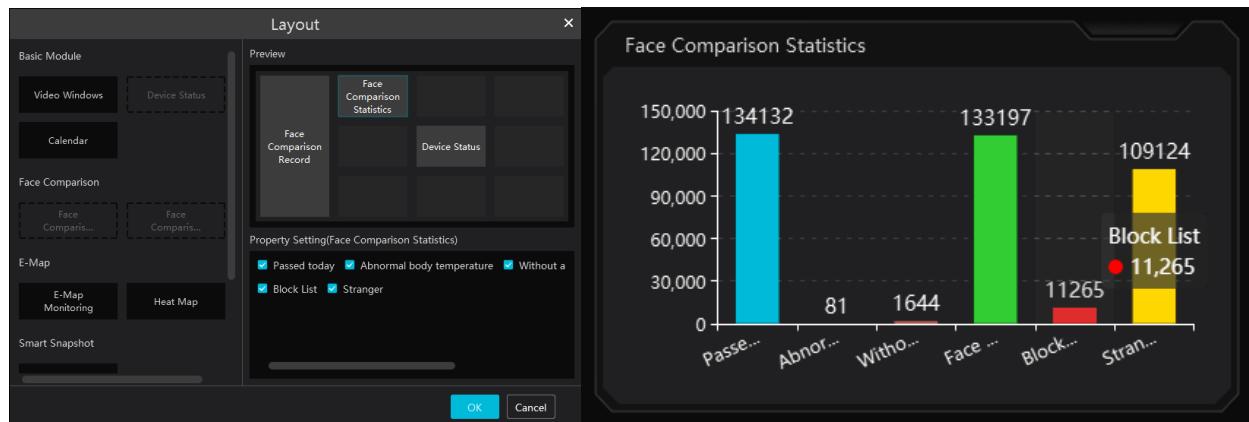
Other modules can set its attributes that you want to display as needed.





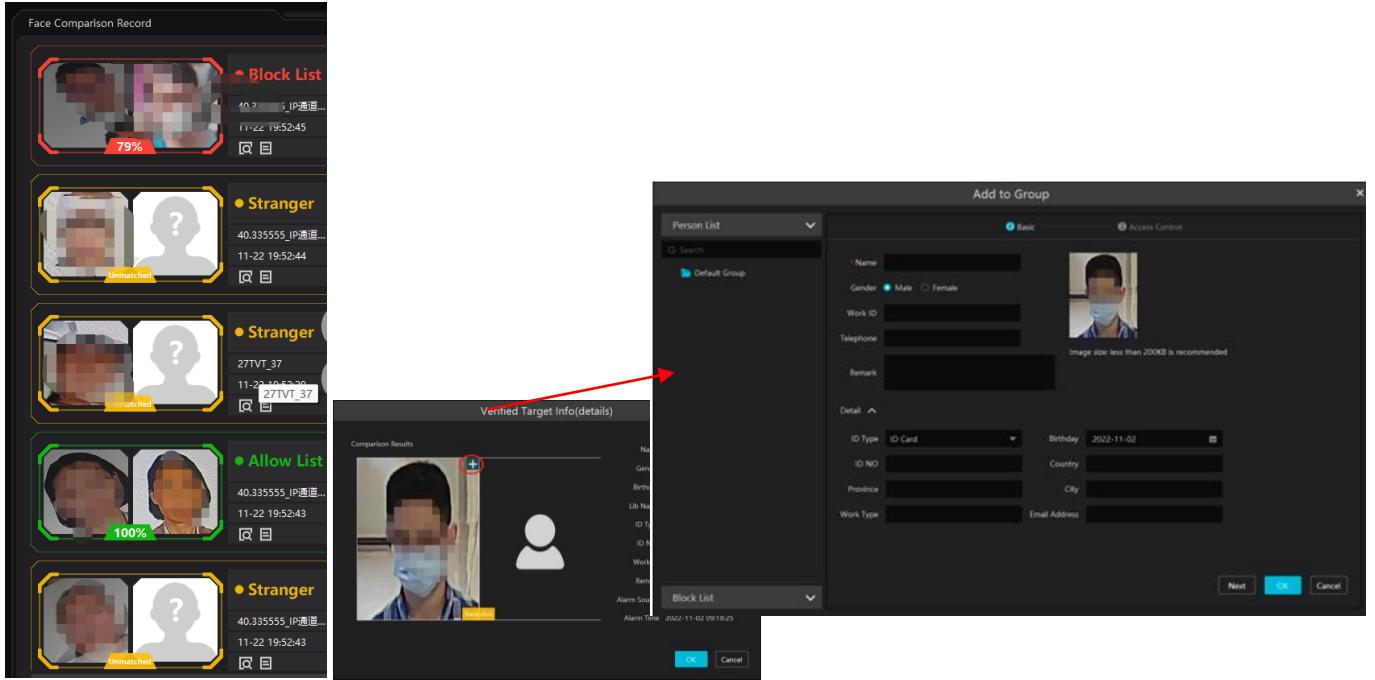
## 17.3 Face Comparison Display

Face Comparison display includes face comparison statistics and face comparison record display. In the layout interface, drag these two modules to the preview window. Then you can set the attributes as needed.



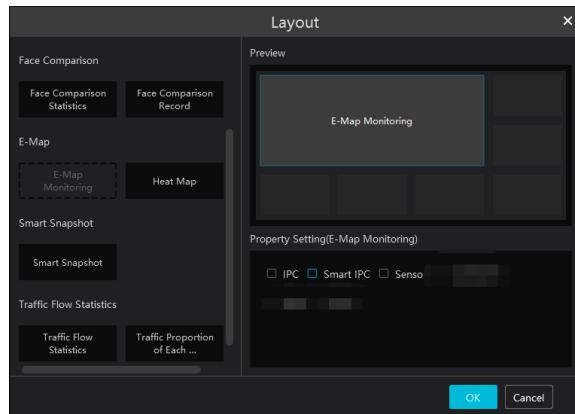
Smart Snapshot module: You can set the snapshot channel and attributes.

In the face comparison records, you can view the comparison similarity. Click to quickly skip to face comparison retrieval interface. Click to pop up the detail box. In this box, you can modify the personnel information; click to add this person to the face database.



## 17.4 E-map Display

E-Map includes E-map monitoring and heat map analysis. The layout settings are as follows.



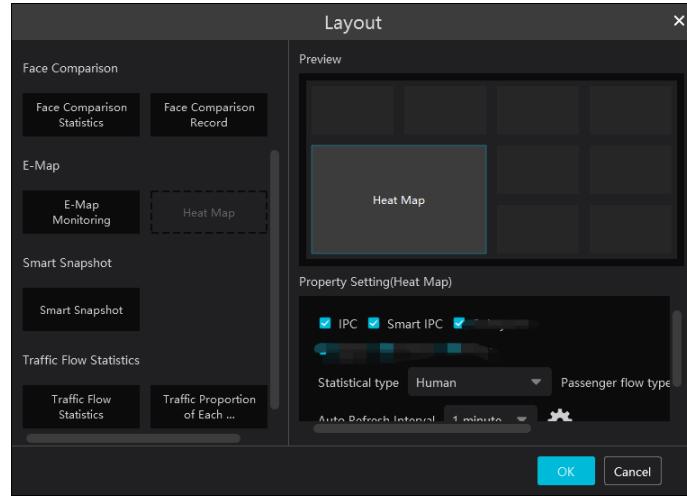
You need to set the hotspots in advance and then you can view here. Please refer to E-Map → E-Map Monitoring for details.



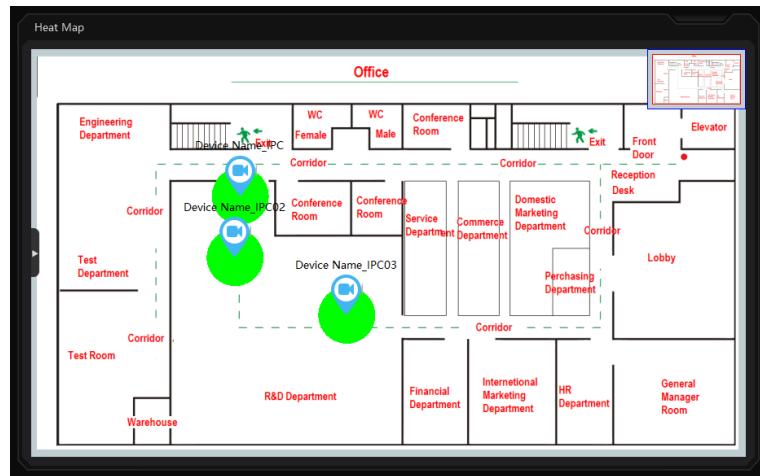
Heat map module: The more people/vehicles enter, the deeper the color is. Move the cursor on the monitoring point to view the current

traffic flow. You need to set the E-map and hotspots in advance. Please refer to E-map settings chapter for details.

Besides the above hotspot setting, you can set other parameters as shown below.

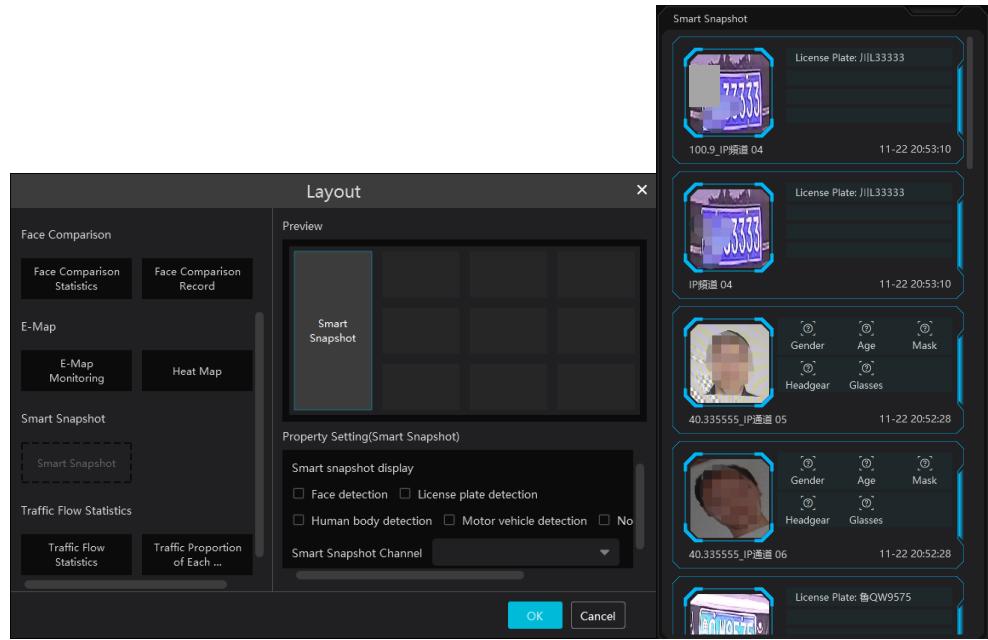


In the heat map module of the intelligent dashboard, you can view the statistics of human/motor-vehicle/non-motor vehicle.



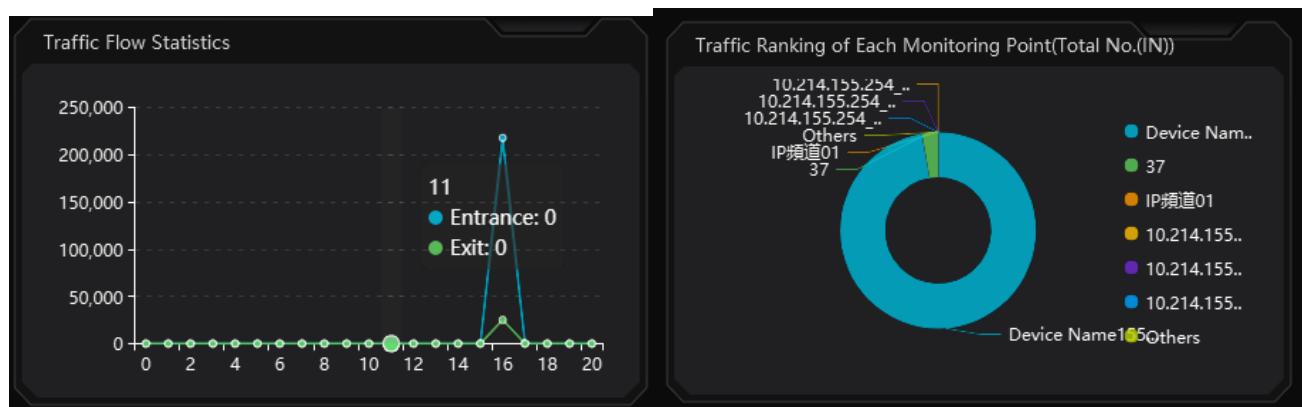
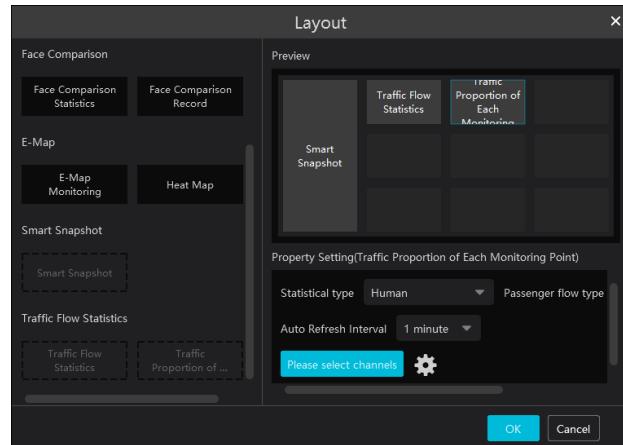
## 17.5 Smart Snapshot Display

You need to set the snapshot attributes in the layout interface and then the relevant data can be viewed on the dashboard. The smart snapshot type includes face, license plate, human body, motor vehicle and non-motor vehicle. Please select them as needed.



## 17.6 Traffic Flow Statistics Display

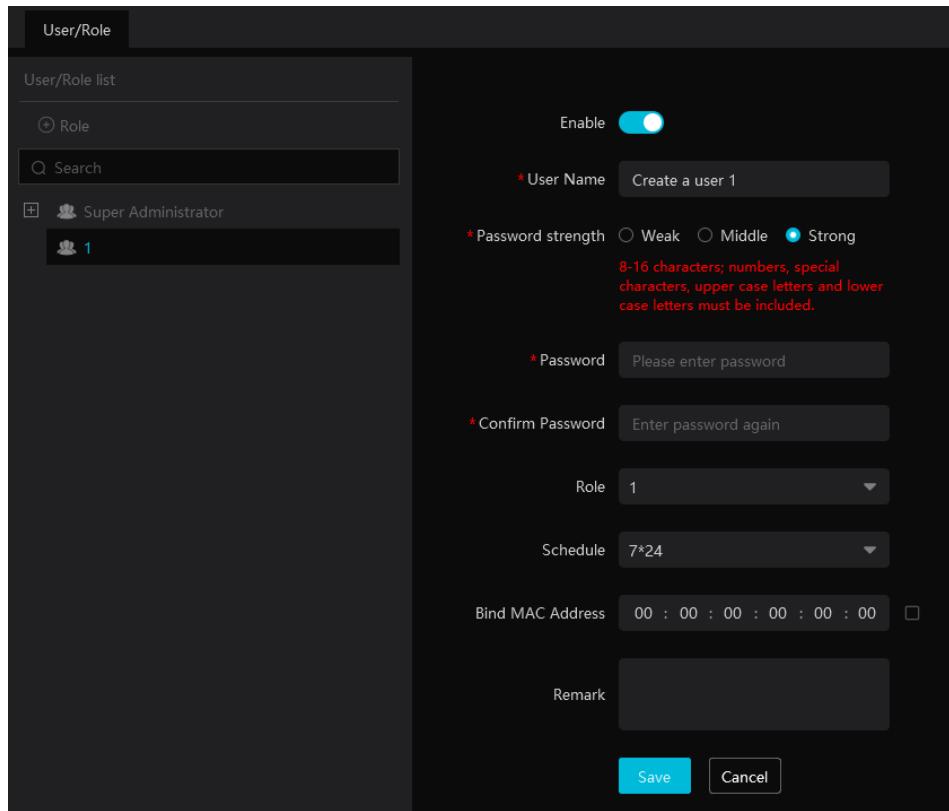
You need to set the statistical type, auto refreshing interval and channel in advance. Please refer to Target Counting →Task Management for details. Then set the layout of traffic statistics and display attributes.



# 18 Troubleshooting

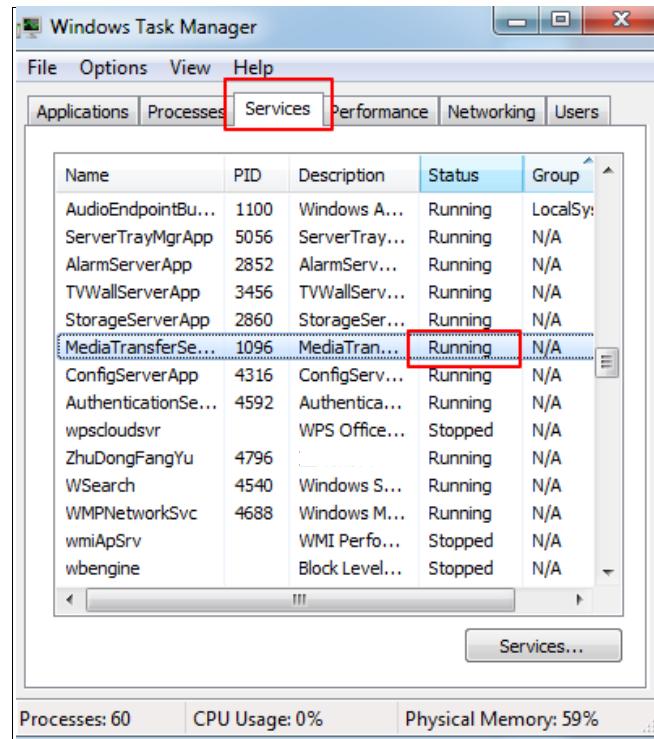
## 1. How to modify the password by yourself?

Login monitor client and then go to the User Management interface. Select the user to modify the password. Then click [Save].



## 2. Unable to work normally after starting server.

- 1) Please check whether the port is occupied and view the run status of the service as shown below



## 3. The device information cannot be seen or the device is offline after the user logs in to the monitor client.

- 1) Please check whether this user account is an administrator account. If this account is an operator account, please check whether it has

the authority to view the device information.

- 2) Please check whether the media transfer server of the device has been started.

#### **4. The alarm information cannot be received after the user logs in to the monitor client.**

- 1) Please check whether the schedule of the event (including motion alarm, sensor alarm, line crossing detection, etc.) is set in the NVMS system.
- 2) As for remote login device in the monitor client, please check whether alarms and alarm schedules of the remote login device have been enabled.

#### **5. The record cannot playback after the user logs in to the monitor client.**

- 1) Please check whether the storage server is online. If it is online, please check whether this account logged on has playback permission.
- 2) Please check whether the record source selected has record data. If you want to get record data from a storage server, please check whether to set the record schedule of the storage server or not.
- 3) Check whether there are record data in the playback channel and whether the record source and the start time and the end time of the playback are set up correctly.
- 4) Please check the record schedules of the storage server are set correctly.

#### **6. The configuration of devices cannot be modified remotely after the user logs in to the monitor client.**

- 1) When the device configuration is required by the monitor client and prompts “Someone is configuring. Please try later”, please open the IE browser to log in to the device remotely and then go to “Online user” interface to see if there are any other users logging in.
- 2) Please go to the live to see whether the device is being set up.
- 3) If the problem still exists, please contact your device manufacturer.

#### **7. The preview image on the client cannot display fluently.**

- 1) Please check whether the CPU occupancy rate of the client platform is 100% or there still has usable memory. This situation will not emerge when the CPU occupancy rate is less than 75% and there still has usable memory.
- 2) Please check whether the network environment is supported, including whether the uplink bandwidth of the device and stream match and whether the downlink bandwidth of the media transfer server and the streams of all channels of devices match.
- 3) Please check whether the media transfer server is overload operation.

#### **8. After starting the authentication server and media transfer server, the storage server still cannot save.**

- 1) Please check whether channels of devices are added to the storage server.

### **Notes**

1. Please use super administrator or standard user (permission control is set to “Never Notify”) to log in operation system, install and use servers and client software.
2. The resolution of the surveillance client’s monitor shall be more than 1280\*960.