Viewtron VMS Software

User Manual

CMS Software for Windows and Mac PCs

Viewtron Security Camera Systems

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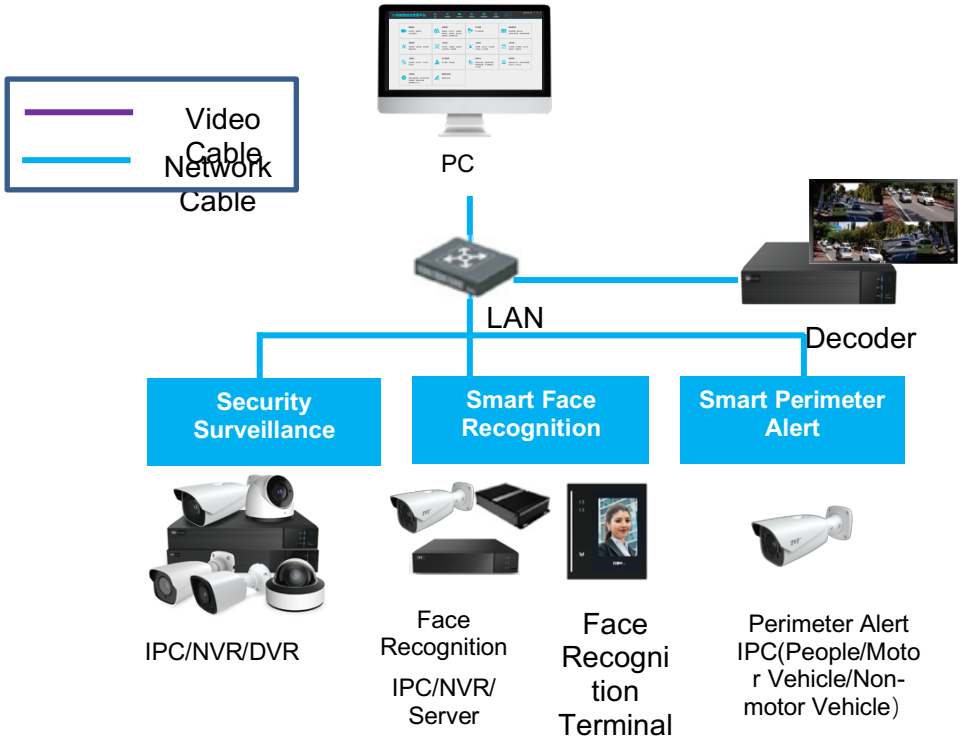
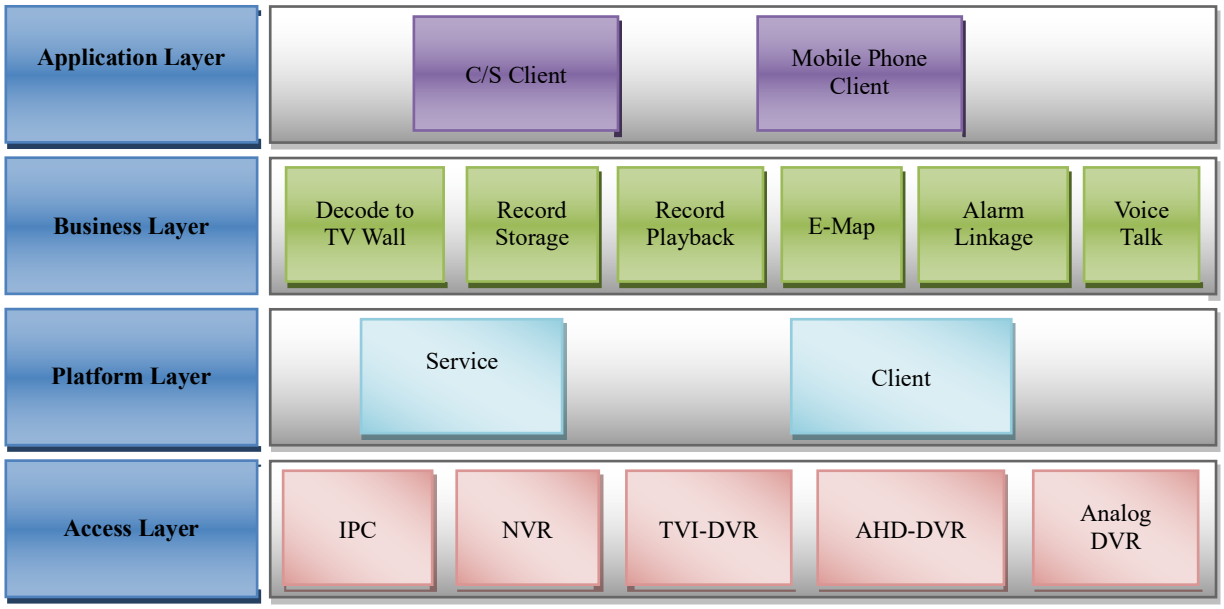
1 Introduction

1.1 Introduction

Viewtron NVMS (network video management software) is used to centrally manage and view Viewtron NVRs, DVRs, and IP cameras from Mac and Windows PCs. This is sometimes called CMS software (central management software). The Viewtron NVMS software supports real-time security camera viewing (remote Internet & local network), record storage, record playback, record download, alarm linkage, TV wall camera display. Viewtron NVMS is applicable to small, medium, and enterprise sized video surveillance applications. Some examples are home security camera systems, industrial parks, education / universities, banking, retail / chain stores, storage facilities, office buildings and transportation.

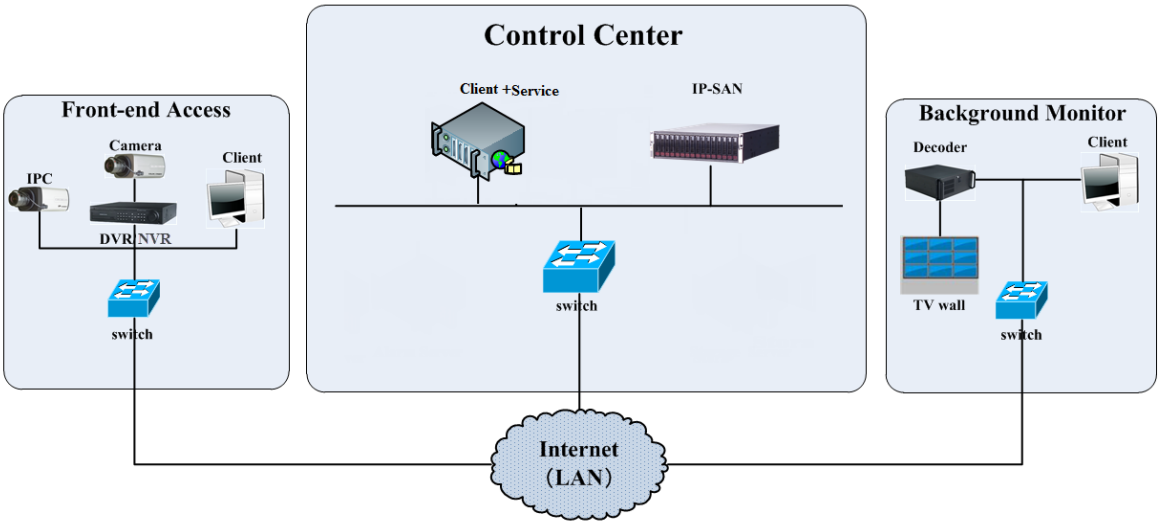


1.2 Software Architecture



1.3 System Components

1.3.1 System



1.3.2 Front-end Access

- Front-end devices include IP Cameras, DVRs and NVRs.
- You need to connect monitor devices such as IP Cameras, DVRs and NVRs 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 Client, Configuration Management Center and Monitor Client.
- 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

- In the control center, NVMS lite realizes various services, such as, video transmission, recording, decoding on TV wall, etc.
- In the control center, add IP-SAN storage array to realize centralized storage.
- In the control center, connect servers and IP-SAN storage array to internet through switches.
- Please set up IP addresses in accordance with the actual situation.

Note： If servers are installed in the same PC, these servers shall have the same IP address.

1.4 Version

Version	Max signal access
Viewtron 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 /1T SATA/ 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 7 SP1 64bit Professional/Ultimate Windows 10 Professional/Ultimate/Home 64bit	As needed

2.2 Requirement for Firewall

In order to ensure network security, it is necessary for the system to set up a firewall. All monitor ports should 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

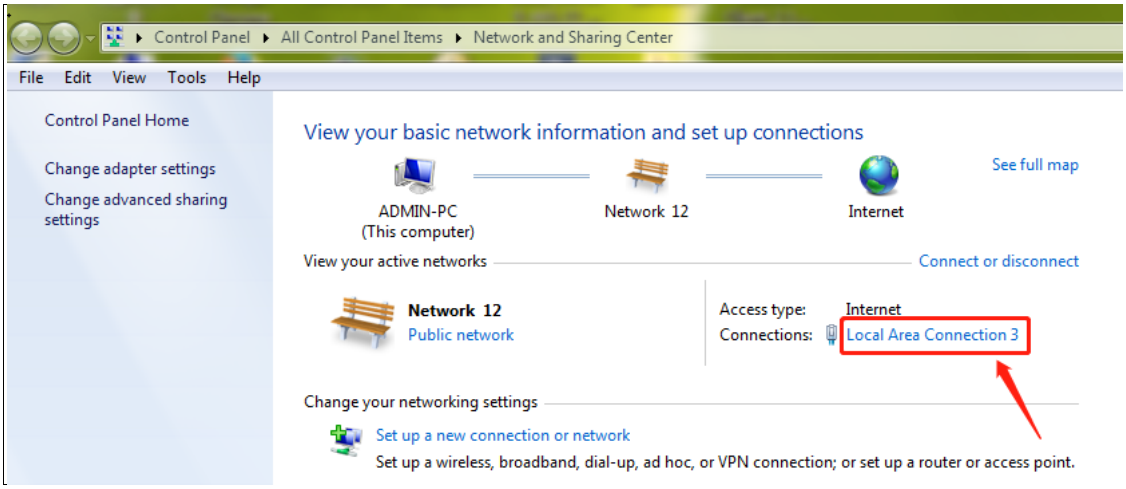
Item	Checkup Standard
Hardware	Check whether the hardware meets the standard required. (including CPU, memory, HDD, etc.)
Software	Check whether the software meets the standard required. (including the type and version of the operation system, NVMS version, etc.)
Front-end device	Check whether the device 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

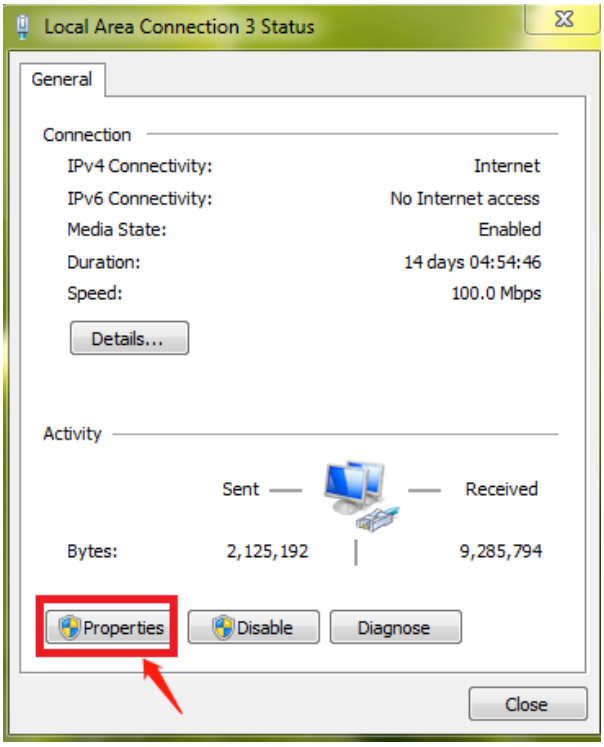
The IP address of the server (computer) is the IP address of the platform. Please make sure the platform and other devices are connected to the WAN/LAN. It is recommended that the platform and the devices that are about to be added to the platform are in the same local network segment. Here is how to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

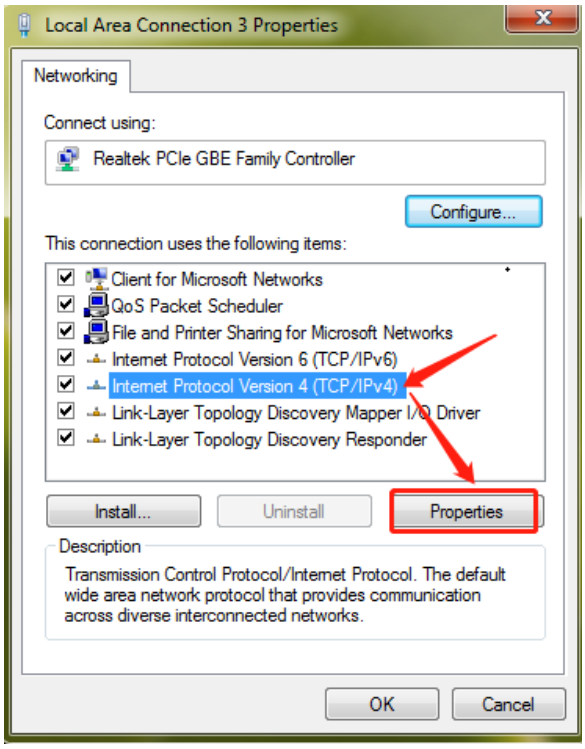
1. Connect the network cable to the server, power on and start the server.

2. Click at the lower right corner of the computer desktop and then click “Open Network and Sharing Center” as shown below.

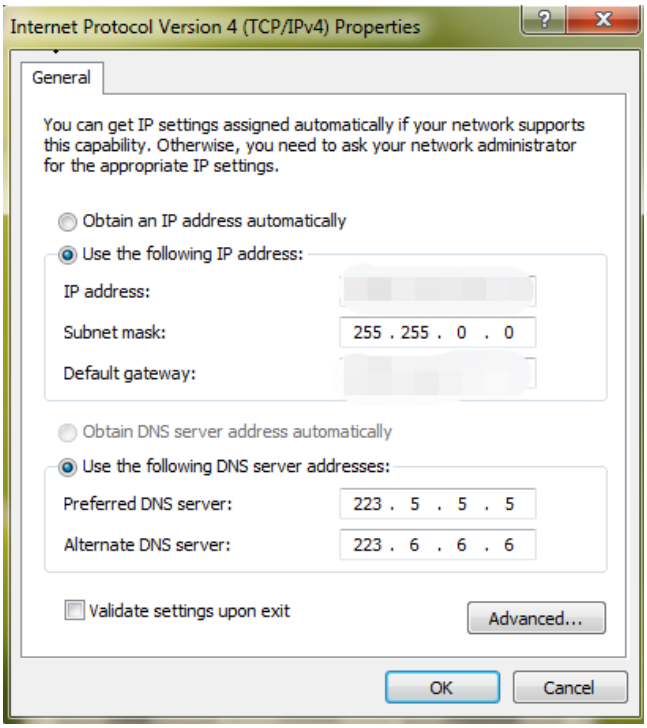


3. Click “Local Area Connection x” → “Properties”.
4. Select IPv6 or IPv4 according to the actual network environment. Here we take IPv4 as an example. Then click “Properties” of IPv4.





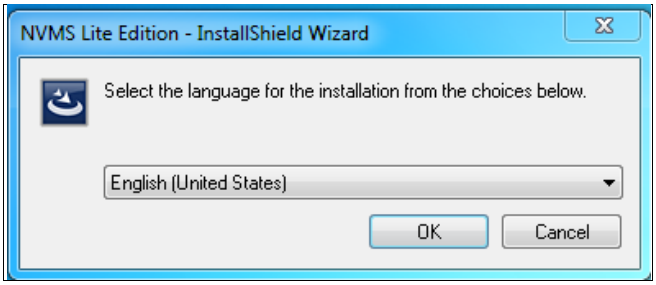
5. Select “Use the following IP address” and then configure the IP address, default gateway and DNS server addresses according to the actual network environment. After that, click “OK” to save the settings.



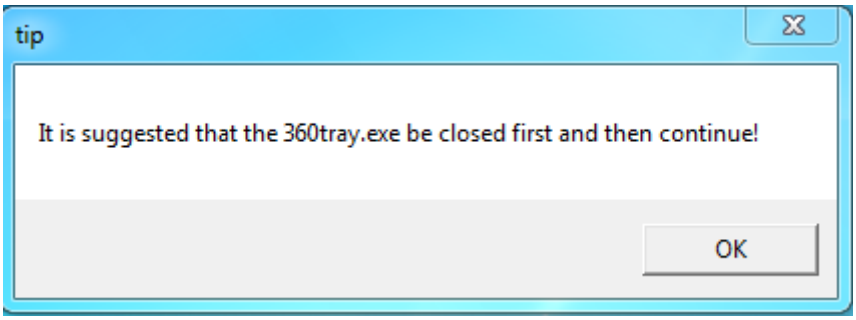
3 Install and Uninstall the Software

3.1 Install the software

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

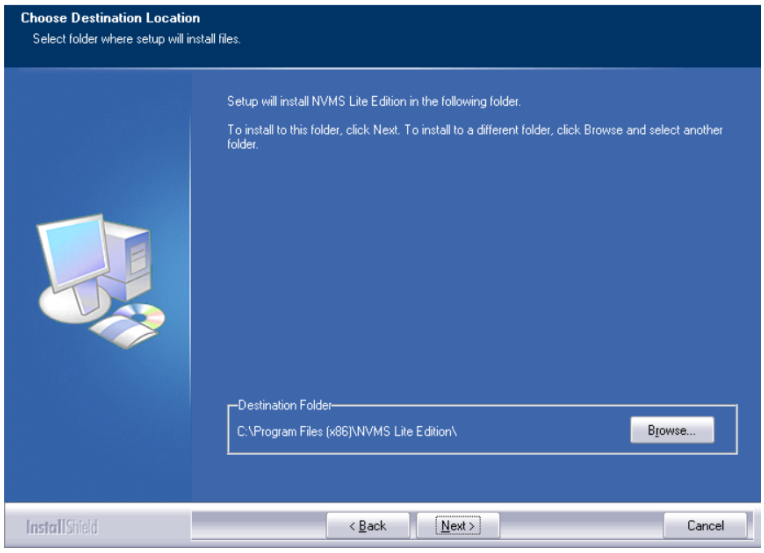


2) A tip will pop up to suggest you to close the antivirus software. If no prompt window appears, please skip this step.

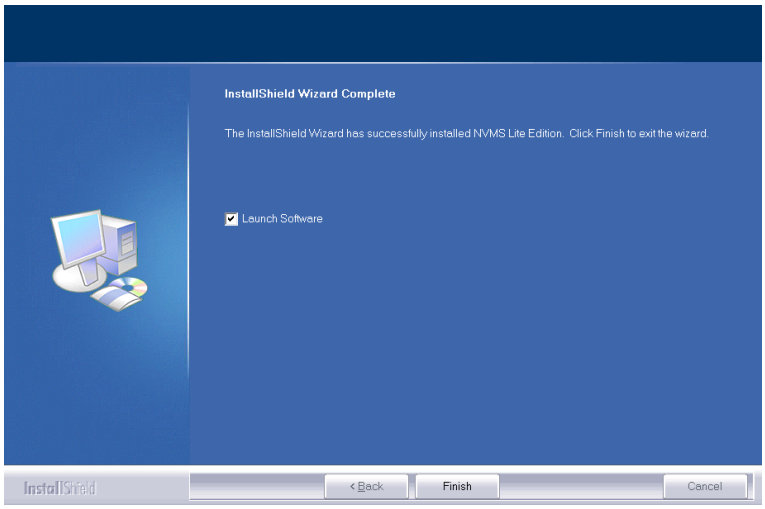


3) Click “I accept the terms of the license agreement” and then click [Next].

4) Click [Browse] to select the installation location and then click [Next].



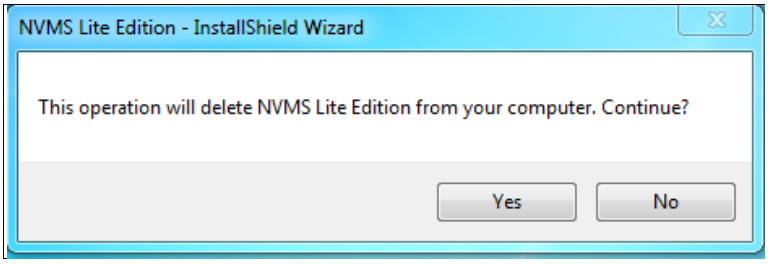
5) Check “Launch Software” as needed and then click [Finish]”.



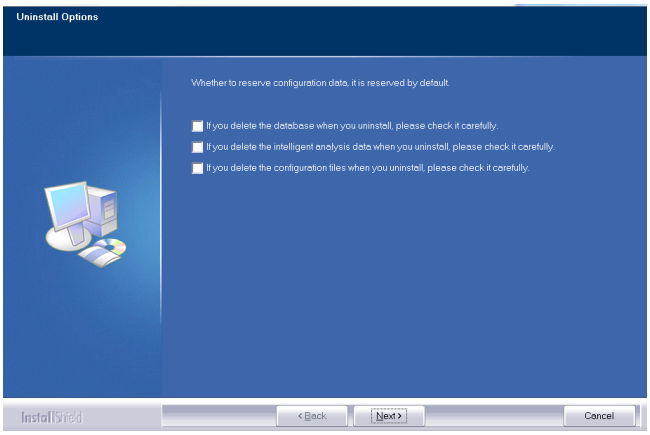
3.2 Uninstall Software

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.



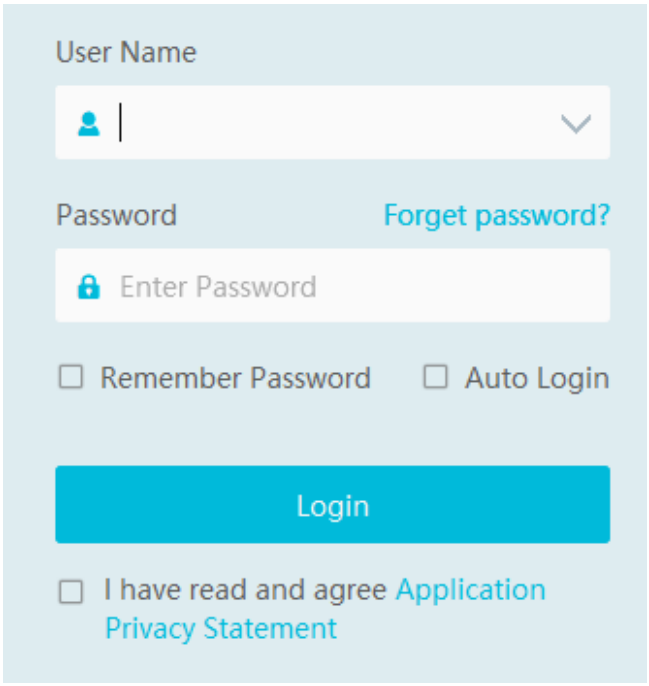
Select whether to delete the database, intelligent analysis data or configuration files as needed. Then clicking the “Finish” button ends the uninstallation.



4 Login

4.1 Login

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

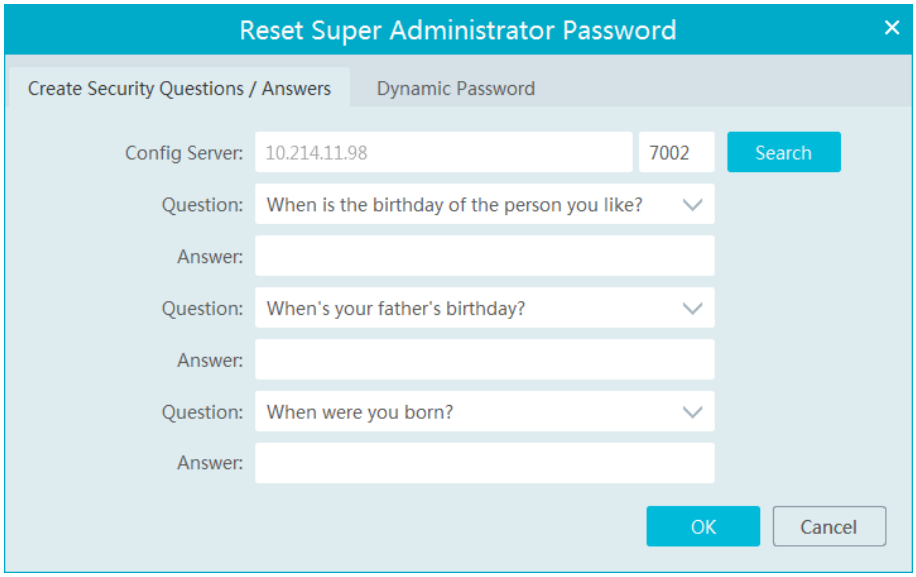


① Enter username and password (the default username is admin; the default password is 123456). Check “Remember Password” or “Auto Login” as needed.

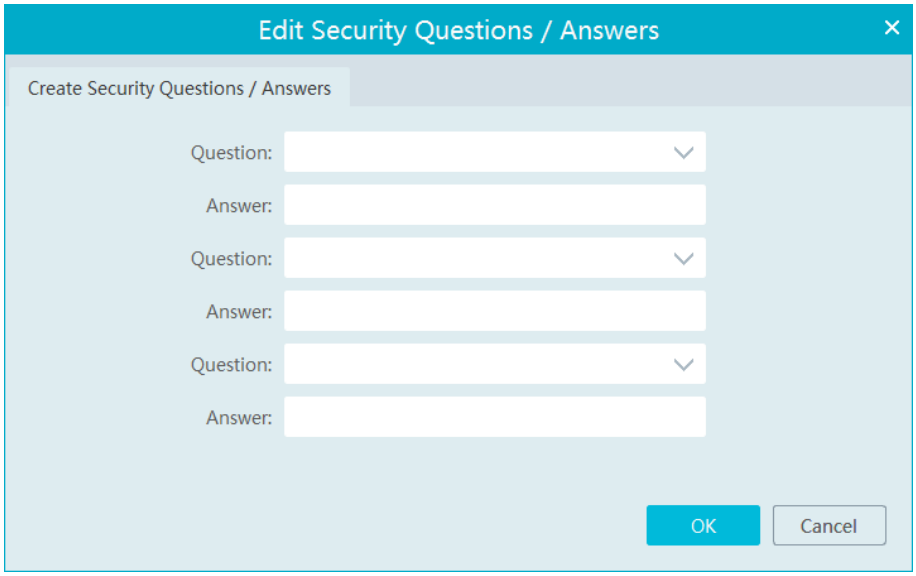
② Check “I have read and agree Application Privacy Statement”.

③ Click [Login].

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



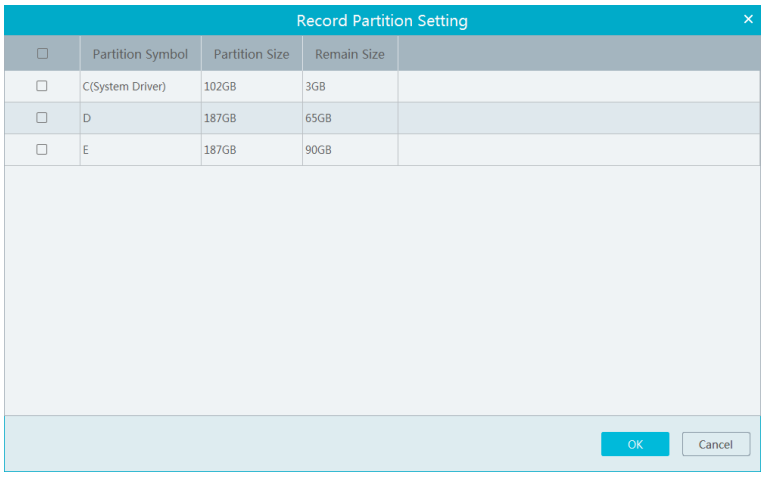
If this is the first time for you to log in, please create security questions and answers. (Go to Home → User and Permission →User Management→Edit Security Questions/Answers)



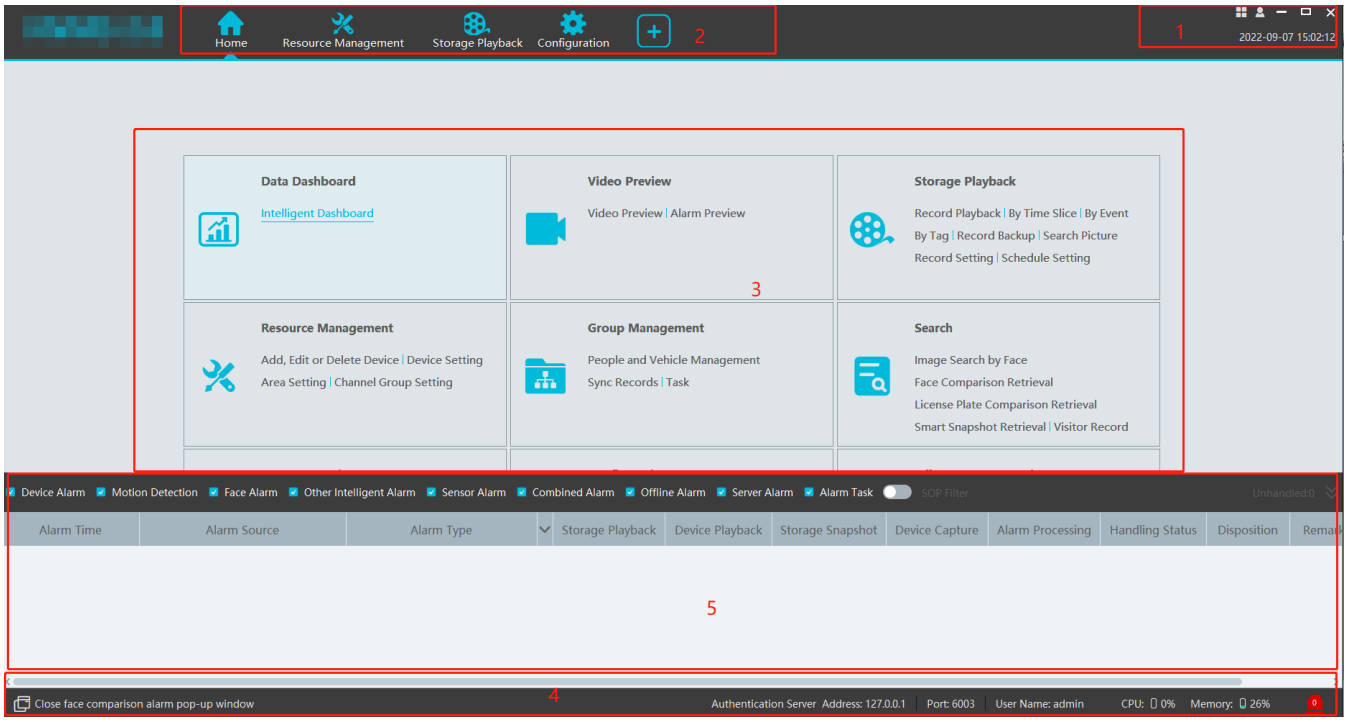
It is important that you remember the answers for these questions or you will not be to reset your password and be locked out.

If you don't set 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.

After you log in, a record partition setting box will pop up. Please select the desired record storage location. Then click [OK] to save the settings.



4.2 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”, “Modify Password”, “User Manual” and “Skin”

Functional area

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

User and Permission	To add, modify or delete user account and set permissions for these accounts.
Alarm Center	To set alarm linkage, schedule, SOP, E-mail, SIRA, alarm task and so on; To search alarm logs.
Target Counting	To monitor and analyze people/vehicle flow in real time
Operation and Maintenance Management	To search, export and maintain logs; To back up or restore configuration; To display device/server/record status
Configuration	To set record path, snapshot path, system startup and maintenance, overload and alarm view.
Edit Common Function	To select the functional module you want to display in the home page

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.

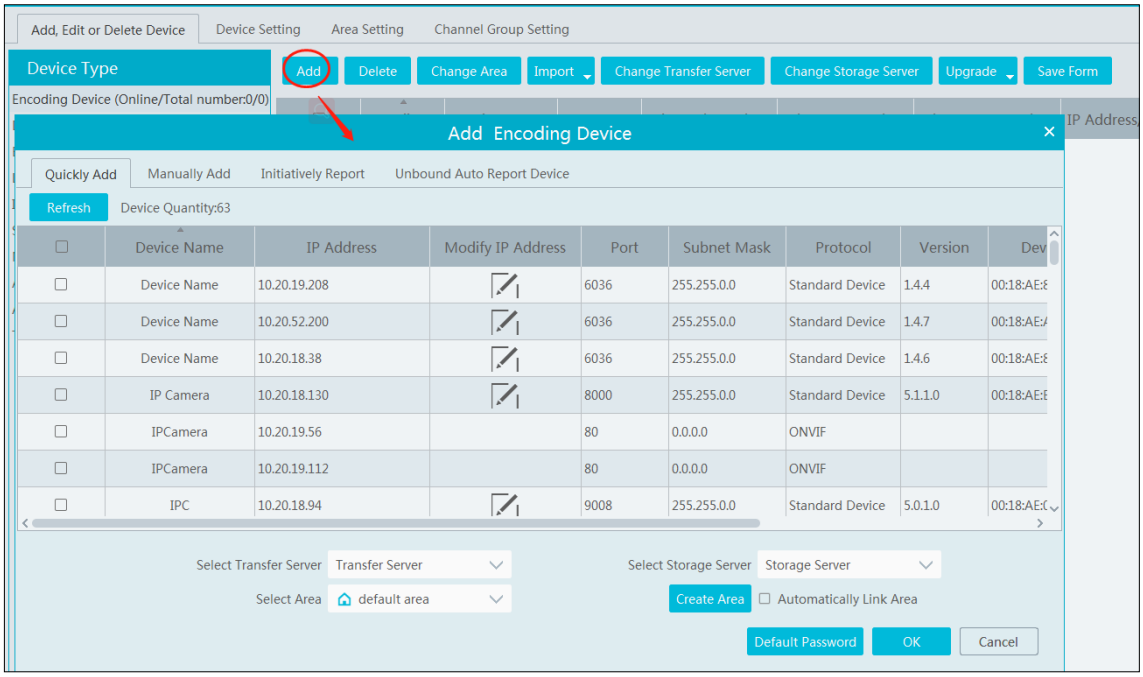
Common buttons:

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

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.



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].

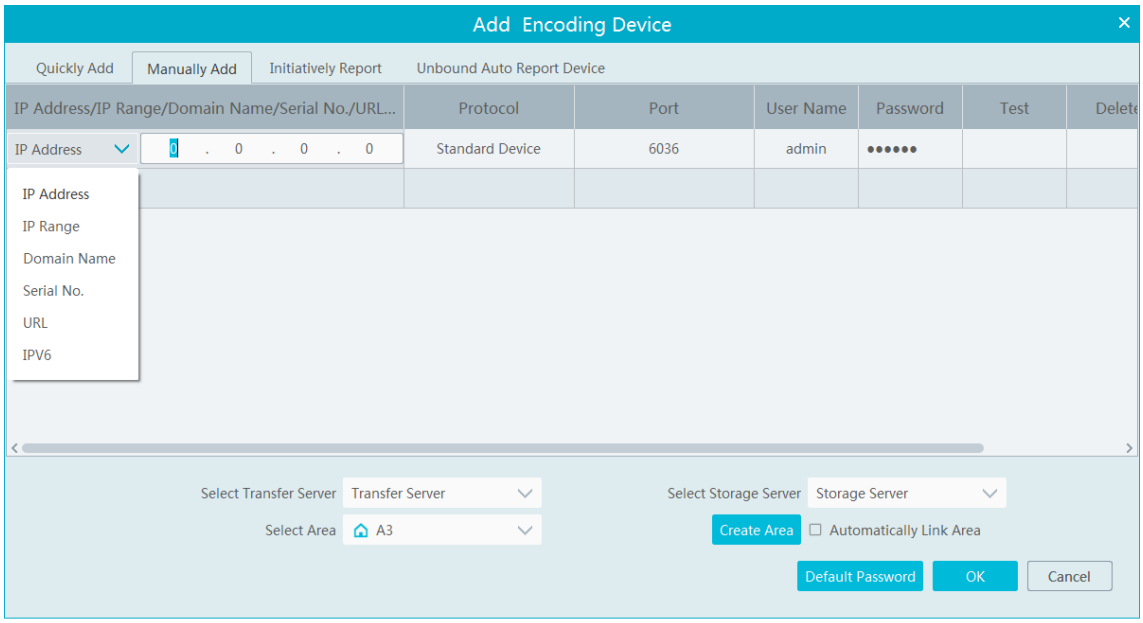
Click “Default password” to set the default username and password of the devices from different manufacturers, such as Hikvision, Dahua, etc. The default username of the standard device is “admin and the default password of the standard device is “123456”.

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



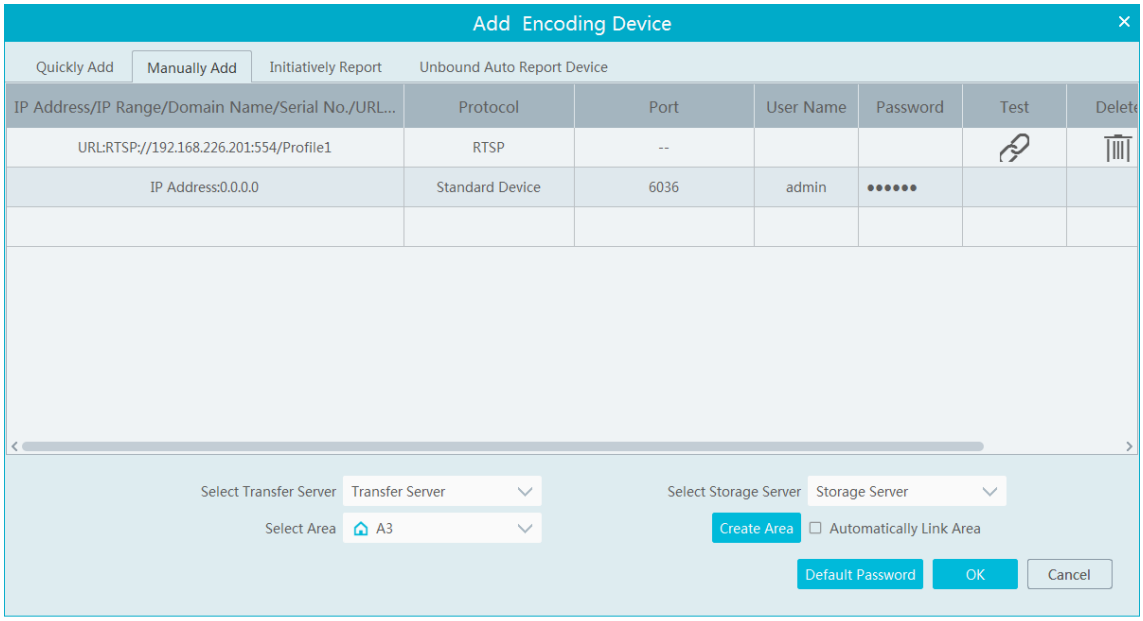
① Enter IP address/IP range/domain name/Serial No./URL/IPv6 address, username and password and choose protocol type.

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?

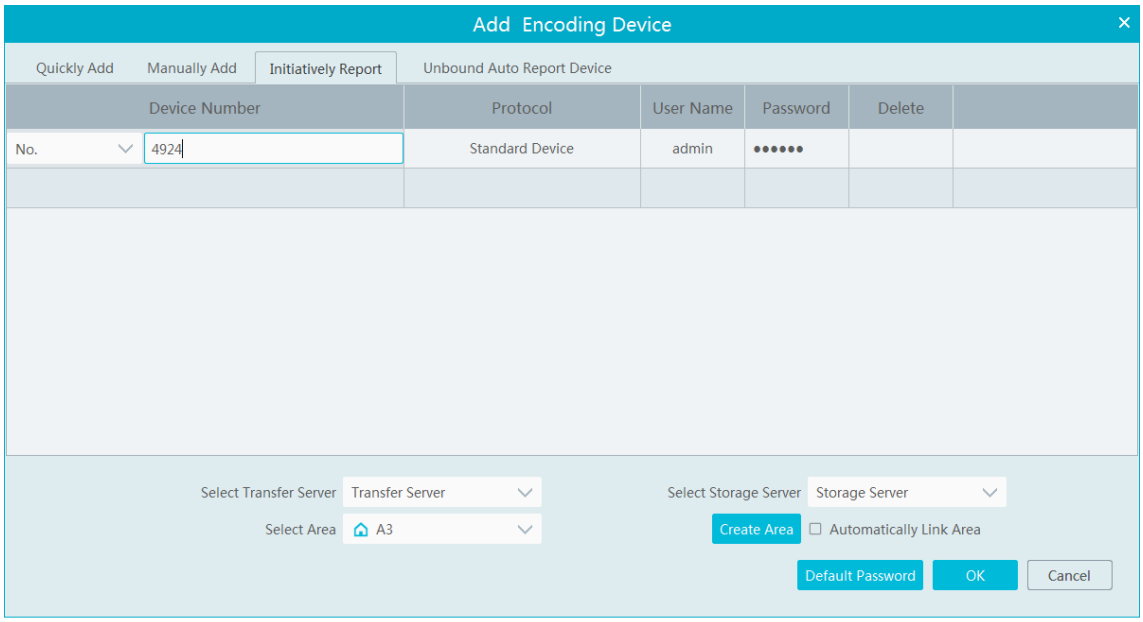
Here we take the IPC of our company for example. Log in to the web client of the IPC and then go to "Config"→ "Network"→ "RTSP" interface to configure RTSP.

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. Profile1stands 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.

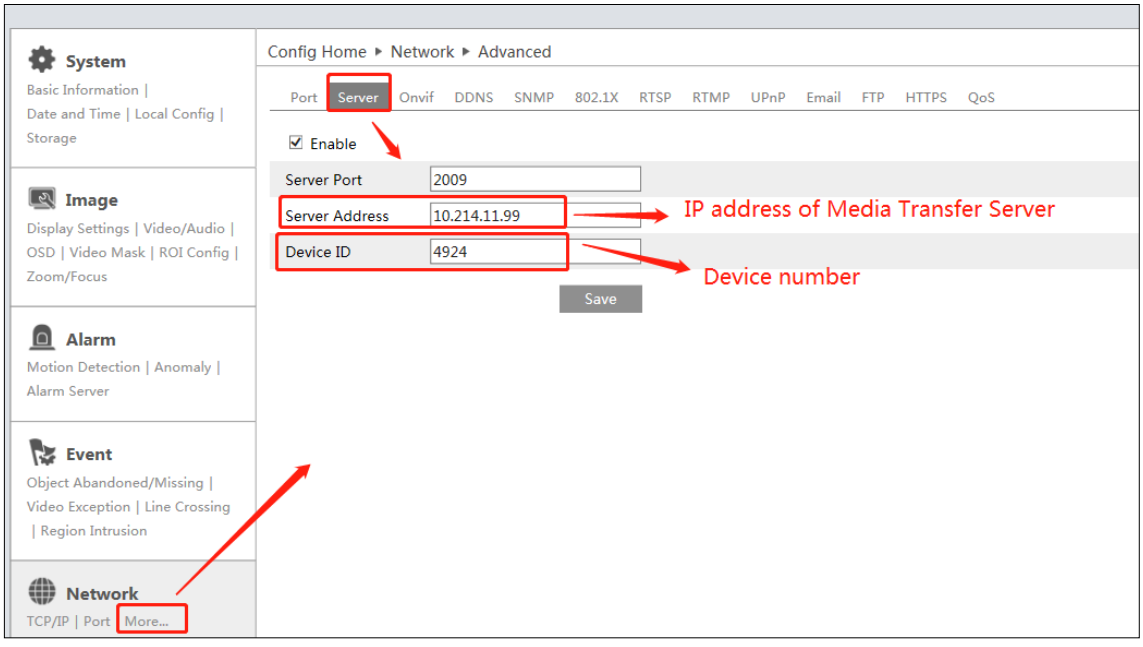
5.1.3 Initiatively Report

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.

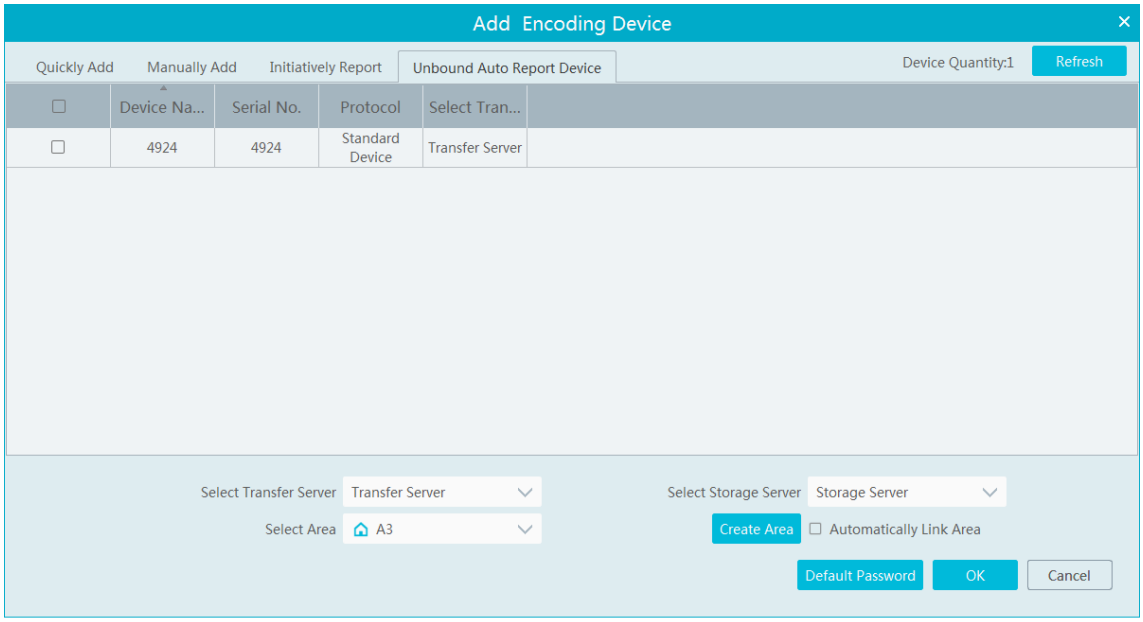


② Select the transfer server, storage server, area and then click [OK].

5.1.4 Quickly Add Auto Report Device

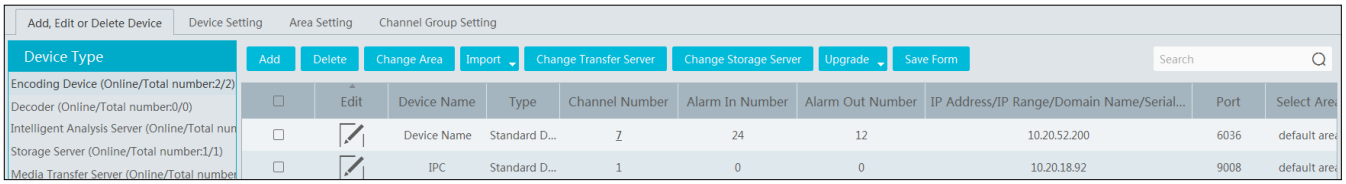
For the auto report devices, you can go to the "Unbound Auto Report Device" interface to add them quickly.

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.



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.

5.4 Batch Import/Export

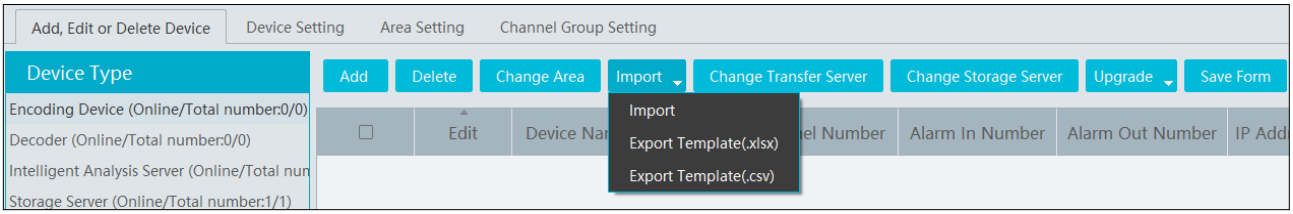
You can import multiple encoding devices (NVR/IPC) in different local network at a time. The setting steps are as follows:

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”.

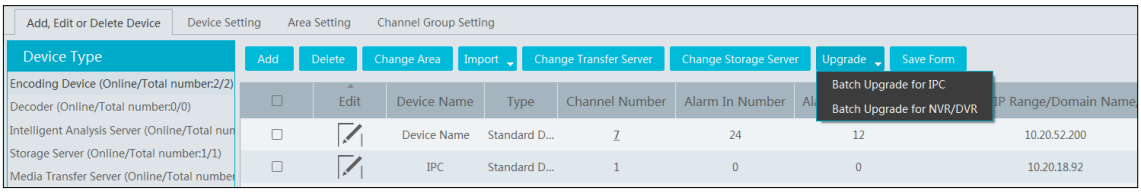
2. Save the file as “.cvs” or “.xlsx”.
3. Click Home→Resource Management→Add, Edit or Delete Device. Then click [Import] to import the file.



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

5.5 Device Upgrade

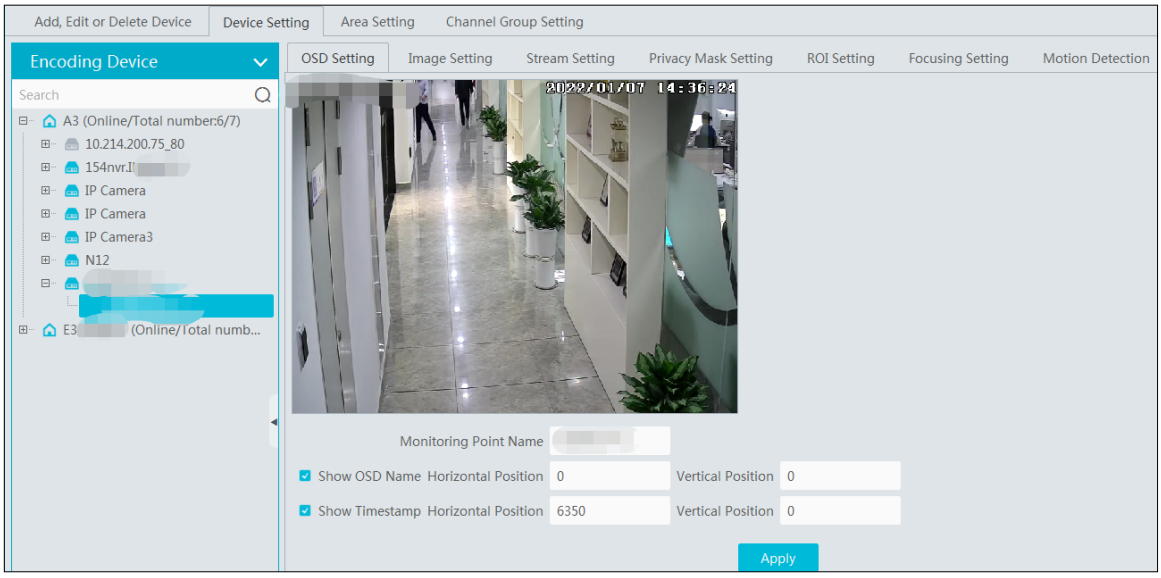
In the "Add, Edit or Delete Device" interface, check the devices you want to upgrade and then click [Upgrade]. Select the upgrade type as needed.



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

5.6 Device Setting

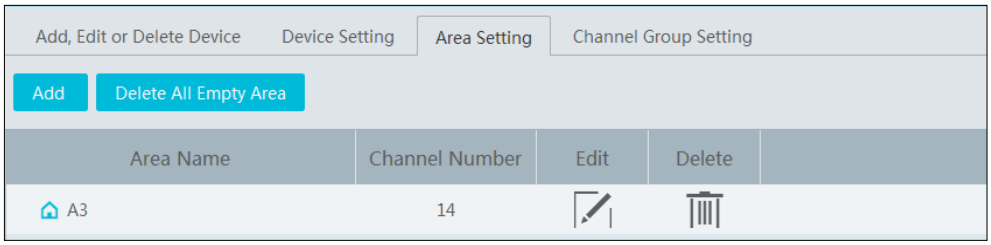
Go to Home→Device Setting interface as shown below. In this interface, the parameters of the device can be set up.



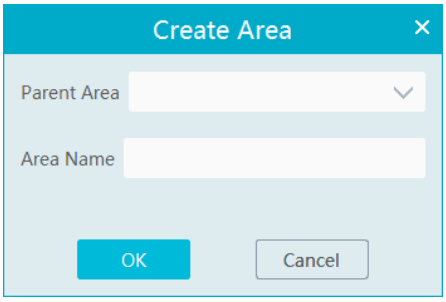
Different devices have different menus. Please configure the device according to the corresponding user manual.

5.7 Area Setting

Go to Home→ Area Setting interface as shown below.

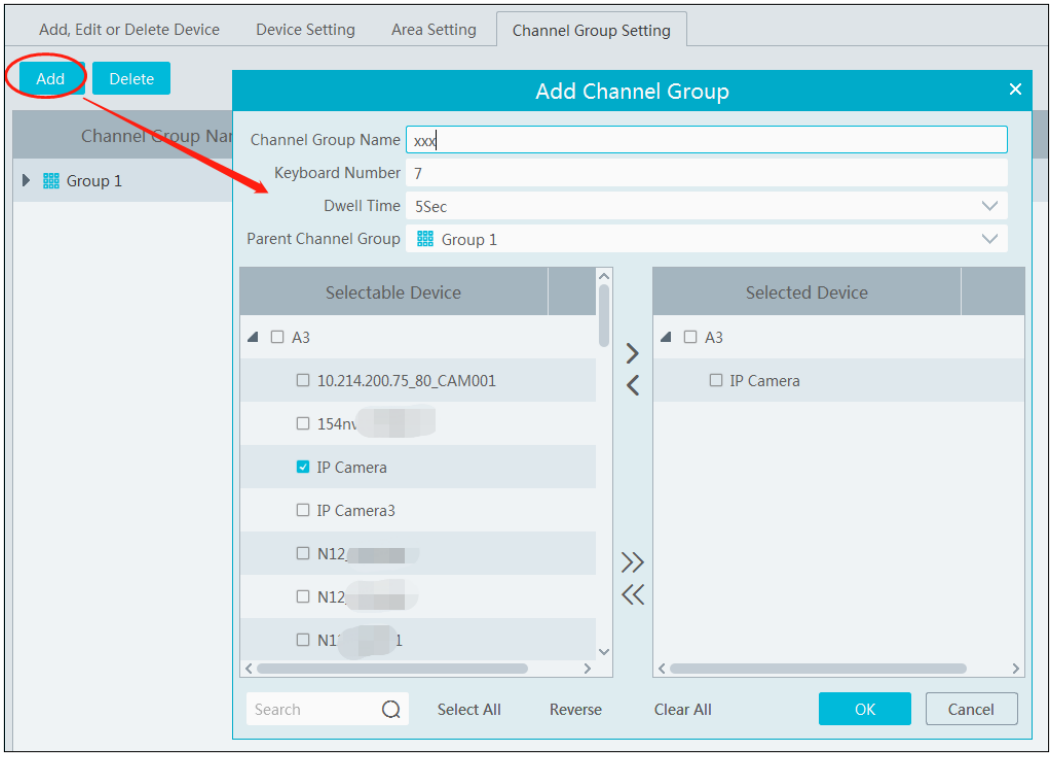


Click [Add] to go to Area adding interface. Enter area name to create parent area. Then click [OK] to save the settings. To create sub area, click [Add], choose the parent area, enter the area name and click [OK].



5.1 Channel Group Settings

Go to Home→ 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.

6 Group Management

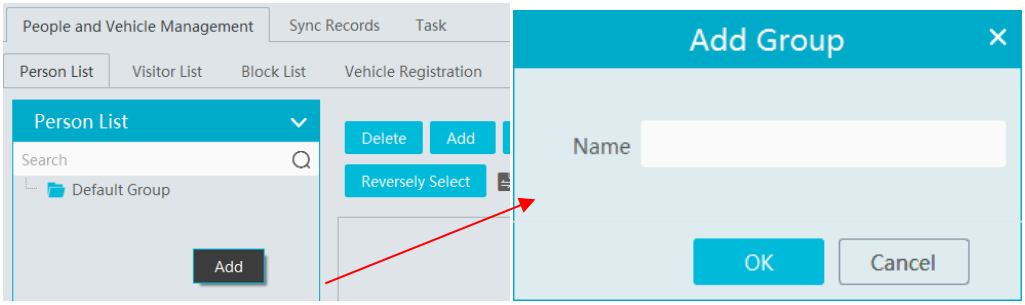
6.1 People Management

You can add group for three libraries—Person list, Visitor list and Blacklist.
Here taking "Add target to person list" for example

6.1.1 Add Group

- Add the parent group

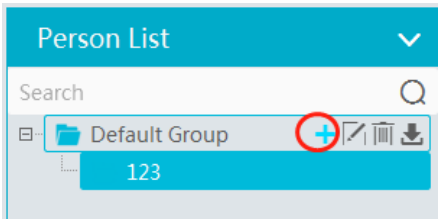
Go to Home→Group Management→People & Vehicle Management→Person List.



Right click on the blank of the person list column and then the "Add" button will appear. Click it to add the group name.

- Add the sub group:

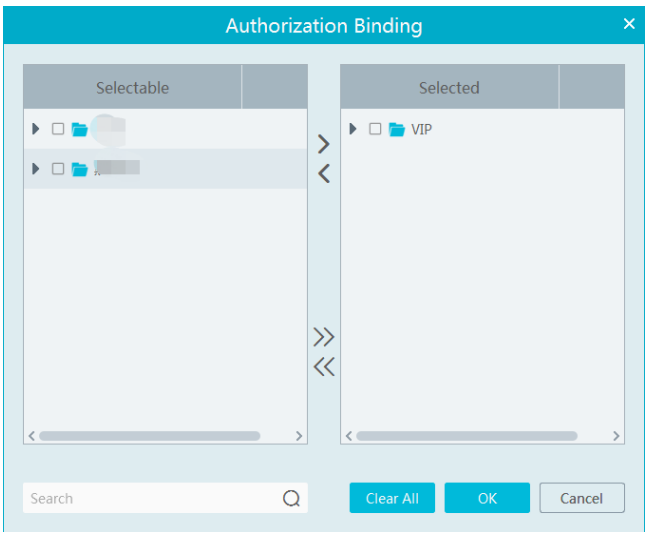
Put the cursor on the parent group name and then you will see the follow buttons. Click "+" to add the sub group name. A maximum of 9 sub groups can be created.



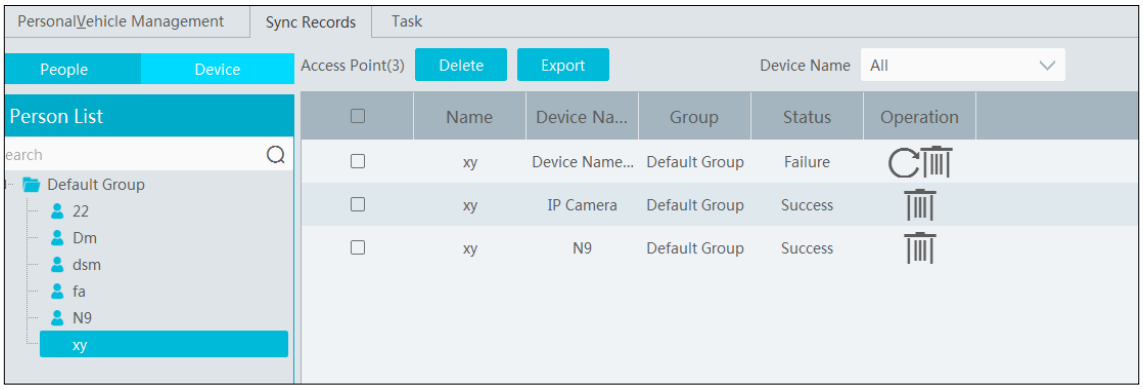
Click to bind the camera.

Bind the camera to the group: Add the people images of the group to the face database of the binding camera. When the person whose picture has transferred to the face database of the binding camera appears in the detection area, the face comparison result will be sent to the platform.

Note: 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.



In the people management interface, click “Sync Records” →”People” or “Device” to view the synchronization status.

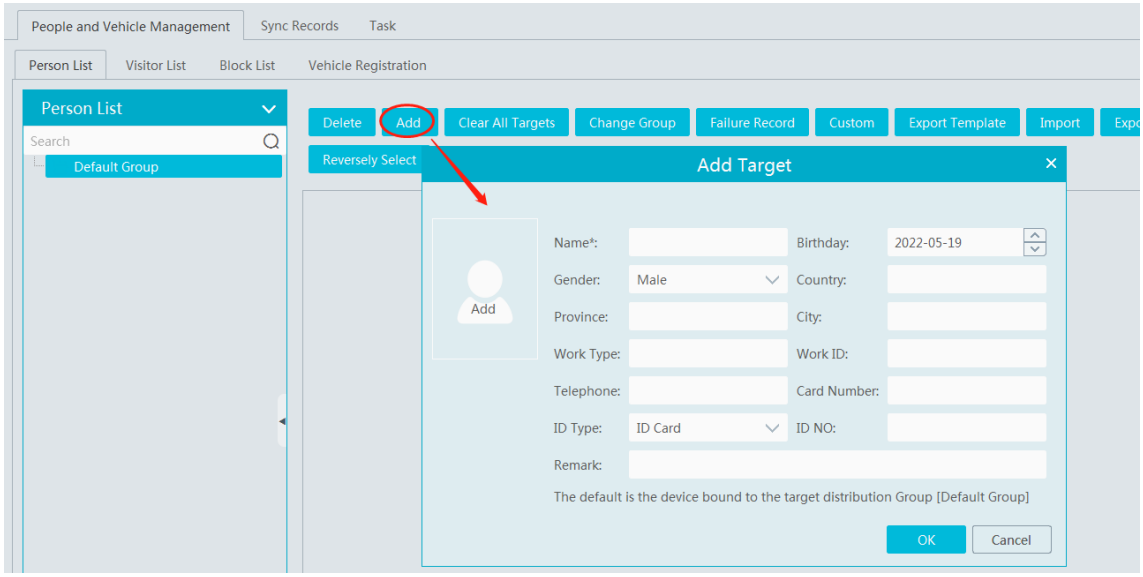


6.1.2 Add Target

You can add targets for three libraries-- people, Visitor and Block list.

- Add target one by one

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



Click

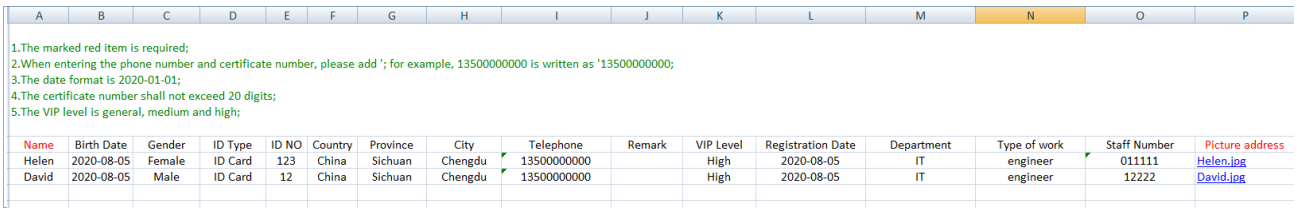
and select the face image saved in the local PC. Then fill out the corresponding information and click [OK] to save.

Note: the resolution of the face image shall be less than 3840*3840.

- Batch Import

In the above interface, click [Export 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.

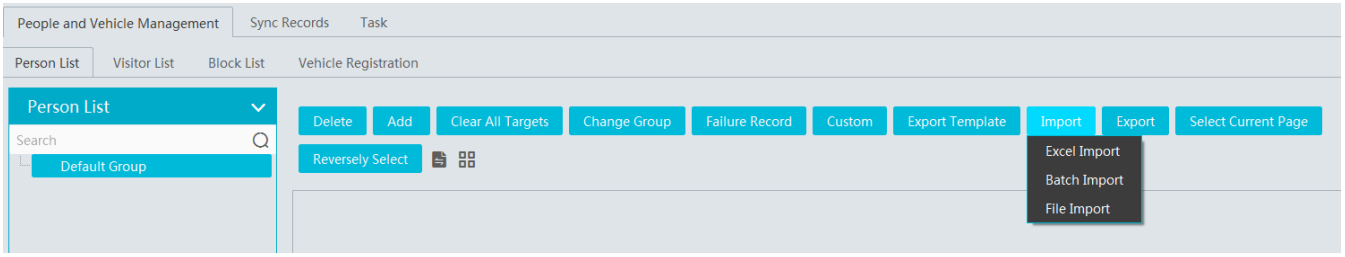


1.The marked red item is required;
2.When entering the phone number and certificate number, please add '; for example, 13500000000 is written as '13500000000;
3.The date format is 2020-01-01;
4.The certificate number shall not exceed 20 digits;
5.The VIP level is general, medium and high;

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	12222	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.

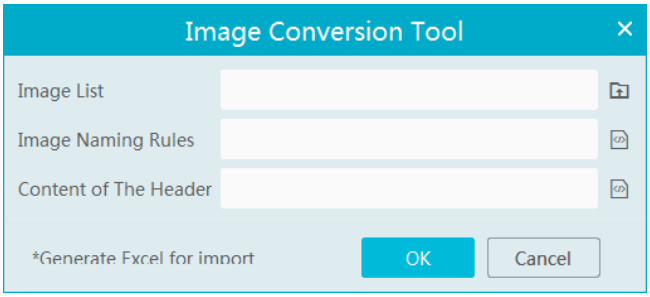
Search Subfolders: choose a folder including multiple subfolders and then all pictures in the folder and its subfolders will be imported.

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.

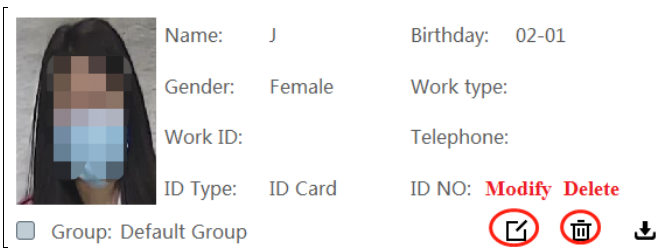
1. Name the face images (like David_Male_1989-01-03_Engineer_Group1), separating each field with “_”.
2. Clicking on displays an image conversion box. Click to select the desired images.
3. Click respectively to set the image naming rules and content of the header.



Note:

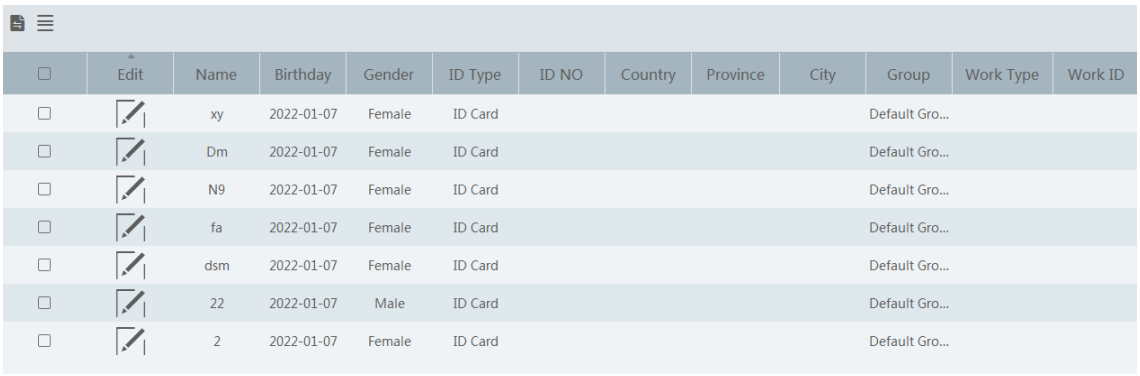
1. The naming sequence of each image selected must be the same. Please select the image naming rules in accordance with the sequential order of the name of the image.
2. The content of the header must contain those items of the image name and can be selected in any order.
3. The content of the header 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**



Click to bind the camera. After you bind the camera, the face image will be added to the face database of the camera.

Click to view the target list as shown below.



Edit	Name	Birthday	Gender	ID Type	ID NO	Country	Province	City	Group	Work Type	Work ID
	xy	2022-01-07	Female	ID Card					Default Gro...		
	Dm	2022-01-07	Female	ID Card					Default Gro...		
	N9	2022-01-07	Female	ID Card					Default Gro...		
	fa	2022-01-07	Female	ID Card					Default Gro...		
	dsm	2022-01-07	Female	ID Card					Default Gro...		
	22	2022-01-07	Male	ID Card					Default Gro...		
	2	2022-01-07	Female	ID Card					Default Gro...		

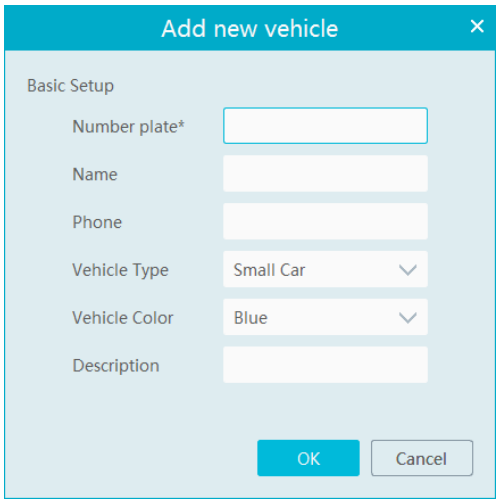
Click “Custom” to customize the target display information.

Click “Change group” to change the group.

6.2 Vehicle Management

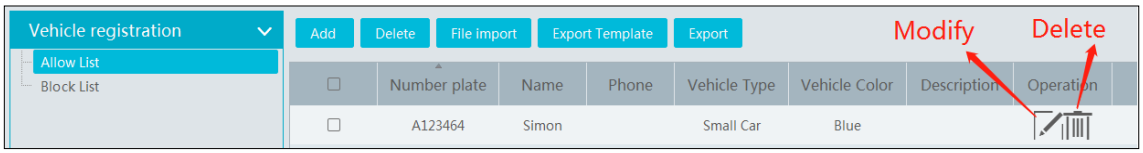
6.2.1 Add Vehicles

Select the desired vehicle list (allow list or block list) and then click [Add] to add the relevant vehicle information.



6.2.2 View, Modify or Delete Vehicles

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



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.

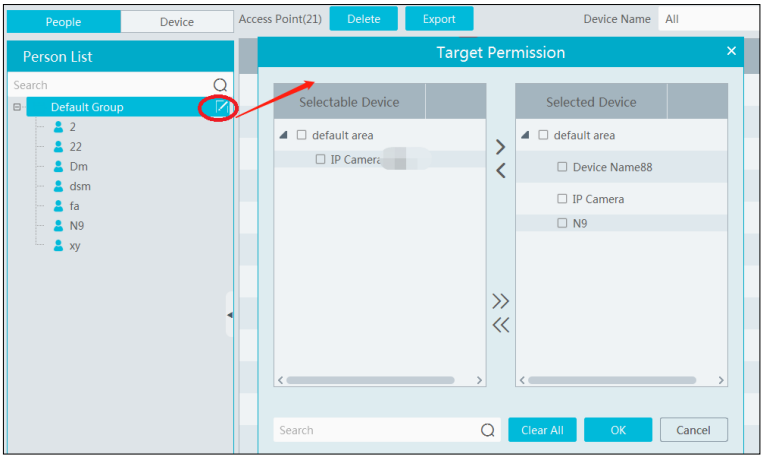
6.3 Sync Records

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

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

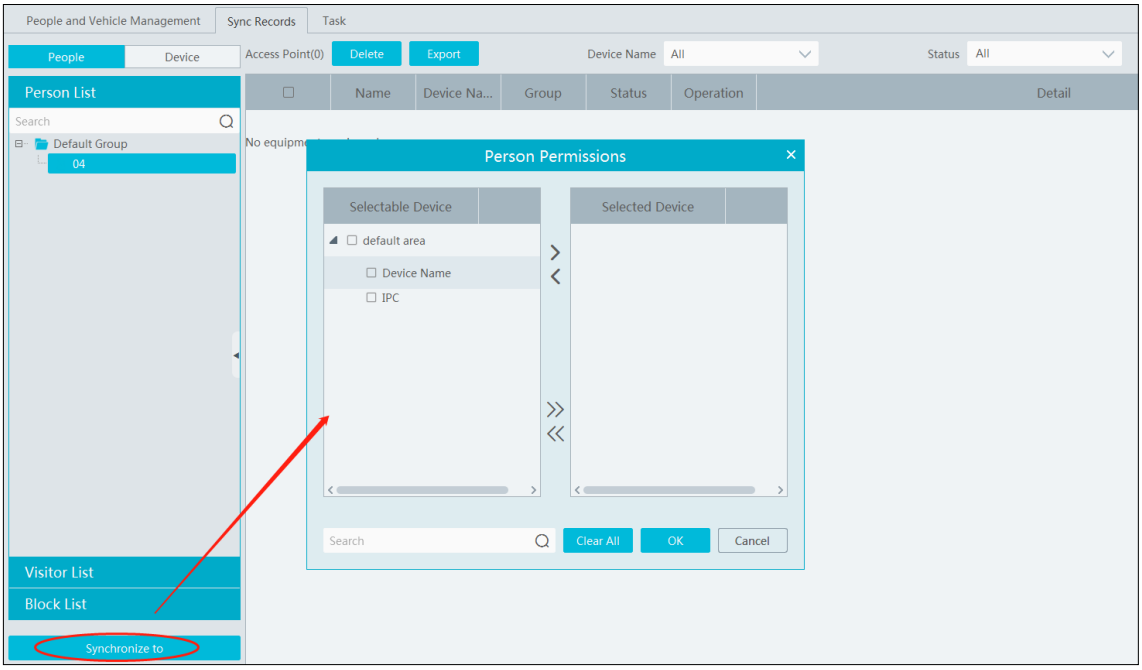
➢ **Binding the group to the device**

Put the cursor on the group name and then will be shown. Click it to bind the camera.



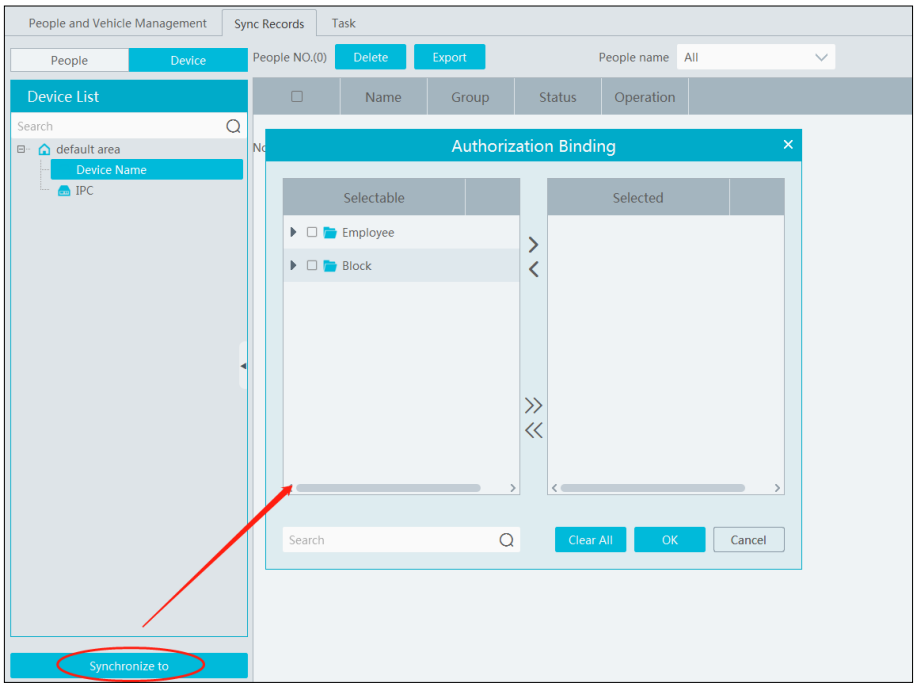
➢ **Binding the person to the device**

Select the person's name and then click "Synchronize to". This will bring a window as follow. Select the camera and then click "OK". This personal information will be synchronized to the selected camera.



➢ **Binding the device to the group or person**

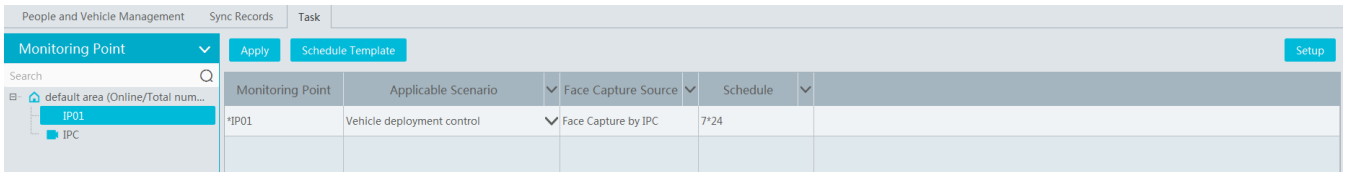
Click the “Device” tag, select the device and then click “Synchronize to”. Select the group or person in the pop-up window.



When the device is offline, the target synchronized to it cannot be deleted. Then you can go to the Sync Records interface to delete the synchronization records and then delete the target.

6.4 Task Management

Set the face capture source, schedule and applicable scenario.

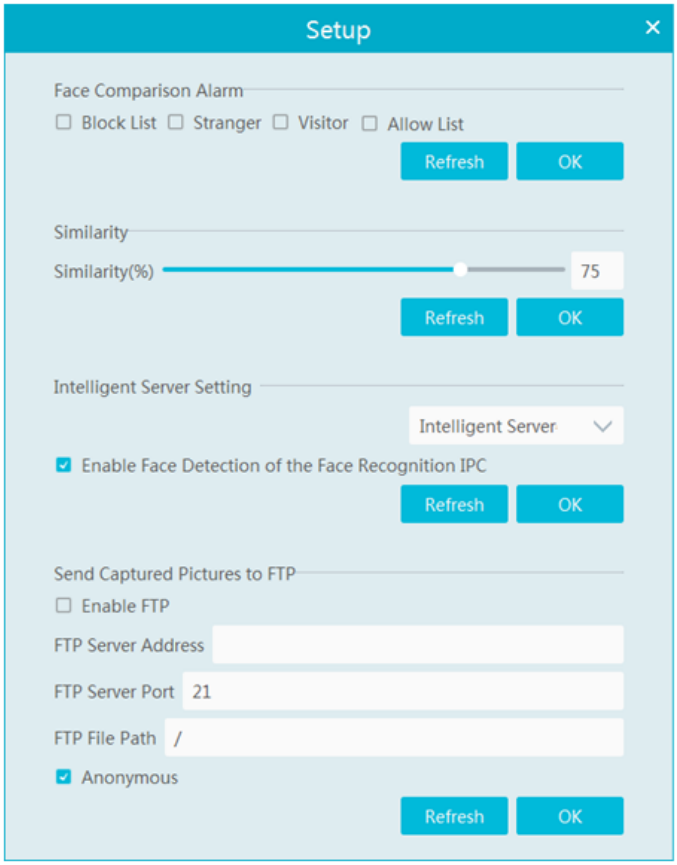


Face Capture by IPC: it is applicable to the face detection camera.

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 [Setup].



Face Comparison Alarm: Select face comparison alarm list. For example, “Visitor” is selected, when a person is detected and is successfully compared with visitor 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.

7 Search

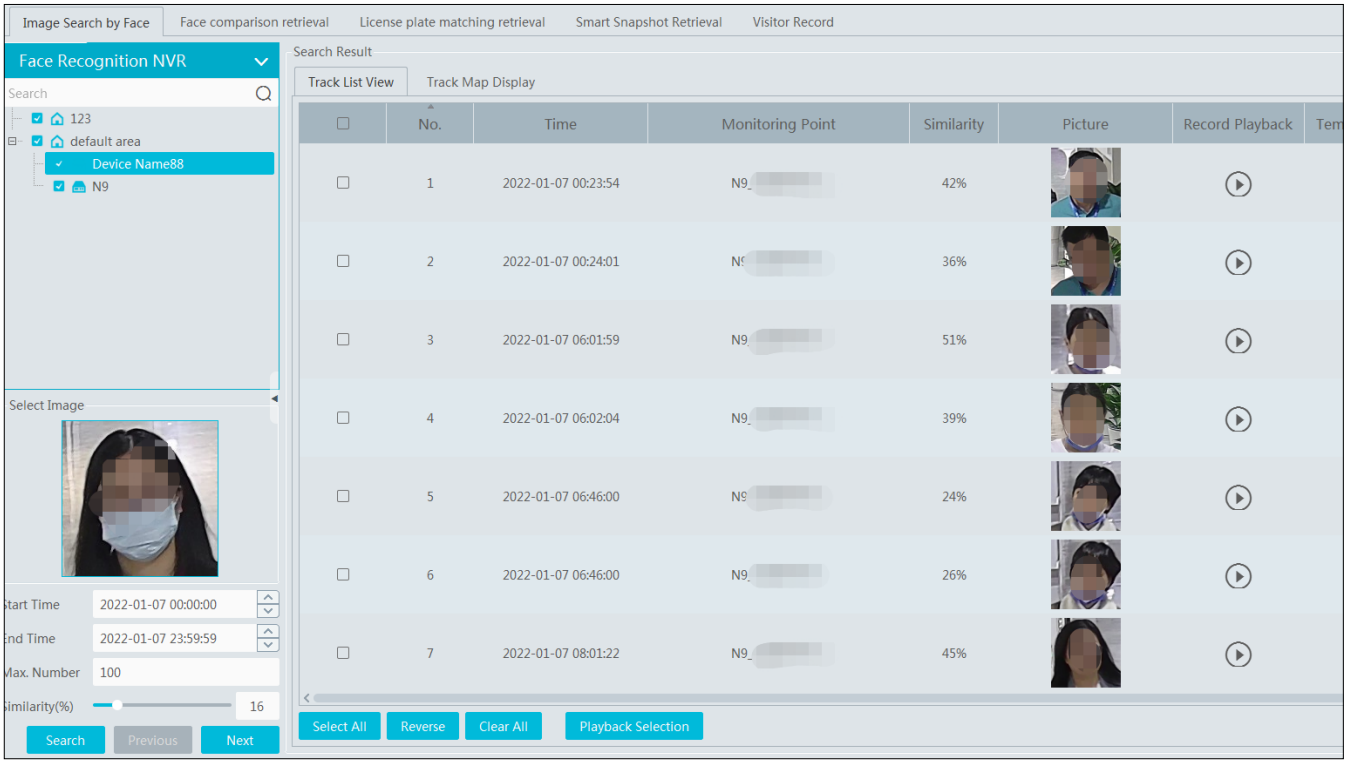
7.1 Image Search by Face

① Select a picture and picture source.

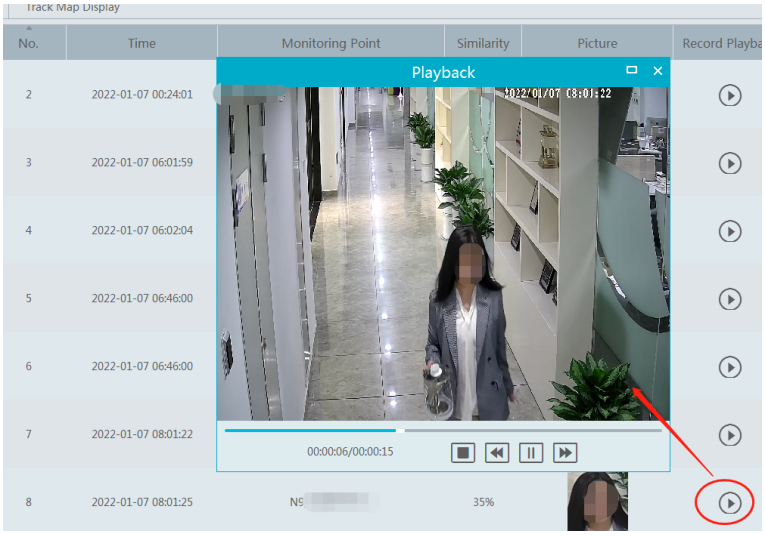
② Set the start time and the end time.

③ Set the maximum count and similarity.

④ Click [Search].

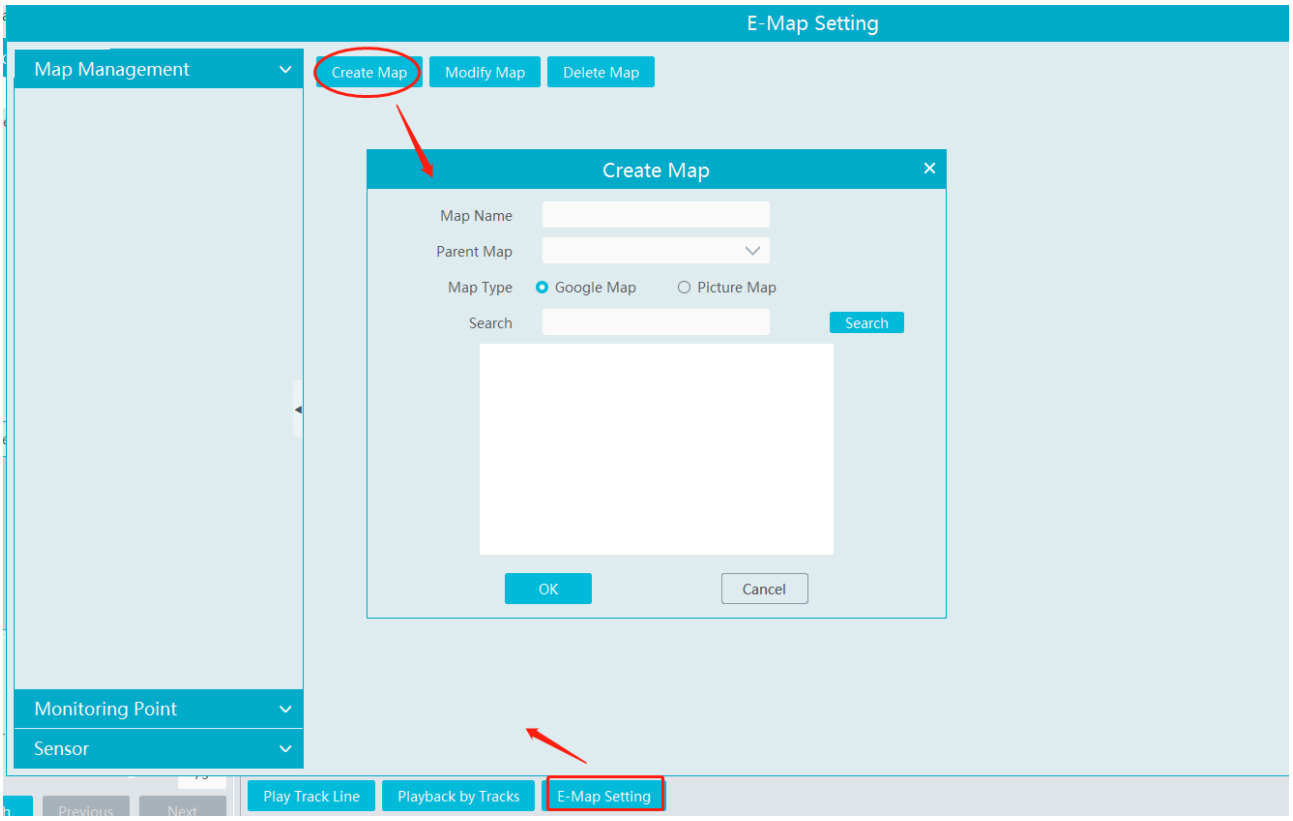


Click to play the record in a small window.



- 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.



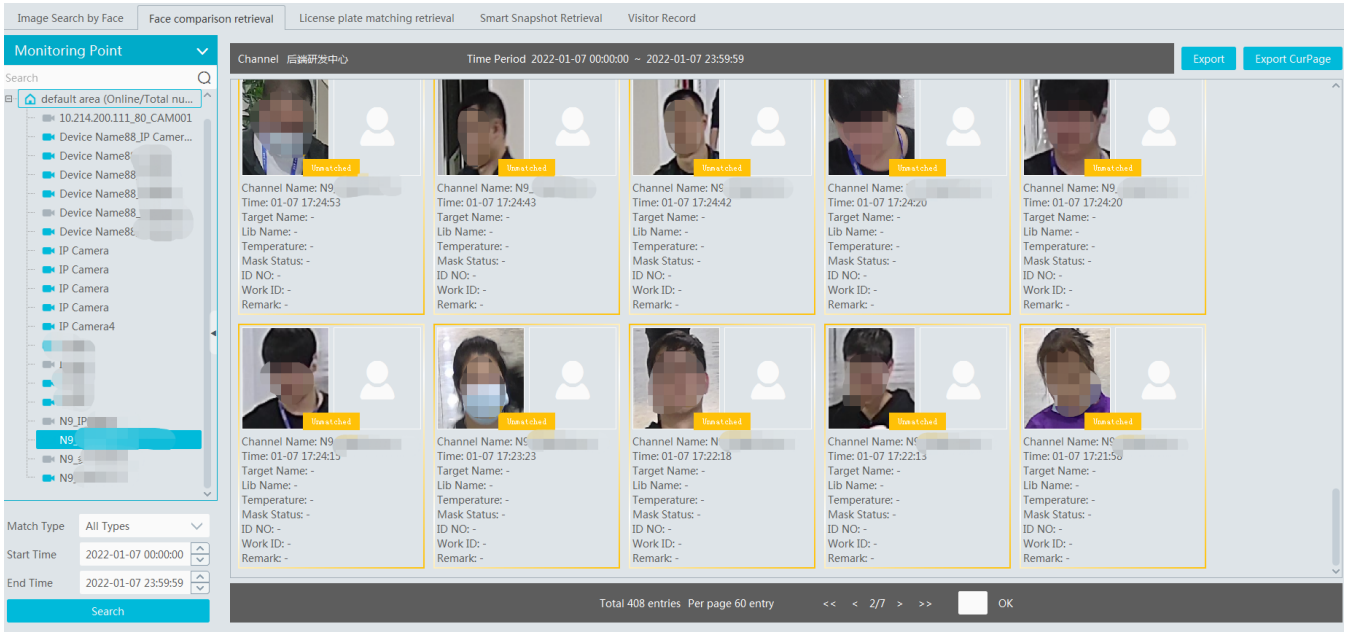
Play Track Line: Click this button to play the track line on a map.
Playback by Tracks: Click this button to play the track video.

7.2 Face Comparison Search

① Go to Search →Face comparison retrieval interface.

② Select the IPC and match type

③ Set the start and end time and then click [Search] to search the face pictures.



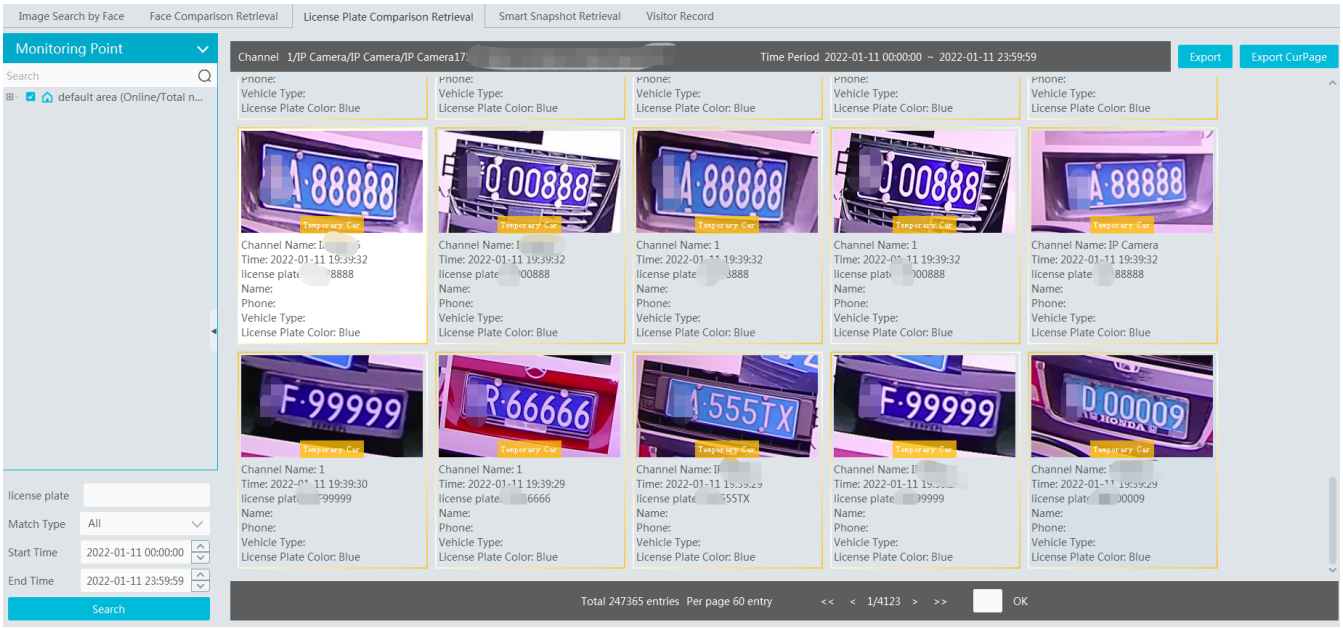
7.3 License Plate Comparison Search

1. Select the camera.

2. Enter the license plate and select the match type.

3. Set the start time and end time.

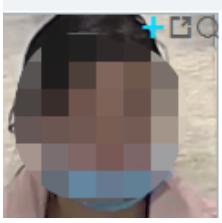
4. Click [Search]



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.

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

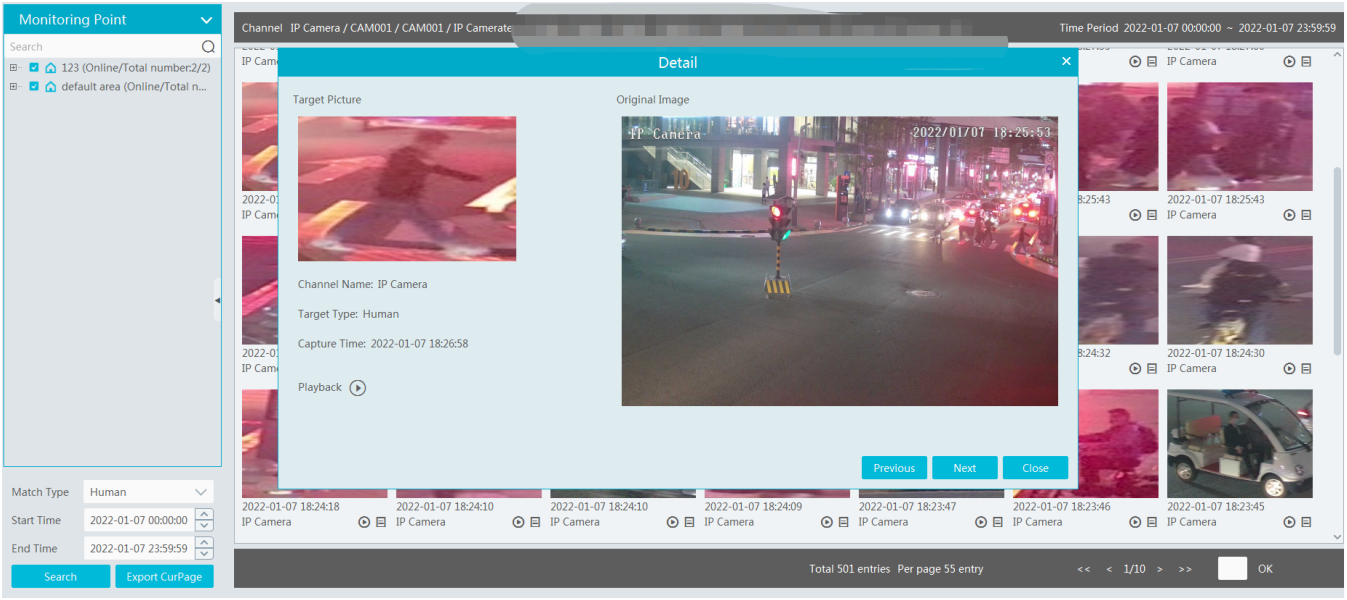


Click + to add the capture picture to the library. Select the library on the left and then fill out the information of this target. Click [OK] to add.

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.

Human Body/Vehicle Snapshots:



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.

7.5 Visitor Record Search

Set the start and end time and click [Search] to search the visitor record in the specified time.

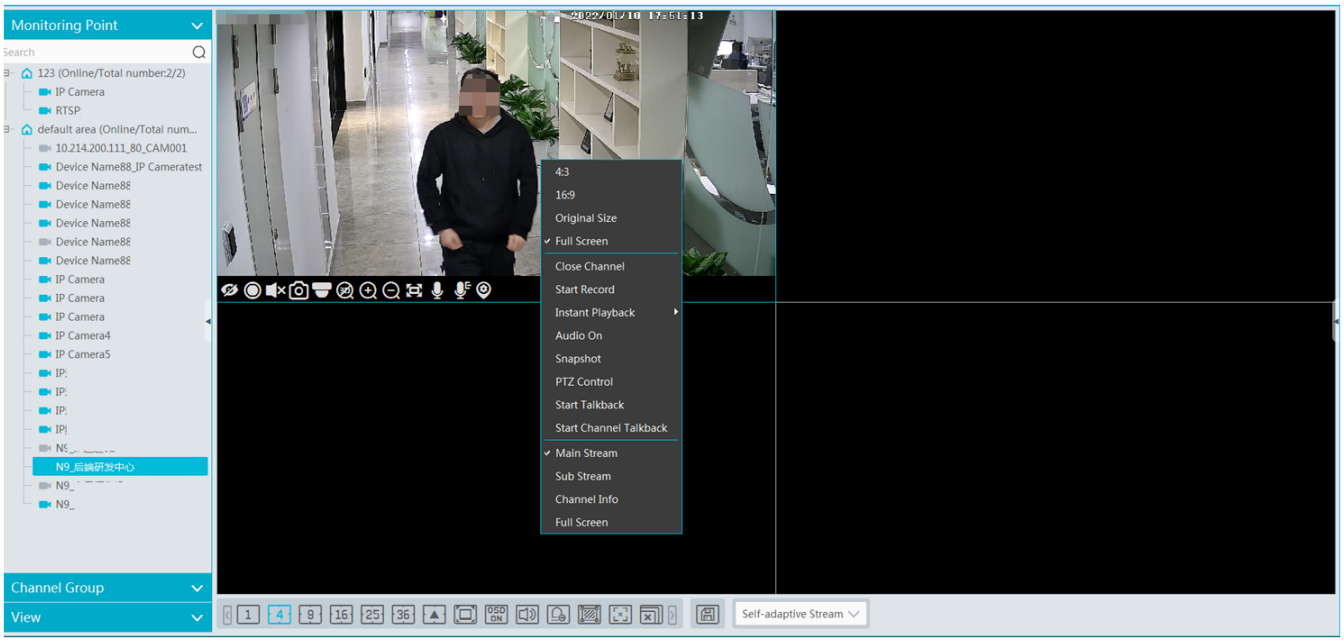
You can also enter the key word in the search bar and click to search the visitor record.

Click [Export] to export the current visit record to EXCEL file (image included). Only super administrator supports visitor record export.

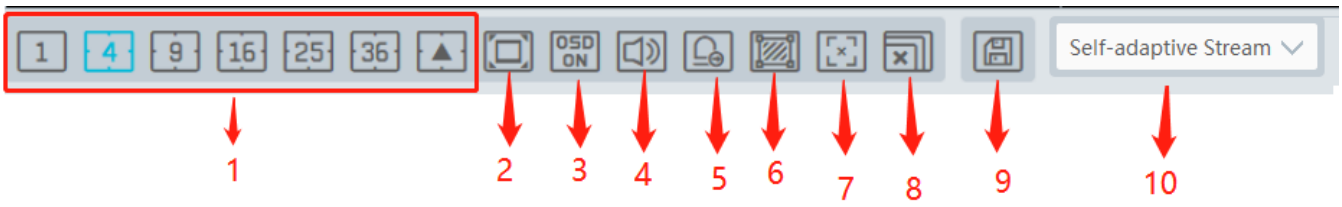
8 Live View

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	6	Show the smart event detection area
2	Full screen	7	Show/hide target tracking box
3	Enable/disable OSD	8	Close all preview
4	Enable/disable broadcast	9	Save the current view mode
5	Manual alarm output	10	Choose the camera stream

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		3D zoom in
	Start/stop recording		Zoom in
	Enable/disable audio		Zoom out
	Snapshot		Fit to window
	PTZ control		Enable/disable talkback
	Monitoring point setting (camera setting)		

Right-click button function:

Menu	Description	Menu	Description
Close Channel	Close image	**Snapshot**	Capture images
Start Record	Start/stop recording	**Start Talkback**	Enable/disable talkback
Instant Playback	Click it to play back immediately	**Channel Info.**	Display channel name, IP address and the current stream
Audio ON	Enable/disable audio	**Stream**	Choose video stream
PTZ Control	Click it to show PTZ control panel	**Full Screen**	Display image in full screen

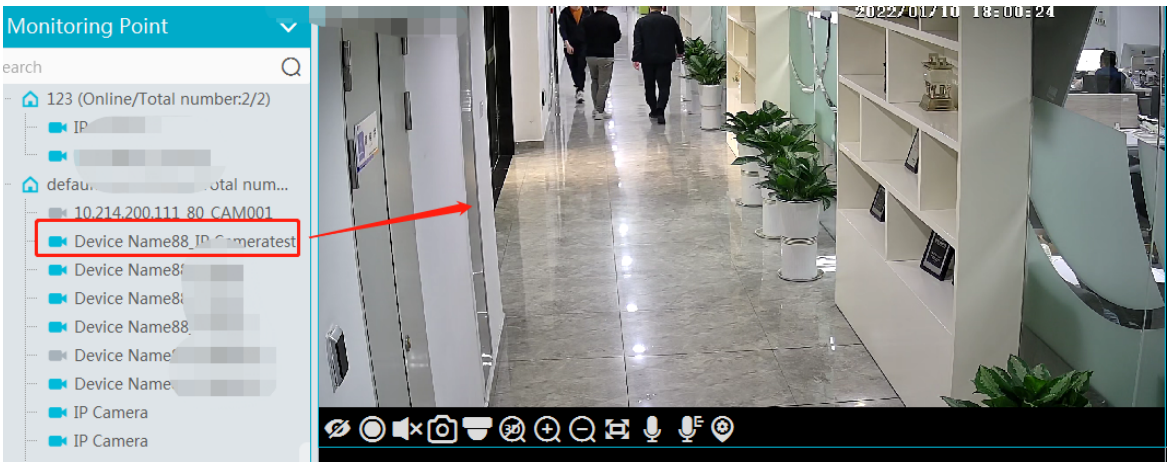
4:3/16:9/Original Size/Full Screen: screen display proportion; please select it as needed.

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.

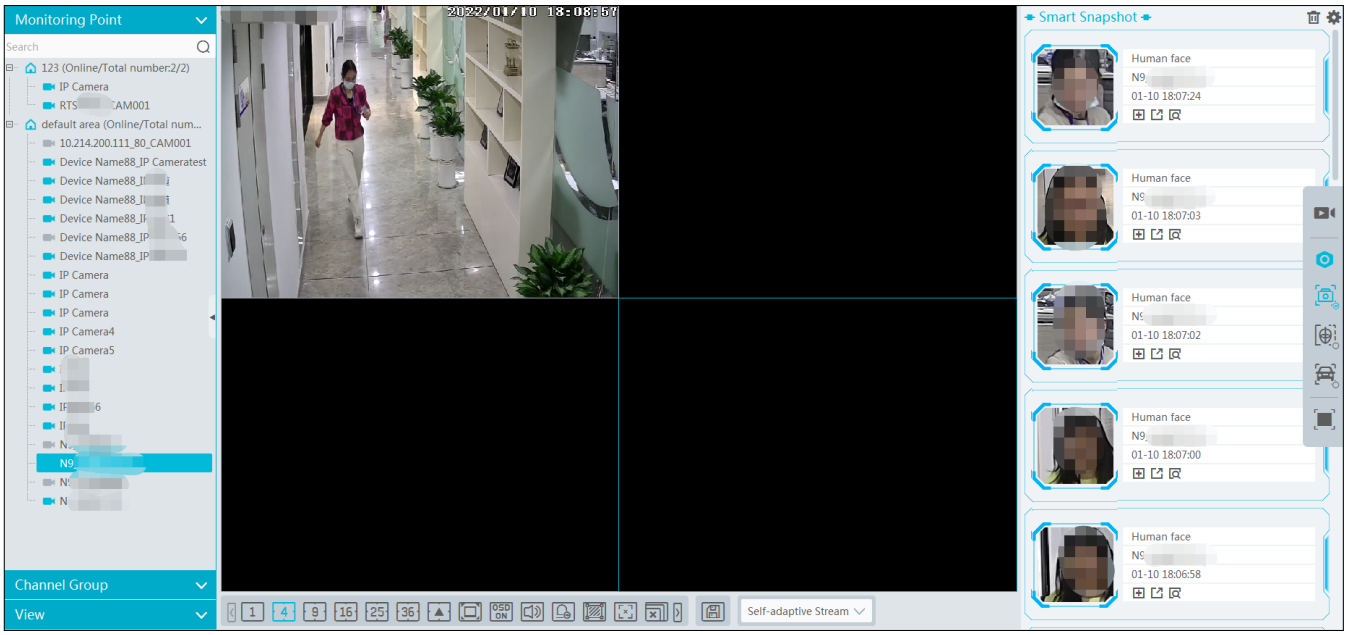
② Right click on the live view window and then select “Close Channel” to stop viewing.

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.

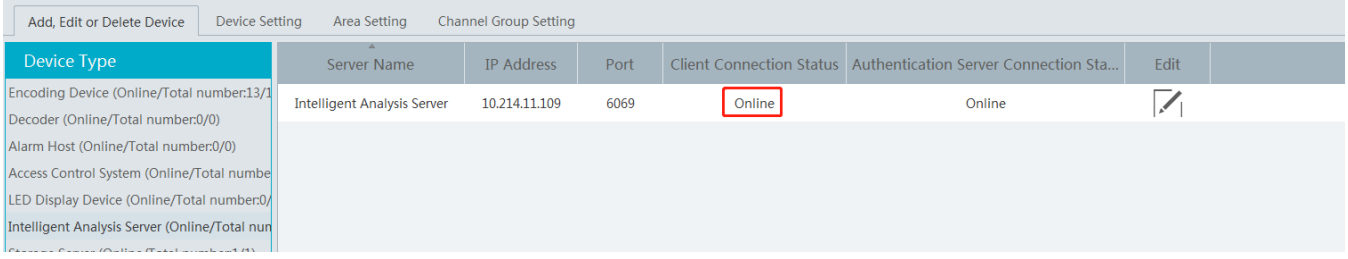


The descriptions of the button on the right：

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

Before using intelligent functions, please confirm the default intelligent analysis server is online.

Go to Home→Resource Management→Intelligent Analysis Server. There is a default intelligent analysis server. Please make sure the server is online.



8.2.1 Face Comparison

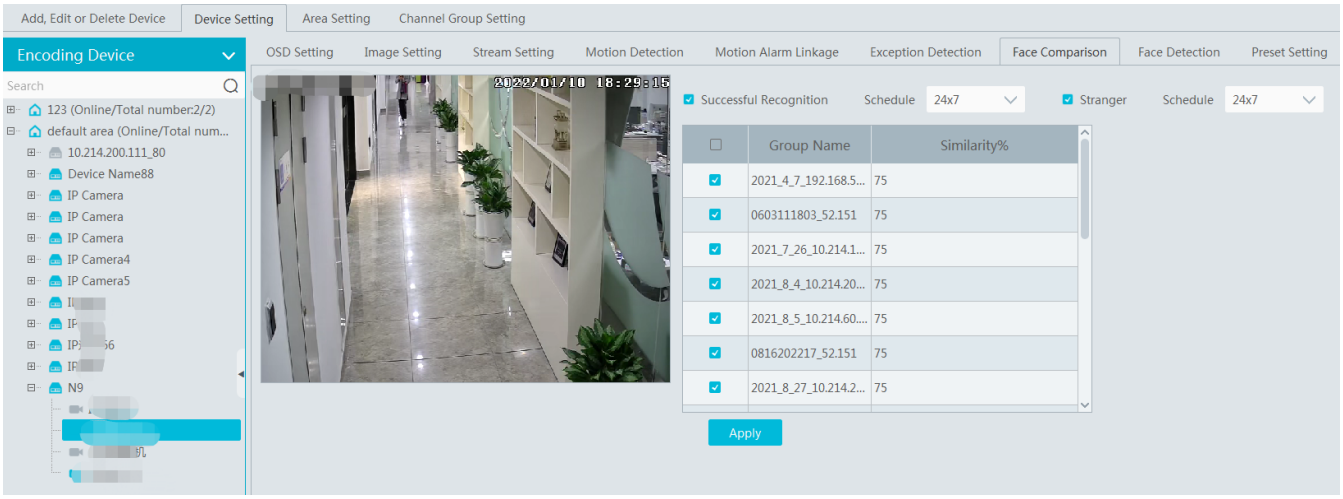
If it is the first use of face comparison function, please configure it in the following order.

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

1. Create a group, add targets to the group and set Task. Please refer to chapter 6 People & Vehicle Management for details.

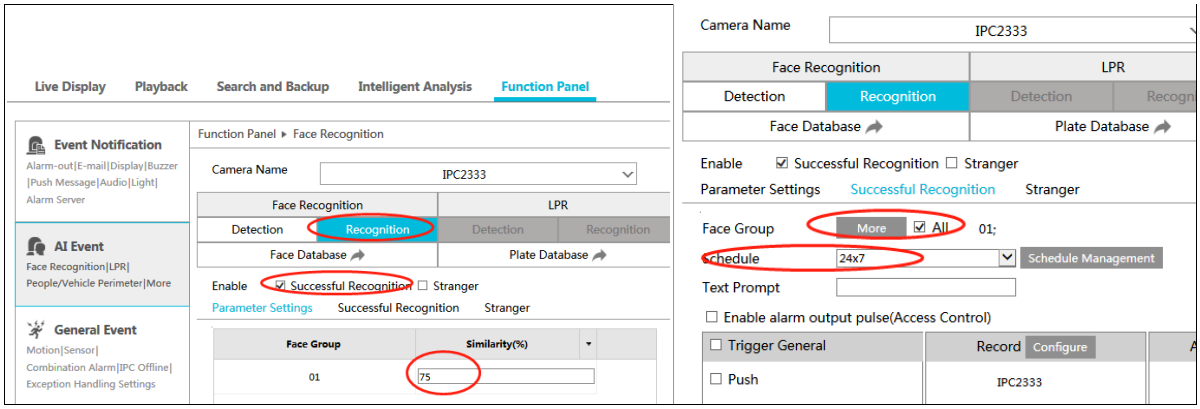
   Note: Please remember binding the target with a camera after it is added to a group.

2. 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.

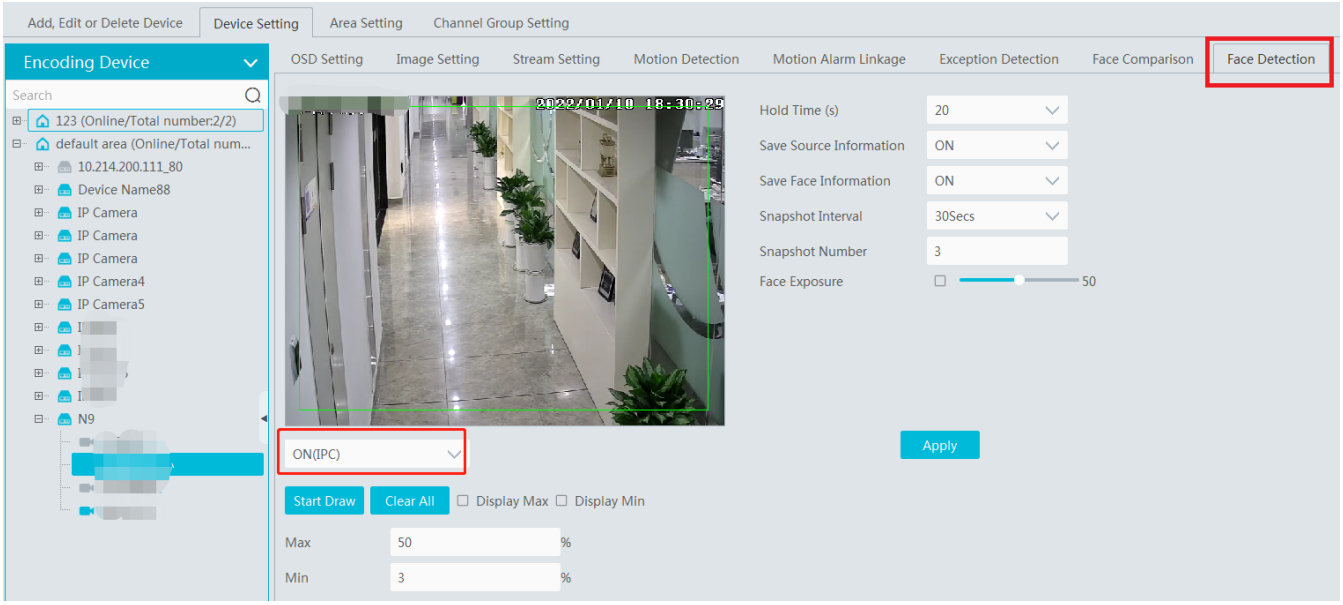


Please select “Successful Recognition” or “Stranger” as needed and then set the schedule separately. After that, check the group and set the similarity. Finally, save the settings by clicking [Apply].

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.

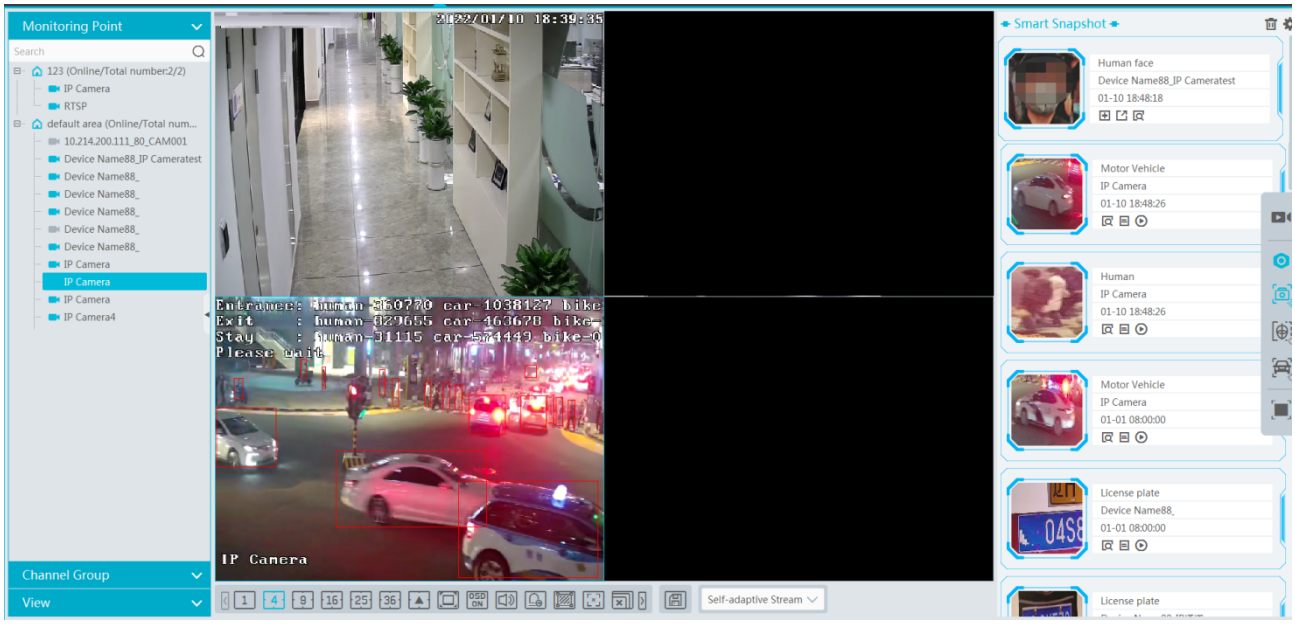


Additionally, please make sure the face detection function is enabled for the AI IPC (click Device Setting→Face Detection).



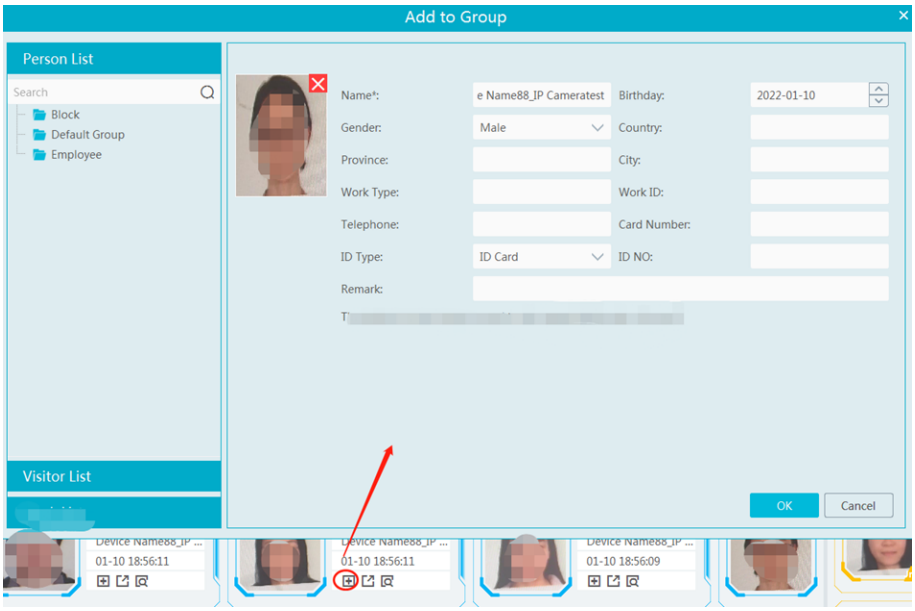
- **View the real-time snapshot and comparison result**

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.



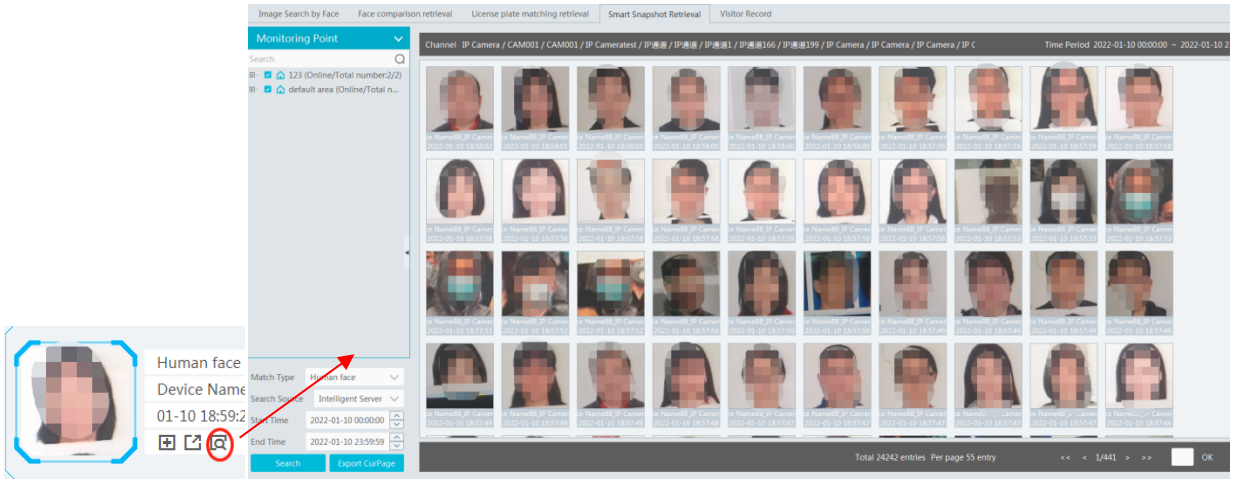
Click to add the captured face picture to the person list.

Fill in the relevant informaiton and then click [OK].



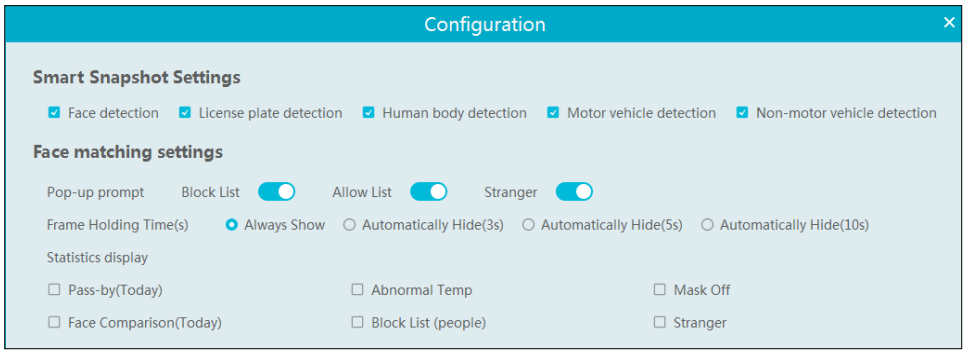
Click to quickly enter the smart snapshot retrieval interface.

.

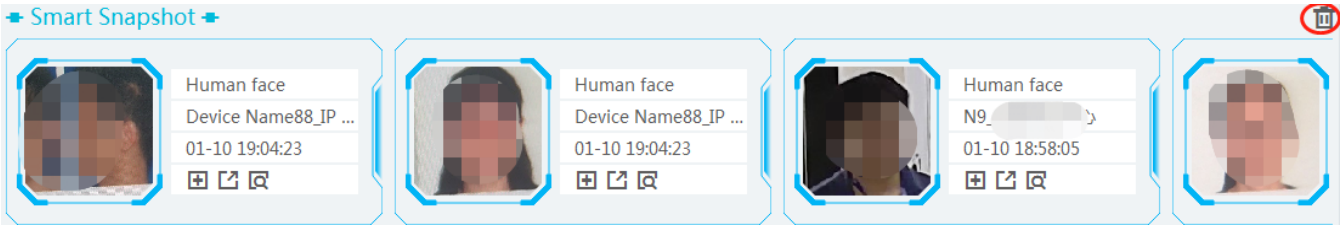


- **Smart snapshot display settings:**

Click on the right corner of the live interface to display the configuration window as shown below. Please select the smart snapshot display type as needed. One or more items can be selected.

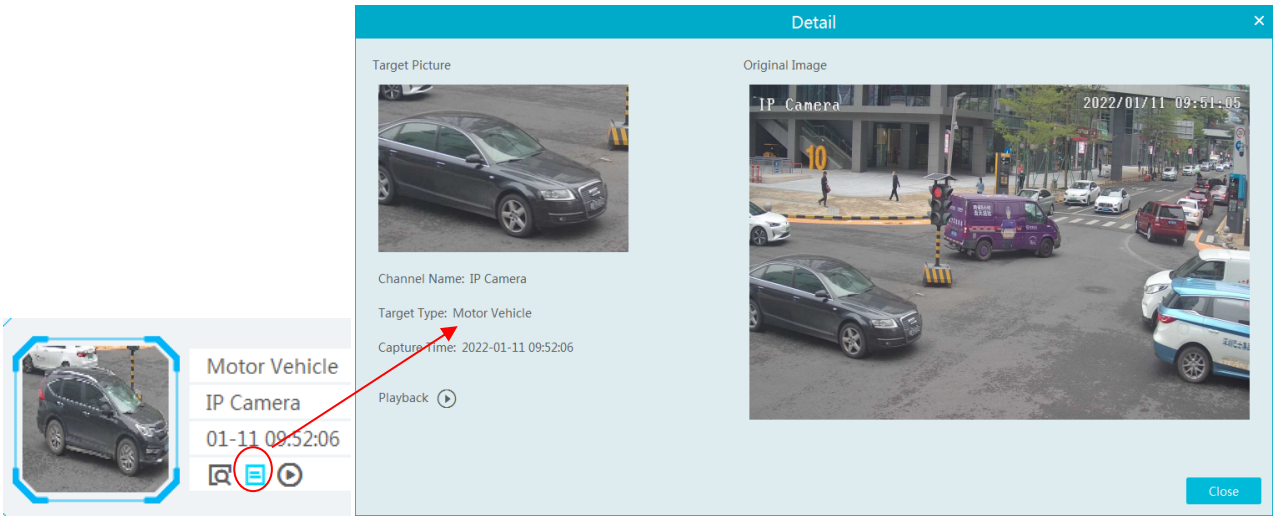


Click to clear the smart snapshot records.

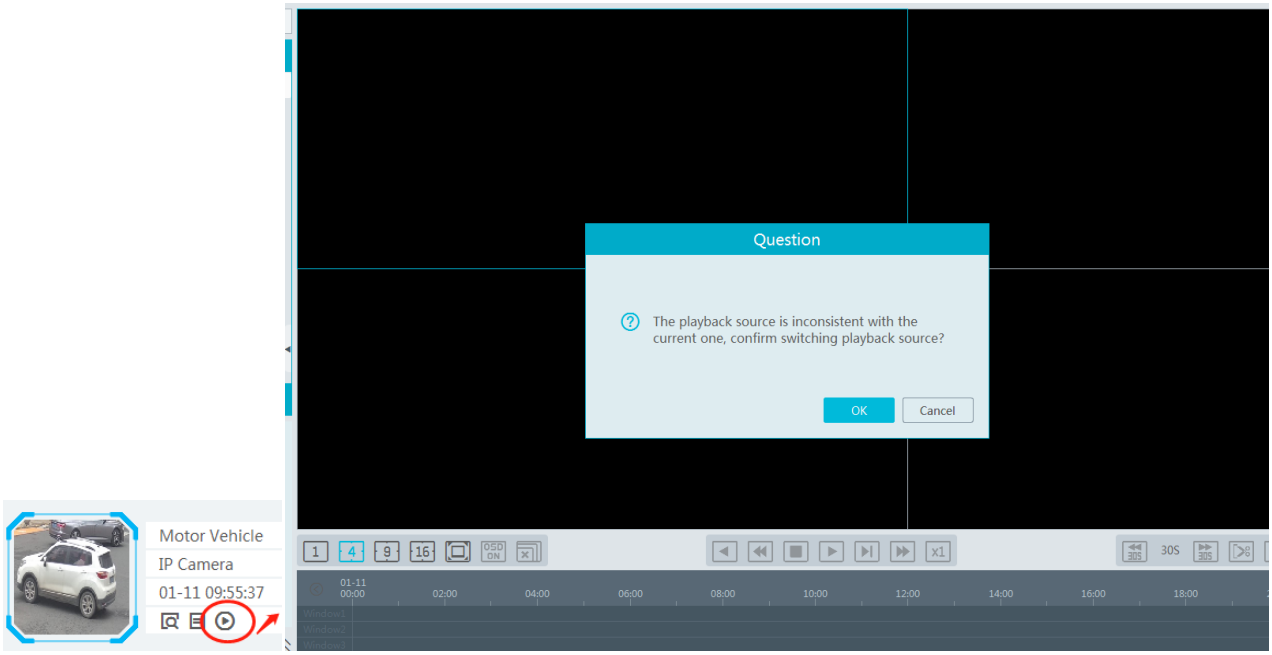


The captured picture can be exported. Click and then select the export path and then click [OK] to export

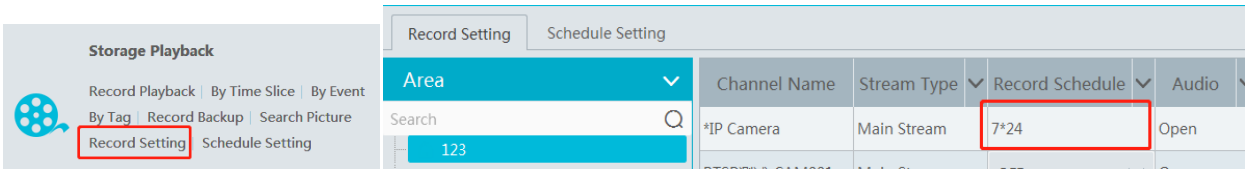
Click to view the details of the captured picture. Click to play back the records.



Click the playback button next to . This will take you to the playback interface. Maybe it will pop up the following tips.

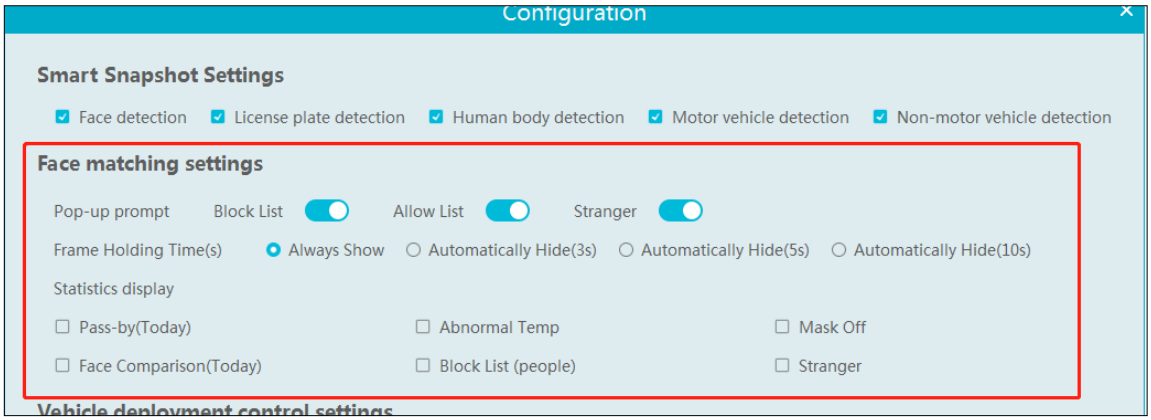


Note: Only when the record schedule is set in advance, can the video be played. Click Home→Record Setting to enter the record setting interface. Select the desired camera and then select the record schedule.



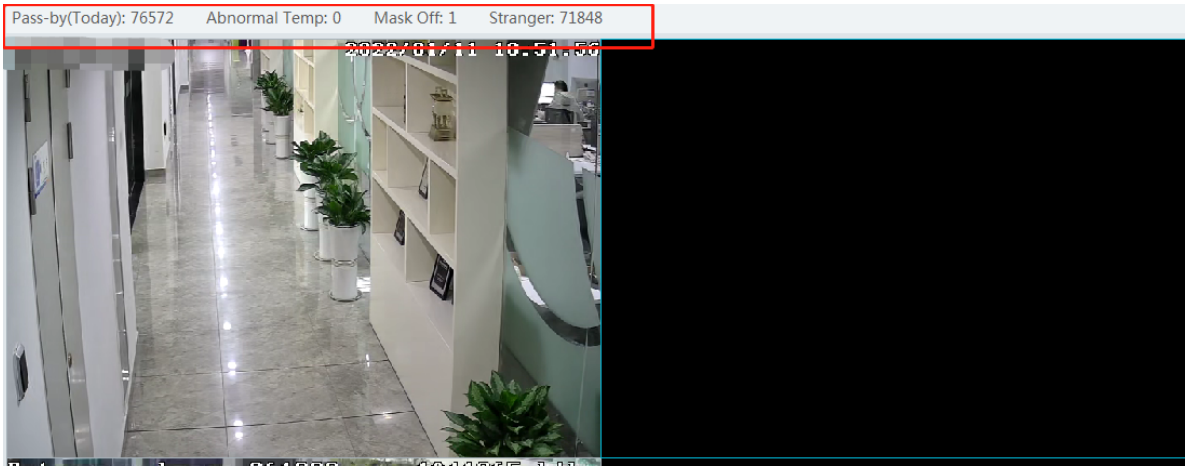
- **Face Comparison Settings**

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.



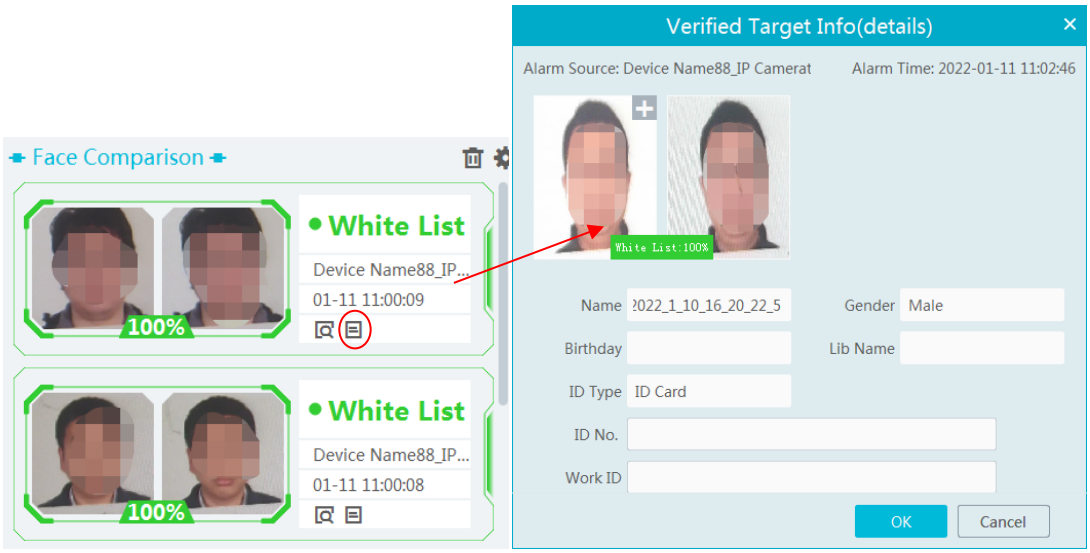
Frame Holding Time: select the alarm pop-up window holding time as needed.

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

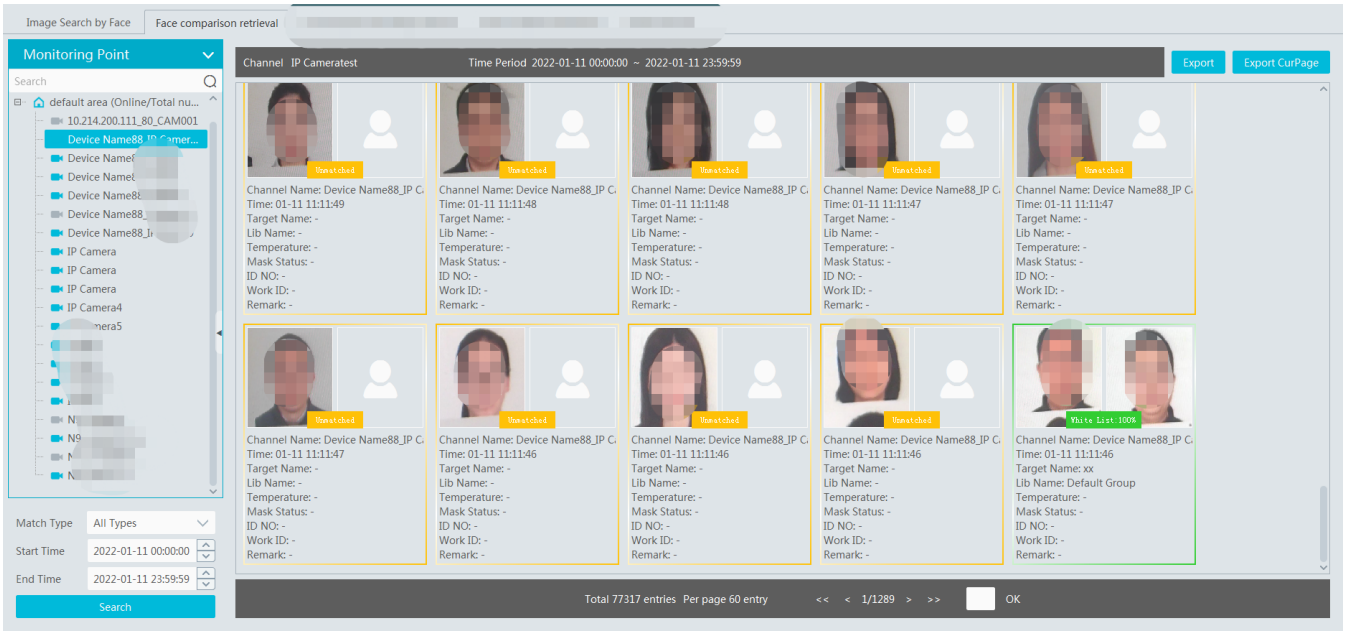


- **Face Comparison Records**

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.

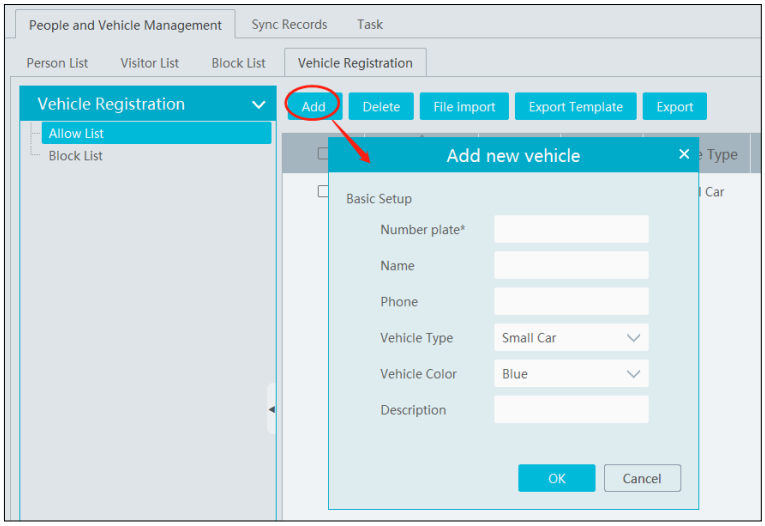


8.2.2 License Plate Comparison

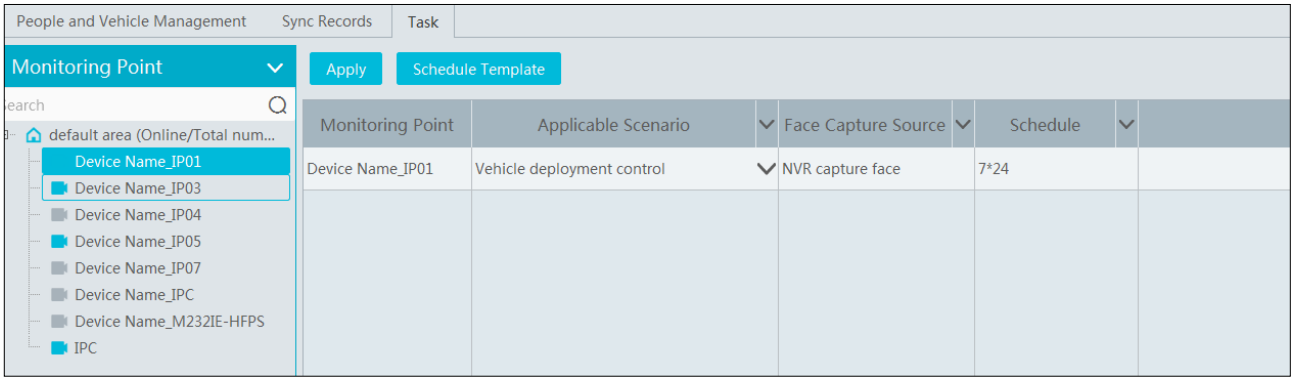
If this is the first time for you to set the license plate recognition function, please follow the procedures.

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

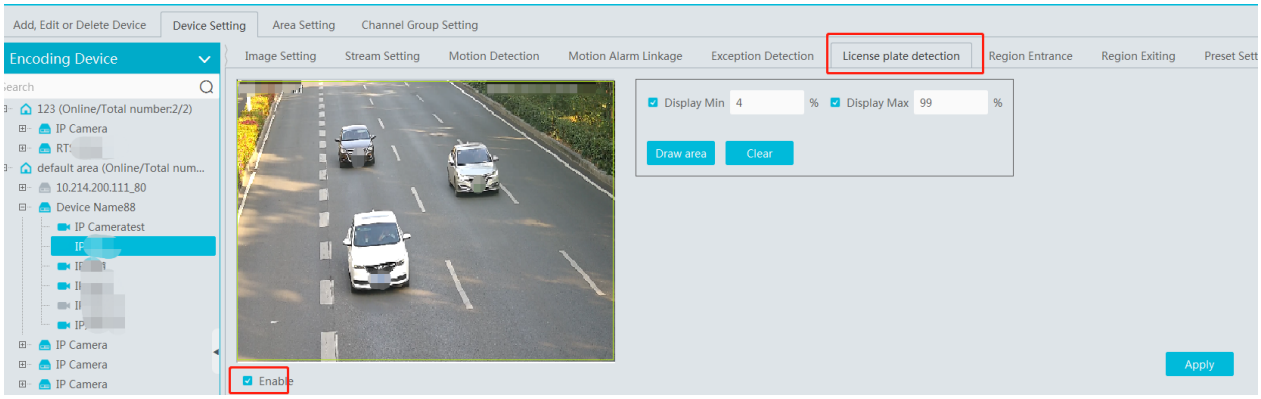
1. Go to People & Vehicle Management → Vehicle Registration interface. Click [Add] to add the vehicle information to Allow List or Block List.



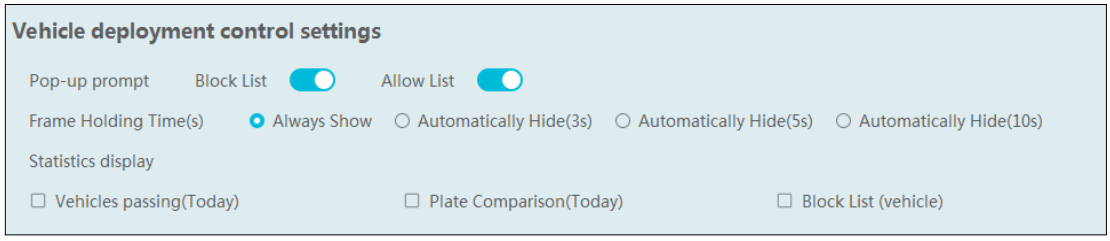
2. Click the “Task” tab to setting license plate recognition task. Select the license plate recognition camera and then click applicable scenario. Select “Vehicle deployment control” and click “OK”.



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



- **License Plate Comparison Display 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.

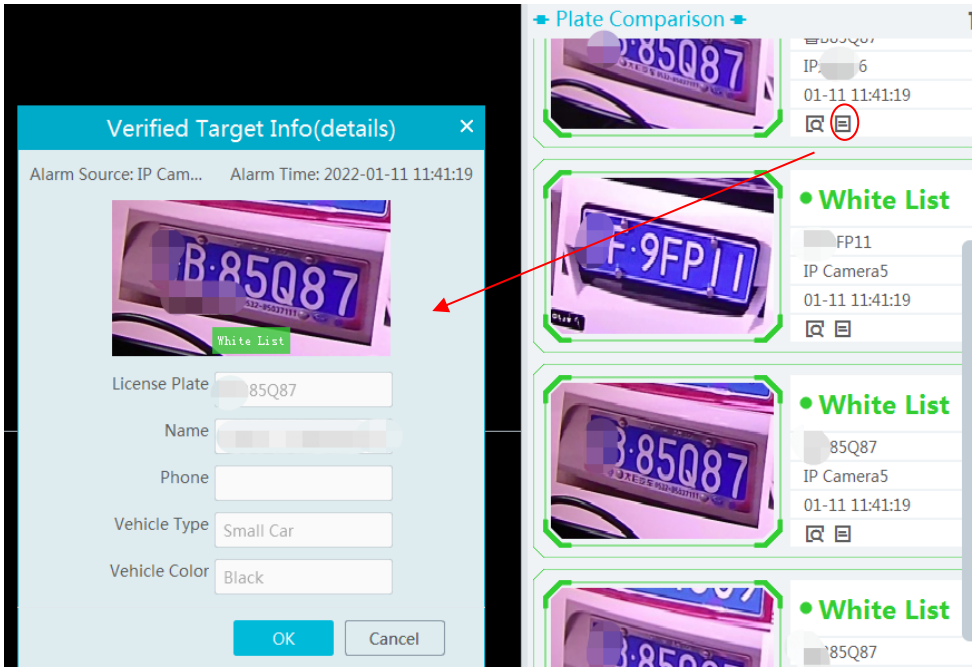


Frame Holding Time: select the alarm pop-up window holding time as needed.

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

- **License Plate Comparison Records**

  Click to view the license plate comparison details.

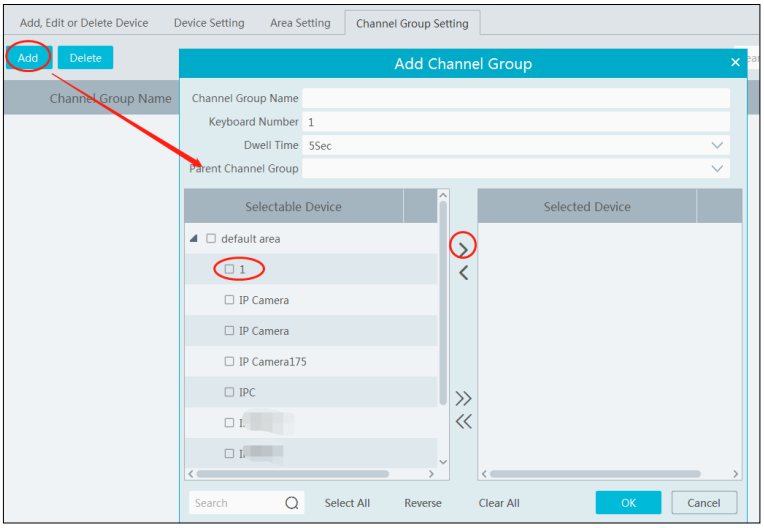


  Click to quickly go to the license plate comparison retrieval interface.

8.3 Channel Group View

➢ Channel Group Setting

① Go to Home→ Channel Group Setting interface as shown below.



② Click [Add].

③ Enter channel group name, channel group and dwell time.

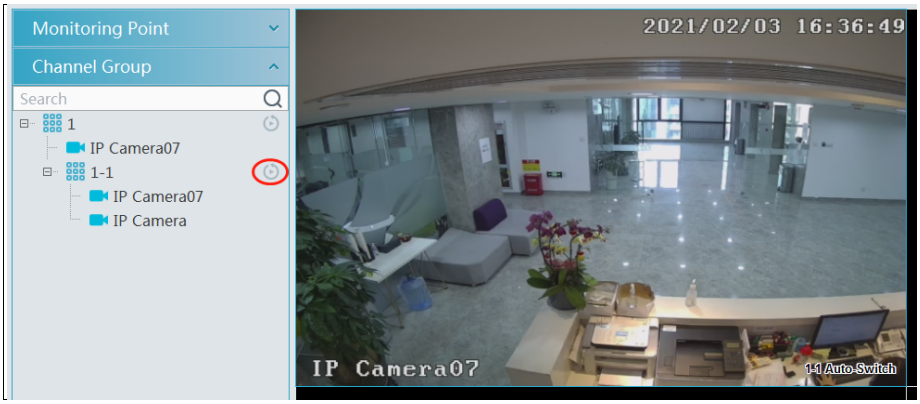
④ Select the parent channel group.

⑤ Add channels to the channel group.

⑥ Click [Ok] to save the settings.

➢ Start Channel Group View

After the channel group is set successfully (See Channel Group Setting), 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 or dragging the channel group to a window 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.

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.

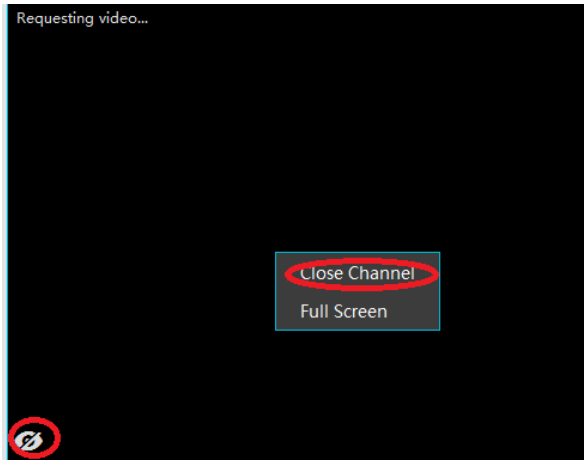
Select a window and click next to the sub channel group to play all channels of the sub channel group in this window in sequence.

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.

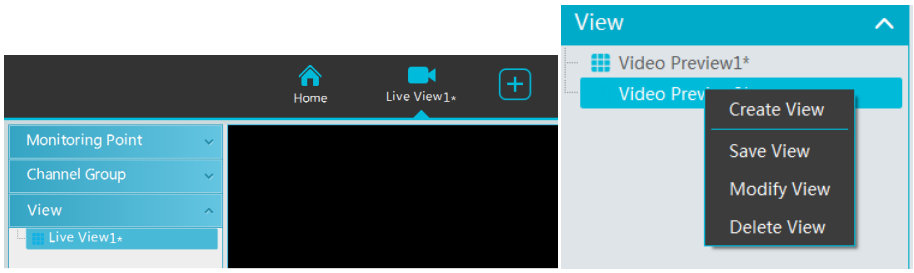
➢ Stop Channel Group View

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.

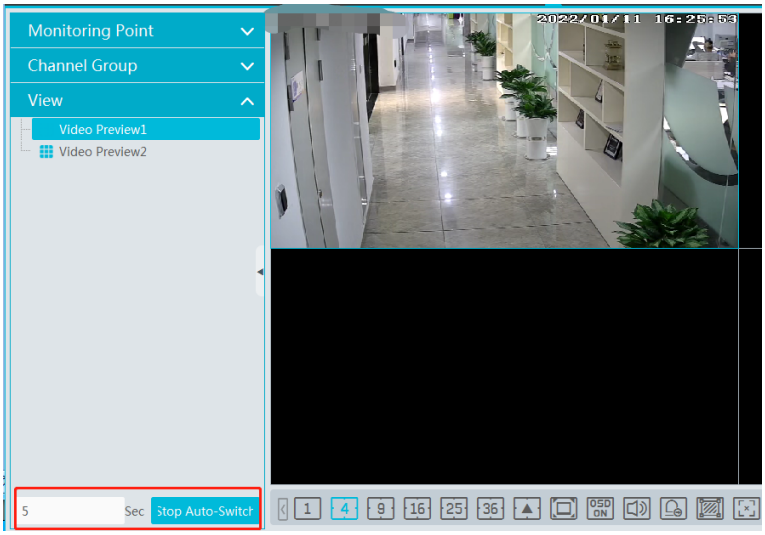
Double click view name to call the view plan.

- **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**

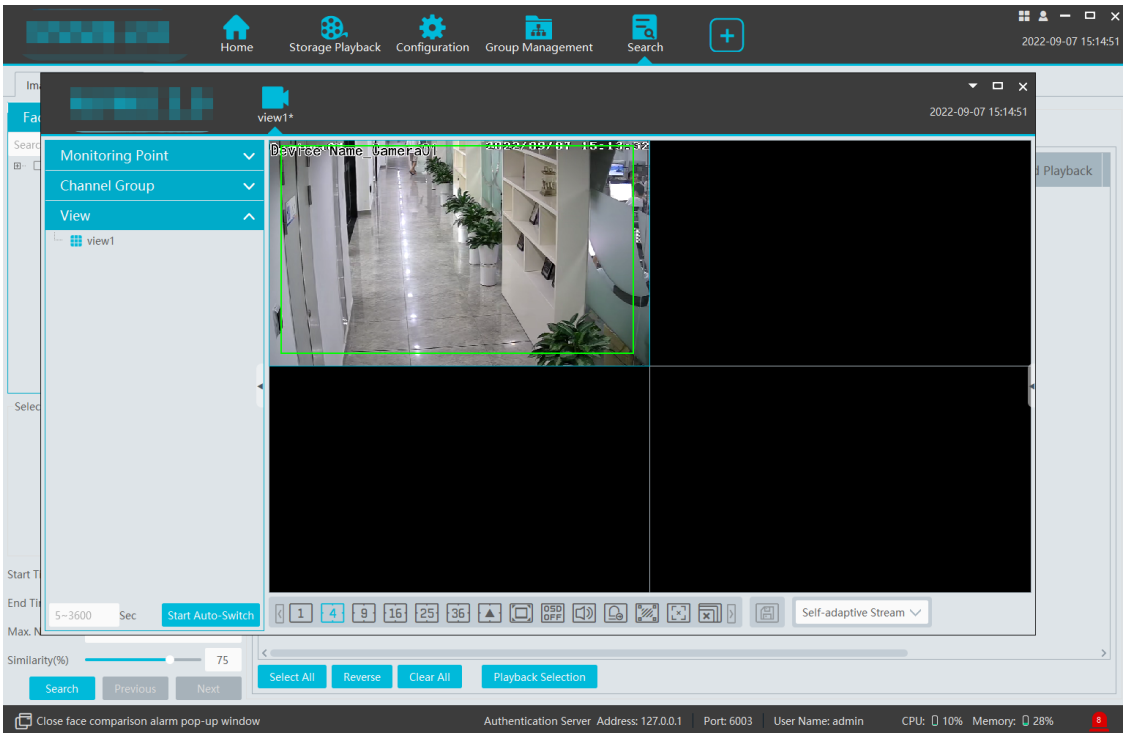
If multiple view plans saved, you can play these views in sequence.



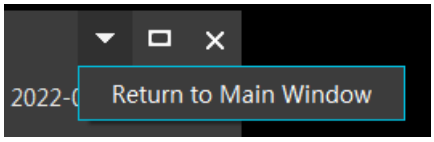
Enter the dwell time (5~3600s) and then click [Start auto-switch] to play these views in sequence. Stop the current auto-switch by clicking [Stop auto-switch].

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).

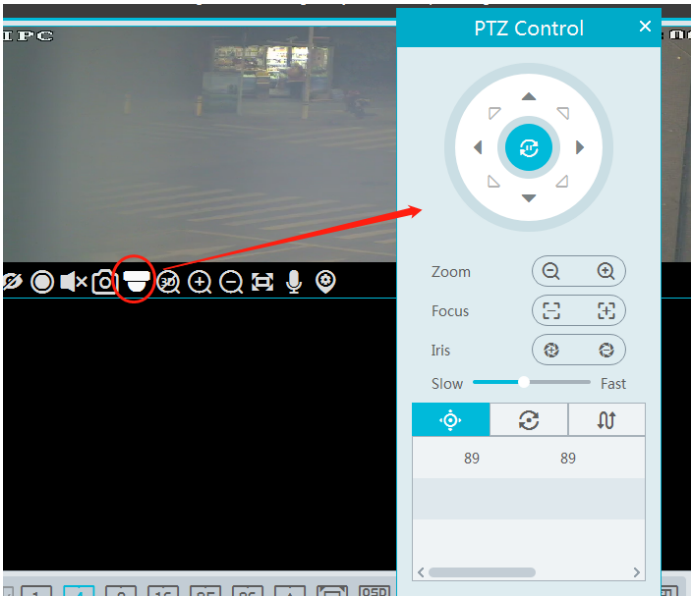


Click on the float window and select “Return to Main Window” to embed this tab in the main interface.



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).

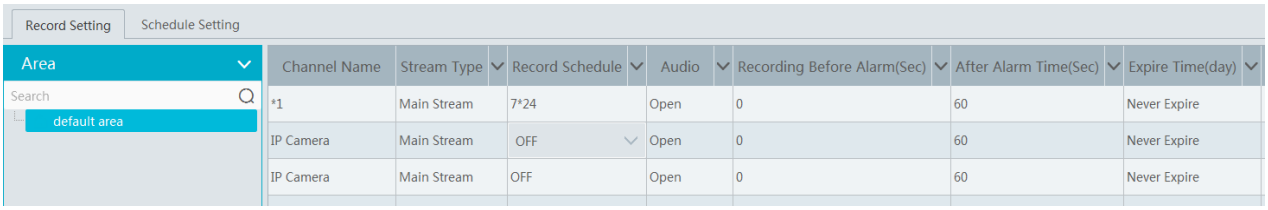
9 Record & Playback

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".



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

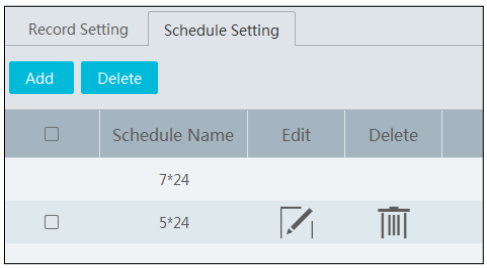
Recording Before Alarm: set the time to record before the actual recording begins.

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

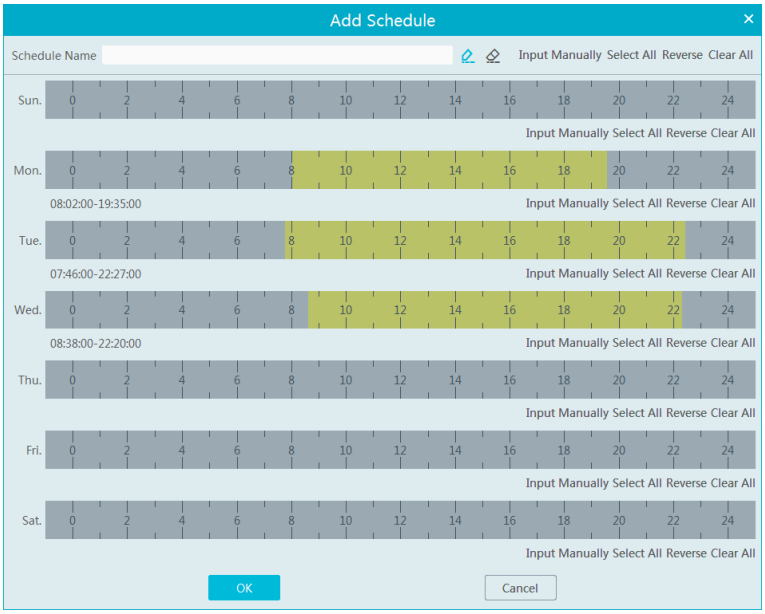
Expire Time: set the expiration time for recorded video. If the set date is overdue, the recorded data will be deleted automatically.

- To set schedule:

① Click the "Schedule Setting" tab to go to the following interface.



② Click [Add].

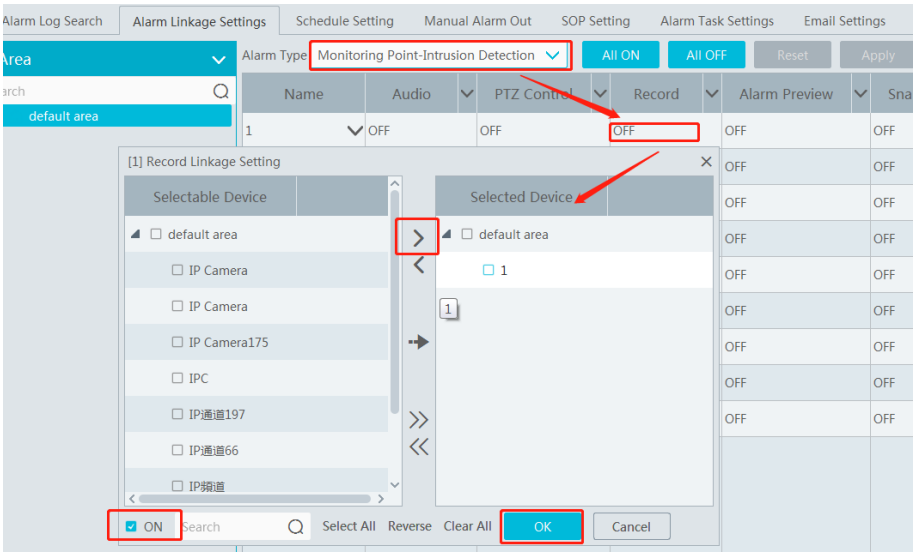


③ Enter the schedule name.

④ Set the schedule. Click and then move the cursor to select the time; click and then move the cursor to delete the selected time. Click “Input Manually” to manually enter the time. Click “All” or “Reverse” to quickly select time. Click “Clear All” to clear all 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 Linkage as shown below. Select alarm type, enable record, set linkage channel and set schedules.
③ Click [Apply] to save the settings.

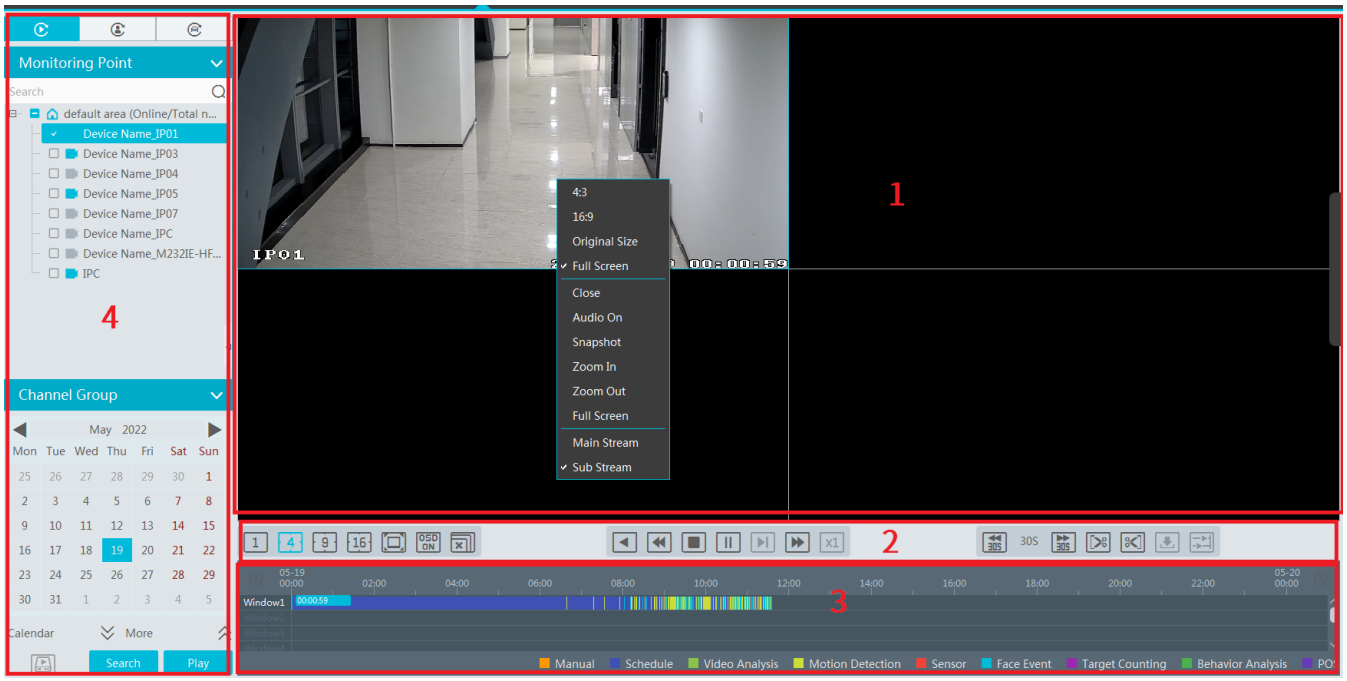


9.2 Record Playback

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



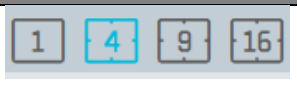
Area Description

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. 1/4/9/16 screen mode is optional.
	Full screen
	Enable or disable OSD
	Close all window viewing
	Get record from network devices
	Get record from storage servers
	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
	Backup start time
	Backup end time
	Start backup
	Synchronous playback or asynchronous playback

Right-click button menu

Menu	Description	Menu	Description
Close	Close viewing	**Zoom out**	Zoom out the current image
Audio On/Off	Audio on/off	**Full Screen**	Click to enter full screen mode
Snapshot	Snapshot	**Sub stream**	Switch to sub stream playing
Zoom In	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 type includes manual recording, motion detection recording, schedule recording, sensor recording, object removal recording, video exception recording, intrusion recording and line crossing recording 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.

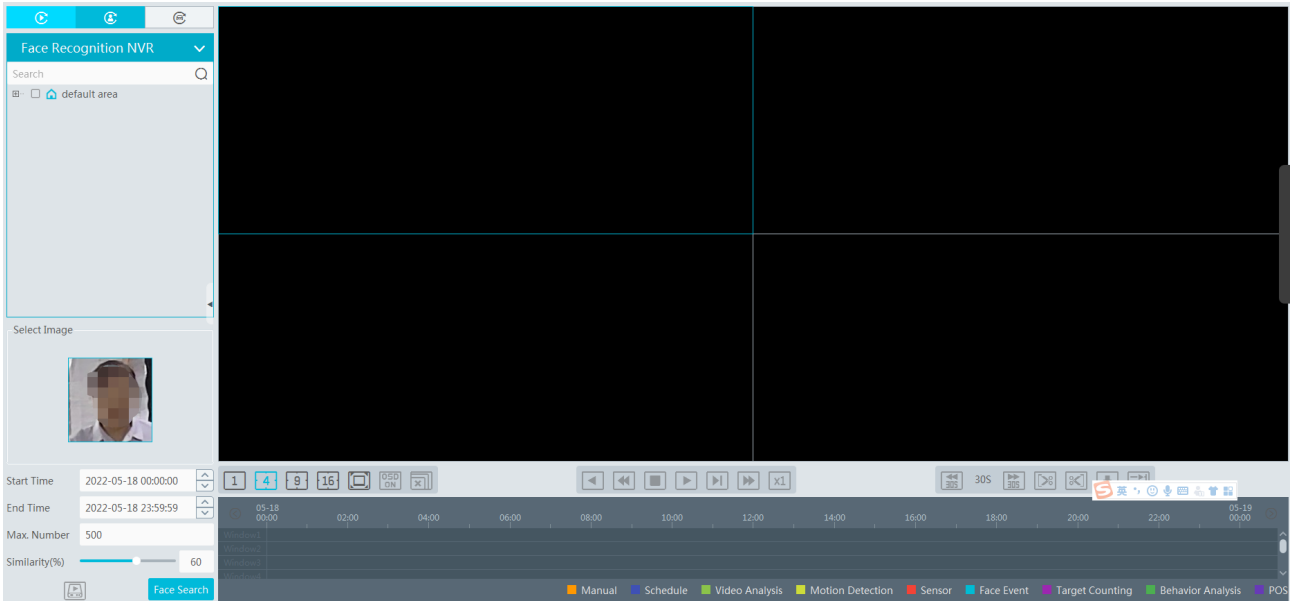
In synchronous mode, one camera can only have one playing window. All cameras’ record information can be viewed at the same time. When playing record file in synchronous mode or asynchronous mode, clicking or will be useless unless all the playback windows are closed.

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

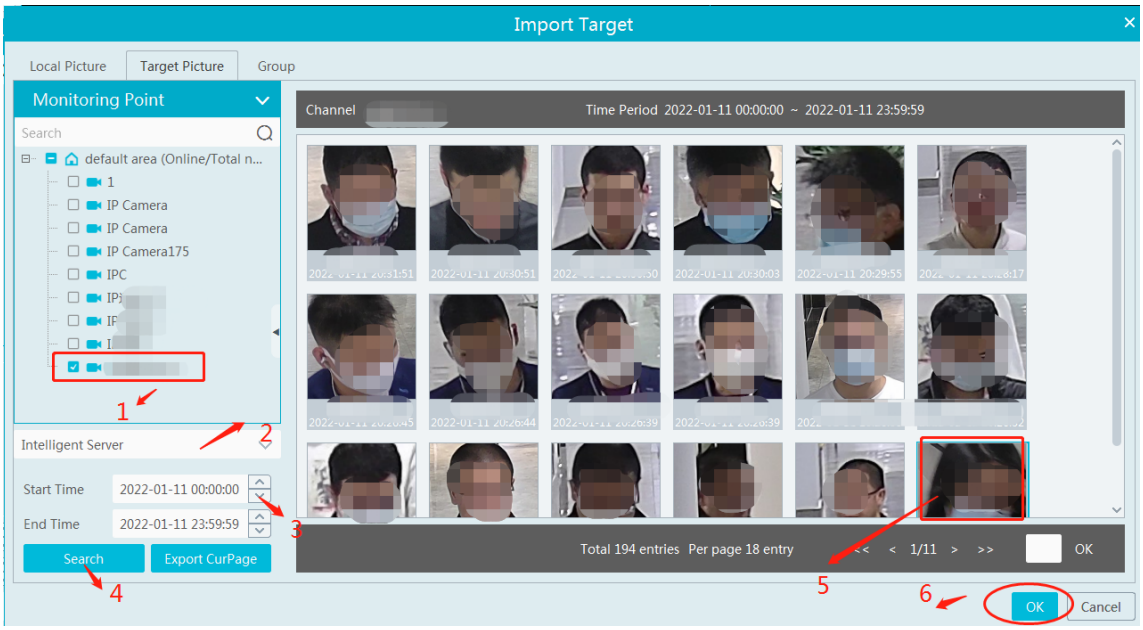
For the added face recognition NVR, you can play back by searching face.



Clicking on enters the above interface. Select the face recognition NVR and then click to add a face picture. You can add the face picture form 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.

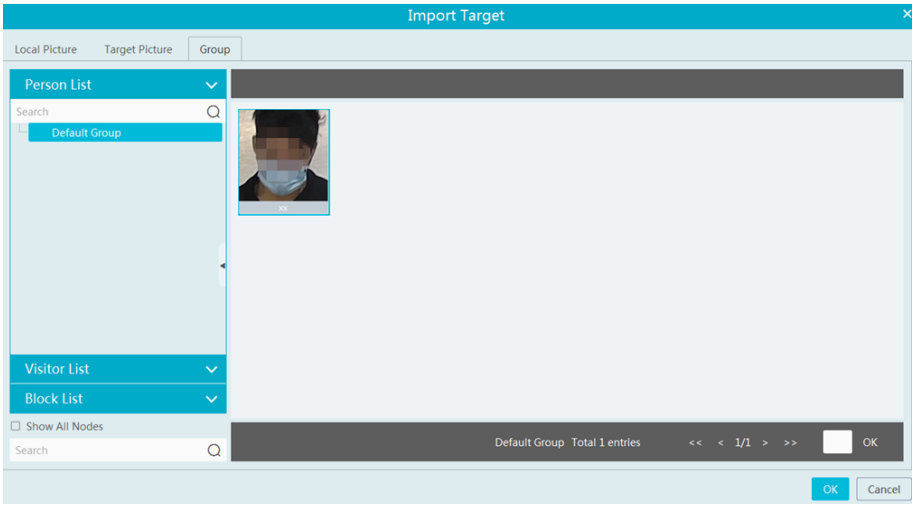
Add a face picture from the local PC: Click to select the desired face picture in the local PC and then click [OK] to save the settings.

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



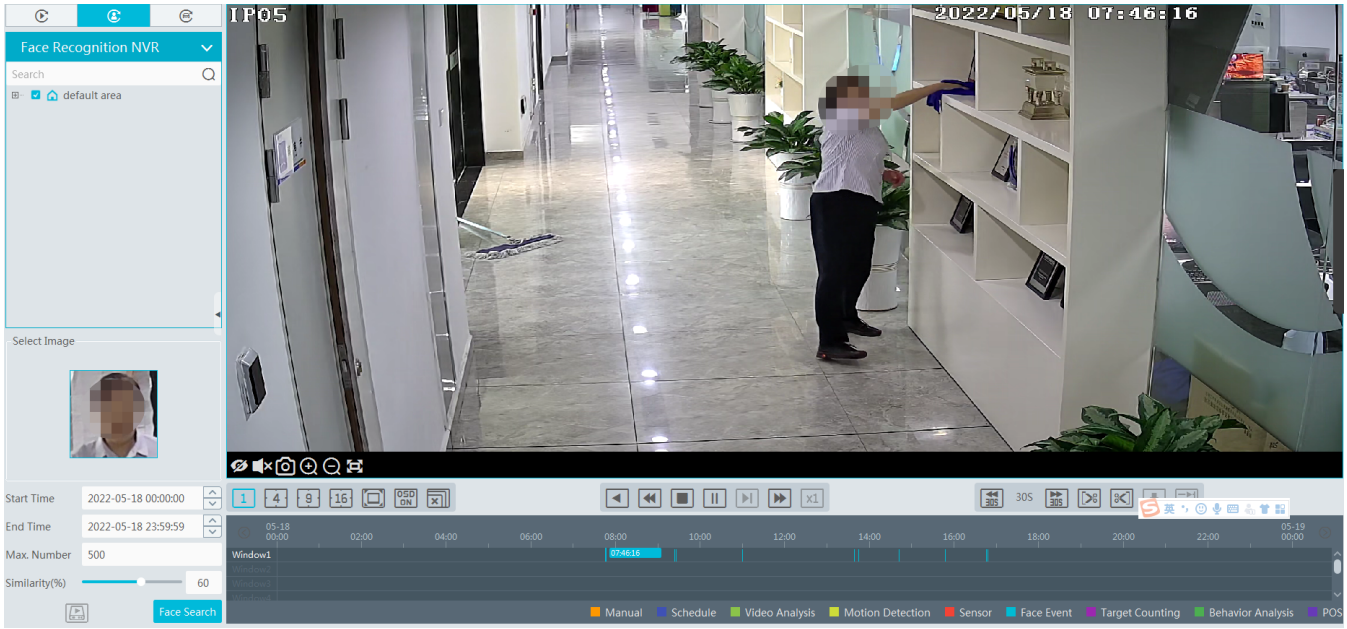
Add a face from the face database:

1. Click the “Group” tab.
2. Select the face picture from the person list or visitor 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.

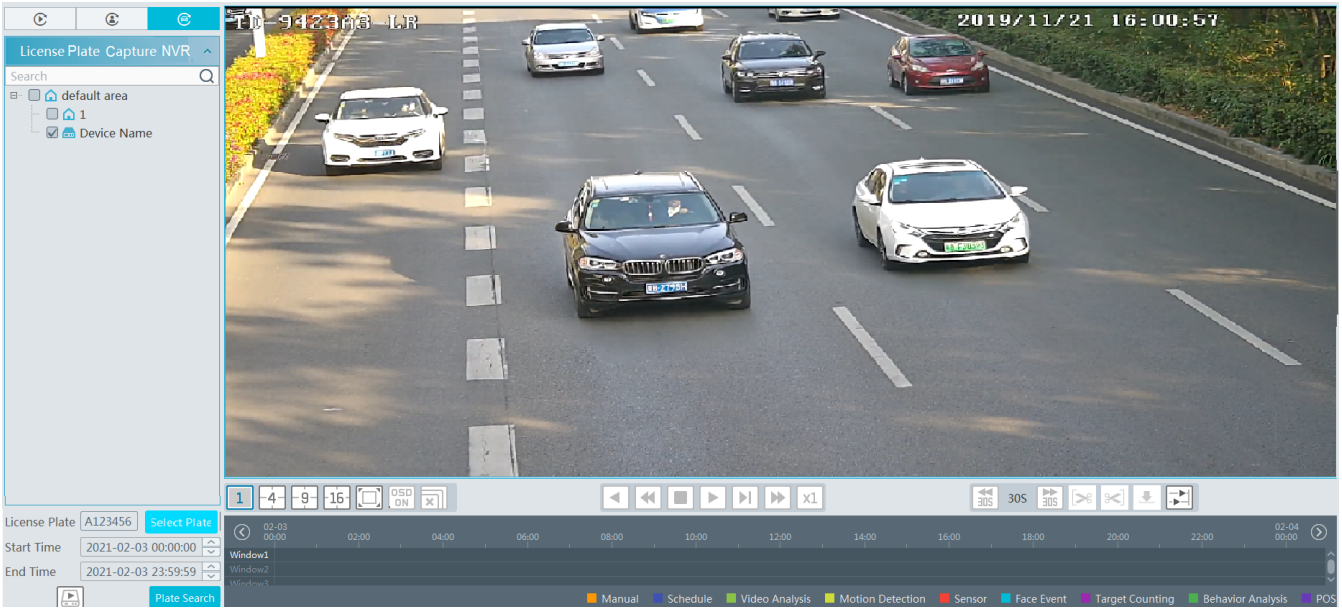
Note: The record source is from the HDD of the face recognition NVR. The comparison record of this person must exist in the HDD, or no record can be played.



9.2.3 Smart Playback by License Plate

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

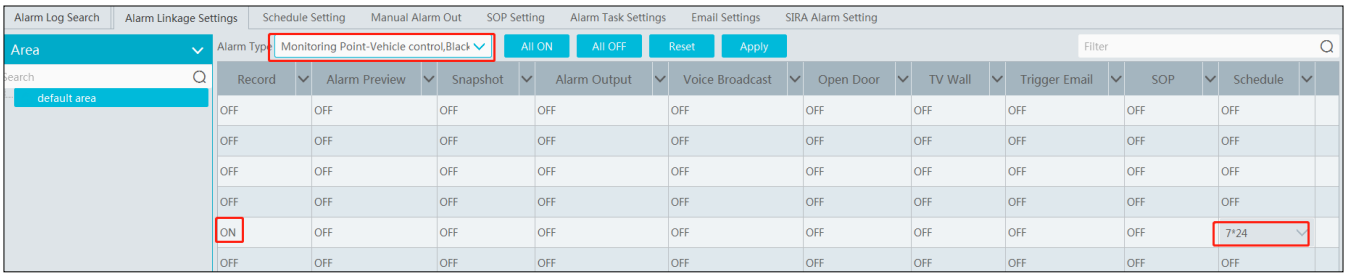
1. Select the ANPR camera or NVR.
2. Enter the license plate number or click [Select plate] to select the plate from vehicle database or license plate captured when the vehicle entering or exiting the parking lot.



: select the record source from the storage server. License plate captured by ANPR camera or ANPR camera bound to the lane of the parking lot can be searched.

: select the record source from the HDD of the NVR.

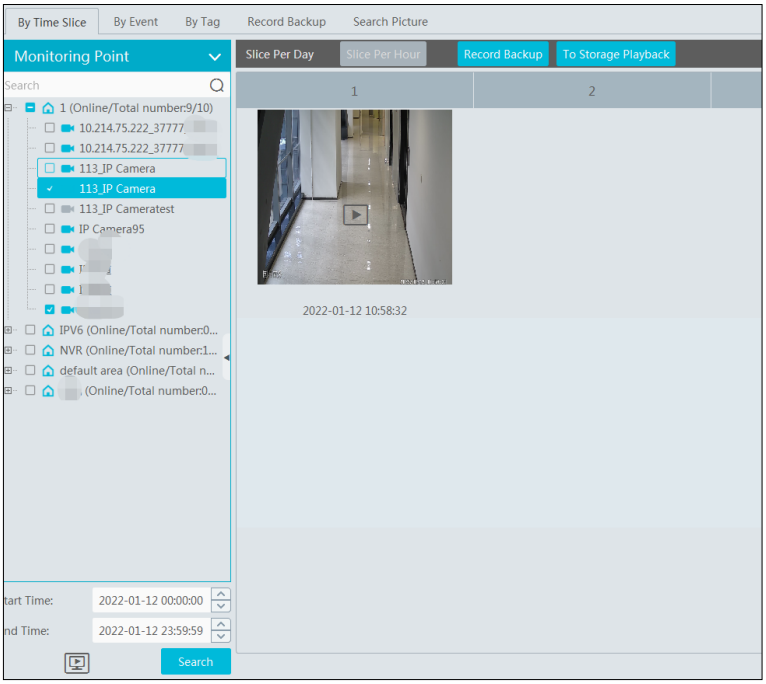
Note: before you start searching, the license plate detection must be enabled and corresponding alarm linkages and the schedule must be set in advance.



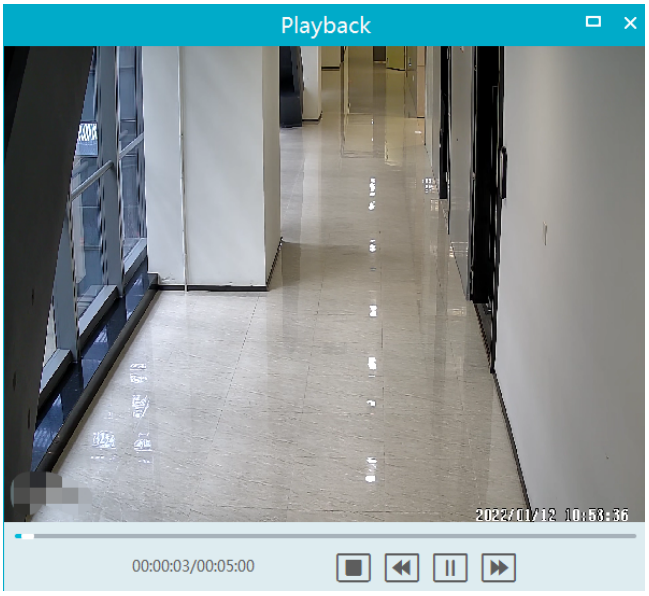
9.2.4 Playback by Time Slice

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.

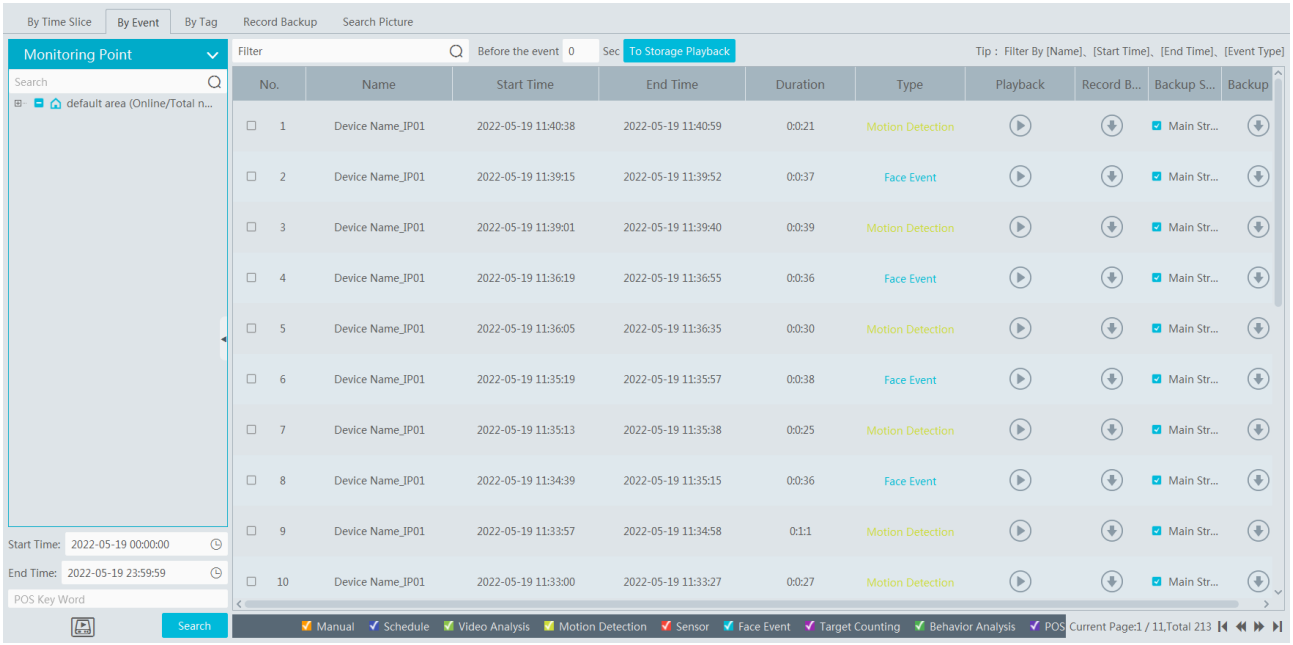
Record Backup: In the Search by Time Slice interface, select a time slice and then click “Record Backup” to back up the record file during this period quickly.

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.



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:

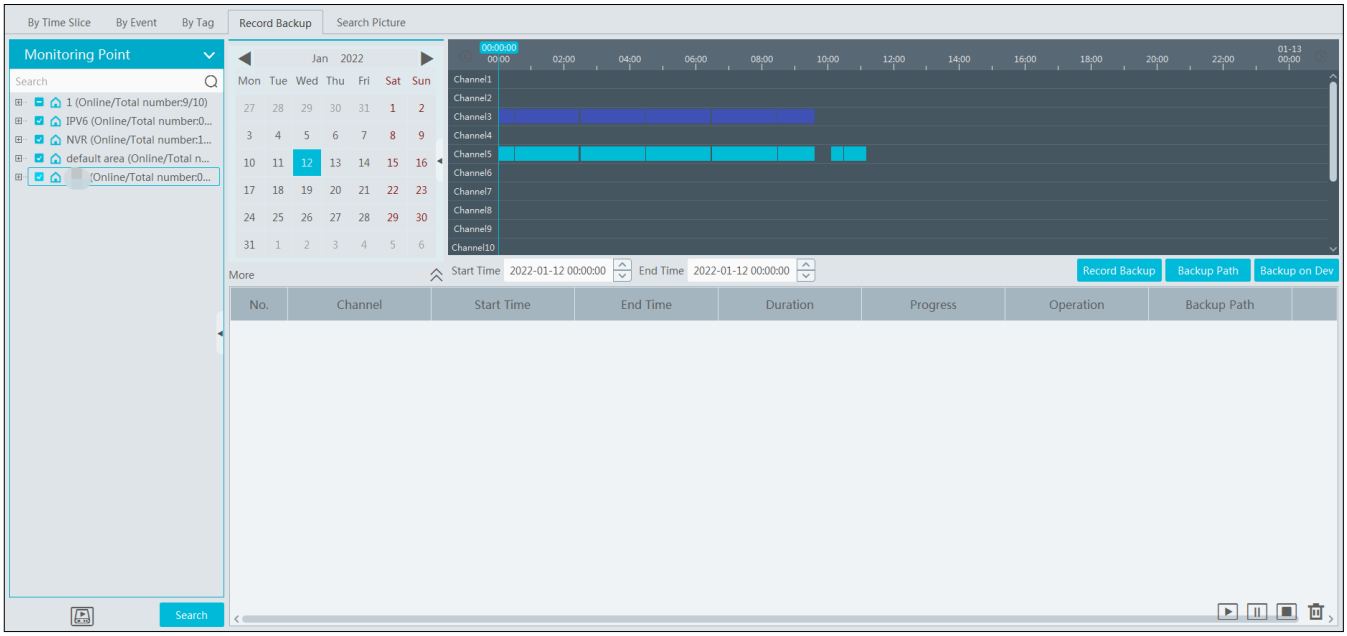
① Select the desired monitoring point.

② Select date and click “More” to select the start and the end time and event type.

③ Click / to get records from device or storage server.

④ Set the start time and the end time of backup. Then click [Backup].

⑤ The backup progress will be seen during backing up the record. Click to pause; click to stop backing up the record; click to clear the backup list.

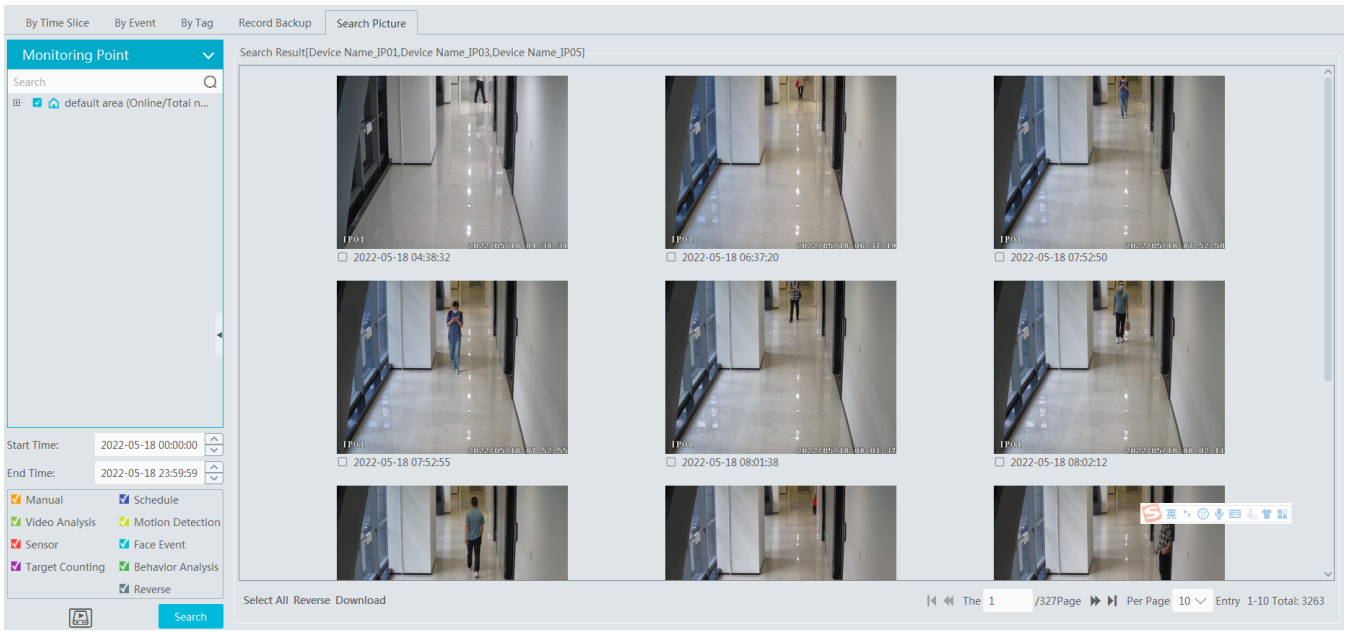


"Backup on device": This function is applied to the added NVR devices. Search the record from the HDD of the NVR in this interface and then insert a USB storage device into the USB port of the NVR and then click this button. Then the recorded files will be backed up to the USB storage device remotely.

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.

② Set the start time and the end time.

③ Choose events.

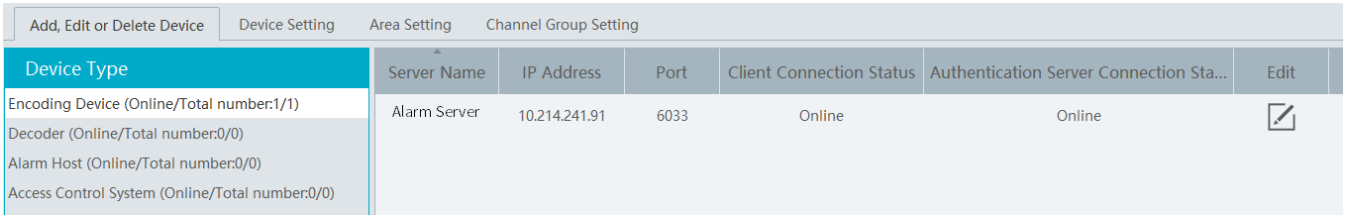
④ Click [Search]

10 Alarm Management

10.1 Alarm Server Configuration

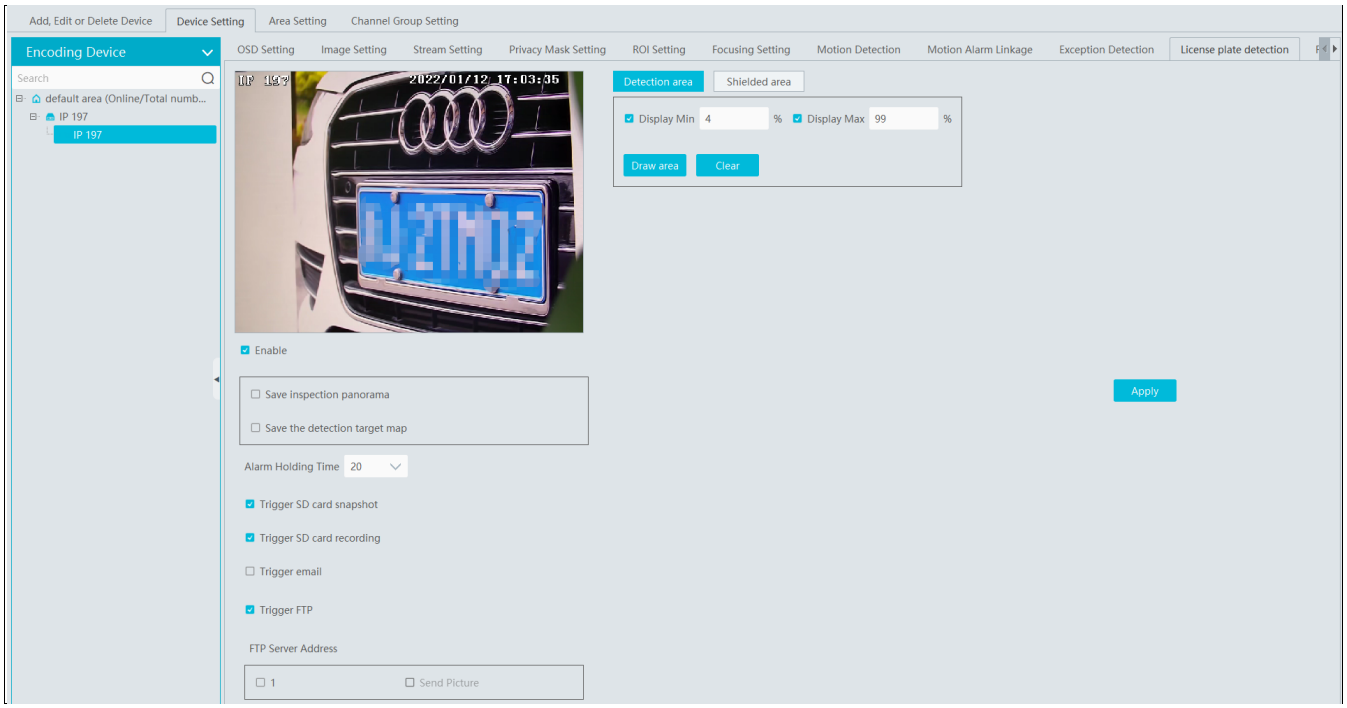
Alarm server is in charge of receiving and recording alarm information of connected devices and then sending the alarm information to the relevant user terminal system or devices in accordance with prior alarm settings. There is a default alarm server.

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.



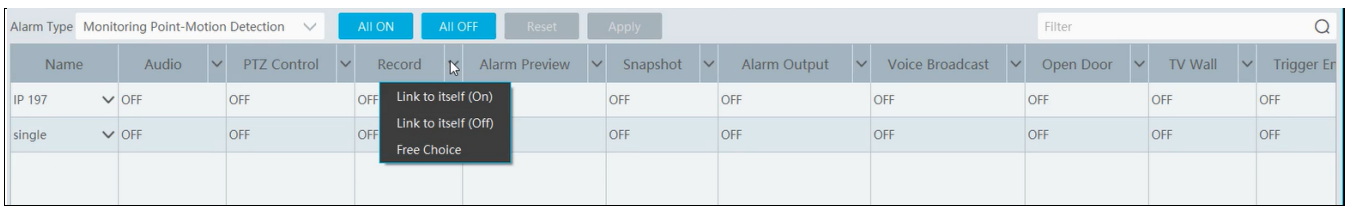
10.2 Alarm Configuration

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.

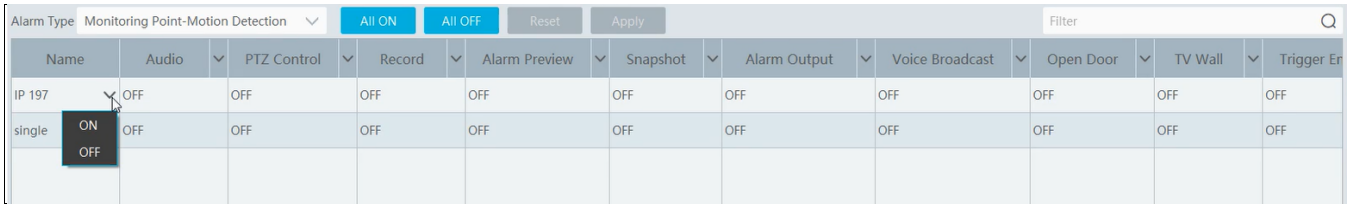


Select area, alarm type and then enable alarm linkages.

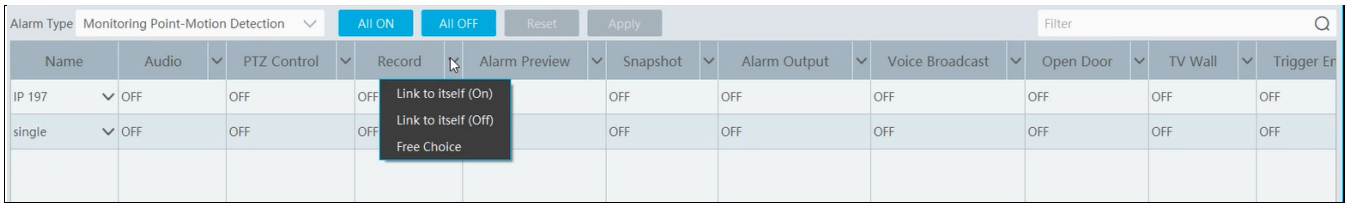
All ON: enable all alarm linkages of the current alarm type and area (schedule excluded).

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

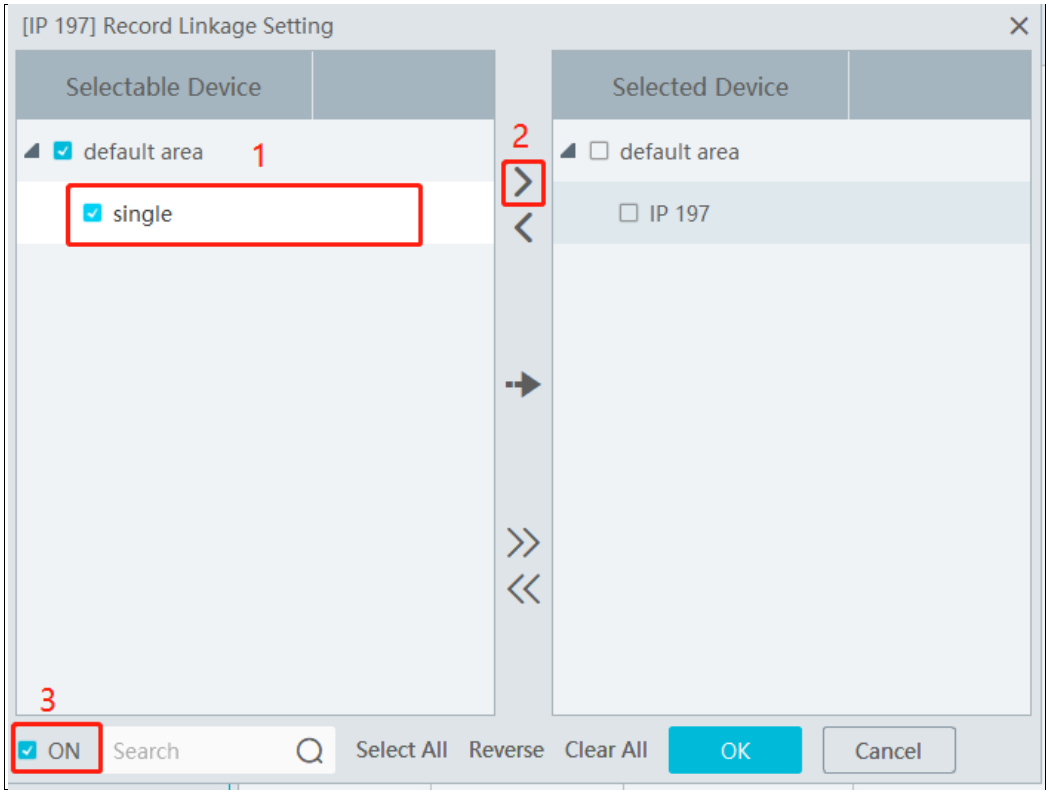
Select beside the device name and select “ON” to enable all alarm linkages of the device (schedule excluded).



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

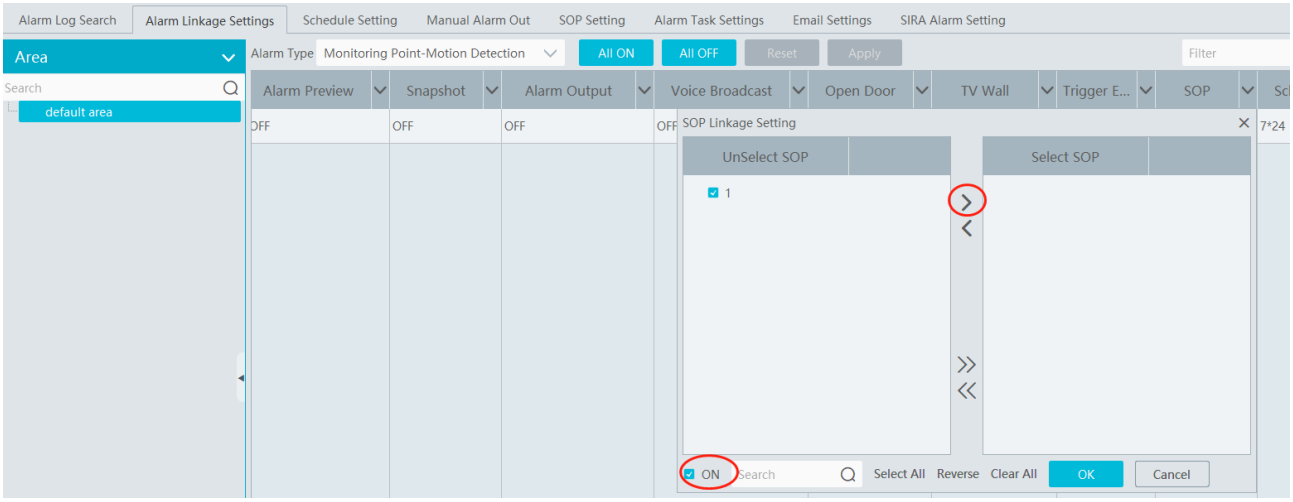
advance. Click the “Schedule Setting” tab to set (See Schedule Recording→To set schedule for details).

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 and visitor 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”.

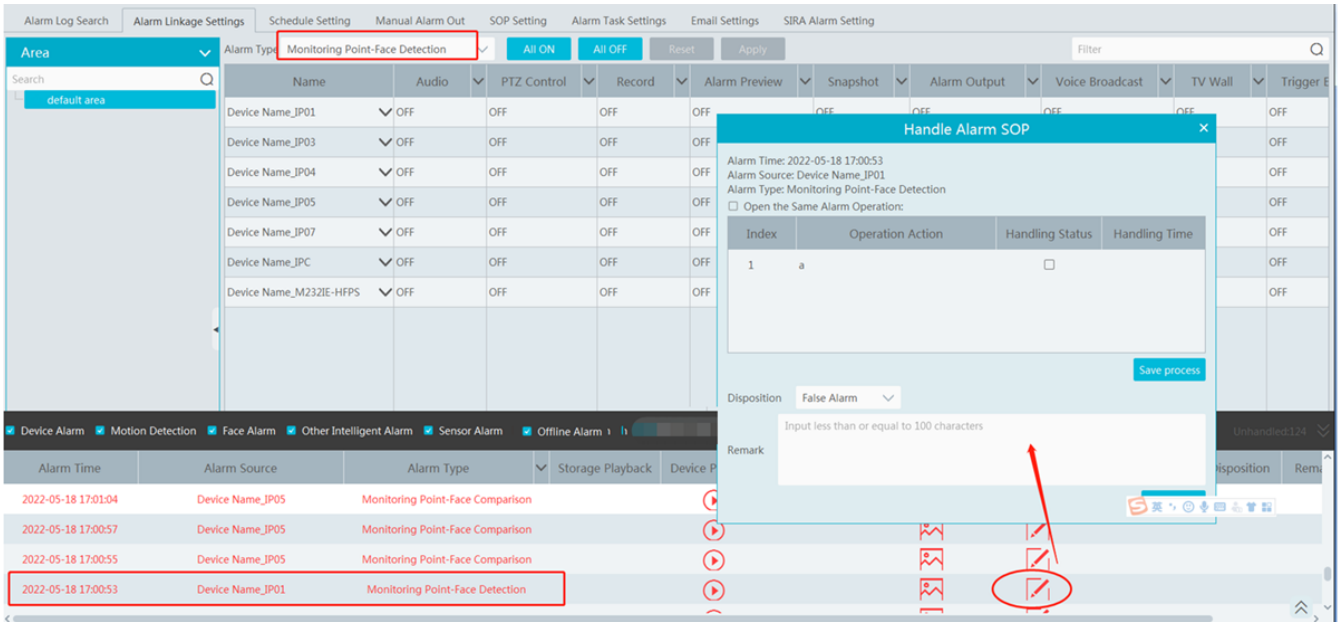
10.3 SOP Settings

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

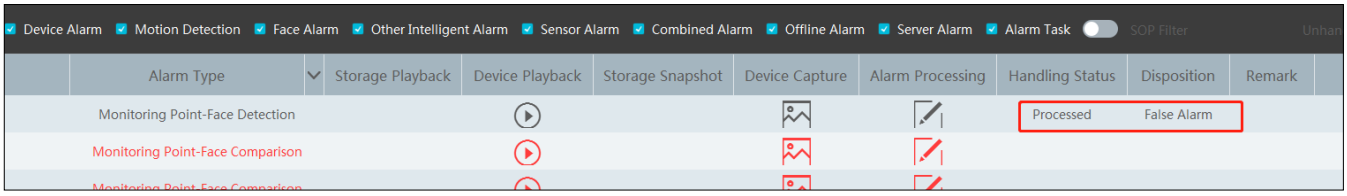
1. Click “+” to add a SOP name.
2. Click “Create” to create a SOP action.
3. In the alarm linkage settings interface, select the alarm event and enable SOP of the relevant device.



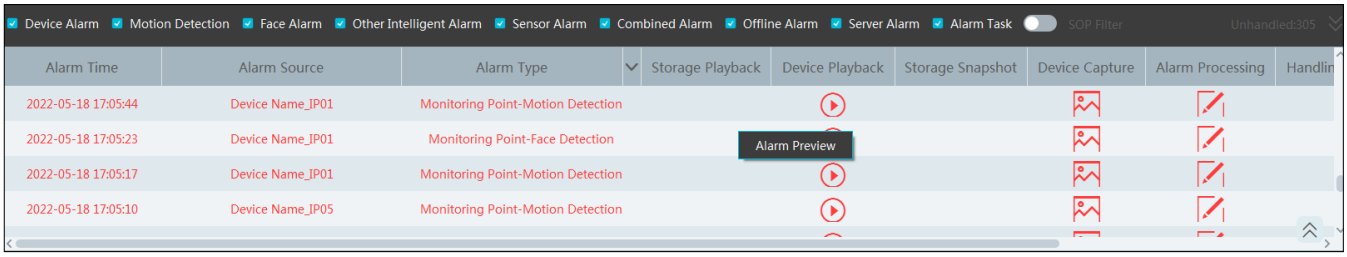
4. Click to extend the alarm list.
5. Click to handle the alarm. Select the SOP action and then click “Save Process”. After that, choose disposition and enter remark as needed.
   The disposition includes: False alarm, true alarm, customer test, technical event, service test.



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



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.



10.4 Alarm Task Settings

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

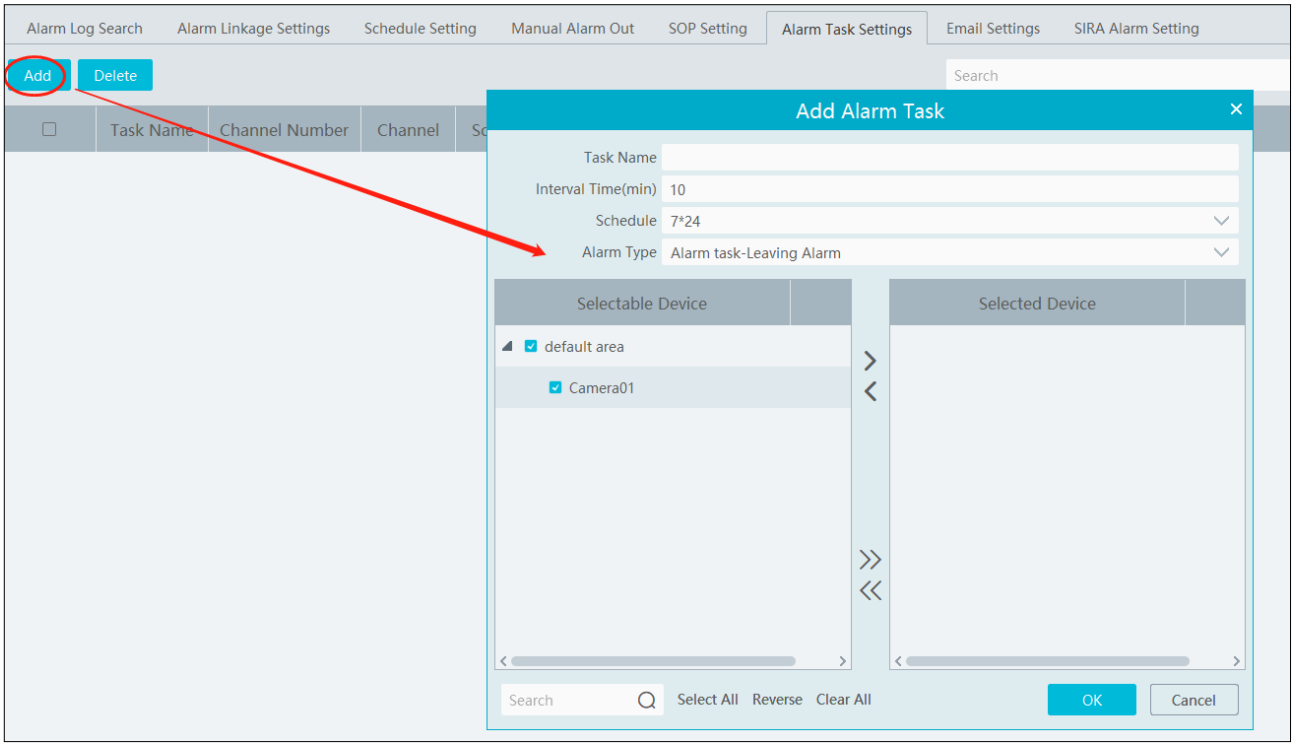
Leaving alarm: When someone leaves the predefined area and doesn't come back within the set time duration, the system will perform alarm linkages.

To set a leaving alarm task:

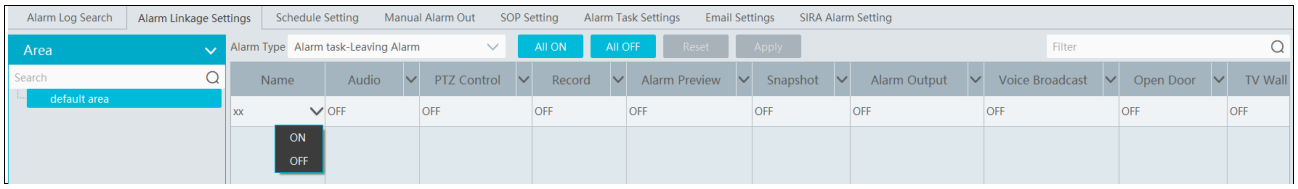
1. Enter the Alarm Task Setting interface.
2. Click [Add] to add the alarm task.

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

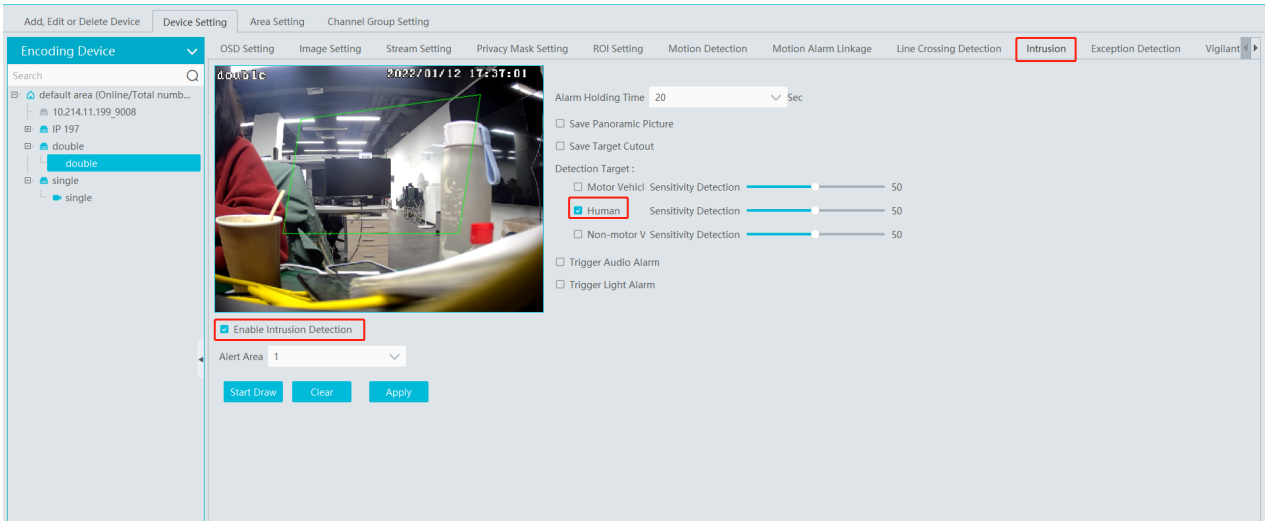
   Multiple cameras can be added to an alarm task.



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.

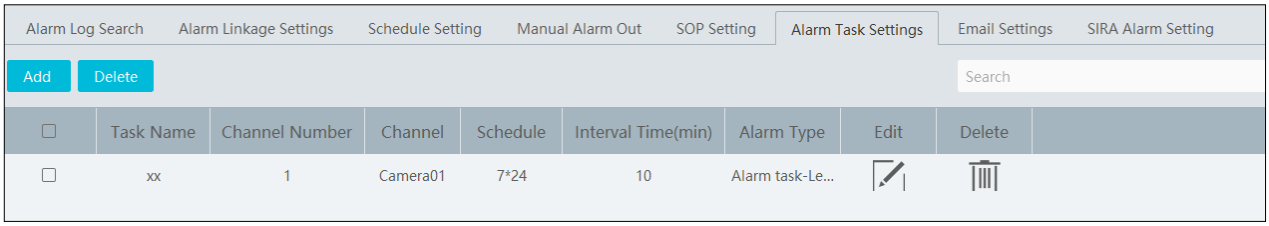


4. Go to the Device Setting interface to enable Intrusion and set the detected area.



Note:

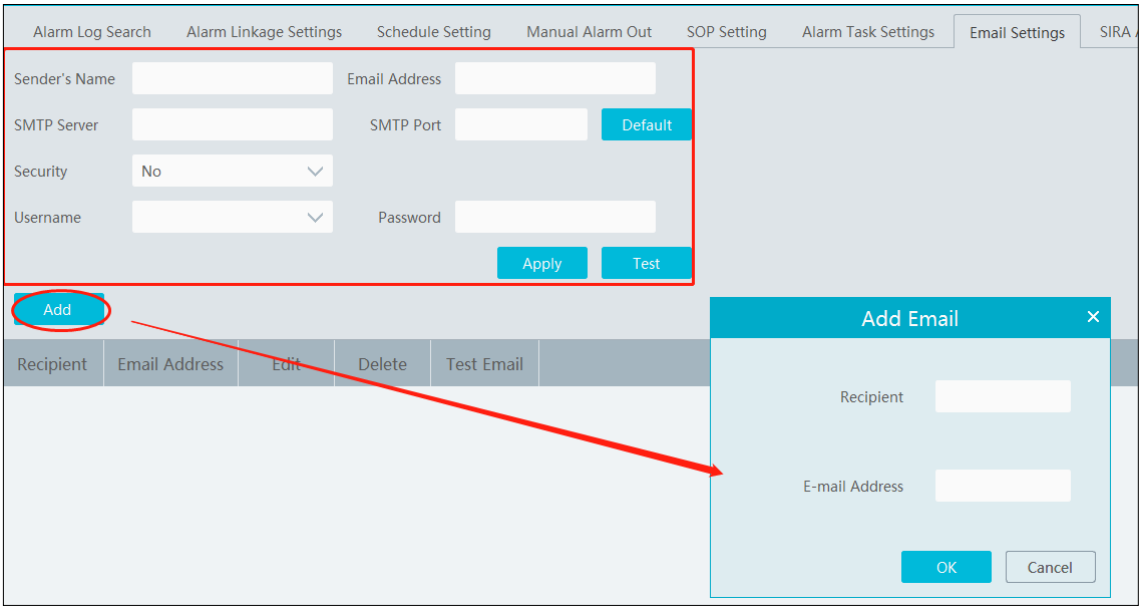
1. The selected camera must support and enable intrusion function, or leaving alarm will not take effect. If the camera supports vehicle/people classification, please check “Human” as the detection target.
2. After the leaving alarm task is set and intrusion is enabled for the camera, when someone enters 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.



10.5 Email Settings

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

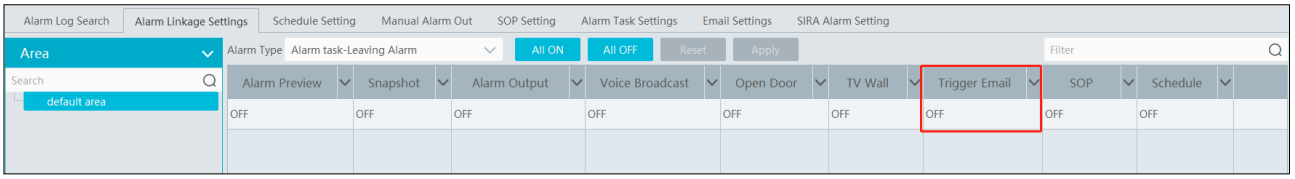
Click Home→Alarm Center→Email Setting to go to the following interface. Add the sender and recipient’s email information here.



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

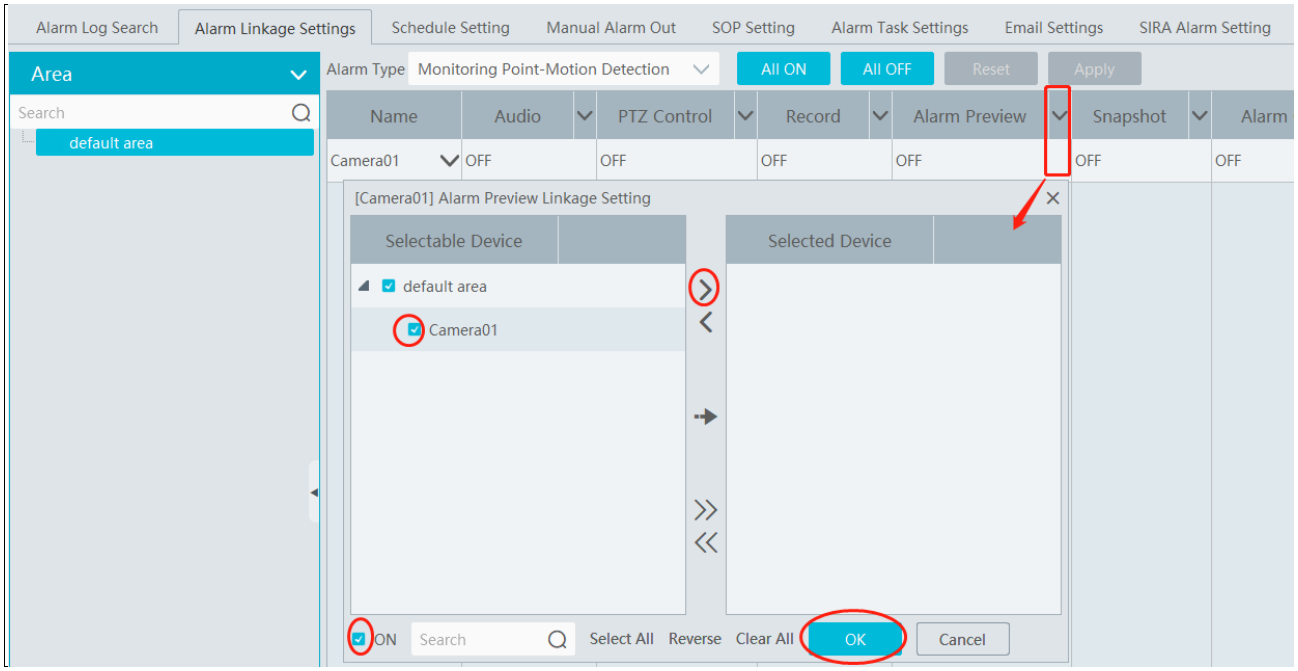
Clicking on the [Add] button adds the recipient information.

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

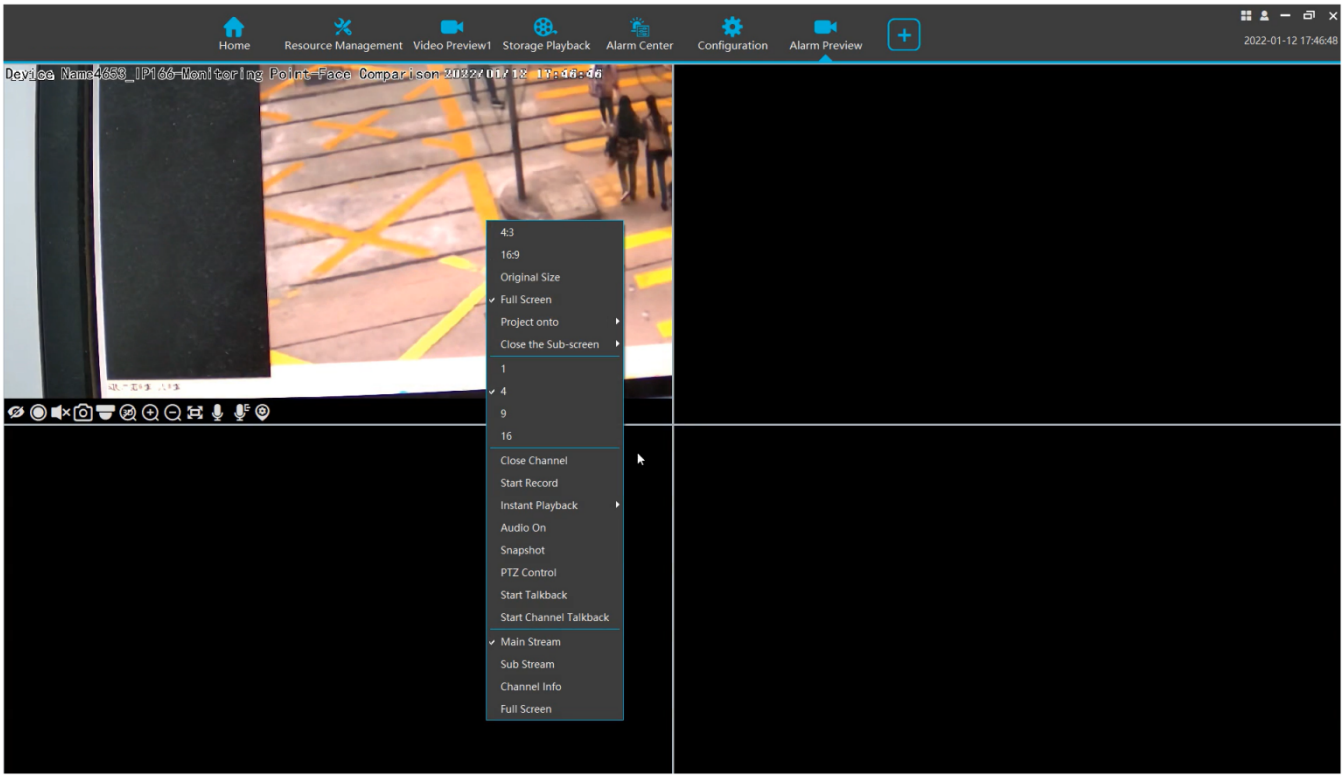


10.6 Alarm View

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

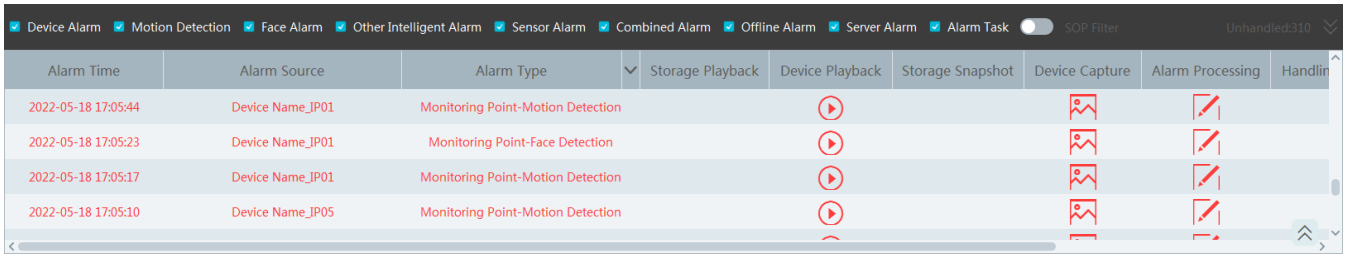


In the alarm preview interface, you can select multi-screen display mode by right clicking on the preview window as shown below.

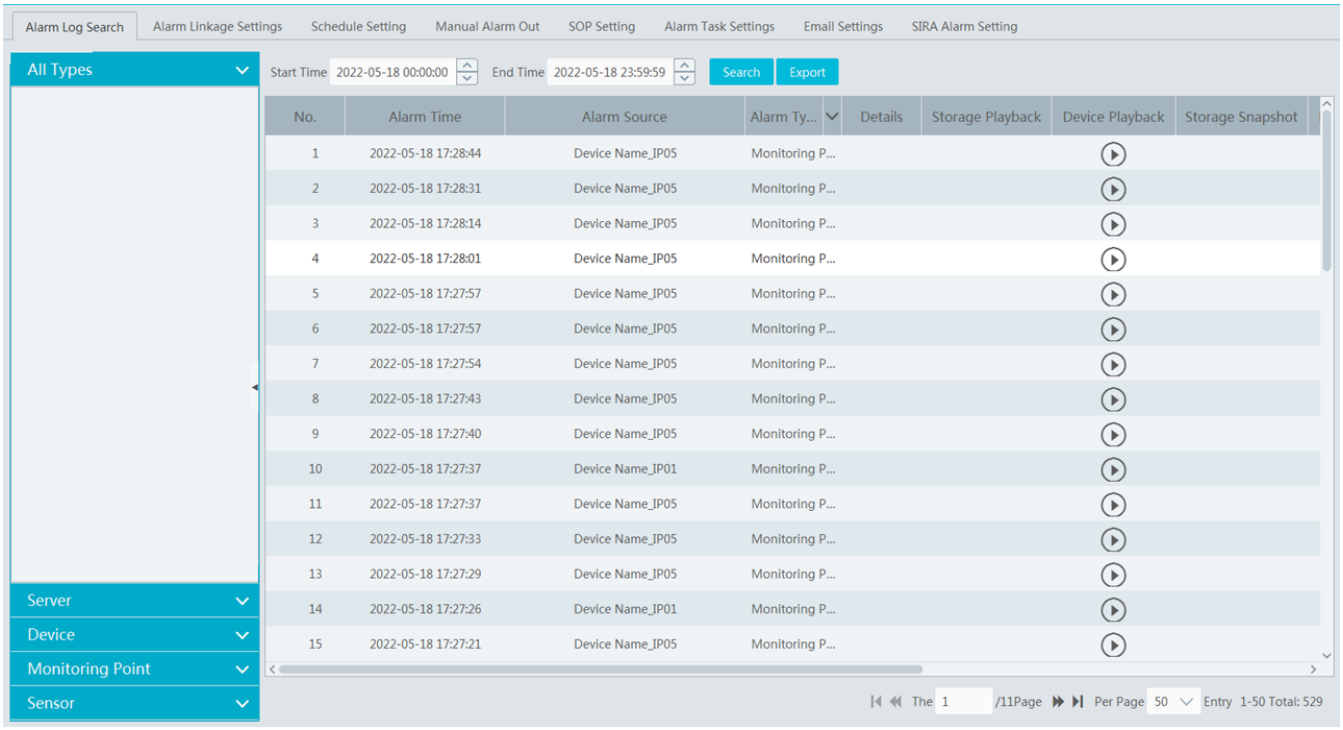


Click on the bottom right corner to expand the alarm list as shown above. Hover the cursor on the top of the alarm list and then a bidirectional arrow will appear. Drag the alarm list up or down to extend or shrink the alarm list.

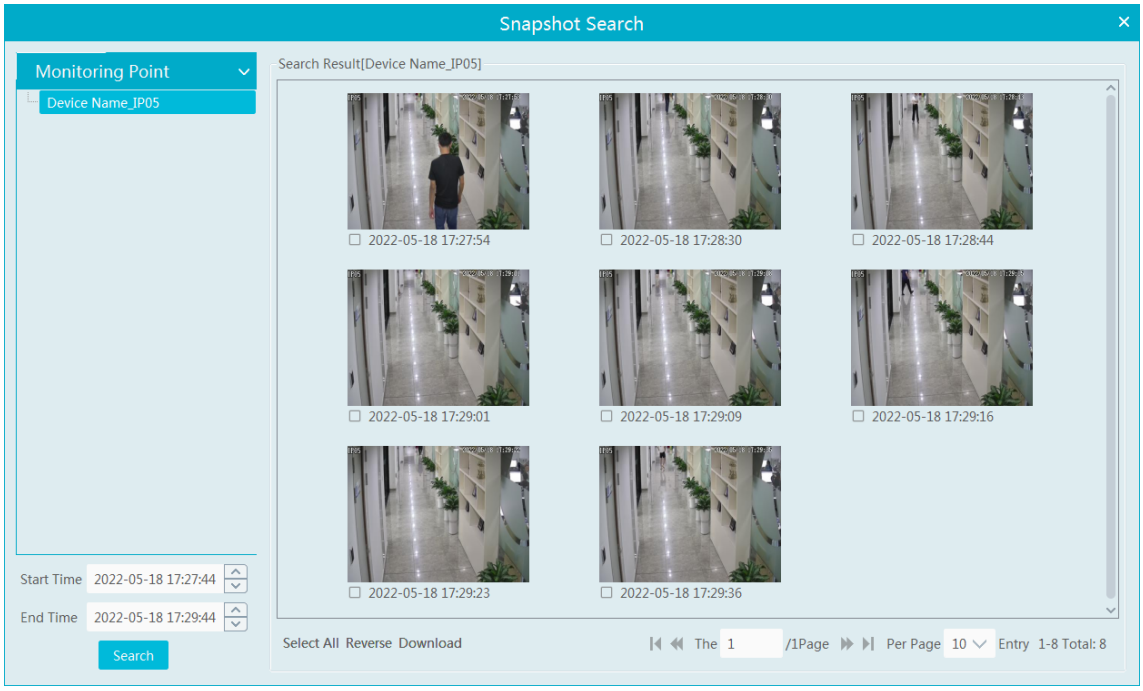
Click or to play the record or captured images.
Right clicking on an alarm item displays a menu as shown below. Click “Alarm Preview” to jump to the alarm preview interface.



10.7 Alarm Log



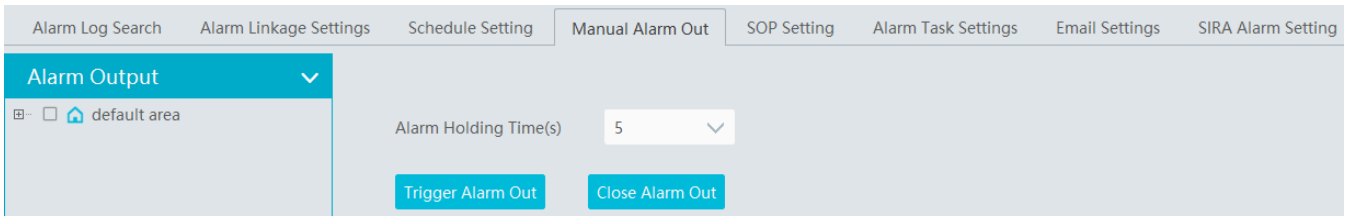
Click to play the record; click to open the snapshot search window as shown below.



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

10.8 Manual Alarm Out

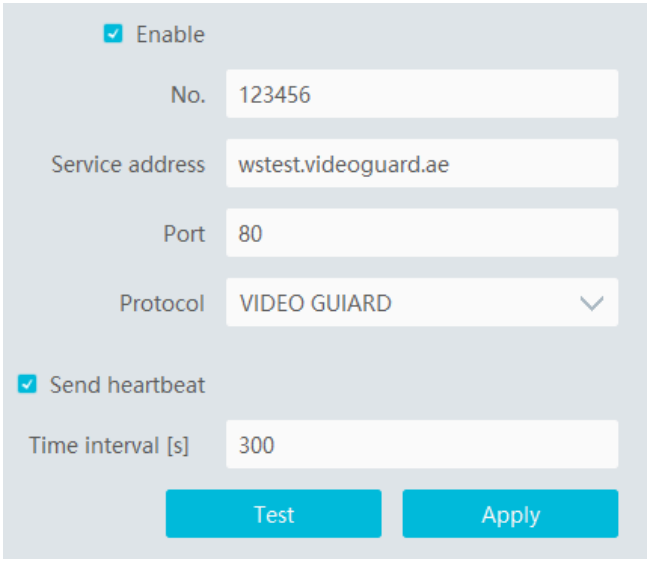
Click “Manual Alarm Out” tab to go to the following interface.



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

10.9 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.



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.

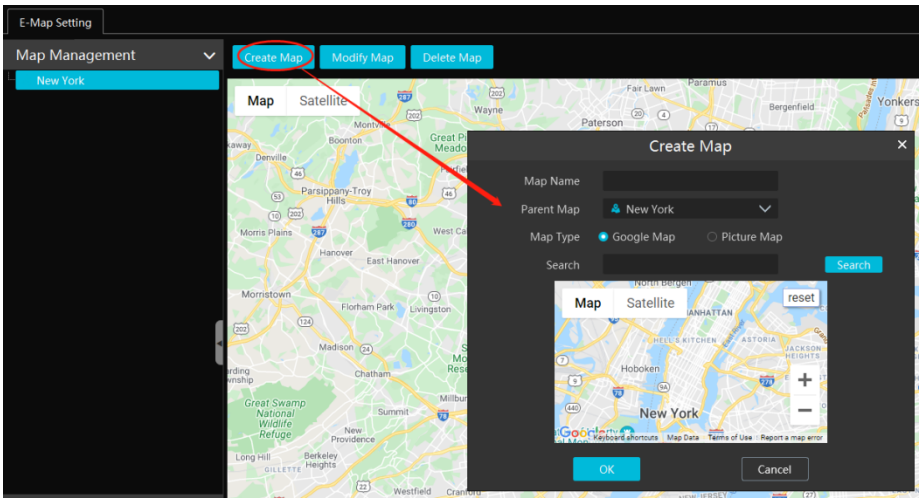
11 E-Map

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.

11.1 E-Map Settings

11.1.1 Create E-Map

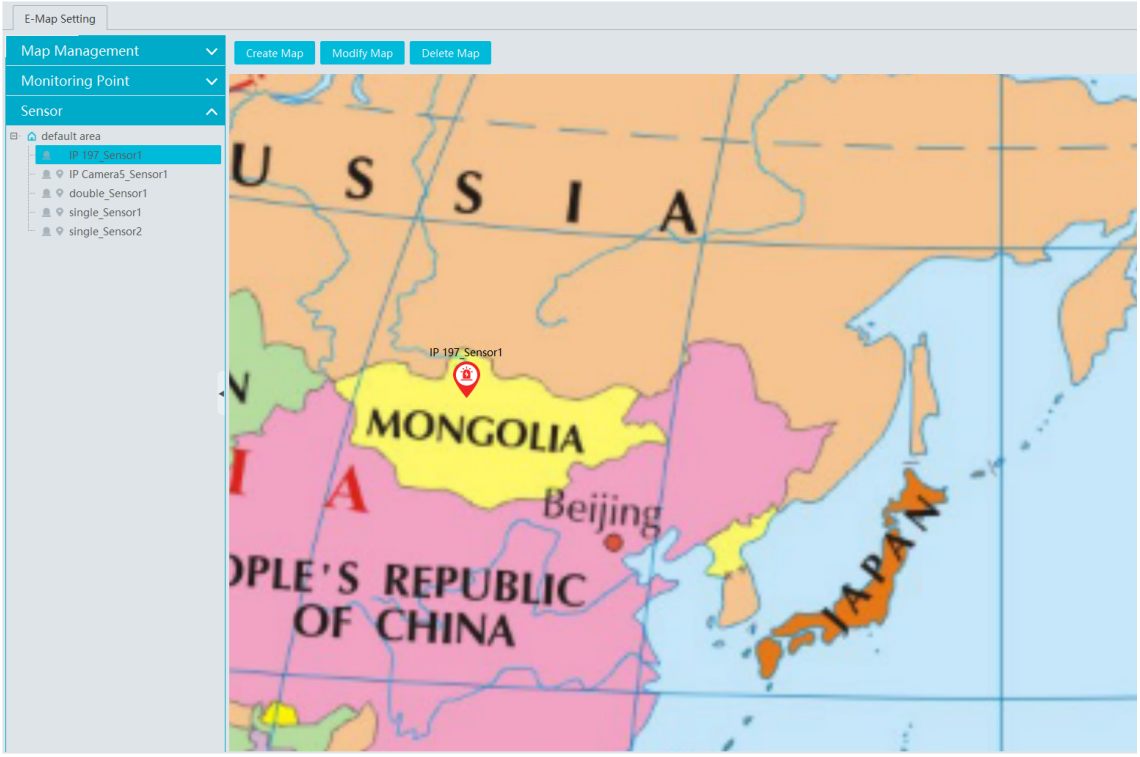
Go to Home→E-Map Setting interface. Click [Create Map] to create a map.



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

11.1.2 Add Hotspot

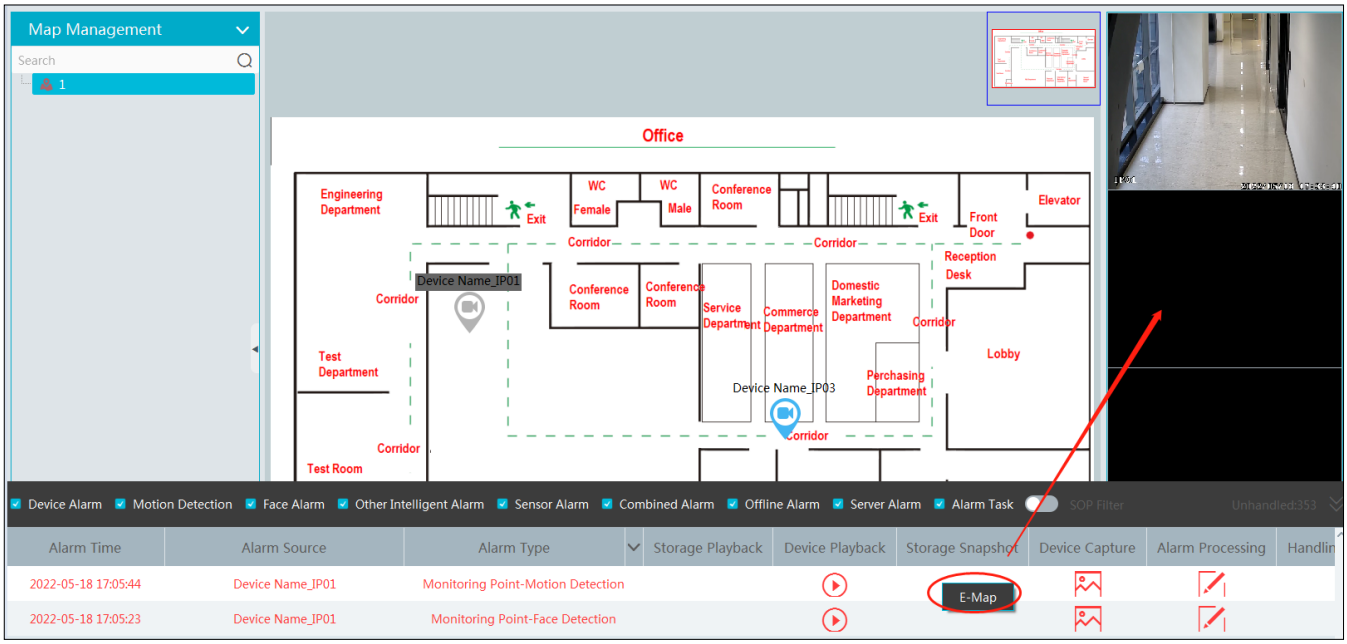
The hotspots include monitoring points and sensors. Drag a hotspot to the corresponding area on the map as shown below.



Click [Modify Map] to change map name and parent map.

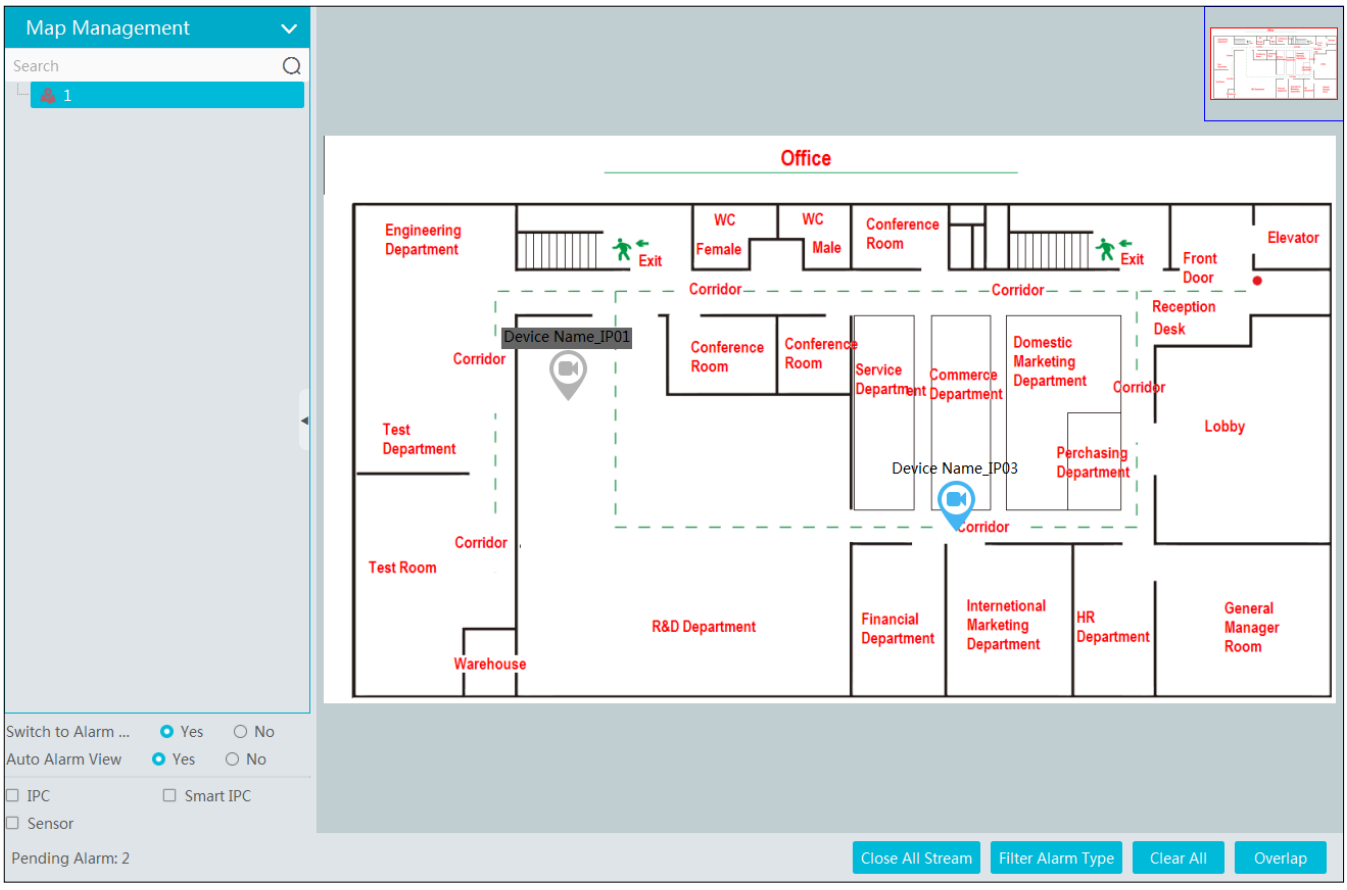
Select [Delete Map] to delete the added map.

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.



11.1.3 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 “Yes” is selected, the system will automatically switch to the E-map on which the alarm occurs.

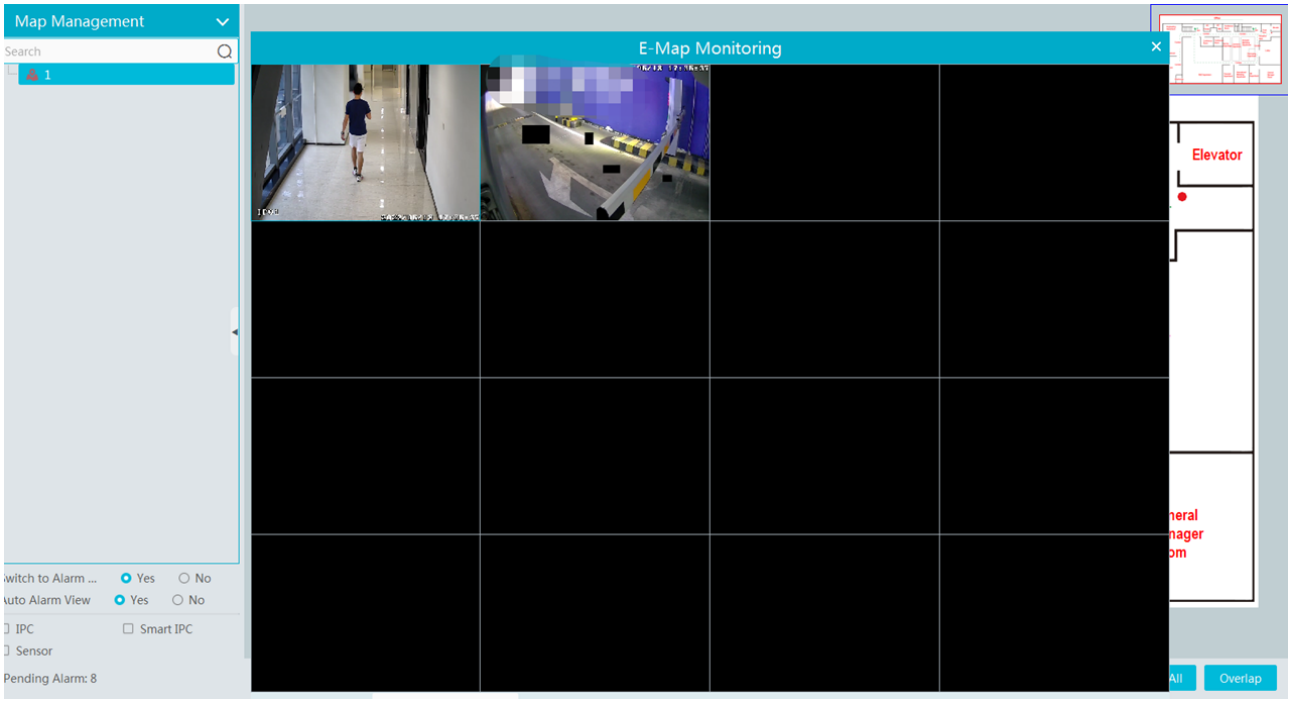
Auto Alarm View

Alarm view: if you select “Yes”, 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.

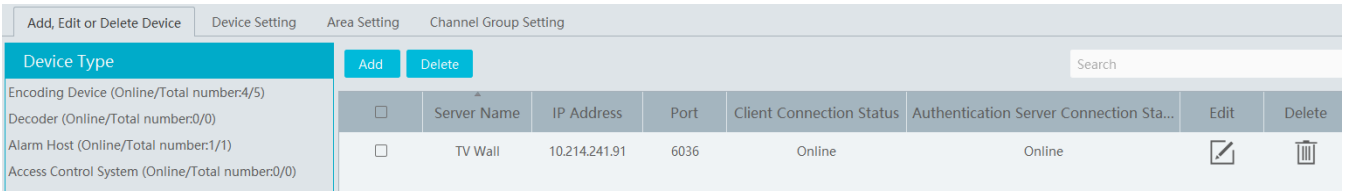
If multiple cameras need to play, you can drag the window on the right panel to the right. Then an independent monitoring interface will display. You can choose the screen display mode as needed.



12 TV Wall

12.1 Add TV Wall Server

Go to Home→ Add, Edit or Delete Device→TV Wall Server interface as shown below. There is a default TV wall server. Please check whether it is online.

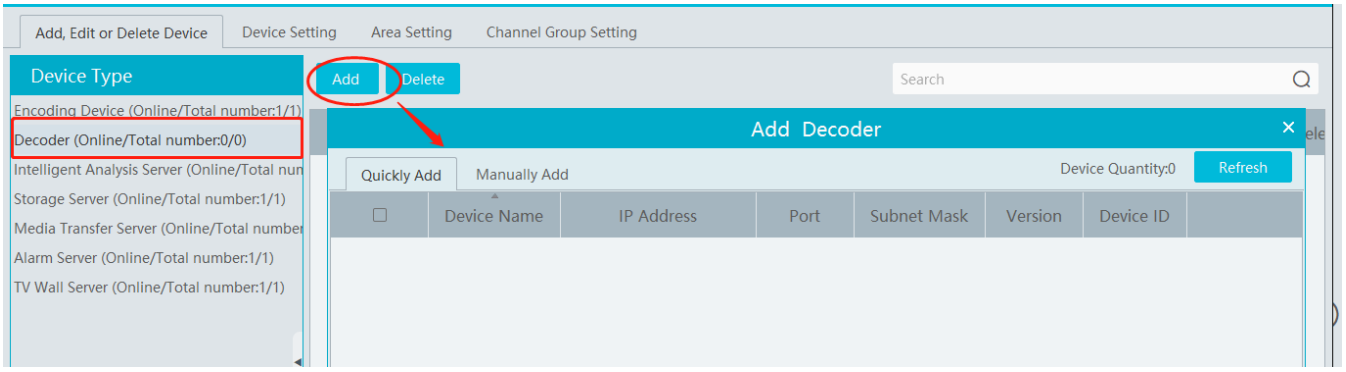


An adding TV Wall window will be prompted by clicking [Add]. Click [Refresh] to quickly add the TV wall server in the same local network, or add the TV wall server by manually entering server name, IP address and port.

12.2 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.

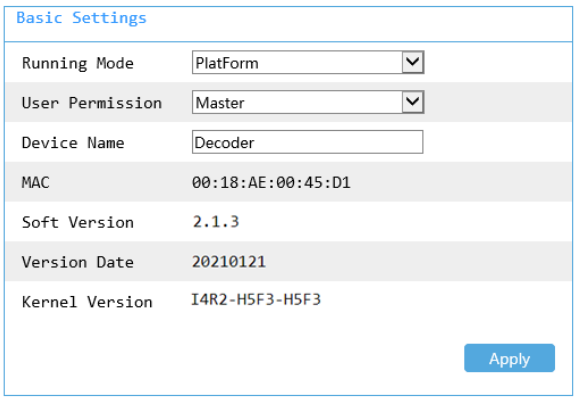


The steps for adding decoders are the same as the setup for adding encoding device (see Add Encoding Device for details).

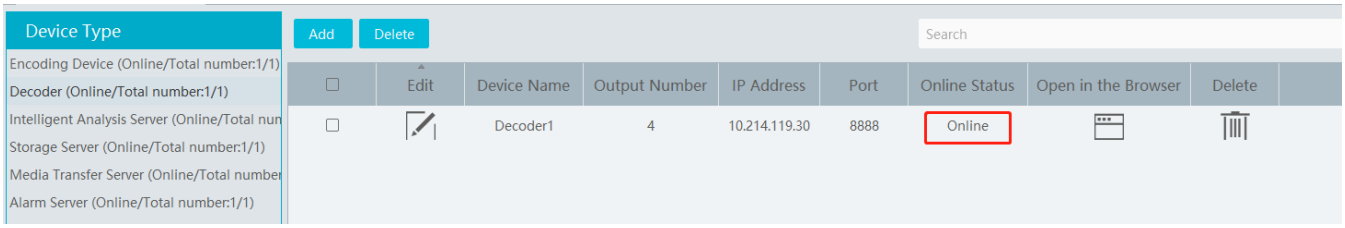
➢ **Create and Connect Decoder**

The decoder which needs to be connected to the platform must be the master decoder and in platform mode. 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.

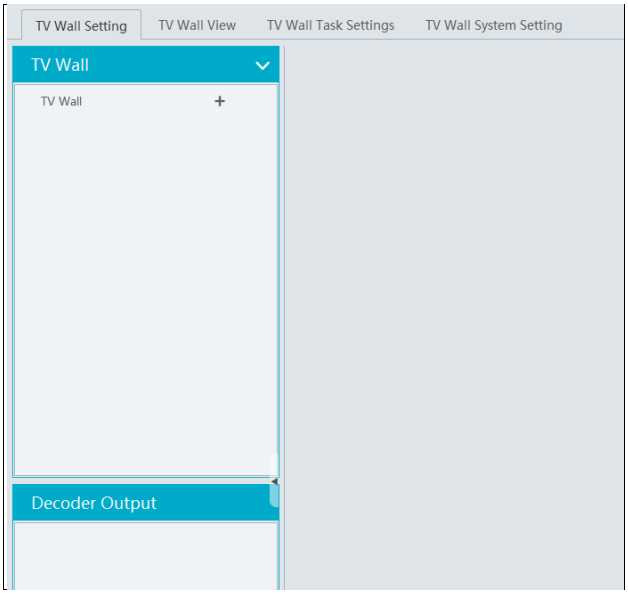


The decoder will not be online until it is bound to a TV wall. Please create a TV wall first and then bind the decoder to the TV wall. See 12.3.1 section for details.



12.3 TV Wall Management

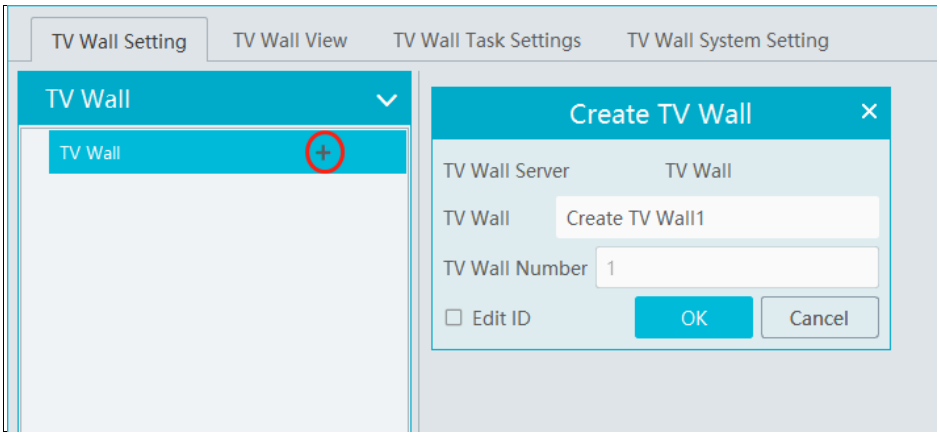
Go to Home→TV Wall Management→ TV Wall Setting.



12.3.1 TV Wall Settings

◆ Create TV Wall

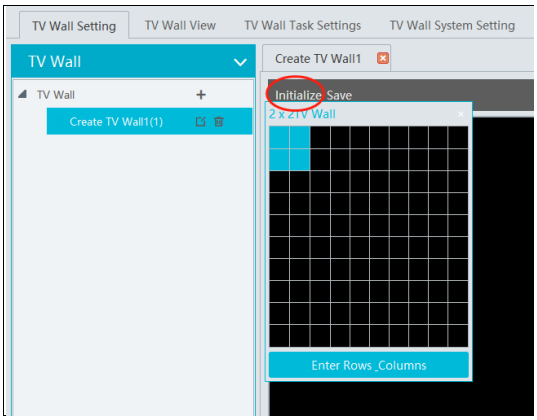
Go to Home→TV Wall Management→Edit TV Wall. Select a TV wall server and then click + to create a TV wall.



◆ Initializing

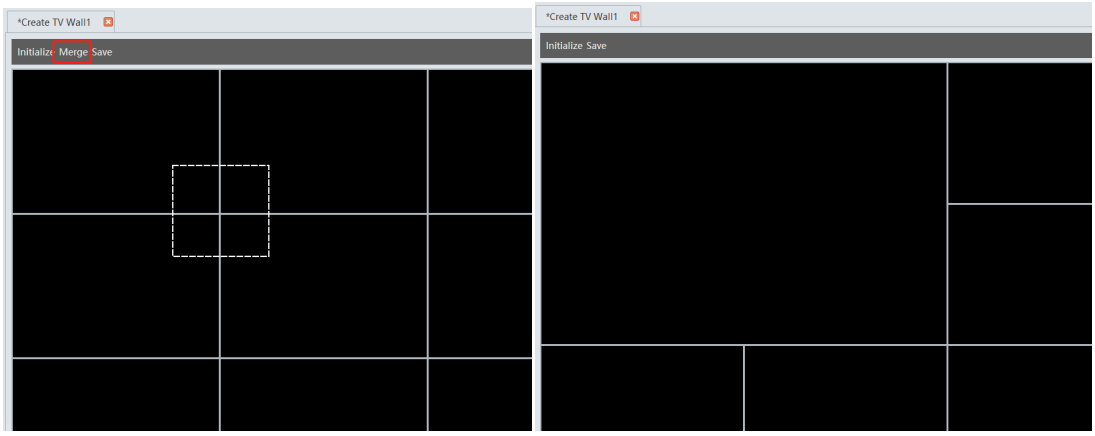
① Double click the created TV wall to prompt a TV wall window.

② Click “Initialize” to create TV wall layout



◆ Merging\Splitting

Merging: drag on the screen and then release. The “Merge” button will be shown. Click it to merger these small windows.



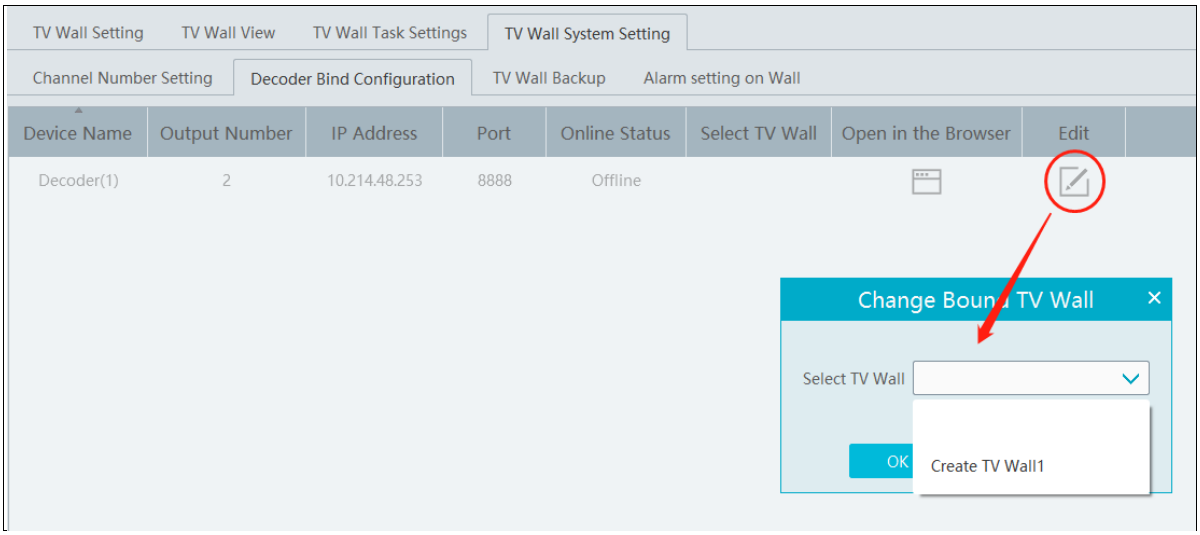
Splitting: select the merged window and click “Split” to restore the window to the previous status.

The online decoder displayed in the decoder output list is the binding decoder of this TV wall. Drag the outputs to windows on the right in sequence and then click “Save” to save the settings.

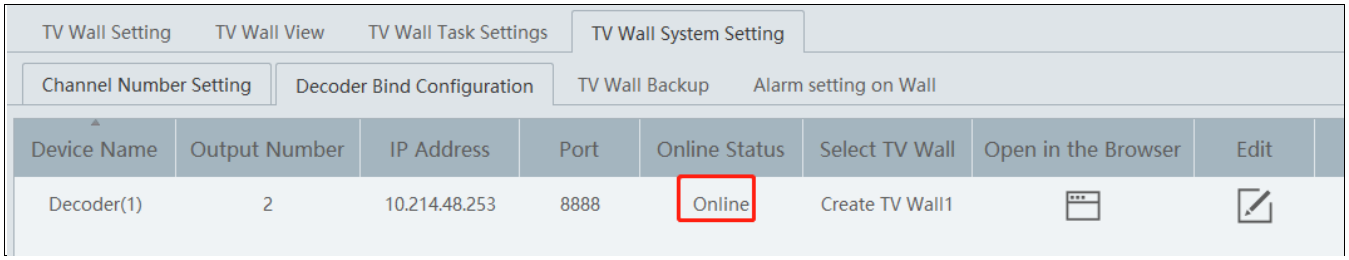
● **Decoder Binding**

Go to Home→TV Wall Management→TV Wall System Setting interface as shown below. In this interface, decoder bind can be set up.

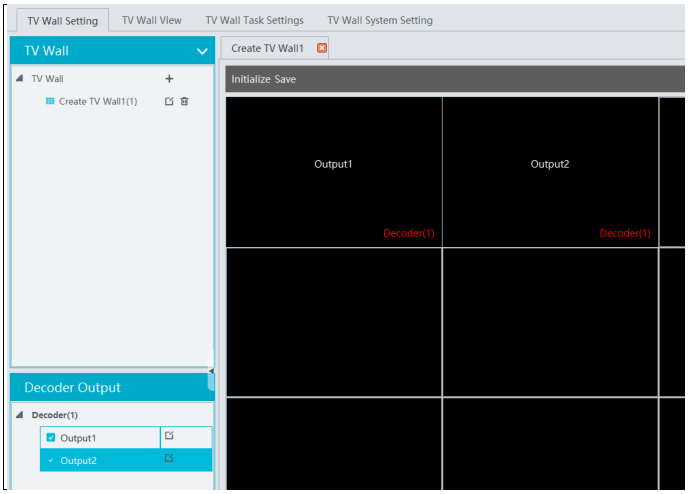
Decoder bind configuration: modify the binding state between decoder and TV wall.



Click to change bound TV Wall. After the decoder is bound to the TV Wall, the online status will be “Online”.

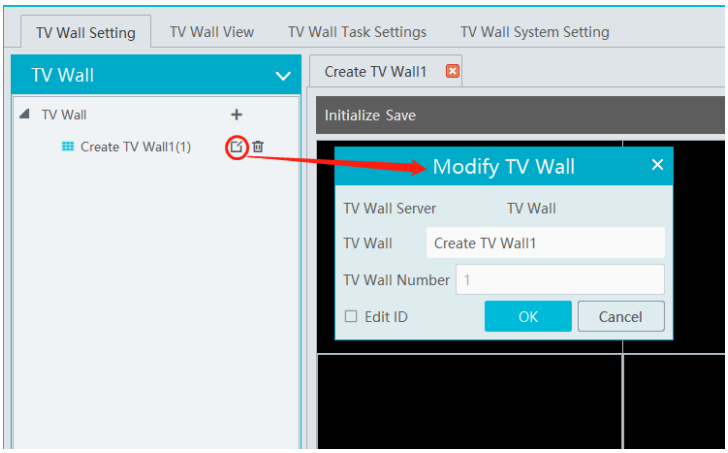


Return to the decoder management interface as shown above. The online status of the decoder indicates that the decoder is successfully bound with TV wall. Go to TV Wall Setting interface as shown below. Drag the outputs of the decoder to the window on the right and save them to complete output bind.



Modify TV Wall：

Click next to the TV wall name and then modify the TV wall information as needed.



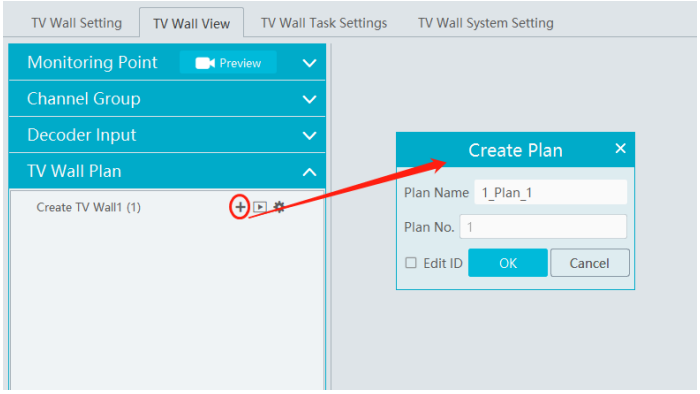
Check “Edit ID” to modify the ID number of the TV wall. Note that the ID number of the TV wall cannot be repeated.

12.3.2 TV Wall View

◆ Create Plan

Go to Home→ TV Wall Management→ TV Wall View→TV Wall Plan.

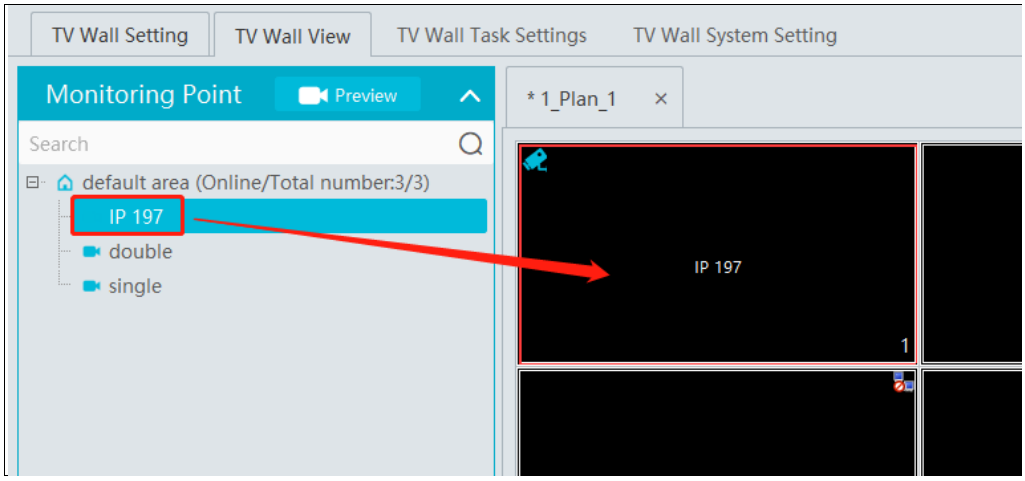
Click + beside the TV wall name to create the TV wall plan name.



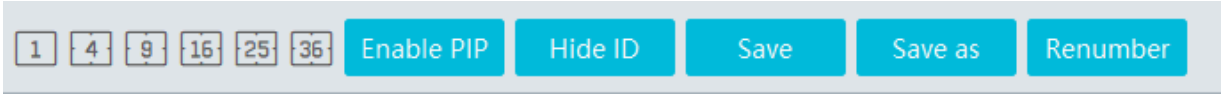
◆ Configure Plan

Double click the plan name to show the plan.

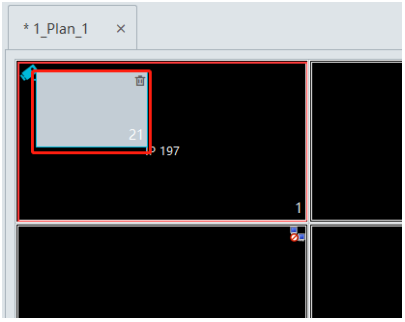
Drag the monitoring points to the corresponding window respectively to decode image.



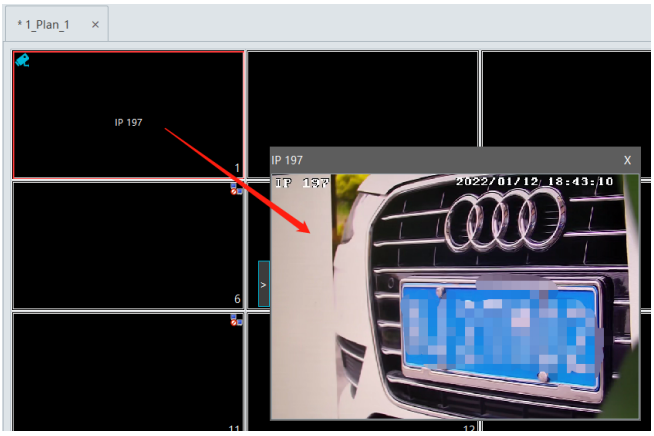
◆ Toolbar Menu



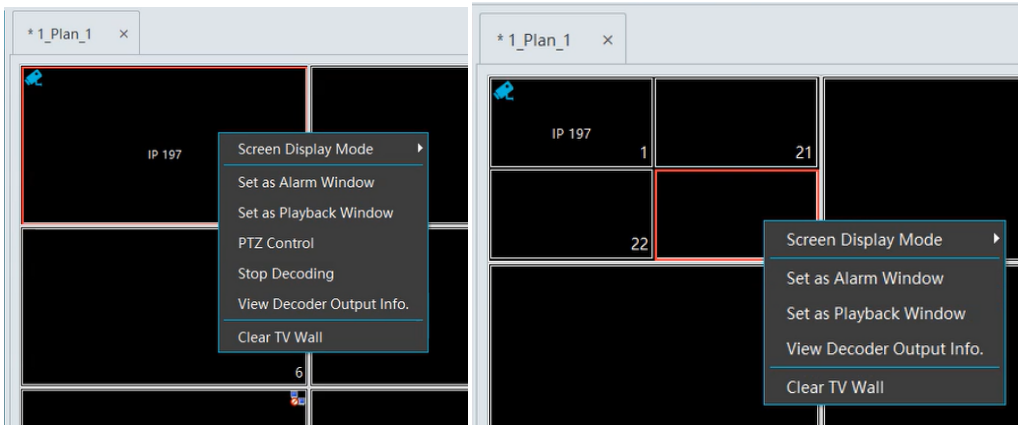
1. Screen mode：1\4\9\16\25\36 screen mode is optional.
2. Open Window：Click [Enable PIP] and then drag on a window to open a small window on it. Click [Disable PIP] to stop opening window. The small window can be dragged to anywhere on the big window.



3. Click [Hide ID] to hide the window number; click [Display ID] to display the window number.
4. Click [Save] to save the current plan.
5. Click [Save as] to save it as another plan.
6. Renumber: Click it to renumber the window of the plan from left to right and top to bottom.
7. Select a window assigned a monitoring point and then press the right mouse and drag to another window to copy monitoring point to it.
8. Double click a window to play the video.



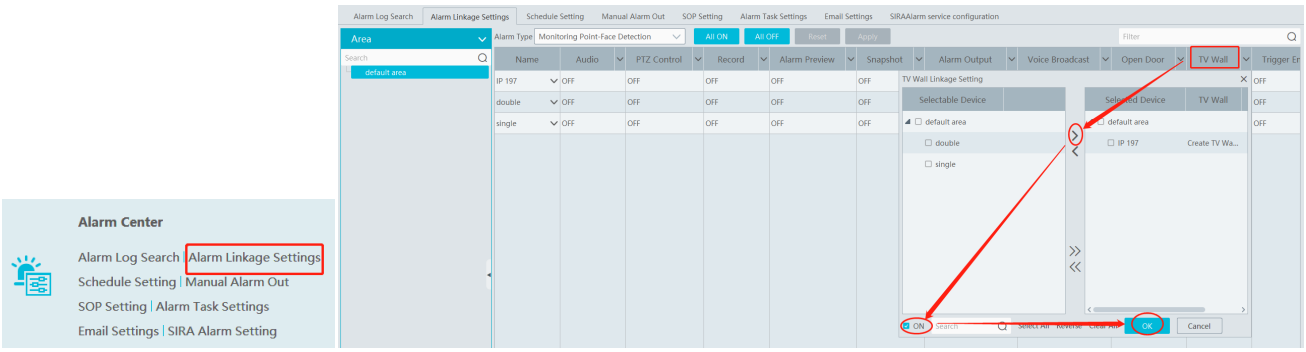
◆ Right-click Menu



1. Screen mode:1\4\9\16\25\36 screen mode is optional.

2. Zoom in\out：if the current screen mode is multi-screen display mode, click “Zoom In” to zoom in the current image. Click “Zoom Out” menu again to restore to the previous status.

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 Linkage (or Home→Alarm System→Alarm Linkage) interface. Select TV wall linkage item to set alarm linkage.

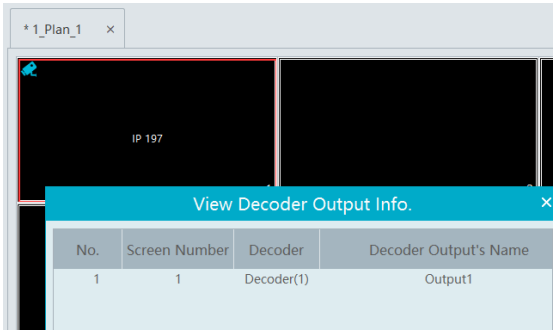


4. Set as Playback Window：when decoding images, click this menu to play the records of the current channel (the record source is the current record source).

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.

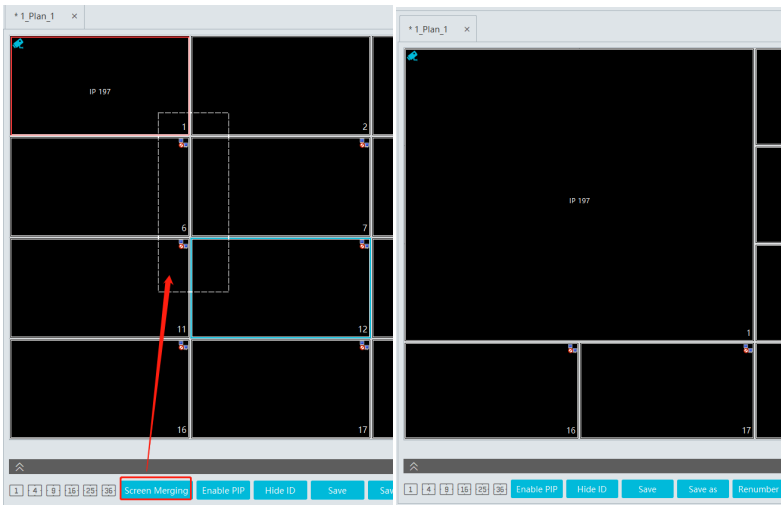
7. View Decoder: view the information of the decoder.



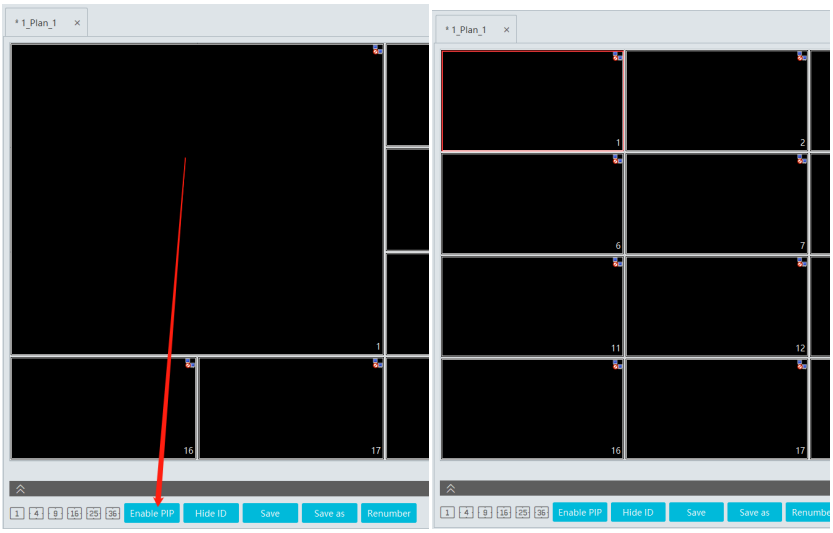
8. Clear TV Wall: click it to clear the decoding configuration of the current output.

◆ Screen Merging or Splitting

Drag the mouse to select multi-window and then click [Merge] to merge these windows.



Select the merged window and click [Split] to restore the window to its previous status.

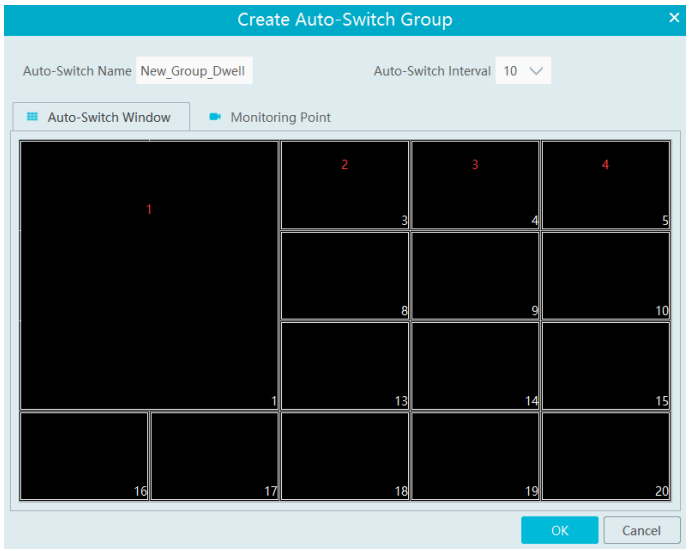


◆ Auto-Switch Group

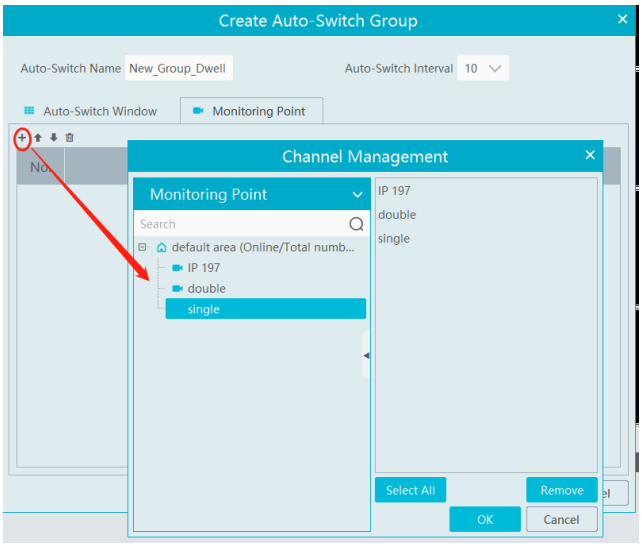
1. Create Auto-Switch Group

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

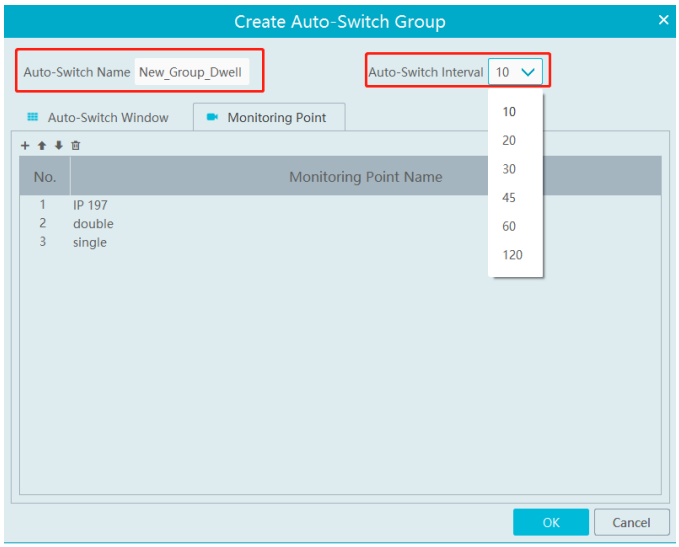
② Select “Auto-Switch Window” to select the window group.



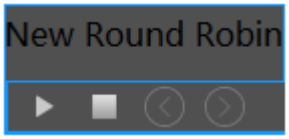
③ Click “Monitoring Point” to select the auto-switch channel group.



④ Enter auto-switch name and dwell time.



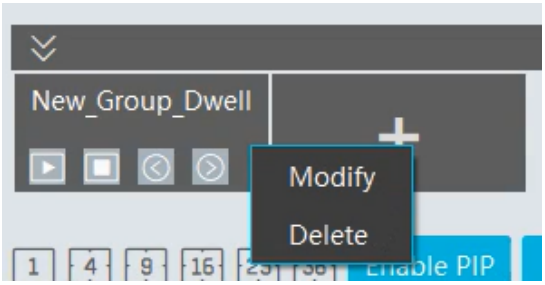
2. Execute auto-switch



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.

3. Modify or delete auto-switch

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

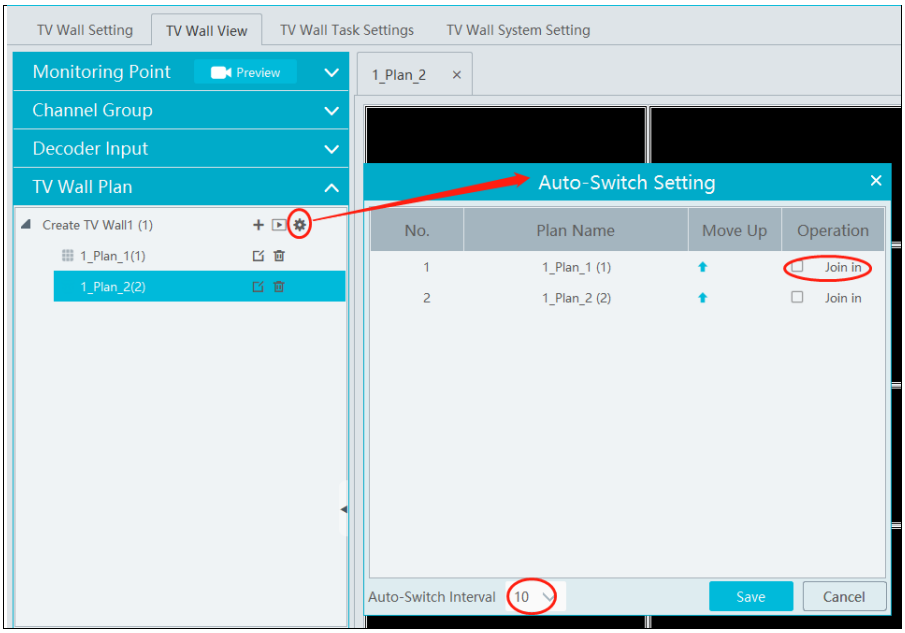


Note: If there are overlapped auto-switch window in a plan, the auto-switch groups will not be executed at the same time.

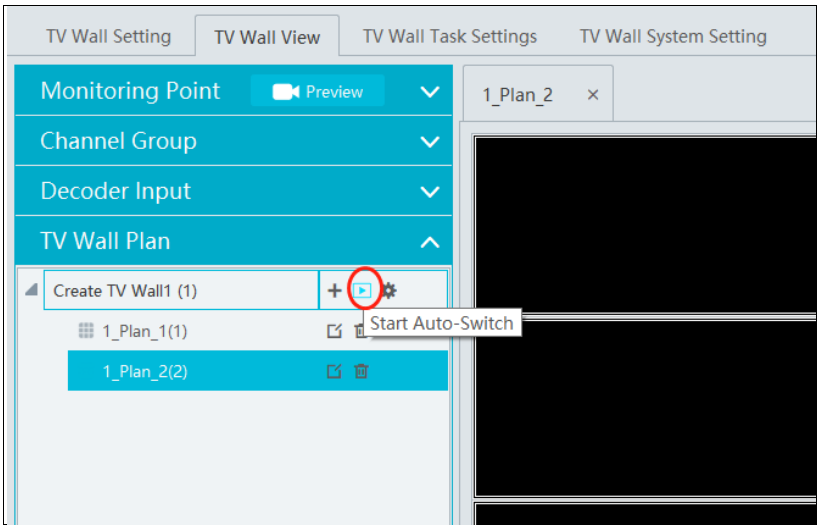
◆ Auto-switch plan

1. Create auto-switch plan

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

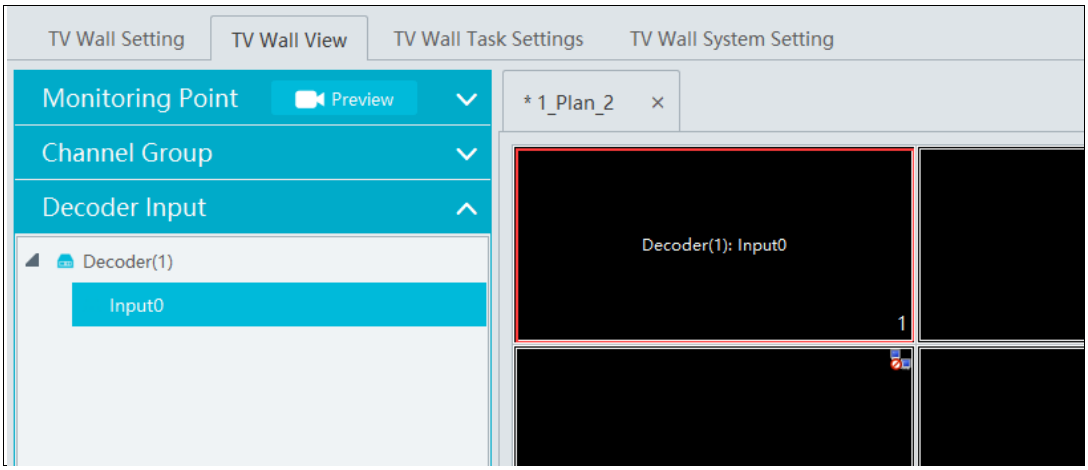
3.Modify auto-switch plan

Click ⚙ again to modify the auto-switch plan.

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

12.3.3 Decoder Input

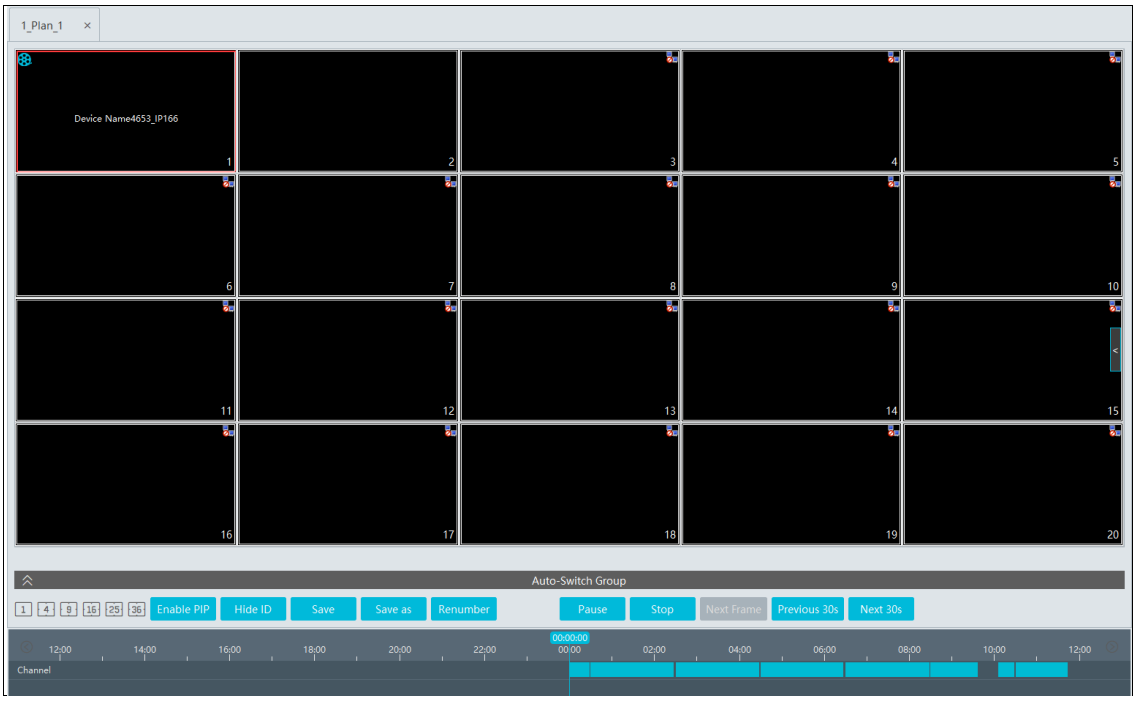
Go to Home→TV Wall Management→Decoding on TV Wall→Decoder Input. Drag an input to a window to execute decoding.



12.3.4 Playback

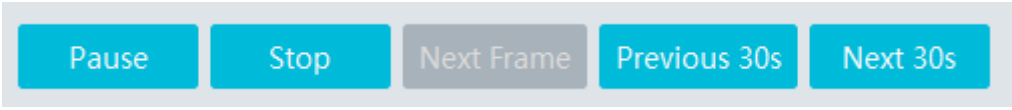
◆ **Playback on TV Wall**

Click “Preview” on the left panel. Then this button becomes “Record”. Click ^ at the bottom of the left panel to extend the filtering condition. Click / to get records from device or storage server, check the alarm events and then drag the cameras (or channels) to a window to search and play the records.



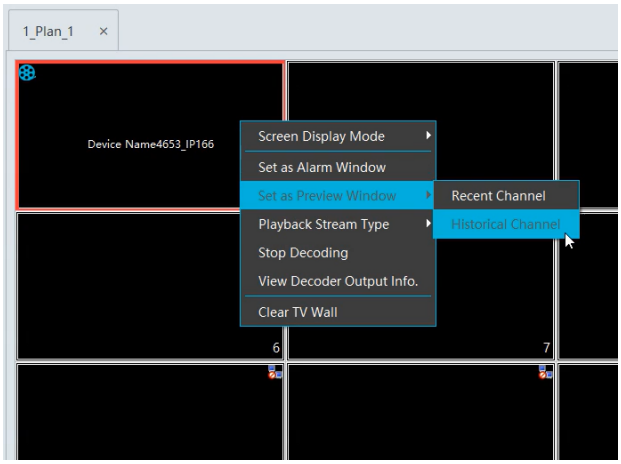
Of course, the specified time and event types can be set to search the specified records.

◆ **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**



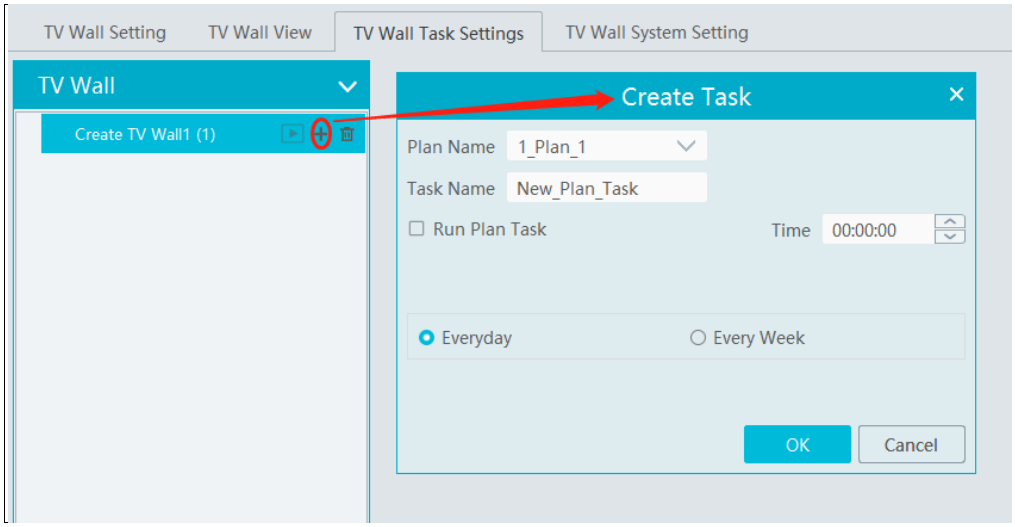
1. Screen mode:1\4\9\16\25\36 screen mode is optional
2. Zoom in
3. Save as an alarm window
4. Save as preview window:：the current channel or the historical channel is optional.
5. Playback stream type: main stream or sub stream is selectable.
6. Stop decoding
7. View decoder information
8. Clear TV wall

The following picture is an example of TV Wall.

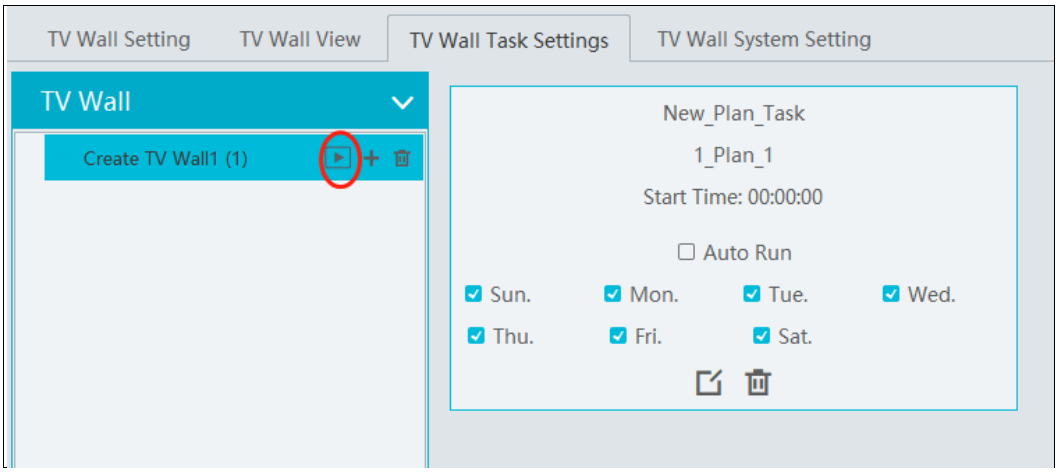
12.3.5 Task Setting of TV Wall

Go to Home→TV Wall Management→Task Setting. Click + behind the TV wall name.

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

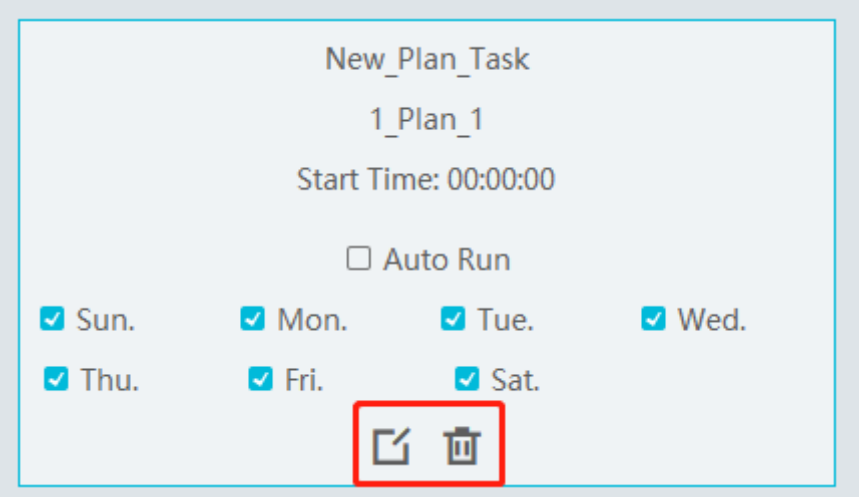


Click ▶ to start the task. Click the Stop button to stop this task.



Modify or delete task

Double click the TV wall name and then the tasks will be displayed on the right window.



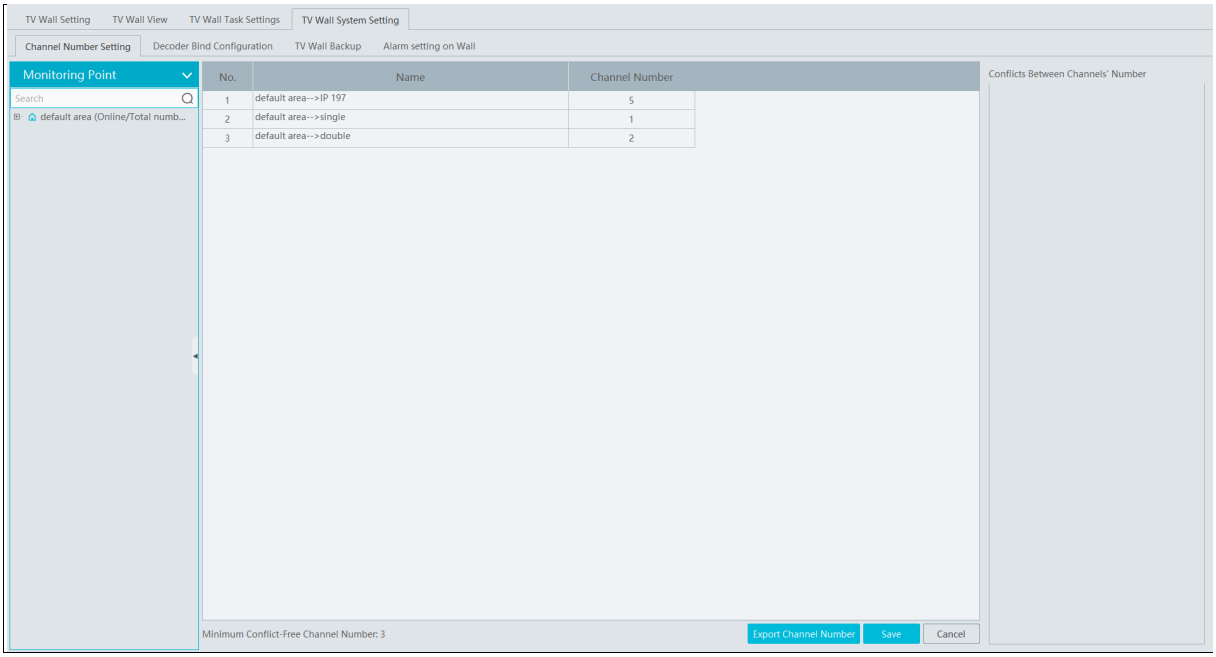
Click or to modify or delete the task.

12.3.6 TV Wall System Configuration

Go to Home→TV Wall Management→TV Wall System Setting interface as shown below. In this interface, the channel number can be set up.

➢ **Channel Number Settings**

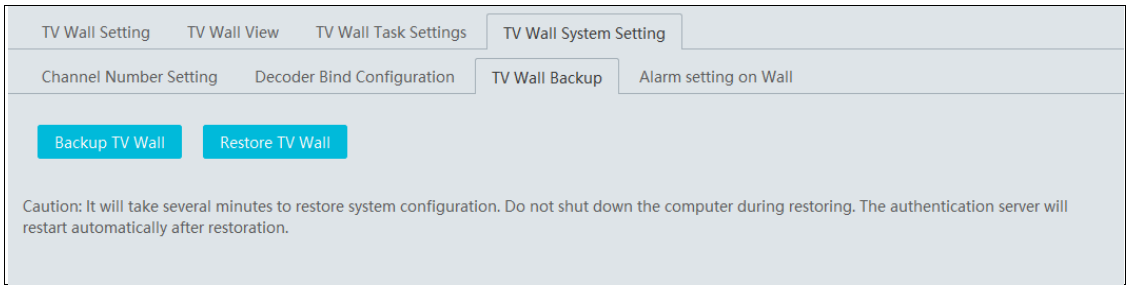
Channel number configuration: set the channel number and make the channel convenient to be controlled by the network keyboard controller. Users can export these channel number in this interface.



➢ **TV Wall 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.



➢ 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.

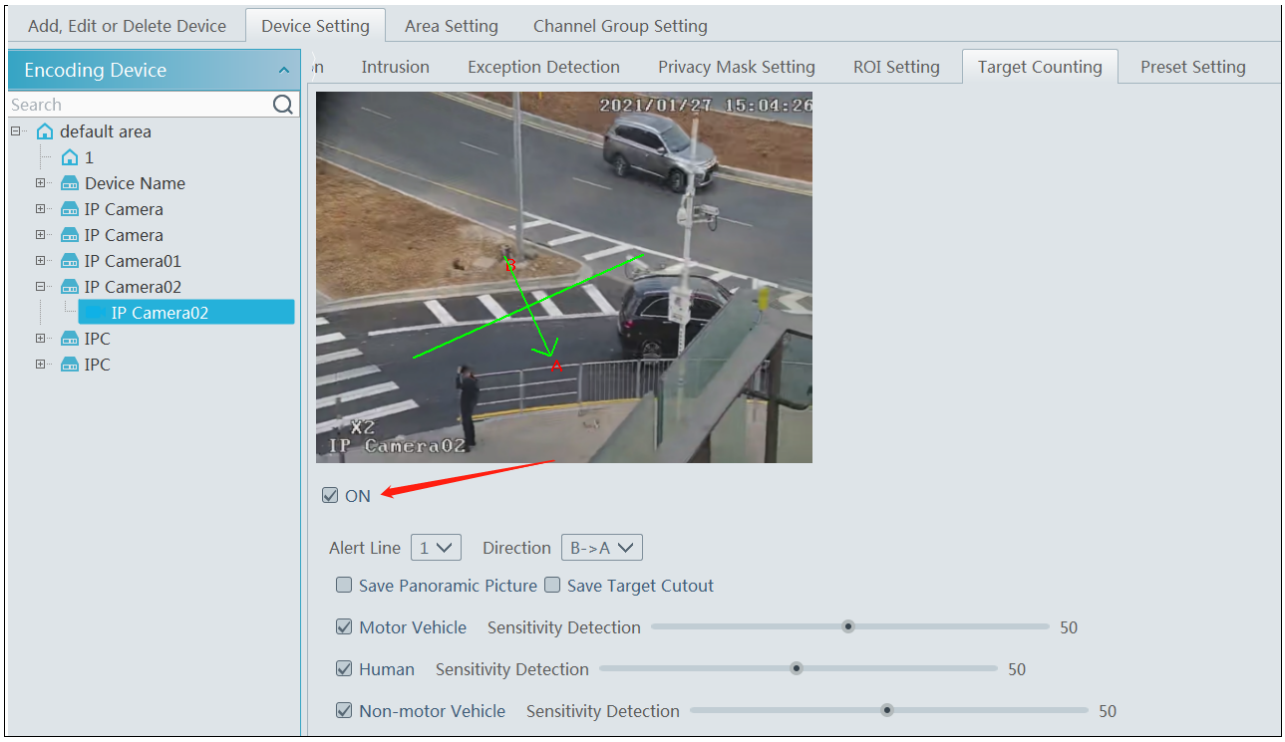
13 Target Counting

13.1 Task Management

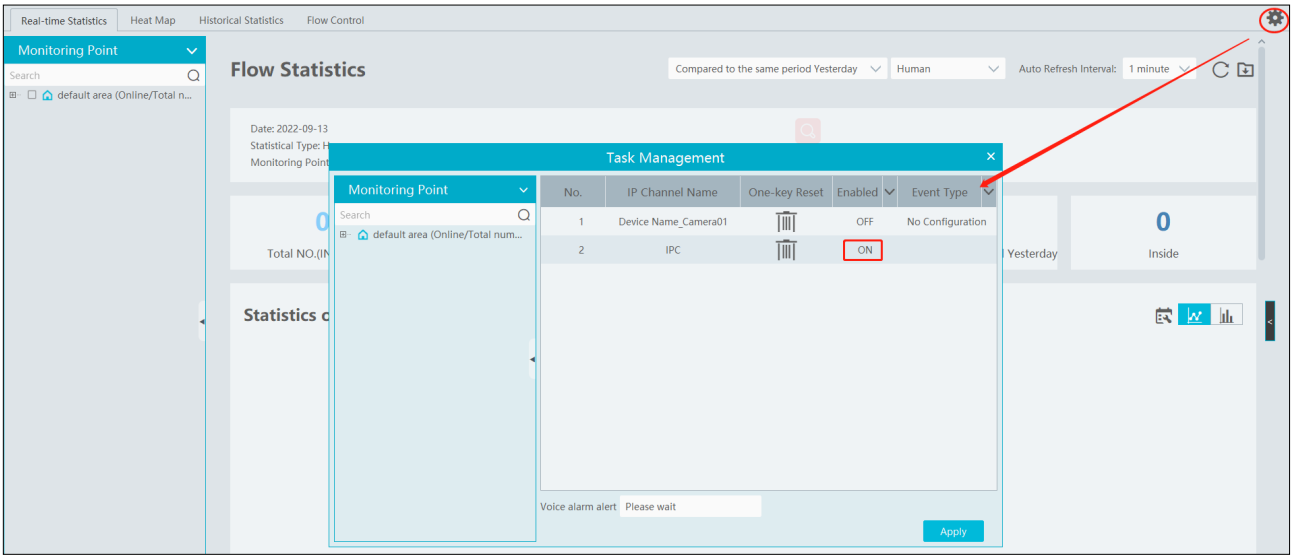
1. Enable “Target Counting” function of the IPC.

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.

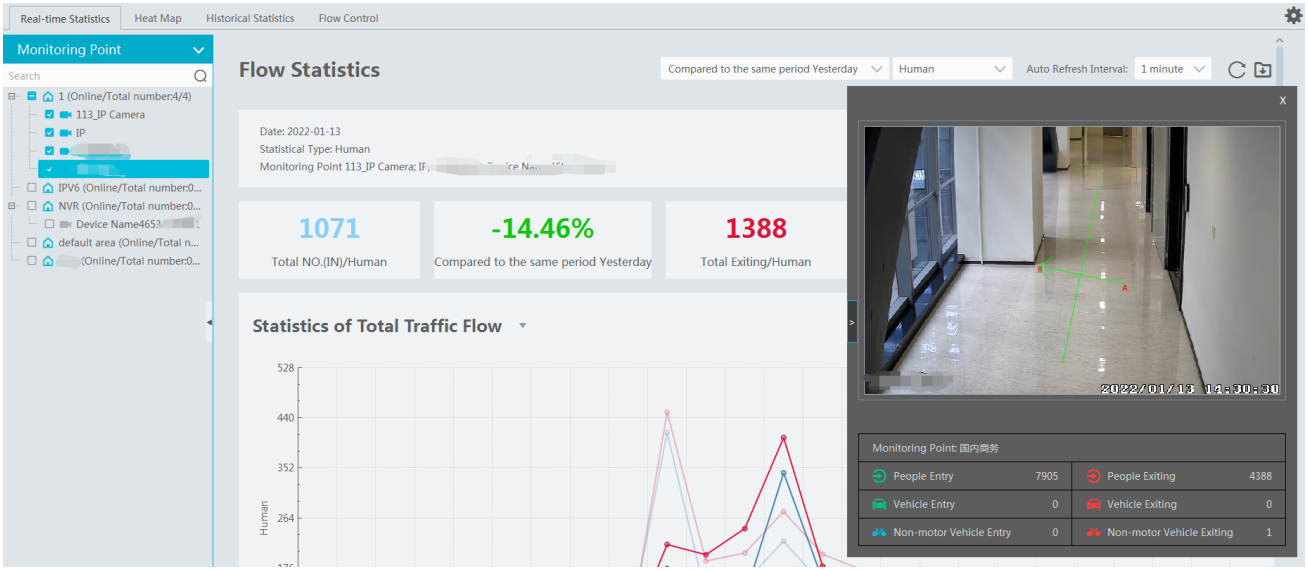


13.2 Real-time Statistics

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

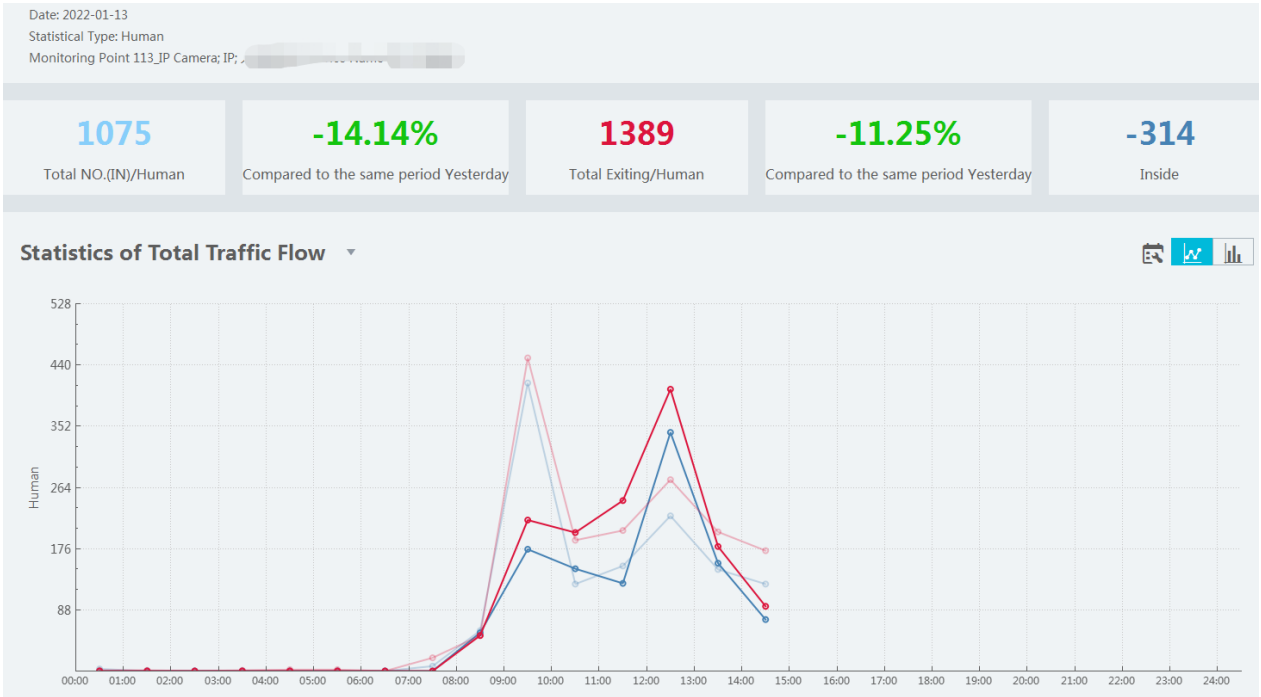
automatically analyze the traffic flow trends.

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.

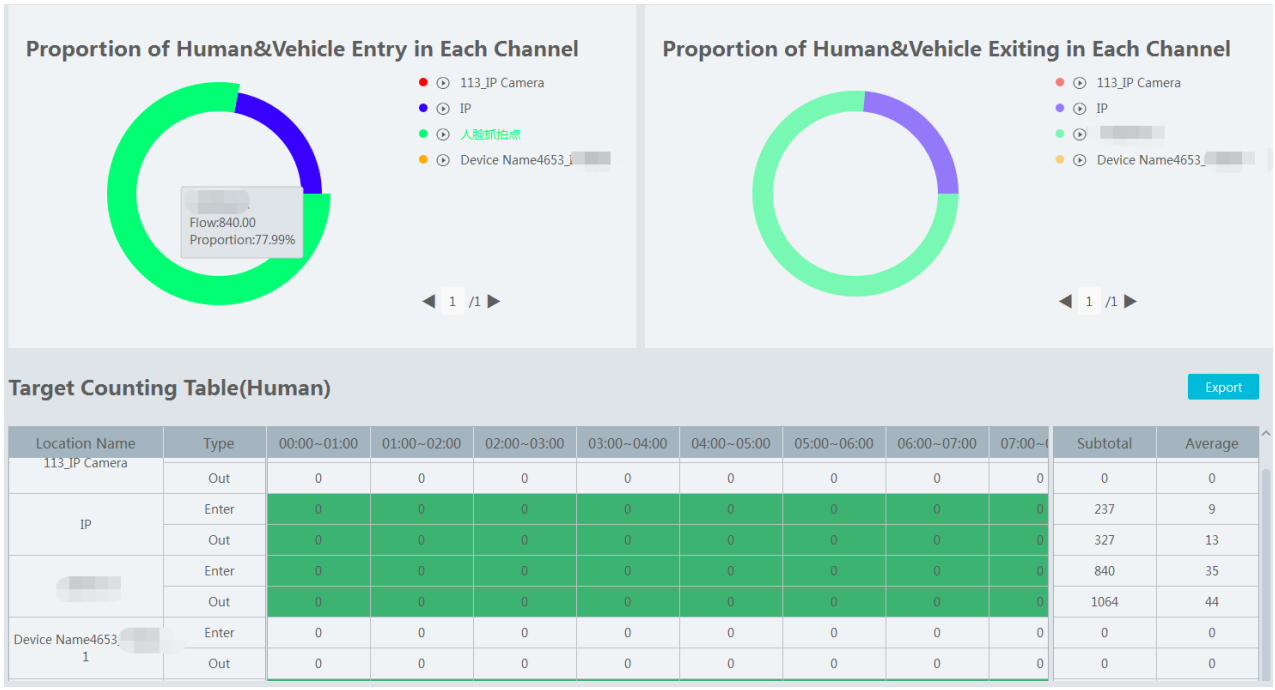


Please select the type as needed to view the flow trend. Click to refresh the current statistics.

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.

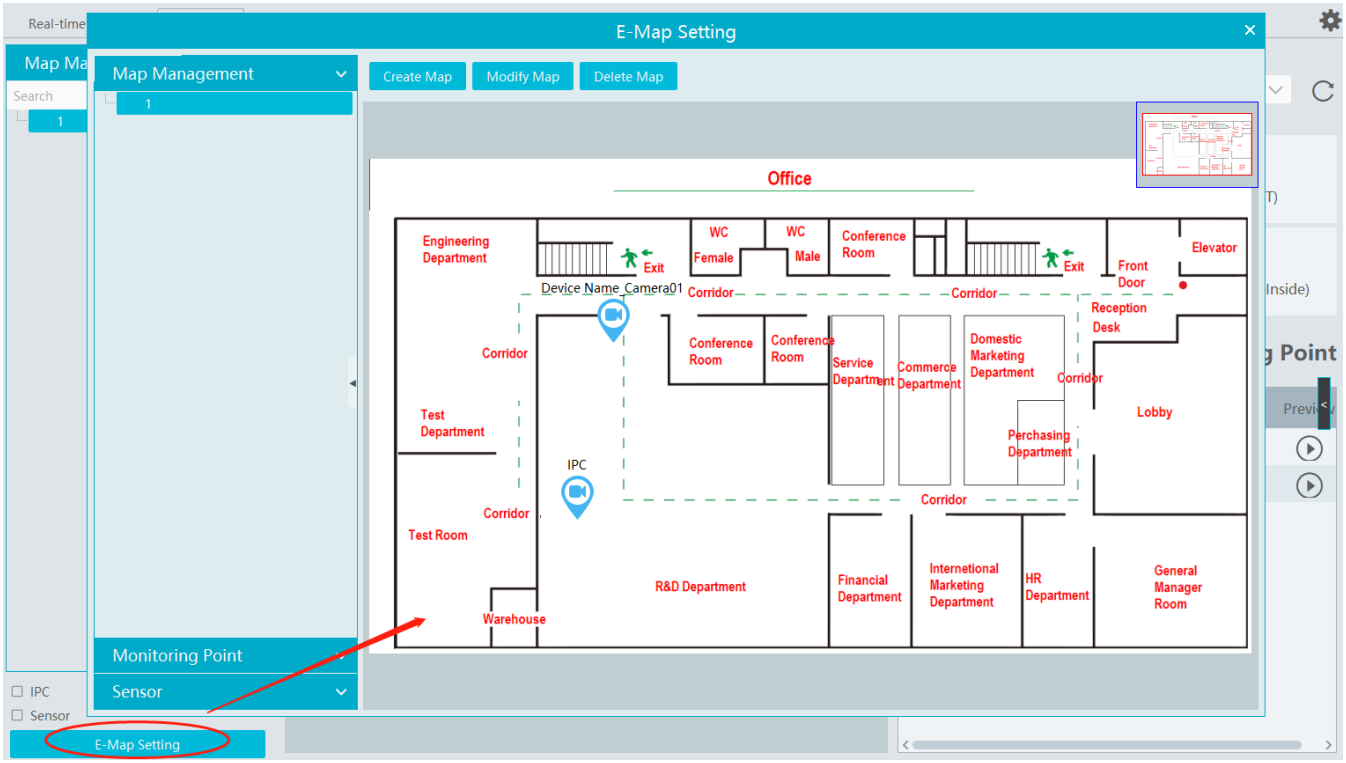


Location Name	Type	00:00~01:00	01:00~02:00	02:00~03:00	03:00~04:00	04:00~05:00	05:00~06:00	06:00~07:00	07:00~	Subtotal	Average
113_IP Camera	Out	0	0	0	0	0	0	0	0	0	0
IP	Enter	0	0	0	0	0	0	0	0	237	9
	Out	0	0	0	0	0	0	0	0	327	13
	Enter	0	0	0	0	0	0	0	0	840	35
	Out	0	0	0	0	0	0	0	0	1064	44
Device Name4653_1	Enter	0	0	0	0	0	0	0	0	0	0
	Out	0	0	0	0	0	0	0	0	0	0

13.3 Heat Map

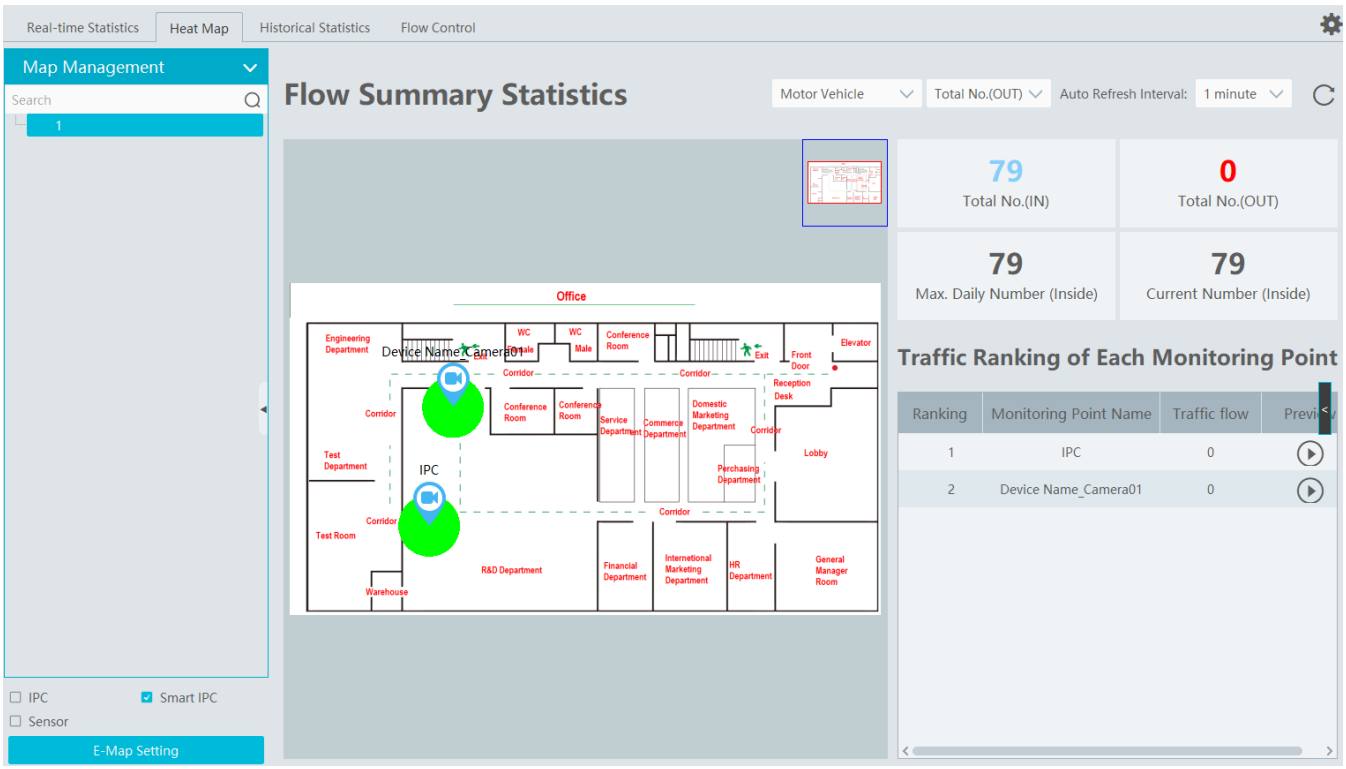
Go to Home→Target Counting→Heat Map interface.

Please create a map first.



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

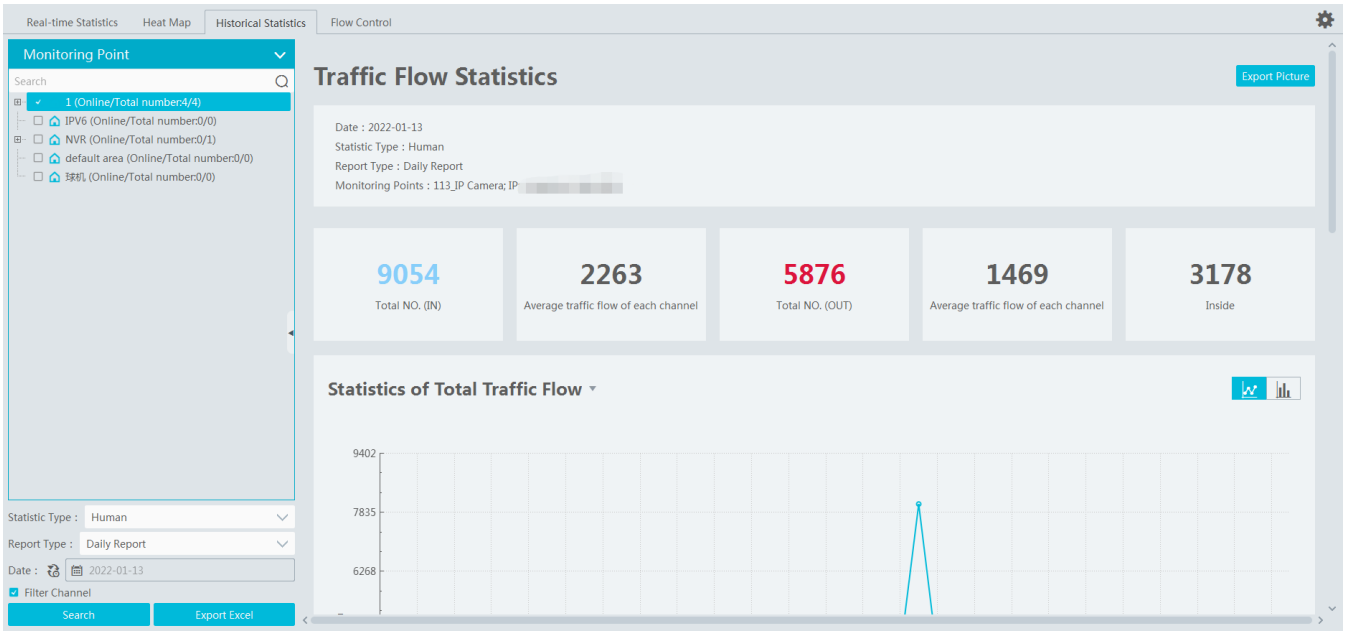
Put the cursor on the camera icon and then you will see the detailed flow statistics.



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.

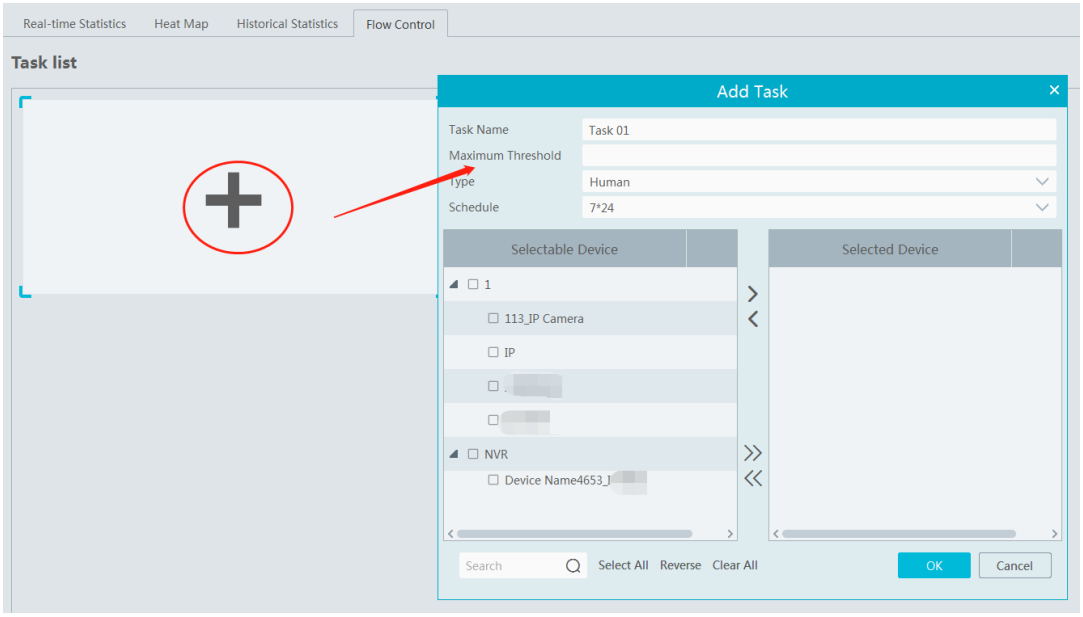


13.5 Flow Control

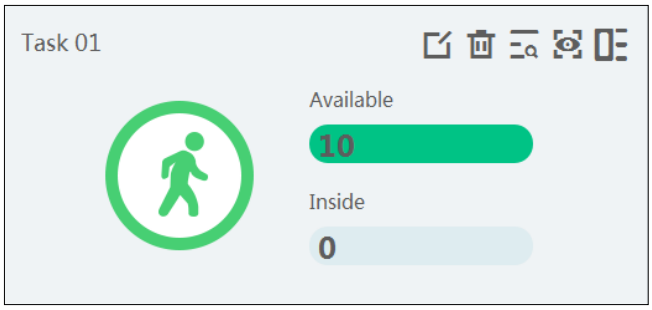
Flow Control: Control the people/vehicles entering or exiting in a specified area to avoid overcrowding. When the people/vehicles stay in the specified area exceeds the threshold, the alarm will be triggered and no entry icon will display.

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

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

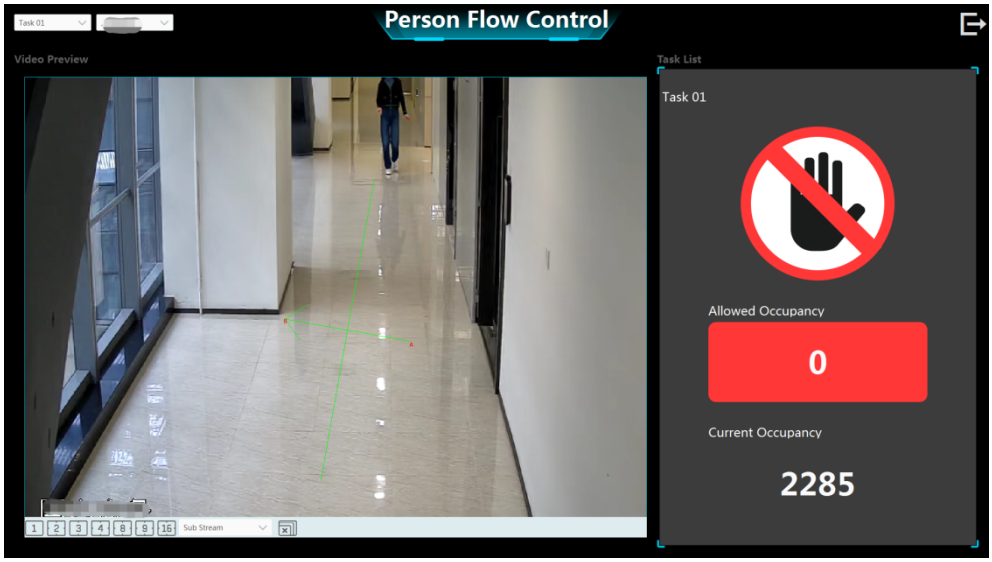


Then the available number and inside number can be viewed as below.

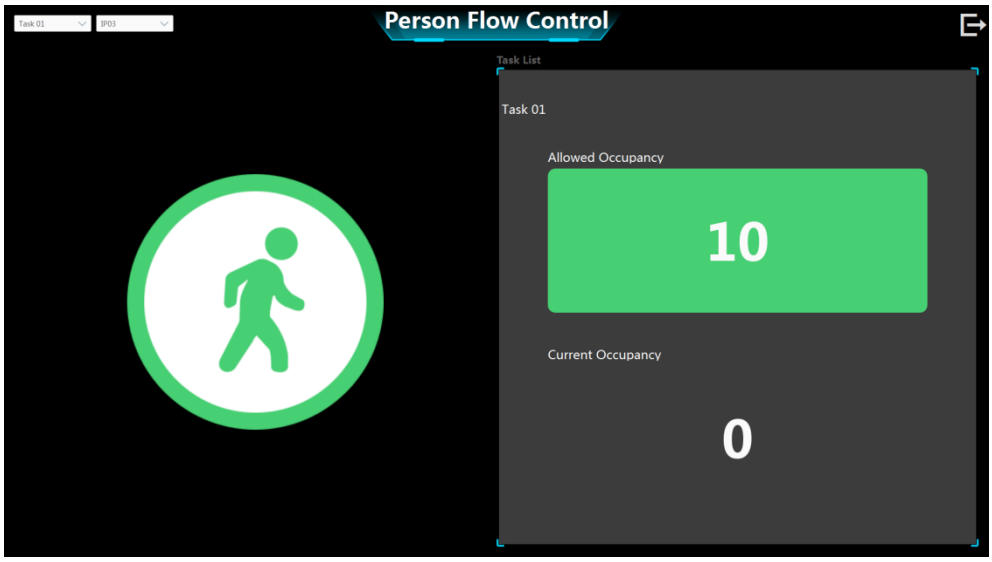


Click to view the quantities of the people/vehicles entry and exiting.

Click to enter the flow control preview interface.



Click to view the access status and the allowed/current occupancy.



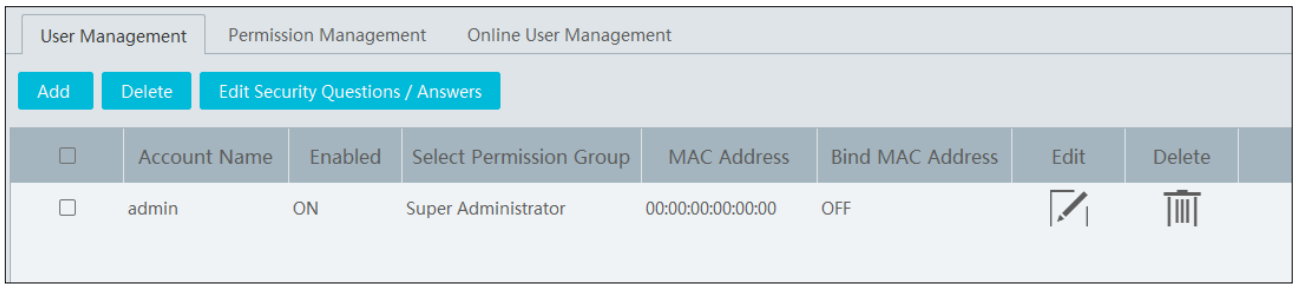
In the above interface, you can switch the camera and view the image. When the people/vehicles inside exceed the threshold, the icon will turn red.

Click on exits the current page.

14 User and Permission

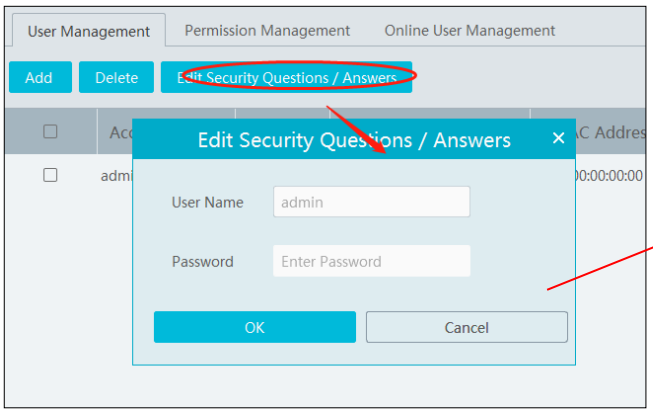
14.1 User Management

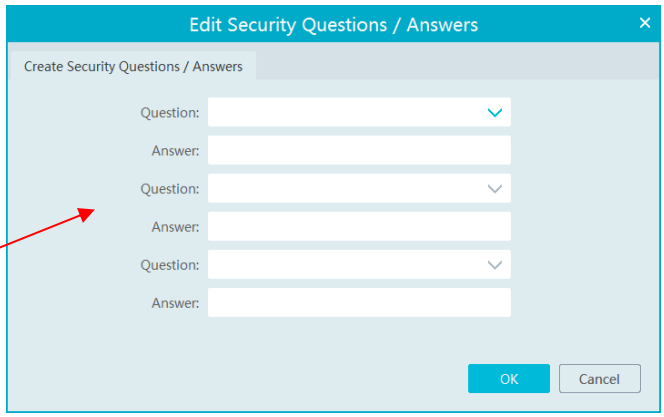
Go to Home→User and Permission.



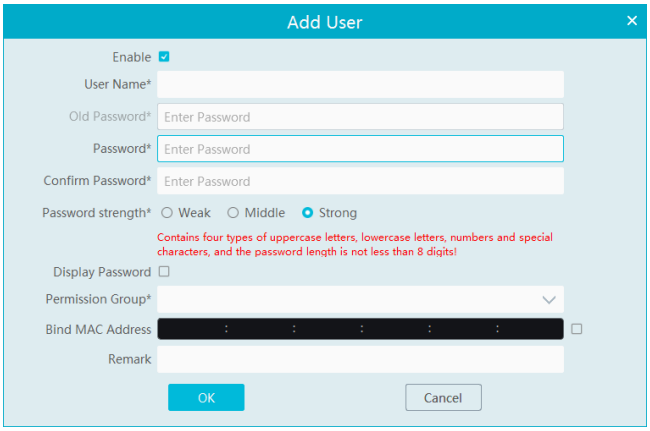
There is a default super admin user (the username is admin; the password is 123456). The super admin user cannot be deleted.

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





Click [Add] to prompt an adding user window as shown below.

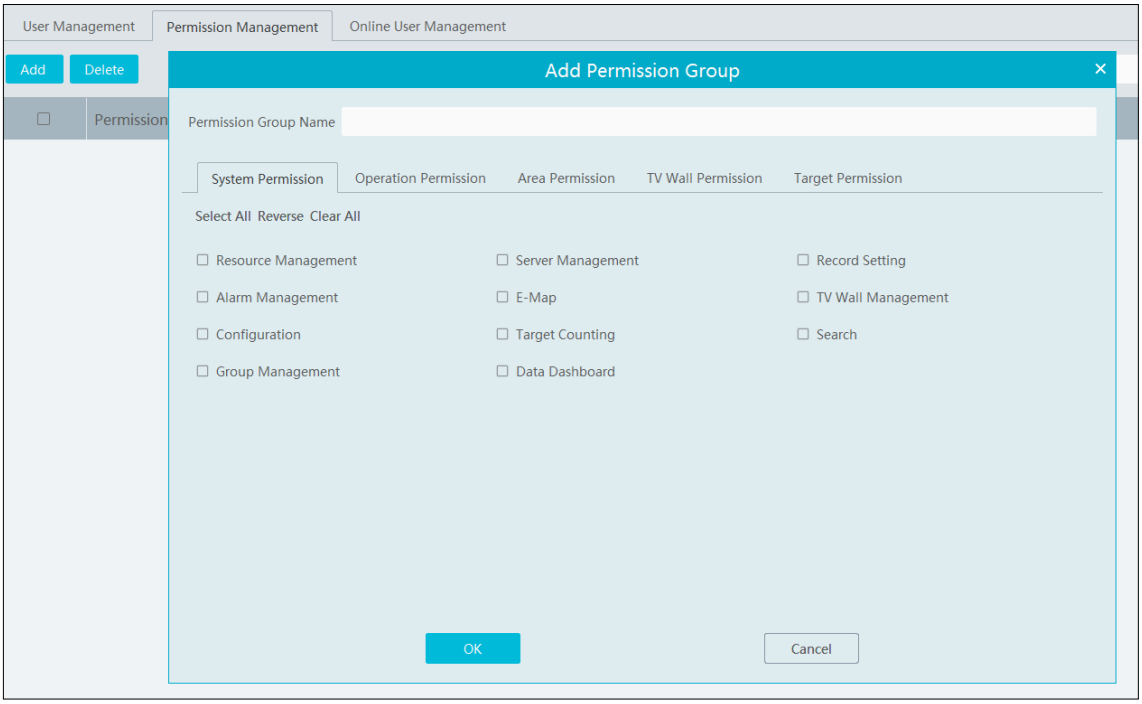


Enter user name and password. Then select password level, permission group (it must be set in advance). Binding MAC address or remark can be filled in as needed. After that, click [OK] to save.

14.2 Permission Management

Go to Home→User and Permission → Permission Management.

① Click [Add] to create permission group.

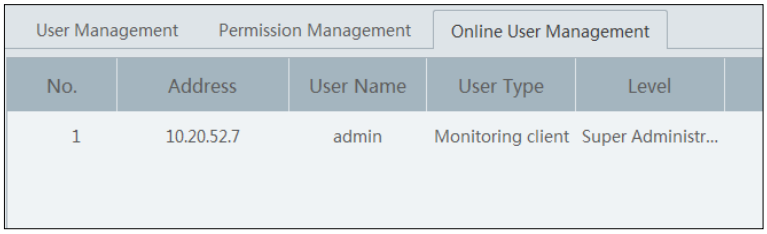


② Enter permission group name.

③ Select system permission, operation permission, area permission and TV wall permission as needed.

14.3 Online User Management

In this interface, you can view the online user who log onto the management server. The user type includes monitoring client, web client, platform SDK, APP, etc.

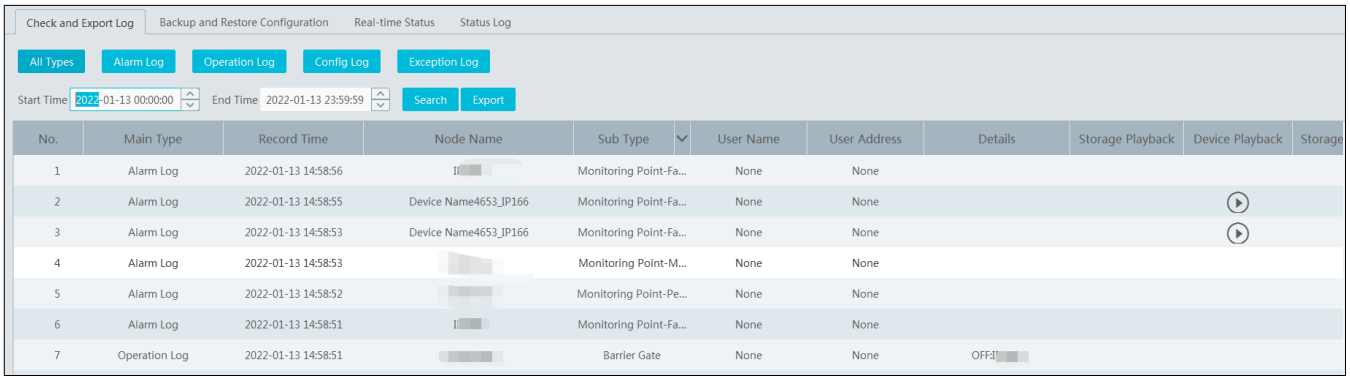


15 Operation and Maintenance Management

15.1 Check and Export Log

Go to Home→Operation and Maintenance Management.

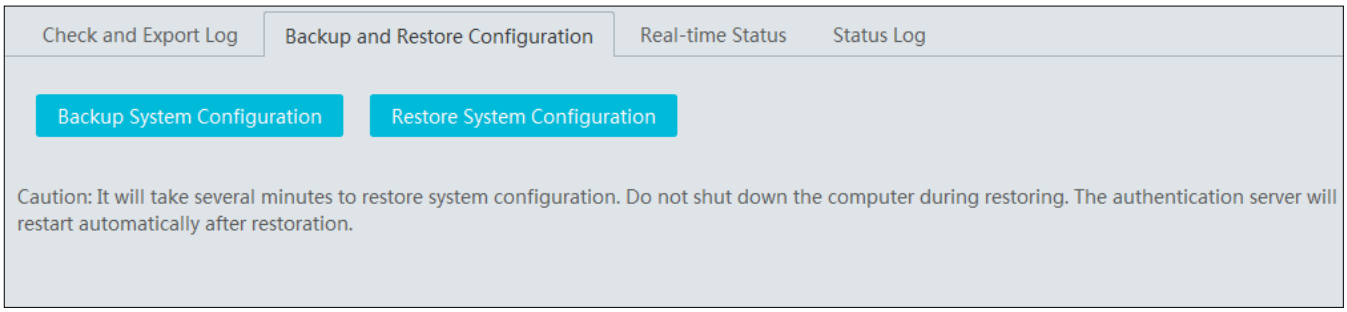
Click the “Check and Export Log” tab as shown below. All types of logs can be searched and exported here.



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.



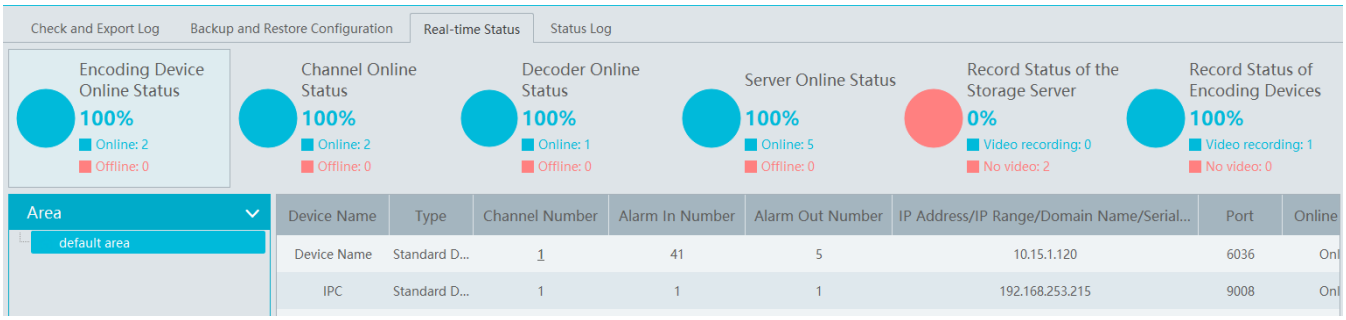
You can import the former system configuration files to the new version. Click [Backup System Configuration] in the last version to backup the system configuration files. Additionally, TV wall configuration also can be backed up as needed. Then click [Restore System Configuration] in the new version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

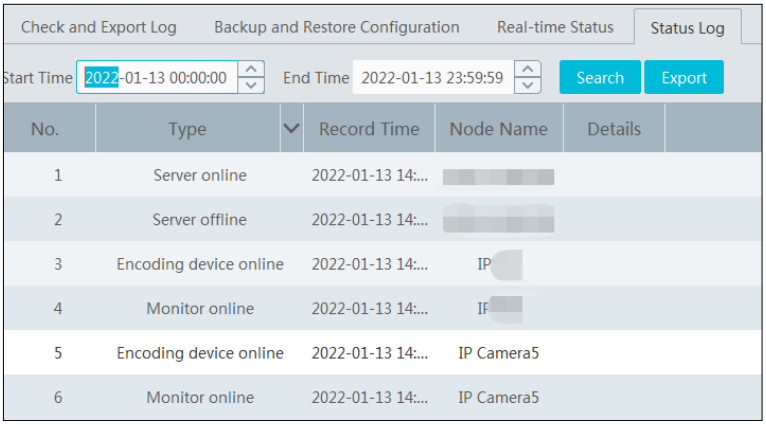
Go to Home→Operation and Maintenance Management→Online Status interface.

You can view the online status of encoding devices, channels, decoders, alarm hosts 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.



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

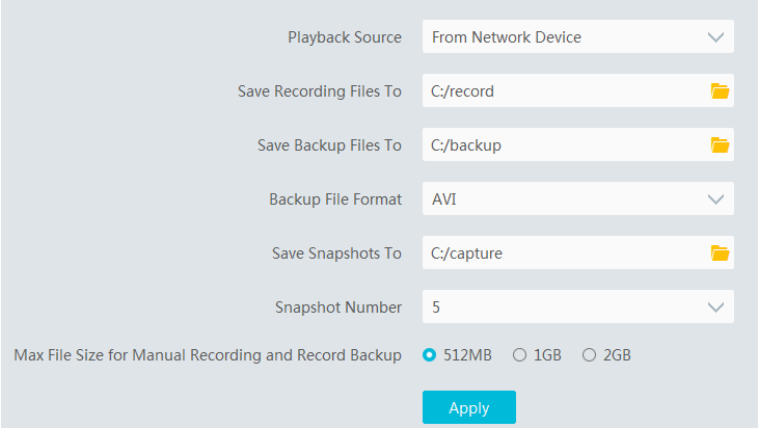
Set the start time and the end time and then click [Search] to search status logs.

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

16 Configuration

16.1 Record and Snapshot Settings

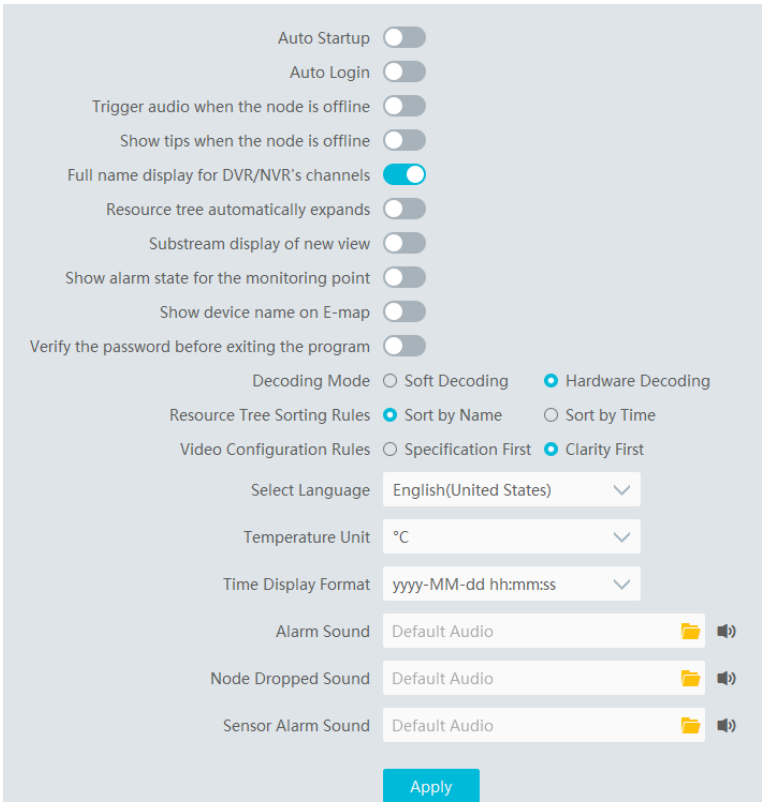
Go to Home→ Configuration.



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.

16.2 Local Settings

Go to Home→ Configuration→Local Setting.



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.

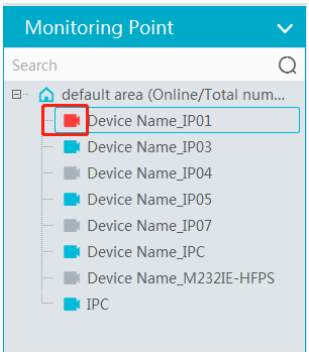
Show tips when the node is offline: if enabled, the system will pop up tips when there is node offline.

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.

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

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



Show device name on E-Map: if enabled, the device name will be displayed on the E-Map.

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.

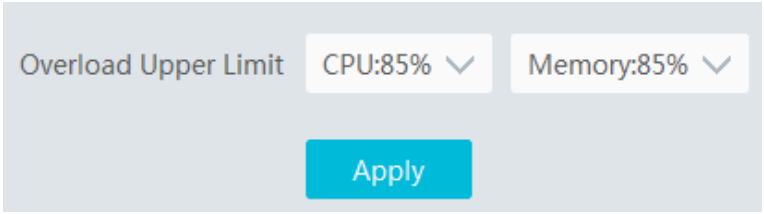
Temperature Unit: °C or °F can be selected

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

In this interface, you can also select the resource tree sorting rules, video configuration rules, language, time display format and upload various alarm audio files.

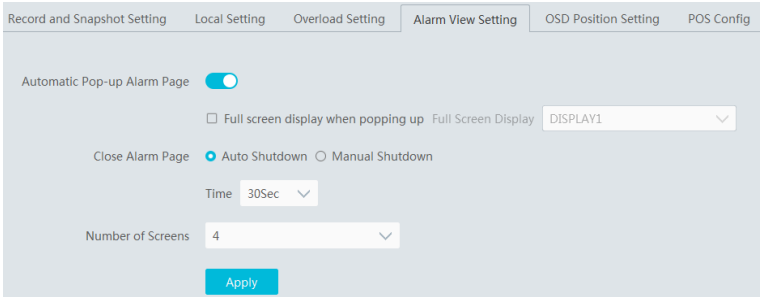
16.3 Overload Settings

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.



16.4 Alarm View Settings

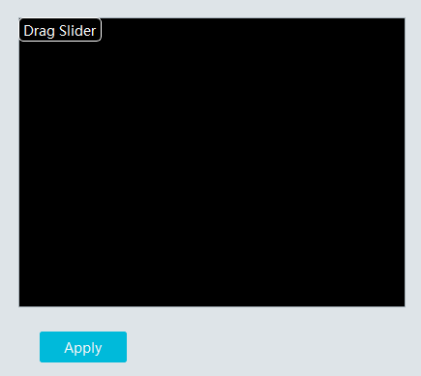
Go to Home→ Configuration→Alarm View Setting.



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).

16.5 OSD Position Configuration

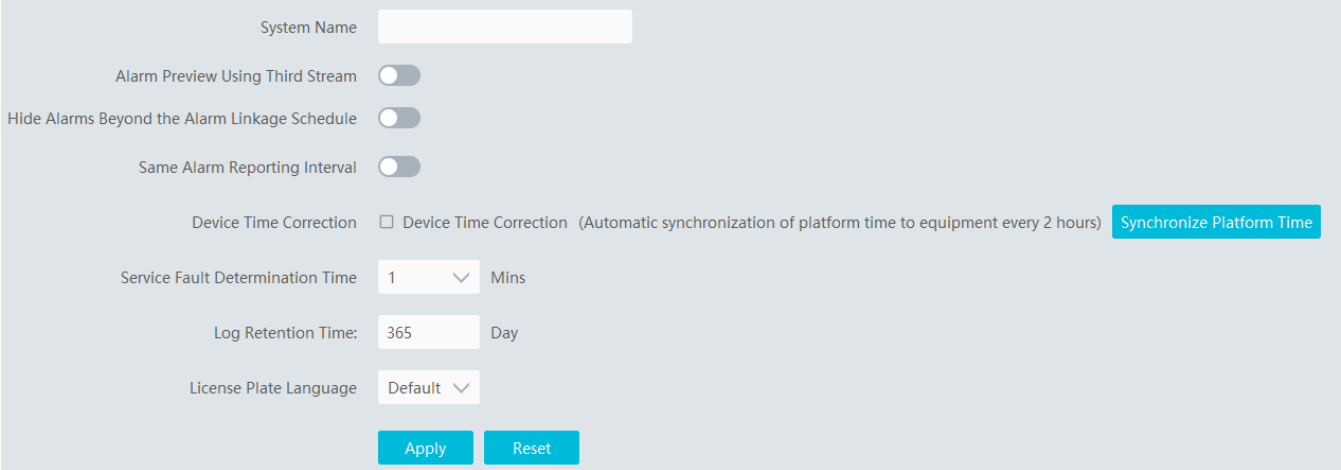
Click Home→ Configuration→OSD Position Config to go to the following interface.



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

16.6 System Configuration

Click Home→ Configuration→System Config to go to the following interface.



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

Enable and set the same alarm reporting interval and its linked alarm type.

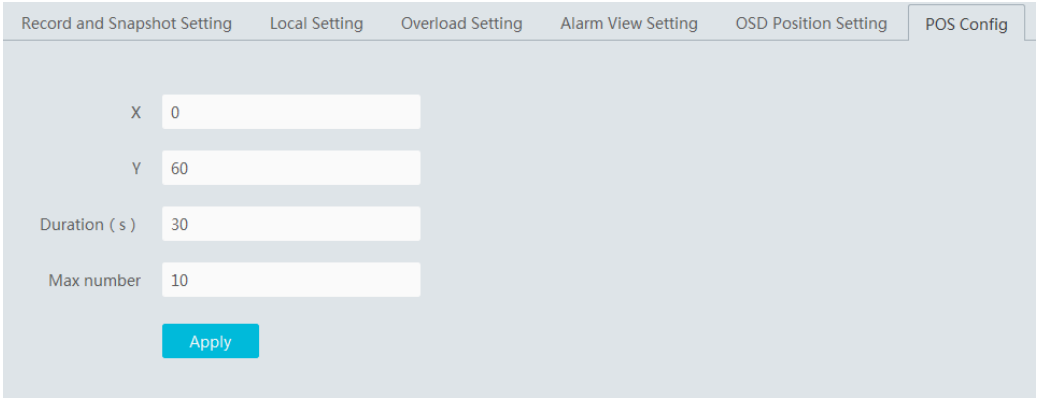
Choose “Synchronize devices” and “Synchronize Time Zone” and then click [Synchronize Platform Time] to synchronize the device times with the time of the platform.

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

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.

16.7 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.

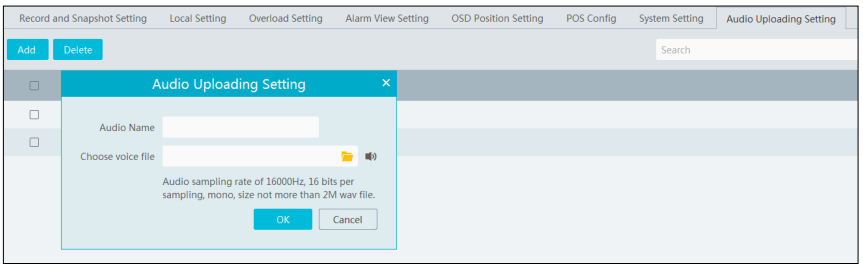


Note: The video files with POS information saved as DAT format can be played with DatPlayer and the POS information will be shown on the screen.

16.8 Audio Uploading

Go to Home→ Configuration→Audio Uploading.

Click [Add] to bring the following box.

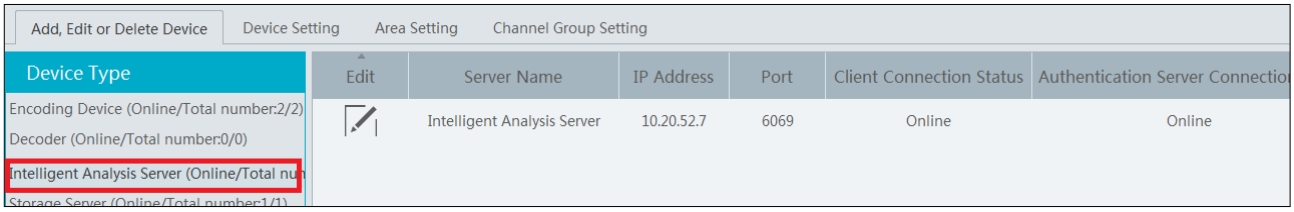


Click [Browse] to choose the audio file and then enter the audio name. Click [OK] to save this audio. After the audio is uploaded successfully, you can listen to it.

17 Data Dashboard

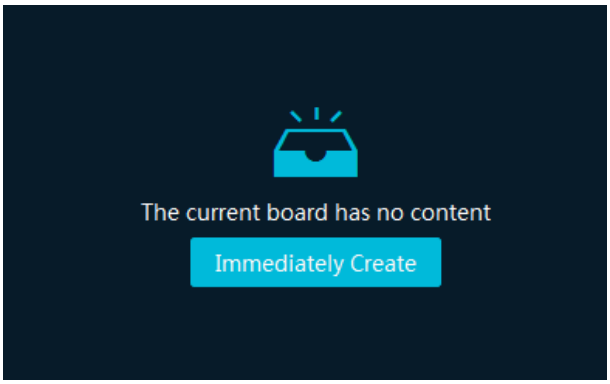
Before opening the data dashboard, please makes sure the intelligent server is online.

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

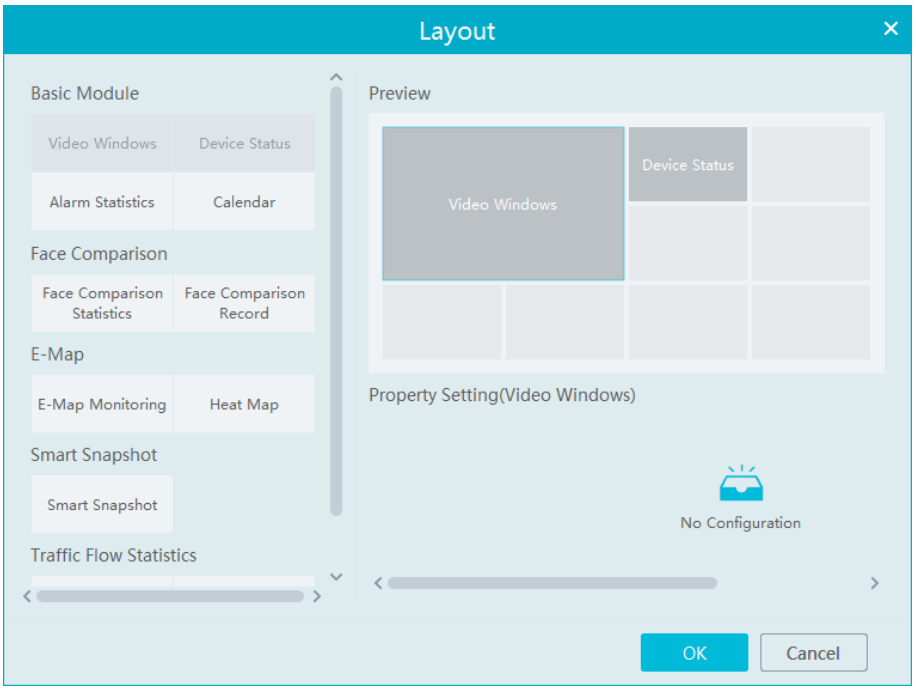


17.1 Create Intelligent Dashboard

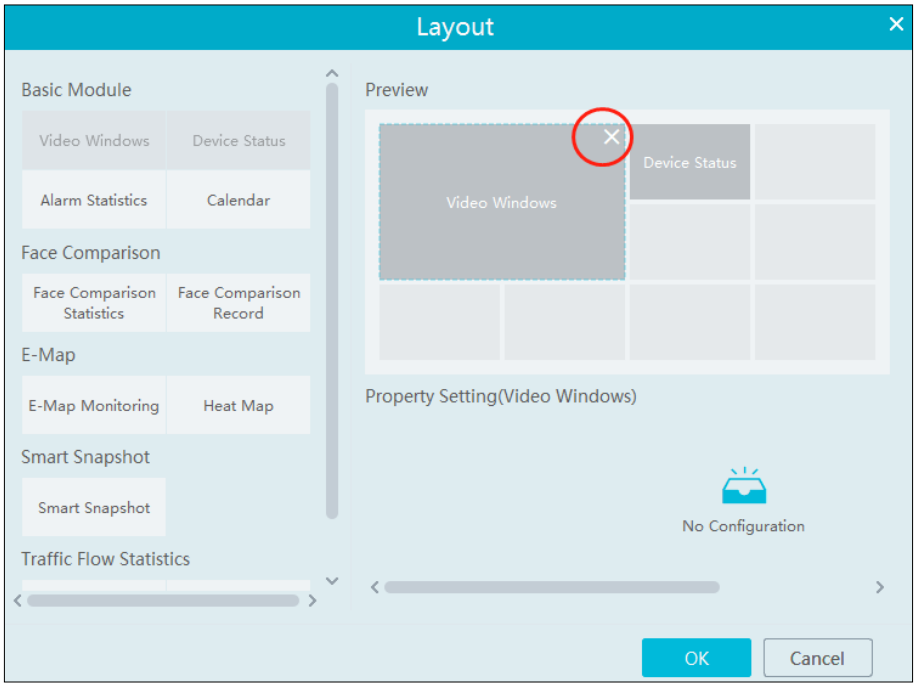
Go to Home→Intelligent Dashboard.



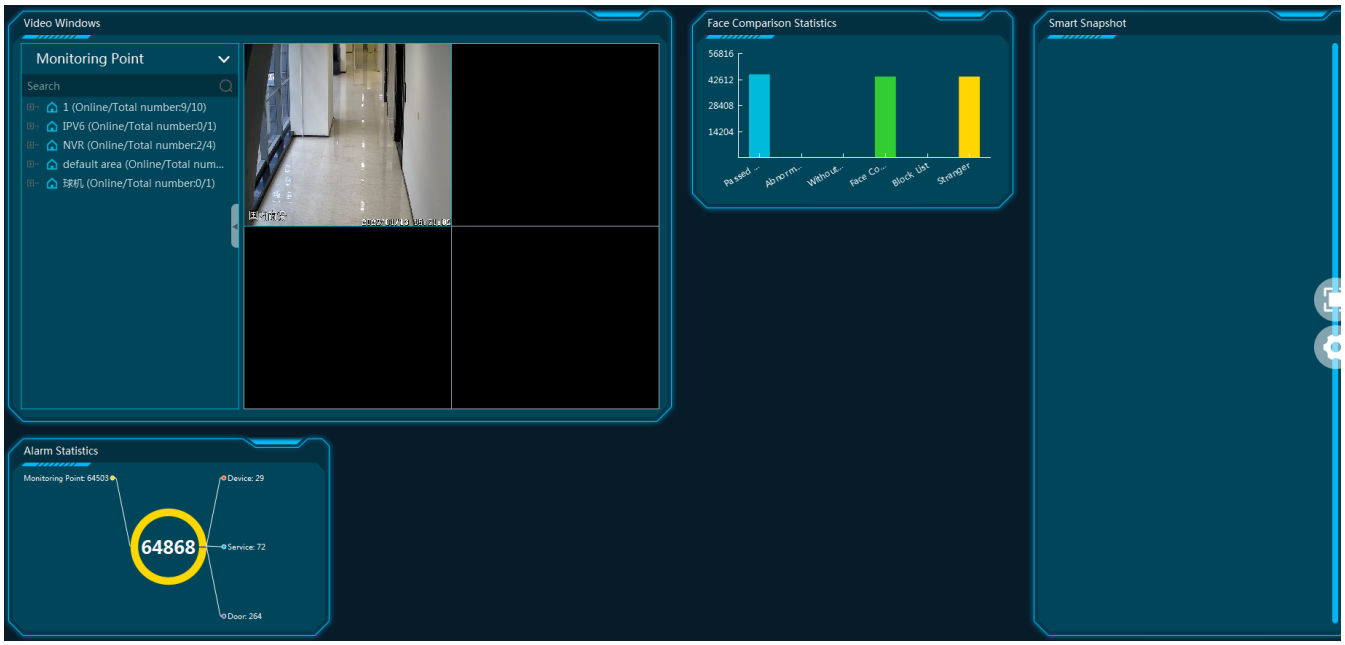
Click [Immediately Create] to create the layout of the data dashboard. Drag the module you want to display to the right preview window as needed. After that, click [OK] to save the settings.



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

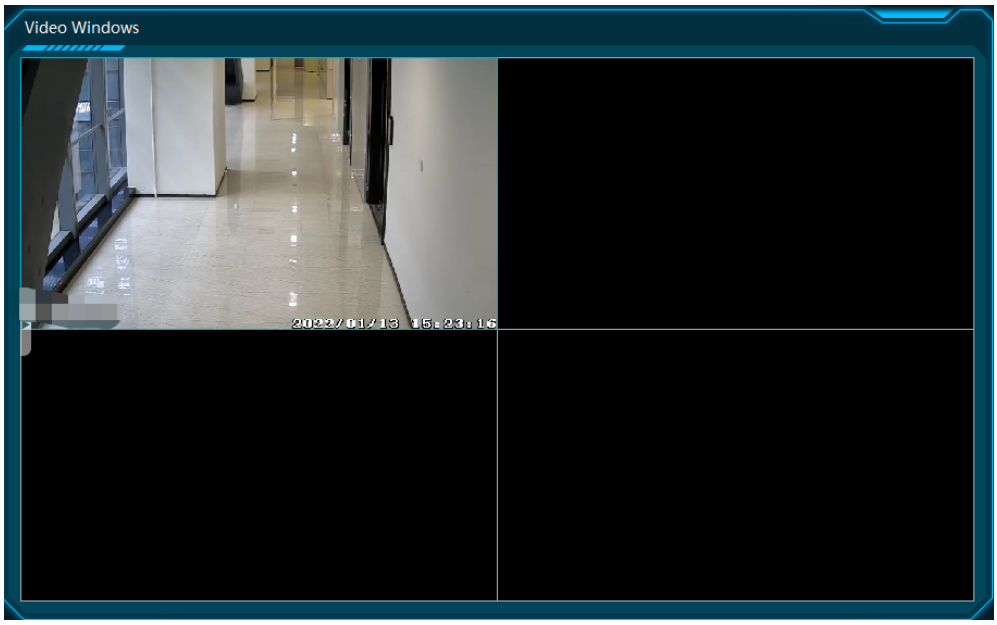


After the data dashboard is created, click to display it in full screen mode. Click or ESC to exit the full screen mode. Click to set the layout of the dashboard.

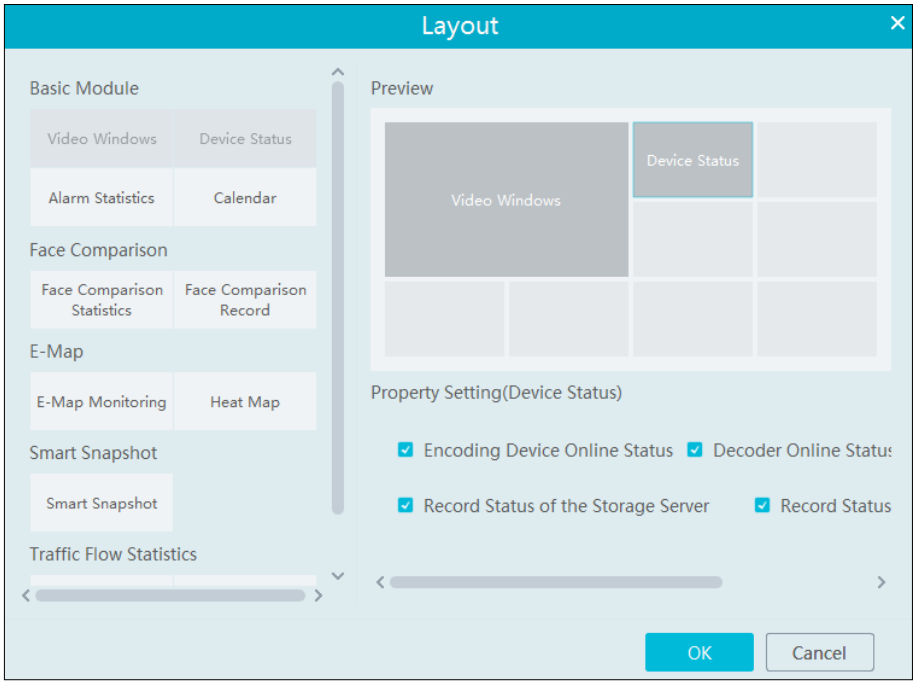


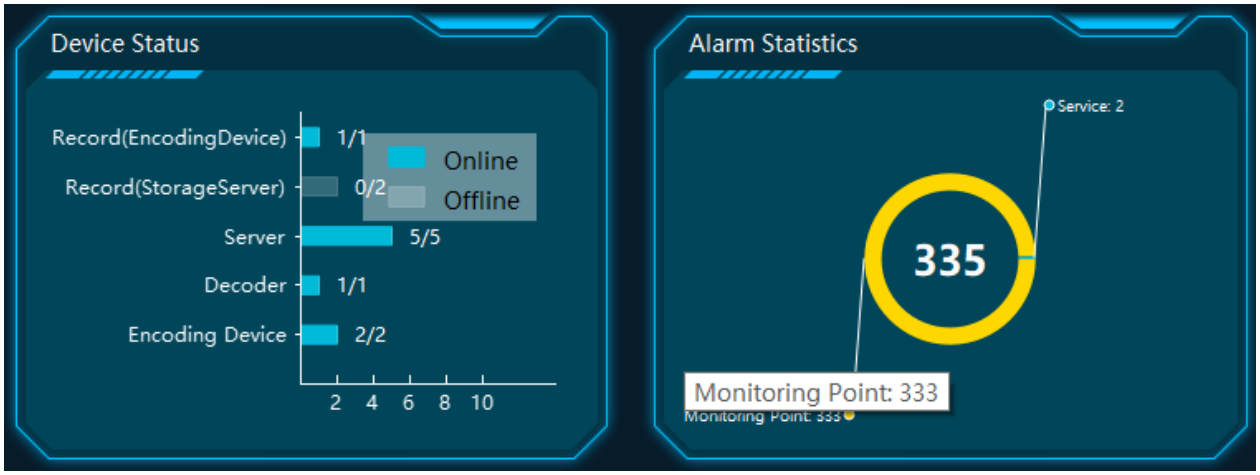
17.2 Basic Module

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.



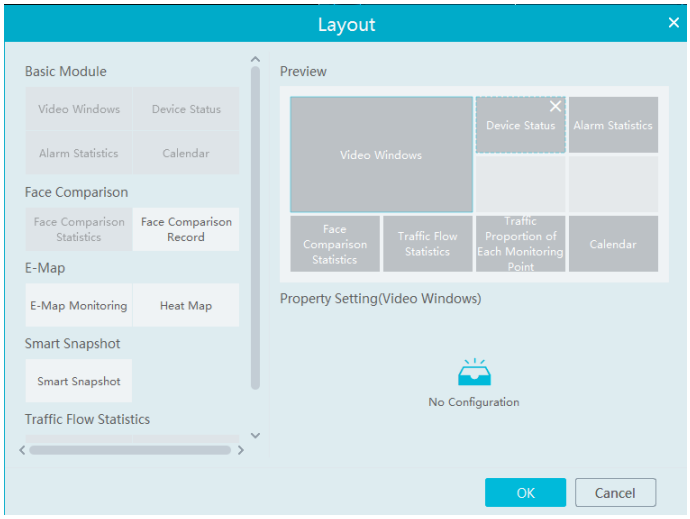
Other modules can set its attributes that you want to display as needed.

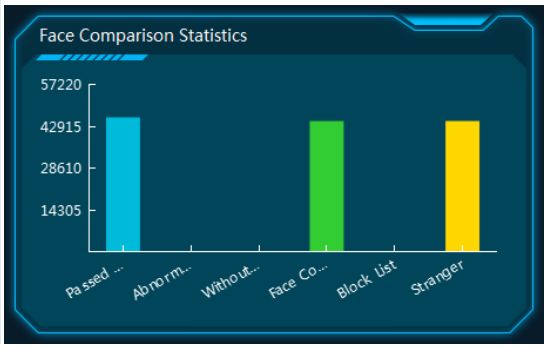




17.3 Face Comparison Display

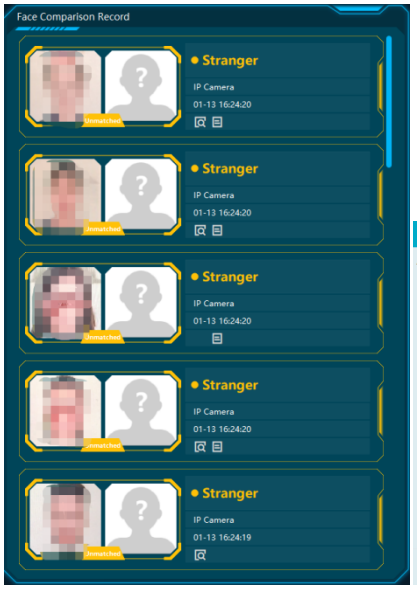
Face Comparison display includes face comparison statistics and face comparison record display. In the layout interface, drag these two modules to the preview window. Then you can set the attributes as needed.

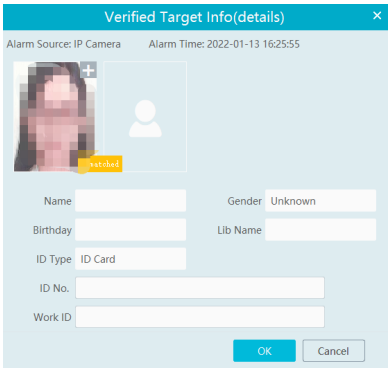


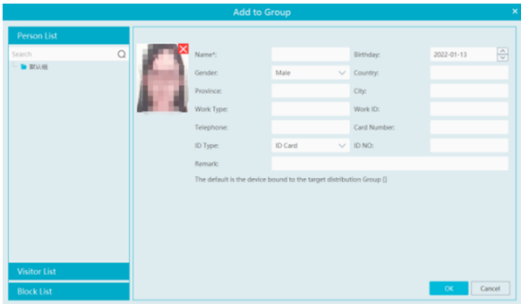


Smart Snapshot module: You can set the snapshot channel and attributes.

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.

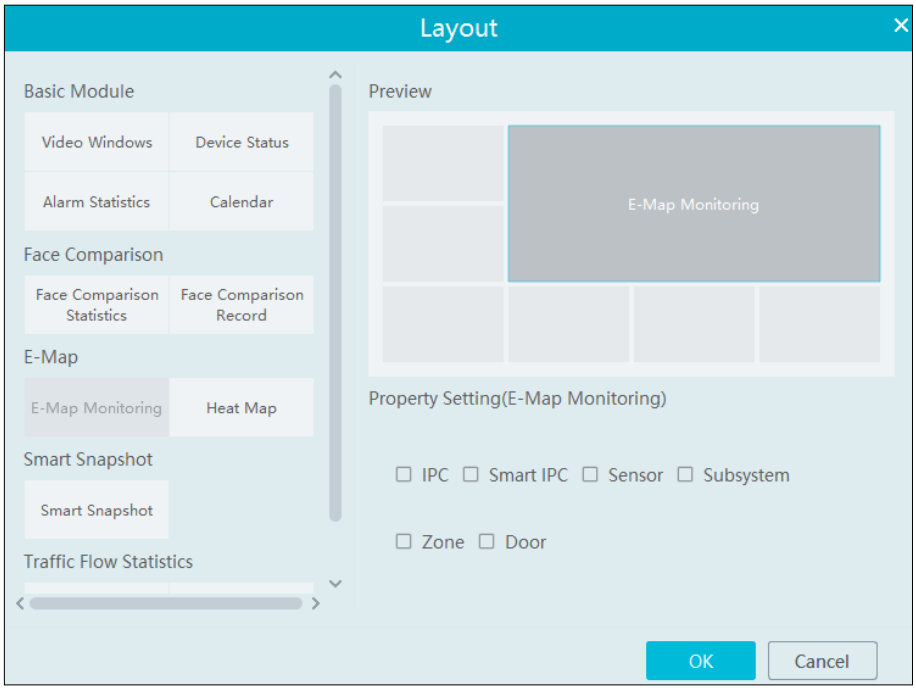




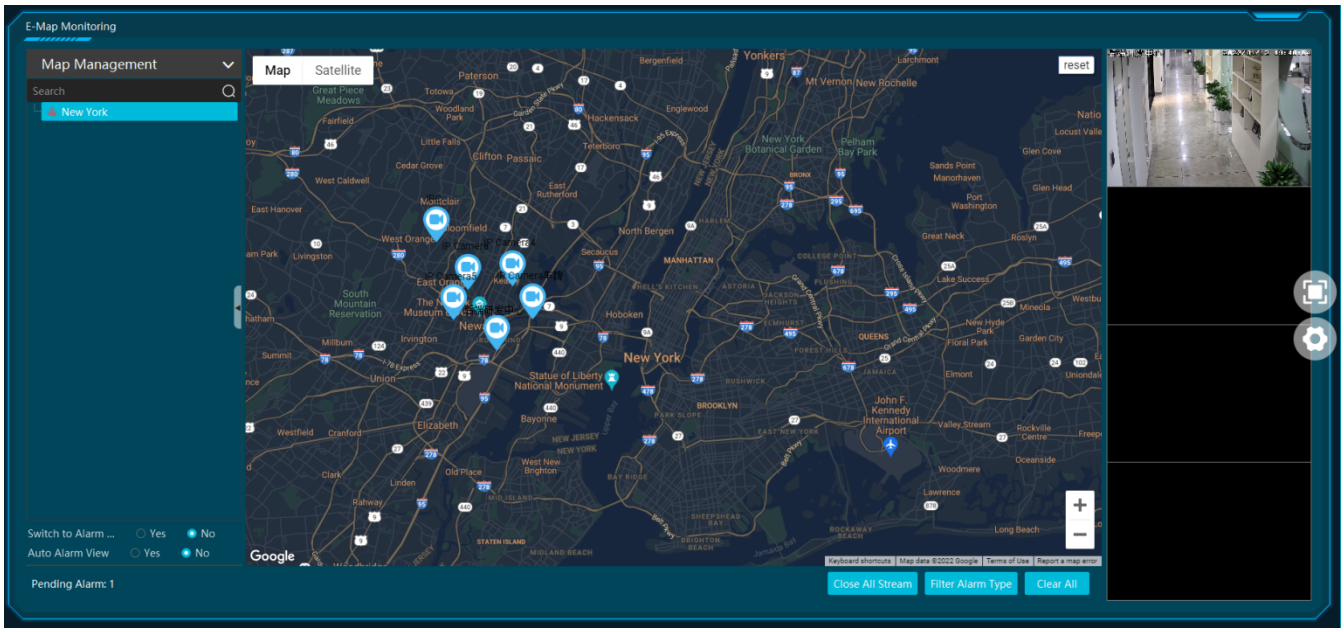


17.4 E-map Display

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

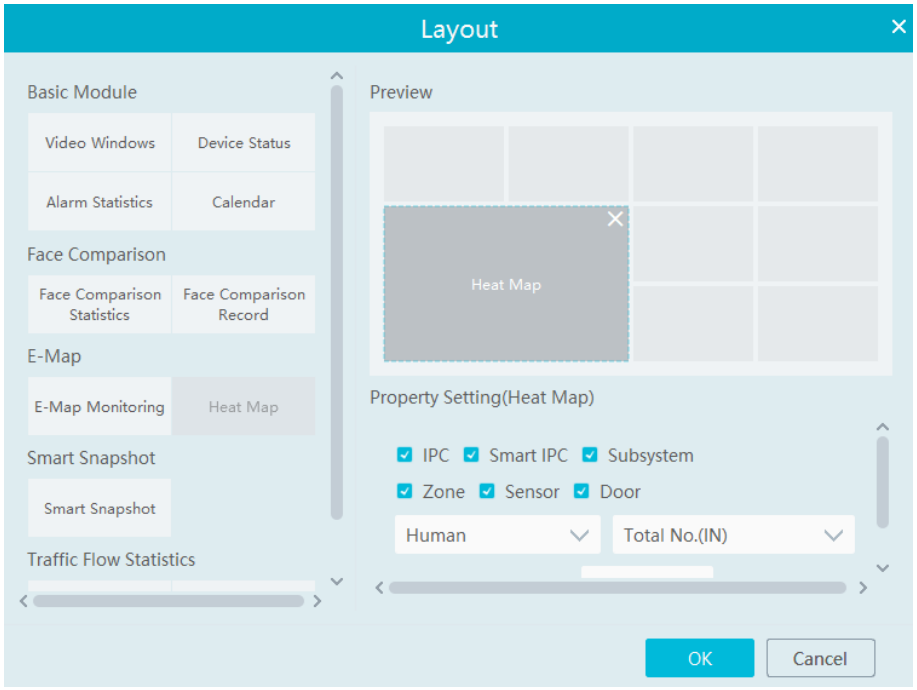


You need to set the hotspots in advance and then you can view here. Please refer to E-Map→ E-Map Monitoring for details.

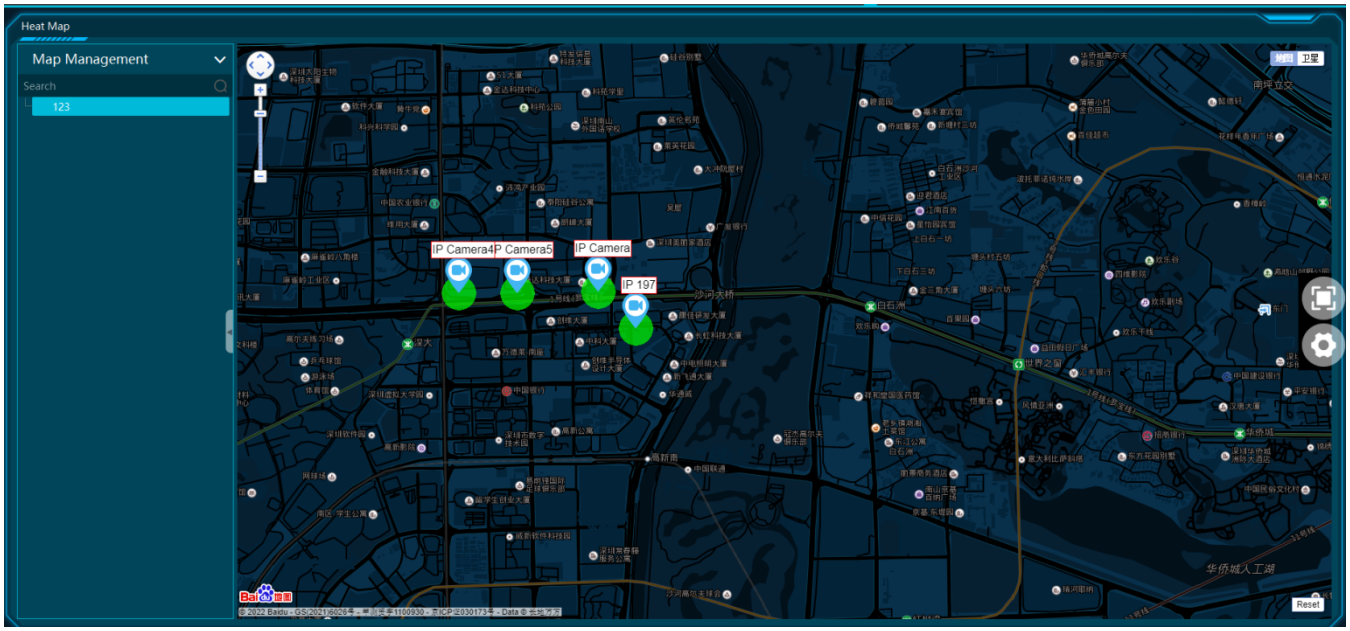


Heat map module: The more people/vehicles enter, the deeper the color is. Move the cursor on the monitoring point to view the current traffic flow. You need to set the E-map and hotspots in advance. Please refer to E-map settings chapter for details.

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

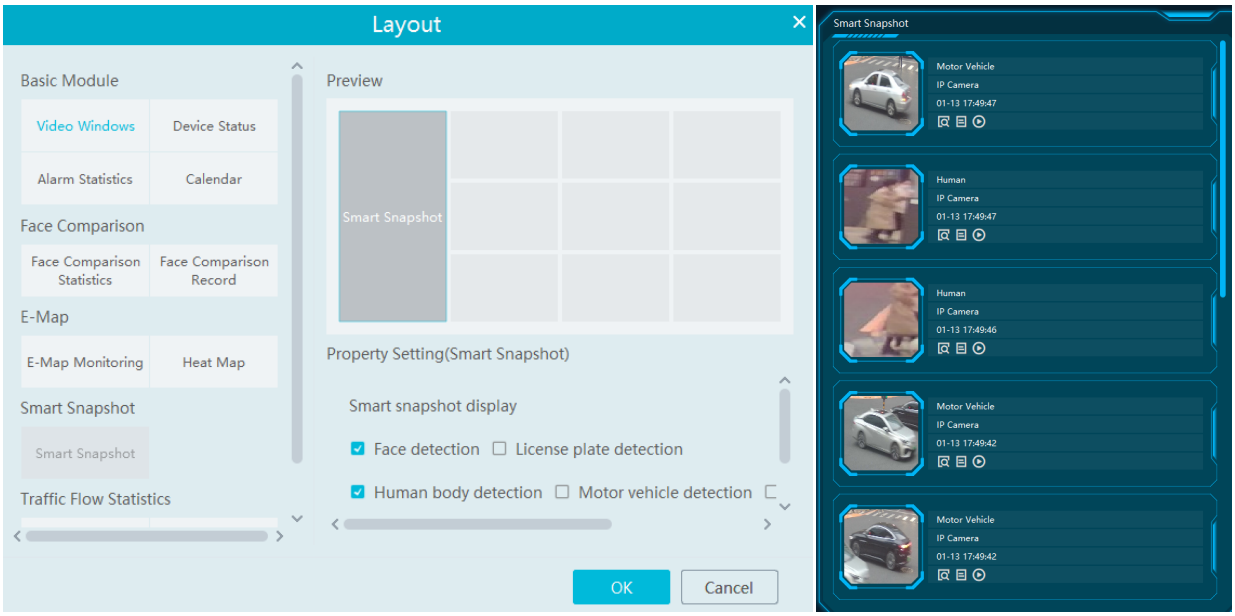


In the heat map module of the intelligent dashboard, you can view the statistics of human/motor-vehicle/non-motor vehicle.



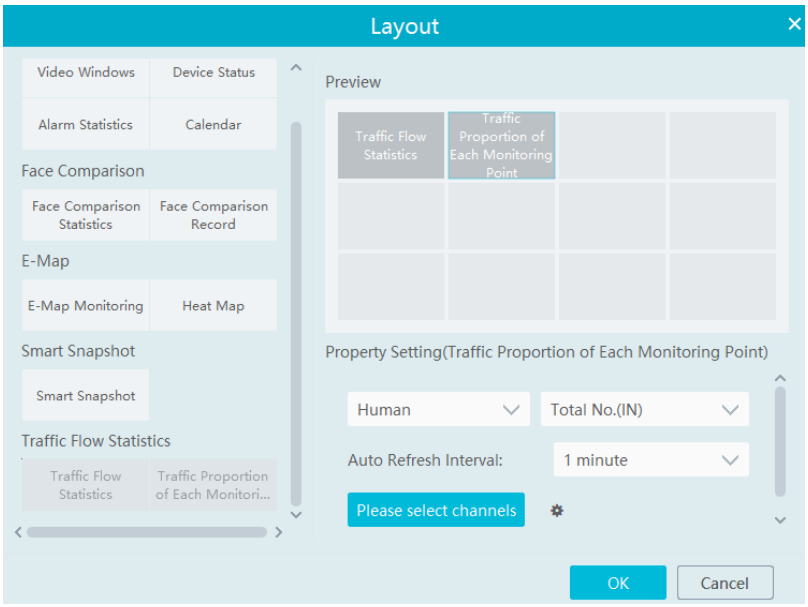
17.5 Smart Snapshot Display

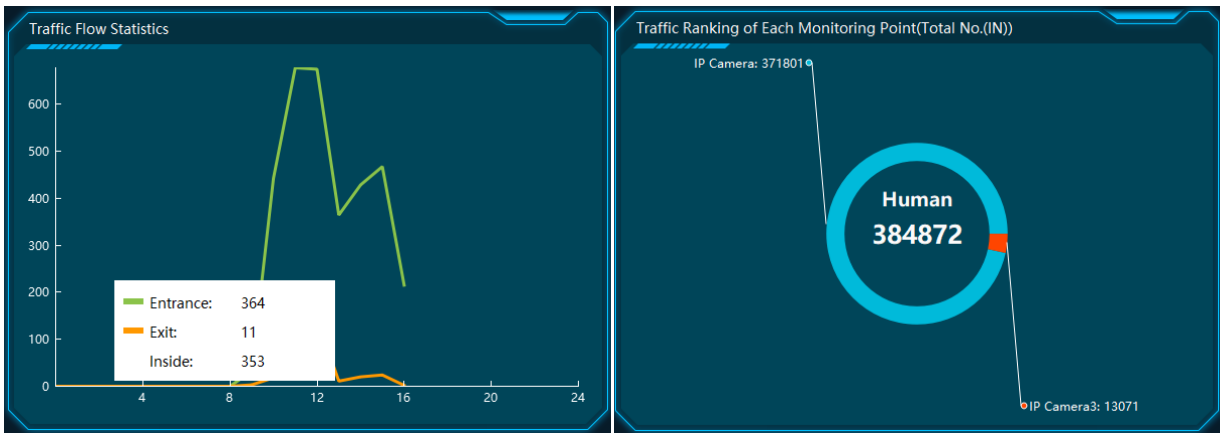
You need to set the snapshot attributes in the layout interface and then the relevant data can be viewed on the dashboard. The smart snapshot type includes face, license plate, human body, motor vehicle and non-motor vehicle. Please select them as needed.



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.

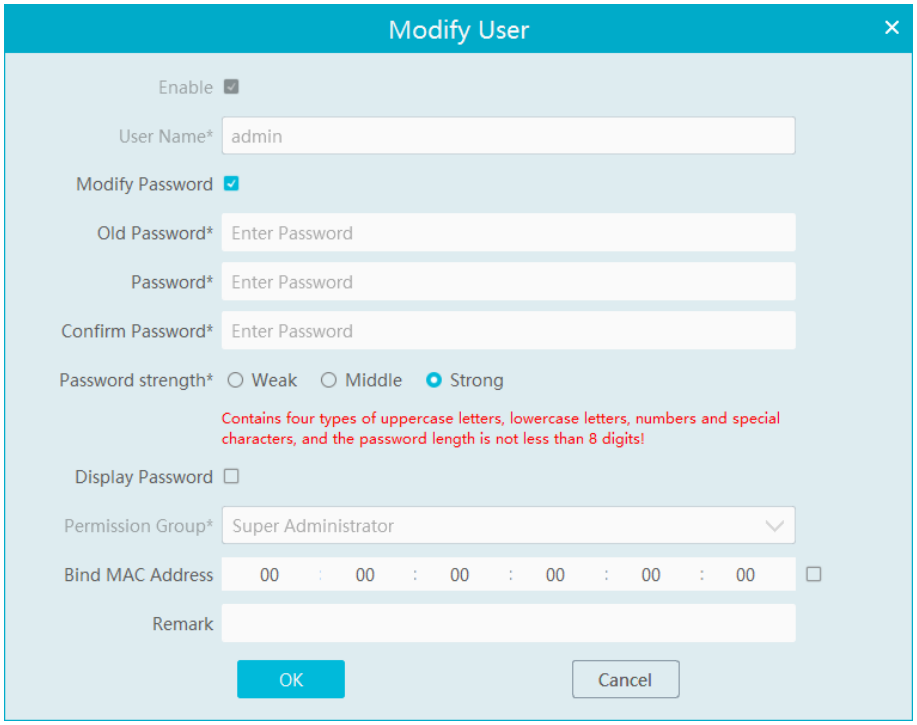




18 Troubleshooting

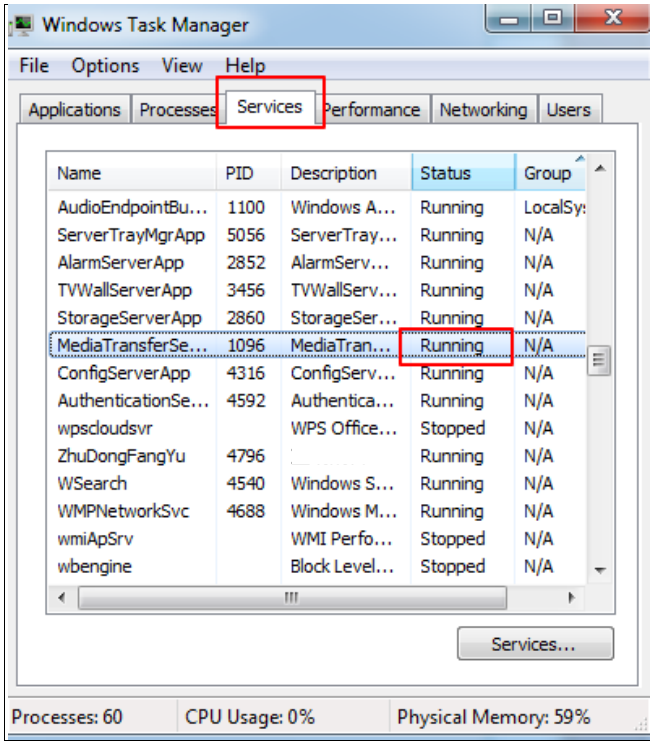
1. How to modify the password by yourself?

Login monitor client and then go to the Account and Permission interface. Select the account and click to modify the password.



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 logins 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 logins 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 enabled.

5. The record cannot playback after the user logins 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 is 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 logins 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 login 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.
3. If you want to delete the files of a server, please stop the server first.