

NVMS

User Manual



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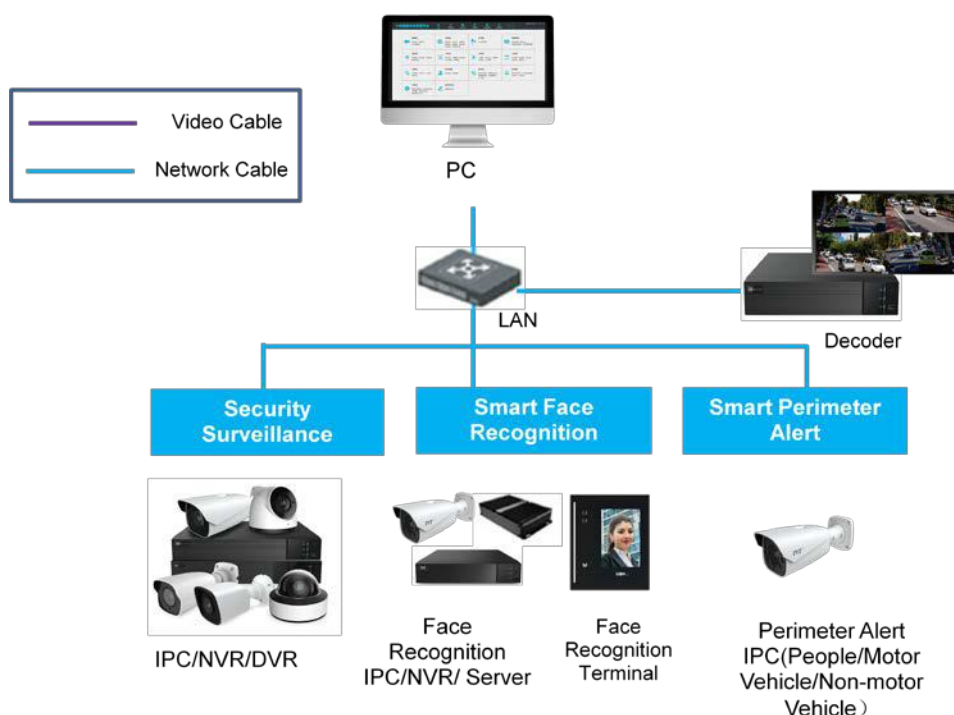
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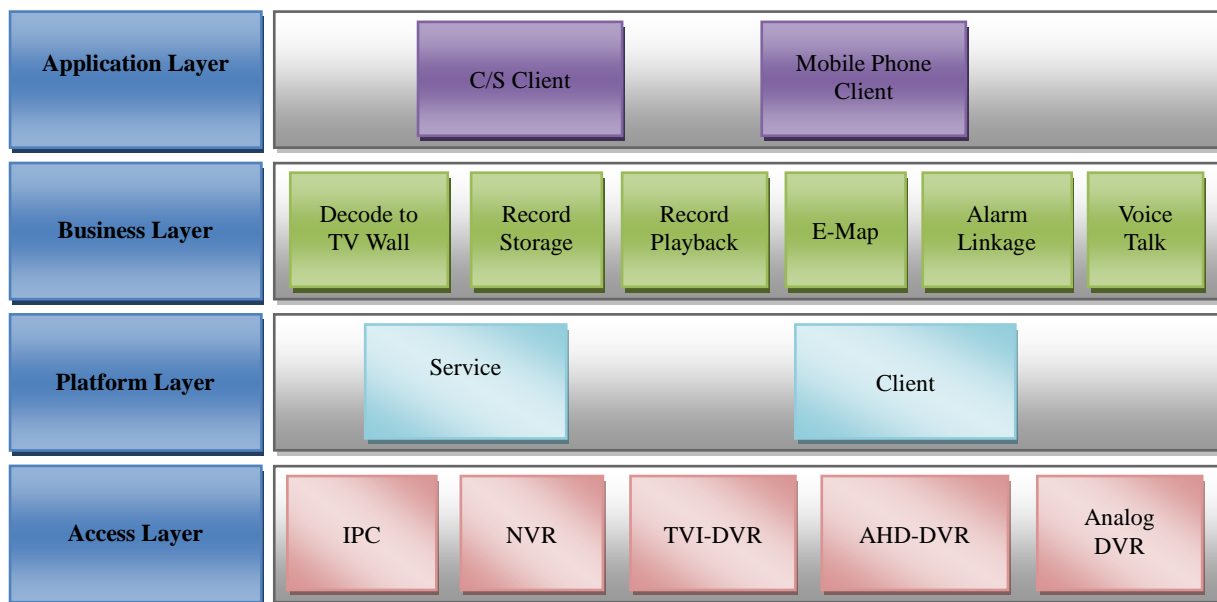
1 Introduction

1.1 Introduction

NVMS Lite is a newly integrated security management software released by our company, seamless access to all products of our company and encoding devices of the famous manufacturers in the industry (like Hikvision, Dahua, etc.). With the powerful capability of video surveillance management, real-time preview, record storage, record playback, record download, alarm linkage, decoding on TV Wall and keyboard control are supported. Due to its small, exquisite, flexible and diverse deployments, NVMS Lite can meet various demands of small-sized projects and can be widely used in the video surveillance of industrial park, education, banking, chain stores, buildings and transportation.

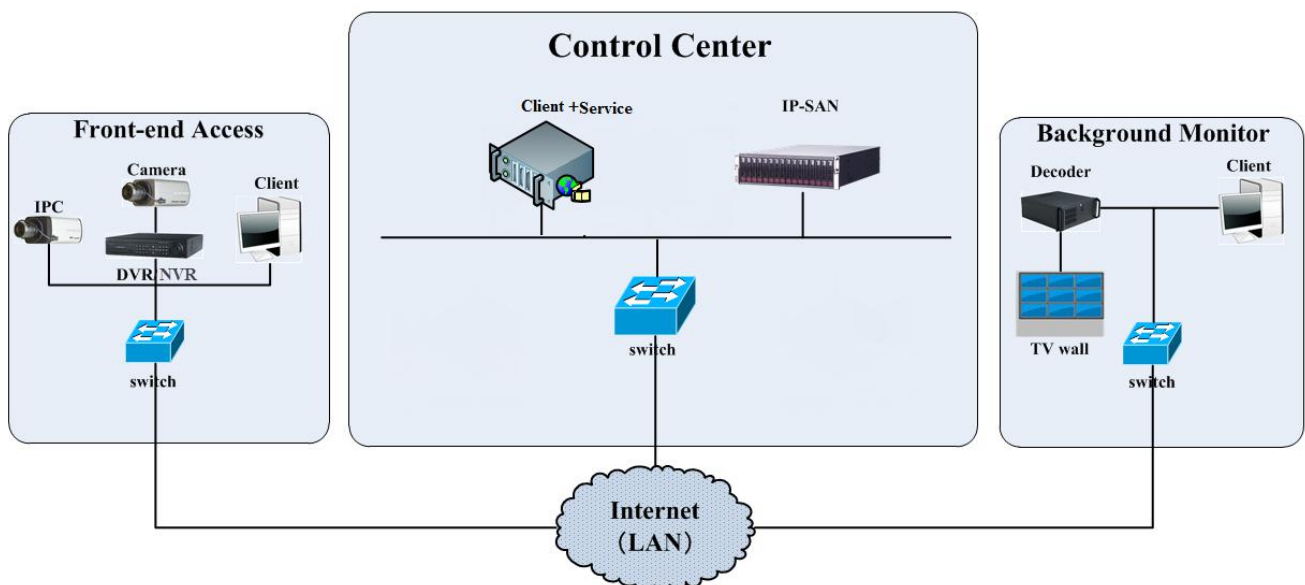


1.2 Software Architecture



1.3 System Components

1.3.1 System



1.3.2 Front-end Access

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

1.3.3 Background Monitor

- Background monitors include TV Wall 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
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 the network security, it is necessary for the system to set up firewall. All monitor ports shall be opened in 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

Server	Port Type	Port
Intelligent Server	Internal Port	6069
TV Wall Server	Internal Port	6036


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

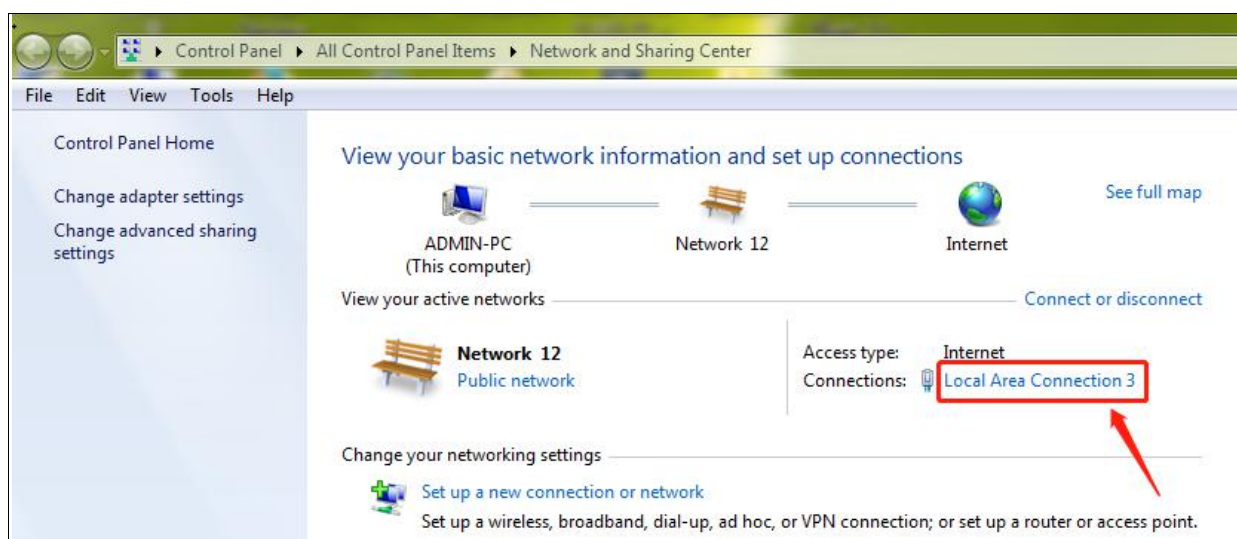
2.3 Checking Installation Environment

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

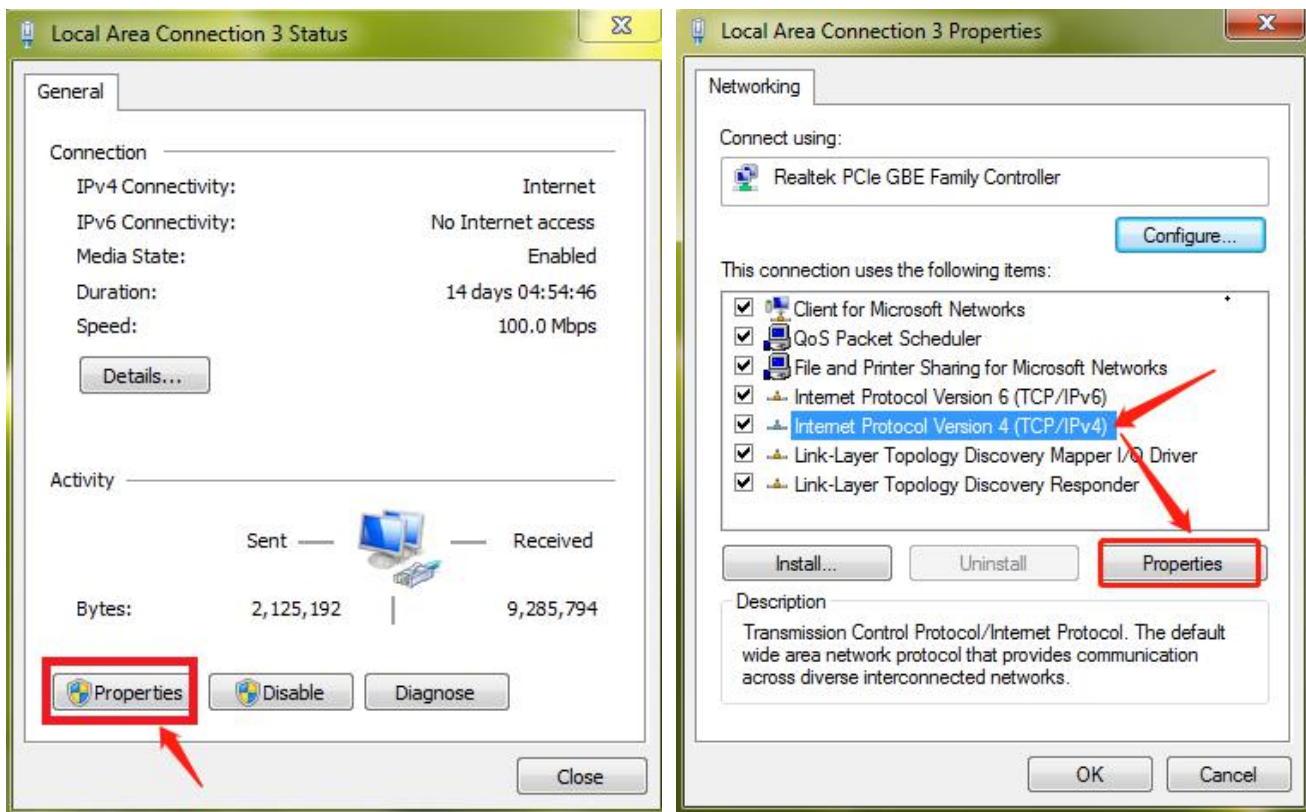
2.4 Configuring Server IP Address

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

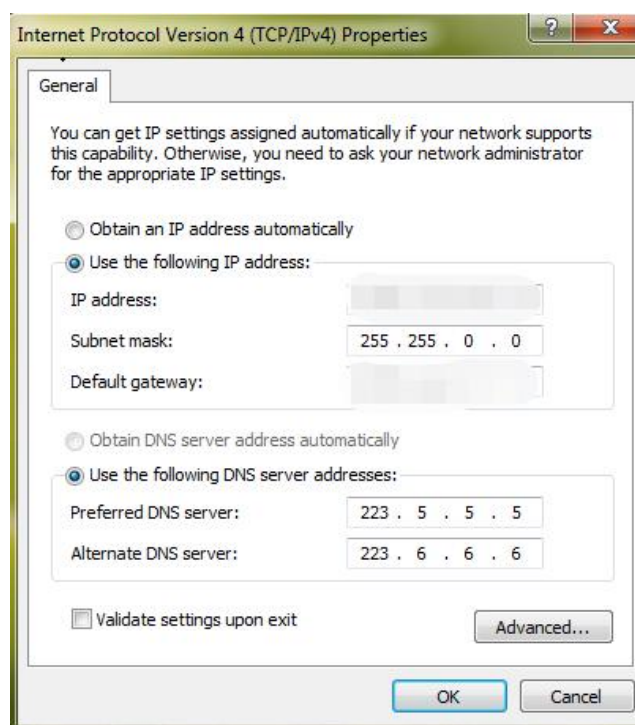
1. Connect the network cable to the server, power on and start the server.
2. Click  at the lower right corner of the computer desktop and then click “Open Network and Sharing Center” as shown below.



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.



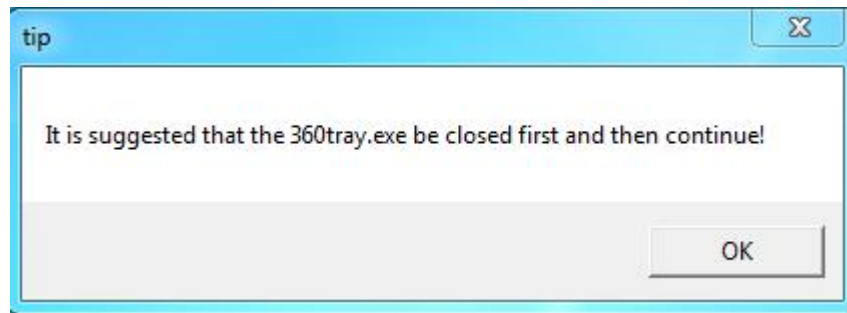
3 Install and Uninstall the Software

3.1 Install the software

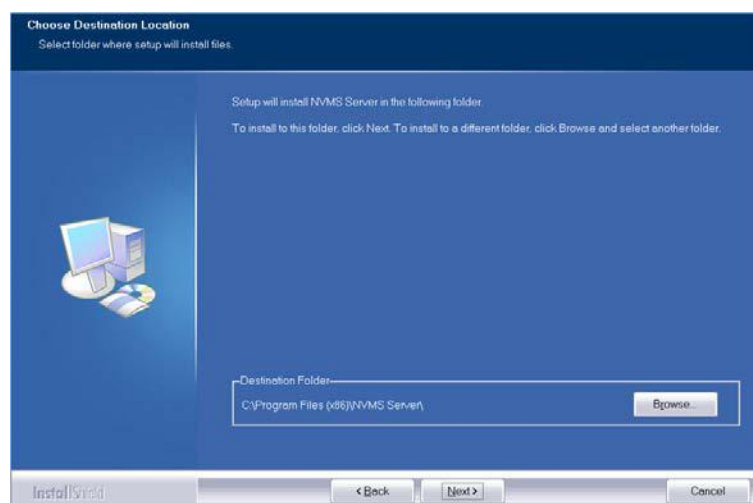
- 1) Double click “NVMS server.exe”. Select the UI language as needed.



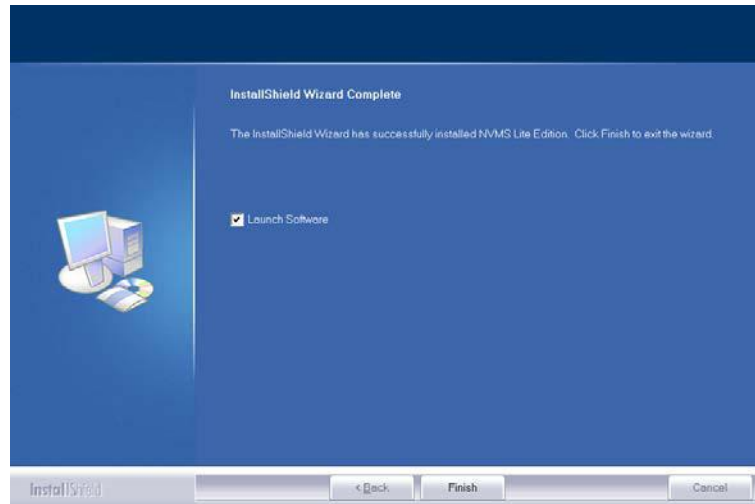
- 2) A tip will pop up to suggest you to close the antivirus software. If no prompt window appears, please skip this step.



- 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].



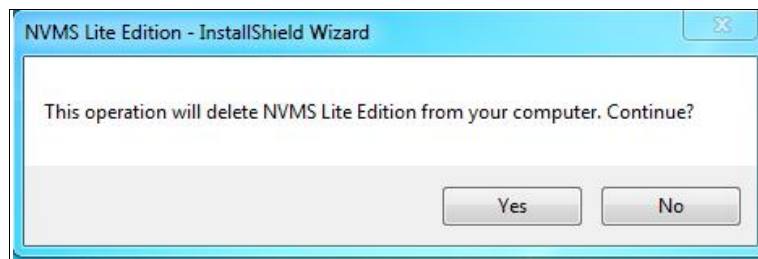
- 5) Check “Launch Software” as needed and then click [Finish]”.



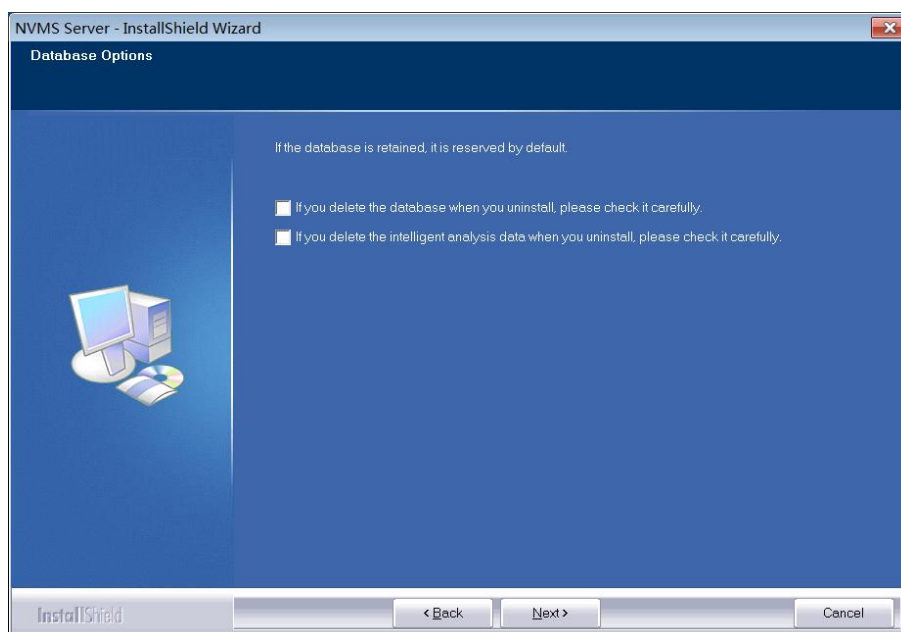
3.2 Uninstall Software

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.



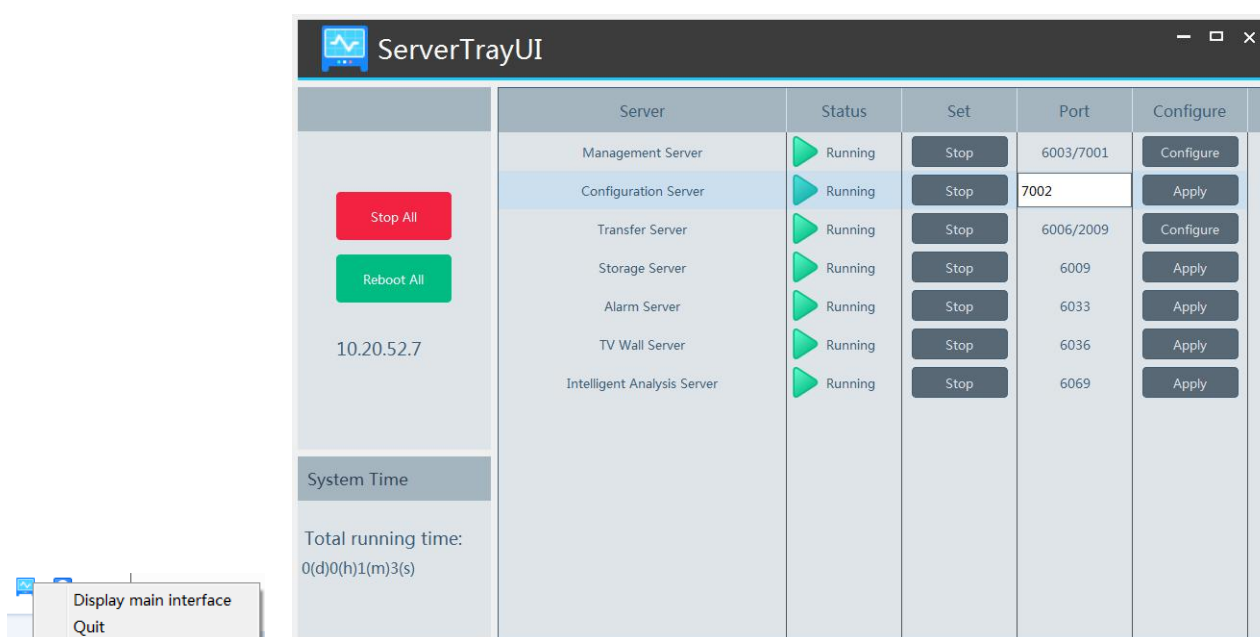
Select whether to delete the database or intelligent analysis data as needed. Then clicking the “Finish” button ends the uninstallation.



4 Login

4.1 Run Servers

Before logging onto the client, please ensure all servers are working normally. Having been installed successfully for the first time, the server tray will minimize on the taskbar of the computer. Double click the server tray icon to pop up the server tray interface. You can also right click the server tray icon and select “Display main interface” to pop up the server tray interface as shown below.

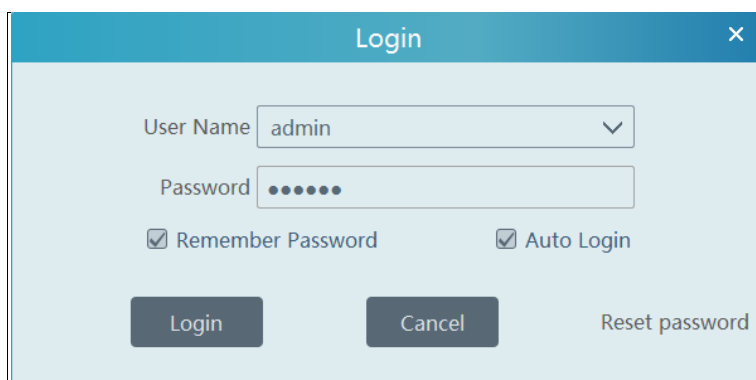


The working status and port can be viewed from the server tray. All servers can be stopped and restarted. Additionally, all server ports can be modified as needed. Click the corresponding port number to modify it and the modified port can be saved automatically after you move your mouse to another place.

Please set up according to the actual network.

4.2 Login

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

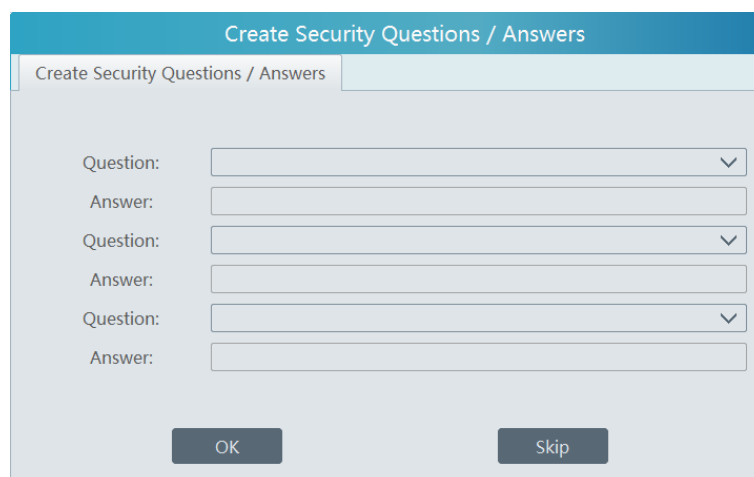


① Enter username and password (the default username is admin; the default password is 123456).

Check “Remember Password” or “Auto Login” as needed.

② Click [Login].

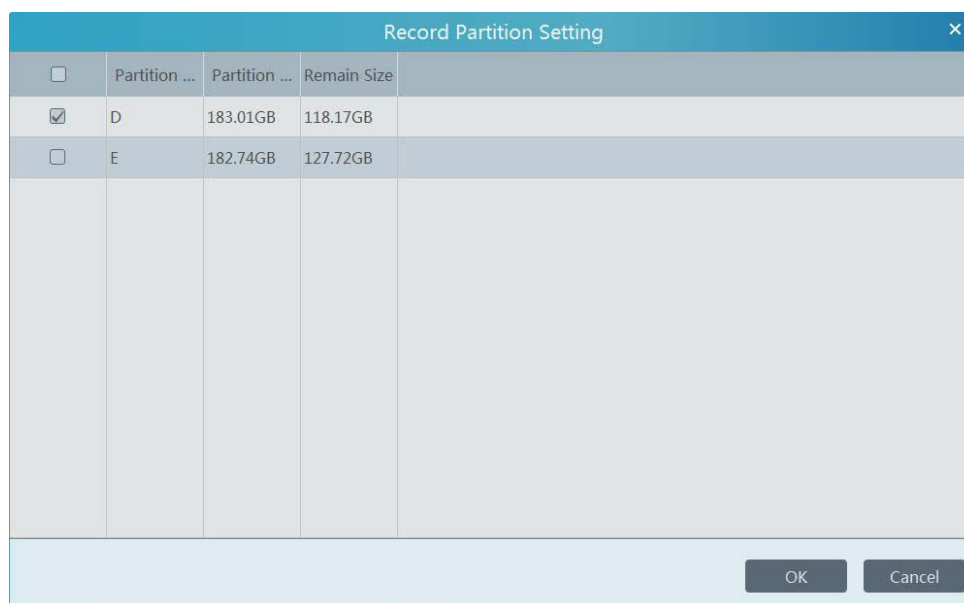
If you forget the password, please click “Reset password”. Then a small window will appear. You can reset the password by answering the pre-defined questions.



The dialog box titled "Create Security Questions / Answers" contains a tab labeled "Create Security Questions / Answers". It features three sets of input fields, each with a "Question:" dropdown menu and an "Answer:" text box. At the bottom, there are "OK" and "Skip" buttons.

If this is the first time for you to log in, please create security questions and answers. It is important that you remember the answers for these questions or you will not be able to reset your password and be locked out.

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.

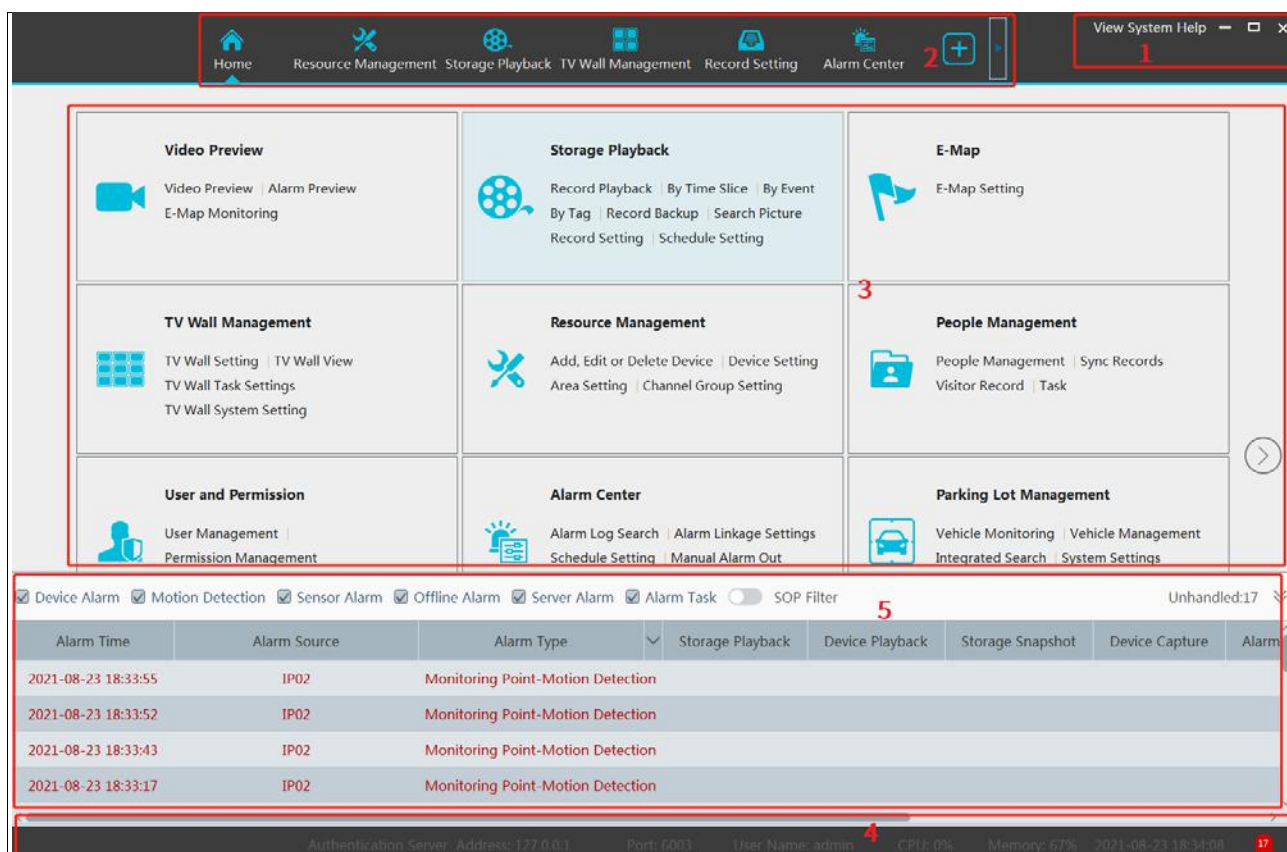


The dialog box titled "Record Partition Setting" contains a table with the following data:

<input type="checkbox"/>	Partition ...	Partition ...	Remain Size
<input checked="" type="checkbox"/>	D	183.01GB	118.17GB
<input type="checkbox"/>	E	182.74GB	127.72GB

At the bottom right, there are "OK" and "Cancel" buttons.

4.3 Main Menu Interface Introduction



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

Menu Bar

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

Tab Bar






Menu	Description
View	"Video preview", "Edit video preview", "Change to home page".
System	Including "Video preview", "Record Playback", "E-Map", "TV Wall Management", Resource Management, "Account and Permission", "Alarm Center" "Operation and Maintenance Management", "Face Surveillance", "Target Counting", etc.
Help	Including "User Manual", "Register license" and "About NVMS"

Functional area







Menu	Description
Video preview	To view live images and to record, snapshot and talk, etc.
Record 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.
People Management	To manage people and assign the access permission
Account and Permission	To add, modify or delete user account and set permissions for these accounts.
Alarm Center	To set alarm linkage and schedule; To search alarm logs.
Face Surveillance	To recognize, compare or search face.
Target Counting	To monitor and analyze people/vehicle flow in real time
Operation and Maintenance Management	To search, export and maintain logs.
Local Configuration	To set record path, snapshot path, system startup and maintenance, overload and alarm view.
Functional Selection	To select common functions displayed on 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 video preview page.
	When the tab pages exceed the applicable numbers, this icon will display. Click it to view the hidden tabs.

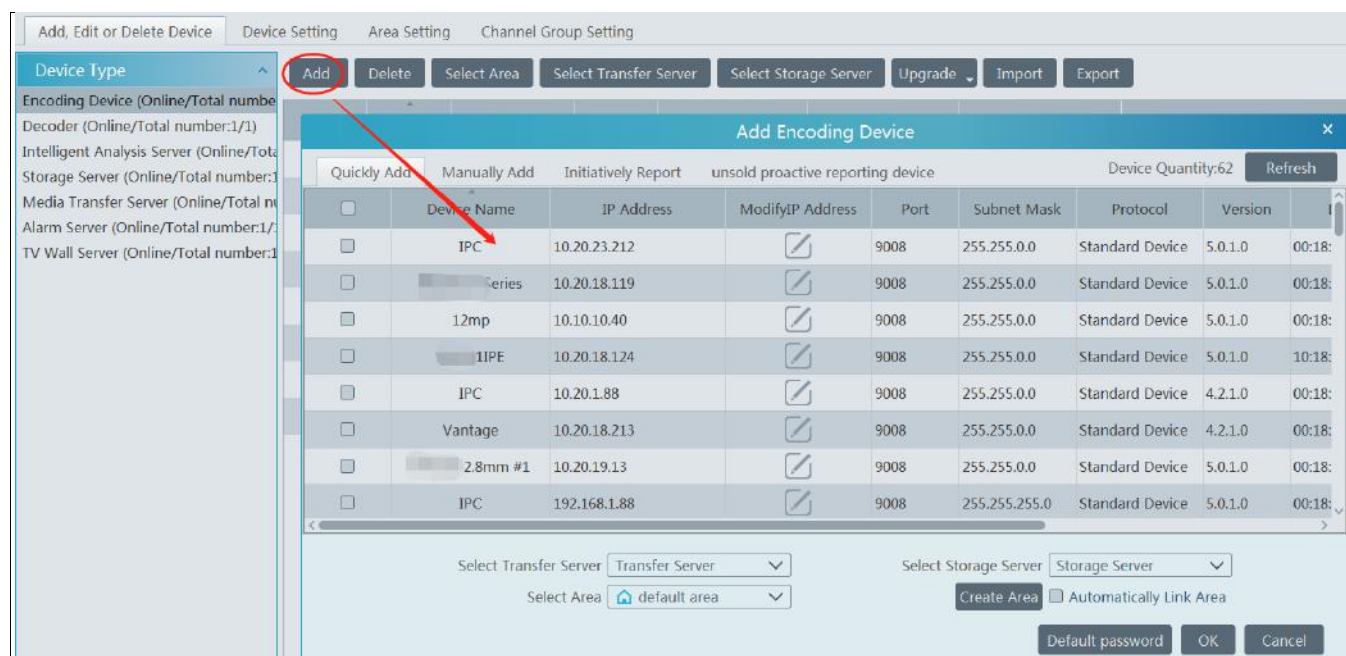
Common buttons:

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 cameras
	Click it to remove all selected cameras

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, perimeter alert IPC, ANPR camera, etc.

Select Transfer Server: there is a default transfer server. Click Home→Resource Management→Add, Edit or Delete Device→Media Transfer Server to view the online status of the default transfer server or modify its name.

Select Storage Server: there is a default storage server. Click Home→Resource Management→Add, Edit or Delete Device→Storage Server to view the online status of the default storage server or modify its name and record partition.

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

IP Address/IP Range/Domain Name/URL	Protocol	Port	User Name	Password	Test	Delete
IP Address: 0.0.0.0	Standard Device	6036	admin	*****	Test	

Select Transfer Server: Transfer Server
 Select Storage Server: Storage Server
 Select Area: default area
 Create Area ☐ Automatically Link Area
 Default password OK Cancel

- ① Enter IP address/IP range/domain name, 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.

IP Address/IP Range/Domain Name/URL	Protocol	Port	User Name	Password	Test	Delete
URL:RTSP://192.168.226.201:554/profile1	RTSP	--			Test	
IP Address:0.0.0.0	Standard Device	6036	admin	*****		

Select Transfer Server: Transfer Server
 Select Storage Server: Storage Server
 Select Area: default area
 Create Area ☐ Automatically Link Area
 Default password OK Cancel

How to get URL?

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

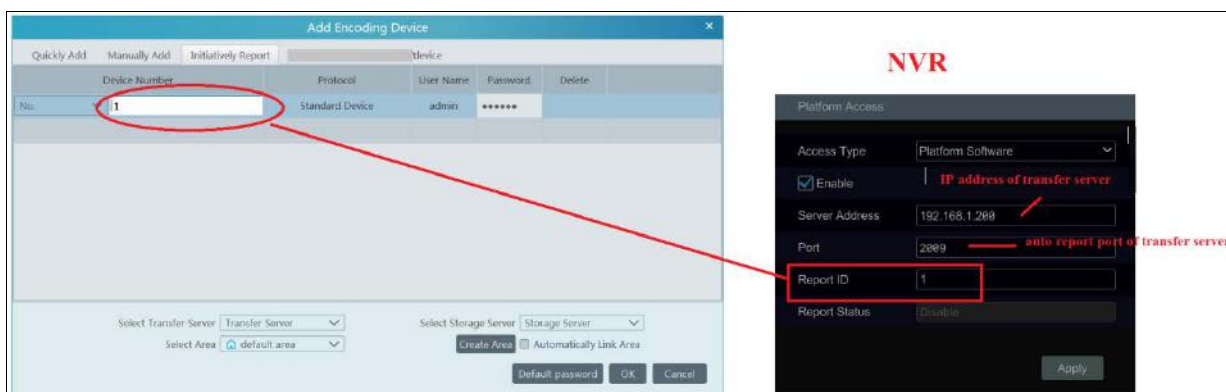
The default RTSP port is 554 and the URL format is “rtsp://IP or domain name:port/profile1”. For example:

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

The URL of the device of other companies, please get the URL from its web client or the third-party tools (like ODM).

5.1.3 Initiatively Report

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

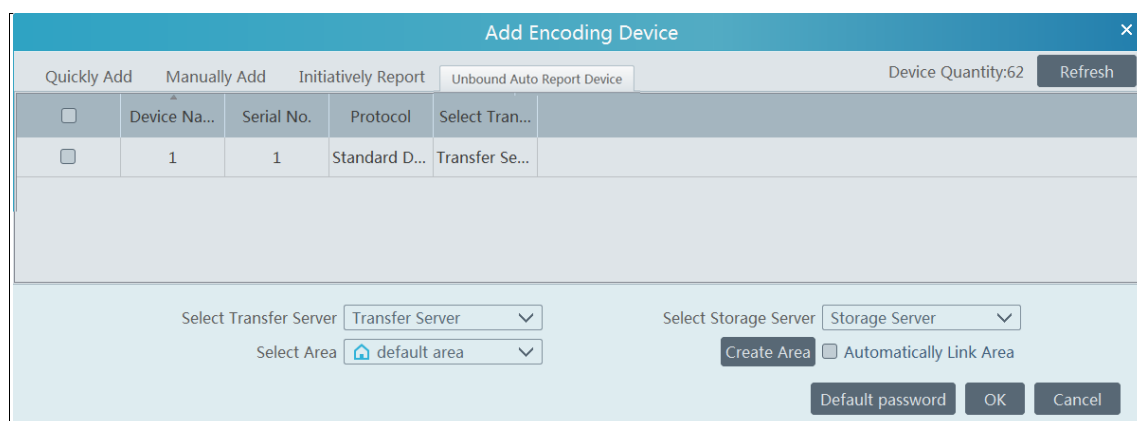


- ① Enter the device ID set in the DVR/NVR or IP camera and choose the protocol.
- If the DVR/NVR is needed to add, please go to Network→Platform Access interface of the DVR/NVR. Check “Enable”, enter the IP address and port (default 2009) of the NVMS and then set the device number of the DVR/NVR.
- If the IP camera is needed to add, please go to Network Configuration→Server Configuration of the IP camera. Check “Do you want IPcamera to connect Server”, enter the IP address and port (default 2009) of the NVMS and then set the device number of the IP camera.
- ② Select the transfer server, storage server, area and then click [OK].

5.1.4 Quickly Add Auto Report Device

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


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



5.2 Modify or Delete Device

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

Add, Edit or Delete Device									
Device Setting									
Area Setting									
Channel Group Setting									
Device Type									
Add									
Delete									
Select Area									
Select Transfer Server									
Select Storage Server									
Upgrade									
Import									
Export									
Search									
Device Name									
Type									
Channel Number									
Alarm In Number									
Alarm Out Number									
IP Address/IP Range/Domain Name									
Port									
Encoding Device (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Decoder (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera	Standard ...	1	0	0	192.168.250.7	9008
Intelligent Analysis Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera	Standard ...	1	1	1	192.168.250.34	9008
Storage Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Media Transfer Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Alarm Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
TV Wall Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008

The device channel number, alarm status, online status and record status can be viewed from the above table. Click  to modify the device information; select the device and click [Delete] to delete it.

5.3 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	192. 168. 226. 201	9008	ipc	admin	123456
3					

Protocol: four protocols can be used here, including “ipc”, “standard device”, “NVR” and “TVT”.

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.

Add, Edit or Delete Device									
Device Setting									
Area Setting									
Channel Group Setting									
Device Type									
Add									
Delete									
Select Area									
Select Transfer Server									
Select Storage Server									
Upgrade									
Import									
Export									
Device Name									
Type									
Channel Number									
Alarm In Number									
Alarm Out Number									
IP Address/IP Range/D									
Encoding Device (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Decoder (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera	Standard ...	1	0	0	192.168.250.7	9008
Intelligent Analysis Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera	Standard ...	1	1	1	192.168.250.34	9008
Storage Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Media Transfer Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Alarm Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
TV Wall Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008

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

5.4 Device Upgrade

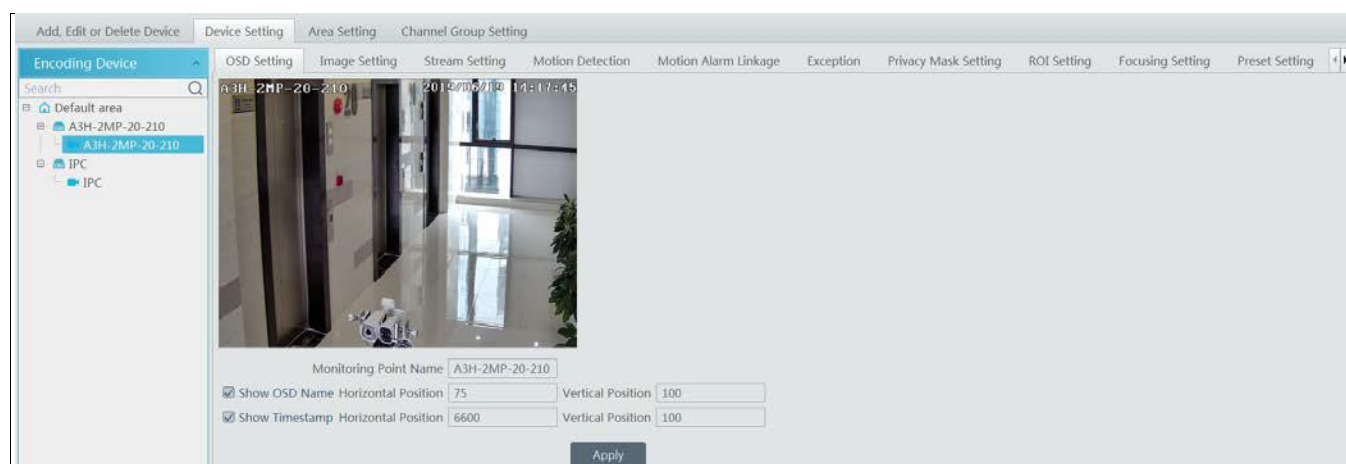
In the “Add, Edit or Delete Device” interface, check the devices you want to upgrade and then click [Upgrade]. Select the upgrade type as needed.

Add, Edit or Delete Device									
Device Setting									
Area Setting									
Channel Group Setting									
Device Type									
Add									
Delete									
Select Area									
Select Transfer Server									
Select Storage Server									
Upgrade									
Import									
Export									
Device Name									
Type									
Channel Number									
Alarm In Number									
Alarm Out Number									
IP Address/IP Range/D									
Encoding Device (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Decoder (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera	Standard ...	1	0	0	192.168.250.7	9008
Intelligent Analysis Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera	Standard ...	1	1	1	192.168.250.34	9008
Storage Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Media Transfer Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
Alarm Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008
TV Wall Server (Online/Total number:1/1)	<input type="checkbox"/>	<input type="checkbox"/>	IP Camera01	Standard ...	1	1	1	192.168.250.105	9008

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

5.5 Device Setting

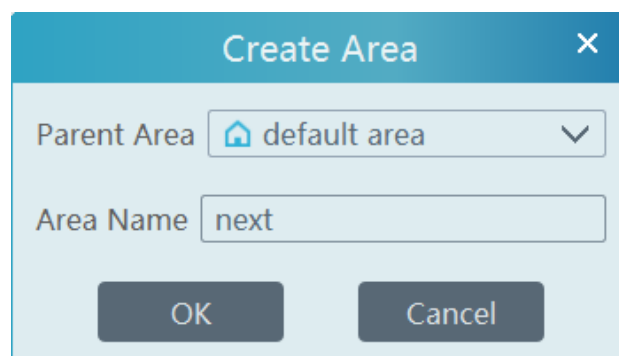
Go to Home→Device Setting interface as shown below. In this interface, the parameters of the device can be set up.



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

5.6 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].

6 People Management

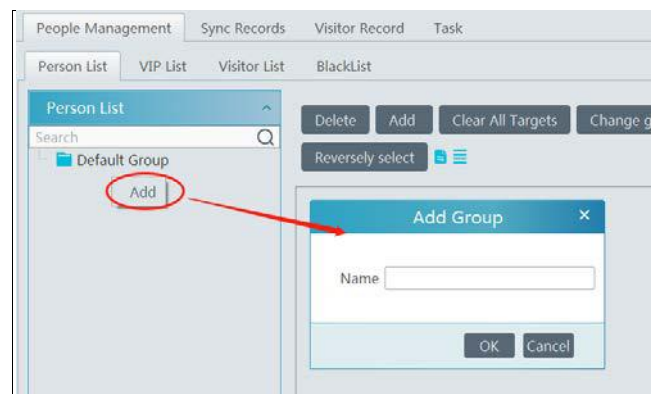
6.1 People Management

6.1.1 Add Group

You can add group for four libraries—Person list, VIP list, Visitor list and Blacklist.

- **Add the parent group**

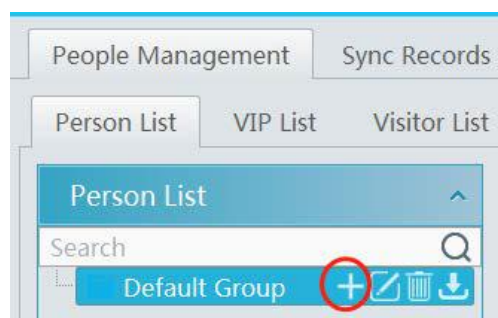
Go to Home→People Management→People Management→Person List.




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

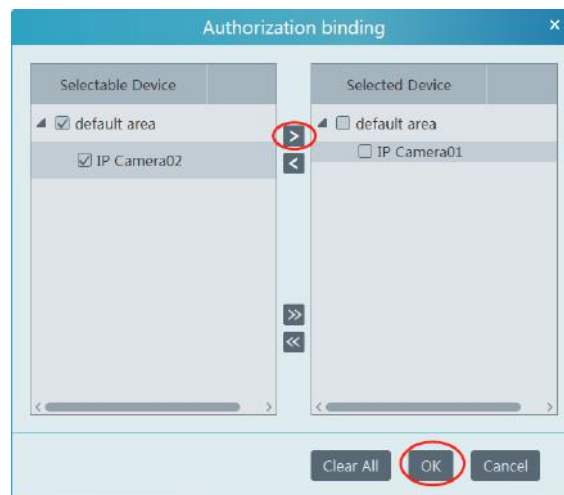
- **Add the sub group:**

Put the cursor on the parent group name and then you will see the follow buttons. Click “+” to add the sub group name.

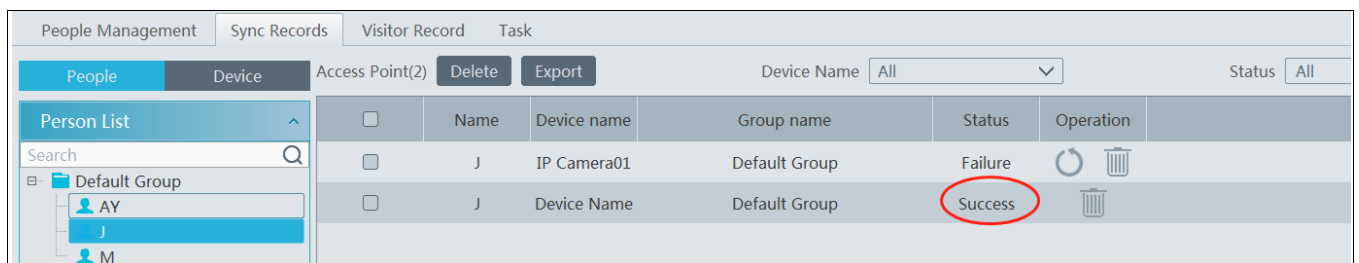


Click  to bind the camera.

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.



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

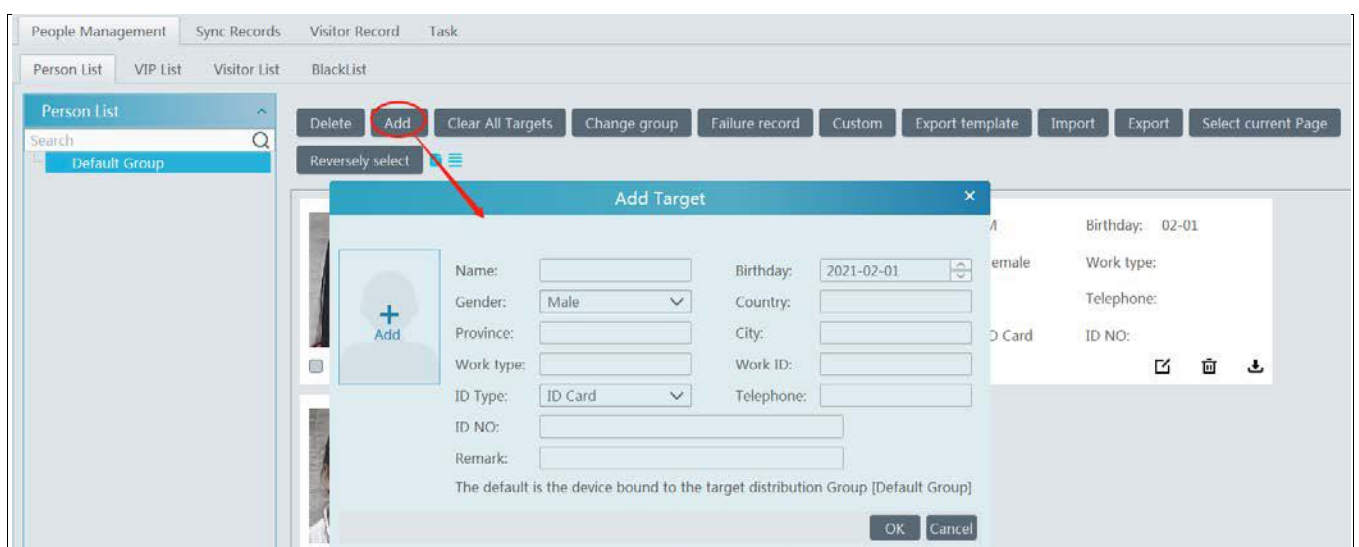



6.1.2 Add Target

You can add targets for four libraries-- people, VIP, Visitor and Blacklist.

- **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.

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

● Batch Import

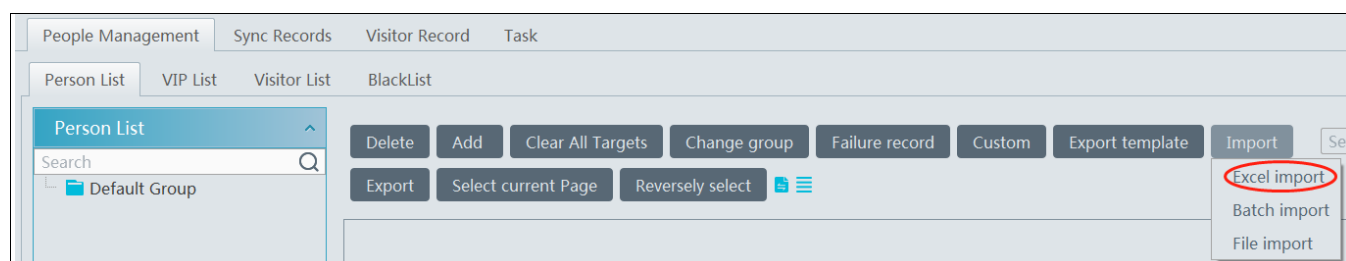
In the above interface, click [Export template] to export an Excel template and then fill out the corresponding information in the table as shown below.

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

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

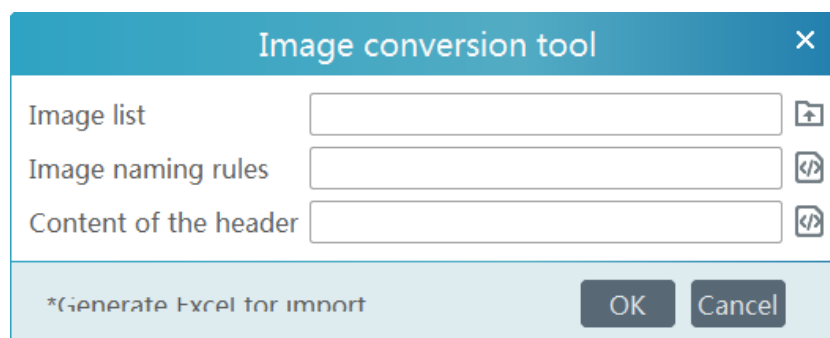
Search Subfolders: choose a folder including multiple subfolders and then all pictures in the folder and its subfolders will be imported.

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 “Excel Import” 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.

Delete

Add

Clear All Targets

Change group

Failure record

Custom

Export template

Import

Export

Apply

Reset

<

Click “Custom” to customize the target display information.

Click “Change group” to change the group.

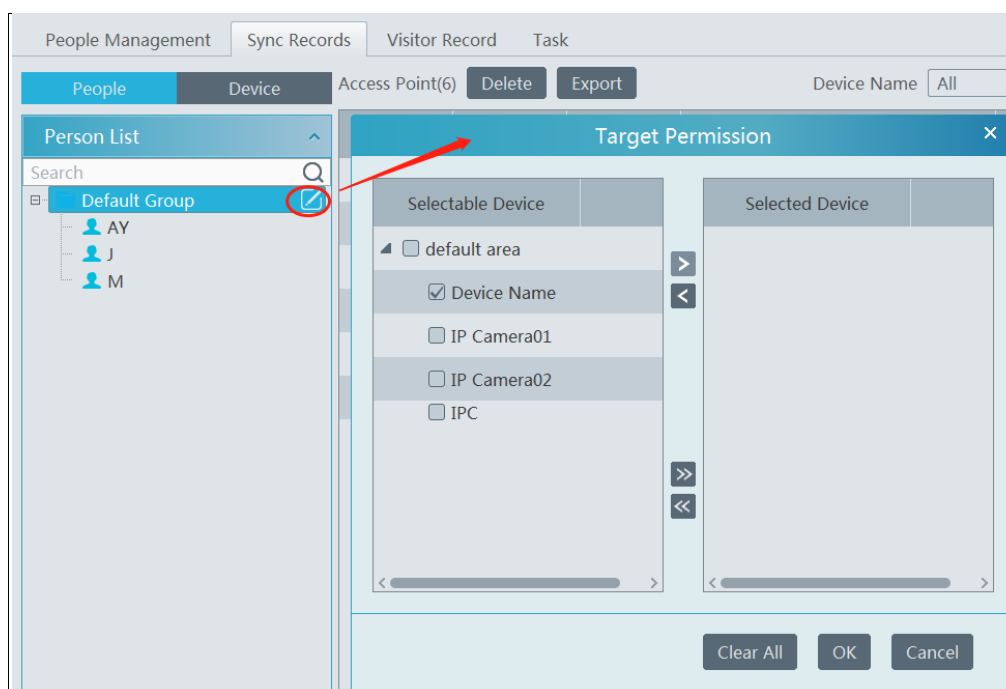
6.2 Sync Records

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

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

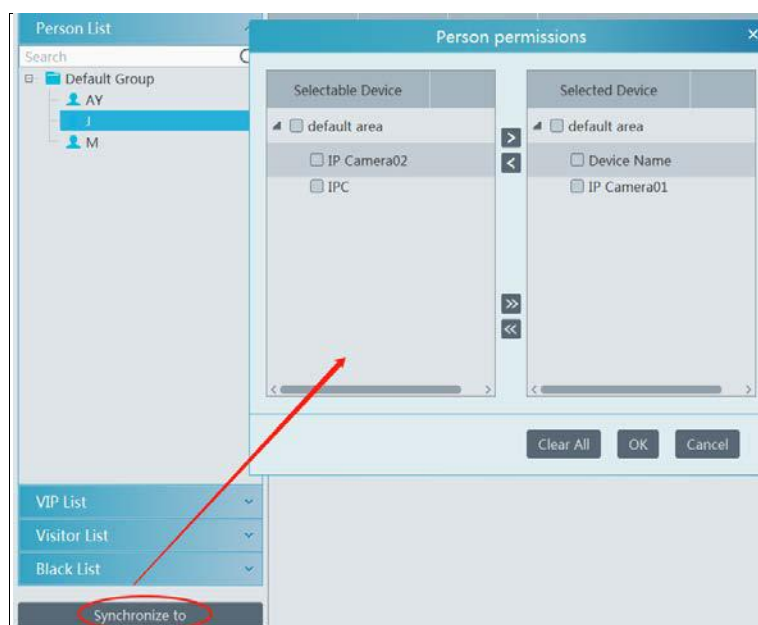
➤ Binding the group to the device

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



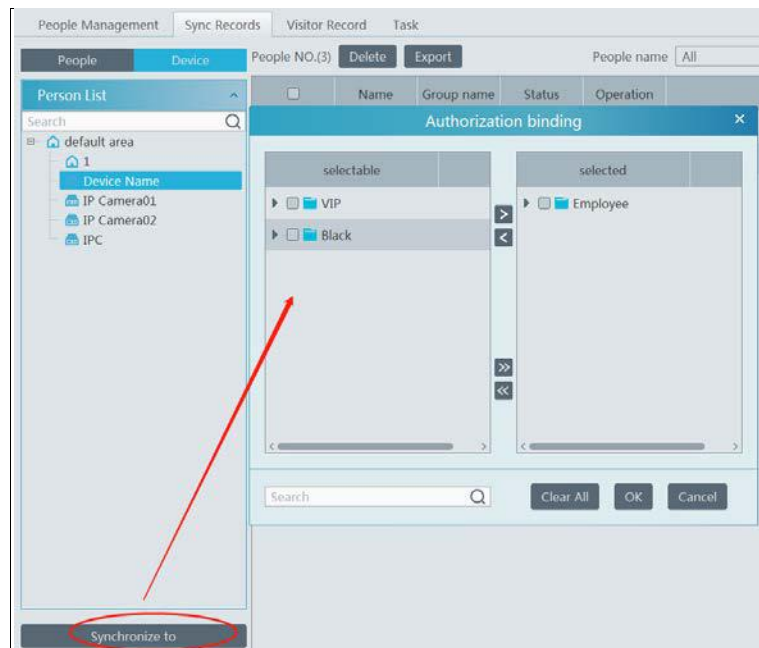
➤ Binding the person to the device

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.

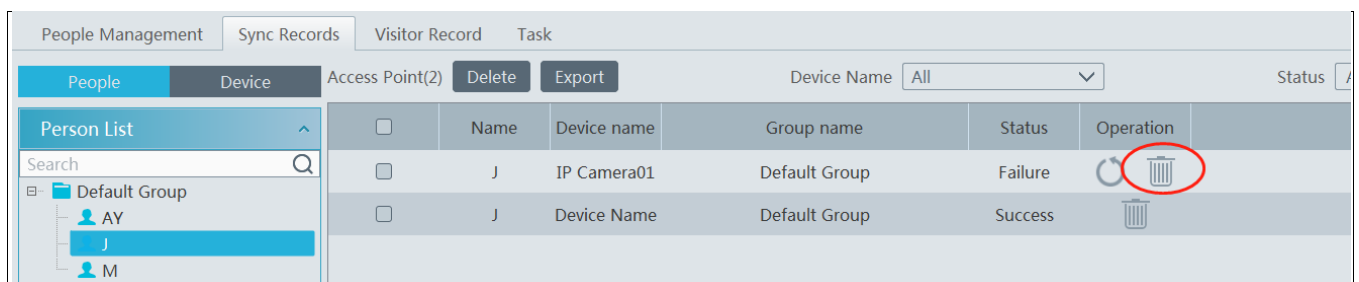


➤ Binding the device to the group or person

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

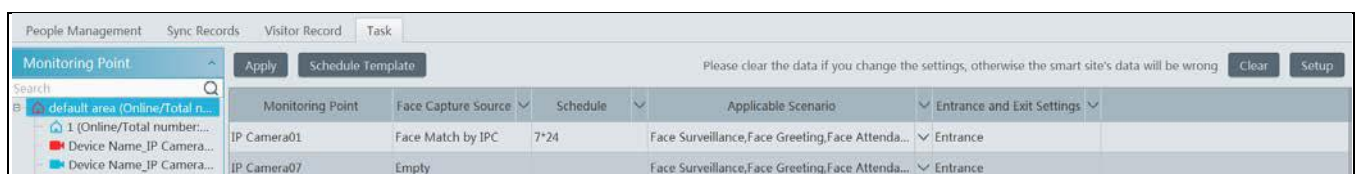


When the device is offline, the target synchronized to it cannot be deleted. Then you can go to the Sync Records interface to delete the synchronization records and then delete the target.



6.3 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].

The screenshot shows a 'Setup' window with three main sections:

- Similarity:** A slider for 'Similarity' is set to 75. Below it is a 'Similarity(%)' label and a numeric input field showing '75'. There are 'Refresh' and 'OK' buttons.
- Intelligent Server Setting:** A dropdown menu is set to 'Intelligent Server'. Below it is a checked checkbox labeled 'Enable face detection of the face recognition IPC'. There are 'Refresh' and 'OK' buttons.
- Send Captured Pictures to FTP:** An unchecked checkbox labeled 'Enable FTP'. Below it are input fields for 'FTP Server Address', 'FTP Server Port' (set to 21), and 'FTP File Path' (set to /). There is an unchecked checkbox labeled 'Anonymous'. Below these are 'User Name' and 'Password' input fields. There are 'Refresh' and 'OK' buttons.

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→Face Surveillance→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→Face Surveillance→Search).

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

7 Face Surveillance

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.

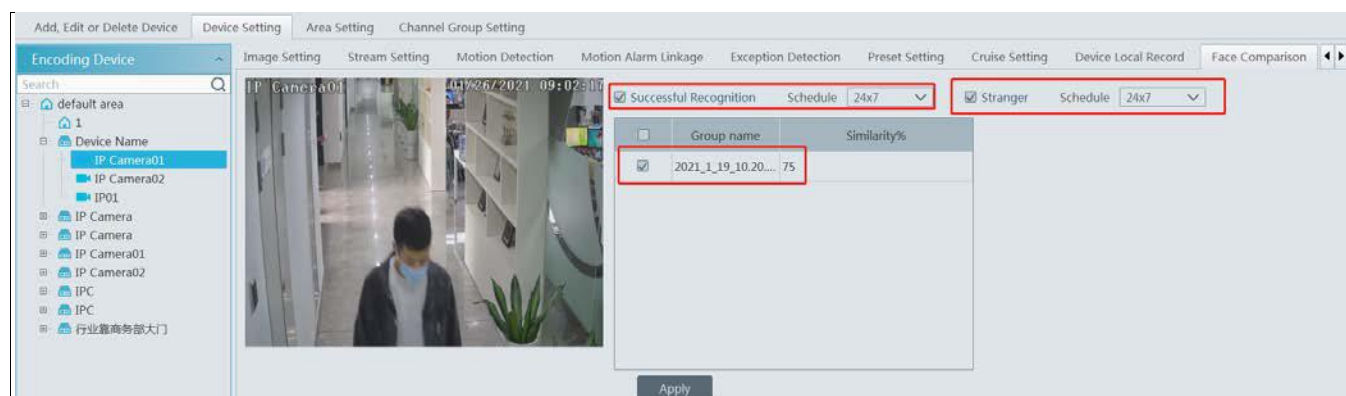
Add, Edit or Delete Device		Device Setting		Area Setting		Channel Group Setting	
Device Type	Server Name	IP Address	Port	Client Connection Status	Authentication Server Connection Status	Edit	
Encoding Device (Online/Total number:1/1)	Intelligent Server	10.20.52.7	6069	Online	Online		
Decoder (Online/Total number:1/1)							
Intelligent Analysis Server (Online/Total number:1/1)							
Storage Server (Online/Total number:1/1)							
Media Transfer Server (Online/Total number:1/1)							
Alarm Server (Online/Total number:1/1)							
TV Wall Server (Online/Total number:1/1)							

7.1 Face Surveillance Settings

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

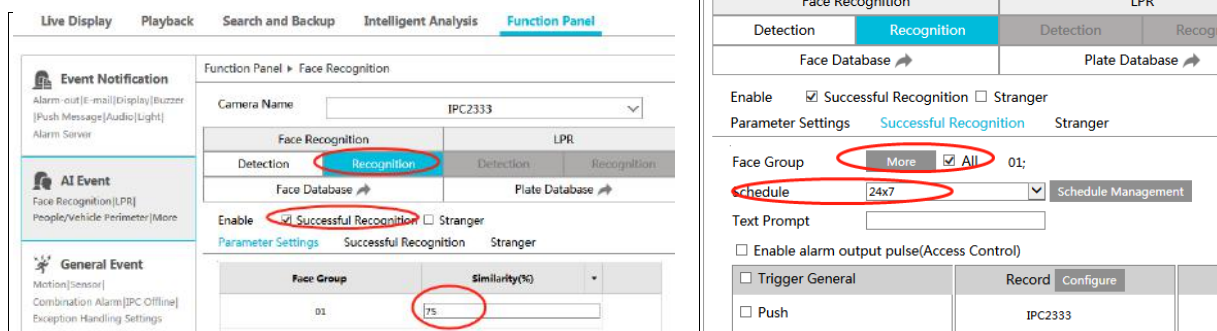
Create a group → Add targets to the group → Set task → Real-time View → Search faces

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

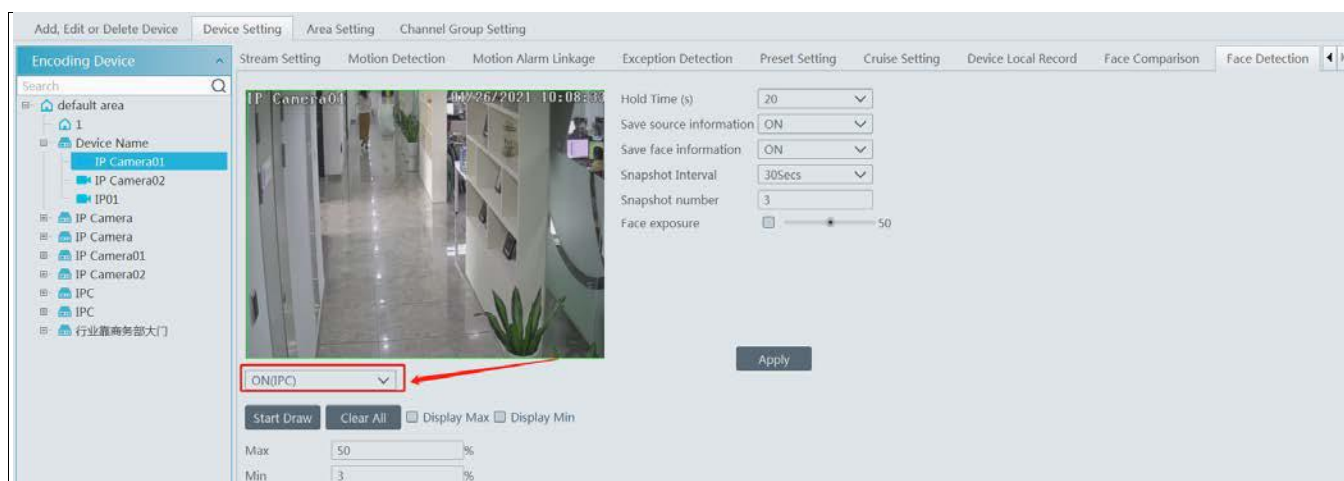


Please select “Successful Recognition” or “Stranger” as needed and then set the schedule separately. After that, check the group and set the similarity. Finally, save the settings by clicking [Apply].

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.



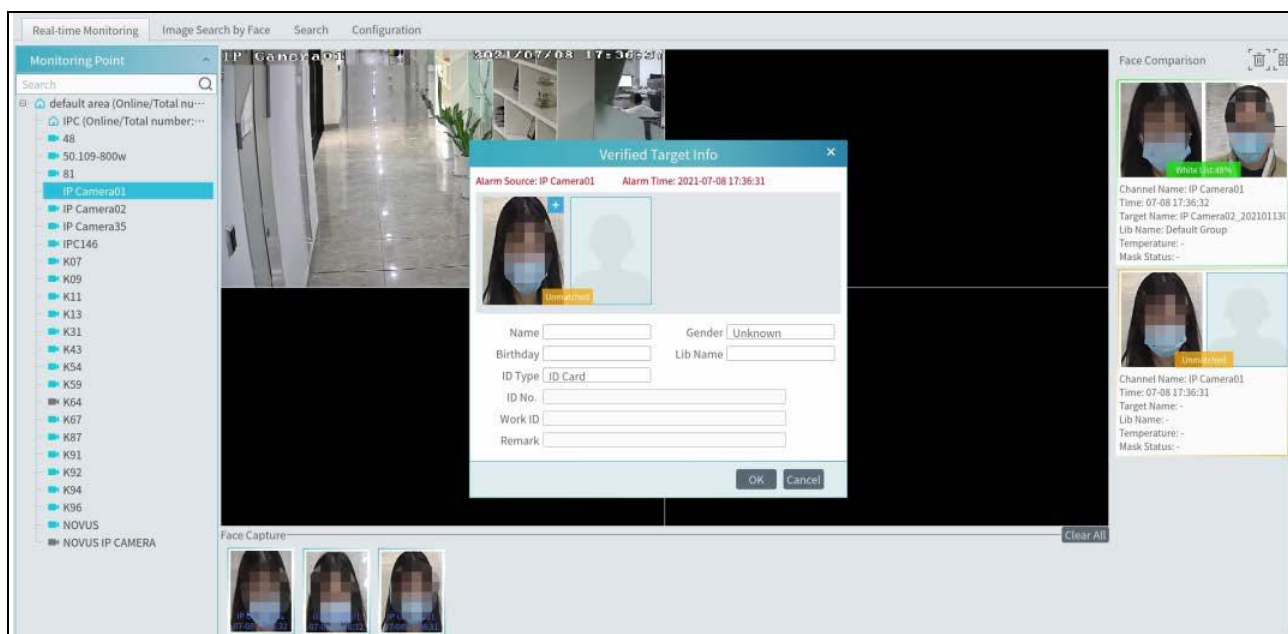
Additionally, please make sure the face detection function is enabled for the AI IPC (click Device Setting→Face Detection).





7.2 Real-Time View

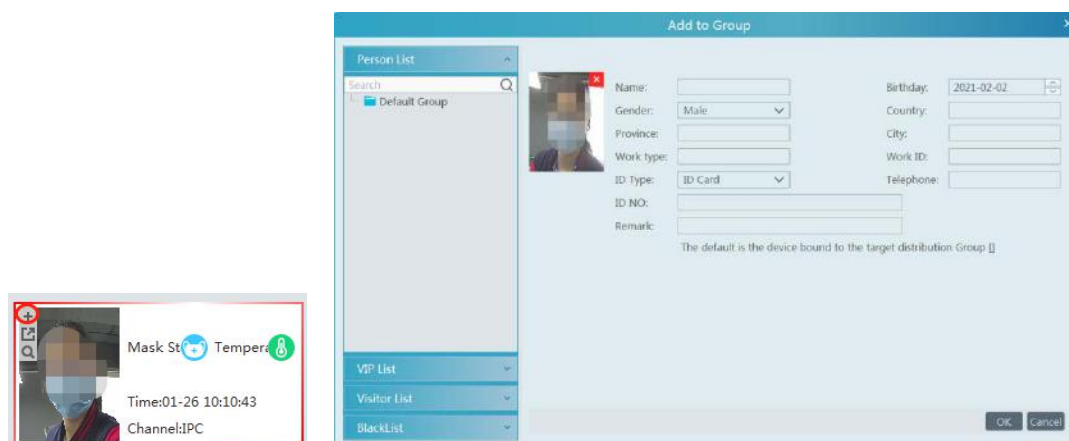
If the IPC supports face detection, you will view the face capture picture.


The screen display mode: 1/4/9/16 can be selected.




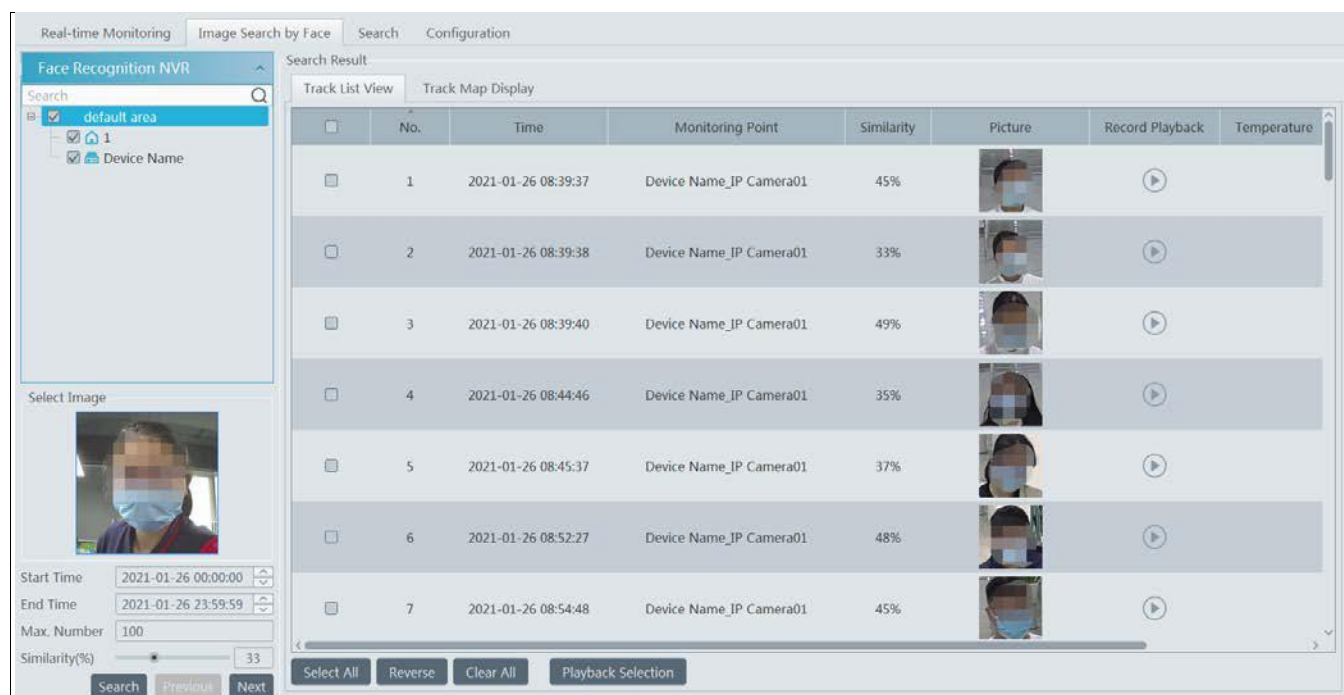
If the added AI camera/panel supports temperature measurement and mask detection, you will see the detailed face match information, including mask status, body temperature, snapshot camera, snapshot time, etc.

Click the  button on the top left corner of the captured face picture to add the face picture to the library quickly; click the  button to enter the Search by Face interface quickly.



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

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



The right panel of the real-time view interface is face match result area.

Click it to view the matched details.

Verified Target Info ×

Alarm Source: Device Name_IP Camera01 Alarm Time: 2021-01-26 10:17:49



Name Gender


Birthday Lib Name


ID Type

ID No.

Work ID

Remark

Click  to clear all face match result.

Click  to display all face match result.

Click  to display unmatched result.

Click  to display matched result.

7.3 Search

➤ Search Snapshot

- ① Go to Face Recognition → Search interface.
- ② Select the IPC and picture source.
- ③ Select the captured match pictures from intelligent server or face recognition NVR.
- ④ Set the start and end time and then click [Search] to search the face pictures.

Real-time Monitoring Image Search by Face Search Configuration

Search Snapshot Search Comparison Result

Monitoring Point

Search


- default area (Online/Tot...
- 1 (Online/Total numb...
- ☒ Device Name_IP Cam...
- ☐ Device Name_IP Cam...
- ☐ Device Name_IP01
- ☐ Device Name_IPC
- ☐ IP Camera01
- ☐ IP Camera02
- ☐ IP Camera07
- ☐ IP Camera
- ☒ IPC
- ☐ IPC

Intelligent Server

Start Time: 2021-02-02 00:00:00

End Time: 2021-02-02 23:59:59

Channel IP Camera01 / IPC Time Period 2021-02-02 00:00:00 -- 2021-02-02 23:59:59




Total 1014 entries Per Page 40Entry << < 1/26 > >>

Put the cursor on the captured picture and then some shortcut buttons will be displayed.



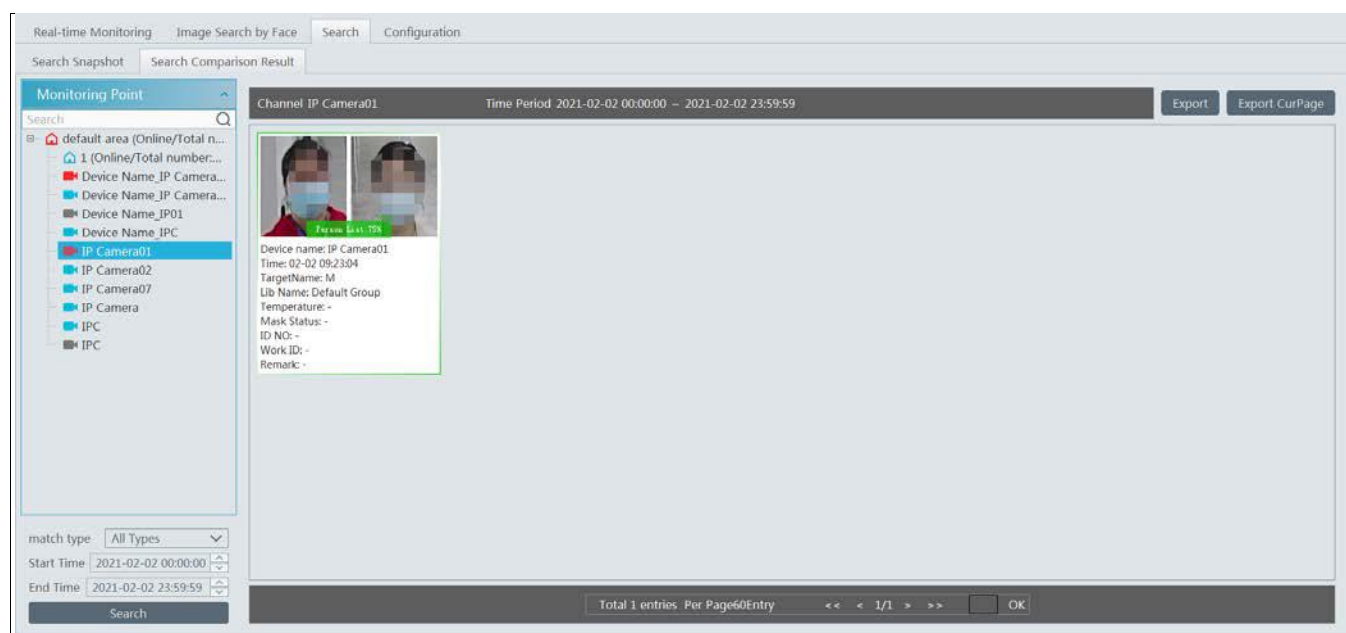
Click + to add the capture picture to the library. Select the library on the left and then fill out the information of this target. Click [OK] to add.

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

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

➤ Search Comparison Result


Only the match results from the intelligent server can be searched.

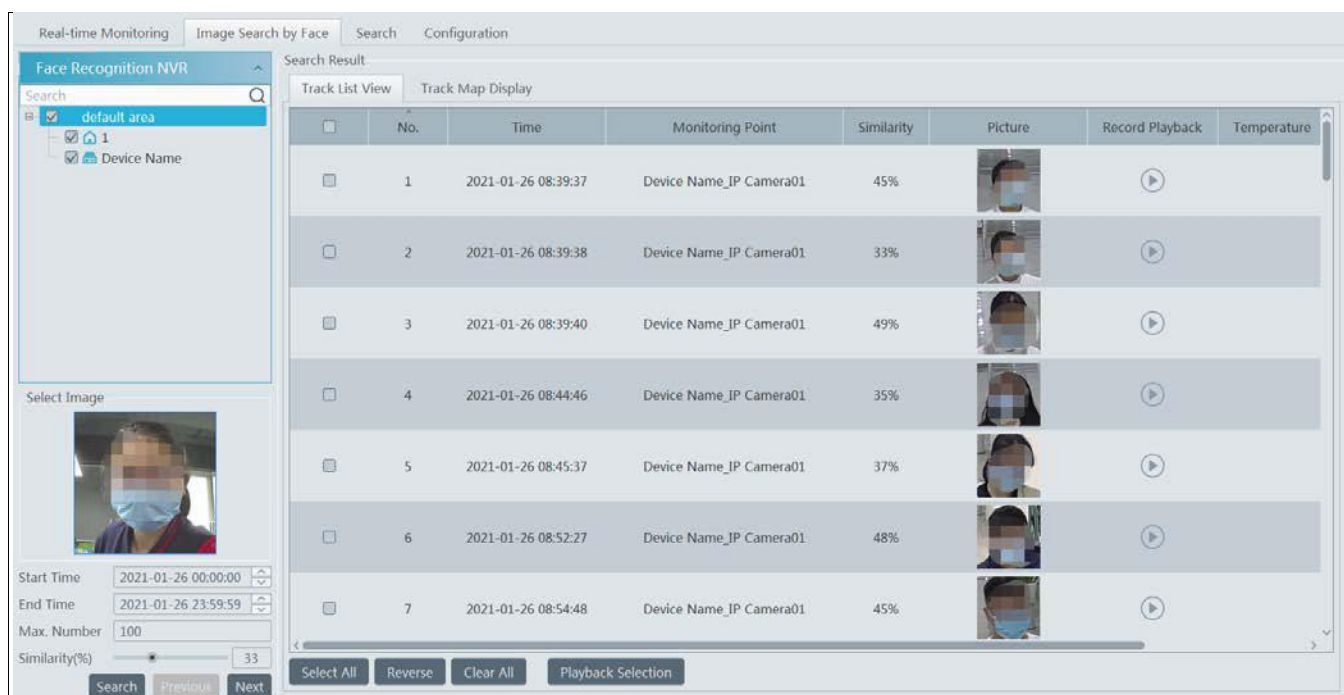


7.4 Search Image by Image

This function is only available for the NVR with face recognition function.

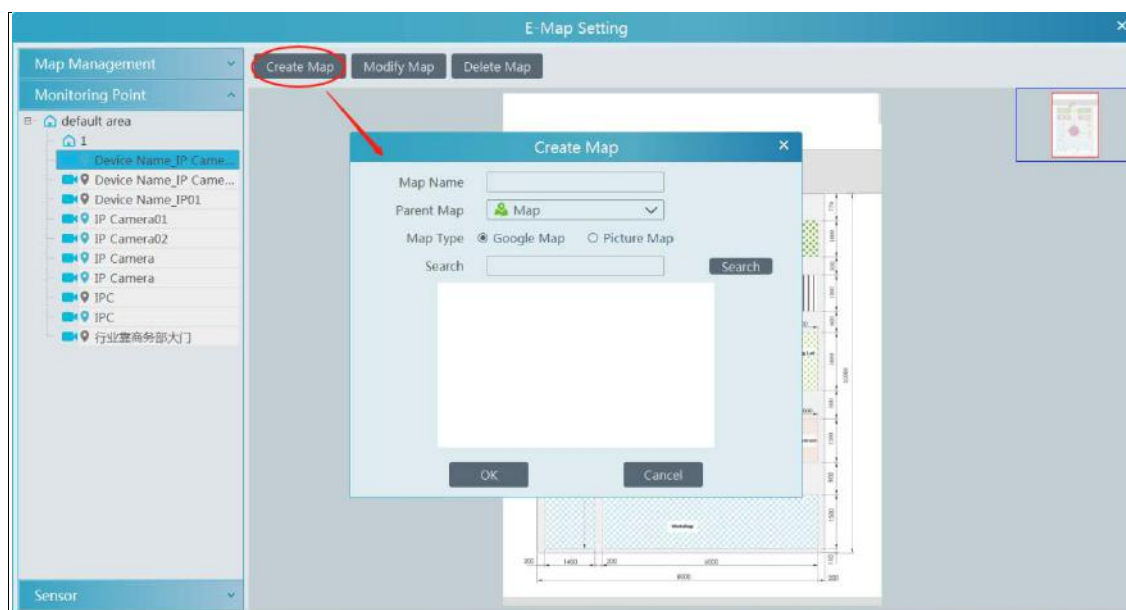
- ① Select a picture and picture source.
- ② Set the start time and the end time.
- ③ Set the maximum count and similarity.
- ④ Click [Search] .

Click  to play the record in a small window.



● E-Map Track View:

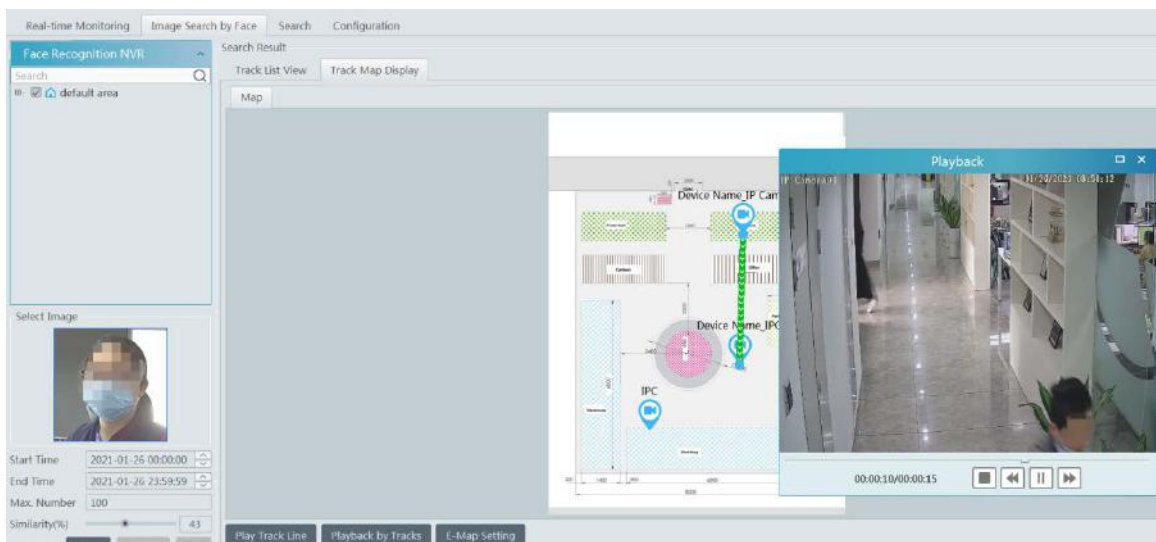
Create an E-map. You can create or delete an E-map in this interface. The hot spot can be added to the E-map too.



Play Track Line:



Playback by Tracks



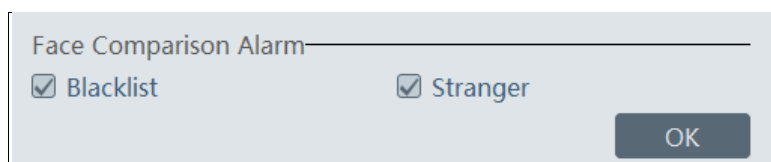
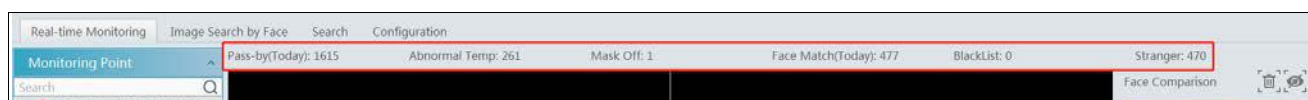
7.5 Configuration

● Pop-up Window Setting

Real-time Monitoring	Image Search by Face	Search	Configuration
Black list	<input type="radio"/> Pop up	<input checked="" type="radio"/> Don't pop up	
White list	<input type="radio"/> Pop up	<input checked="" type="radio"/> Don't pop up	
Stranger	<input type="radio"/> Pop up	<input checked="" type="radio"/> Don't pop up	
Duration Time of VIP	<input checked="" type="radio"/> Always show	<input type="radio"/> Automatically hide	<input type="radio"/> Automatically hide
<input checked="" type="checkbox"/> Pass-by(Today)	<input checked="" type="checkbox"/> Abnormal Temp	<input checked="" type="checkbox"/> Mask Off	
<input checked="" type="checkbox"/> Face Match(Today)	<input checked="" type="checkbox"/> BlackList	<input checked="" type="checkbox"/> Stranger	
			<input type="button" value="Apply"/>

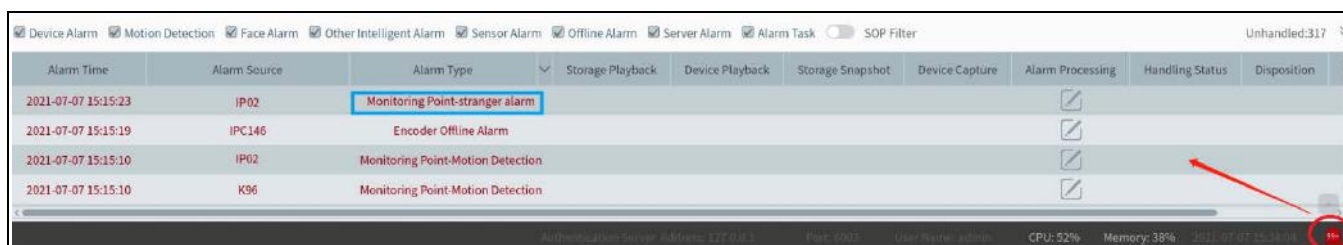
In this interface, you can choose whether to pop up the alarm window when the camera detects a stranger or the person blacklisted or white listed. Additionally, you can choose the duration time of VIP Box(s).

Total Pass-by (Today)/Abnormal Temp/Mask Off/Face Match(Today)/Blacklist/Stranger: If enabled, the statistical information will be shown on the real-time view interface.



- **Face comparison alarm setting:**

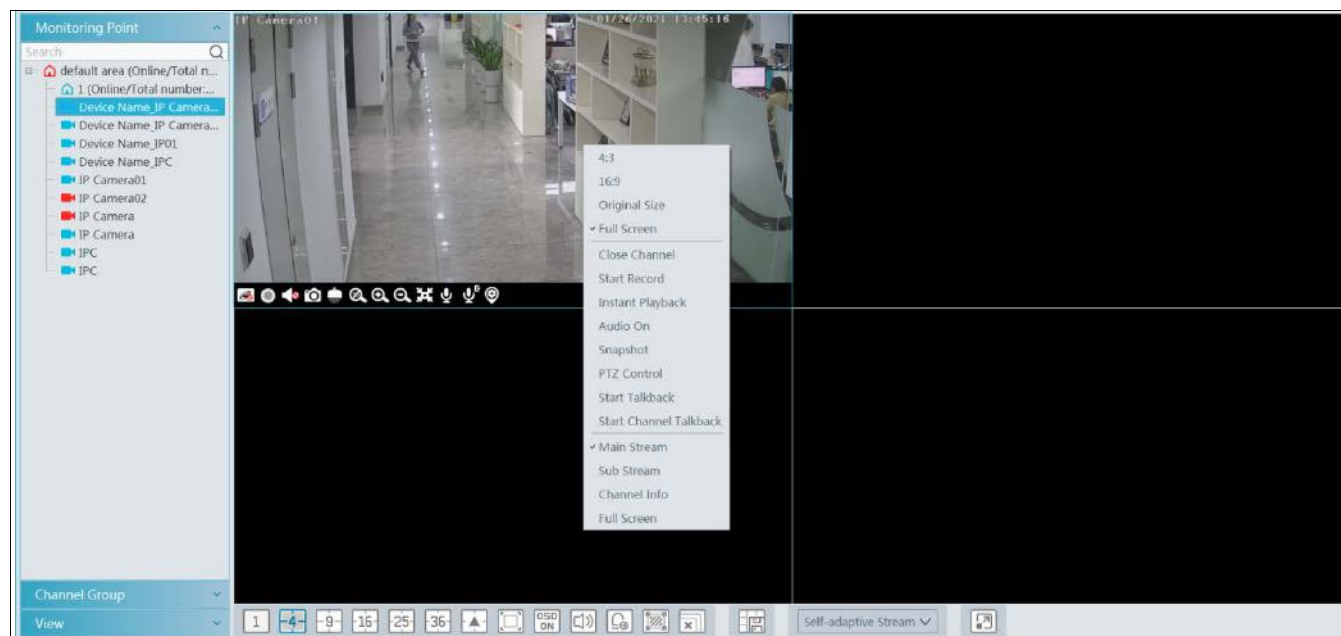
If “Blacklist / Stranger alarm” is selected, the alarm information will be shown on the real-time alarm list (see the following picture) or it can be searched from the alarm log.



8 Video Preview

8.1 Video Preview

Go to Home→Video Preview interface as shown below.














The descriptions of the video preview buttons are as follows.



NO.	Description	NO.	Description
1	Screen display mode	6	Show the smart event detection area
2	Full screen; In full screen mode, right click on the window and then click “Exit Full Screen” to exit the full screen mode.	7	Close all preview
3	Enable/disable OSD	8	Save the current view mode
4	Enable/disable broadcast	9	Choose the camera stream
5	Manual alarm output	10	Show target detection

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

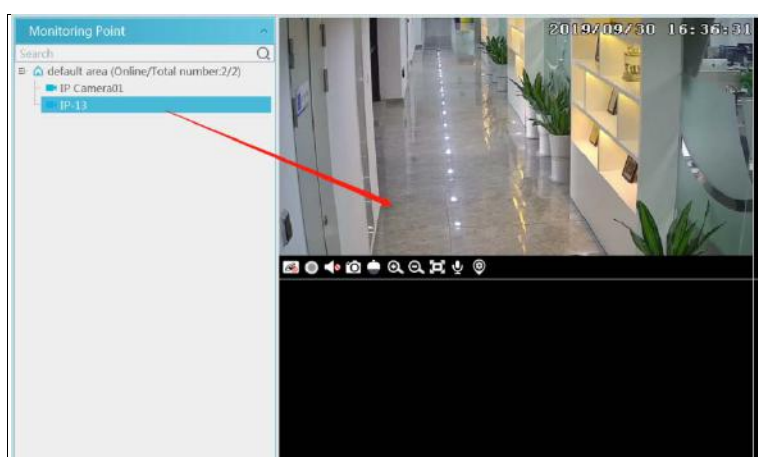
4:3/16:9/Original Size/Full Screen: screen display proportion; please select it as needed.

8.1.1 Monitoring Point View



● Start View

To start video preview, 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

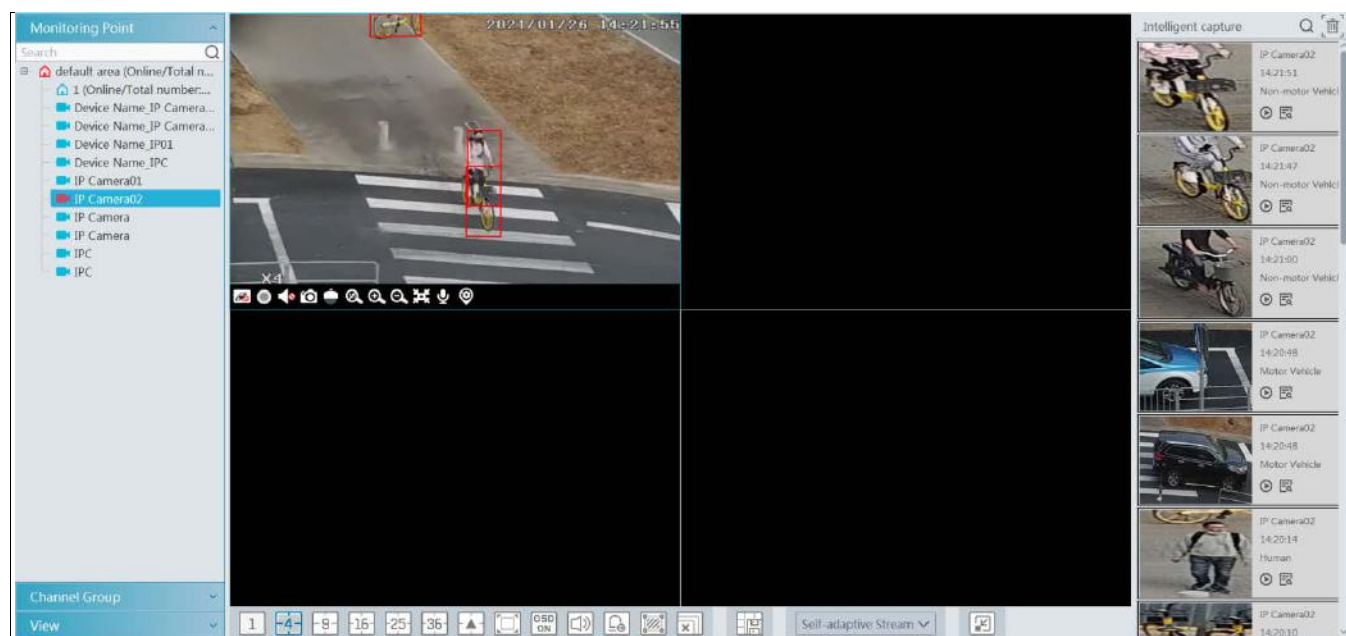
- ① Place the cursor on the video preview window to display the menu toolbar and then click  to stop viewing.
- ② Right click on the video preview window and then select “Close Channel” to stop viewing.
- ③ Click  on the toolbar of the video preview interface to stop all videos.


● Smart Snapshot

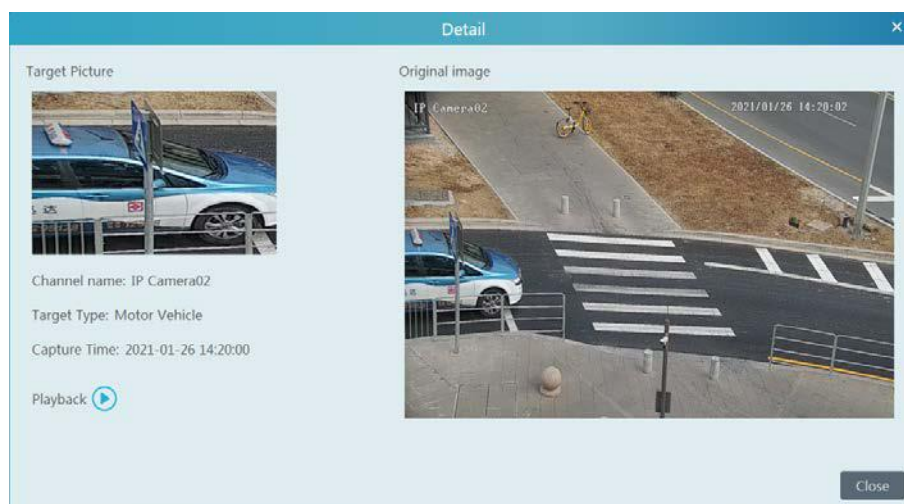



In the video preview, drag the AI IPC to the preview window to play. Clicking  displays the captured human/motor vehicle/non-motor vehicle pictures in real time.

Note: Only when the AI IPC with human/motor vehicle/non-motor vehicle classification function enables the corresponding smart event (like line crossing detection, region intrusion/entrance/exiting detection, target counting) and checks the detection target (like human, motor vehicle), can the captured pictures be displayed on the smart snapshot list.

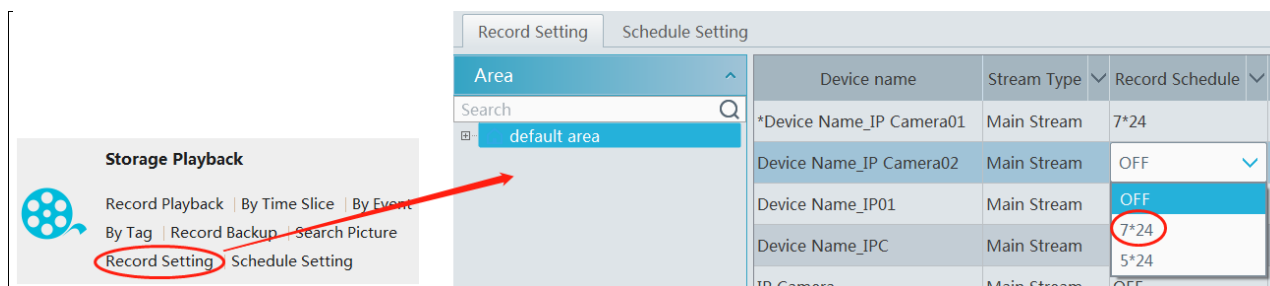


Clicking on  shows the following snapshot details.



Click  to play the video in the storage playback interface.

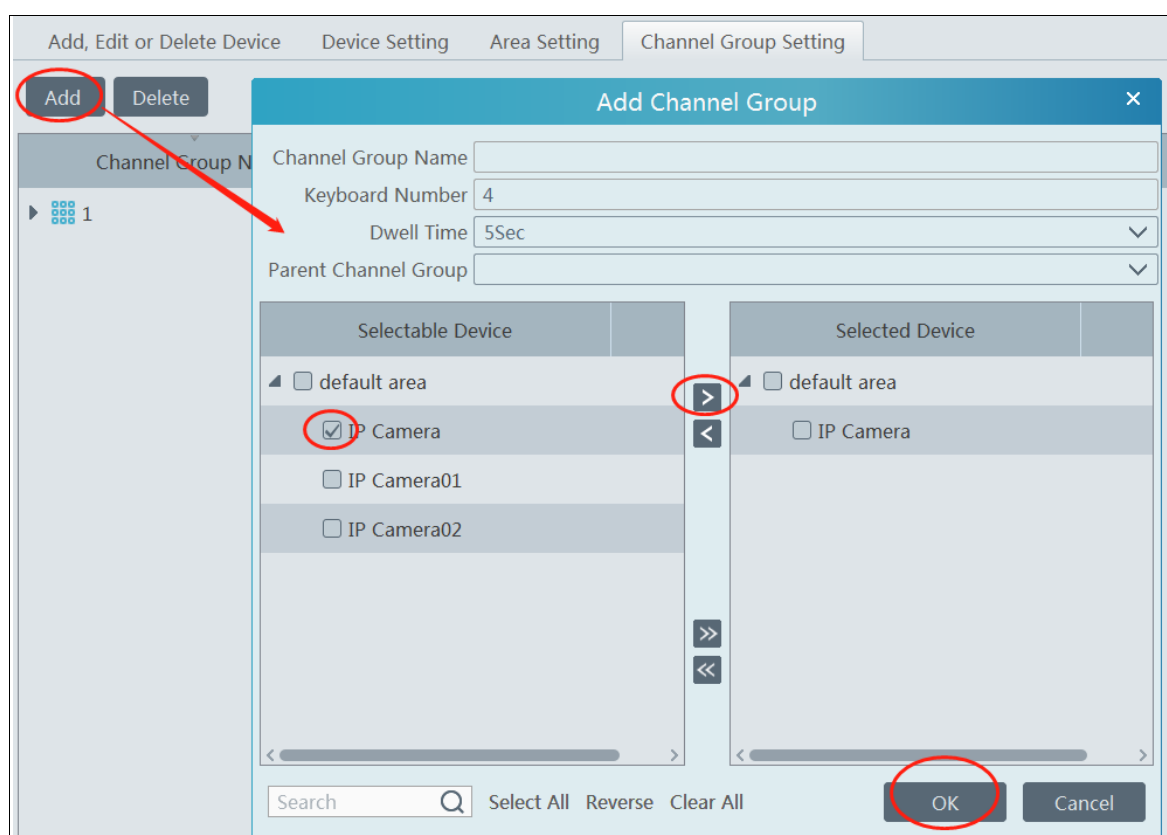
Note: The record schedule must be enabled in the record setting interface in advance, or no record can be played. (Click Home→Record Setting to enter the record setting interface and then set the record schedule for the desired AI IPC)



8.1.2 Channel Group View

➤ Channel Group Setting

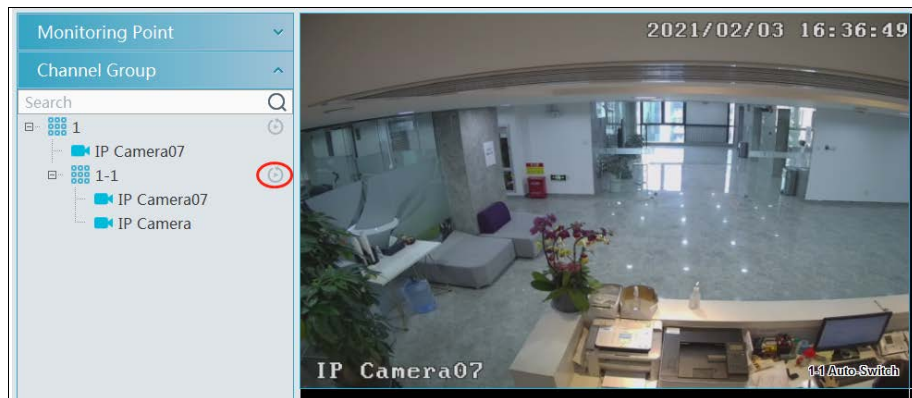
- ① Go to Home→ Channel Group Setting interface as shown below.




- 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. 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.
- ⑥ Click [Ok] to save the settings.


➤ Start Channel Group View


After the channel group is set successfully (See Channel Group Setting), go to video preview 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.

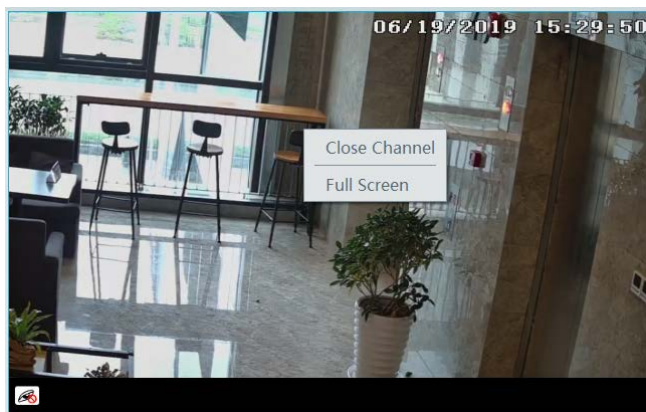
3. If there are several sub channel groups under the parent channel group, click  next to the parent group name and then all sub channel groups will play in sequence. The screen display mode will automatically adapt to the channels of the sub group.



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.

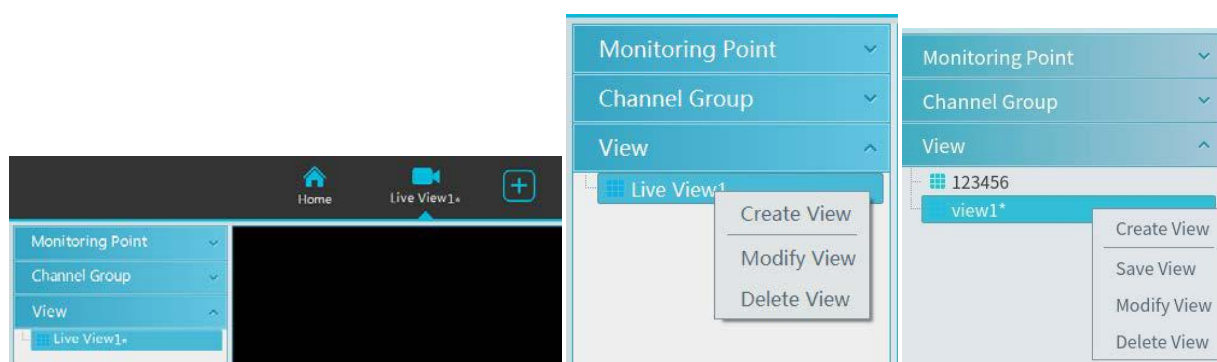
➤ Stop Channel Group View

- 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.





8.1.3 Plan View

In the video preview interface, select “View” on the left menu bar.



● Add View Plan :

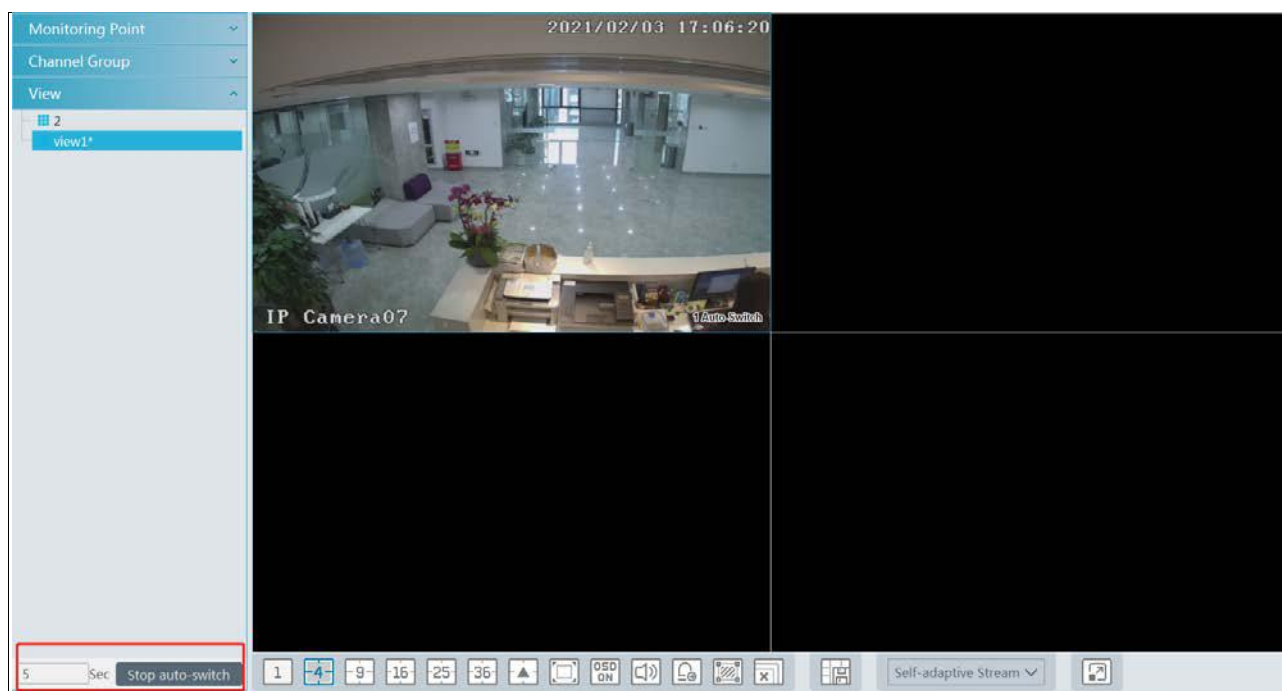
- ① Right click “Live View 1” and then select “Create View” or click  to add a new view plan. Clicking “Create View” to prompt an adding view window. Enter the view name and click [OK] to set view plan.
- ② Select screen display mode and then drag monitoring points or channel group to each window.
- 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

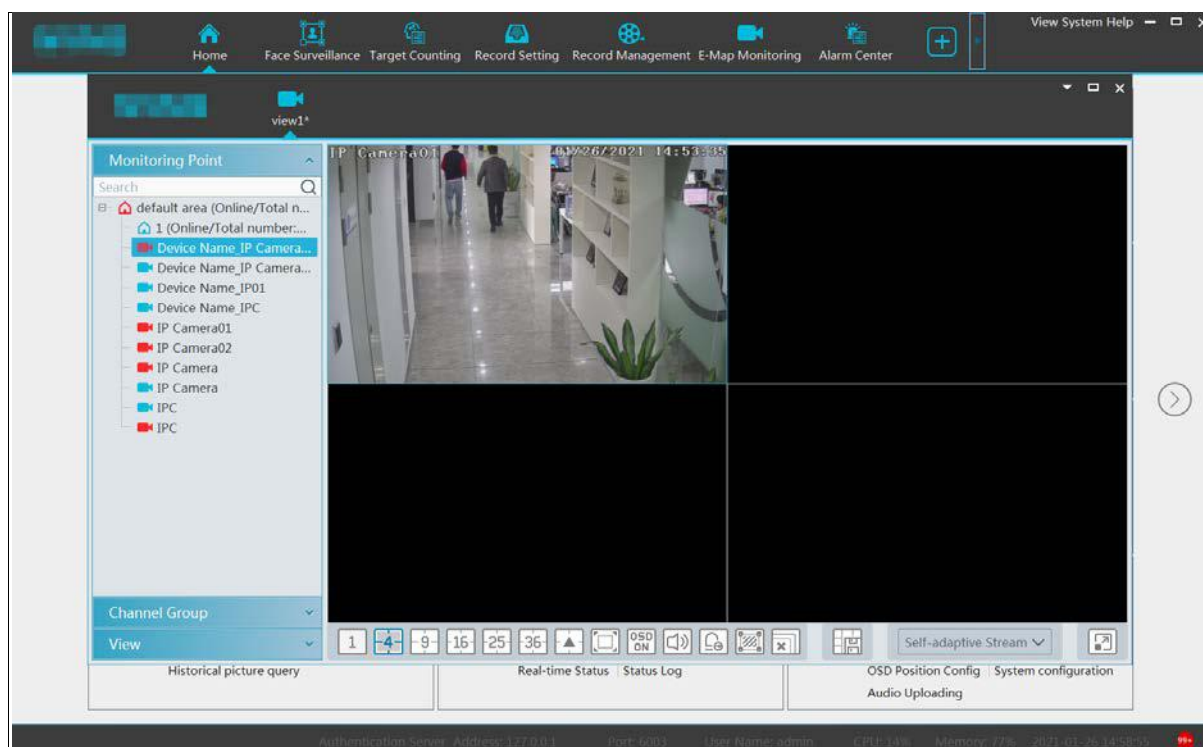
If multiple view plans saved, you can play these views in sequence.



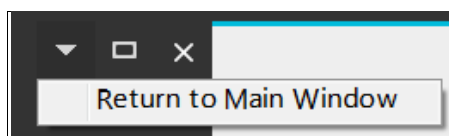
Enter the dwell time (5~3600s) and then click [Start auto-switch] to play these views in sequence. Stop the current auto-switch by clicking [Stop auto-switch].

8.2 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).

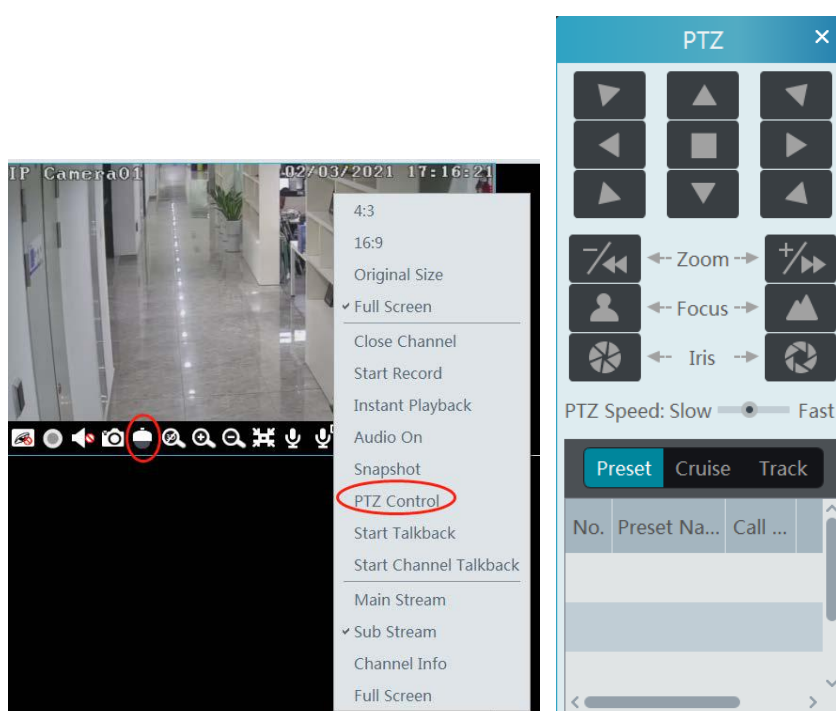


Click  on the float window and select “Return to Main Window” to embed this tab in the main interface.



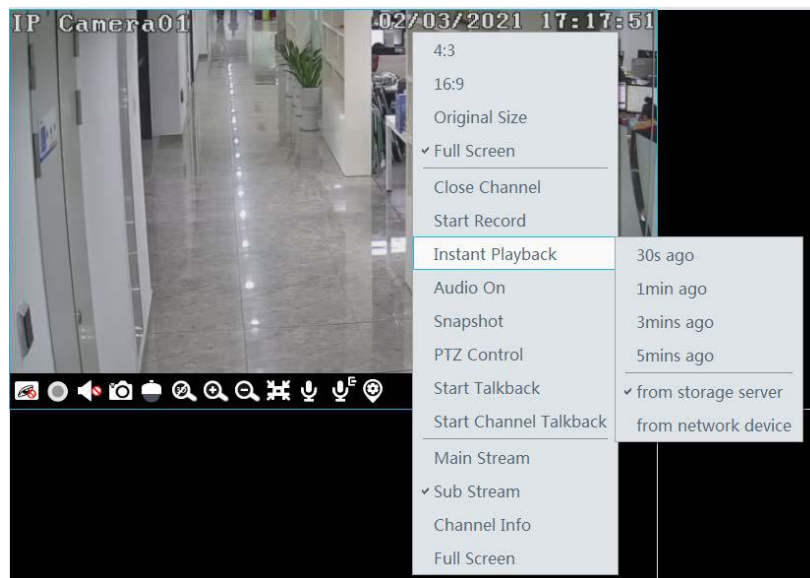
8.3 PTZ Control

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.



8.4 Instant Playback

In the video preview 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 that time when 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”.

Record Setting		Schedule Setting					
Area	Device name	Stream Type	Record Schedule	Audio	Recording Before Alarm(Sec)	After Alarm Time(Sec)	
Search	*Device Name_IP Camera01	Main Stream	7*24	Open	0	60	
default area	Device Name_IP Camera02	Main Stream	OFF	Open	0	60	
	Device Name_IP01	Main Stream	OFF	Open	0	60	

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

- To set schedule:



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



Record Setting

Schedule Setting

Add

Delete

<input type="checkbox"/>	Schedule Name	Edit	Delete
	7*24		
<input type="checkbox"/>	5*24		

- 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.

Modify Schedule

ScheduleName

1

Input Manually Select All Reverse Clear All

Sun.

0

2

4

6

8

10

12

14

16

18

20

22

24

04:39-16:15

Input Manually Select All Reverse Clear All

Mon.

0

2

4

6

8

10

12

14

16

18

20

22

24

Input Manually Select All Reverse Clear All

Tue.

0

2

4

6

8

10

12

14

16

18

20

22

24

Input Manually Select All Reverse Clear All

Wed.

0

2

4

6

8

10

12

14

16

18

20

22

24

Input Manually Select All Reverse Clear All

Thu.

0

2

4

6

8

10

12

14

16

18

20

22

24

Input Manually Select All Reverse Clear All

Fri.

0

2

4

6

8

10

12

14

16

18

20

22

24

Input Manually Select All Reverse Clear All

Sat.

0

2

4

6

8

10

12

14

16

18

20

22

24

04:06-16:59

Input Manually Select All Reverse Clear All

OK

Cancel

9.1.2 Alarm Linkage Recording

- ① Go to Home→ Device Setting interface. Select the desired device to enable the alarm event and set schedule.
- 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.

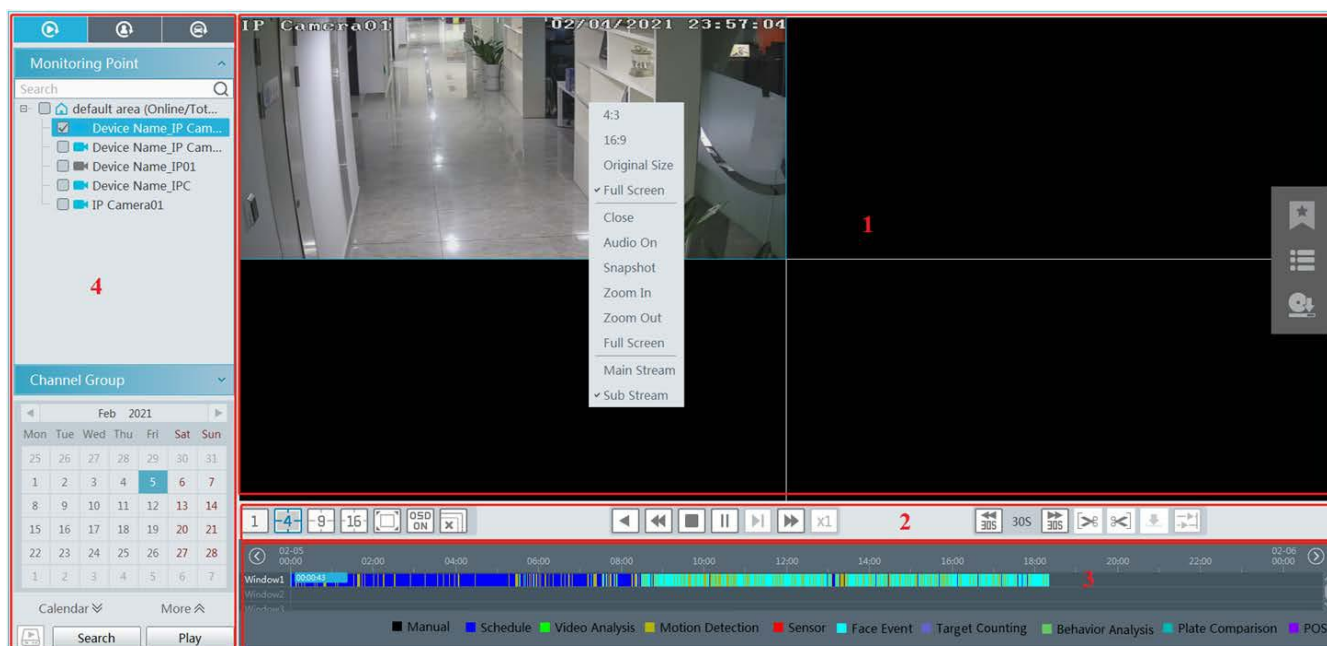
The screenshot shows the 'Alarm Linkage Settings' window. The 'Alarm Type' is set to 'Monitoring Point-Motion Detection'. The 'ON' button for the 'default area' is highlighted. A red arrow points from this button to the 'RecordLinkage Setting' dialog box. In the dialog, the 'default area' is selected in the 'Selected Device' list, and the 'OK' button is highlighted. The background table shows various alarm linkage settings for different areas and devices.

9.2 Record Playback

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

There are three types of record playback: normal playback, face playback, vehicle playback.

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 restore normal playback
	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, target counting recording and behavior analysis 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.

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

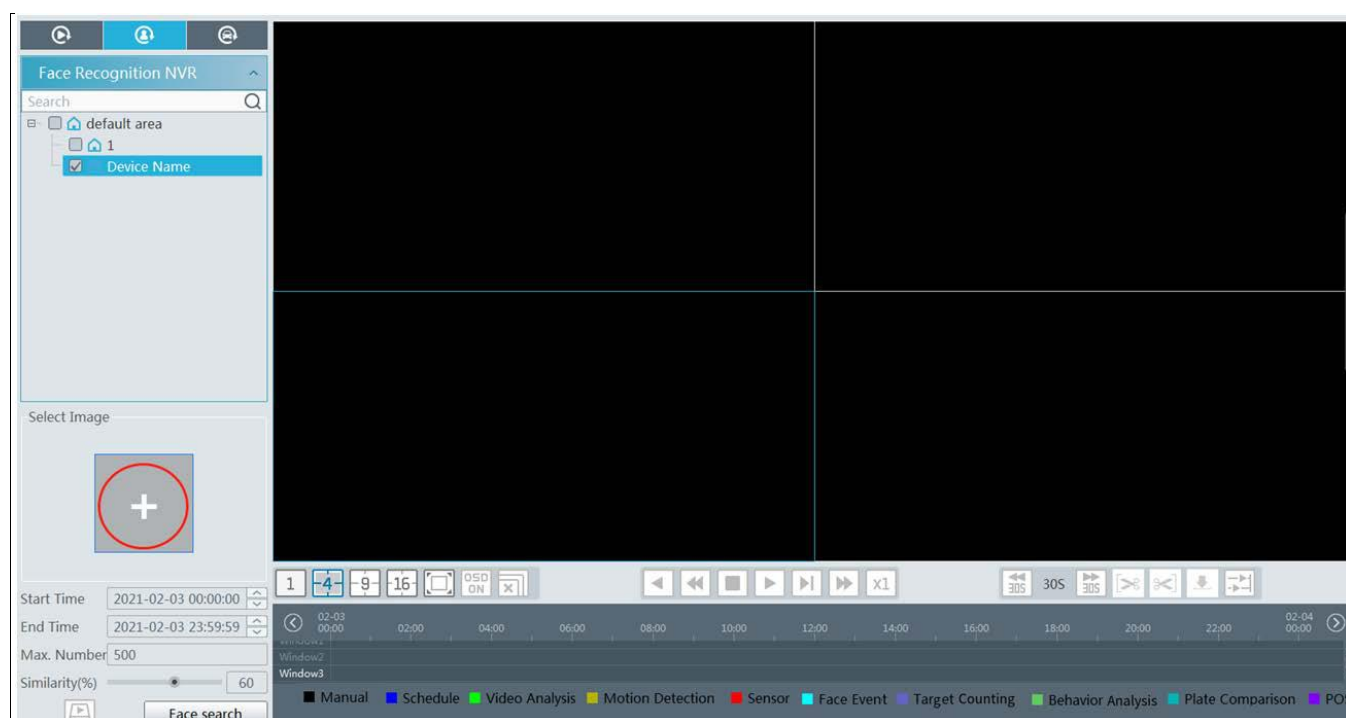
When playing record file in synchronous mode or asynchronous mode, clicking  or  will be useless unless all the playback windows are closed.



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.

9.2.2 Smart Playback by Face

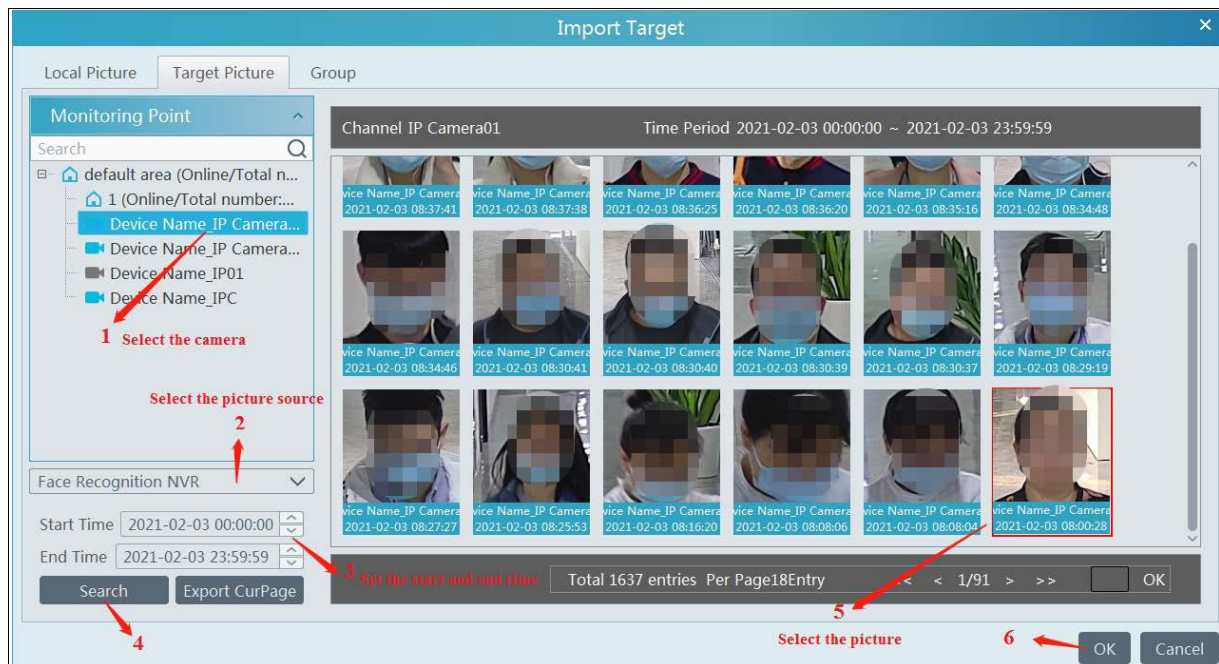
For the added NVR with face recognition function, you can search the recorded file by face as shown below.



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 from local PC, target picture or group. After that set the start and end time, max. number and similarity and then click [Search] to search the records.

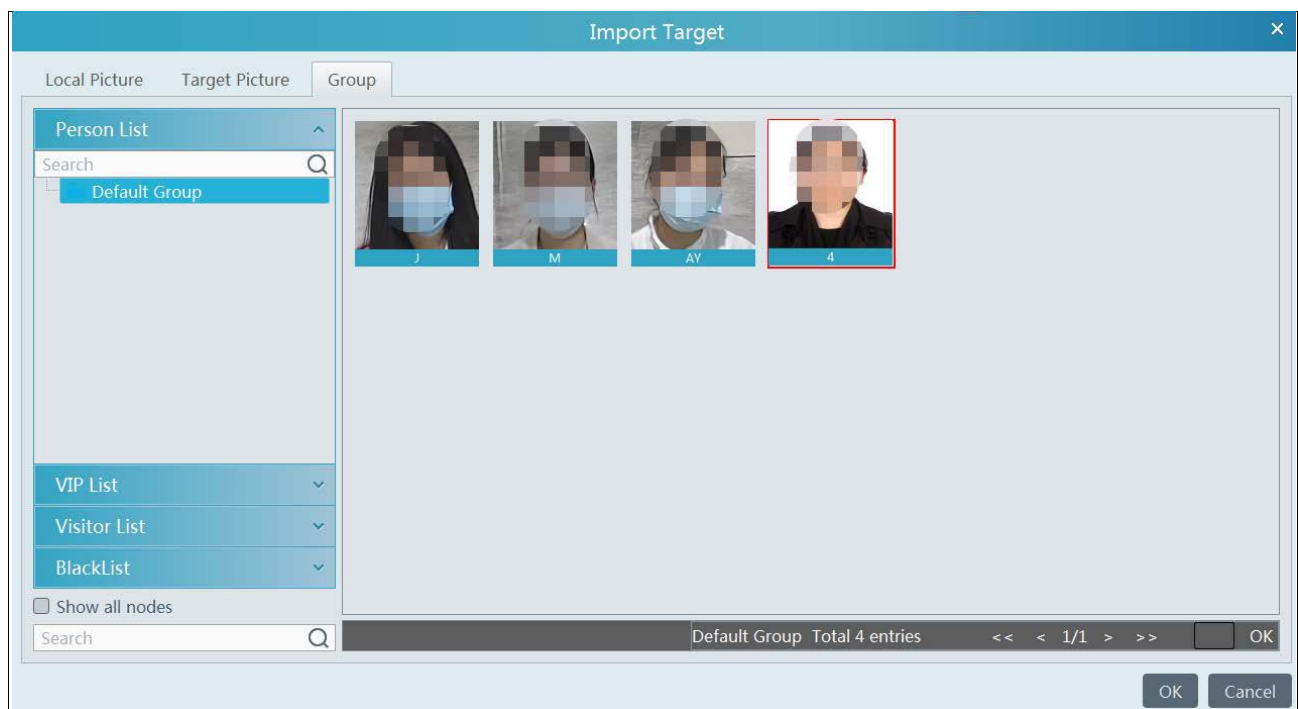
Add a face picture from the local PC: Click  to select the desired face picture in the local PC and then click [OK] to save the settings.

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, VIP list or visitor list.
3. Click [OK] to save the settings.



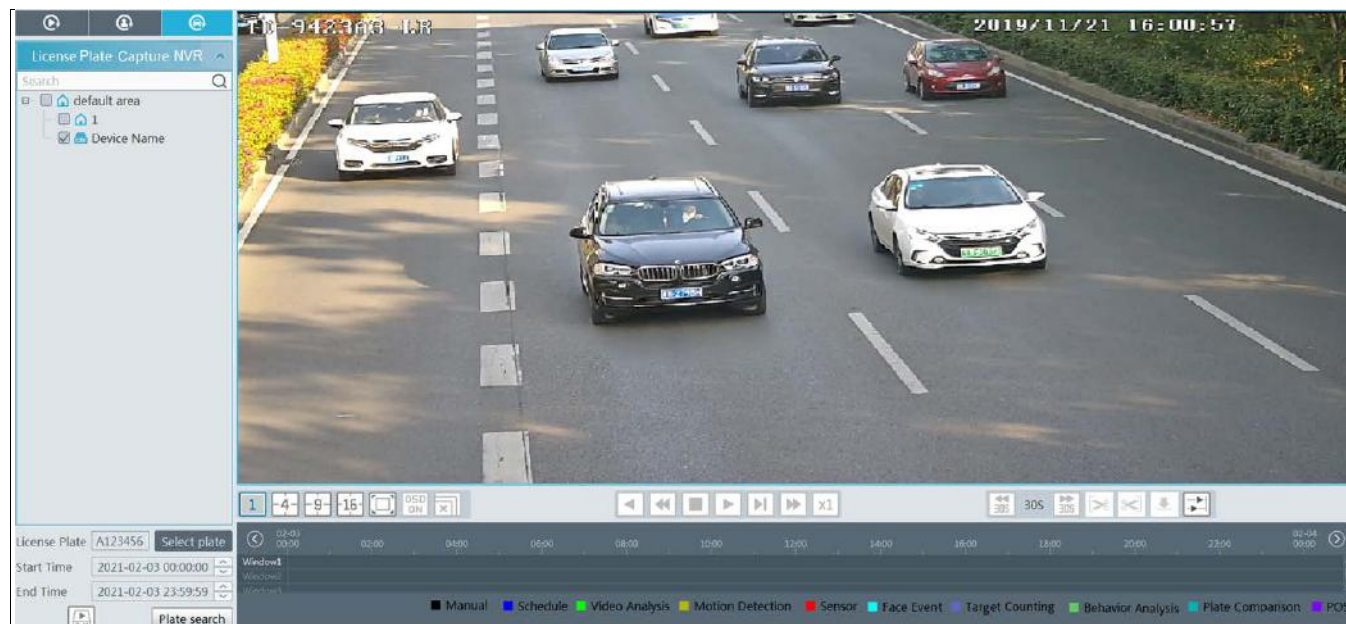
The picture must be added to the corresponding list in advance, or no picture can be searched. Refer to Chapter 6 People Management for details.

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.

Alarm Log Search

Alarm Linkage Settings

Schedule Setting

Manual Alarm Out

SOP Setting

Alarm Task Settings

Email Settings

Area

Alarm Type: Monitoring Point-Whitelist vehicle

All ON

All OFF

Reset

Apply

Filter

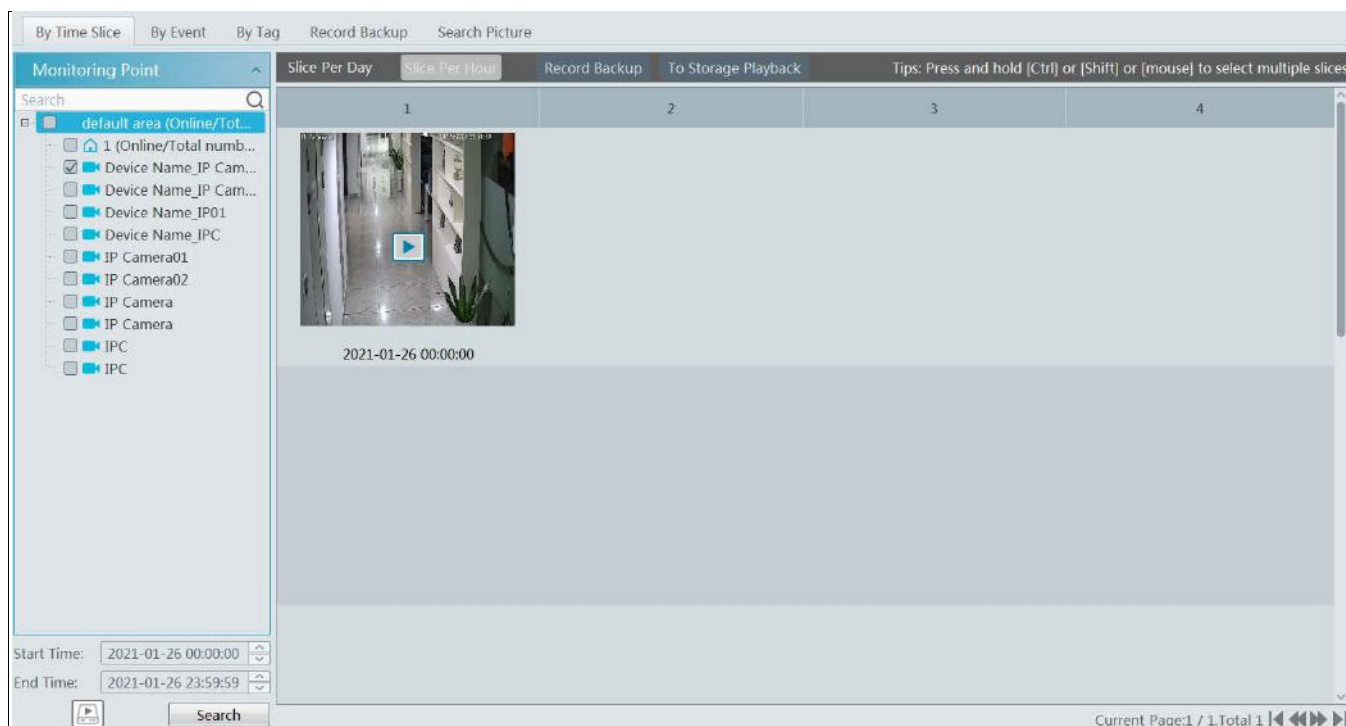
Search

default area

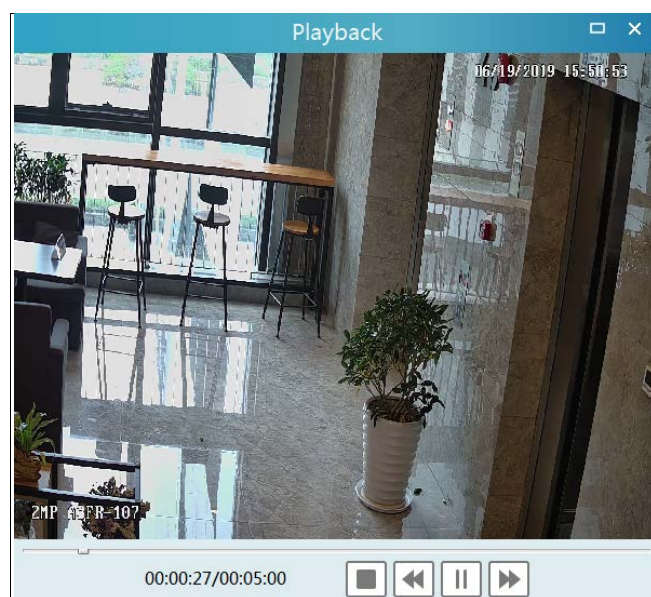
PTZ Control	Record	Alarm preview	Snapshot	Alarm Output	Voice Broadcast	TV Wall	Trigger Email	SOP	Schedule
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	7*24
OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF


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 hour.

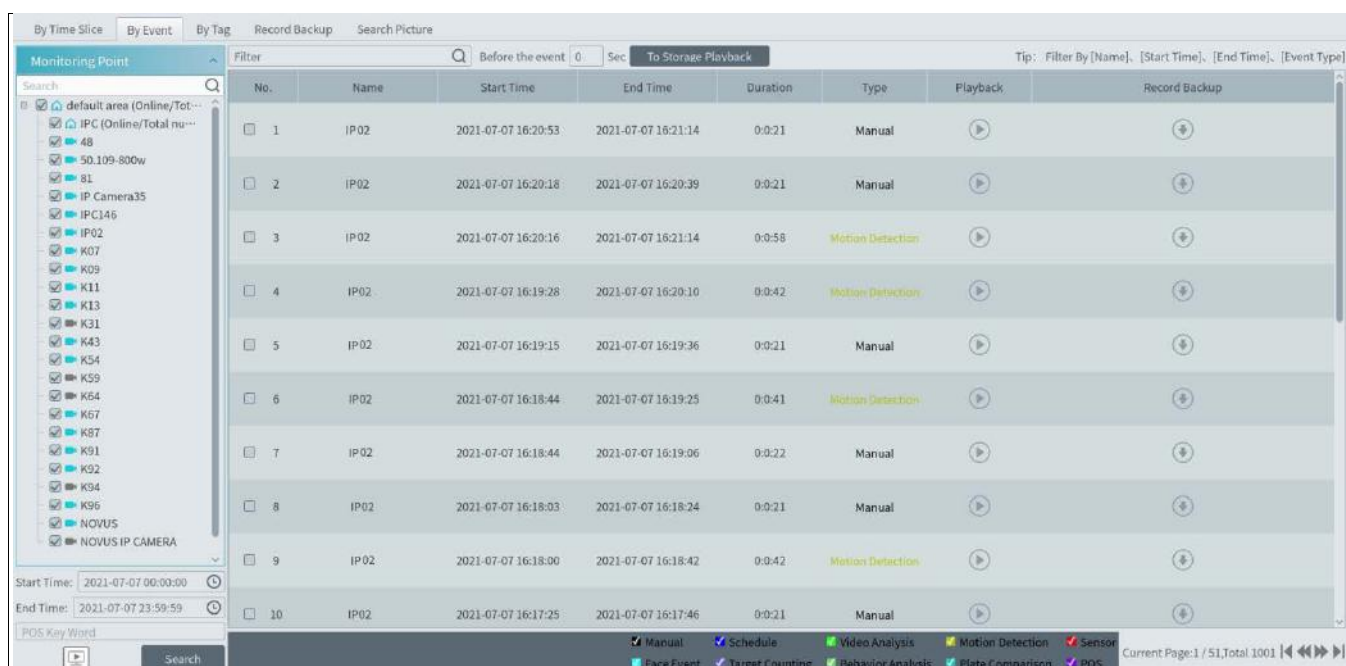
Double click an image to switch to slice search mode by 5 minutes. Click “Slice Per Day” or search it again to return to slice search mode by day.



Record Backup: The selected time slice will be quickly backed up by clicking the “Record backup” tab next to “Slice Per 5 Min”.

To Storage Playback: The selected time slice will be quickly played back in the storage playback interface by clicking this button.

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.

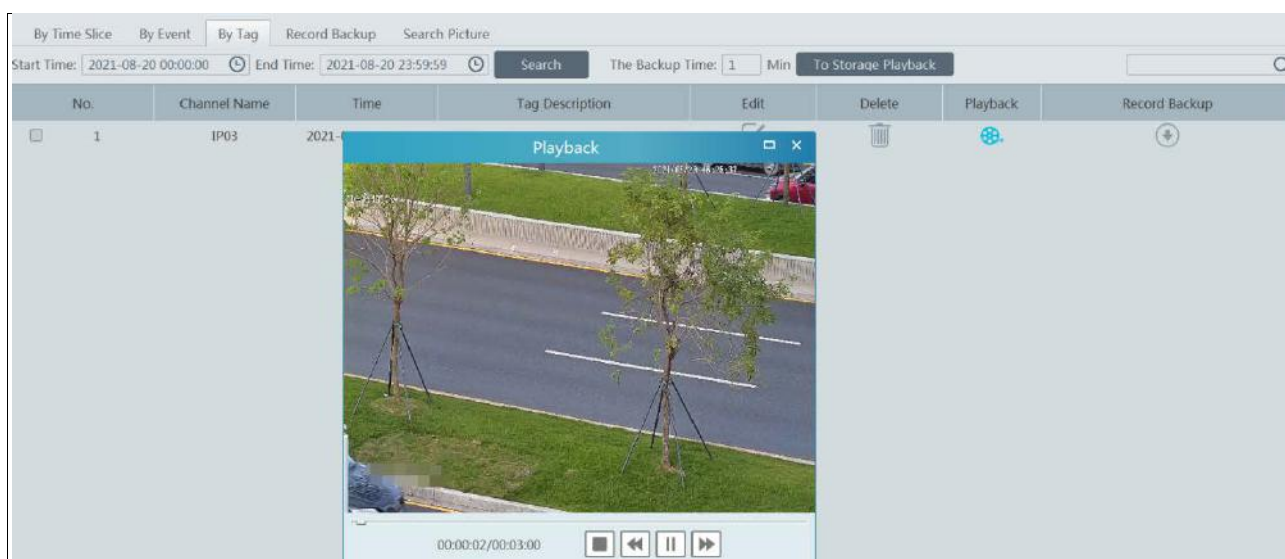


③ Click [Search]. The searched record data will be listed. Click [To Storage Playback] to play the record in the storage playback interface; click  to play the record in a small playback window; click  to back up the record data.

9.2.6 Playback by Tag

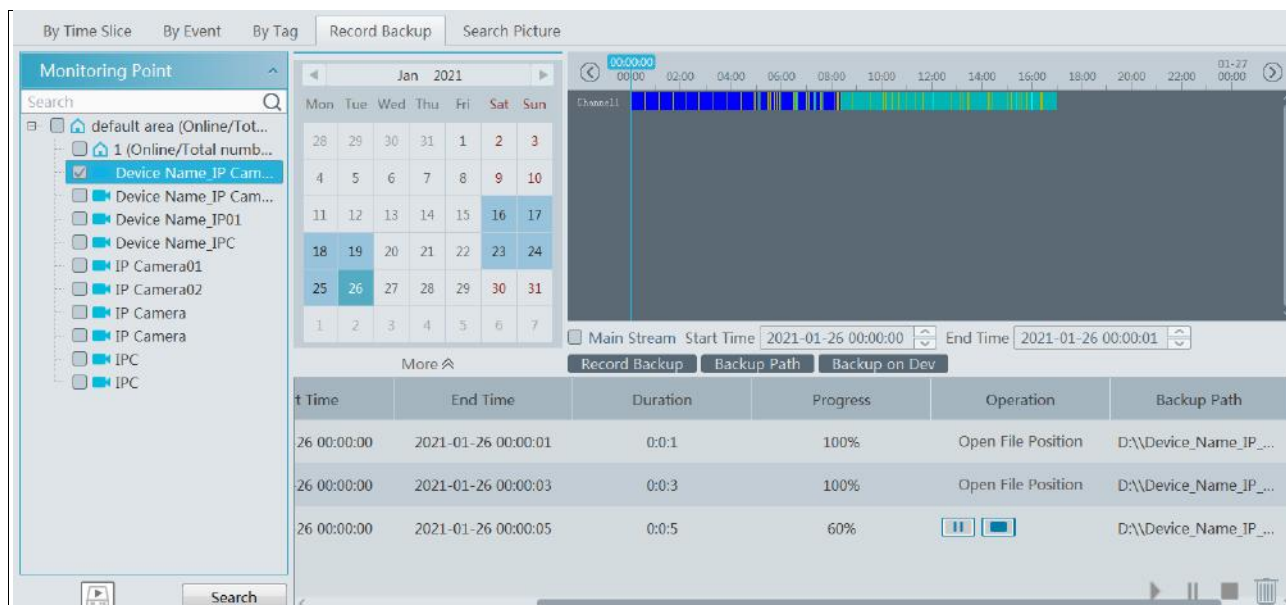
Note: Record tag cannot be added to the record from the device.






- 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 Backup

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



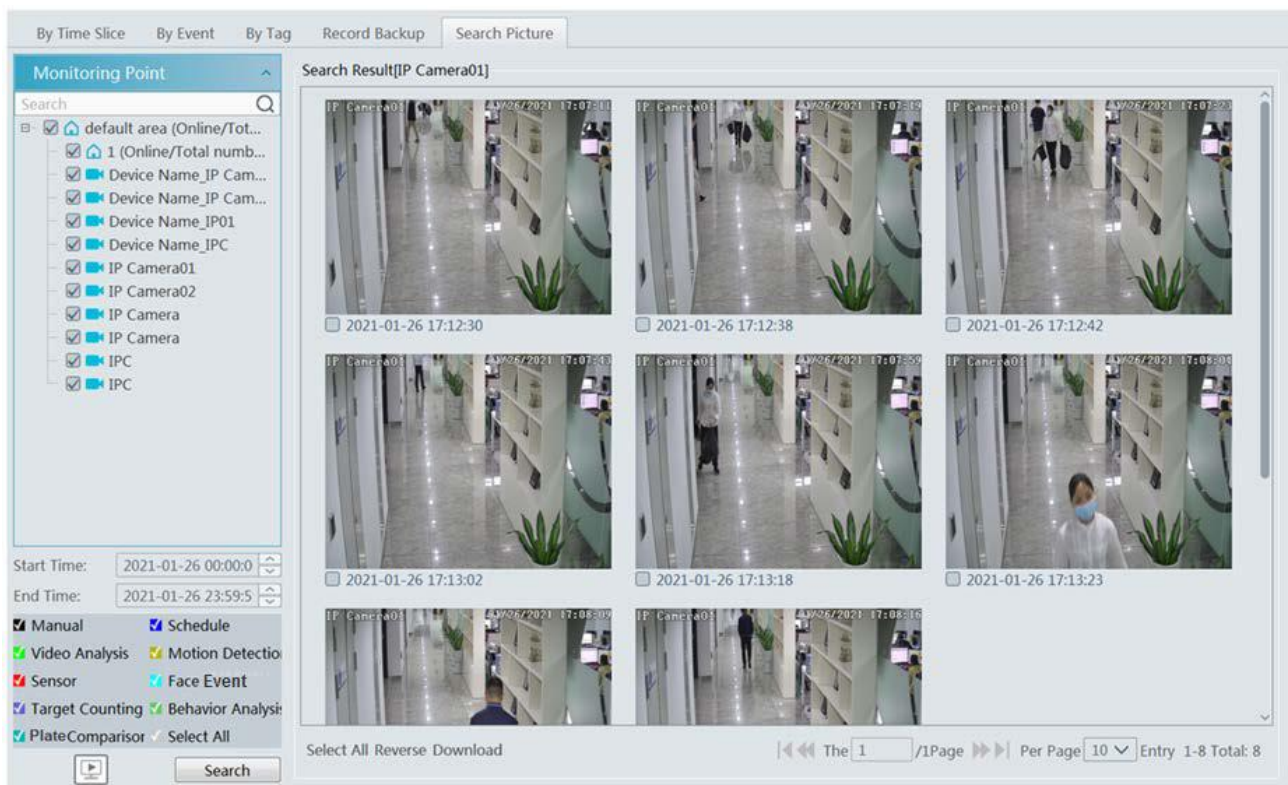
- ① Select the desired monitoring point.
- ② Select date and click “More” to select the start and the end time and event type.
- ③ Click  /  to get records from device or storage server.
- ④ Set the start time and the end time of backup. Then click [Backup].
- ⑤ The backup progress will be seen during 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.

These snapshots saved on the storage server or SD card /HDD must be triggered by alarm events so that they can be searched.




- 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

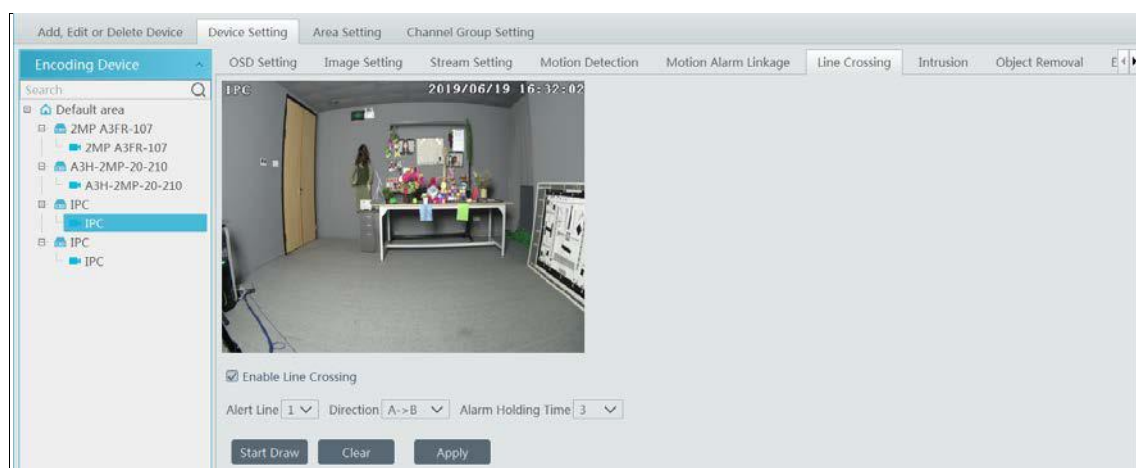
Alarm server is in charge of receiving and recording alarm information of connected devices and then sending the alarm information to the relevant user terminal system or devices in accordance with prior alarm settings. There is a default alarm server.

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.

Add, Edit or Delete Device							Device Setting	Area Setting	Channel Group Setting
Device Type	Server Name	IP Address	Port	Client Connection Status	Authentication Server Connection Status	Edit			
Encoding Device (Online/Total number:1/1)	Alarm Server	10.20.52.7	6033	Online	Online				
Decoder (Online/Total number:1/1)									
Intelligent Analysis Server (Online/Total number:1/1)									
Storage Server (Online/Total number:1/1)									
Media Transfer Server (Online/Total number:1/1)									
Alarm Server (Online/Total number:1/1)									
TV Wall Server (Online/Total number:1/1)									

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.

Alarm Log Search

Alarm Linkage Settings

Schedule Setting

Manual Alarm Out

SOP Setting

Alarm Task Settings

Email Setting

Area

Search

default area

1

Alarm Type

Monitoring Point-Face Detection

All ON

All OFF

Reset

Apply

Filter

Alarm preview

Snapshot

Alarm Output

Voice Broadcast

TV Wall

Trigger Email

SOP

Schedule

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF

OFF


OFF

OFF


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).

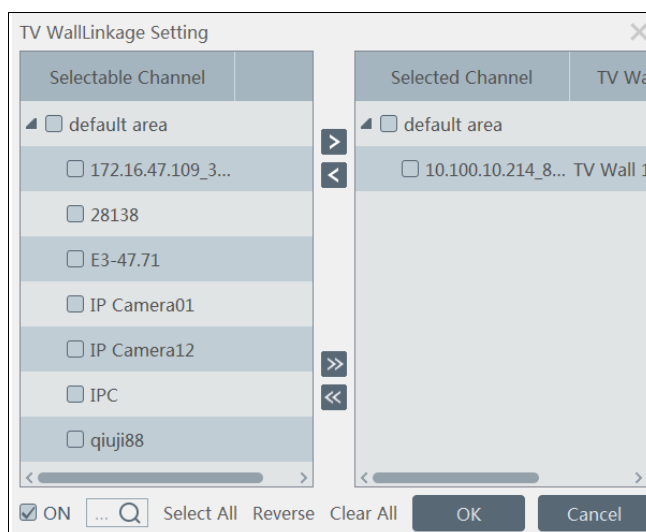
Select  beside the device name and select “ON” to enable all alarm linkages of the device (schedule excluded).





Name	Audio	PTZ Control	Record	Alarm preview	Snapshot	Alarm Output
Device Name_IP Camera01	OFF	OFF	OFF	OFF	OFF	OFF
Device Name_IP Camera	ON	OFF	OFF	OFF	OFF	OFF
Device Name_IP01	OFF	OFF	OFF	OFF	OFF	OFF

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.

Name	Audio	PTZ Control	Record	Alarm preview	Snapshot	Alarm Output	Voice Broadcast
*Device Name_IP Camera01	ON	ON	Link to itself (On)	ON	ON	ON	ON
Device Name_IP Camera02	OFF	OFF	Link to itself (Off)	OFF	OFF	OFF	OFF
Device Name_IP01	OFF	OFF	Free Choice	OFF	OFF	OFF	OFF

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 17.7 for details).



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

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

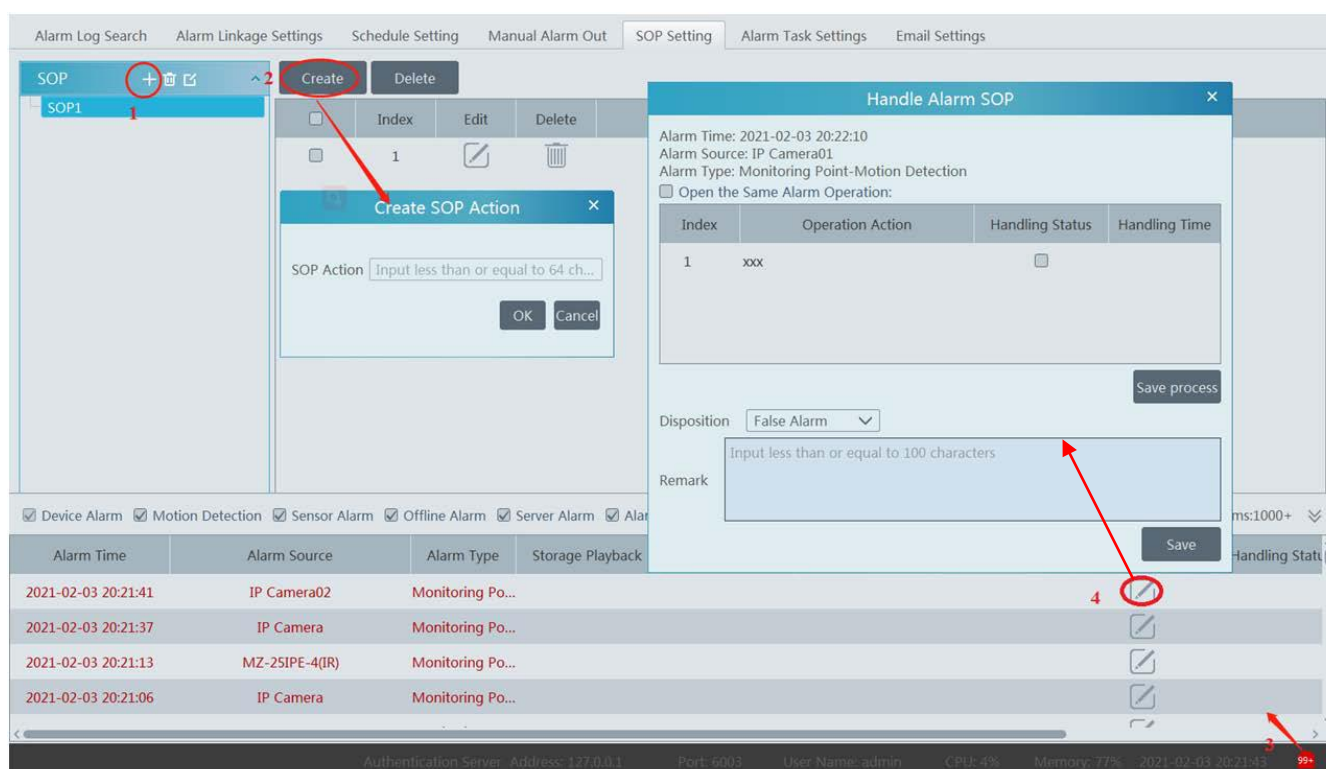
③ Set alarm schedule. Select the schedule of the desired device. 7*24 or 5*24 is the default schedule. Other schedules need to be set in advance. Click the “Schedule Setting” tab to set (See Schedule Recording→To set schedule for details).

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. Click  to extend the alarm list.
4. 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.



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.

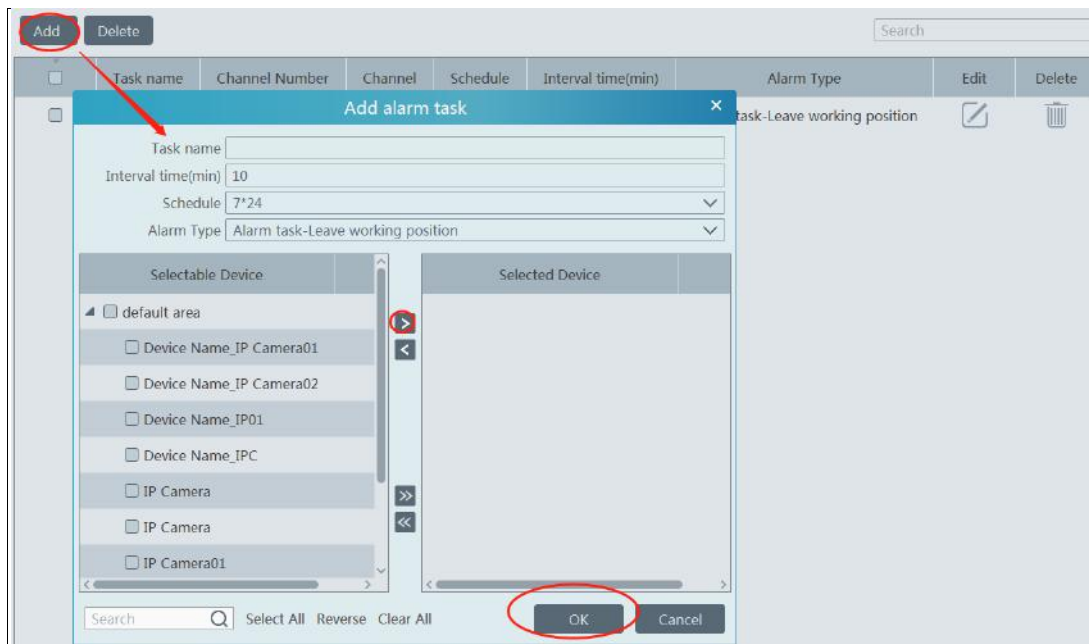
To set a leaving alarm task:

1. Enter the Alarm Task Setting interface.

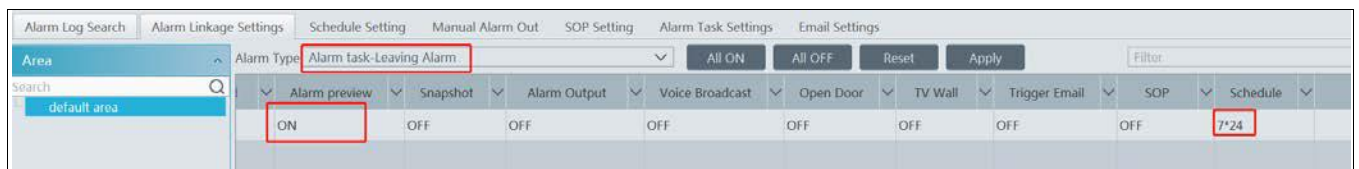
- Click [Add] to add the alarm task.

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

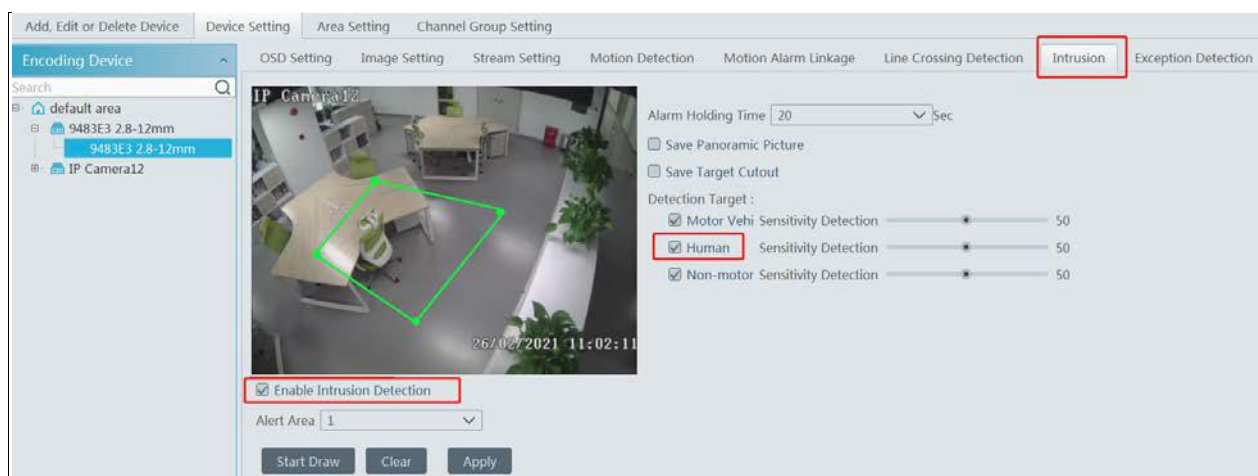
Multiple cameras can be added to an alarm task.



- 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.



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



Note:

- 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.

- 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.

Alarm Log Search Alarm Linkage Settings Schedule Setting Manual Alarm Out SOP Setting Alarm Task Settings Email Setting								
Add Delete		Search						
<input type="checkbox"/>	Task name	Channel Number	Channel	Schedule	Interval time(min)	Alarm Type	Edit	Delete
<input type="checkbox"/>	1	0		7*24	10	Alarm task-Leaving Alarm		

10.5 Email Setting

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.

Alarm Log Search	Alarm Linkage Settings	Schedule Setting	Manual Alarm Out	SOP Setting	Alarm Task Settings	Email Settings
Sender's Name <input type="text" value="xxx"/> Email Address <input type="text" value="xxx@163.com"/> SMTP Server <input type="text" value="163.smtp.com"/> SMTP Port <input type="text" value="25"/> Default Security <input type="text" value="No"/> ▼ Username <input type="text" value="xxx@163.com"/> ▼ Password <input type="password" value="....."/> Apply Test Add						
Recipient	Email Address	Edit	Delete			
xxxx	xxx@163.com					

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

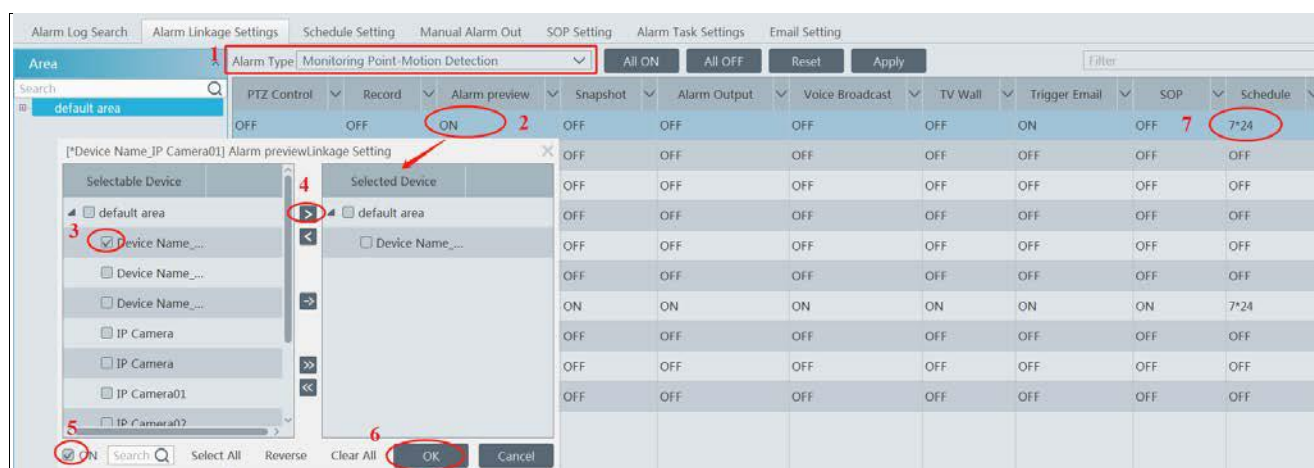
Clicking on the [Add] button adds the recipient information.

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

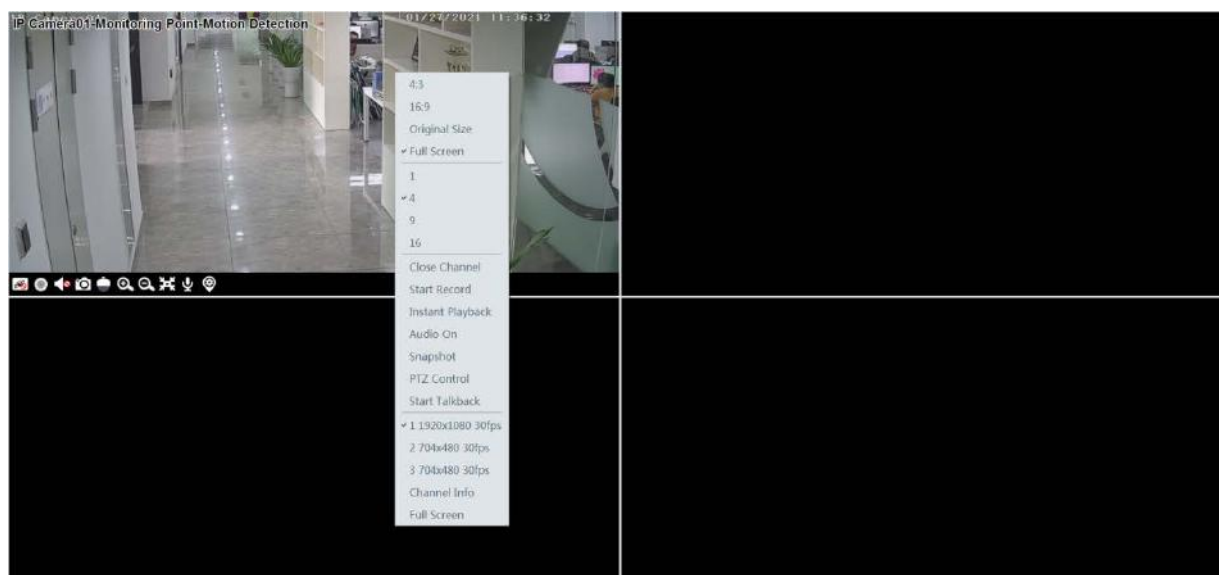
Alarm Log Search Alarm Linkage Settings Schedule Setting Manual Alarm Out SOP Setting Alarm Task Settings Email Setting										
Area		Alarm Type		All ON All OFF		Reset	Apply	Filter		
Search		Monitoring Point-Motion Detection								
default area		Trig	Record	Alarm preview	Snapshot	Alarm Output	Voice Broadcast	TV Wall	Trigger Email	SOP
		OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	7*24
		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF


10.6 Alarm View

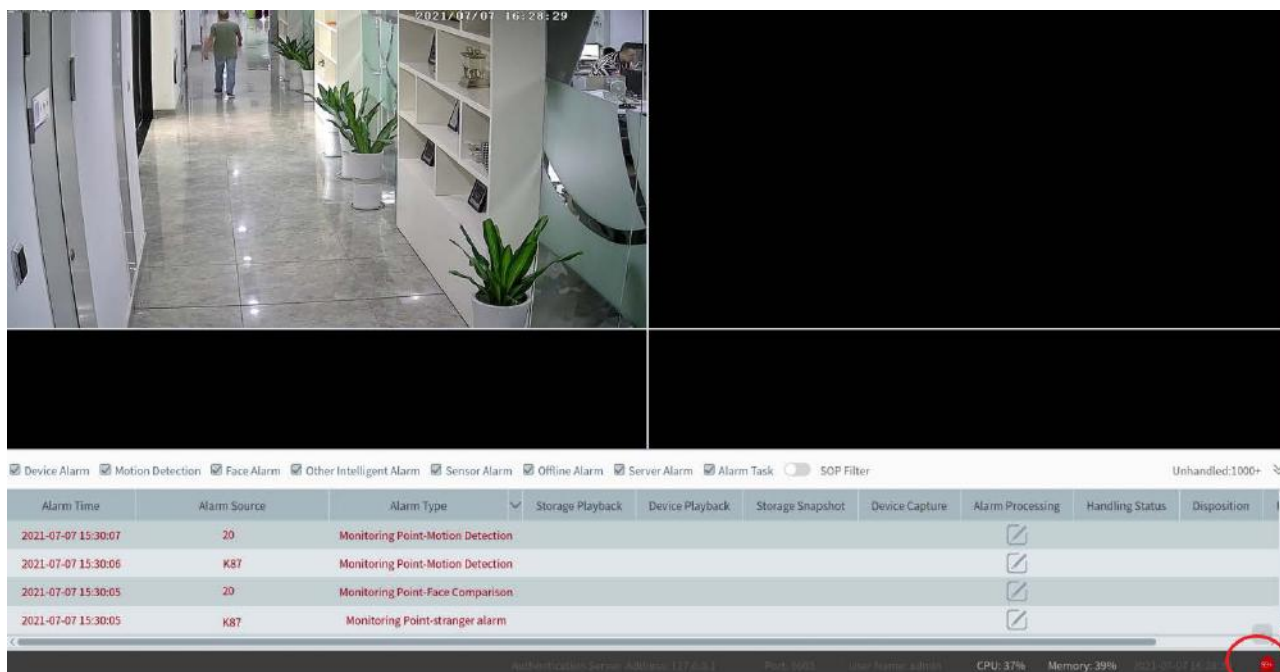
Having set the alarm preview linkage, the alarm view window will prompt when an alarm is triggered.



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

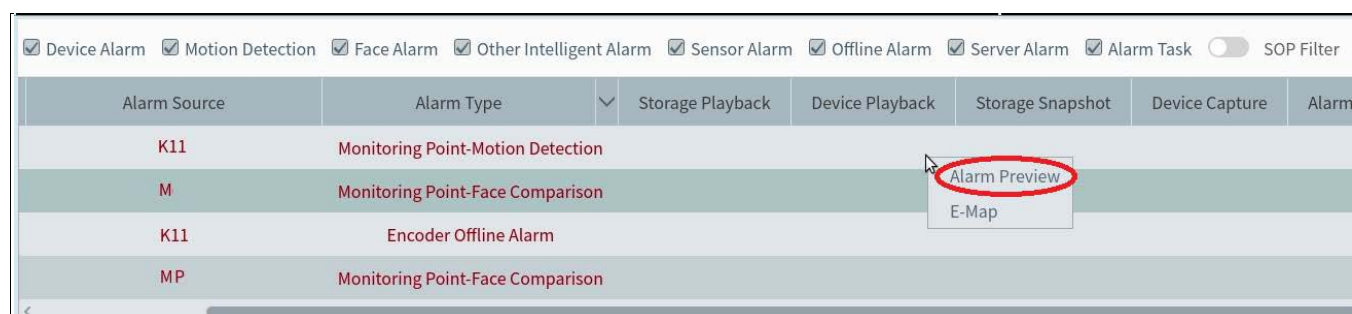


Click  on the bottom right corner to expand the alarm list as shown above. Hover the cursor on the top of the alarm list and then a bidirectional arrow will appear. Drag the alarm list up or down to extend or shrink the alarm list.



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.

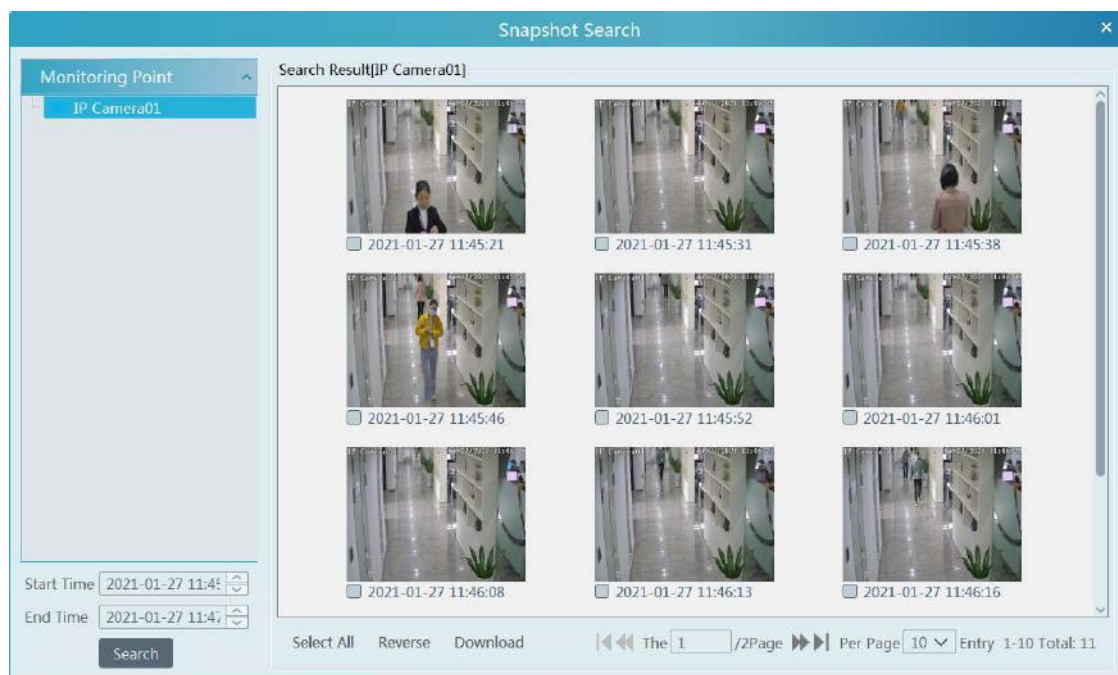


10.7 Alarm Log

Alarm logs can be searched and exported by going to Home→Alarm Center→Alarm Log interface.



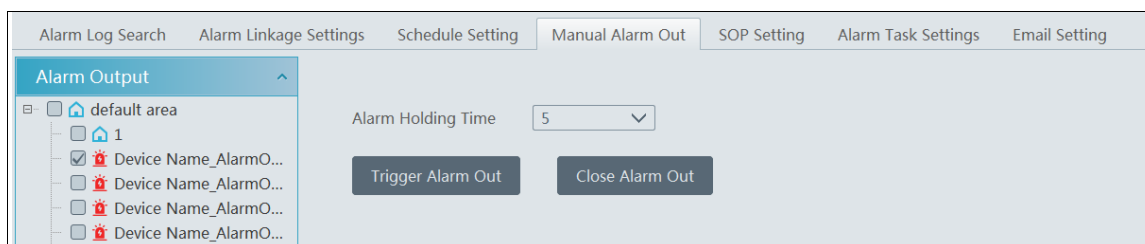
Click  to play the record; click  to open the snapshot search window as shown below.



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.

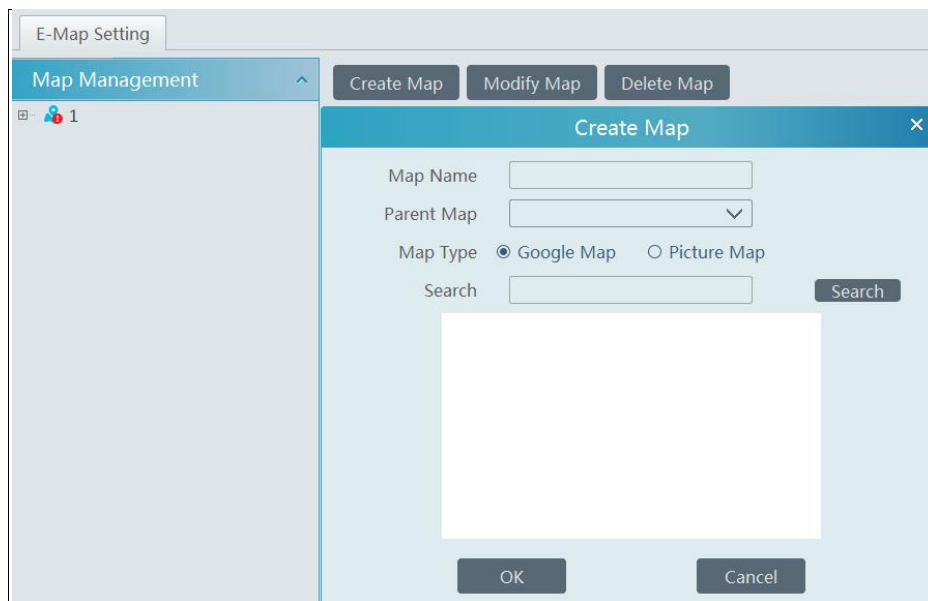
11 E-Map

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.



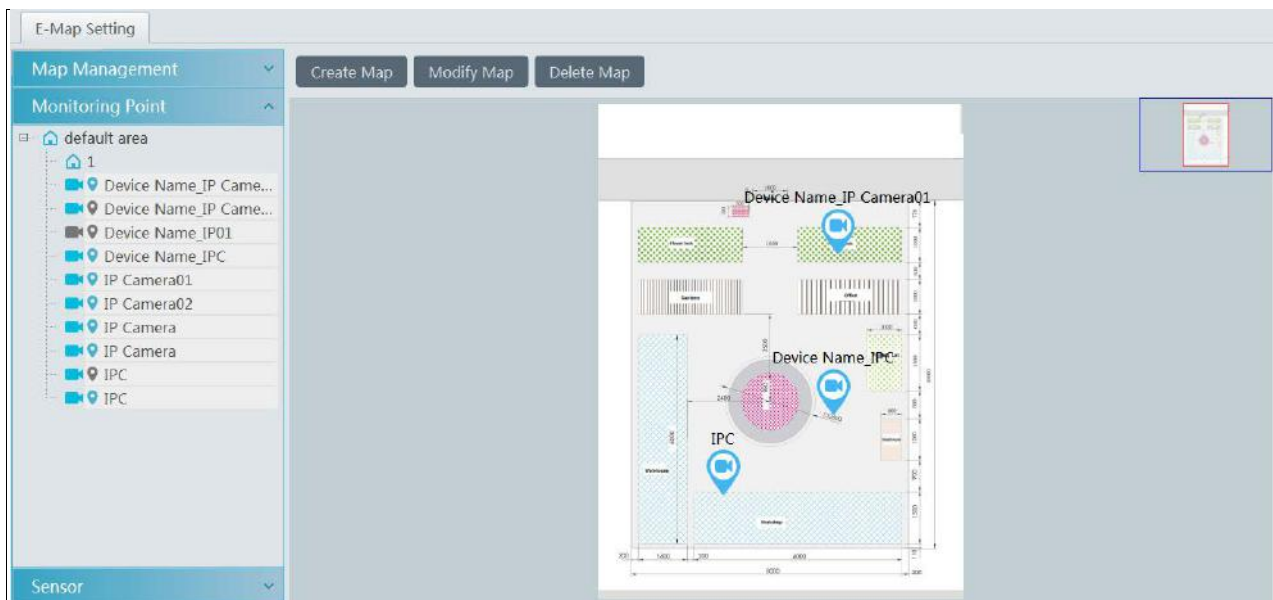
The screenshot displays the 'E-Map Setting' window. On the left is a 'Map Management' sidebar with a tree view showing a single map. The main area contains three buttons: 'Create Map', 'Modify Map', and 'Delete Map'. The 'Create Map' button is active, opening a 'Create Map' dialog box. This dialog box includes the following fields and controls:

- Map Name:** A text input field.
- Parent Map:** A dropdown menu.
- Map Type:** Two radio buttons, 'Google Map' (selected) and 'Picture Map'.
- Search:** A text input field with a 'Search' button to its right.
- Map Preview:** A large white rectangular area below the search field.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom.

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.

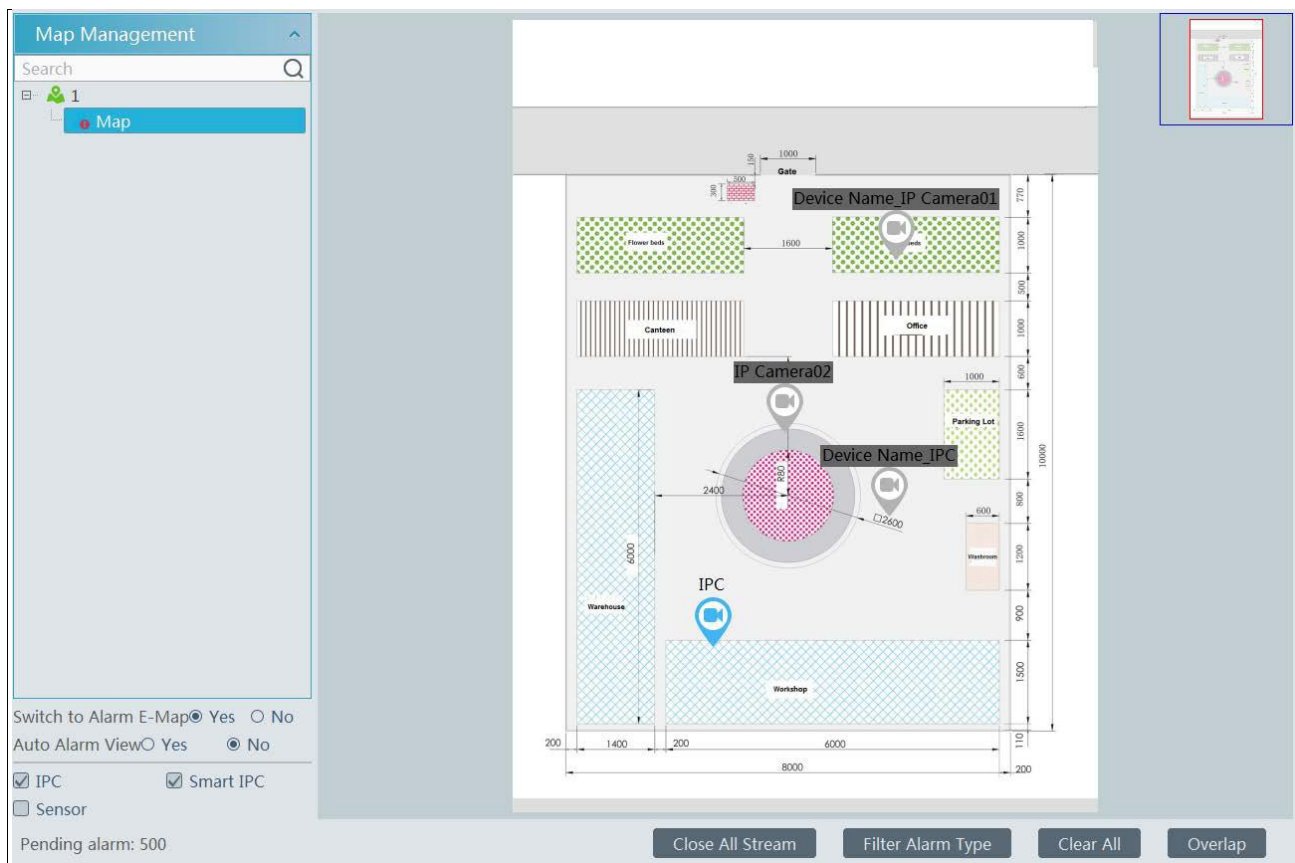


Click [Modify Map] to change map name and parent map.

Select [Delete Map] to delete the added map.


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.



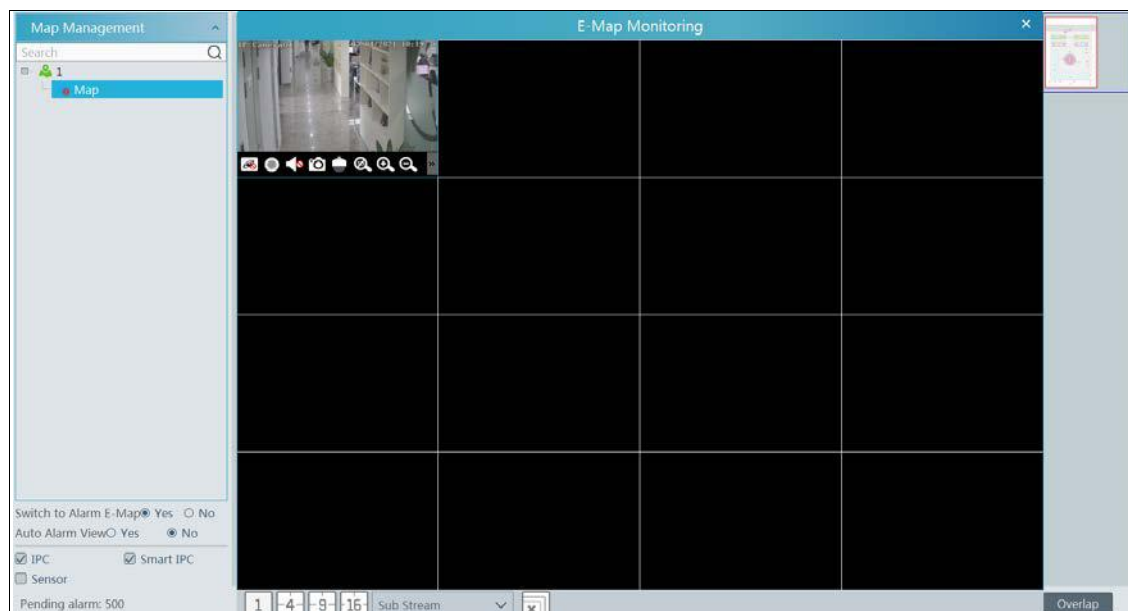
Switch to Alarm EMap: if “Yes” is selected, the system will automatically switch to the E-map on which the alarm occurs.

Auto Alarm View: 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.

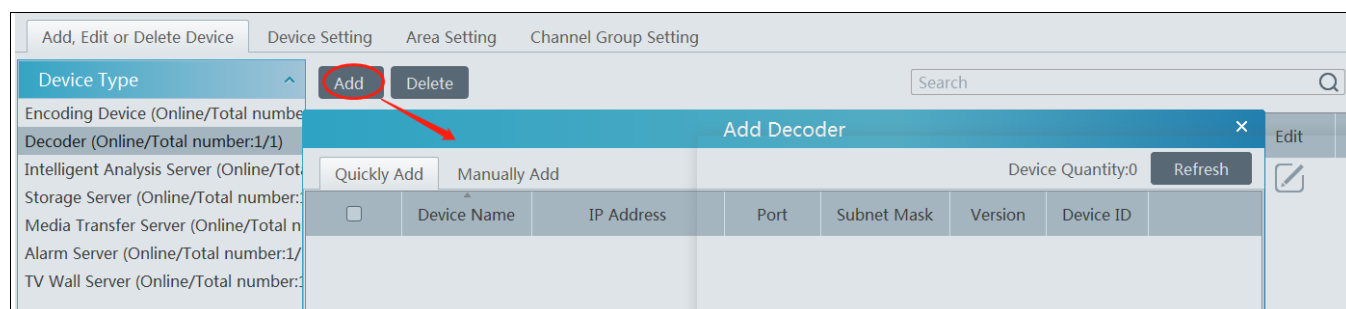


12 TV Wall

12.1 Add 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 setting steps of adding decoders are the same as adding encoding device setup (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.

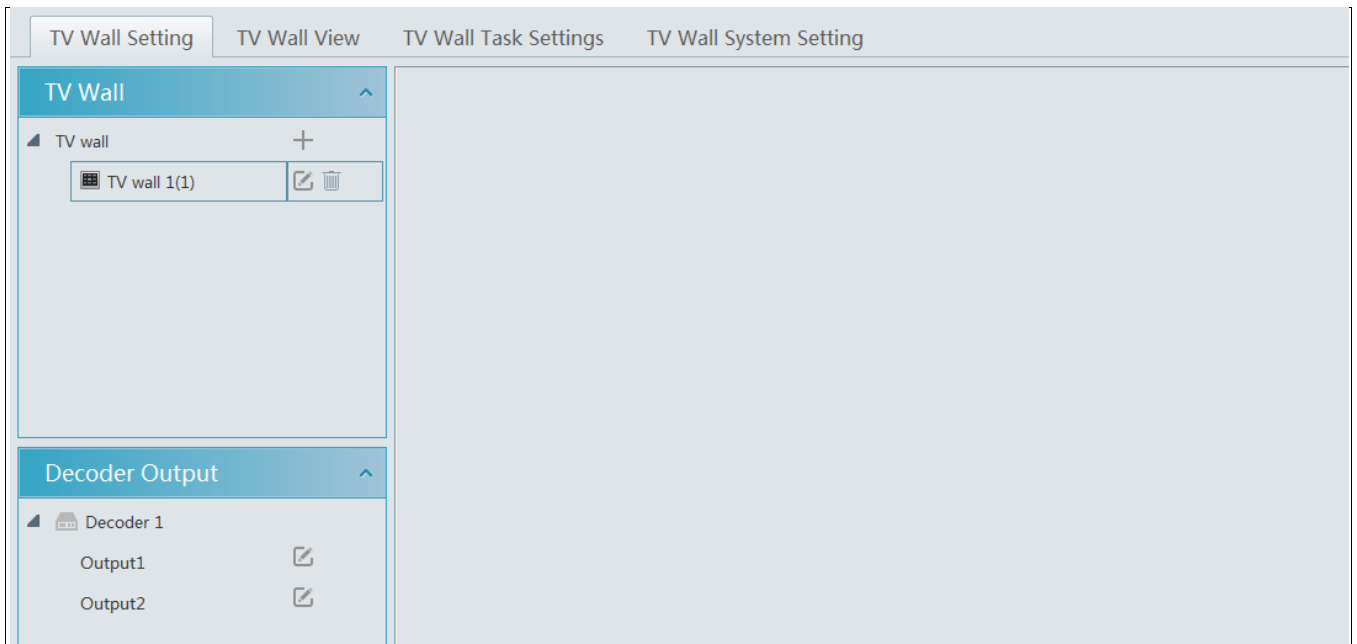
Basic Settings	
Running Mode	Platform
User Permission	Master
Device Name	Decoder
MAC	00:18:AE:00:45:D1
Soft Version	2.1.0.12
Version Date	20181214
Kernel Version	I9F6-I9F6-I9F6
<input type="button" value="Apply"/>	

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

12.2 TV Wall Management

There is a default TV wall server. Before using TV wall, please make sure the default TV wall is online (Click Home→Add, Edit or Delete Device→TV Wall Server).

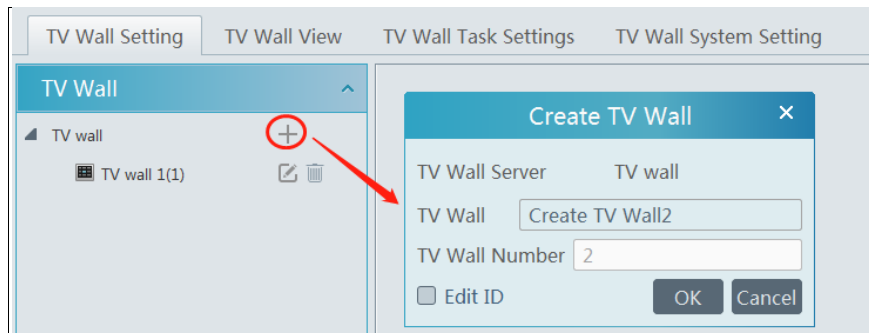
Then go to Home→TV Wall Management→TV Wall Setting.



12.2.1 TV Wall Settings

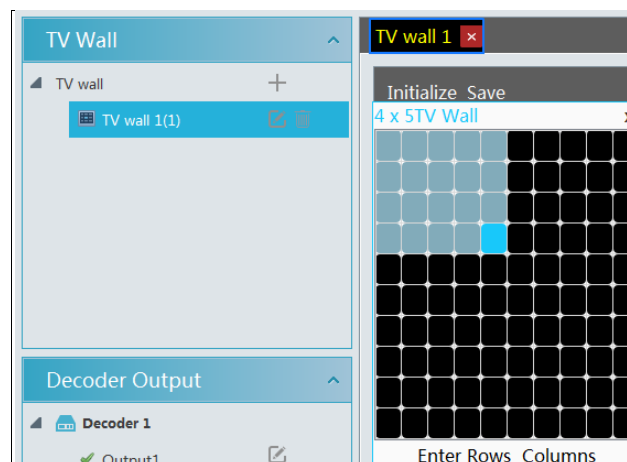
◆ Create TV Wall

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.

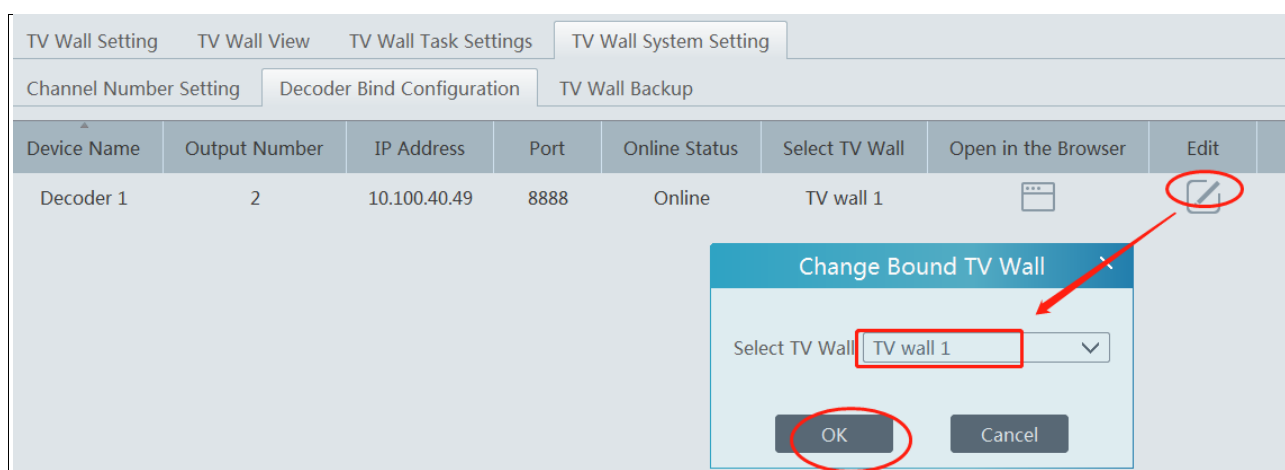


Splitting: select the merged window and click “Split” to restore the window to the previous status.

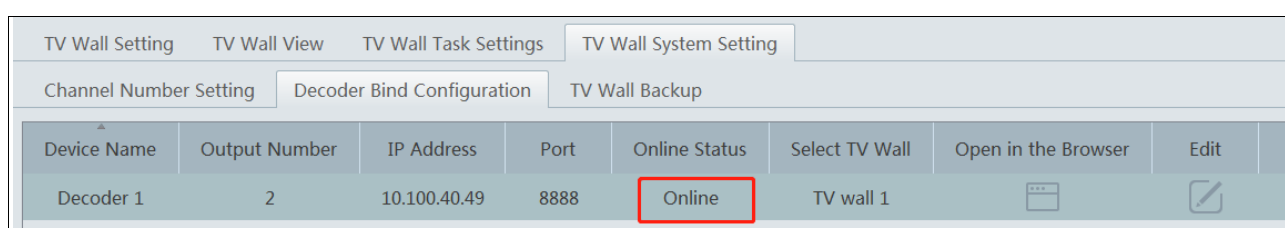


● Decoder Binding

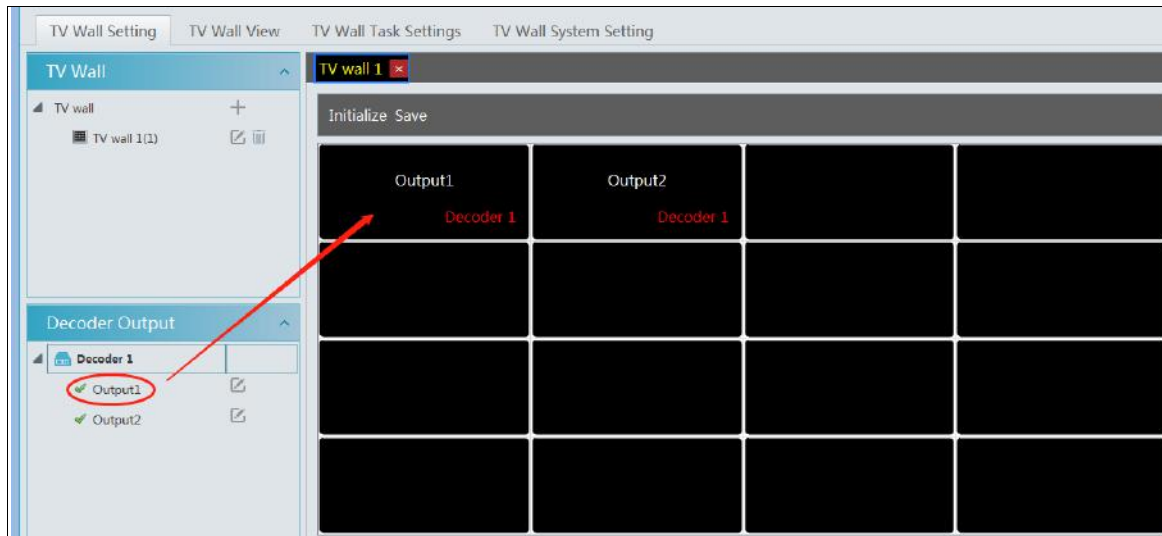
Go to Home→TV Wall Management→TV Wall System Setting interface as shown below. In this interface, decoder bind can be set up. Decoder bind configuration: modify the binding state between decoder and TV wall.



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.

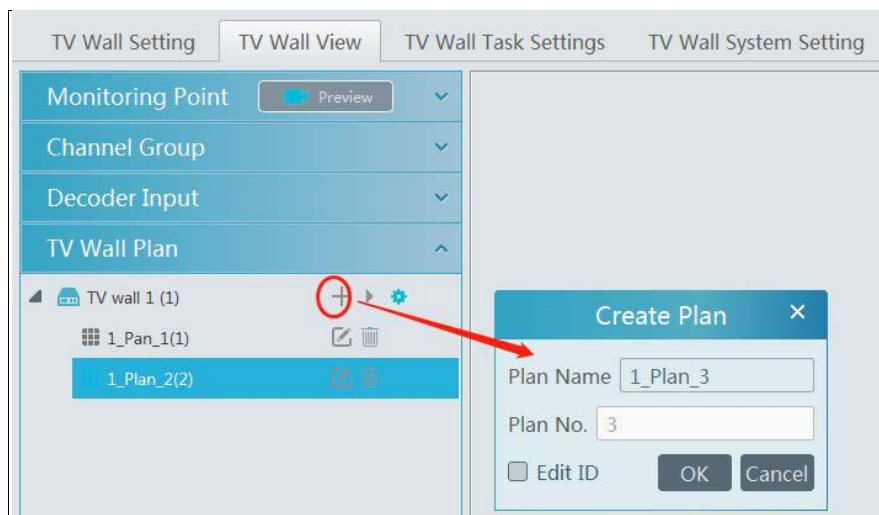


12.2.2 TV Wall View

◆ Create Plan

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

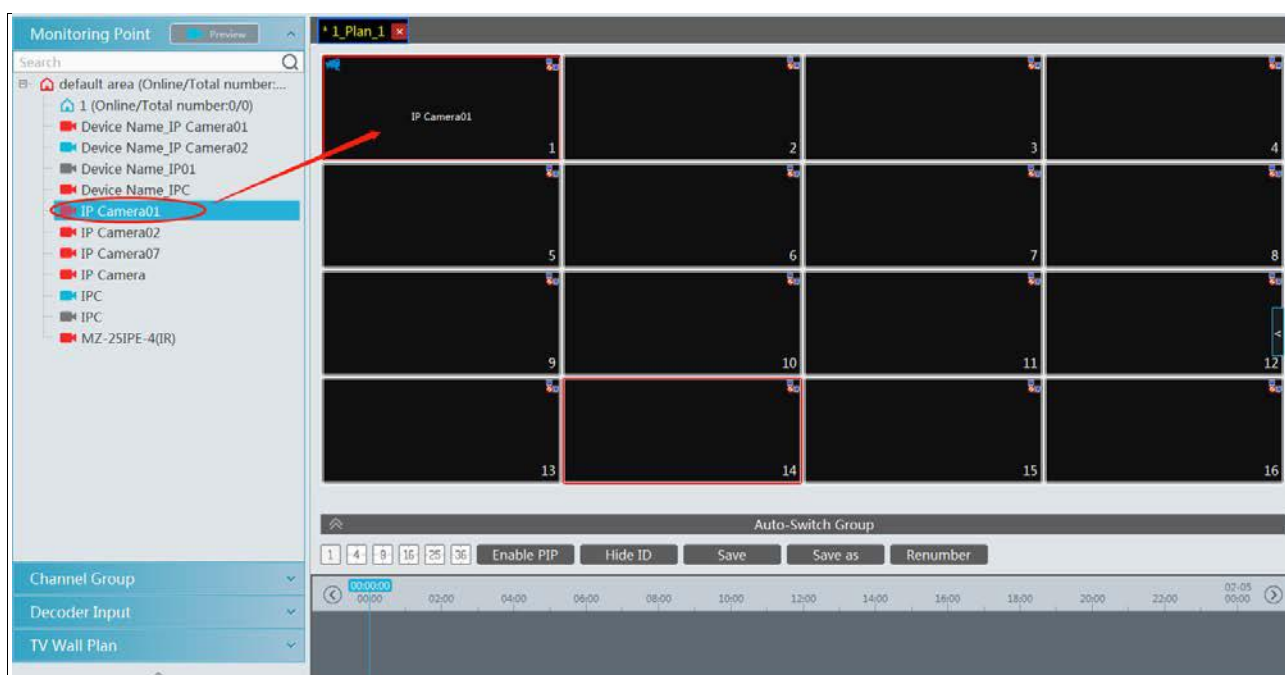
Click  beside the TV wall name to create the TV wall plan name.



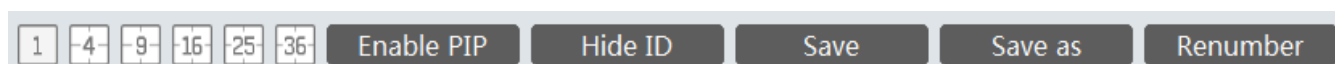
◆ Configure Plan

Double click the plan name to show the plan.

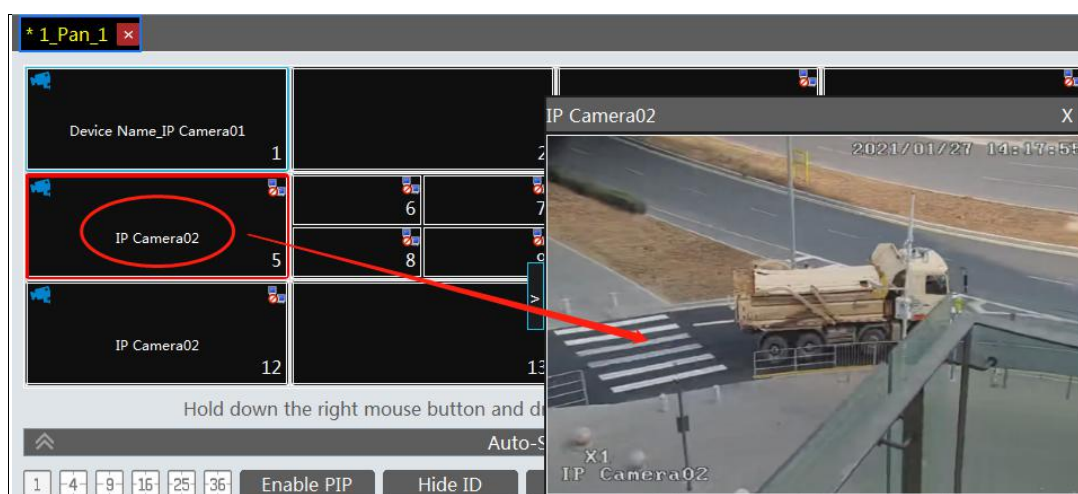
Drag the monitoring points to the corresponding window respectively to decode image.



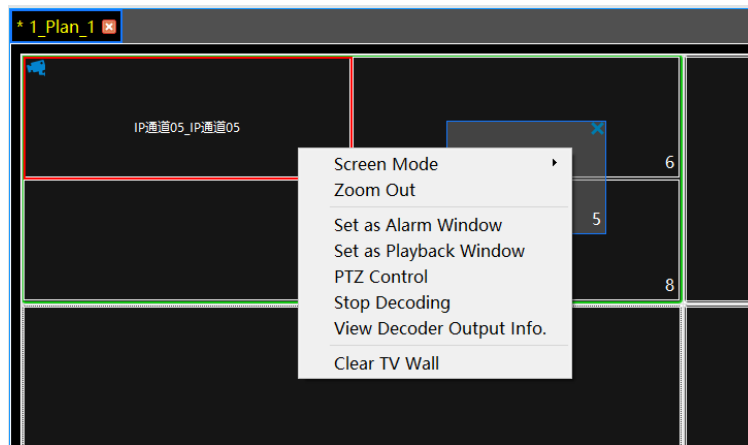
◆ Toolbar Menu



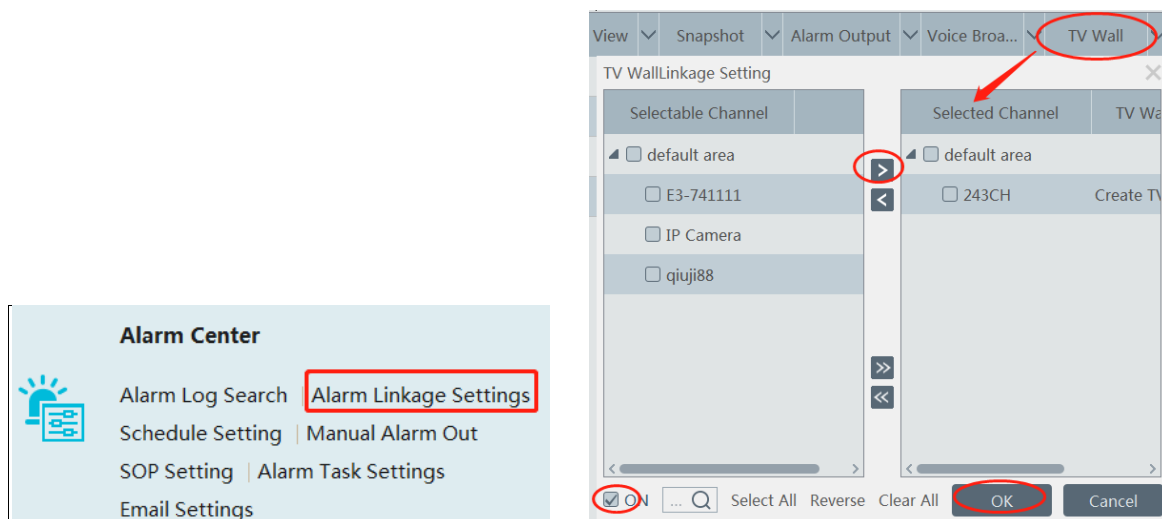
1. Screen mode : 1\4\9\16\25\36 screen mode is optional.
2. Open Window : Click [Enable PIP] and then drag on a window to open a small window on it. Click [Disable PIP] to stop opening window. The small window can be dragged to anywhere on the big window.
3. Click [Hide ID] to hide the window number; 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. Auto Renumber: Click it to renumber the window of the plan from left to right and top to bottom.
7. Select a window assigned 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



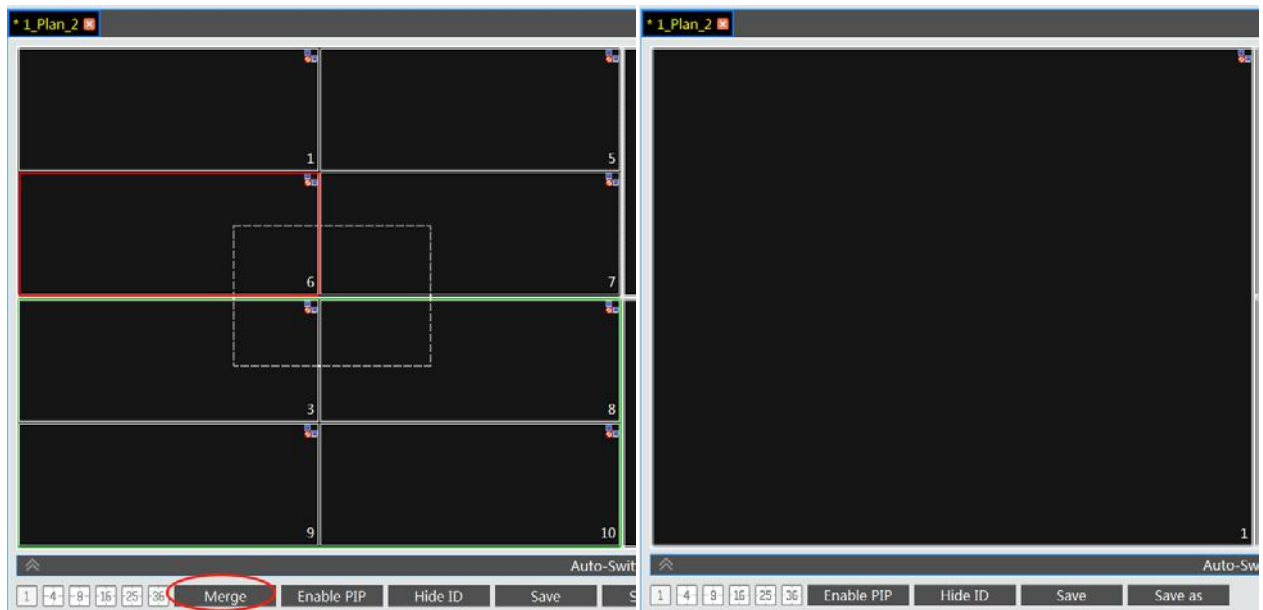
1. Screen mode: 1\4\9\16\25\36 screen mode is optional.
2. Zoom in/out : if the current screen mode is multi-screen display mode, click “Zoom In” to zoom in the current image. Click “Zoom Out” menu again to restore to the previous status.
3. Save as Alarm Window: click it to save the current window as 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.



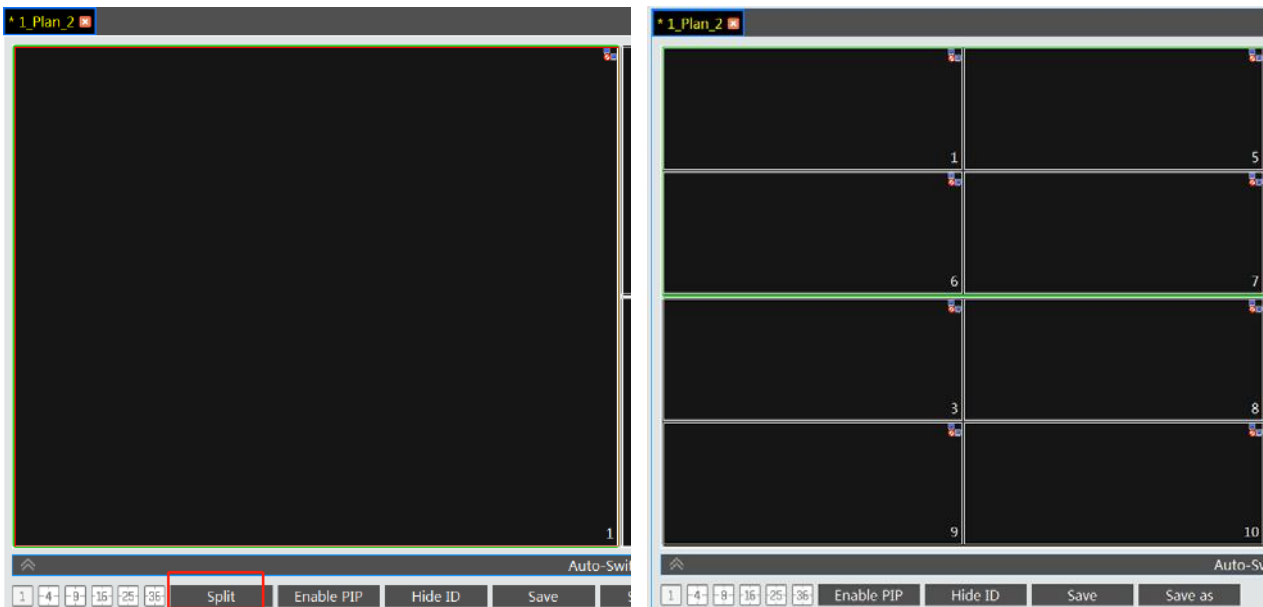
4. Set as Playback Window : when decoding images, click this menu to play the records of the current channel (the record source is the current record source).
5. PTZ Control: click this menu to prompt a PTZ control panel of the current decoding window. Direction control, zooming and focusing, Iris control, 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.




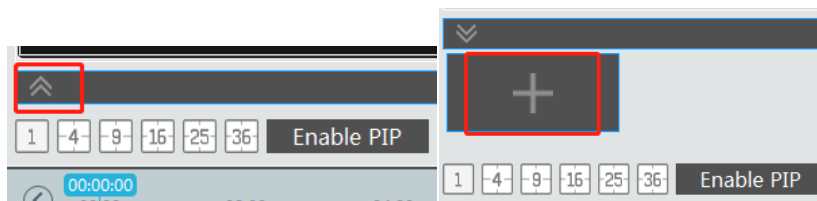
Select the merged window and click [Split] to restore the window to its previous status.



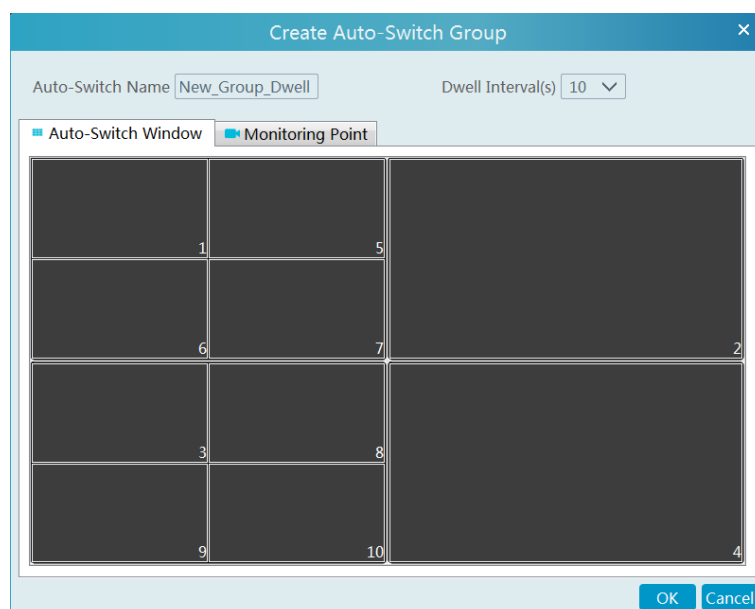
◆ Auto-Switch Group

1. Create Auto-Switch Group

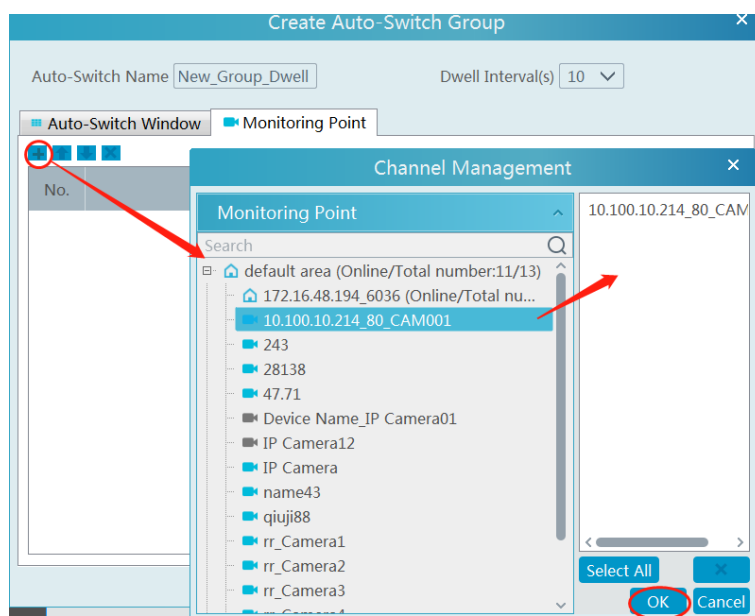
① Click Auto-Switch Group under the screen and then click  to create auto-switch group.



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

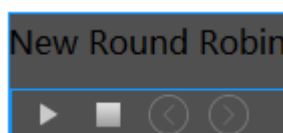


- ③ Click “Monitoring Point” to select the auto-switch channel group.



- ④ Enter auto-switch name and dwell time.

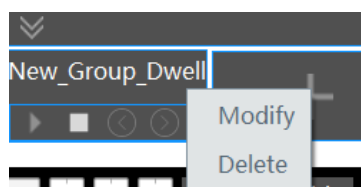
2. Execute auto-switch



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.

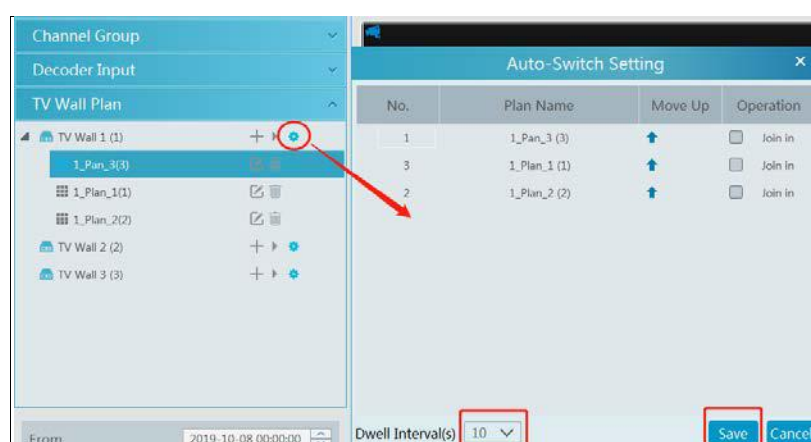


Note: If there are overlapped auto-switch window in a plan, the auto-switch groups will not be executed at the same time.

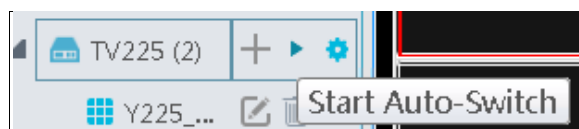
◆ Auto-switch plan


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.

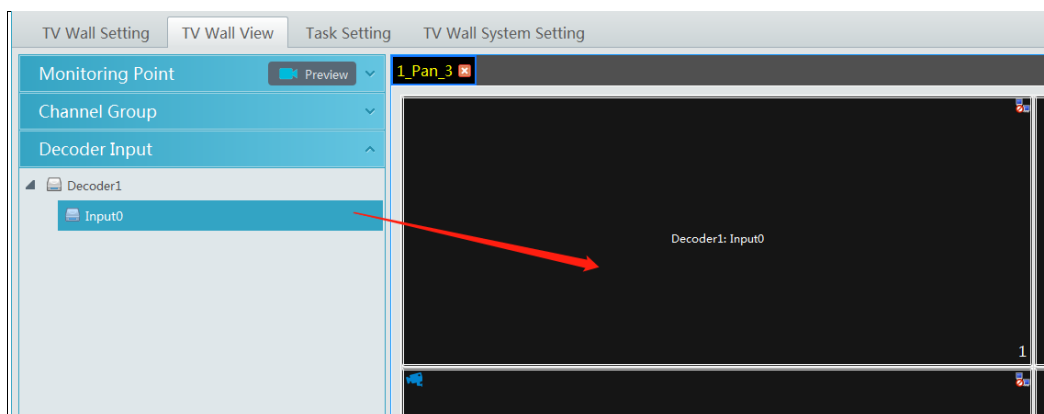
3. Modify auto-switch plan

Click  again to modify the auto-switch plan.

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

12.2.3 Decoder Input

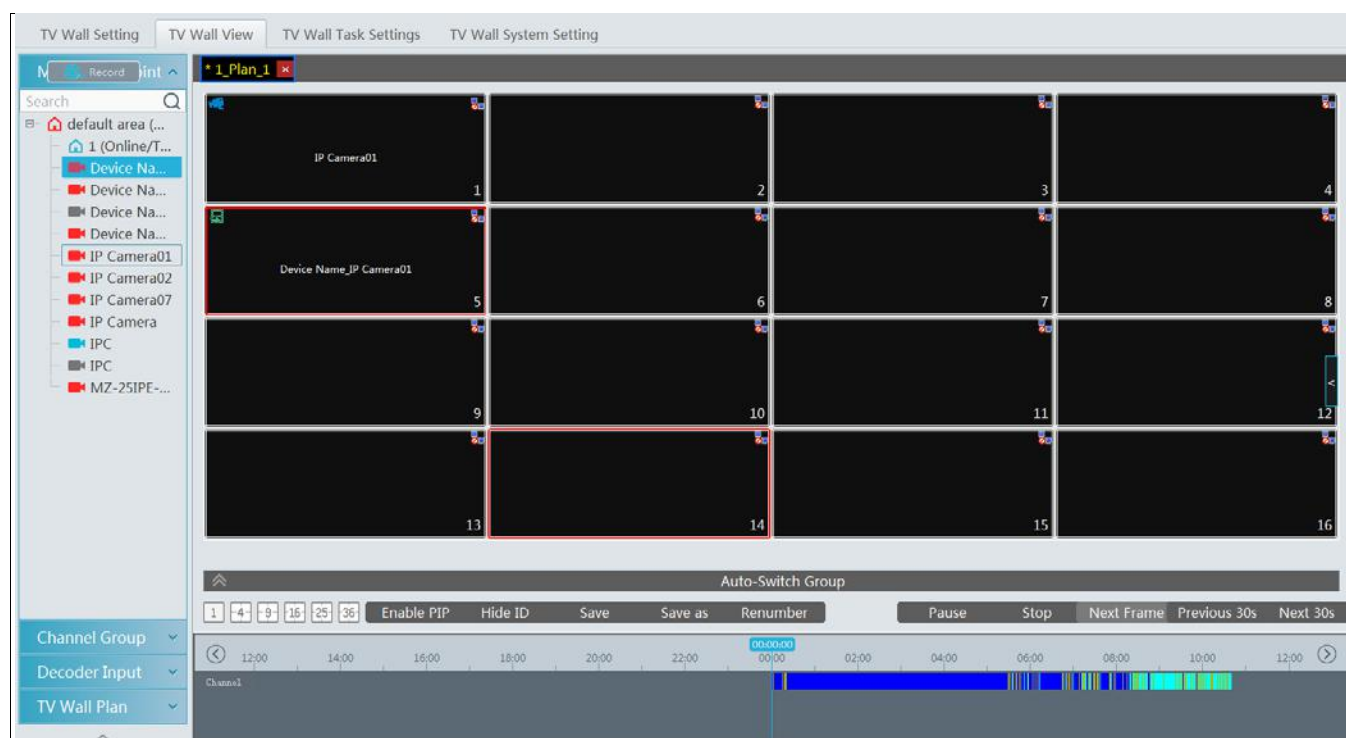
Go to Home→TV Wall Management→Decoding on TV Wall→Decoder Input. Drag an input to a window to execute decoding.



12.2.4 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.



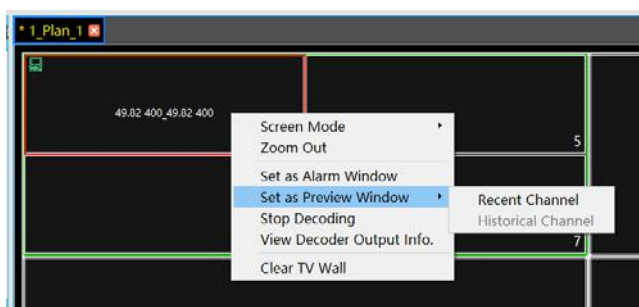
Of course, the specified time and event types can be set to search the specified records.

◆ Playing control



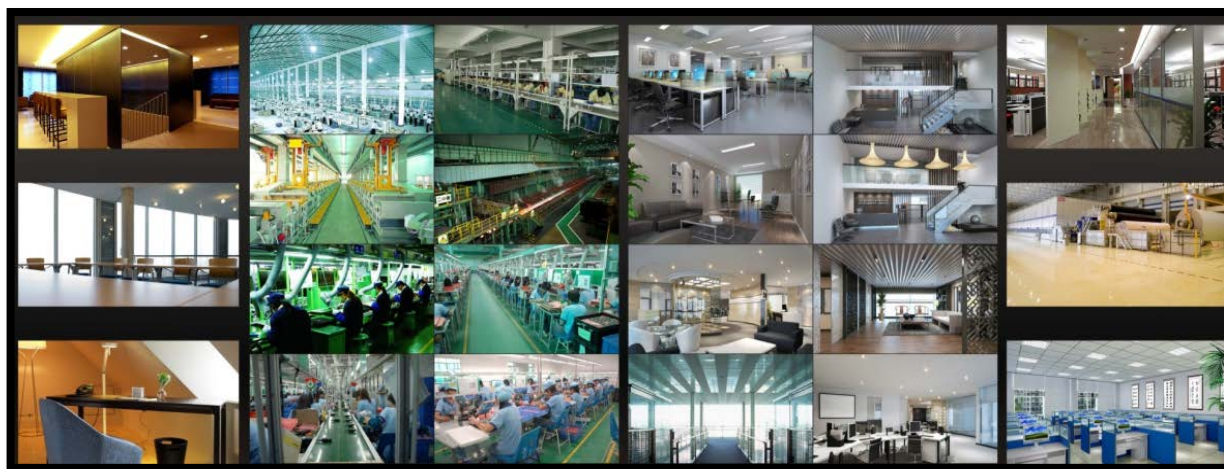
During playback, the record can be controlled by the above buttons.

◆ 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

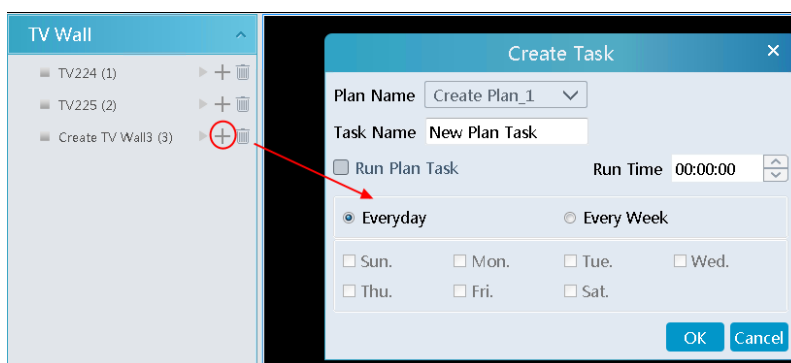
The following picture is an example of TV Wall.




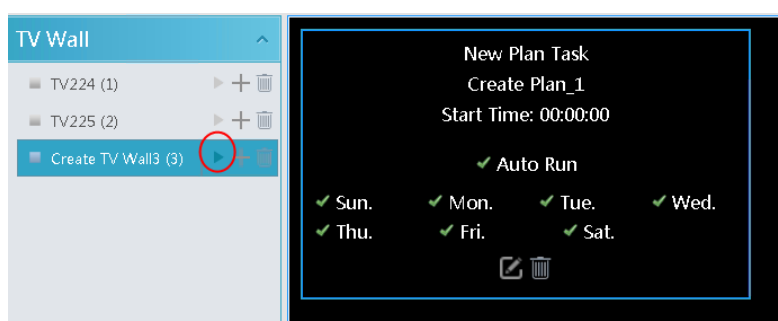
12.2.5 Task Setting of TV Wall

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.

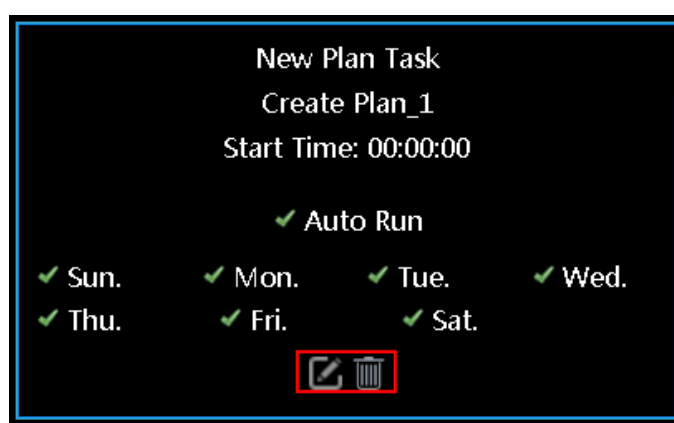




Click  to start the task. Click the Stop button to stop this task.



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.

12.2.6 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.

No.	Name	Channel Number
1	group-->1	1
2	group-->1-1	2
3	default area-->IP Camera01	1
4	default area-->IP Camera07	17
5	default area-->IP Camera	19
6	default area-->IP Camera02	5
7	default area-->IPC	3
8	default area-->IPC	4
9	default area-->Device Name_IP Camera01	2
10	default area-->Device Name_IP Camera02	7
11	default area-->Device Name_IP01	8
12	default area-->Device Name_IPC	9
13	default area-->MZ-25IPE-4(IR)	6

Minimum Conflict-Free Channel Number: 10

Export Channel Number Save Cancel

➤ 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.

Channel Number Setting Decoder Bind Configuration TV Wall Backup

Backup TV wall Restore TV wall

Caution: It will take several minutes to restore system configuration. Do not shut down the computer during restoring. The authentication server will restart automatically after restoration.

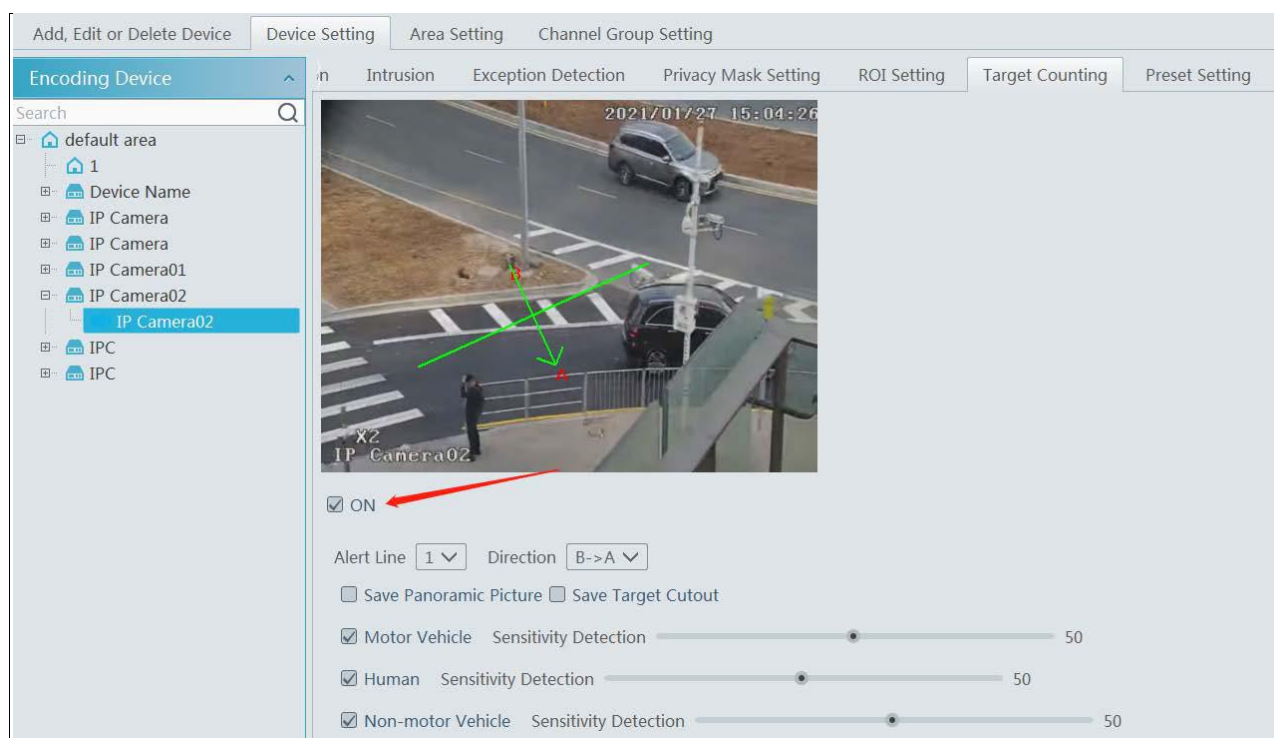
13 Target Counting

13.1 Task Management

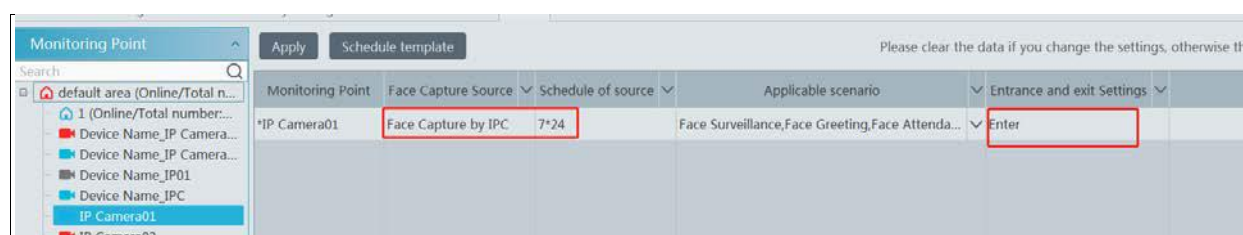
1. Enable “Target Counting” function of the IPC.

Note: the added camera must enable target counting function. If the IPC doesn’t support “Target Counting” function, it must support face detection function and the “Face Capture by IPC”, schedule and the entrance and exit type are set in advance.


IPC with Target Counting function

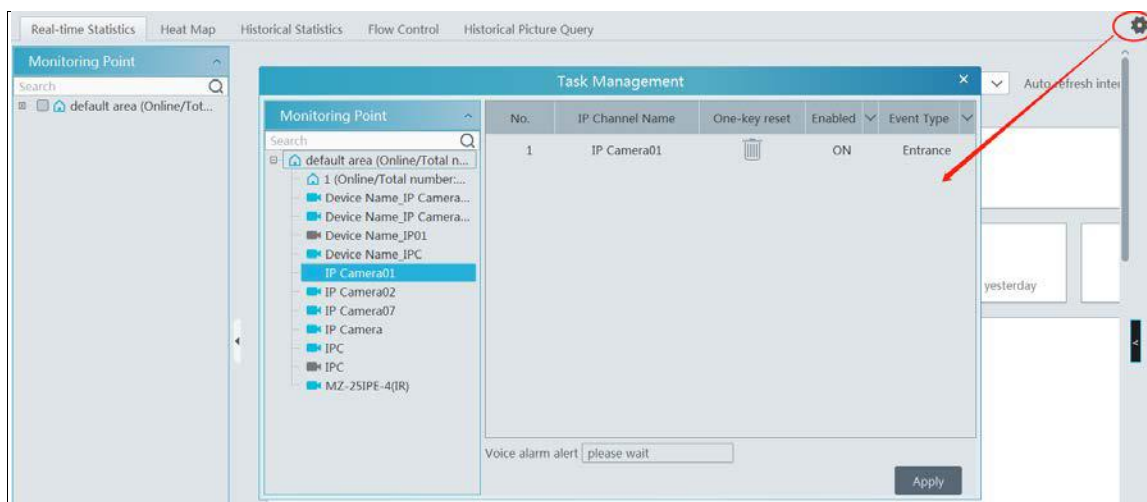


IPC without Target Counting function



Note: The IPC without target counting function must support face detection, or the target cannot be counted.

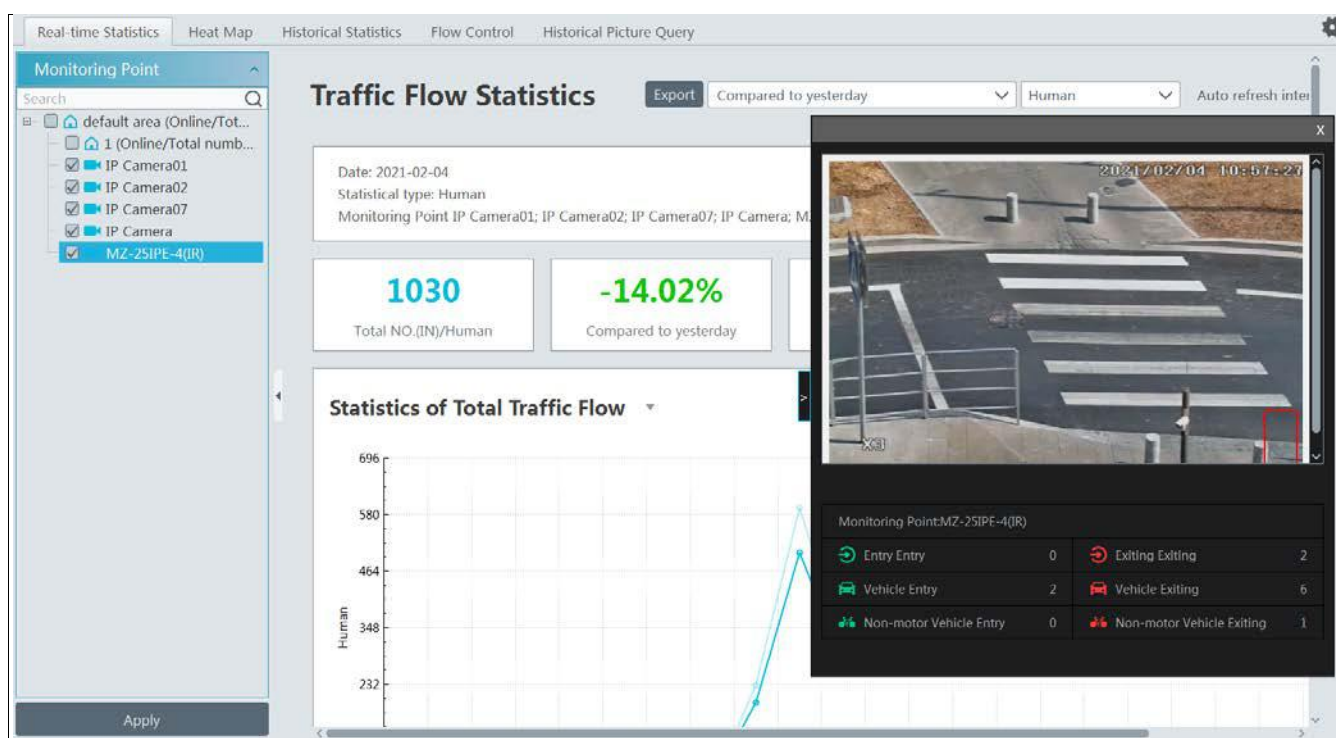
2. Go to Home→Target Counting interface. Clicking on  enters the following interface. Double click the camera with the target counting function and then select the schedule. After that, click [Apply] to save the settings.




13.2 Real-time Statistics

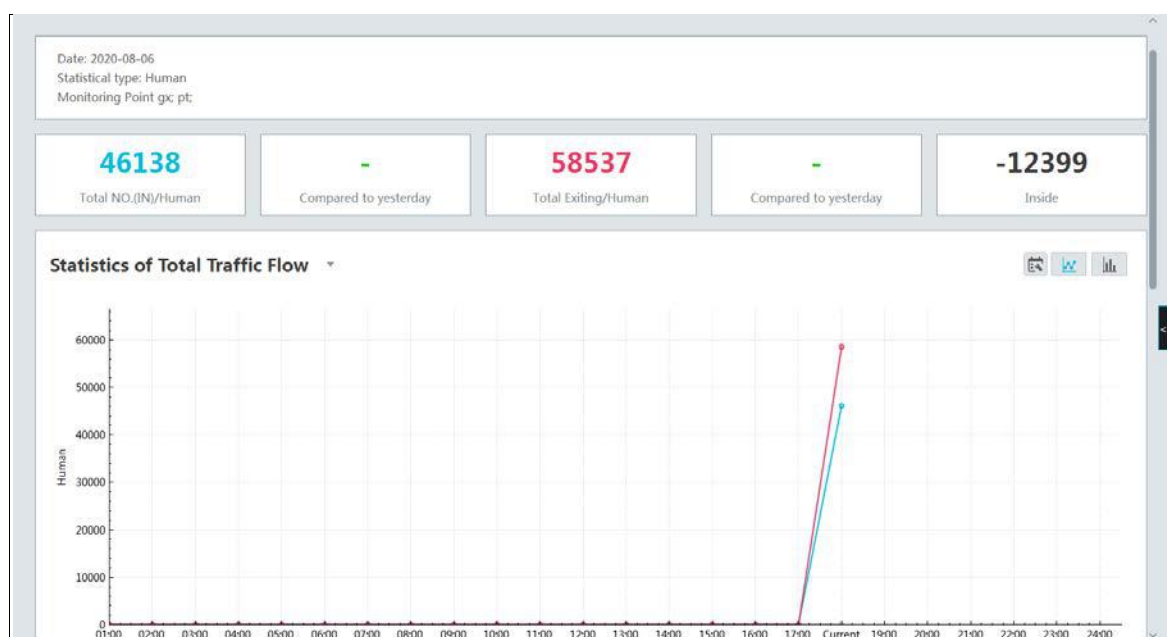
Go to Home→Target Counting→Real-time Statistics. Double click the camera with the target counting function to view the live image. The camera will automatically count the number of people/motor vehicle/non-motor vehicle crossing the predefined line and the system will automatically analyze the traffic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

Target counting Table(Human)

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	Su
IP Camera02	Out	2	0	1	0	1	12	27	
IP Camera02	Enter	0	0	0	0	0	0	0	
IP Camera02	Out	0	0	0	0	0	0	0	
IP Camera	Enter	0	0	0	0	0	0	0	
IP Camera	Out	0	0	0	0	0	0	0	
MZ-25IPE-4(IR)	Enter	0	0	0	0	0	0	0	
MZ-25IPE-4(IR)	Out	0	0	0	0	0	0	0	
Total	Enter	0	1	0	0	0	18	8	1
Total	Out	2	0	1	0	1	12	27	
Average	Enter	0	0	0	0	0	3	1	
Average	Out	0	0	0	0	0	2	5	

Proportion of people/vehicle flow(Human)

Statistical name	Entry number	Proportion of people/vehicle entering	Exiting number	Proportion
IP Camera01	1018	98.36%	0	
IP Camera02	17	1.64%	220	
IP Camera07	0	0.00%	0	
IP Camera	0	0.00%	0	

Target counting Table(Human)

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	Su
IP Camera02	Out	2	0	1	0	1	12	27	
IP Camera07	Enter	0	0	0	0	0	0	0	
	Out	0	0	0	0	0	0	0	
IP Camera	Enter	0	0	0	0	0	0	0	
	Out	0	0	0	0	0	0	0	
MZ-25IPE-4(IR)	Enter	0	0	0	0	0	0	0	
	Out	0	0	0	0	0	0	0	
Total	Enter	0	1	0	0	0	18	8	1
	Out	2	0	1	0	1	12	27	
Average	Enter	0	0	0	0	0	3	1	
	Out	0	0	0	0	0	2	5	

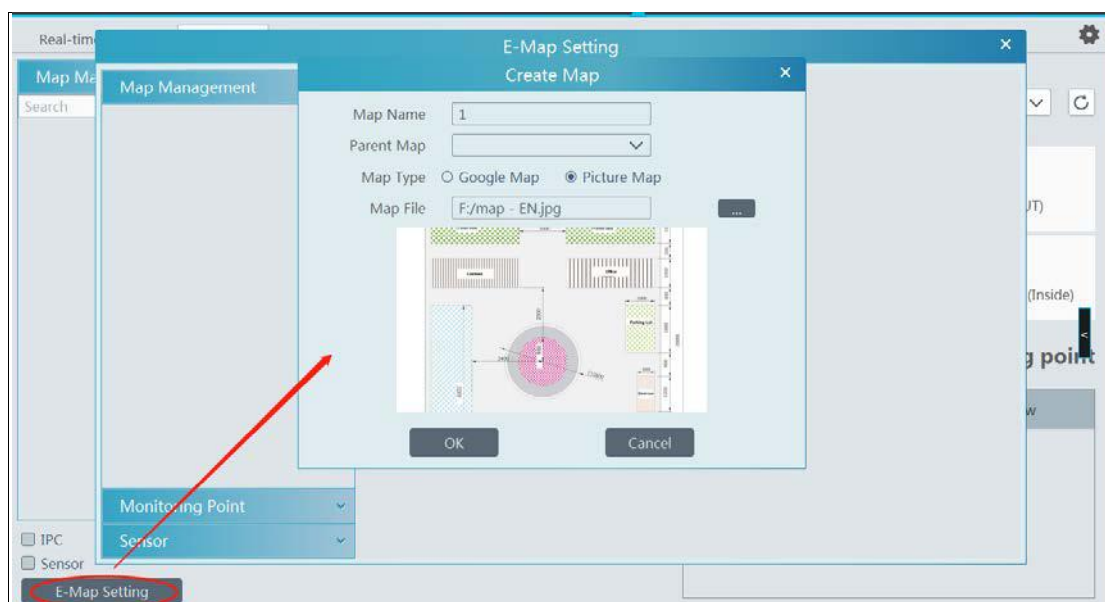
Proportion of people/vehicle flow(Human)

Statistical name	Entry number	Proportion of people/vehicle entering	Exiting number	Proportion
IP Camera01	1018	98.36%	0	
IP Camera02	17	1.64%	220	
IP Camera07	0	0.00%	0	
IP Camera	0	0.00%	0	

13.3 Heat Map

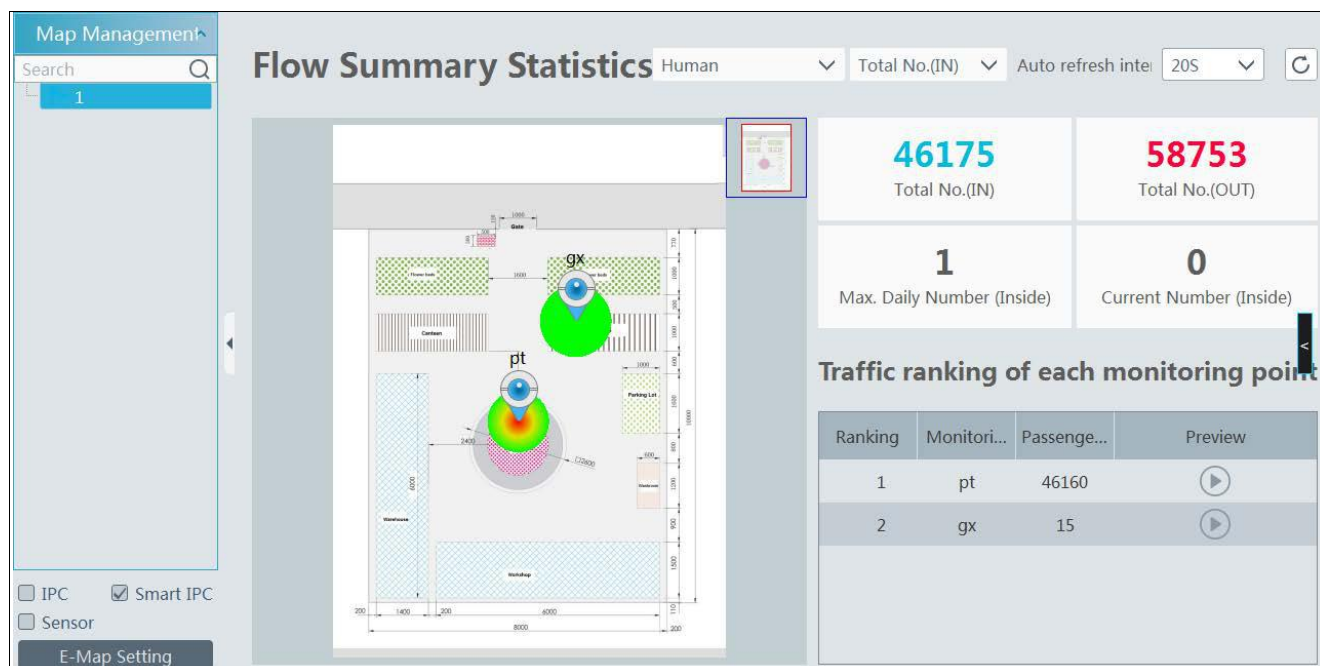
Go to Home→Target Counting→Heat Map interface.

Please create a map first.



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

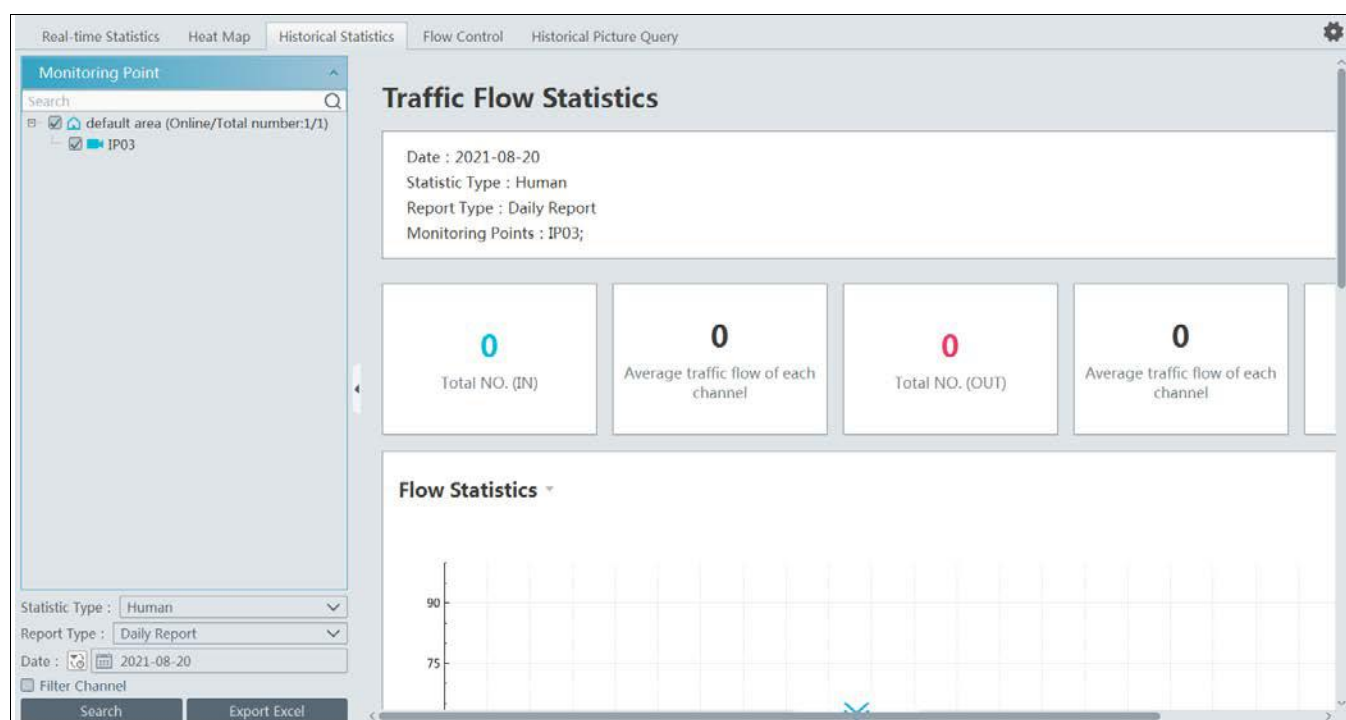
Put the cursor on the camera icon and then you will see the detailed flow statistics.



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.




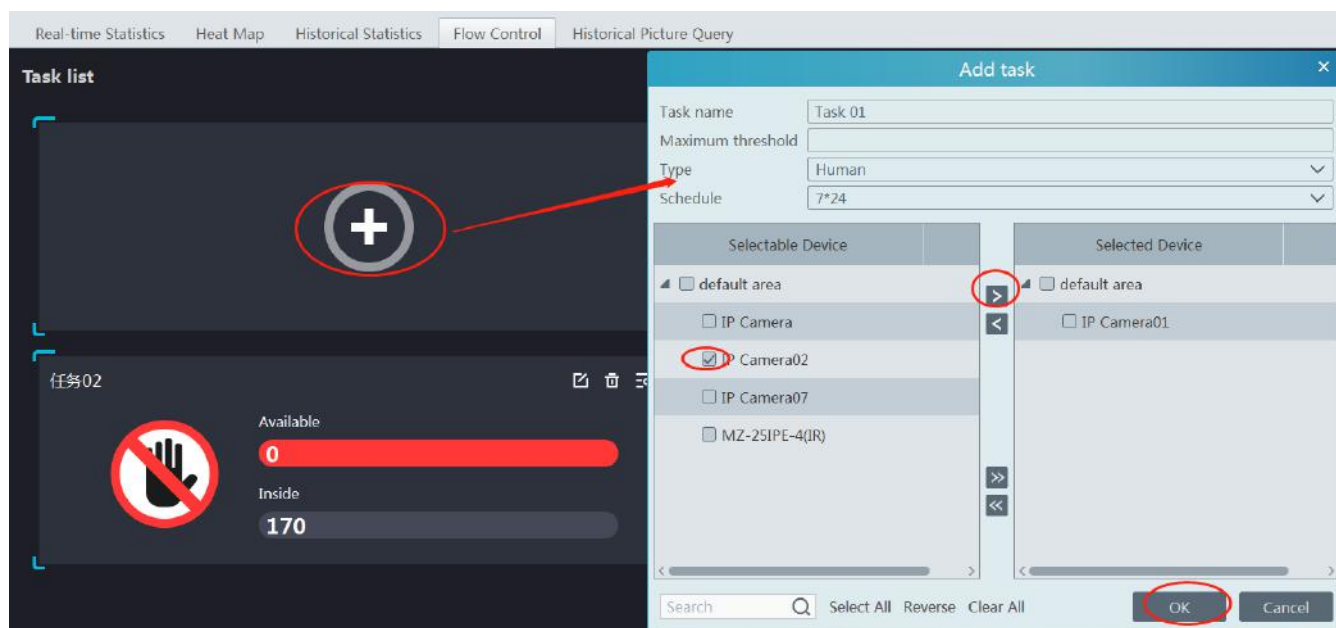
13.5 Flow Control

Flow Control: Control the people/vehicles entering or exiting in a specified area to avoid overcrowding. When the people/vehicles stay in

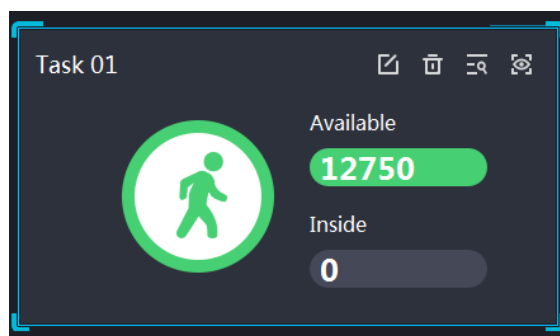
the specified area exceeds the threshold, the alarm will be triggered and no entry icon will display.


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


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

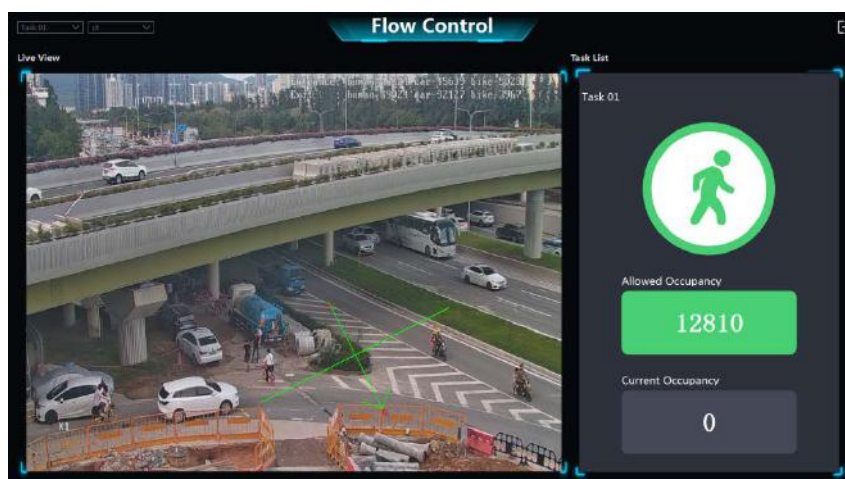


Then the available number and inside number can be viewed as below.




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

Click  to enter the flow control preview interface.



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.

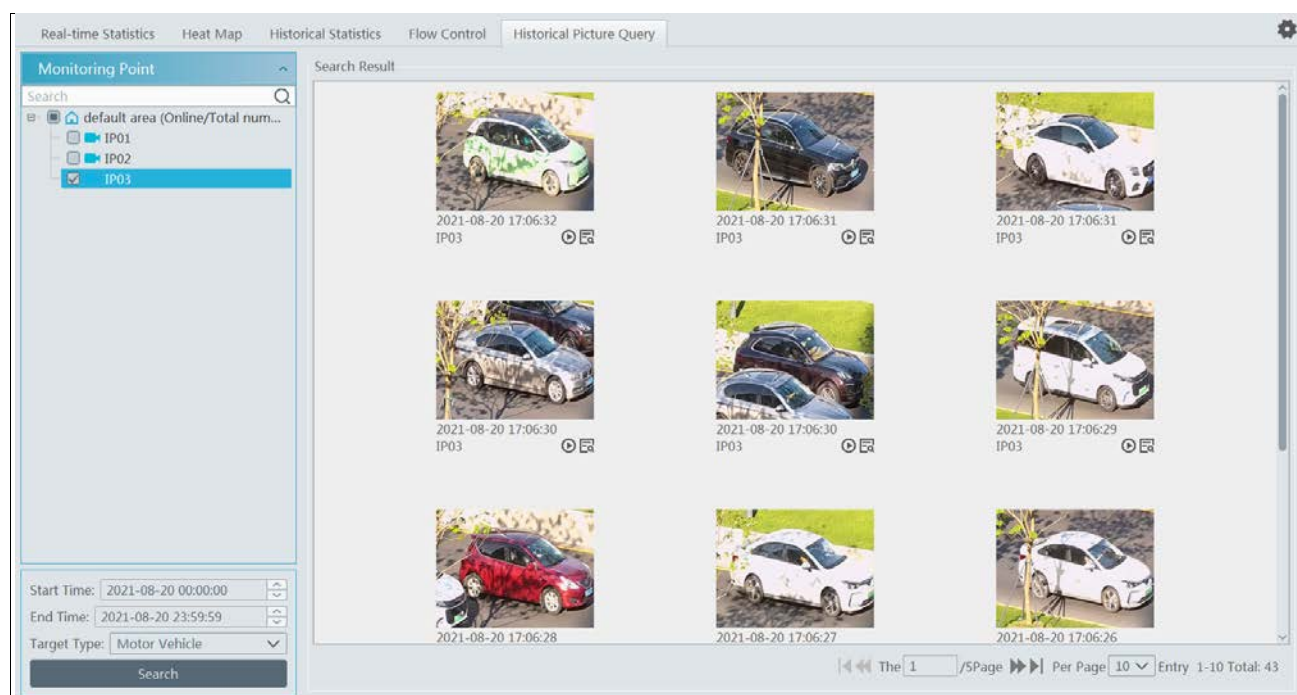
13.6 Search Historical Picture

Go to Home→Target Counting→Search Historical Picture interface. The historical snapshots of each camera can be searched.

Note: Only the snapshots of the IPC with target counting function can be searched here.

The snapshots of the IPC without target counting function can be searched in the search interface (Home→Face Surveillance→Search).


Check the IPC with target counting function, set the start and end time, target and then click [Search].




Click  to view the snapshot details as shown below.


Detail

Target Picture



Channel Name: IP03
Target Type: Motor Vehicle
Capture Time: 2021-08-20 17:06:30
Playback 

Original Image



Previous

Next

Close

14 Visit Management

The visitors can be managed effectively by using this system.

14.1 Add Access Control Device

You can add the face recognition & access control device to manage visitors.

Click Home→Resource Management→Add, Edit or Delete Device→Encoding Device to add face recognition & access control devices.

Note: Access control device includes face recognition and access control panel, face recognition IPC, Face recognition NVR, among which face recognition IPC and face recognition NVR can view the access records of the visitors.

14.2 Apply for a Visit

There are two ways to apply for a visit.

1. Go to the visitor list interface (Home→People Management→Visitor List) to add the visitor.

Fill out the information of the visitor and then select the visitee as needed.

The screenshot displays the 'Visitor List' interface with the 'Add Target' dialog box open. The 'Basic' tab is selected, showing fields for visitor information. The 'Visitee' dropdown menu is highlighted with a red box. A 'Select visitor' dialog box is also open, showing a list of visitors under the 'Default Group' with 'J' selected. The 'Select visitor' dialog also shows a preview of the selected visitor's face and details like Name, Calling, Work ID, and Group.

Select the access point.

Add Target

Basic Certificate

No.

Name

Gender ☐ Male ☒ Female

Phone No.

Effective time -

☒ Timeout reminder

Visitee

Access Point

Remarks

Add access control device

Select access control device

Selectable Device

- ☐ default area
- ☐ Device Name
- ☐ IP Camera02
- ☐ IPC
- ☐ MZ-25IPE-4(IR)

Selected Device

- ☐ default area
- ☐ IP Camera01

Search Select All Reverse Clear All

OK Cancel

2. Add the visitor information by real-time face snapshot

a. Add a visitor from the alarm pop-up window in the face surveillance interface

Real-time Monitoring Image Search by Face Search Configuration

Monitoring Point

Pass-hw(Today): 8118 Abnormal Temp: 4923 Mask Off: 0 Face Match(Today): 1477 BlackList: 3

Search

Alarm Source: Device Name_IP Camera

Verified

Person List

VIP List

Visitor List

Search

Default Group

BlackList

Add to Group

Basic Certificate

No.

Name

Gender ☒ Male ☐ Female

Phone No.

Effective time -

☐ Timeout reminder

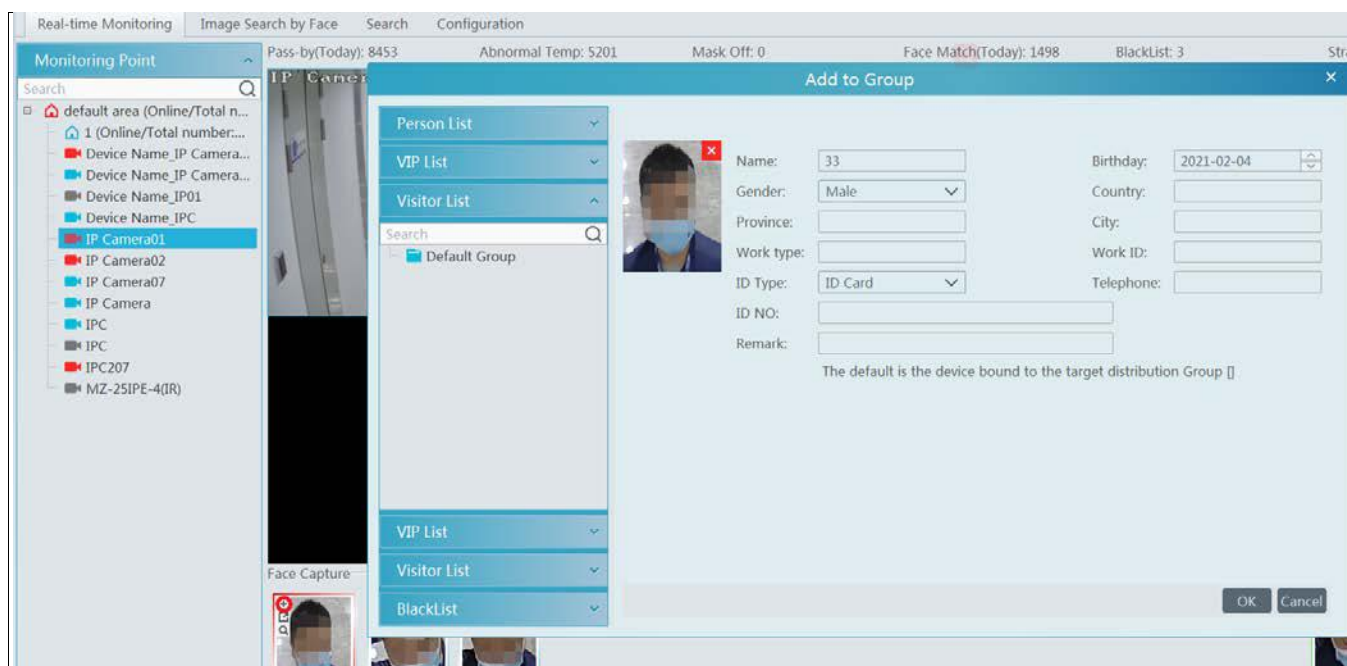
Visitee

Access Point

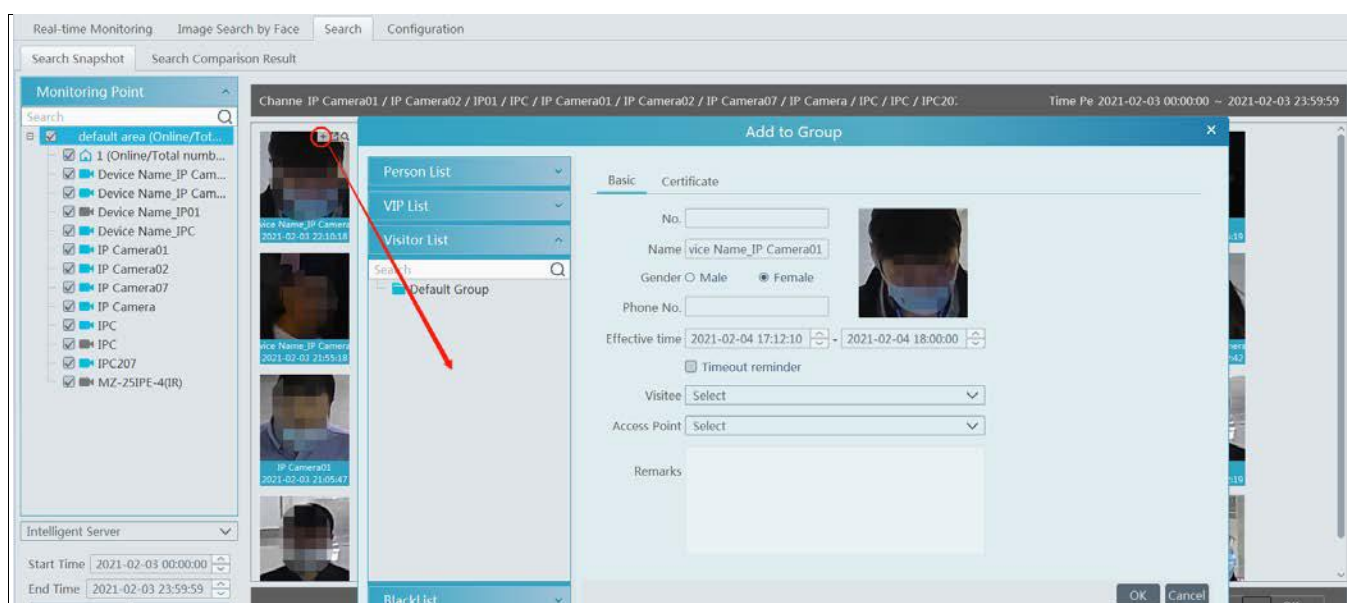
Remarks

OK Cancel

b. Add a visitor from the snapshot in the face surveillance interface




c. Add a visitor from the snapshot in the search snapshot interface (Home→Face Surveillance→Search→Search Snapshot)

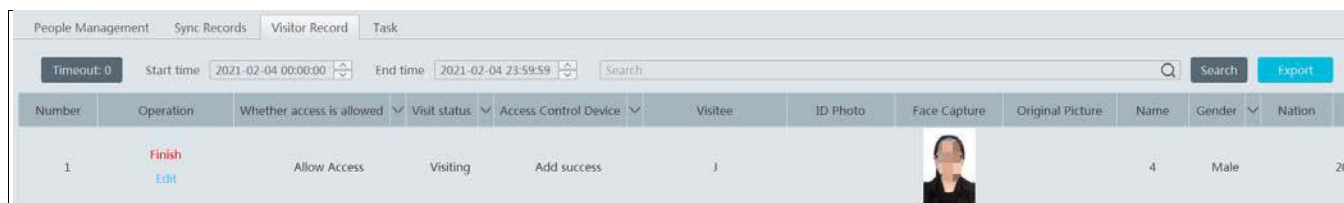


14.3 Search and Export Visitor Record

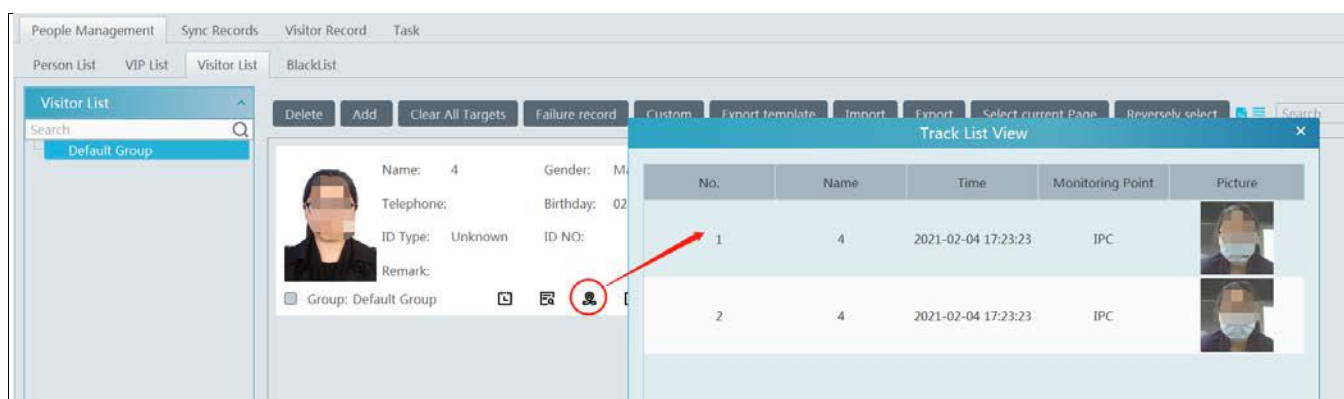
Set the start and end time and then click [Search] to search the visitor record.

You can also enter the key words and click  to search the visitor record.

Click [Export] to export the visitor record to an Excel file.



After the access control device is linked to the visitor, the access control device will report the matched information to the platform when the visitor came. Please refer to the following picture.

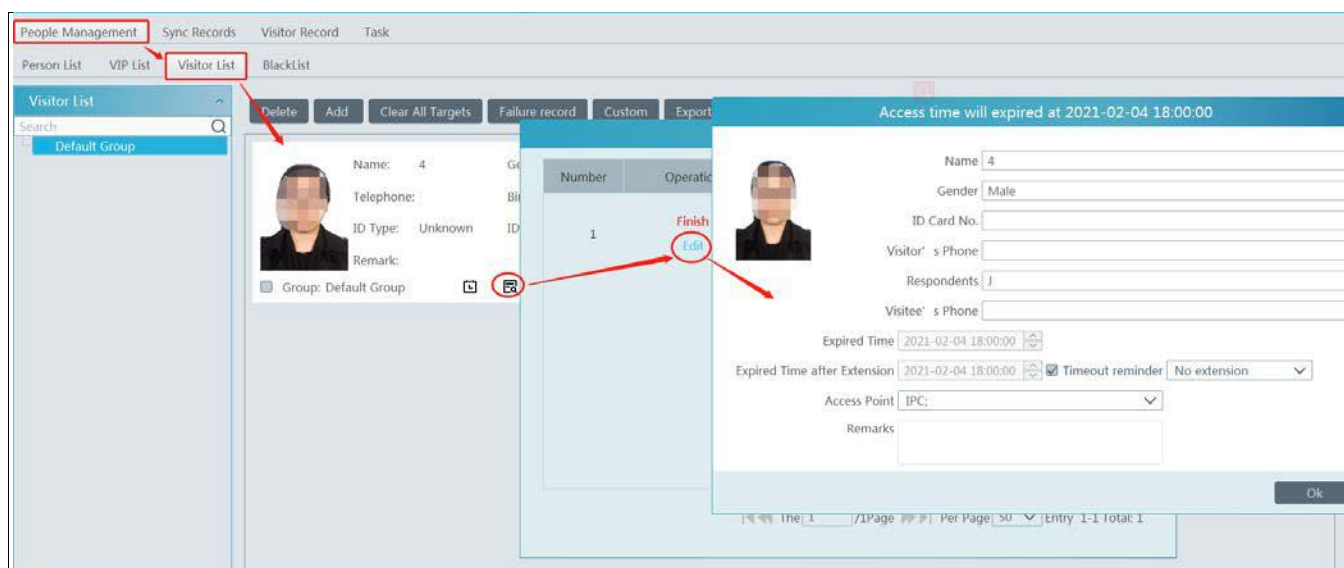


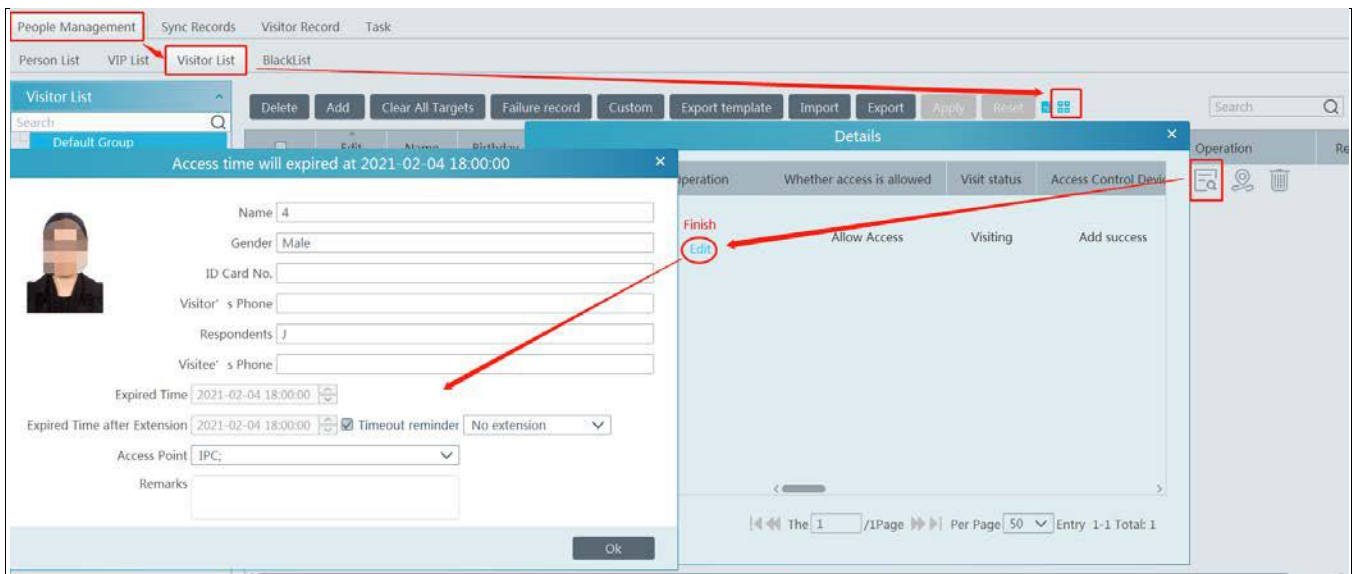
14.4 Exception Handling

14.4.1 Extending Visit Time or Modify Access Point

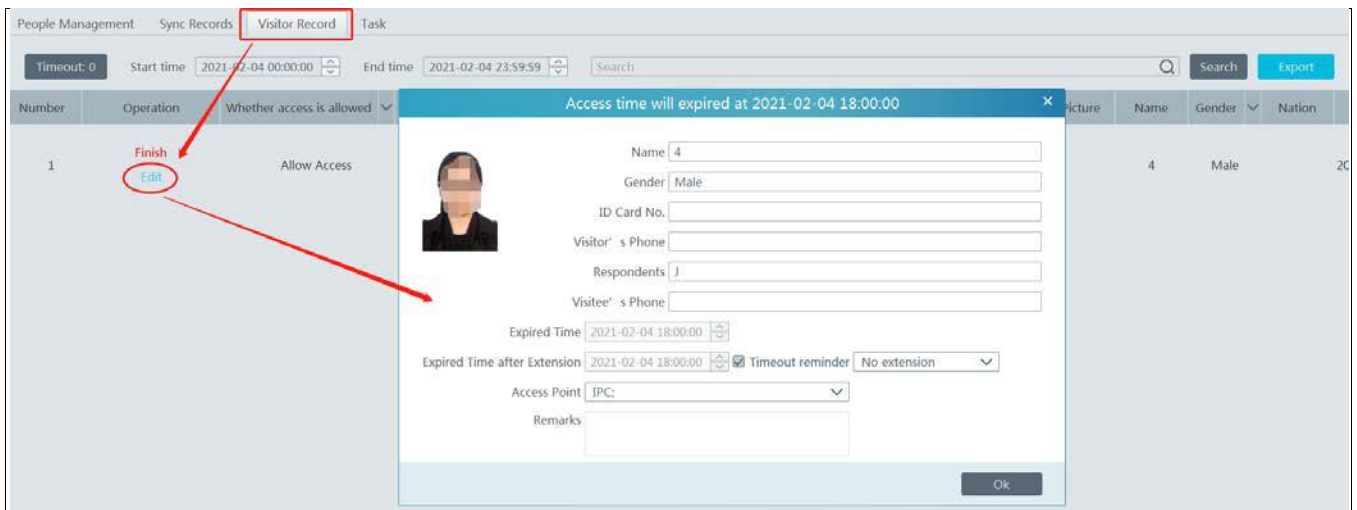
There are two ways to handle the exception.

1. Go to People Management → Visit list interface as shown below.





2. Go to People Management→Visitor Record interface as shown below.




For valid record, you can edit the visit time period and access point.

Please set the expired time or extend the visit time period as needed.

14.4.2 Not Visiting/Leaving Beyond the Given Time

When someone's visiting is about to exceed the given time or the pre-registered visitor doesn't come within the given time, a prompt window will appear to remind the operator to extend the visit time or take other actions.

Access time will expired at 2021-02-05 08:56:00



Name
Gender
ID Card No.
Visitor' s Phone
Respondents
Visitee' s Phone

Expired Time

Expired Time after Extension
☒ Timeout reminder


Access Point

Remarks

Ok

If this prompt window is not handled, the visitor will be marked as “Timeout”.

Clicking on the [Timeout] button appears the relevant records

People Management Sync Records Visitor Record Task											
Timeout: 1 Start time: 2021-02-04 00:00:00 End time: 2021-02-04 23:59:59 Search											
Number	Operation	Whether access is allowed	Visit status	Access Control Device	Visitee	ID Photo	Face Capture	Original Picture	Name	Gender	Nation
1	Finish(Timeout) Edit	Allow Access	Timeout not ...	Invalid	J				4	Male	20

15 Account and Permission

15.1 Create Account

Go to Home→Account and Permission.

User Management

Permission Management

Add

Delete

Create Security Questions / Answers

Search

<div><div></div></div>	Account Name	Enabled	Select Permission Group	MAC Address	Bind MAC Address	Edit	Delete	
<div><div></div></div>	admin	ON	Super Administrator	00:00:00:00:00:00	OFF	<div><div></div></div>	<div><div></div></div>	

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.

The left screenshot shows the 'User Management' table with the 'Create Security Questions / Answers' button highlighted. The right screenshot shows the 'Create Security Questions / Answers' dialog box with three sets of 'Question' and 'Answer' fields.

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

The 'Add User' dialog box contains the following fields and options:

- Enable ☒
- User Name*
- Old Password*
- Password*
- Confirm Password*
- At least 8 digits in length, including three or more of numbers/lowercase letters/uppercase
- Display Password ☐
- Permission Group*
- Bind MAC Address
- Remark
- OK
- Cancel

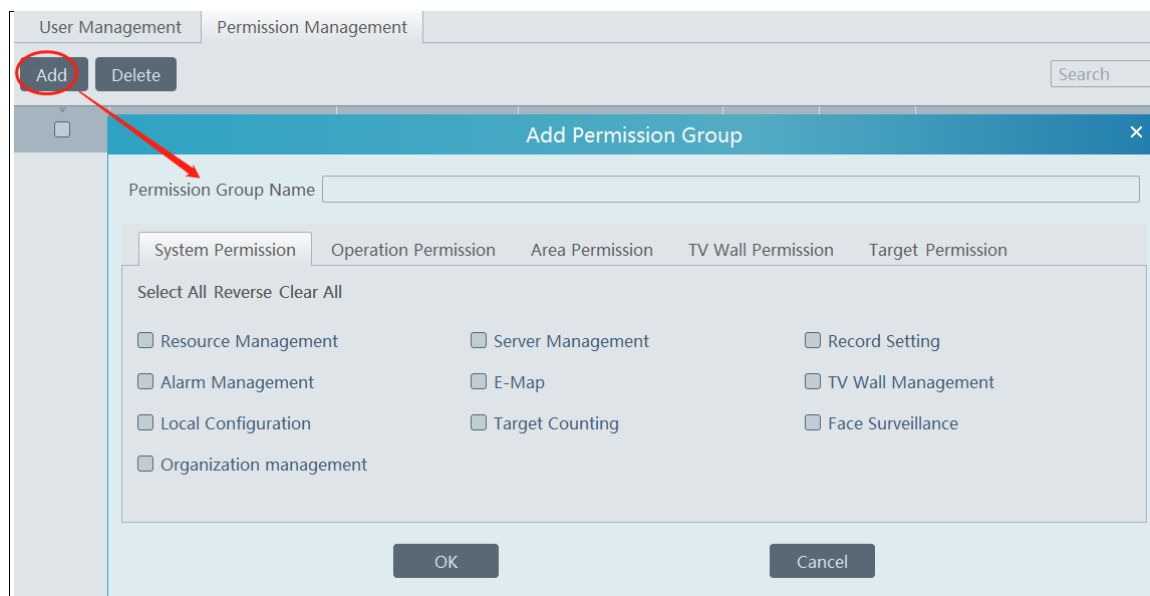
Enter user name and password. Then select permission group (it must be set in advance). Binding MAC address or remark can be filled in

as needed. After that, click [OK] to save.

15.2 User Permission Settings

Go to Home→Account and Permission → User Permission Group Setting.

- 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.

16 Operation and Maintenance Management

16.1 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.

Check and Export Log Backup and Restore Configuration Real-time Status Status Log

All Types Alarm Log Operation Log Config Log Exception Log

Start Time: 2021-01-27 00:00:00 End Time: 2021-01-27 23:59:59 Search Export

No.	Main Type	Record Time	Node Name	Sub Type	User Name	User Address
1	Alarm Log	2021-01-27 16:44:24	IP Camera02	Monitoring Point-...	None	None
2	Alarm Log	2021-01-27 16:44:22	IP Camera01	Monitoring Point-...	None	None
3	Alarm Log	2021-01-27 16:44:22	Device Name_IP Camera01	Monitoring Point-...	None	None
4	Alarm Log	2021-01-27 16:44:05	IP Camera	Monitoring Point-...	None	None
5	Alarm Log	2021-01-27 16:44:03	IP Camera01	Monitoring Point-...	None	None
6	Alarm Log	2021-01-27 16:44:03	Device Name_IP Camera01	Monitoring Point-...	None	None
7	Alarm Log	2021-01-27 16:44:00	IP Camera02	Monitoring Point-...	None	None

< > The 1 /233Page Per Page 50 Entry 1-50 Total: 11636

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.

16.2 Backup and Restore Configuration

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

Check and Export Log Backup and Restore Configuration Real-time Status Status Log

Backup System Configuration Restore System Configuration

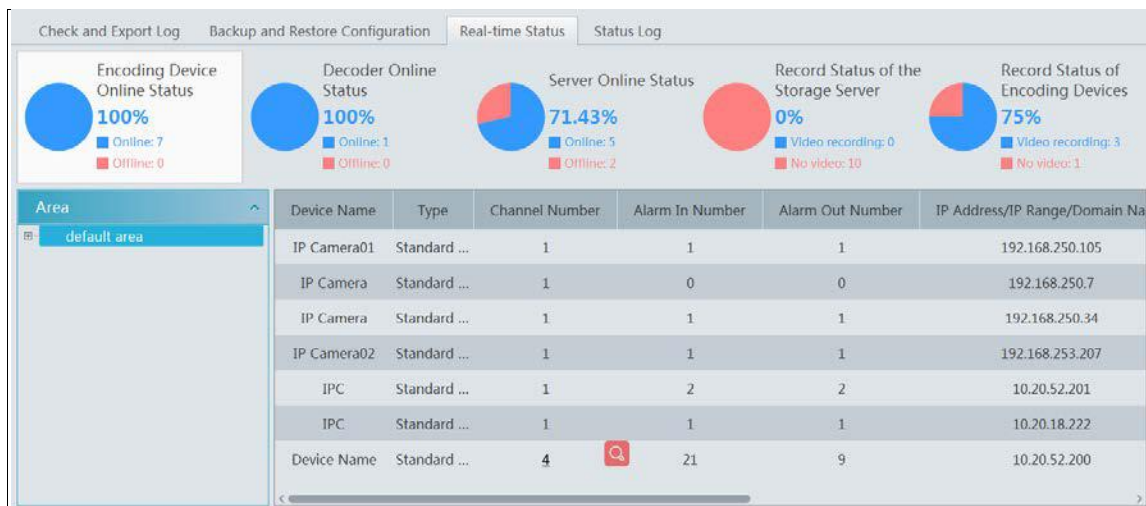
Caution: It will take several minutes to restore system configuration. Do not shut down the computer during restoring. The authentication server will restart automatically after restoration.

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. Then click [Restore System Configuration] in the new version to restore the system configuration.

16.3 Viewing Online Status

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

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



16.4 Viewing Status Log

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

Check and Export Log Backup and Restore Configuration Real-time Status Status Log						
Start Time		2021-01-27 00:00:00	End Time		2021-01-27 23:59:59	Search Export
No.	Type	Record Time	Node Name	Details		
1	Decoder online	2021-01-27 12:...	Decoder 1			
2	Monitor online	2021-01-27 12:...	Device Name_I...			
3	Decoder offline	2021-01-27 12:...	Decoder 1			
4	Monitor offline	2021-01-27 12:...	Device Name_I...			
5	Monitor offline	2021-01-27 11:...	Device Name_I...			
6	Decoder online	2021-01-27 03:...	Decoder 1			
7	Monitor online	2021-01-27 03:...	IP Camera01			
8	Encoding device online	2021-01-27 03:...	IP Camera01			
9	Monitor online	2021-01-27 03:...	Device Name_I...			
10	Monitor online	2021-01-27 03:...	Device Name_I...			

◀◀ The 1 /2Page ▶▶ Per Page 50 Entry 1-50 Total: 77

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

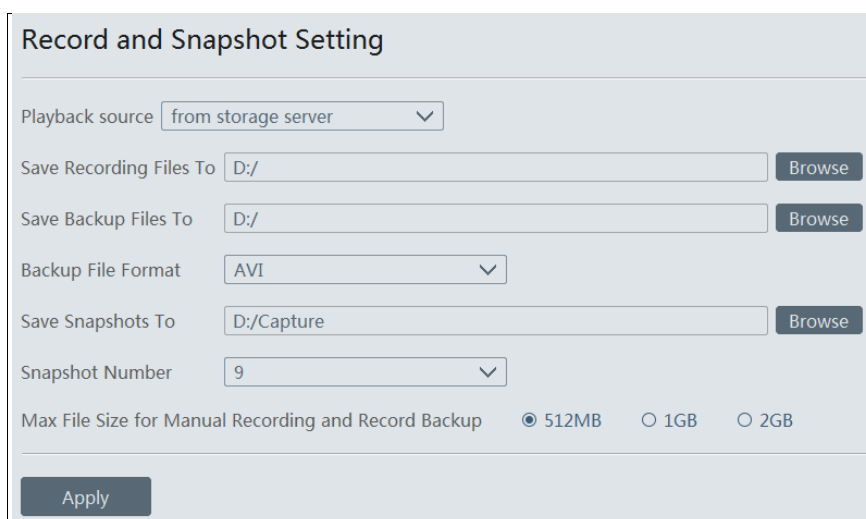
Set the start time and the end time and then click [Search] to search status logs.

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

17 Local Configuration

17.1 Record and Snapshot Settings

Go to Home→Local Configuration.



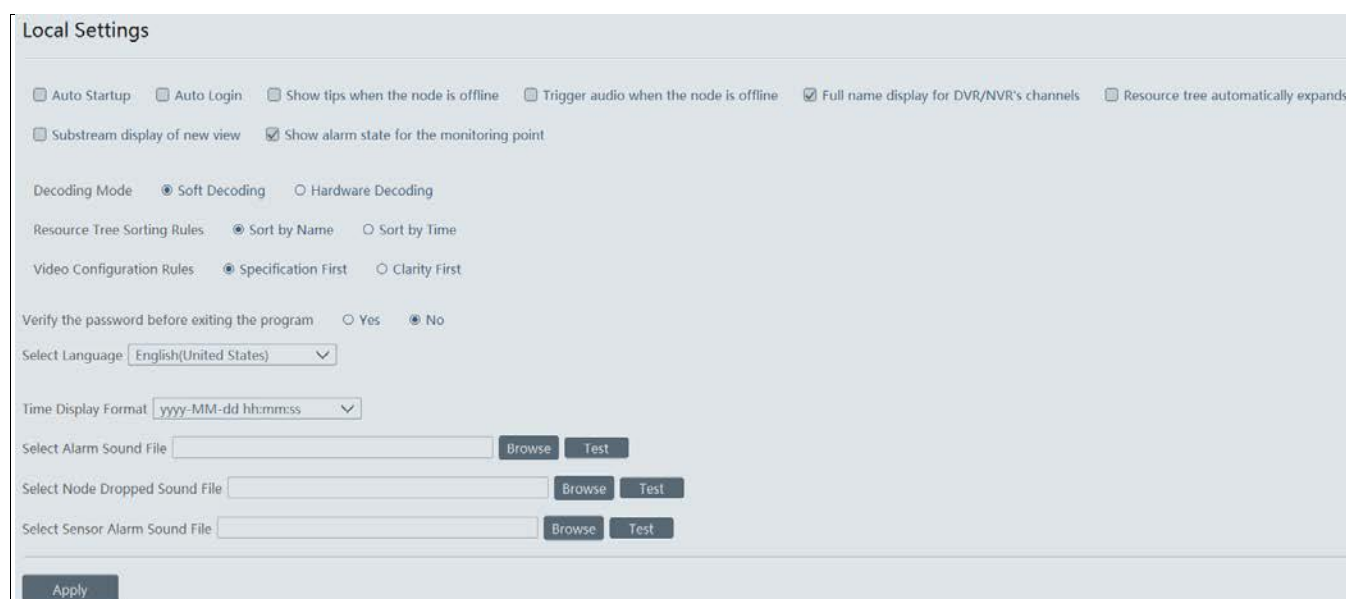
The 'Record and Snapshot Setting' interface contains the following fields and controls:

- Playback source:** A dropdown menu currently set to 'from storage server'.
- Save Recording Files To:** A text input field with 'D:/', followed by a 'Browse' button.
- Save Backup Files To:** A text input field with 'D:/', followed by a 'Browse' button.
- Backup File Format:** A dropdown menu currently set to 'AVI'.
- Save Snapshots To:** A text input field with 'D:/Capture', followed by a 'Browse' button.
- Snapshot Number:** A dropdown menu currently set to '9'.
- Max File Size for Manual Recording and Record Backup:** Three radio buttons: '512MB' (selected), '1GB', and '2GB'.
- Apply:** A button at the bottom left.

In this interface, playback source, 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.

17.2 Local Settings

Go to Home→Local Configuration→Local Setting.



The 'Local Settings' interface contains the following fields and controls:

- Auto Startup:** ☐ Auto Startup
- Auto Login:** ☐ Auto Login
- Show tips when the node is offline:** ☐ Show tips when the node is offline
- Trigger audio when the node is offline:** ☐ Trigger audio when the node is offline
- Full name display for DVR/NVR's channels:** ☒ Full name display for DVR/NVR's channels
- Resource tree automatically expands:** ☐ Resource tree automatically expands
- Substream display of new view:** ☐ Substream display of new view
- Show alarm state for the monitoring point:** ☒ Show alarm state for the monitoring point
- Decoding Mode:** ☒ Soft Decoding ☐ Hardware Decoding
- Resource Tree Sorting Rules:** ☒ Sort by Name ☐ Sort by Time
- Video Configuration Rules:** ☒ Specification First ☐ Clarity First
- Verify the password before exiting the program:** ☐ Yes ☒ No
- Select Language:** A dropdown menu currently set to 'English(United States)'.
- Time Display Format:** A dropdown menu currently set to 'yyyy-MM-dd hh:mm:ss'.
- Select Alarm Sound File:** A text input field, followed by 'Browse' and 'Test' buttons.
- Select Node Dropped Sound File:** A text input field, followed by 'Browse' and 'Test' buttons.
- Select Sensor Alarm Sound File:** A text input field, followed by 'Browse' and 'Test' buttons.
- Apply:** A button at the bottom left.

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.

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

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

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

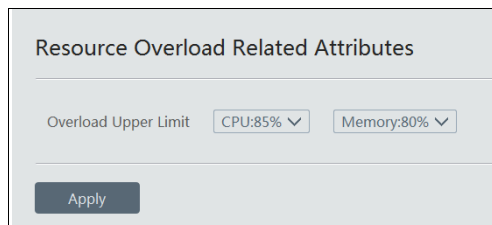
Decoding Mode: Soft decoding or hardware decoding is optional. When the graphics card doesn't support hardware decoding, please select "Soft Decoding" and the video decoding will be taken over by CPU.

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.

17.3 Overload Settings

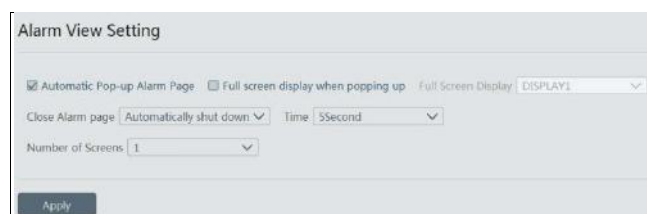
This system supports CPU and memory overload protection. When the system overloads, the monitor client will restrict the new video preview and playback operation and the overload tip will prompt. Go to Home→Local Configuration→Overload Setting. Select the overload upper limit and then click [Apply] to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



The screenshot shows a window titled "Resource Overload Related Attributes". Inside, there is a section labeled "Overload Upper Limit" with two dropdown menus: "CPU:85%" and "Memory:80%". Below these, there is an "Apply" button.

17.4 Alarm View Settings

Go to Home→Local Configuration→Alarm View Setting.



The screenshot shows a window titled "Alarm View Setting". It contains several settings: "Automatic Pop-up Alarm Page" (checked), "Full screen display when popping up" (unchecked), "Full Screen Display" (set to "DISPLAY"), "Close Alarm page" (set to "Automatically shut down"), "Time" (set to "5Second"), and "Number of Screens" (set to "1"). An "Apply" button is at the bottom.

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).

17.5 OSD Position Configuration

Click Home→Local 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.

17.6 System Configuration

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

In this interface, you can enable “Alarm preview using third stream” or “Do not display the alarm without schedule”.

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.

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.

17.7 Audio Uploading

Go to Home→Local Configuration→Audio Uploading.


Click [Add] to bring the following box.

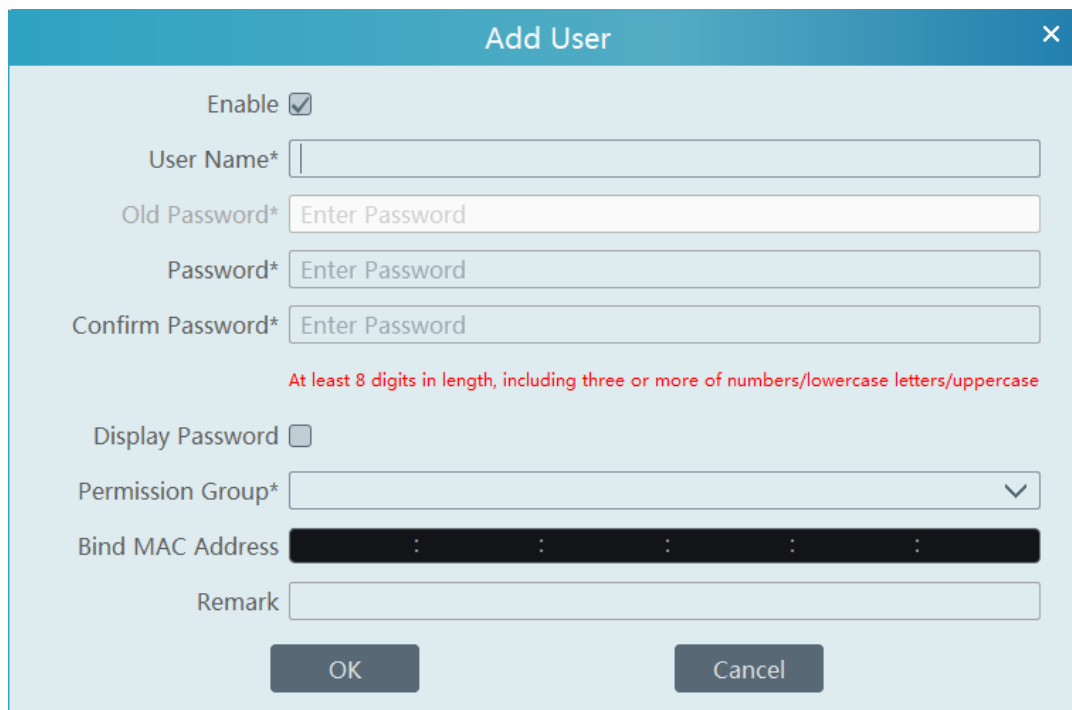
The screenshot shows a web interface for audio uploading. At the top, there are 'Add' and 'Delete' buttons and a search bar. Below this is a table with columns for a checkbox, 'Audio Na...', and 'Delete'. A modal dialog box titled 'Audio Uploading' is open in the center. It contains a file input field with a 'Browse' button and a 'Test' button. Below these is a text field for 'Audio Name'. A note specifies: 'Audio sampling rate: 16000Hz, 16bit; monophonic; file size: less than 10M; file format: ".wav"'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

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.

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.

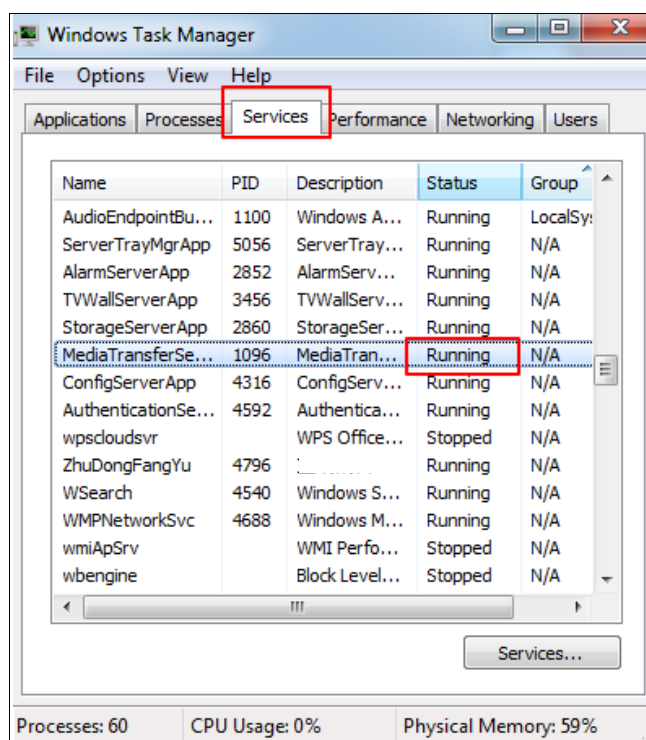


The 'Add User' dialog box contains the following fields and options:

- Enable:** ☒
- User Name*:**
- Old Password*:**
- Password*:**
- Confirm Password*:**
- Display Password:** ☐
- Permission Group*:**
- Bind MAC Address:**
- Remark:**
- Buttons:** OK, Cancel
- Validation:** At least 8 digits in length, including three or more of numbers/lowercase letters/uppercase

2. Unable to work normally after starting server.

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



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

- 1) Please check whether this user account is an administrator account. If this account is an operator account, please check whether it has the authority to view the device information.
- 2) Please check whether the media transfer server of the device has been started.

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

- 1) Please check whether the schedule of sensor alarm, motion detection alarm and so on are 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 logs in to the monitor client.

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

- 1) When the device configuration is required by the monitor client and prompt "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.