PS1A-MINISERVER

User Manual

PARAMONT

Notes

- Please read this user manual carefully to ensure that you can use the device correctly and safely.
- There may be several technically incorrect places or printing errors in this manual. The updates will be added into the new version of this manual. The contents of this manual are subject to change without notice.
- This device should be operated only from the type of power source indicated on the marking label. The voltage of the power must be verified before using the same. Kindly remove the cables from the power source if the device is not to be used for a long period of time.
- Do not place this device near any heat sources such as radiators, heat registers, stoves or other devices that produce heat.
- Do not place this device near water. Clean only with a dry cloth.
- Do not block any ventilation openings and ensure proper ventilation around the machine.
- Do not power off the device at normal recording condition.
- This machine is for indoor use only. Do not expose the machine in rain or moist environment. In case any solid or liquid get inside the machine's case, please turn off the device immediately and get it checked by a qualified technician.
- Do not try to repair the device by yourself without technical aid or approval.
- When this product is in use, the relevant contents of Microsoft, Apple and Google will be involved in. The pictures and screenshots in this manual are only used to explain the usage of our product. The ownerships of trademarks, logos and other intellectual properties related to Microsoft, Apple and Google shall belong to the above-mentioned companies.
- All examples and pictures used in the manual are from one of the models for reference purpose.

Disclaimer

- With regard to the product with internet access, the use of product shall be wholly at your own risks. Our company shall be irresponsible for abnormal operation, privacy leakage or other damages resulting from cyber attack, hacker attack, virus inspection, or other internet security risks; however, our company will provide timely technical support if necessary.
- Surveillance laws vary from country to country. Check all laws in your local region before using this product for surveillance purposes. We shall not take the responsibility for any consequences resulting from illegal operations.
- The storage period of the personal data depends on the capacity of the storage devices the users use and all data stored in the device shall be handled by themselves. Our company shall not be responsible for the data loss.

Cyber Security Recommendations

- Change passwords and use strong passwords. At least 8 characters or a combination of characters, numbers, and upper and lower case letters should be used in your password.
- Regularly change the passwords of your devices to ensure that only authorized users can access the system.
- Change default ports (like HTTP, data port) to reduce the risk of outsiders being able to access.
- It is recommended to set the firewall of your router. But note that some important ports cannot be closed (like 80, 6036).

Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1. FCC compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

2. FCC conditions:

- This device complies with part 15 of the FCC Rules. Operation of this product is subject the following two conditions:
- This device may not cause harmful interface.
- This device must accept any interference received, including interference that may cause undesired operation.

CE Information

CE The products have been manufactured to comply with the following directives.

EMC Directive 2014/30/EU

RoHS

The products have been designed and manufactured in accordance with Directive EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

2012/19/EU (WEEE directive): The Directive on waste electrical and electronic equipment (WEEE Directive). To improve the environmental management of WEEE, the improvement of collection, treatment and recycling of electronics at the end of their life is essential. Therefore, the product marked with this symbol must be disposed of in a responsible manner.

Directive 94/62/EC: The Directive aims at the management of packaging and packaging waste and environmental protection. The packaging and packaging waste of the product in this manual refers to must be disposed of at designated collection points for proper recycling and environmental protection.

REACH(EC1907/2006): REACH concerns the Registration, Evaluation, Authorization and Restriction of Chemicals, which aims to ensure a high level of protection of human health and the environment through better and earlier identification of the intrinsic properties of chemical substances. The product in this manual refers to conforms to the rules and regulations of REACH. For more information of REACH, please refer to DG GROWTH or ECHA websites.

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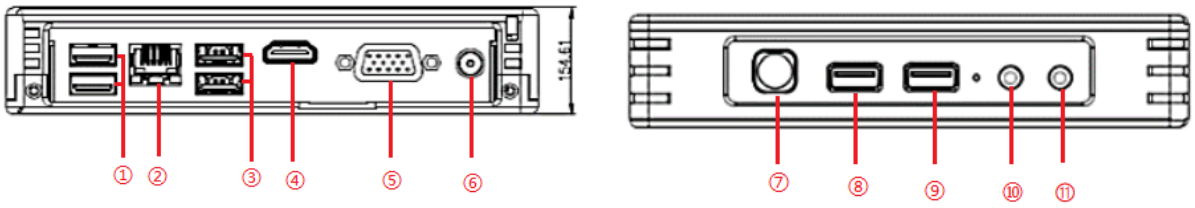
1 Introduction

1.1 Introduction

Based on the conception of “AIll-in-One”, the mini NVMS server is a management server specially designed and developed for security surveillance application. Its software is installed before delivery and combines management, video preview and intelligent applications. Due to its low lost, simple deployment, flexible expansion, powerful performance and high reliability, it can meet the requirements of the medium and small-sized security systems.

1.2 Front Panel Instructions

The picture below is for reference only. Please refer to the interfaces and indicators of the real server.



No.	Description	No.	Description
1	USB3.0 *2	7	Power button（LED）
2	Ethernet port（LAN）	8	USB3.0 *1
3	USB2.0 *2	9	USB3.0 *1
4	HDMI output	10	Audio Input
5	VGA output	11	Audio Output
6	DC power supply		

1.3 System Components

1.3.1 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.

1.3.2 Background Monitor

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

1.3.3 Control Center

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

1.4 Default System

The default network settings are as follows:

The default IP address:**192.168.0.10**；the default HTTP port: **8000**

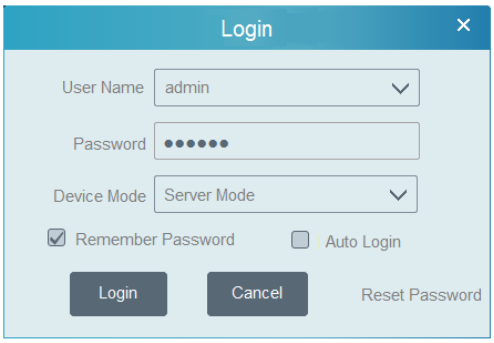
Web client login: http://192.168.0.10:8000

The default username: **admin**；the default password: **123456**

2 Login & Network Configuration

2.1 Login

Before starting, please make sure network cable, monitor and power are connected. After the server is started, the following window will appear as shown below.
Server mode or client mode can be selected when logging in. If “Client mode” is selected, you need to enter the address and port of the authentication/management server. Then this server will be used as a client. If “Server mode” is selected, this server can be used directly.



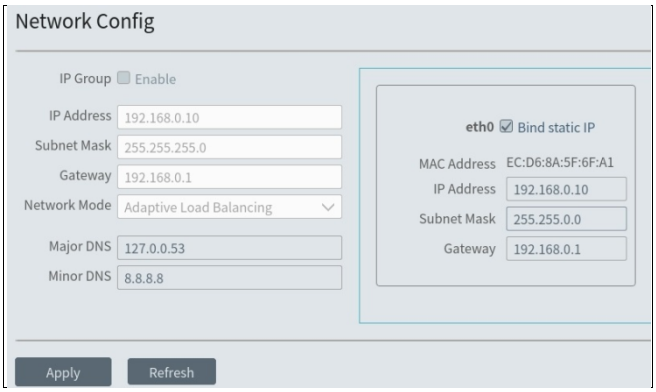
① Enter username and password (the default username is admin; the default password is 123456).
② Enter the IP address and port of the authentication server (the default port is 6003).
③ Check “Remember Password” or “Auto Login” as needed.
④ Click [Login].

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

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

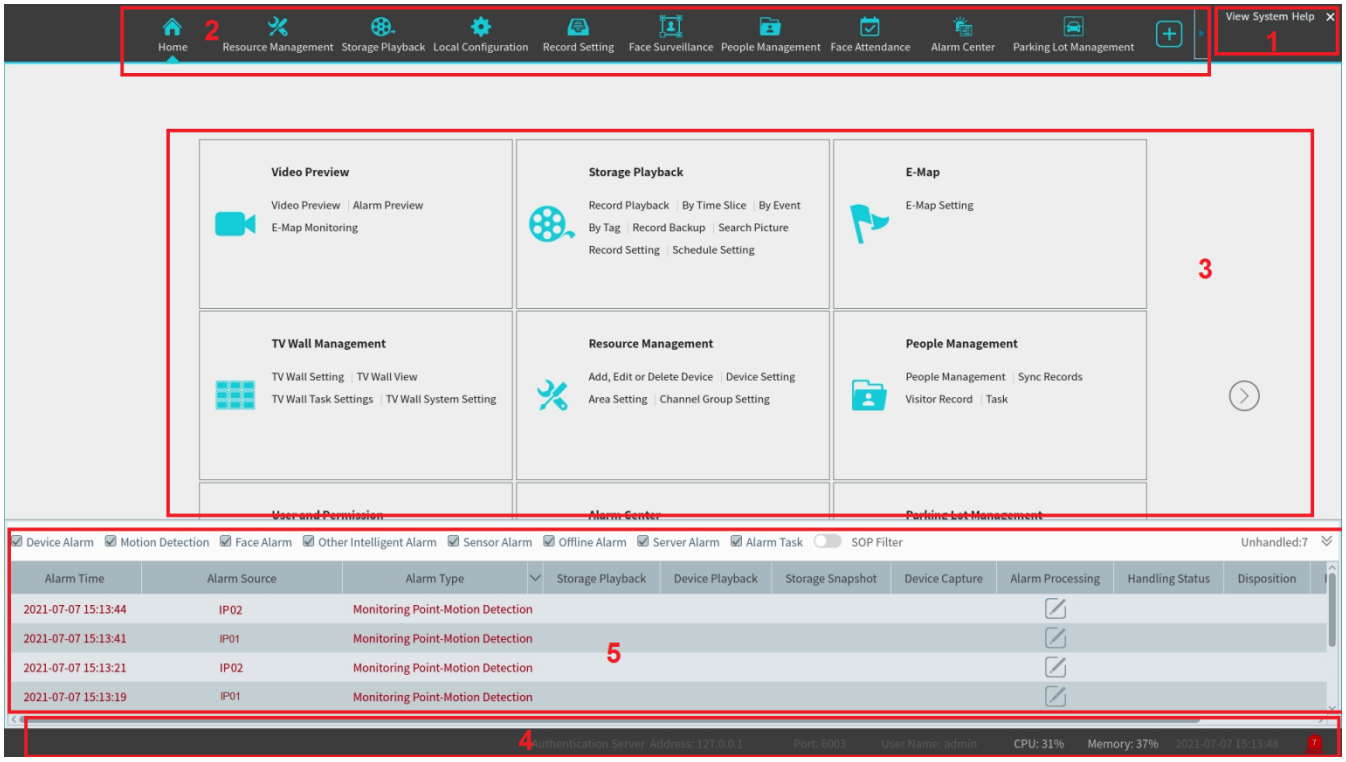
2.2 Network Configuration

After logging in, enter Local Configuration→Network Config interface as shown below.



Set the network parameter according to the actual condition.

2.3 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 view”, “Change to home page”, “Change to smart view page”
System	Including “Live View”, “Record Playback”, “E-Map”, “TV Wall Management”, Resource Management”, “Account and Permission”, “Alarm Center” “Operation and Maintenance Management”, “Face Surveillance”, “Face Greeting”, “Target Counting”, etc.
Help	Including “Register license”, “About NVMS”, etc.

Functional area

Menu	Description
Video Preview	To view live images and to record, snapshot and talk, etc.
Storage Playback	To remotely play the local records or back up records.
E-Map	To manage and display maps, hot spots, etc.
TV Wall Management	To set TV wall and decoding videos on TV Walls
Resource Management	To add, modify or delete areas, devices or servers.
Group Management	To manage people and assign the access permission
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.
Temperature measurement	To view the statistics of body temperature
Face Greeting	To welcome visitors based on face recognition technology
Face Attendance	To help to manage staff attendance based on face recognition technology
Parking Lot Management	To manage vehicles in the parking lot
Target Counting	To monitor and analyze people/vehicle flow in real time
Operation and Maintenance Management	To search, export and maintain logs.
Configuration	To set system startup and maintenance, overload, alarm view, etc.
Functional Selection	To select common functions displayed on the home page.

Other buttons:

Button	Description
	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.

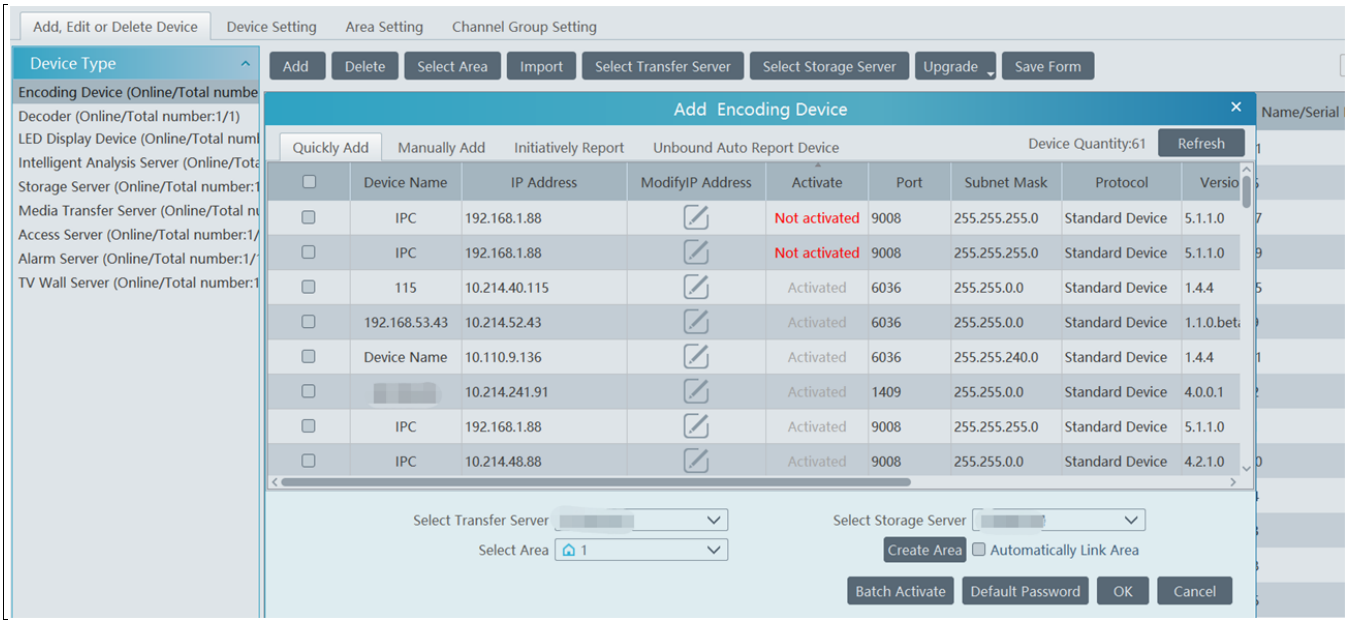
Common buttons:

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

3 Device Management

3.1 Add Encoding Device

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



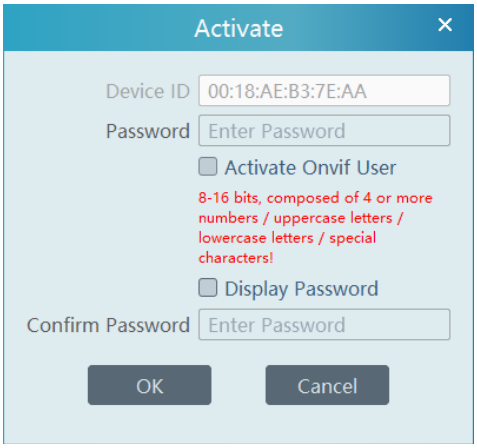
Then click “Add” to add devices. You can add multiply devices in this interface, such as face detection IPC, face recognition IPC/NVR, face recognition terminal, active deterrence IPC, ANPR camera, etc.

In the encoding device interface, you can view the activated device or inactivate device. Click the “Activate” tab to sort.

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

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

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



3.1.1 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].

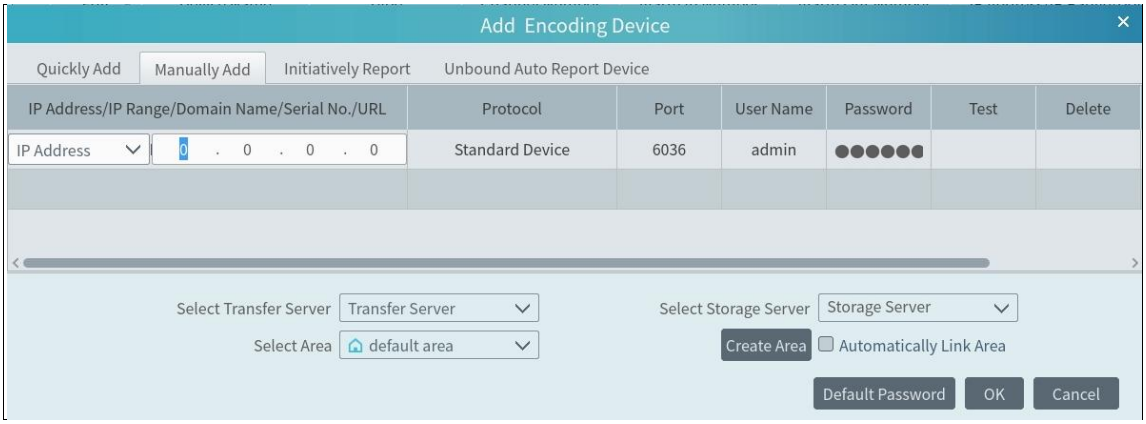
Click “Default password” to set the default username and password of the devices from different manufacturers, such as Hikvision, Dahua, etc. The default username of the standard device is “admin and the default password of the standard device is “123456”.

Note:

* The default media transfer server can be selected when adding devices. If you want to save recorded files to the storage server, you need to create a storage server in advance (see Add Storage Server) and then select the storage server when adding devices.

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

3.1.2 Manually Add



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

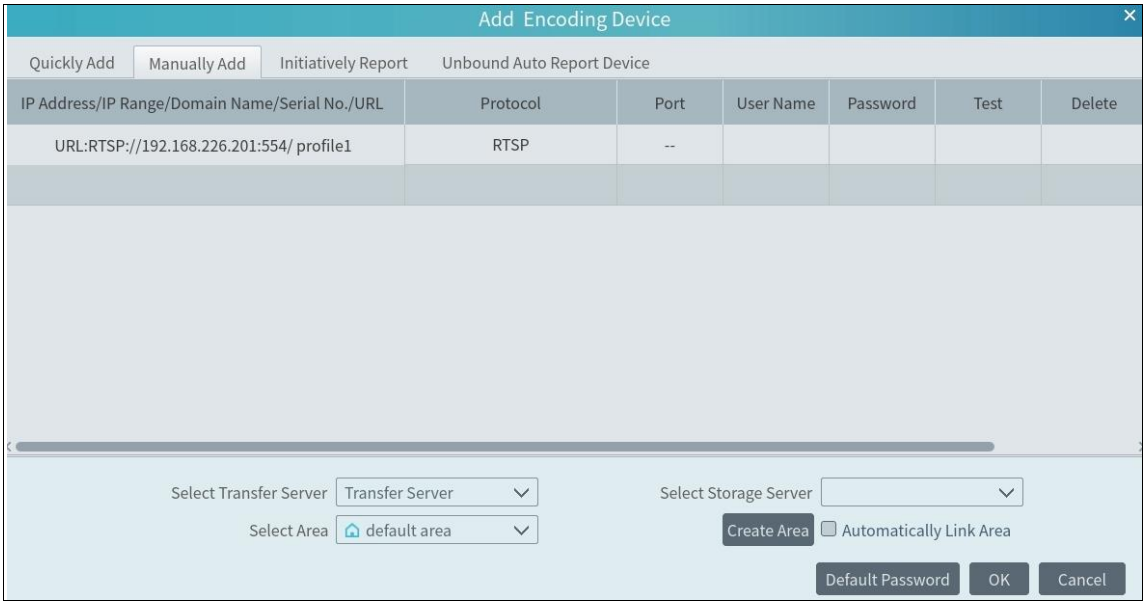
② Click [Test] to test whether the device is connected successfully or not.

③ Select transfer server, storage server and area and then click [OK].

Devices can be added in batch by adding IP range.

If “Serial NO.” is selected, please make sure that the device enables NAT2.0.

If “URL” is selected, you shall add the device via RTSP protocol. Enter the URL, username and password of the device and then click [Test] to test whether the device is connected successfully or not.



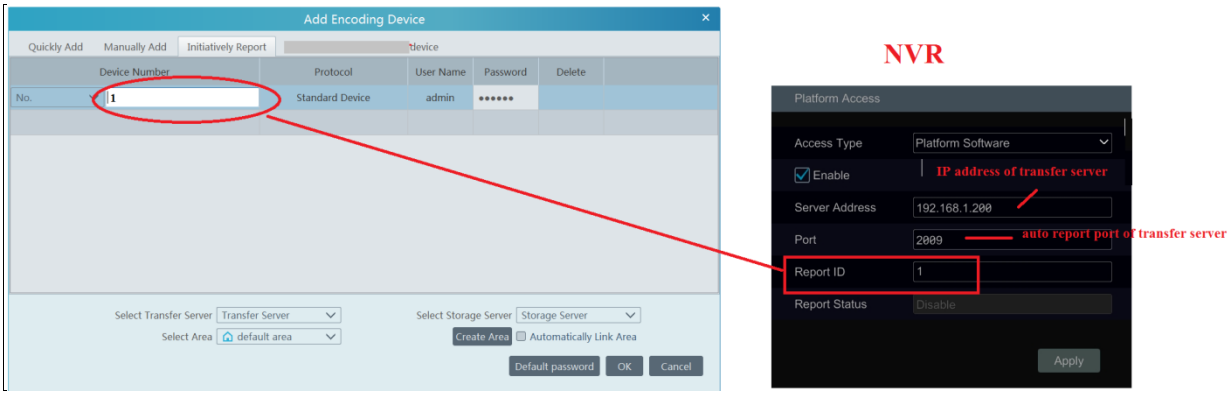
How to get URL?

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

The default RTSP port is 554 and the URL format is “rtsp://IP or domain name:port/profile1”. For example: rtsp://192.168.1.1:554/profile1. Profile1stands for main stream; profile2 stands for sub stream; profile3 stands for the third stream. The URL of the device of other companies, please get the URL from its web client or the third-party tools (like ODM).

3.1.3 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.

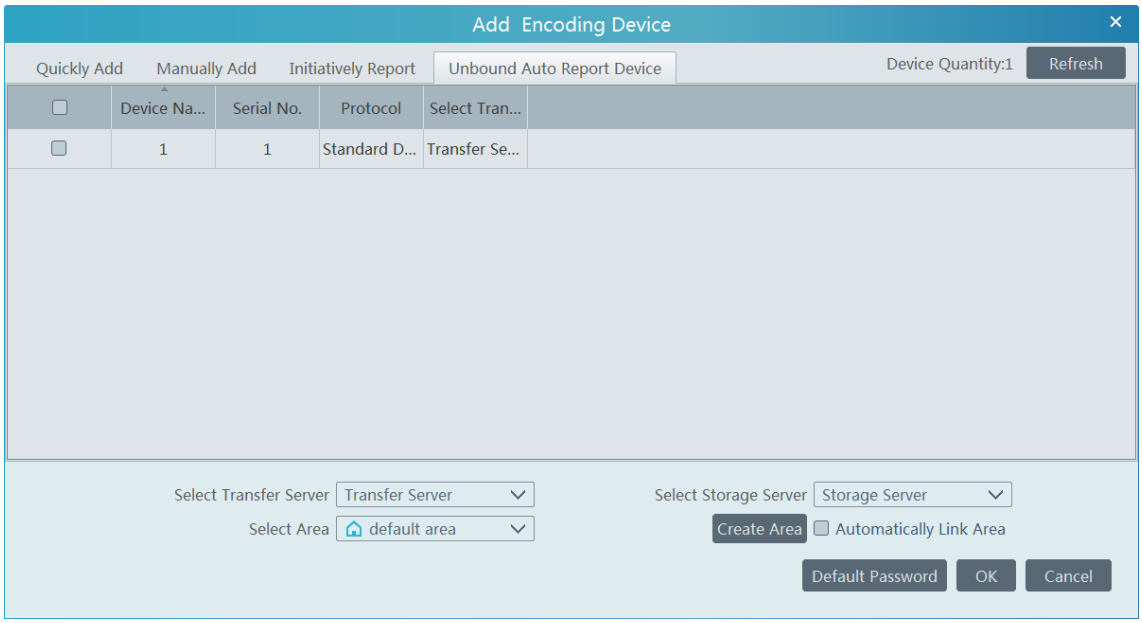
- If the DVR/NVR is needed to add, please go to Network→Platform Access interface of the DVR/NVR. Check “Enable”, enter the IP address and port (default 2009) of the NVMS and then set the device number of the DVR/NVR.
- If the IP camera is needed to add, please go to Network Configuration→Server Configuration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

3.1.4 Quickly Add Auto Report Device

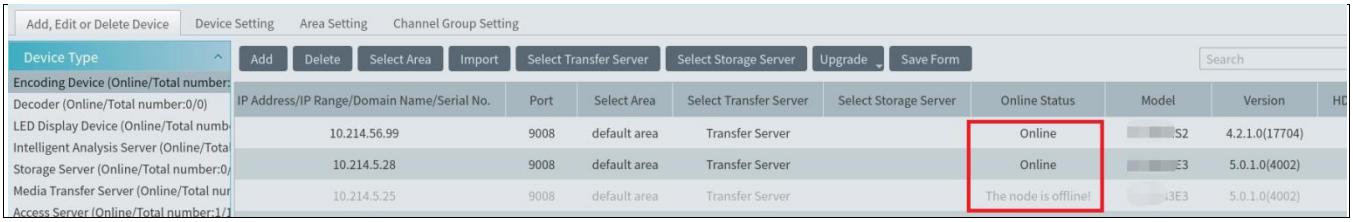
For the auto report devices in the same local network with the platform, you can go to the “Unbound Auto Report Device” interface to add them quickly.

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.



3.2 Modify or Delete Device

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

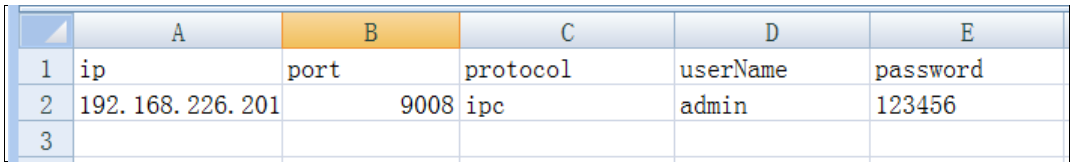


The device channel number, alarm status, online status and record status can be viewed from the above table.

3.3 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.



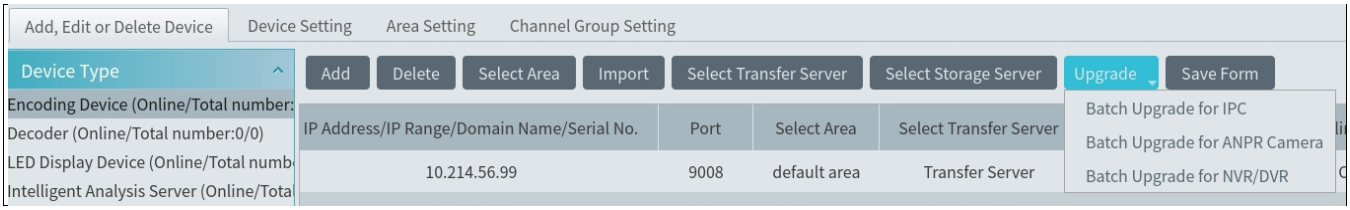
	A	B	C	D	E
1	ip	port	protocol	userName	password
2	192.168.226.201	9008	ipc	admin	123456
3					

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

Export encoding devices: insert the USB storage device into the server, check the device you want to export and then click [Export] to export the device list.

3.4 Device Upgrade

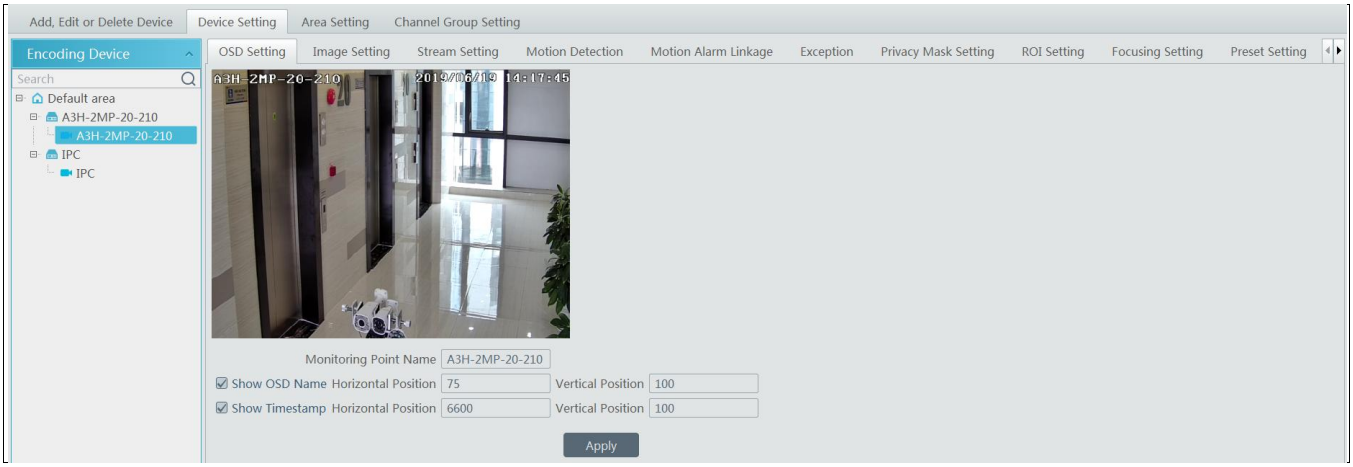
In the "Add, Edit or Delete Device" interface, check the devices you want to upgrade and then click [Upgrade]. Select the upgrade type as needed.



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

3.5 Device Setting

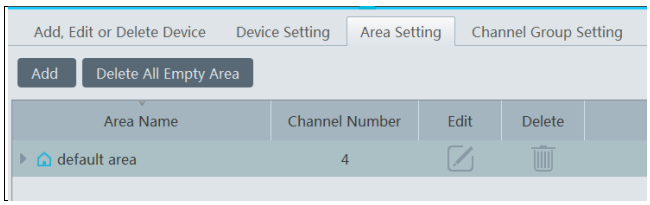
Go to Home→Device Setting interface as shown below. In this interface, the parameters of the device can be set up.

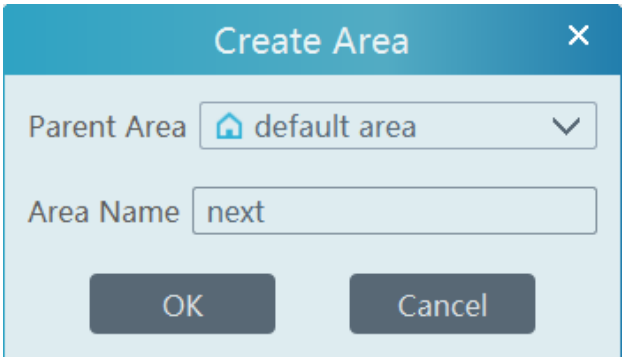


Different devices have different menus. Please configure the device according to the corresponding user manual.

3.6 Area Setting

Go to Home→ Area Setting interface as shown below.



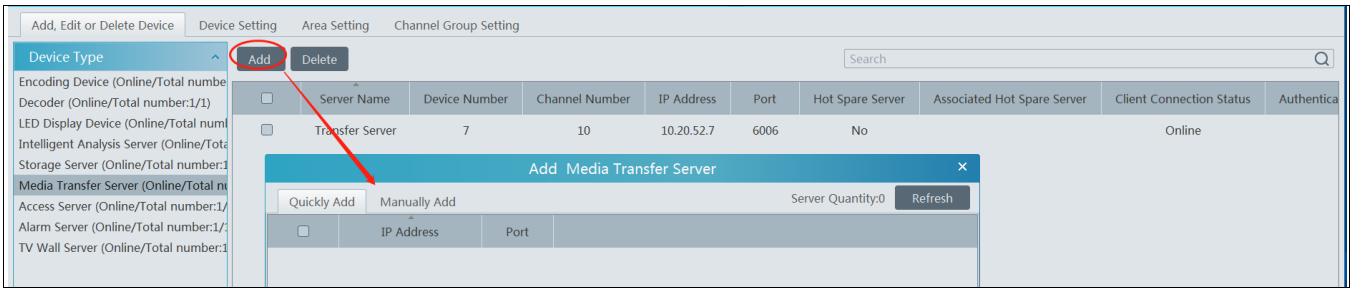


Click [Add] to go to Area adding interface. Enter area name to create parent area. Then click [OK] to save the settings. To create sub area, click [Add], choose the parent area, enter the area name and click [OK].

3.7 Add Media Transfer Server

Media transfer server is in charge of the video signal reception of the front-end devices (like IPC) and transfers the signal to the client to view or to the storage server to record. The command of viewing the video of the front-end devices sent by the client or storage server is transferred by the media transfer server to the front-end devices. There is a default transfer server. If you want to add a new transfer server, please follow the directions as below.

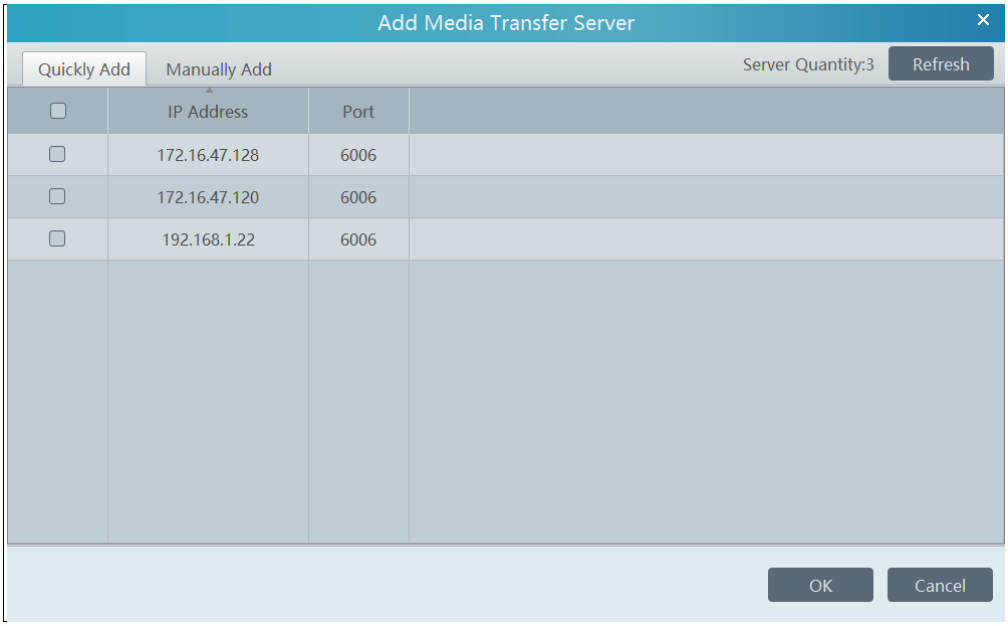
1. Go to Home→Add, Edit or Delete Device→Media Transfer Server.



2. Click [Add] to go to media transfer server addition interface. Users can quickly add or manually add media transfer servers.

3. Select the "Quickly Add" tab and click [Refresh] to quickly search servers in the same local network. Check the desired servers and click [OK] to save the settings.

Select the "Manually Add" tab to go to the media transfer server adding interface. Enter the server name, IP address and port and click [OK] to save the settings.



When adding the transfer server, you can select it as a hot spare server.

If there are devices under the transfer server, this server cannot be changed to a hot spare server.

If you have added a hot spare server, it will work as follows.

1. When the transfer server of the device is offline and the offline time exceeds the predefined service fault time, the device will be transferred by the online hot spare server.

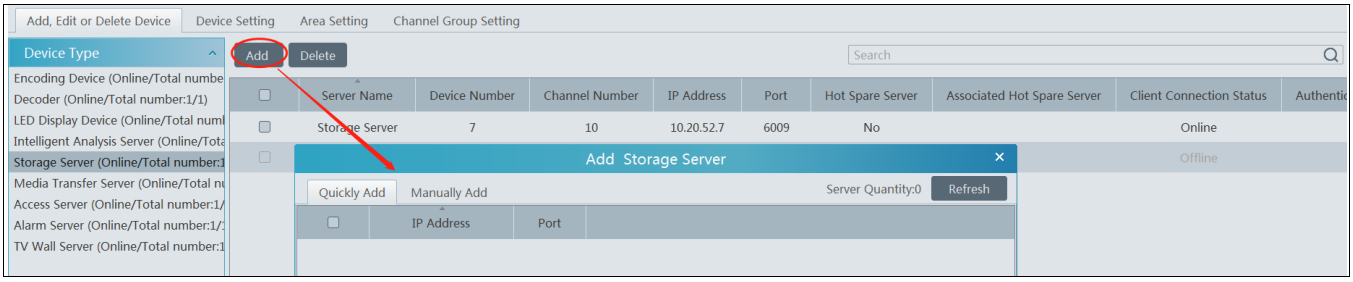
2. When the original transfer server of the device is online again and the online time exceeds the predefined server fault time, the device will be transferred by the original transfer server.

To set the server fault determination time, please go to Home→Local Configuration→System Configuration interface to set.

3.8 Add Storage Server

Storage server is in charge of the storage of record information, including the information of schedule record, record based on motion alarm, sensor alarm, smart detection alarm (like object removal detection, line crossing detection, etc.), responding to the search and playback of all storage data. It also supports self-defined storage path settings and IP-SAN access. You need to add a new storage server if you want to save recorded files to the storage server. Please follow the directions to add a storage server as below.

1. Click Home→Add, Edit or Delete Device→Storage Server.



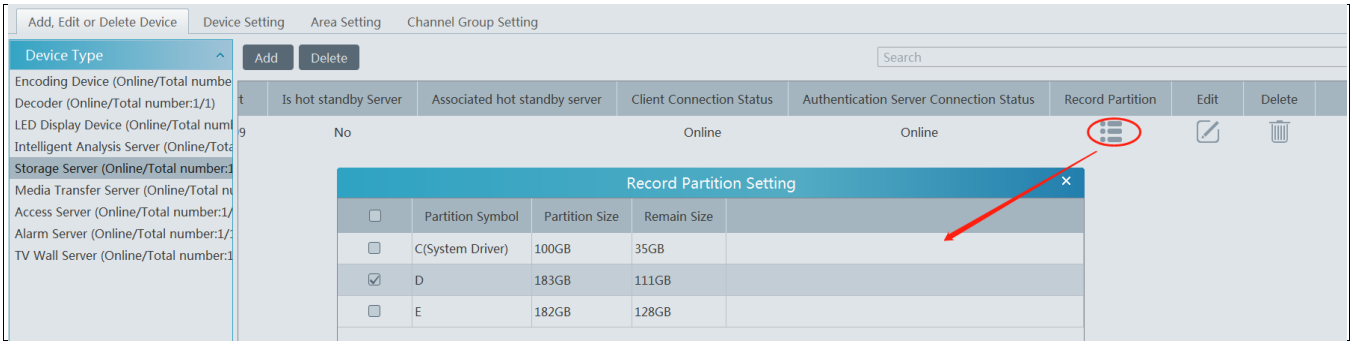
2. Click [Add] to go to storage server adding interface. Users can quickly add or manually add storage servers.

3. Select the “Quickly Add” tab and click [Refresh] to quickly search servers in the same local network. Check the desired servers and click [OK] to save the settings.

Select the “Manually Add” tab to go to the storage server adding interface. Enter the server name, IP address and port and click [OK] to save the settings.

You can also add another server as a hot spare server. Once the host server is offline, the spare server will take over.

After the storage server is added, click to set record partition. In the record partition setting interface, select the disk and click [OK] to save the settings.



If you have added a hot spare server, it will work as follows.

1. When the storage server of the device is offline and the offline time exceeds the predefined service fault time, the recorded file of the device will be saved by the online hot spare server.

2. When the original storage server of the device is online again and the online time exceeds the predefined server fault time, the recorded file of the device will be saved by the original storage server.

To set the server fault determination time, please go to Home→Local Configuration→System Configuration interface to set.

4 Group Management

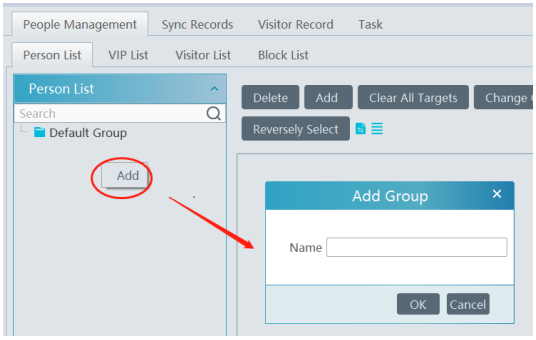
4.1 People Management

4.1.1 Add Group

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

- **Add the parent group**

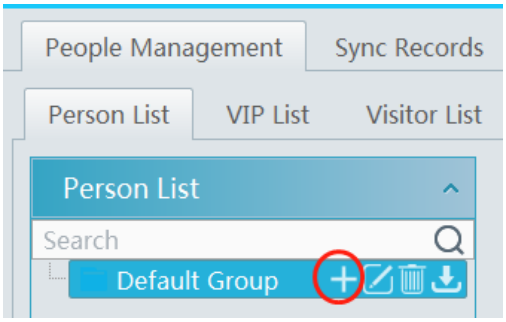
Go to Home→Group Management→People Management→Person List.



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

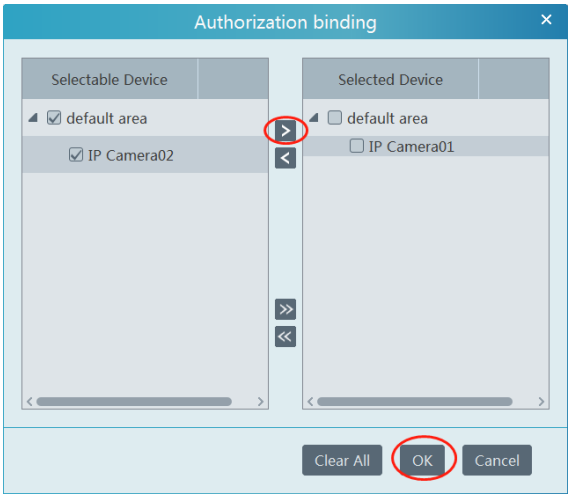
- **Add the sub group:**

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

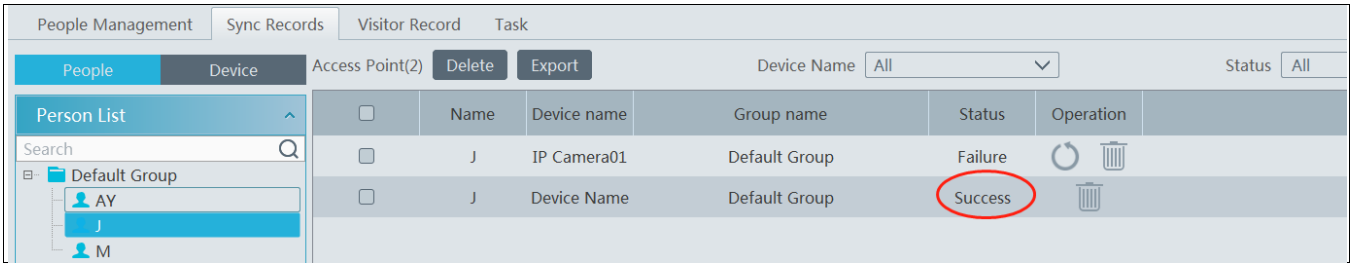


Click to bind the camera.

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

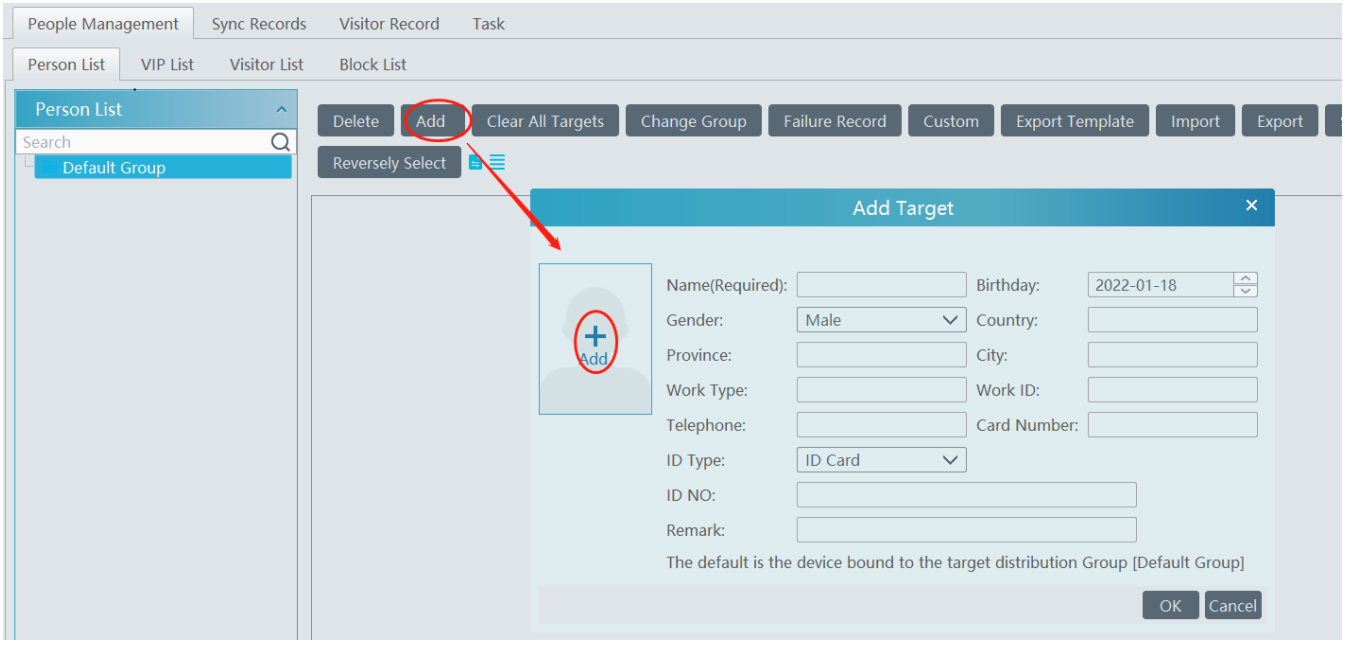


4.1.2 Add Target

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

- **Add target one by one**

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



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

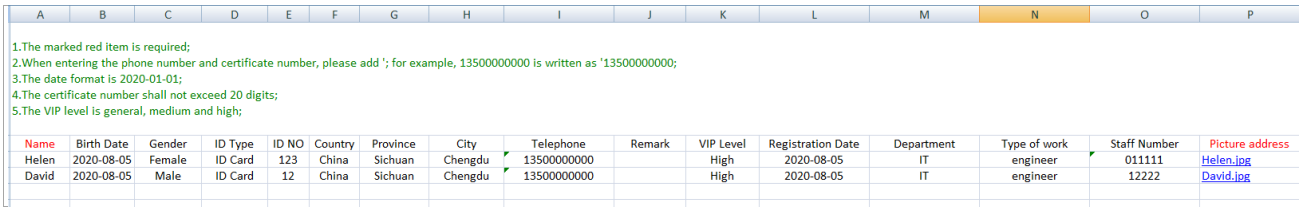
Note: the resolution of the face image shall be less than 3840*3840.

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.

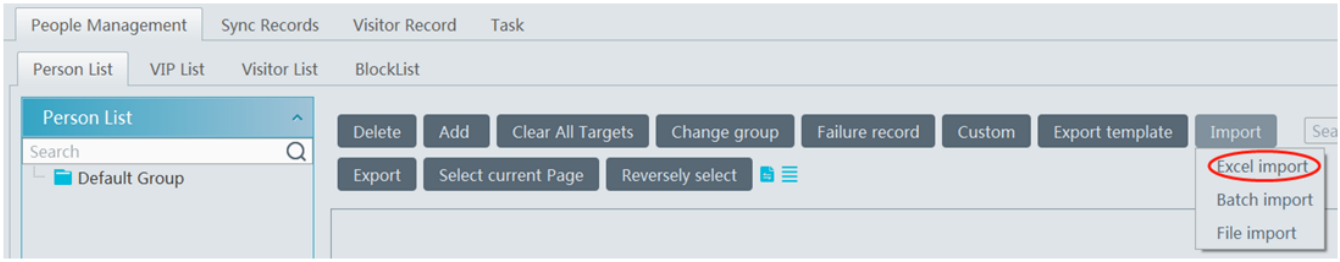


1.The marked red item is required;
2.When entering the phone number and certificate number, please add '; for example, 13500000000 is written as '13500000000;
3.The date format is 2020-01-01;
4.The certificate number shall not exceed 20 digits;
5.The VIP level is general, medium and high;

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.

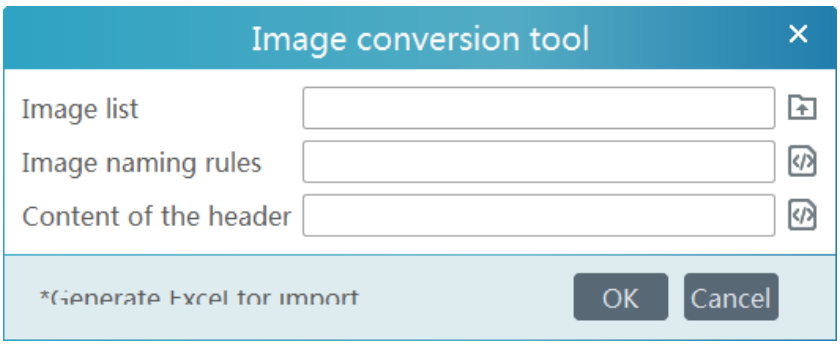
Search Subfolders: choose a folder including multiple subfolders and then all pictures in the folder and its subfolders will be imported.

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.

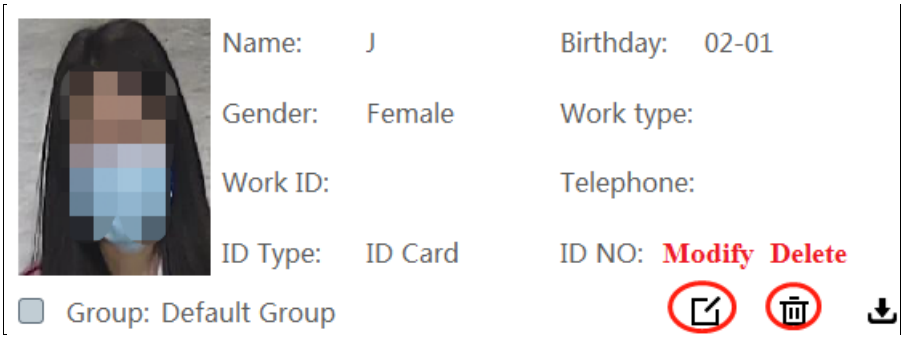
1. Name the face images (like David_Male_1989-01-03_Engineer_Group1), separating each field with "_".
2. Clicking on displays an image conversion box. Click to select the desired images.
3. Click respectively to set the image naming rules and content of the header.



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.

Click “Custom” to customize the target display information.

Click “Change group” to change the group.

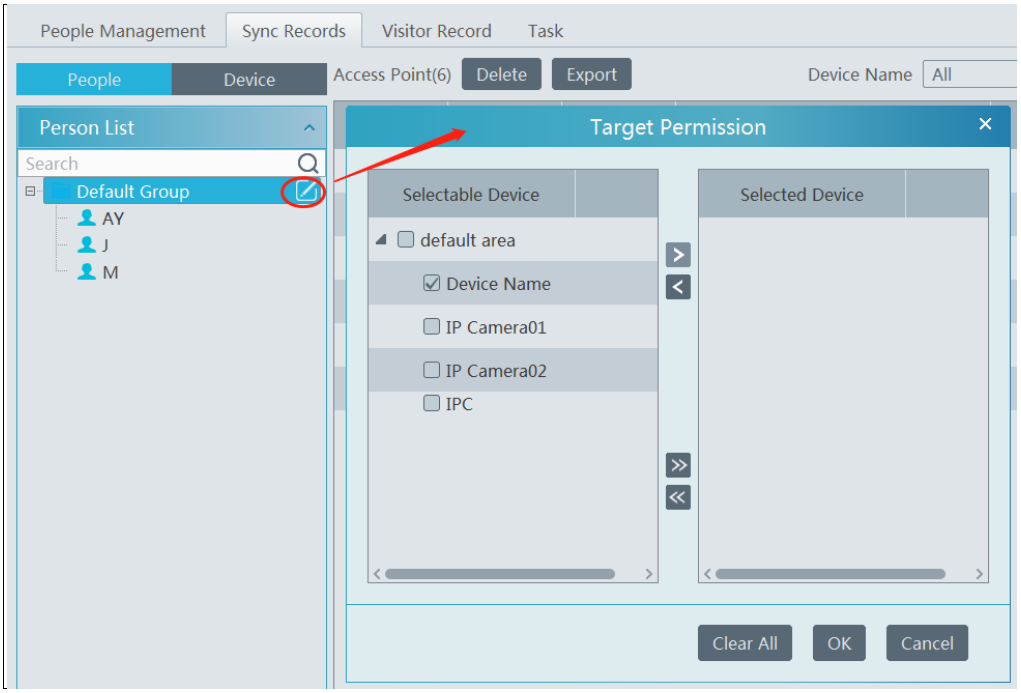
4.2 Sync Records

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

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

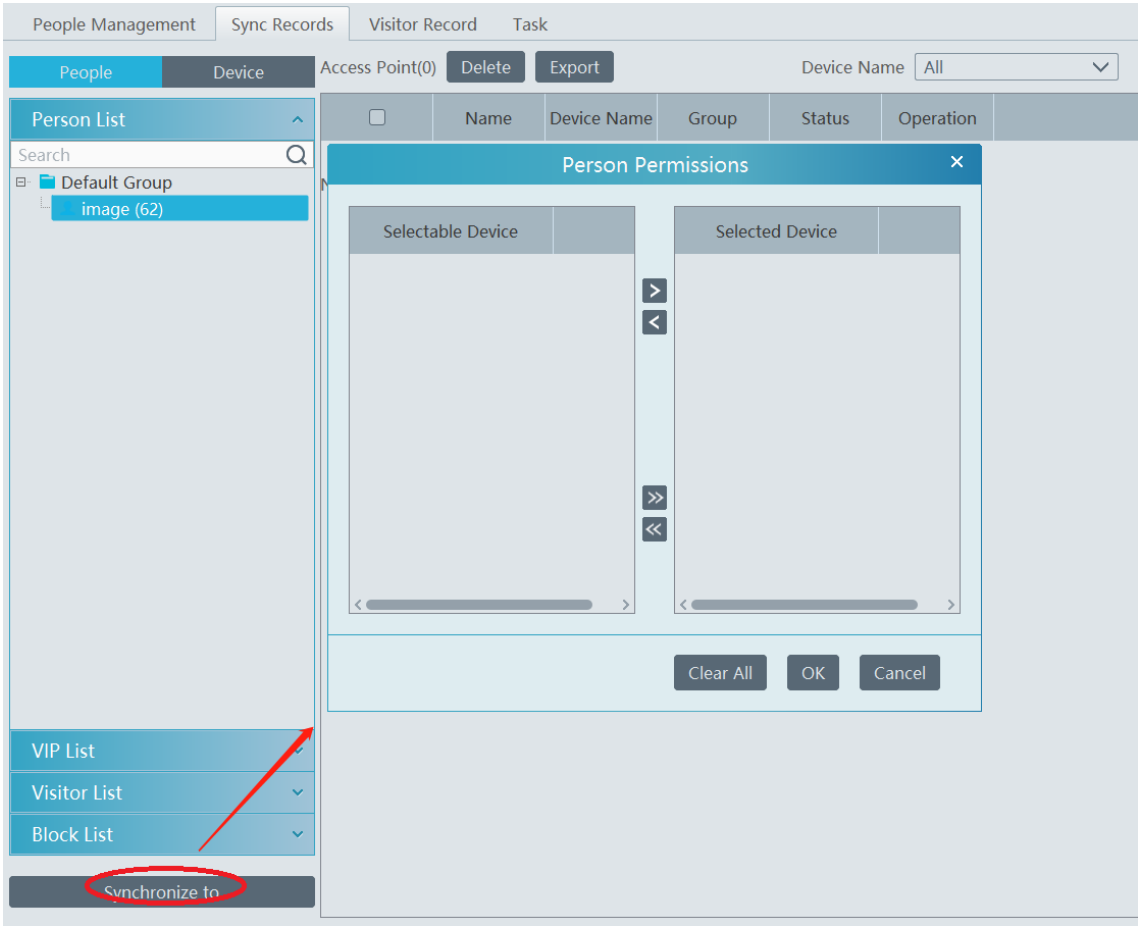
- **Binding the group to the device**

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



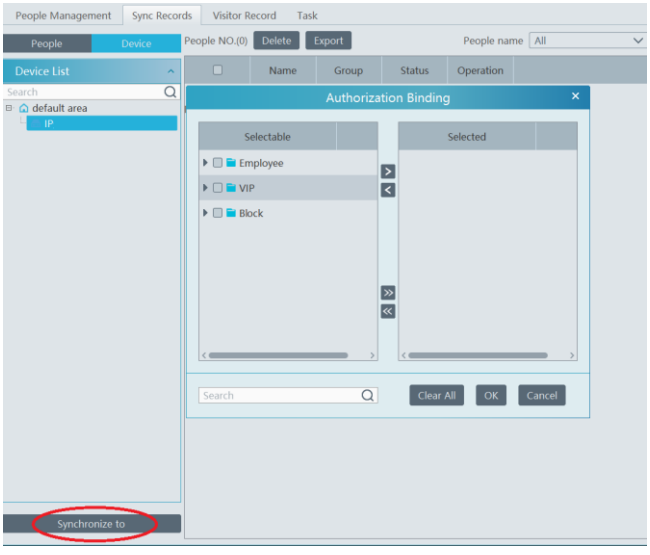
- **Binding the person to the device**

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.

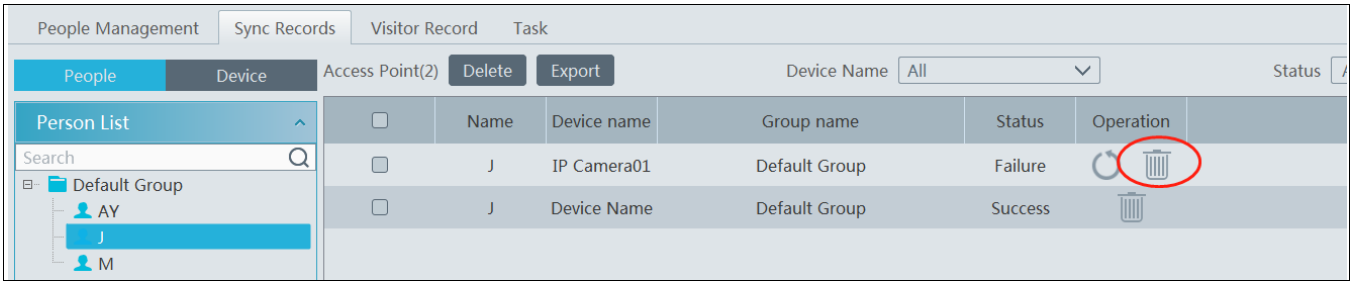


➢ **Binding the device to the group or person**

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

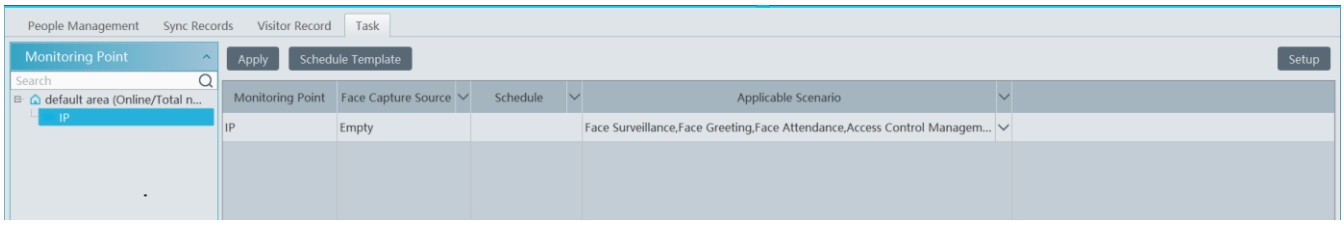


When the device is offline, the target synchronized to it cannot be deleted. Then you can go to the Sync Records interface to delete the synchronization records and then delete the target.



4.3 Task Management

Set the face capture source, schedule and applicable scenario.

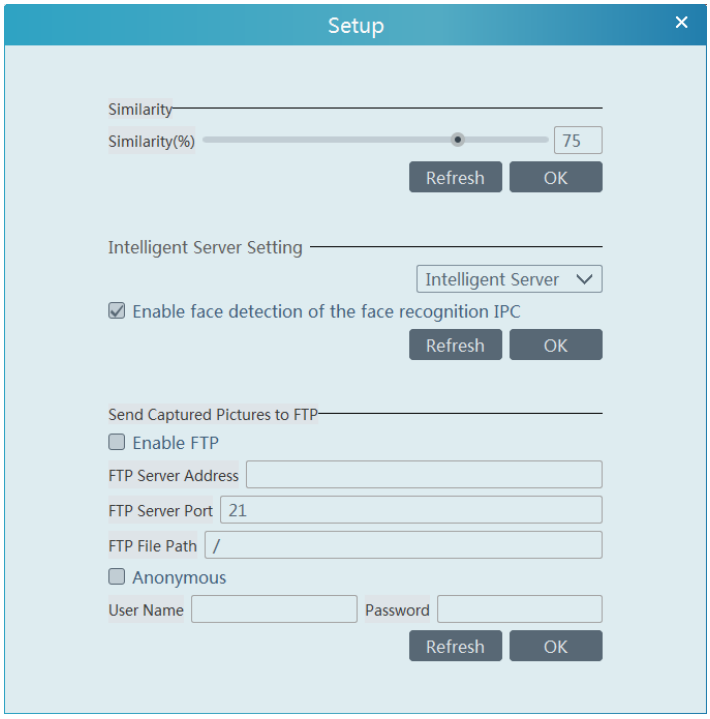


Face Capture by IPC: it is applicable to the face detection camera.

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].



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).

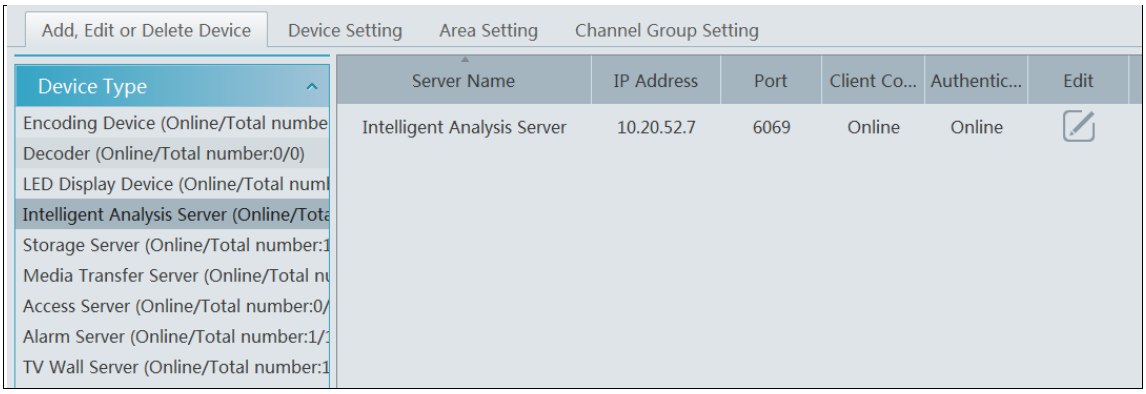
If unchecked, the intelligent server will only get the matched face snapshots after you configure face comparison parameters and set the schedule for the IPC. Only the face snapshots successfully matched with the face database can be searched in the Search interface (Home→Face Surveillance→Search).

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

5 Face Recognition Management

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.



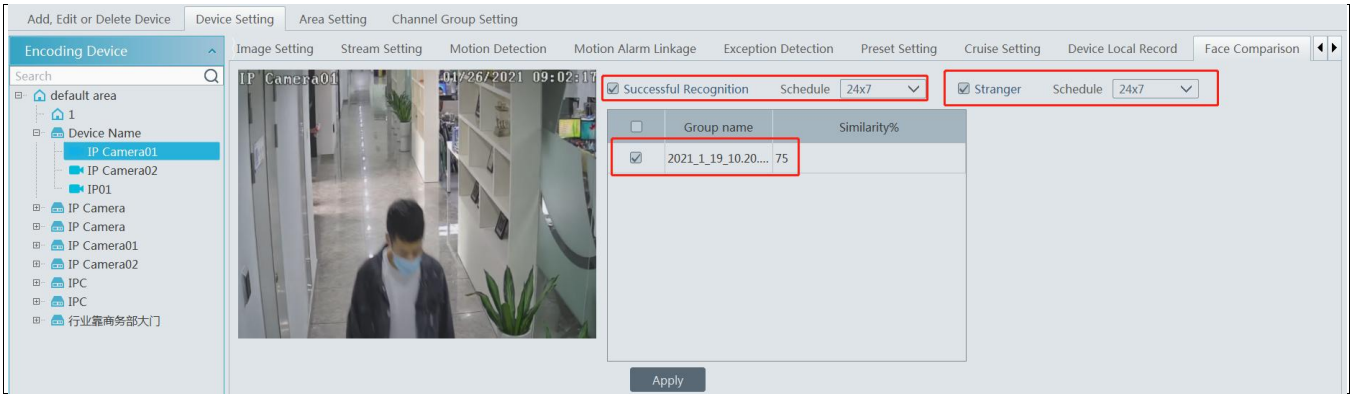
5.1 Face Surveillance

5.1.1 Face Surveillance Settings

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

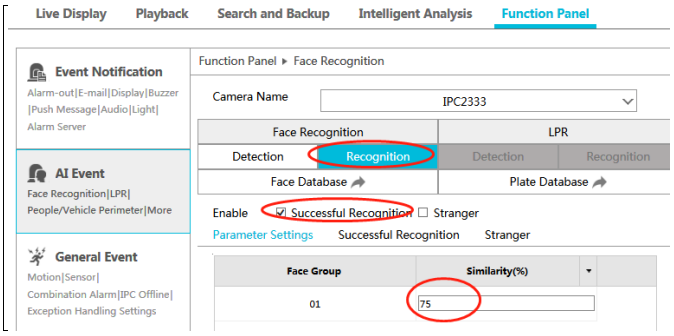
Create a group → Add targets to the group →Set task → Real-time View → Search faces

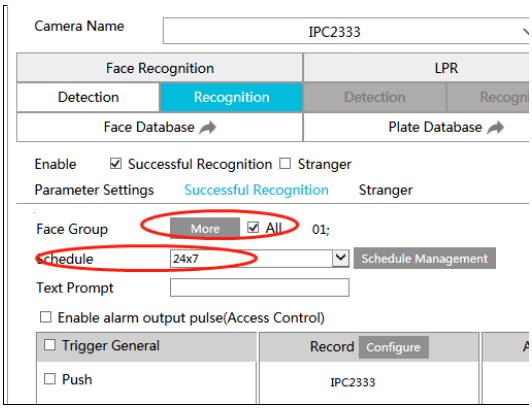
1. Create a group, add targets to the group and set Task. Please refer to chapter 6 People Management for details.
2. For the added NVR with face recognition function please set the face comparison parameters by entering Resource Management→Device Setting interface. Refer to the following interface.



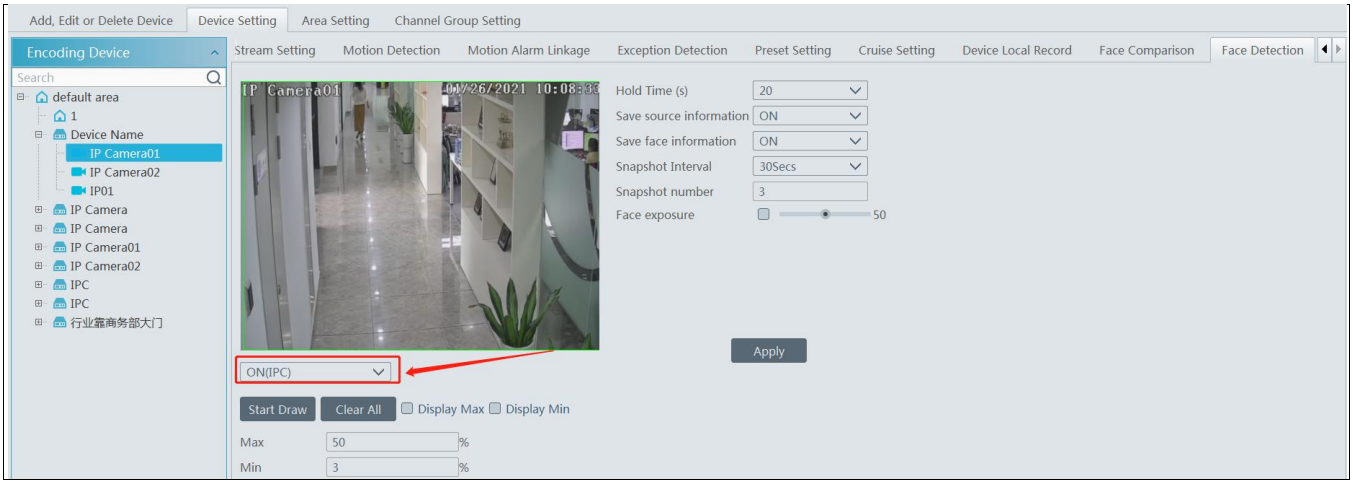
Please select “Successful Recognition” or “Stranger” as needed and then set the schedule separately. After that, check the group and set the similarity. Finally, save the settings by clicking [Apply].

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.





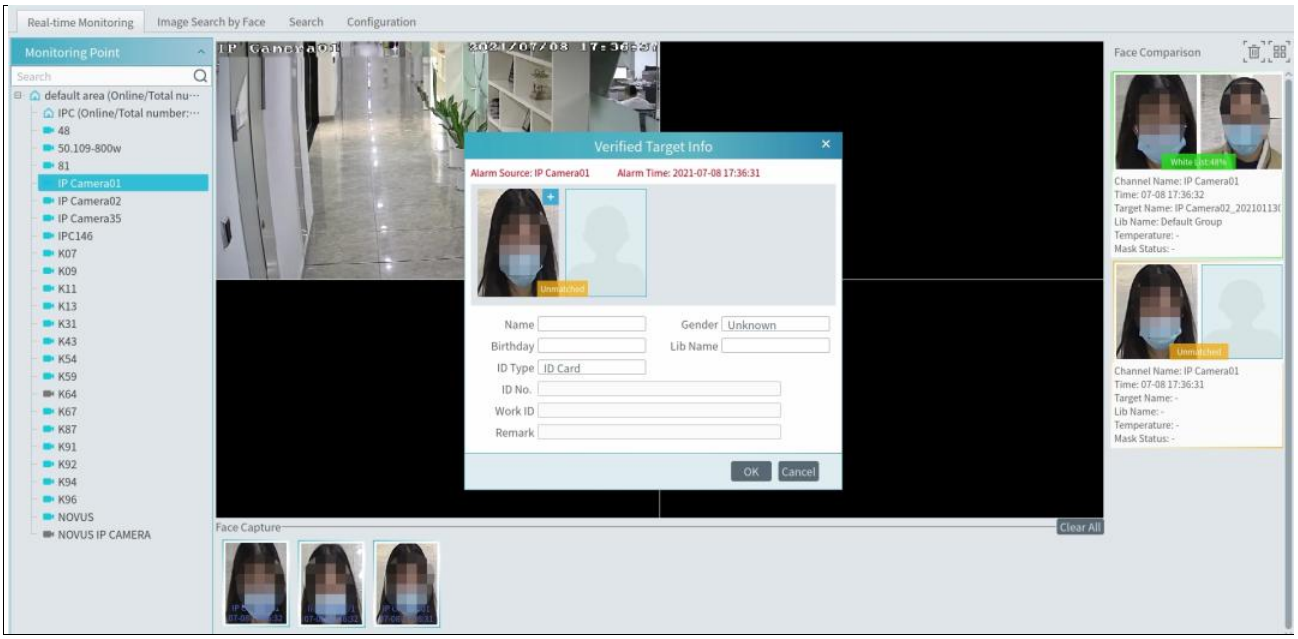
Additionally, please make sure the face detection function is enabled for the AI IPC (click Device Setting→Face Detection).



5.1.2 Real-Time View

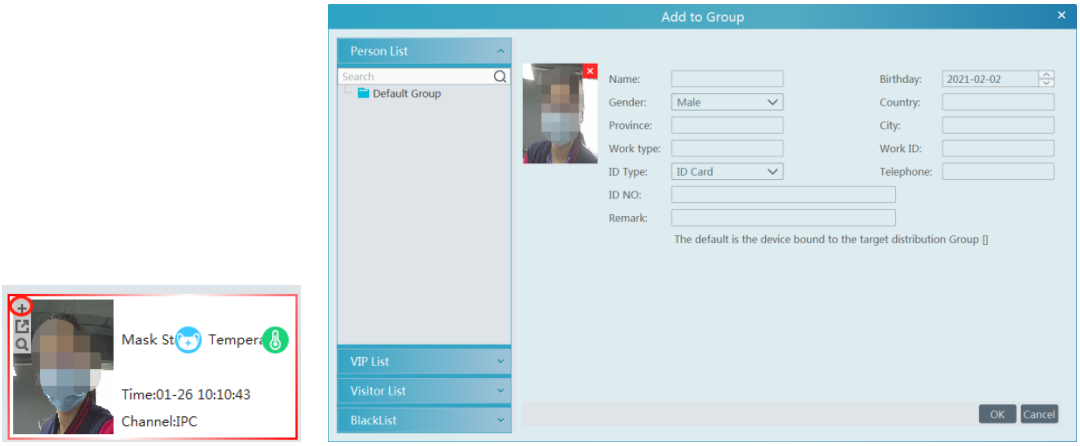
If the IPC supports face detection, you will view the face capture picture.

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



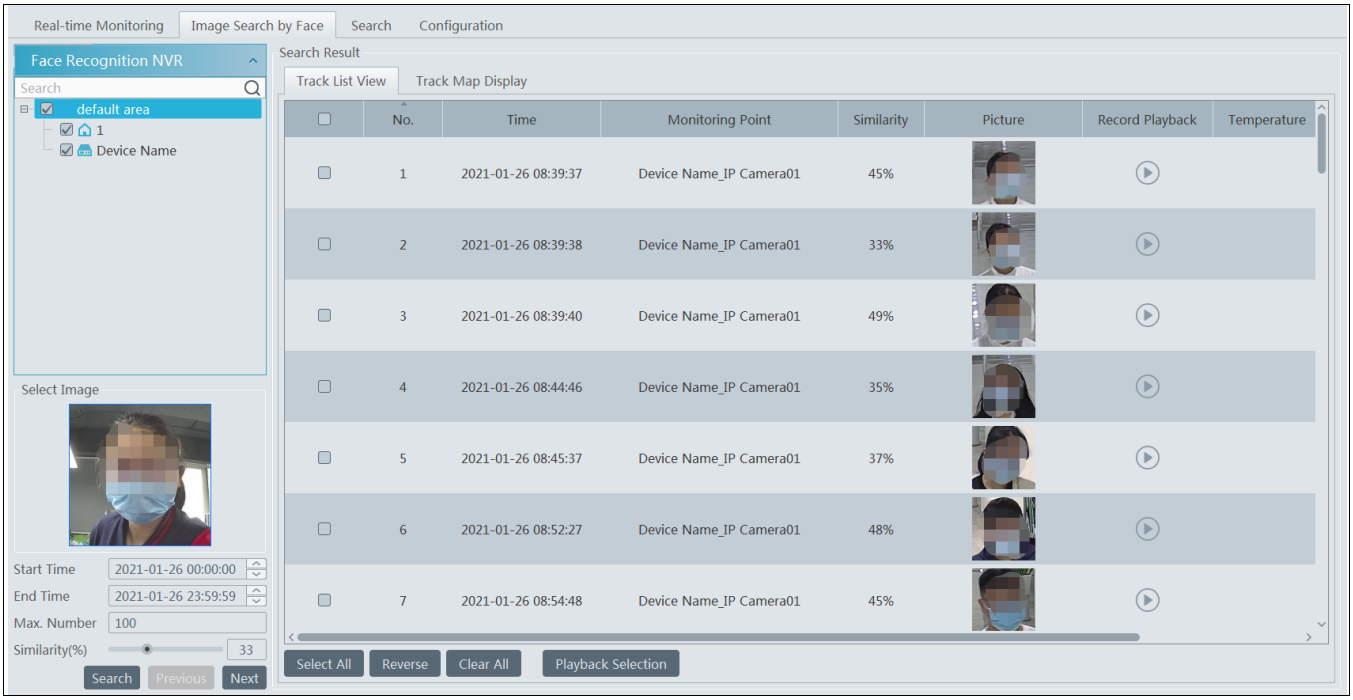
If the added AI camera/panel supports temperature measurement and mask detection, you will see the detailed face match information, including mask status, body temperature, snapshot camera, snapshot time, etc.

Click the + button on the top left corner of the captured face picture to add the face picture to the library quickly; click the search 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.

Click to clear all face match result.

Click to display all face match result.

Click to display unmatched result.

Click to display matched result.

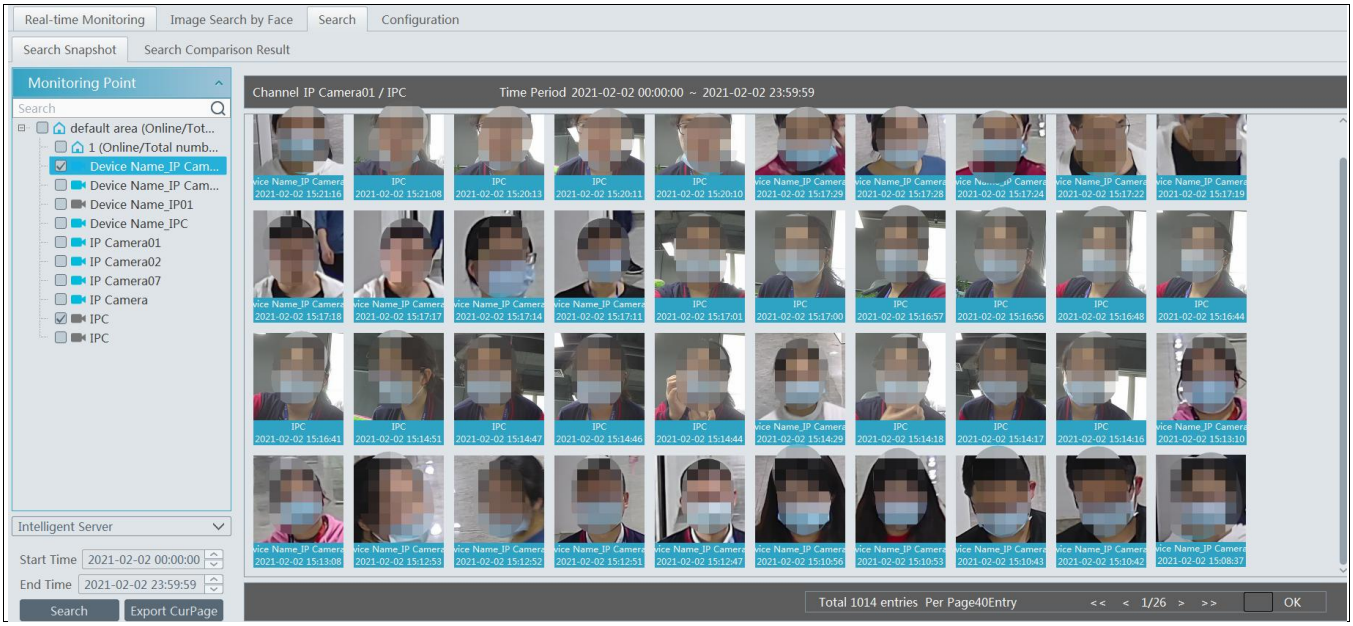
5.1.3 Search Snapshots and Comparison Result

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.



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

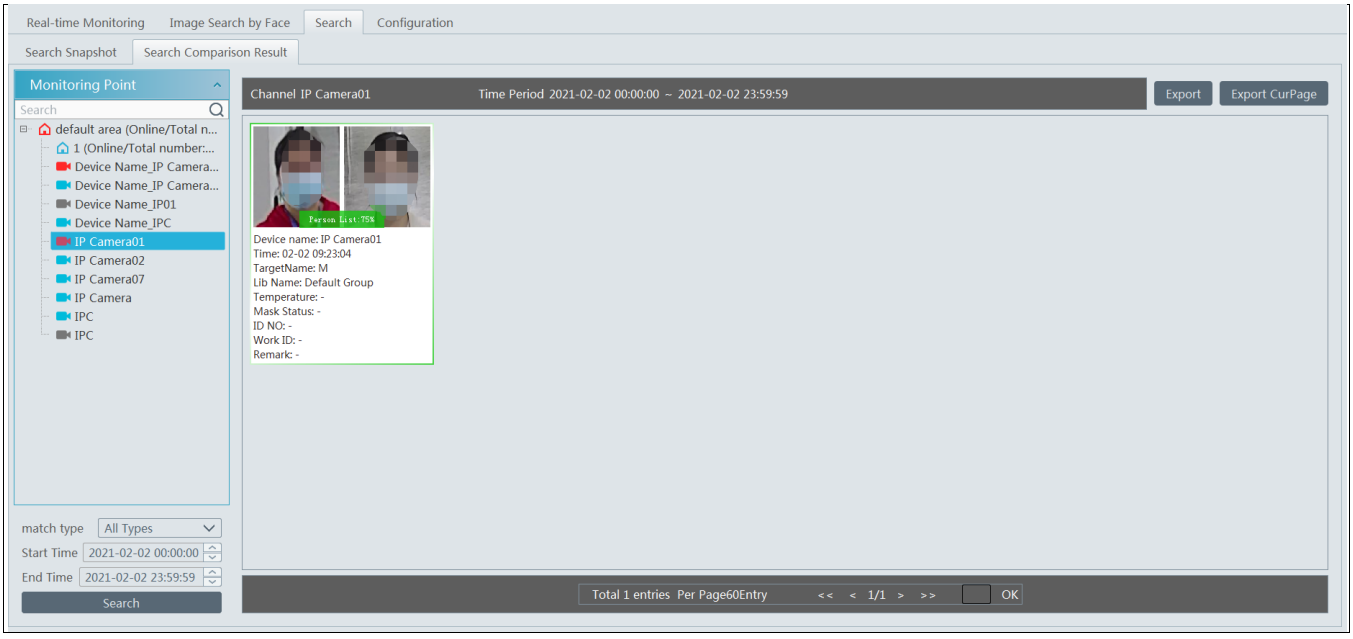
Click + to add the capture picture to the library. Select the library on the left and then fill out the information of this target. Click [OK] to add.

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.



5.1.4 Search Image by Image

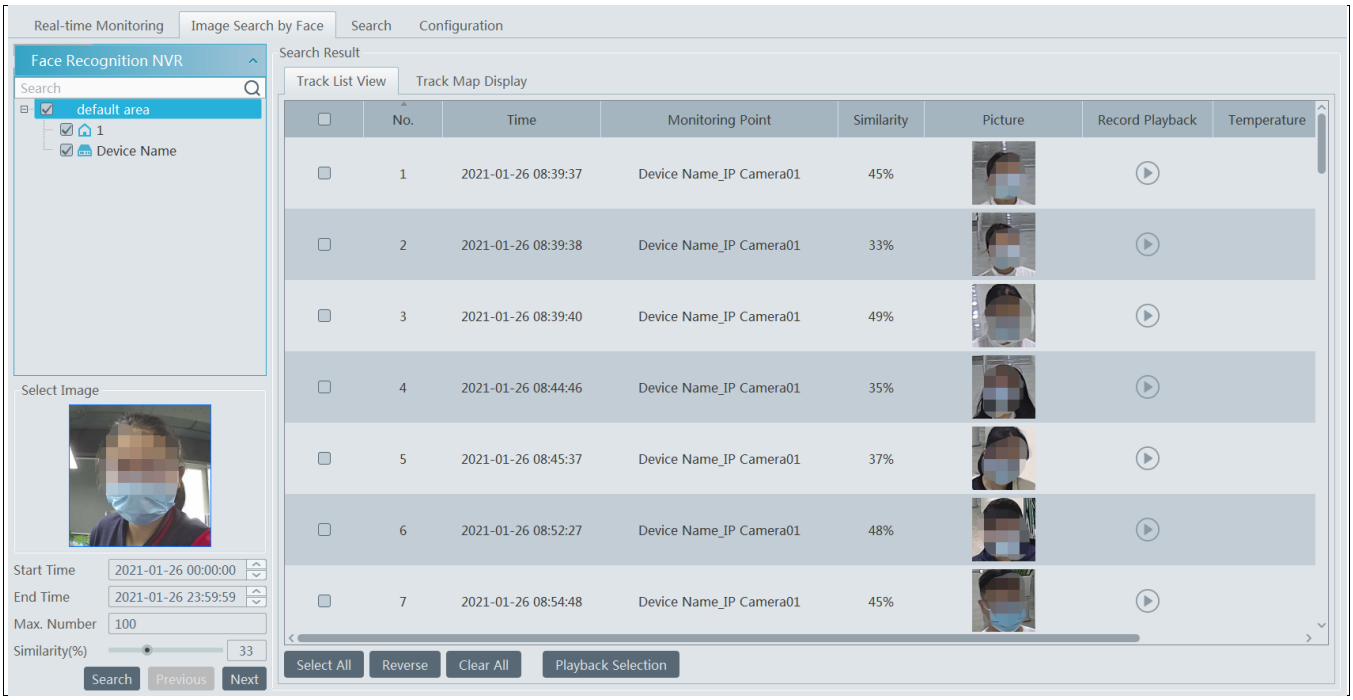
This function is only available for the NVR with face recognition function.

① Select a picture and picture source.

② Set the start time and the end time.

③ Set the maximum count and similarity.

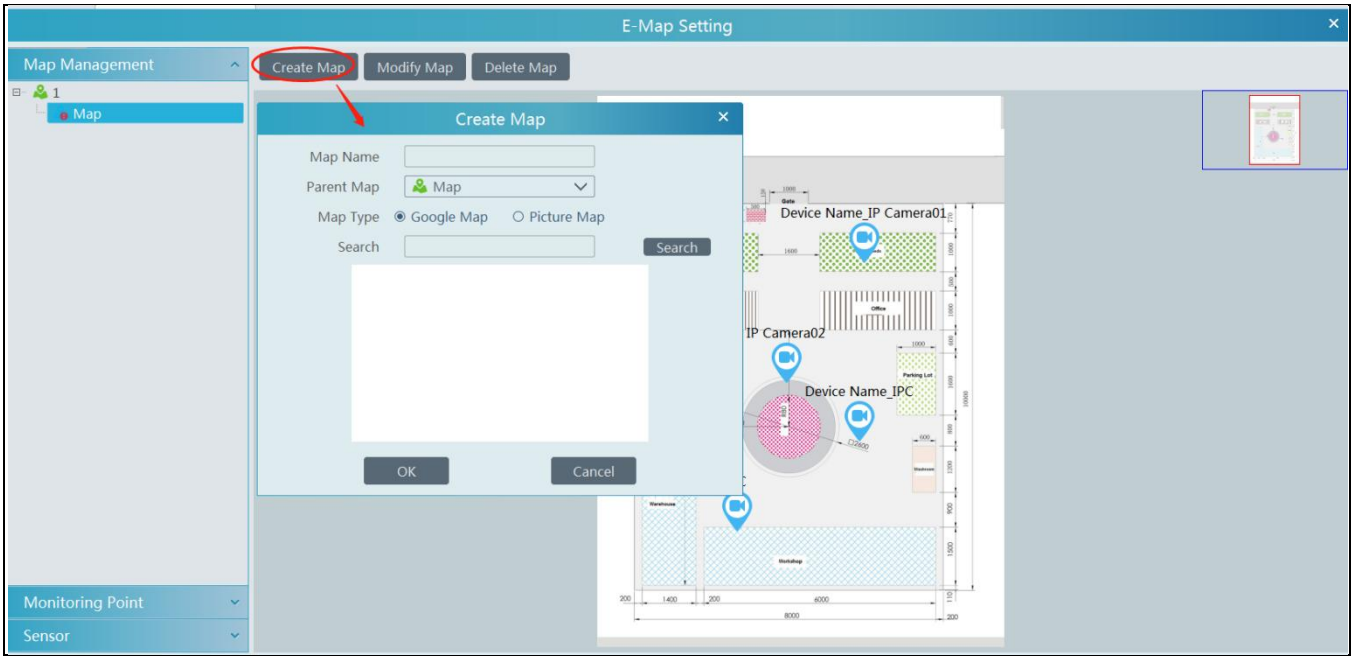
④ Click [Search].



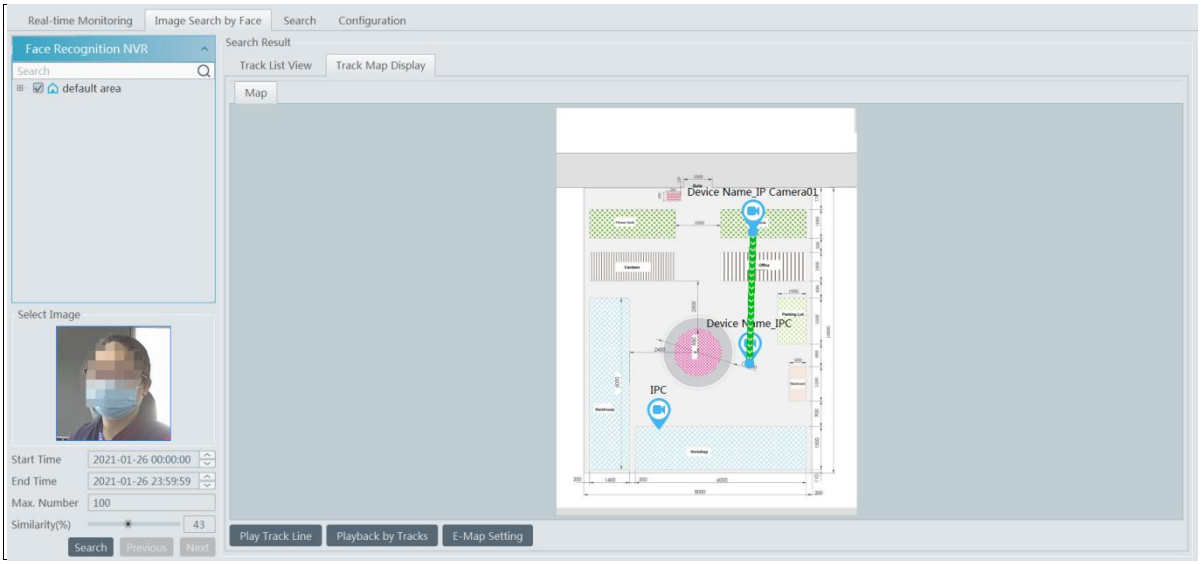
Click to play the record in a small window.

- E-Map Track View:

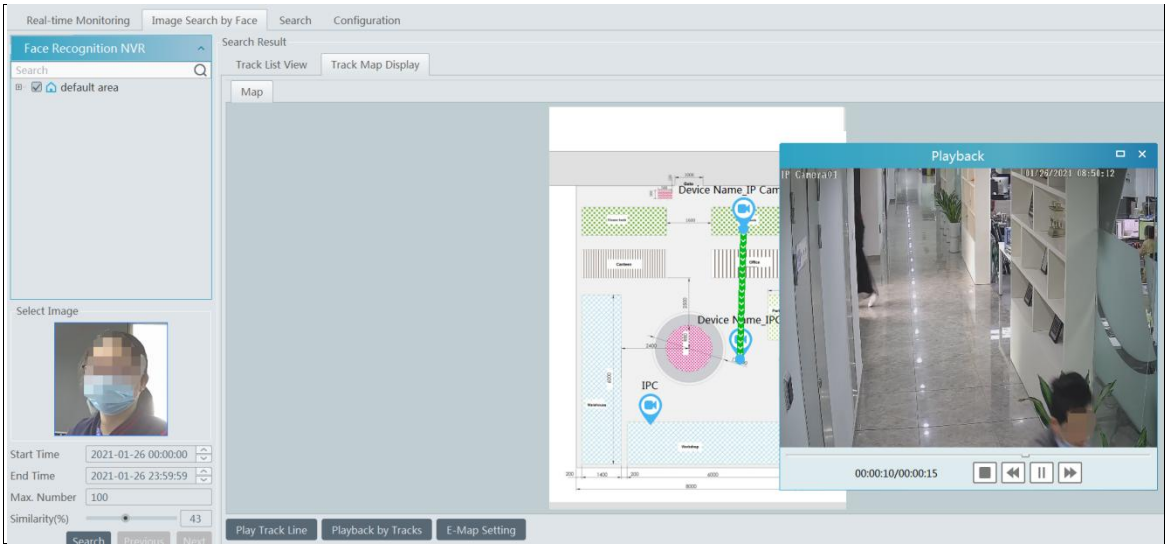
Create an E-map. You can create or delete an E-map in this interface. The hot spot can be added to the E-map too.



Play Track Line:

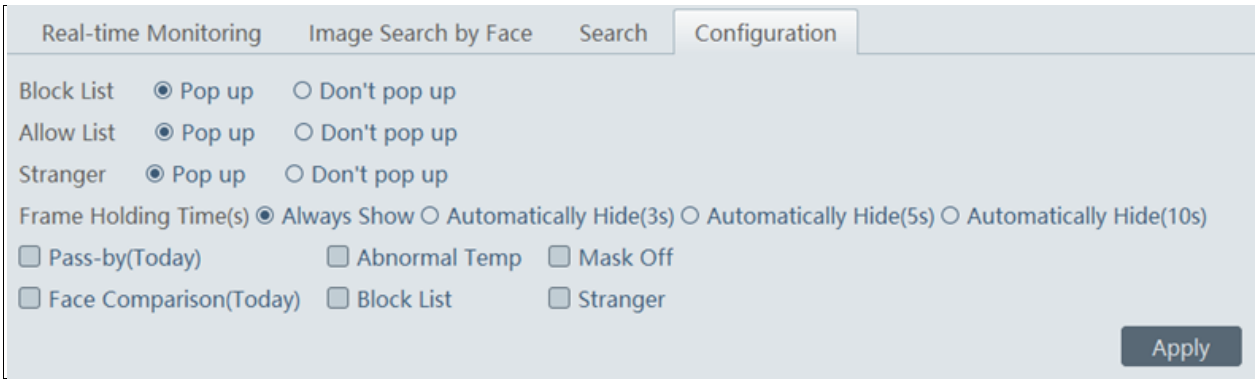


Playback by Tracks



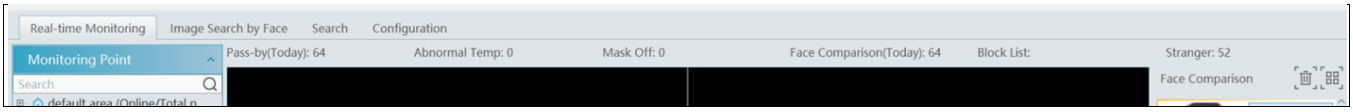
5.1.5 Other Settings

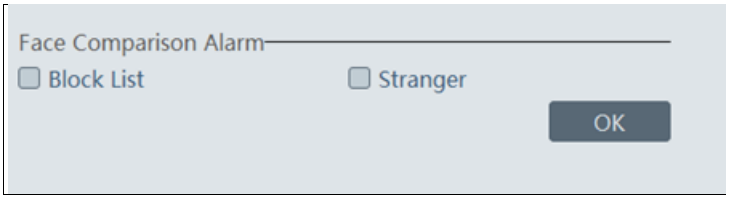
- **Pop-up Window Setting**



In this interface, you can choose whether to pop up the alarm window when the camera detects a stranger or a person in the block list or allow list. Additionally, you can choose the holding time of pop-up box.

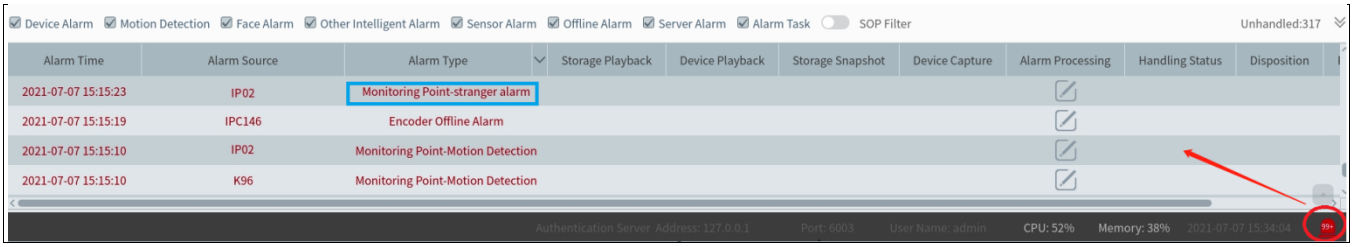
Total Pass-by (Today)/Abnormal Temp/Mask Off/Face Comparison (Today)/Block list/Stranger: If enabled, the statistical information will be shown on the real-time view interface.





- **Face comparison alarm setting:**

If “Block list / 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.



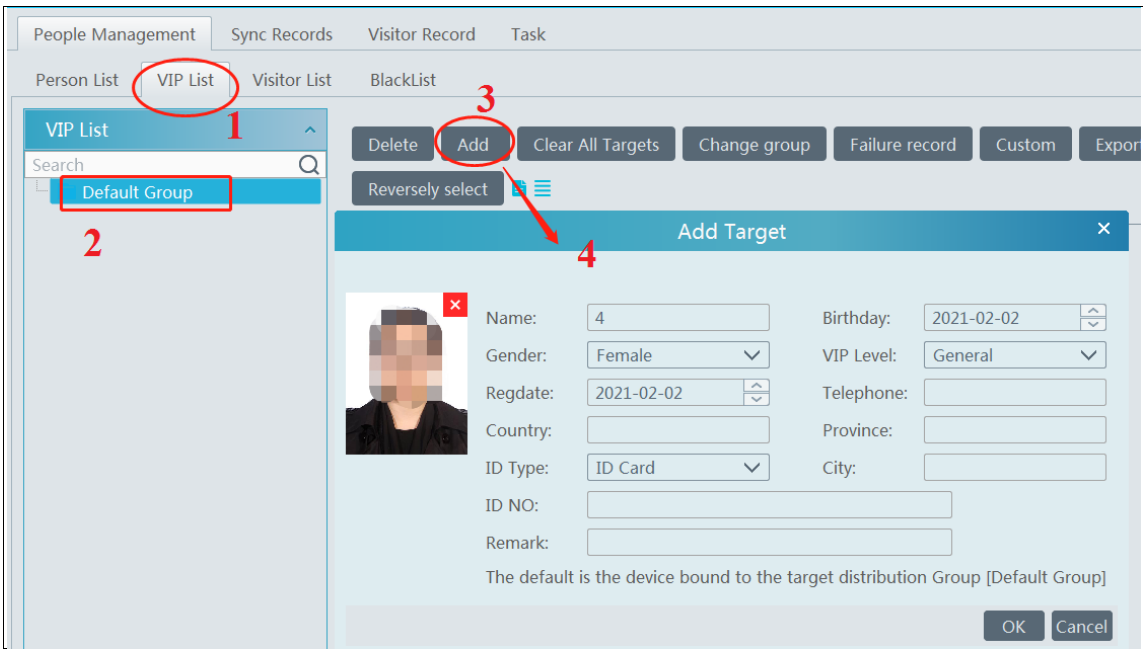
5.2 Face Greeting

Face Greeting: After successful face comparison, the words/voice of welcome will be heard by the guests and their photos will be shown on the screen.

Click “Face Greeting” to go to the face greeting interface. The setting steps are as follows:

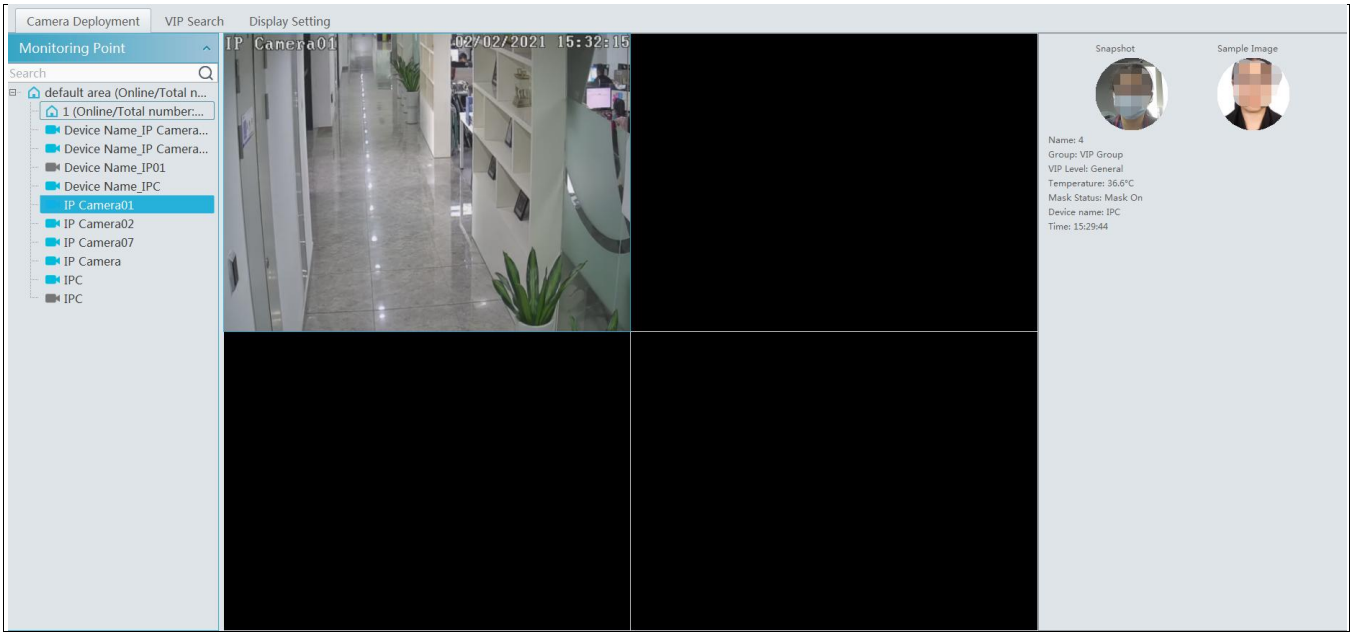
① Create a VIP group and add targets for this group in the VIP list interface. Then bind the VIP person and the camera. The setting details are similar to adding targets to the person list. See chapter 6 for details.

Note: **the camera for face greeting must support face recognition function, such as face recognition and access control panel, face recognition camera and so on.**



② Select the schedule, face match type in the Task interface of the people management (See 6.3 for details).

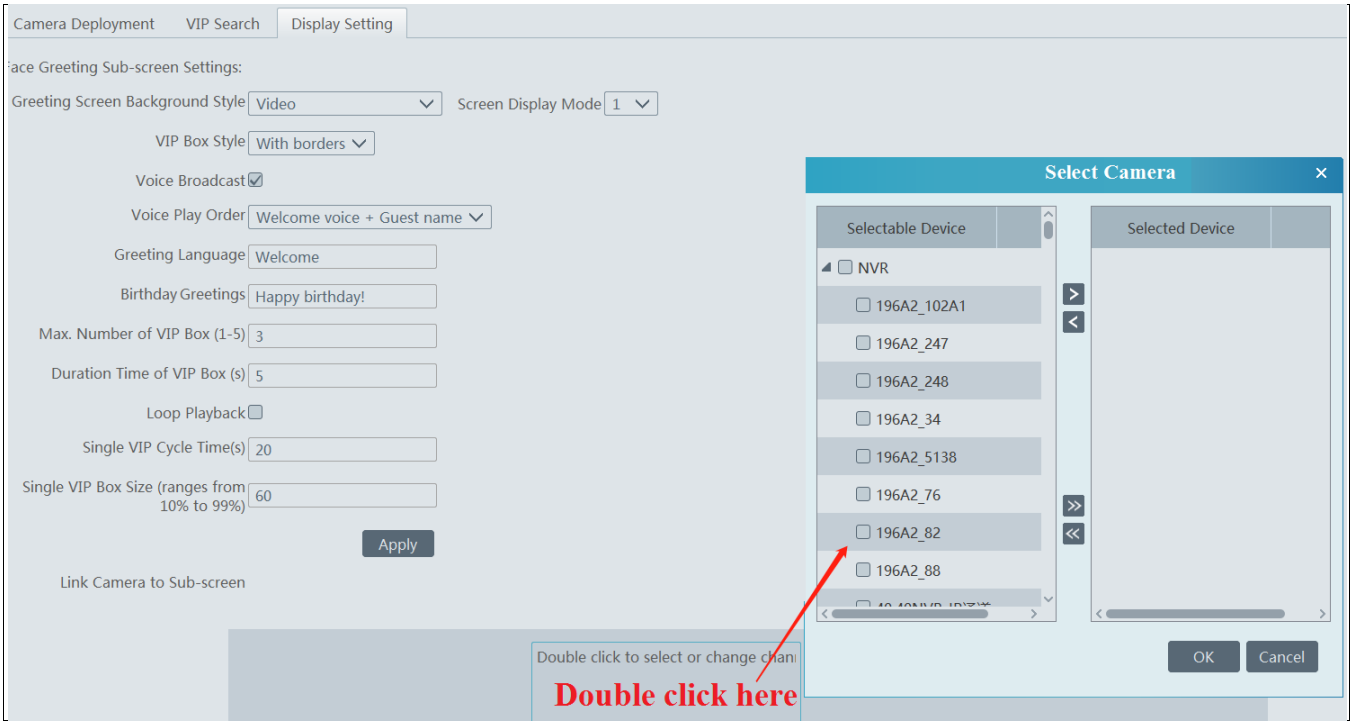
③ Set camera deployment. Drag the camera name to the preview window. When there are targets detected, the match result will be displayed on the right panel.



④ View the match result of the greeting screen. Click the “Display Setting” tab to set the sub screen (greeting screen).

In this interface, greeting screen background style, screen display mode, VIP box style, face greeting language and so on can be set up.

Select the sub-screen display channel: double clicking on the sub-screen box as shown below displays a camera selection box. Choose the desired cameras and then click [OK] to save the settings. Multiple cameras can be selected at a time.



Greeting Screen Background Style: three options: Video, Background Picture and Pure Color Background

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

VIP Box Style: with borders or pure image.

Voice Broadcast: if enabled, the welcome voice will be broadcasted when the VIP person is successfully recognized.

Voice Play Order: choose which one to broadcast first between welcome voice and guest name

Face Greeting Language: please enter the content as needed.

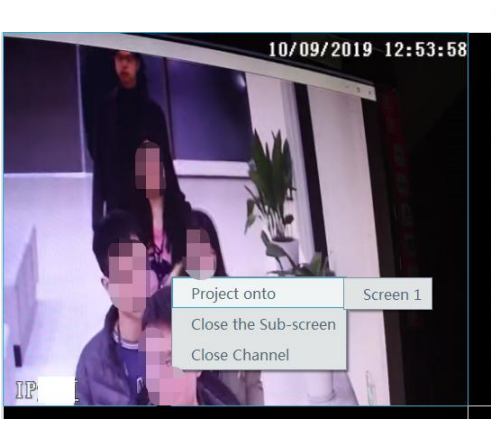
Max. Number of VIP Box: up to 5 boxes.

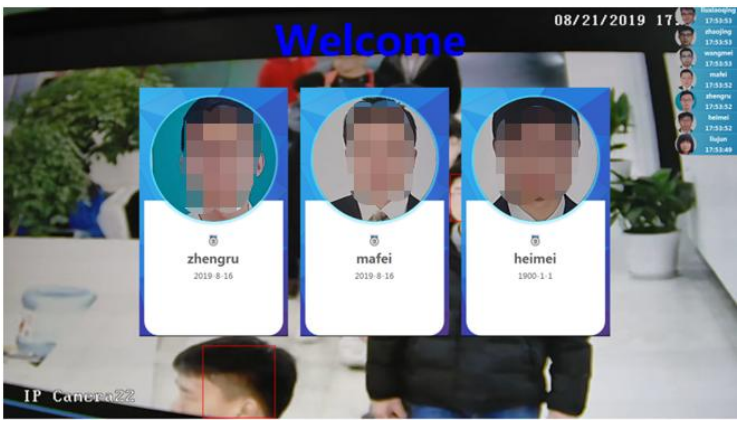
Duration Time of VIP Box: set the duration time of VIP box appearing after the captured face is matched successfully.

Loop Playback: if enabled, the VIP name will be broadcasted in a loop.

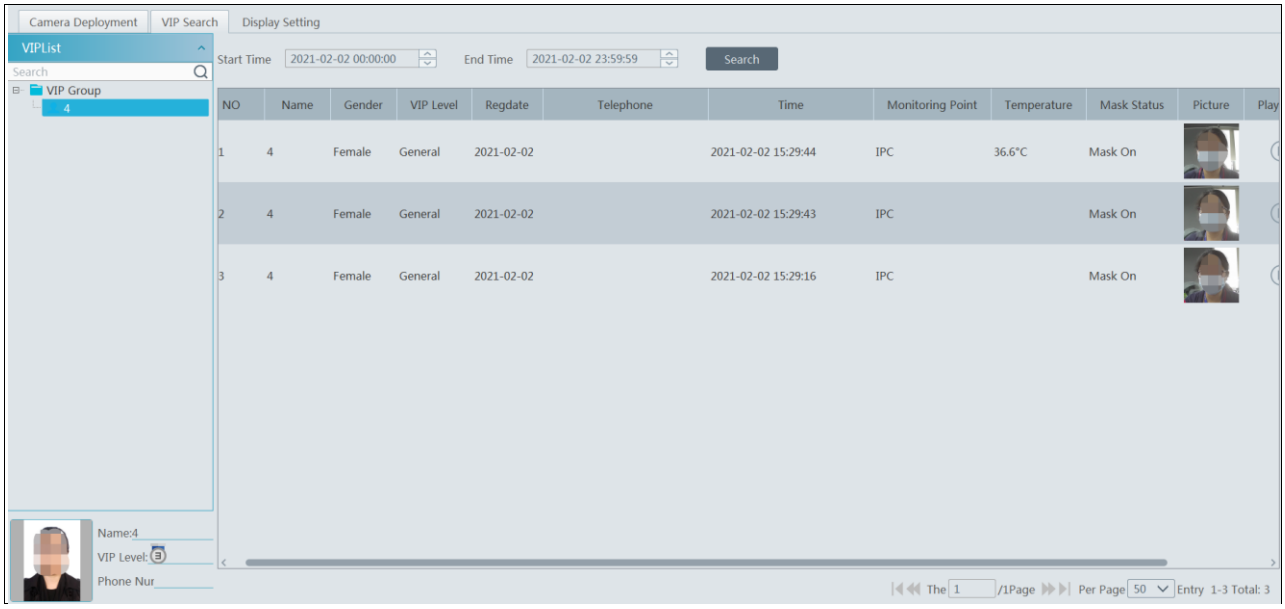
Single VIP Cycle Time: set the time of the single VIP name broadcasted.

Single VIP Box Size: set the percentage of VIP box size occupying the entire screen.





⑤ Search the face greeting records. Click “VIP Search” tab as shown below.

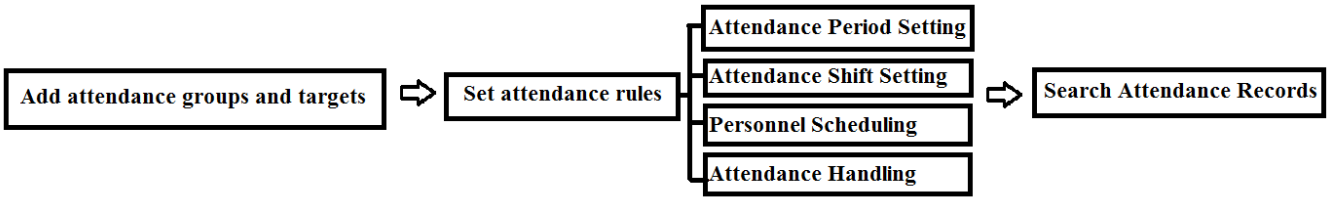


You can enter the key word to search the target or manually select the target from the library. Then set the start time and the end time and click "Search" to search the record. The detailed information of this target will be shown. Click to play the record.

5.3 Face Attendance

The attendance records of the employees can be viewed and traced after adding the persons to the person list and setting the attendance rules.

Flow Chart:



5.3.1 Add Attendance Group and Targets

1. Create an attendance group and add targets for this group in the person list interface. Then bind the person and the attendance camera. See chapter 6 for details.

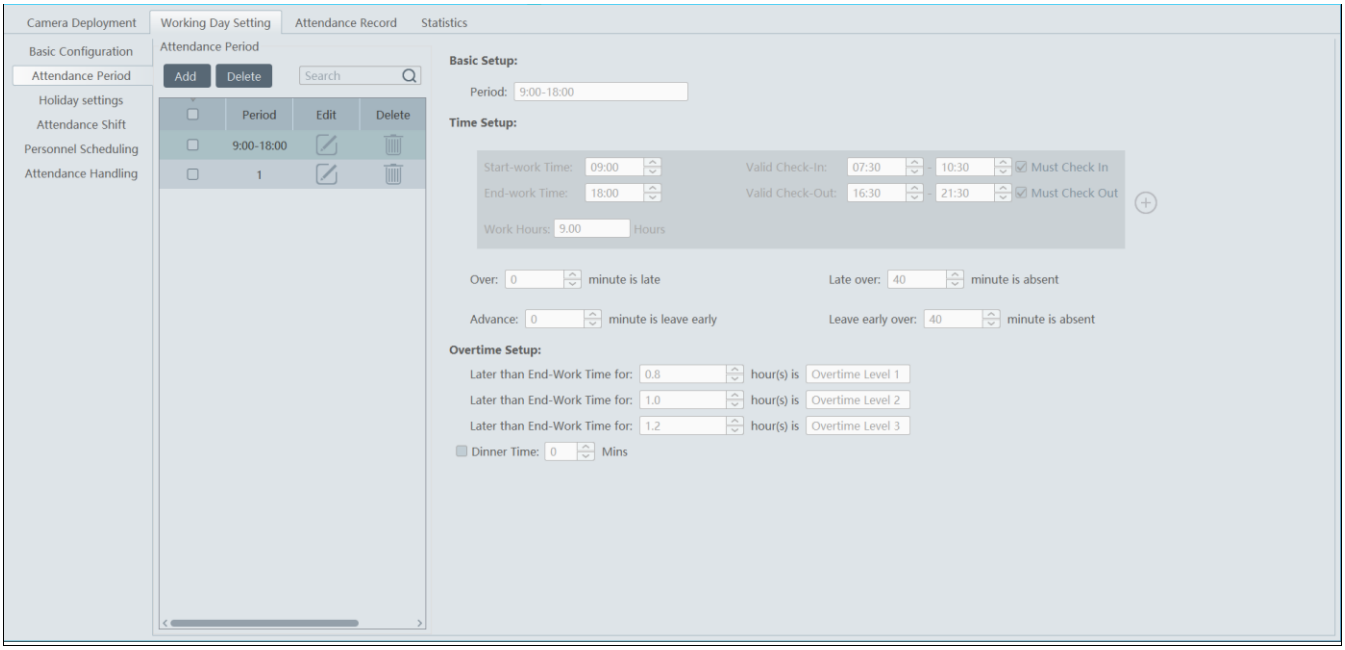
Note: the attendance camera must support face recognition function, such as face recognition and access control panel, face recognition camera and so on.

2. Configure the schedule and face match way of the camera. See 6.3 Task Management for details.

5.3.2 Set Attendance Rules

Go to the Working Day Setting interface to set different attendance rules. The system will compare the pre-defined attendance time and the actual attendance time and trigger alarms when an exception attendance event occurs. The attendance rule settings include basic configuration, attendance period setting, attendance shift, personnel scheduling and attendance handling.

1. Attendance Period Settings



If a company has different working time for different employees, you can add different attendance rules.

Click [Add] to set the detailed attendance rule. After that, click [Save] to save the settings.

Basic Setup: set the normal working period.

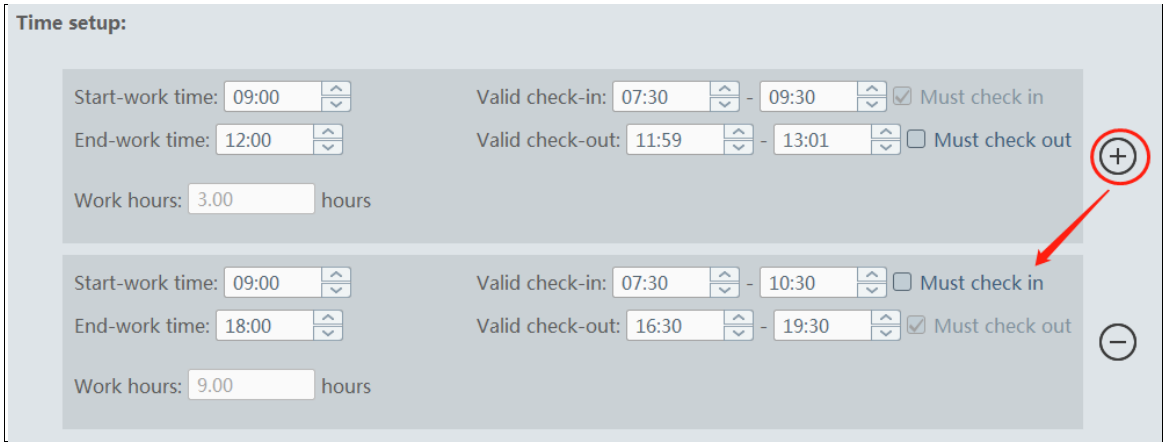
Start-work time: the normal start-work time

End-work time: the normal end-work time

Valid check-in: Set the valid check-in period. If the employees check in before/after this period, the check-in will be invalid and will be regarded as "Not check-in".

Work hours: automatically calculate according to the start-work and end-work time.

Clicking on ⊕ displays another timetable. You can set the detailed rules for work time.



Must check-in/out: "Must check in" next to the first valid check-in period and "Must check out" next to the last valid check-out period are checked by default. That is to say, in the first check-in period, the employees must check in; in the last check-out period, the employees must check out. During the period that "Must check in/out" is not checked, the employees don't check in/out, who will not be regarded as "Not check in/out" or "Absent".

Allow Late/Leave Early:

Over xx min is late: set the allowable minutes for late. If the employees check in within the period after the start-work time, the status will be "Normal".

Advance xx min is leave early: set the allowable minutes for leave early. If the employees check out within the period before the end-work time, the status will be “Normal”.

For example: The start-work time is set as 09:00, and the late allowable duration is 20 minutes. If the employee checks in at 9:15, the attendance status will be “Normal”.

Absent:

Late over xx min is absent: if the employees checking in later than this time will be marked as “Absent”. For example: The start-work time is set as 09:00, and the absent allowable duration is 40 minutes. If the employee checks in at 9:45, the attendance status will be “absent”.

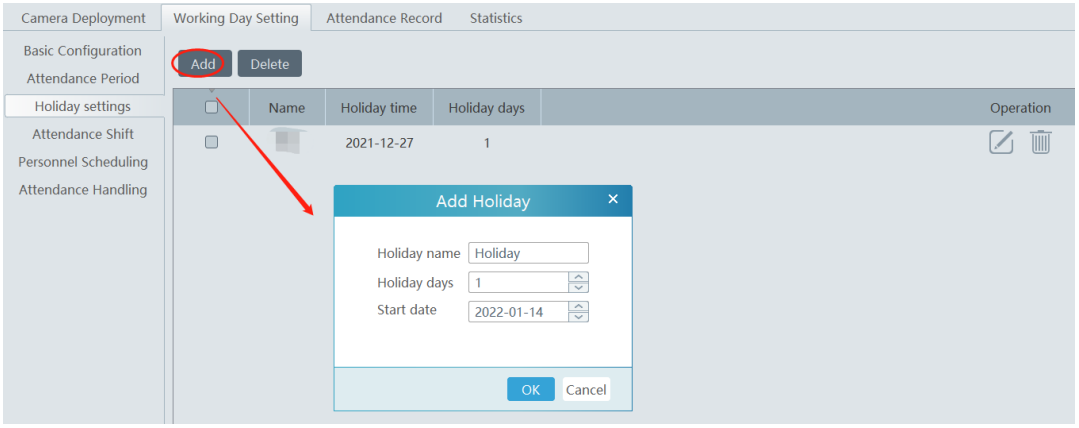
Leave early over xx min is absent: if the employees checking out earlier than this time will be marked as “Absent”. For example: The end-work time is set as 18:00, and the absent allowable duration is 40 minutes. If the employee checks out at 17:19, the attendance status will be “absent”.

Overtime setup: there are three overtime levels. Please set as needed.

Dinner time: if checked, the system will automatically deduct the dinner time from the overtime. The overtime level depends on the time duration after deducting the dinner time.

2. Holiday Settings

You can set a special day as a holiday. The holiday here takes priority over the attendance shift. That is to say, once a day is set as a holiday, there is no need for you to check in even if it is scheduled in the working day.



3. Attendance Shift Settings

Attendance Shift: The employees shall perform their duties according to the shift schedule.

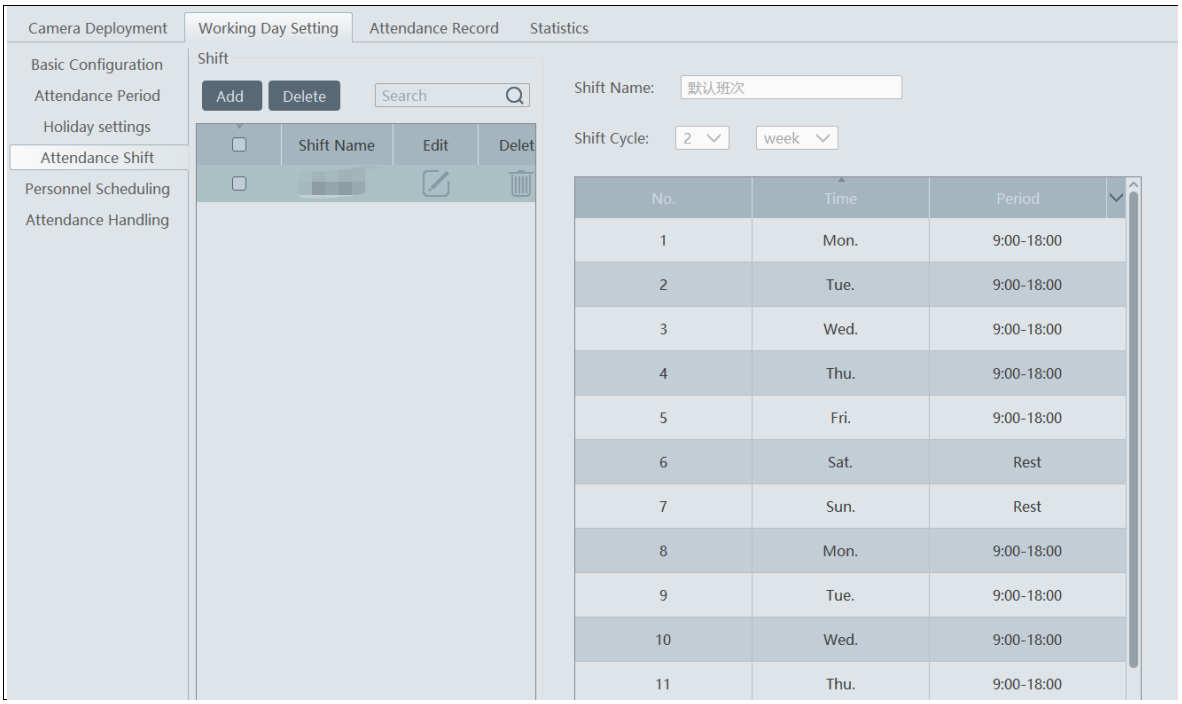
Click [Add] to set the shift name and shift schedule.

Shift cycle can be set by day, week or month. The schedule will automatically repeat according to the set day(s), week(s) or month(s).

Day: You can customize the attendance period of each day. The number of days should be between 1 and 31.

Week: The schedule will repeat every 7/14/21/28/35 days based on the week.

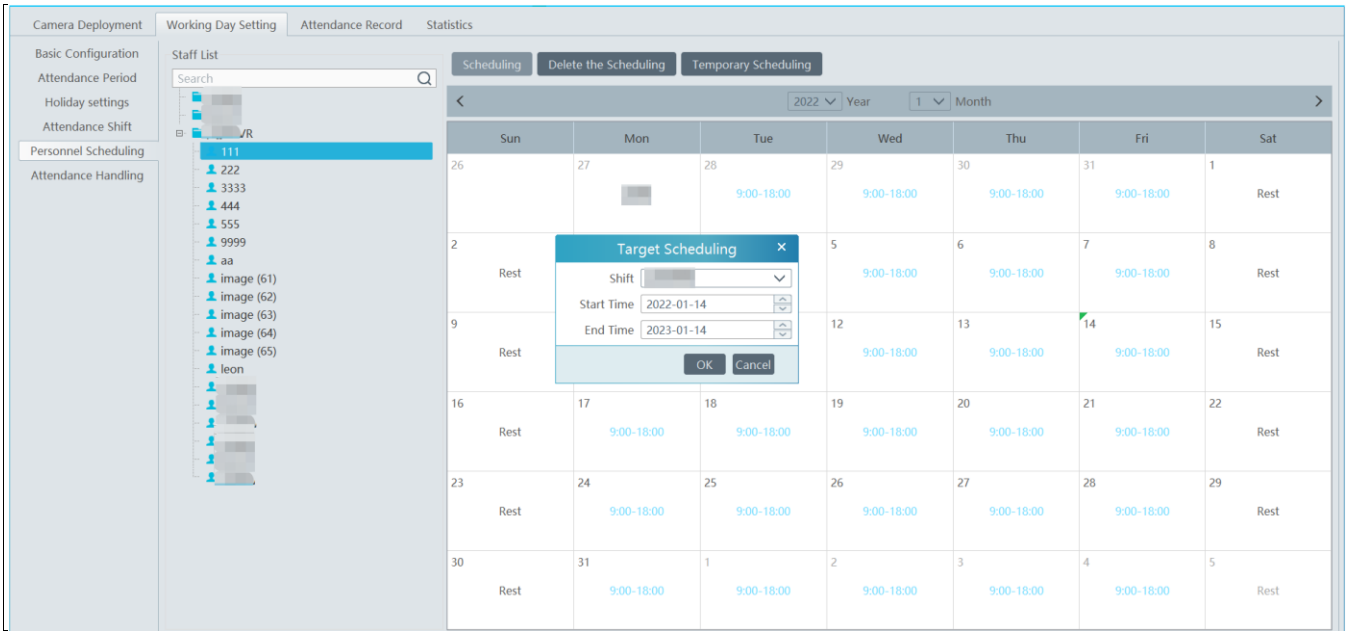
Month: You can customize the attendance period of each month.



After you set the shift schedule, click [Save] to save the settings.

4. Personnel Scheduling

You can set different schedule for different attendance groups or employees.

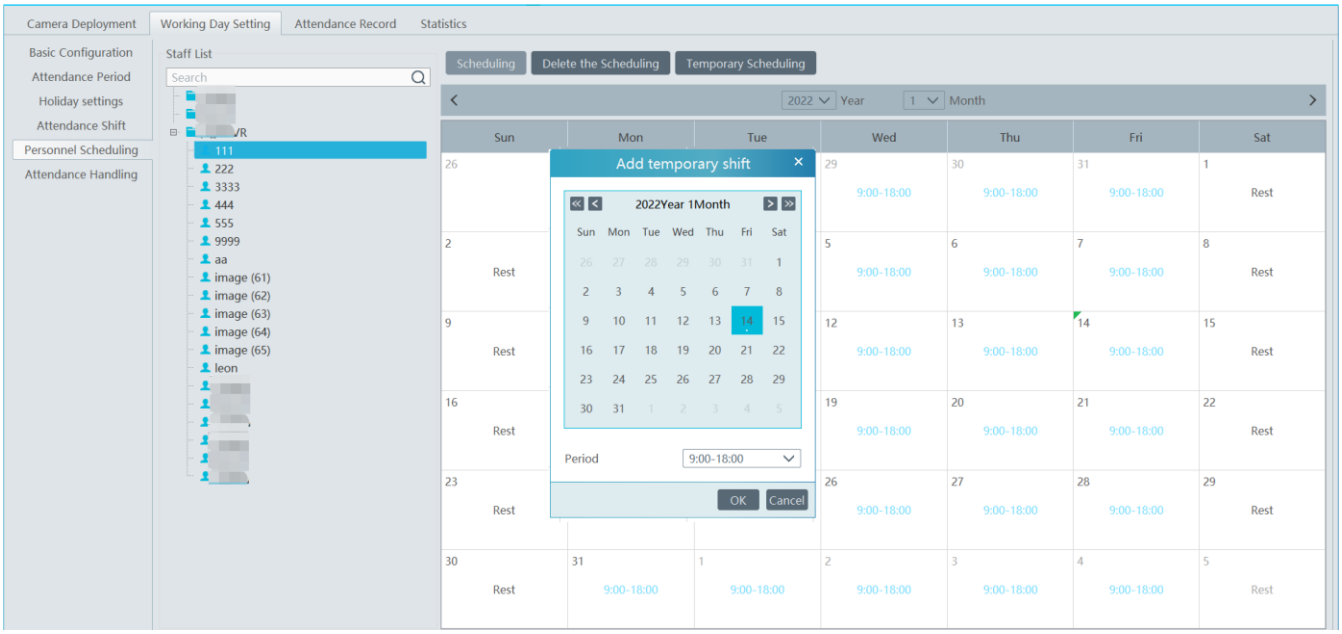


Select the attendance group or employee and then click [Scheduling] to select the shift and schedule start time and end time. Finally, click [Ok] to save the settings.

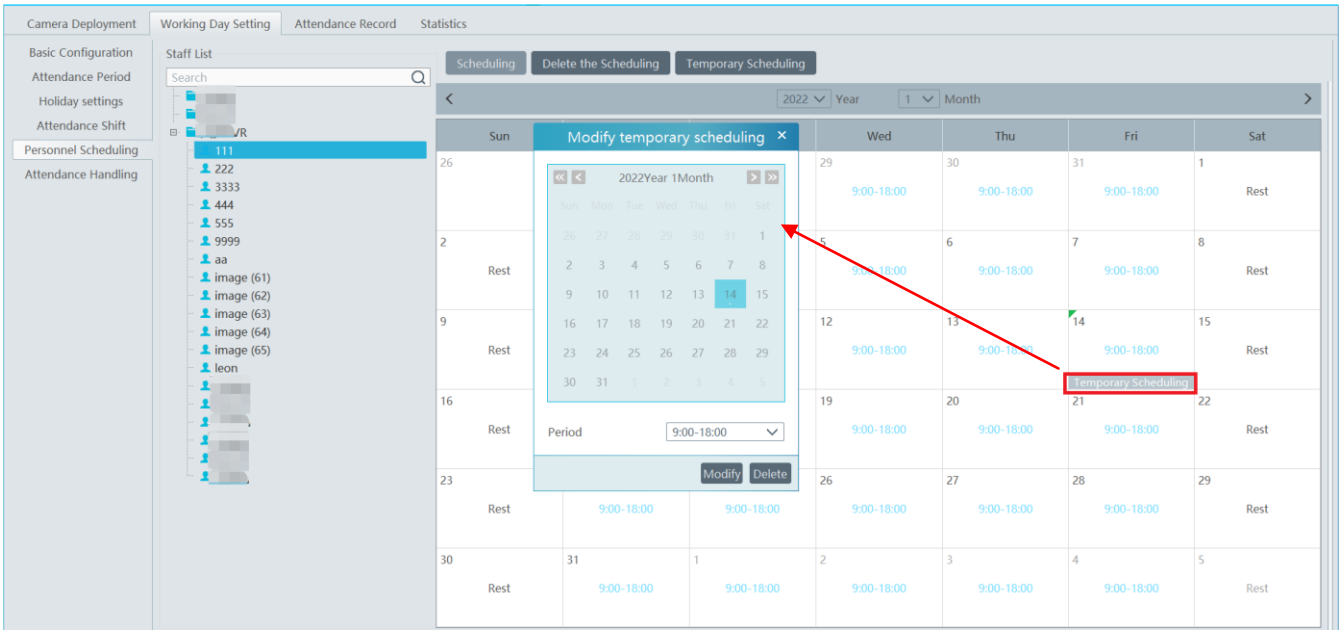
If the schedule for the attendance group or the employee needs to modify, select the group or person, click [Delete the scheduling] to delete the current schedule.

If there is something wrong with the attendance shift, you can select the person or group on the left and click [Scheduling] to modify.

When the temporary scheduling is needed, select the person or group, click [Temporary Scheduling] and select date and period. After that, click [Ok] to save the settings.



If you want to modify the temporary scheduling, you can select the person or group and click Temporary Scheduling to modify. Click [Delete] to delete the temporary scheduling of the day.



5. Attendance Handling

If someone needs to apply for leave or correct the check-in/out record, you can enter the attendance handling interface to set up.

Leave/Business-Trip Settings:

① Select the employee who want to apply for leave or do business trip.

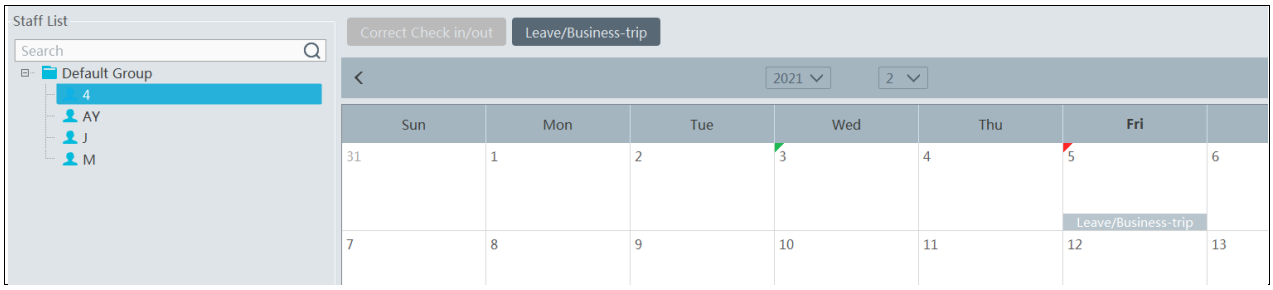
② Click [Leave/Business-trip].

③ Select the date the employee wants to apply for leave or do business trip.

④ Select the type, sub type, leave time and remark.

⑤ Click [OK] to save the settings.

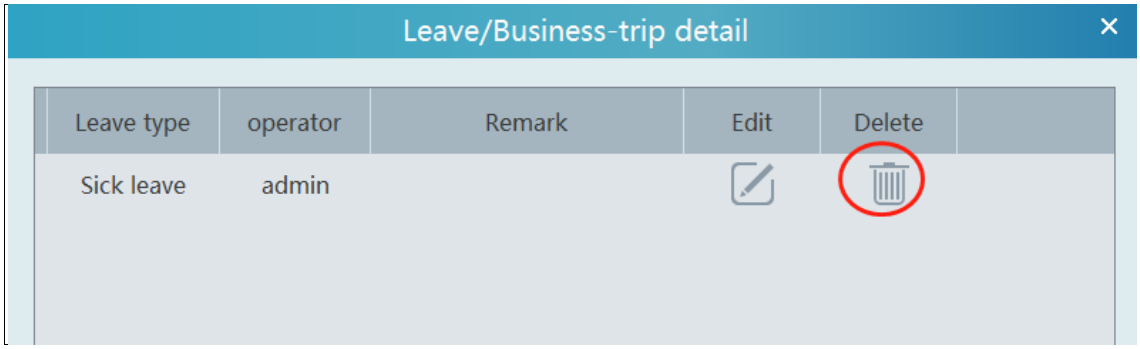
: click it to set the sub type of leave or business trip.



Cancel Leave/Business-Trip:

When the leave or business-trip cancels, you can go to the attendance handling interface to cancel it.

1. Select the person you want to cancel the leave/business-trip and then a timetable will display.
2. Clicking on the Leave/business trip tag will display a Leave/business-trip detail box.
3. Move the slide bar to the right as shown below. Click to cancel this item.

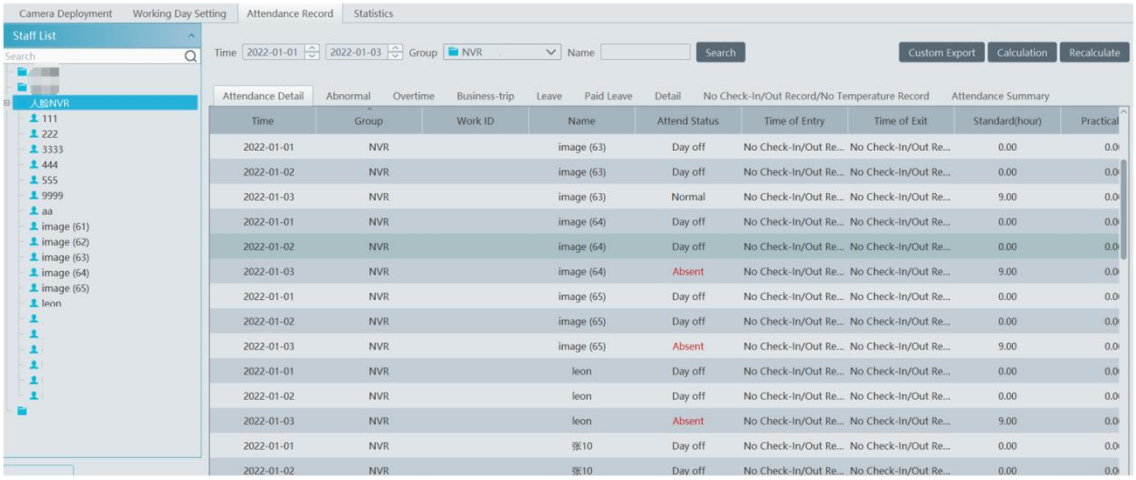


In addition, you can also correct check-in/out time for the exceptional records according to actual needs.

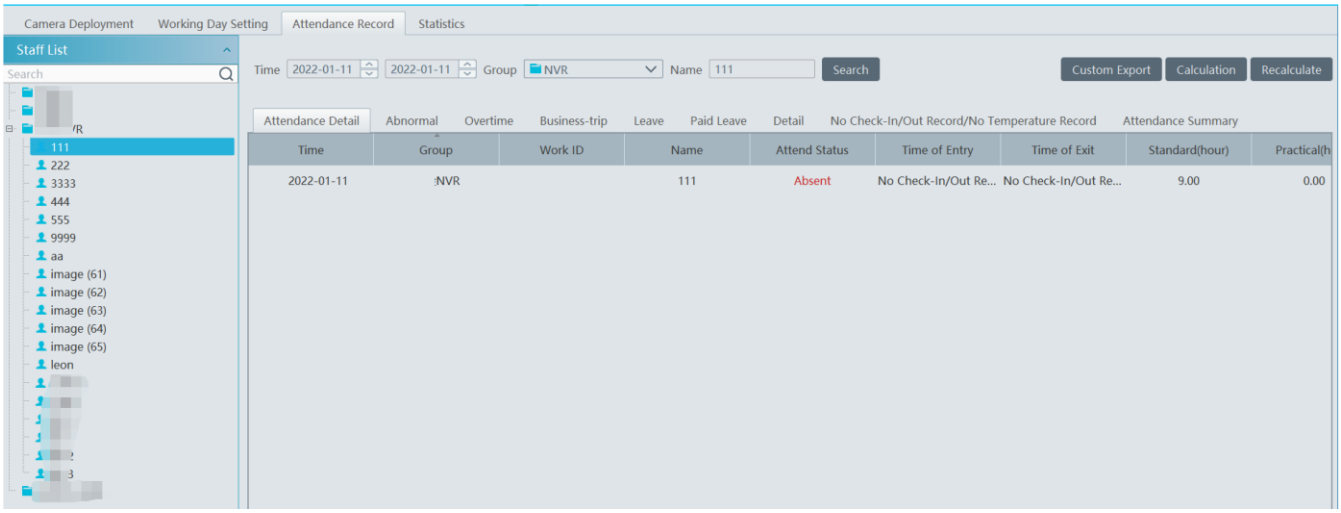
5.3.3 Search Attendance Record

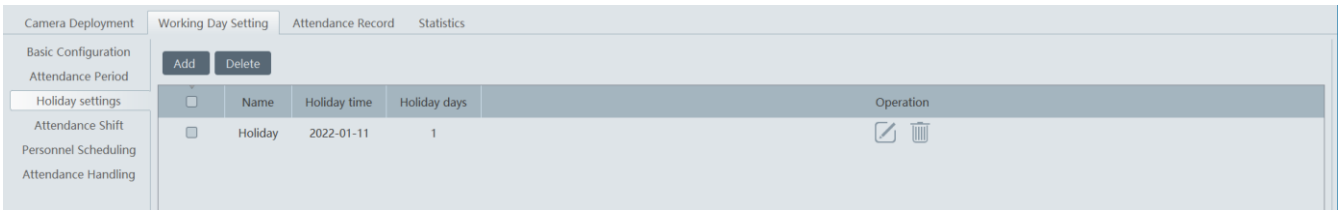
You can search the desired attendance records to view the employee's attendance status by filtering the conditions, such as attendance group, name, etc.

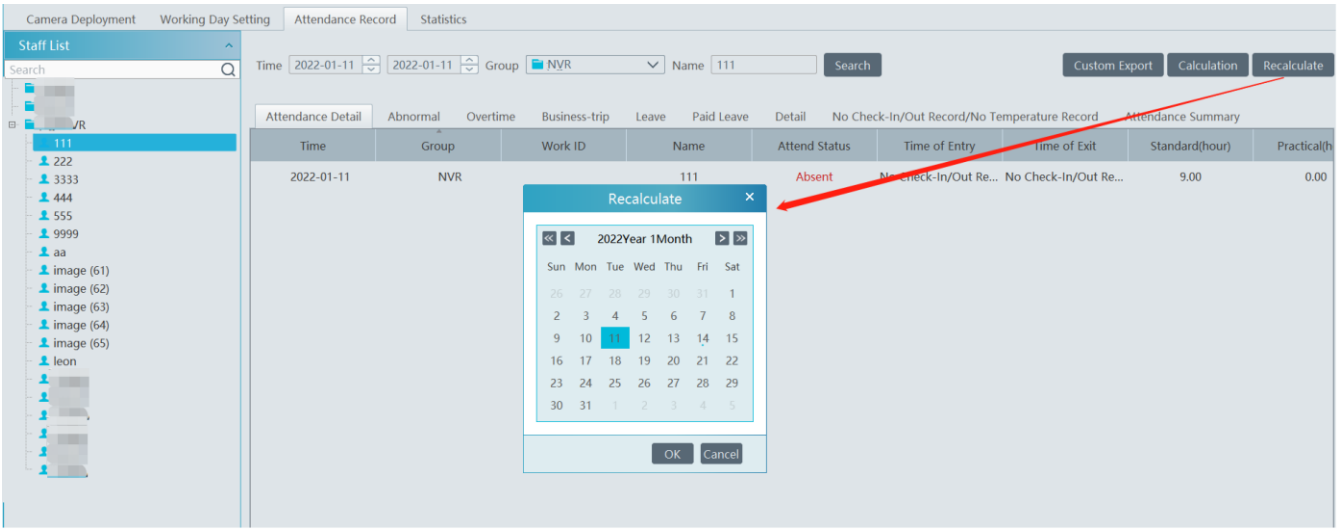
1. Click Home→Face Attendance→Attendance Record to go to the following interface.
2. Set the search conditions, such as time, group, name, attendance status (abnormal, overtime, business-trip, etc.).
3. Click [Search] to filter the attendance records.

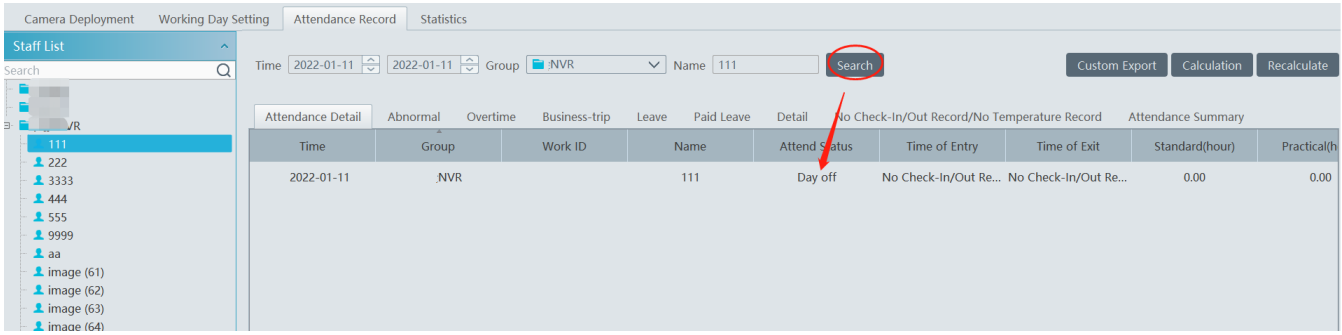


The attendance detail of each day, abnormal status, overtime and so on can be displayed.
After setting temporary shift or holiday, click [Recalculate] and then select the date on which the temporary shift or holiday has been set. Finally, click [Search]. The updated attendance data will be displayed. Refer to the following pictures.

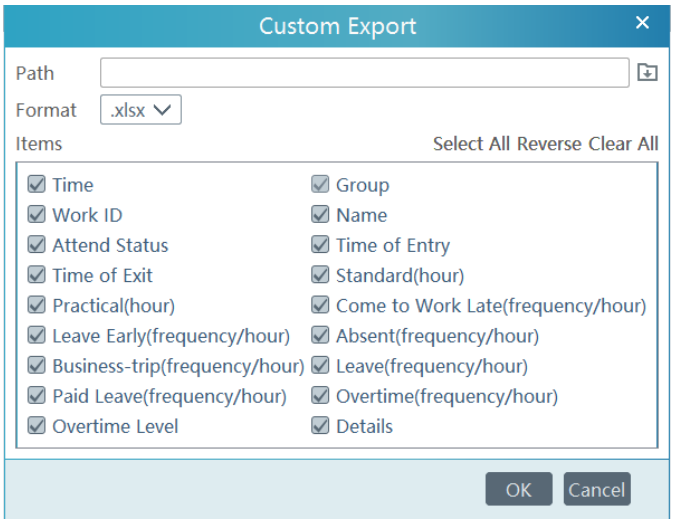








Click [Custom export] to export an Excel of the attendance result. These exporting items can be customized as needed.

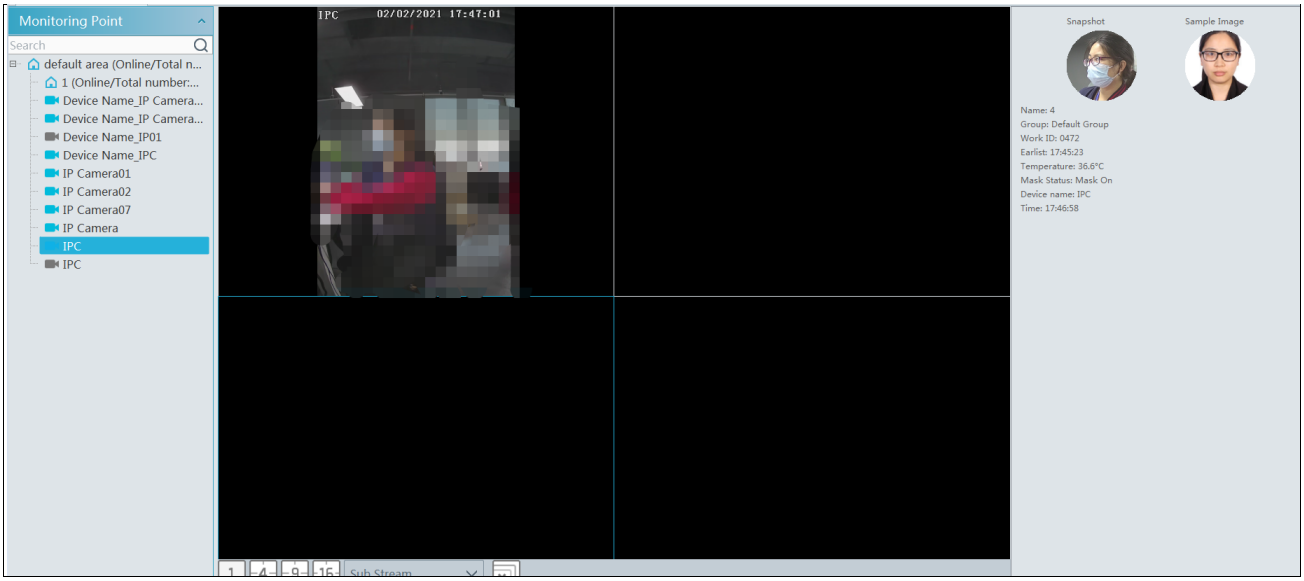


5.3.4 Real-time View

Click Home→Face Attendance→Camera Deployment to go to the following interface.

Drag the attendance camera to the preview window. Then you will see the live video. The face match result will be displayed on the right of the interface.

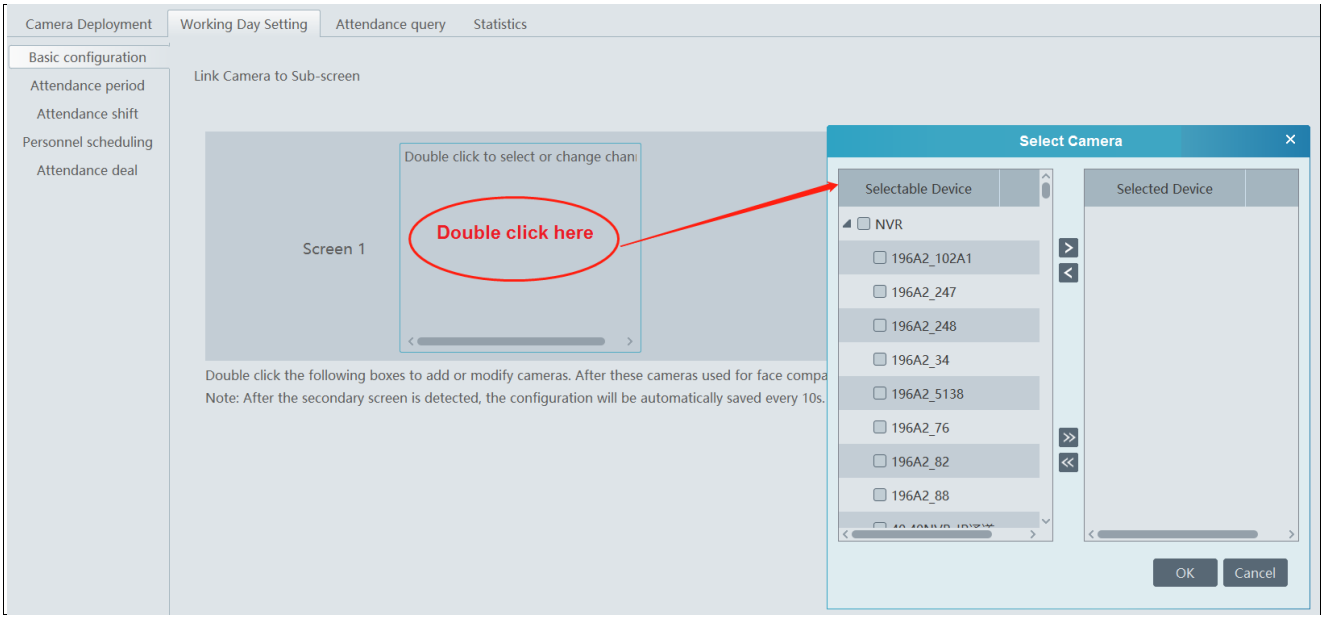
Note: The compared person in attendance system shall be added in the person list in advance. One person only can be added in one group. If this person also be added in other groups (like VIP list), the comparison result will not be obtained.



View the match result of the sub-screen:

① Click Face Attendance→Working Day Setting→Basic Configuration.

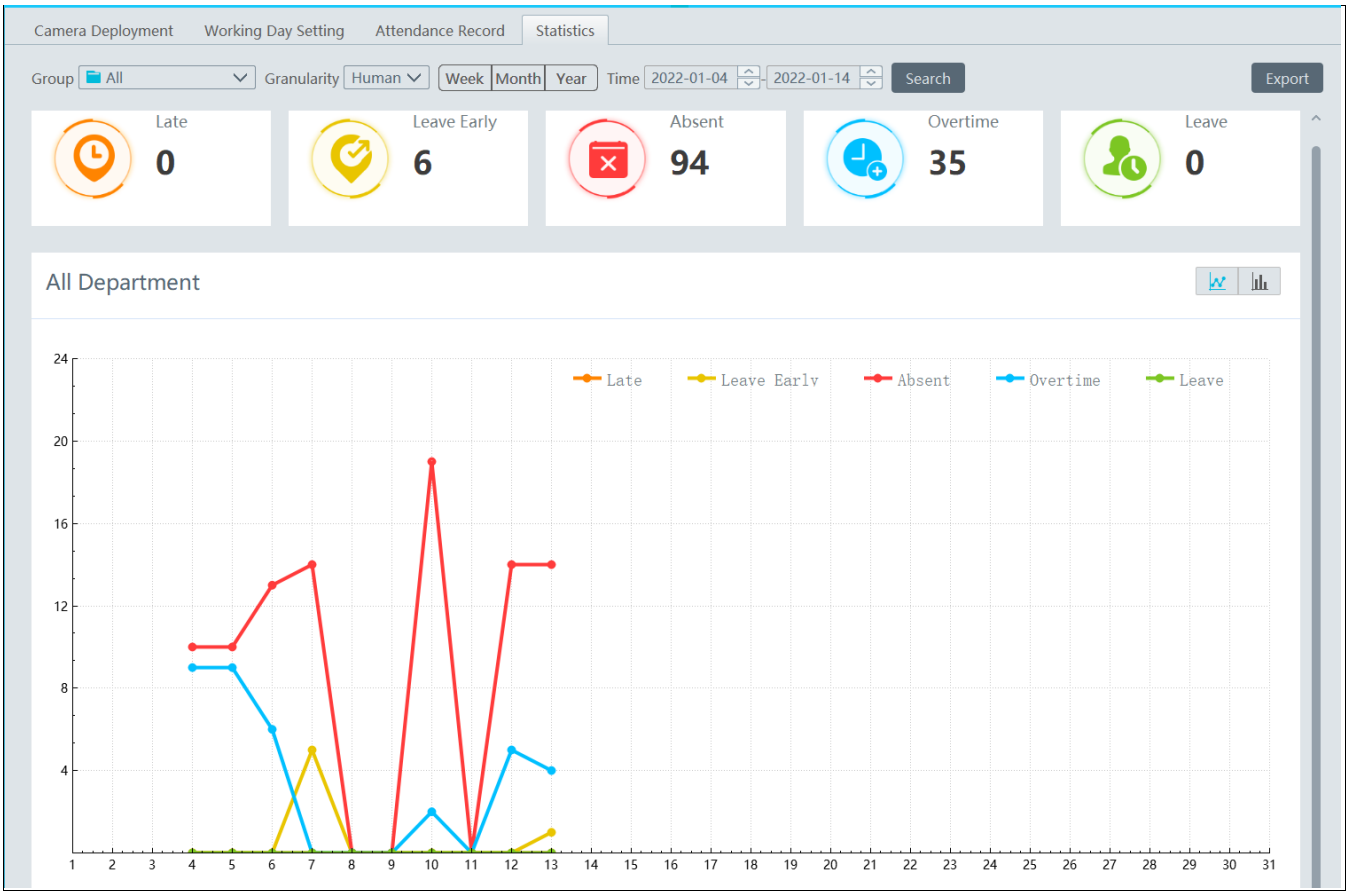
② Double clicking on the box displays a camera selection box. Select the desired camera and then click [OK] to save the setting.

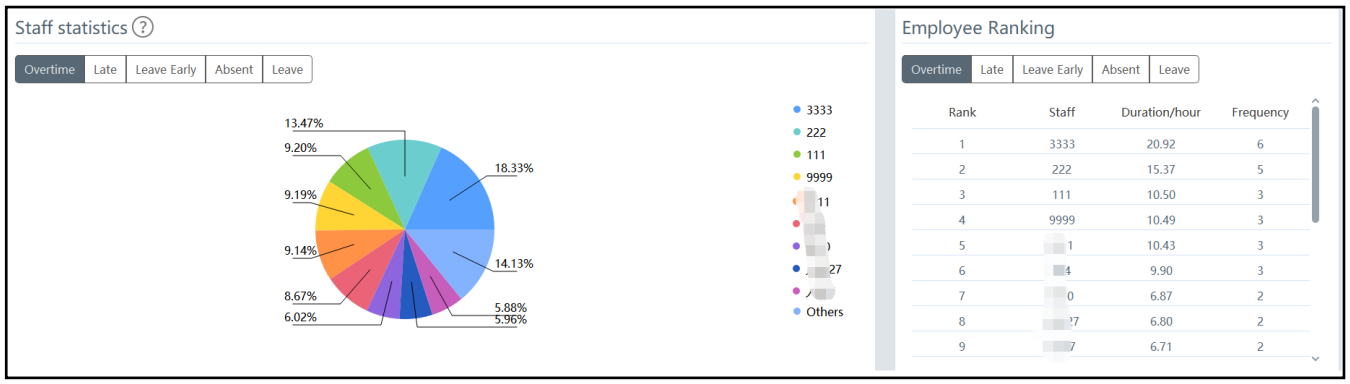


③ Click Face Attendance→Camera Deployment. In the camera deployment interface, right click on the screen to select “Project onto” to select sub screen. Then you will see the face display on the sub screen as shown on the below.

5.3.5 Statistics of Attendance Data

In the statistics interface of Face Attendance, you can view the attendance data in the form of chart.





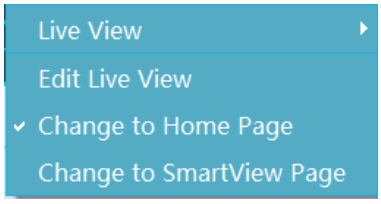
Granularity: Group or human can be selected. If Group is selected, the attendance data of each group (department) can be viewed.

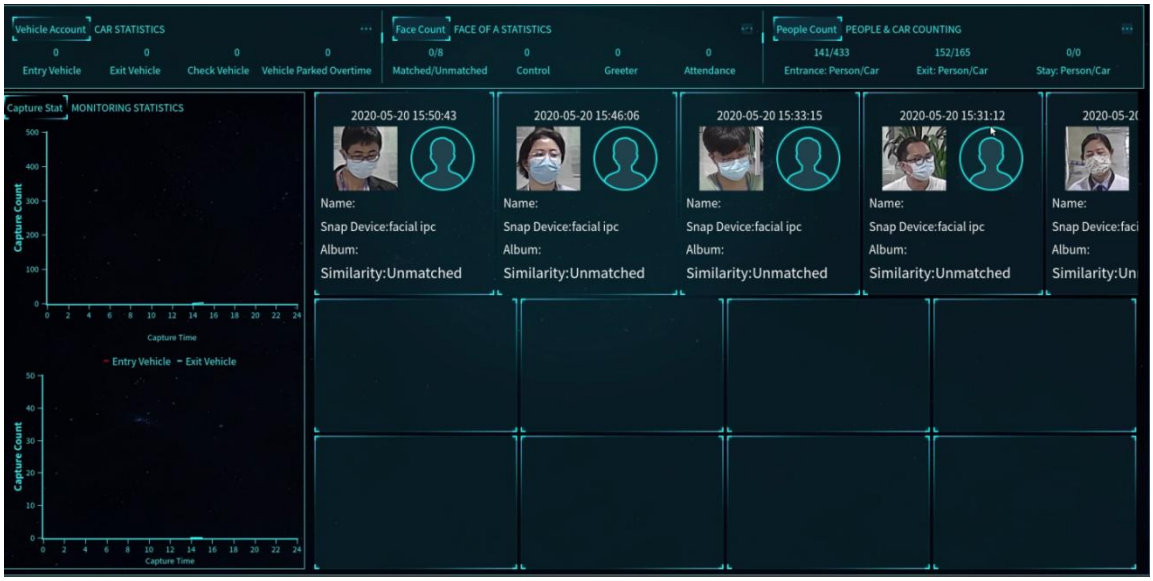
If Human is selected, the attendance data of the employees in the group (department) can be viewed.

You can quickly view the attendance data by week/month/year and also can view the attendance data in a specified period.

5.4 Smart View

In the home page, click “View” and select “Change to Smart View Page”.



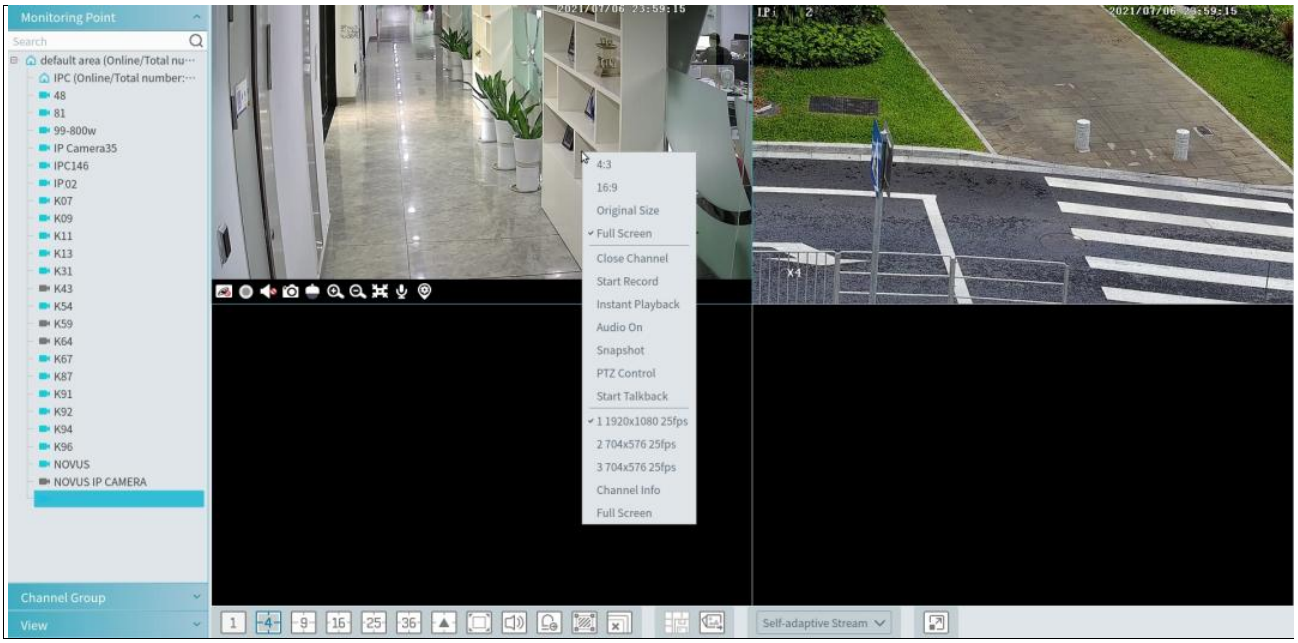


In this page, you can view the statistics of smart events, such as license plate recognition, face recognition, line crossing human/vehicle counting. Click ••• to enter the corresponding intelligent analysis configuration interface.

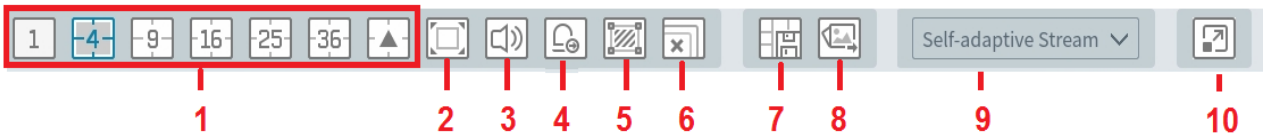
6 Live View

6.1 Live View

Go to Home→Video Preview interface as shown below.



The descriptions of the live view buttons are as follows.



NO.	Description	NO.	Description
1	Screen display mode	**6**	Close all videos
2	Full screen	**7**	Save the current view mode
3	Enable/disable broadcast	**8**	Image export
4	Manual alarm output	**9**	Choose the camera stream
5	Show the smart event detection area	**10**	Show smart snapshot

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

Toolbar on the display window:

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

Right-click button function:

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

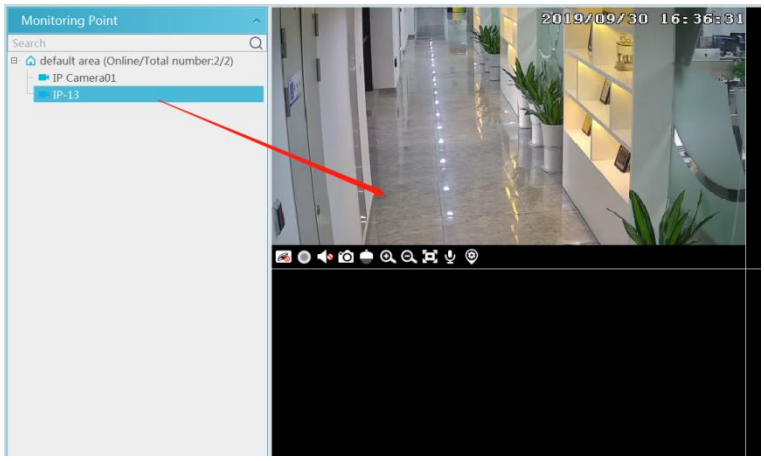
4:3/16:9/Original Size/Full Screen: screen display proportion; please select it as needed.

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

6.1.1 Monitoring Point View

- **Start View**

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



- **Stop View**

① Place the cursor on the live view window to display the menu toolbar and then click to stop viewing.

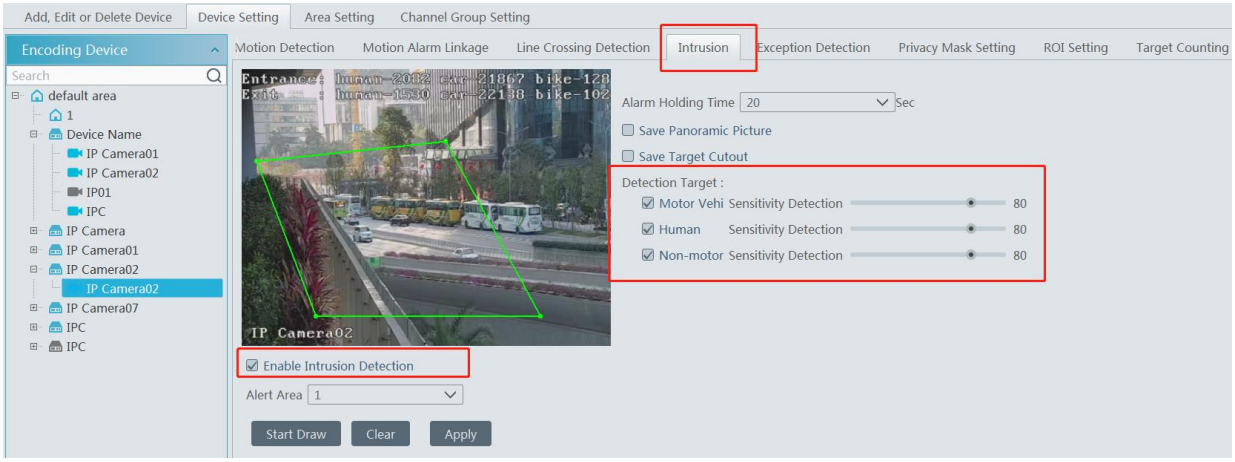
② Right click on the live view window and then select "Close Channel" to stop viewing.

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

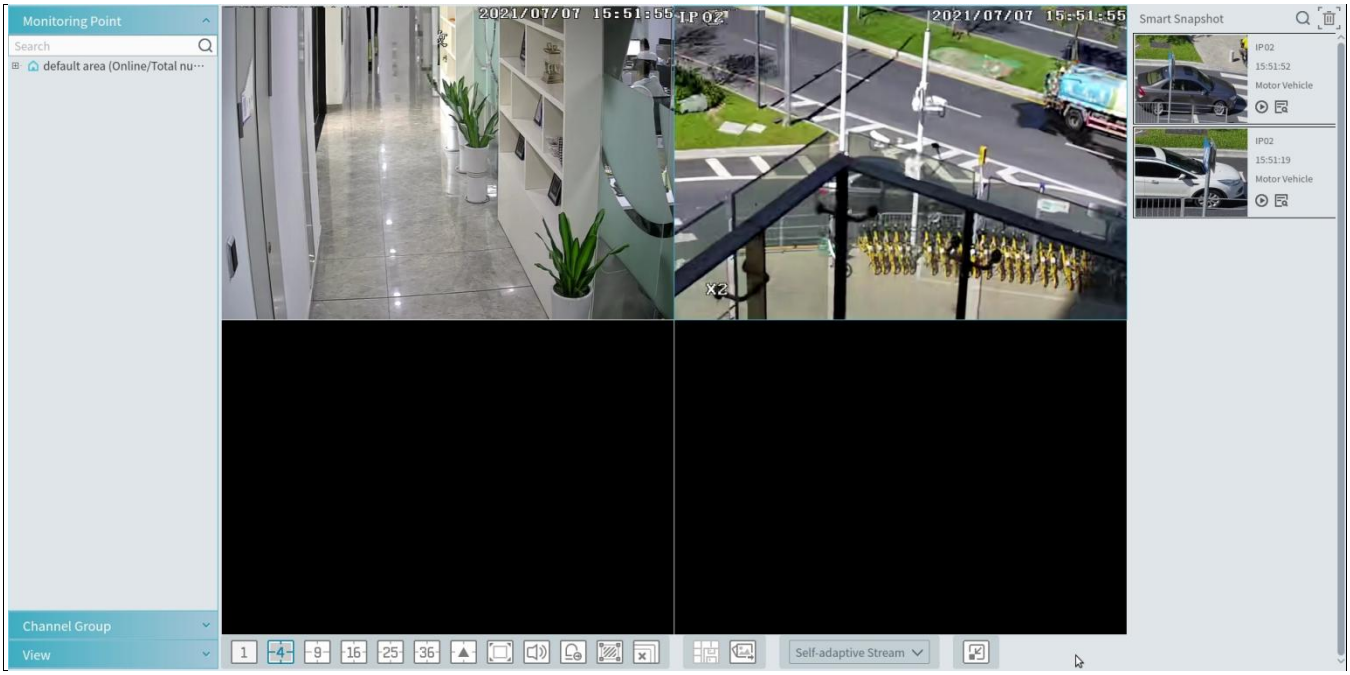
- **Smart Snapshot**

In the video preview interface, drag the AI IPC to the preview window and then click . This will bring a smart snapshot list on the right panel. The captured people/motor vehicle/non-motor vehicle picture will display in real time.

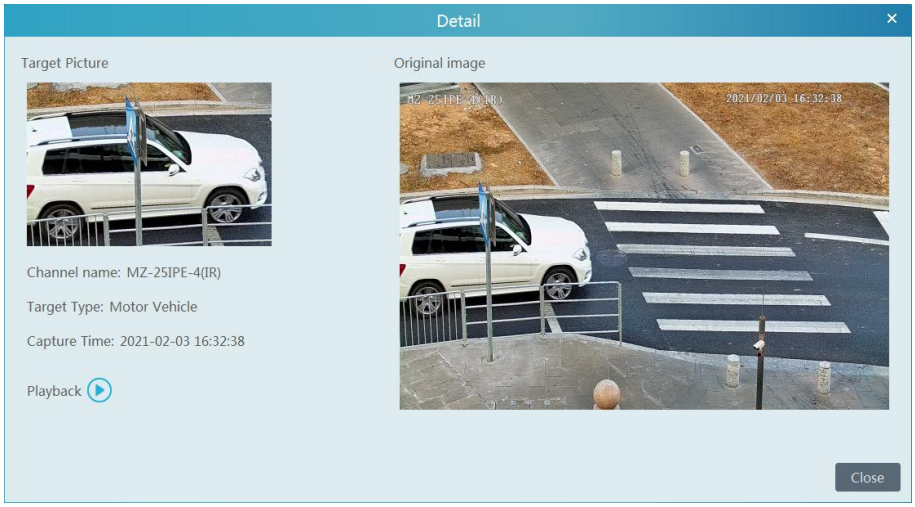
Note: Only when the AI IPC with human/vehicle classification function enables the corresponding smart event, such as line crossing, region intrusion/entering/exiting and target counting, can smart snapshots be displayed. Please go to Home→Resource Management→Device Setting interface to enable the corresponding smart event and check the detection target as shown below.



After that, you will see the smart snapshots as shown below.

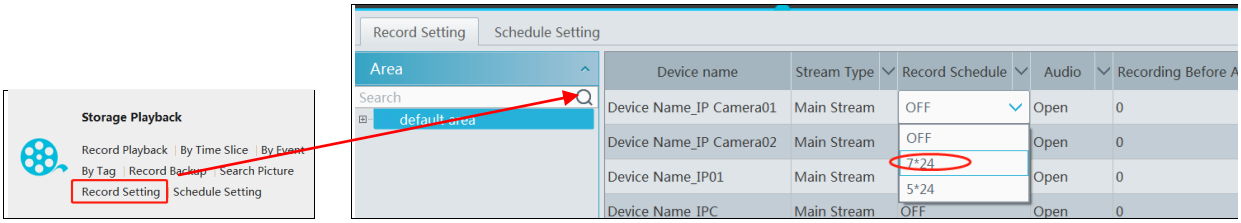


Click the button of the captured picture to view the snapshot detail as shown below.



In the above interface, click the play button to enter the storage playback interface to play the video.

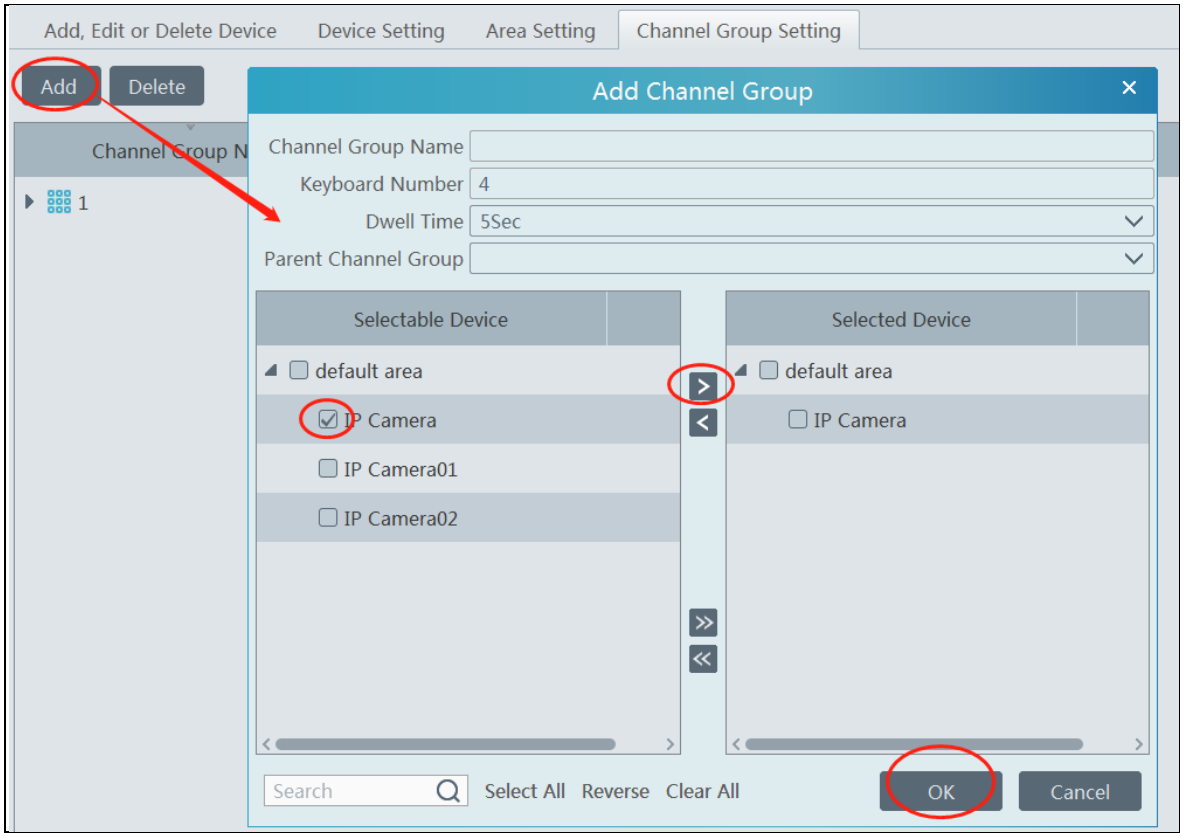
Note: the record schedule shall be enabled in advance or no recorded video can be played.



6.1.2 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.

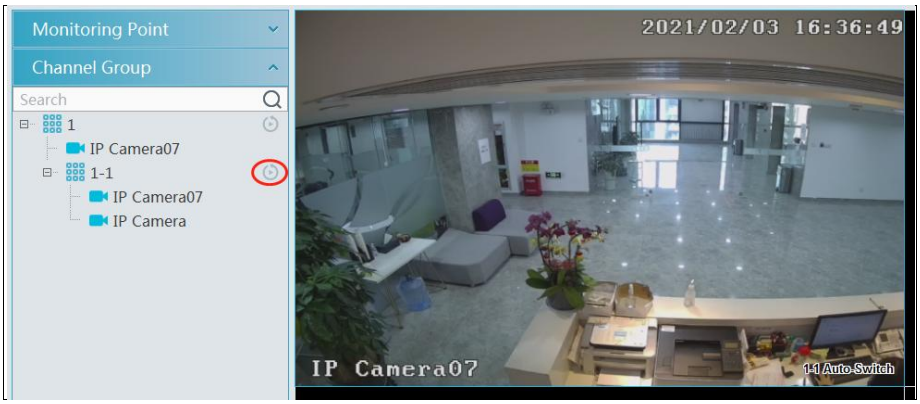
④ Select the parent channel group.

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 live view interface as shown below.



You can start the channel group view as follows.

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

2. In the current screen display mode, select a window and then click beside the channel group name to play all channels of the

channel group in this window in sequence.

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

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

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

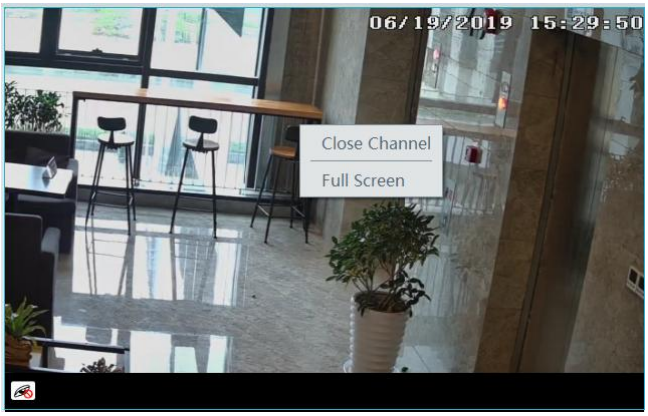
Click to play the previous sub channel group; click to play next sub channel group; click to stop auto switch among the sub channel groups.

➢ Stop Channel Group View

① Place the cursor on the auto-switch window and then click to stop viewing.

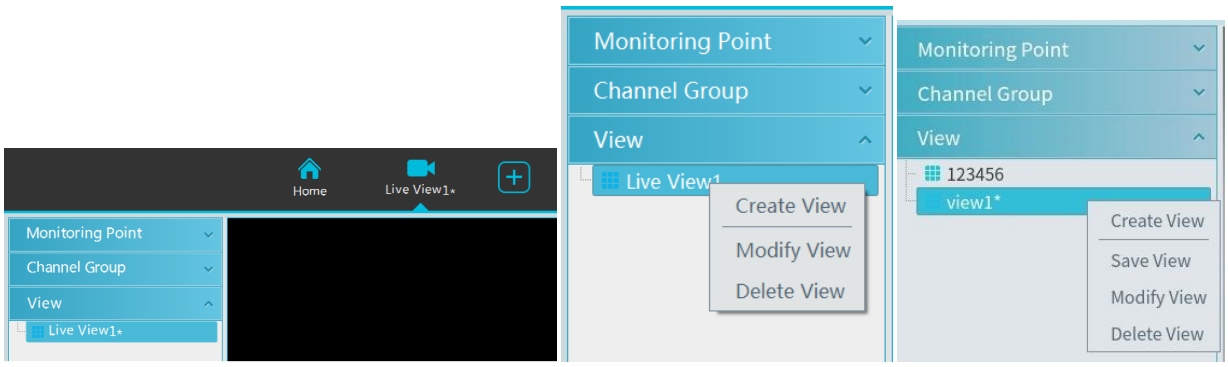
② Right click the auto-switch window and then click “Close Channel” to stop viewing.

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



6.1.3 Plan View

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



- **Add View Plan**

① Right click “Live View 1” and then select “Create View” or click to add a new view plan. Clicking “Create View” to prompt an adding view window. Enter the view name and click [OK] to set view plan.

② Select screen display mode and then drag monitoring points or channel group to each window.

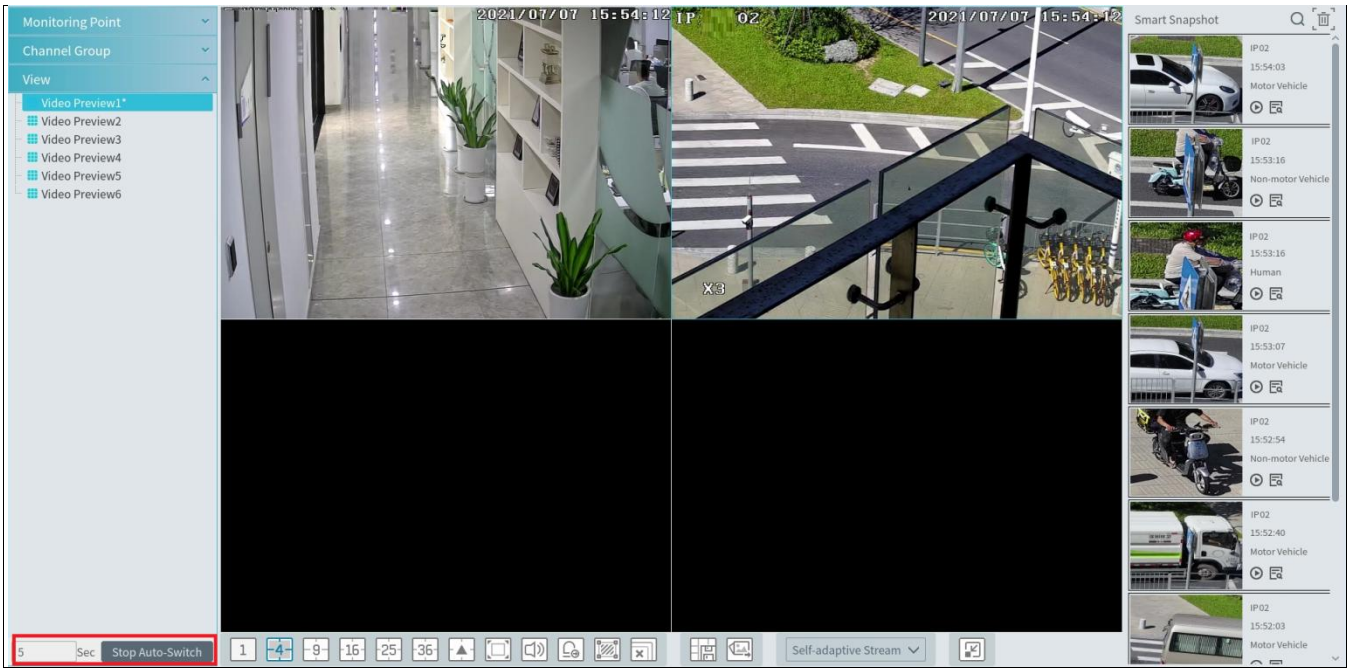
③ Click “View” on the left menu and then right click the newly added view name. Select “Save View” on the pop-up menu to save the view plan or click on the live view interface to save the view plan.
Double click view name to call the view plan.

- **Modify or Delete View Plan**

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

- **Start/stop auto-switch**

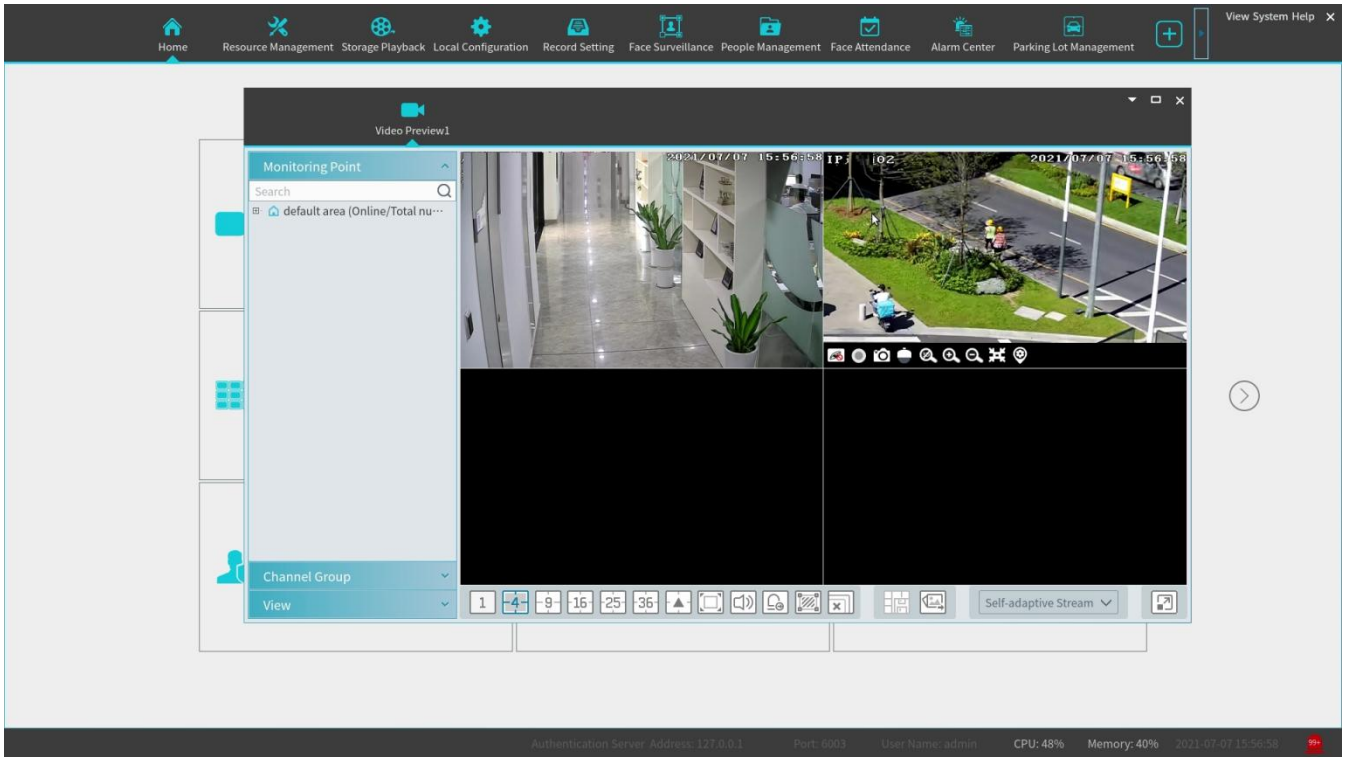
If multiple view plans saved, you can play these views in sequence.



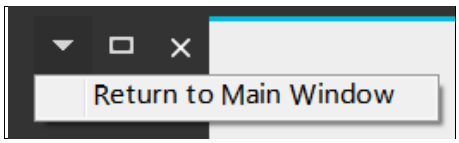
Enter the dwell time (5~3600s) and then click [Start auto-switch] to play these views in sequence. Stop the current auto-switch by clicking [Stop auto-switch].

6.2 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).

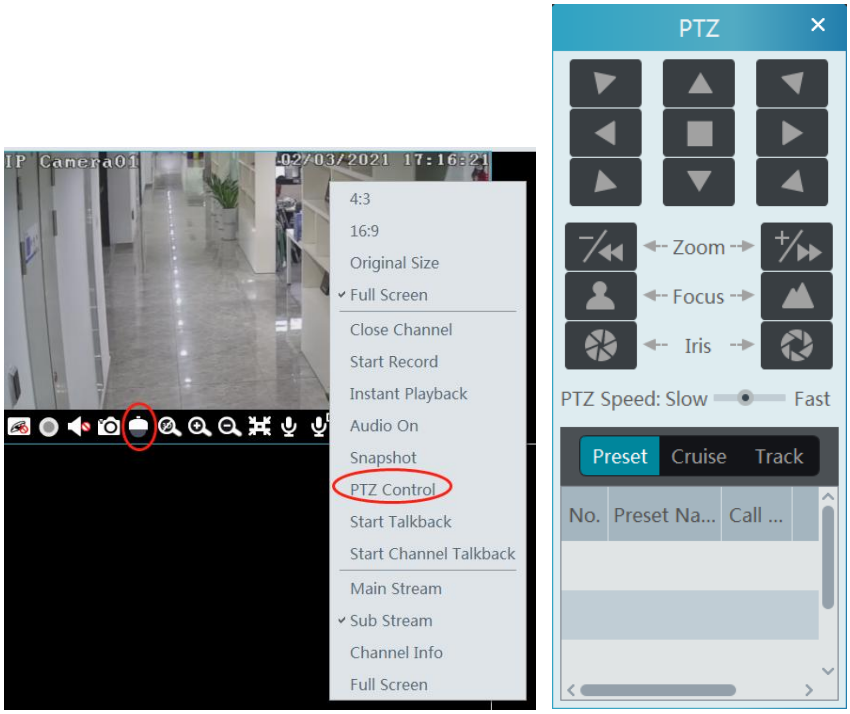


Click on the float window and select “Return to Main Window” to embed this tab in the main interface.



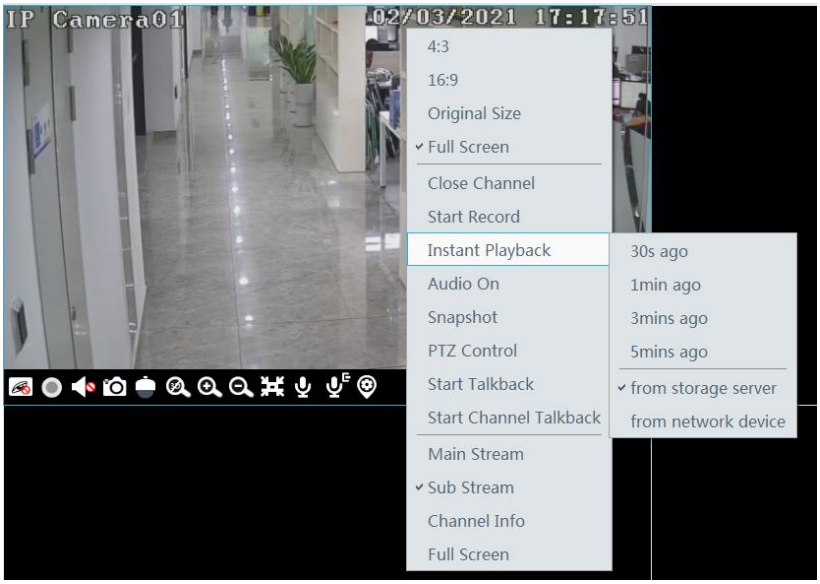
6.3 PTZ Control

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.



6.4 Instant Playback

In the live view interface, right clik 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).



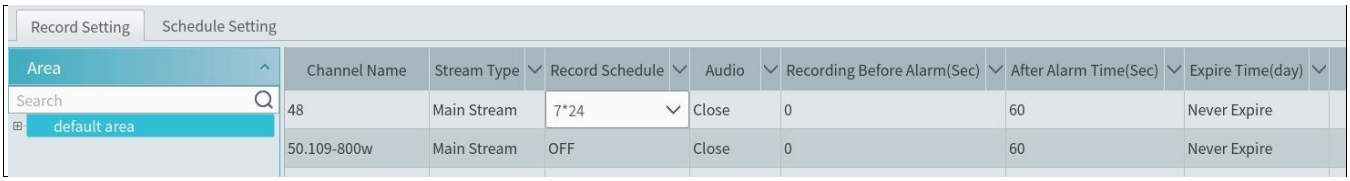
7 Record & Playback

7.1 Record Configuration

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

7.1.1 Schedule Recording

Go to Home→"Record Setting".



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

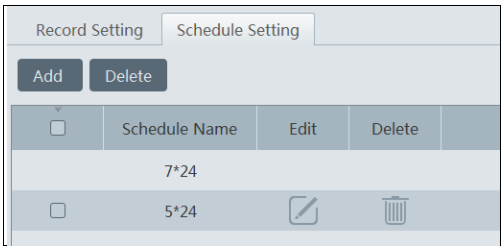
Recording Before Alarm: set the time to record before the actual recording begins.

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

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

- To set schedule:

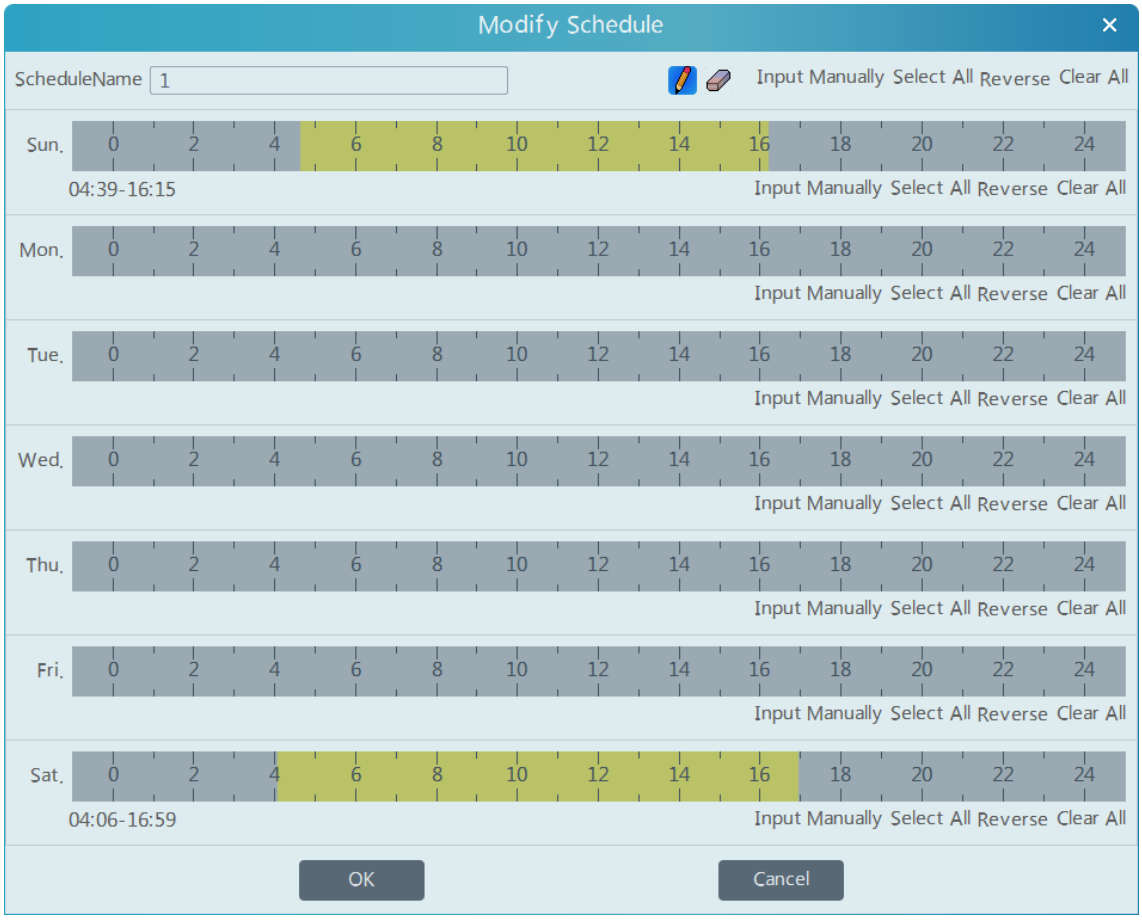
① Click the "Schedule Setting" tab to go to the following interface.



② Click [Add].

③ Enter the schedule name.

④ Set the schedule. Click and then move the cursor to select the time; click and then move the cursor to delete the selected time. Click "Input Manually" to manually enter the time. Click "All" or "Reverse" to quickly select time. Click "Clear All" to clear all schedule.

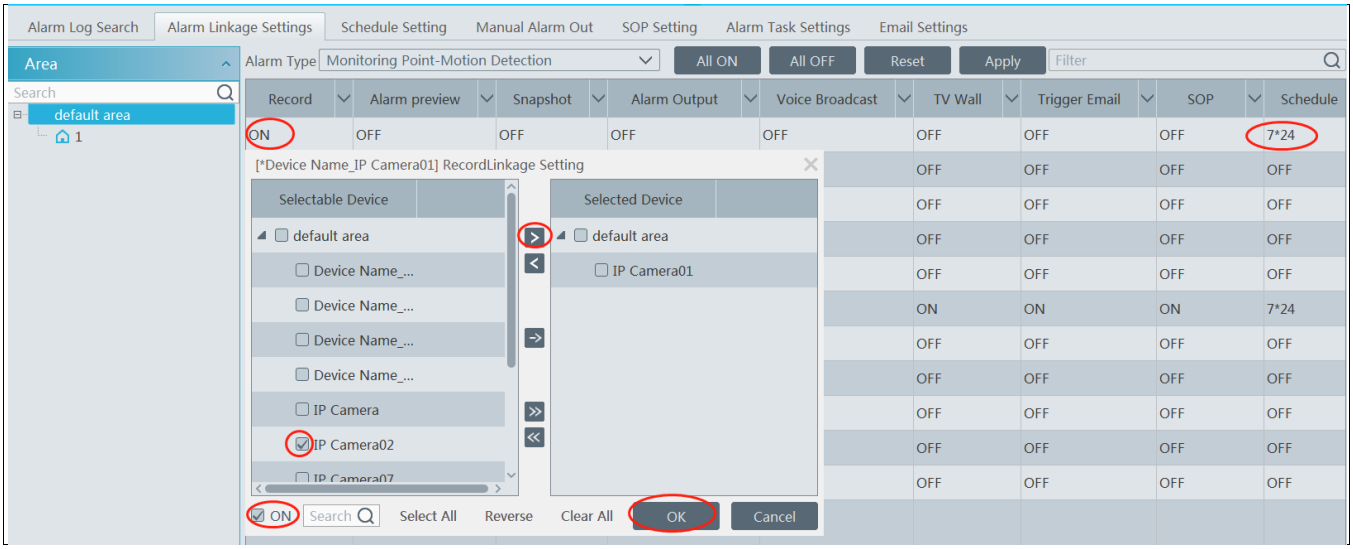


7.1.2 Alarm Linkage Recording

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

② Go to Home→Alarm Center→Alarm Linkage as shown below. Select alarm type, enable record, set linakage channel and set schedules.

③ Click [Apply] to save the settings.



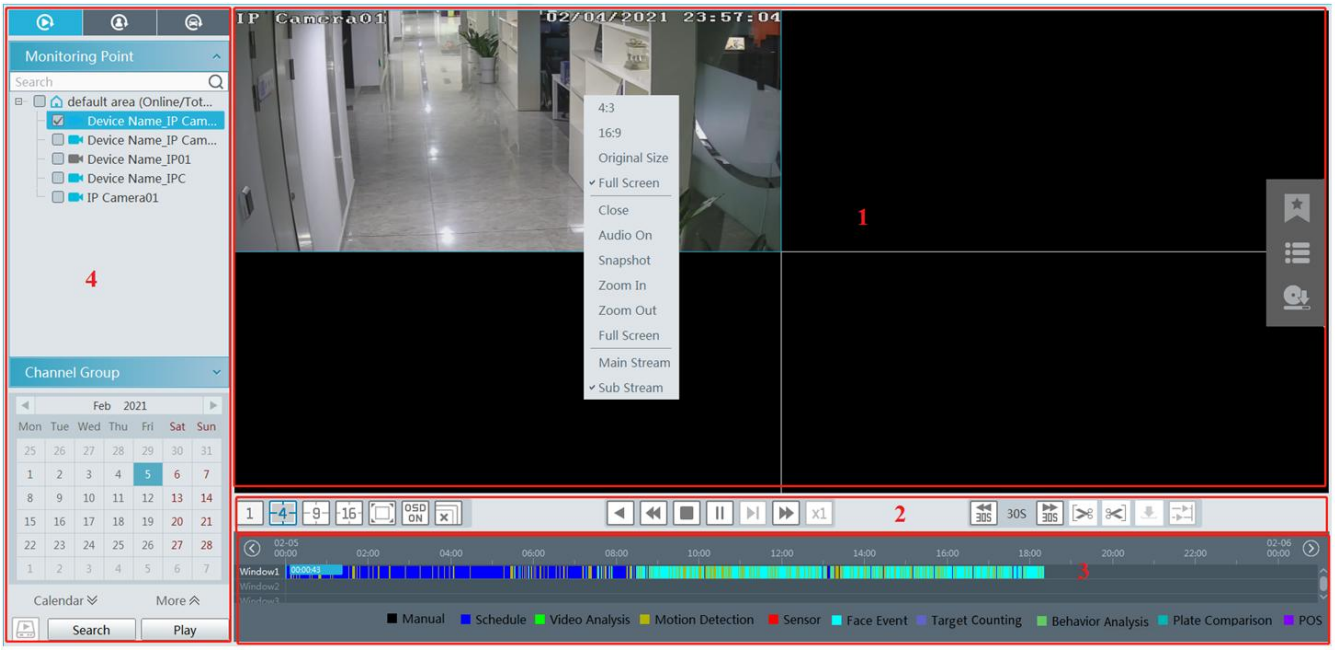
7.2 Record Playback

In the main menu interface, click “Record Playback” to go to record playback interface. Record files saved on the HDD/ SD card of the

devices and storage server can be played.

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

7.2.1 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.
x1	Click it to play in normal speed.
30S 30S	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		

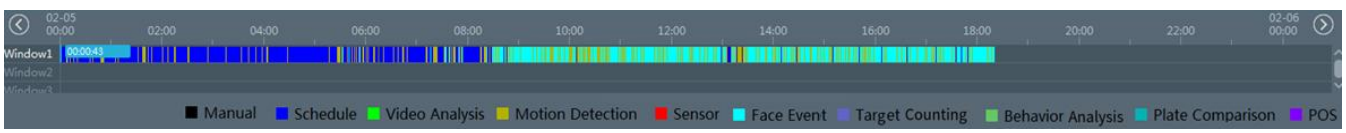
Other buttons

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, video analysis, target counting, face event and so on.

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



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

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

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

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

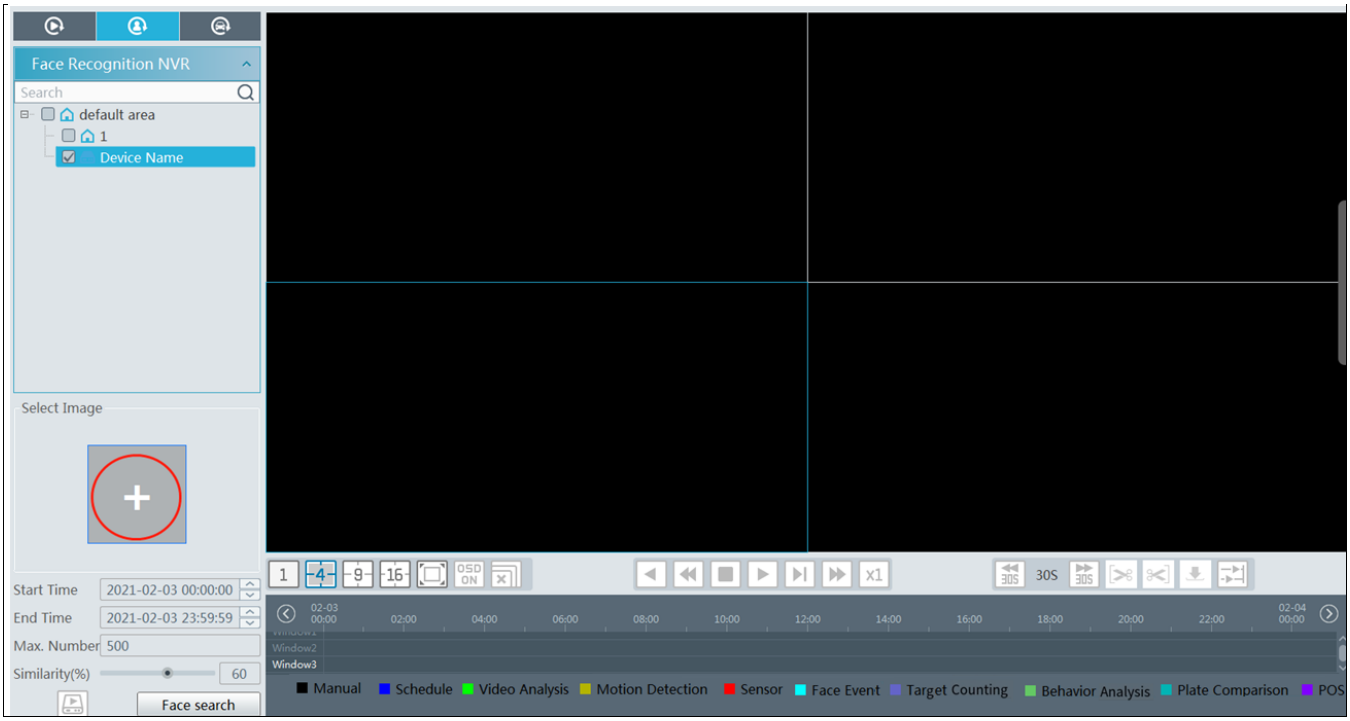
When playing record file in synchronous mode or asynchronous mode, clicking or will be useless unless all the playback windows are closed.

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

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

7.2.2 Smart Playback by Face

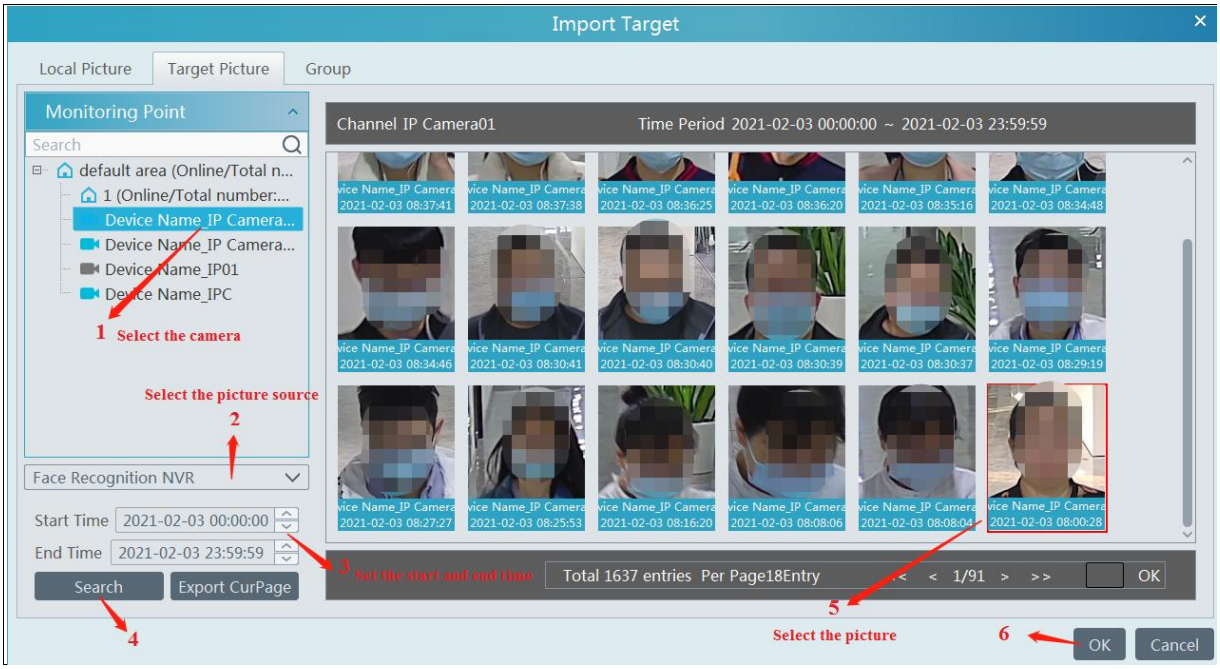
For the added face recognition NVR, you can play back by searching face.



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

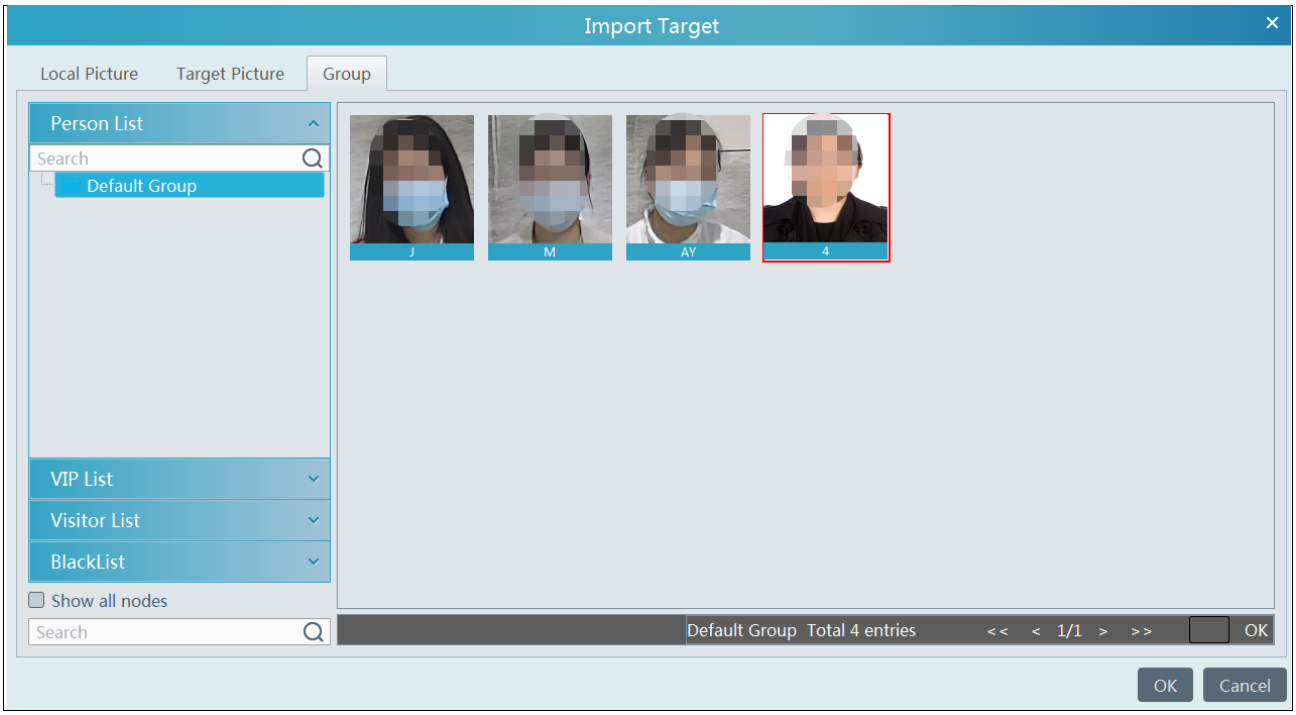
Add a face picture from the local PC: Click to select the desired face picture in the local PC and then click [OK] to save the settings.

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



Add a face from the face database:

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



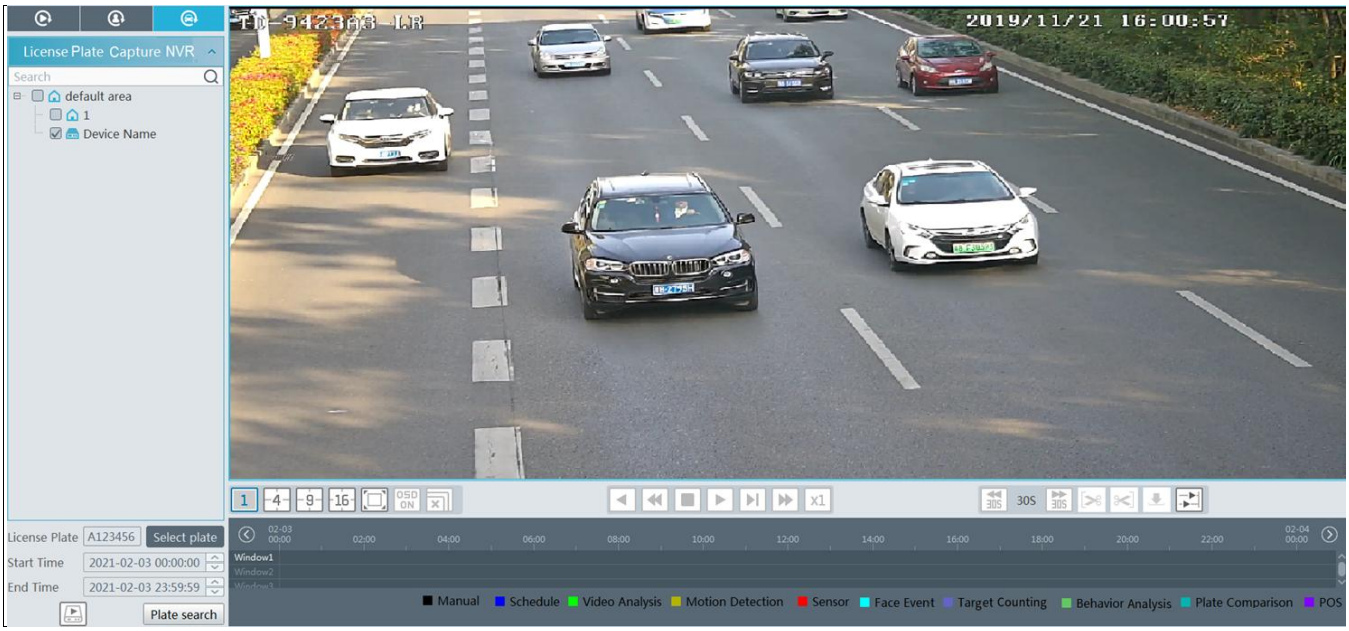
The picture must be added to the corresponding list in advance, or no picture can be searched. Refer to Chapter 6 Group Management for details.

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

7.2.3 Smart Playback by License Plate

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

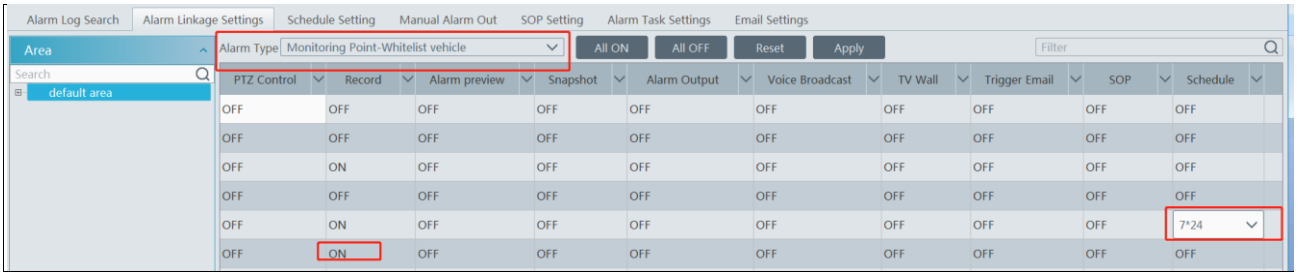
1. Select the ANPR camera or NVR.
2. Enter the license plate number or click [Select plate] to select the plate from vehicle database or license plate captured when the vehicle entering or exiting the parking lot.



: 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.

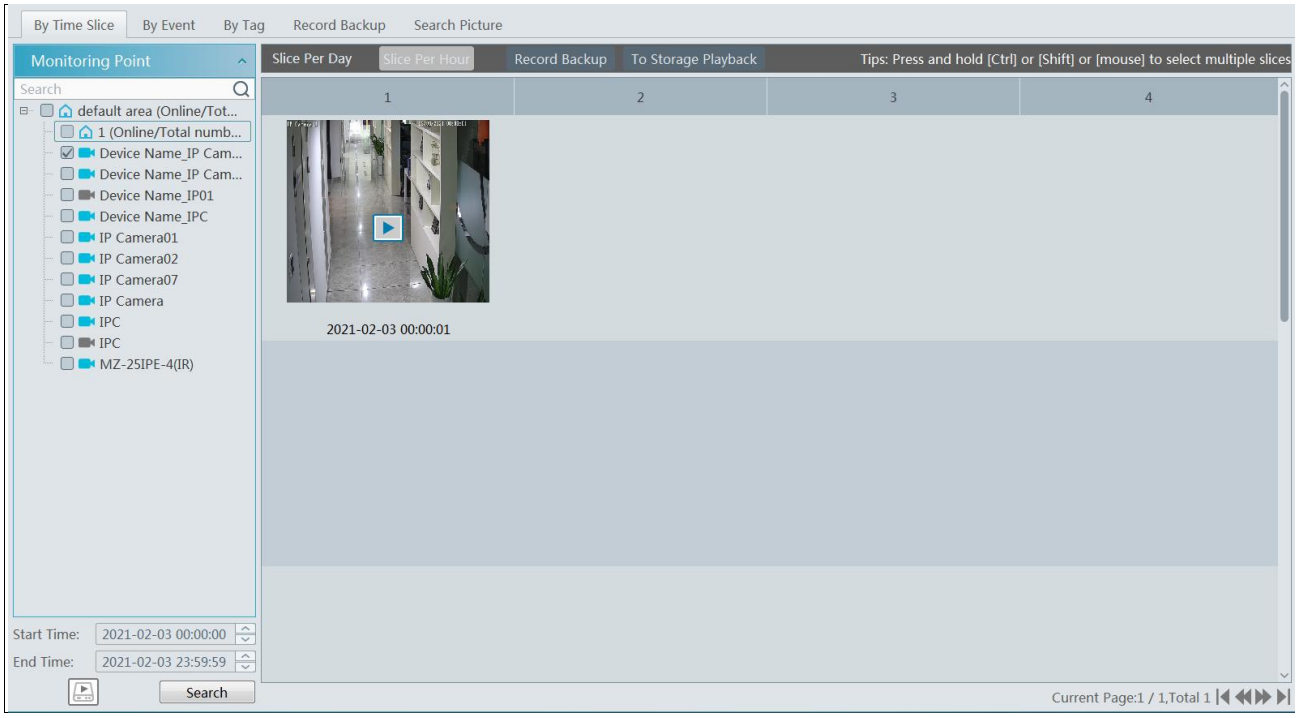
Note: before you start searching, the license plate detection must be enabled and corresponding alarm linkages and the schedule must be set in advance.



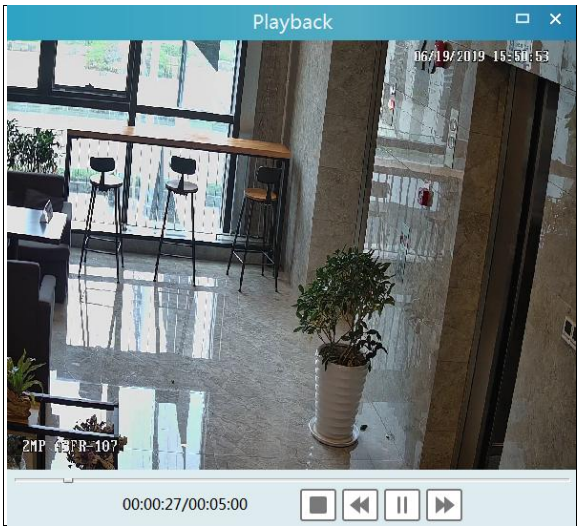
7.2.4 Playback by Time Slice

① Go to Home→By Time Slice interface.

② Select channel (or monitoring point), set the start time and the end time, select the record source and then click [Search].



③ Click to play the record.



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

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

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

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

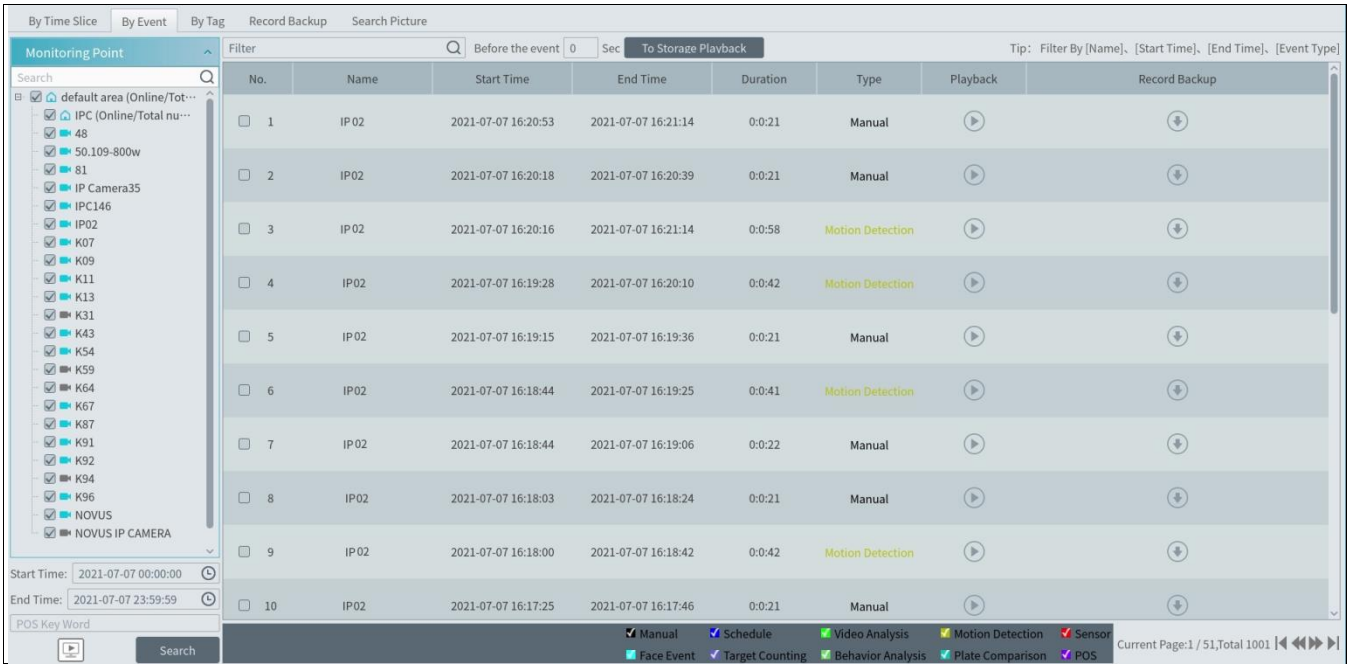
Record Backup: In the Search by Time Slice interface, select a time slice and then click “Record Backup” to back up the record file during this period quickly.

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

7.2.5 Playback by Event

① Go to Home→ By Event interface.

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



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

7.2.6 Playback by Tag

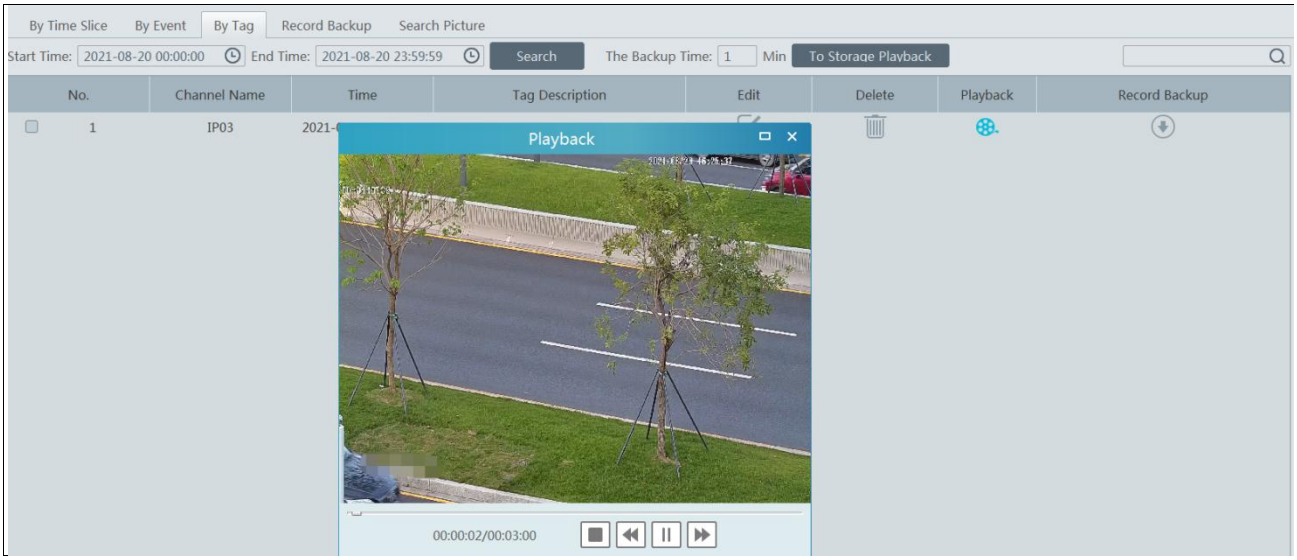
Note: **The tag cannot be added to the record from the HDD of the NVR.**

① Go to Home→Record Playback interface.

② Select a channel and put the cursor on the right center. Then a tag icon ( ) will appear. Click this icon to add tag.

③ Go to Home→By Tag interface. Select the start time and click [Refresh] to search the added tags.

④ Click in the playback column to play the record.



7.3 Record Backup

In the main menu interface, click “Record Backup” to go to the backup interface. The recorded files stored on the DVR/NVR/storage server can be exported to the USB storage device of the Mini NVMS Server. The setting steps are as follows:

① Insert a USB flash drive into the USB port of the Mini NVMS Server.

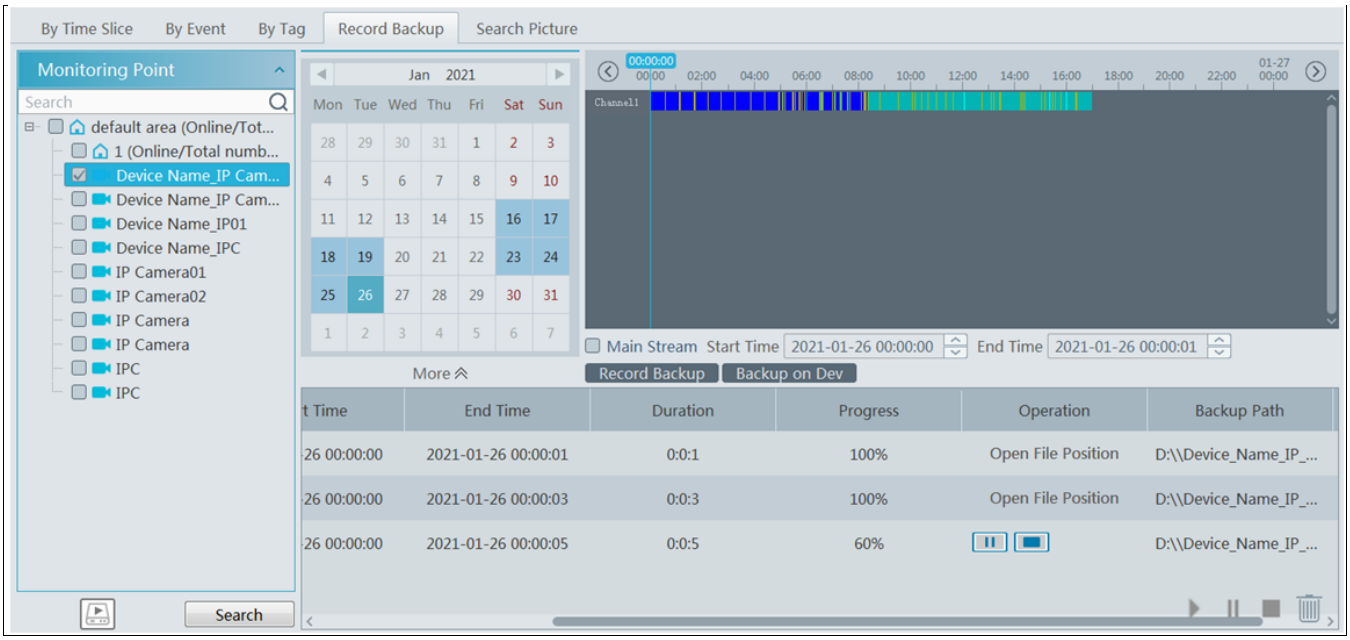
② Select the desired monitoring point.

③ Select date and click “More” to select the start and the end time and event type.

④ Click / to get records from device or storage server.

⑤ Set the start time and the end time of backup. Then click [Backup].

⑥ 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.

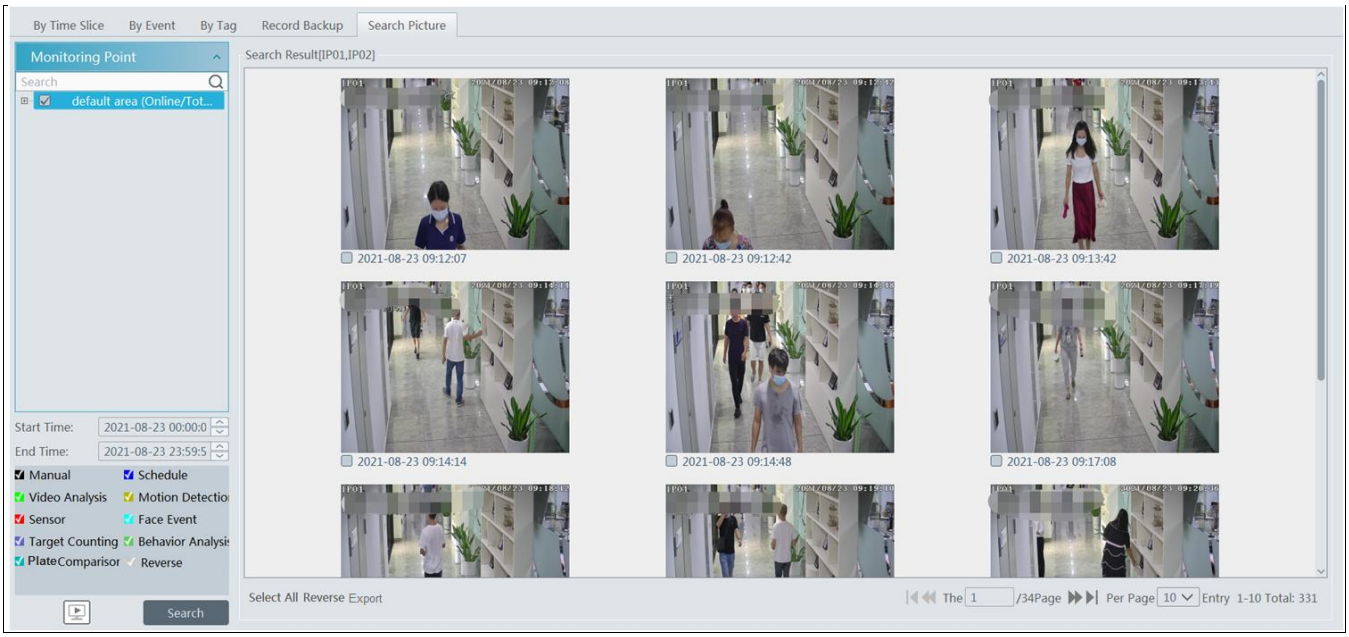


“Backup on device”: This function is applied to the added NVR devices. Search the record from the HDD of the NVR in this interface and then insert a USB storage device into the USB port of the NVR and then click this button. Then the recorded files of the NVR will be backed up to the USB storage device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

7.4 Search Picture

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

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



① Select the device.

② Set the start time and the end time.

③ Choose events.

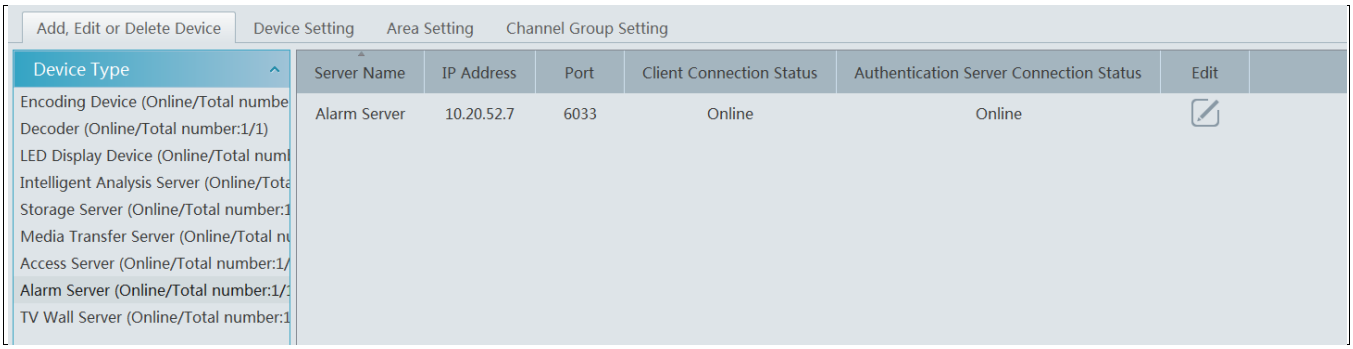
④ Click [Search]

8 Alarm Management

8.1 Alarm Server Configuration

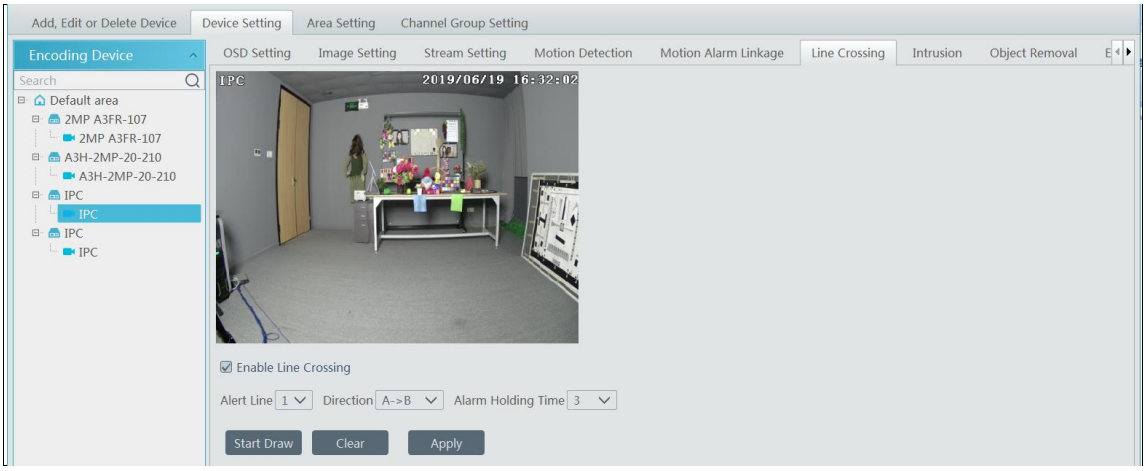
Alarm server is in charge of receiving and recording alarm information of connected devices and then sending the alarm information to the relevant user terminal system or devices in accordance with prior alarm settings. There is a default alarm server.

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.



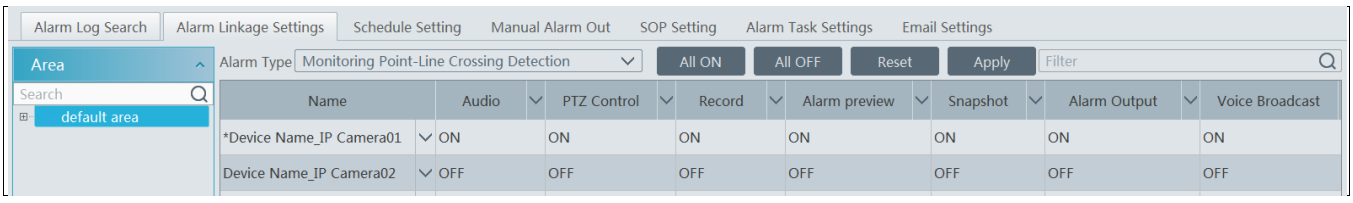
8.2 Alarm Configuration

① Go to Home→Device Setting interface.



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

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

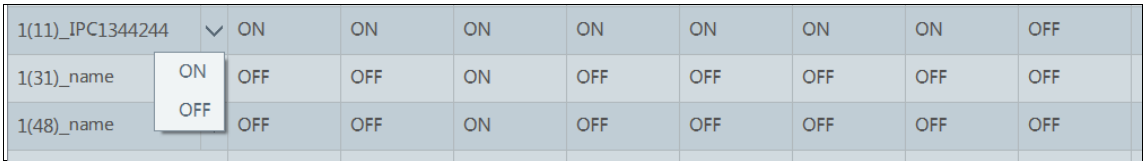


Select area, alarm type and then enable alarm linkages.

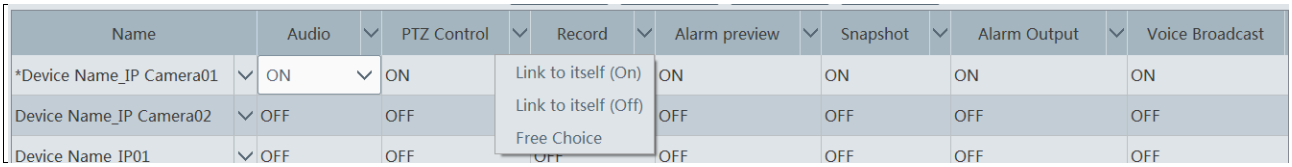
All ON: enable all alarm linkages of the current alarm type and area (schedule excluded).

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

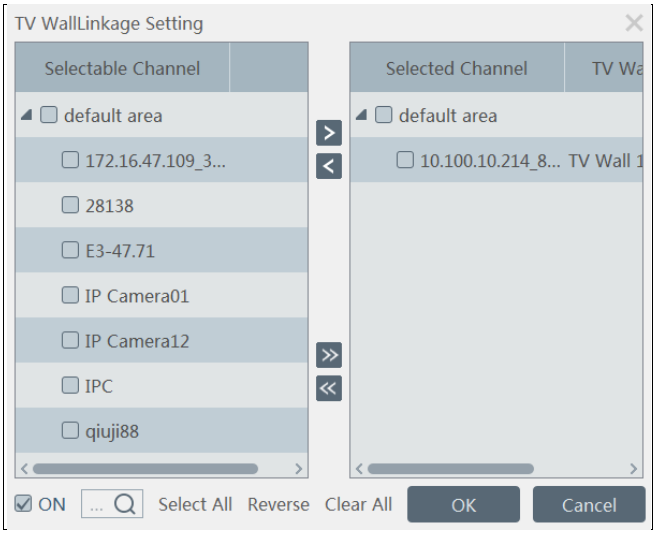
Select beside the device name and select "ON" to enable all alarm linkages of the device (schedule excluded).



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



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



Check the selectable channel and click to select the channel; check the selected channel and click to remove this channel; click to select all channels; click to remove all selected channel.

After the channels are selected, check "On" and then click "OK" to save the settings.

Note: Before checking voice broadcast, please upload the voice first (See chapter 19.7 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)

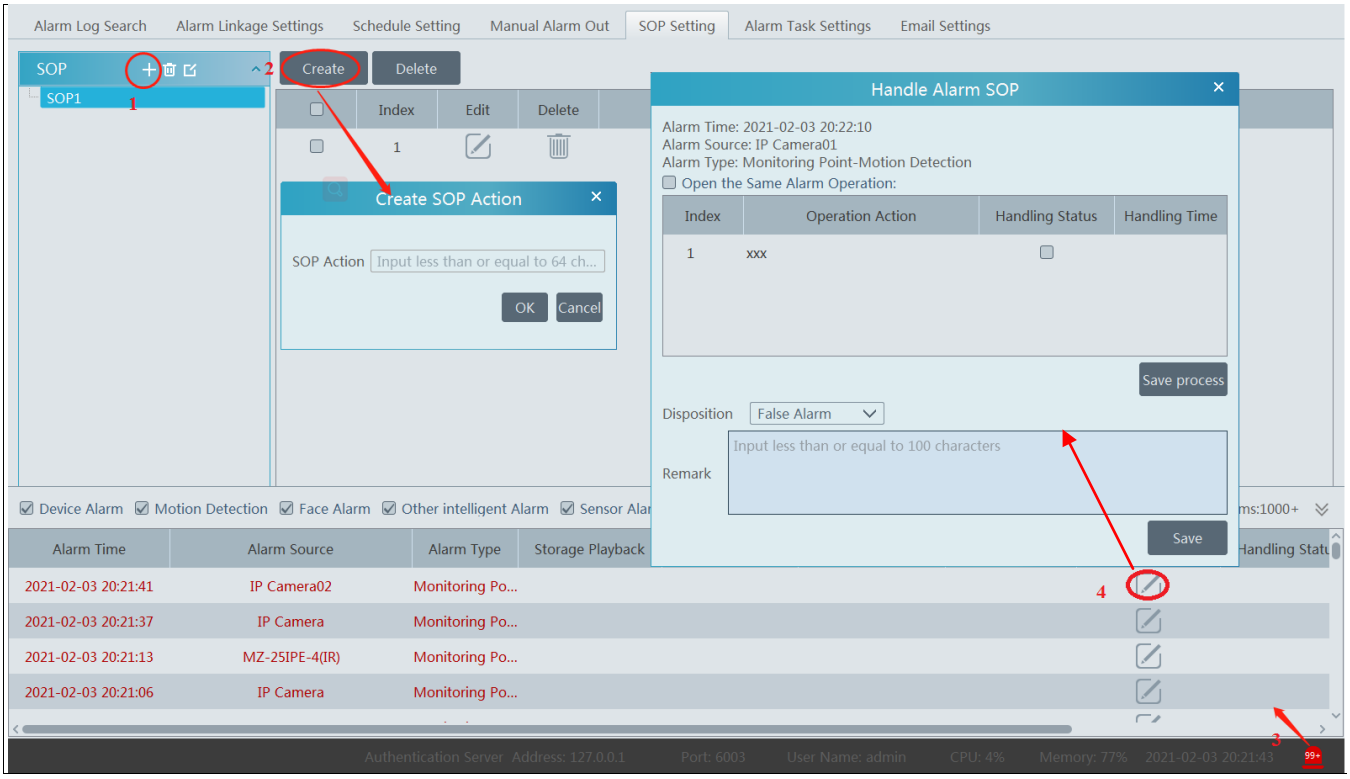
③ Set alarm schedule. Select the schedule of the desired device. 7*24 or 5*24 is the default schedule. Other schedules need to be set in advance. Click the "Schedule Setting" tab to set (See Schedule Recording→To set schedule for details).

8.3 SOP Settings

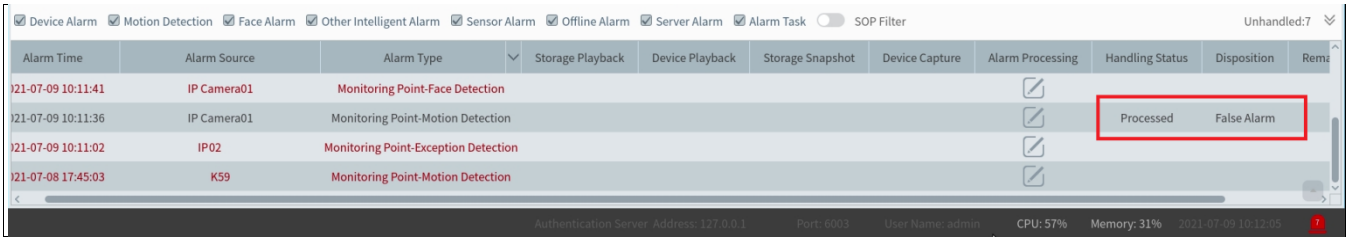
Click the “SOP Setting” tab in the alarm center interface to go to the following interface as shown below.

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.



8.4 Alarm Task Settings

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

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

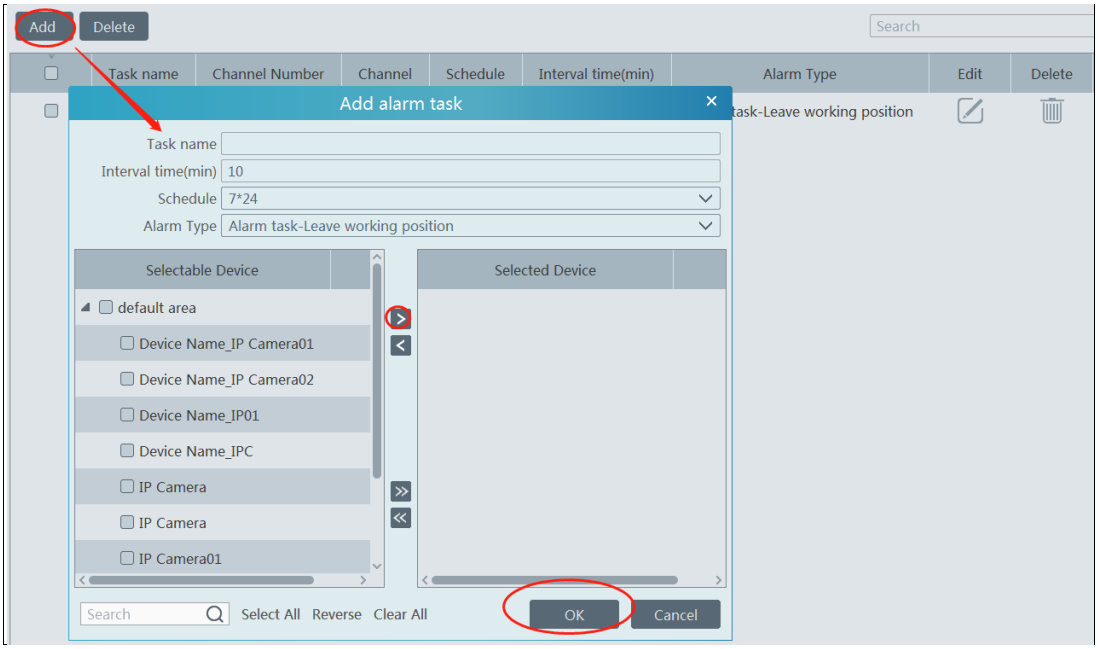
To set a leaving alarm task:

1. Enter the Alarm Task Setting interface.

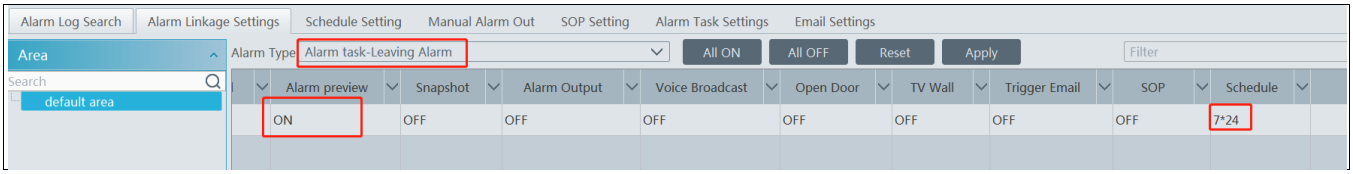
2. Click [Add] to add the alarm task.

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

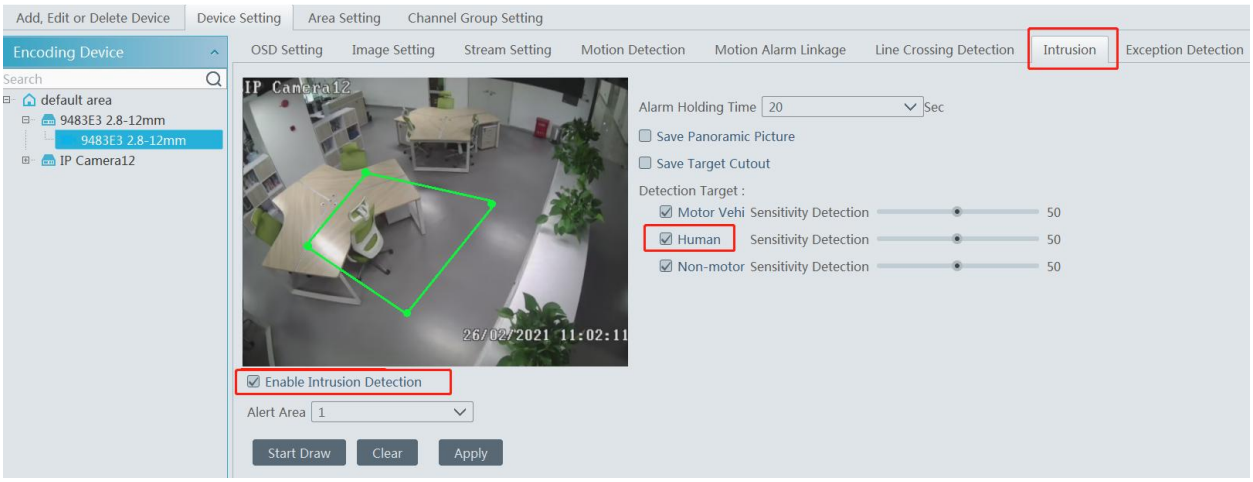
Multiple cameras can be added to an alarm task.



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



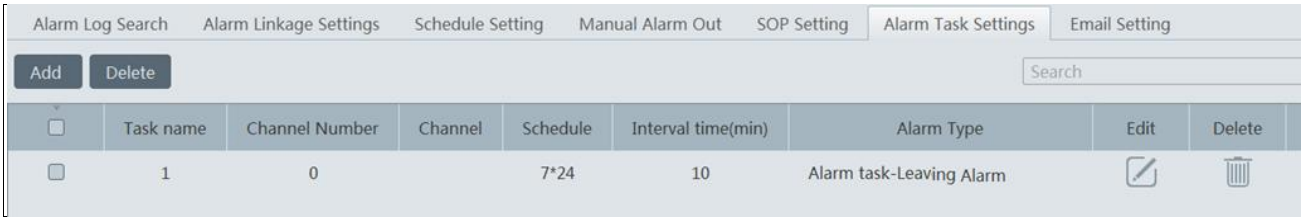
4. Go to the Device Setting interface to enable Intrusion and set the detected area.



Note:

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

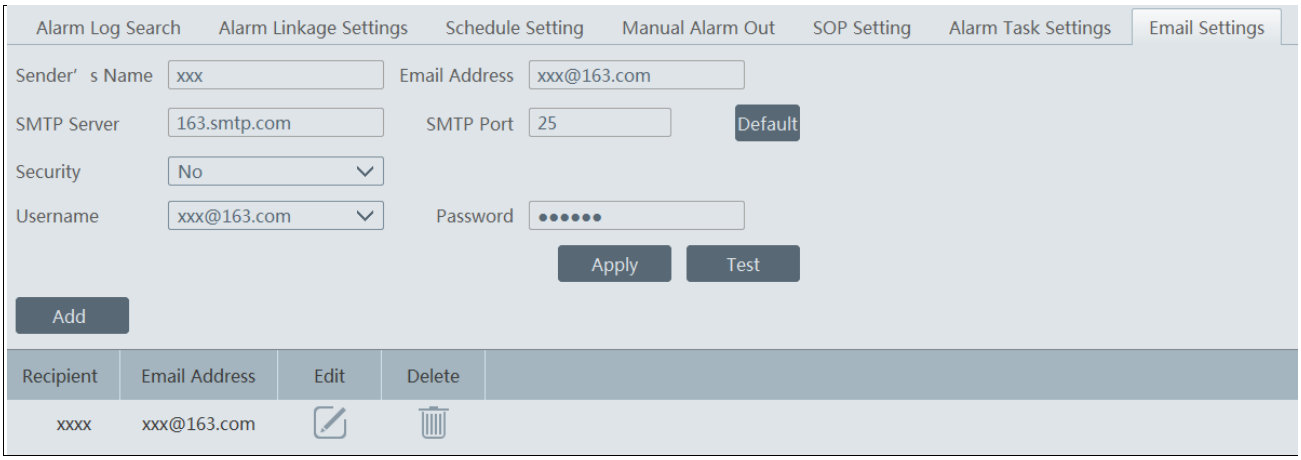
this person will be judged as “On Duty” so that leaving alarm will not be triggered and the intrusion alarm will not be displayed on the alarm list; but when this person leaves and doesn’t return within the set time duration (interval time) or no one appears in the set time duration, leaving alarm will be triggered.



8.5 Email Settings

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

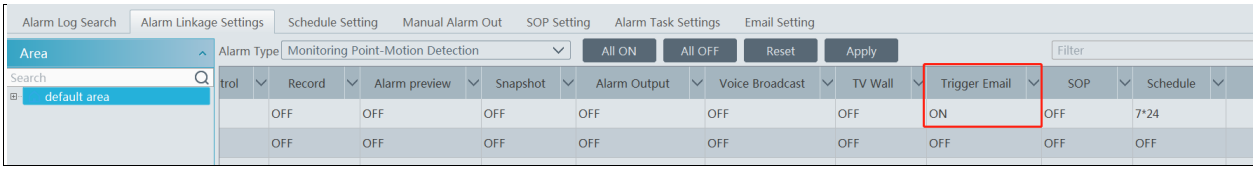
Click Home→Alarm Center→Email Setting to go to the following interface. Add the sender and recipient’s email information here.



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

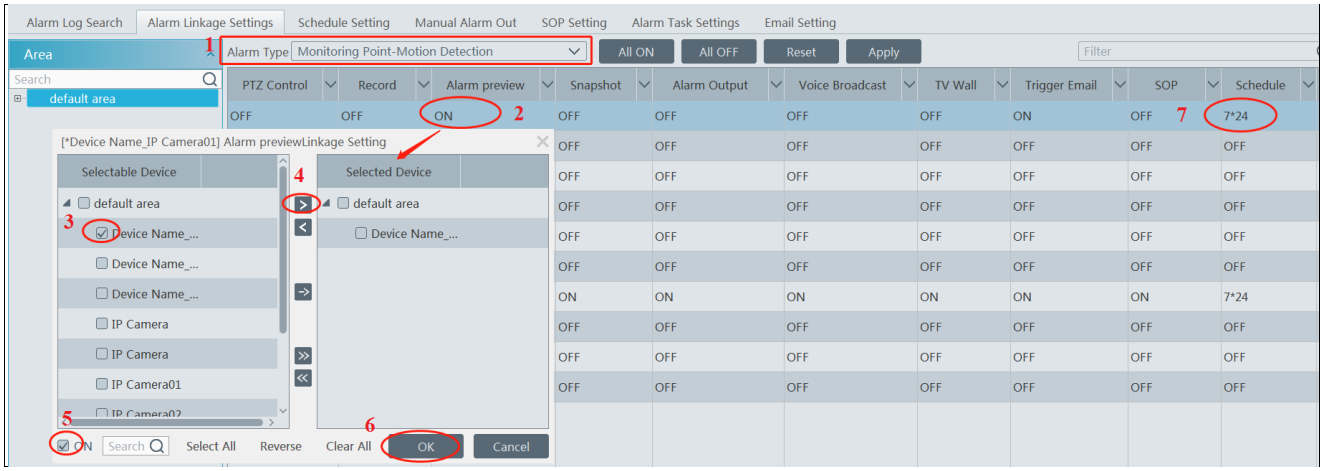
Clicking on the [Add] button adds the recipient information.

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

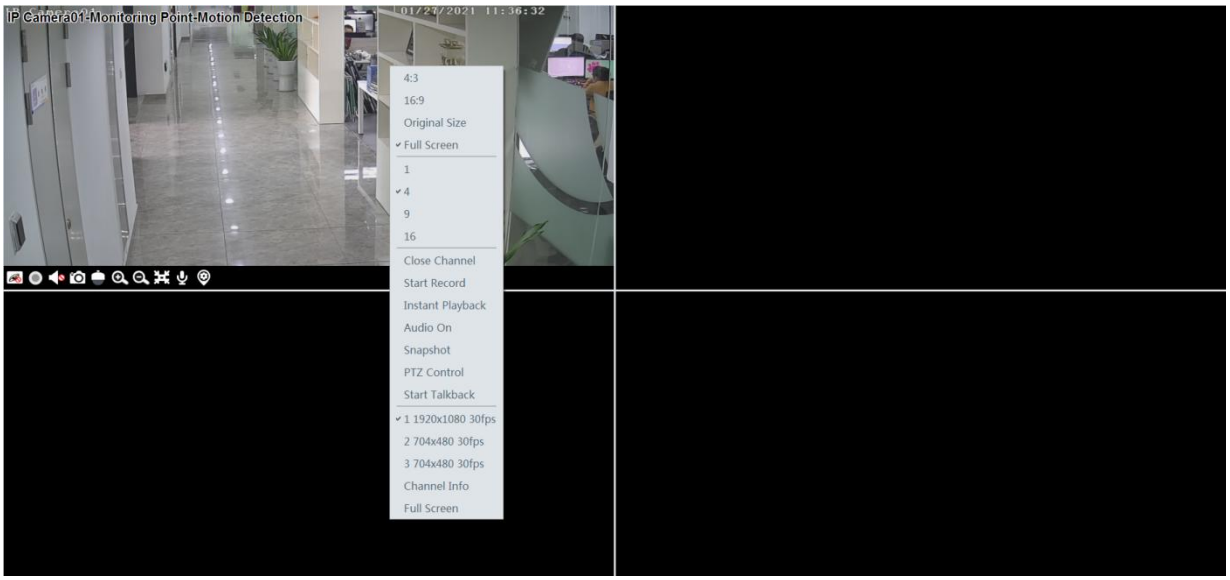


8.6 Alarm View

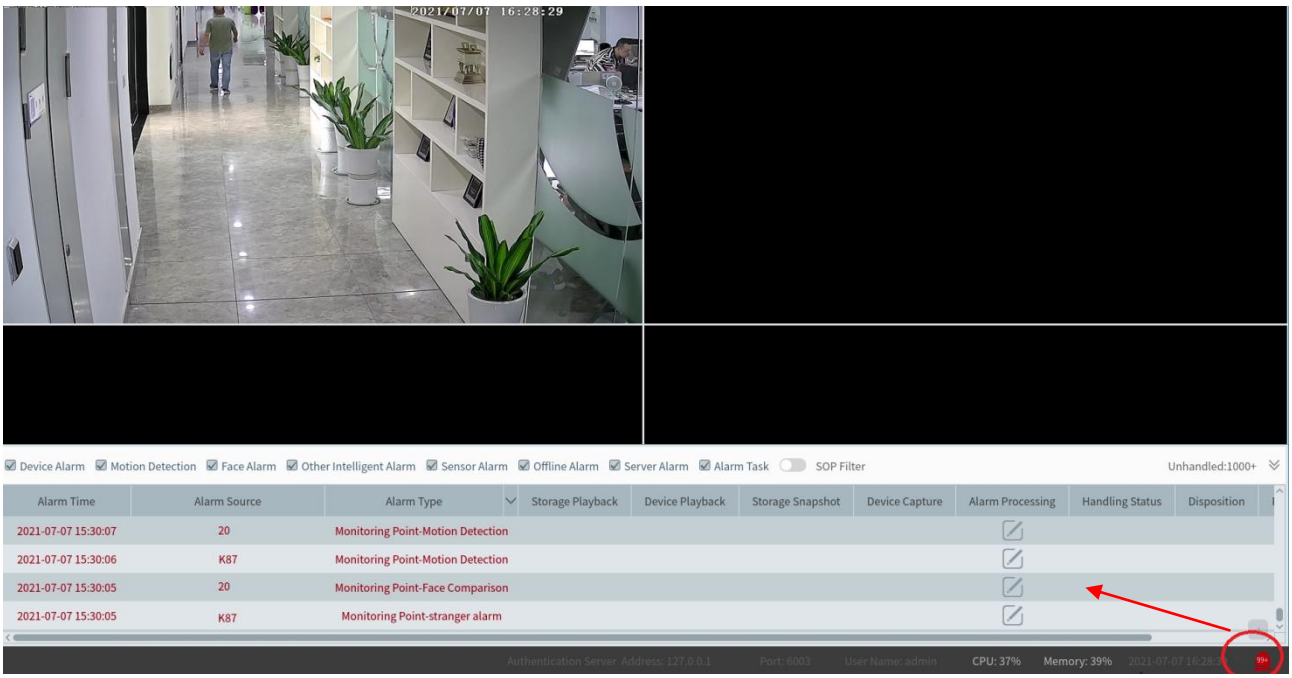
Having set the alarm preview linkage, the alarm view window will prompt when an alarm is triggered.



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

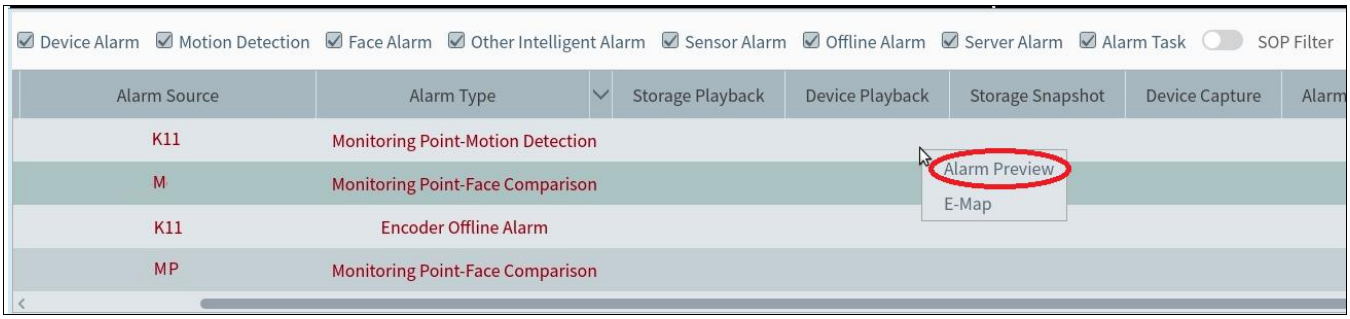


Click on the bottom right corner to expand the alarm list as shown above. Hover the cursor on the top of the alarm list and then a bidirectional arrow will appear. Drag the alarm list up or down to extend or shrink the alarm list.

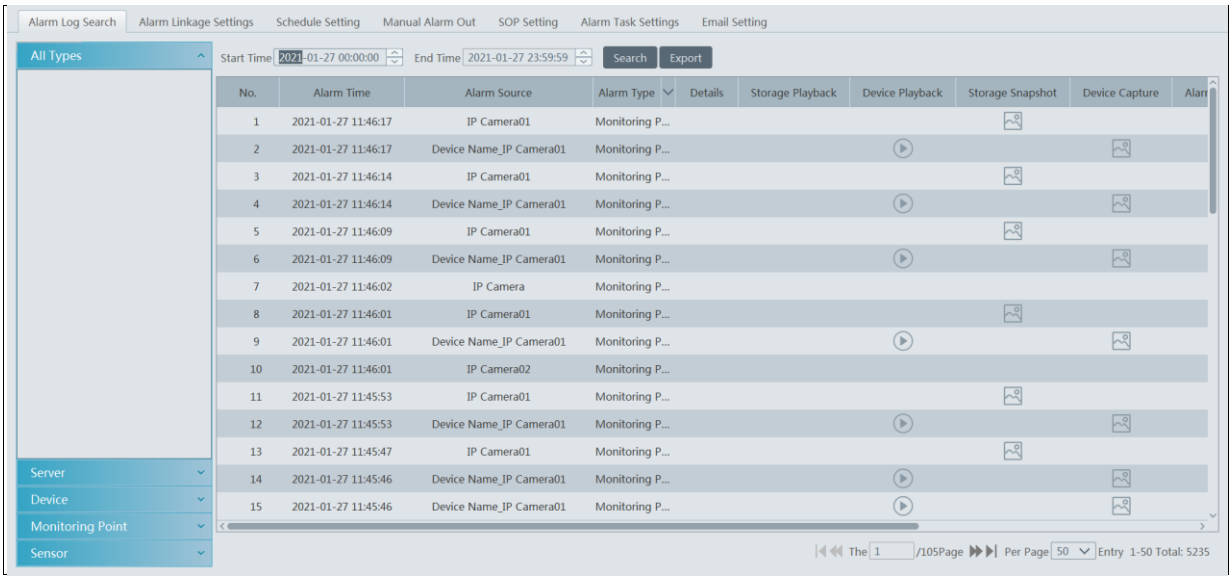


Click or to play the record or captured images.

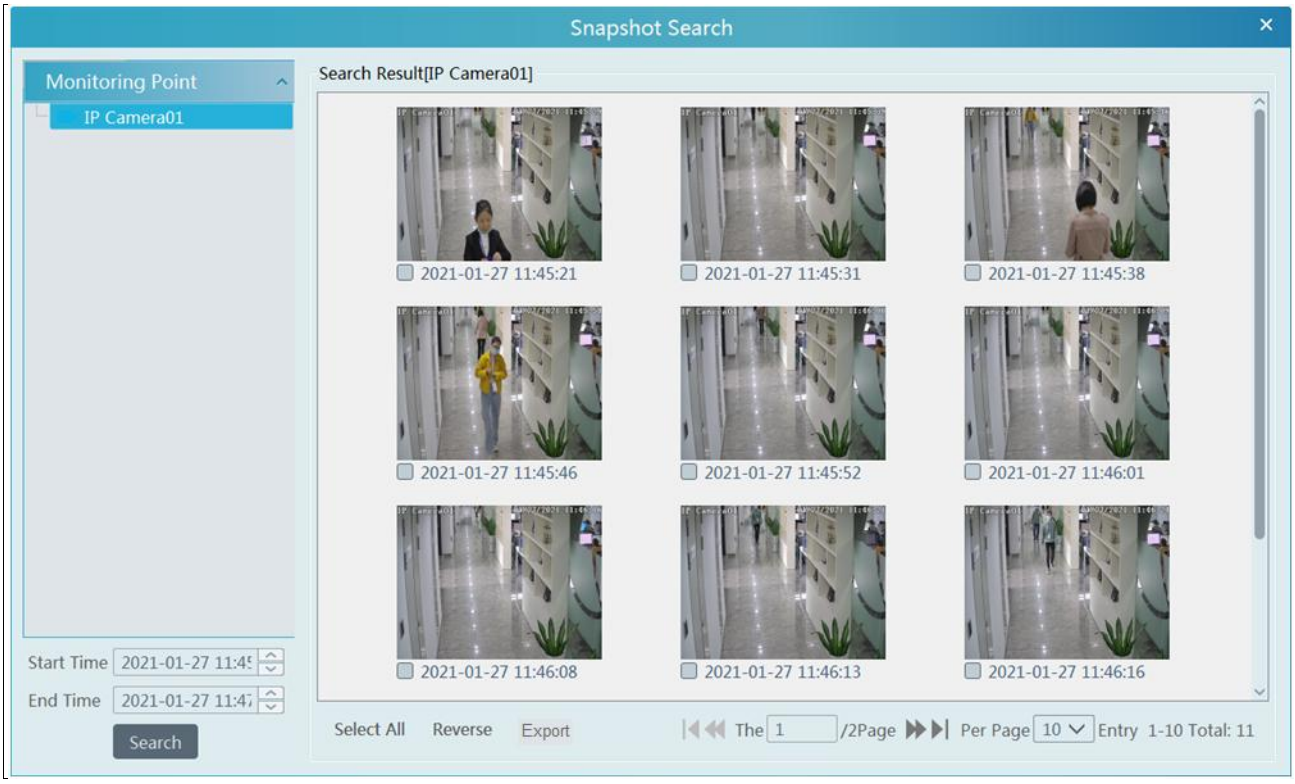
If the camera has configured the alarm preview linkage based on the specified event, right clicking on the alarm item displays a menu as shown below. Click “Alarm Preview” to jump to the alarm preview interface.



8.7 Alarm Log



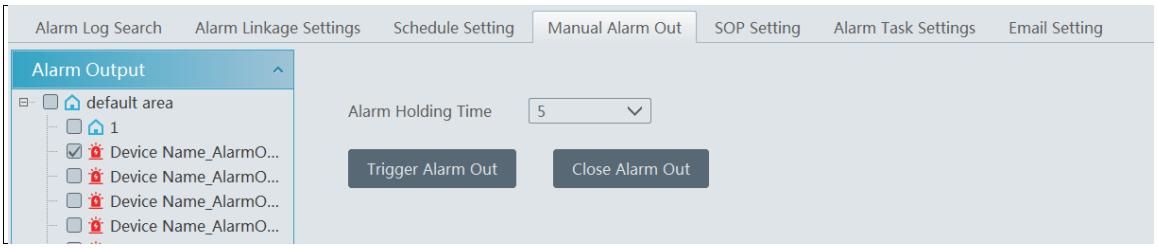
Click to play the record; click to open the snapshot search window as shown below.



Check the searched image and then click “Export” at the bottom of the interface to export this picture to the USB storage device.

8.8 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.

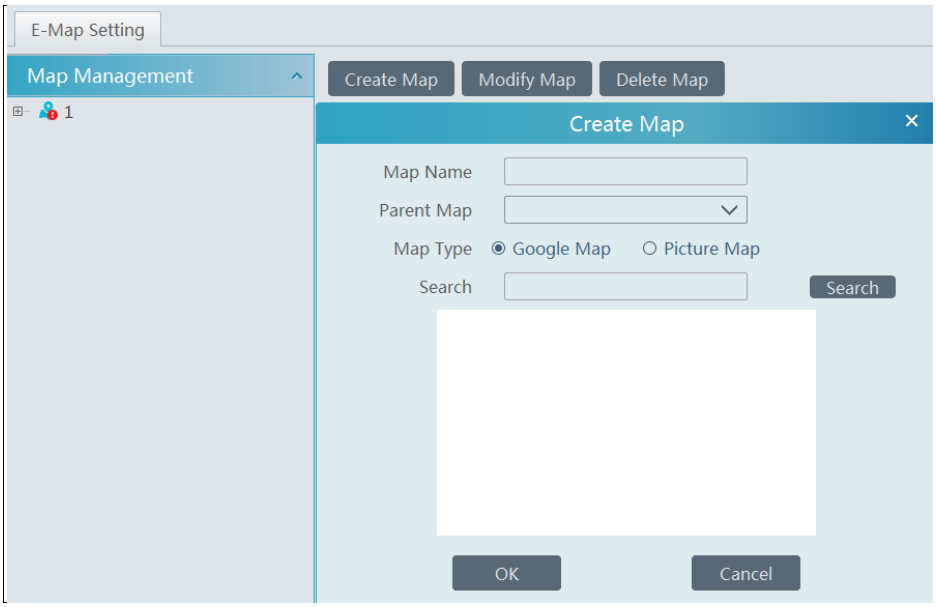
9 E-Map

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.

9.1 E-Map Settings

9.1.1 Create E-Map

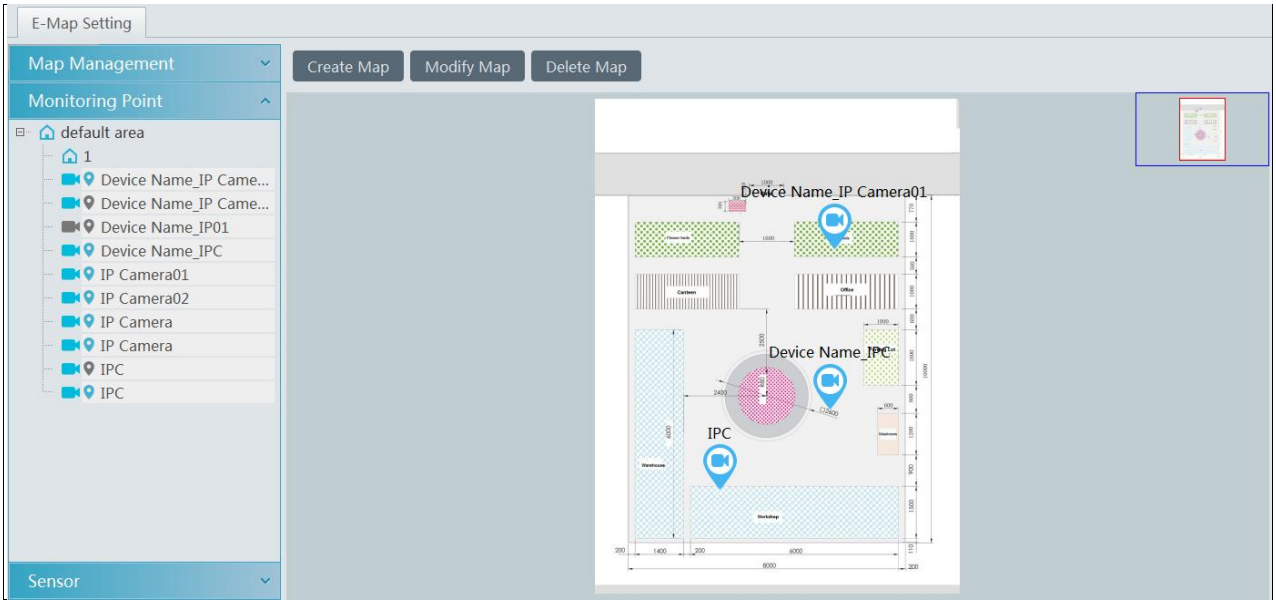
Go to Home→E-Map Setting interface. Click [Create Map] to create a map.



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

9.1.2 Add Hotspot

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

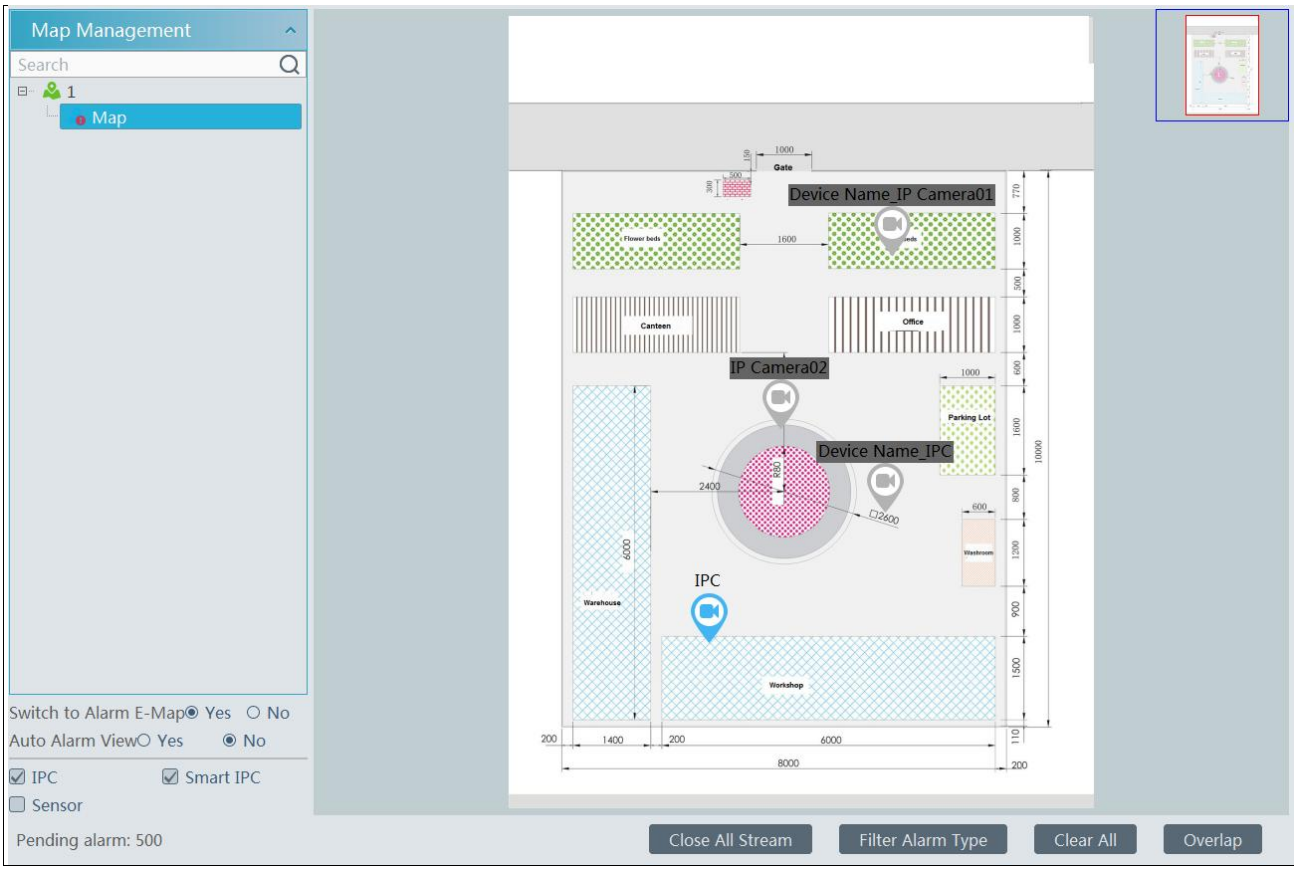


Click [Modify Map] to change map name and parent map.

Select [Delete Map] to delete the added map.

9.2 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.



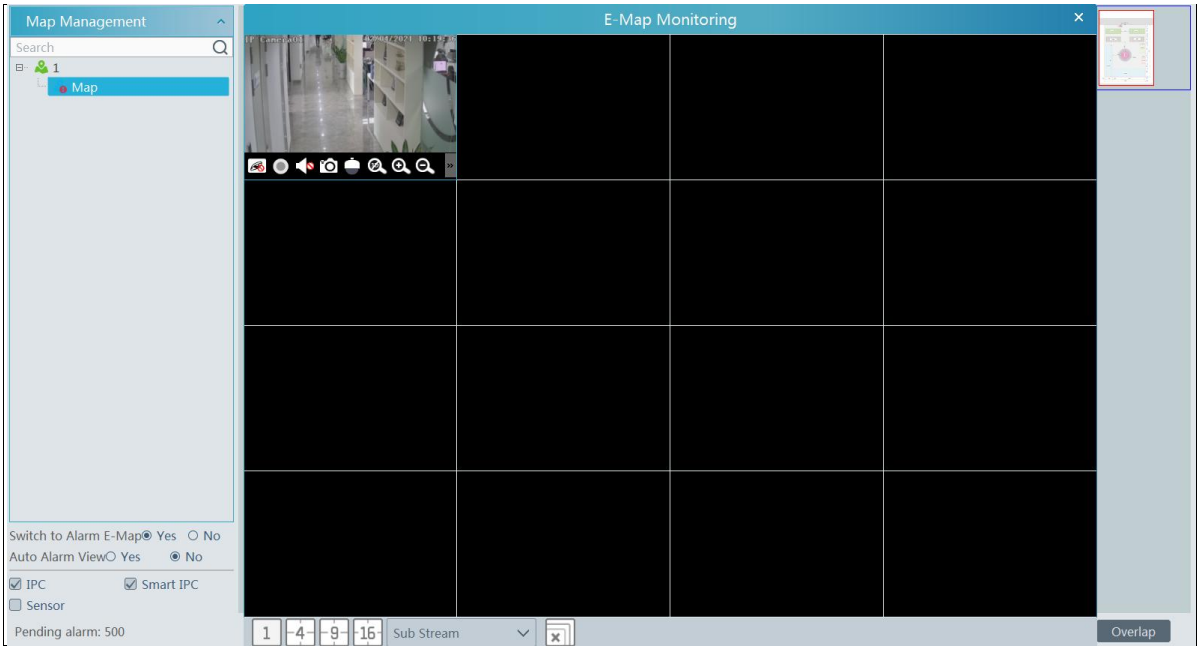
Switch to Alarm E-Map: if "Yes" is selected, the system will automatically switch to the E-map on which the alarm occurs.

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 videos. The preview window will be overlaid on the map by clicking "Overlap".

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

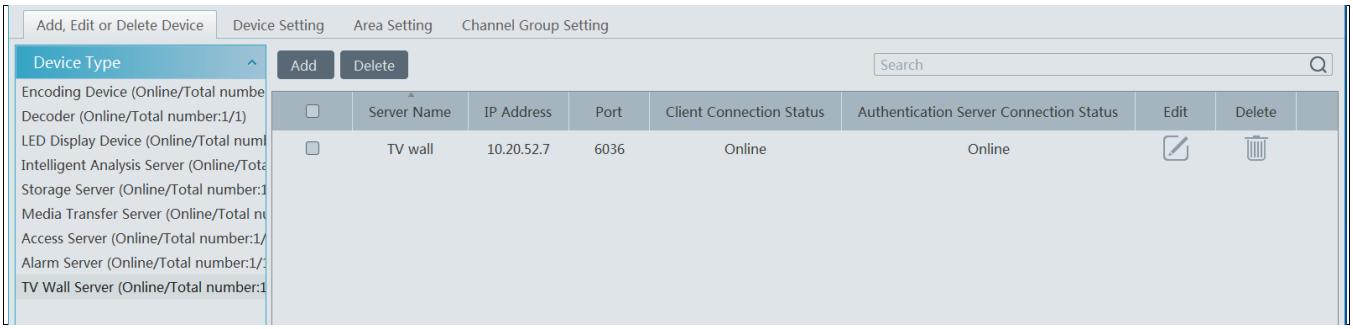
If multiple cameras need to play, you can drag the window on the right panel to the right. Then an independent monitoring interface will display. You can choose the screen display mode as needed.


Map Management
Search
1
Map
Switch to Alarm E-Map Yes No
Auto Alarm View Yes No
IPC
Smart IPC
Sensor
Pending alarm: 500
E-Map Monitoring
1
4
9
16
Sub Stream
Overlap

10 TV Wall

10.1 Add TV Wall Server

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

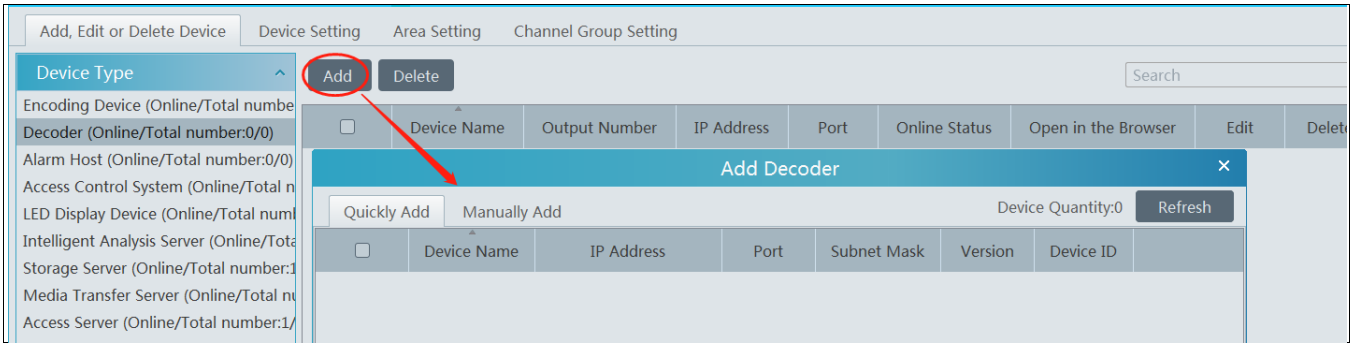


An adding TV Wall window will be prompted by clicking [Add]. Click [Refresh] to quickly add the TV wall server in the same local network, or add the TV wall server by manually entering server name, IP address and port.

10.2 Add Decoder

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

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

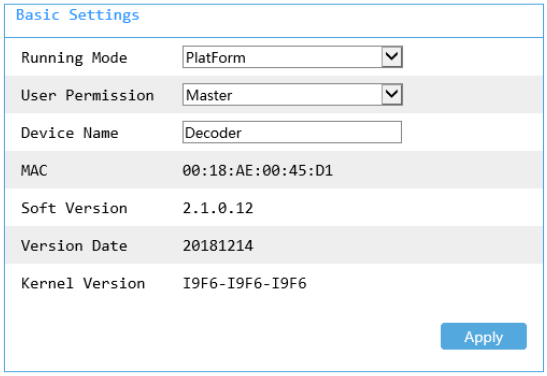


The setting steps of adding decoders are the same as adding encoding device setup (see Add Encoding Device for details).

➢ 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.

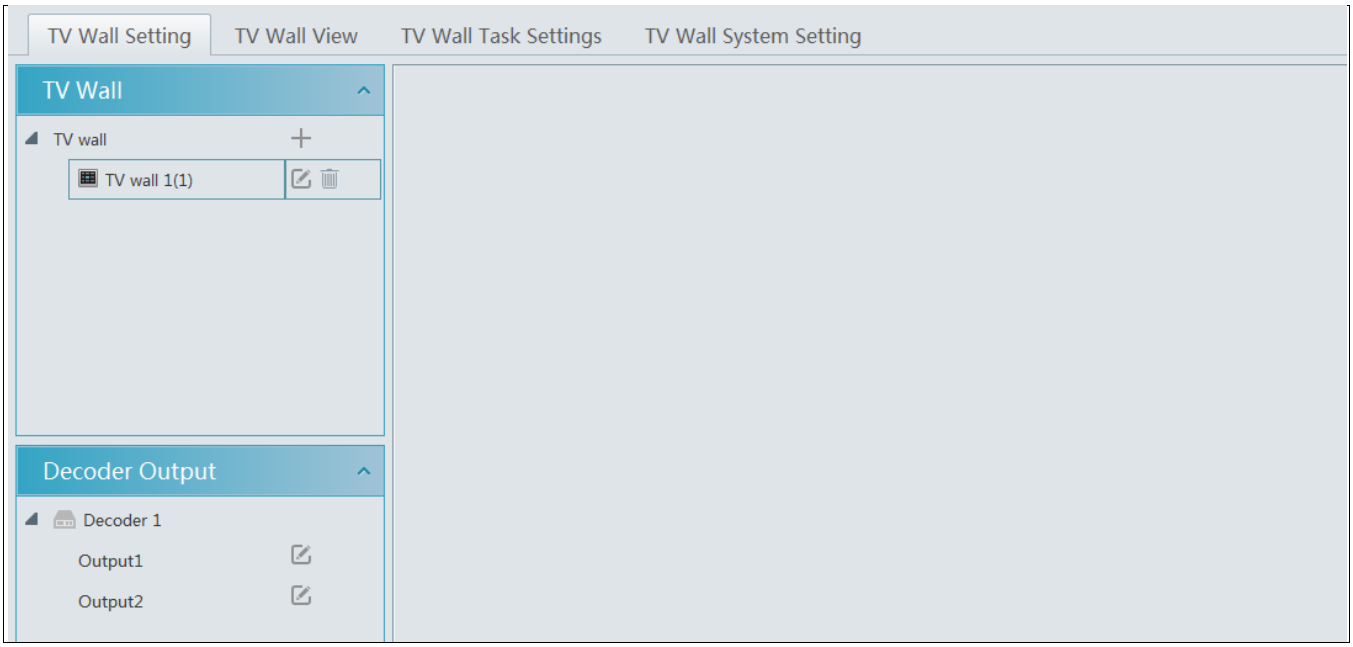
Go to Basic Settings→ System Settings to check the user permission and running mode of the decoder and make sure its user permission is master and its running mode is platform. Then apply the settings and restart the decoder.



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

10.3 TV Wall Management

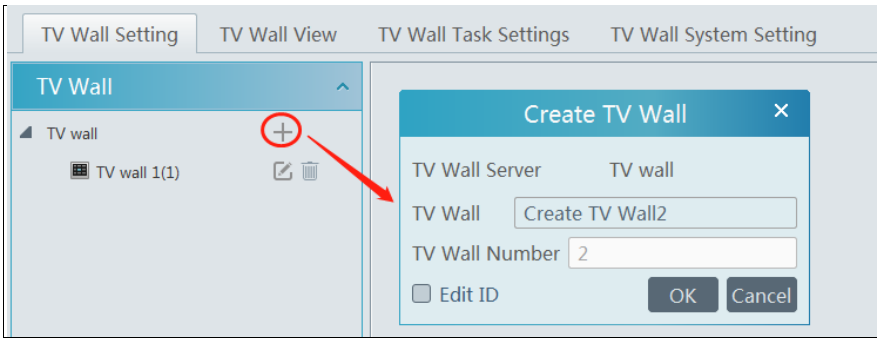
Go to Home→TV Wall Management→ TV Wall Setting.



10.3.1 TV Wall Settings

◆ Create TV Wall

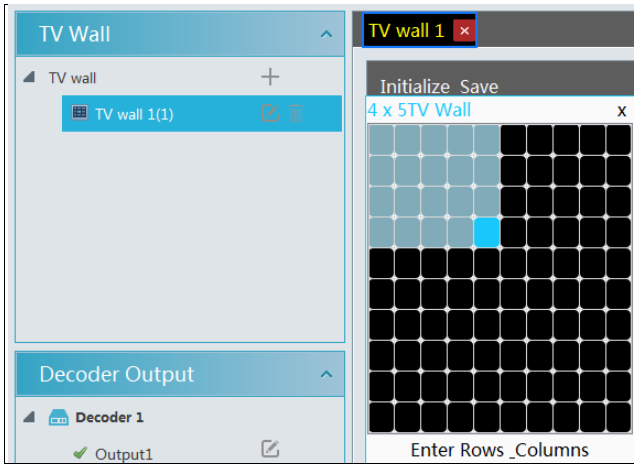
Go to Home→TV Wall Management→Edit TV Wall. Select a TV wall server and then click + to create a TV wall.



◆ **Initializing**

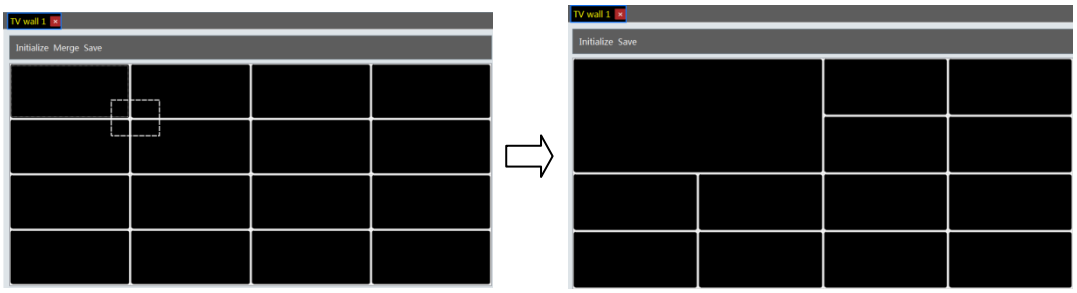
① Double click the created TV wall to prompt a TV wall window.

② Click “Initialize” to create TV wall layout.

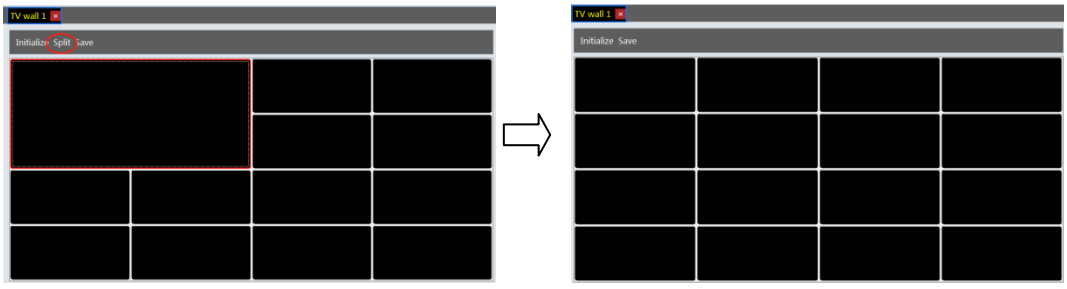


◆ **Merging\Splitting**

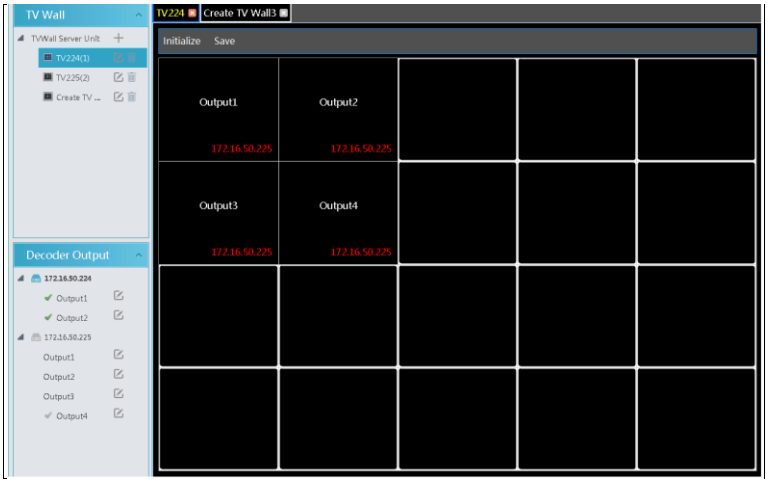
Merging: drag on the screen and then release. The “Merge” button will be shown. Click it to merger these small windows.



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

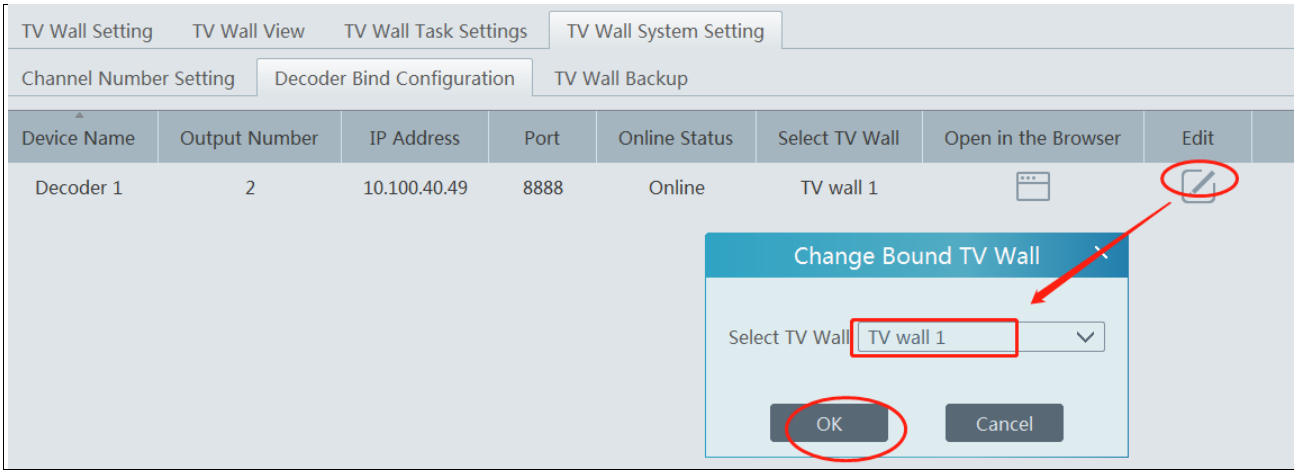


The online decoder displayed in the decoder output list is the binding decoder of this TV wall. Drag the outputs to windows on the right in sequence and then click “Save” to save the settings.

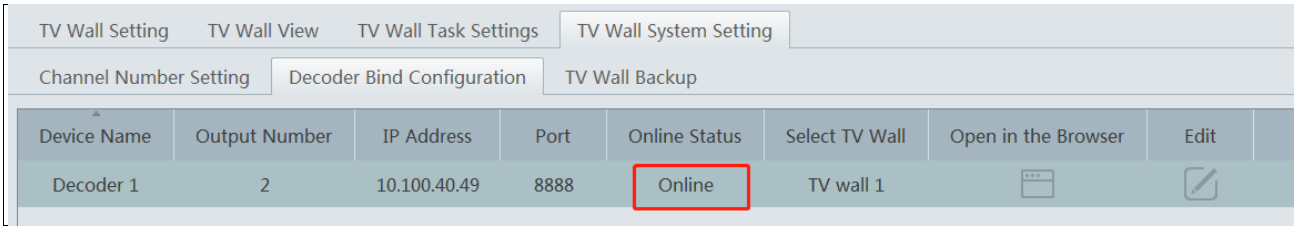


- **Decoder Binding**

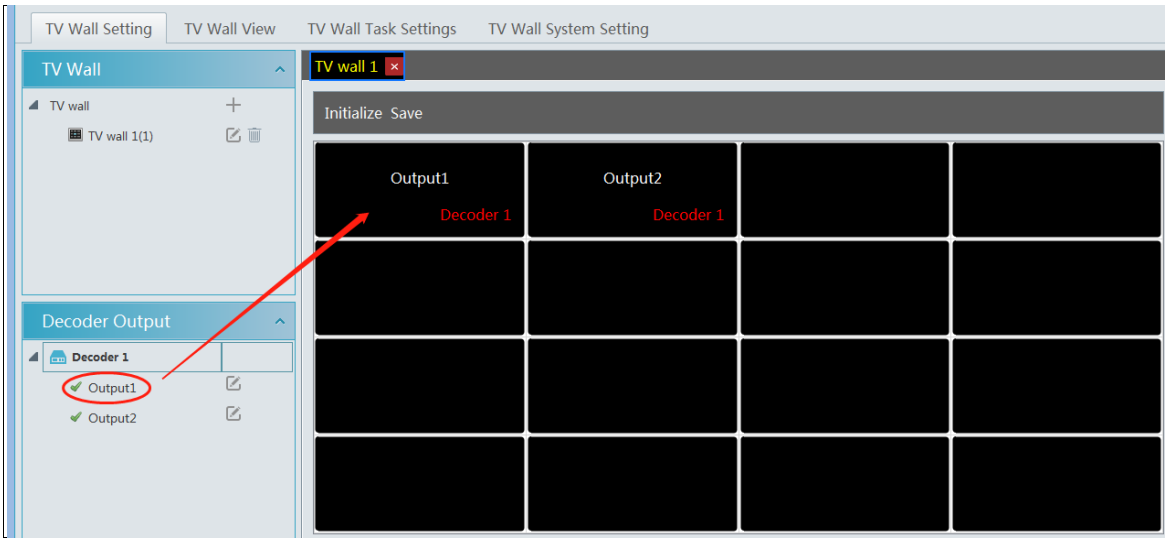
Go to Home→TV Wall Management→TV Wall System Setting interface as shown below. In this interface, decoder bind can be set up. Decoder bind configuration: modify the binding state between decoder and TV wall.



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



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

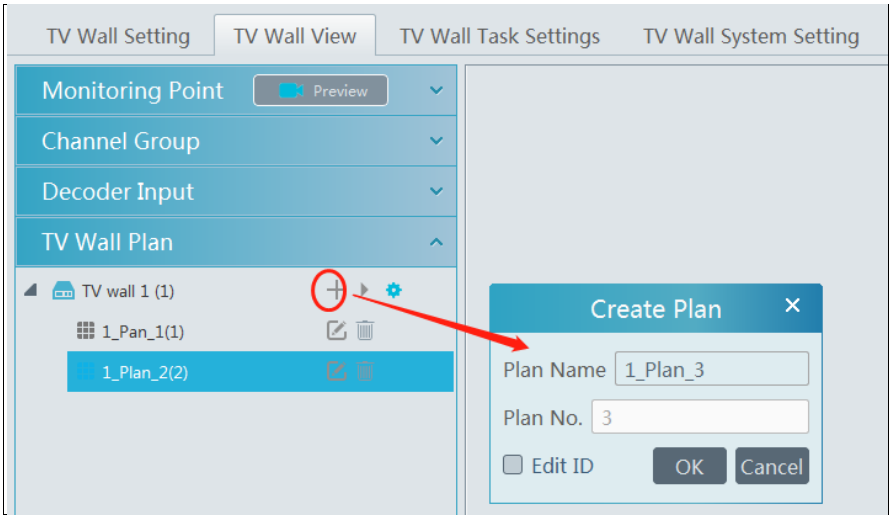


10.3.2 TV Wall View

◆ **Create Plan**

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

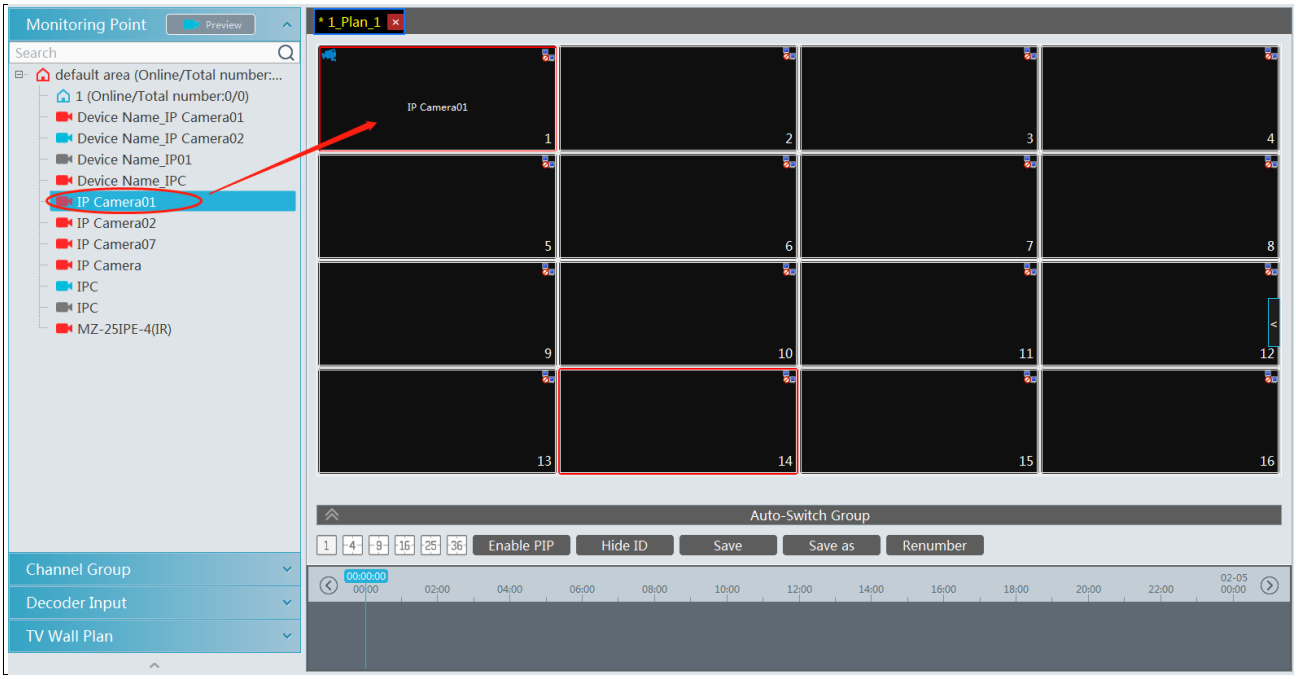
Click + beside the TV wall name to create the TV wall plan name.



◆ **Configure Plan**

Double click the plan name to show the plan.

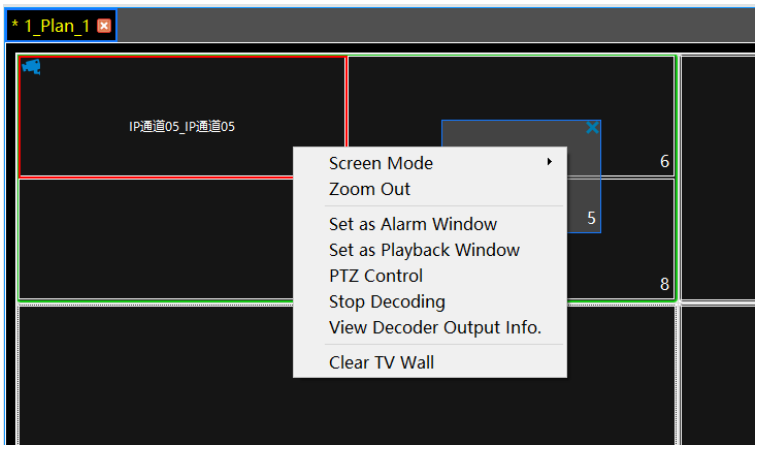
Drag the monitoring points to the corresponding window respectively to decode image.



◆ **Toolbar Menu**

1. Screen mode：1\4\9\16\25\36 screen mode is optional.
2. Open Window：Click [Enable PIP] and then drag on a window to open a small window on it. Click [Disable PIP] to stop opening window. The small window can be dragged to anywhere on the big window.
3. Click [Hide ID] to hide the window number; click [Display ID] to display the window number.
4. Click [Save] to save the current plan.
5. Click [Save as] to save it as another plan.
6. Renumber: Click it to renumber the window of the plan from left to right and top to bottom.
7. Select a window assigned a monitoring point and then press the right mouse and drag to another window to copy monitoring point to it.
8. Double click a window to play the video.

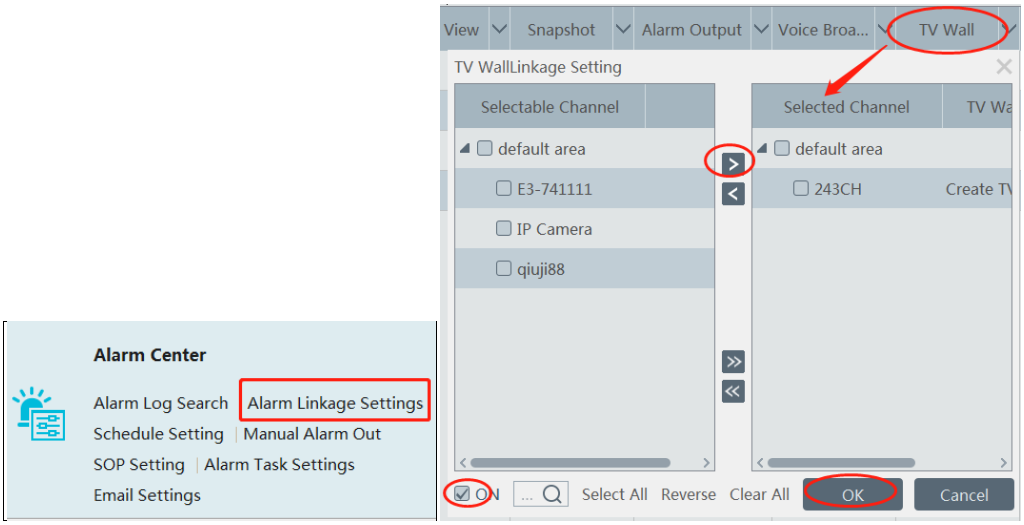
◆ **Right-click Menu**



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

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

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



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

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

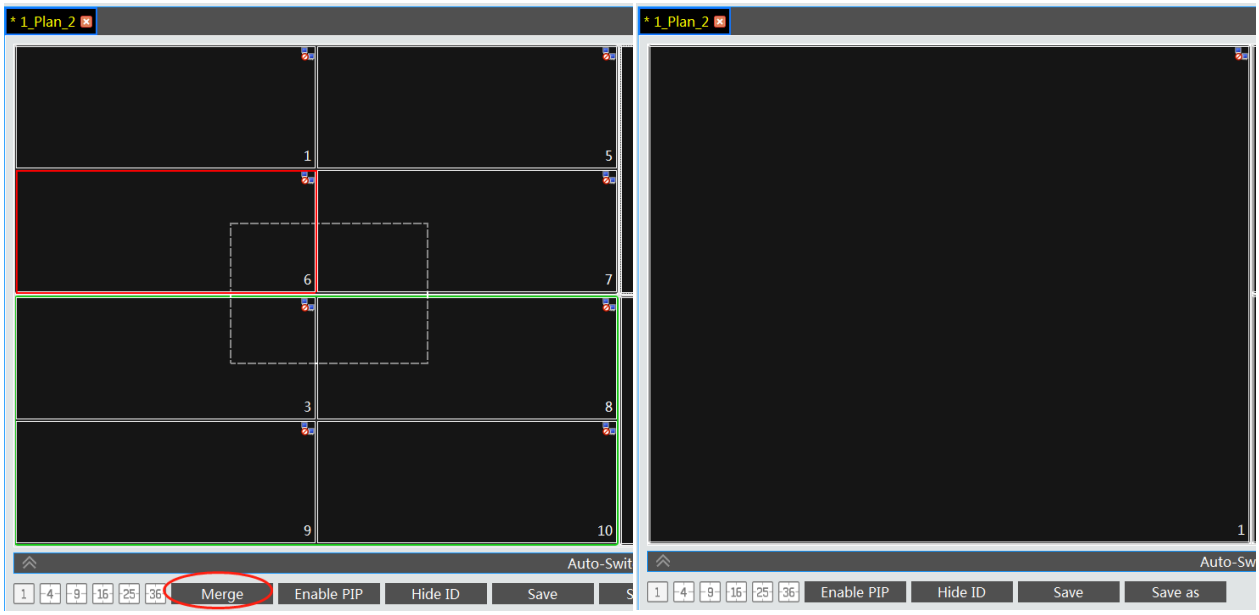
6. Stop Decoding: click it to stop decoding the current image.

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

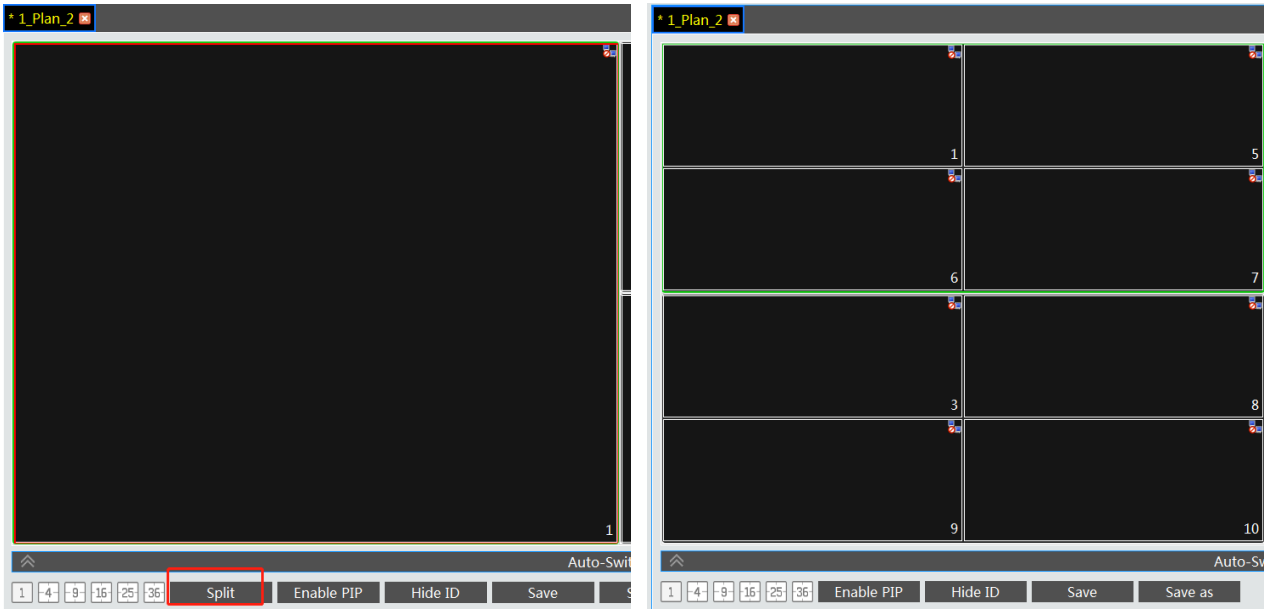
8. Clear TV Wall: click it to clear the decoding configuration of the current output.

◆ **Screen Merging or Splitting**

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



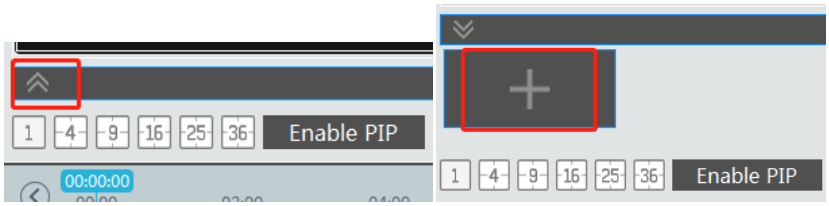
Select the merged window and click [Split] to restore the window to its previous status.



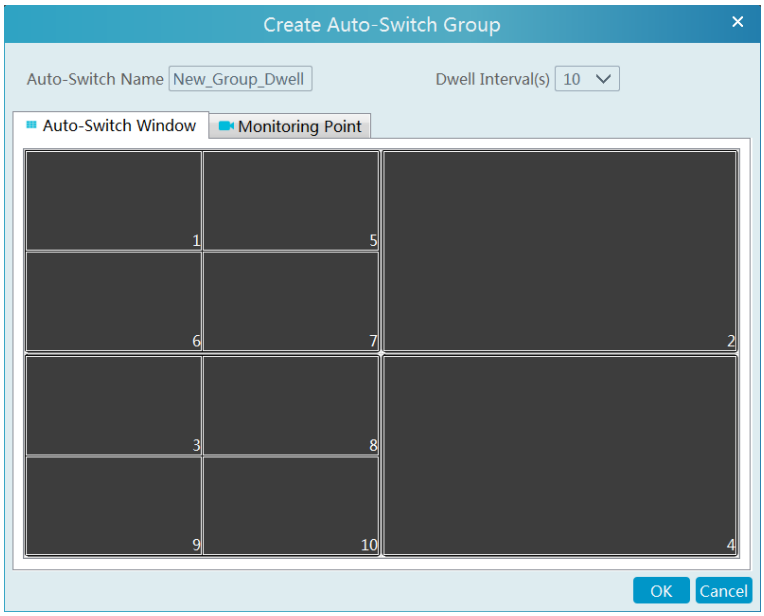
◆ **Auto-Switch Group**

1. Create Auto-Switch Group

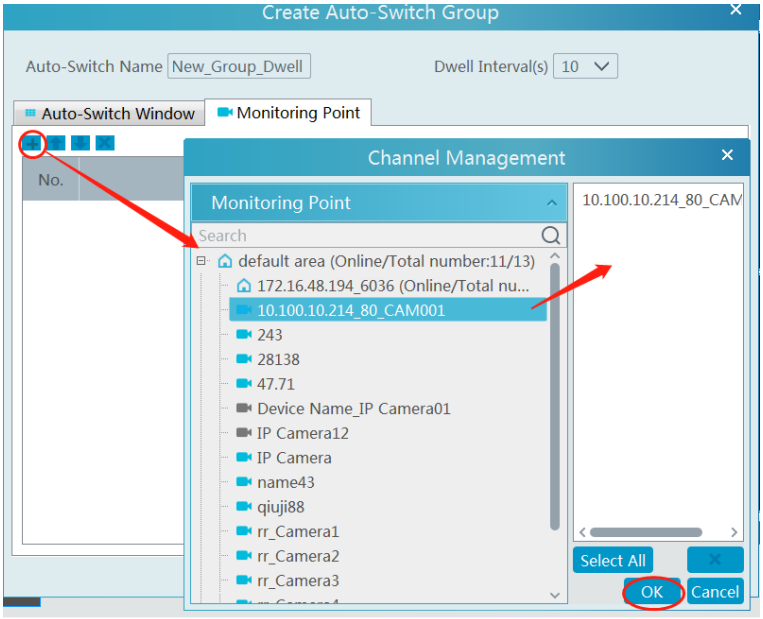
① Click Auto-Switch Group under the screen and then click + to create auto-switch group.



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

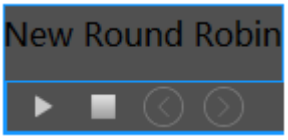


③ Click “Monitoring Point” to select the auto-switch channel group.



④ Enter auto-switch name and dwell time.

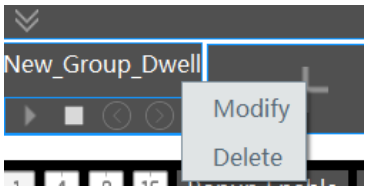
2. Execute auto-switch



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

3. Modify or delete auto-switch

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

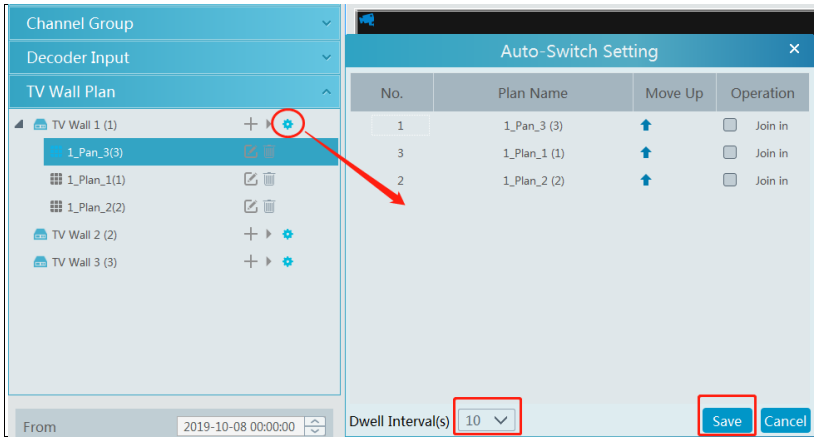


Note: If there are overlapped auto-switch window in a plan, the auto-switch groups will not be executed at the same time.

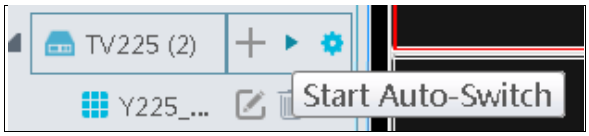
◆ **Auto-switch plan**

1. Create auto-switch plan

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



2. Start/stop auto-switch



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

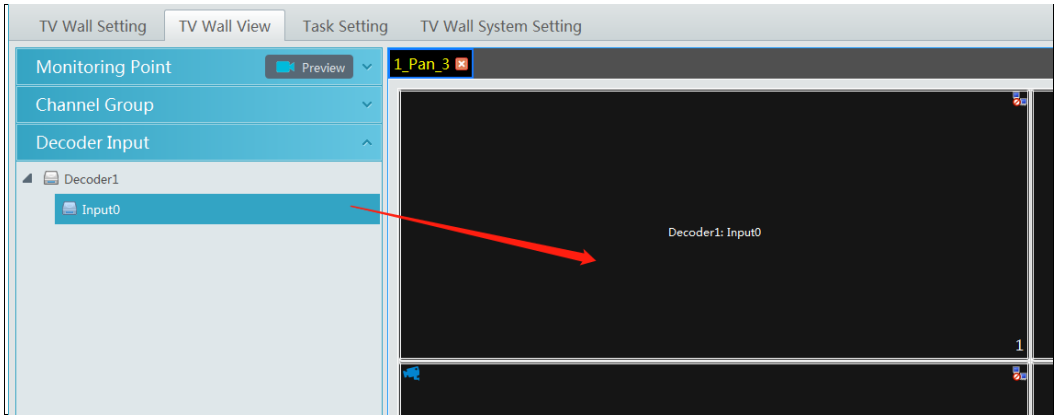
3. Modify auto-switch plan

Click ⚙ again to modify the auto-switch plan.

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

10.3.3 Decoder Input

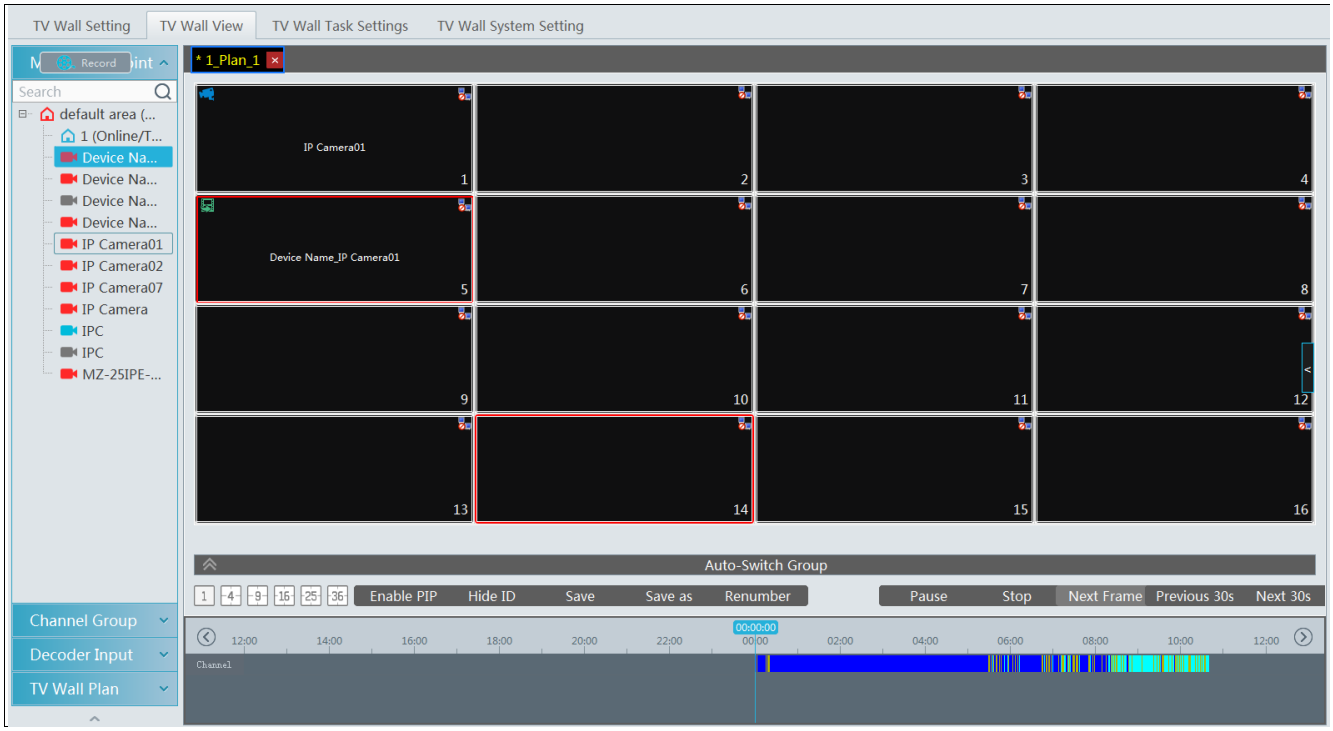
Go to Home→TV Wall Management→Decoding on TV Wall→Decoder Input. Drag an input to a window to execute decoding.



10.3.4 Playback

◆ **Playback on TV Wall**

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

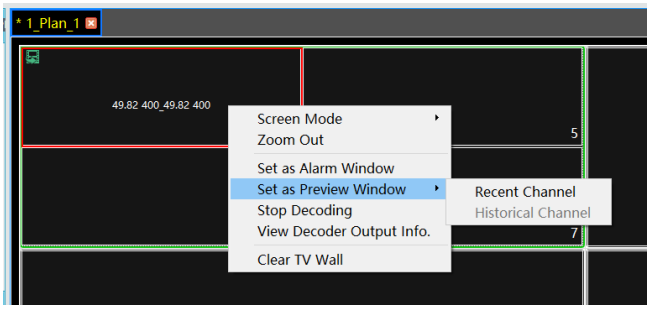


Of course, the specified time and event types can be set to search the specified records.

◆ **Playing control**

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

◆ **Right-click menu**



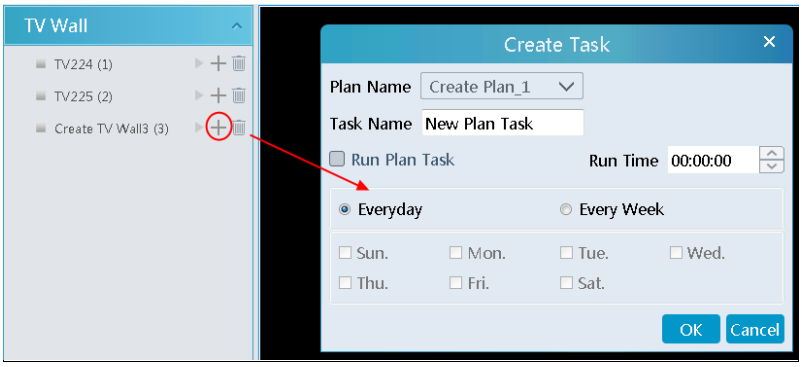
1. Screen mode:1\4\9\16\25\36 screen mode is optional
2. Zoom in
3. Save as an alarm window
4. Save as preview window:： the current channel or the historical channel is optional.
5. Playback stream type: main stream or sub stream is selectable.
6. Stop decoding
7. View decoder information
8. Clear TV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

The following picture is an example of TV Wall.

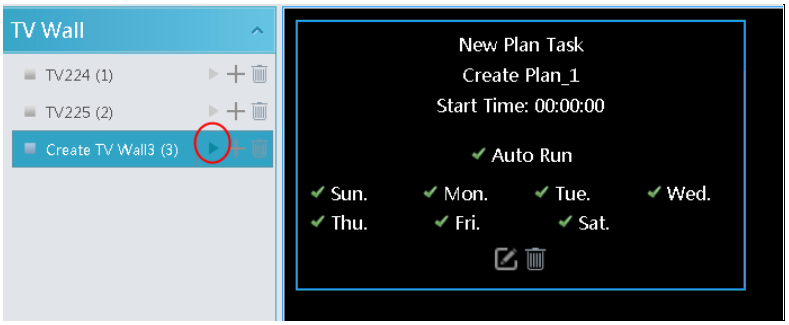
10.3.5 Task Setting of TV Wall

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

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

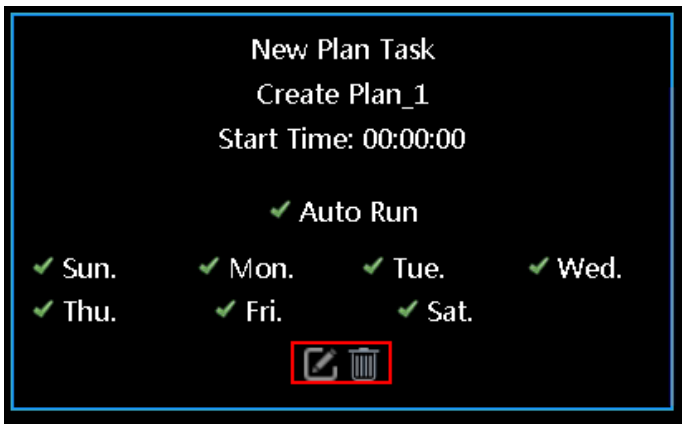


Click to start the task. Click the Stop button to stop this task.



Modify or delete task

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



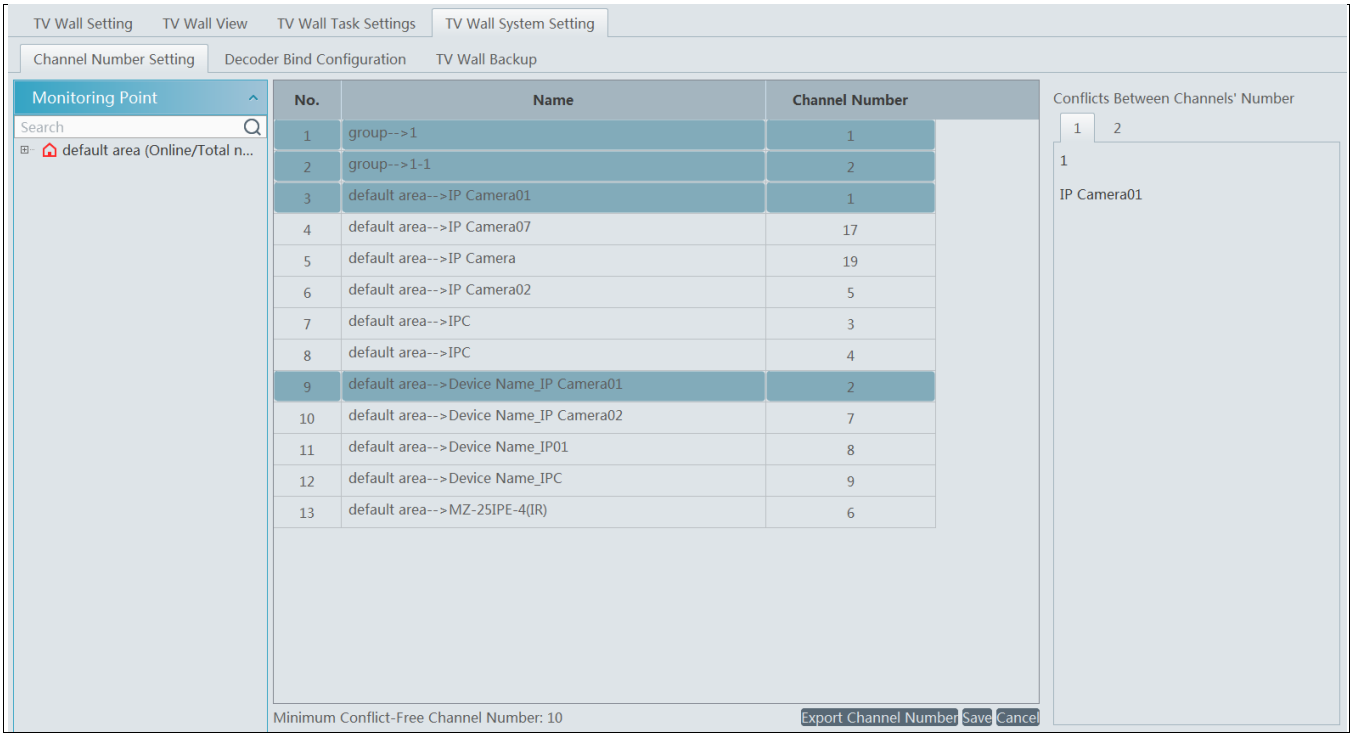
Click or to modify or delete the task.

10.3.6 TV Wall System Configuration

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

➢ **Channel Number Settings**

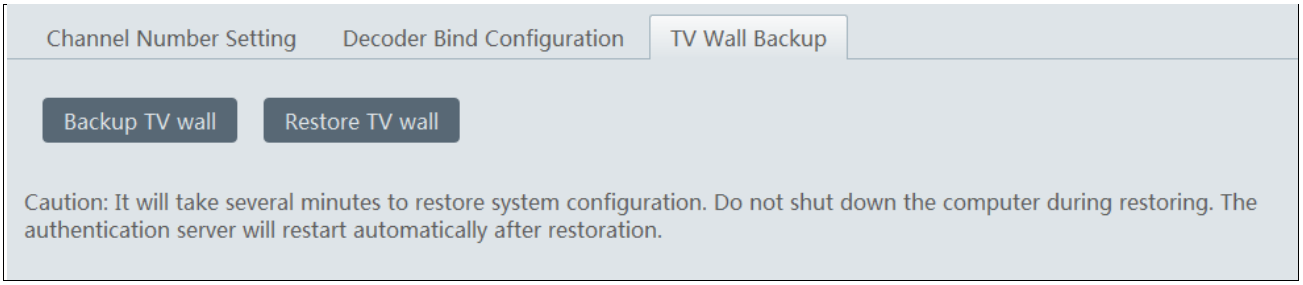
Channel number configuration: set the channel number and make the channel convenient to be controlled by the network keyboard controller. Users can export these channel number in this interface.



➢ **TV Wall Backup**

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

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

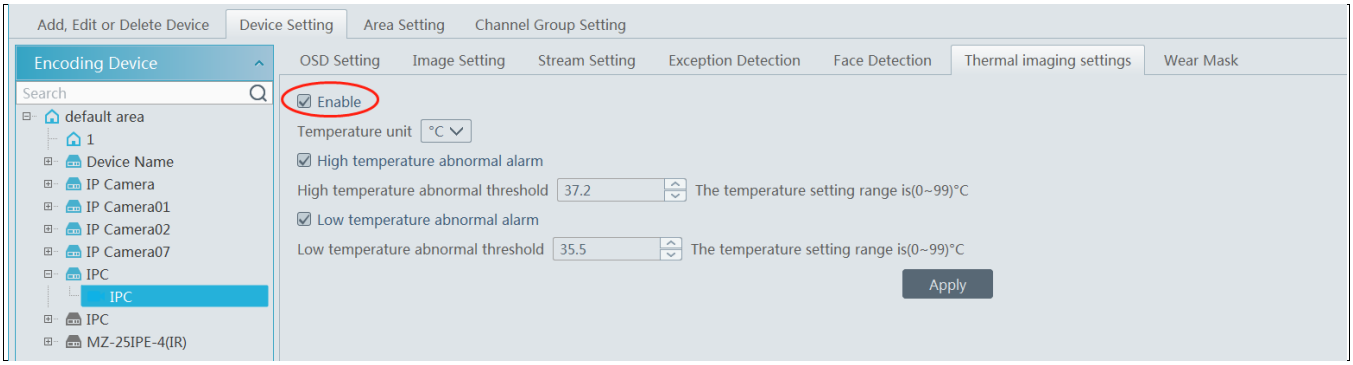


11 Temperature Measurement

11.1 Add Temperature Reading Devices

This platform supports thermal network camera and temperature measurement panel access.

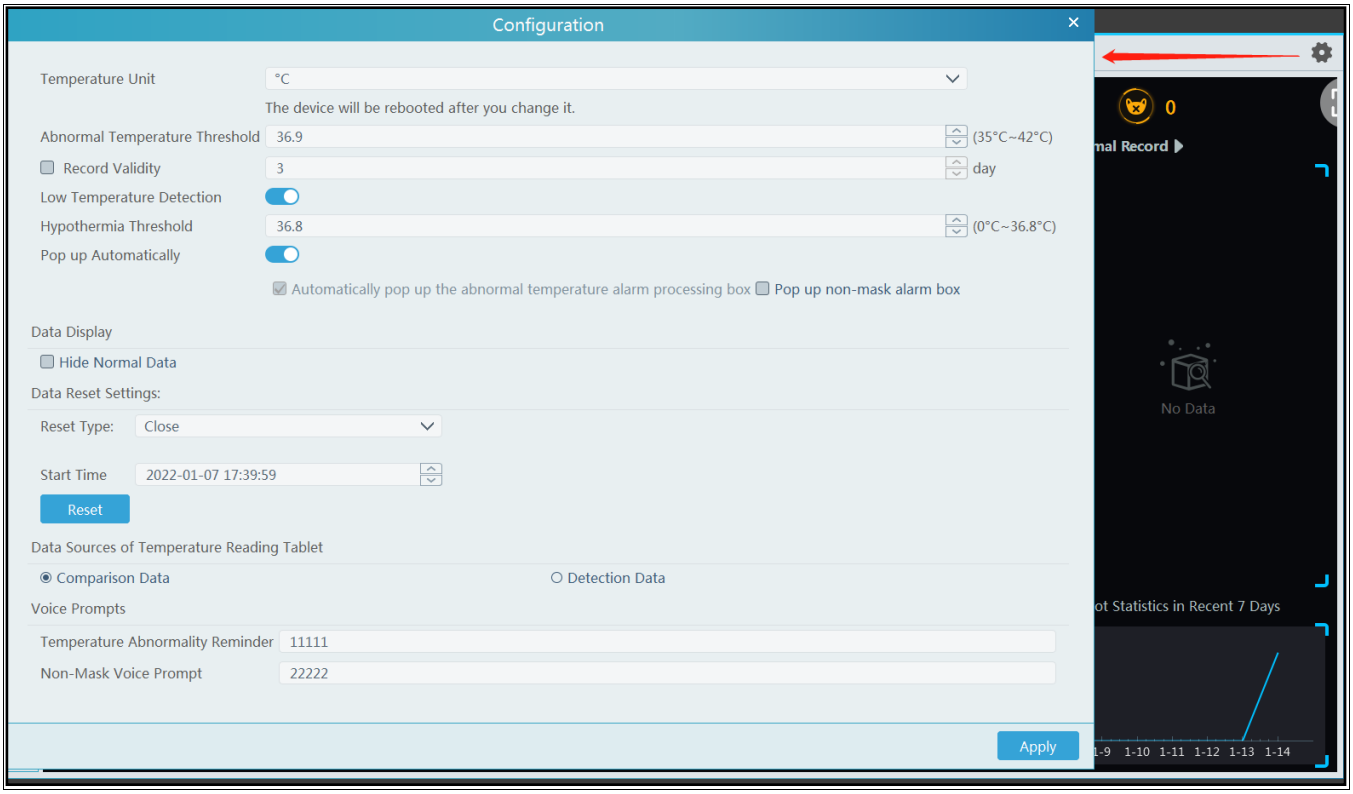
1. Click Home→Resource Management→Add, Edit or Delete Device→Encoding Device to go to the encoding device interface. Click [Add] to add the temperature reading devices.
2. Click Home→Resource Management→Device Setting to go to the device setting interface. Select the temperature reading device and then click the "Thermal imaging settings" tab to enable temperature measurement function.
3. Set the temperature unit, high temperature threshold and low temperature threshold.
4. Click [Apply] to save the settings.



11.2 Temperature Screening

11.2.1 Configuration

1. Click Home→Temperature Measurement→Live Preview→ to go to the following interface.
2. Set the temperature measurement parameters as needed.



Temperature Unit: two options: ℃ or℉.

Abnormal temperature threshold: please set the value according to the actual condition. When the temperature detected is over than the set value, alarms will be triggered.

Record validity: Set how long the platform will keep the temperature records. If it is enabled, the temperature records will be cleared beyond the set days.

Low Temperature Detection：please set the value according to the actual condition. When the temperature detected is lower than the set value, alarms will be triggered.

Pop-up automatically: if enabled, the abnormal temperature alarm processing box will pop up automatically. Additionally, you can enable "Pop up non-mask alarm box" as needed.

Data Display: you can choose "Do not display normal data". That is to say, if the temperature of the person scanned is normal and the mask is detected, these data will not be displayed on the client.

Data Reset Settings:

a. Reset time and type: please reset time of the temperature data as needed. These data can be reset every day, every week or every month.

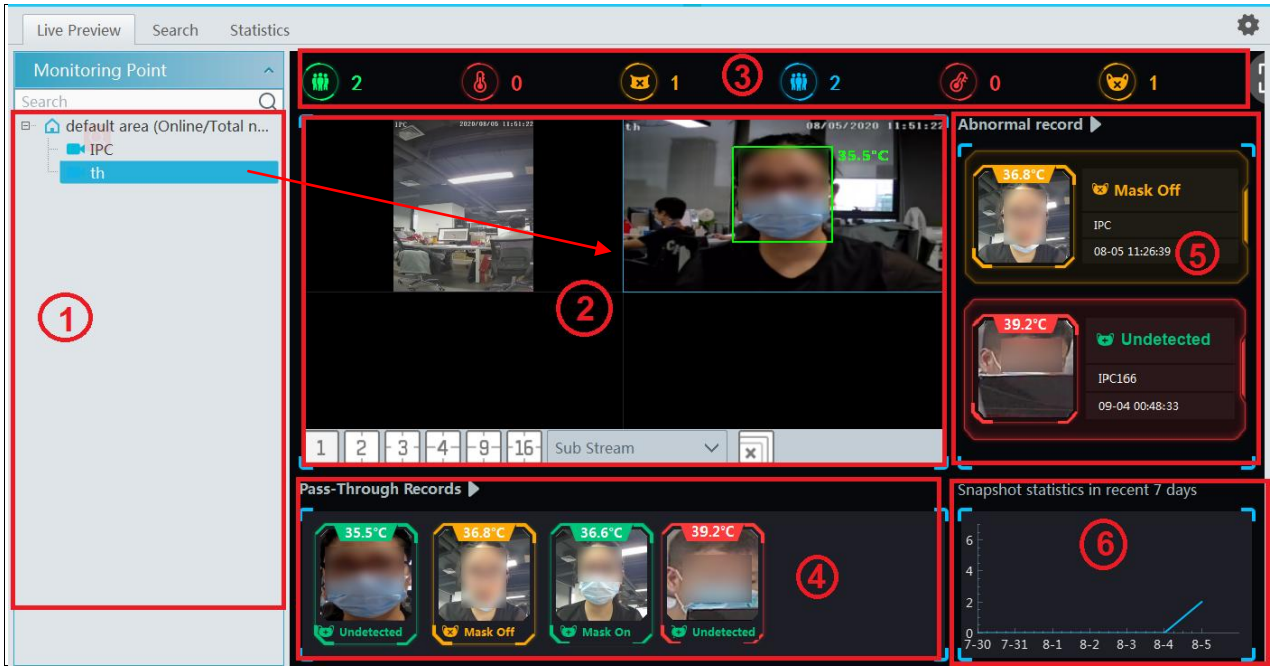
b. You can reset the statistics by clicking [Reset].

Data sources of Temperature Reading Tablet: including comparison data and detection data. If comparison data is selected, the platform will receive the temperature reading result and face comparison result; if detection data is selected, the platform will receive the temperature reading result and face detection result, but it is not sure whether the person is matched with that of the face database

Voice Prompt: Please set the abnormal temperature voice prompt and non-mask voice prompt as needed. When no mask or elevated/low temperature is detected, the set voice prompt will be heard.

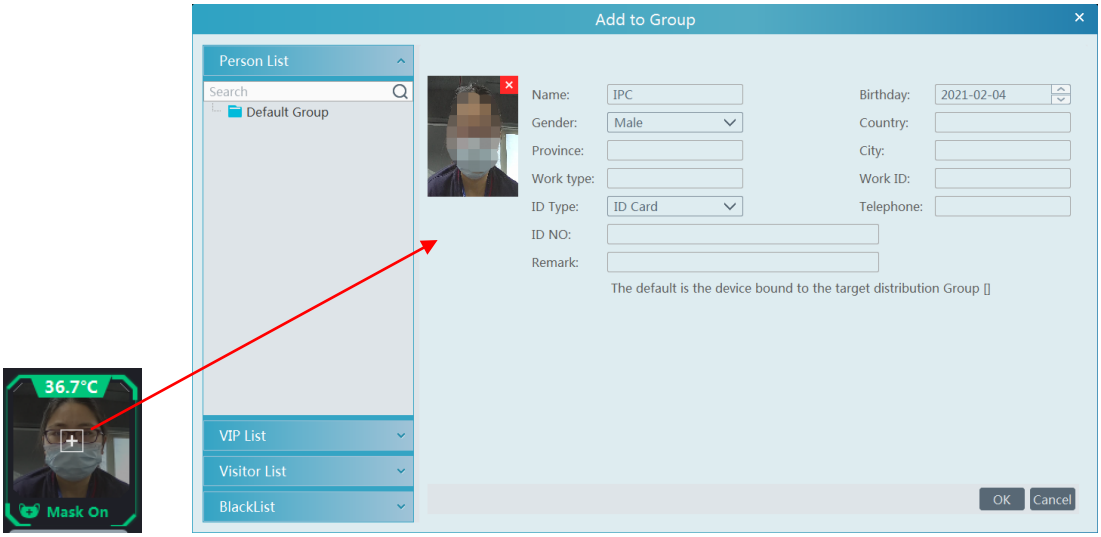
11.2.2 Live Preview

Drag the thermal cameras/temperature measurement and face recognition terminals to the preview window. In this interface, you can view various statistical information, such as total pass-by(today/total), Over-temperature(today/total), mask off (today/total), etc.

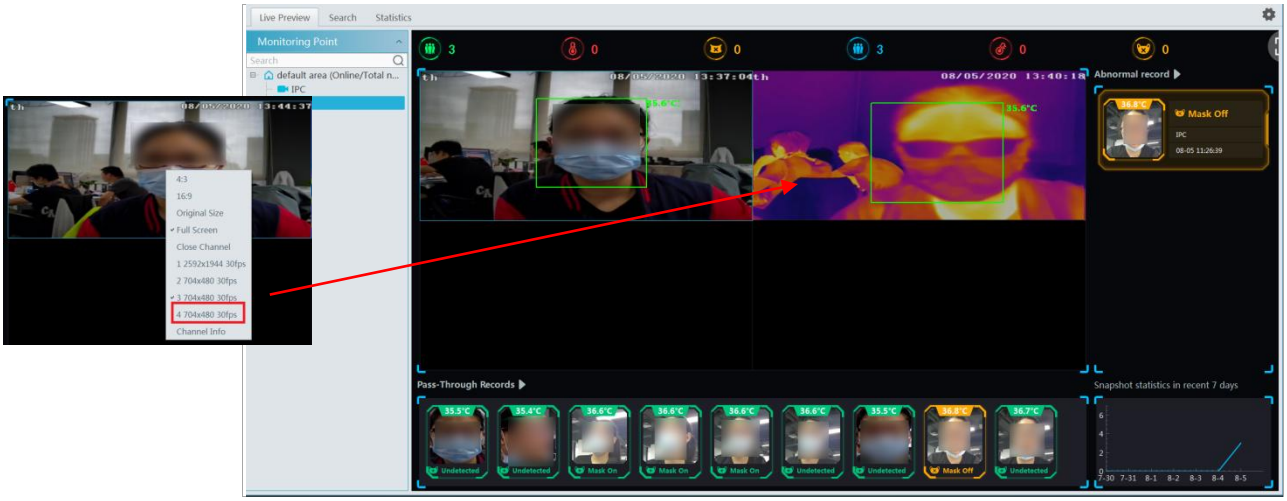


No.	Descriptions
①	Camera list, including temperature measurement terminal/panel and thermal network camera.
②	Preview Area; drag the camera to the preview window to play.
③	Statistical display area, including such as total pass-by counts(today/total), Over-temperature counts (today/total), mask off counts (today/total)
④	Pass-through records (snapshot display area)
⑤	Abnormal record display area, including mask off, over temp
⑥	Snapshot statistics in recent 7 days

Putting the cursor on the snapshot picture appears a "+" icon. Click this icon to add this picture to the group of the face database.



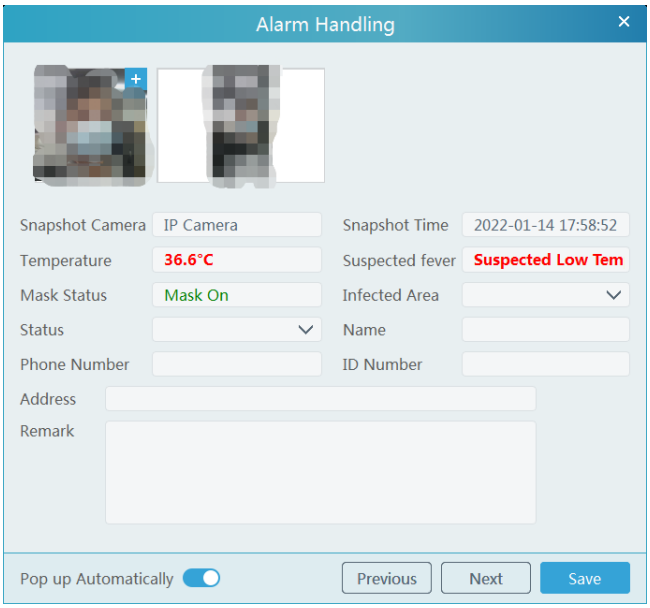
The thermal image and visible light image will be displayed simultaneously if the thermal camera is dragged to the preview area. Right click on the thermal camera window and then select the fourth stream to view the thermal image as shown below.



➢ **Alarm Handling**

Click the captured image on area ⑤ to pop up an alarm handling box as shown below. You can edit the personal information, including name, phone number, ID number, address, whether to go to the infected area, etc.

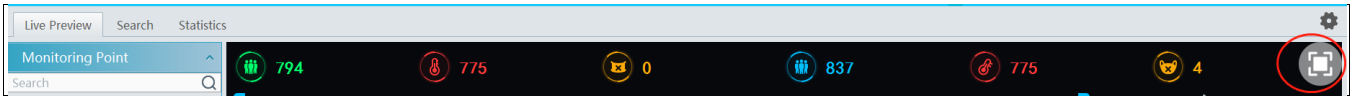
Click "+" on the top right corner of the snapshot image to add it to the group of the face database.

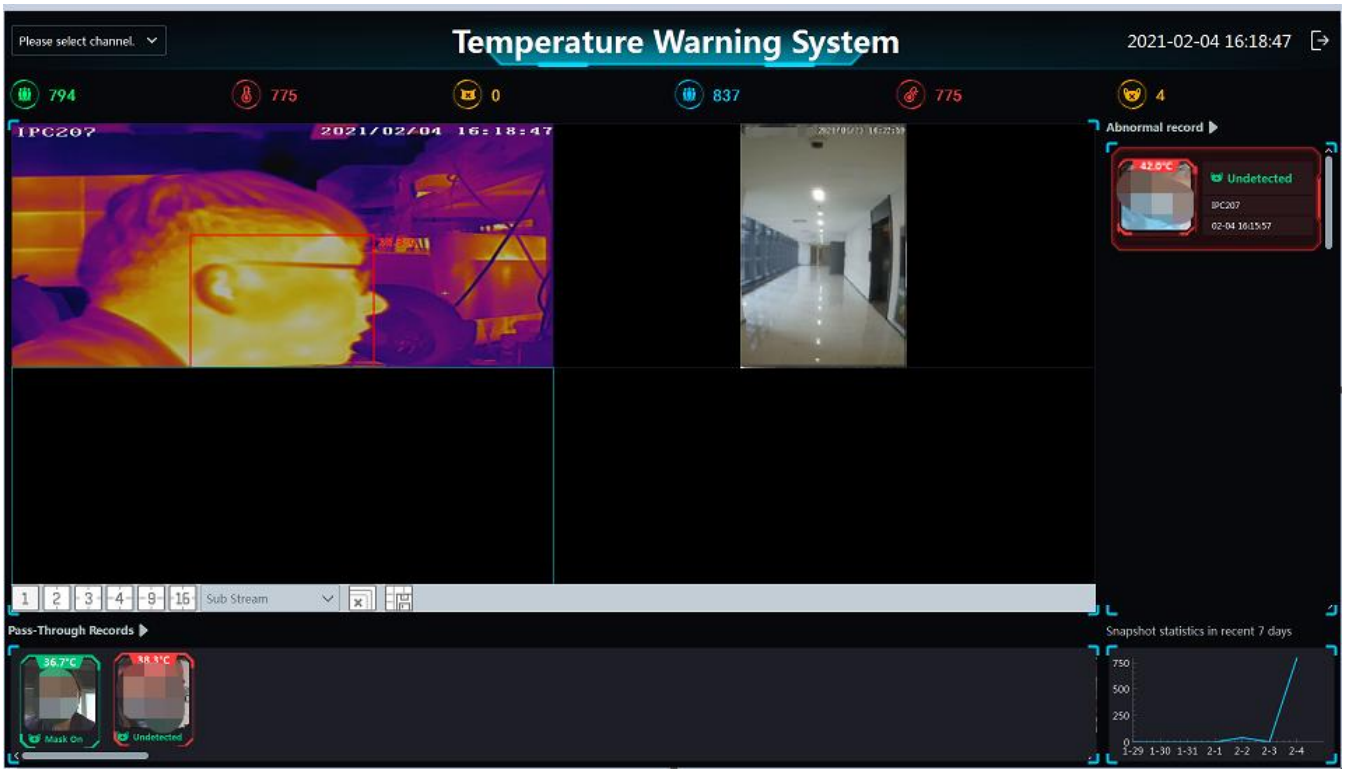


Pop up automatically: if enabled, the alarm handling box will automatically pop up on detecting an abnormal event (over temp/low temp/mask off).

➢ **Full Screen Display**

In the temperature measurement interface, click to enter temperature warning system interface.

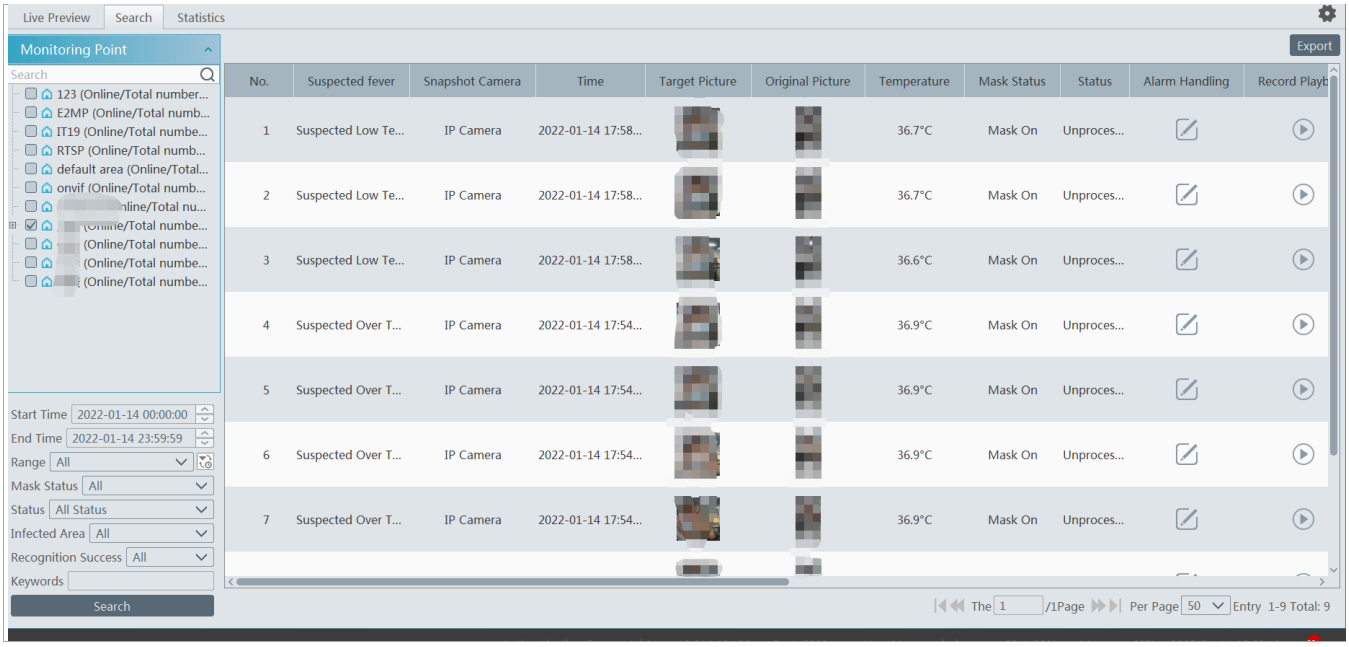




Click to exit the full screen mode.

11.2.3 Records Search

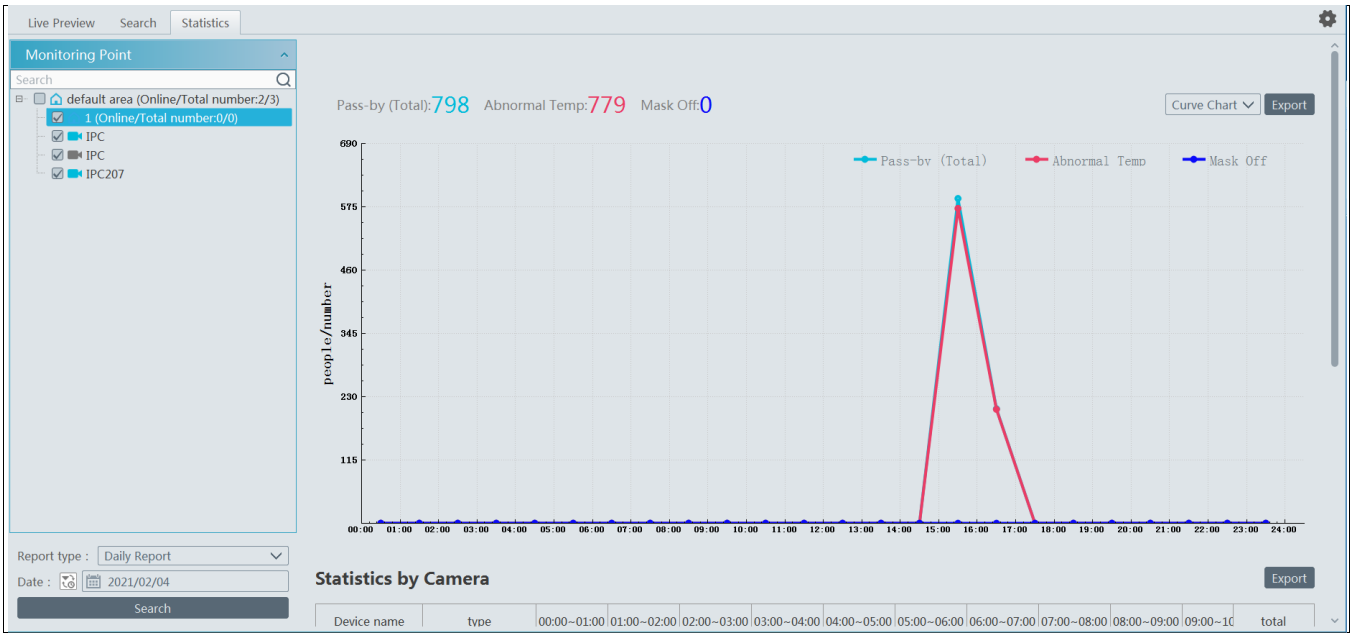
Select the camera and then set the filter condition (like the start and end time, temperature range, keywords, etc.) to search the records.



In the above interface, you can view the target picture and the original picture, body temperature, mask status, alarm handling status, etc.

11.2.4 Statistics

In the statistics interface, you can view the total pass-through counts, abnormal temperature counts and mask off counts.



: Click it to switch between date and date range.

Choose the camera and then set the start time and end time. Click “Search” to view the statistics.

You can view the statistics via a line chart or bar graph. The statistical data can be exported by clicking “Export”.

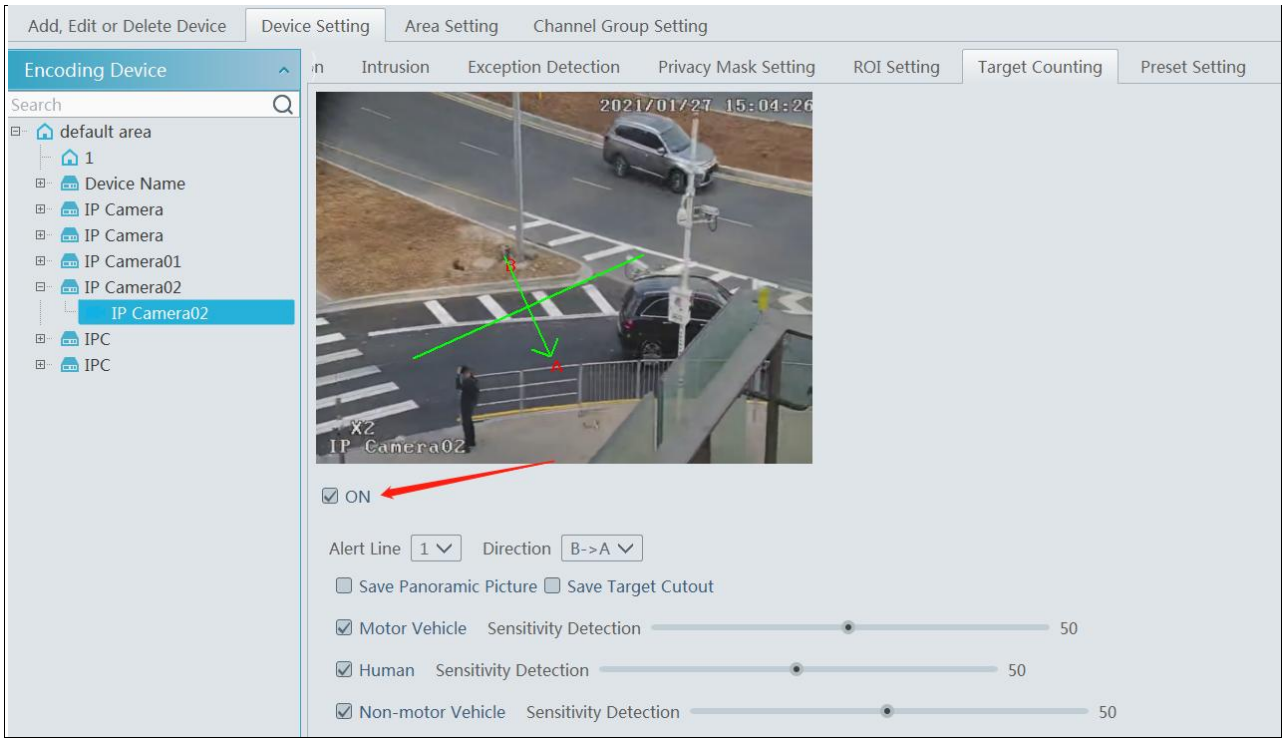
12 Target Counting

12.1 Task Management

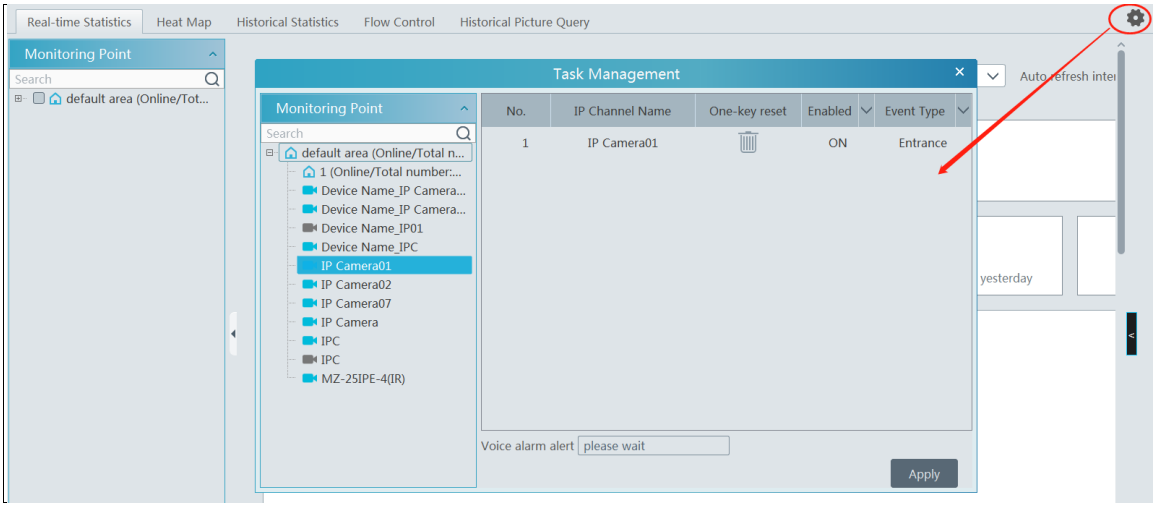
1. Enable “Target Counting” function of the IPC.

Note: the added camera must enable target counting function.

IPC with Target Counting function



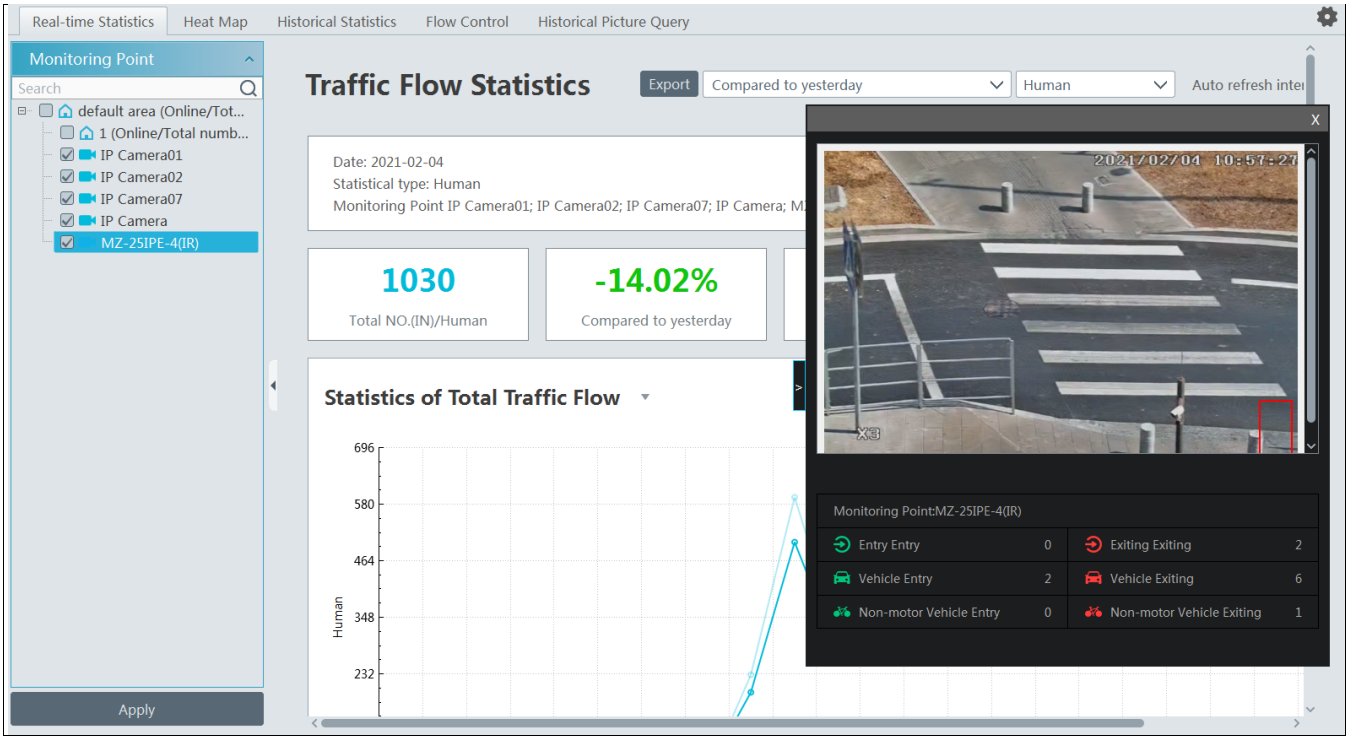
2. Go to Home→Target Counting interface. Clicking on enters the following interface. Double click the camera with the target counting function and then select “ON”. After that, click [Apply] to save the settings.



12.2 Real-time Statistics

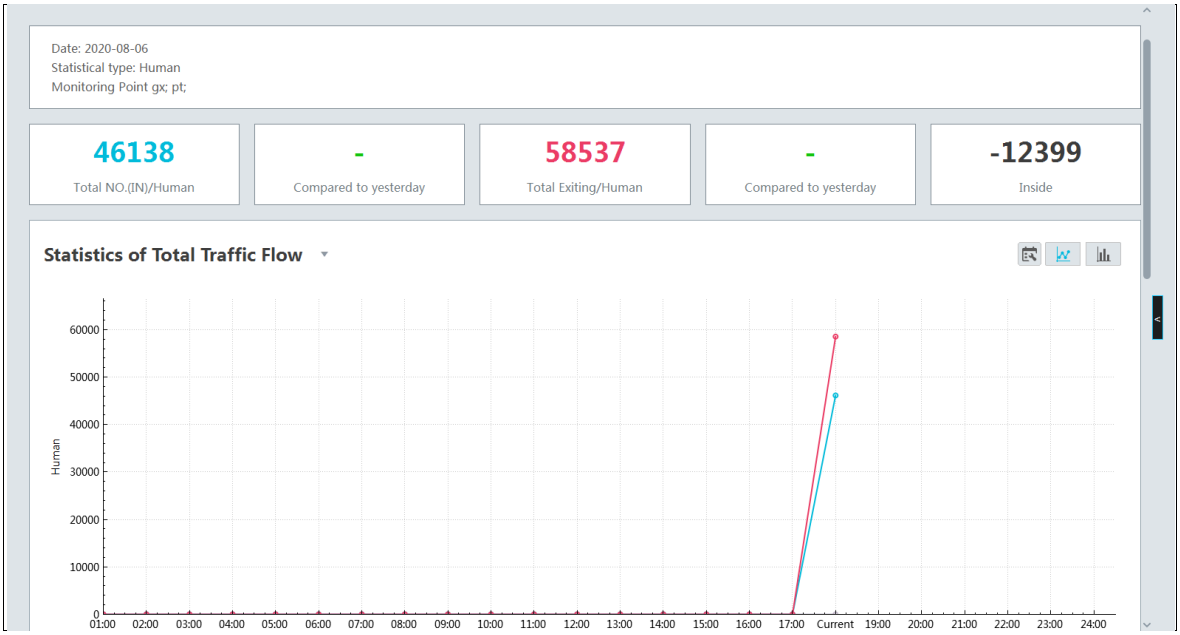
Go to Home→Target Counting→Real-time Statistics. Double click the camera with the target counting function to view the live image. The camera will automatically count the number of people/motor vehicle/non-motor vehicle crossing the predefined line and the system will automatically analyze the traffic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

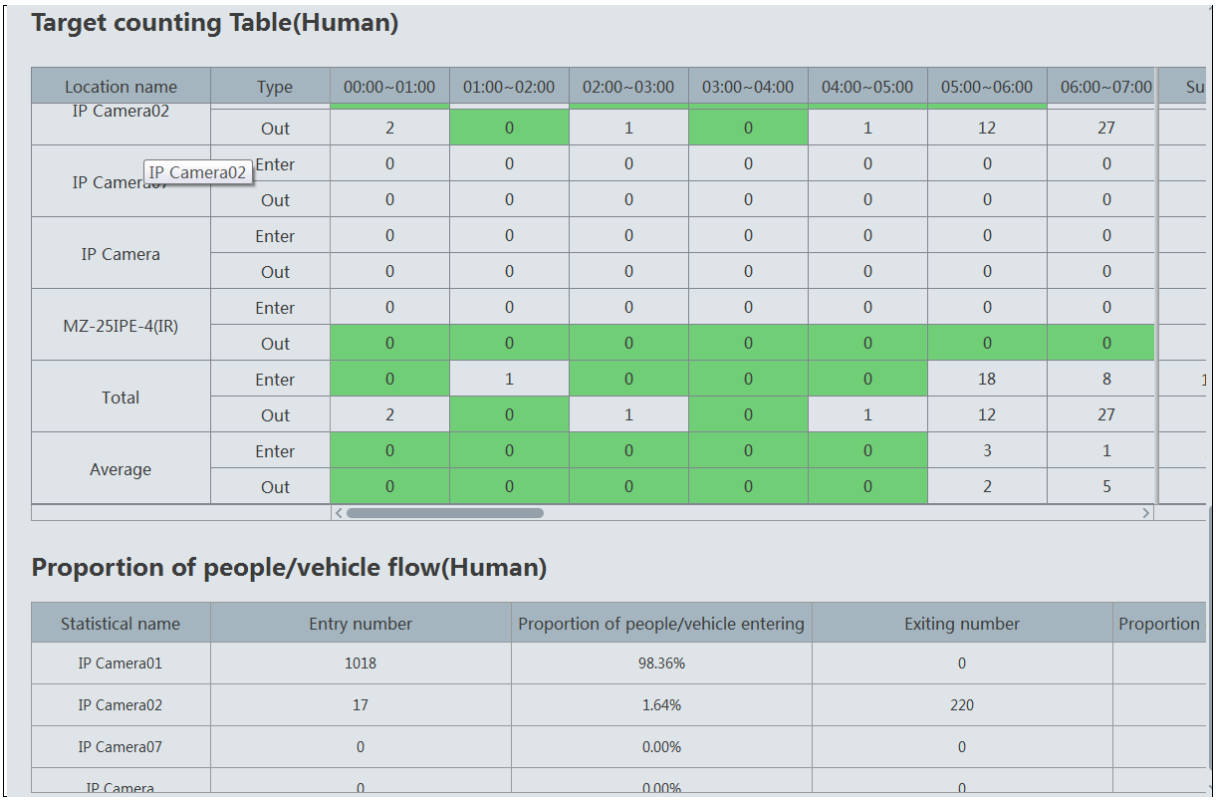


Please select the type as needed to view the flow trend. Click to refresh the current statistics.

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 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	

IP Camera02

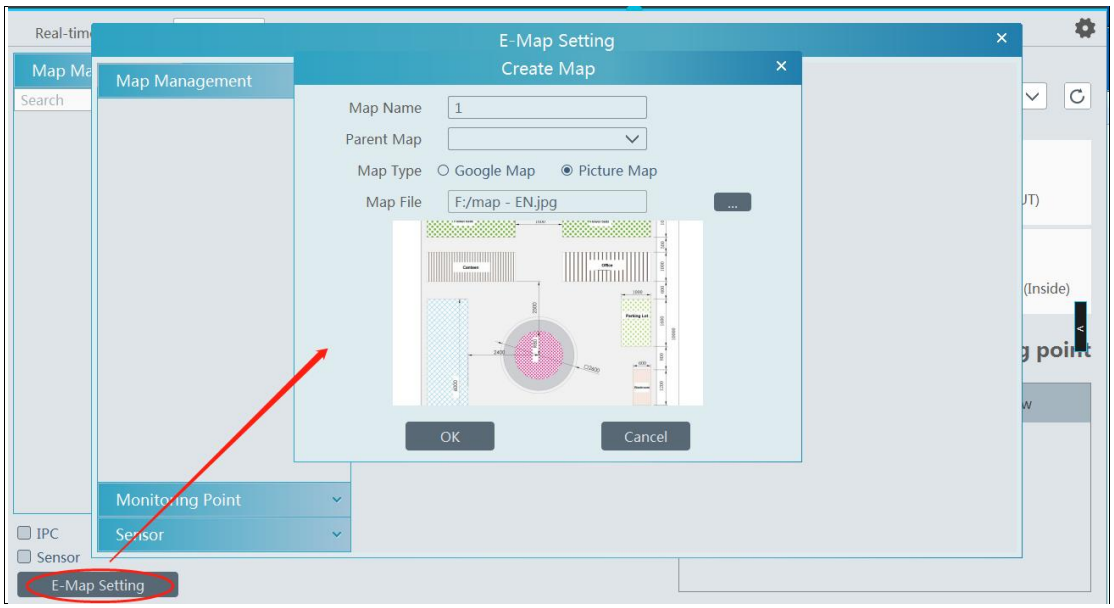
Proportion of people/vehicle flow(Human)

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	

12.3 Heat Map

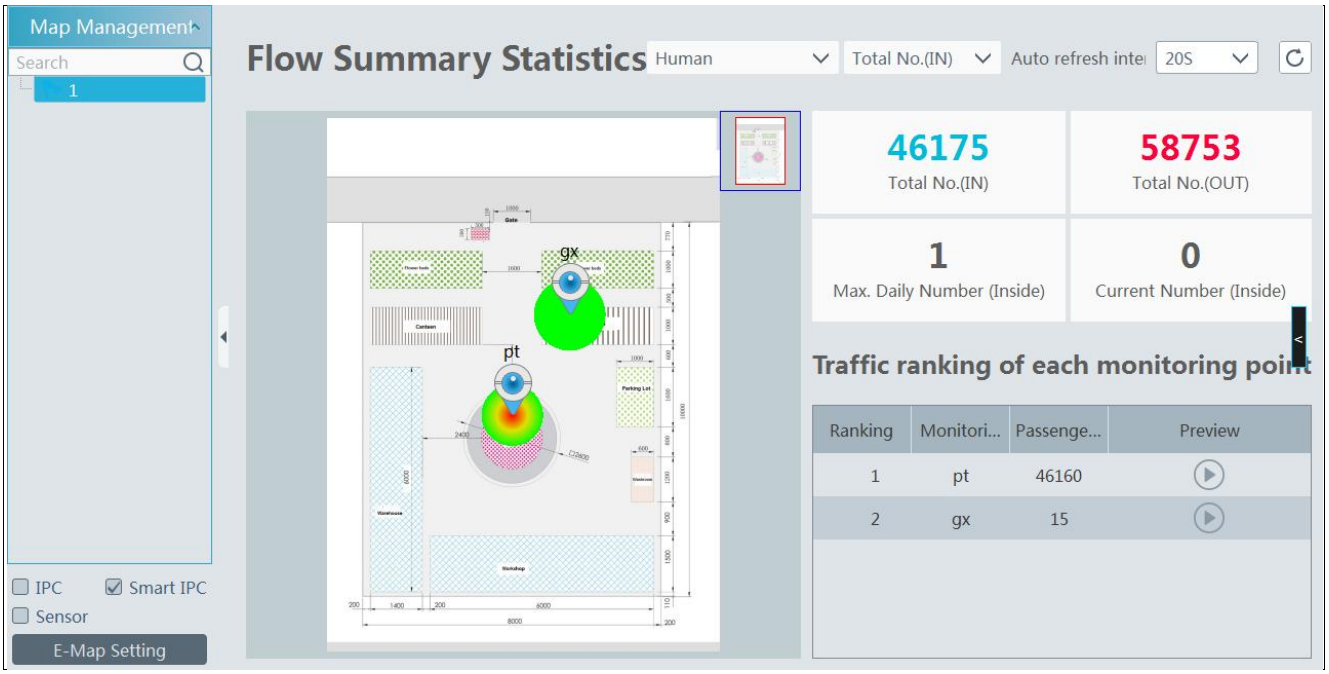
Go to Home→Target Counting→Heat Map interface.

Please create a map first.



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

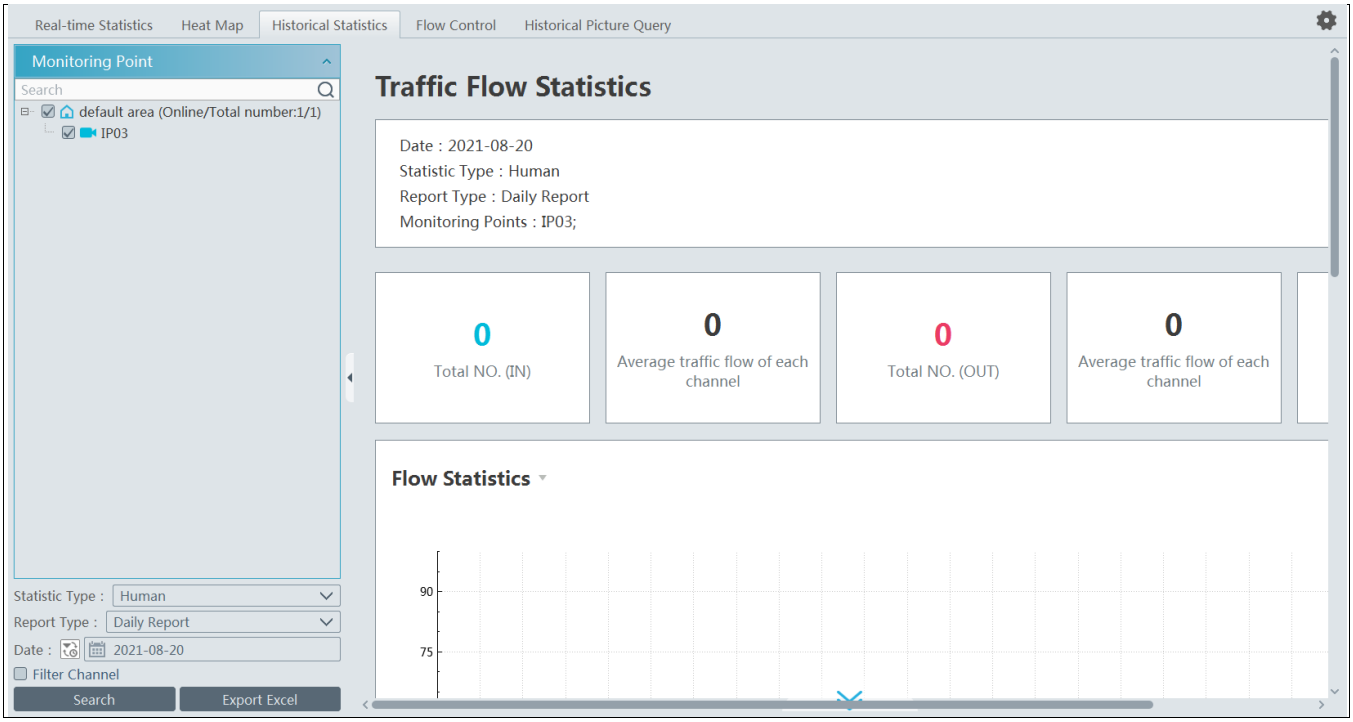
Put the cursor on the camera icon and then you will see the detailed flow statistics.



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

12.4 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.



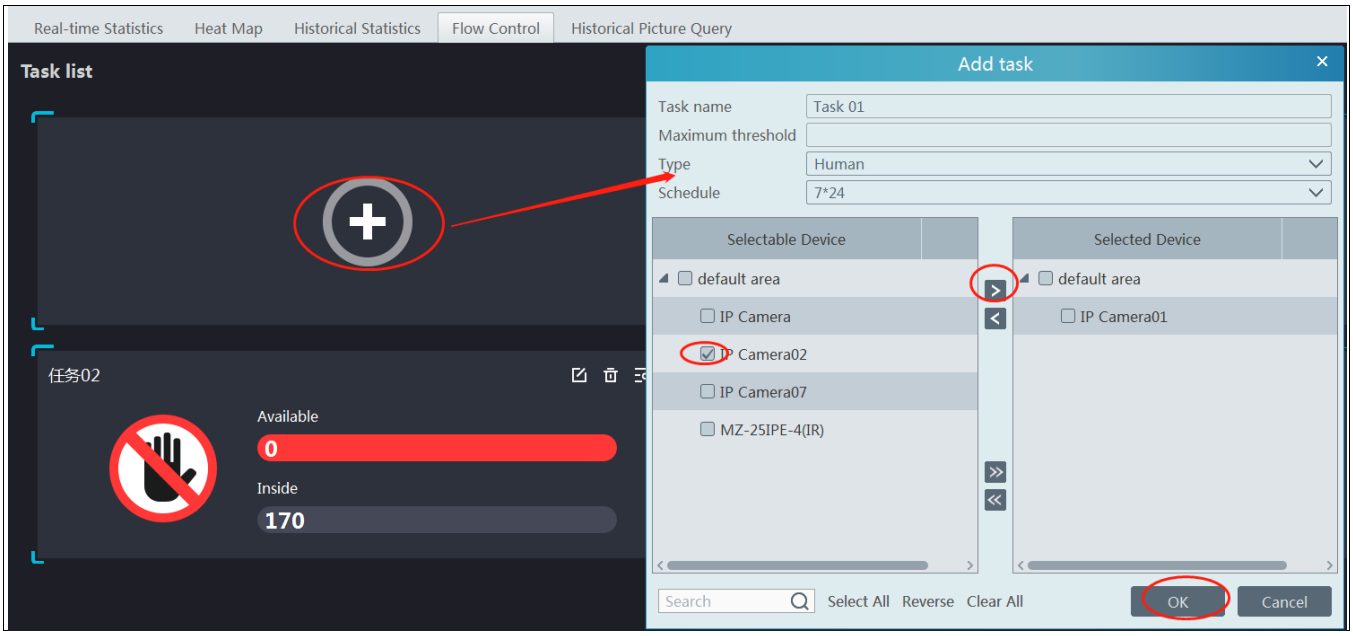
12.5 Flow Control

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

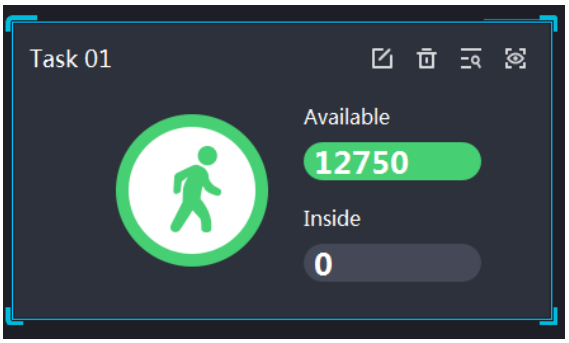
the specified area exceeds the threshold, the alarm will be triggered and no entry icon will display.

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

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

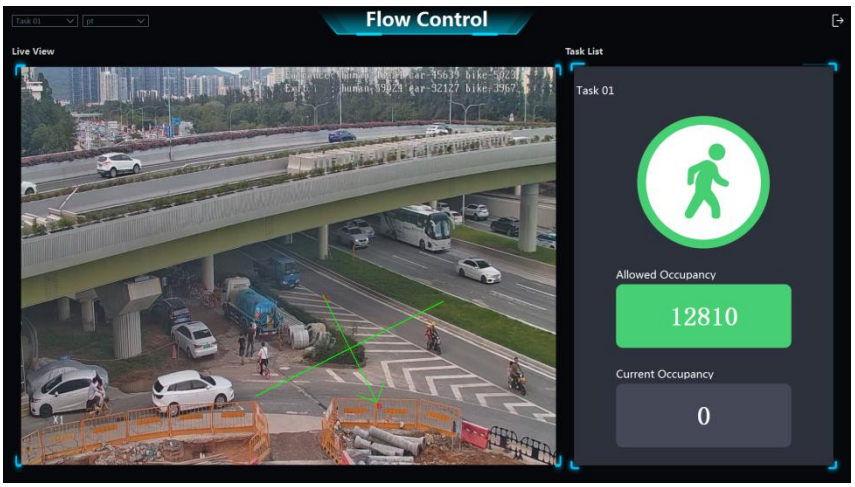


Then the available number and inside number can be viewed as below.



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.

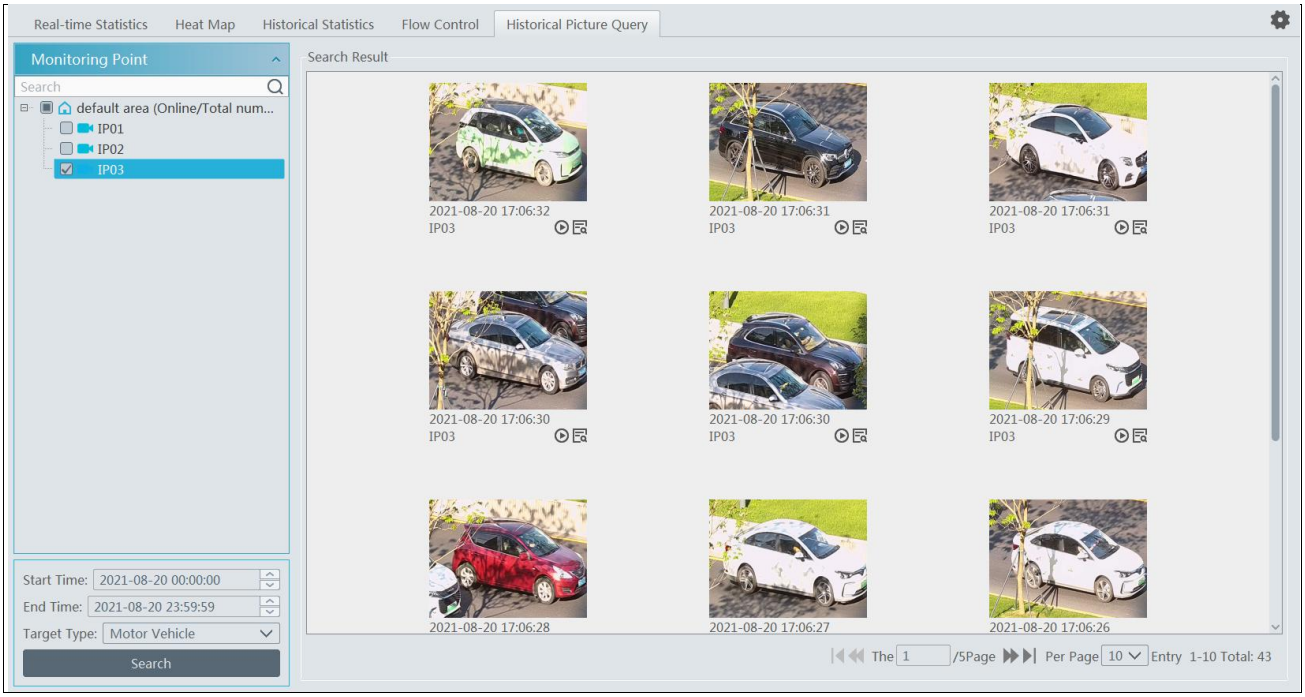
12.6 Search Historical Picture

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

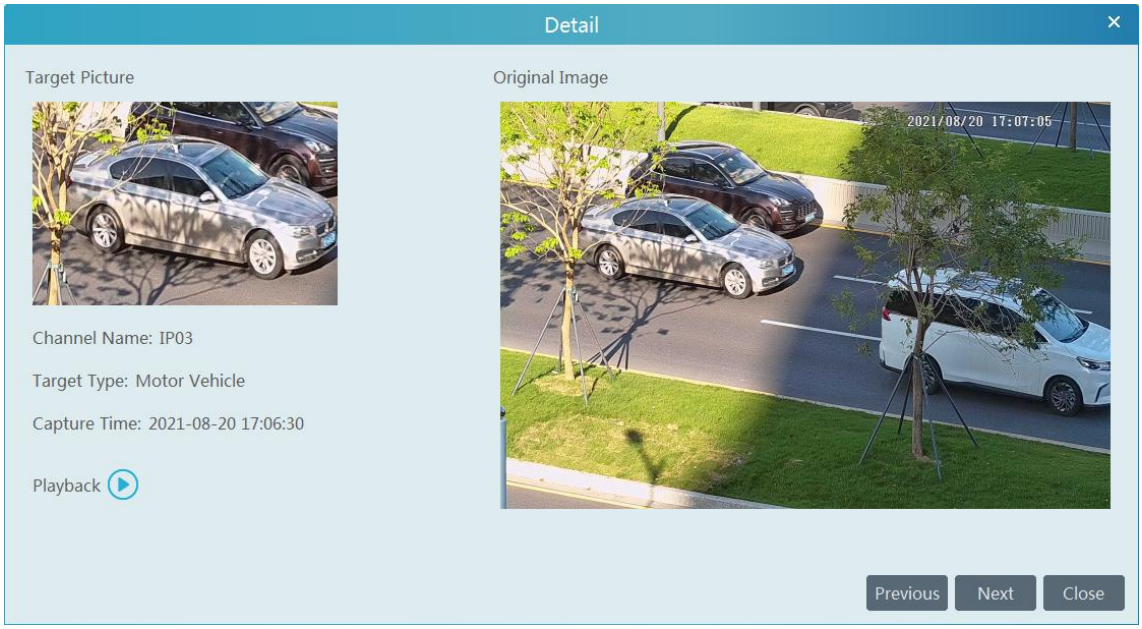
Note: Only the snapshots of the IPC with target counting function can be searched here.

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.



13 Visitor Management

The visitors can be managed effectively by using this system.

13.1 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.

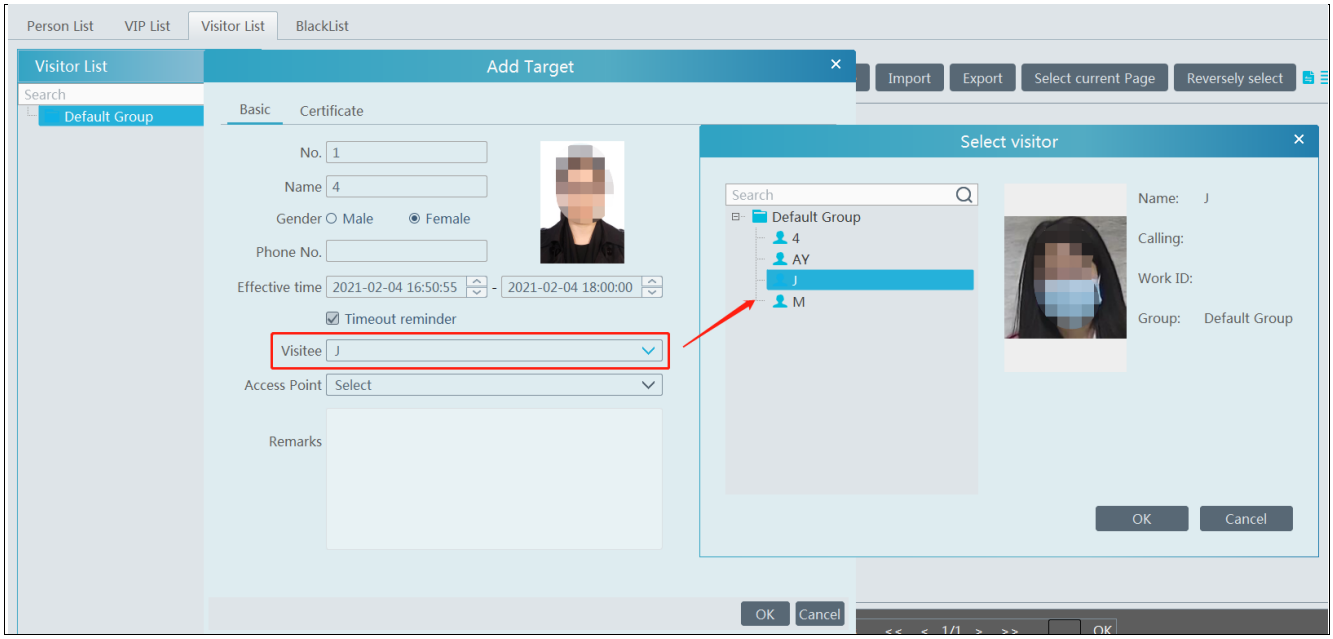
Note: Access control device includes face recognition box, face recognition and access control panel, face recognition IPC, Face recognition NVR, among which face recognition box, face recognition IPC and face recognition NVR can view the access records of the visitors.

13.2 Apply for a Visit

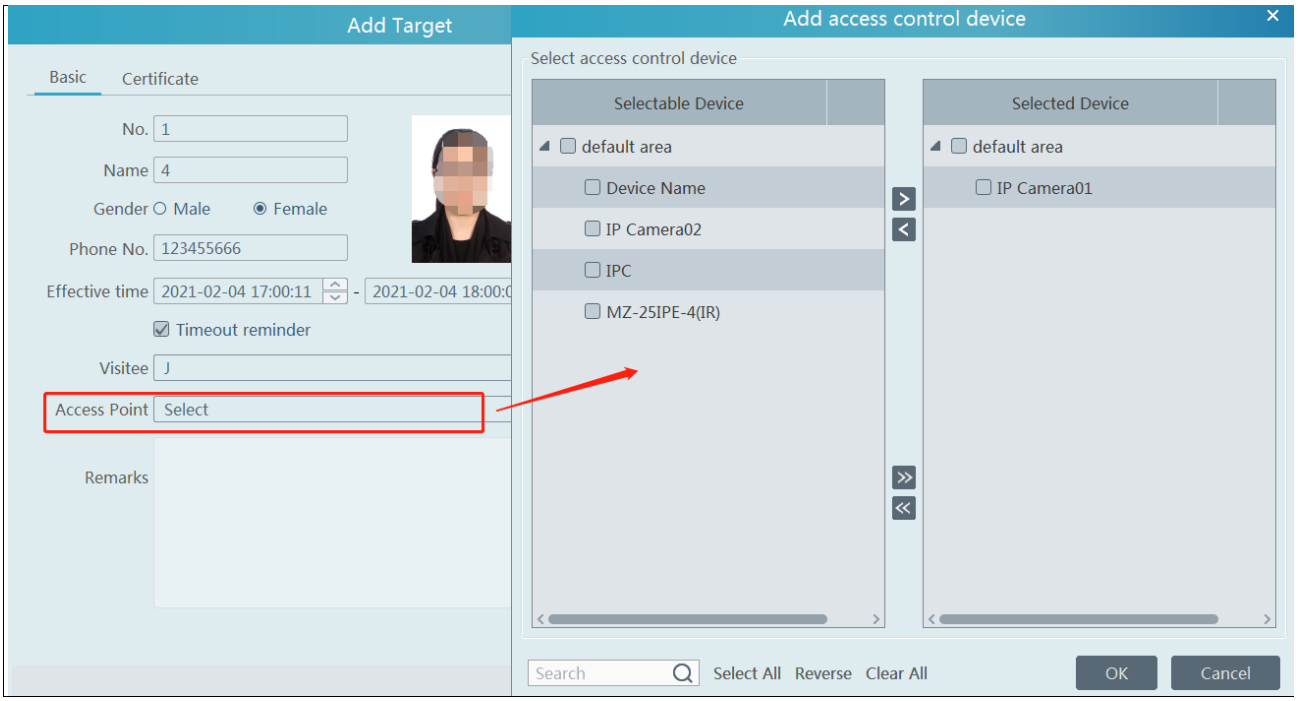
There are two ways to apply for a visit.

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

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

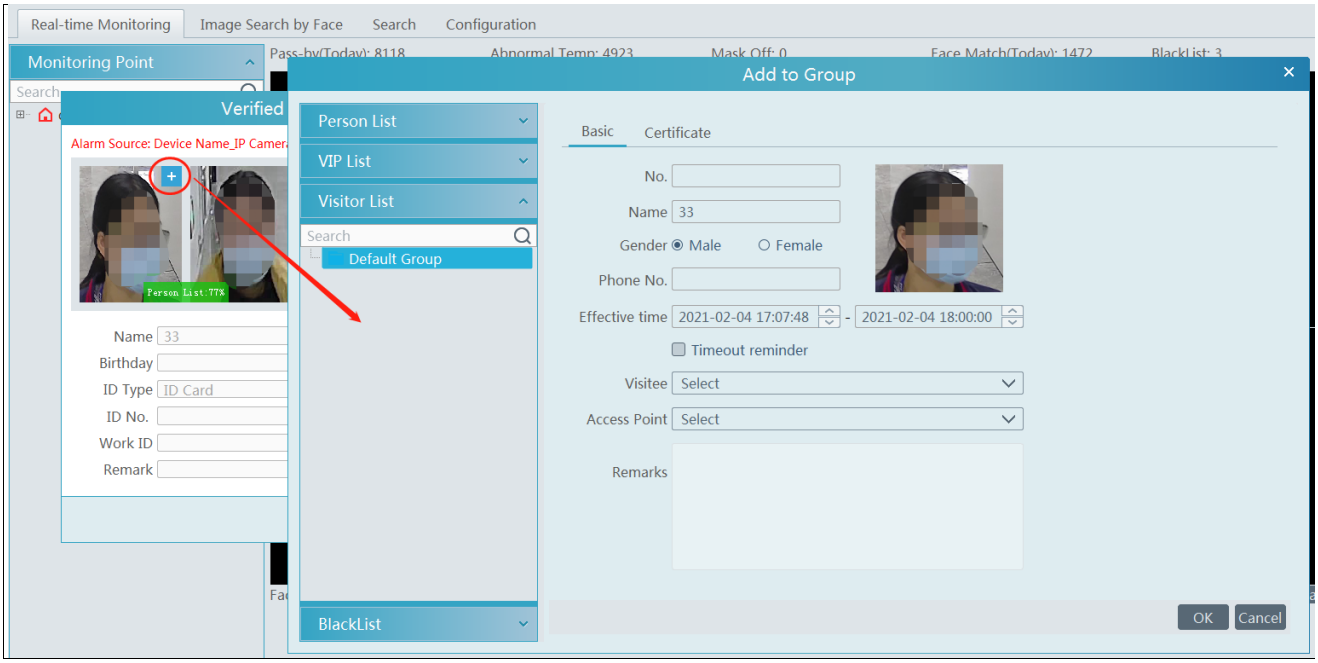


Select the access point.

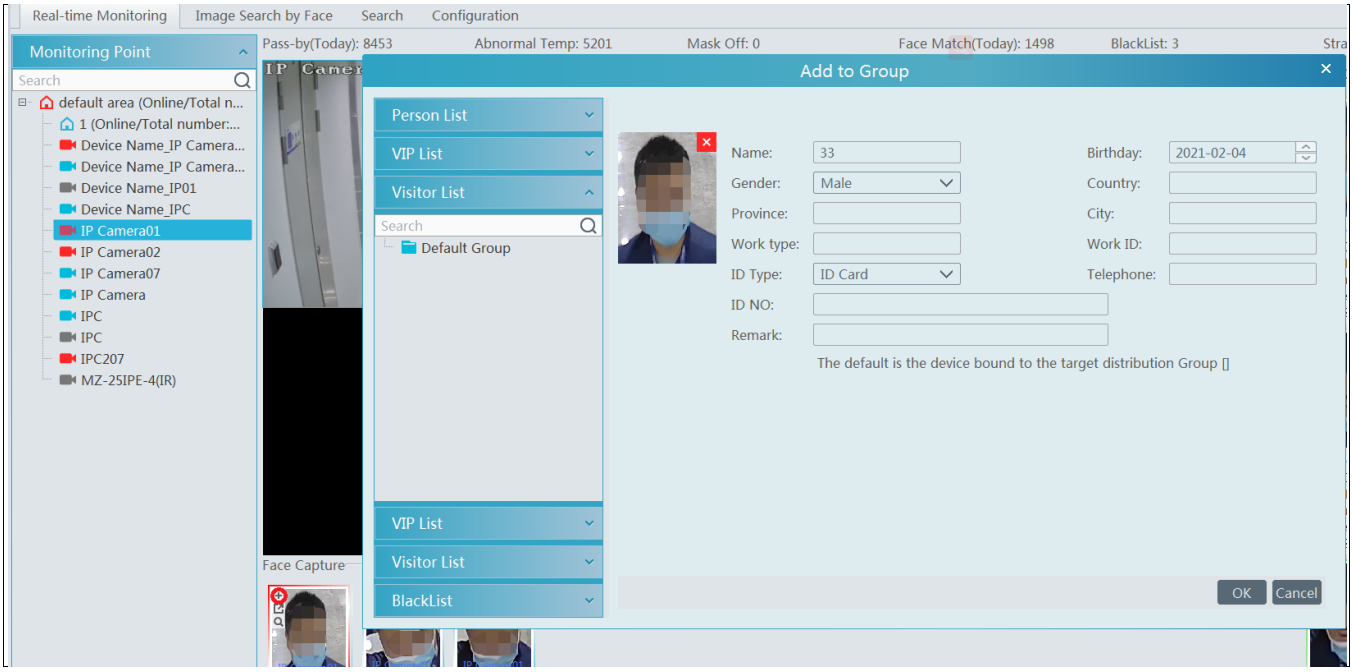


2. Add the visitor information by real-time face snapshot

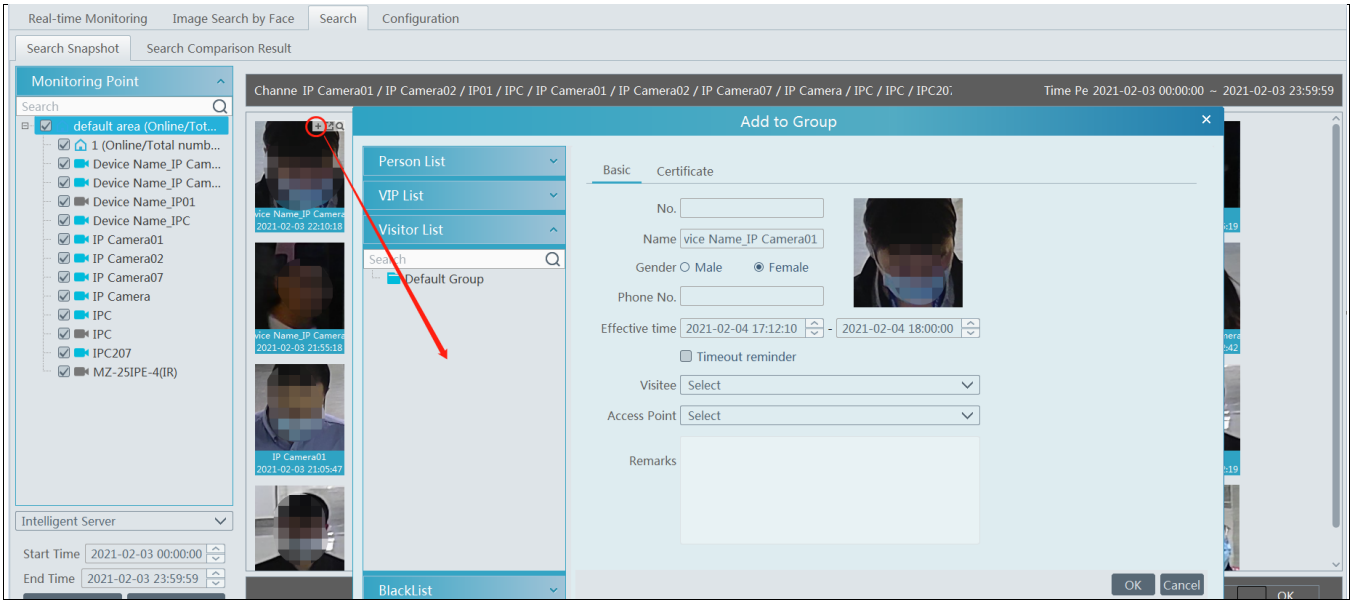
a. Add a visitor from the alarm pop-up window in the face surveillance interface



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)

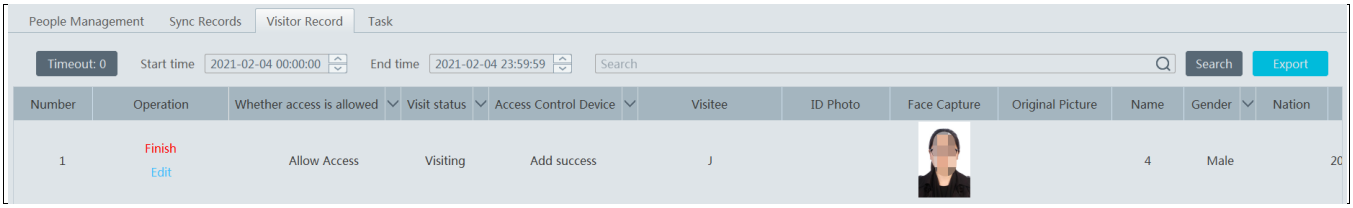


13.3 Search and Export Visitor Record

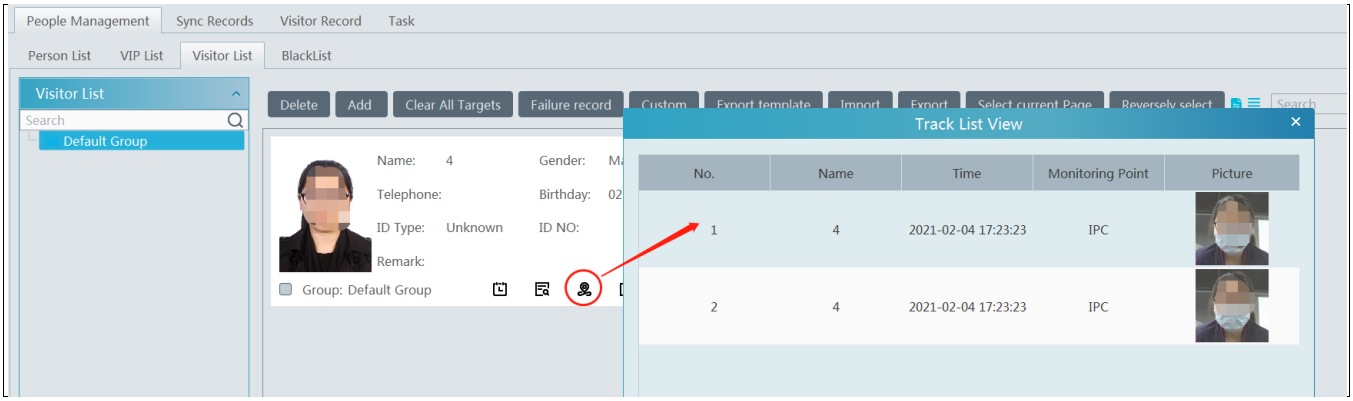
Set the start and end time and then click [Search] to search the visitor record.

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.

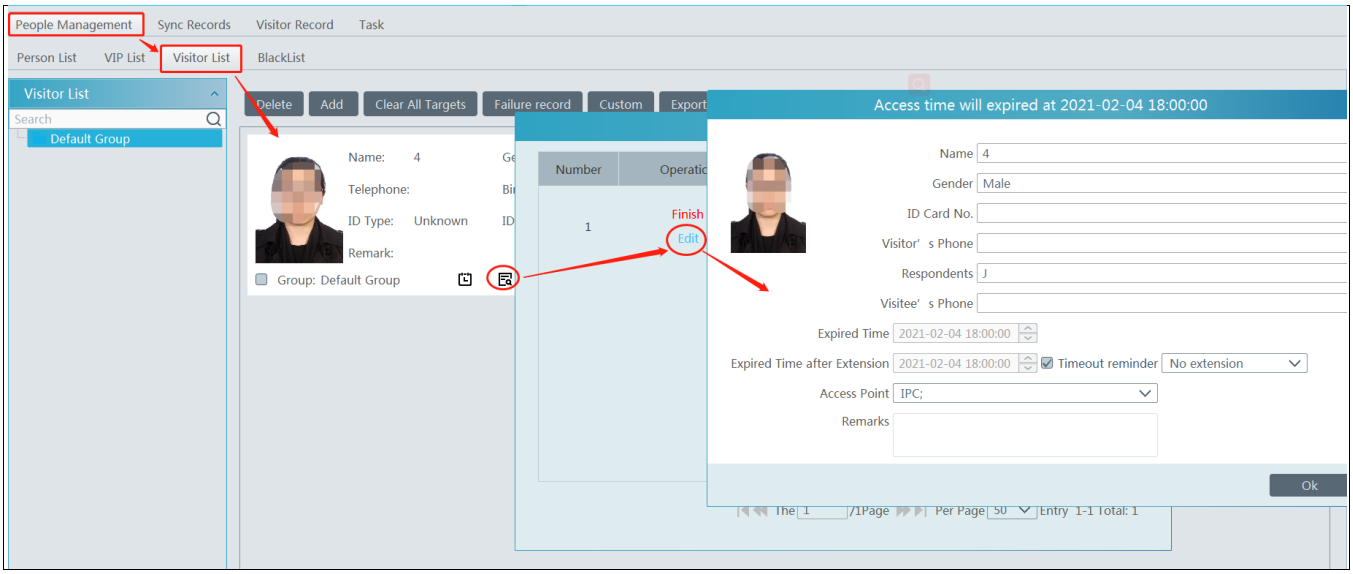


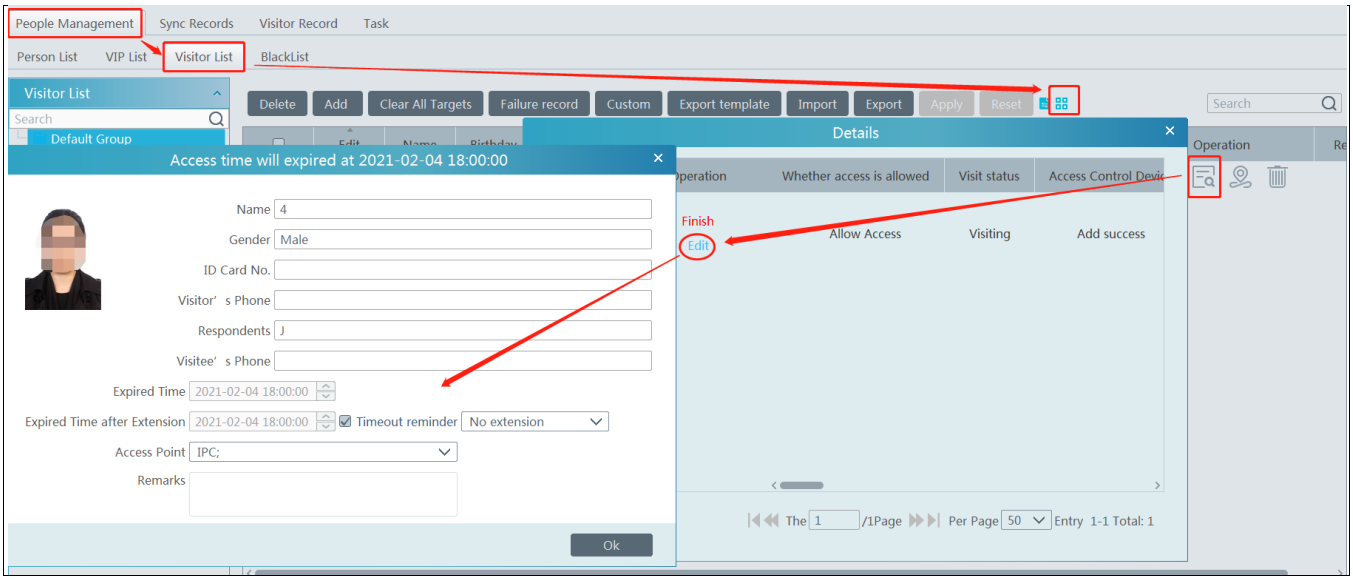
13.4 Exception Handling

13.4.1 Extending Visit Time or Modify Access Point

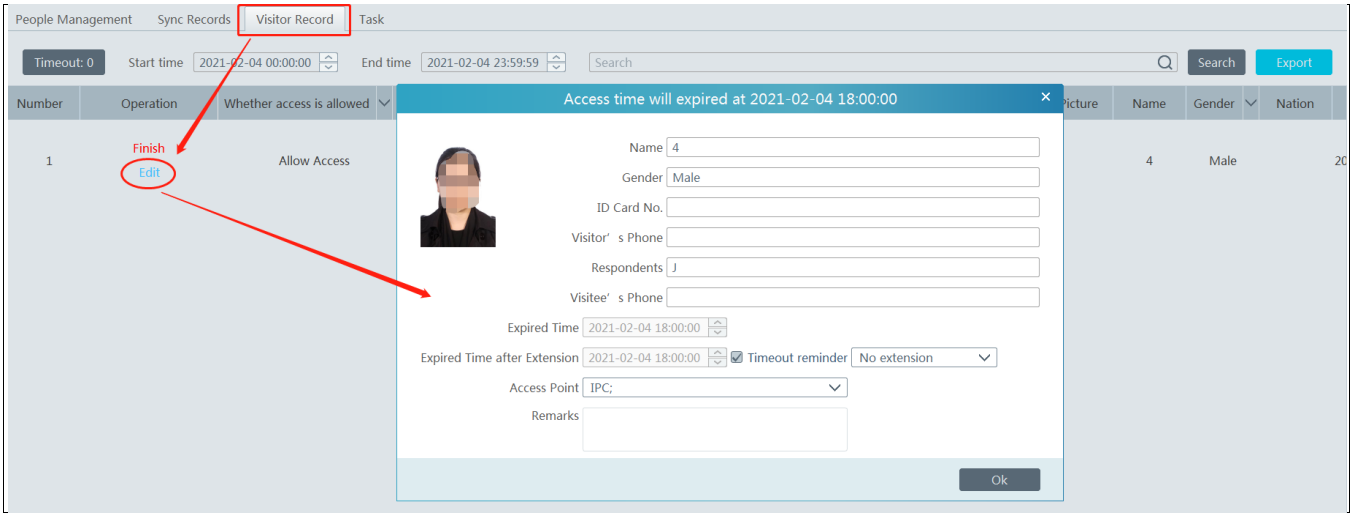
There are two ways to handle the exception.

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





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

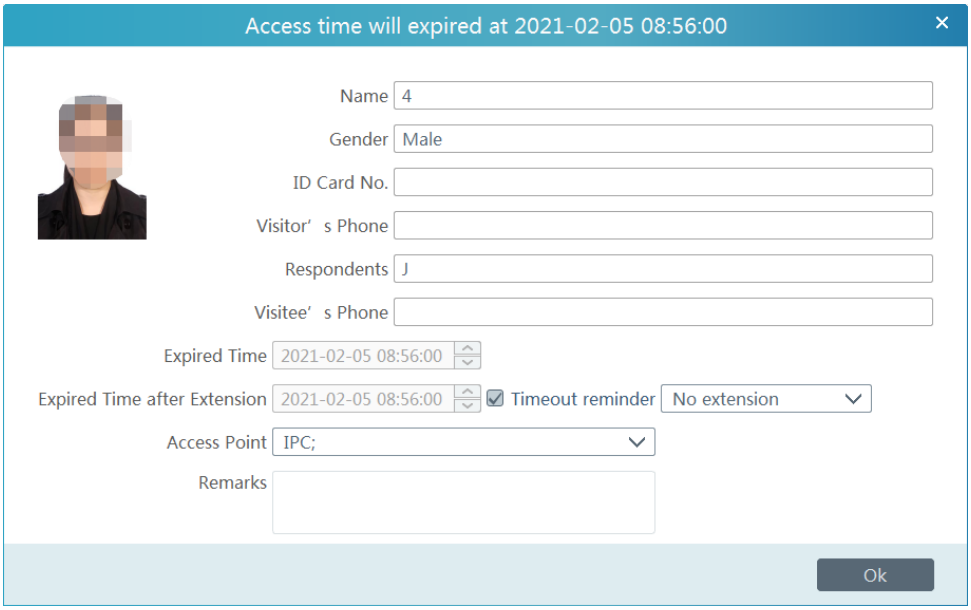


For valid record, you can edit the visit time period and access point.

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

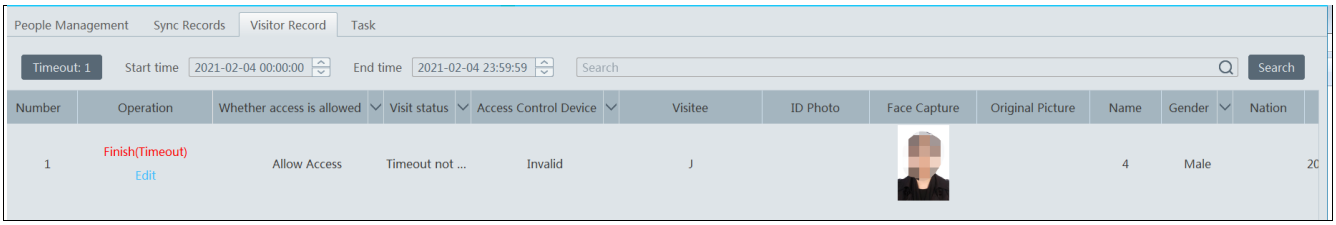
13.4.2 Not Visiting/Leaving Beyond the Given Time

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.



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

Clicking on the [Timeout] button appears the relevant records



14 Parking Lot Management

14.1 Add ANPR Camera

Before using parking lot system, please add ANPR cameras first. The ANPR camera is use to capture the license plate of the vehicles entering or exiting the parking lot.

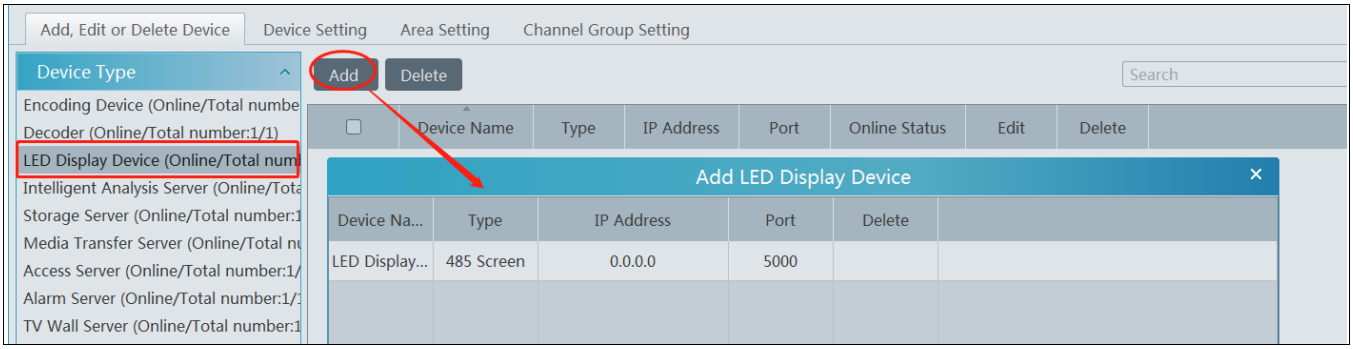
There are two ways to add ANPR camera.

1. Click Home→Resource Management→Add, Edit or Delete Device→Encoding Device to enter the encoding device adding interface. Click [Add] to add your ANPR camera.
2. Add the ANPR camera to your NVR with license plate recognition function and then add this NVR to the platform.

14.2 Add LED Display Screen

Before using parking lot system, please add the LED Display Screen which is used to display the information of the vehicles entering or exiting the parking lot.

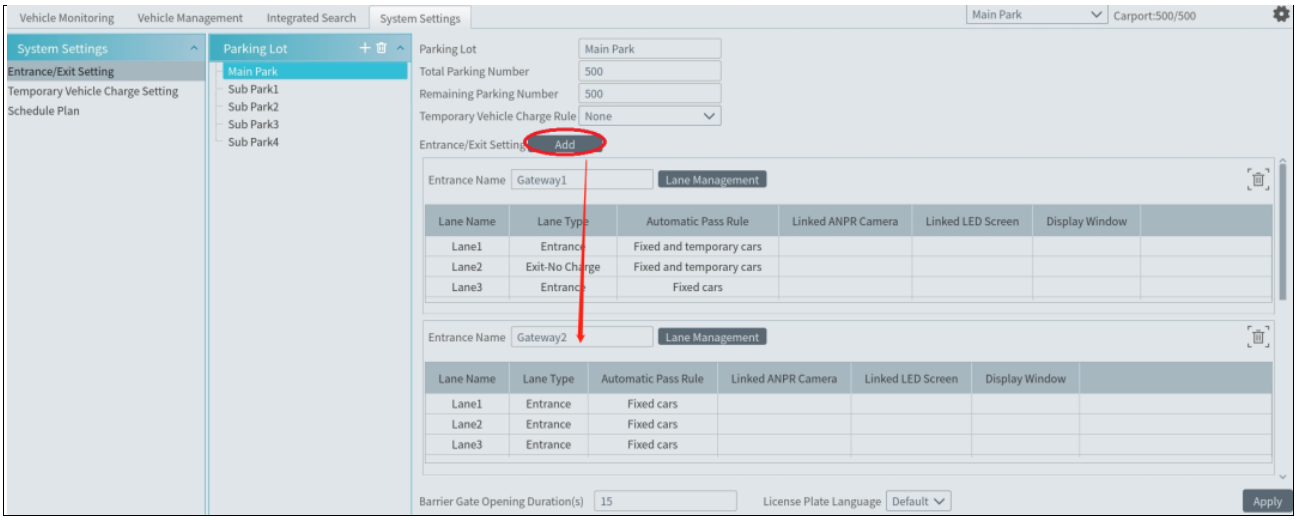
Click Home→Resource Management→Add, Edit or Delete Device→LED Display Device to go to the LED display device adding interface.



14.3 System Settings

14.3.1 Set Entrance and Exit

Go to Home→Parking Lot Management→System menu as shown below.



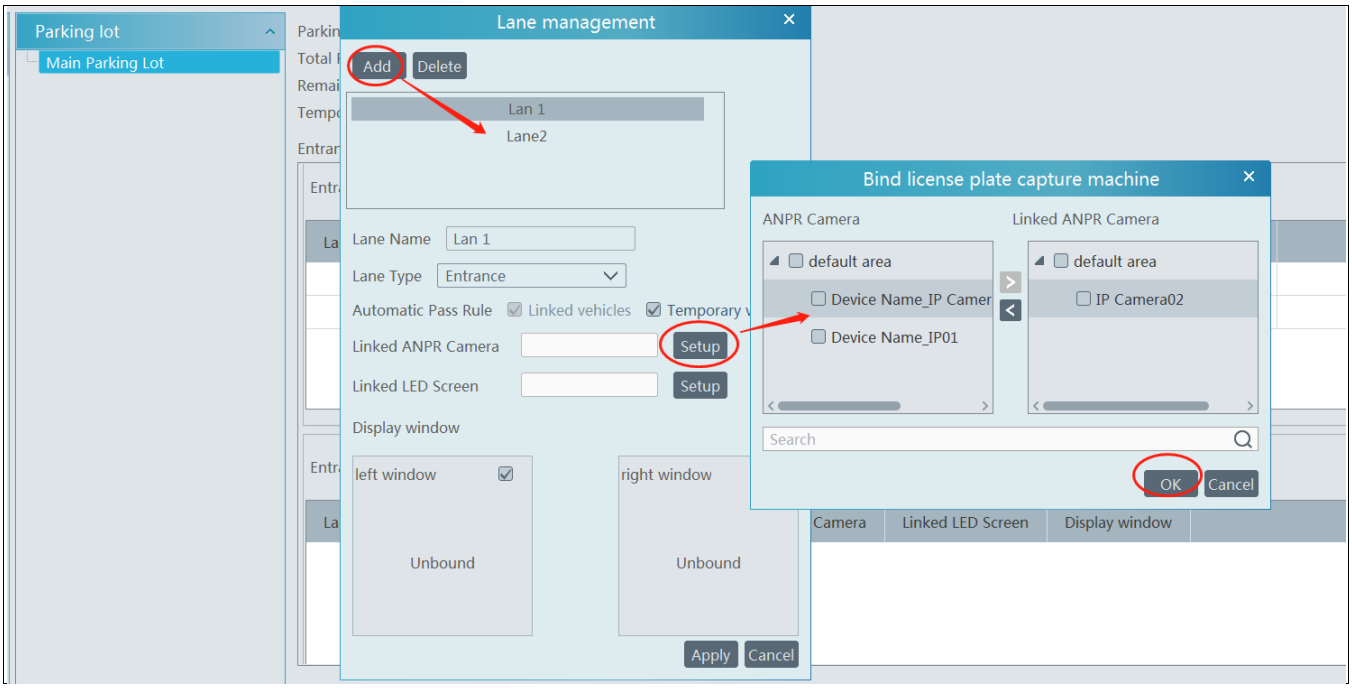
Click to set the display contents of the LED display.

Click [Add] to add a new entrance.

In the above interface, you can set the total parking room, remaining parking room, entrance and lane, barrier gate opening duration, temporary vehicle charge rule and so on.

➢ Lane Management

1. Click [Lane management] to enter the lane management interface.
2. Click [Add] to add a new lane.



3. Select the lane and then enter the lane name and select the lane type.

   Lane type: set it as “Entrance” or “Exit-Charge” or “Exit-Free” as needed.

4. Set the automatic pass rule.

   Linked vehicles: the vehicles adding to the allow list.

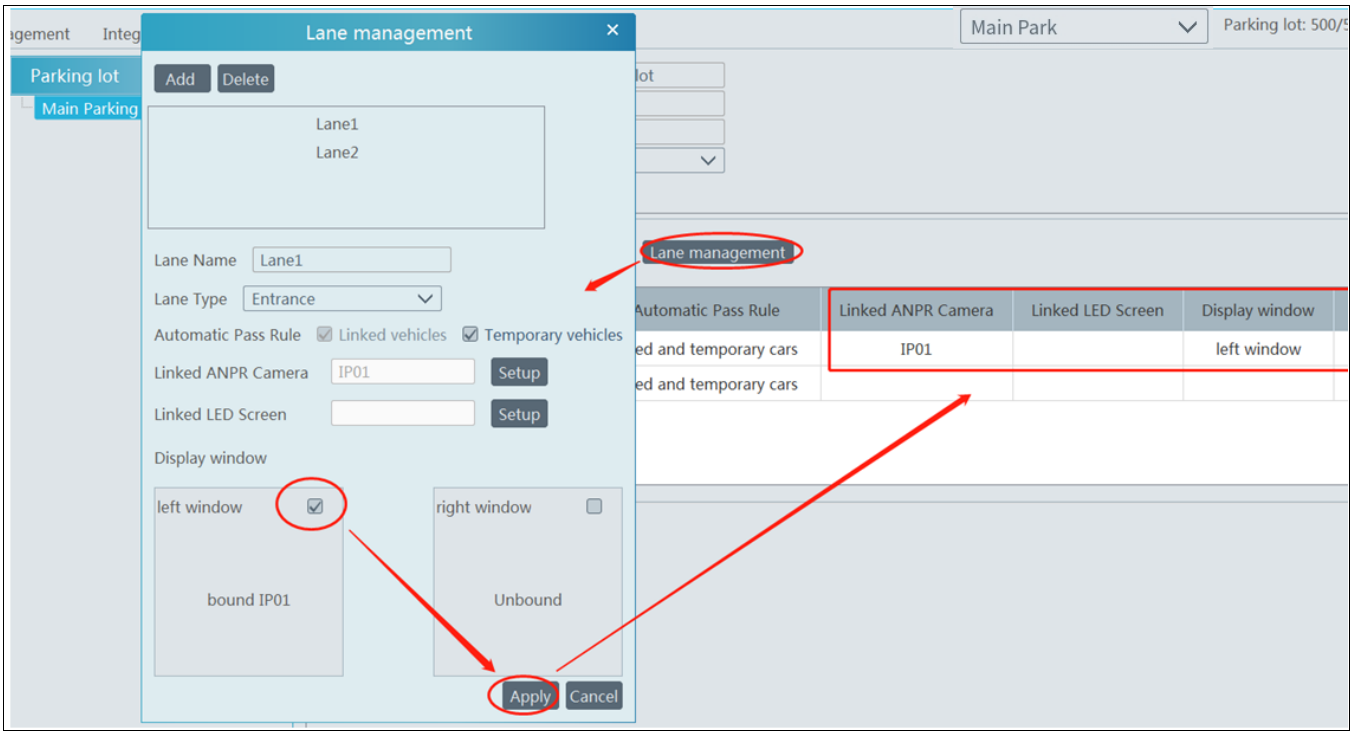
   Temporary vehicles: the vehicles not adding to the vehicle database

The “Linked vehicles” is checked by default, these vehicles linked to the parking lot can automatically pass the parking lot without stop.

5. Bind the ANPR camera and the LED screen to the lane.

6. Select the window and then click [Apply]. Then the ANPR camera and the LED screen will be bound to this window as shown below.

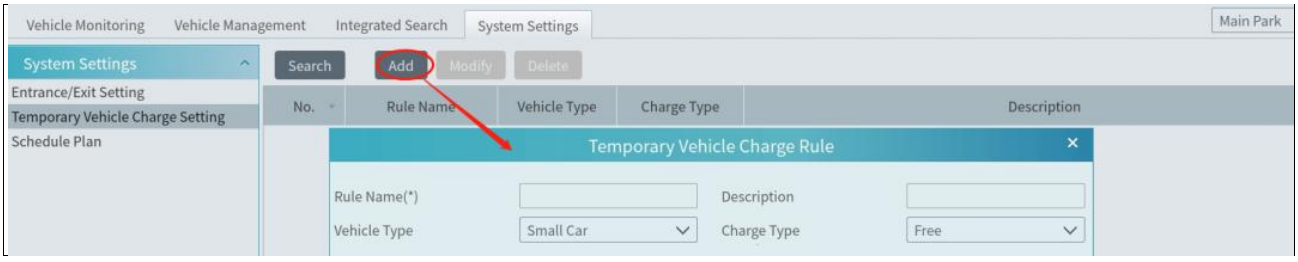
Uncheck this window and then click [Apply] to unbind the ANPR camera and the LED screen with the window.



Barrier Gate Opening Duration: For example, it is set to 15s. Then the barrier gate will be automatically closed after it is opened for 15s.

14.3.2 Set the Charge Rule for Temporary Vehicles

Charge rules include “Free”, “Charge per each exiting”, “Charge by parking time” and “Custom rules”. Please set the charge rules as needed.



After you set the charge rules, click one charge rule listed on the above interface and then the detailed information will be shown on the right panel.

Then you can select the temporary vehicle charge rule when you fill out the information of the parking lot.

14.3.3 Set Schedule

Please set the schedule for the linked and temporary vehicles. If the vehicle of the vehicle group wants to enter the parking lot in its non-scheduled period, it will be not allowed to enter. But vehicles can leave the parking lot anytime.

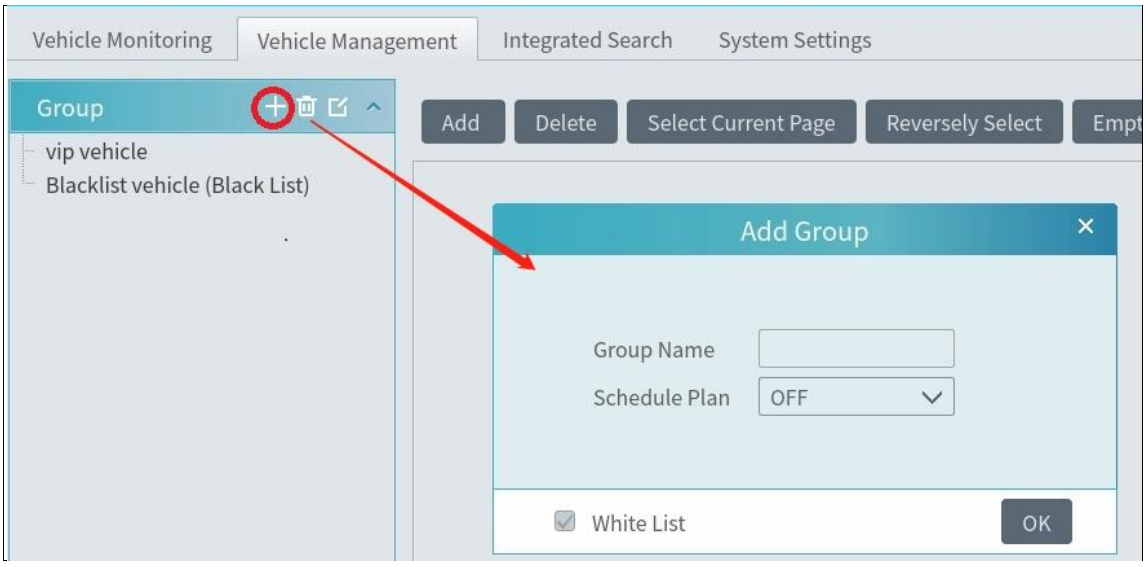
If you don't want to use the default schedule, you can click the [Add] button to set other schedules as needed.

14.4 Vehicle Management

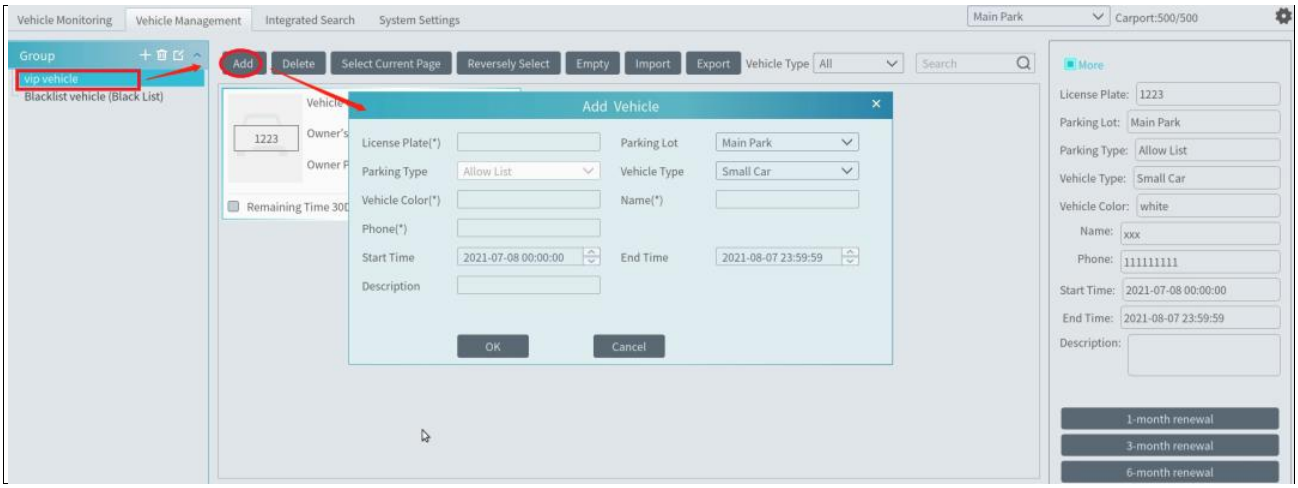
In the vehicle management interface, you can add or delete the vehicle group and add vehicles to the vehicle group. There are two vehicle groups by default-allow list group and block list group. These two default groups cannot be deleted. You can add other allow list groups as needed.

14.4.1 Link Vehicles to the Parking Lot

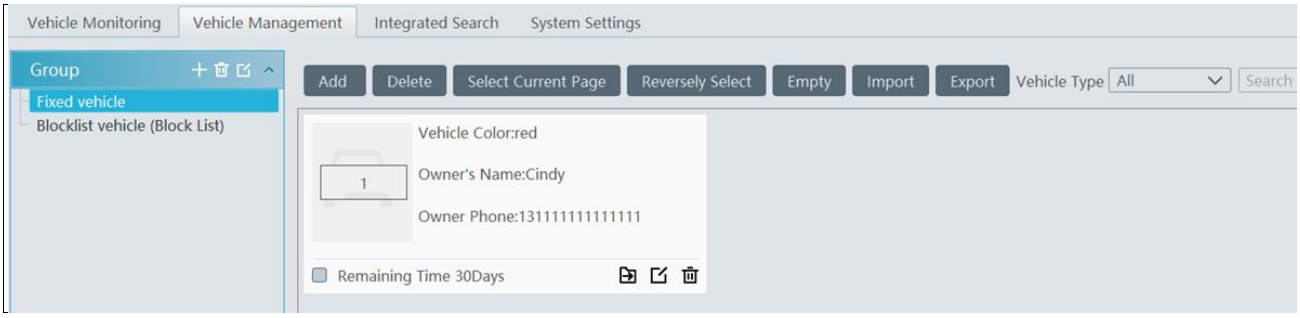
- **Add a new vehicle group:**



- **Add vehicles to the vehicle group**



After the vehicle information is added, click this vehicle and then its detailed information will be shown on the right. In this interface, you can renew your vehicle, including 1-month renewal, 3-month renewal, 6-month renewal and 12-month renewal.

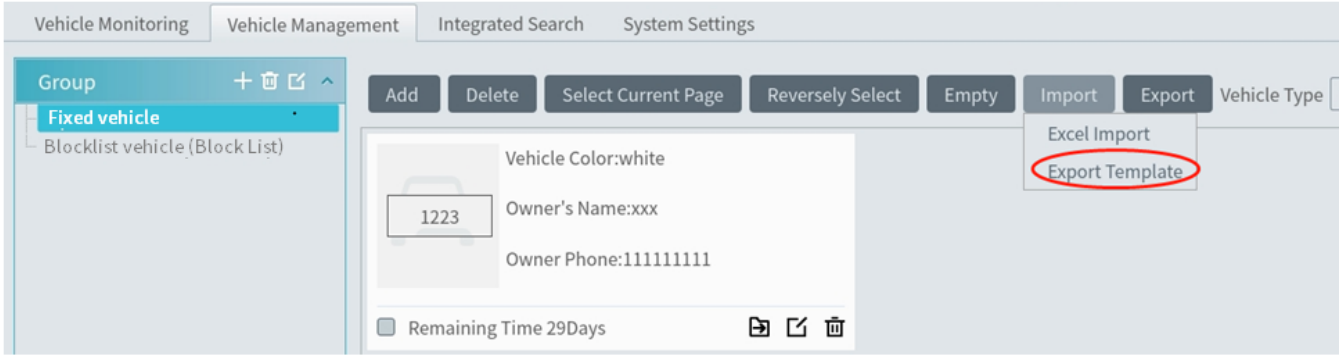


Click to move the vehicle to another group.

If there are so many vehicles added in the current parking lot, you can view the desired vehicle information by filtering license plate number, vehicle color and so on.

➢ **Import/Export Vehicles**

You can add multiple vehicles in a batch. Click [Import] and then select “Export template” to export a template (Excel).



	A	B	C	D	E	F	G	H	I
1	Number plate	Parking lot	'ehicle Typ	Vehicle color	Owner's name	Owner's phone	Starting time	End Time	Description
2	A12345	Main parking lot	Small car	Color	Simon	1379820xxxx	2020-09-23 00:00:00	2021-09-23 23:59:59	Discription
3									
4									
5									

Fill out the vehicle information according to the template and then save it. Then go to the vehicle management interface, click “Excel import” to import the vehicle information file.

Check the vehicle you want to export and then click [Export] to export the vehicle information into the designated path.

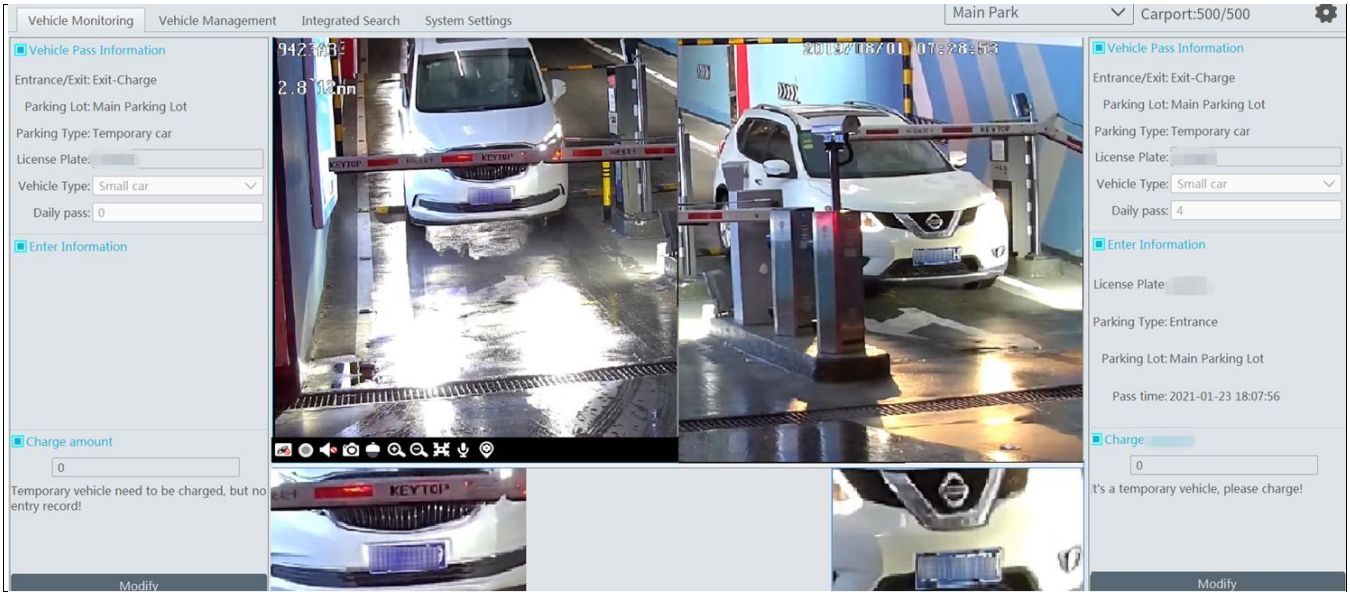
14.4.2 Block List

There is only one blocklist and it is the default blocklist. The default blocklist cannot be deleted. You can add vehicles to the blocklist. The setting steps are the same as adding vehicles to the allow list.

14.5 Vehicle Monitoring

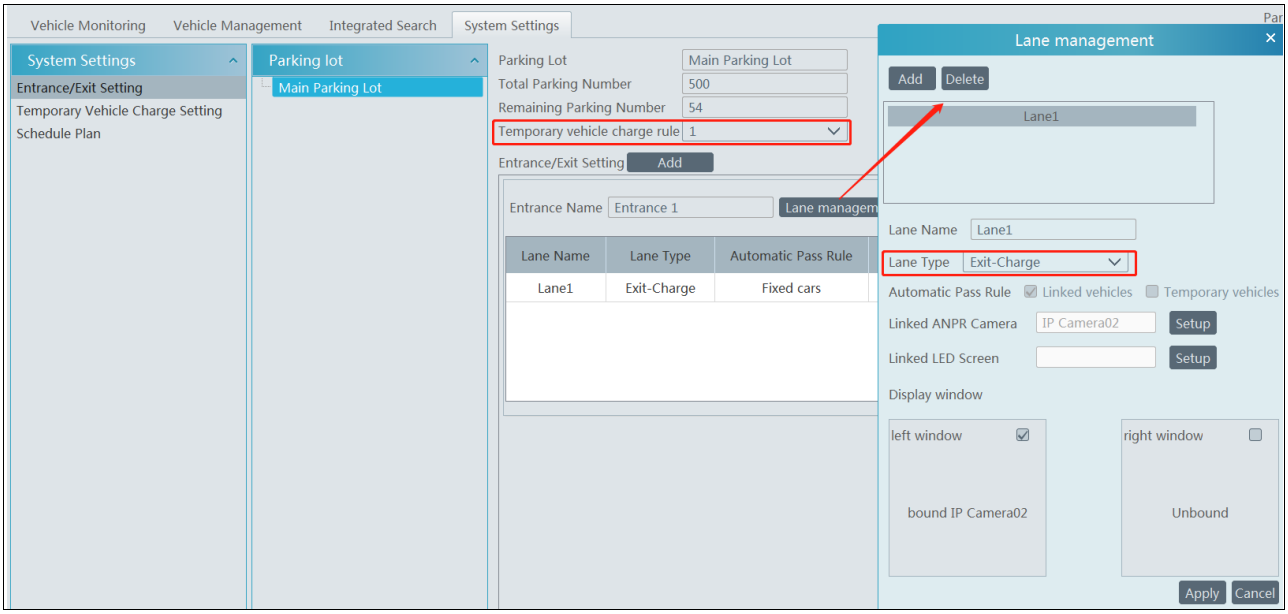
14.5.1 Temporary Vehicles

After configuring the ANPR camera binding, allocating the corresponding lanes of vehicle monitoring and adding vehicles to vehicle list, the captured vehicle picture and its detailed information will display on the following interface when the vehicle passes the ANPR camera beside the lane and its license plate number is captured and recoginzed accurately by ANPR cameras.



If the vehicle passing the lane is neither added to the linked vehicle list nor added to the block list and “Temporary Vehicle” in the automatic pass rule is not selected, this vehicle will not be allowed to pass automatically.

If the lane type is set as “Exit-Free”, the temporary vehicle will be allowed to pass automatically; if the lane type is set as “Exit-Charge”, the temporary vehicle will be allowed to pass after the owner pay the parking fee according to the set temporary vehicle charge rule.



If the temporary vehicle charge rule is set as “None”, the operator shall enter the amount of the parking fee and then open the barrier manually to let it go.

14.5.2 Linked Vehicles

When the vehicle added to allow list vehicle group enters or exits the parking lot, it will be considered as the vehicle whose parking fee has paid by month. For example, if the owner of the linked vehicle has paid 1month’s parking fee, then the vehicle can enter/exit the parking lot automatically for one month.

At entrance, the parking time of the linked vehicle is within the period of validity and the linked vehicle enters in the effective schedule, it can be allowed to enter automatically. If the parking time of the linked vehicle is expired, it will be treated as a temporary vehicle.

At exit, no matter whether to charge or not, the linked vehicle can pass through automatically.

14.5.3 Vehicles in the Blocklist

The vehicles added to balcklist are not allowed to pass, even if the license plate number is captured by the ANPR camera.

Note: The vehicles have been linked to a parking lot can not be added to blocklist, and vice versa.

14.6 Search

14.6.1 Search Pass Information

In this interface, the information of the vehicles entering and exiting the parking lot can be searched.

Set the filtering condition, such as the start and end time, license plate, vehicle type and lane.

Pass record: including vehicle information, entering/exiting time, parking lot, lane, pass type, etc. The pass record also can be modified as

needed. Choose the pass record and click [Modify] to modify it.

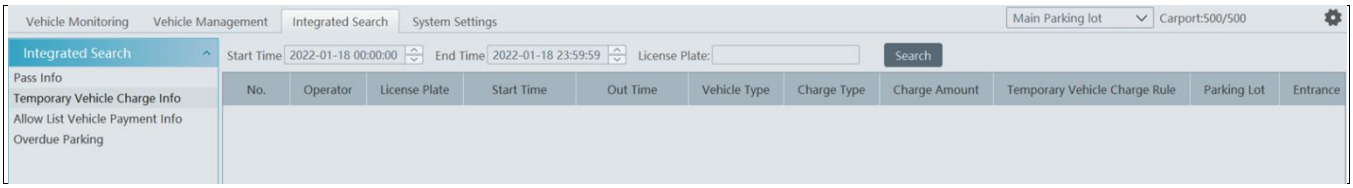
Additionally, the captured vehicle picture can be viewed on the right by clicking this record inforamtion. Click [Zoom in] to zoom in the picture; click [Download] to download the picture. At the same time, you can also play the record by clicking .

For the exit record, you can see the stay time.

You can also export all searched pass record by clicking [Export].

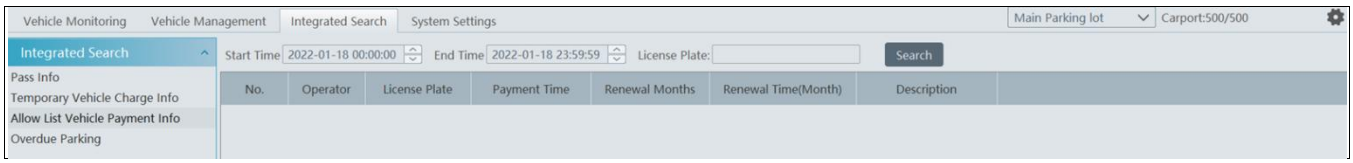
14.6.2 Search Temporary Vehicle Charge Inforamtion

Go to Home→Parking Lot Mangement →Integrated Search→Temporary Vehicle Charge Info interface. The charge information of the temporary vehicles can be searched here as shown below.



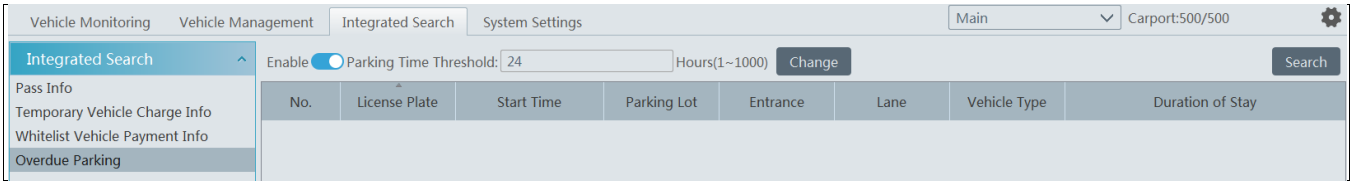
14.6.3 Search Vehicle Payment Information

Go to Home→Parking Lot Mangement →Integrated Search→Allow List Vehicle Payment Info interface. The charge information of the allowlist vehicle can be viewed as shown below.



14.6.4 Search Overdue Parking

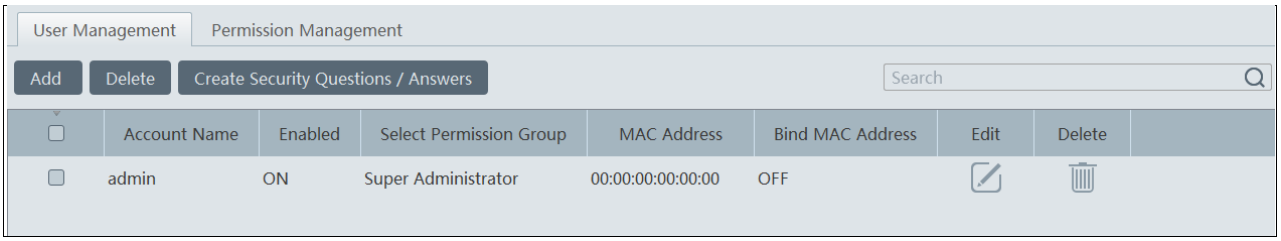
In this interface, you can check the information of the vehicles which stay in the parking lot longer than the predefined parking duration. Enable this function and then enter the parking duration and then click [Search] to display the detail information of overstaying vehicles, such as license plate number, entering time and duration.



15 Account and Permission

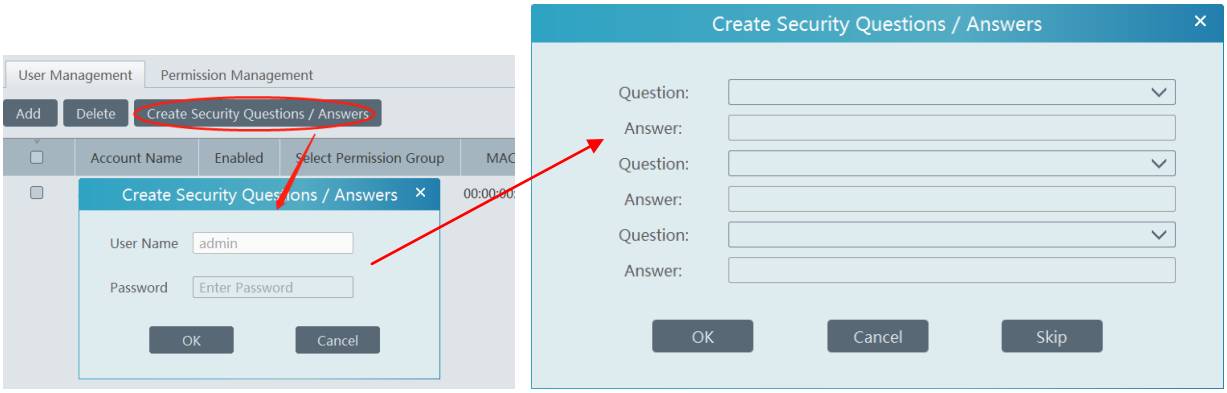
15.1 Create Account

Go to Home→Account and Permission.



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

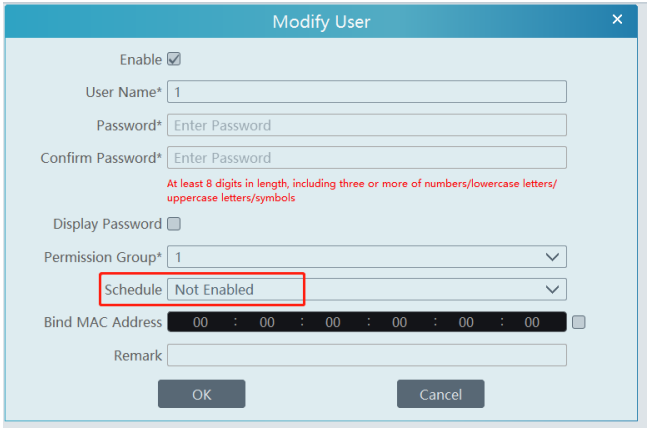
If it is the first time for you to log in, please select the super admin user and then click "Create Security Questions/Answers" to set the questions and answers. It is very important to reset the password if you forget your password.



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

Binding MAC address or remark can be filled in as needed. After that, click [OK] to save. Click to modify common user's information.

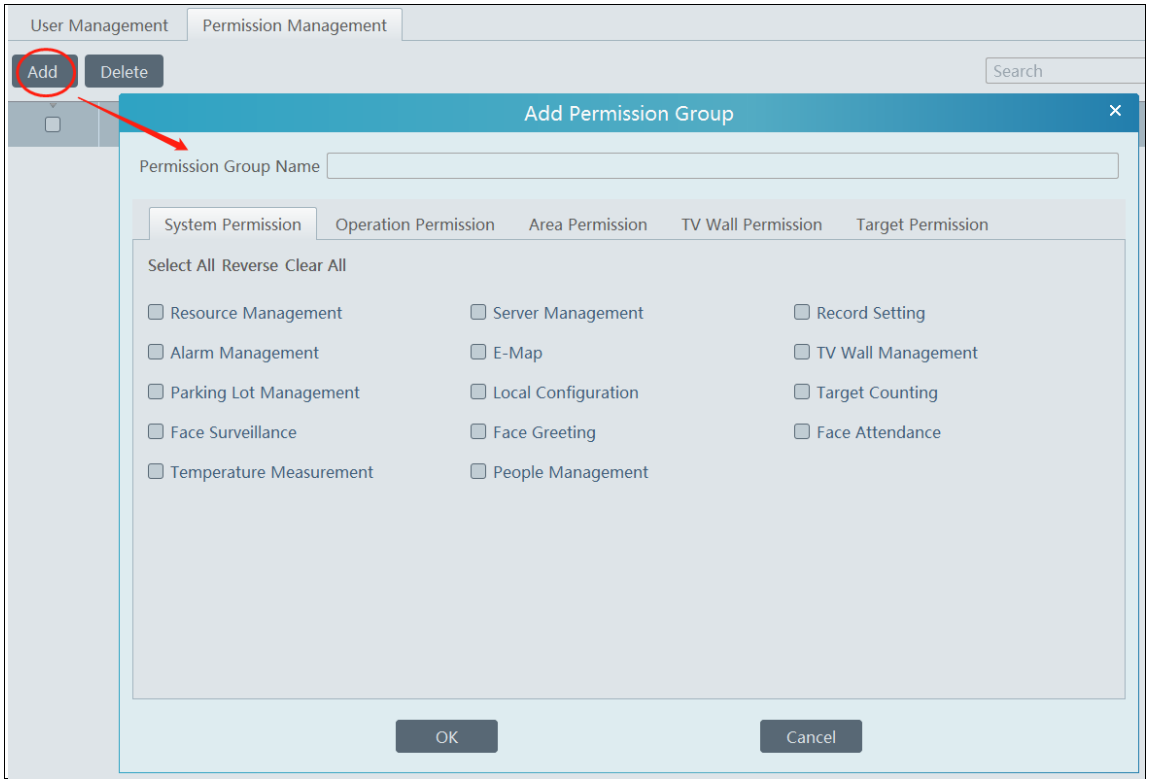
For common users, the administer can set the schedule for them, so that they can only log in within the specified time.



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.

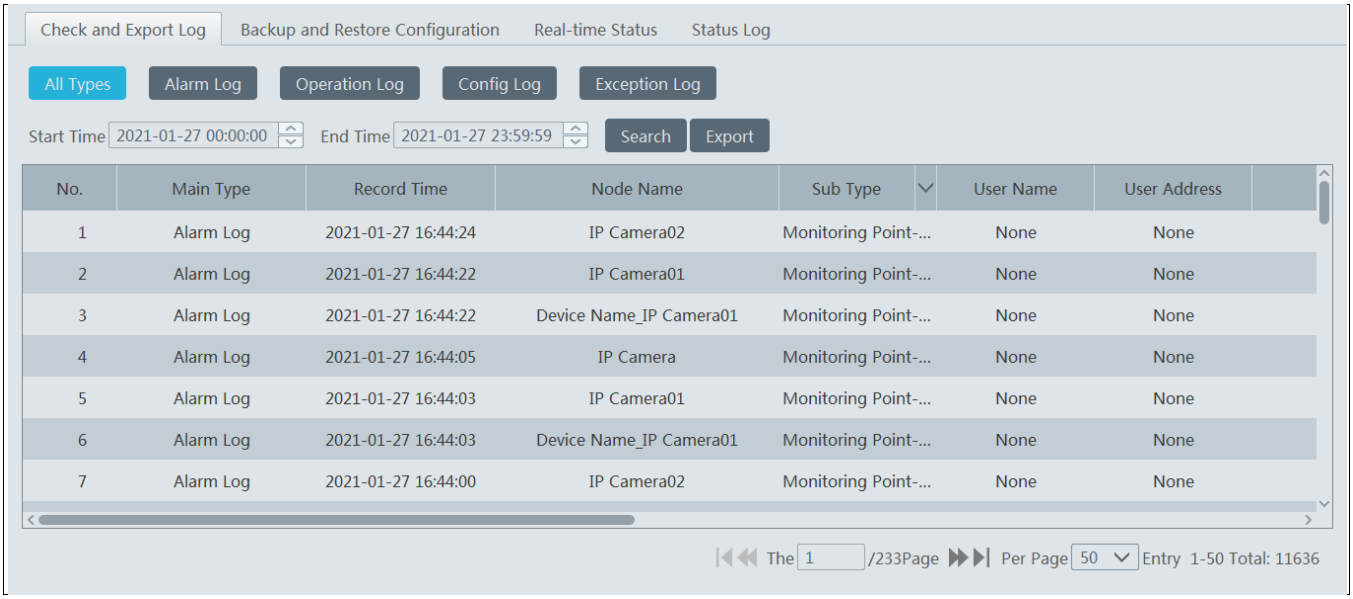
③ Select system permission, operation permission, area permission and TV wall permission as needed.

16 Operation and Maintenance Management

16.1 Check and Export Log

Go to Home→Operation and Maintenance Management.

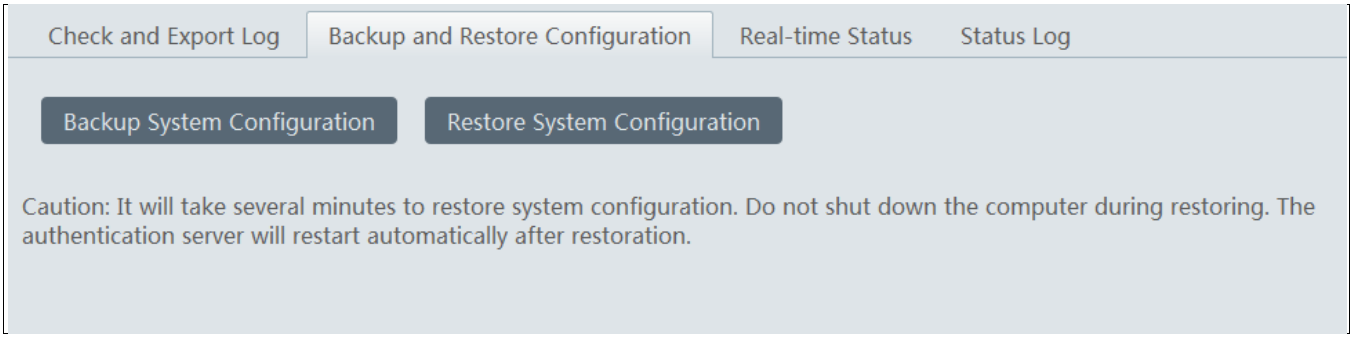
Click the “Check and Export Log” tab as shown below. All types of logs can be searched and exported here.



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.

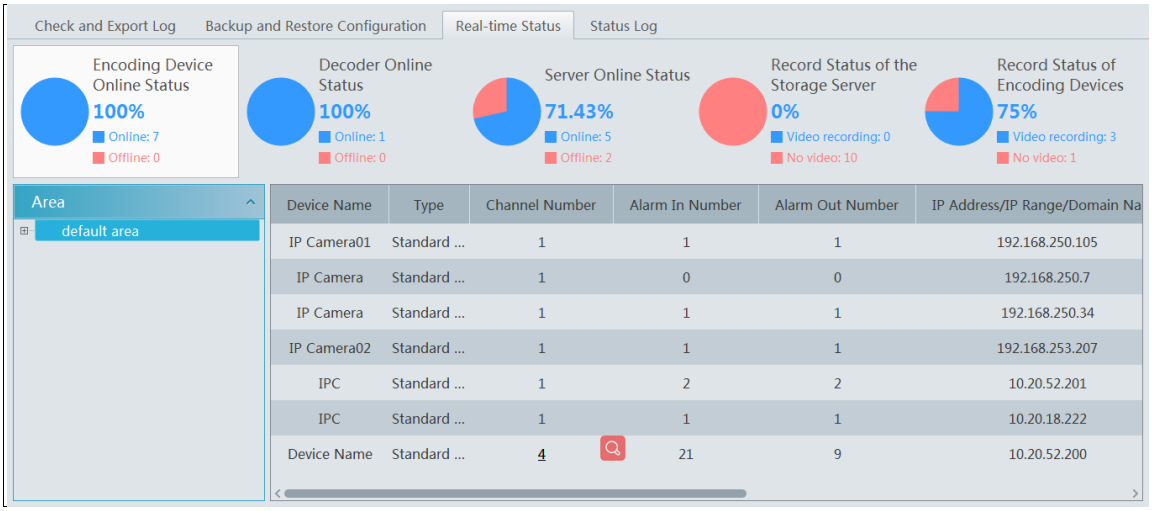


You can import the former system configuration files to the new version. Click [Backup System Configuration] in the last version to backup the system configuration files. Then click [Restore System Configuration] in the new version to restore the system configuration.

16.3 Viewing Online Status

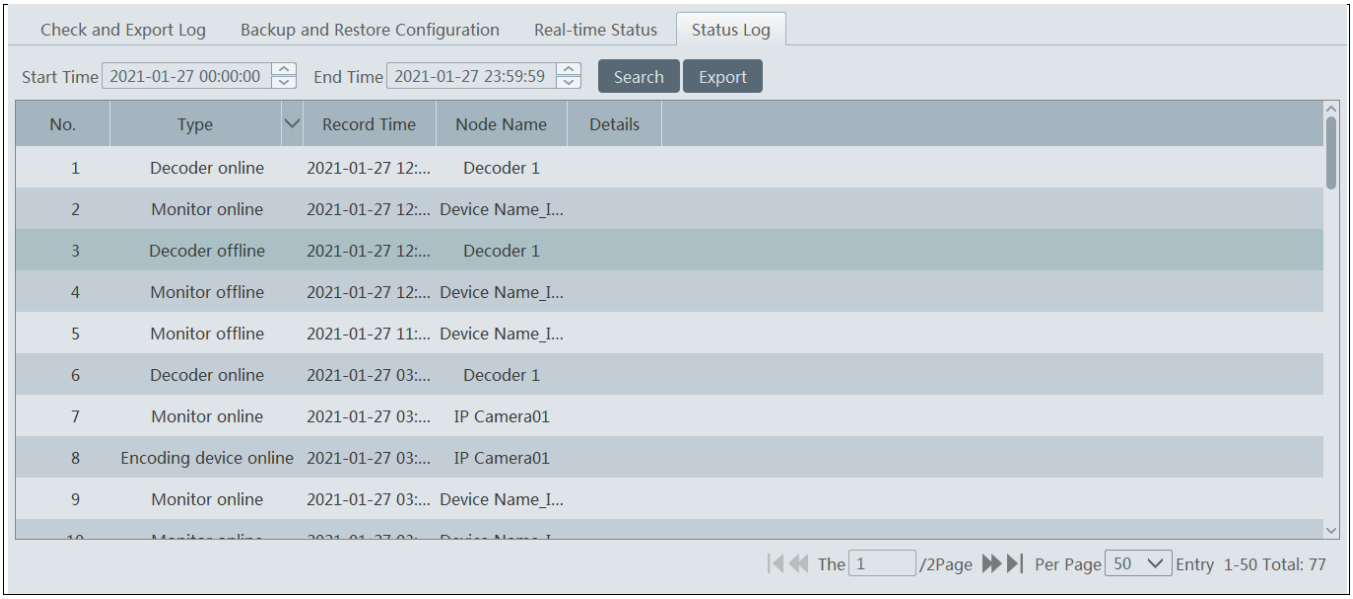
Go to Home→Operation and Maintenance Management→Online Status interface.

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.



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 Configuration

17.1 Local Settings

Go to Home→ Configuration→Local Setting.

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.

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 HDMI screen resolution and keyboard layout.

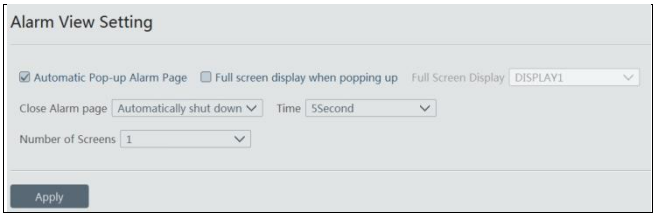
Check "Alarm Sound Loop" and then click "Apply". Go to Alarm Center→Alarm Linkage Settings. Select the device and alarm type and enable Audio and set the schedule. The alarm audio will be triggered upon detecting an alarm event and audio alarm icon will display on the lower right. Click this icon to turn off the audio.

17.2 Overload Settings

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

17.3 Alarm View Settings

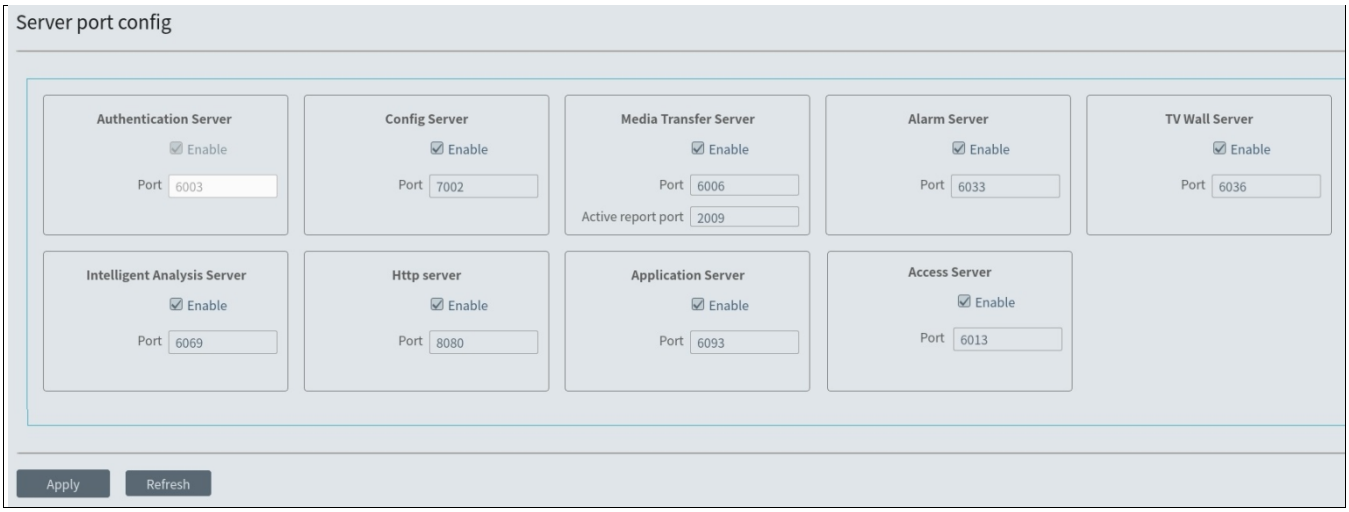
Go to Home→Configuration→Alarm View Setting.



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

17.4 Server Port Configuration

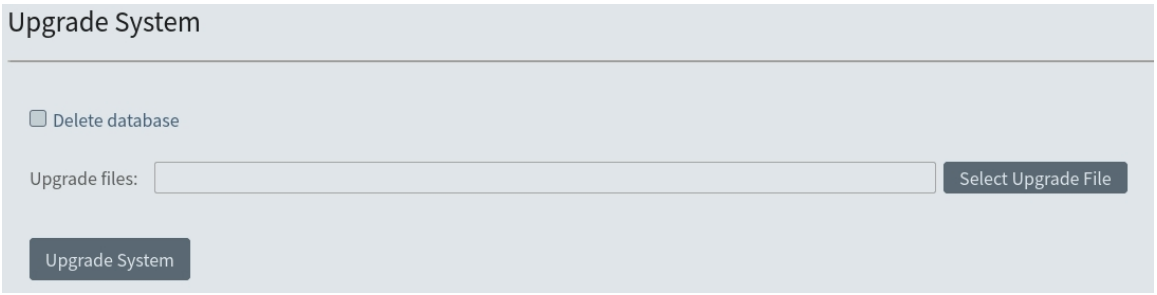
Click Home→Configuration→Server Port Config to go to the following interface.



In this interface, you can set the ports of authentication server, config server, media transfer server, alarm server, TV wall server, intelligent analysis server and so on. The service of all servers is enabled by default. Please set these ports as needed.

17.5 Upgrade System

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



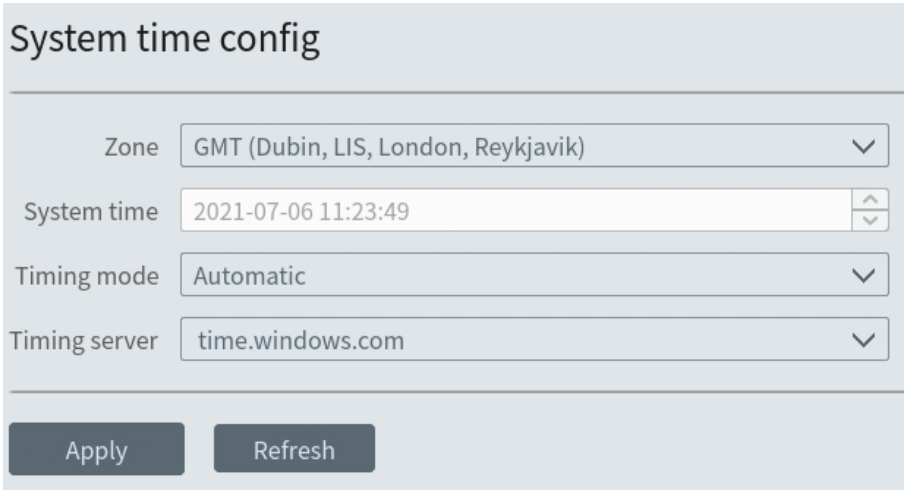
Please check “Delete database” as needed.

Insert the USB storage device into the device and then click [Select Upgrade File] to find the upgrade file. Then click [Upgrade System].

During the process of upgrading, please do not power off your device. After the upgrade is finished, the system will automatically reboot.

17.6 System Time Configuration

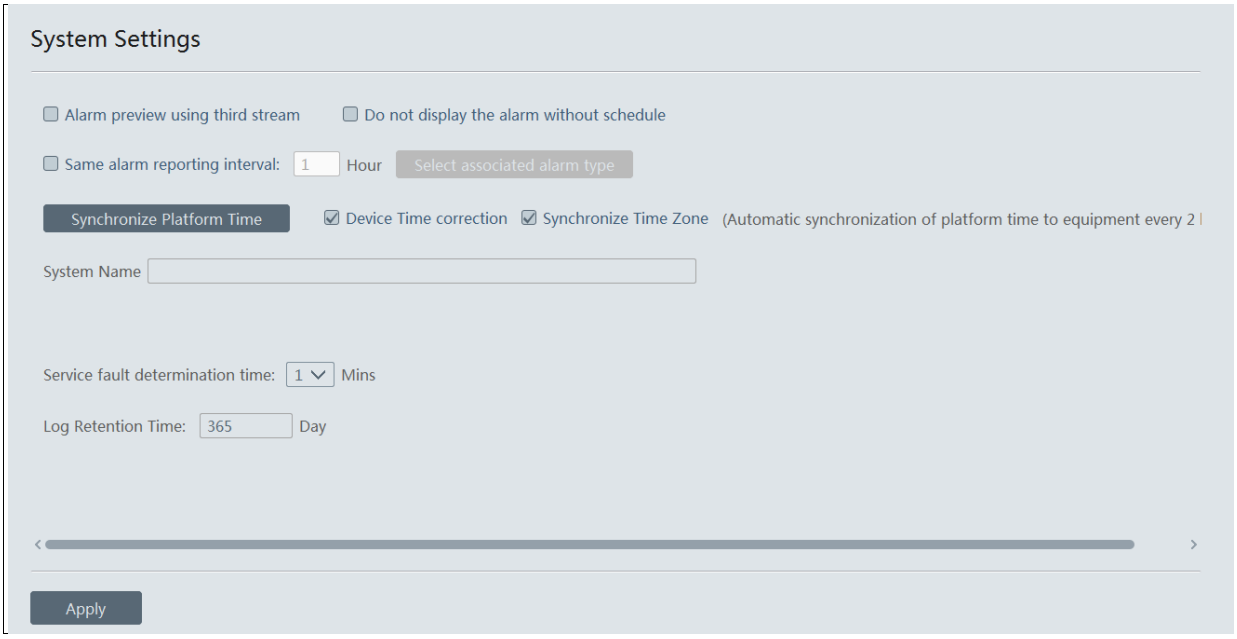
Click Home→Configuration→System Time Config to go to the following interface.



Please select the time zone as needed.
You can set the time manually or automatically as needed.

17.7 System Configuration

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

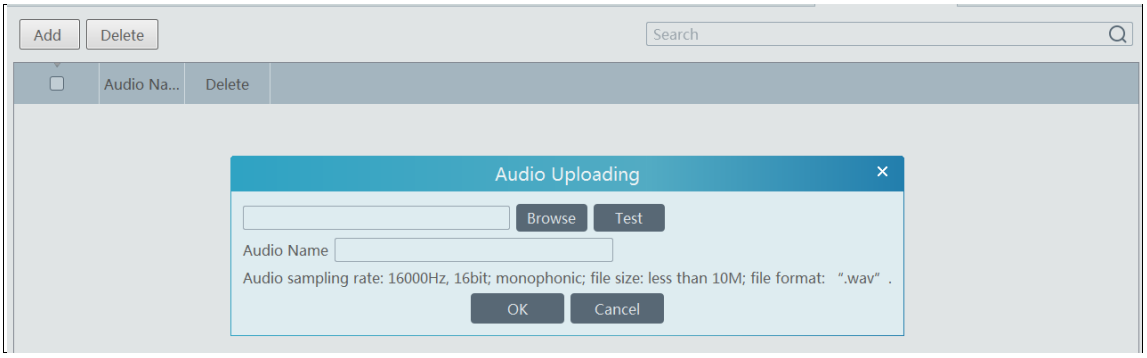


In this interface, you can enable “Alarm preview using third stream” or “Do not display the alarm without schedule”.
Enable and set the same alarm reporting interval and its linked alarm type.
Choose “Synchronize devices” and “Synchronize Time Zone” and then click [Synchronize Platform Time] to synchronize 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.

17.8 Audio Uploading

Go to Home→Configuration→Audio Uploading.

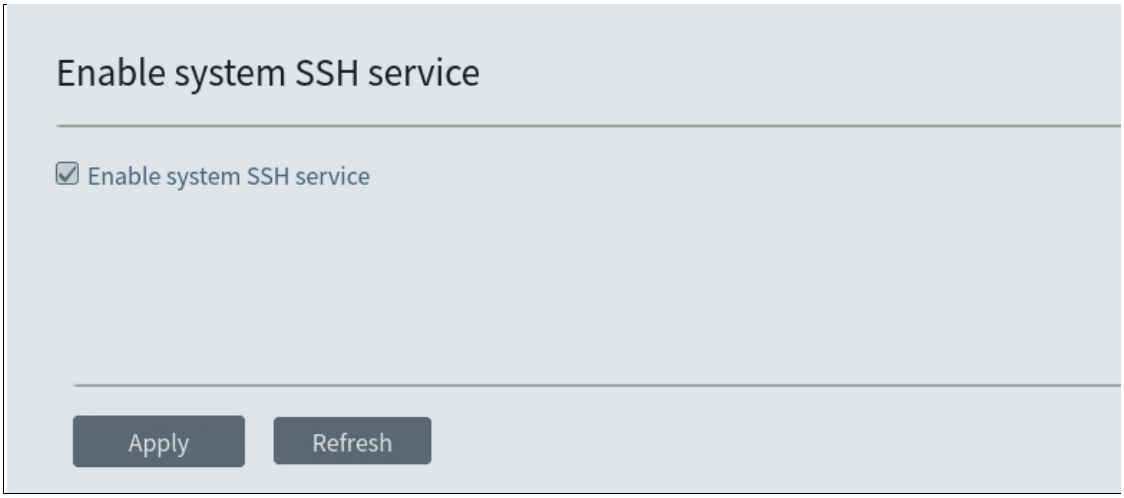
Click [Add] to bring the following box.



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

17.9 Other Configuration

Go to Home→ Configuration→Other Config.



In this interface, you can enable system SSH service. This service is for test.

18 Web Client

18.1 Operating Environment of Web Client

The web client supports IE9/IE10/IE11, Firefox or Google browser. Please make sure that your browser supports the downloading and use of the Web Client. Here we take IE Client for example.

- Check whether the IE browser prohibits Active X control from downloading:

Open IE browser, click → Internet Options → Security → Custom level…to pop up a security settings window.Then enable all sub options under "Active X controls and plug-ins".

- Check whether there are other components or antivirus to stop downloading Active X control. Please close other components and configure antivirus and firewall to allow the installation of the plugin files.

18.2 Start IE Client

Before starting IE client, make sure all servers must be started first.

❖ **Login**

Input the IP address or domain name of Authentication Server and the web server port, for example: http://192.168.50.3:8088 (In this example, IP address is 192.168.50.3. The default web server port is 8088) to go to IE Client. Then input the user name and password you created in Account and Permission interface, select the language and platform and then click "Login" to login to the IE client.

Please download the relavant Active X controls according to the tips if you login to the IE client for the first time.

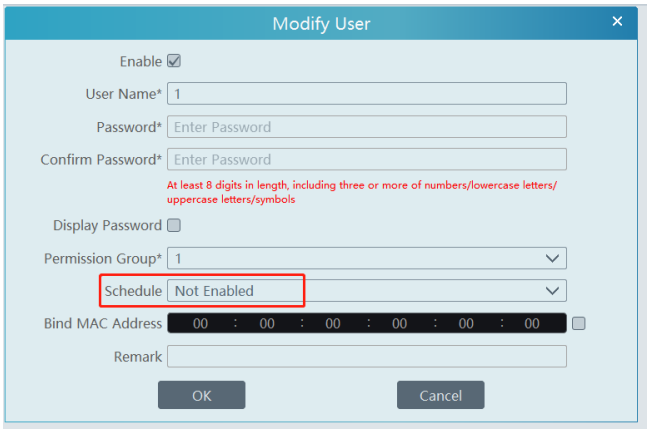
In the platform interface, users can modify the login password and remotely set the monitor client and configuration client. In the web monitor client, click "Return to Configuration" to go to the web configuration client. In the web configuration client, click "Return to Monitor" to go to the web monitor client. In the web monitor client or configuration client, click the platform logo to return to the platform interface.

The operation steps of this web client interface are similar as the monitor client. Please refer to relevant chapter for details.

19 Troubleshooting

1. How to modify the password by yourself?

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



2. Unable to login IE client.

1) Please check whether the Active X control is forbidden to download and refer to the operating environment in Operating Environment of Web Client.

2) Please check whether the IP address input in the browser address bar is right.

Suppose the LAN IP address of the authentication server is 192.168.50.3, WAN IP address is 58.251.86.194, domain name is authentication.meibu.com and Web port is 8080. If logging in to the IE client in LAN, please input http://192.168.50.3:8080, or http://58.251.86.194:8080, or http:// authentication.meibu.com:8080；If logging in to the IE client in WAN，please enter http:// authentication.meibu.com:8080, or http://58.251.86.194:8080 (only when the WAN IP is a fixed IP, will it take effect).

3. Some service works abnormally after all servers start.

1) Please check whether the IP address and port of each service is right.

2) If no HDD is installed, the storage server will not be online.

4. The device information cannot be seen or the device is offline after the user logins to the monitor client.

1) Please check whether this user account is anadministrator account. If this account is an operator account, please checkup whether it has the authority to view the device information.

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

5. The alarm information cannot be received after the user logins to the server.

1) Please check whether the schedule of sensor alarm, motion detection alarm and so on are set in the system.

2) Check whether the alarm server is online.

6. The record cannot playback after the user logins to the server.

1) Please check whether the storage server is online. If it is online, please checkup 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 checkup 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 playaback is set up correctly.

4) Please check the record schedules of the storage server are set correctly.

7. The configuration of devices cannot be modified remotely after the user logins to the server.

1) When the device configuration is required by the server 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.

8. The preview image on the server cannot display fluently.

1) Please check whether the CPU occupancy rate of the server 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.

9. 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.

Note:

1. For face recognition function, you shall add the face recognition devices.

2. It is recommended that the face recognition device only connects one intelligent analysis server.

3. It is recommended to use HDMI output.

Firewall Requirement

In order to ensure the network security, it is necessary for the system to set up firewall. All monitor ports shall be opened. Refer to server port configuration chapter for these open ports. If all these ports are modified, these open ports shall be modified accordingly in the firewall configuration.