SunView User Manual

Issue: 1.7

Date: 2021-09-16

Introduction

Overview

This document describes in detail the configuration and use of the video management of SunView.

Reader

This document is intended for:

- Technical Support Engineer
- System Manager
- System Operator

Symbol Convention

The following symbols may appear in this document, and their meanings are as follows:

Symbol	Description
DANGER	Alert you to a high risk hazard that could be, if not avoided，result in death or serious injury.
WARNING	Alert you to a medium or low risk hazard that could be, if not avoided, result in moderate or minor injury.
CAUTION	Alert you to a potentially hazardous situation which, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
TIP	Provide a tip that may help in solving a problem or saving time.
NOTE	Provide additional information to emphasize or supplement important points in the main text.

Server Name

Acronym	Full Name	Note
CMU	Central Manager Unit	Central Manager Server
MDU	Media Distribution Unit	Media Distribution Server
IAU	Intelligent Analysis Unit	Intelligent Analysis Server

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1 Platform Description

The platform can be used for video management of different monitoring scales. It supports centralized management, distributed deployment, multi-user remote access. With user management, device management, server management, alarm management, map management, device configuration, real-time video, video playback, personnel archive management, data statistics, face recognition and other functions. Meets a variety of video surveillance solutions.

1.1 System Function

- Multiple front-end devices can be connected. Support IPC, NVR, face capture camera, panda camera.
- Centralized management and distributed deployment. Unified management of resources such as users and devices, and distributed deployment of servers.
- Authority management. Different users can be assigned different functional rights.
- Device management. Support automatic search, manual addition, batch import of devices.
- User rating management. Support the combination of administrative organization structure to achieve user hierarchical management. The superior can manage the subordinates.
- Organizational management. Users of a specific organization can be restricted to only view the content of their organization's camera.
- Real-time monitoring. Support multi-screen layout preview, round tour preview.
- Video playback. Support multi-picture video synchronous playback.
- Video download. Support downloading NVR and DVR recordings to local clients.
- Map management. Support for electronic map-based video preview.
- Real-time alarm. Support alarm display of front-end devices.
- Data statistics. It can count the alarm data of the platform equipment and online rate of the equipment.
- Personnel information management. The fundamental library for face recognition supports multi-level management and batch import.
- Face recognition comparison. The face of the face capture machine is displayed in real-time and determined by comparing with the fundamental library.
- Search by image. Support fuzzy search for faces and support for finding similar faces through faces of library.
- Attendance management. Support face library for attendance.
- AI recognition. Statistics of vehicle, human, etc.
- Health archives. Manage the health information of personnel, and show the chosen person’s temperature.
- Vehicle identify. Real-time view of the vehicle license plate snapshot pictures, relevant warehousing information.
- Attendance management. The face detection cameras can be used to manage employee attendance and face recognition punching.
- Temperature monitor. Support human body thermometer to monitor body temperature in the face database to form a health archive.
- Thermal imaging management. Support for thermal imaging preview, thermal imaging config, thermal imaging search, historical retrieval and thermal imaging inspection.
- Monitoring center. Comprehensive monitoring center, visual comprehensive management interface, which mainly displays the current main data of the platform, conventional monitoring, AI intelligence, etc.
- Temperature monitor. Support preview real-time temperature measurement video, view temperature measurement personnel information, summary statistics of the number of temperature measurement on the day.
- Classification query. Support retrieval of picture data of strangers, registered personnel, and filtered personnel, and view detailed information of captured pictures.
- Personnel track: Support to view the action tracking of the captured person in the Gis map.
- Target on-screen person. Support to view the associated faces in the target on-screen person, export and add to face library.

- Event Linkage：Set the action of linkage, it will send the alarm if the condition is meeting of setting. Control the external alarm system, or set E-mail to inform the users.
- TV wall: Set TV wall layout, bind the channels to TV wall, push the stream of channels through decoder. The live video will show on TV wall immediately.
- Access control: Set the real time access, control the system of access control.

1.2 System Components

1.2.1 Central Management Server

The central management server centralizes user management, authority management, device management, server management, alarm management, electronic map management, face database management, etc.; Running as a server, can be installed on a separate physical server or installed with other components. Users must first connect to the central management server for permission authentication, and then connect to the media distribution server, intelligent analytics server to use the relevant features.

1.2.2 Database Server

The central management server and intelligent analysis server use the MySQL database storage system configuration; and run as a server, and are installed with the central management server.

1.2.3 Media Distribution Server

The media distribution server forwards the audio and video streams of the device to the requesting user, ensuring high performance with end-to-end low latency; support running as a service, can be installed on a separate physical server or installed with other components.
When the media distribution server is installed separately on a server, the IP address of its central management server must be configured so that it can be managed by the central management server.
The performance indicators of the media distribution server are as follows:
NIC is Gigabit

Table 1-2 NIC parameters

Channel	Camera Bitrate	Input Bitrate	Output Bitrate
200	4 Mbps	800 Mbps	800 Mbps
400	2 Mbps	800 Mbps	800 Mbps
500	1.5 Mbps	800 Mbps	800 Mbps

1.2.4 Intelligent Analysis Server

The intelligent analysis server is used for face recognition applications; it only supports cameras with face detection; it runs as a service and can be installed on a separate physical server or installed with other components. For high performance requirements, it is recommended that the intelligent analysis server be installed separately on a physical server.

The V1.6 version of the intelligent analysis server's face recognition algorithm mode supports CPU or face box devices.

Reference:

Type	Model	ROM	Channel of face detection

CPU	Intel(R) Core i5-7500	8 G	1-3
CPU	Intel(R) Core i7-8700	8 G	2-8
CPU	Intel(R) Xeon(R) cpu E5-2630 v4	16 G	4-10
Face-box	Intel(R) Core i5-8500 Face-box *4	8G	6-12

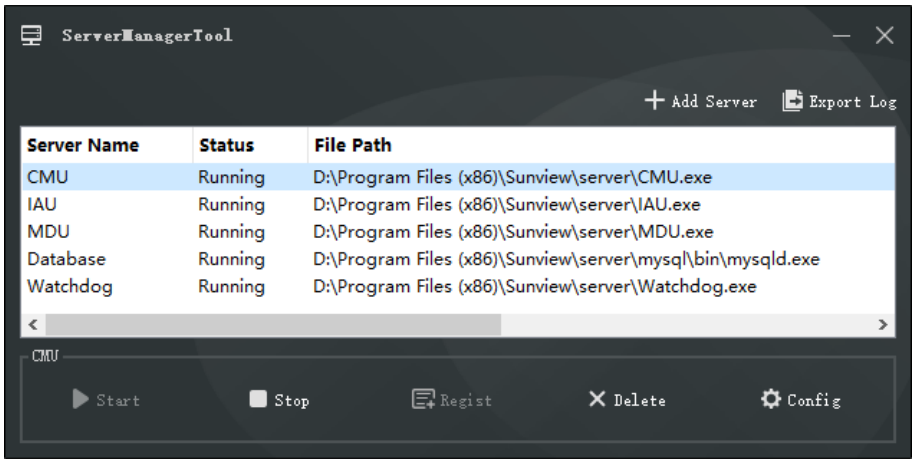
NOTE

In the same configuration, the fewer the access cameras, the higher quality of real-time video, the denser the flow of people (human faces), the worse quality of real-time video, and can be adjusted according to actual needs. This is only a reference, please refer to actual configuration.

1.2.4.1 Server Management Tool

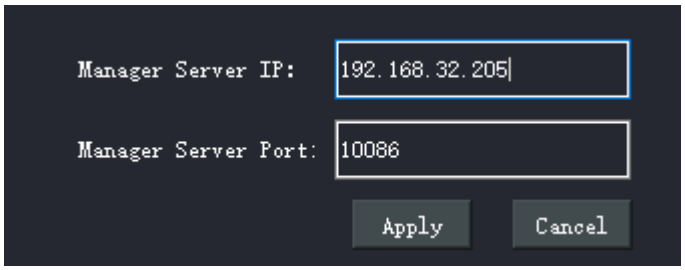
The server management tool is used to manage the platform server components, which exclude the client; displaying the running status of the component, it can also control the startup, stop, and delete the component; you can manually add the service. If the service component does not start normally, it will flash a reminder in the system tray to find the problem in time. The tool will launch as soon as the installation is successful. As shown in figure 1-1.

Figure 1-1 Server Management UI



Configuration: configure the servers(IAU and MDU) are associated with the corresponding the CMU server.

Export log: export the logs of servers to local folder.

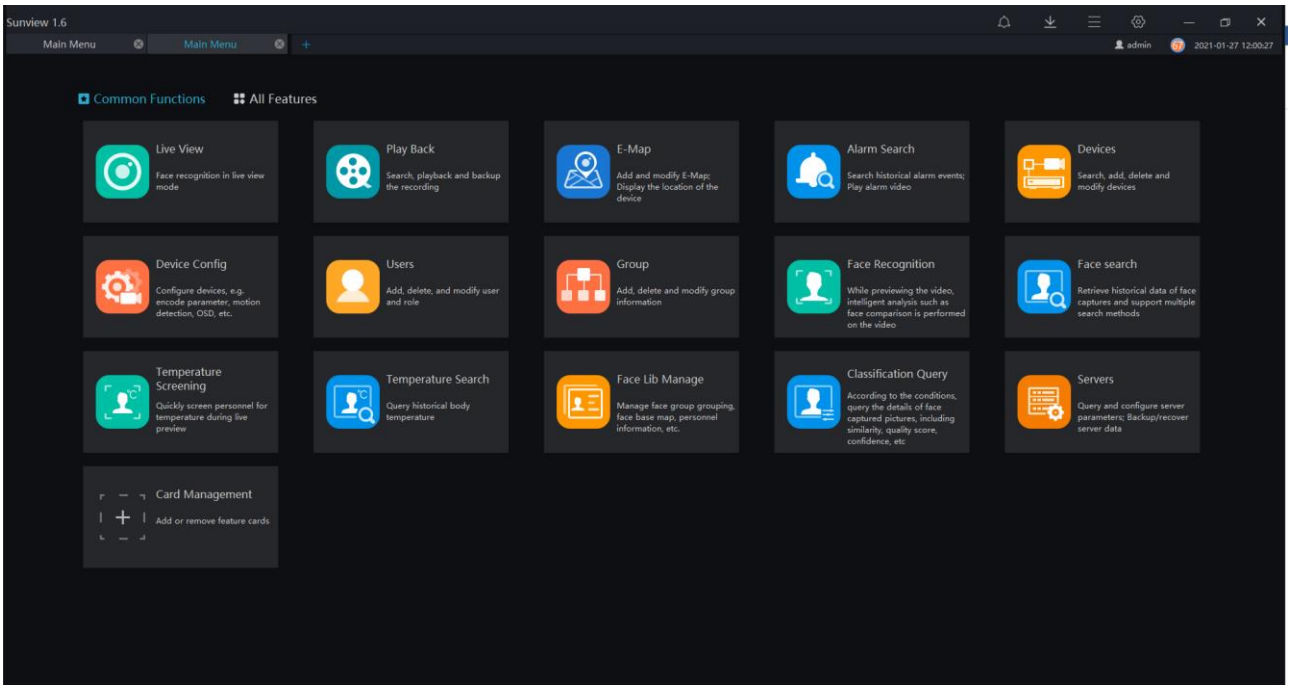


1.2.5 Client

1.2.5.1 About PC Client

Currently, the client only supports Windows system. It is a kind of software specially designed for video management. Users can remotely access real-time video and video recordings, and manage users, devices, servers, alarms, etc. and meanwhile control devices. The client integrates common users and administrator users to facilitate unified management of resources. The interface is as follows:

Figure 1-2 Client interface

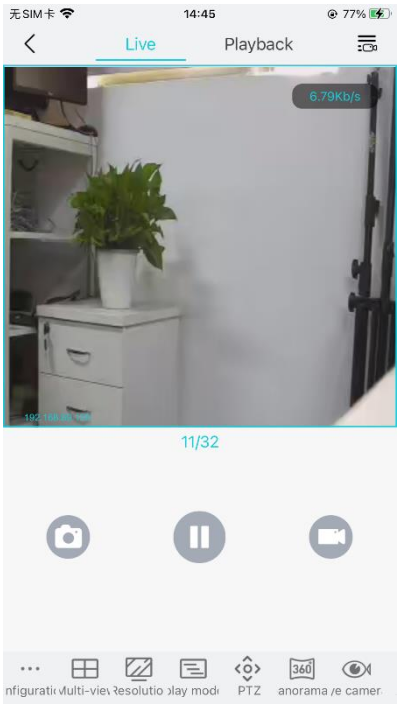


NOTE

After the client login, check the client server and versions. If they do not match, a note will show "Client and server versions do not match." This situation is generally caused by the client and server not being installed synchronously. It is recommended to use it after updating and synchronization to avoid it.

1.2.5.2 About Mobile Client

The Mobile client provides users with wireless-based video surveillance, which allows users to remotely access real-time video and video recorders, receive device alarms and control devices. The interface is as follows



1.3 System Requirement

CAUTION

OS Not support Microsoft Windows 32 bit anymore.

Name	PC Client	Central Management Server	Media Distribution Server	Intelligent Analysis Server (CPU environment)	Intelligent Analysis Server (GPU environment)
CPU	Intel® Core™ i5-7500 or better	Intel® Core i5-7500 or better	Intel® Core™ i5-7500 or better	Intel® Core™ i7 or better	Intel® Core™ i7 or better
RAM	8 GB or more	8GB or more	8 GB or more	8 GB or more	8 GB or more
Network Card	Gigabit/s				
HDD	50 GB or Above	50 GB or Above	50 GB or Above	50 GB or Above	50 GB or Above

OS	Microsoft® Windows® 7 Pro (64 bit) Microsoft® Windows® 10 Pro (64 bit) Microsoft® Windows® 10 Enterprise (64 bit) Microsoft® Windows® Server 2012 Microsoft® Windows® Server 2016				
Software	DirectX 11 or above	——	——	——	——
Display Resolution	1600×960 and above, default 1920x1080	——	——	——	——
Video Card	——	——	——	——	——
GPU	——	——	——	——	NVIDIA GTX 1050 or better

1.4 Deployment Planning

CAUTION

This content is suitable for administrators to understand the platform before installing, you can choose the appropriate deployment according to different plans.

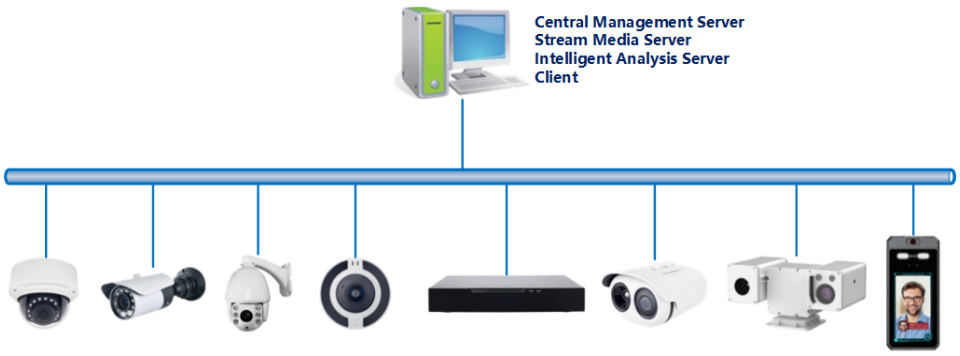
The platform has good scalability and can support three deployment methods.

- Mini type: All components of the platform are installed on the same machine.
- Middle type: The platform client and server are installed on different machines.
- Large: All components of the platform are installed on different machines.

1.4.1 Mini Method (Standalone Deployment)

All components of the platform, including server components and client components, are deployed on the same physical machine for easy deployment of small-scale monitoring applications.

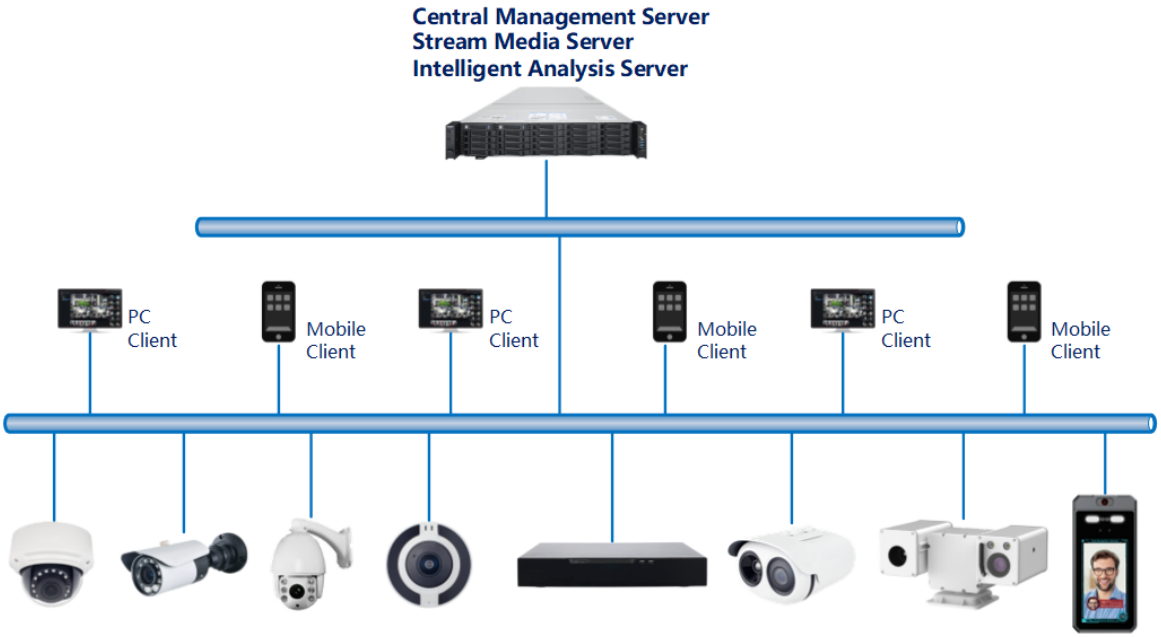
Figure 1-3 Mini method



1.4.2 Middle Method (Distributed Deployment)

You can install all the server components on one physical machine and the client installs multiple machines.

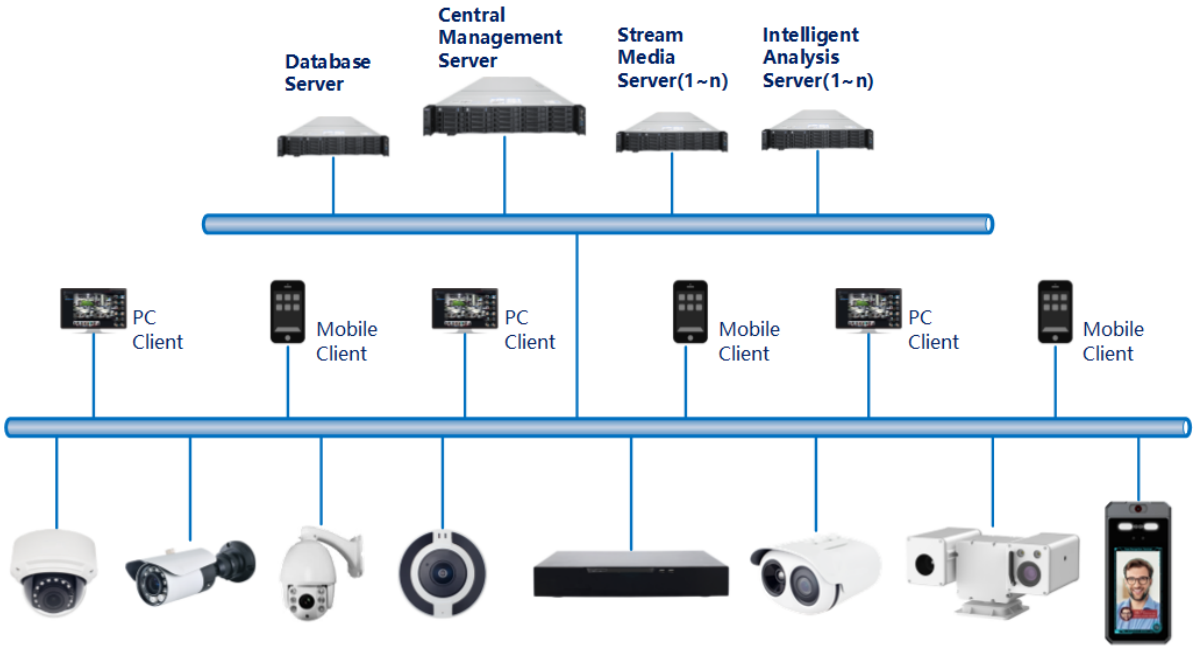
Figure 1-4 Middle method



1.4.3 Large Method (Distributed Deployment)

If the system is large or you can install each server component on a different machine and the client installs multiple machines. One or more MDU and IAU can be deployed according to actual needs.

Figure 1-5 Large method



2 Installation

2.1 Setup

Setup is a simplified installation of the Mini type, and the installation process does not require any configuration. The platform is quickly installed on a single machine and is installed by default in the system disk C:\Program Files (x86)\Sunview directory. After installation, the server component and client program are automatically started.

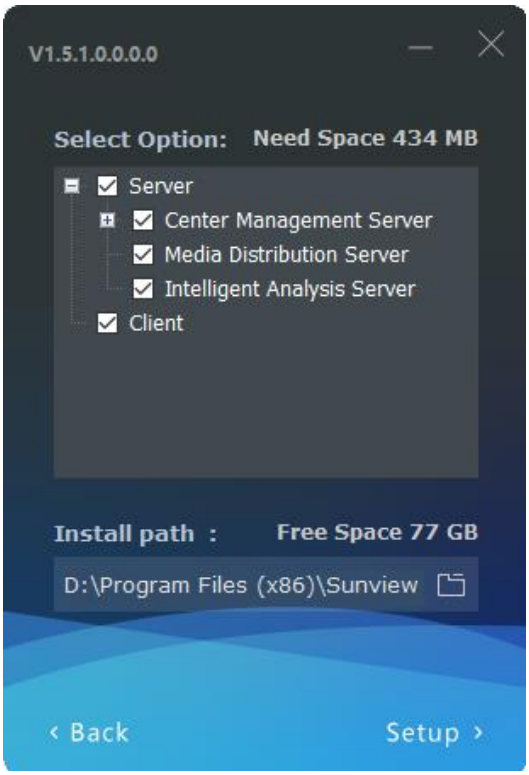
Figure 2-1 One click installation

2.2 Custom Setup

Custom Setup supports flexible installation. You can choose three installation methods, which correspond to the three deployment modes of the platform. The way is as follows:

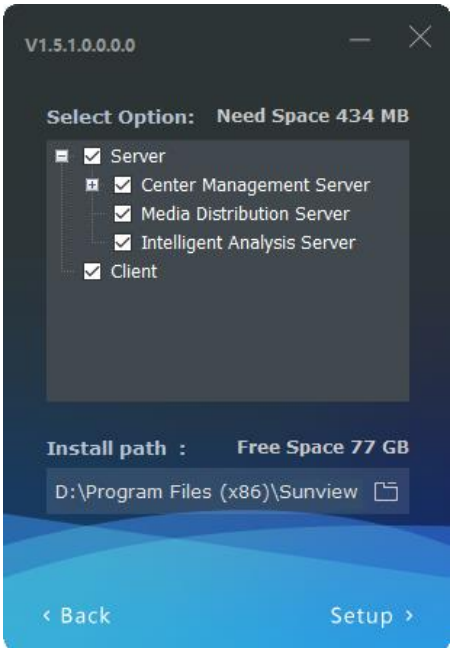
- Mini method: All components of the platform can be installed on a single machine; it is similar to “one click installation”.

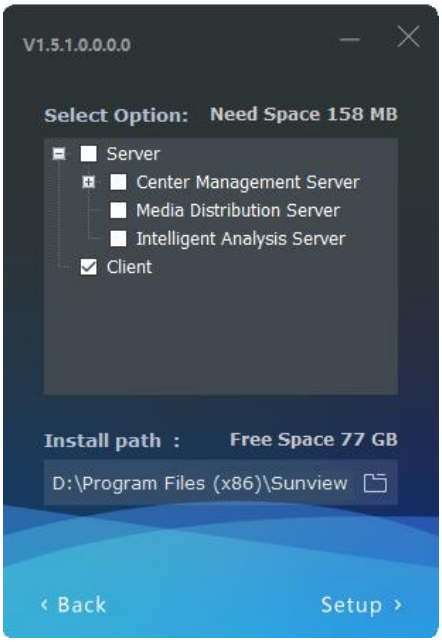
Figure 2-2 Installtion interface



- Middle method: The Sever and Clients installed on differnet machines, build up a distributed deployment

Figure 2-3 Server installed on a machine Client installed on another machine

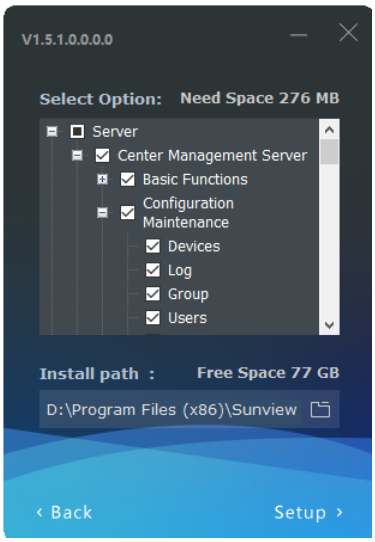


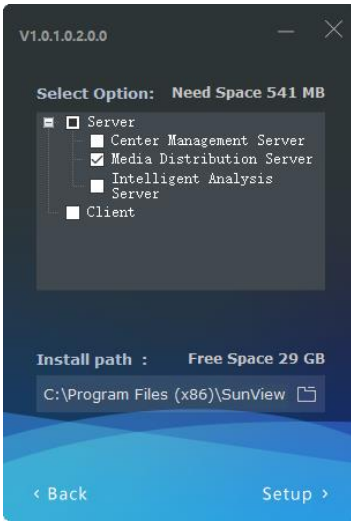


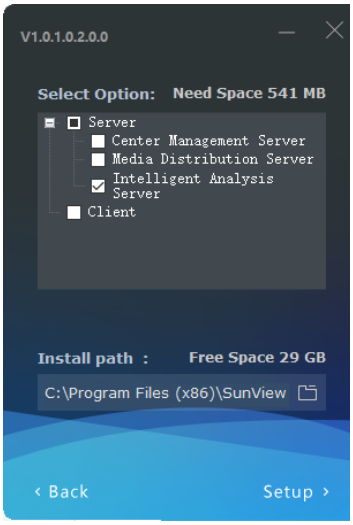
- Large Method: All components of the platform are installed on different machines to form a larger system

Figure 2-4 Description of installing

CMU on A machine MDU on B machine IAU on C machine







The central management server can install some functions or all functions when installing, user can tick them manually.

NOTE

In distributed deployment, the firewall is turned off after the installation of the program is completed or the program is allowed to pass through the firewall. Otherwise, when logging in remotely, it will be intercepted by the firewall, resulting in login failure.

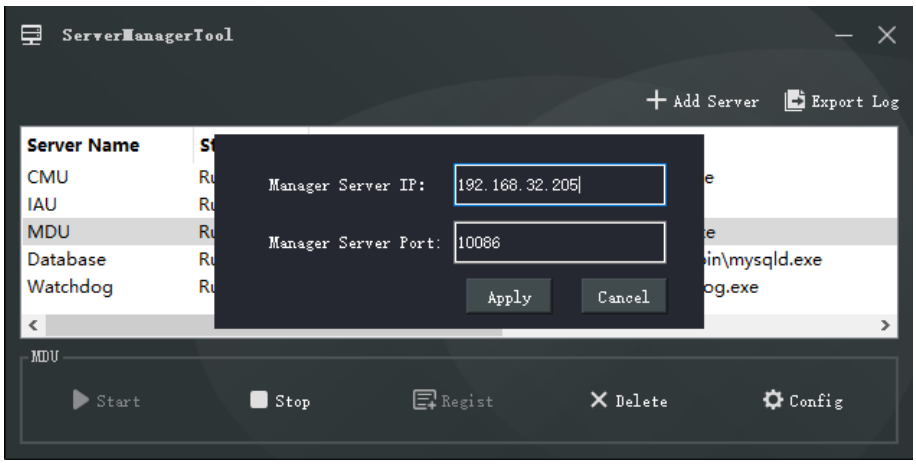
After the server is installed, you need to use the server management tool to configure the IP of the central management server of the media distribution server and the intelligent analysis server, which is convenient for unified management by the central management server. The tool is automatically displayed in the system tray after the system is installed. After displaying the main interface, select the corresponding service and click “Configure”, as shown in figure 2-5.

NOTE

If the installation is failed, it is recommended to close the firewall or antivirus software.

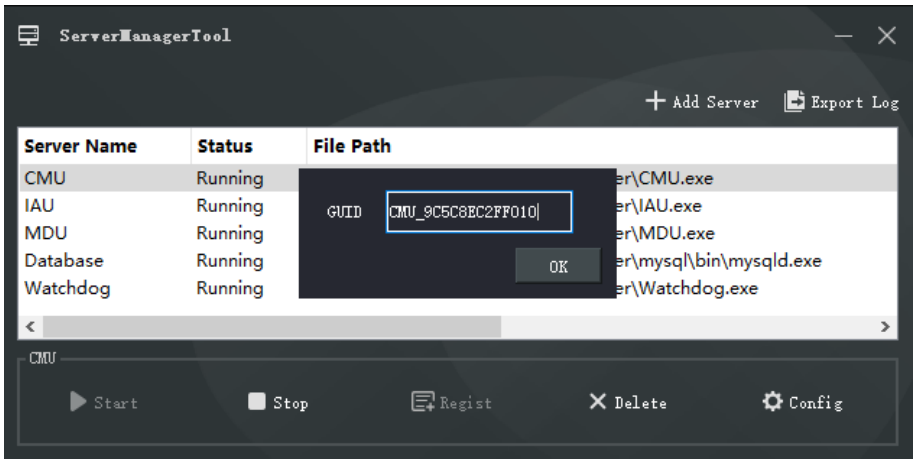
The server management tool runs automatically after the server is installed successfully. The system tray icon is , click and open the menu.

Figure 2-5 Server manager tool



2.3 **Retrieve Password**

Figure 2-6 GUID



If the user forget the password, please provide the GUID for us, we feedback a new password lasting for one day. User can use it to modify a new password.

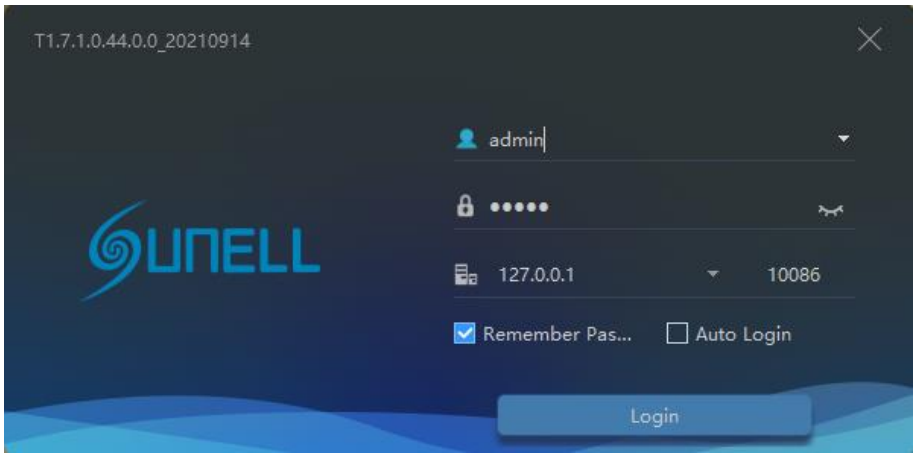
3 Login

Server installation is complete, double click on the desktop icon , input the user, password, and central management server IP, click "Login", the login interface is shown in figure 3-1

NOTE

The default user name and password are both admin. You should modify after first login to make sure safety of system.

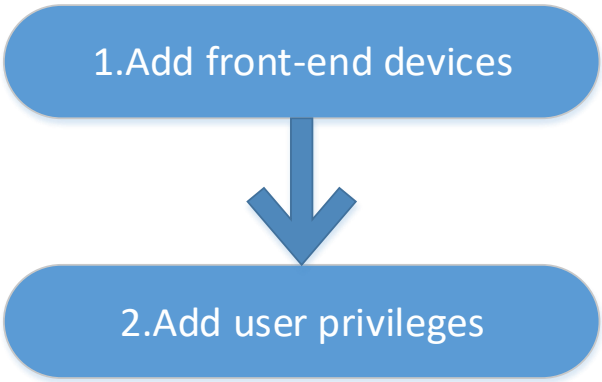
Figure 3-1 Login interface



4 Quick Start

After both the client and the server are successfully installed and running normally, the administrator can login to the system through the client to quickly use the platform as follows. The platform includes basic monitoring applications and smart applications. The smart application is suitable for face recognition and supports our camera with face detection function, including face capture camera and human body thermometer.

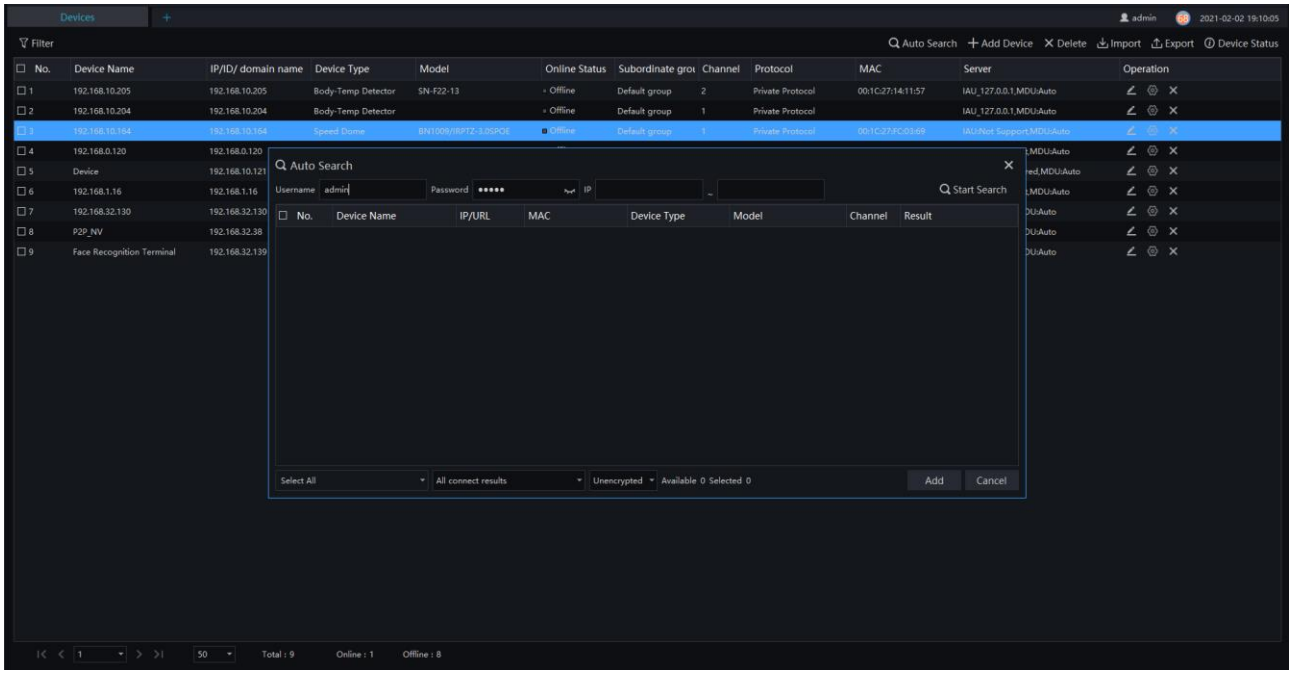
4.1 Monitoring Application Configuration Process



4.1.1 Add Front-end Device

Enter the main interface, open "device management, for the introduction of the function menu, you need to cut out the icon, now just a name and then directly interface, it seems more monotonous", if the device and the platform are in the same network segment, you can quickly add by automatic search Equipment, as shown in Figure 4-1:

Figure 4-1 Add device



After selecting the device, click “Add” and the camera can assign the specified server. Figure as below:

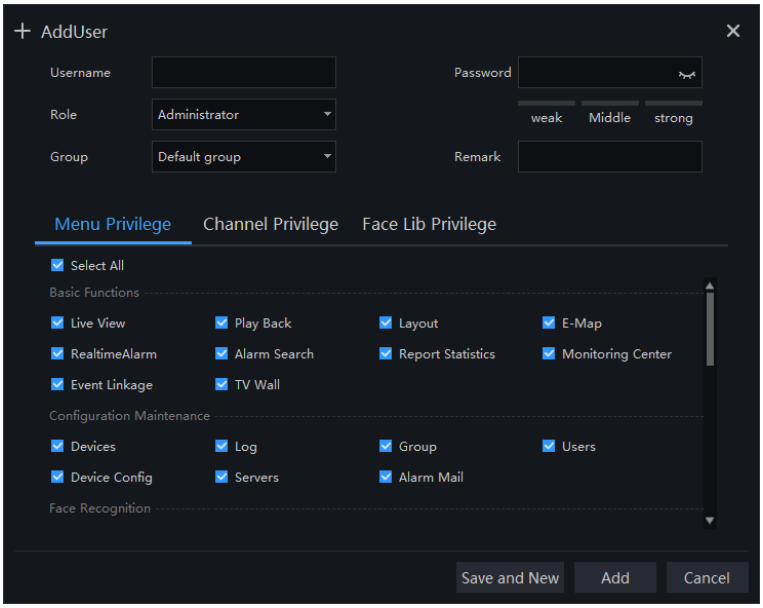
4.1.2 Add User Permissions

The system has administrator and operator roles by default. You can create users based on the default roles directly. You can assign menu permissions and channel permissions to users. As shown in Figure 4-2:

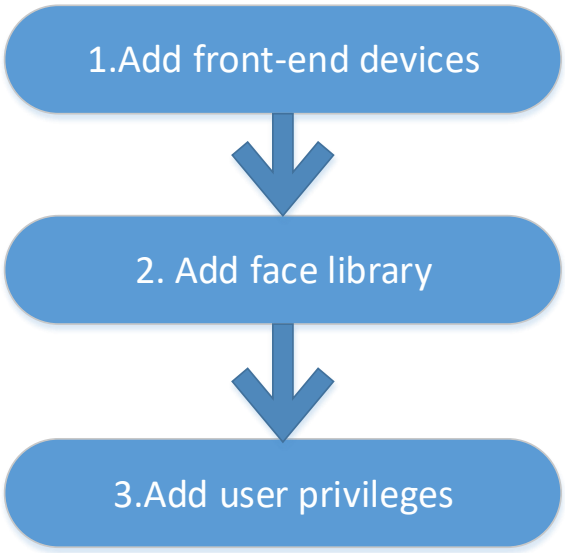
NOTE

The monitoring application does not have to assign personnel file permissions, which is used for smart (face recognition) applications.

Figure 4-2 Add user



4.2 Intelligent Application Configuration Process



4.2.1 Add Front-End Device

Refer to 4.1.1

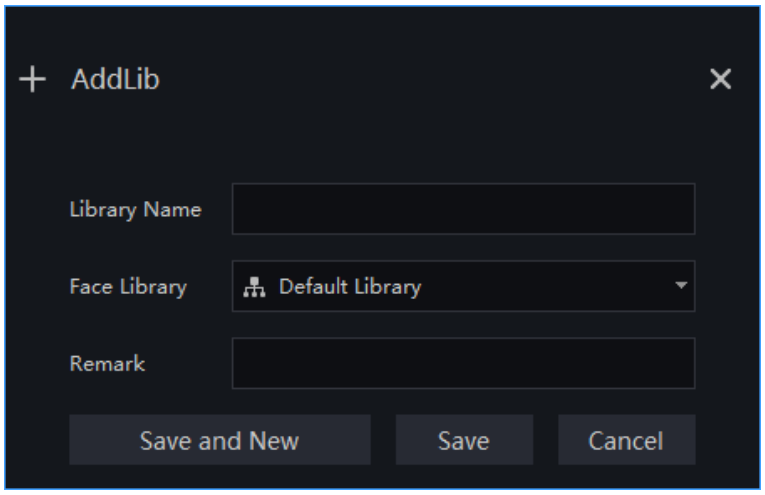
4.2.2 Add Face Database

This function is used for cameras which support face detection.

NOTE

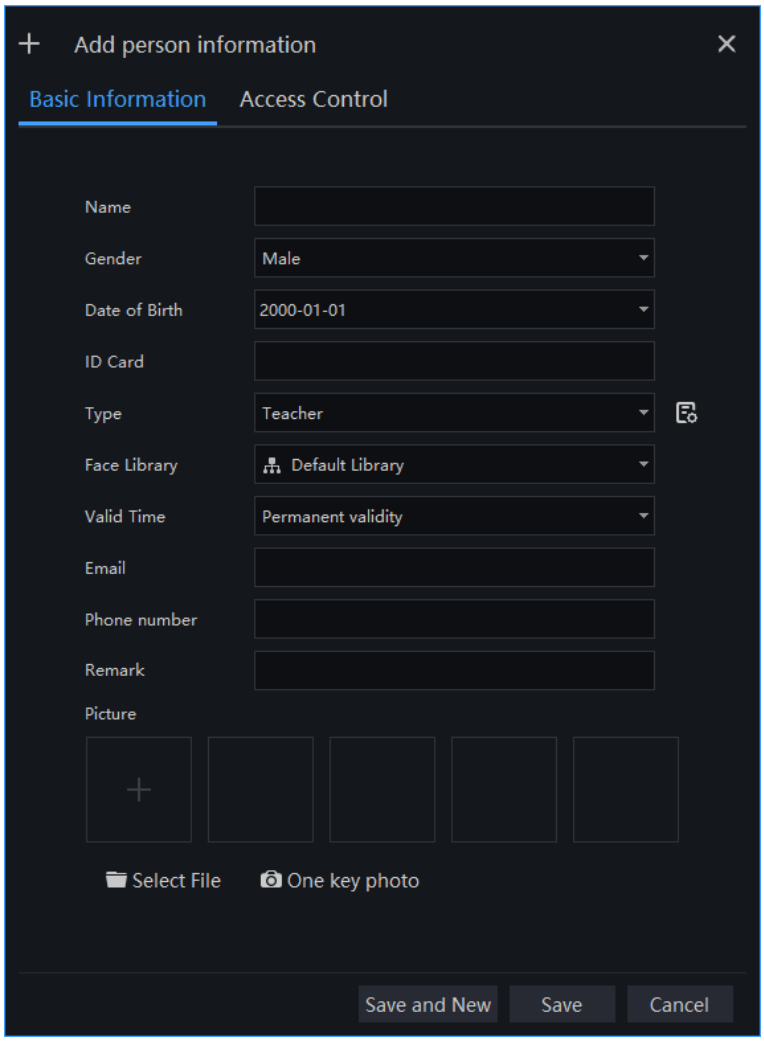
Enter the main interface, open "Face Lib Manage", you can add a face library, as shown in Figure 4-3.

Figure 4-3 Add face library UI



After selecting the face library, you can add personnel information. You should select a face photo, as shown in Figure 4-4

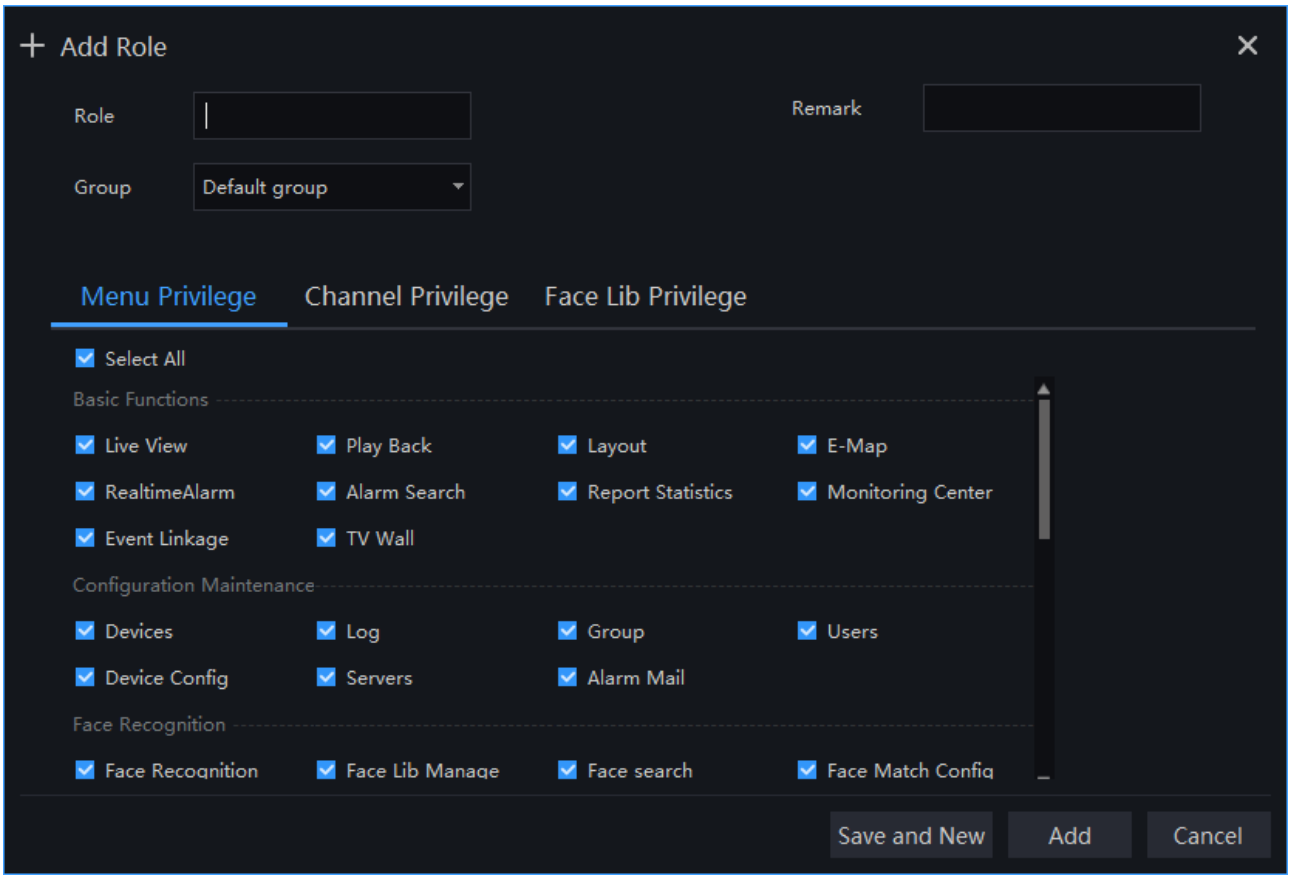
Figure 4-4 Person enroll



4.2.3 Add User Permissions

Refer to 4.1.2， However, if you need to assign different personnel file permissions to different users, you need to assign the file permissions after assigning channel permissions. As shown in Figure 4-5.

Figure 4-5 Add role

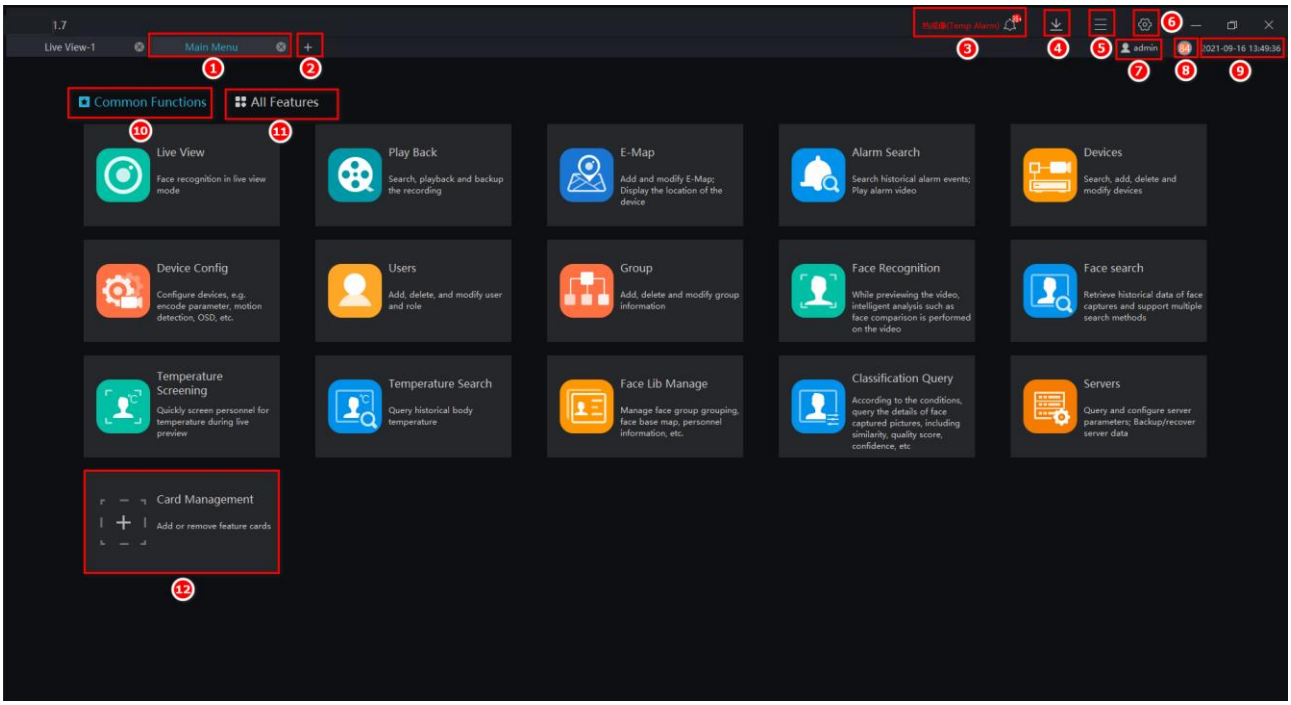


5 Main Menu Page

5.1 Main Menu Page

The user enters the function page directly after logging in for the first time, as shown in the figure.

Figure 5-1 Main menu page

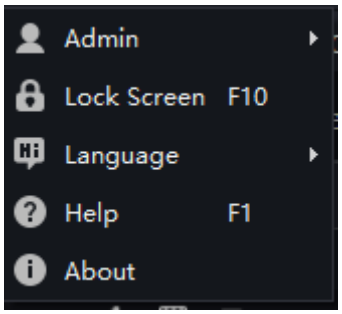


TIP

Click the function in the display area to view the corresponding function module separately. Click to drag outward, the function page can be displayed in multiple screens, which is convenient for multi-page and multi-window to view detailed information.

Table 5-1 Main Interface Introduction

No.	Function	Description
1	Main menu page	Main page, user can choose all function at this page
2	New	Click and build a new main menu page
3	Alarm Message	Alarm message reminder, click enter the real-time alarm interface directly; more details please refer to Chapter Real-time alarm.
4	Backup	Backup the task, click to display the list of tasks backup and backup history.

No.	Function	Description
5	Operate	 User: Switch users and modify passwords. Lock screen: Click to lock the screen, enter the password to unlock the lock screen, and the password is the login password. Language: there are nine languages can be chosen. Help: Click to go to the help page for instructions. About: Platform version information.
6	Setting	Click to enter the system configuration, you can set the basic settings, alarm notification, file path, shortcut setting, snapshot setting, log export as shown in Figure 5-2. Click the drop-down menu to select a specific setting. Click "Save" to save the relevant settings.
7	User	Show current user.
8	Run status	Show CPU and RAM running status.
9	Date and Time	Current Date and Time.
10	Common Function	If the function is used for usually, user can add that function to common function page to find it quickly.

No.	Function	Description
11	Function display area	All function modules are displayed, and the function interface is quickly entered. You can drag the function module to change the placement position. Basic function: Live View, Playback, Layout, E-map, Real-time Alarm, Alarm Search, Report Statistic, Monitoring Center, Event Linkage, TV Wall, as shown in Figure 5-5. Configuration Maintenance: Devices, Log, Group, Users, Device Config, Servers, Alarm Mail, as shown in Figure 5-6. Face Recognition: Face Recognition, Face Lib Manage, Face Search, Face Match Config, Classification Query, as shown in Figure 5-7. License Plate Recognition: License Plate, License Plate Search, License Plate Manage, License Match Config, as shown in Figure 5-8. Multi-target Recognition: AI Recognition, Intelligent Search, Traffic Statistics, Person Control, Traffic Area Config, People Flow Statistics as shown in Figure 5-9. Attendance: Attendance Preview, Attendance Statistics, Attendance Config, Time Tracking, as shown in Figure 5-10. Temperature Monitor: Temperature Screening, Temperature Search, Health Archives, Temperature Config, Temperature Statistics, as shown in Figure 5-11. Thermal Imaging: Thermal Imaging Thermal Image Config, Thermal Image Search, Thermal Image History, Thermal Imaging Inspection, as shown in Figure 5-12. Access control: Real Time Access Control, Access Control Inquiry, Access Control Configuration as shown in Figure 5-13.
12	Card management	Add or remove feature card to common functions interface, as shown in Figure 5-14.

Figure 5-2 System Setting

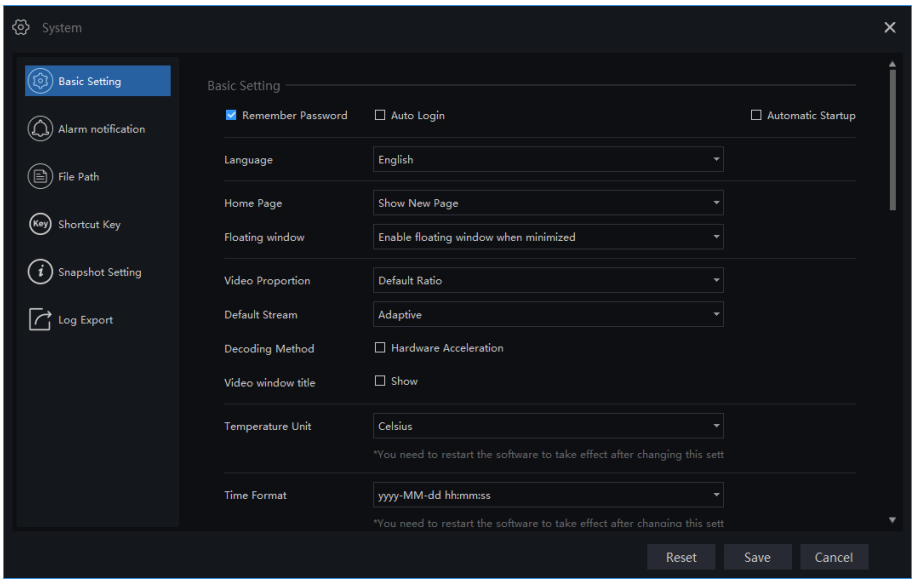
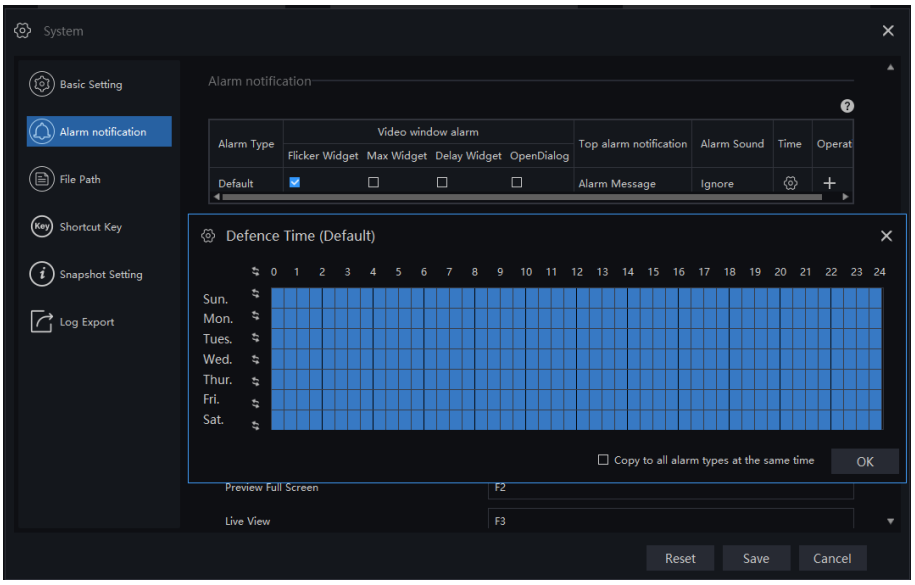


Figure 5-3 Alarm notification



Tick the video window alarm (Flicker widget, max widget, delay widget, open dialog);

Choose the top alarm notification (alarm message, show alarm quantity, ignore alarm message);

Choose alarm sound (ignore, sound, buzzer);

Click “Time” to set the defence time, as shown in Figure 5-3.

Click “+” to add a new alarm type as shown in Figure 5-4, click “- ” to delete the alarm type.

Figure 5-4 Alarm type

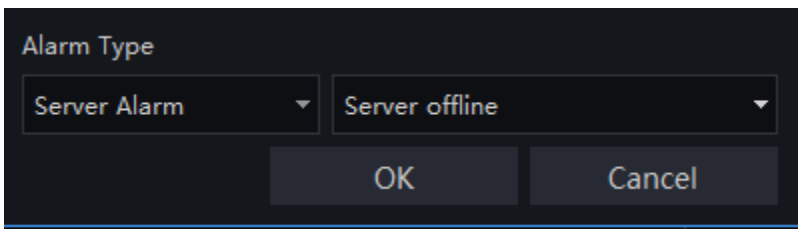


Figure 5-5 Basic Functions

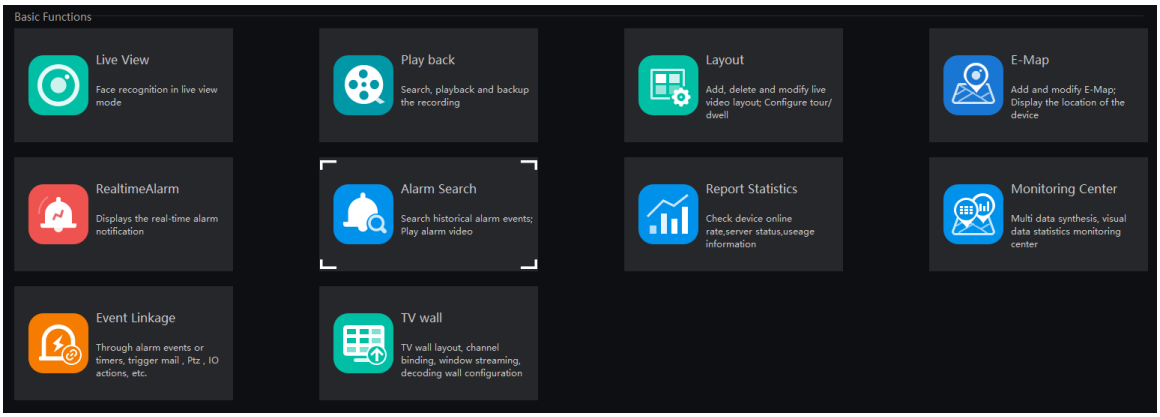


Figure 5-6 Configuration Maintenance

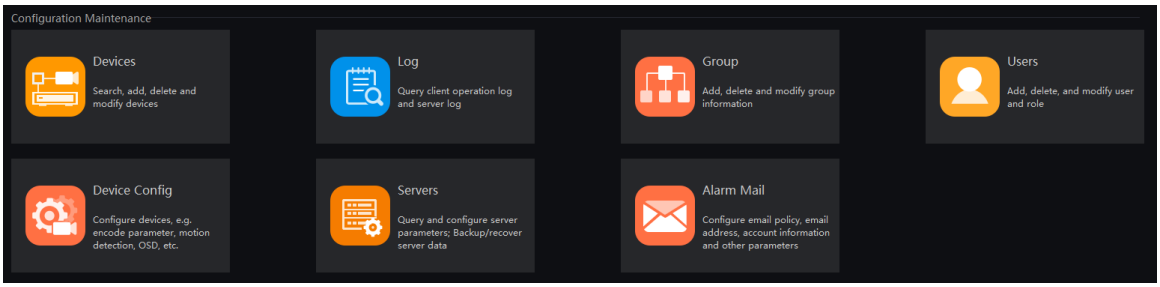


Figure 5-7 Face Recognition

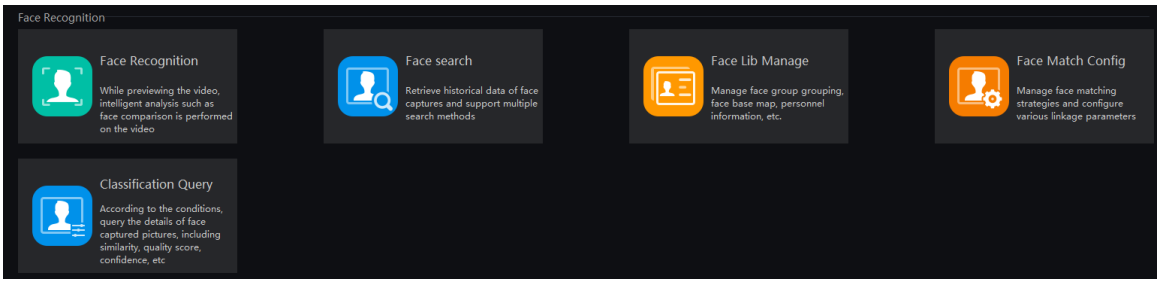


Figure 5-8 License Plate Recognition

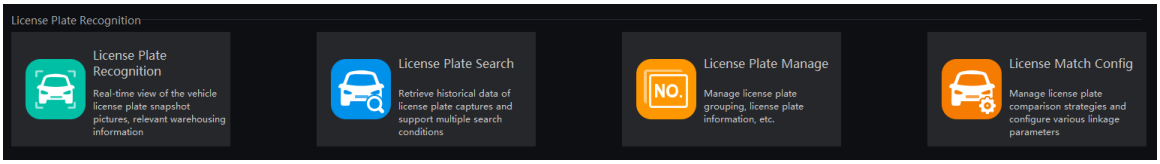


Figure 5-9 Multi-target Recognition

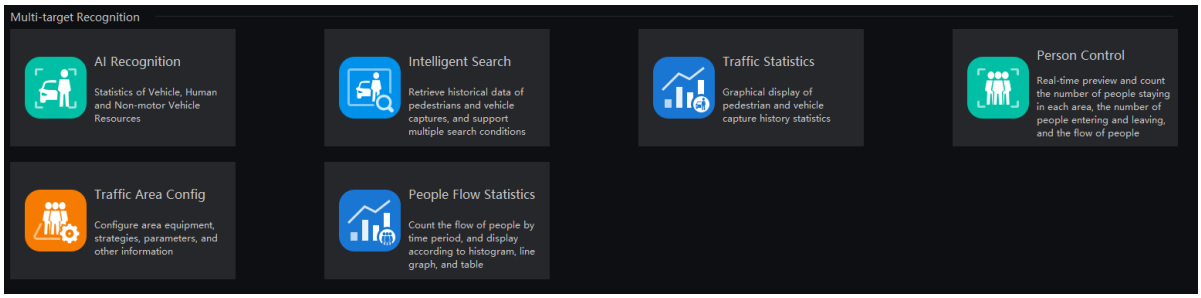


Figure 5-10 Attendance

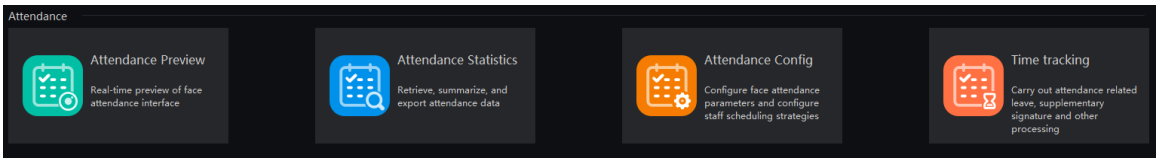


Figure 5-11 Temperature Monitor

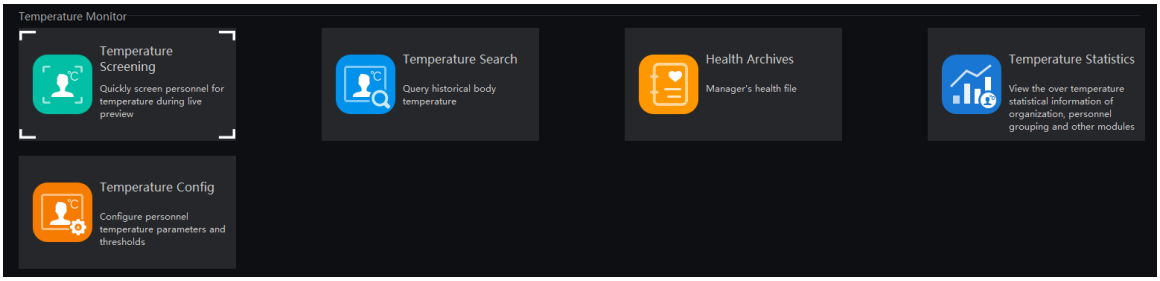


Figure 5-12 Thermal Imaging

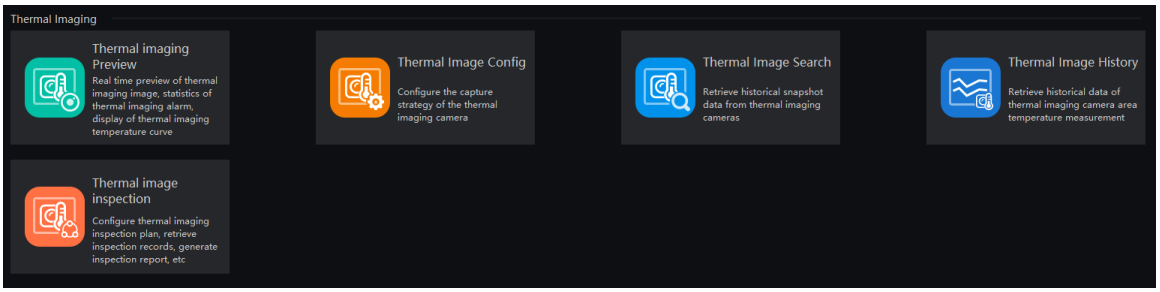
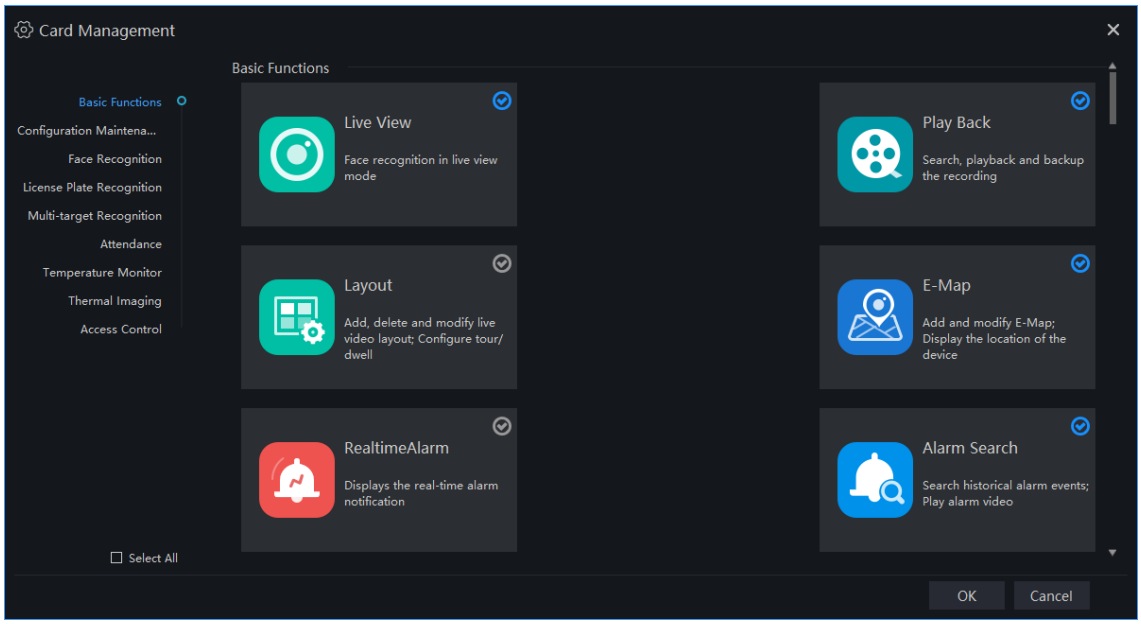
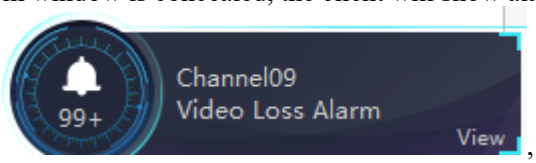


Figure 5-13 Access Control

Figure 5-14 Card management



5.2 Suspended Ball

When the platform window is concealed, the client will show alarm suspended ball at floating mode, as shown in figure 

, click the ball to view the detail alarm information.

The user can master the alarm timely.

6 Basic Functions

6.1 Live view

At live view interface, you can watch the real-time video , real-time cruise video, local video, set screenshot ,open the audio, start the voice intercom, zoom in the video, switch the code stream, save the layout, 3D positioning, and control the PTZ. The right-click menu can quickly set video parameters.

On the main menu page, click

to enter detailed page, as shown in Figure 6-1

TIP

Support opening up to maximum 4 live view windows simultaneously, and can use mouse to drag out, convenient for multiple screens display synchronously.

Figure 6-1 Live view UI

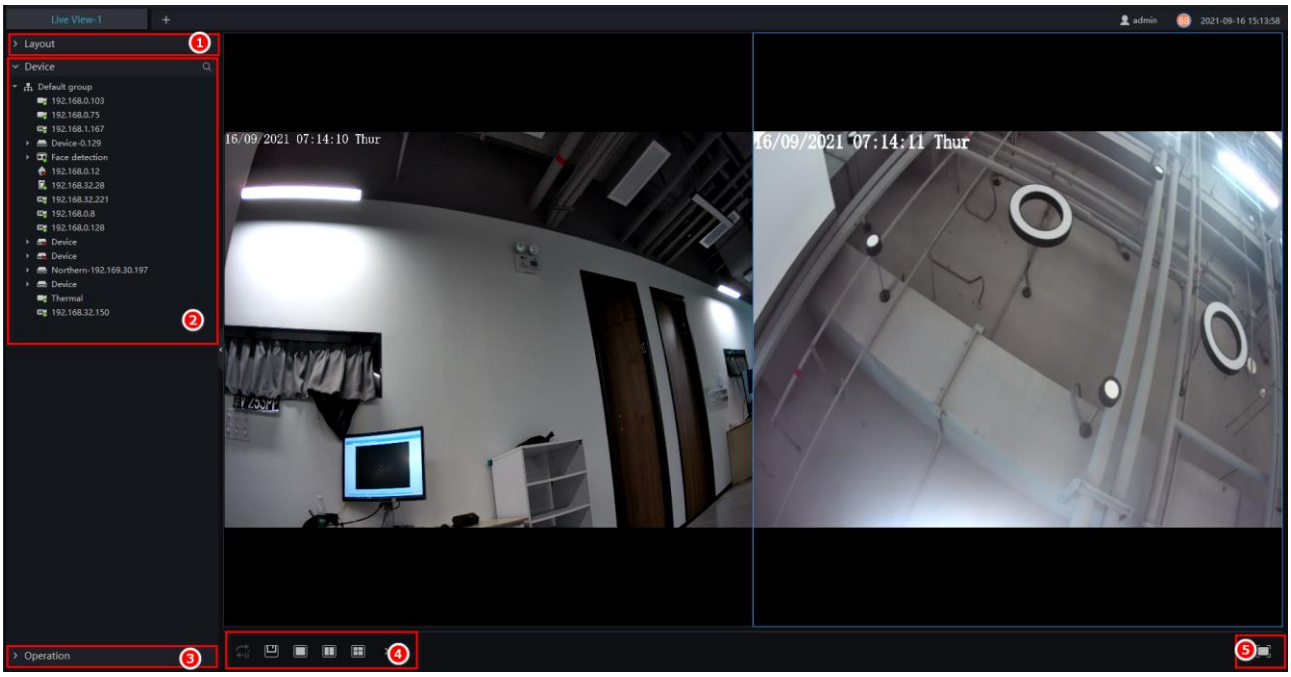


Table 6-1 Live view

No.	Function	Description
1	Layout	Video display format, add the layout.

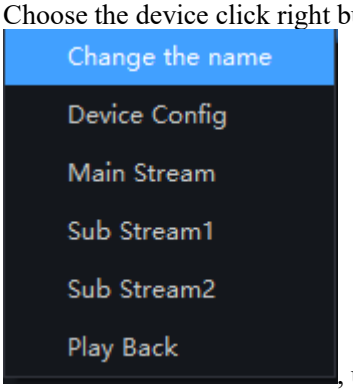
No.	Function	Description
2	Device list	Show the device list At blank space, click right button of mouse to choose show online only or show all. Choose the device click right button of mouse, the menu will show  , user can change the name of device. Click “device config” to jump to device configuration page. Choose stream to view the live video. Click “playback” to jump to playback page.
3	Operation	Set dome device PTZ/ Image parameter.
4	Video display layout	Start the cruise, save the current layout, single screen, four screens, support maximum 64 screens
5	Full screen	Show live video at full screen mode, as shown in Figure 6-2. Click right button of mouse, click “full screen” to exit the full screen mode.

Figure 6-2 Full screen

6.1.1 Layout

"Layout function interface" can be used to add layout to bind the channel and window, enter "Function preview interface" click layout list, the complete layout list will be shown, double click a layout name, real-time videos of all the channels in this layout will be displayed.

6.1.2 Device

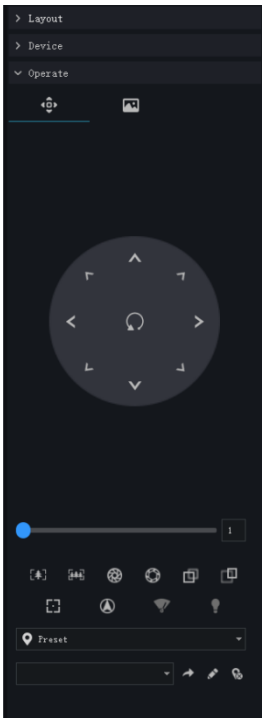
Display the device list under current user account, users can watch the real-time video by double clicking or dragging and dropping the mouse at online channel.

6.1.3 Operation

NOTE

This function is only available for the dome product with PTZ, support direction controlling, presetting location operation and cruising operation.

Figure 6-3 PTZ adjustment



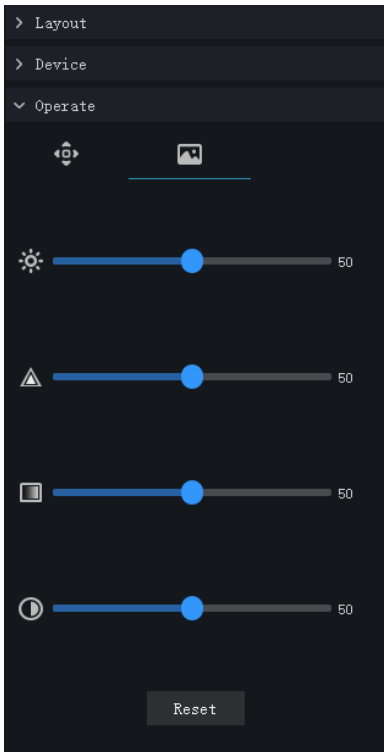
PTZ Operation: adjust the PTZ full-scale movement, lens zoom, edit and control, zoom in, zoom out, IRIS increase and decrease, near focus, far focus, focus, orientation, and wiper, turn on the light.

Cruise: cycle the preset positions according the order.

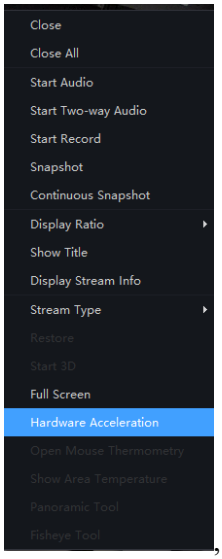
Preset position: set the preset position name and set the current position as the preset position to facilitate the cruise operation.

Image operation: adjust image brightness, sharpness, saturation and contrast. The default values are all 50. Focus is changed by dragging the right side of the slider or clicking the left and right axes to change the value, the range is 0-100.

Figure 6-4 Image adjustment



At the live video page, click right button of mouse, the menu show as the figure



, the different devices have different function, user can operate the correspond function actually

6.2 Playback

6.2.1 Playback

At the playback function interface, the video from the front-end device can be played back and backed up, support multiple channels synchronous playback, support playback control operations.

On the main menu page, click to enter the detailed page, as shown in Figure 6-5

Figure 6-5 Playback interface

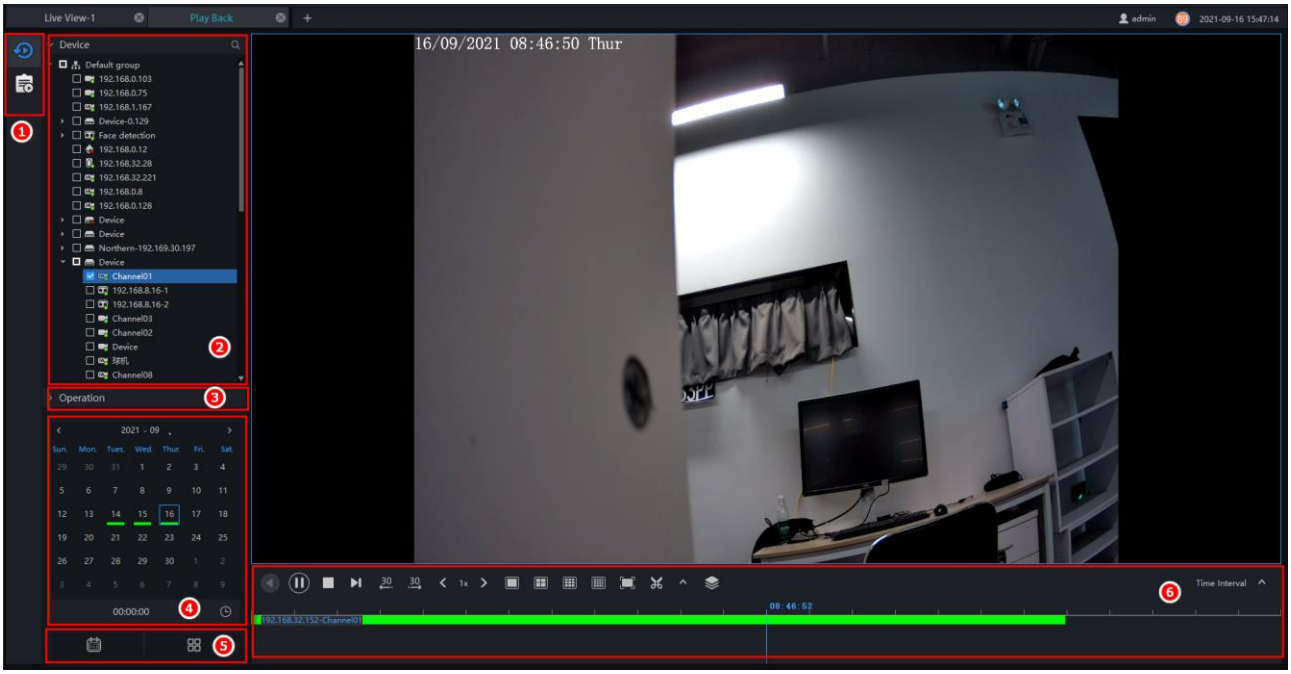


Table 6-2 Playback

No.	Function	Description
1	Playback / Event playback	Choose the playback or event playback (when the radar devices are connected to platform, and linkage with the dome camera, there are SD card to record the event, user can view the event playback)
2	Device	Show devices on the platform as organizational structure
3	Operation	Set dome device PTZ/ Image parameter.
4	Calendar	Display date, there is a green bar below the date to indicate that there is a recording on this date. Positioning can manually enter the time and position.
5	Show or hide calendar / grid	Close or open the calendar/ Video grid

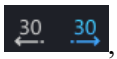
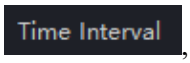
No.	Function	Description
6	Toolbar operation	Video operation: operation, timeline, display. For example , Rewind , Pause/Play , Stop , Next frame  , Backward 30s/ Forward 30s , Several fold speed slow release, fast release , Layout display , Full screen , Download back up device video, specific steps please refer to chapter 9.3 , Bath backup, choose multiple channels to backup the video.  , Select progress bar format

Figure 6-6 Batch backup

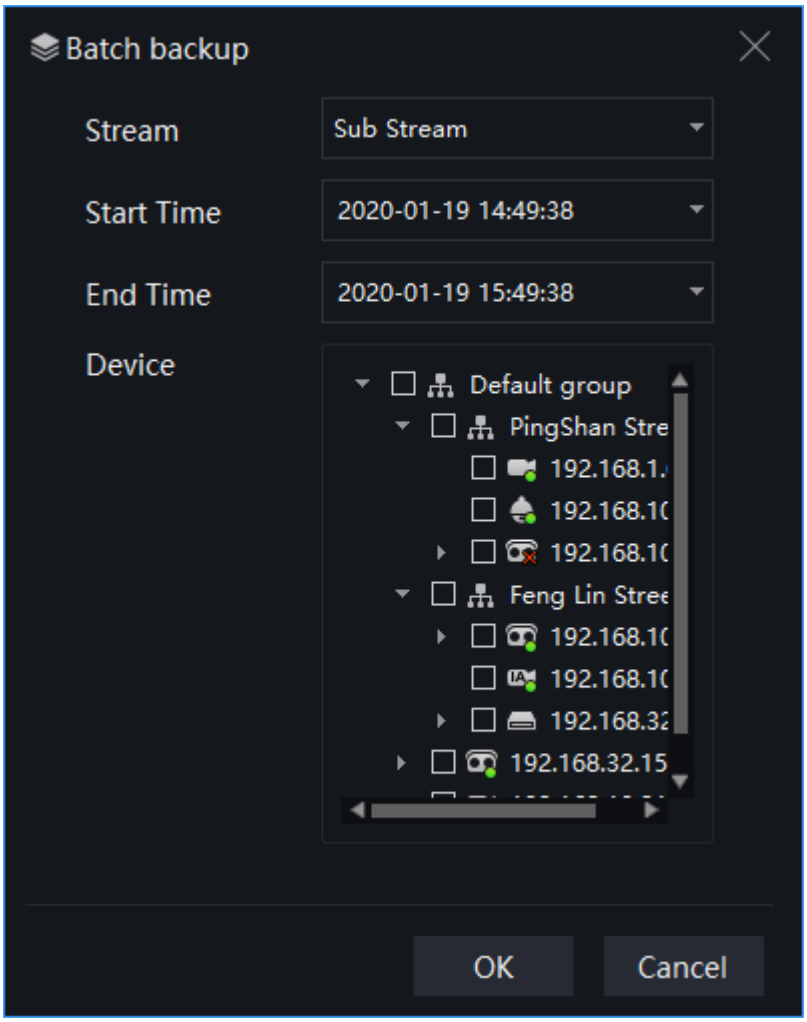


Figure 6-7 Video grid

6.2.2 Event Playback

When the user set the parameters of radar and high speed dome cameras, the cameras are connected to recorder, or plugged the SD card, it will be search the records of radar alarm, and view the videos.

Figure 6-8 Event playback

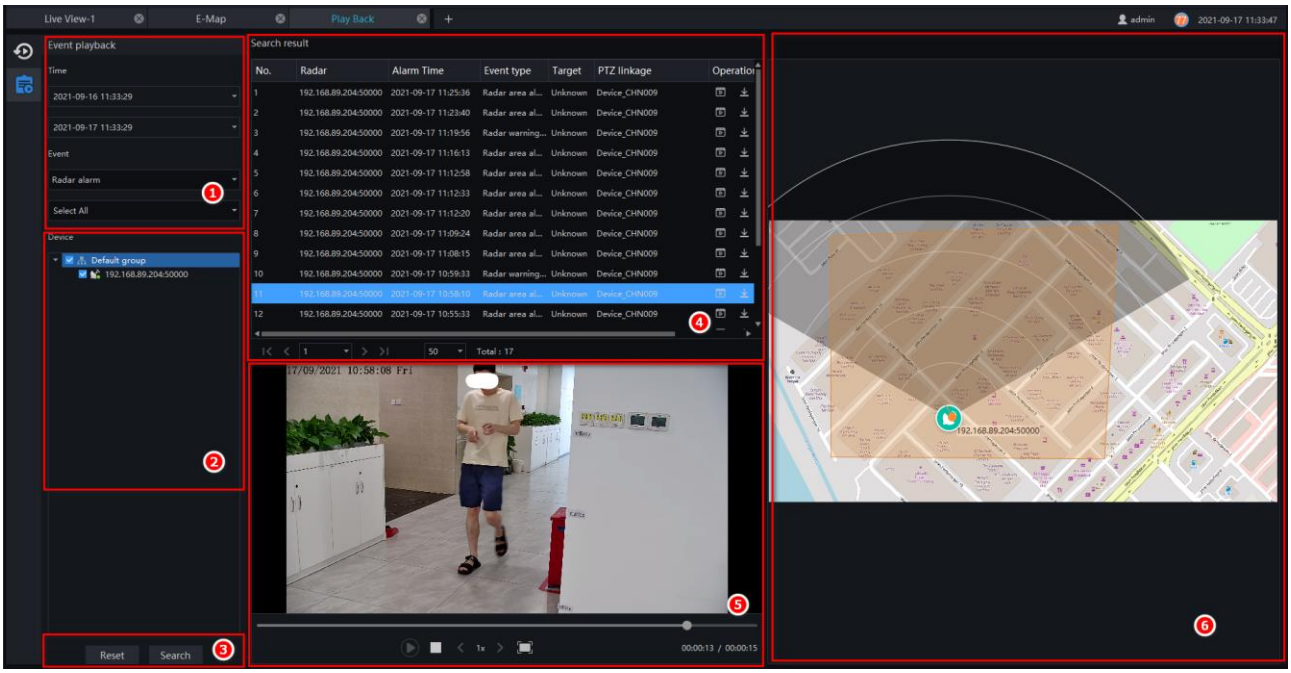


Table 6-2 Event Playback

No.	Function	Description
1	Search conditions	Set time, choose the event, and alarm type.
2	Device	The radar device list.
3	Search result	The result of searching conditions
4	Alarm recording	Choose the alarm to view the capturing recording.
5	Tracking	The tracking on the map.

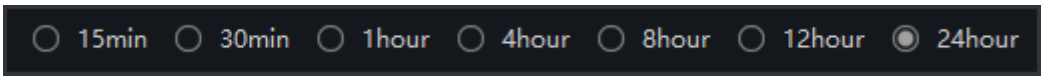
6.2.3 Playback the Device Video

Procedure：

Step 1 Select display layout mode, support multiple devices synchronous playback

Step 2 Select the device in the device list that needs to be played back, video at the current time will be automatically queried and played back

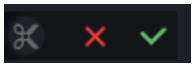
Step 3 Select the way as shown in the picture on the timeline ,can play back the video by selecting different time interval.



Step 4 Select the operation tool in the toolbar to watch the video playback according to one’s needs.

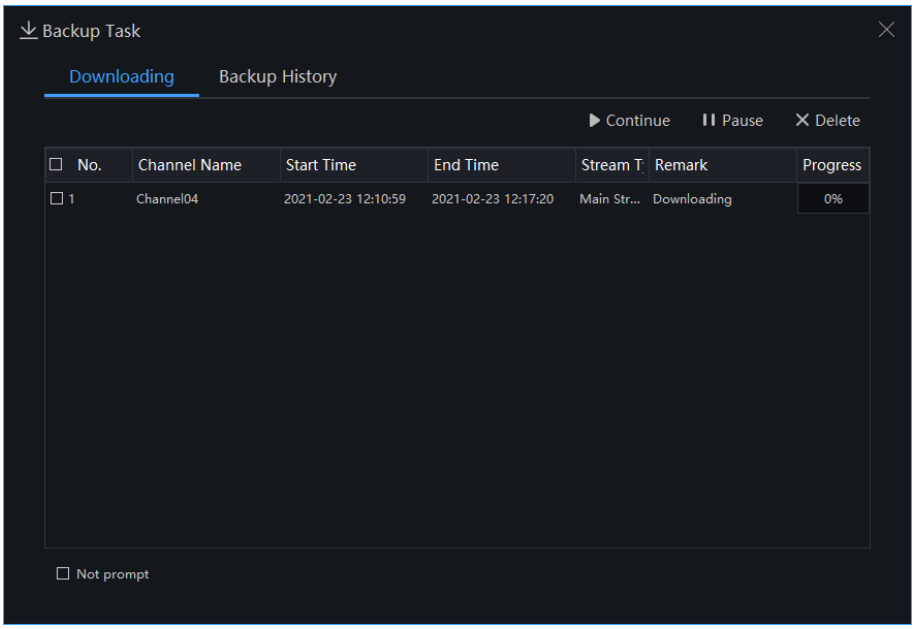
6.2.4 Back up the Device Video

Procedure：

Step 1 Click , the video starts to back up, the icon  shows, drag the time scale can copy the video quickly, download the video with MP4 format.

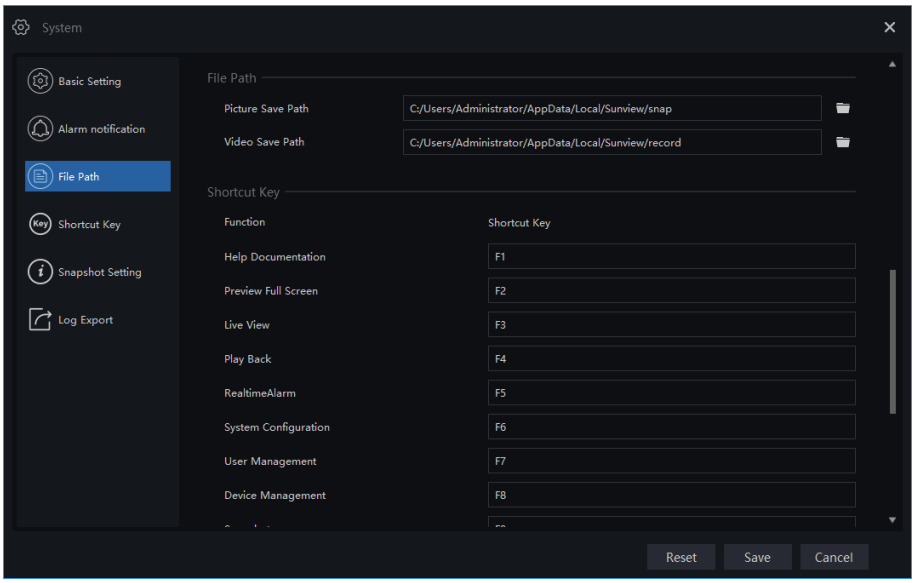
Step 2 Click the checkmark to complete the selection and copy of the video, and jump to the download interface as shown in Figure 6-9

Figure 6-9 Download interface



Step 3 Click "Downloaded" on the top right corner of interface to view the start and end time of the downloaded video, and the store path.

Figure 6-10 File path



6.3 Real Time Alarm

At the interface of real time alarm, alarm information from the front-end equipment in real-time could be received, and enable to handle single or batch of alarms.

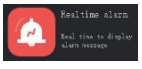
On the main menu page, please click  to enter the detailed interface, as shown in Figure 6-11.

Figure 6-11 Real Time alarm interface

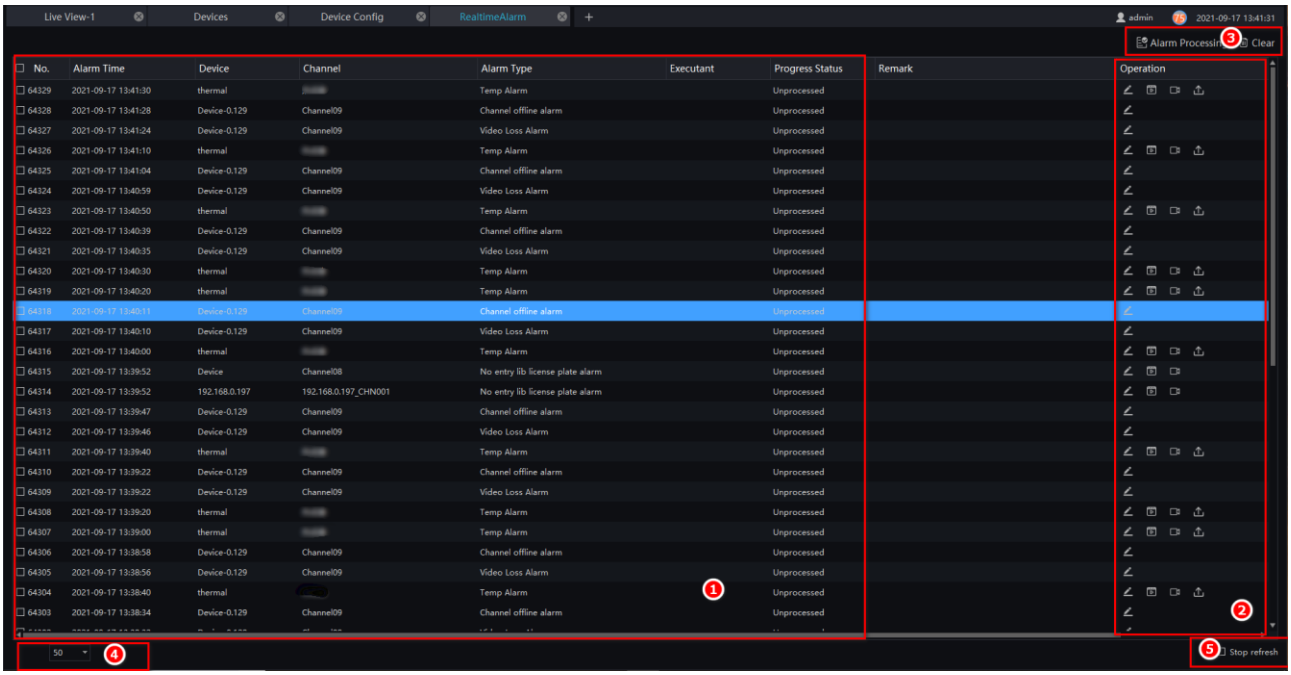


Table 6-3 Real time alarm

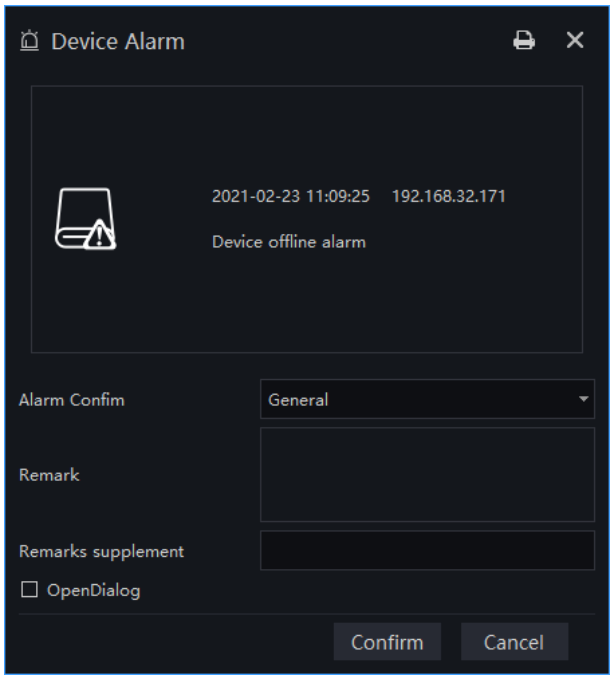
No.	Function	Description
1	Alarm display area	Display alarm related information.
2	Alarm processing.	Process the specified alarm information, click ‘clear’, the current alarm will be cleared. The alarm of thermal camera can be export, the information includes comment, summary, action, temperature, alarm time, and so on.
3	Alarm operation	Alarm processing, video of alarm playback, live video.
4	Interface display.	Quantity of the current page’s alarms
5	Stop refresh	Tick to stop refresh the real time alarm

Procedure:

Step 1 Click the real time alarm icon at the main menu page to enter the detailed page, and you can access quickly by clicking icon in the upper right corner of the screen.

Step 2 Tick the alarm information, click “Alarm Processing” in the upper right corner, and a pop-up window will show, which can be set according to the actual situation, when the processing is completed, the status will become processed.

Figure 6-12 Alarm process



Step 3 Click to play back the alarm occurrence video for 30S.

Step 4 Click to view live video of the alarm device.

Step 5 Click to export the alarm information of thermal cameras. Before exporting the information, user can input the comment, summary, action.

6.4 Alarm Search

At the interface of Alarm Search, the follow-up date of historical alarm, alarm type, processing status, name of device could be retrieved, and enable to process the search results single or batch individually.

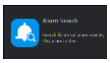
On the main menu page, click  to enter the detailed interface, as shown in Figure 6-13

Figure 6-13 Alarm search interface

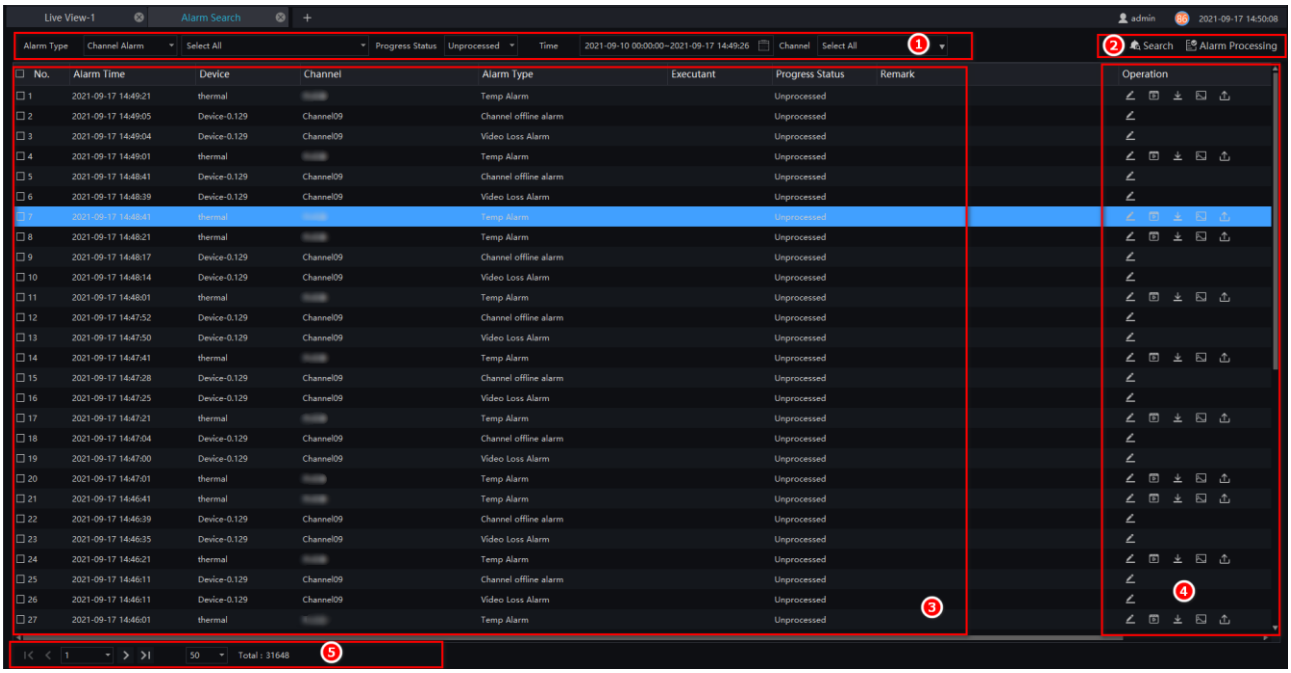
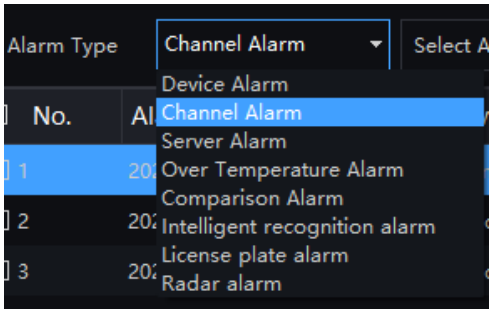


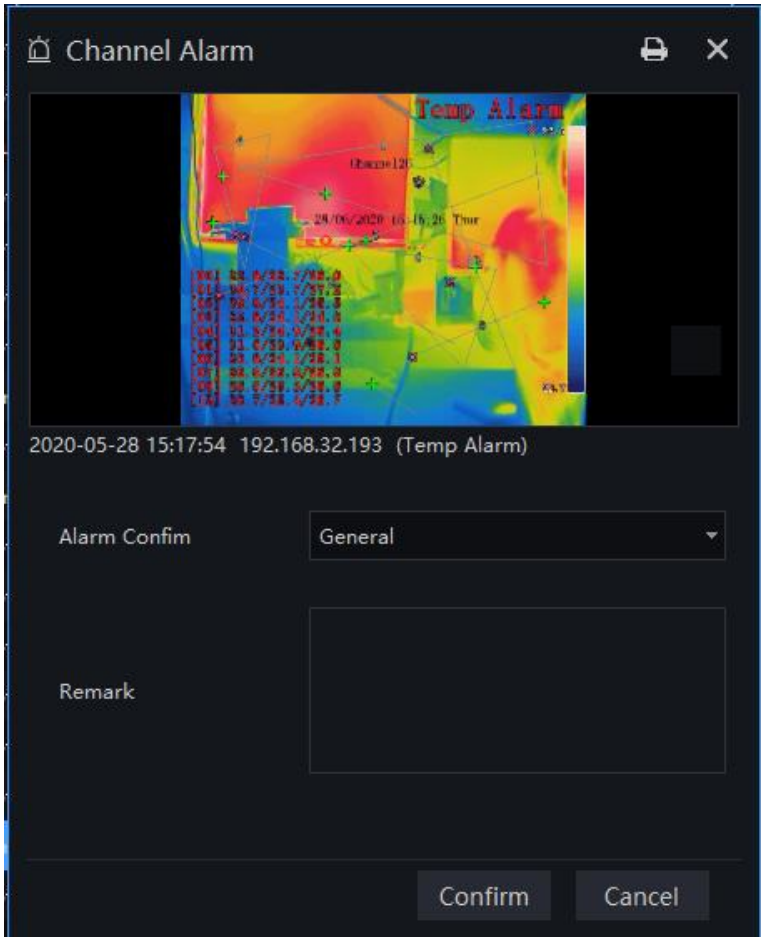
Table 6-4 Alarm search

No.	Function	Description
1	Search condition	User set the search condition, choose alarm type, progress status, set time of searching 
2	Search/Process	Click the icon to search or process the alarm
3	Search results	Results of searching.
4	Operation	Edit, playback, process, backup task, export(it is used for thermal camera, user should enable the over temperature alarm snap at thermal image config page)
5	Interface display	Show the current page of the alarm, and the page displays the number of alarms, switch to next page to show alarm information

NOTE

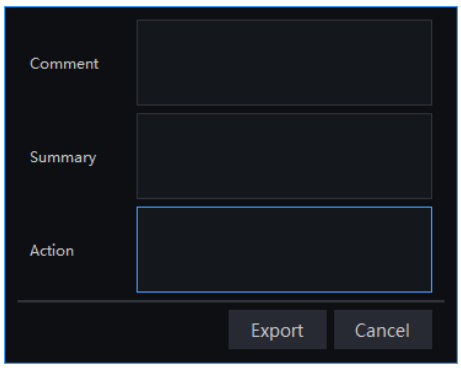
The processing status of the temperature alarm will affect the alarm statistics. Only the manual processing of related alarm information over-temperature statistics can be accurate.

Figure 6-14 Processing alarm



At processing alarm interface, user can edit the alarm information, and print the alarm.

Figure 6-15 Export thermal alarm



User click to export thermal imaging alarm information, the information include basic camera information, snapshot, parameter of temperature, the adding comment, summary, action, and so on.

6.5 Layout

At the interface of layout, adding the binding of the channel to the window and setting the polling interval are available. The layout will display on the interface of "Preview". It helps more convenient for video monitoring.

On the main menu page, click

to enter the detailed interface, click to add layout as shown in Figure 6-16.

Figure 6-16 Layout management interface

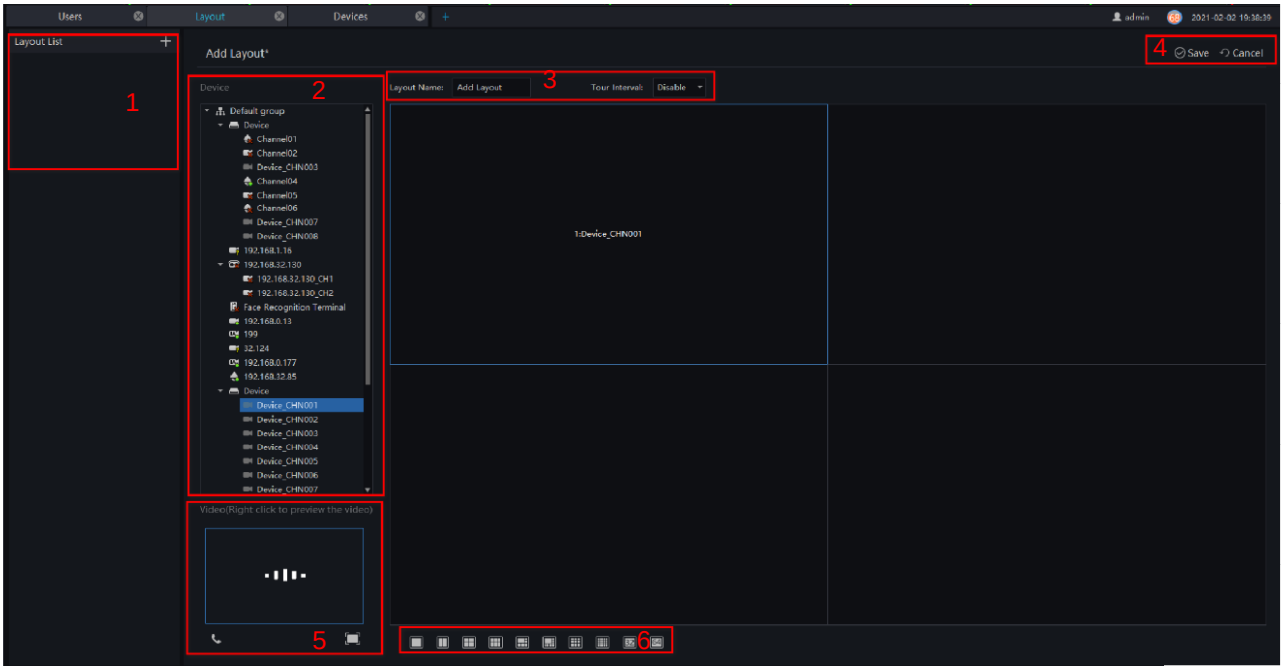
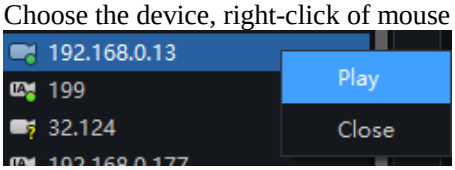


Table 6-5 Layout management

No.	Function	Description
1	Create new layout	Click ,or the huge ” +” icon to create new overall arrangement
2	Devices list	Drag the device to layout screen.
3	Basic information of layout	Set the name of new layout, set tour interval.
4	Operation	Save or cancel setting layout.
5	Play video	Choose the device, right-click of mouse to play. 
6	Display mode	Choose video display mode.

Procedure:

Step 1 Click at the layout list to create a new layout.

Step 2 Input the name of the layout and select the window layout.

Step 3 Set tour interval.

Step 4 Choose and hold the mouse to set the channel to display at layout window, you could bind multiple channels at the same window and enable tour interval, so that users view several cameras.

Step 5 Click "Save" to save settings.

6.6 E-Map

At the interface of electronic map, you can set map that the system supports JPG, PNG, BMP. It supports multi-level sub maps, which makes it easy for monitoring sites on the map.

At new function page, click to enter detailed interface, as shown in Figure 6-17.

NOTE

E-Map editing function only admin user is authorized, other users do not have the authority for it.

Figure 6-17 E-Map interface

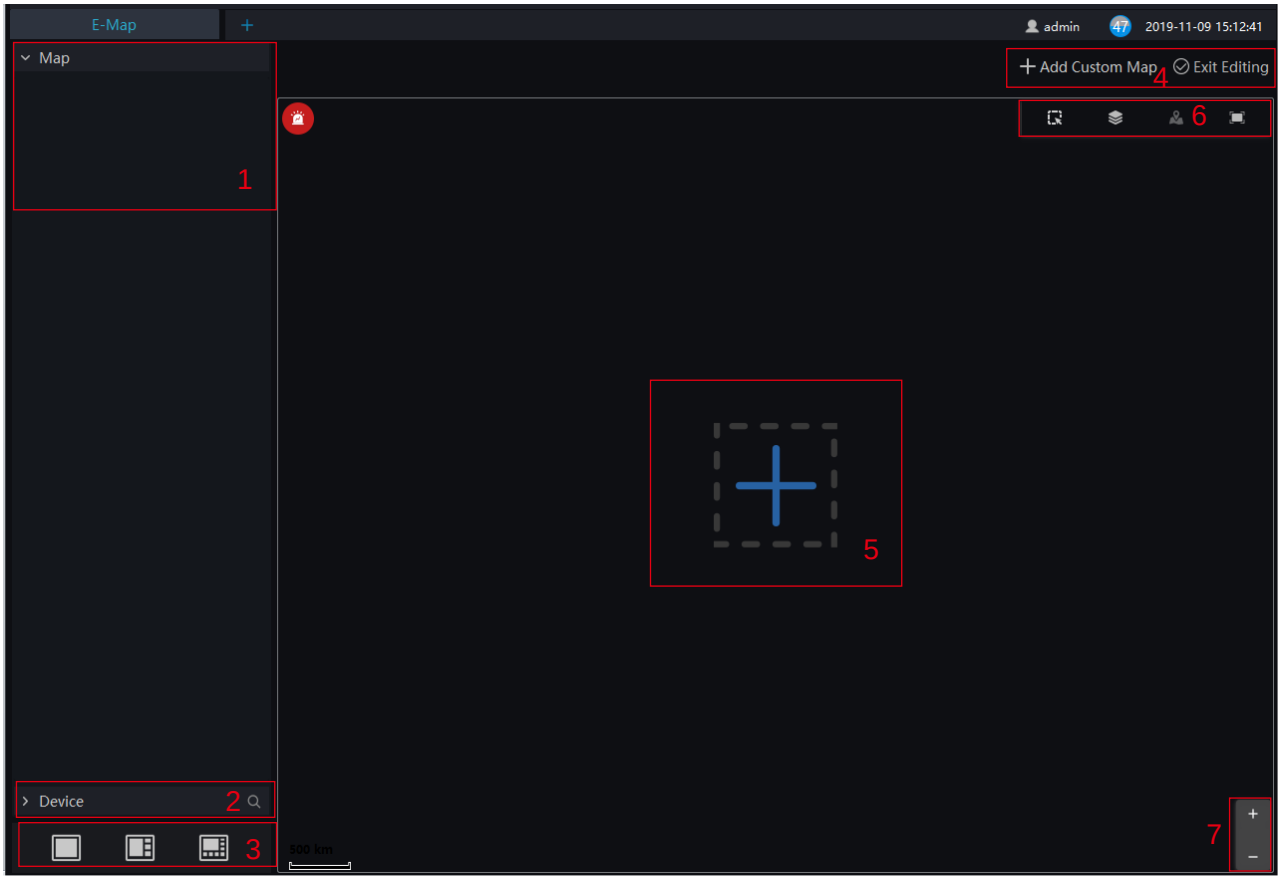


Table 6-6 E-map

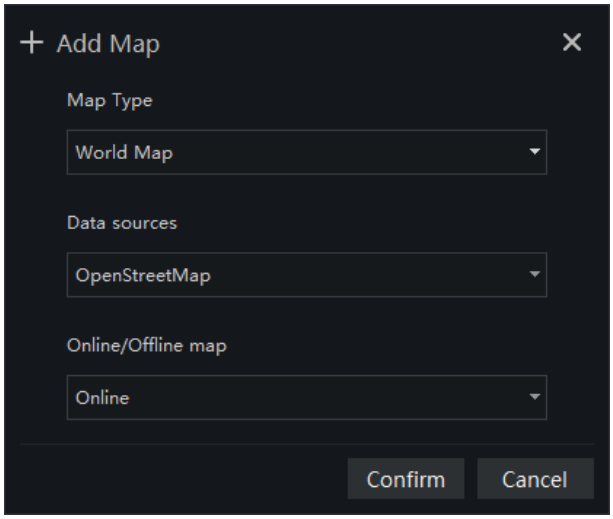
No.	Function	Description
1	Map Display List	Setting map of devices' layout
2	Device	Details of map

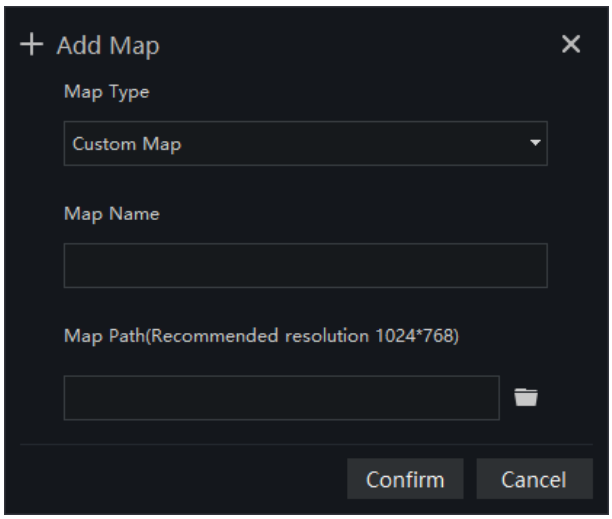
No.	Function	Description
3	Video Display	Map and layout of video display
4	Add map	Add custom map, edit the maps
5	Zoom in/ zoom out	Zoom the map to set monitoring points
6	Operation of Map	User can operate the devices of map.
7	Zoom in/zoom out	

6.6.1 Add Electronic Map

Procedure:

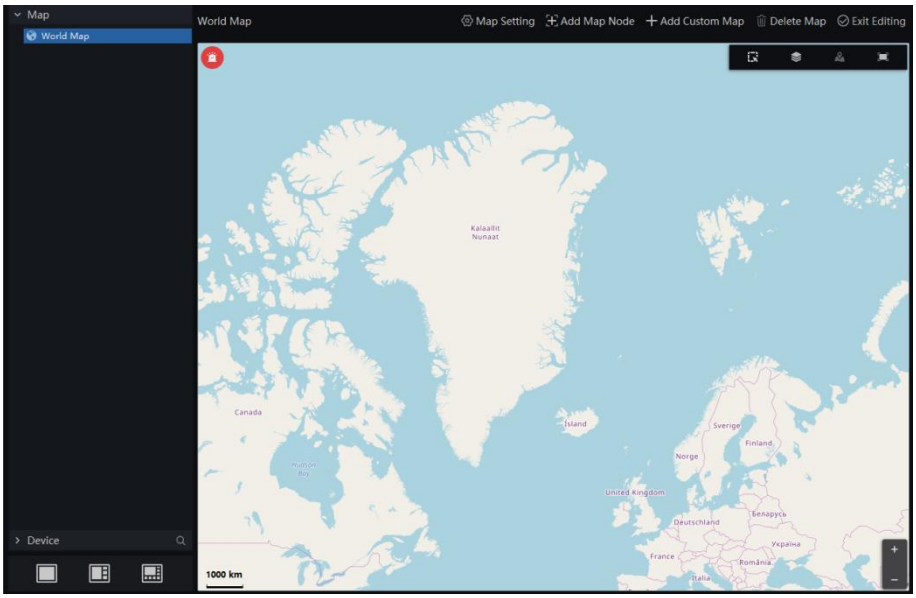
Step 1 Click , the interface will be shown as below.





Step 2 Input the map name and choose map path, we provide the open street map and custom map.

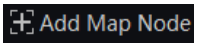
Figure 6-18 World map

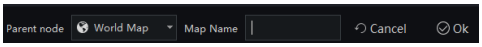


Step 3 Click “Confirm” to save the map.

NOTE

We can create the sub map below the world map. Roll and drag the world map, choose the detail area to create sub map.

Click 

to create map node, 

set the node, click OK to save the settings..

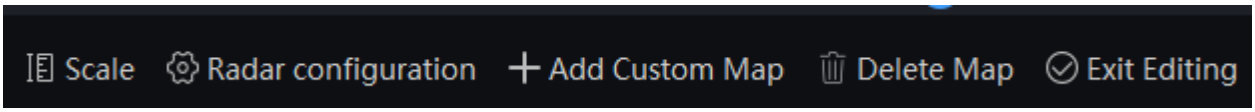
Drag cameras to map as actual deployment. The current live video can line to the camera of map.

6.6.2 Edit Map

Step 1 Click

ton enter the edit status.

Figure 6-19 Edit map



Step 2 Click scale, draw a line to act as scale, input the actual distance of line. The scale will display in the lower left corner of the map page.

Figure 6-20 Map setting

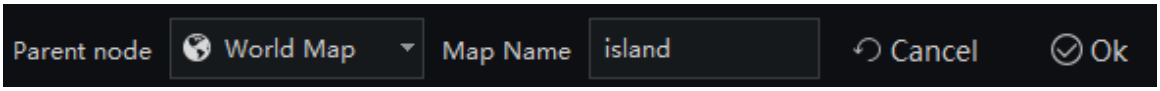


Figure 6-21 Add map node

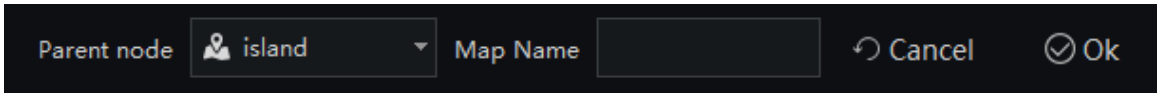


Figure 6-22 Custom Map

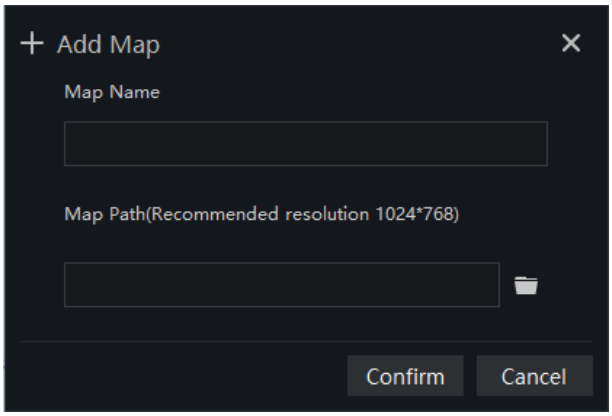
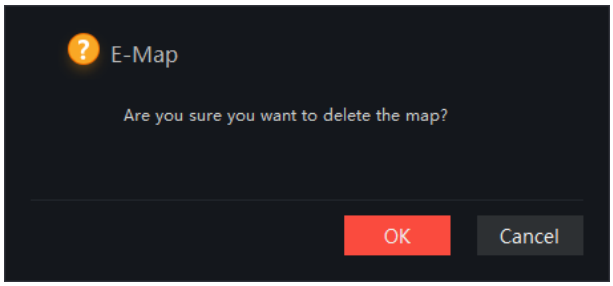
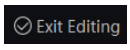


Figure 6-23 Delete map

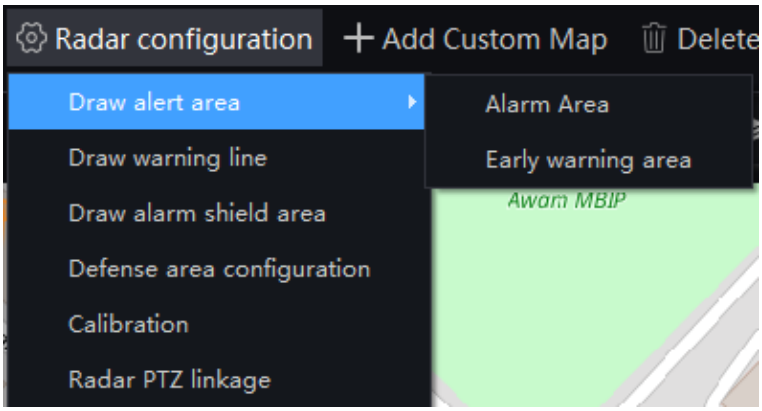


Step 3 Click  to save the edit.

Step 4 Click “Radar configuration” to configure the parameters of radar, as shown in Figure 6-24.

6.6.3 Edit Radar

Figure 6-24 Radar configuration



Draw alert area: alarm area, or early warning area; user use mouse to draw a polygon, left-click mouse to choose the points, right-click mouse to end drawing. Choose the area, right-click to choose delete the area.

Draw waring line: use left mouser to choose two points to draw a warning line.

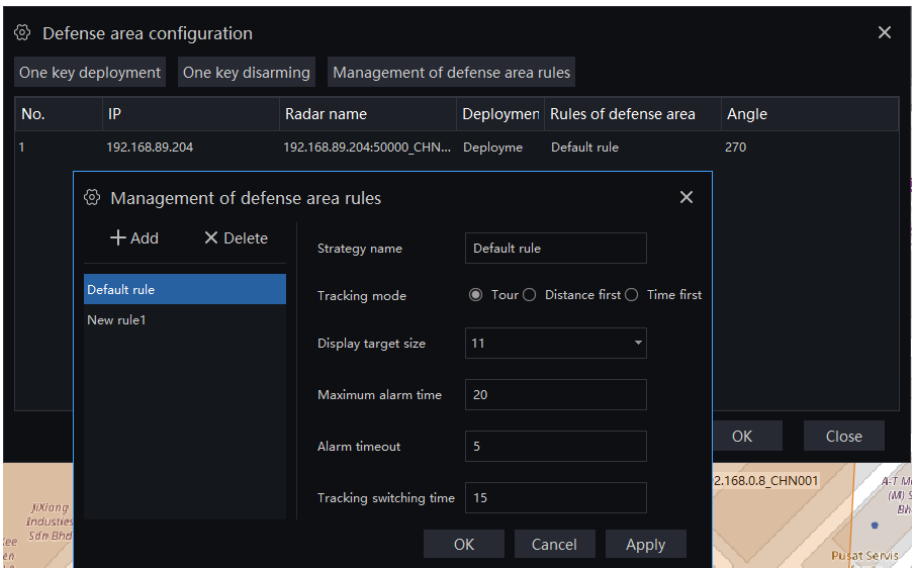
Draw shield area: draw the area to shield, it will do not sent alarm at that area.

Defense area configuration: choose the radar to set the angle of detecting (it depends on radars’ performance), deployment (deployment or disarming).

If user want to deploy the configuration quickly, he can click one key deployment to set the default setting, or click one key disarming to disarm.

Click “Management of defense area rules” to set it manually, as shown in Figure 6-25. Add or delete the rules, set the strategy name, choose tracking mode and display target size, set maximum alarm time/ alarm timeout/ tracking switching time.

Figure 6-25 Defense area configuration



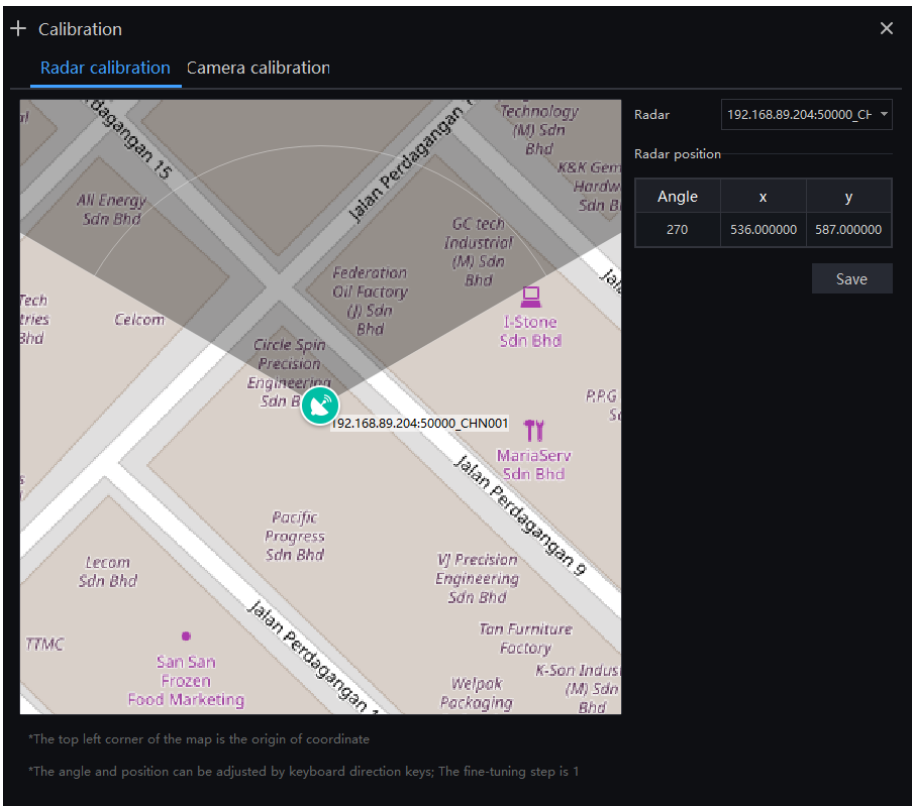
Click “OK” to save the defense area configuration.

Calibration: radar calibration and camera calibration.

Radar calibration

Radar calibration is shown as Figure 6-26.

Figure 6-26 Radar calibration



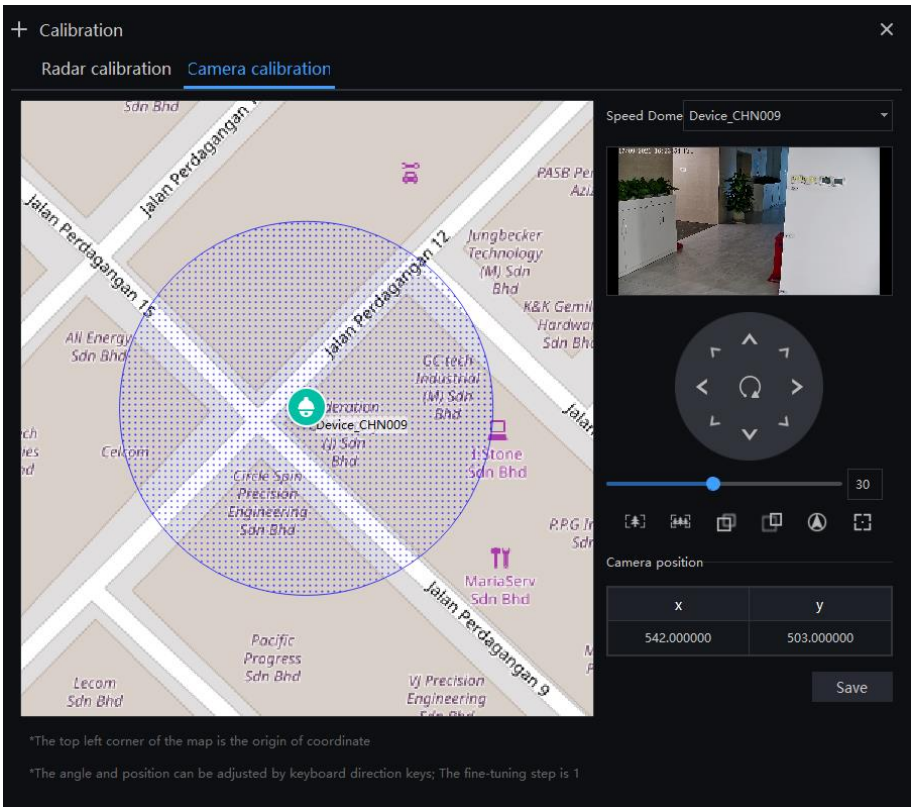
Choose the radar form drop list to calibrate.

Input the angle of radar detecting, the value of axis for radar on map (the coordinate origin is the top left of map, X and Y are the actual location of radar locating on map), you can move the icon of radar to the real position, and the platform can obtain the location automatically.

Camera calibration

Camera calibration is shown as Figure 6-27.

Figure 6-27 Camera calibration



Choose the linkage speed dome camera from drop down list, use PTZ keyboard to adjust the camera's view.

You can move the icon of camera to locate the place, or input the value of axis for camera on map directly (the coordinate origin is the top left of map, X and Y are the actual location of radar locating on map).

Click "Save" to set the camera calibration.

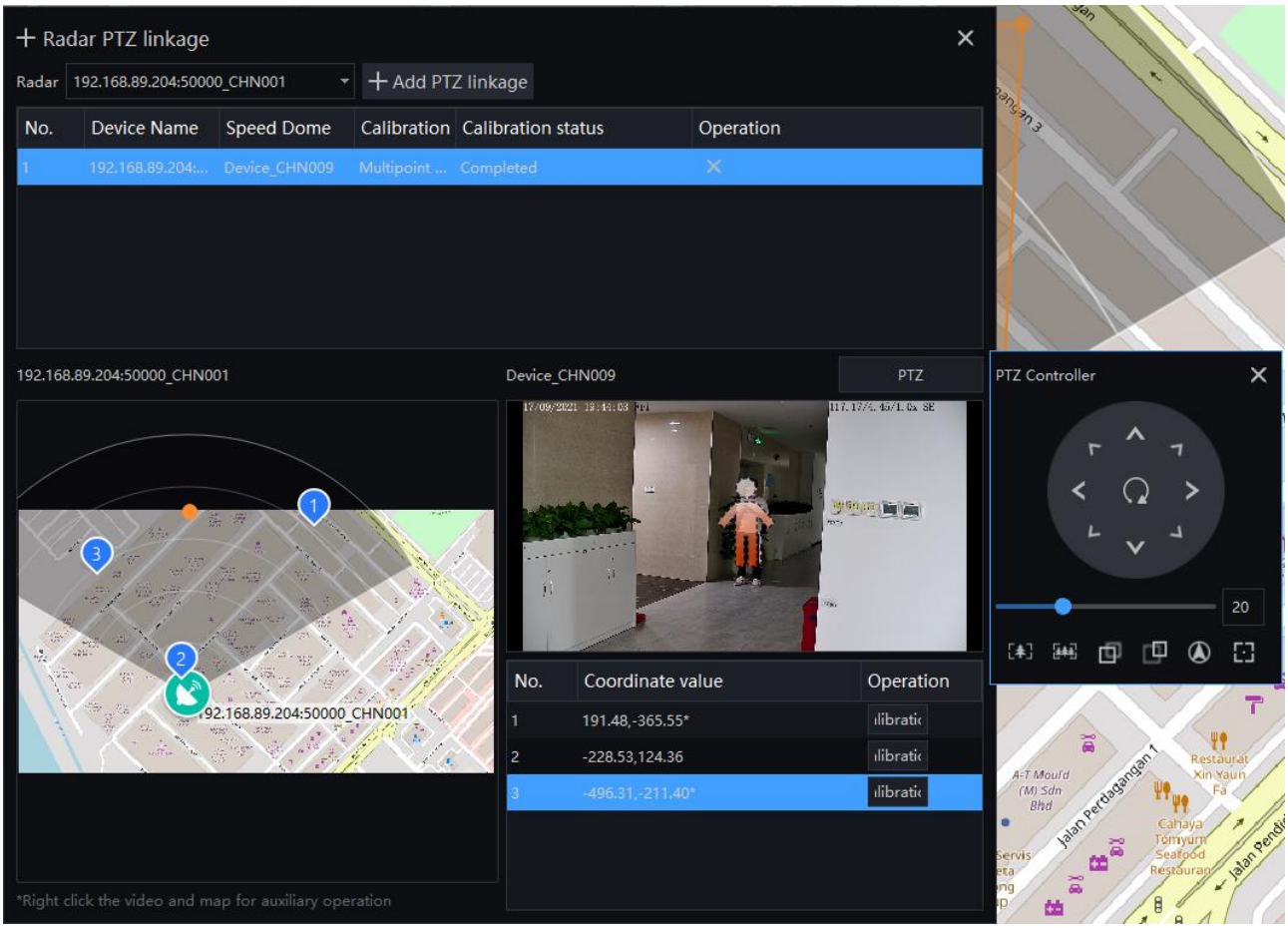
NOTE

The angle an position can be adjust by keyboard direction key; the fine-tuning step is 1.

Radar PTZ Linkage

The radar link with the speed dome, so that the radar detect the human or vehicle, the speed dome can track the object which is detected by radar quickly and accurately. The setting page is shown in Figure 6-28.

Figure 6-28 Radar PTZ linkage



Choose the radar, click “Add PTZ linkage” to choose one speed dome to link.

There three mapping points to map. Choose three points at the area of radar detection, these three point should include three scene of near, middle, far, and the acreage should be large enough.

Choose point 1, and one person to stand on the actual place, adjust the speed dome, so that the human icon is cover the person completely, click “Calibration” to calibrate point 1.

The other two points use the same steps of point 1 to company the three points calibrations.

6.6.4 Deploy Monitoring Site

Procedure：

Step 1 Choose the custom map, choose the map from the local folder.

Step 2 If cannot be edited, please click editing icon to switch to editable.

Step 3 Select the map for monitoring deployment

Step 4 Drag camera icon on the map with mouse, the monitoring direction and the size of area can also be controlled with mouse.

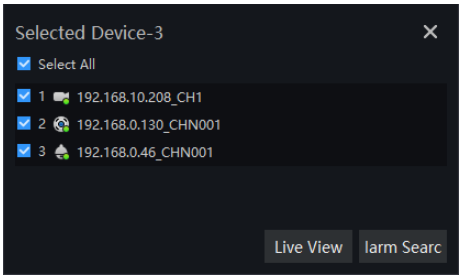
Step 5 Click live video, the map will show line of connecting the monitoring site to map.

Step 6 Click to zoom in or zoom out the map the focus the map correctly.

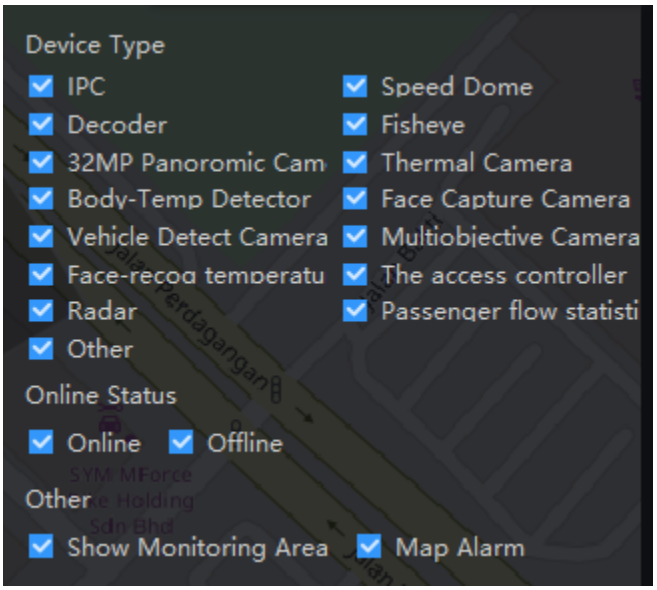
6.6.5 Quick Navigation

Step 1 Click at tar.

Step 2 Drag mouse to select the area, and the resulte shows on pop-up window, as shown in figure.



Step 3 Click to filter the devices.

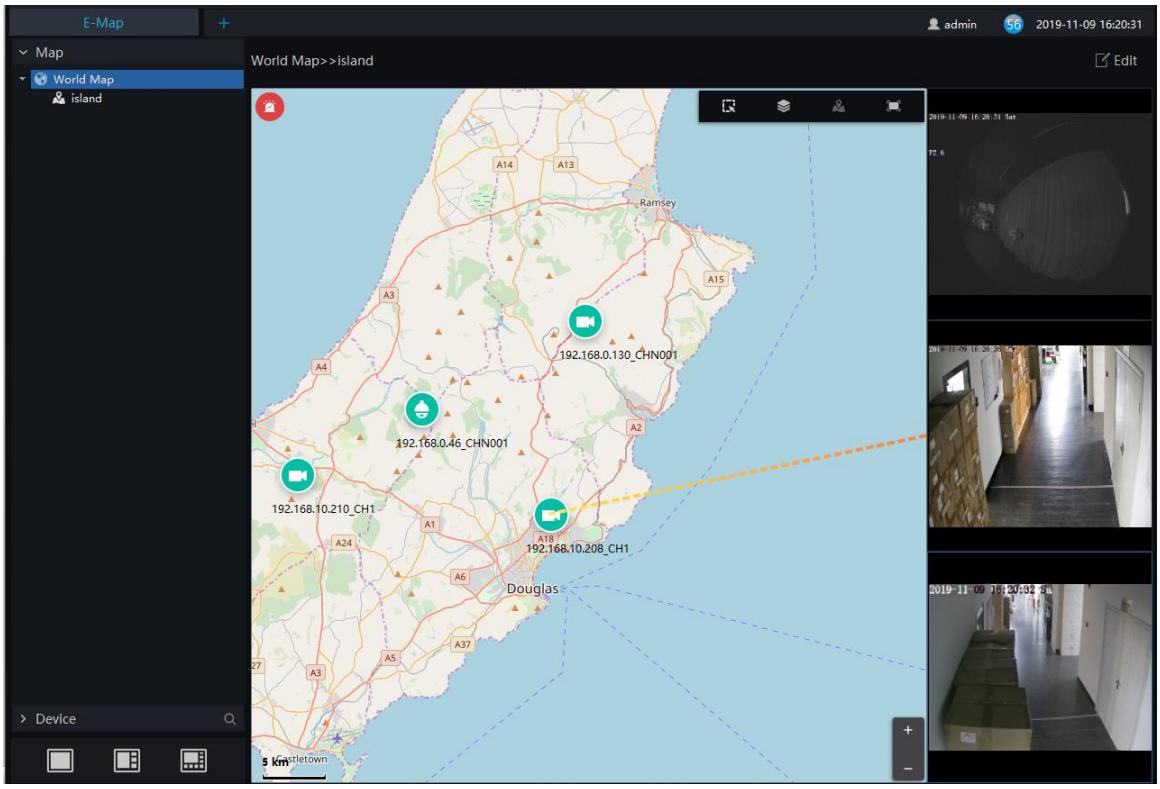


Step 4 If the alarm is generated, click to position the camera, and double click to view the live video.

Step 5 Click to view the alarm information.

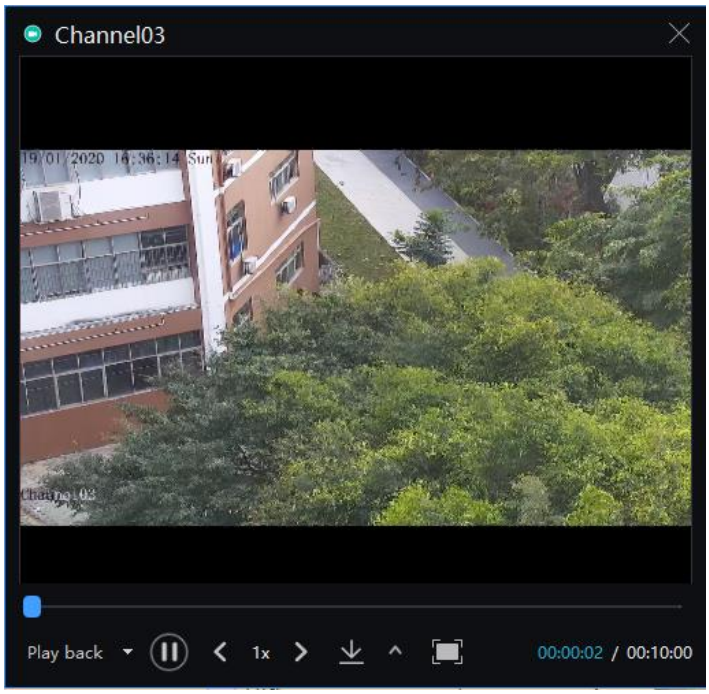
Step 6 Click to set the live video split screen.

Figure 6-29 Live video of map



Step 7 Click the shinning camera to view the live video or playback, as shown in Figure 6-30.

Figure 6-30 Live video of alarming



6.7 Report Statistics

At the interface of report statistics, the user can view the alarm statistics of group, devices, the online rate of devices is also reported.

On the main menu page, click to enter the detailed page, as shown in Figure 6-31.

Figure 6-31 Report statistics interface

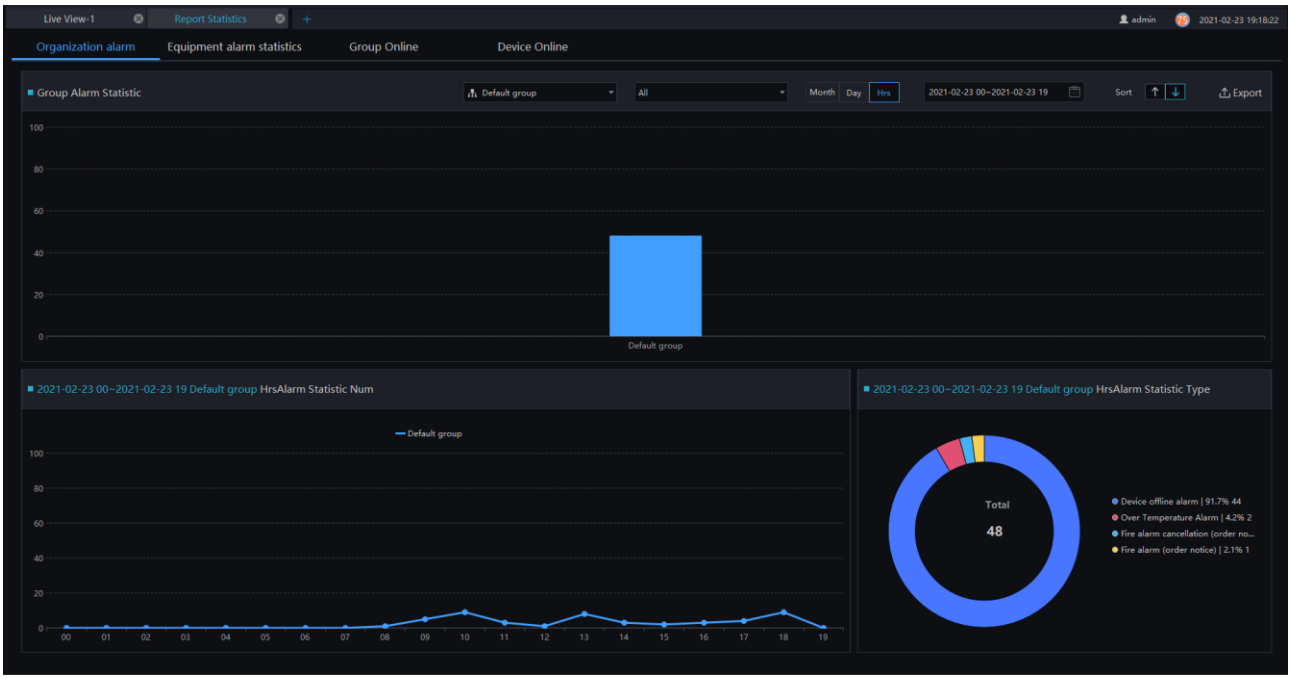
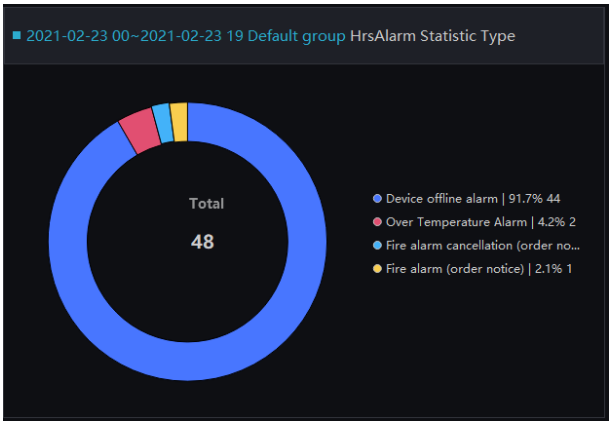


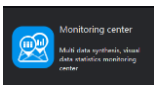
Figure 6-32 Alarm type statistics



There are three forms of visual display of data statistics, histograms, line charts and torus charts.

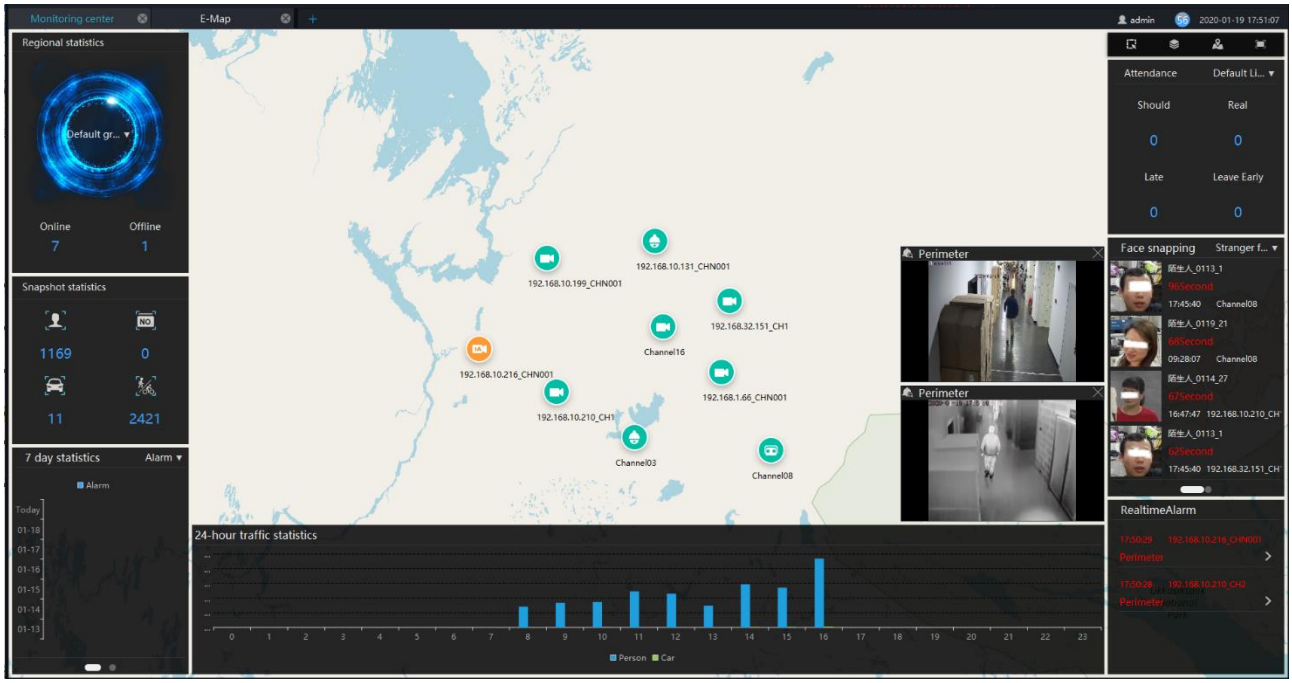
6.8 Monitoring Center

In the monitoring center, a visual comprehensive management platform. It can directly call the electronic map to view the online status of regional statistical equipment, such as regional statistics, snapshot statistics, 7 day statistics, 24-hour traffic statistics, attendance, face snapping, real time alarm, E-map, and alarming live video.

On the main menu page, click 

to enter the detailed page, as shown in Figure 6-33.

Figure 6-33 Monitoring Center



Regional statistics: Count the number of online and offline devices in different groups.

Snapshot statistics: devices under the organization, statistics faces, number of license plates, vehicles, number of person and vehicles snapshot.

7 days statistics: Pedestrian and vehicle traffic and alarm conditions within the 7 days. This statistic is updated regularly every day. It cannot be updated in real time. Automatically switch between pedestrian and alarm's statistics by default.

24-hour traffic statistics: statistics about the number of people and cars in a 24-hour period.

Attendance: statistics of attendance at the attendance points under the structure of the group.

Face snapping: Count the frequency of strangers and over-temperature capture. By default, two kinds of statistical data are automatically switched and the data is updated in real time.

Real time alarm: Display real-time alarm information. If the device is connected to the map, you can click to view the real-time video.

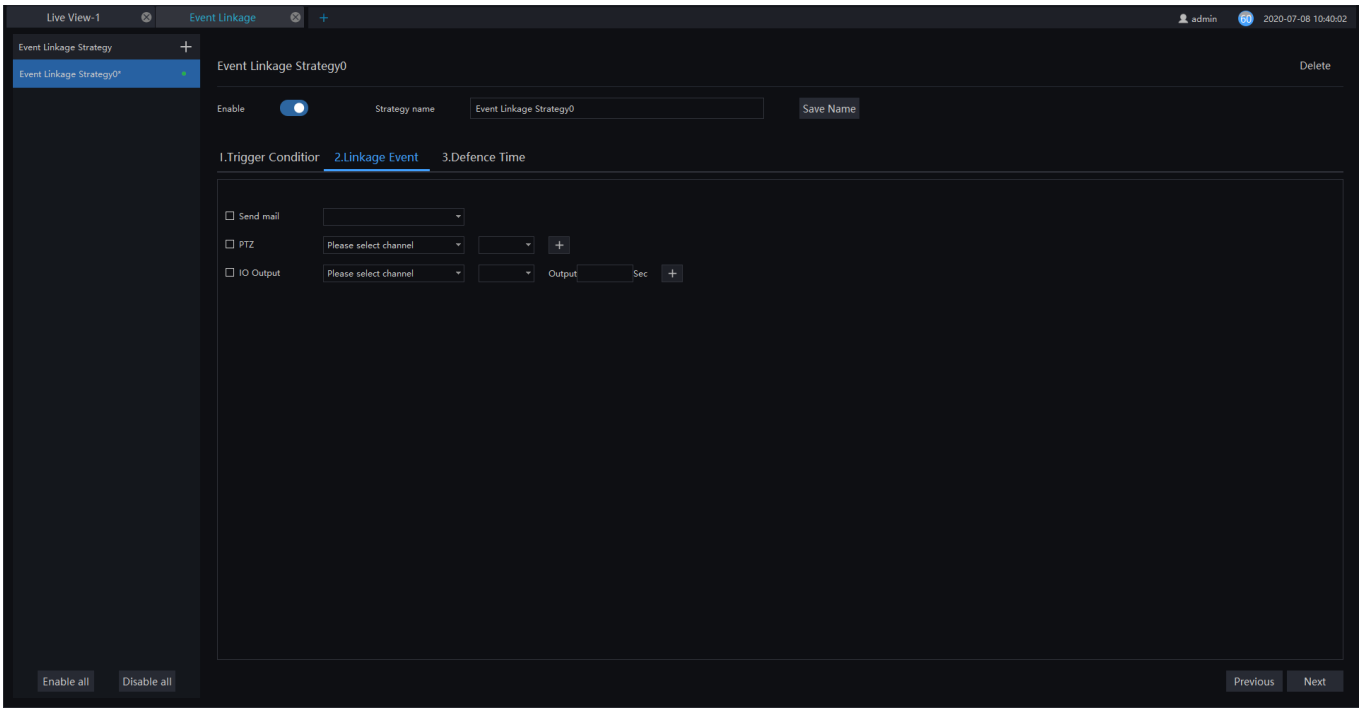
Realtime video: Switch the real-time alarm video of the electronic map device in real time.

Click the camera in the E-map can view the live video or playback.

6.9 Event Linkage

User can set the alarm linkage action at event linkage interface, such as trigger condition, linkage event(send email, PTZ, IO output), defense time, as shown in Figure 6-34.

Figure 6-34 Alarm Linkage



Step 1 Click to add the new event linkage strategy.

Step 2 Enable the strategy, set the name of strategy.

Step 3 Choose trigger type(alarm event or timing), as shown in Figure 6-35.

Step 4 Timing, user need to set trigger time or tick repeat.

Step 5 Alarm event, user need to choose event and alarm devices, as shown in Figure 6-36.

Step 6 Click “Next” to set linkage event, choose one or more to alarm, as shown in Figure 6-37.

Step 7 Click “Next” to set defense time.

Step 8 Click “ Apply” to save the setting.

Figure 6-35 Trigger condition

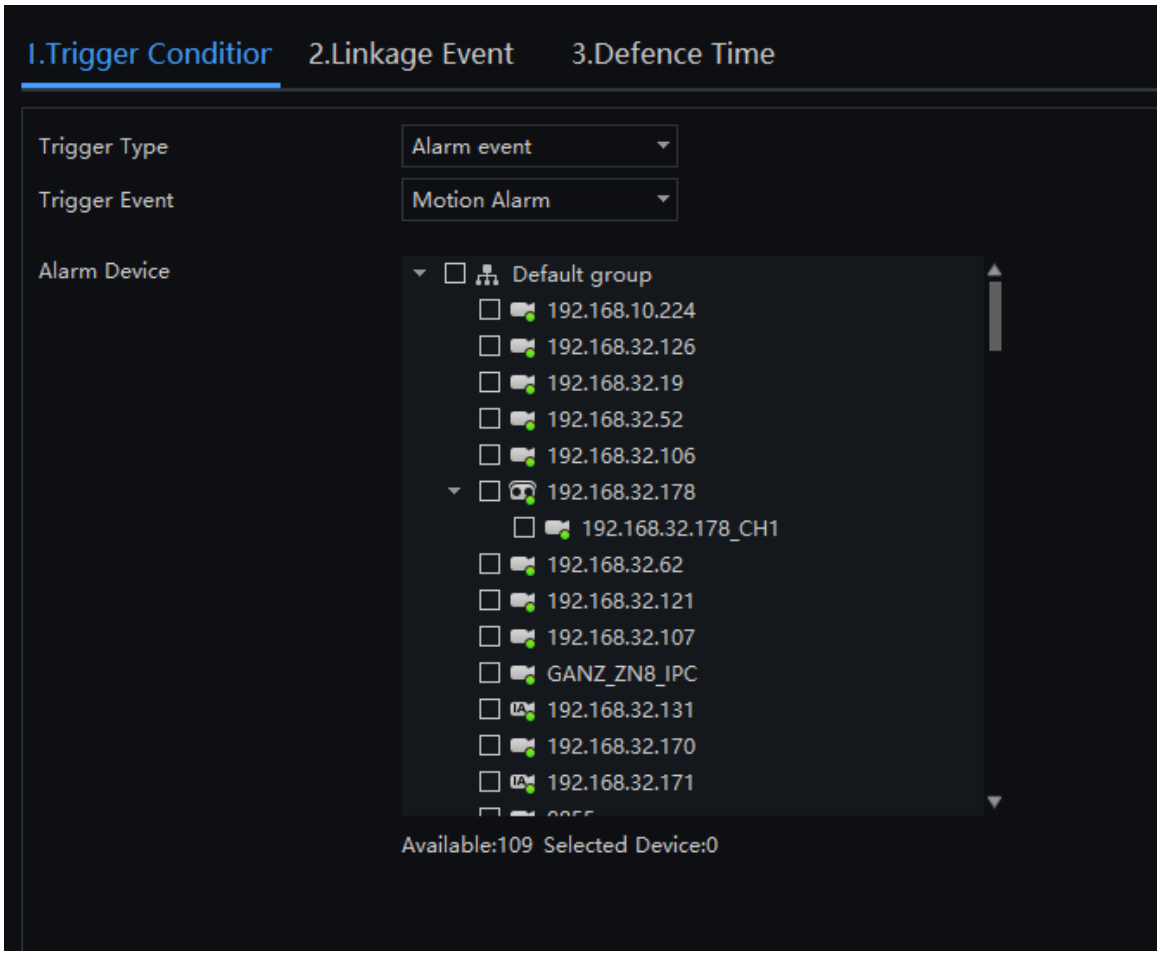


Figure 6-36 Linkage event

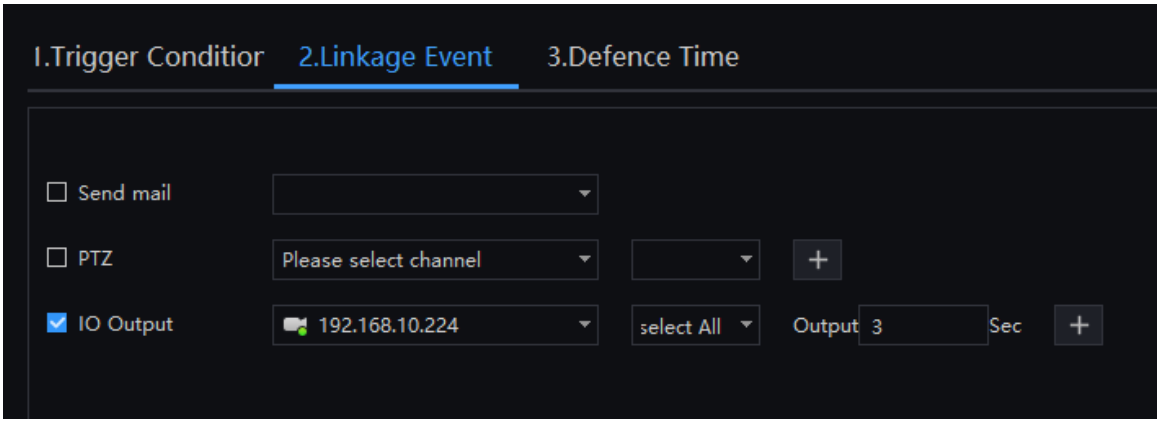
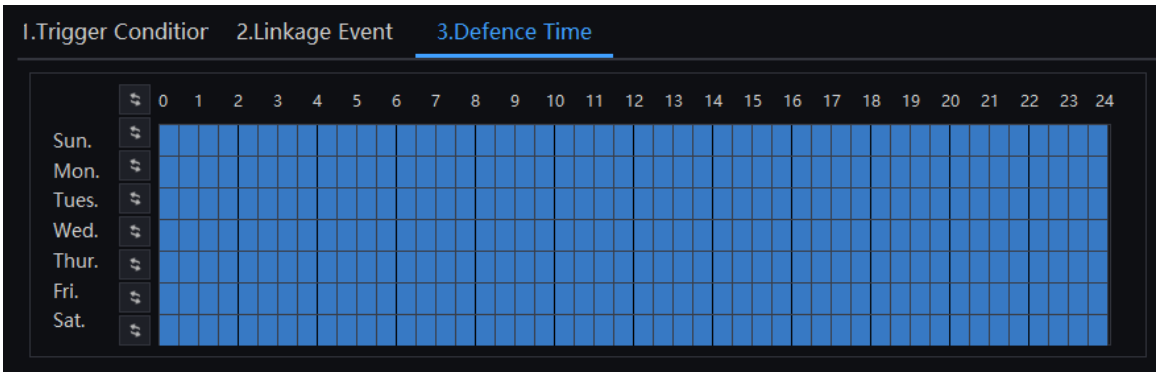


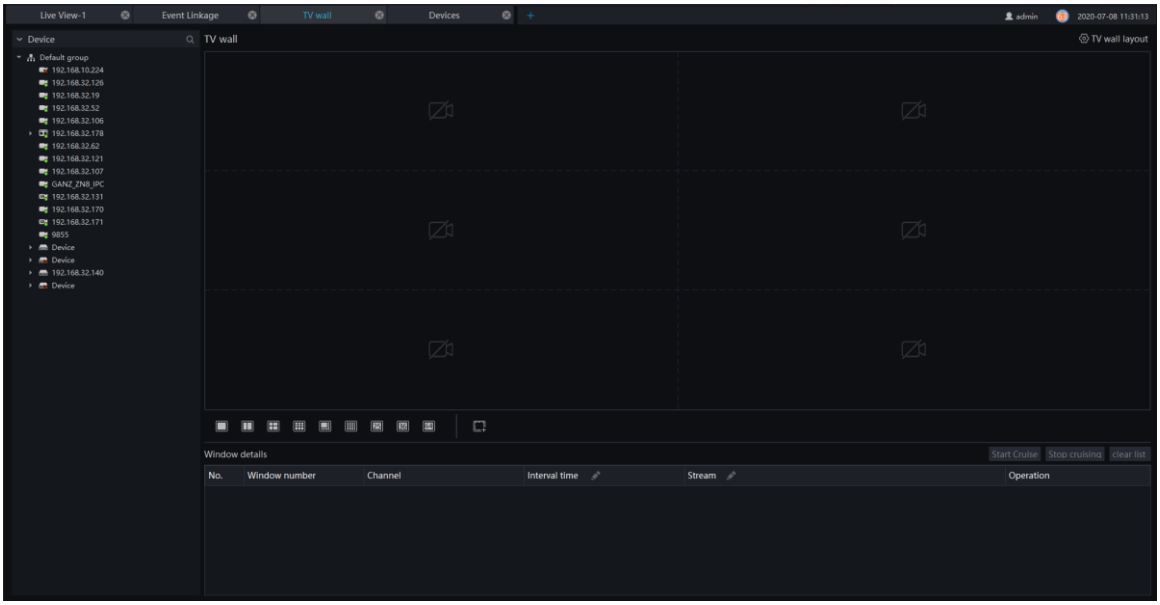
Figure 6-37 Defense time



6.10 **TV Wall**

The TV wall can be connected to the decoder by using a decoder, and the TV wall can be connected by VGA or HDMI. The selected channel will directly have a decoder to directly push the stream to play live video, as shown in Figure 6-38.

Figure 6-38 TV wall

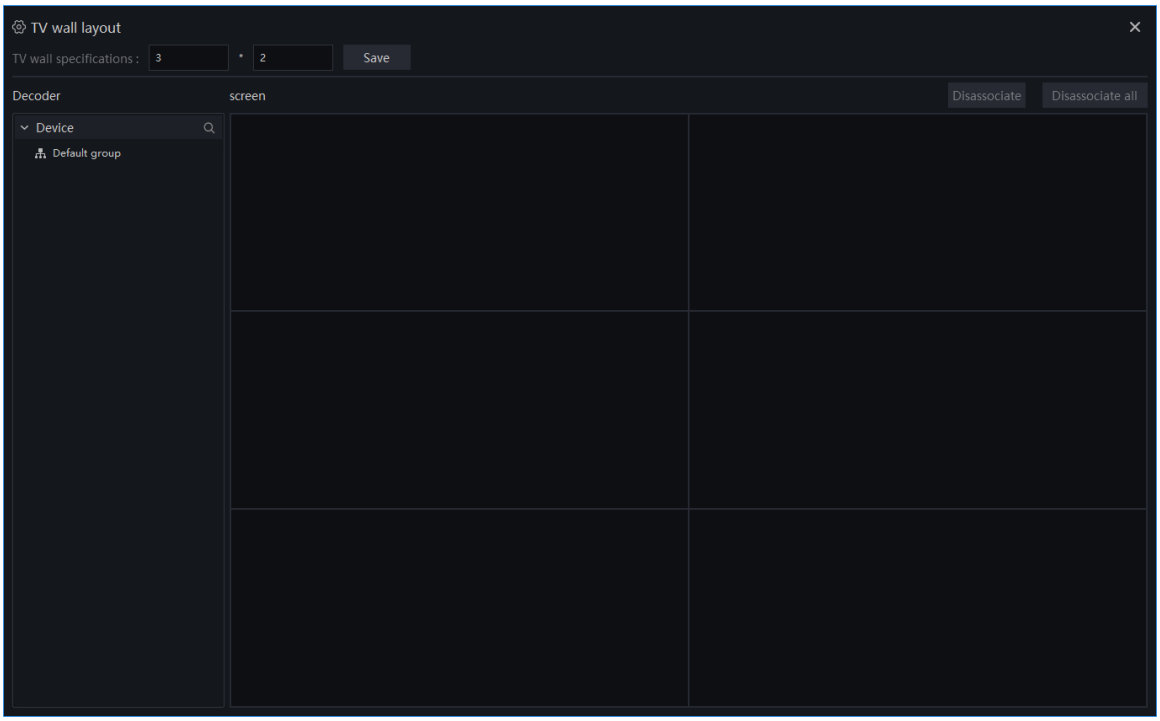


Step 1 Click on the upper right corner of the TV wall interface to set the TV wall layout. The default layout is 2*2.

Step 2 Drag the online channel and the prompt "Please bind the decoder output port first" appears.

Step 3 Set up the interface of the interface device, and you can watch the live video directly on the TV wall after completion.

Figure 6-39 TV wall layout



The TV wall supports auto sequence play video.

7 Configuration Maintenance

7.1 Devices

At the device management page, you can add devices (such as IPC, DVR, NVR) through automatically searching, manually adding or batch importing. The platform supports the following device types: IPC, DVR, NVR, thermal imaging camera, face capture camera, human thermometer devices and so on.

On the Main menu page, click , enter the detailed page, as shown in Figure 7-1

Figure 7-1 Device Management interface

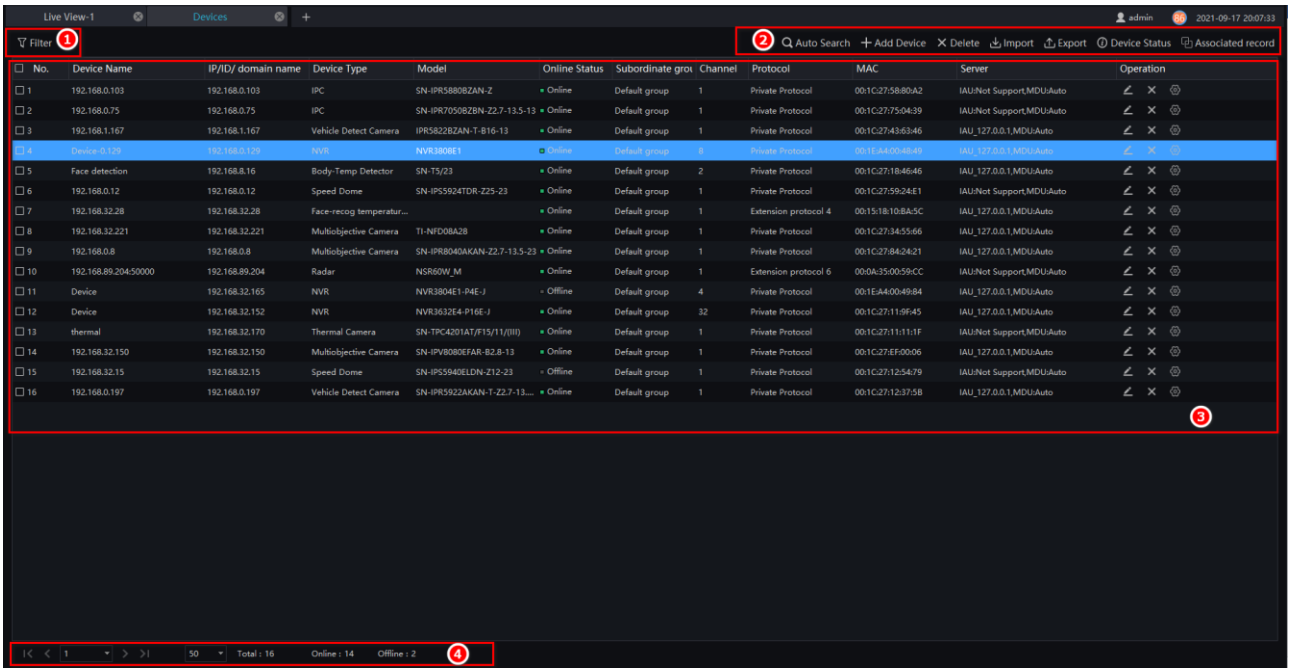


Table 7-1 Device Management

No.	Function	Description
1	Filter	Filter the device by setting device type, online status and device name.
2	Operation	Search, add, delete, export, import devices, Status of All devices, Associated record(when the camera is connected to platform and NVR, the NVR is connected to platform too, the platform system can transfer recording from NVR immediately to act as the IP cameras' recording).
3	Device information display	Details of device, operating device: edit, delete device, quickly enter to device configuration.

No.	Function	Description
4	Page	Device display page, next page, quantity.

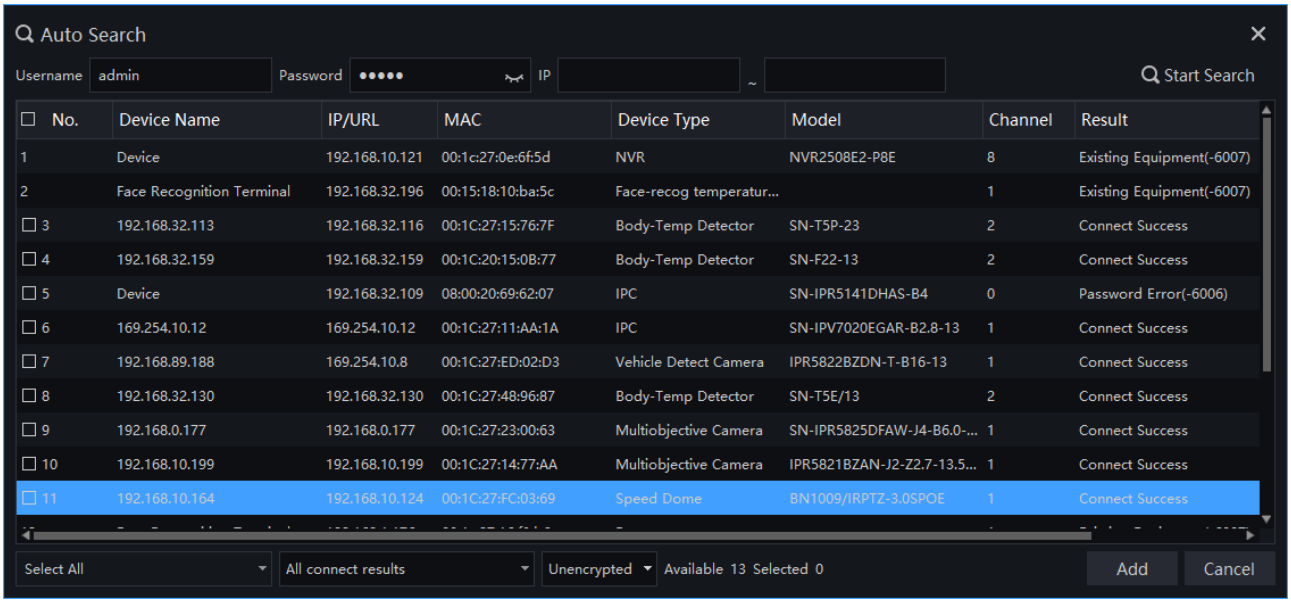
7.1.1 Auto Search

The device and the server are on the same network segment.

Procedure:

Step 1 On device management page click Auto Search enter auto search page ,as shown in Figure 7-2.

Figure 7-2 Auto search page



Step 2 Input the user name and password of the device and set the IP address range to filter.

Step 3 Click “Start Search”, the device on the same network as the client will be automatically searched and the search results will be displayed on the current page.

Step 4 Tick the number of the device and click “Add”. After finished, the device is displayed in the device list.

TIP

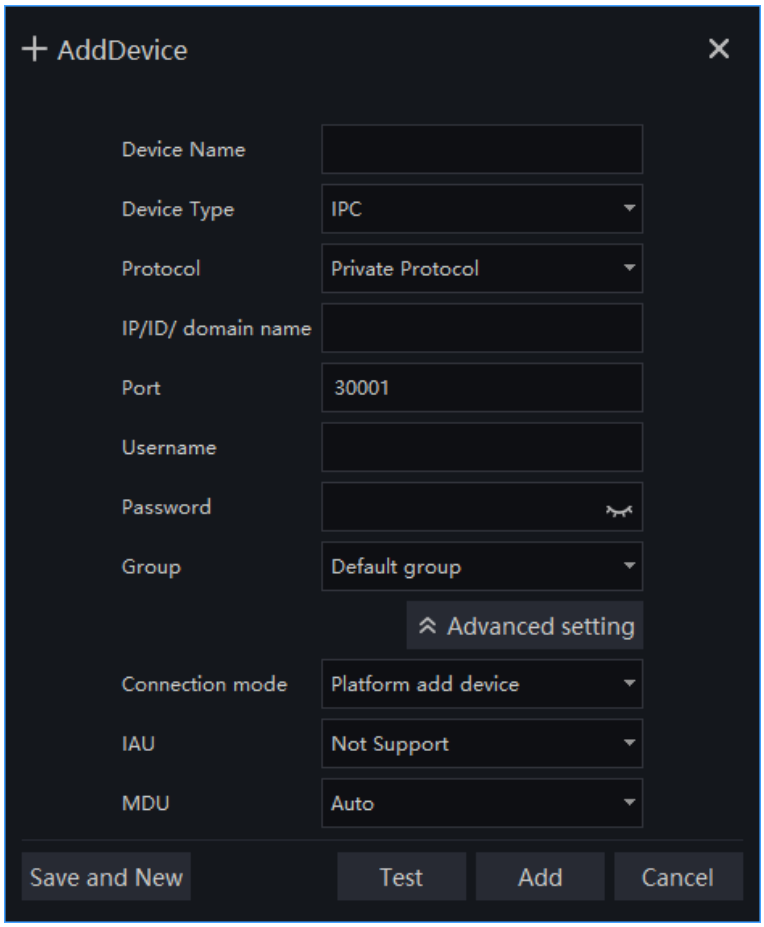
All devices can be added to list, but some device is failed to connect, it may be incorrect password or some error settings, modify the settings of device manually.

7.1.2 Manual Add

Procedure:

Step 1 Click Add Device at device management page, get into manual add device page, as shown in Figure 7-3

Figure 7-3 Manually add device page

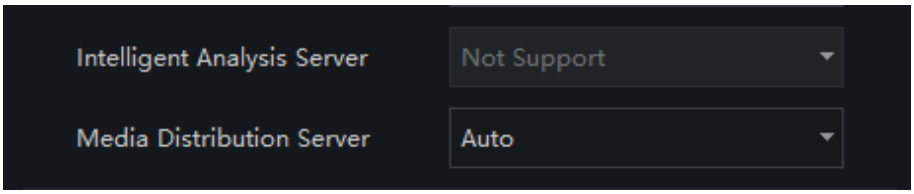


CAUTION

The intelligent analysis server does not support auto, only supports cameras with face detection;

The media distribution server supports automatic, such as multiple media distribution servers for load balancing.

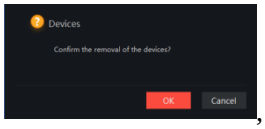
Figure 7-4 Server associated



Step 2 Input the device name, select the device type, input the IP address/user name/password, and select group

Step 3 Click “test” to check your settings, click “Save and New”

Step 4 Pop-up window show “Add successfully”, device is displayed in the device management page (device details are displaying on the page at the same time).

Step 5 Delete the cameras: tick the No of cameras, click “Delete” to show 

, click “ OK ” to delete the cameras.

7.1.3 Export and Import Device

Procedure：

Step 1 Click “Export”.

Step 2 Click “Export Template”, edit information at template page.

Step 3 Click “Import”.

Step 4 Select files to be imported , click “Save” , import device successfully.

--End

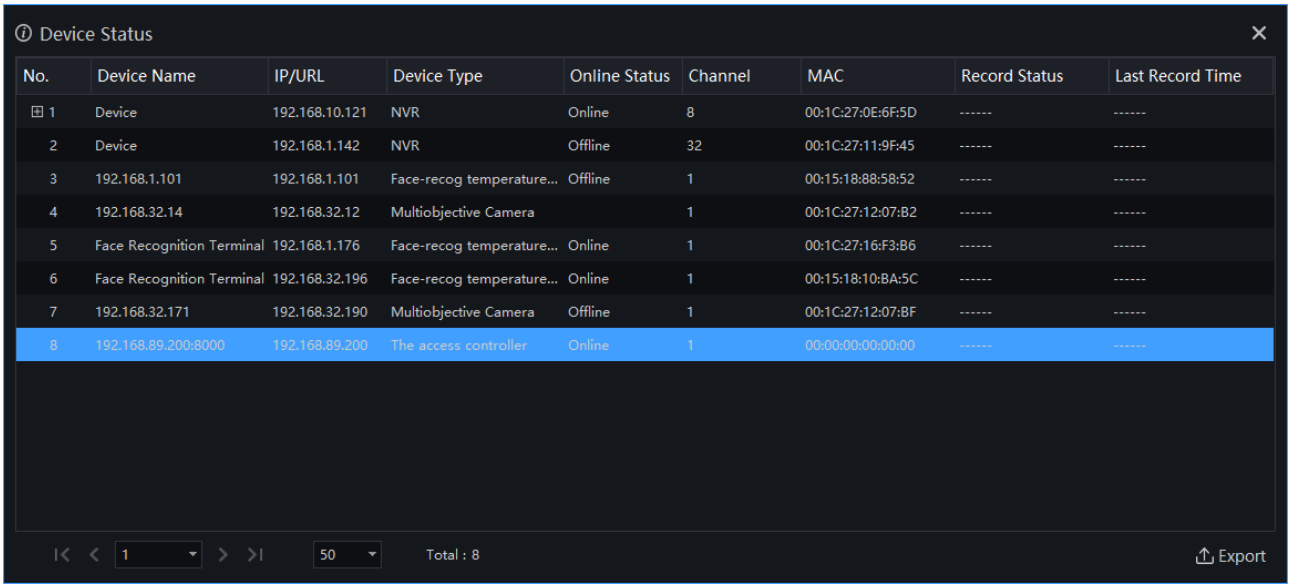
7.1.4 Device Status

Procedure：

Step 1 Click “Device Status”.

Step 2 The pop-up window show the status of devices as shown in Figure 7-5.

Figure 7-5 Device Status



Step 3 Click “Export”.

Step 4 Set the save folder to save the status log.

--End

7.2 Device Config

At the interface of device configuration, you can view and set the parameter of the front-end device, such as bit rate parameters, motion detection parameters, OSD parameters, image parameters, thermal parameters, etc. For more device's configuration, click on "Link Web" to enter the device.

The configuration function is related to the firmware version of the device. Please refer to the actual situation.

On the main menu page, click to enter the detailed page, as shown in Figure 7-6.

Figure 7-6 Device configuration interface

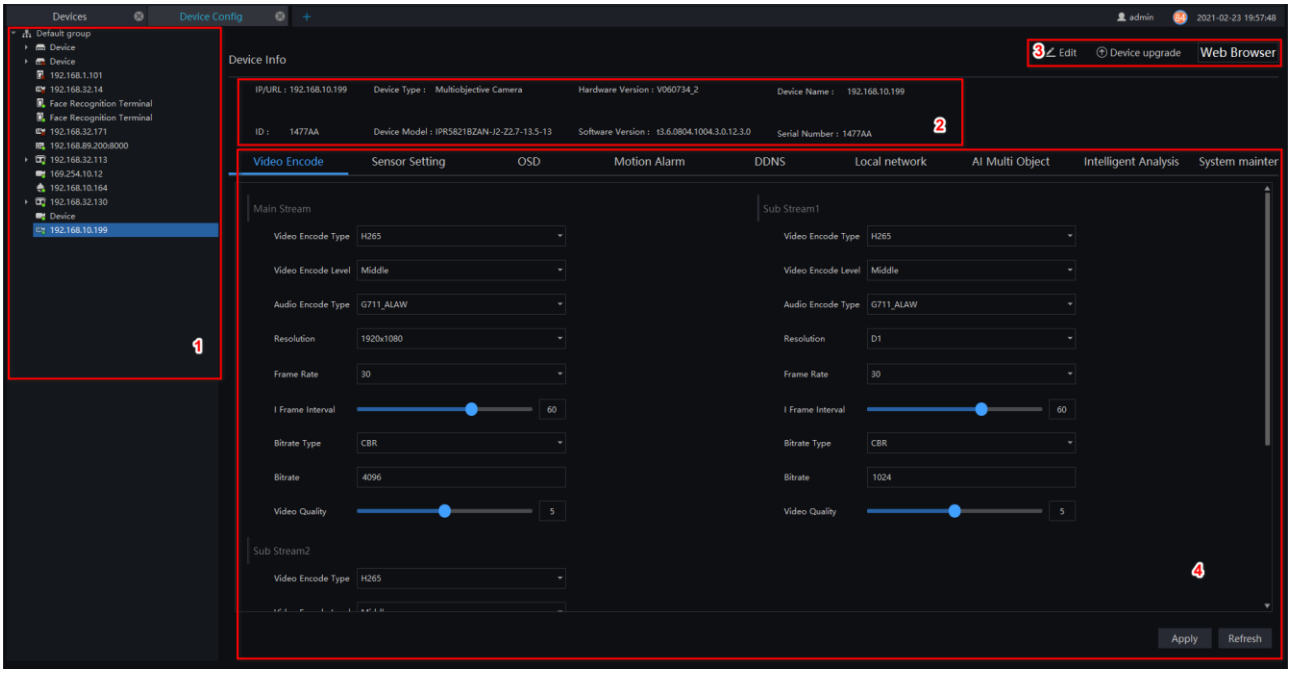


Table 7-2 Device configuration

No.	Function	Description
1	Organization structure	Show organizational structure information
2	Basic Information	Show basic information
3	Edit / Device upgrade/ Link Web	Edit: edit the device information Device upgrade: click to upgrade the device immediately. Link web: user can login to the device's web directly.
4	Device configuration information	Show and set the device configuration information, click "Apply" to save the information.
--	Panel settings	Set UI parameters, temperature measurement mode, temperature parameters, panel prompt tone and picture setting, and so on.

No.	Function	Description
--	Access control conditions	Set unlocking conditions, wiegand setup.

Figure 7-7 Panel settings

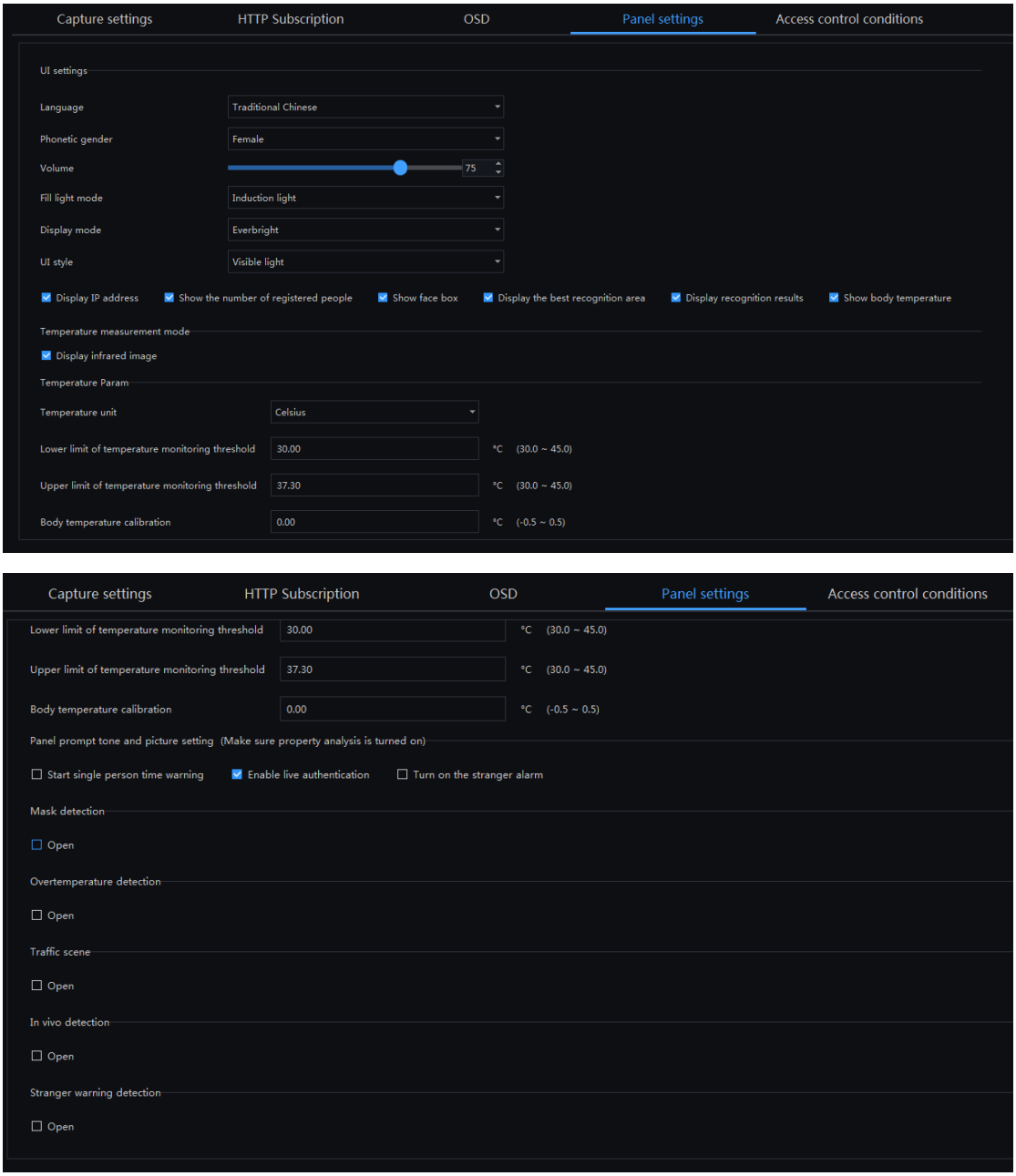
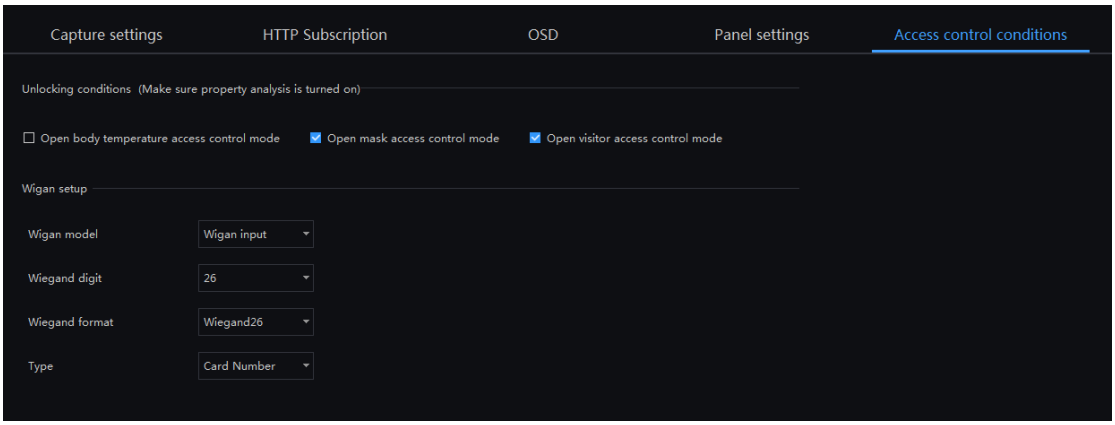


Figure 7-8 Access control conditions



7.3 Group

For surveillance of a certain scale, an group tree can be created to run a hierarchical management on devices, the system default setting is a root group which supports 6 layers.

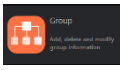
On the main menu page, click  to enter detailed page, as shown in Figure 7-9.

Figure 7-9 Organization interface

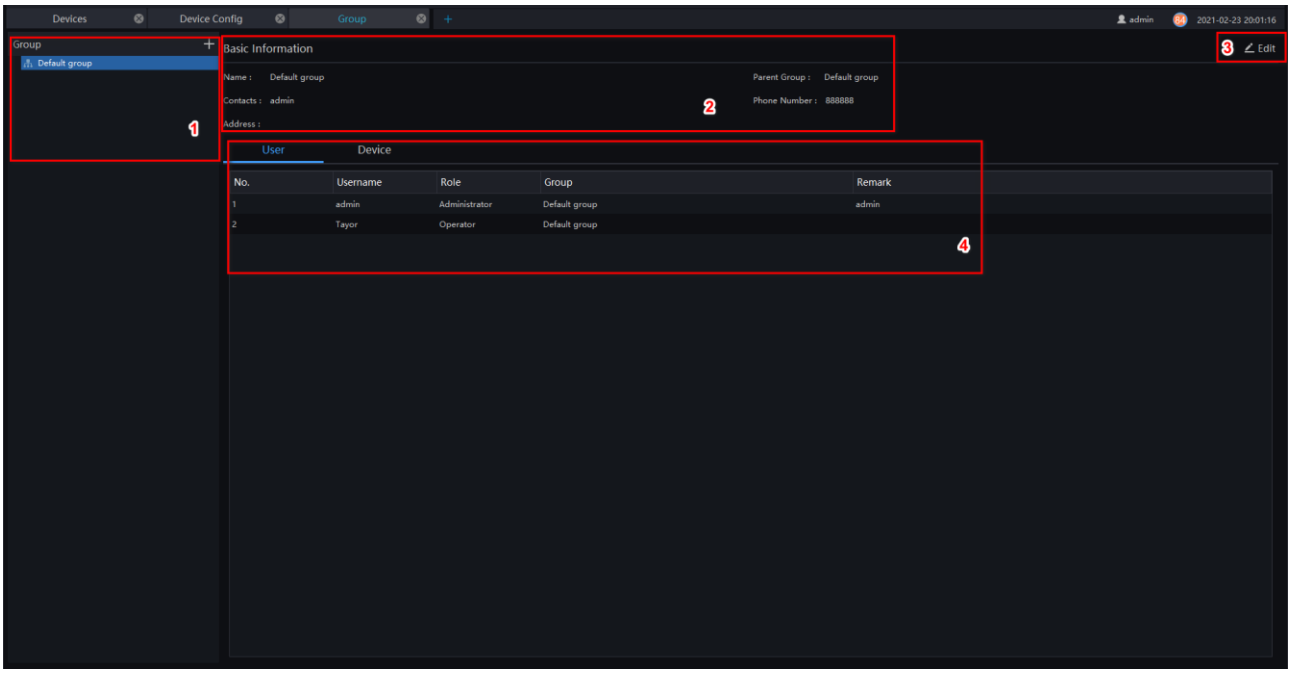


Table 7-3 Organization

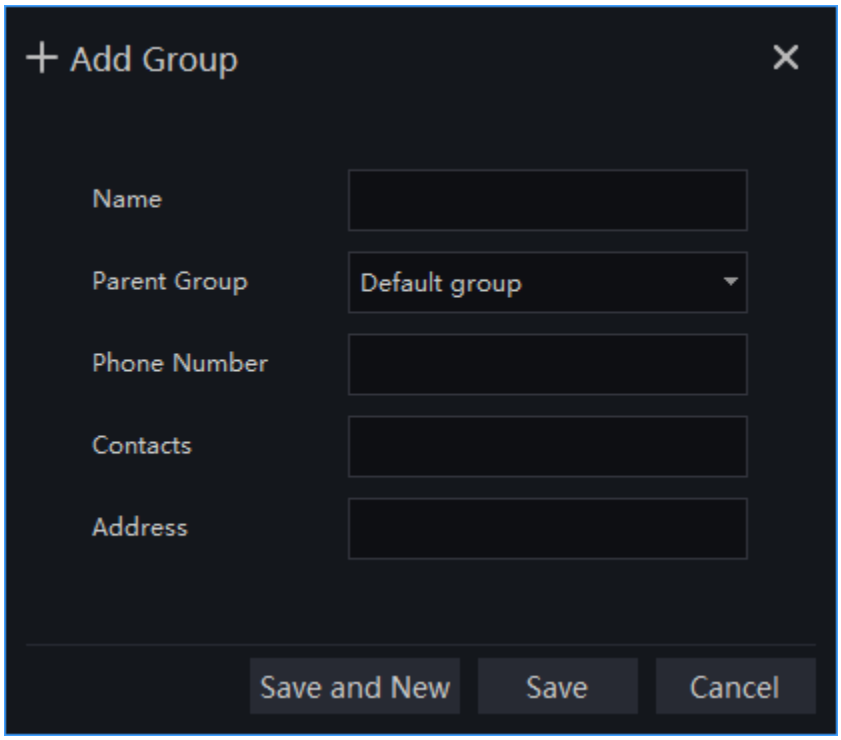
No.	Function	Description
1	Group	Display group tree, new group can be added by clicking +
2	Basic Information	Display basic information of device or group
3	Edit	Basic information can be edited by clicking “Edit”
4	Display area of user or device	Display information of user or device

7.3.1 Add Group

Procedure:

Step 1 Click the add icon to add a new group. The screen shows as Figure 7-10 .

Figure 7-10 Add group



Step 2 Input name, phone number, contacts and address. Choose the parent organization

Step 3 Click “Save and New” to save and build a new one at the same time.

Step 4 Click “Save” to save and finish the adding.

7.4 Log

At interface of log, users can query operation log, server log, system log.

On the main menu page, click to enter the detailed page, as shown in Figure 7-11.

Figure 7-11 Log management interface

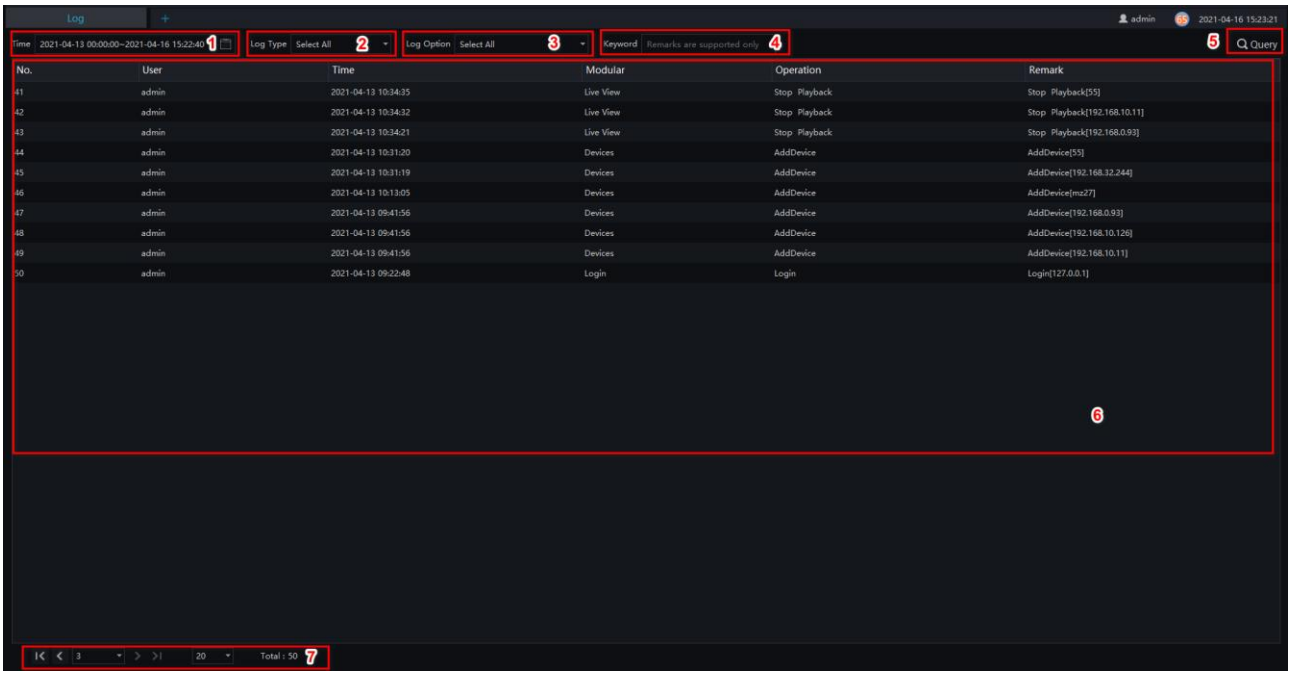


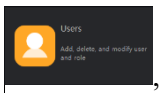
Table 7-4 Log management

No.	Functions	Description
1	Time	Set the start and end time of querying
2	Log types	The default is to select all. Other types have mobile log, operation logs, system logs and service log.
3	Log options	The default is to select all. There are many options to select, and more details logs can be chosen alone, more details please refer to actual product.
4	Keyword	Set keyword to query quickly.
5	Query	Search logs according to the previous settings
6	The query show	Query result display area.
7	Interface display	Show the current page of logs, and the page displays the number of logs, switch to next page.

7.5 User

At the user page, you can add users /modify user privilege/search/delete user through user management feature

System has default administer and operator administer has all the privileges, operator has partial privileges

On the main menu page, Click 

, go to detailed page as shown in Figure 7-12.

Figure 7-12 User management interface

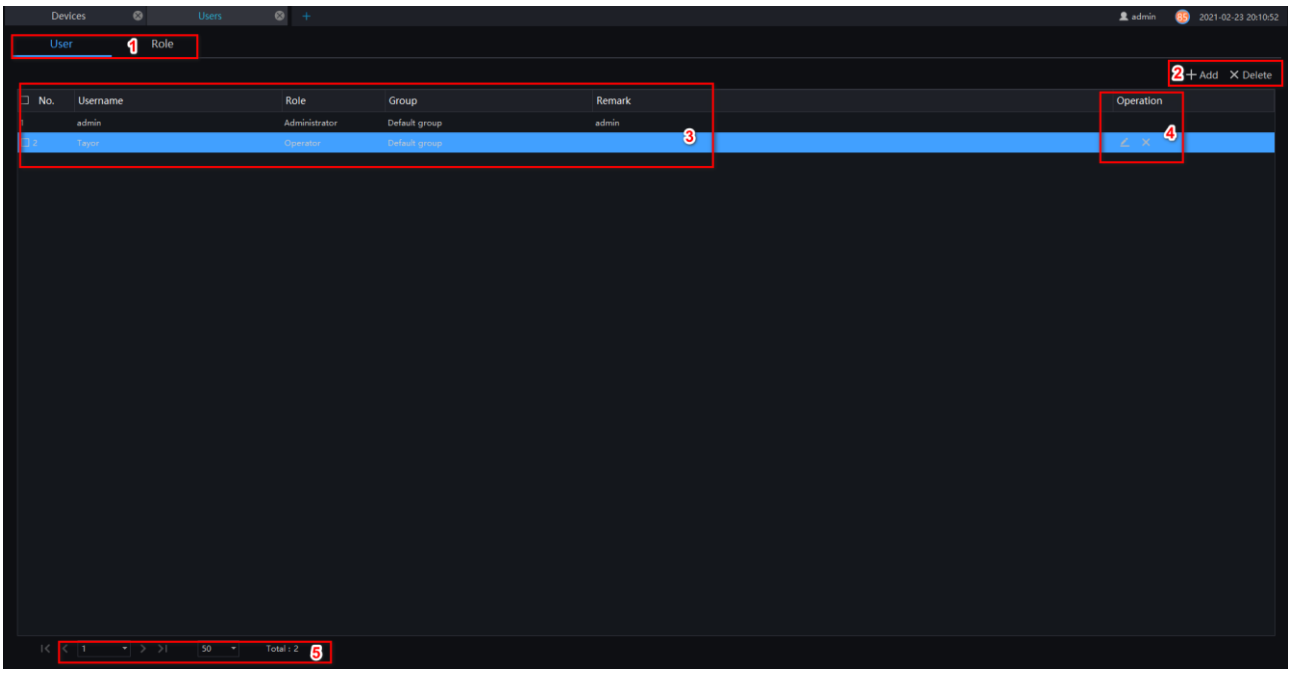


Table 7-5 User management

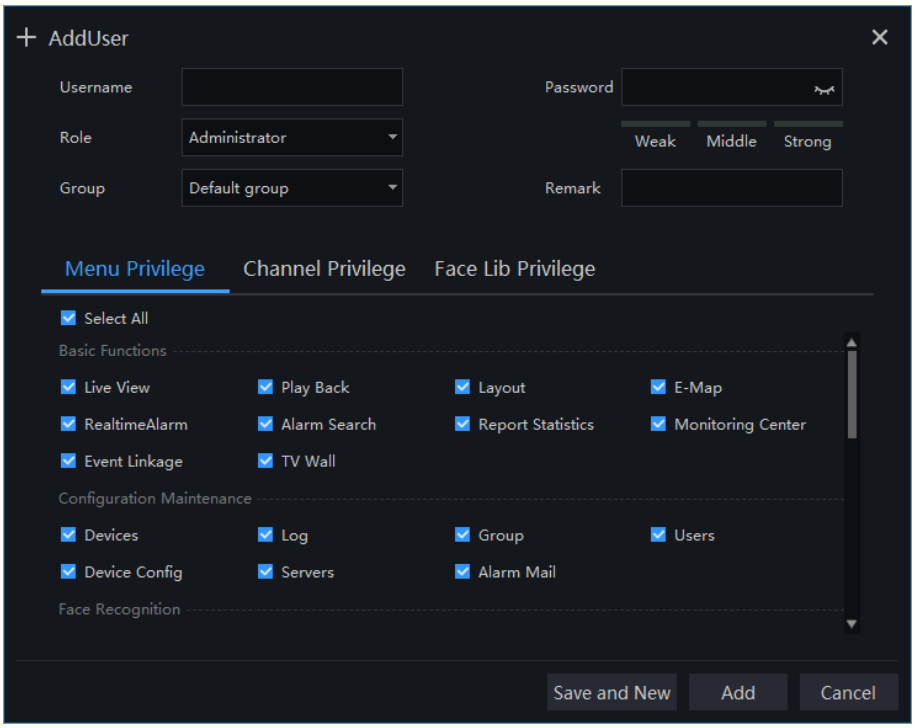
No.	Function	Description
1	User and role	Choose user or role to operate.
2	Add/Delete	Add/delete user or role.
3	Display area	Display user/role information
4	Edit/Delete	Click edit/delete icon to operate current roles or users
5	Interface display	Show the current page of user/role, and the page displays the number of users, switch to next page.

7.5.1 Add User

Procedure:

Step 1 At the user management interface, click “Add” to add user.

Figure 7-13 Add User



Step 2 Input user name, try to set it with numbers and English characters. User name can be set “Administrator” or “Operator”.

Step 3 Set login password and group.

Step 4 Select menu privilege, channel privilege and face library privilege (The default is all selected).

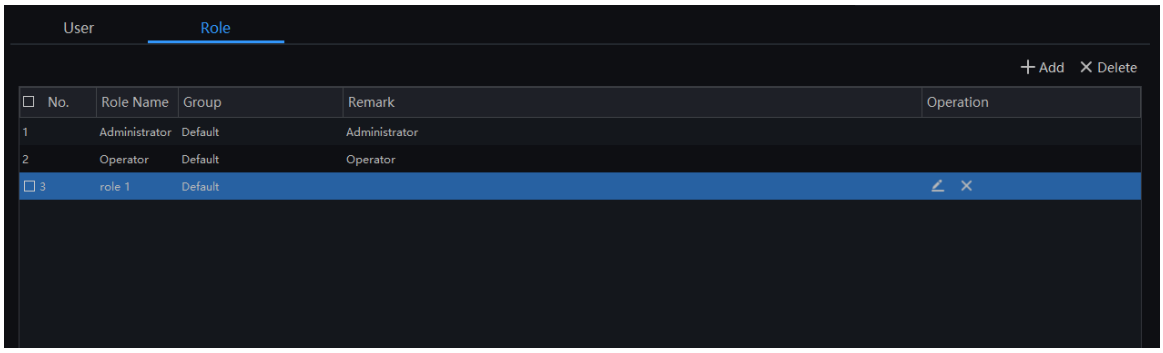
Step 5 Click “Save and New” or “Add” to save and add user, it will pop-up “Add successfully”.

7.5.2 Add Role

Procedure：

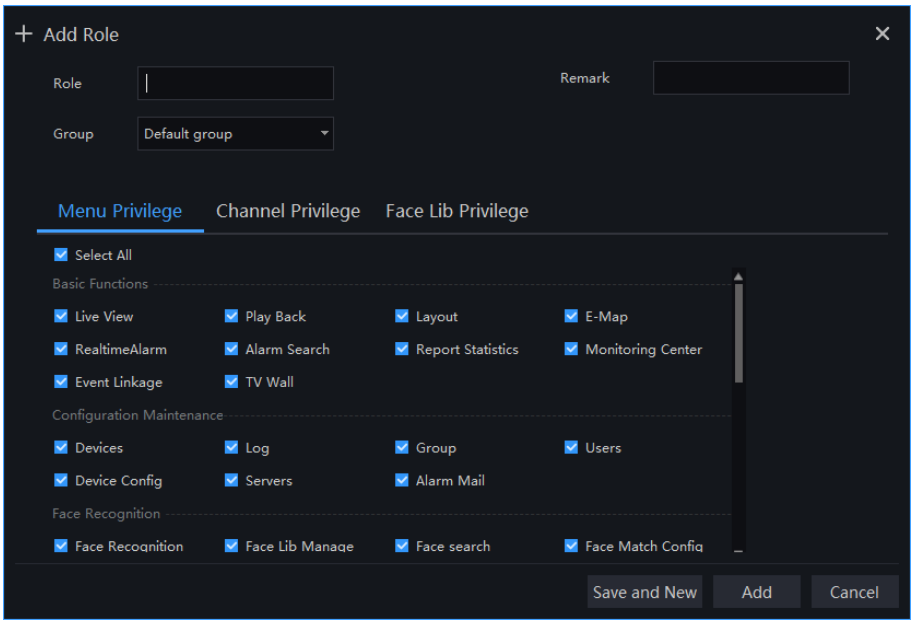
Step 1 At the user management interface, click “Role Name” to get the below interface

Figure 7-14 Role interface



Step 2 Click “Add”, input role name, select organization, shown as figure 7-4.

Figure 7-15 Add role



Step 3 Choose menu privileges, channel privilege, face library privilege.

Step 4 Click “Save and New” to save current settings. Click “Add” to add user successfully.

Step 5 Added role will display in the interface, click “Edit” or “Delete” icon to operate roles.

7.6 Servers

At the interface of service, you can view the running status, performance data, and parameter configuration of the server to understand better the server running data and better maintain the system.

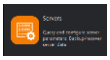
On the main menu page, click  to enter the detailed page, as shown in Figure 7-16.

Figure 7-16 Servers interface

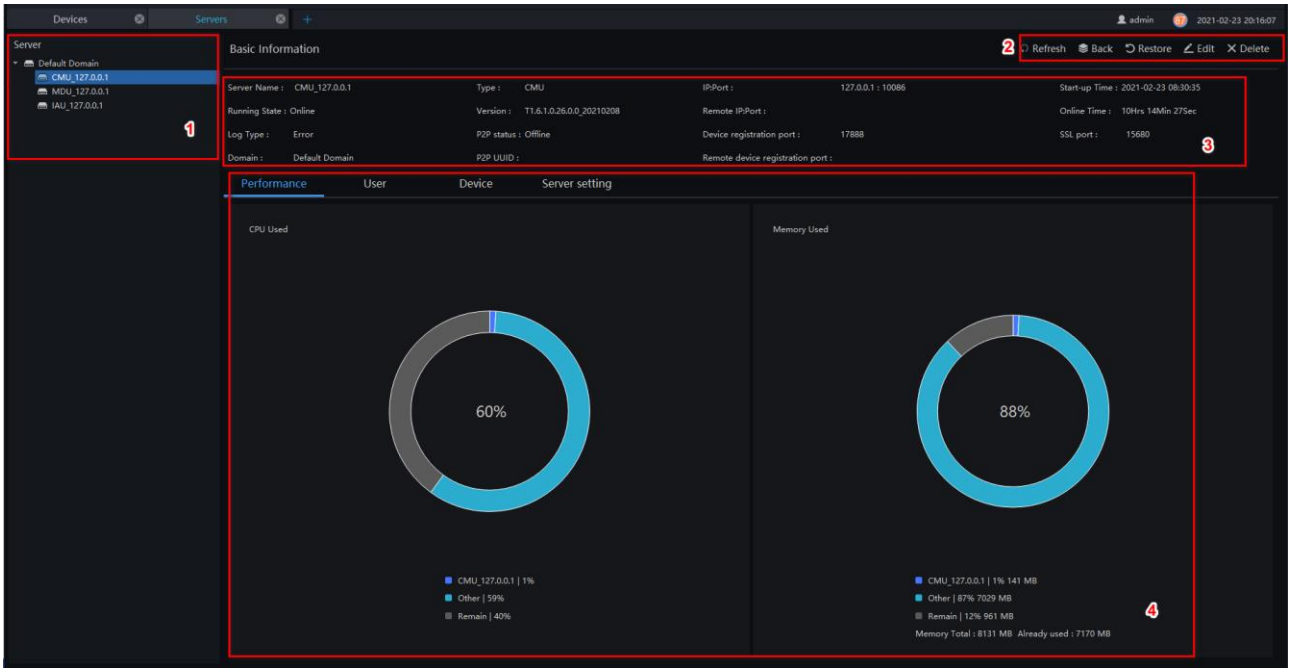


Table 7-6 Servers management

No.	Function	Description
1	Server	Default Server Domain, CMU/MDU/IAU Server
2	Basic information	Basic information displays 1. At the main menu interface, click on the server management screen to display the device configuration screen as displayed in Figure 7-16. 2. Edit the P2P UUID, user can view and manage the platform through the mobile. 3. Click “Edit”, edit the server name, select the log level, and log retention days. Click “Save” to save the relevant settings.
3	Basic operation	Refresh, edit, delete server related information (online service device cannot be deleted)
4	Performance, other information display	Performance display area, capture information

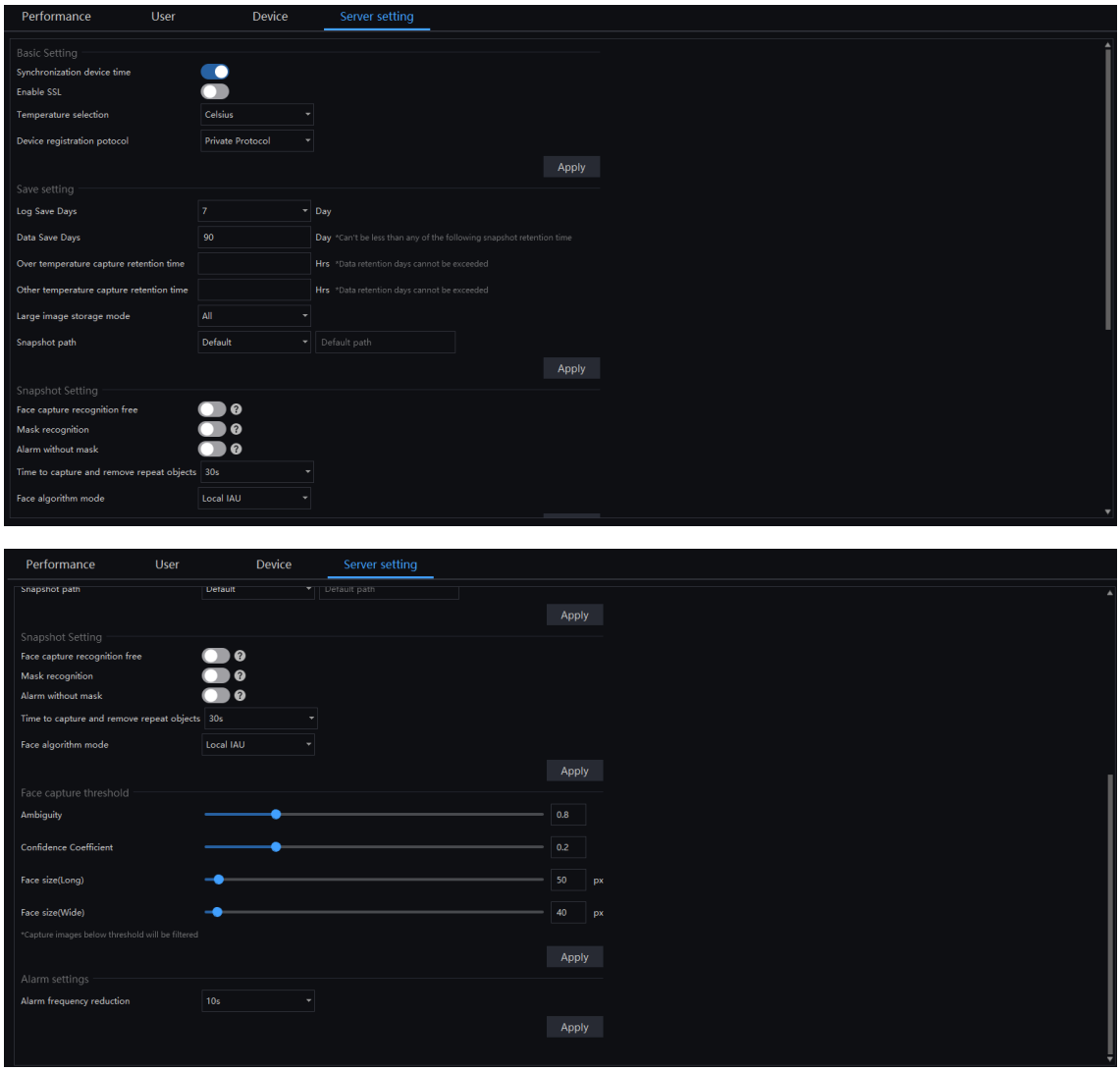
7.6.1 Central Management Server

Data backup and recovery normally is used for system migration, which requires data backup first and recovery then. The backup data contains data from database, like users, device, server, alarm, log, face photos, etc.

Data backup means it will download data from the server where the VMS installed. Data recovery means it will upload the backup data to the servers, it includes perform recovery operations and ensure the system resume normal work.

Server setting, user can set the general parameters of snapshot face capture threshold, the parameters can be used to all cameras with these functions, as shown in Figure 7-17.

Figure 7-17 Server Setting



NOTE

The over(other) temperature capture retention time is null, it means the capture images will be keep the same time as data save days.

It the over(other) temperature capture retention time is 0, it means the capture images are not be save.

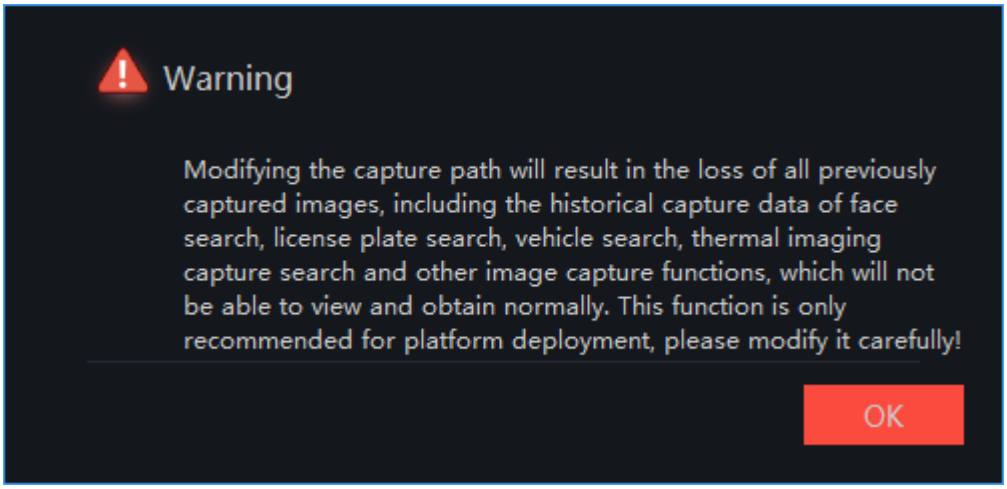
There are four settings for server, they are basic setting, save setting, snapshot setting, face capture threshold.

Basic Setting: synchronization device time, enable SSL(Secure sockets layer), temperature selection unit, device registration protocol (the alarm box can add to platform by private protocol encrypted).

Save Setting: log save days, data save days, over temperature capture retention time, other temperature capture retention time, large image storage mode, snapshot path.

When you modify the snapshot path, you must attention that, as shown in Figure 7-18

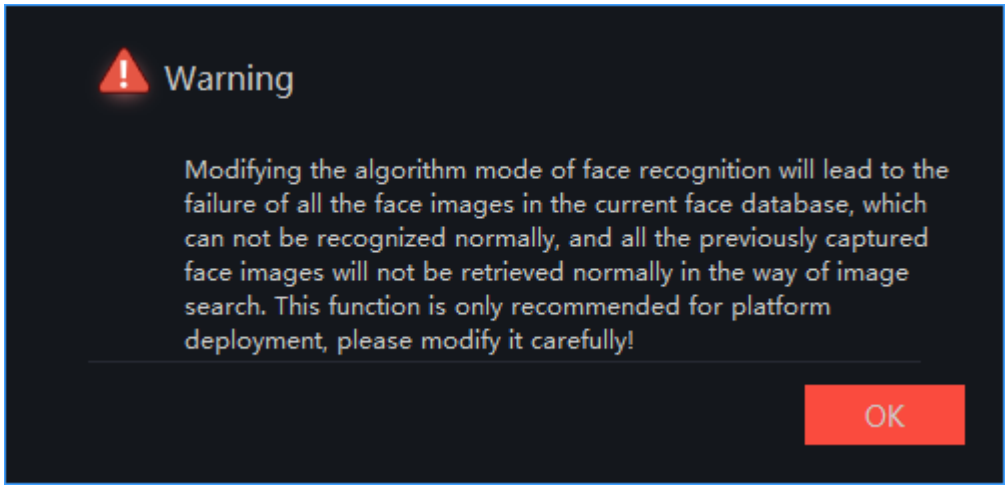
Figure 7-18 Modifying capture path



Snapshot Setting: face capture recognition free, mask recognition, alarm without mask, time to capture and remove heavy objects, face algorithm mode. If the user can put the mouse cursor on ? icon to learn more information about functions.

When you modify the face algorithm mode you must attention that, as shown in Figure 7-19.

Figure 7-19 Modifying face algorithm mode



Step 1 Enable synchronization to set the time to facilitate unified management of the device and reduce inconvenience caused by inconsistent time.

Step 2 Choose the mail temperature unit, all the temperature unit sent to mail will be unity as the setting.

Step 3 Set the snapshot of the duplication time of removing the similarity capture. In the drop-down list, 5S, 10S, 15S, 30S.

Step 4 Snapshot saving path. It is best not to change the default path. Only change it if you have special needs.

Step 5 Enable face capture recognition free, the system will measurement the temperature only, it will save the performance of system.

Step 6 Enable mask recognition, the system will recognition the face wear mask.

Step 7 If the mask recognition is enable, user can enable the alarm without mask, when recognize someone is without mask, it will send alarm information.

Step 8 The face algorithm mode can choose local IAU and face algorithm box.

Step 9 Face capture threshold, ambiguity, confidence coefficient, face size length and width.

Step 10 Click "OK" to save the settings.

NOTE

Enable face capture recognition free, skip face recognition operation and only perform temperature measurement management. All captured faces will be treated as strangers and cannot be searched by the image search function. The recognition-free mode is suitable for scenarios that do not pay attention to the identification of personnel, such as airport, subway, station and other bayonet entrances, parks, and public service agencies.

Face capture threshold: ambiguity, confidence coefficient, face size (long), face size (wide).

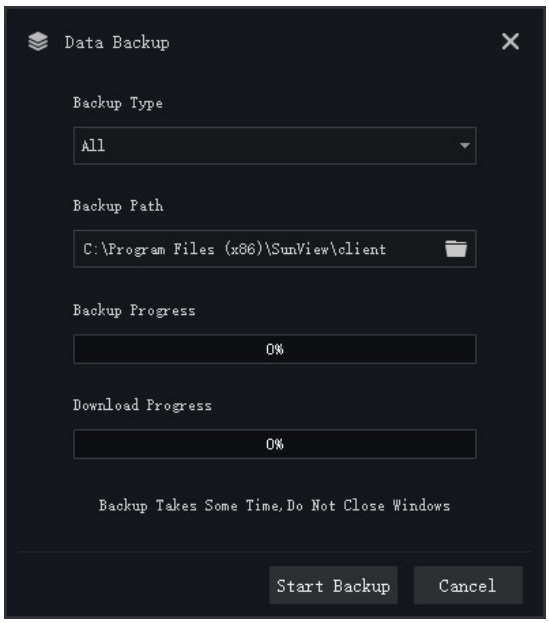
Alarm frequency reduction : when the same alarm occurs frequently, set the time to filter the same alarm information.

7.6.1.1 Data Backup

Procedure：

Step 1 Click “backup” button at right upper of screen, then the pop-up window appears, as shown in Figure 7-1 ;

Figure 7-20 Date backup



Step 2 Browser the backup path, click “start backup” to back-up the server’s data.

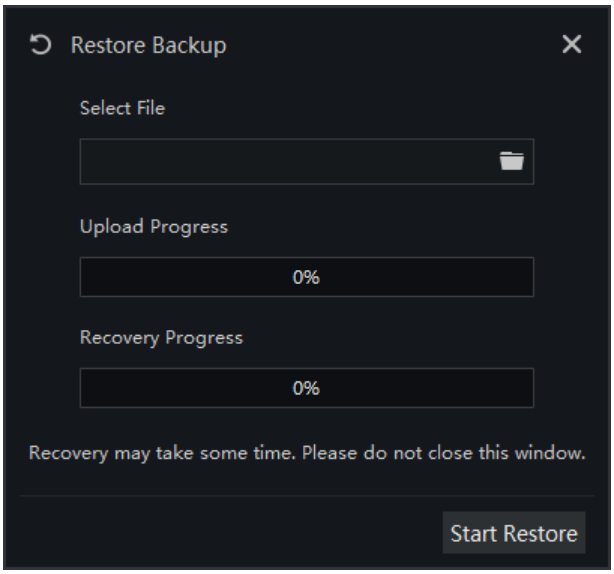
Step 3 After backup successfully, the backup progress display “100%”;

Step 4 Click to exit backup.

7.6.1.2 Date Restore

Click and the pop-up window shows as Figure 7-2, choose the download data

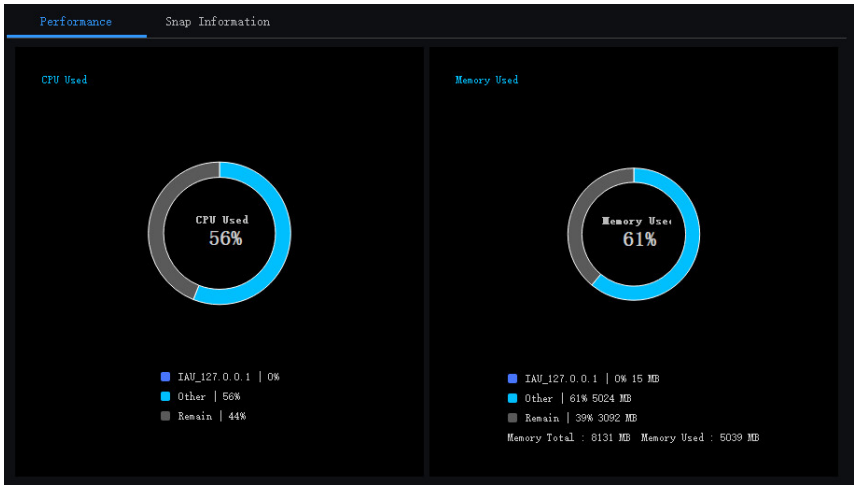
Figure 7-21 Restore backup



7.6.2 Media Distribution Server

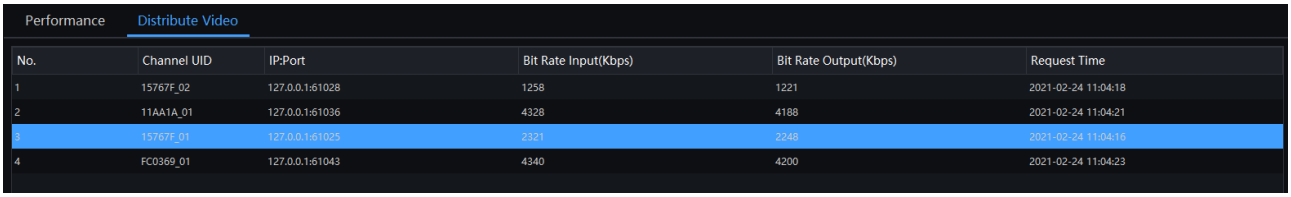
7.6.2.1 Performance

Figure 7-22 Performance



7.6.2.2 Distribution Status

Figure 7-23 Distribution Status



7.6.3 Intelligent Analysis Server

7.6.3.1 Performance

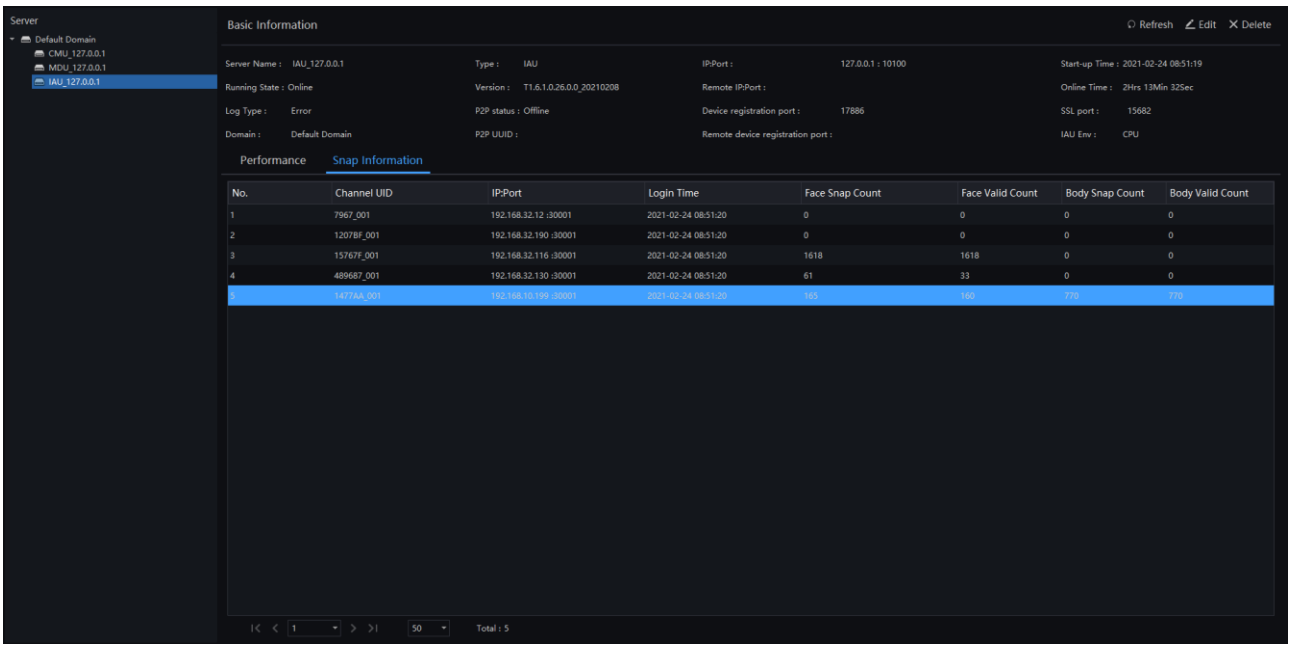
Please refer to chapter 18.2.1

7.6.3.2 Snap Information

NOTE

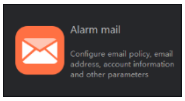
This function is generally applicable to the face capture device, it can analyze image if the device captures normally. If the number of captured face is 0, please check whether the camera is configured correctly. The details are shown as Figure 7-24.

Figure 7-24 Snap information



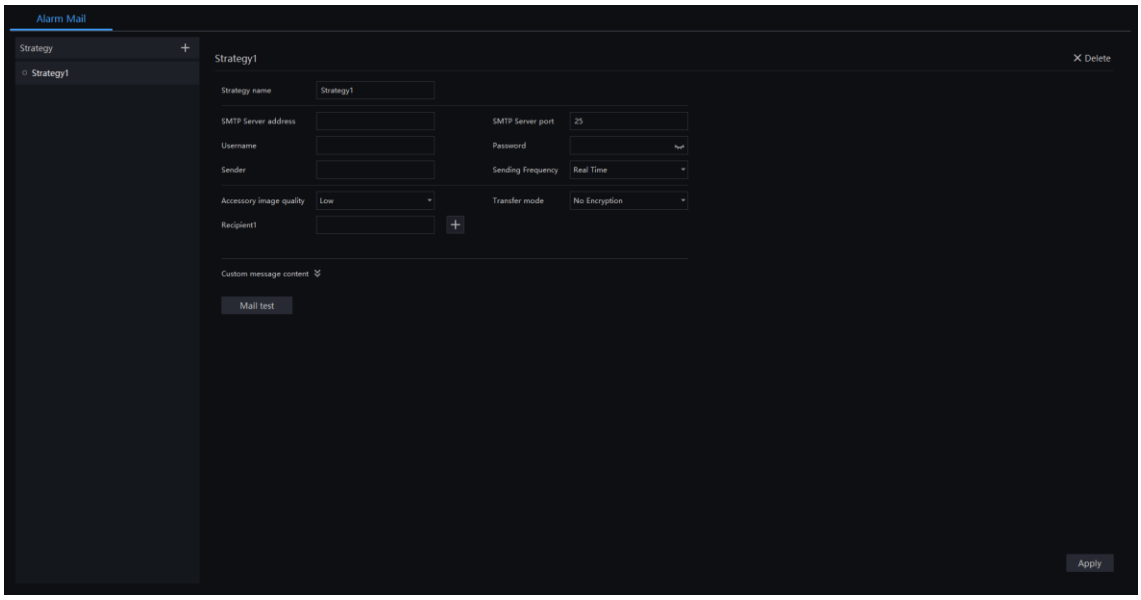
7.7 Alarm Mail

Set the alarm information sender information and recipient information. When sending an alarm, it can be pushed to the corresponding personnel by email.

On the main menu page, click 

to enter the detailed page, as shown in Figure 7-25.

Figure 7-25 Alarm mail

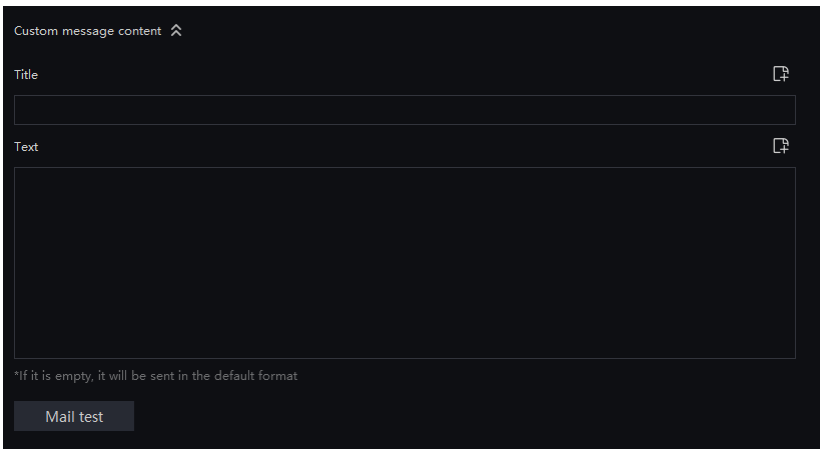


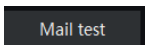
Step 1 Click to add the new strategy.

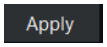
Step 2 Input the name and information of SNMP. User can also set the frequency of sending email.

Step 3 The alarm can be set accwssory image. User can custom messege content, as shown in Figure 7-26.

Figure 7-26 Custom message content



Step 4 Click  to test the settings.

Step 5 Click  to save the settings.

8 Face Recognition

The face recognition can transfer the parameter of AI NVR, such as face library, thermal temperature measurement, face search, and so on.

Face recognition supports algorithm calculation using CPU or face box, which can be configured on the server management interface.

8.1 Face Recognition

On the Face Recognition page, you can view the results of face capture and face comparison in real time. This function needs to add a face image in advance through the "Personnel Information Management" function page. Can be broadcast by device voice.

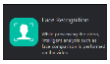
On the main menu page, click  to enter the detailed page, as shown in Figure 8-1.

Figure 8-1 Face recognition

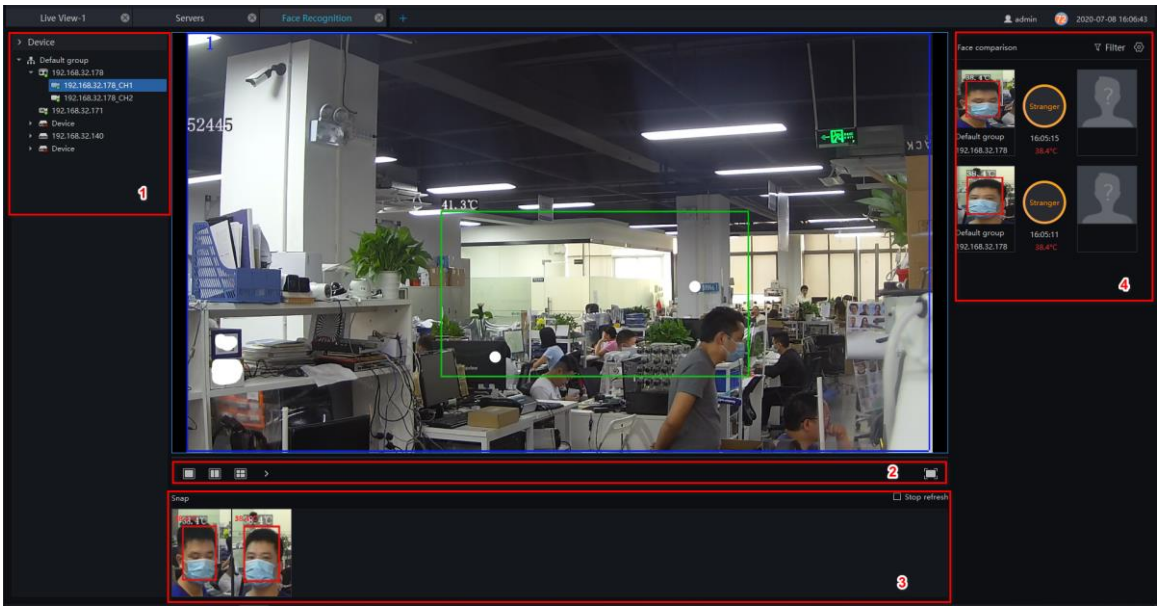
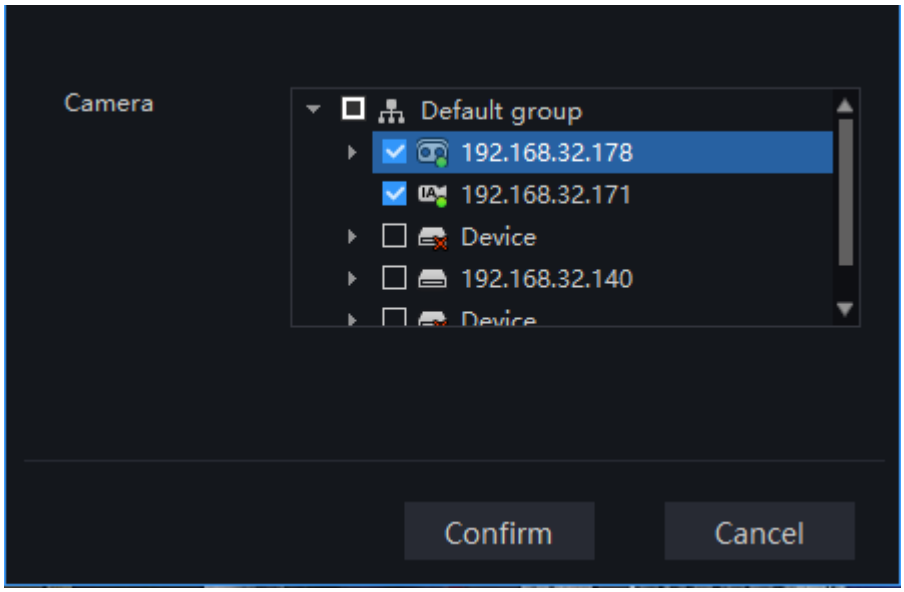


Table 8-1 Face recognition

No.	Function	Description
1	Devices list	Show the devices with face recognition function.
2	Layout	Choose the layout of video.
3	Alarm snapshot	Alarm information About over-temperature face capture display, you can choose to stop refresh.

No.	Function	Description
4	Face comparison	The snapshot face compares with the library. Filter the device of capture the face, you can correspond channel quickly, if set the filter (by default, only real time snapshots of 4 face recognition channels are displayed, which can be selected here Set the broadcast Figure 8-3.)

Figure 8-2 Filter device



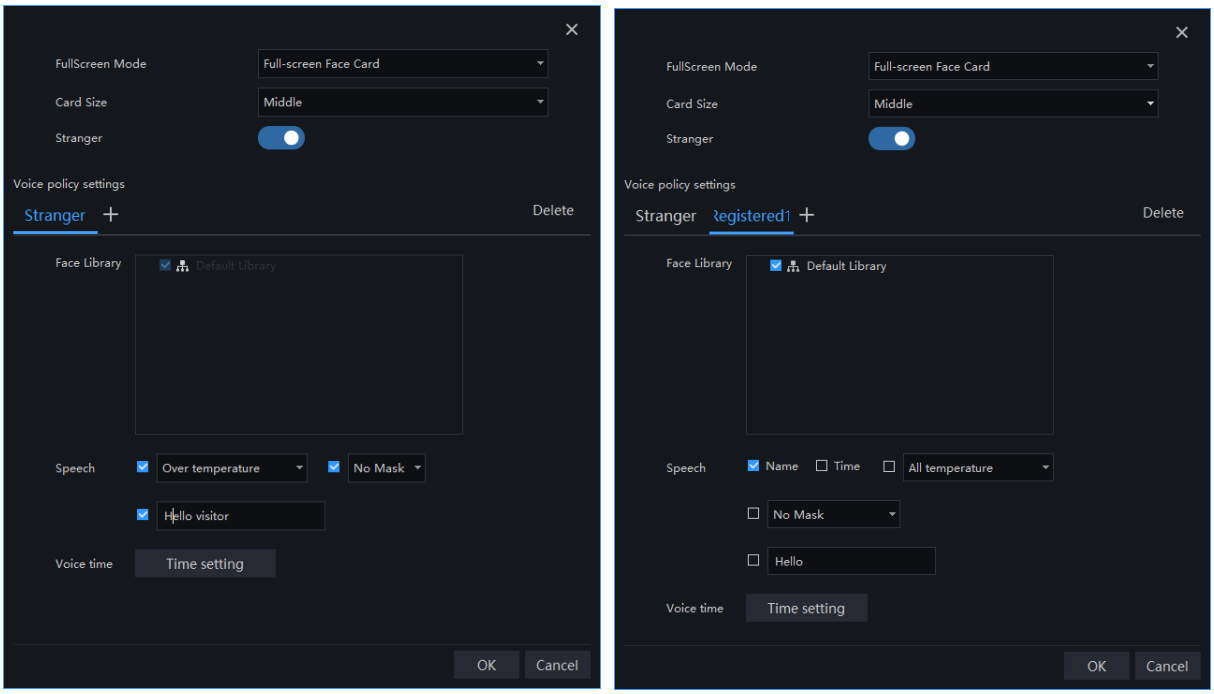
Step 1 The devices have face capture function that automatically captures the face. The snapshot show on the area of face comparison.

Step 2 Click the search icon in the lower right corner of the snapshot image to go directly to the smart search interface.

Step 3 Similar faces of the face database appear again in the picture, and faces higher than the set similarity will be compared in the comparison area and related information is displayed.

Step 4 Click “+” that appears on the picture to add it directly to the face database.

Figure 8-3 Voice announcement setting



Procedure:

Step 1 Select the full screen display mode, there are two modes, cards (need to set the card size) and list card.

Step 2 Enable the stranger, If not the stranger snapshot image is not show on comparison area.

Step 3 Strangers can set the content of the voice broadcast, the characters are within 10 characters.

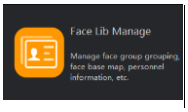
Step 4 The staff already in the library tick the face library, it can set whether to speech the name, time of snapshot, and play text.

Step 5 Set the voice time.

Step 6 Click "+" that appears on the picture to add it directly to the face database.

8.2 Face Library Manage

At the interface of face library manage, a multilevel face library directory can be created. Different face libraries can be added and edit personnel information for face recognition. When the camera detects a face, it can be compared with the library to identify, who was captured.

On the main menu page, click 

to enter the configuration page, as shown in Figure 8-4

NOTE

This function is only subject to face detection cameras.

Figure 8-4 Face library manage

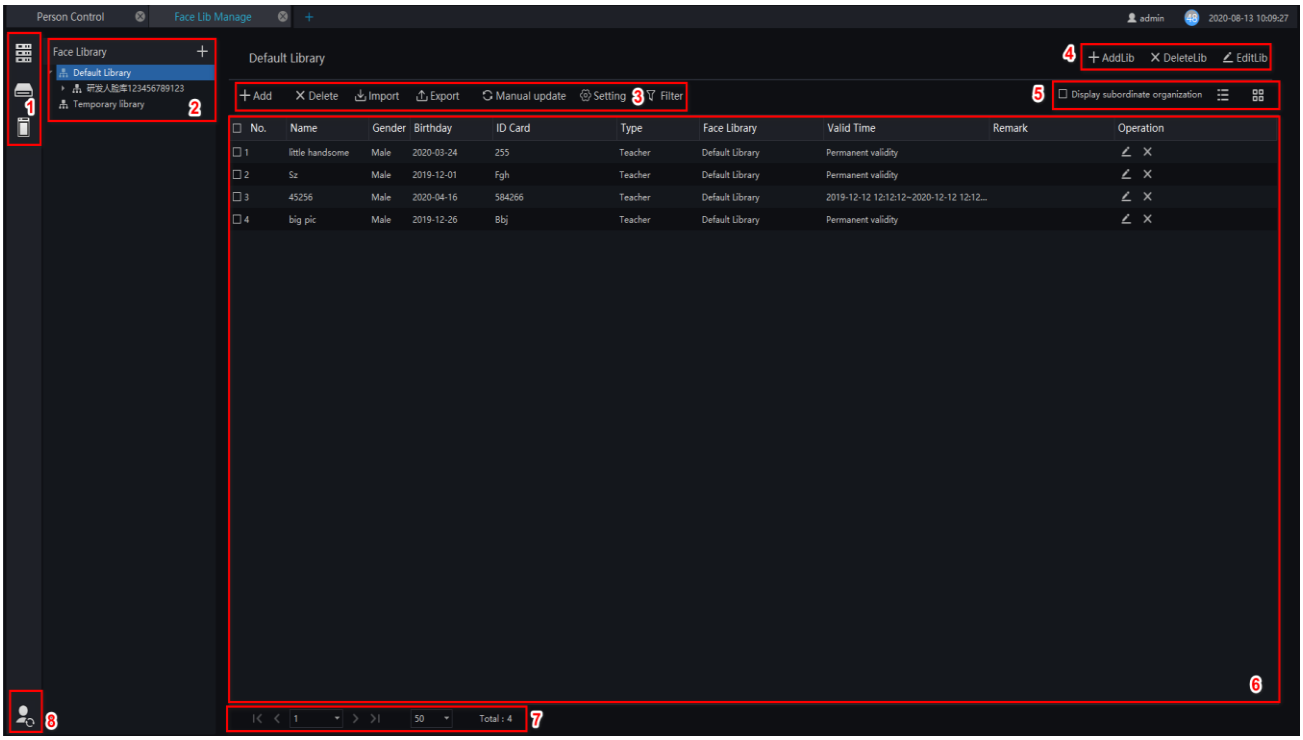
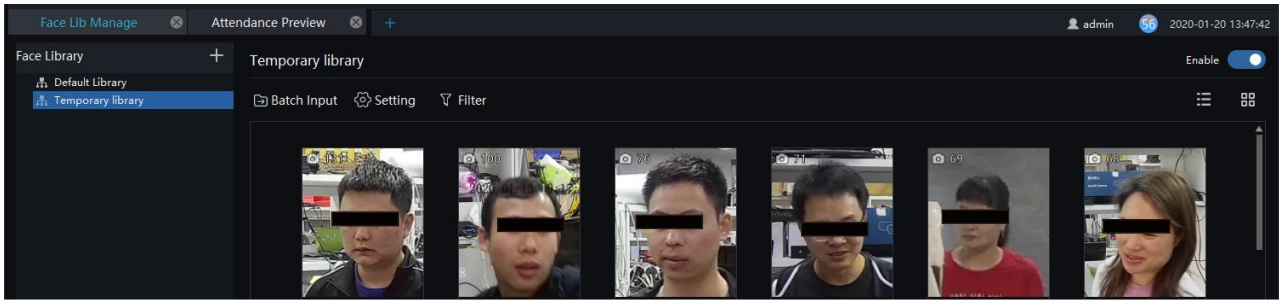


Table 8-2 Face library

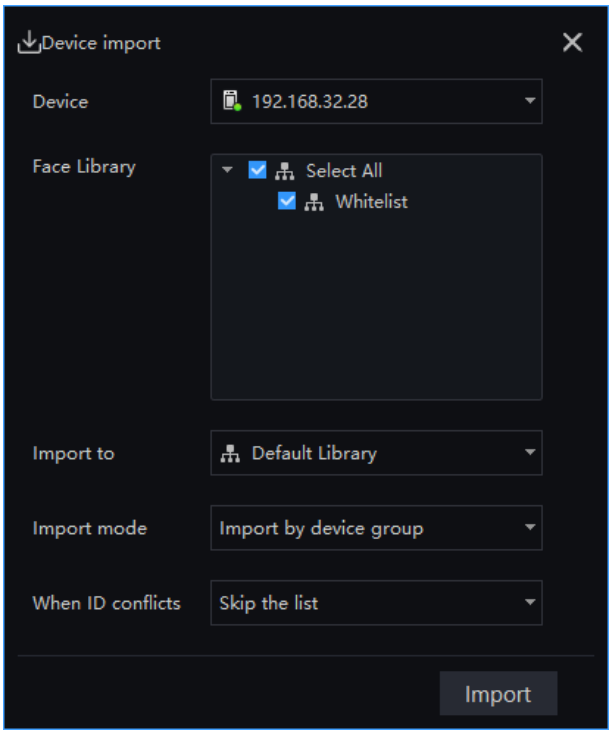
No.	Function	Description
1	Face libraries of platform, Intelligent NVR, face recognition panel	Click the icon to switch the face database.
2	Face Library list	Face library, default group, add library.
3	Basic operation of person	Add, delete, import , exporting, manual update and filter person.
4	Basic operation of library	Add, delete, and edit library.
5	Arrangement	Tick or not display subordinate organization. List mode, card mode.
6	Display information	Face library basic information display.
7	Page information	Page number, number of pages per page, total number of showing. Switch to next page.
8	Face database sync strategy	The libraries of platform can be synchronize to face recognition terminal.

Figure 8-5 Temporary library



There are two modes to import face libraries, device import (face recognition temperature panel) and local import.

Figure 8-6 Device import



Step 1 Choose the face recognition temperature panel, tick the face libraries.

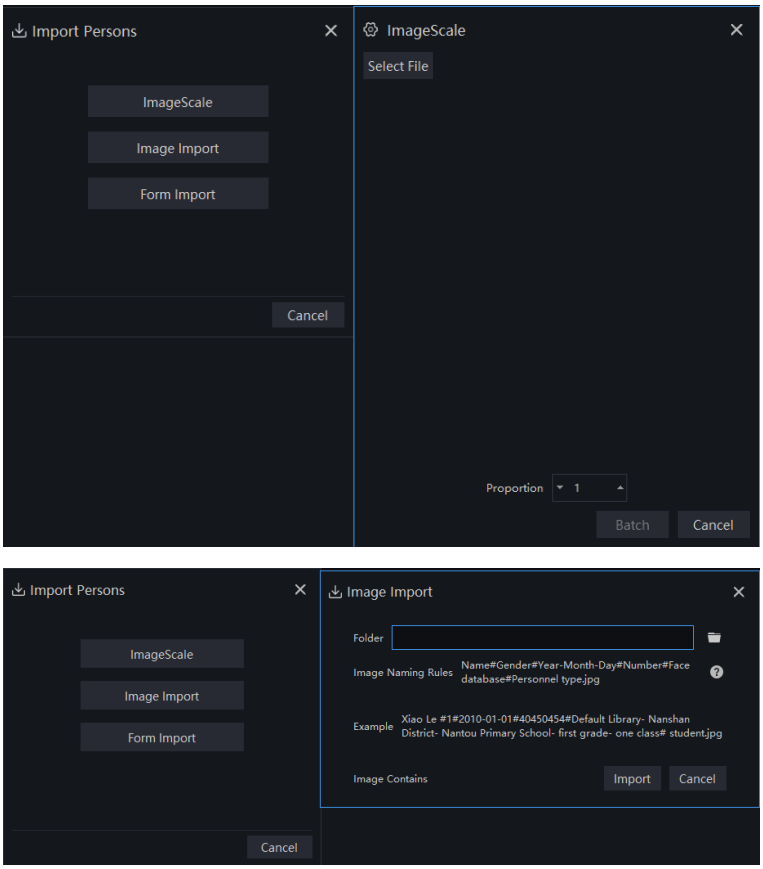
Step 2 Choose the library want to be imported and the import mode.

Step 3 Set the ID conflicts strategy, click “Import” to import libraries.

Step 4 The result of importing will be send to local folder.

Local import: the human faces from local folder or files can be import to platform, there are three modes to import, such as image scale/ image import / form import.

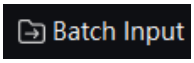
Figure 8-7 Local import



The temporary library will show the all of capture faces, and the number of snapshots will show on the picture.

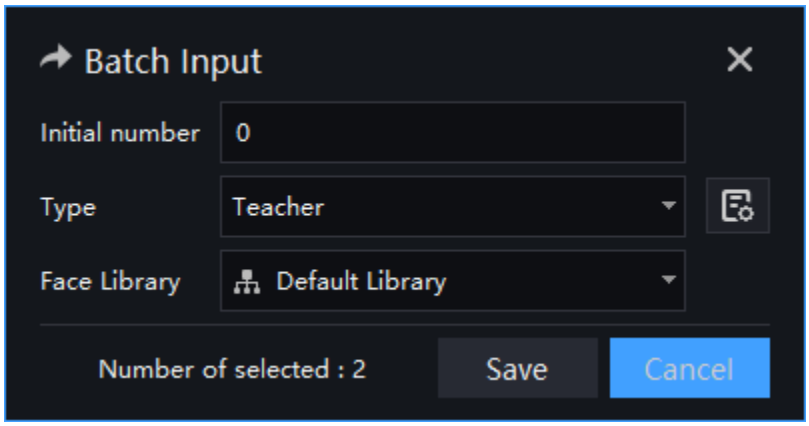
Click on picture to add stranger to library.

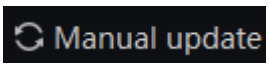
Click to enter face search.

At temporary library interface, click 

to enter the batch input interface to add the library, as shown in Figure 8-8.

Figure 8-8 Batch input



Click 

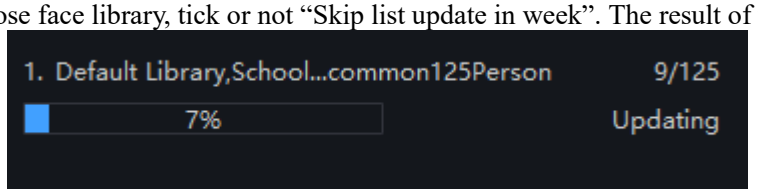
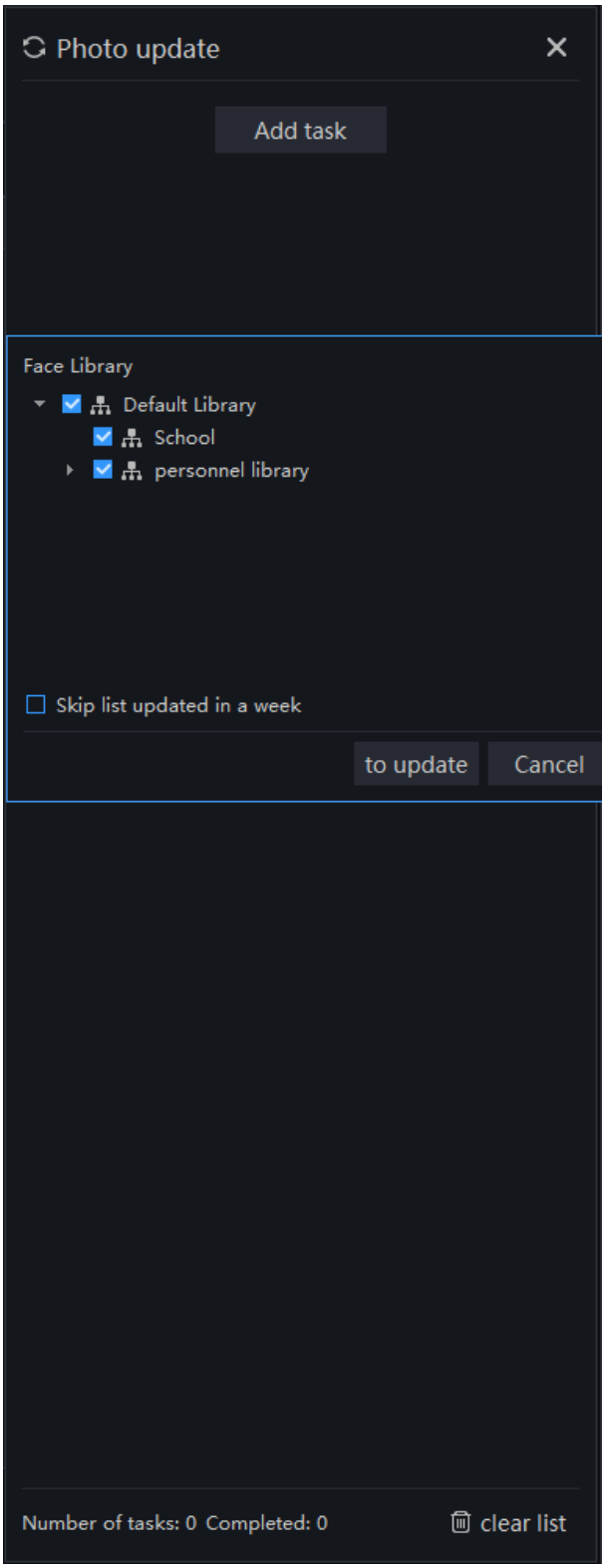
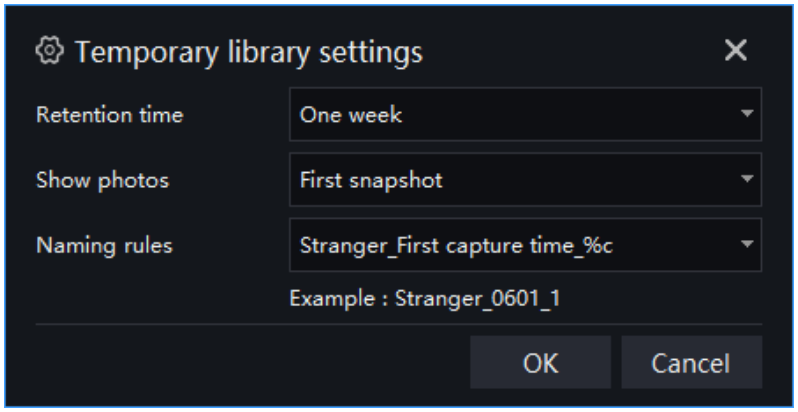
to update the face date manually, enter the interface as shown in Figure 8-9. Click “Add task” to choose face library, tick or not “Skip list update in week”. The result of update will show on window, as shown in 

Figure 8-9 Manual update



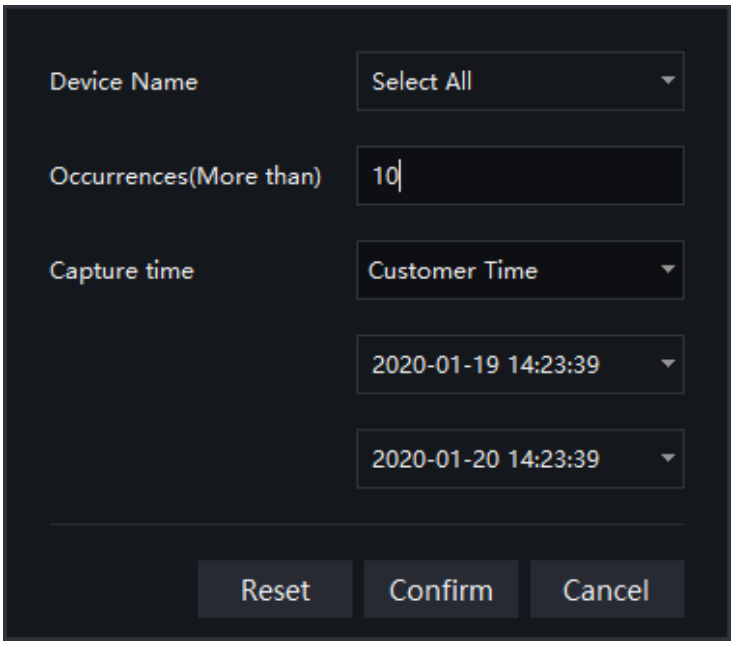
Click Setting to set temporary library settings, as shown in Figure 8-10.

Figure 8-10 Temporary library setting



Click Filter to set filter, as shown in Figure 8-11.

Figure 8-11 Filter



The temporary library is live update.

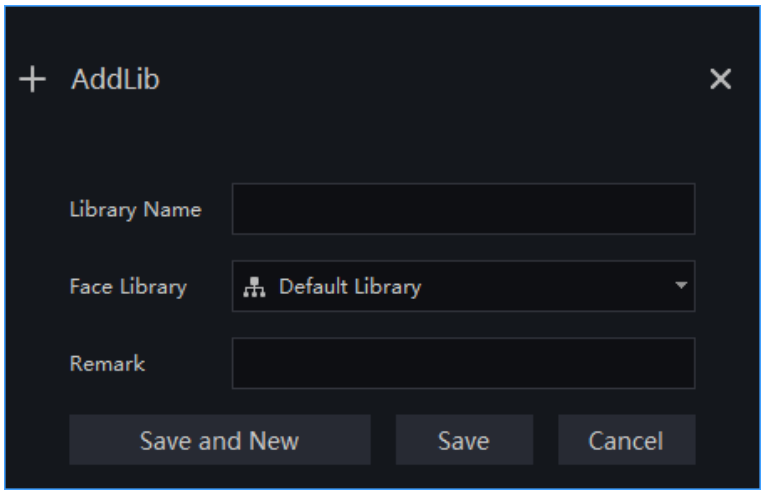
8.2.1 Add Face Library

Procedure:

Step 1 Click + to add face library.

Step 2 Input library name, remark, choose library , as shown in Figure 8-12.

Figure 8-12 Add face library



Step 3 Click “save” to save settings. Click “save and new” to save and add another one.

8.2.1.1 Add Personnel Information

Procedure：

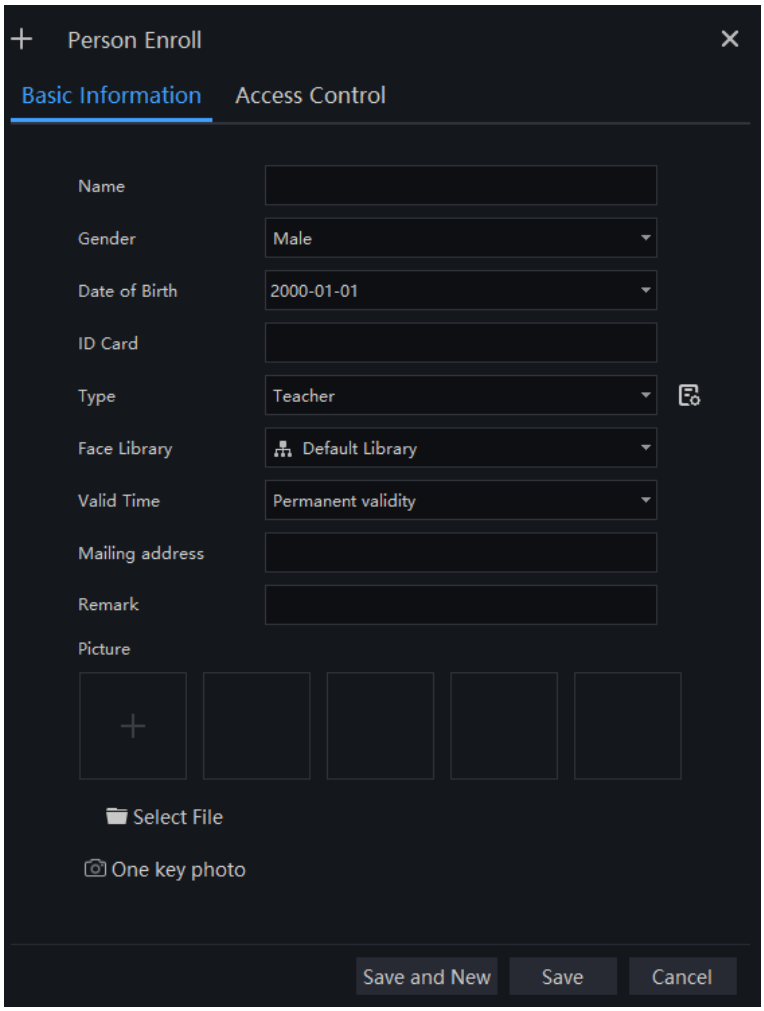
Step 1 Select a face library

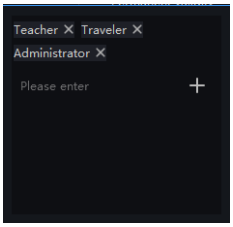
Step 2 Click

to add new personnel information

Step 3 Input the information as shown in Figure 8-13, user can also set the authority of access control if the device with access control is connected to platform, as shown in Figure 8-14.

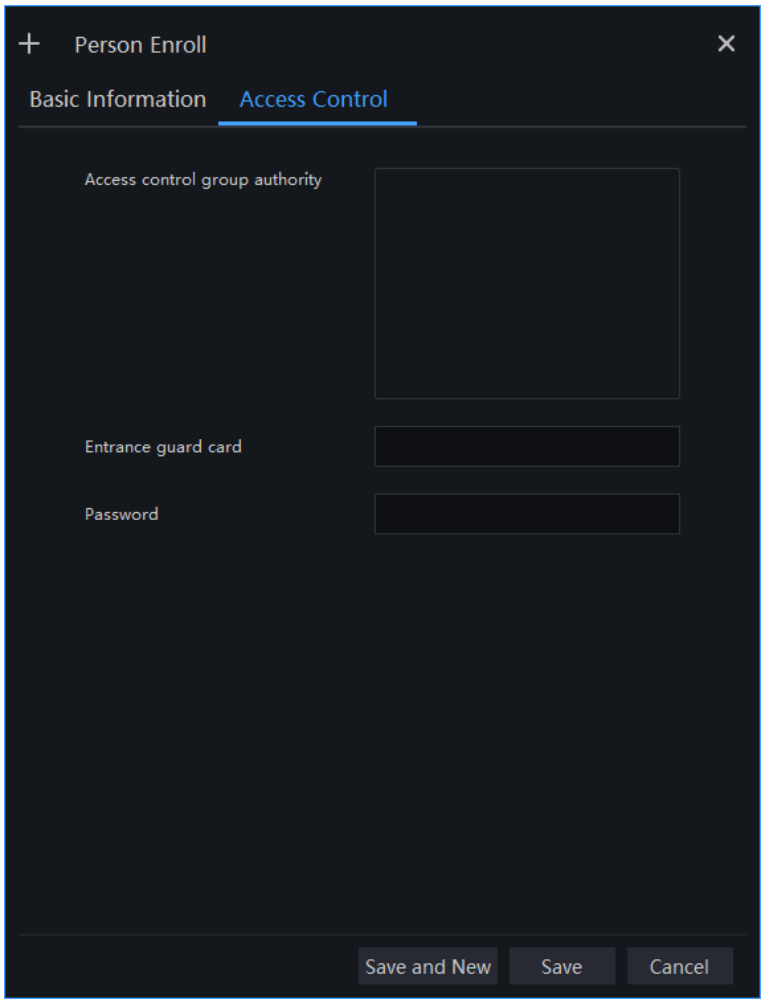
Figure 8-13 Person enroll basic information



Click to add or delete types, 

input the name to add type.

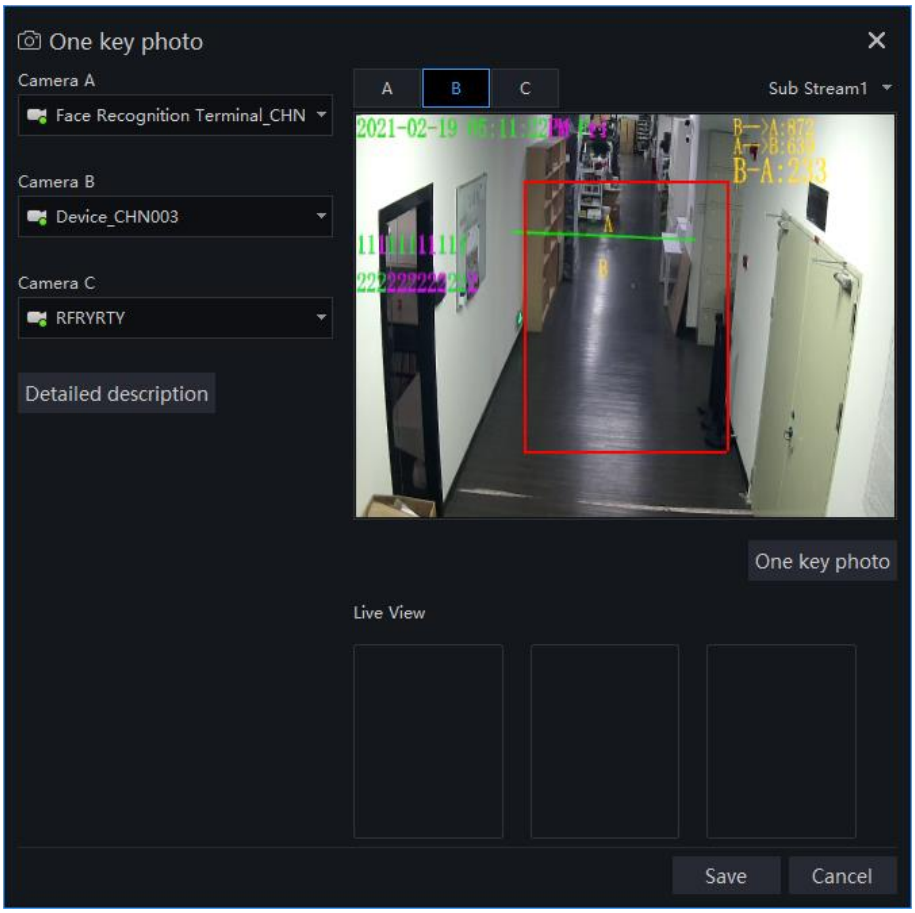
Figure 8-14 Access control



Step 4 Support one person to add multiple images, increase the comparison rate, each selected photo has a delete icon, click to delete.

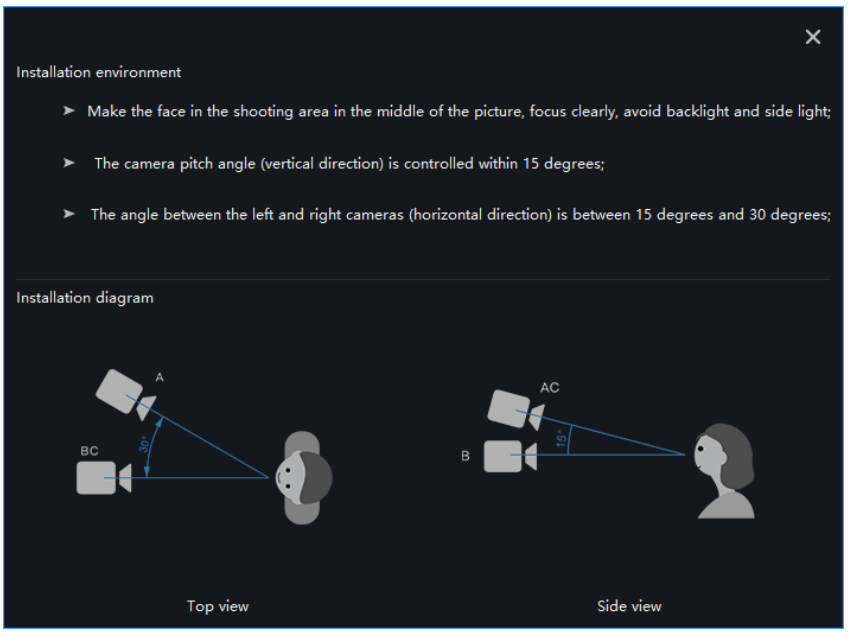
Step 5 Click “One key photo” to enter capture person immediately, as shown in Figure 8-15.

Figure 8-15 One key photo



Step 6 Choose one camera to snapshot, if you want to collect multiple pictures and improve the correct of comparing, you can choose three cameras to snapshot through different angle, as shown in Figure 8-16. The cameras of computer also can capture the human face to face database.

Figure 8-16 Best installation angle



Step 7 Click “ Save ”, the showing “Add person succeed” and add succeed.

TIP

Clear face image could be highly recommended, which can get higher accuracy for comparison.

8.2.1.2 Batch Import

Procedure：

Step 1 Click “Export ” , select “Export template”.

Step 2 Edit above Export template, and save.

Step 3 Click above edited Export template to import all personnel information.

8.2.1.3 Batch Export

Procedure：

Step 1 Click “Export” to get into the Export interface.

Step 2 Click “Export personnel information”.

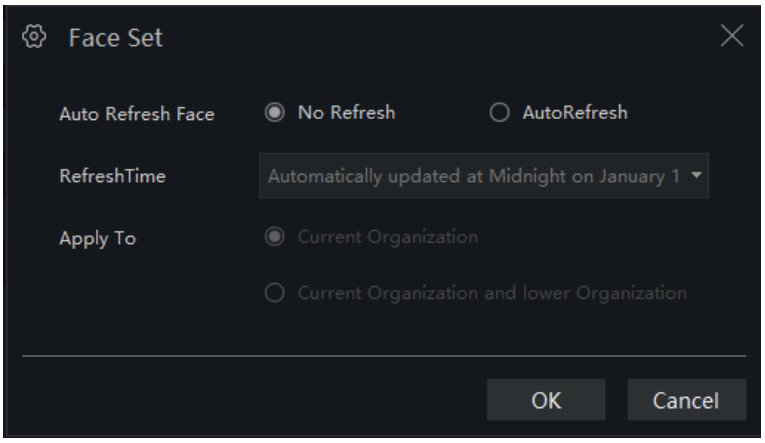
Step 3 Choose the save path, and click “ save” to save the settings.

8.2.1.4 Face setting

Procedure：

Step 1 Click “Setting” to get into the face setting interface, as shown in Figure 8-17.

Figure 8-17 Face setting



Step 2 Choose “No Refresh” or “ Auto Refresh”.

Step 3 Set the refresh time and apply to.

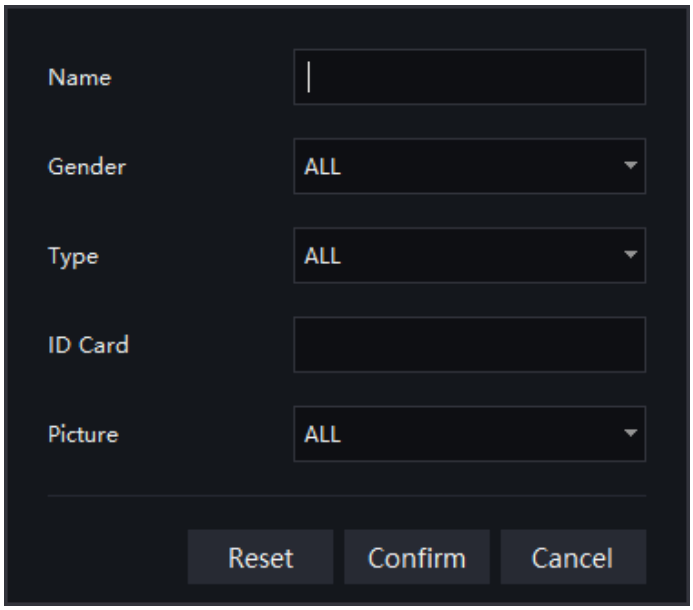
Step 4 Click “OK” to save the settings.

8.2.1.5 Filter

Procedure：

Step 1 Click “Filter” to get into the filter interface, as shown in Figure 8-18.

Figure 8-18 Filter setting



Step 2 Input the name need to filter.

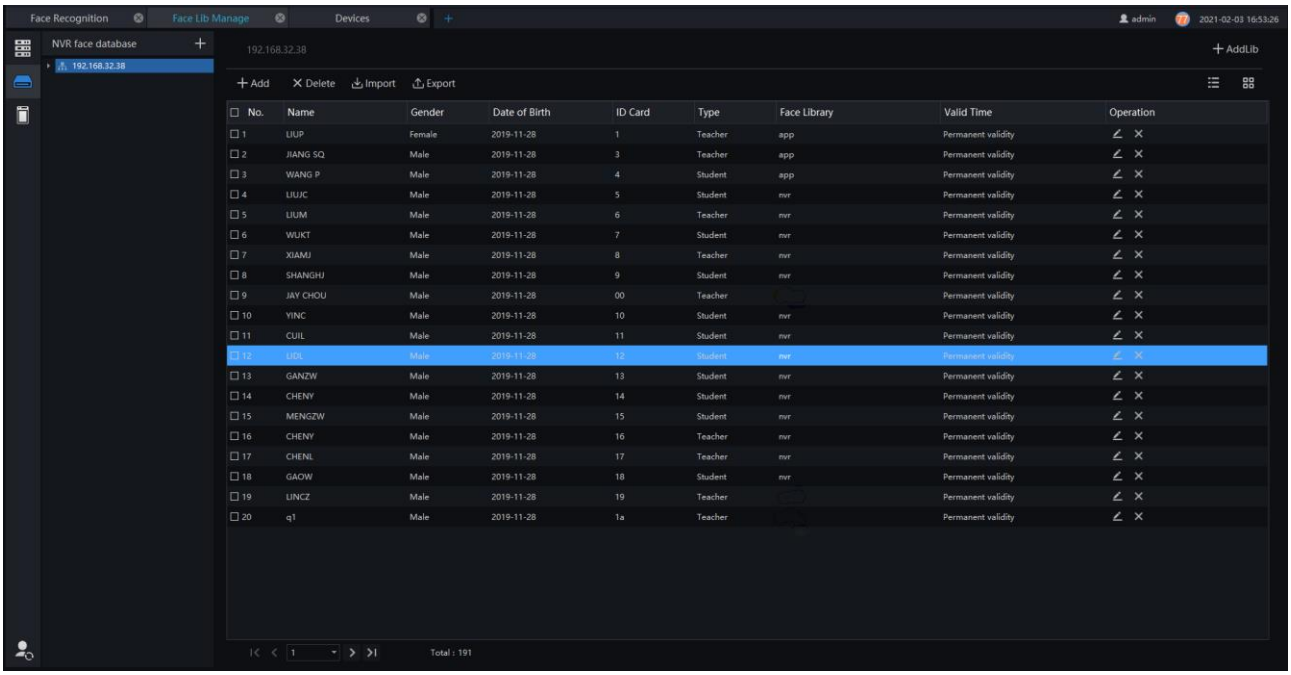
Step 3 Choose the gender , type, ID card and picture.

Step 4 Click “Confirm” to save the settings.

8.2.2 NVR Face Database

At NVR face database, the platform can set the database parameters of AI NVR which is online, as shown in Figure 8-19.

Figure 8-19 NVR face database



Add persons or libraries into NVR face database, as shown in Figure 8-21.

User can delete/import/export the database at that interface.

Figure 8-20 Add library

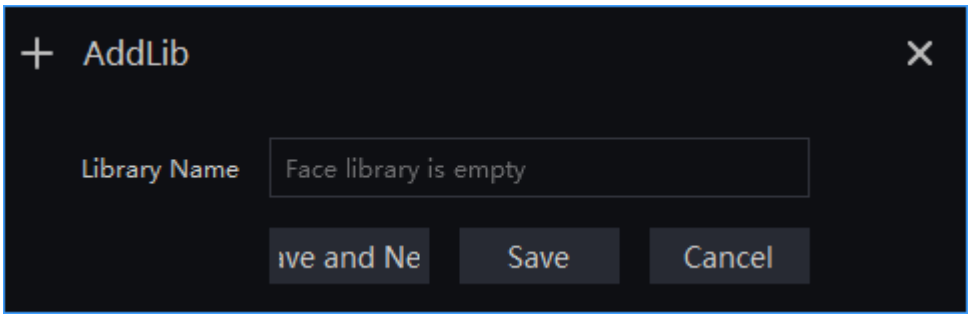
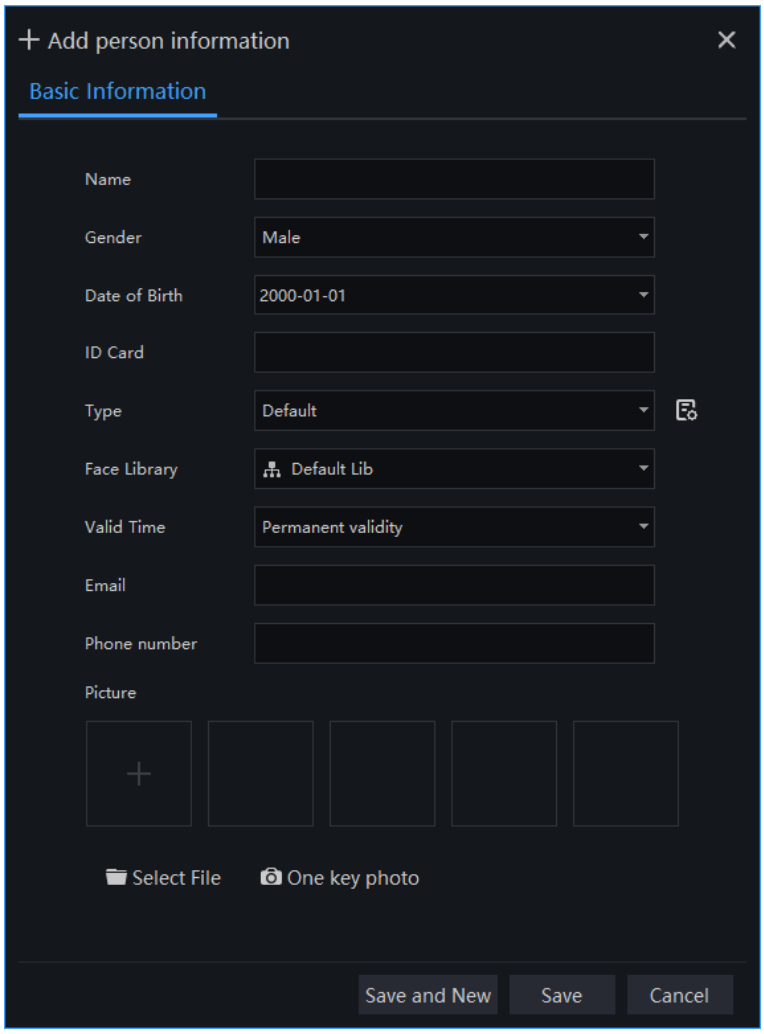
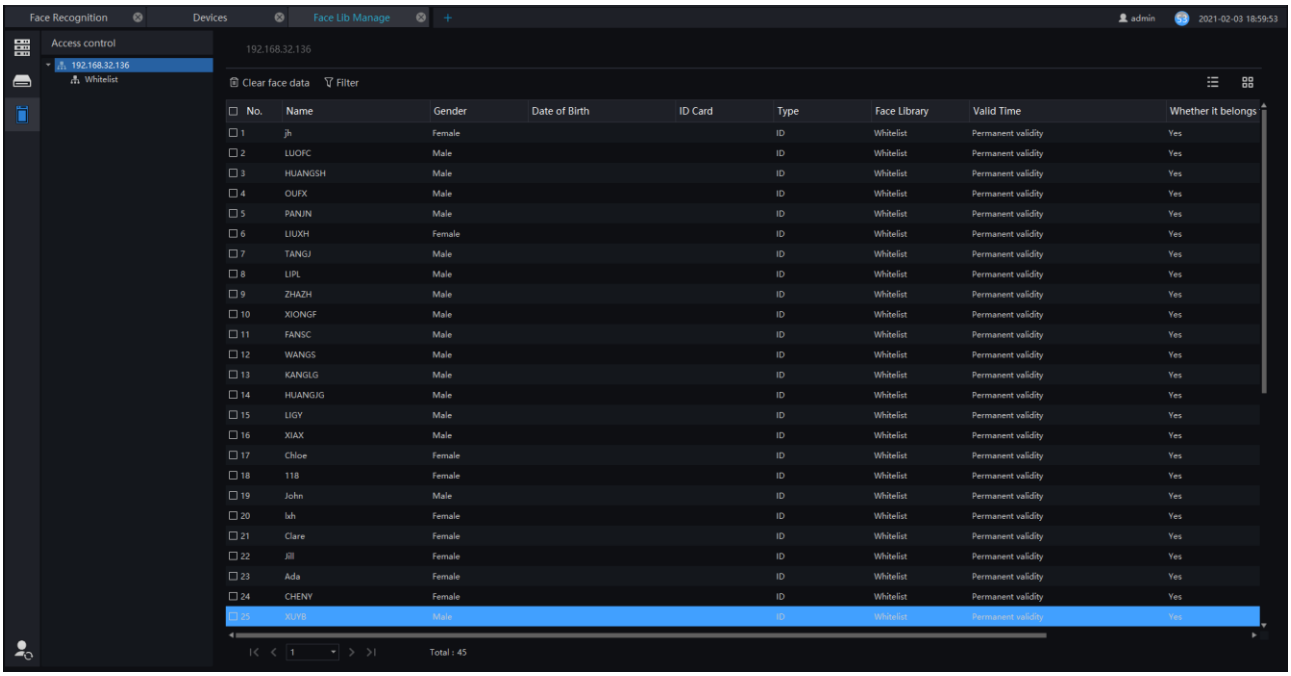


Figure 8-21 Person enroll

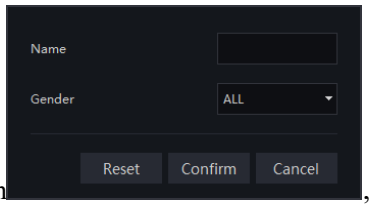


8.2.3 Access Control

Figure 8-22 Access control list

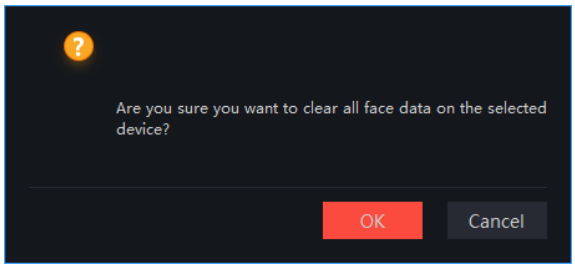


The access control cameras are connected to platform system, the system can transfer the whitelist of cameras immediately, as show in Figure 8-22.

Click Filter to set detail filter information, as shown in 

, user can search the person information quickly.

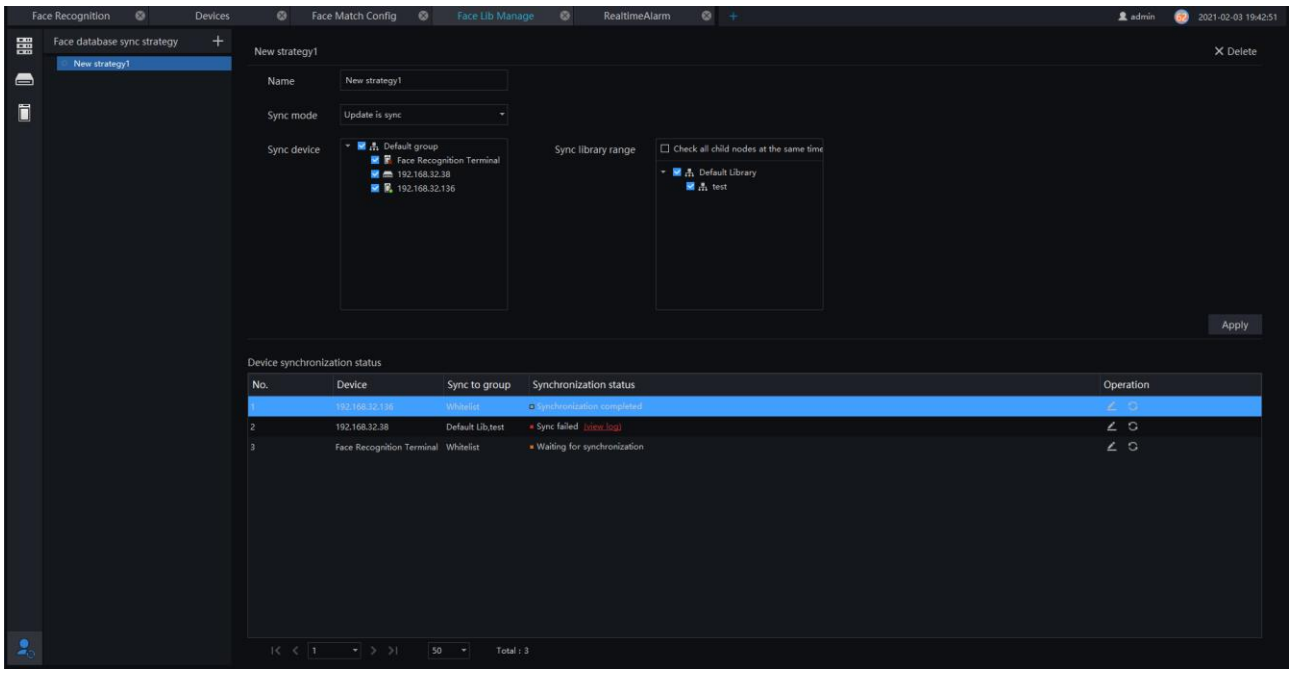
Click Clear face data to clear the face data of face recognition temperature device.

The note is shown in as 

8.2.4 Face Database Sync Strategy

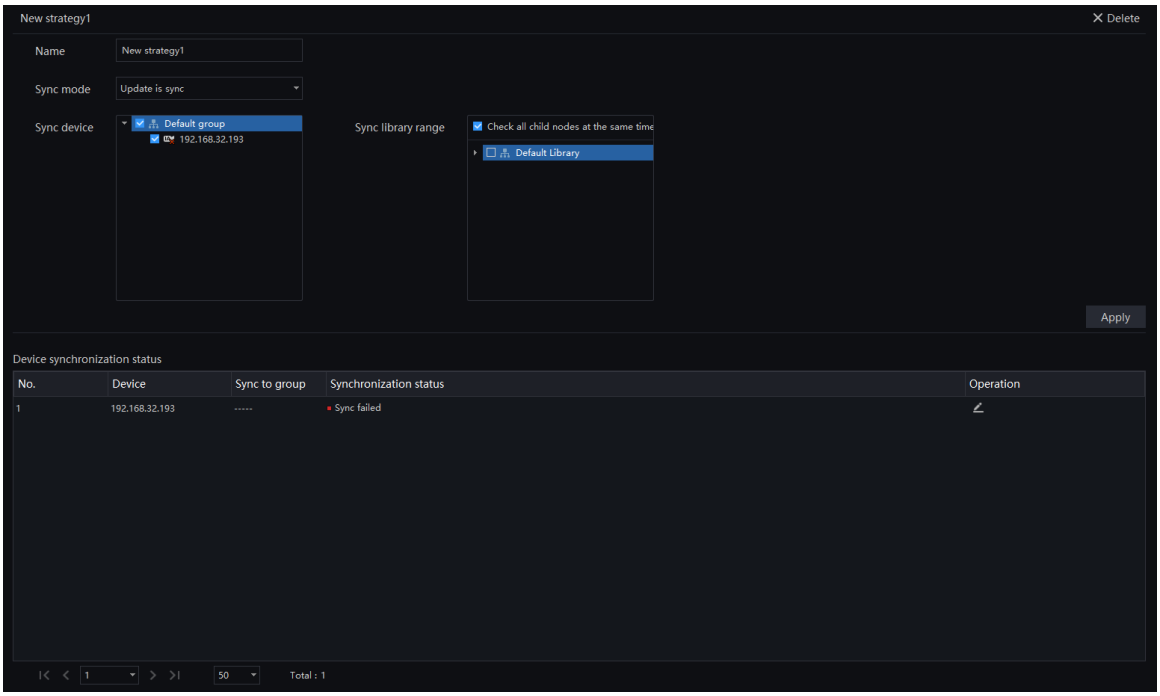
This function is specialized for access control cameras (such as face recognition temperature camera) and AI NVR, the platform system and cameras can share face database to access control cameras, as shown in Figure 8-23.

Figure 8-23 Face database sync strategy



Step 1 Click “+” to add a new strategy as shown in figure .

Figure 8-24 New strategy



Step 2 Edit the name, choose the sync mode.

Step 3 Tick sync device and sync library range.

Step 4 Click “Apply” to save settings. The device synchronization status will show at bottom of interface.

NOTE

Syni failed means the face library can be synchronize to access control, user can view log to learn the reasons.

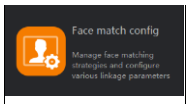
Waiting for synchronization means the device may be offline.

8.3 Face Match Configuration

At the Face Match configuration page, you can add a comparison strategy between the camera and the face library for different cameras to be compared with different face databases. When the camera detects a face, it only compares with the chosen library.

NOTE

This function is only subject to Face Detection cameras.

On the main menu page, click 

to view the configuration interface, as shown in Figure 8-25.

Figure 8-25 Face Match configuration interface

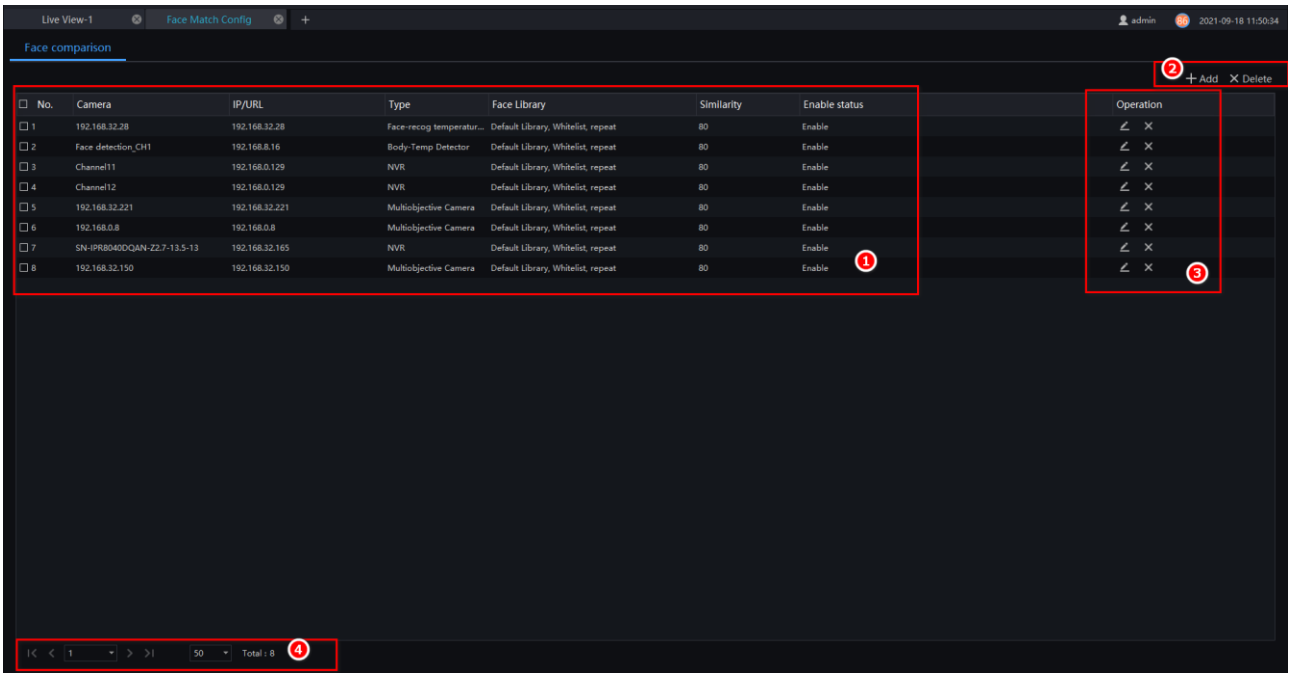


Table 8-3 strategy configuration

No.	Function	Description
1	Detail of face comparison	Setting up face comparison detail information.
2	Basic operation	Add, Delete
3	Operation	Modify and delete the face library.
4	Page information	Page number, number of pages per page, total Switch to next page

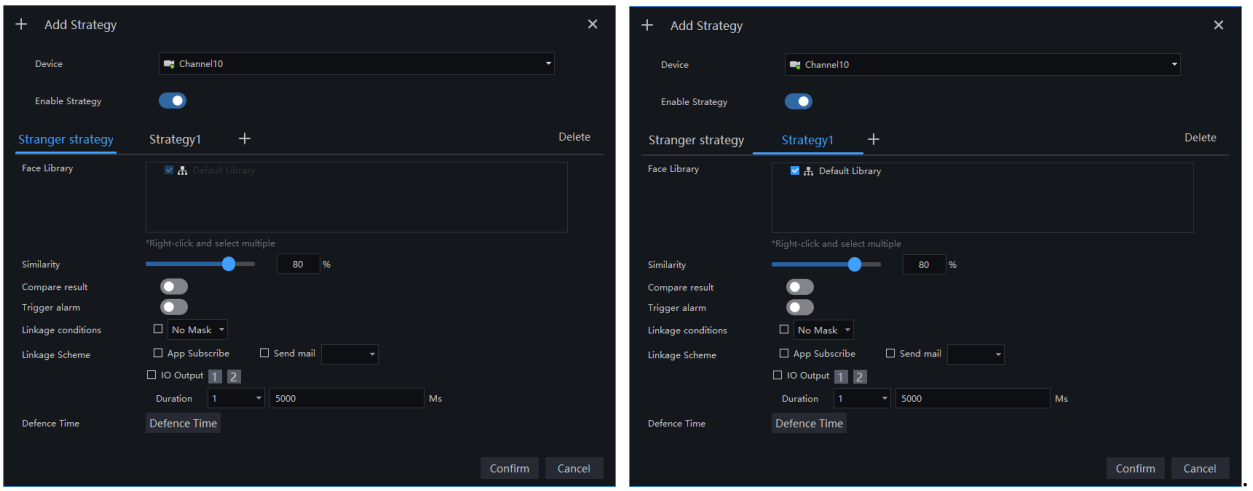
8.3.1 Face Comparison Configuration

Procedure:

Step 1 Click icon of strategy configuration in new page, into the interface.

Step 2 Click “Add” to get into new face comparison, as shown in Figure 8-26.

Figure 8-26 Add strategy



Step 3 Check camera and face library.

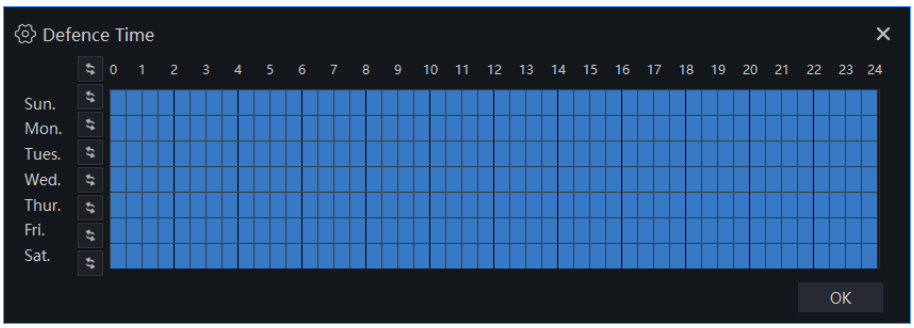
Step 4 Set up Similarity and activate Stranger mode.

Step 5 Click to confirm the success of adding face comparison, relative devices showing in the list and executable for both Edit and Delete.

User can tick the linkage conditions, such as over temperature personnel, no mask, these two conditions only use for body temperature cameras.

Linkage scheme can tick App subscribe, send mail, IO output (choose ID, set duration).

Figure 8-27 Defense time



8.4 Face Search

At the Face Search page, you can select a face image to retrieve a face photo that matches the face similarity from the platform and play back the track on the map.

NOTE

This function only supports cameras with face recognition.

On the main menu page, click to view more detailed interface.

Figure 8-28 Face search

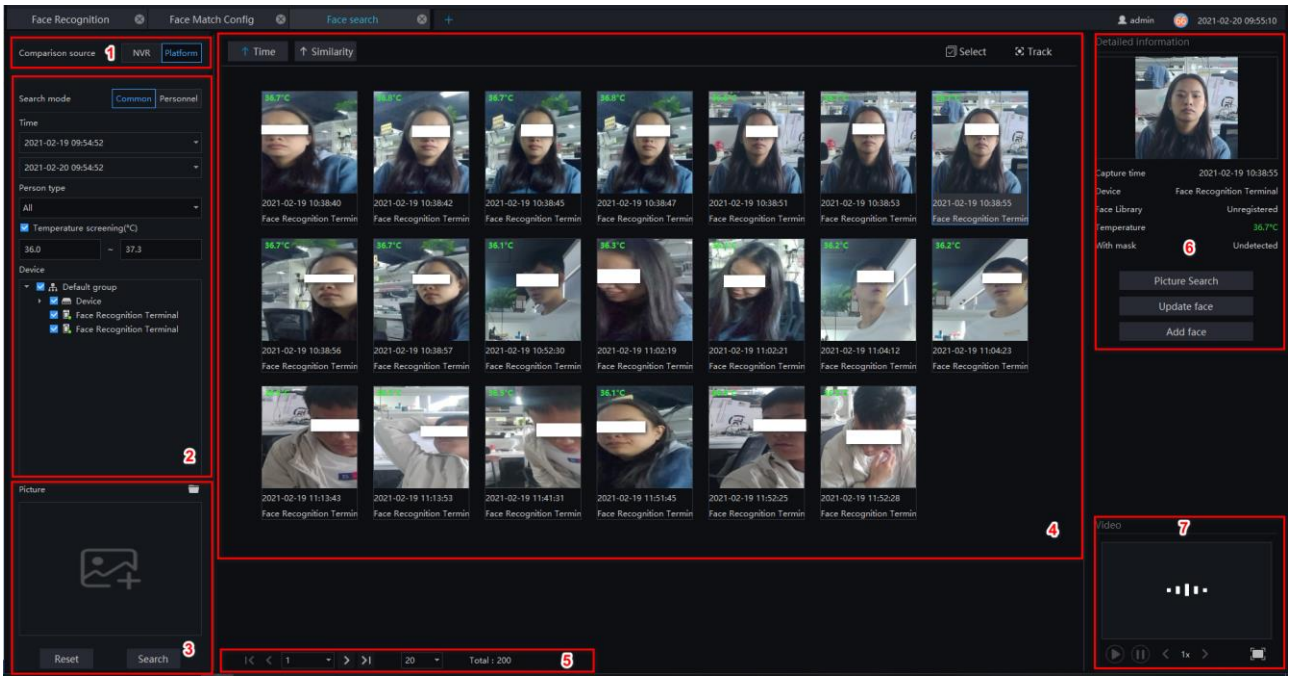


Table 8-4 Smart search

No.	Function	Description
1	Comparison source	Choose the comparison source to search, platform or AI NVR(the data come from the storage of NVR).
2	Set search mode	The search modes are common and personnel. Set the start time of the query. Select the capture camera, tick the group to select all.
3	Set picture	Select picture from the local folder. Set the similarity. Reset: reset the search items. Search: click “Search” and switch the details picture to search
4	Display information	The information can be displayed by time, similarity in row, behavior track.
5	Page information	Page number, number of pages per page, total Switch to next page

No.	Function	Description
6	Details	Click on the image of the query result to display the panorama in the captured state. The captured picture can be entered into the face database. Search directly with snap shots by clicking “Picture Search”. Click “Update face” to update the face images of library, as shown in Figure 8-30. Click “Add face” to enroll the searched picture into library, as shown in Figure 8-31. Enter the face database and search for images. The pictures captured by the camera are generally stored in the snap folder by default.
7	Switch picture to search	If there is a record, you can directly play the video before and after the snapshot.

Figure 8-29 Search mode

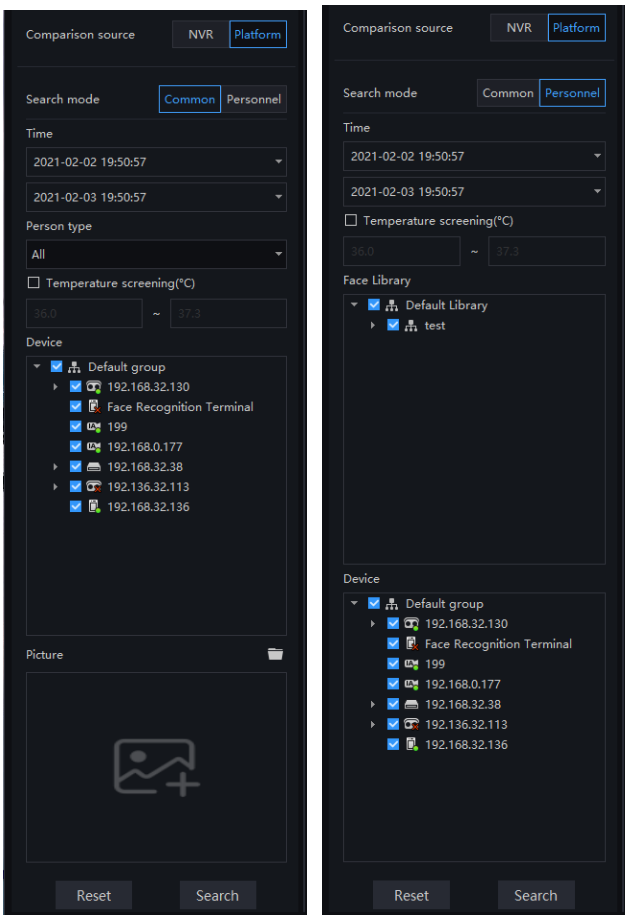


Figure 8-30 Update face picture

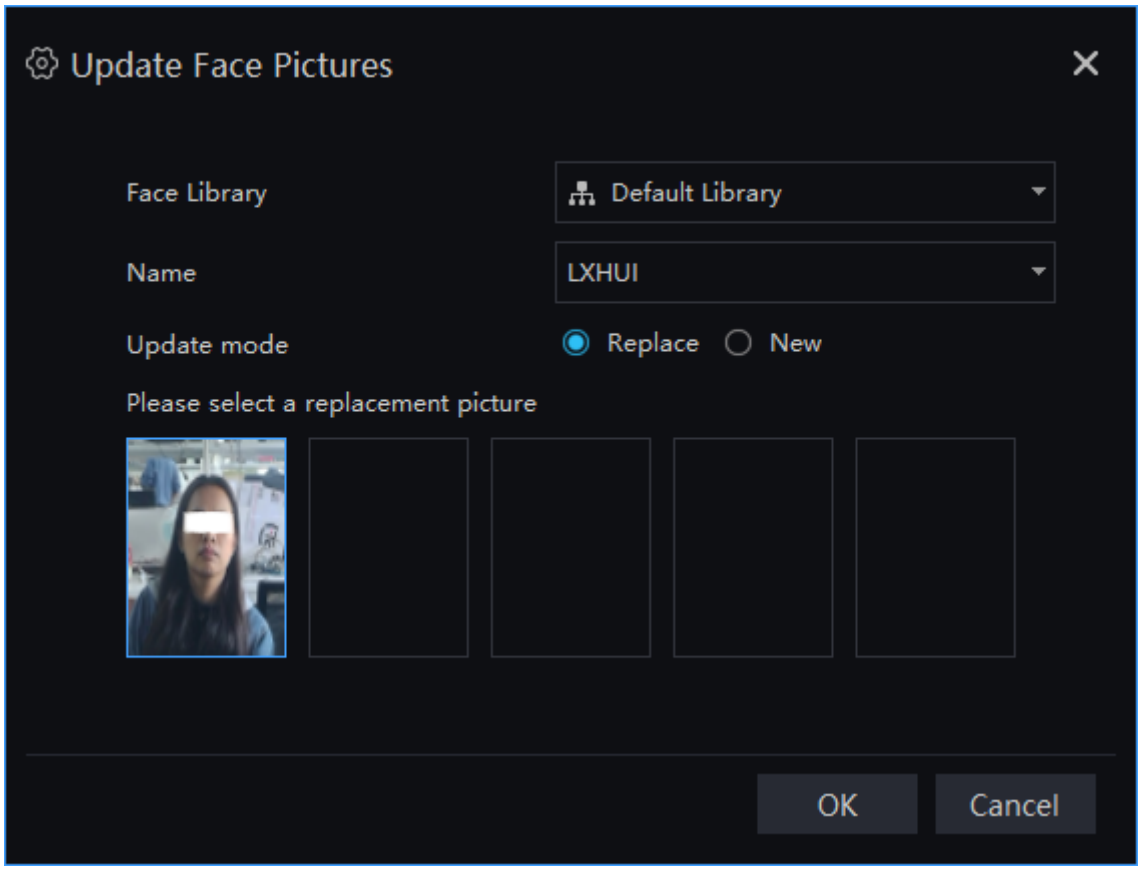
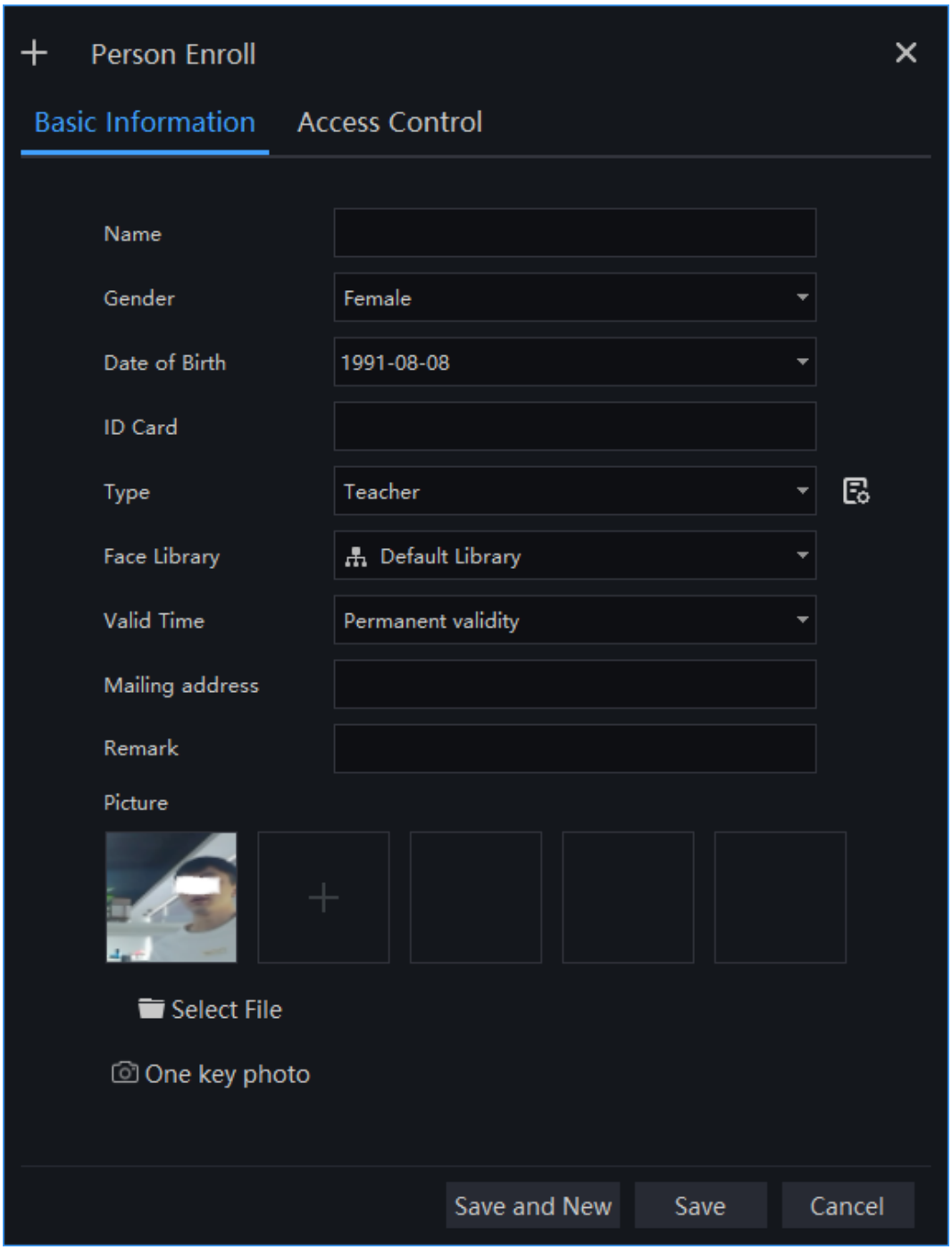


Figure 8-31 Add face



8.4.1 Image Searching

Procedure:

Step 1 Click to select image.

Step 2 Set Similarity; set time of searching picture and the capture devices.

Step 3 Click “Search”, the searching results will display by Time and Similarity.

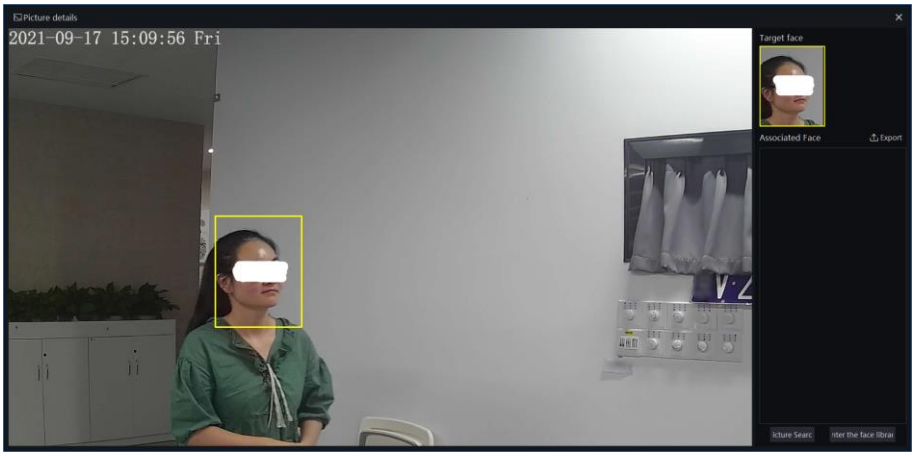
Step 4 Click the images in the result, displaying the details.

Step 5 Click “ Enroll” and show the pop up “Person Enroll” interface. Input relative information and save.

Step 6 Click “Select” to choose picture of searching result.

The detailed information shows the panorama of snapshot, click to view the all person at the same screen, as shown in Figure 8-32.

Figure 8-32 Picture details



The yellow wireframe is drawing the snapshot face.

The red wireframe is drawing the other face at the same scenes.

8.4.2 Track

NOTE

User need to set more than two the face detection cameras at the custom e-map at first.

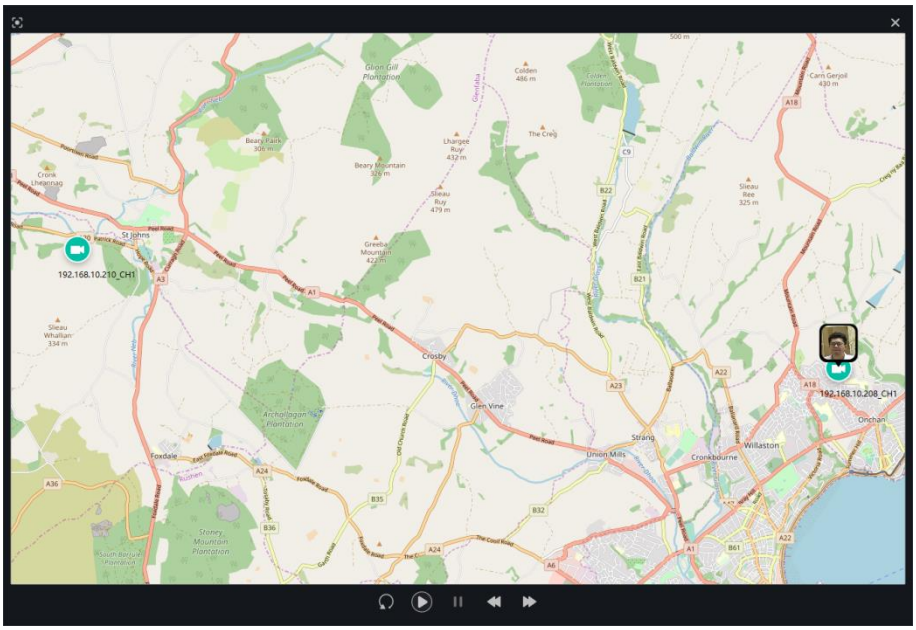
Procedure：

Step 1 Click “select” to start select pictures.

Step 2 Tick the pictures from different cameras.

Step 3 Click “track”, the pop-up track map will show, as shown in Figure 8-33.

Figure 8-33 Track



Step 4 Replay or playback the track line.

8.5 Classification Query

At the classification query page, you can set the query conditions to search the images.

NOTE

This function is only subject to Face Detection cameras.

On the main menu page, click to view the configuration interface, as shown in Figure 8-34.

Figure 8-34 Classification query

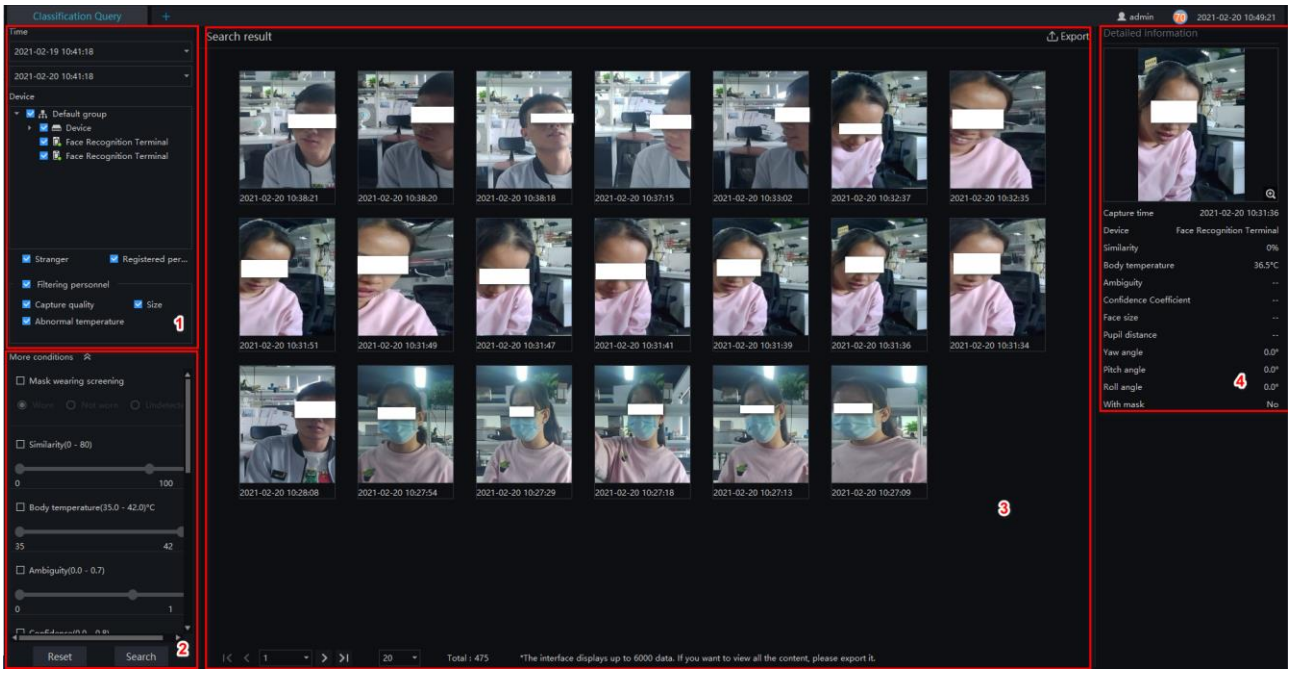


Table 8-5 Classification query

No.	Function	Description
1	Basic conditions of querying	Start time and end time, tick the devices and modes of face libraries, tick the filtering personnel conditions, such as capture quality, size, abnormal temperatures.
2	More conditions	Set similarity, quality score, confidence, face size range, pupil distance range, yaw angle, pitch angle, roll angle.
3	Display result	The result of classification query.
4	Detailed information	The result of querying, show the detail information.

Procedure:

Step 1 Set the query start time and select the device.

Step 2 Tick the devices of the query. The default is to select all.

Step 3 Set the classification query conditions and search accurately.

Step 4 Click “Query” and the result of the query is now displayed.

Step 5 Click “Reset” to reset the query criteria.

Figure 8-35 More conditions

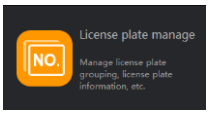
9 License Plate Recognition

9.1 License Plate Manage

The license plate library can add license plate library to identify the matching license plates and manage the vehicle entry and exit. Different levels of license plate face libraries are established according to different needs.

NOTE

This function only supports cameras with license plate recognition.

On the main menu page, click 

to view more detailed interface.

Figure 9-1 License plate manage interface

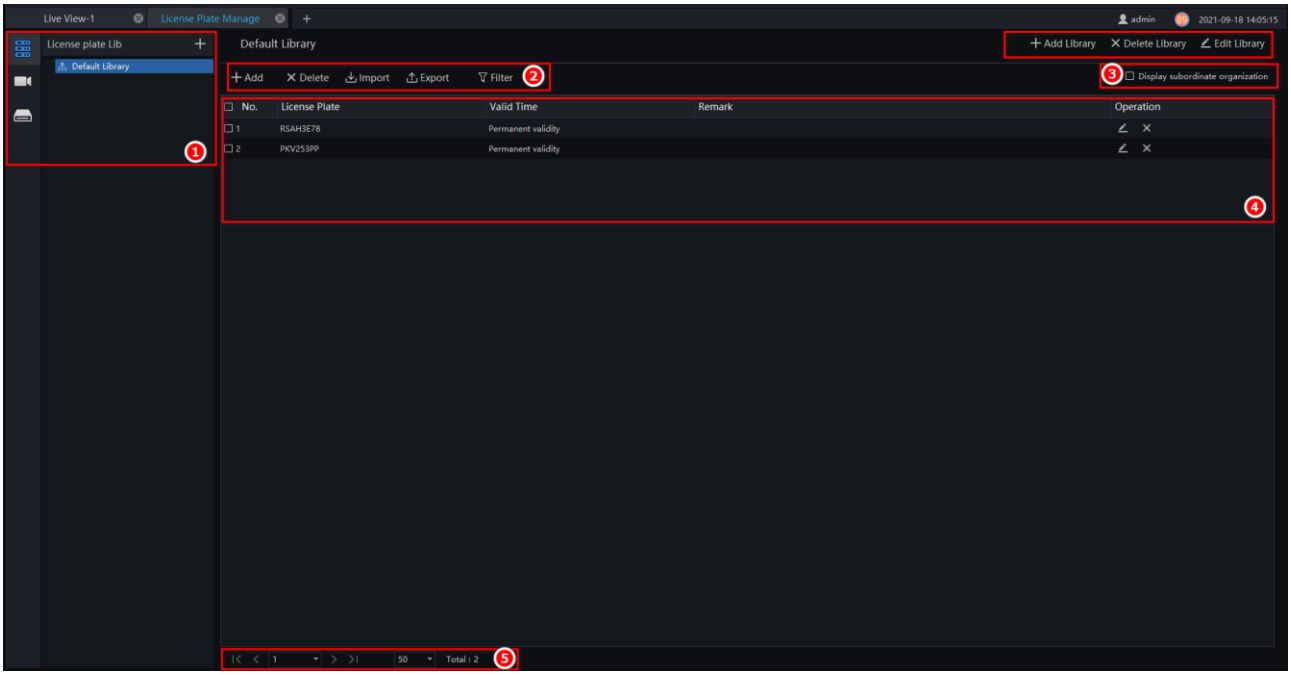
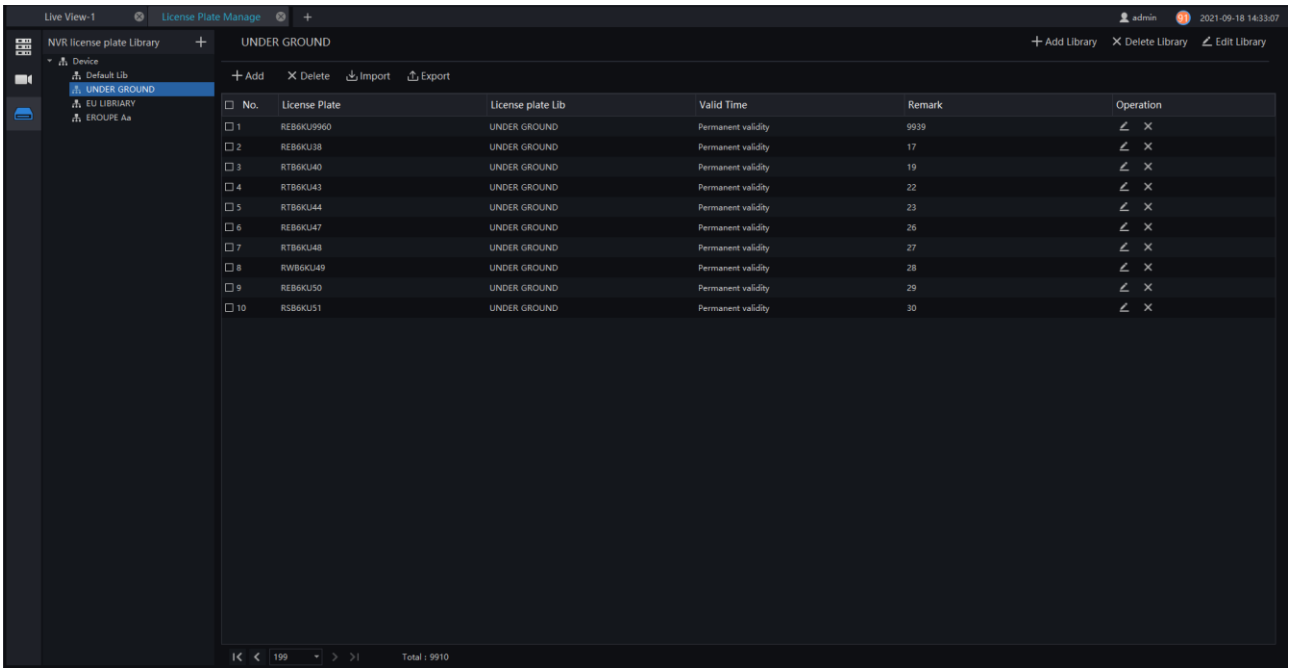


Table 9-1 License plate manage

No.	Function	Description
1	License plate library	Choose platform, IPC (license plate cameras), NVR(the smart NVR) to add plate library Click “add” to add the library of license plate. Show the libraries.
2	Operation of license	The basic operation of license plate.
3	Operation of library	The basic operation of license plate library.

No.	Function	Description
4	Display subordinate organization	Show subordinate organization: Check the license plate information that can display the subordinate organization.
5	Display information	The basic information of the license plate library is displayed.
6	Page information	Page number, number of pages per page, total Switch to next page.

Figure 9-2 NVR license plate library



9.1.1 Add license Plate Library

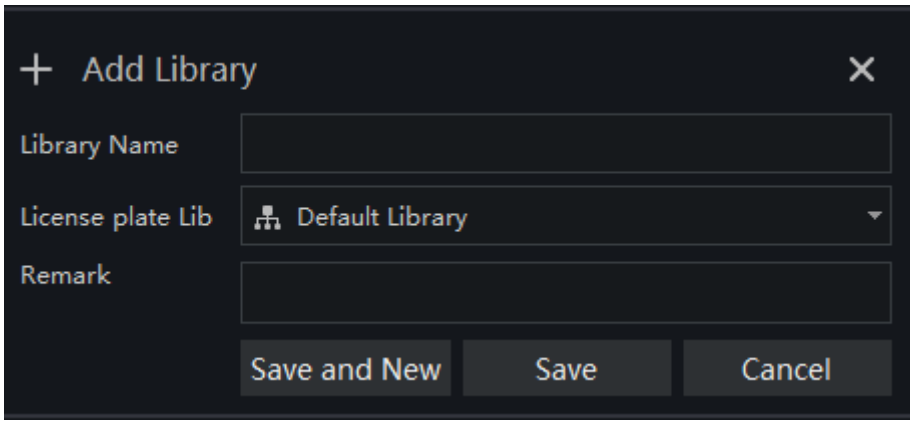
Procedure:

Step 1 Choose “license Plate Library” at archives library interface.

Step 2 Click to add license plate library.

Step 3 Input library name, remark, choose library , as shown in Figure 9-3.

Figure 9-3 Add license plate library



Step 4 Click “Save” to save the parameters.

9.1.2 Add License Plate Information

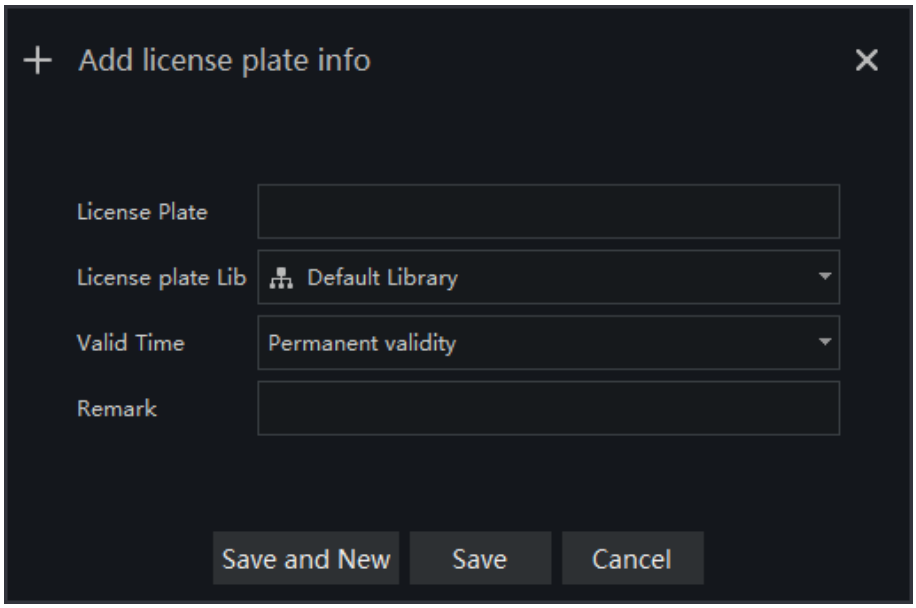
Procedure：

Step 1 Select a license library.

Step 2 Click to add new license plate information.

Step 3 Input the information as shown in Figure 9-4, choose the picture from the local client.

Figure 9-4 Add license plate



Step 4 Click “ Save ”, will show “Add license plate succeed”.

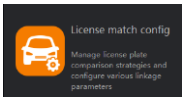
The operations such as import, export, delete license plate library are same as face library, please refer to *chapter 8.2.*

9.2 License Match Config

The license plate recognition function camera is selected in the license plate comparison configuration, so that the vehicle identify can call the configuration.

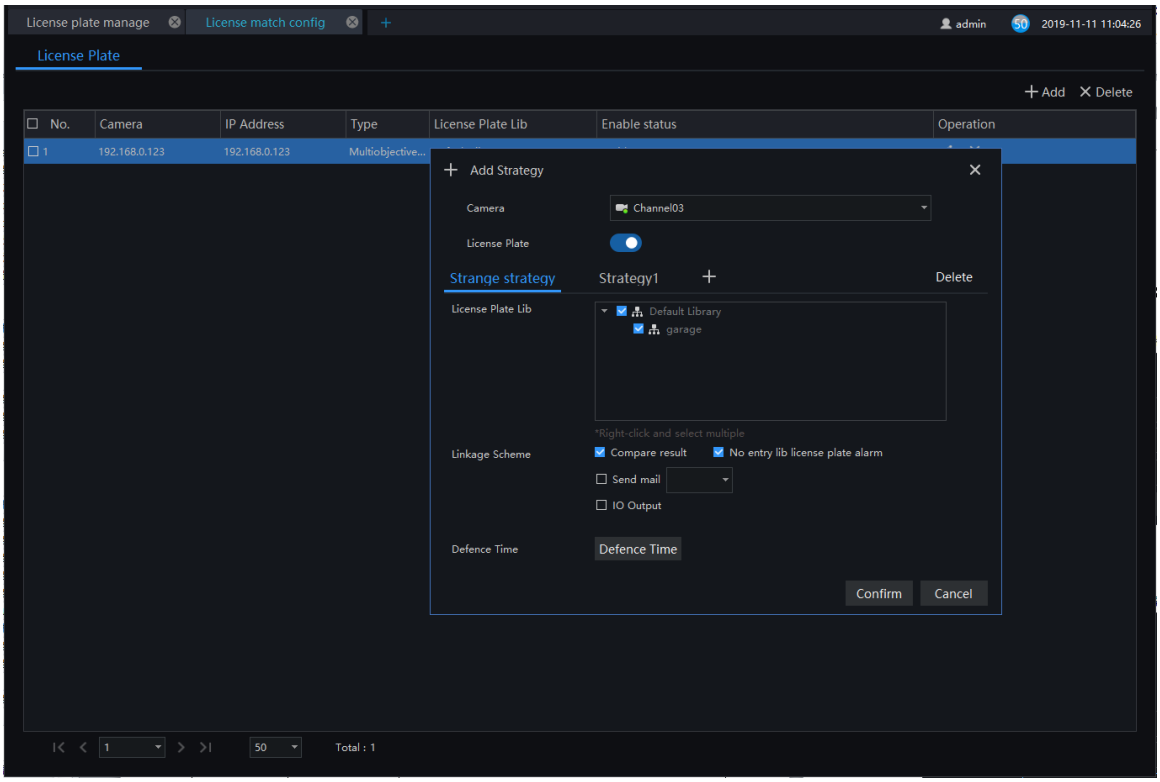
NOTE

This function only supports cameras with license plate recognition.

On the main menu page, click 

to view more detailed interface.

Figure 9-5 License plate configuration

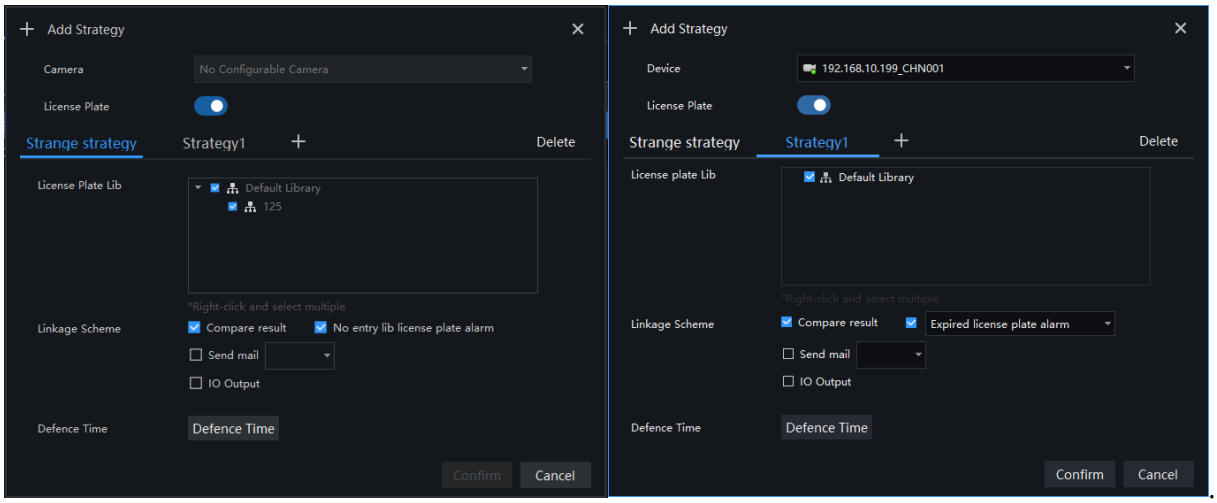


Procedure:

Step 1 Choose “License Plate” at strategy configuration interface.

Step 2 Click “Add” to get into new add strategy, as shown in Figure 9-6.

Figure 9-6 Add strategy



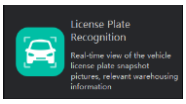
Step 3 Choose camera and license plate library

Step 4 Set up Similarity and activate Stranger mode.

Step 5 Click “Confirm” to save the settings.

9.3 License Plate Recognition

At this page, you can view the snapshots of vehicle, the snapshot will compare with license plate library.

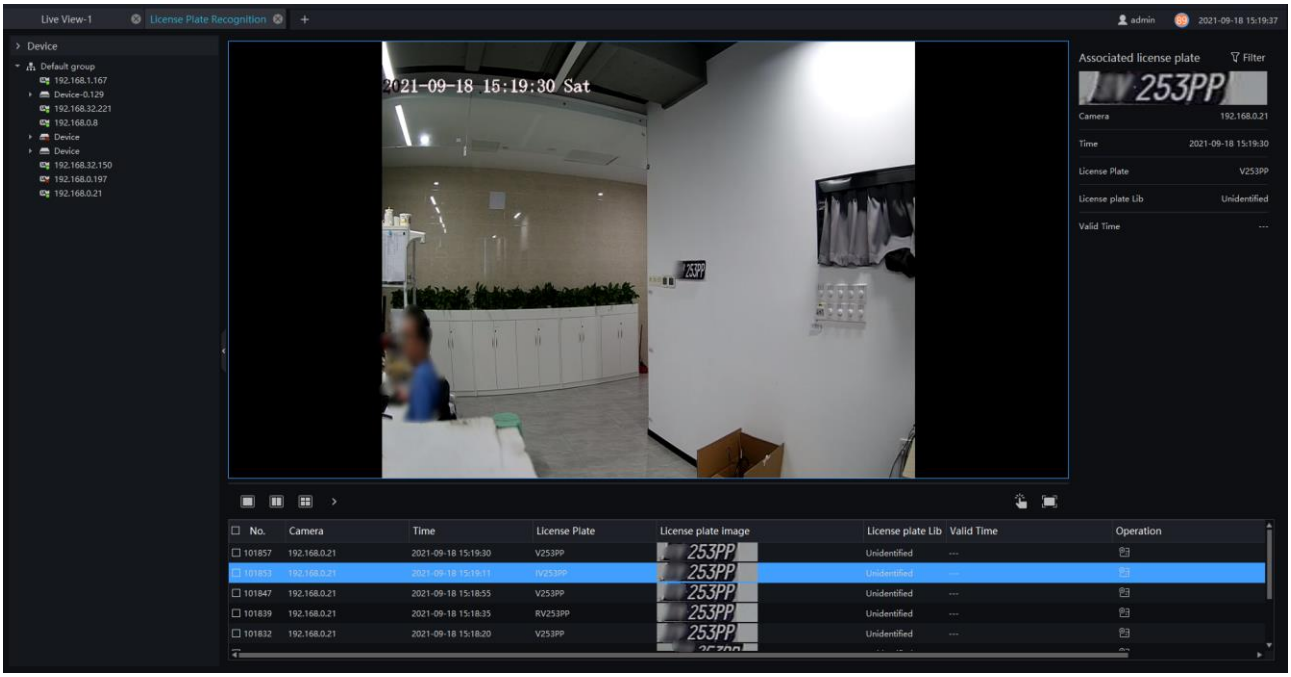
On the main menu page，click 

view the detailed interface, as shown in Figure 9-7.

NOTE

This function only supports the cameras with license plate detection.

Figure 9-7 License plate recognition interface



Procedure：

Step 1 The license plate recognition camera will be displayed directly in the list area.

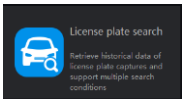
Step 2 Click on the working camera.

Step 3 The captured license plate will be displayed in the area below the live video.

Step 4 The associated license plate information is displayed on the right interface.

Step 5 Click to open or close the I / O output manually.

9.4 License Plate Search

On the main menu page，click 

view the detailed interface, as shown in Figure 9-8.

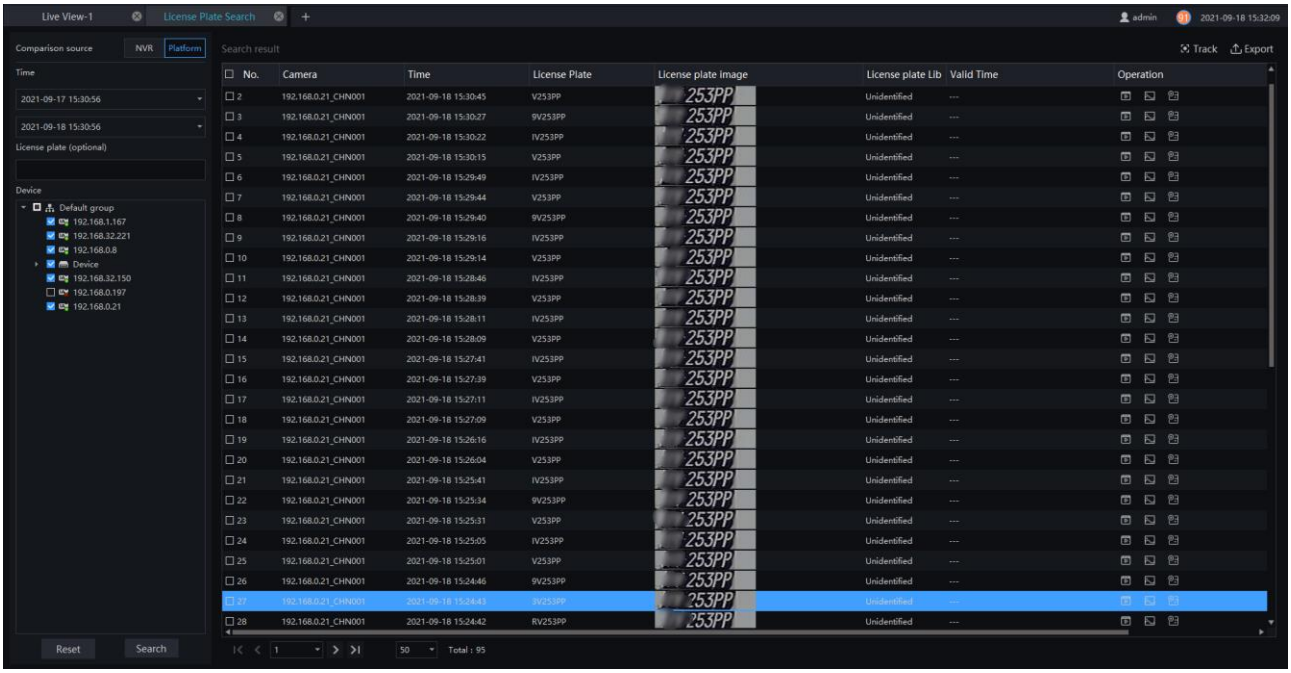
Procedure：

Step 1 Set time of searching picture and the capture devices.

Step 2 Click “Search”, the searching results will display .

Step 3 Click the images in the result, displaying the details.

Figure 9-8 IPC license plate search



Step 4 Tick more than two pictures, and the pictures are from two or more cameras.

Step 5 Click “Track” to form the track of car.

Step 6 Click the operations to play the record, image and add the license to library.

Step 7 Click “Export” to export the result, user can choose the export mode (no graph mode and small graph mode).

Figure 9-9 Export

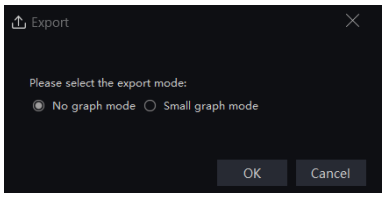
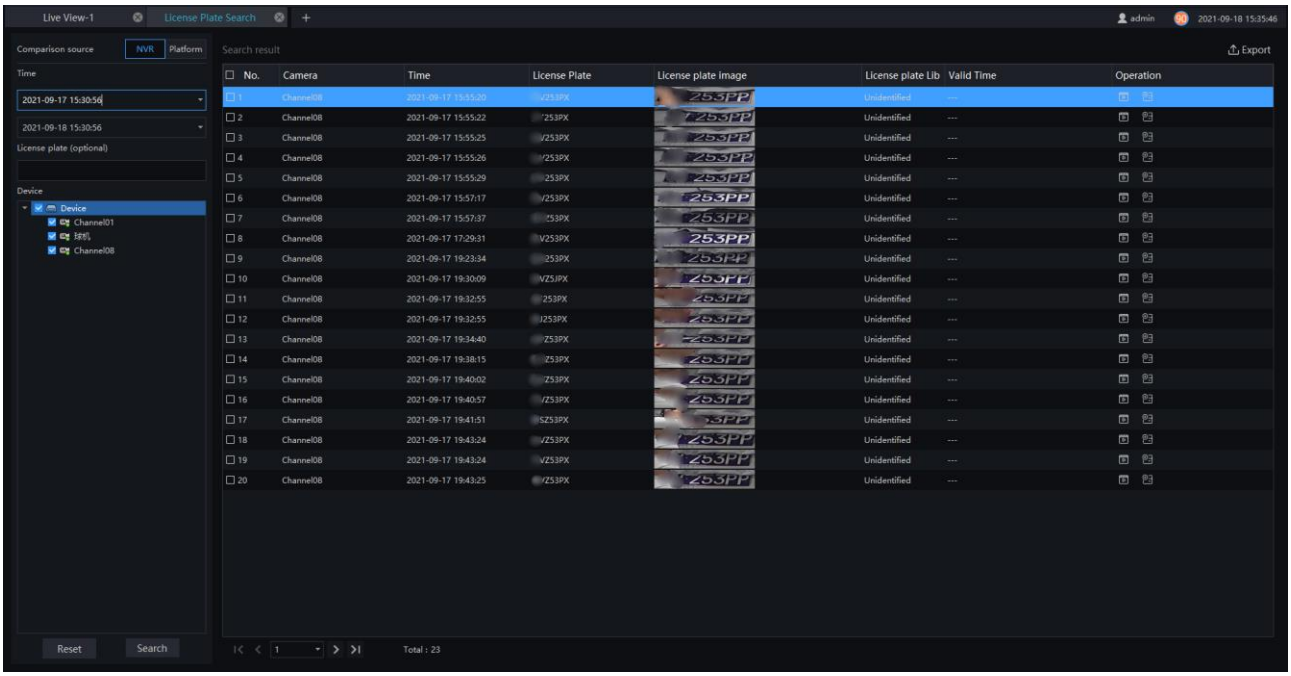


Figure 9-10 NVR license plate search



10 Multi-target Recognition

10.1 AI Recognition

At AI recognition interface, user can snapshot the vehicle, car, human and non-motor vehicle by AI cameras.

NOTE

This function only supports AI cameras and vehicle cameras.

On the main menu page，click view the detailed interface, as shown in Figure 10-1.

Figure 10-1 AI recognition

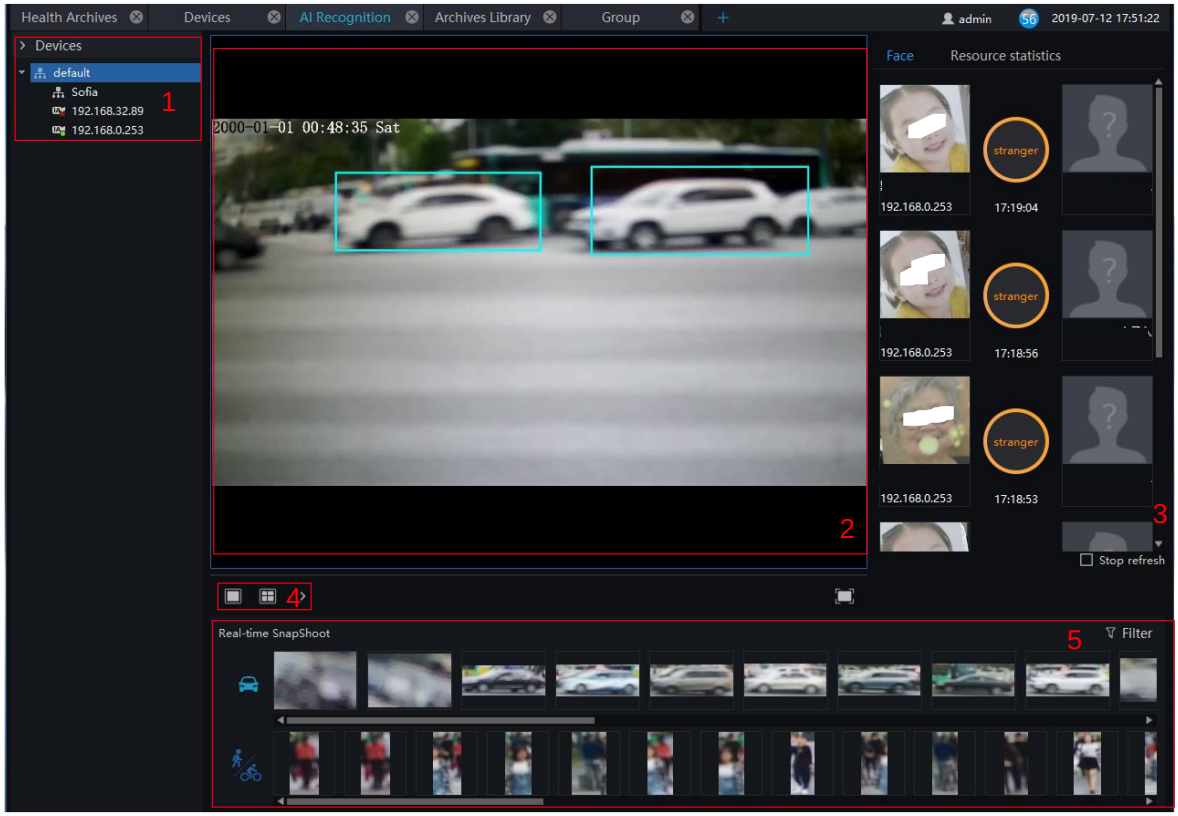


Table 10-1 AI recognition

No.	Function	Instruction
1	Device list	The AI cameras will show at this area.
2	Live video	Show live video

No.	Function	Instruction
3	Face/ Resource statistics	The snapshot of face will compare with library, and results show here. Count the vehicles and face/ride bike
4	Switch windows	Switch live video windows format.
5	Real-time snapshot	the results display area, which will show real-time snapshot of the license plate, face, and bicycle. You can also set the filter conditions.

Figure 10-2 Filter

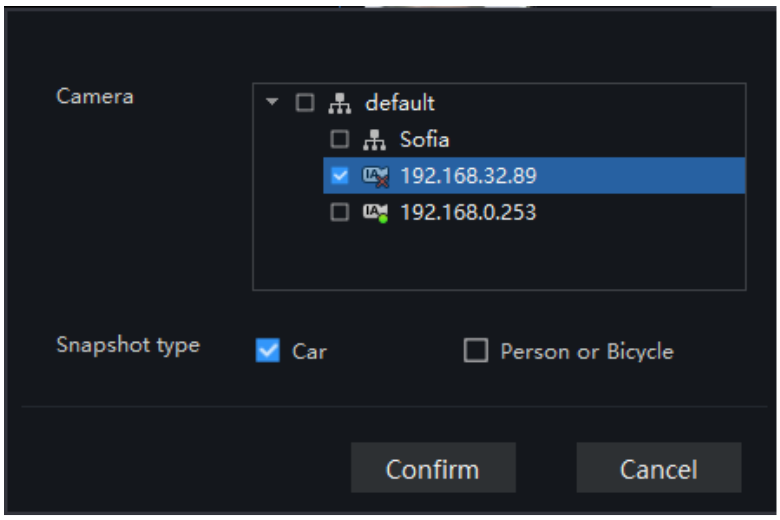


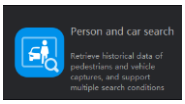
Figure 10-3 Resource statistics

10.2 Intelligent Search

At intelligent search interface, user can search snapshot of vehicle or person by AI cameras.

NOTE

This function only supports AI cameras.

On the main menu page，click 

view the detailed interface, as shown in Figure 10-4.

Procedure：

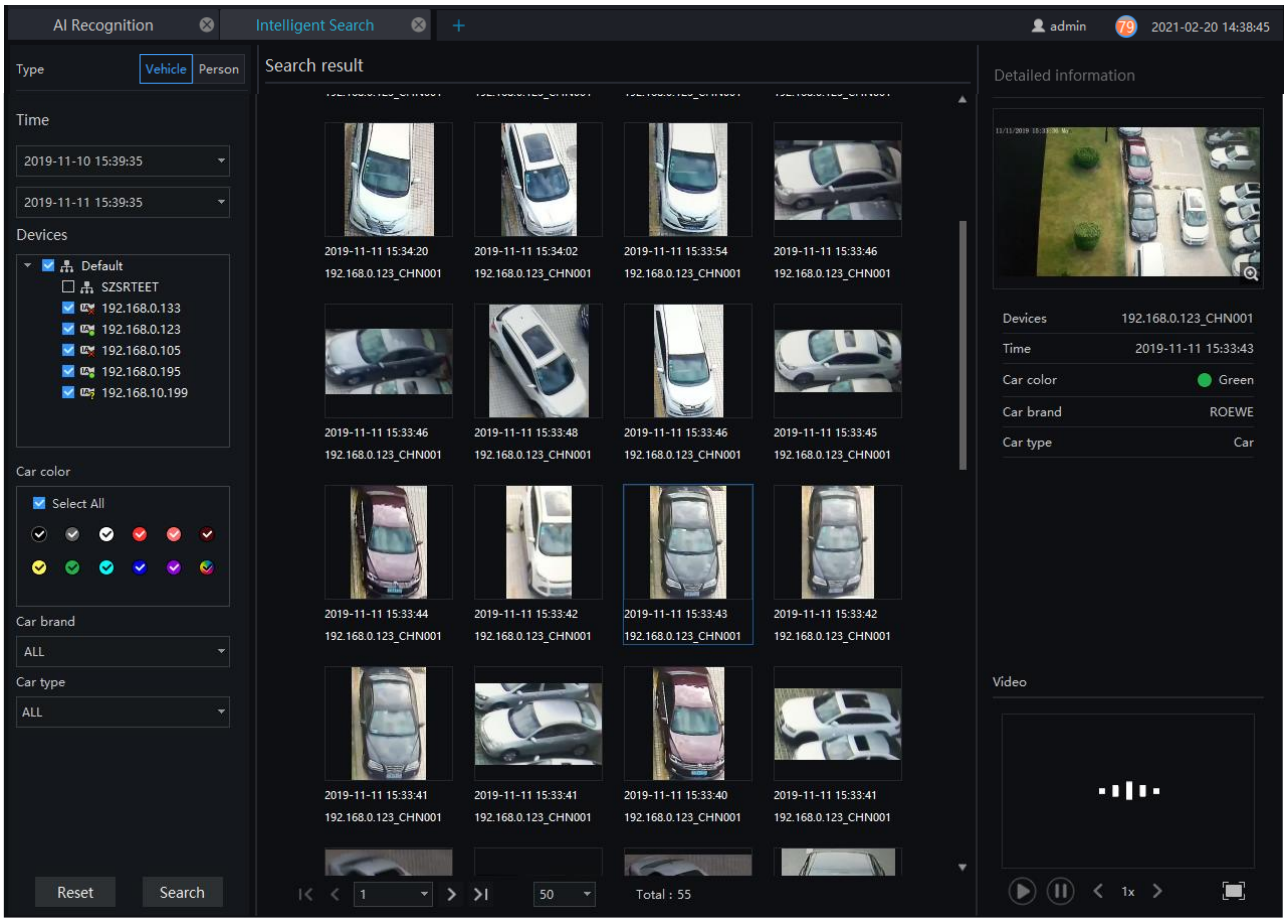
Step 1 Choose the type, car or person.

Step 2 Set time of searching picture and the capture devices.

Step 3 Set license plate, it is optional.

Step 4 Click the images in the result, displaying the details.

Figure 10-4 AI search



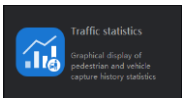
10.3 Traffic Statistics

On the traffic statistics page, you can query the group's traffics flow (statistics of people and vehicles under an organizational structure) and devices traffic (the traffic of people on a certain day), and count the number of vehicles and pedestrians at a specific time.

NOTE

This function only supports AI cameras.

Choose month, day, or hour to count.

On the main menu page，click 

view the detailed interface, as shown in Figure 10-5.

Figure 10-5 Traffic statistics

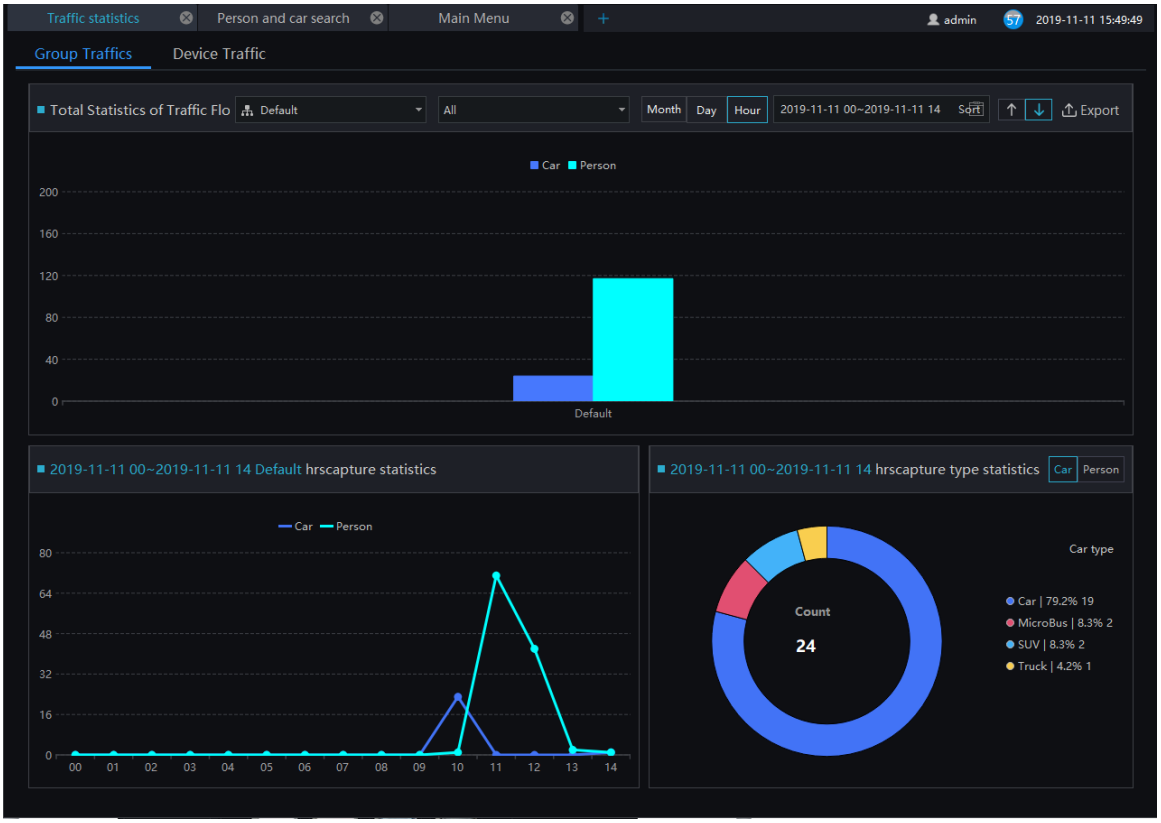
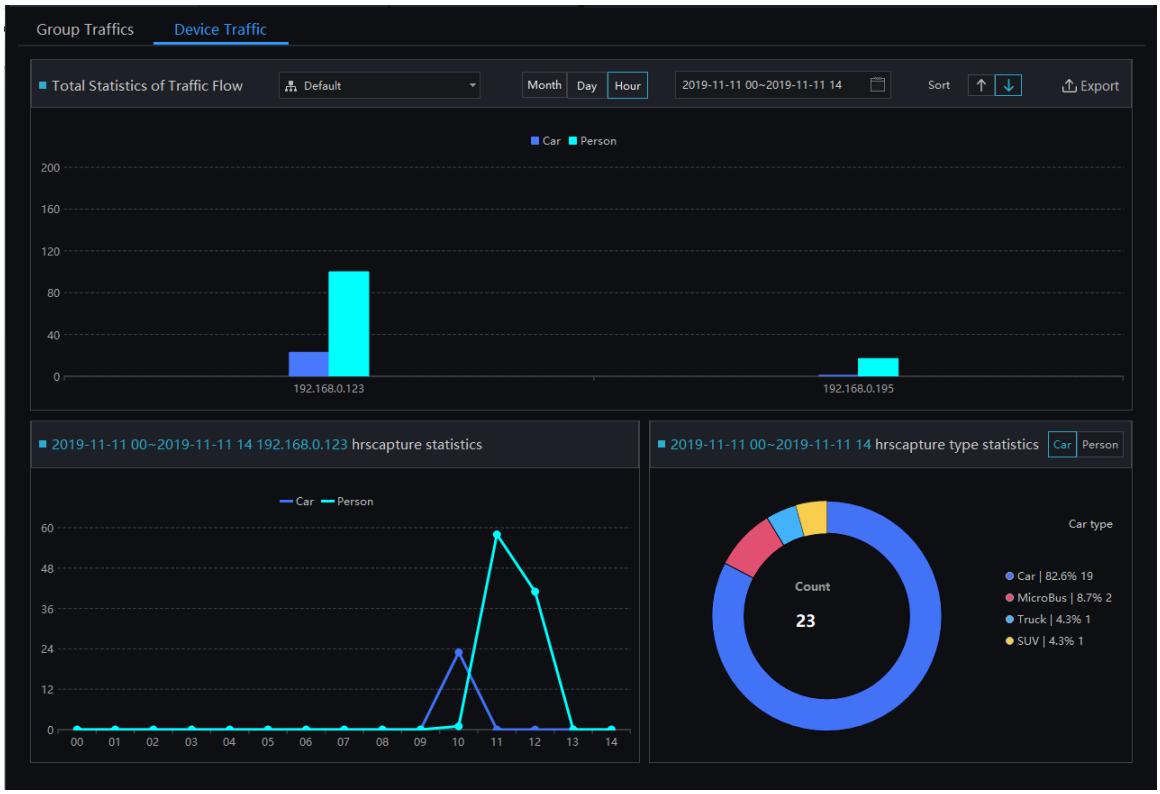


Figure 10-6 Device traffic

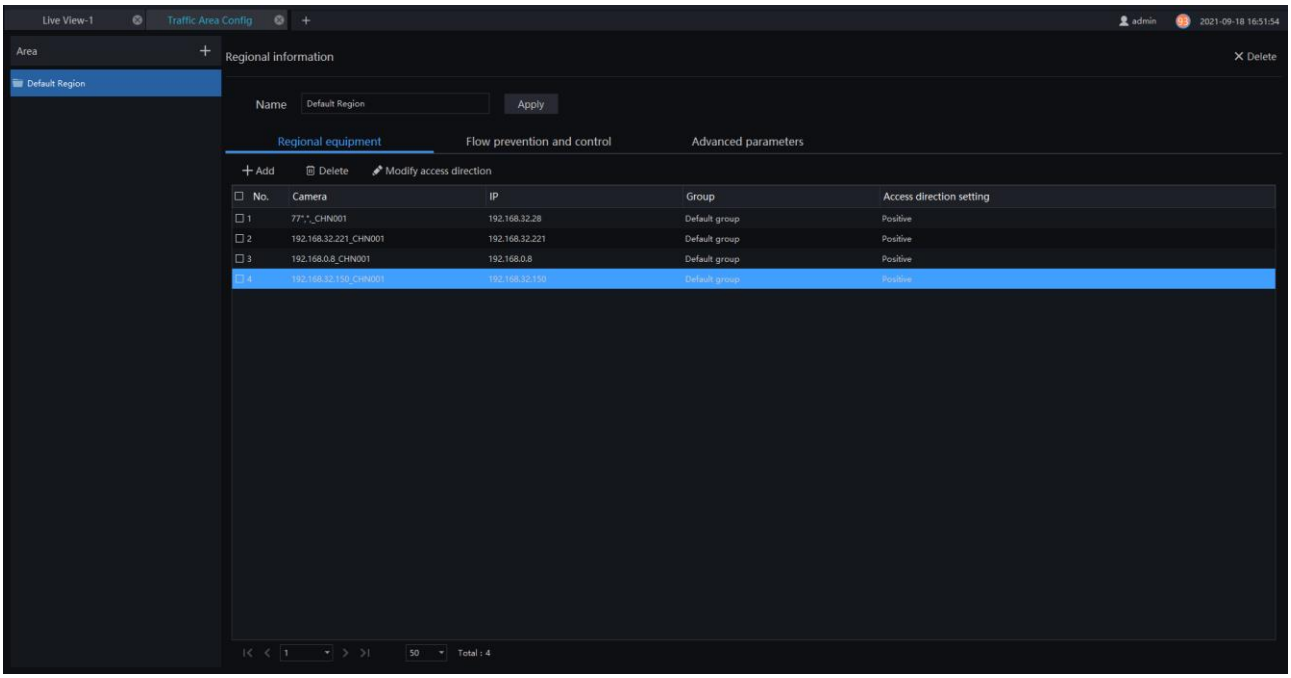


10.4 Traffic Area Config

On the main menu page，click view the detailed interface, as shown in Figure 10-7.

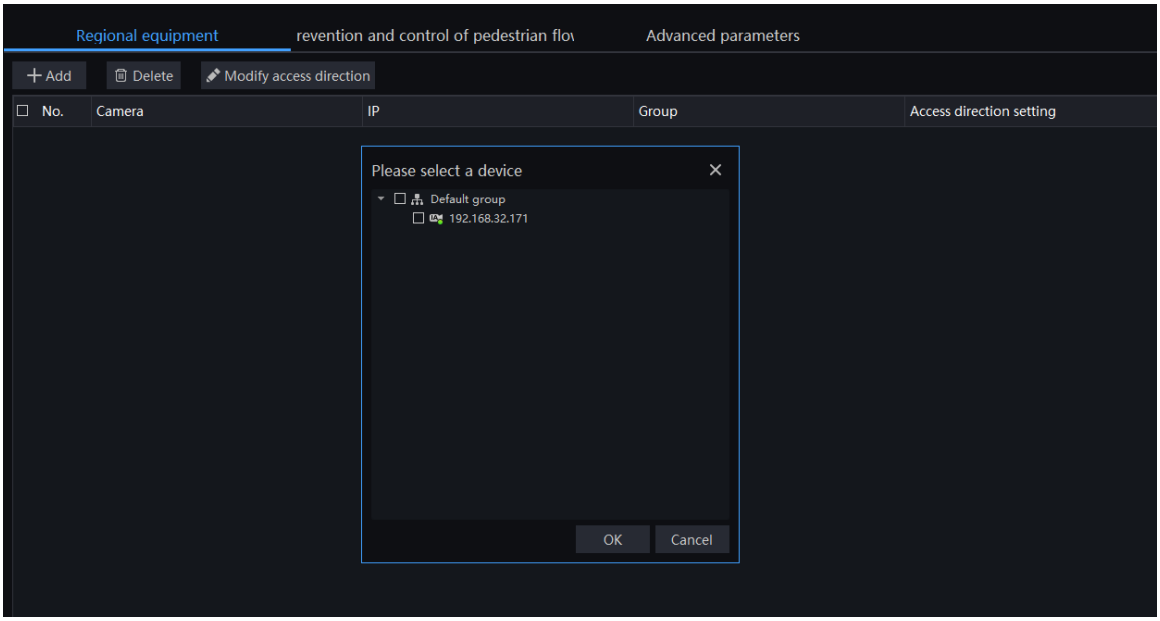
Step 1 User install multiple AI cameras to manage the areas, set the difference area configurations, as shown in Figure 10-7.

Figure 10-7 Traffic area configuration

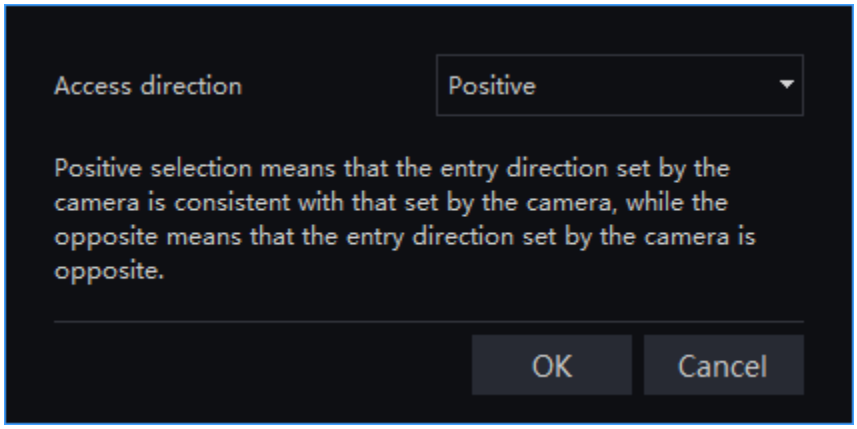


Step 2 Click “+” to add new area to deploy, as shown in Figure 10-8 , choose the devices(the AI cameras should enable the personnel count function at first). Add successfully and the list will show on interface.

Figure 10-8 Regional equipment

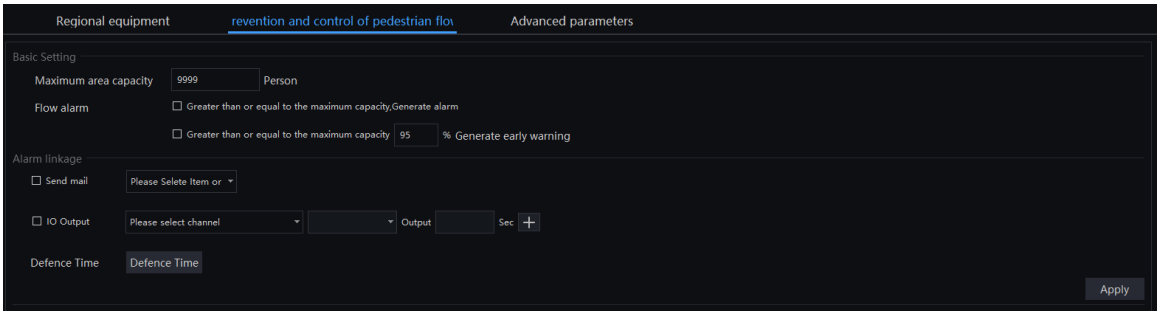


Step 3 Choose the camera, click “Modify access direction” to set the direction, as shown in figure.



Step 4 Set the prevention and control of pedestrian flow, basic settings include maximum area capacity and flow alarm. User can set the alarm linkage to reminder the manager.

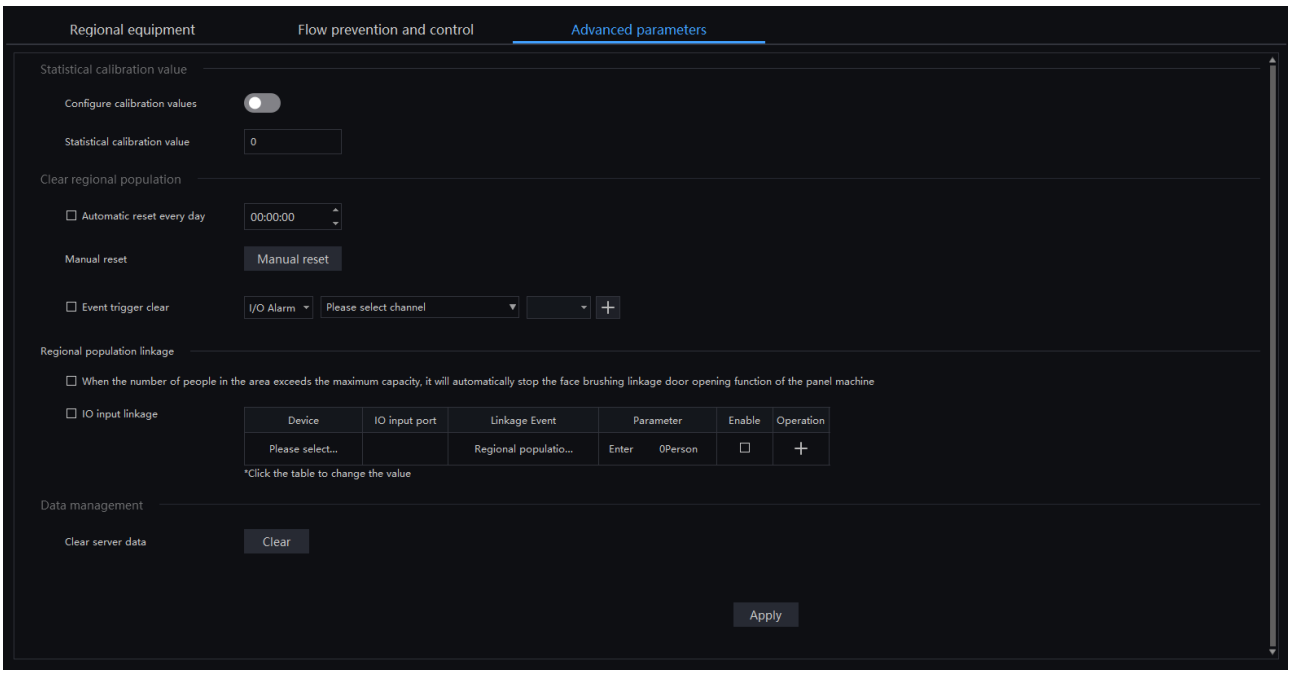
Figure 10-9 Prevention and control of pedestrian flow



Step 5 Set the advance setting(statistical calibration, clear regional population, regional population linkage), automatic reset every day or manual reset. Automatic reset everyday means the regional traffic data will be cleared at the set time.

Step 6 Manual reset means the data will be cleared when user click the “Manual reset” icon. Clear server data means the data of personnel will be cleared up (User should be cautious about that operation to keep data safety).

Figure 10-10 Advanced parameters



Step 7 Click “Apply” to save the settings.

10.5 People Flow Statistic

On the main menu page，click view the detailed interface, as shown in Figure 10-11.

People flow statistics can be based on passenger flow statistics and regional statistics.

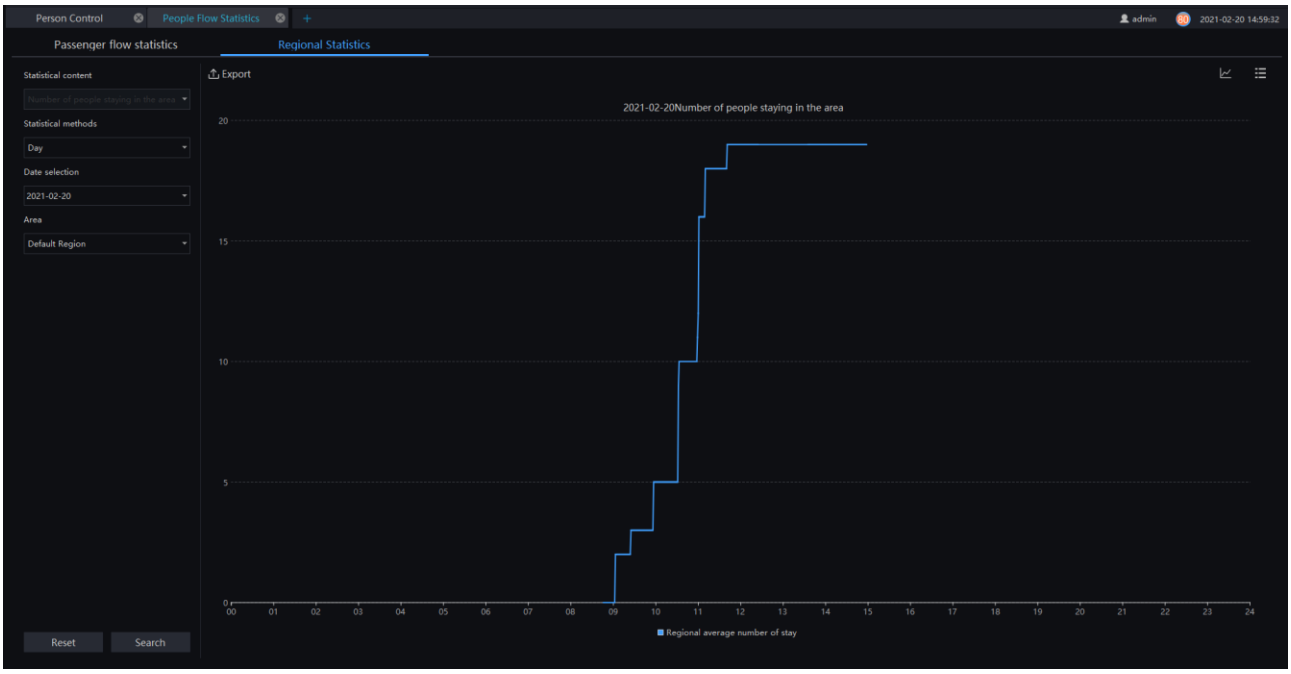
Passenger flow statistics are mainly to count the incoming and outgoing flow of people, and support single-point, multi-point, and regional statistics.

Passenger flow statistics: Select the statistical method, set the date, select the statistical type and equipment, and click "Search" to view the statistical results. The results can be displayed in three ways, as shown in Figure 10-11 .

Figure 10-11 Passenger flow statistics

Regional statistics mainly take the area as a unit to count the number of people staying in the area. Set the statistical method (year, month, day) and select the area to accurately retrieve the relevant data, as shown in Figure 10-12.

Figure 10-12 Regional statistics



10.6 **Person Control**

On the main menu page，click view the detailed interface, as shown in Figure 10-13.

Person control is to display human flow-related data in an intuitive way. There are three display modes: administrator mode, preview mode and traffic light, as shown in Figure 10-13.

Figure 10-13 Person control

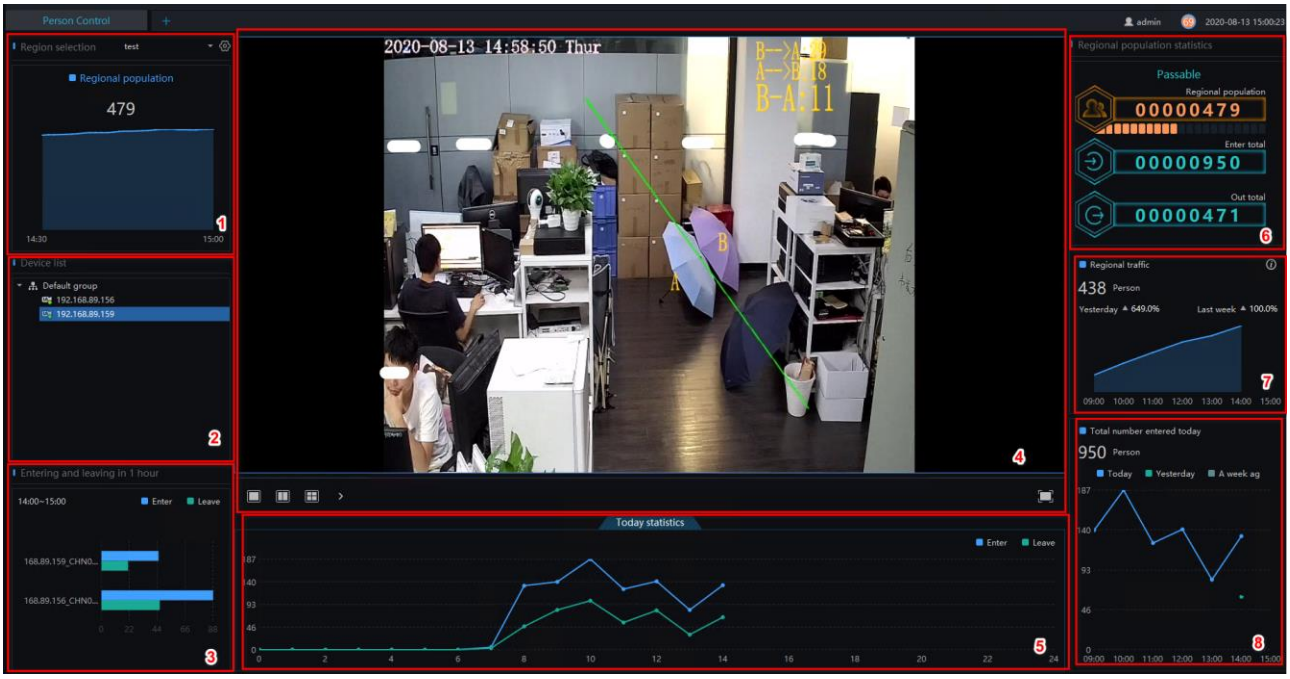


Table 10-6 Person control

No.	Function	Description
1	Region selection	Select the setting area for display, and real-time display of the number of people in the area (updated once a minute).
2	Device list	List of devices in the area
3	Entering and leaving in 1 hour	Different cameras enter and exit the comparison at the same time (updated every hour).
4	Live video play	User can set different split screens to play real-time videos in the device list.
5	Toady statistics	Count the number of people every hour (updated every hour).
6	Regional population statistics	Shows the number of people in the area, the total number of entering, and the total number of outing. The display person can pass under the set number limit. If the number of people exceeds the warning value, it is displayed in orange, and the threshold value is displayed in red (updated once a minute).

No.	Function	Description
7	Regional traffic	Regional traffic: the average number of people staying in the region during the most recent hour Yesterday: Comparison of the number of people stranded in the region during the same time period today and yesterday Last week: Comparison of the number of people stranded in the region during the same time period today and last week, (updated every hour).
8	Total number entered today	Today, yesterday, and the previous three sets of data comparison display (updated every hour).

Figure 10-14 Display setting

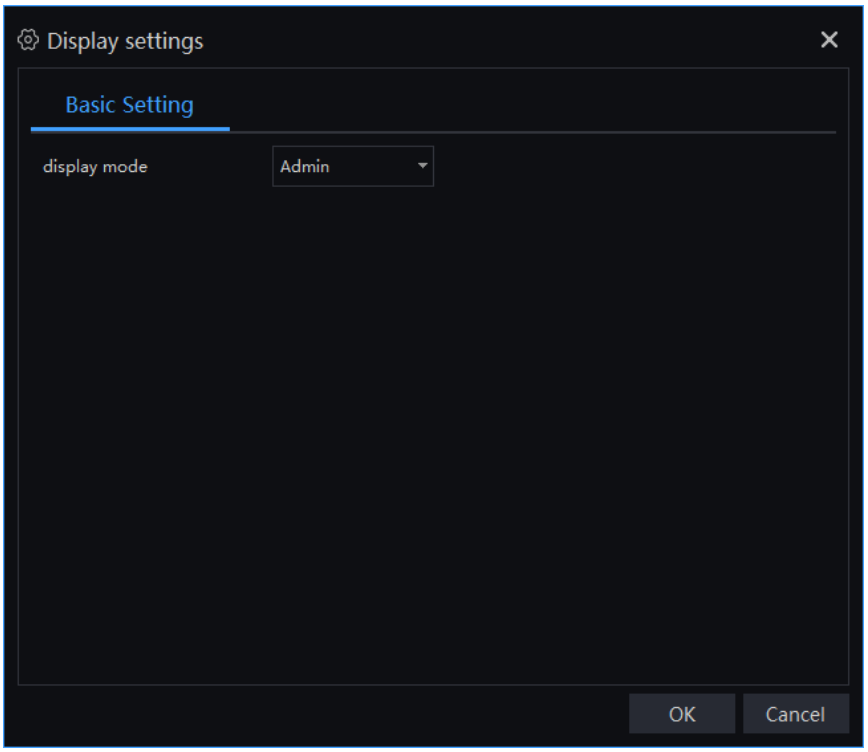


Figure 10-15 Preview mode

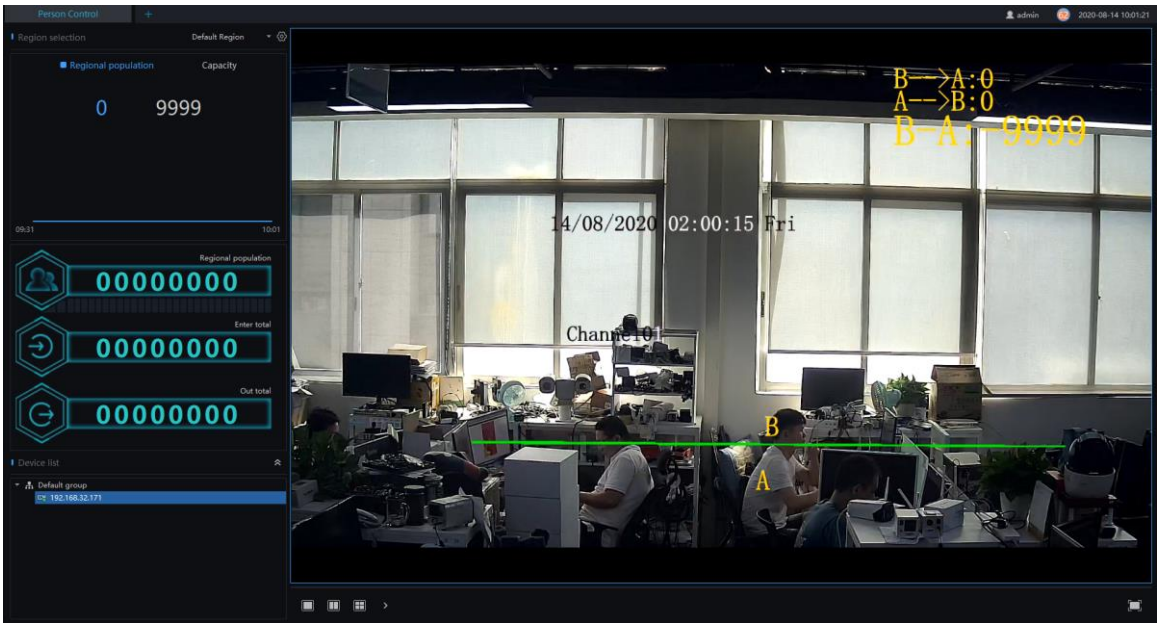
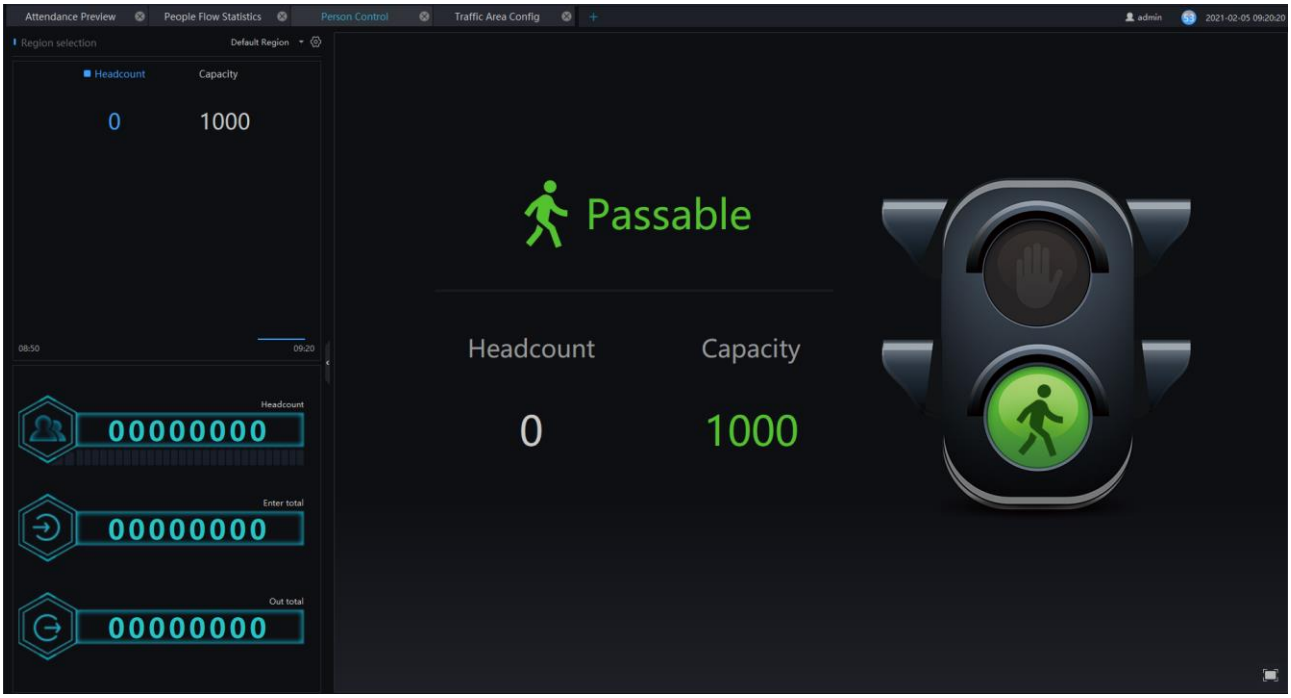


Figure 10-16 Traffic light display mode



The display mode is set the traffic light, the personnel count is less than capacity, it will show the green light, and be allowed pass.

11 Attendance

11.1 Attendance Config

Attendance configuration has attendance group management, schedule management, attendance settings.

Figure 11-1 Attendance configuration

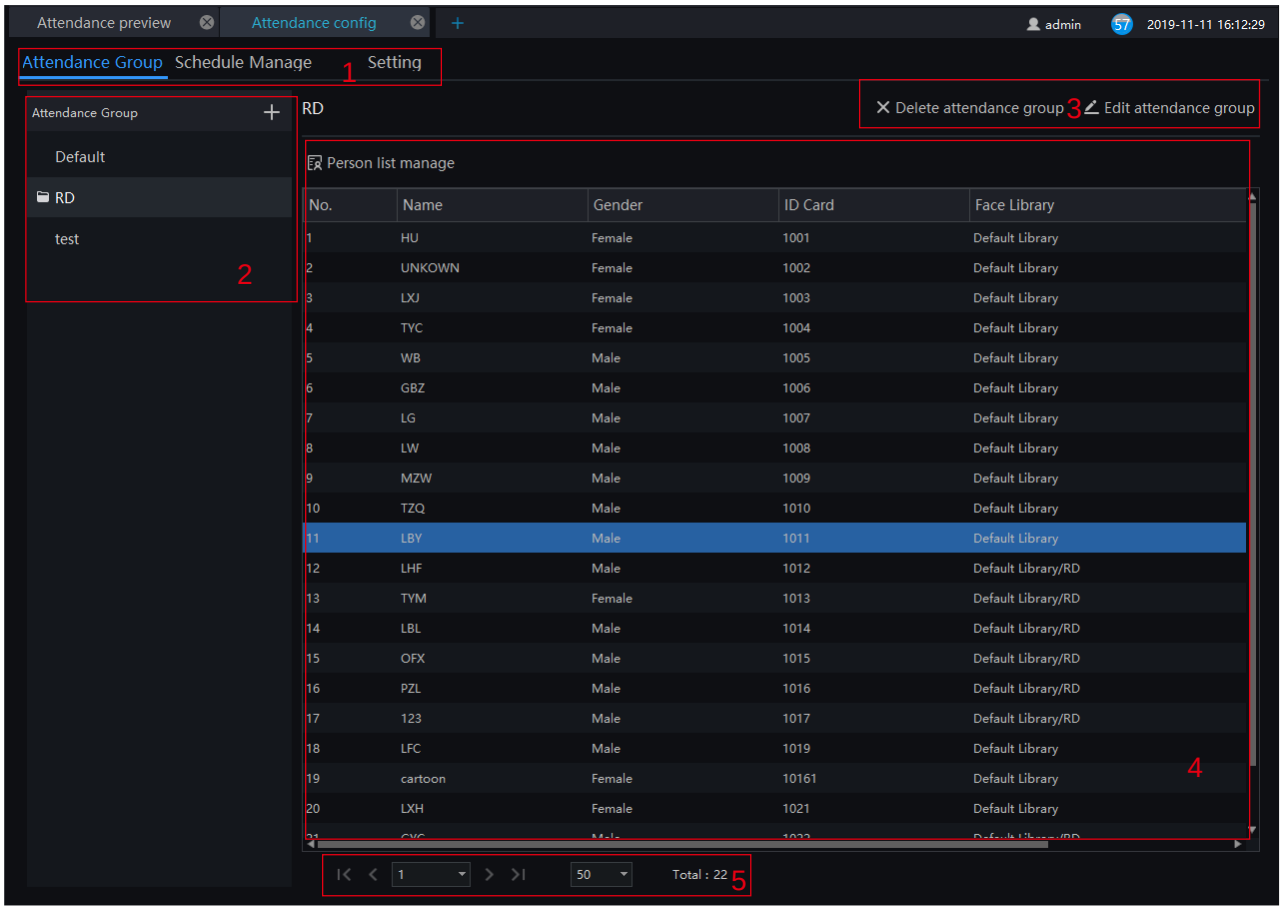


Table 11-1 Attendance

No.	Function	Description
1	Guide of attendance	Attendance group, schedule manage, attendance setting.
2	Group	Show the attendance group.
3	Basic operation	Edit or delete the attendance group.
4	Person list manage	Basic information of group.

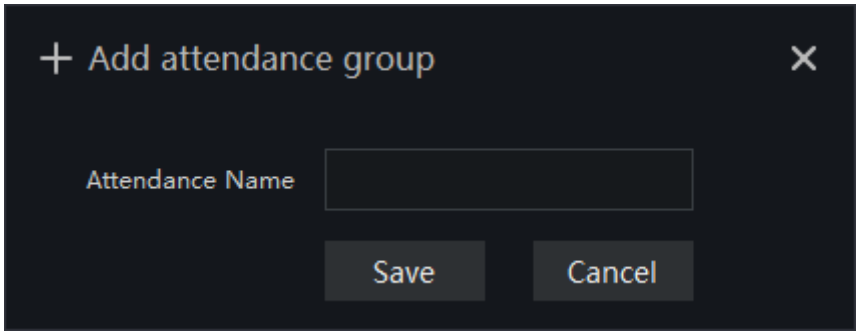
No.	Function	Description
5	Interface display	Show the current page of the person, and the page displays the number of alarms, switch to next page to show alarm information.

11.1.1 Attendance Group

Procedure:

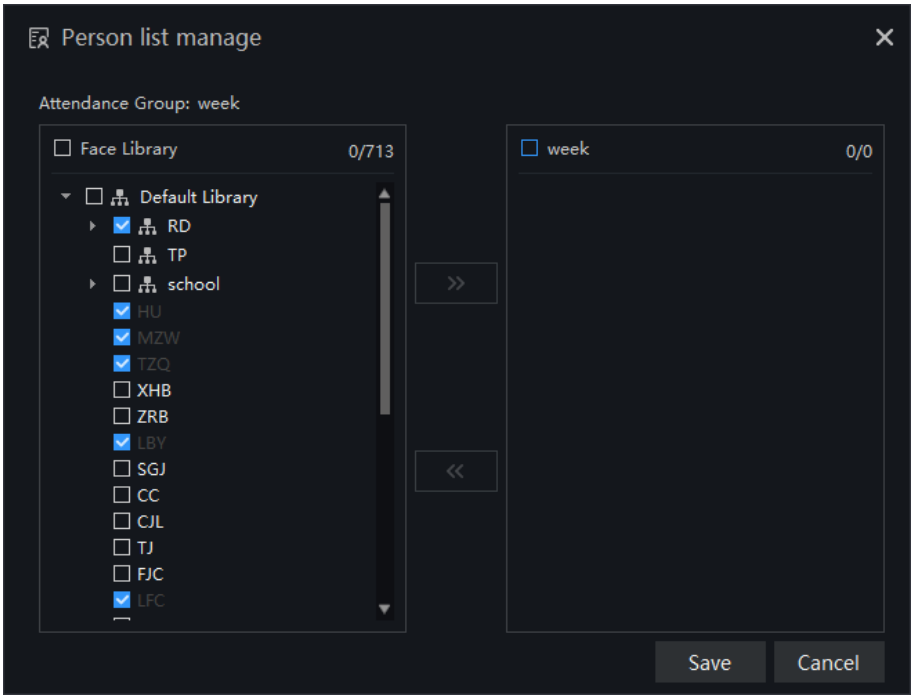
Step 1 Click "+ " to add attendance group, input the name of group.

Figure 11-2 Add attendance group



Step 2 Click "Person list manage" to add person to new group, as shown in Figure 11-3.

Figure 11-3 Person list manage



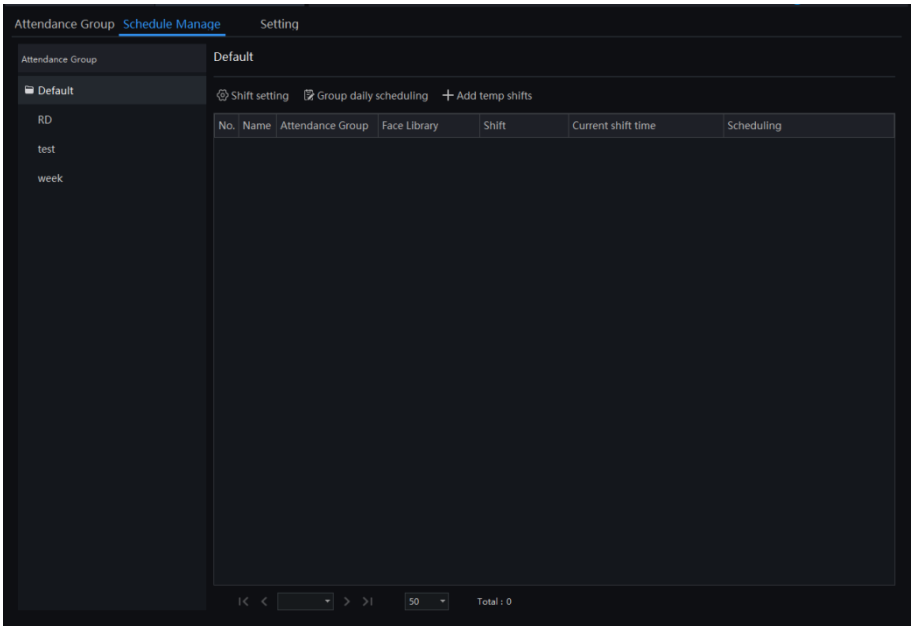
Step 3 Tick the staff of face library to attendance group.

Step 4 Click "Save" to save the settings.

Step 5 Click "Edit attendance group" to modify.

11.1.2 Schdule Manage

Figure 11-4 Schedule manages



Procedure：

Step 1 Click “Shift setting” to enter the interface, as shown in Figure 11-5.

Figure 11-5 Shift setting

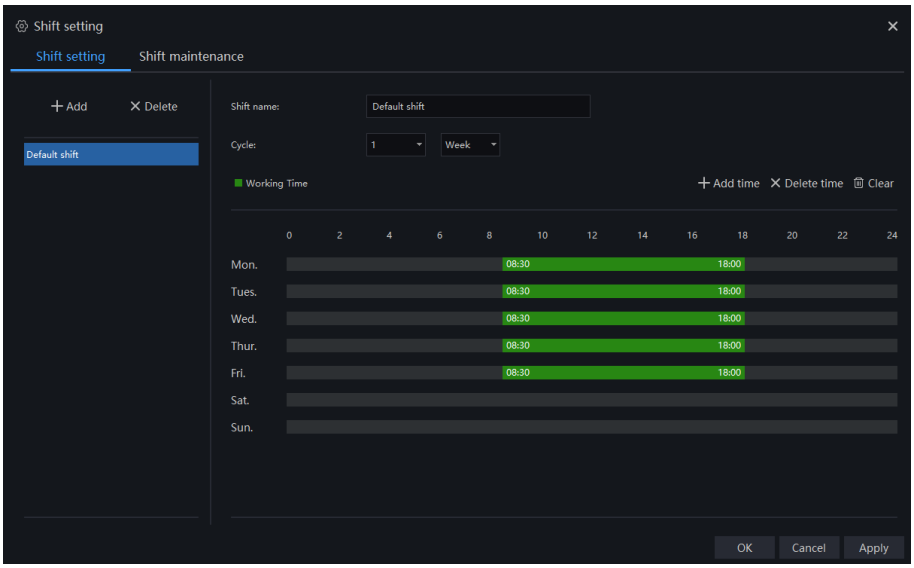
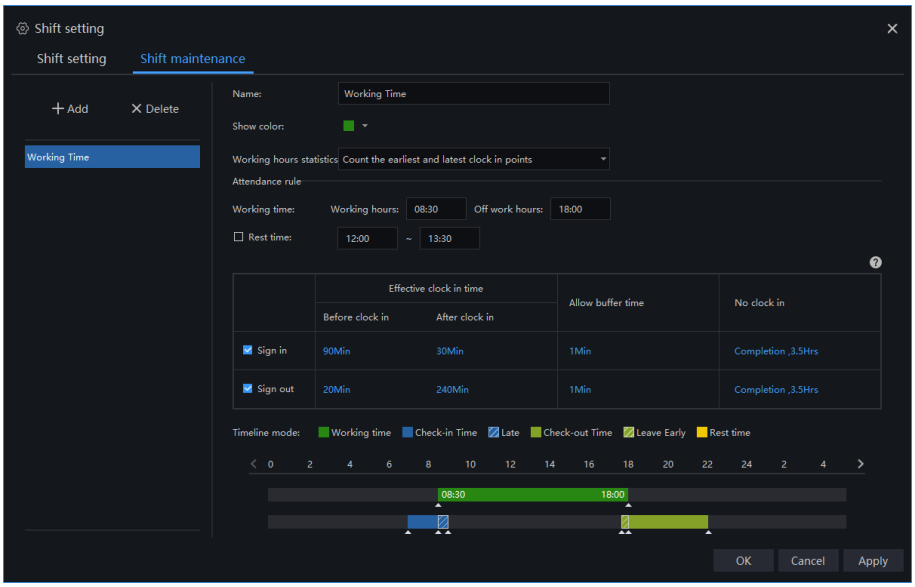


Figure 11-6 Shift maintenance

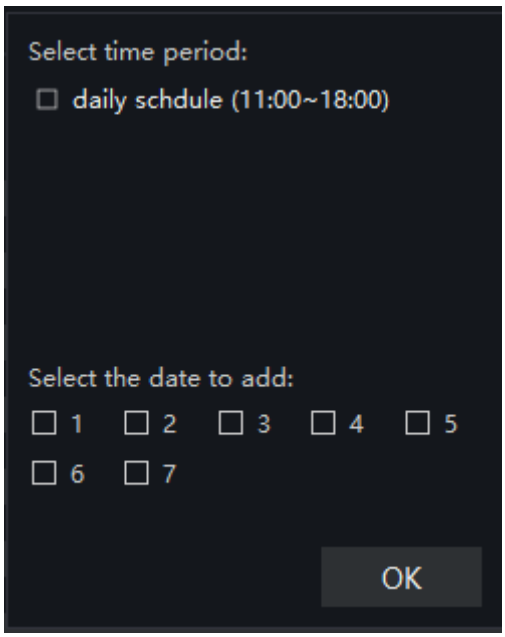


Step 2 Click “Add” to add new schedule, click “Delete” to delete the schedule.

Step 3 Set the name and cycle of shift schedule. Or tick the rest time to compute the working time.

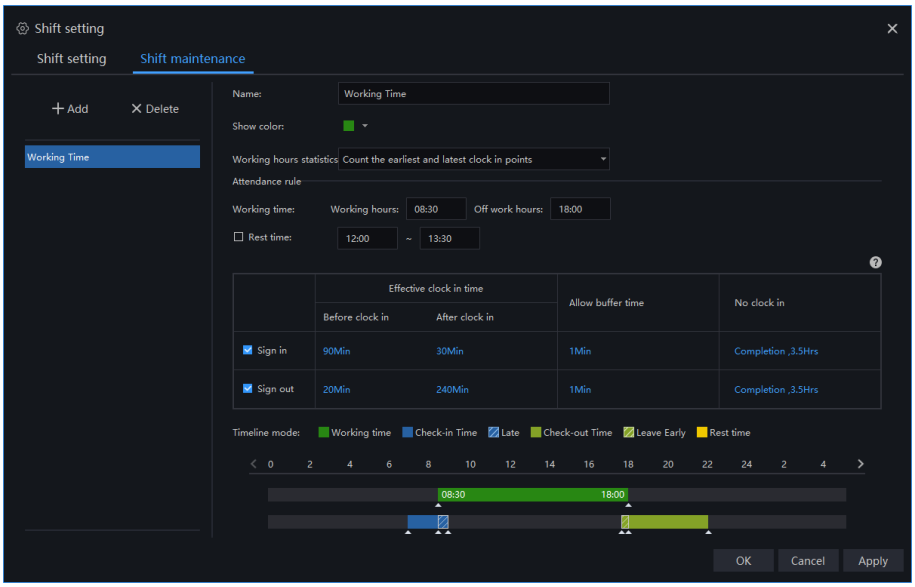
Step 4 Click “ Add time” as shown in Figure 11-7, or “Delete time” to modify the time.

Figure 11-7 Add time



Step 5 Choose “Shift maintenance” to maintain the shift, as shown in Figure 11-8

Figure 11-8 Shift maintenance

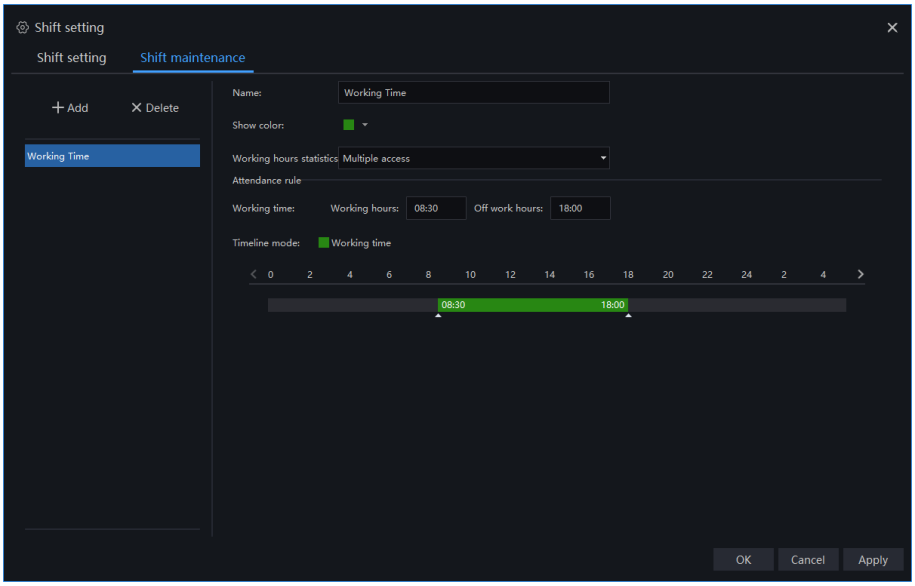


For example, the working hours is from 8:30 to 18:00. If the personnel is signing in at 7:00 to 9:00, it means valid. But it means late that sign in at 8:30 to 9:00. It the people do not sign in at valid time, it means absenteeism in the morning for 3.5 hours.

The valid time is 17:40 to 22:00 for signing out. It means leaving early for sign in at 17:40 to 18:00. It the people do not sign in at valid time, it means absenteeism at afternoon for 3.5 hours.

Work hours statistics：count the earliest and latest clock in points and multiple access (the working hours will be counting by adding all sign-in time).

Figure 11-9 Multiple access

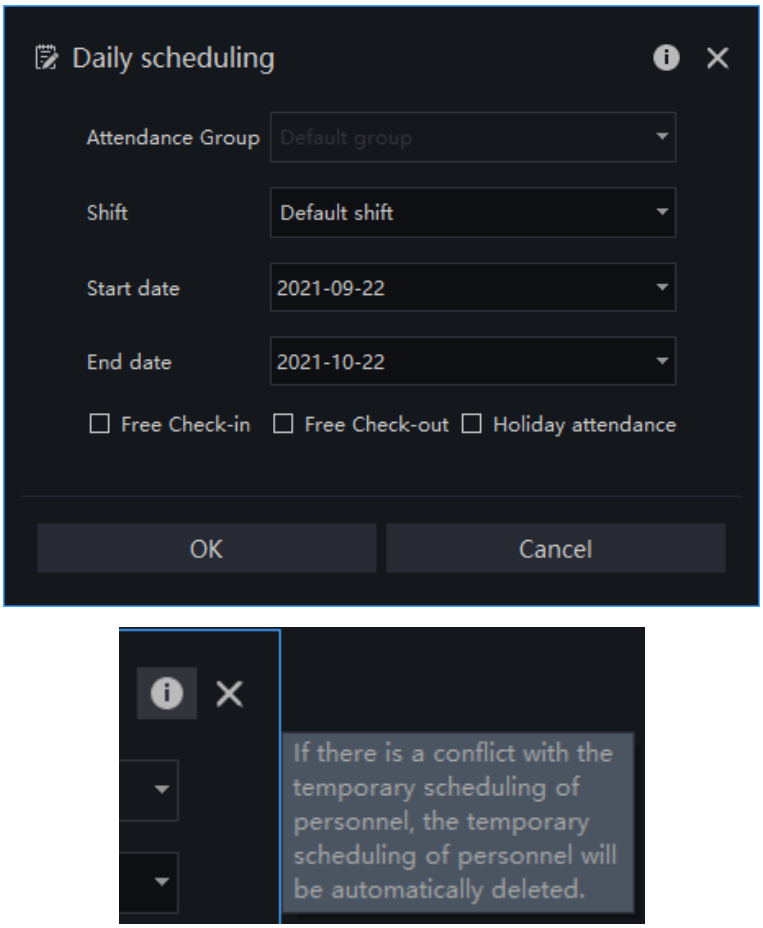


Sign in and out at working time is running through real time.

Step 6 Click “OK” to save the shift setting.

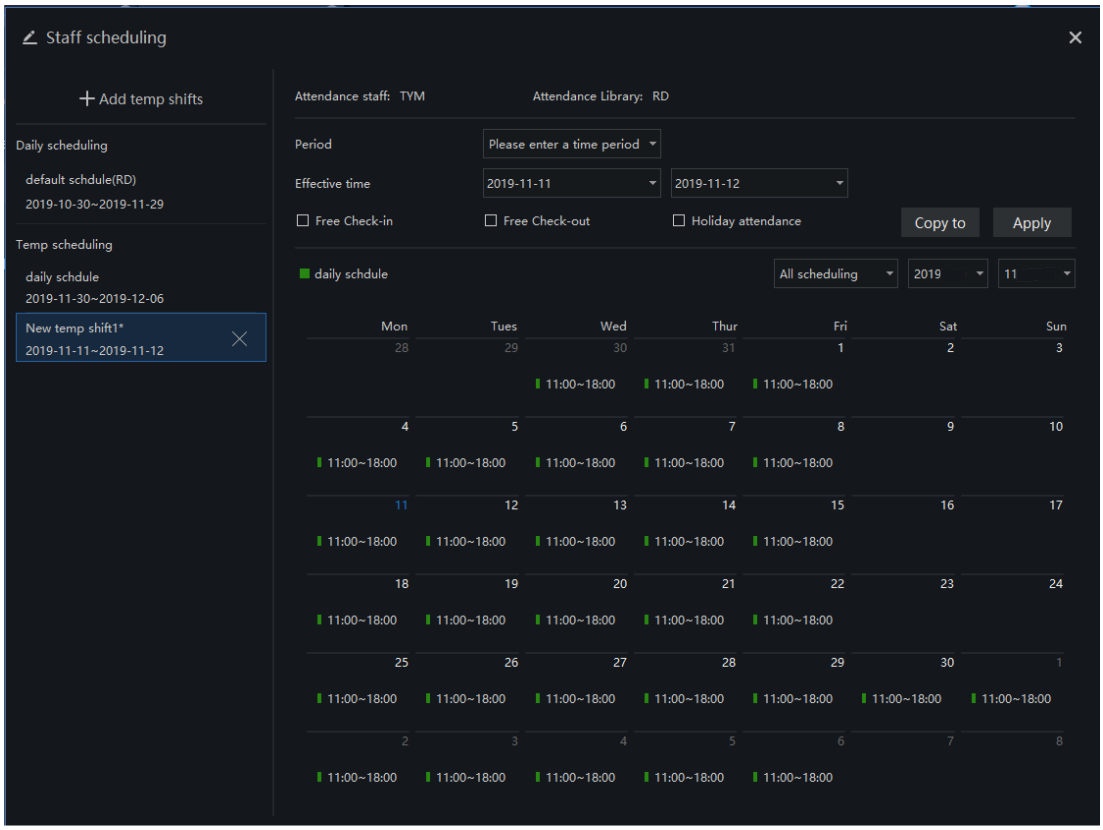
Step 7 Click “Group daily schedule” at schedule manage, as shown in Figure 11-10.

Figure 11-10 Daily scheduling



Step 8 Choose one staff and click “Add temp shifts ” at schedule manage, as shown in Figure 11-11.

Figure 11-11 Add temp shifts



Step 9 Set the time and click " Apply" to save the settings.

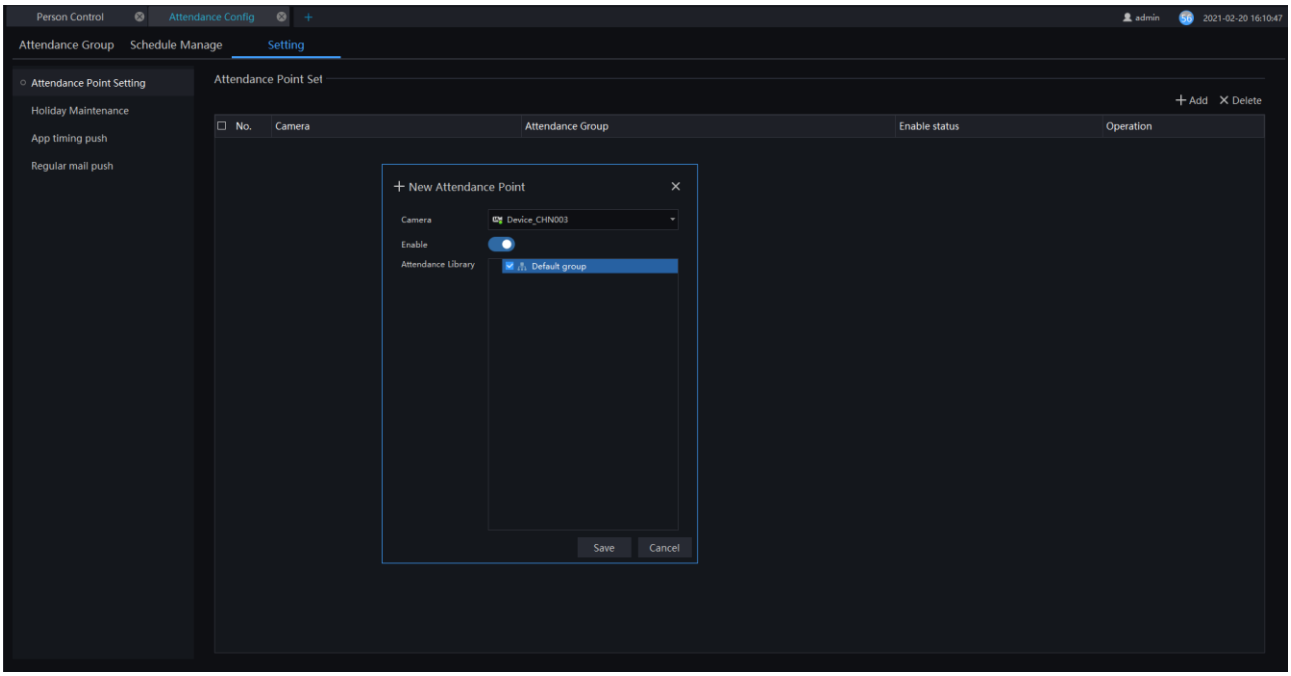
11.1.3 Attendance Setting

11.1.3.1 Attendance Point

Procedure:

Step 1 Choose "Attendance Point Setting" at setting interface, click "Add" to add a new point, as shown in Figure 11-12.

Figure 11-12 Attendance point



Step 2 Choose the camera, enable the function.

Step 3 Tick the attendance library.

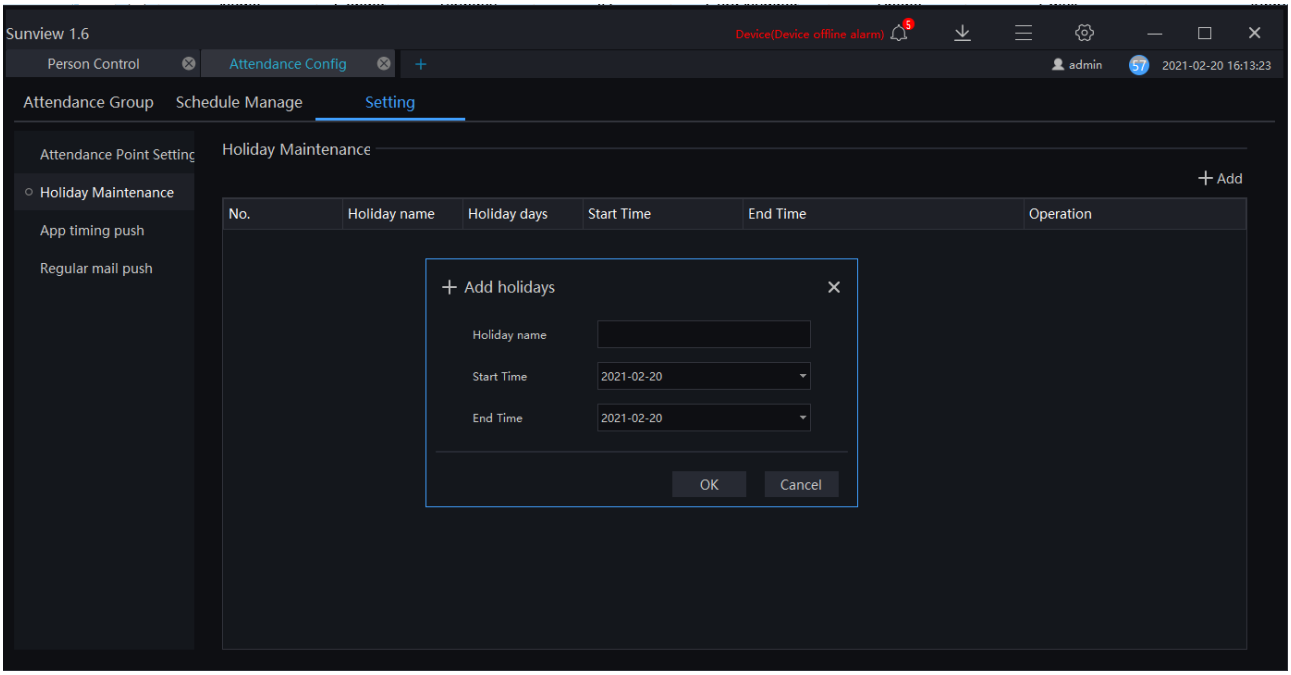
Step 4 Click “ Save” to save the settings.

11.1.3.2 Holiday Maintenance

Procedure：

Step 1 Choose “Holiday Maintenance” at setting interface, click “Add” to add a new one, as shown in Figure 11-13.

Figure 11-13 Holiday maintenance



Step 2 Input the holiday name.

Step 3 Set the start time and end time.

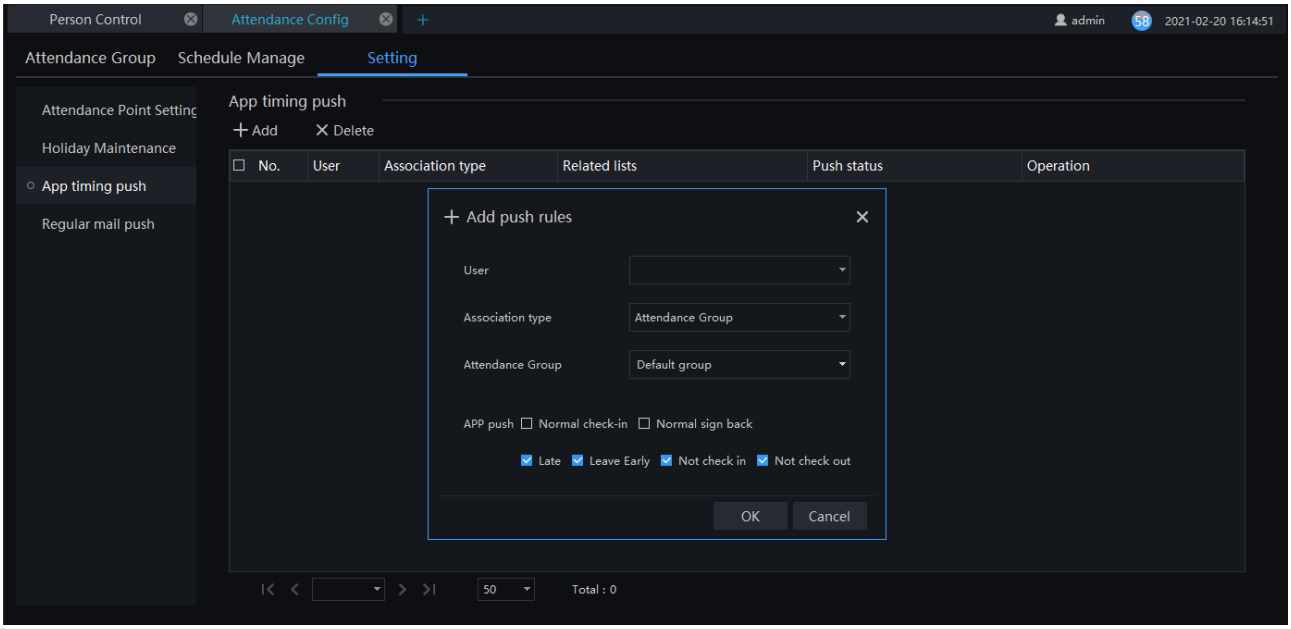
Step 4 Click “ OK” to save the settings.

11.1.3.3 App Timing Push

Procedure：

Step 1 Choose “App timing push” at setting interface, click “Add” to add a new one, as shown in Figure 11-14.

Figure 11-14 App timing push



Step 2 Choose the attendance type and group.

Step 3 Tick the push contents, and select notice to send.

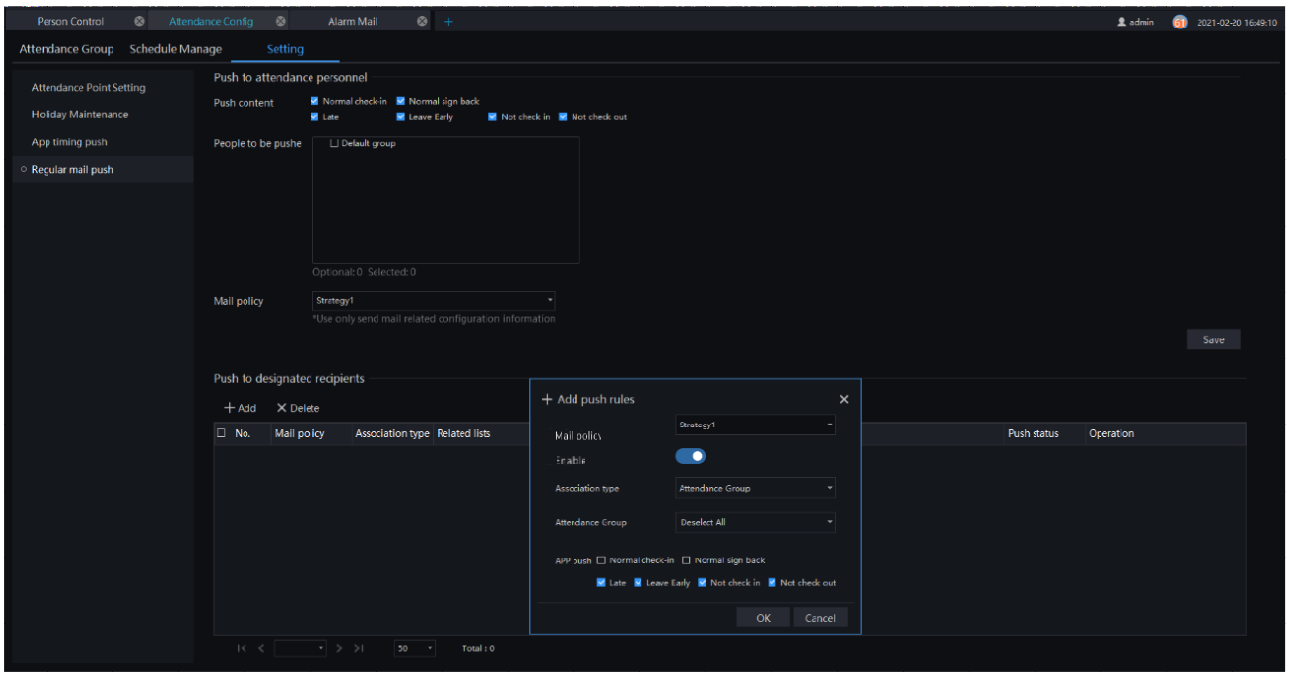
Step 4 Click “ OK” to save the settings.

11.1.3.4 Regular Mail Push

Procedure：

Step 1 Choose “Regular mail push” at setting interface, click “Add” to add a new one, as shown in Figure 11-15.

Figure 11-15 Regular mail push



Step 2 Tick the push content, such as normal check-in, normal sign back, late, leave early, not check-in, not check-out.

Step 3 Choose the people to be pushed and mail policy.

Step 4 Set the push to designated recipients, add or delete the push rules.

Step 5 Click “Save” to save the settings.

11.2 Attendance Preview

At this page, you can manage employee attendance through the face detection cameras.

NOTE

This function only supports face detection cameras.

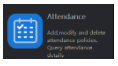
On the main menu page, click  to view the detailed interface, as shown in Figure 11-16.

Figure 11-16 Attendance interface

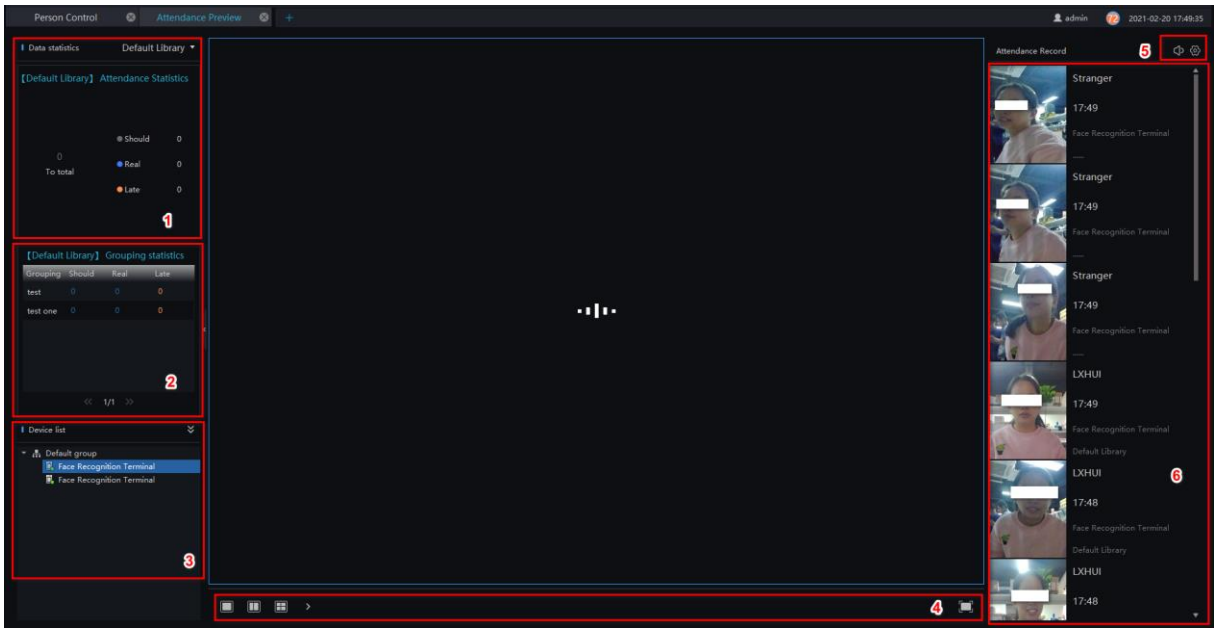


Table 11-2 Attendance

No.	Function	Description
1	Attendance statistics	Show the times of persons who is due, real, late
2	Group statistics	Show the statistics of different groups.
3	Devices list	The device of face detection. Show the device and group.
4	Video layout/ Full screen	Switch layout mode. Click to enter full screen.
5	Audio/Setting	Open or close audio/set card parameters.
6	Snapshot of attendance	Basic information of snapshot.

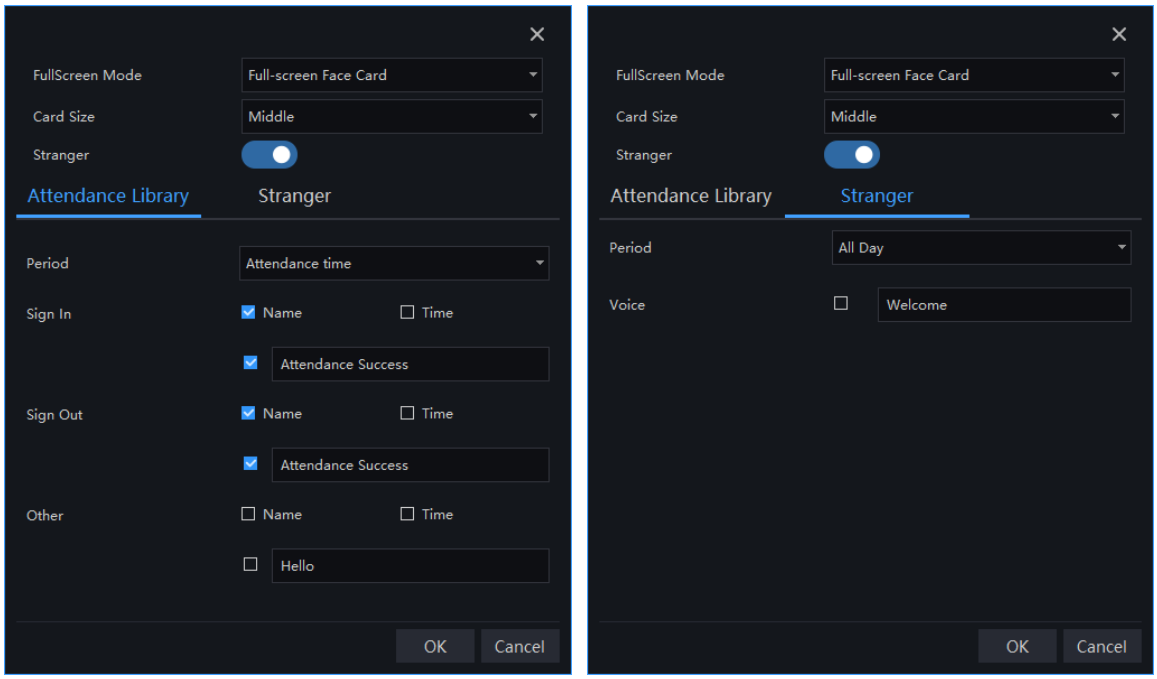
Procedure：

Step 1 Select a display device to play live video.

Step 2 The personnel information captured by the device when the staff pass the attendance point

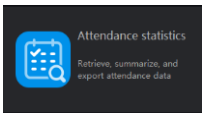
Step 3 Click the Settings icon to set the attendance related parameters.

Figure 11-17 Card parameters of library



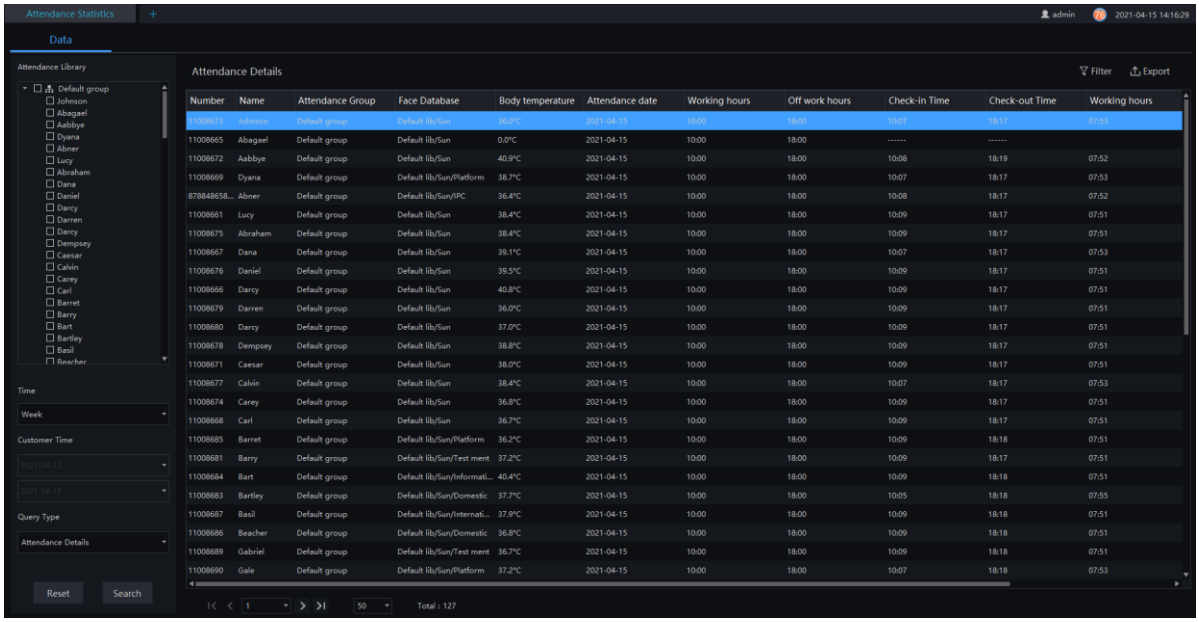
11.3 Attendance Statistics

In the attendance statistics interface, users can set the query conditions to quickly find relevant statistics.

On the main menu page, click 

to view the detailed interface, as shown in Figure 11-18.

Figure 11-18 Attendance data



Procedure:

Step 1 Select personnel of library.

Step 2 Choose time or set customer time.

Step 3 Select query type; click “Search” to query.

Step 4 Result show in page.

Step 5 Click “Export” to export the result.

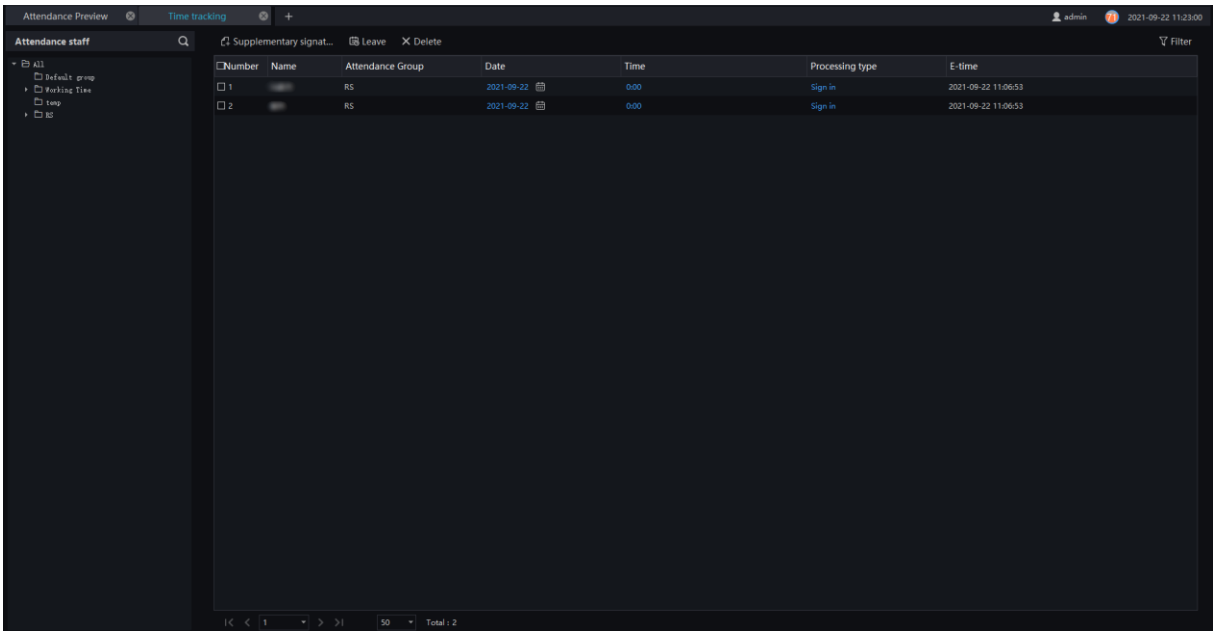
NOTE

The parameters of on-duty time, off-duty time, and rest time are set in the shift management, and the working hours is related to the absenteeism setting. If the check-in time is within the interval for calculating the absenteeism, the working hours need to subtract the length of the absenteeism. It cannot be calculated solely based on the actual clock-in time.

11.4 Time Tracking

At time tracking interface, user can supplementary signature, leave delete the tracking, as shown in Figure 11-19.

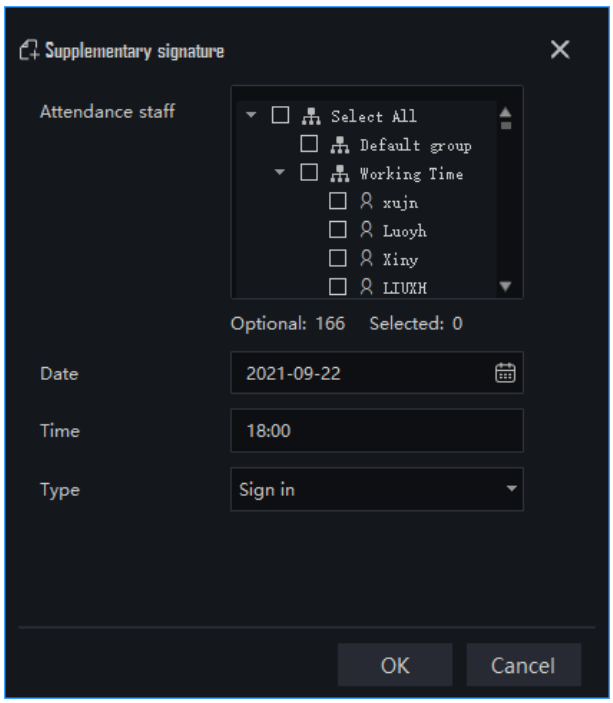
Figure 11-19 Time tracking



11.4.1 Supplementary Signature

Step 1 Click “Supplementary Signature” to choose staffs to set parameters as shown in Figure 11-20.

Figure 11-20 Supplementary Signature



Step 2 Choose the staffs, set the date and time.

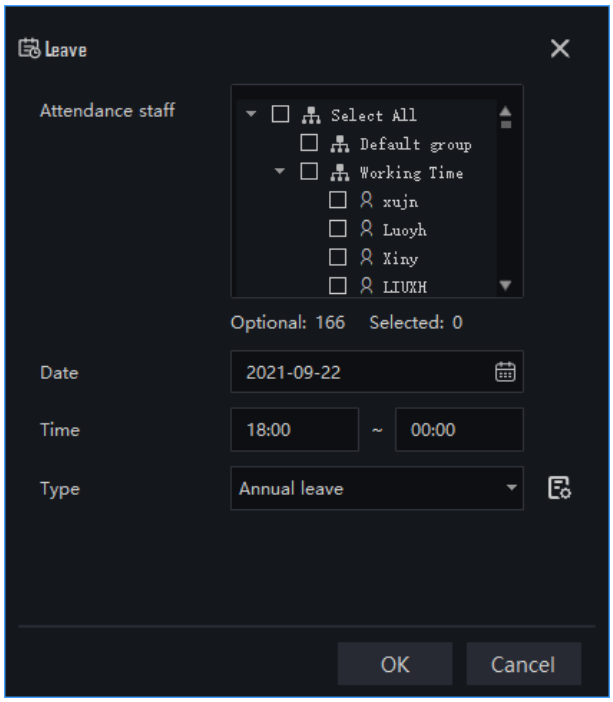
Step 3 Choose the type (sign in and sign out).

Step 4 Click “ OK ” to save the settings.

11.4.2 Leave

Step 1 Click “Leave” to enter the leave setting pop-up window as shown in .

Figure 11-21 Leave



Step 2 Choose the staffs, set the date and time.

Step 3 Choose the type (annual leave, compensatory leave and go out). Click to edit the new type.

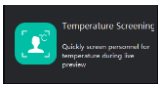
Step 4 Click “ OK ” to save the settings.

11.4.3 Delete

Choose the names to delete the statistics, the pop-up message “ Delete success” , the statistics are deleted successfully.

12 Temperature Monitor

12.1 Temperature Screening

On the main menu page, click 

to view more detailed interface, as shown in Figure 12-1

Real-time temperature screening supports showing two interfaces simultaneously. The configurations of the two interfaces are independent of each other and can be configured separately, which facilitates channel management and is also suitable for multiple scenarios.

NOTE

This function is only subject to body temperature cameras.

Figure 12-1 Temperature screening

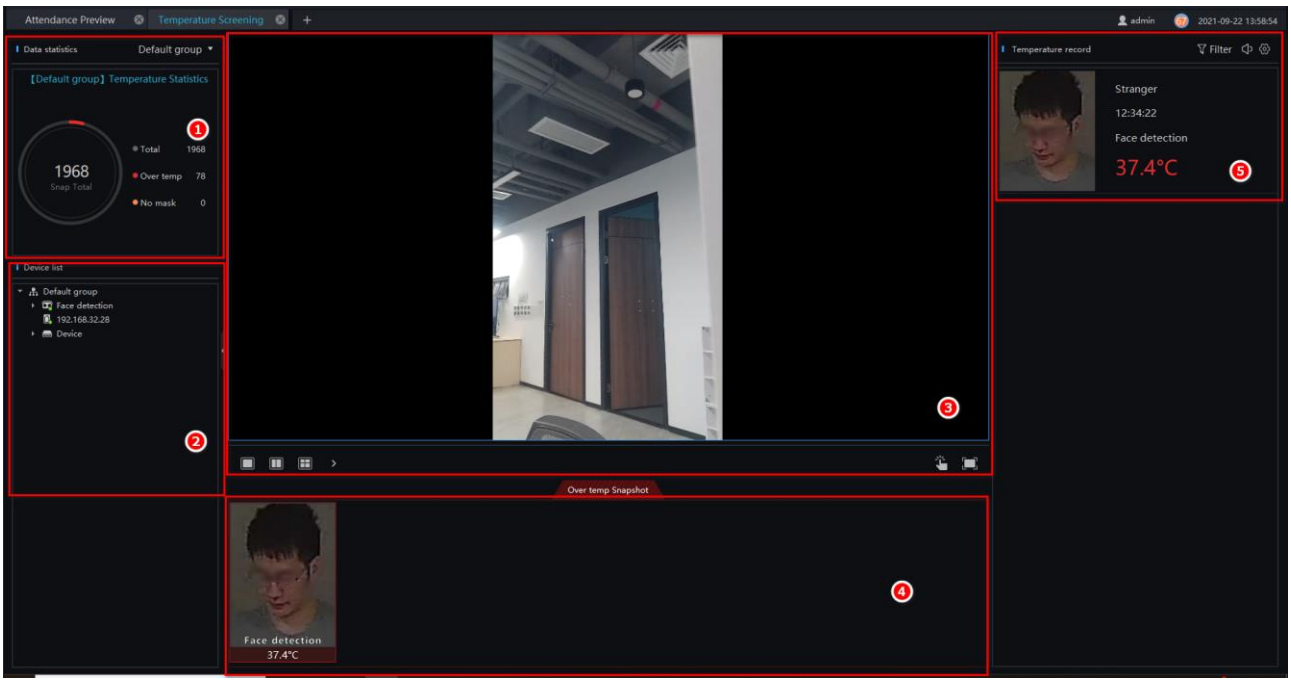


Table 12-1 Temperature screening

No.	Function	Description
1	Data statistics	Show the number of snapshots, over temperature, no mask (enable it at the Setting-Display settings Display the total number of masks no worn).
2	Devices list	The device of body temperature. Show the status and group of devices.

No.	Function	Description
3	Live video	Show the live video, and choose split screens to show many cameras' live video. There are many layouts can be chosen, such as 1 screen, 2 screens, 4 screens, 6 screens, 8 screens, 9 screens, 16 screens, 25 screens, 32 screens, 64 screens, the default is 2 screens. The piracy mode need not spilt screen. Show the video at full screen, the snapshot will show by card, as shown in Figure 12-2. Click to open or close the I / O output manually. Click the bottom of full screen to exit the full screen.
4	Over temperature snapshot	The snapshots of over the normal temperature. Click to delete all over temperature snapshot at the display area.
5	Temperature record	The information of snapshots, include temperature, device and time of snapshot. You can also set voice broadcast and full screen face card. Filter: tick the devices to check human face temperature.

Figure 12-2 Full screen face card

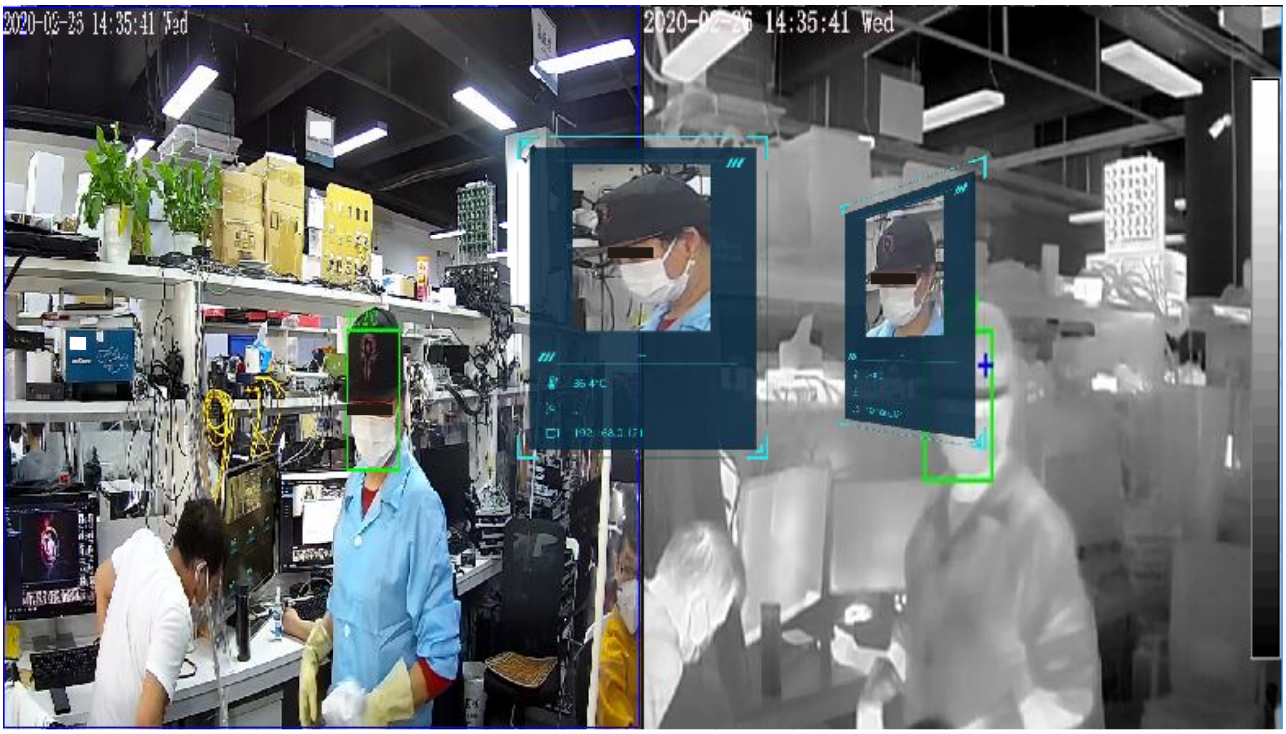


Figure 12-3 Display Setting

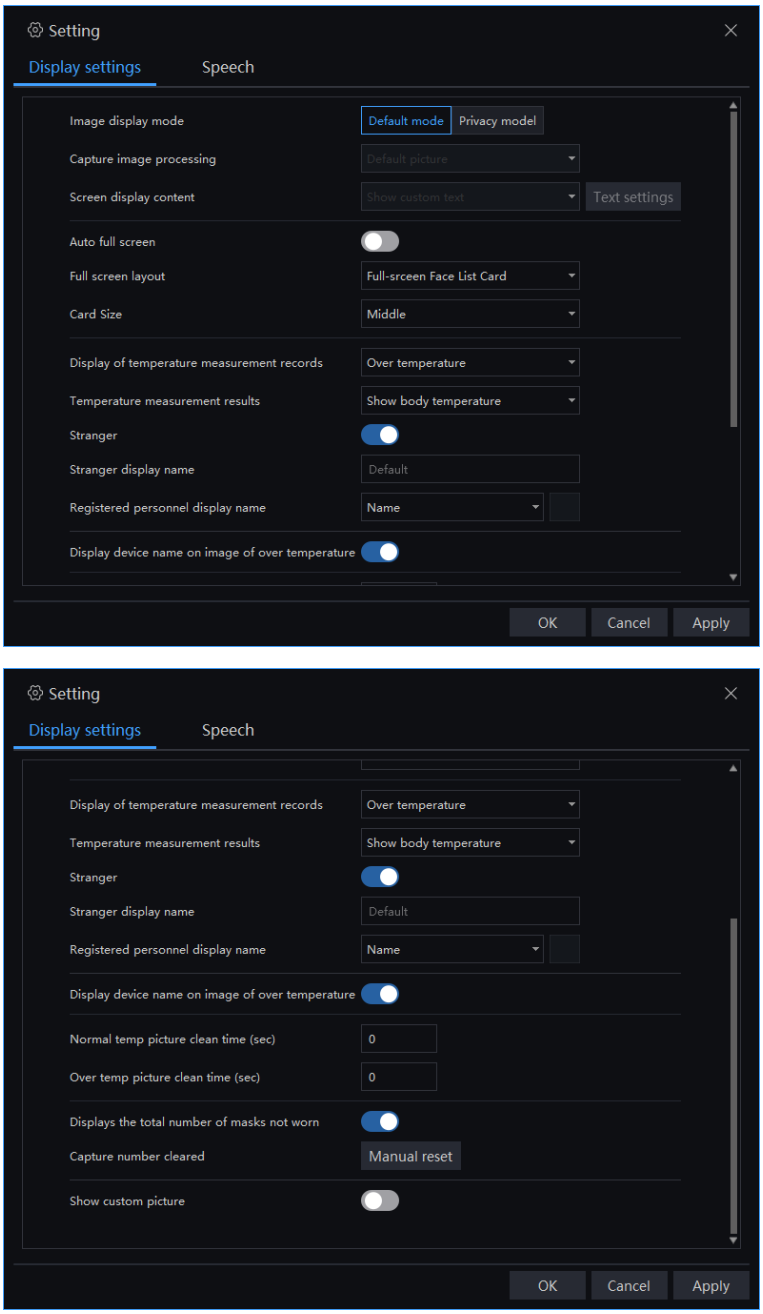
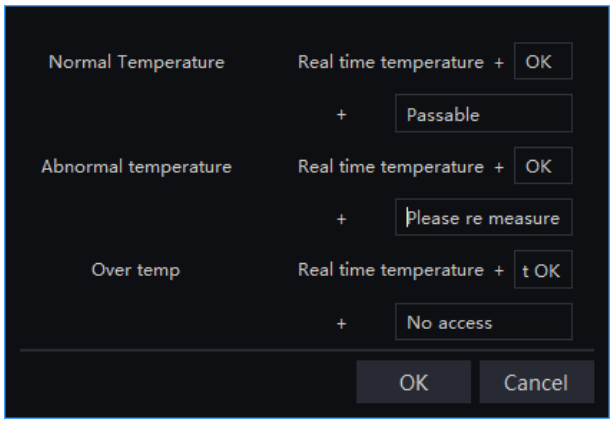


Image display mode: there are two modes, default and privacy mode.

Screen display content: show custom text, display live video.

Capture image processing and **screen display content** can be set at privacy mode. **Capture Image processing**: default picture, mosaic treatment, don't deal with it.

Figure 12-4 Text settings



Enable or disable auto full screen. **Full screen layout:** full-screen face card, full-screen face list card.

Card size: middle, big, small.

Temperature measurement results: show body temperature, body temperature is not shown, display temperature measurement results.

Enable or disable stranger. **Stranger display name**: custom the showing name of stranger.

Registered personnel display name: name, not show, customer time.

Display device name on image of over temperature: enable, the capturing device's name will show on the images.

Normal temp picture clean time: set time to clean the normal temperature picture.

Over temp picture clean time： set time to clean the over temperature picture.

Display the total number of masks not worn: enable, the page of temperature statistics will show number of no mask.

Capture number cleared: click "Manual reset" to reset the statistics, so that the user can count the number directly.

Show custom picture: enable to choose custom picture to show on screen.

Figure 12-5 Speech setting of stranger

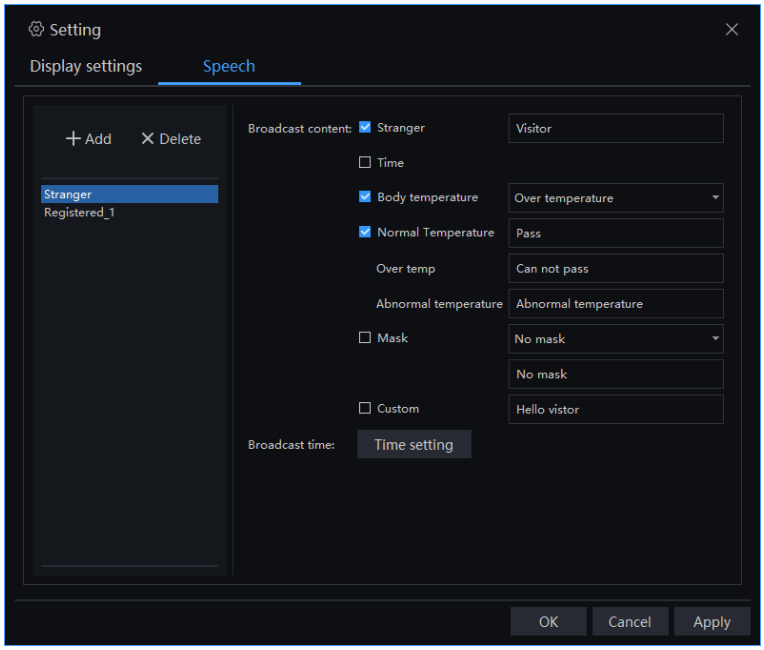
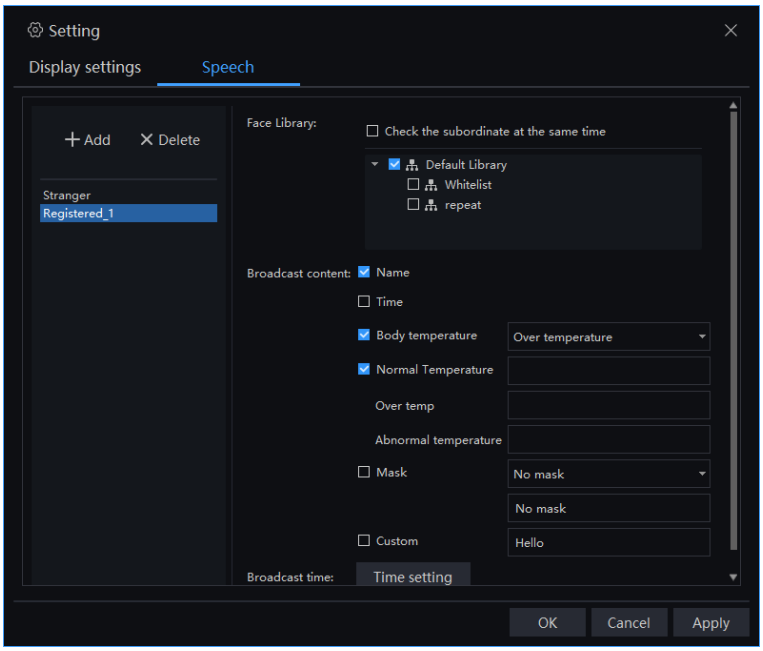
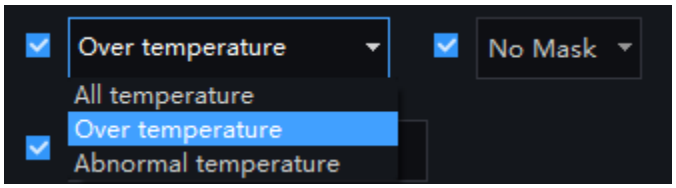


Figure 12-6 Speech Setting of registered



Tick the speech content, such as stranger, time.

The speech setting can tick temperature and no mask, as shown in Figure 12-7.



The display mode include default(user can view live video, snapshot human face, and show the temperatures.), face privacy mode, face privacy mode(video), body temperature mode.

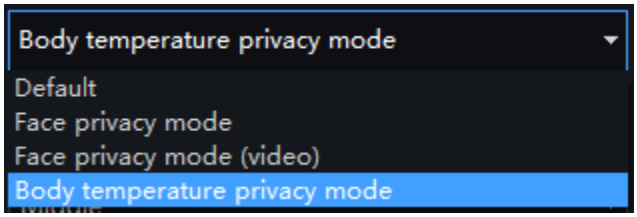


Figure 12-7 Body temperature privacy mode

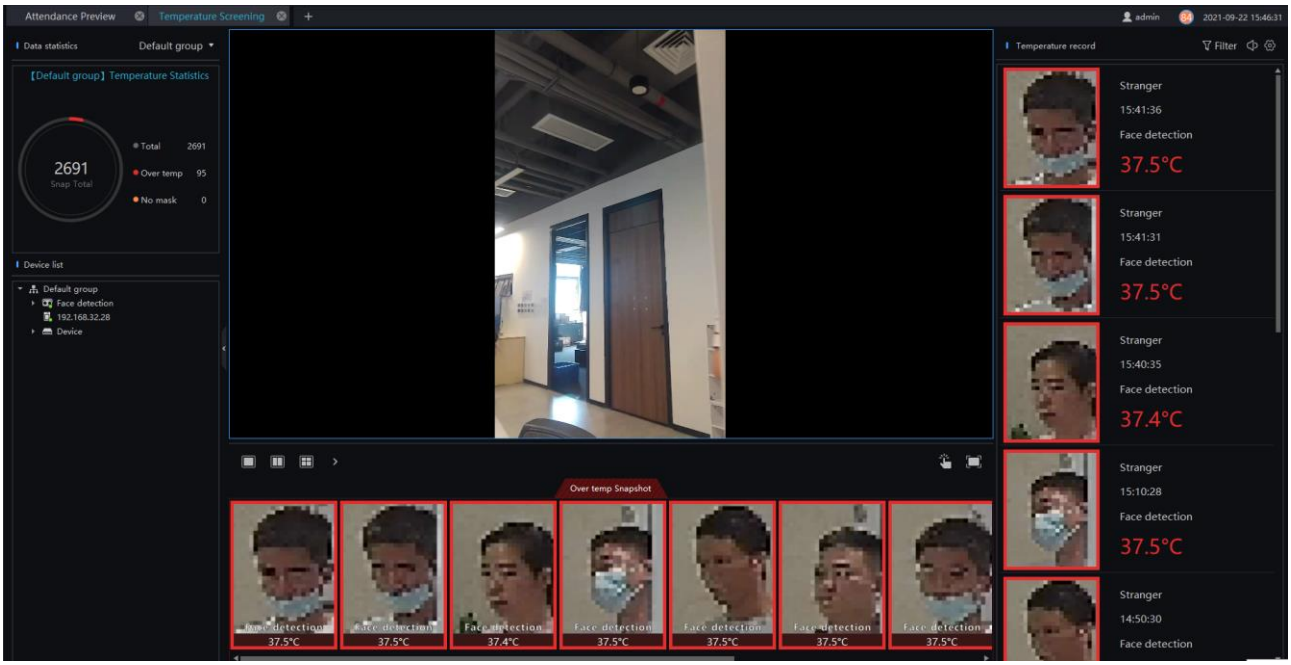


Figure 12-8 Face privacy mode

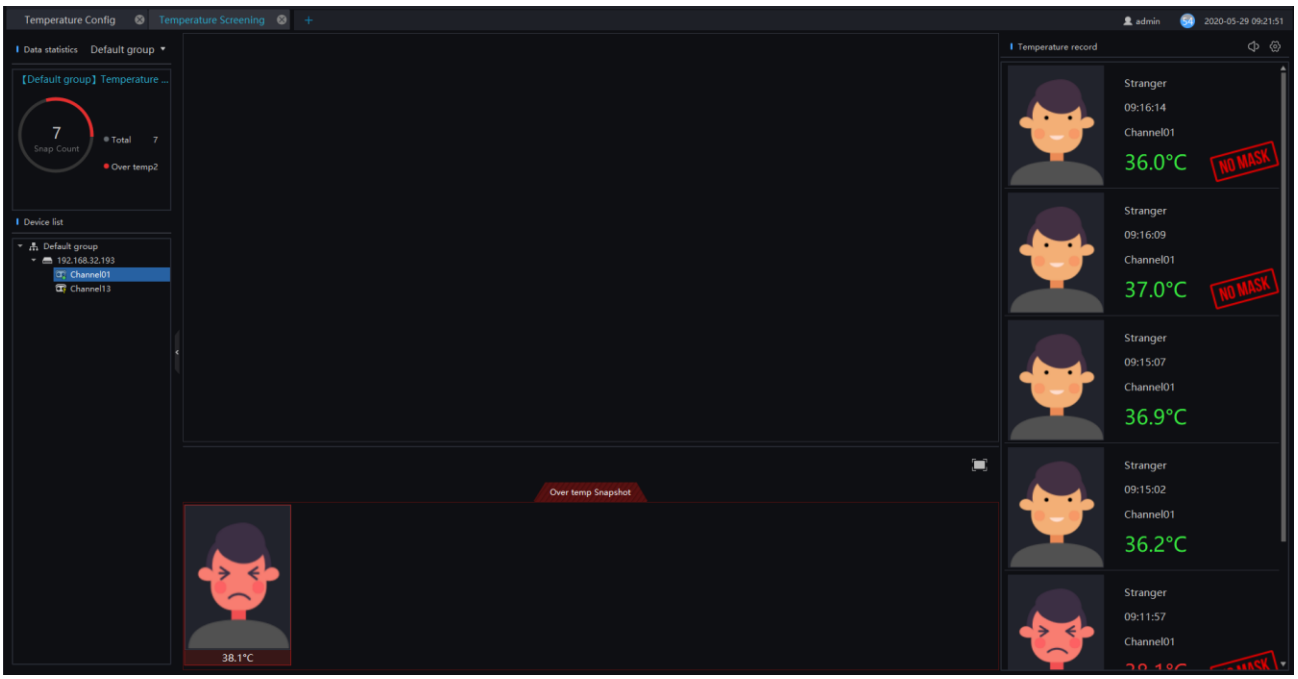
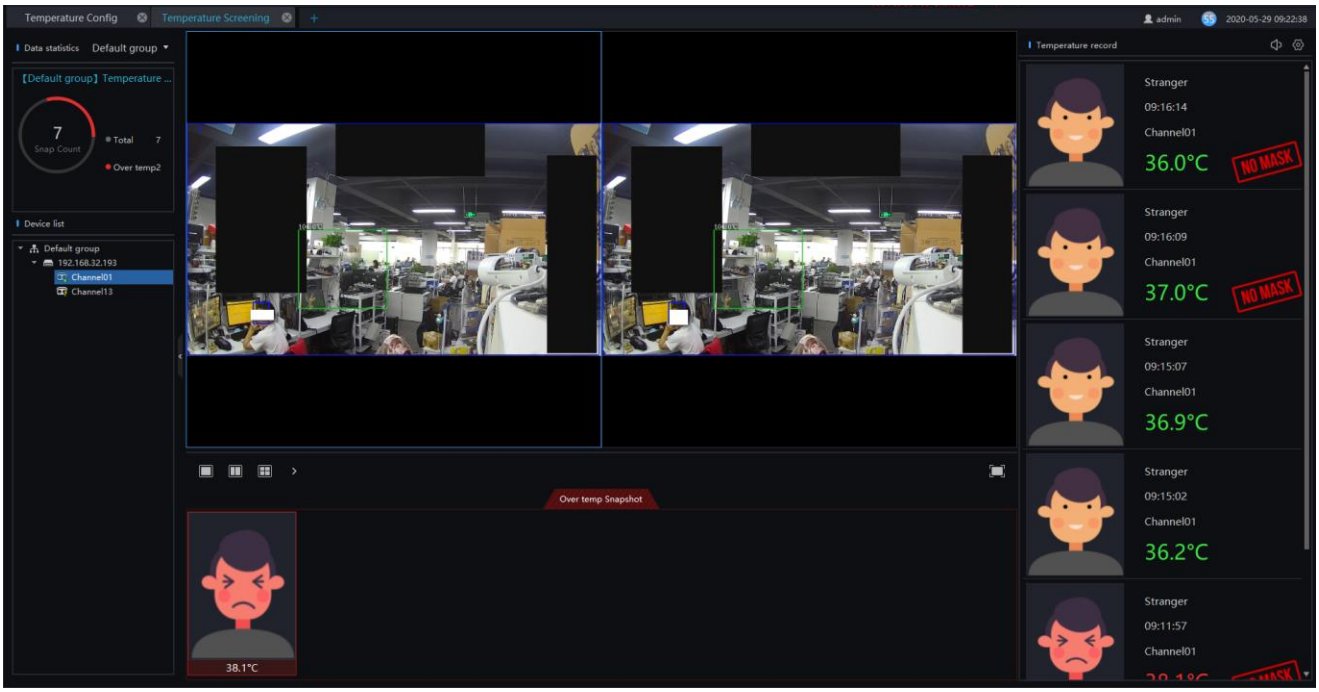


Figure 12-9 Face privacy mode (video)



NOTE

The reminder of no mask is set at “**Server > CMU > Server Setting**” interface. Enable the mask recognition. If the function is disable, the

will not appear.

12.2 Temperature Config

On the main menu page, click

to view more detailed interface, as shown in Figure 12-10.

NOTE

This function is only subject to thermal cameras.

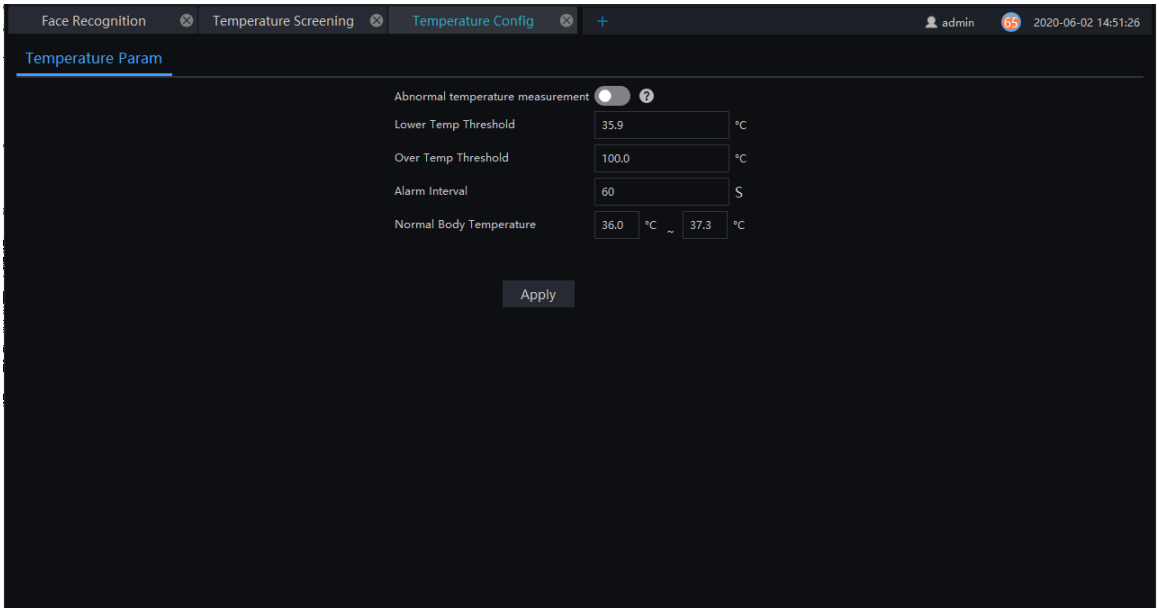
Procedure:

Step 1 Click “Temperature” to modify temperature configurations.

Step 2 Input the information of threshold, as shown in Figure 12-10.

Step 3 Click “Save” to save the settings.

Figure 12-10 Temperature



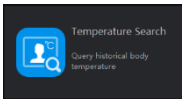
NOTE

The abnormal temperature is lower than lower temp threshold or higher than over temp threshold.

Enable the abnormal temperature measurement, the measurement temperature will be alarmed when it is outside the threshold (below the low temperature threshold and above the high temperature threshold).

When the abnormal temperature measurement alarm is disable, the measured temperature will not be saved beyond the threshold

12.3 Temperature Search

On the main menu page, click 

to view more detailed interface, as shown in Figure 12-11.

NOTE

This function is only subject to body temperature cameras.

Figure 12-11 Temperature search

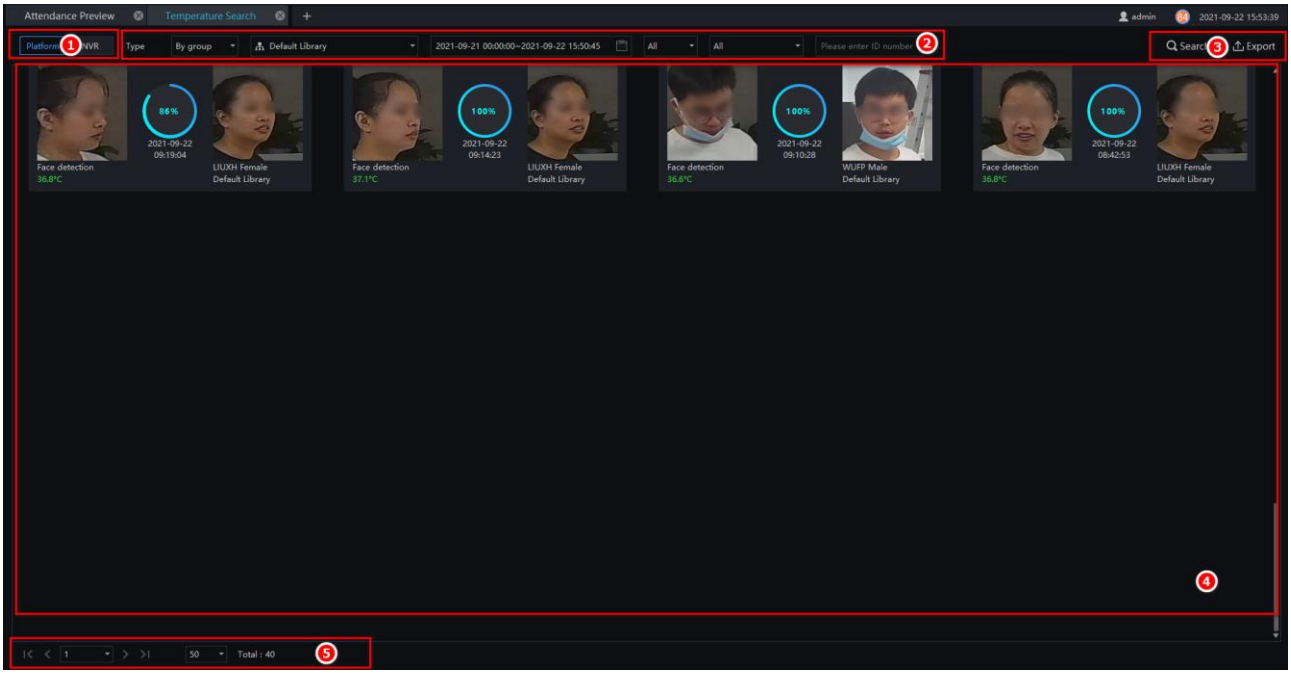
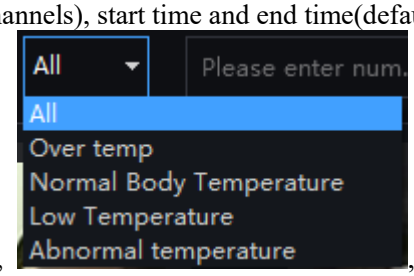


Table 12-3 Temperature search

No.	Function	Description
1	IPC/NVR_DVR	Choose the source of search, IPC or NVR_DVR
2	Condition of search	Set type (devices or channels), start time and end time(default is 24 hours), personnel type,  , also can input the number of library.
3	Operation	Search and export
4	Result of search	The image of searching result is showing.
5	Interface display	Show the current page of the person, and the page displays the number of alarms, switch to next page to show alarm information.

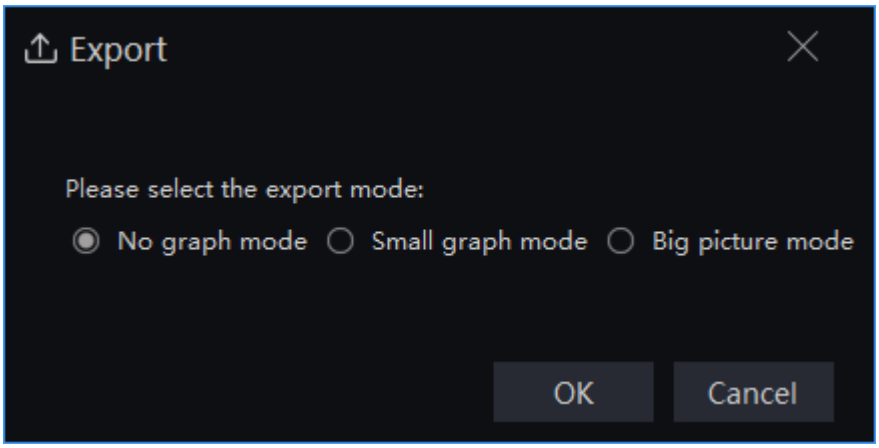
Procedure：

Step 1 Choose the type and library of searching.

Step 2 Set the start and end time.

Step 3 Choose the personnel and temperature type.

Figure 12-12 Mode of exporting



There are three modes to export the result of searching.

No graph mode: only basic information, no graph.

Small graph mode: it will show the snapshot of human face.

Big picture mode: it will provide the storage path of panorama.

Step 4 Click “Search” to view the result.

Step 5 Click “export” to export the result to local folder.

12.4 Health Archives

At health archives interface, user can track and observe the health status of the person, check the body temperature trend, and the recent over-temperature dynamics; you can also filter, retrieve, and export the person health file.

NOTE

This function only supports body temperature cameras.

12.4.1 Arrchives Manage

Figure 12-13 Health archives

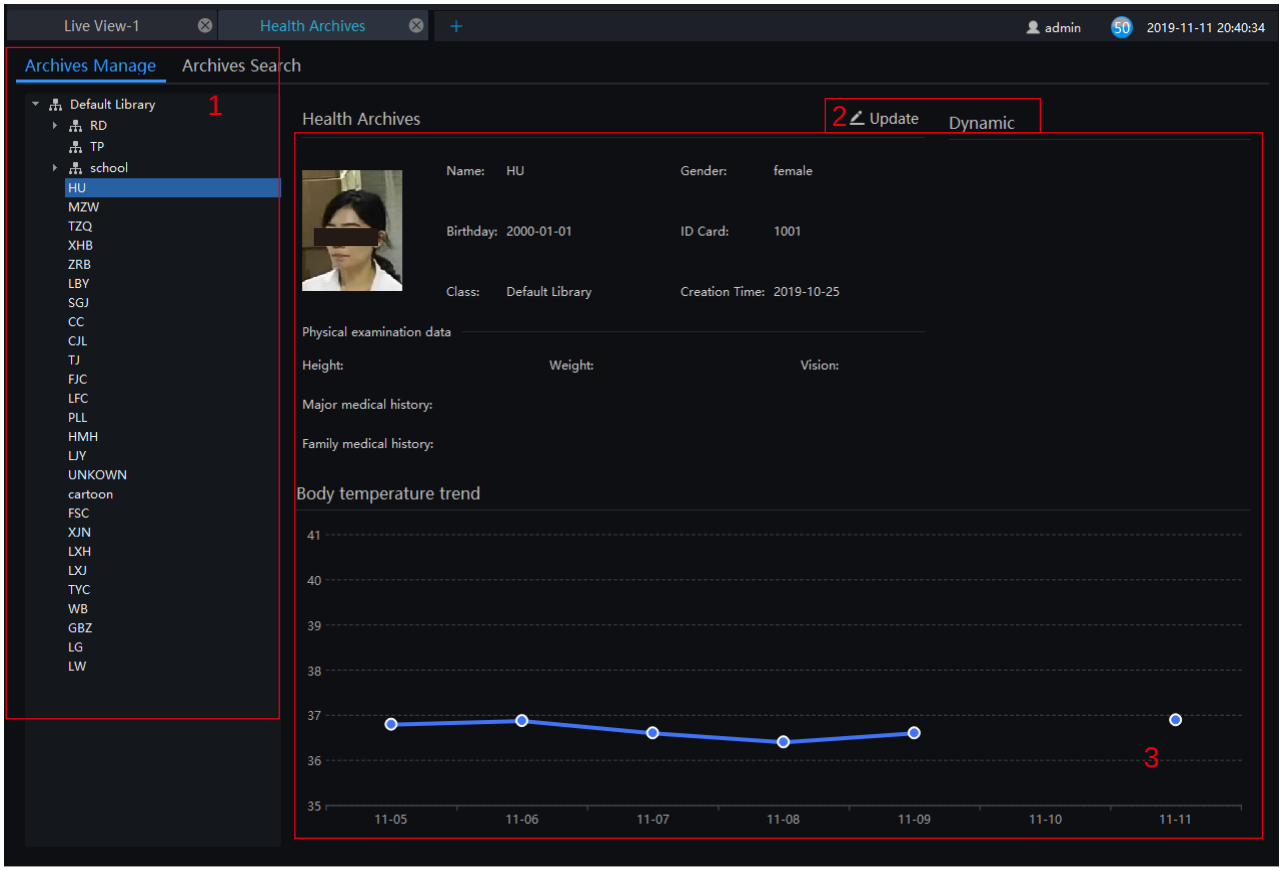


Table 12-4 Health archives

No.	Function	Description
1	Personnel list	Show the people of library.

No.	Function	Description
2	Operation	Update the information. Dynamic: click the name to show dynamic temperature.
3	Detail information	staff information and body temperature trend display, click or roll the mouse wheel, switch to the body temperature chart to the one day.

12.4.2 Archives Search

Procedure：

Step 1 Input the name.

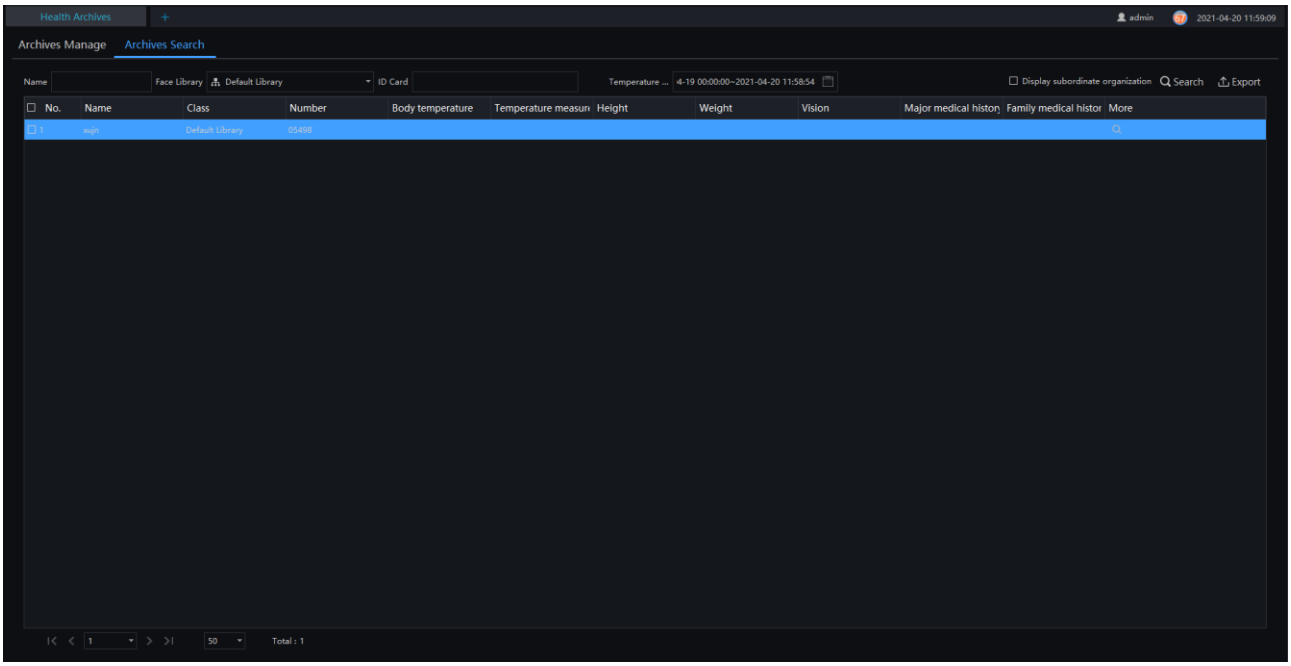
Step 2 Select the face library.

Step 3 Click “Search” to query the archives search.

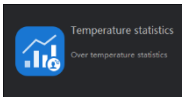
Step 4 The result will show on interface.

Step 5 Click “Export” to export the result to local folder.

Figure 12-14 Archives search



12.5 Temperature Statistics

On the main menu page, click 

to view more detailed interface, as shown in Figure 12-15.

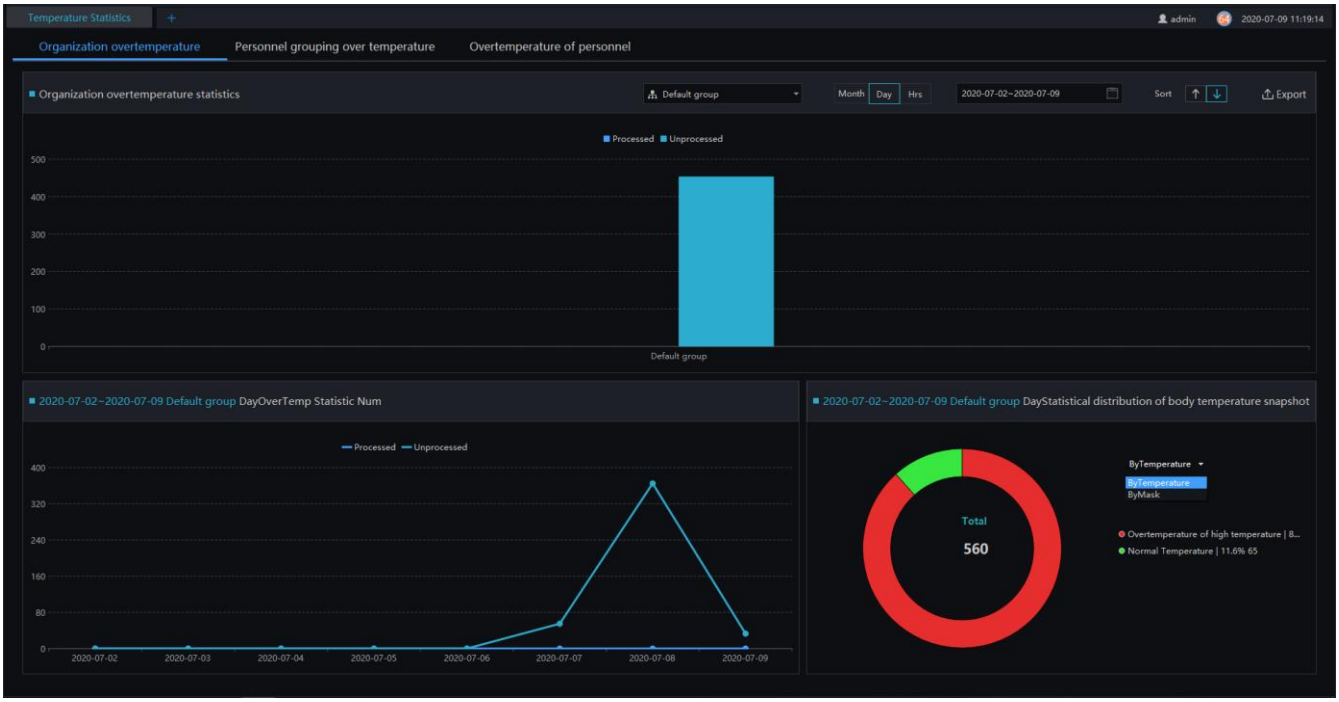
NOTE

This function only supports temperature detection cameras.

Only processed over-temperature alarms are counted in the statistics.

The pie chart can be showed by temperature, or mask.

Figure 12-15 Temperature Statistics



The pie chart can show by temperature or mask.

12.5.1 Organization Over Temperature

Procedure:

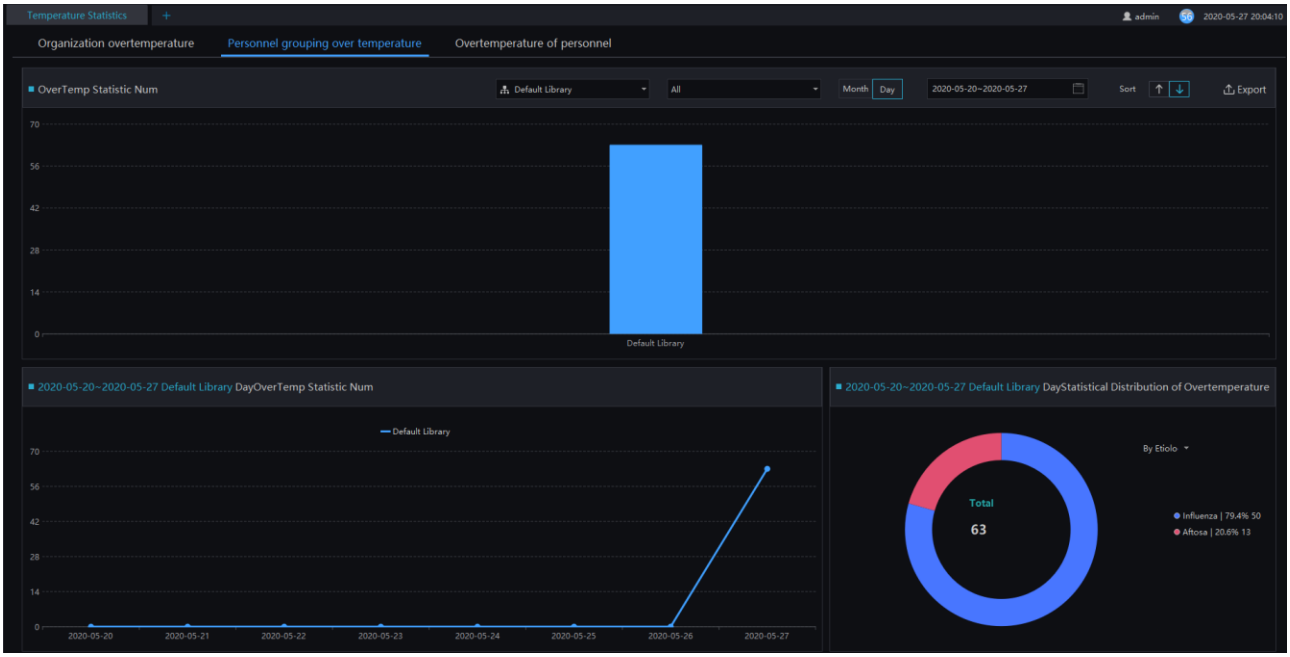
Step 1 Select the face database and summarize the type. You can view a summary of the month or day.

Step 2 Set the display sort type.

Step 3 User can click " Export" to export the statistics.

12.5.2 Personnel Grouping Over Temperature

Figure 12-16 Personnel Grouping Over Temperature



Procedure:

Step 1 Select the face database and summarize the type. You can view a summary of the month or day.

Step 2 Set the display sort type.

Step 3 Results can be exported to a local folder.

Step 4 Select to view the personnel over temperature.

12.5.3 Over Temperature of Personnel

At over temperature of personnel interface, user can view the personnel's over temperature immediately, as shown in Figure 12-17.

Figure 12-17 Person Over Temperature

13 Thermal Imaging

13.1 Thermal Image Preview

When the thermal cameras are connected to platform, user can view these cameras' live video, it also can view the alarm information of thermal imaging, display the temperature curve

On the main menu page, click

to view more detailed interface, as shown in Figure 13-1.

Figure 13-1 Thermal imaging preview

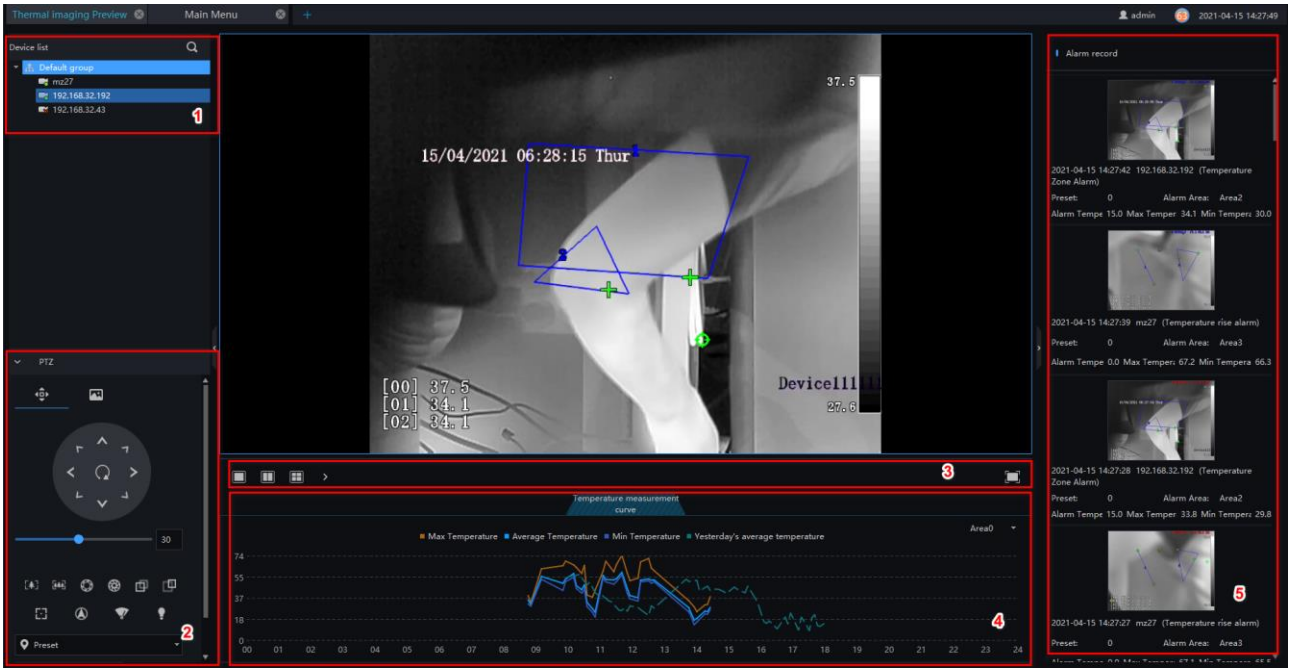
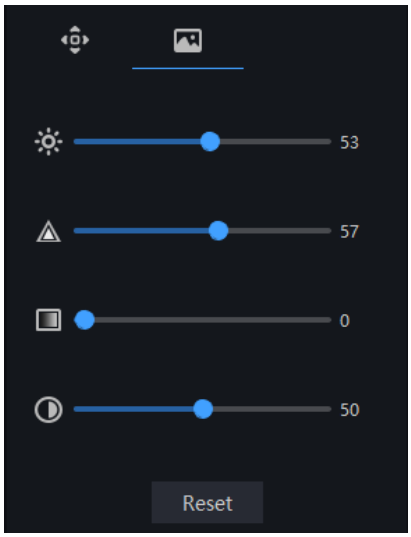


Table 13-1 Thermal imaging preview

No.	Function	Description
1	Device list	The thermal device will show this area.

No.	Function	Description
2	PTZ Operation / image setting	It the thermal camera has the PTZ function, user can use the PTZ keyboard to adjust direction, lens iris, and so on. Image setting:  adjust brightness, sharpness, saturation, contrast.
3	Switch windows	Switch live video windows format.
4	Thermal imaging temperature curve	Show the areas' temperature of all day, such as max temperature, average temperature, min temperature, yesterday average temperature.
5	Alarm record	Show the real time alarm, show the detail alarm information, such as time, IP, location, alarm area, alarm temperature, max temperature, min temperature.

13.2 Thermal Image History

At the thermal temperature interface, you can search the temperature recording of thermal temperature cameras

NOTE

This function only supports temperature detection cameras.

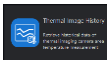
On the main menu page, click  to view more detailed interface, as shown in Figure 13-2.

Figure 13-2 Thermal image interface

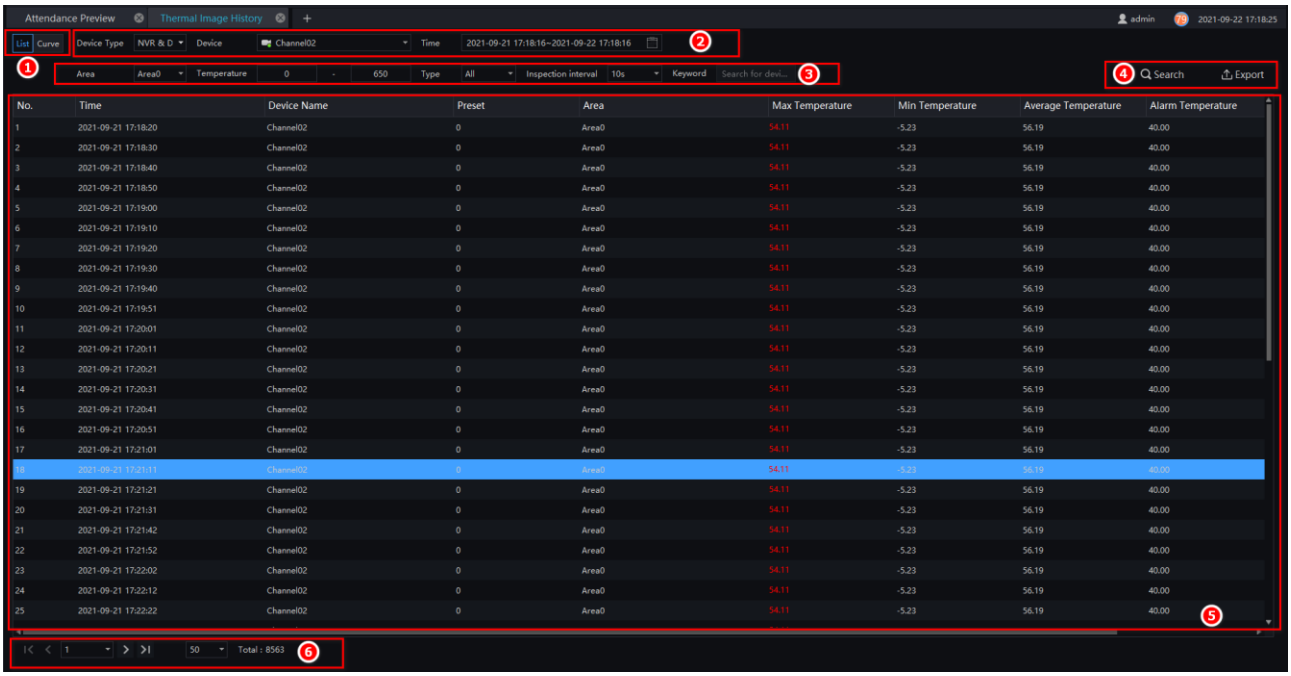


Table 13-2 Temperature alarm

No.	Function	Instruction
1	The showing mode	List or curve graph
2	IPC/NVR_DVR	Choose the source of search, IPC or NVR_DVR
3	Querying condition	Setting temperature search structure, Starting / Ending time, processing status, Start and end time, interval and keyword
4	Search	Search by the setting conditions
5	Displaying information	Basic information display of temperature alarm
6	Page information	Page number, number of pages per page, total Switch to next page

Procedure:

Step 1 Choose the group / Organization .

Step 2 Setting Searching starting / ending time, processing.

Step 3 Click “ Search” the temperature alarm recording.

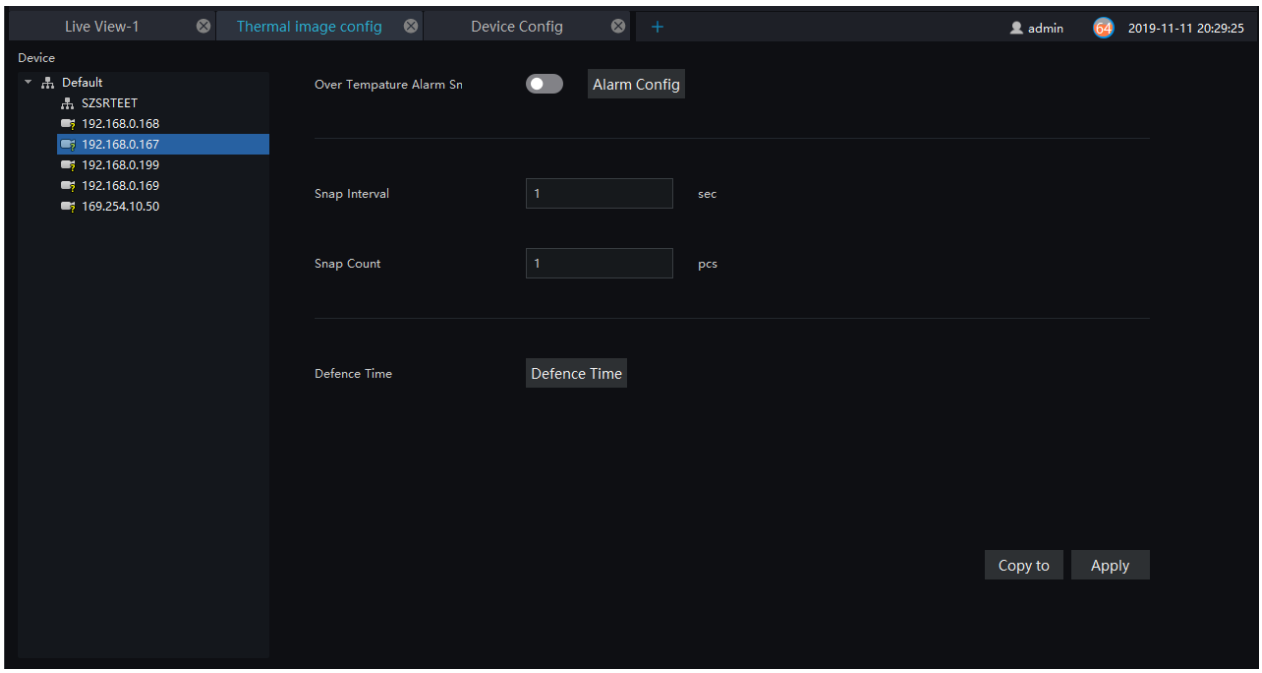
13.3 Thermal Image Config

On the main menu page, Click to view more detailed interface, as shown in Figure 13-3。

NOTE

This function is only subject to thermal cameras.

Figure 13-3 Thermal image configuration



Procedure:

Step 1 Select the camera you want to set in the thermal imaging device list.

Step 2 Turn on the over-temperature alarm capture, set the capture interval and the count of captures.

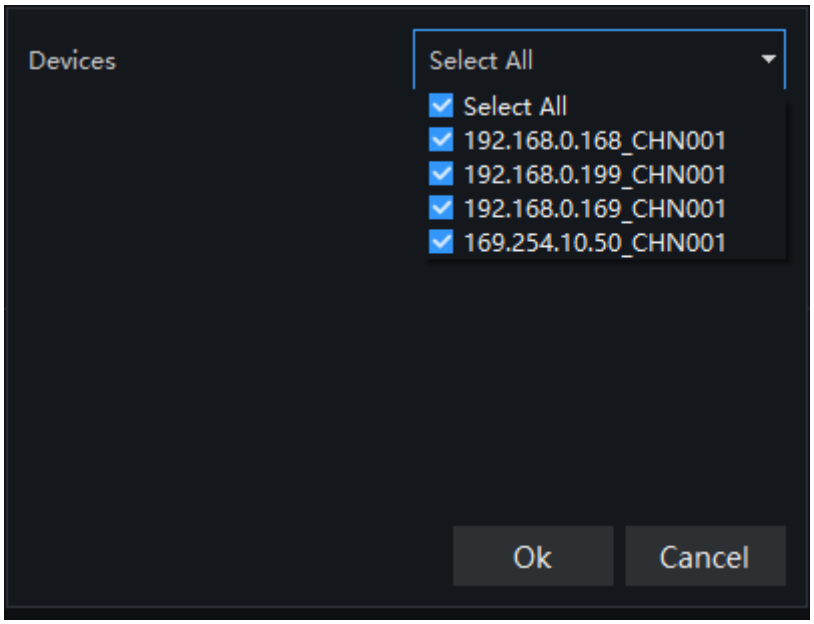
Step 3 Set the arming time, you can pull the mouse, or select all.

Step 4 Click Copy to to copy the setup parameters to other cameras.

Step 5 Click “Apply “ to save settings.

Step 6 Click “Copy to”, as shown in Figure 13-4

Figure 13-4 Copy to



13.4 Thermal Image Search

At this page, you can search the body temperature from the recording.

NOTE

This function only subject to the body temperature detection cameras.

On the main menu page, click to view more detailed interface, as shown in Figure 13-5.

Figure 13-5 Thermal image interface

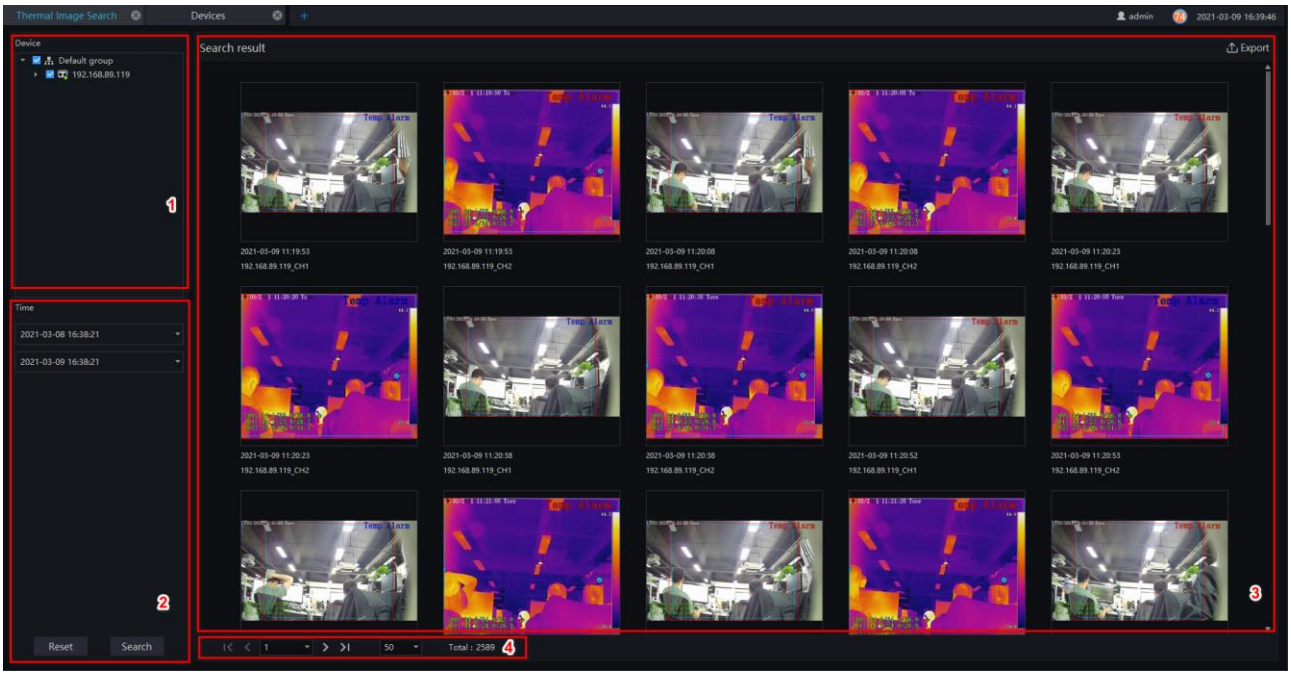


Table 13-4 Temperature search

No.	Function	Description
1	Device list	The thermal image devices
2	Search time	Set start and end time of searching.
3	Displaying information	Result of searching.
4	Page information	Page number, number of pages per page, total. Switch to next page.

Procedure：

Step 1 Select the devices.

Step 2 Set start and end time of searching, the default is previous 24 hours.

Step 3 Click “ Search” the temperature will show in the display area.

Step 4 Click “Export” to export the result to local folder.

---End

13.5 Thermal Imaging Inspection

At thermal imaging inspection interface, user can set inspection plan and patrol calendar, view inspection. record.

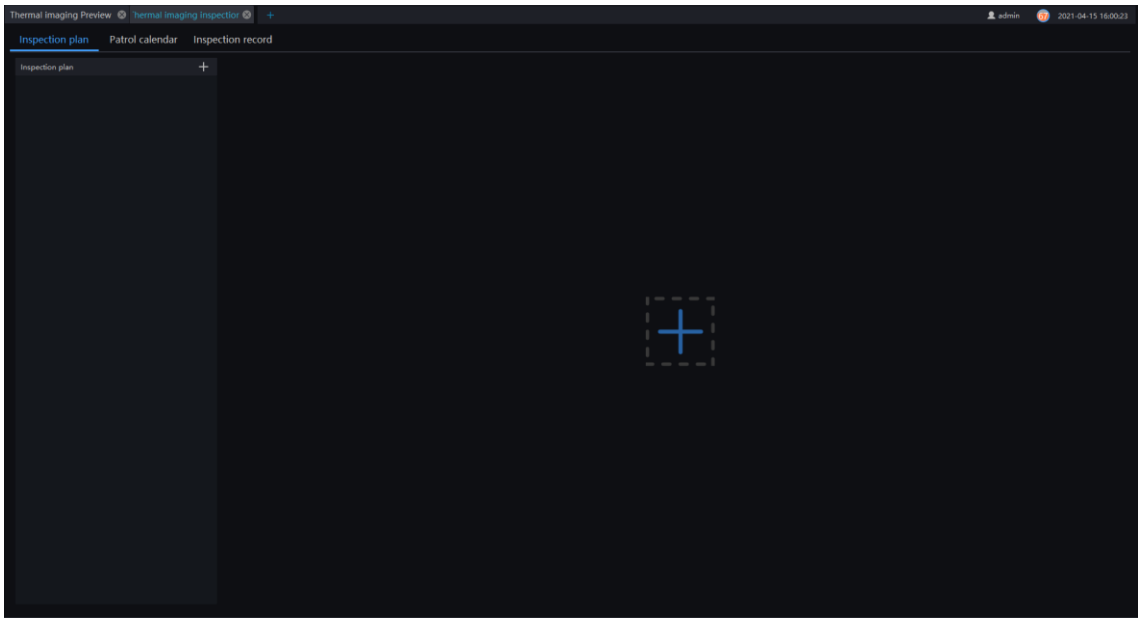
NOTE

This function only subject to the thermal imaging cameras.

On the main menu page, click to view more detailed interface, as shown in Figure 13-6.

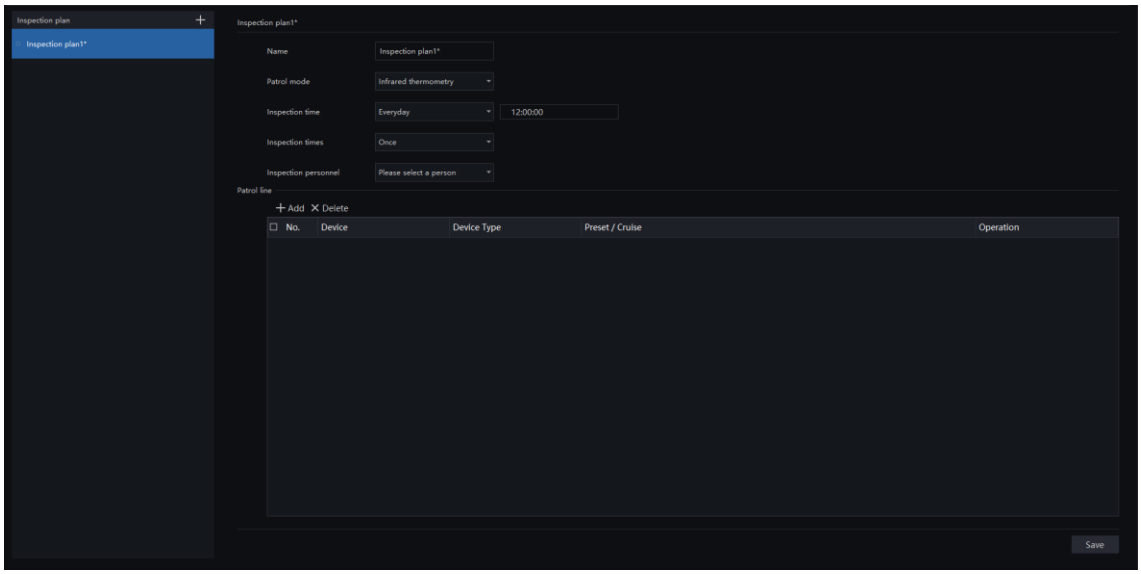
13.5.1 Inspection Plan

Figure 13-6 Thermal imaging inspector



Step 1 Click to add a new inspection plan, as shown in Figure 13-7

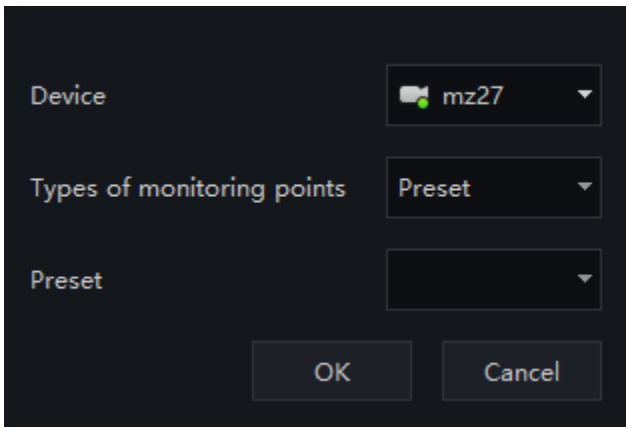
Figure 13-7 Add a new inspection plan



Step 2 Input name, choose patrol mode and inspection time(also need set detail time), inspection times (once, twice, 3 times), inspection personnel(who is in human face libraries).

Step 3 Click Add to add patrol line, as shown in Figure 13-8.

Figure 13-8 Add a new patrol line



Step 4 Choose the thermal device from the drop-down list, types of monitoring points(preset or tour).

Step 5 Click “OK” to finish add patrol line. The plan can be add many patrol line, it depends on the actual need.

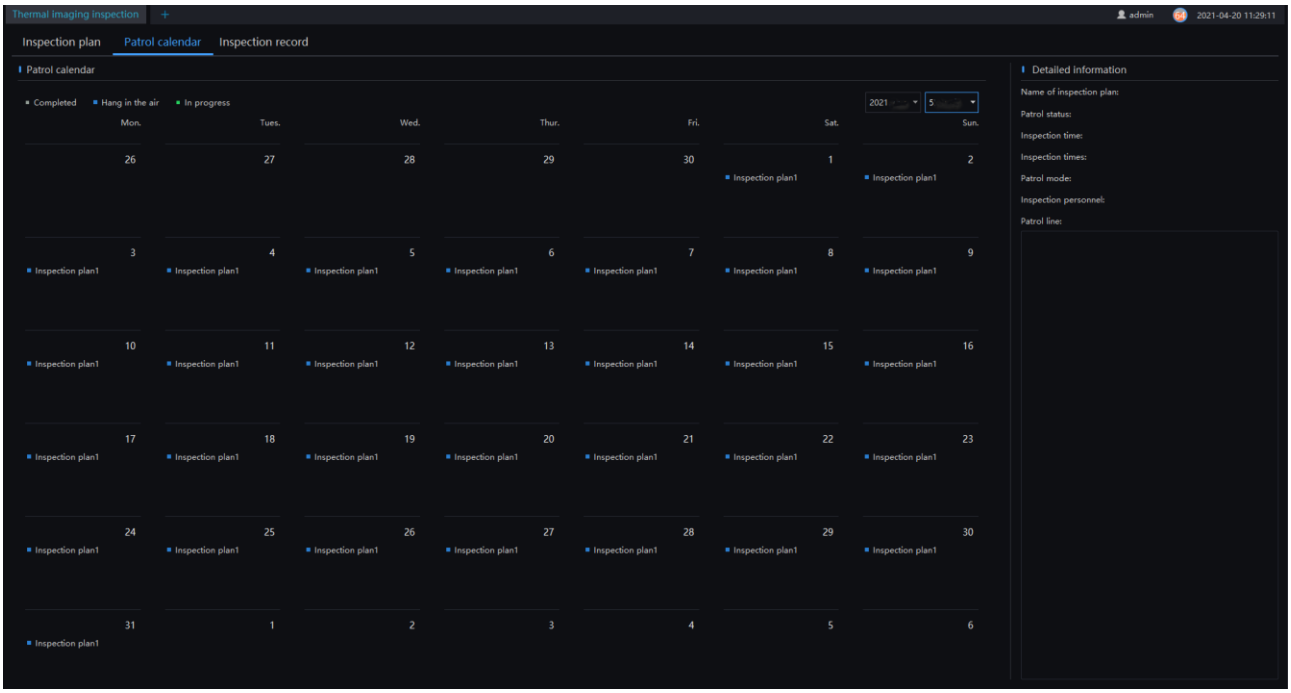
Step 6 Click “Save” to save the plan. There are up to 50 plans can be set.

---End

13.5.2 Patrol Calendar

User can view the patrol plan at calendar as shown in Figure 13-9.

Figure 13-9 Patrol calendar



Click the plan can view the detail information at right page.

13.5.3 Inspection Record

Set the filter to search the inspection record, the detail record will be showing in as Figure 13-10.

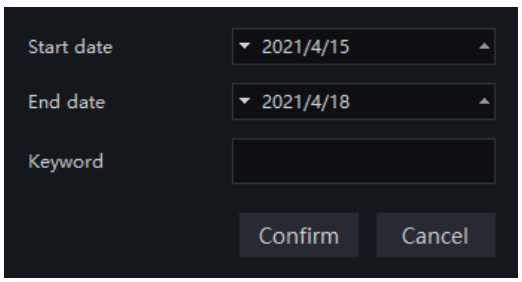
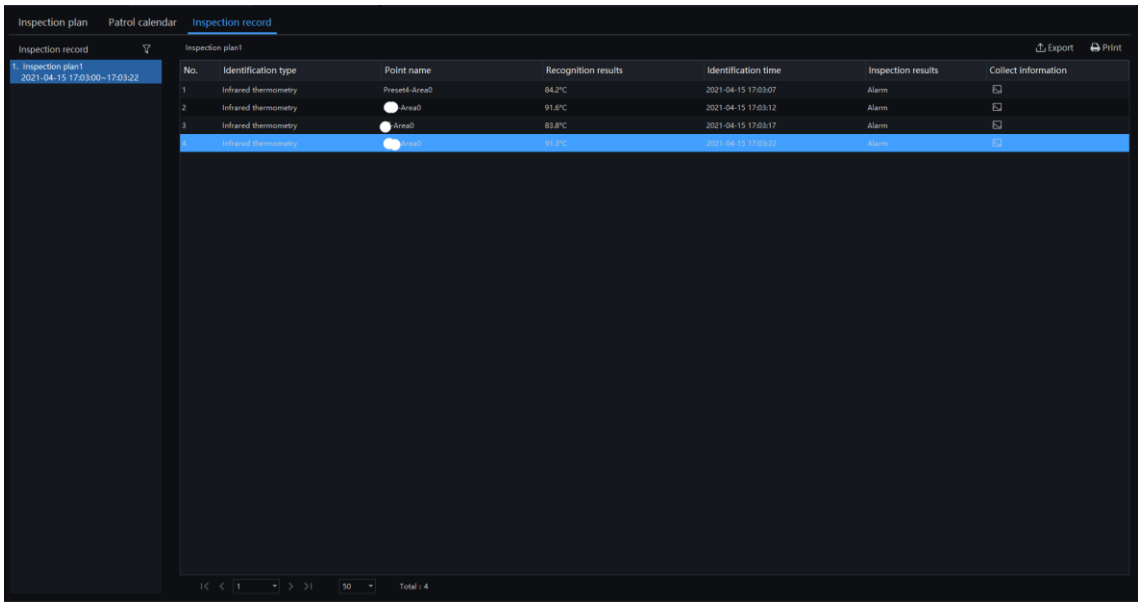


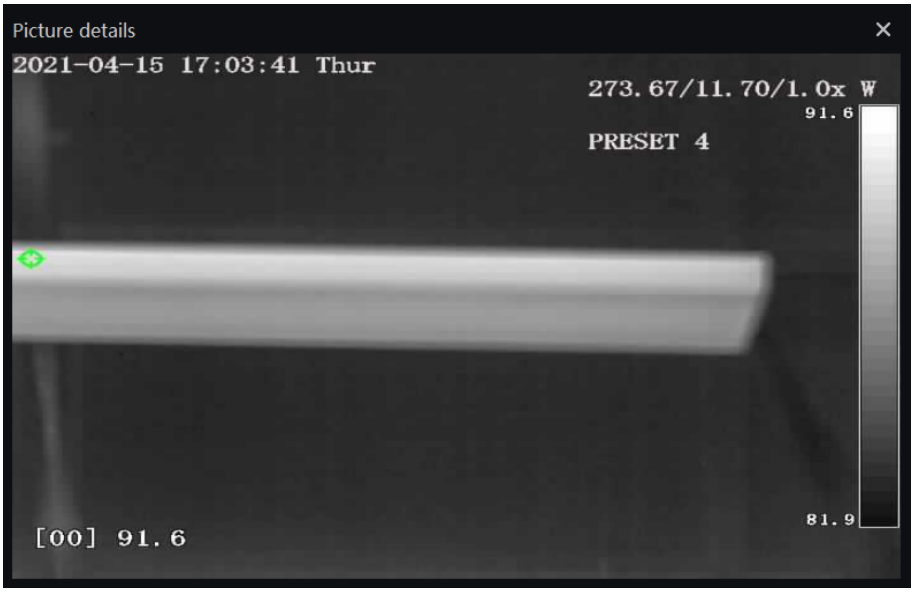
Figure 13-10 Inspection Record



Choose one inspection record to view detail information, such as identification type, point name, recognition results, identification time, inspection results, collect information.

Click the picture of collection information to view the snapshot of alarm, as shown in Figure 13-11.

Figure 13-11 Picture details



14 Access Control

NOTE

This function only subject to the access control equipment of our company, such access control panel machines, face recognition terminal panel, etc.

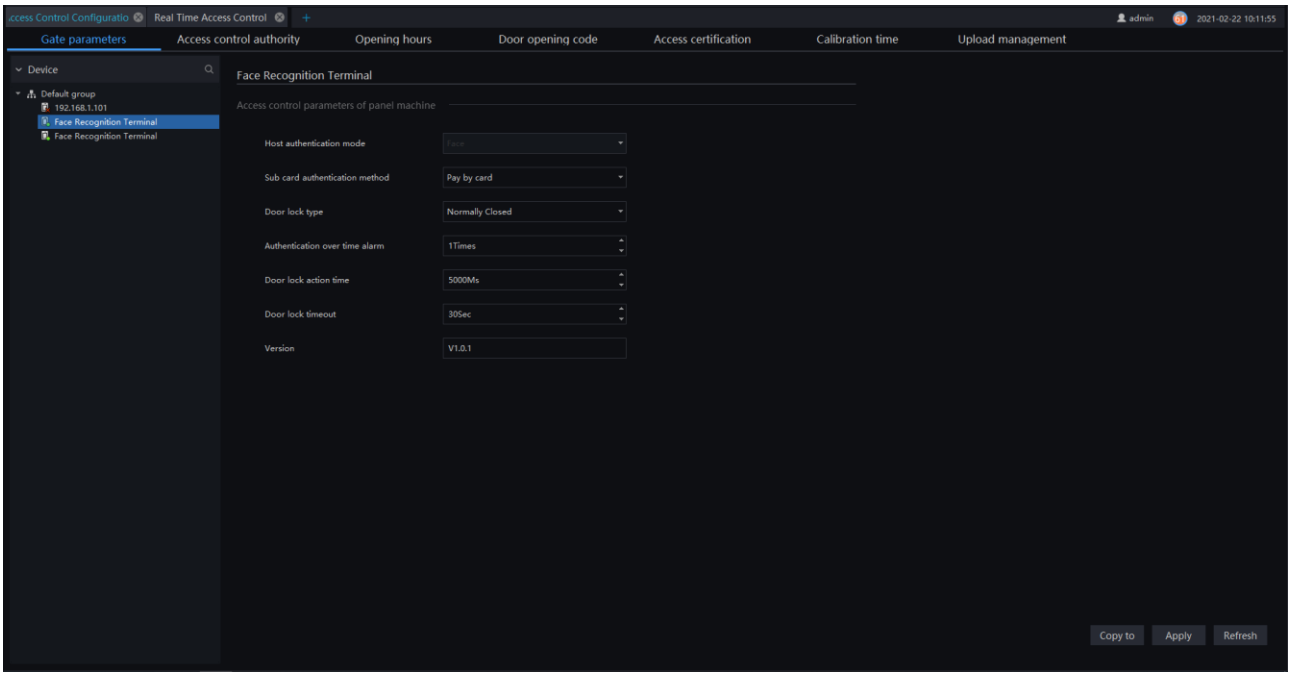
14.1 Access Control Configuration

On the main menu page, click to view more detailed interface, as shown in Figure 14-1.

All setting parameters must be uploaded to the device, the device will write these parameters.

14.1.1 Gate Parameters

Figure 14-1 Gate parameters



Different access control can be connected to platform, user can set the gate parameters of the access control system. The common ones include basic access control information (door name, relay working mode), door opening (opening hold time, door open overtime reminder, overtime alarm output alarm bell, door open time upper limit), Exit switch (press and hold the exit switch for 5 seconds, the door is set to normally open, time period setting), card reader (open parameters, keyboard function management, entry code keyboard, exit code keyboard), etc. If it is the same type of access control equipment, you can copy the relevant settings to other.

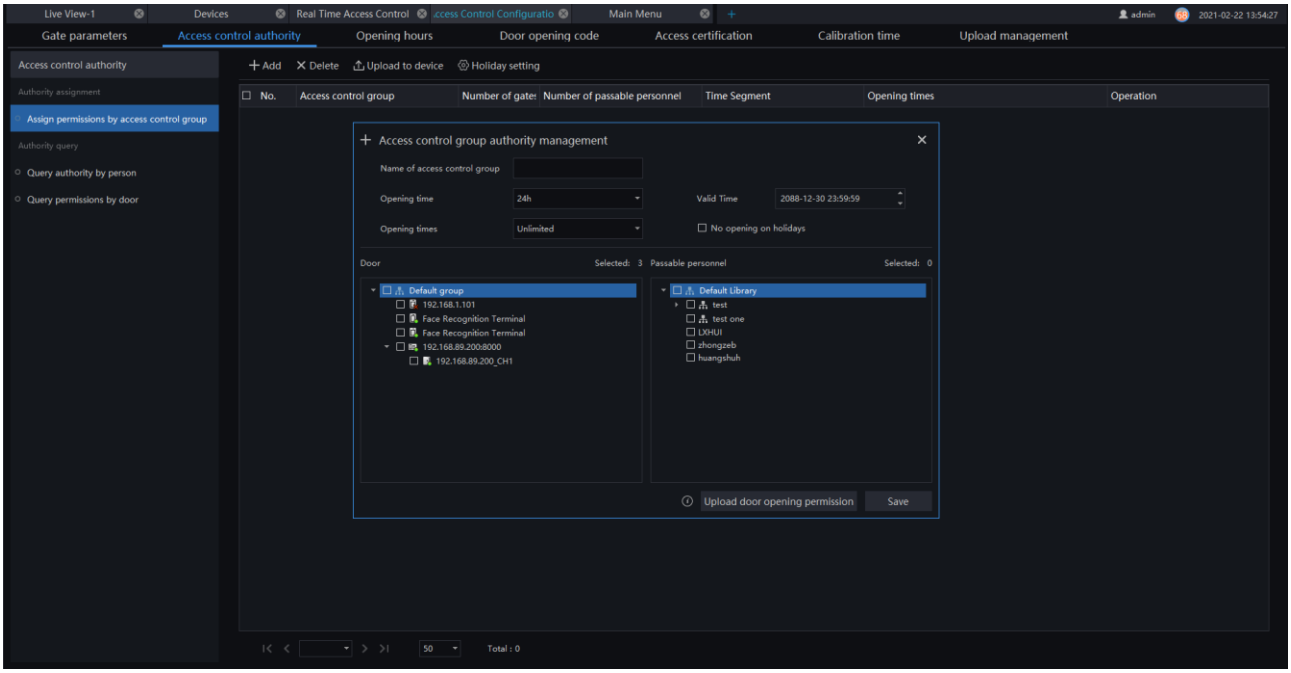
14.1.2 Access Control Authority

At access control configuration interface, choose “access control authority” to enter the page, as shown in Figure 14-2.

There are two sections at access control authority, authority assignment and authority query (by person and by door).

14.1.2.1 Assign Permissions by access control group

Figure 14-2 Access control group authority management



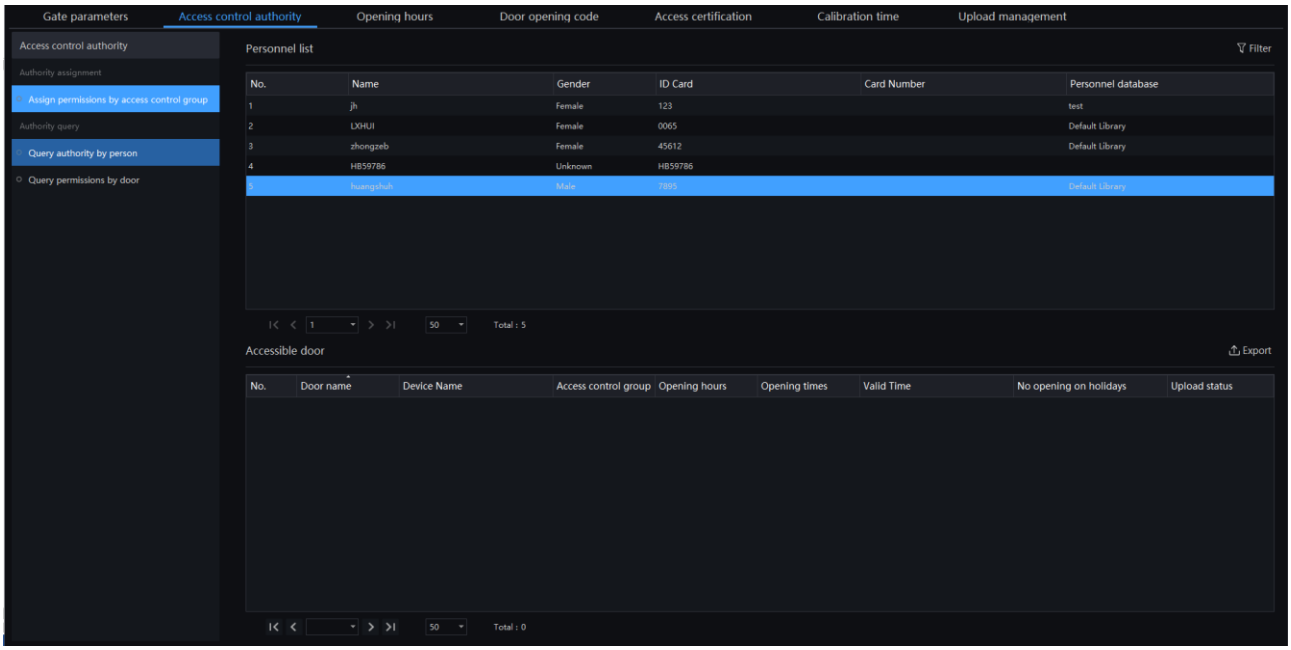
Click “Add” to add group the manage, set the name of control group, opening time, valid time, opening times and opening on holidays.

Choose the doors and tick the personnel who is allowed to open the doors.

14.1.2.2 Query Authority by Person

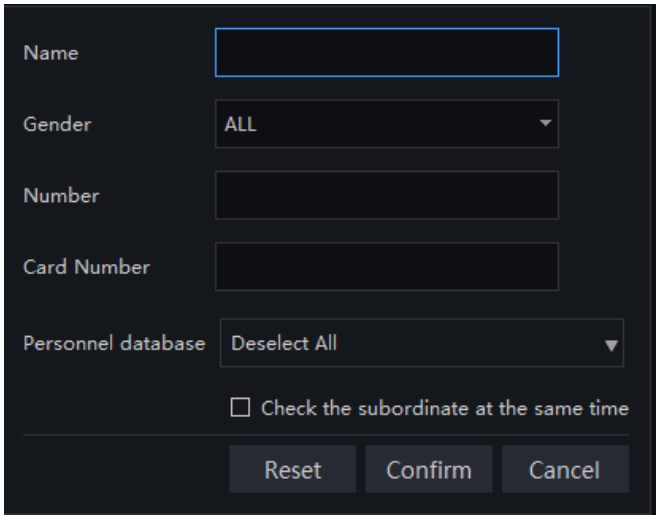
Click “query authority by person” at access control authority page, as shown in Figure 14-3.

Figure 14-3 Query authority by person



User can set the filter to query accurately, as shown in Figure 14-4.

Figure 14-4 Filter



14.1.2.3 Query Authority by Door

Click “query authority by door” at access control authority page, as shown in Figure 14-5

Figure 14-5 Query permissions by door

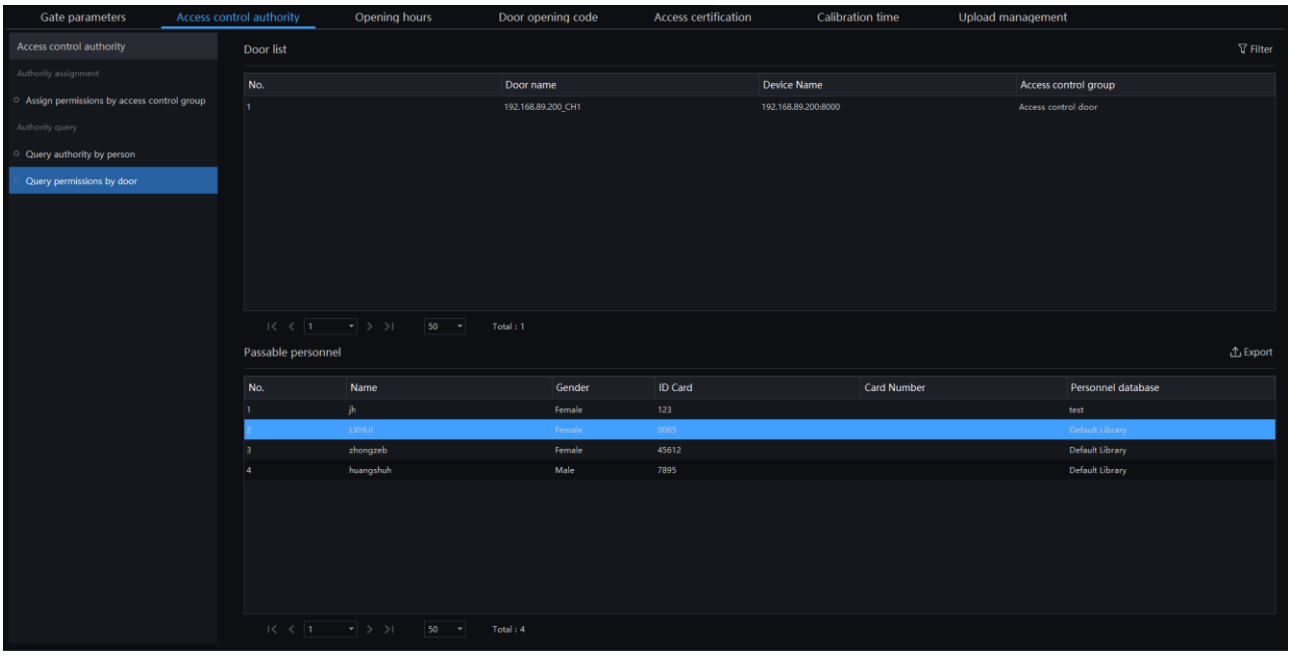
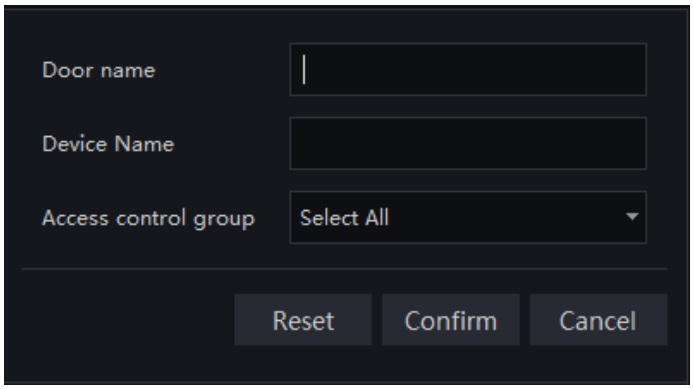


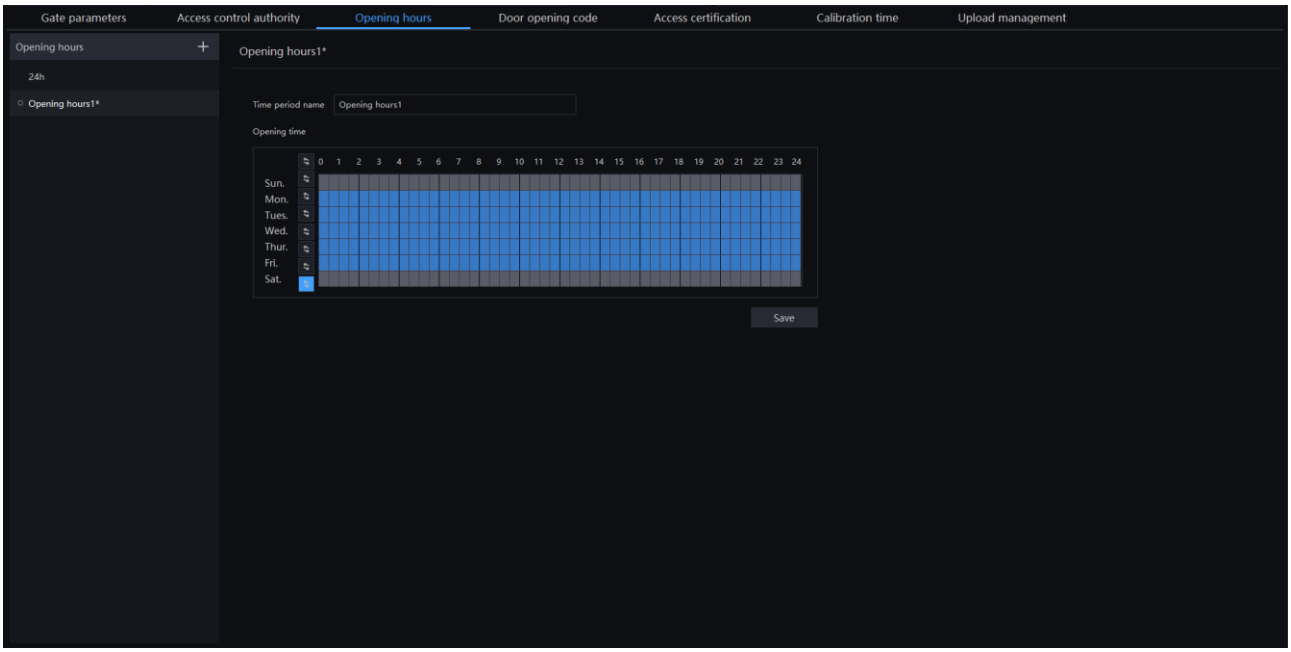
Figure 14-6 Filter



14.1.3 Opening Hours

At access control configuration interface, choose “Opening hours” to enter the page, the default rule is 7*24 hours, user can add new opening hours, as shown in Figure 14-7.

Figure 14-7 Opening hours

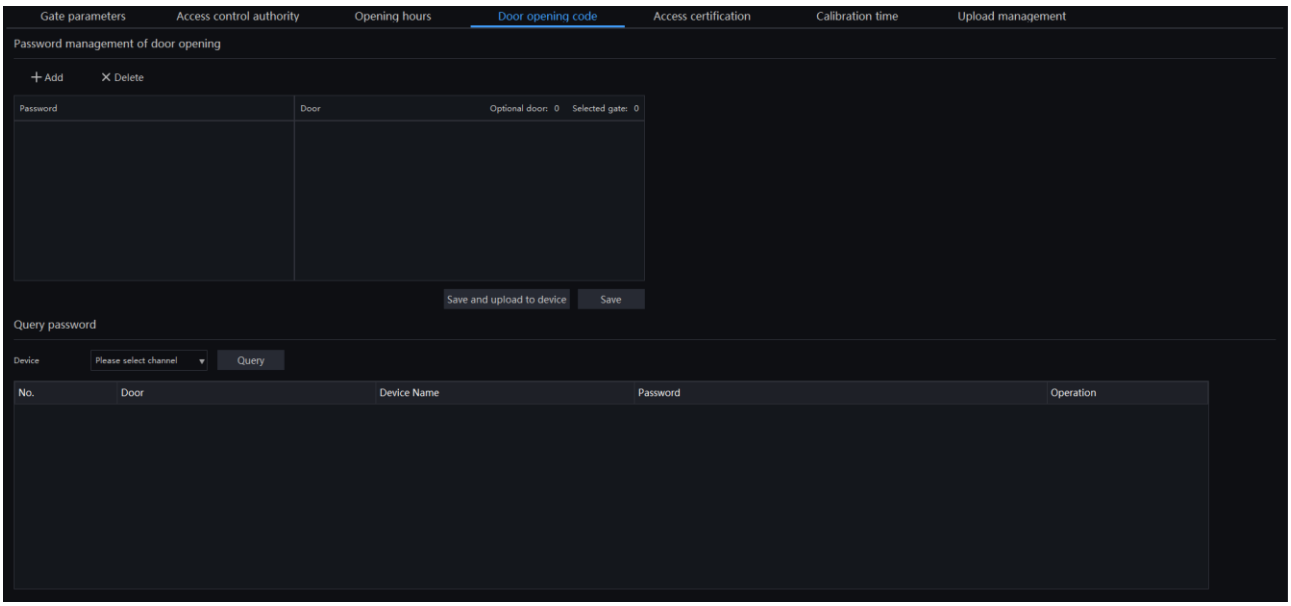


Set the time period name, and choose the opening time. Click “Save” to save the settings.

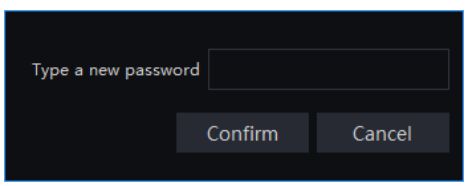
14.1.4 Door Opening Code

At access control configuration interface, choose “Door opening code” to enter the page, as shown in Figure 14-8.

Figure 14-8 Door open code



Click “add” to add password to open the door,

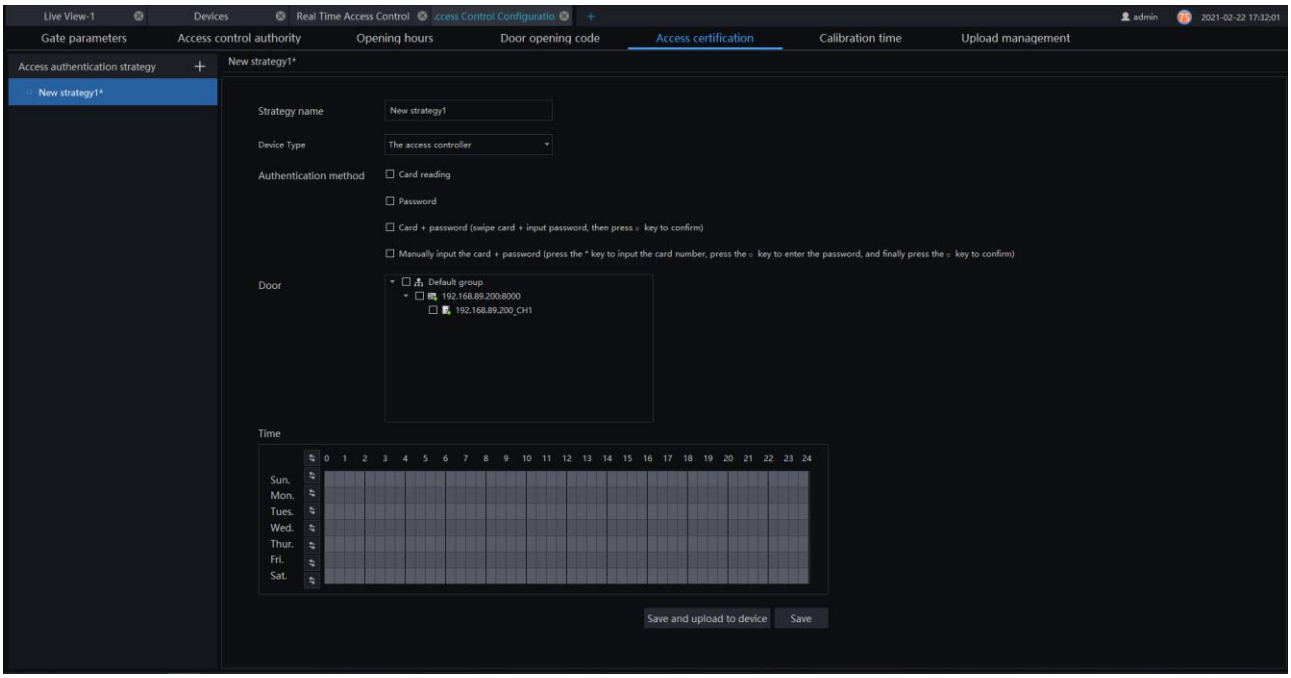


Choose the device can query password.

14.1.5 Access Certification

At access control configuration interface, choose “Access certification” to enter the page, as shown in Figure 14-9.

Figure 14-9 Access certification

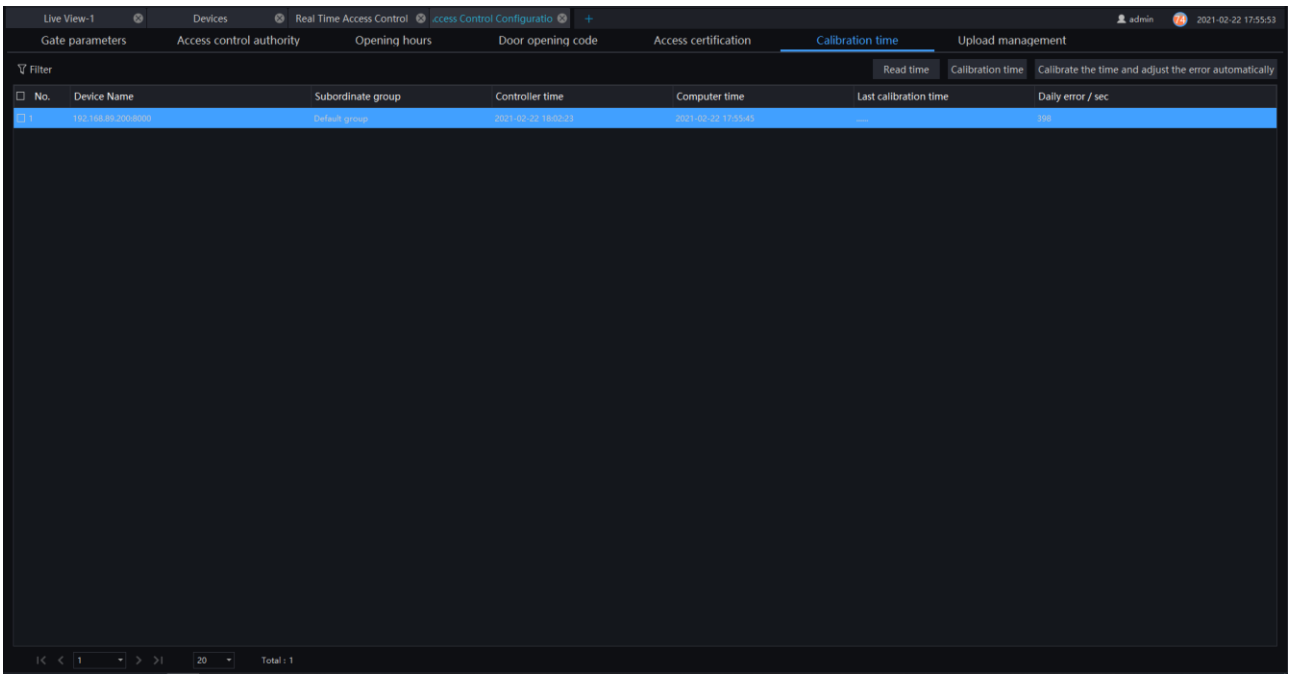


Click “Add” to add new access authentication strategy, set the strategy name, device type, authentication method, choose door, and set the time.

14.1.6 Calibration Time

At access control configuration interface, choose “Calibration Time” to enter the page, as shown in Figure 14-10.

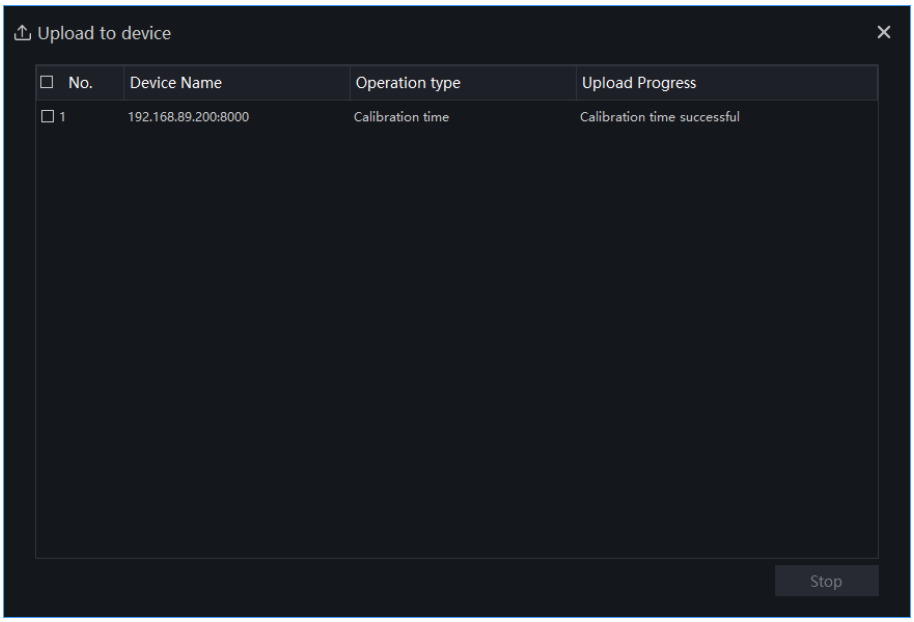
Figure 14-10 Calibration Time



Calibration time means the devices of access control are set the same as the platform server, so that user control the access control devices conveniently.

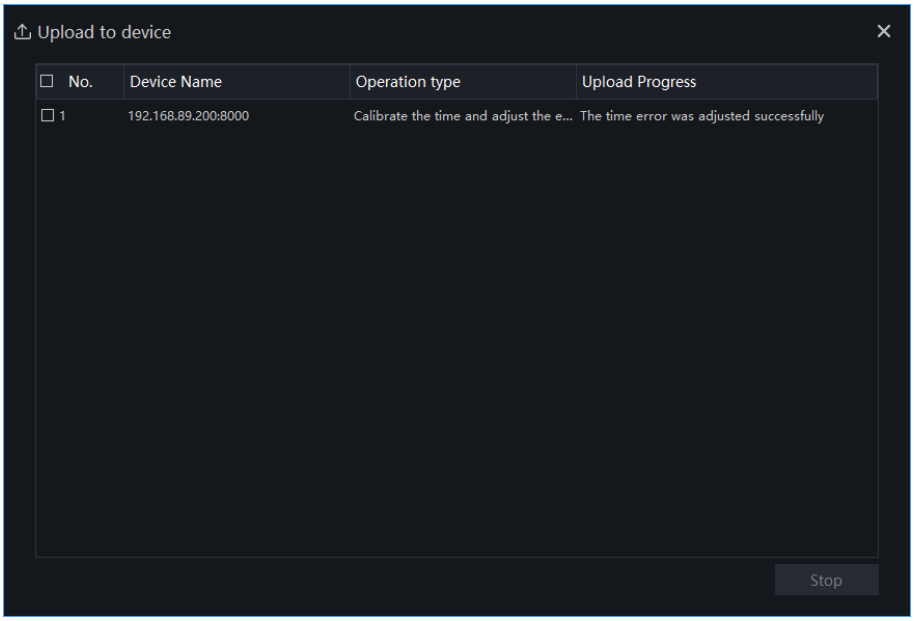
Set the filter to show the detail information, such as device name, subordinate group, controller time, computer time, last calibration time, daily error/sec.

Figure 14-11 Calibration time – upload to device



Click “Calibrate the time and adjust the error automatically” to adjust the time automatically. The progress window will show as Figure 14-12.

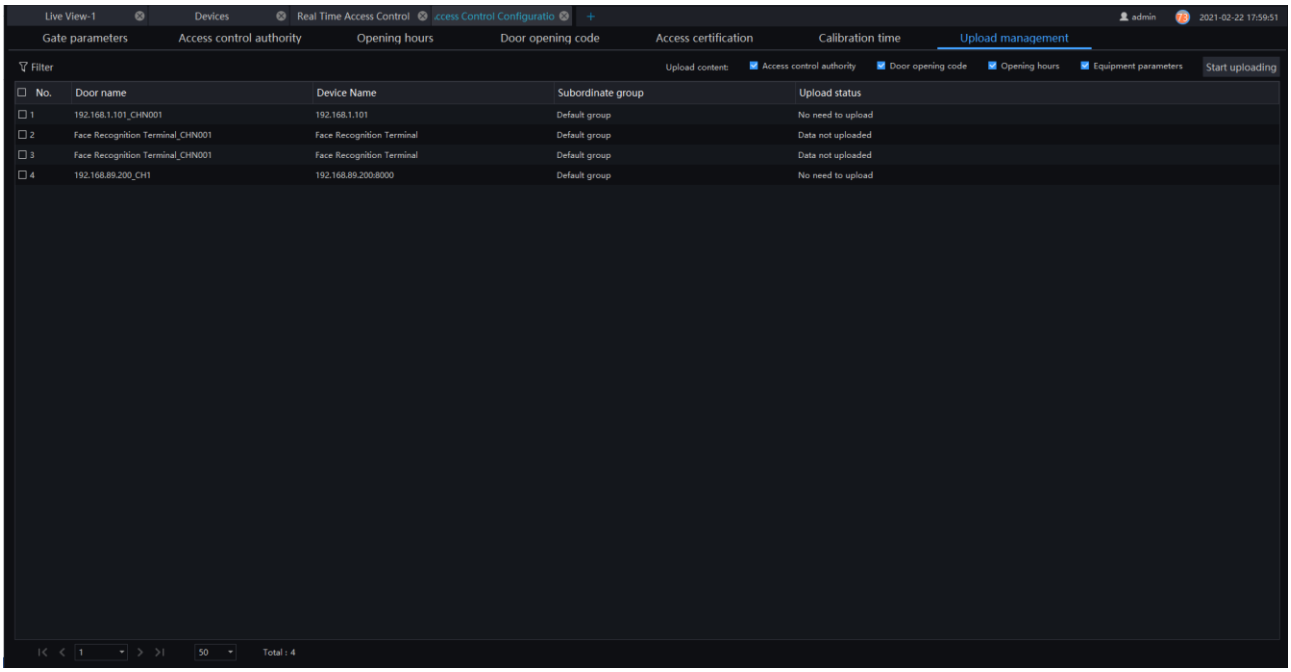
Figure 14-12 Status window



14.1.7 Upload Management

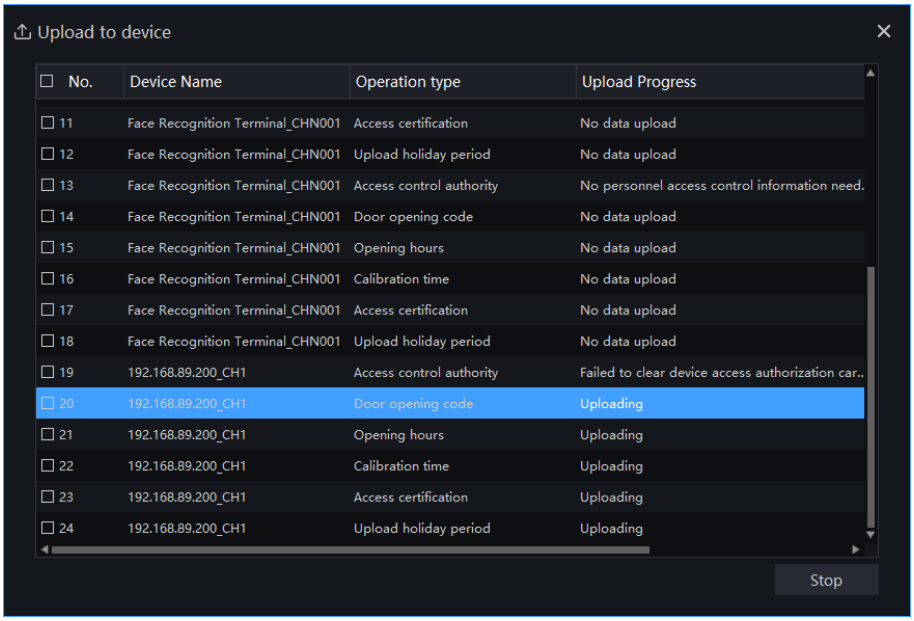
Set the filter, tick the upload content, click “Start uploading”, the settings will upload to device.

Figure 14-13 Upload management



The status will show as Figure 14-14.

Figure 14-14 Upload to device



14.2 **Real Time Access Control**

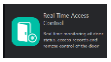
On the main menu page, click  to view more detailed interface, as shown in Figure 14-15.

Figure 14-15 Real time access control

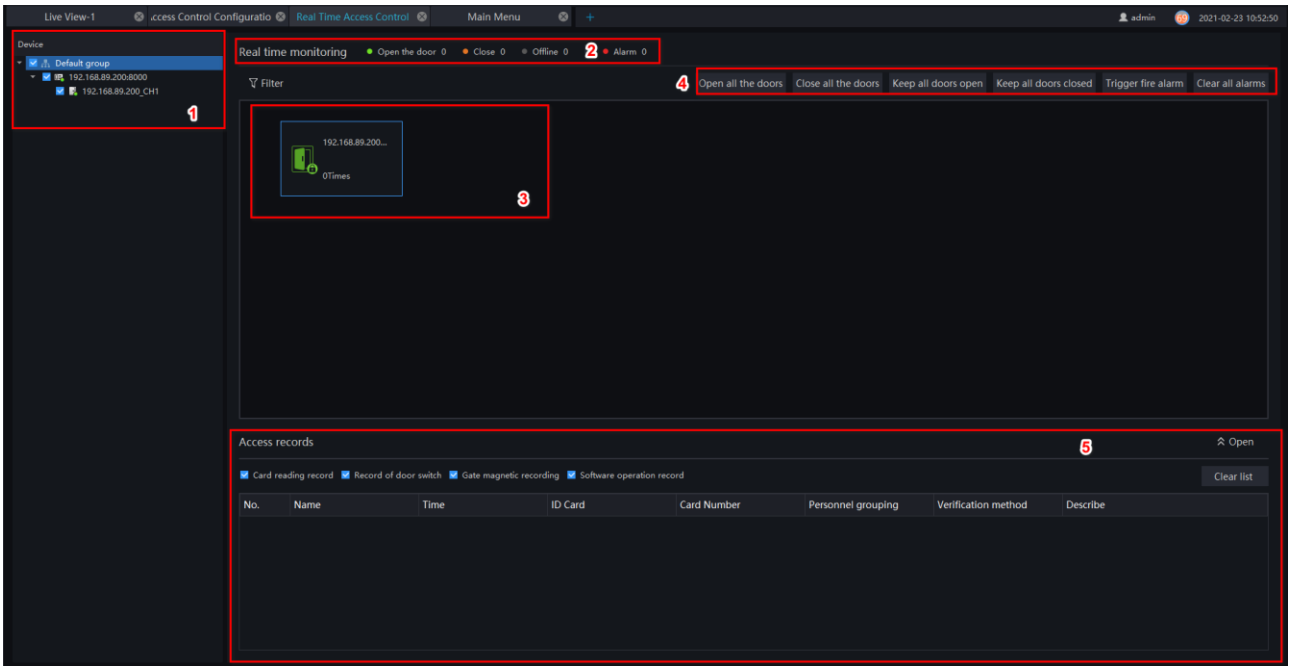
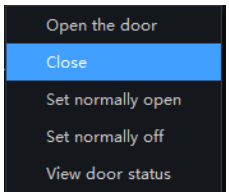


Table 14-2 Real time control

No.	Function	Description
1	Device list	The access control devices
2	Real time monitoring	Show the times of opening the door, closing the door, offline and alarming at 24 hours.
3	Status of access control	The status of door, open or close. Green means the door is open, red means the door is closed. Right-click menu  to operate the door individually.
4	Operation	Click the icon to operate the doors. Open all doors, close all doors, keep all doors opening, keep all door closed, trigger fire alarm, clear all alarms.
5	Access records	Show the card reading record, record of door switch, gate magnetic recording, software operation record. The detail information will show on list.

14.3 Access Control Inquiry

On the main menu page, click to view more detailed interface, as shown in Figure 14-16.

Figure 14-16 Access control inquiry

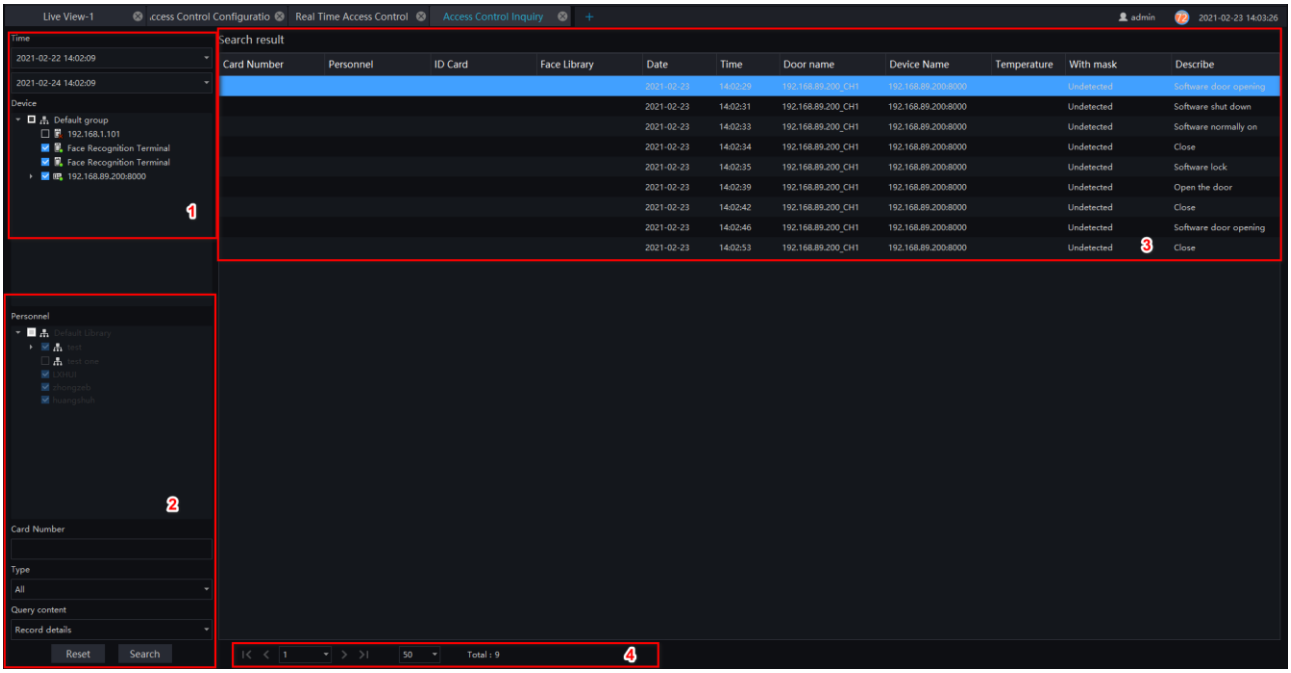


Table 14-3 Temperature search

No.	Function	Description
1	Set time Choose devices	Set the query time Tick the devise to query
2	Personnel	Choose the personnel, or set more information, such as card number, type (all or some people), query content (record details or statistical report)
3	Search result	Result of searching.
4	Page information	Page number, number of pages per page, total. Switch to next page.