# CMS (Center Management System) User Manual

User Manual Version:1.1

CMS Version: 1.5

Date: 2021/04/16

# Introduction

## Overview

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

## 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, if not avoided, result in death or serious injury.
Alert you to a medium or low risk hazard that could, if result in moderate or minor injury.	
A CAUTION	Alert you to a potentially hazardous situation which, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
<b>©</b> —" 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, thermal 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 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.
- ➤ Body temperature monitoring. Support human body thermometer to monitor body temperature in the face database to form a health archive.
- Thermal temperature management. Support for thermal imaging capture, snap search and historical retrieval.
- Monitoring center. Comprehensive monitoring center, visual comprehensive management interface, which mainly displays the current main data of the platform, conventional monitoring, AI intelligence, etc.

## 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 1-1 NIC parameters

Channel	Camera Bitrate	Input Bitrate	Output Bitrate
200	4 Mbps	800 Mbps	800 Mbps
400	400 2 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 V1.2 version of the intelligent analytics server only supports CPU.

#### Reference:

Туре	Model	ROM	Channel of face detection
CPU	Intel(R) Core i5-7500	8 G	1-3
СРИ	Intel(R) Core i7-8700	8 G	2-8

CPU Intel(R) Xeon(R) cpu E5- 16 G 4-10 2630 v4	CPU		16 G	4-10
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## M 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 configure.

#### 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.

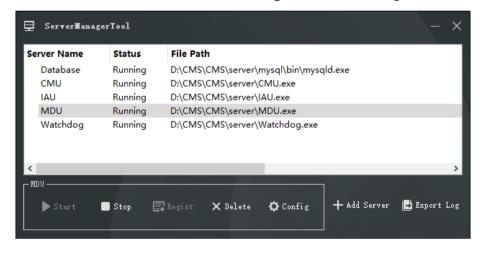


Figure 1-1 Server Management UI

#### **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

# 1.3 System Requirement



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 <sup>TM</sup> i5-7500 or better	Intel® Core <sup>TM</sup> i5-7500 or better			Intel® Core <sup>TM</sup> i7 or better
RAM	8 GB or more	GB or more 4 GB or more 8 GB or more 8		8 GB or more	8 GB or more
Network Card	Gigabit/s				
HDD	50 GB or Above	50 GB or Above	50 GB or Abov	e 50 GB or Abo	ve 50 GB or Above

os		Microsoft®  Microsoft®	ft® Windows® 7 Pro ft® Windows® 10 Pro Windows® 10 Enterp oft® Windows® Serv oft® Windows® Serv	o (64 bit) orise (64 bit) er 2012	
Software	DirectX 11 or above				
Display Resoluti on	1600×960 and above, default 1920 x 1080				
Video Card					
GPU					NVIDIA GTX 1050 or better

# 2 Installation

## 2.1 One-Click Installation

One-click installation 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)\CMS directory. After installation, the server component and client program are automatically started.



Figure 2-1 One click installation

## 2.2 Custom Installation

Custom installation 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".

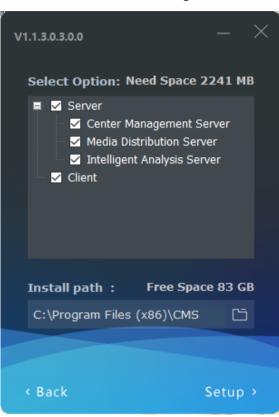


Figure 2-2 Installtion interface

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





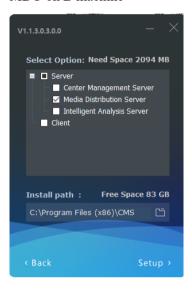
Large Method: All components of the platform are installed on different machines to form a larger system

Figure 2-4

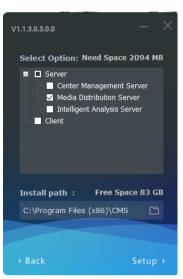
CMU on A machine



MDU on B machine



IAU on C machine



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.

## M 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. The system tray icon is



click and open the menu.

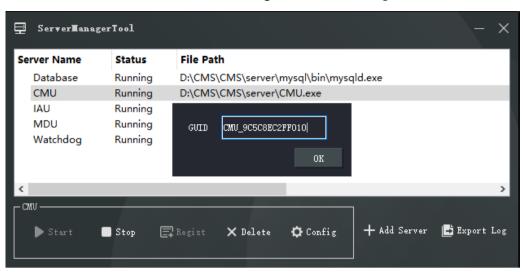
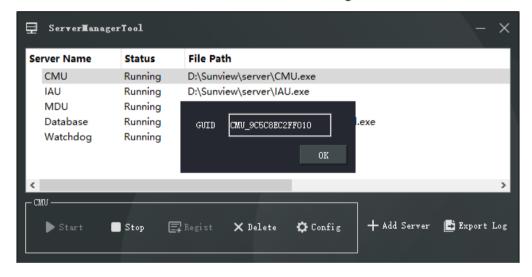


Figure 2-5 Server manager tool

# 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

## M NOTE

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

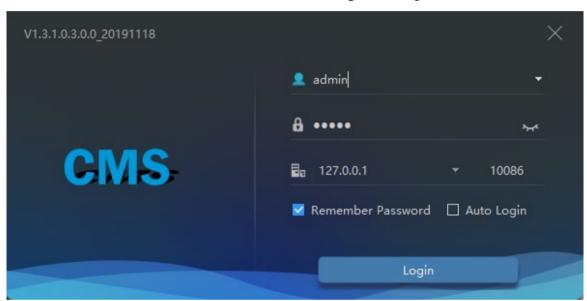
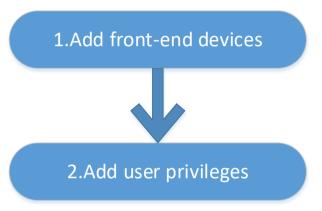


Figure 3-1 Login interface

# 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:

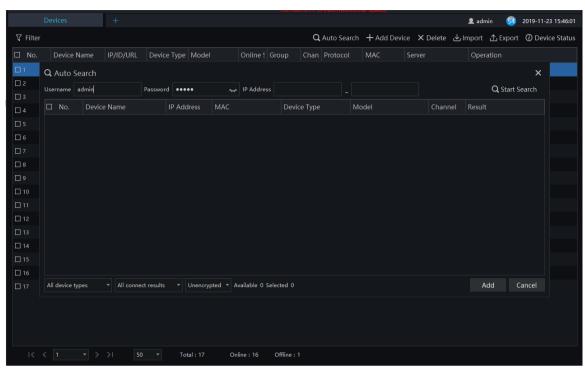


Figure 4-1 Add device

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:

### M NOTE

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

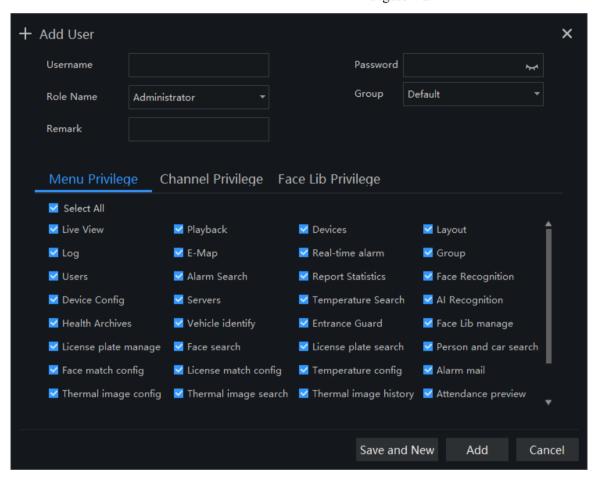
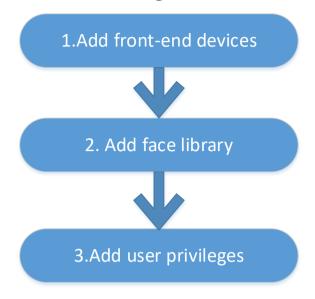


Figure 4-2 Add user

## 4.2 Intelligent Application Configuration Process



## 4.2.1 Add Front-End Device

Refer to 4.1.1

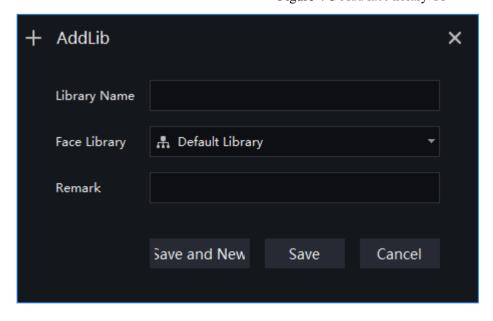
## 4.2.2 Add Face Database

This function is used for cameras which support face detection.

## **M** NOTE

Enter the main interface, open "Archives Library" > "Face Library", 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

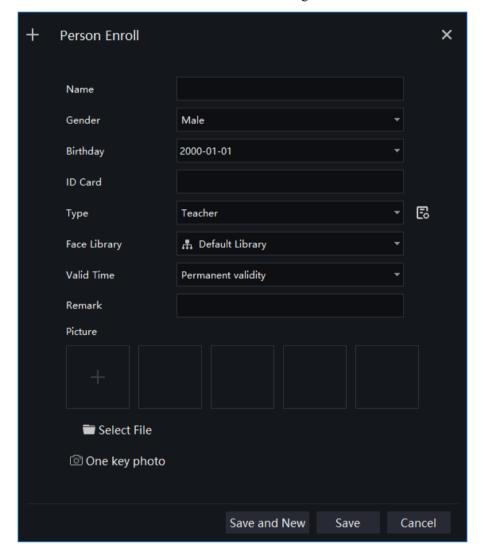


Figure 4-4 Person enroll

## 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.

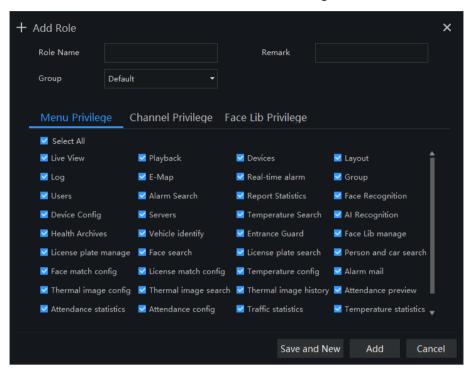
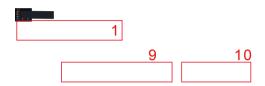


Figure 4-5 Add role

# 5 Main Menu Page

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







6<del>2-</del> 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 built a new main menu page

No.	Function	Description
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.
5	Operate	Admin Lock Screen F10 Language Help F1 About  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, file path, hotkey 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.

No.	Function	Description
	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, as shown in Figure 5-3.
		Configuration Maintenance: Devices, Log, Group, Users, Device Config, Servers, Alarm Mail, as shown in Figure 5-4.
		Face Recognition: Face Recognition, Face Library Manage, Face Search, Face Match Config, Classification Data Query, as shown in Figure 5-5.
		License Plate Recognition: Vehicle Identify, License Plate Manage, License Plate Search, License Match Config, as shown in Figure 5-6.
		Multi-target Recognition: AI Recognition, Person and Car Search, Traffic Statistics, as shown in Figure 5-7.
		Attendance: Attendance Preview, Attendance Statistics, Attendance Config, as shown in Figure 5-8.
		Temperature Monitor: Temperature Screening, Temperature Search, Health Archives, Temperature Config, Temperature Statistics, as shown in Figure 5-9.
		Thermal Imaging: Thermal Image Config, Thermal Image Search, Thermal Image History, as shown in Figure 5-10.
11	Card management	Add or remove feature card to common functions interface, as shown in Figure 5-11.

Figure 5-2 System Setting

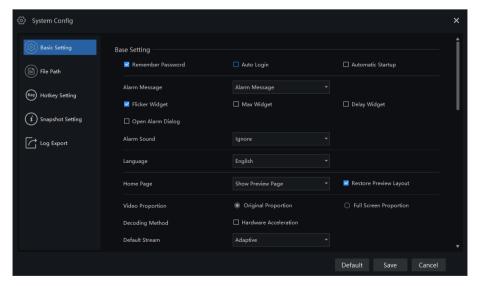


Figure 5-3 Basic Functions

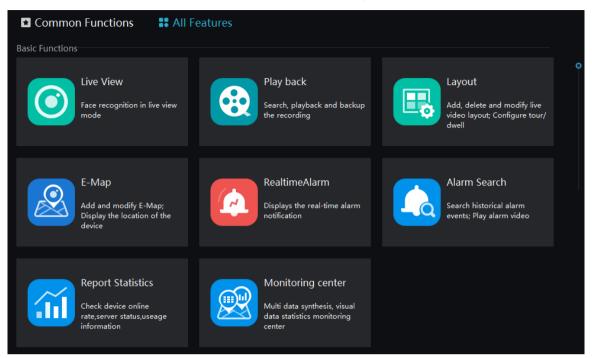


Figure 5-4 Configuration Maintenance

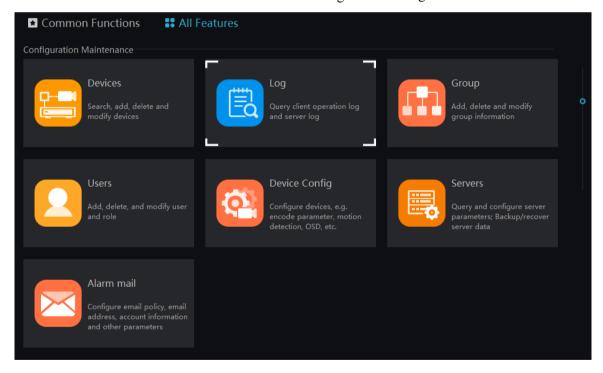


Figure 5-5 Face Recognition

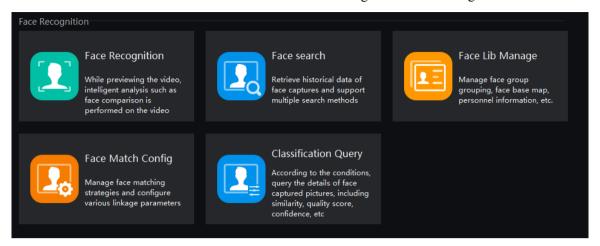


Figure 5-6 License Plate Recognition

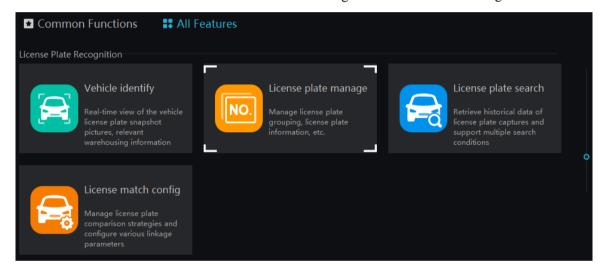


Figure 5-7 Multi-target Recognition

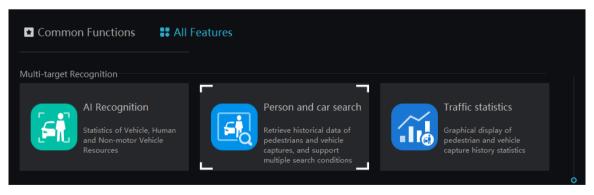


Figure 5-8 Attendance

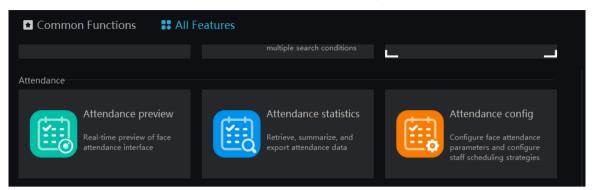


Figure 5-9 Temperature Monitor

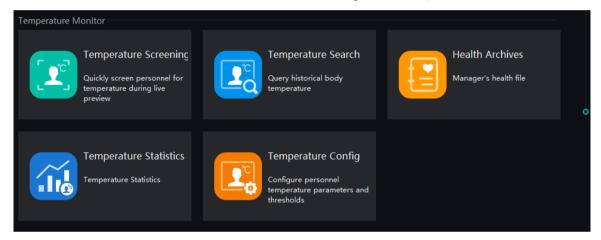
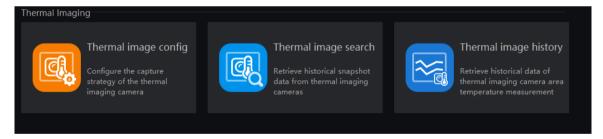


Figure 5-10 Thermal Imaging



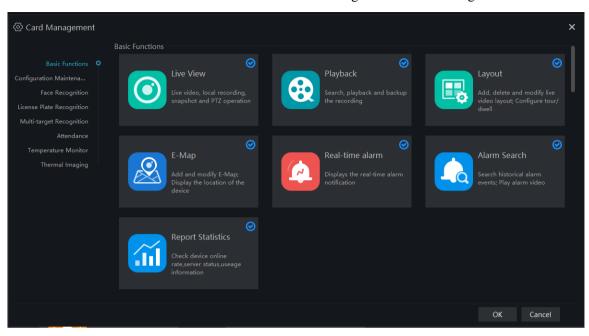


Figure 5-11 Card management

# 6 Devices Management

At the device management page, you can add devices (such as IPC, NVR) through automatically searching, manually adding or batch importing. The platform supports the following device types: IPC, 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 6-1

Figure 6-1 Device Management interface

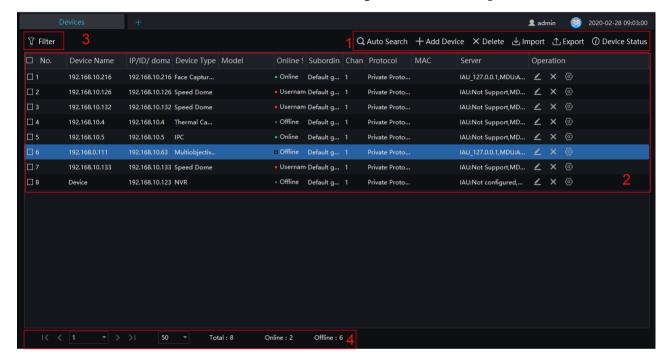


Table 6-1 Device Management

No.	Function	Description
1	Operation	Search, add, delete, export, import devices, Status of All devices.
2	Device information display	Details of device, operating device: edit, delete device, quickly enter to device configuration.
3	Filter	Filter the device by setting device type, online status and device name.
4	Page	Device display page, next page, quantity.

#### 6.2 Auto Search

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

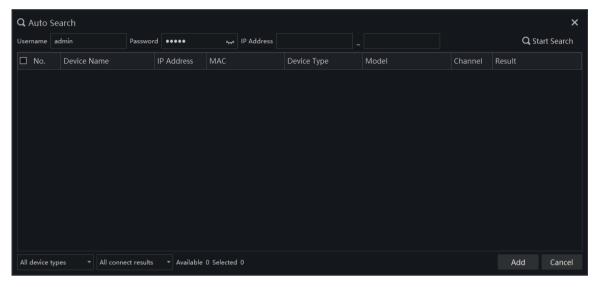
#### **Procedure:**

Step 1 On device management page click



enter auto search page ,as shown in Figure 6-2.

Figure 6-2 Auto search page



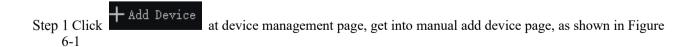
- Step 2 Input the user name and password of the device and set the IP address range to filter.
- Step 3 Click "Start Search", the device on the same network as the client will be automatically searched and the search results will be displayed on the current page.
- Step 4 Tick the number of the device and click "Add". After finished, the device is displayed in the device list.



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.

## 6.3 Manual Add

#### **Procedure:**



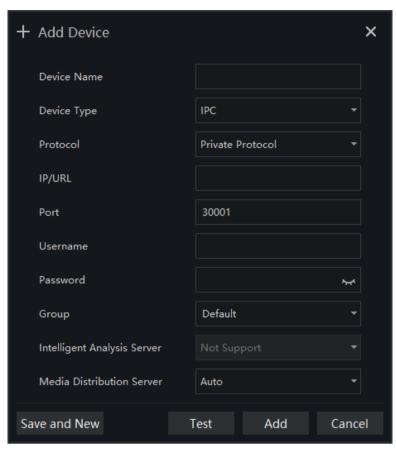


Figure 6-3 Manually add device page

# **!** 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 6-4 Server associated



Step 1 Input the device name, select the device type, input the IP address/user name/password, and select group Step 2 Click "test" to check your settings, click "Save and New"

Step 3 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).

Confirm the removal of the denica?

OK. Cancel , click "OK" to

Step 4 Delete the cameras: tick the No of cameras, click "Delete" to show delete the cameras.

## 6.4 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

## 6.5 Device Status

#### **Procedure:**

Step 1 Click "Device Status".

Step 2 The pop-up window show the status of devices as shown in Figure 6-5.

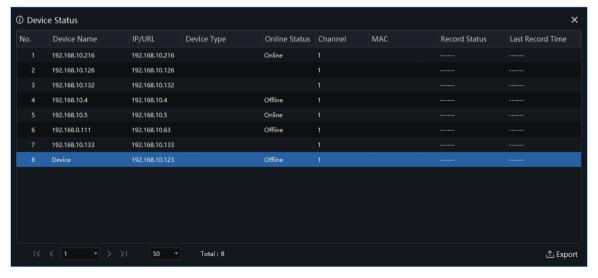


Figure 6-5 Device Status

Step 3 Click "Export".

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

--End

# 7 User Management

At the user management 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 7-1.

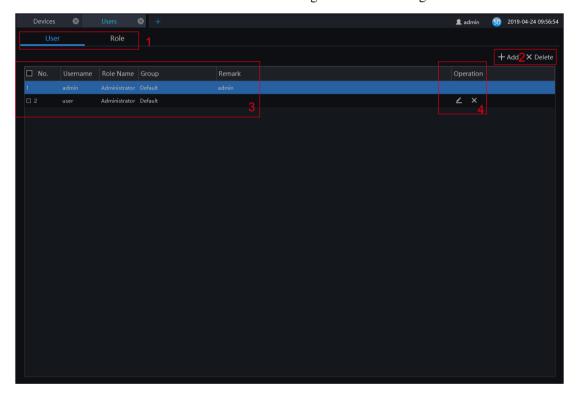


Figure 7-1 User management interface

Table 7-1 User management

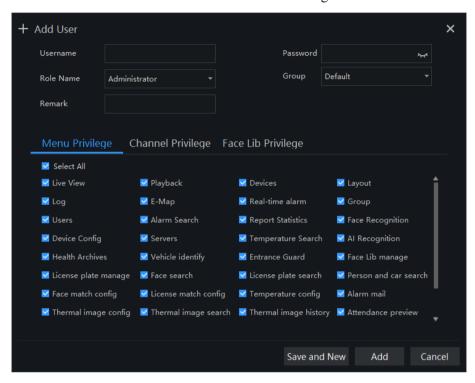
No.	Function	Description
1	User and role	Choose user or role to operate.
2	Add/Delete	Add/delete user or role.
3	Display area	Display user/role information
4	Edit/Delete	Click edit/delete icon to operate current roles or users

#### 7.1 Add User

#### **Procedure:**

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

Figure 7-2 Add User



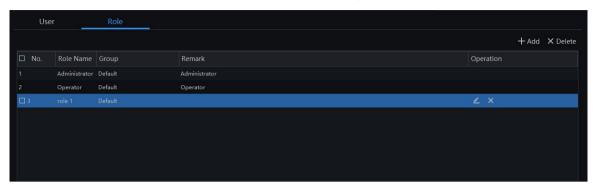
- Step 2 Input user name, try to set it with numbers and English characters. User name can be set "Administrator" or "Operator".
- Step 3 Set login password and group.
- Step 4 Select menu privilege, channel privilege and face library privilege (The default is all selected).
- Step 5 Click "Save and New" or "Add" to save and add user, it will pop-up "add successfully".

## 7.2 Add Role

#### **Procedure:**

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

Figure 7-3 Role interface



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

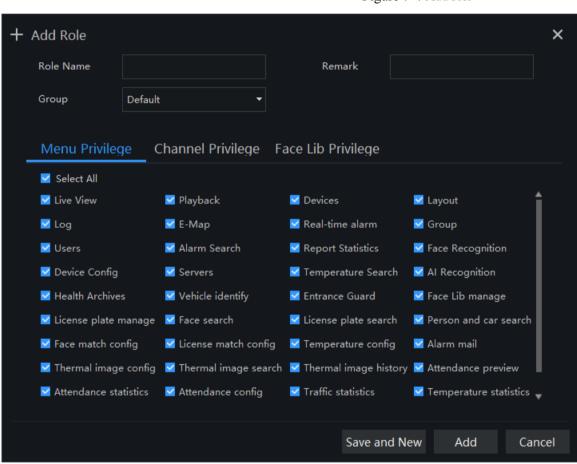


Figure 7-4 Add role

- 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.

## 8 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 8-1



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

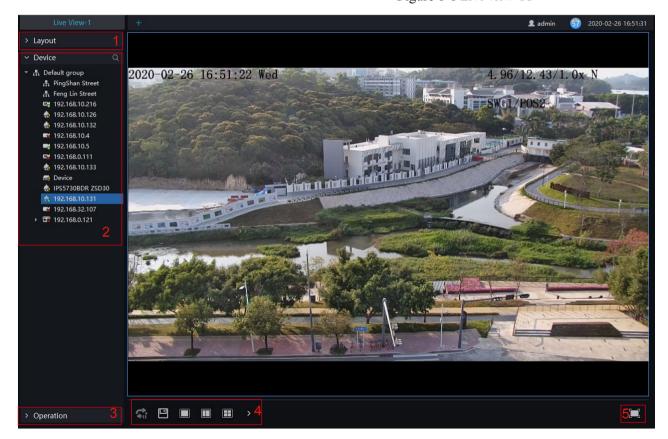


Figure 8-1 Live view UI

Table 8-1 Live view

No.	Function	Description
1	Layout	Video display format, add the layout.
2	Operation	Set dome device PTZ/ Image parameter.

No.	Function	Description
3	Video display layout	Start the cruise, save the current layout, single screen, two screens, four screens, support maximum 64 screens.
4	Operation	Set dome device PTZ/ Image parameter.
5	Full screen	Full screen

## 8.1 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.

### 8.2 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.

## 8.3 Operation



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



Figure 8-2 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 8-3 Image adjustment

# 9 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 9-1

Figure 9-1 Playback interface

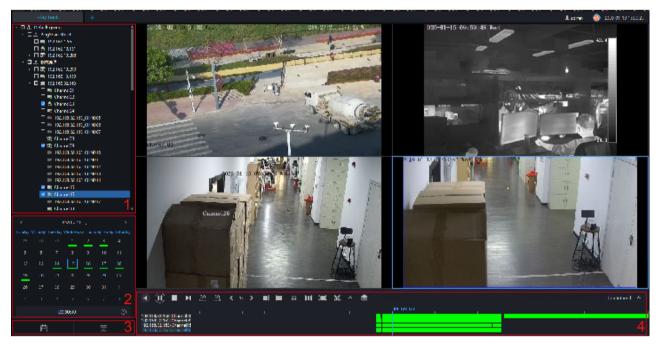


Table 9-1 Playback

No.	Function	Description
1	Device	Show devices on the platform as organizational structure
2	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.
3	Operation	Close or open the calendar/ Video grid

No.	Function	Description
4	Toolbar operation	Video operation: operation, timeline, display. For example
		, Rewind
		Pause/Play
		Stop
		Next frame
		30, 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.
		1Day ^, Select progress bar format

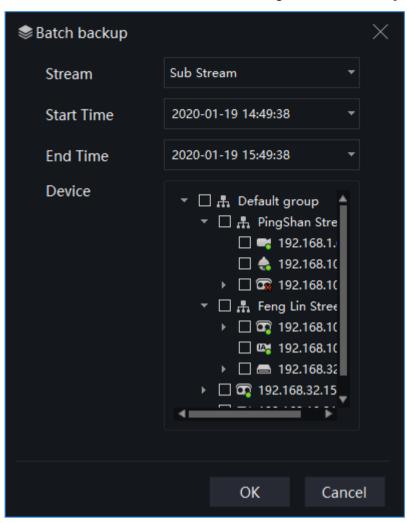
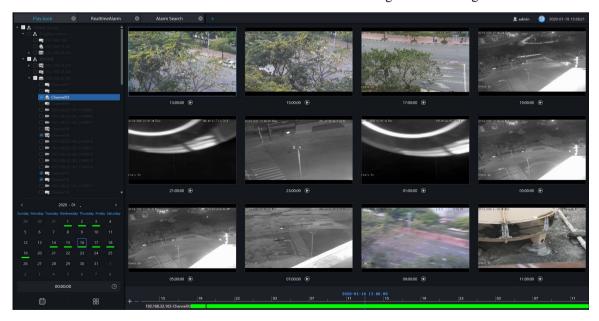


Figure 9-2 Batch backup

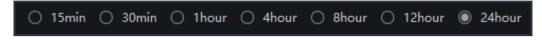
Figure 9-3 Video grid



## 9.1 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 progress bar formats.



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

## 9.2 Back up the Device Video

#### **Procedure:**

Step 1 Click , the video starts to back up, the icon 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 9-4

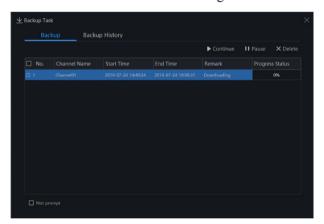


Figure 9-4 Download interface

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 9-5 File path

## 10 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 10-1

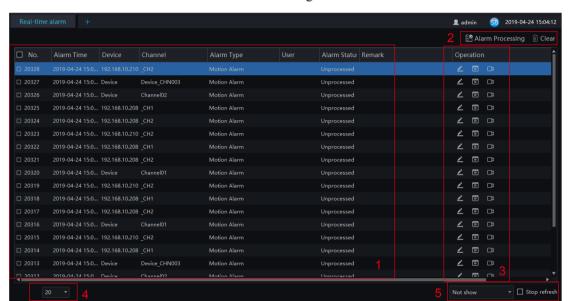


Figure 10-1 Real-Time alarm interface

Table 10-1 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.
3	Alarm operation	Alarm processing, video of alarm playback, live video.
4	Interface display.	Quantity of the current page's alarms
5	Toolbar alarm shortcut settings.	Quickly display the real alarm message and content settings.

#### **Procedure:**

Step 1 Click the real-time 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.

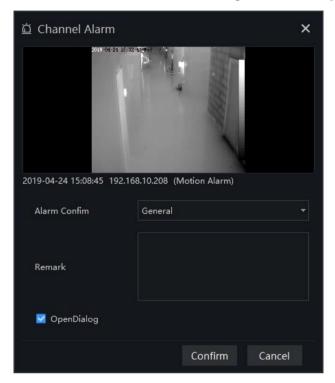


Figure 10-2 Alarm process

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

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

## 11 Alarm Search

At the interface of Alarm Research, 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 11-1

Figure 11-1 Alarm search interface

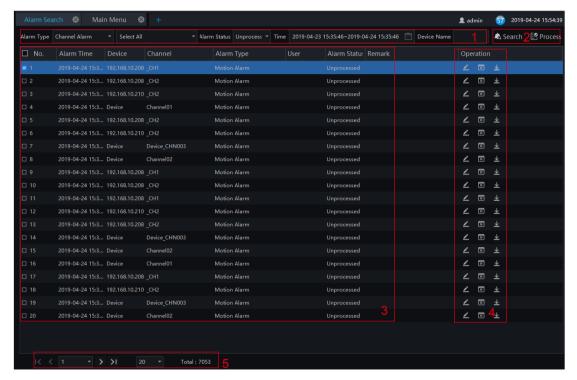


Table 11-1 Alarm search

No.	Function	Description
1	Search condition	User set the search condition, choose alarm type, alarm 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

No.	Function	Description
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.

# 12 Layout Management

At the interface of layout management, 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.

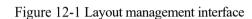
On the main menu page, click shown in Figure 12-1.



to enter the detailed interface, click



to add layout as



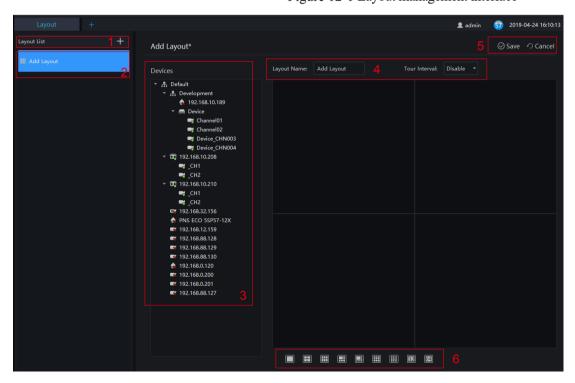


Table 12-1 Layout management

No.	Function	Description
1	Create new layout	Click +, or the huge "+" icon to create new overall arrangement
2	Previous layout	Click the precious layout, user can edit or delete the layout
3	Device information display.	Click and drag the device to place it in the display area to start the arrangement
4	Arrangement	Edit layout name and setting tour interval.
5	Save setting	Save, cancel new arrangement settings
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.

## 13 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 13-1.

### $\square$ NOTE

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

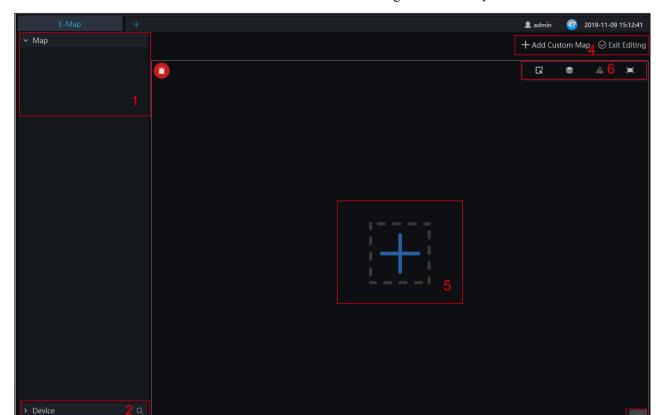


Figure 13-1 E-Map interface

Table 13-1 E-map

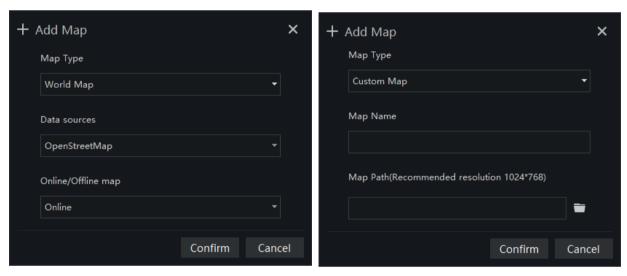
No.	Function	Description
1	Map Display List	Setting map of devices' layout
2	Device	Details of map
3	Video Display	Map and layout of video display

No.	Function	Description
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	

## 13.1 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

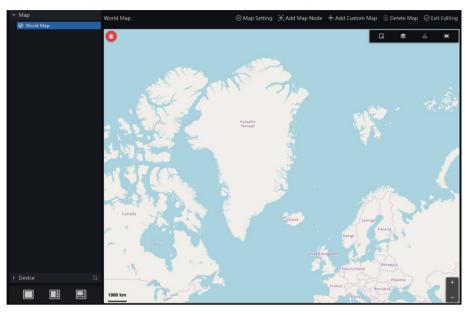


Figure 13-2 World map

Step 3 Click "Confirm" to save the map.



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



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

## 13.2 Edit Map



Figure 13-3 Map setting



Figure 13-5 Custom Map

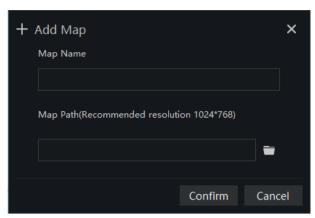
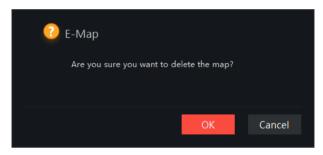


Figure 13-6 Delete map



Step 2 Click osave the edit.

## 13.3 Deploy Monitoring Site

#### **Procedure:**

- Step 1 If cannot be edited, please click editing icon to switch to editable.
- Step 2 Select the map for monitoring deployment
- Step 3 Drag camera icon on the map with mouse, the monitoring direction and the size of area can also be controlled with mouse.

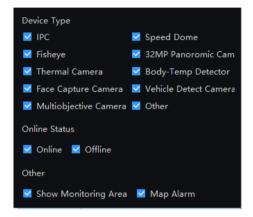
## 13.4 Quick Navigation



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

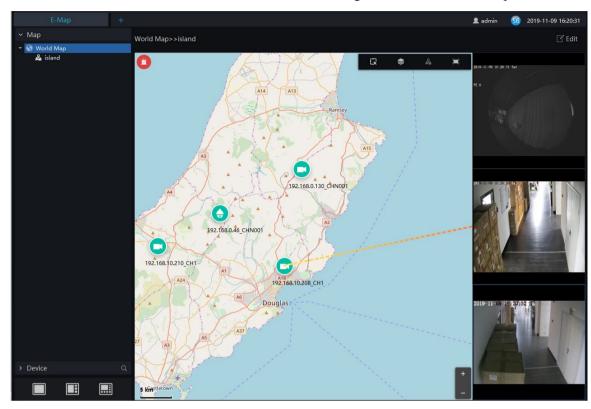


Figure 13-7 Live video of map

Step 7 Click the shinning camera to view the live video or playback, as shown in Figure 13-8.

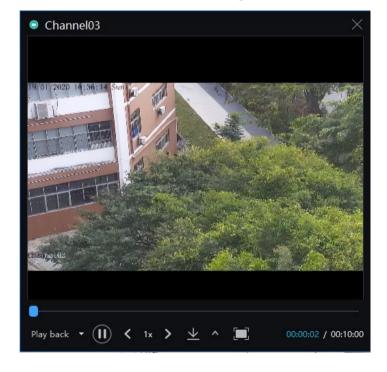


Figure 13-8 Live video of alarming

# 14 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 14-1

Group + Basic Information 3 Z tall

A berdight

A seddional 1 Contacts: admin Address:

User Device

No. Username Role Name Group Remark

1 admin Administrator Default

2 user Administrator Default

4 Leo Administrator Default

4 Leo Administrator Default

4

Figure 14-1 Organization interface

Table 14-1 Organization

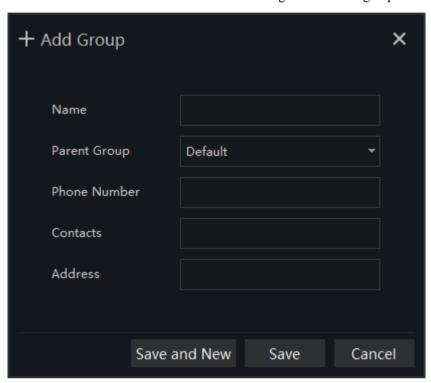
No.	Function	Description
1	Group	Display group tree, new group can be added by clicking
2	Basic Information	Display basic information of device or group
3	Edit	Basic information can be edited by clicking "Edit"
4	Display area of user or device	Display information of user or device

## 14.1 Add Group

#### **Procedure:**

Step 1 Click the add icon to add a new group. The screen shows as figure 14-2.

Figure 14-2 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.

# 15 Log Management

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

On the main menu page, click



to enter the detailed page, as shown in the figure 15-1

Figure 15-1 Log management interface

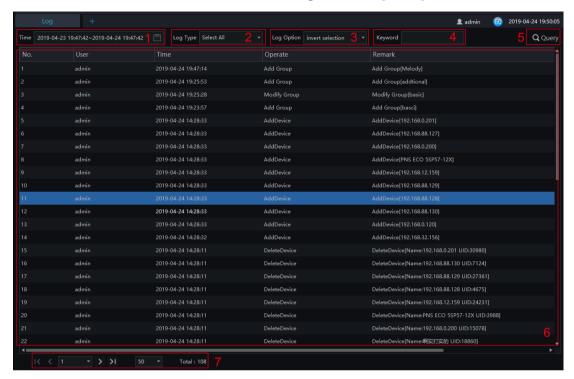


Table 15-1 Log management

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 operation logs, system logs, and service logs.
3	Log options	The default is to select all. There are many options to select.
4	Keyword	Set keyword and quickly query
5	Query	Search logs according to the previous settings
6	The query show	Query result display area.

No.	Functions	Description
7	Interface display	Show the current page of logs, and the page displays the number of logs, switch to next page.

# **16 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 the figure 16-1.

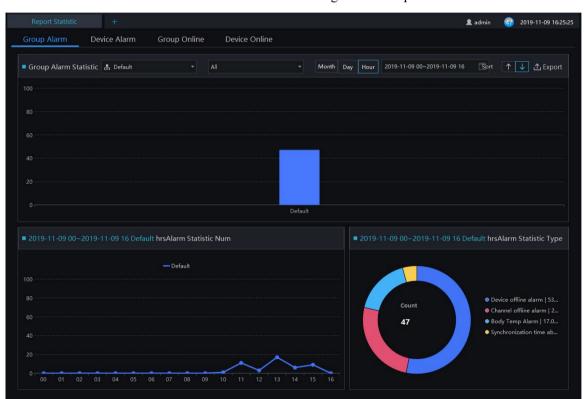


Figure 16-1 Report statistics interface

Figure 16-1 Alarm type statistics



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

## 17 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 17-1.

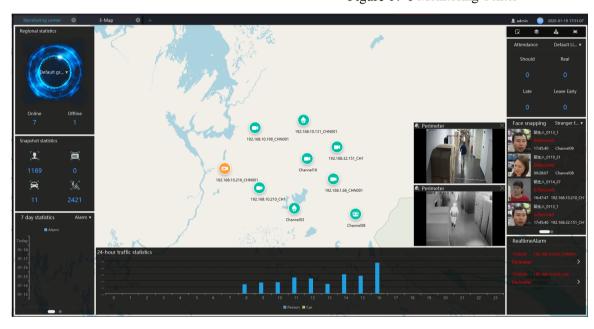


Figure 17-1 Monitoring Center

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.

Real-time 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.

# 18 Device Configuration

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 devices 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 18-1.

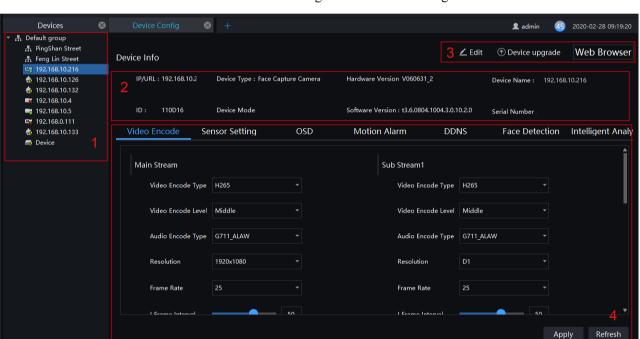


Figure 18-1 Device configuration interface

Table 18-1 Device configuration

No.	Function	Description
1	Organization structure	Show organizational structure information
2	Basic Information	Show basic information

No.	Function	Description
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.

# 19 Servers Management

At the interface of service manager, 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 18-1.

Figure 19-1 Servers management interface

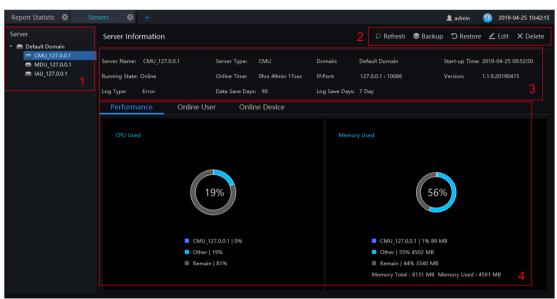


Table 19-1 Servers management

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 17–1.  2. 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

## 19.1 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 19-2a.

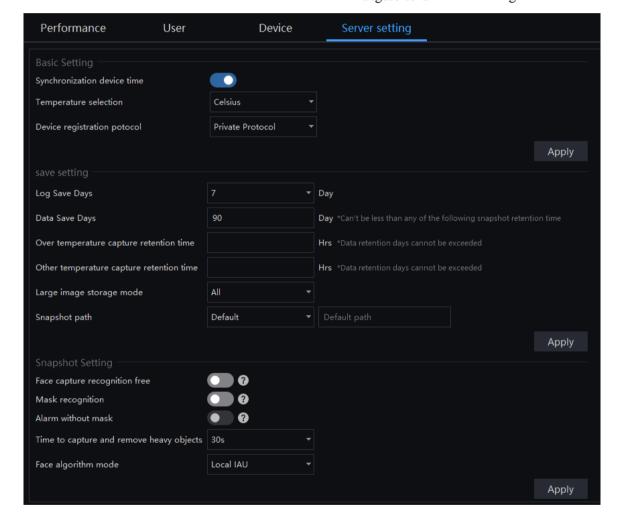
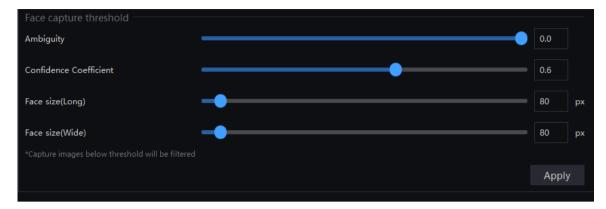


Figure 19-2 a server Setting



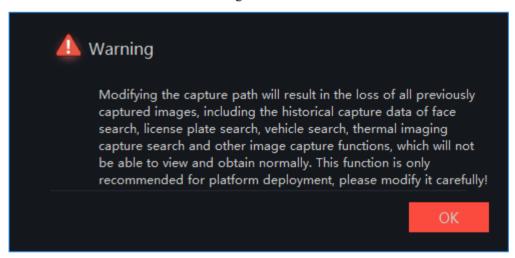
There are four settings for server, they are basic setting, save setting, snapshot setting, face capture threshold.

**Basic Setting**: synchronization device time, 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 19-2b

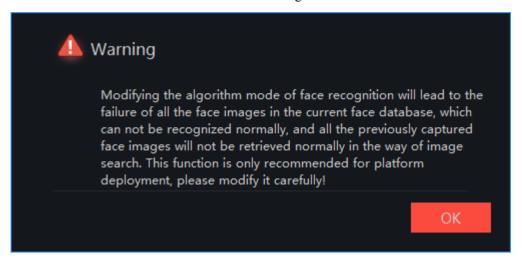
Figure 19-2b



**Snapshot Setting**: face capture recognition free, mask recognition, alarm without mask, time to capture and remove heavy objects, face algorithm mode.

When you modify the snapshot path, you must attention that, as shown in Figure 19-2c

Figure 19-2c



- 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.

Capture retention time: Over-temperature capture retention time: delete over-temperature data in the server and database at the same time. Other temperature snapshot retention time: delete other temperature data in the server and database at the same time.

### 19.2 Data Backup

#### **Procedure:**

Step 1 Click "backup" button at right upper of screen, then the pop-up window appears, as shown in Figure 19-1;

Backup Type

All

Backup Fath

C:\Frogram Files (x86)\SunView\client

Backup Frogress

OW

Download Frogress

OW

Backup Takes Some Time, Do Not Close Windows

Start Backup

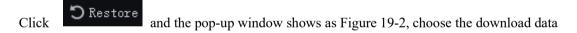
Cancel

Figure 19-3 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%";



## 19.3 Date Recovery



Select File

Upload Progress

0%

Recovery Progress

0%

Recovery may take some time. Please do not close this window.

Start Restore

Figure 19-4 Restore backup

## 19.4 Media Distribution Server

### 19.4.1 Performance

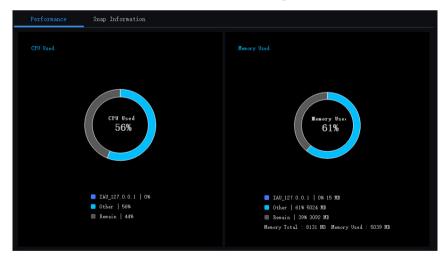
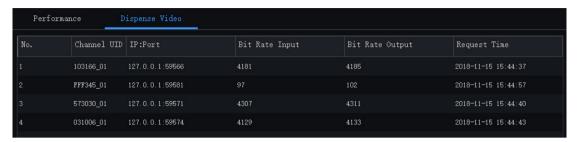


Figure 19-5 Performance

### 19.4.2 Distribution Status

Figure 19-6 Distribution Status



## 19.5 Intelligent Analysis Server

### 19.5.1 Performance

Please refer to chapter 18.2.1

### 19.5.2 Snap Information

### M 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 19-7.

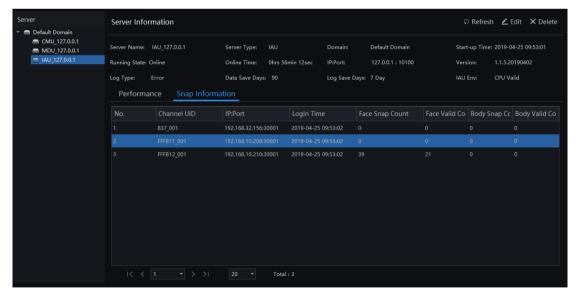


Figure 19-7 Snap information

# 20 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 20-1.

Report Statistic 
Device Config 
Alarm mail

Strategy 
Strategy 
Strategy 
Strategy 
Strategy 
Strategy 
Strategy 
Mail test 

X Delete

Figure 20-1 Alarm mail

Step 1 Click + to add the new strategy.

Step 2 Input the name and information of SNMP.

Step 3 Click Mail test to test the settings.

Step 4 Click Apply to save the settings.

# 21 Face Recognition

On the Face Recognition function 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 20-1.

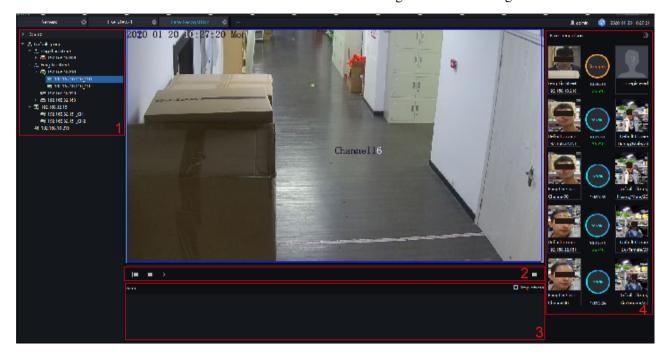


Figure 21-1 Face recognition

Table 21-1 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.
4	Face comparison	The snapshot face compare with the library. Set the broadcast.

- 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.

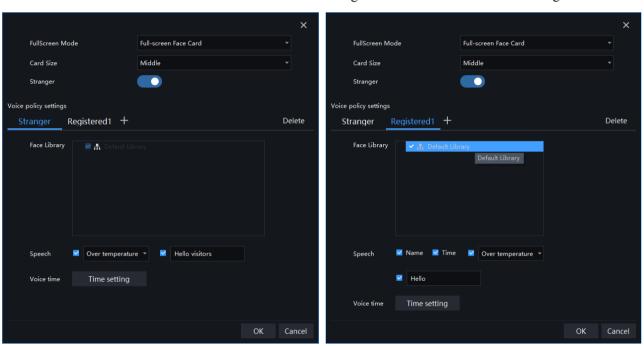


Figure 21-2 Voice announcement setting

## 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.

# 22 Face Library Manage

At the interface of face library management, 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 19-1

## MOTE

This function is only subject to face detection cameras and license plate detection cameras.

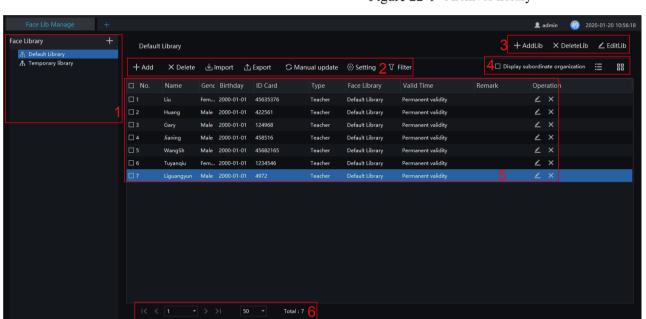


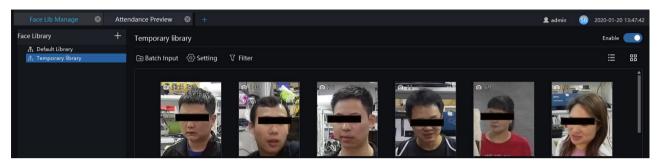
Figure 22-1 Archives library

Table 22-1 Face library

No.	Function	Description
1	Face Library/license plate library	Face library or license plate library default group/add library
2	Basic operation of person	Add, delete, import, exporting, manual update and filter person.
3	Basic operation of library	Add, delete, and edit library
4	Arrangement	Tick or not display subordinate organization. List mode, card mode
5	Display information	Face library basic information display

No.	Function	Description
6	Page information	Page number, number of pages per page, total number of showing. Switch to next page

Figure 22-2 Temporary library



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.

Click Eatch Input to enter the batch input interface to add the library, as shown in Figure 22-3.

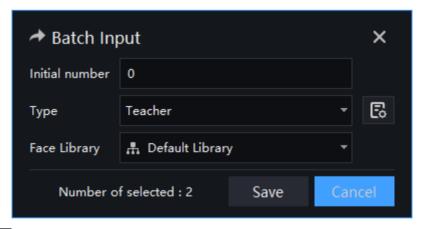


Figure 22-3 Batch input

Click Setting to set temporary library settings, as shown in Figure 22-5

Figure 22-4 Temporary library setting

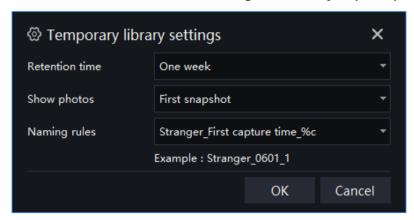
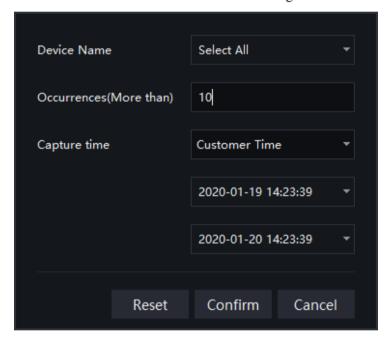


Figure 22-5 Filter



The temporary library is live update.

# 22.1 Add Face Library

### **Procedure:**

Step 1 Click + to add face library.

Step 2 Input library name, remark, choose library, as shown in Figure 22-6.

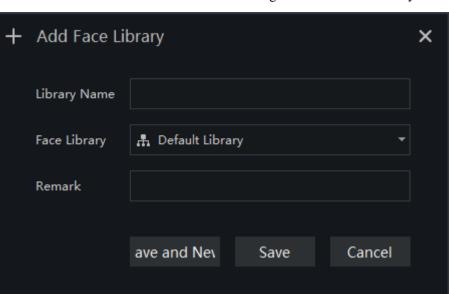


Figure 22-6 Add face library

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

## 22.1.1 Add Personnel Information

### **Procedure:**

Step 1 Select a face library

Step 2 Click + Add to add new personnel information

Step 3 Input the information as shown in Figure 22-7.

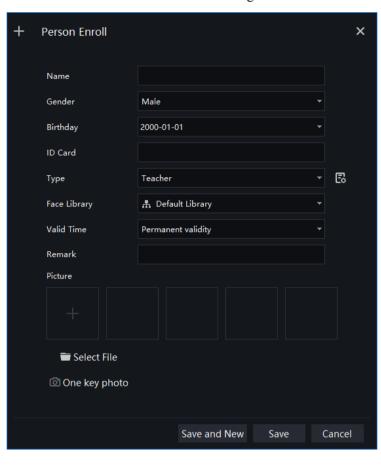


Figure 22-7 Person enroll

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

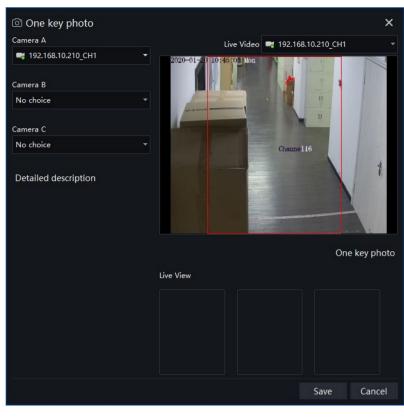


Figure 22-8 One key photo

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 22-9.

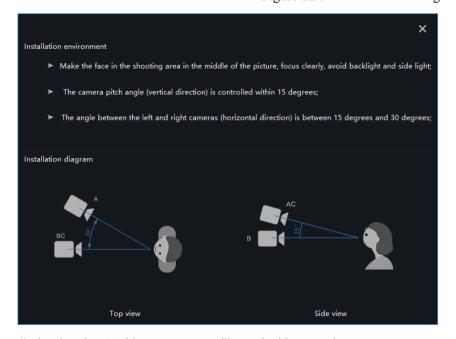


Figure 22-9 Best installation angle

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

g<u>--</u>-^ TIP

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

## 22.1.2 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.

## 22.1.3 Batch Export

#### **Procedure:**

- Step 1 Click "Export" to get into the Export interface.
- Step 2 Choose the save path, and click "save" to save the settings.

## 22.1.4 Face setting

### **Procedure:**

Step 1 Click "Setting" to get into the face setting interface, as shown in Figure 22-10.

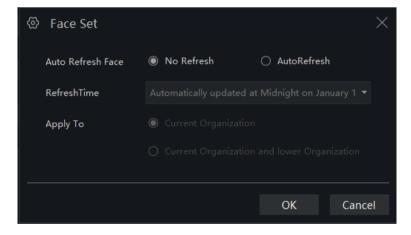


Figure 22-10 Face setting

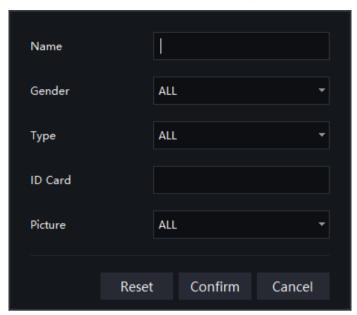
- Step 2 Choose "No Refresh" or "Auto Refresh".
- Step 3 Set the refresh time and apply to.
- Step 4 Click "OK" to save the settings.

## **22.1.5** Filter

#### **Procedure:**

Step 1 Click "Filter" to get into the filter interface, as shown in Figure 22-11.

Figure 22-11 Filter setting



- Step 2 Input the name need to filter.
- Step 3 Choose the gender, type and photo.
- Step 4 Click "Confirm" to save the settings.

# 23 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.

## MOTE

This function is only subject to Face Detection cameras.

On the main menu page, click



to view the configuration interface, as shown in Figure 23-1.

Figure 23-1 Face Match configuration interface

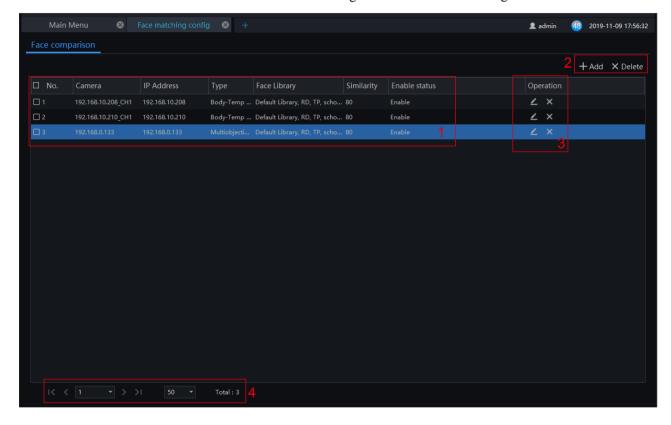


Table 23-1 Strategy configuration

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.

No.	Function	Description
4	Page information	Page number, number of pages per page, total
		Switch to next page

# 23.1 Face Comparison Configuration

### **Procedure:**

Step 1 Click icon of strategy configuration in new page, into the interface as figure 20-1.

Step 2 Click "Add" to get into new face comparison, as shown in figure.

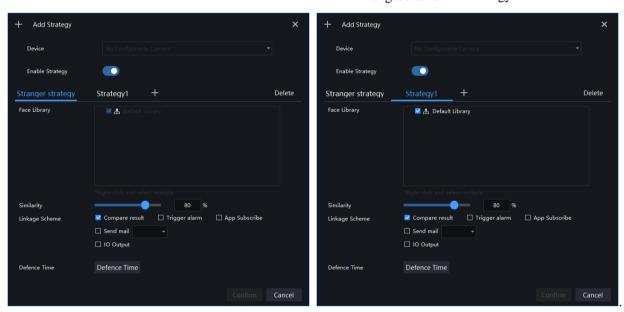


Figure 23-2 Add strategy

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.

# 24 Face Search

At the Smart Search function 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.

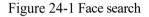
## NOTE

This function only supports cameras with face recognition.

On the main menu page, click



to view more detailed interface.



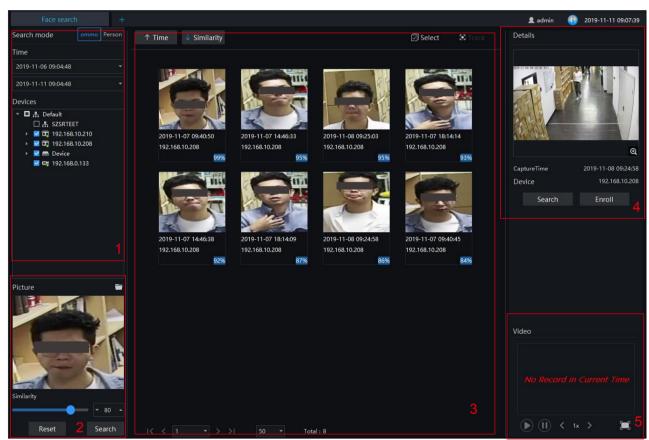


Table 24-1 Smart search

No.	Function	Description
1	Set search mode	The search modes are common and person.  Set the start time of the query.  Select the capture camera, tick the group to select all.

No.	Function	Description
2	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
3	Display information	The information can be displayed by time, similarity in row, behavior track.
4	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.  Enroll: click to enroll the searched picture.  Enter the face database and search for images. The pictures captured by the camera are generally stored in the snap folder by default.
5	Switch picture to search	If there is a record, you can directly play the video before and after the snapshot.

# 24.1 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.

## 24.2 Track

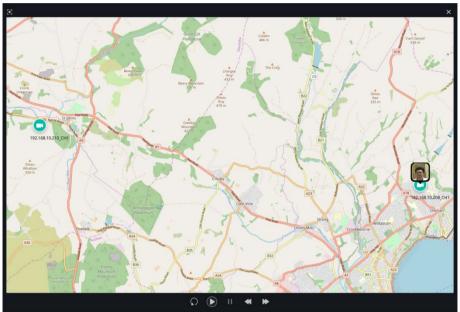


User need to set more than two the face detection cameras at the custom e-map at first.

### **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 24-2 Track



Step 4 Replay or playback the track line.

# 25 Classification Data Query

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.

### M 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 25-1.

Figure 25-1 Classification data query

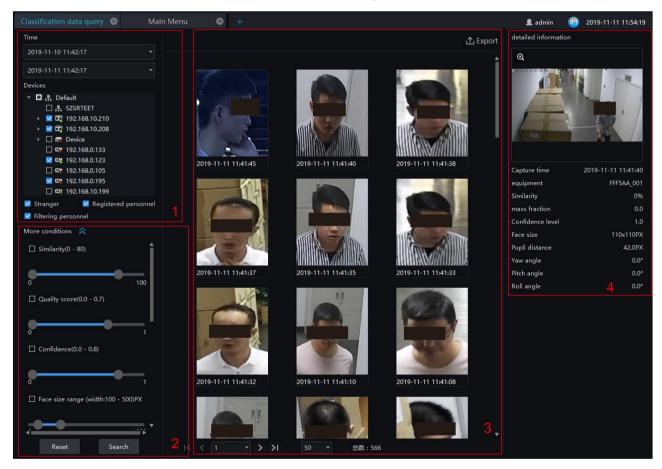


Table 25-1 Smart search

No.	Function	Description
1	Basic conditions of querying	Start time and end time, tick the devices and modes of face libraries.

No.	Function	Description
2	More conditions	Set similarity, quality score, confidence, face size range, pupil distance range, yaw angle, pitch angle, roll angle.
3	Operation of library	The basic operation of license plate library.
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.

☐ Face size range (width:100 - 500)PX ☐ Similarity(0 - 80) 1920 100 ☐ Yaw angle(0 - 90)° ☐ Face size range (height:100 - 500)PX ☐ Body temperature(35.0 - 42.0)°C 1920 42 ☐ Pitch angle(0 - 90)° ☐ Pupil distance range(100 - 500)PX ☐ Ambiguity(0.0 - 0.7) 90 1920 Roll angle(0 - 90)° ☐ Yaw angle(0 - 90)° ☐ Confidence(0.0 - 0.8) 90 Retrieval Reset

Figure 25-2 More conditions

# 26 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.

### M NOTE

This function only supports cameras with license plate recognition.

On the main menu page, click

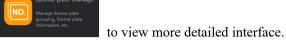


Figure 26-1 License plate manage interface

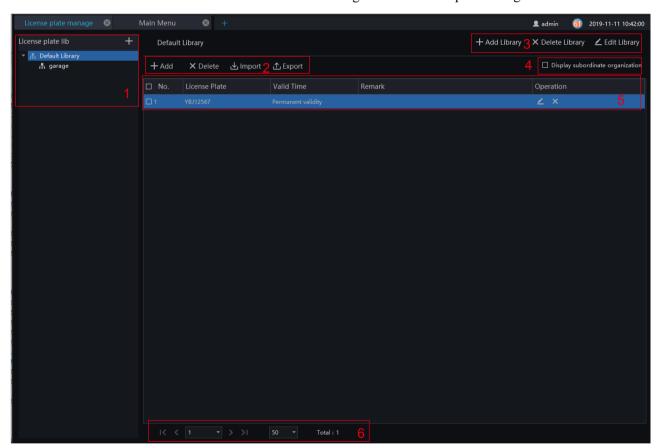


Table 26-1 Smart search

No.	Function	Description
1	License plate library	Click "add" to add the library of license plate. Show the libraries.
2	Operation of license	The basic operation of license plate.

No.	Function	Description
3	Operation of library	The basic operation of license plate library.
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

## 26.1 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 26-2.

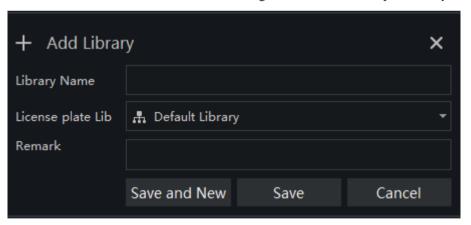


Figure 26-2 Add license plate library

Step 4 Click "Save" to save the parameters.

## 26.2 Add License Plate Information

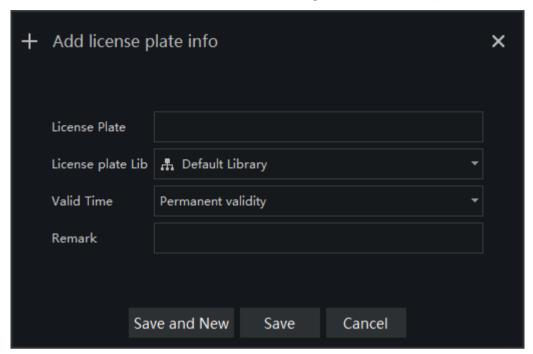
### **Procedure:**

Step 1 Select a face library

Step 2 Click + Add to add new license plate information.

Step 3 Input the information as shown in Figure 26-3, choose the picture from the local client.

Figure 26-3 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 22*.

# 27 License Plate Configuration

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

### M NOTE

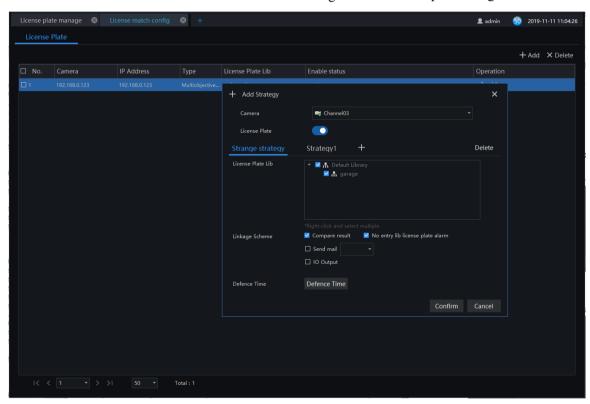
This function only supports cameras with license plate recognition.

On the main menu page, click



to view more detailed interface.

Figure 27-1 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.



Figure 27-2 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.

# 28 Vehicle Identify

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

## MOTE

This function only supports the cameras with license plate detection.

Figure 28-1 Vehicle identity 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.

## 29 License Plate Search



On the main menu page, click

view the detailed interface, as shown in Figure 29-1.

#### 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.

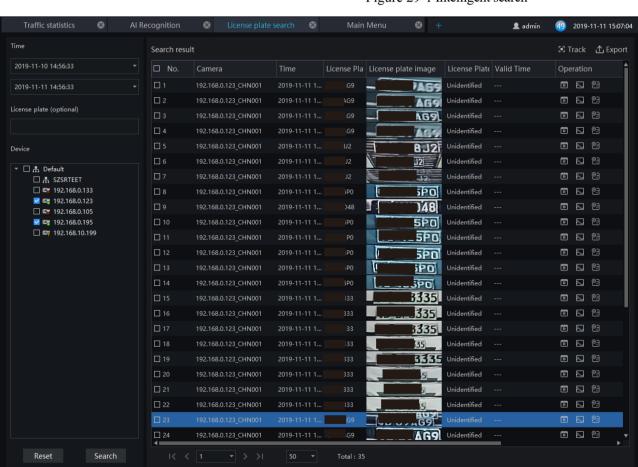


Figure 29-1 Intelligent search

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.

# 30 AI Recognition

At AI recognition interface, user can snapshot the vehicle, car, person, face and biking 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 30-1.

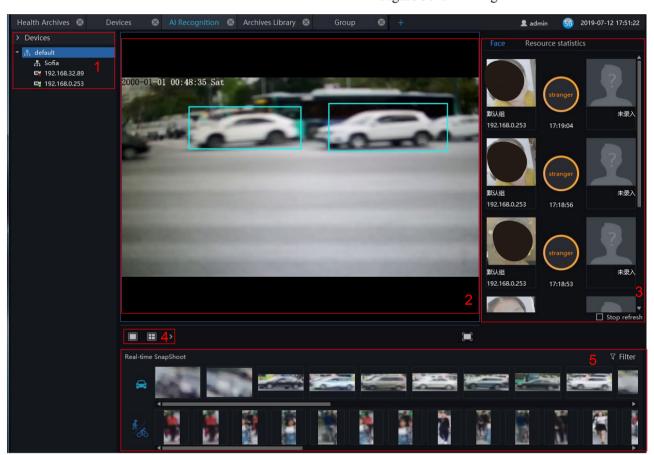


Figure 30-1 AI recognition

Table 30-1 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 as shown in figure 23-2.

Figure 30-2 Filter

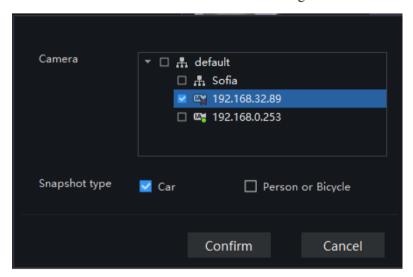




Figure 30-3 Resource statistics

# 31 Person and Car Search

At AI recognition interface, user can snapshot the vehicle, car, person, face and biking by AI cameras.

### M NOTE

This function only supports AI cameras.

On the main menu page, click



view the detailed interface, as shown in Figure 31-1.

#### **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.

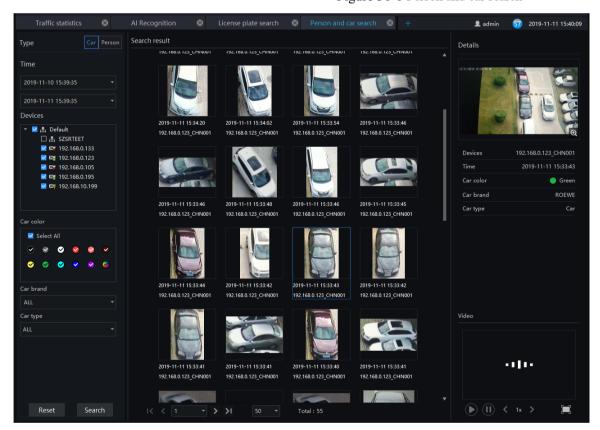


Figure 31-1 Person and car search

# 32 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.

### M 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 32-1.

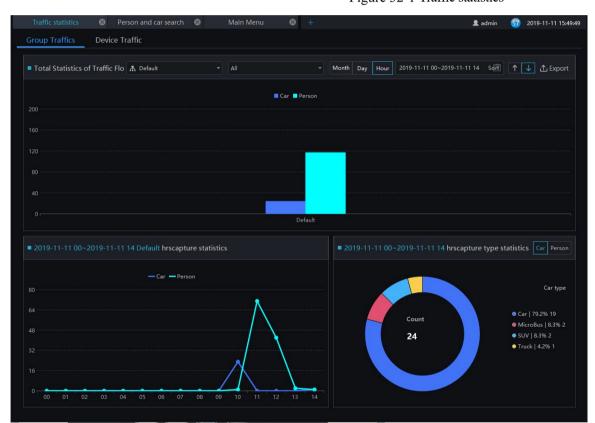


Figure 32-1 Traffic statistics

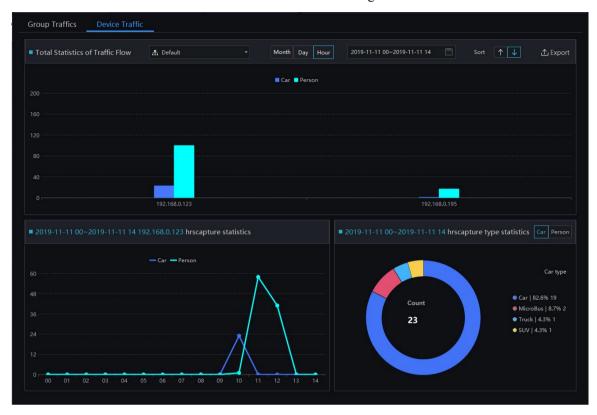


Figure 32-2 Device traffic

# 33 Attendance Configuration

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

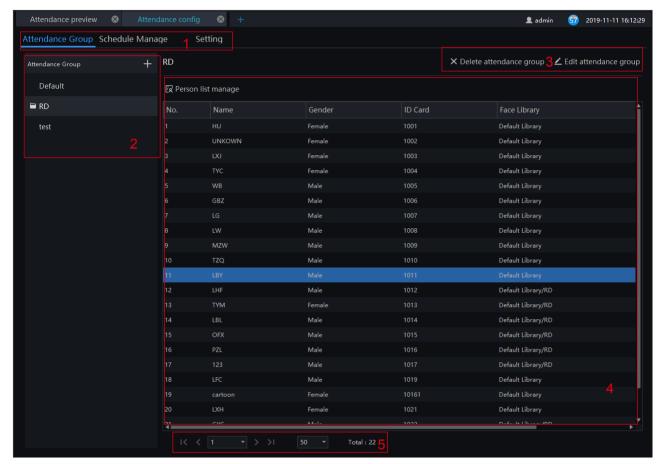


Figure 33-1 Attendance configuration

Table 33-1 Attendance

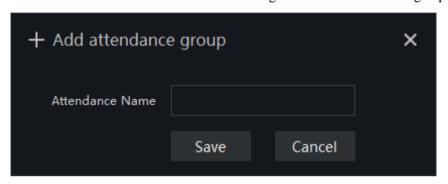
No.	Function	Description
1	Guide of attendance	Attendance group, schedule manage, attendance setting.
2	Group	Show the attendance group.
3	Basic operation	Edit or delete the attendance group.
4	Person list manage	Basic information of group.
5	Interface display	Show the current page of the person, and the page displays the number of alarms, switch to next page to show alarm information.

# 33.1 Attendance Group

### **Procedure:**

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

Figure 33-2 Add attendance group



Step 2 Click "person list manage" to add person to new group, as shown in Figure 33-3.

R Person list manage Attendance Group: week ☐ Face Library ■ week ▼ 🗌 🛔 Default Library ▶ 🗹 🚠 RD □ A TP ▶ 🗆 🛔 school □ хнв ☐ ZRB ☐ SGJ  $\square$  cc ☐ CJL ☐ FJC Save Cancel

Figure 33-3 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.

# 33.2 Schdule Manage

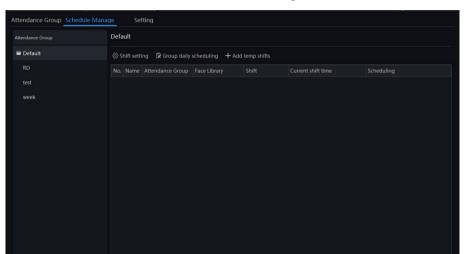


Figure 33-4 Schedule manage

## **Procedure:**

Step 1 Click "Shift setting" to enter the interface, as shown in Figure 33-5.

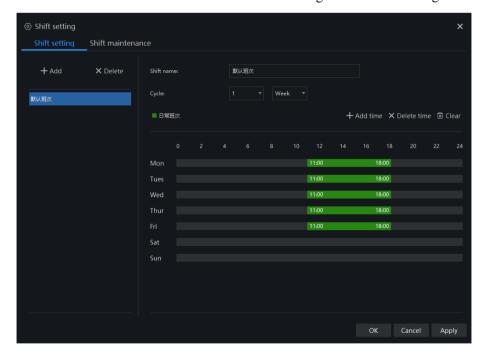


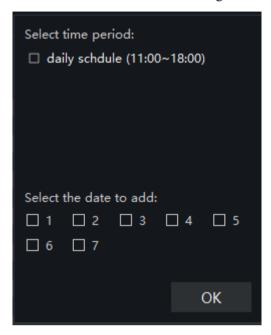
Figure 33-5 Shift setting

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

Step 3 Set the name and cycle of shift schedule.

Step 4 Click "Add time" as shown in Figure 33-6, or "Delete time" to modify the time.

Figure 33-6 Add time



Step 5 Choose "Shift maintenance" to maintain the shift, as shown in Figure 33-7

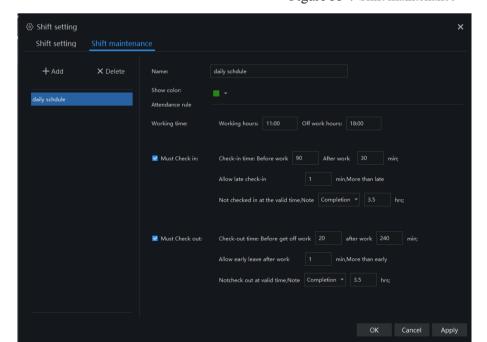
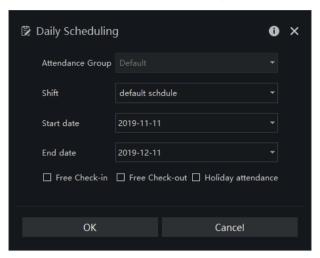


Figure 33-7 Shift maintenance

Step 6 Click "OK" to save the shift setting.

Step 7 Click "Group daily schedule" at schedule manage, as shown in Figure 33-8.

Figure 33-8 Daily scheduling



Step 8 Choose one staff and click "Add temp shifts" at schedule manage, as shown in

Figure 33-9 Add temp shifts

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

## 33.3 Attendance Setting

## 33.3.1 Attendance Point

### **Procedure:**

Step 1 Choose "Attendance Point" at setting interface, click "Add" to add a new point, as shown in Figure 33-10.

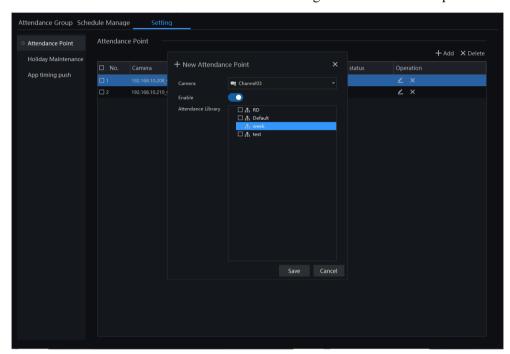


Figure 33-10 Attendance point

Step 2 Choose the camera, enable the function.

Step 3 Tick the attendance library.

Step 4 Click "Save" to save the settings.

## 33.3.2 Holiday Maintenance

### **Procedure:**

Step 1 Choose "Holiday Maintenance" at setting interface, click "Add" to add a new one, as shown in Figure 33-11.

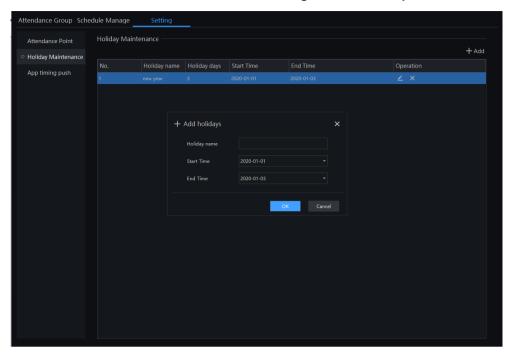


Figure 33-11 Holiday maintenance

Step 2 Input the holiday name.

Step 3 Set the start time and end time.

Step 4 Click "OK" to save the settings.

## 33.3.3 App Timing Push

### **Procedure:**

Step 1 Choose "App timing push" at setting interface, click "Add" to add a new one, as shown in Figure 33-12.

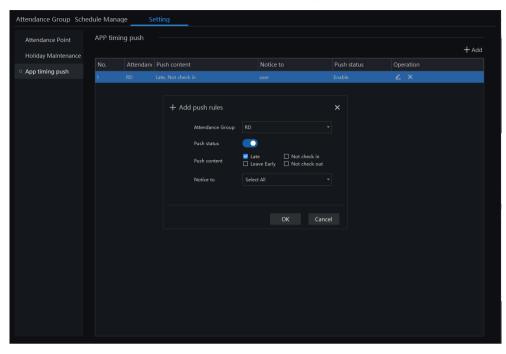


Figure 33-12 App timing push

- Step 2 Choose the attendance group, enable "Push Status".
- Step 3 Tick the push contents, and select notice to send.
- Step 4 Click "OK" to save the settings.

## 34 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 34-1.

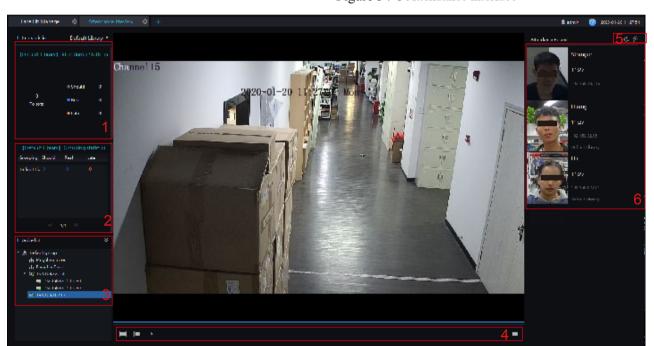


Figure 34-1 Attendance interface

Table 34-1 Attendance

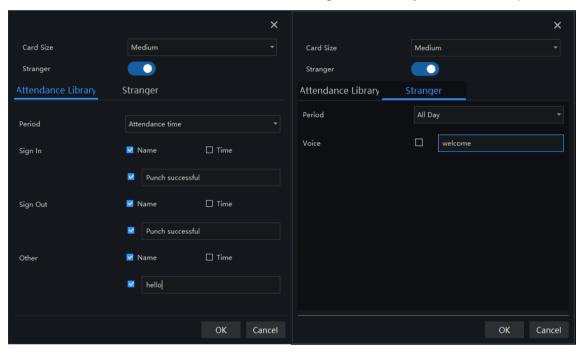
No.	Function	Description
1	Attendance statistics	Show the number of person who is due, real, late
2	Group statistics	Show the statistics of different groups.
3	Devices list	The device of face detection. Show the device and group.
4	Video layout/ Full screen	Switch layout mode. Click to enter full screen.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

No.	Function	Description
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 34-2 Card parameters of library



## 35 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 35-1.

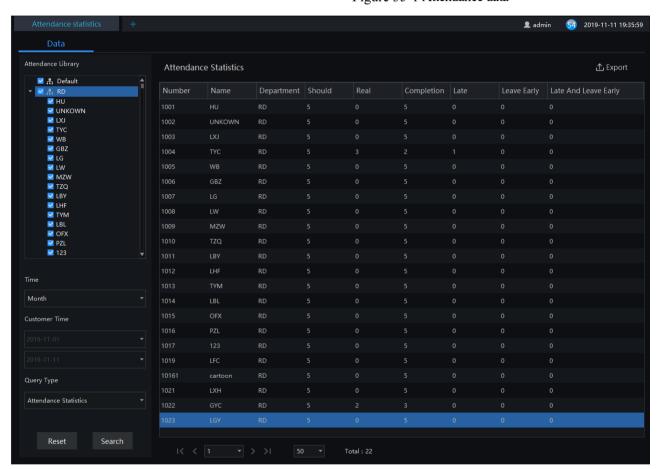


Figure 35-1 Attendance data

### **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 area 3.
- Step 5 Click "Export" to export the result.

# 36 Temperature Configuration

Temperature config
Configure personnel temperature parameters and thresholds

On the main menu page, Click

to view more detailed interface, as shown in Figure 36-1.

This function is only subject to thermal cameras.

### **Procedure:**

Step 1 Enable the abnormal temperature measurement alarm, the snapshot will keep the record of snapshots which are abnormal. Disable the function, the snapshots of abnormal will be abandoned and not show on screen.

Step 2 Input the information of threshold, as shown in Figure 36-1.

Step 3 Click "Apply" to save the settings.

Figure 36-1 Temperature configuration



O NOTE

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

# 37 Temperature Screening

On the main menu page, Click



to view more detailed interface, as shown in

### NOTE

This function is only subject to body temperature cameras.

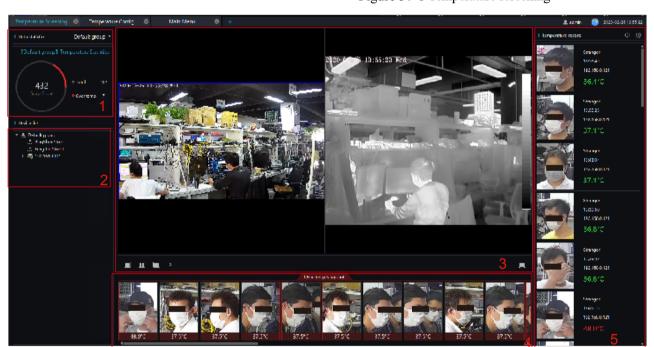


Figure 37-1 Temperature screening

Table 37-1 Temperature screening

No.	Function	Description
1	Data statistics	Show the number of snapshot, over temperature.
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.  Show the video at full screen, the snapshot will show by card, as shown in Figure 37-2.  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.

Figure 37-2 Full screen face card

# 38 Temperature Search

Temperature Search
Query historical body
temperature

On the main menu page, Click

to view more detailed interface, as shown in Figure 38-1.

This function is only subject to body temperature cameras.

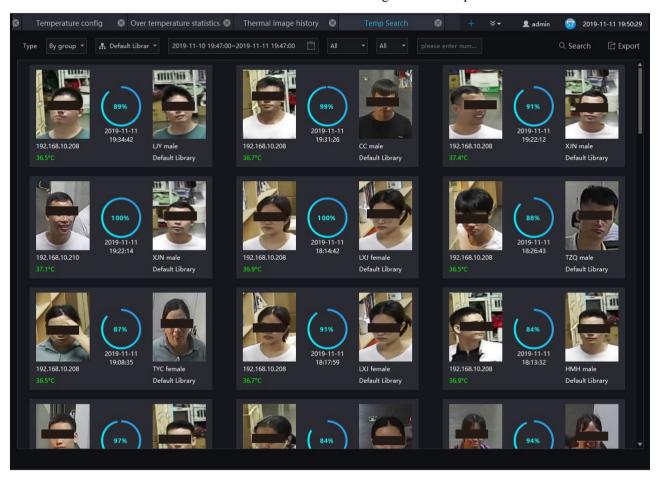


Figure 38-1 Temperature search

### **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.
- Step 4 Click "Search" to view the result.
- Step 5 Click "export" to export the result to local folder.

## 39 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.

### MOTE

This function only supports body temperature cameras.

## 39.1 Arrchives Manage

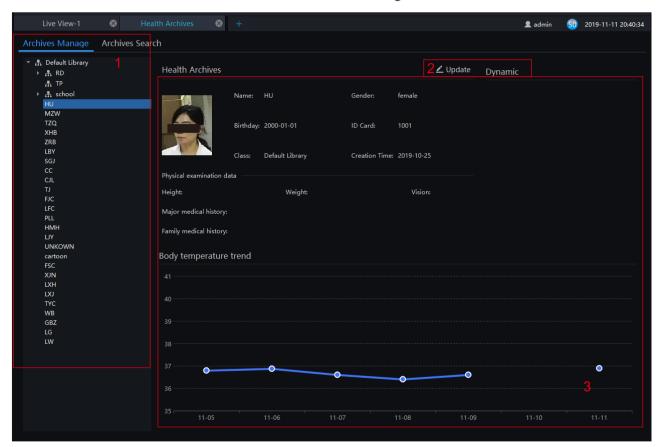


Figure 39-1 Health archives

Table 39-1 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 .

### 39.2 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.

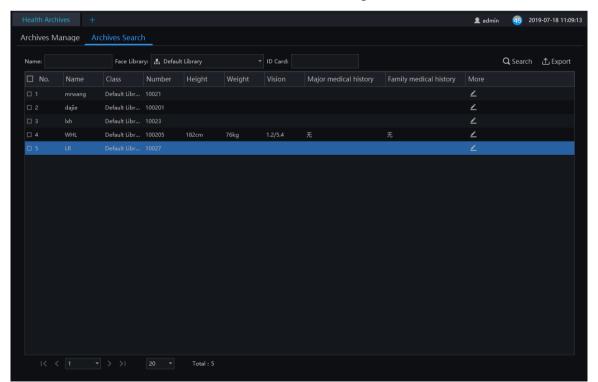


Figure 39-2 Archives search

# **40** Temperature Statistics



On the main menu page, Click

to view more detailed interface, as shown in Figure 41-1.

### M NOTE

This function only supports temperature detection cameras.

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

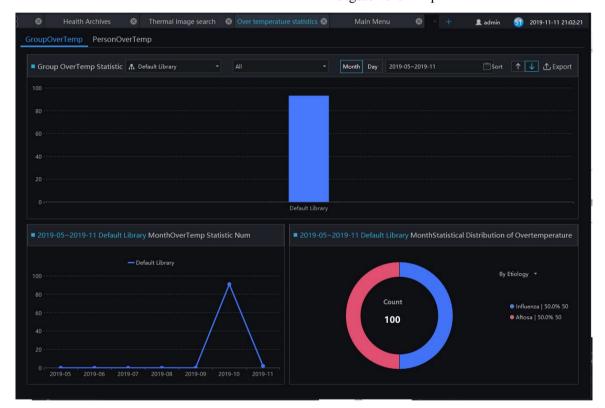


Figure 40-1 Temperature Statistics

## **40.2** Group 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.

# 40.3 Person Over Temperature

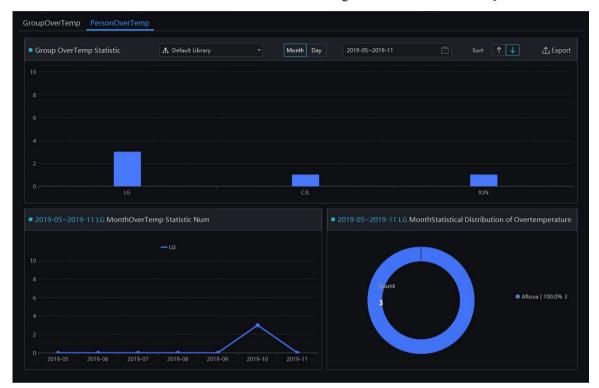


Figure 40-2 Person Over Temperature

# 41 Thermal Image History

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

### M NOTE

This function only supports temperature detection cameras.

On the main menu page, Click to view more detailed interface, as shown in Figure 41-1.

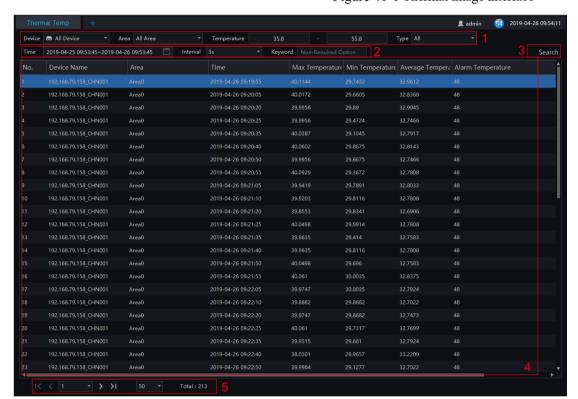


Figure 41-1 Thermal image interface

Table 41-1 Temperature alarm

No.	Function	Instruction
1	Temperature querying setting	Setting temperature search structure, Starting / Ending time, processing status
2	Querying condition	Start and end time, interval and keyword
3	Search	Search by the setting conditions
4	Displaying information	Basic information display of temperature alarm

No.	Function	Instruction
5	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.

# 42 Thermal Image Configuration



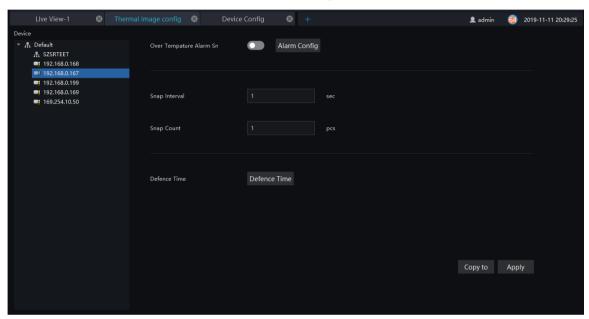
On the main menu page, Click

to view more detailed interface, as shown in

### ON NOTE

This function is only subject to thermal cameras.

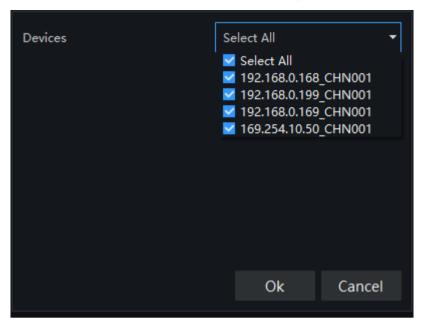
Figure 42-1 Thermal image configuration



#### 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 42-2

Figure 42-2 Copy to



# 43 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 43-1.

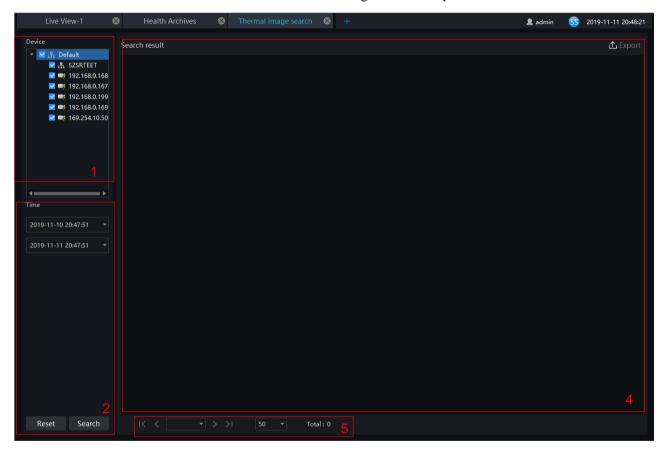


Figure 43-1 Temperature search interface

Table 43-1 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.

No.	Function	Description
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.