SunView User Manual

Issue: 1.2

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Introduction

Overview

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

Reader

This document is intended for:

- Technical Support Engineer
- System Manager
- System Operator

Symbol Convention

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

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

Server Name

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

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1 Platform Description

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

1.1 System Function

- Multiple front-end devices can be connected. Support IPC, NVR, face capture camera, panda camera.
- Centralized management and distributed deployment. Unified management of resources such as users and devices, and distributed deployment of servers.
- Authority management. Different users can be assigned different functional rights.
- Device management. Support automatic search, manual addition, batch import of devices.
- User rating management. Support the combination of administrative organization structure to achieve user hierarchical management. The superior can manage the subordinates.
- Organizational management. Users of a specific organization can be restricted to only view the content of their organization's camera.
- Real-time monitoring. Support multi-screen layout preview, round tour preview.
- Video playback. Support multi-picture video synchronous playback.
- Video download. Support downloading NVR and DVR recordings to local clients.
- Map management. Support for electronic map-based video preview.
- Real-time alarm. Support alarm display of front-end devices.
- Data statistics. It can count the alarm data of the platform equipment and online rate of the equipment.
- Personnel information management. The fundamental library for face recognition supports multi-level management and batch import.
- Face recognition comparison. The face of the face capture machine is displayed in real-time and determined by comparing with the fundamental library.
- Search by image. Support fuzzy search for faces and support for finding similar faces through faces of library.
- Attendance management. Support face library for attendance.
- AI recognition. Statistics of vehicle, human, etc.
- Health archives. Manage the health information of personnel, and show the chosen person’s temperature.
- Vehicle identify. Real-time view of the vehicle license plate snapshot pictures, relevant warehousing information.

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	2 Mbps	800 Mbps	800 Mbps
500	1.5 Mbps	800 Mbps	800 Mbps

1.2.4 Intelligent Analysis Server

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

The V1.2 version of the intelligent analytics server only supports CPU.

Reference:

Type	Model	ROM	Channel of face detection
CPU	Intel(R) Core i5-7500	8 G	1-3
CPU	Intel(R) Core i7-8700	8 G	2-8
CPU	Intel(R) Xeon(R) cpu E5-2630 v4	16 G	4-10

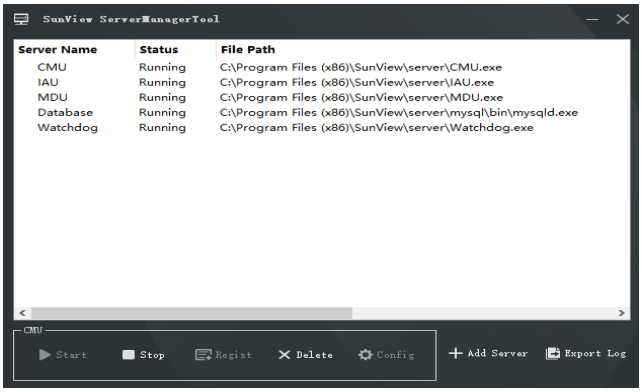
NOTE

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

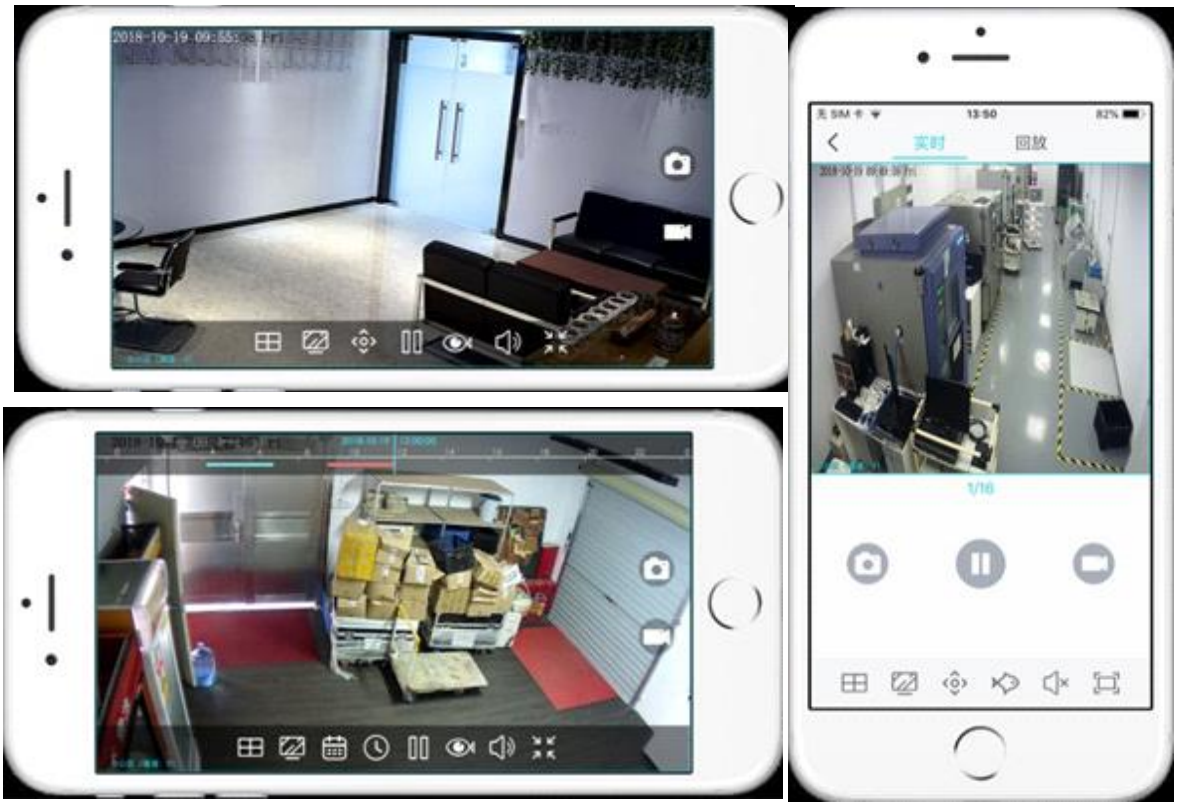
1.2.5.1 About PC Client

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

1.2.5.2 About Mobile Client

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



1.3 System Requirement

CAUTION OS Not support Microsoft Windows 32 bit anymore.

Name	PC Client	Central Management Server	Media Distribution Server	Intelligent Analysis Server (CPU environment)	Intelligent Analysis Server (GPU environment)
CPU	Intel® Core™ i5-7500 or better	Intel® Core™ i5-7500 or better	Intel® Core™ i5-7500 or better	Intel® Core™ i7 or better	Intel® Core™ i7 or better
RAM	8 GB or more	4 GB or more	8 GB or more	8 GB or more	8 GB or more
Network Card	Gigabit/s				
HDD	50 GB or Above	50 GB or Above	50 GB or Above	50 GB or Above	50 GB or Above

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

1.4 Deployment Planning

CAUTION

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

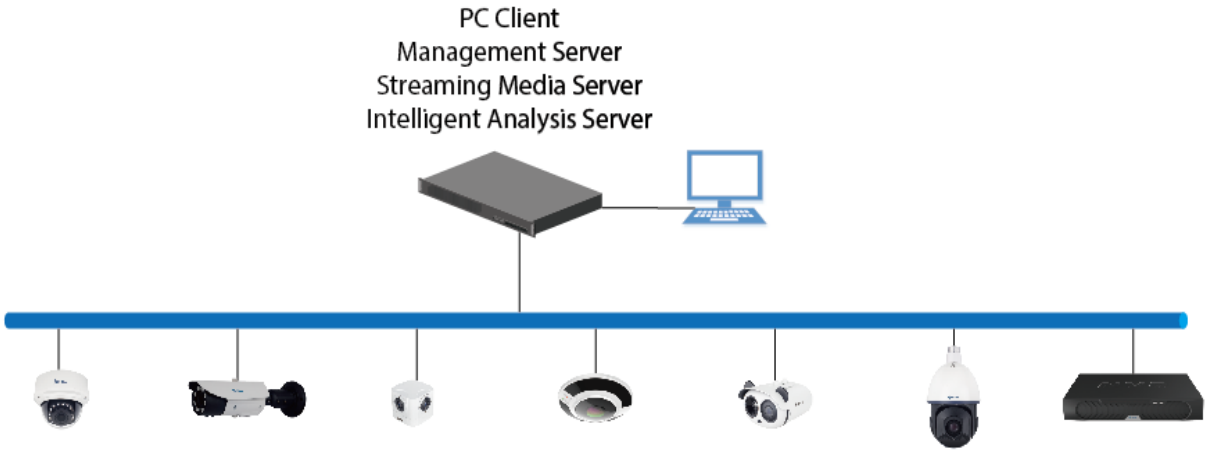
The platform has good scalability and can support three deployment methods.

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

1.4.1 Mini Method (Standalone Deployment)

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

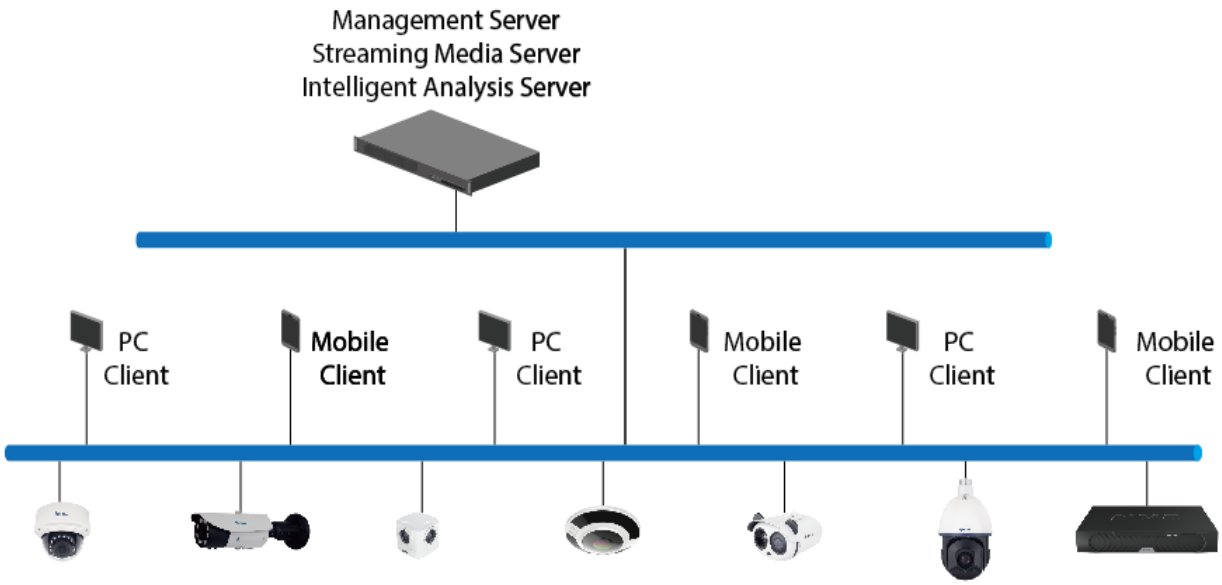
Figure 1-3 Mini method



1.4.2 Middle Method (Distributed Deployment)

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

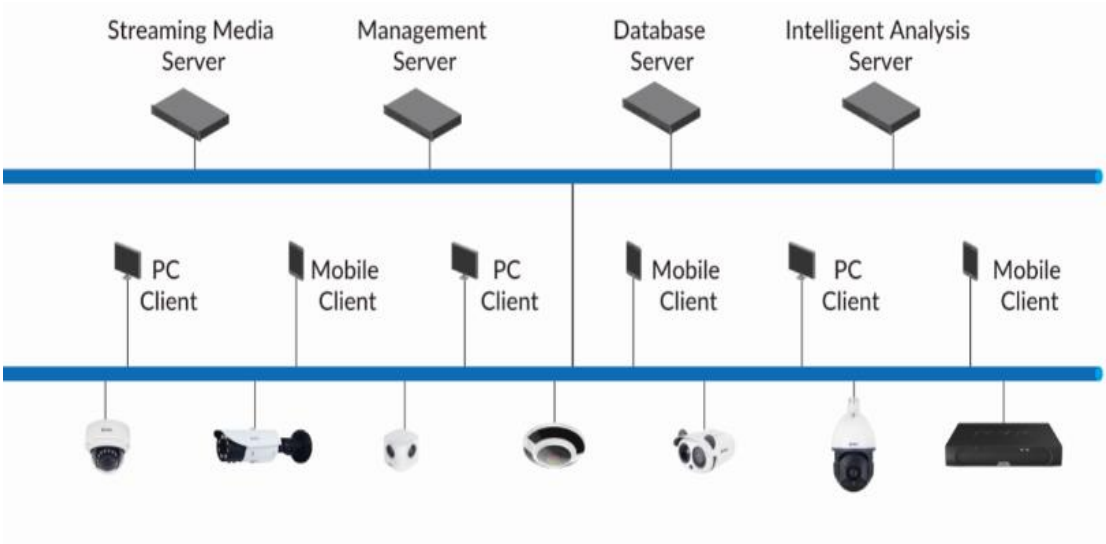
Figure 1-4 Middle method



1.4.3 Large Method (Distributed Deployment)

If the system is large or you can install each server component on a different machine and the client installs multiple machines

Figure 1-5 Large method

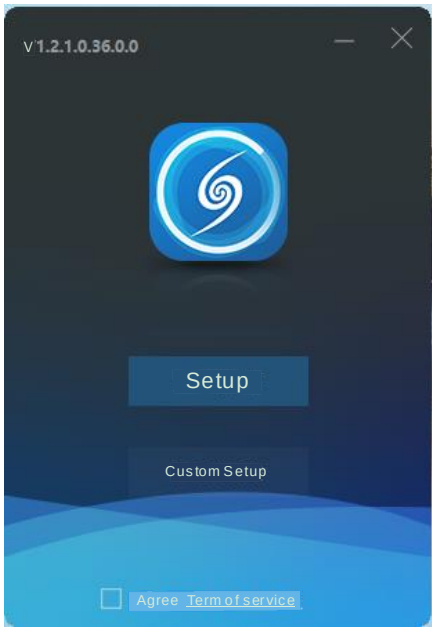


2 Installation

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)\Sunview directory. After installation, the server component and client program are automatically started.

Figure 2-1 One click installation

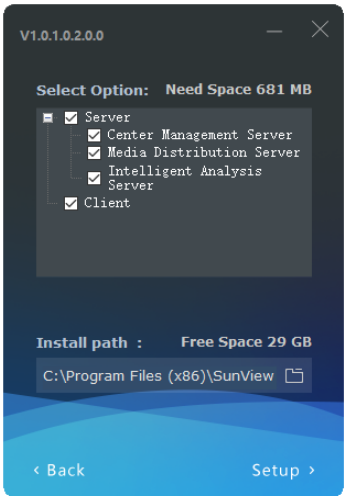


2.2 Custom Installation

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:

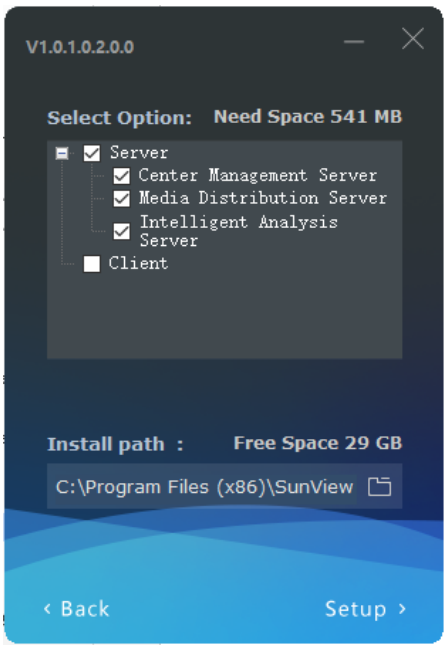
- Mini method: All components of the platform can be installed on a single machine; it is similar to “one click installation”.

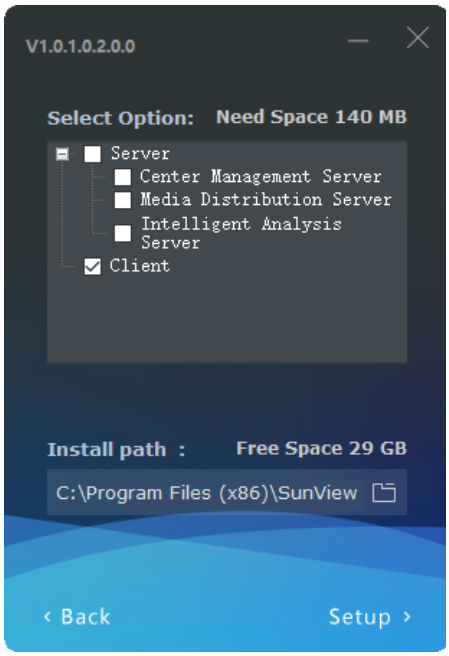
Figure 2-2 Installtion interface



➢ 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

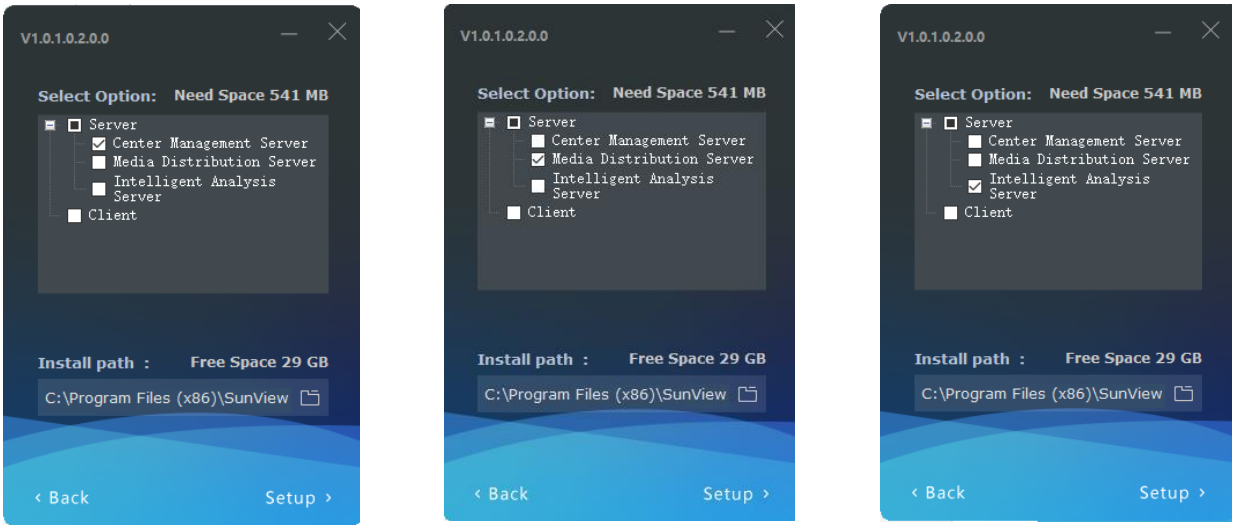




➢ Large Method: All components of the platform are installed on different machines to form a larger system

Figure 2-4

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



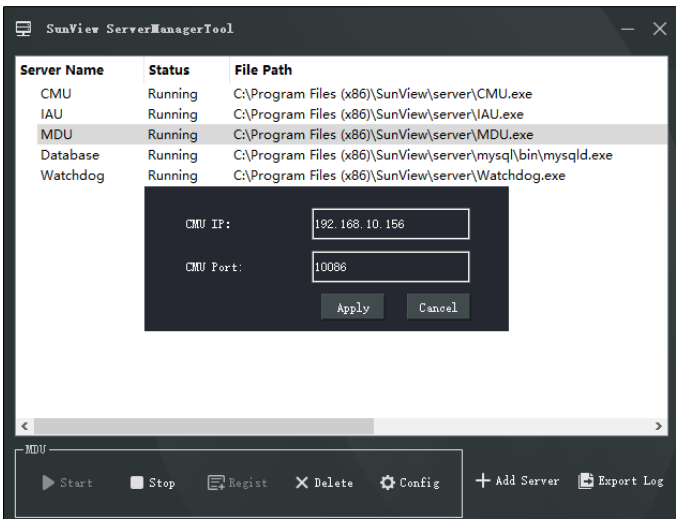
After the server is installed, you need to use the server management tool to configure the IP of the central management server of the media distribution server and the intelligent analysis server, which is convenient for unified management by the central management server. The tool is automatically displayed 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.

NOTE

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

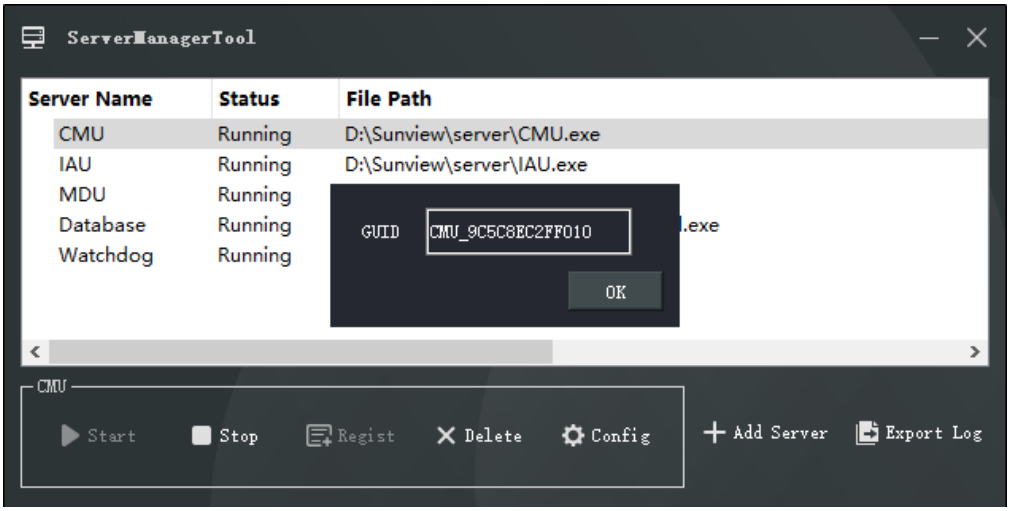
The server management tool runs automatically after the server is installed. The system tray icon is , click and open the menu.

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

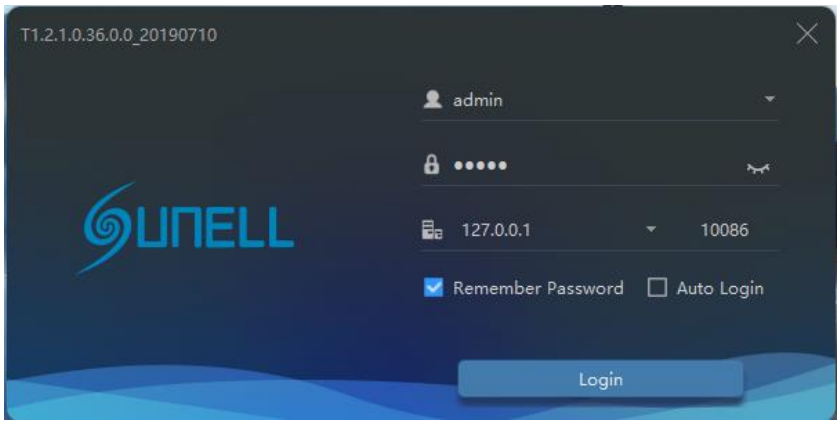
Server installation is complete, double click on the desktop icon

, input the user, password, and central management server IP, click "Login", the login interface is shown in figure 3-1

NOTE

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

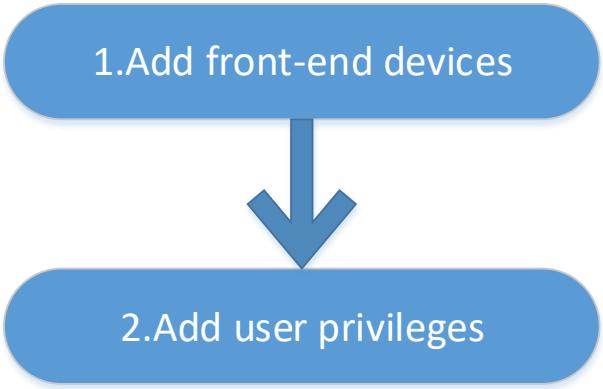
Figure 3-1 Login interface



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.

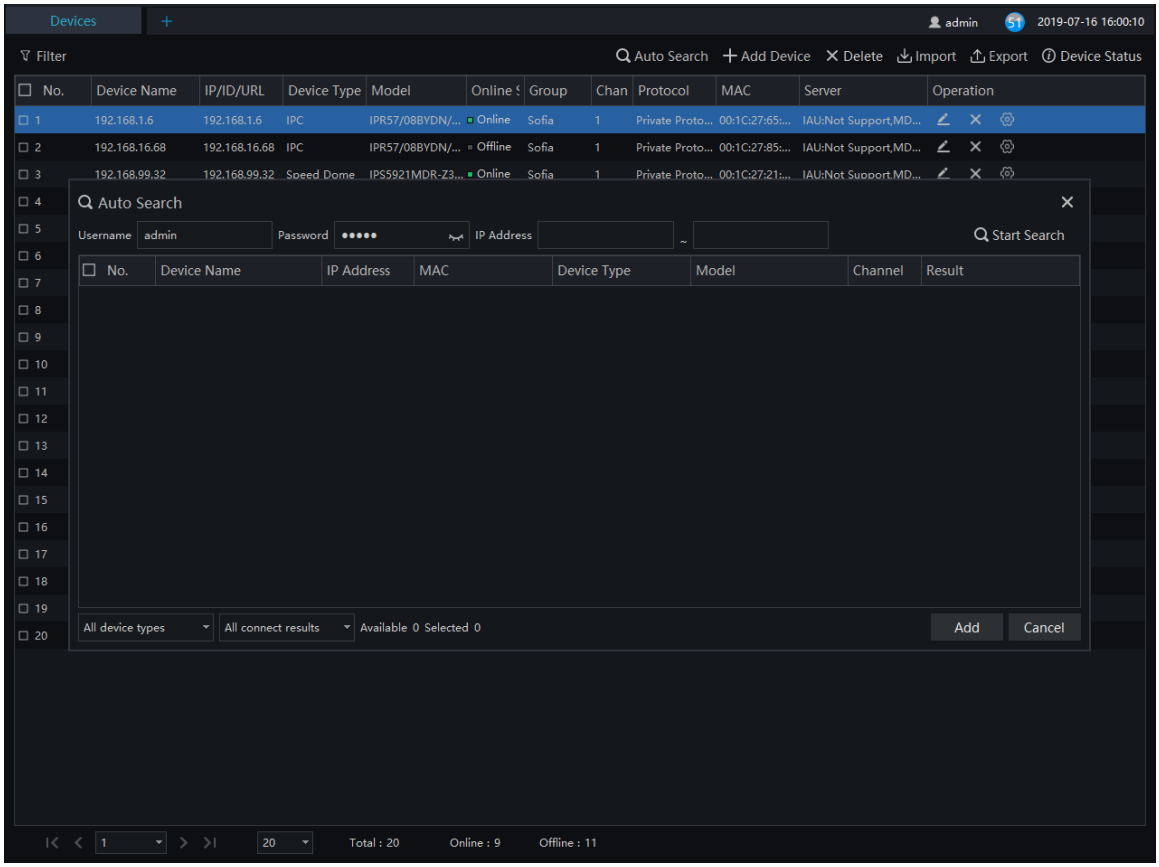
4.1 Monitoring Application Configuration Process



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 **错误!未找到引用源。**:

Figure 4-1 Add device



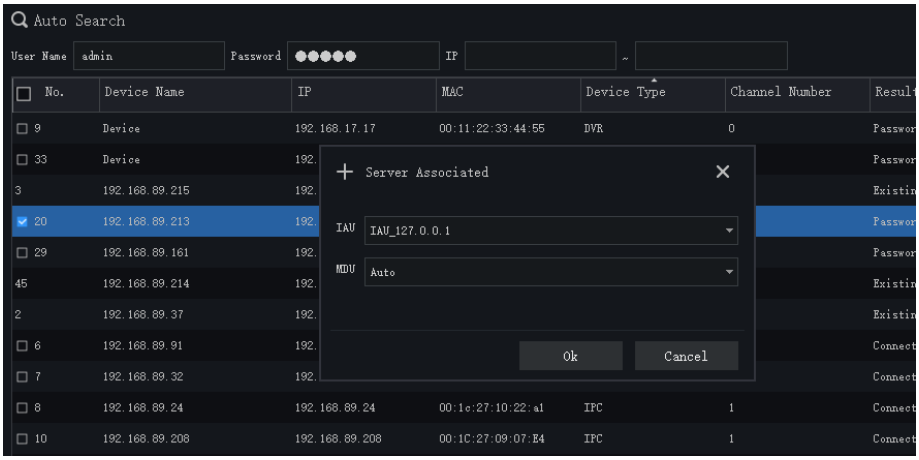
After selecting the device, click “Add” and the camera can assign the specified server. Figure as below:

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 4-2 Server associated



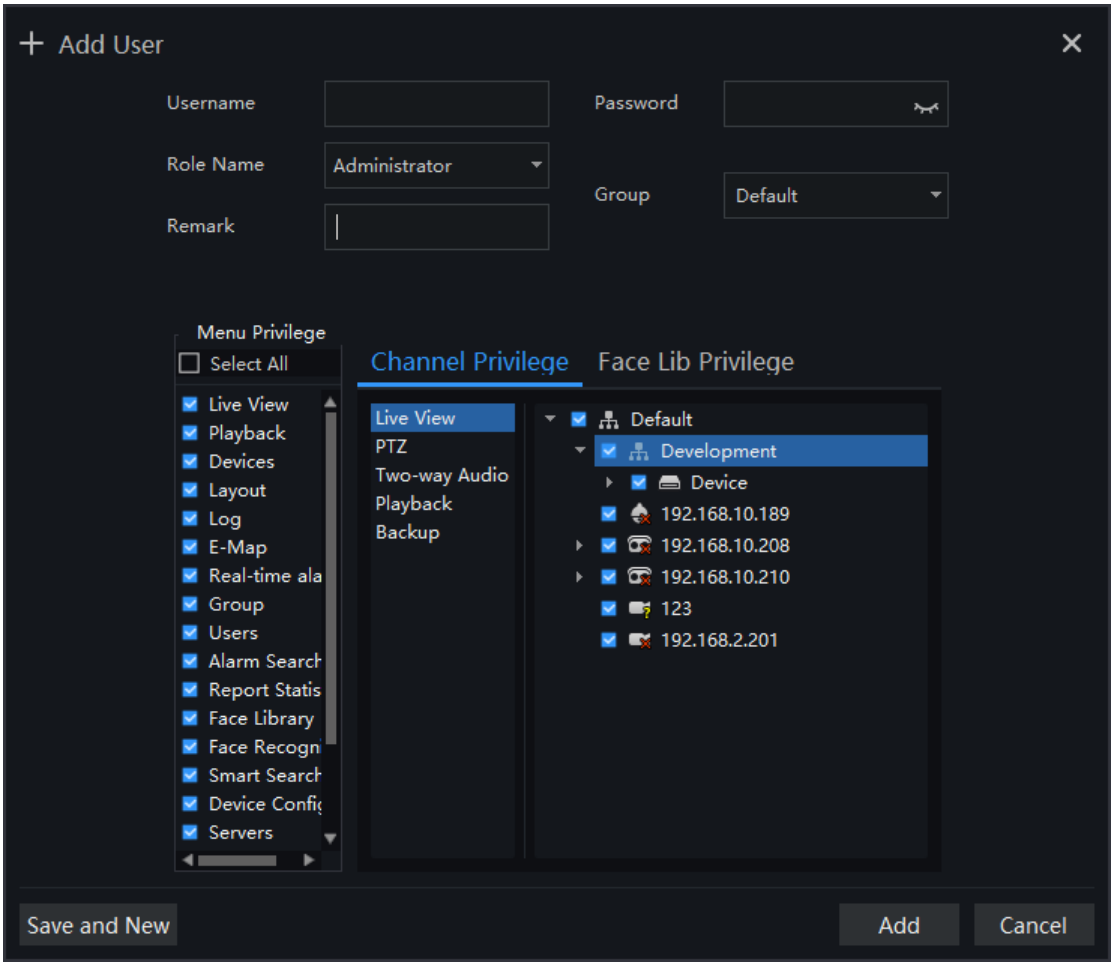
4.1.2 Add User Permissions

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 **错误!未找到引用源。**:

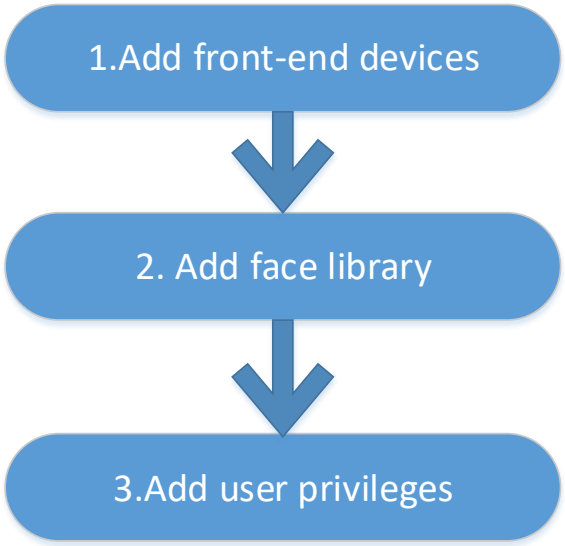
NOTE

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

Figure 4-3 Add user



4.2 Intelligent Application Configuration Process



4.2.1 Add Front-End Device

Refer to 4.1.1

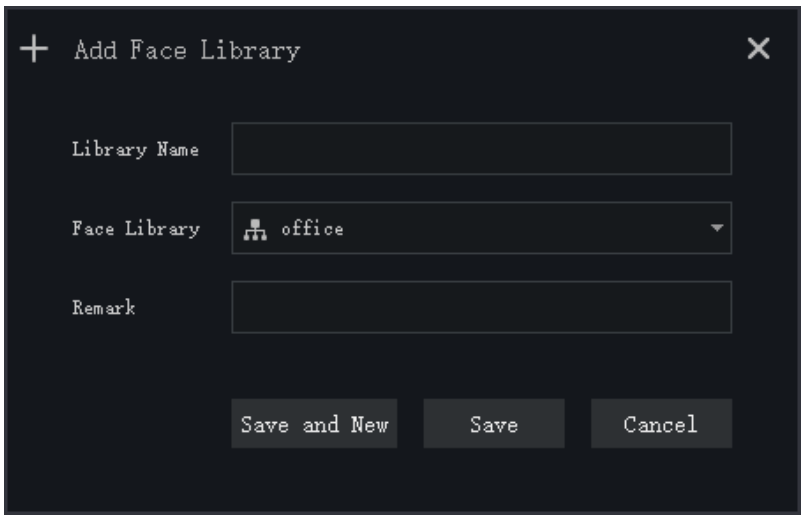
4.2.2 Add Face Database

This function is used for cameras which support face detection.

NOTE

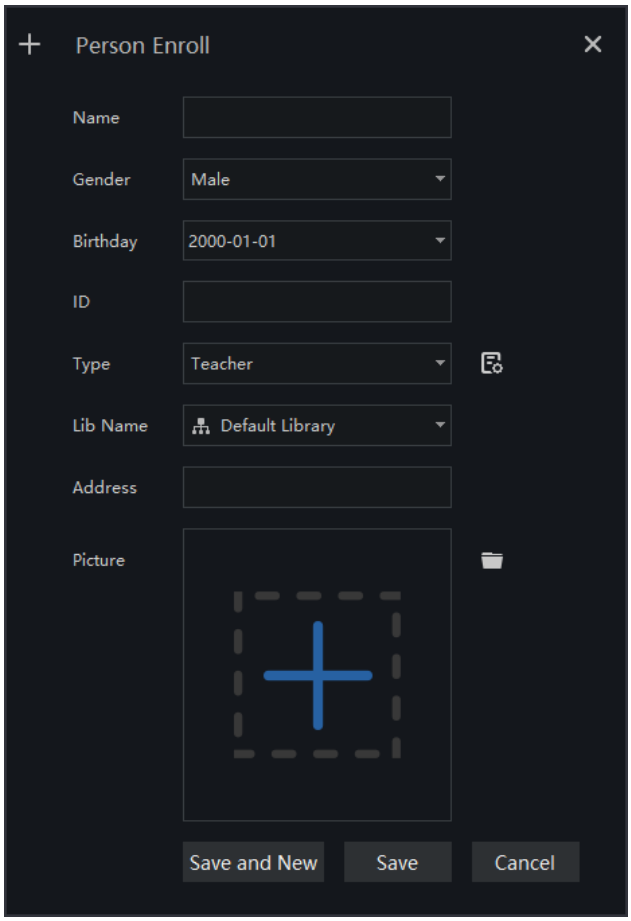
Enter the main interface, open “Archives Library” > "Face Library", you can add a face library, as shown in **错误!未找到引用源。**

Figure 4-4 Add face library UI



After selecting the face library, you can add personnel information. You should select a face photo, as shown in **错误!未找到引用源。**

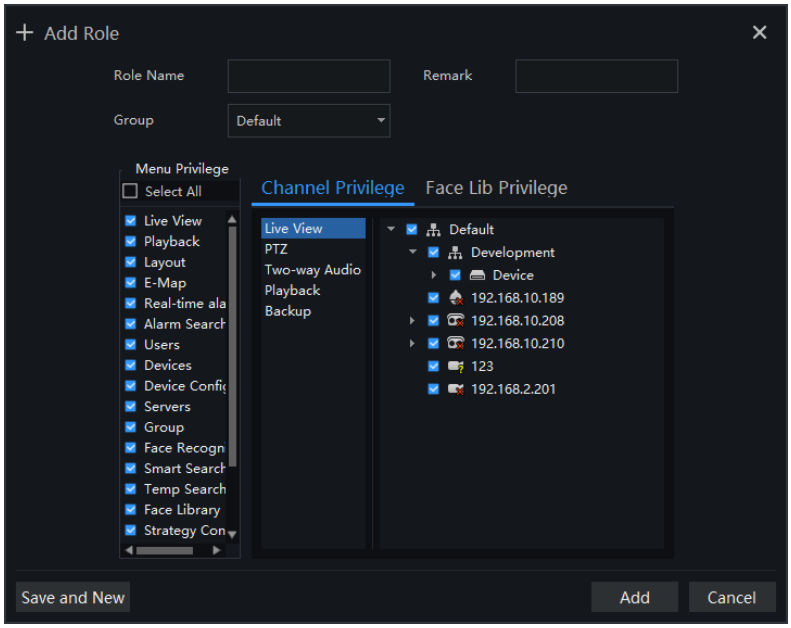
Figure 4-5 Person enroll



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 **错误!未找到引用源。**

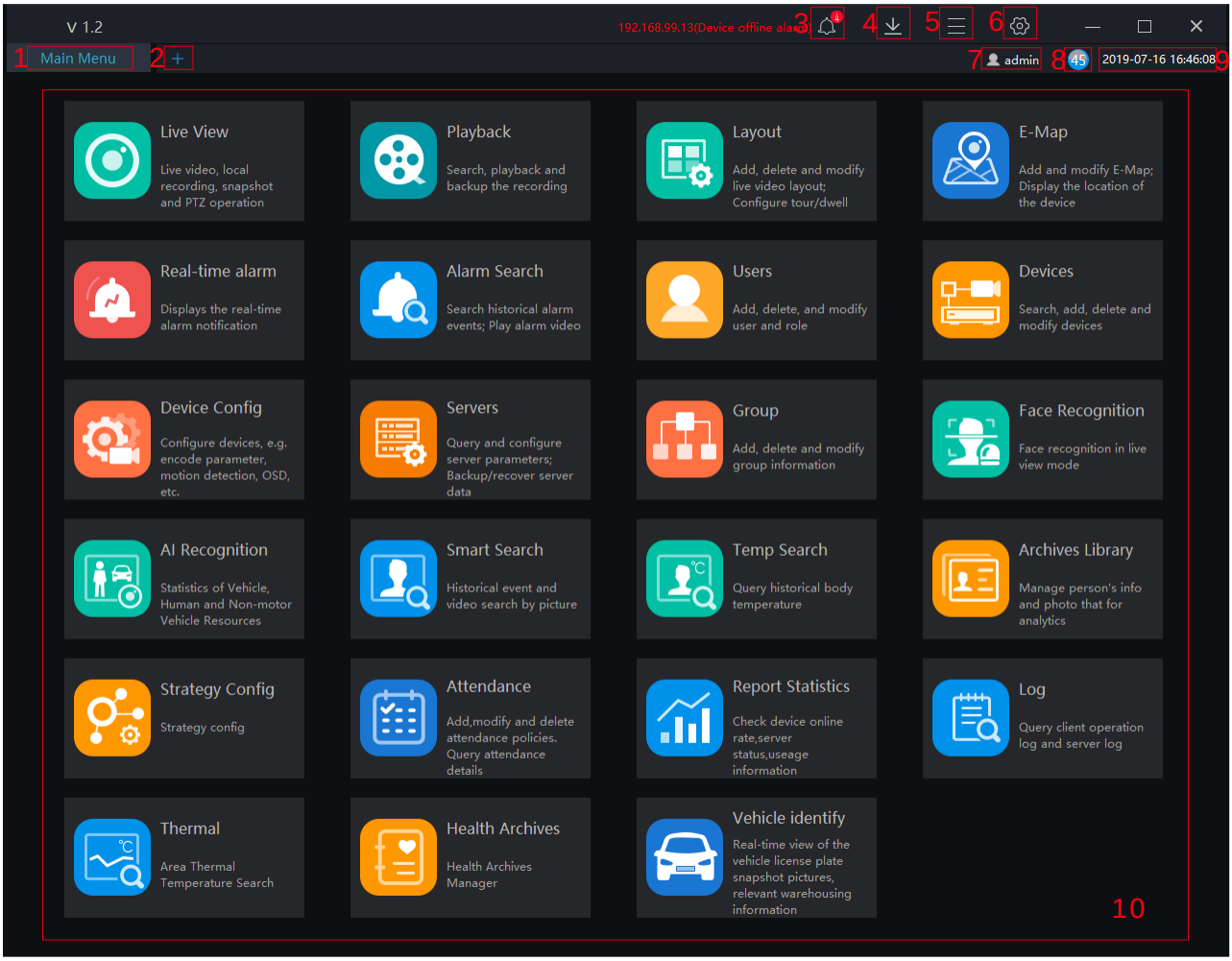
Figure 4-6 Add role



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



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

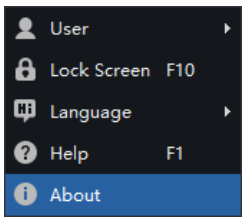
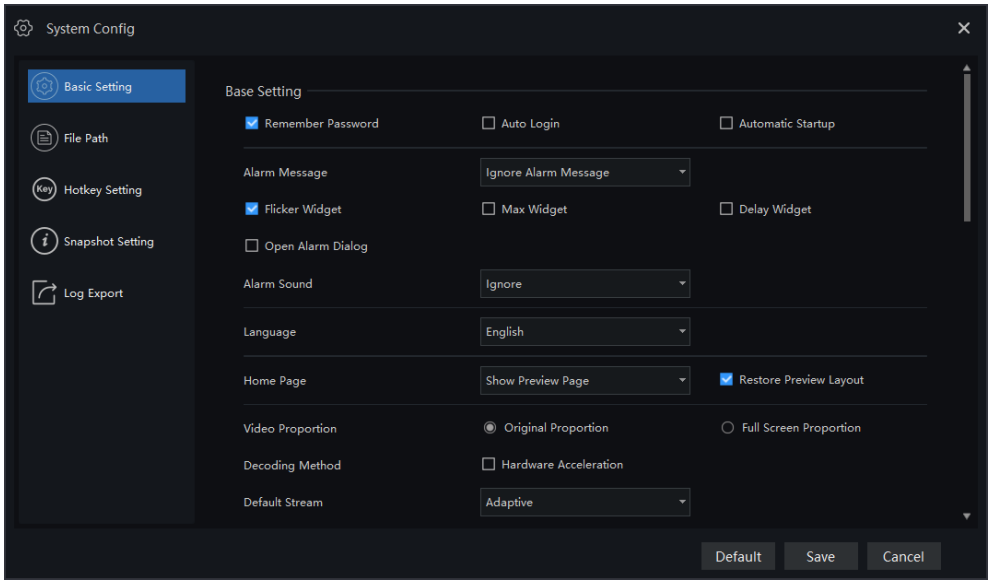
No.	Function	Description
1	Main menu page	Start page, user can choose all function at this page
2	New	Click and built a new main menu page
3	Alarm Message	Alarm message reminder, click enter the real-time alarm interface; more details please refer to Chapter Real-time alarm.
4	Download	Download the task, click to display the list of tasks downloading and downloaded, and the function is available in the function module.
5	Operate	 User: Switch users and modify passwords. Lock screen: Click to lock the screen, enter the password to unlock the lock screen, and the password is the login password. Language: there are four 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 15–2 system configuration interface. Click the drop-down menu to select a specific setting. Click "Save" to save the relevant settings
7	User	Show current user.
8	Run status	Show CPU and RAM running status.
9	Date and Time	Current Date and Time
10	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

Figure 5-2 System Setting



6 Devices Management

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

On the Main menu page, click , enter the detailed page, as shown in 错误!未找到引用源。

Figure 6-1 Device Management interface

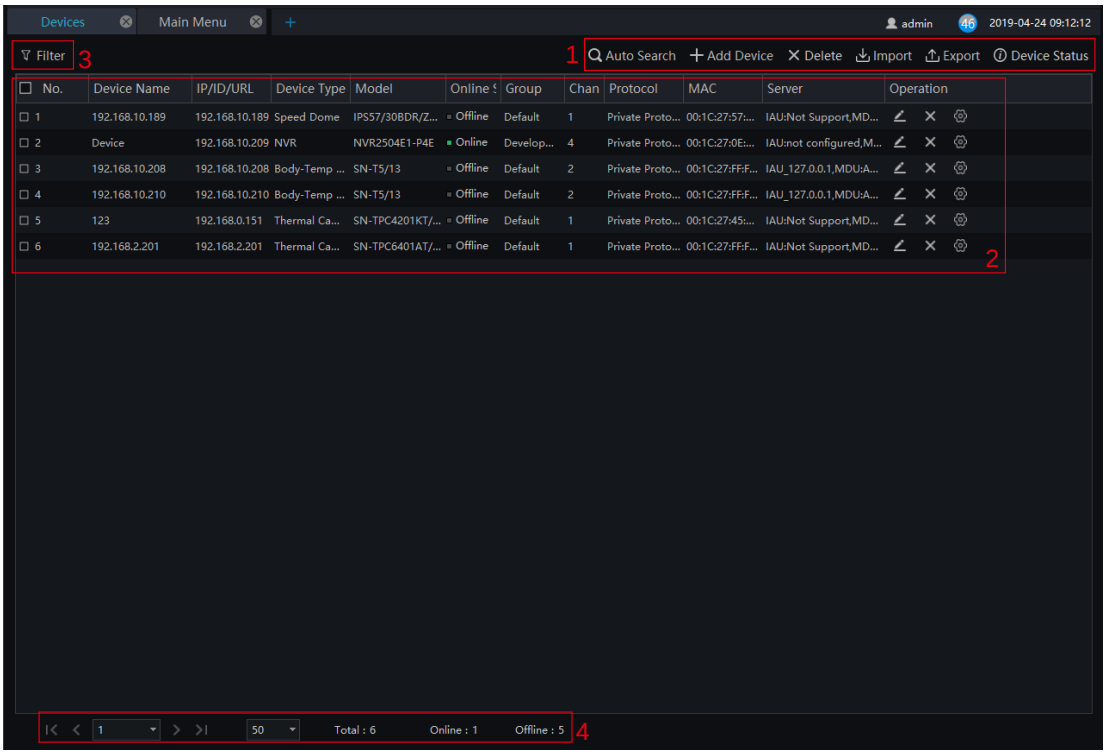


Table 6-1 Device Management

No.	Function	Note
1	Operation	Search, add, delete, export, import devices, Status of All devicess
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

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

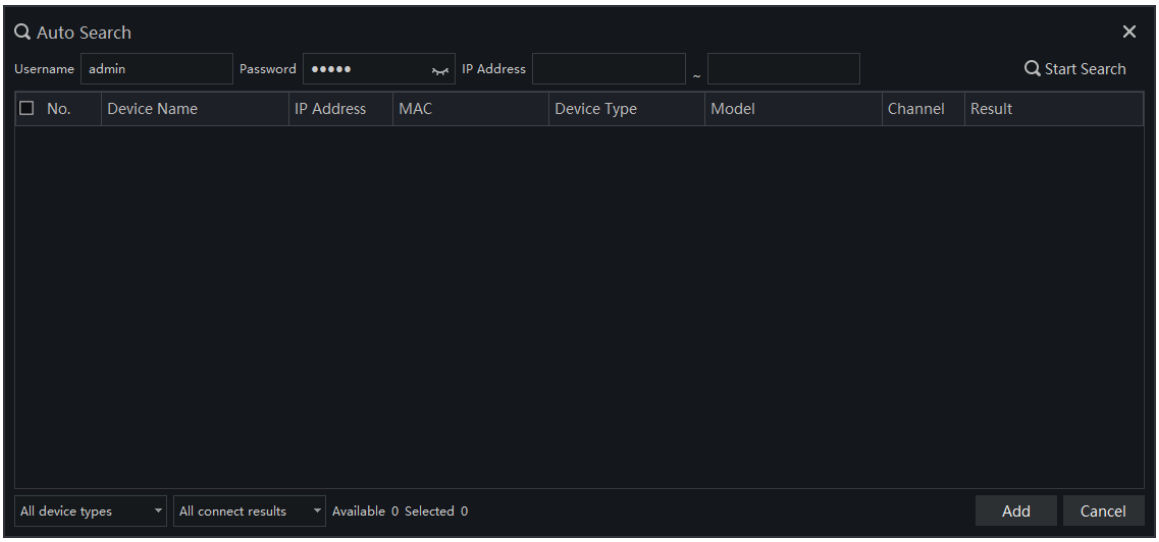
6.1 Auto Search

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

Procedure：

Step 1 On device management page click Auto Search enter auto search page ,as shown in 错误!未找到引用源。..

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

TIP

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

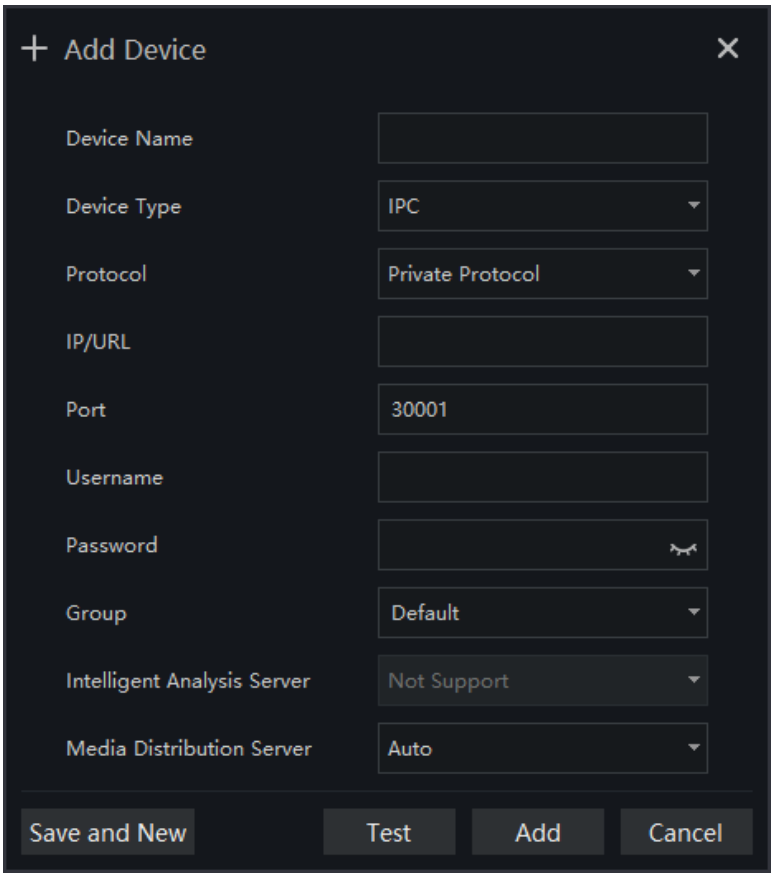
6.2 Manual Add

Procedure：

Step 1 Click

at device management page, get into manual add device page, as shown in Figure 6-1

Figure 6-3 Manually add device page



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

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

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

6.3 Export and Import Device

Procedure：

Step 1 Click “Export”.

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

Step 3 Click “Import”

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

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

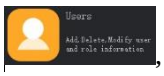
On the main menu page, Click  , go to detailed page as shown in 错误!未找到引用源。

Figure 7-1 User management interface

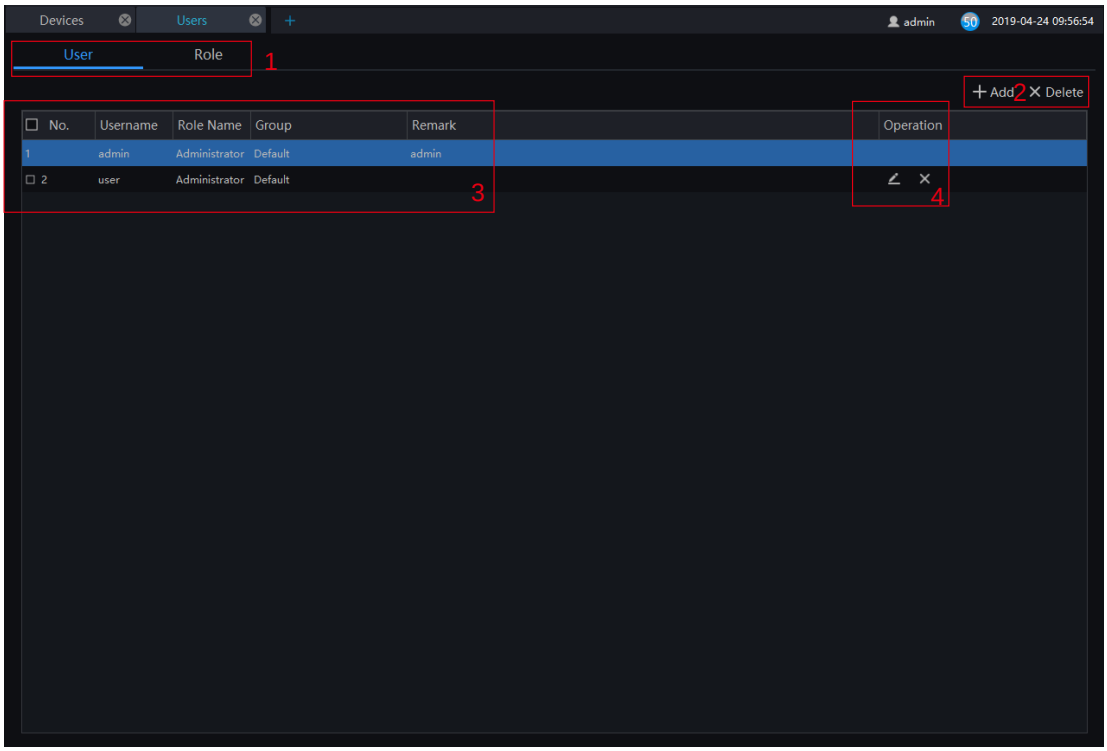


Table 7-1 User management

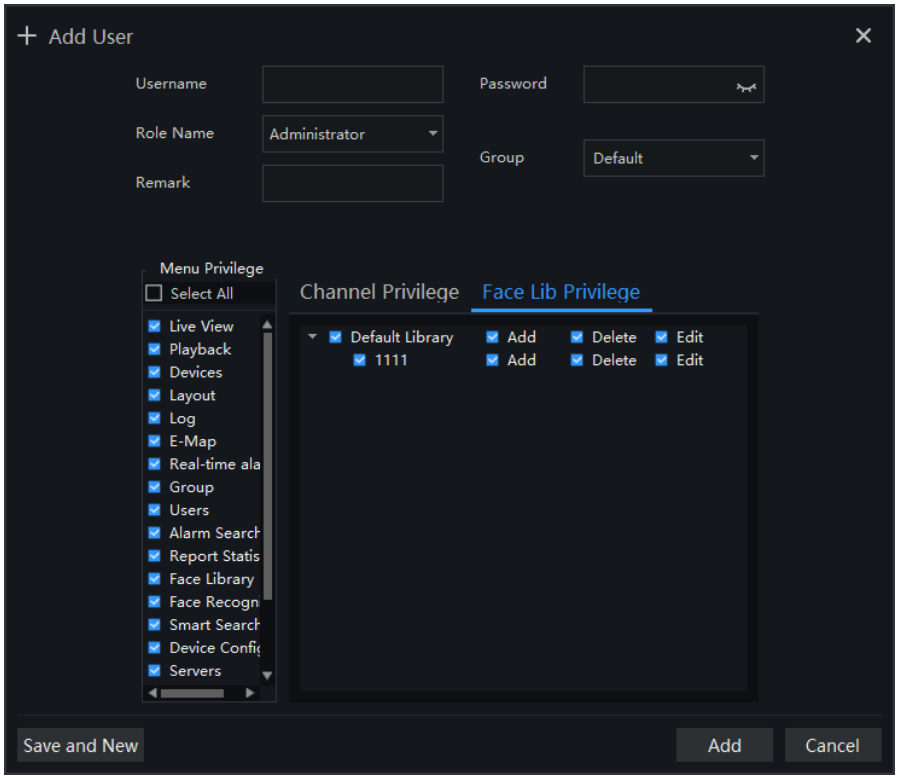
No.	Function	Description
1	User and role	Choose user or role to operate
2	Add/Delete	Add/delete user or role.
3	Display area	Display user/role information
4	Edit/Delete	Click edit/delete icon to operate current roles or users

7.1 User Add

Procedure：

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

Figure 7-2 User add



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).

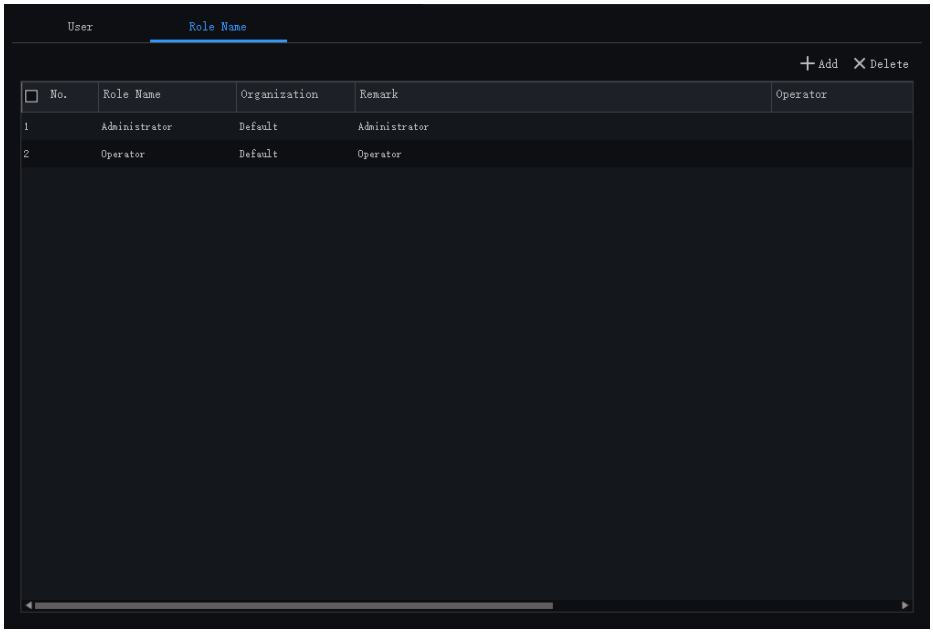
Step 5 Click “Save and New” or “Add” to save and add user, it will pop-up “add successfully”.

7.2 Add Role

Procedure：

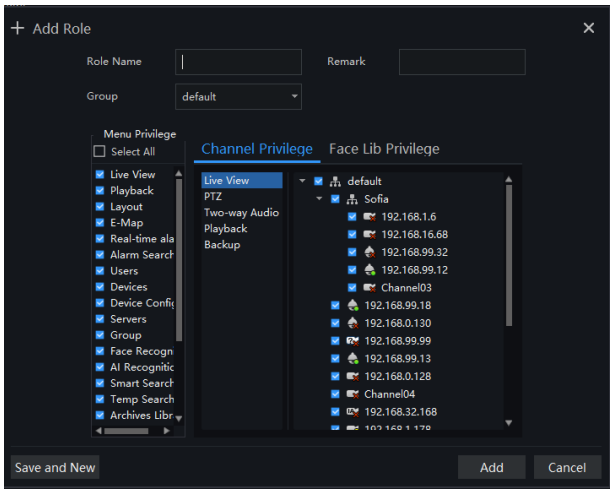
Step 1 At the user management interface, click “Role Name” to get the below interface

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 错误!未找到引用源。

TIP

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

Figure 8-1 Live view UI

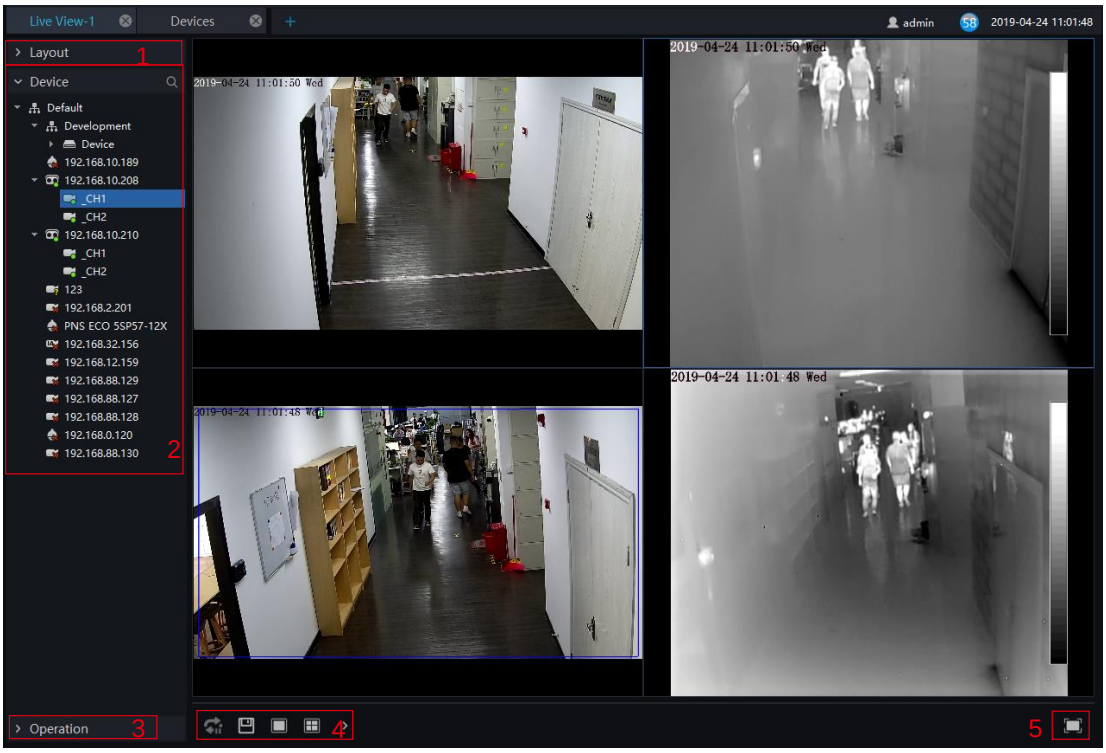


Table 8-1 Live view

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, 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

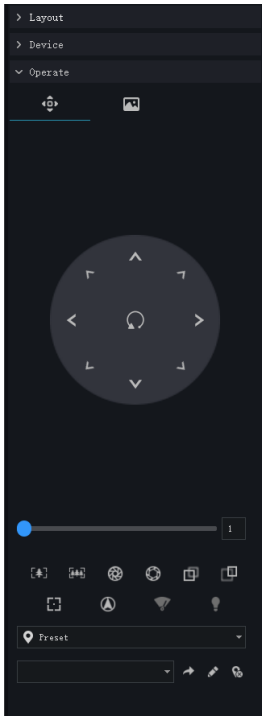
Display the device list under current user account, users can watch the real-time video by double clicking or dragging and dropping the mouse at online channel.

8.3 Operation

NOTE

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



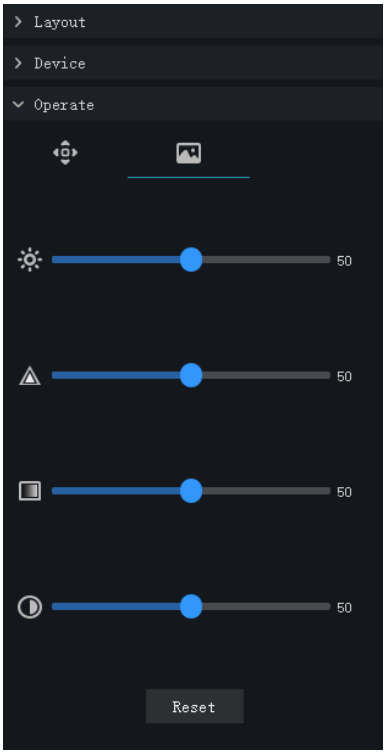
PTZ Operation: adjust the PTZ full-scale movement, lens zoom, edit and control, zoom in, zoom out, IRIS increase and decrease, near focus, far focus, focus, orientation, and wiper, turn on the light.

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 **错误!未找到引用源。**

Figure 9-1 Playback interface

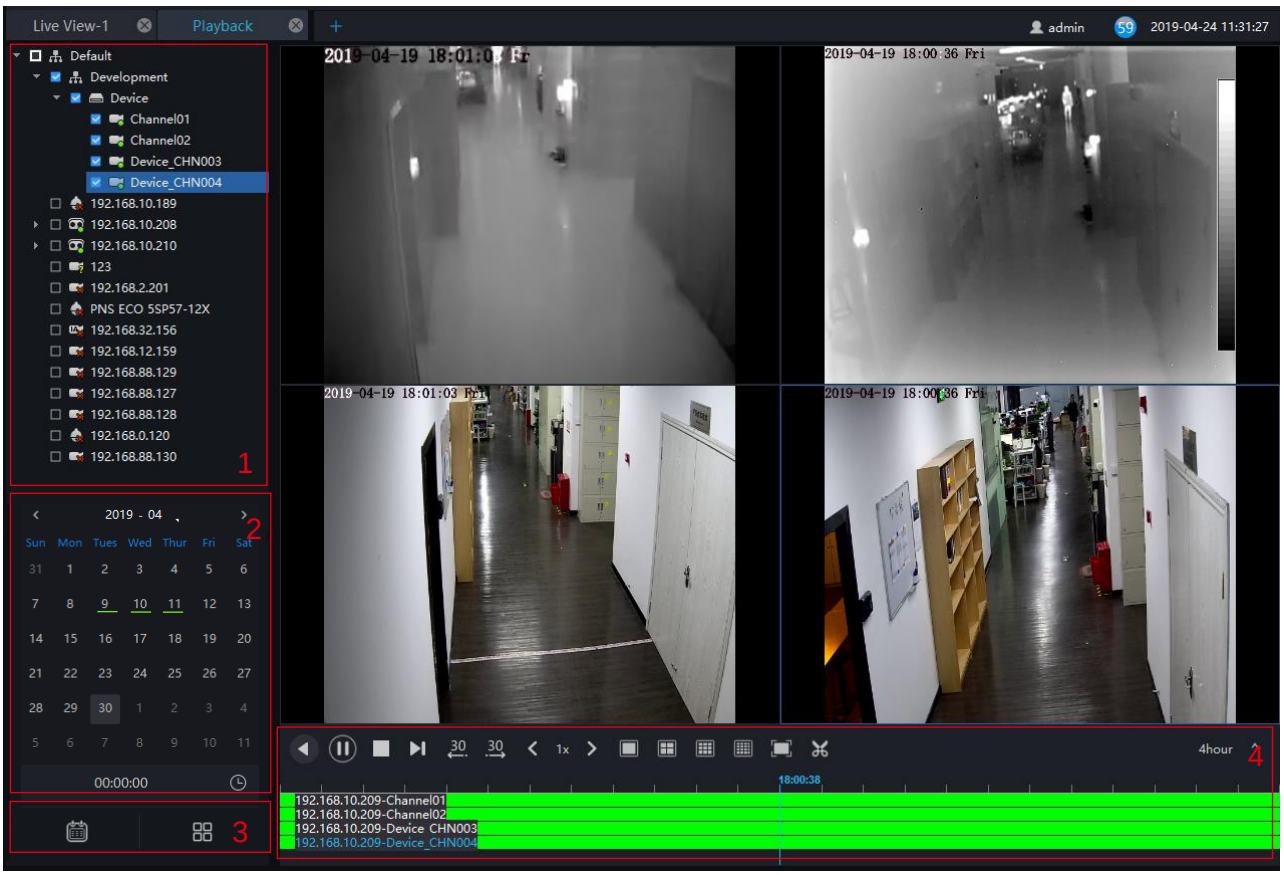
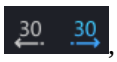
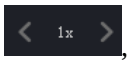


Table 9-1 Playback

No.	Function	Description
1	Device	Show devices on the platform as organizational structure

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

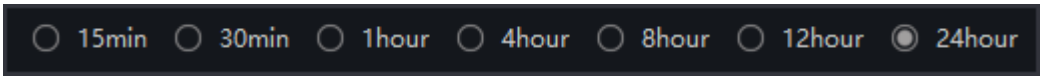
9.1 Playback the Device Video

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

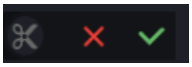
Step 3 Select the way as shown in the picture on the timeline ,can play back the video by selecting different progress bar formats.



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

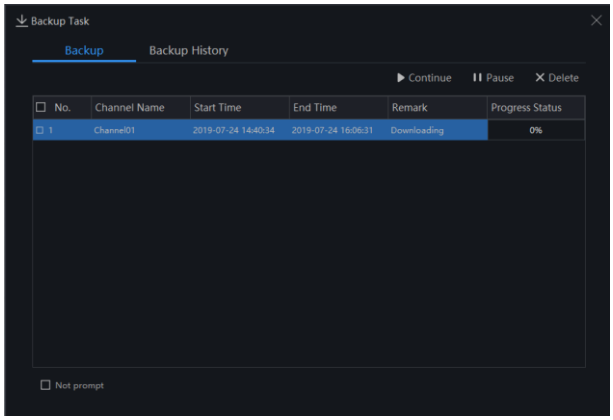
9.2 Back up the Device Video

Procedure：

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

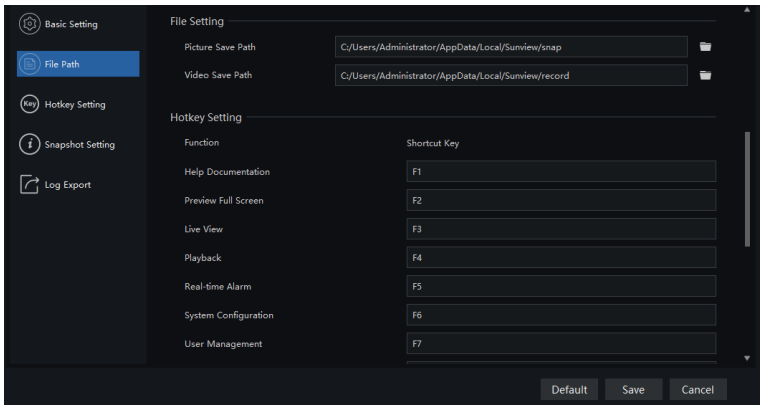
Step 2 Click the checkmark to complete the selection and copy of the video, and jump to the download interface as shown in **错误!未找到引用源。**

Figure 9-2 Download interface



1. 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 9-3 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 错误!未找到引用源。.

Figure 10-1 Real-Time alarm interface

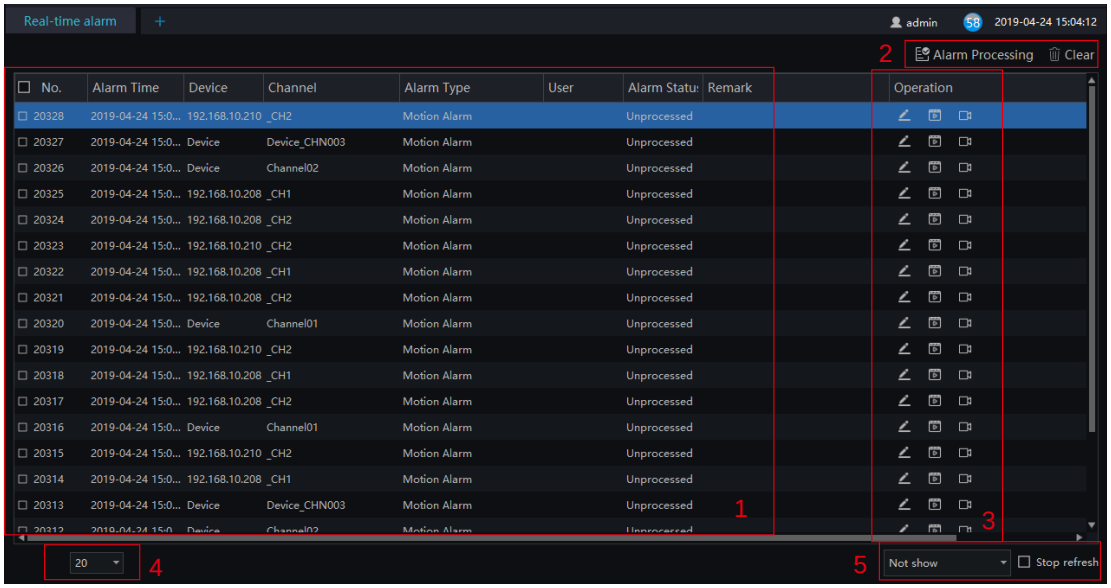


Table 10-1 Real-time alarm

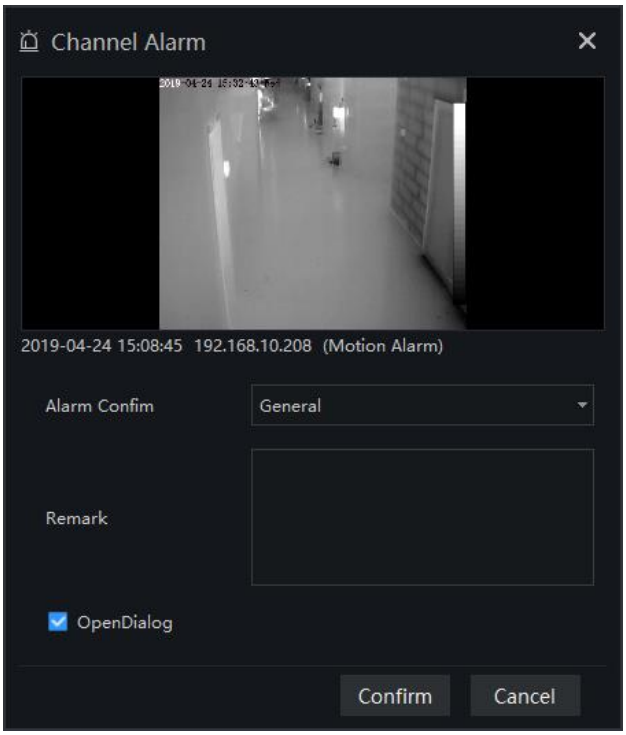
No.	Function	Description
1	Alarm display area	Display alarm related information.
2	Alarm processing.	Process the specified alarm information, click “clear”, the current alarm will be cleared.
3	Alarm operation	Alarm processing, video of alarm playback, live video.
4	Interface display.	Quantity of the 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



1. Click to play back the alarm occurrence video for 30S.
2. 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 **错误!未找到引用源。**

Figure 11-1 Alarm search interface

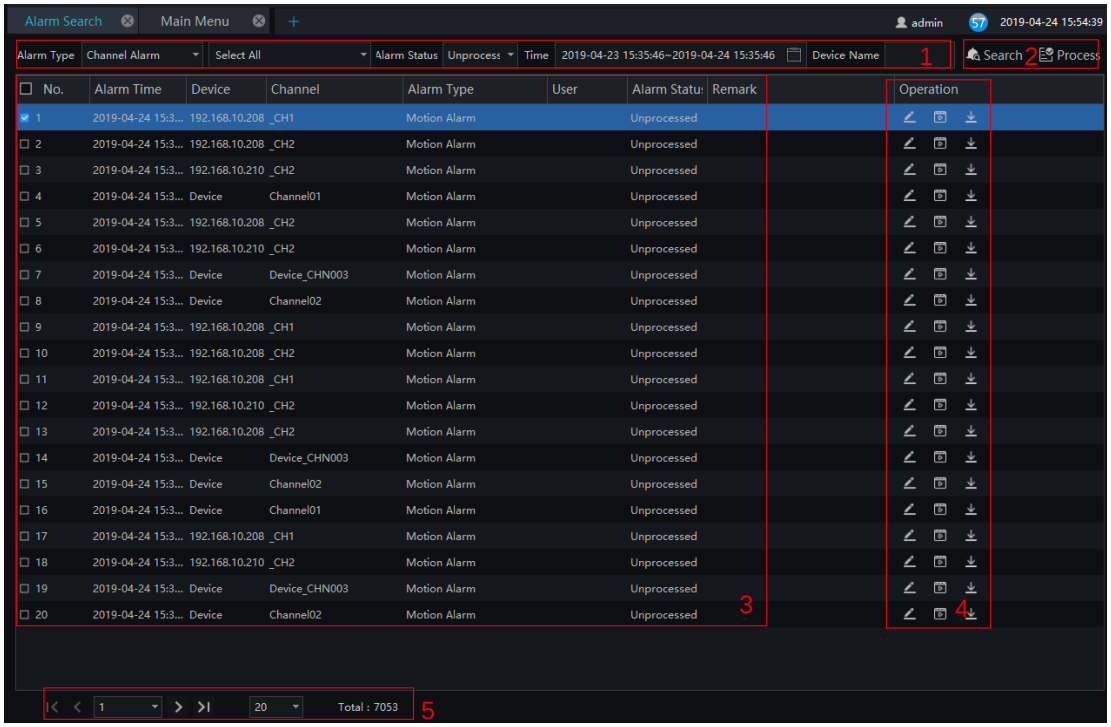


Table 11-1 Alarm search

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

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

to enter the detailed interface, as shown in Figure 12-1.

Figure 12-1 Layout management interface

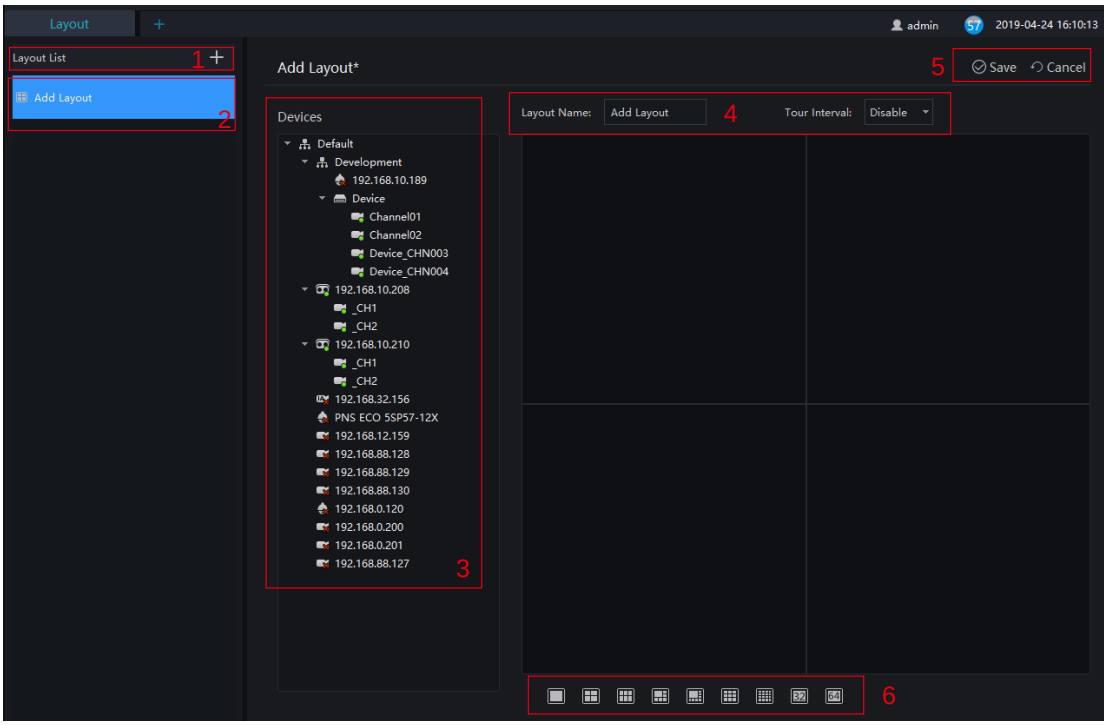


Table 12-1 Layout management

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.

No.	Function	Description
5	Save setting	Save, cancel new arrangement settings
6	Display mode	Choose video display mode.

Procedure：

1. Click + at the layout list to create a new layout.
2. Input the name of the layout and select the window layout.
3. Set tour interval.
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.
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.

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

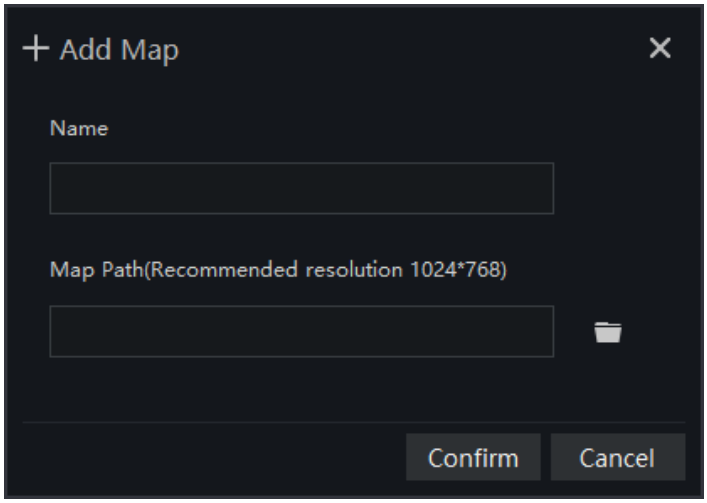
No.	Function	Description
1	Map Display List	Setting map of devices' layout
2	Device	Details of map
3	Video Display	Map and layout of video display

No.	Function	Description
4	Add map	Devices are shown on map, new map can be added by clicking plus icon as shown in picture
5	Zoom in/ zoom out	Zoom the map to set monitoring points

13.1 Add Electronic Map

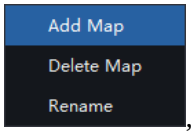
Procedure：

Step 1 Click ， the interface will be shown as below



Step 2 Input the map name and choose map path, click “Confirm” to save the map

Step 3 Drag cameras to map as actual deployment. The current live video can line to the camera of map.

Step 4 Sub map can be added by clicking “add” or right-clicking at the main map 

, there are multiple level map can be created.

Step 5 Click “save” to save the settings.

13.2 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.

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.

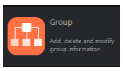
On the main menu page, click  to enter detailed page, as shown in figure 14-1

Figure 14-1 Organization interface

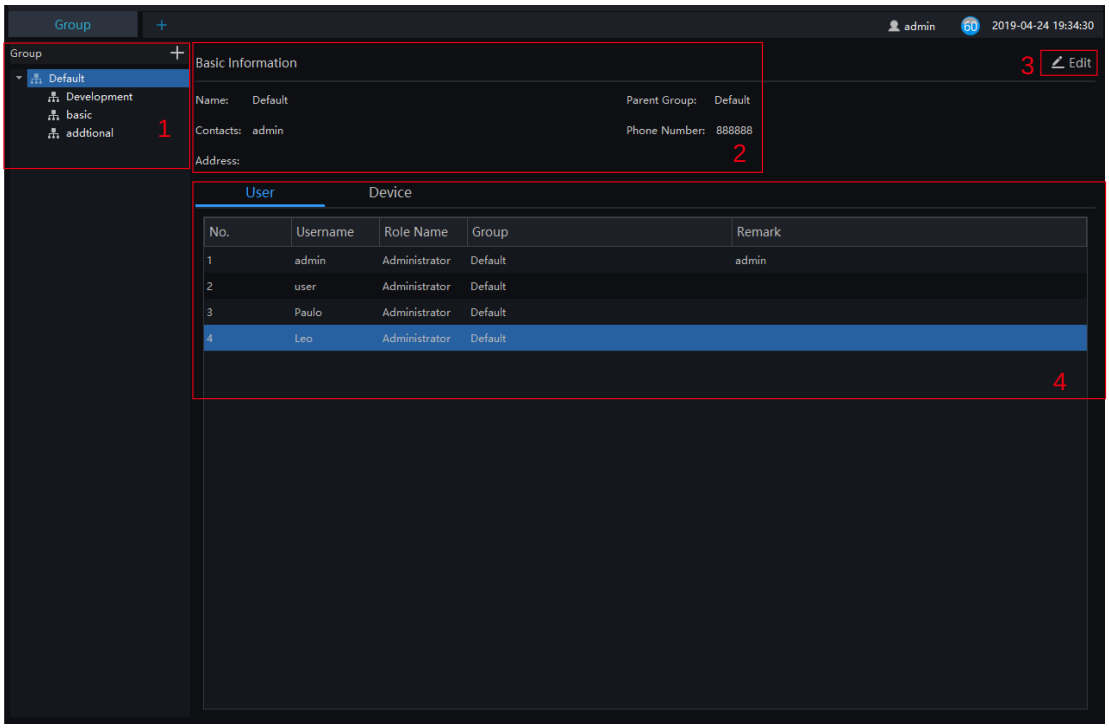


Table 14-1 Organization

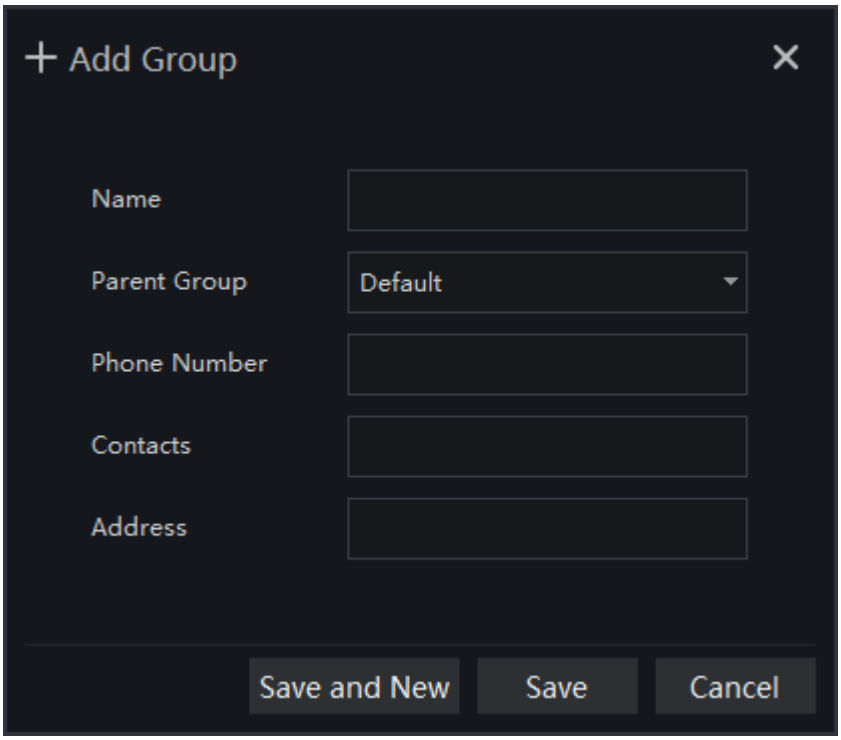
No.	Function	Description
1	Group	Display group tree, new group can be added by clicking +
2	Basic Information	Display basic information of device or group
3	Edit	Basic information can be edited by clicking “Edit”
4	Display area of user or device	Display information of user or device

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

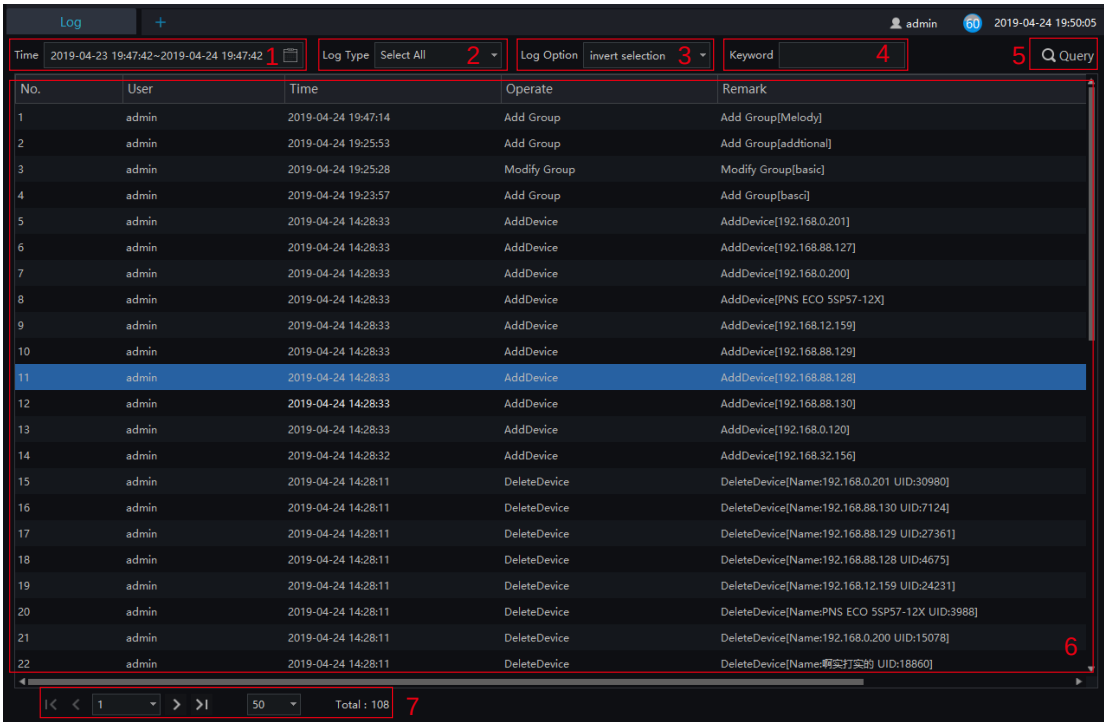


Table 15-1 Log management

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

No.	Functions	Description
6	The query show	Query result display area.
7	Interface display	Show the current page of logs, and the page displays the number of logs, switch to next page.

16 Report Statistics

At the interface of report statistics, the user can view the alarm statistics of group, devices, person overtemp, and other types. 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

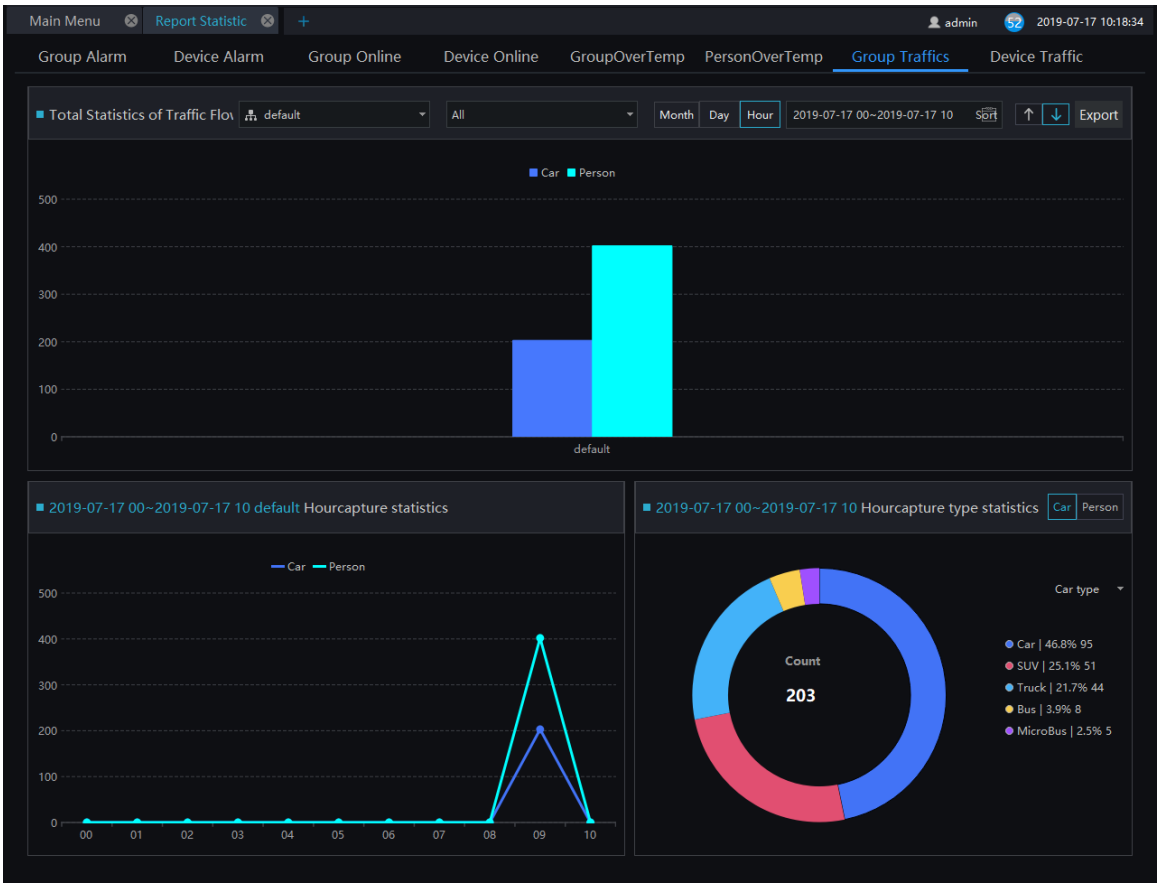
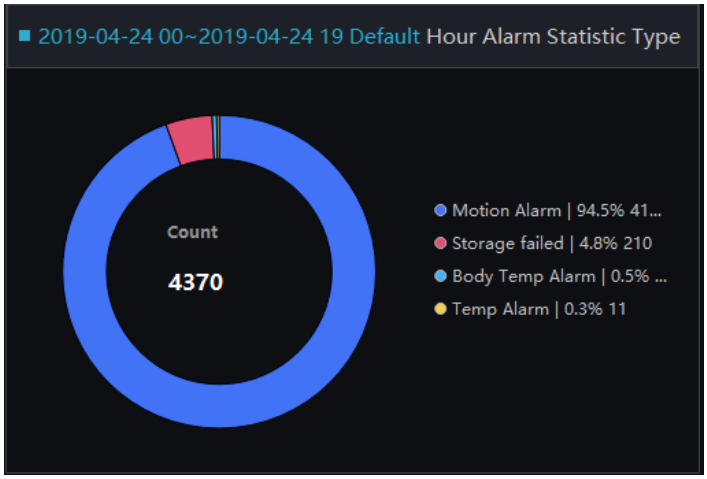


Figure 16-1 Alarm type statistics



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

17 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, 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 17-1.

Figure 17-1 Device configuration interface

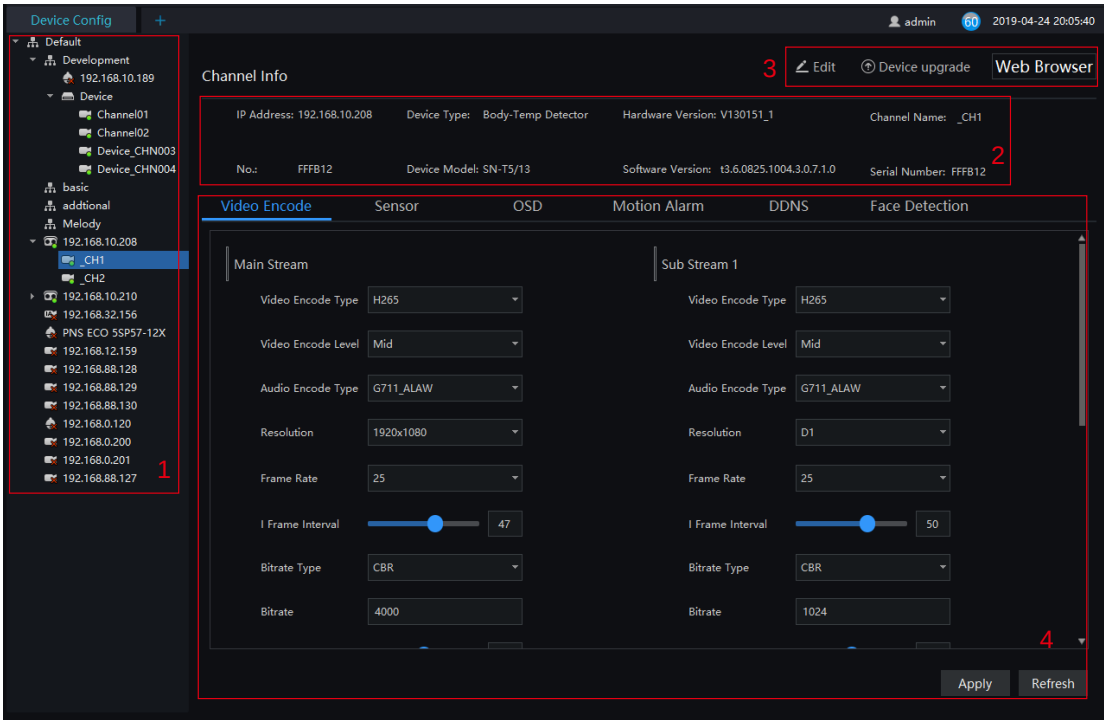


Table 17-1 Device configuration

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.

18 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 18-1 Servers management interface

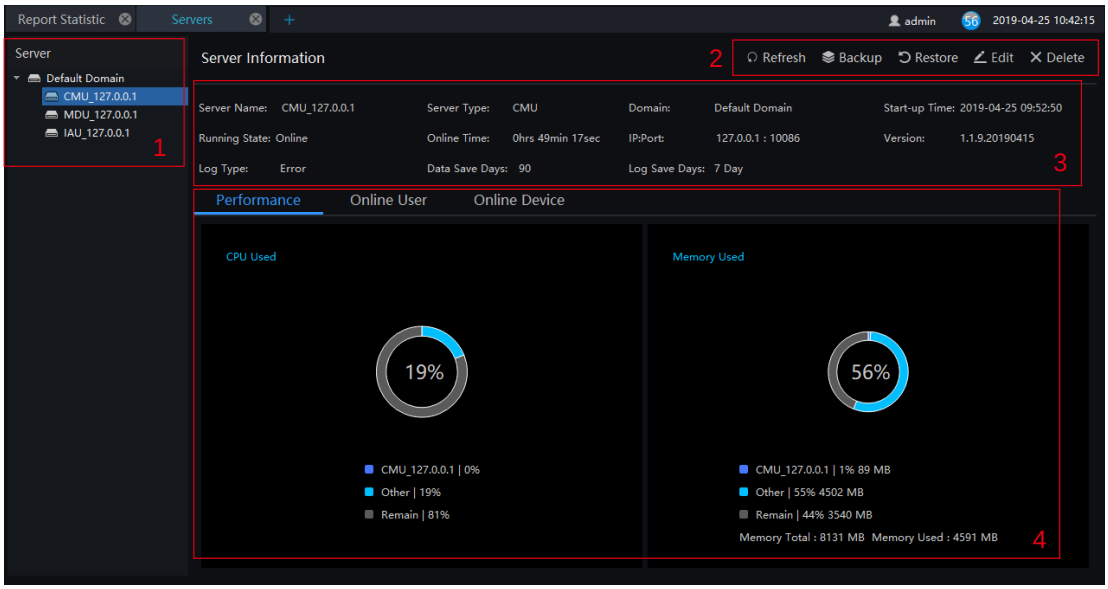


Table 18-1 Servers management

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)

No.	Function	Description
4	Performance, other information display	Performance display area, capture information

18.1 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.

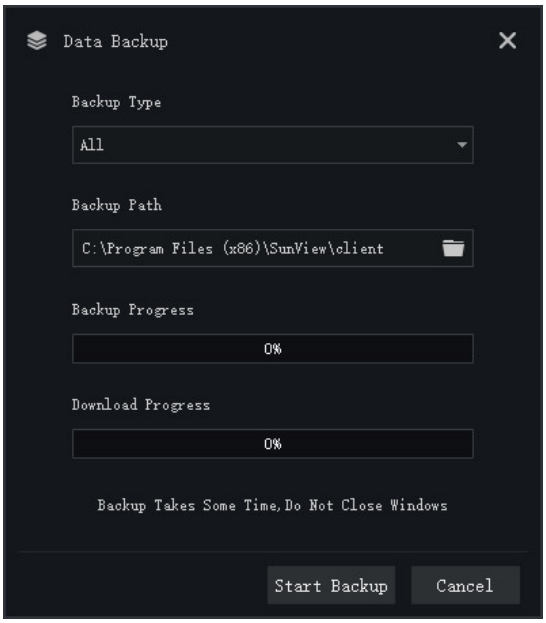
Data backup means it will download data from the server where the VMS installed. Data recovery means it will upload the backup data to the servers, it includes perform recovery operations and ensure the system resume normal work.

18.1.1 Data Backup

Procedure:

1. Click “backup” button at right upper of screen, then the pop-up window appears, as shown in Figure 18-1 ;

Figure 18-2 Date backup



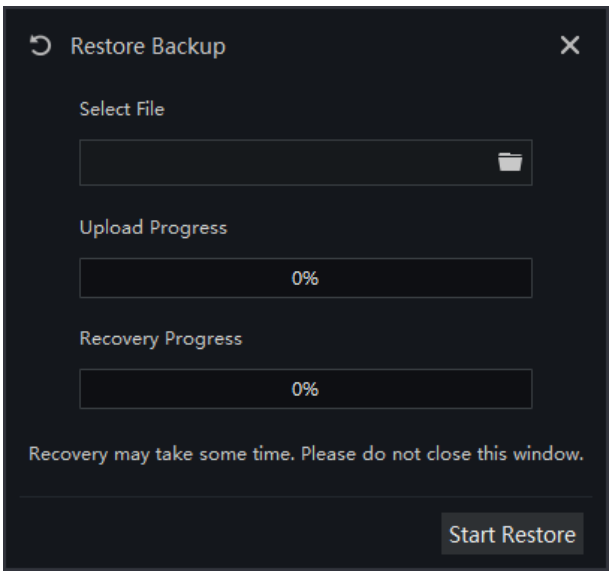
2. Browser the backup path, click “start backup” to back-up the server’s data.
3. After backup successfully, the backup progress display “100%”;
4. Click to exit backup.

18.2 Date Recovery

Click

and the pop-up window shows as Figure 18-2, choose the download data

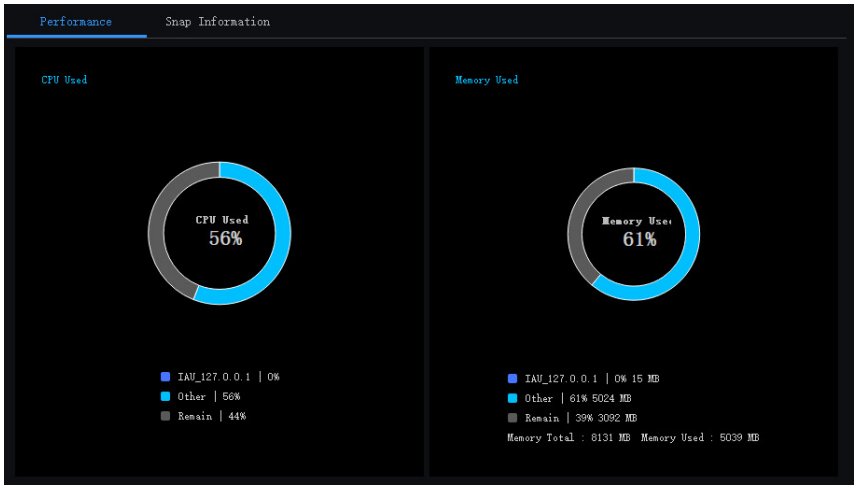
Figure 18-3 Restore backup



18.3 Media Distribution Server

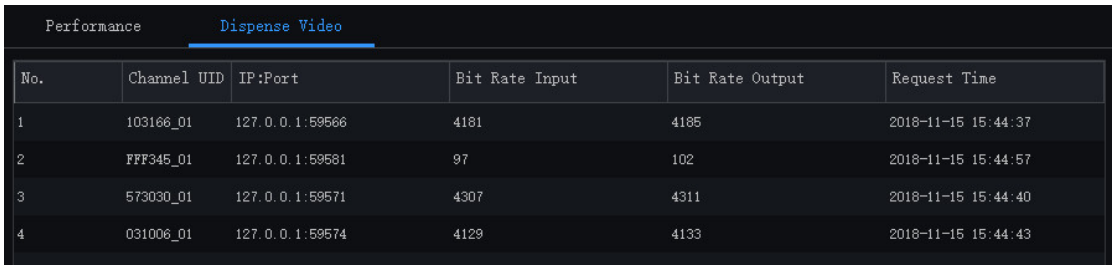
18.3.1 Performance

Figure 18-4 Performance



18.3.2 Distribution Status

Figure 18-5 Distribution Status



18.4 Intelligent Analysis Server

18.4.1 Performance

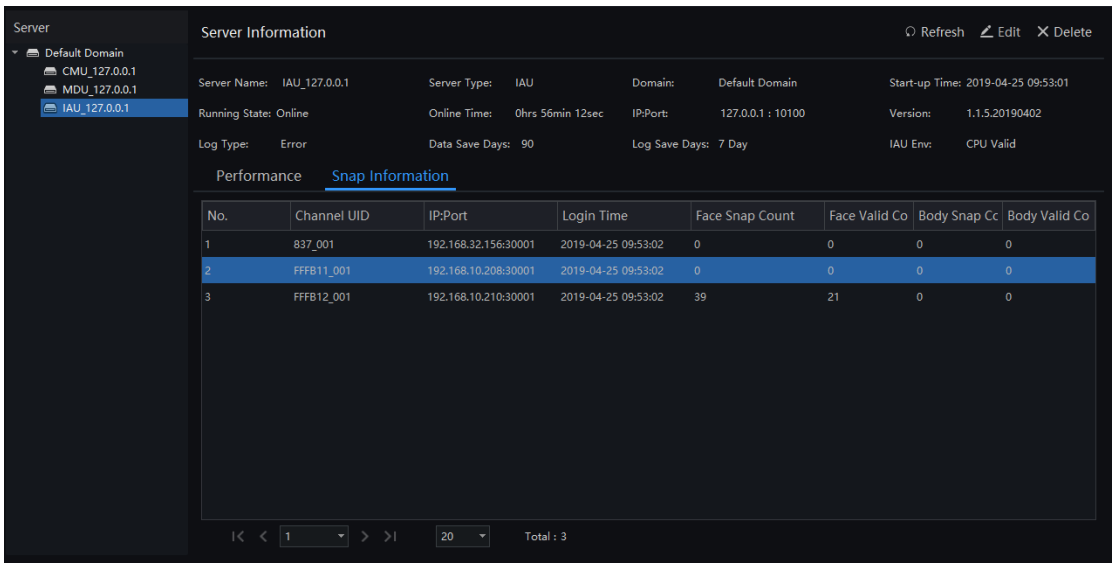
Please refer to chapter 18.2.1

18.4.2 Snap Information

NOTE

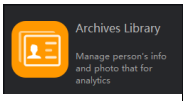
This function is generally applicable to the face capture device, it can analyze image if the device captures normally. If the number of captured face is 0, please check whether the camera is configured correctly. The details are shown as **错误!未找到引用源。**.

Figure 18-6 Snap information



19 Archives Library

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

NOTE

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

Figure 19-1 Archives library

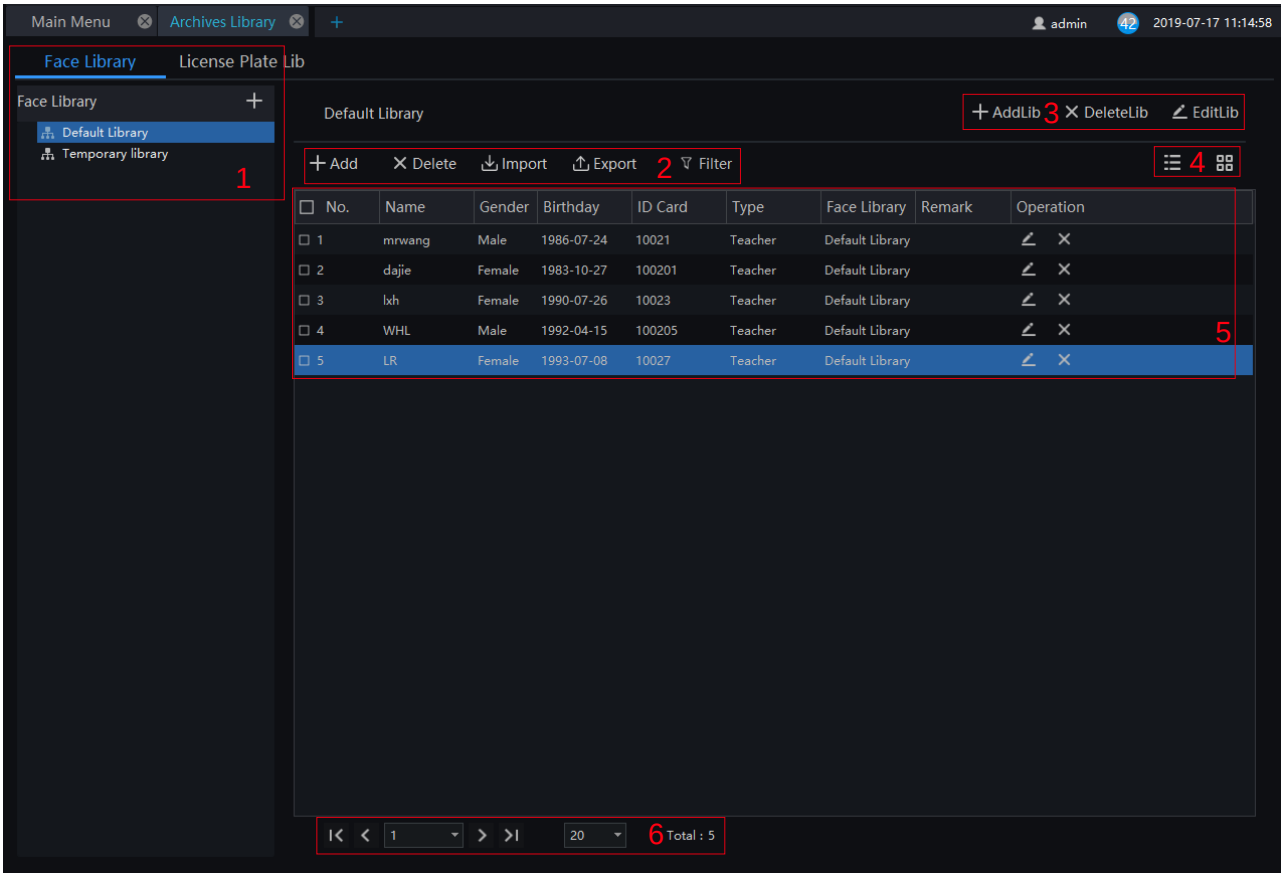


Table 19-1 Face library

No.	Function	Description
1	Face Library/license plate library	Face library or license plate library default group/ add library

No.	Function	Description
2	Basic operation of person	Add, delete, import , exporting and filter person.
3	Basic operation of library	Add, delete, and edit library
4	Arrangement	List mode, card mode
5	Display information	Face library basic information display
6	Page information	Page number, number of pages per page, total number of showing. Switch to next page

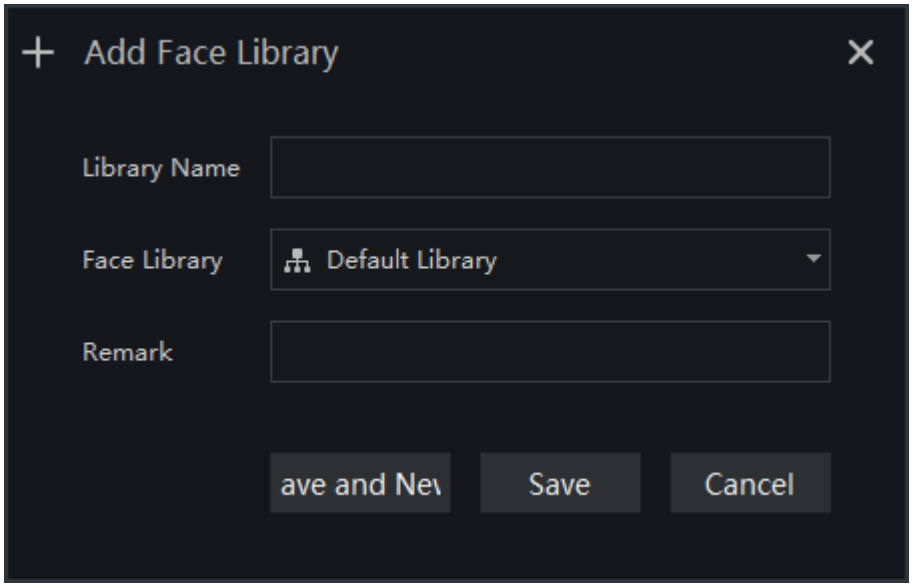
19.1 Add Face Library

Procedure：

Step 1 Click to add face library.

Step 2 Input library name, remark, choose library , as shown in figure 19-2

Figure 19-2 Add face library



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

19.1.1 Add Personnel Information

Procedure：

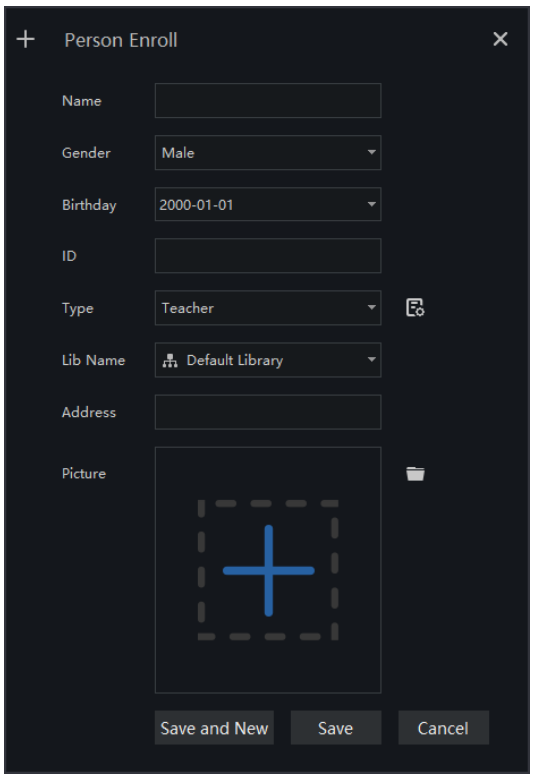
Step 1 Select a face library

Step 2 Click

to add new personnel information

Step 3 Input the information as shown in figure 19-3, choose the picture from the local client.

Figure 19-3 Person enroll



Click “ Save ”, “Add person succeed”

TIP

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

19.1.2 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.

19.1.3 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.

19.2 Add License Plate Library

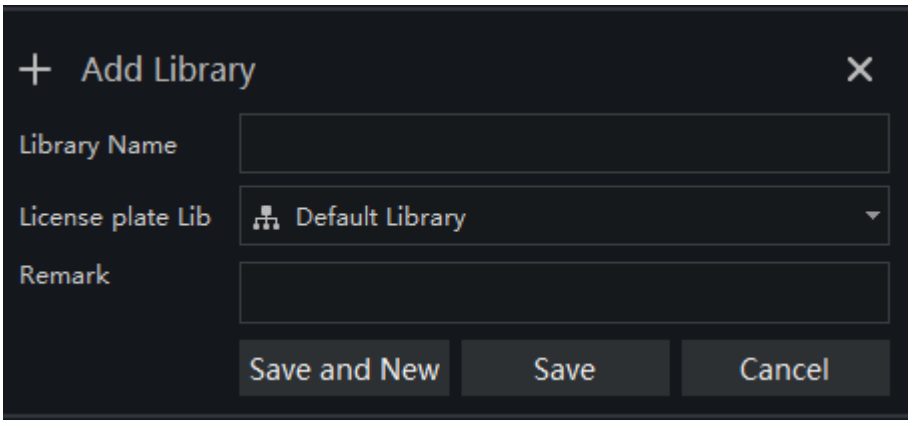
Procedure：

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 19-4

Figure 19-4 Add license plate library



Step 4 Click “Save” to save the parameters.

19.2.1 Add License Plate Information

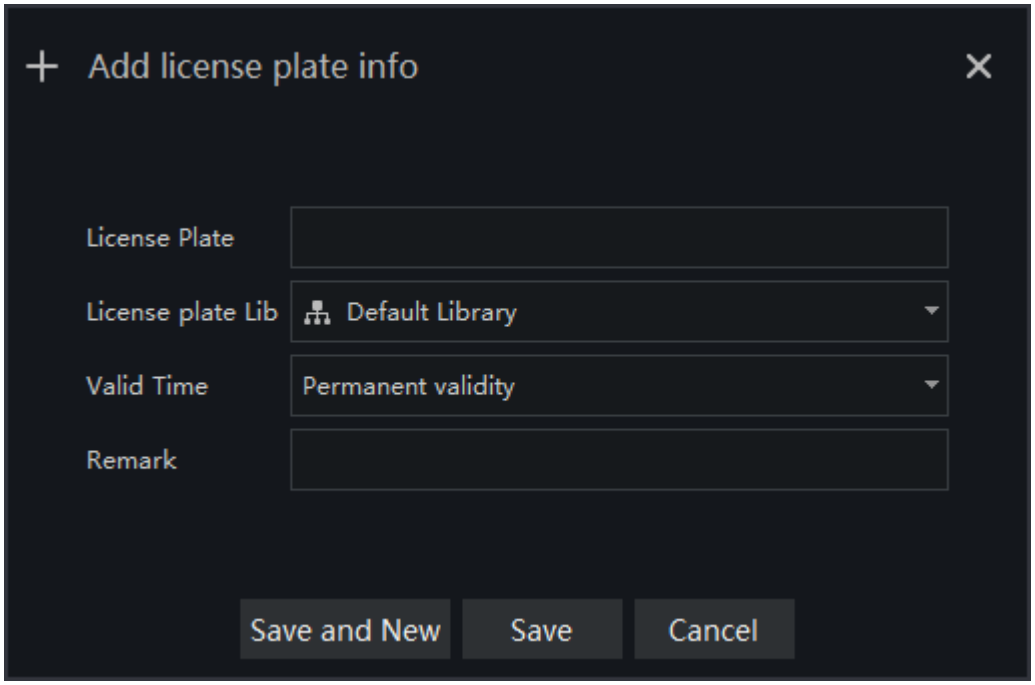
Procedure：

Step 1 Select a face library

Step 2 Click to add new license plate information.

Step 3 Input the information as shown in figure 19-5, choose the picture from the local client.

Figure 19-5 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 19.1.2-chapter 19.1.4*

20 Strategy Configuration

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

NOTE

This function is only subject to Face and License Plate Detection cameras.

On the main menu page, click to view the configuration interface, as shown in figure 20-1.

Figure 20-1 Strategy configuration interface

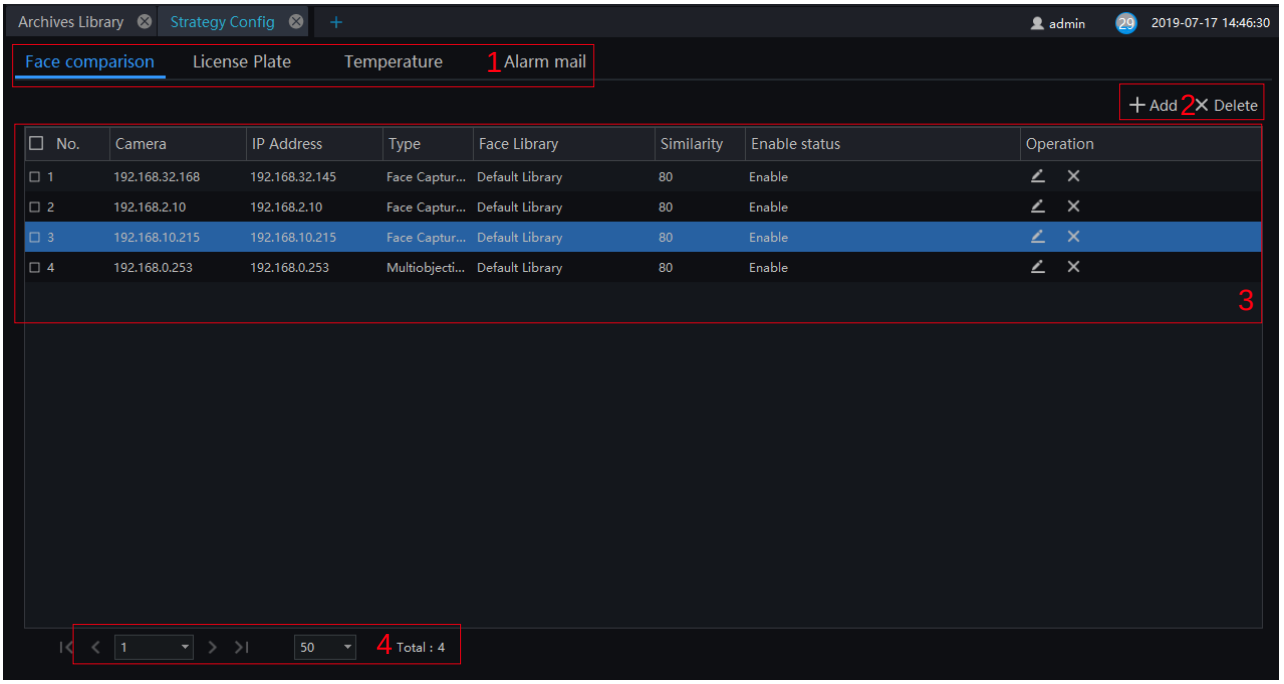


Table 20-1 Strategy configuration

No.	Function	Description
1	Strategy configuration face and temperature	Setting up face comparison, license, temperature and alarm mail.
2	Basic operation	Add, Delete
3	Display information	Basic information display of face database, shortcut to delete and edit

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

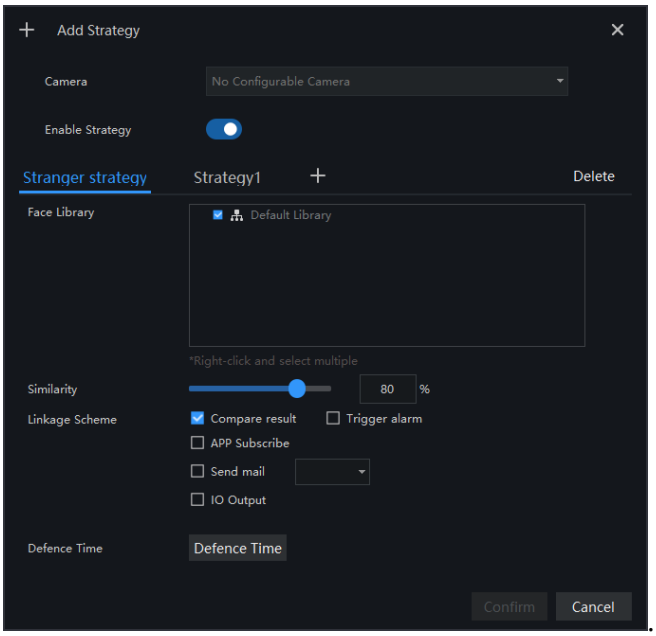
20.1 Face Comparison Configuration

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 20-2 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.

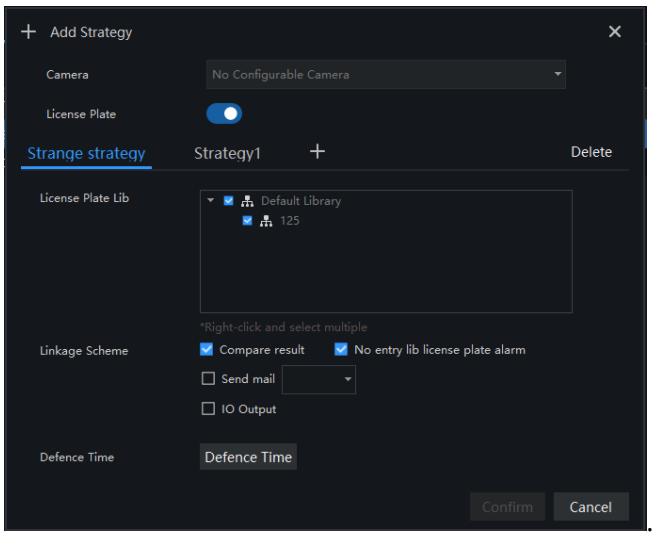
20.2 License Plate

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 20-3 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.

20.3 Temperature Configuration

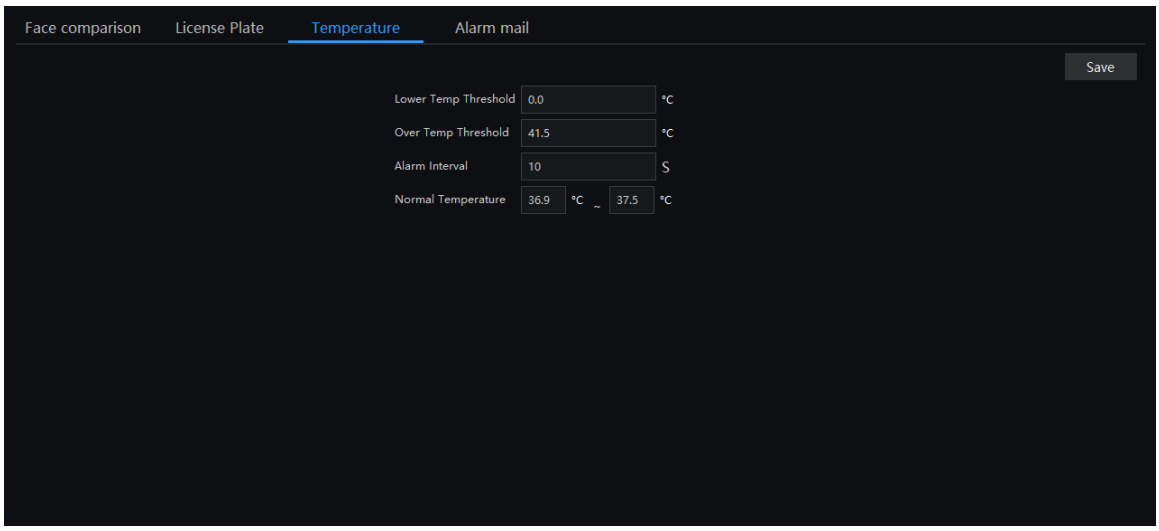
NOTE

This function is only subject to thermal cameras

Procedure:

1 Click “Temperature” to modify temperature configurations.
2 Input the information of threshold, as shown in figure 20-4.

Figure 20-4 Temperature



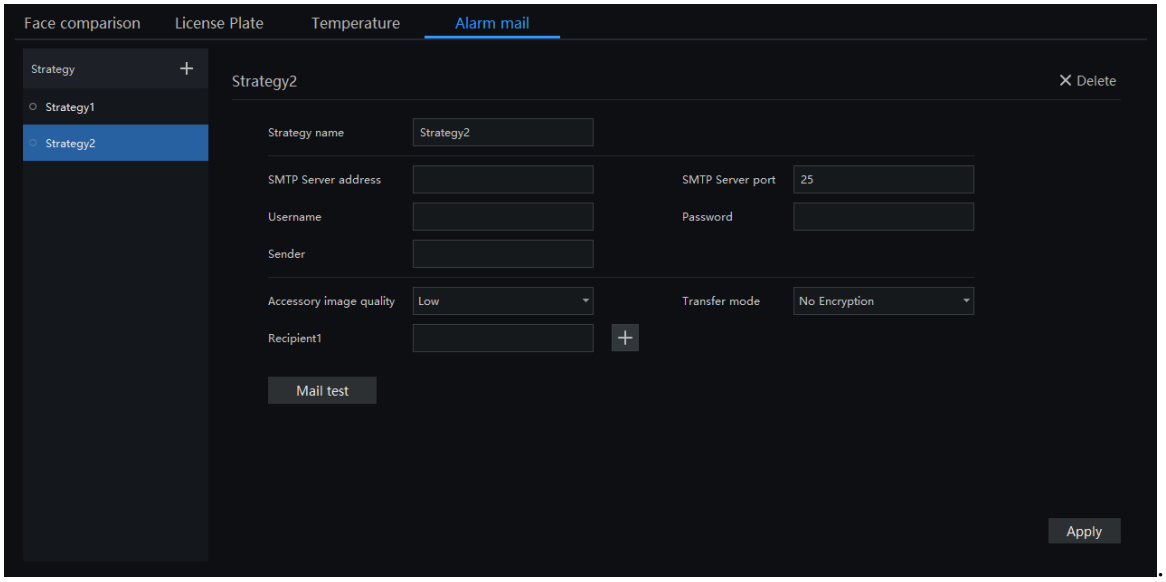
20.4 Alarm Mail

Procedure:

Step 1 Choose “Alarm Mail” at strategy configuration interface.

Step 2 Click + to add new strategy, as shown in figure.

Figure 20-5 edit strategy



Step 3 Input the parameters of SMTP.

Step 4 Click “Mail test” to check the input.

Step 5 Click “ Apply” to save and apply the settings.

21 Smart 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 AI recognition and vehicles cameras.

On the main menu page, click

to view more detailed interface.

Figure 21-1 Smart search

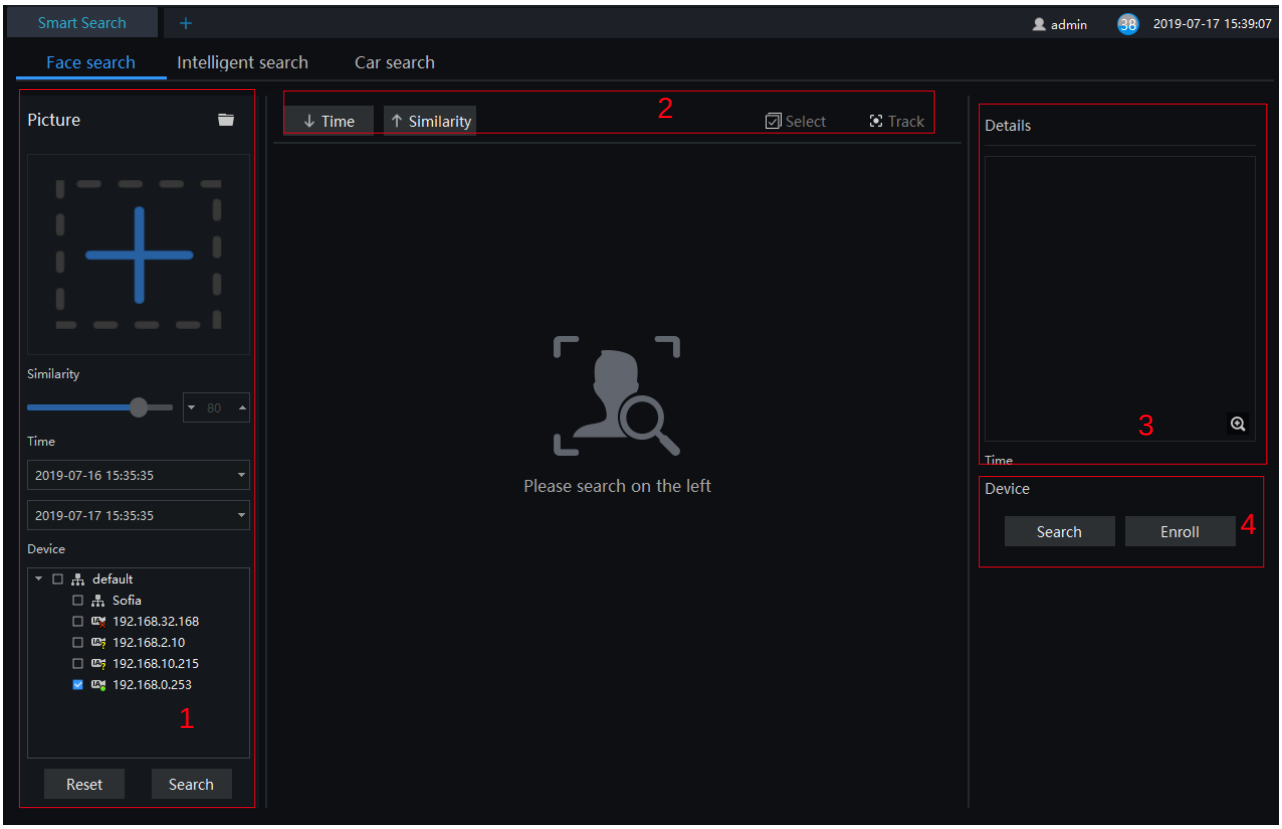


Table 21-1 Smart search

No.	Function	Description
1	Picture display	Image info, similarity, the capture time, device info。 Choose face search, intelligent, or car search.

No.	Function	Description
2	Display information	The information can be displayed by time, similarity in row, behavior track. Intelligent search: search car , you can set car color, car brand, car type or license plate. Search person, you can set gender, age group, cycling or not.
3	Details	Capture details
4	Switch picture to search	Search: click “Search” and switch the details picture to search Enroll: click to enroll the searched picture.

21.1 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.

21.2 Intelligent Search

Procedure：

Step 1 Click “Intelligent Search” at smart search.

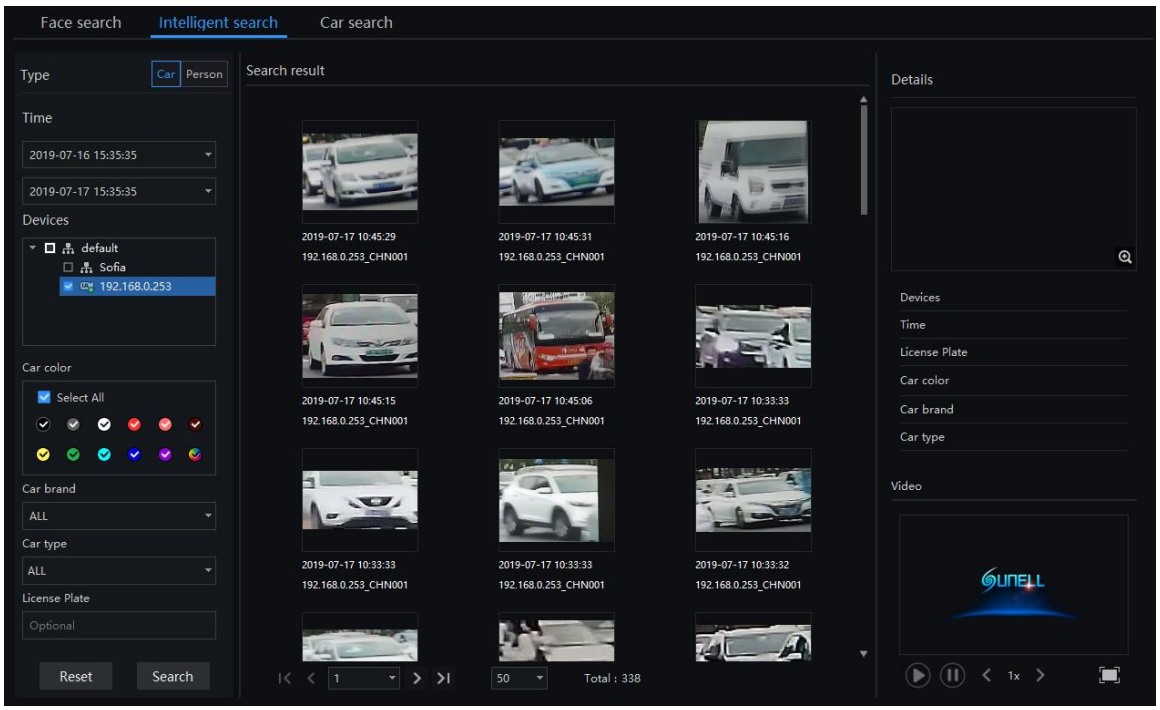
Step 2 Set time of searching picture and the capture devices.

Step 3 Set the car color, car brand, car type, or license plate.

Step 4 Click “Search”, the searching results will display .

Step 5 Click the images in the result, displaying the details.

Figure 21-2 Intelligent search



21.3 Car Search

Procedure：

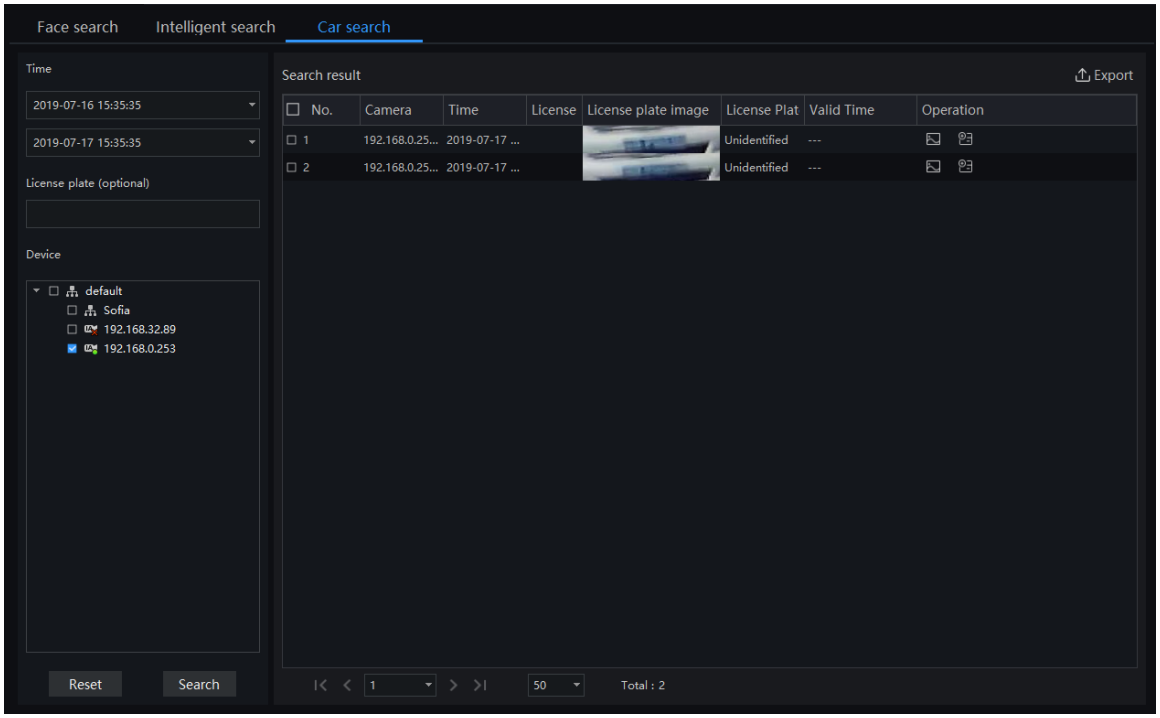
Step 1 Click “Intelligent Search” at smart search.

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 21-3 Car search



22 Face Recognition

At Face recognition interface, the live face capture and result of face comparison will be displayed. Before this feature was activated, the face data must be imported to “Personnel information management”.

NOTE

This function only supports face detection feature cameras and body detection cameras.

On the main menu page，click

view the detailed interface, as shown in figure 22-1

Figure 22-1 Face recognition interface

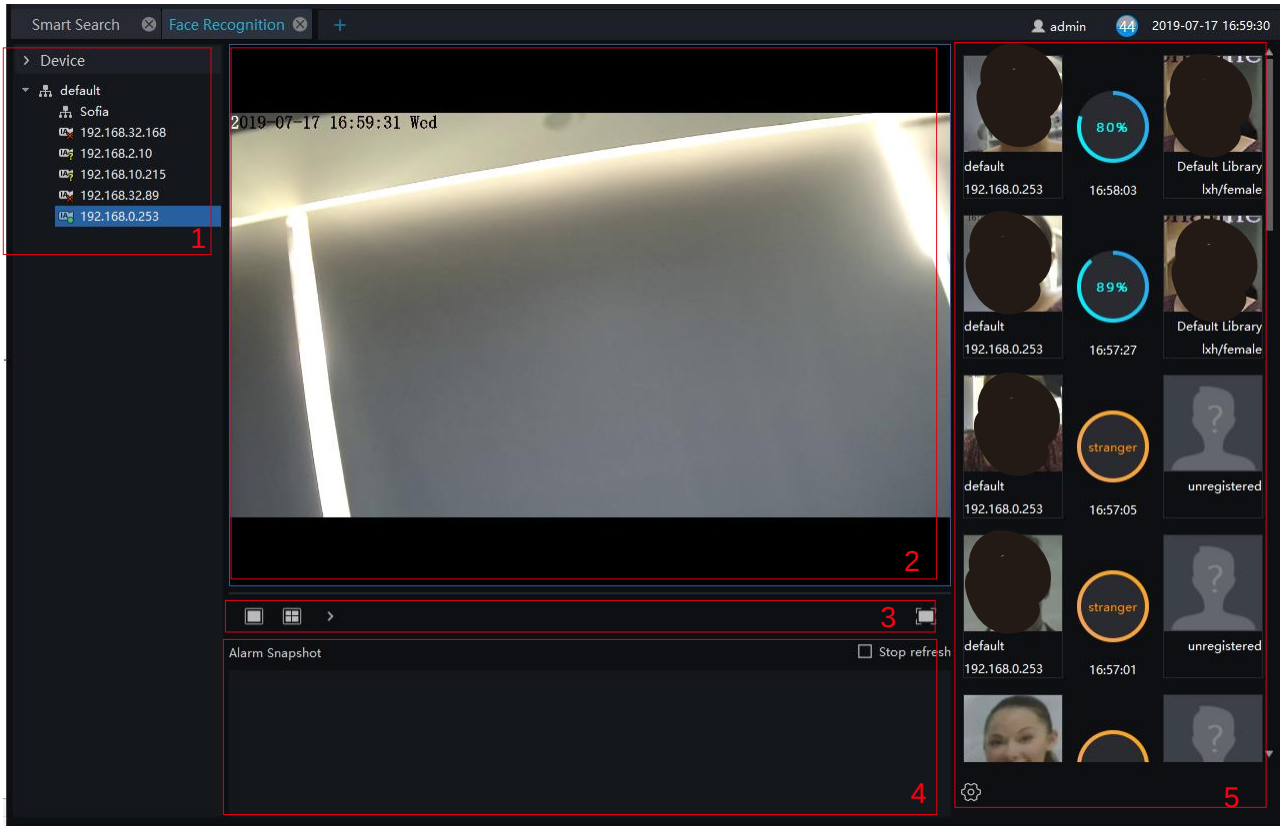


Table 22-1 Face recognition

No.	Function	Description
1	Devices list	Displaying devices in current group
2	Video Displaying	Live video Displaying
3	Layout	Video Layout

No.	Function	Description
4	Temperature alarm	Pop up face capture alarm, tick the stop refresh the picture will stop refresh more.
5	Comparison	Capture faces comparing with face library.

Procedure：

Step 1 Devices with face capture feature, snapshot face automatically.

Step 2 Click search icon on picture to enter immediately smart search.

Step 3 Click the icon ＋ on the snapshot to add the picture to face library.

Step 4 Click the icon on the snapshot to enter the face search interface.

23 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 .

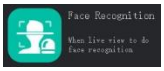
On the main menu page，click  view the detailed interface, as shown in

Figure 23-1 AI recognition

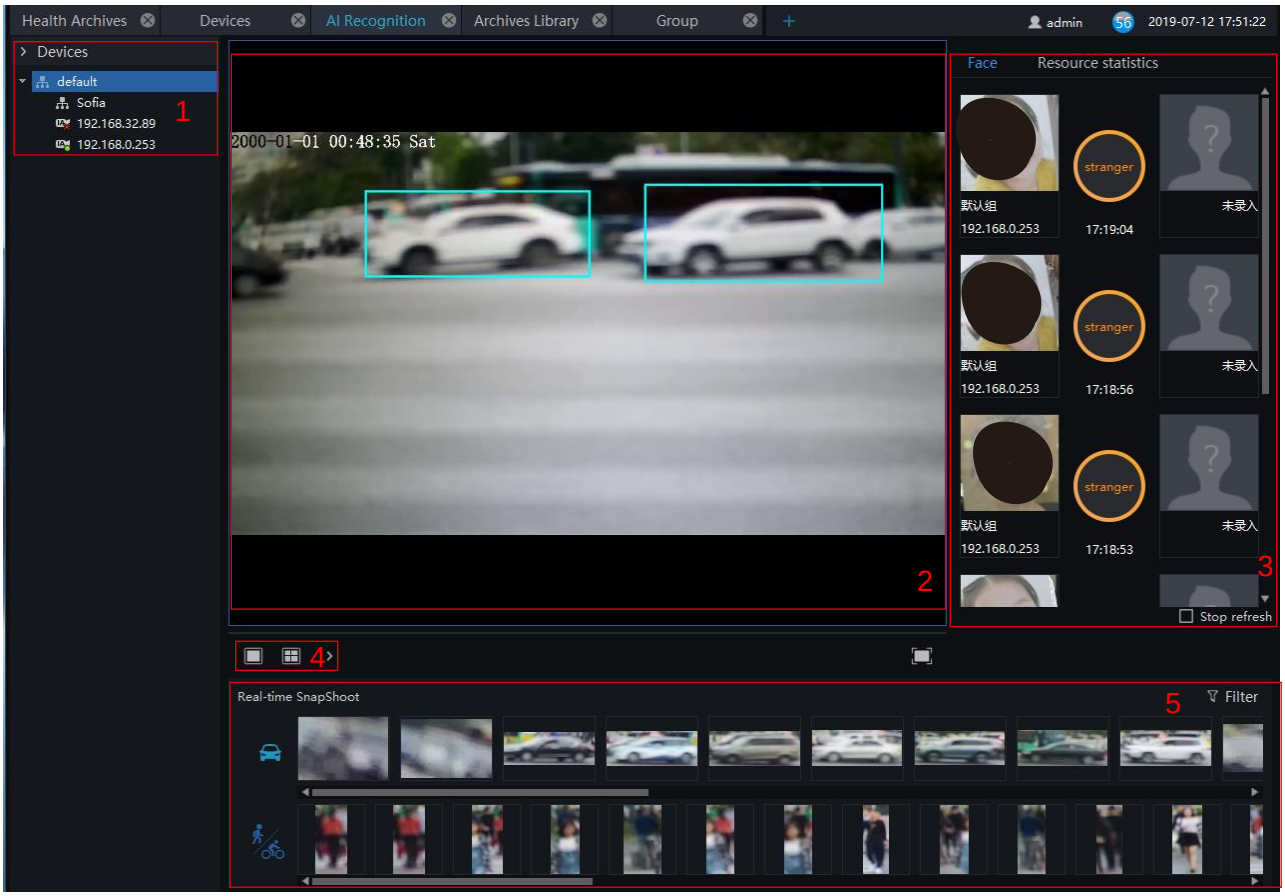
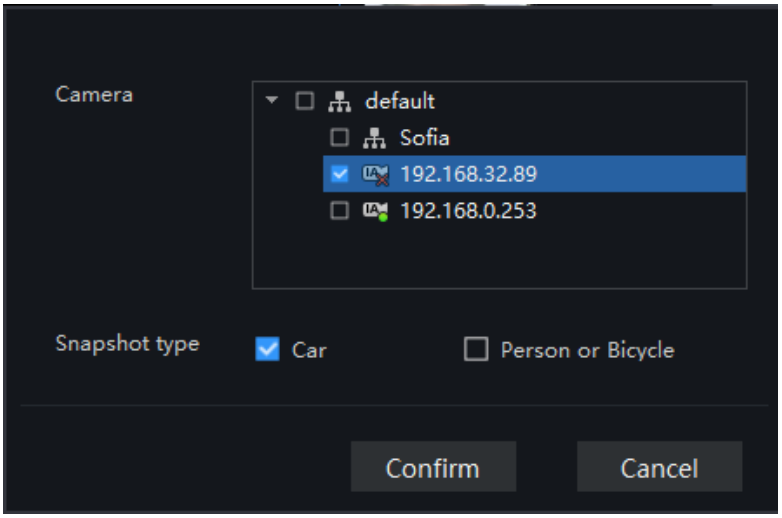


Table 23-1 AI recognition

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 23-2 Filter



24 Thermal Temperature

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

NOTE

This function only supports temperature detection cameras.

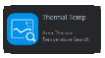
On the main menu page, Click  to view more detailed interface, as shown in figure 23-1:

Figure 24-1 Thermal temperature interface

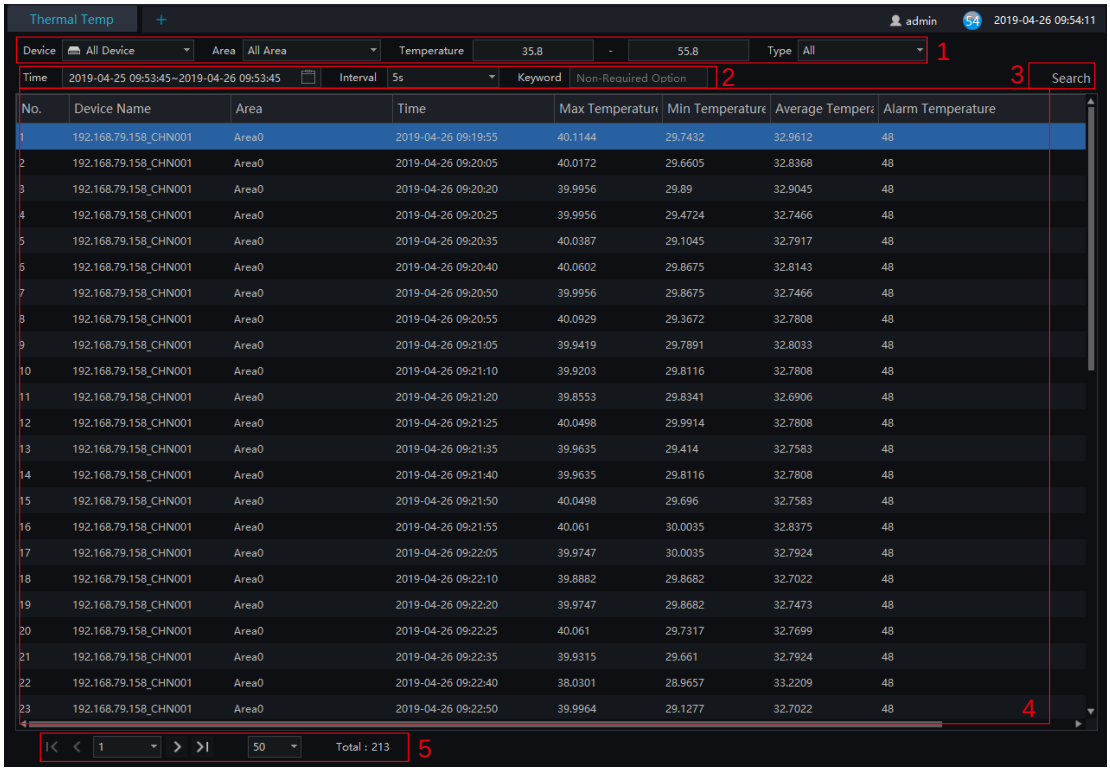


Table 24-1 Temperature alarm

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.

25 Temperature 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 24-1

Figure 25-1 Temperature search interface

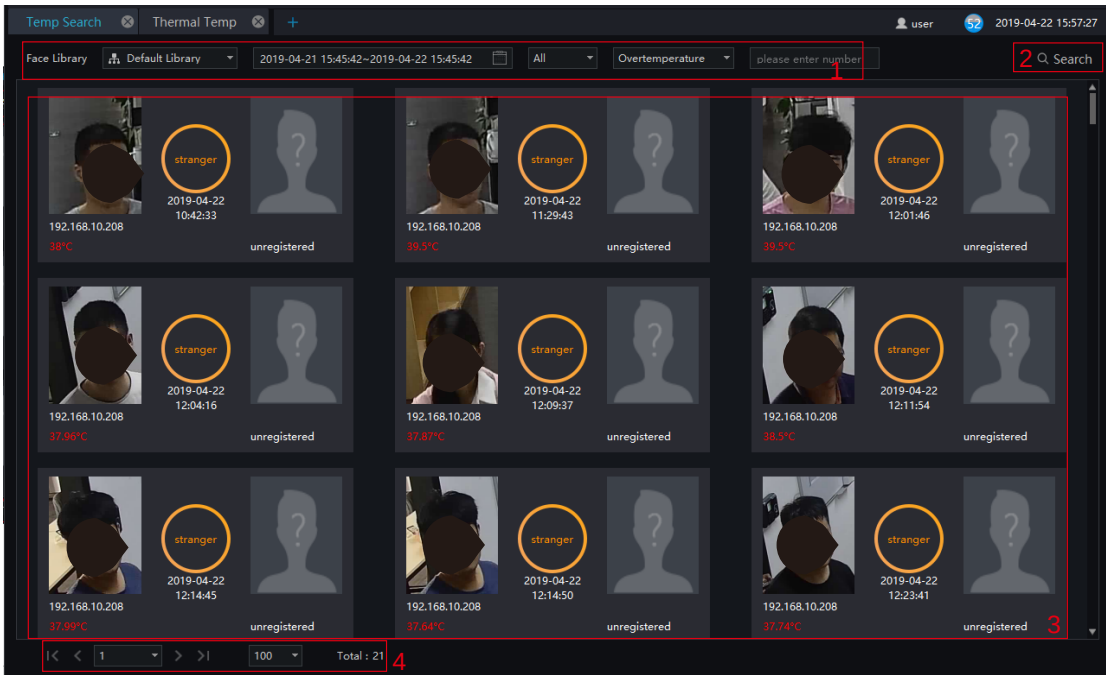


Table 25-1 Temperature search

No.	Function	Description
1	Search configuration	Setting temperature search face library, Starting / Ending time, type, temperature type, and keyword.
2	Search	Search by the setting conditions
3	Displaying information	Basic information display of face comparison, shortcut to delete and edit

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

Procedure：

Step 1 Select the face library.

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

Step 3 Select personnel type, the default is all types.

Step 4 Select temperature search type, the default is normal

Step 5 Input number, it may not be set.

Step 6 Click “ Search”, the temperature will show in the display area.

26 Attendance Management

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

NOTE

This function only supports face detection cameras.

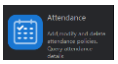
On the main menu page, click  to view the detailed interface, as shown in 错误!未找到引用源。.

Figure 26-1 Attendance interface

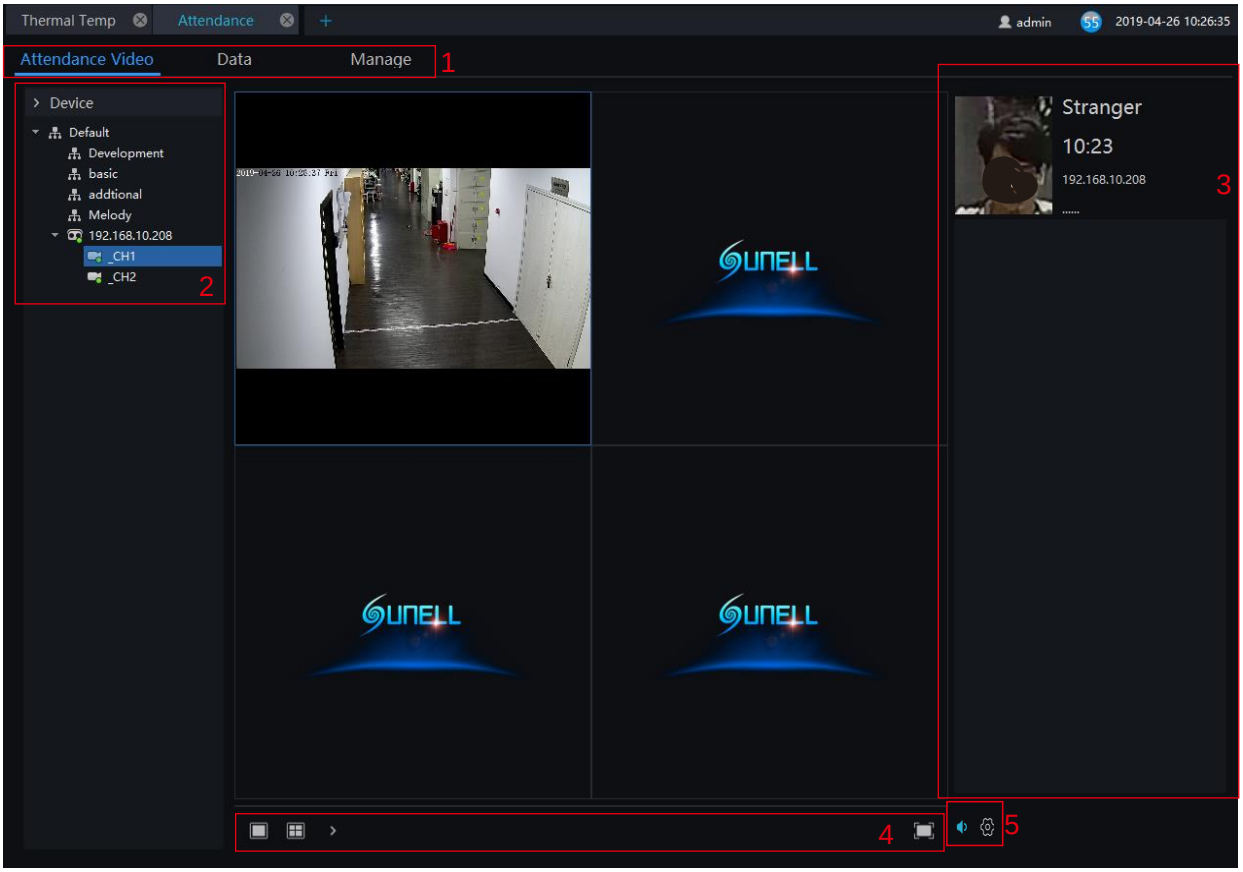
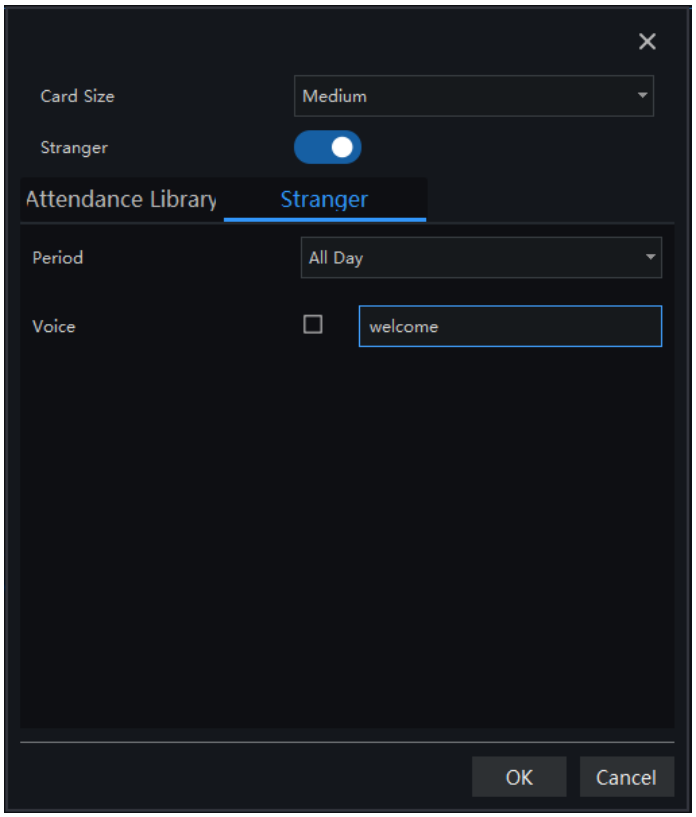


Table 26-1 Attendance

No.	Function	Description
1	Guide of attendance	Choose live video, data and management of attendance.
2	Group and device list	Show the device and group.

No.	Function	Description
3	Snapshot of attendance	Basic information of snapshot.
4	Video layout	Switch layout mode.
5	Audio/Setting	Open or close audio/set card parameters.

Figure 26-2 Car parameters



26.1 Attendance video

Procedure：

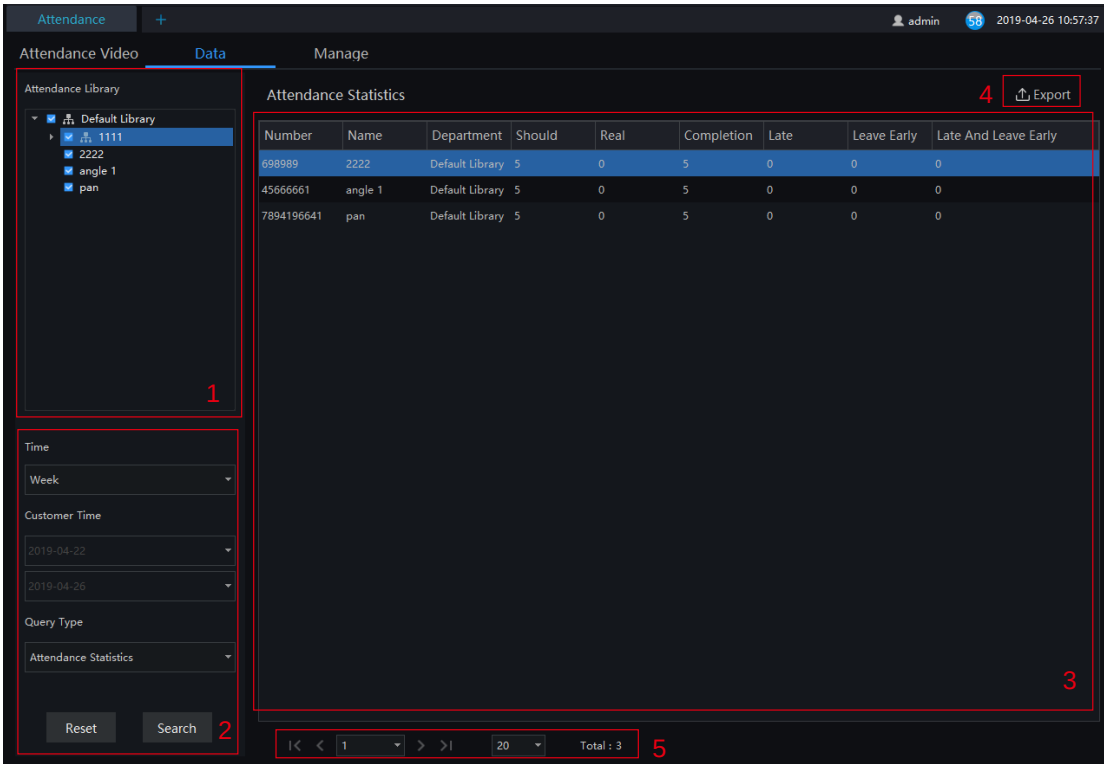
Step 1 Choose face detection cameras to show live video.

Step 2 Camera snapshot the person who is passing through the designated area.

Step 3 The Results that compare with pictures of libraries show at area 3.

26.2 Attendance Data

Figure 26-3 Attendance data



Procedure:

Step 1 Select personnel of library.

Step 2 Choose time or set customer time.

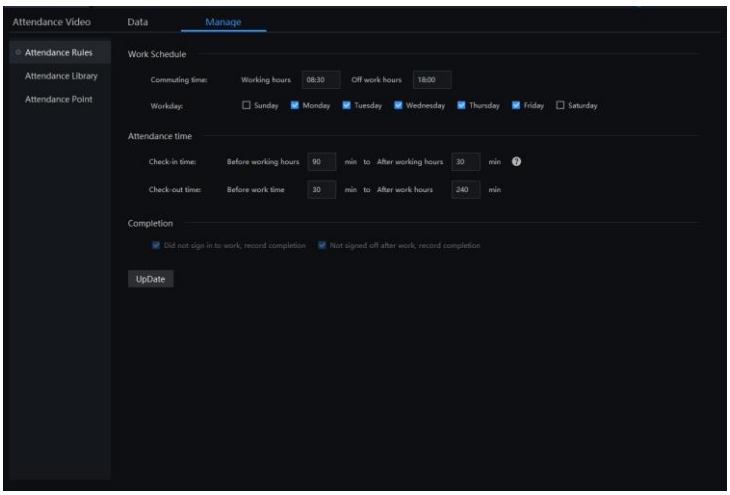
Step 3 Select query type; click “Search” to query.

Step 4 Result show in area 3.

Step 5 Click “Export” to export the result.

26.3 Attendance manage

Figure 26-4 Manage



Procedure：

Step 1 Set the attendance rules, such as work schedule, attendance time and completion.

Step 2 Add face library to attendance library, or remove the attendance library.

Step 3 Enter face library to add new personnel to library.

Step 4 Add or delete the attendance point. Edit the previous libraries.

Figure 26-5 Attendance library

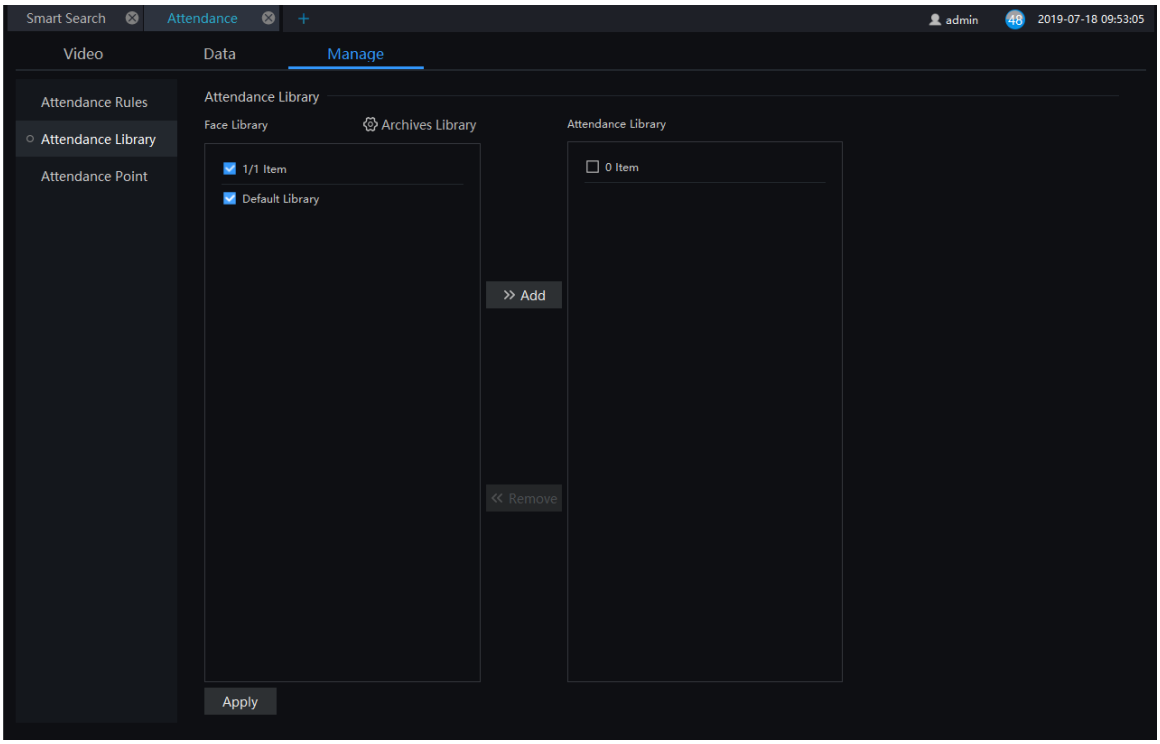
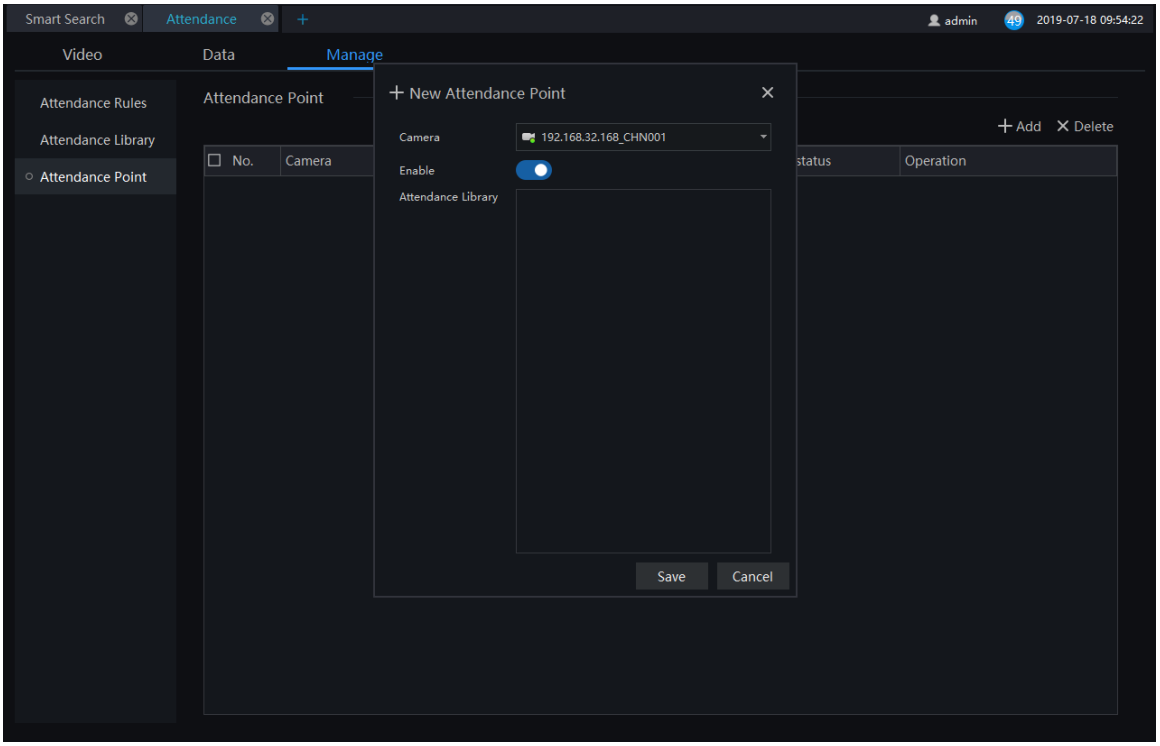


Figure 26-6 Attendance point



27 Health Archives

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

NOTE

This function only supports body temperature cameras.

27.1 Arrchives Manage

Figure 27-1 Health archives

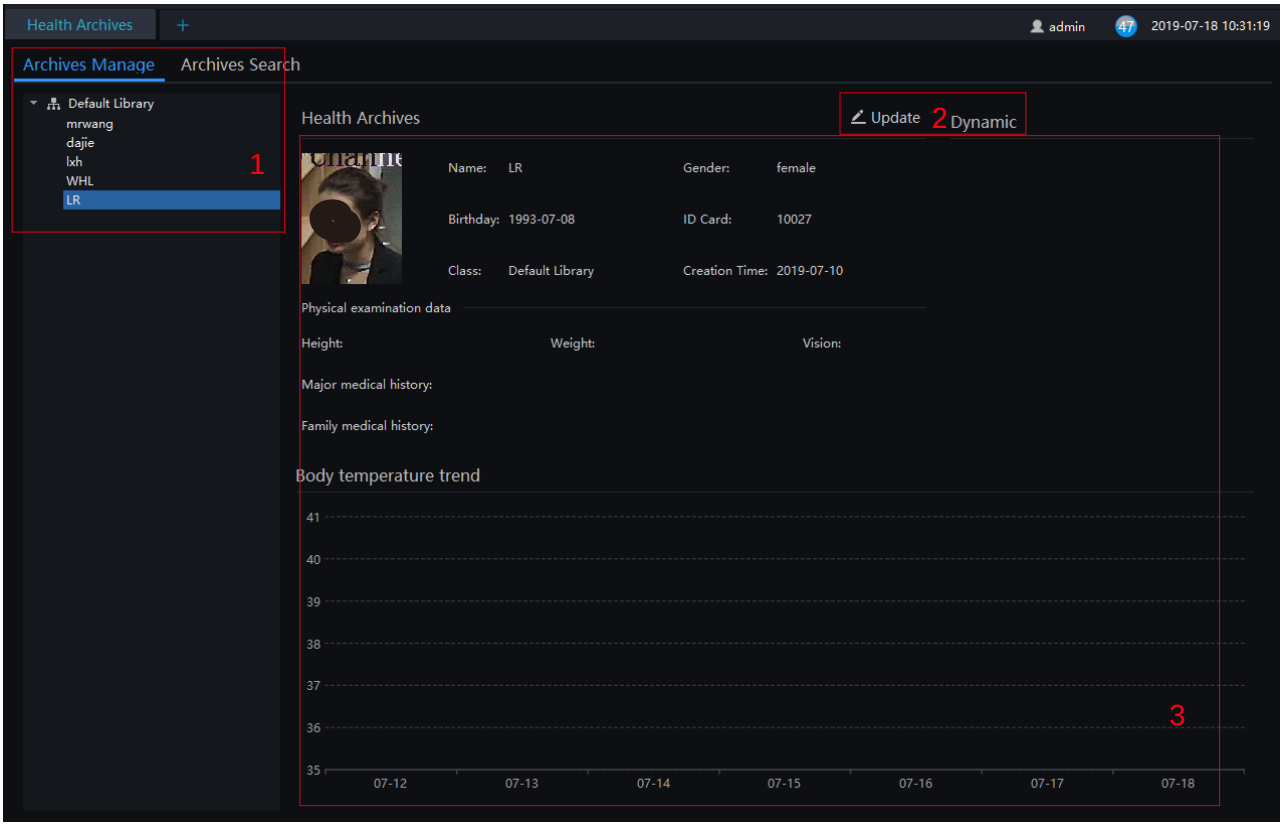


Table 27-1 Health archives

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	Information of personnel, trend of temperature.

27.2 Archives Search

Procedure：

Step 1 Input the name.

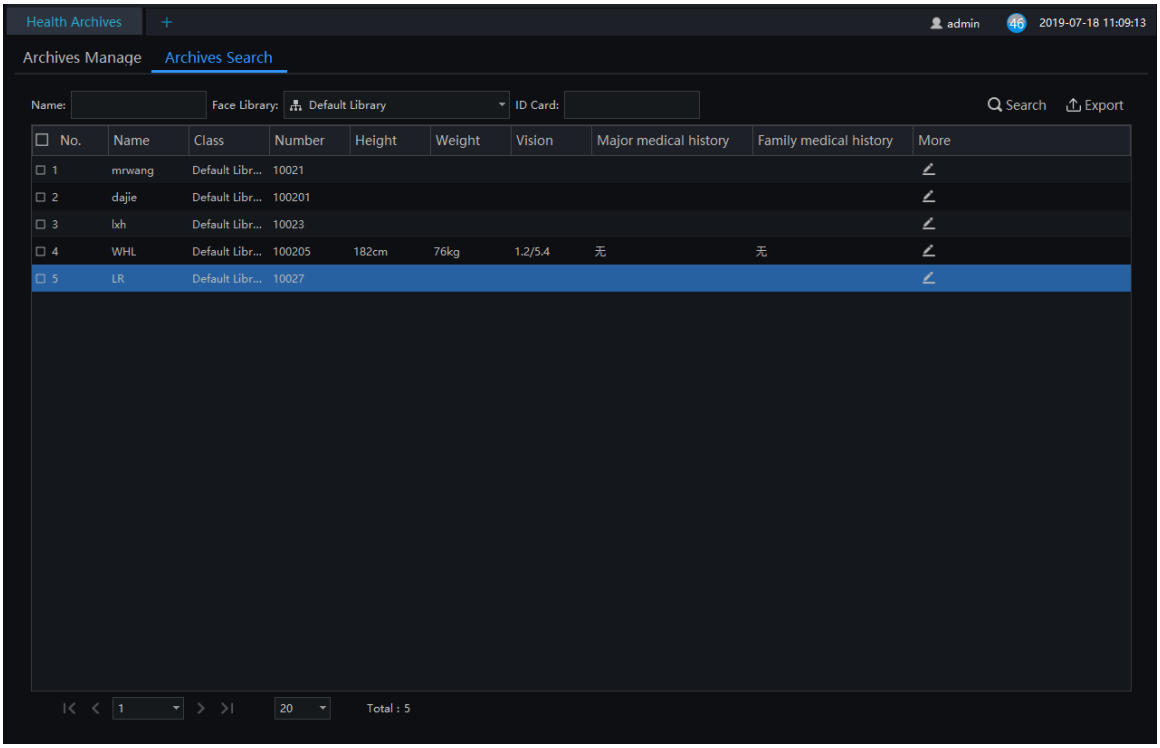
Step 2 Select the face library.

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 27-2 Archives search



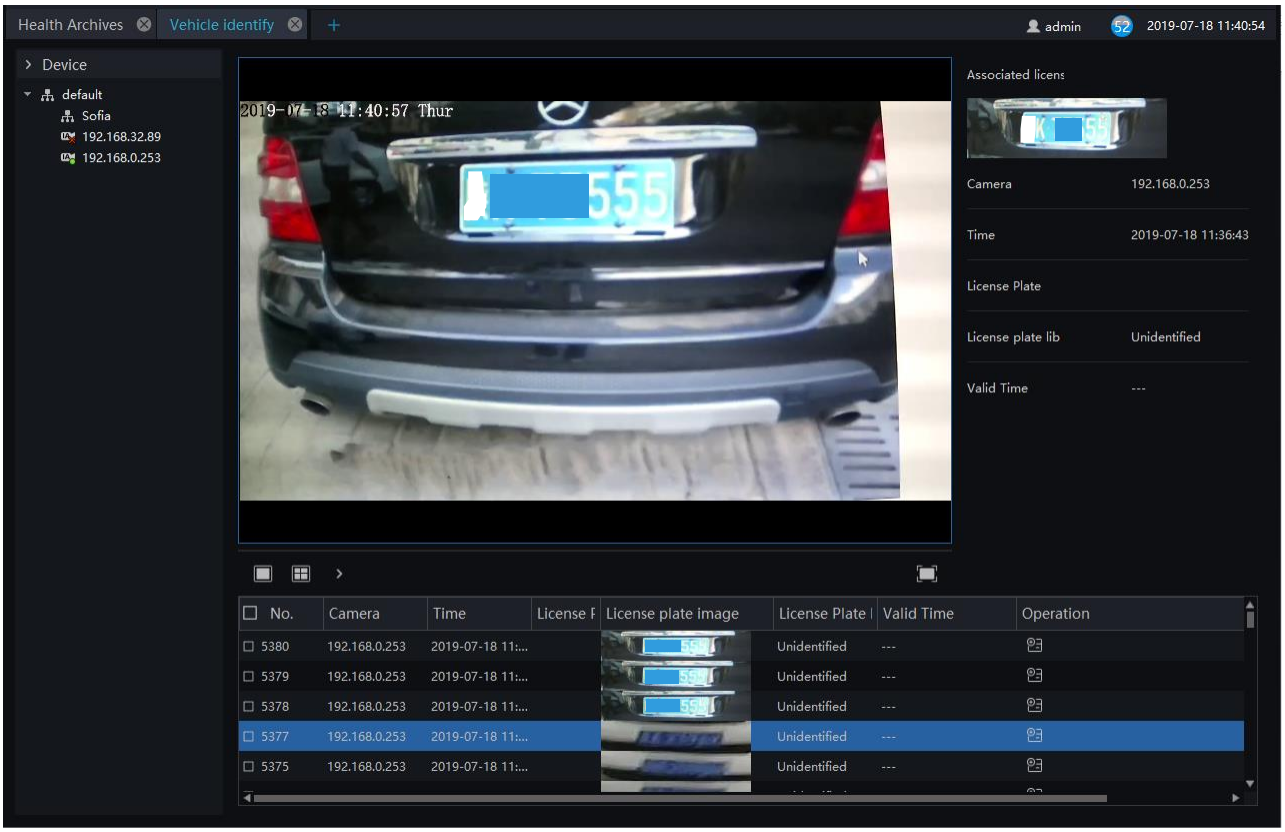
28 Vehicle Identity

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

NOTE

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.