Tiandy

Easy7 VMS User Manual



ISO 9001:2008
ISO 14001:2004

Thank you for choosing our products.
Please read the User Manual carefully before using this product.
This user manual will provide you with instructions for correct installation and operation.

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Preface

This user manual is based on video surveillance system. Provide a brief function description for the system to help users understand the operation process of the system.

The purpose of this document is to ensure that the user uses the product properly to avoid danger or property damage. Before using this product, please read it carefully and keep it for future reference. If you have any questions in use, please consult our after-sales service.

Symbolic agreement

For symbols that appear in the document, the description is as follows:

Icon	Instruction
Notice:	Indicates a potential risk that, if ignored, may result in a function that cannot be used properly or an unpredictable result.
Explain:	The expression is the additional information of the text, which is the emphasis and supplement to the text.

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1 Product overview

1.1 Product profile

Video monitoring system is a dedicated application for managing, previewing and operating network monitoring devices based on MacOS and Windows operating systems, which is applicable to a full range of NVR, IPC and other devices. The software can realize grouping management of monitoring points according to different scenes, customize grouping names, conduct real-time video browsing, audio preview, voice intercom and other operations based on equipment, control equipment PTZ, set preset bits and calls, switch video playback between custom groups, support front-end and local video playback, and control playback through the timeline. At the same time, video files can be downloaded to the client. The software has rich video surveillance business functions and is suitable for various video surveillance scenarios.

1.2 Product highlights

- Comprehensive function

It provides abundant management and operation functions for small and medium-sized monitoring systems, such as Live view control of audio and video, retrieval and playback of historical video data, reception of alarm information, linkage disposal, etc.

- Strong extensibility

Video monitoring software capable of integrated management of NVR/IPC.

1.3 Update instructions

See the update instructions at the time of software release for details.

1.4 Terms and abbreviations

No.

1.5 Precautions for use

- Current monthly largest quantity of human face pictures received from single channel is 1 million. The current upper limit of quantity of human face pictures received from all channels is 5 million. If the quantity exceeds the upper limit, result of intelligent retrieval cannot be acquired.
- Standalone version can support 500 point locations at most at present.
- Present screen supporting 3,840*2,160 (4K) resolution at most.
- This platform is not compatible with cameras in sky-eye series cameras at present.
- MAC AIO only supports external microphones.
- As for the equipment added in P2P account number way, audio sampling frequency shall be set to be 8kHz. Other sampling frequency may cause program failure on standalone version, so please use it cautiously.
- As for the same NVR and IPC, video playback and video download exist at the same time. 5 channels at most are supported at present. Otherwise, download failure or equipment overload will be reminder in download process and video playback will fail.
- MAC system authorizes standalone version, such as microphone authority. Restart the standalone version.
- As for MAC version, the Live view in full screen cannot quit from full screen by pressing ESC (unless equipment list is closed).

- Firewall of computer may influence some normal functions of standalone version. Please add white list or close firewall.

2 Login and Configuration

During network access, in order to protect the security and privacy of personal accounts and improve the security of monitoring, please set the login password and prevent others from logging in the device to obtain monitoring data.

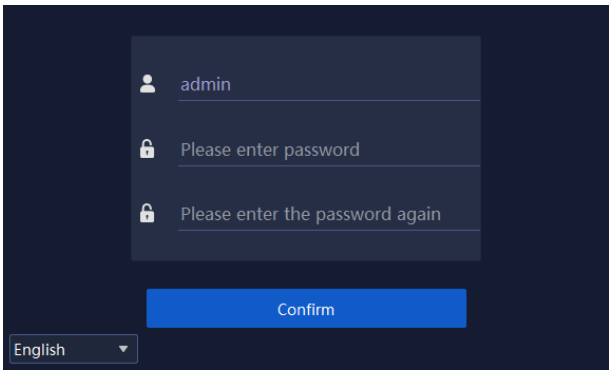
2.1 Software login

Premise:

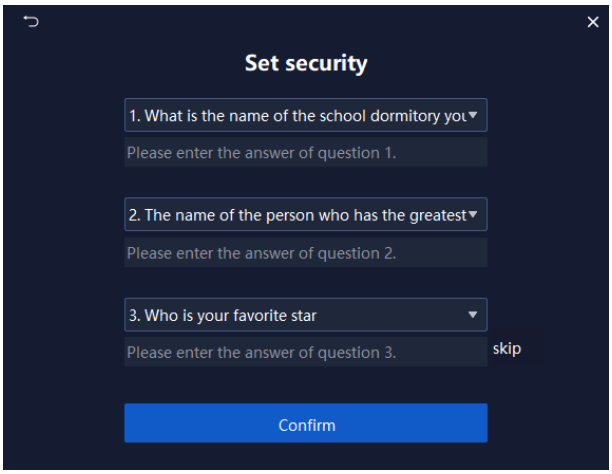
The VMS software is installed.

Operation steps:

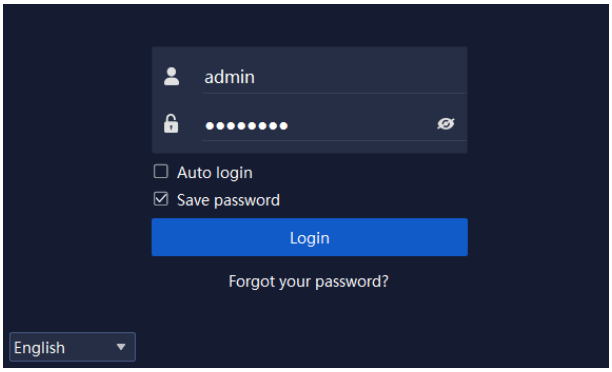
1. Double-click the application icon on the desktop to enter the system login interface. You need to set the initial password for the first login, as shown in the following figure.



2. After the initial password is set, enter the password protection setting interface, and you can choose to skip, as shown in the following figure.



3. After setting the password protection question or skipping, you can enter the login interface, as shown in the following figure.



Notice:

- In order to protect your personal privacy and corporate data and avoid network security problems, it is recommended that you set a strong password that meets the security specifications.
- In order to improve the security of product network use, the password should be two or more combinations of numbers, letters and special characters, and support 6-32 bits.
- If you do not set the security problem, when you forget the password, you can only uninstall and reinstall the software.

The interface parameters are described as follows:

Parameter	Instruction

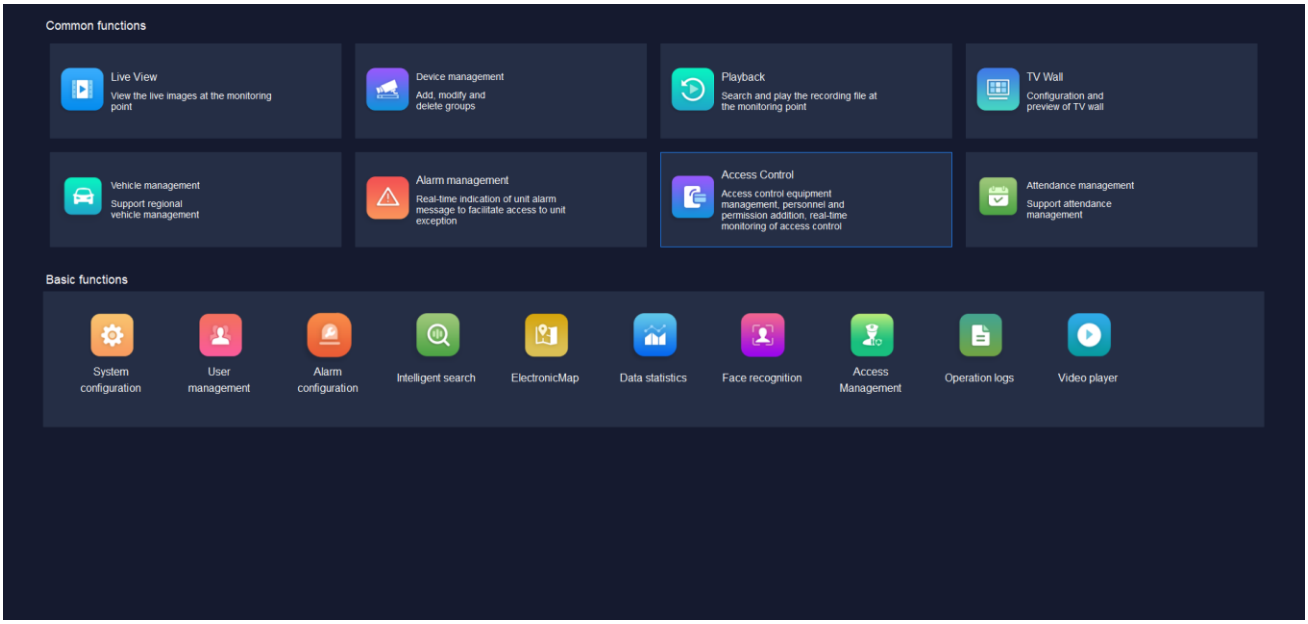
Auto login	Tick and enable the check box. If the user name and password is correct, there’s no need to input user name and password anymore the next time, you may enter automatically. Cancel automatic login: System configuration -> Common Settings->Login Settings->Automatic Login Software.
Save password	Tick and enable the check box. If the user name and password is correct, the current password will be saved and it will automatically fill in the password for the next time.
Login	Click and enable it. If the user name and password is correct, you may log in the program.
Forget the password	Click enable and click to enter the password verification page. After the password security question is successfully verified, you can re-enter the initial password setting page to set the password.
English	Support shifting between multiple languages.
×	Click and enable it. Click to close login interface.

2.2 Homepage framework introduction

Introduce the home page interface parameters and function modules.

Operation steps:

1. Enter the correct user name and password in the platform registration and login interface, and click [Login] to enter the main program interface of the platform. The default grouping of the Home page is shown in the following figure.



The functional parameters of the module are described as follows:

Module name	**Instruction**
Live view	View the live images at the monitoring point.
Equipment management	Add, modify and delete groups.
Video playback	Search and play the recording file at the monitoring point.
TV Wall	Configuration and preview of TV wall.
Vehicle management	Support regional rehicle management
Alarm management	Real-time indication of unit alarm message to facilitate access to unit exception.
System configuration	Typical operation on client configuration.
User management	Manage client users in a unified way, and add, edit, delete and configure permissions.
Alarm configuration	Coordinated configuration of various alarms
Intelligent search	Retrieve the received intelligent analysis information, such as face

	retrieval.
Electronic Map	Management and operation function of electronic map.
Data statistics	The total amount, proportion and trend of data are displayed through statistical charts and lists.
Face recognition	Management and distribution of face database.
Access Management	Bayonet preview and information query
Operation logs	Query the operation log of the system to understand the usage of the system.
Video player	Local video files can be played.
Access Control	Access control equipment management, personnel and permission addition, real-time monitoring of access control.
Attendance management	Support attendance management

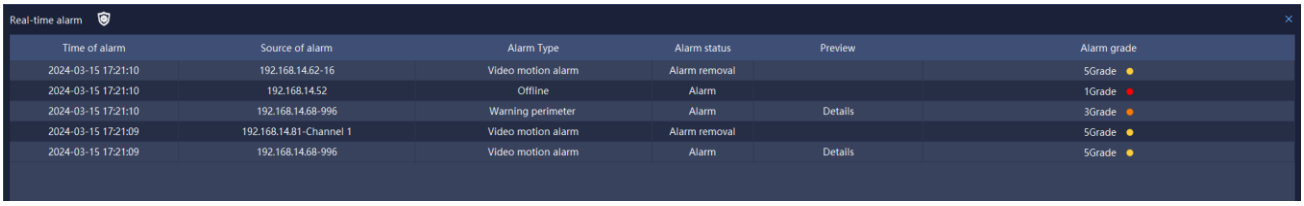
2.2.1 Real-time alarm

Premise:

The device has been added to the client software, and relevant alarms, such as intelligent alarm and mobile alarm, are configured on the device. When an alarm occurs on the device, the real-time alarm will push the alarm information.

Operation steps:

1. Click the "" button in the upper right corner of the interface to display the real-time alarm information, as shown in the following figure.



2. Click " " to enter the alarm setting function module interface. For details, please refer to Chapter 8 Alarm Setting.

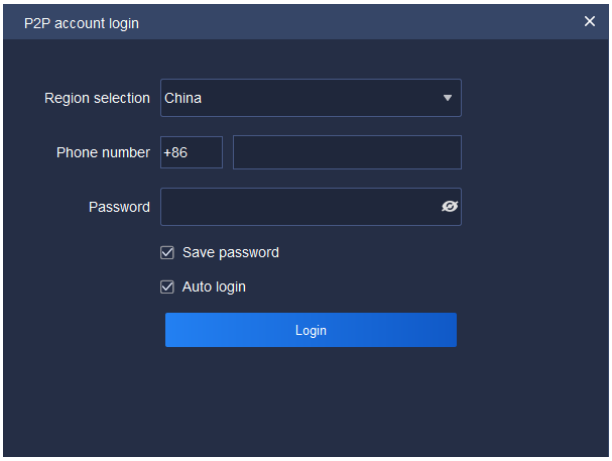
2.2.2 P2P Account Login

Premise:

You have registered an account in the APP.

Operation steps:

1. After entering the interface, click the "Not logged in" button in the upper right corner, and the [P2P account login] interface will pop up, as shown in the following figure.



2. Enter the P2P account and password to log in to the P2P account. Some regions support mobile phone number or email account registration, please choose according to the actual situation.

3. After successful login, automatically synchronize the device information under the P2P

account to the cloud device. Operations such as adding, deleting and sharing devices on the APP will be synchronized and prompted.



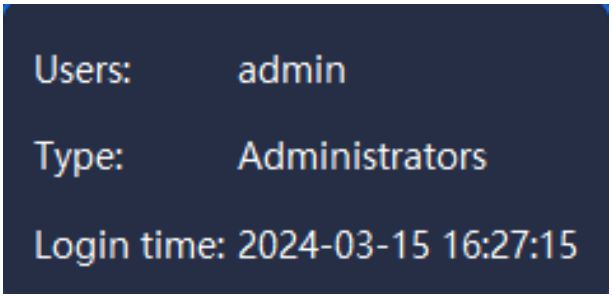
Notice:

- The P2P account synchronization device does not support modification and deletion operations on the client.

2.2.3 Other button operations

Operation steps:

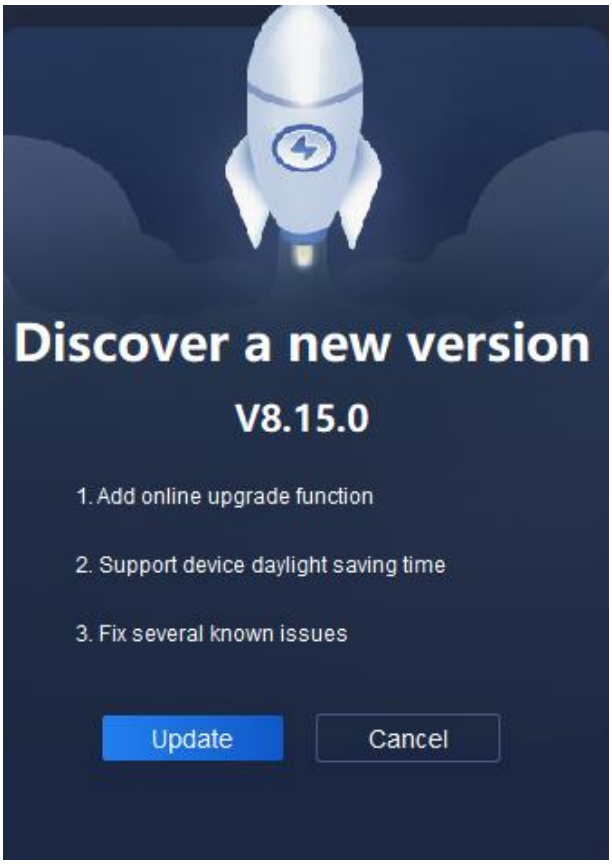
1. Click the "" button in the upper right corner to display the current login status, as shown in the following figure.



2. Click the "" button in the upper right corner to display the user manual and version information. Select [User Manual] or [Version Information] to jump to the corresponding file.

3. Click the "" button in the upper right corner to display the version information and date.If a new version needs to be upgraded and updated, the icon will change to " ".

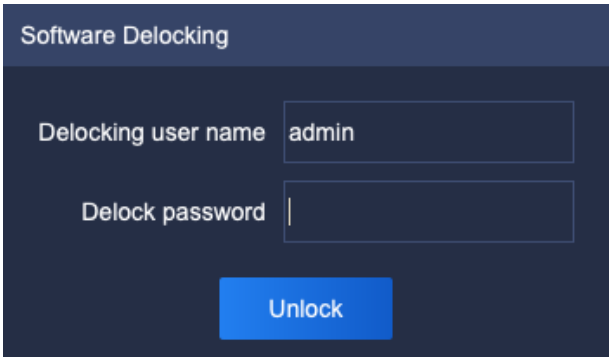
Click the icon to pop up an interface to prompt the new version.After clicking "Software Update", the update interface will pop up, as shown in the figure below. Follow the prompts to upgrade to the new version.



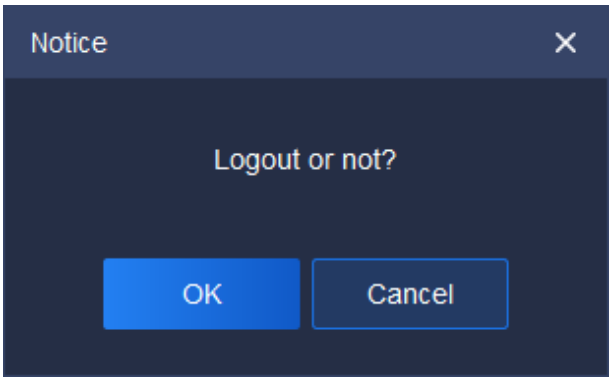
4. When the mouse slides over the "" button in the upper right corner of the interface, the current CPU occupancy and memory occupancy will be displayed, as shown in the following figure.



5. Click the "" button in the upper right corner of the interface to lock the screen. After entering the correct unlock password (i.e. login password), the screen will be unlocked, as shown in the following figure.

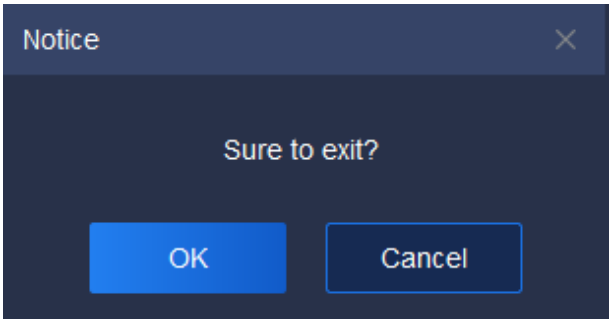


6. Click the "⏻" logout button in the upper right corner of the interface to pop up a logout prompt box; click [OK] to exit the current platform and return to the login interface; click [Cancel] or "✕" in the upper right corner of the prompt box to exit the current prompt box, as shown in the following figure.



7. Click the "—"button in the upper right corner of the interface to minimize the program; click the"❐/☐/⛶ "button in the upper right corner of the interface to restore/maximize/full-screen program; click the "✕" button in the upper right corner of the interface to exit the program.

8. To ensure that the user closes the program by mistake during use, when clicking the "✕" button to exit the program, a prompt box will pop up to confirm whether to exit the program, as shown in the following figure.



9. If "✕" is clicked by mistake, click "Cancel" to return to previous operation interface; if you are sure to quit the system, click "OK" to quit.

Explain:

- Only accounts with [System Lock Permission] and [System Unlock Permission] can be locked and unlocked.
- The current system time is displayed in the upper right corner of the interface.
- The navigation menu bar at the top of the interface can be separated from the main interface by dragging the menu, and can also be exchanged by dragging.
- Interface function items are divided into common functions and basic functions. The module icons in the basic function area and the common function area can be dragged to each other, and the user can select the common function for use.

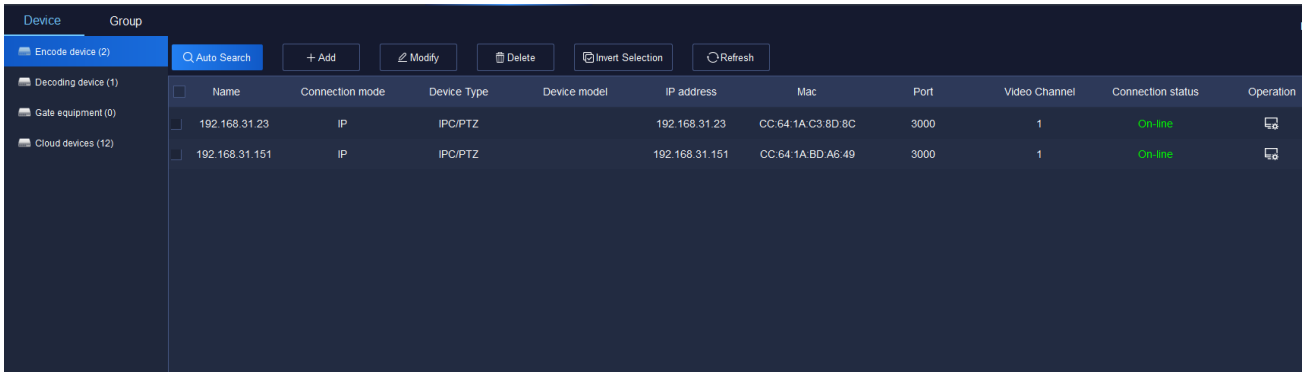
3 Equipment management

Add, delete, modify and group devices.

3.1 Encode device

Operation steps:

In the Equipment Management interface, click Coding Equipment to enter the Coding Equipment interface, as shown in the following figure.



Parameters related to the interface are described as follows:

Parameter	Instruction
Auto Search	Automatically search for devices under the same network segment, batch addition supported.
Add	Manually add encode device, support IP method, Standard domain name method, EasyDDNS method , P2P direct connection method, P2P account number method to add device.
Modify	Modify information of already added device.
Delete	Delete already added device, batch deletion of device supported.

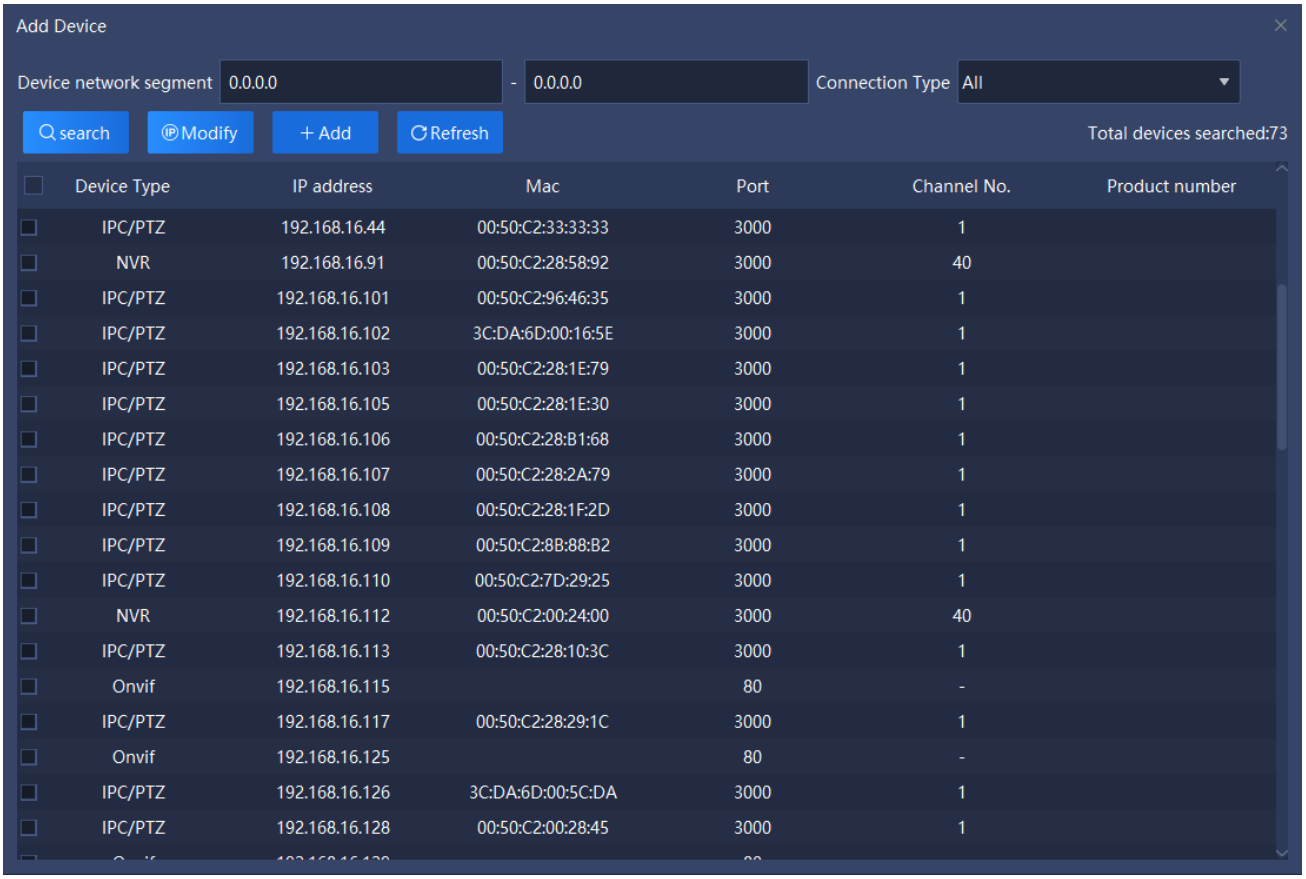
Output	Select the device, and output the device information in three forms of Equipment List, Organization Chart, and Organization Relationship Table.
Import	Click the device, and input the information in Equipment List, Organization Chart, and Organization Relationship Table, which are contained in the file.
Invert Selection	Select all device that are not selected at that moment.
Refresh	Update the status of device at current interface.
Name	Display the name of all already added device.
Device Type	Display the device type of all already added device.
IP Address	Display the IP address of all already added device.
Port	Display the port of all already added device.
Video Channel	Display the maximum number of video channels allowed to play of all already added device.
Connection Status	Display the current connection status of all already added device. The reason will be displayed, if equipment login fails.
Operation	Click and enable it to open the web user-side interface of the device.

3.1.1 Auto search

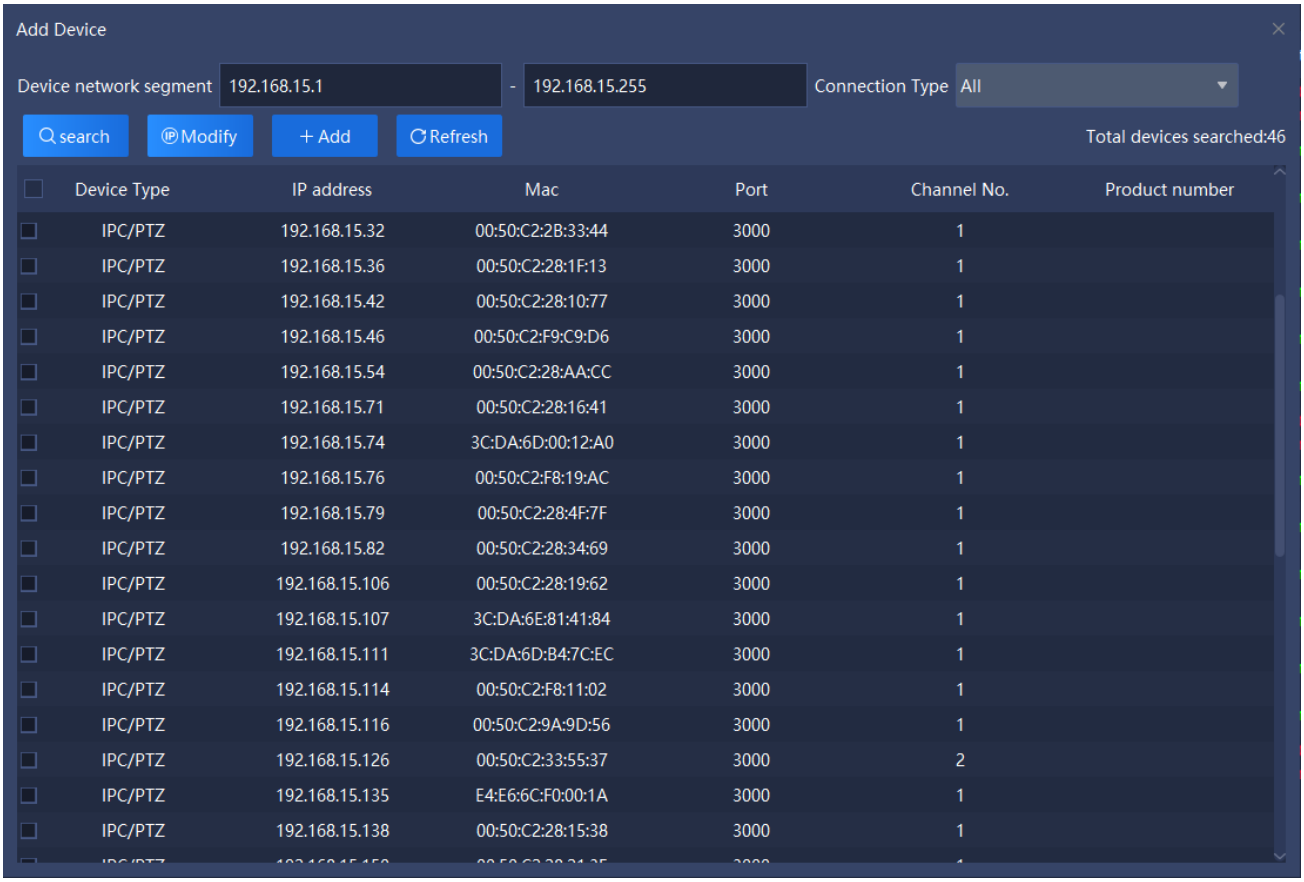
Operation steps:

1. Click the [Auto Search] button to automatically search all devices in the same network segment and pop up the [Add Device] window, as shown in the following

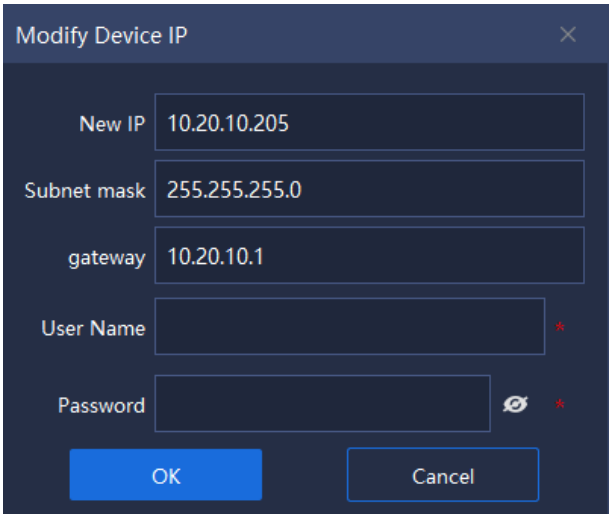
figure.The connection mode can be filtered to display devices with different connection modes, including All, IP and Onvif.



2. Fill in the starting and ending IP in the [device network segment]. You can set the IP range of the search device. When filling in the IP segment, it supports automatic completion and verification. After filling, click [Search], and the devices that can be searched in the IP range of the filled network segment will appear in the search results below, as shown in the following figure.



3. Check one or more devices in the device box in the list, and then click the [Add] button to pop up the [Add Device] window, as shown in the following figure. If you do not enter a name, the device IP is used as the device name.



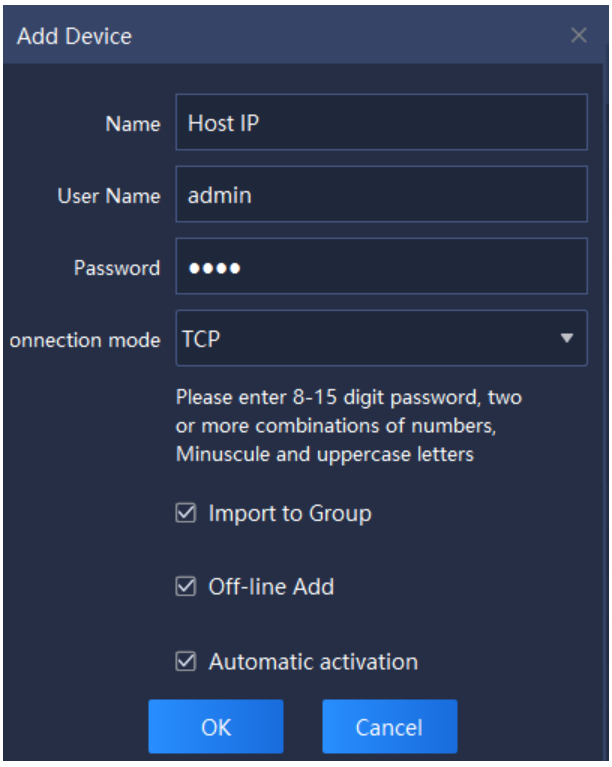
4. You can modify the connection mode of the device, including TCP, MCAST (SRTP), and MCAST (RTSP). Some devices do not support multicast. When MCAST (SRTP) and

MCAST (RTSP) modes are selected, a prompt will pop up and video preview cannot be performed.

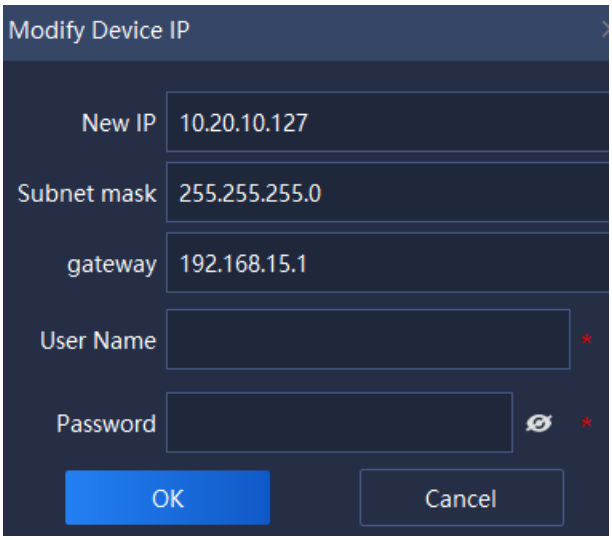
5. If [Add Offline] is checked, the device that is not online or has an incorrect user name and password will also prompt successful addition, and the device that failed to be added will be displayed in the device list; if [Add Offline] is not checked, the number of devices that were added successfully or unsuccessfully will be prompted, and the device list will not display the device that failed to be added.

6. Select Import to Group to automatically import the device into the group. Otherwise, you need to manually add it to the group.

7. If an unactivated device is added, check [Automatic Activation] to activate the device. After activation, the device IP and the computer IP are in the same network segment. If the computer has multiple network cards, you need to select them.



8. You can modify the IP of the discovered device. Select the device to be modified in the device list, and click [Modify] to pop up the [Modify Device IP] window. Enter the new IP address and the correct user name and password, and the modification will be successful and the [Prompt] window will pop up, as shown in the following figure.



9. Click the [Refresh] button to refresh the information of all devices in the search results list.

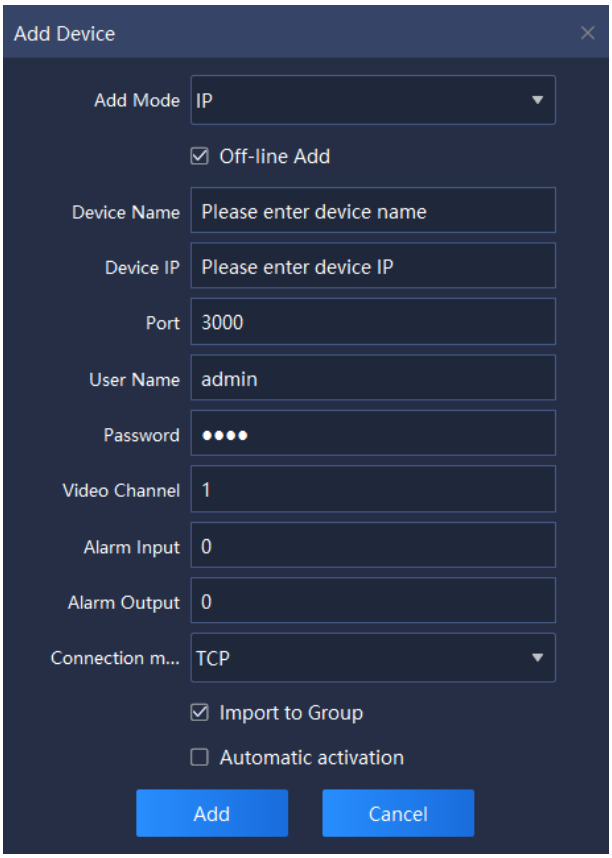
Explain:

- Device search results are displayed in order of IP.
- When MCAST (SRTP) and MCAST (RTSP) modes are selected, different multicast addresses shall be configured for different devices and different code streams of the same device, otherwise cross-screen phenomenon will occur.
- When adding devices in batches, it is recommended to set a unified user name and password for multiple devices. If the user name and password information are wrong, it will lead to the failure of adding some devices.

3.1.2 Add

Operation steps:

1. Click the [Add] button to enter the [Device Add] interface, as shown in the following figure.



The interface parameters are described as follows:

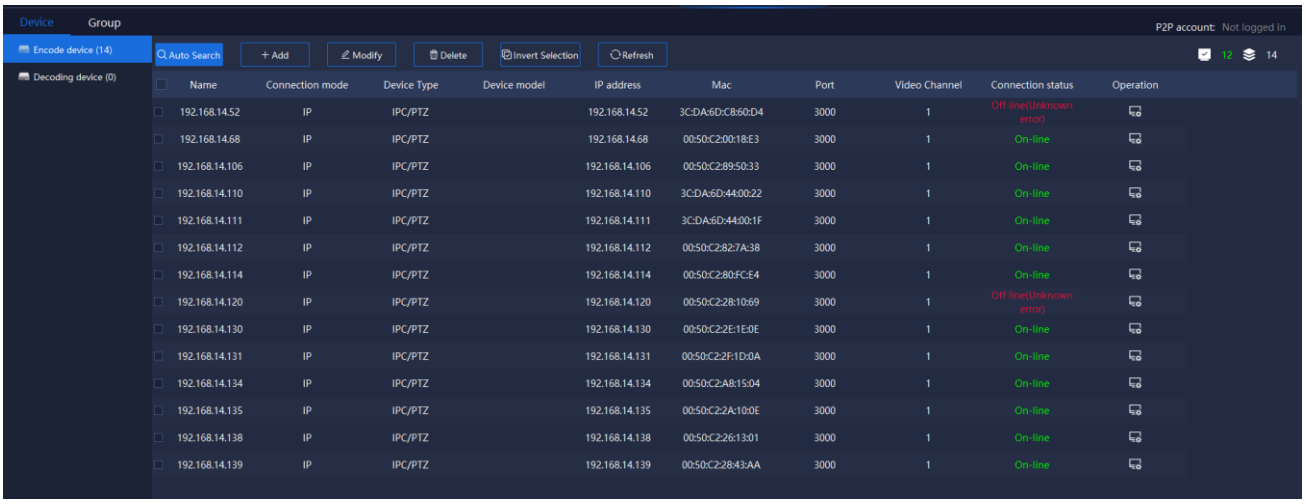
Parameter	Instruction
Add mode	Select different add type: IP type, Standard domain name type, EasyDDNS type ,P2P direct connection type and onvif type.
Off-line Add	Check to add online or offline devices. Only online devices can be added after the check is removed.
Device Name	Enter a device name. (There is an illegal character limit when

	adding a device name. The following characters are not allowed to be entered ~! # $% ^ () = [] { }, ":; '< >? * ` +/\ &)
Device Type	This is required when the standard domain name mode is selected.
Device IP	Device IP. This field is required when IP and Onvif are selected.
Device ID	Device ID number. This item is required to be filled in when selecting P2P direct connection mode.
DNS	Domain name of device. This is required when selecting the standard domain name and EasyDDNS mode.
Port	The communication port of the device. Onvif defaults to 80. IP and standard domain name defaults to 3000.
User Name	The login user name for the device.
Password	The login password for the device.
Video Channel	The total number of video channels owned by the device.
lmport to Group	After checking, the system automatically adds the device to the custom list and creates a group (the same as the device name).
Alarm Input	After checking, the system automatically adds the device to the custom list and creates a group (the same as the device name).
Alarm Output	Number of alarm output ports owned by the device.
Connection Mode	Select TCP, MCAST (SRTP), or MCAST (RTSP) modes.
Automatic Activation	If you add a device that is not activated, you can check Auto Activate to activate the device.

2. Select the [Add Device] mode in the [Add Device] window, fill in the corresponding

information, and check whether to add a device offline and whether to import a group as required.

3. After entering the correct information, click [Add], and the display shows that the device is added successfully. The added device information appears in the list, as shown in the following figure.



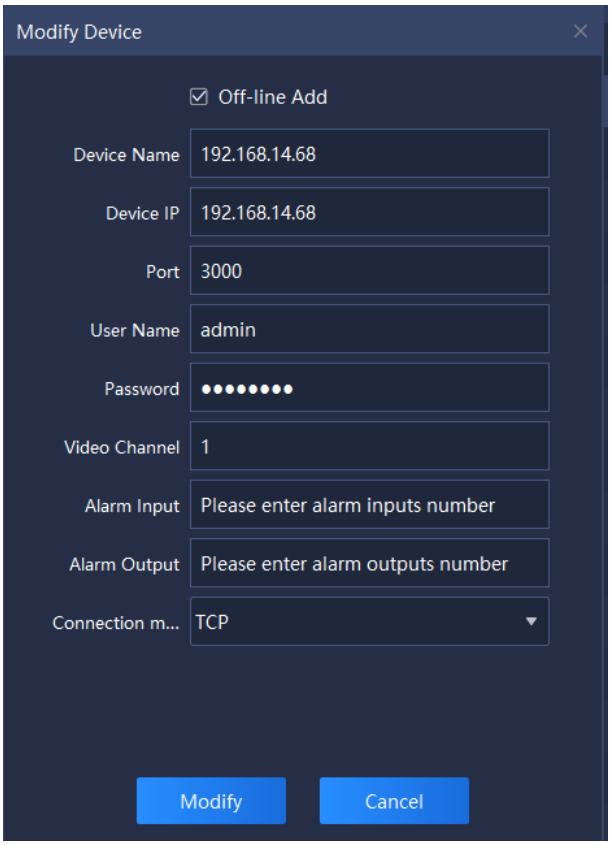
Explain:

- The device connection status is green for online devices and red for offline devices.

3.1.3 Modify

Operation steps:

1. Check the device to be modified in the added device list, and click the [Modify] button to pop up the [Modify Device] window, as shown in the following figure.



2. Click the "Modify" button to show "Modify Successfully".

Notice:

- Only one device can be modified at a time.

3.1.4 Delete

Check one or more devices to be deleted in the list of added devices, click the [Delete] button to enter the [Device Delete] interface, and select [OK] to delete them successfully.

3.1.5 Invert Selection

In the list of added devices, check one or more devices that do not need to be operated on the current page, click the [Invert Selection] button, and select all devices except

those in the currently selected range to perform the [Invert Selection] operation on the selected devices.

3.1.6 Refresh

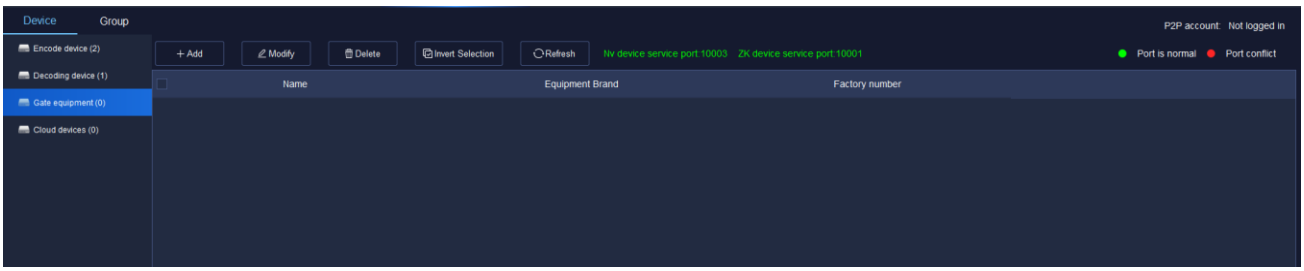
Click the [Refresh] button in the [Device List] to refresh the information of all devices on the current interface.

3.2 Decoding device

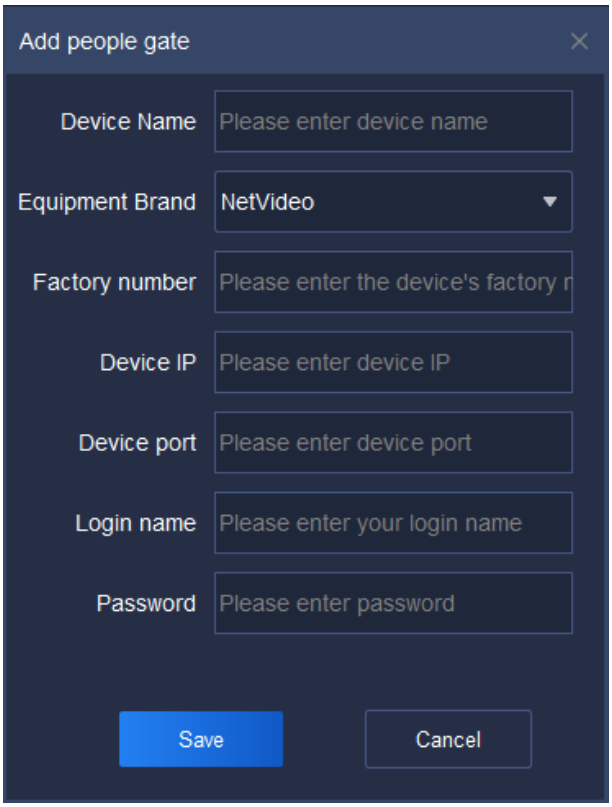
All operations are the same as the coding equipment management. Refer to 3.1 Coding Equipment.

3.3 Gate Equipment

Click [Gate Equipment] on the [Equipment Management] interface to enter the gate equipment interface, as shown in the following figure.



Click the [Add] button to add the man gate equipment, as shown in the following figure.



Operation steps:

1. The equipment serial number is the factory number of the personnel gate equipment, which can be obtained from the web interface of the personnel gate equipment [Configuration-System Settings-System Maintenance-System Upgrade], such as ID06021810909222019 00XXX.



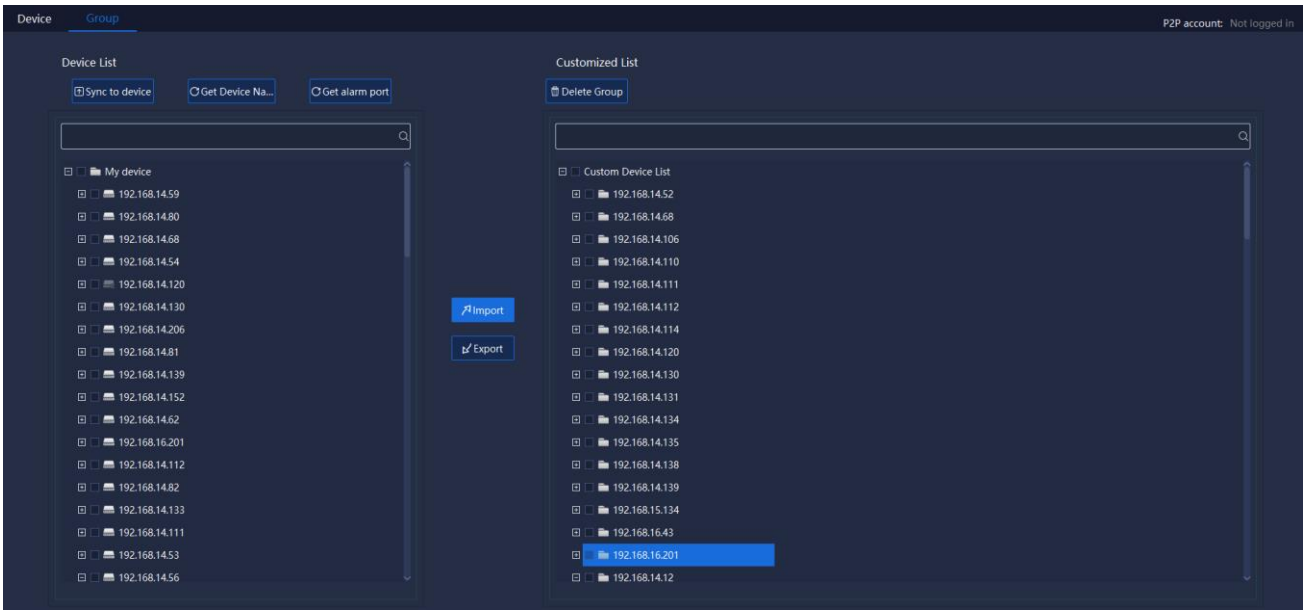
2. When connecting the gate equipment, it is necessary to note that the port number is 80.

3. If the device is configured as a PAD, you need to enter the PAD interface [Main Menu-Communication Settings-Network Settings] to change the server address to the IP address of the computer where the client is located, so that the PAD and the client can communicate.

4. Enable the intelligent application picture collection function in the client [System Settings-Intelligent Application] to ensure that the client can receive the pictures of the human gate equipment.

3.4 Group

In the [Device Management] interface, enter the [Group Management] interface, as shown in the following figure.



The interface parameters are described as follows:

Parameter	Instruction
Sync to device	Set the channel name on the local device tree synchronously to the front-end channel.
Get Device Name	Obtain the front-end channel name of the online channel in the device list; if the channel name is modified locally, clicking [Obtain Name] will not obtain the front-end channel name.
Get alarm port	Obtain the alarm input and output information of IPC and NVR equipment.
Delete Group	Tick and select a Customized list group, click to delete the group and delete the sub-groups and channels in the group at the same time.
Import	Tick and select the channel in left Device list, select a group in right Customized list, click to import the device to the customized device list.

Export	Tick and select the channel in Customized list group, click to export that channel.
	Quick search of channel name, input key information and the channel name including that key information will be displayed in Device list and Customized list.
	Sync to device, move the mouse to Device list channel node, click synchronize the channel name to the front-end channel.
	Get the name, move the mouse to Device list channel node, click to get the front-end channel name of single channel.
 (in Device list)	Modify channel name, move the mouse to Device list channel node, click to modify the channel name
 (in alarm list)	Upon acquiring the alarming port information of the present equipment list channel, click to modify the name, No. and descriptions of alarming port.
	Add group, move the mouse to Customized list group, click to add the sub-group of the group.
 (in Customized list)	Modify watch point group, move the mouse to Customized list group, click to modify the name of the watch point group
 (in Custom List Grouping)	Delete group, move the mouse to Customized list group, click to delete the group, and delete the sub-groups and channels in the group at the same time

Explain:

- The information in the [Equipment List] is the information of all the added encoding equipment and their channels automatically generated by the system.
- [User-defined list] User-defined grouping information.
- Users can add the encoding equipment and its channel in [Equipment List] to [Custom Group] according to their own needs, which is convenient for users to manage.

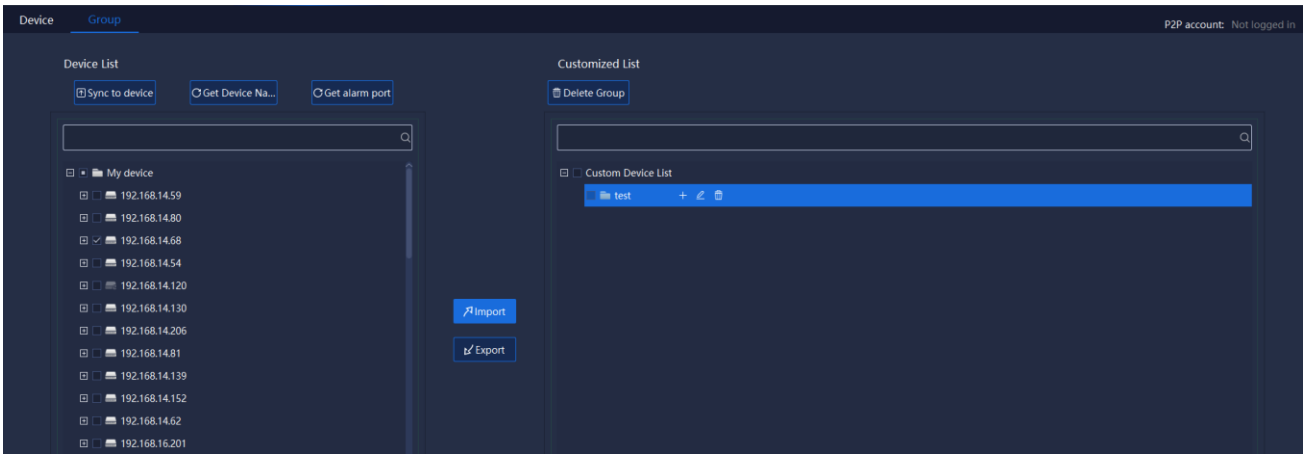
3.4.1 Add device to custom groups

For example, add all channels of the device 192.168.14.68 in [Device List] to the custom group [Test Group] in [Custom List].

Operation steps:

1. Check all channels of 192.168.14.68 in [Device List].

2. Select (highlight) the custom group to be added in the [Custom List], as shown in the following figure.



3. Click "Import" to void and add lines.

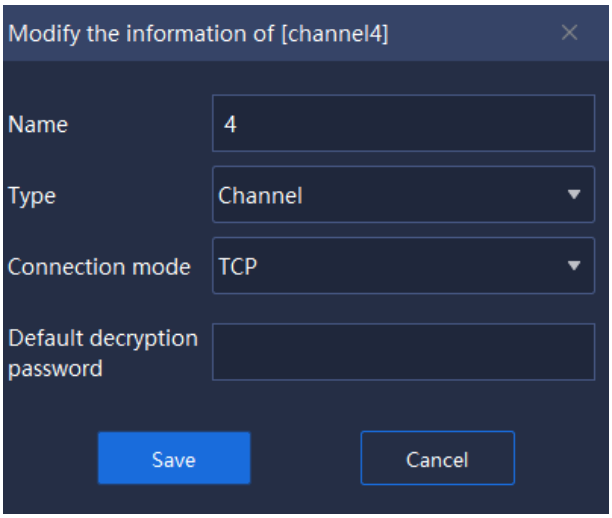
Explain:

- Select the corresponding device channel in the [Custom Group], and click the [Move Out] button to delete the device channel from the custom group.

- All modules except the device management module load the custom device list, and the user needs to add the device to be used to the custom list.

3.4.2 Modify the channel name

In [Device List], slide the mouse to the corresponding channel name and click "✎" to modify the channel information and set the decryption password of the encrypted channel, as shown in the following figure.



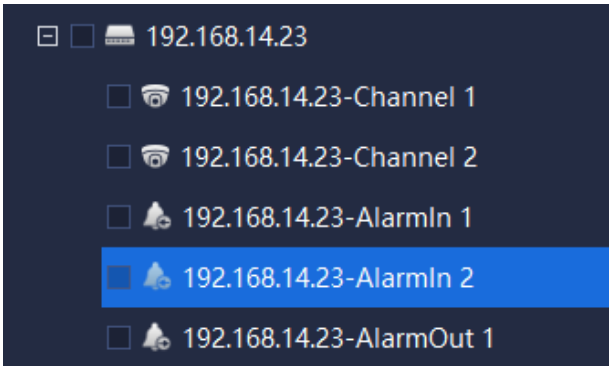
The interface parameters are described as follows:

Parameter	Instruction
Name	Modify the name of the current channel.
Type	Support channel and bayonet.
Connection mode	Modify the connection mode to support TCP, MCAST (RTSP) and MCAST (SRTP).
Default decryption password	Set the video channel encryption password here.

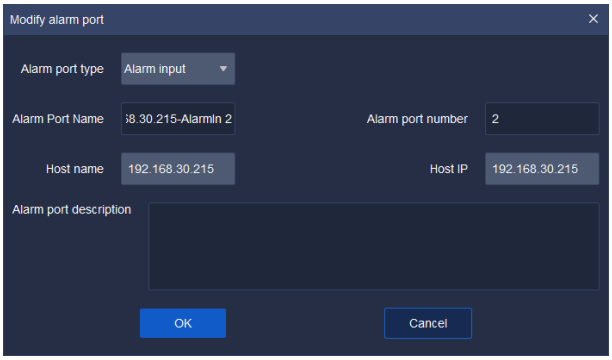
3.4.3 Get and modify the device alarm port

Operation steps:

1. Select the corresponding device in the [Device List], and click the [Obtain Alarm Port] button. The alarm port will appear under the device, as shown in the following figure.



2. Select the corresponding alarm port and click "" to pop up the [Modify Alarm Port] window, as shown in the following figure.



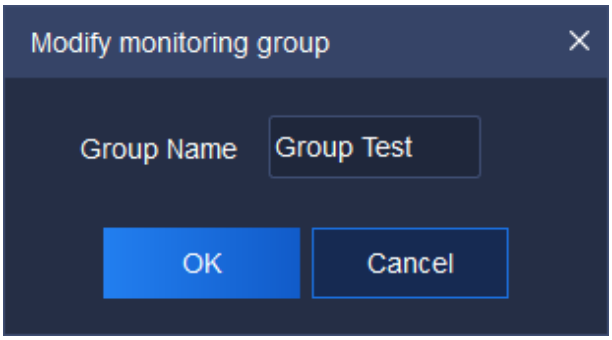
The interface parameters are described as follows:

Parameter	Instruction
Type of alarming port	Obtain the information about the present alarming port and support two types of ports, i.e., alarm input and alarm output.
Name of alarming port	Name of alarming port can be self-defined.

No. of alarming port	The No. of alarming port can be self-defined (ensure port No. cannot be repeated).
Host name	Obtain name of the present host automatically. Modify host name by Equipment-> Coding device -> Modify.
Host IP	Obtain the IP of the present host automatically
Descriptions of alarming port	For encrypted channels, the default is to use the set decryption password for decryption.

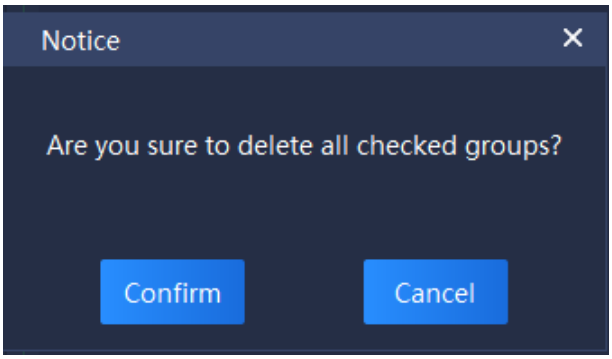
3.4.4 Modify group

Select the list grouping in [User-defined Grouping], and click "✎" to pop up the [Modify Monitoring Point Group] window, as shown in the following figure.



3.4.5 Delete group

Check the list grouping in [Custom Grouping], and click "Delete Grouping" to pop up a confirmation box. After confirmation, you can delete the grouping. Multiple selections or all selections can be deleted, as shown in the following figure.

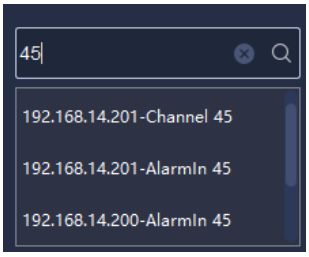

Notice
Are you sure to delete all checked groups?
Confirm
Cancel

4 Live view

View the real-time picture of the monitoring point, and perform live service operation on the monitoring point.

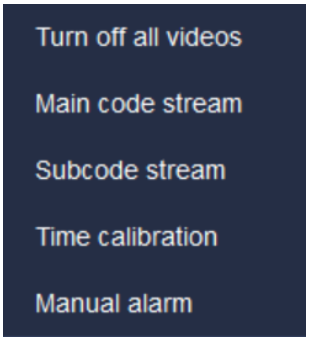
4.1 Custom Device List

Select [Custom Device List] to display all custom grouping lists, and enter information in the [Search Box] to fuzzy search the corresponding channel or port, as shown in the following figure.



4.1.1 Customize the device list with the right-click menu

Right click on [Custom Device List] to pop up a right-click menu, as shown in the following figure.



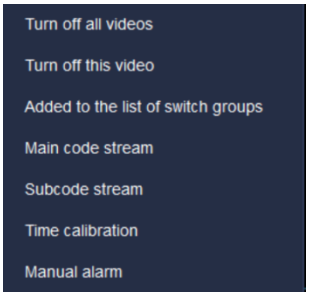
The related Parameters are described as follows:

Parameter	Instruction

Turn off all videos	Turn off all videos connected at that moment.
Main code stream	All the videos in current list are added and played in main code stream mode (as for the channel being played, the playing code stream will not be changed)
Subcode stream	All the videos in current list are added and played in subcode stream mode (as for the channel being played, the playing code stream will not be changed)
Time calibration	Conduct time calibration on on-line devices in all group lists.
Manual alarm	Cancel the current alarm in the channel in video manually.

4.1.2 Device grouping right-click menu

Select a group in Device list and click right key, the right key menu of device group list will pop up, as shown in below figure.



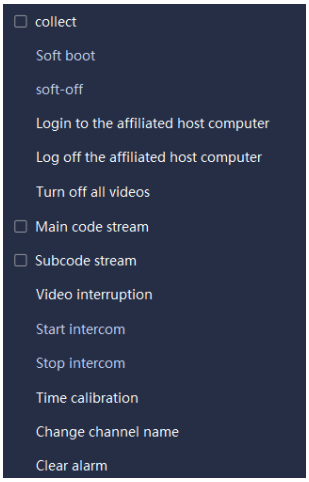
The related Parameters are described as follows:

Parameter	Instruction
Turn off all videos	Turn off all videos connected at that moment.
Turn off this video	Turn off all videos connected in current group.
Added to the list of switch groups	Add selected encode device to automatic switch group list.

Main code stream	All the videos in current list are added and played in main code stream mode (as for the channel being played, the playing code stream will not be changed)
Subcode stream	All the videos in current list are added and played in subcode stream mode (as for the channel being played, the playing code stream will not be changed)
Time calibration	Conduct time calibration on on-line devices in selected group lists.
Manual alarm	Cancel the current alarm in the channel in video manually.

4.1.3 Device channel right-click menu

Select a channel watch point of a device in device list group, click right key, the right menu of device list will pop up, as shown in below figure.



The related Parameters are described as follows:

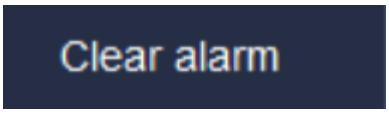
Parameter	Instruction
Collect	Add the channel to [Favorites].
Soft boot	When the device is in the soft shutdown state, click Soft Startup to

	start the device. Suitable for low power consumption series products.
Soft-off	When the device is powered on, click Soft Shutdown to shut down the device. Suitable for low power consumption series products.
Login to the affiliated host computer	Right click on the device channel to restore the connection between the device host to which the channel belongs and the platform.
Log off the affiliated host computer	Right click on a device channel to disconnect the device host to which the channel belongs from the platform.
Turn off all videos	Turn off all videos connected at that moment.
Main code stream	In the channel of login encode device, click this button to connect the main code stream video of the channel.
Subcode stream	In the channel of login encode device, click this button to connect the subcode stream video of the channel.
Video interruption	In the channel connected to video, click this button to disconnect the video of the channel.
Start intercom	In the channel of login encode device, click this button to talk to the video source of the channel. Click this button in the channel of DVR/NVR device, the intercom box "Talking to XXXX" will pop up to start talking with DVR/NVR; click this button in the channel of IPC device, the intercom box "Talking to XXX" will pop up to start talking with IPC device.
Stop intercom	In the channel of login encode device, click this button to stop the

	intercom with video source of the channel.
Time calibration	To conduct time calibration on this on-line device.
Change channel name	Change the name of currently selected channel.
Manual alarm	Cancel the current alarm in the channel in video manually.

4.1.4 Alarm entry port right-click menu

Select the corresponding alarm input port in the group in [Device List], and right click to pop up the context menu of the alarm input port, as shown in the following figure.

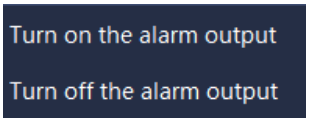


The related Parameters are described as follows:

Parameter	Instruction
Manual alarm cancellation	If the equipment alarm inputs alarm, click "Manual alarm cancellation" to clear the alarm in process.

4.1.5 Alarm output port right-button menu

Choose one alarming output port in group in the equipment list, click the right key and the right key menu of equipment list will pop out, as shown in the figure below.



The related Parameters are described as follows:

Parameter	Instruction
Open/close alarm output	Control the on/off status of alarm output port.

4.2 Video preview window

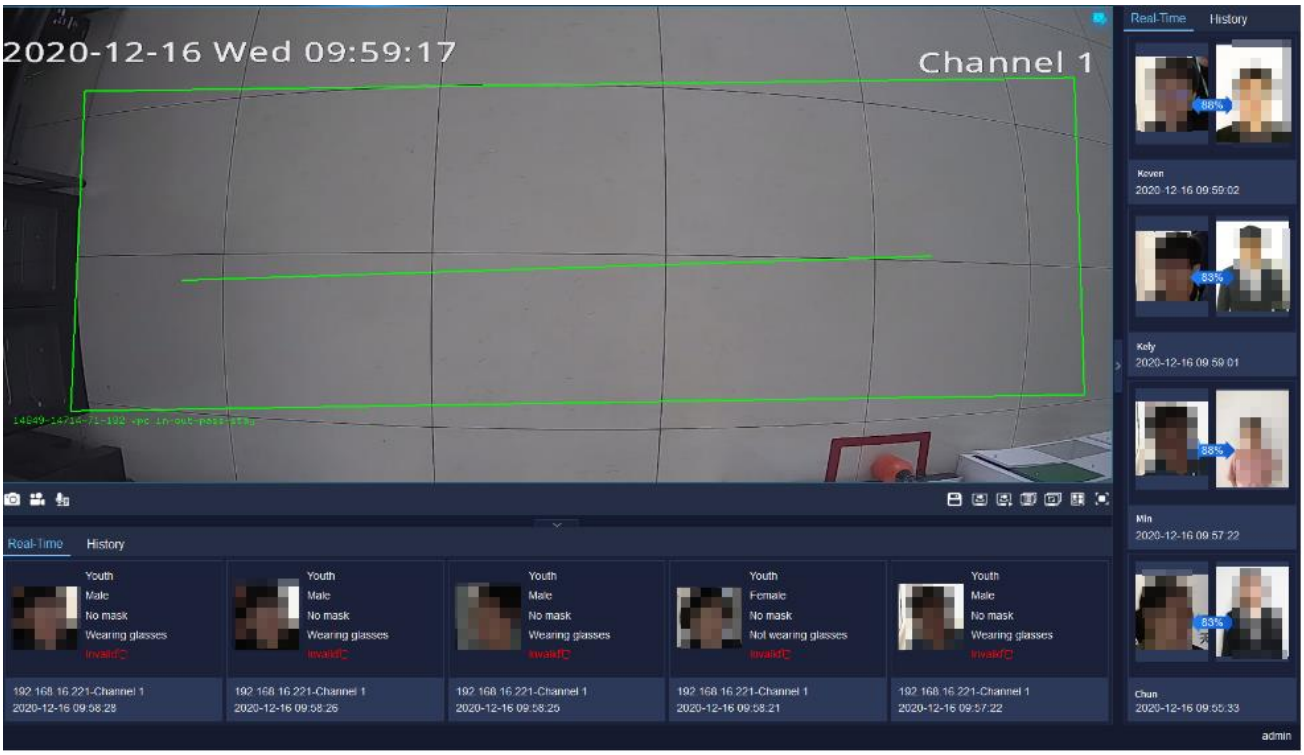
The right side of the [Video Preview] interface is the video preview window. Double-click to maximize it. Double-click again to restore it. When the main video is previewed, the split-screen window supports self-adaptation according to the number of linked videos, and supports real-time video playback by devices added in various ways.

The video played in real time supports watermark by default, and the watermark information displays the current client login user, the computer IP of the client, and the device channel name. The user can configure the watermark display in [System Settings-Video Related].

Notice:

- Only the administrator user of the VMS client can configure and turn off the watermark display.

The target bar below the main video can display face information, age, gender, whether to wear a mask, whether to wear glasses and body temperature. The target bar on the right side of the main video shows similar results compared with the face database (strangers are not displayed), as shown in the following figure.



4.2.1 Video preview window displays the information

When the video is previewed, the lower left status bar of the video supports closing the video, audio preview, snapshot video and instant playback.

The channel name can be displayed in the lower left corner of the main video screen. When the alert is turned on, the alert icon is displayed in the upper right corner of the video window. When it is turned off, the alert icon is cancelled.

Low-power battery series products can display the battery level and the playing time in the upper left corner of the screen, as shown in the figure below.



Click the battery icon to pop up the [Battery Management] interface to switch the power mode of the device, as shown in the following figure.



4.2.2 Video preview window toolbar

When browsing the channel video, you can continue to operate the channel in the lower toolbar of the screen, as shown in the following figure.

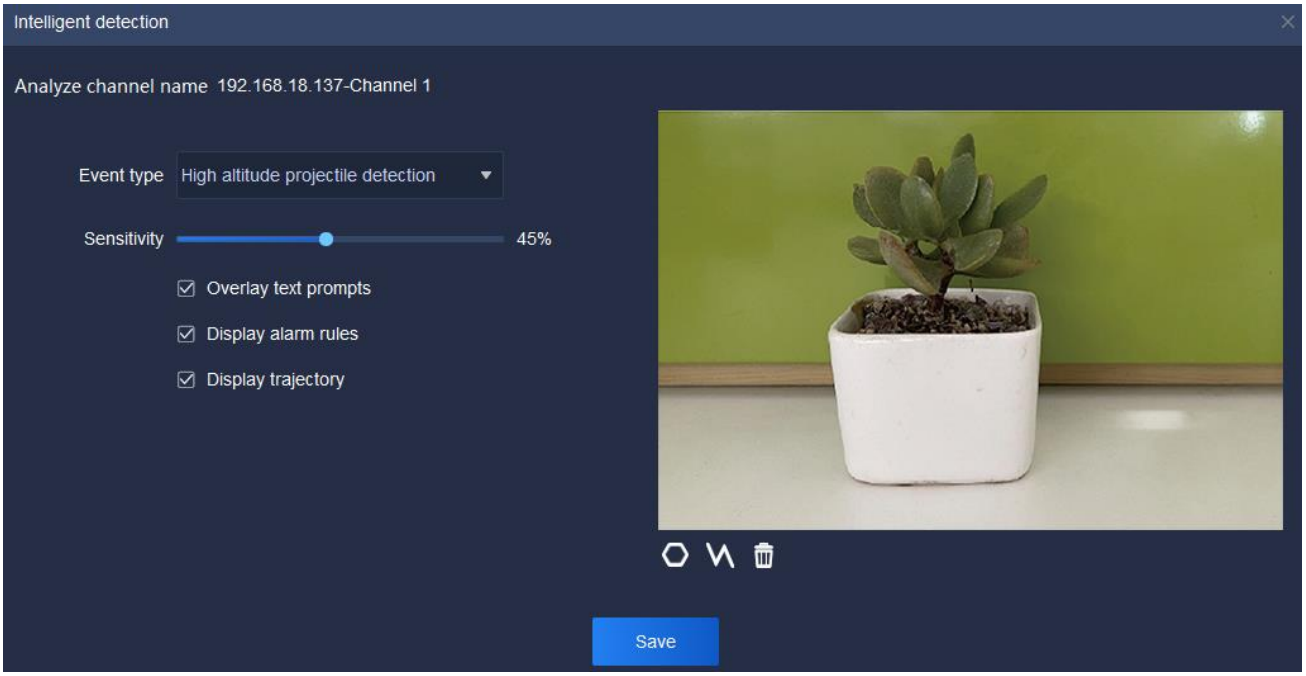


The icon description is as follows:

Icon	Explain
	Disconnect the current channel video
	Turn on/off the video sound of the current channel
	Turn on the intercom
	Capture current channel video
	Record the current channel video
	Enter the instant replay interface
	Fisheye expansion, see 4.11 Fisheye expansion function for details.
	Intelligent detection, supporting high-altitude parabolic alarm and electric vehicle detection alarm settings, requiring equipment support.
	Manual one-key alarm elimination

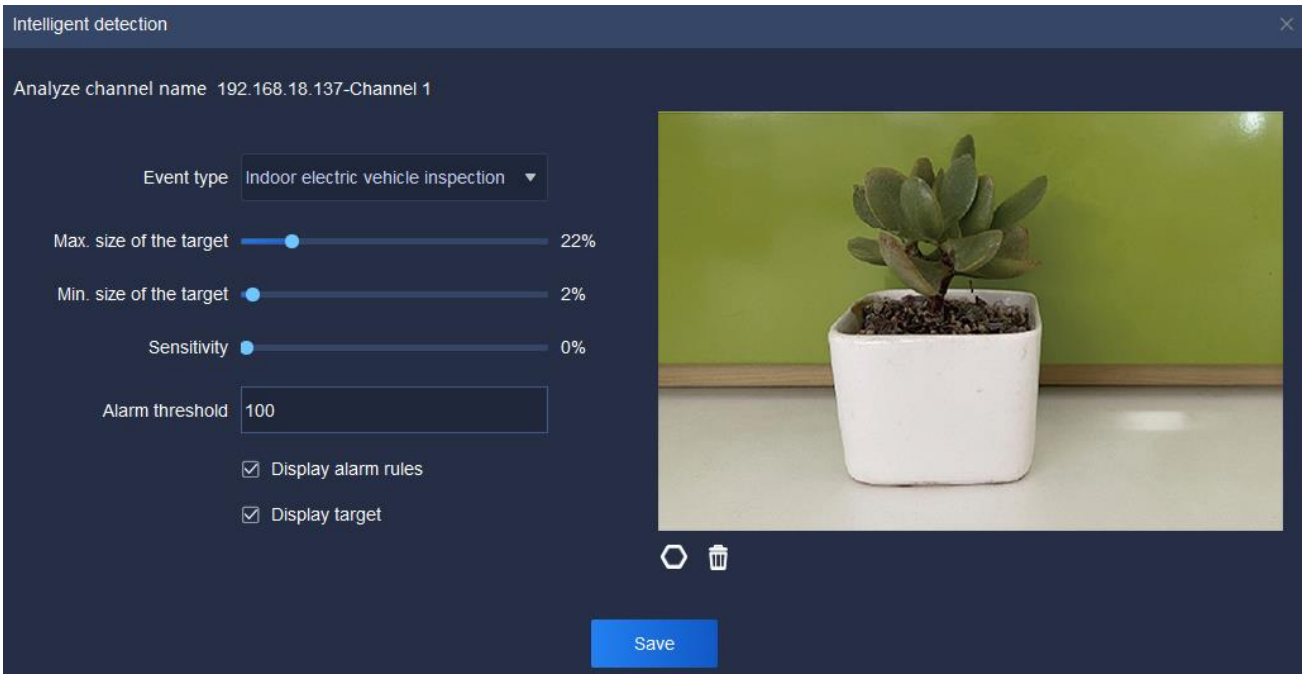
4.2.2.1 Intelligent detection

Support high-altitude parabolic alarm and electric vehicle detection alarm settings, requiring equipment support.



The interface description is as follows:

Function	Explain
Sensitivity	Set the sensitivity. The larger the value is, the more sensitive it is. The detection rate will increase, and the false detection will also increase.
Overlay text tips	When checked, a character prompt is displayed when an alarm is triggered.
Displays the alarm rules	When checked, the Alarm Rule box is displayed.
Displays the trace	When checked, the trajectory of the dropped object is displayed.



The interface description is as follows:

Function	Explain
Target Max/Min Size	Set the maximum and minimum size of the target, which represents the percentage of the target width in the picture.
Sensitivity	Set the sensitivity. The larger the value is, the more sensitive it is. The detection rate will increase, and the false detection will also increase.
alarm threshold	Set the alarm threshold, support the input range of 2 ~ 3600 values, that is, the alarm occurs when the electric vehicle stays beyond the threshold.
Displays the alarm rules	When checked, the Alarm Rule box is displayed.
Display the target	When checked, the test object is framed.

4.2.3 Video preview screen toolbar

When browsing the main video preview, the operation functions of the main video interface can be displayed in the lower toolbar of the main video screen, as shown in the following figure.



The toolbar icons in the video preview interface are described as follows:

Icon	Instruction
	Capture all, to capture windows of all connected videos at current screen.
	Start all recording, record windows of all connected videos at current screen.
	Intercom list, display current intercom status.
	3D control, adjust the scene to be monitored to the video center through mouse click control. Specific operations: 1. Left click on the monitoring video screen and move the corresponding point to the center of the video; 2. Hold down the left button and pull down a rectangular area to the right, then move the center of the designated area to the center of the video and zoom in; 3. Hold down the left button and pull out a rectangular area to the

	top left, then move the center of the designated area to the center of the video and zoom out to view it.
	Electronic zoom-in. After this function is enabled, select the channel picture and slide the mouse wheel to zoom in the picture. After zoom-in, drag the picture. After dragging to a certain part of the picture, you can continue to zoom in.
	Connection status. Shows/does not show how the channel is connected.
	Save view and the user can save the current information.
	Rotating display plan, allow users to set their own switch mode, so that software can automatically switch video channels on [Real-time preview] interface for users' convenient browse.
	Start rotating display, automatically switch video channels to preview according to rotating display plan.
	Group switching list, click this button to display group switching list. There will have devices in the list only when right click the device group in customized device list of device list on the left to select and add devices to [Add to group switching list].
	Last group, which supports the manual switch group to switch the last screen of group.
	Start/Stop group switching, open video window, click this button to conduct group switching; click again to stop group switching.

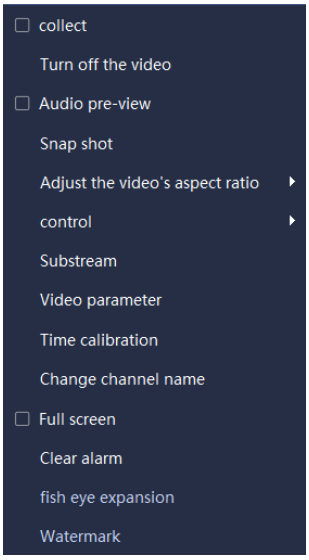
	Next group, which supports the manual switch group to switch the next screen of group.
	Set number of video views, click and the setting menu of displayer will pop up.
	Full screen, click to display video window at full screen. Click ESC button or right click the video to cancel full-screen display to escape from full-screen model.
	Indicate that the video connecting status is direct connection
	The video is currently experiencing an alarm.
	Turn off the video, i.e. disconnect the connection of present video.
	Turn on audio / Turn off audio
	Screen capture, capture the picture of the present video。
	Turn on tape recording / turn off tape recording
	Instant replay, which supports timely view of present playback based on demands. The time of instant replay can be modified according to System settings -> Video-related -> Time of instant playback.
	Return to preview to exit the page of instant playback.

4.2.4 Video preview window right-click menu

Operation steps:

Right-click the main video browsing window to pop up the right-click menu of the

video preview window, as shown in the following figure.



The related Parameters are described as follows:

Parameter	Instruction
collect	Click on the single video window of connected video to turn off the video in the window.
Turn off the video	Click on the single video window of connected video to listen to the audio of video channel in the window.
Audio pre-view	Click on the single video window of connected video to take snap shot of the window.
Adjust the video's aspect ratio	Electronic amplification and fast ball 3D control are available.
control	Click on the single video window of connected video to turn off the video in the window.
Electronic amplification	Same as the icon of the video preview window toolbar “” 。
Fast ball 3D control	Same as the icon of the video preview window toolbar “” 。

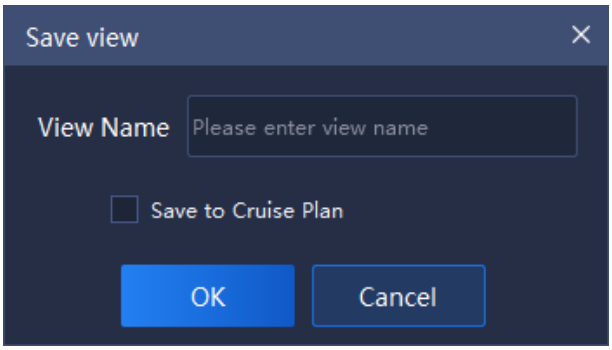
Switching of main code and subcode streams	Auto switch between main code and subcode streams. Support simultaneous switch among native video.
Video parameter	Set the display parameter of currently selected video: brightness, contrast, saturation and Hue.
Time calibration	Conduct time calibration on the on-line device.
Change channel name	Change the name of currently selected channel.
Full screen	Display video view window at full screen.
Manual alarm	Cancel the current alarm in the channel in video manually.
fish eye expanslon	Device support is required. See 4.11 Fisheye Deployment Function for details.
Watermmark	Device support is required. The watermark can be displayed on the video interface.

4.3 Cruise Plan

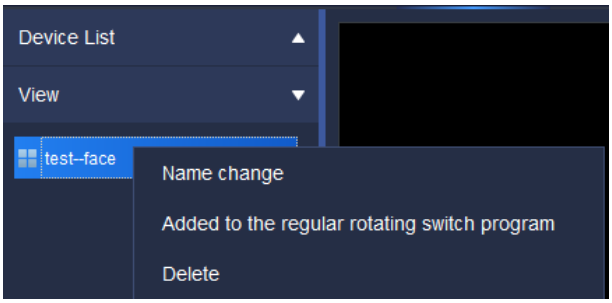
The main function of the polling plan is to allow users to set their own switching mode, so that the platform can automatically switch video channels in the [real-time preview] interface, which is convenient for users to browse.

Operation steps:

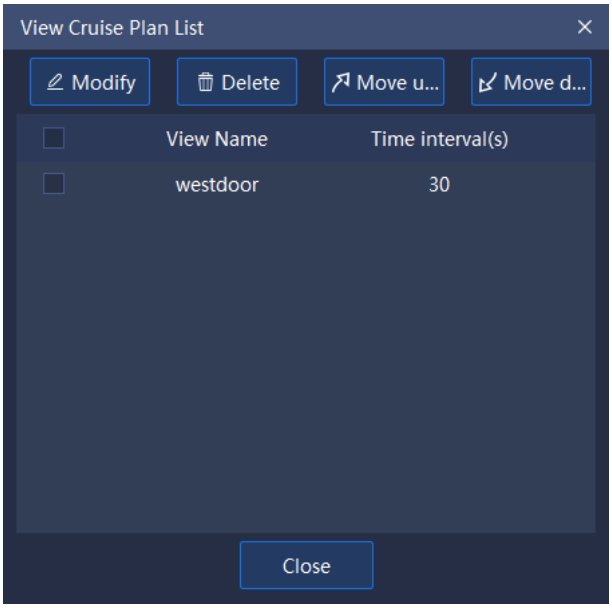
1. Add a view. After configuring the split-screen scheme and the video to be played according to the above operations, click the "" button in the toolbar of the preview interface and enter the customized [view name] to save the view, as shown in the following figure.



2. Add a polling schedule. First, click the view bar on the left, select the view to be added, and then right click to pop up the right-click menu, and select [Add to polling plan] in the menu, as shown in the following figure.



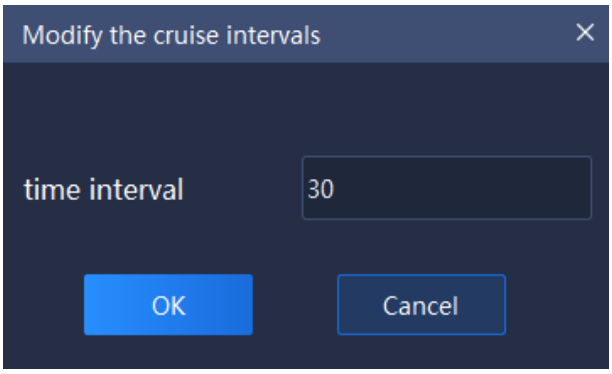
3. Set the polling schedule. Click "" in the toolbar of the preview interface at the lower right corner to enter the interface for setting the polling plan, as shown in the following figure.



4. Enable/disable the polling plan. Click the "" button in the toolbar of the preview interface at the lower right corner to enable the polling plan, and click again to close the polling plan.

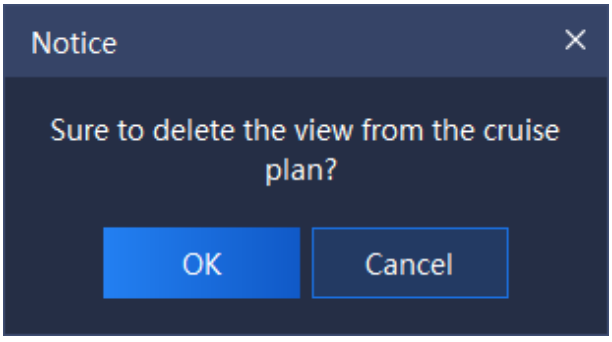
4.3.1 Modify the cruise intervals

Check the view to be modified and click the [Modify] button to change the polling interval, as shown in the following figure.



4.3.2 Delete view

Check the view to be deleted and click [Delete] to delete the view, as shown in the following figure.



4.3.3 Move view

Operation steps:

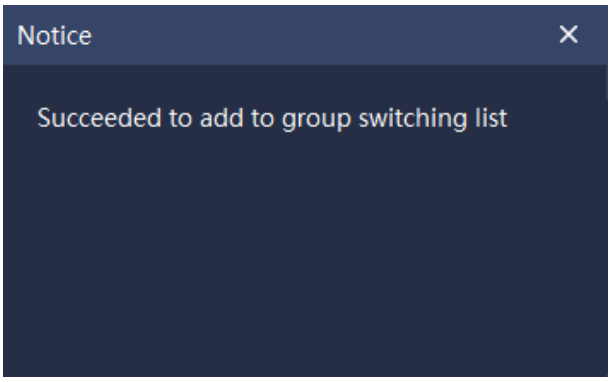
Check the view to be moved and click the [Move Up]/ [Move Down] button to adjust

the view playback order.

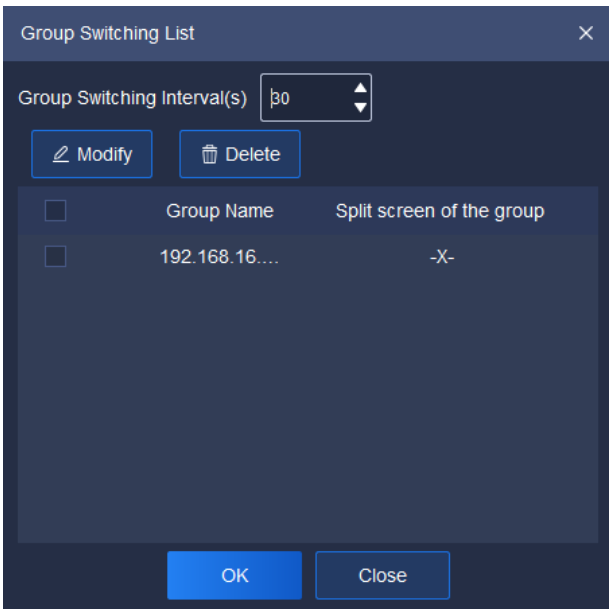
4.4 Group switch set

Operation steps:

1. Create a group cut. Right click the group in the [Custom Device List] column, and click [Add to Switch Group List] to create a group switch and pop up a prompt box, as shown in the following figure.



2. Set up group cuts. Click the "" button in the toolbar of the preview interface at the lower right corner of the main video to set the group switching time interval and the number of group split screens, as shown in the following figure.



Notice:

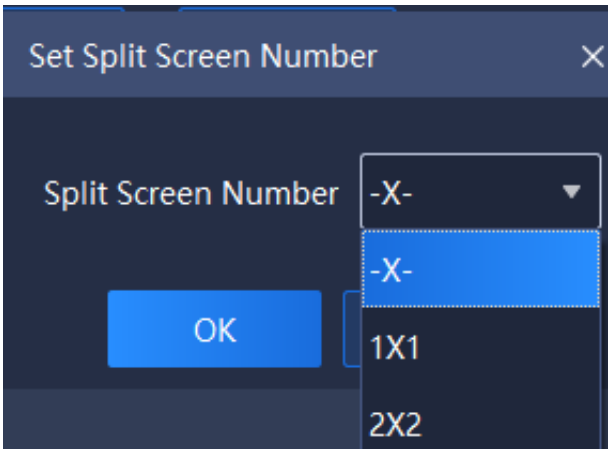
- Set the time interval of group cutting: set the time interval of group cutting on the upper part of the interface, and the value range of the time interval is 30 ~ 3600 s.
- Set the number of split screens, support-×-screen (do not change the number of split screens, keep the original number of split screens), 1 × 1 screen, 2 × 2 screen, etc.

4.4.1 Modify number of components

Operation steps:

1. Click the [Modify] button to enter the interface for setting the number of split screens.

2. Double-click the number of split screens in the group to enter the interface for setting the number of split screens, as shown in the following figure.

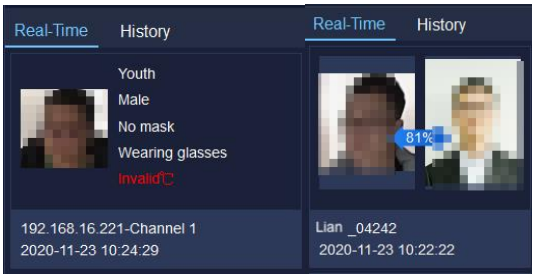


4.4.2 Open/close group switch

Click the "" button in the toolbar of the preview interface at the lower right corner of the main video to open the group cutting, and click again to close the group cutting.

4.5 Target information

Below and on the right side of the main video interface of the real-time preview, the information of the identified person and the information in the comparison face database are displayed respectively, as shown in the following figure.



Explain:

- Target information can identify the age, gender, whether to wear masks, whether to wear glasses, temperature detection and detection time of personnel in real time.
- At the same time, it can identify whether the person is a person in the face database, if so, it will be compared with the picture uploaded in the face database, and the similarity, the name of the person and the detection time will be displayed.
- If you want to view the previous records, you can switch to [History] to view the history information.

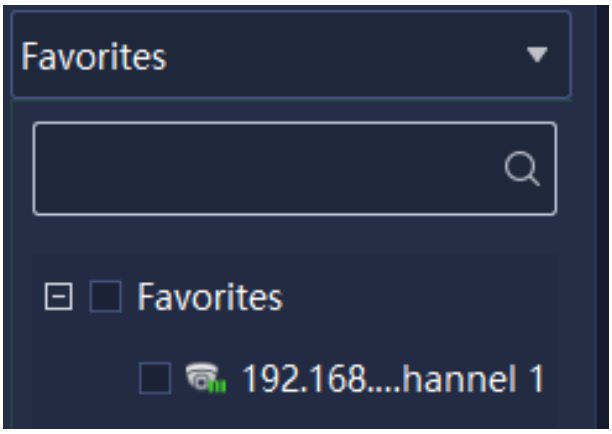
4.6 Favorites

Operation steps:

1. Collection Channel. Right click the channel menu under the grouping in the [Device List] column and select Favorite, or right click the currently playing screen and select [Favorite] to collect the channel.

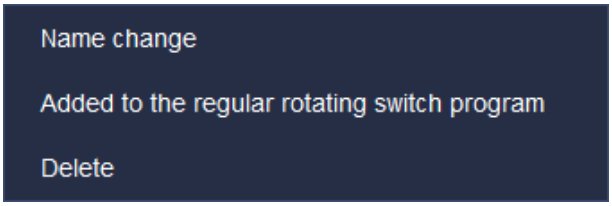
2. View favorite channels. Select [Favorite] in the drop-down box on the upper left to

see the favorite channels, as shown in the following figure.



4.7 View

Select [View] in the drop-down box on the upper left to display the currently saved view. Double-click to preview the view information. Right click the list view node menu to pop up an interface, as shown in the following figure.



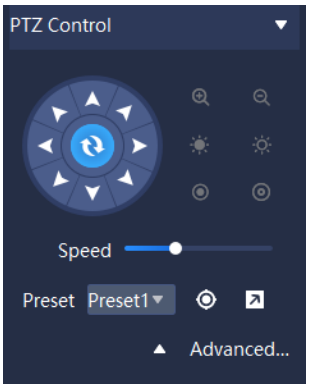
The related Parameters are described as follows:

Parameter	Instruction
Name change	Click to change view name.
Add to the regular rotating switch plan	Click to add the view to the regular rotating switch plan list.
Delete	Click to delete this view information node from view list.

4.8 PTZ Control

Expand the [PTZ Control] list on the left side of the interface to display the PTZ

operation interface. The PTZ control can control the PTZ speed, preset position, etc., as shown in the following figure.



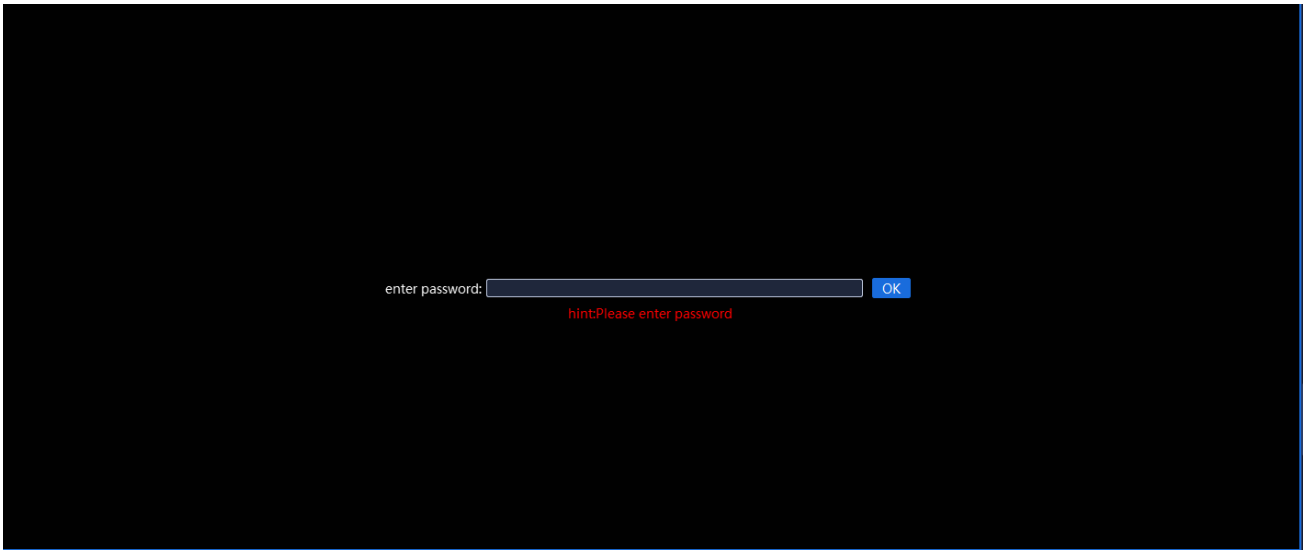
The cradle control icon is described as follows:

Icon	Instruction
	8-direction key, press corresponding direction key to control PTZ to rotate in the direction accordingly; the center button is scan shortcut key.
	Zoom control button, press "" to control the device to perform zoom-out operation, the field of view angle becomes larger and the scene becomes smaller; press "" control device to perform zoom-in operation, the field of view angle becomes smaller and the scene becomes larger.
	Focus control button, press "" to control the device to perform focusing-in operation, the near scene is clear and the far scene is fuzzy; press "" to control the device to perform focusing-out operation, the far scene is clear and the near scene is fuzzy.
	Aperture control button, press "" to control the device to perform

	aperture reduction operation, press "◉" to control device to perform aperture enlargement operation.
Speed	The slider can adjust the rotation speed of the device.
Preset 1	Set the preset number for calling.
◎	Call the preset. Select saved preset, click to call and the screen will jump to the preset part.
↗	Set the preset. Select the preset number to be saved, adjust the screen to the preset to be saved, click Set to save this position.
▼ Advanced Fu...	Click to expand or hide advanced features. Advanced features include lights and wipers, which can be switched on and off.

4.9 Unlocks the encrypted channel function

The video can be played normally by entering the correct password in the prompt box for entering the password in the playback screen, as shown in the following figure.

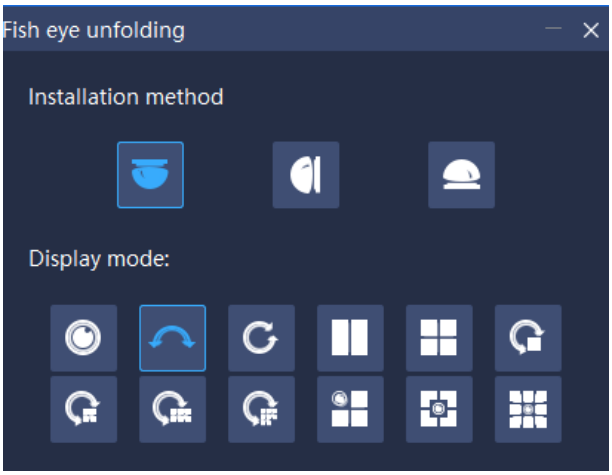


4.10 Fish eye unfold

Operation steps:

1. Right click and select [Fisheye Expansion] during video preview, or click the "" icon in the menu bar at the lower left corner of the video screen to pop up the [Fisheye Expansion] window.

2. There are three installation methods, which are "installation", "wall installation" and "ground". As shown, the following is "installation".

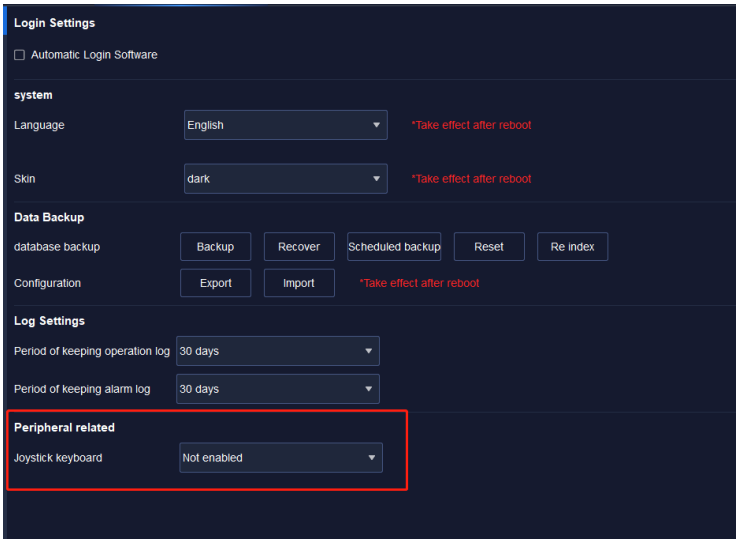


3. In the [top installation] installation mode, the display mode is to select [fisheye + 3ptz] as an example, and the rest is similar to this operation. The left screen in the small window is the fisheye screen, and the remaining areas are the other three screens. In these areas, the screen can be enlarged. After selecting a specific area, the screen can be dragged by using the PTZ control. You can control the speed of the drag by controlling the speed bar. Click "" in the PTZ control, and the selected screen will cruise according to a certain track.

4. The remaining display modes are the same as the [fisheye + 3ptz] operation.

4.11 USB keyboard control

Enable the joystick keyboard in [System Settings-Common Settings].

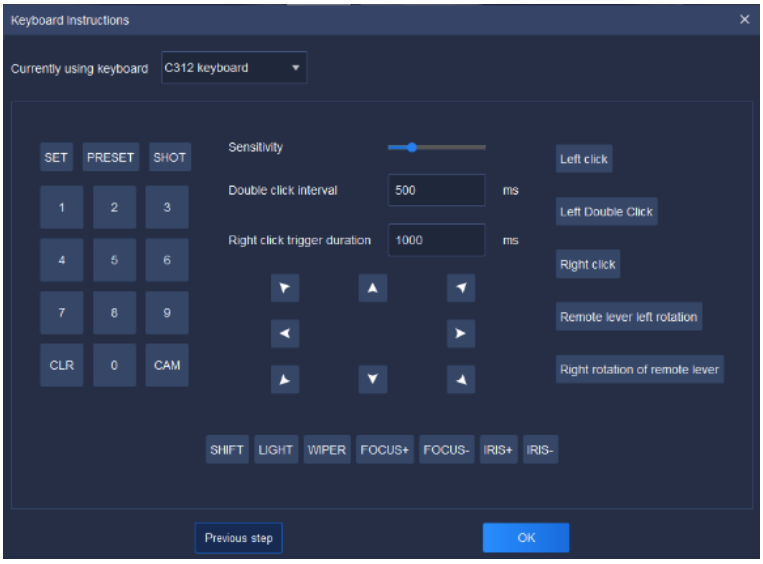


Operation steps:

1. Connect the keyboard to the computer and click the connection status icon to display the instruction manual, as shown in the following figure.



2. Click the Debug button to debug the keyboard, as shown in the following figure.



3. Use the keyboard to control the preview operation according to the instructions.

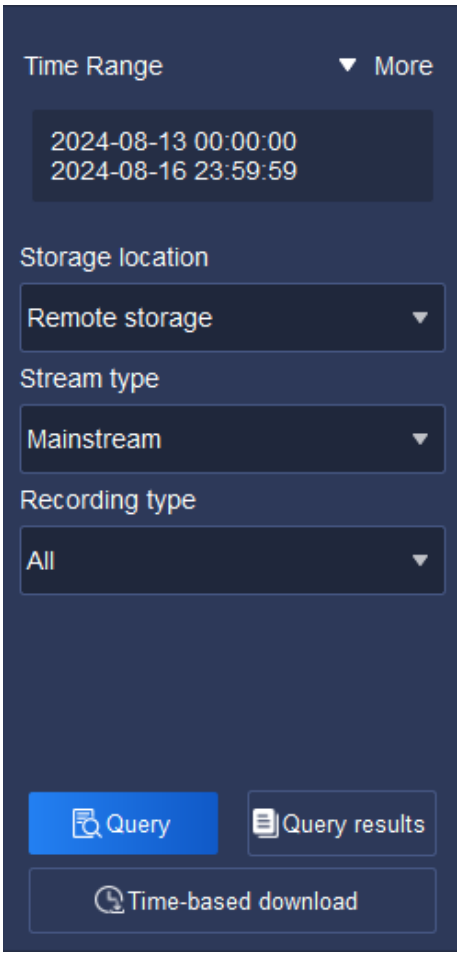
5 Video playback

Search and play the video file of the monitoring point, and perform playback service operation on the monitoring point.

5.1 Video query

Operation steps:

1. In the [Video Playback] interface, click the monitoring point on the left to set the query time range, as shown in the following figure.

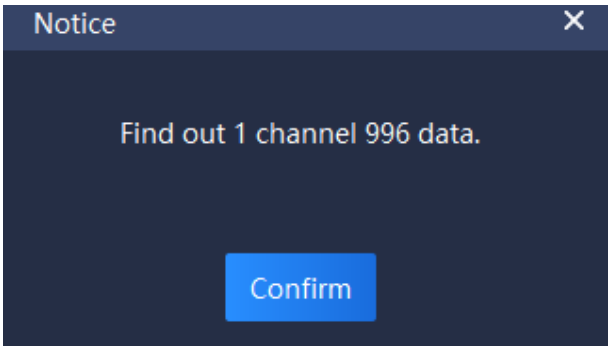


The function parameters are described as follows:

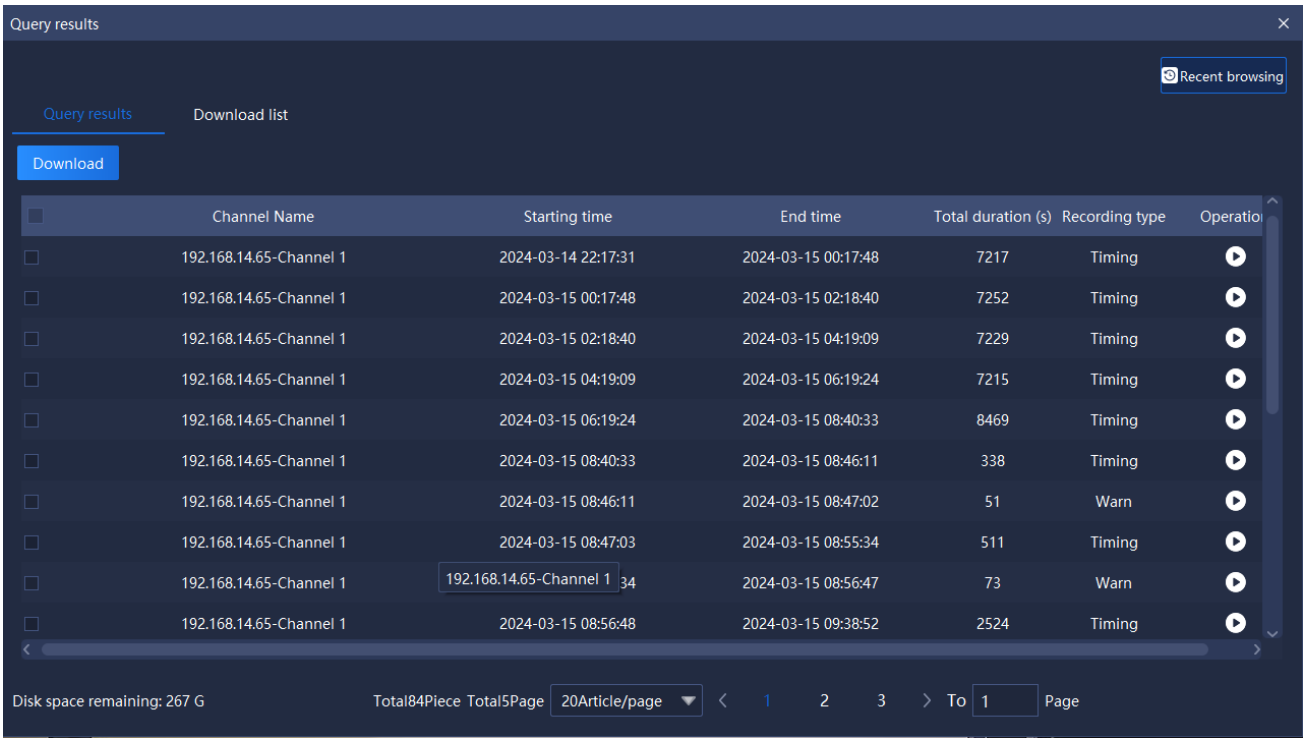
Parameter	Instruction

Time Range	Select the time range to be queried. The maximum query range is seven days.
Storage Location	Choose remote storage, local storage, or cloud storage. Remote storage: the video stored in the storage medium of the ipc. Local Storage: Video stored on the computer disk where the VMS software is installed. Cloud storage: The P2P account device is available, and the device needs to open the cloud storage service on the APP.
Stream Type	Remote storage and local storage support. Select the stream type of video recording.。
Recording Type	Remote storage support. Select the video type to be queried, including All, Manual Video Recording, Timing Video Recording and Warning Video Recording. Playback by video type is supported. For example, if the video type is selected for query, only the color bar of the alarm video is displayed on the playback axis, and only the Warning video is played.

2. After selecting the condition, click the query button to display the query result prompt box, as shown in the following figure.



3. Click [Query Result] below to see the current result, as shown in the figure below.



Explain:

- For more accurate query, you can click the [More] button to set the storage location and code stream type filter conditions for query. Click the [More] button again to hide the detailed filter conditions.
- Select the time range. On the time range start calendar, select the start time. On the end time calendar, select the end time.
- When the storage location is selected as front-end storage, the following code stream types can be selected, and two code stream types of main code stream and sub-code stream are supported.
- The query result will be displayed on the progress bar after the query result is obtained, which can be played back by clicking the time point on the progress bar.
- Synchronous playback is supported, and four-way synchronous playback is supported at most.

5.2 Video playback

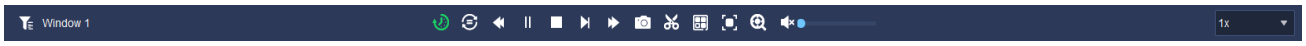
Play mode 1: Click [OK] in the query result prompt box to play back the first video file of the query result.

Playback mode 2: Select a video file in the query result and click "" in the operation bar to play back the file.

Playback mode 3: Select a playback window and directly click the time point on the timeline to play back from that time point.

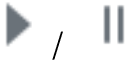
5.3 Playback control

In the video playback interface, display each function key in the playback control menu bar. The playback control menu is shown in the following figure.



The icon function is described as follows:

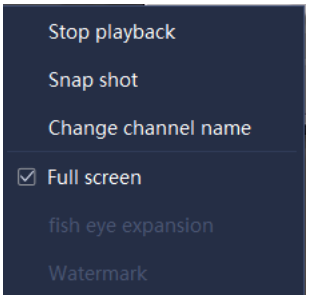
Icon	Instruction
	Video type filter button. Click it to filter the video timeline type. The unselected video type will not be displayed on the timeline, but will continue to play. Support the screening of all formats, alarm video, timing video and manual video.
Window 1	Displays the current window number.
	Click to configure daylight saving time. Once configured, the Playback Timeline will be displayed according to the Daylight Saving Time setting.

	On/off synchronous playback; asynchronous playback is set by default. Click to enter synchronous playback mode and click again to exit it. Note: Synchronous playback not supported for local video.
	Slow forward button, click to make the video file play slowly. Note: as for the equipment added by P2P direct connection, click the "slow play" button to slow from 4x to 2x and from 2x to 1x. 1x speed is the slowest. 1/2 speed is not supported.
	Fast forward button, click to make the video file play quickly. Note: the equipment added by P2P direct connection supports 4X speed playing at most.
	Play/Pause button, click to control the start/pause of video file.
	Step forward button, click to make the video file play frame by frame.
	Stop button, click to stop the playback of current video file.
	Capturing button. Click it to capture the video file that is selected and being played.
	Video clip button: click it to start video clip and click it again to finish that. The time axis of clipped section will become red and the target section will be saved. The format of video saved can be modified by setting "system settings -> video -> download video format"; three formats sdv ,mp4, and avi are available.
	Set screen number button, click to pop up the menu of playback window split screen.

	1×1 screen playback supported, click and the video playback window will display in single screen.
	Same as "" in real-time preview 4.2.1.
	Volume adjustment bar, drag to adjust the sound of video playback. Click on the horn to turn sound on/off.
	Used to adjust the accuracy of time axis.

5.3.1 Replay window right-click menu

Right-click the video playback window to pop up the right-click menu of the playback window, as shown in the following figure.



The related Parameters are described as follows:

Parameter	Instruction
Stop playback	Click to stop the playback of current video.
Snap shot	Click to snap shot of selected playback window.
Change channel name	Click to change channel name of selected playback window.
Full screen	Click to display the playback window at full screen. Click again to turn off full screen display.
fish eye expanslon	Device support is required. See 4.11 Fisheye Deployment Function for details.

Watermmark	Device support is required. The watermark can be displayed on the video interface.

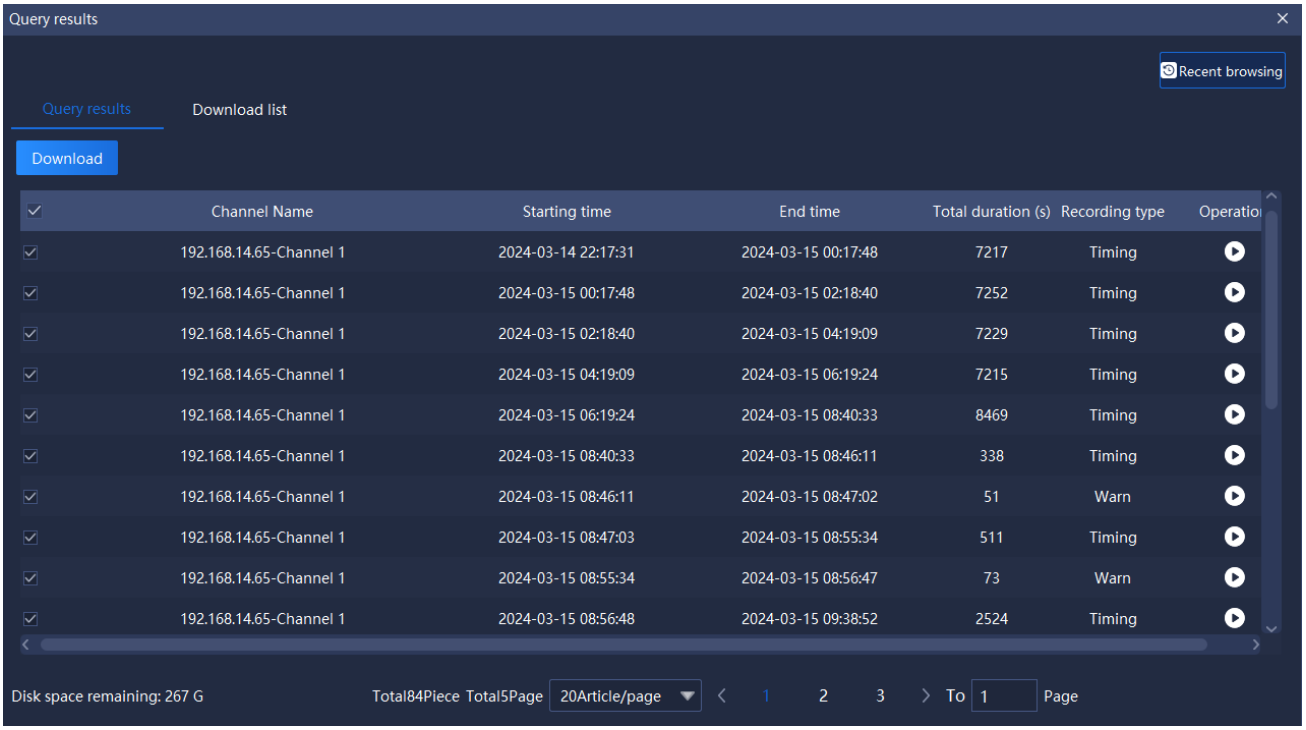
5.4 Video download

There are two ways to download videos: download by file and download by time period.

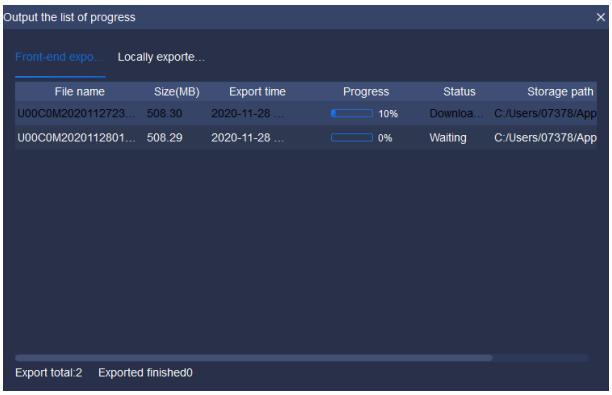
5.4.1 Download by file

Operation steps:

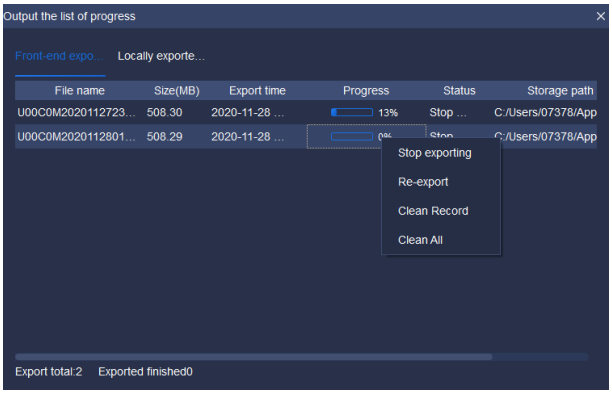
1. Batch download. Click the query result in the [Video Playback] interface to pop up the query result interface. After checking multiple video files, click the [Download] button to download them in batches, as shown in the following figure.



2. Select [Download List] to enter the export progress list interface to view the progress of downloaded files, as shown in the following figure.



3. Stop the export. Select the file to be exported in the export progress list, right click the file, and select [Stop Export] to stop downloading the file, as shown in the following figure.



4. Re-export. Select the file to be re-exported in the export progress list, right click the file, and select [Re-export] to re-export the file for download.

5. Clear the record. Right-click a file in the export progress list and select [Clear Record] to delete the downloaded record.

6. Clear all. Right-click a file in the export progress list and select [Clear All] to delete all download records in the list.

Notice:

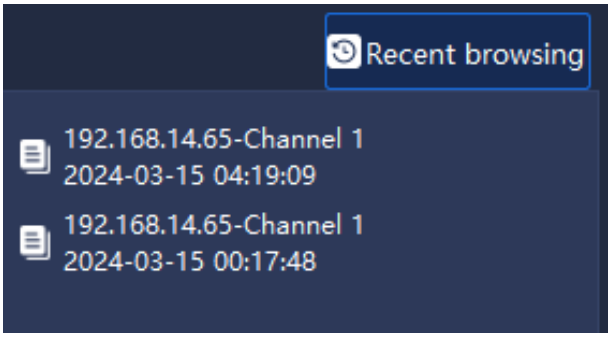
- When downloading video files, only one video file can be downloaded at the same time.

5.4.2 Download by time period

Select the channel you want to download through the drop-down menu or by clicking the channel in the tree list, select the time period you want to download, and then click the [Download by Time Period] button.

5.5 Recently browse

Record the recently viewed video. Click the query result in the [Video Playback] interface to pop up the query result interface. Click [Recent View] to quickly preview, as shown in the following figure.



5.6 Fish eye unfold

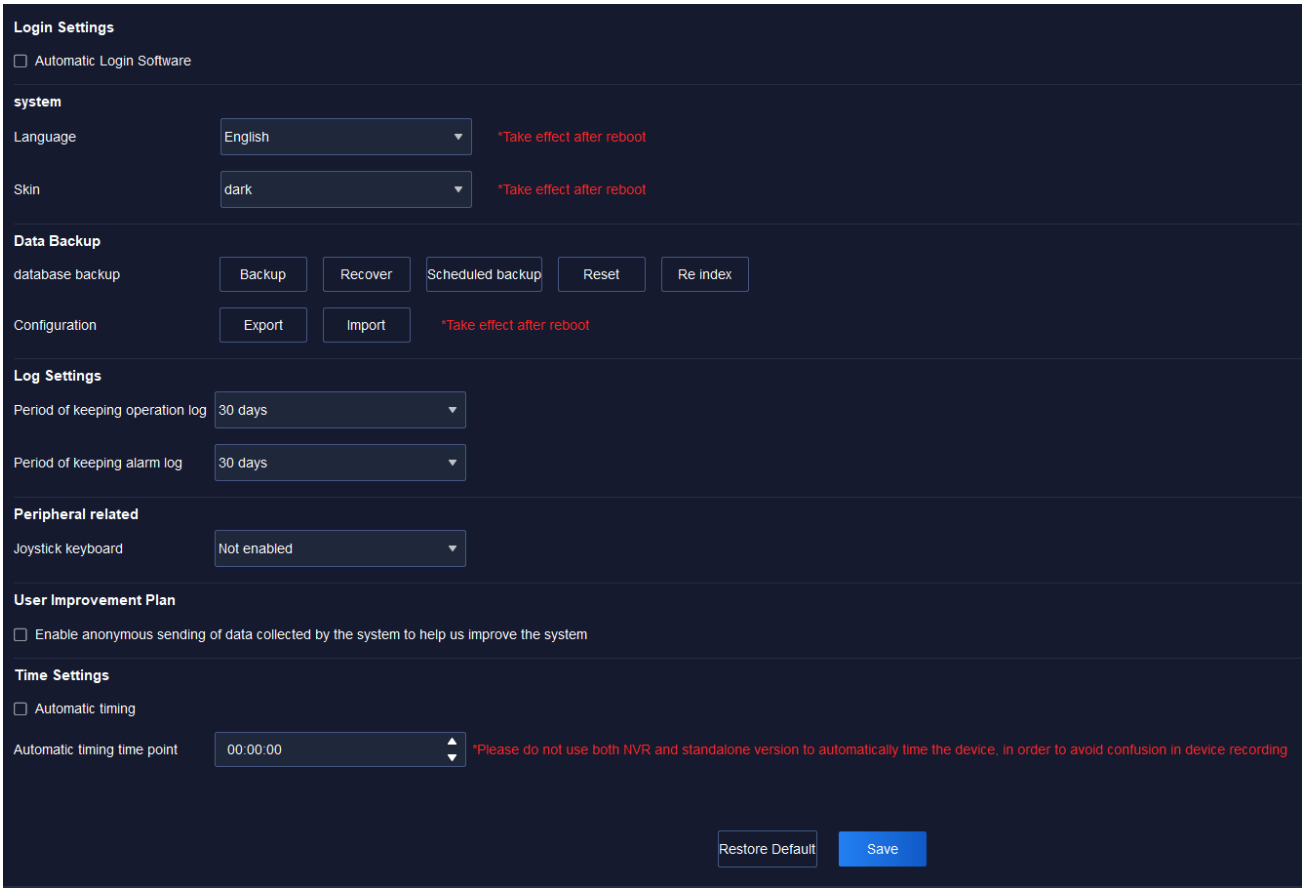
See the real-time preview 4.10 fisheye expansion function for details.

6 System configuration

Configure common client operations.

6.1 Common Settings

Click [Common Settings] in the [System Settings] interface to display the function items of [Common Settings], as shown below.



The interface parameters are described as follows:

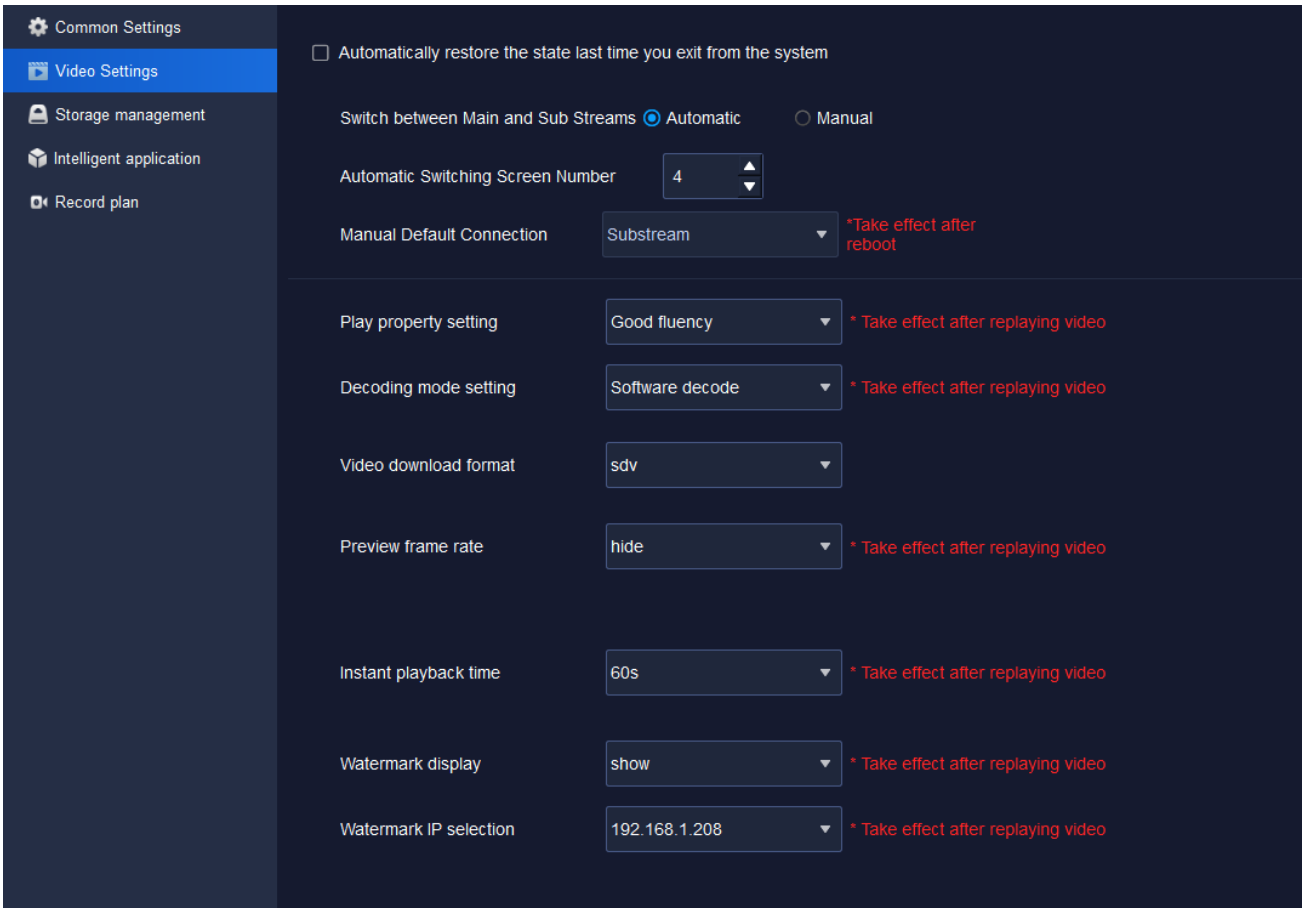
Parameter		Instruction
Login Settings	Automatic Login Software	Tick and select, after fill in correct [User name] and [Password] by users, the software will realize

		automatic software login function when the operation system starts.
System	Language	Set the language of software system, effective after restart.
	Skin	Set the skin of software system, effective after restart.
Data backup	Data backup path	Backup: Backup all configurations, devices, etc. Of the current program. Restore: Import the backup file to restore the program to the state when it was backed up. Scheduled backup: backup operations are performed on a scheduled basis. Restore factory settings: restore factory settings. Rebuild index: scan all disks of the computer where the stand-alone version is located, and automatically generate records and save them to the database after finding the files saved by the stand-alone version (such as intelligent analysis pictures, manual video files, etc.).
	Configuration	Import/export relevant configuration information with one key, such as equipment list, user authority and electronic map.
Log Settings	Period of keeping	Set the save time of each operation log.

	operation log	
	Period of keeping alarm log	Set the save time of each alarm log.
Restore Default		Restore the configuration of current page to the configuration information when initially installed.
Peripheral related		Set whether to enable the joystick keyboard; if not, the joystick keyboard cannot be used by the client after it is inserted into the computer.
User improvement plan		Collects crash data and uploads it anonymously to the server.
Automatic timing		Automatically time the equipment in the equipment management.

6.2 Video Settings

Click [Video Related] in the [System Settings] interface to display the [Video Related] function item, as shown in the following figure.



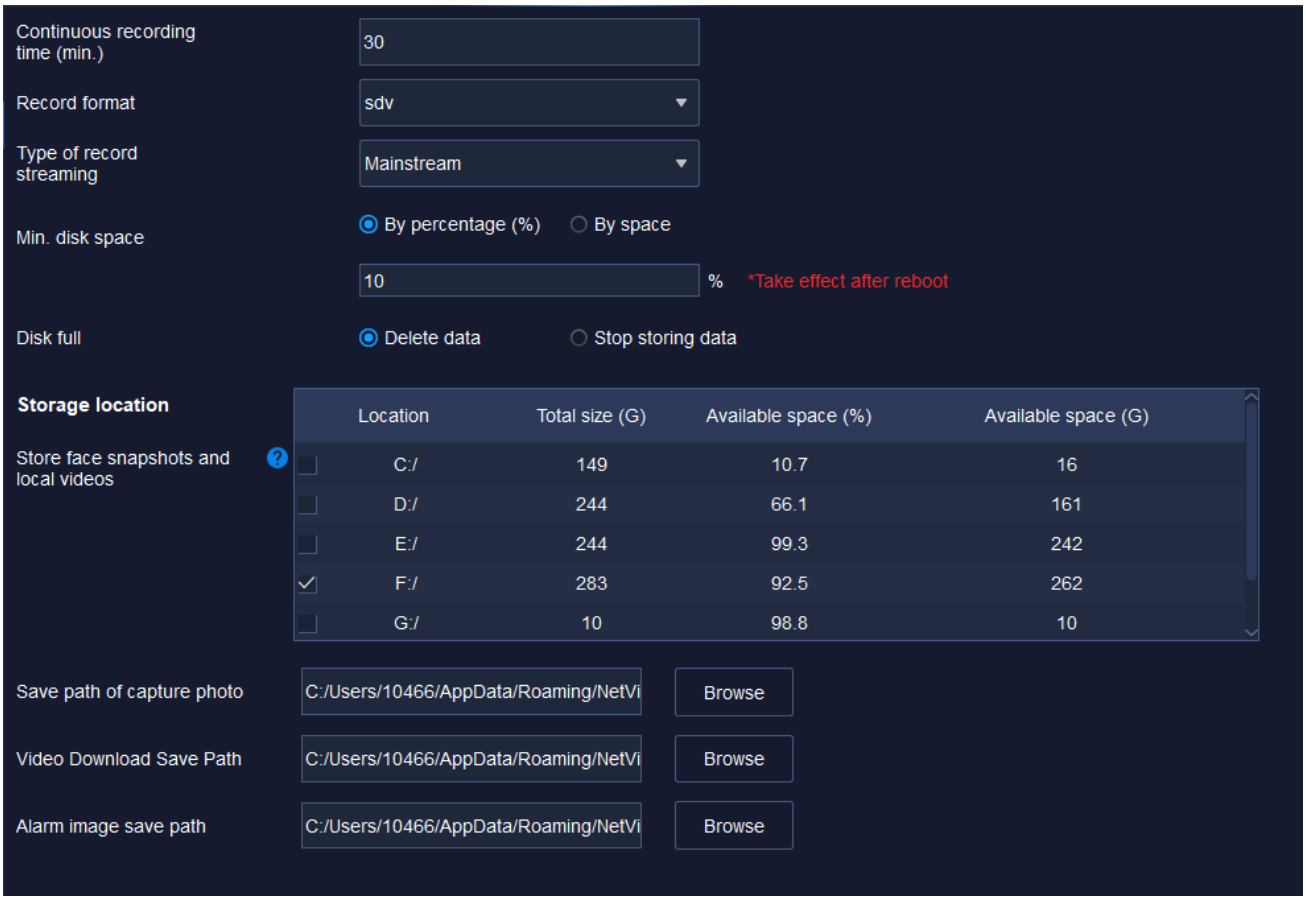
The interface parameters are described as follows:

Parameter	Instruction
Automatically restore the state last time you exit from the system	The video connected to video preview, when turns on the software again, the video before turn-off will restore connection.
Switch between Main and Sub Streams, Automatic Switching Screen Number	Set switching screen number, when the number of windows displayed in the client-side video browsing interface is greater than the number of split screens, the connected channel video will default to the subcode stream.
Manual Default Connection	Set the code stream type of default play.
Play property setting	Available to set Good fluency/Minimum delay. Take effect after

	replaying video.
Decoding mode setting	Software decode and hardware decoding are supported, effective after restart. Take effect after reboot.
Video download format	The download recording may set SDV (private format) ,MP4 (general format) and AVI format.
Preview frame rate	Show or conceal frame rate on preview screen. Take effect after accessing video again.
Automatically restore the state last time you exit from the system	The video connected to video preview, when turns on the software again, the video before turn-off will restore connection.
Watermark display	Set whether to display the watermark in the preview screen of the [Live Preview] channel. Only admin users can set it.
Watermark IP selection	Select the watermark IP to display.

6.3 Storage management

Click [Storage Management] in the [System Settings] interface to display the function items of [Storage Management], as shown in the following figure.



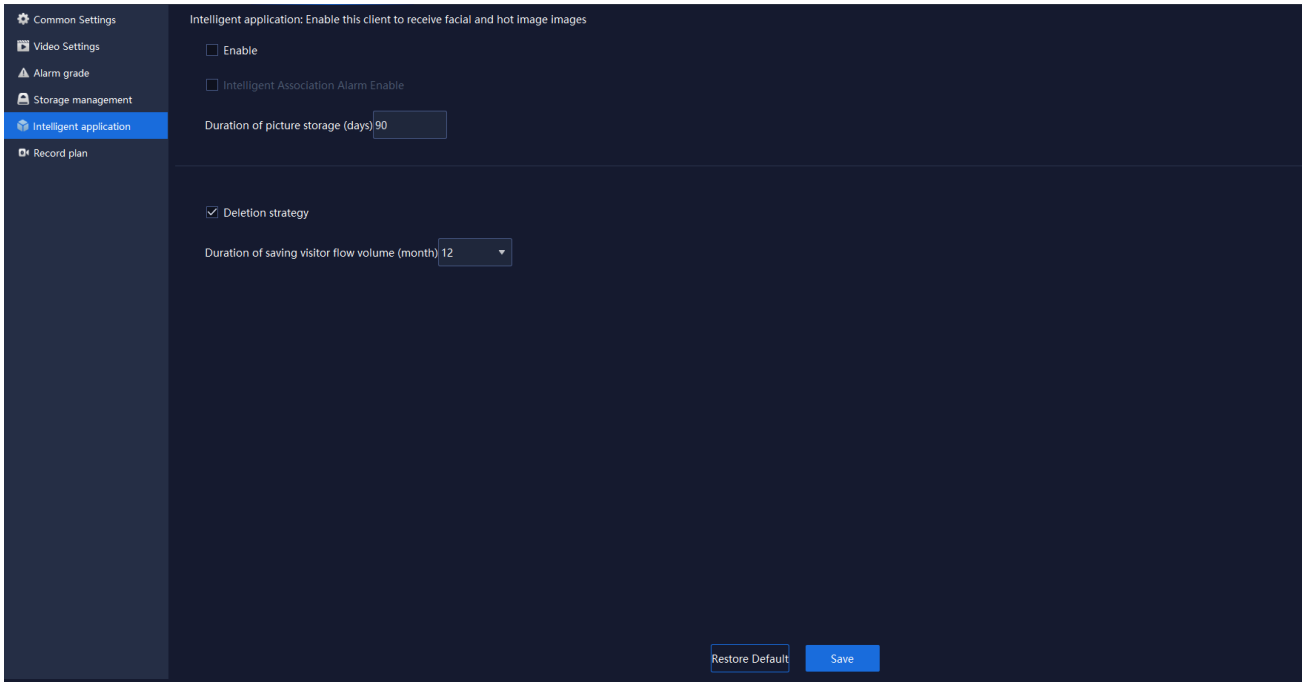
The interface parameters are described as follows:

Parameter	Instruction
Continuous recording time (min)	Set the time of continuous recording (recording packaging), the time range is 5~120 min.
Record format	SDV format , mp4 format and AVI format are supported for recording storage.
Type of record streaming	Main code stream and minor stream supported.
Min. disk space	Supported to set by percentage (%) or by space (G), fill in corresponding parameter in the text box below.
Disk full	Supported to select and delete the earliest local recording or stop recording.

Storage location	Set the storage location of files.
Path Setting	The save path of capture, preview and playback photo.
	The save path of video download.

6.4 Intelligent application

In the [System Settings] interface, click [Smart App] to display the function items of [Smart App], as shown in the following figure.

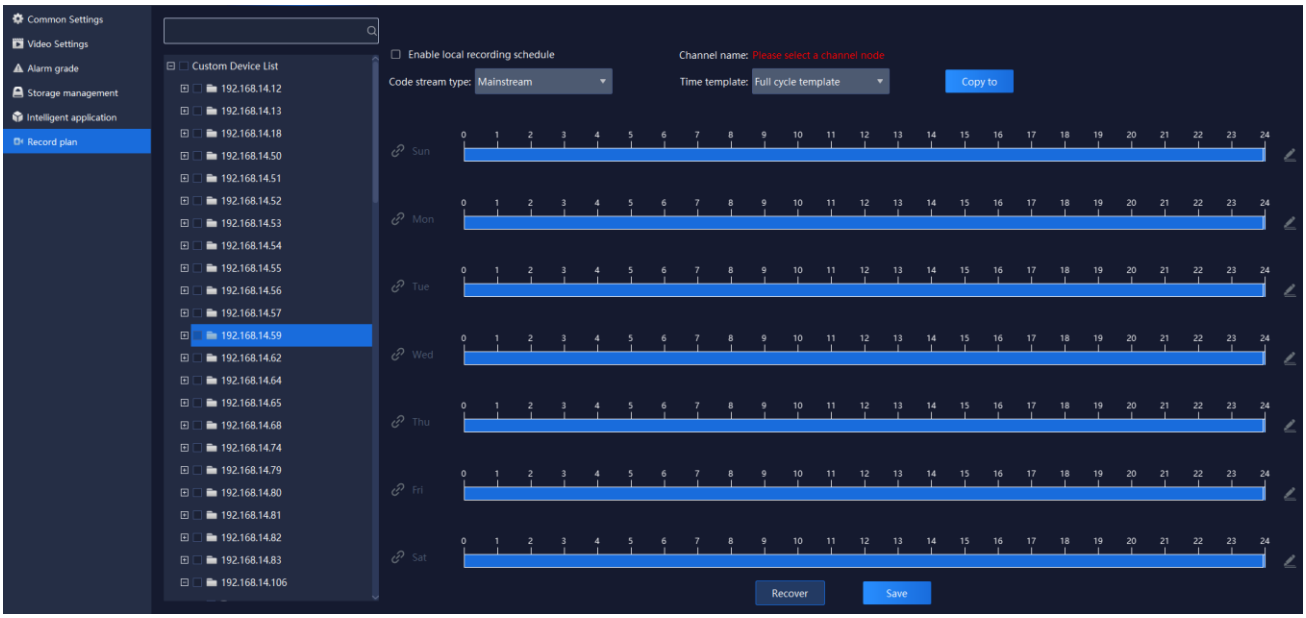


Explain:

- After the smart application is enabled, it can receive face and human gate pictures, and the retention time of snapshot pictures can be defined according to the needs.
- After the deletion strategy is checked, this strategy can be executed after the upper limit of the storage time of passenger flow (which can support 6 ~ 24 months) is reached.

6.5 Record plan

Click [Video recording plan] in [System setting] interface to display the function item of [Video recording plan], as shown in the following figure.



The interface parameters are described as follows:

Parameter	Instruction
Enable local recording schedule	Check the box to enable the local recording schedule.
Channel name	After selecting a device from [Custom Device List] on the left, the corresponding channel name appears.
Code stream types	Support main stream and sub stream.
Time template	Full-cycle templates and custom templates are supported. Custom templates can be set by clicking the "" icon on the right or dragging the blue slider.
Copy to	The recording plan configuration of the current channel can be

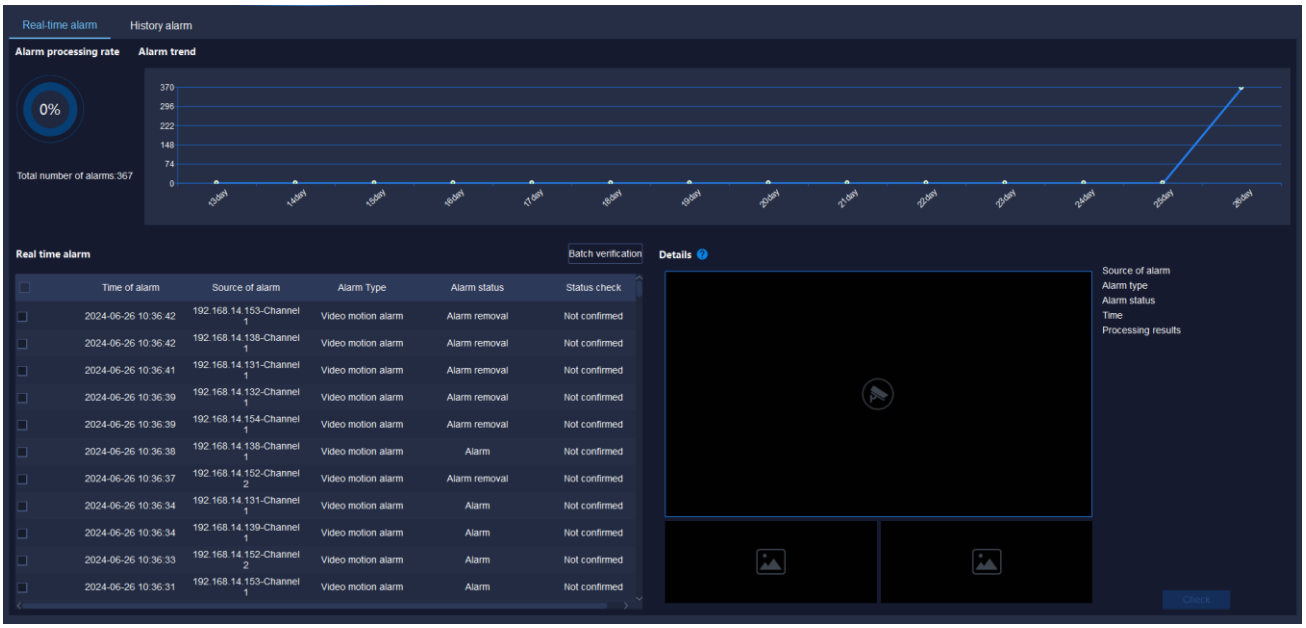
	copied to other channels.
Recover	Click to restore the settings before the change.
Save	Click to save the current configuration.

7 Alarm management

Real-time display of equipment alarm information, timely understanding of equipment abnormalities.

7.1 Real-time alarm

Click the [Real-time alarm] option in the [Alarm management] interface to display the real-time alarm list in the lower area, as shown in the following figure.



Premise:

The device has a storage medium (such as SD card), and is configured with alarm recording and alarm capture, and the picture receiving function is enabled in the client [System Settings-Smart Application].

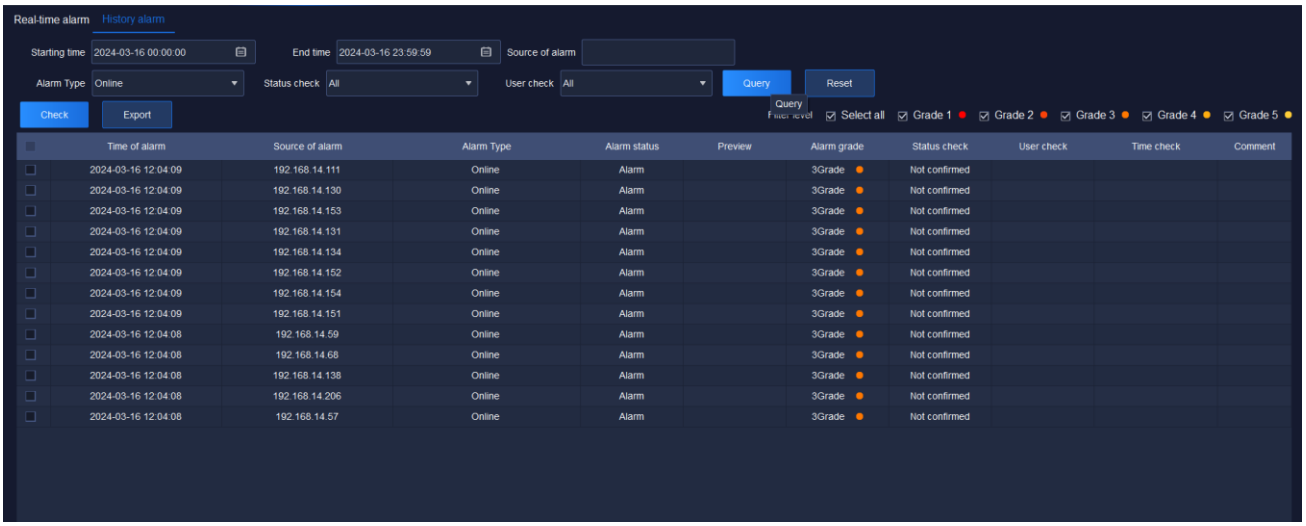
Operation steps:

Double clicking on an alarm record can display alarm information, alarm recording, and alarm capture in the details section on the right; If the alarm device does not have

storage media, the alarm information and real-time video will be displayed in the details on the right.

7.2 History alarm

Click the [Historical Alarm] option in the [Alarm Management] interface to display the real-time alarm list in the lower area, as shown in the following figure.



The interface parameters are described as follows:

Parameter	Instruction
Starting time	Available to set the starting time of history alarm query.
End time	Available to set the end time of history alarm query.
Alarm type	You can set the alarm type for querying historical alarms and select it from the drop-down menu.
Source of alarm	Available to set the source of alarm of history alarm query, search by key word supported.
Status check	Available to set the checking status of history alarm query, including all, unchecked and checked.

User check	Available to set the checking user of history alarm query
Query	Click to search history alarm information conforms to search condition.
Reset	Click to restore to default query condition.
Check	Tick and select alarm records need to be checked, click to fill in handling suggestion. Update verification status, verify users, verify real-time, and process comments after verification.
Output	Click to output query results to local device.
Filter level	Tick and select filter level, the selected level will be displayed in the list, nothing will be displayed if on level selected.
Play	Click to play the video 10s before and after the time of alarm, if there's no video, real-time preview will be displayed.
Starting time	Available to set the starting time of history alarm query.

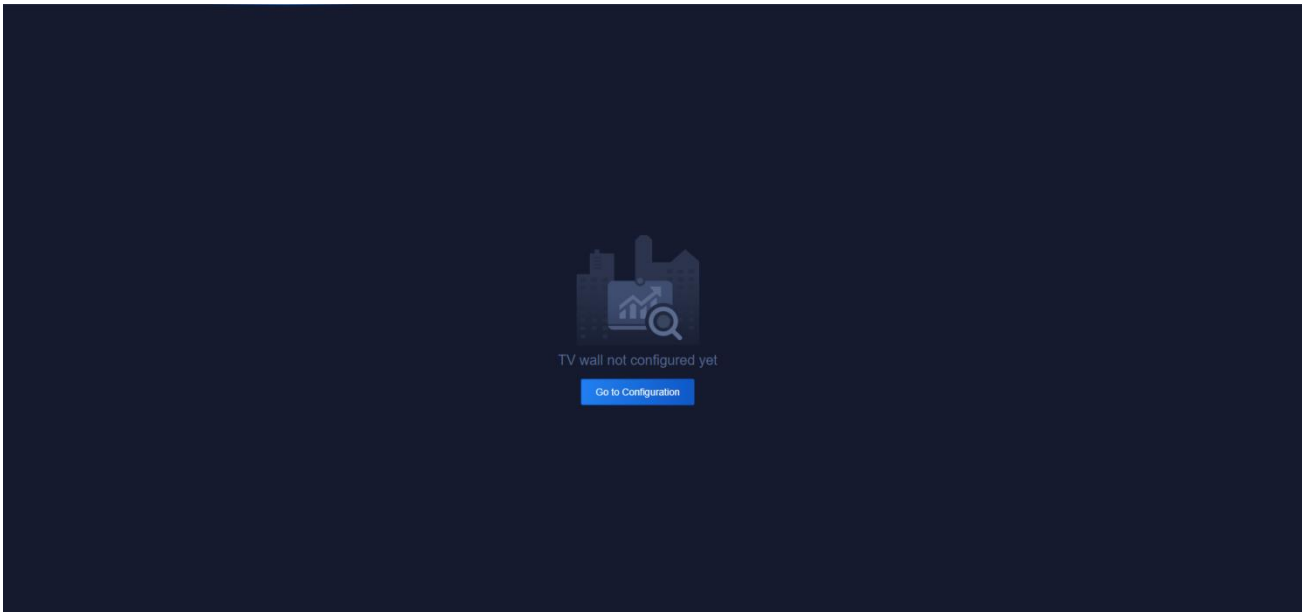
8 TV Wall

Video wall configuration and preview.

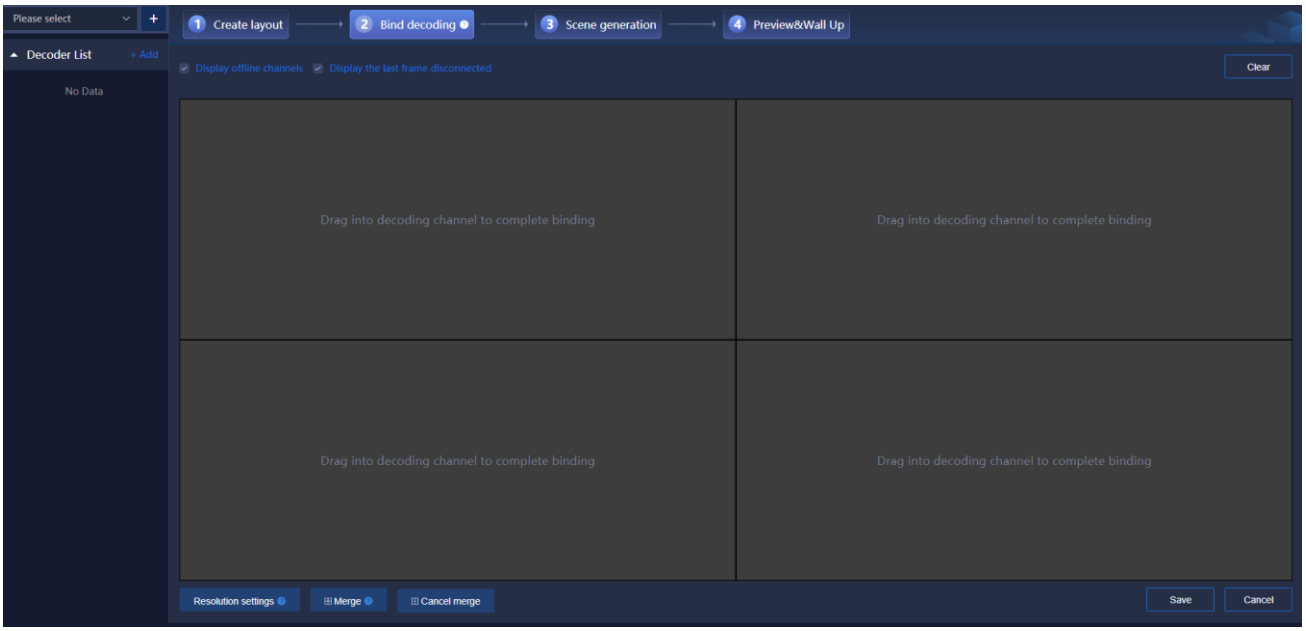
8.1 Create layout

Operation steps:

1. After entering the interface, if the TV wall is not configured, select the [Go to Configuration] option to enter the TV wall configuration interface, as shown in the following figure.



2. Set [TV Wall Name], select [TV Wall Type] and [TV Wall Layout], and click [Save] to generate the layout, as shown in the following figure.



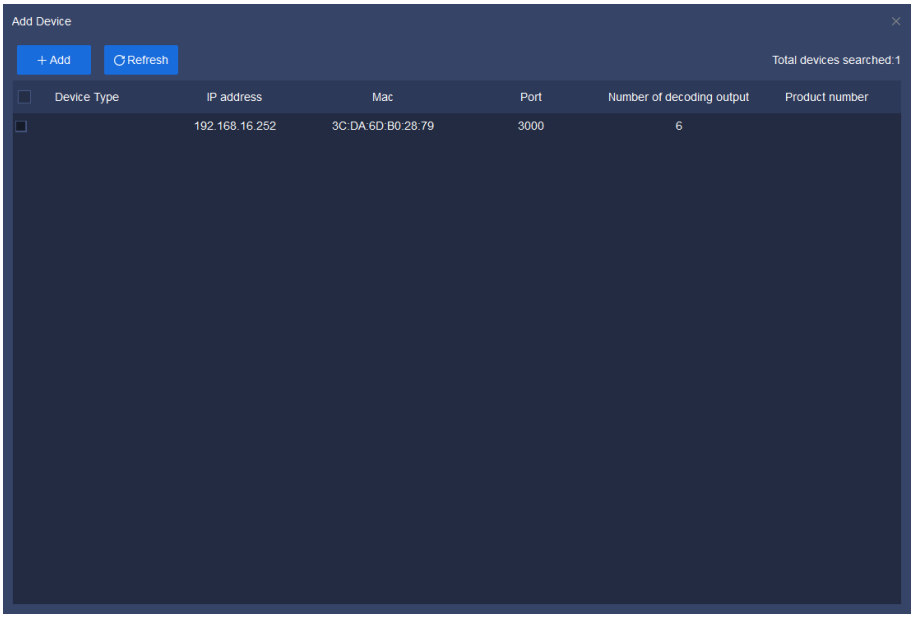
Explain:

- [TV wall type] There are two types of LCD and LED, which can be selected according to the display used.
- [TV wall layout]: Support the setting of 1 * 1 ~ 8 * 8 pictures.

8.2 Bind decoding

Operation steps:

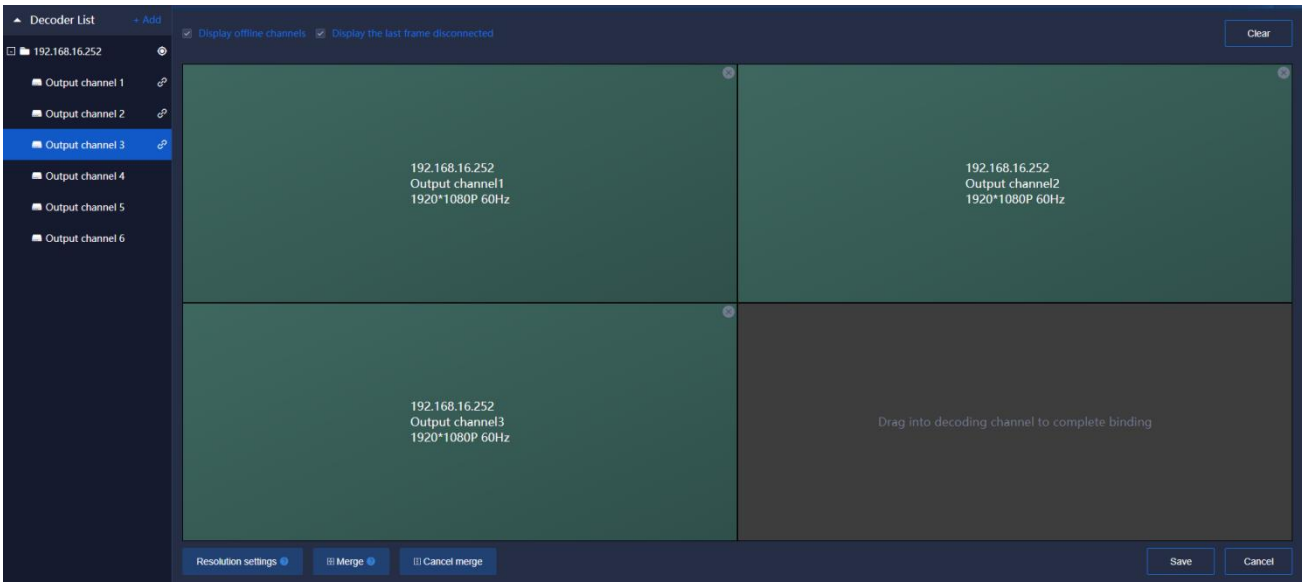
1. Add a decoding device on the left side of the interface, as shown in the following figure.



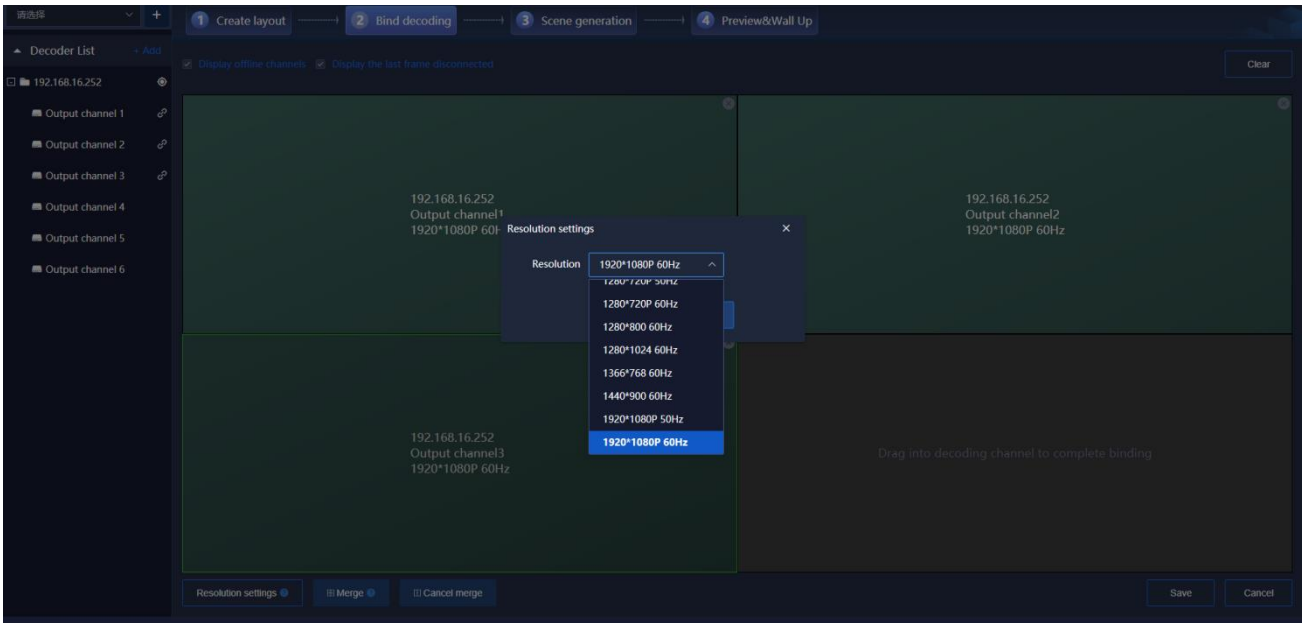
Explain:

- You can also add a decoding device in the [Device Management] interface.

2. Drag the decoder channel into the layout screen, as shown in the following figure.



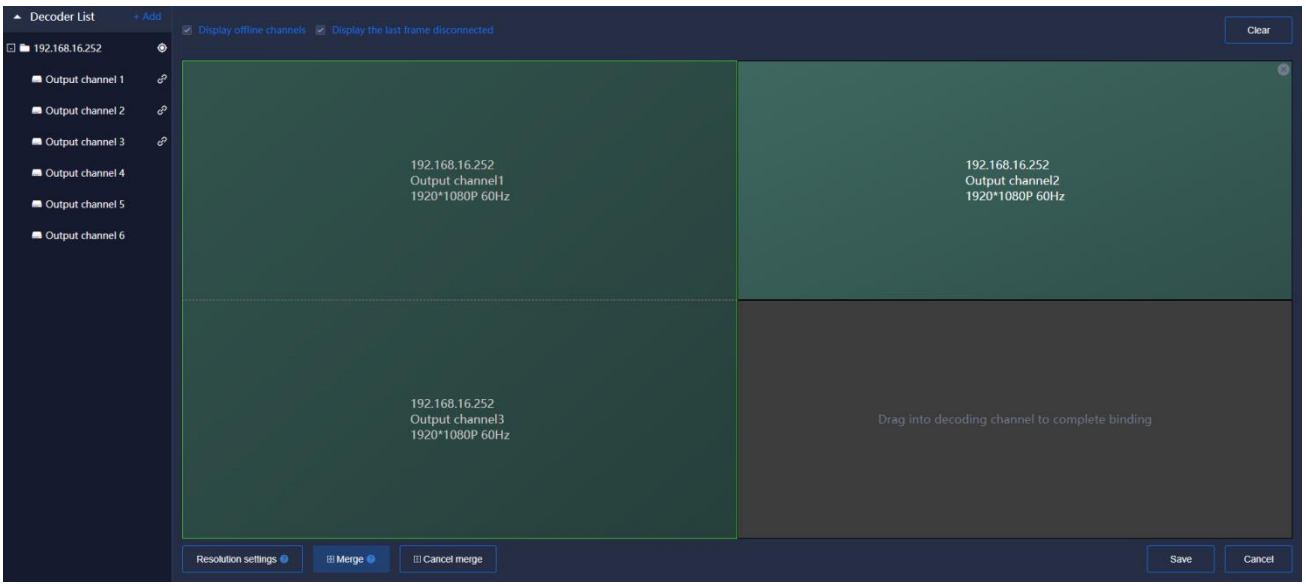
3. After selecting the bound output channel, click [Resolution Setting] in the lower left corner of the interface to set the resolution for the channel, as shown in the following figure.



Explain:

- Set the resolution to the width and height of a single screen, ranging from 240-1920 in width and 240-1080 in height.

4. Press and hold the left mouse button and slide to select the bound output channel, and then click [Merge] in the lower left corner of the interface to merge the selected channel into one output channel, as shown in the following figure.



Notice:

- Only output channels of the same decoder can be combined.

- Merging into regular rectangles is only supported.

5. Click [Cancel merge] to cancel the merging of output channels.

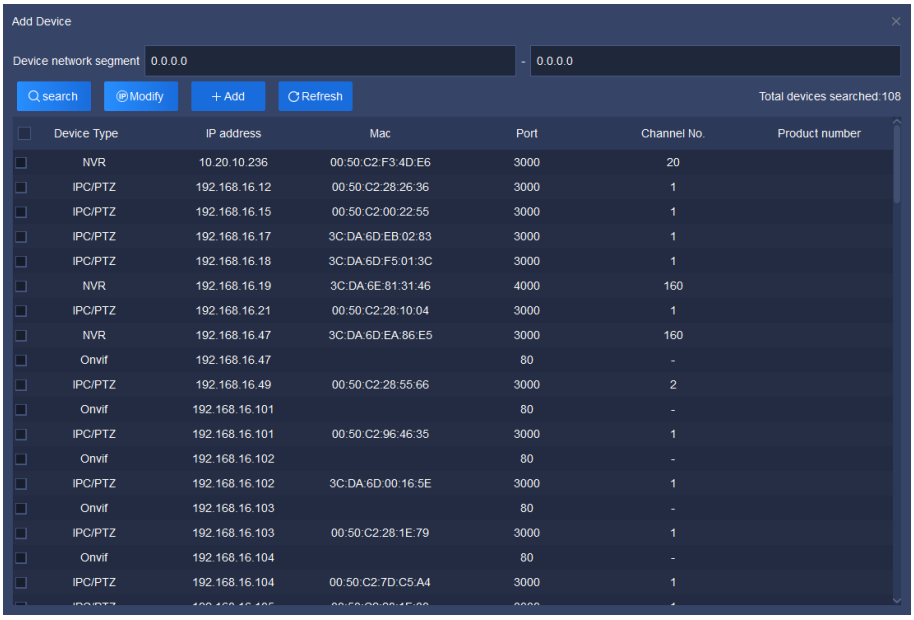
The other parameters of the interface are described as follows:

Parameter	Instruction
Display offline channels	Display information about channels that are not online
Display the last frame connected	After the network is disconnected, the last frame of the channel is retained.
Clear	To clear all the image channels.

8.3 Scene generation

Operation steps:

1. Click [Add Code] in [Coding Equipment List] on the left of the interface to add coding equipment, as shown in the following figure.



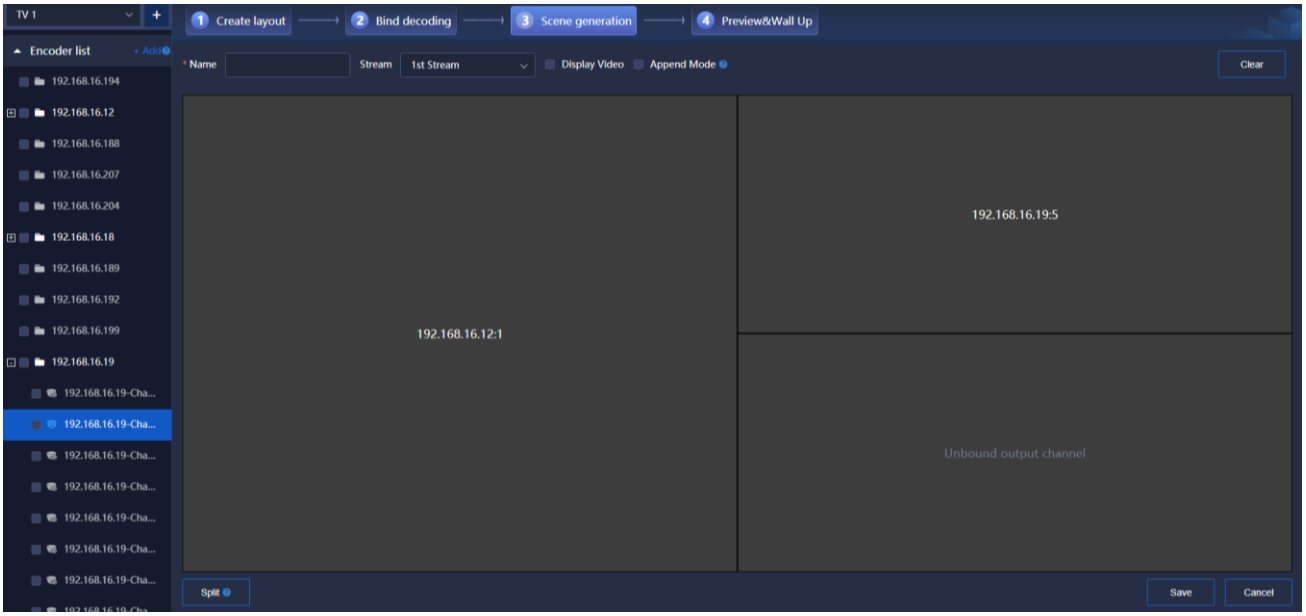
Explain:

- The coding equipment added in [Equipment Management] will be displayed in [Coding

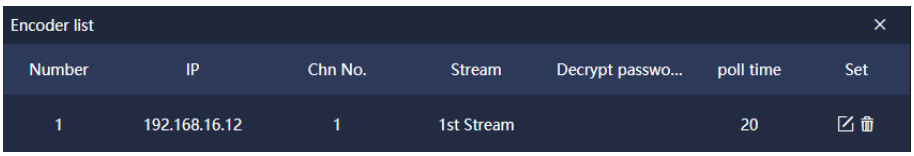
Equipment List] on the TV wall interface.

2. Set [scene name] and code stream.

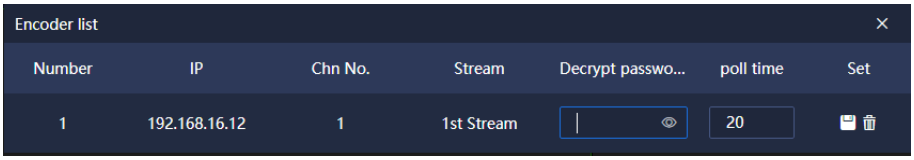
3. Drag the encoding device channel into the layout screen to complete the binding, as shown in the following figure.



4. Select a binding channel and click the "" icon in the lower left corner to view the channel information, as shown in the following figure.



5. Click the "" icon in [Coding Equipment List] to set the decryption password or modify the polling time for the channel, and click the "" icon to save, as shown in the following figure.



6. Click the "" icon in [Coding Equipment List] to unbind the channel.

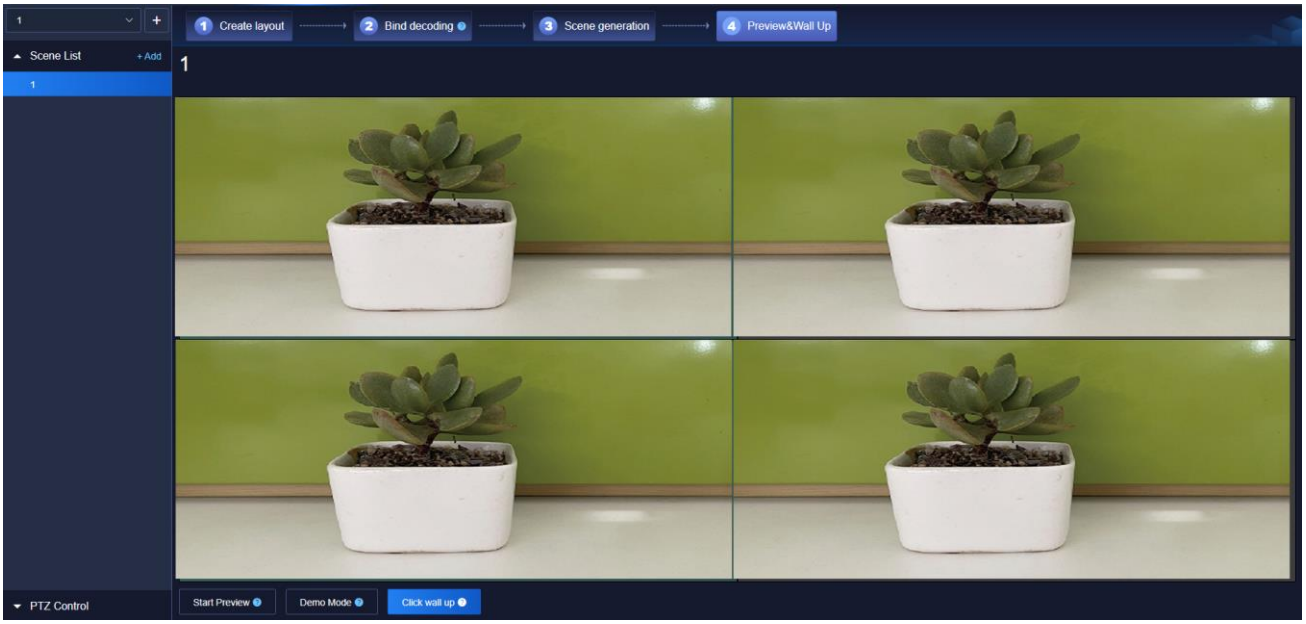
The other parameters of the interface are described as follows:

Parameter	Instruction
Display video	Check it to display the video image of the bound channel.
Append mode	Check it to bind multiple encoding device channels in the same screen and automatically switch according to the polling time.
Clear	Remove (delete) all bound encoding device channels.
Split	After selecting a channel, you can divide the output channel into multiple screens. Each screen supports binding to one encoding device channel and supports 0-16 split-screen screens. 0 screens means disabling the output channel.

8.4 Preview & Wall up

Operation steps:

1. Click on "Start Preview" to start previewing the video images of each channel in the current scene, and click on "Stop Preview" to stop the current preview, as shown in the following figure.



2. Click on "One-click wall mounting" to send the current scene configuration to the bound decoder.

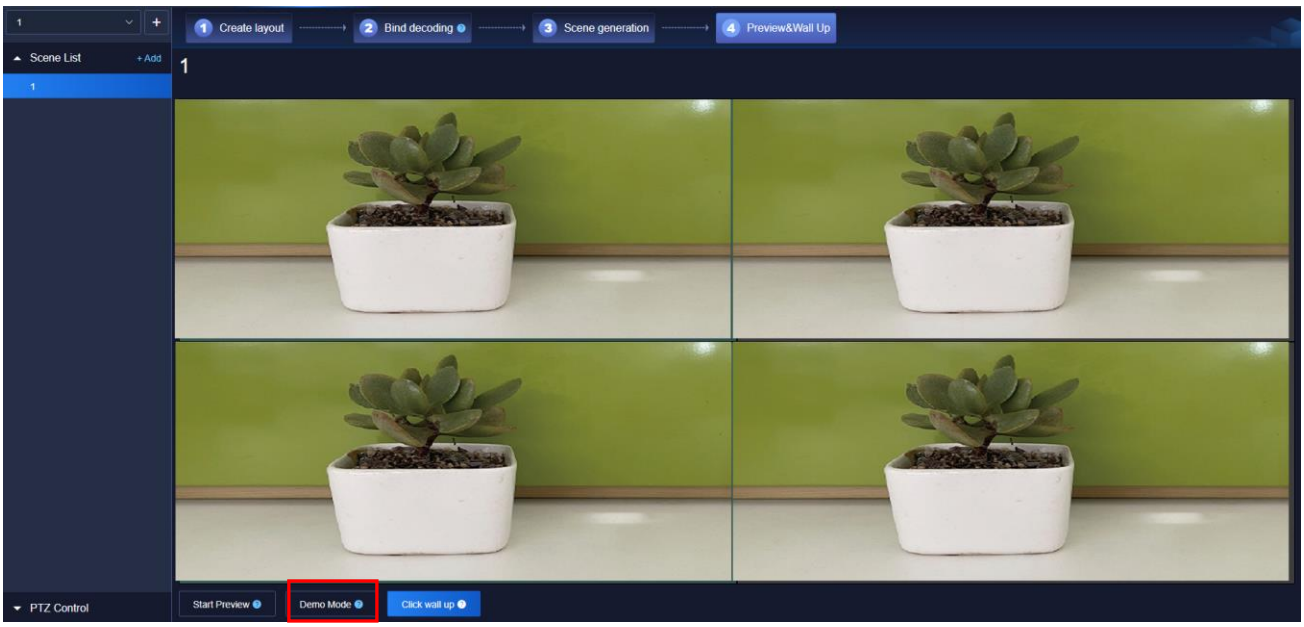
3. The control of the pan-tilt unit is the same as that in Chapter IV 4.8 PTZ control.

8.4.1 Demo Mode

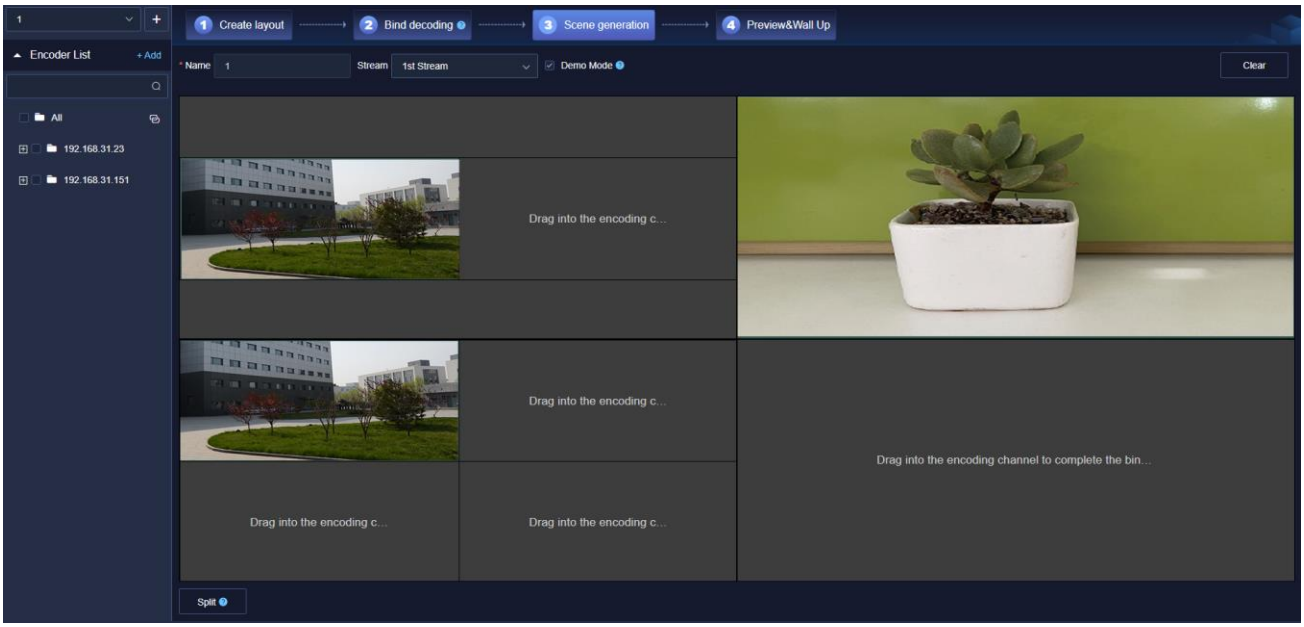
Demo mode: instant display mode. In this mode, as long as the decoder device is added to the device management and online, the bound decoding output channel is online, and the online encoding device channel is dragged to the decoding channel, you can preview and upload it to the wall. This mode does not interfere with the set scene. After exiting the demo mode, you will return to the set scene.

Operation steps:

1. Click [Demo Mode] in the [Preview & Wall] interface to jump to the [Scene Generation] interface.



2. In this interface, you can directly drag the online channel to the decoding channel to bind and put it on the wall.



Select a channel and click [Split-screen] to divide the output channel into multiple images. Each image supports binding one channel of encoding equipment and supports 0 ~ 16 split-screen images.

9 Vehicle management

Vehicle management is used for entrance and exit control of parking lot or set area, mainly for information registration and access control of black and white list vehicles and temporary vehicles.

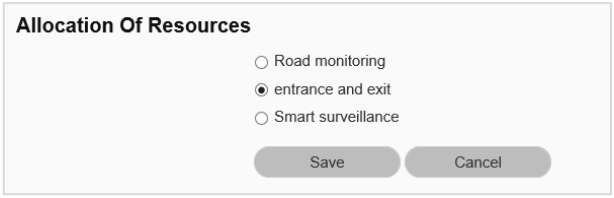
Premise:

1. Add a LPR device. After successful addition, edit the channel in the group and change the type from channel to bayonet.

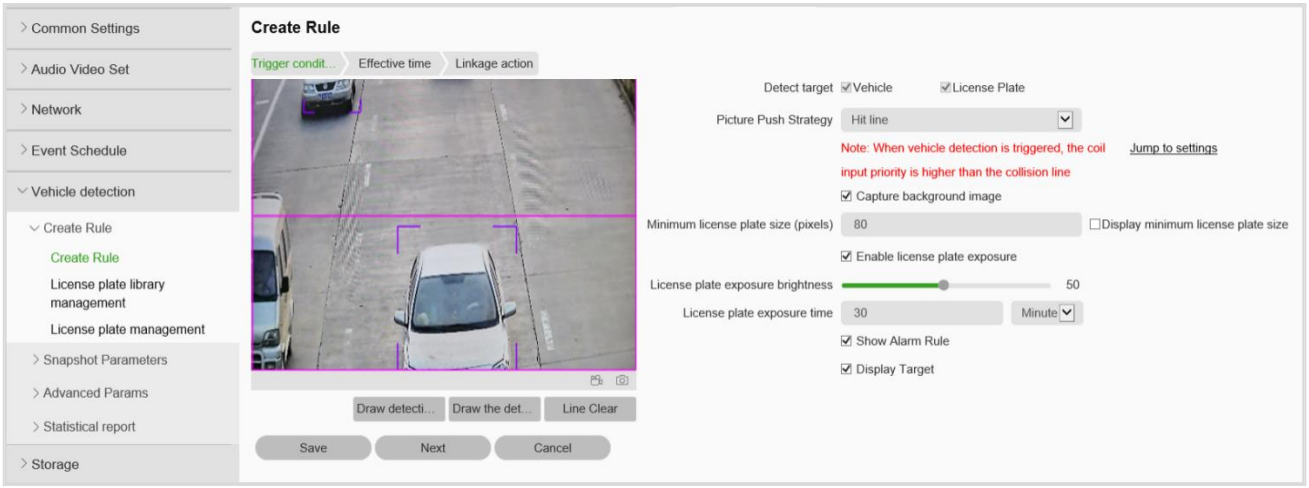
2. The added device has been configured in the web interface.

The device configuration can refer to the following:

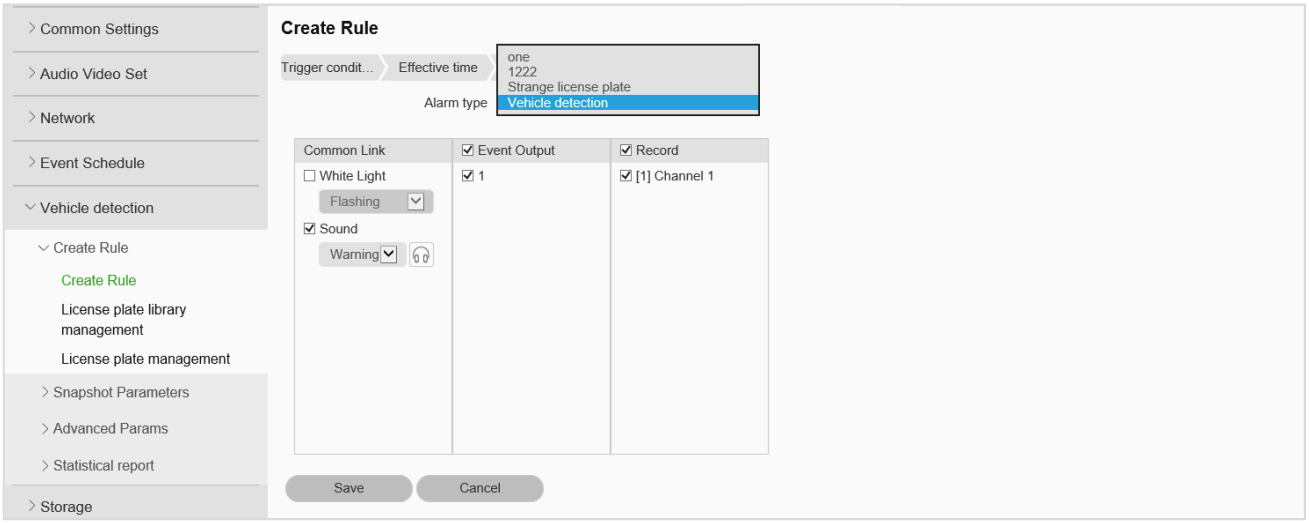
1. Select [entrance and exit] in [Configuration-System Settings- Allocation of Resource] on the device web interface.



2. Select [Event Parameters] in the device web interface [Configuration-System Settings-Vehicle Detection-Event Parameters] to set the trigger conditions. Then set the effective time and linkage action according to the use requirements.



3. If you want to lift the garage pole, you need to connect a peripheral to the alarm output port of the device and set the port mode in [Configuration-Alarm Management-Alarm Output]. Whether the port mode is normally open or normally closed depends on the type of peripheral. Then the linkage output is turned on in the linkage action.



Notice:

- The client does not recognize the vehicle detection or unfamiliar license plate alarm, so the selection of the alarm type does not affect the use of the VMS vehicle module function.

4. License plates can be added in [License Plate Library Management] and [License

Plate Management], similar to the white list. The license plates in the license plate library can automatically lift the pole when entering and leaving the garage.

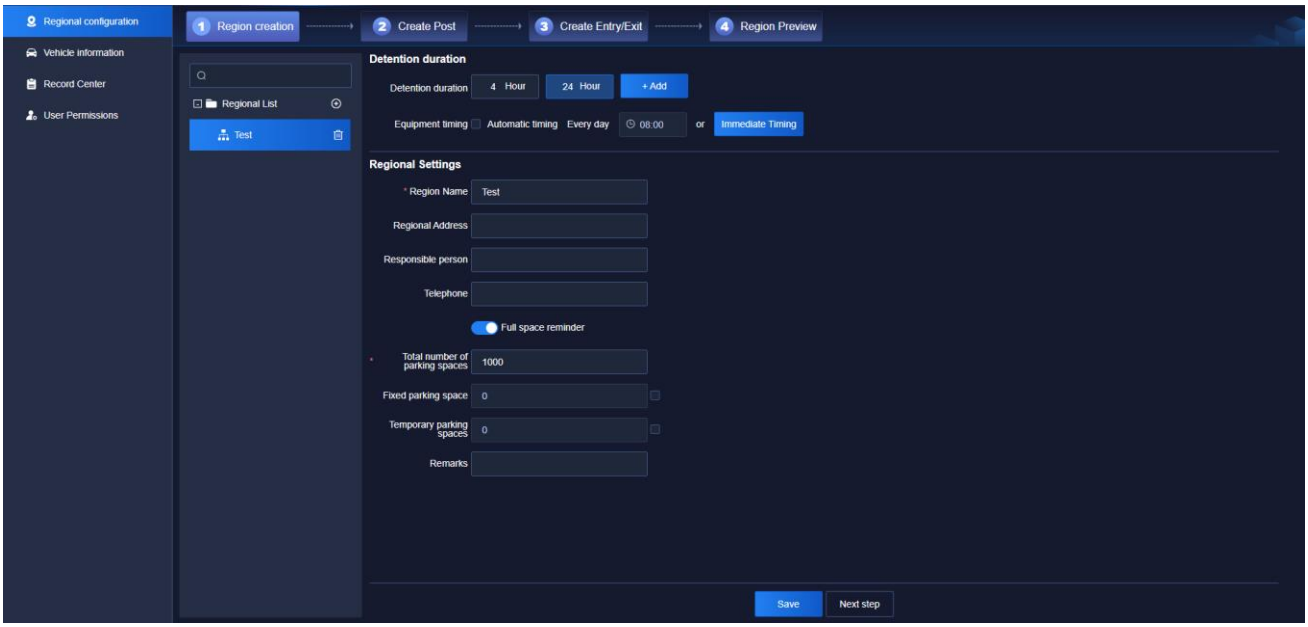
9.1 Regional configuration

After entering the interface, if the region is not configured, the region can be added in the region creation.

9.1.1 Region creation

Operation steps:

1. Click the "⊕" icon on the right side of [Area List] under [Area Creation] to set the detention time and area, and click [Save] to generate the area, as shown in the following figure.



The interface parameters are described as follows:

Parameter	Explain
Duration of detention	Vehicle detention time. 4 default durations can be set. Click to select

	and switch to the corresponding duration
Equipment timing	Support the setting of equipment timing, which can be set immediately or automatically. Please ensure a unique timing source, otherwise it will affect the video storage. Unique timing source: (1) The device is not connected to NVR; (2) The device does not start NTP timing; (3) The device is not connected to a third-party timing function platform
Area name	Fill in the name of the area
Area address	Optional, set area address
Person in charge	Optional, set the person in charge of the area
Phone	Optional, set the telephone number of the person in charge of the area
Total number of parking spaces	Set the total number of parking spaces
Fixed number of parking spaces	When checked, the number of fixed parking spaces can be set
Number of temporary parking spaces	When checked, the number of temporary parking spaces can be set
Full seat reminder	Display the parking space status icon in the area preview interface after opening
Remark	Optional

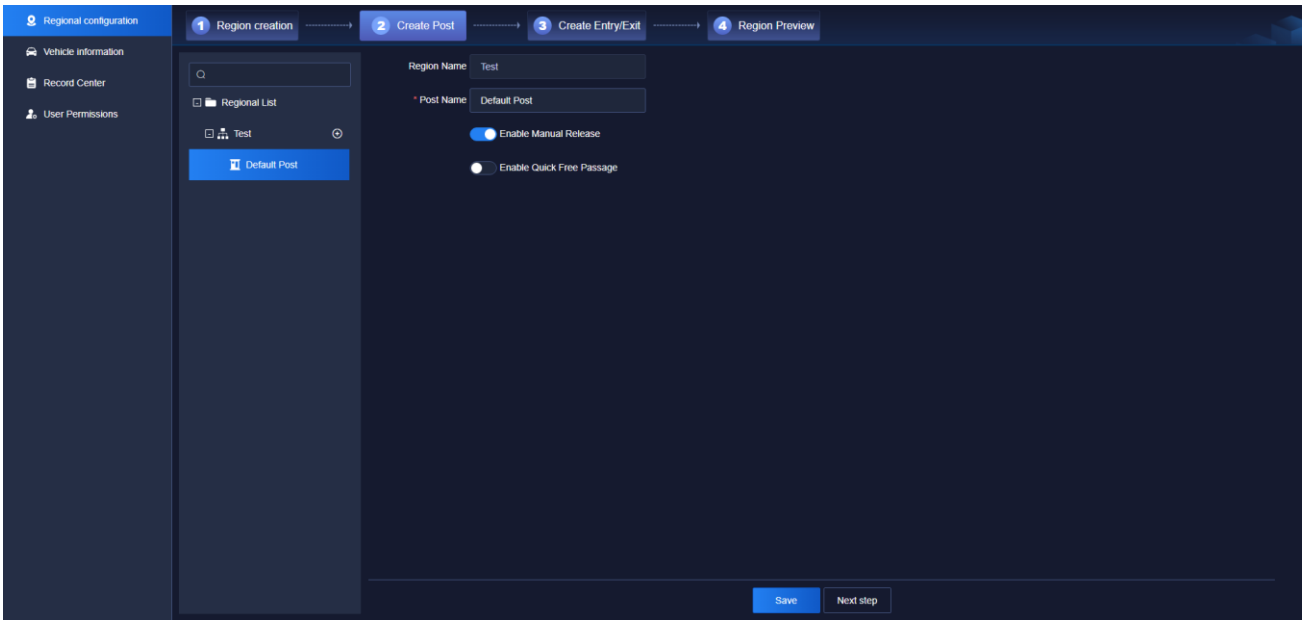
9.1.2 Create Post

On the basis of the added area, create a booth with configurable parameters:

1. Job booth name: Fill in according to actual needs

2. Enable manual release: It can automatically open the gate or manually control the opening (registration release)

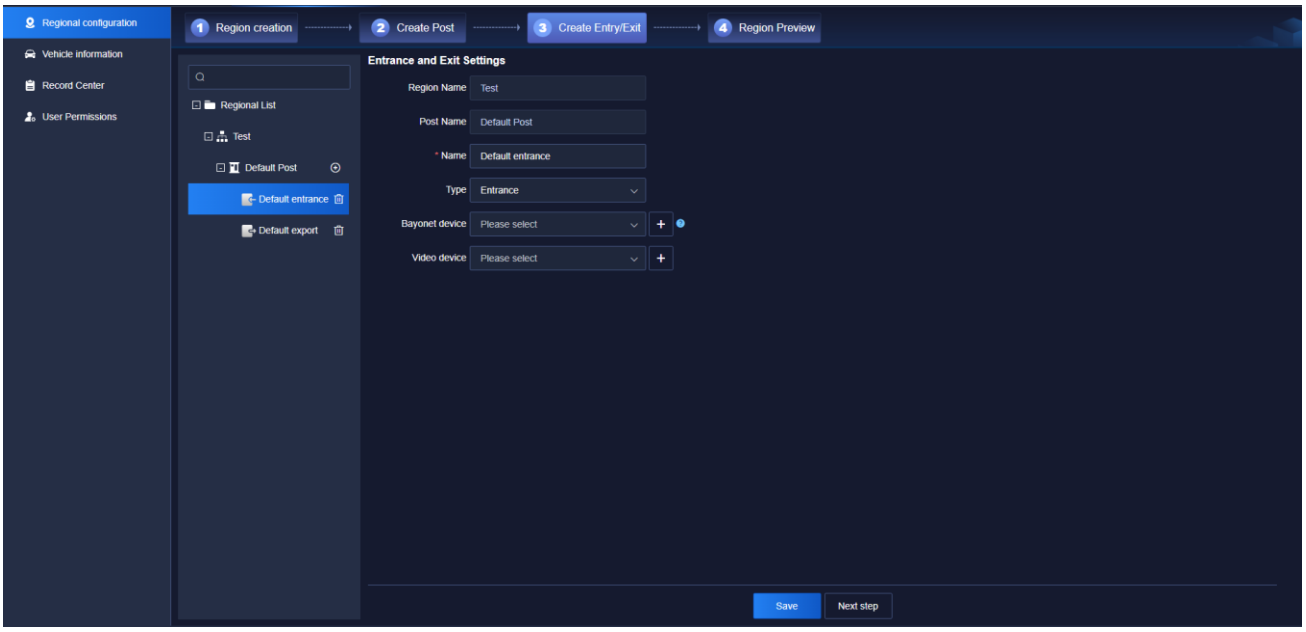
3. Enable free fast pass: After activation, the gate will be opened directly after recognizing the license plate, without the need for payment



9.1.3 Create Entry/Exit

Operation steps:

1. Set the entry and exit to add and delete operations. At most one video device can be added to each entrance or exit, and at most 8 entrances or exits can be added, as shown in the following figure.



The interface parameters are described as follows:

Parameter	Explain
Name	In/out name port.
Type	An exit or entrance.
Bayonet device	Select the added bayonet device for binding, or click "+" to pop up the automatic search interface, and add the bayonet device for binding.
Video equipment	Select the added video device for binding, or click "+" to pop up the automatic search interface, and add a new video device for binding.
Mode of passage	Set the access mode for temporary vehicles not in the license plate library. Manual registration: temporary vehicle parking is required, and the information is manually registered. Automatic registration: No need for temporary vehicle stop,

	automatic registration of information.

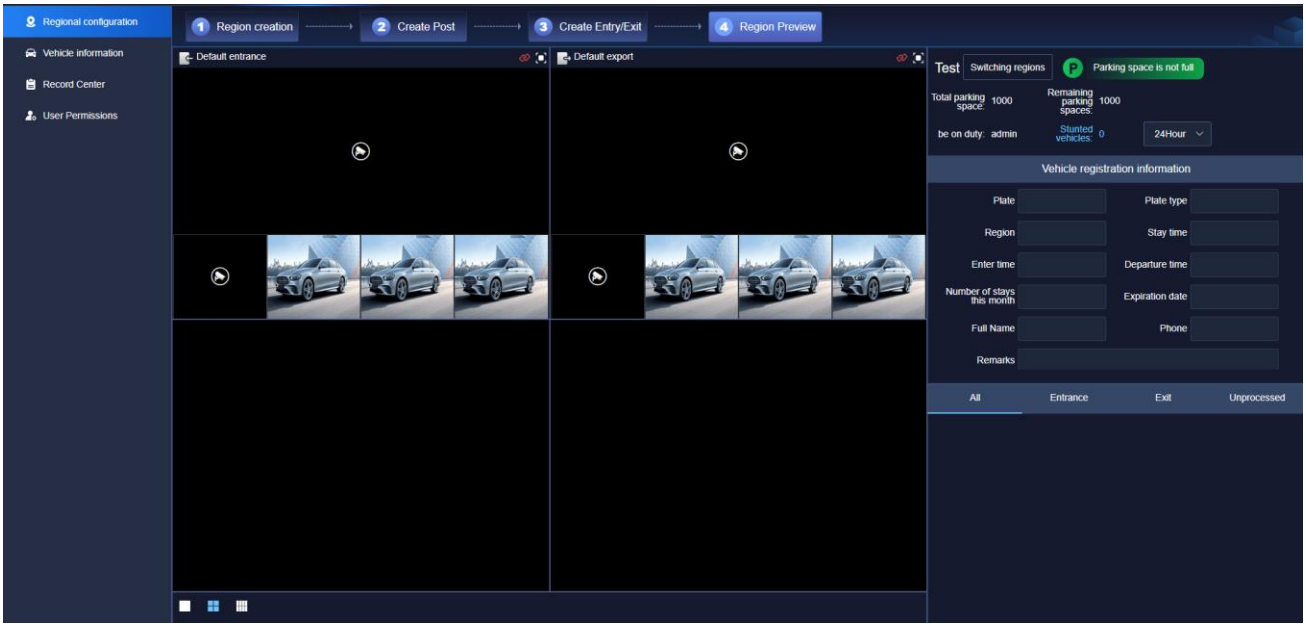
Explain:

- The bayonet equipment is used to monitor the entrance and exit equipment, and the video equipment is used to monitor the bayonet equipment and around the gate. Please determine the installation location of the equipment when using it.
- The binding bayonet device shall be used after the relevant algorithm is configured.
- The entrance/exit bayonet devices cannot be the same.

9.1.4 Region Preview

Operation steps:

1. Preview the entrances and exits of the area and view the remaining parking spaces in real time, as shown in the following figure.

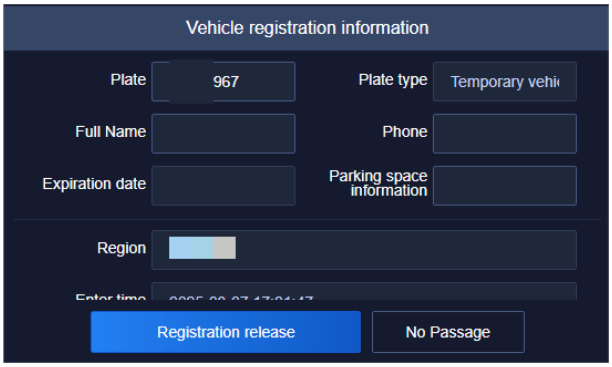


The main interface parameters are described as follows:

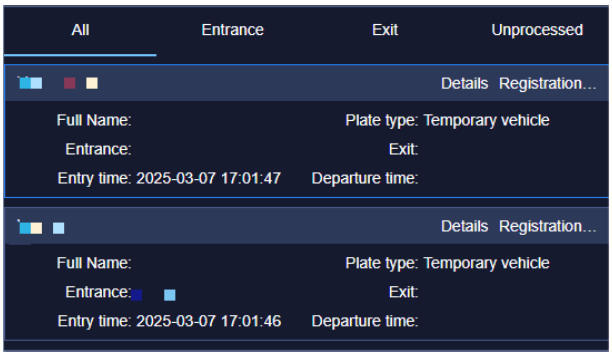
Parameter	Explain
Switch area	Toggles the display of other areas.

Parking space status	 Displays whether the parking space is full.
Total parking space	Displays the total number of parking spaces set when the area is created.
Remaining parking spaces	The remaining available free parking spaces are displayed, and all registered and released vehicles entering the area will occupy the parking spaces, and no longer occupy the parking spaces after leaving the area.
Details	Click to view parking details, including total parking, fixed parking and temporary parking.
Attendant	Displays the account currently in use.
Stranded vehicles	Select a dwell time, such as 24 hours, to view the number of vehicles that have been held for that time.
License plate registration information	Real-time license plate registration information and license plate registration information records are displayed.
Exit/entrance	The real-time pictures of the entrance/exit bayonet equipment are displayed respectively. The upper single picture displays the video of the bayonet equipment. Among the lower four pictures, the leftmost one displays the picture of the video equipment bound to the entrance/exit, and the three right pictures display the license plate photos captured by the bayonet equipment. The photo size needs to be set on the web interface of the bayonet equipment.

Vehicle registration information is divided into two parts, the upper part is real-time license plate registration information. If the access mode selected during area binding is [temporary vehicle access, manual registration], temporary vehicles not in the fixed list can be registered and released (pole lifting) or prohibited from passing (pole lifting).



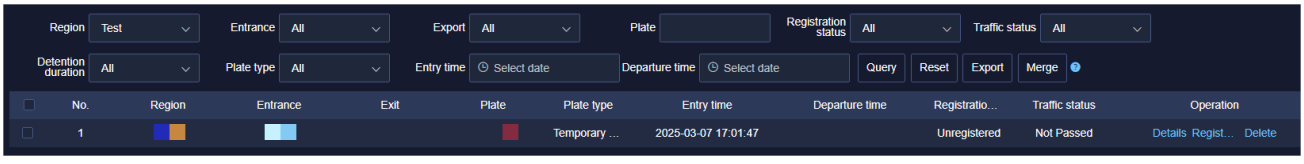
The lower part is the license plate registration information record, which can classify and filter all information, entrance information, exit information and unprocessed information, as shown in the following figure.



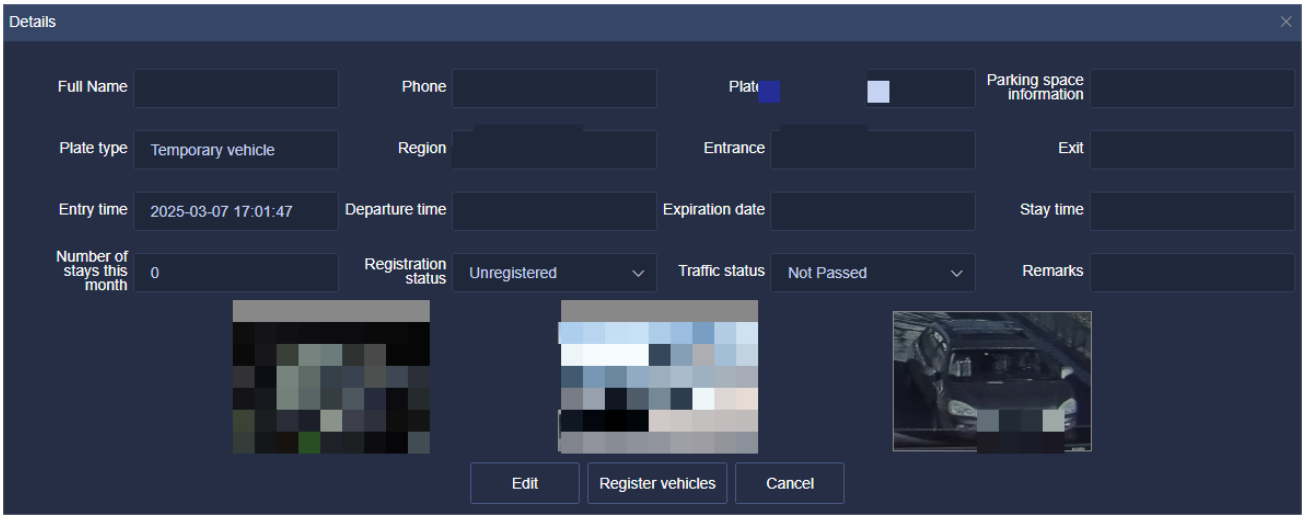
Operation steps:

1. Select different categories to view different vehicle information.

2. Click [Details] to jump to the [Record Center] interface to view the information of the record and operate it, as shown in the following figure.

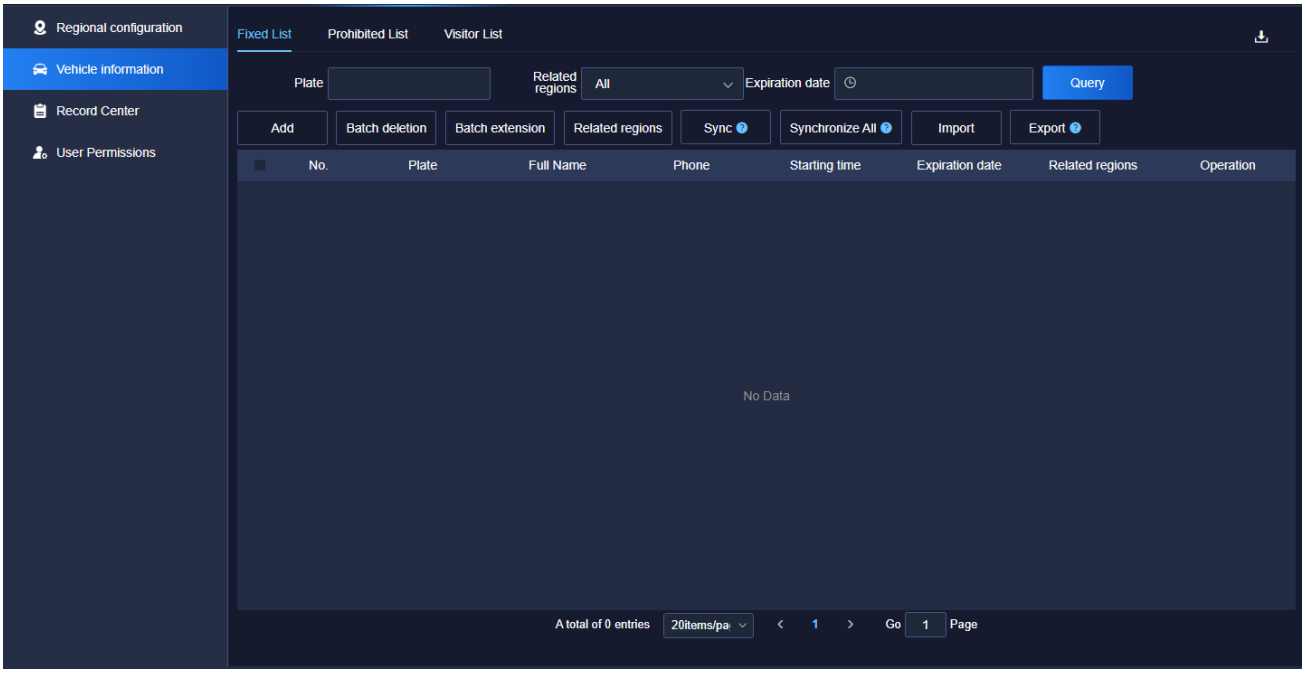


3. Click the record center interface [Details] to pop up the vehicle details interface, where you can view the vehicle information and snapshot pictures, as shown in the following figure. In this window, you can click Edit to manually modify the vehicle information, or add the vehicle to the fixed list.



9.2 Vehicle information

9.2.1 Fixed list

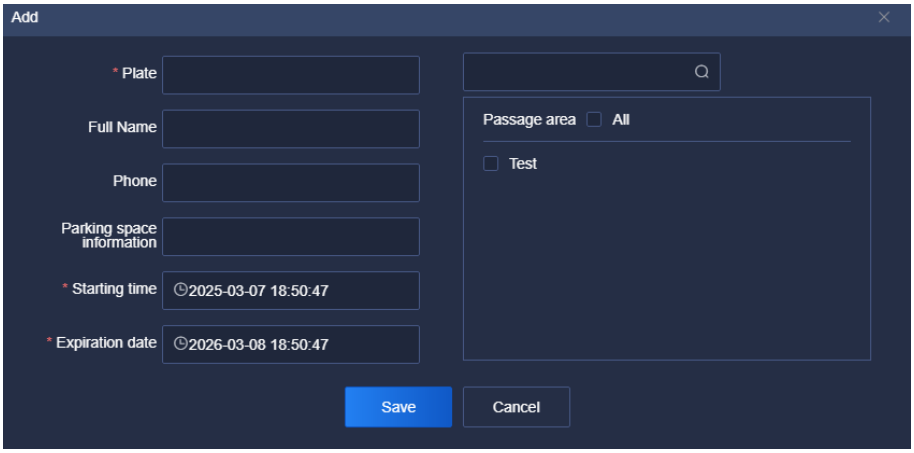


Fixed list: equivalent to "white list", vehicles in the fixed list do not need to be registered

when entering the corresponding area.

Operation steps:

1. Click the [Add] button and enter the vehicle information in the pop-up window to join the fixed list.

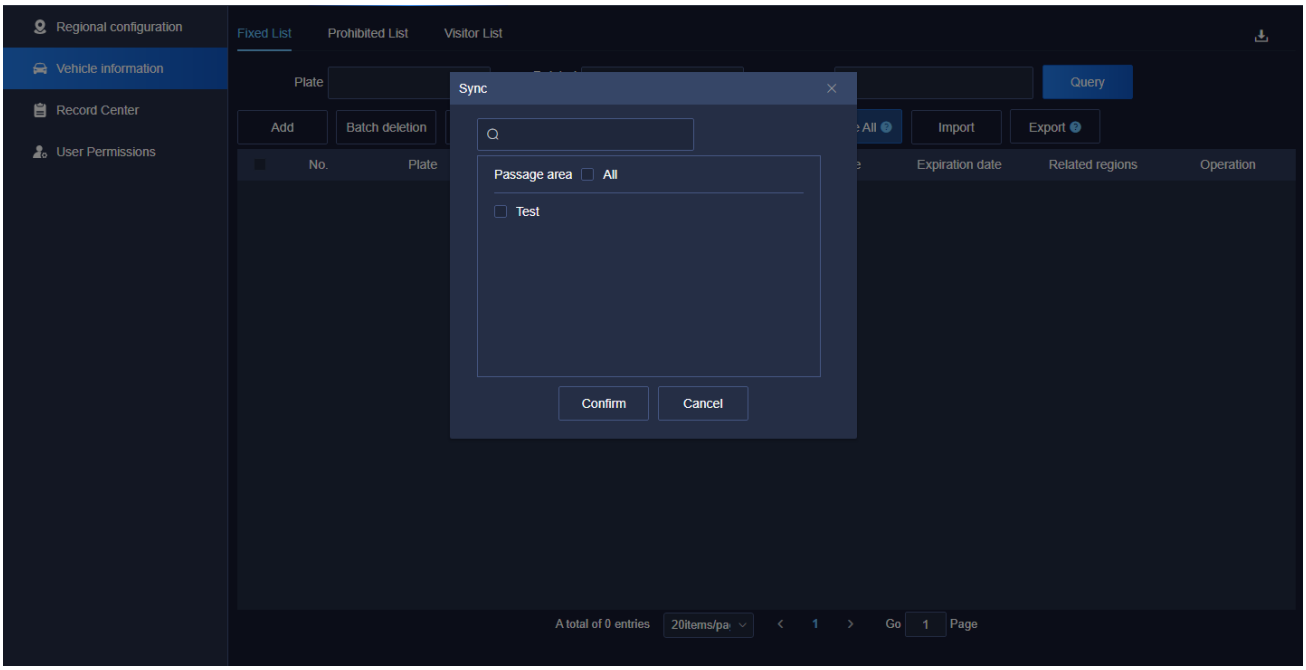


2. Select the vehicle to be deleted in the list and click [Batch Delete] to delete the selected vehicle.

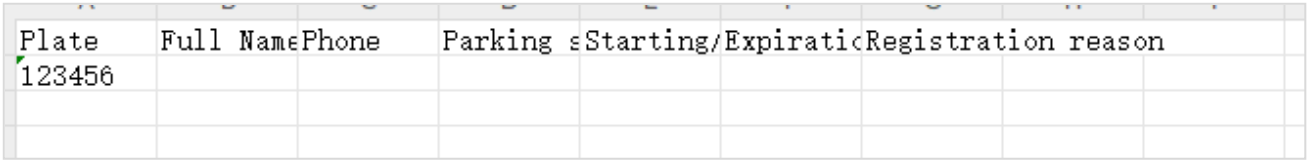
3. Select the corresponding vehicle in the list and click [Batch Extension] to extend the effective time of the vehicle in the corresponding area.

4. Select the corresponding vehicle and click [Associated Area] to set the vehicle traffic area.

5. Select the corresponding vehicle and click [Synchronize] to synchronize the vehicle information in the area to another area.



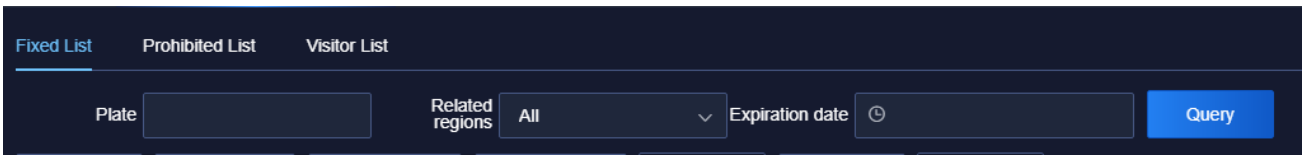
6. Click the "" icon in the upper right corner to download the license plate import template to the local.



7. Edit the license plate information to be imported in the import template, and click [Import] to import the license plate information in the template to the fixed list.

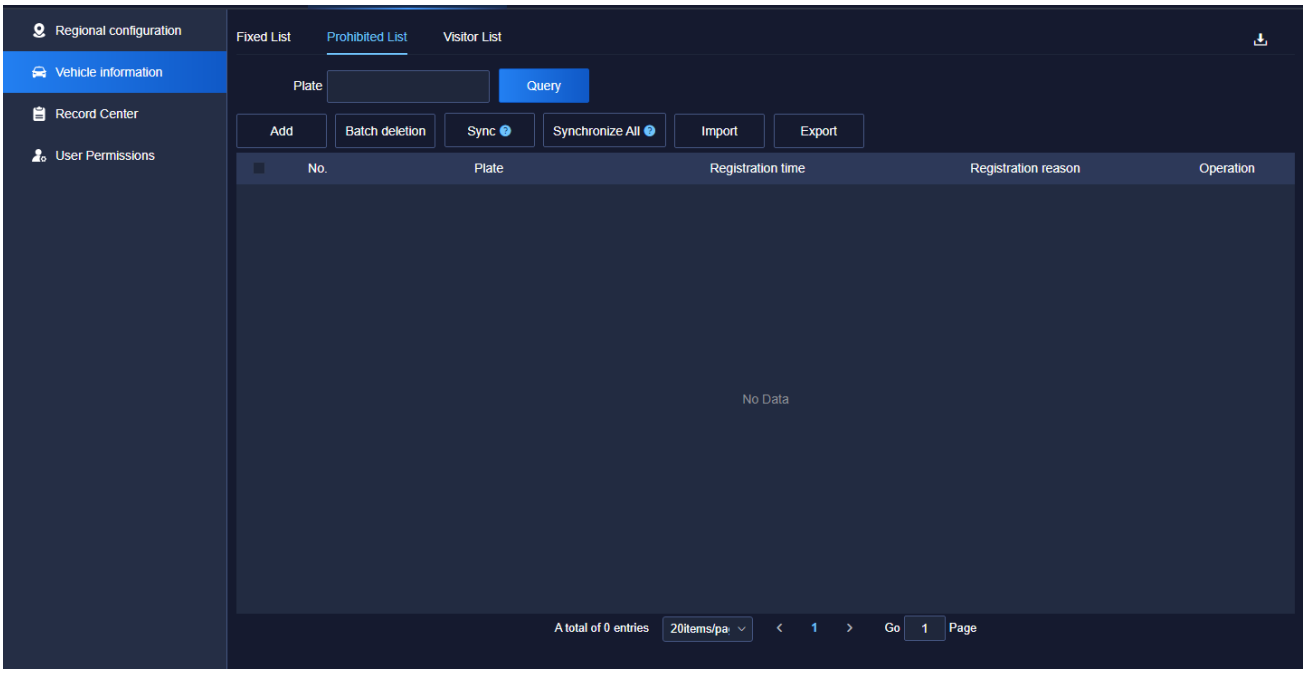
8. Select the corresponding vehicle and click the [Export] button to export the selected vehicle information to the local.

9. Enter or select key information in the query column above to quickly query vehicle information.



9.2.2 Prohibited List

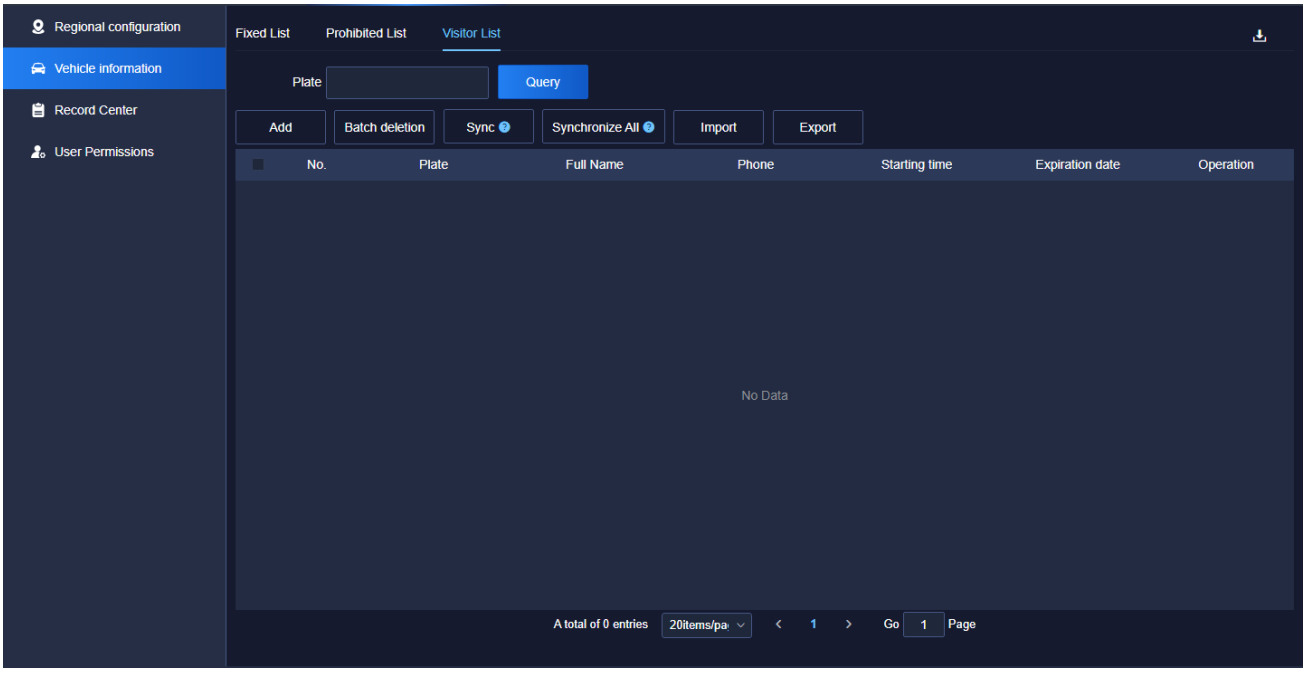
Prohibited list: a list of prohibited vehicles.



Please refer to the fixed list in 9.2.1 for operation steps.

9.2.3 Visitor List

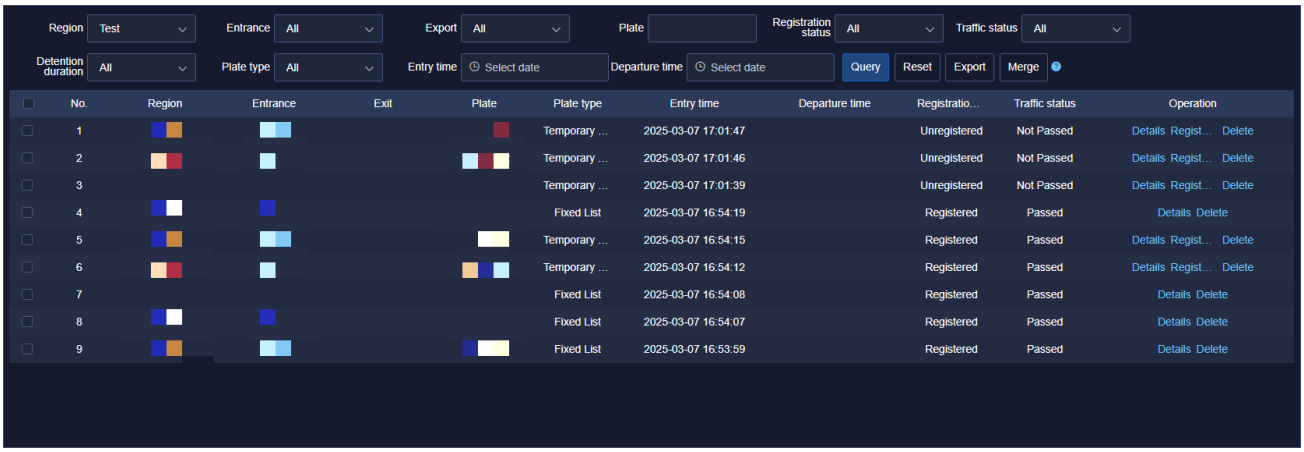
Visitor list: list of vehicles allowed to pass for a short time.



Please refer to the fixed list in 9.2.1 for operation steps.

9.3 Record Center

1. In the [Record Center] interface, you can query all the vehicle registration information in the area. Select the area, entrance, exit and other information, and click [Query] to view all the vehicles that meet the requirements, as shown in the following figure.

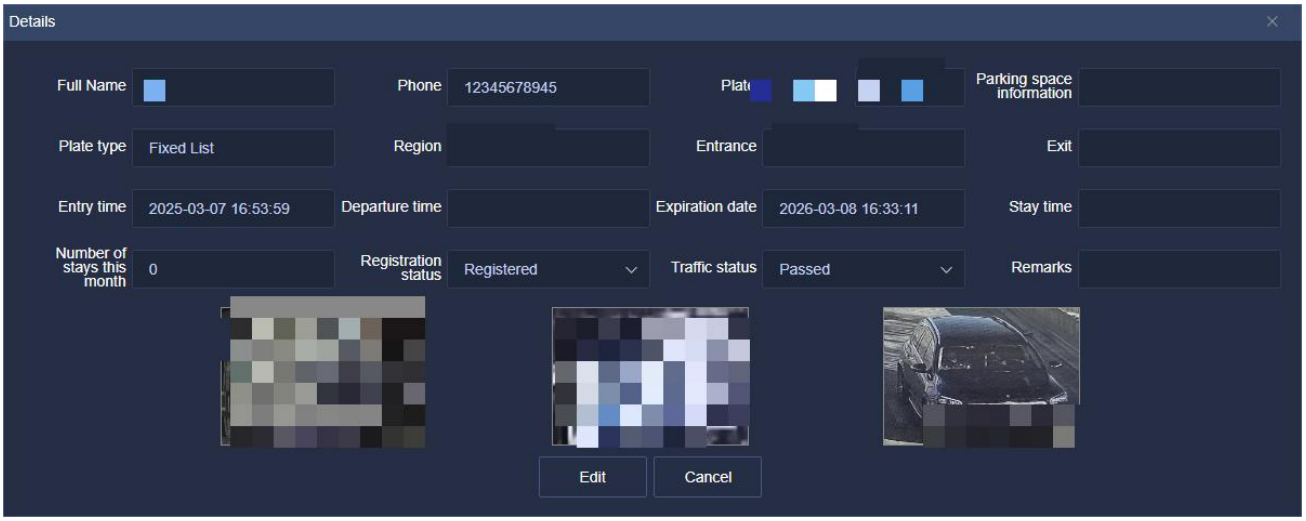


2. Click [Reset] to reset the query criteria.

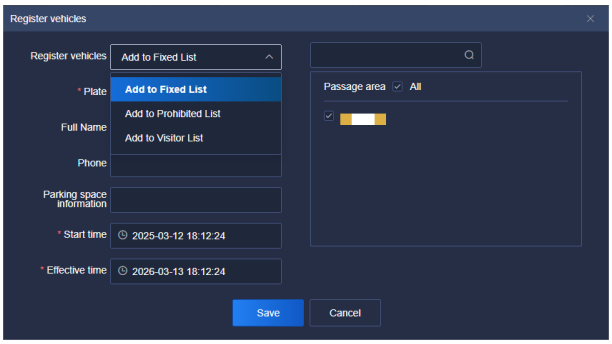
3. Select the record and click [Export] to export the record to the local.

4. Check two pieces of data and click [Merge] to merge the two pieces of data into one.

5. Click [Details] after the record to view the details of the record, and edit and delete the record.



6. If the recorded vehicle is a temporary vehicle, click [Registered Vehicle] to add the vehicle to the fixed list, visitor list or prohibited list, and select it in the drop-down box.

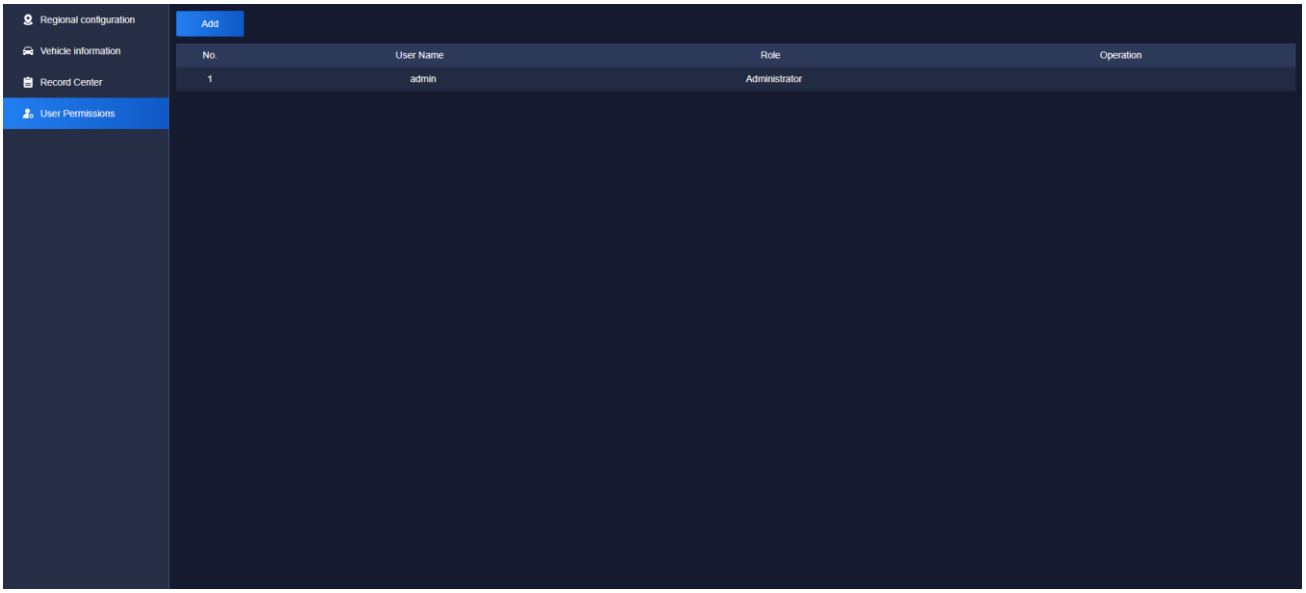


Explain:

- Requirements for merging two pieces of data: the two records shall be the same license plate in the same area, and one is the entry record and the other is the departure record, and the time of the departure record shall be longer than that of the entry record.

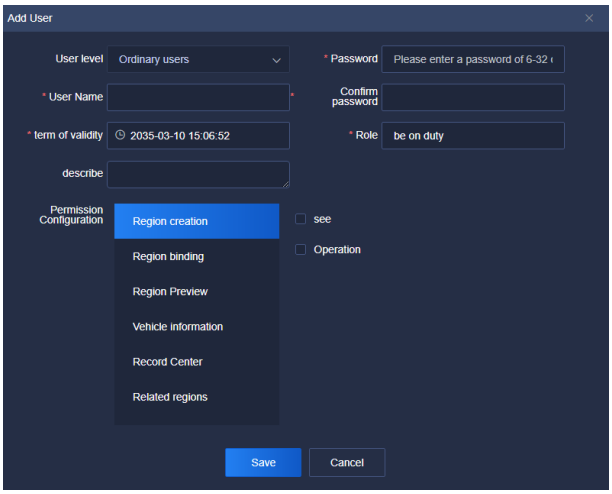
9.4 User Permissions

Manage, add users.



Operation steps:

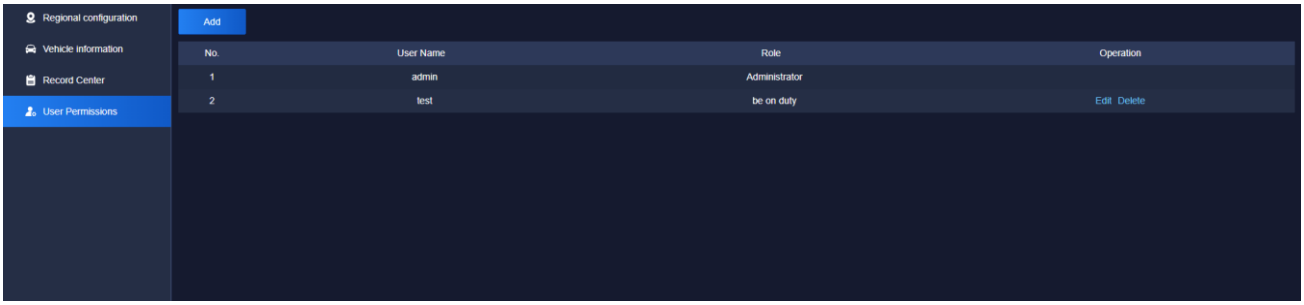
1. Click the [Add] button in the upper left corner to add users in the pop-up window.



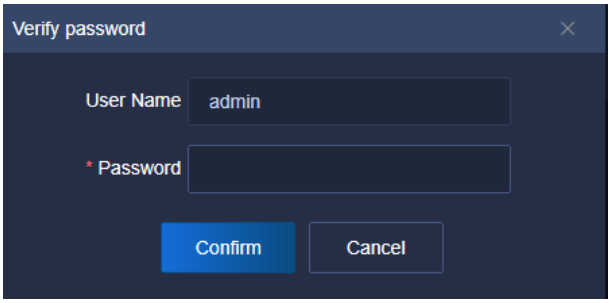
2. Enter the user name and password, and set the validity period, role and permission.

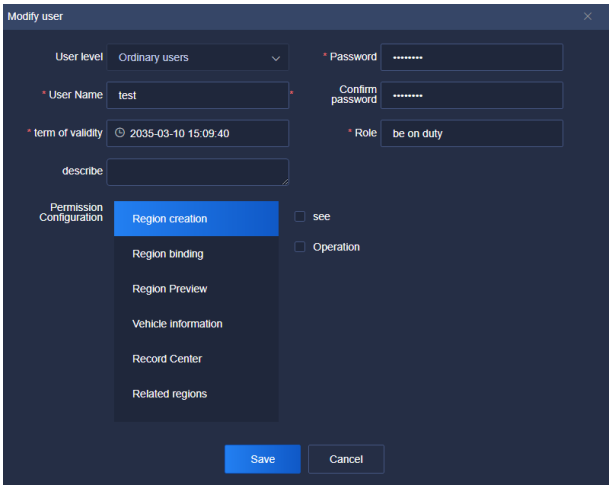
Parameter	Explain
Expiration date	Set the user account validity period.
Role	Enter the role name according to actual requirements.
Permission configuration	Set permissions for each function, view or view and operate.
Associated area	Set the area that the account can be associated with.

3. The added user can be edited or deleted.



4. Select [Edit] after the user, enter the password of the user, and modify the user information in the pop-up window.





5. Select [Delete] after the user, and delete the user after confirmation.

10 Access Control

Access control equipment management, personnel and permission addition, real-time monitoring of access control.

Access controller configuration can refer to the following contents:

1. The access controller is directly plugged into the power supply and network cable.

2. After connecting the power supply and network cable, press the button below for a long time (10 seconds), hear the sound of "drip drip", and restore the factory equipment successfully.



3. Configure the computer IP to 192.168.1 segment, connect the computer to the

access controller directly with the network cable, and use the Internet Explorer browser to access the http://192.168.1.2. The user name is admin, and the password is 1111.

4. After logging in, enter the [Device Management] interface and change the IP address of the device to the IP address of the computer where the client is located.

5. Enter the [Network Settings] interface, modify the IP address, subnet mask, and gateway, so that the access control equipment can communicate with the network of the computer where the client is located.

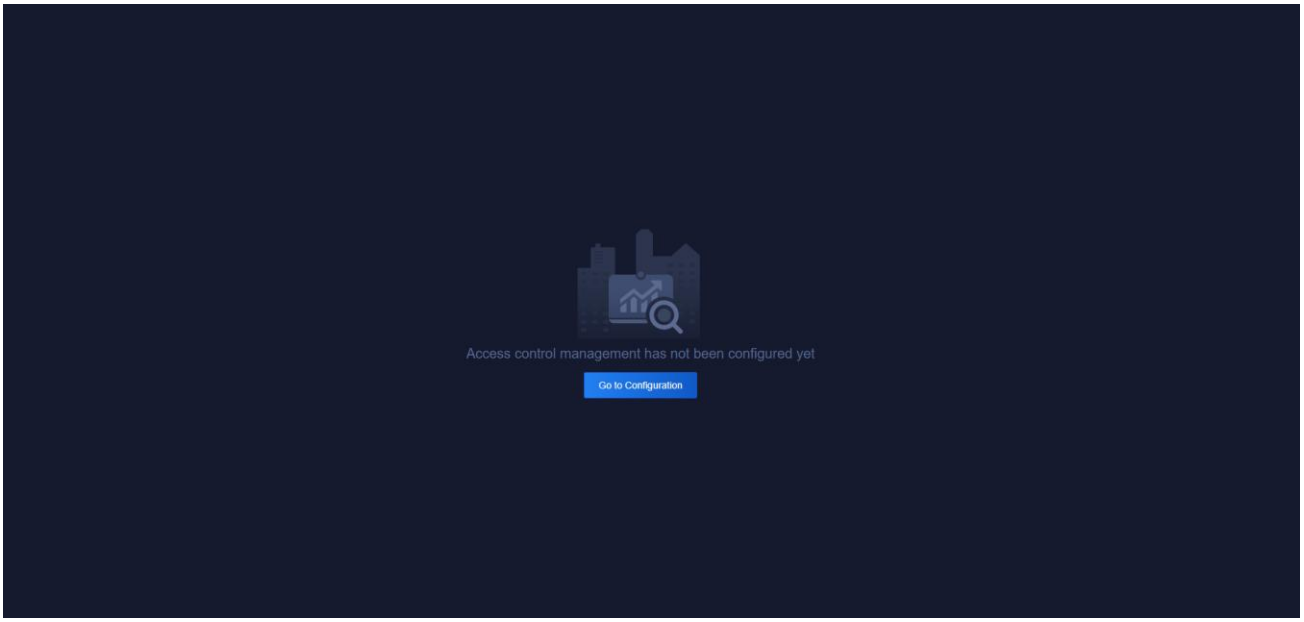
Notice:

- The port number of the network access control device is the start port + 6, and the network port of the device is the 18807. The network port number of the PC client is the 18809, which is the open port of the PC client and is used to transmit data with the access controller. If the PC client cannot receive the data transmitted by the access controller, the problem can be solved by checking the port occupancy.
- After modifying the IP address and web port, you need to log in to the web interface again using the new IP and port.

For configuration of PAD equipment, please refer to 3.3 Man-brake equipment.

10.1 Basic Configuration

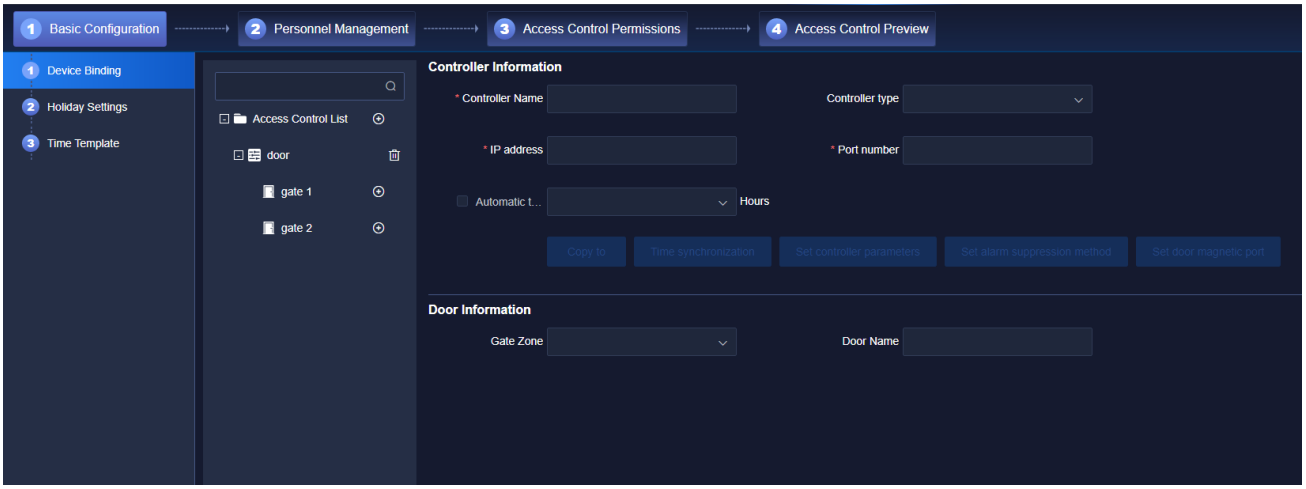
After entering the interface, if the access management is not configured, select the [Go to Configuration] option to enter the basic configuration interface, as shown in the following figure.



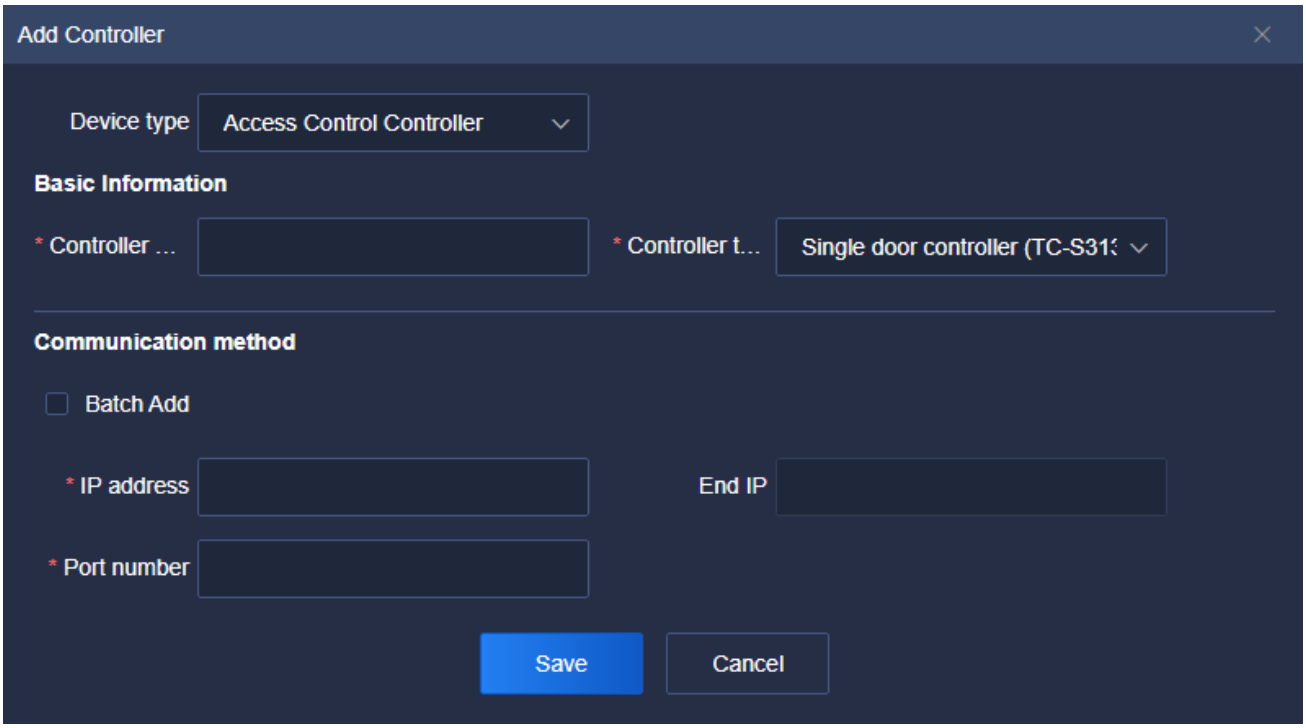
10.1.1 Device Binding

Operation steps for adding access control equipment:

1. Add access control equipment in the access control list, click "⊕" next to [Access Control List], fill in the controller (access control equipment) information and communication mode in the pop-up window, and add it successfully after saving.



Interface and parameters of access controller are as follows:



Parameter	Explain
Device type	Select the access controller.
Controller Name	Fill in the custom controller name.
Controller Type	Select the controller type. Note: If the selection is wrong, the device will fail to add.
Batch Add	Check Batch Add to add access control equipment in batch. Enter the IP address, end IP address and port number. Note that the equipment should be set with a unified port number.
IP address	IP address of the device.
End IP	If Batch Add is checked, it is required to fill in.
Port number	Fill in the port number of the access control device.

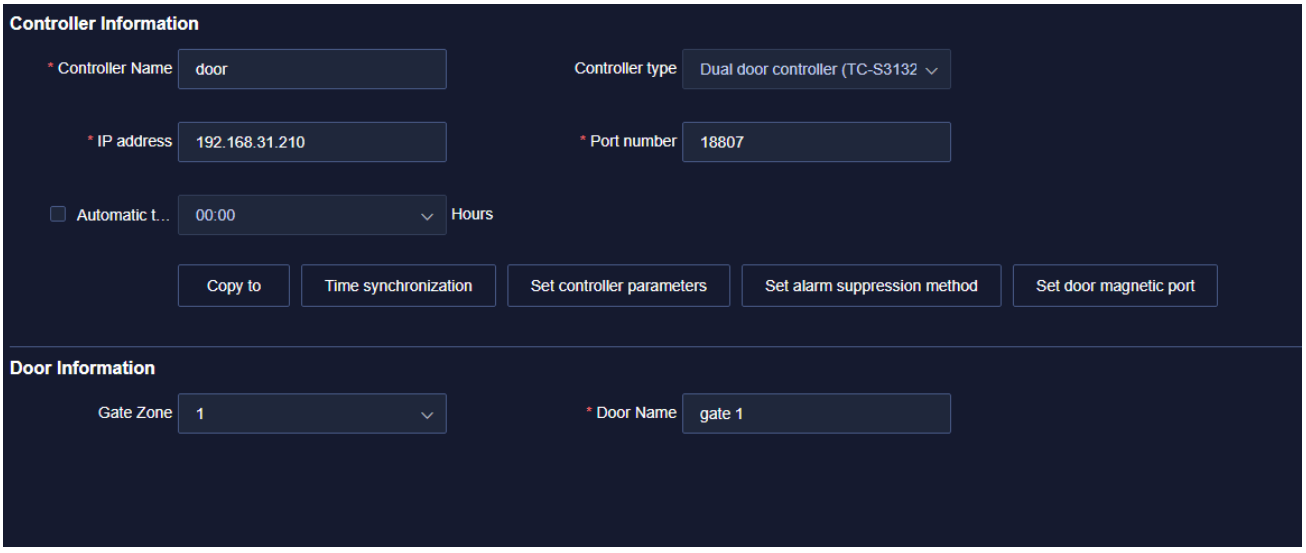
The PAD equipment parameters are described as follows:

Parameter	Explain

Device type	Select the PAD device.
Device Name	Fill in the custom PAD device name.
IP address	IP address of the PAD device.
Port number	Fill in the port number 80 of the PAD device.
Factory number	Fill in the factory number of PAD equipment. Refer to 3.3 Man-brake equipment.
Login name	Fill in the login name of the PAD device.
Password	Fill in the PAD device password.

Controller information interface:

1. Select the access control device, and the information of the device will be displayed on the right side, as shown in the following figure.



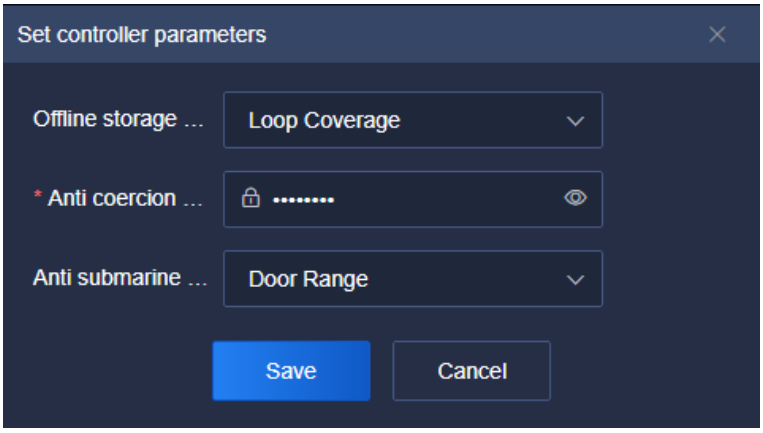
The interface parameters are described as follows:

Parameter	Explain
Controller Name	Displays the name of the controller, which you can modify.
Controller Type	Displays the type of the controller.

IP Address	Displays the IP address of the controller, which can be modified.
Port number	Displays the IP address of the controller, which can be modified.
Automatic timing	Check Enable to set automatic timing every day to synchronize with the computer where the client is located.
Copy to	Copy the configuration of this access control device to other devices.
Time synchronization	Manual timing and synchronization with the computer where the client is located.

Operation steps for setting controller parameters:

1. Click [Set Controller Parameters] to pop up a window for parameter setting.



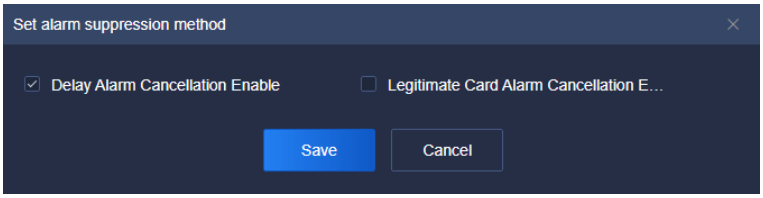
The interface parameters are described as follows:

Parameter	Explain
Offline storage mode	When the access controller network is disconnected from the network, the event log is stored locally. It is divided into cycle coverage and storage full alarm. Circular Overwrite: When the local storage is full, the oldest record is deleted in a circular manner, and then the storage continues.

	Storage full alarm: when the local storage record is full, it will not be stored and a storage full alarm record will be generated.
Anti coercion password	Generally, access control systems require reading and entering personal passwords before the door can be opened; When encountering an emergency situation, it is necessary to open the door. At this time, simply enter the anti coercion code after reading the access card, and the system will sound an alarm at the same time as opening the door.
Anti submarine return range	Anti-sneak back function: the anti-trailing function of the access control system requires the card holder to enter from a certain door and exit from a certain door, and the card swiping records must be strictly corresponding to one entry and one exit. Set the anti-backwash range. Door range: the card holder enters from the door and must exit from the door. Controller range: the card holder enters from door A of the controller and exits from other doors of the controller. This range is mostly used for two-door and four-door controllers.

Operation steps for setting the alarm elimination mode:

1. Click [Set Alarm Elimination Mode] to pop up a window for parameter setting.

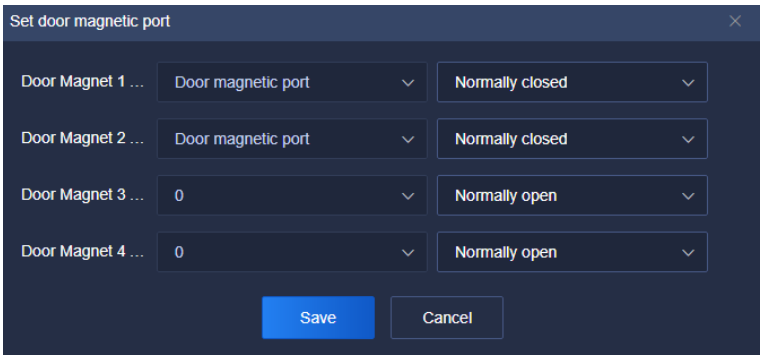


Delay alarm elimination enable: After checking, the alarm will be eliminated after a period of time. Alarm delay time can be set in [Access Control Authority].

Enable the legal card to eliminate the alarm: After checking, you can use the card reader of the legal card close to the access controller to eliminate the alarm. Note: Before using this alarm elimination method, it is necessary to ensure that the access controller is connected to the card reader.

Operation steps for setting door magnetic port:

1. Click [Set Door Magnetic Port] to pop up a window for parameter setting.



PAD device information interface:

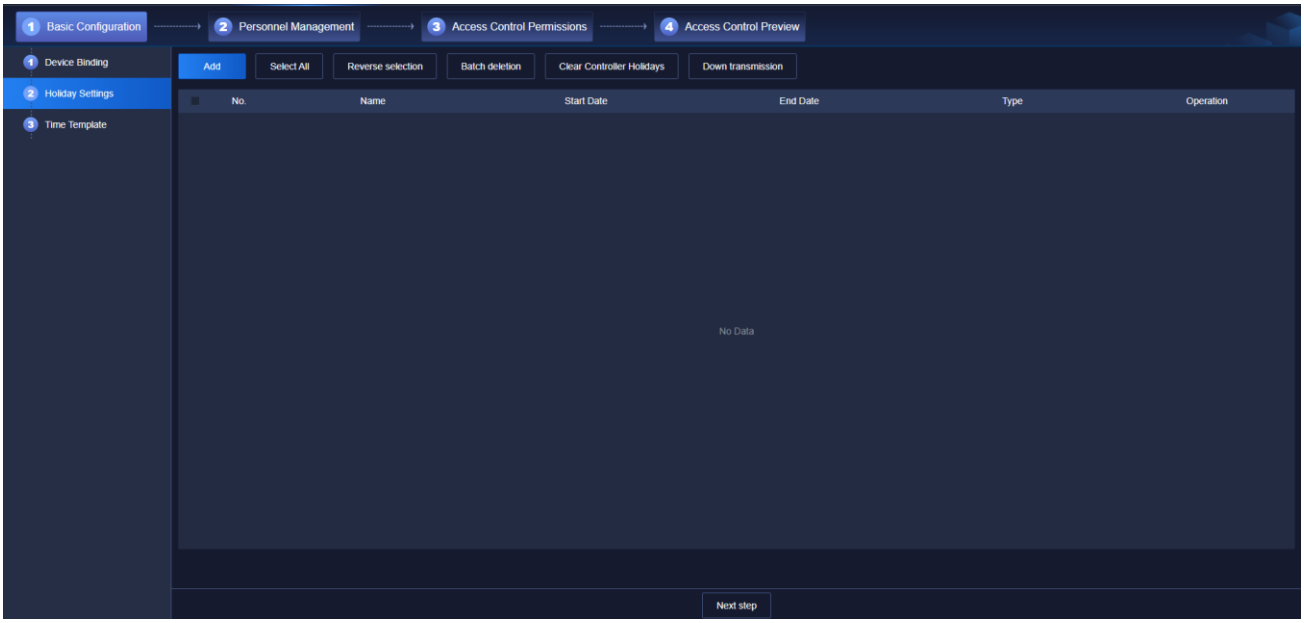
1. Select the PAD device, and the information of the device will be displayed on the right.

You can view the information of the PAD device and set the device to synchronize time with the computer where the client is located.

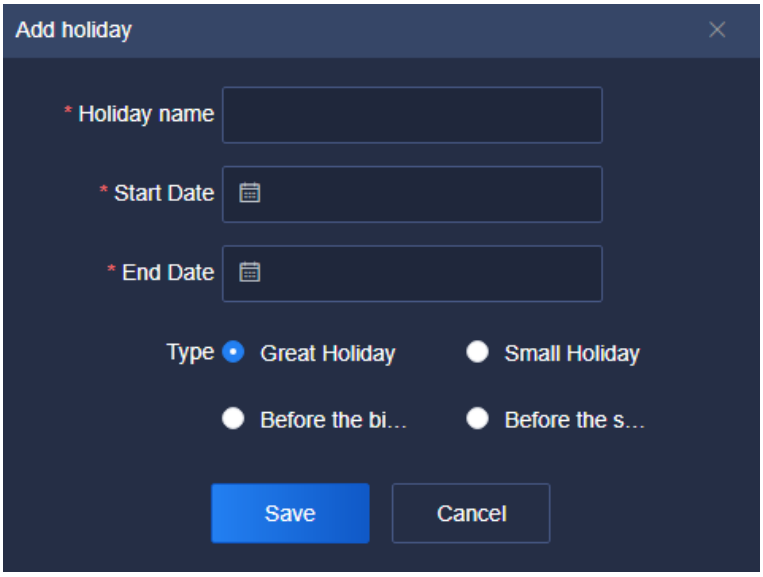
10.1.2 Holiday Settings

Operation steps:

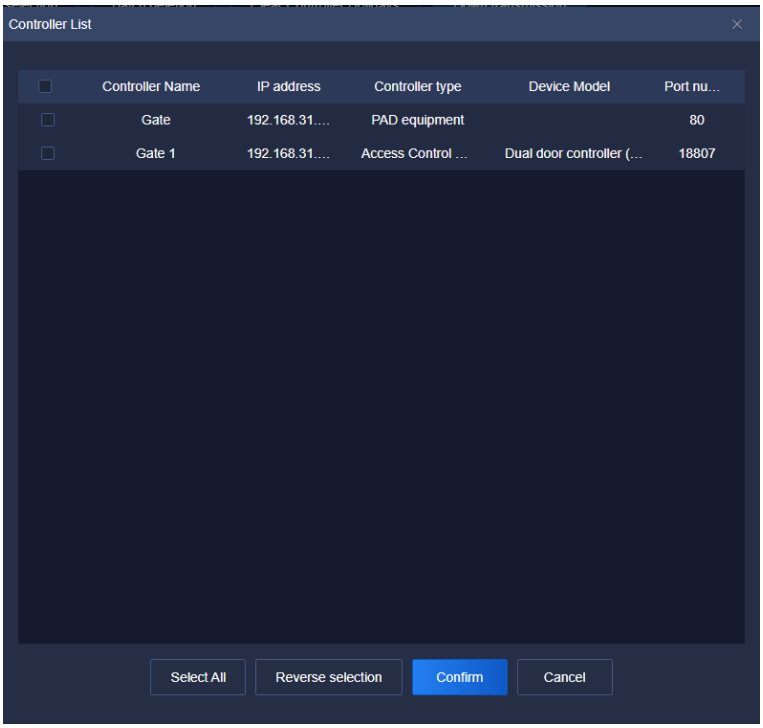
1. Click [Holiday Setting] to enter the holiday setting interface.



2. Click [Add] and configure the holiday information in the pop-up window.



3. After selecting the holiday, click Download and select the access controller to download the holiday to the corresponding controller.



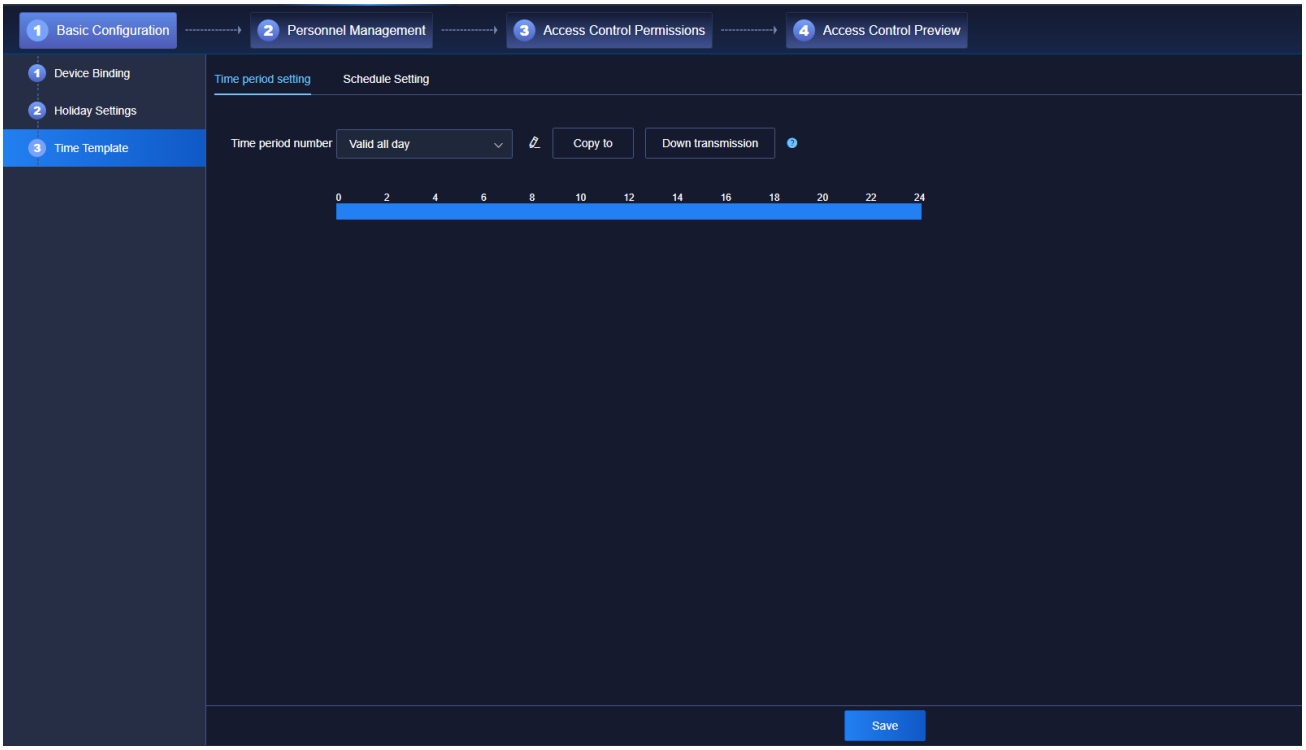
4. Click [Clear Controller Holiday] to clear the holiday settings on the access controller.

10.1.3 Time Template

Set the effective time of the access controller.

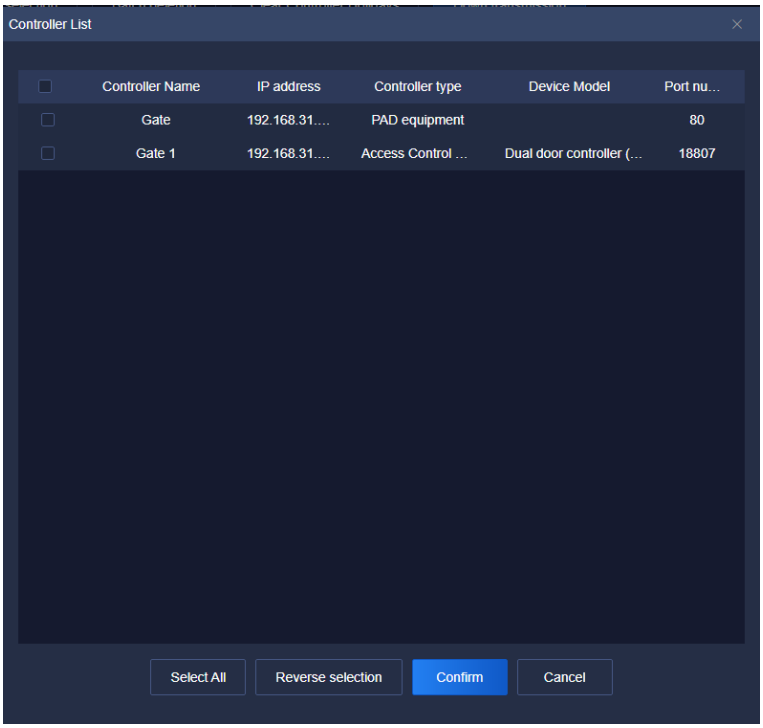
Time Period Settings:

1. Click [Time Template] to enter the time template interface and select the time period setting.



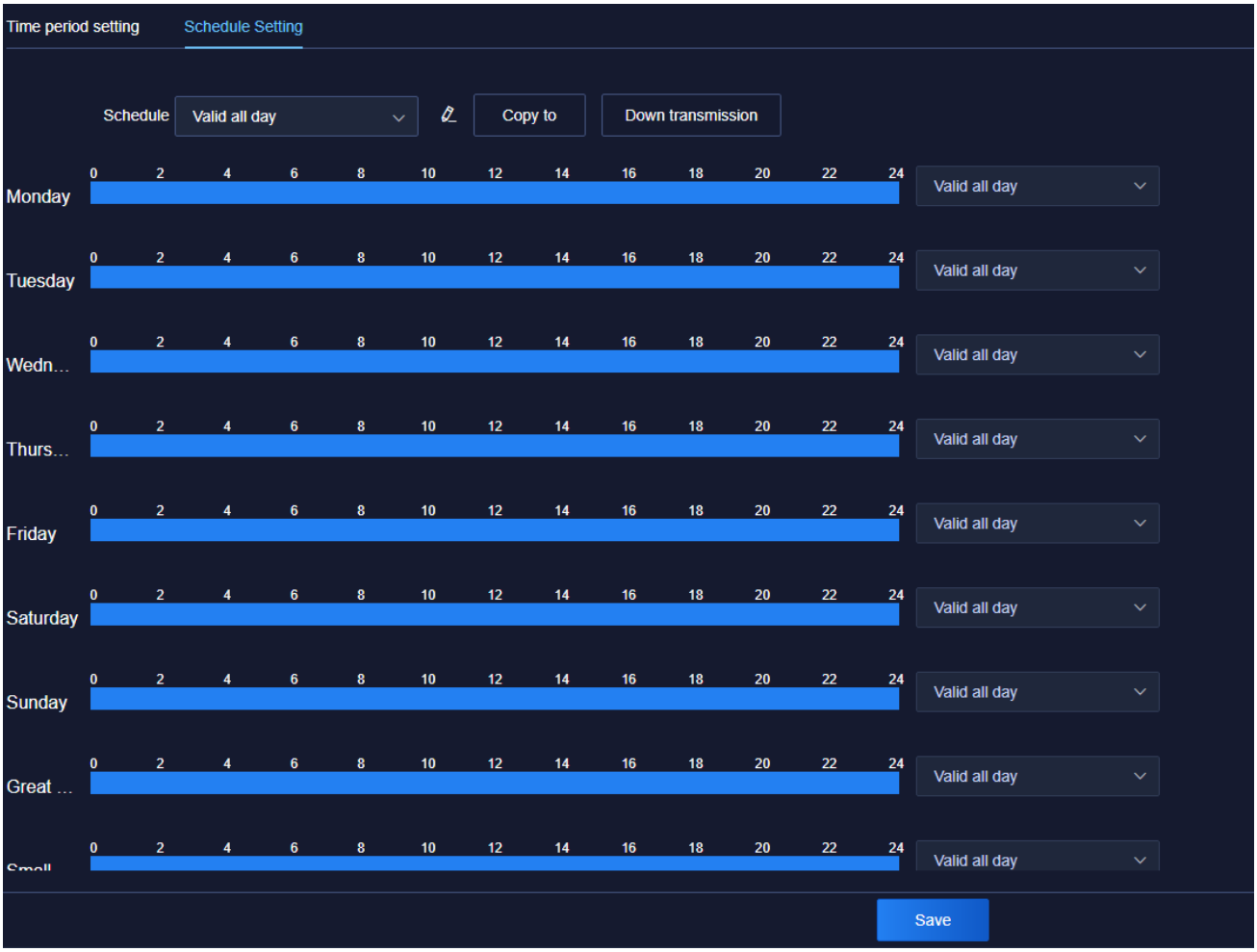
2. Select the time period number and set 31 time period numbers at most. Drag the blue bar to modify the time period. Set four time periods at most for each time period number. Click [Copy To] to copy the time period of this time period number to another time period number. Click the "" icon to modify the name of the period number.

3. Click [Download] to download all time slots to the controller.



Schedule settings:

1. Click [Time Template] to enter the time template interface and select the schedule setting.

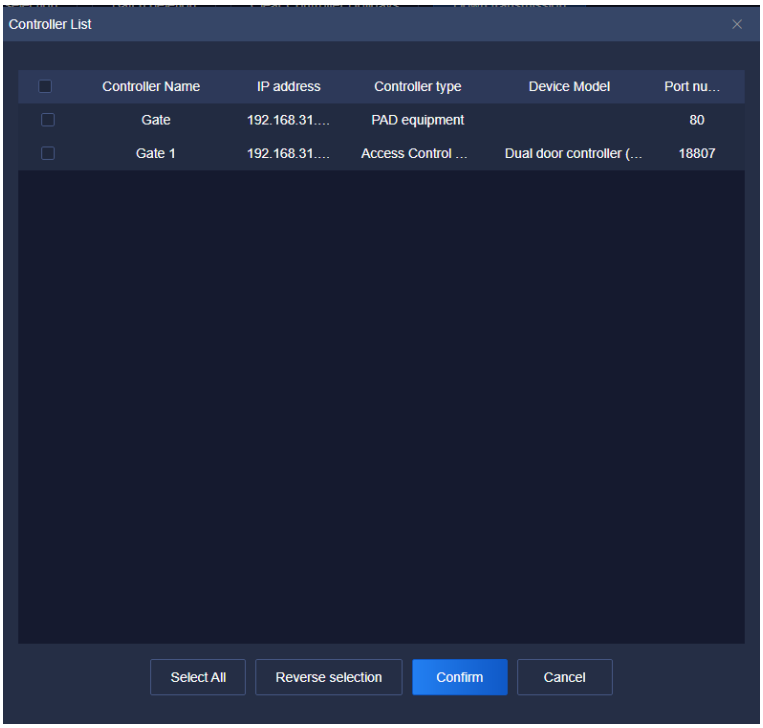


2. When the schedule is selected as [valid all day], it is valid from Monday to Sunday and holidays.

3. Select the schedule number and set up 31 schedules at most. Each schedule can set the time period from Monday to Sunday and holidays. Set Timesheet 1. Set Monday and Tuesday to be valid for the whole day, set Wednesday to be period number 1, set Thursday to be period number 2, and so on. You can select one period number from 31 period numbers every day, or valid for the whole day.

4. Click [Copy to] to copy the capital involved in this time period table to other time period tables. Click the "" icon to modify the name of the time period table.

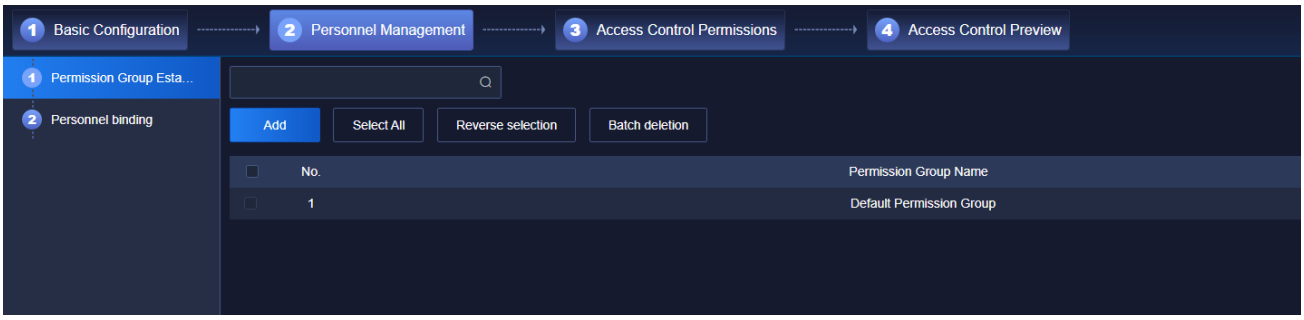
5. Click [Download] to download all time tables to the controller.



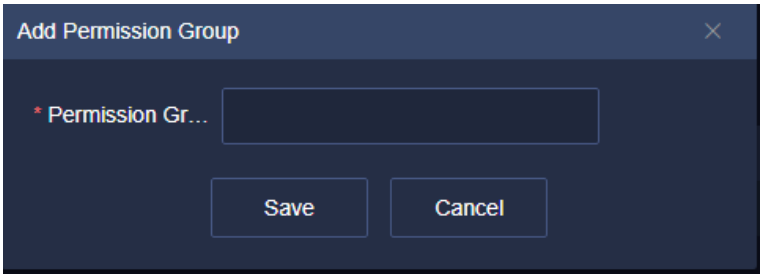
10.2 Personnel Management

Set up people and permission groups.

10.2.1 Permission Group Establishment

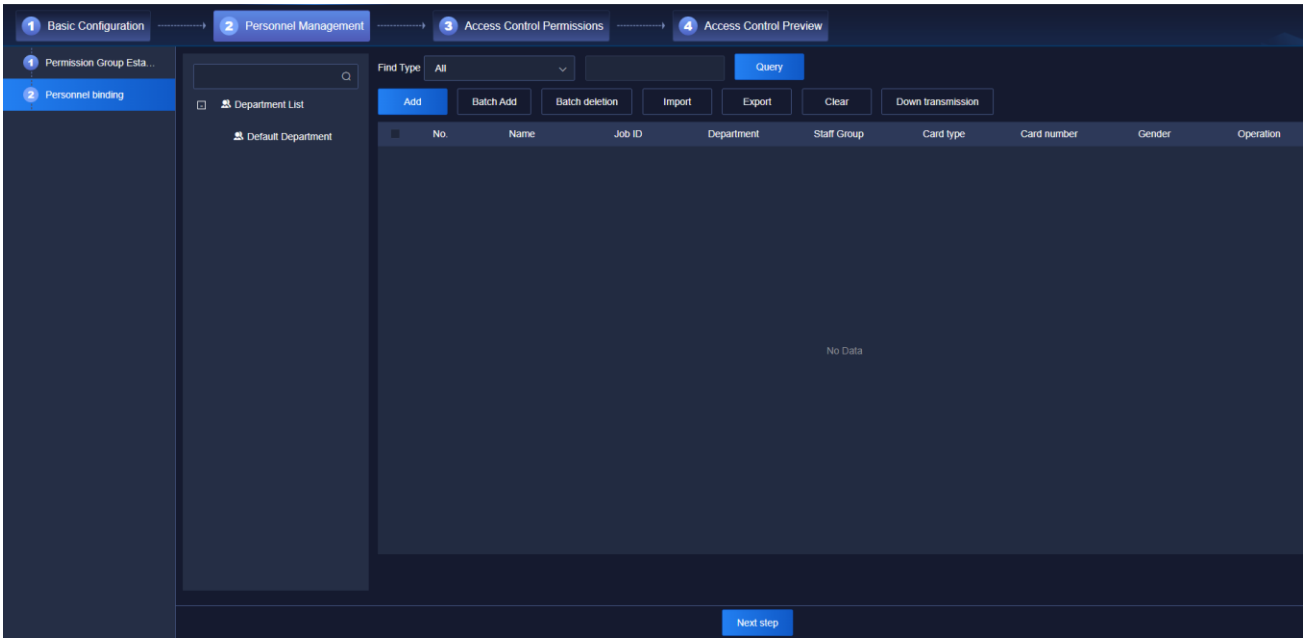


1. Click [Add], fill in the name, and add [Permission Group].

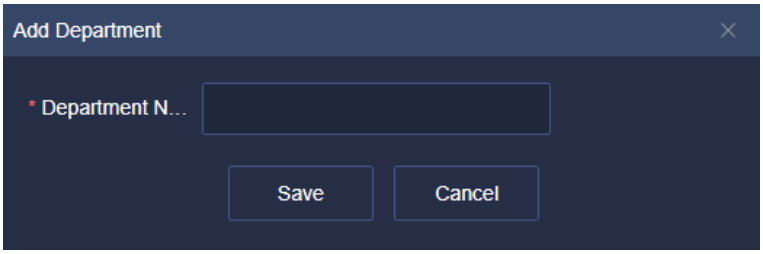


10.2.2 Personnel binding

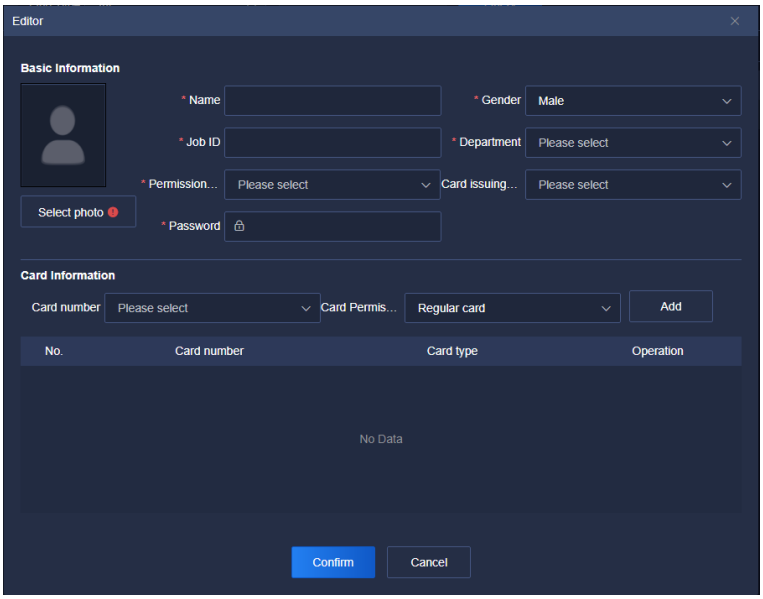
Create departments and people.



1. Create a department. Place your mouse next to [Department List] and click the "+" icon to add a department.



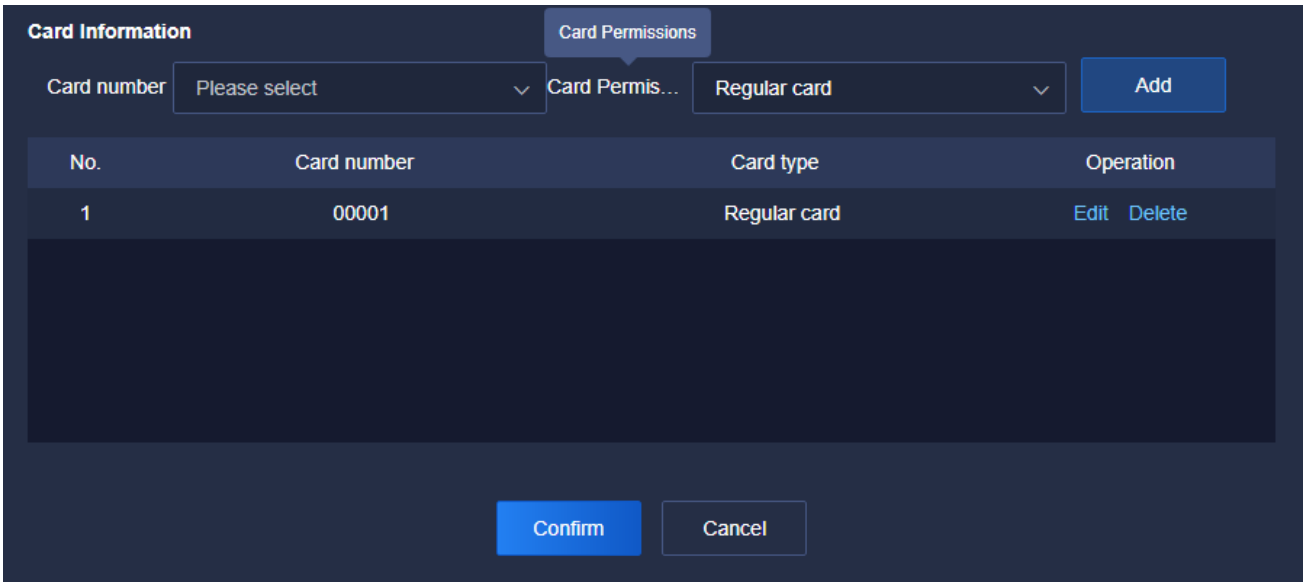
2. Click [Add] in the right part to add personnel in the department.



The interface parameters are described as follows:

Parameter	Explain
Name	Fill in the name of the person
Gender	Select the person's gender
Job ID	Fill in the personnel job number
Department	Select Personnel Department from Existing Departments
Staff Group	That is, permission group. Select the permission group of the person
Card issuing controller	Select the access controller
Password	Set the personnel card password; when the door opening mode is card swiping + password, the password shall be input; the password shall not exceed 4 characters.

3. Enter the card number, select the card permission, and click [Add] to add a card for the person.

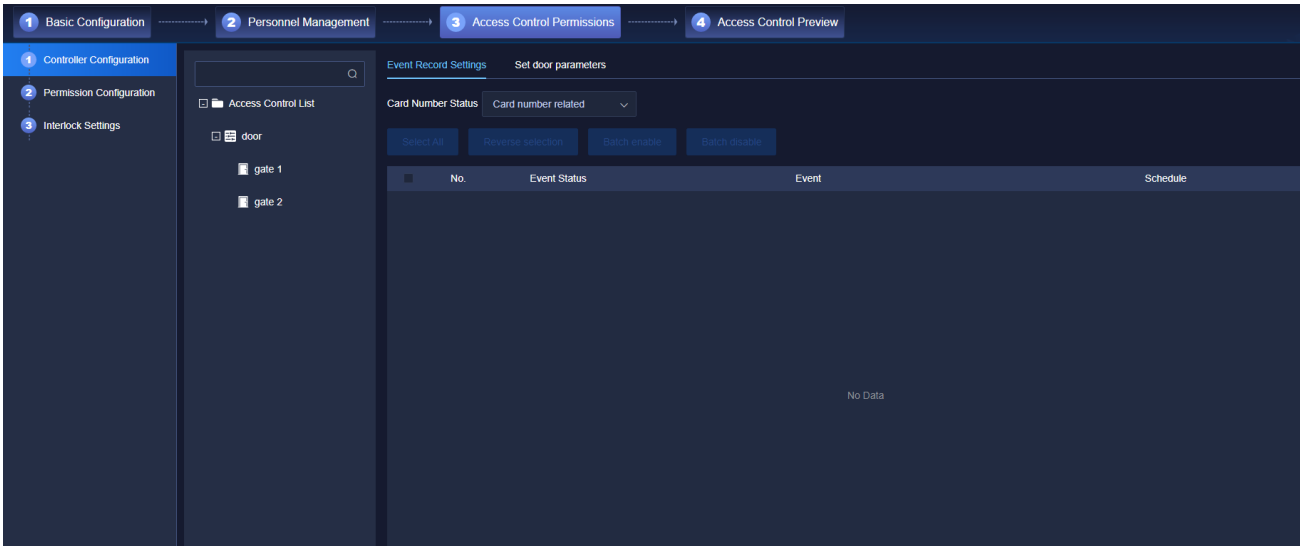


4. Click [Edit] or [Delete] to edit or delete the card.

10.3 Access Control Permissions

10.3.1 Controller Configuration

1. In the controller configuration interface, you can see the list of all added access control.

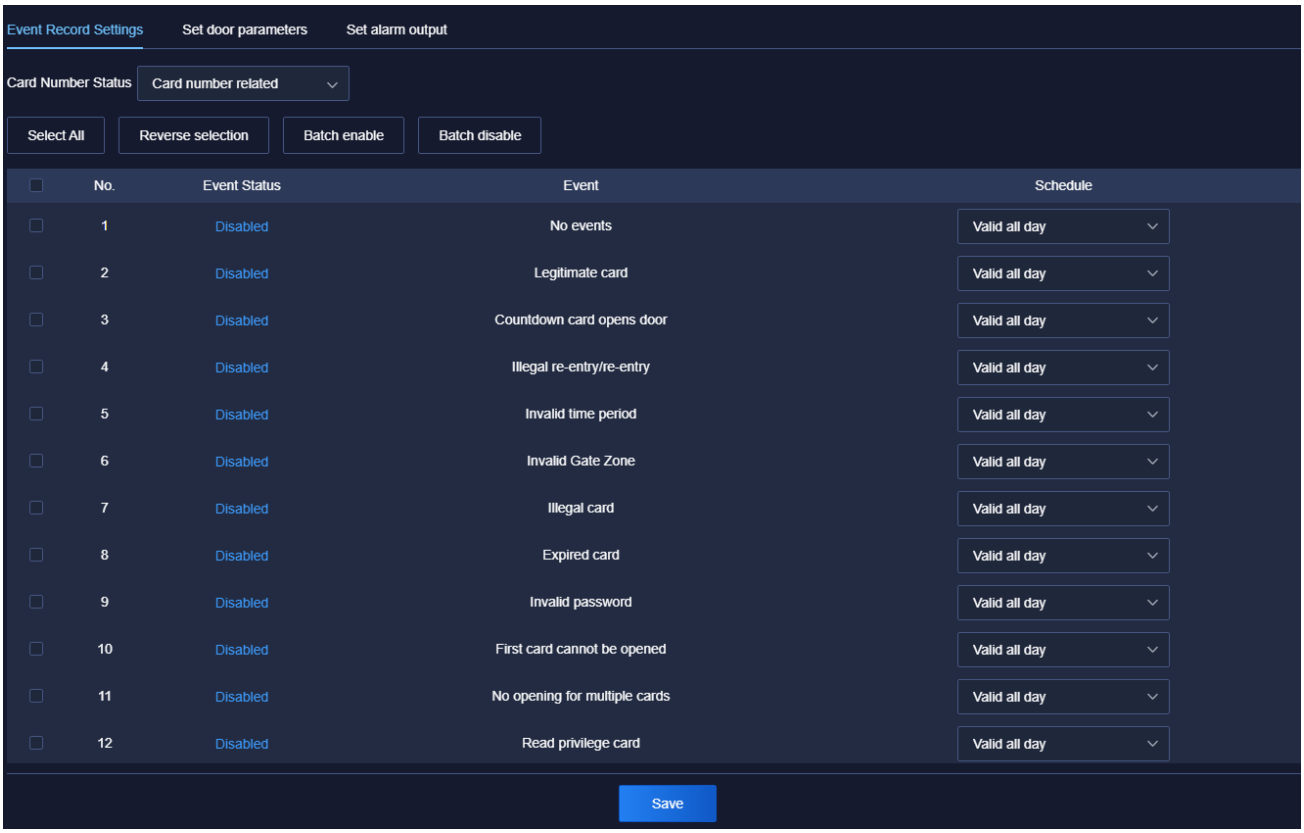


2. Select the access controller or PAD device to be configured, and you can set its parameters.

Access controller setting method:

Event logging settings:

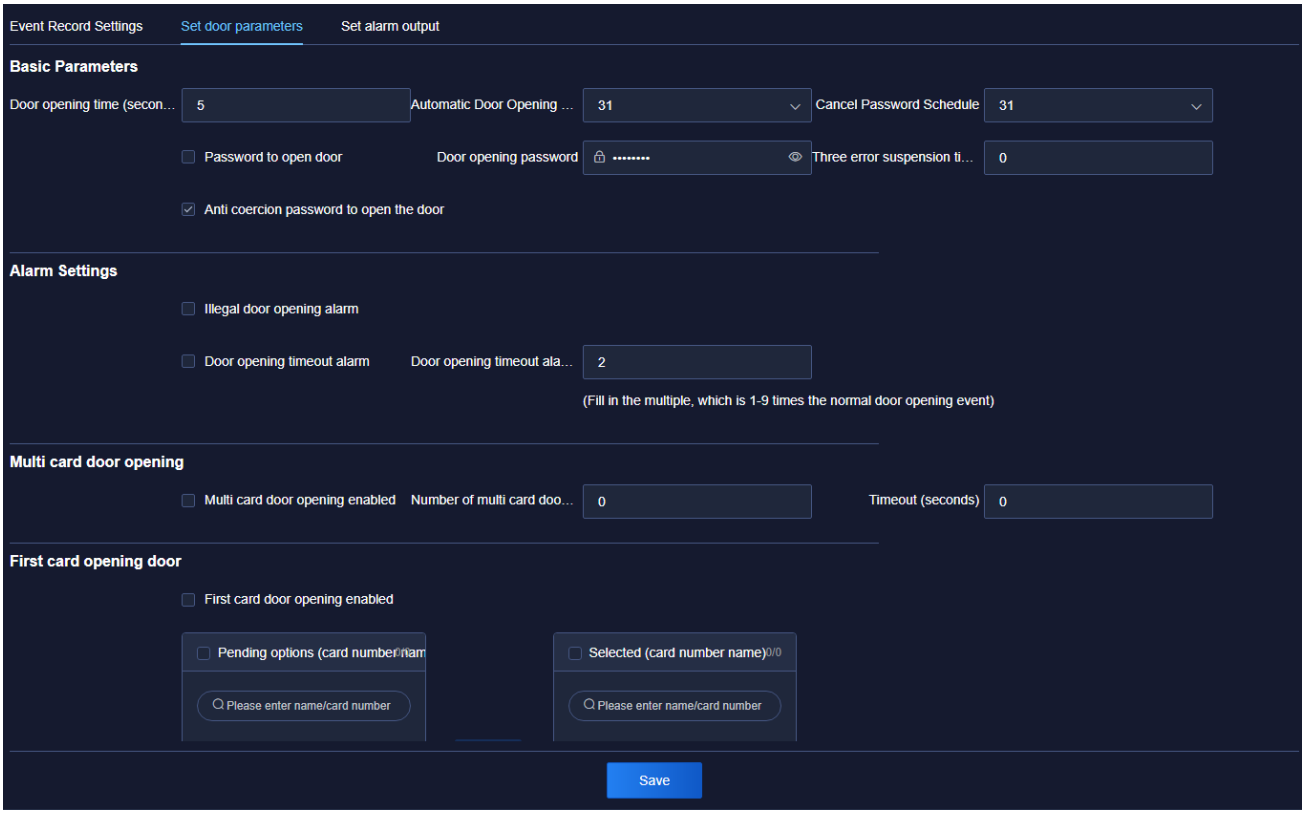
1. Configure access controller events, which are card number related and card number independent. When the event is enabled, a record will be generated when the corresponding event occurs in the access controller. When the event is disabled, no record will be generated. Select the schedule to set the effective time of the event. The schedule can be configured in [Basic Configuration-Time Template].



2. Click [Batch Enable] or [Batch Disable] to enable or disable events in batch.

Set door parameters:

1. Configure door parameters, such as basic parameters, alarm settings, multi-card door opening, first card door opening, etc.



The basic parameter interface is described as follows:

Parameter	Explain
Door opening time	The time when the door is opened by swiping the card or password.
Automatic Door opening Schedule	Set the automatic door opening schedule. After setting, the door will remain open for a period of time within the schedule.
Cancel Password Schedule	Set the cancellation password schedule. After setting, the password cannot be used to open the door in the time period within the schedule range.
Password to open door	After checking the password to open the door, you can open the door by entering the password.
Door opening password	Set the password for opening the door. When the password is enabled to open the door, the door can be opened through this password. This

	password supports 8 characters at most.
Three error suspension time	After inputting the wrong opening password for three times, it will be locked for a period of time, that is, the suspension time. After the suspension time is over, it is allowed to input the password again.
Anti coercion password to open the door	After selecting, enter the anti coercion password to open the door; If not checked, entering the anti coercion password will not open the door, but an alarm will still be generated. The anti coercion password can be set in 【 Basic Configuration - Device Binding 】.

The alarm setting interface is described as follows:

Parameter	Explain
Illegal door opening alarm	When enabled, an alarm will be generated when the access control controller experiences an illegal door opening event.
Door opening timeout alarm	When enabled, an alarm will be generated when the access controller opens the door overtime.
Door opening timeout alarm time	Set the timeout for opening the door; When the opening time exceeds this event, an alarm occurs.

The multi-card door opening interface is described as follows:

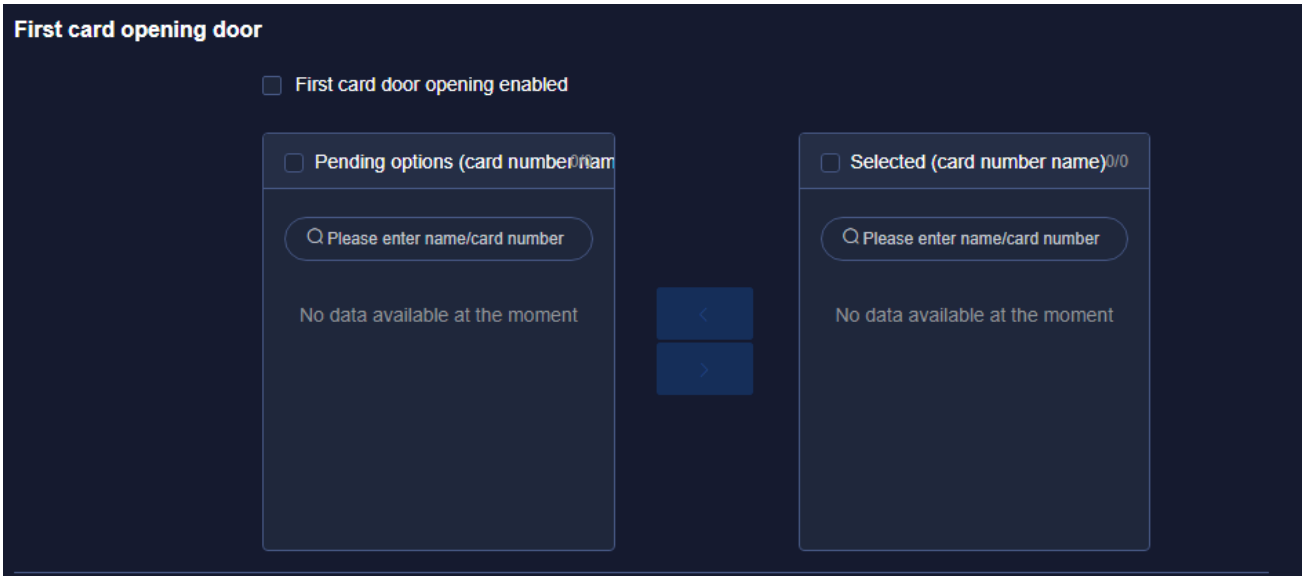
Parameter	Explain
Multi card door opening enabled	After the multi-card door opening is enabled, the door can be opened only after a set number of door cards are used.
Number of multi card door openings	Set the number of multi-card door opening. For example, if the quantity is set to 2, two different cards must be swiped to open the

	door.
Timeout	Set the timeout, which is the interval. For example, if the timeout time is set to 10 s, after the first card is swiped, the second card cannot be swiped for more than 10 s, otherwise the first card needs to be swiped again.

Operation steps for opening the first card:

1. Opening the door for the first time, that is, opening the door for the first time every day, requires some people to swipe their cards, and then other people's cards can open the door.

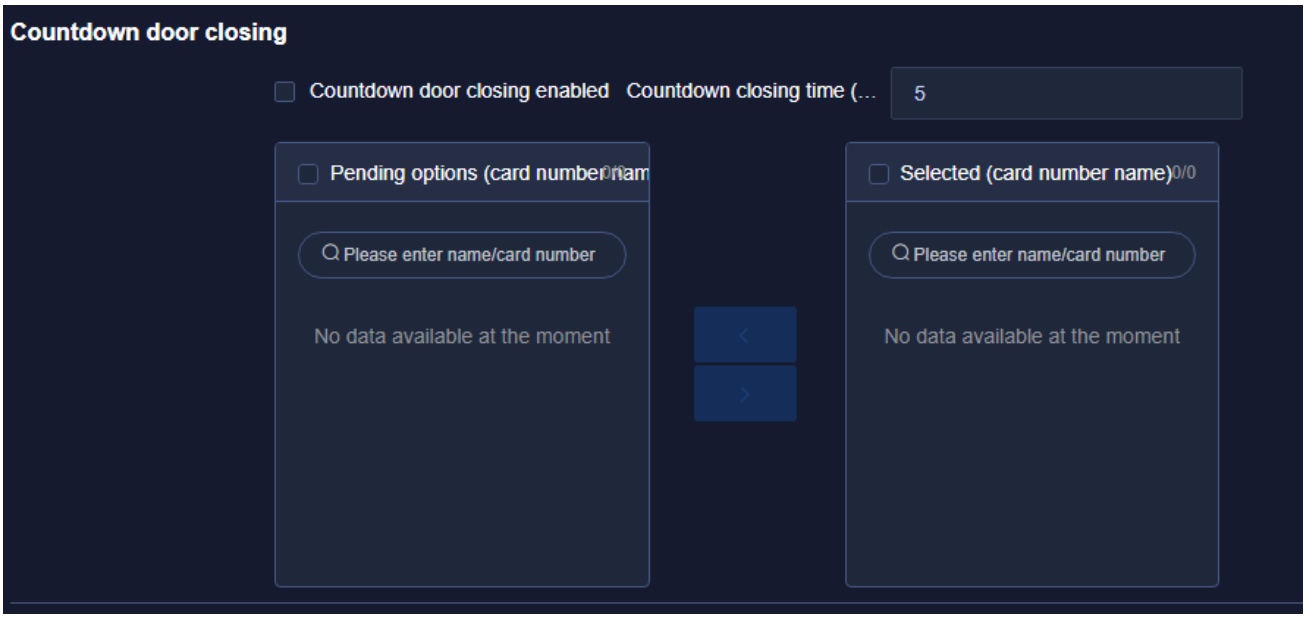
2. Check to enable the first card to open the door, select the personnel card number from the options to be selected, move it into the options and save it. For example, after [X] is moved into the selected item, the door must be opened by swiping the card of X before other cards can open the door.



Countdown door closing operation steps:

1. Countdown closing, that is, select certain people, limit their opening time, when the

countdown closing time is over, the door will be closed. For the personnel not selected, the door opening time follows the door opening time set in [Basic Parameters].

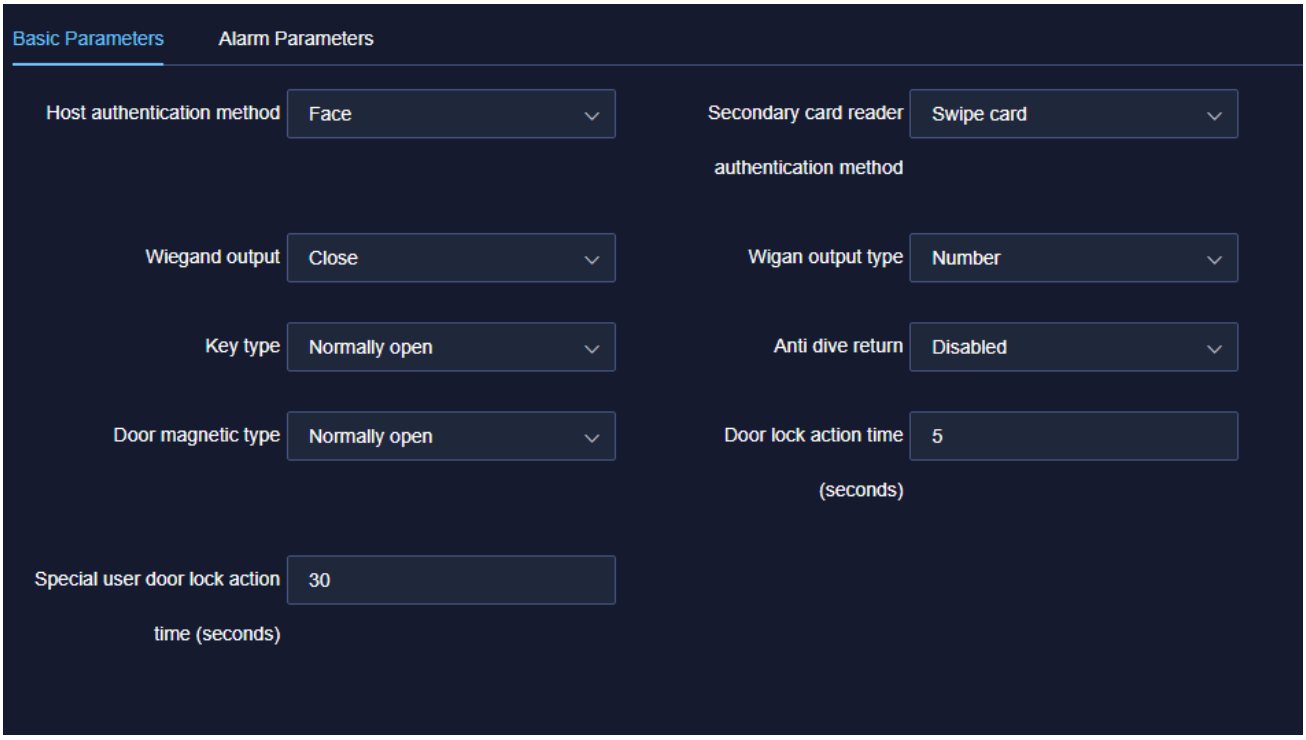


2. Check to enable the first card to open the door, select the personnel card number from the options to be selected and move it into the options to be saved. For example, after [X] is moved to the selected option, the countdown closing time is set to 10s, and the door will automatically close 10 seconds after X opens the door.

PAD device setting method:

Basic parameter setting:

1. Configure the basic parameters of the PAD device.



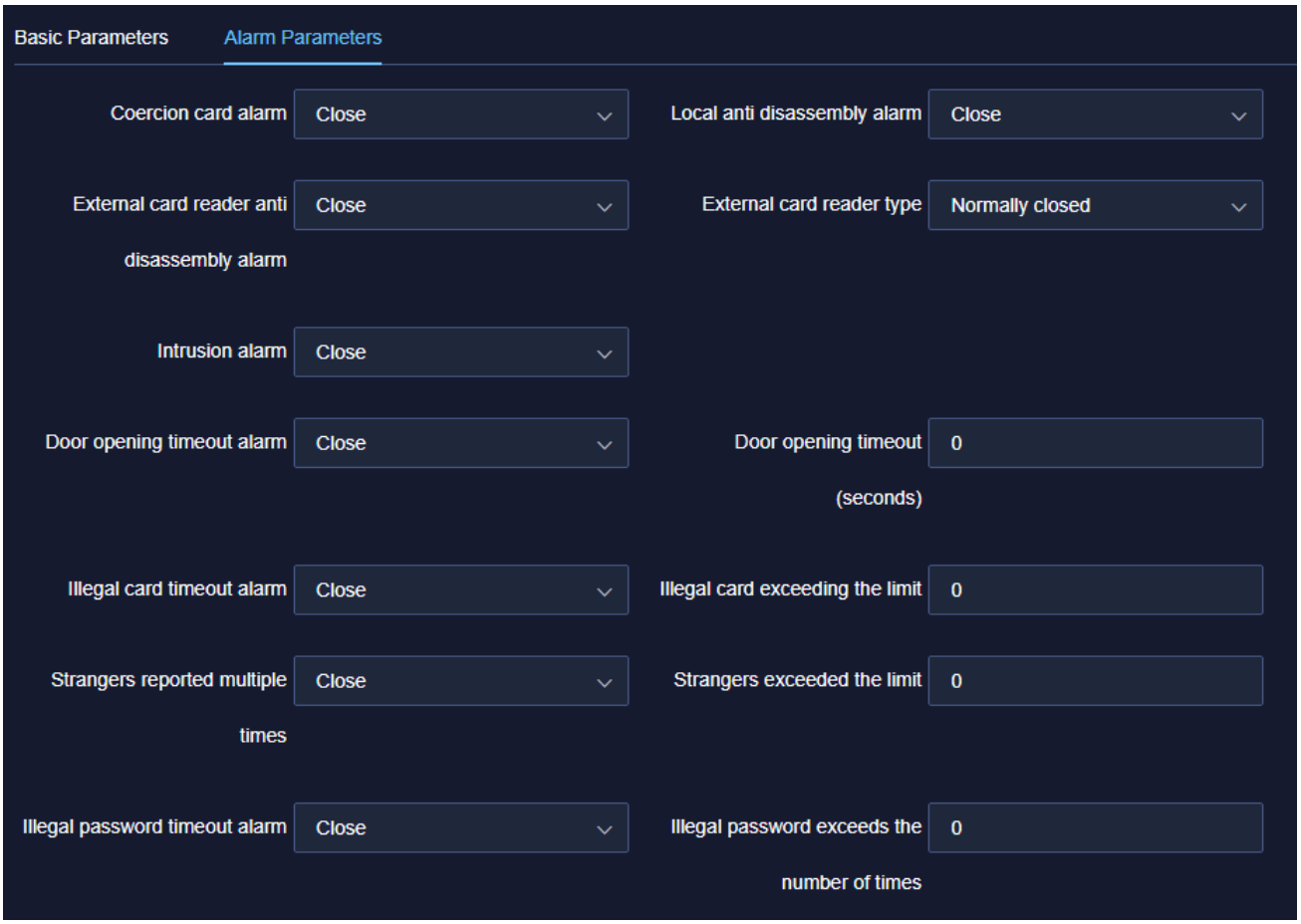
The basic parameter interface is described as follows:

Parameter	Explain
Host authentication method	Select the PAD device authentication method, including face, swipe card, face/swipe card, face + password, face + swipe card, swipe card + password, face + password/swipe card + password.
Secondary card reader	If the host is connected to an external card reader, set the authentication mode of the card reader, including card swiping and card swiping + password.
Wiegand output	Set the Wiegand output protocol.
Wigan output type	Sets the Wiegand output type.
Key type	Set the key type to normally open or normally closed.
Anti dive return	Set to enable/disable anti-reentry.
Door magnetic type	Set the door magnet type as normally open or normally closed.

Door lock action time	Set the duration after the door lock is unlocked.
Special user door lock action time	Sets the duration after the door lock is unlocked for a particular user.

Alarm parameter setting:

1. Configure PAD device alarm parameters.



The alarm parameter interface is described as follows:

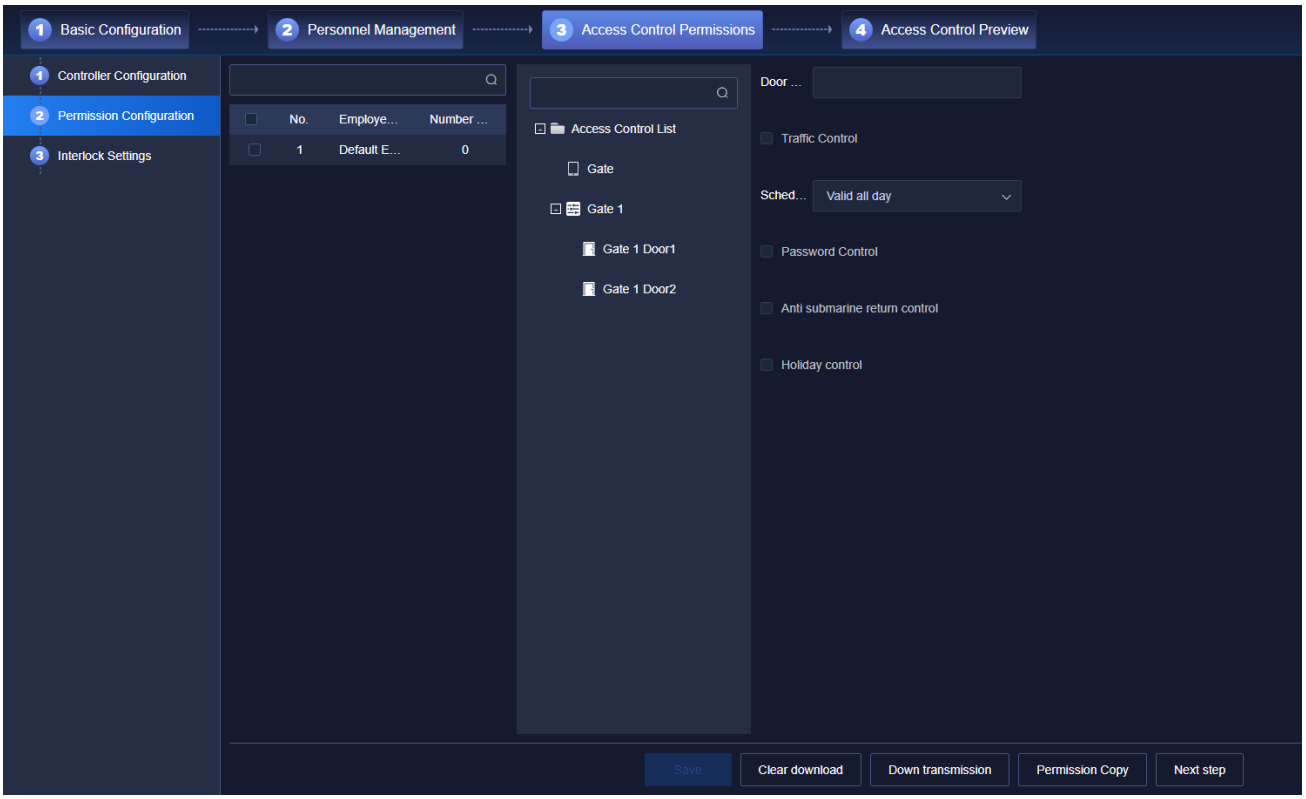
Parameter	Explain
Coercion card alarm	Whether to activate the coercion card alarm.
Local anti disassembly alarm	Alarm when the device host is disassembled.

Extemal card reader anti disassembly alarm	Alarm when external card reader is removed.
External card reader type	Normally closed or normally open.
Intrusion alarm	Alarm when breaking into the gate.
Door opening timeout alarm	The door opening time exceeds the set time, triggering an alarm.
Door opening timeout	Set the maximum time the door is open.
Illegal card timeout alarm	An alarm is triggered when an illegal card is used more than the set number of times.
Illegal card exceeding the limit	Set the maximum number of times an illegal card can be used.
Strangers reported multiple times	Strangers (people who are not in the face database) are recognized on the screen more than a set number of times to trigger an alarm.
Strangers exceeded the limit	Set the maximum number of times a stranger can be identified on the screen.
Illegal password timeout alarm	The number of illegal password input exceeds the set number to trigger the alarm.
Illegal password exceeds the number of times	Sets the maximum number of times an illegal password can be entered.

10.3.2 Permission Configuration

1.Select and highlight a certain permission group and access control device, and

configure the permission of this access control device for this permission group.

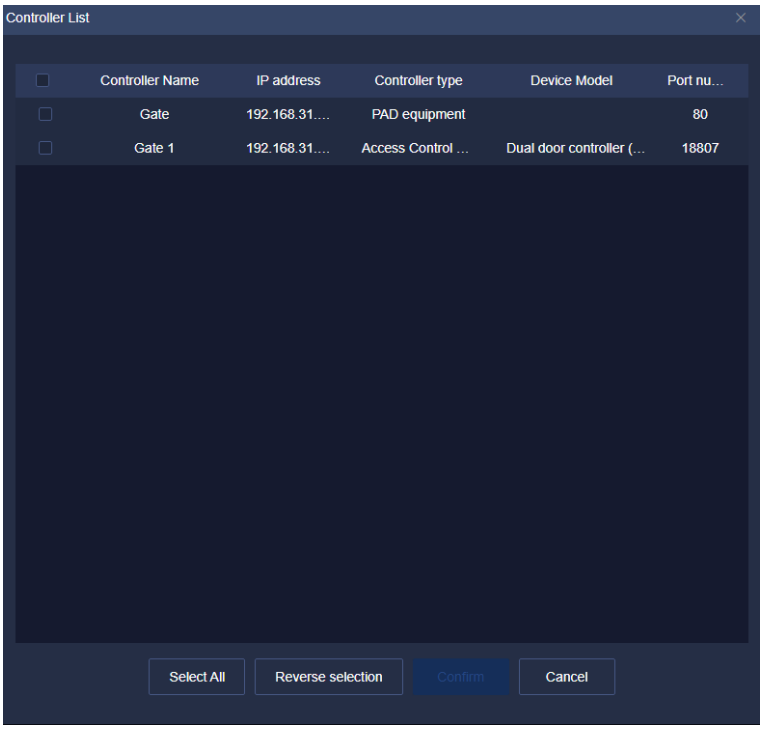


The parameters in the permission configuration interface are described as follows:

Parameter	Explain
Door name	After the access control device is selected, the currently selected door will be displayed.
Traffic Control	Whether to grant access permission to this permission group? If it is checked, all personnel cards in this permission group can be accessed.
Password Control	Check to enable password control, that is, after swiping the card, you still need to enter the password. This password is set and modified in HR Management-Personnel Binding.

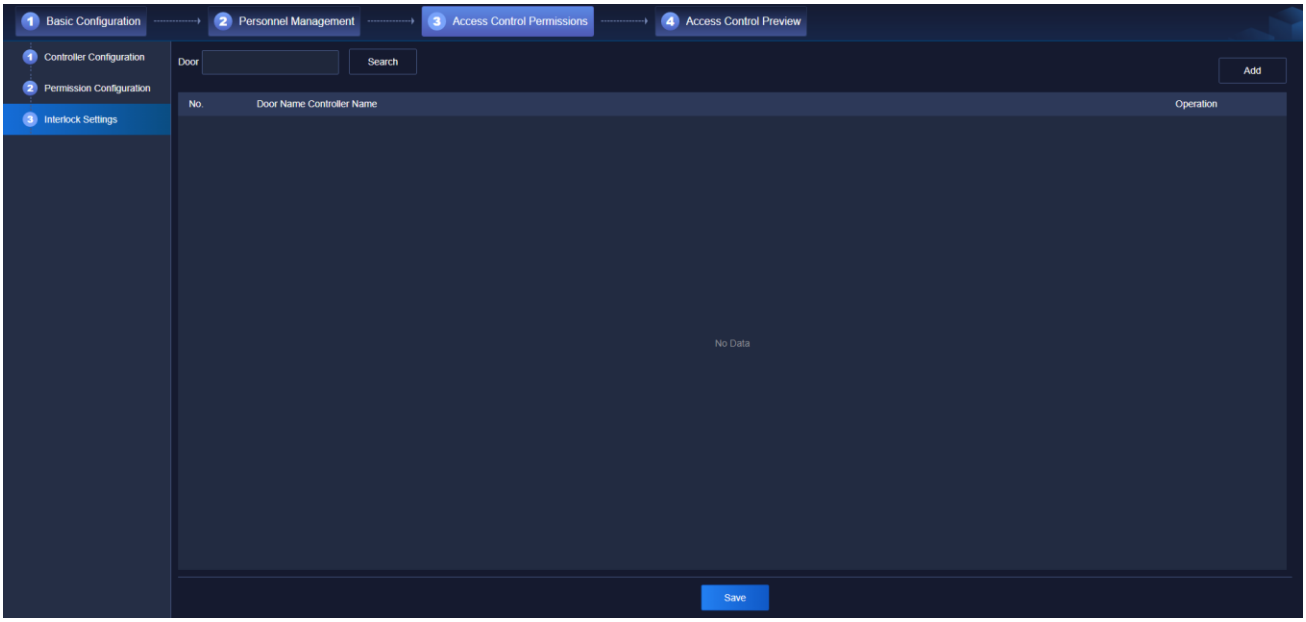
Anti submarine return control	Check the Enable anti-sneak back setting.
Holiday control	Check to enable the holiday setting, otherwise it will not be enabled, and only the time from Monday to Sunday will be followed.

2.After saving the configuration, click [Download] to download the permission group to the access controller, click [Copy Permission] to copy the permission to other permission groups, and click [Clear Download] to clear the permission group on the access controller and download the selected new permission group.

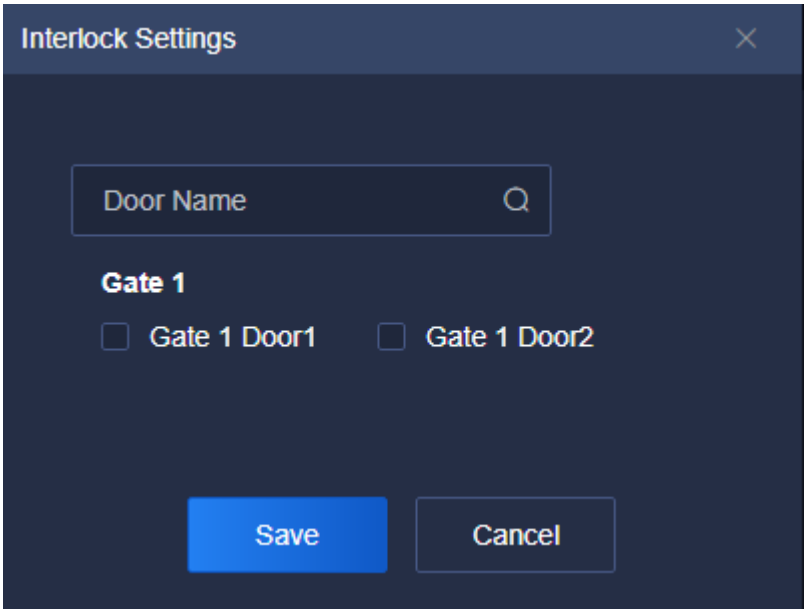


10.3.3 Interlock Settings

1.Only one of the interlocked doors is allowed to be opened. If the door A is opened, the door B cannot be opened. Interlock settings are only allowed on the same access controller.



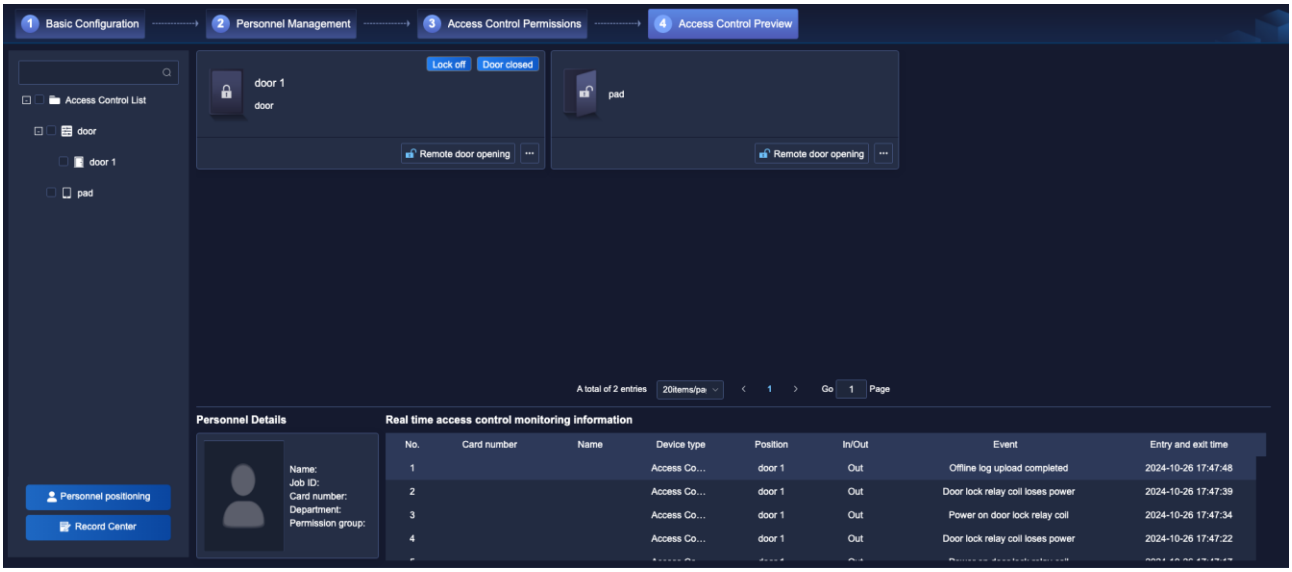
2.Click the [Add] button in the upper right corner to add an interlocking door.



10.4 Access Control Preview

10.4.1 Access Control Preview Interface

1. In the access control preview interface, the access control controller can be operated remotely, such as opening the door remotely, and the real-time monitoring information of access control can also be viewed.

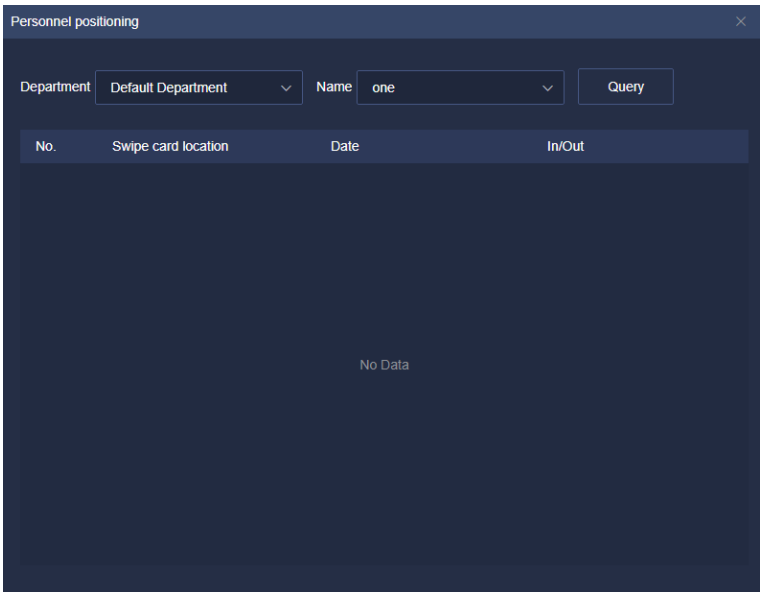


The parameters of the access control preview interface are described as follows:

Parameter	Explain
Remote door opening	Control the door opening once on the client, follow the door opening time, and close the back door after the time.
Personnel positioning	Click the pop-up search box to view the passers.
Internal personnel inquiry	Click the pop-up search box to view the people in the door for the corresponding date range.
Remote continuous door opening	Click to open the door, and the door does not close automatically. Click to close the rear door remotely and continuously.
Remote continuous door closing	Click to close the door, and the door cannot be opened by swiping the card or password. You need to click to restore the automatic control before you can use other functions.
Countdown door closing	Click on the rear door and follow the countdown closing time, after which the rear door closes.
Restore self-control	Automatic control of access control equipment is restored.

10.4.2 Personnel positioning

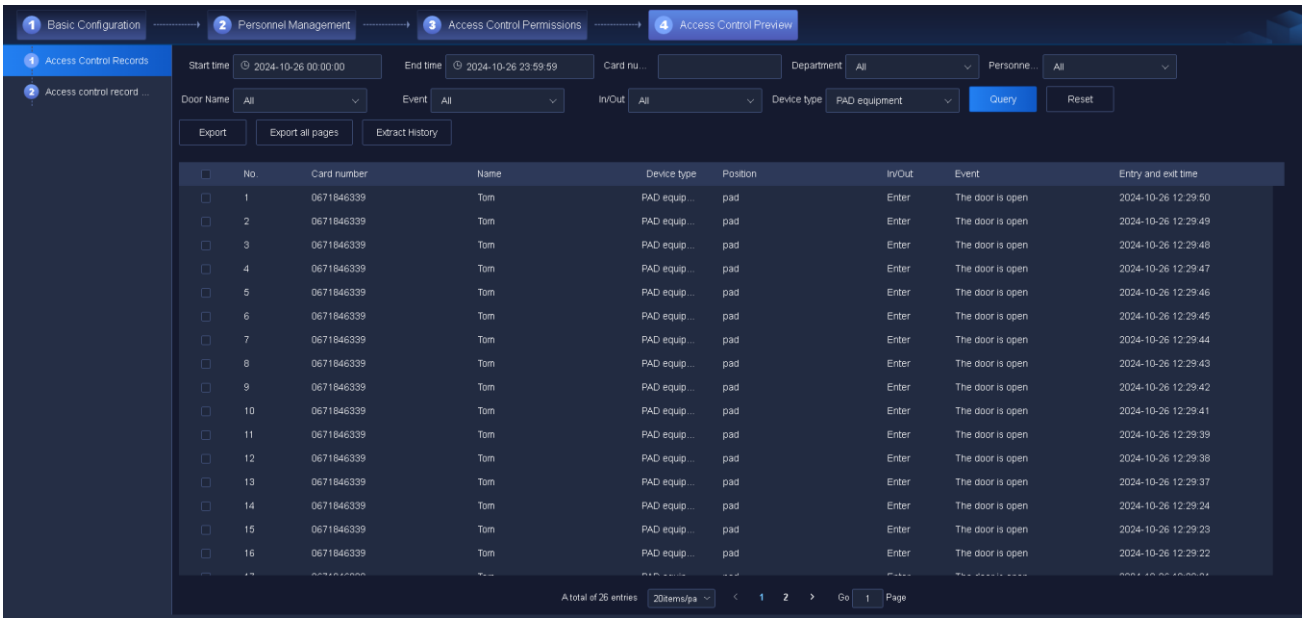
Support personnel positioning, and query the location and time of personnel card swiping.



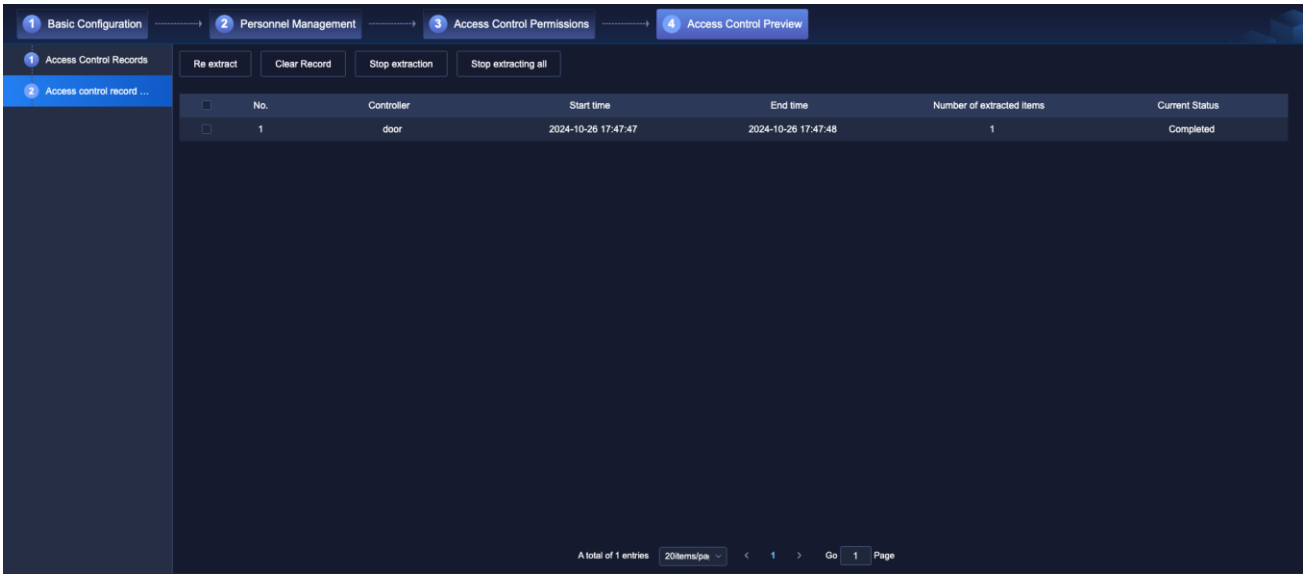
10.4.3 Record Center

The access control history monitoring information can be viewed in the record center.

Select the query condition and click Query to query the access control record.



Access control extraction record status extraction, you can view the event record when the access control is offline.



11 Face recognition

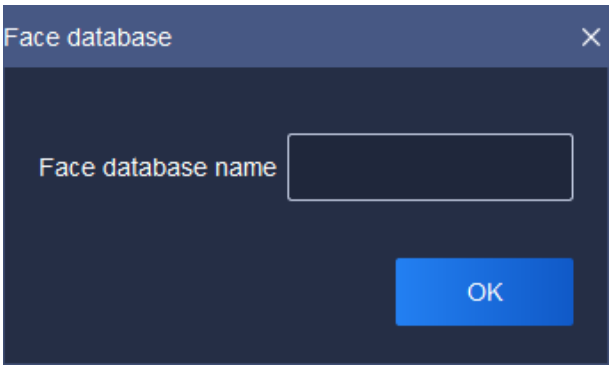
Management and distribution of face database.

11.1 Face database management

11.1.1 Face database addition/modification/delete

Face database add operation steps:

In [Face Database Management], right click [Face Database List] and select [Add] to create a new face database, as shown in the following figure.



Notice:

- The face library name is unique.

Face database modify operation step:

Right click the name of the face library to be modified, select the [Modify] modification option, re-enter the name of the face library, and click the [OK] button to complete the modification of the face library.

Face database delete operation step:

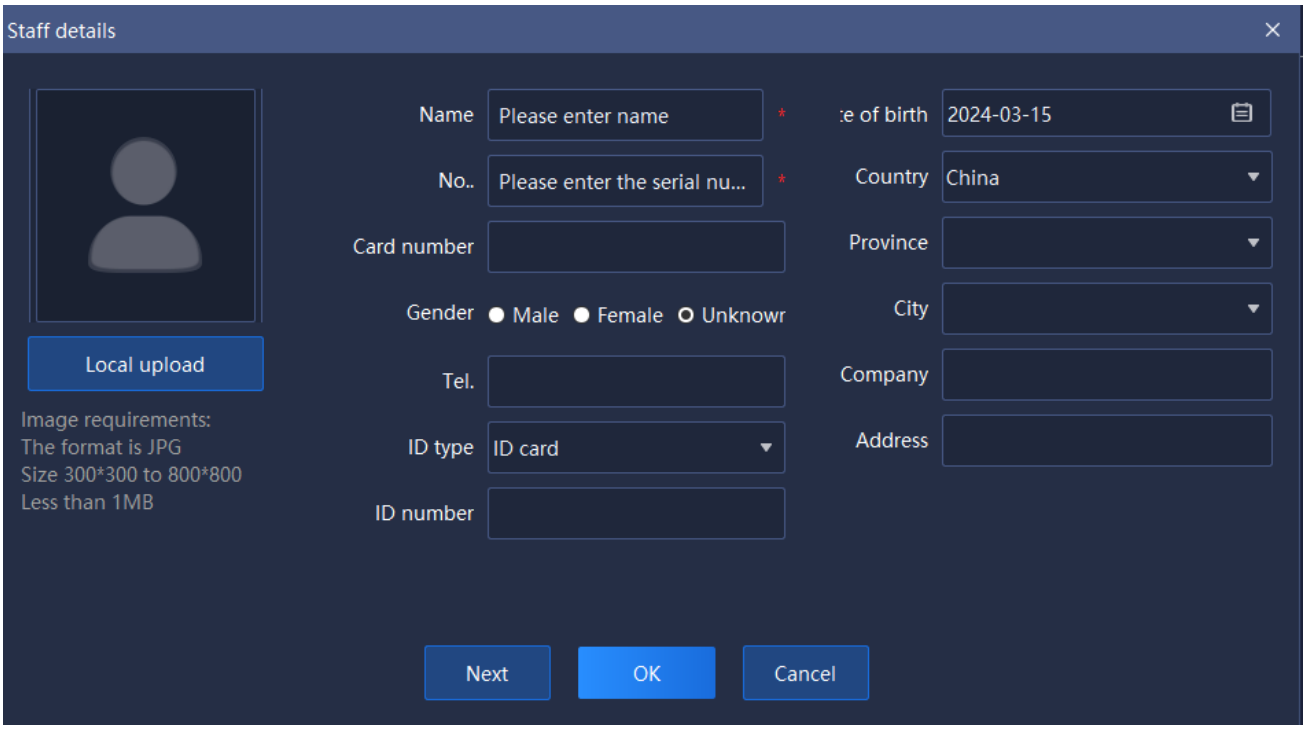
Right click the name of the face database to be deleted, select the [Delete] deletion

option, and click the [OK] button to complete the deletion of the face database.

11.1.2 Face Image Addition

Operation steps:

1. Select the face database to add a face picture, and click the [Add] button to add a person, as shown in the following figure.



2. Click Next to save the current employee information and create a new employee details interface.

3. Click OK to save the current employee information and close the current employee details interface.

4. Click [Cancel] to close the current personnel details interface.

Explain:

- Click the [Local Upload] button to upload a face image (note that this item is required).

Note that the image format is JPG format, the size is between 300 * 300 and 800 * 800, and the size cannot be greater than 1MB. The image should be kept as clear as possible to facilitate face recognition.

- Enter the name of the person corresponding to the picture, which is required.
- Enter the personnel number corresponding to the picture, which is required. Numbering supports values between 0 and 999999999.
- Other information is not required, and the corresponding information can be filled in according to the actual needs.

11.1.3 Personnel query

After entering the face database management interface, query personnel in the right area, enter [Name], [Number] and [Gender] in turn, and click the [Query] button to query personnel.

Explain:

- Support query based on name, number and gender.

11.1.4 Add Existing Face Image

Operation steps:

1. Select the face database to be added, click the [Add Existing] button, and select the person to be added, as shown in the following figure.



2. Click [OK] to add successfully, and click [Cancel] to close the current personnel details interface.

11.1.5 Delete (All) Face Image(s)

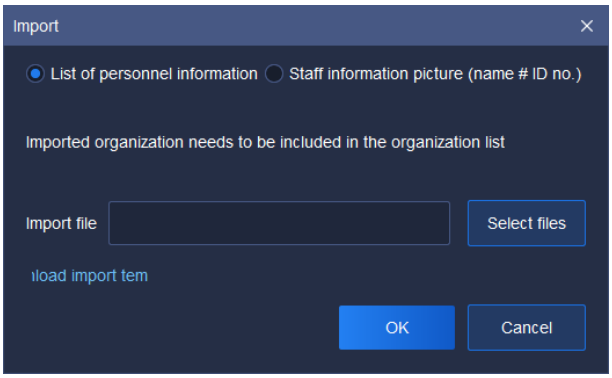
Select the face image to be deleted and click [Delete] to delete the selected face image.

To delete all face images, click [Delete All] to delete all face images.

11.1.6 Face Image Import/Export/Export All

Operation steps:

1. Click the [Import] button to enter the import operation interface, as shown below. Click [Download and Import Template] to download the employee information template.



2. You can fill in the personnel information according to the downloaded template content, as shown in the following figure.

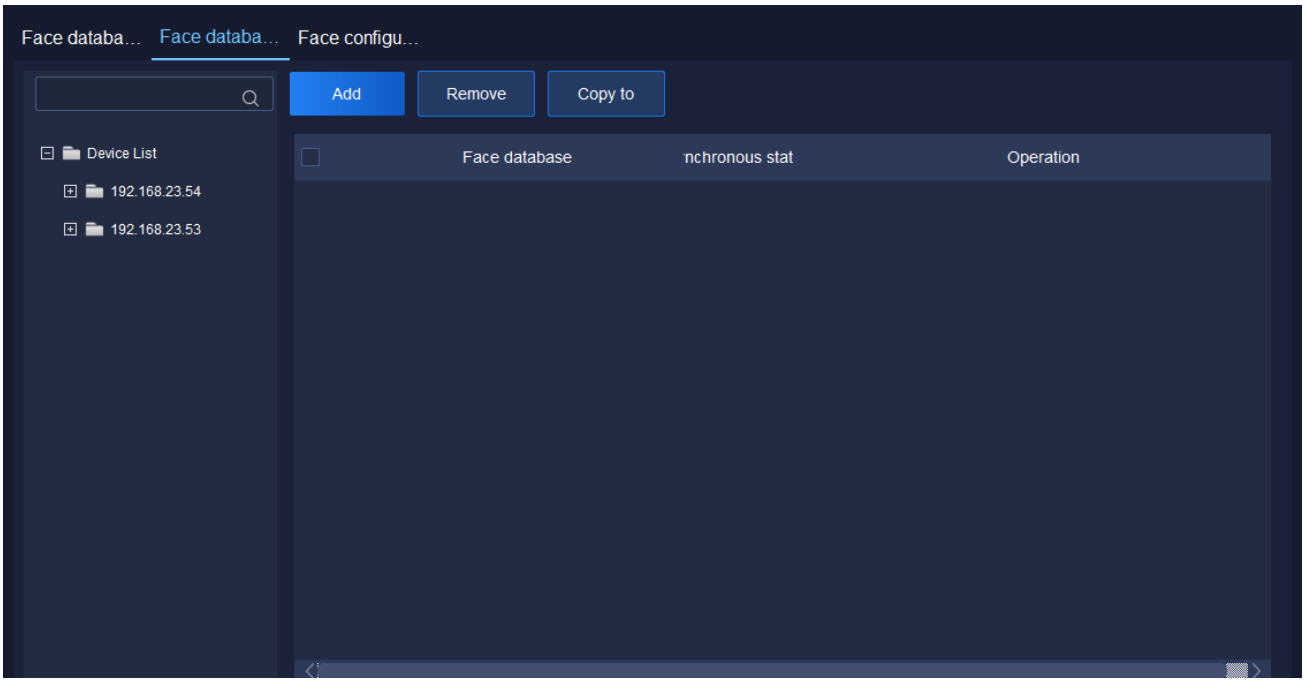
Attentior	Use the t												
Personnel	Serial nu	Card numb	Gender (r	phone nur	Birthday	Country	Province	City	Address	Company	ID type	ID number	Image pat	Face library name
Zhang San	123	6666	Female	123456789	2000-01-1	China	Tianjin	Tianjin	Xiqing Di	**** Co.,	ID card	12011120	C:/FacePi	Face database

Explain:

- Check [Personnel Information Table] or [Personnel Information Picture (Name # Job No.)], click [Select File] to import the file, click [OK] to upload the file, and click [Cancel] to close the interface.

11.2 Face database download

Select [Face Library Download] in the face recognition interface to display its function content, as shown in the following figure.

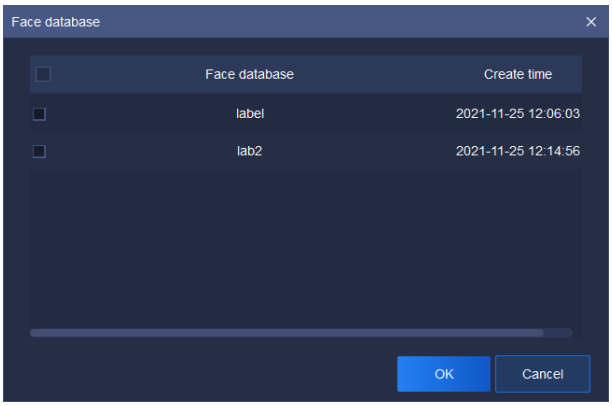


Explain:

- In the device list, select the channel that needs to download the face database. This channel needs to support the face recognition function.

11.2.1 Face library synchronization

After selecting the corresponding channel, click the [Add] button to pop up the [Face Database] window, as shown in the following figure. Select the face database to be synchronized, and click [Confirm] to start synchronization.



Explain:

- The synchronization status and synchronization result can be viewed in the current interface. If the synchronization fails, click the operation result in the [Operation] interface to view the synchronization failure information, as shown in the following figure. To try to synchronize the information again, select the synchronization content and click the [Synchronize] button to synchronize again.



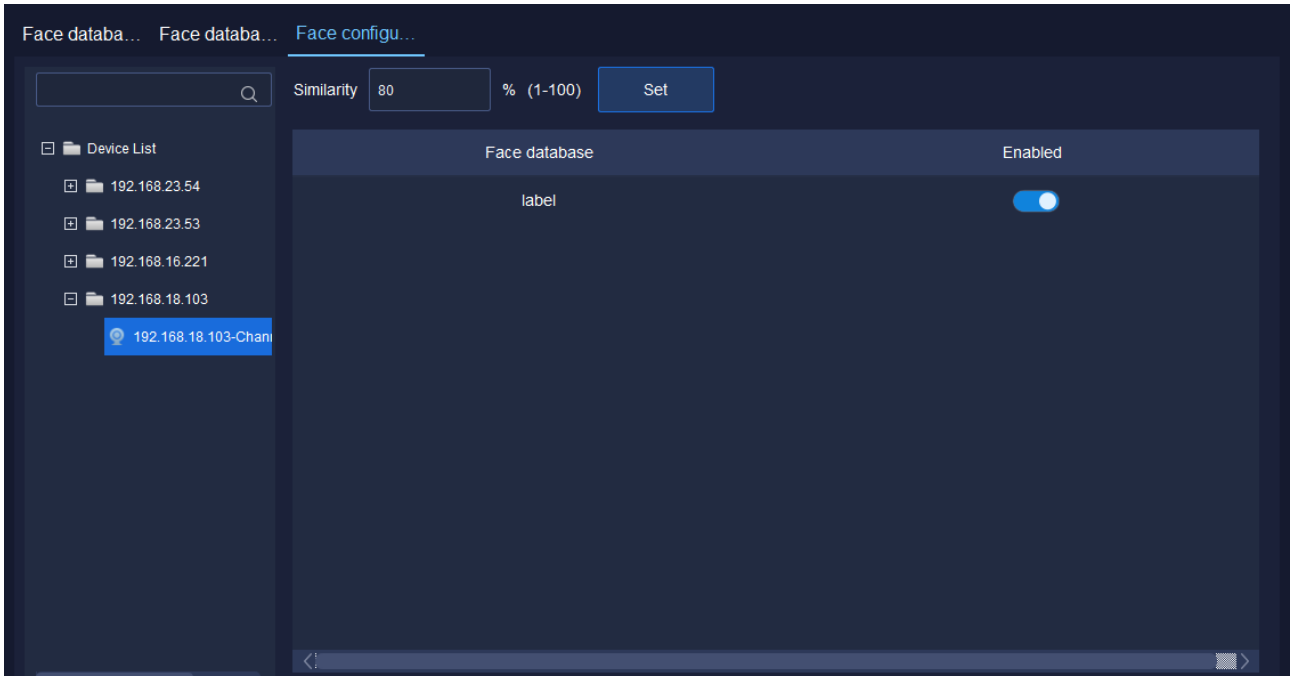
Explain:

- Click [Remove] to delete the current face library in the current channel.
- Click [Copy to] to copy to other channels.

11.3 Face configuration

Operation steps:

1. After entering the face recognition interface, select [Face Library Configuration] in the menu in the upper right corner of the left column of the interface to display its function content in the right column area, as shown in the following figure.



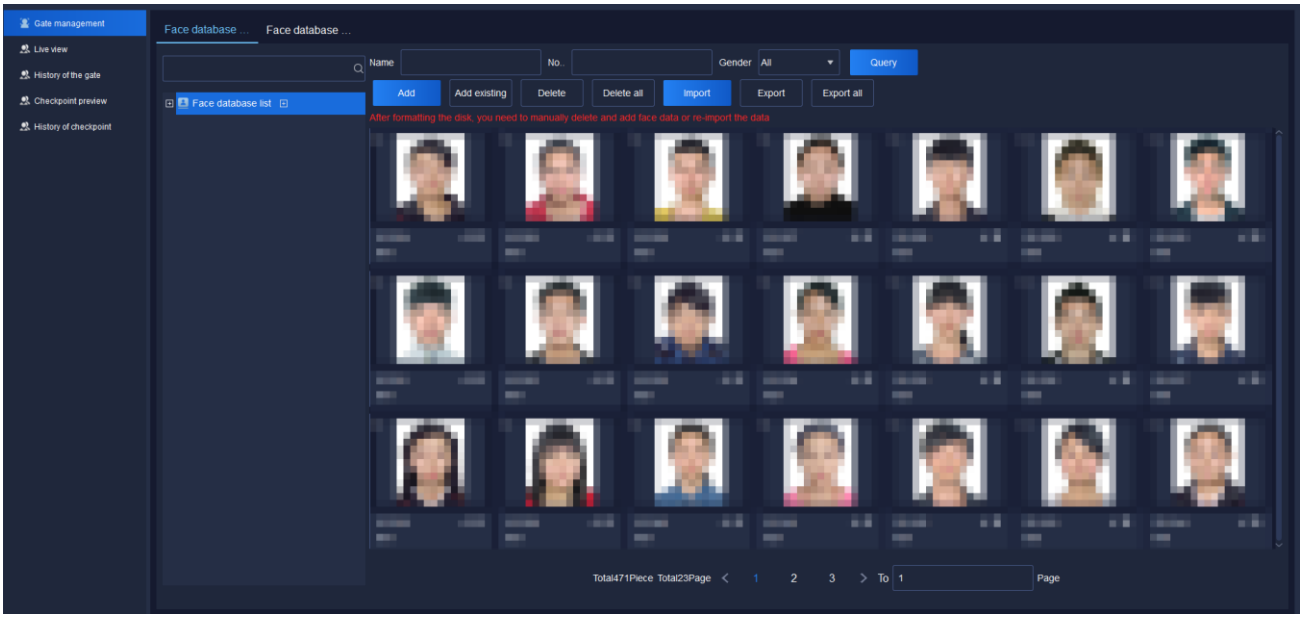
2. You can set whether to enable the face database and set the similarity. The data above the similarity is valid and can be recognized.

12 Access Management

Bayonet preview and information query.

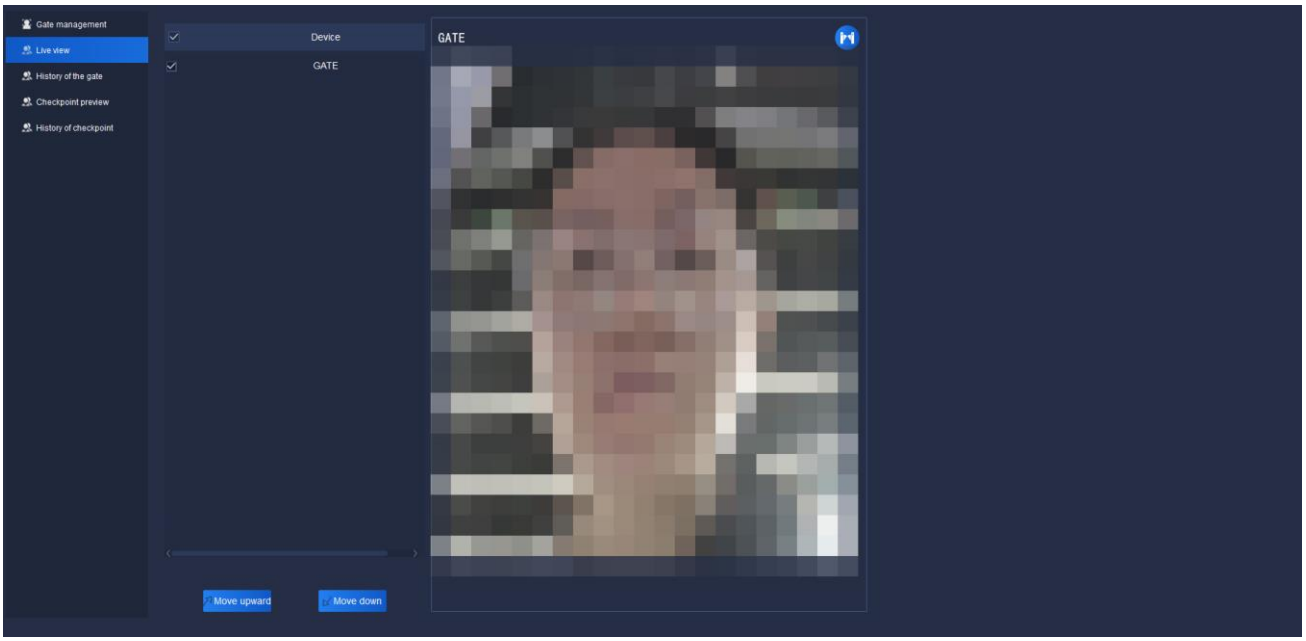
12.1 Gate Management

The human gate management interface is shown in the figure below, and the operation is the same as that in 10.1 Face Database Management.



12.2 Live View

Select the [Real-time preview] option in the access management interface to display the video screen of the passenger gate equipment when there is a face, as shown in the following figure.



Explain:

- In the real-time preview interface, you can view the real-time preview map of the current monitoring area, and support operations such as opening the gate and lifting the bar of the linkage equipment.
- The IP address of the VMS client needs to be set in the device web side network storage-push map settings.

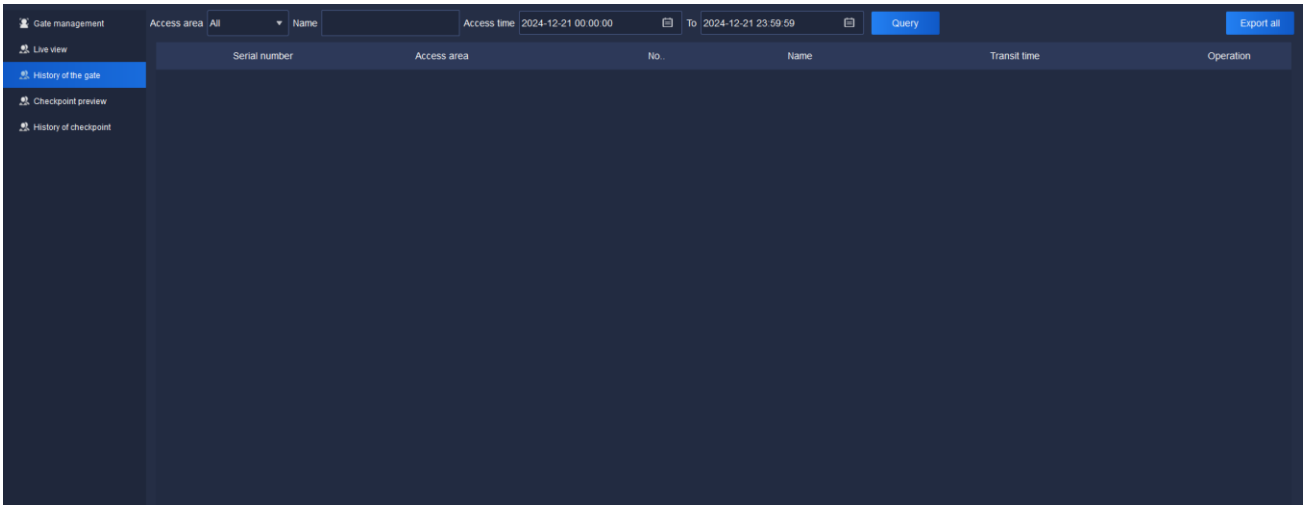
12.2.1 Equipment sequencing

Click "<" on the right to expand the device list. You can set the real-time preview sorting of devices and the displayed devices. As shown in the following figure. Select the equipment to be moved and click [Move Up/Move Down] to change the display order.



12.3 History of the Gate

In the access management interface, select the [Passenger Gate History] option in the right column to display the [Passenger Gate History] list screen in the right area, as shown in the following figure.



Explain:

- In the human gate history interface, it supports the search and query of the access area, user

name and access time.

12.3.1 Access to areas

Select one item in the [Gate History] list, and click the [View] button to view the current personnel access to the area.

12.4 Checkpoint preview

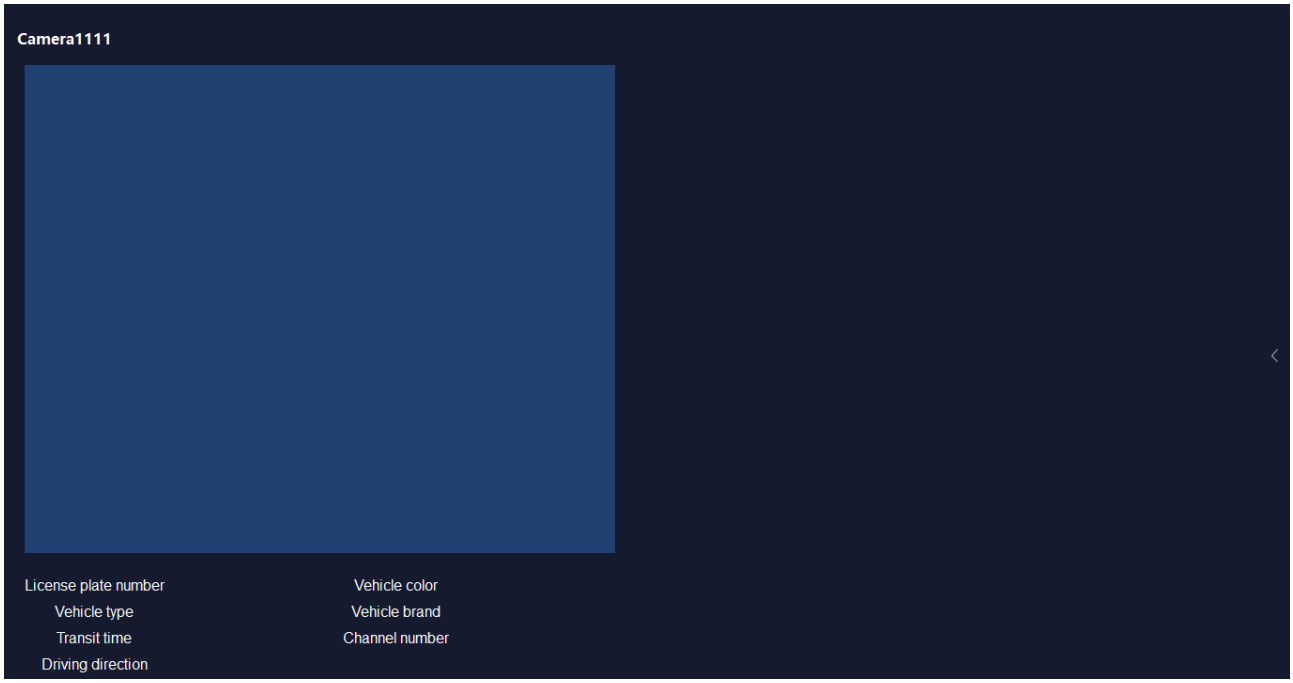
Premise:

1. Add a device at Device Management-Coding Device. After successful addition, edit the channel in the group and change the type from channel to bayonet.

2. The added device needs to support the vehicle detection function.

3. Refer to Chapter 9 Vehicle Management for equipment configuration.

In the access management interface, select the [Bayonet Preview] option in the right column to display the [Bayonet Preview] video screen in the right area, as shown in the following figure.

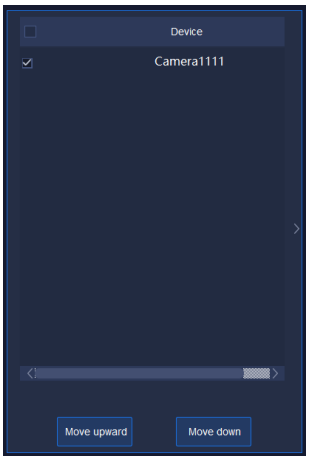


Explain:

- In the bayonet preview interface, you can view the real-time snapshot preview of the bayonet in the current monitoring area, and you can view the current vehicle information.

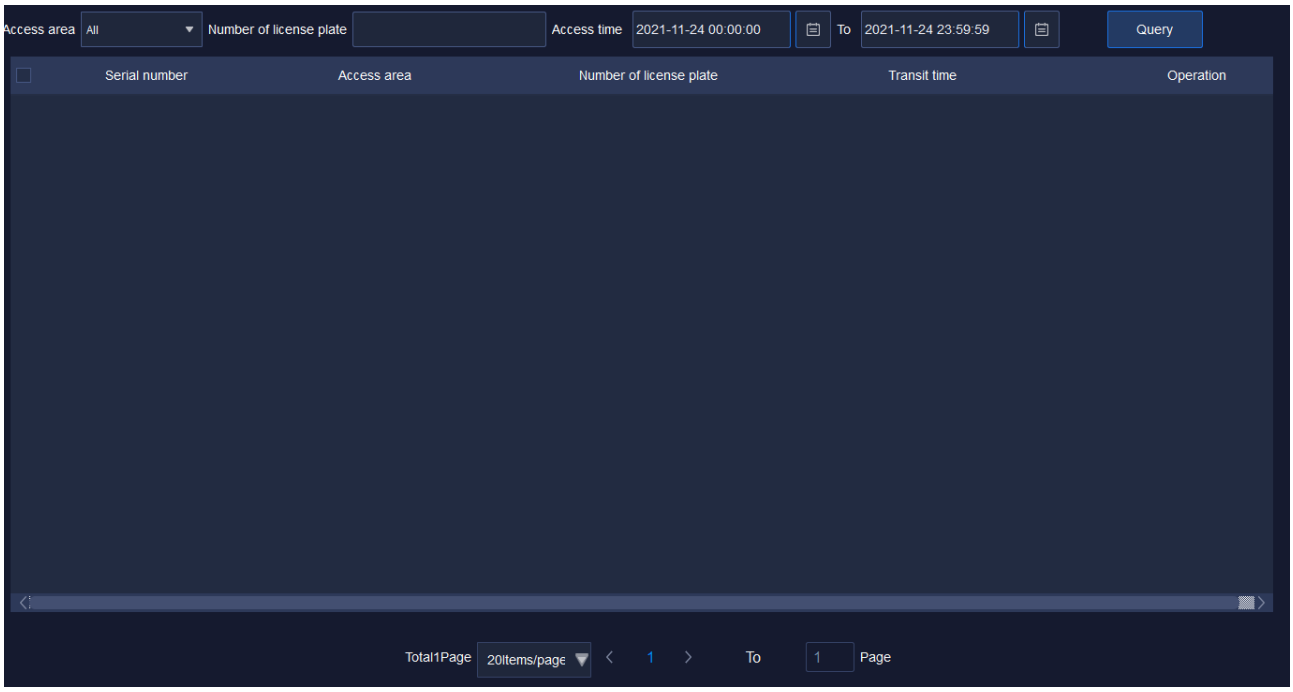
12.4.1 Device sorting

Click "<" on the right to expand the device list. You can set the real-time preview sorting of devices and the displayed devices. As shown in the following figure. Select the equipment to be moved and click [Move Up/Move Down] to change the display order.



12.5 Checkpoint history

Select [Checkpoint History] in the access management interface to display the [Checkpoint History] list, as shown in the following figure.

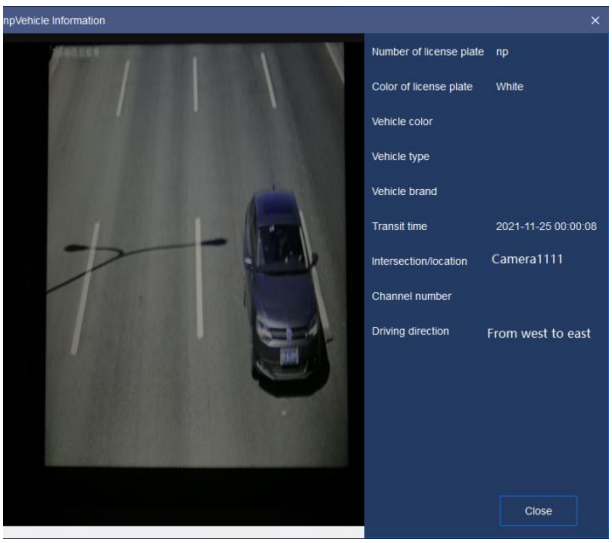


Explain:

- In the bayonet history interface, the access area, license plate number and access time can be searched and queried.

12.5.1 Access area

In the [Checkpoint History] list, select one of them and click the [View] button to view the current vehicle access area, as shown in the following figure.


npVehicle Information
Number of license plate np
Color of license plate White
Vehicle color
Vehicle type
Vehicle brand
Transit time 2021-11-25 00:00:08
Intersection/location Camera1111
Channel number
Driving direction From west to east
Close

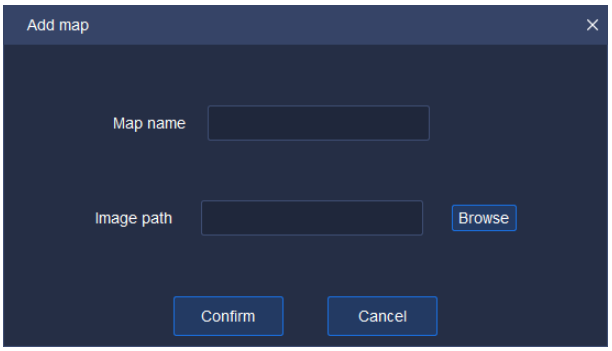
13 Electronic Map

Operation function and management of electronic map.

13.1 Electronic Map configuration

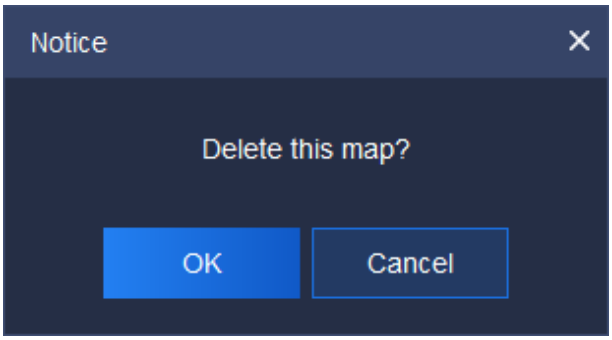
13.1.1 Add map

Click the [Add Map] button, as shown in the following figure, enter the map name and select the map picture path, click [OK] to save the current map, and click [Cancel] to close the current interface.



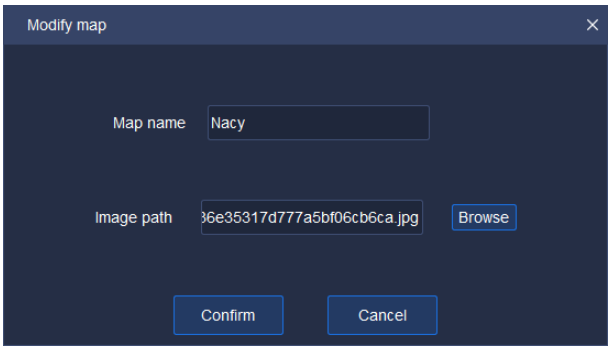
13.1.2 Delete map

Select the electronic map to be deleted in the interface, click the [Delete Map] button, and a prompt box of the deletion button will appear, as shown in the following figure. Click [OK] to delete the electronic map, and click [Cancel] to close the prompt box and cancel the deletion.



13.1.3 Modify map

To modify the map name or map base picture, click the [Modify Map] button, as shown in the following figure, click [OK] to save the current map, and click [Cancel] to close the current interface.



13.1.4 Add / delete devices

Operation steps:

1. In the user-defined equipment list on the right side of the editing interface, select the equipment to be added to the electronic map, and drag the mouse to the area where the equipment needs to be added to complete the addition of the data acquisition channel. Drag the "" channel device icon to change where you want to add it. When an alarm occurs on this channel, the "" icon flashes with a red border.

2. Support to add two nodes of alarm input "" and alarm output "" in the

electronic map. The input node will flicker when receiving the alarm of alarm input. The alarm can be eliminated through the context menu [Eliminate alarm]. The alarm output can be controlled to open and close the alarm output through the context menu [Open alarm output/Close alarm output].

3. For devices that have been added, [Added] will be prompted in the custom device list.

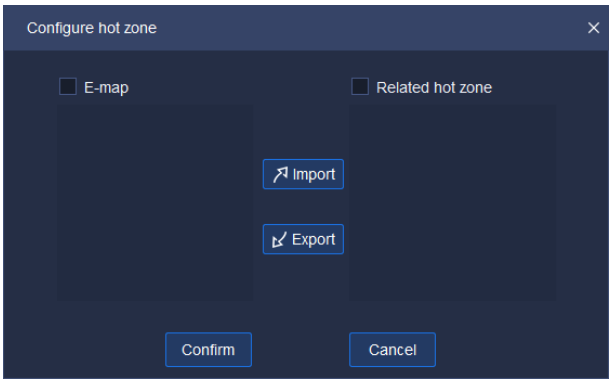
4. To delete the device, select and right click the [Delete Device] button in the figure, or select the device to be deleted in the electronic map list on the left, and click the [Delete Device] button above to delete the device on the current electronic map.

13.2 Configure heat zone

Operation steps:

1. Click the [Configure Hotspot] button to associate other electronic maps on the current electronic map, as shown in the following figure.

2. Check the electronic map on the left and click the [Move In] button to add the electronic map to the associated area on the right, as shown in the following figure.



3. Click the [Move Out] button to move the electronic map from the right associated area back to the electronic map area.

4. Click the [Confirm] button to display the "" hotspot icon on the current electronic map, and drag it to reset the location of the hotspot.

5. Click the [Cancel] button to close the current interface.

Explain:

- To delete the hotspot, select the hotspot button and right click Delete.

13.3 Electronic map preview

Operation steps:

1. Click the [Preview] button to preview the current electronic map.

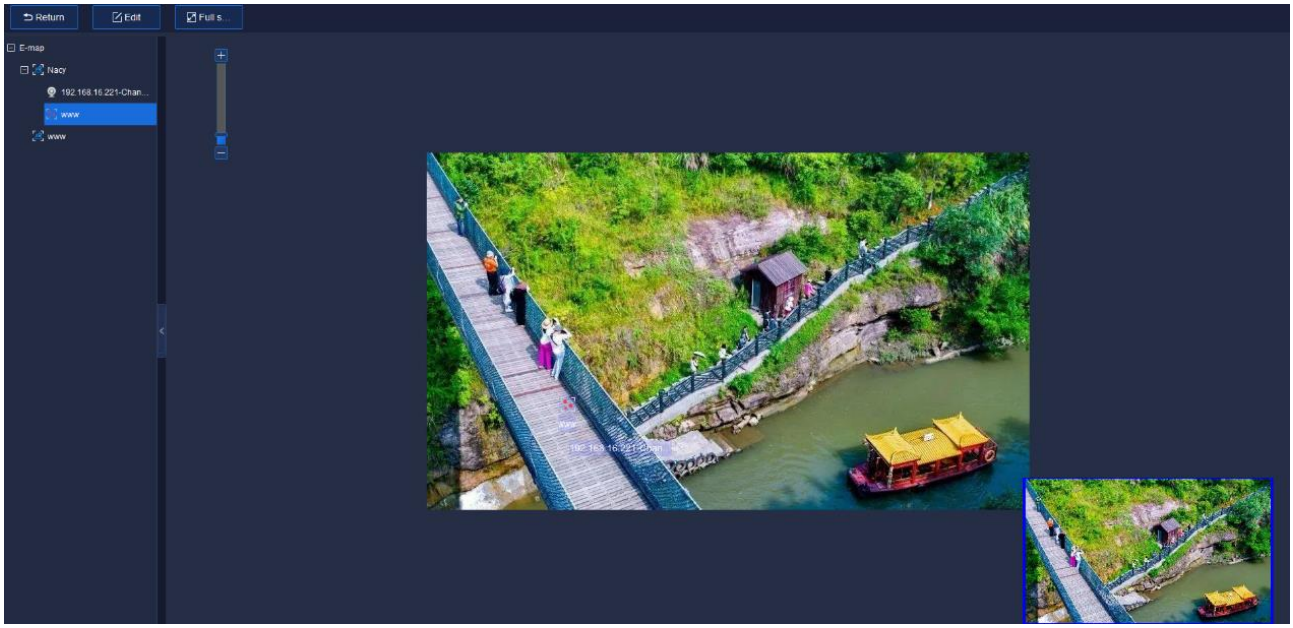
2. Click the [Full Screen] button to view the preview interface in full screen.

3. Click the [Back] button to return to the previous preview operation.

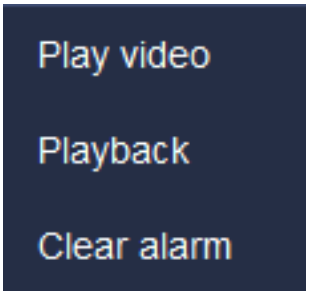
Explain:

- In the electronic map preview interface, it is supported to manually drag the picture or the mouse wheel to change the display position of the picture or enlarge the picture of the position.

4. Double-click the device button on the map to open the device video preview, as shown in the following figure.



5. Right click the equipment icon to pop up the selection box to play the video, play back the video and eliminate the alarm, as shown in the following figure. Select the video playback to jump to the video playback interface.



14 User management

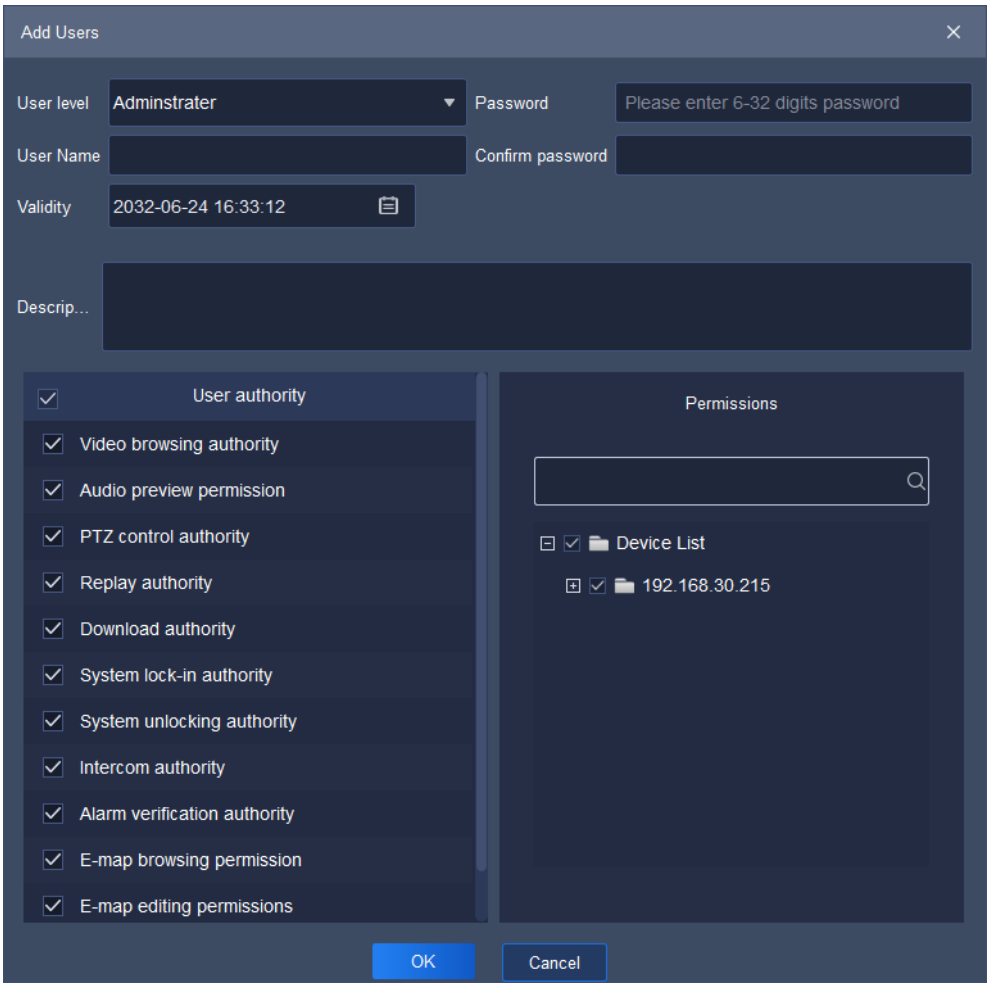
Unified management of client users, add, delete, edit and configure permissions.

Explain:

- The interface displays the basic information of all currently added users.
- Only the Admin super administrator account has permission to enable this function.

14.1 Add user

Click Add in the User Management interface to pop up the Add User window, as shown in the following figure.



The interface parameters are described as follows:

Parameter	Instruction
User level	Set administrator or operator for current system.
User name	Users to fill in any name. 【Note】 There’s illegal character limit when adding user name, following characters are not allowed to be input ~!#$%^()=[]{},":;'<>?*`+/\&.
Password	To set password for newly added user.
Confirm password	Needs to be the same as input "Password".
Validity	Set the expire date of the authority for users.
Description	Supplement and describe user information.
User authority	Set the user authority of administrator or operator, such as the authority of video browsing, audio preview authority ,PTZ control, video playback, video download, system lock, system delock, intercom, alarm check, etc.
Permissions	Set devices permit user authority to apply.

Explain:

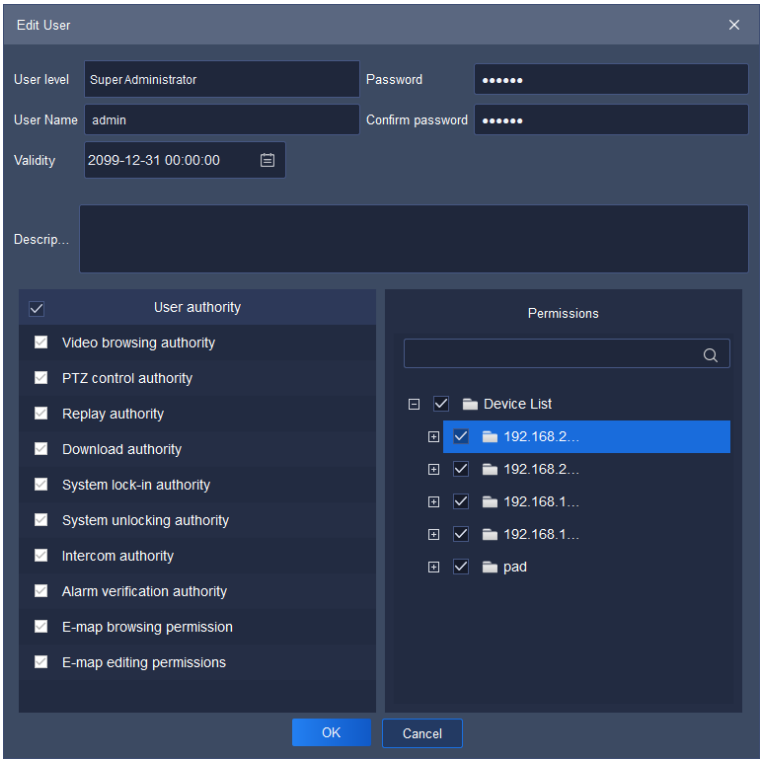
- The audio preview permission is mainly used to control all audio opening operations in the platform.
- The audio preview permission, PTZ control permission, video playback permission, and video download permission depend on the video preview permission. If you want to open any one of the audio preview permission, PTZ control permission, video playback permission, and video download

permission of a channel, you must open the video preview permission first;

- The intercom permission depends on the audio permission. Only when at least one channel under the host has enabled the audio permission, can the intercom permission of the host be enabled.

14.2 Edit user

Select the user to be edited in [User List], and click [Edit] to pop up the [Modify User] window, as shown in the following figure.

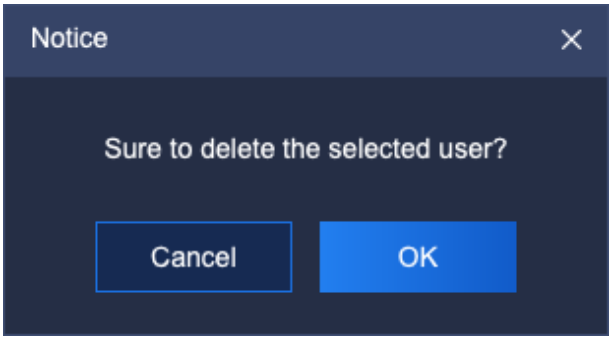


Notice:

- The related information of the user can be modified in the editing interface, including user level, user name, validity period, password, description, user authority and authority configuration. Admin Super Admin user can only modify the password.

14.3 Delete user

Select the user to be deleted in User List, click Delete to pop up a prompt box, click OK to delete the selected user, and click Cancel to cancel the deletion, as shown in the following figure.



Notice:

- You can delete multiple users at the same time. The superuser admin cannot be deleted.

15 Intelligent search

Retrieve the received Intelligent information.

15.1 Face retrieval

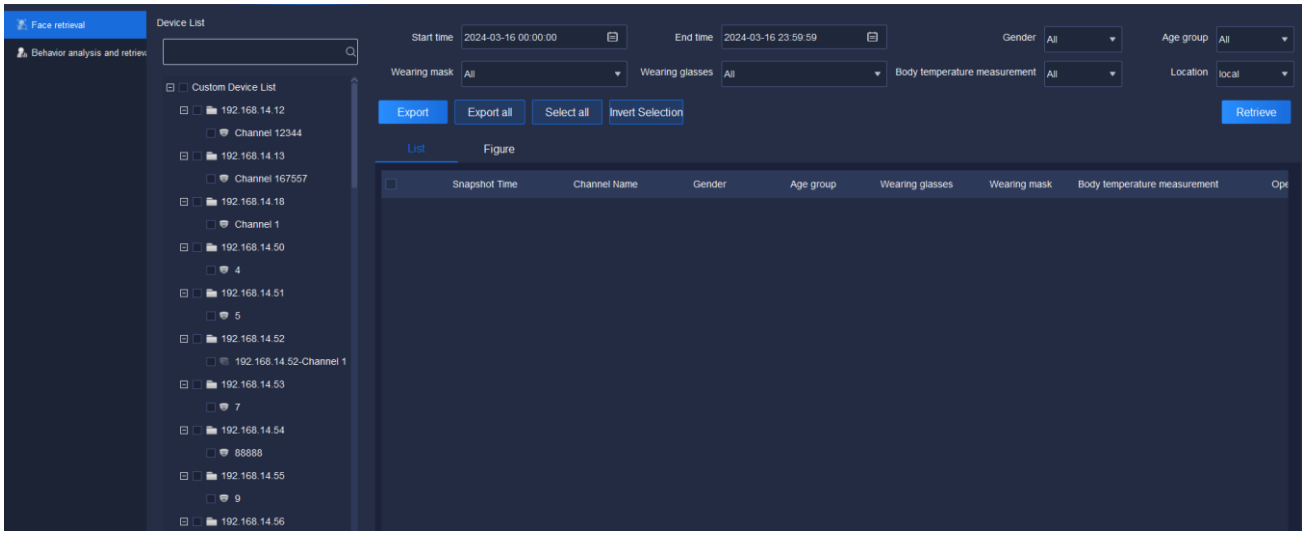
Premise:

1. The device channel has a storage medium and is configured with a face detection algorithm.

2. Enable the smart application image collection function in the client [System Settings-Smart Application].

Operation steps:

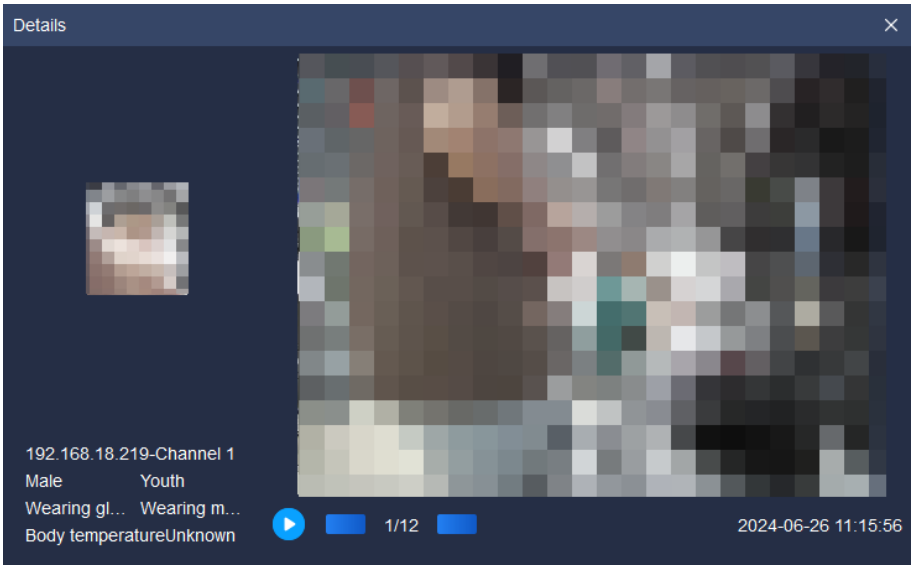
1. After entering the [Intelligent Retrieval] interface, select [Face Retrieval] in the rightmost display bar, and the relevant functions and contents will be displayed in the left area, as shown in the figure.



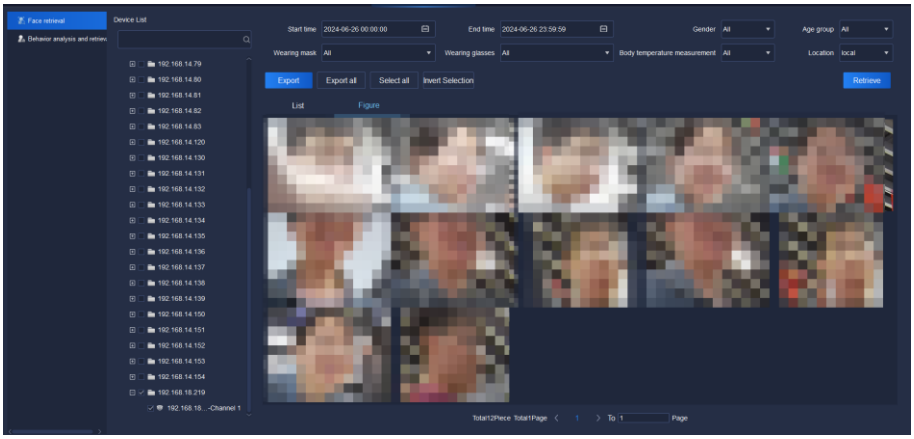
2. The user can select any channel in the monitoring point on the left, set the query conditions, and click the [Search] button to query the detailed information of all the

records of the monitoring point in the time period. Two display forms, list and chart, are supported.

3. Click [List] to display the search results in the form of a list, including the snapshot time, channel name, gender, age, whether to wear a mask, whether to wear glasses and body temperature. Click [Details] to see the detailed information of the snapshot, as shown in the following figure. Click [Playback] to see the playback video.

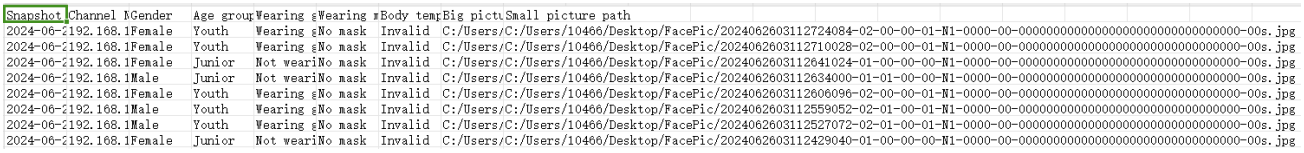


4. Click [Figure] to display the search results in the form of a chart. You can view the details and playback information of the captured pictures, as shown in the following figure.



5. Select any piece of data in the search results and click the [Export] button to download the data results to the local. The export results are shown in the following figure.

6. Click the [Export All] button to export all the search results.



Snapshot	Channel N	Gender	Age group	Wearing g	Wearing g	Body temp	Big pictu	Small picture path
2024-06-21	92.168.1	Female	Youth	Wearing g	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031127240	84-02-00-00-01-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Female	Youth	Wearing g	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031127100	28-02-00-00-01-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Female	Junior	Not weari	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031126410	24-01-00-00-00-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Male	Junior	Not weari	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031126340	00-01-01-00-00-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Female	Youth	Wearing g	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031126060	96-02-00-00-01-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Male	Youth	Wearing g	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031125590	52-02-01-00-01-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Male	Youth	Wearing g	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031125270	72-02-01-00-01-N1-0000-00-00000000000000000000000000000000-00s.jpg
2024-06-21	92.168.1	Female	Junior	Not weari	No mask	Invalid	C:/Users/C:/Users/10466/Desktop/FacePic/20240626031124290	40-01-00-00-00-N1-0000-00-00000000000000000000000000000000-00s.jpg

15.2 Behavior analysis and retrieval

Premise:

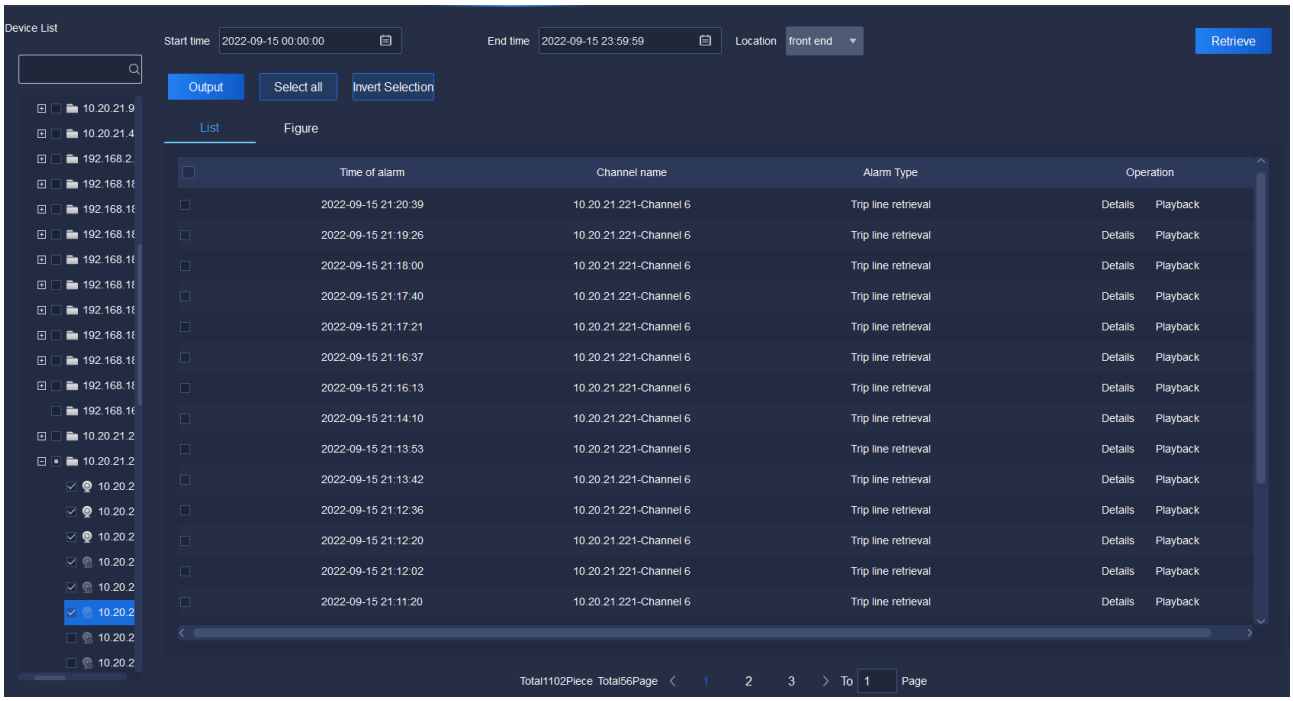
1. The NVR device has a storage medium, and the device channel is configured with a behavior analysis algorithm.

2. Enable the smart application image collection function in the client [System Settings-Smart Application].

3. This function supports NVR devices and queries up to 32 channels at the same time.

Operation steps:

The user can select the equipment supporting the algorithm in the monitoring point on the left, set the query conditions, and click the [Search] button to query the detailed information of all records of the monitoring point in the time period, including the alarm time, channel name, alarm type, etc., as shown in the following figure.



The interface parameters are described as follows:

Parameter	Instruction
Start Time	The start time of query behavior analysis alarm can be set.
End Time	End time of query behavior analysis alarm can be set.
Behaviors Type	Types of behavior analysis can be selected, including tripwire, double tripwire, perimeter, wandering, parking, running, stolen items, and items left behind.
Retrieve	Click to display the search results.
Export	Select any piece of data in the search results and click the button to download the data to the local.
Select All	Click to select all search results.
Reverse election	Select all search results except those in the currently selected range.

Details	Click to see the snapshot details of the search results.
Playback	Click to see the playback video of the retrieval result. If there is no video, the real-time preview screen of the channel will be played.

16 Data statistics

Face data, passenger flow data and heat map are counted, and the total amount, proportion and trend of data are displayed through statistical charts and lists.

16.1 Face statistics

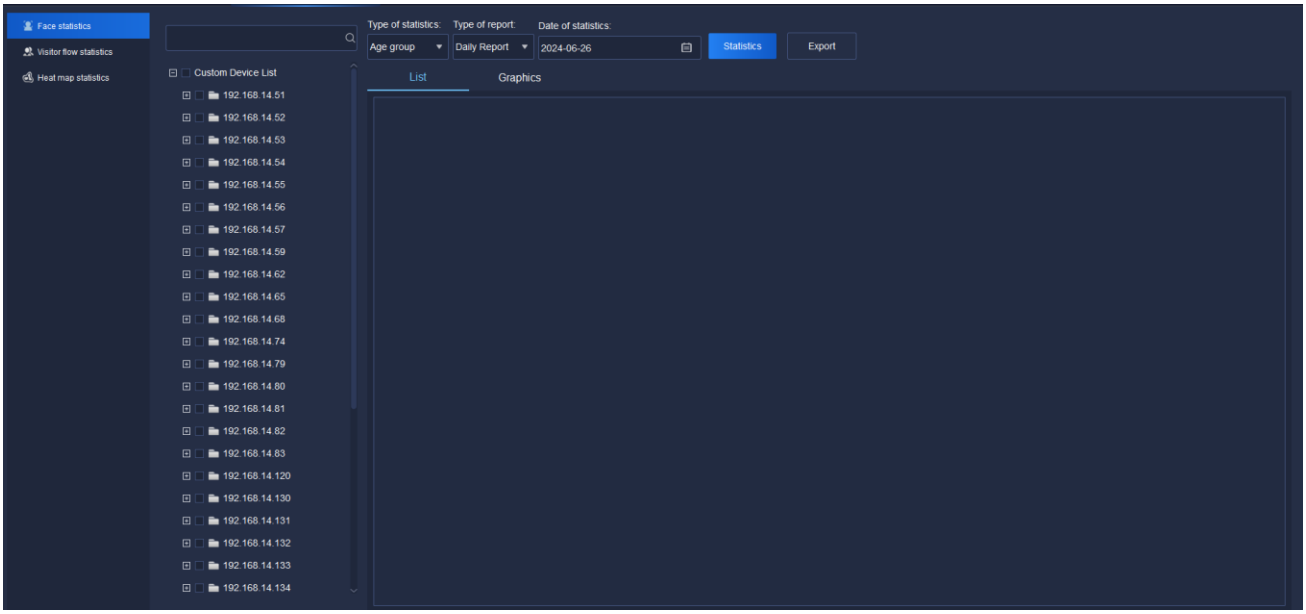
Premise:

1. Device has a storage medium and is configure with a face detection algorithm.

2. Enable the smart application image collection function in the client [System Settings-Smart Application].

Operation steps:

After entering the data statistics interface, select [Face Statistics] in the leftmost column to display the relevant contents and functions in the right sidebar.



Explain:

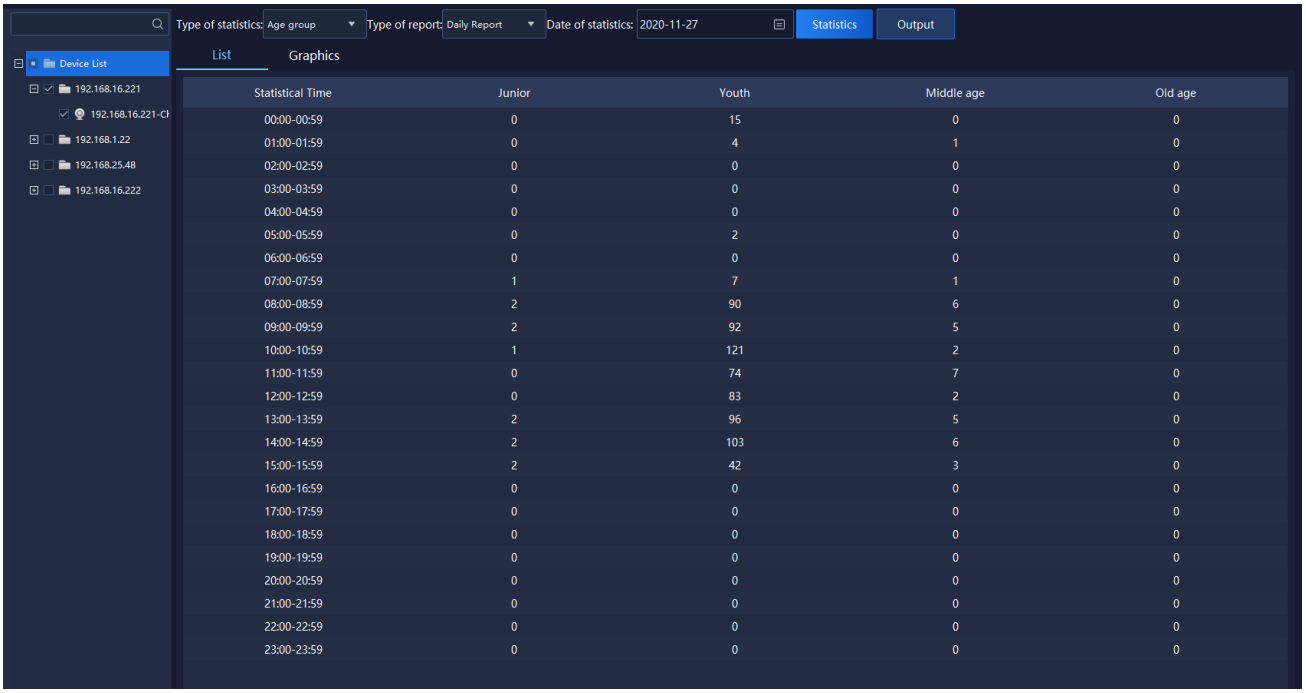
- Face statistics support statistics according to age, gender, number of people, whether wearing

glasses, whether wearing masks, and abnormal body temperature.

16.1.1 Statistics by age group

Operation steps:

1. In the [Face Statistics] function interface, select [Statistics Type-> Age] at the top of the left column to perform statistics according to age, as shown in the following figure.

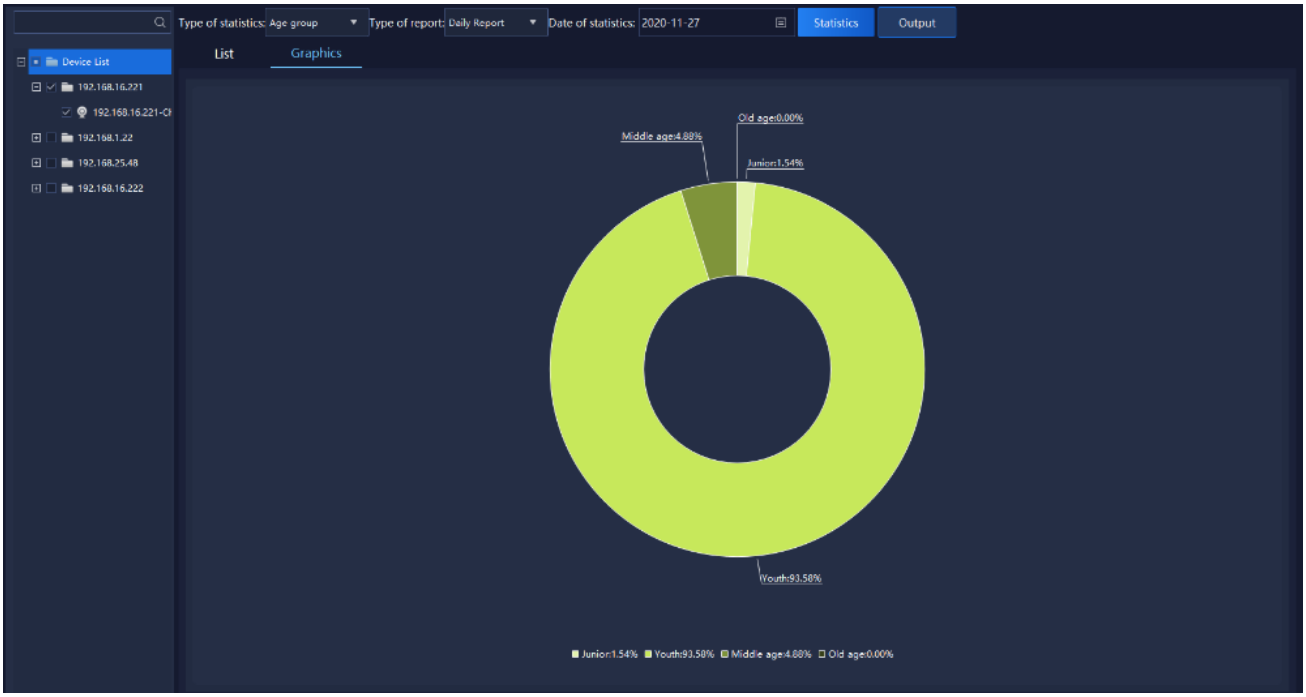


Statistical Time	Junior	Youth	Middle age	Old age
00:00-00:59	0	15	0	0
01:00-01:59	0	4	1	0
02:00-02:59	0	0	0	0
03:00-03:59	0	0	0	0
04:00-04:59	0	0	0	0
05:00-05:59	0	2	0	0
06:00-06:59	0	0	0	0
07:00-07:59	1	7	1	0
08:00-08:59	2	90	6	0
09:00-09:59	2	92	5	0
10:00-10:59	1	121	2	0
11:00-11:59	0	74	7	0
12:00-12:59	0	83	2	0
13:00-13:59	2	96	5	0
14:00-14:59	2	103	6	0
15:00-15:59	2	42	3	0
16:00-16:59	0	0	0	0
17:00-17:59	0	0	0	0
18:00-18:59	0	0	0	0
19:00-19:59	0	0	0	0
20:00-20:59	0	0	0	0
21:00-21:59	0	0	0	0
22:00-22:59	0	0	0	0
23:00-23:59	0	0	0	0

Explain:

- Face statistics can be divided into four age groups: youth, youth, middle age and old age.

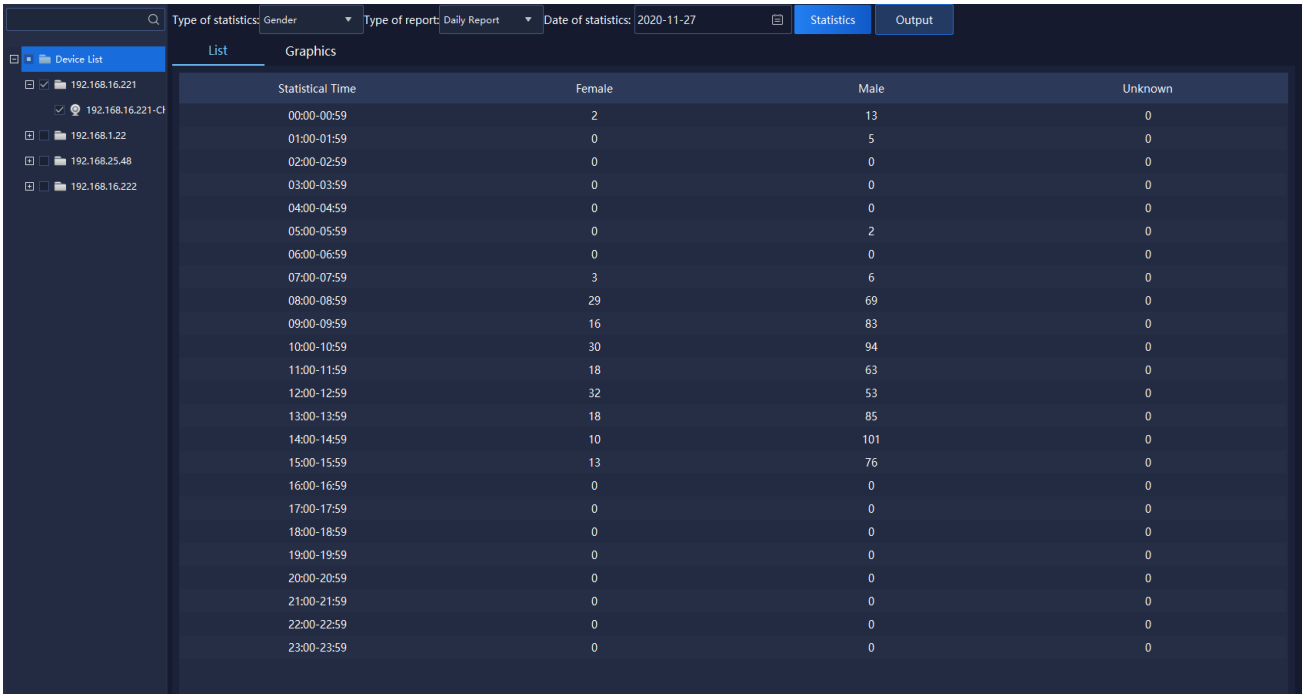
2. The platform supports list display and chart display, as shown in the following figure.



16.1.2 Statistics by gender

Operation steps:

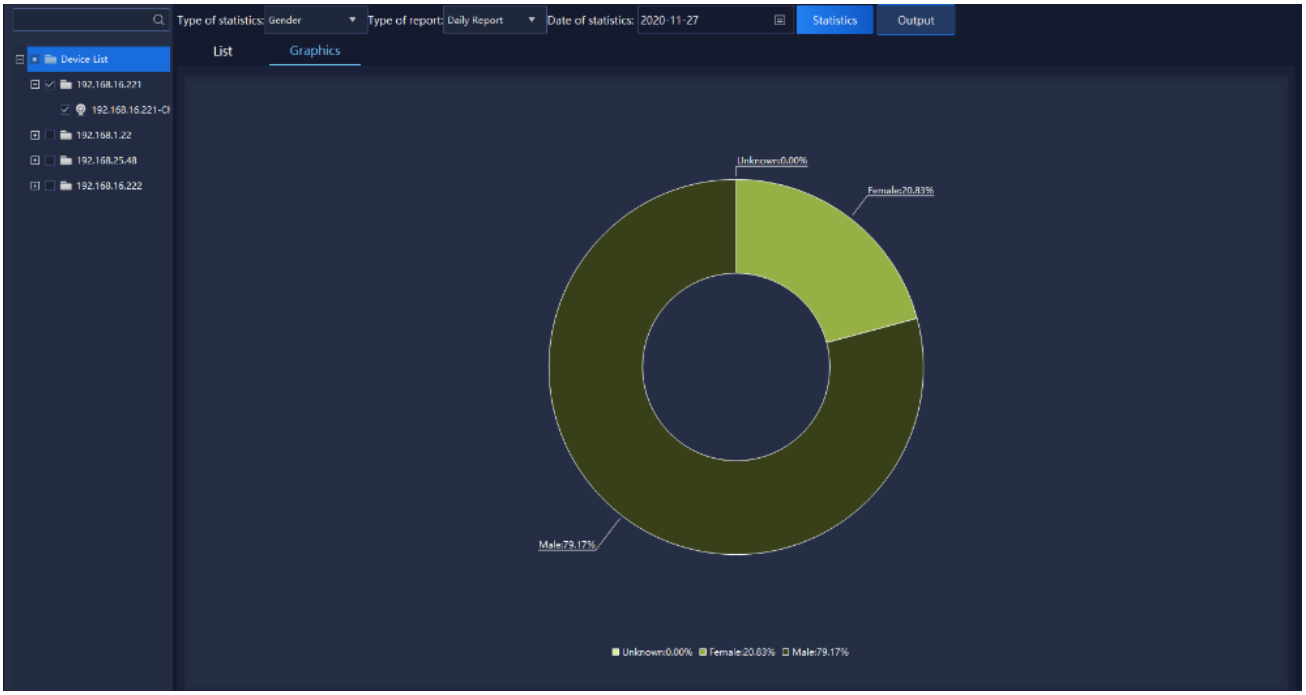
1. In the [Face Statistics] function interface, select [Statistics Type-> By Gender] at the top of the left column to perform statistics according to gender, as shown in the following figure.



Explain:

- [Unknown] Displays [Unknown] when a human form is detected for the device but no face is detected.
- Face statistics can be divided into male, female and unknown according to gender statistics.

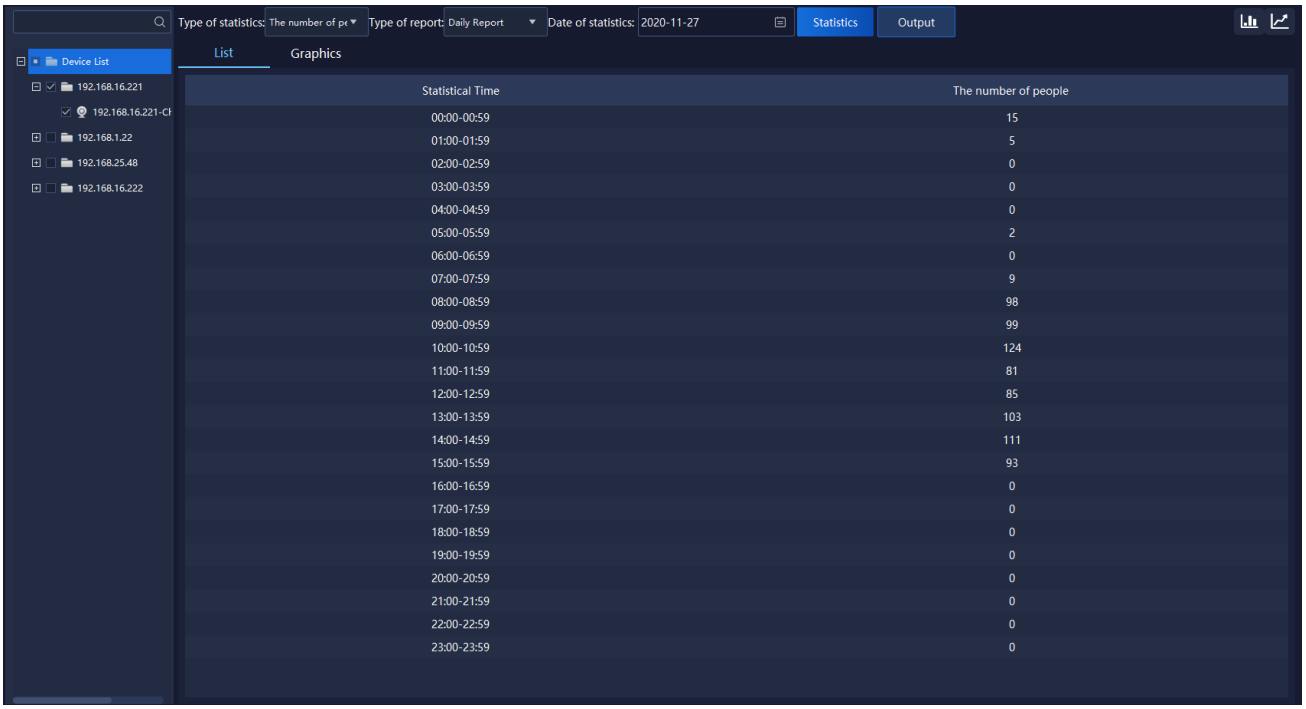
2. The platform supports list display and chart display, as shown in the following figure.



16.1.3 Statistics by the number of people

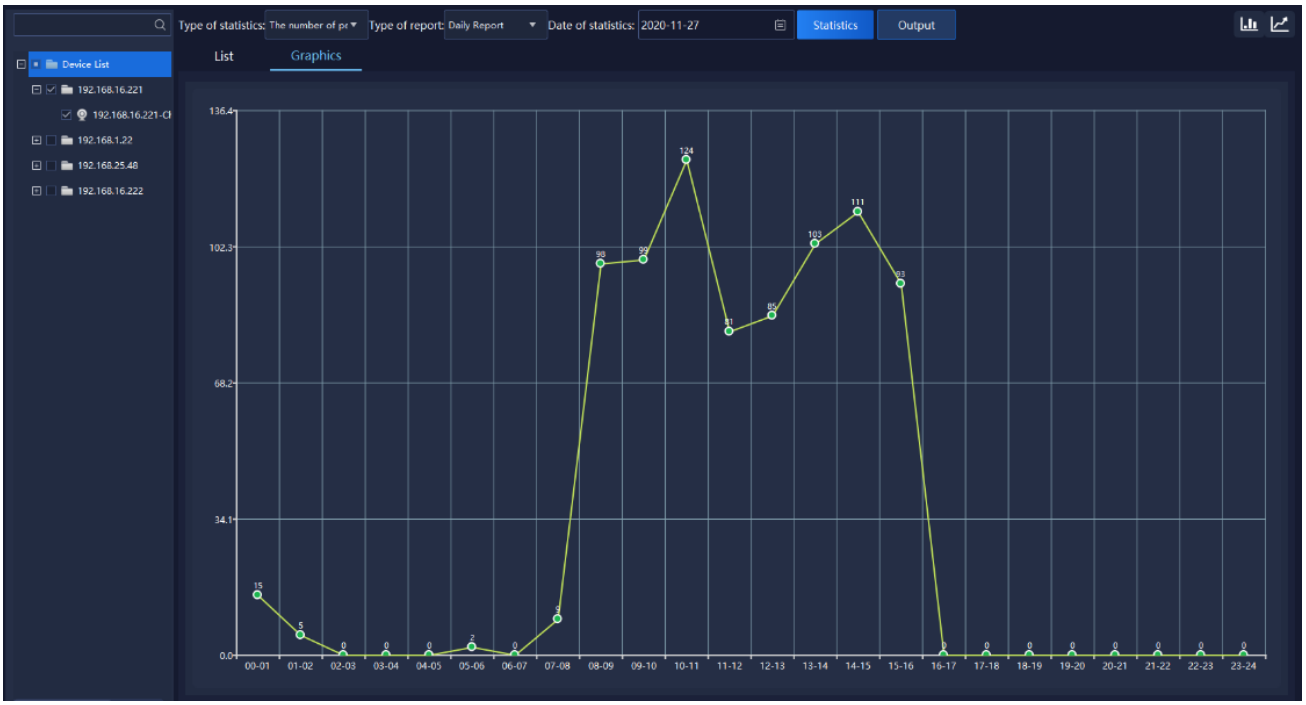
Operation steps:

1. In the [Face Statistics] function interface, select [Statistics Type-> By Number of People] at the top of the left column to perform statistics according to the number of people, as shown in the following figure.



2. Face statistics counts the number of people per hour according to time. The platform supports list display and chart display. In the graphic interface, click "" to switch to line chart display, and click "" to switch to histogram display, as shown in the following figure.



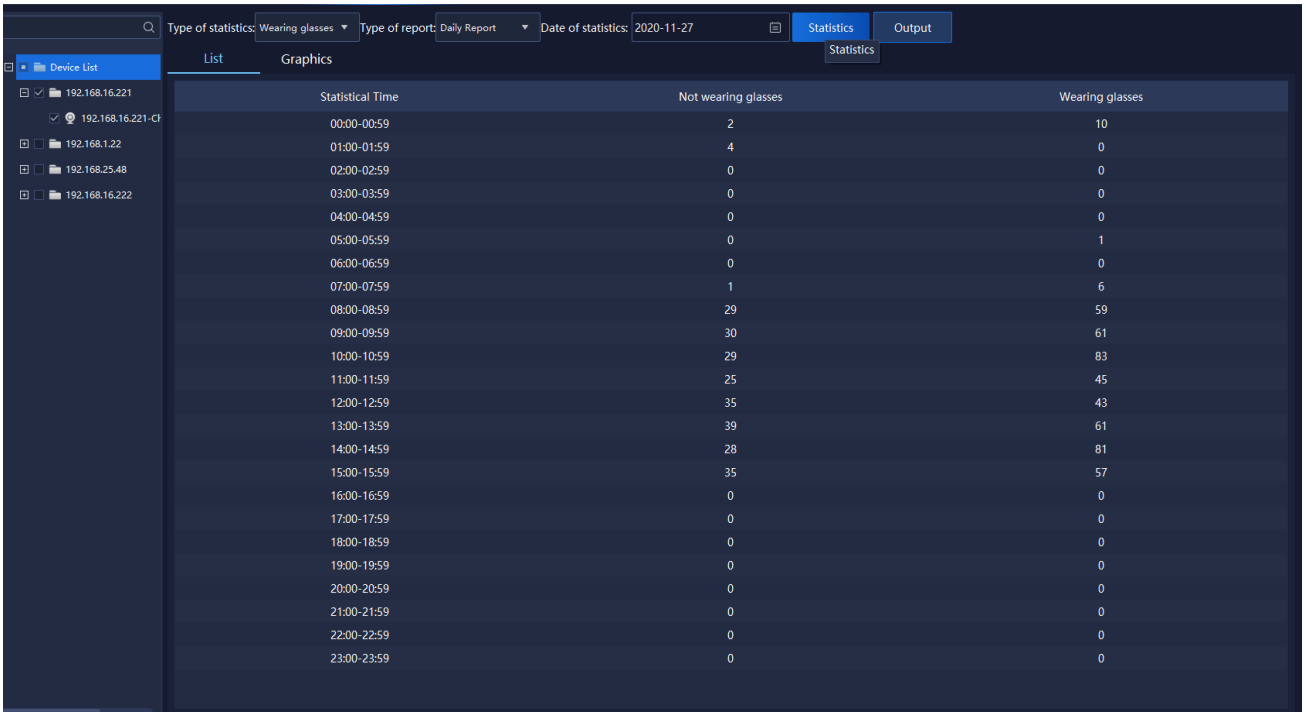


16.1.4 Statistics by whether wearing glasses

Operation steps:

1. In the [Face Statistics] function interface, select [Statistics Type-> Wear Glasses] at the top of the left column to perform statistics according to the number of people, as

shown in the following figure.

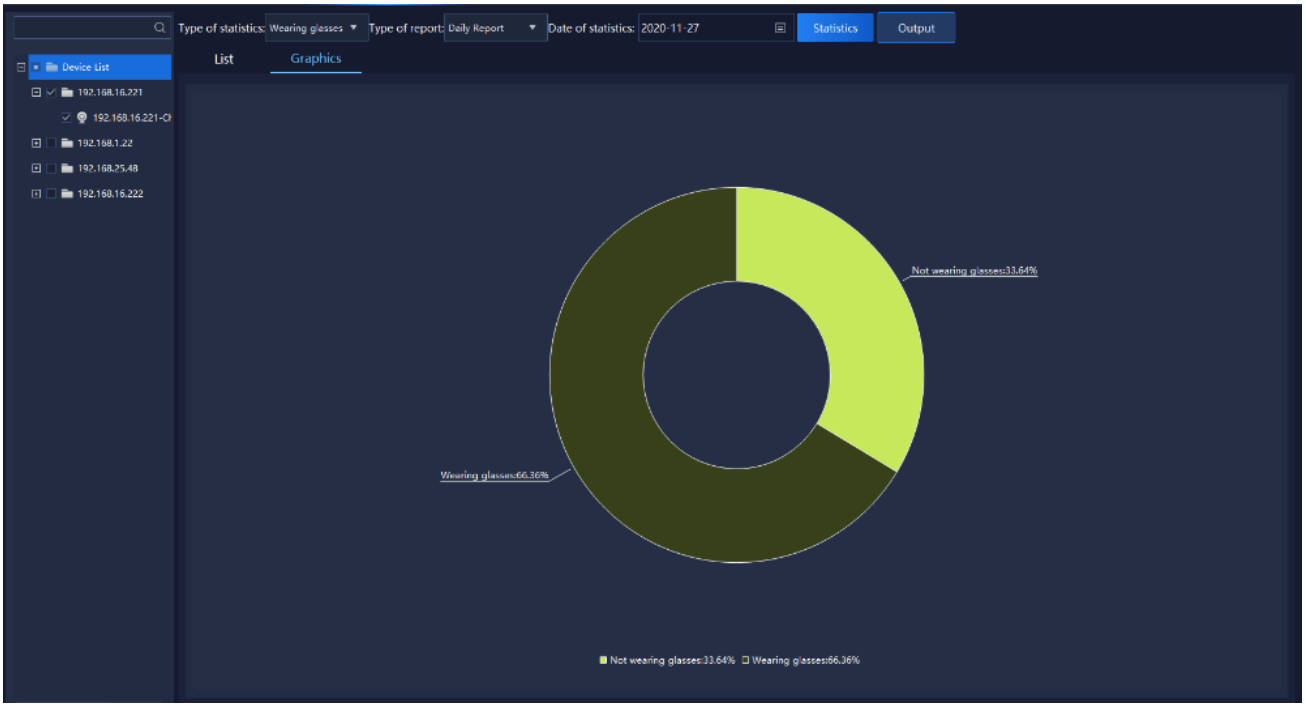


Statistical Time	Not wearing glasses	Wearing glasses
00:00-00:59	2	10
01:00-01:59	4	0
02:00-02:59	0	0
03:00-03:59	0	0
04:00-04:59	0	0
05:00-05:59	0	1
06:00-06:59	0	0
07:00-07:59	1	6
08:00-08:59	29	59
09:00-09:59	30	61
10:00-10:59	29	83
11:00-11:59	25	45
12:00-12:59	35	43
13:00-13:59	39	61
14:00-14:59	28	81
15:00-15:59	35	57
16:00-16:59	0	0
17:00-17:59	0	0
18:00-18:59	0	0
19:00-19:59	0	0
20:00-20:59	0	0
21:00-21:59	0	0
22:00-22:59	0	0
23:00-23:59	0	0

Explain:

- Face statistics are based on whether the inspector wears glasses or not, which can be divided into two kinds of display: without glasses and with glasses.

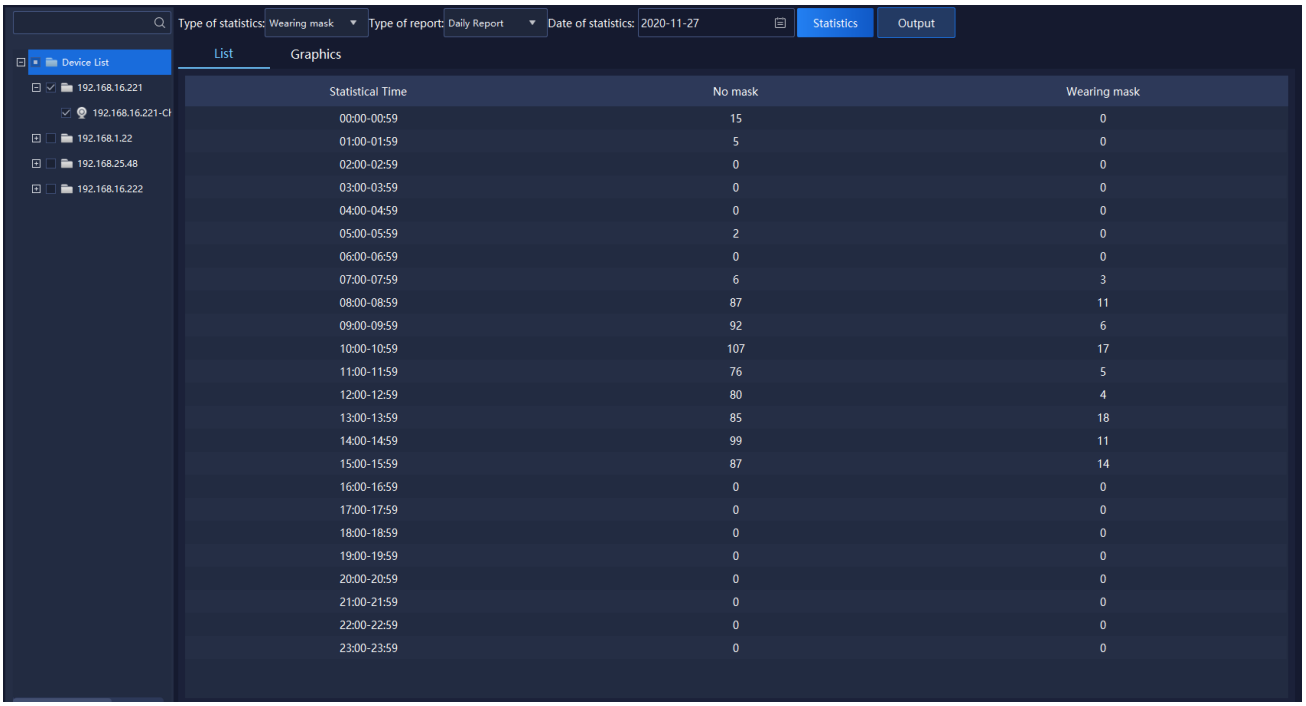
2. The platform supports list display and chart display, as shown in the following figure.



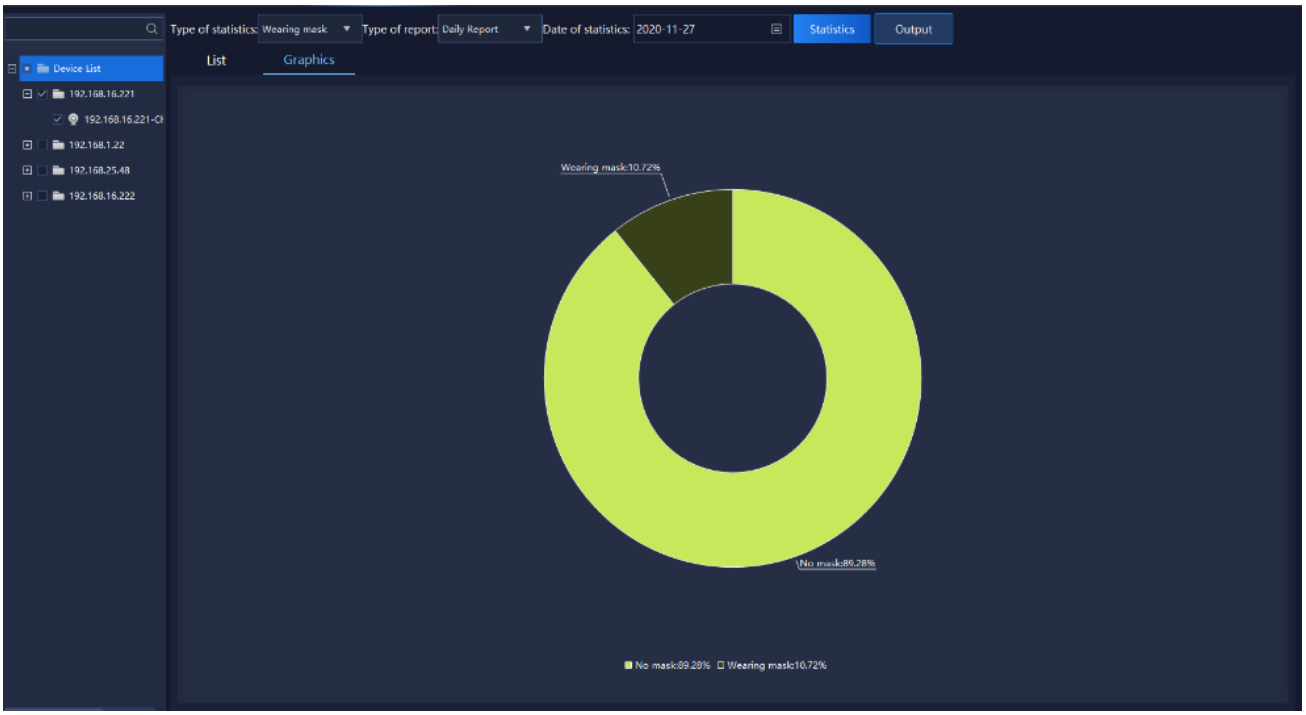
16.1.5 Statistics by whether wearing mask

Operation steps:

1. In the [Face Statistics] function interface, select [Statistics Type-> Wear Masks] at the top of the left column to perform statistics according to the number of people, as shown in the following figure.



2. The platform supports list display and chart display, as shown in the following figure.



16.1.6 Statistics by body temperature measurement

Operation steps:

1. After selecting [Statistics Type-> Abnormal Body Temperature] in the [Face Statistics] function interface, statistics can be made according to the number of people, as shown in the following figure.



Explain:

- Face statistics counts the number of people with abnormal body temperature per hour according to time.

2. The platform supports list display and chart display, as shown in the following figure.



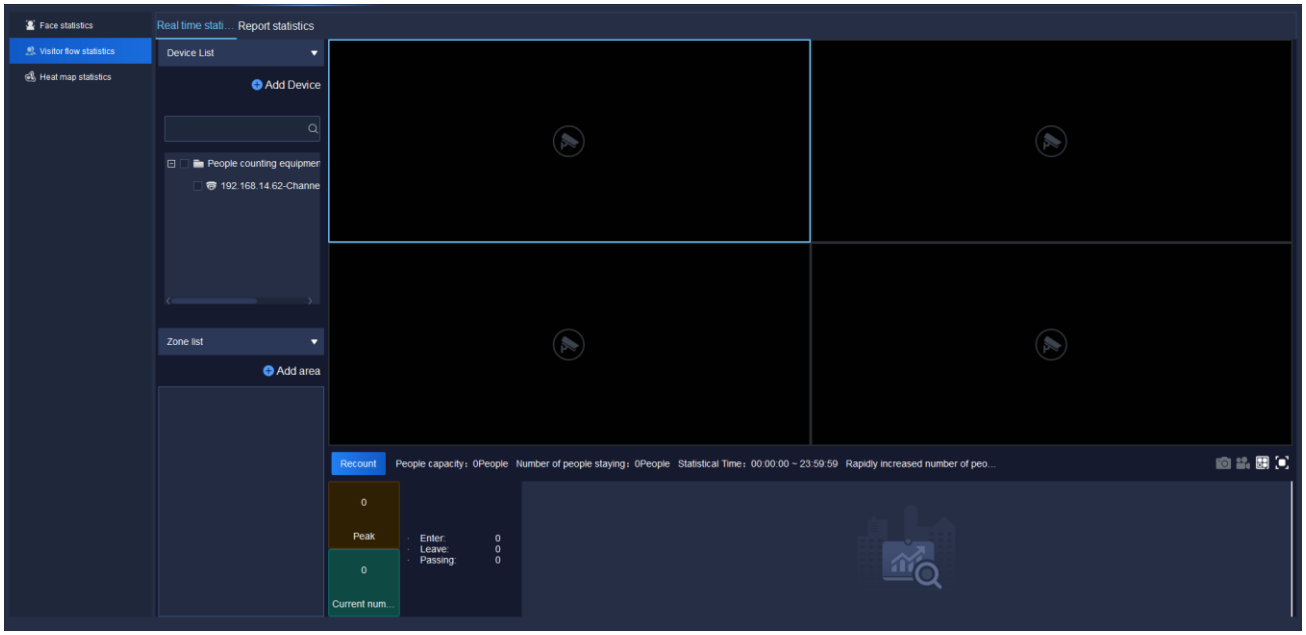
16.2 Visitor flow statistics

Premise:

1. The device has a storage medium and is configured with a headcount algorithm.

2. Turn on the picture receiving function in the client [System Settings-Smart Application].

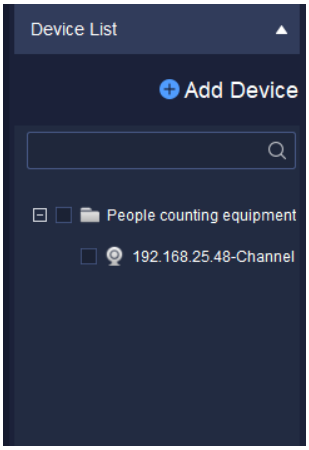
Select [Passenger Flow Statistics] in the [Data Statistics] interface to display its relevant contents and functions. Passenger flow statistics supports real-time statistics and report statistics. Real-time statistics can monitor the passenger flow in real time according to the set area, and alarm when the number of people increases too much. The report statistics can count the number of people entering, leaving and passing according to the set area, and display it in the form of list or graph, as shown in the following figure.



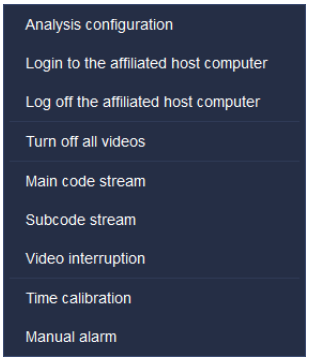
16.2.1 Real-time Statistics Device List

Operation steps:

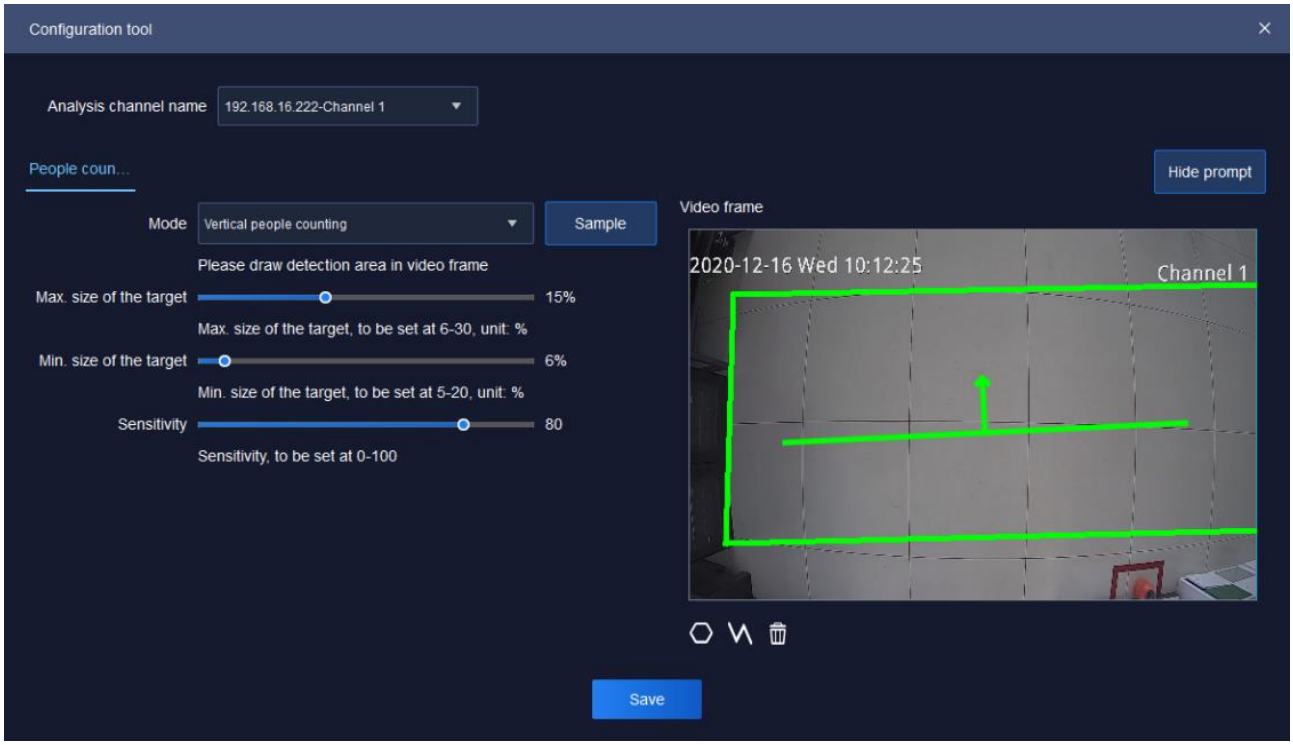
1. After entering the [Data Statistics] interface, select [Real-time Statistics] in the middle column, expand [Equipment List] below to enter the equipment list column, enter key information in the search box, and double-click to locate the passenger flow equipment, as shown in the following figure.



2. Select the equipment in the list of passenger flow equipment and right click to pop up the right-click menu of the list of passenger flow equipment, as shown in the following figure.



3. Select [Analysis Configuration] to enter the configuration tool interface to view the current configuration of each channel, as shown in the following figure.

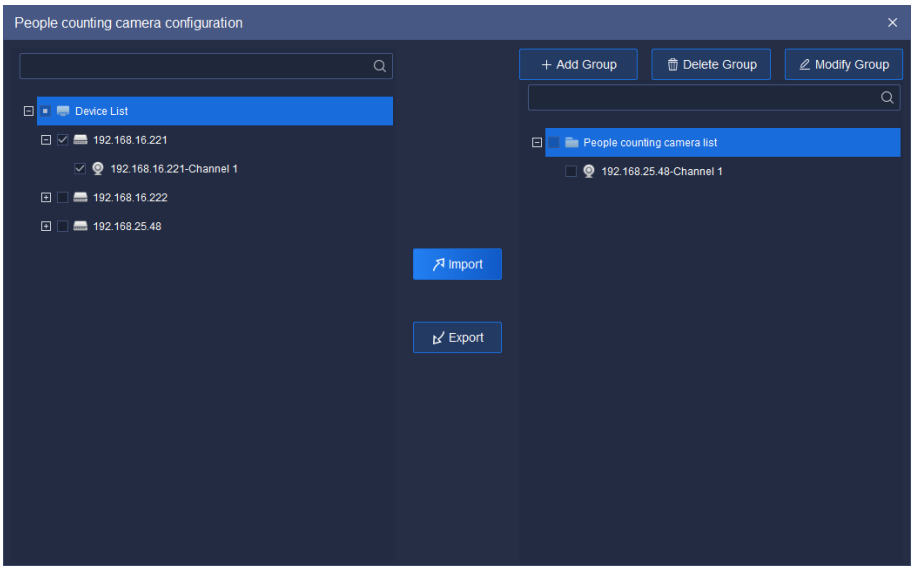


The interface parameters are described as follows:

Parameter	Instruction
Analysis channel name	Switch channels and analyse the configuration of each channel.
Mode	Read the algorithm supported by the front-end device and draw it in the right video frame or directly in the video frame.
Sample	Display the effect sketch shown in the video box.
Max. Size of the target	Display the maximum size of the target, and the range can be set from 6% to 30%
Min. Size of the target	Display the minimum size of the target, and the range can be set from 5% to 20%
Sensitivity	Set the detection sensitivity. The higher the sensitivity, the more sensitive it is. The range can be set from 0 to 100.
Video frame	Display the video and its algorithm under the channel.

Hide prompt	Hide the prompts in the configuration information on the left.
	Redraw the statistical area in the video graph.
	Redraw the statistical lines in the video graph.
	Eliminate the lines.
Analysis channel name	Switch channels and analyse the configuration of each channel.

4. Click [Add Device] in the device list to enter the passenger flow camera configuration interface, as shown in the following figure.



The interface parameters are described as follows:

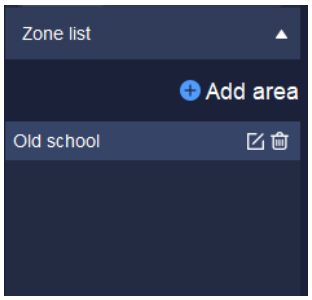
Parameter	Instruction
Import	In the left device list, select the device or device channel. In the right guest flow camera list, select a group, and click to add the device or device channel to the guest flow camera group.
Export	In the right guest flow camera list, select a group or device channel, and click to delete the group and its device channel or device channel from the guest flow camera list.

Add Group	In the right guest flow camera list, select the node and click to add the guest flow group.
Delete Group	In the right guest flow camera list, select a group and click to delete the guest flow group.
Modify Group	In the right guest flow camera list, select the node and click to modify the guest flow group name.

16.2.2 Real-time Statistics Area List

Operation steps:

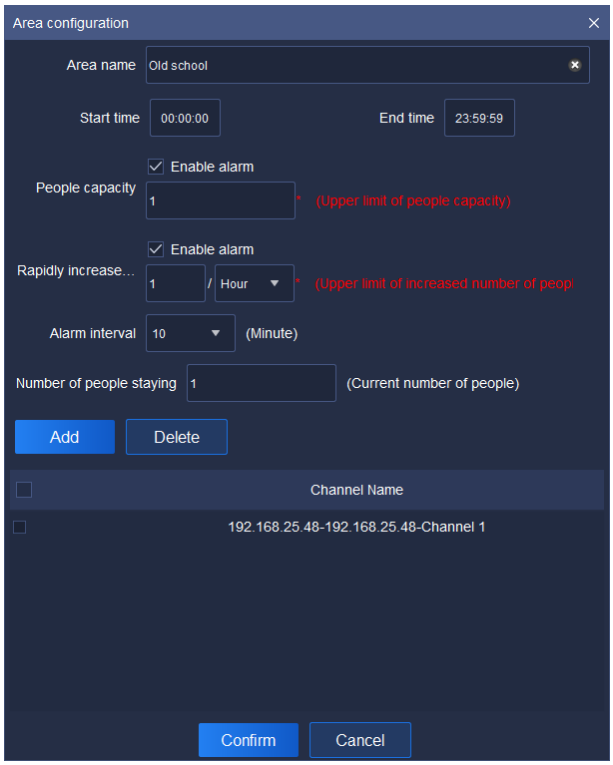
1. After entering the [Data Statistics] interface, select [Real-time Statistics] in the middle column, and expand [Area List] at the bottom to enter the equipment list column. After entering the area list, you can switch the area scene, as shown in the following figure.



2. In the area list, click "" to delete established area.

3. Click "" to update the configuration information of present area

4. Click "Add area" to enter the area configuration page to set information of area detection time, capacity, number of people surge, whether or not to enable alarm, detection device channel, etc, as is shown in below figure



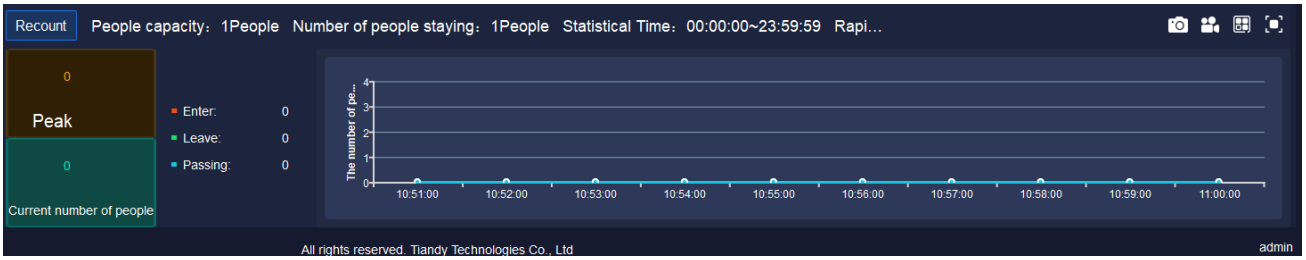
The interface parameters are described as follows:

Parameter	Instruction
Area name	Set the name of the detection area to facilitate the rapid positioning of the area.
Start time/End time	Set the time of starting and finishing of statistics.
People capacity	Set the upper limit of the capacity. This is required.
Rapidly increased number of people	Set the upper limit of the increase of the number of people in the unit time (10 minutes, 30 minutes, 1 hour, 2 hours). This is a required field.
Alarm interval	Set alarm interval, supporting 10, 20, 30, 40, 50, 60 minutes.
Number of people staying	Set the current number of existing people.
Add	Set the detected channel video to be detected. Multiple channel videos adding is possible.

Delete	Select the channel video to be deleted. Multiple channel videos deletion is possible.

16.2.3 Real-time Data of Real-time Statistics

Select the area to be viewed in the area list, and the configuration information of the area can be viewed at the bottom of the interface, as shown in the following figure.



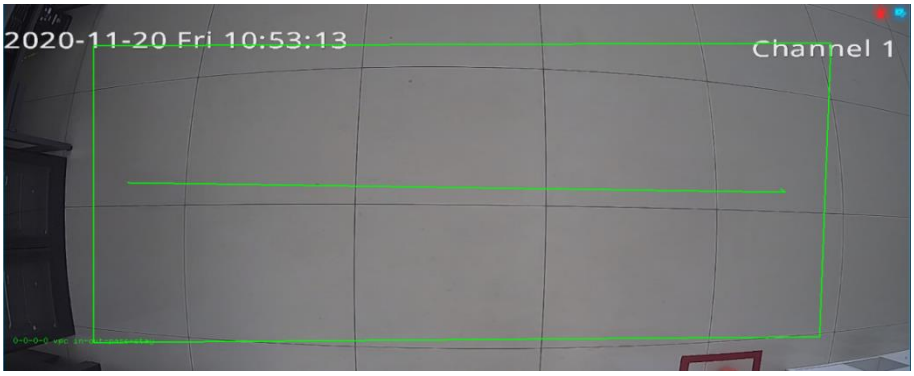
The interface parameters are described as follows:

Parameter	Instruction
Recount	Click to eliminate the recorded number of people.
Peak	Record the maximum number of people in current area.
Current number of people	Record the number of people at current time. If the number exceeds the one that can be accommodated, it will turn into a red box; otherwise, it will be a green box.
Enter/Leave/Passing	Record the number of people in three status namely entering / leaving / passing by. At the same time, the color of each case is distinguished. Red colour represents entering, green leaving, and blue passing by.
Real-time Line Chart	The number of people is displayed in real time according to minutes. Red represents entering, green represents leaving, and blue represents passing.

	Capture, capture picture save path can be changed from [system settings] > [common settings] > [path settings].
	Start all videos. The video download and save path can be changed from system Settings > Common Settings > Path Settings.
	Set the number of pictures, supporting picture display amount 1, 4, 9, 36, 49, 64.
	Full screen, full screen display of video page and real-time data page. Click again to cancel the full screen.

16.2.4 Video Page of Real-time Statistics

View the video effect of real-time preview in video page, as is shown in below figure:



Explain:

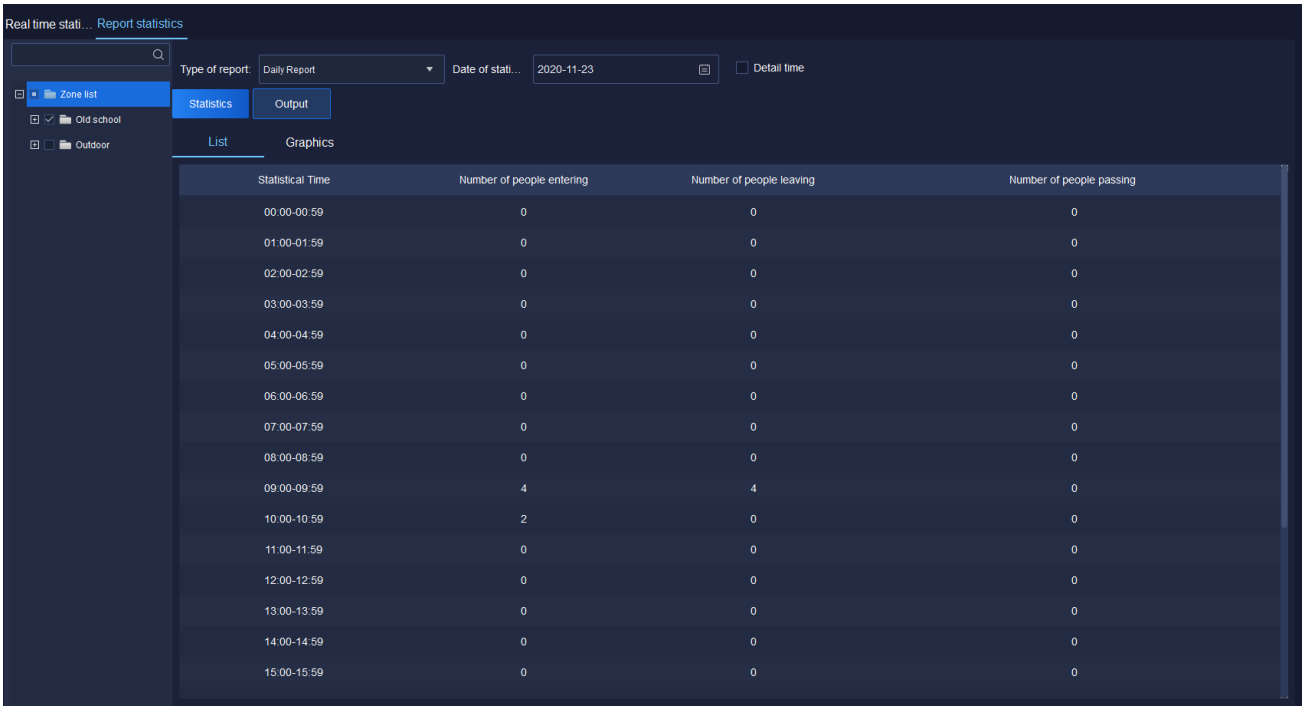
- See the [Video Preview] window for relevant Parameters of the interface.

16.2.5 Report statistics

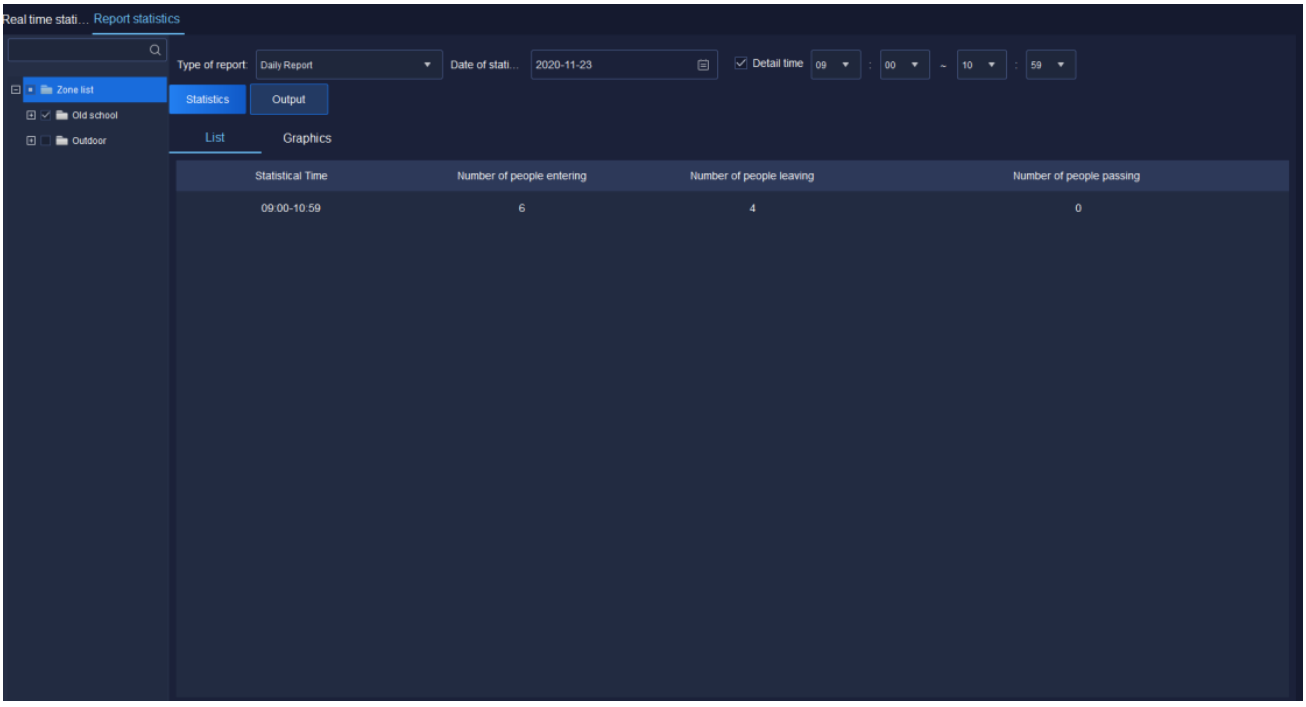
Operation steps:

1. Count the number of people in a selected area in the report statistics interface. It supports the statistics of the number of people entering, leaving, and passing by

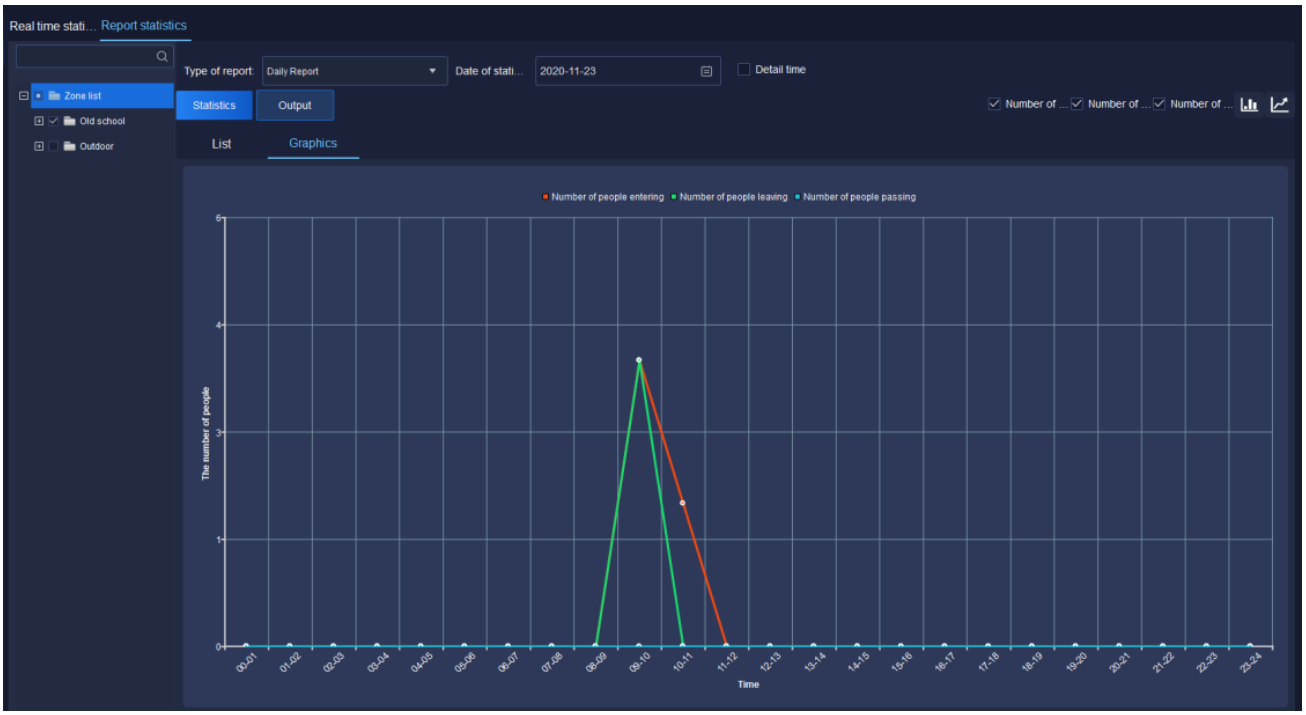
according to detailed time, as shown in the following figure.

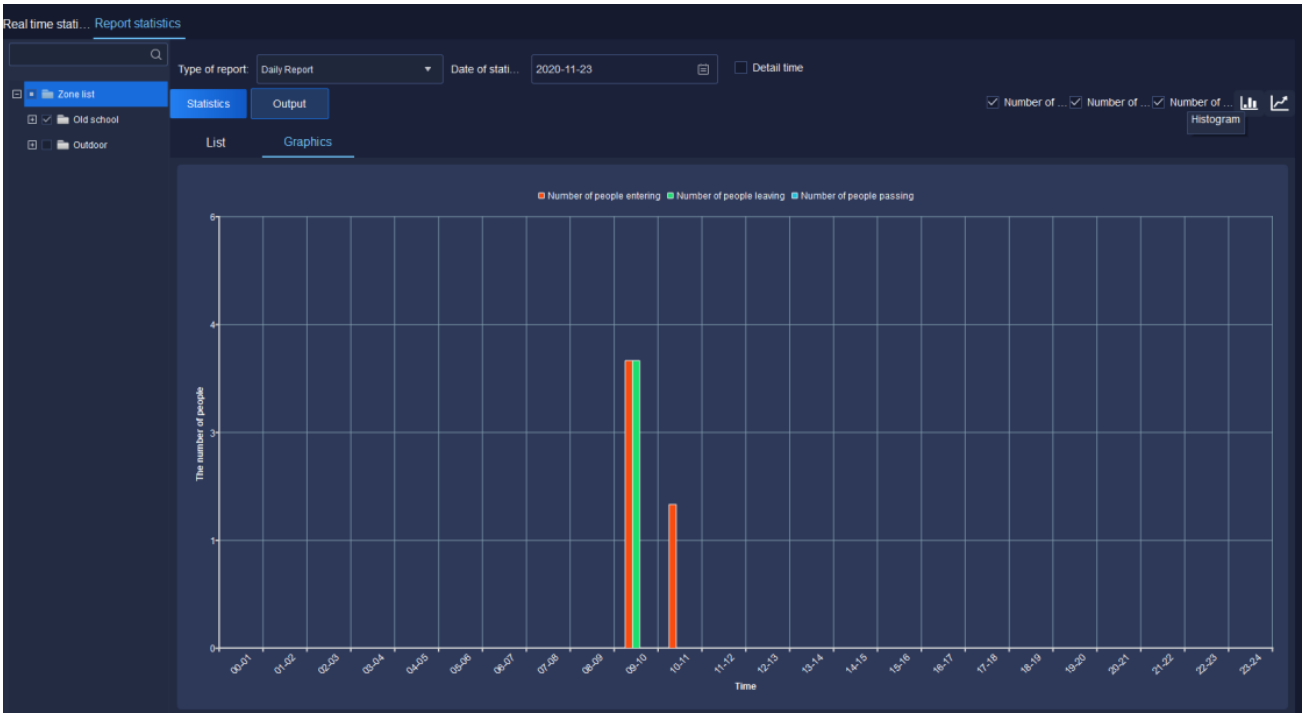


2. Select the report type and statistics time. If you want to make statistics by detailed time, enable the Detailed Time check box. During statistics, the number of people in the detailed time period will be displayed. Click Export to export the statistics data to the local machine, as shown in the following figure.



3. Data can be displayed in list form and graph form. Graph form supports line chart and column chart, as shown in the following figure.





16.3 Heat map statistics

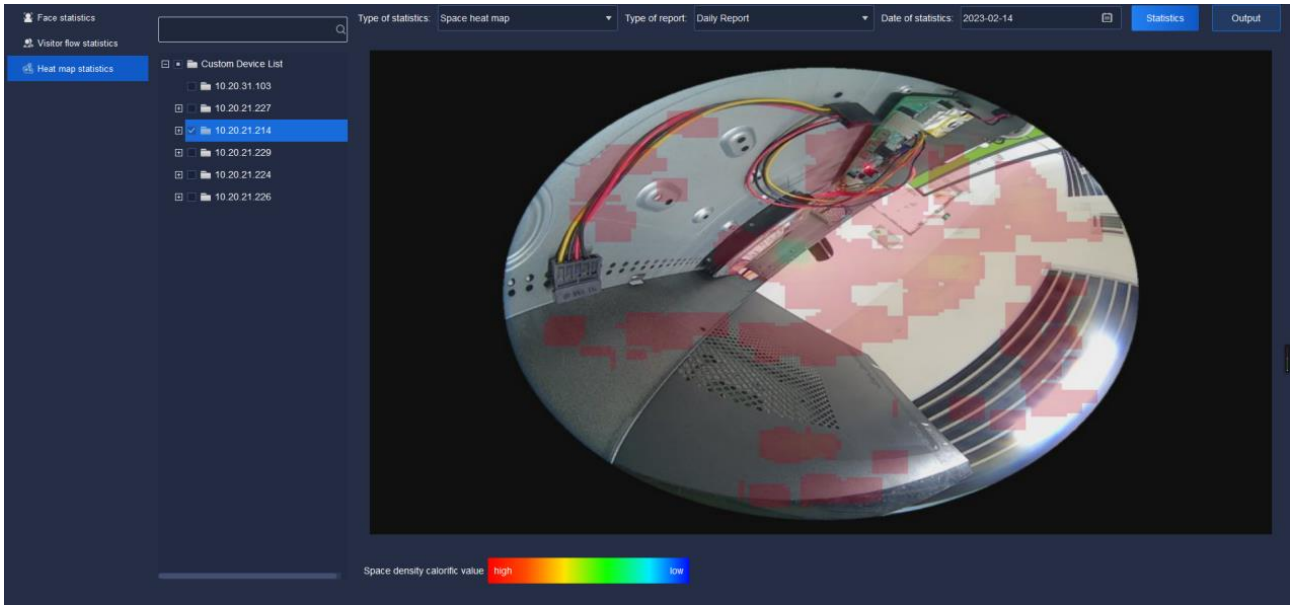
Premise:

1. The device has a storage medium and is configured with a behavior analysis-heat map statistical algorithm.

2. Turn on the picture receiving function in the client [System Settings-Smart Application].

Operation steps:

After entering the data statistics interface, select [Heat Chart Statistics] in the leftmost column, and select the corresponding equipment in the equipment list to display its related contents and functions in the right sidebar, as shown in the following figure.



Explain:

- Heat map is to show the distribution of people in each part of the screen with the color of heat. A detection area is set to detect the active information of personnel in the specified area. Through the heat chart report, the personnel distribution can be visually presented in terms of time or space.

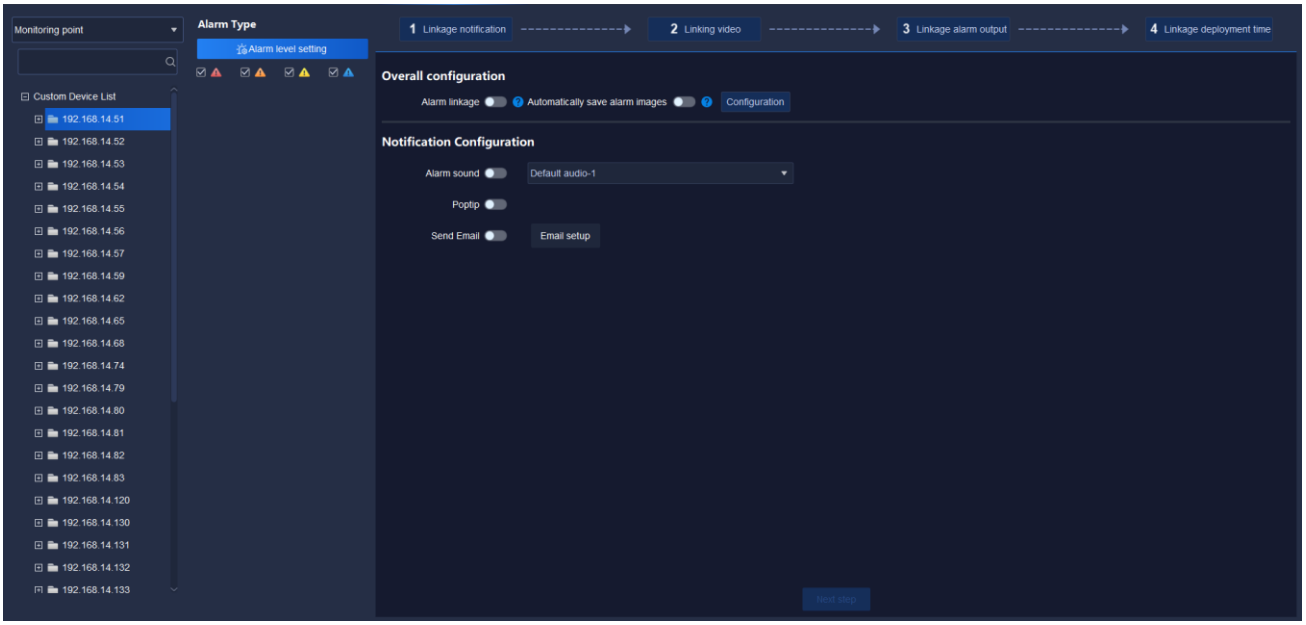
17 Alarm configuration

Configure linkage for various types of alarms.

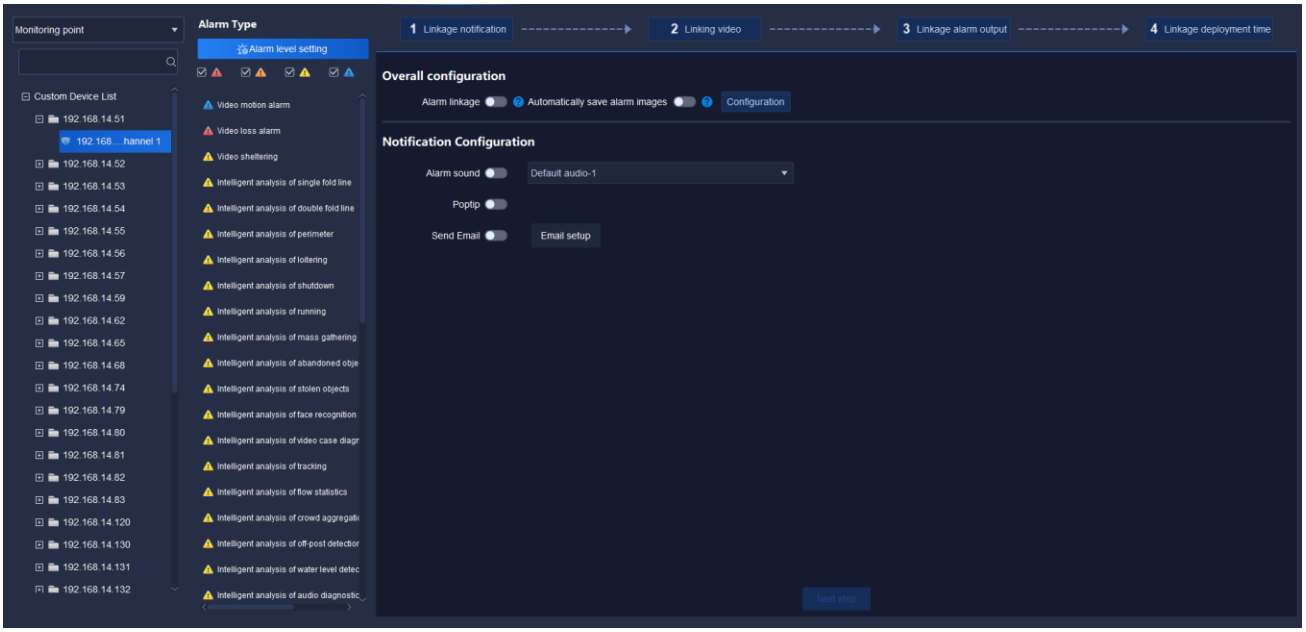
17.1 Alarm configuration of Monitoring point

Operation steps:

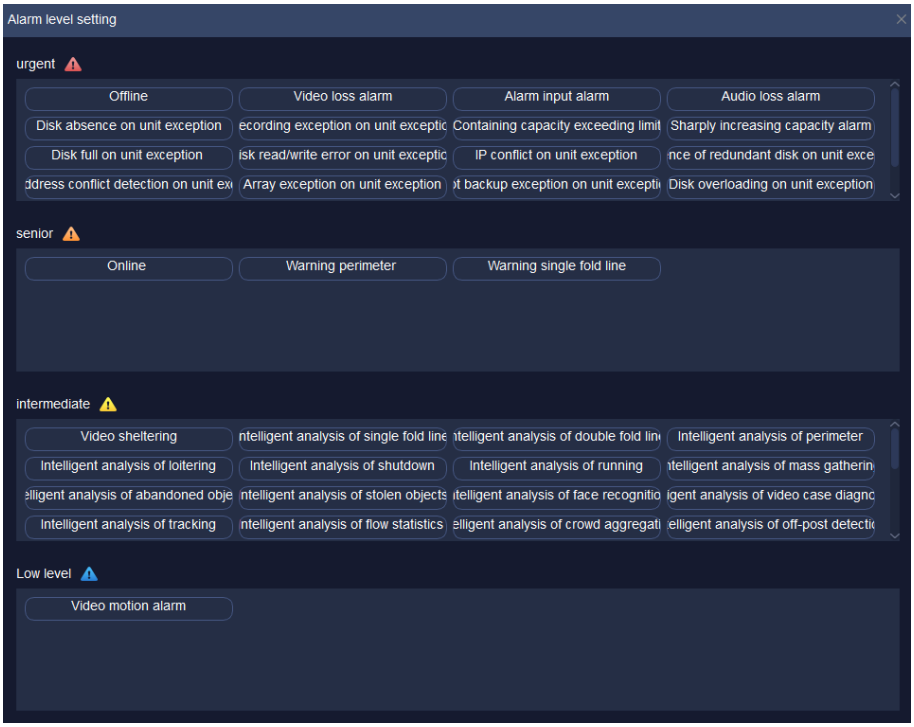
1. After entering the [Alarm Configuration] interface, expand [Monitoring Point] in the left column to perform the operation of monitoring point alarm configuration, as shown in the following figure.



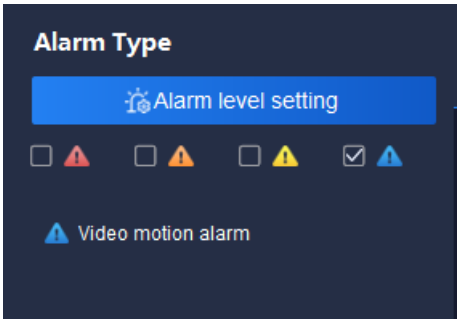
2. Select the channel to set the alarm at the monitoring point on the left, and the alarm type supported by the monitoring point will be displayed, as shown in the following figure.



3. Click [Alarm Level Setting] to modify the alarm level. The alarm level is divided into emergency, high level, medium level and low level. The alarm types in different level boxes can be dragged to other levels, as shown in the following figure.

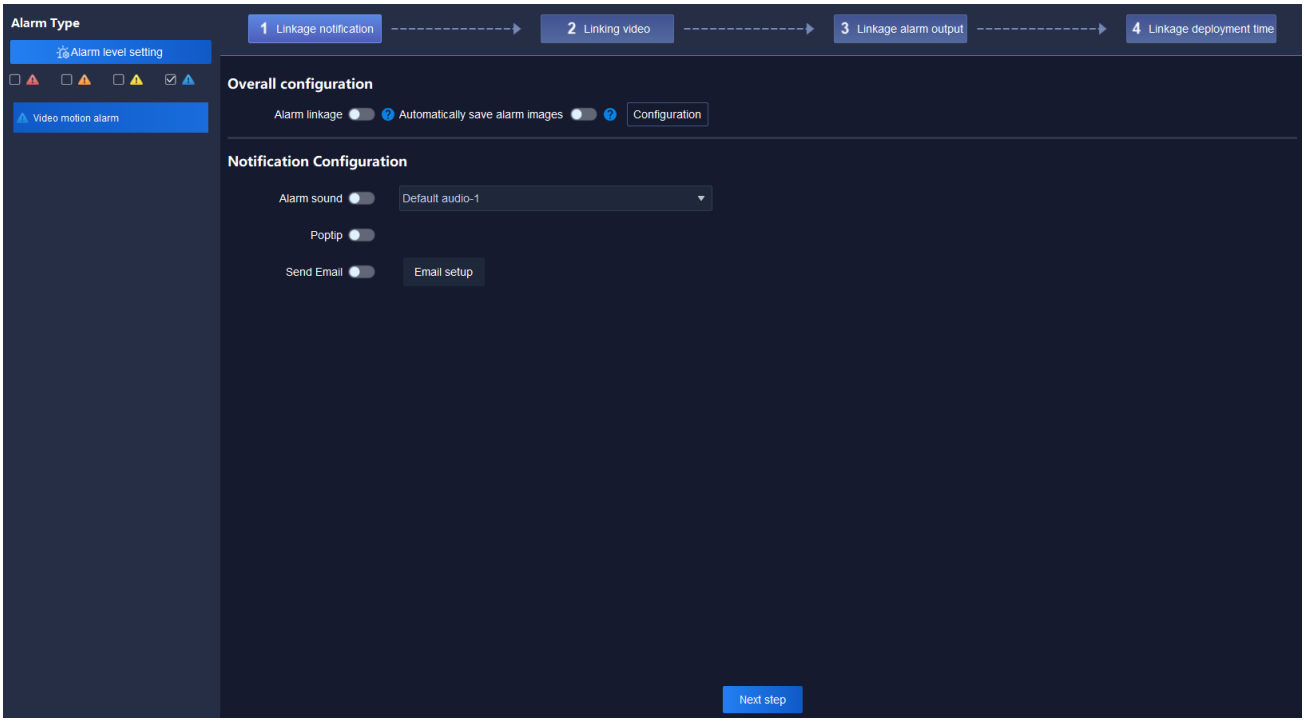


4. Uncheck or check the alarm level to filter different alarm levels, as shown in the following figure.



5. Uncheck or check the alarm level to filter different alarm levels, as shown in the following figure.

6. After the channel and alarm type are selected, the alarm linkage can be configured, as shown in the following figure.



17.1.1 Linkage notification

Operation steps:

1. Enable alarm linkage. Alarm linkage is a general configuration item. If it is not enabled, even if notification and linkage video are configured, alarm linkage will not

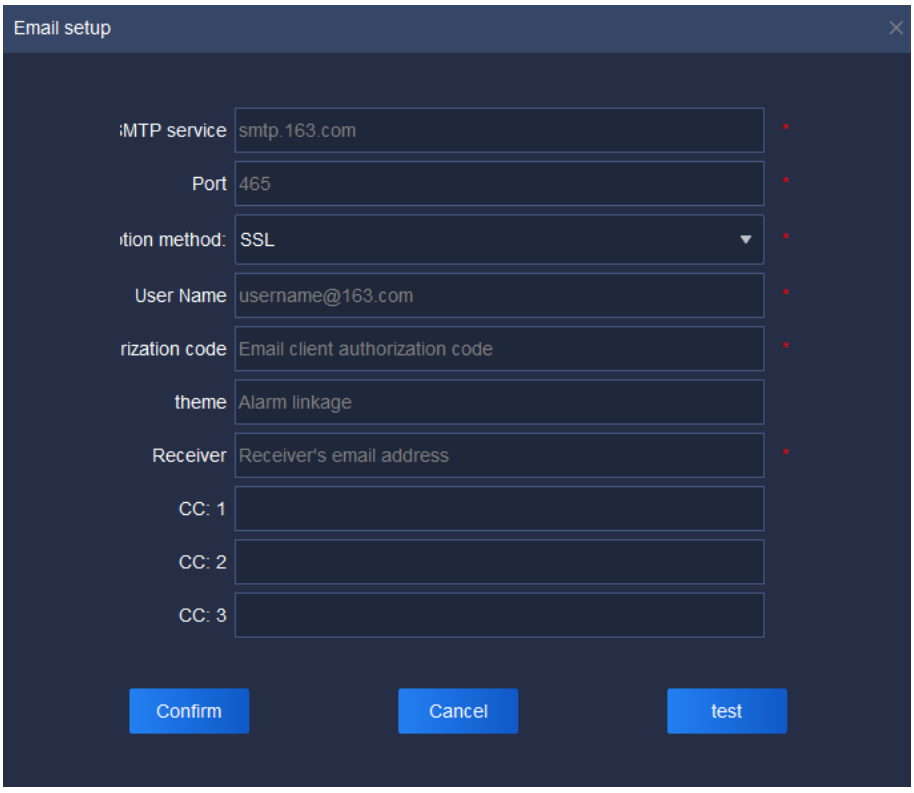
take effect.

2. Enable automatic saving of alarm pictures. Before enabling this function, it is necessary to ensure that the equipment alarm linkage is configured with linkage snapshot, and the client has enabled the function of collecting pictures in [System Settings-Intelligent Applications].

3. After the alarm sound is turned on, when an alarm occurs, the computer where the client is installed will play the alarm sound. You can use the default sound or upload the voice by yourself.

4. After the bubble prompt is turned on, when an alarm occurs, the client will pop up an alarm prompt box in the lower right corner.

5. After sending mails is enabled, when an alarm occurs, an alarm mail will be sent to the set receiving mailbox. The configuration is shown in the following figure.

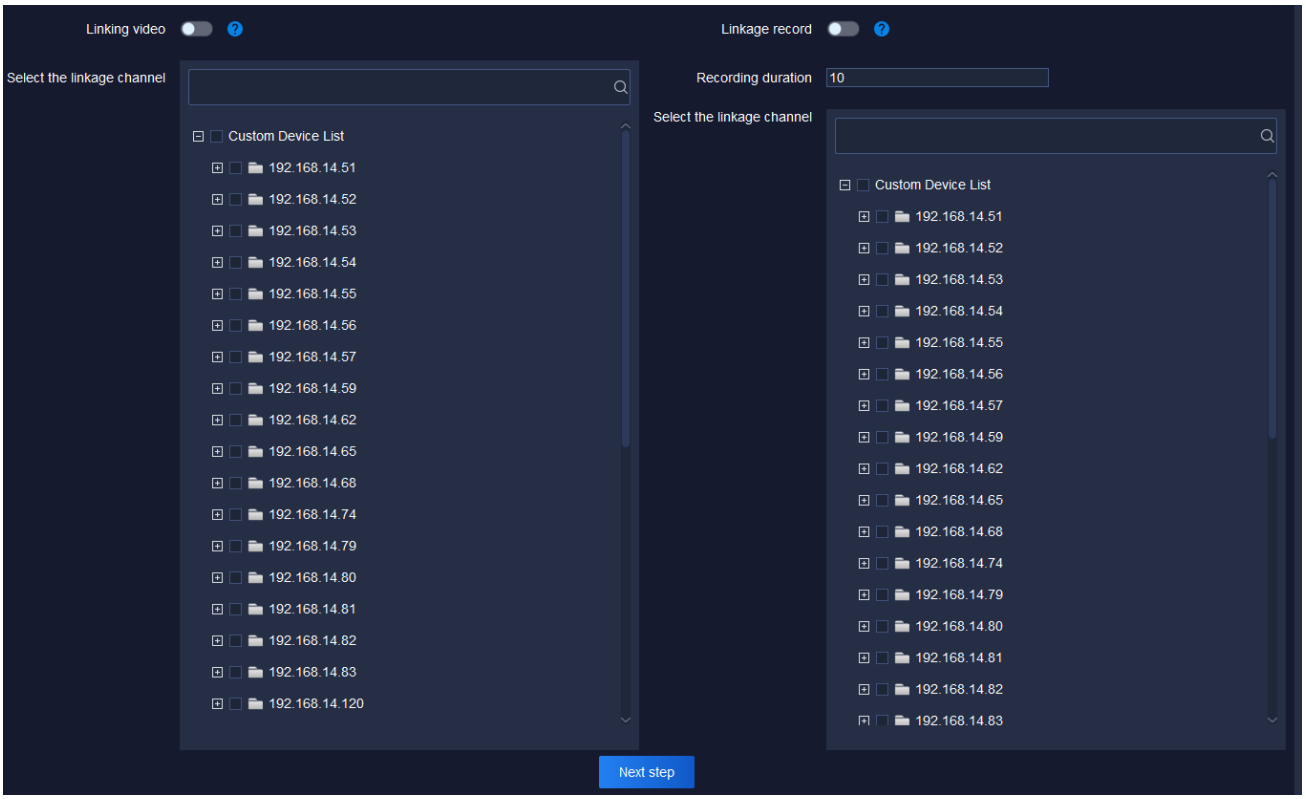


The interface parameters are described as follows:

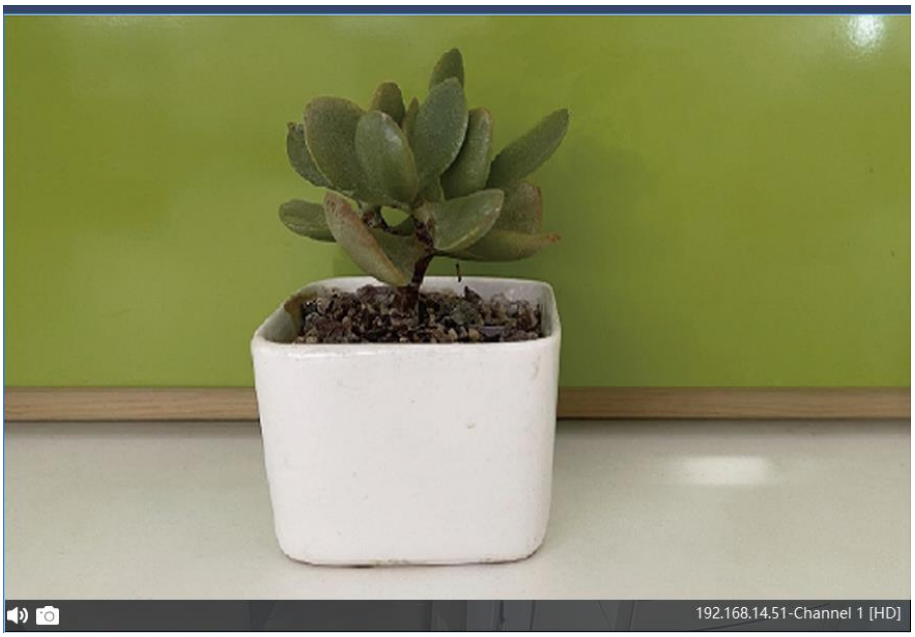
Parameter	Instruction
SMTP service	Configure the E-mail server address.
Port	Manually fill in the server port.
Encrypton method	Point encryption methods, including SSL and TSL.
User name	Configure sender E-mail name.
Authorization code	Configure sender E-mail authorization code.
theme	Manually fill in the subject of the message.
Receiver	Configure the recipient E-mail address.
CC	Configure the CC mailbox address.

17.1.2 Linking video

After setting the linkage notification, click Next to set the linkage video.



Linkage video means that when an alarm occurs, the real-time video screen of the configured channel will pop up, as shown in the following figure.

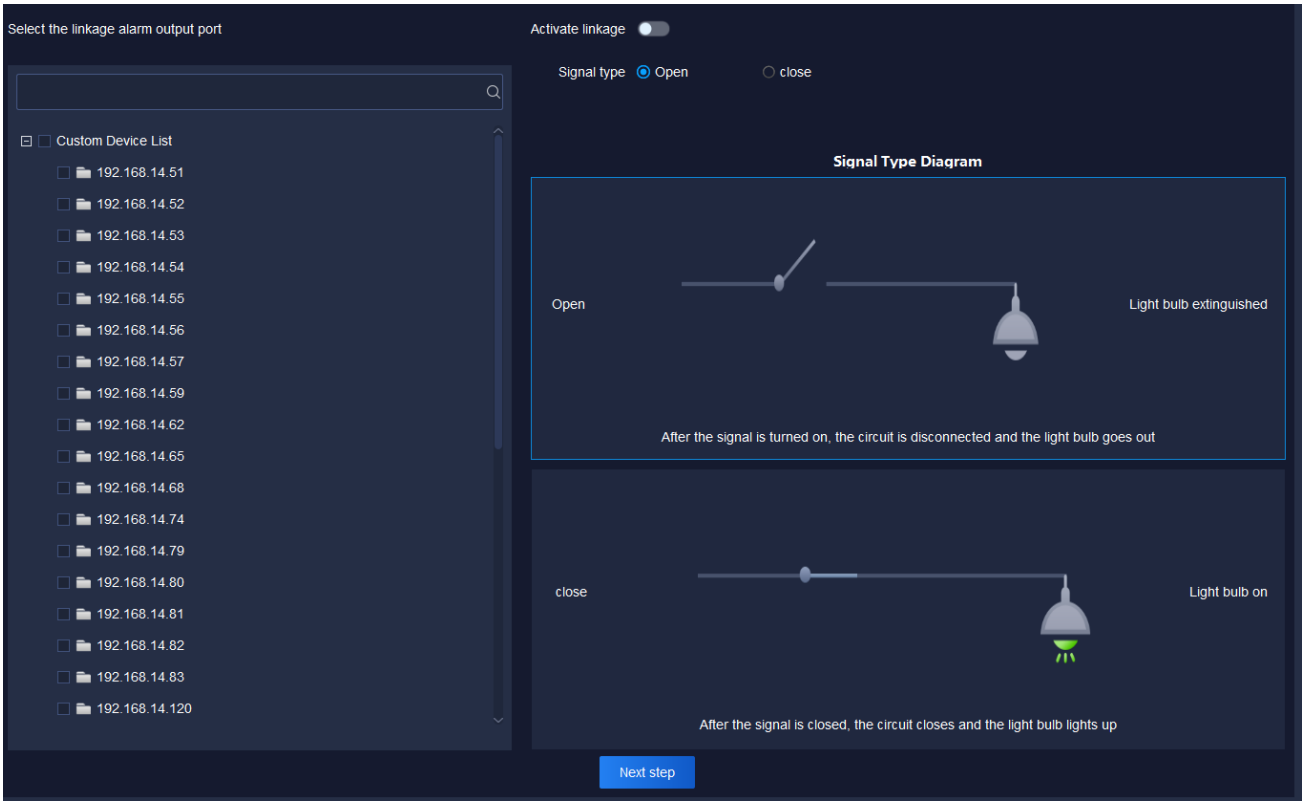


Linkage video recording means that when an alarm occurs, the configured channel will record the video, and the video recording duration can be set.

17.1.3 Linkage alarm output

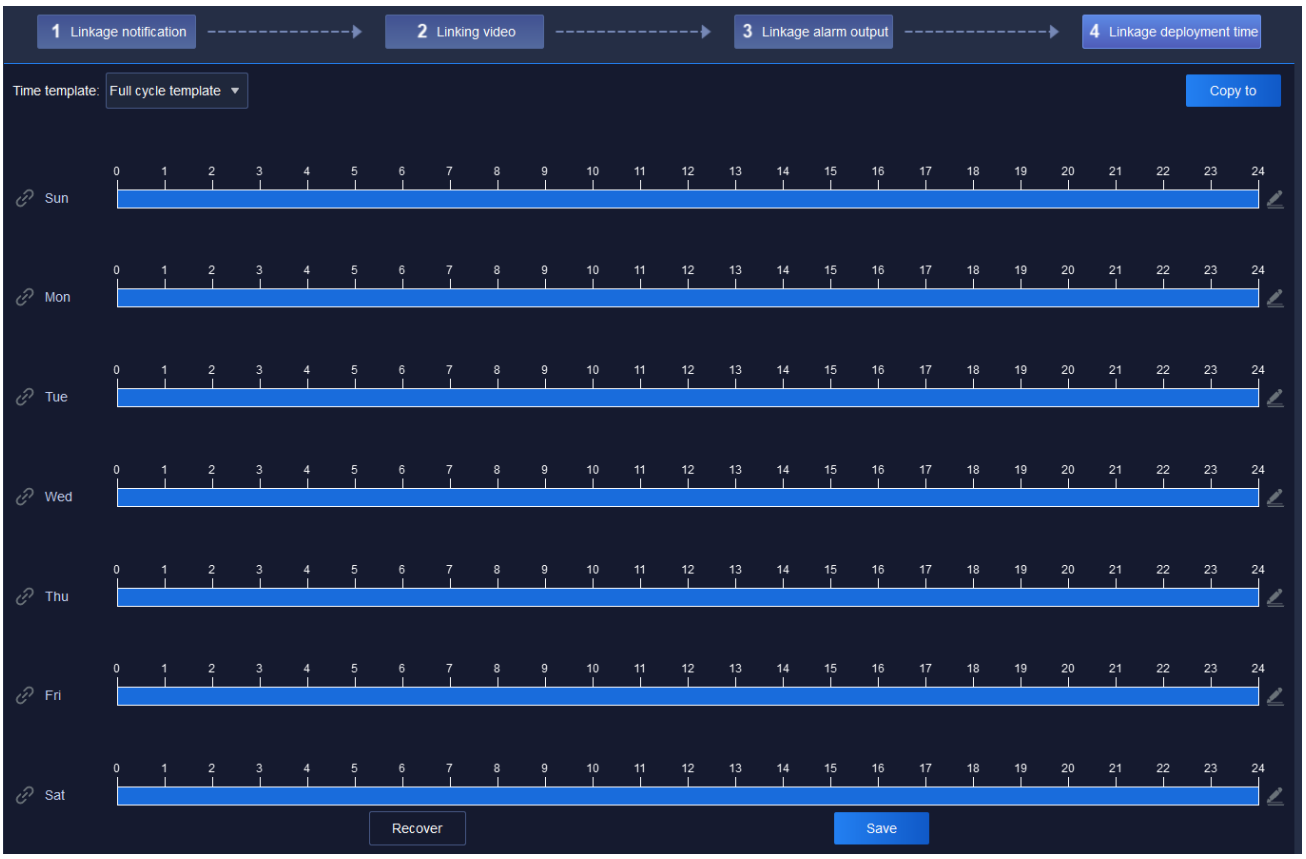
After setting the linkage video, click Next to set the linkage alarm output. This function can only be used after the open linkage is checked. Linkage alarm output requires that the equipment supports alarm output and has an alarm output port. The equipment can realize the specific alarm function through the external alarm. The IPC generates an alarm and transmits the signal to the alarm, and then the alarm takes effect. Commonly used alarms, such as external alarm lights, alarm bells, buzzers and other equipment, are connected to the ALARM OUT interface of the equipment. The signal type is divided into open and close, that is, the open and close of the line, as shown in the following

figure.

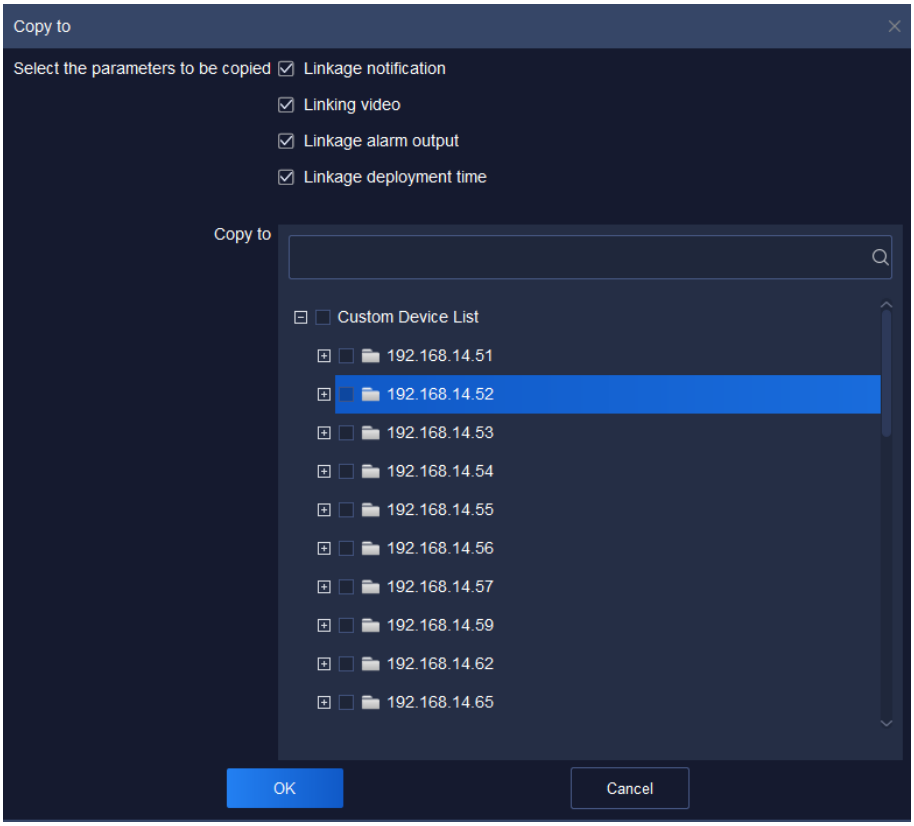


17.1.4 Linkage deployment time

After setting the linkage alarm output, click Next to enter the linkage defense time configuration, and configure the effective time for the linkage mode, as shown in the following figure.



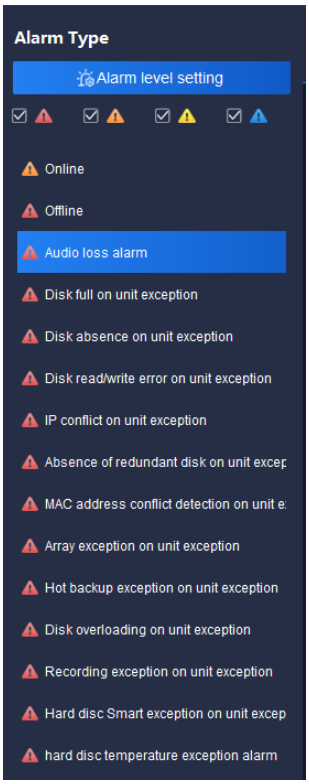
Click the [Copy to] button in the upper right corner of the linkage deployment time to copy the set linkage mode to other channels, as shown in the figure below.



17.2 Alarm configuration of device

Operation steps:

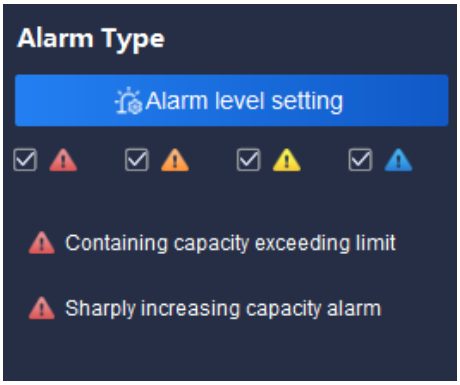
The alarm types supported by the device are shown in the following figure, and the specific operation is the same as the 16.1 monitoring point alarm configuration.



17.3 Alarm configuration of People counting area

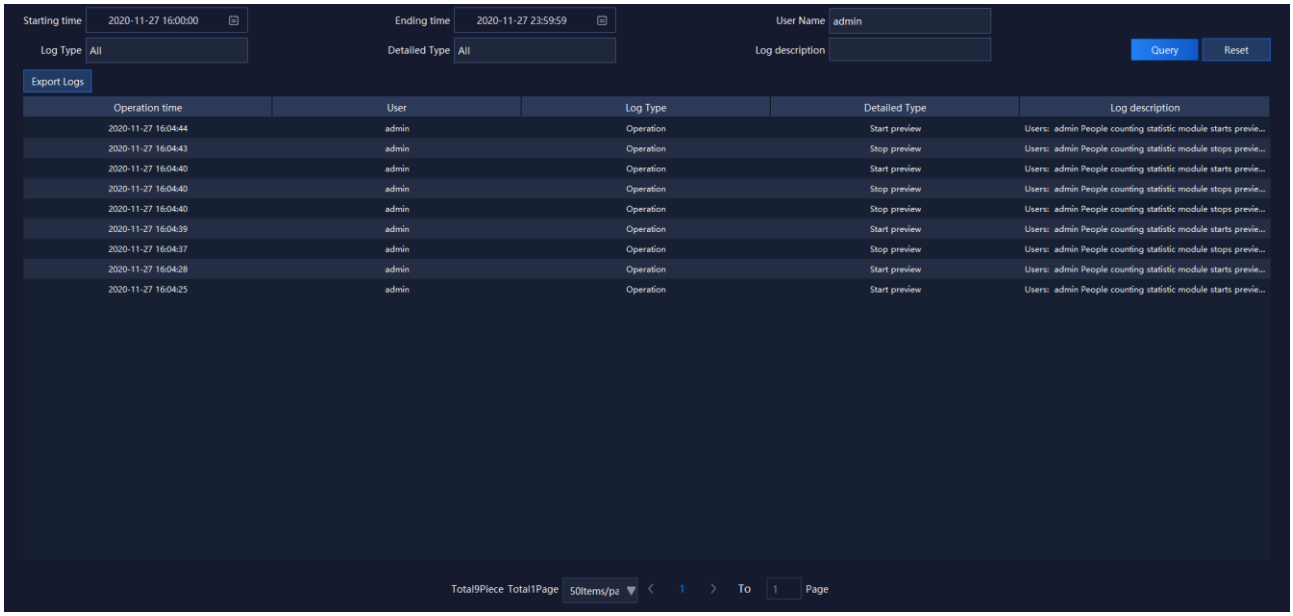
Operation steps:

The alarm types supported by the passenger flow area are shown in the following figure, and the specific operation is the same as the alarm configuration at the 16.1 monitoring point.



18 Operation logs

Query the operation log of the system to understand the usage of the system, as shown in the following figure.



Explain:

- Support query of login log, operation log and configuration log.

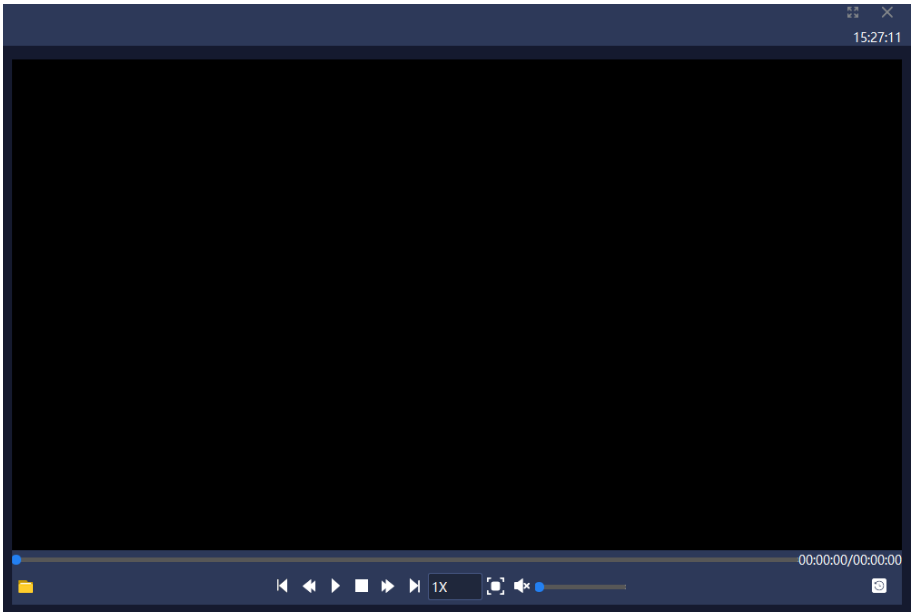
The interface parameters are described as follows:

Parameter	Instruction
Starting time	Available to set the starting time of log query.
Ending time	Available to set the ending time of log query.
User name	Available to query the operation record of one user. Admin-super administrator user may check the operation record of all users.
Log Type	Available to query logs by type, including all, login, operation and configuration.

Detail Type	Available to conduct detailed classified query of all, login, operation and configuration by type.
Log description	Search key word to query log information.
Export Logs	Click Export Logs, available to output and save logs.
Query	Click Query, available to query logs according to query conditions.
Reset	Click Reset, to restore query conditions to default status.
Total X Pages	Display how many pages does the query result has.
To X Page	Select a page to jump to the log record on that page.

19 Video player

Play the local playback video, as shown in the following figure.



The interface parameters are described as follows:

Parameter	Instruction
	Local video can be selected for playback.
	Step button. Click it to play the video file frame by frame, but the player does not support this function.
	Slow button. Click it to slow down the video file.
	Play/Pause button, click to control the start/pause of the video file.
	Stop button, click to stop the current video file playback.
	Fast-play button, click to fast-play the video file.
	You can adjust the playback speed of the video. The available playback speeds are 1/16 X, 1/8 X, 1/4 X, 1/2 X, 1x, 2 X, 4 X, 8 X, 16x.

	Full Screen button. Click it to display the playback window in full screen. Press the ESC key to turn off the full screen.
	Volume adjustment bar. Drag to adjust the volume of video playback sound. Tap the speaker to turn the sound on/off.
	Click to view recently viewed video files.
	Zoom in/out on the current player interface.
	Close the player.

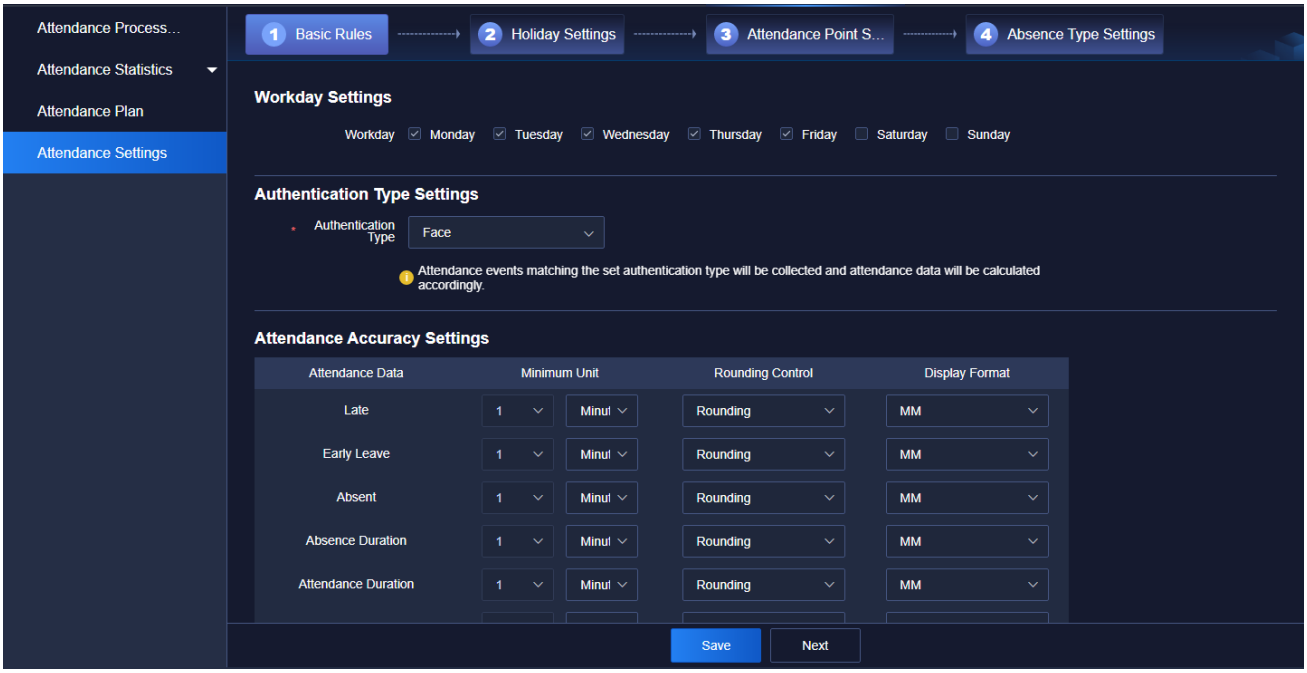
20 Attendance management

20.1 Attendance Settings

20.1.1 Basic Rules

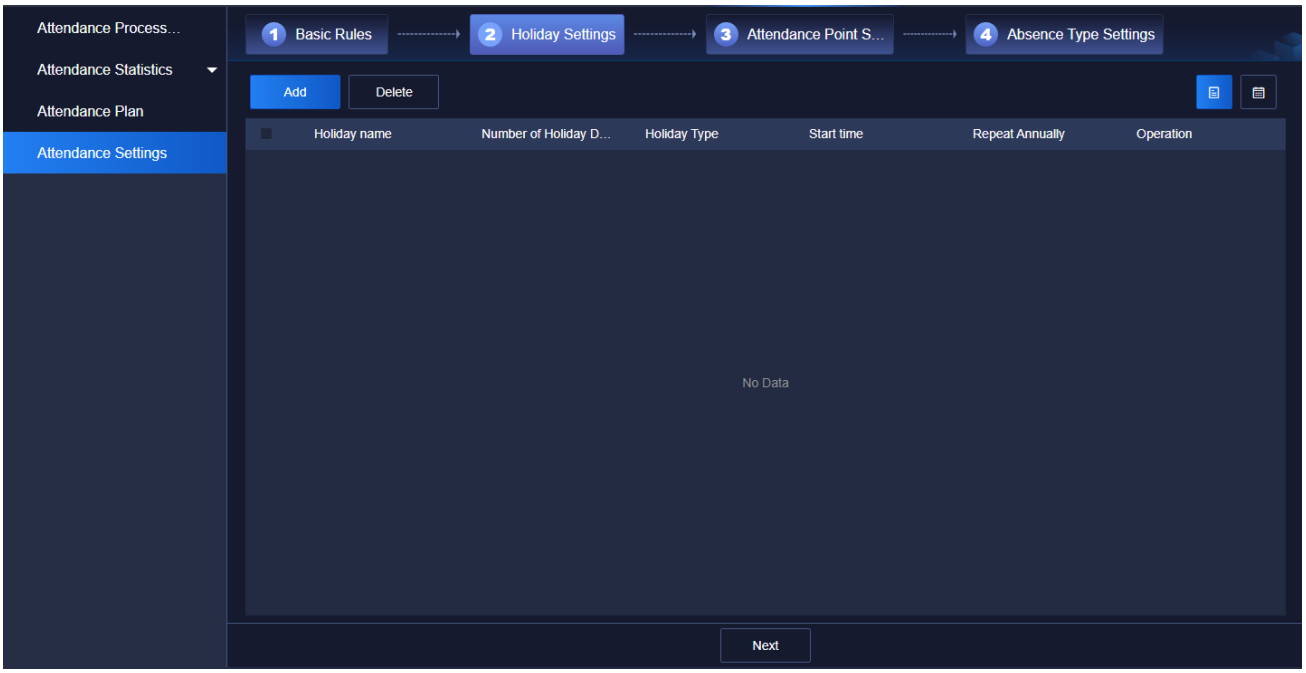
Configurable basic information, including Workday Settings and Attendance Accuracy Settings.

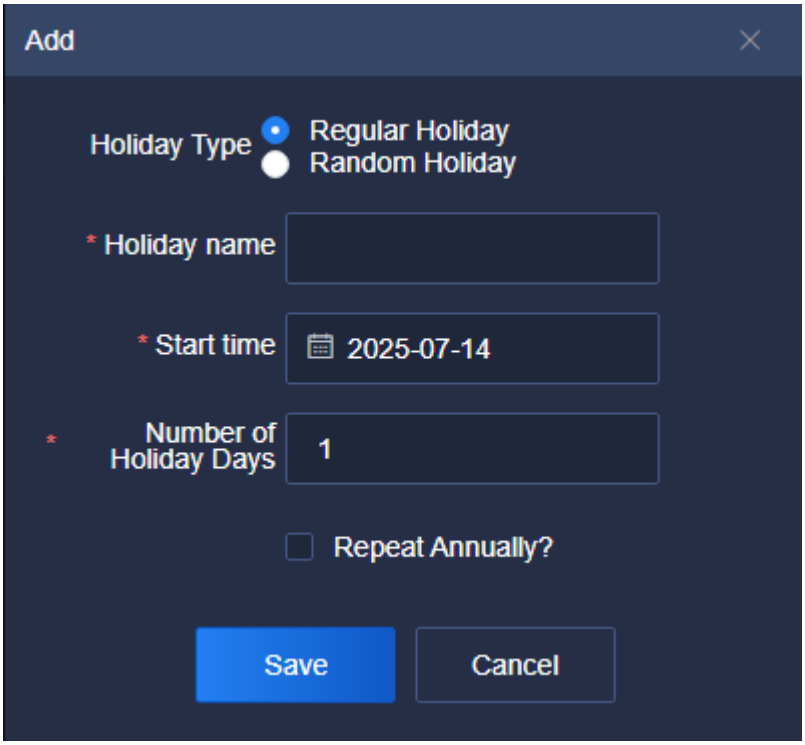
1. The workday setting can be selected from Monday to Sunday.
2. Select authentication type from the dropdown menu:Face,Card,Face or Card.
3. Attendance accuracy configuration: select minutes, hours, and days as the minimum units; Rounding control options include rounding, rounding up, and rounding down; Display format: MM or HH: MM.



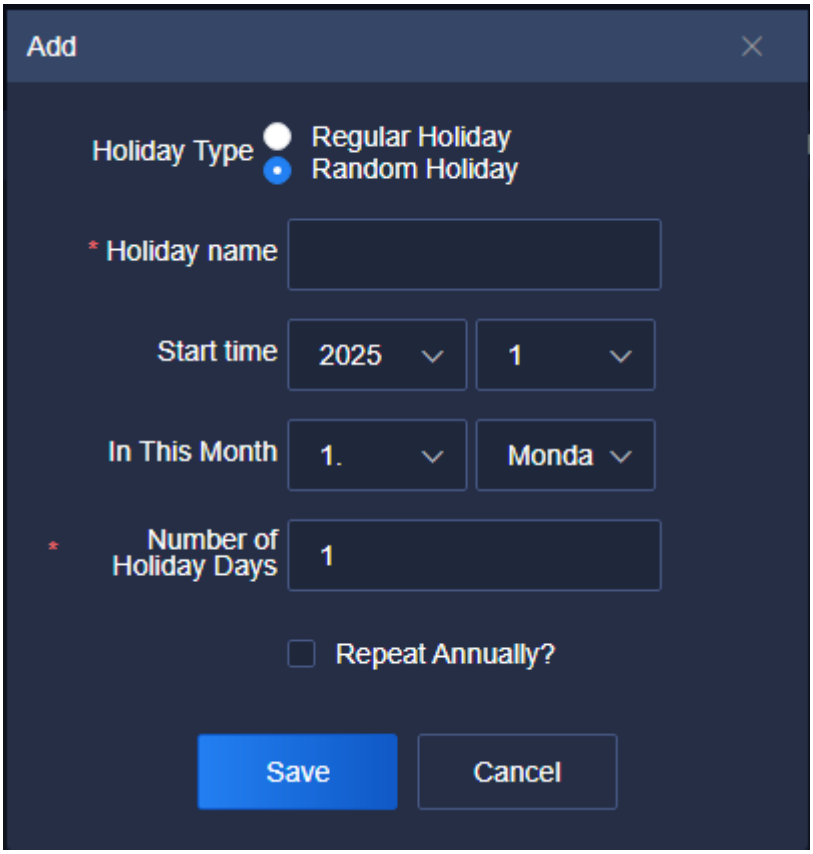
20.1.2 Holiday Settings

Regular and Random holidays can be added.





1.Regular Holiday:Holiday name,Start time,Number of Holiday Days,Repeat Annually.



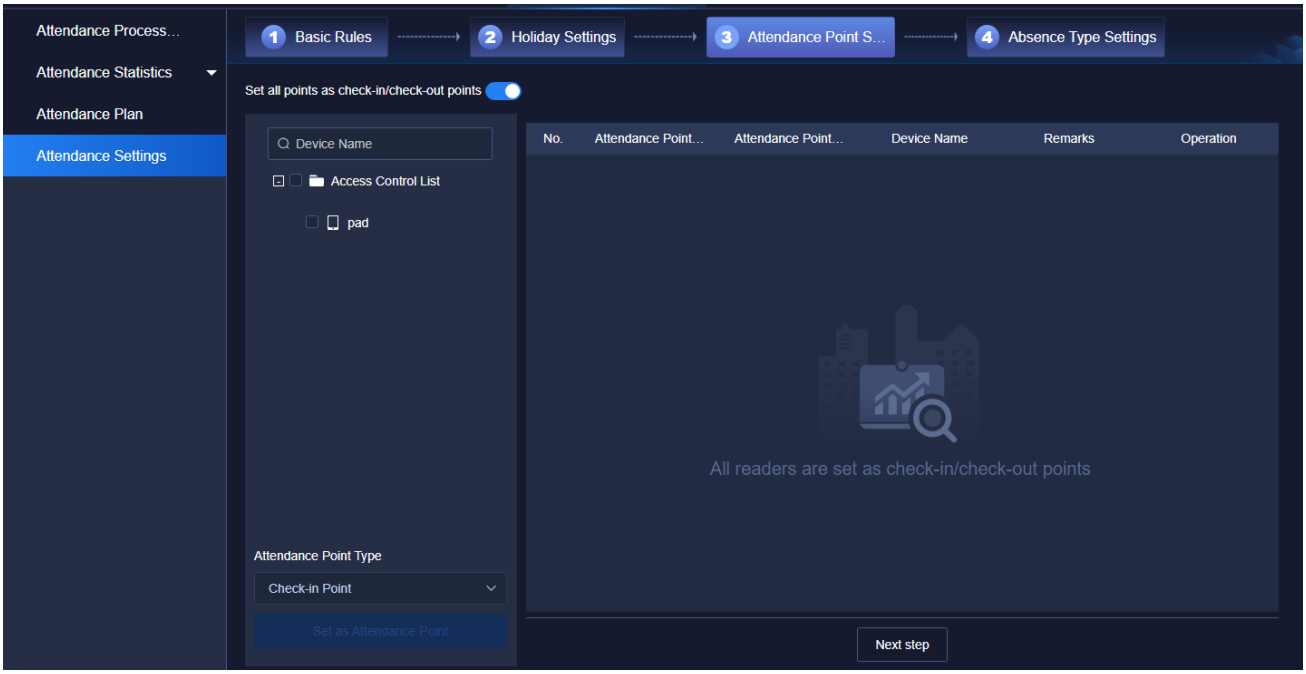
2.Random Holiday:Holiday name,Start time, Number of Holiday Days,Repeat Annually.

20.1.3 Attendance Point Settings

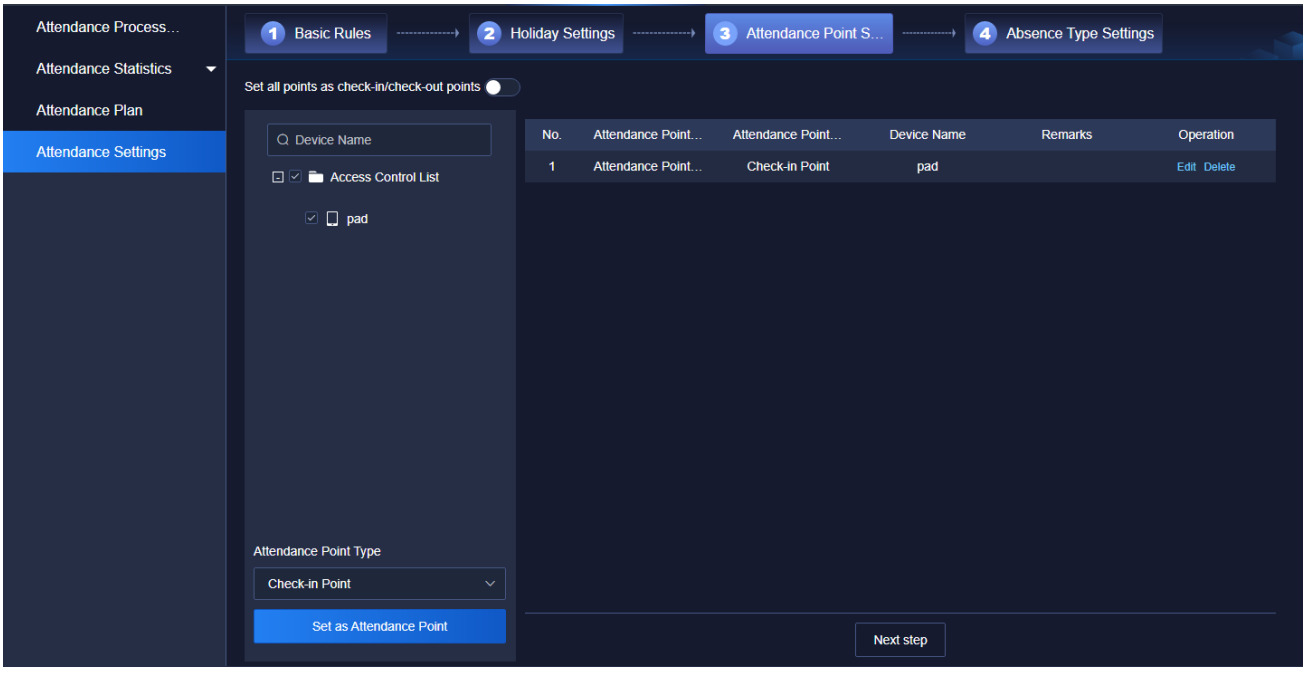
You can set up clock in and clock out points, and you can set all clock in and clock out points with just one click. There is a main switch above, which can be turned on to set all facial devices and access control devices as attendance points for commuting.

The left side of the interface displays all devices that can be set as attendance points, supporting filtering and batch selection.

After selecting the device, you can choose the attendance point type below and set it as an attendance point. Attendance points are divided into on duty attendance points, off duty attendance points, and on/off duty attendance points.



The set attendance points are displayed in the room area, showing the attendance point name, attendance point type, equipment name, remarks, and operation (modifiable content includes name, type, and remarks).



20.1.4 Absence Type Settings

The left side displays the main categories, and the right side displays the subcategories.

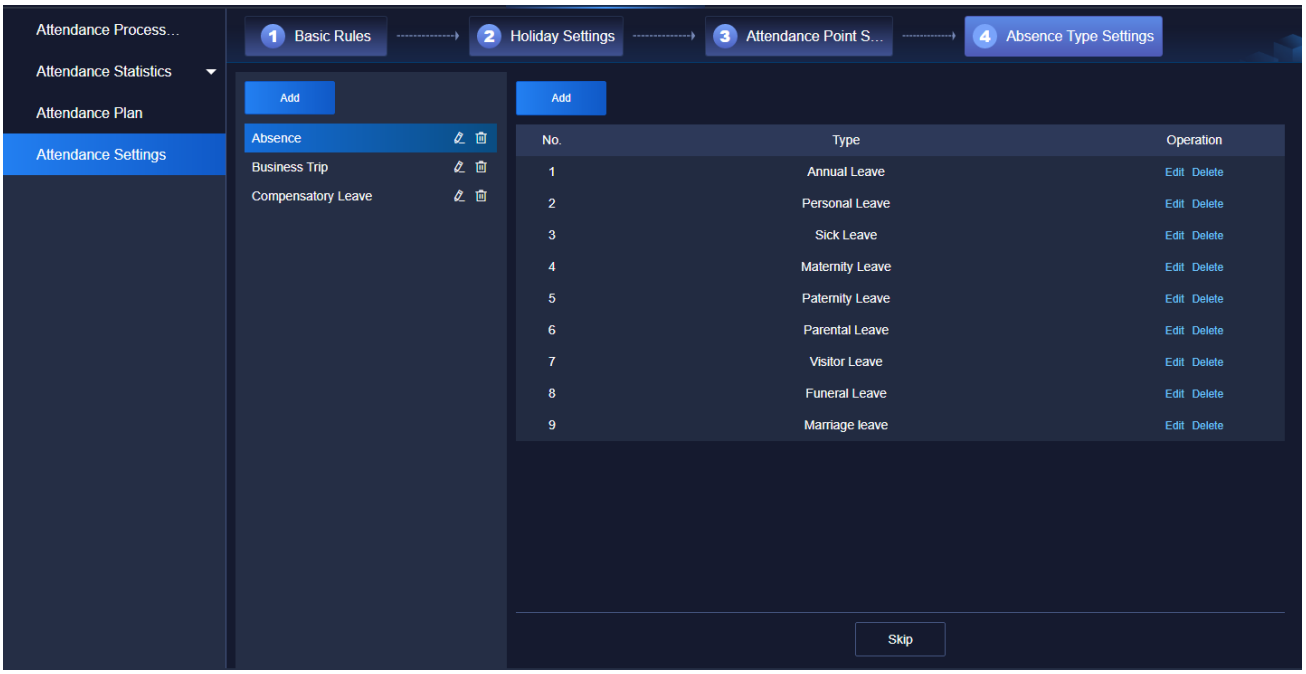
There are three default categories: leave, business trip, and compensatory leave.

1. Default subclasses of leave: annual leave, personal leave, sick leave, maternity leave, paternity leave, parental leave, family visit leave, bereavement leave, marriage leave.

2. Default subclass for business trips: business trips.

3. Default subclass for compensatory time off: compensatory time off.

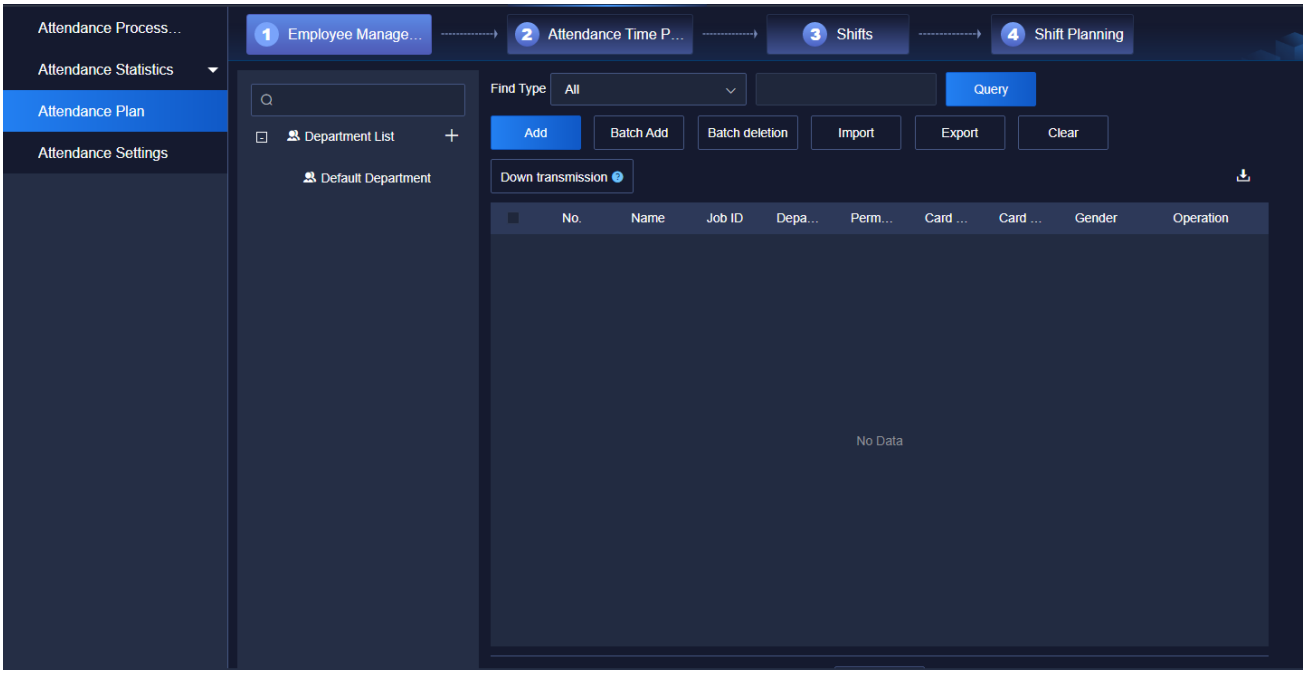
4. Both categories and subclasses can support custom addition and deletion.



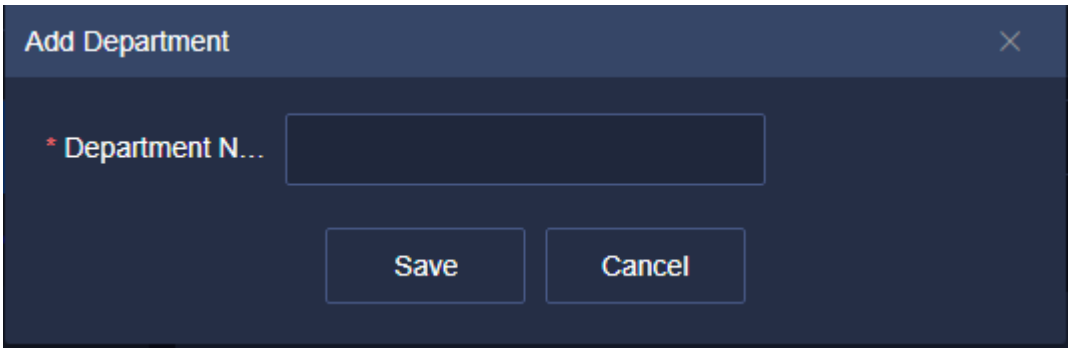
20.2 Attendance Plan

20.2.1 Employee Management

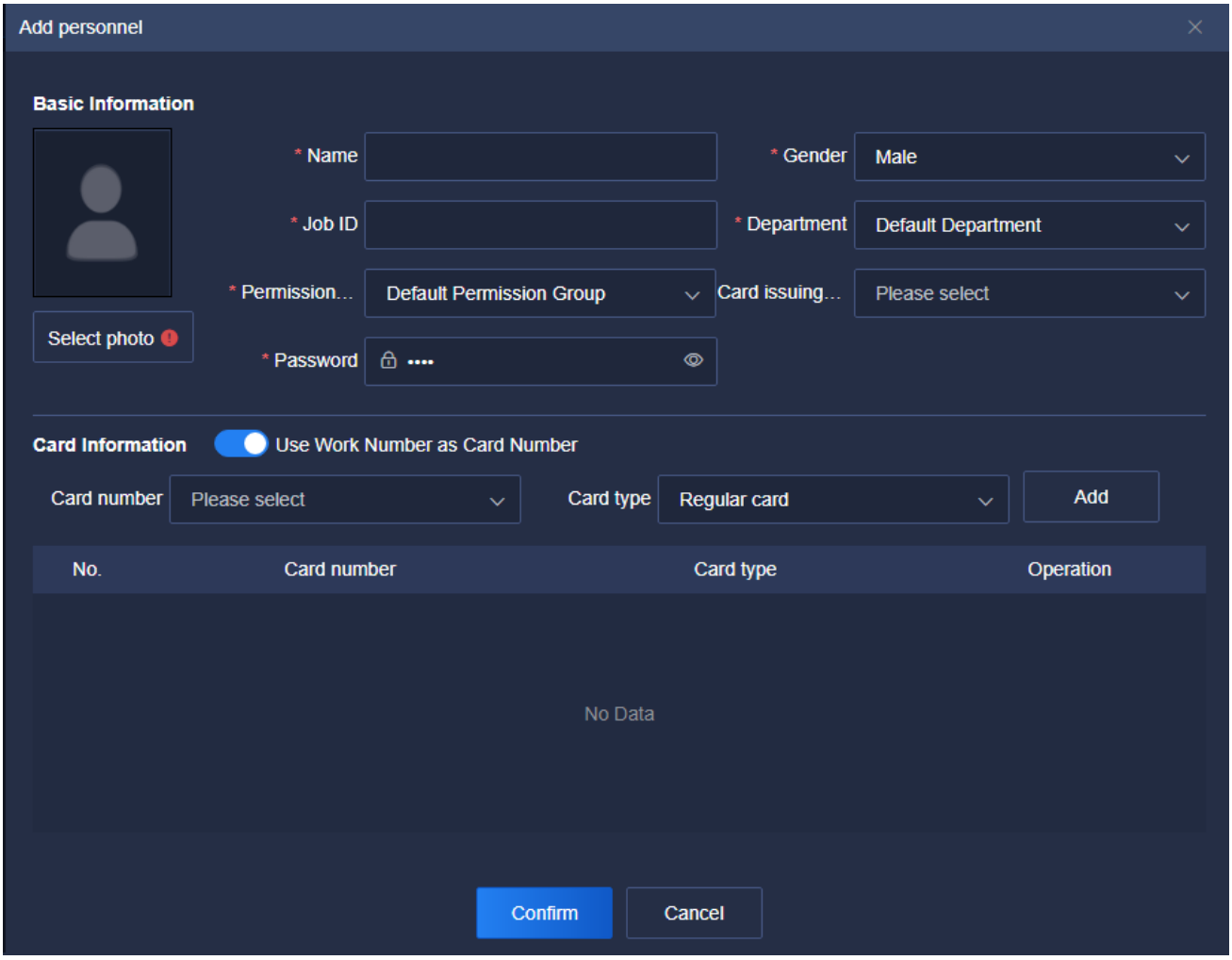
Create departments and personnel



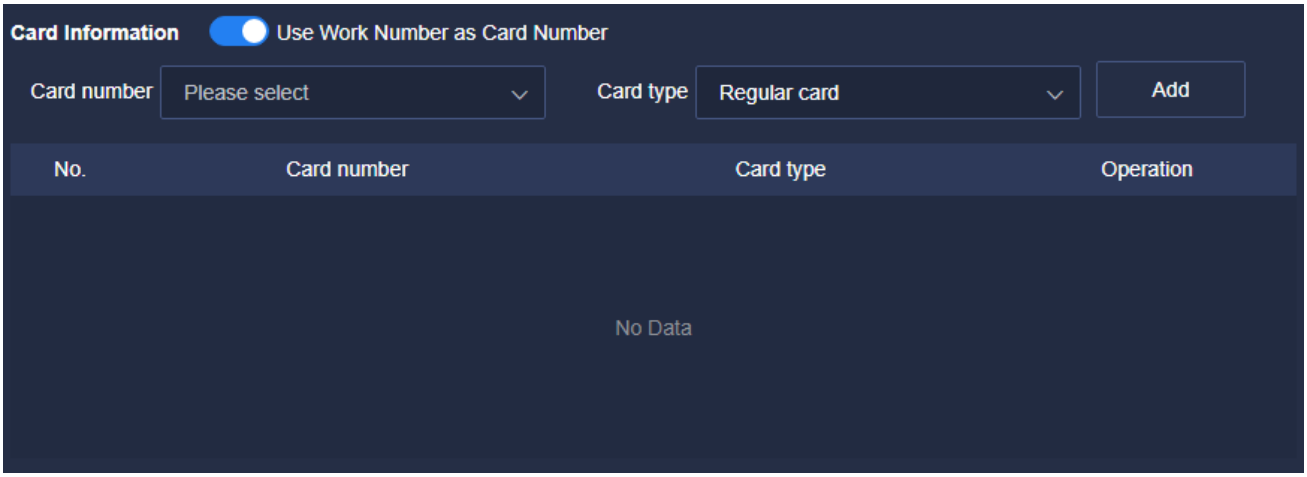
1.Create a department. Place the mouse next to the 'Department List' and click the '+' icon to add a department.



2.Click [Add] on the right side to add personnel in the department.



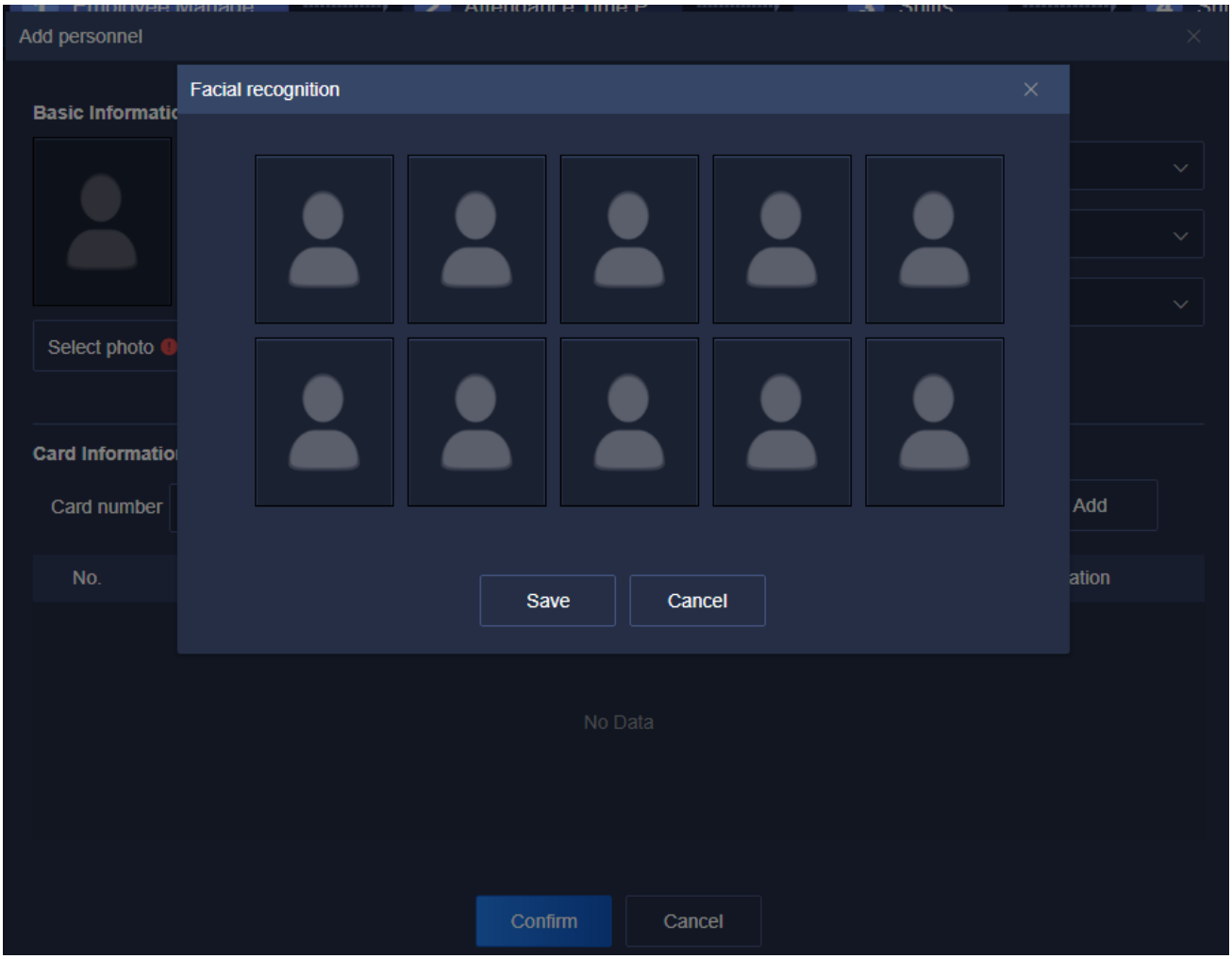
3.Enter the card number, select card permissions, and click [Add] to add a card for the person.



4.Click 'Edit' or 'Delete' to edit or delete the card.

5.By using the card issuing controller, simply connect the card reader to the computer and the card information can be entered into the client through the card reader.

6.When the card issuing controller is a PAD device, it supports collecting faces.



20.2.2 Attendance Time Periods

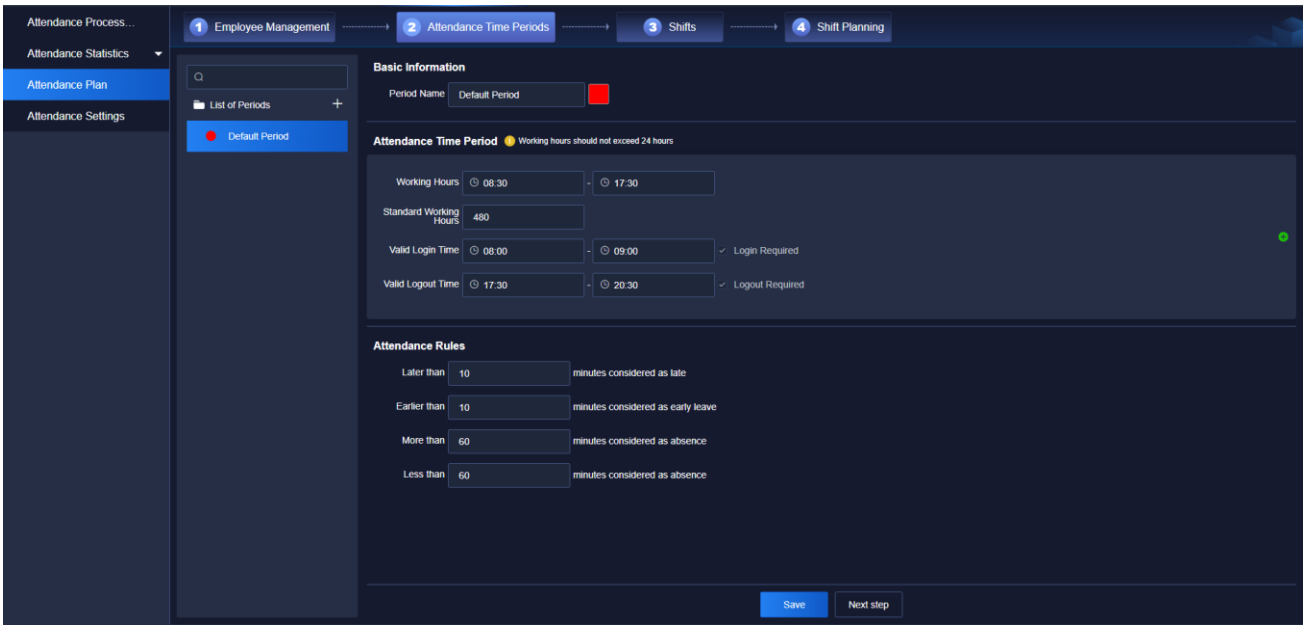
Set the attendance period for each day, which can be divided into a maximum of 2 periods, and choose whether to clock in during the middle period. Attendance rules can be set, including how to calculate tardiness, early departure, and absenteeism.

1.The left side displays a list of time periods, supporting addition and deletion.

2.Attendance period: including working hours, calculation of working hours, effective

check-in period, and effective check-out period; Only clocking in within the valid time period will be counted towards attendance. The first time period must be checked in, and the last time period must be checked out.

3. Attendance rules: Being late for work for more than X minutes, leaving early for x minutes, being late for x minutes, and leaving early for x minutes are recorded as absenteeism. Failure to sign in can be recorded as absenteeism or tardiness. Failure to sign off can be recorded as absence or early departure.



20.2.3 Shifts

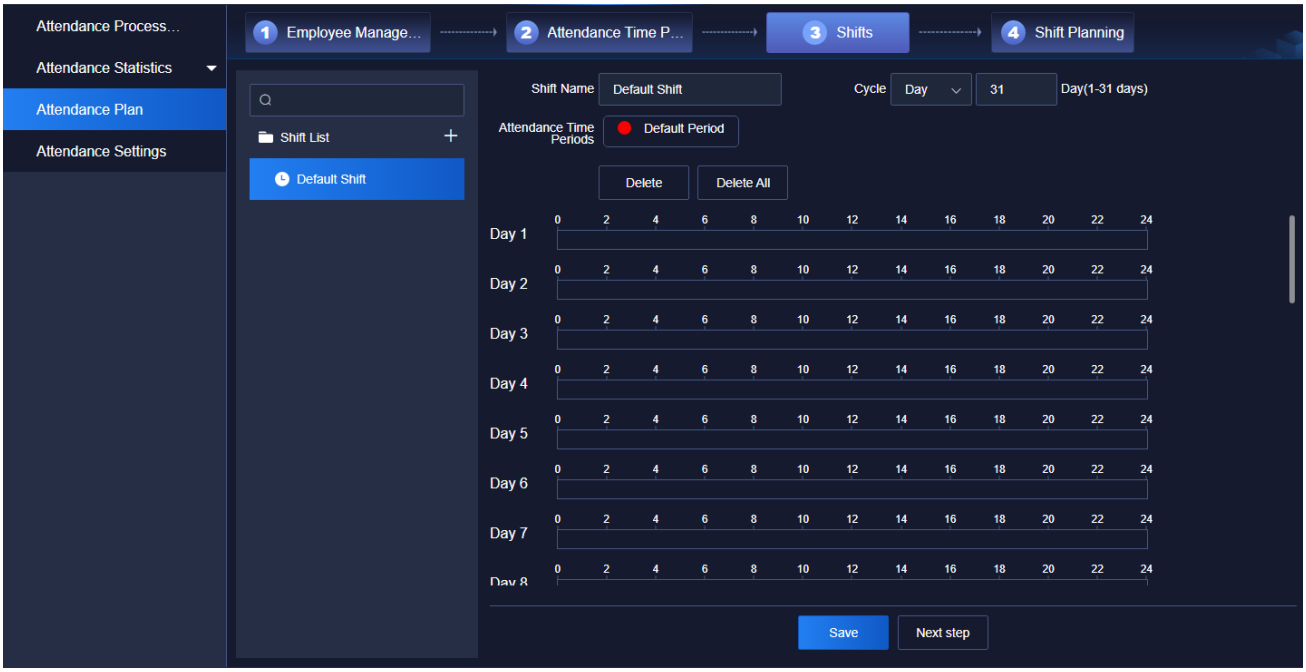
Set attendance cycle shifts, which can be cycled by week, month, or year. Within the cycle, you can select the previously configured attendance period for each day.

1. The left side displays a list of time periods, including checkboxes and names. The specific content of the selected item is displayed on the right. The list supports adding and batch deletion can be selected.

2. The shift content includes: name, cycle period, optional: quantity, unit; The unit is in

days and hours, with quantities ranging from 1 to 31. The unit is in weeks and hours, with quantities ranging from 1 to 52. The unit is in months and hours, with quantities ranging from 1 to 12. The optional time period displays 2 lines, the area can be scrolled, and the display mode is name and color. The following list displays the cycle period by day. When the cycle is in days or months, display the xth day, and when the cycle is in weeks, display the week x.

3. Select the time period and click to display it on the current day's timeline. Support deleting a single time period of a certain day and clearing it all.

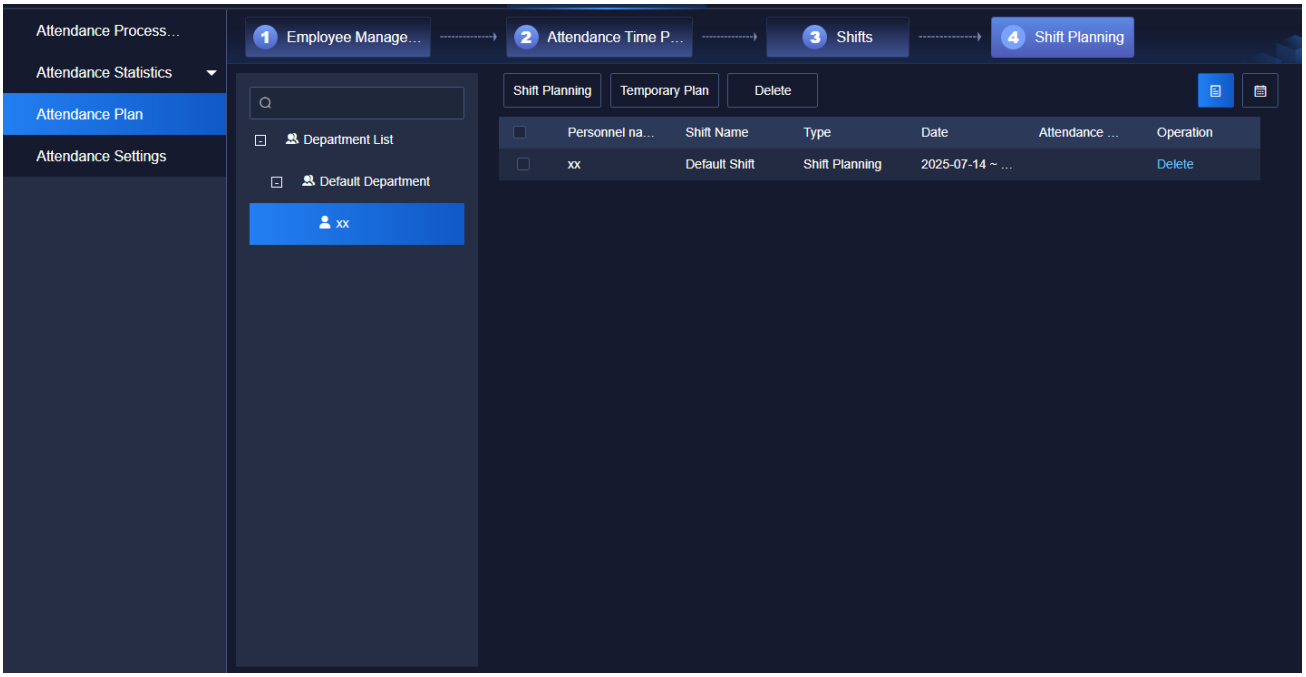


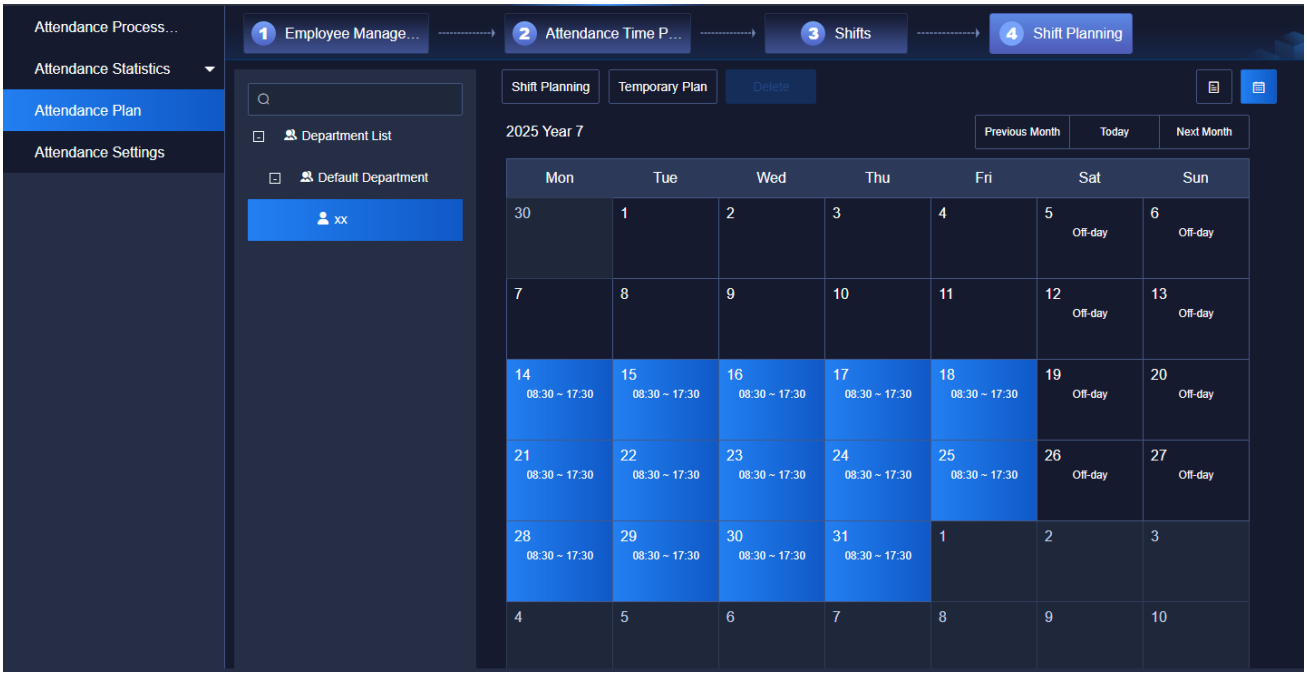
20.2.4 Shift Planning

By default, the scheduling status of the selected personnel on the organizational tree is displayed. Departments and employees can be scheduled, as well as temporary scheduling.

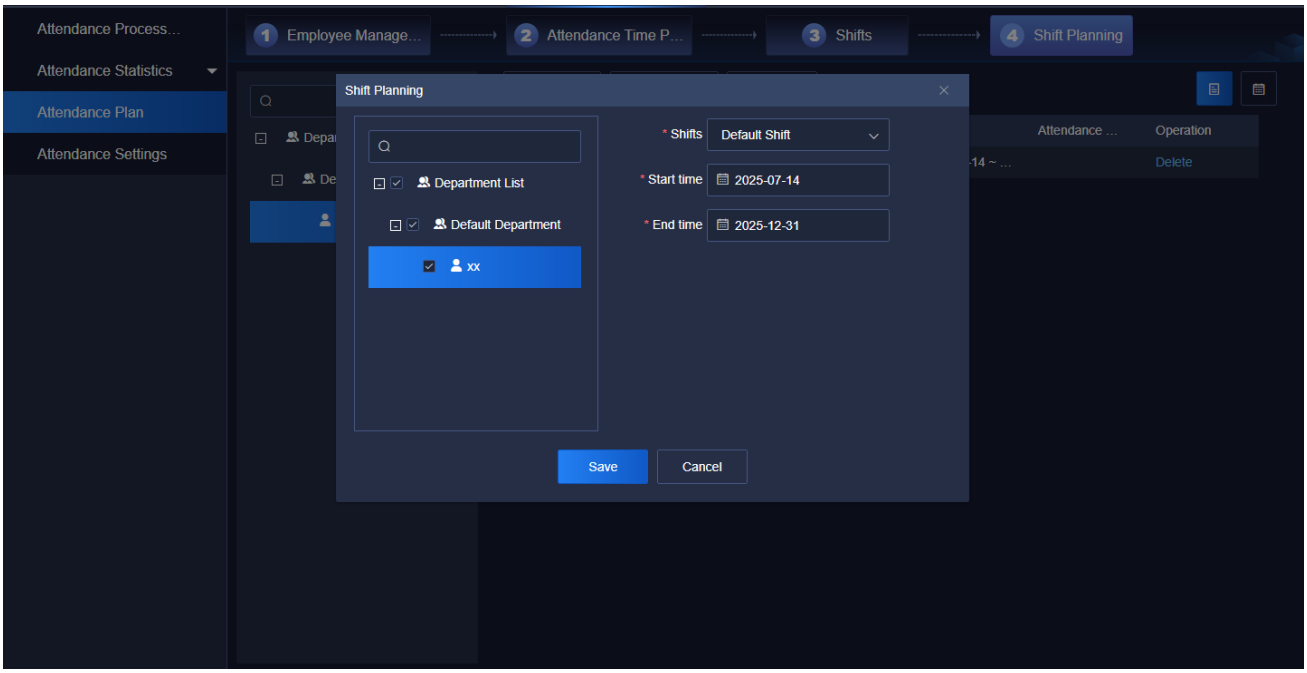
1.On the left side, personnel or departments are displayed and can be searched. The

scheduled dates display the earliest and latest check-in times, while temporary schedules display text temporary schedules. In case of conflicts between regular schedules and temporary schedules, temporary schedules are displayed.

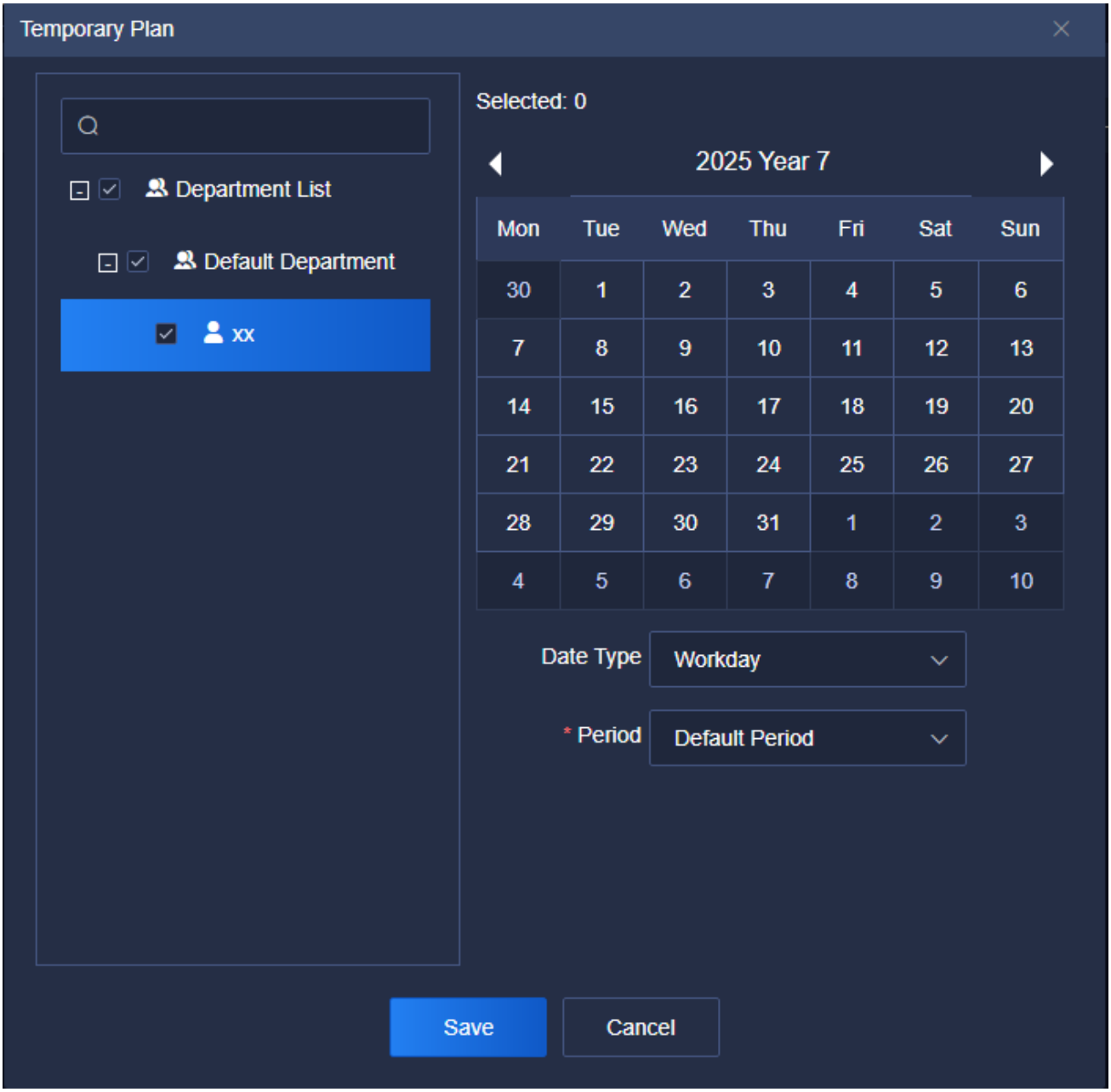




2.Scheduling interface, selectable shifts and validity period.



3.Temporary scheduling: The calendar on the right displays the dates of temporary scheduling, which can be selected multiple times. Temporary scheduling can schedule working days as rest days or rest days as working days.

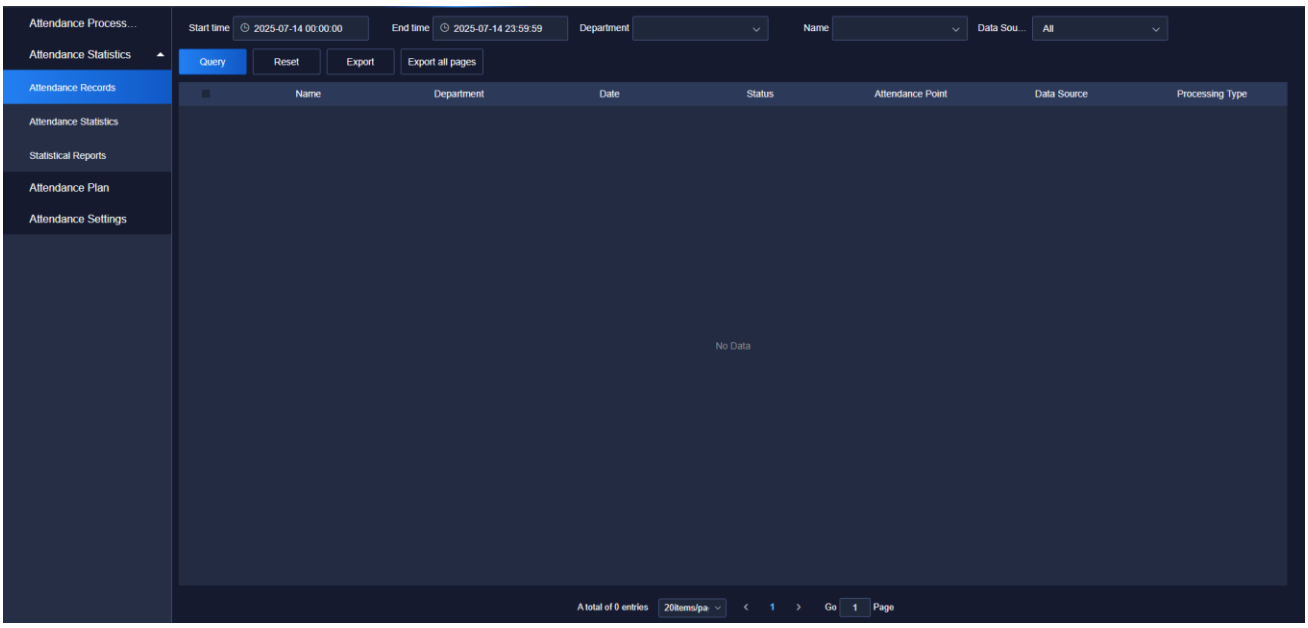


20.3 Attendance Statistics

20.3.1 Attendance Records

Query employee's original attendance records and support conditional queries: start time, end time, department, name, data source.

The query results are displayed as: checkbox, name, department, date, status, attendance point, data source, and processing type.



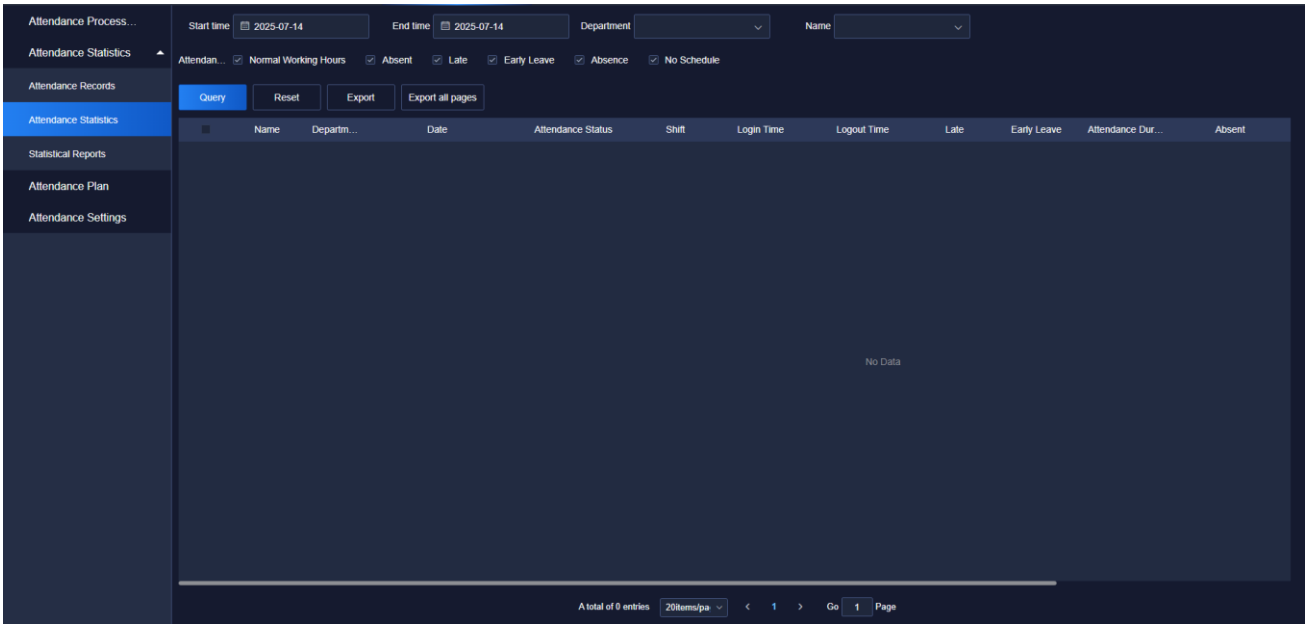
20.3.2 Attendance Statistics

Statistics of employee attendance

1. Statistical conditions: start time, end time, department, name, attendance status (normal attendance, absence, tardiness, early departure, leave, no scheduling).

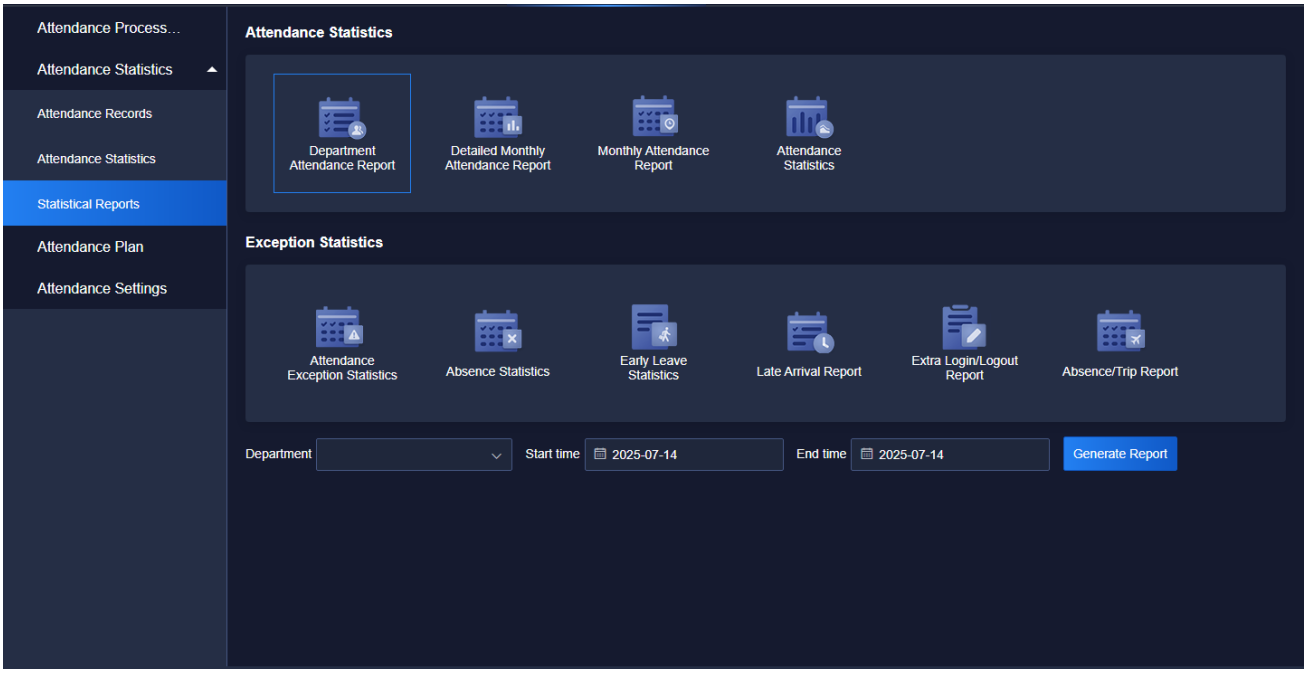
2. List display of statistical results: checkbox, name, department, date, attendance status, shift, check-in time, check-out time, tardiness, early departure, attendance duration, absenteeism, work, rest, leave type, leave duration.

3. Statistical results support export.



20.3.3 Statistical Reports

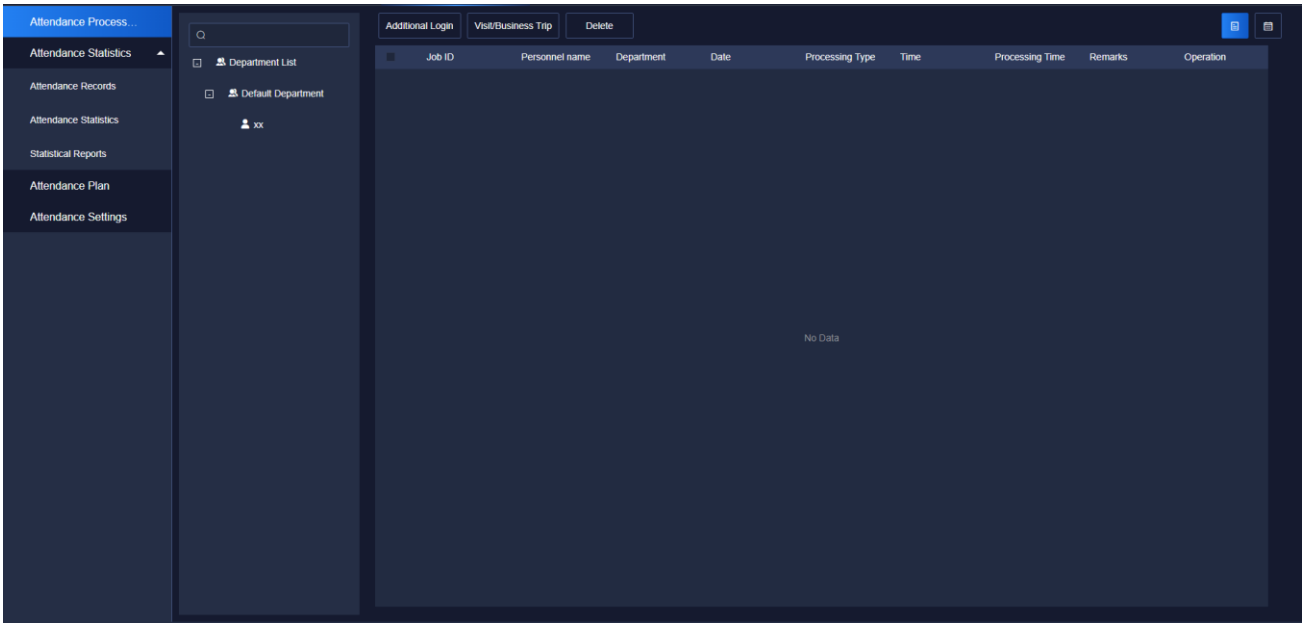
Support multiple forms of report export. After selecting the report, the corresponding settings parameters will be displayed, and the report will be generated based on the parameters. Export formats include PDF and Excel.



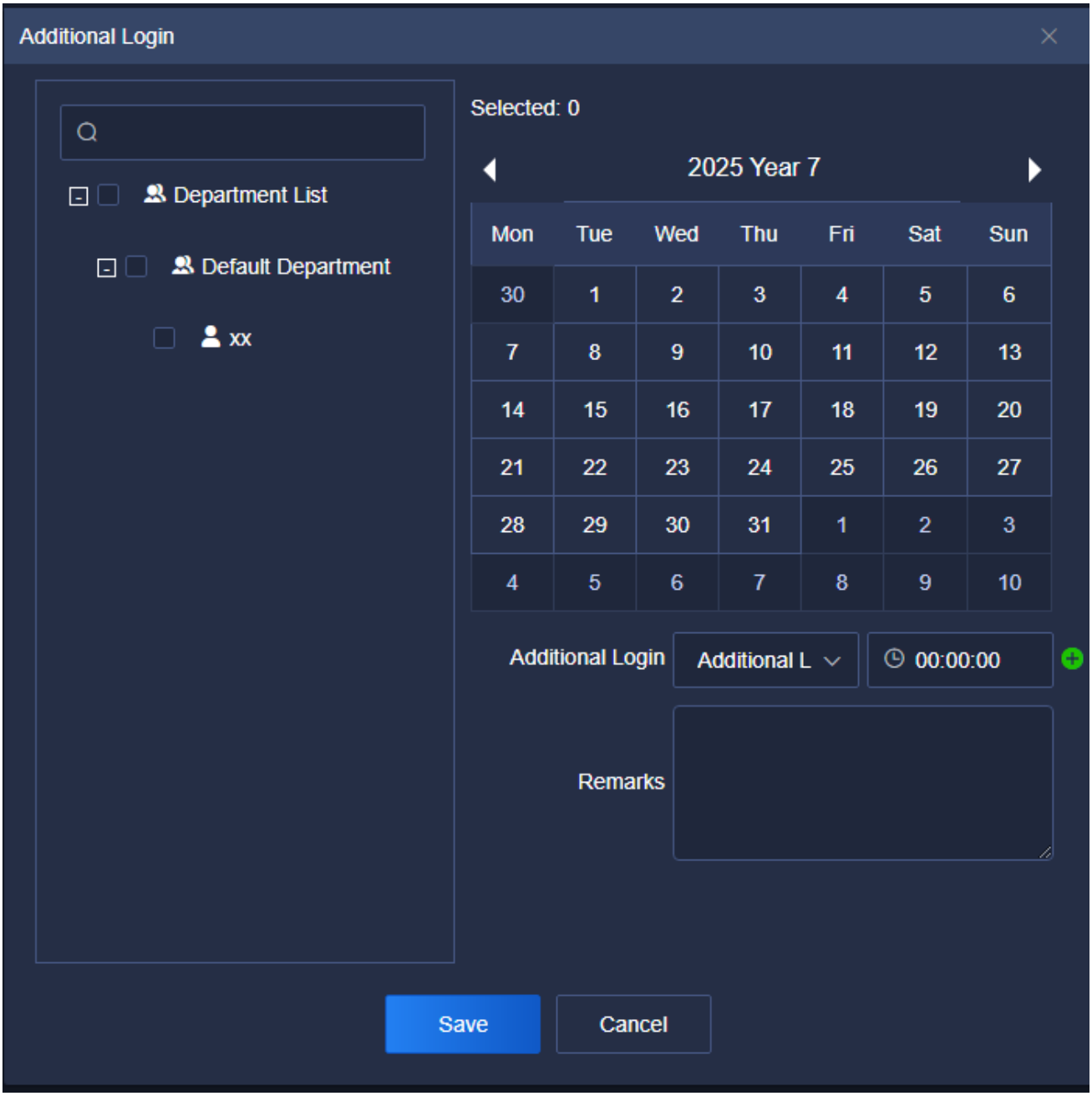
20.4 Attendance Processing

Display the attendance status of the selected person and support filtering personnel

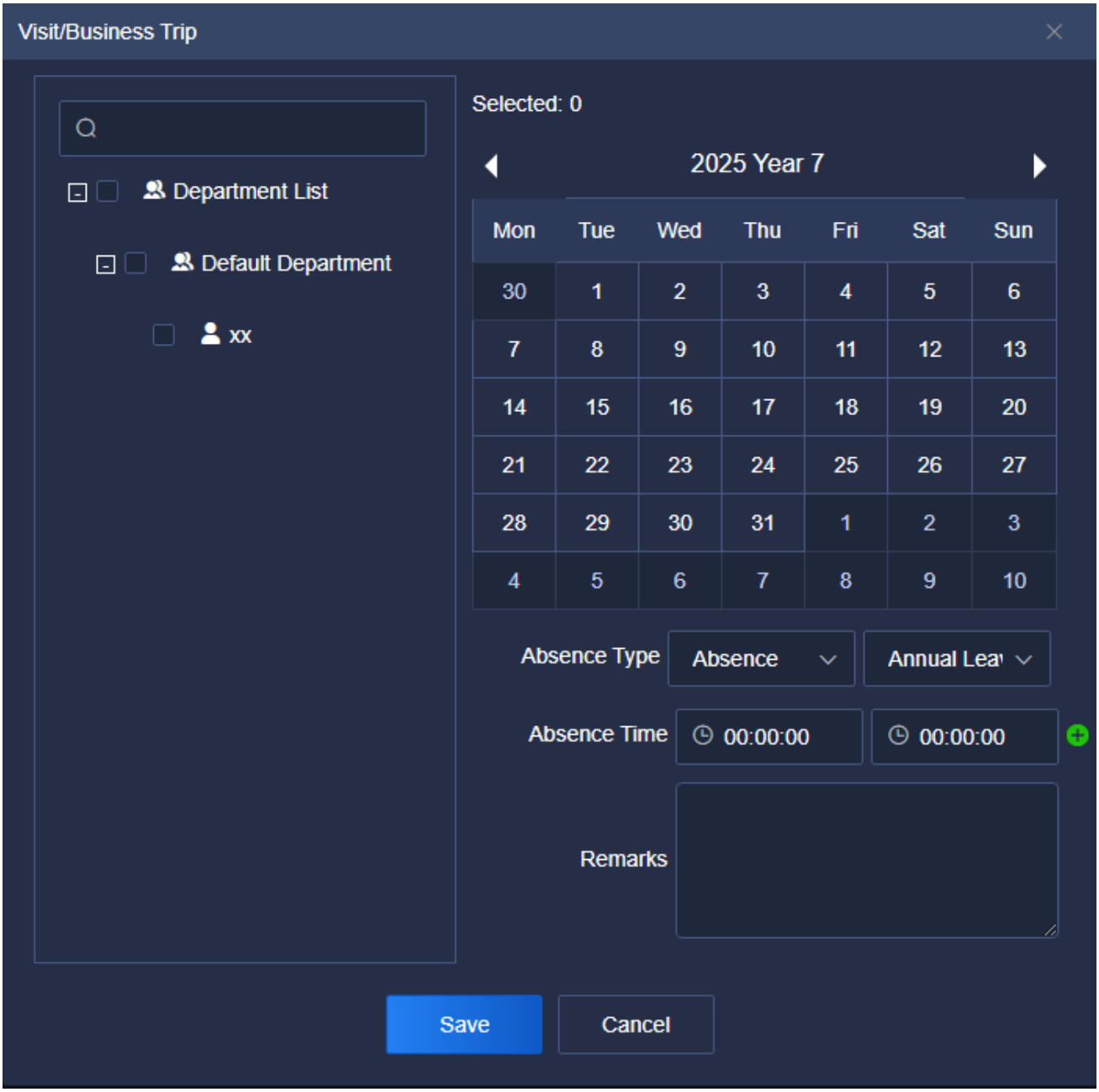
1. On the left side, the organization tree is displayed, and on the right side, the attendance status of the selected personnel is displayed: not scheduled, rest days, normal, absent. After exception handling, overlay and display in the calendar.



2. Supplementary sign in: Can provide supplementary sign in for employees who have not checked in yet.



3. Leave and Business Trip: Supports processing employee attendance as leave, with the option to choose the type and time of leave.


Visit/Business Trip
Department List
Default Department
xx
Selected: 0
2025 Year 7
Mon Tue Wed Thu Fri Sat Sun
30 1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31 1 2 3
4 5 6 7 8 9 10
Absence Type
Absence
Annual Leav
Absence Time
00:00:00
00:00:00
Remarks
Save
Cancel