Mobile Center

User's Manual

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V1.2.0

Foreword

General

This manual introduces the functions and operations of the Mobile Center Platform (hereinafter referred to as "the Platform").

Models

Mobile Center

Safety Instructions

The following categorized signal words with defined meaning might appear in the manual.

Signal Words	Meaning
CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
TIPS	Provides methods to help you solve a problem or save you time.
NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

Version No.	Revision Content	Release Date
V1.2.0	Add new functions on PC client.	June 2022
V1.1.0	Updated document version. Modified the description of functions at the Web Manager and client.	January 2021
V1.0.0	First release.	December 2019

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1 Introduction

1.1 Overview

Mobile Center is a professional platform for mobile surveillance. Focusing on the safety and protection on road transportation, public transport and long distance transportation, it integrates video monitoring, electrical map, alarm linkage, intelligent analysis and maintenance together to form a flexible, scalable, highly reliable and powerful central management system.

The client-server structure provides integrated management, easy connection and multiple businesses cooperation. Basic functions such as management on user permissions, devices, alarms, and central storage make it a professional mobile vehicles management platform.

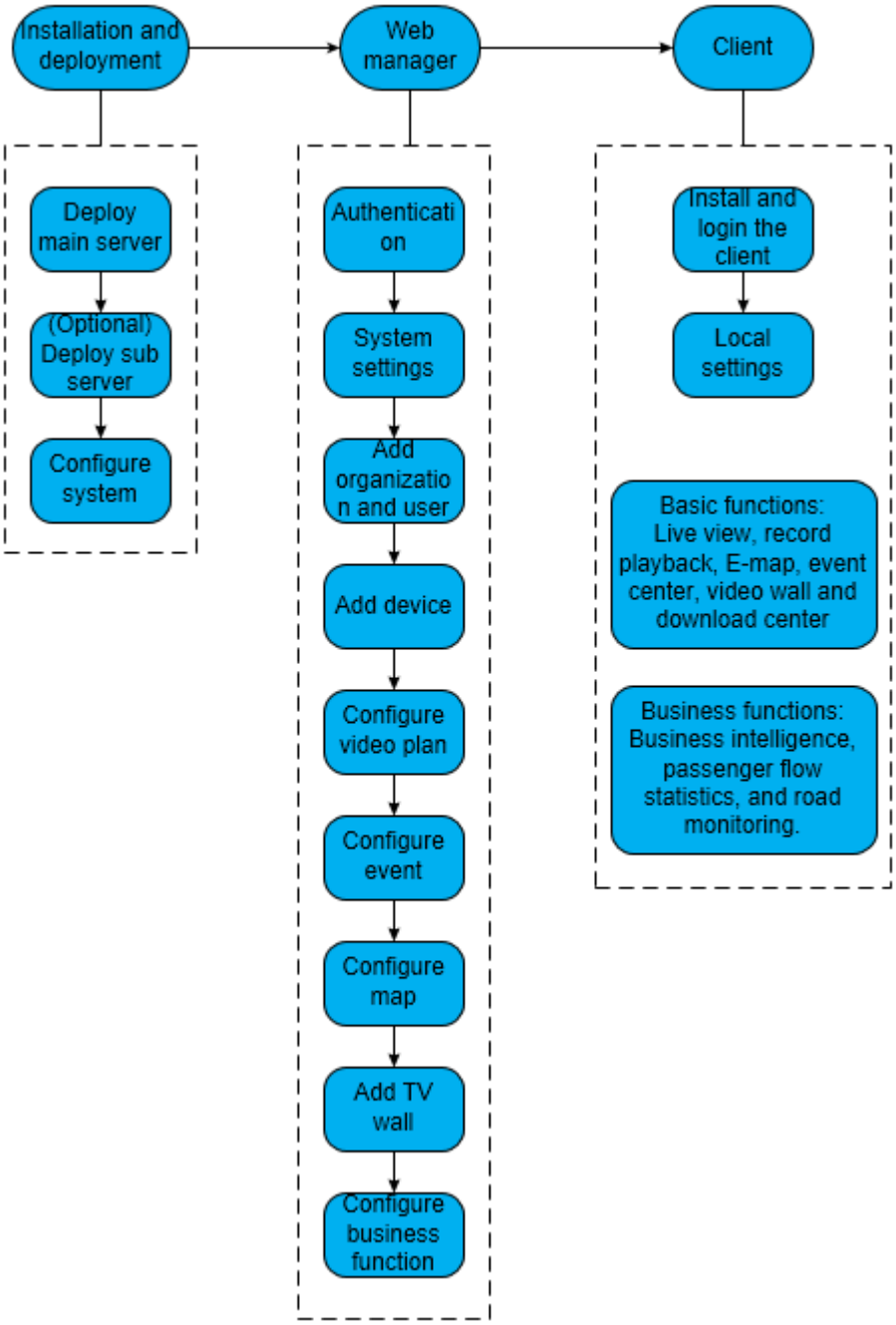
1.2 Highlights

- Video Surveillance
  Supports live view, playback, video wall and audio intercom on important regions. Connection with the third party cloud platform, and operating on Iphone, Ipad and Android are available.
- Alarm Linkage
  Manage alarms through regional devices and intelligent rules. You can also link the alarm with videos, recordings, messages, Emails, video wall, audio intercom and PTZ preset.
- Electrical Map
  Supports Google offline map, Gaode online map, raster map and Baidu map. Operations such as real-time and real-location video monitoring, vehicle history track search, vehicles passing search and positioning trace are available.
- Statistical Maintenance
  Real-time detection and analysis on the status of the device, user, system, disk and network. The platform supports viewing logs of user and system management, and business operations.
- Active Security
  Integrate active security devices to report alarm information such as locations, images and short videos showing on one interface. Graphical display of the alarm statistics is supported.
- Data Management
  Supports the adding and editing of face database and ANPR database, the planning of route sites, and the query of distribution progress and records.

2 Business Flowchart

- The chart below shows the general processes done by the Platform.
- The Platform includes three modules: Web manager, PC client and mobile client. Before logging in to the Platform, you need to deploy the master server.
- This manual mainly introduces the operation of the Web manager and the PC client. For the operation of the mobile client, please refer to the VIMS-APP user manual.

Figure 2-1 Flowchart



3 Web Manager

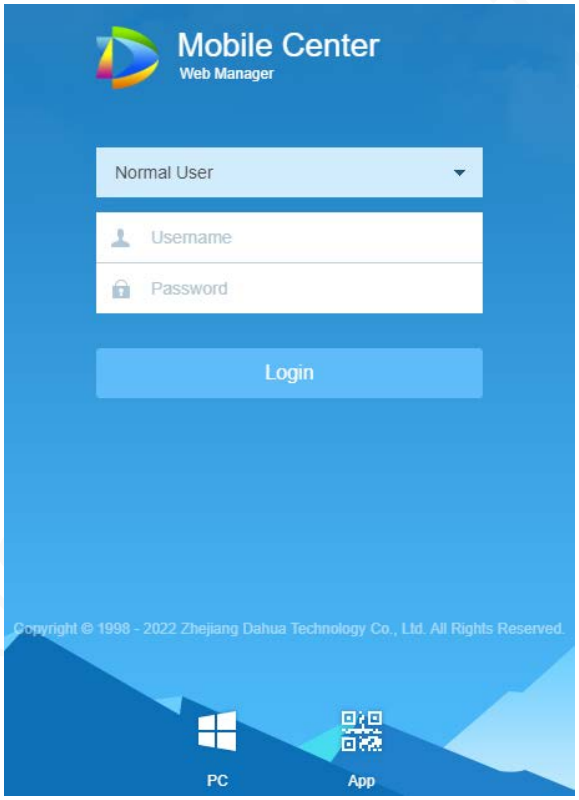
Use IE11 and above browsers or Google Chrome 56 and Firefox to log in to Mobile Center web manager.

3.1 Logging in to Web Manager

Log in to the Web Manager of the Platform server on a browser for administrator to operate remotely.

Step 1 Enter the IP address of the Platform in the browser bar, and then press the Enter key.

Figure 3-1 Login interface



Step 2 Enter **Username** and **Password**, and then click **Login**.

The default username is system.

- Upon the first login, the password change interface will pop up. Change the password in time, and then log in to the system.
- If you log in to Web Manager for the first time, add the Platform IP address as a trusted site of the browser.

Figure 3-2 Homepage

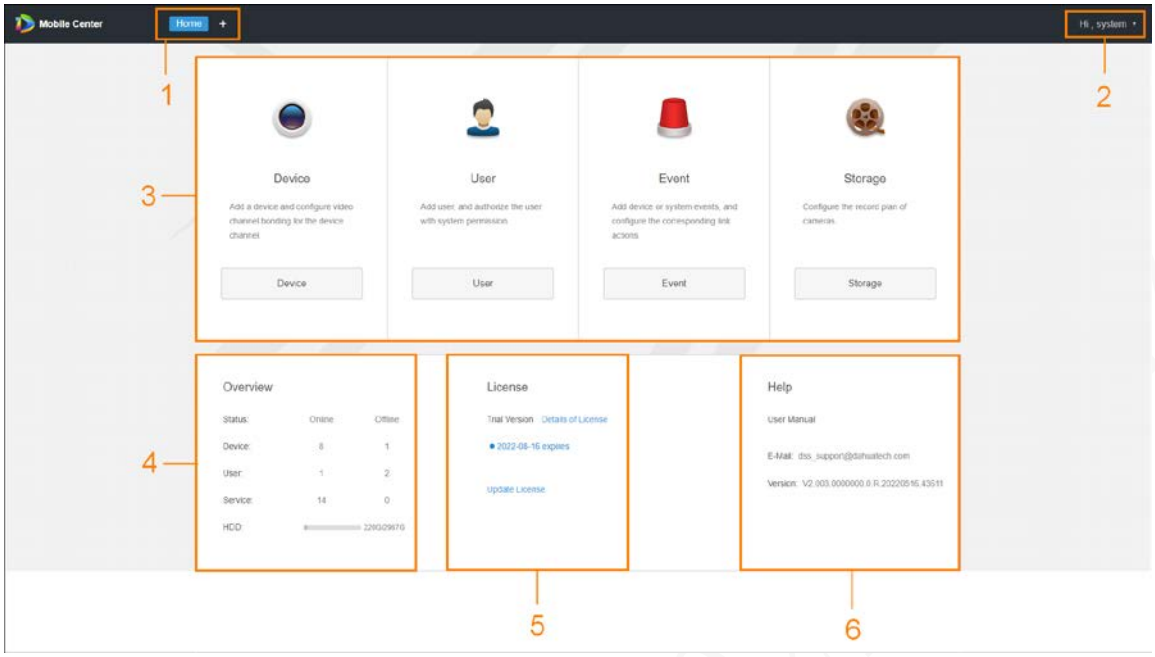


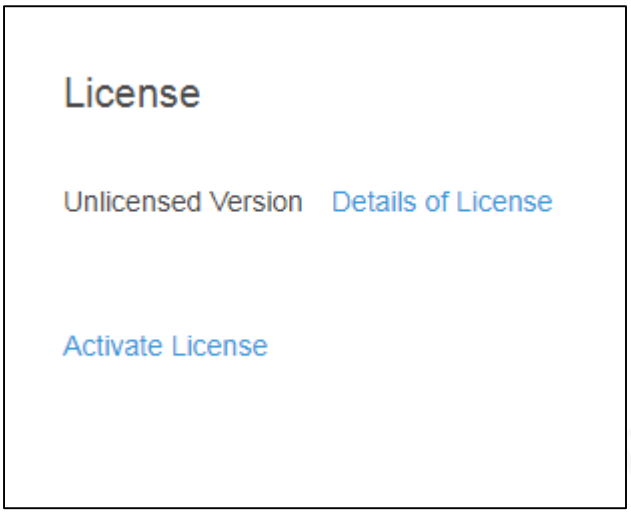
Table 3-1 Homepage description

No.	Description
1	Home: Click to go back to the Platform homepage. +: Click to go to the main menu of the Platform.
2	Hover over the username to change the password or log out of the current account.
3	Shortcuts of common modules.
4	Displays the online or offline status of devices, users and services, and HDD usage.
5	Displays the current license status.
6	View user's manual, contact information, and version information.

3.2 Authorizing License

You need to authorize license before login to ensure that the system can add devices properly.

Figure 3-1 Unauthorized



Formal Version Authorization

The license key is provided by the regional salesperson.

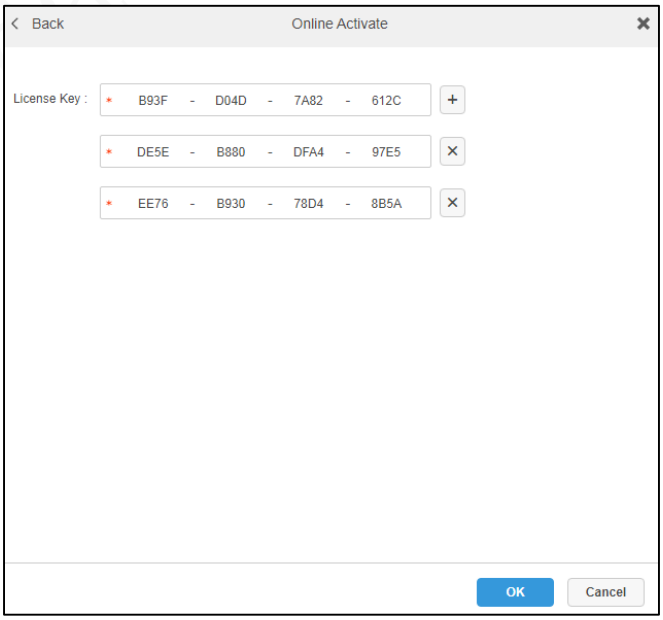
Step 1 Log in to web and click **Activate License** on Home interface.

Step 2 Select activation mode.

- **Online Activation**: Under public network, enter the activation code online to activate DSS.
  1. Click **Online Activate** and enter the **License Key**.

     Click + to add up to 10 strings of license key.

     Figure 3-2 Online activation

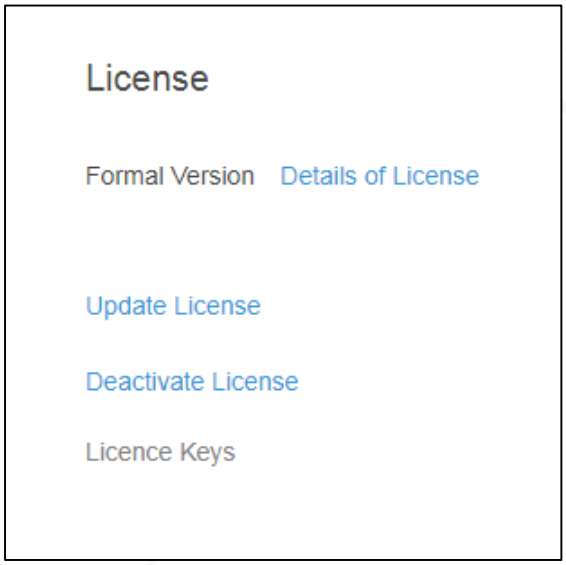
  2. Click **OK**.

- **Offline Activation**: When there is no network available, you can export license request file and obtain the activation file offline.
  1. Click **Offline Activate** and enter the **License key**.

     Click + to add up to 10 strings of license key.
  2. Click **Export** to export offline license authorization file.
  3. Open DSS license management web page on a PC which is connected with network, and then upload the exported license authorization file.
  4. Download the authorized license from DSS, and then click **Import** to import the license.

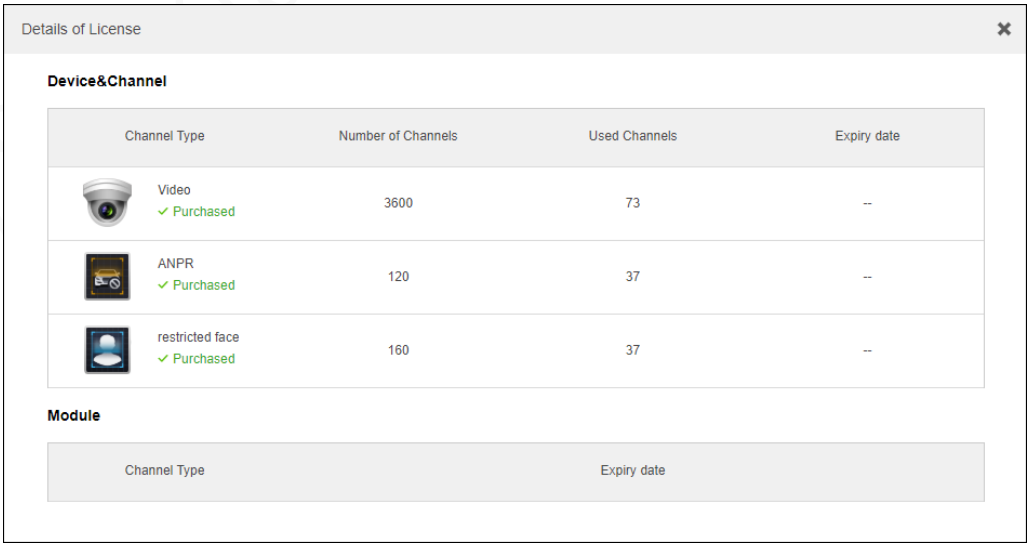
Step 3 Log in to web again after activated.

Figure 3-3 Formal version



- **Details of License**: Used to view information of the basic module and added module.

Figure 3-4 Details of formal license



- **Update License**: Used for updating the license key.
  - ◇ **Online Update**: Under public network, enter the license key online to activate DSS.

- ◇ **Offline Update**: When there is no network available, you can export license request file and obtain the activation file offline.

- Deactivate License
  - ◇ **Online Deactivate**: Deactivate the activated license, and DSS restores to non-activated status under public network. The license key can be used again.
  - ◇ **Offline Deactivate**: export the deactivation file when there is no network available, and then log in to the license server to deactivate. The deactivated license can be used again to activate.

Trial Version

You can use the DSS trial version for a defined time period, once exceeds, DSS will not be available.

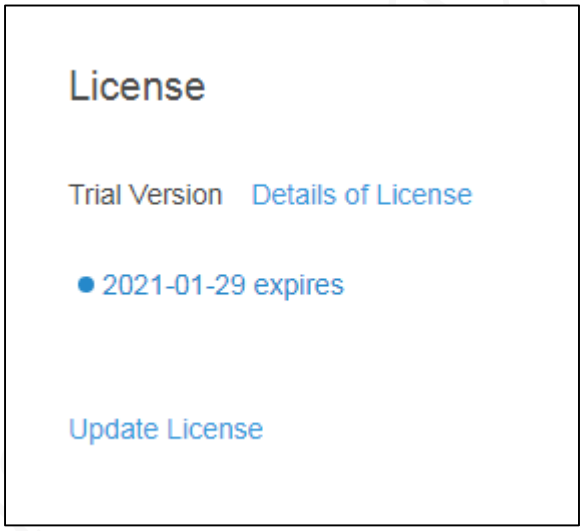
Step 1 Log in to web and click **Activate License** on Home interface.

Step 2 Select activation mode from Online Activation and Offline Activation.

Step 3 Log in to web again after activated.

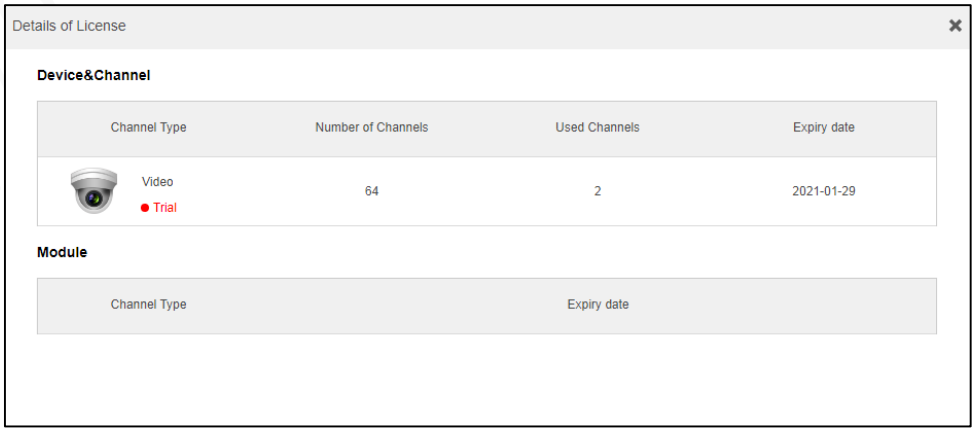
The authorization process is the same as the formal version.

Figure 3-5 Trial version



- **Details of License**: Used to view information of the basic module and added module.

Figure 3-6 Details of trial license



- **Expiry Date**: Shows the date when the trial version expires.
- **Update License**: Used for updating the license key.
  - ◇ **Online Update**: Under public network, enter the license key online to activate DSS.

◇ **Offline Update**: When there is no network available, you can export license request file and obtain the activation file offline.

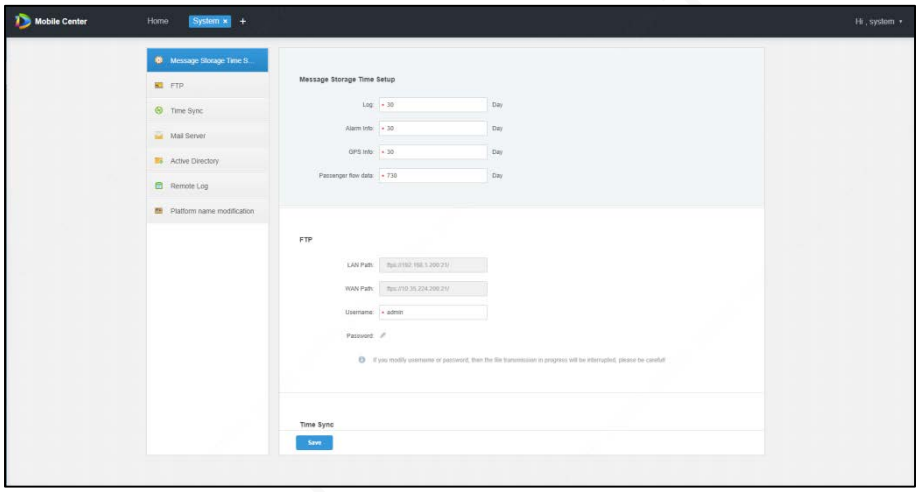
3.3 Configuring System

3.3.1 Configuring System Parameters

Upon the first login, you need to configure system parameters first to make sure that the system works normally.

Step 1 Select + > **System**.

Figure 3-7 Setting System



Step 2 Configure parameters.

Table 3-2 Description of system parameters

Parameter		Description
Message Storage Time Setup	Log	Set the maximum storage time of logs, alarm information, GPS information and passenger flow data (maximum 30 days).
	Alarm Info	
	GPS information	
FTP	—	● View LAN and WAN paths. ● Set username and password. Configure the LAN and WAN paths when installing server.
Time Sync	Scheduled Time Sync	Set the schedule of time syhchronization.
	Start time	Set the start time of time synchronization.

Parameter		Description
	Sync Interval	The time interval of the system time synchronization. 24 hours by default, that is, every 24 hours. The system time is subject to the server time to synchronize the time of the device and server. Time synchronization is done through SDK.
	Immediately	Start time synchronization immediately.
	Device Online Time Sync	Enable the function to synchornize the time when the device is online.
Mail Server	—	Set the SMTP server type, port, encryption type, password, sender mail address, test recipient, and other information. When the administrator configures alarm linkage and the client handles alarms, you can send an email to the user, and the mailbox server shall be configured first.
Activity Directory	—	Set domain information including domain name, IP, port, username, password and more. If you have configured domain server, you can either click **Get DN** to get or directly enter the base DN.
Remote Log	—	Set remote log information including log server IP, port and self-defined platform number.
Platform name modification	—	Modify the name and icon of the platform and client.

Step 3 Click **Save**.

3.3.2 Device Time Sync

Time Sync means the device syncs time with the Platform server (reference time). The platform can sync time for all Dahua devices.

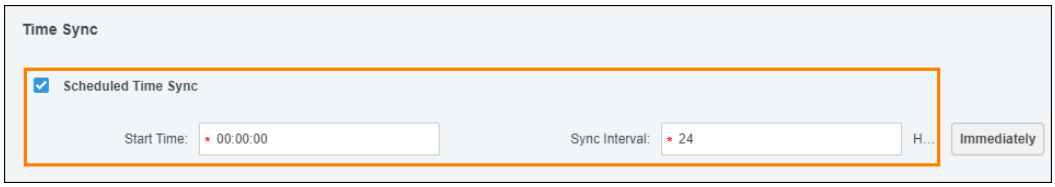
- Automatic time sync: The system automatically synchronizes time at a fixed time or period.
- Manual time sync: You can send a time synchronization request and the system immediately synchronizes the time.

3.3.2.1 Automatic time sync

Step 1 Select > **System**.

Step 2 Click **Time Sync**, select the **Scheduled Time Sync** checkbox, and then set the time sync parameters.

Figure 3-8 Scheduled Time Sync



Step 3 Click **Save** to save the configuration.

3.3.2.2 Manual time sync

Step 1 Select > **System**.

Step 2 Click **Time Sync**, select the **Scheduled Time Sync** checkbox, and then click **Immediately**.

Figure 3-9 Immediate time sync

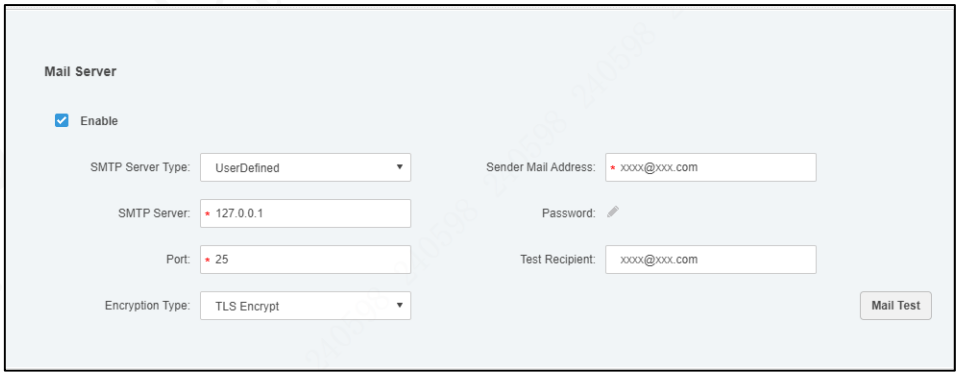
3.3.3 Configuring Mail Server

When the administrator configures alarm linkage and the client handles alarms, you can send an email to the user, and the mail server needs to be configured first.

Step 1 Select > System > Mail Server.

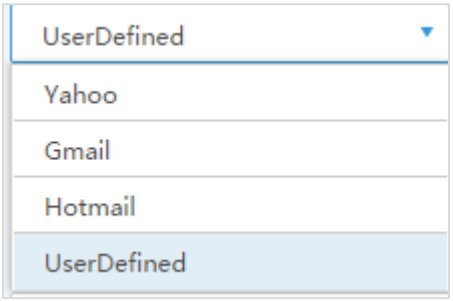
Step 2 Select **Enable** to configure mail server.

Figure 3-10 Mail server selection



Step 3 Select a mail server type in the **SMTP Server Type** drop-down box.

Figure 3-11 Type selection



Step 4 Set SMTP server IP, port, encryption mode, sender address, password, test recipient, and other information.

Step 5 Click **Mail Test** to test whether the mail server configuration is valid. When the test succeeds, there is a prompt and the test account receives the corresponding email.

Step 6 Click **Save**.

3.4 Adding Organization

For easy management, add an organization to deploy the organization or device levels. If no organization is added, all users or devices added will be classified under the default organization.

The first-level organization is **root** by default. The added organization is displayed at the next level of **root**.

Procedure

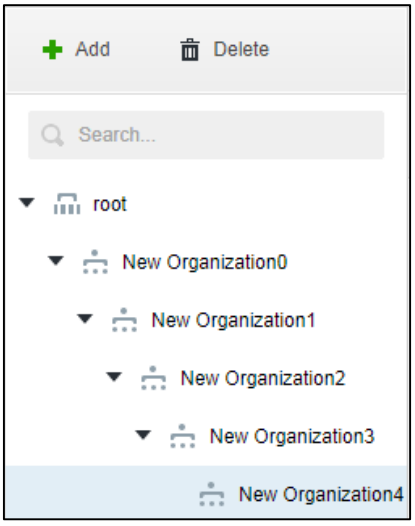
Step 1 Select > Organization Management.

Figure 3-12 Organization management

Step 2 Select **root** and click **Add**.

There are up to 10 layers in the depth of organization.

Figure 3-13 Adding Organization



Step 3 Enter the organization name, and then press Enter.

Related Operations

- **Move To**: Select a device under the root, and then click Move To to select **New Organization 1**, and then click **OK**.
- **Rename**: Click to modify the organization name.
- **Delete**: Select an organization, and then click Delete to delete it.

3.5 Adding Role and User

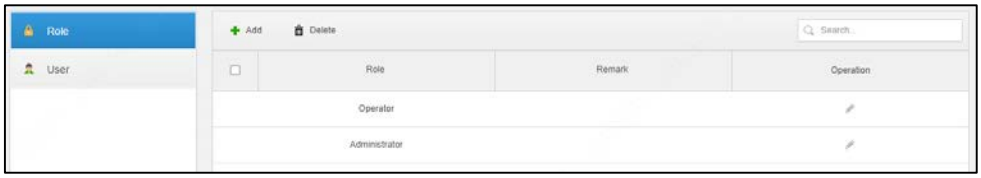
3.5.1 Adding Role

You can create a role and then add user on the platform.

- The created user can log in to the Web Manager and client. Different roles determine that the users have different operation permissions.
- The operation permissions of the role include device permission and control permission. You can only do corresponding operations after granting permissions.

Step 1 Select > **User** > **Role**.

Figure 3-14 User management



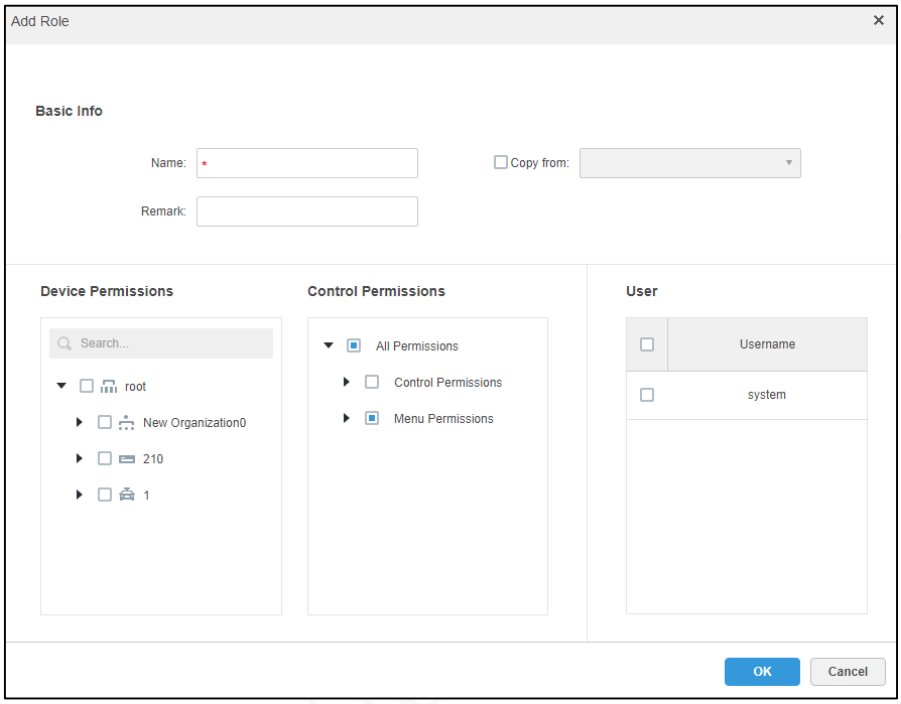
Step 2 Click **Add**.

Step 3 Enter the role name and remarks (optional).

If you select **Copy from** next to **Name** and select a role in the drop-down list, the configuration information will be copied to the selected role for quick configuration.

Step 4 Select Device Permissions and Control Permissions.

Figure 3-15 Device permission configuration



If the device permission or menu permission is not selected, the role cannot do corresponding operations on the device or menu.

Step 5 Click **OK**.

3.5.2 Adding User

If you have added a role, you can add users to the role.

Procedure

Step 1 Select > User > User.

Figure 3-16 User tab

Step 2 Click **Add**.

Figure 3-17 Adding User

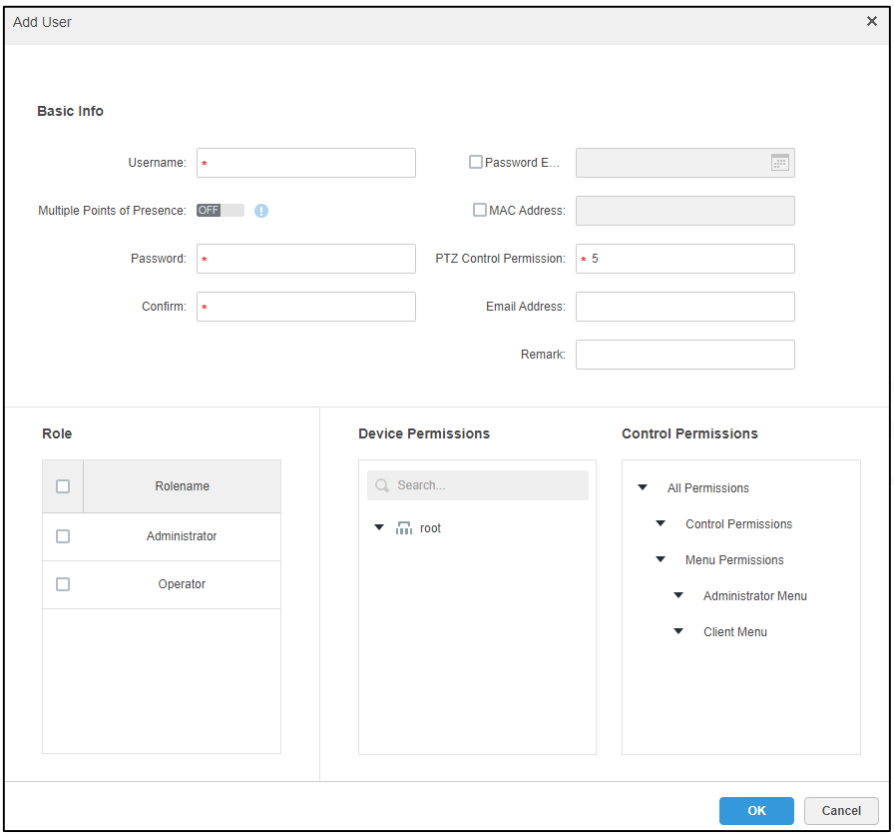


Table 3-3 Description of adding user parameters

Parameter	Description
Username	Set username and password, and confirm the password.
Password	
Confirm	
Multiple Points of Presence	Enable the account to log in to multiple clients at the same time. Video call is not available when the account logs in to multiple devices at the same time.
Password Expiry	Validity of user account.
MAC Address	MAC address of the computer used to log in to the Platform.
PTZ Control Permission	The larger the number, the higher the permission of controlling PTZ.
Email Address	Email address of the user account.
Remark	User description.

Step 3 Configure user information, and then select a role, and the corresponding permissions display on the right side.

- If no role is selected, **Device Permissions** and **Control Permissions** are unavailable.
- The user can select multiple roles at the same time.

Step 4 Click **OK**.

Related Operations

- Click to freeze the user, which will be forced to exit the client.
- Click to change user information except for username and password.
- Click to delete the user.

3.5.3 (Optional) Configuring Domain User

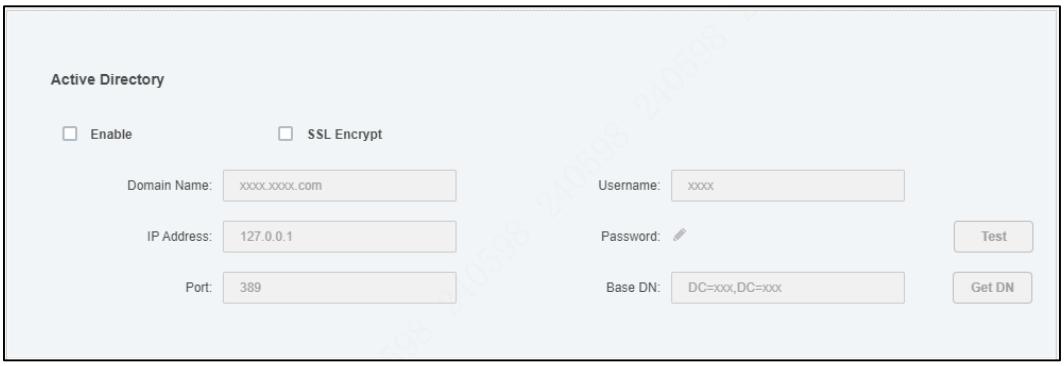
Domain user refers to the user logged in in domain mode. When certain company has LAN (Local Area Network) and wants to use the domain user to login, you can use the domain user import function to facilitate project deployment.

3.5.3.1 Configuring Domain Information

Step 1 Select > System > Activity Directory.

Step 2 Configure domain information.

Figure 3-18 Domain settings



Step 3 After setting domain information, click **Get DN** to automatically get the basic DN information.

Step 4 Click **Test** to test whether the domain information is available.

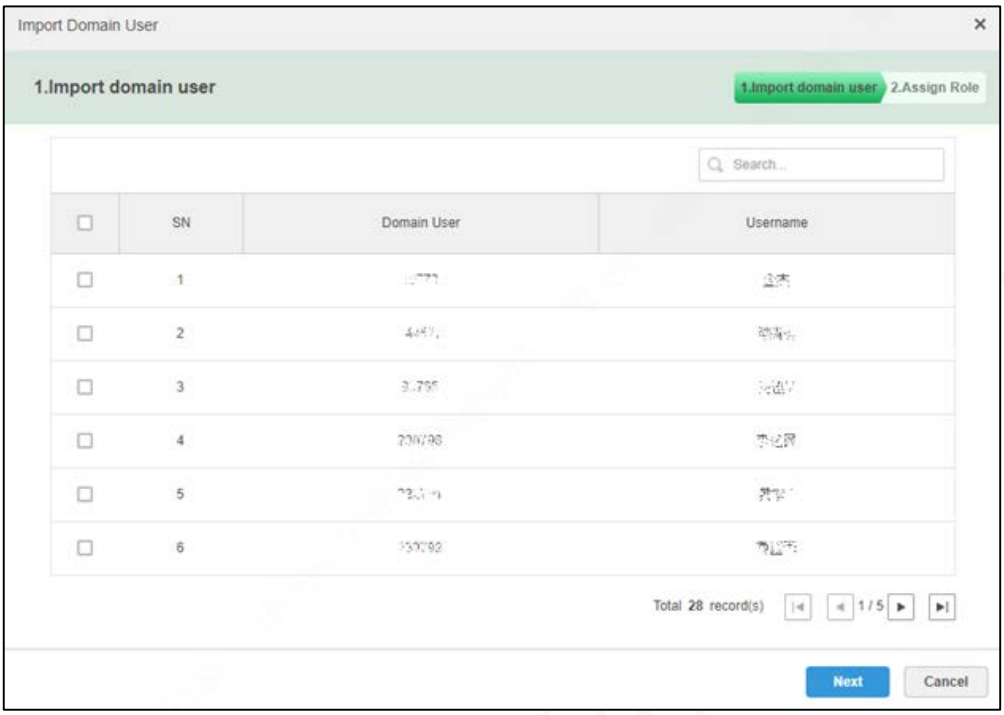
Step 5 Click **Save**.

3.5.3.2 Importing Domain User

Step 1 Select > **User > User**.

Step 2 Click **Import Domain User** on the right side.

Figure 3-19 Domain user import

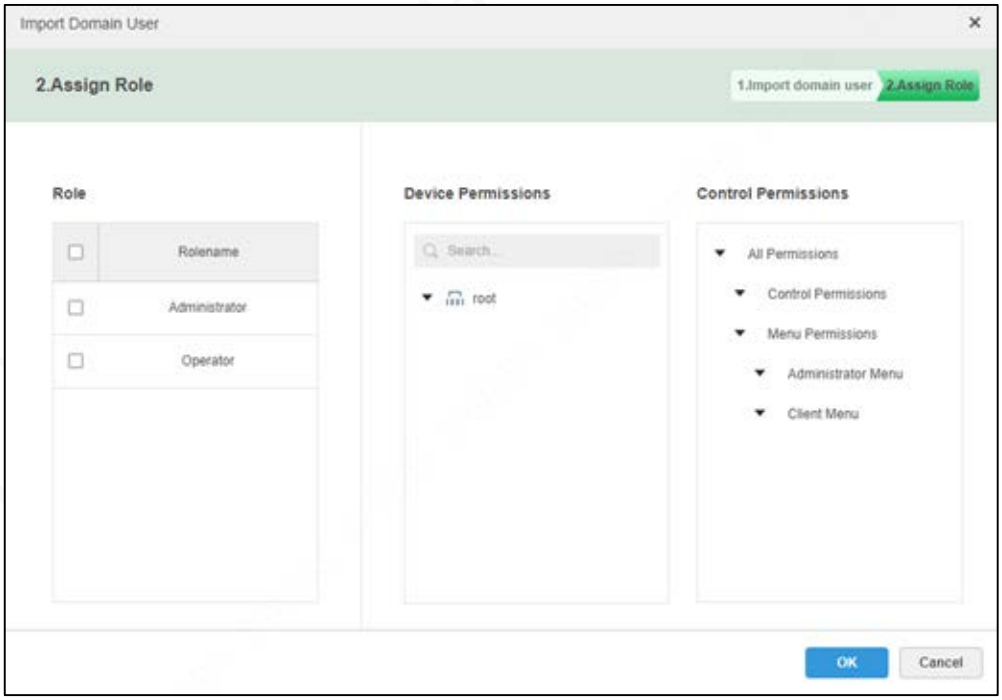


Step 3 Select the user to be imported from the obtained domain users.

You can enter keywords in the search box to search for users.

Step 4 Click **Next**.

Figure 3-20 Domain user import

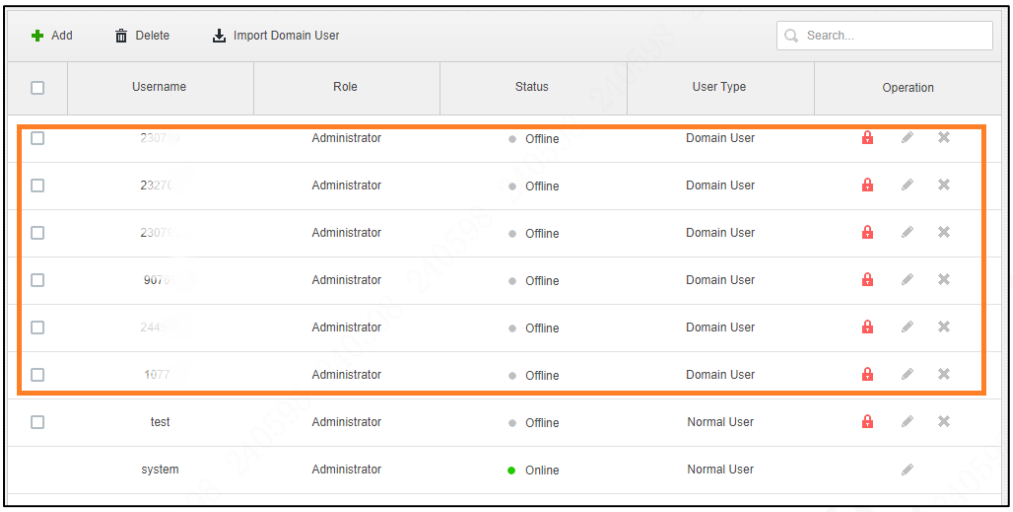


Step 5 Select a role for the domain user with corresponding permissions displayed on the right side.

Step 6 Click **OK**.

You can check whether the domain user has been imported successfully in **User Info**.

Figure 3-21 Domain user imported successfully

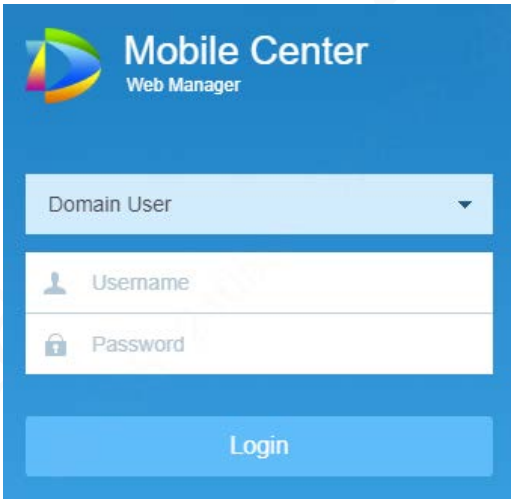


3.5.3.3 Logging in Domain User

You can use domain user to log in to the client.

Step 1 Select **Domain User** in the **User Type** drop-down list on the login interface of the client.

Figure 3-22 Domain user type selection



Step 2 Enter **Username** and **Password**, and then click **Login**.

The interface and functions of domain users are the same as those of normal users.

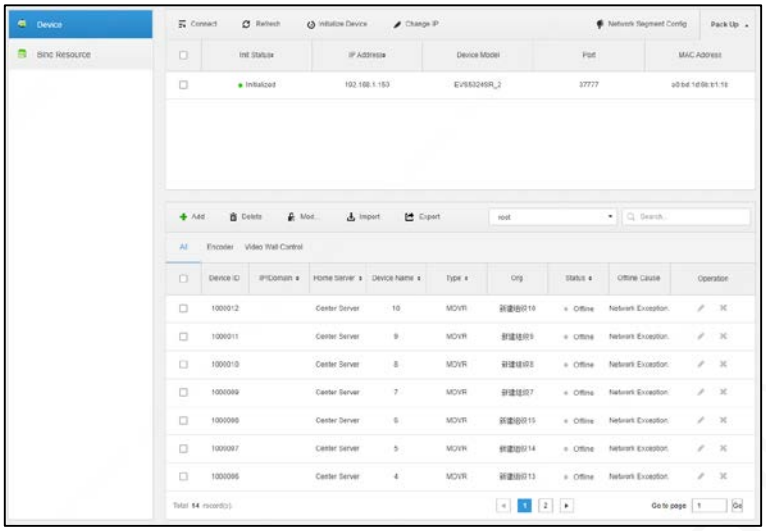
3.6 Adding Device

You can add different types of devices as required.

3.6.1 Adding Device Manually

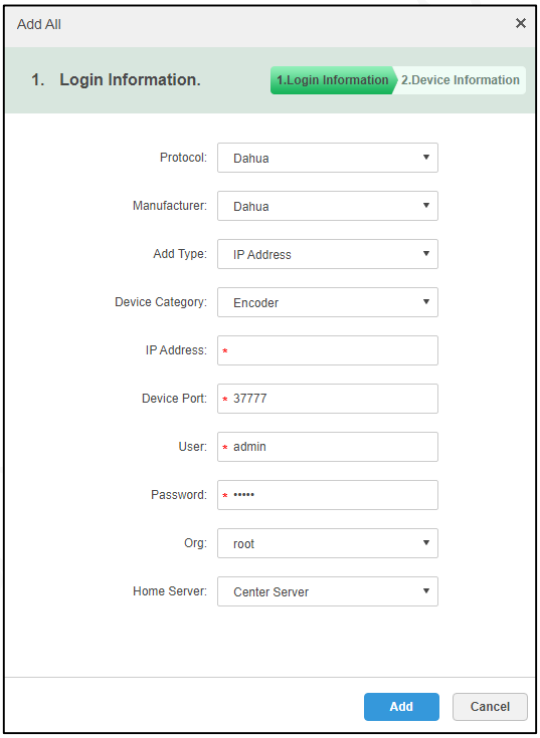
Step 1 Select > Device > Device.

Figure 3-23 Device management



Step 2 Click **Add**.

Figure 3-24 Login information



The configuration parameters slightly vary with the **Protocol** you selected. The actual interface shall prevail.

Step 3 Configure parameters of login information.

Table 3-4 Login information description

Parameter	Description
Protocol	Select the communication protocol.
Manufacturer	The manufacturer of the device.
Add Type	● When you select IP Address as the Add Type, enter the IP address of the device. ● When you select Auto Registration as Add Type, enter the auto

Parameter	Description
	registration ID of the device. Only encoder can be added in this case, and the auto registration ID must be consistent with the registration ID configured at encoder. ● When you select Domain Name as Add Type, the options come from the configured domain during deployment.
Device Category	Supports Encoder and Video Wall Control.
Device Port	The port number of the device.
User	The user and password to login the device.
Password	
Org	Select organiztion to which the device is added.
Home Server	The server (center and sub server) on which the Platform is deployed.

Step 4 Click **Add**.

Figure 3-25 Device information

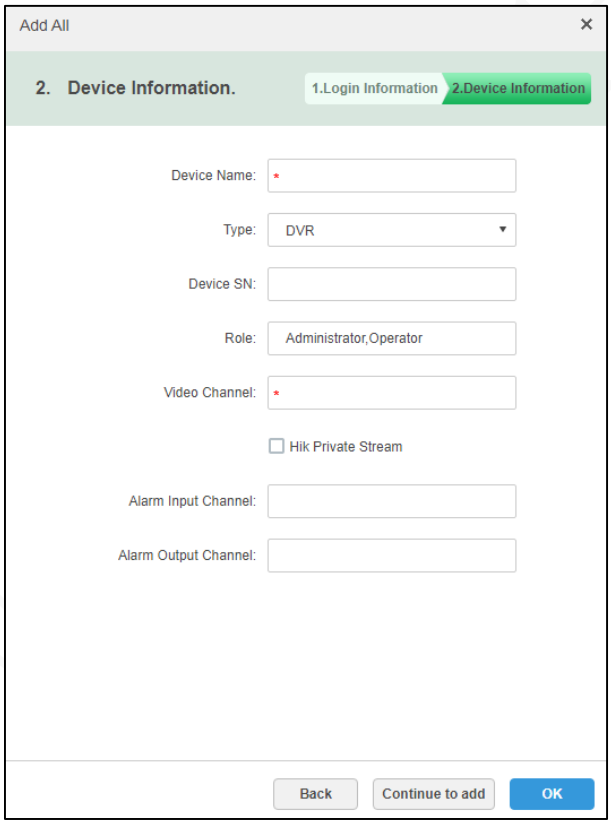


Table 3-5 Device information description

Parameter	Description
Device Name	Enter the device name.
Type	Select device type.
Device SN	Enter the device serial number.
Role	Account with the defined roles (along with permissions) can operate on the device.
Video Channel	Set the video channel of the device.
Alarm Input Channel	Set the alarm input channel.
Alarm Output Channel	Set the alarm output channel.

Parameter	Description
Hik Private Stream	After enabled, the stream will be taken according to the private agreement of Hikvision.

Step 5 Configure parameters of device information.

Step 6 Click **OK**.

Click **Continue to add** to add more devices.

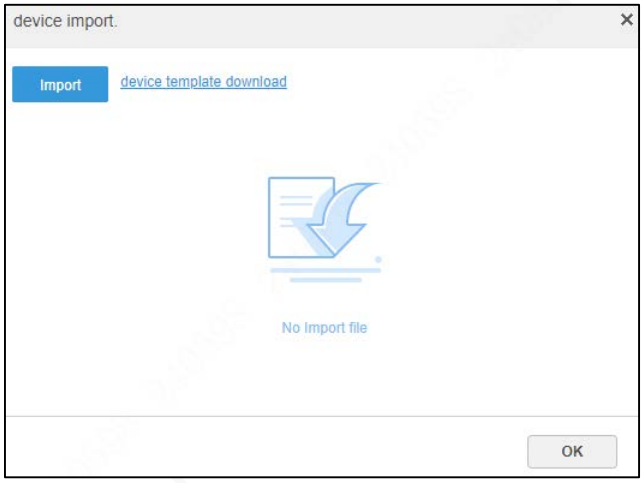
3.6.2 Importing Device in Batches

Create a device information sheet based on the template and import it to add devices.

Step 1 Select + > Device > Device.

Step 2 Click **Import**.

Figure 3-26 Device import



Step 3 Click **device template download**, and then fill in the device information to be imported based on the template and save it.

Step 4 Click **Import** to import the filled template into the system.

Step 5 Click **OK**.

- Click **Export** to export devices in batches.
- Only encoders can be exported in batch.
- Click Mod... to change device password.

3.6.3 Searching and Adding Device

You can add automatically obtained channels in the same LAN as the Platform server.

Step 1 Select + > Device > Device.

Step 2 Click **Refresh** to refresh the device list on which all the devices are in the same network segment with the Platform.

Click network segment configuration to reconfigure the IP segment, and click search again to search for devices with IP addresses within this range.

Figure 3-27 Devices in the same segment with the Platform

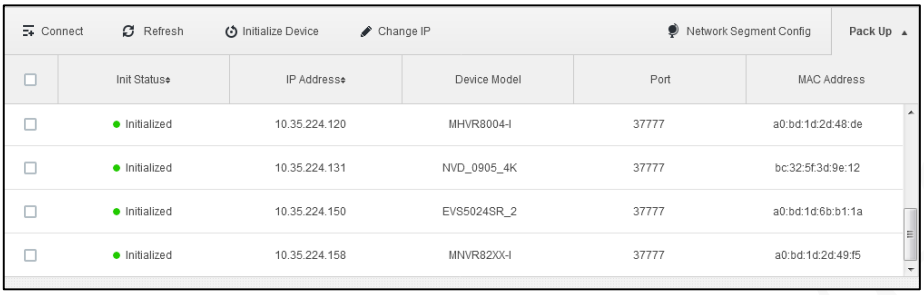


Table 3-6 Description of searching same segment devices

Parameter	Description
Connect	Select devices to be added and click **Connect** to add to the Platform.
Refresh	Click to obtain the latest device list.
Initialize Device	Select uninitialized devices and click **Initialize Device** to initialize in batches.
Change IP	Select devices, click **Change IP** and enter the user and password to validate before changing.
Network Segment Config	Click to set the IP segment to obtain devices within the defined range.
Pack Up/Find Device	To hide or display the obtained device list.

Step 3 Select the device to be added, and then click **Connect**.

Figure 3-28 Batch add

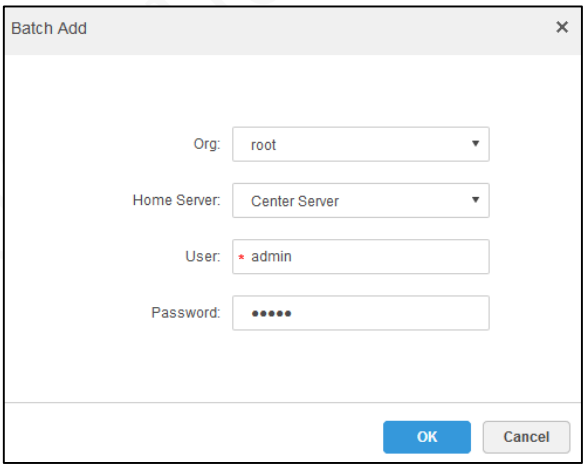


Table 3-7 Batch add parameter description

Parameter	Description
Org	Select the organization to which the device adds.
Home Server	The server (center and sub server) on which the Platform is deployed.
User	The username and password that have been used to log in to the device (The username is **admin** and the password is **admin123** by default).
Password	

Step 4 Configure parameters of **Batch Add**.

Step 5 Click **OK**.

The system adds devices to the corresponding organization.

3.6.4 Editing Device

After a device is added, edit it and set related channel information.

Step 1 Select > Device > Device.

Step 2 Click the corresponding in the added device list.

Click **Get Info**, and the Platform synchronizes the device information.

Figure 3-29 Editing Device

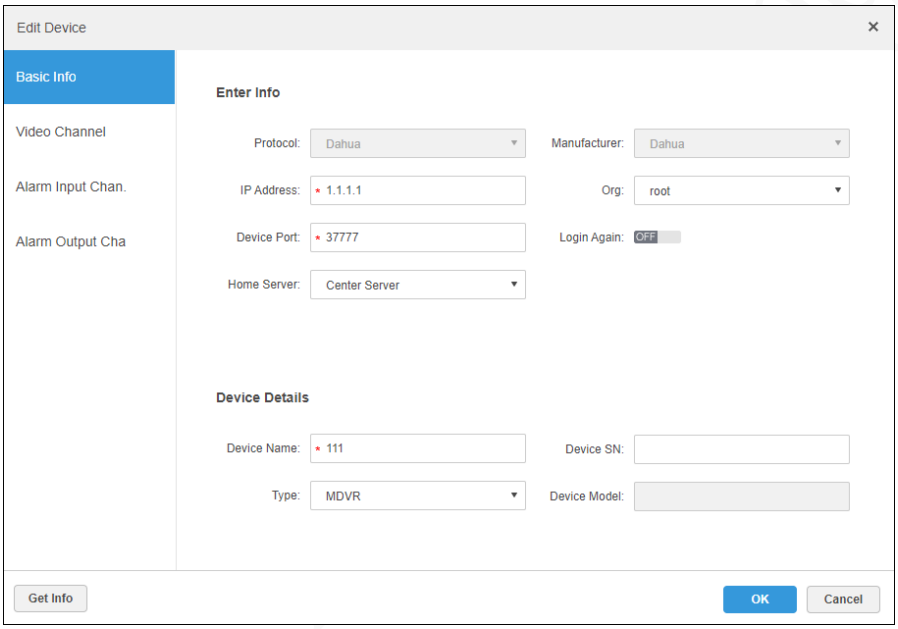


Table 3-8 Information parameter description

Parameter		Description
Enter Info	Protocol	Configured when adding the device. Cannot change.
	Manufacturer	
	Org	Select the organization to which the device adds.
	Device Port	The TCP port of the device. It is 37777 by default.
	Home Server	The server (center and sub server) on which the Platform is deployed.
	Login Again	When the device changes password, you can enable this to update new password.
Device Details	Device Name	The name, serial number, type and model (configured when adding the device, cannot change) of the device.
	Device SN	
	Type	
	Device Model	

Step 3 Modify the basic information of the device on the **Basic Info** interface.

Step 4 Click the **Video Channel** tab, and configure Channel Name, Channel Numbers, Camera Type, Features, SN, and Keyboard Code of the device.

Figure 3-30 Video Channel

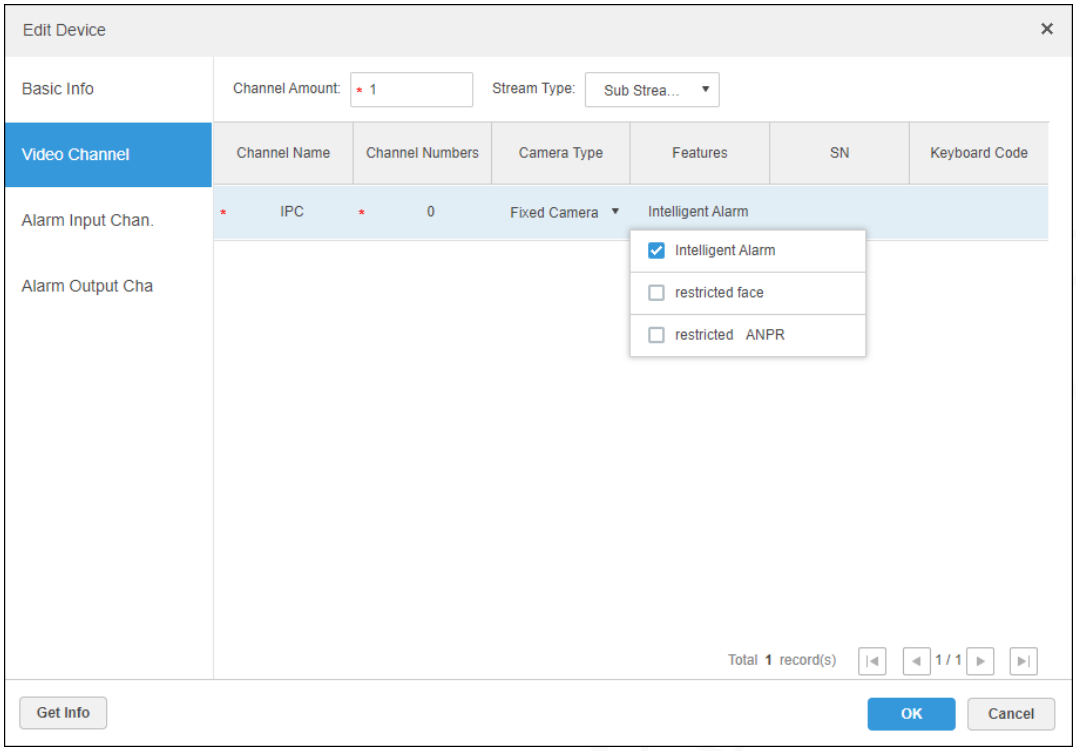


Table 3-9 Video channel description

Parameter	Description
Channel Amount	Set the video channel amount.
Stream Type	Select from **Main Stream**, **Sub Stream 1** and **Sub Stream 2**. The device pulls the video stream from the defined type.
Zero Channel Code	Enable it to pull stream of all channels.
Channel Name	Enter the channel name and number of the added device.
Channel Numbers	
Camera Type	Select from **Speed Dome**, **Fixed Camera** and **Dome Camera** as needed.
Features	Supports **Intelligent Alarm, restricted face, restricted ANPR**.
SN	Enter the device serial number.

- When ADAS or DSM is selected as the camera, select **Intelligent Alarm** as **Features**.
- When the camera connected to the video channel is used for restricted face, select **restricted face** as **Features**.
- When the camera connected to the video channel is used to capture the license plate, select **Restricted ANPR** as **Features**.

Step 5 (Optional) Select **Alarm Input Channel**, and configure related information.

Figure 3-31 Alarm input channel information configuration

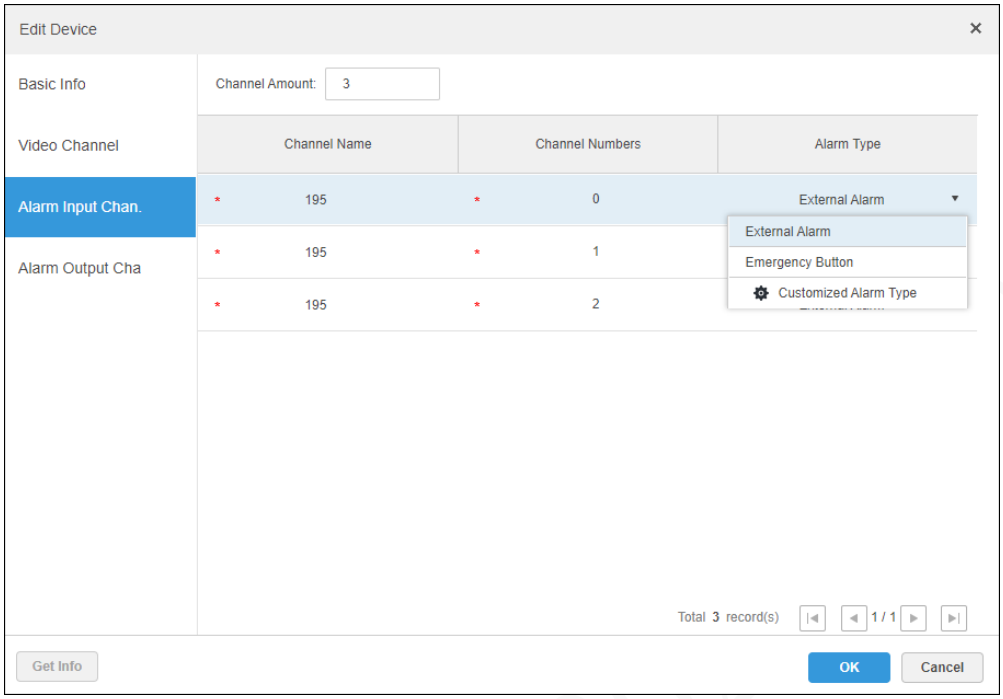


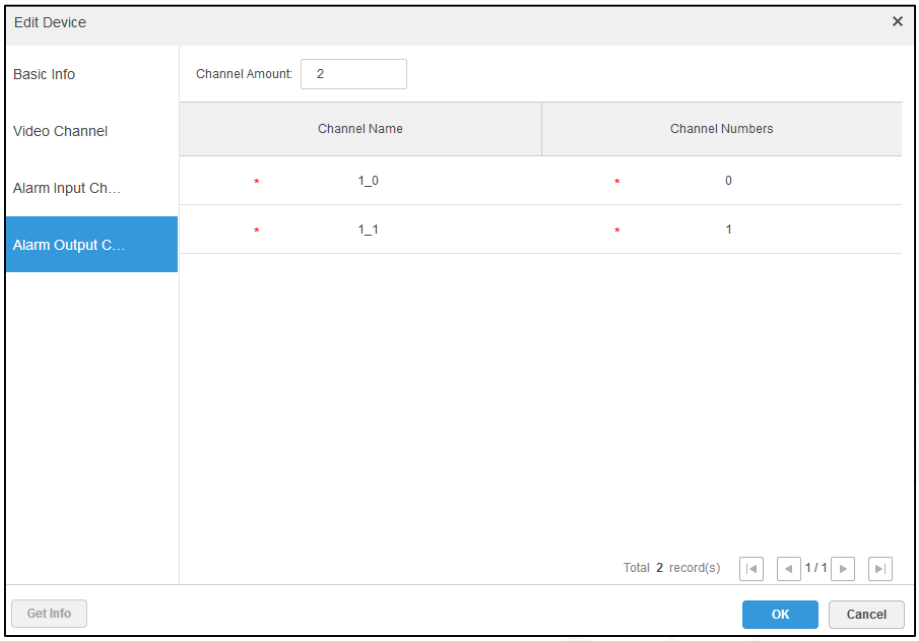
Table 3-10 Alarm input channel information description

Parameter	Description
Channel Amount	Set the amount, name and number of the channels.
Channel Name	
Channel Numbers	
Alarm Type	**External Alarm**: All alarms triggered by other devices except alarm buttons are configured as **External Alarm** by default. **Emergency Button**: When connecting with alarm buttons, select **Emergency Button** to enable the alarm to report to the Platform after triggering. **Customized Alarm Type**: You can add and delete customized alarm type. It supports up to 30 customized alarm type.

- Only configure the function when the added device supports alarm input.
- If the custom alarm type is used in **Alarm Scheme** under **Event**, it cannot be deleted but can only be modified.
- If the custom alarm type is not used in **Alarm Scheme**, it can be deleted. After deletion, the alarm type under **Alarm Input Channels** is restored to default.
- After the custom alarm type name is modified, the historical data keeps the original name and the new data uses the modified name.

Step 6 Select **Alarm Output Channel**, and you can modify the alarm output channel information such as **Channel Amount**, **Channel Name** and **Channel Number**.

Figure 3-32 Add alarm type



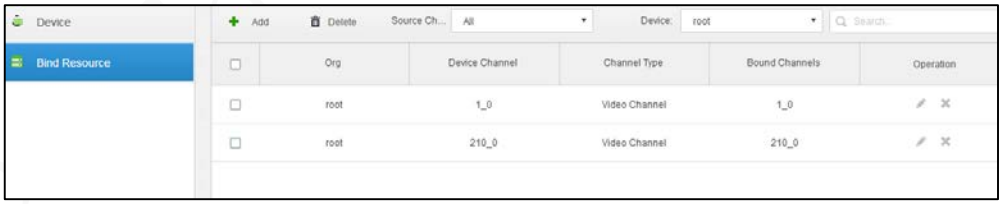
Step 7 Click **OK**.

3.6.5 Binding Resource

The Platform supports binding video channel with source channels (video channel and alarm input channel). In services such as **Map** and **Event**, you can view bound videos through the binding relationship.

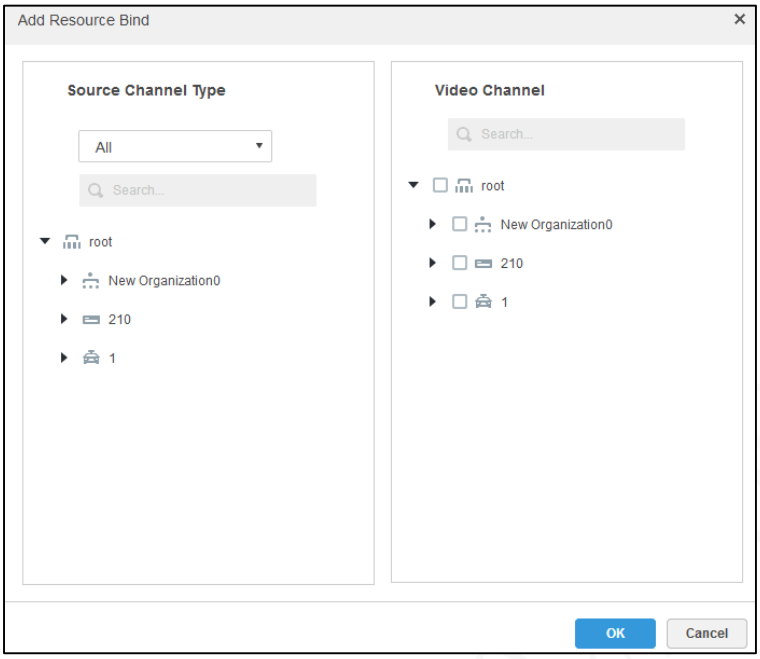
Step 1 Select > Device > Binding Resource.

Figure 3-33 Binding Resource



Step 2 Click **Add**.

Figure 3-34 Adding Resource Binding



Step 3 Select source channel and video channel separately, and then click **OK**.

3.7 Configuring Record Plan

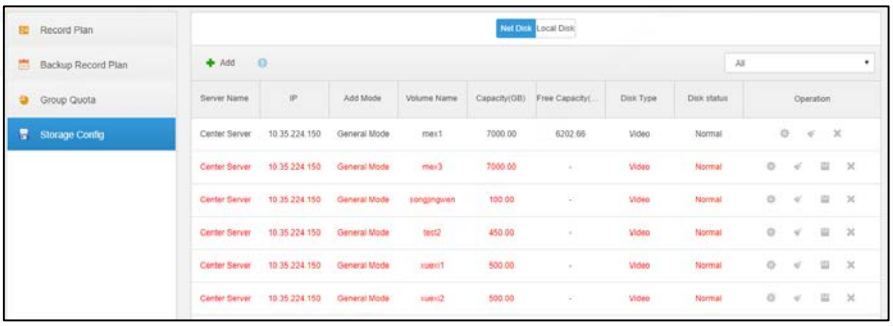
The Platform supports configuration of record plan for video channels to have the camera recording during the defined time.

3.7.1 Configuring Storage Disk

Procedure

Step 1 Select + > Storage > Storage Config.

Figure 3-35 Storage configuration

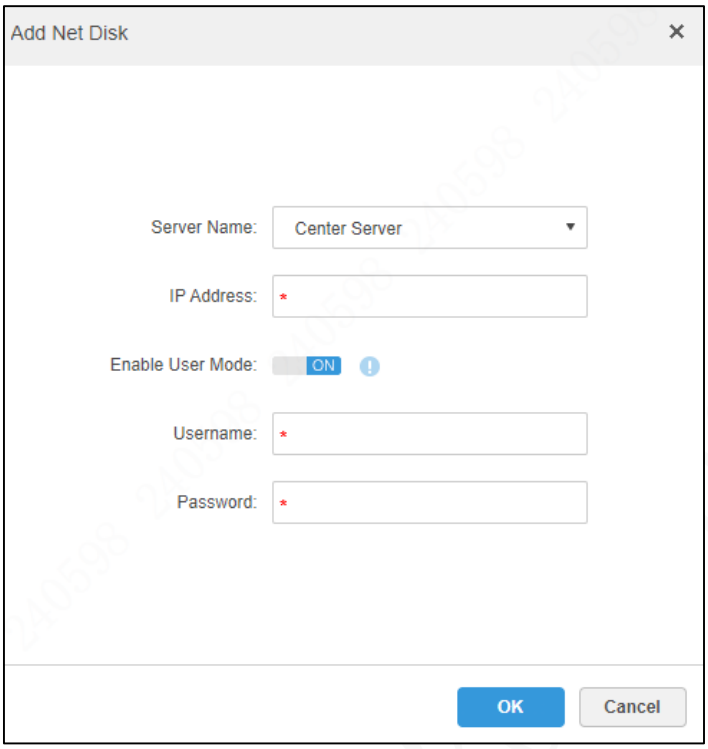


Step 2 Configure disk information, and select **Net Disk** or **Local Disk**

- Net disk

1) Select **Net Disk**, and then click **Add**.

Figure 3-36 Adding net disk



2) Configure **Server Name**, and enter the IP address.

- **Enable User Mode** is off: Net disk is directly added in the form of IP and can be added by multiple systems in the same network.
- **Enable User Mode** is on: Only add the storage space allocated to the user (username and password required) from the net disk.

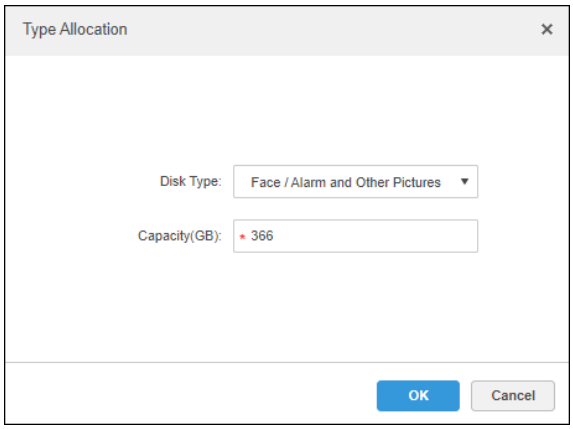
3) Click **OK**.

- Local disk

  The local disk only supports changing disk type.

1) Select **Local Disk**, and then click in disk operation.

Figure 3-37 Type allocation



2) Select **Face / Alarm and Other Pictures** as disk type.

To make sure that alarm images can be displayed normally, select **Face / Alarm and Other Pictures** as disk type. The capacity cannot exceed the local disk capacity. Click **OK**.

Related Operations

Select a disk and click **Format** or to format it.

After formatting, you can view the disk in the list and confirm whether the disk size and available space are correct.

3.7.2 Configuring Group Quota

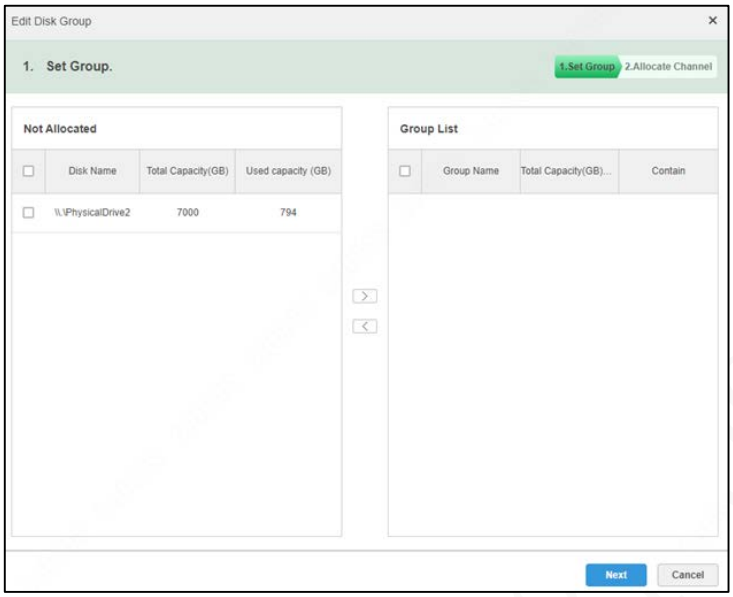
Take a single server as the operation unit to group storage disks, and specify the storage path of video channels to a fixed disk group. On the one hand, directional storage is realized through grouping and binding; on the other hand, scheduled storage is realized through the proportional relationship between disk capacity and channels.

Step 1 Select Group Quota.

Figure 3-38 Group quota

Step 2 Click

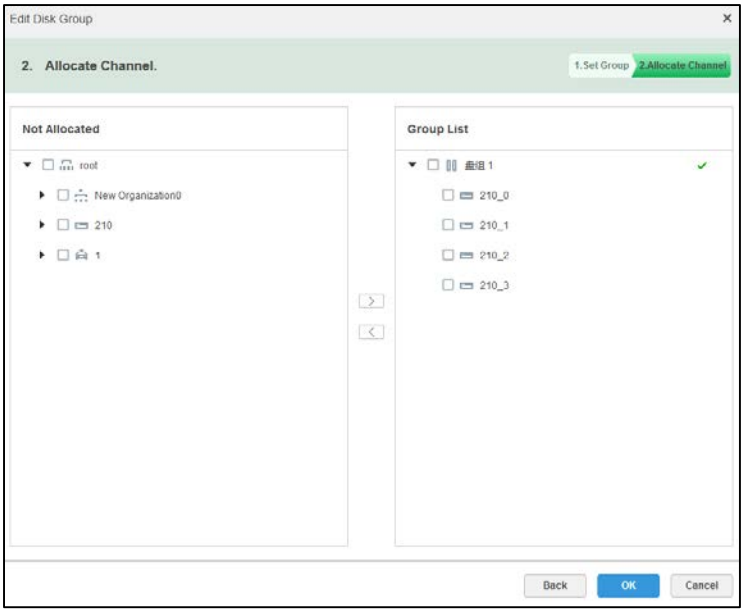
Figure 3-39 Editing disk group



Step 3 Select a disk on the left side, and then click to add it to the group list on the right side.

Step 4 Click **Next** to allocate channels to the disk group.

Figure 3-40 Allocating channel



Step 5 Select a channel from the device list as needed, and then click to add it to the disk group on the right side.

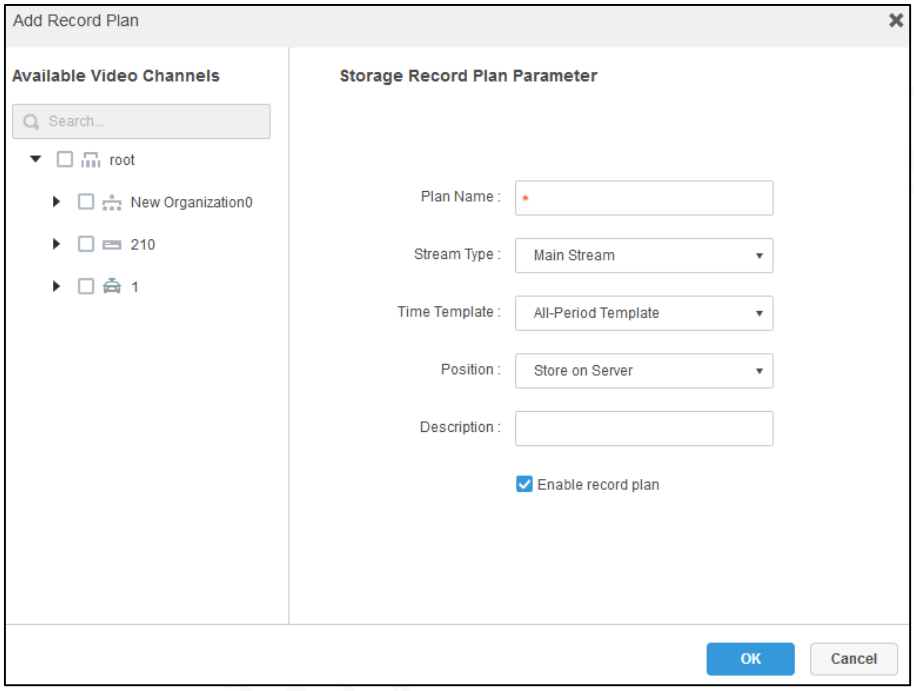
Step 6 Click **OK**.

3.7.3 Adding Record Plan

Procedure

Step 1 Select > **Storage** > **Record Plan**, and then click **Add**.

Figure 3-41 Add record plan



Step 2 Select the video channel to create record plan, and configure **Plan Name**, **Stream Type**, **Time Template** and **Position**.

- Stream type: Main Stream, Sub Stream 1, and Sub Stream 2.
- You can select the default time template or create a time template. For details, see "3.7.4Adding Time Template".
- You can select server or video recorder as the storage position.

Step 3 Click **OK**.

Related Operations

- Enable or disable record plan

  In the operation bar, ON means that the plan has been enabled; click the icon to disable the plan, and the icon turns to OFF.
- Edit record plan

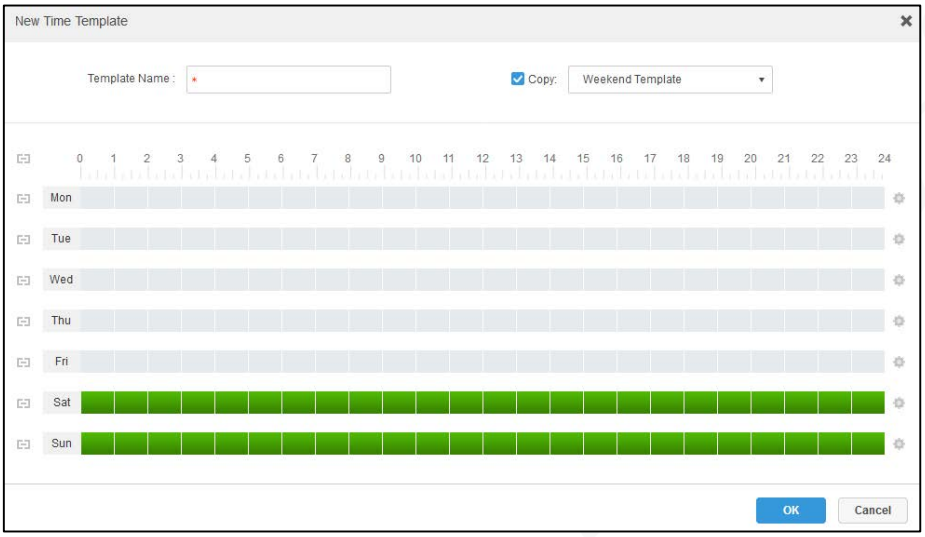
  Click to edit.
- Delete record plan
  - ◇ Select multiple record plans, and then click **Delete** in batches.

◇ Click to delete one by one.

3.7.4 Adding Time Template

Step 1 Select **New Time Template** in **Time Template** drop-down list when adding record plan.

Figure 3-42 New time template



Step 2 Set template name and period.

- Press and drag the mouse on the timeline to set the period.
- Click corresponding to the day of week to directly set the period through entering time and days.

- Enable the day of week. The record plan can be set on multiple dates at the same time. You can set up to six periods for one day.
- Select **Copy** to directly copy the existing time template.

Step 3 Click **OK**.

3.7.5 Adding Backup Record Plan

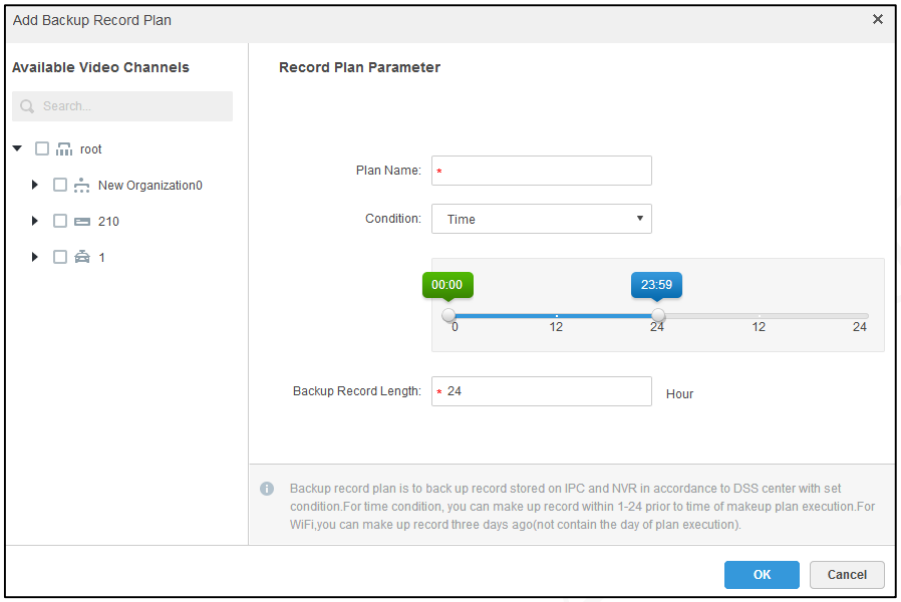
The system can back up device records of the first three days, and you can configure the plan across days.

- Backup videos come from the local recording of camera.
- Time and Wi-Fi can be selected as **Condition**. If time is selected, set the backup record plan time, at which the record will be automatically backed up. If Wi-Fi is selected, when the device is connected to Wi-Fi, the record will be automatically backed up.

Procedure

Step 1 Select > Storage > Backup Record Plan, and then click Add.

Figure 3-43 Time as condition



Step 2 Configure parameters.

Table 3-11 Backup record plan configuration

Parameter	Description
Avialable Video Channels	Select video channels to backup.
Plan Name	Enter the record plan name.
Condition	**Time**: Set the time of automatic recording backup through dragging the time bar. **Wi-Fi**: Starts to backup when the device is connected with Wi-Fi.
Backup Record Length	Set the length of the backup recordings (up to 24 hours). Only appears when setting **Time** as **Condition**.

Step 3 Click **OK**.

Related Operations

- Enable or disable backup record plan

  In the operation bar, ON means that the plan has been enabled; click the icon to disable the plan, and the icon turns to OFF.
- Edit backup record plan

  Click corresponding to the backup record plan to edit it.
- Delete backup record plan
  - ◇ Select multiple backup record plans, and then click **Delete** in batches.

◇ Click to delete one by one.

3.8 Configuring Event Management

After the alarm scheme is configured on the Web Manager, the reported events can be displayed and processed on the client.

3.8.1 Configuring Alarm Source

The alarm source can be video channel and alarm input channel. The alarm type varies with the encoder.

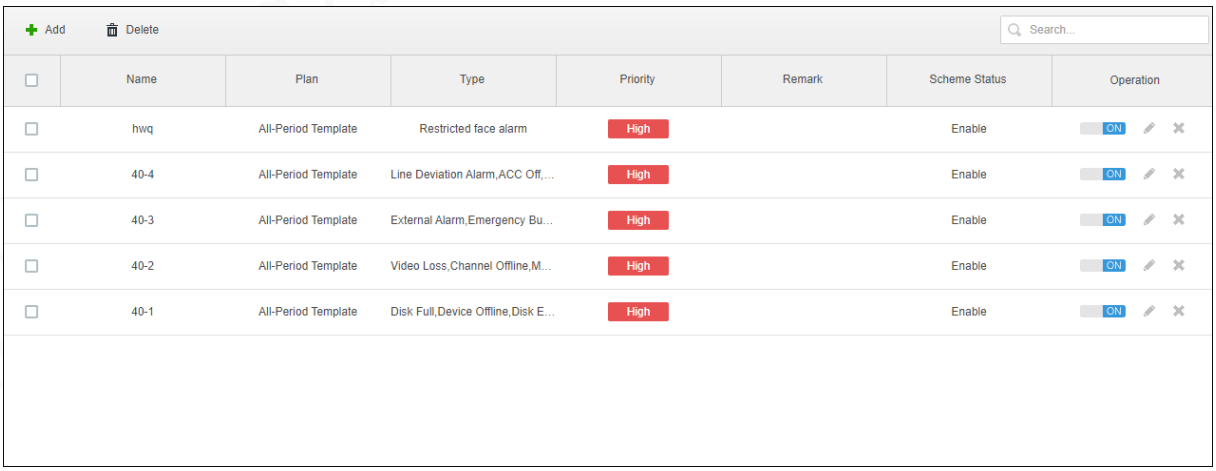
- Before configuration, confirm that the alarm input channel of the device has been connected to the external alarm device; otherwise, no alarm will be uploaded.
- Configure different alarm types for different devices. For details, see the corresponding user's manual.

3.8.2 Adding Alarm Scheme

Set the alarm events to be displayed on web manager. You can link the alarm with camera, PTZ, email, video wall and more to perform various operations, and set alarm periods.

Step 1 Select > **Event**, and then click **Add**.

Figure 3-44 Event

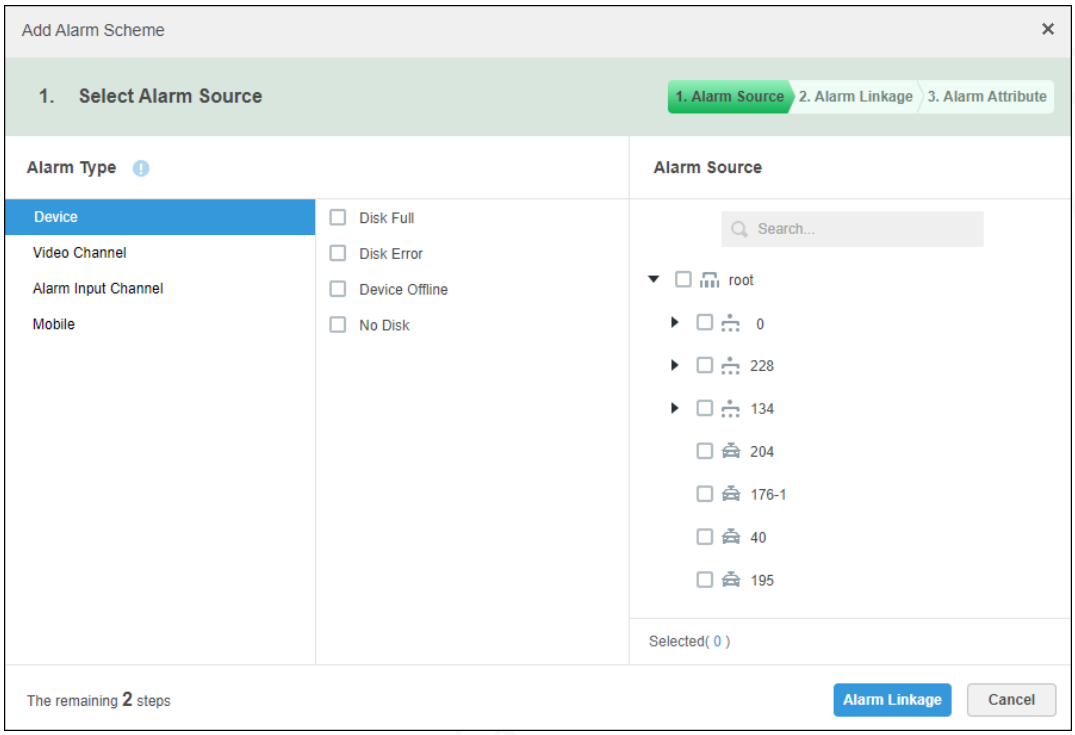


Step 2 Configure alarm source.

Select the alarm type, event type and the corresponding device.

When setting **Alarm Input Channel** as the **Alarm Type**, make sure the event type (external alarm and emergency button) is consistent with what selected when editing the device channel.

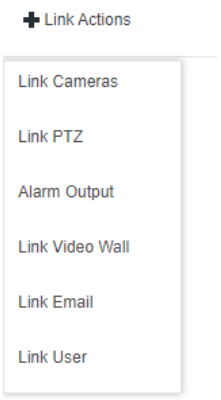
Figure 3-45 Select alarm source



Step 3 Configure alarm linkage.

1) Click Alarm Linkage and then click ✚.

Figure 3-46 Link actions



2) Select one or more linkage actions.

◇ Select **Link Cameras** to set parameters.

Figure 3-47 Link cameras

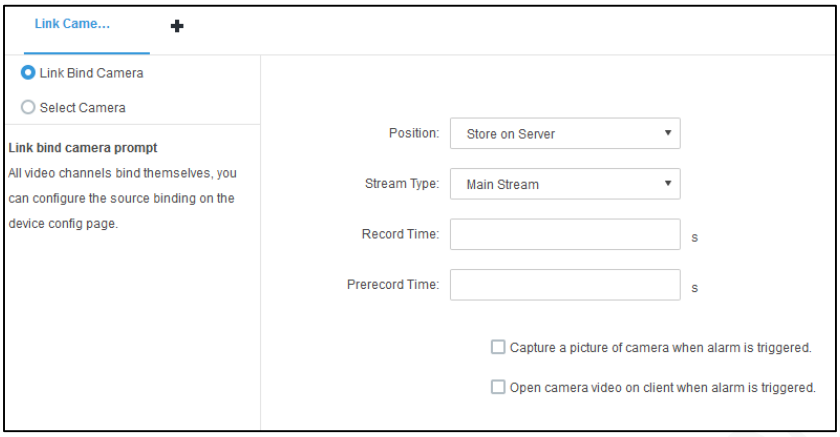


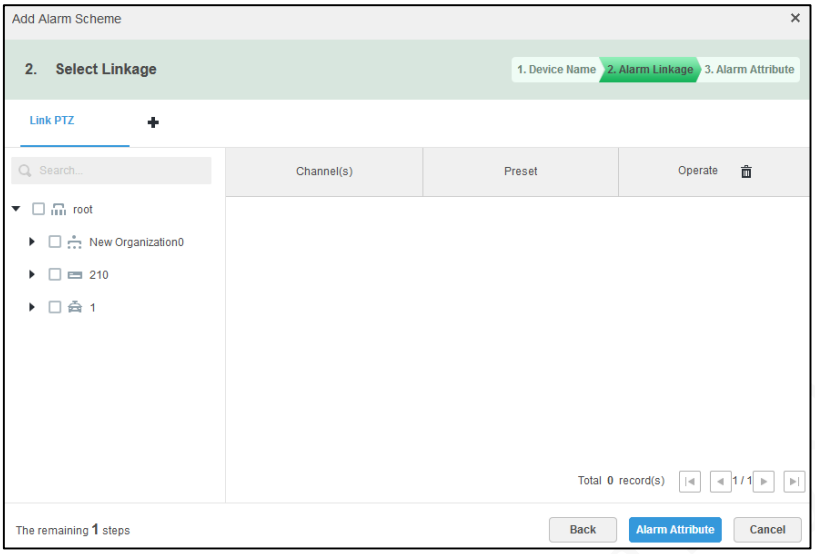
Table 3-12 Parameter description of link cameras

Parameter	Description
Link Bind Camera	● Link Bind Camera: The video channel has been bound to the alarm source. Quickly configure the scheme through the resource binding relationship in **Device > Bind Resource**. ● Select Camera: Manually select cameras that need to be linked with the alarm source.
Select Camera	
Position	Set storage path. You can select whether to store on server or not.
Stream Type	Set stream type of the recorded video. The main stream is clearer but consumes more resources than the sub stream.
Record Time	Set the recording duration.
Prerecord Time	Set the recording start time before an alarm is triggered. The selected device needs to support recording and storing video records.
Capture a picture of camera when alarm is triggered.	Confirm whether to capture when an alarm is triggered.
Open camera video on client when alarm is triggered.	Confirm whether to open the camera video on the client when an alarm is triggered.

◇ Select **Link PTZ**, and select the channel to link PTZ.

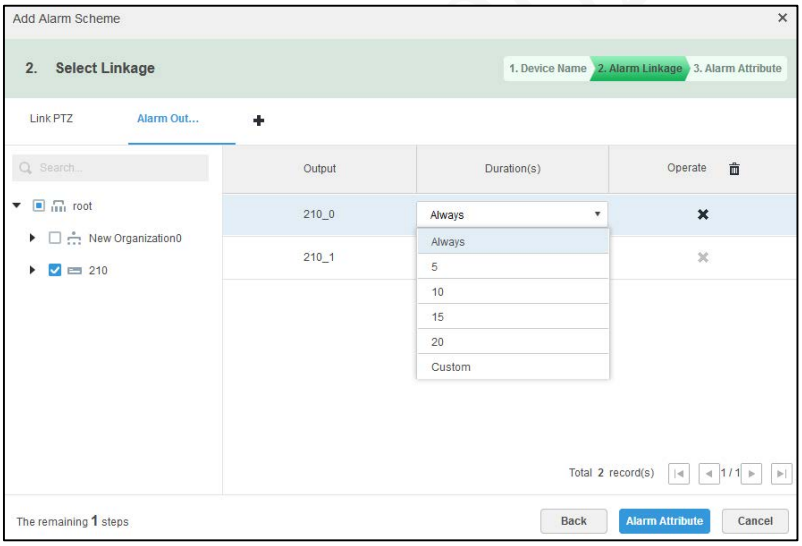
Preset is defined from 1–255, which is configured on the PTZ web. For example, you can set the PTZ preset point 1 as turning left at an angle of 30°, and then set 1 as **Preset** on the Platform. When an alarm is triggered, the PTZ will turn 30°left.

Figure 3-48 Link PTZ



◇ Select **Alarm Output**, select an alarm output channel, and then set the alarm duration.

Figure 3-49 Alarm output



◇ Select **Link Video Wall**, select linked cameras on the left side and video walls on the right side. Click **Edit Video Wall Alarm Window Setup** to set the duration, and select the video channel to be displayed on wall.

The interface is different when you select **Link Bind Camera** and **Select Camera**. The actual interface shall prevail.

Figure 3-50 Link video wall

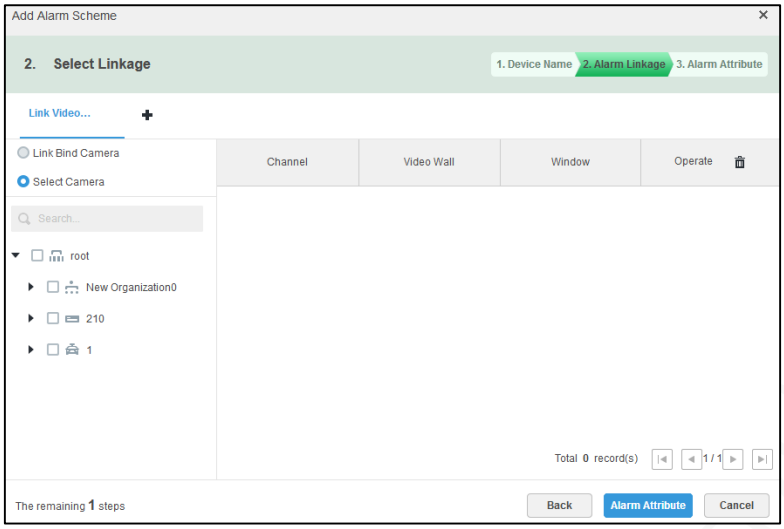
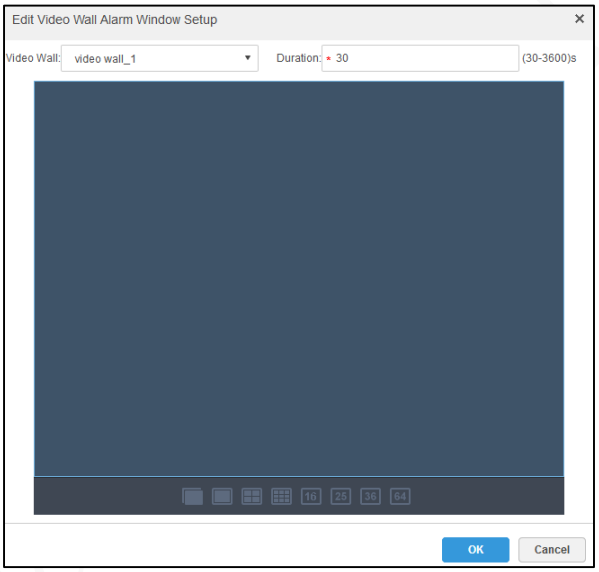


Figure 3-51 Edit video wall alarm window setup



◇ Select **Link Email**, and select email template and recipient.

Email template can be configured. Click ▼ next to **Email Template**, and then select **New Mail Template**. Click **Event time**, **Org name** and other buttons to insert them into **Subject** or **Mail Content**.

Figure 3-52 Link email

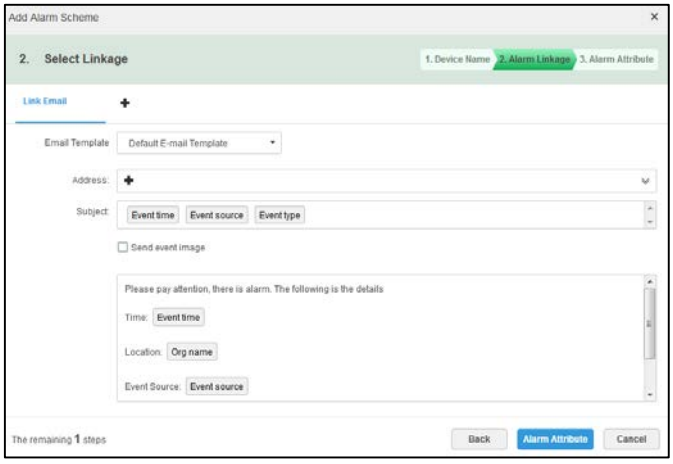
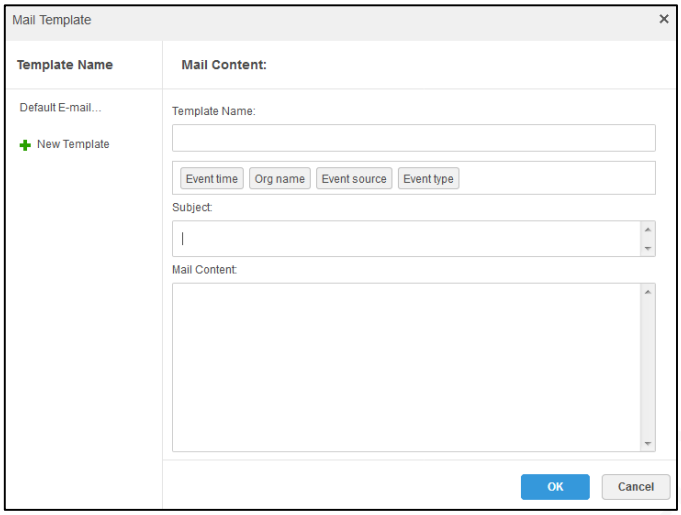
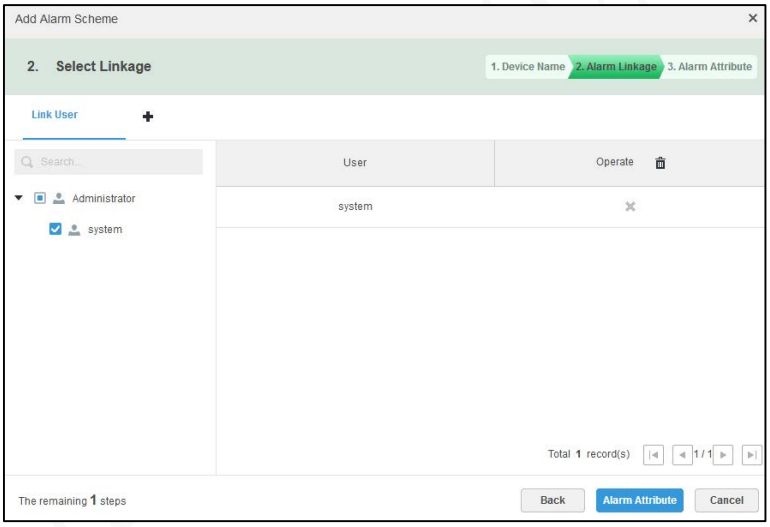


Figure 3-53 Mail template



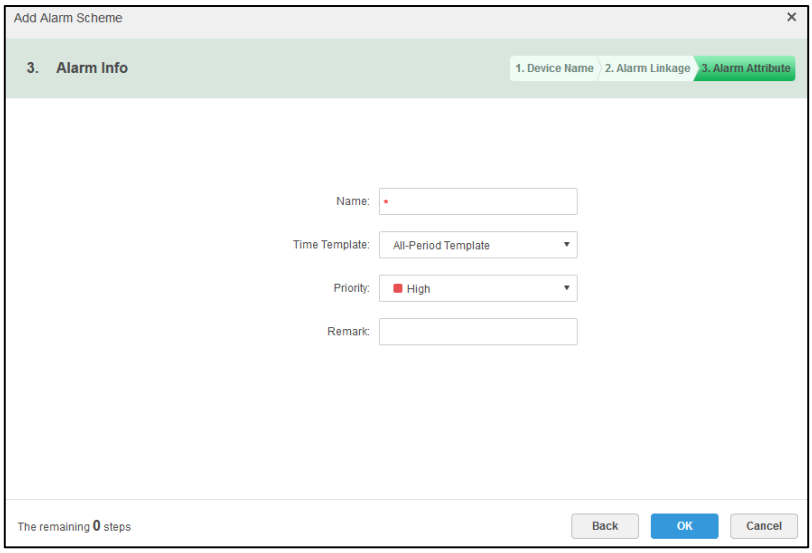
◇ Select **Link User**, and then select the users to be notified when an alarm is triggered.

Figure 3-54 Link user



Step 4 Click Alarm Attribute.

Figure 3-55 Alarm attribute



Step 5 Configure alarm attribute.

1) Set alarm name.
2) Select the time template and the priority of alarm.
3) Click **OK**.

Related Operations

- Edit

  Click corresponding to the alarm scheme to edit it.

- Delete
  - ◇ Select multiple alarm schemes and click **Delete** to delete them in batches.
  - ◇ Click next to the alarm scheme to delete one by one.
- Enable or disable alarm scheme

  In the operation bar, ON means that the scheme is enabled; click the icon to disable it, and the icon turns to OFF.

3.9 Configuring Map

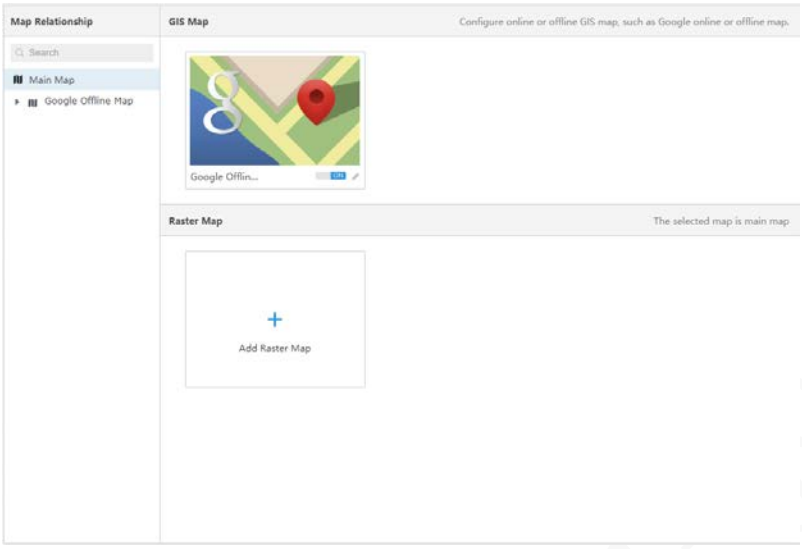
Select map category on Web Manager from raster map, Google online map and Google offline map, and drag the video device and alarm device to the map before using E-Map on the client. E-Map supports alarm prompt, video view and record playback.

- Raster map
  The raster map is a displayed picture, which is suitable for indoor scenes. Place the camera in a fixed location indoors, such as parking lots and similar plane scenes. For passenger flow counting, retail and similar indoor scenes, the server enables raster map by default.
- Google online Map
  For Google online Map, the client needs to have network permission to access Google map. When you use Google online map through network, the map of the entire city is displayed; it can be zoomed in or out to display a large city image or to be accurate to a location in the city.
- Google offline map
  For Google offline map, when the offline map is deployed on other servers and the client that accesses the map can connect the server. The offline map is accessible and the functions are the same as Google online map.

3.9.1 Editing GIS Map

Step 1 Select > **Map**.

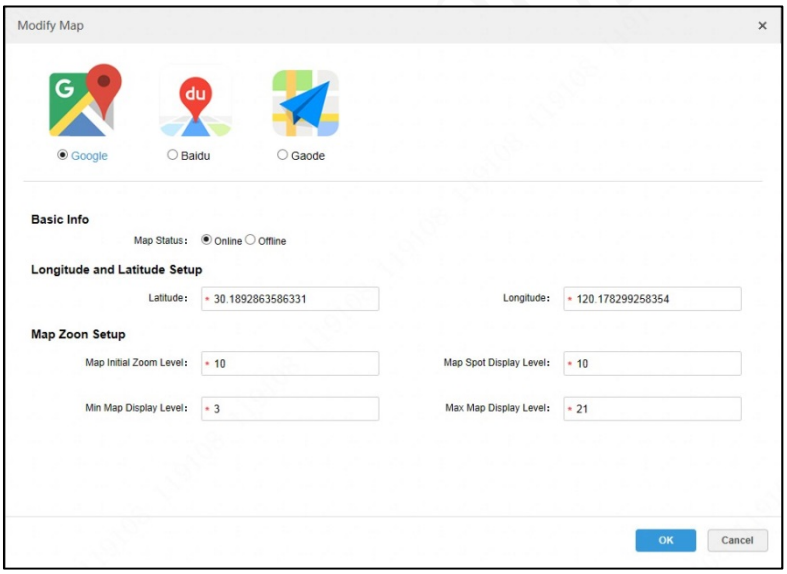
Figure 3-56 Map interface



Step 2 Click next to the GIS Map.

Select from **Google, Baidu** and **Gaode**, and then configure the map information.

Figure 3-57 Map modification



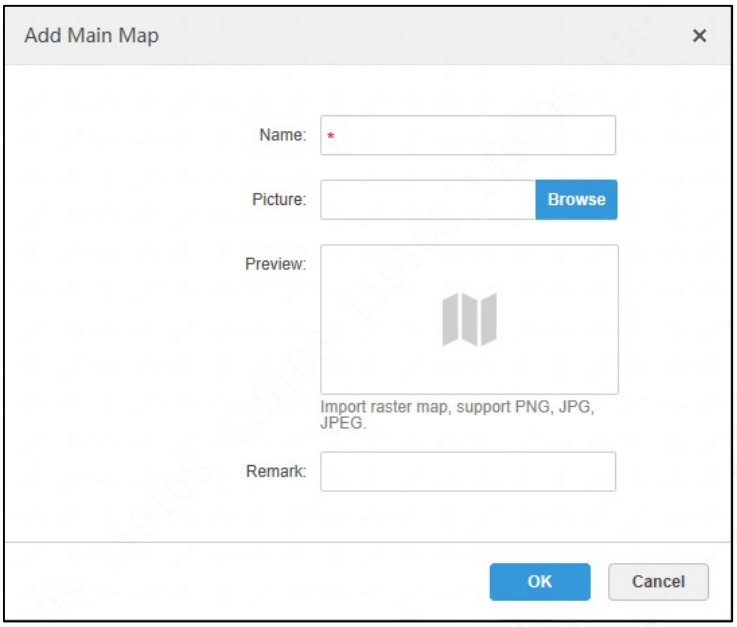
Step 3 Click **OK**.

3.9.2 Adding Hot Zone

You can add a raster map as the hot zone to view detailed scene images, such as parking lots and similar plane scenes.

Step 1 Click **Add Raster Map** on the **Map** interface.

Figure 3-58 Adding main map



Step 2 Enter the name, select the picture to upload, and then click **OK**.

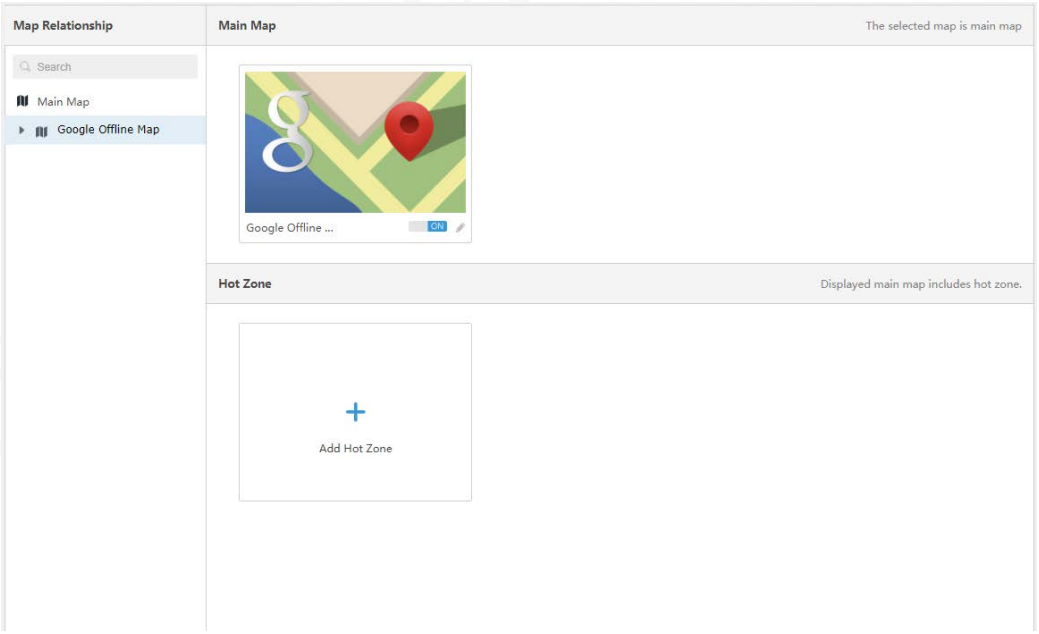
You can also continue to add multiple raster maps.

Step 3 Add hot zone.

You can add up to seven layers of hot zone.

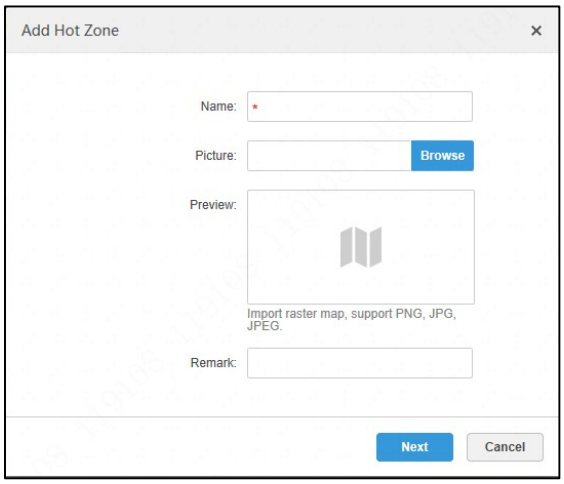
1) Select the map that has been added on the left side.

Figure 3-59 Adding Hot Zone



2) Click **Add Hot Zone**.

Figure 3-60 Adding Hot Zone



3) Enter **Name** and upload a picture, and then click **Next**.
4) Drag the icon to determine the hot zone position, and then click **OK**.

3.9.3 Marking Device

Step 1 Click an added main map in the main map tree on the **Map** interface.

Figure 3-61 Map

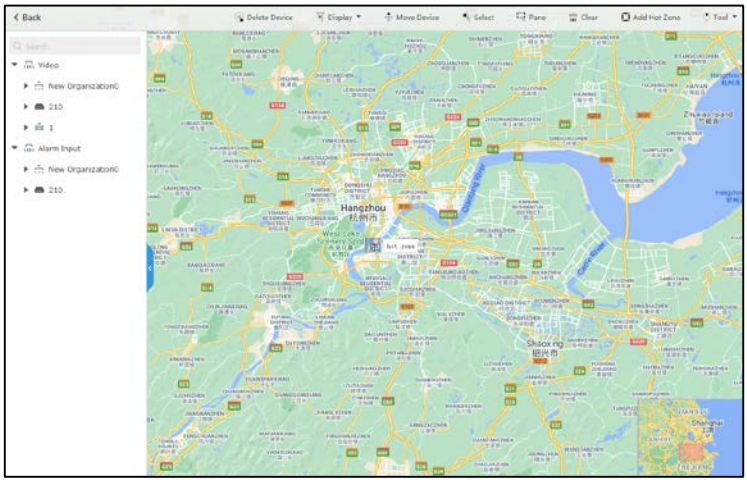


Table 3-13 Description of functions on the map interface

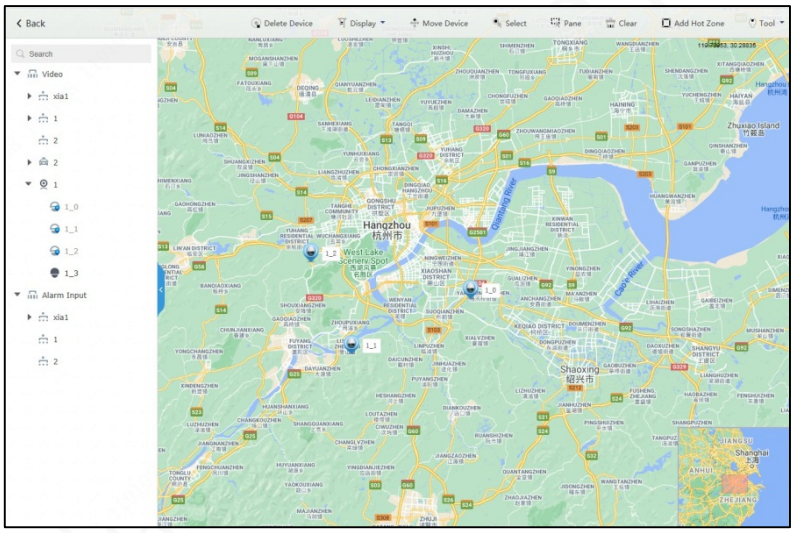
Parameter	Description
Display	Select to display video devices or alarm input channels.
Move Device	Click to move the device to another location on the map.
Select	Select a device.
Pane	Draw a rectangle to select multiple devices.
Clear	Clear pane select traces on the screen.
Add Hot Zone	Click to add a hot zone on the map.

Parameter	Description
Tool	● **Length**: Measure the actual distance between start and end points drawn on the map. ● **Area**: Measure the actual area of a drawn region on the map. ● **Mark**: Mark on the map. ● **Reset**: Restore the map to the initial default position.
Other Operations	● Click the hot zone to modify its information. ● Double-click the hot zone, and the system automatically jumps to the hot zone map, to which channels can be dragged and on which you can add hot zone.

Step 2 Drag device channels in the device tree on the left side to the corresponding locations on the map.

Mobile device MDVR cannot be dragged to the map for display.

Figure 3-62 Marking Device



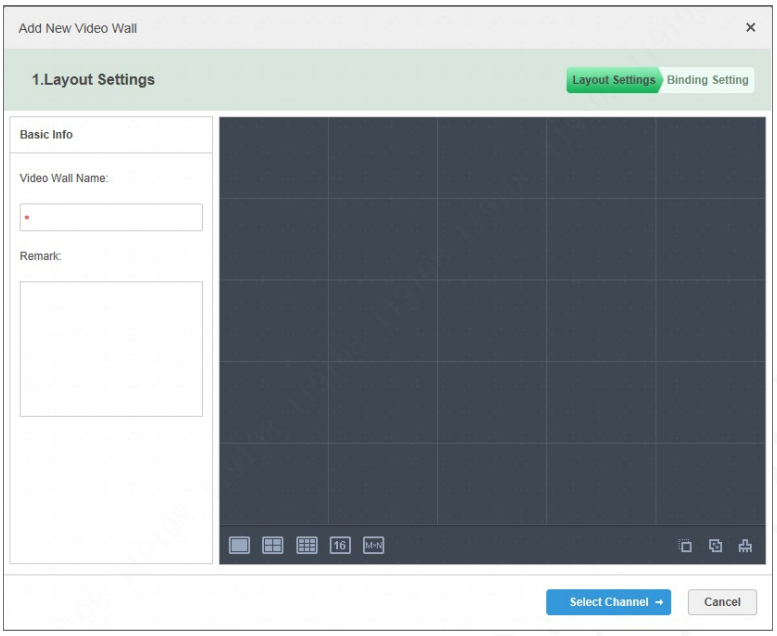
3.10 Adding Video Wall

Configure to display video on the wall.

Step 1 Select > **Video Wall**.

Step 2 Click Add Video Wall.

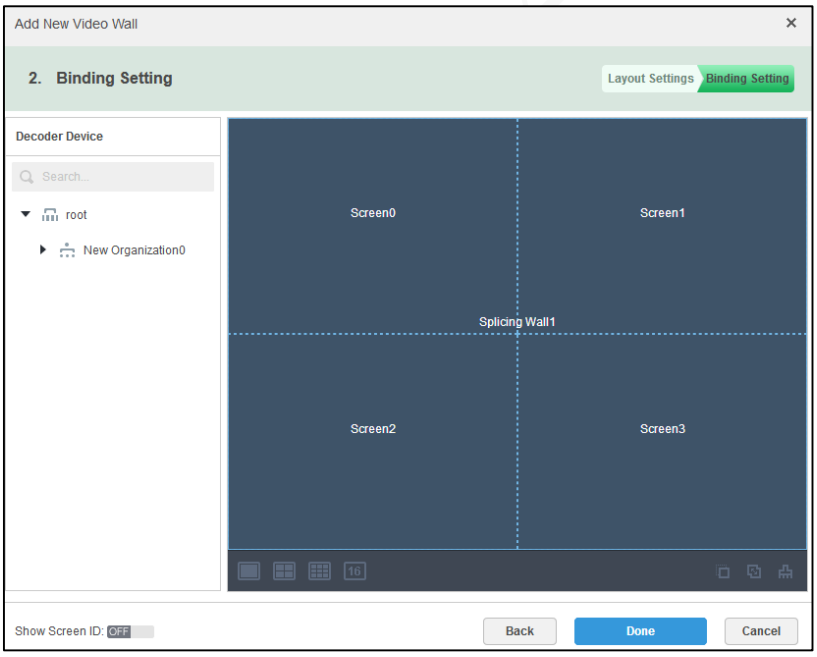
Figure 3-63 New video wall



Step 3 Enter the video wall name and select window layout.

Step 4 Click Select Channel.

Figure 3-64 Selecting decode channel



You can select whether to show screen ID. **Off** means that the screen ID has been disabled. Click the icon to enable the screen ID.

Step 5 Select the decoder to be bound in **Device Tree** and drag it to the corresponding screen.

Step 6 Click **OK**.

3.11 Configuring Vehicle

3.11.1 Updating Device

Upload the update package of the device for remote device update.

Procedure

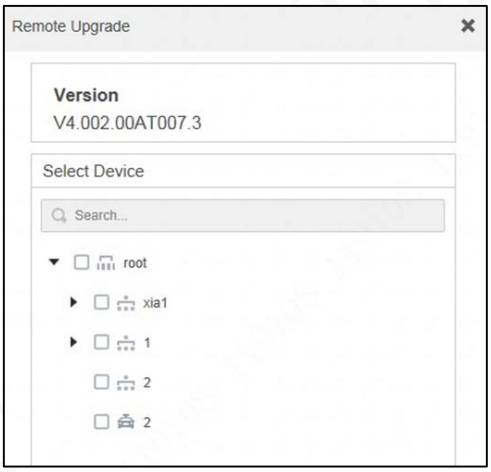
Step 1 Select > Vehicle > Package Management, and then click Upload.

Step 2 Select a local update package to upload.

You need to configure **FTP** in **System** before uploading.

Step 3 Select the update package, and then click .

Figure 3-65 Remote upgrade



Step 4 Select the device to be updated, and then click **OK**.

Step 5 Select **Mobile > Device Remote Upgrade** to view the update status.

Related Operations

- Click **Refresh** to get the latest updating progress.
- Click or select an update package and click **Delete** to delete it.

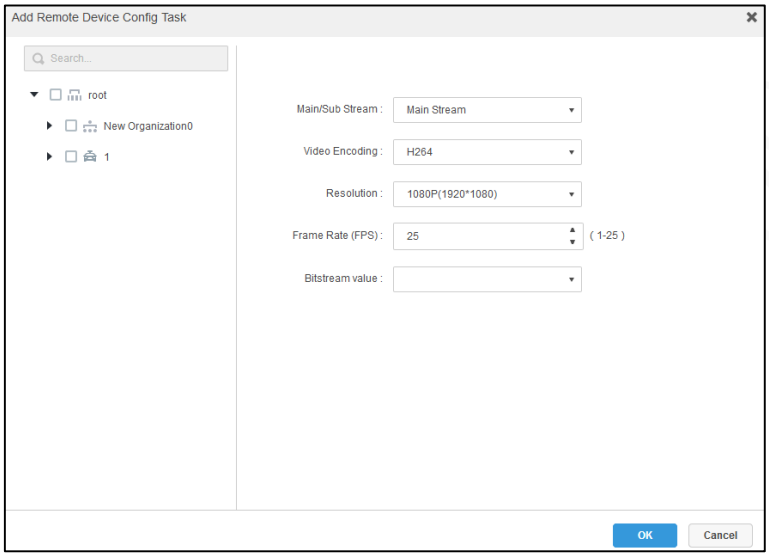
  After the update package is deleted, the corresponding records in **Upgrading** and **Completed** status are deleted.

3.11.2 Configuring Device in Batches

Procedure

Step 1 Select > Vehicle > Device Batch Config, and then click Add.

Figure 3-66 Device configuration task



Step 2 Configure parameters.

The higher the bitstream value, the better the video quality.

Step 3 Click **OK**.

Related Operations

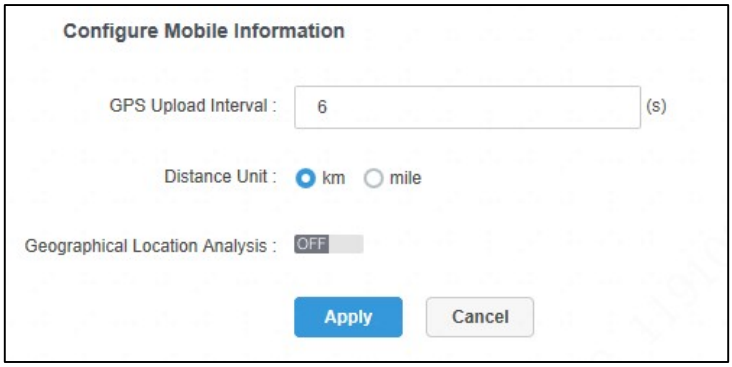
- Click to delete the device configuration task.
- Click to view exception details of tasks that failed to be issued.
- Click to refresh the task list.

3.11.3 Configuring Mobile Information

You can configure mobile information of the device through selecting > **Vehicle > Configure Mobile Information**.

The GPS upload interval range is 6 s–60 s.

Figure 3-67 Configuring vehicle information



3.11.4 Active Security Rule

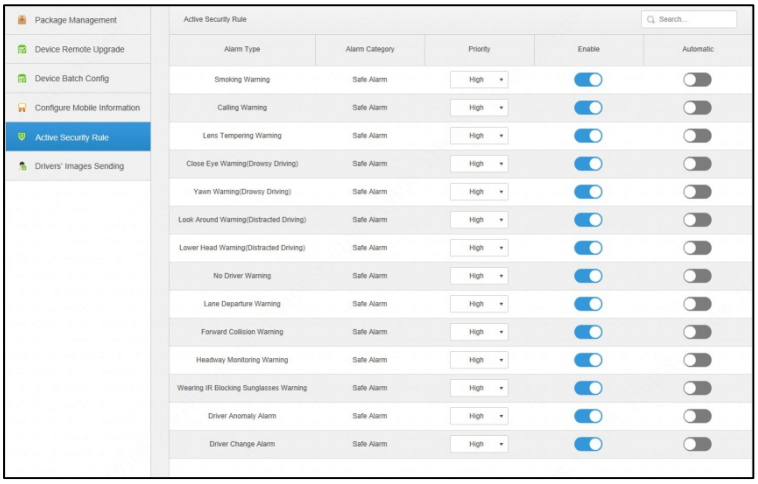
Configure active security rules on the mobile ADAS, including the security level of active security alarm, whether to enable, whether to push to the real-time alarm floating window of the client, and whether to automatically process.

Step 1 Select > Vehicle > Active Security Rule.

Step 2 Click **Enable** next to a security rule to enable or disable it.

Step 3 Click **Automatic** next to a security rule to enable or disable automatic alarm processing.

Figure 3-68 Active Security Rule



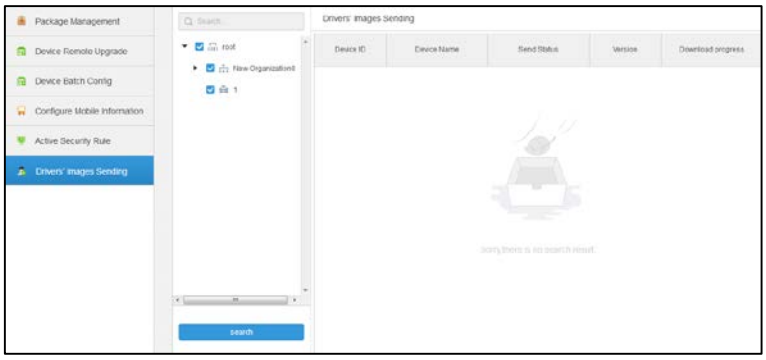
3.11.5 Driver's Images Sending

It is used to view the progress of sending face images from the Platform to the device.

Step 1 Select > Vehicle > Driver's Images Sending.

Step 2 Select a device in the device tree on the left side, and then click **Search**.

Figure 3-69 Driver's Images Sending



3.12 System Maintenance

3.12.1 Managing Server

- Select + > **Server Management > Server Config**, if you have deployed multiple servers, you can do following operations.

Figure 3-70 Server configuration

◇ OFF means that the server is disabled; click the icon to enable the server, and the icon turns to ON.

◇ Click ✖ to delete the server information.

- Select + > **Server Management > Resource Config**, you can drag devices from the right side to the server (listed on the right side) to bind them.

Figure 3-71 Resource configuration

3.12.2 Backup and Restoration

Web Manager can back up and save the configured information to the local PC and restore the system through the backup file for system maintenance and security.

Backup and restoration are available only for system users. That is, system backup and restoration can only be realized by logging in to the Web Manager with a system account.

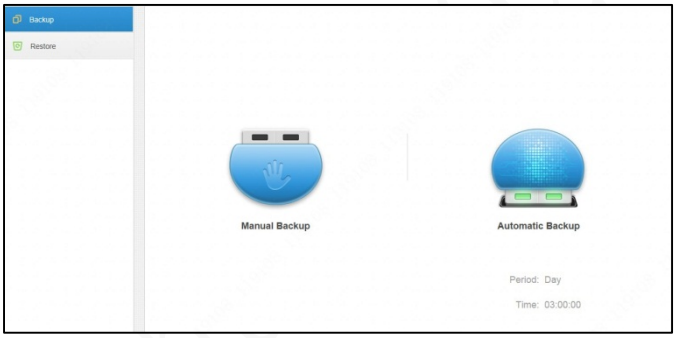
3.12.2.1 System Backup

To ensure the security of user data, the system provides data backup, which includes manual backup and automatic backup.

- Manual Backup

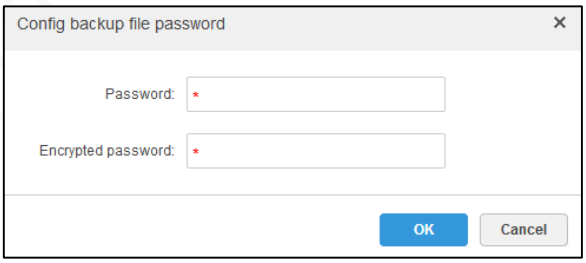
Step 1 Select > Backup and Restore > Backup.

Figure 3-72 Tab selection



Step 2 Click **Manual Backup** and configure the backup file Password and **Encrypted Password**.

Figure 3-73 Backup file password configuration



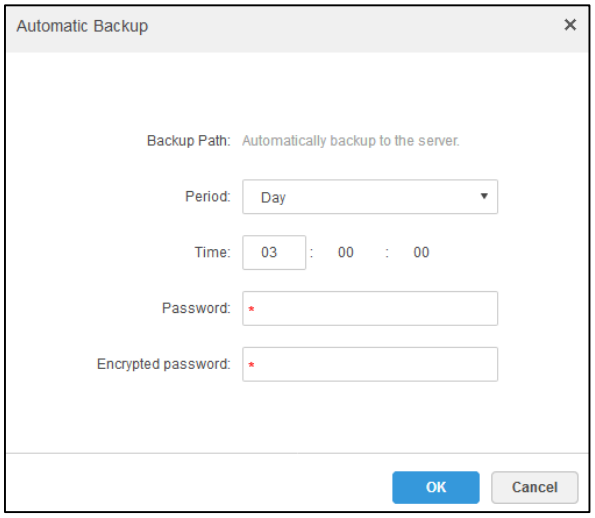
Step 3 Click **OK**, and the backup file will be downloaded to your PC.

- Automatic Backup

Step 1 Select > Backup and Restore > Backup.

Step 2 Click **Automatic Backup** and configure parameters.

Figure 3-74 Automatic Backup



Step 3 Click **OK**.

Files are automatically backed up to the server based on the selected period and time.

Step 4 View the automatically backed up files on the server. The default backup path is Server Installation Directory-Servers-back- db_backup

Figure 3-75 Viewing backup directory

3.12.2.2 Restoring System

When the user database is abnormal, you can use system restoration to restore the data to the last backup time, thus quickly restoring the Platform and reduce losses.

During system restoration, stop other users from using the Platform. This function might change the data information. Use this function with caution.

- Local File Restoration

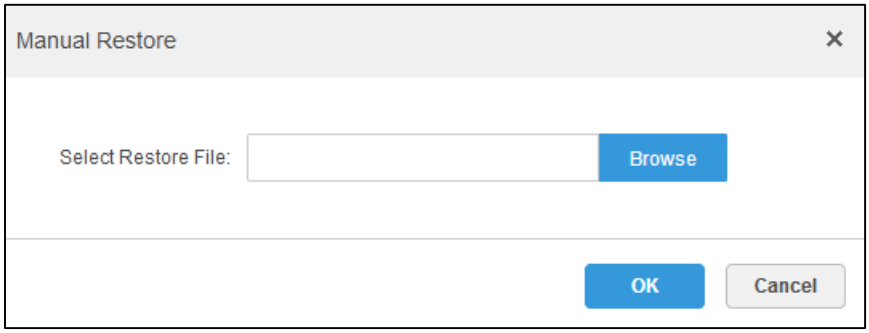
  Local restoration usually restores the backup file to the server.

Step 1 Select + > Backup and Restore > Restore.

Figure 3-76 Restoring System

Step 2 Click **Local**.

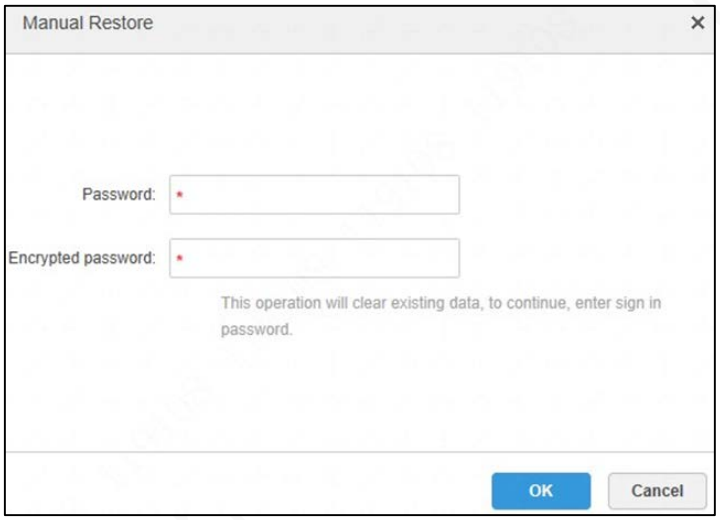
Figure 3-77 Select the backup file path.



Step 3 Click **Browse**, select a file and click **OK**.

Step 4 Set Password and Encrypted Password.

Figure 3-78 Entering password



Step 5 Click **OK**.

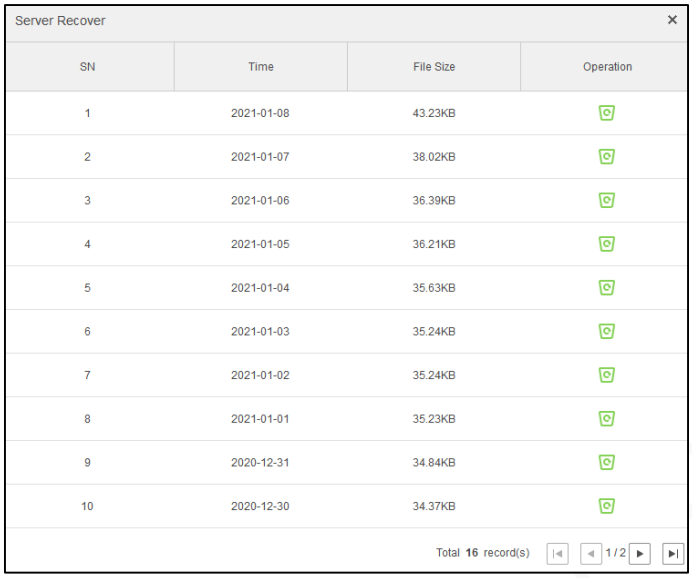
During data restoration, you can see the restoration progress from the process bar. After restoration, the system will restart.

- Server File Restoration

To restore data from the backup file on the server, you need to enable the automatic backup, and the server will back up the database based on the defined period and generate a backup file.

Step 1 Select > Backup and Restore > Restore, and click Server.

Figure 3-79 Restoring from server



Step 2 Click in the pop-up list and select the file to be restored.

Step 3 Enter the admin password and click **OK** to restore the data.

After the data is restored successfully, the system will restart.

3.12.3 Log Management

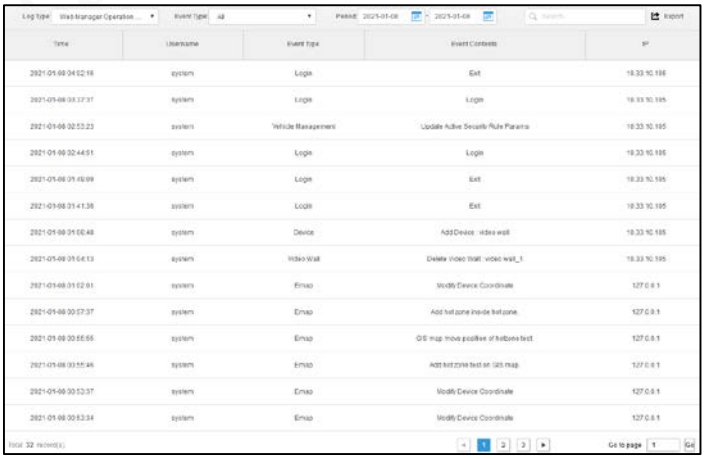
You can view the web manager and the client operation log in **Log** on the Platform, and search by type, period and keywords. The results can be exported (in pdf format by default).

Step 1 Select > **Log**.

Step 2 Select Log Type, Event Type or Period.

Search results are displayed, and the total number is displayed at the lower-left corner.

Figure 3-80 Log



Step 3 Click **Export** to export the log information, it will be automatically downloaded to your PC.

3.12.4 Operation and Maintenance Statistics

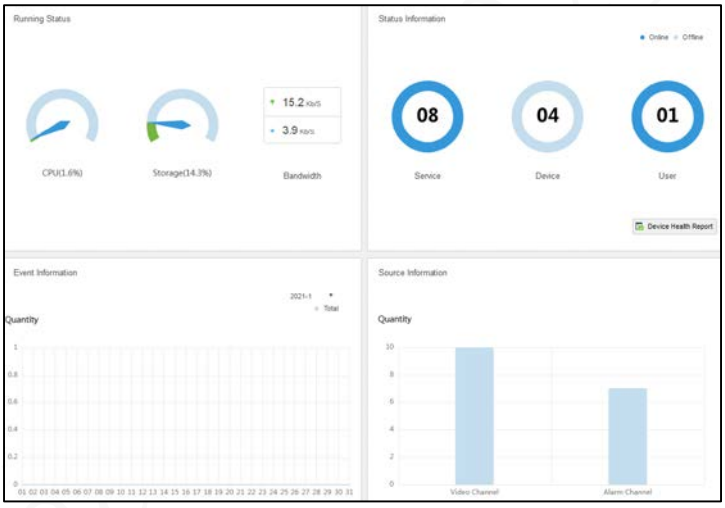
System operation and maintenance statistics search is supported on the Web Manager to understand system operation status in time.

3.12.4.1 Overview

Select > **Overview**, you can see the integrated system information such as running status, status information, event information and source information.

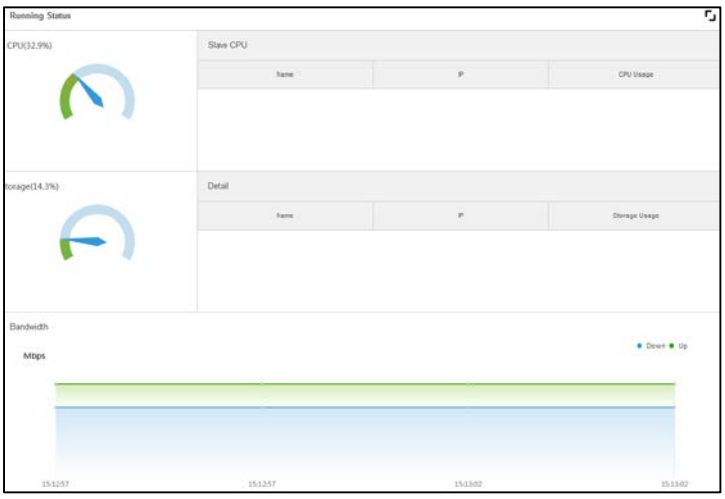
Click at the upper-right corner of each module interface to get back to the system information main page.

Figure 3-81 Overview



- Running Status
  Click **Running Status** to view the detailed CPU, storage occupancy, and bandwidth utilization.

Figure 3-82 System Information



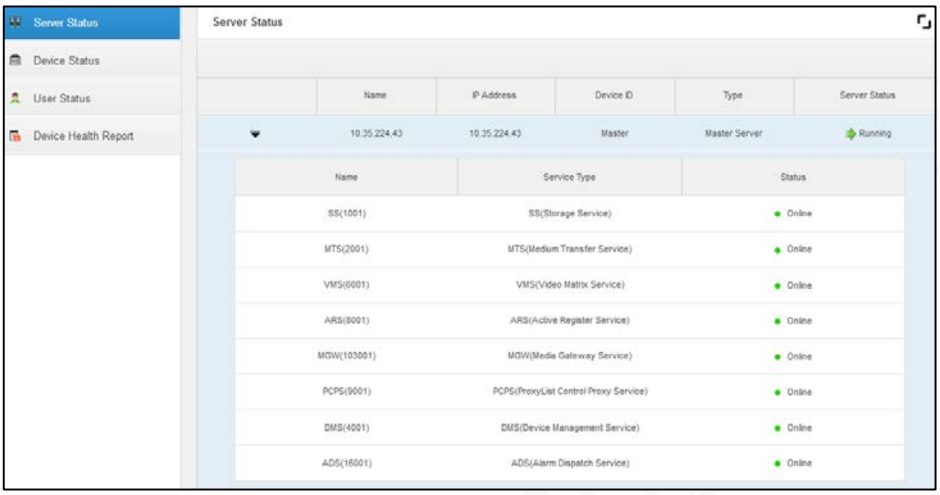
- Status Information

Click **Status Information** to view the statistics of online and offline status of servers, devices, and users. You can also check the device health report.

◇ Server Status

Click ▶ on the **Server Status** interface to display the server details.

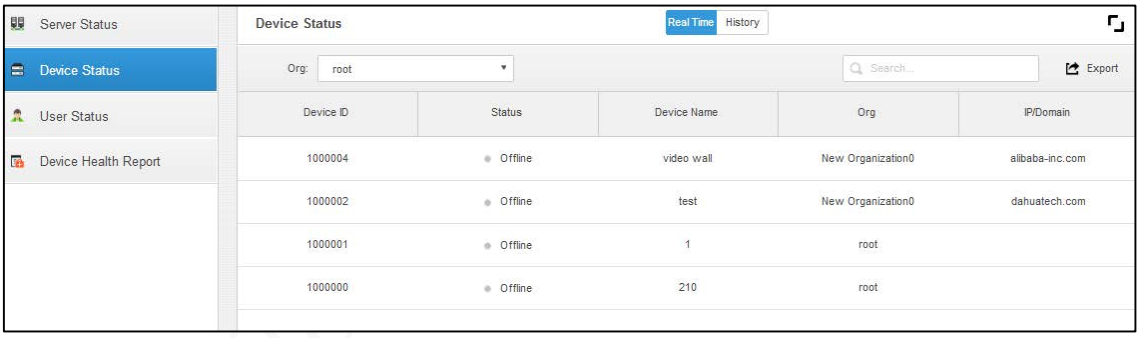
Figure 3-83 Server status



◇ Device Status

1) Click **Device Status**.

Figure 3-84 Real-time status



2) View the device status.

◇ Click **Real Time** on top to view the real-time status of the device.

◇ Click **History** on top to view the history status of the device.

3) Click **Export**.

Export the real-time status of the device (pdf format).

◇ User Status

Click to view the details.

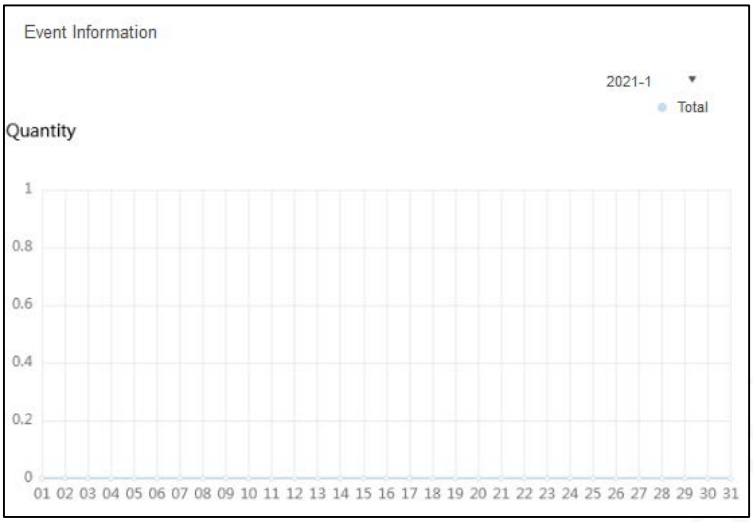
◇ Device Health Report

Click to view the details.

- Event Information

View the total number of alarm events and the number of processed alarm events by month.

Figure 3-85 Event Information



- Resource Information

  Click **Resource Information** to view the statistics of video and alarm channels.

  ◇ Click **Video Channel** to view the video channel details.

  ◇ Click **Alarm Channel** to view the alarm channel details.

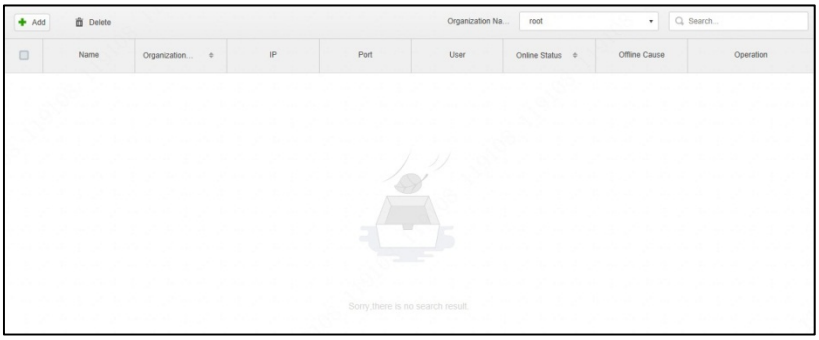
3.12.5 Domain

The Platform supports cascading, which means the superior can view the channels (video, recordings and alarms). Cascading configuration is to add subordinates to the superior, and up to three levels are supported.

- Confirm that a single server has been deployed before configuration.
- If there are multiple subordinates, add them in turn according to the following steps.

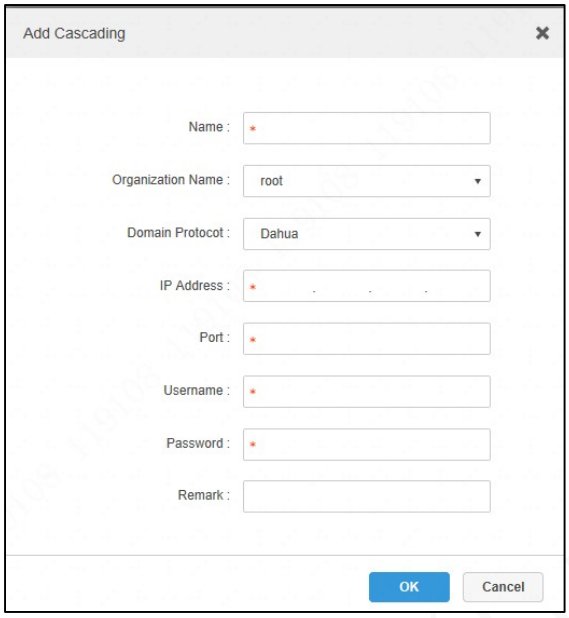
Step 1 Select > **Domain**.

Figure 3-86 Cascading



Step 2 Click **Add**.

Figure 3-87 Adding cascading



Step 3 Configure parameters and click **OK**.

Table 3-14 Description of cascading parameters

Parameter	Description
Organization Name	Set the superior platform of the added cascading platform. After setting, all organizations and devices of this platform can call monitoring on the superior platform.
Port	Set as the HTTPS port number of the added cascading platform.

Step 4 Click **OK**.

Figure 3-88 Cascading record

Other operations

- Select one or more cascading records, and then click **Delete** to delete them.
- You can operate the cascading records as follows.
  - ◇ Click to jump to the login interface of the channel.
  - ◇ Click to edit the cascading information of the channel.
  - ◇ Click to delete the cascading information.

4 Client

There is the PC client and mobile APP. PC client is taken as an example to introduce the functions.

4.1 Installation and Login

4.1.1 PC Configuration Requirements

Table 4-1 Configuration requirements

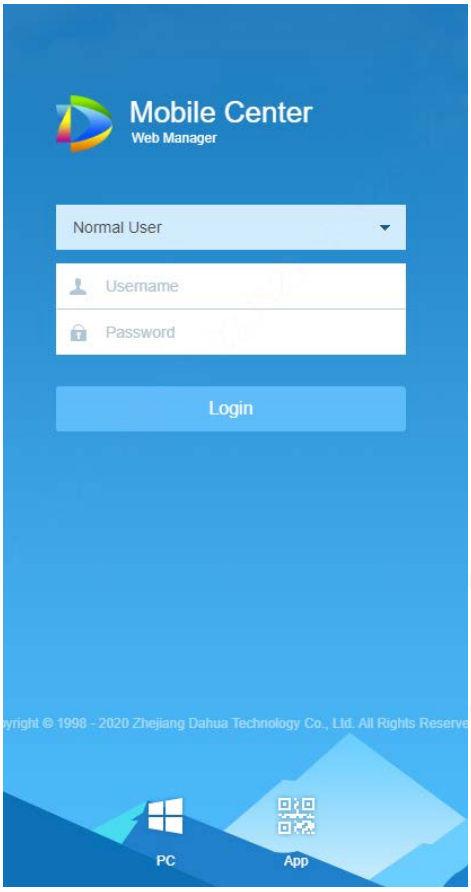
Parameter	Description
Recommended Configuration	● CPU: i5-6500 ● Main frequency: 3.20 GHz ● RAM: 8 GB ● Graphics card: Inter HD Graphics 530 ● Network adapter: 1 Gbps ● HDD: HDD 1T ● Space: 200 GB
Minimum configuration	● CPU: i3-2120 ● Memory: 4 GB ● Graphics card: Intel (R) Sandbridge Desktop Gra ● Network adapter: 1 Gbps ● HDD: HDD 300 GB ● Space: 100 GB

4.1.2 Downloading and Installing Client

4.1.2.1 Installing PC Client

Step 1 In the browser address bar, enter the Platform IP address, and then press **Enter**.

Figure 4-1 Download PC client



Step 2 Click to download the client.

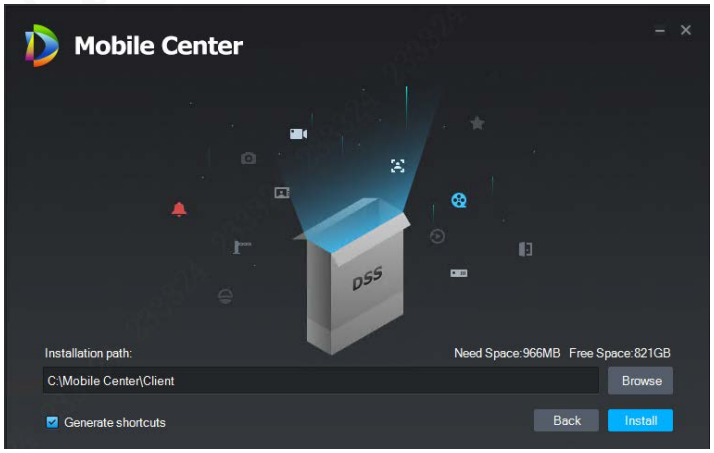
Step 3 Click **Save** to save it to your PC.

Step 4 Double-click the client installation package.

Step 5 Select a language, select I have read and agree to the DSS agreement, and then click Next.

Step 6 Select the installation path.

Figure 4-2 Select the installation directory



Step 7 Click **Install**.

The installation takes three to five minutes.

Step 8 Click **Run**.

4.1.2.2 Mobile APP

Step 1 In the browser address bar, enter the Platform IP address, and then press Enter.

Step 2 Click to view the QR code of the mobile APP. This function is currently available on iOS and Android.

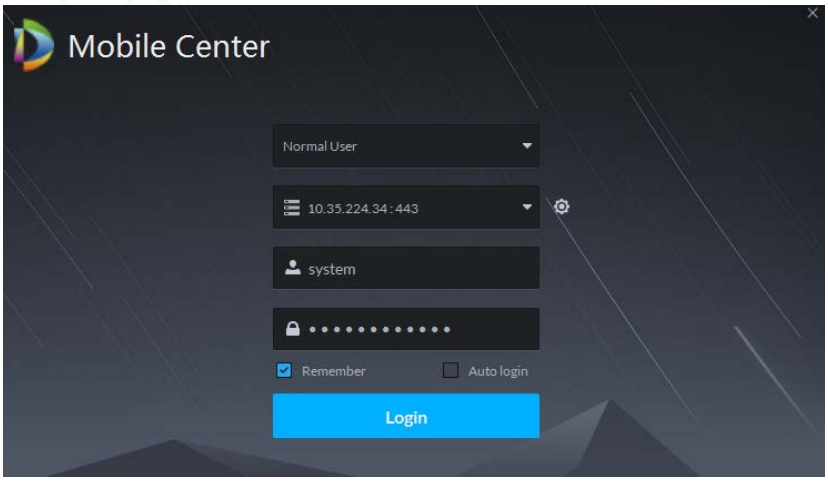
Figure 4-3 Mobile APP QR code

Step 3 Scan the QR code to download the mobile APP.

4.1.3 Logging in to the Client

Step 1 Double-click .

Figure 4-4 Client login interface

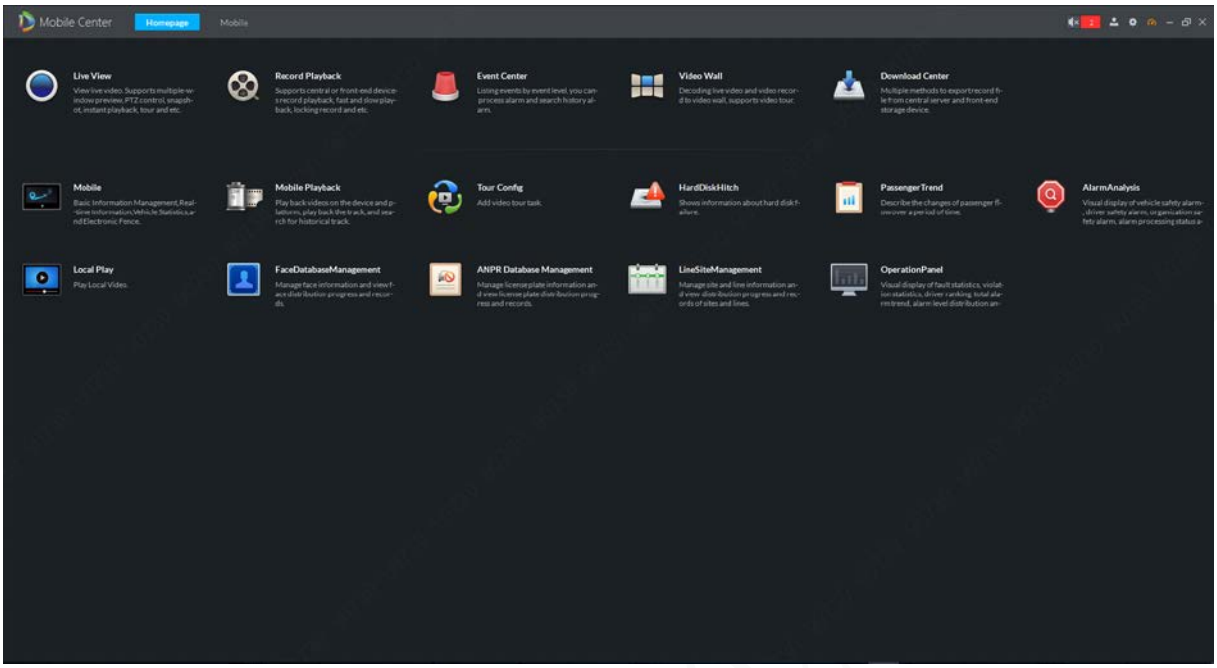


Step 2 Enter the username, password, server IP and port.

Server IP is the IP address of the Platform, and the port is 8443 by default.

Step 3 Click **Login**.

Figure 4-5 Main interface of the client

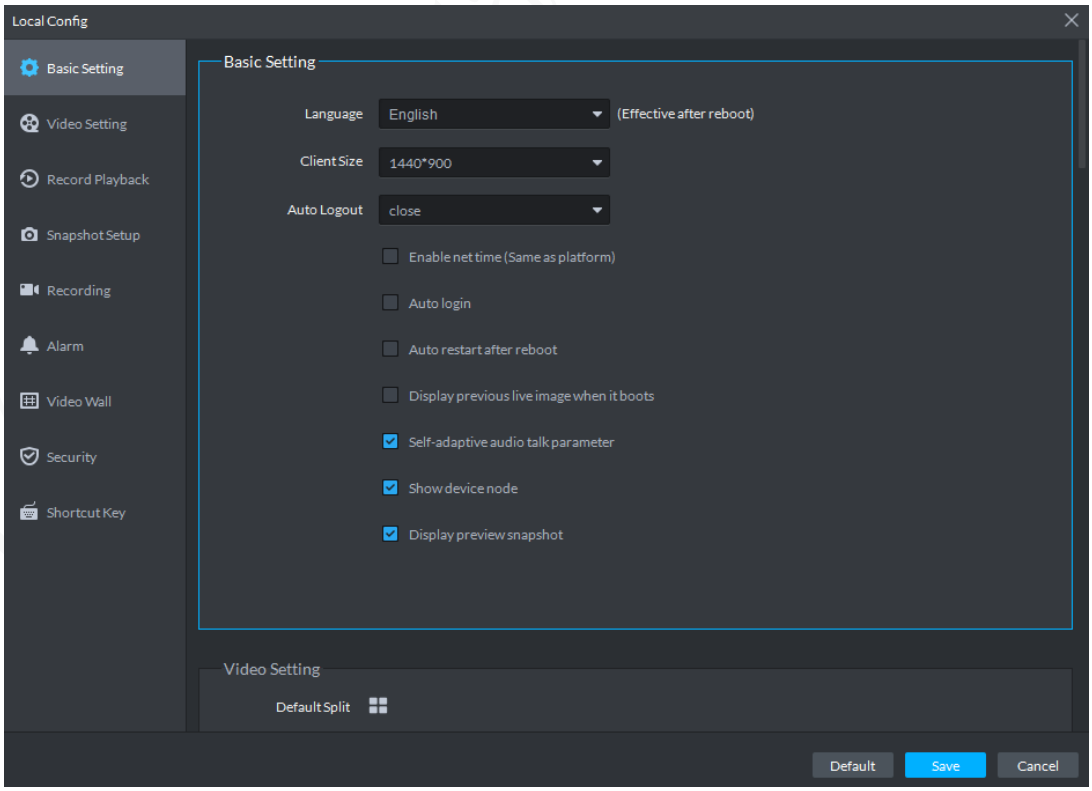


4.2 Local Configuration

When logging in to the client for the first time, you need to set the system parameters.

Step 1 Click at the upper-right corner of the homepage.

Figure 4-6 Local Configuration



Step 2 Configure Basic Setting.

Table 4-2 Description of parameters for basic setting

Parameter	Description
Language	The language displayed on the client. You can choose from **Chinese** and **English**.
Client Size	The display size of the client.
Enable net time (Same as platform)	Select the checkbox and the client immediately sends a request to the server for time synchronization.
Auto Logout	Select the Auto logout time, and the user will automatically log out the selected time point.
Auto login	Select the checkbox to enable auto login.
Auto start after reboot	Select the checkbox to enable auto start of the client after PC startup.
Display previous live image when it boots	Select the checkbox to display previous live image at the next boot without binding the channel again.
Self-adaptive audio talk parameter	Select the checkbox and the system automatically matches the sampling frequency, sampling bits, and audio format of the device in voice talk.
Show device node	Select this checkbox and the device node is displayed.
Display preview snapshot	Move the mouse over the device to display live view snapshot.

Step 3 Click Video Setting.

Figure 4-7 Video setting

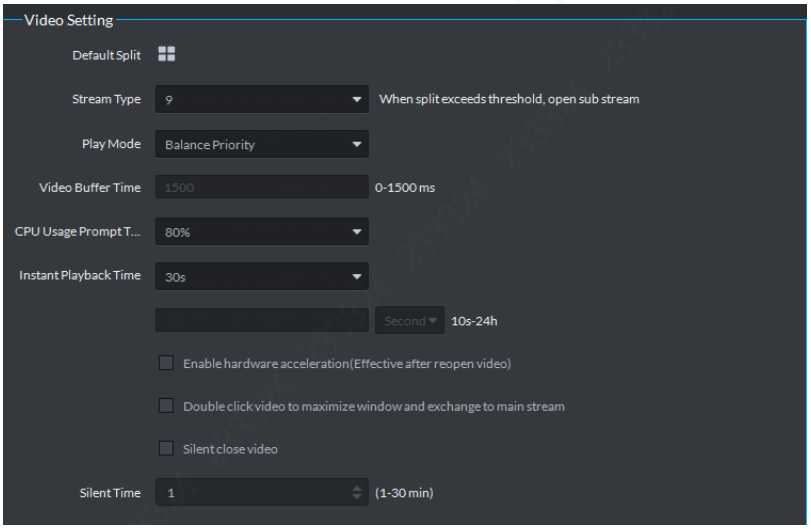


Table 4-3 Description of parameters for video setting

Parameter	Description
Default Split	Select the default split of the video window.
Stream Type	Set the split threshole, and when the split number exceeds the threshold, open the sub stream.
Play Mode	Select a play mode from Real-time Priority, Fluency Priority, Balance Priority, and Customize.
Video Buffer Time	Set the video buffer time. Only available when setting **Play Mode** to **Customize**.
CPU Usage Prompt Threshold	Prompts CPU usage alert when exceeding the defined threshold.

Parameter	Description
Instant Playback Time	Select the instant playback time. Click **Instant Playback** on the live interface to view playback of the defined period.
Enable hardware acceleration (Effective after reopen video)	Select the checkbox to improve the client running performance through hardware acceleration.
Double-click video to maximize window and exchange to main stream	Select the checkbox to enable this function.
Silent close video	Select the checkbox and set the time (1–30 minutes). When there is no operations on the video for the defined period, video closes.

Step 4 Click Record Playback.

Figure 4-8 Recording playback

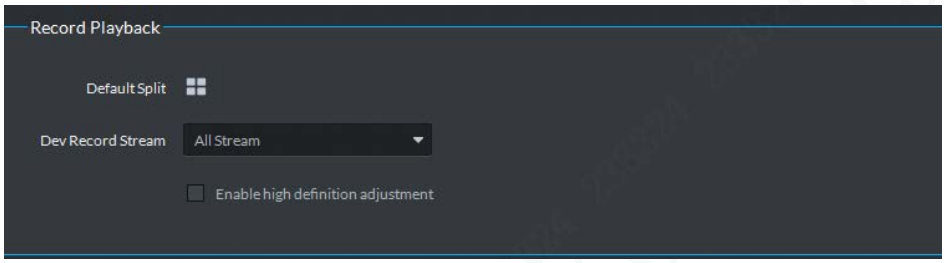


Table 4-4 Description of parameters for record playback

Parameter	Description
Default Split	Select the default split of the record playback window.
Dev Record Stream	Select the stream for record playback.
Enable high definition adjustment	Select the checkbox to enable this function. Frame extraction under high-definition fast play at high stream can relieve decoding pressure and play video smoothly.

Step 5 Click Snapshot Setup.

Figure 4-9 Snapshot setup

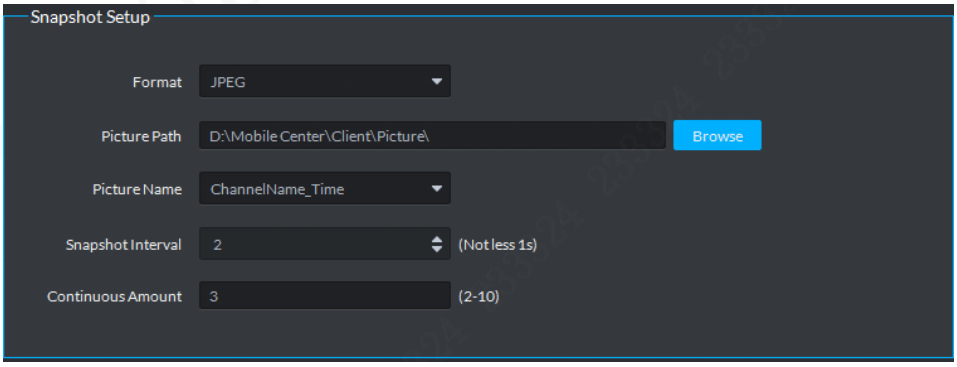


Table 4-5 Description of parameters for snapshot setup

Parameter	Description
Format	The format of snapshot.
Picture Path	The path for saving snapshots. The default path is "\Mobile Center\Client\Picture".
Picture Name	Naming rule of snapshot.
Snapshot Interval	The interval of taking snapshots.
Continuous Amount	Number of continuous snapshots.

Step 6 Click Recording.

Figure 4-10 Recording

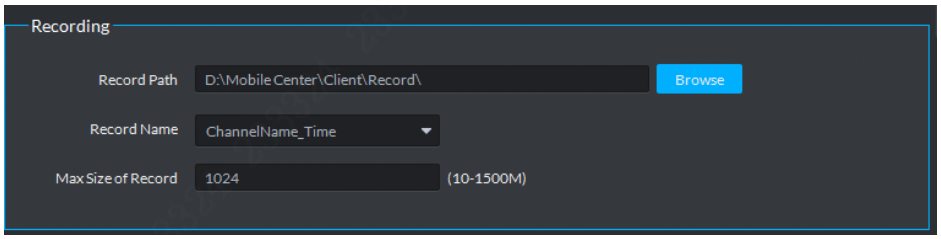


Table 4-6 Description of recording parameters

Parameter	Description
Record Path	Path for saving recordings. The default path is "\Mobile Center\Client\Record".
Record Name	Naming rule of recording files.
Max Size of Record	The maximum size of recording files.

Step 7 Click **Alarm**.

Figure 4-11 Alarm

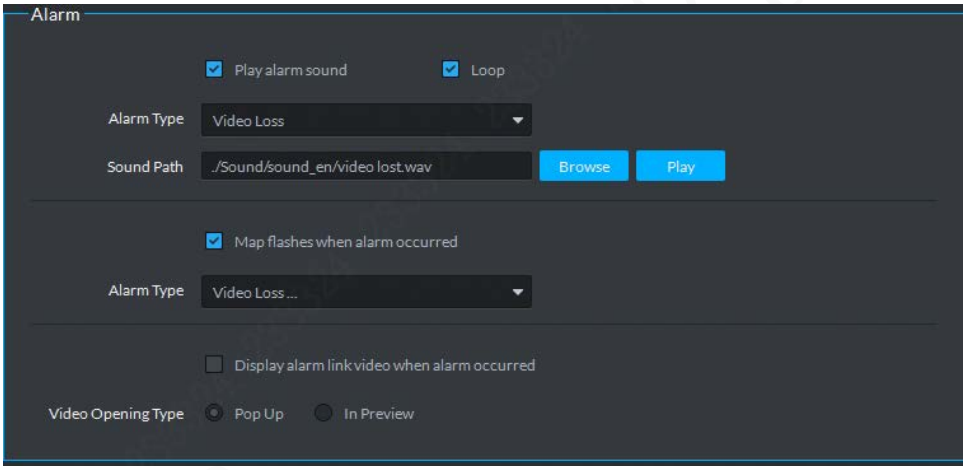


Table 4-7 Description of alarm parameters

Parameter	Description
Play alarm sound	Play the alarm sound when an alarm is triggered.
Loop	Play the alarm sound repeatedly when an alarm is triggered. Select the checkbox only when **Play alarm sound** is enabled.
Alarm Type	Select the alarm type for playing alarm sound. Select **Alarm Type** only when **Play alarm sound** is enabled.
Sound Path	The path of alarm sound.
Map flashes when alarm occurred	Select the checkbox and set the alarm type. When the alarm of selected type is triggered, the alarm location flashes on the map.
Display alarm link video when alarm occurred	Select the checkbox to automatically play alarm link video when an alarm is triggered.

Parameter	Description
Video Opening Type	Select **Pop Up** or **In Preview** to play the video in the client when an alarm is triggered. If **In Preview** is selected, set the live view window as the alarm window.

Step 8 Click Video Wall.

Figure 4-12 Video Wall

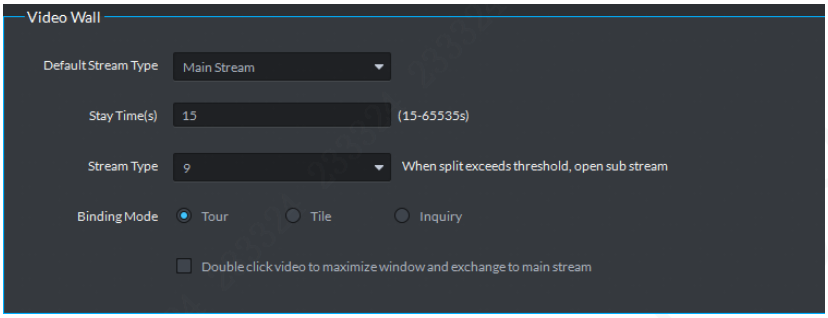


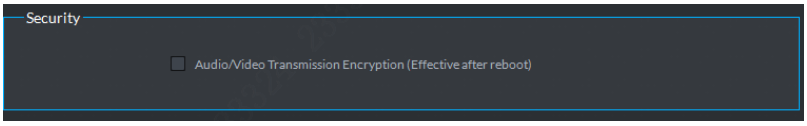
Table 4-8 Description of video wall parameters

Parameter	Description
Default Stream Type	Select from **Main Stream**, **Sub Stream 1**, **Sub Stream 2**, and **Local Signal**.
Stay Time(s)	Set the time when the video stays on the wall.
Stream Type	When the split number exceeds the threshold, open the sub stream.
Binding Mode	Select the **Binding Mode** from **Tour, Tile,** and **Inquiry** to display the videos on the wall.
Double click video to maximize window and exchange to main stream	Switches the stream type to the main stream when double-clicking the video to maximize window.

Step 9 Click Security.

Select **Audio/Video Transmission Encryption (Effective after reboot)** to enable audio or video encryption when transmitting.

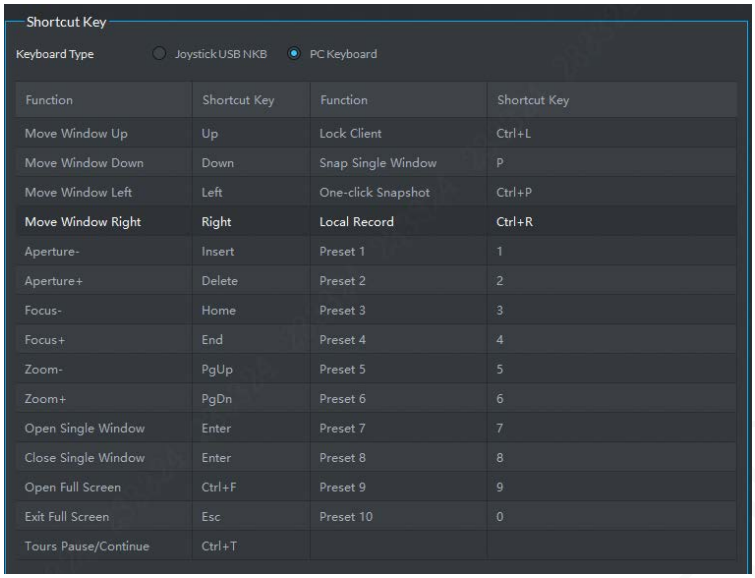
Figure 4-13 Security



Step 10 Click Shortcut Key.

Select **PC Keyboard**, select functions and then press the keys on keyboard to set shortcut keys.

Figure 4-14 Shortcut key



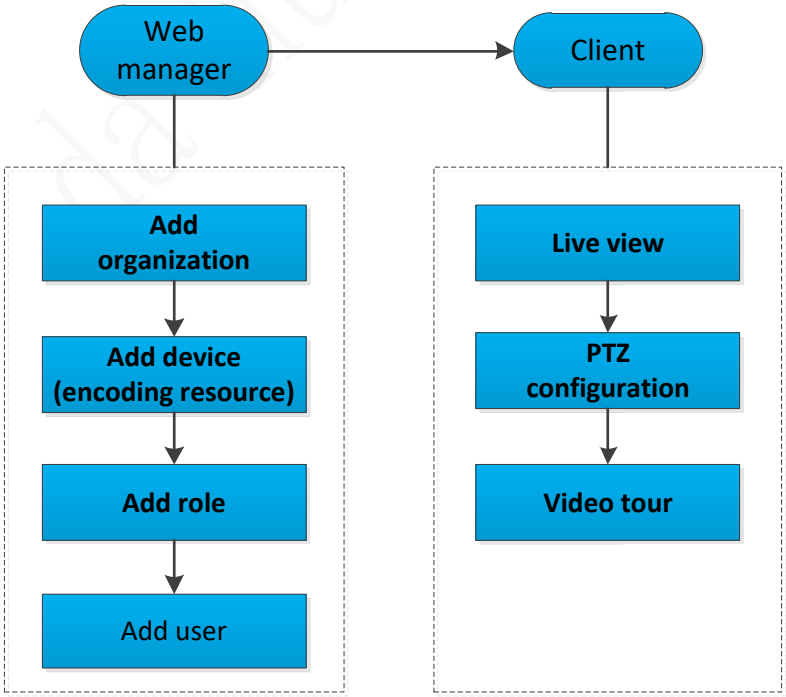
Step 11 Click **Save**.

4.3 Video Live View

4.3.1 Preparations

The encoding device has been added on the Platform. For details, see "3.6Adding Device".

Figure 4-15 Flow chart of video live view



4.3.2 Live View

4.3.2.1 Live Video

Click **Live View** on the main interface. The **Live View 1** interface is displayed by default.

In the device list on the left side, select a channel and double-click it or drag it to the video window. Double-click a device to open all channels of the device. The real-time monitoring interface is displayed in the video window.

Figure 4-16 Live view

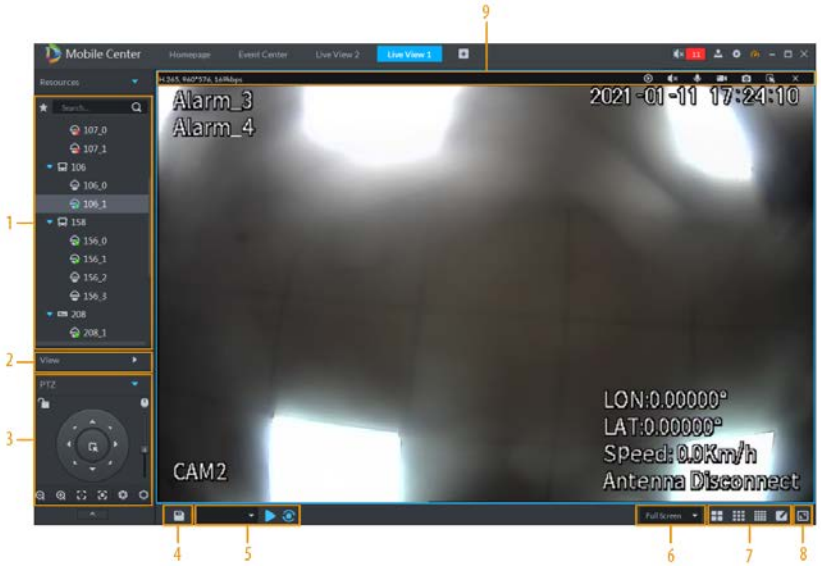


Table 4-9 Functions of live view interface

No.	Parameter	Description
1	Device tree	● If in **Basic Setting**, you select **Show device node**, the Device Tree shows the device and the channels under it. If deselected, channels of all devices are displayed. ● Enter device or channel name in Search... to search for channels. ● : View Favorites folder. Right-click the added channels, you can delete the channel. Right-click the folder, you can tour view the added channels or create new folders.
2	View	Save the current video window as a view through clicking . ● Supports three-level directories. ● Supports video touring at the first and the second nodes. ● You can create up to 100 views.
3	PTZ	For PTZ camera functions, see "4.3.3PTZ Configuration".
4	Save view	Click to save the current video window as a view.

No.	Parameter	Description
5	Tour	Select a tour plan, and click to enable the tour, and click to disable it. Create tour task in **Tour Config** before playing.
6	Display mode	Full Screen: Displays the video in full screen. Original Scale: Displays the video in its actual ratio.
7	Window split mode	You can select to split the video window from 1 to 64, or click to customize the split mode.
8	Full screen	Switch the video window to full screen. Press the Esc key or right-click to select **Exit Full Screen** to exit.
9	Video information	Show encoding format, stream information, and shortcut operations. For details, see "4.3.2.3Window Shortcut Menu".

4.3.2.2 Right-click Shortcut Menu

- Right-click the device tree on the left side. For organization, device and channel, each supports different operations.

Figure 4-17 Organization menu

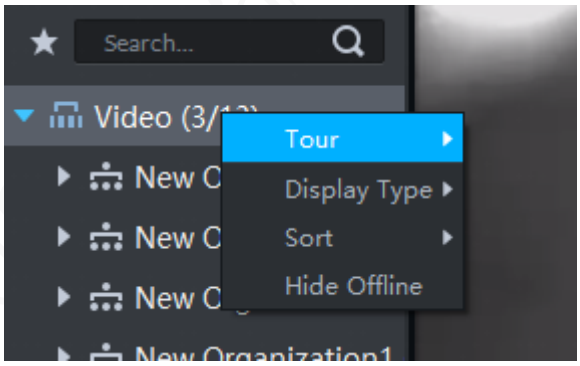


Table 4-10 Description of right-click menu

Menu Type	Parameter	Description
Organization	Tour	Set the tour interval.
	Display Type	Select the display mode of devices (name or IP).
	Sort	Sort the devices by ascending, descending and default order.
	Hide Offline	Hide or display the offline nodes.
Device	Device Config	Configure camera attributes and file management.
Channel	Add to Favorites	Add the channel to Favorites. To display groups added to the **Favorites**, click .

- Right-click the live view video window.

Figure 4-18 Live view menu

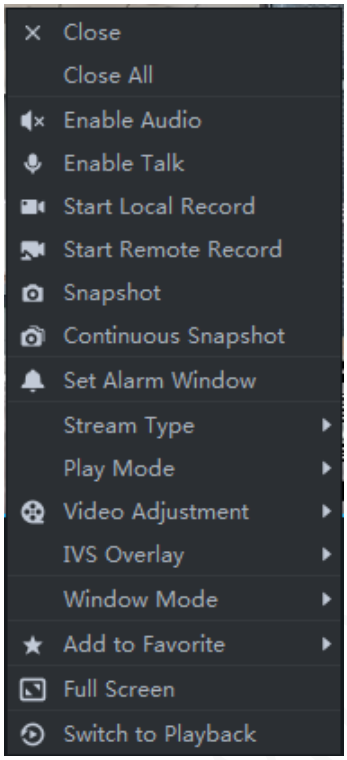


Table 4-11 Description of right-click menu

Parameter	Description
Close	Close the current video window.
Close All	Close all video windows.
Enable Audio	The same as , enabling or disabling the audio function of the camera.
Enable Talk	The same as , enabling or disabling the voice talk function of the corresponding device. Select > **Basic Setting** > **Self-adaptive audio talk parameter**. The device automatically adapts to each parameter value when enabling it.
Start Local Record	The same as , recording the audios and videos in the current video window and saving them to a local PC.
Start Remote Record	Click to start remote record. Then the menu item changes to **Stop Remote Record**. Click it to stop recording. If the Platform is configured with a video storage disk, recording files are stored on the Platform server.
Snapshot	The same as , saving images in the current video window to the picture folder as snapshots. One snapshot is saved for every call of the port.
Continuous Snapshot	Save images in the current video window to the snapshot folder as snapshots. By default, the system takes three snapshots on one click.
Set Alarm Window	Set the current video window as the alarm output window.
Stream Type	Select the stream type from **Main Stream**, **Sub Stream 1**, and **Sub Stream 2**. If **Sub Stream 1** and **Sub Stream 2** are selected, select the same from the **Stream** drop-down list when you add a device on the Platform.

Parameter	Description
Play Mode	You can select from Real-time Priority, Fluency Priority, Balance Priority, or Customize.
Video Adjustment	Picture adjustment.
IVS Overlay	Select from Rule Overlay and Target Box Overlay.
Installation Mode	Installation modes include ceiling mount, wall mount, and ground mount. The real-time videos are automatically corrected according to the selected installation mode. This mode is only available on fisheye camera.
Fisheye view mode	The current image display mode (original image format is supported). Display modes according to different installation modes include: ● Ceiling mount: 1P+1, 2P, 1+2, 1+3, 1+4, 1P+6, 1+8. ● Wall mount: 1P, 1P+3, 1P+4, 1P+8. ● Ground mount: 1P+1, 2P, 1+3, 1+4, 1P+6, 1+8. This mode is only available on fisheye camera.
Split Mode	Standard mode, 1+3 mode, and 1+5 mode.
Add to Favorites	Add the current channel or all channels to the Favorites.
Full screen	Switch the video window to full screen. Press the Esc key or right-click to select **Exit Full Screen** to exit.
Switch to Playback	Quickly switch the live view interface to the playback interface without going back to the homepage.

4.3.2.3 Window Shortcut Menu

Move the mouse to the video window, and the shortcut bar is displayed at the upper-right corner of the window.

Figure 4-19 Window Shortcut Menu

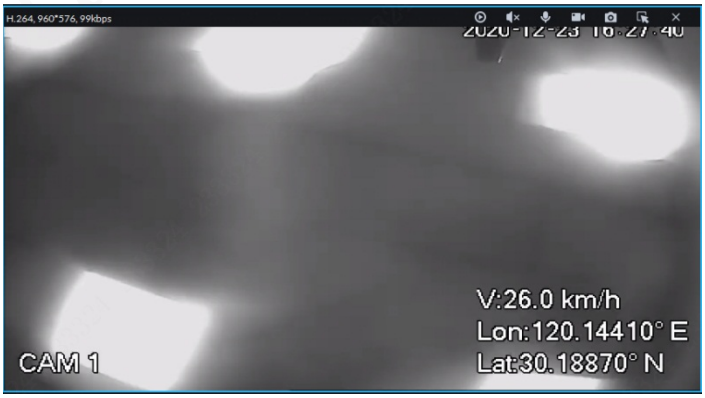


Table 4-12 Description of window shortcut menu

Icon	Icon Name	Description
	Instant playback	Enable or disable instant playback. ● Set the playback time on the **Local Config** interface. ● Only available when central recordings or device recordings exist. ● Central recordings take the priority in playback.
	Audio	Turn on or off audio.
	Voice talk	Turn on or off voice talk.
	Local recording	Click to record a local video. Click again to stop recording and save the recording to the local PC.
	Snapshot	Click to take snapshots.
	Close	Click to close the video.

4.3.3 PTZ Configuration

4.3.3.1 PTZ operation station

Step 1 On the **Live View** interface, open the video of PTZ camera.

Figure 4-20 Live video

Step 2 Click to display the PTZ operation station.

Figure 4-21 PTZ

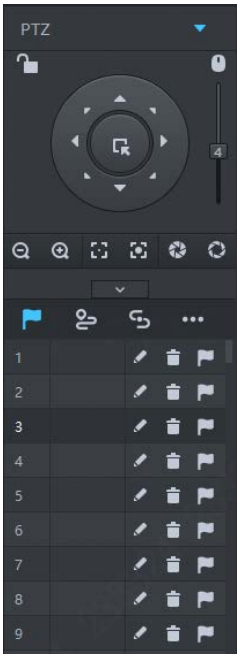


Table 4-13 Description of PTZ operation station

Parameter	Description
	Click to lock the current PTZ. indicates a locked interface. Different PTZ control permissions are given to users of different role levels. ● A high–level user can click to unlock and use the PTZ locked by a lower level user. ● A low–level user cannot unlock the PTZ locked by a higher level user. The PTZ can be used only when the PTZ is automatically unlocked. ● Users of the same level can unlock the PTZ locked by each other. The default time to automatically unlock PTZ is 30 s.
	Control PTZ camera by using the mouse.
Direction button	Used to control the PTZ rotation direction. PTZ can rotate in eight directions: Up, down, left, right, top left, top right, bottom left, and bottom right.
	3-dimensional positioning and local zoom in (high-speed PTZ): Zoom in and out the selected area. This function only works through the mouse operation.
	Adjust the PTZ rotation speed up or down to set different rotation speeds from 1 to 8.
	Zoom: Adjust the zooming of images.
	Focus: Adjust the definition.
	Aperture: Adjust the brightness.

Parameter	Description
, , ,	Provide preset, tour, pattern, line scan, pan, wiper, light, infrared light, and other functions. For detailed settings, see "4.3.3.2PTZ Configuration".

4.3.3.2 PTZ Configuration

4.3.3.2.1 Setting Preset

By setting the preset, you can rotate the camera to the corresponding position.

Step 1 Click the direction button of PTZ to rotate the camera to the target position.

Step 2 Click .

Step 3 Click next to **1**.

Step 4 Enter the preset number and click .

The preset is then added.

Step 5 Click next to the corresponding preset number 1 1 to rotate the camera to preset position 1.

4.3.3.2.2 Setting Tour

By setting the tour, you can enable the camera to tour among different presets.

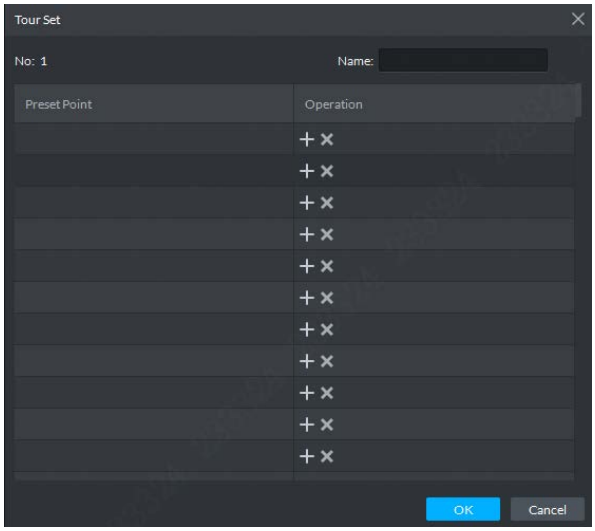
Before setting the tour, add at least two presets in advance.

Step 1 Click , and then click next to **1** to configure **Tour Set**.

Step 2 Enter the **Name**, and click in the **Operation** column.

Step 3 Select the presets from the **Preset Point** drop-down list on the left.

Figure 4-22 Adding preset



Step 4 Click **OK**.

To start the tour, click next to **1**. The camera starts the tour among the configured presets.

4.3.3.2.3 Setting Pattern

Enable Pattern to record the operation process.

Step 1 Click .

Step 2 Click next to **1**, and then use the eight buttons on the PTZ to set the pattern.

Step 3 Click to finish pattern setting.

Step 4 Click , and the PTZ camera rotates according to the configured pattern path.

4.3.3.2.4 Setting Line Scan

Step 1 Click .

Step 2 Click the PTZ button to rotate the PTZ leftward to a position. Click under **Scan** to set the left boundary.

Step 3 Rotate the PTZ rightward to a position. Click to set the right boundary.

Step 4 Click to start line scan. The PTZ rotates between the two configured boundary points.

4.3.3.2.5 Enabling/Disabling Pan

Click and then click , the camera keeps rotating horizontally; click to stop rotating.

4.3.3.2.6 Starting/Stopping Wiper

Control the wiper of external devices through RS-485 command.

Only available when connecting with wiper-attached external devices.

Click and then click to start the wiper; click to stop the wiper.

4.3.3.2.7 Turning on/off Light

Control the light of external devices through RS-485 command.

Only available when connecting with light-attached external devices.

Click and then click to turn on the light; click to turn off the light.

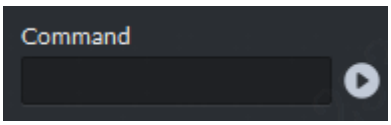
4.3.3.2.8 Setting Custom Commands

Custom commands vary on different devices. For details, contact the device manufacturers.

Step 1 Click ....

Step 2 Enter the command in the **Command** bar.

Figure 4-23 Command



Step 3 Click to display the corresponding result of the custom command.

4.3.3.2.9 PTZ Menu

Step 1 Click ....

Figure 4-24 Menu

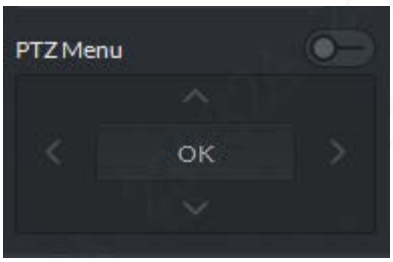


Table 4-14 Description of PTZ menu parameters

Parameter	Description
	Move the cursor up and down to select parameters.
	Change the selected parameter.
	Click to enable PTZ menu. The main menu is displayed on the monitoring window.
	Click to disable PTZ menu.
OK	Click **OK** to perform the following functions: ● If there is a sub-menu for an item, click **OK** to go to the sub-menu. ● Move the cursor to **Return**, and then click **OK** to return to the previous menu. ● Move the cursor to **Exit**, and then click **OK** to exit the menu.

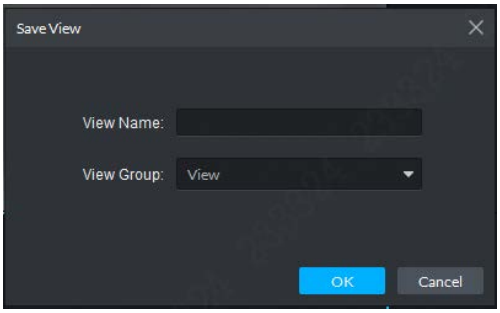
Step 2 Click **OK**.

4.3.4 View Touring

Step 1 On the **Live View** interface, double-click the channel on the left to open the video.

Step 2 Click to save the current video image as a view.

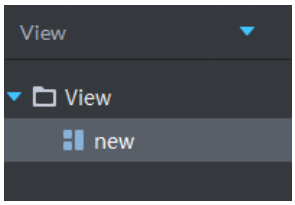
Figure 4-25 Save view



Step 3 Enter the view name, select a view group, and then click **OK**.

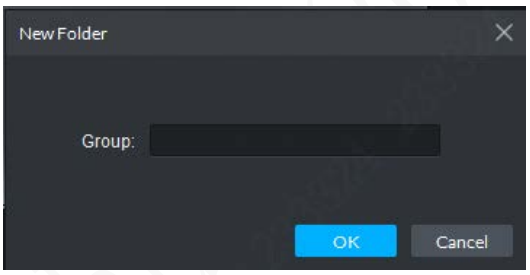
You can view the added view under the tab on the left.

Figure 4-26 Completing view



Step 4 Select **View**, and right-click to select **New**.

Figure 4-27 Creating folder



Step 5 Enter the folder name, and click **OK**.

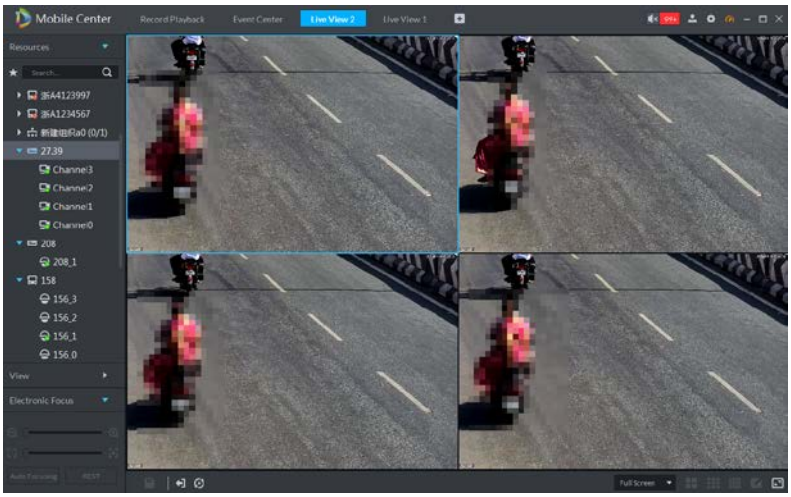
Step 6 Select **View**, and right-click to set the **Tour Time** to, for example, 10 s.

The interface starts touring every 10 s to show the view groups.

Click to stop touring. Click to continue touring. Click to exit the tour.

The tour time can be defined from 5 s to 120 min.

Figure 4-28 View touring

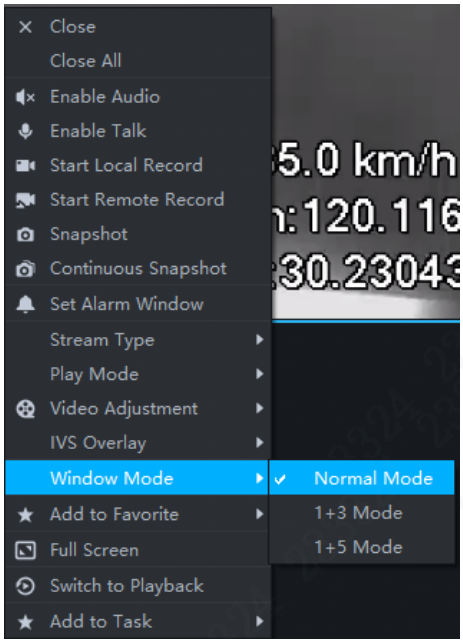


4.3.5 Region of Interest (ROI)

You can zoom in ROI videos through preview in normal mode, 1+3 mode, and 1+5 mode in the live view window at the client.

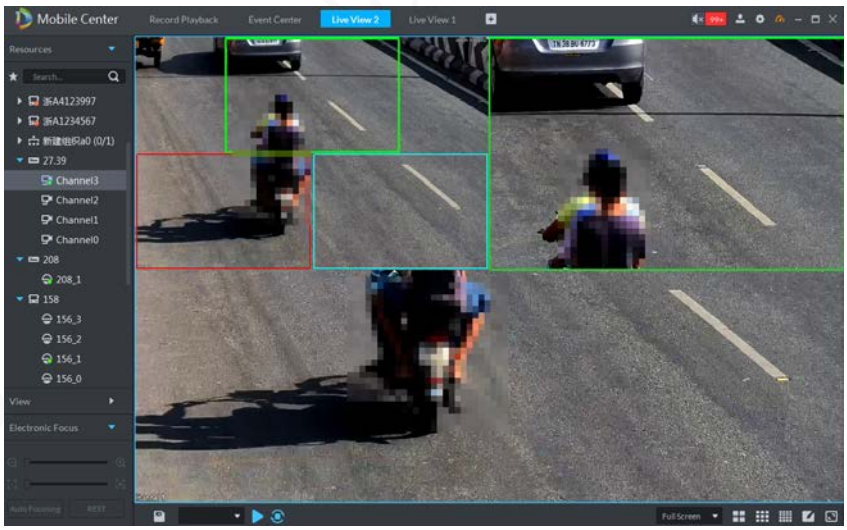
Step 1 Right-click to select **Window Mode** in the live view window.

Figure 4-29 Window mode



For example, select **1+3 Mode**.

Figure 4-30 1+3 Mode



4.4 Recording Service

You can search, playback and download recordings of different channels, dates, and types from the device or the server. The date shows a different color when there is a recording.

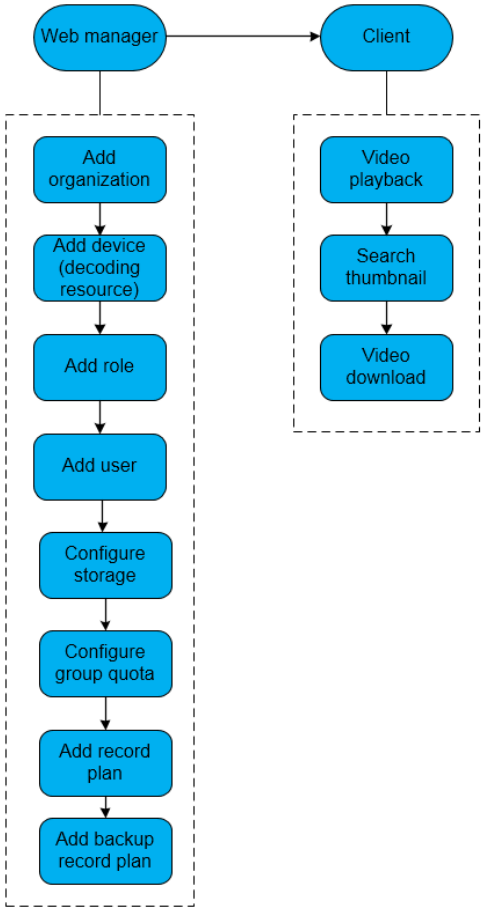
- Device: Recordings stored in the SD card of cameras or hard disks of DVR and NVR. The storage plan is configured on the device.

- Server: Recordings stored on servers or HDD. Configure the recording plan before playback. In the configured period, the system stores the recording files on the server.

4.4.1 Preparations

The recording plan is configured at the Platform. For procedures, contact the administrator or see "3.7Configuring Record Plan".

Figure 4-31 Recording playback flow chart



4.4.2 Recording in Live View

Open a video in the live view window at the client, right-click the menu to enable the central recording of this channel once the disk for central recording is already configured, and no central storage plan is configured for this channel.

Step 1 On the **Live View** interface, select a channel to view.

Step 2 Right-click the live view window and select **Start Remote Record**.

- Stop remote recording: Right-click the window to select **Stop Remote Record**.
- When a recording of the same time exists in the channel, the recording is overlaid in the live view window.

4.4.3 Recording Playback

4.4.3.1 Searching Recordings

You can search recordings of the current day, a specified day or period, including scheduled recordings and alarm recordings.

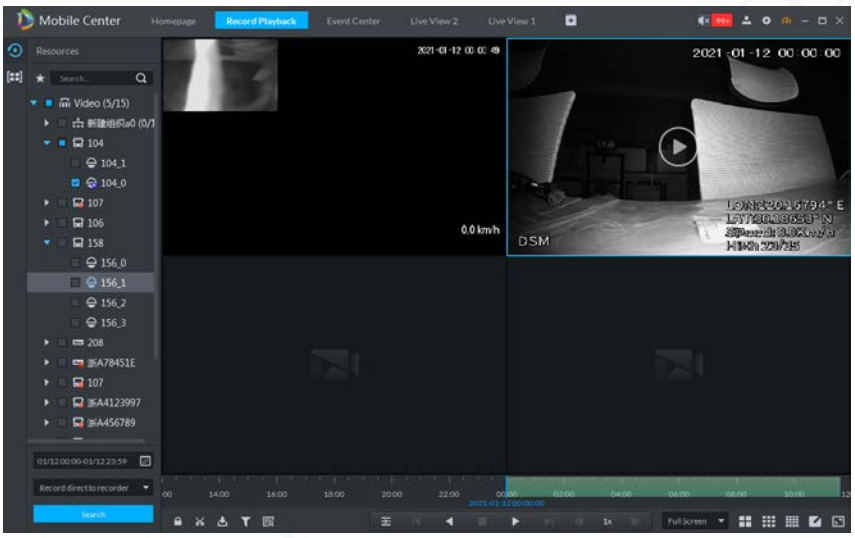
Step 1 Click , and select **Record Playback** on the main interface.

Step 2 Select a channel in the device tree.

Step 3 Select the date and recording storage location, and then click **Search**.

Step 4 Select a video window with recordings and click .

Figure 4-32 Recording playback



4.4.3.2 Filtering Recording Type

Step 1 On the **Record Playback** interface, click at the lower-left corner.

Figure 4-33 Record Playback

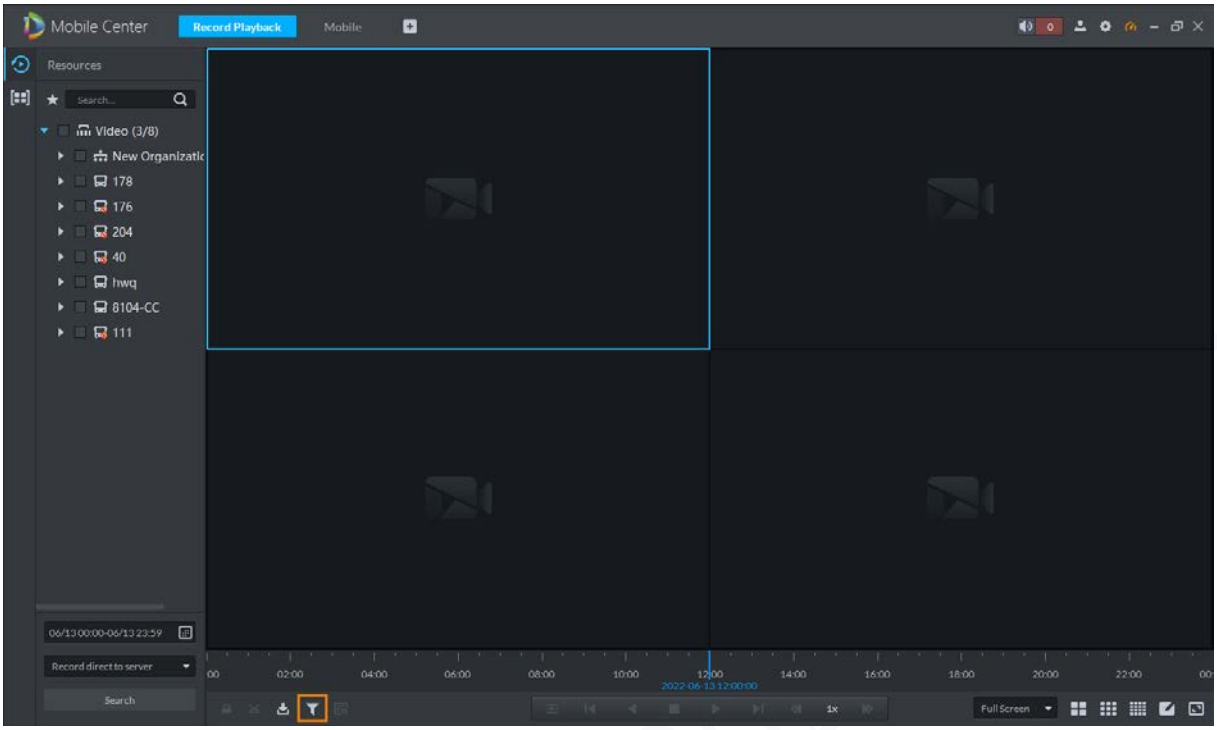


Figure 4-34 Recording filtering

Step 2 Select the record type and click **OK**, and system plays the filtered video.

4.4.3.3 Controlling Record

For the buttons at the bottom of the **Record Playback** interface, see Table 4-15.

Table 4-15 Playback buttons

Icon	Description
	Lock the recording.
	Clip the recording.
	Download the recording.
	Synchronous play in different playback windows.
	Stop or pause recording playback.
	Single-frame play or single-frame playback.
1x	Fast forward or fast backward by up to 64 times.
10:00 12:00 14:00 16:00 2018-07-18 12:16:09	Drag the time progress bar in recording playback to play the recording at corresponding time points.

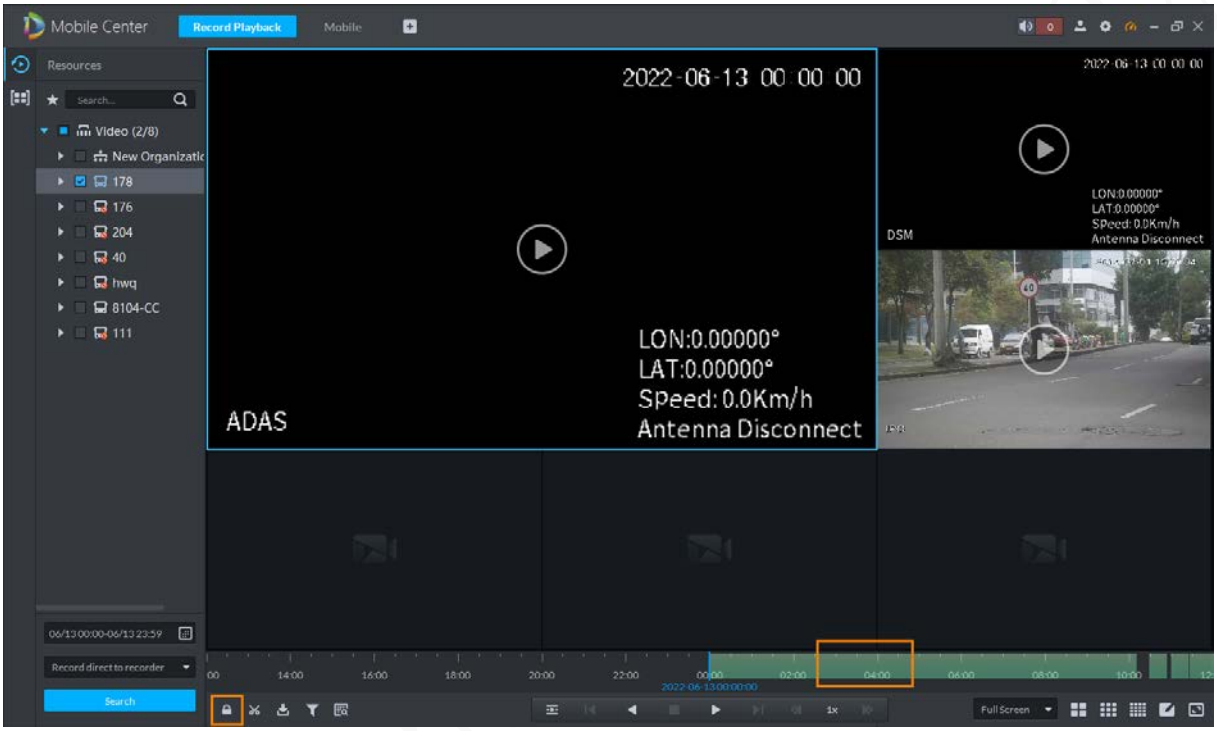
4.4.3.4 Locking Record

This function only applies to the central record stored in the server.

Step 1 On the **Record Playback** interface, click at the lower-left corner.

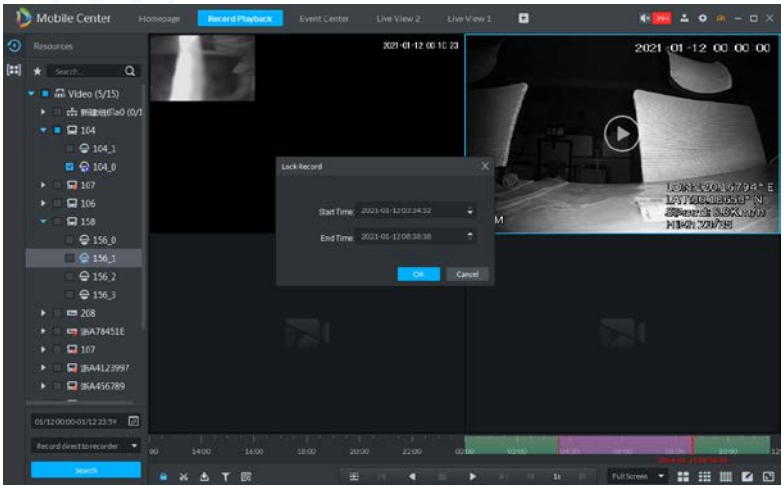
Move the mouse over the time progress bar and select the record clip to be locked.

Figure 4-35 Record Playback



Step 2 Select the **Start Time** of locking on the time progress bar, drag the mouse, and then select the **End Time**.

Figure 4-36 Locking Record



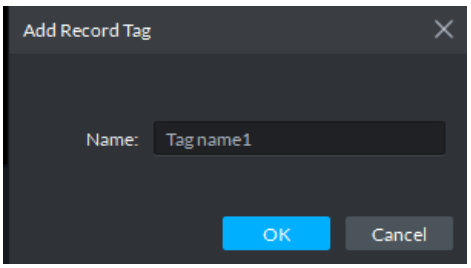
Step 3 Click **OK**.

4.4.3.5 Recording tagging

This function allows you to tag your favorite records for subsequent search and positioning.

Step 1 On the **Record Playback** interface, move the mouse over a window where a video is playing. Click at the upper-right corner of the window to tag the video.

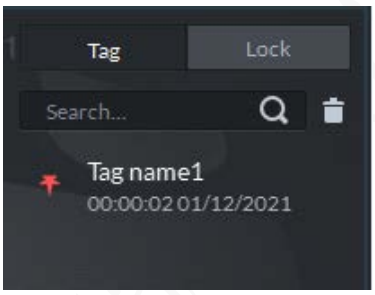
Figure 4-37 Tag



Step 2 Enter the **Name** and then click **OK**.

Move the mouse over the right side of the record playback window, click to display the tagged and locked records.

Figure 4-38 Tag and lock

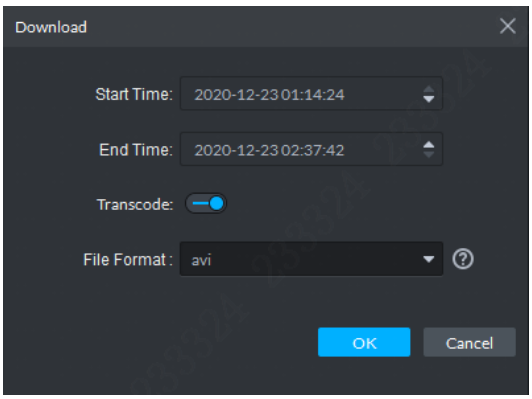


4.4.3.6 Recording Clipping

Step 1 Select a window with recordings and click at the lower-left corner of the **Record Playback** interface.

Step 2 In the time progress bar, click to select the **Start Time** of record clipping, drag the mouse and click to select the **End Time**.

Figure 4-39 Download the clip



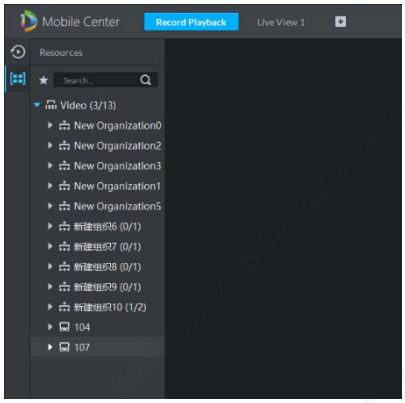
Step 3 Set the **File Format** and click **OK**.

4.4.4 Searching Thumbnail

The system supports searching recording thumbnails of the Platform and device, thus providing a convenient method for searching recordings.

Step 1 On the **Record Playback** interface, click .

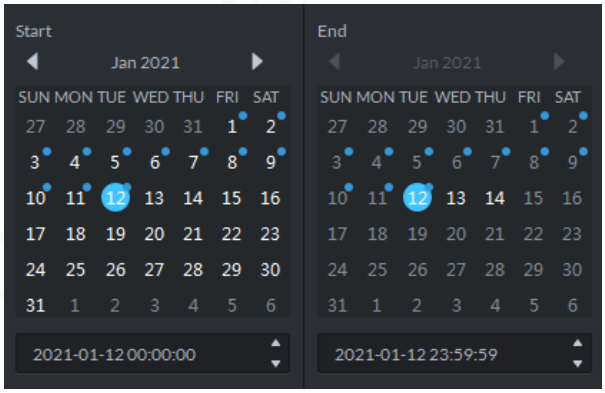
Figure 4-40 Thumbnail



Step 2 Select the video channel, period and location, and then click .

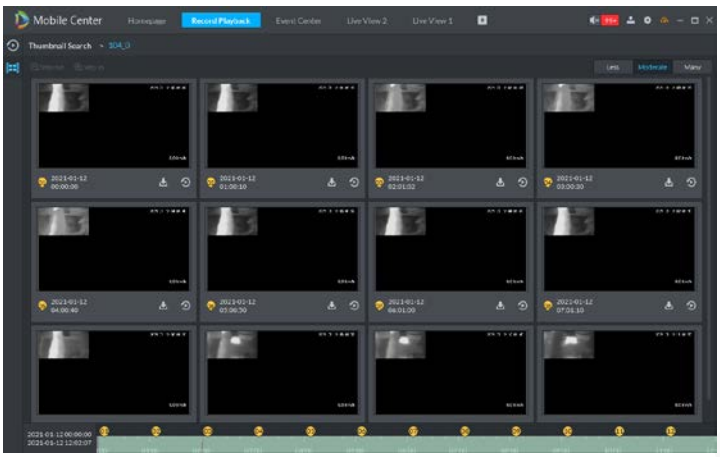
A blue point is displayed at the upper-right corner of a date with the recording in the selected channel.

Figure 4-41 Search period



Step 3 To set the region for a thumbnail, adjust the yellow box on the interface and then click .

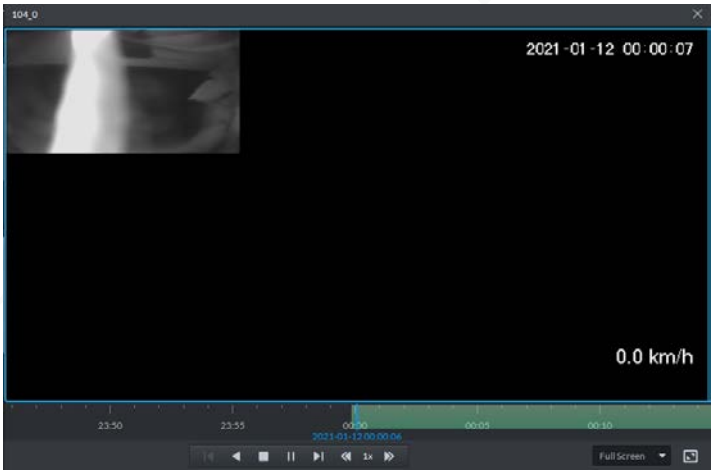
Figure 4-42 Thumbnail search



- The search results are displayed in the **Moderate** mode by default. Click **Less**, **Moderate**, or **Many**, and the search results are displayed accordingly.
- Double-click a thumbnail and the system starts searching again the recording of the period from current thumbnail time to the next thumbnail time.

Step 4 To view associated records of a thumbnail, click at the lower-right corner of the thumbnail.

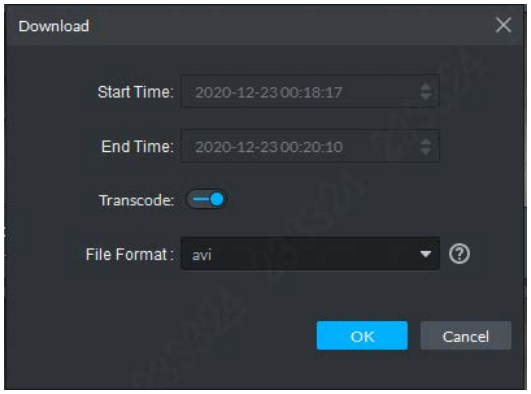
Figure 4-43 Thumbnail playback



Step 5 Download the recording.

1) To download the recording of the period from current thumbnail time to the next thumbnail time, click at the lower-right corner of the thumbnail.

Figure 4-44 Recording download



2) Select the **File Format** and click **OK**.
You can view the download details on the **Download Center**. For details, see "4.4.5 Recording download".

4.4.5 Recording download

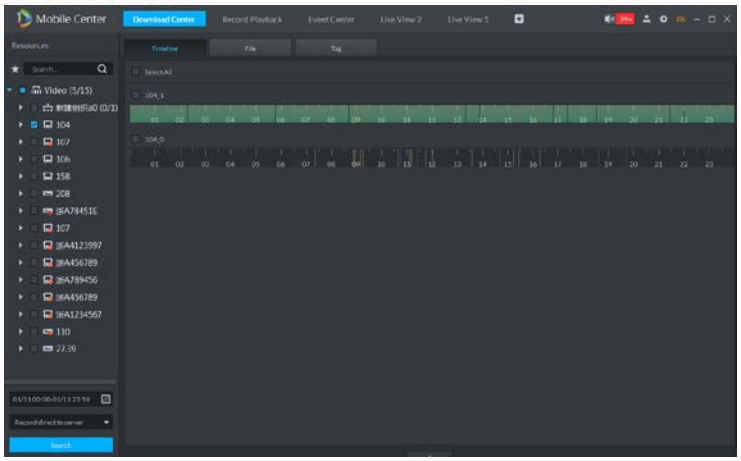
You can download recordings by **Timeline**, **File**, or **Tag**.

4.4.5.1 Timeline

Step 1 Go to the **Download Center** interface.
You can select one of two methods to go to the **Download Center** interface.

- Click at the bottom of the **Record Playback** interface.
- Click , and select **Download Center** on the **New Tab** interface.

Figure 4-45 Download center

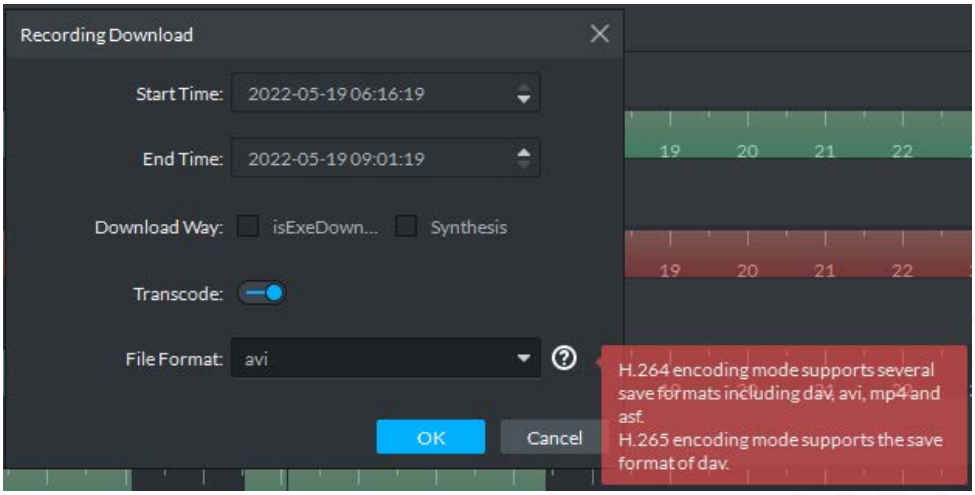


Step 2 Click **Timeline**, and then select the device channel, set the time period and location of the recording, and then click **Search**.

Step 3 Select the time period to be downloaded on the timeline, and the **Password Verification** interface is displayed.

Step 4 Enter the login password and click **OK**.

Figure 4-46 Download by timeline

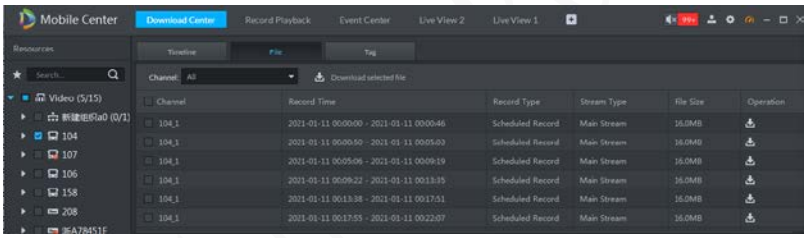


Step 5 Set the **File Format** and click **OK**.

4.4.5.2 File List

Step 1 On the **Download Center** interface, click **File**.

Figure 4-47 File List

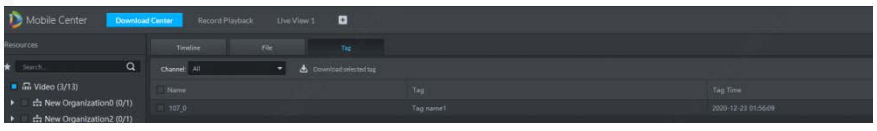


Step 2 Click in the record file list, or select multiple files, and then click **Download selected file**.

4.4.5.3 Tag

Step 1 On the **Download Center** interface, click **Tag**.

Figure 4-48 Tagged files



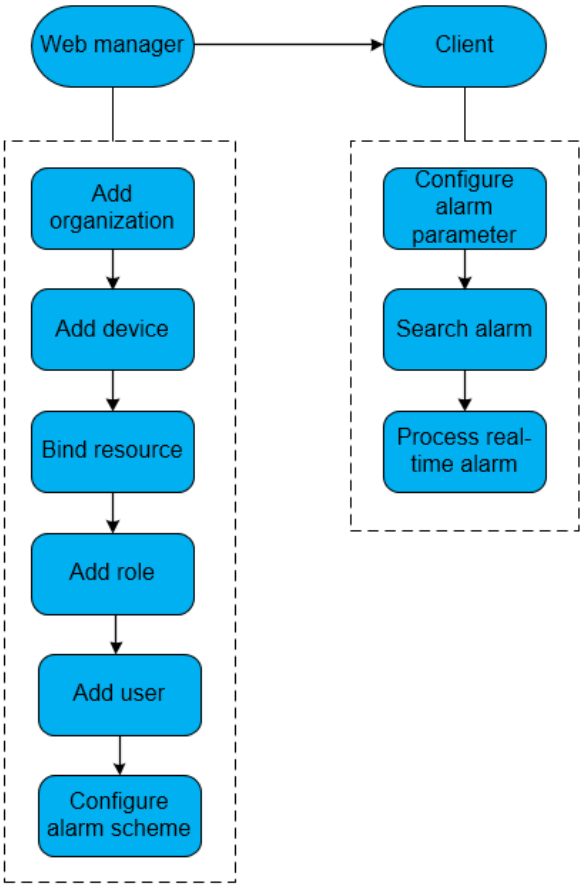
Step 2 Click in the record file list, or select multiple files, and then click **Download selected tag** to download the tagged videos.

4.5 Event Center

4.5.1 Preparations

- Relevant devices have been added at the Platform. For details, see "3.6Adding Device".
- For event management configuration details, see "3.8Configuring Event Management".

Figure 4-49 Event center process



4.5.2 Setting Alarm Parameters

Configure the alarm display modes at the client. For details, see "4.2 Local Configuration".

4.5.3 Searching and Processing Real-time Alarm

Custom alarms can be modified and deleted.

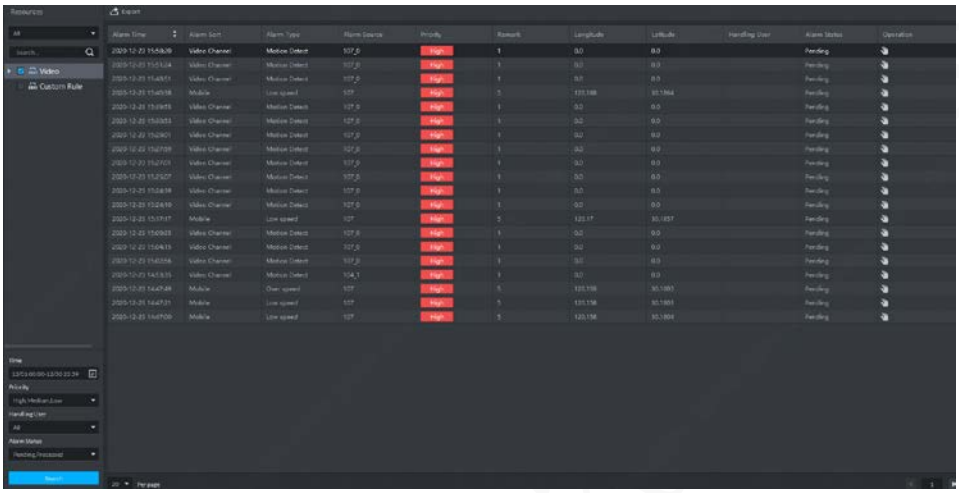
- If the custom alarm type is used by the alarm scheme, it can only be modified.
- If the custom alarm type is not used by the alarm scheme, it can be deleted. After deletion, the alarm type of alarm input channels is restored to default.
- After the custom alarm type name is modified, the historical data keeps the original name and the new data uses the modified name.

4.5.3.1 Processing Real-time Alarm

Procedure

Step 1 Select > Event Center.

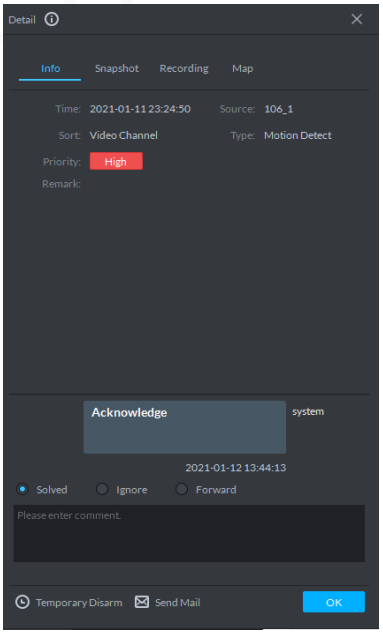
Figure 4-50 Alarm processing



Step 2 Click of the corresponding alarm, and then the username is displayed in the **Handling User** column.

Step 3 Double-click to view alarm details and process alarms.

Figure 4-51 Record processing



Step 4 Click the tabs **Info**, **Snapshot**, **Recording**, and **Map** at the upper-right corner of the interface to view the related information of an alarm.

Step 5 Select the processing method from **Solved**, **Ignore**, or **Forward**, and then enter the comment.

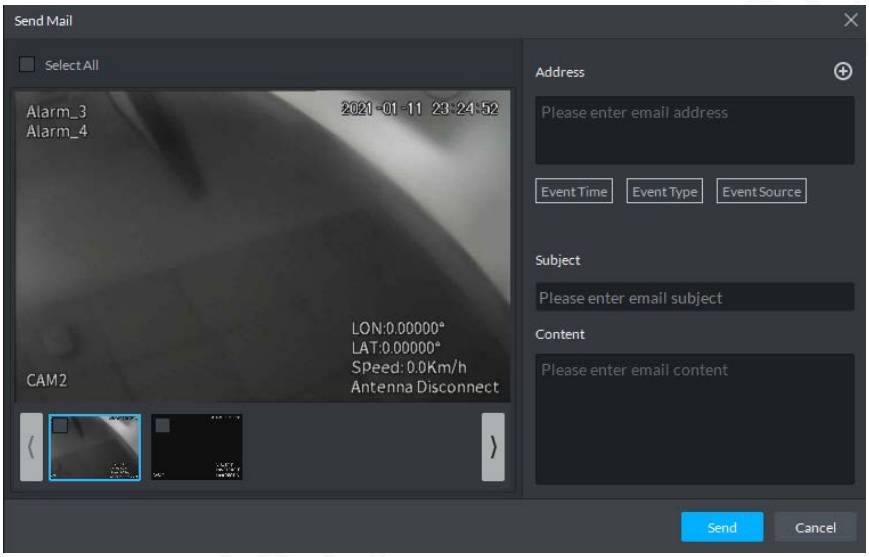
When selecting **Forward**, you can select other users in **Forward to other users** and forward this alarm to a specified user to process it.

Step 6 Click **OK**.

Related Operations

- Temporary Disarm: Click **Temporary Disarm**, set the disarm time on the **Temporary Disarm** interface, and then click **OK**.
- Send Mail: Click **Send Mail**, set the related information on the **Send Mail** interface, and then click **Send**.

Figure 4-52 Sending mail



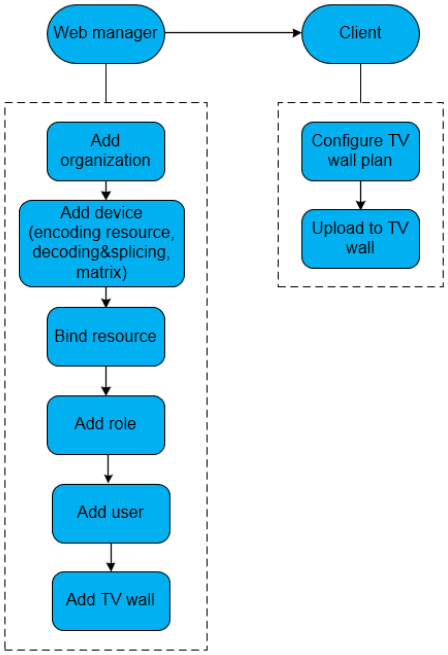
4.6 Video Wall

4.6.1 Preparations

To display videos on the wall at the client, you need to:

- Add related devices: Encoder, decoder, or matrix device. For details, see "3.6Adding Device".
- Add video wall. For details, see "3.10Adding Video Wall".

Figure 4-53 Process of displaying videos on the wall



4.6.2 Videos on the wall

Step 1 Select > **Video Wall**.

Figure 4-54 Displaying videos on the wall

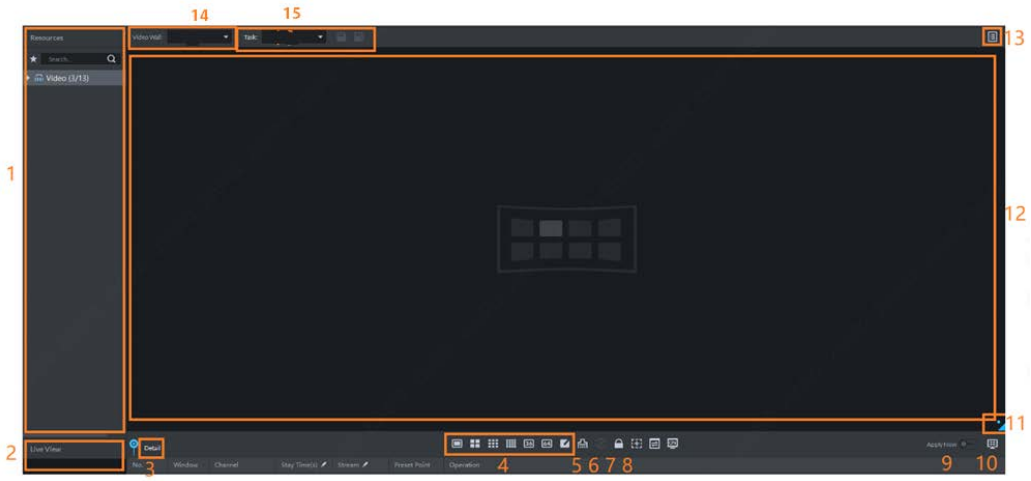


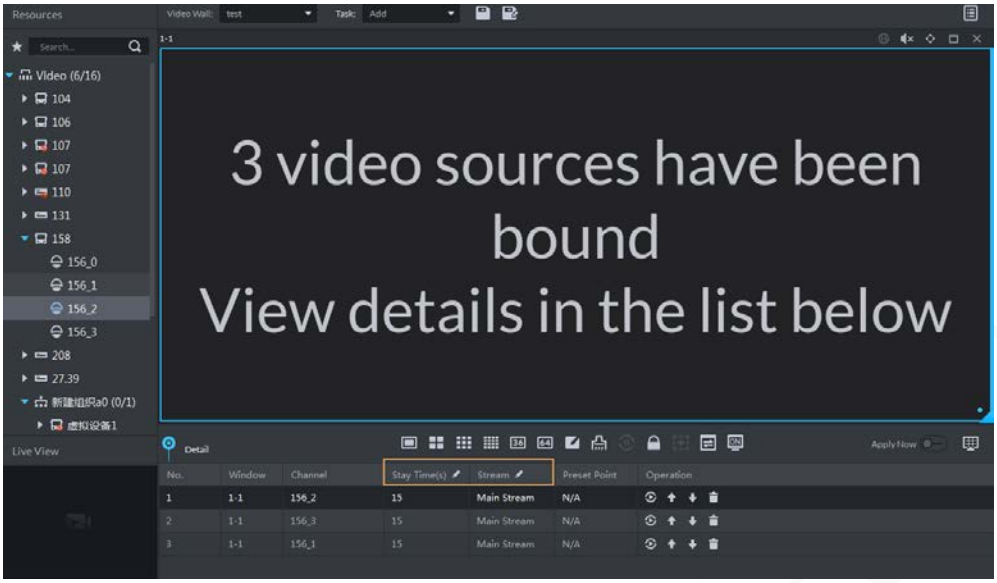
Table 4-16 Description of videos on wall interface

No.	Module Name	Description
1	Device tree	• If in **Basic Setting**, you select **Show device node**, the Device Tree shows the device and the channels under it. If deselected, channels of all devices are displayed. • Enter device or channel name in Search... to search for channels. • : View Favorites folder. Right-click the added channels, you can delete the channel. Right-click the folder, you can tour view the added channels or create new folders.
2	Live view	Live view of video in the channel.
3	Details	Click this icon to view the binding information of the screen, window, and channel. • : View video in the **Live View** area at the lower-left corner to check whether the channel is required. • : Adjust the sequence. • : Delete the video source of the added window. • : Modify the channel stay time in signal tour. • : Modify the video stream.
4	Window split	Set window split mode.
5	Clear	Clear information of all screens.
6	Start or stop all tours	Start or stop all tours.
7	Lock window	A locked window cannot be operated.
8	Back display	View the current layout.
9	Real-time videos on the wall	Enable the function to display videos on the wall while a task is configured.
10	Displaying videos on the wall	Manually display videos on the wall.
11	Eagle eye	View the current video wall layout in thumbnail.
12	Video Wall	Video wall area
13	Video wall plan	Configure the schedule plan and tour plan. For details, see “4.6.3Creating Videos on Wall Plan”.
14	Task manager	Allow for adding, saving, or deleting tasks.
15	Video wall selection	Select a video wall to be configured.

Step 2 Select a video wall and a window.

Step 3 Double-click video channels in the device tree or directly drag the video channel to the video window.

Figure 4-55 Bind channels



- Enter a device name or channel name in the search box to search.
- Multiple video sources can be bound in a window.

Step 4 Click to display videos on the wall.

When multiple video sources are bound in a window, the window automatically starts touring after displaying videos on the wall.

- Modify the stay time and the stream type of a channel in the right-click menu or in **Detail**.
- Click to modify tour sequence.

  Select **Stop all tours** in the right-click menu or click to stop tour.

4.6.3 Creating Videos on Wall Plan

4.6.3.1 Configuring Schedule Plan

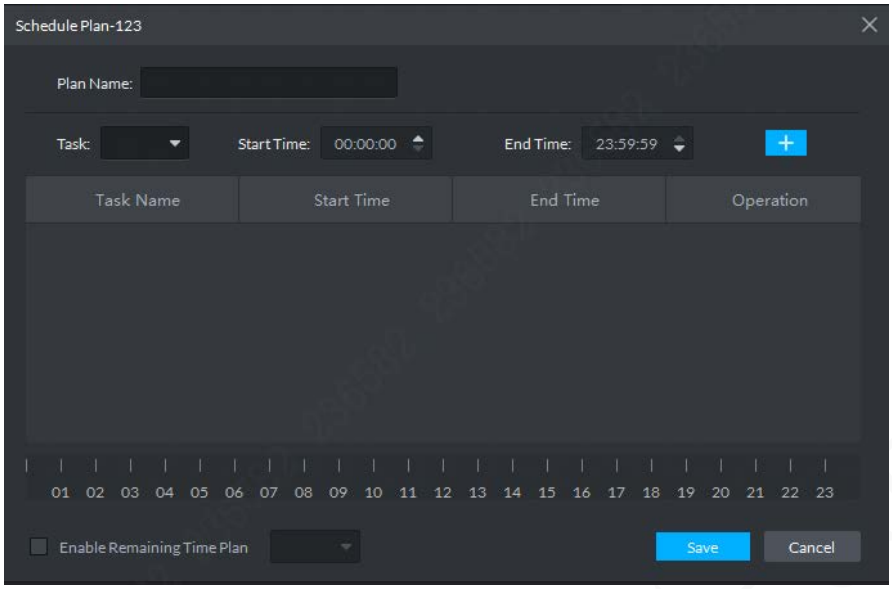
After configuring the schedule plan, you can play video task on video wall at a fixed time.

Procedure

Step 1 On the **Video Wall** interface, click at the upper-right corner.

Step 2 Select .

Figure 4-56 Schedule plan

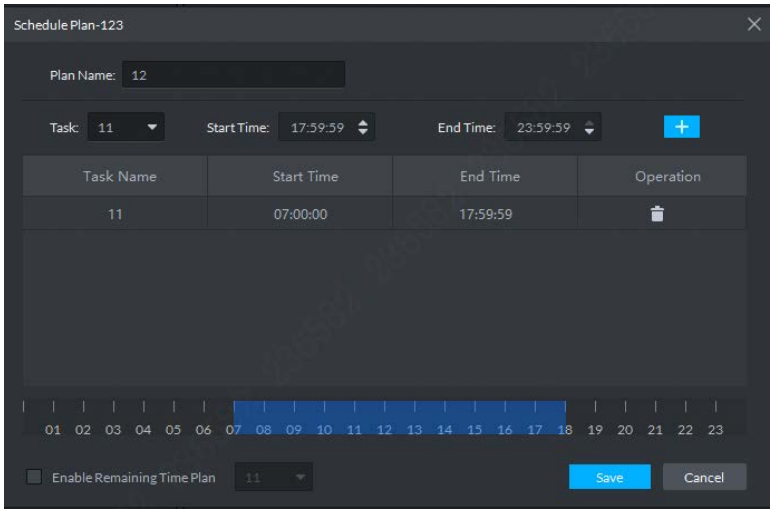


Step 3 Enter the plan name.

Step 4 Select **Task** and configure **Start Time** and **End Time** of the plan. Click .

When you select **Enable Remaining Time Plan** and configure a plan, the corresponding task will be displayed on the wall beyond the schedule time.

Figure 4-57 Plan information and timeline



Step 5 Click **Save**.

The system returns to the **Video Wall Plan** interface.

Step 6 Click to enable the plan.

Related Operations

- Modify: To modify a plan, click corresponding to the plan.
- Delete: To delete a plan, click corresponding to the plan.

4.6.3.2 Configuring Tour Plan

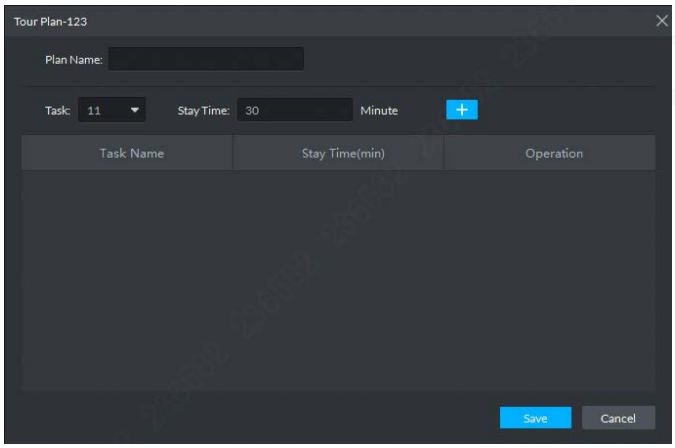
After a tour plan is configured, the system can tour multiple plans on the video wall.

Procedure

Step 1 On the **Video Wall** interface, click at the upper-right corner.

Step 2 Select .

Figure 4-58 Tour plan

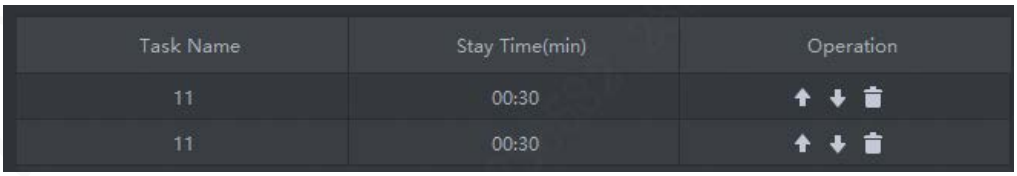


Step 3 Enter the plan name.

Step 4 Select a video task and configure the stay time, and click .

- Click to adjust task sequence.
- Click to delete a task.

Figure 4-59 Tour information



Step 5 Click **Save**.

The system returns to the **Video Wall Plan** interface.

Step 6 Click to enable the plan.

Related Operations

- Modify: To modify a plan, click corresponding to the plan.
- Delete: To delete a plan, click corresponding to the plan.

4.7 Mobile

View real-time information, basic information management, vehicle statistics, and electronic fence.

4.7.1 Real-time Information

View the real-time video and map changes.

Click the function bar, and you can switch among **Video**, **Map**, and **Video/Map**.

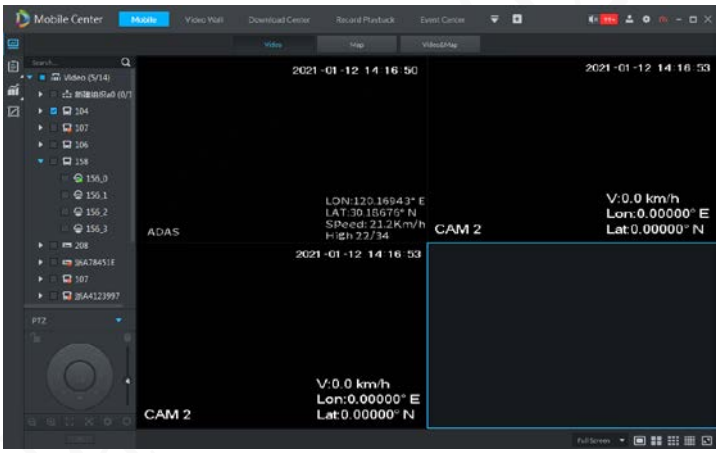
4.7.1.1 Video

Step 1 Select > Mobile > Real-time Information.

Step 2 Click **Video**.

Step 3 In the device channel on the left, double-click and select a video device.

Figure 4-60 Video



Step 4 View the video image, split and save the video. See "4.3.2Live View".

Select a device in the device tree on the left, and right-click the device. Live view, voice intercom, main stream/sub stream, and information dissemination are displayed respectively.

4.7.1.2 Map

Step 1 Select > Mobile > Real-time Information.

Step 2 Click **Map**.

Figure 4-61 Map

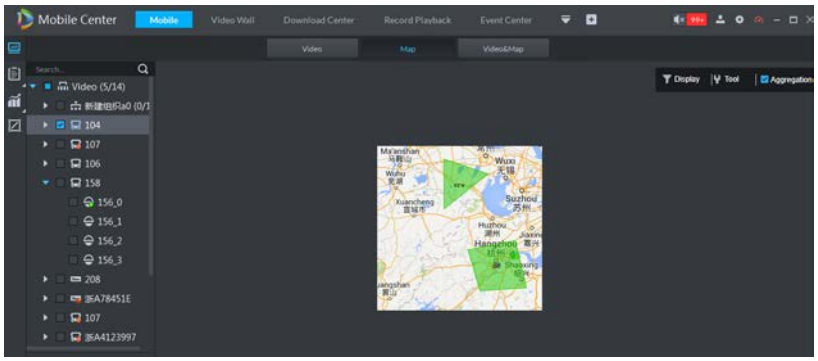
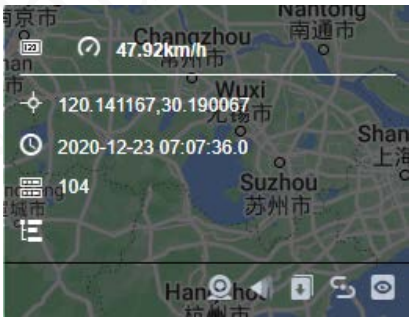


Table 4-17 Description of map parameters

No.	Parameter	Description
1	Display	Vehicle device, electronic fence, and bus stop name are available.
2	Tool	• Length: Use the mouse to draw 2 points on the map to show the distance. • Area: Use the mouse to draw a region on the map to show the area. • Mark: Use the mouse to choose the marking on the map. You can set its name and notes. • Reset: Restore the map to the default position.
3	Aggregation	When two or more vehicle icons appear on the map with a pixel lower than 100,the client aggregates them to form a circle. The number of aggregated devices is displayed in the circle.

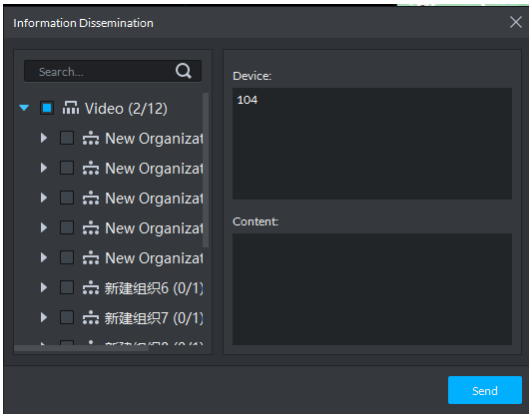
Step 3 Click the online vehicle icon on the map.

Figure 4-62 Vehicle details and operations



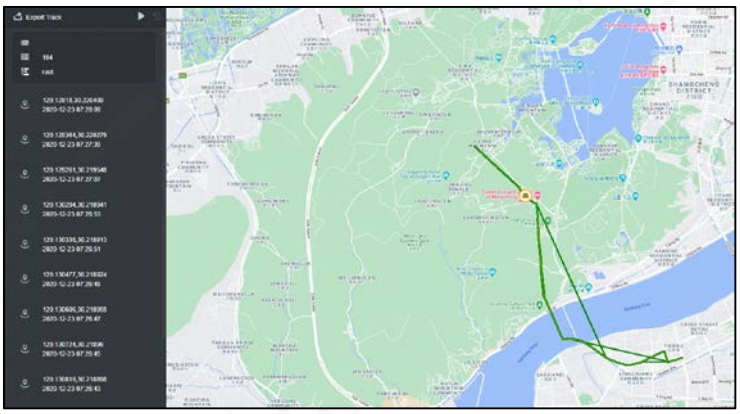
- Click and the system jumps to the **Video&Map** interface.
- Click to enable the voice intercom function.
- Click to send command to vehicle devices. You can select devices in the device tree on the left.

Figure 4-63 Send commands



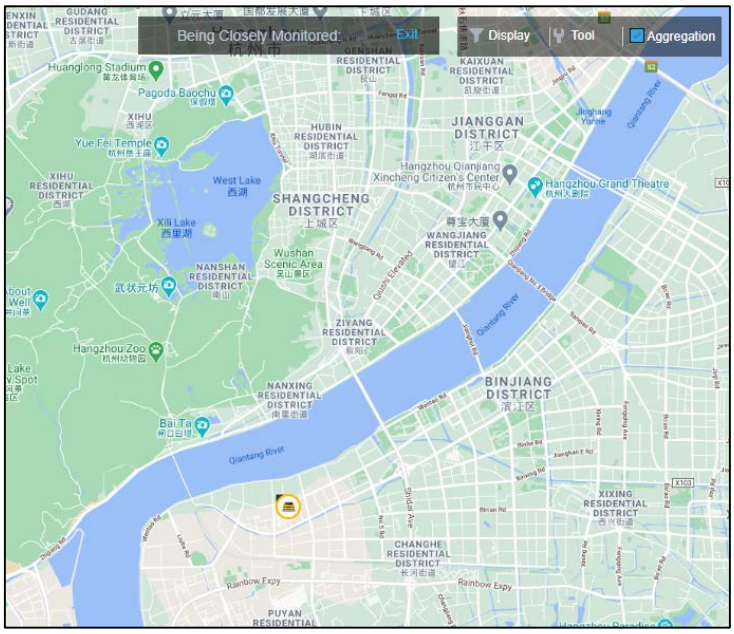
- Click to view the vehicle track. Click to set the time range for track generation; click **Exit** to exit the track viewing interface.

Figure 4-64 View vehicle tracks



- Click to enable key monitoring. The real-time vehicle track and position changes are displayed. Click **Exit** to exit the track viewing interface.

Figure 4-65 Key monitoring



4.7.1.3 Video and Map

The vehicle video image, position information, and alarm information can be displayed simultaneously.

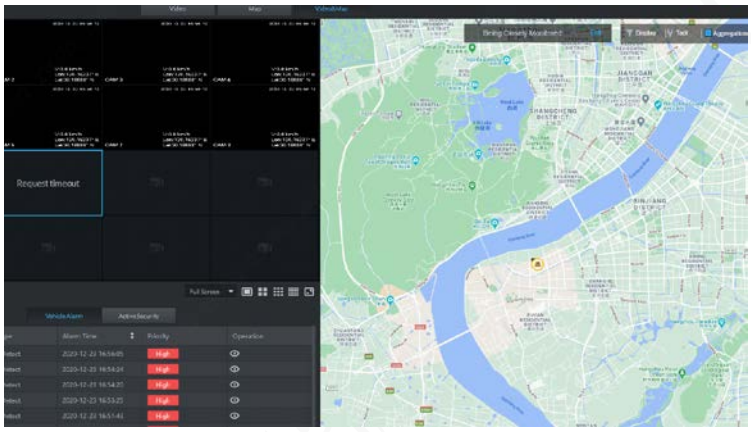
Procedure

Step 1 Select > Mobile > Real-time Information.

Step 2 Click Video/Map.

- **Vehicle Alarm**: Display different types of alarm information.
- **Active Security**: Display information of active security alarms.

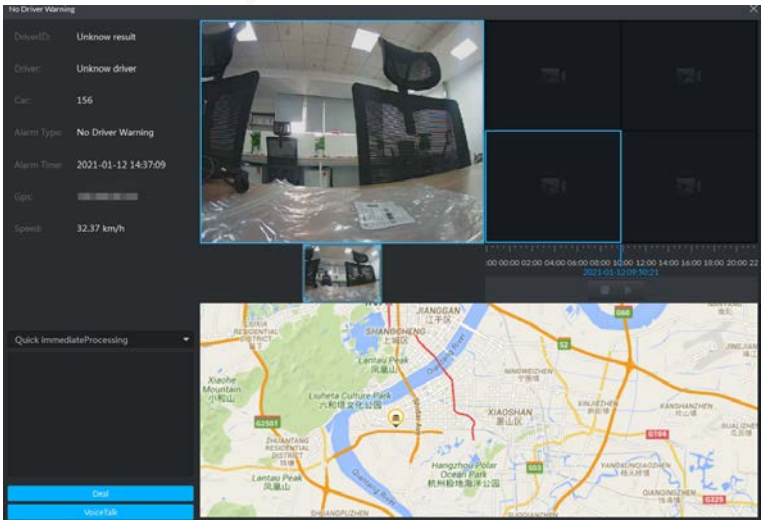
Figure 4-66 Video and Map



Step 3 Click **Active Security** (example).

Step 4 Click in **Operation** column to display the alarm type.

Figure 4-67 Alarm type details



Related Operations

- On the alarm type interface, click to stop or start playing records.
- Click **Voice Talk** to enable this function.

4.7.2 Basic Information Management

You can manage drivers, vehicles, and human-vehicle relationship, so as to add, search for, and delete information.

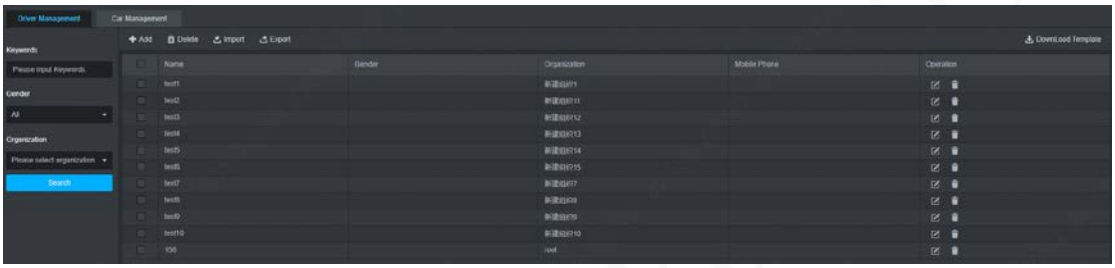
4.7.2.1 Driver Management

You can search, add, modify, delete, or import driver information.

Step 1 Select > Mobile > Basic Information Management.

Step 2 Click Driver Management.

Figure 4-68 Driver Management



Step 3 You can perform operations on driver information.

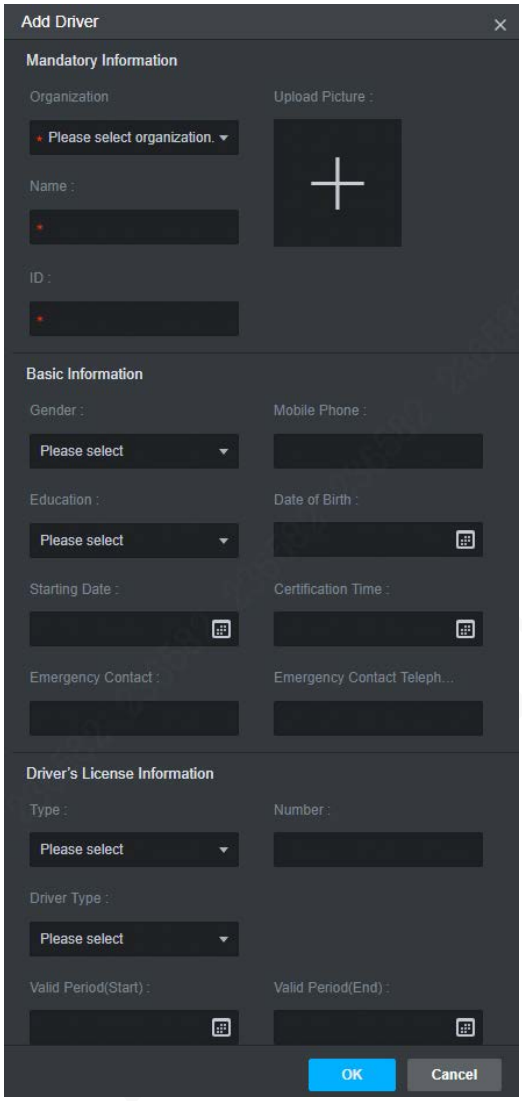
- Search

1) Enter the driver keywords, select the **Gender** and **Organization** of the driver.
2) Click **Search**.
   Matching driver information is displayed in the list on the right side.

- Add

1) Click **Add**.

Figure 4-69 Adding driver



2) Enter the driver information as needed.

Field with * are required. Configure the FTP before uploading pictures.

3) Click **OK**.

- Modify

  To edit driver information, click next to the driver information.

- Delete

  ◇ Click next to the driver information to delete.

  ◇ Select the driver information you want to delete, and click **Delete**.

- Import

  Click **Import** to import driver information.

  To add driver information in batches, click **Download Template**.

4.7.2.2 Car Management

Search, add, modify, delete, and import vehicle information.

Step 1 Select > Mobile > Basic Information Management.

Step 2 Click Car Management.

Step 3 Add vehicles.

The steps are similar to those in driver management. See "4.8.3.1 Driver Management".

4.7.3 Vehicle Statistics

Collect all the alarm information and GPS information. You can set search conditions for searching, processing, and exporting information.

Procedure

Step 1 Select > Mobile > Vehicle Statistics.

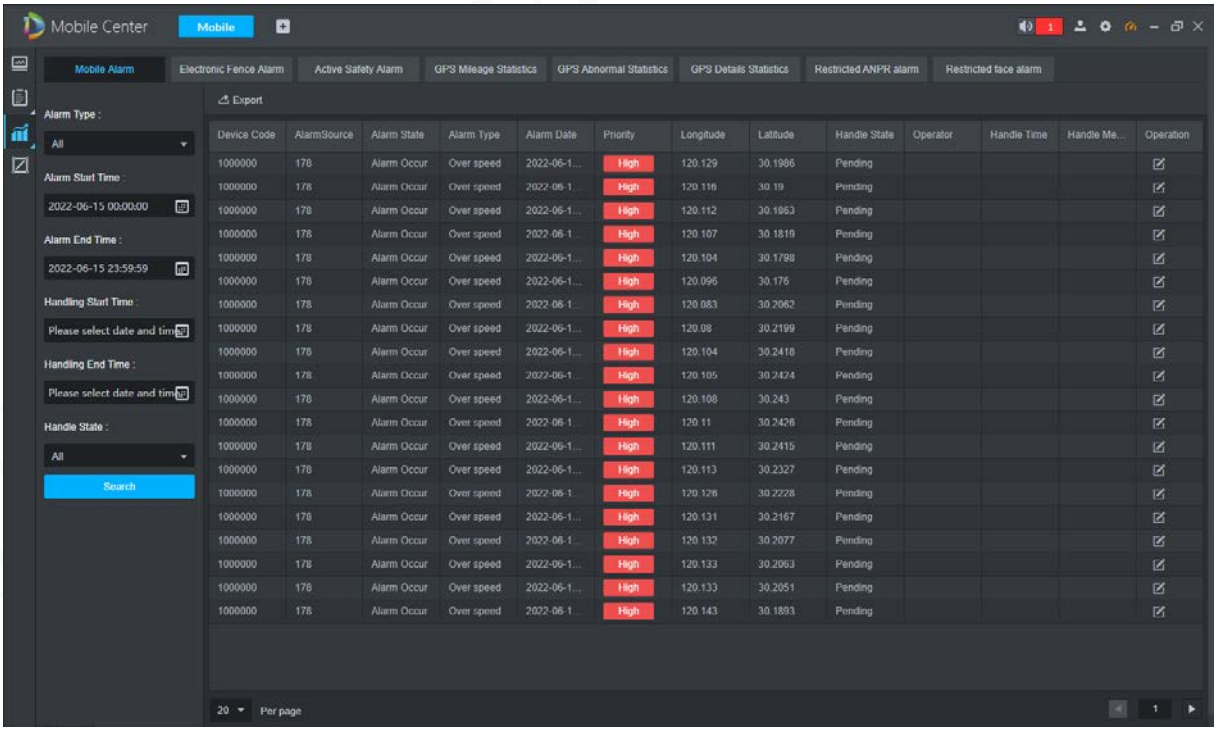
Search alarm information as needed. For example, mobile alarm:

Step 2 Click Mobile Alarm.

Step 3 Enter the search conditions.

Step 4 Click **Search**.

Figure 4-70 Mobile alarm



Related Operations

- Click **Export** to export alarm information and GPS information to local.

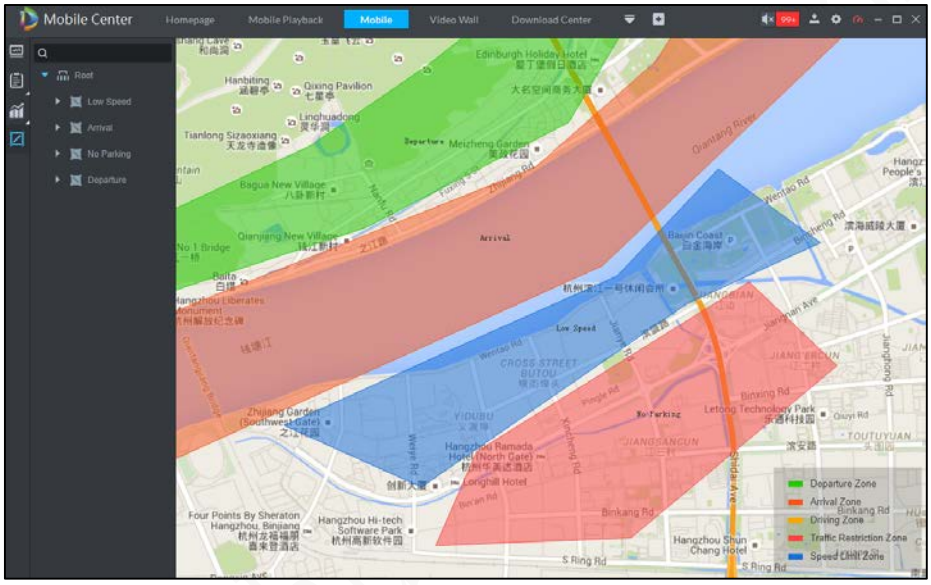
- Click next to the alarm to process it, select the alarm handle status, and enter handle comment.

4.7.4 Electronic Fence

You can add an electronic fence to the map. When a vehicle drives into or out of the fence, an alarm is triggered.

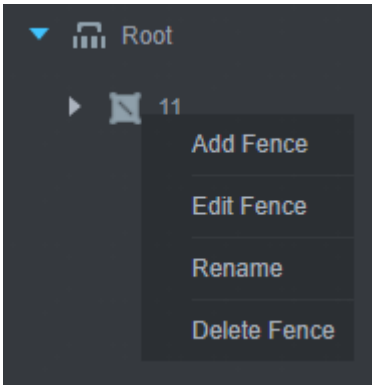
Step 1 Select > Mobile > Electronic Fence.

Figure 4-71 Electronic Fence



Step 2 Right-click to select an existing fence.

Figure 4-72 Fence menu

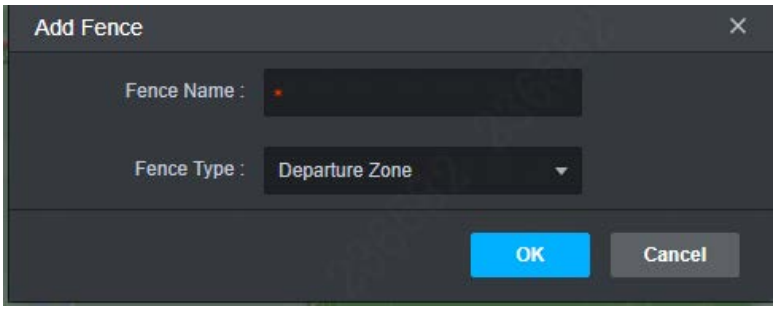


Step 3 Add, edit, rename, or delete an electronic fence.

- Add fence

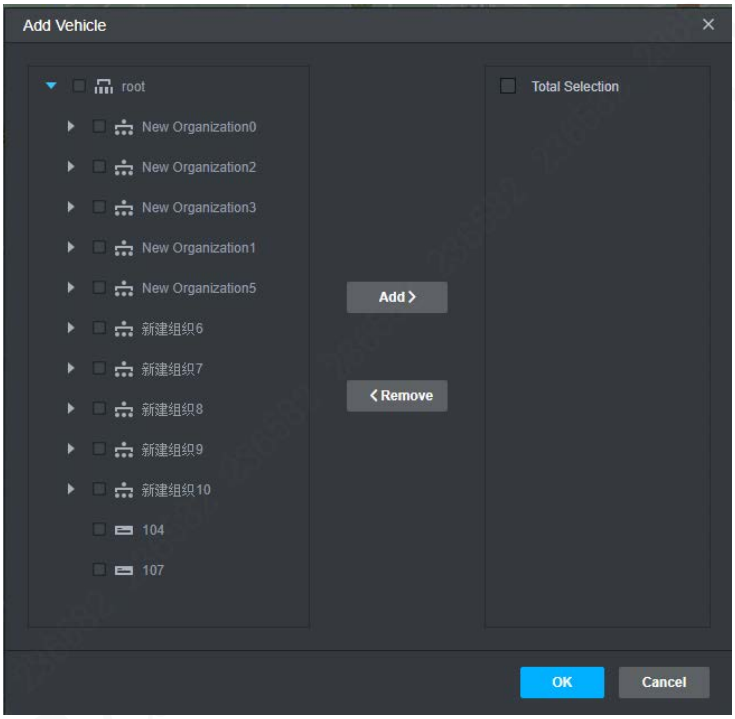
1) Click **Add Fence** and draw the scope of the fence on the map.

Figure 4-73 Add fence



2) Set Fence Name and Fence Type.
3) Click **OK**.

Figure 4-74 Add vehicle



4) Select a vehicle in the vehicle tree on the left.
5) Click **Add** to select the vehicle.
6) Click **OK**.

Add the vehicle to the fence, and double-click the fence name. The fence is then displayed on the map.

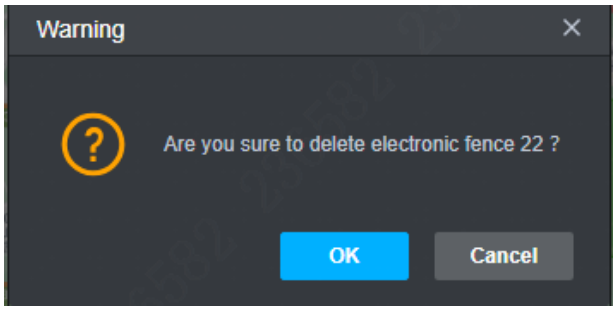
- Edit fence

  Click **Edit Fence** to edit the vehicle information in the fence.
- Rename

  Click **Rename** to modify the fence name.
- Delete

1) Click Delete Fence.

Figure 4-75 Delete fence



2) Click **OK** to delete the fence.

4.8 Mobile Playback

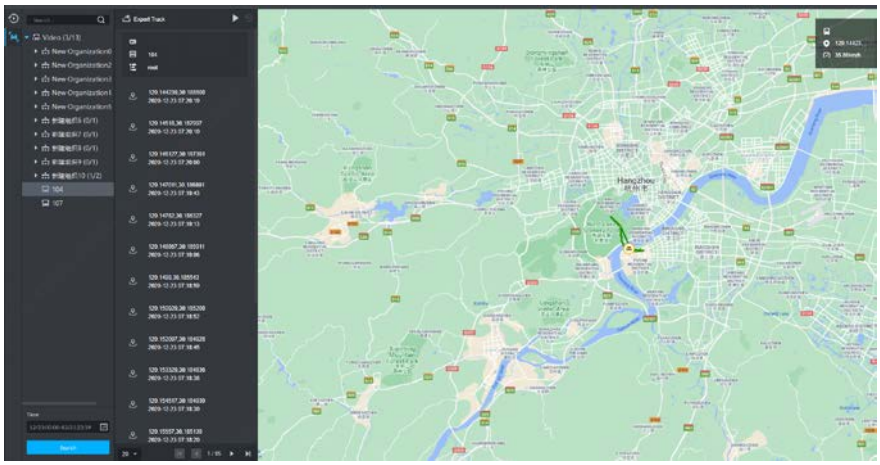
Allow for playback of device recording and server recording, track playback, and searching for history tracks.

Recording playback and track playback are available. For recording playback, see "4.4.3 Recording Playback".

Step 1 Select > Mobile Playback> Track Playback.

Step 2 Select a channel in the device tree.

Step 3 Select the date and recording storage location, and click **Search**.



4.9 Video Tour

The function is used to add video tour tasks.

Procedure

Step 1 Select > Tour Config.

Step 2 Click Add Task.

One window can be bound with up to 20 video channels.

Figure 4-76 Video Tour

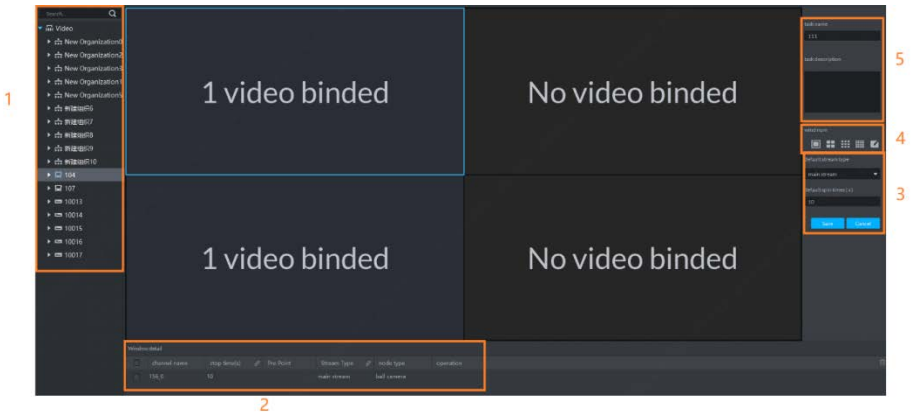


Table 4-18 Description of tour parameters

No.	Parameter	Description
1	Device tree	• The device tree shows devices and their channels. To select an online device, double-click or drag it to display on the window. • Search by device name or channel name.
2	Window detail	Window details include channel name, stop time, pre point, stream type, node type, and operation. Double-click the corresponding operation column to edit the parameters.
3	Default settings	Set the default stream type and spin times. Settings in this window apply to monitored points that are not selected. The selected parameters need to be modified in window details.
4	Window split	1/4/9/16 split or custom split mode are available.
5	Task information	Set the name and description of video tour task.

Step 3 Click **Save**.

Related Operations

- Click to adjust the sequence.
- Click to start touring; click to stop touring.
- Click to modify the stop time and stream type of all channels under this window.
- Click to delete tour.

4.10 HDD Failure

Step 1 Select > Hard Disk Hitch.

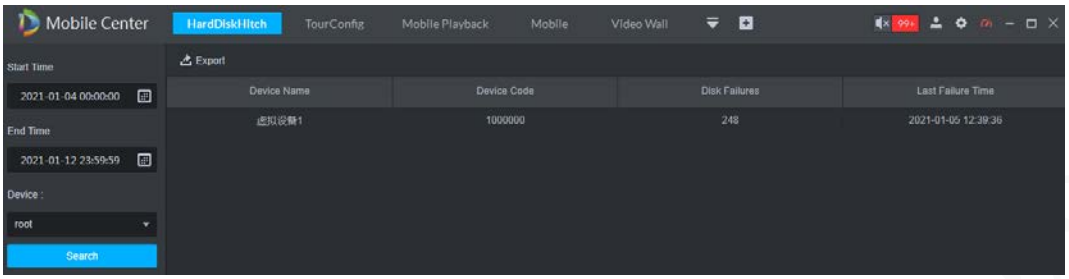
Step 2 Select a channel in the device drop-down list.

Step 3 Select the date and record storage location, and click **Search**.

Step 4 The device name, device code, disk failures, and last failure time are displayed.

Click **Export** to export the failure information.

Figure 4-77 HDD Failure



4.11 Passenger Trend

You can view number of passengers and people flow details, and analyze flow trend.

4.11.1 Total Passenger Flow Management

You can view number of passengers and flow details.

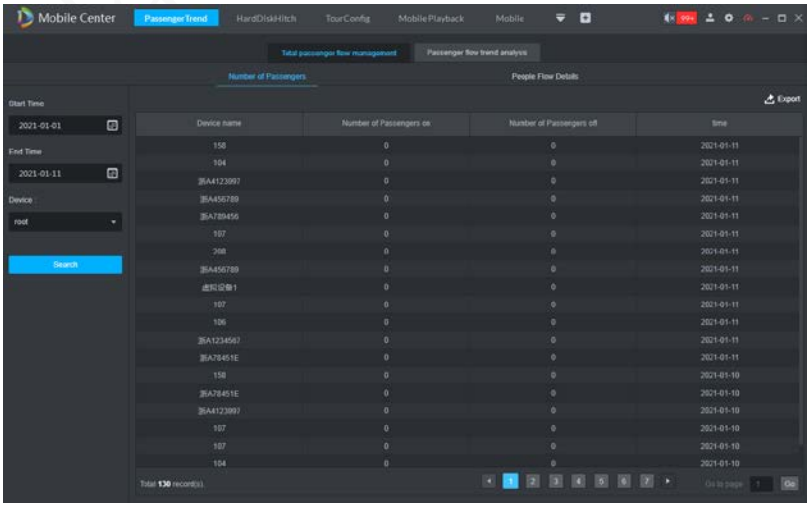
Passenger flow

Step 1 Select > Passenger Trend > Total Passenger Flow Management.

Step 2 Click Number of Passengers, select Start Time, End Time and Device on the left side.

Step 3 Click **Search**.

Figure 4-78 Number of passengers



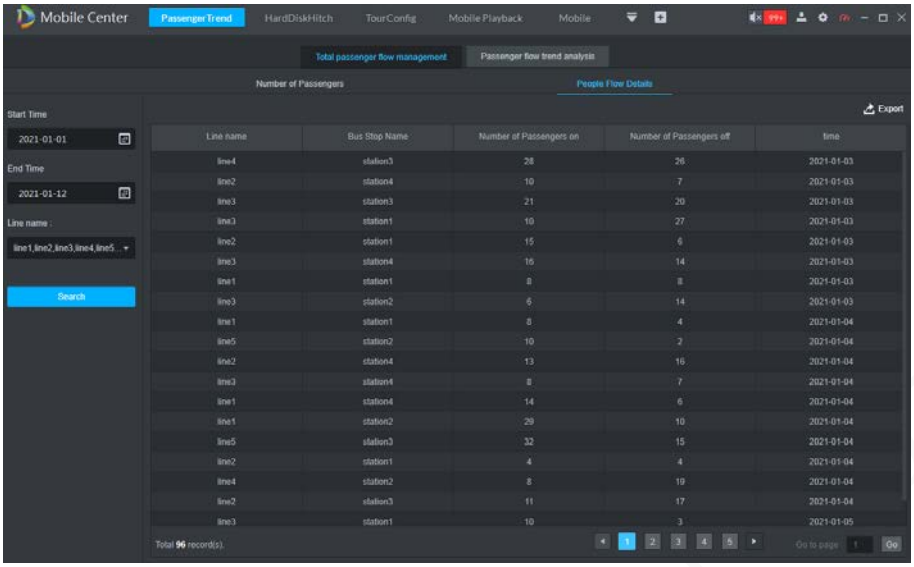
People flow

Step 1 Select > Passenger Trend > Total Passenger Flow Management.

Step 2 Click **People Flow Details**, and select **Start Time**, **End Time** and **Device** on the left side.

Step 3 Click **Search**.

Figure 4-79 People flow details



The number of passengers on the current day is not available.

Related Operations

Click **Export** to export the screenshot of the current report to local.

4.11.2 Passenger Flow Trend Analysis

You can view line passenger flow trend and site traffic trends.

Line passenger flow

Step 1 Select > Passenger Trend > Passenger flow trend analysis.

Step 2 Click **Line passenger flow trend**, select the query type, query time, and line name.

Search data on a daily, weekly, monthly, or yearly basis

- Up to 4 lines are displayed.
- The line passenger flow trend on the current day is not available.

Step 3 Click **Search**.

Move the mouse over a node in the statistical graph, and the number of passengers on and off is displayed.

Figure 4-80 Line passenger flow trend

People flow

Step 1 Select + > Passenger Trend > Passenger flow trend analysis.

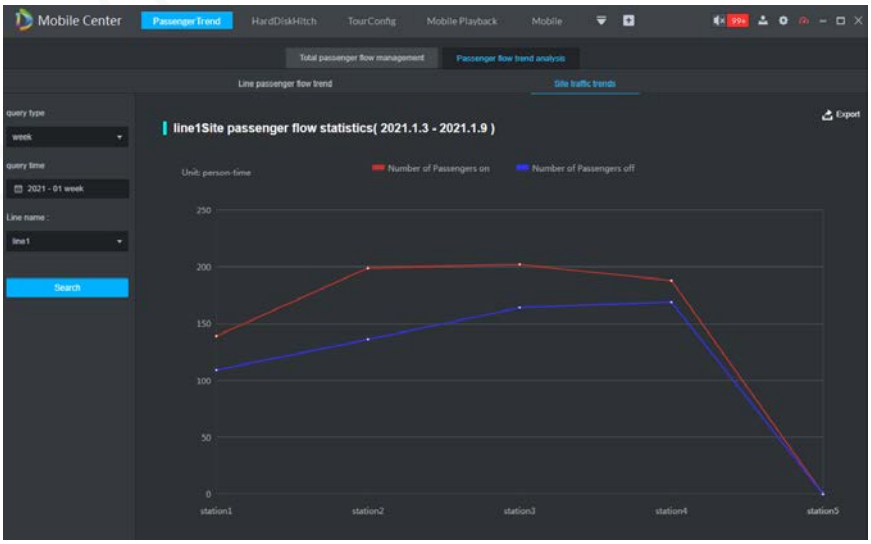
Step 2 Click **Site traffic trends**, and select query type, query time, and Line name on the left. Search data on a daily, weekly, monthly, or yearly basis

- Only one of site traffic trends is displayed.
- The site traffic trends on the current day are not available.

Step 3 Click **Search**.

Move the mouse over a node in the statistical graph, and the number of passengers on and off is displayed.

Figure 4-81 Site traffic trends



Related Operations

Click **Export** to export the screenshot of the current report to local.

4.12 Alarm Analysis

Alarm data is displayed in diagram. You can view **Vehicle security alarm, Driver safety alarm, Organize security alarm**, and **Alarm processing status**.

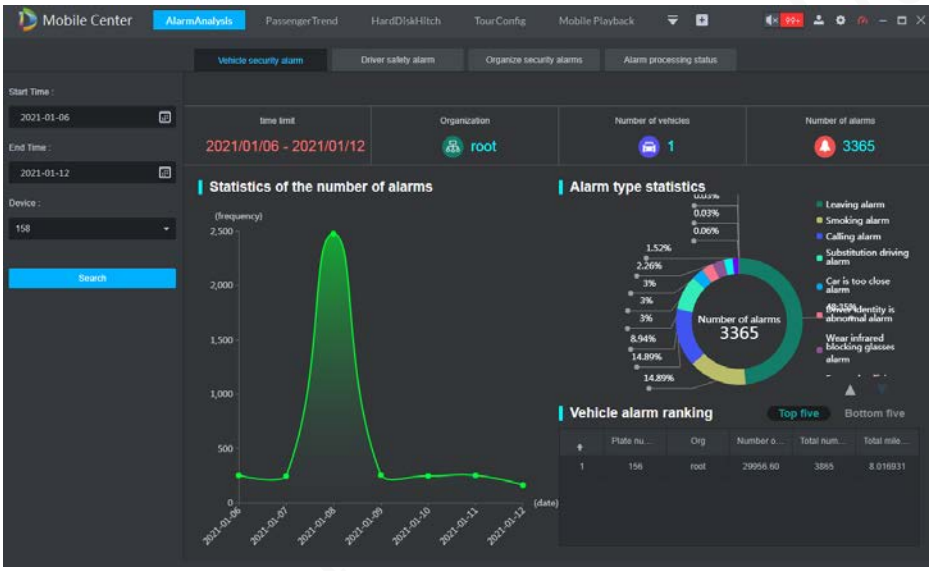
Procedure

Step 1 Select > Alarm Analysis.

Step 2 Select the start time, end time and device. For example, you can view the **Vehicle security alarm**.

Step 3 Click **Search**.

Figure 4-82 Vehicle security alarm



4.13 Operation Board

The statistical analysis, violation information and alarm information collected by the device are displayed in bar chart and line chart.

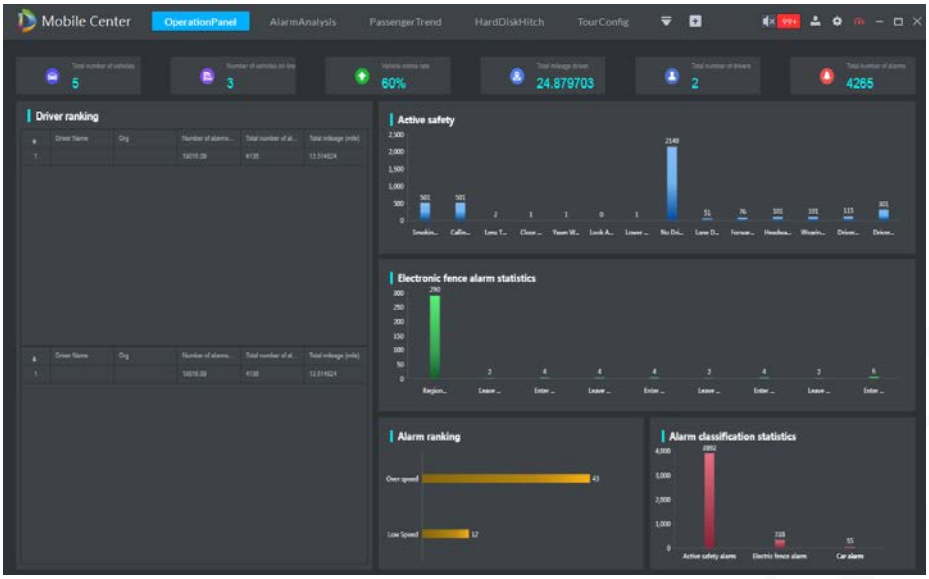
Select > **Operation Panel**.

All data of the current month is collected, excluding the data of the current day.

- The total number of vehicles, vehicles on line, mileage driven, drivers and alarms, and vehicle online rate are displayed on the first row of the interface.

  Vehicle statistics refer to the number of devices bound to the vehicles.
- Move the cursor to the diagram to display the details.
- The operation panel only shows data and analysis result of the current day, and refreshes every 5 minutes.

Figure 4-83 Operation Board

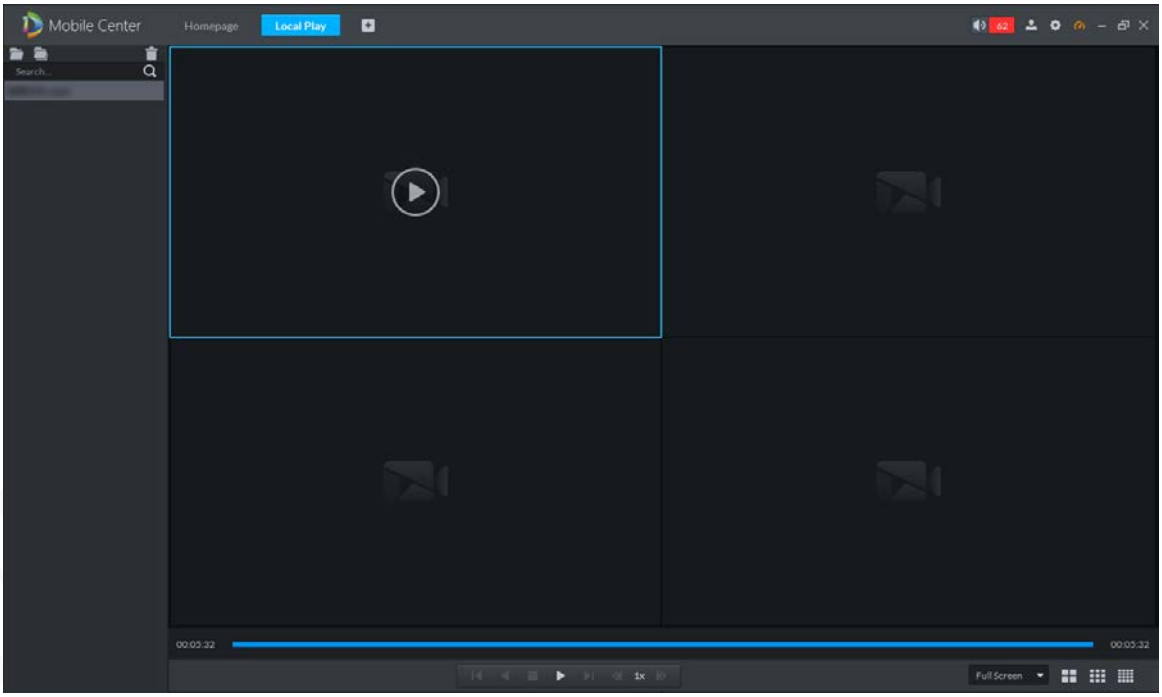


4.14 Local Play

Play locally stored video files on the client.

Step 1 On the Homepage, select Local Play.

Figure 4-84 Local Play



Step 2 Select a local video file to add to the playlist.

- Add a single video: click and select a local video to add to the playlist.
- Add video file: click and select a local video file to add all the video in the file to the playlist.

Step 3 Double click the added video, and the video is played.

In the window splitting mode, select a window and double-click the video to play the video in this window.

Table 4-19 Local play interface description

Icon	Description
	Delete video.
	Stop/pause playing video.
	Single frame play/ Single frame playback
	Accelerate/decelerate play by up to 64 times.
	Used to set the window split mode. You can select window split modes of 4, 9 or 16.

4.15 Data Management

Manage data of Face Database, ANPR database, Line and Site.

4.15.1 Face Database Management

Users can manage the face database and view the distribution progress and records of the face database here.

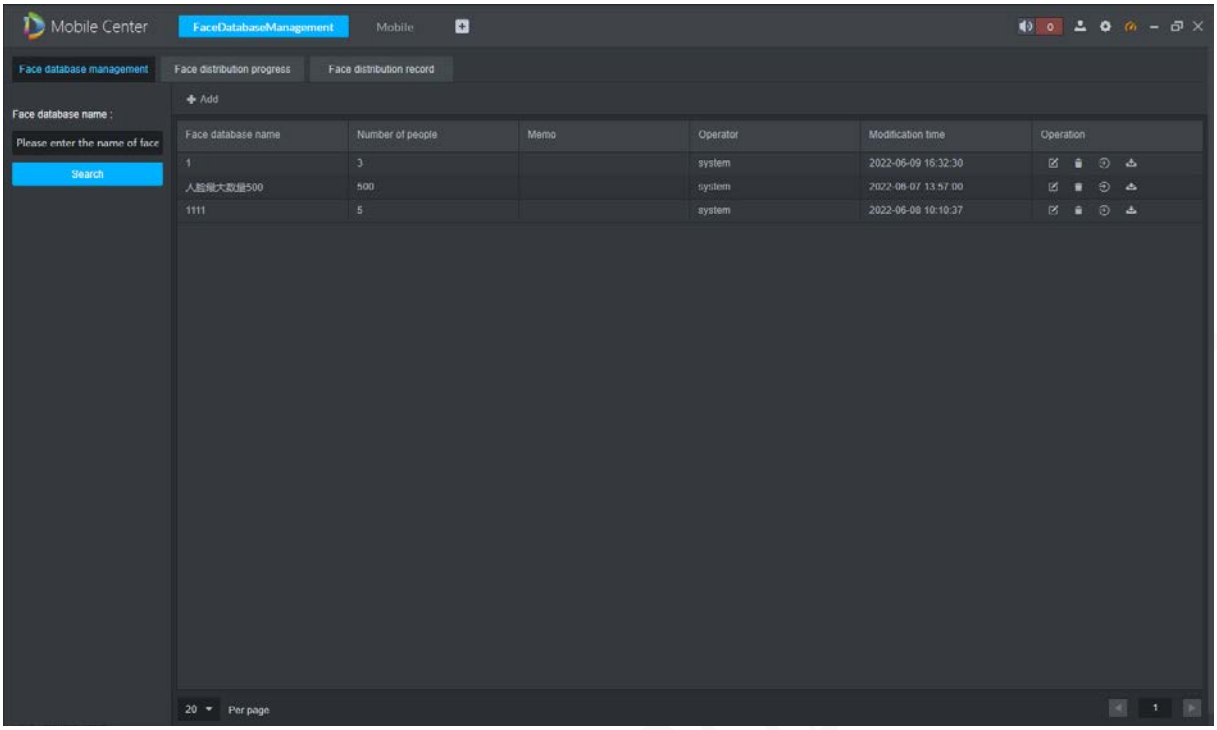
4.15.1.1 Face Database

Before distributing face information, first create a face database, and add personnel information to the face database. When the device detects the face in the face database, it triggers an alarm and reports it to the platform.

Create face database

Step 1 On the Homepage interface, select Face Database Management.

Figure 4-85 Face Database Management



Step 2 Click **Add,** enter the **Face database name** to create face database.

Figure 4-86 Add face database

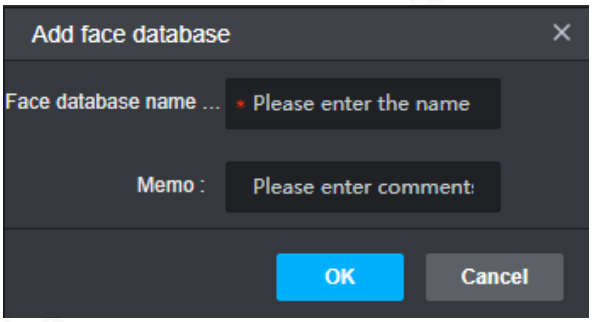


Table 4-20 Face database operation description

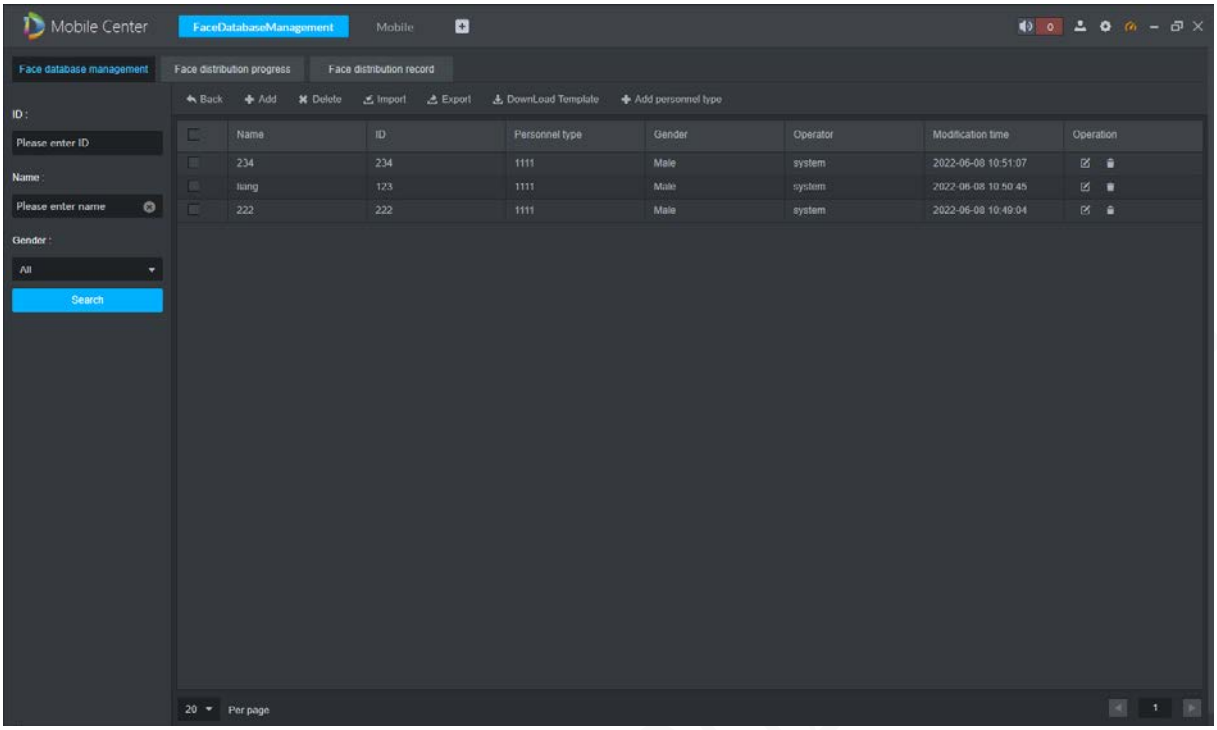
Icon	Description
	Edit face database name and memo.
	Delete face database.
	Click and the interface of adding face data is displayed.
	Distribute the face database to specified vehicles.

Add Face Information

Before first add people information, add personnel type.

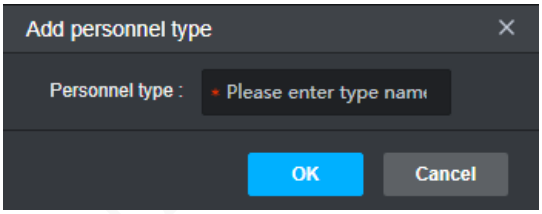
Step 1 Click on the right side of the face database, and the interface of adding face data is displayed.

Figure 4-87 Adding face data



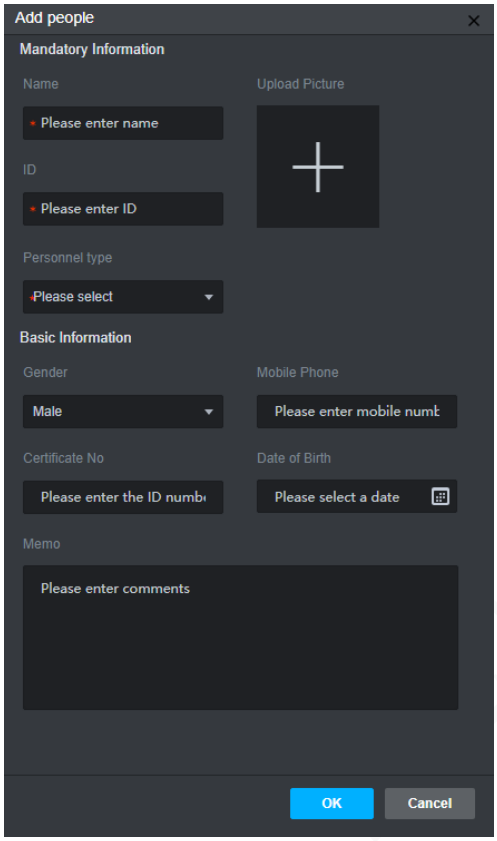
Step 2 Click **Add personnel type** and enter the type name in the pop-up interface. Click **OK**.

Figure 4-88 Add personnel type



Step 3 Click **Add,** the **Add people** interface is displayed.

Figure 4-89 Add people

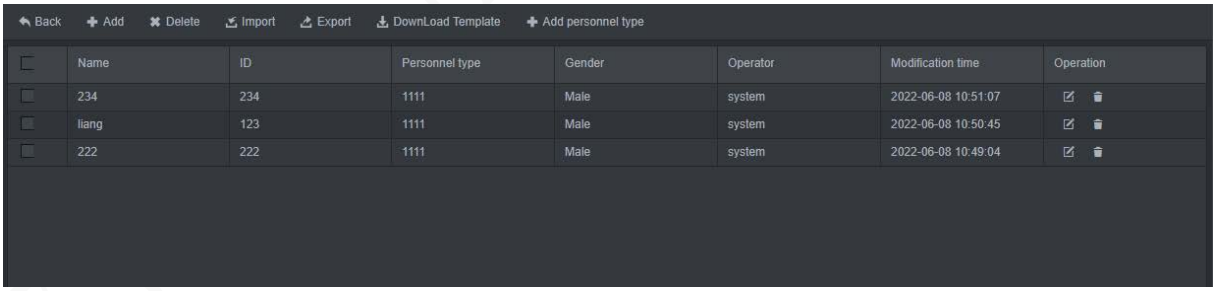


Step 4 Enter **Name**, **ID**, **Personnel type** and upload picture.

The maximum resolution of picture is 720p.

Step 5 Click **OK**, face information is added.

Figure 4-90 Face information



Step 6 Related operations.

- Search: Enter **ID**, **Name** and **Gender** and click **Search**.
- Delete: Click in the right side of the list or click **Delete** above the list.
- Import: Click **Import,** select a people information template, and import the template.

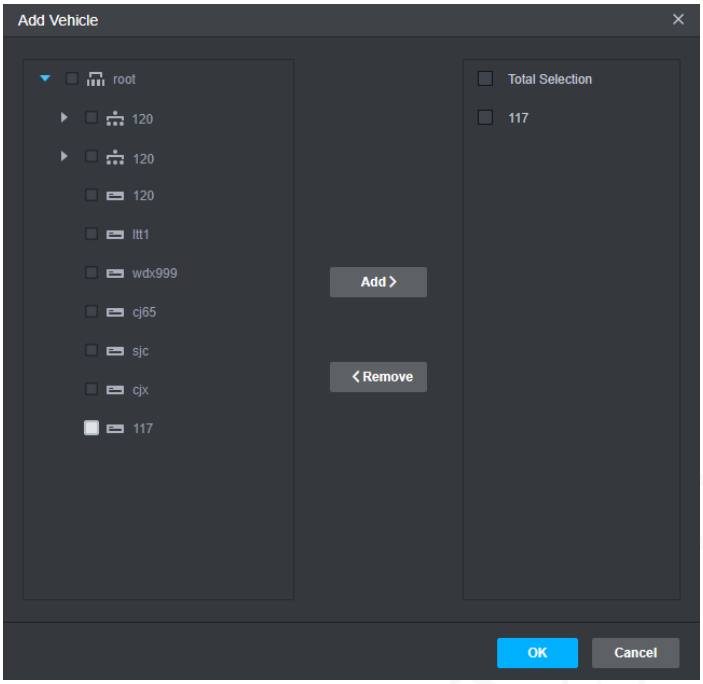
  Click **Download Template** to download a template.
- Export: Click **Export** to export the people information.

Distribute Face Database

Step 1 Click **Back** to return to the **Face Management** interface.

Step 2 Click in the right side of the list and the **Add Vehicle** interface is displayed.

Figure 4-91 Add Vehicle



Step 3 Select vehicle from the organization list on the left, and then click **Add**.

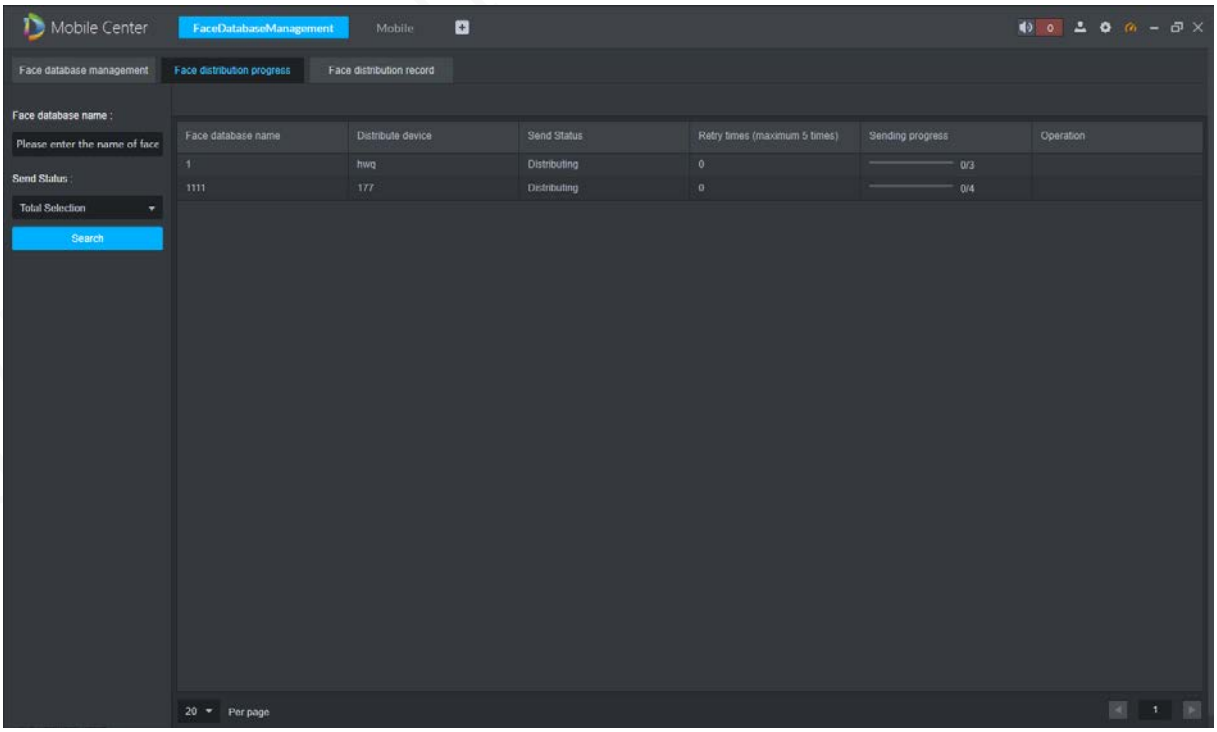
Step 4 Click **OK**, the face database is distributed.

4.15.1.2 Face distribution progress

View the face distribution progress.

Step 1 On the Homepage interface, click Face Database Management > Face Distribution Progress.

Figure 4-92 Face Distribution Progress



Step 2 Related Operations.

- Search: Enter Face Database Name or Send Status and click Search.

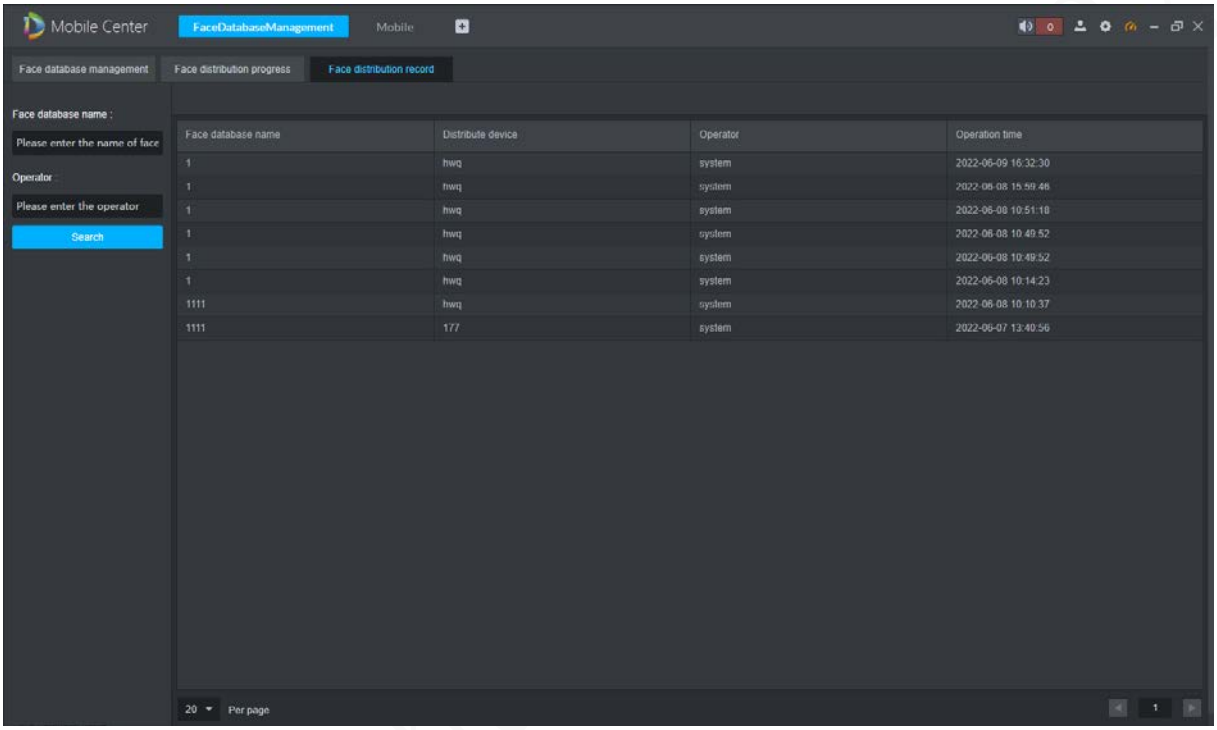
- Automatic retry: The system will automatically retry the distribution for 5 times with an interval of 5 minutes. After retrying fails, the user can click to manually distribute.

4.15.1.3 Face Distribution Record

View the face distribution record.

Step 1 On the Homepage interface, click Face Database Management > Face Distribution Record.

Figure 4-93 Face Distribution Record



Step 2 Enter the **Face database name** and **Operator**, click **Search** to search the distribution record.

The distribution record without operator is automatically distributed by the system.

4.15.1.4 View restricted face alarm

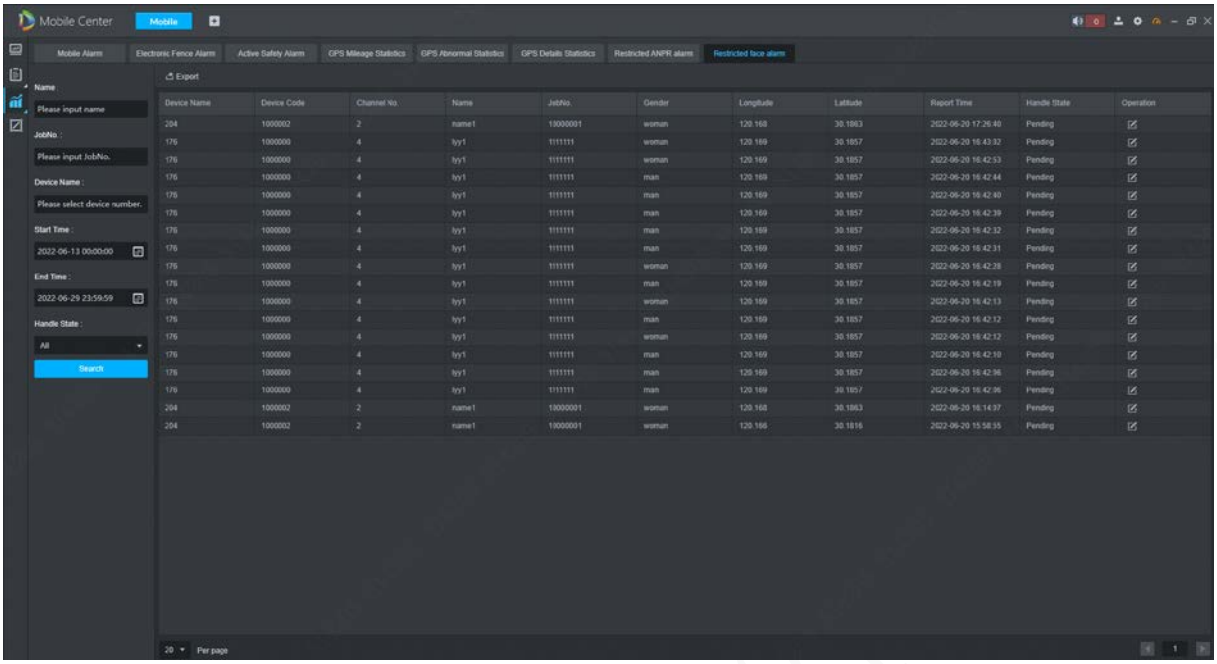
When the device detects the face in the face database, it triggers an alarm and reports it to the platform. Users can view and process restricted face alarm at the client.

Step 1 Select > Mobile > Vehicle Statistics > Restricted face alarm.

Step 2 Enter the search conditions.

Step 3 Click **Search**.

Figure 4-94 Restricted face alarm



4.15.2 ANPR Database Management

Users can manage the ANPR database, view the ANPR distribution progress and ANPR distribution records here. When the device detects the license plate in the ANPR database, it triggers an alarm and reports it to the platform.

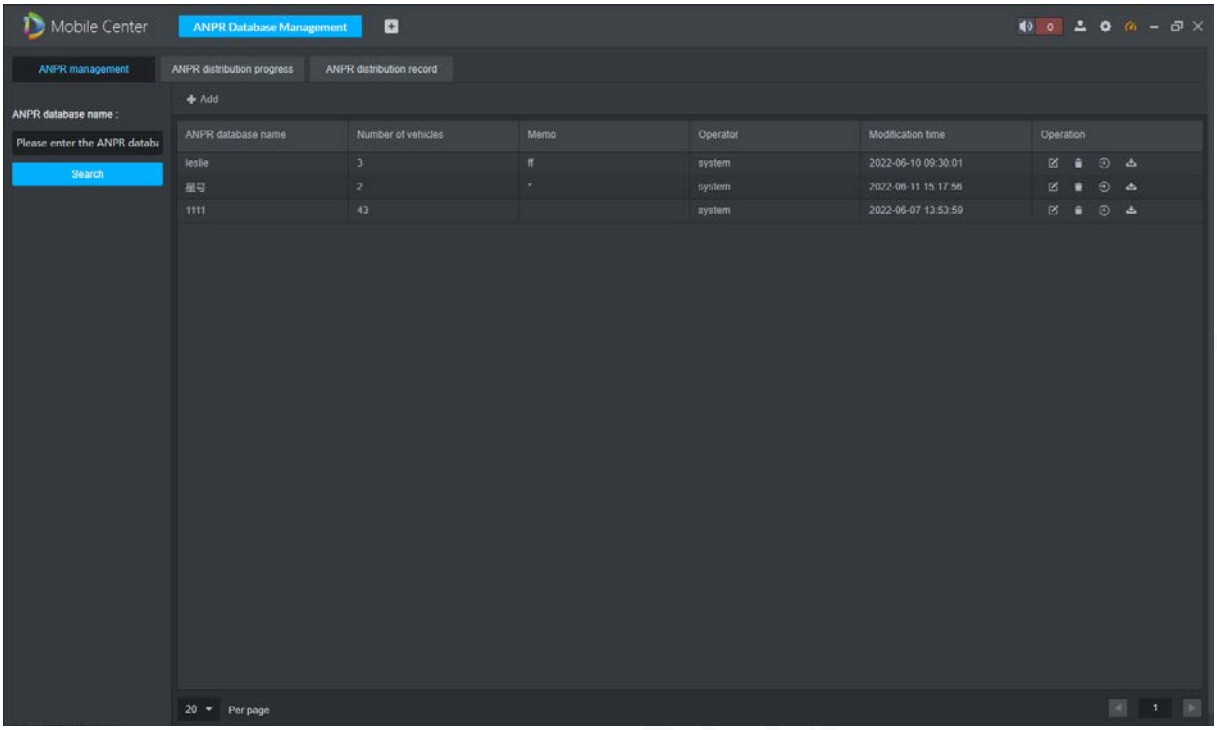
4.15.2.1 Database Management

Before distributing ANPR database information, first create an ANPR database, and then add ANPR database information to the ANPR database.

Create ANPR database

Step 1 On the Homepage interface, click **ANPR Database Management**.

Figure 4-95 ANPR Database Management



Step 2 Click Add and enter the ANPR database name to create an ANPR database.

Figure 4-96 Add ANPR database

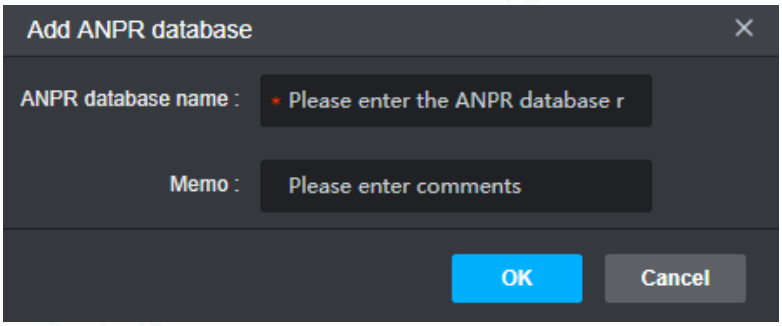


Table 4-21 ANPR database operation description

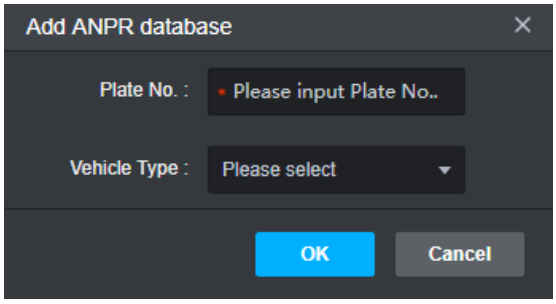
Icon	Description
	Edit ANPR database name and memo.
	Delete ANPR database
	Click and the interface of adding ANPR data is displayed.
	Distribute the ANPR database to specified vehicles.

Add Vehicle to ANPR Database

Step 1 Click on the right side of the ANPR database list.

Step 2 Click **Add** and the interface of **ANPR database** is displayed.

Figure 4-97 Adding ANPR database



Step 3 Enter the vehicle **Plate No.** and **Vehicle Type**, and click **OK**.

Vehicles are added, and up to 1000 vehicles can be added.

Step 4 Related operations.

- Search: Enter **Plate No.** on the left side of the ANPR database list and click **Search**.
- Delete: Click in the right side of the list or click **Delete** above the list.
- Import: Click **Import,** select a vehicle information template, and import the template.

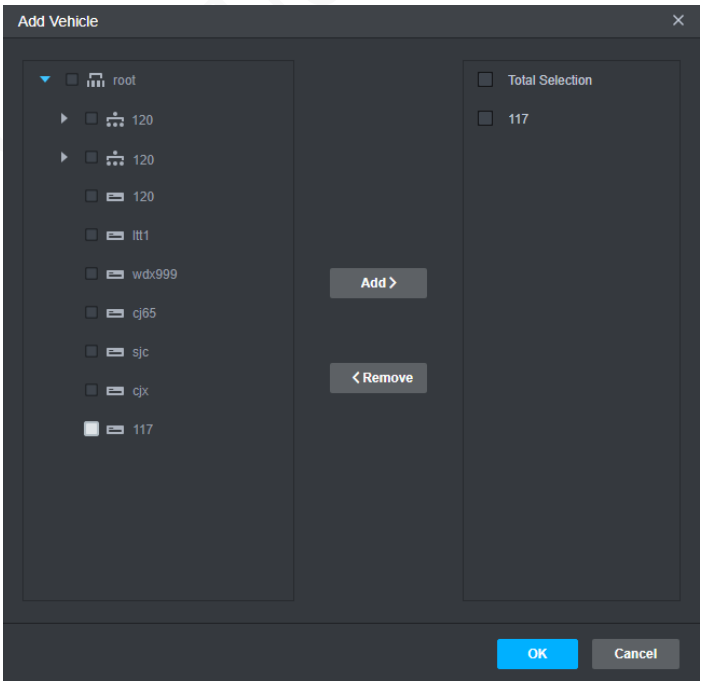
  Click **Download Template** to download a template.
- Export: Click **Export** to export the ANPR database.

Distribute ANPR Database

Step 1 Click **Back** to return to the **ANPR Database Management** interface.

Step 2 Click in the right side of the list and the **Add Vehicle** interface is displayed.

Figure 4-98 Add Vehicle



Step 3 Select vehicle from the organization list on the left, and then click **Add**.

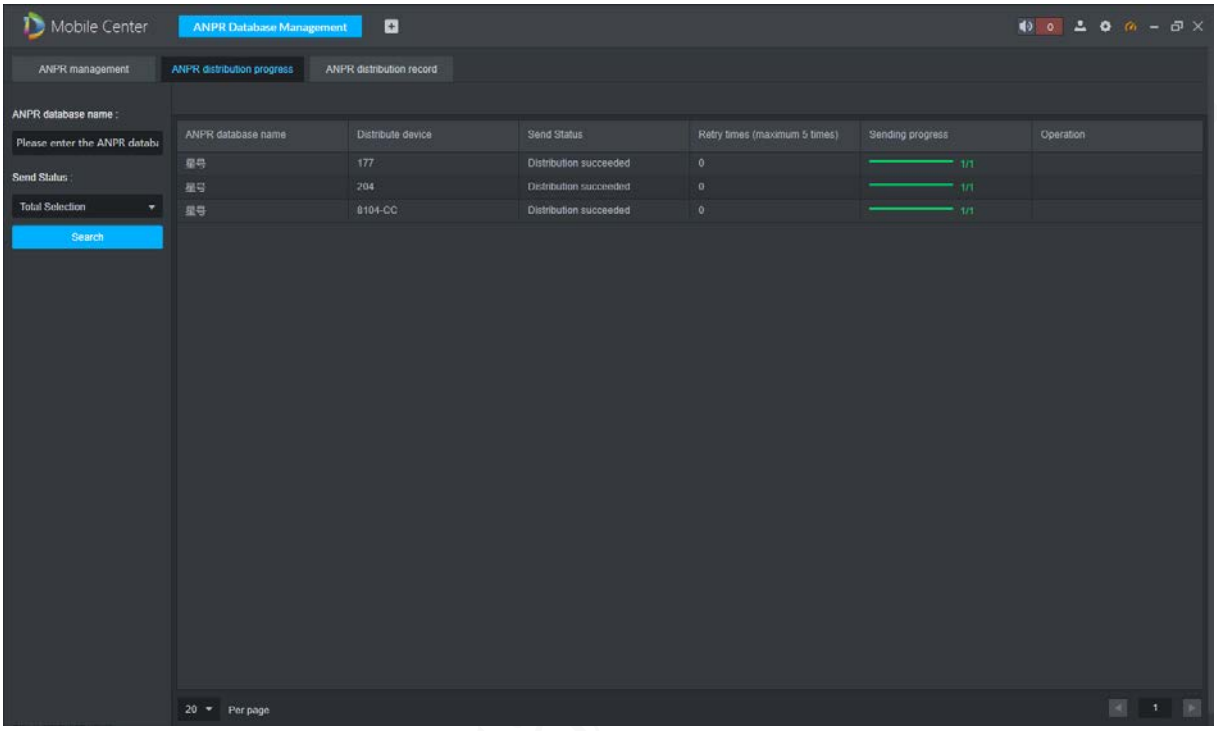
Step 4 Click **OK**, the ANPR database is distributed.

4.15.2.2 ANPR Distribution Progress

View the ANPR distribution progress.

Step 1 On the Homepage interface, click ANPR Database Management> ANPR Distribution Progress.

Figure 4-99 ANPR Distribution Progress



Step 2 Related Operations.

Search: Enter ANPR Database Name or Send Status and click Search.

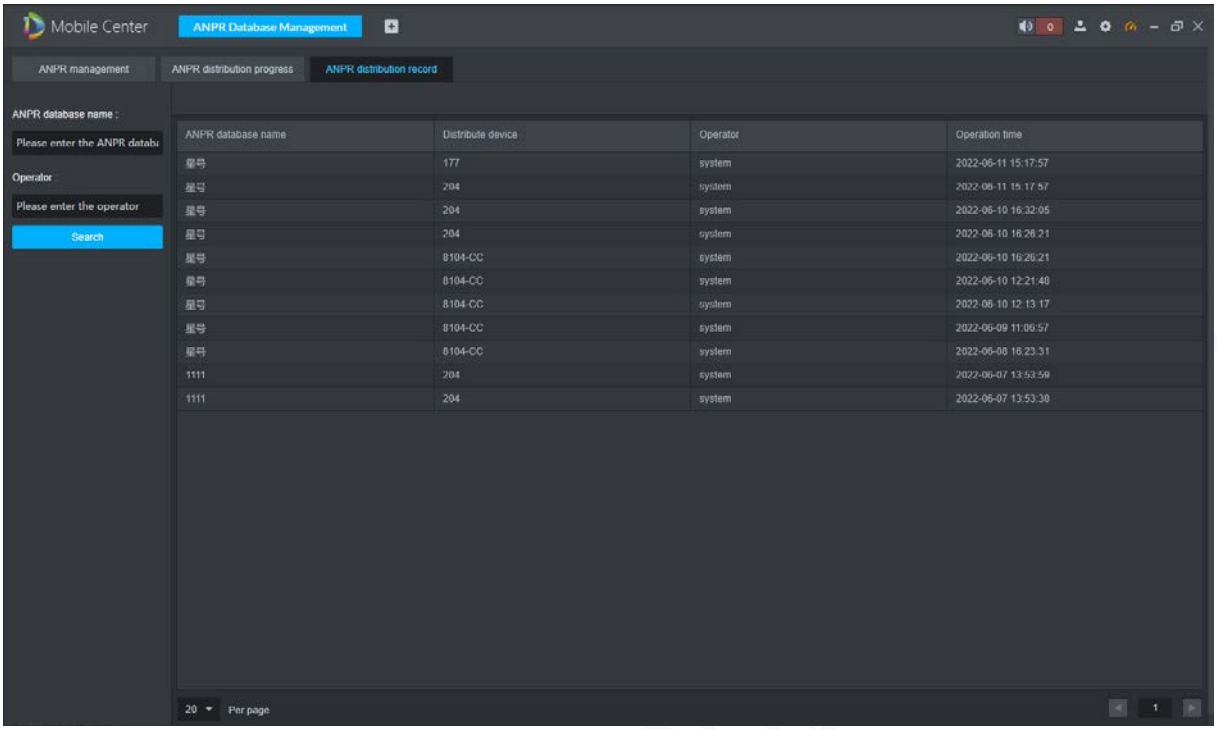
Automatic retry: The system will automatically retry the distribution for 5 times with an interval of 5 minutes. After retrying fails, the user can click to manually distribute.

4.15.2.3 ANPR Distribution Record

View the ANPR distribution record.

Step 1 On the Homepage interface, click ANPR Database Management > ANPR Distribution Record.

Figure 4-100 ANPR Distribution Record



Step 2 Enter the **ANPR database name** and **Operator**, click **Search** to search the distribution record.

The distribution record without operator is automatically distributed by the system.

4.15.2.4 View restricted ANPR alarm

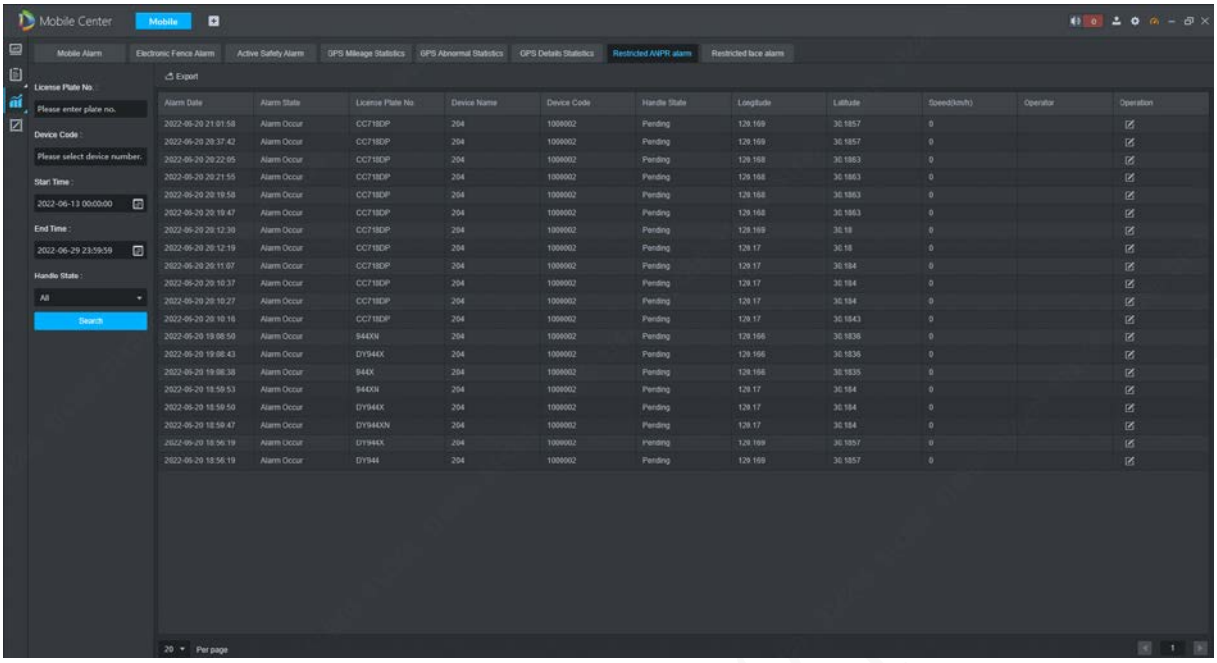
When the device detects the license plate in the ANPR database, it triggers an alarm and reports it to the platform. Users can view and process restricted ANPR alarms at the client.

Step 1 Select > **Mobile** > **Vehicle Statistics** > **Restricted ANPR alarm**.

Step 2 Enter the search conditions.

Step 3 Click **Search**.

Figure 4-101 Restricted ANPR alarm



4.15.3 Line and Site Management

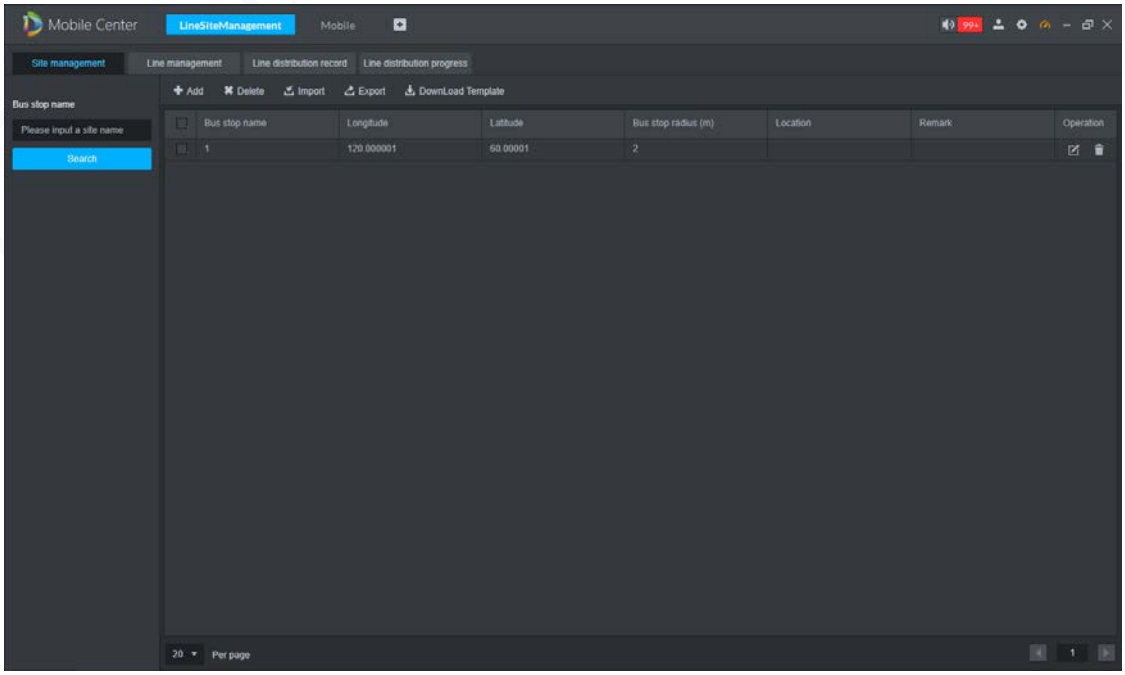
Users can manage the line and site information here, and search the line distribution progress and record.

4.15.3.1 Site Management

Add Site

Step 1 On the Homepage interface, click Line Site Management.

Figure 4-102 Line Site Management

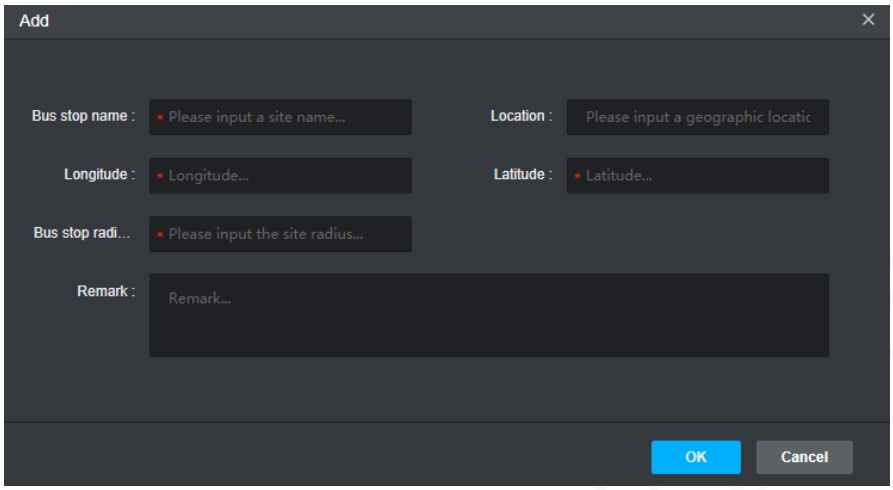


Step 2 Click **Add** and enter Bus stop name, Longitude, latitude and Bus stop radius.

Step 3 Click **OK**. Site adding is completed.

The platform supports adding up to 50000 sites.

Figure 4-103 Add sites



Related Operations

- Search: Enter **Bus stop name** on the left side of the bus stop list and click **Search**.
- Edit: Click in the right side of the list to edit the site information.
- Delete: Click in the right side of the list or click **Delete** above the list.
- Import: Click **Import,** select a template, and import the template.

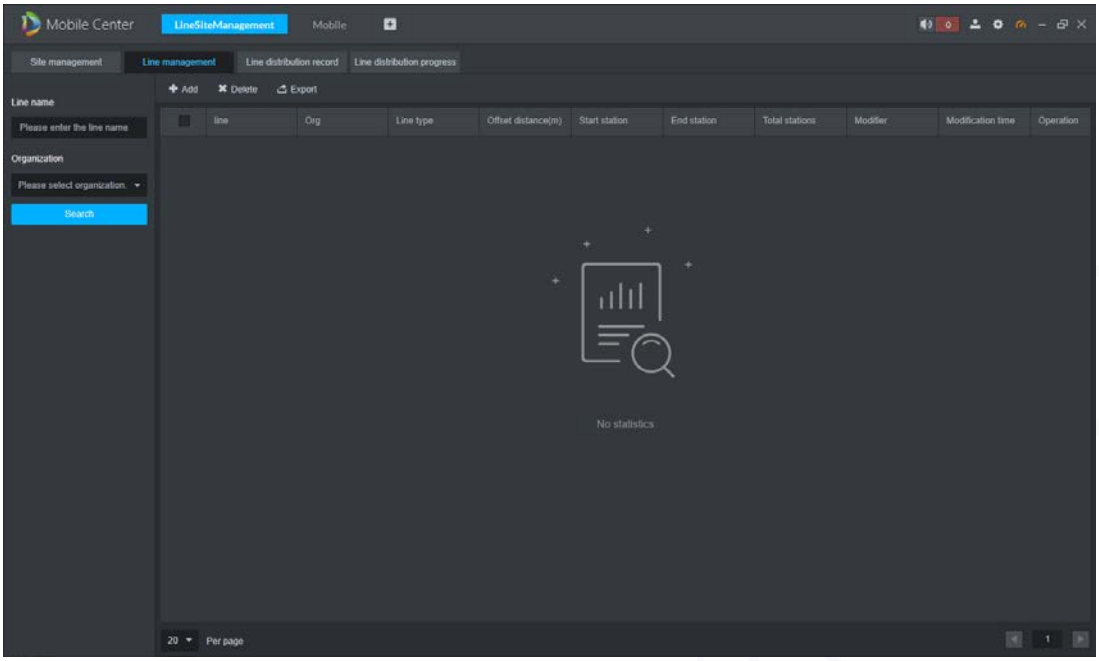
  Click **Download Template** to download a template.
- Export: Click **Export** to export the bus stop list.

4.15.3.2 Line Management

Before adding a line, please confirm that the site has been added.

Step 1 On the Homepage interface, click Line Site Management > Line Management.

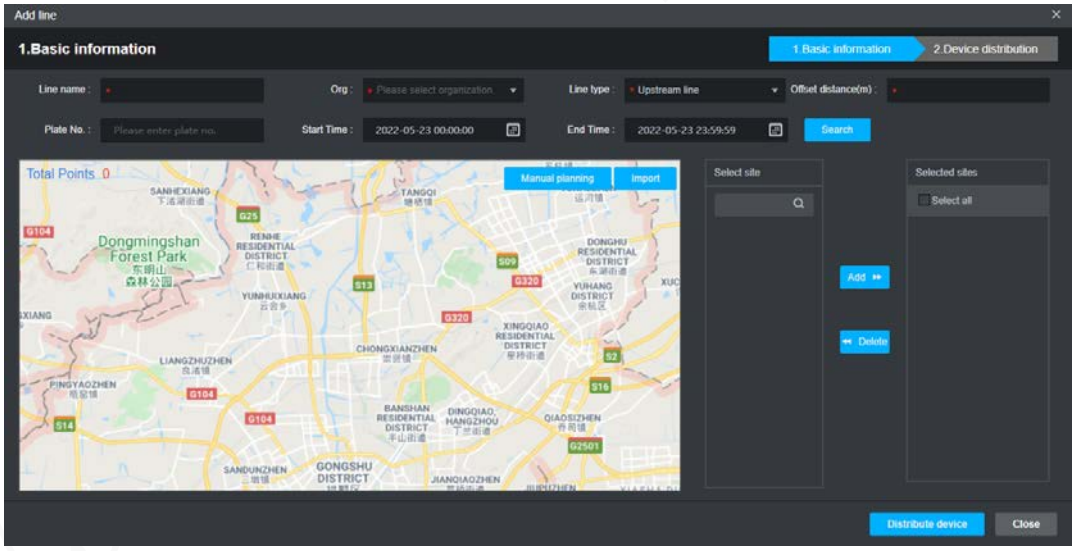
Figure 4-104 Line Management



Step 2 Click **Add**. The interface **Add Line** is displayed.

The platform supports adding up to 2000 lines.

Figure 4-105 Add Line



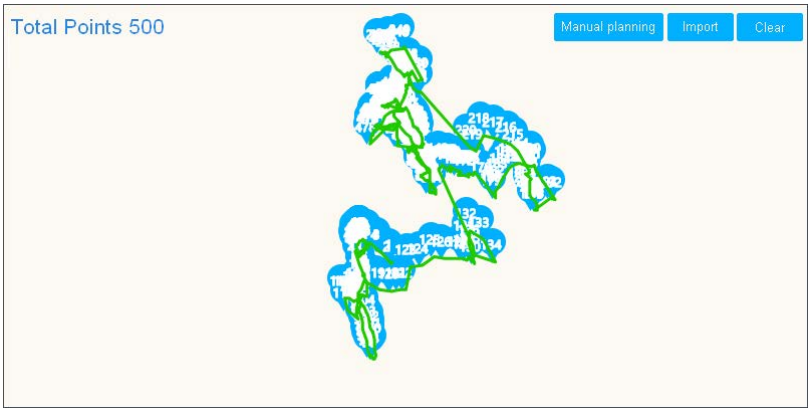
Step 3 Enter Line name, select Organization, Line type, Start Time and End Time, Offset distance and Plate No..

Step 4 Plan line.

- Planning according to vehicle historical track:

1) Enter the **Plate No.**, select **Start Time** and **End Time**, Click **Search**. The system displays the GPS sites during the time. (Up to 500 sites)

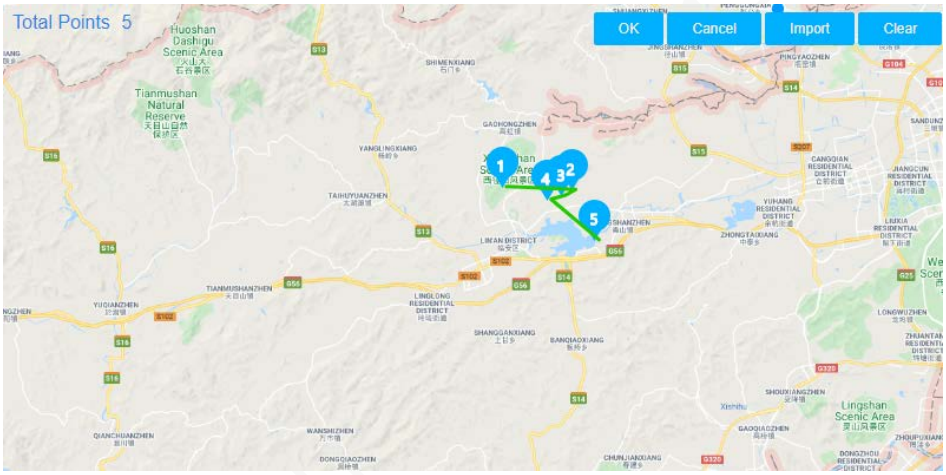
Figure 4-106 GPS sites



2) Select the GPS site, click **Cancel** to delete the site.

- Manual planning: Click **Manual planning** and draw sites on the map. After finished, click **OK**.

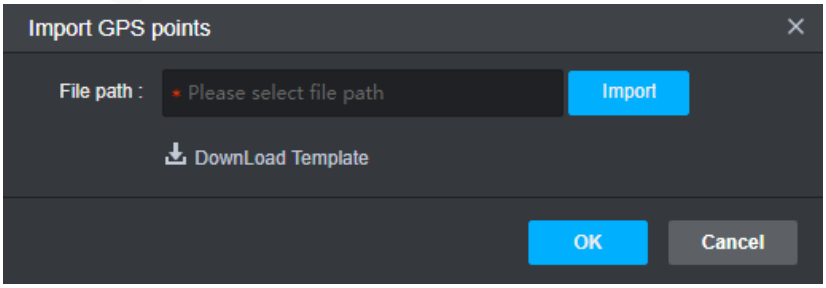
Figure 4-107 Manual planning



- Import template: Click **Import** and select local file, click **OK.**

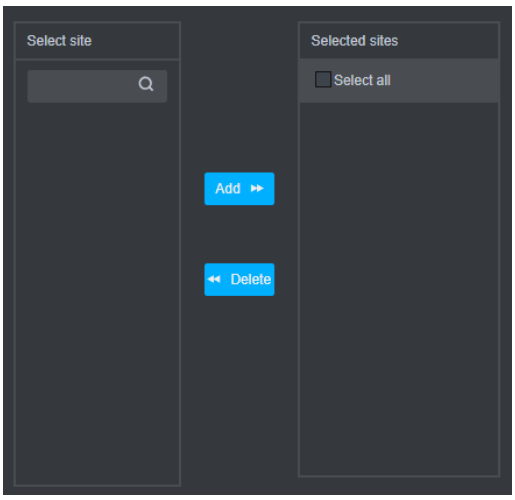
Click **Download Template** to download a template.

Figure 4-108 Import GPS points



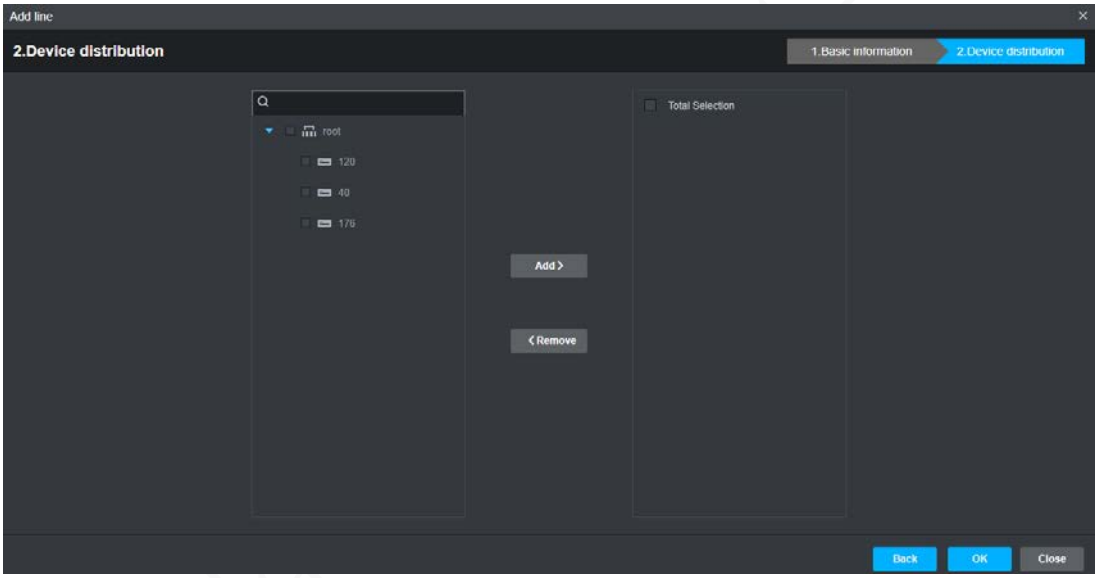
Step 5 (Optional)Add sites. Select sites on the right of the map and click **Add** to add the sites to the map.

Figure 4-109 Add sites



Step 6 Click **Distribute device** and the system displays **Device Distribution** interface.

Figure 4-110 Device Distribution



Step 7 Select vehicle from the organization list on the left, and then click **Add**.

Step 8 Click **OK**.

Related Operations

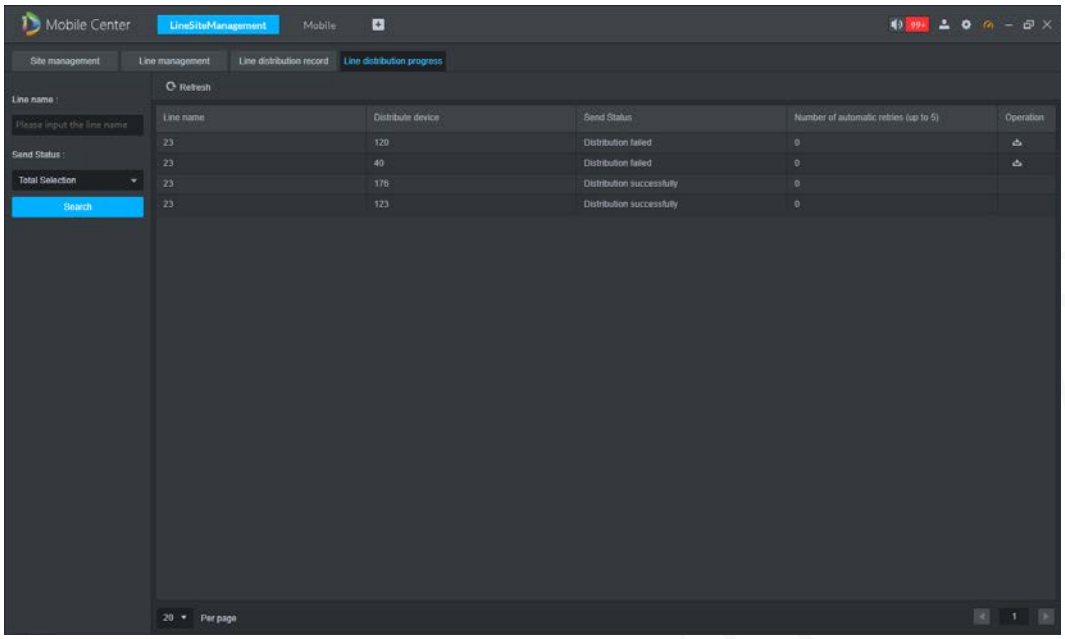
- Search: Enter **Line name** on the left side of the line list and click **Search**.
- Edit: Click in the right side of the list to edit the site information.
- Delete: Click in the right side of the list or click **Delete** above the list.
- Export: Click **Export** to export the line list.

4.15.3.2.2 Line Distribution Progress

View the Line distribution progress.

Step 1 On the Homepage interface, click Line Site Management > Line Site Distribution Progress.

Figure 4-111 Line Site Distribution Progress



Step 2 Related Operations.

Search: Enter **Line Name** or **Send Status** and click **Search**.

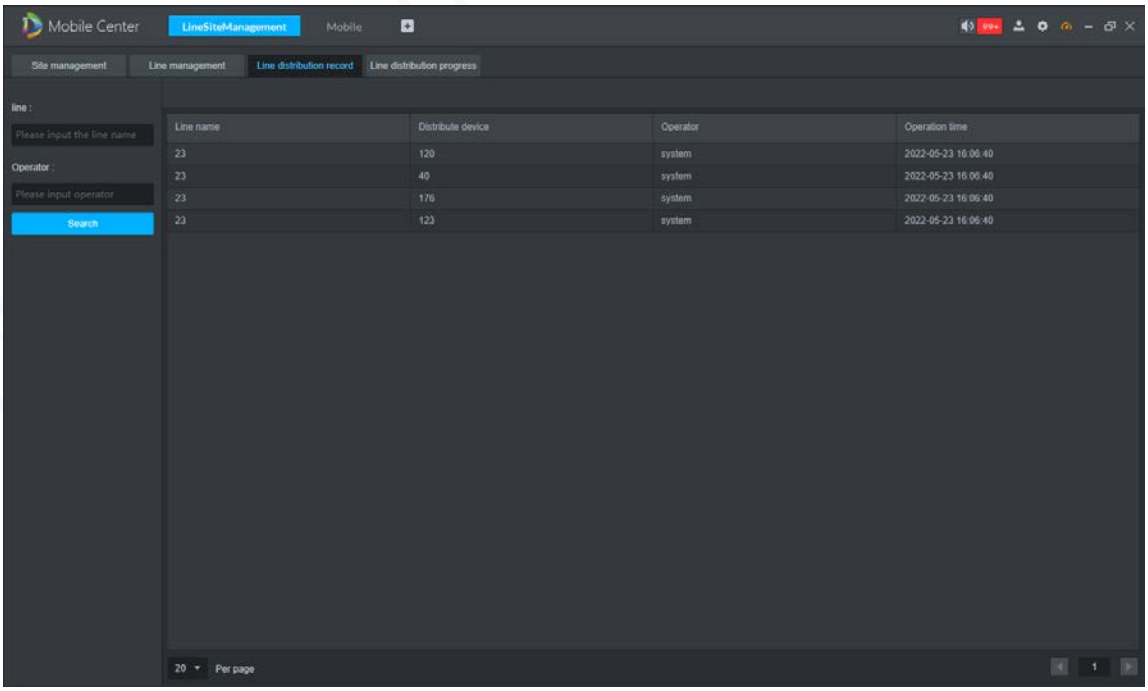
Automatic retry: The system will automatically retry the distribution for 5 times with an interval of 5 minutes. After retrying fails, the user can click to manually distribute.

4.15.3.2.3 Line Distribution Record

View the line distribution record.

Step 1 On the Homepage interface, click Line Site Management > Line Site Distribution Record.

Figure 4-112 Line Site Distribution Record



Step 2 Enter the **Line name** and **Operator**, click **Search** to search the distribution record.

The distribution record without operator is automatically distributed by the system.

4.16 Client Time Sync

Client time sync means the client syncs time with the platform server. The system time of the platform server is taken as the reference time. Automatic time sync and manual time sync are both provided. In manual time sync mode, you can send a time sync request and the system immediately responds to execute time sync. In automatic time sync mode, the system automatically starts time sync at a fixed period or time.

4.16.1 Automatic Time Sync

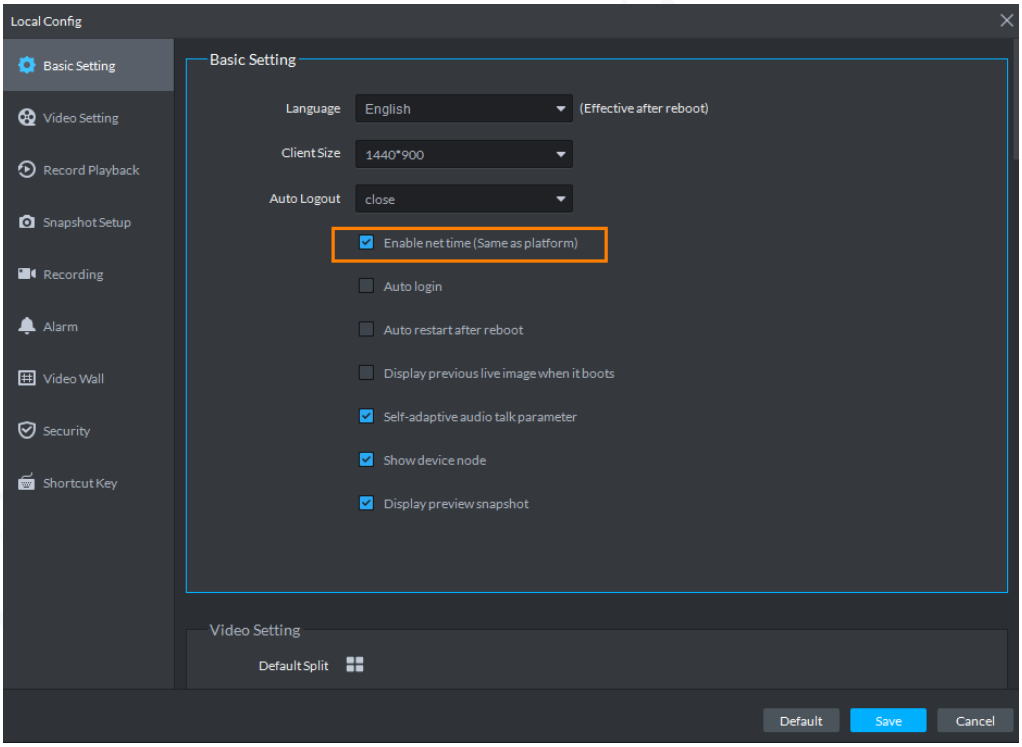
Step 1 Log in to PC client.

Step 2 Click at the upper right corner of the interface and select **Local Config**.

Step 3 Click the **Basic Setting** tab, check the Enable net time (Same as platform) checkbox, and then click **Save**.

If you check the Enable net time (Same as platform) checkbox on the Local Config interface, the client immediately sends a time sync request to the server to complete time sync.

Figure 4-113 Enabling net time

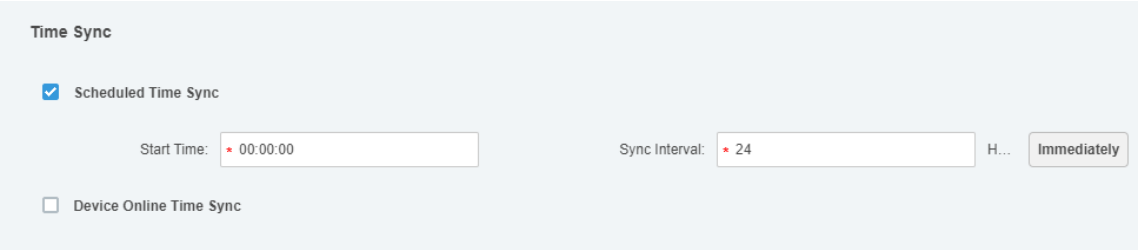


Step 4 Click **Save**.

Step 5 Log in to the Web Manager, click , and then select **System**.

Step 6 Click **Time Sync**, select the **Scheduled Time Sync** checkbox, and then set the time sync parameters.

Figure 4-114 Starting time sync



Step 7 Click **Save** to save the configuration.

4.16.2 Manual Time Sync

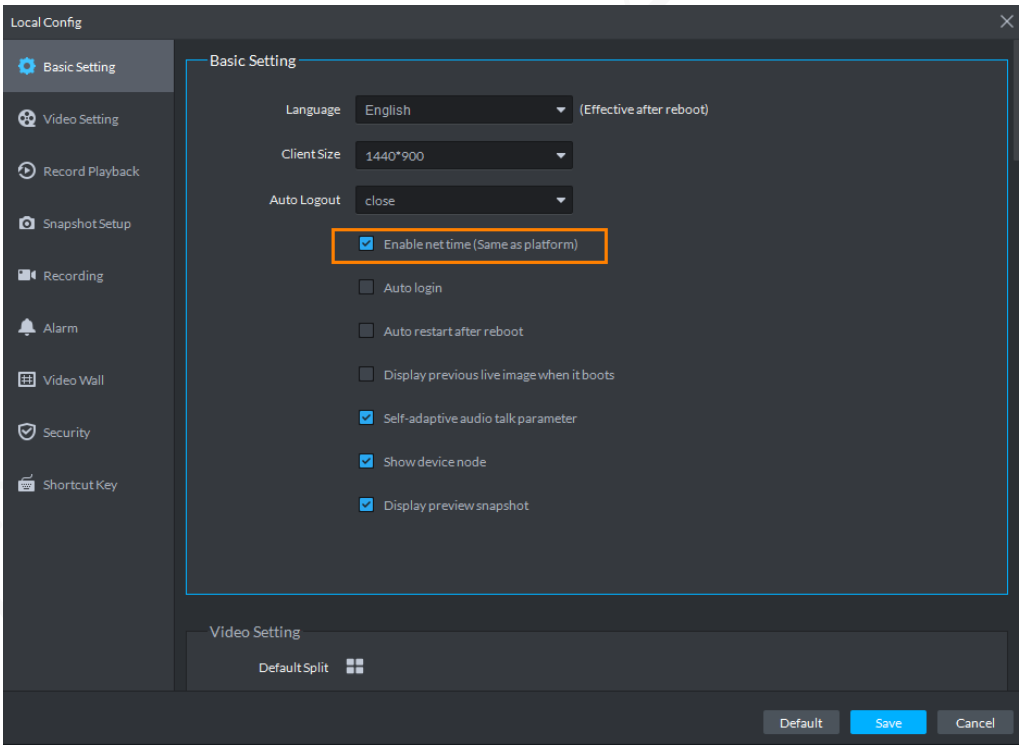
Step 1 Log in to PC client.

Step 2 Click at the upper right corner of the interface and select **Local Config**.

Step 3 Click the **Basic Setting** tab, check the Enable net time (Same as platform) checkbox, and then click **Save**.

If you check the Enable net time (Same as platform) checkbox on the Local Config interface, the client immediately sends a time sync request to the server to complete time sync.

Figure 4-115 Enabling net time

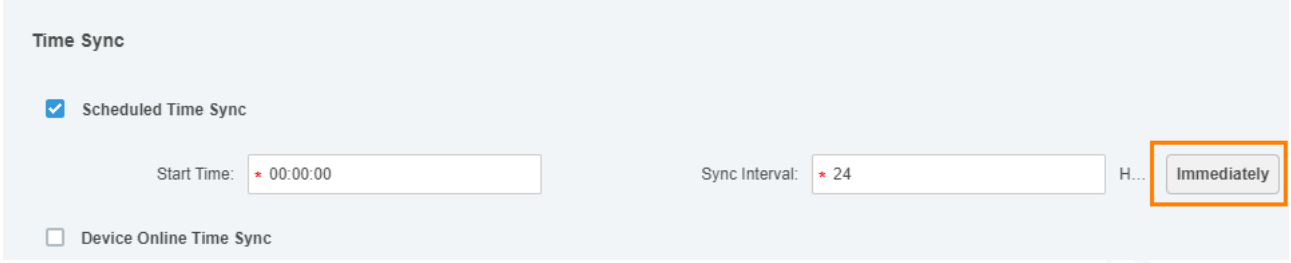


Step 4 Click **Save**.

Step 5 Log in to the Web Manager, click , and then select **System**.

Step 6 Click Immediately.

Figure 4-116 Immediate time sync



Step 7 Click **Save** to save the configuration.

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Appendix 1 Cybersecurity Recommendations

Cybersecurity is more than just a buzzword: it's something that pertains to every device that is connected to the internet. IP video surveillance is not immune to cyber risks, but taking basic steps toward protecting and strengthening networks and networked appliances will make them less susceptible to attacks. Below are some tips and recommendations on how to create a more secured security system.

Mandatory actions to be taken for basic device network security:

1. **Use Strong Passwords**

   Please refer to the following suggestions to set passwords:

   - The length should not be less than 8 characters;
   - Include at least two types of characters; character types include upper and lower case letters, numbers and symbols;
   - Do not contain the account name or the account name in reverse order;
   - Do not use continuous characters, such as 123, abc, etc.;
   - Do not use overlapped characters, such as 111, aaa, etc.;

2. **Update Firmware and Client Software in Time**

   - According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the "auto-check for updates" function to obtain timely information of firmware updates released by the manufacturer.
   - We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. **Physical Protection**

   We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. **Change Passwords Regularly**

   We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. **Set and Update Passwords Reset Information Timely**

   The device supports password reset function. Please set up related information for password reset in time, including the end user's mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. **Enable Account Lock**

   The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. **Change Default HTTP and Other Service Ports**

We suggest you to change default HTTP and other service ports into any set of numbers between 1024~65535, reducing the risk of outsiders being able to guess which ports you are using.

6. **Enable HTTPS**

   We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. **MAC Address Binding**

   We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. **Assign Accounts and Privileges Reasonably**

   According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. **Disable Unnecessary Services and Choose Secure Modes**

   If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

   If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

   - SNMP: Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
   - SMTP: Choose TLS to access mailbox server.
   - FTP: Choose SFTP, and set up strong passwords.
   - AP hotspot: Choose WPA2-PSK encryption mode, and set up strong passwords.

10. **Audio and Video Encrypted Transmission**

    If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.

    Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. **Secure Auditing**

    - Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
    - Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. **Network Log**

    Due to the limited storage capacity of the device, the stored log is limited. If you need to save the log for a long time, it is recommended that you enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

13. **Construct a Safe Network Environment**

    In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

    - Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
    - The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
    - Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.

- Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.

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ENABLING A SAFER SOCIETY AND SMARTER LIVING

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