DSS Pro

User's Manual

V7.02

Zhejiang Dahua Vision Technology Co., Ltd

Cybersecurity Recommendations

Mandatory actions to be taken towards cybersecurity

1. Change Passwords and Use Strong Passwords:

The number one reason systems get “hacked” is due to having weak or default passwords. It is recommended to change default passwords immediately and choose a strong password whenever possible. A strong password should be made up of at least 8 characters and a combination of special characters, numbers, and upper and lower case letters.

2. Update Firmware

As is standard procedure in the tech-industry, we recommend keeping NVR, DVR, and IP camera firmware up-to-date to ensure the system is current with the latest security patches and fixes.

“Nice to have” recommendations to improve your network security

1. Change Passwords Regularly

Regularly change the credentials to your devices to help ensure that only authorized users are able to access the system.

2. Change Default HTTP and TCP Ports:

● Change default HTTP and TCP ports for systems. These are the two ports used to communicate and to view video feeds remotely.

● These ports can be changed to any set of numbers between 1025-65535. Avoiding the default ports reduces the risk of outsiders being able to guess which ports you are using.

3. Enable HTTPS/SSL:

Set up an SSL Certificate to enable HTTPS. This will encrypt all communication between your devices and recorder.

4. Enable IP Filter:

Enabling your IP filter will prevent everyone, except those with specified IP addresses, from accessing the system.

5. Change ONVIF Password:

On older IP Camera firmware, the ONVIF password does not change when you change the system’s credentials. You will need to either update the camera’s firmware to the latest revision or manually change the ONVIF password.

6. Forward Only Ports You Need:

- Only forward the HTTP and TCP ports that you need to use. Do not forward a huge range of numbers to the device. Do not DMZ the device's IP address.
- You do not need to forward any ports for individual cameras if they are all connected to a recorder on site; just the NVR is needed.

7. Disable Auto-Login on DSS:

Those using DSS to view their system and on a computer that is used by multiple people should disable auto-login. This adds a layer of security to prevent users without the appropriate credentials from accessing the system.

8. Use a Different Username and Password for DSS:

In the event that your social media, bank, email, etc. account is compromised, you would not want someone collecting those passwords and trying them out on your video surveillance system. Using a different username and password for your security system will make it more difficult for someone to guess their way into your system.

9. Limit Features of Guest Accounts:

If your system is set up for multiple users, ensure that each user only has rights to features and functions they need to use to perform their job.

10. UPnP:

● UPnP will automatically try to forward ports in your router or modem. Normally this would be a good thing. However, if your system automatically forwards the ports and you leave the credentials defaulted, you may end up with unwanted visitors.

● If you manually forwarded the HTTP and TCP ports in your router/modem, this feature should be turned off regardless. Disabling UPnP is recommended when the function is not used in real applications.

11. SNMP:

Disable SNMP if you are not using it. If you are using SNMP, you should do so only temporarily, for tracing and testing purposes only.

12. Multicast:

Multicast is used to share video streams between two recorders. Currently there are no known issues involving Multicast, but if you are not using this feature, deactivation can enhance your network security.

13. Check the Log:

If you suspect that someone has gained unauthorized access to your system, you can check the system log. The system log will show you which IP addresses were used to login to your system and what was accessed.

14. Physically Lock Down the Device:

Ideally, you want to prevent any unauthorized physical access to your system. The best way to achieve this is to install the recorder in a lockbox, locking server rack, or in a room that is behind a lock and key.

15. Connect IP Cameras to the PoE Ports on the Back of an NVR:

Cameras connected to the PoE ports on the back of an NVR are isolated from the outside world and cannot be accessed directly.

16. Isolate NVR and IP Camera Network

The network your NVR and IP camera resides on should not be the same network as your public computer network. This will prevent any visitors or unwanted guests from getting access to the same network the security system needs in order to function properly.

FCC Information

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC conditions:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.

FCC compliance:

This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the guide, may cause harmful interference to radio communication.

For class A device, these limits are designed to provide reasonable protection against harmful interference in a commercial environment. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For class B device, these limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Foreword

General

This user’s manual (hereinafter referred to be "the Manual") introduces the functions and operations of the DSS general surveillance management center (hereinafter referred to be "the Device" or "the System") and client operations.

Safety Instructions

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

Signal Words	Meaning
DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
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.

Privacy Protection Notice

As the device user or data controller, you might collect personal data of others' such as face, fingerprints, car plate number, Email address, phone number, GPS and so on. You need to be in compliance with the local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures including but not limited to: providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact.

Revision History

No.	Version	Revision Content	Release Time
1	V7.02	● Add new functions such as smart retrieval, face recognition, traffic events and so on. ● Optimizes event center, GDPR and other relevant contents	Aug.30. 2018

About the Manual

The Manual is for reference only. If there is inconsistency between the Manual and the actual product, the actual product shall prevail.

We are not liable for any loss caused by the operations that do not comply with the Manual.

The Manual would be updated according to the latest laws and regulations of related regions. For detailed information, see the paper manual, CD-ROM, QR code or our official website. If there is inconsistency between paper manual and the electronic version, the electronic version shall prevail.

All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the Manual. Please contact the customer service for the latest program and supplementary documentation.

There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, please refer to our final explanation.

Upgrade the reader software or try other mainstream reader software if the Guide (in PDF format) cannot be opened.

All trademarks, registered trademarks and the company names in the Manual are the properties of their respective owners.

Please visit our website, contact the supplier or customer service if there is any problem occurred when using the device.

If there is any uncertainty or controversy, please refer to our final explanation.

Important Safeguards and Warnings

This Chapter describes the contents covering proper handling of the Device, hazard prevention, and prevention of property damage. Read these contents carefully before using the Device, comply with them when using, and keep it well for future reference.

Operation Requirement

- Do not place or install the Device in a place exposed to sunlight or near the heat source.
- Keep the Device away from dampness, dust or soot.
- Keep the Device installed horizontally on the stable place to prevent it from falling.
- Do not drop or splash liquid onto the Device, and make sure there is no object filled with liquid on the Device to prevent liquid from flowing into the Device.
- Install the Device in a well-ventilated place, and do not block the ventilation of the Device.
- Operate the device within the rated range of power input and output.
- Do not dissemble the Device.
- Transport, use and store the Device under the allowed humidity and temperature conditions.

Electrical Safety

- Improper battery use might result in fire, explosion, or inflammation.
- When replacing battery, make sure the same model is used.
- Use the recommended power cables in the region and conform to the rated power specification.
- Use the power adapter provided with the Device; otherwise, it might result in people injury and device damage.
- The power source shall conform to the requirement of the Safety Extra Low Voltage (SELV) standard, and supply power with rated voltage which conforms to Limited power Source requirement according to IEC60950-1. Please note that the power supply requirement is subject to the device label.
- Connect the device (I-type structure) to the power socket with protective earthing.
- The appliance coupler is a disconnection device. When using the coupler, keep the angle for easy operation.

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1 Overview

1.1 Introduction

DSS Pro is a type of video surveillance software which is flexible, easily-extendable, highly-reliable and more professional. DSS Pro is able to meet the requirements of large and medium-sized projects via distributed extension performance. In addition to basic video surveillance business, DSS Pro supports a series of AI functions, such as face recognition, license plate recognition and people counting etc. it can also expand functions like transportation and business analysis via value-added modules. These rich functions enable DSS Pro to be widely used in chain supermarket, casino, safe town, road traffic, medium and large-sized campus surveillance and some other scenarios.

1.2 Highlights

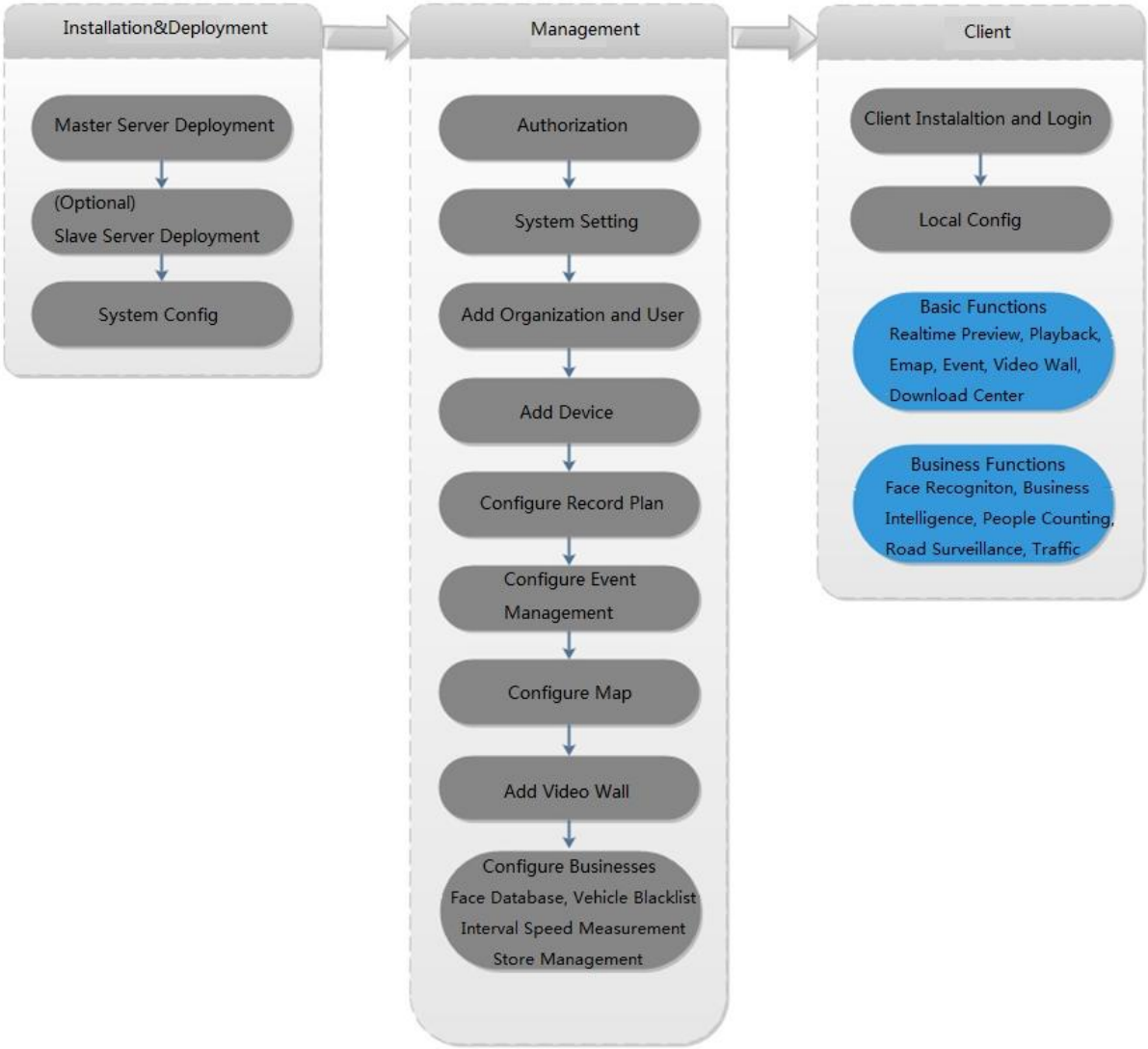
- Easily extendable
  - ◇ Supports extension system performance.
  - ◇ Supports DSS Pro extension via Add-ons.
- More professional
  - ◇ Supports system operation and maintenance, easily acquire service, system, device, time and some other system info.
  - ◇ Separate Web management end, makes management more convenient and professional.
  - ◇ Supports face recognition, plate recognition, people counting and other AI functions, retail and transportation functions, makes DSS Pro more powerful.
- Highly reliable
  - ◇ Supports dual hot standby, makes DSS Pro system more stable.
  - ◇ Supports system data auto backup and manual backup, reduce loss caused by system crash.
- More open
  - ◇ Supports standard Onvif protocol connecting to third-party device.
  - ◇ Open SDK, the third party platform can be connected via SDK.

2 Business Flow Chart

In the business flow chart, shading means config item, shading means the exact application of business in the client.

The overall flow chart is shown in Figure 2-1.

Figure 2-1



3 Installation and Deployment

DSS platform supports both single server deployment and master/slave distributed deployment.

3.1 Server Config Requirement

Please refer to Table 3-1 for the requirements of server config.

Table 3-1

Parameter	Hardware Requirement
Recommended config	● CPU：E5-2640 v3@2.60GHz 2.60GHz 8core ● RAM：16GB ● Network card：1Gps ● Hard drive type：HDD 1TB ● DSS installation directory space：Over 500G
Minimum config	● CPU：E3-1220 v5 @3.00GHz 3.00GHz 4core ● RAM：8GB ● Network card：1Gps ● Hard drive type：HDD 1TB ● DSS installation directory space：Over 500G

3.2 DSS Master Server Deployment

3.2.1 Master Server Installation

Step 1 Double click and enter installation mode.

The system will display the interface. See Figure 3-1.

Program name includes version number and program data, please confirm it before installation.

Figure 3-1

Step 2 Click “Agreement Protocol”, read and accept agreement protocol, select “I have read and agree the agreement”, click “Next”.

The system displays the interface. See Figure 3-2.

Figure 3-2

Step 3 Select installation mode as “Master”, make sure if it supports dual hot standby, click “Next’.

Master means master mode; Slave means slave mode; HA means it supports dual hot standby.

The system displays the interface. See Figure 3-3.

Figure 3-3

Step 4 Select installation path, it supports default installation path, you can click “Browse” to customize installation directory.

After selecting installation directory, the system displays need space and free space of installation.

If “Install Now” button is gray, please check if installation directory is correct, or if the available space of installation directory is bigger than the space needed by system.

Step 5 Click “Install Now”

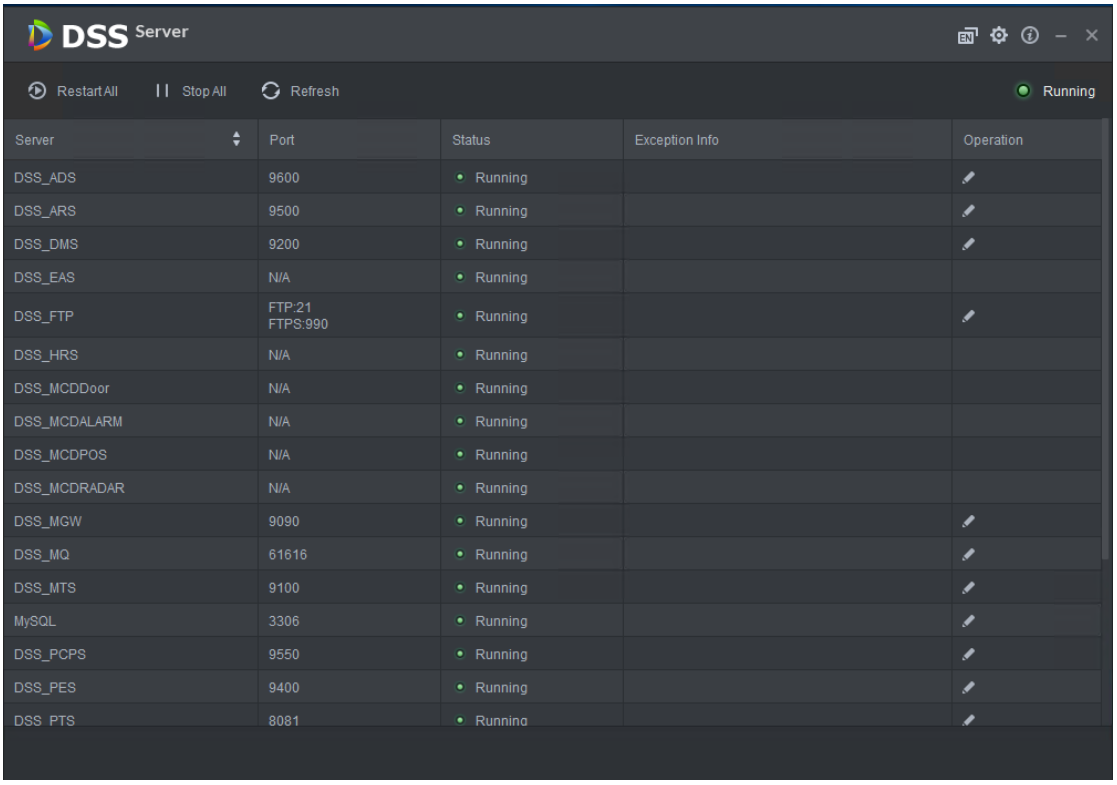
The system displays the interface. See Figure 3-4. The installation process needs about 3 to 5 minutes, please wait patiently. The interface is shown in Figure 3-5 after installation is completed.

Figure 3-4

Figure 3-5

Step 6 Click “Start Now” and it enables service immediately.
The system displays the interface. See Figure 3-6.

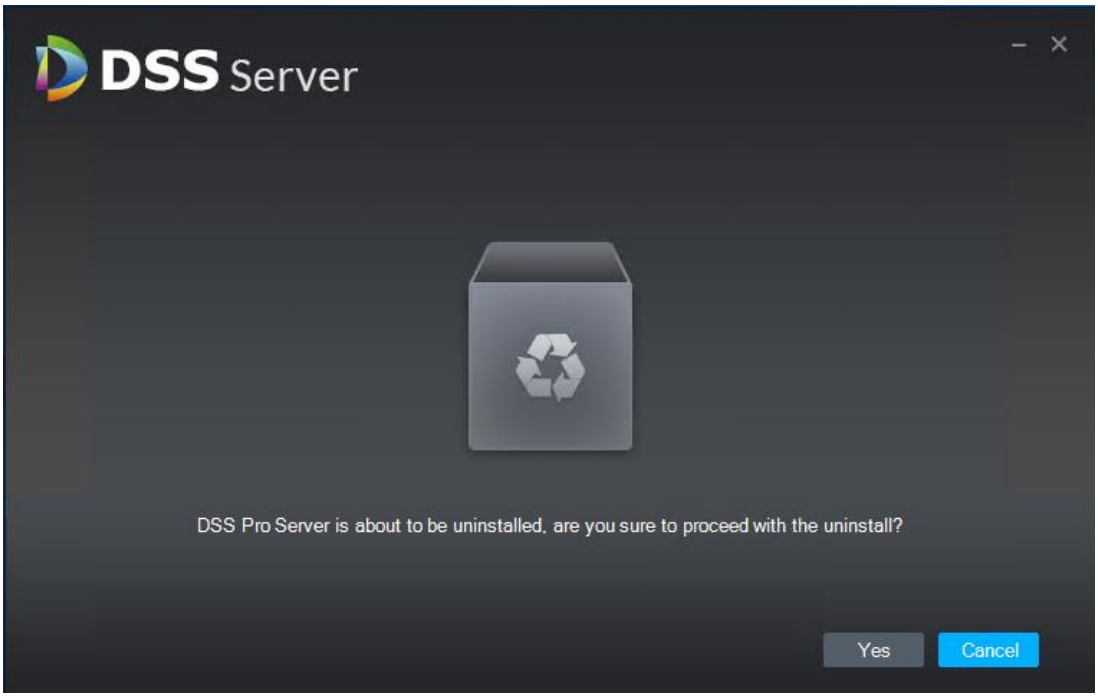
Figure 3-6



3.2.2 Uninstallation

Step 1 Select “Start > All Programs”, unfold DSS Pro folder, click “DSS Pro Uninstall”. The system displays the interface. See Figure 3-7.

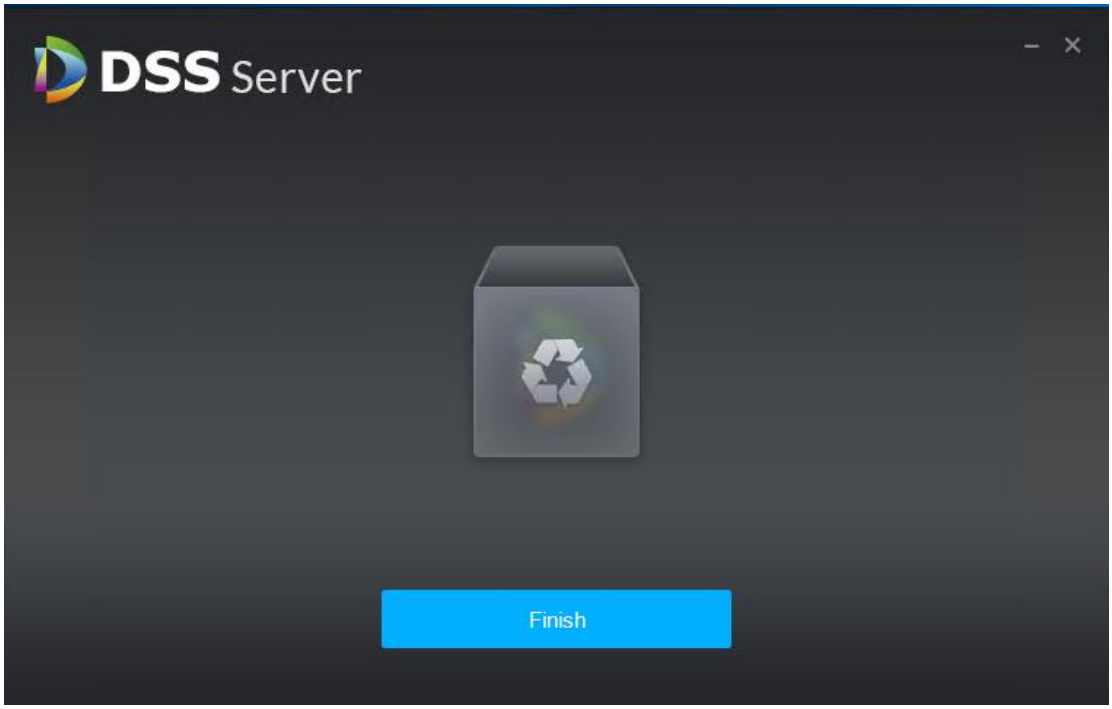
Figure 3-7



Step 2 Click ‘Continue”.

The system displays uninstallation progress; the system will display the interface which is shown in Figure 3-8 after uninstallation is completed.

Figure 3-8



Step 3 Click “OK” to complete uninstallation.

3.3 Slave Server Deployment

Please skip the chapter if it only needs to deploy a single server.

3.3.1 Slave Server Installation

Step 1 Double click installation program and enter installation mode.

The system displays the interface. See Figure 3-9.

The program name includes version number and program data, please confirm it before installation.

Figure 3-9

Step 2 Click “Agreement Protocol”, read and accept agreement protocol, select “I have read and agree the agreement”, click “Next”.

The system displays the interface. See Figure 3-10.

Figure 3-10

Step 3 Select installation mode as “Slave”, click “Next”.

The system displays the interface. See Figure 3-11.

Figure 3-11

Step 4 Select installation path, supports default installation path, click “Browse” to customize installation directory.

After selecting directory, the system displays space needed for installation and available space for selected path.

If “Install Now” button becomes gray, please check if installation directory is correct or available space of installation directory is bigger than space needed by system.

Step 5 Click “Install Now”.

The system displays the interface. See Figure 3-12. The installation process needs about 3 to 5 minutes, please wait patiently. The interface is shown in Figure 3-13 after installation is completed.

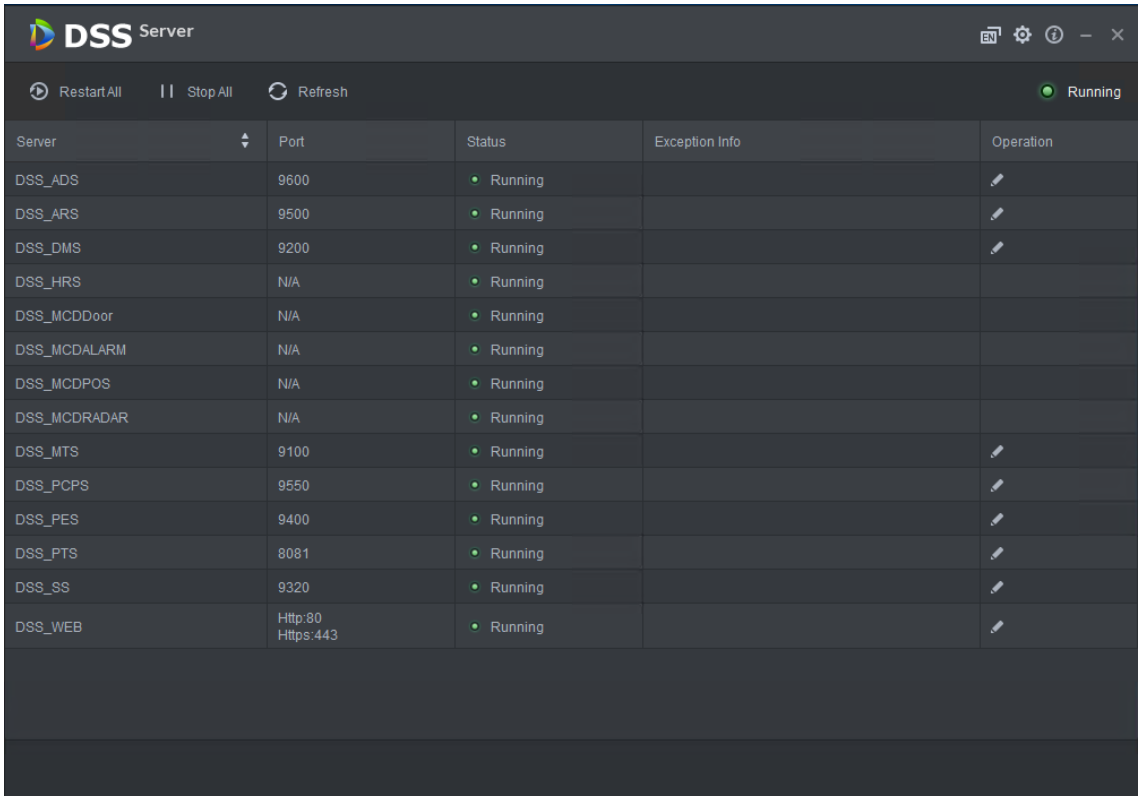
Figure 3-12

Figure 3-13

Step 6 Click “Start Now” to enable server immediately.

The system displays the interface. See Figure 3-14.

Figure 3-14



3.3.2 Configuring Slave Server

For slave server, it only needs to configure the master server IP and port, and then it can be registered onto the master server.

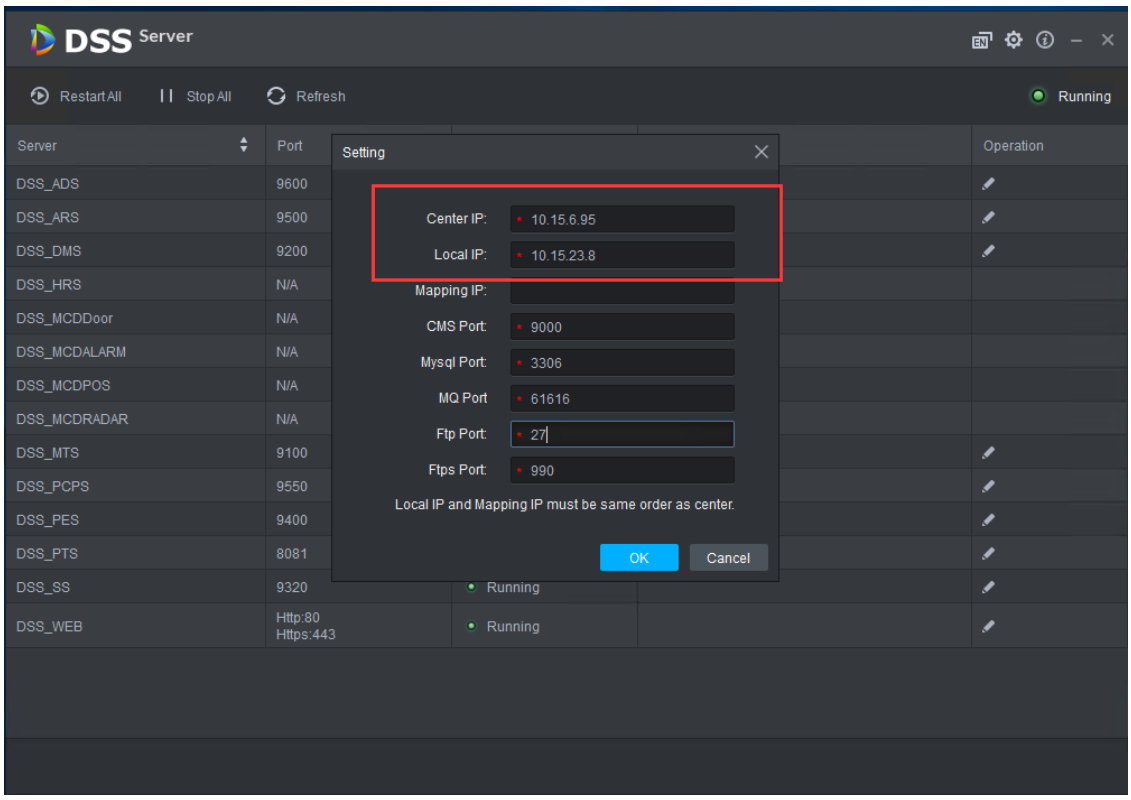
Step 1 Double click on the slave server.

The system displays the interface. See Figure 3-14.

Step 2 Click on the top right corner of the interface.

The system displays the interface. See Figure 3-15.

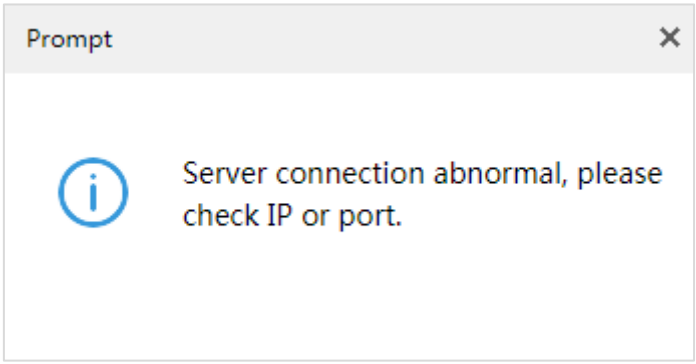
Figure 3-15



Step 3 Set “Center IP”, “Local IP” and each port number, click “OK”.

The system auto detects if master server IP and port are valid, it will restart the service of slave server if it is valid, DSS Server will be loaded again; it will pop out the prompt box shown in Figure 3-16 if info detection fails. It needs to reset it.

Figure 3-16



3.3.3 Enabling Slave Server

It can enable server from the platform management end and check the status of each server, please refer to “4.15.1 Server Management” for more details.

3.4 Configuring System

It is to introduce the operations of config tool.

Figure 3-17

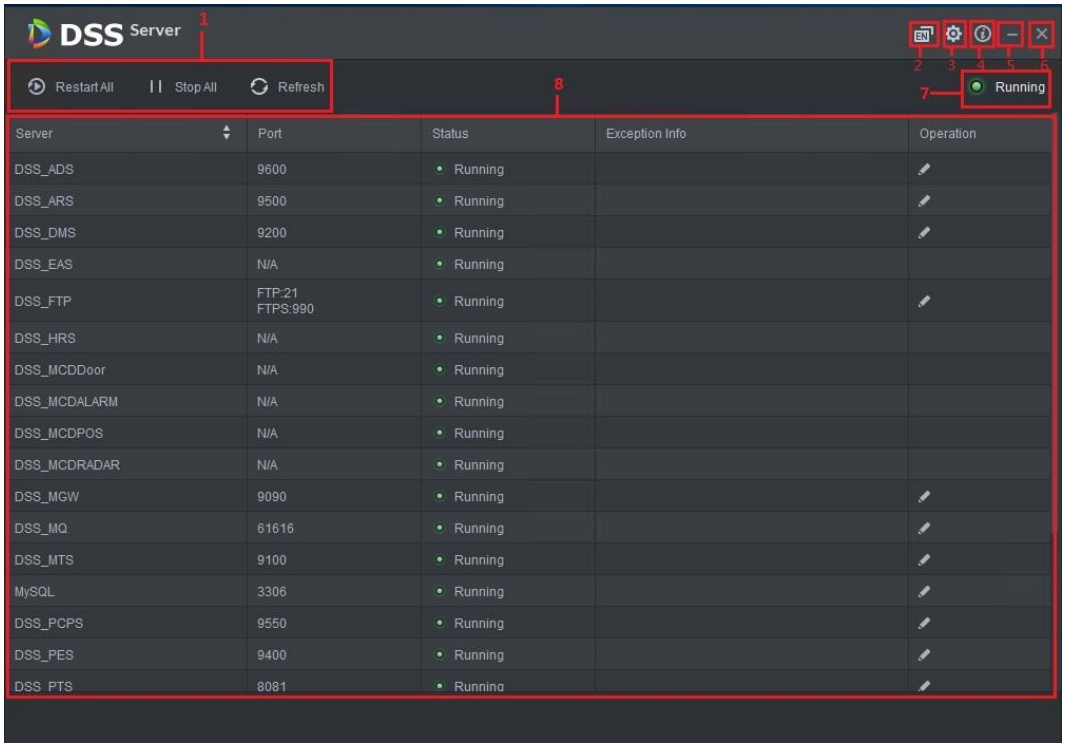


Table 3-2

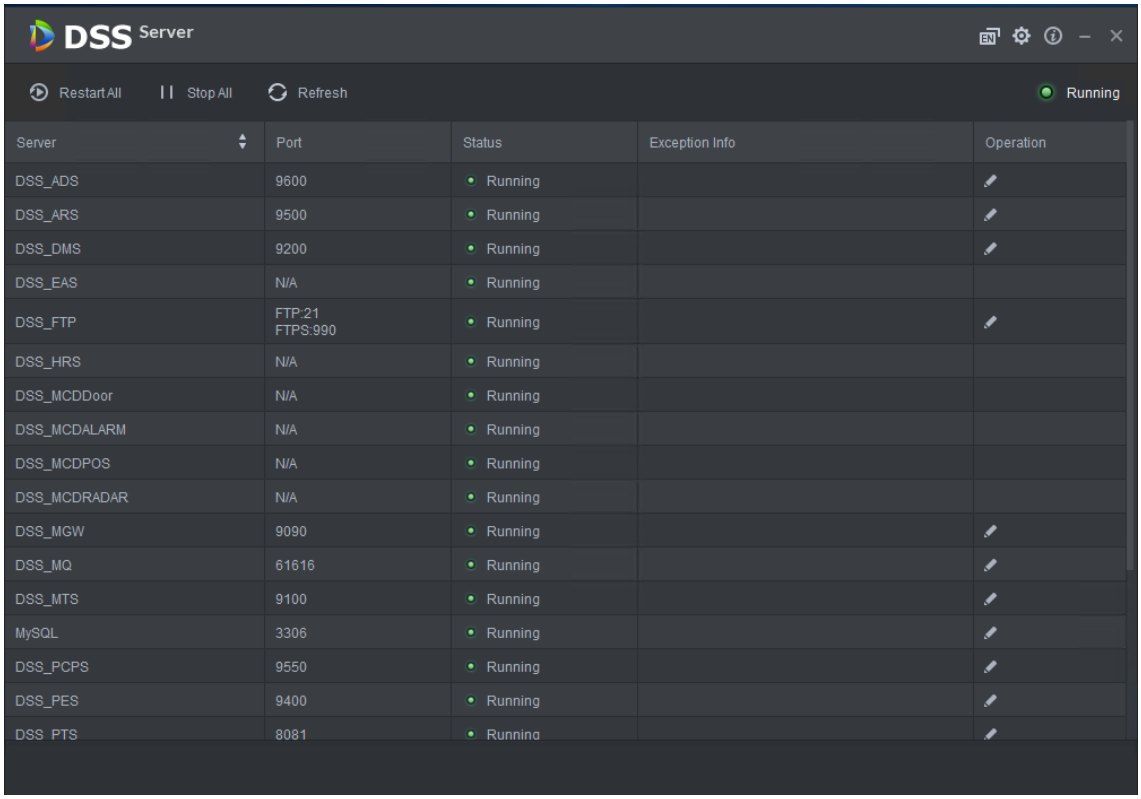
SN	Function	Note
1	Service Management	Service management, it supports following three types of operation: ● Click Restart All to restart all services. ● Click Stop All to stop all services. ● Click Refresh to refresh services.
2	Language	The system supports two languages which are Chinese and English. It supports language switch by click the icon. It needs to restart to make config tool valid after switching languages.
3	Setting	It is to set CMS IP as the IP address of server which installs DSS. If it is in the LAN/WAN environment, then it needs to configure mapping address as WAN IP address.
4	About	Click the icon to check software version and release date.
5	Minimize	Click the icon and it minimizes the config tool interface.
6	Disable	Disable config tool.

SN	Function	Note
7	Service Status Display	It is to display service total status, including: ● Starting ● Unavailable: Service abnormity for the server. ● Stopping ● Running: All the services of the server run normally. ● Stopped
8	Service Display	It is to display each service and service status. Click to modify service port number, the system will restart service automatically after modification.

3.5 Modifying Service Port

Step 1 Log in DSS and install server, double click .
The system displays the interface. See Figure 3-18.

Figure 3-18

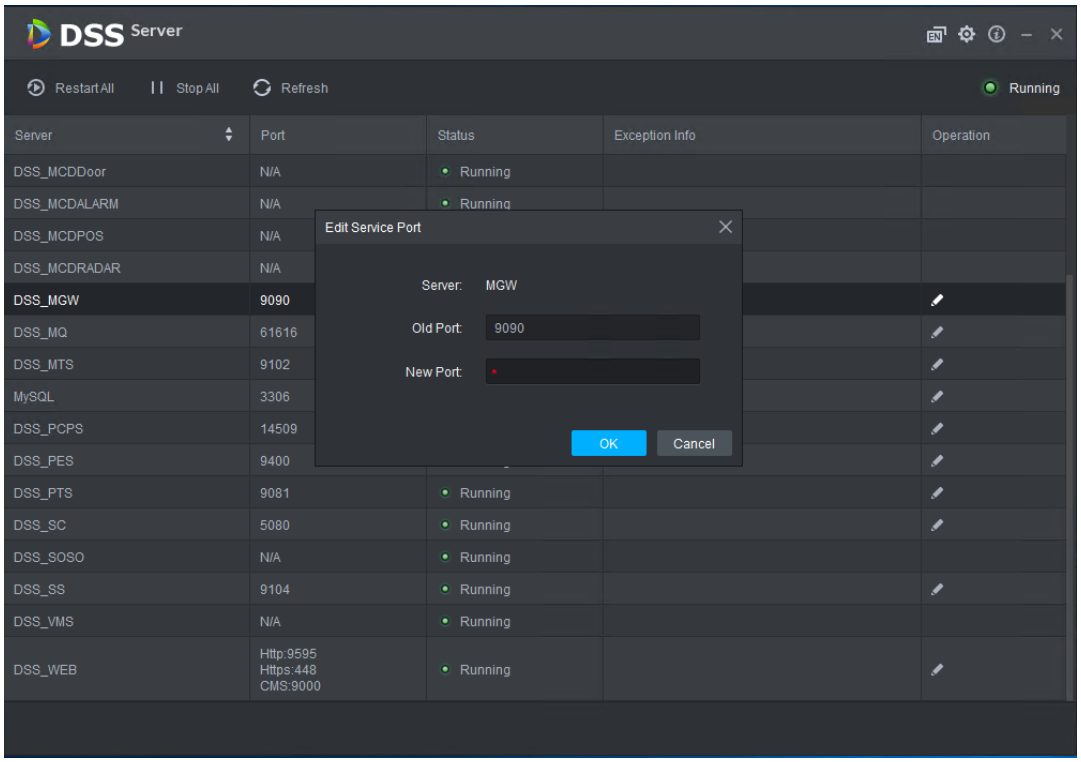


Step 2 Click and modify the port info of corresponding service. See Figure 3-19.

If there is LAN/WAN config, then LAN/WAN port are modified as the value customized by users.

- “DSS_PTS” service default port is “8081”, which can be often occupied; it is recommended to modify the port.
- The system will prompt when the port is occupied, please modify port in time according to the prompt.

Figure 3-19



Step 3 Click “OK” to save config.

The system will restart service after it is successfully modified.

3.6 Configuring LAN/WAN

Now the DSS Server config system does not distinguish between LAN and WAN port of service, port config option is uniform, LAN and WAN port are consistent.

3.6.1 Configuring Router

It is recommended to do DMZ mapping, it can do port mapping if it is not allowed by the environment. The ports which need to be opened are 9500、9200、21、990、9090、61616、9100、3306、9550、9400、80、5080 and so on. Please refer to “Appendix 1 Service Module Introduction” for more details about port. If there is port being occupied by other mapping, for

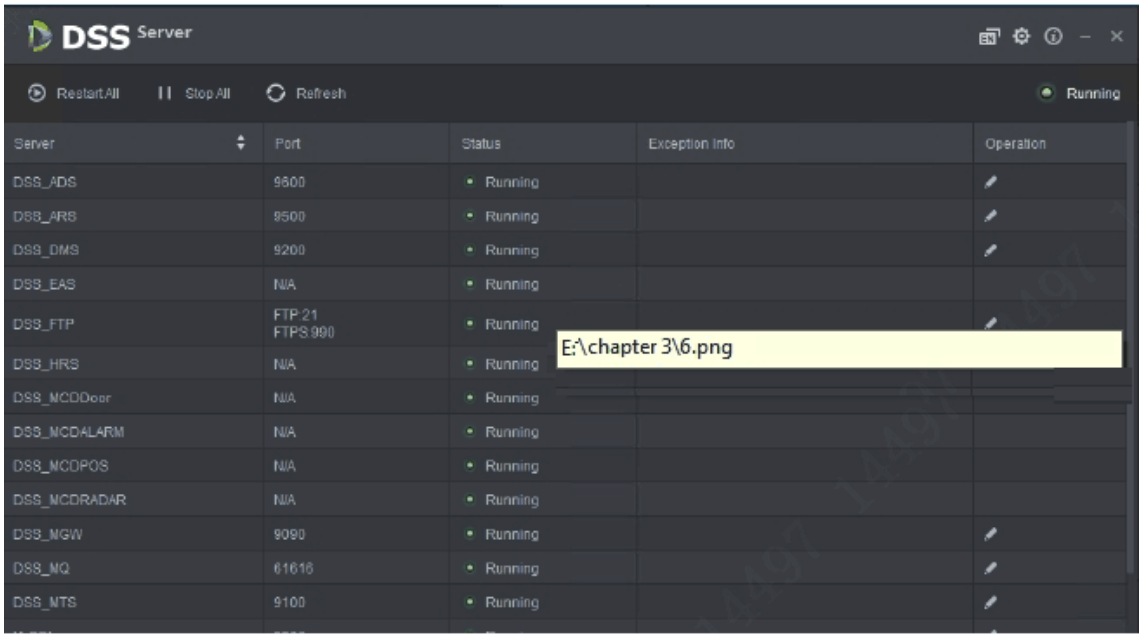
example, 80 port has been occupied and it needs to be modified as 81, then it needs to modify port by referring to “3.5 Modifying Service Port”, and then it can add mapping rule onto the router.

3.6.2 Configuring DSS Platform

Step 1 Log in DSS and install server, double click .

The system displays the interface. See Figure 3-20.

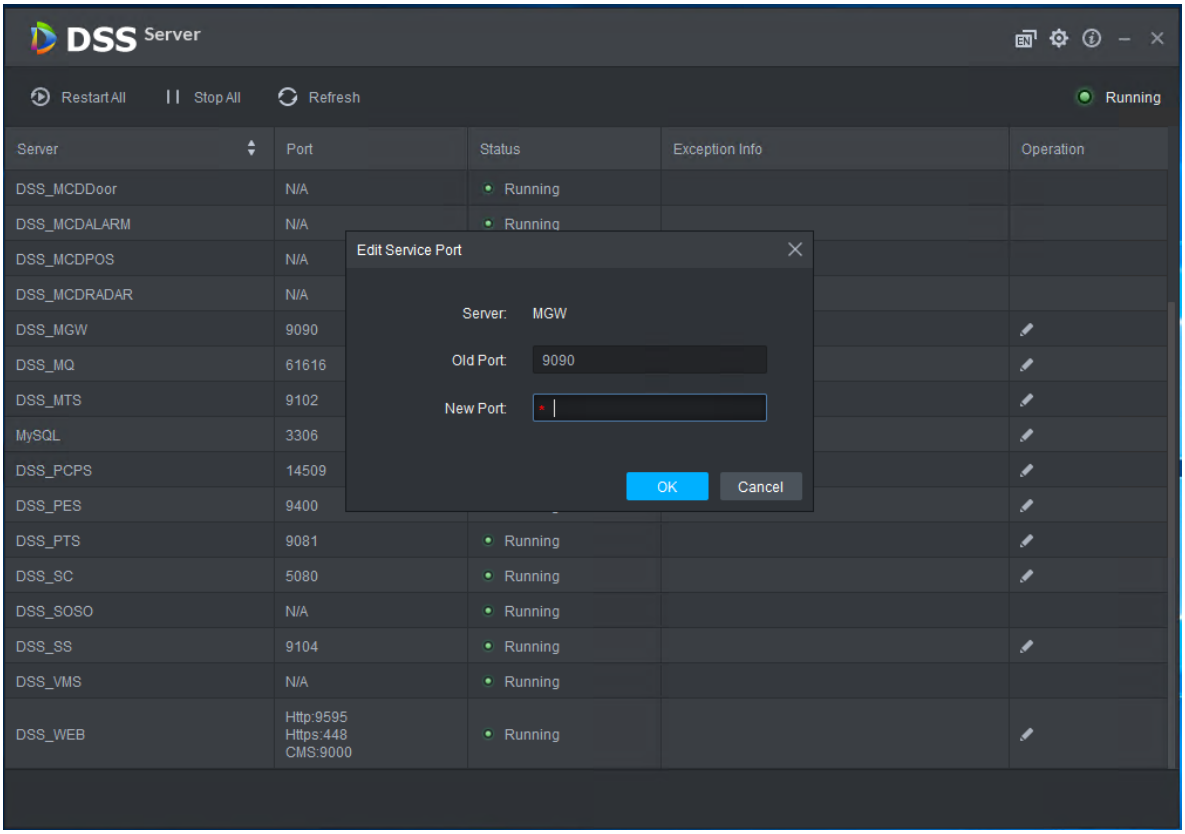
Figure 3-20



Step 2 Click the on the top right corner.

The system displays the interface. See Figure 3-21.

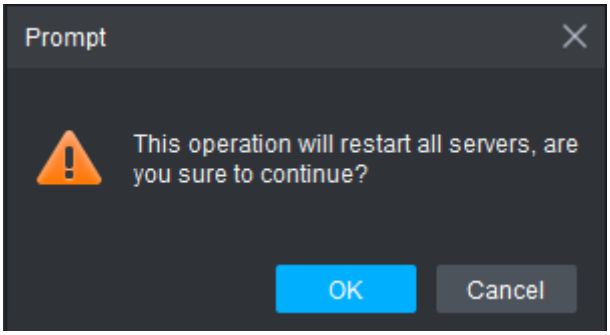
Figure 3-21



Step 3 Set “Mapping IP” as WAN address, click “OK”.

The system pops out the dialog box. See Figure 3-22.

Figure 3-22



Step 4 Click “OK” and the system restarts service.

4 Manager Operations

It needs to use Internet Explorer 9 or higher version browser to log in DSS PROFESSIONAL platform, or you can use Google Chrome and Firefox as well.

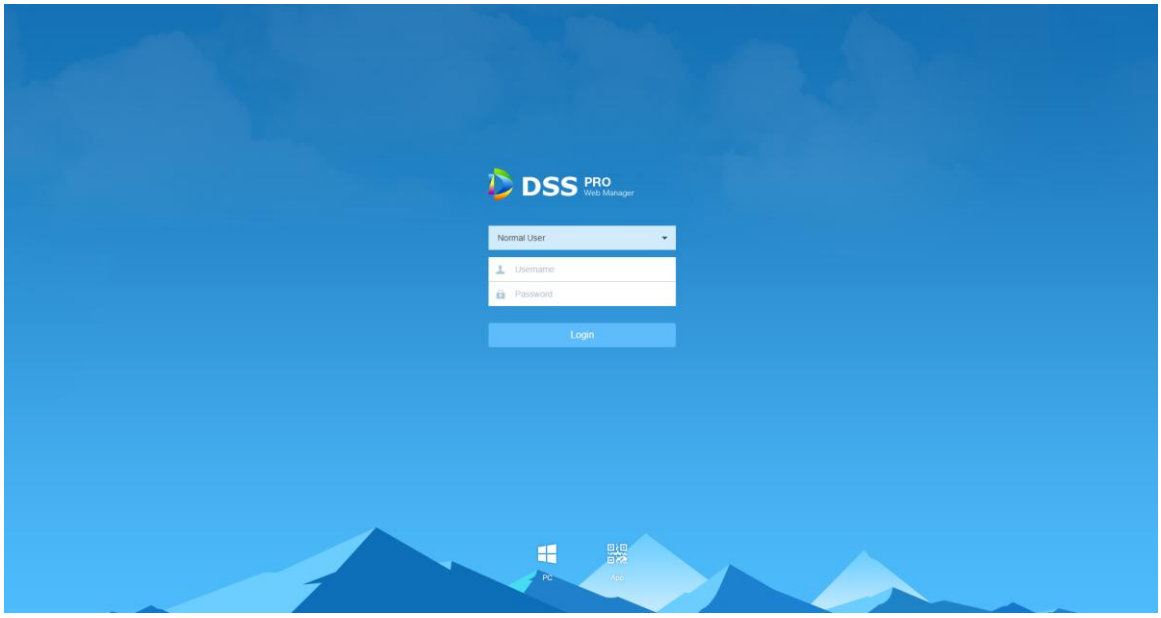
4.1 Logging in Management End

It can log in the management end of platform server via browser, and realize remote config of relevant business by administrator.

Step 1 Enter platform IP address in the browser, press【Enter】button.

The system displays the login interface. See Figure 4-1.

Figure 4-1



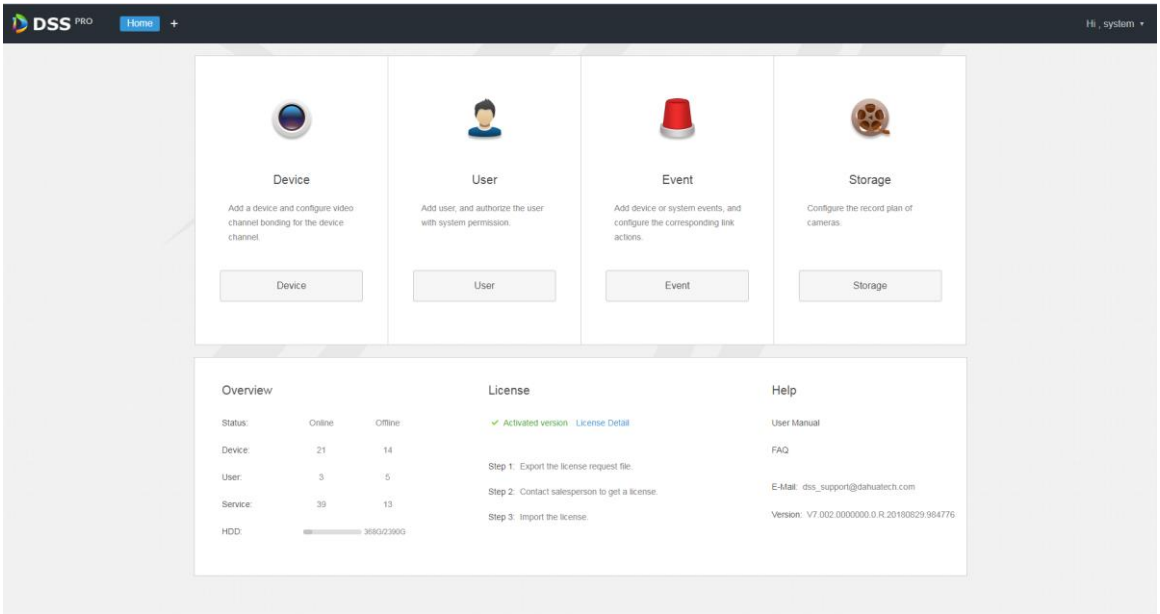
Step 2 Enter username and password, click “Login”.

The default username is system.

- The system will pop out the interface of modifying password if it is the first time to log in system. It can continue to log in system after the password is modified in time.
- Please add the platform IP address into the trusted sites of browser if it is your first time to log in DSS management end.

It will display the homepage after login. See Figure 4-2.

Figure 4-2



- Place the mouse on the username of top right corner, and then you can modify password or log out current user.
- The shortcut access of general modules is displayed on the top of interface, click ⊞ on the homepage to present all the modules and open new modules.
- Overview: It displays the online/offline status of device, user and service, and the usage proportion of hard drive.
- Authorization: Check authorization details, purchase authorization document step by step according to requirements. Please refer to “4.2 Authorization” for more operation details.
- Help: Check user operation manual, FAQ file and so on.

4.2 Authorization

4.2.1 License Introduction

Please refer to Table 4-1 for description of probation period, there is no limit for modules and channels (such as alarm input and output) that are not in the table.

The probation period only lasts 90 days, it is recommended to purchase License. It fails to use ‘Device”, “Event”, “Storage” or “TV Wall” when you log in DSS management without purchasing License after 90-day probation period, and it cannot log in client or mobile APP.

Table 4-1

Function		Performance
Channel	Video (Encoding)	32 channels
	Face Recognition	2 channels
	ANPR	2 channels
	POS	2 channels
Module	Transportation	90 days

Function		Performance
	Business Intelligence	90 days

4.2.2 Applying for License

Applying for License includes first application and second application when upgrading License. The quantity of all the authorized channel starts from 0 for the first application, the initial status of module authorization is “probation”. The authorization status becomes “Purchased” if it is bought again. The purchase quantity of second purchase means the quantity which needs to be added. If you want to increase to 10 channels after you already own 5 channels, then you only need to purchase another 5 channels.

Step 1 Acquire authorization request file.

1) Log in DSS management end.
2) Click “Step 1” on the “Homepage” interface, which is shown in Figure 4-3. The system displays “Upgrade” interface. See Figure 4-4.

Figure 4-3

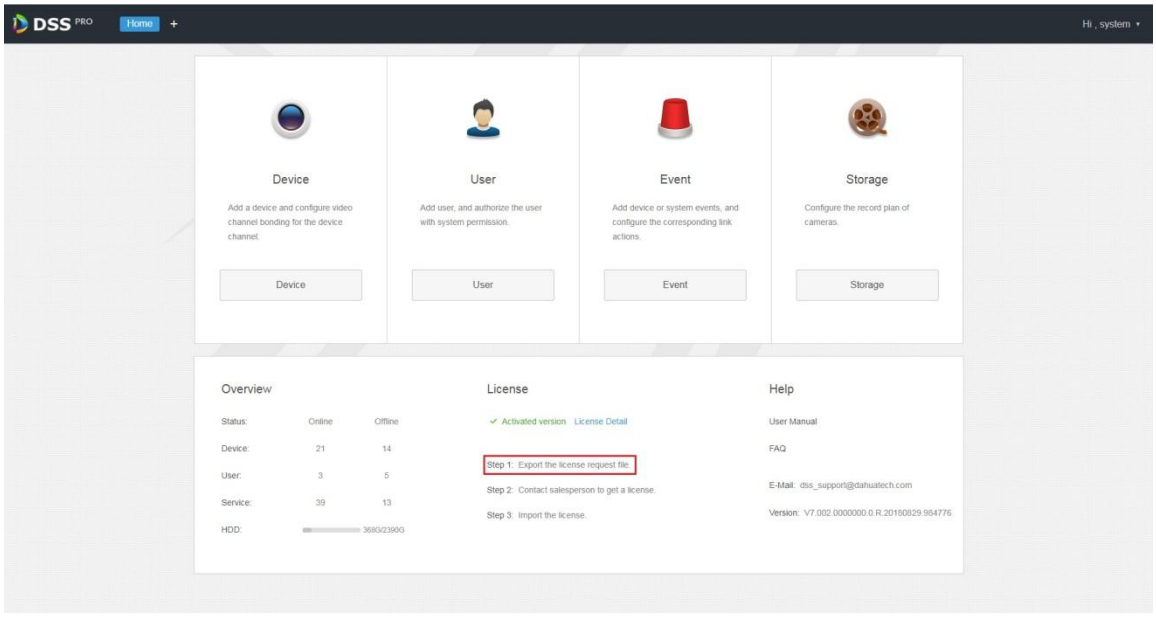
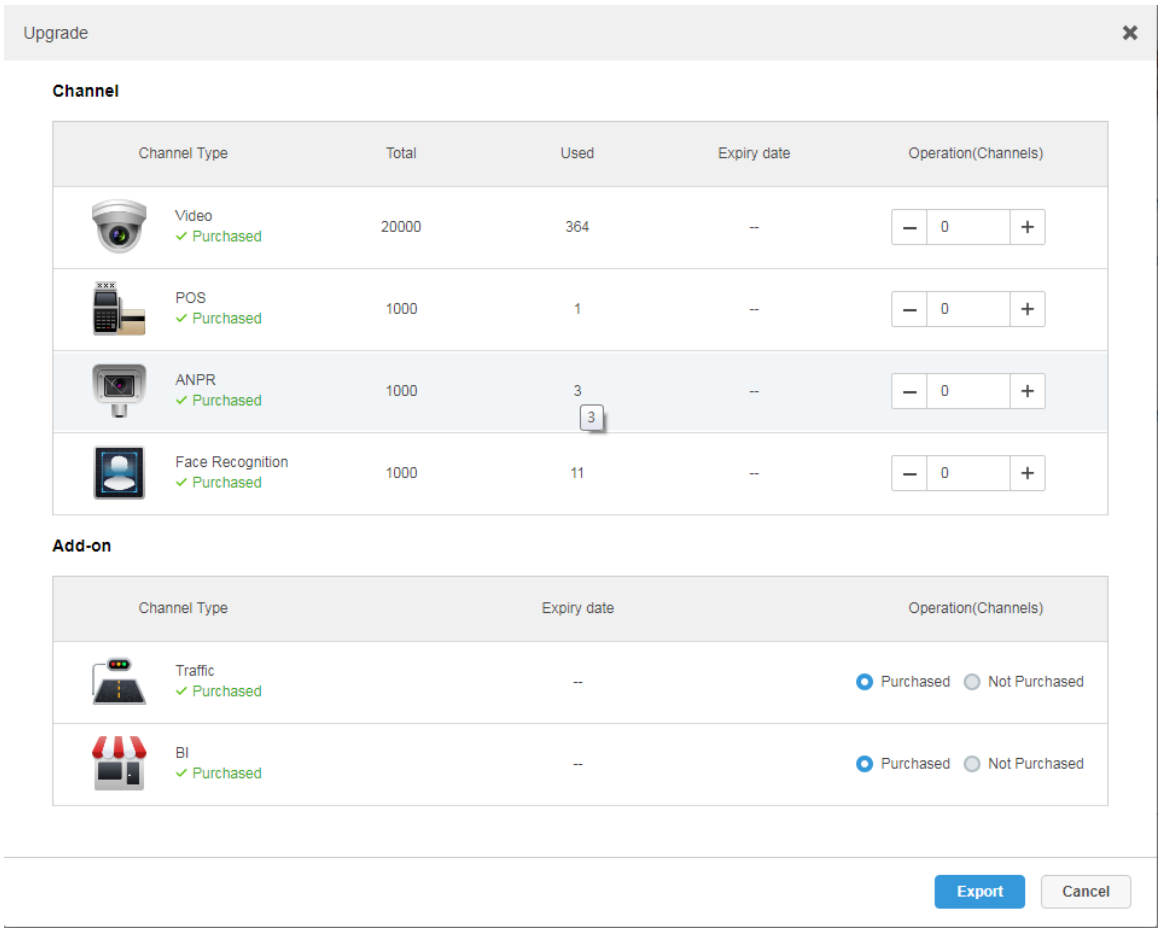


Figure 4-4



3) Enter channel number and select module according to actual purchase.
4) Click “Export”, generate zip compression package and save it under the default download path of the browser.
It supports to open, save or save as the export file on the interface after export is completed.

Step 2 Send authorization application file to sales, which is used to acquire authorization file.

4.2.3 Loading License

Please make sure you have made application and acquired License file before loading License.

Step 1 Log in DSS management end.

Step 2 Click “Step 3” on the “Homepage” interface, which is shown in Figure 4-5.
The system displays “Upgrade” interface. See Figure 4-6.

Figure 4-5

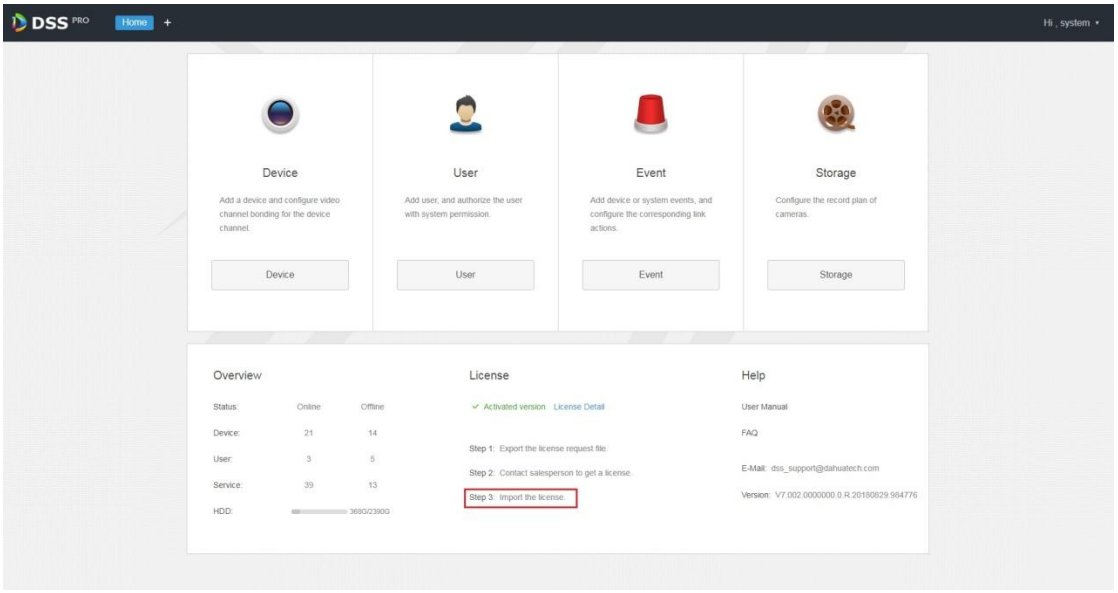
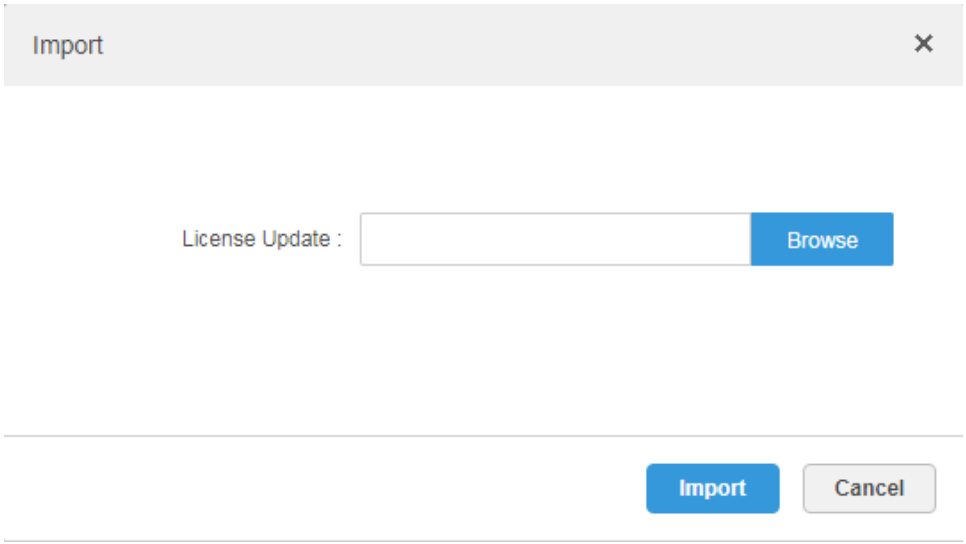


Figure 4-6



Step 3 Click “Browse” and select the uploaded License file.

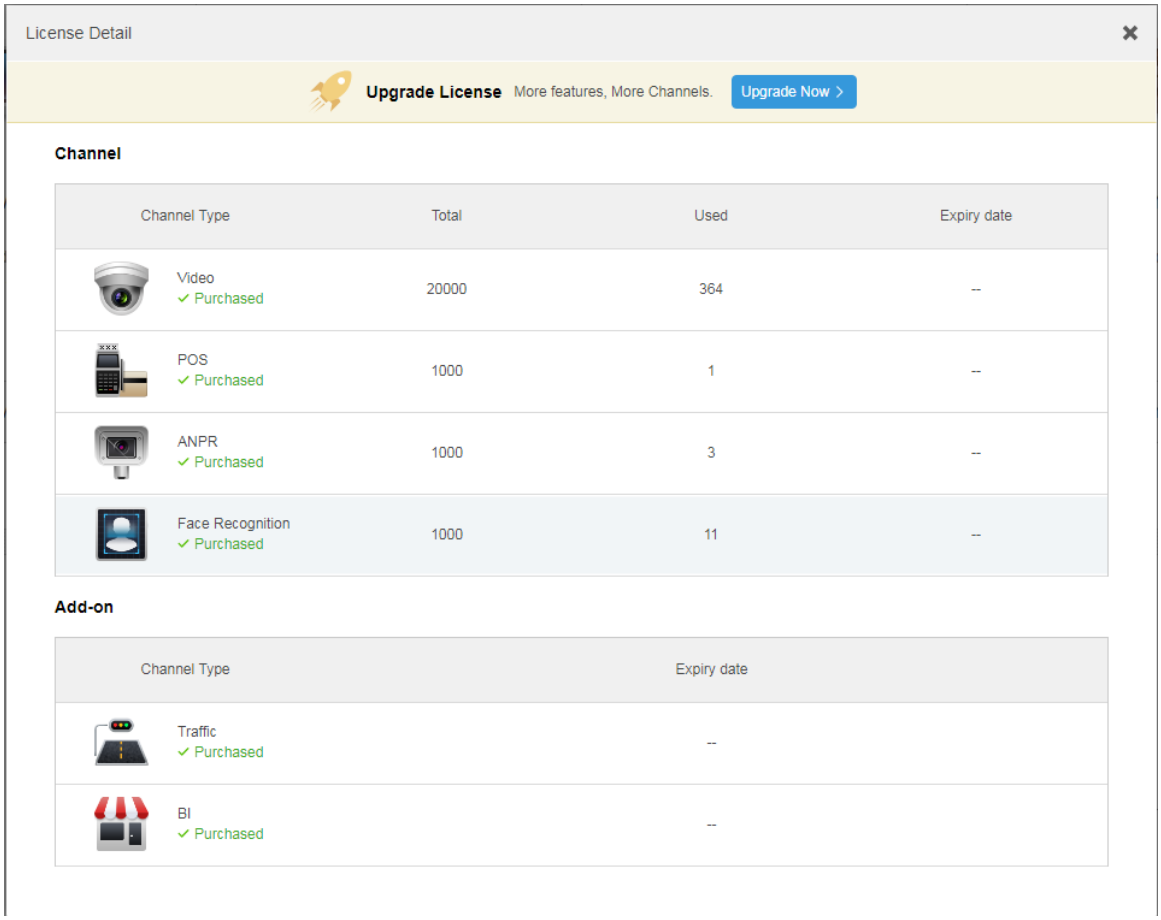
Step 4 Click “Import” and complete License loading.

The system prompts that authorization information has changed after loading, and then the program starts again.

Step 5 Log in DSS management end again, click “License Details” on the “Homepage” interface, and check License.

Click “Upgrade Now” and skip to “Upgrade” interface, then you can export authorization application file.

Figure 4-7



4.3 System Settings

4.3.1 Setting System Parameters

It needs to configure system parameters when it is first time to log in DSS system, which is to make sure that the system runs normally.

Step 1 Click , select “System Settings” in the interface of “New Tab”.

The system displays the interface. See Figure 4-8.

Figure 4-8

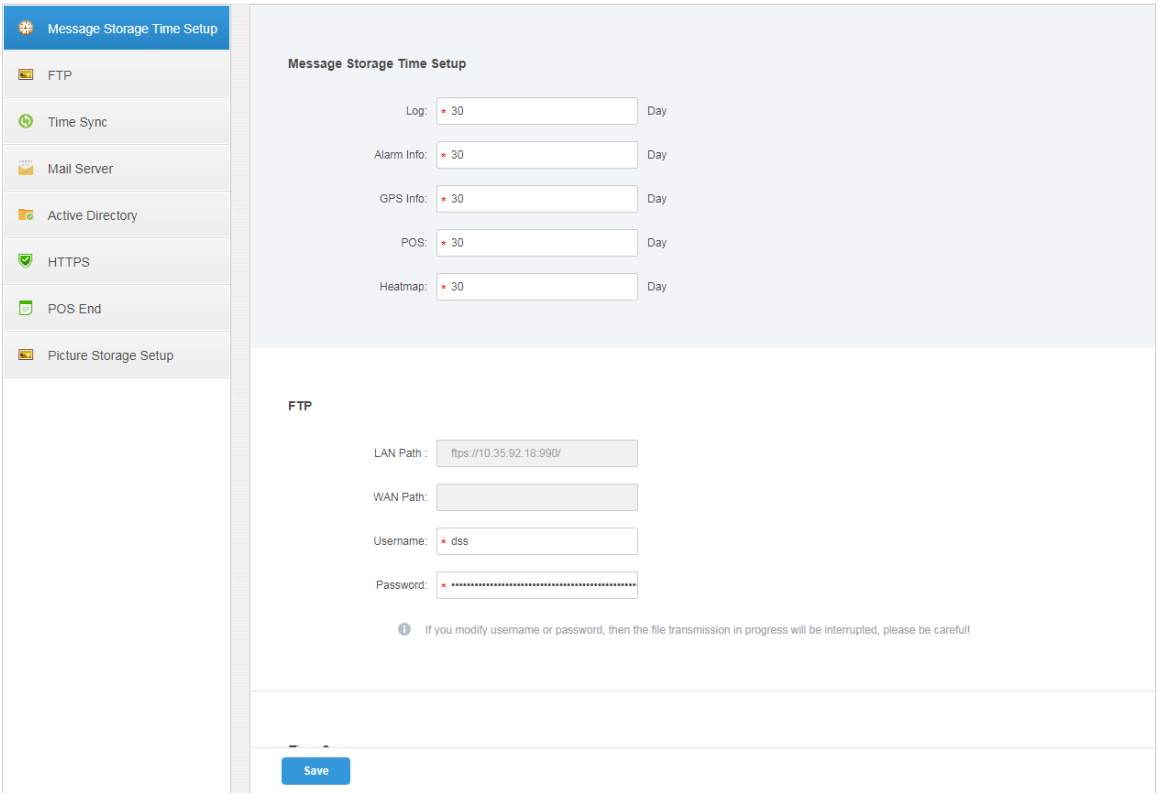


Table 4-2

Parameter		Note
Message Storage Time Setup	Log	Sets longest keep time of log, it is 30 days by default.
	Alarm info	Sets the longest keep time of alarm info, it is 30 days by default.
	GPS info	Sets the longest keep time of GPS info, it is 30 days by default.
	POS	Sets the longest keep time of POS info, it is 30 days by default.
	Heatmap	Sets the longest keep time of heat map info; it is 30 days by default.
FTP	LAN path	The FTP server LAN path where file is stored.
	WAN path	The FTP server Internet path where file is stored.
	Username/ password	Username and password used to log in FTP server.
Time Sync	Enable	Check it to enable the function of time sync.
	Start time	Sets start time of time sync.
	Sync Interval	The time of server shall prevail; synchronize the time of device and server. It is 2 hours by default, the system is based on the server time every 2 hours, and then it is to synchronize the time of both device and server. **NOTE** The time between device and server is synchronized via SDK.
	Immediately	Click the button to start time sync immediately.

Parameter		Note
Mail Server	-	It is to set mail server IP, port, encryption type, username/password, sender, test recipient etc. It can select to send email to users when the administrator configures the alarm linkage and the client handles the alarm. At this moment, it needs to configure mail server first.
Activity Directory	-	Set domain info.
HTTPS	-	Enable HTTPS security verification.
POS End	-	After setting POS end mark, it will display on the location of POS receipts end.
Picture Storage Setup	Picture storage time	Sets the storage time of the picture, unit: day.
	Min Capacity	

Step 2 Configure corresponding parameters.

Step 3 Click ‘Save”.

4.3.2 FTP

4.3.2.1 Use

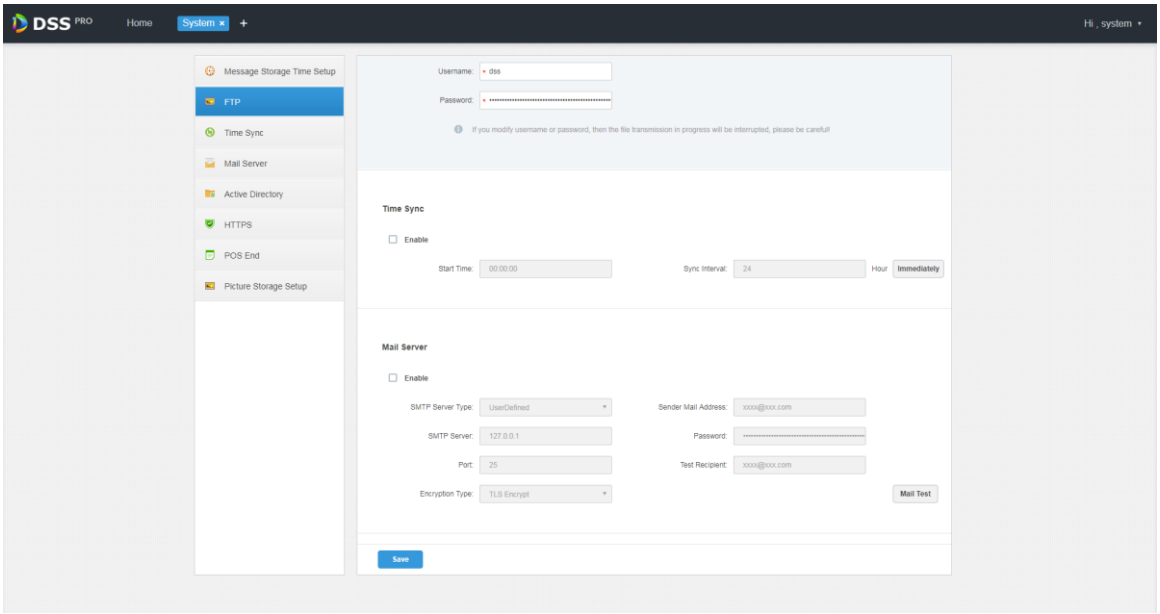
It is to enable FTP in the DSS server, which is mainly used to upload alarm capture to DSS platform. It can use built-in FTP of DSS system (Fail to support IP address modification), it can also configure the FTP server which is set up by users themselves.

4.3.2.2 Configuration Method

Step 1 Click , select “System” in the interface of “New Tab”.

Step 2 Click “FTP” and set FTP address, username and password.
The interface is displayed. See Figure 4-9.

Figure 4-9



NOTE

The item with * has to be filled in, the standard format of FTP address is ftps://x.x.x.x, the system's own FTP address is the IP address of DSS server; both username and password are dss/dss by default.

Step 3 Click "Save" to save config.

You can use relevant tools to visit FTP address.

4.3.3 Setting Mail Server

4.3.3.1 Application Scenarios

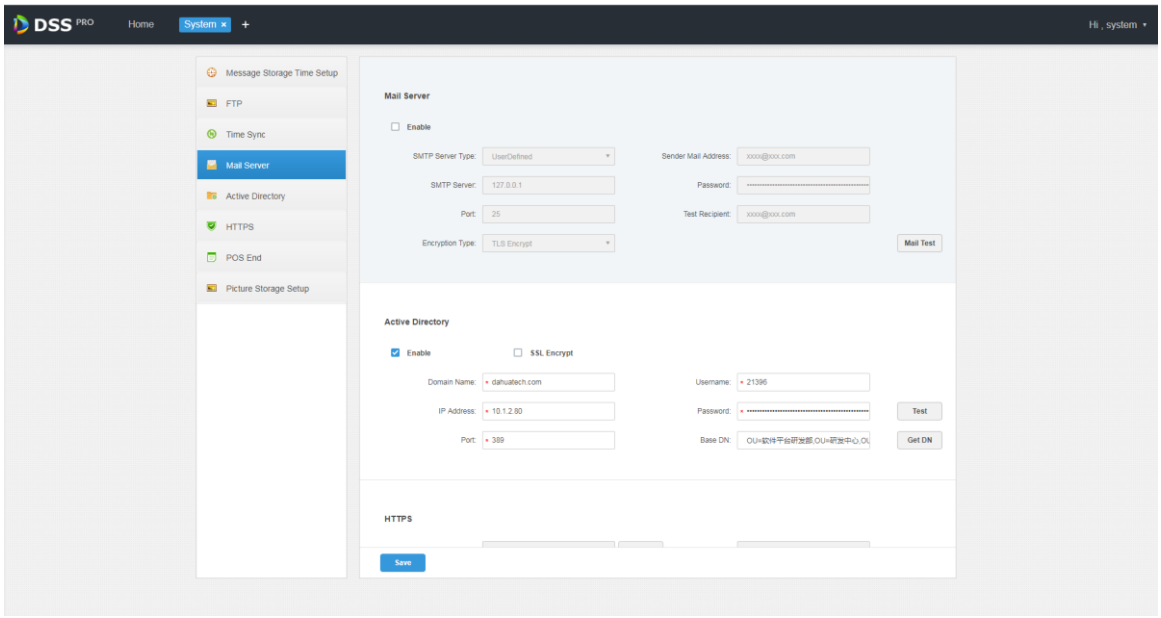
It can select to send mail to user when the administrator is configuring alarm linkage and client handling alarm, at this moment, it needs to configure mail server first.

4.3.3.2 Config Method

Step 1 Click and select "System" on the interface of "New Tab".

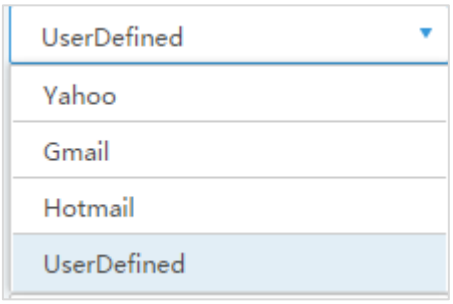
Step 2 Select the tab of "Mail Server", check "Enable" to enable mail config. See Figure 4-10.

Figure 4-10



Step 3 Select the type of mail server in the drop-down box. See Figure 4-11.

Figure 4-11



Step 4 It is to set mail server IP, port, encryption type, username/password, sender and test recipient etc.

Step 5 Click “Mail Test” to test if the config of mail server is valid. Test prompt will be received if the test is successful, and the test account will receive corresponding email.

Step 6 Click Save after the test is successful, and then it can save config info.

4.4 Adding Organization

Adding organizations is to deploy the hierarchy of organization or device, which is to make it easy to manage. It doesn’t have to add organizations, the added users or devices are classified to the default organization.

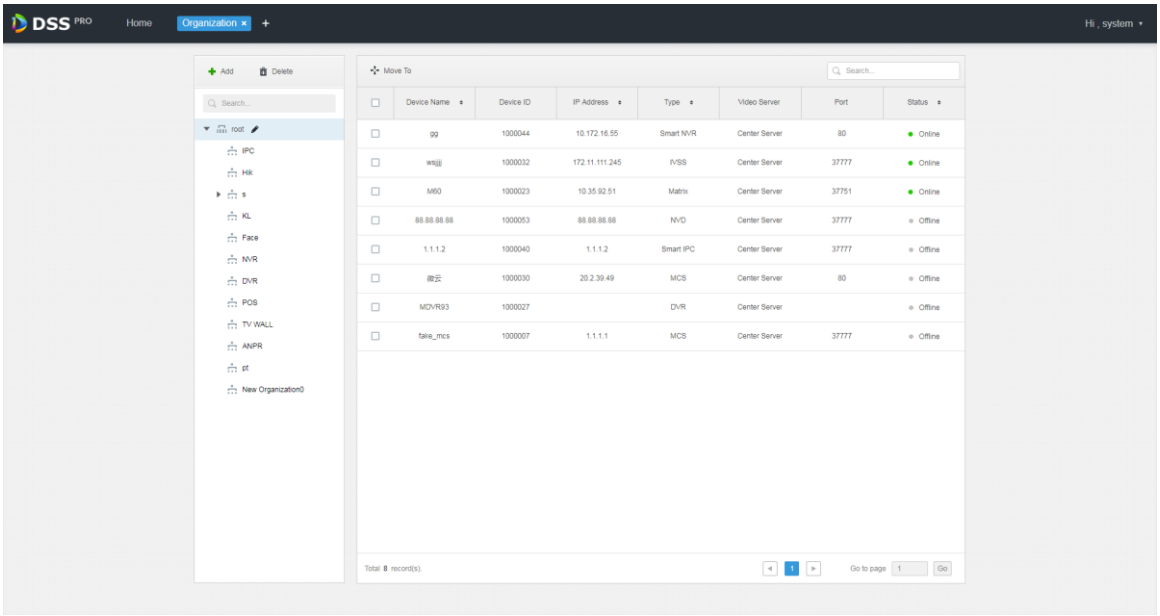
The default first level organization of the system is “Root”, the newly-added organization is displayed at the next level of “root”.

Steps

Step 1 Click + and select “Organization” on the interface of “New Tab”.

The system displays the interface of organization. See Figure 4-12

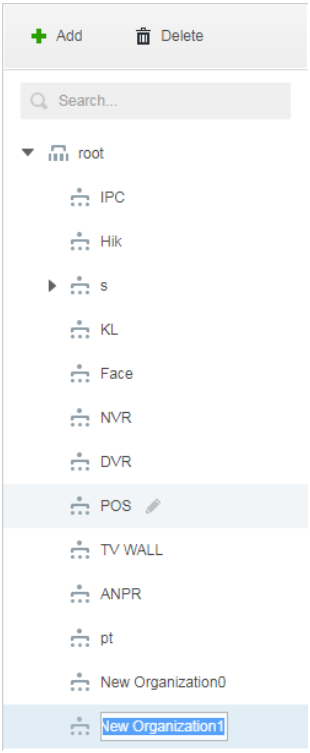
Figure 4-12



Step 2 Select root organization, click “Add”.

It is to add new organizations under the root organization. See Figure 4-13.

Figure 4-13



Step 3 Enter organization name, press【Enter】button.

Operations

- Move device: Select the device under the root organization, click Move To, select “New Organization 1”, click “OK”.
- Edit: Click the next to the organization and modify the organization name.
- Delete: Select organization, click Delete to delete organization.

4.5 Adding Role and User

4.5.1 Adding User Role

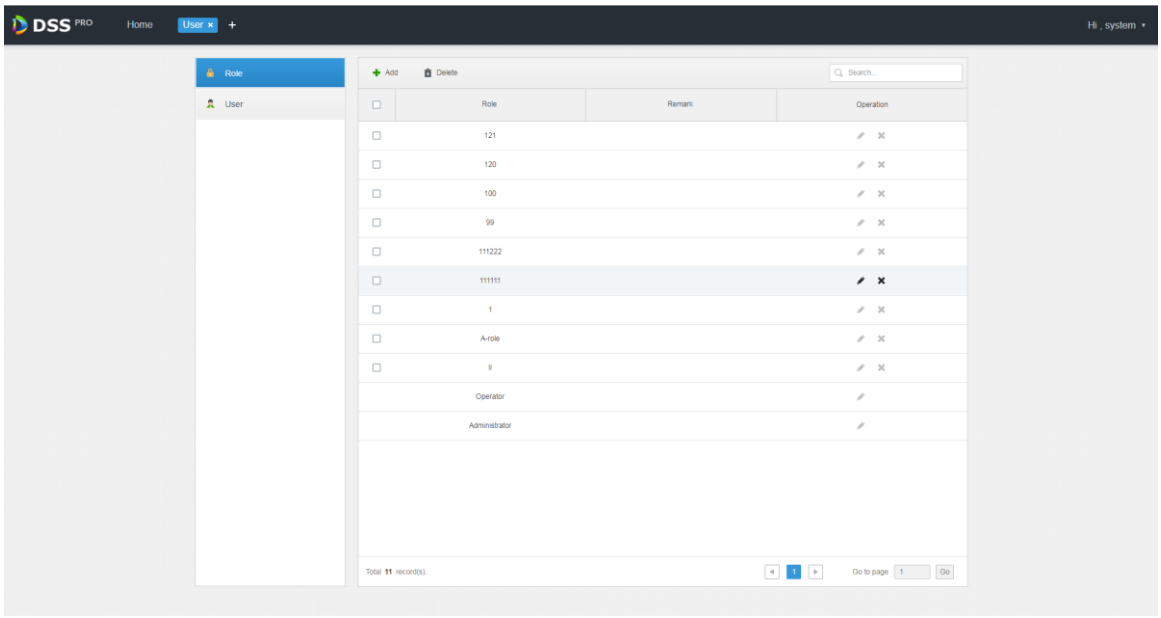
You can create user role and add user. The created user can log in both admin and client. Different user roles decide users to have different operation permissions.

The operation permission of user role includes device permission, management menu permission and operation menu permission. First it needs to grant permissions to these operations and then it can implement corresponding operations.

Step 1 Click and select “User” on the interface of “New Tab’.

The system displays the interface of user. See Figure 4-14.

Figure 4-14



Step 2 Click ‘Add” under the “Role” tab.

The system pops out the interface of “Add Role”.

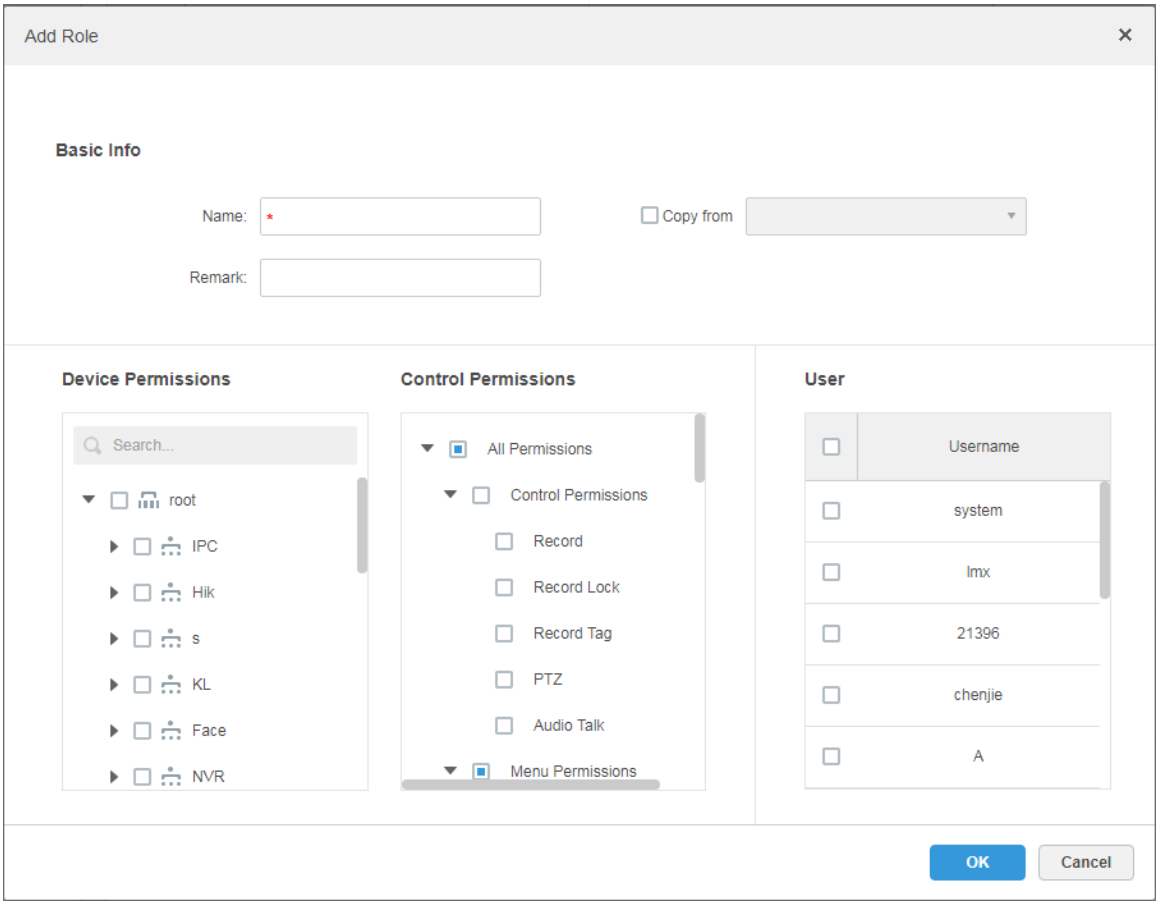
Step 3 Enter “Role Name”.

If it selects “Copy from” next to the “Role Name” and select some role in the drop-down Box, then it can copy the config info into the selected roles and realize quick config.

Step 4 Select “Device Permission” and “Operation Permission”.

The system will display the interface. See Figure 4-15.

Figure 4-15



Note

If it fails to select corresponding device permission or menu permission, then the users under the role has no corresponding device or menu operation permission.

Step 5 Click “OK” to add the role.

4.5.2 Adding User

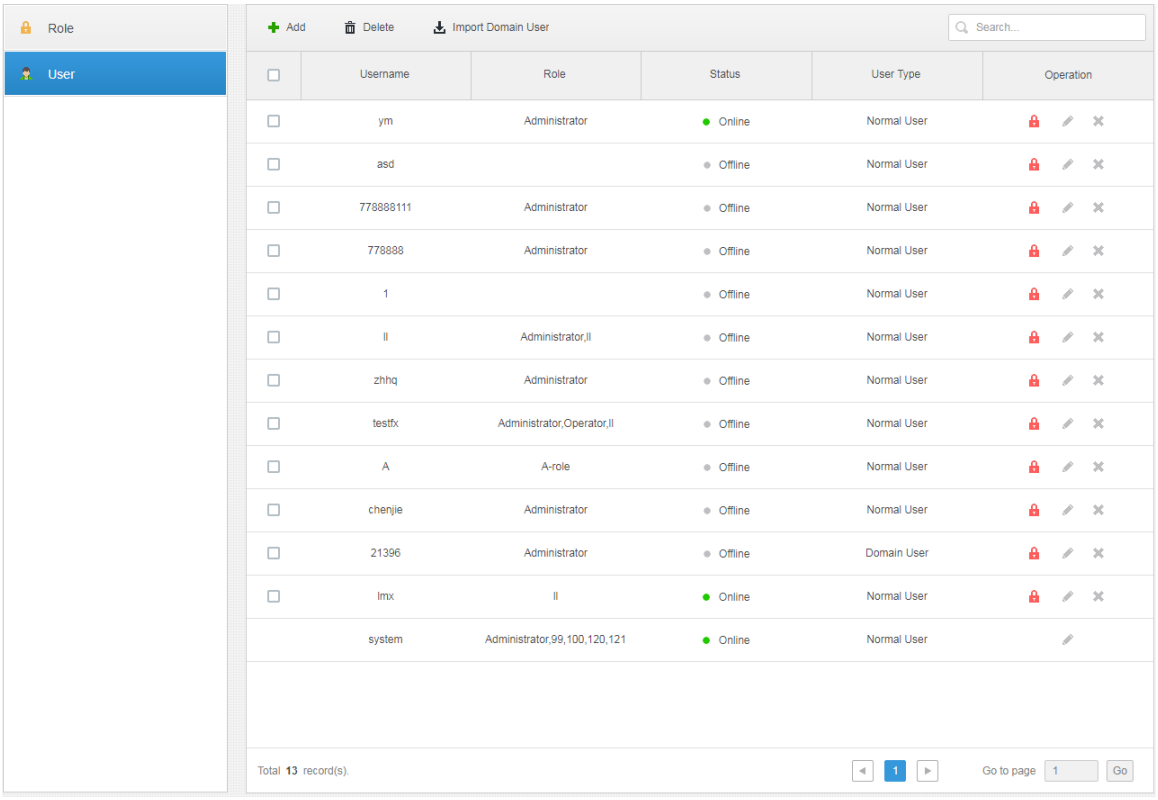
You can add the user of the role if you have added the user role.

Steps

Step 1 Click “User” tab.

The system displays the interface. See Figure 4-16.

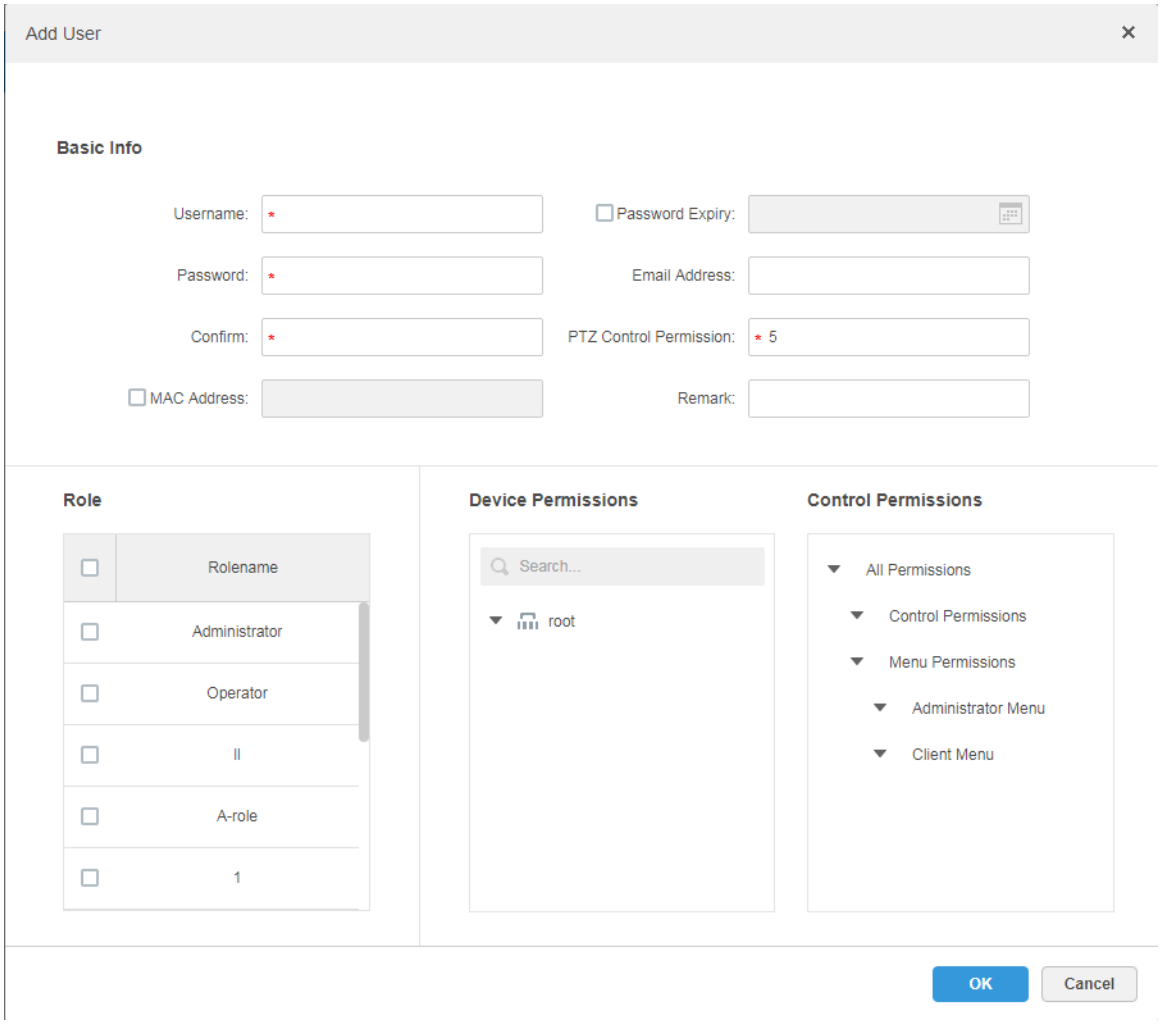
Figure 4-16



Step 2 Click ‘Add”.

The system will pop out the interface of “Adding User”.

Figure 4-17



Step 3 Configure user info, select role below, and it will display device permission and operation permission of corresponding role on the right.

NOTE

- The user has no “Device Permission” or “Operation Permission” if it fails to select “Role”.
- You can select several roles at the same time.

Step 4 Click “OK” to add the user.

Operations

- Click to freeze user, the user which logs in the client will quit.
- Click to modify user info except username and password.
- Click to delete user.

4.5.3 Setting Domain User

The setting in this chapter is optional, please select if it is to set domain user according to the actual situation.

4.5.3.1 Application Scenario

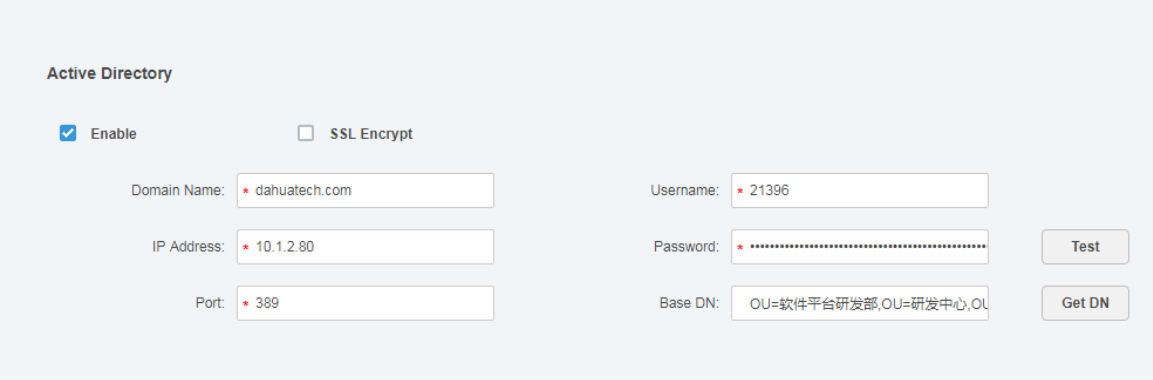
For the companies with domain information and want to use domain users as system login users, using domain user import can improve the convenience of project deployment.

4.5.3.2 Setting Domain Info

Step 1 Click and select “System” on the interface of “New Tab”.

Step 2 Click the tab of “Active Directory” and configure domain info. See Figure 4-18.

Figure 4-18



Step 3 After setting domain info, click “Get DN” and it will acquire basic DN info automatically.

Step 4 After getting DN info, click “Test” to test if domain info is available.

Step 5 Click “Save” to save config.

It can import domain user on the interface of “User” after it prompted successfully.

Please refer to the next chapter for more operation details.

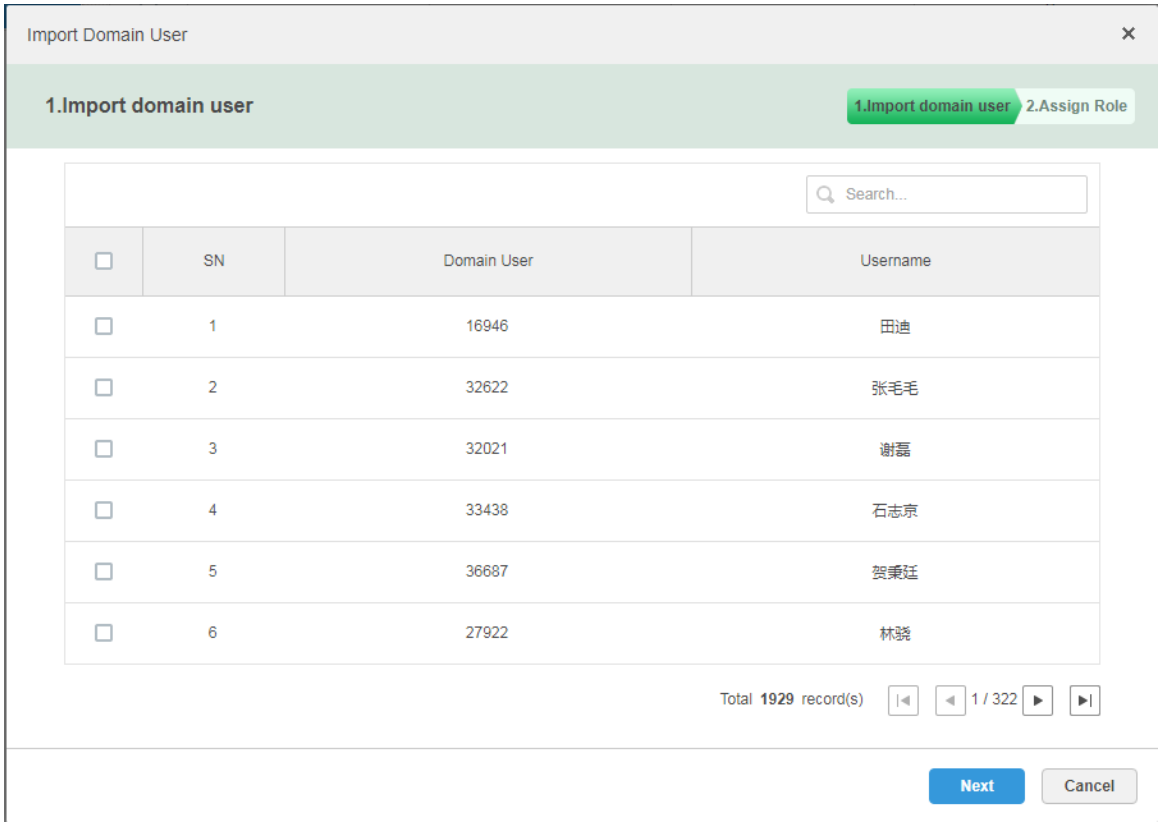
4.5.3.3 Importing Domain User

Step 1 Click and select “User” on the interface of “New Tab”.

Step 2 Select “User” tab, click “Import Domain User” on the right of the interface.

The system will display the interface of “Import Domain User”. See Figure 4-19.

Figure 4-19



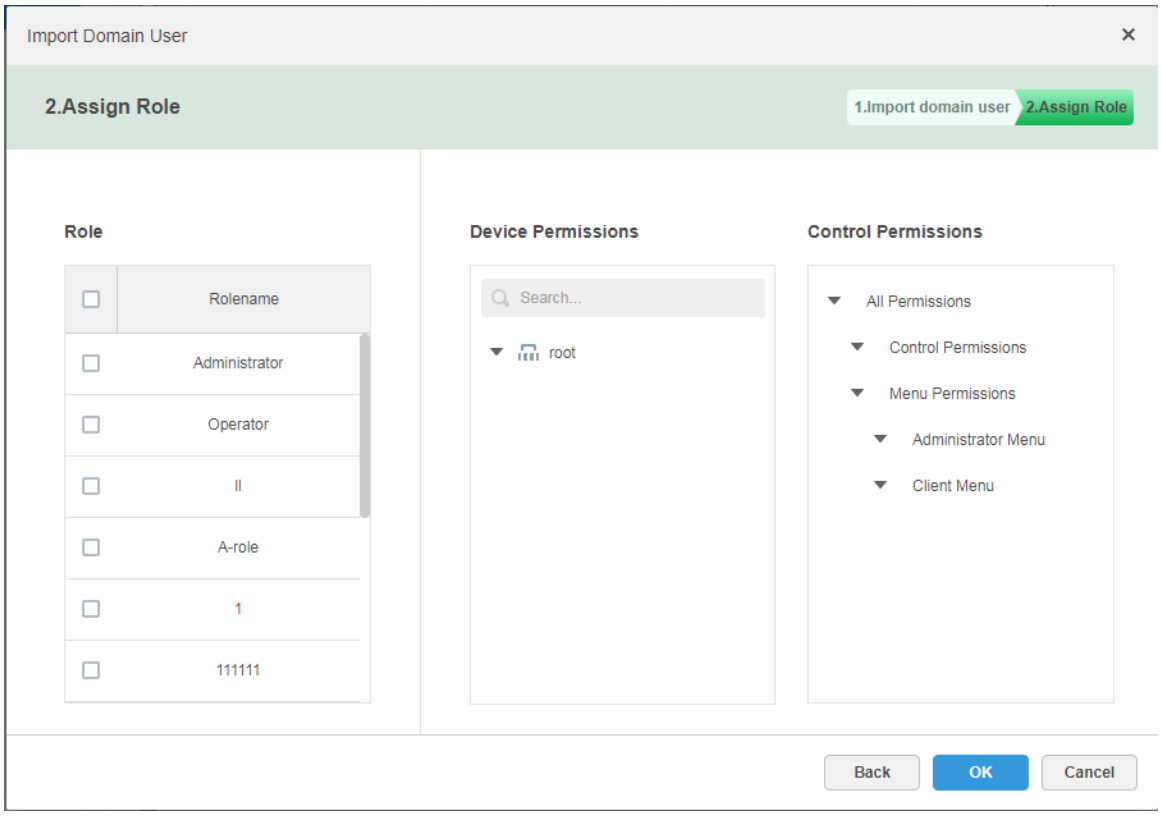
Step 3 Select the users which need to be imported from the acquired domain users.

It supports searching users by entering key words in the search box.

Step 4 Click “Next”.

The system displays the interface of “Import Domain User”. See Figure 4-20.

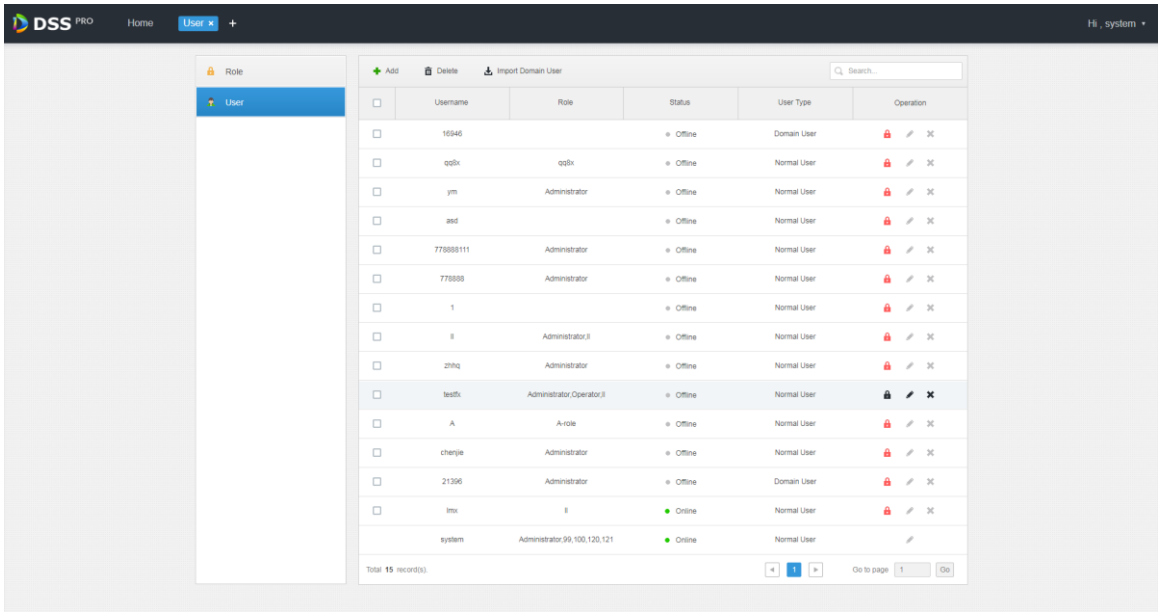
Figure 4-20



Step 5 Select role for domain user, it displays corresponding device info and function permission info on the right of the interface, click “OK” after it is confirmed.

Make sure domain user has been successfully imported in “User Info”. See Figure 4-21.

Figure 4-21



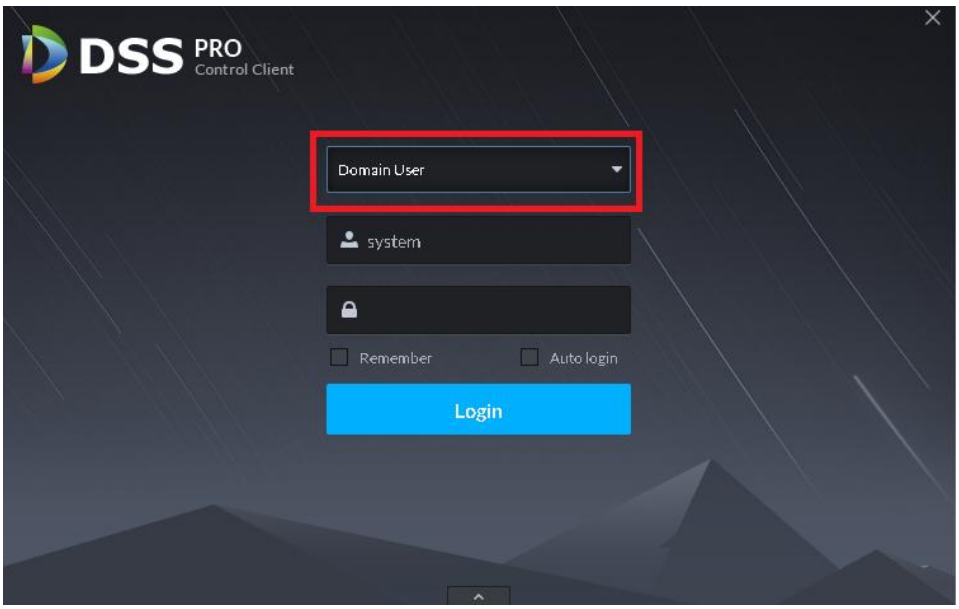
4.5.3.4 Logging in Domain User

It can use domain user to log in client.

Step 1 Select “Domain User” in the drop-down box of “User Type” on the client login interface.

See Figure 4-22.

Figure 4-22



Step 2 Enter domain username, password, server IP, port and other info, click “Login”. The interface and function are the same as login via general user after it logged in successfully, which is not going to be repeated here.

4.6 Adding Device

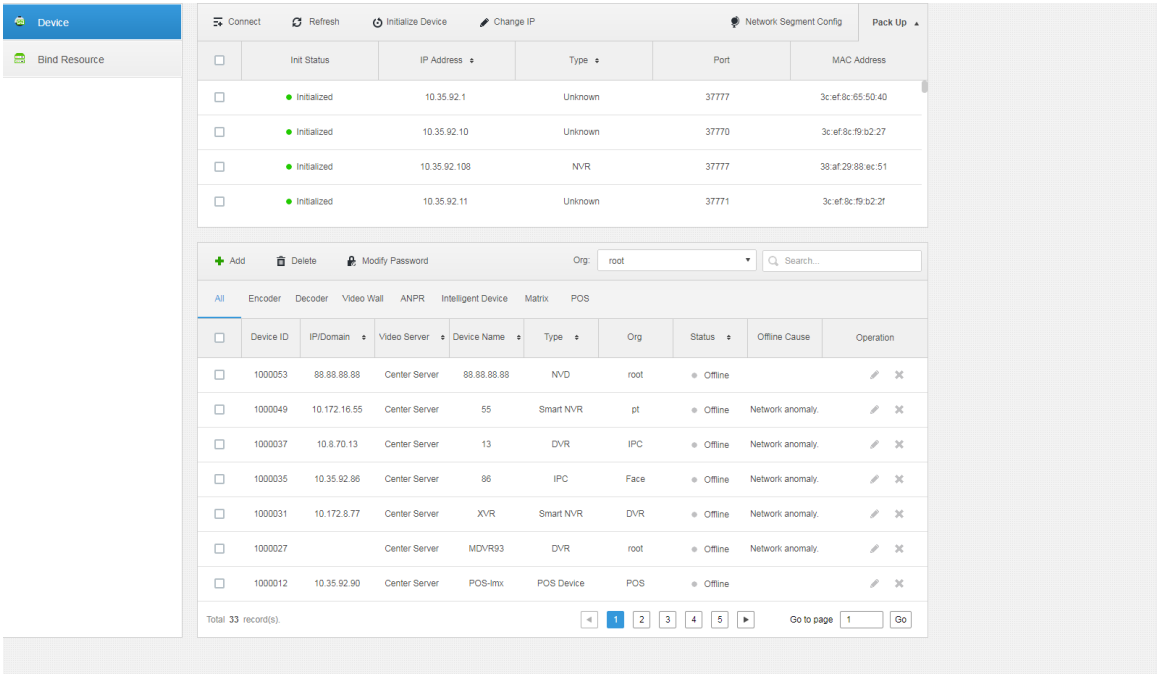
It can add different types of devices according to different business requirements.

4.6.1 Adding Device Manually

Step 1 Click and select “Device” on the interface of “New Tab”.

The system will display the interface of “Device”. See Figure 4-23.

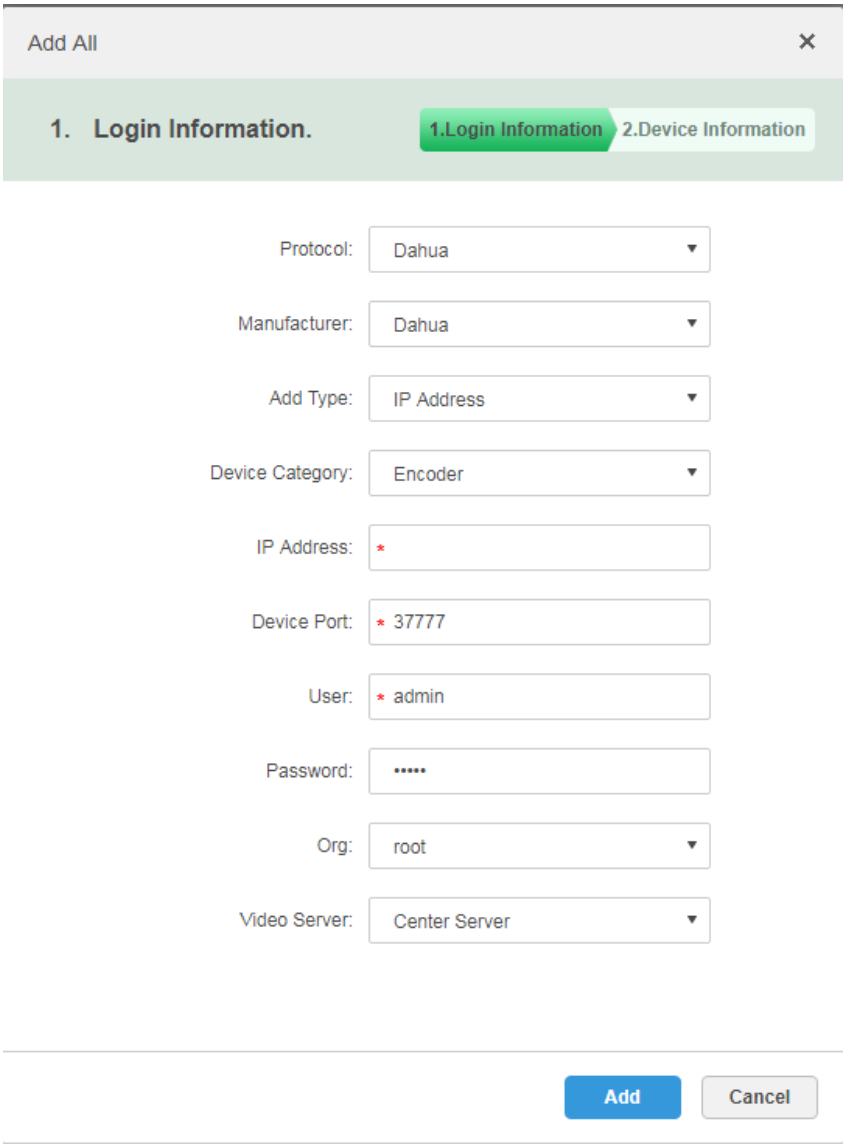
Figure 4-23



Step 2 Click “Add”.

The interface is shown in Figure 4-24.

Figure 4-24



Step 3 Select “Protocol”, “Manufacturer”, “Add Type”, “Device Category”, “Organization”, “Video Server”, input “IP Address”, “Device Port” and “Username/Password” etc.

NOTE

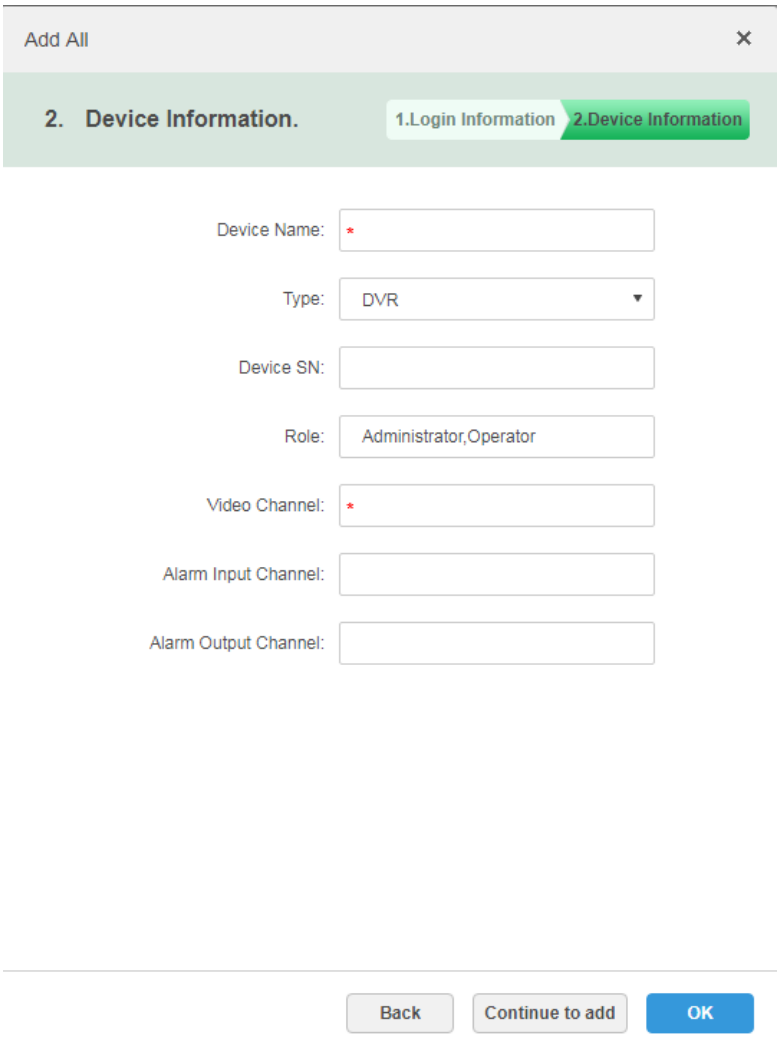
Select different “Protocol”, it will configure different parameters, please refer to the interface for more details.

- When “Add Type” selects “IP Address”, it enters device IP address.
- When “Add type” selects “Auto Register”, it enters device auto register ID. It can only add encoder via auto register, the ID of auto register has to be in accordance with the registered ID configured at encoder.
- When “Add Type” selects “Domain Name”, the options are from configured domain during deployment.

Step 4 Click “Add”.

The interface is shown in Figure 4-25.

Figure 4-25



Step 5 Select “Device Type” and enter “Device Name” “Alarm input/output channel” and so on.

Step 6 Click “OK”.

Please click “Continue to add” if it continues to add device.

4.6.2 Searching Added Device

Channels on the LAN with the platform server can be added using the automatic search function.

Step 1 Click and select ‘device” on the interface of “New Tab”.

Step 2 Click “Search Again” above the “device” interface.

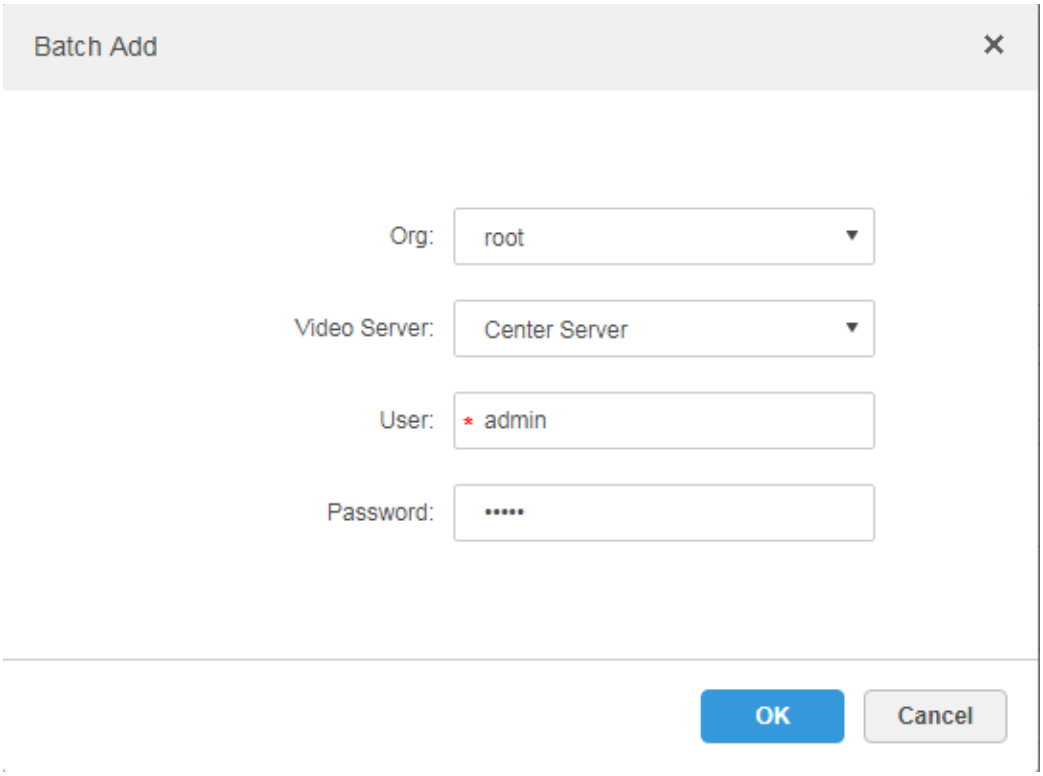
NOTE

Click “Network Segment Config” to configure IP segment again, click “Search again” to search the devices whose IP addresses are within the range.

Step 3 Select the device which needs to be added, and click “Connect”.

The system will pop out the interface of “Batch Add”. See Figure 4-26.

Figure 4-26



Step 4 Select “Organization” and “Video Server”, enter “User” and “Password”.
“User” and “Password” are the username and password which are used to log in the device; both are “Admin” by default.

Step 5 Click “OK”.
The system will add the devices into corresponding organization.

4.6.3 Editing Device

It needs to edit device after adding devices, set relevant channel info.

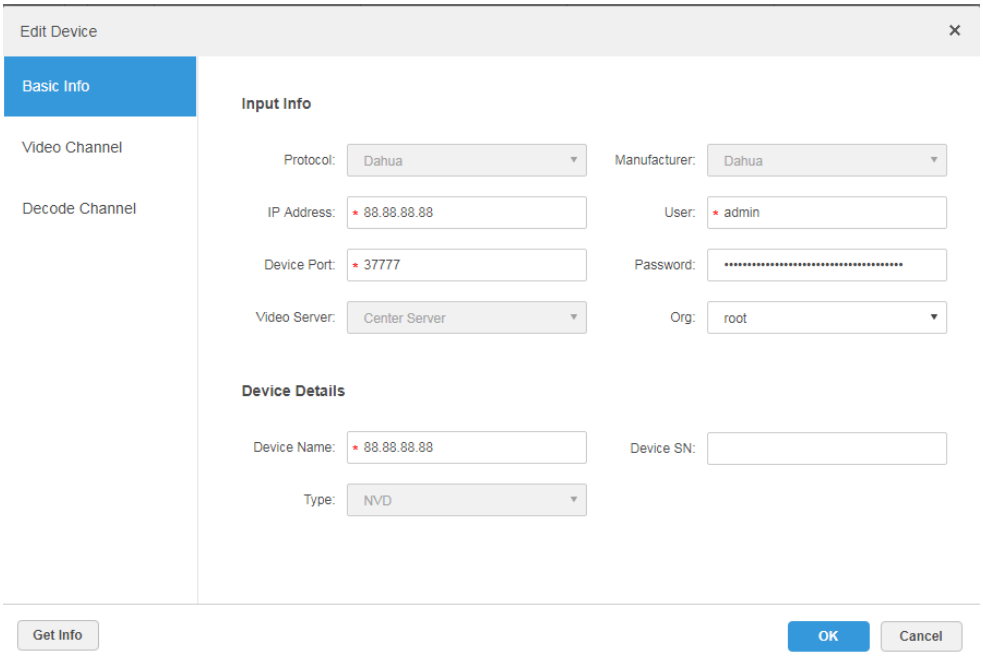
Step 1 Click and select “Device” on the interface of “New Tab”.

Step 2 Click the corresponding of device list.
The system displays the interface of “Edit Device”. See Figure 4-27.

NOTE

Click “Get Info” and the system will synchronize device info.

Figure 4-27



Step 3 It is to modify device basic info on the interface of “Basic Info”.

Step 4 Click “Video Channel” tab, set the device channel name, channel function, camera type, SN, keyboard code and face function.

The interface is shown in Figure 4-28.

NOTE

Different types of device have different interfaces of channel setting; please refer to the real interface for more details. See Figure 4-28, Figure 4-29, Figure 4-30 and Figure 4-31.

Figure 4-28

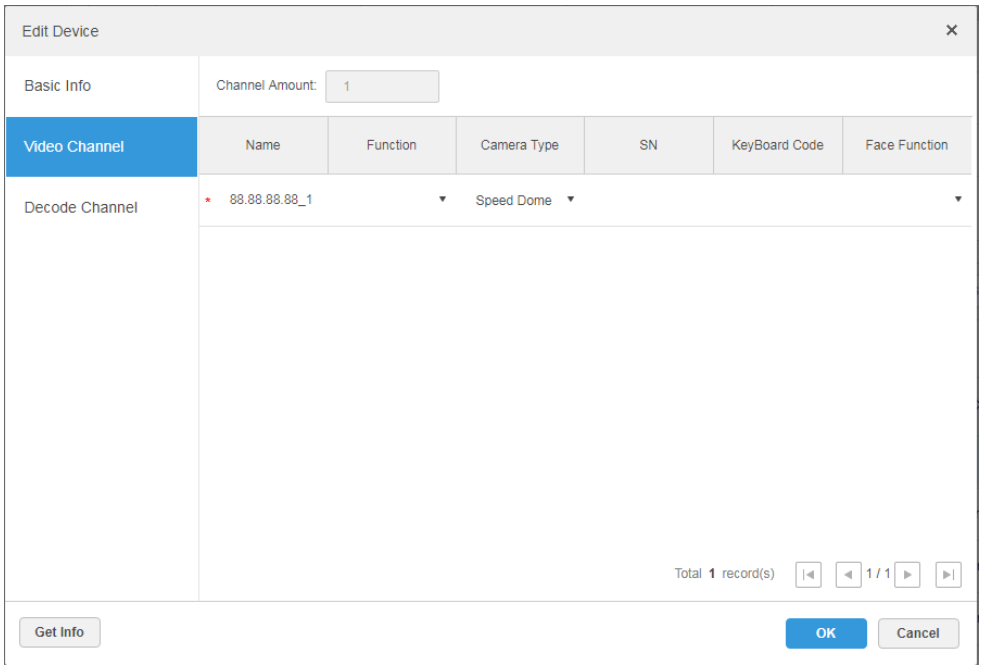
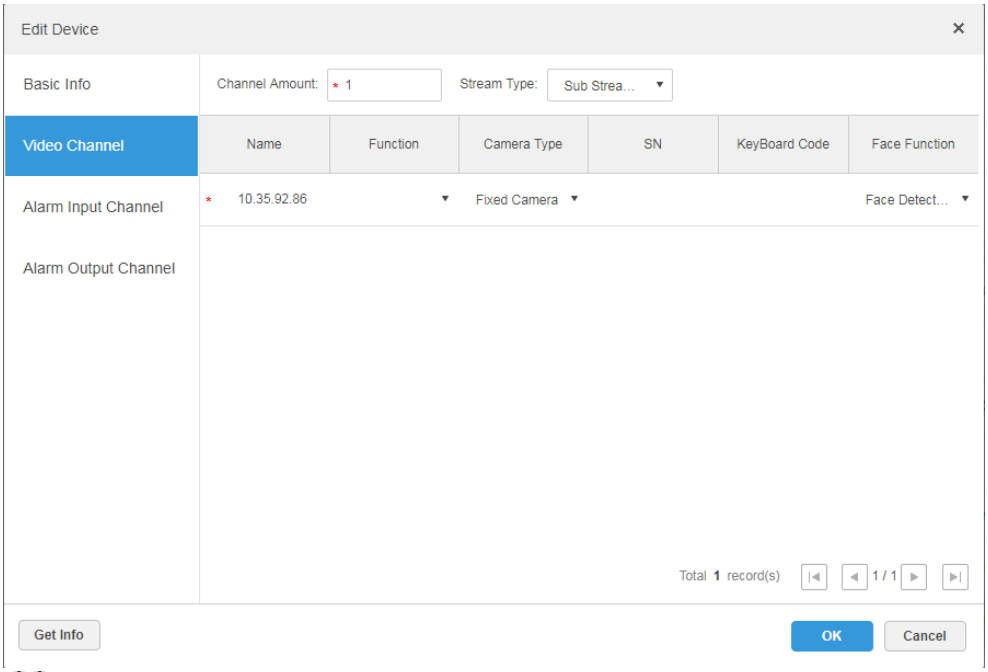


Figure 4-29



NOTE

It is to set video channel function according to the actual face recognition plan.

- Encoder has no need to set face function if face detection and recognition are realized by intelligent server.
- Face function shall be set as “Face Detection” if intelligent server realizes face recognition and encoder realizes face detection.
- Face function of encoder channel is set as “Face Recognition” if encoder realizes face detection and recognition.

Figure 4-30

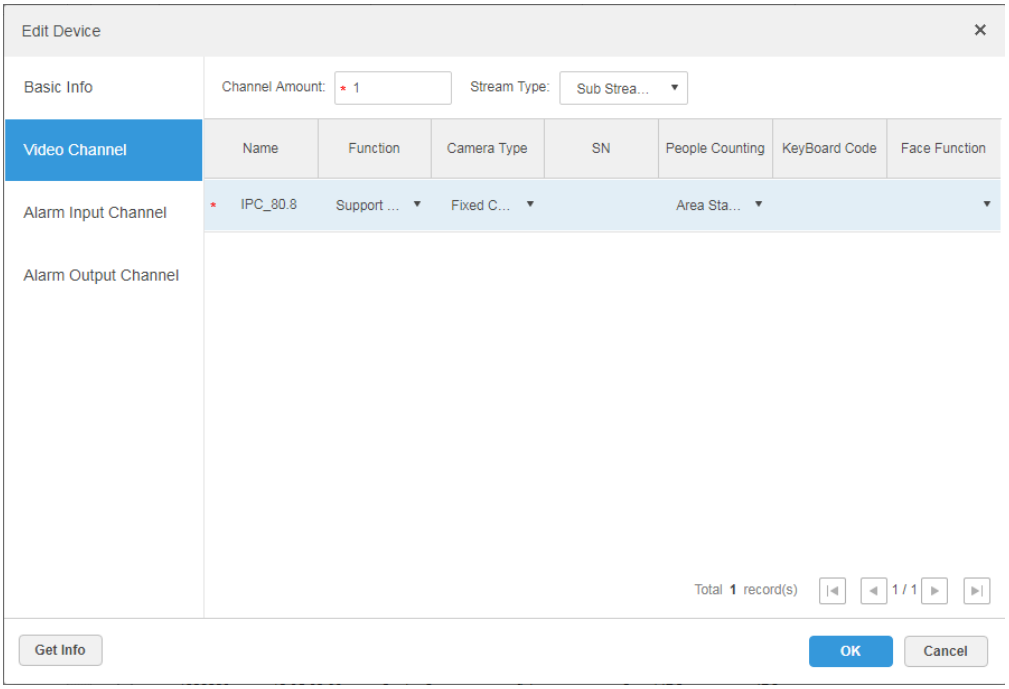
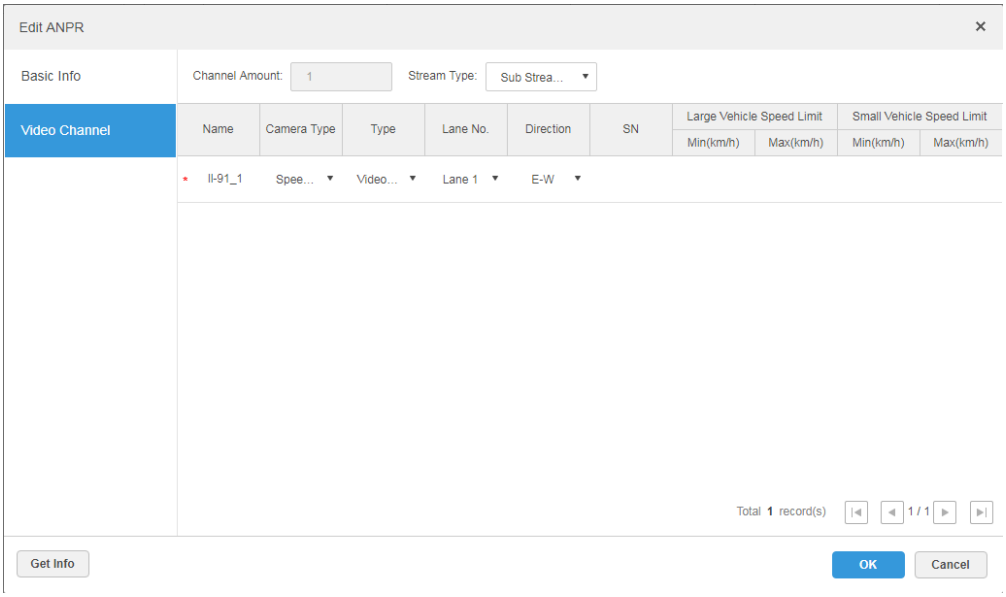


Figure 4-31



Step 5 Click the tab of “Alarm Input Channel”, configure channel name and alarm type of alarm input. See Figure 4-32.

NOTE

Please skip the step only when added devices need to be configured during alarm input.

- Alarm type includes external alarm, IR detect, zone disarm, PIR, gas sensor, smoke sensor, glass sensor, emergency button, stolen alarm, perimeter and preventer move.
- Alarm type supports custom. Select “Customize Alarm Type” in the drop-down box of “Alarm Type”, clicks “Add” to add new alarm type. It supports max 30 custom newly-added alarm types.

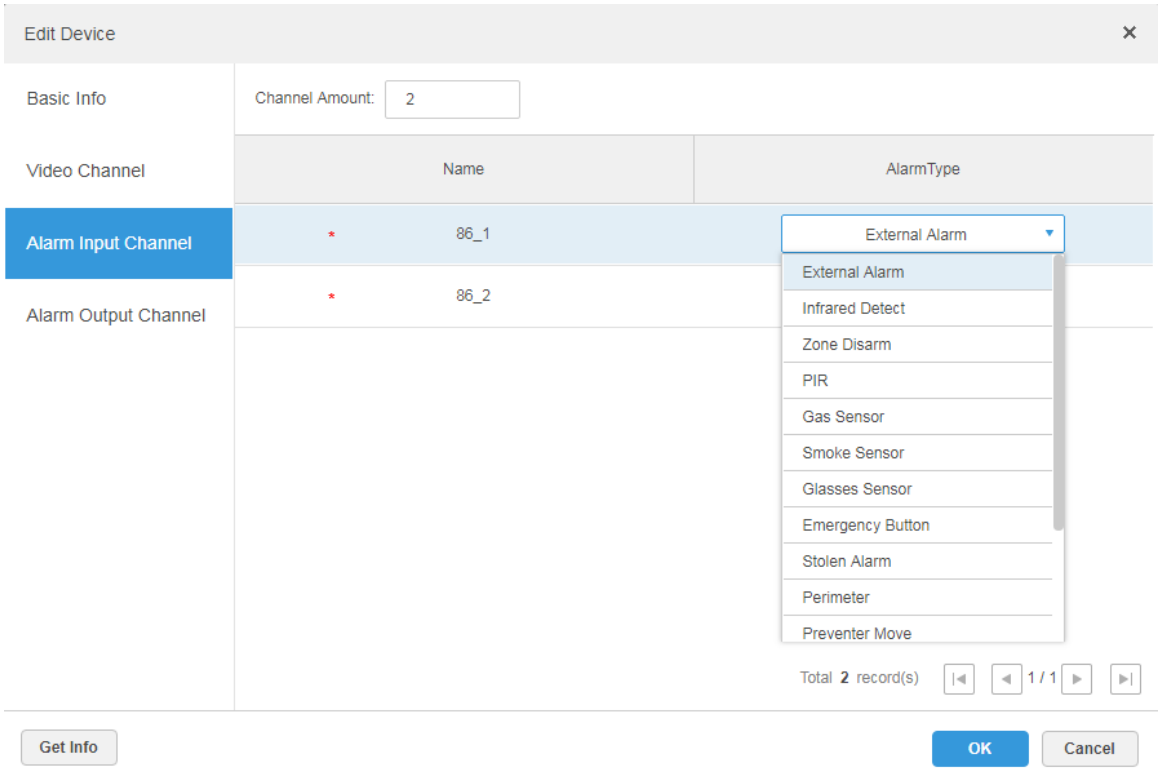
NOTE

Custom alarm supports modification and deletion.

- If custom alarm type is used by alarm plan, then it is not allowed to deleted but modified.
- It supports deletion if it is not used by alarm plan, after deletion, the alarm type of the alarm input channel configured with this alarm type is restored to the default value.
- When the name of the custom alarm type is modified, the history data remains the original name, while the new data adopts the modified name.

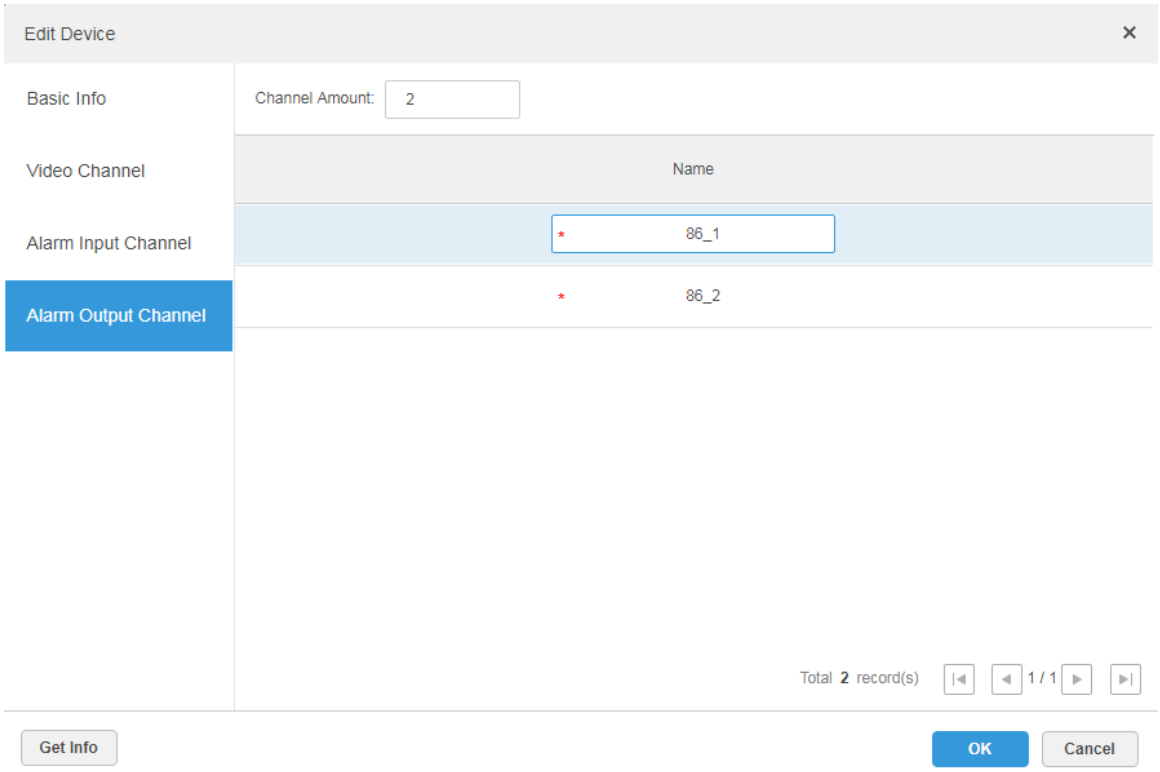
- The alarm input channel of alarm host is “Alarm Host Alarm” by default, the types of other alarm input channel are “External Alarm” by default.

Figure 4-32



Step 6 Click the tab of “Alarm Output Channel” and then modify the name of alarm output channel.

Figure 4-33



Step 7 Click “OK” to finish modification.

4.6.4 Binding Resource

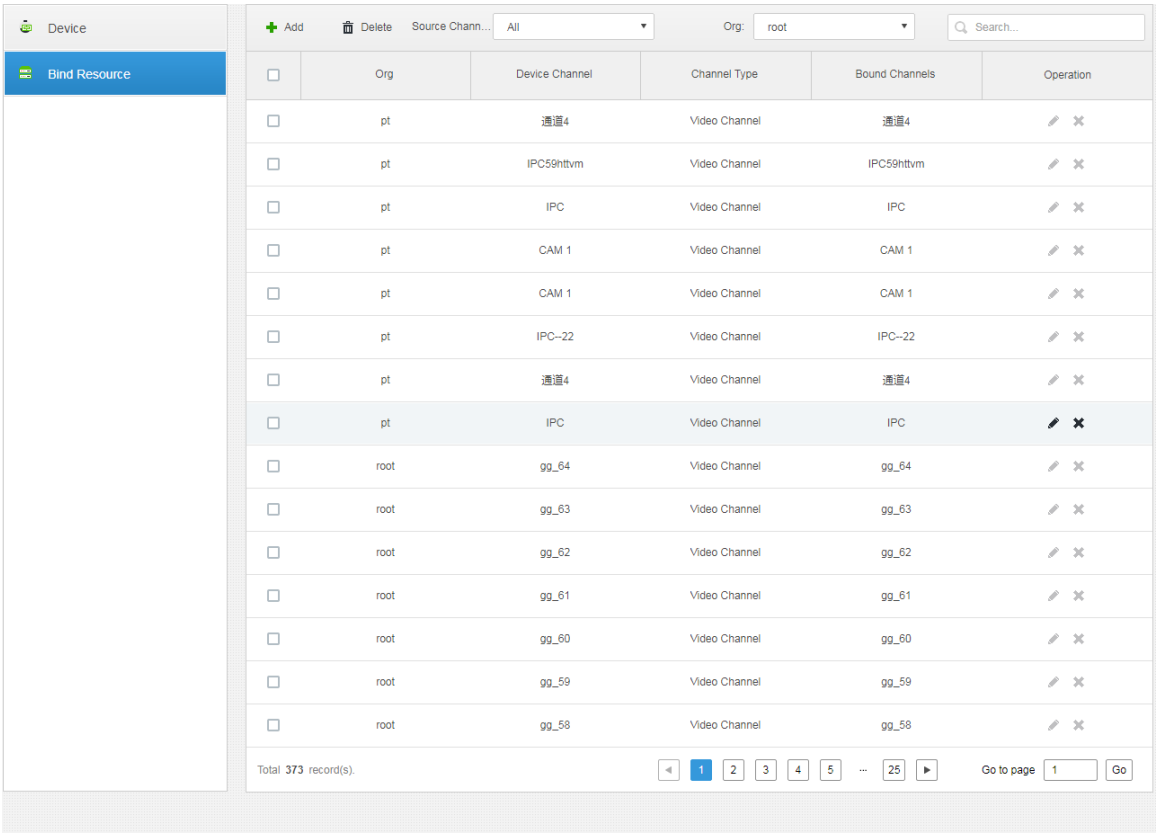
The platform supports setting video channel, alarm input channel, ANPR channel, POS channel, face channel and video channel resource binding. It can check bound video via resource bind for businesses such as map, alarm, commercial intelligence and face etc.

Adding Resource Bind

Step 1 Click “Resource Bind”.

The system displays the interface of “Resource Bind”. See Figure 4-34.

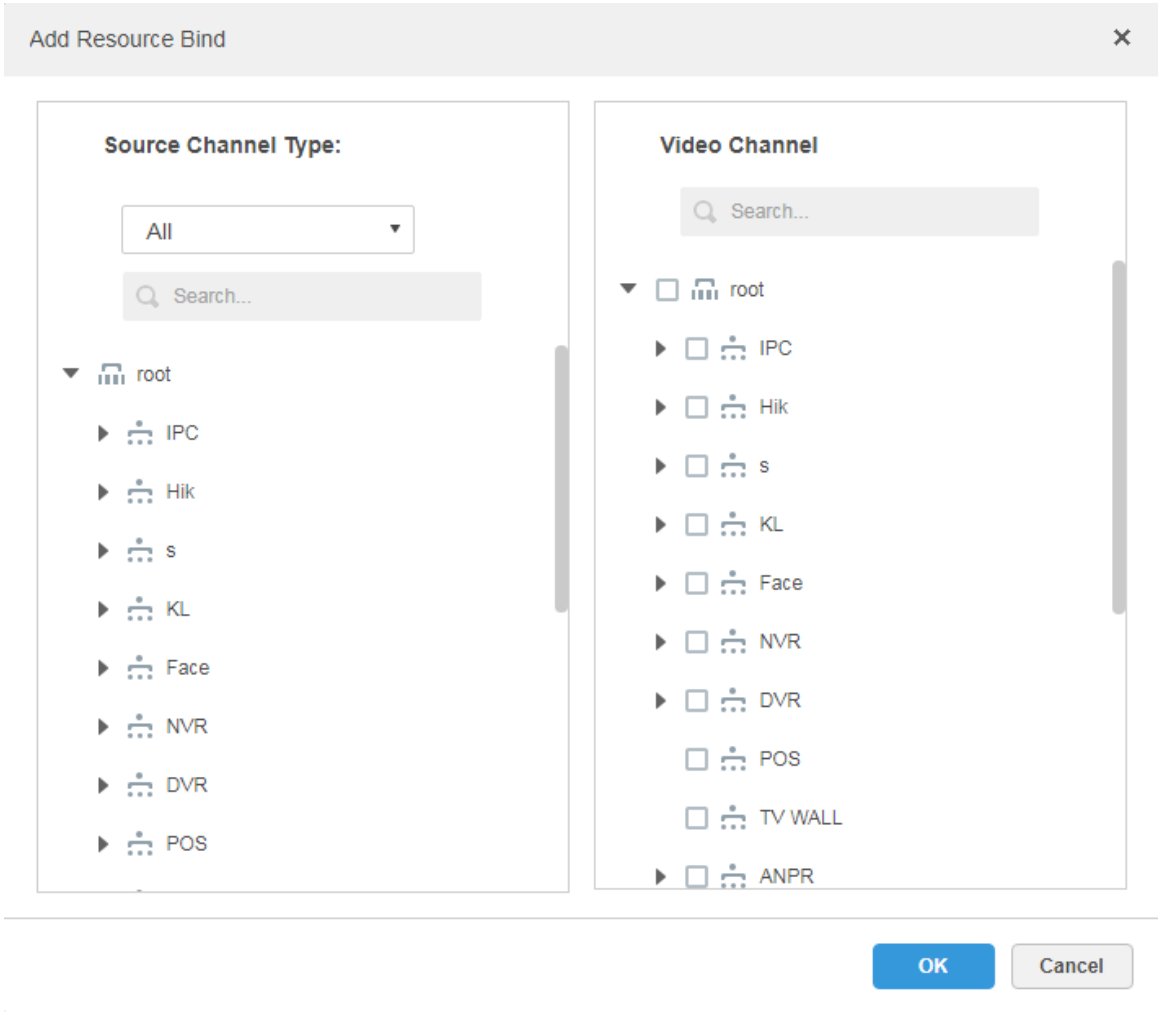
Figure 4-34



Step 2 Click “Add”.

The interface is shown in Figure 4-35.

Figure 4-35



Step 3 Select source channel and video channel respectively, click “OK”.

4.7 Configuring Record Plan

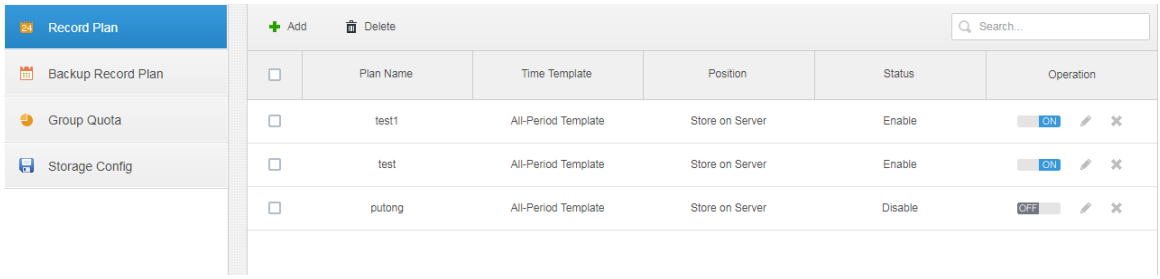
The platform management supports configuring record plan for video channel, which is to make front-end device record during the period which has been set.

4.7.1 Configuring Storage Disk

Step 1 Click and select “Record Plan” on the interface of “New Tab”.

The system displays the interface of “Record Plan”. See Figure 4-36.

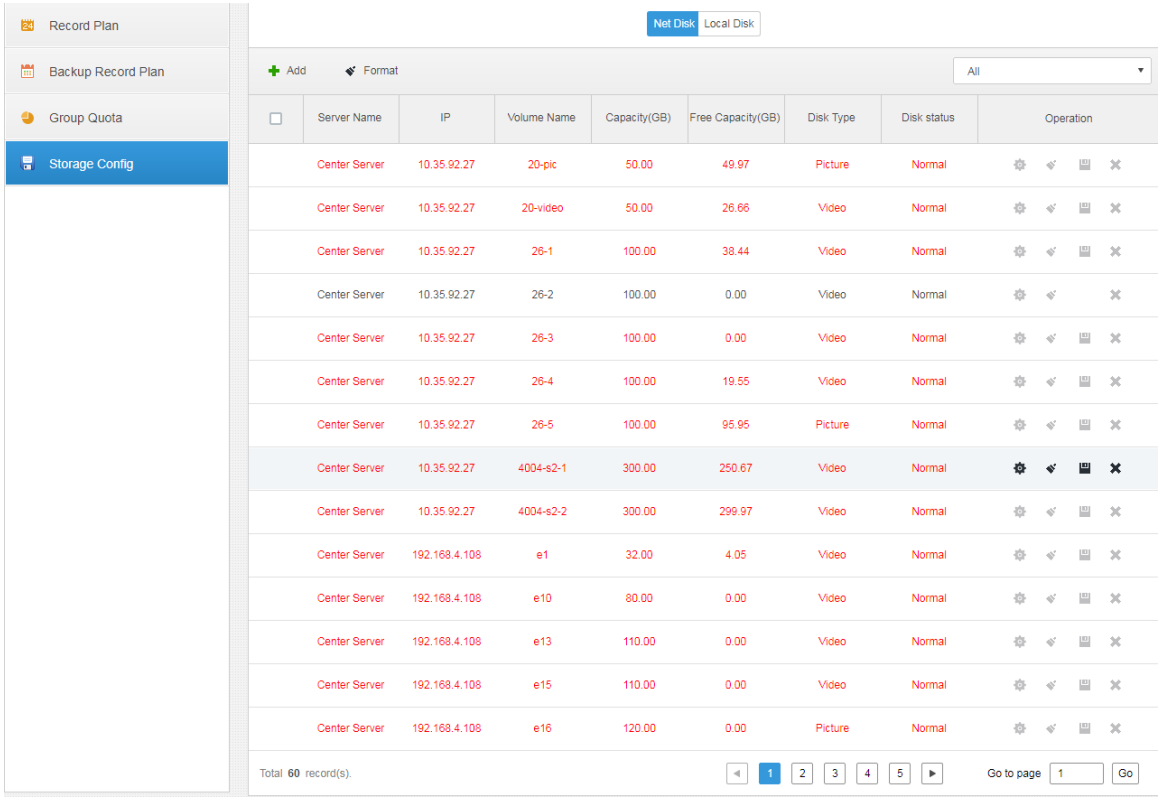
Figure 4-36



Step 2 Click the tab of “Storage Config”.

The system displays the interface of “Storage Config”. See Figure 4-37.

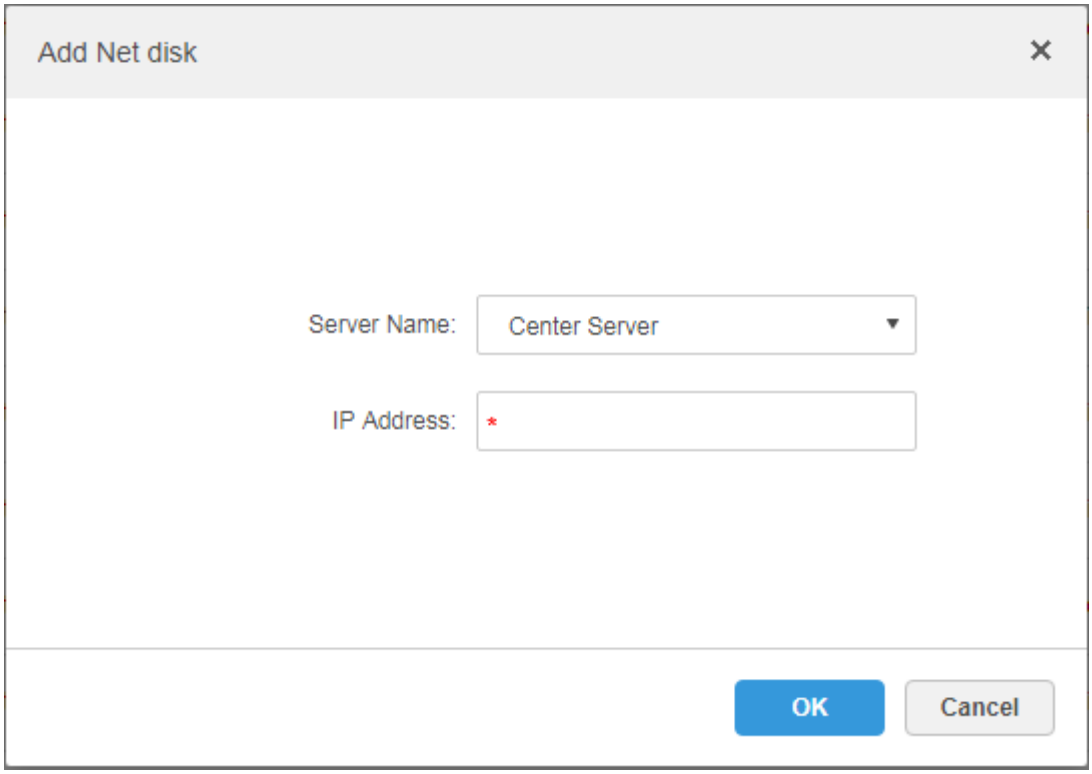
Figure 4-37



Step 3 Click ‘Add”.

The interface is shown in Figure 4-38.

Figure 4-38



Step 4 Select server name, fill in the IP address of network disk, and click “OK”.

Step 5 Select disk and click “Format” or click the next to the disk info, which is to format the corresponding disk.

Step 6 Select format disk type according to actual situation, click “OK” to implement formatting.

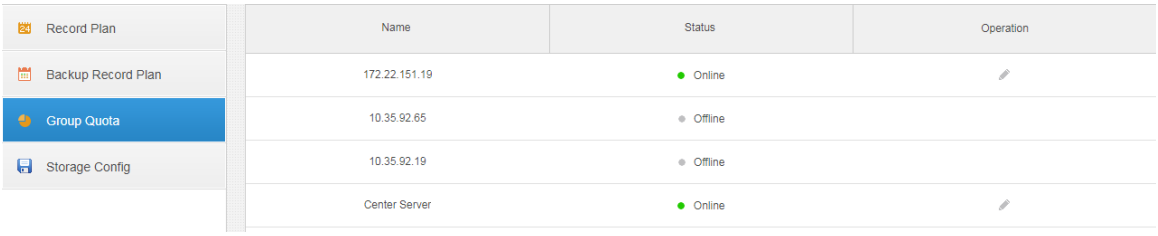
Step 7 Click “OK” in the prompt box to confirm formatting.
You can check the results of disk formatting after formatting is completed; make sure both disk size and available space are correct.

4.7.2 Setting Disk Group Quota

Operate on a single server, divide storage disks into several groups, and designate the storage path of the video channel to a fixed packet disk. On the one hand, directional storage is realized through the grouping and binding method; on the other hand, timed storage is realized through the proportional relation between disk capacity and channel.

Step 1 Click the tab of “Group Quota”.
The system will display the online status of server. See Figure 4-39.

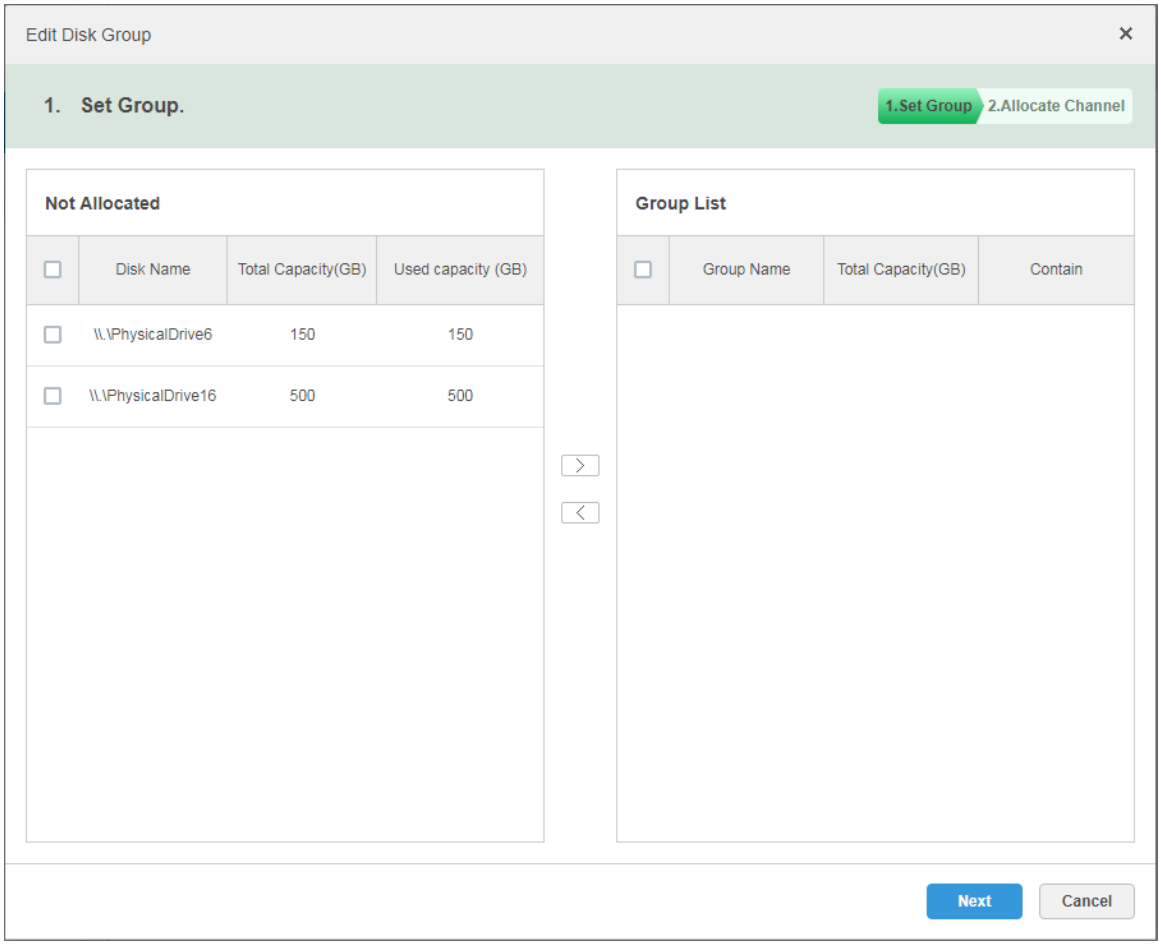
Figure 4-39



Step 2 Click next to the “Online” status server.

The system will pop out the interface of “Edit Disk group”. See Figure 4-40.

Figure 4-40

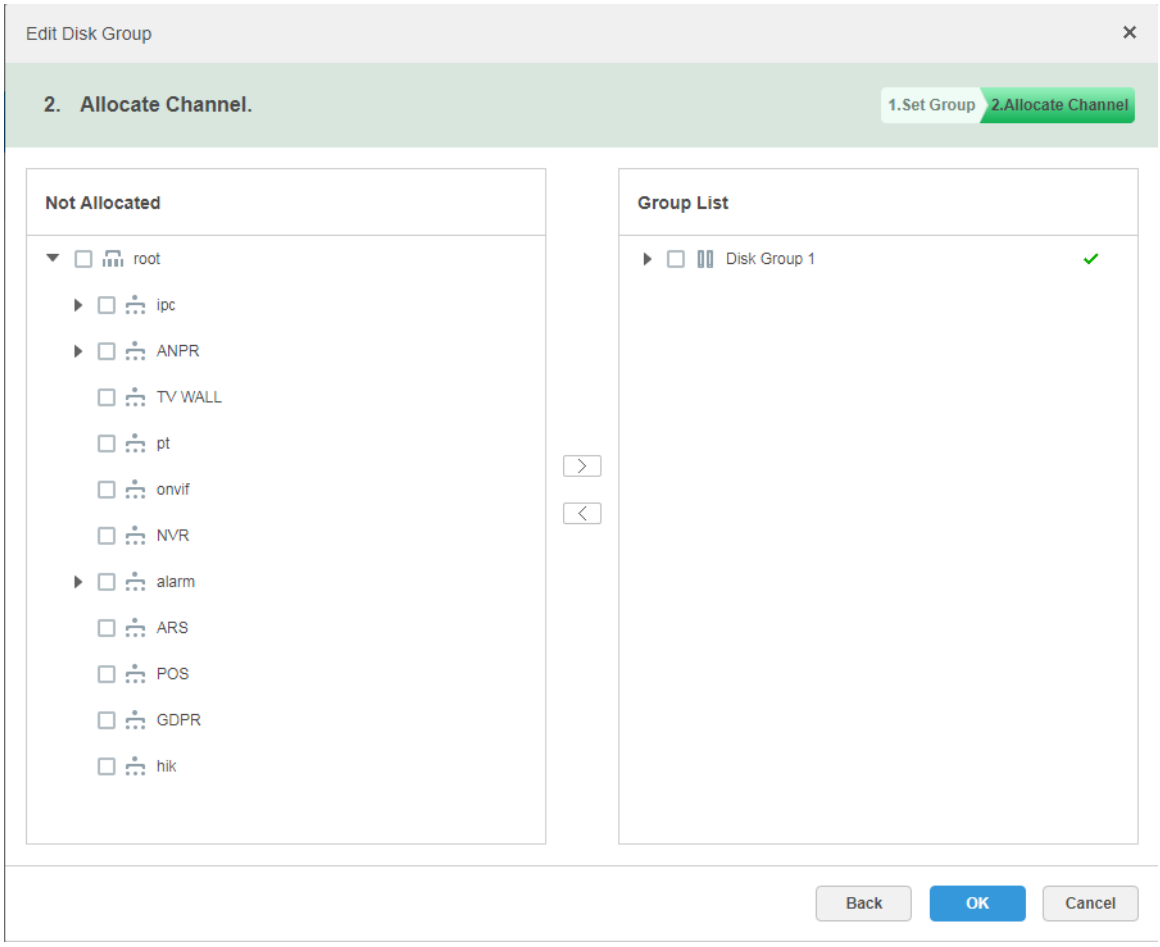


Step 3 Select the undistributed disks on the left, click and add it to the disk group list on the right.

Step 4 Click “Next” to distribute channels for disk group.

The interface is shown in Figure 4-41.

Figure 4-41



Step 5 Select channels in the device list on the left, click to add it to the disk group on the right.

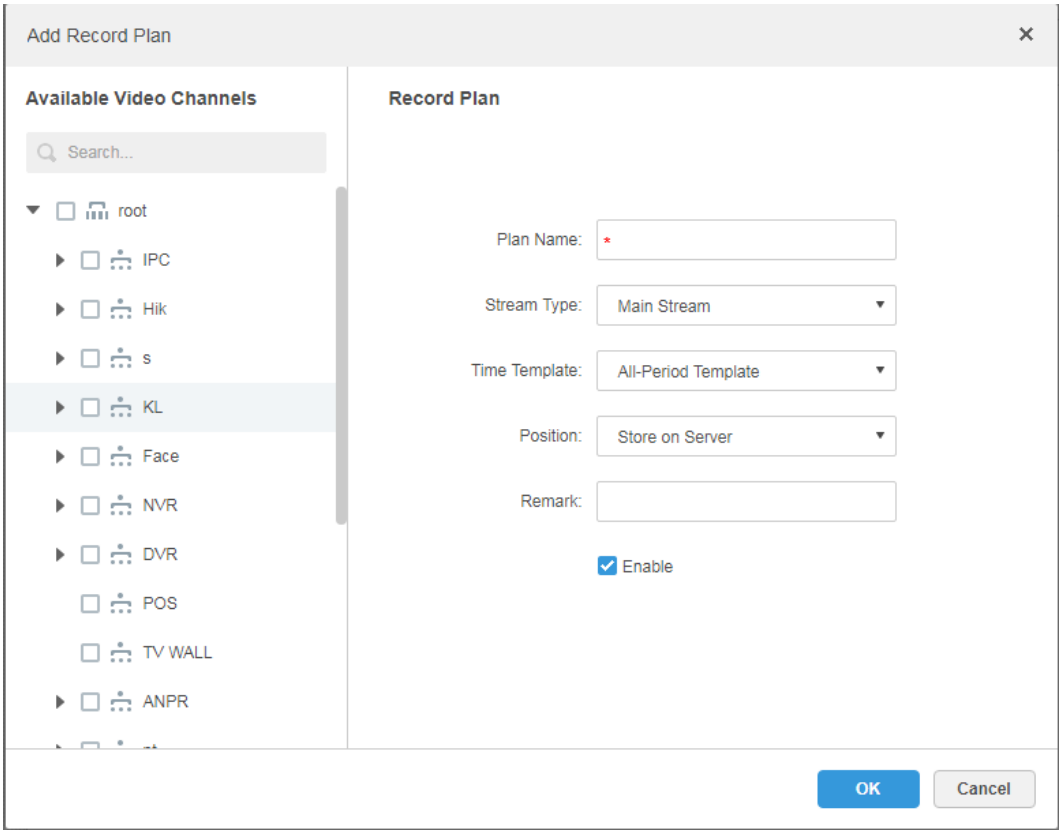
Step 6 Click “Done”.

4.7.3 Adding General Plan

Steps

Step 1 Click the tab of “Record Plan”, click ‘Add”.
It is to add record plan. See Figure 4-42.

Figure 4-42



Step 2 Select the video channel which needs to configure record plan, set “Plan Name”, “Stream”, select “Time Template” and “Position”.

NOTE

- Stream type includes: Main stream, sub stream 1, sub stream 2.
- Time template can select the system default template or new template created by users, please refer to “4.7.5 Adding Time Template” for details of adding time template.
- Storage position can select server or recorder.

Step 3 Click “OK”.

Operations

- Enable/disable general plan

  In the operation column, ON means that the plan has been enabled, click the icon and it becomes OFF, and it means that the plan has been disabled.

- Edit General Plan

  Click of corresponding plan to edit the general plan.

- Delete General Plan

  ◇ Select general plan, click Delete to delete plans in batches.

  ◇ Click of corresponding general plan to delete the individual general plan.

4.7.4 Adding Backup Record Plan

The system supports backup recording over the devices 3 days ago, the implementation time of backup plan can span the day, the condition of backup record is time/Wi-Fi optional.

NOTE

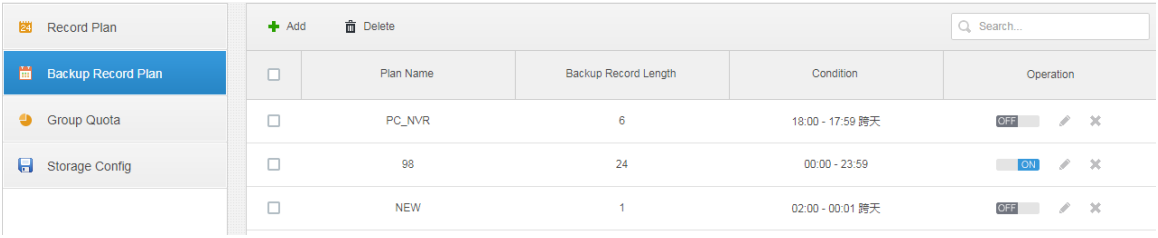
- Backup video comes for the local record of the camera.
- “Backup Condition” can select time and Wi-Fi. If it selects time, sets backup plan time, it will make backup record automatically after the time reaches; If it selects Wi-Fi, then it will make backup record automatically after the device is connected to Wi-Fi mode.

Steps

Step 1 Click the tab of “Backup Plan”.

The interface is shown in Figure 4-43.

Figure 4-43



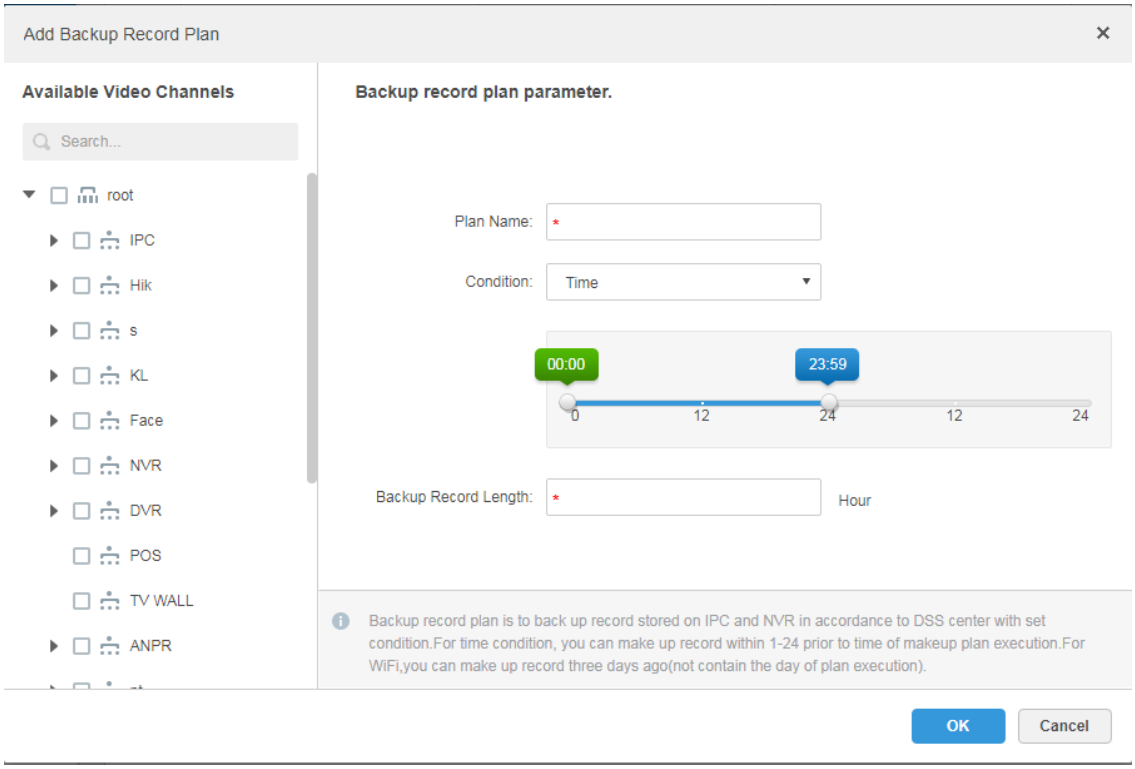
Step 2 Click ‘Add” to add backup plan.

Step 3 Select corresponding devices on the left device tree, and enter plan name.

Step 4 Set backup conditions.

- Take time as condition.

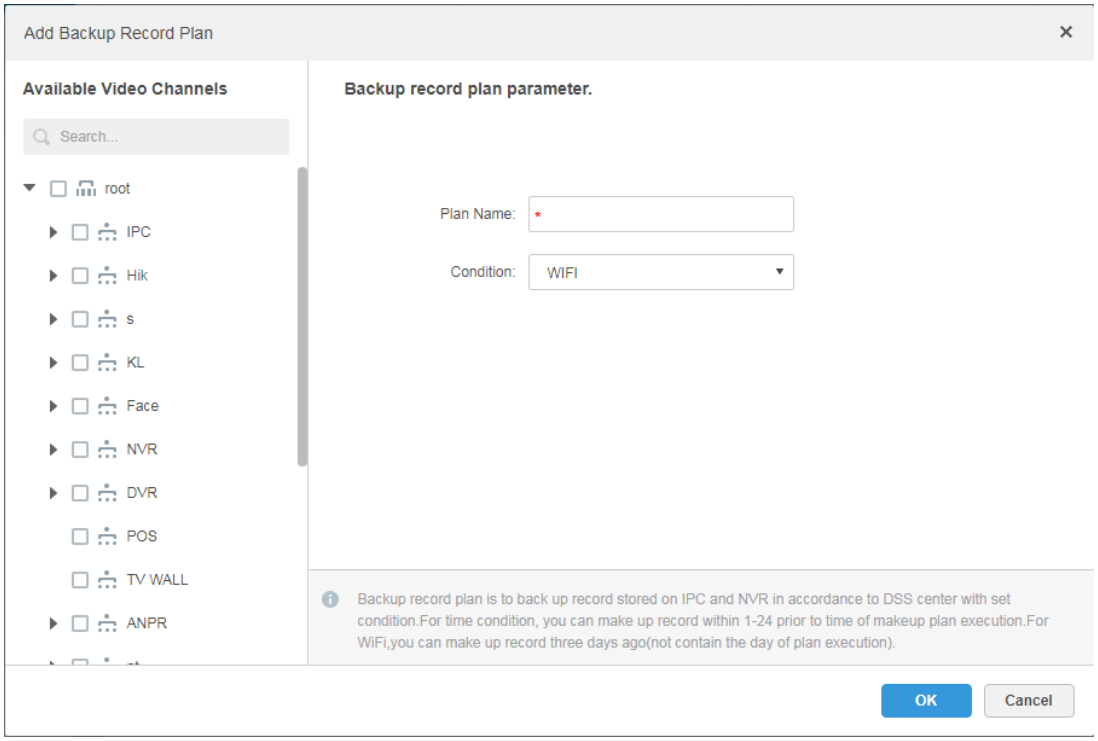
Figure 4-44



1) Select “Time” in the backup condition.
1) Drag time line and set the time period of backup record plan.
2) Enter backup record length, click “OK”.
   The time range is 1-24 hours.

- Take Wi-Fi as condition.

Figure 4-45



1) Select “Wi-Fi” in the backup record condition.

2) Click “OK”.
It will make backup record automatically when the network of backup device is switched to Wi-Fi.

Operations

- Enable/Disable backup record plan.

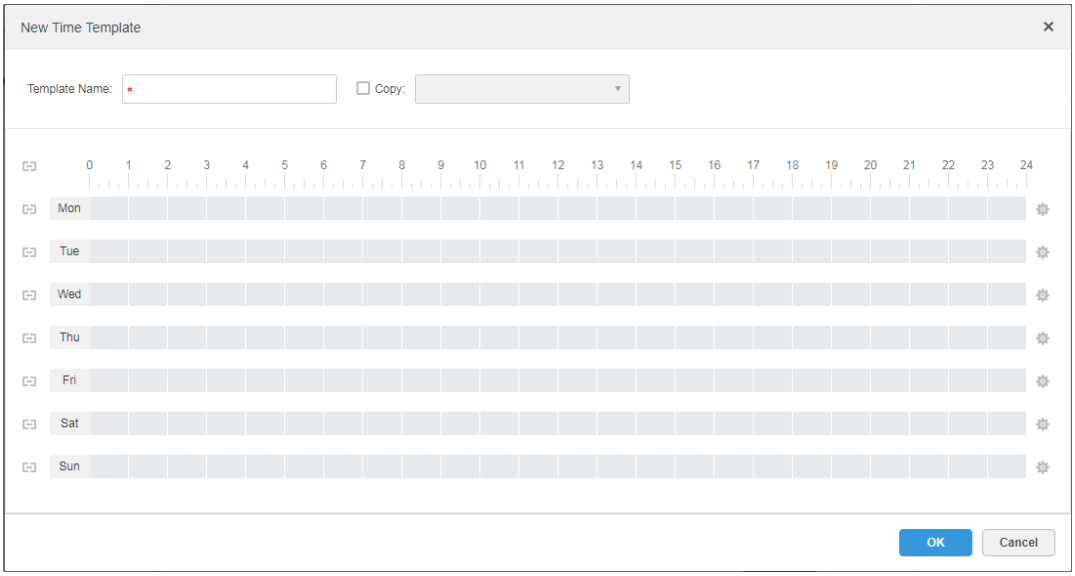
  In operation column, ON means that the plan has been enabled; click the icon and it becomes OFF, it means that the plan has been disabled.
- Edit backup record plan

  Click the corresponding of the plan, and then you can edit the backup record plan.
- Delete backup record plan
  - ◇ Select backup record plan, click Delete to delete plan in batch.
  - ◇ Click the corresponding of backup record plan, then you can delete the backup plan individually.

4.7.5 Adding Time Template

Step 1 Select “New Time Template” in the drop-down box of “Time Template”.
The system displays the interface of “New Time Template”. See Figure 4-46.

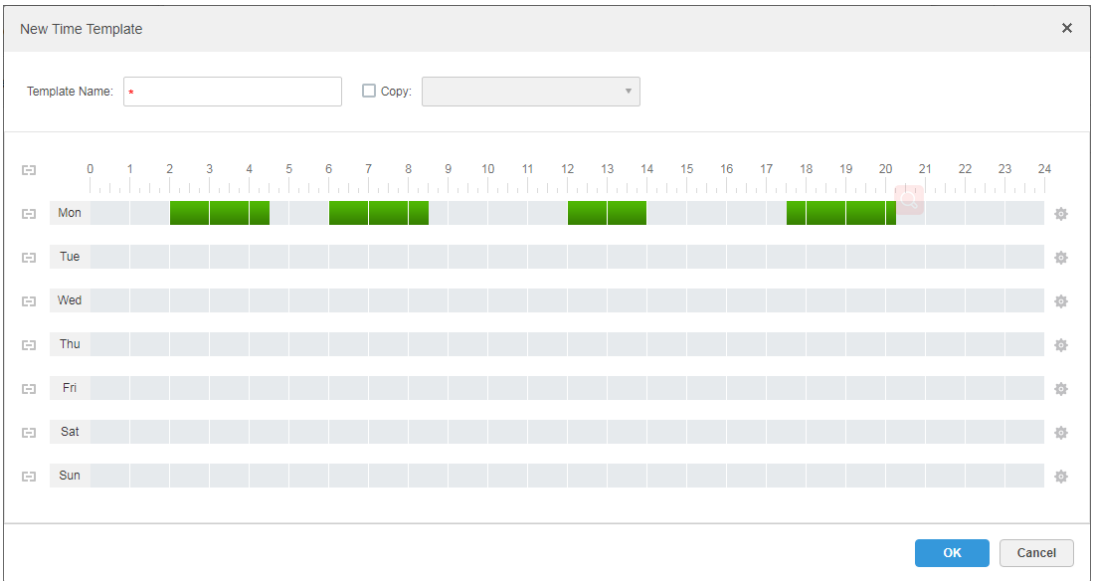
Figure 4-46



Step 2 Sets template name and time period.

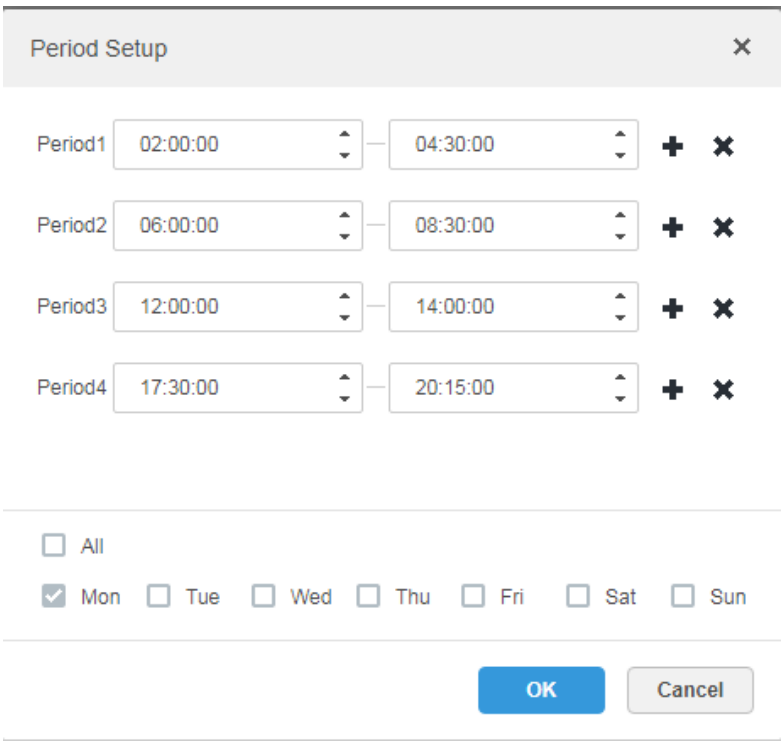
- Press the left button and drag it to draw time period on the time line. See Figure 4-47.

Figure 4-47



- Click the ⚙ of the corresponding day, set time period on the interface of “Period Setup”. See Figure 4-48.

Figure 4-48



NOTE

It can set max 6 periods in one day.

Step 3 Click “OK” to save time template.

NOTE

Select “Copy” and select the time template in the drop-down box, then you can directly copy the config of the time template.

4.8 Configuring Event

After configuring alarm plan on the management end, it supports displaying and handling corresponding report events on the client.

4.8.1 Configuring Alarm Source

Alarm source can be video channel, thermal channel and alarm input channel etc. Different encodes are configured with different alarm types, here it is to take IPC as an example to introduce.

NOTE

- Please make sure that IPC alarm input channel has connected to external alarm device before config, otherwise there will be no alarm being uploaded.
- Different devices need to configure different alarm types; it is based on the requirements of actual businesses. Please refer to user manual of each device for config of device end.

Step 1 Log in WEB config interface of IPC, or click next to IPC info line on the interface of "Device" of DSS management end.

Step 2 Select "Setting > Alarm".

The system displays the interface of "Alarm Setting". See Figure 4-49.

Figure 4-49

Step 3 Set alarm input info, click "OK". Please refer to Table 4-3 for more details.

Table 4-3

Parameter	Note
Enable Alarm Input	Select check box; enable the selected alarm input channel.
Arm/Disarm Period	Set the time of alarm being reported to IPC.
Device Type	Select NO/NC; make sure it is in accordance with alarm device.
NOTE Other parameters need to be set according to actual requirements.	

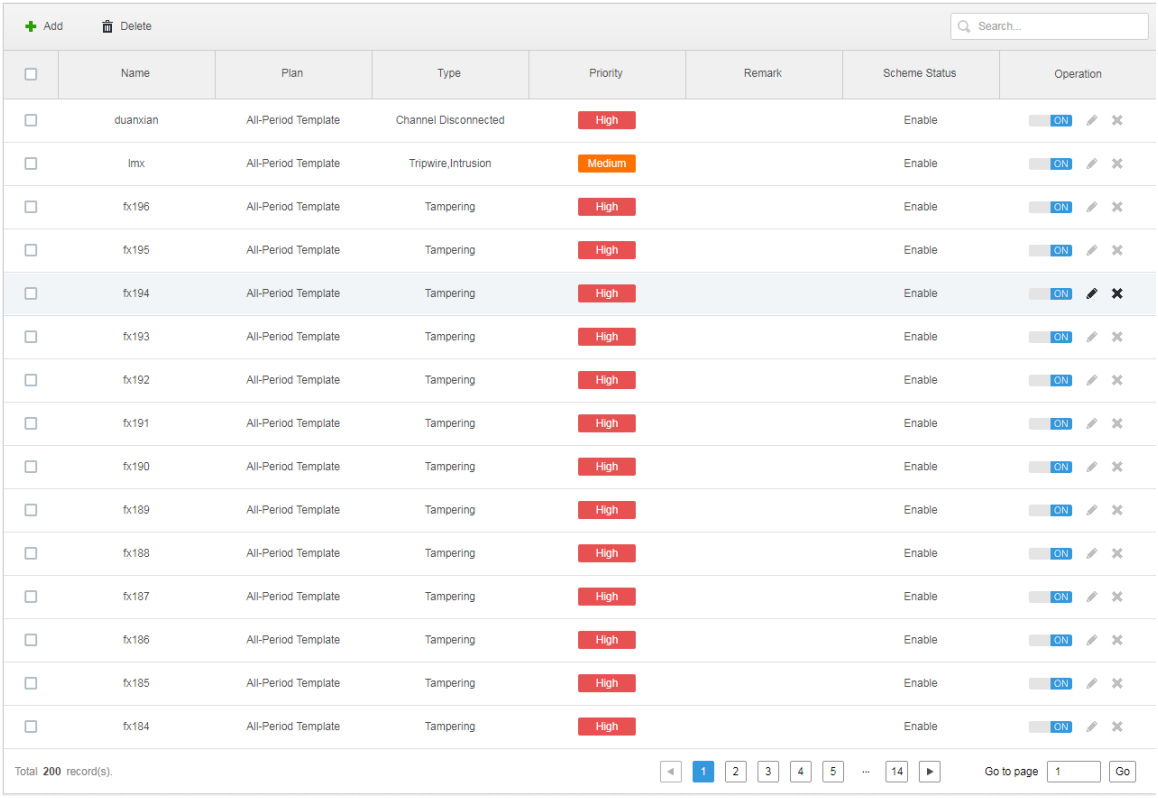
4.8.2 Adding Alarm Scheme

It is to set the reported events displayed on the DSS, it supports setting linkage record, email, capture, display on wall and so on, and set alarm period.

Step 1 Click on the management end; select ‘Event” on the interface of “New Tab”.

The system displays the interface of “Event”. See Figure 4-50.

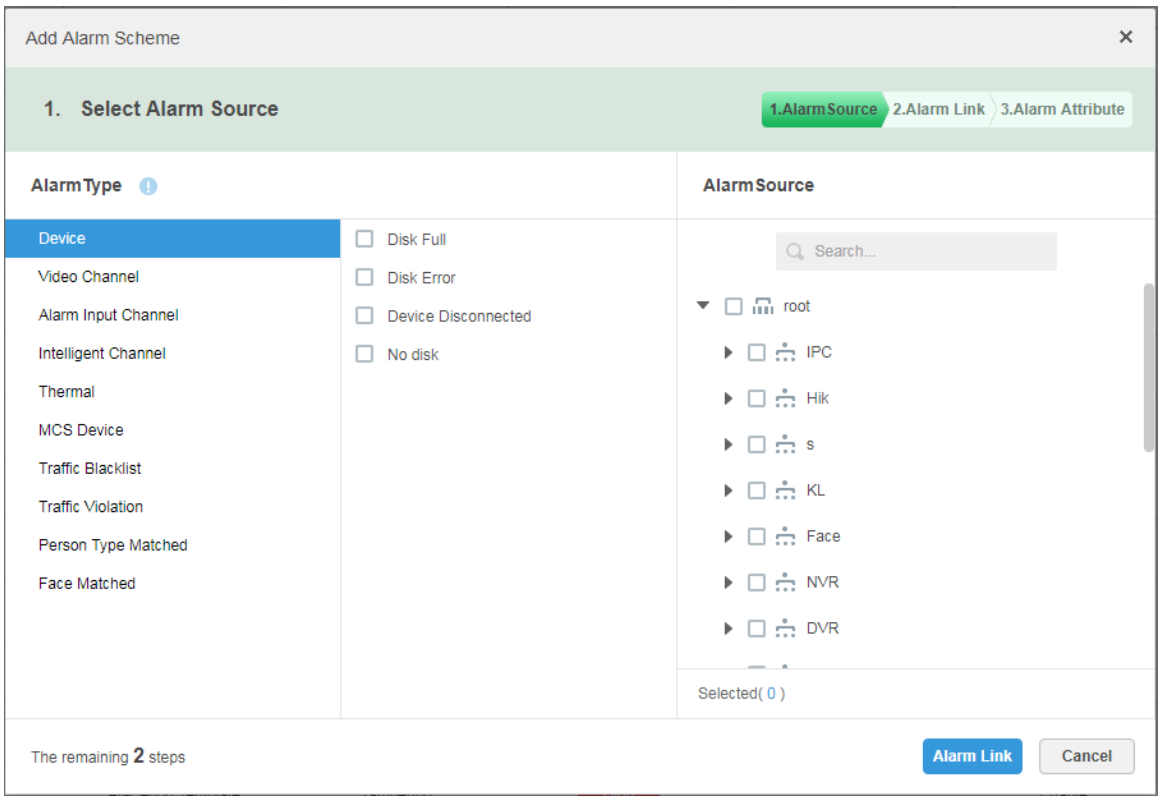
Figure 4-50



Step 2 Click “Add”.

The system displays the interface of “Add Alarm Scheme”. See Figure 4-51.

Figure 4-51



Step 3 Configure alarm source.

1) Select alarm type and alarm source.

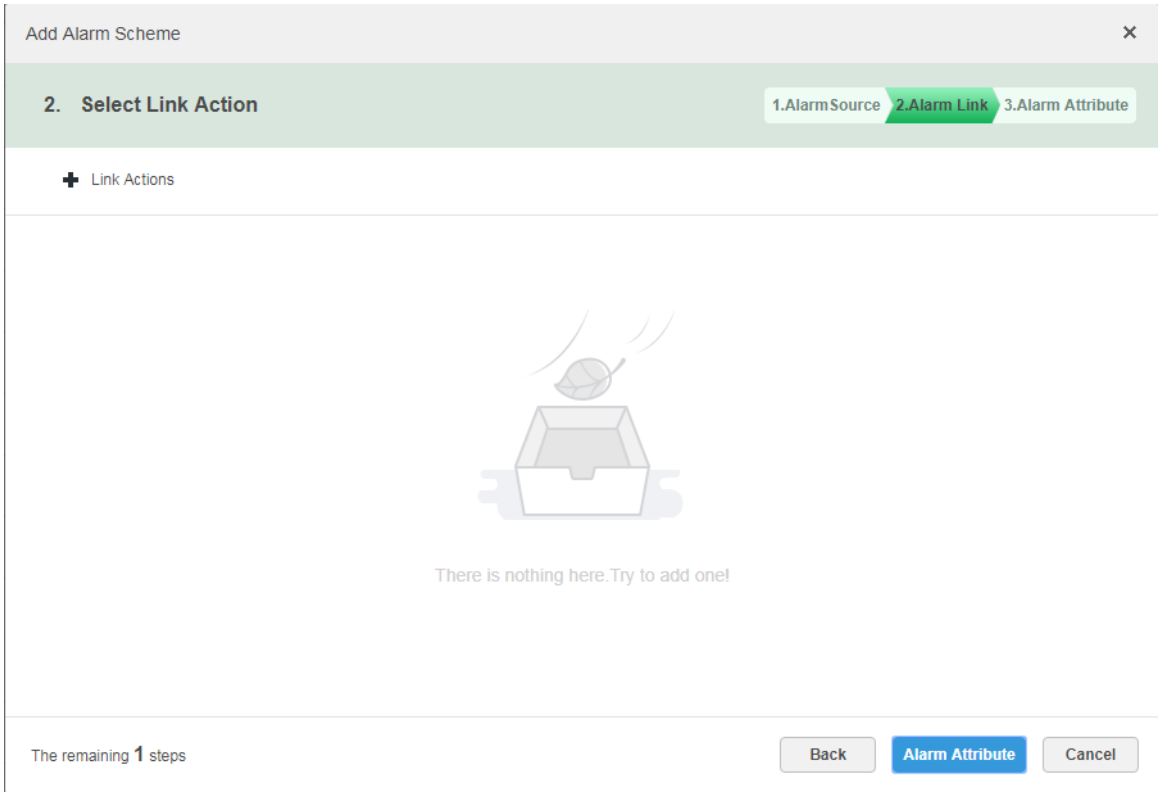
NOTE

Alarm type selects “Alarm Input Channel”, the alarm type is required to be the same as the one when editing encoding device.

2) Click “Alarm Link”.

The system displays the interface of “Alarm Link”. See Figure 4-52.

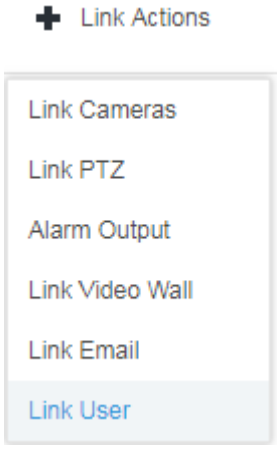
Figure 4-52



Step 4 Configure alarm link.

1) Click ✚ , the system pops out the window of link actions. See Figure 4-53.

Figure 4-53



2) Select link action, it supports several link actions.

◇ Click “Link Cameras”, set parameters. See Figure 4-54. Please refer to Table 4-4 for more details about parameters.

Figure 4-54

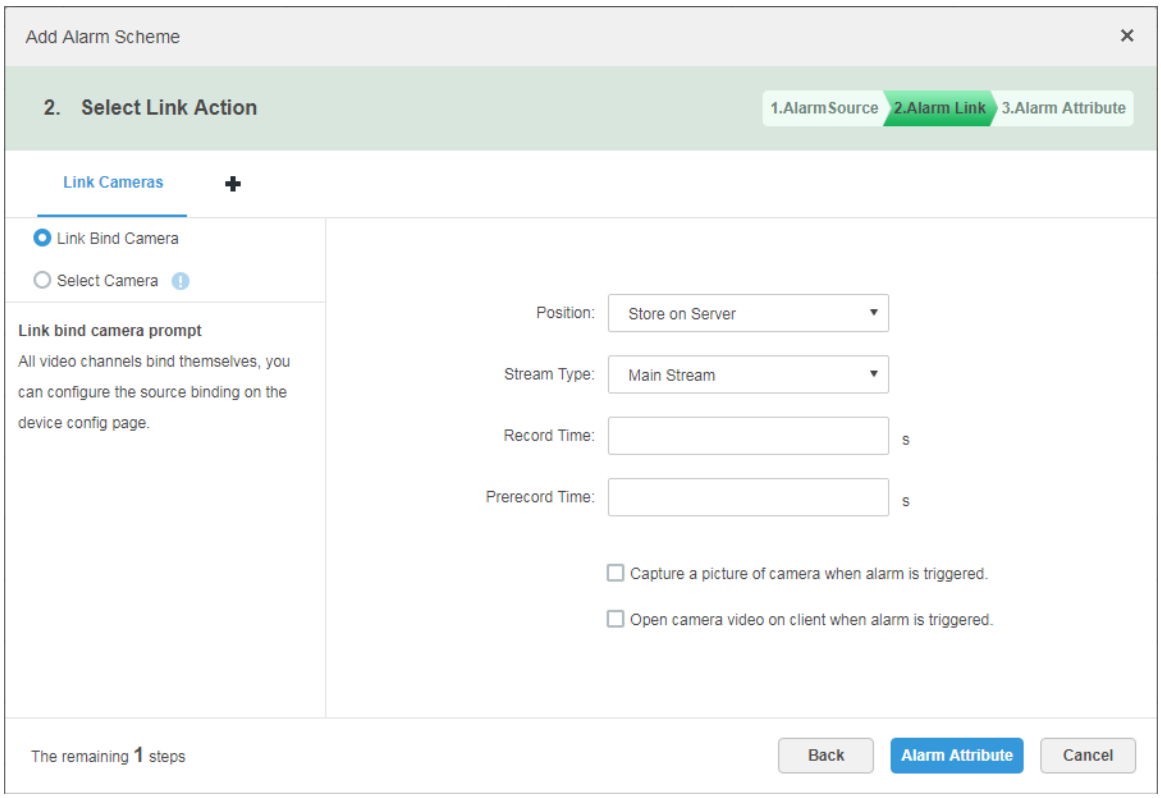
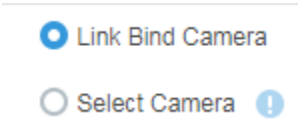
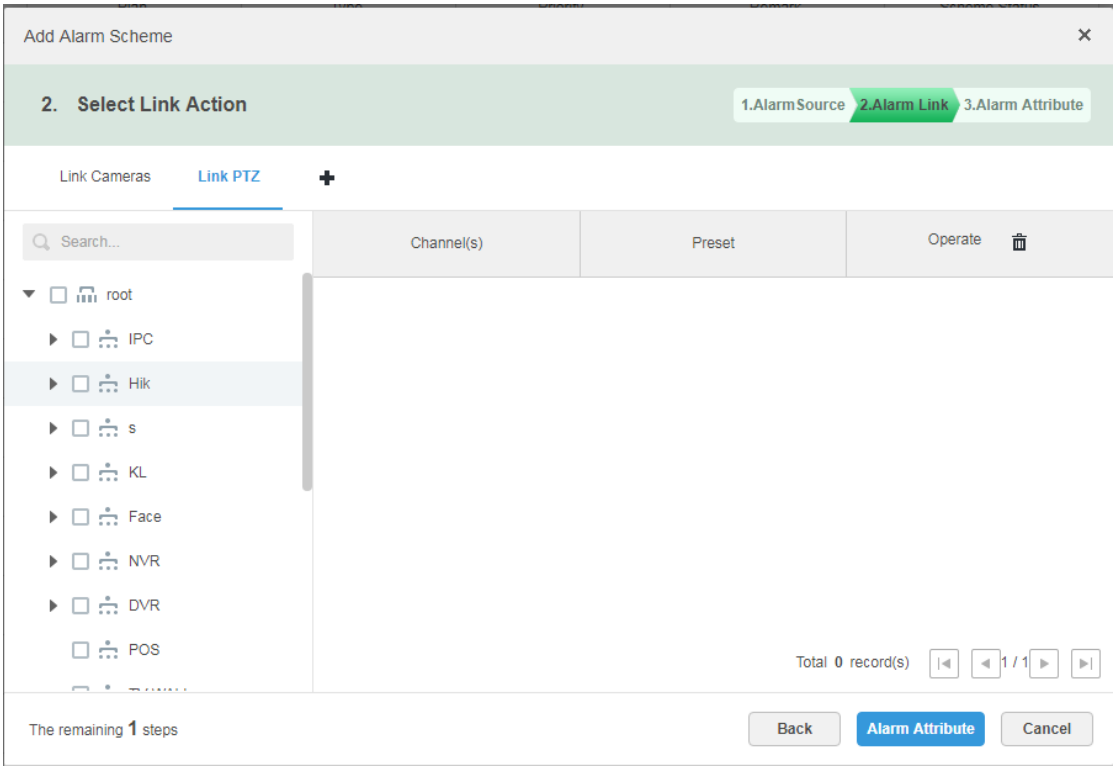


Table 4-4

Parameter	Note
	• Link bind camera: Video channel has been bound with alarm source. It is to quickly configure scheme via resource binding of device management. • Select link camera: It needs link camera to manually select the alarm source.
Position	If it is to set the position of storing video. It supports 3 options which are store on server, store on recorder and not stored respectively.
Stream	It is to set the stream type of recording video. Main stream and sub stream are clear but resource intensive.
Record Time	It is to set the length of video recording.
Prerecord Time	It is the recording time before setting link camera, the selected device is required to support record and it already exists in the device recording.
Capture picture when alarm is triggered.	Confirm if it captures camera picture.
Open camera video on client when alarm is triggered.	Confirm if it opens camera video window on the client during alarm.

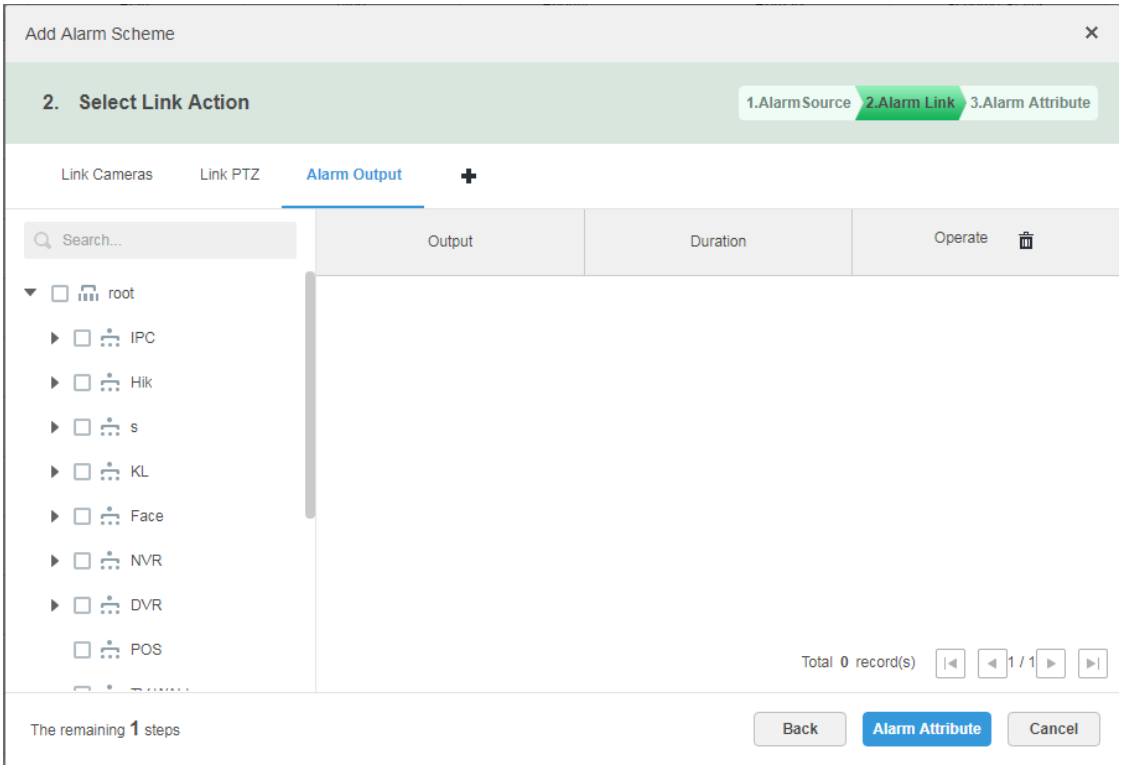
◇ Click “Link PTZ”, select the channels which need PTZ to link device, set prerecord actions. See Figure 4-55.

Figure 4-55



◇ Click “Alarm Output”, select alarm output channel, set duration. See Figure 4-56.

Figure 4-56



◇ Click “Link Video Wall”, select link camera on the left of the interface, select video wall on the right of the interface. See Figure 4-57. Select “Link Bind Camera” and “Select Link Camera”, the interface will display differently,

please base on the actual display. Click “Video Wall Alarm Window Setup” to set duration and select the video channel which needs to be displayed on wall. See Figure 4-58.

Figure 4-57

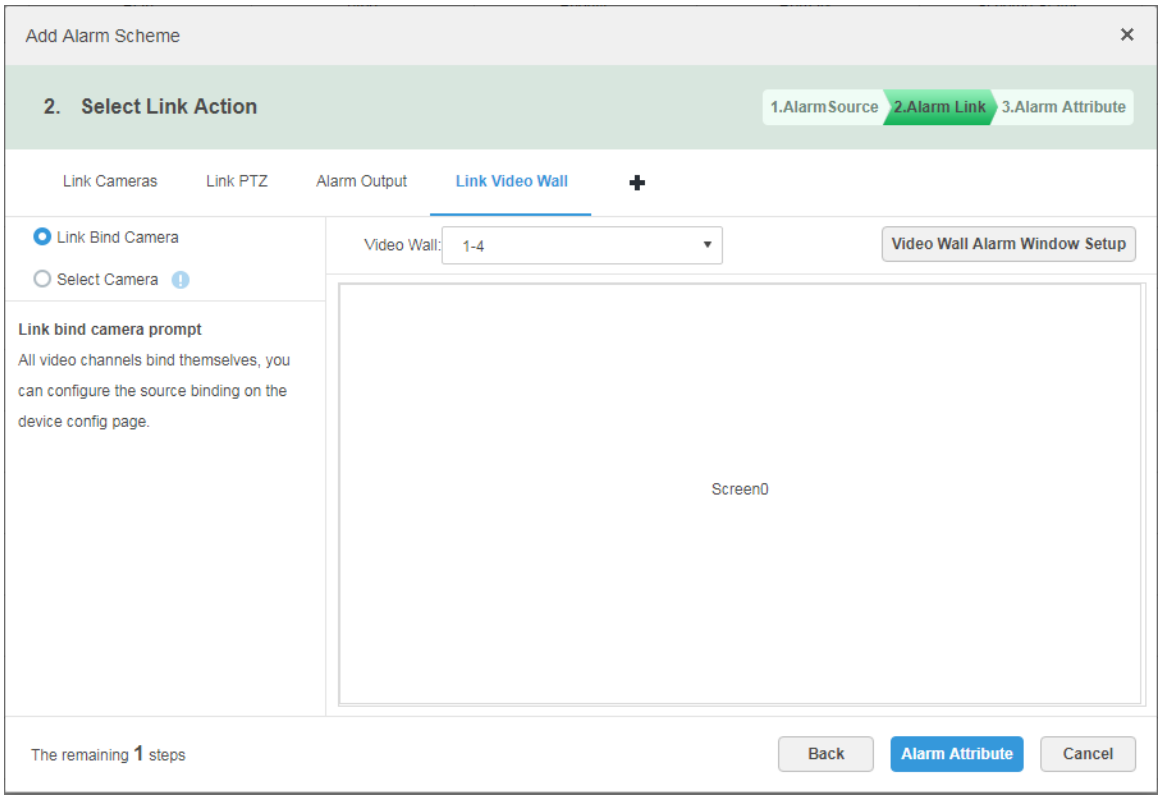
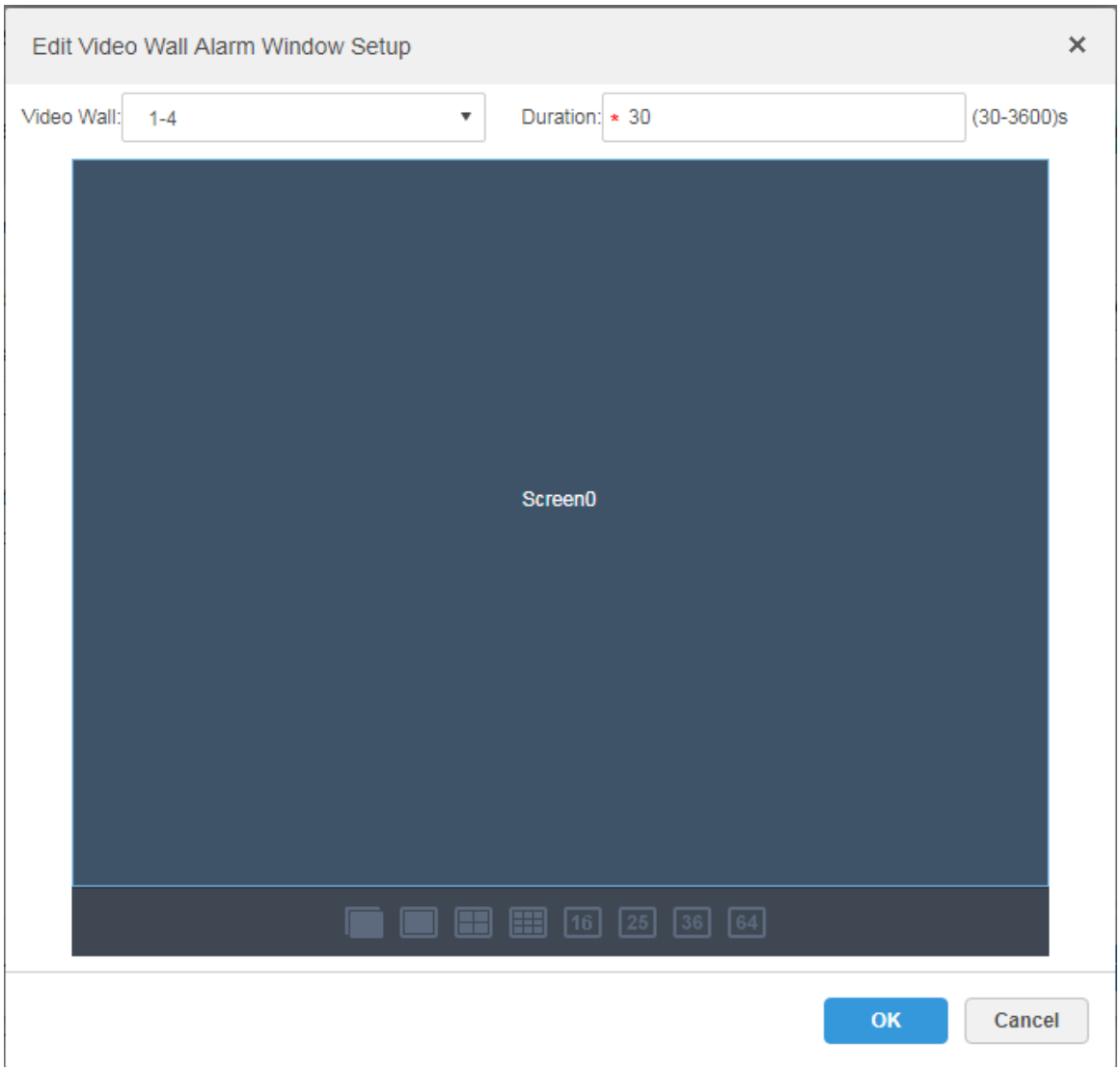


Figure 4-58



◇ Click “Link Email”, select email template and recipient. See Figure 4-59. The mail template can be configured, click the ▼ next to “Mail Template” and select “New Mail Template”, set new mail template. See Figure 4-60. Click “Alarm Time”, “Organization” and other buttons to insert buttons into “Email Theme” or “Email Content”.

Figure 4-59

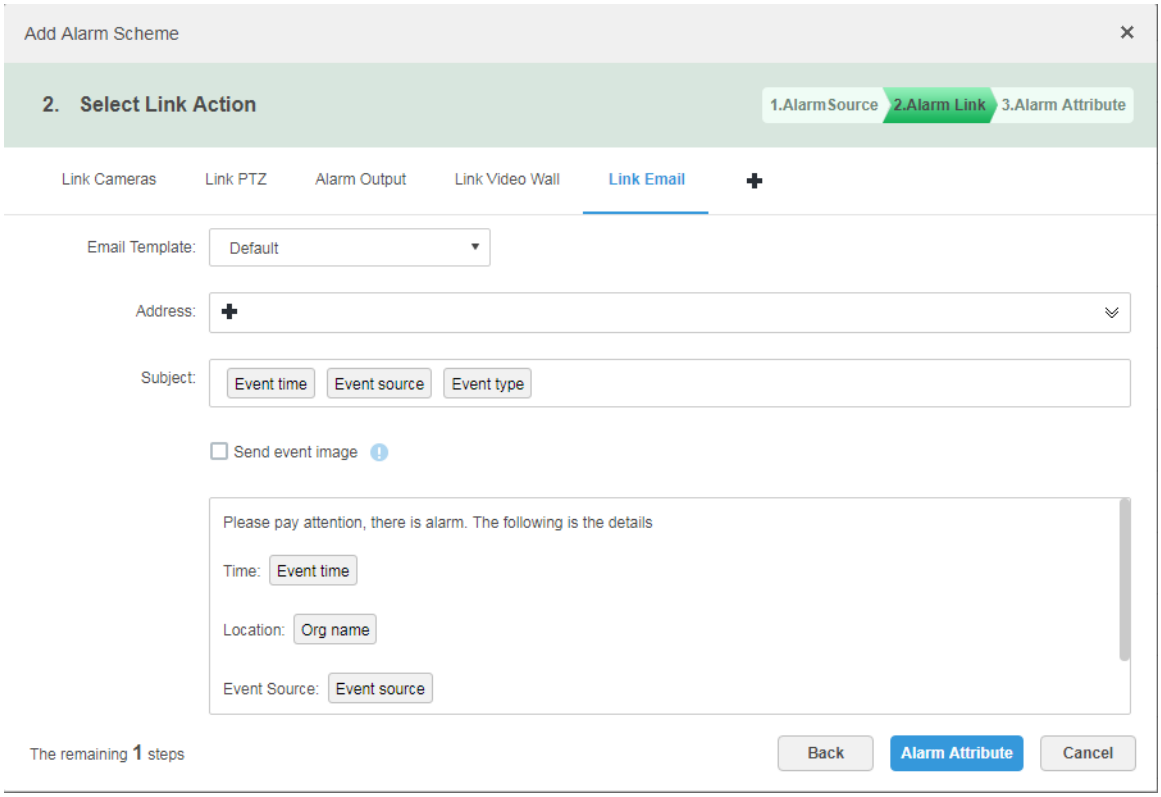
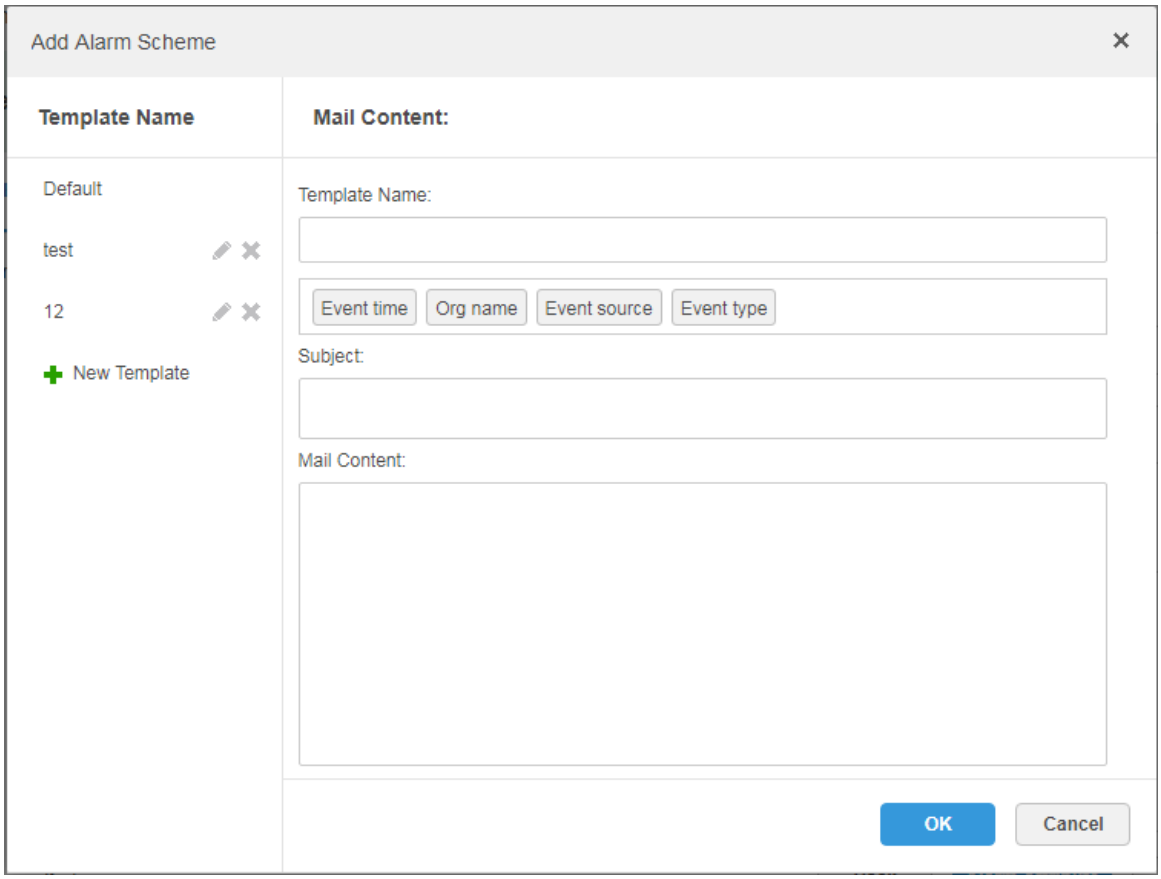
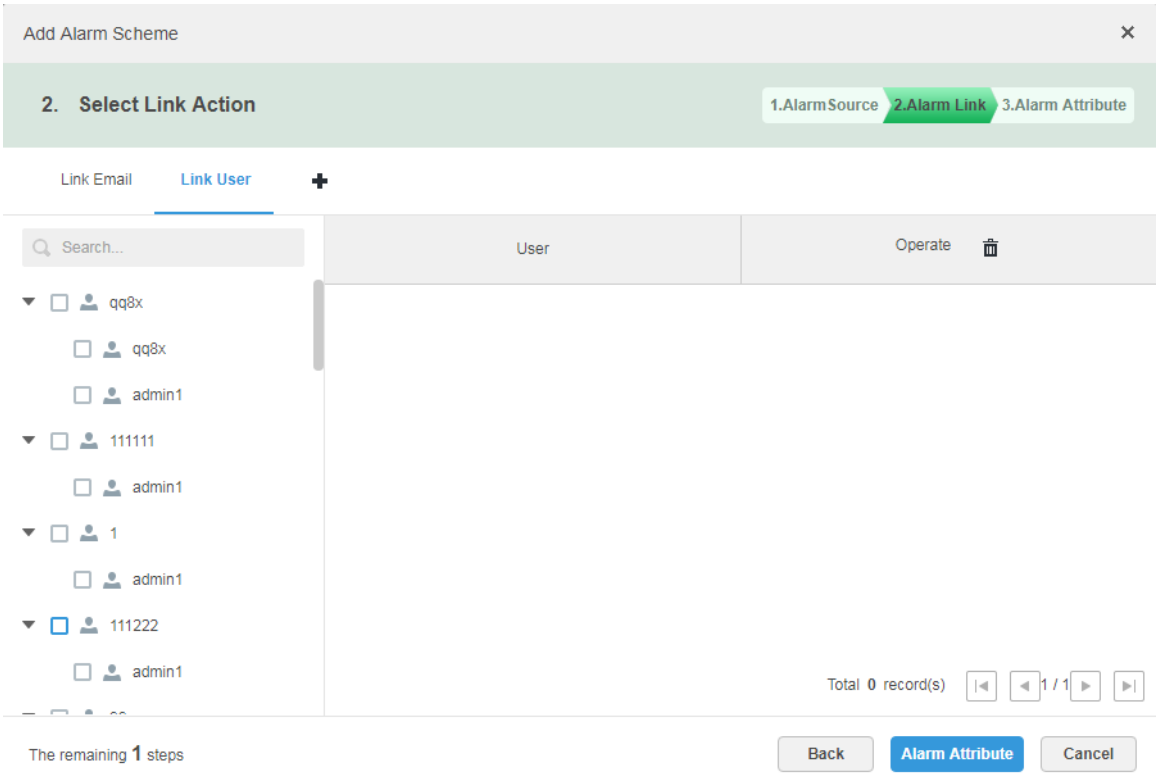


Figure 4-60



◇ Click “User”, select the users who need to be informed. See Figure 4-61.

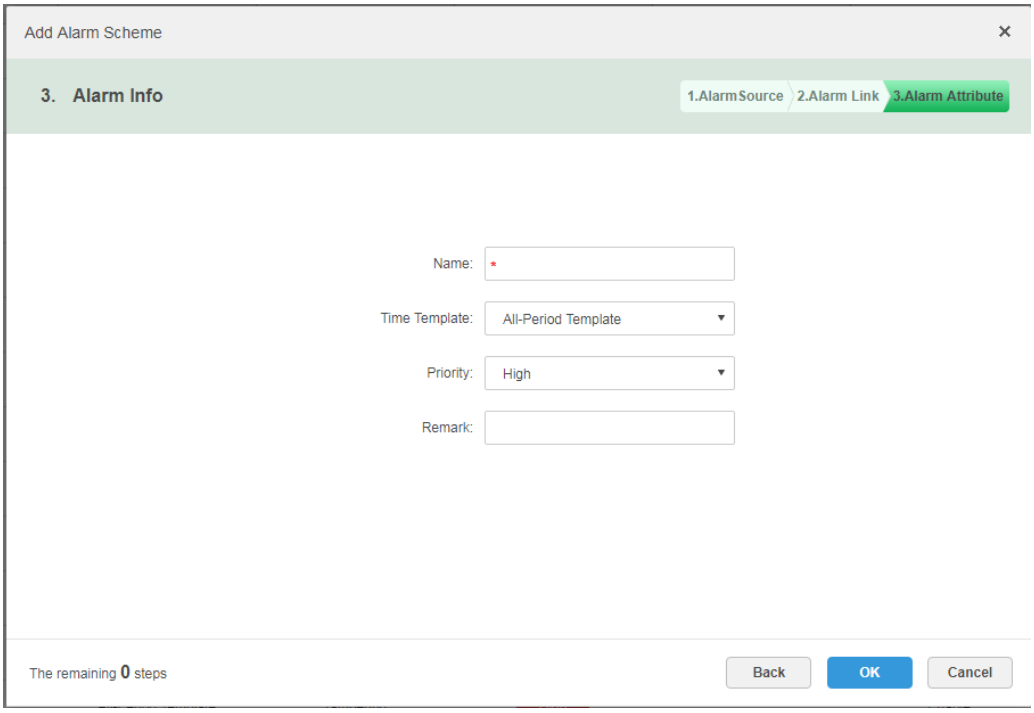
Figure 4-61



Step 5 Click “Alarm Attribute”.

The system displays the interface of “Alarm Attribute”. See Figure 4-62.

Figure 4-62



Step 6 Configure alarm attribute.

1) Set alarm name.
2) Select alarm time template and priority.
3) Click “OK”.

The system displays the added alarm scheme.

Step 7 Enable/Disable Scheme.

In the operation column, ON means that the scheme has been enabled; click the icon and it becomes OFF, then it means that the scheme has been disabled.

Operations

- Edit

  Click the of corresponding scheme, and then you can edit the alarm scheme.

- Delete

  ◇ Select alarm scheme, click Delete to delete scheme in batches.

  ◇ Click the corresponding of alarm scheme, then you can delete the alarm scheme individually.

4.9 Configuring Average Speed

It can refer to the config of this chapter if it is to realize transportation business.

It is to calculate the speed when vehicle passing through the location interval according to speed =distance/time.

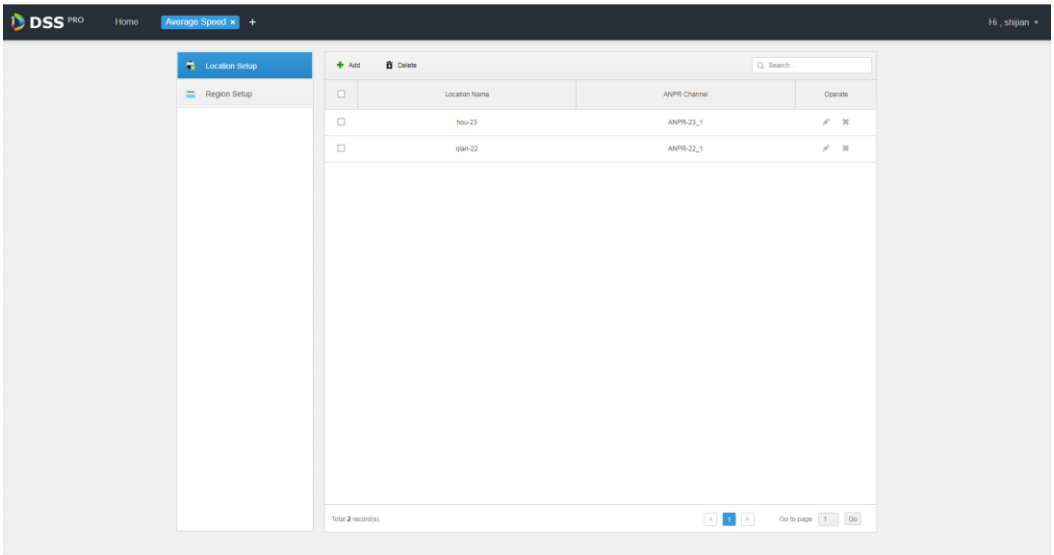
4.9.1 Configuring Location

It is to configure ANPR device as bayonet location, which is for reference of location interval and realize interval speed measurement business.

Steps

Step 1 Click on the management end, select “Average Speed” on the interface of “New Tab”. See Figure 4-63.

Figure 4-63



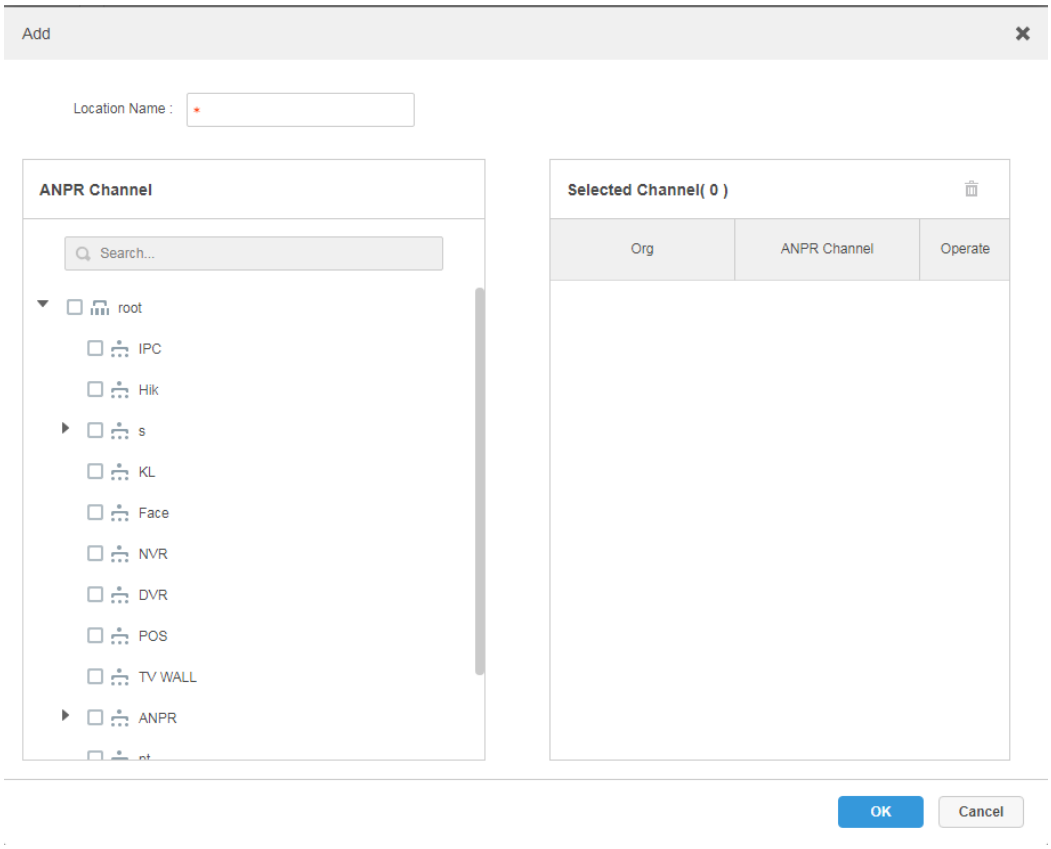
Step 2 Click the tab of “Location Config”.

The system will display the interface of “Location Config”.

Step 3 Click “Add”.

The system will display the interface of “Add”. See Figure 4-64.

Figure 4-64



Step 4 Enter “Location Name”, select one or several ANPR channels (consider vehicle lane changing) as location.

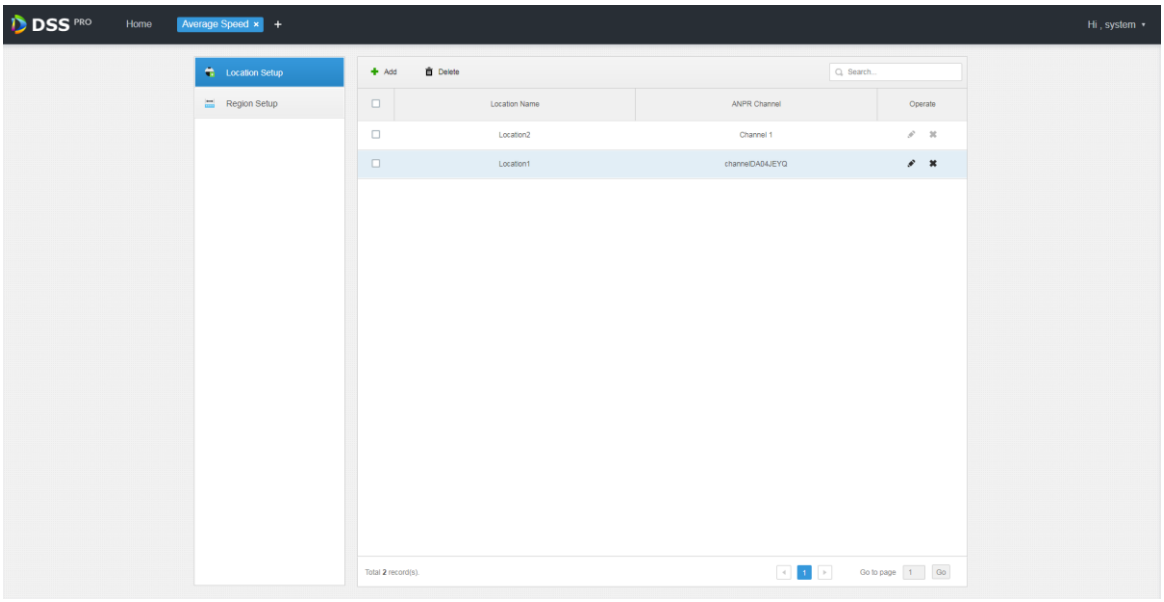
NOTE

One ANPR channel can only exist in one location. The ANPR which has been configured as location cannot be selected again.

Step 5 Click “OK” to complete location config.

The system displays the list of location. See Figure 4-65.

Figure 4-65



Operations

- Edit

  Click the corresponding of location, then you can edit the name and channel of the location.

- Delete

  ◇ Select location in the list, click the Delete above the interface, and then you can delete the location in batches.

  ◇ Click the corresponding of location in the list, and then delete the location.

4.9.2 Configuring Location Interval

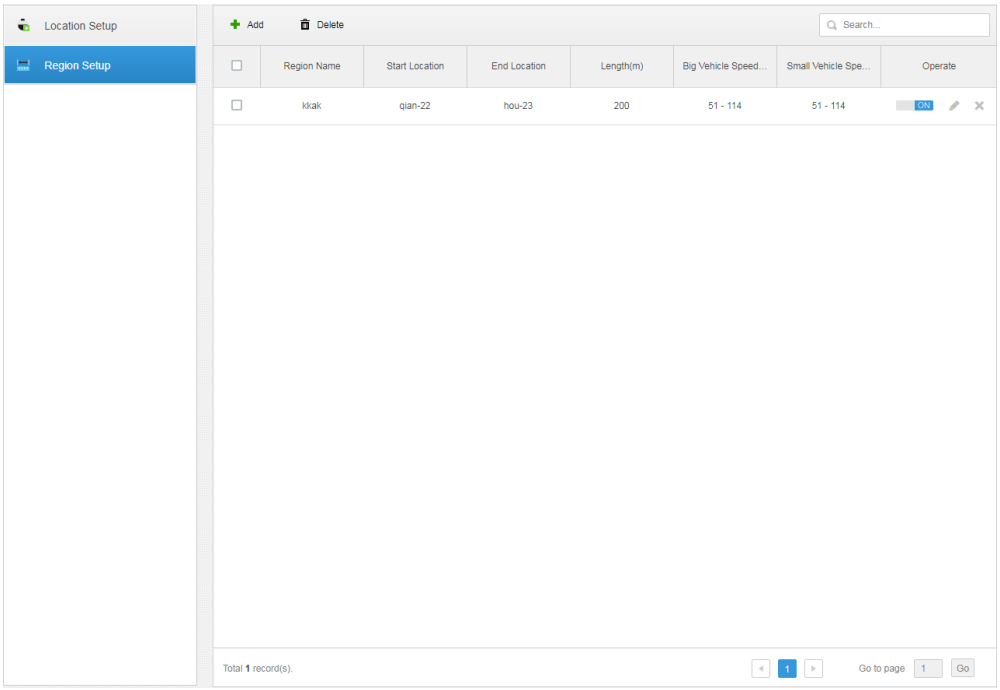
Configure ANPR device as location, which is for reference of location interval and realize interval speed measurement business.

Steps

Step 1 Click on the management end, select “Region Setup” on the interface of “New Tab”.

The system displays the interface of “Region Setup”. See Figure 4-66.

Figure 4-66



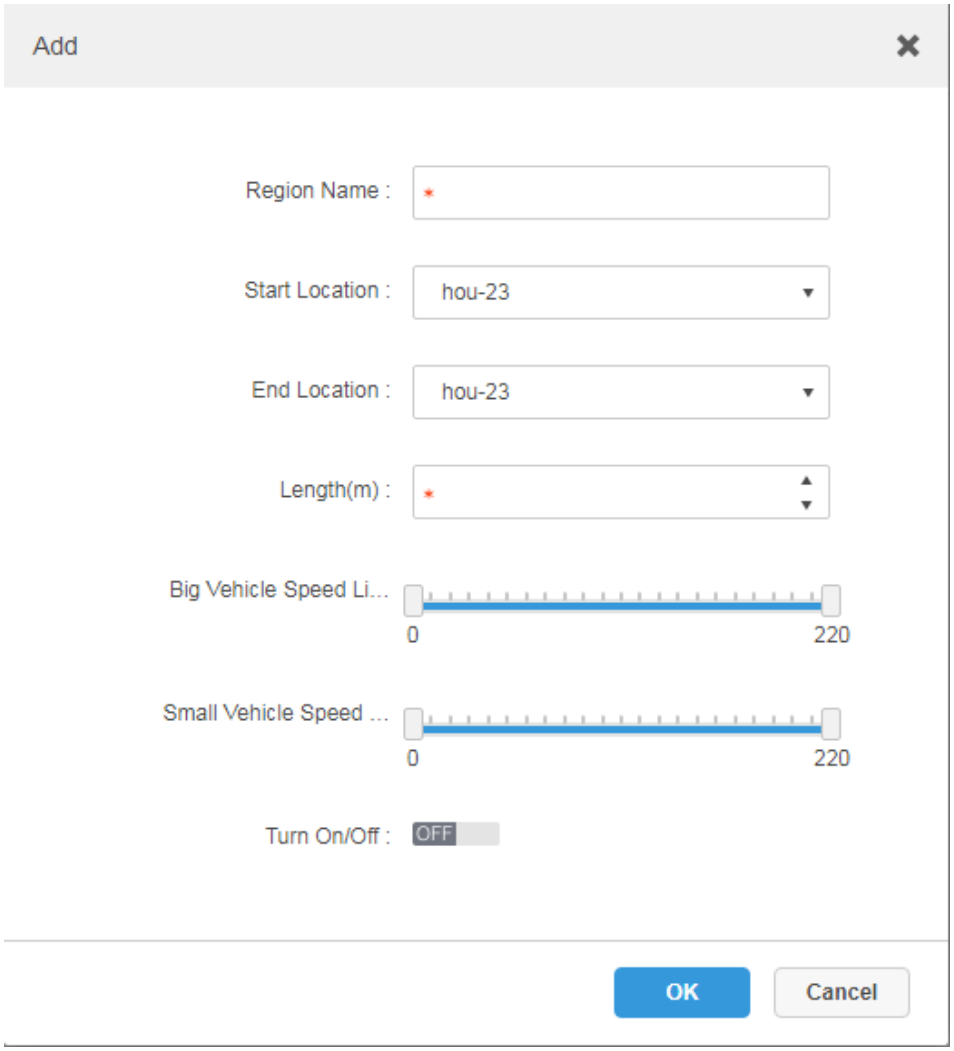
Step 2 Click the tab of “Region Setup”.

The system displays the interface of “Region Setup”.

Step 3 Click “Add”.

The system displays the interface of “Add”. See Figure 4-67.

Figure 4-67



Step 4 Set the parameters of region setup; please refer to Table 4-5 for more details.

Table 4-5

Parameter	Note
Region Name	It is to name the region name, which is used to distinguish different location region.
Start Location	Select location and set region range.
End Location	
Length (m)	Set the length of region section.
Big Vehicle Speed Limit (km/h)	It can set the speed limit of both big and small vehicle. It set min speed and max speed respectively.
Small Vehicle Speed Limit (km/h)	
Turn on/off	Set if it is to enable the region config.

Parameter	Note
	It exceeds max travel time (region section length/min speed limit), the vehicle info will be removed if it fails to pass through end location, and then it will not generate the speed measurement info during this region.

Step 5 Click “OK” to complete the config of location region.

Operations

- Edit

  Click the corresponding of location region and it can delete the info of the region.

- Delete

  ◇ Select location region in the list, click the Delete above the interface, and then you can delete the region in batches.

  ◇ Click the corresponding of the region in the list, and then it deletes the region.

4.10 Configuring Map

Before using the electronic map function, you need to select the map category on the administrative side, including rater map, Google and Google offline map, and then drag the video device, alarm device and so on to the map on the DSS management side before you can use the map function on the client side. E-map supports alarm prompts, video viewing and video playback.

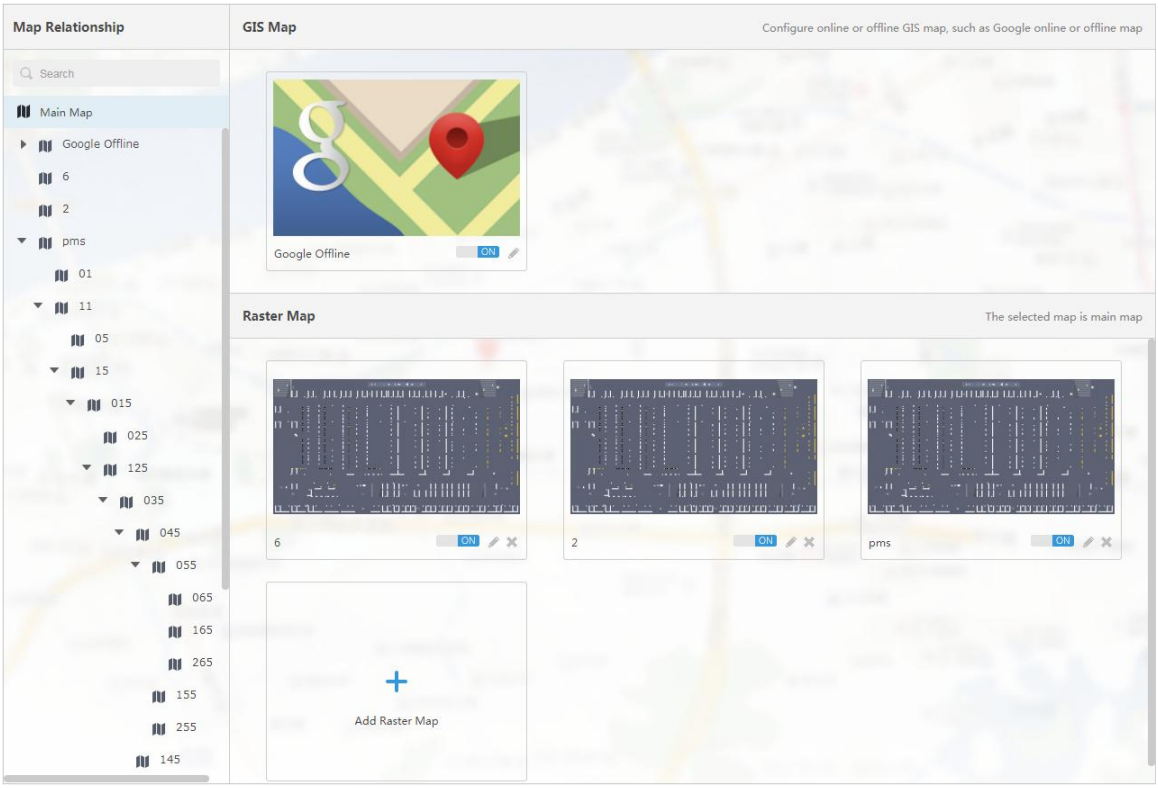
- Raster Map
  A displayed picture, it is more suitable for indoor scenario. Place the camera in the fixed location indoors, such as parking lot (flat scene), people counting, retail and some other indoor scenarios. The server enables raster map by default.
- Google Online Map
  Google online map, it needs network permission of accessing Google map to access the map client, it is to display the map of whole city via network and using the map info of Google online, it can zoom in and out, present the picture of magnificent city and it can be accurate to some spot in the city as well.
- Google Offline Map
  Google offline map, deploy the offline map on other servers. The offline map can be accessed by accessing the client of the map and the server network of Google offline service.

4.10.1 Editing Google Map

Step 1 Click and select “Map” on the interface of “New Tab”.

The system displays the map interface. See Figure 4-68.

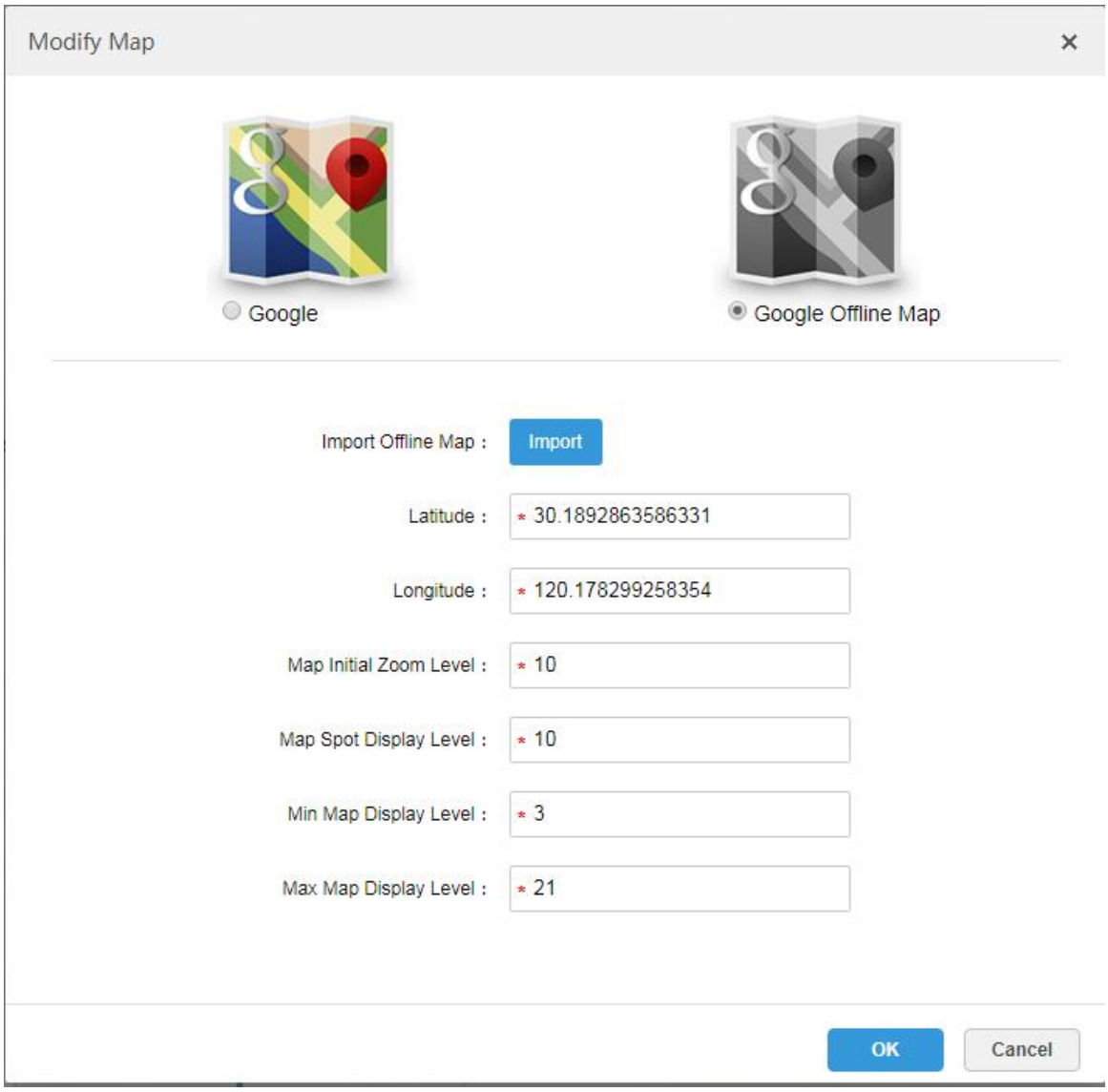
Figure 4-68



Step 2 After click the above the Google map.

The system pops out the map config interface. See Figure 4-69.

Figure 4-69



- Google online map

1) Select Google online map.
2) Configure map info, click “OK”.

- Google offline map

3) Select Google offline map.
4) Click “Import” and import offline map.
5) Configure map info, click “OK”.

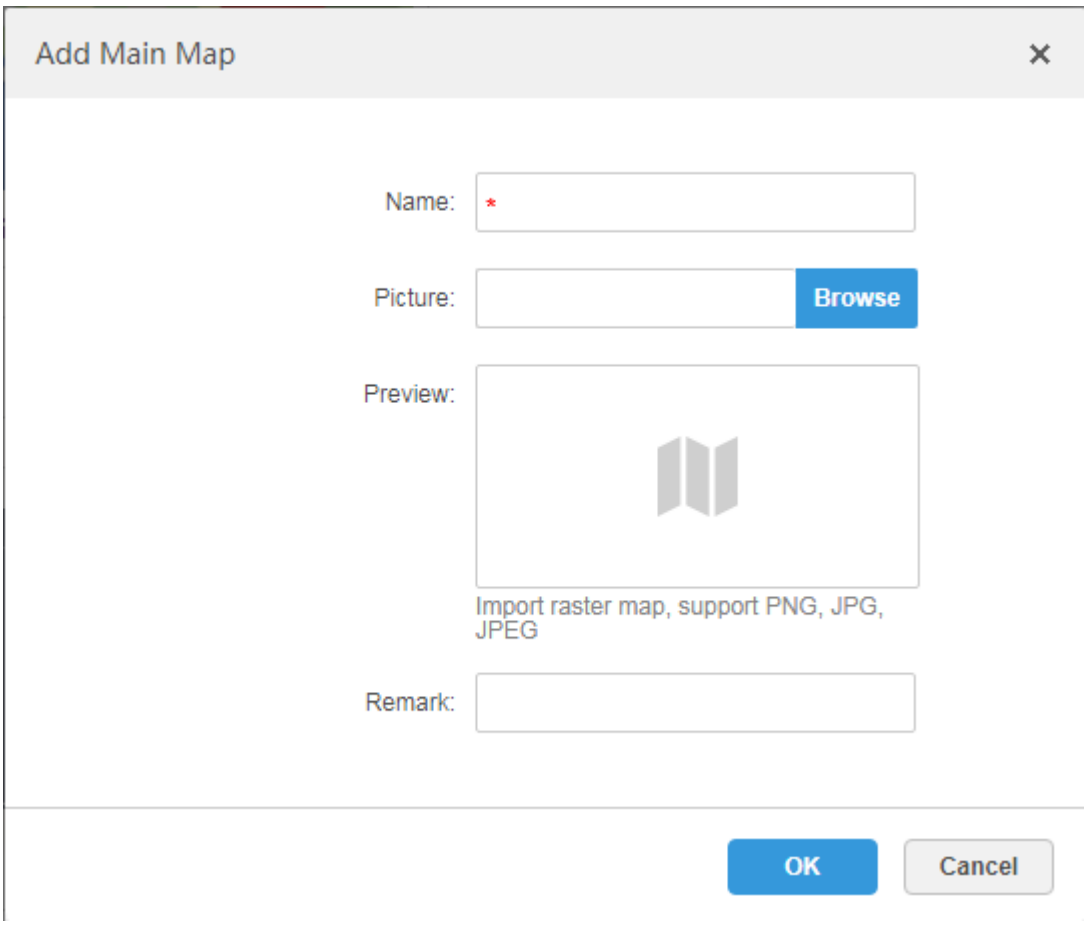
4.10.2 Adding Hot Zone

It can add raster map as hot area, which is convenient for checking detailed scene picture. For example, it can be used in flat scene like parking lot.

Step 1 Click “Add Raster Map” on the “Map” interface.

The system pops out the interface of “New Main Map”. See Figure 4-70.

Figure 4-70



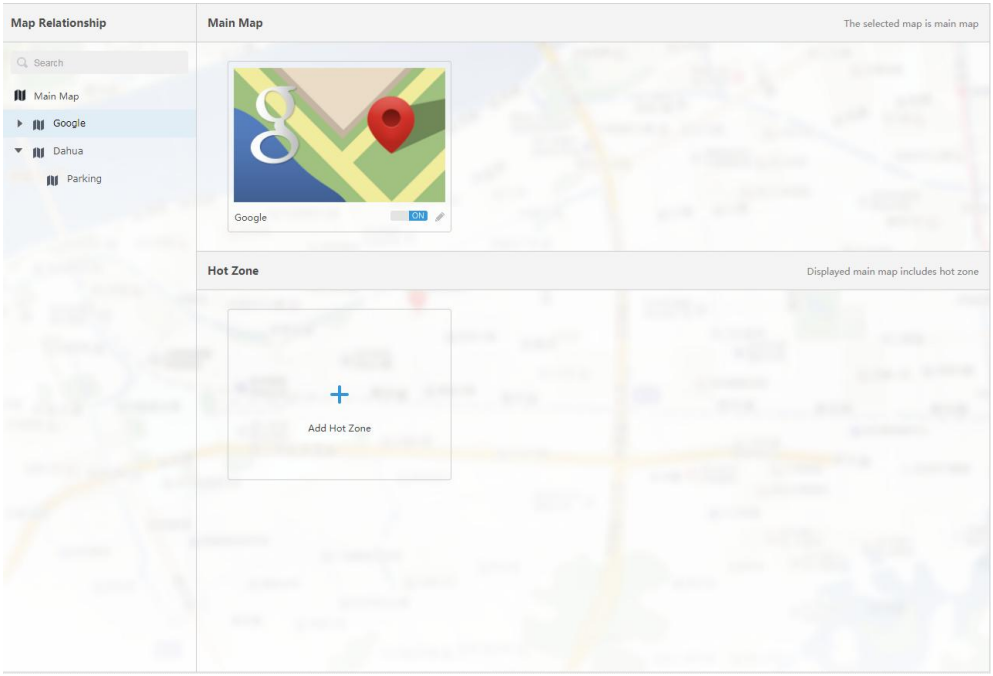
Step 2 Enter “Name”, select upload picture, click “OK”.

You can continue to add several raster maps.

Step 3 Add hot area.

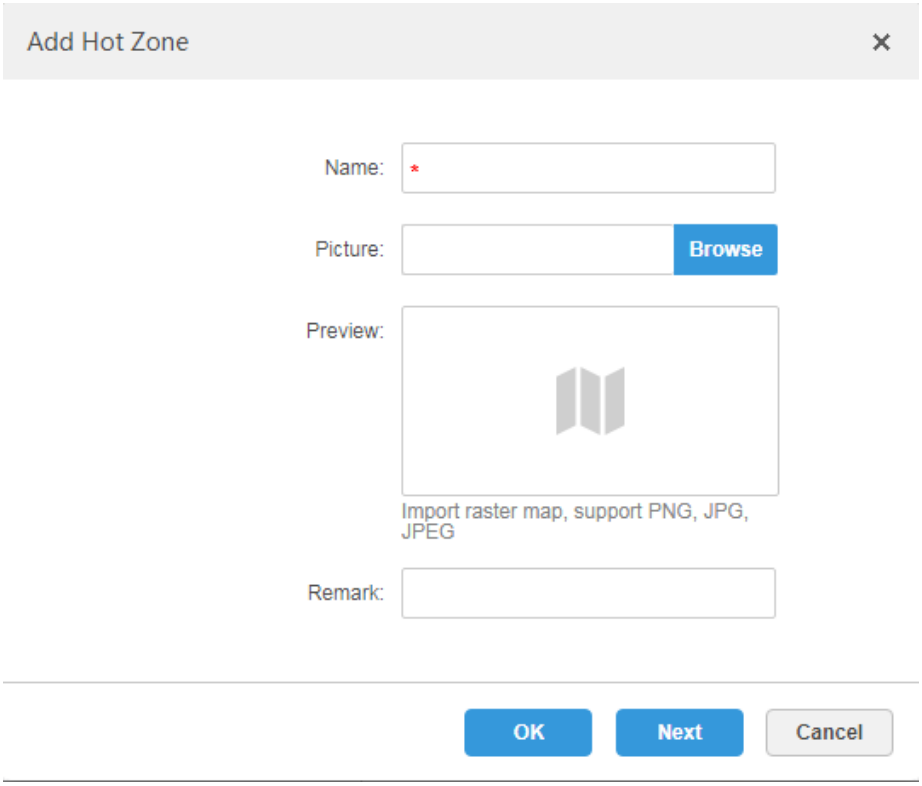
1) Click the Google map or raster map on the left, it will display added hot zone module on the right. See Figure 4-71.

Figure 4-71



2) Click “Add Hot Area”.
The system displays the interface of “Add Hot zone”. See Figure 4-72.

Figure 4-72



3) Enter hot zone name and upload picture, click “Next”.
4) Drag icon and confirm hot zone location, and then click ‘OK”.

4.10.3 Marking Device

Step 1 Click the added main map on the navigation tree on the “Map” interface. The system will display the map info. See Figure 4-73.

Figure 4-73

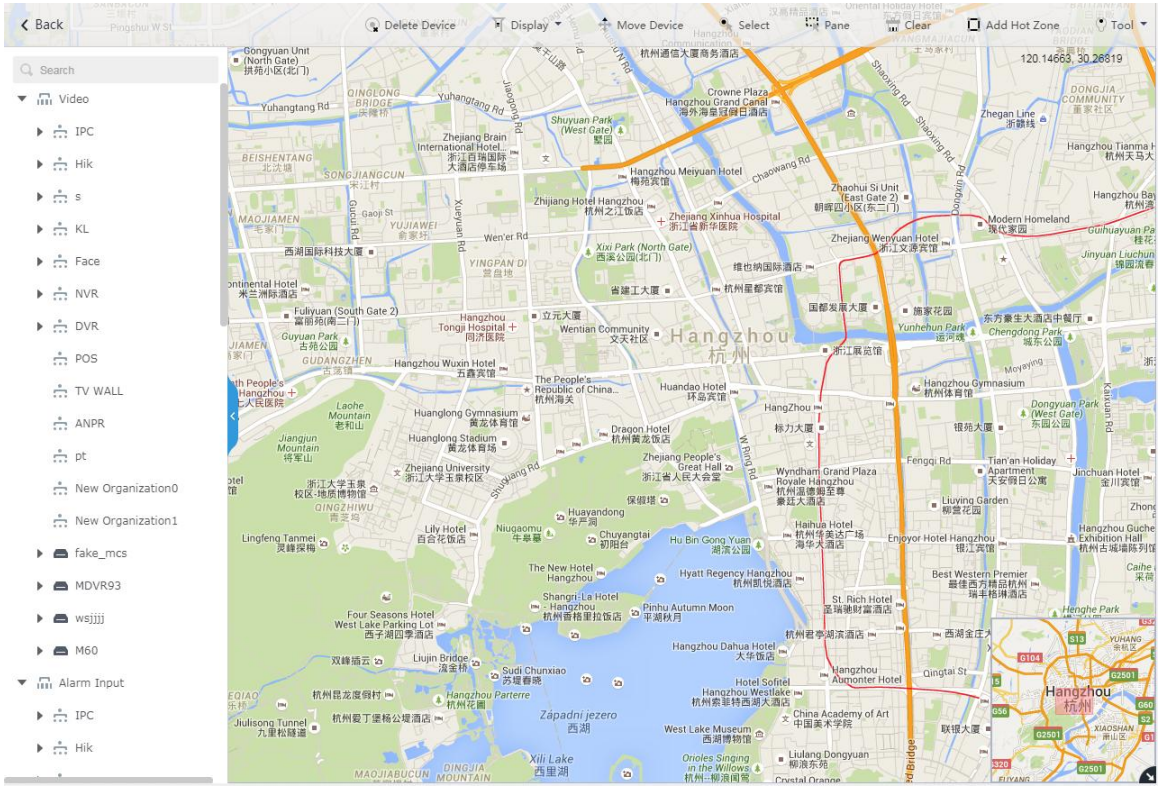


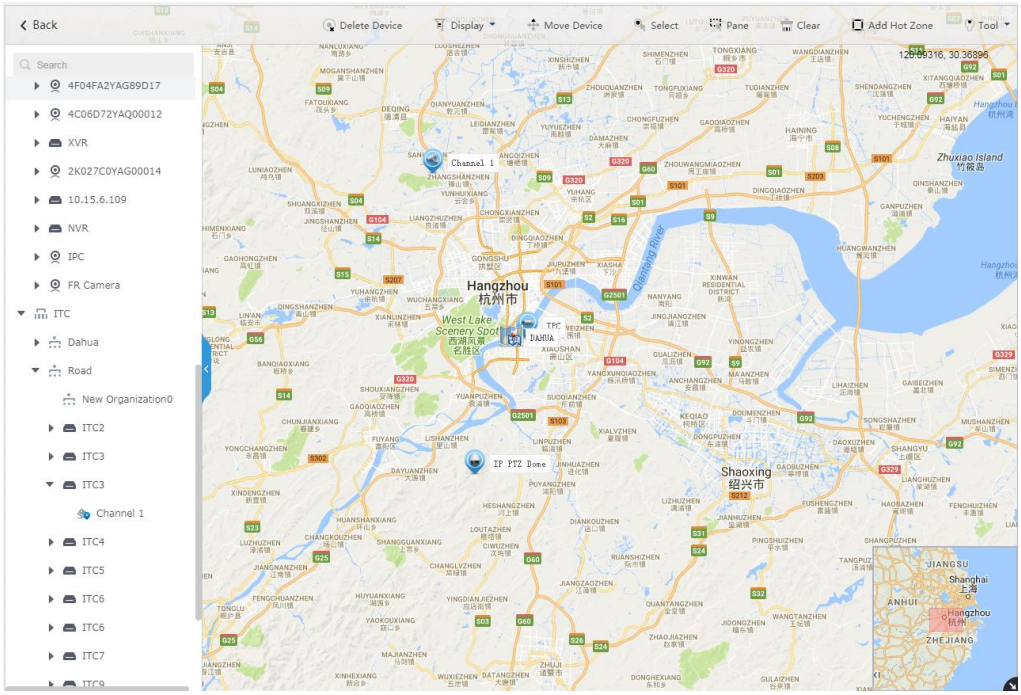
Table 4-6

Parameter	Note
Device Display	Filter and display video device, alarm input channel.
Delete Device	Click to move the device location on the map.
Select	Select device via clicking on it.
Pane	Select device via box selection.
Clear	Clear the boxing trace on the screen.
Add Hot Zone	Click “Add Hot Zone”, select location on the map and add hot zone map. After entering hot zone, it can also continue to add lower-level hot zone map. Click hot zone on the client map, the system will automatically link the map to the hot zone map.
Tool	Includes length, area, mark and reset. ● Length: it is to measure the actual distance between two spots on the map. ● Area: It is to measure the actual area of the previous area on the map. ● Mark: It is to mark on the map. ● Reset: it is restored back the initial default location of the map.

Others	• Click hot zone, and it can modify the info of hot zone map. • Double click hot zone, the system will automatically skip to hot zone map, and then it can drag it into the channel on the hot zone map.

Step 2 Drag the device channel from the left device tree to the corresponding location of the map. The interface is shown in Figure 4-74.

Figure 4-74



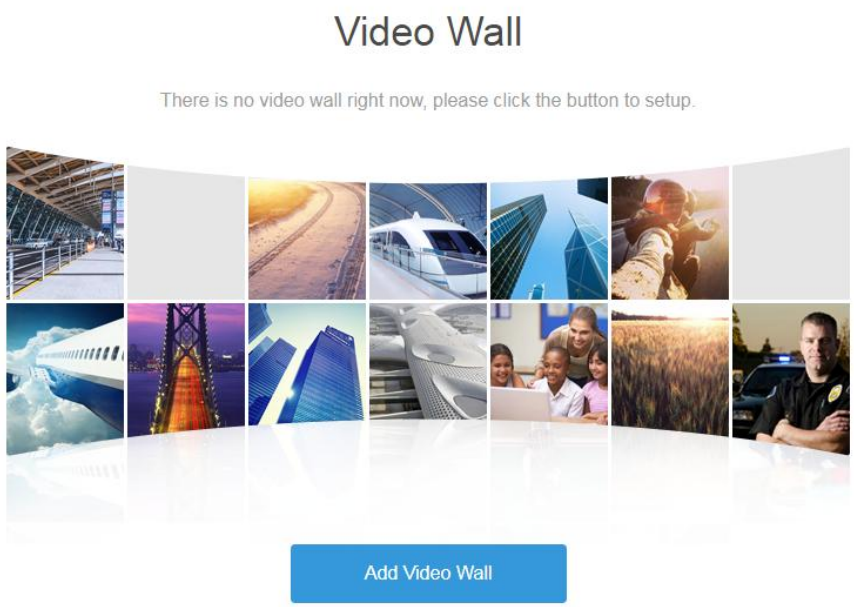
4.11 Adding Video Wall

It can refer to the content of the following chapter if you want to realize the business of displaying on wall.

Step 1 Click and select “Video Wall” on the interface of “New Tab”.

See Figure 4-75.

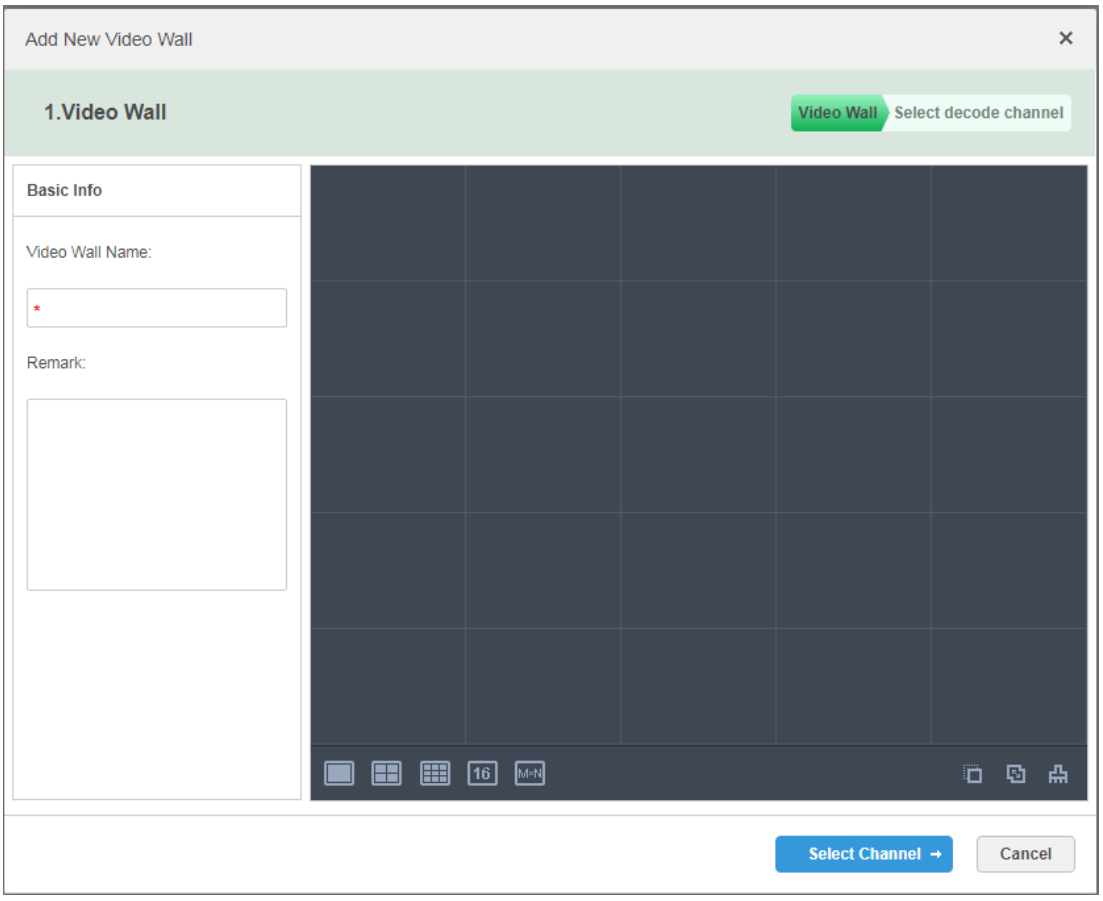
Figure 4-75



Step 2 Click “Add Video Wall”.

The system pops out the interface of “Add Video Wall”. See Figure 4-76.

Figure 4-76

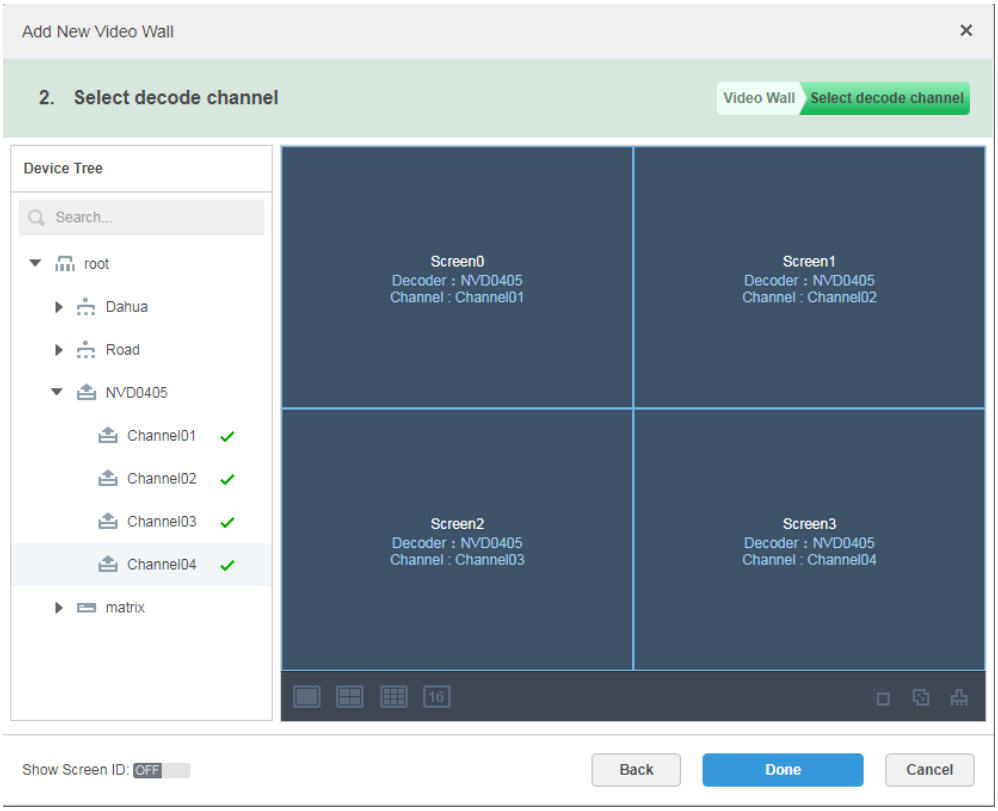


Step 3 Enter “Video Wall Name”, select window distribution.

Step 4 Click “Config Channel”.

The system will display the interface of decoding channel. See Figure 4-77.

Figure 4-77



NOTE

It can set if it displays ID in the screen, Show Screen ID: OFF means that the screen ID has been disabled; click the icon and it becomes Show Screen ID: ON, and then it means that screen ID has been enabled.

Step 5 Select the encoder which needs to be bound in the device tree, and drag it to the corresponding screen.

Step 6 Click “Done”.

4.12 Configuring Face Recognition

You can refer to the following chapter if it is to realize the function of face recognition.

4.12.1 Creating Face Database

It supports creating staff library, managing the staff info in the library.

4.12.1.1 Adding Face Library

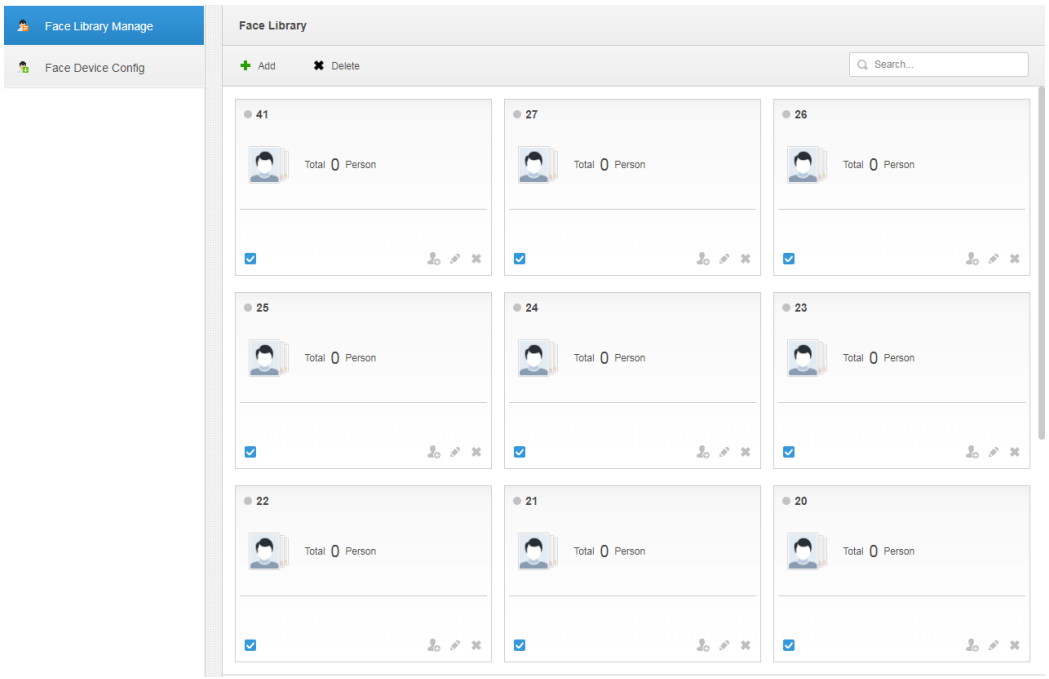
Face library is used to store staff info, which is convenient to deploy or search staff.

Steps

Step 1 Click and select “Face Database” on the interface of “New Tab”.

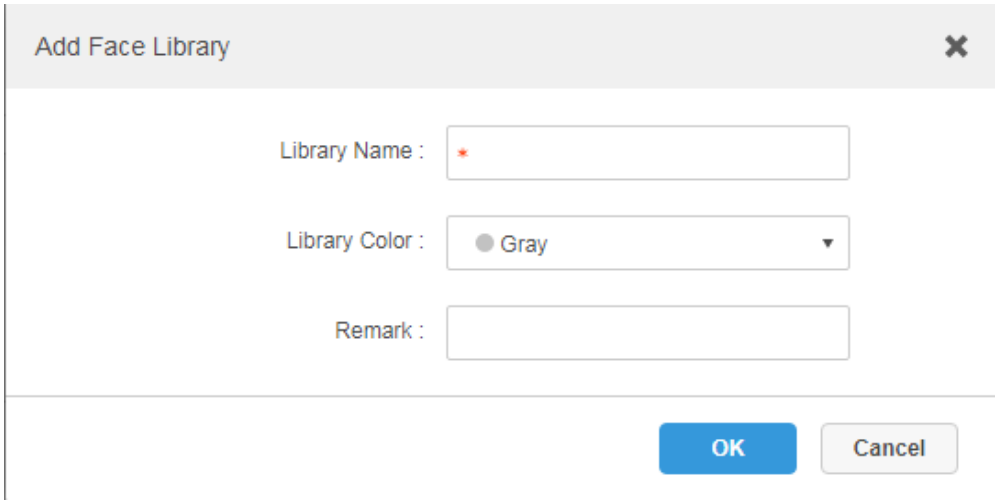
The system displays the interface of “Face Library”. See Figure 4-78.

Figure 4-78



Step 2 Click ‘Add”.

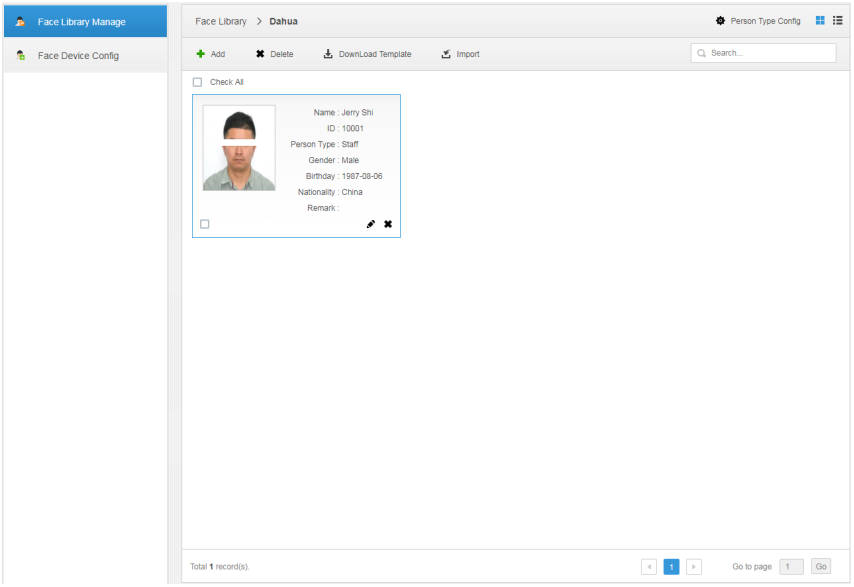
Figure 4-79



Step 3 Enter library name, select library color, and then click “OK”.

The interface is shown in Figure 4-80.

Figure 4-80



Operations

- Search library
  Filter the library via face library type or keyword.
- Add face library

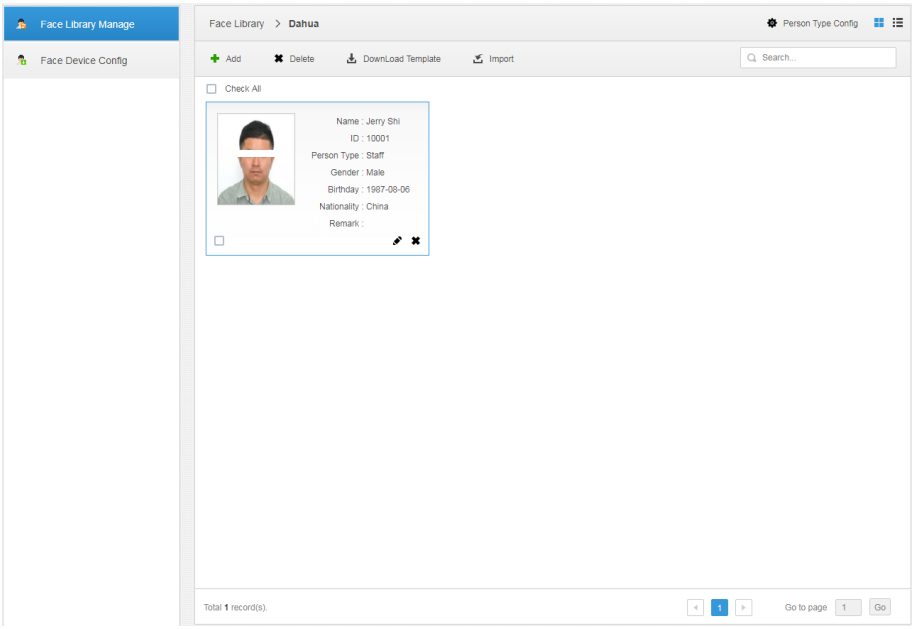
  Click to add staff info. Please refer to “4.12.1.3 adding Staff Library Info”.
- Modify Staff Library
  Click to modify library name and library description.
- Delete Staff Library

  Click to delete face library only when there is no face info under the library.

4.12.1.2 Configuring person Type

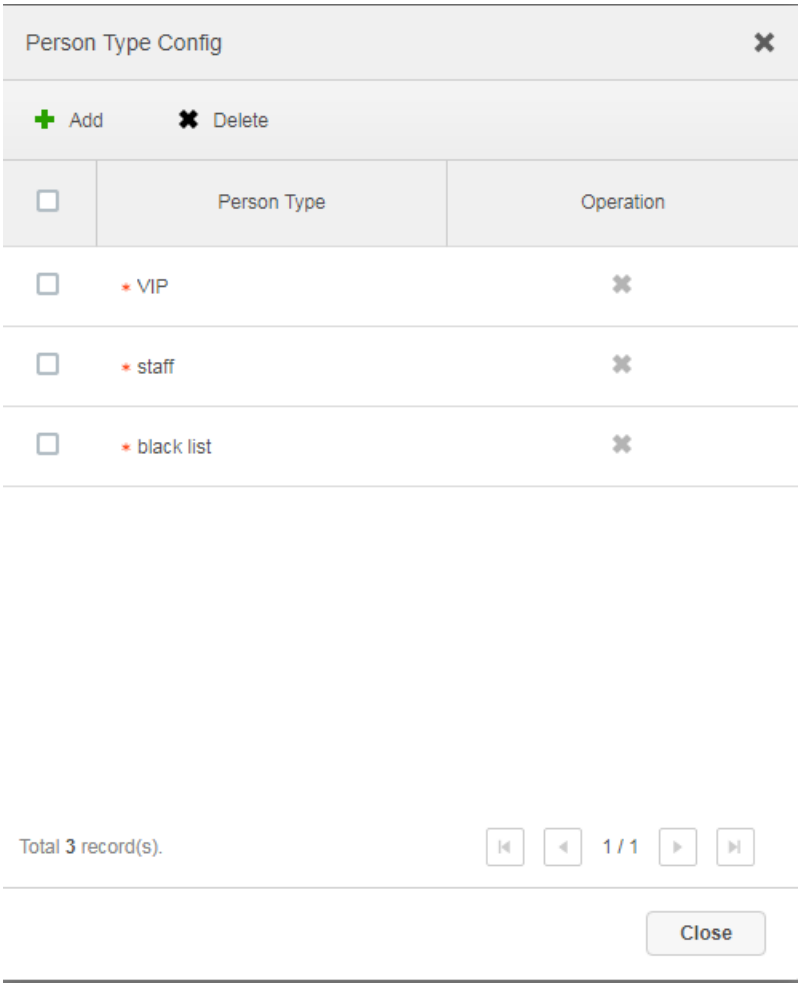
Step 1 Click the face library which needs to be added with person on the interface of “Face Library Manage”.
The interface is shown in Figure 4-81.

Figure 4-81



Step 2 Click “Person Type Config”. The interface is shown in Figure 4-82.

Figure 4-82



Step 3 Click ‘Add” and enter type name in the column of “Person Type”.

Step 4 Click ✖ to disable the window.

4.12.1.3 Adding Face Library Info

It can add person info via adding individual person and importing in batches.

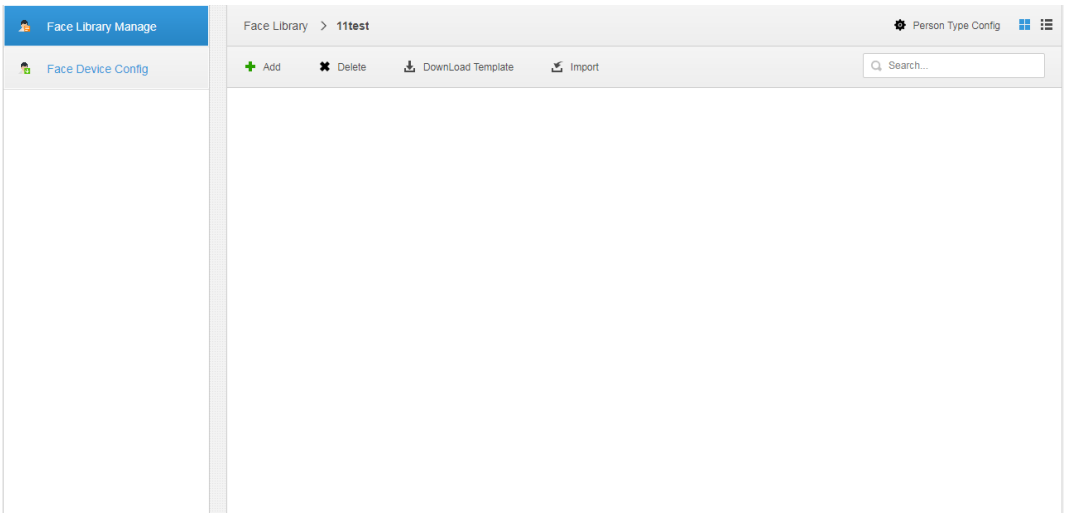
4.12.1.3.1 Adding Individually

Steps

Step 1 Enter the interface of adding person.

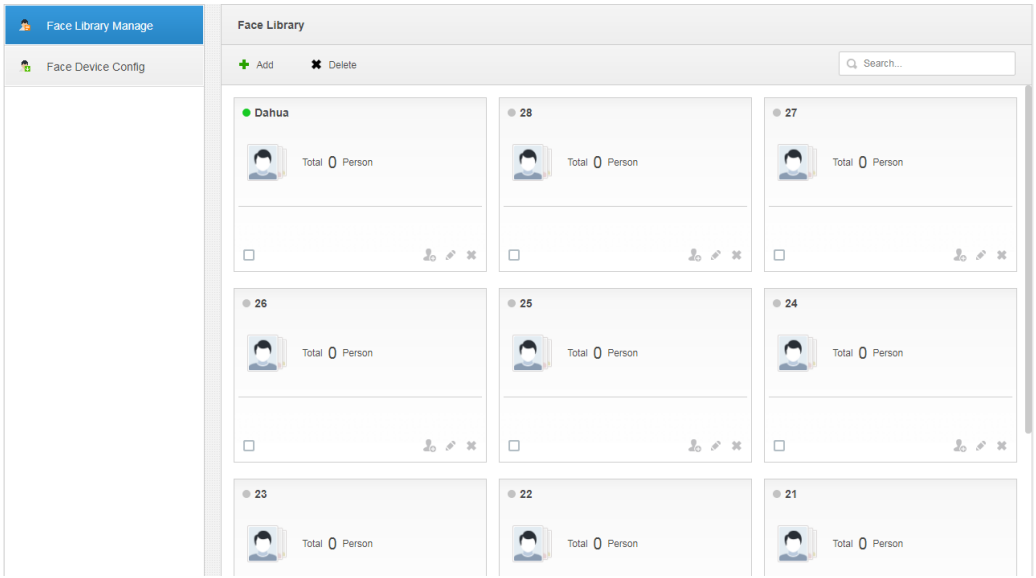
- Click the library which needs to be added with person on the interface of “Face Library Manage”. See Figure 4-83. Click “Add”.

Figure 4-83



- Click on the card of person library, the interface is shown in Figure 4-84.

Figure 4-84



Step 2 Enter person info.

Step 3 Click profile photo and upload the picture.

Step 4 Click “OK”.

Click “Continue to add” of it needs to add several persons, save person info and stay on the interface of “Add Person”, and then you can continue to add person info.

Operations

- Query person

  Enter key words into the query text box, press Enter or click to query person.

- Delete person

  ◇ Click on person interface and then you can delete person individually.

  ◇ Select person, click ‘Delete” to delete person in batches.

4.12.1.3.2 Batch Import

It needs to prepare person picture in advance if you want to import in batches, and compress it into zip RAR. RAR and excel style are shown in Figure 4-85 and Figure 4-86. Currently batch import supports max 1000 pictures at one time.

Figure 4-85

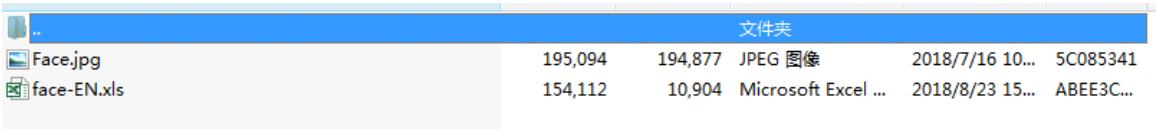
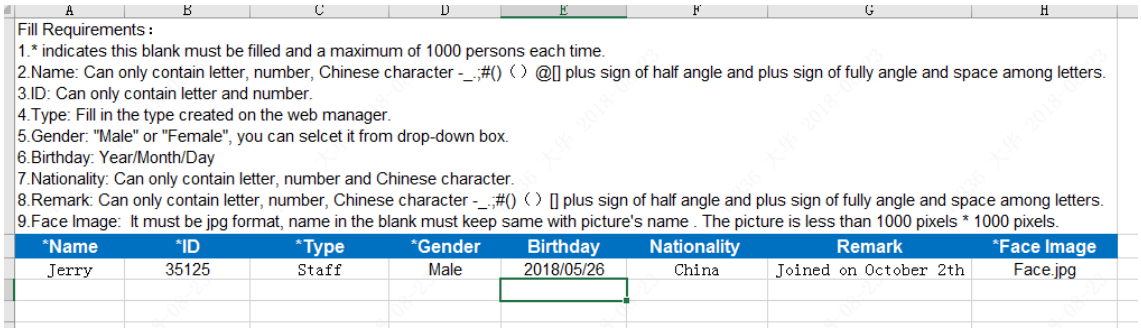


Figure 4-86



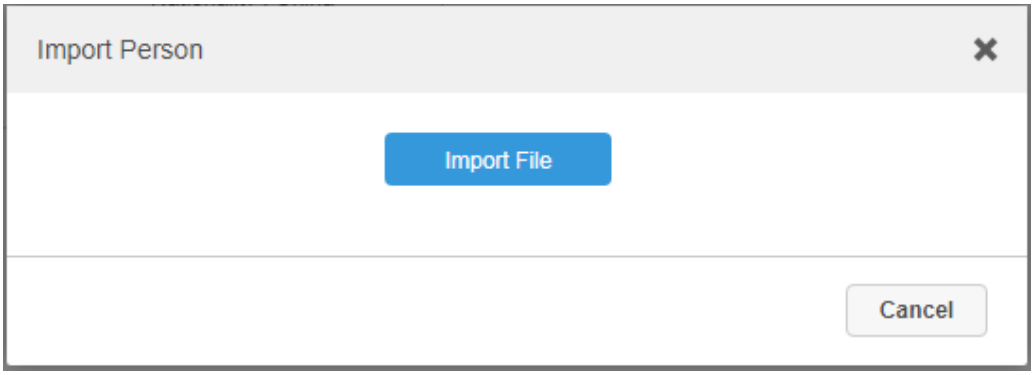
Steps

Step 1 Click the library to add person on the interface of “Face Library Manage”.

Step 2 Click “Import”.

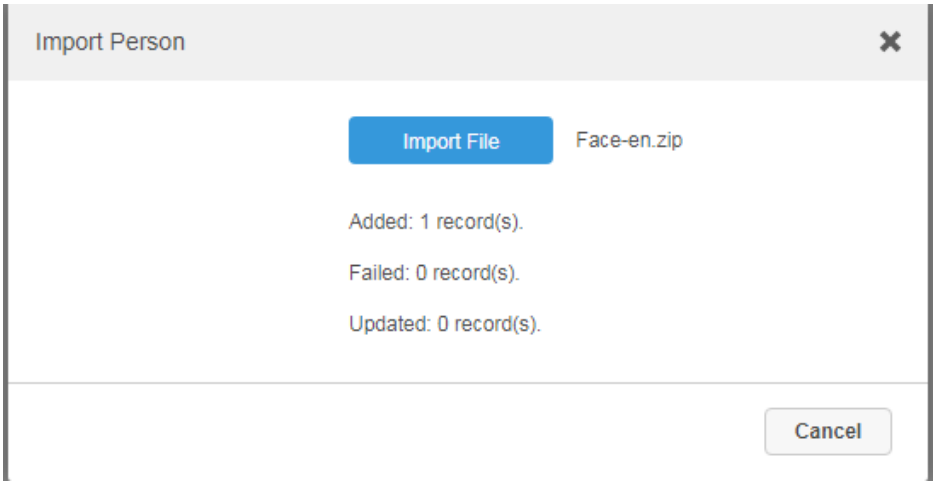
The system displays the interface of “Import Person”. See Figure 4-87.

Figure 4-87



Step 3 Click “Import File” and upload compressed package according to prompt.
The system will display import progress, it will display import info after import is completed. See Figure 4-88.

Figure 4-88



Operations

Relevant operation is the same as that in “4.12.1.3.1 Add individually”.

4.12.2 Arm Config

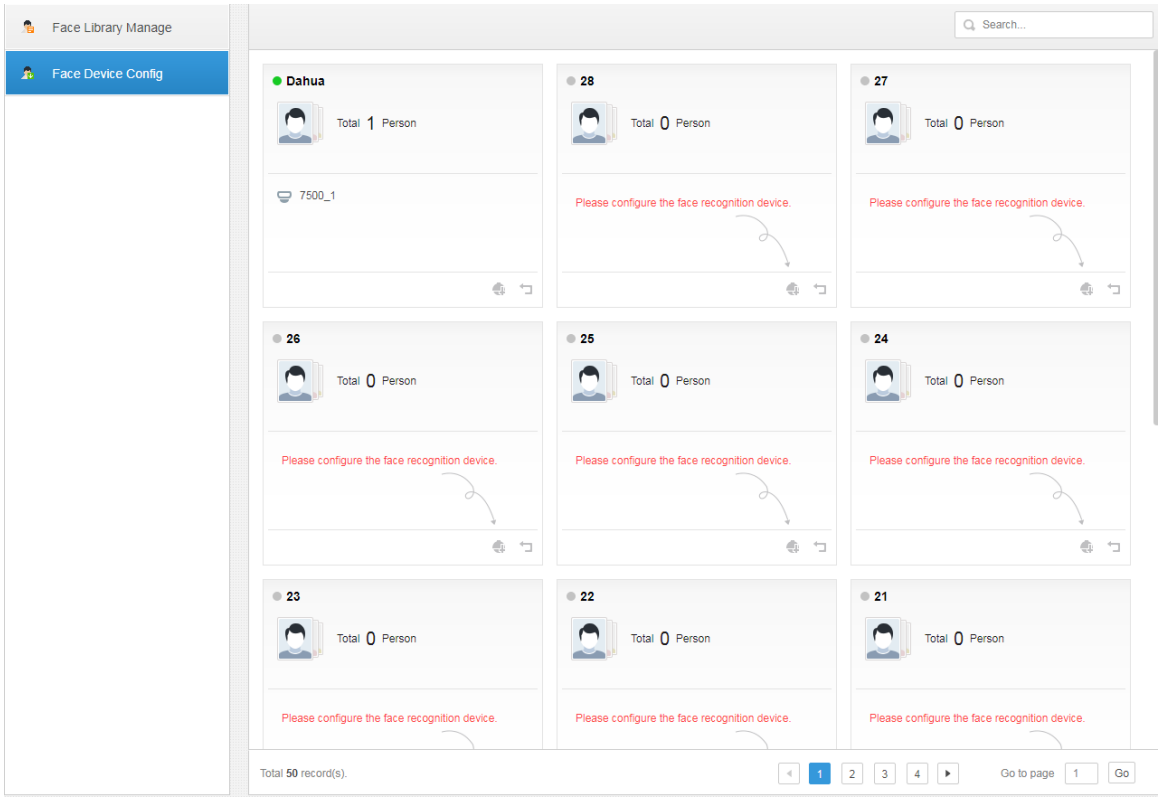
Arm means real-time comparison between capture image and face database image; it will trigger real-time alarm when the similarity reaches the value which has been set. It can make arm upon the face database where the person exists if it needs to take real-time surveillance over the designated person.

Steps

Step 1 Click and select “Face Database” on the interface of “New Tab”.

Step 2 Click “Face Device Config” on the left of navigation bar.
The system displays the interface of ‘Face Device Config”. See Figure 4-89.

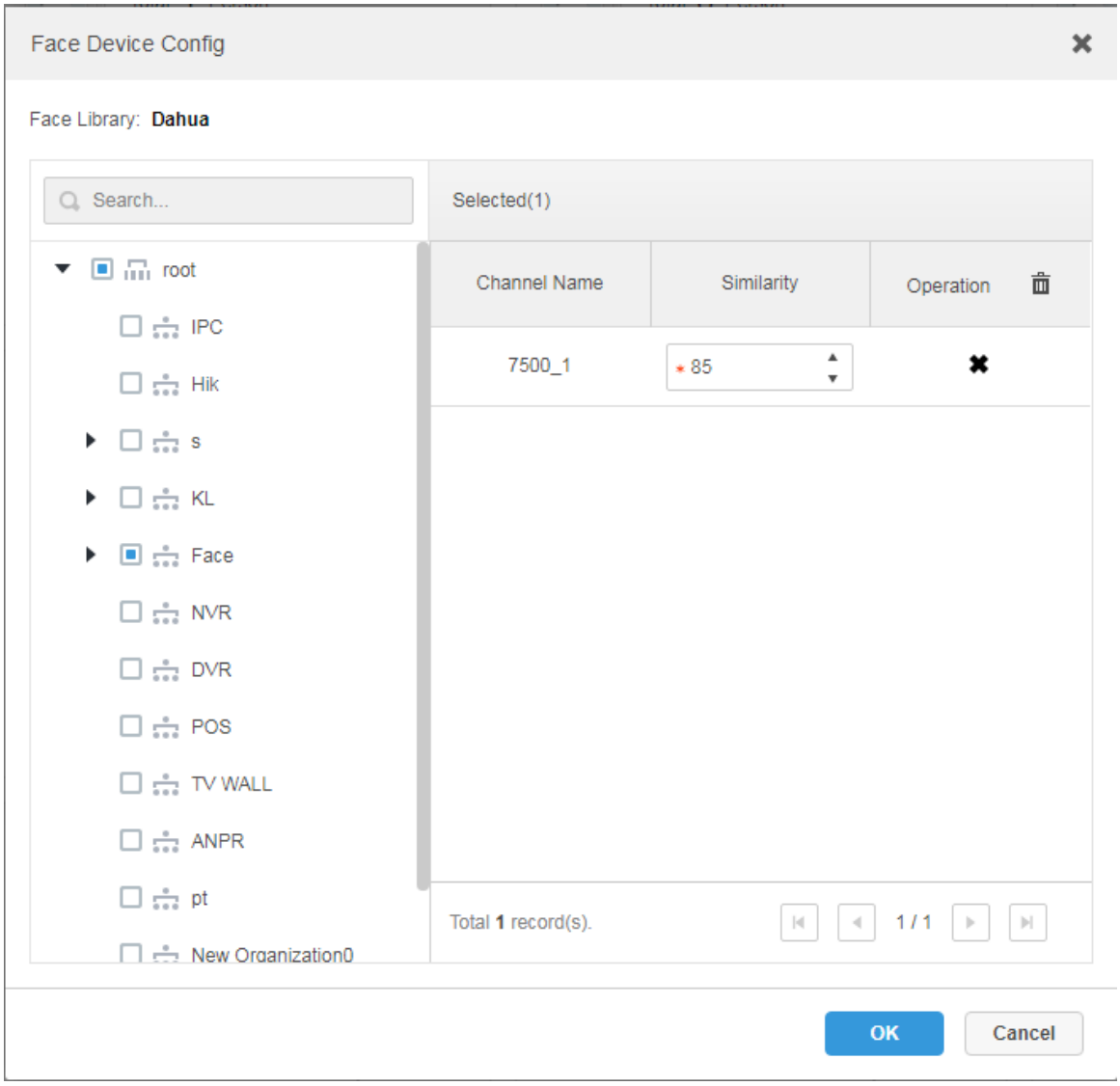
Figure 4-89



Step 3 Click to start arm.

The interface is shown in Figure 4-90.

Figure 4-90



Step 4 Select arm channel and set similarity.

Step 5 Click “OK” to complete arm.

Operations

- Modify arm

  Arm has been implemented; click and it can modify related device and similarity value on the arm interface.

- Disarm

  Click on the interface of “Arm Manage” to disarm.

4.13 Adding Vehicle Blacklist

Arm means monitoring vehicles, it will trigger alarm when it takes snapshot and recognizes the vehicle with designated license plate. Arm management includes adding vehicle blacklist, verify arm and repeal arm.

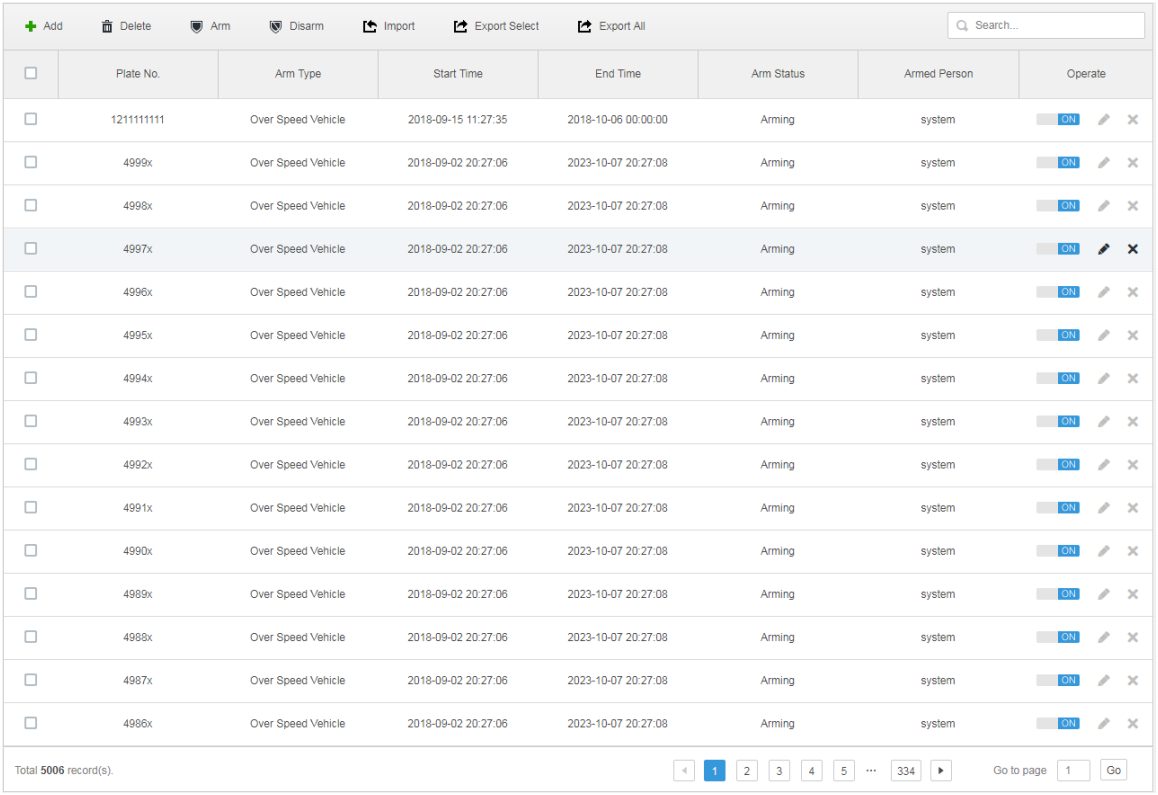
It can refer to the chapter when it needs to realize the business of road surveillance.

Steps

Step 1 Click and select “Vehicle Blacklist” on the interface.

The system displays the interface of “Vehicle Blacklist”. See Figure 4-91.

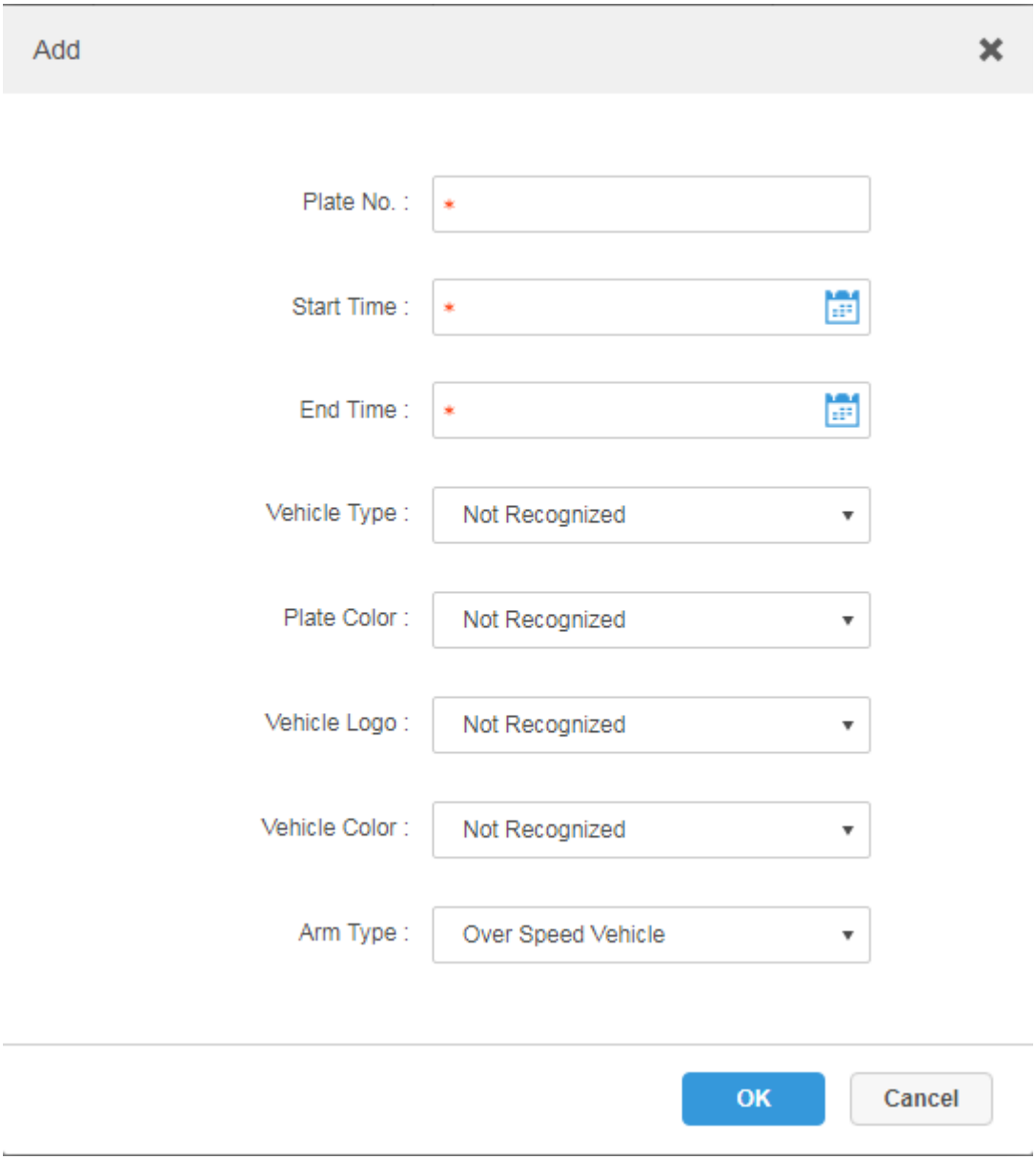
Figure 4-91



Step 2 Click ‘Add”.

The system displays the interface of “Add Arm”. See Figure 4-92.

Figure 4-92



Step 3 Set armed vehicle info, including plate number, start time, vehicle type, plate color, vehicle logo, vehicle color and arm type.

Step 4 Click “OK”.

The system prompts that it has added successfully. It is armed by default.

Operations

- Modify vehicle blacklist

  Click of corresponding vehicle in the list, and then you can edit relevant info of vehicle arm.

- Delete vehicle blacklist

  Click of corresponding vehicle arm info in the list, or select vehicle arm info, click “Delete” to delete vehicle arm info.

- Arm/Disarm

Select vehicle arm info, click ‘Arm” to arm the vehicle; Click ‘Disarm” to disarm the vehicle.

- Import

  Click “Import” and it can import vehicle arm info according to template.

NOTE

It can download import template in the “Import” interface after clicking “Import”.

- Export

  Select vehicle arm info, click “Export Selected” to export the selected vehicle arm info; click “Export All” to export all the vehicle arm info in the list.

4.14 Adding Store

The system supports adding maps such as store layout, connecting smart devices and set weather info.

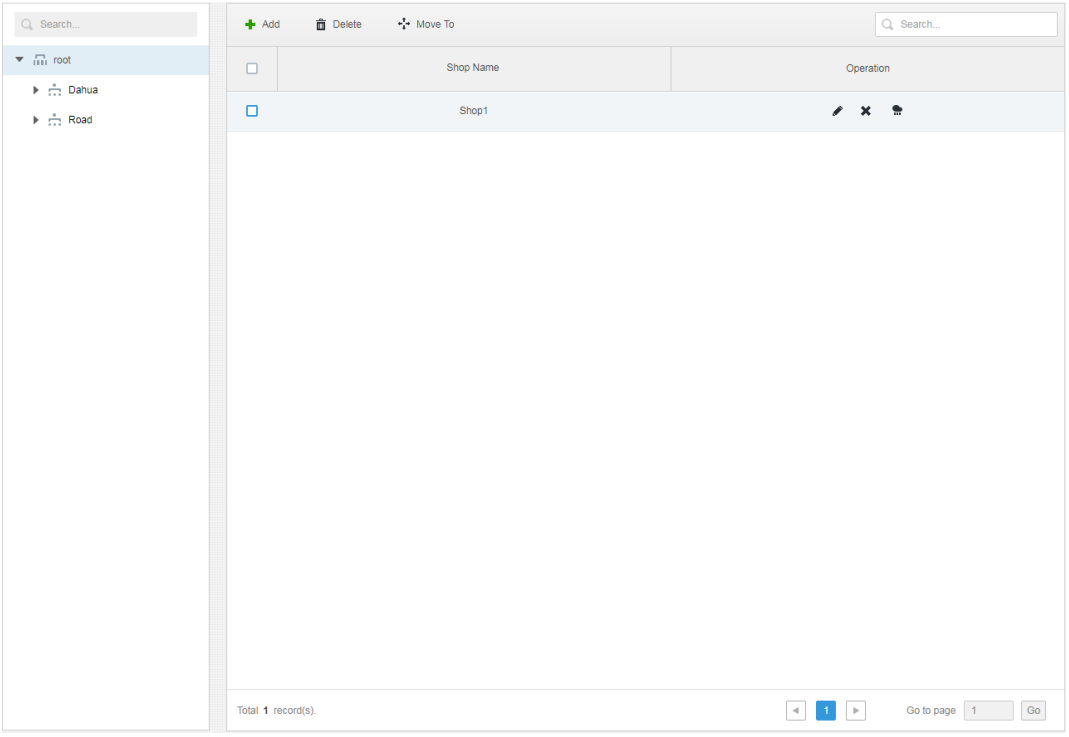
It can refer to the chapter for config when realizing the business of commercial intelligence.

Steps

Step 1 Click and select “Store Management” on the interface.

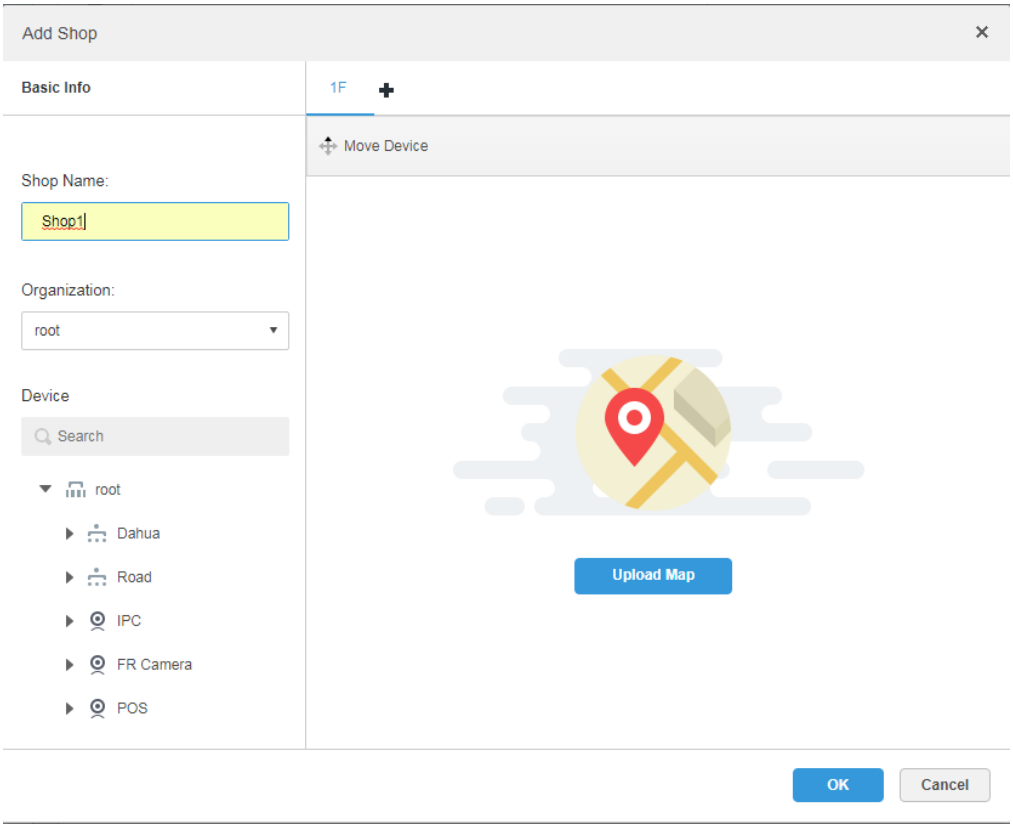
The system displays the interface of “Store Management”. See Figure 4-93.

Figure 4-93



Step 2 Click “Add”.

Figure 4-94

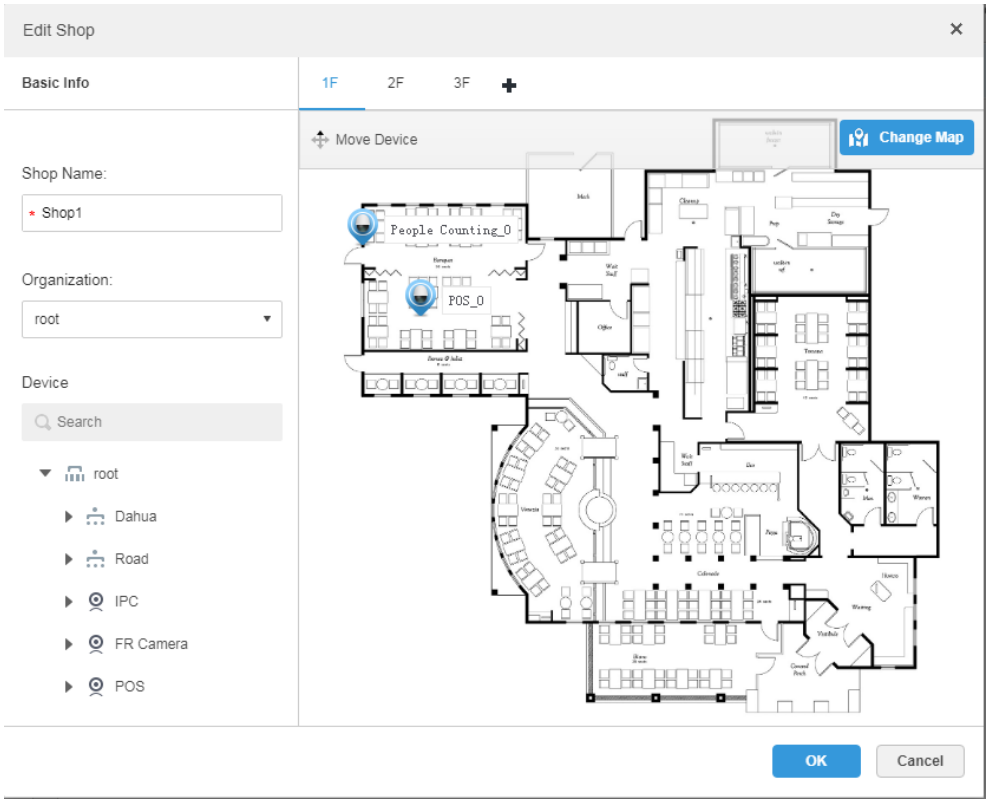


Step 3 Enter shop name and select organization.

Step 4 Click “Upload Map” to upload shop layout map.

Click ✚ to add several floors. See Figure 4-95.

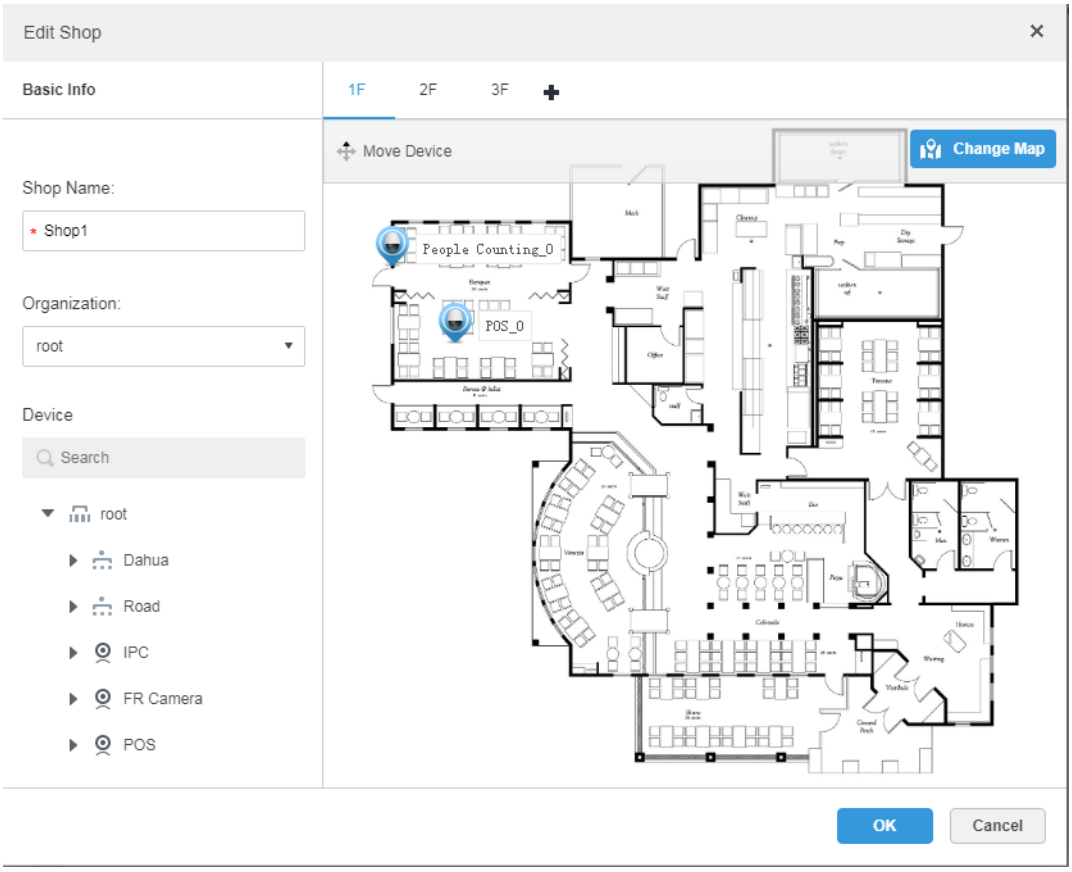
Figure 4-95



Step 5 Drag the device channels in the left device tree into the corresponding location of the map.

Step 6 Double click the device in the map and then you can set camera type. See Figure 4-96.

Figure 4-96



Step 7 Click ✕ to close the window of “Set Camera Type”, and then click “OK”.

Operations

- Configure weather
  Click the ⛈ of corresponding shop and configure weather info. The interface is shown in Figure 4-97.

Figure 4-97

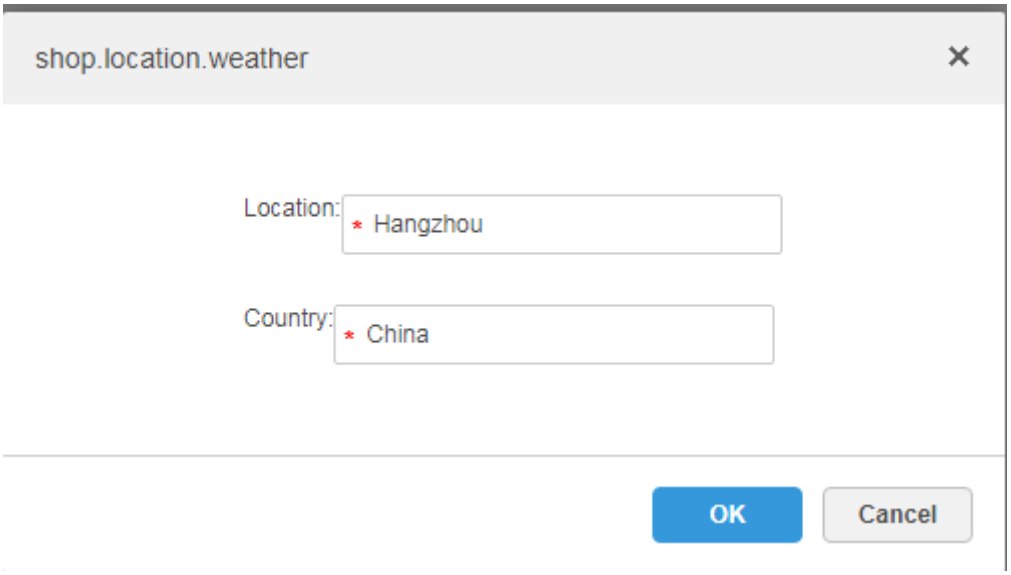


Table 4-7

Parameter	Note
Location	Enter the Chinese Pinyin of the city, such as Hangzhou.
Country	Enter the English name of the country, such as China.

- Edit Shop

  Click of the corresponding shop and edit the info the shop.

- Delete shop

  ◇ Select shop, click Delete to delete shops in batch.

  ◇ Click the corresponding of shop and you can delete the shop.

- Move organization

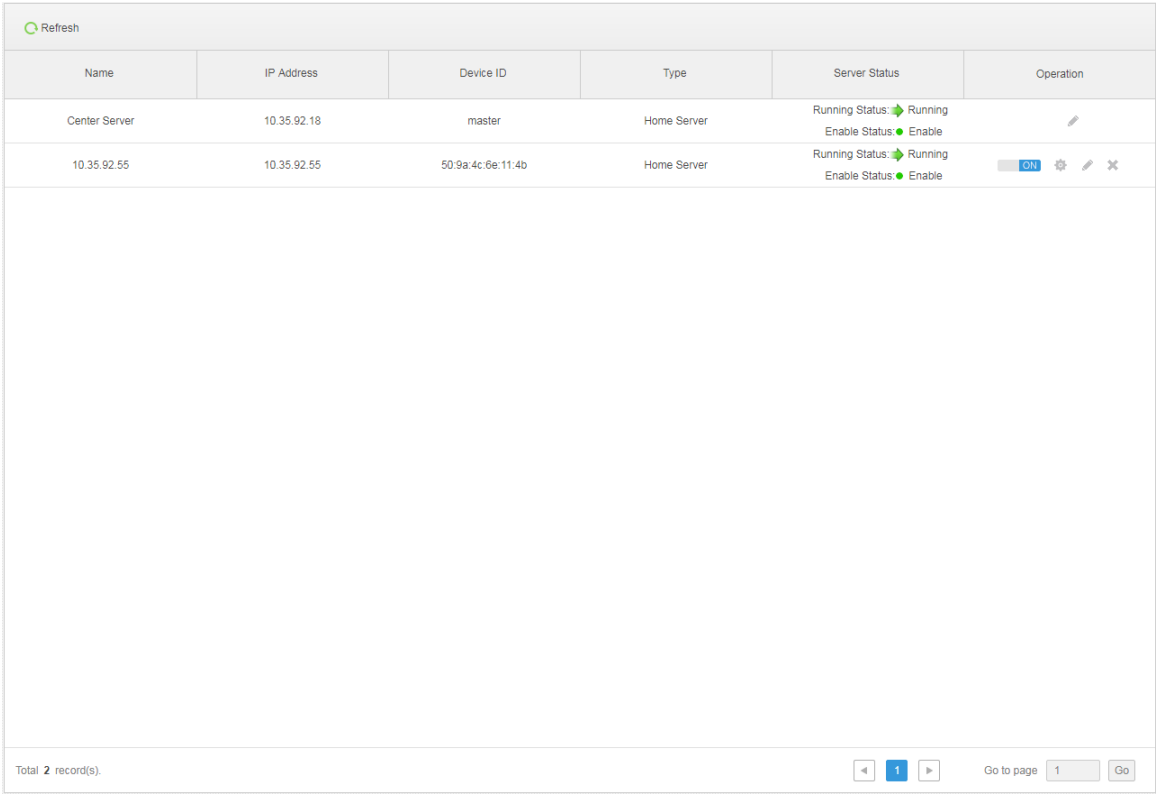
  Select shop and click Move To, select organization and you can move the shop to the corresponding organization.

4.15 System Maintenance

4.15.1 Service Management

Click and select “Service Management” on the interface of “New Tab”, which is shown in Figure 4-98.

Figure 4-98



- Click and edit the server info.
- OFF Means the server is not enabled; click it and the icon becomes ON, which means it has enabled the server.
- Click to distribute the server type.
- Click to delete the server info.

4.15.2 Backup and Restore

DSS management end supports backing up configured info and save it to local PC, meanwhile it supports restoring system via backup file, which is convenient for system maintenance and guarantee system security.

NOTE

Only system user supports backup and restore. It can implement system backup and restore only when it logs in DSS management end via system account.

4.15.2.1 System Backup

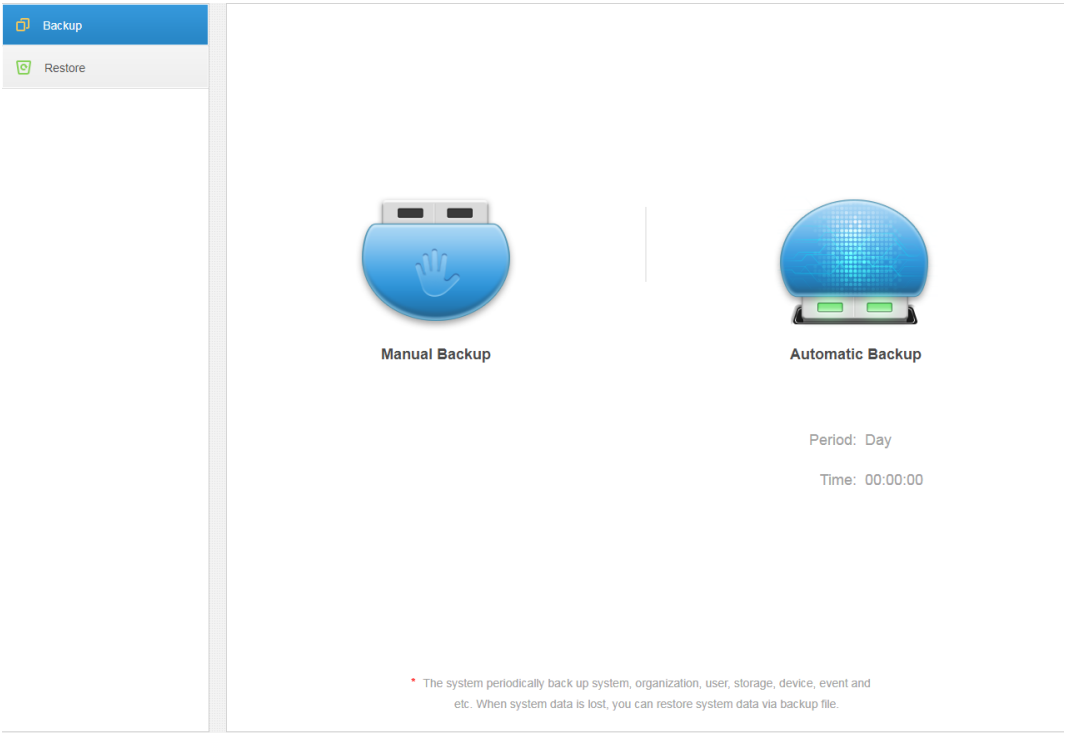
In order to guarantee the security of user data, DSS PROFESSIONAL system provides data backup function. The backup includes manual backup and automatic backup.

Manual Backup

Step 1 Click and select “Backup and Restore” on the interface of “New Tab”.

The system displays the interface of “Backup”. See Figure 4-99.

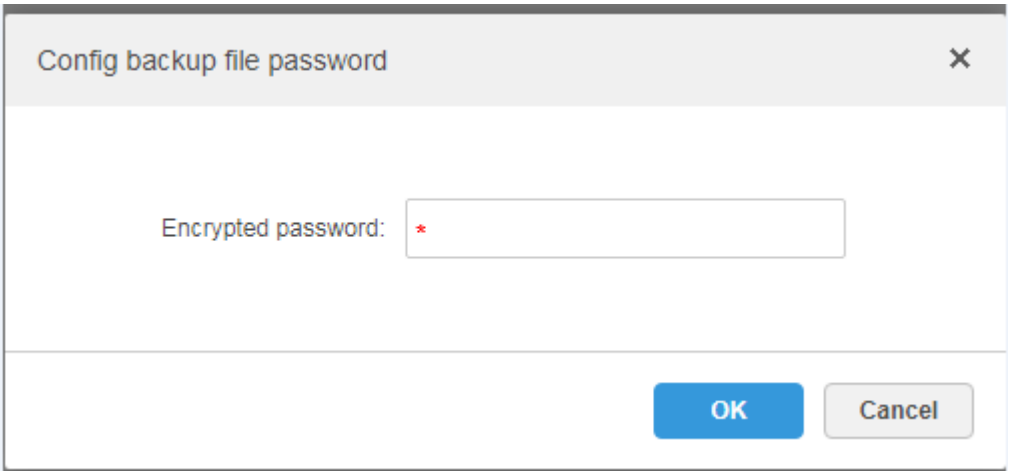
Figure 4-99



Step 2 Click “Manual Backup”.

The system displays the interface which is shown in Figure 4-100.

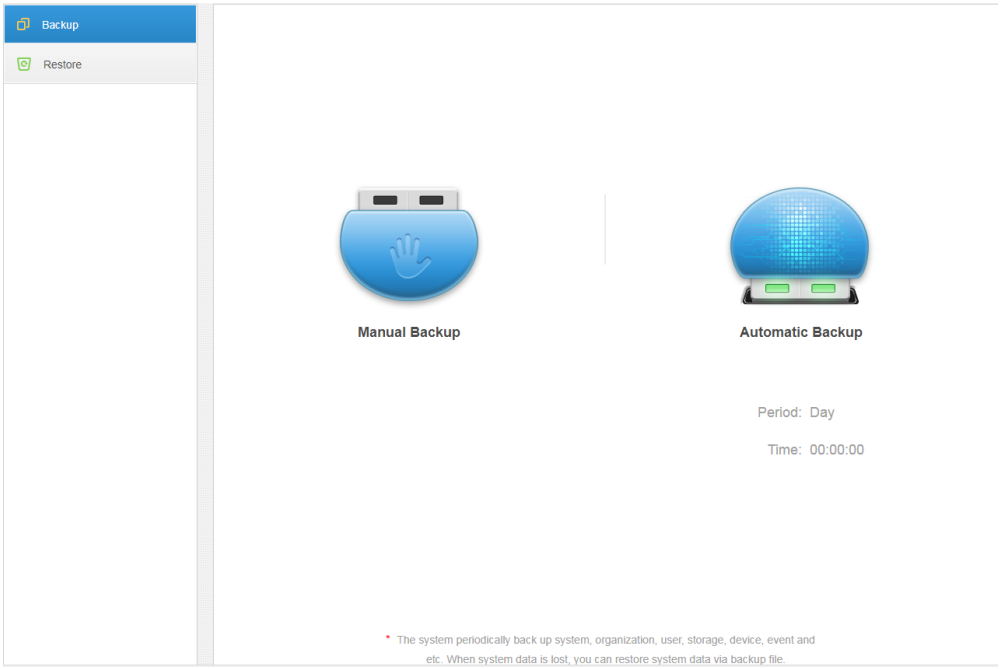
Figure 4-100



Step 3 Enter encrypted password, click “OK”.

The backup result is displayed in Figure 4-101.

Figure 4-101



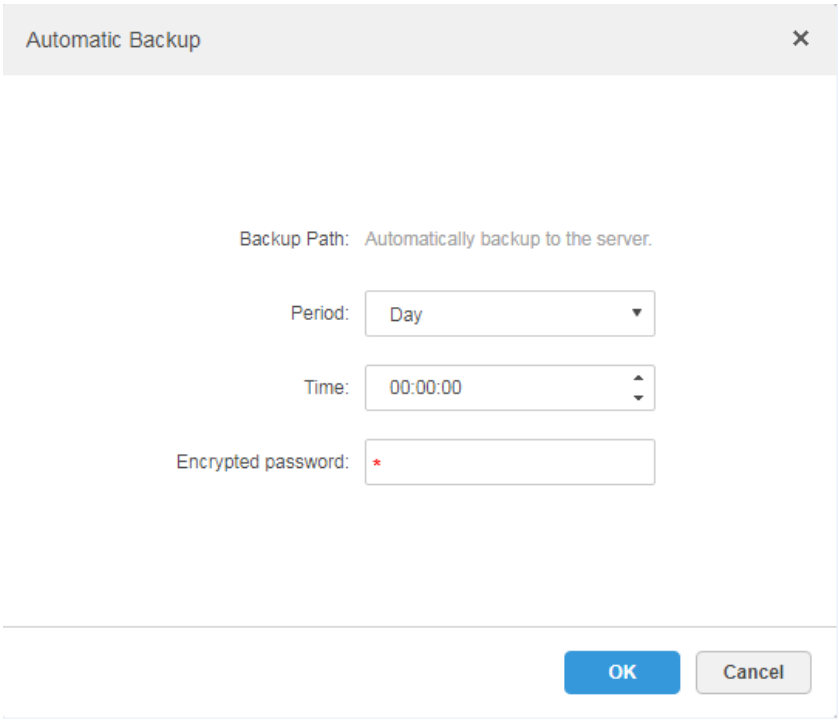
Automatic Backup

Step 1 Click + and select “Backup and Restore” on the interface of “New Tab”.

Step 2 Click “Auto Backup”.

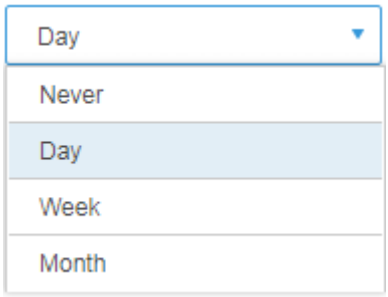
The system pops out the interface of “Auto Backup”. See Figure 4-102.

Figure 4-102



Step 3 Select backup period, it includes: never, day, week, and month. See Figure 4-103.

Figure 4-103

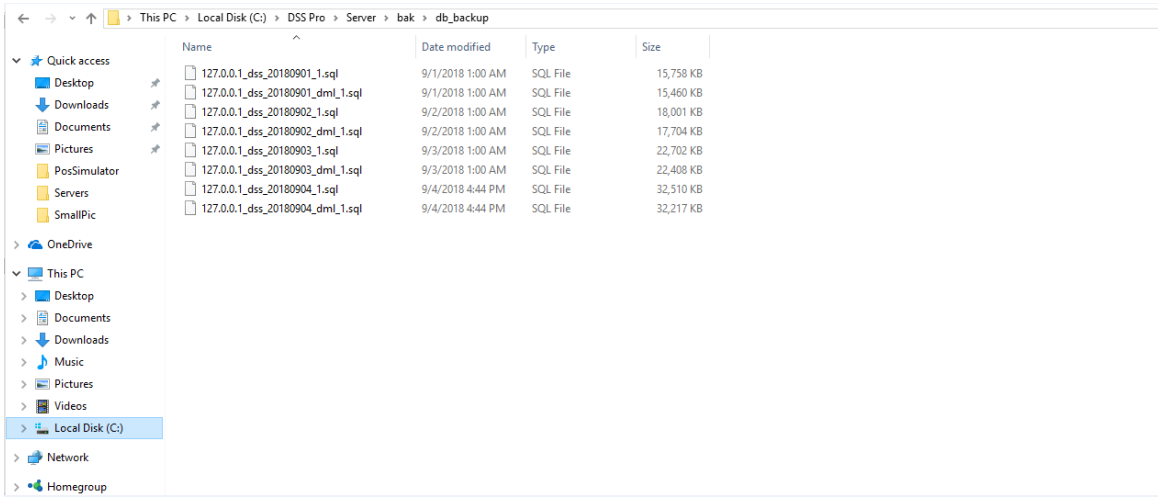


Step 4 Click “Ok” to save config.

The system will automatically back up the file onto the server according to the period and time which have been set.

Step 5 Check the auto-backup file on the server, the default backup path is -Servers-bak-db_backup. See Figure 4-104.

Figure 4-104



4.15.2.2 System Restore

It can use system restore function to restore the data back the time point of the latest backup when the user database becomes abnormal. It can quickly restore the user’s DSS system and lower user loss.

It needs to stop other users using DSS system when implementing system restore. Please be cautious when using the function because it may change data info.

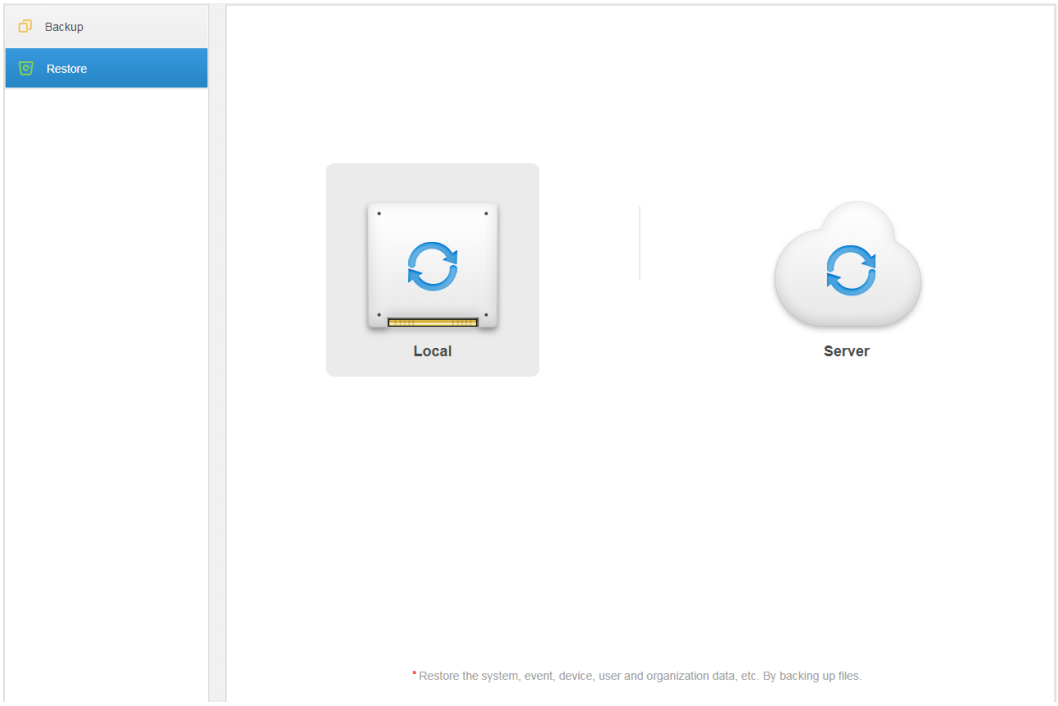
Local

In general, local file restoration means restoring manual backup fills onto the server.

Step 1 Select “Restore” tab.

The system enters the interface of “System Restore”. See Figure 4-105.

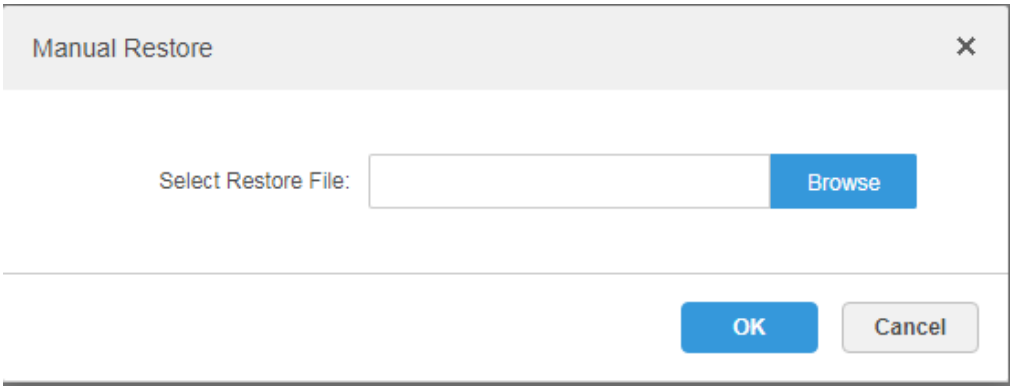
Figure 4-105



Step 2 Click “Local”.

The interface is shown in Figure 4-106.

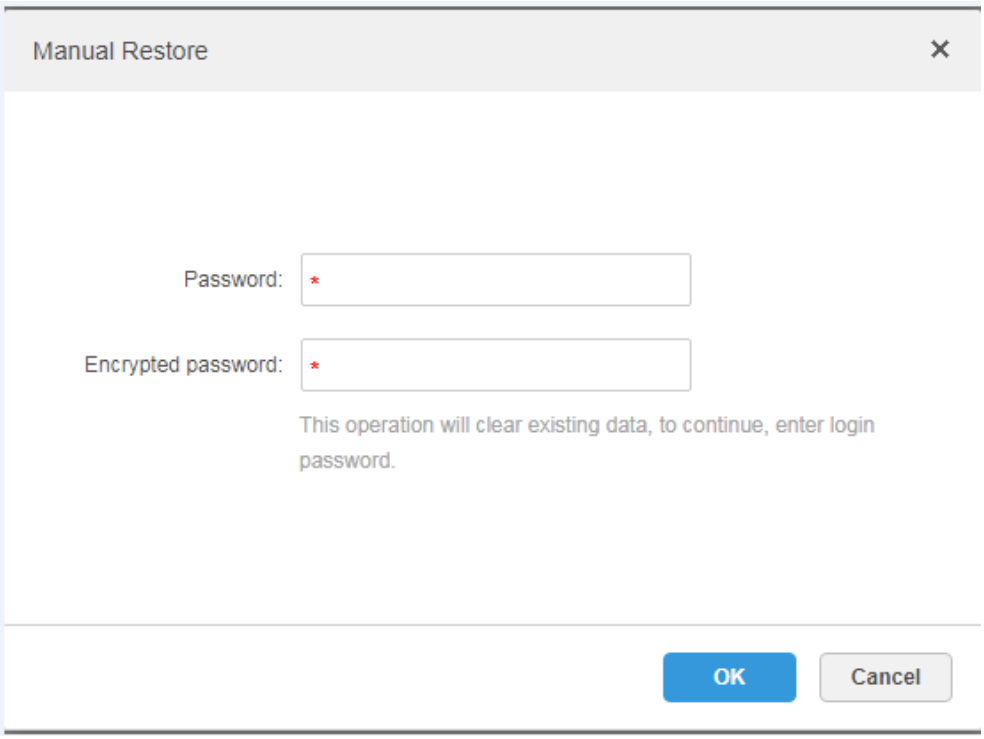
Figure 4-106



Step 3 Click “Browse”, select file and then click “OK”.

Step 4 Enter administrator “Login Password” and backup file “Encrypted Password”. See Figure 4-107.

Figure 4-107



Step 5 Click “OK”.

The data is being restored; it will display the restoration percentage via progress bar. The system will start again after it is completed.

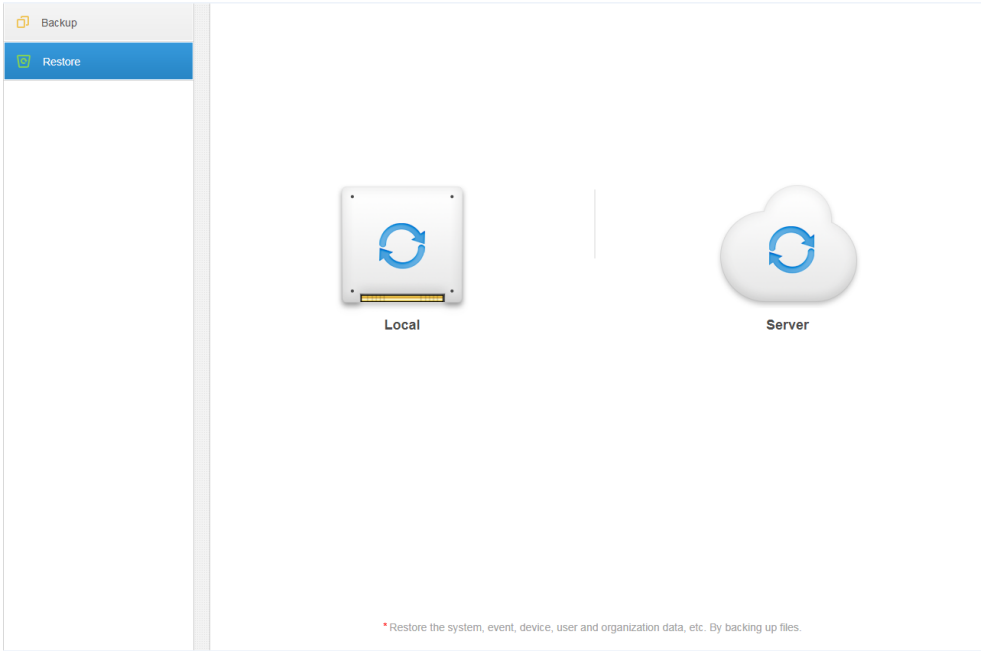
Server

It selects to restore the data from the backup file on the server side. The precondition is that it needs to enable the auto backup function, the server end backs up the database according to the set period and form backup file.

Step 1 Select “Restore” tab.

The system enters the interface of “System Restore”. See Figure 4-108.

Figure 4-108



Step 2 Click ‘Server” and click from the list and select the file which needs to be restored.

Step 3 Enter admin password, click “OK” and restore.

The system will restart after the data is successfully restored.

4.15.3 Log

The system supports inquiring management configuring log, client setting config and system log. It can filtrate type, select period and search via key word during query. It can inquire log export as well (it is PDF by default).

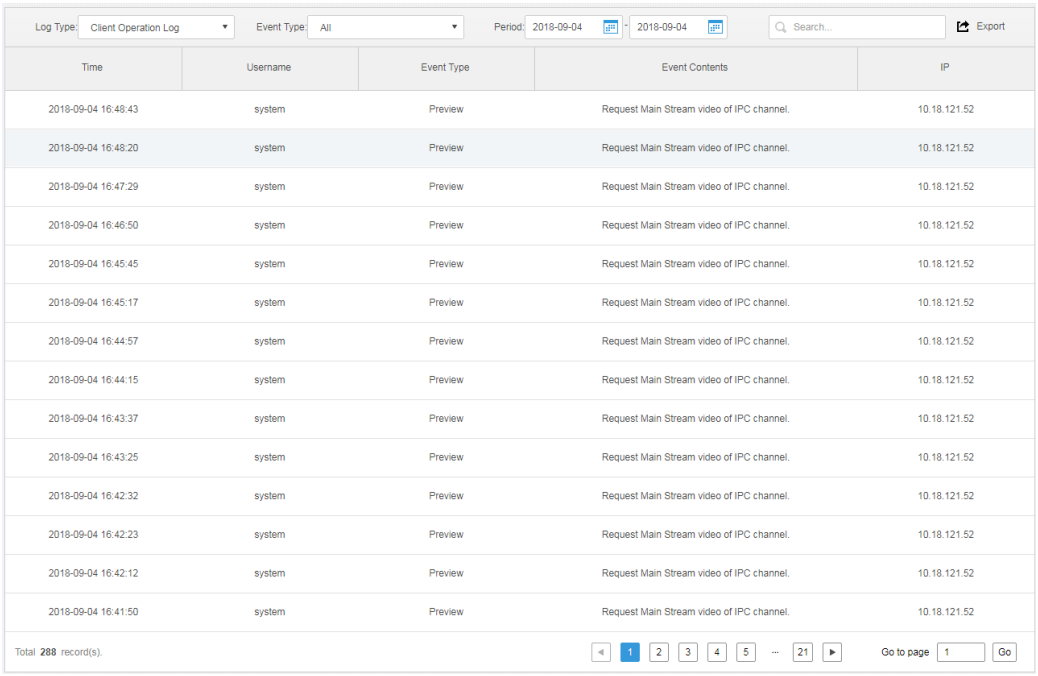
Take “Management Configuring Log” for an example.

Step 1 Click and select “Log” on the “New Tab” interface.

Step 2 Select “Log Type”, “Event Type” or “Query time”.

The system displays query results; it will display the total records on the lower left corner. See Figure 4-109.

Figure 4-109



Step 3 Click “Export” and export log info.

Step 4 Log exports results to check, the currently exported log package is displayed in the lower left corner of the browser, and you can also check it in the download section of your browser.

Step 5 Check log final record results. See Figure 4-110.

Figure 4-110

Time	Username	Event Type	Event Contents	IP
2018-09-04 16:48:43	system	Preview	Request Main Stream video of IPC channel.	10.18.121.52
2018-09-04 16:48:20	system	Preview	Request Main Stream video of IPC channel.	10.18.121.52
2018-09-04 16:47:29	system	Preview	Request Main Stream video of IPC channel.	10.18.121.52
2018-09-04 16:46:50	system	Preview	Request Main Stream video of IPC channel.	10.18.121.52
2018-09-04 16:45:45	system	Preview	Request Main Stream video of IPC channel.	10.18.121.52
2018-09-04 16:45:17	system	Preview	Request Main Stream video of IPC channel.	10.18.121.52
2018-09-04	system	Preview	Request Main Stream video of	10.18.121.52

4.15.4 System Dashboard

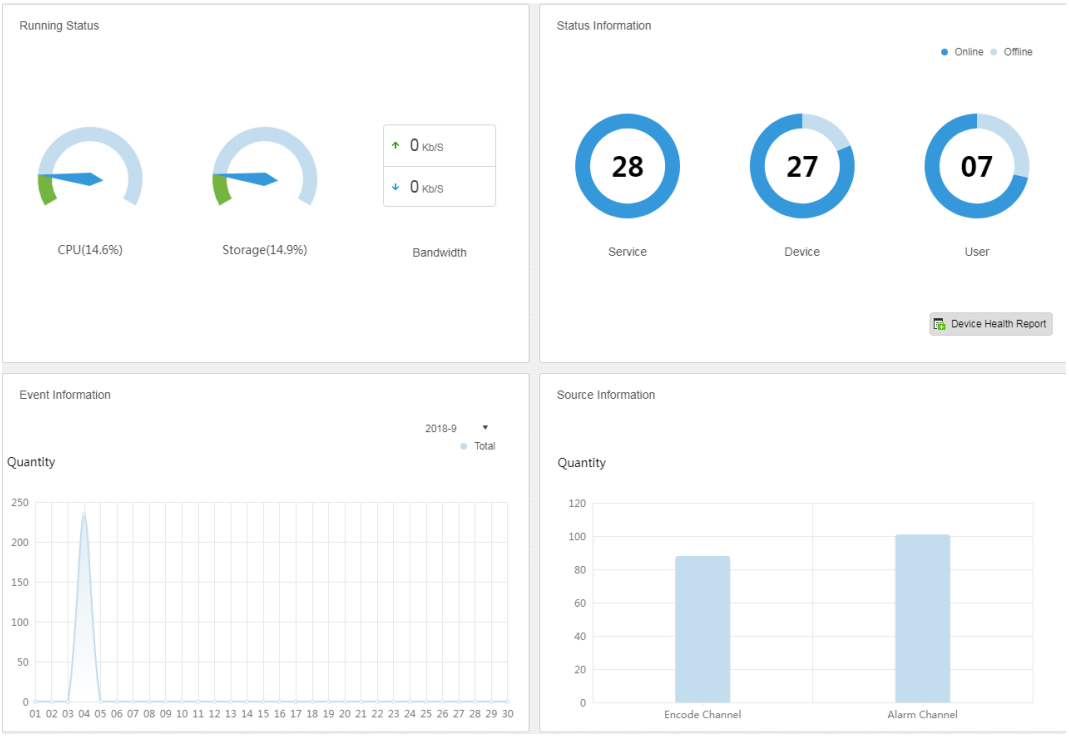
DSS management end supports function of inquiring system operation and maintenance statistics, which is to know the system running situation in time.

4.15.4.1 Overview

Step 1 Click and select “System Dashboard” on the interface of “New Tab”.

The system displays the interface of “Dashboard”. See Figure 4-111.

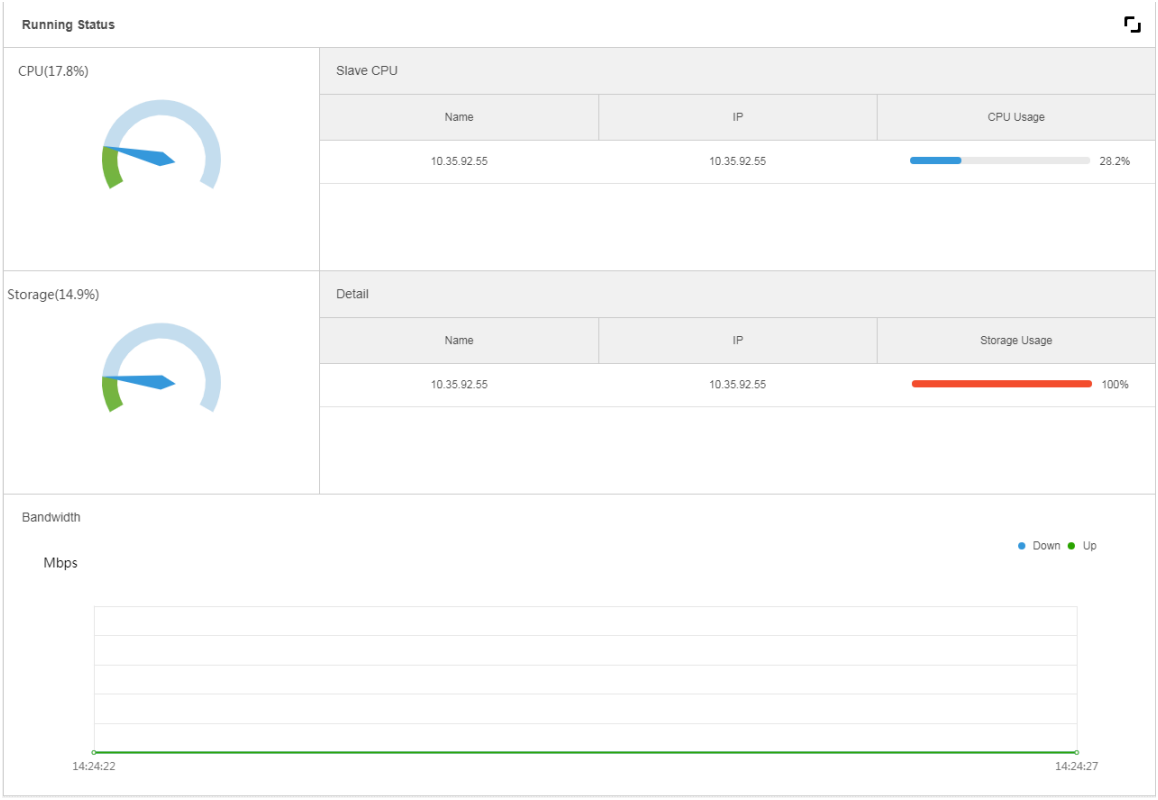
Figure 4-111



4.15.4.2 Running Status

Check CPU, storage, bandwidth and so on; click “Running Status” or the icon below to jump to the detail interface. See Figure 4-112.

Figure 4-112



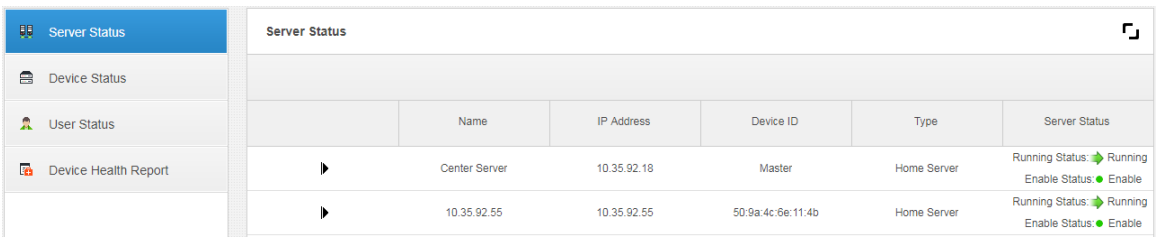
4.15.4.3 Status Information

Check server, device, user online/offline status statistics, click “Status Information” or the icon below to jump to the detailed interface.

Service Status Information

Click on the “Service Status” interface, and then the interface displays service details. See Figure 4-113.

Figure 4-113

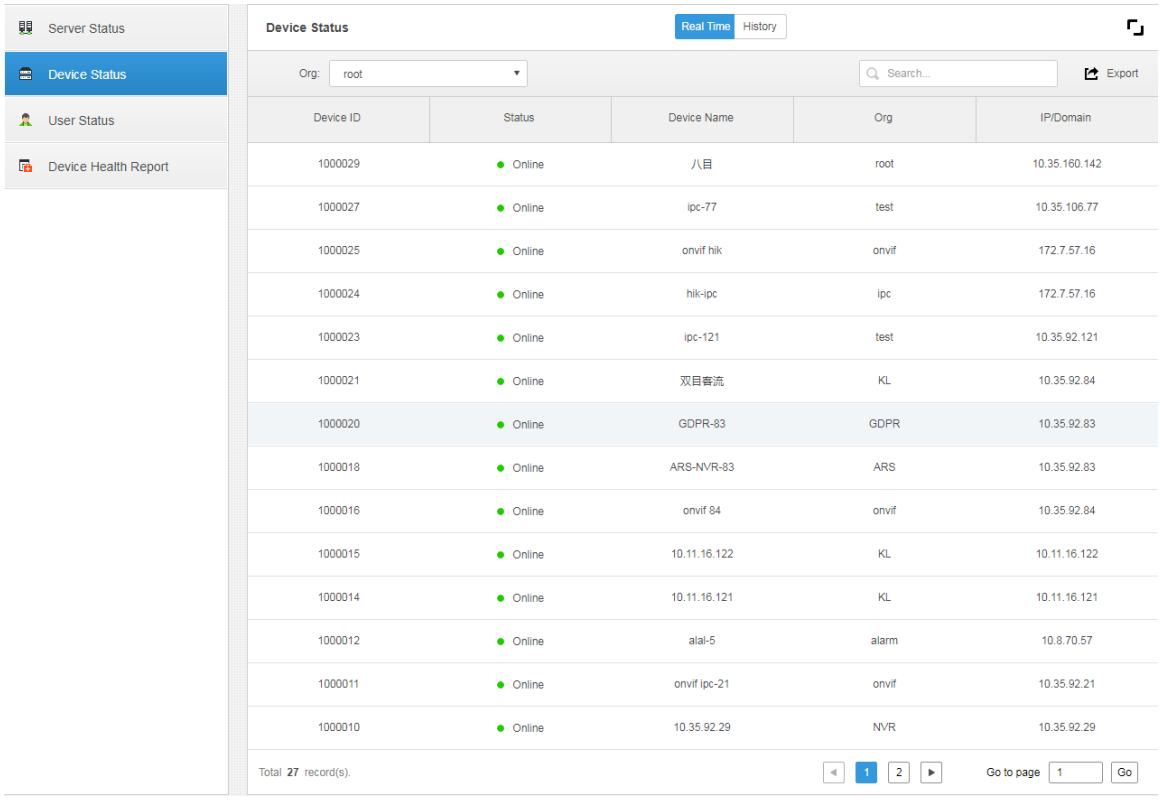


Device Status Information

Step 1 Click the tab of “Device Status”.

The system will display device real-time status by default. See Figure 4-114.

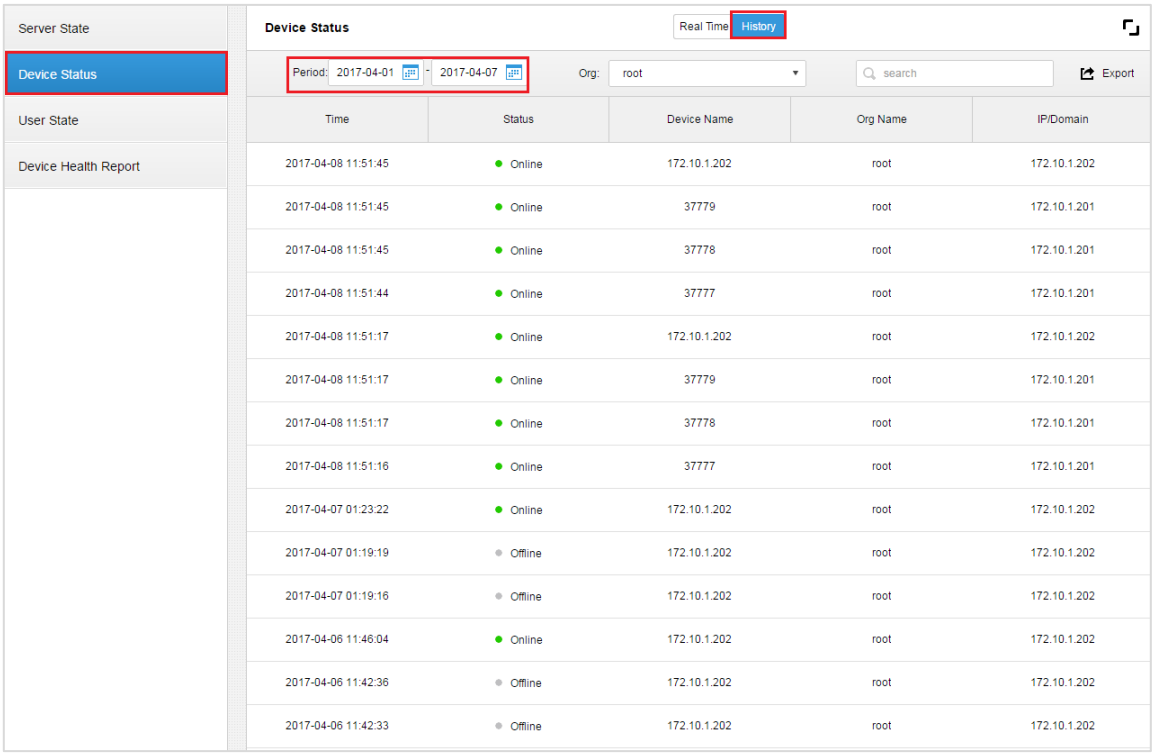
Figure 4-114



Step 2 Check device status.

- Click the “Real Time” tab on the device status information interface, check device realtime status info.
- Click the “History” tab on the device status information interface, check device history status info. See Figure 4-115.

Figure 4-115



Step 3 Click “Export”

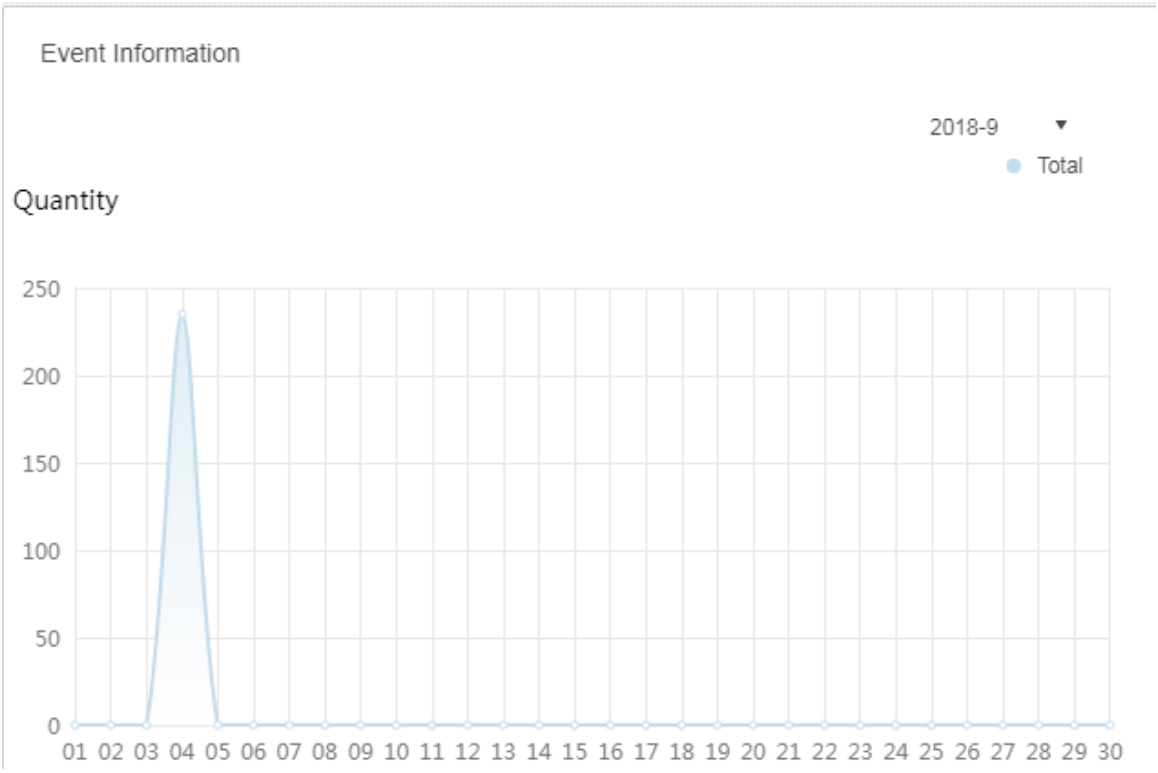
It exports device realtime status information (PDF format).

Click “User Status”, “Device Health Report” tab to check corresponding details.

4.15.4.4 Event Information

It is to check total number of alarm events and processed events according to month. See Figure 4-116.

Figure 4-116

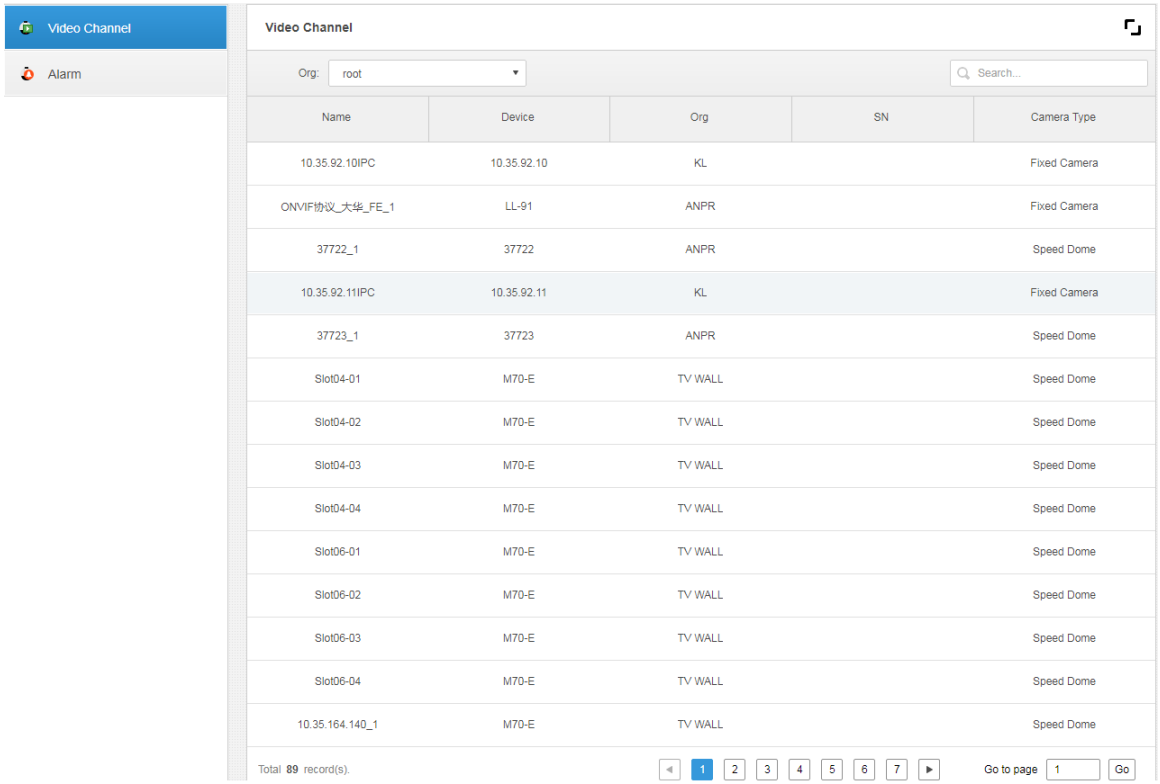


4.15.4.5 Source Information

It is to check the statistics of encoding channel and alarm channel, click “Source Information” or the icon below to jump to the detailed interface.

- Check video channel details. See Figure 4-117.

Figure 4-117



- Click “Alarm” tab to check the details of alarm channel.

5 Client Functions

NOTE

The client includes PC and cellphone App. Here we use operation on the PC to continue.

5.1 Installation and Login of the Client

5.1.1 PC Requirements

To install the DSS Client, the PC shall meet the requirements as shown in Table 5-1.

Table 5-1

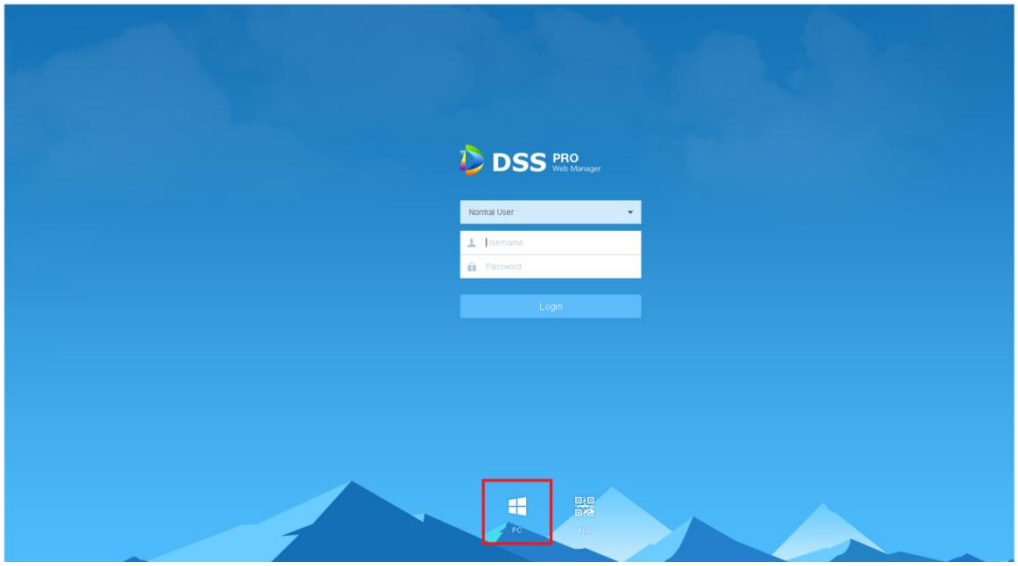
Parameters	Note
Recommended Requirements	● CPU: i5-6500 ● Main frequency:3.20GHz ● Memory:8GB ● Graphics:Inter HD Graphics 530 ● Network adapter:1Gbps ● HDD Type:HDD 1T ● DSS client installation space:200GB
Min. Requirements.	● CPU:i3-2120 ● Memory:4GB ● Graphics:Inter(R) Sandbridge Desktop Gra ● Network adapter:1Gbps ● HDD Type:HDD 300GB ● DSS client installation space:100GB

5.1.2 Download and Installation

5.1.2.1 Installation on PC

Step 1 Input IP address of DSS on the browser and then click 【Enter】 button. The Login interface is displayed. See Figure 5-1.

Figure 5-1



Step 2 Click to download the client.

System pops up the “File Downloads” dialogue box.

Step 3 Click “Save” to download and save the DSS client software on the PC.

Step 4 Double click the client installation applications to install.

Figure 5-2

Step 5 Check the box to agree DSS agreement and then click Next to continue.

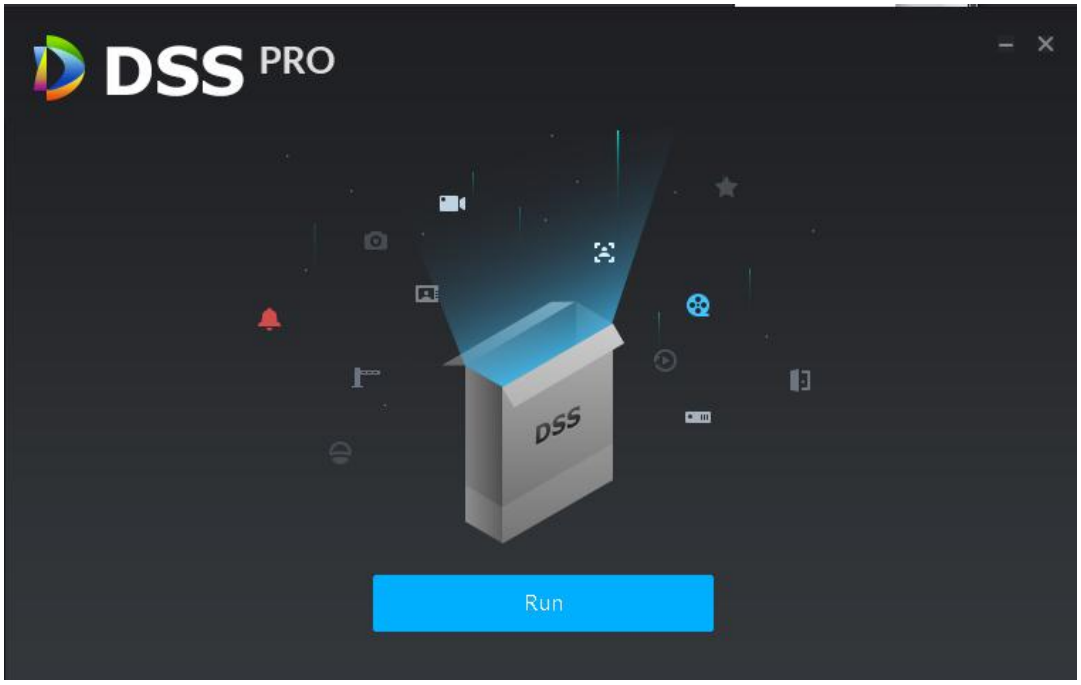
Step 6 Select installation path. See Figure 5-3.

Figure 5-3

Step 7 Click Install to install the client.

System displays installation process. It takes 3 to 5 minutes to complete. Please be patient. The complete interface is shown as in Figure 5-4.

Figure 5-4



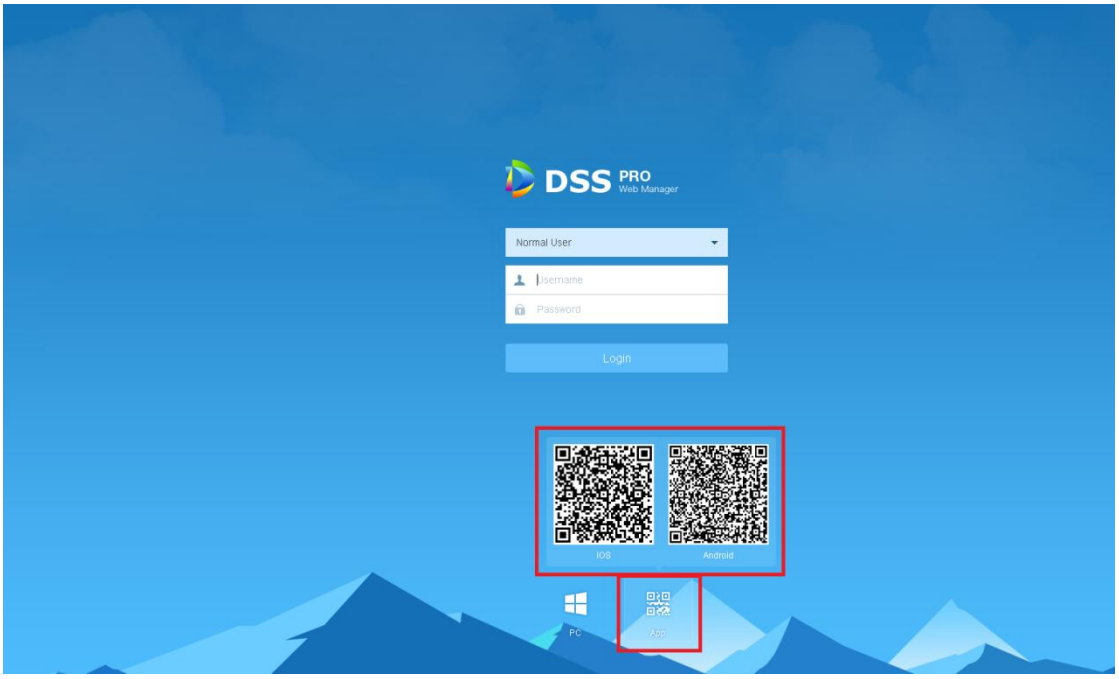
Step 8 Click Run to run the client.

5.1.2.2 Cellphone App

Step 1 Input IP address of DSS on the browser and then click 【Enter】 button.

Step 2 Click to view cellphone App QR code. Now it supports iOS and Android.

Figure 5-5



Step 3 Scan the QR code and then download the cellphone App.

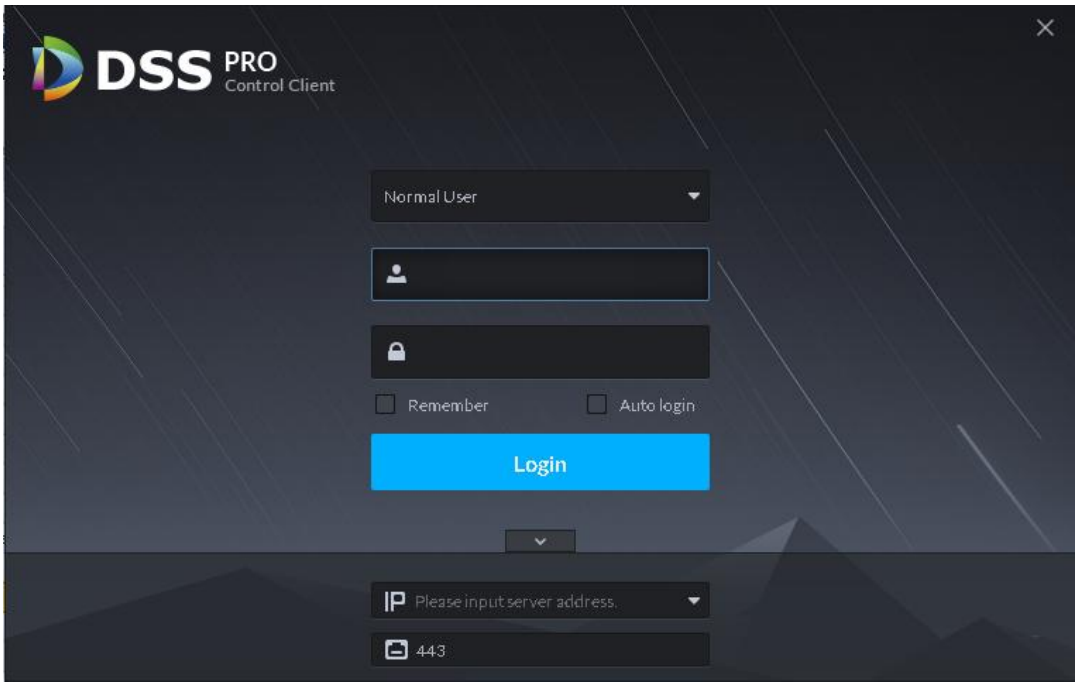
5.1.3 Login Client

Step 1 Double click icon

on the desktop.

The client login interface is displayed. See Figure 5-6.

Figure 5-6



Step 2 Enter “User Name” and “Password”, “Server IP” and “Port”. “Server IP” means the IP address of the DSS platform Manager, while “Port” defaults to “443”

Step 3 Click “Login”.

The Live view interface is displayed by default. See Figure 5-7.

Figure 5-7

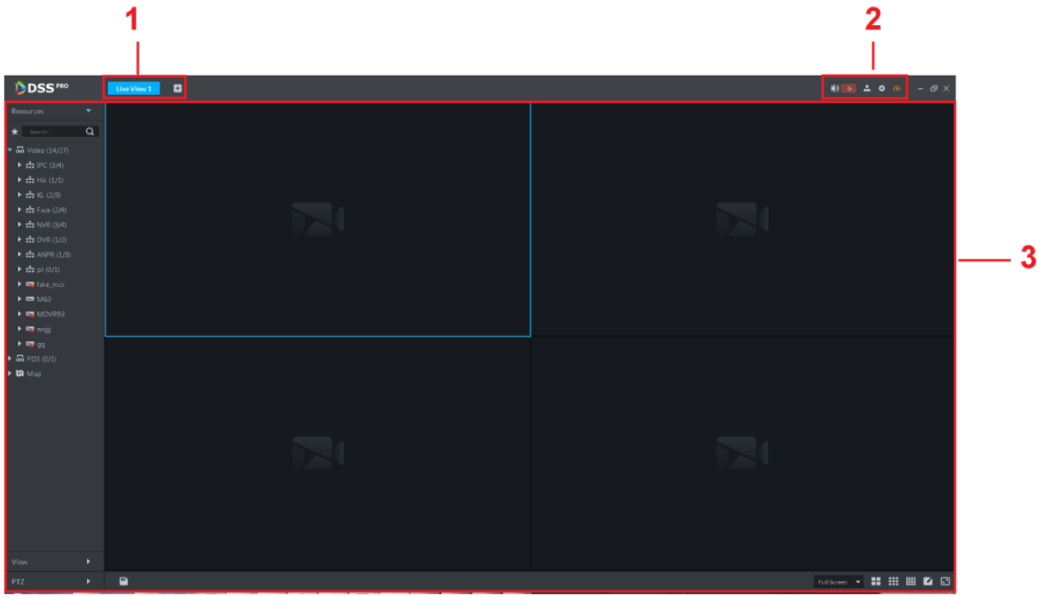


Table 5-2

SN	Name	Function
1	Tab	It displays all valid tab. Click to open the desired module.

SN	Name	Function
2	System operation pane	Refer to the following contents for icon definition. ● : Open/close alarm audio. ● 0: It displays alarm amount. Click an alarm; you can go to Event center interface. ● : User information: click the icon and then select the corresponding function, you can login platform manager, modify password, lock client, view help file, and logout user. ◇ Select platform IP address, system goes to platform manager login interface. ◇ Select Modify password, you can change user password. ◇ Select Lock Client, it is to lock the system, you cannot operate on the client. Input the login password again to unlock. ◇ Select About, it is to view version information, released date. ◇ Select Logout, it is to logout the system. System goes back to the client login interface. ● : Local config. It is to set general, video, playback, snapshot, record, alarm shortcut settings. Refer to chapter 5.2 Local configuration for detailed information. ● : It is to view system status. It includes network status, CPU status, and memory status.
3	Operation pane	It is to operate the functions.

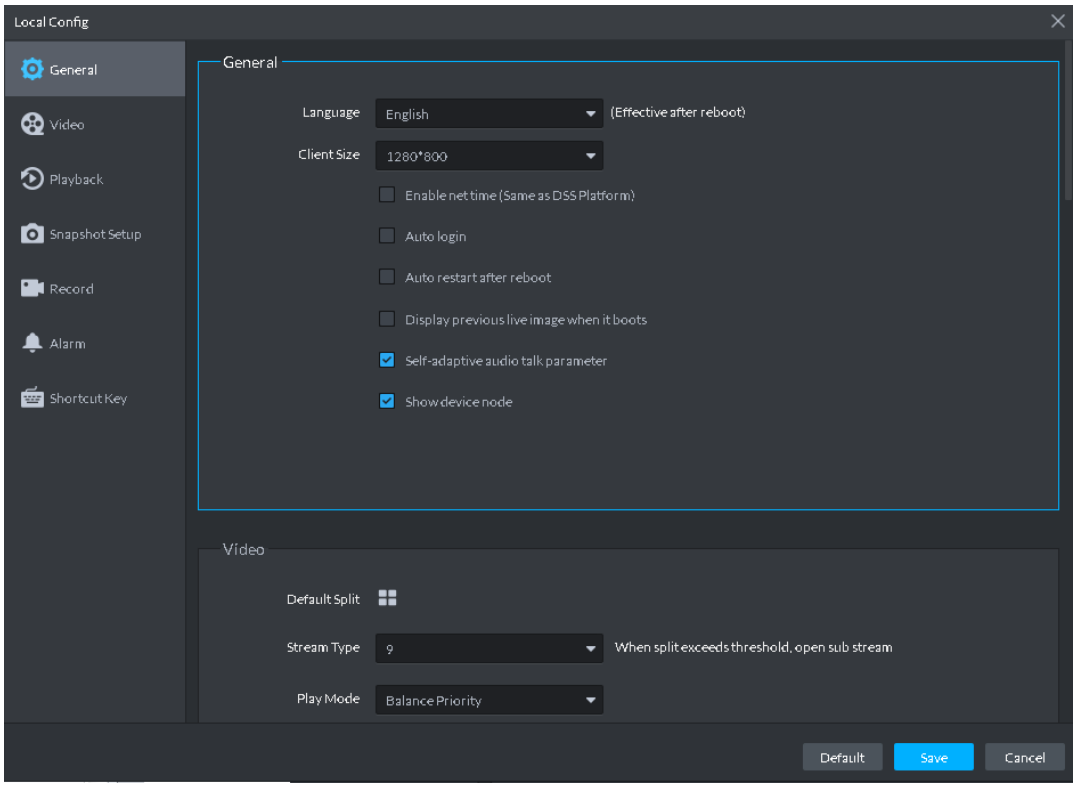
5.2 Local Configuration

After logging into the client for the first time, you need to configure the system parameters. It includes General, Video, Playback, Snapshot, Record, Alarm and the Shortcut Key.

Step 1 Click at the top right corner on the Homepage.

The General interface is displayed. See Figure 5-8.

Figure 5-8



Step 2 Refer to Table 5-3 to set parameters.

Table 5-3

Parameters	Note
Language	Choose the language for the interface. It includes Simplified Chinese, English, etc.
Client size	It is to set client display size.
Enable net time	If checked, the client starts to synchronize network time with the server. It is to complete time synchronization.
Auto Login	If checked, auto login is allowed when Client starts running.
Auto Reboot	If checked, auto reboot of the Client is allowed when the PC power is on.
Display Previous live Image when it boots	If checked, system displays the last Live video automatically after rebooting the client.
Self-adaptive Audio Talk Parameter	If checked, the system will adapt to “Sampling Frequency”, “Sampling Bit”, and “Audio Format” to the device automatically during audio talk.

Parameters	Note
Show Device Node	Check the box, system displays device node.

Step 3 Click Video to set parameters.

The Video interface is shown as in Figure 5-9. Refer to Table 5-4 to set parameters.

Figure 5-9

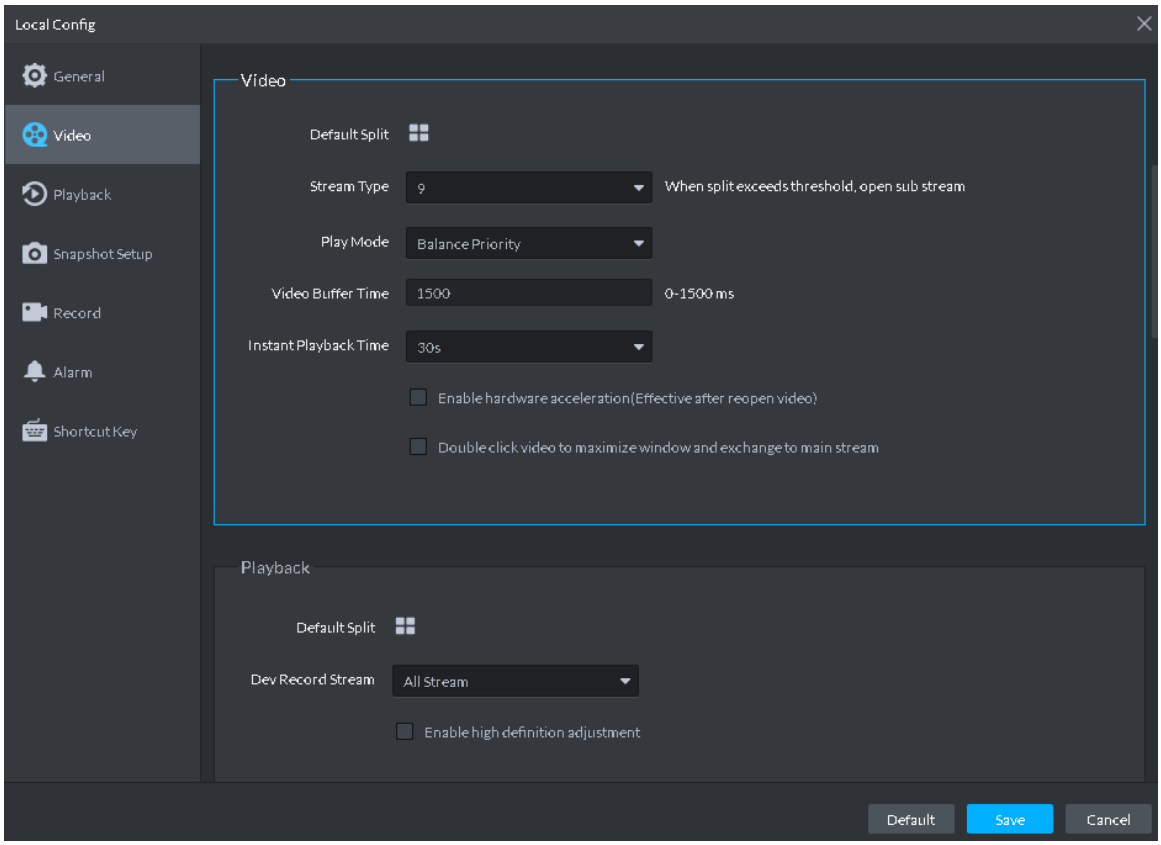


Table 5-4

Parameters	Note
Default Split	Set split mode of the video window.
Stream type	Defines bit stream type for video transmission. With main bit stream as default, the auxiliary bit stream will be used when number of window splits is greater than the value selected here.
Play Mode	Play mode to be selected as required, including “Real Time Priority”, “Fluency Priority”, “Balance Priority”, as well as user-defined modes.
Video buffer time	It is to set video buffer time. It is only valid when play mode is customized.
Instant playback time	Select instant playback time and then click Instant playback on the Live view interface, you can view the record of current period.

Parameters	Note
Enable hardware acceleration (effective after reopen the video)	Check the box to enable the function. It is to use hardware module to enhance acceleration features.
Double click video to maximize window and exchange to main stream	Check the box to enable the function.

Step 4 Click Playback to set parameters.

The playback interface is shown as in Figure 5-10. Refer to Table 5-5 to set parameters.

Figure 5-10

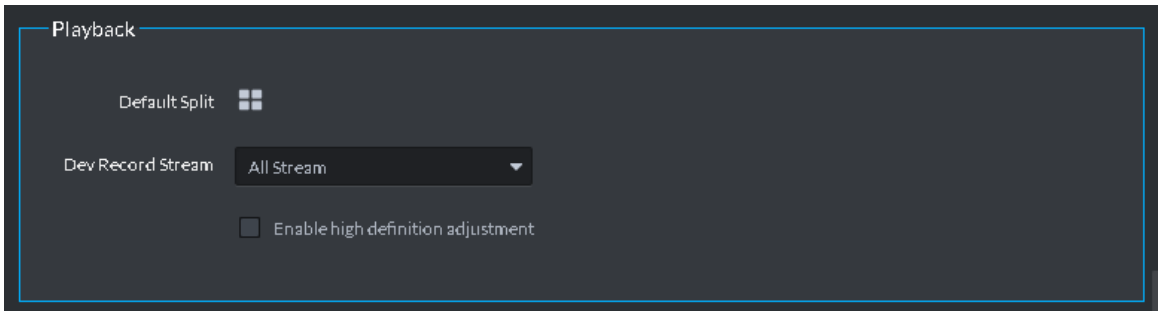


Table 5-5

Parameters	Note
Default Split	Set default split mode of the playback window.
Device record stream	It is to select record playback bit stream.
Enable high definition adjustment	Check the box to enable the function. In high definition, big bit stream playback mode, system reserves I frames only to guarantee video fluency and reduce high decoding pressure.

Step 5 Click Snapshot to set parameters.

The Snapshot interface is shown as in Figure 5-11. Refer to Table 5-6 to set parameters.

Figure 5-11

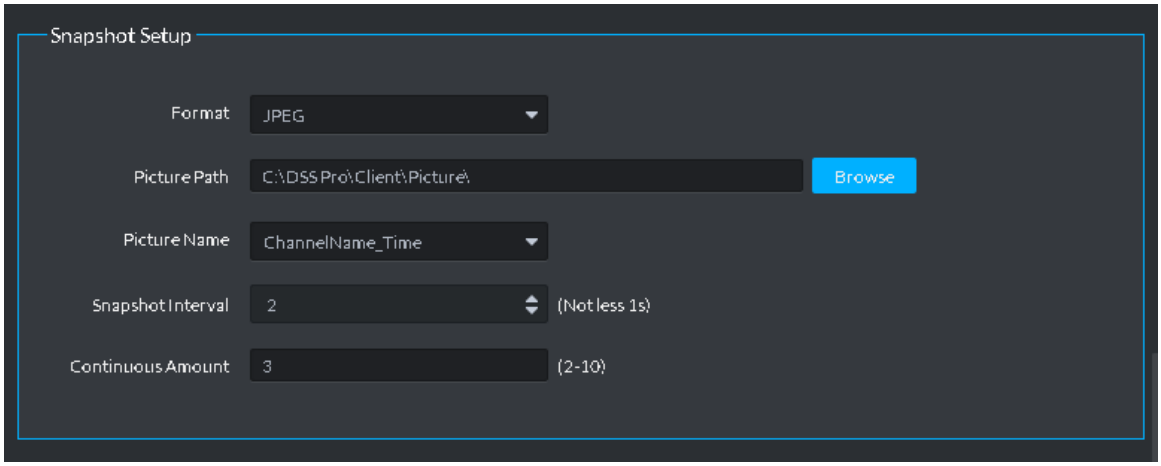


Table 5-6

Parameters	Note
Format	It is to set snapshot image format.
Picture path	It is to set snapshot storage path. The default path: C:\DSS Pro\Client\Picture\.
Picture name	It is to select picture name rule.
Snapshot interval	It is to set snapshot interval. System snapshot once after the specified period.
Continuous amount	It is to snapshot amount at each time.

Step 6 Click Record to set parameters.

The Record interface is shown as in Figure 5-12. Refer to Table 5-7 to set parameters.

Figure 5-12

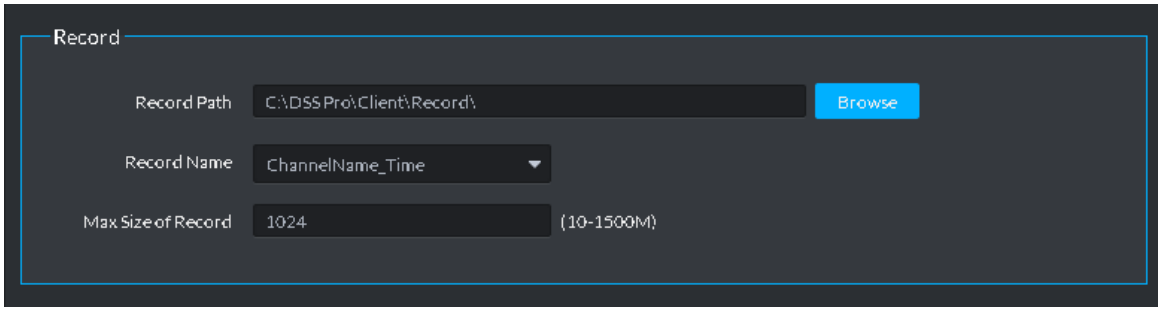


Table 5-7

Parameters	Note
Record path	It is to set record storage path. The default path: C:\DSS Pro\Client\Record\.
Record name	It is to set record file name rule.
Max. record size.	It is to set record file size.

Step 7 Click Alarm to set parameters.

The Alarm interface is shown as in Figure 5-13. Refer to Table 5-8 to set parameters.

Figure 5-13

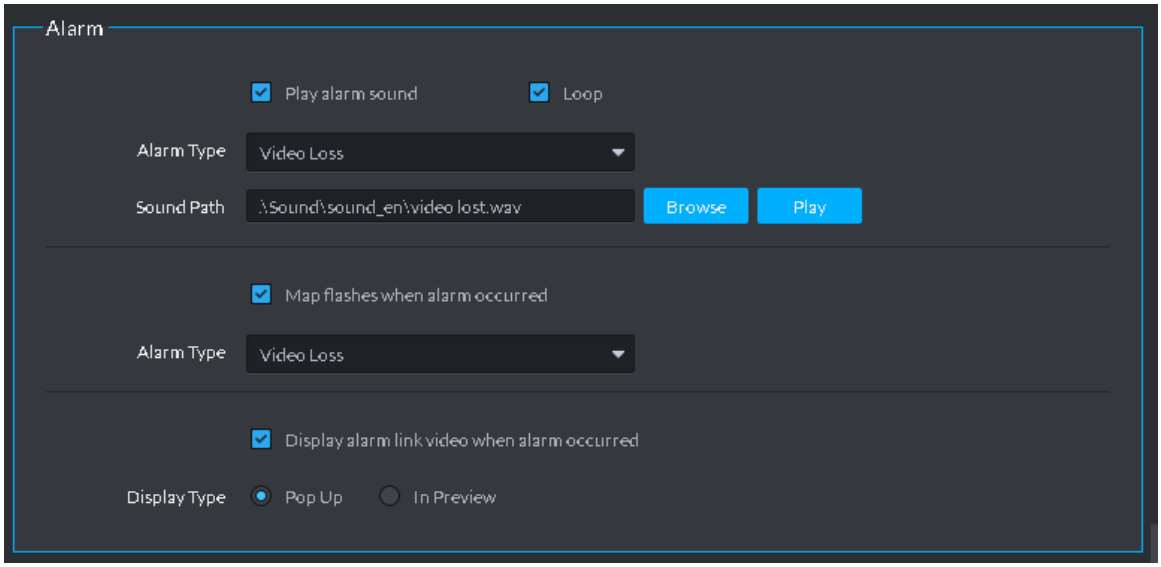


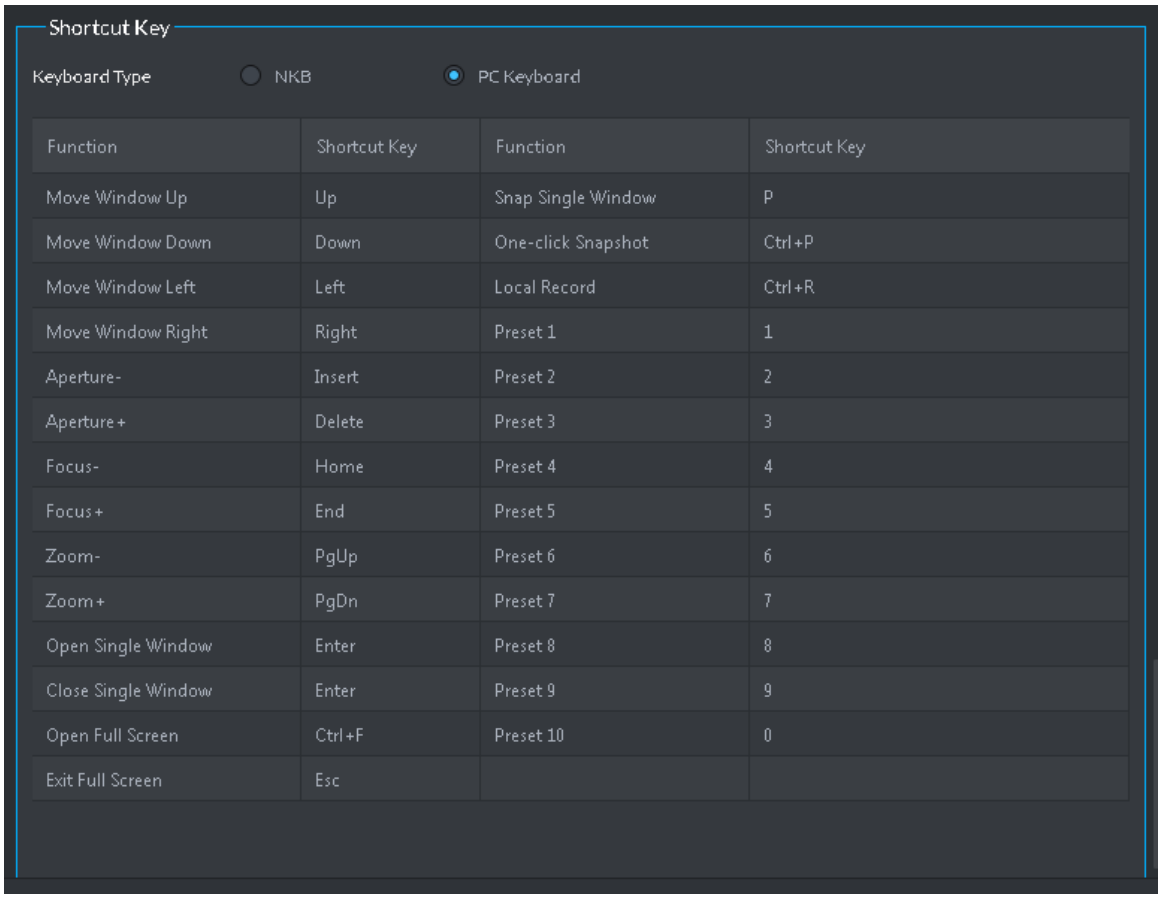
Table 5-8

Parameters	Note
Play alarm sound	Check the box, system generates a sound when an alarm occurs.
Loop	Check the box; system plays alarm sound repeatedly when an alarm occurs. **NOTE** This item is only valid when Play alarm sound function is enabled.
Alarm type	It is to set alarm type. System can play sound when corresponding alarm occurs. **NOTE** This item is only valid when Play alarm sound function is enabled.
Sound path	It is to select alarm audio file path.
Map flashes when alarm occurred	Check the box and then select alarm type. When the corresponding alarm occurs, the device on the emap can flash.
Display alarm link video when alarm occurred	Check the box, system automatically opens linkage video when an alarm occurs.
Display type	System automatically opens linkage video when an alarm occurs. You can view on the pop-up window or on the preview interface.

Step 8 Click Shortcut key to set parameters.

The Shortcut key interface is shown as in Figure 5-14.

Figure 5-14



Step 9 Click Save.

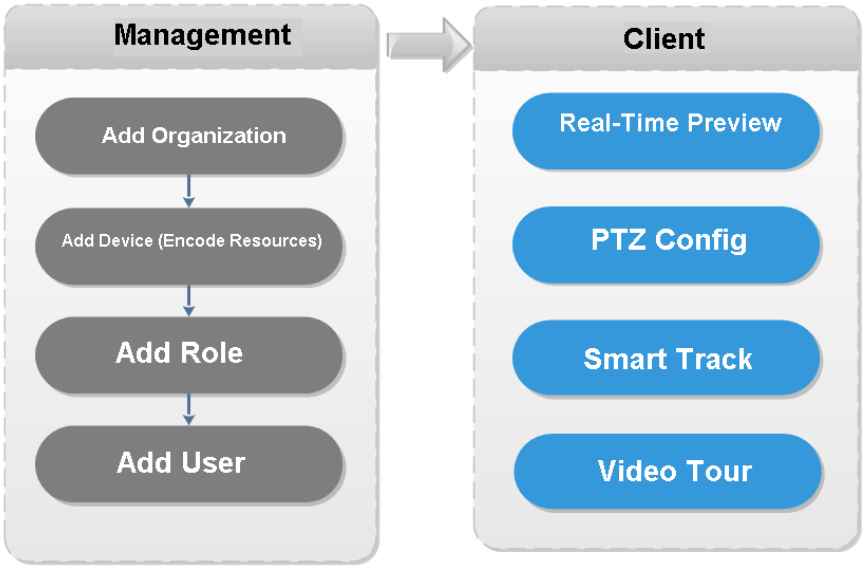
5.3 Video Preview

5.3.1 Preparations

Before the operation, refer to chapter 4.6 Adding device to add decode device on the manager.

Refer to Figure 5-15 for video preview flows information.

Figure 5-15



5.3.2 Real-Time Preview

5.3.2.1 Real-Time Video Preview

Click + and then on the New tab interface, select Live View, system displays Live view interface by default.

Select channel from the device list on the left side of the Live view interface, and double click or drag it to video window. If you double click device, then all channels of the device will be opened.

Real-time monitoring interface is displayed in the video window. See Figure 5-16. Refer to Table 5-9 to set parameters.

Figure 5-16

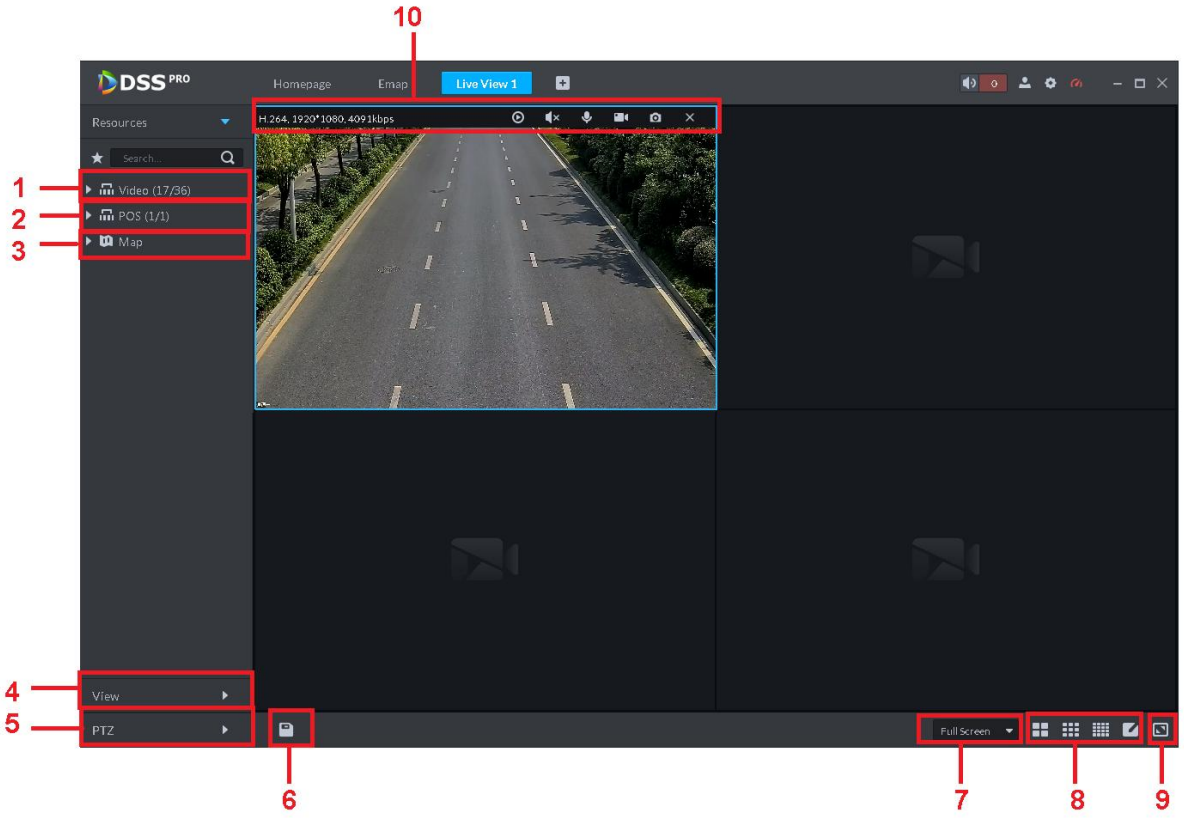


Table 5-9

SN	Name	Function
1	Favorites and Device Tree Search	• From Local config> General, if you enable Show device node, device tree displays all channels of current device. If you cancel the box, system display all channels of all device. • Search is supported by input device name or channel name in Search.. here. • : Add, Delete or Rename Favorite. Favorite Tour supported.
2	POS	It is to open POS and its corresponding video channel on the Live view interface.
3	Map Resource	Map can be opened in preview window, both GIS map and Raster map.
4	View	• Live video window can be saved as View. Three-level directory is adopted for view, with level one as root node, level two for group and level three for view. Video Tour is supported from root node and group node, with tour intervals selected from 10s, 30s, 1min, 2min, 5min and 10min. Maximum of 100 views can be created.
5	PTZ	More info about PTZ of PTZ camera, refer to chapter 5.3.3 PTZ".
6	Save view	Click to save current video window as a view.

SN	Name	Function
7	Display mode	• Aspect ratio of the video window, selected from two modes for video play: actual scale and fit in window.
8	Window Split Mode	• Select from modes among 1 to 64 to set window split mode, or click to define split mode.
9	Full Screen	• Switch the video window to “full screen” mode. To exit “full screen”, press the Esc key, or right click to select “exit full screen”.
10	Bit Stream and Quick Start	It is to display encode format, bit stream information and quick start. Refer to chapter 5.3.2.3 Window Shortcut Menu for detailed information.

5.3.2.2 Right –Click Shortcut Menu

On the Preview video window, right click mouse, the interface is shown as in Figure 5-17. Refer to Table 5-10 to set parameters.

Figure 5-17

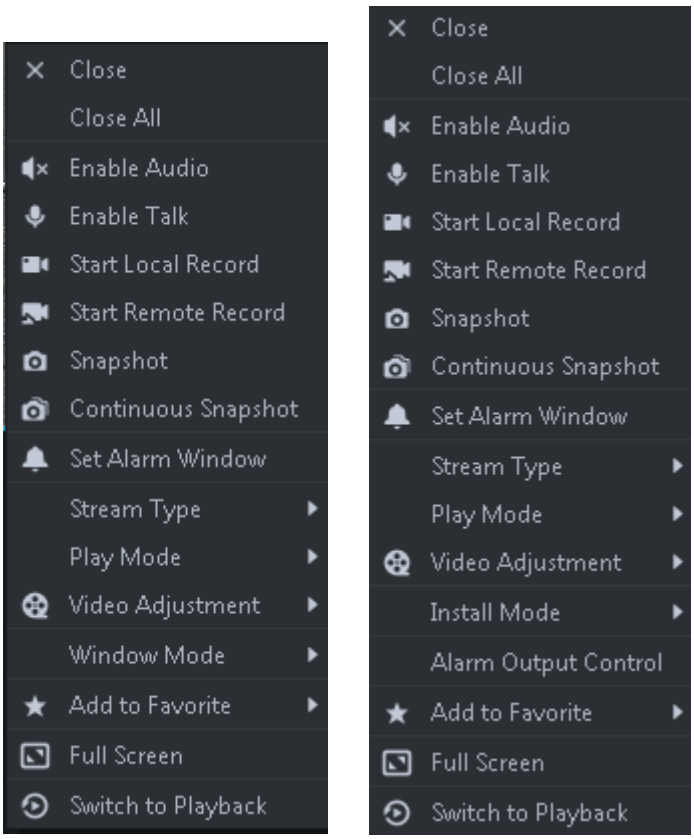


Table 5-10

Parameters	Note
Close Video	Close active video window.
Close All Videos	Close all video windows.

Parameters	Note
Audio Enable	Same as , to enable or disable camera audio.
Audio Talk Enable	Same as , to enable or disable audio talk of corresponding device. Check “Self-adaptive Audio Talk Parameters” from “Local Config > General”; when audio talk is on, it will automatically adapt to various parameters without showing a pop-up box.
Start Local Record	Same as , to record audio/video of the active video window and save them in local PC.
Start remote record	Click to start remote record. The item becomes Stop remote record. Click Stop remote record, system stops record. If the platform has configured video storage HDD, the record file is saved on the platform server.
Snapshot	Same as , to save image of the active video window as picture (one picture for each snapshot).
Continuous Snapshot	To save image of the active video window as picture (three snapshots each time by default).
Set Alarm Window	Turn on/off alarm output.
Switch Bit Stream	Switch among “Main stream”, “Sub stream” and “Third stream”. **NOTE** If selecting “Sub stream” or “Third stream”, you need to check “enable Sub Stream” and “enable Third Stream” in the “Bit Stream” dropdown list when adding encoder from the Manager.
Play Mode	Switch between the modes of “Real Time Priority”, “Fluency Priority”, “Balance Priority” and custom defined mode.
Video Adjustment	Perform video adjustment and video enhancement.
Installation mode	**Note** For fisheye camera only. The installation mode has three types:ceiling mount, wall mount and ground mount. Select corresponding installation mode according to the actual situation, the real-time video can automatically dewarp according to the installation mode.
Fisheye view mode	**Note** For fisheye camera only It refers to current video display mode (system supports original video mode by default.). System supports following display modes according to different installation mode. ● 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.
Split mode	It supports standard mode, 1+3 mode, 1+5 mode.
Alarm output control	It control alarm input/output.
Add To Favorites	You can add the active channel or all channels into Favorite.

Parameters	Note
Full Screen	Switch the video window to “full screen” mode. To exit “full screen”, double click video window, or right click to select “exit full screen”.
Switch to Playback	You can switch between live view interface and playback interface quickly, without going back to homepage first.

5.3.2.3 Window Shortcut Menu

Move the mouse to the video window, you can see the shortcut menu at the top right. See Figure 5-18. Refer to Table 5-11 for detailed information.

Figure 5-18

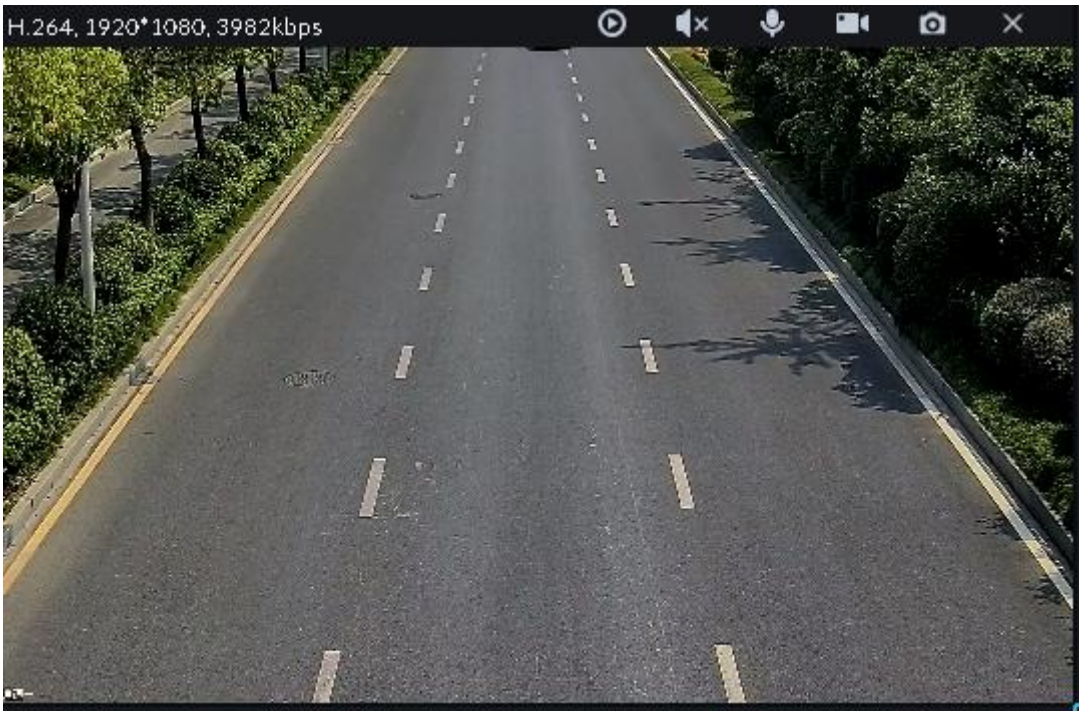


Table 5-11

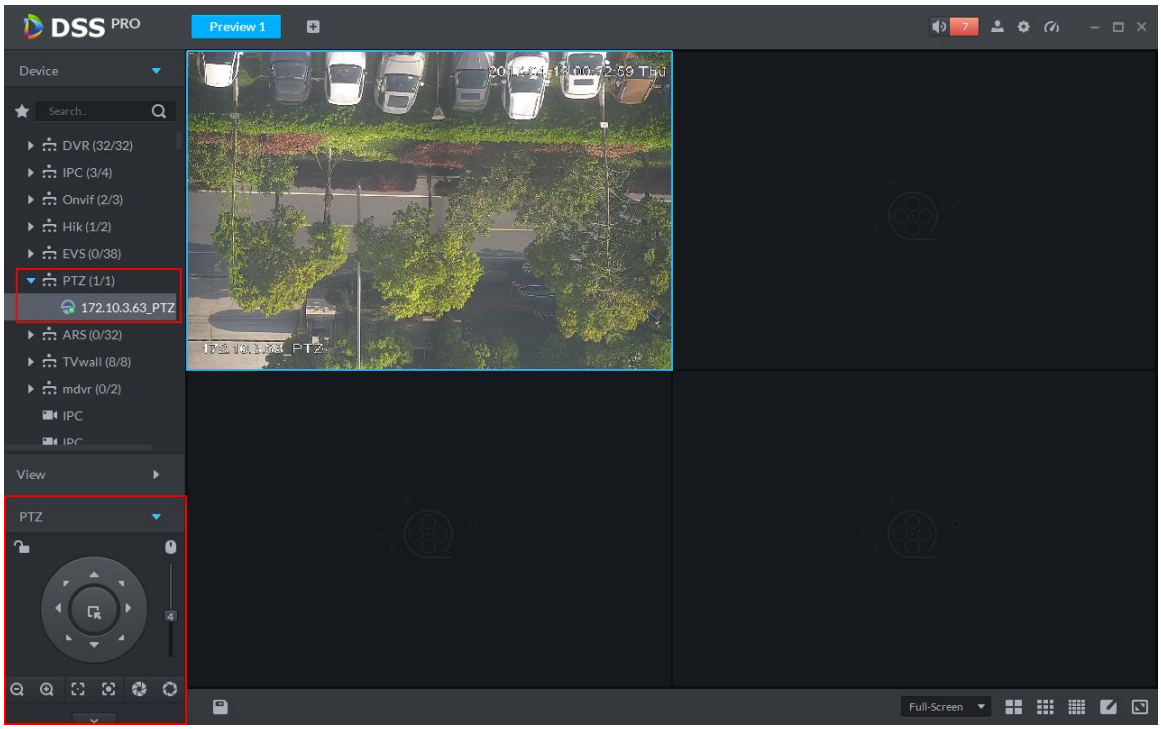
Icon	Name	Note
	Instant playback	Open/close instant playback. Go to Local config>General to set instant playback time. Make sure there is a record on the platform or the device.
	Audio	Open/close audio.
	Audio talk	Open/close bidirectional talk.
	Local record	Click it, system begins record local file and you can view the record time at the top left. Click again, system stops record and save the file on the PC.
	Snapshot	Click to snapshot once.
	Close	Click to close video.

5.3.3 PTZ

5.3.3.1 PTZ Operation Pane

Step 1 On Preview interface, open video from the PTZ camera, you can see PTZ operation pane on the left. See Figure 5-19.

Figure 5-19



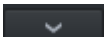
Step 2 Click  at the bottom of the interface to operate. See Figure 5-20.

Figure 5-20

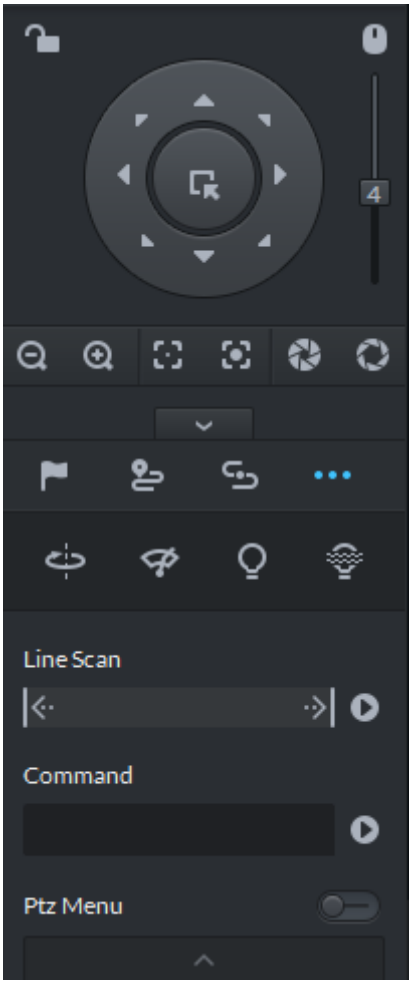


Table 5-12

Parameters	Note
	Click to lock the current PTZ. Locked status shows as . Control over PTZ varies depending on user level. ● When user of low level locks PTZ, user of high level can unlock and enable the PTZ by clicking . ● When user of high level locks PTZ, user of low level can't unlock the PTZ, unless PTZ automatically unlock itself. ● Users of the same level can unlock PTZ locked by each other. **Note** • Default time for automatically unlocking PTZ is 30s.
	• Control speed dome with mouse.
Direction Key	• Set rotation direction of PTZ, eight directions are available in total: up, down, left, right, upper left, upper right, lower left and lower right.

Parameters	Note
	• 3D Location and Partially Zoom In (for Speed Dome PTZ), to zoom in or zoom out the selected area. **Note** This function can be controlled with mouse only.
	From top to the bottom to adjust rotation speed of PTZ, to set the step size chosen from 1 to 8.
	• Zoom, to control zoom operation of speed dome.
	• Focus, to adjust focus.
	• Aperture, to adjust brightness.
	It is to set preset, tour, pattern, scan, rotation, wiper, light, IR light function, etc. Refer to chapter 5.3.3.2 PTZ settings for more information.

5.3.3.2 PTZ Settings

5.3.3.2.1 Configuring Preset

By adding “preset”, you can rotate the camera to the specified position.

Step 1 Click direction key of the PTZ to rotate the camera to the needed place.

Step 2 Click .

Step 3 Place mouse over 1 and click .

Step 4 Input preset point SN, and click .

Adding preset point completed.

To the right of , click , then camera will be rotated to the related position.

5.3.3.2.2 Configuring Tour

Set “Tour” to enable camera to go back and forth among different presets.

Note

To enable tour, at least 2 preset points are required.

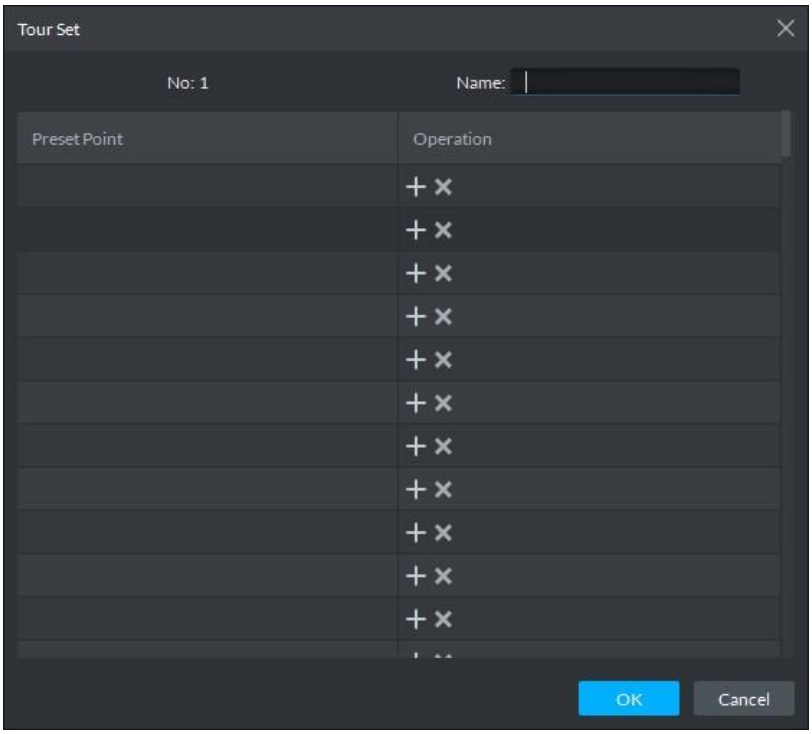
Step 1 Click .

Step 2 Place mouse over 1 and click .
New tour dialogue box pops up.

Step 3 Input “name”, and click “Operation” bar .

Choose preset points from the dropdown list on the left. See Figure 5-21.

Figure 5-21



Step 4 Click “OK”.

System prompts “Tour Saved Successfully”.

Step 5 Click “OK”.

To start tour, place mouse over 1 and click, then camera goes back and forth among the presets of “Tour 1”.

5.3.3.2.3 Pattern

Pattern is equivalent to a record process.

Step 1 Click .

Step 2 Place mouse over 1 and click , then operate 8 buttons of PTZ to set pattern.

Step 3 Click to complete pattern setup.

Step 4 Click , and the camera will rotate following the pattern settings.

5.3.3.2.4 Configuring Scan

Step 1 Click .

Step 2 Click PTZ button, and rotate PTZ toward left to a position, then click to set left boundary.

Step 3 Continue to rotate PTZ toward right to a position, and click to set right boundary.

Step 4 Click to start scan, then PTZ will rotate back and forth within the two boundaries.

5.3.3.2.5 Start/stop rotation

Click , and then click , PTZ rotate at 360° by specified speed. Click to stop camera rotation.

5.3.3.2.6 Start/stop wiper

It is to use RS485 command to control the connected peripheral device wiper on/off. Make sure the connected peripheral device supports wiper function.

Click , and then click , it is to enable wiper. After enabling wiper, click to disable.

5.3.3.2.7 Start/stop light

It is to use RS485 command to control the connected peripheral device light on/off. Make sure the connected peripheral device supports light function.

Click , and then click , it is to enable light. After enabling light, click to disable.

5.3.3.2.8 Start/stop IR light

Click , and then click , it is to enable IR light. After enabling IR light, click to disable.

5.3.3.2.9 Configuring customized commands

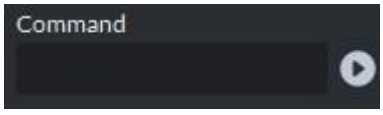
NOTE

Different devices support different customized commands. Contact the manufacture for detailed information.

Step 1 Click .

Step 2 Input command on the customized command interface. See Figure 5-22.

Figure 5-22



Step 3 Click to display the function of the customized command.

5.3.3.2.10 PTZ Menu

Step 1 Click .

The PTZ menu is shown as in Figure 5-23.

Figure 5-23

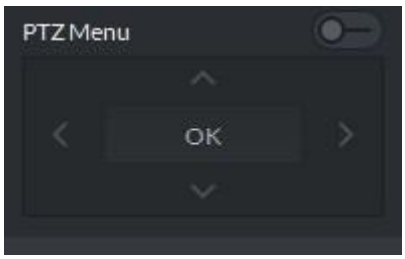


Table 5-13

Parameters	Note
/	Up/down button. Move the cursor to the corresponding item.
/	Left/right. Move the cursor to set parameters.
	Click to enable PTZ menu function. System displays main menu on the monitor window.
	Click to close PTZ menu function.
OK	It is the confirm button. It has the following functions. ● If the main menu has the sub-menu, click OK to enter the sub-menu. ● Move the cursor to Back and then click OK to go to go back to the previous menu. ● Move the cursor to Exit and then click OK to exit the menu.

Step 2 Click OK.

The monitor window displays main menu. See Figure 5-24.

Figure 5-24

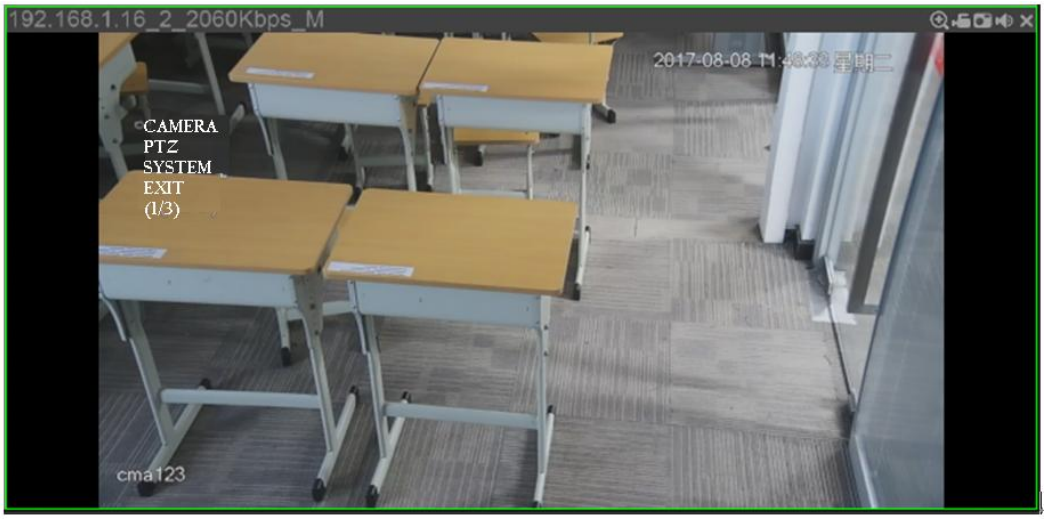


Table 5-14

Parameters	Note
Camera	Move the cursor to Camera and then click OK to enter camera settings sub-menu interface. It is to set camera parameters.It includes picture, exposure, backlight, day/night mode, focus and zoom, defog, default, etc.
PTZ	Move the cursor to PTZ and then click OK to enter PTZ sub-menu interface. It is to set PTZ functions. It includes preset, tour, scan, pattern, rotation, PTZ restart, etc.

Parameters	Note
System	Move the cursor to System and then click OK to enter system sub-menu interface. It is to set PTZ simulator, restore camera default settings, video camera software version and PTZ version.
Return	Move the cursor to the Return and then click OK, it is to go back to the previous menu.
Exit	Move the cursor to the Exit and then click OK, it is to exit PTZ menu.

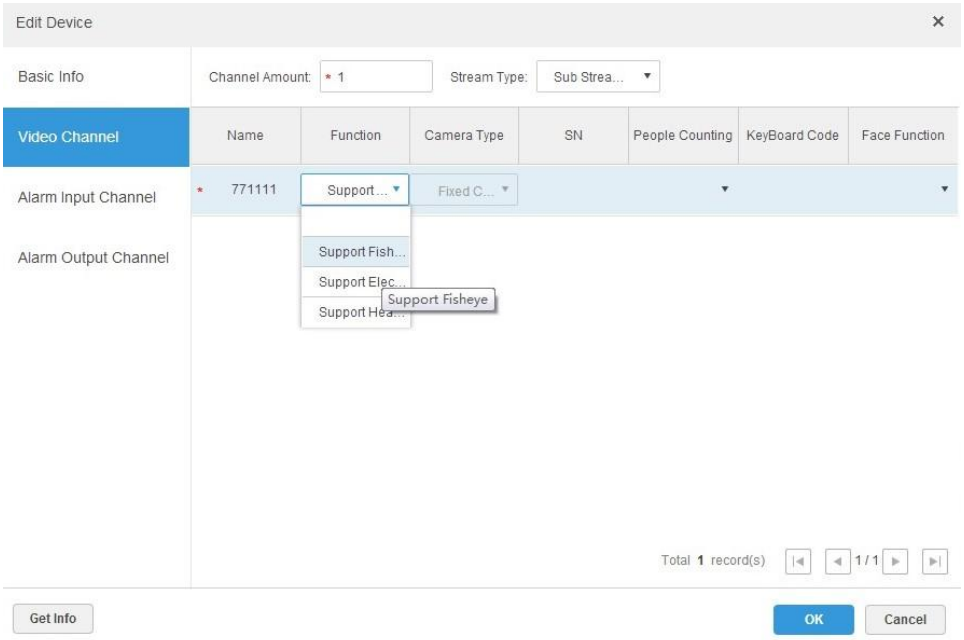
5.3.4 Smart Track

DSS Client supports smart track which links fisheye speed dome to general speed dome to better control each monitoring position.

5.3.4.1 Preparations

- Before operating smart track, go to Device manager to add fisheye device and PTZ camera first. Refer to chapter 4.6 Adding device for detailed information.
- After device is added, click , and select fisheye and general speed dome.

Figure 5-25



5.3.4.2 Adding Smart Track Settings

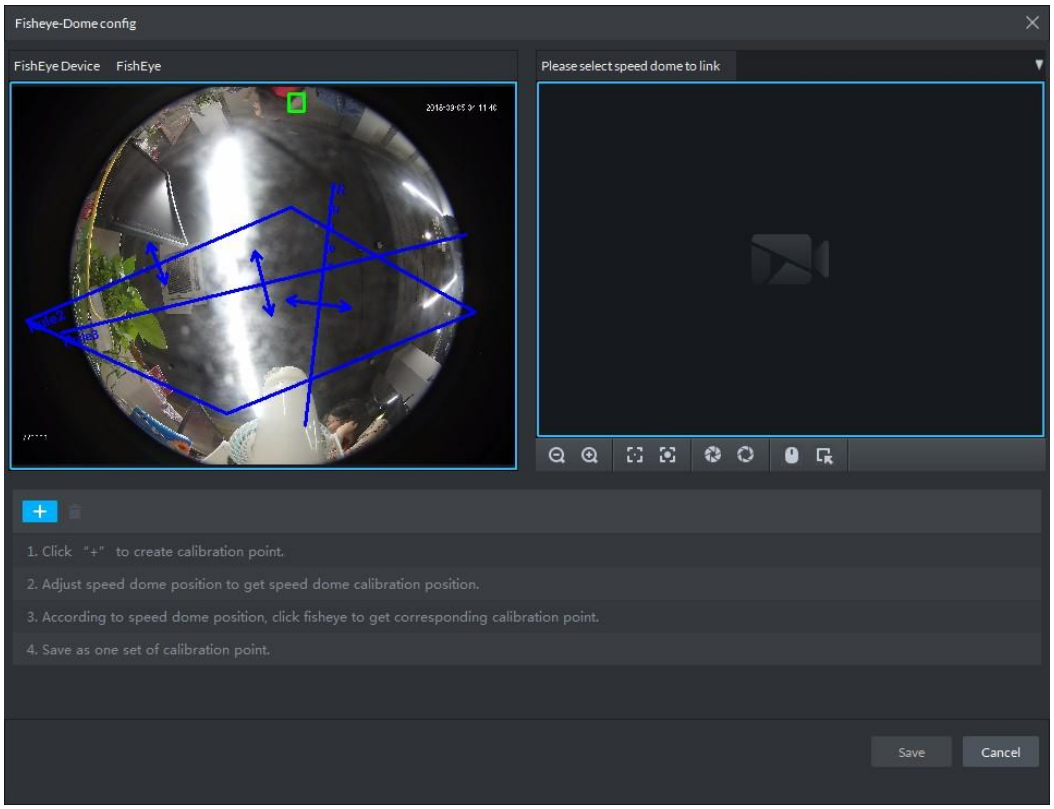
Step 1 Select the fisheye device on the device tree and then right click to select Smart track.

NOTE

If it is not the first time to use smart track function, select the fisheye device and then right click to select Smart track config.

The Smart track interface is displayed. See Figure 5-26.

Figure 5-26

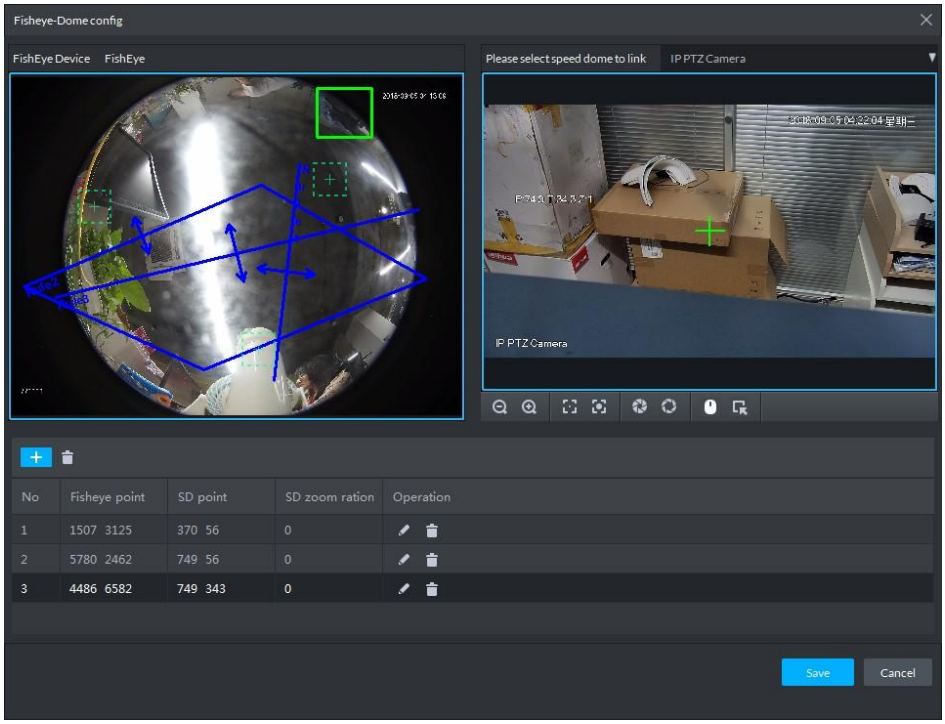


Step 2 Click ▼ after the Select linkage PTZ camera and then select a PTZ camera.

Step 3 Click + and then move the ⊕ of the fisheye on the right to select a position.

Click 🖱 on the general PTZ camera to find the position. Adjust the PTZ camera to find the position and move the PTZ to the center position (The green cross on the image). See Figure 5-27.

Figure 5-27



NOTE

- Select 3-8 mark points on fisheye camera.
- When you find mark point on the left side of general PTZ camera, click to zoom out PTZ.
- Click to 3D position, and when you click a certain point on the left side of PTZ camera, it will automatically move to the center.

Step 4 Click to save the calibration point.

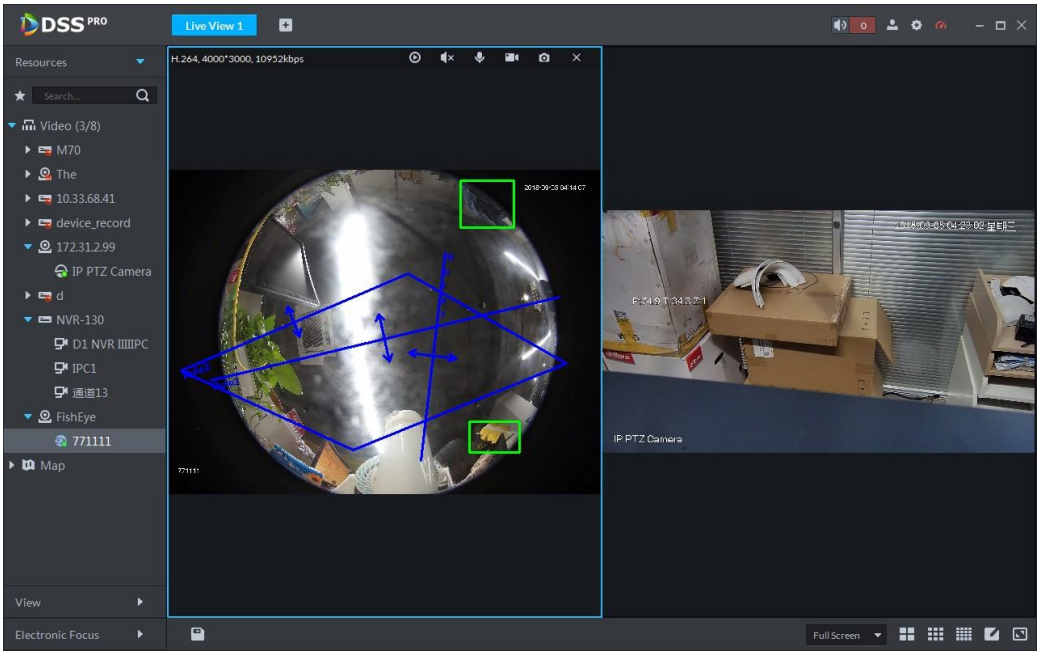
Refer to above steps to add at least three calibration points. These three points shall not be on the same straight line.

Step 5 Click Save.

5.3.4.3 Enable Smark Track Function

Step 1 Select the fisheye device on the device tree and then right click to select Smart track. See Figure 5-28.

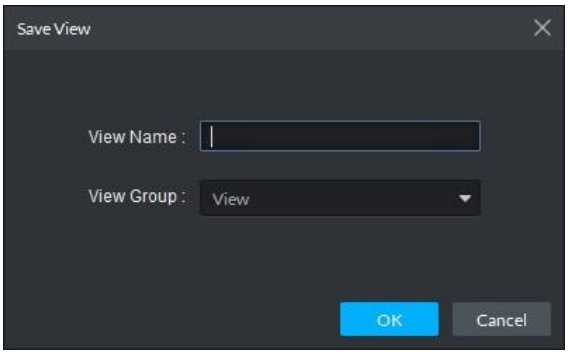
Figure 5-28



Step 2 Click any point on the left of fisheye, general PTZ camera on the right will auto link to corresponding position

Step 3 Click ,system pops up Save View box. See Figure 5-29.

Figure 5-29



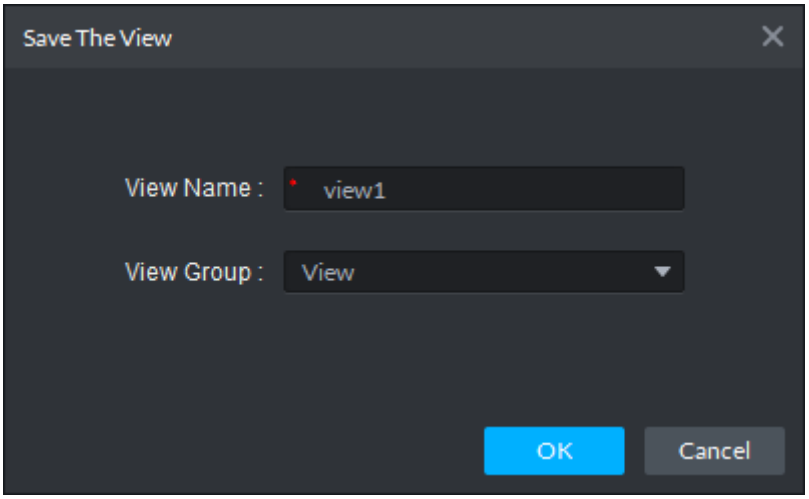
Step 4 Enter view name, select group, and click OK.

5.3.5 View Tour

Step 1 On the “Live View” interface, double click a channel on the left side to open the video.

Step 2 Click in the lower part, system pops up “Save the View” dialogue box. See Figure 5-30.

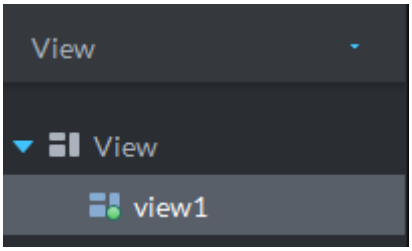
Figure 5-30



Step 3 Input “View Name”, select “View Group”, and click “OK”.

Check the added view under View tab on the left. See Figure 5-31.

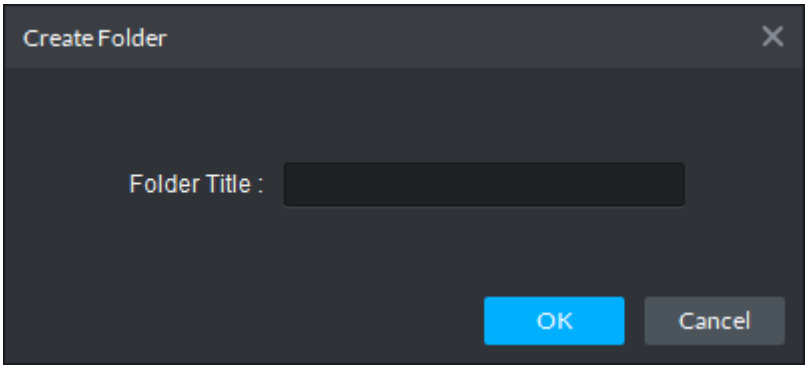
Figure 5-31



Step 4 Right click View and then select New directory.

Create folder dialogue box is displayed. See Figure 5-32.

Figure 5-32



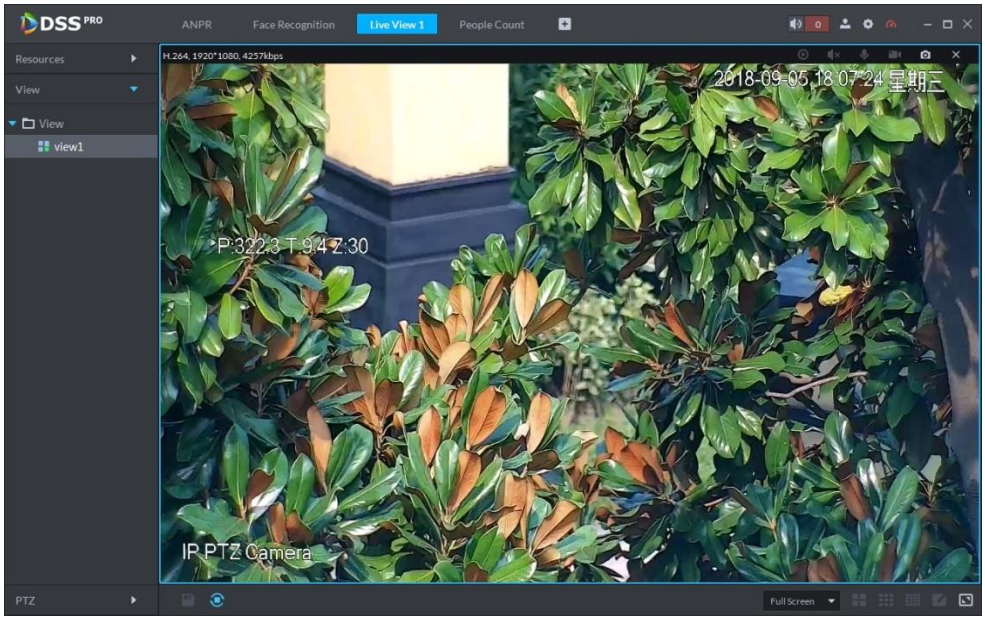
Step 5 Input “Folder Title” and click “OK”.

Step 6 Right click View to select Tour interval, for example, 10s.

a View Tour will be initiated at intervals of 10s. See Figure 5-33.

Click to stop Tour.

Figure 5-33

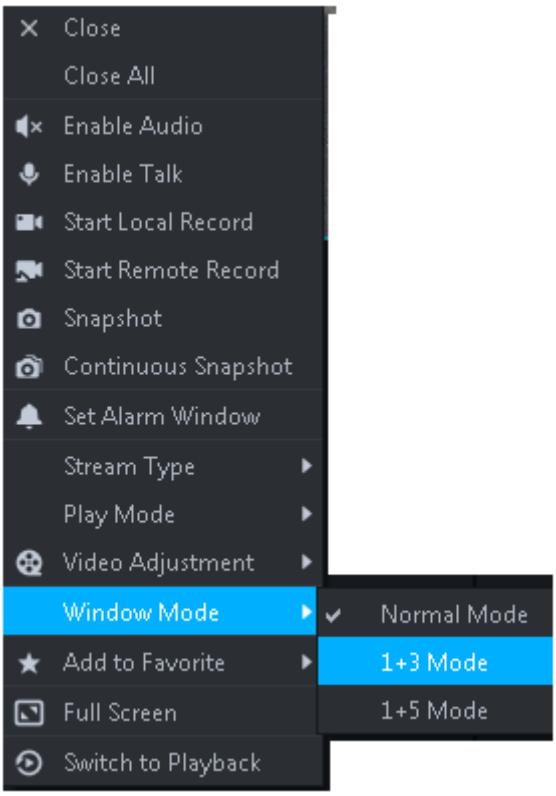


5.3.6 Region of Interest (RoI)

Client Live view window supports Normal mode, 1+3 mode and 1+5 mode.

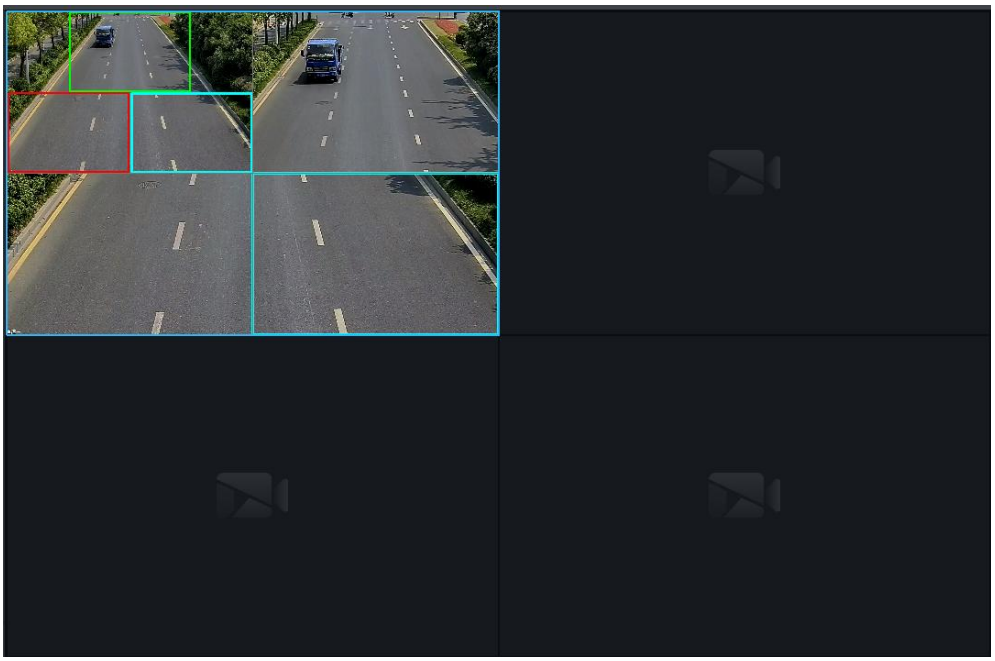
Right click to select “Screen Mode” in the live view window. See Figure 5-34.

Figure 5-34



For example, select 1+3 mode. See Figure 5-35.

Figure 5-35



5.4 Record

System can search and playback records from the device or center storage media, which enables you to search, playback and download records of different channels, different times and different types from the Client. If there are records, system displays different colors in date selection region.

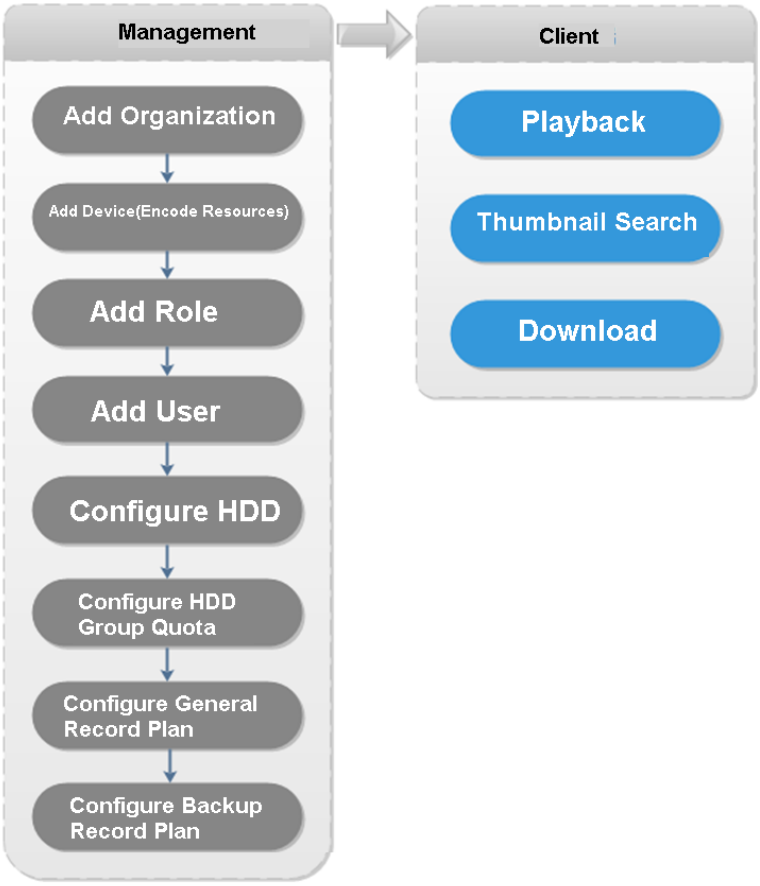
- Device Storage: Record to be stored in front-end SD card, or disks like DVR or NVR. Storage plan is configured on the device.
- Center Storage: Record to be stored in network storage server or DSS disks. For detailed configuration, see Storage config in System Introduction. To play back the record, you need to configure the record plan first, and then system will store the record of the specified period in network storage server.

5.4.1 Preparations

Make sure you have set record schedule on the manager. Contact the admin or refer to chapter 4.7 Configuring Record Schedule for detailed information.

Refer to Figure 5-36 for Playback flows information.

Figure 5-36



5.4.2 Recording when Previewing

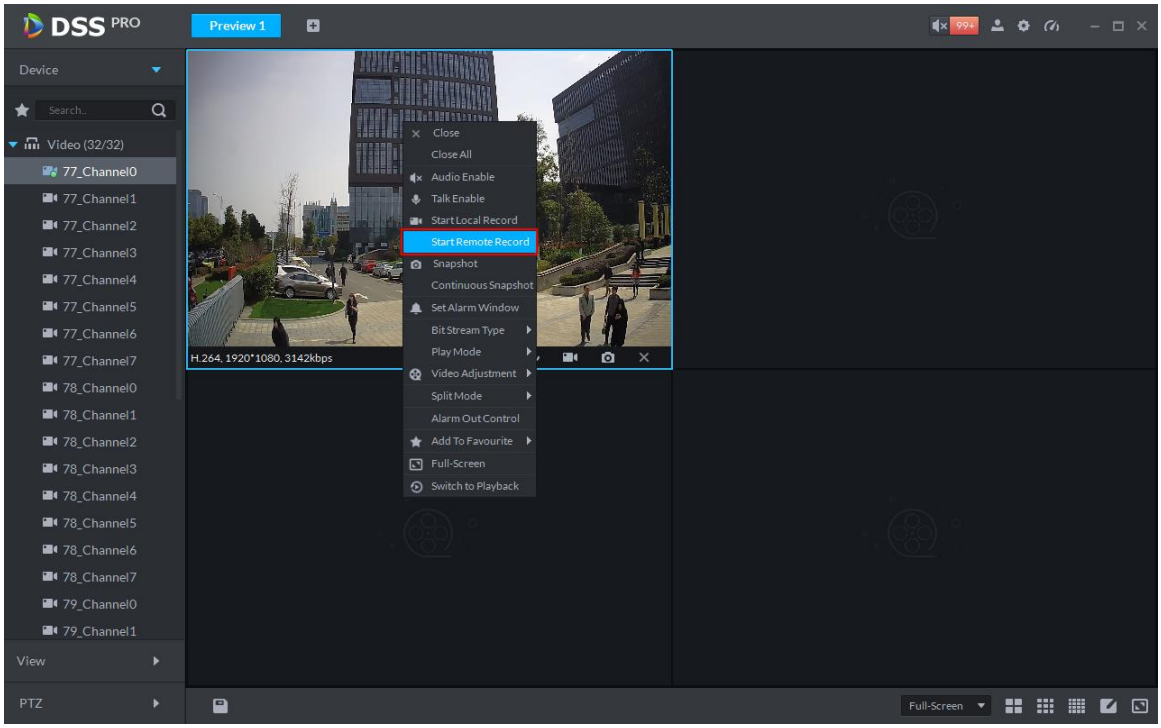
Open video in the preview window of the Client, then you can start center record of the channel from the right-click menu, provided that the center storage disk has been configured and the channel is not configured with a central storage plan.

Step 1 On Preview window, click the corresponding channel of the device tree on the left.

Step 2 Right click the window, and select “Start Remote Record”

See Figure 5-37.

Figure 5-37



NOTE

- Stop remote record: Select the window that is remotely recording and then right click mouse to select Stop remote record.
- Once current channel has the record at the same time, the preview window overlays record status.

5.4.3 Playback

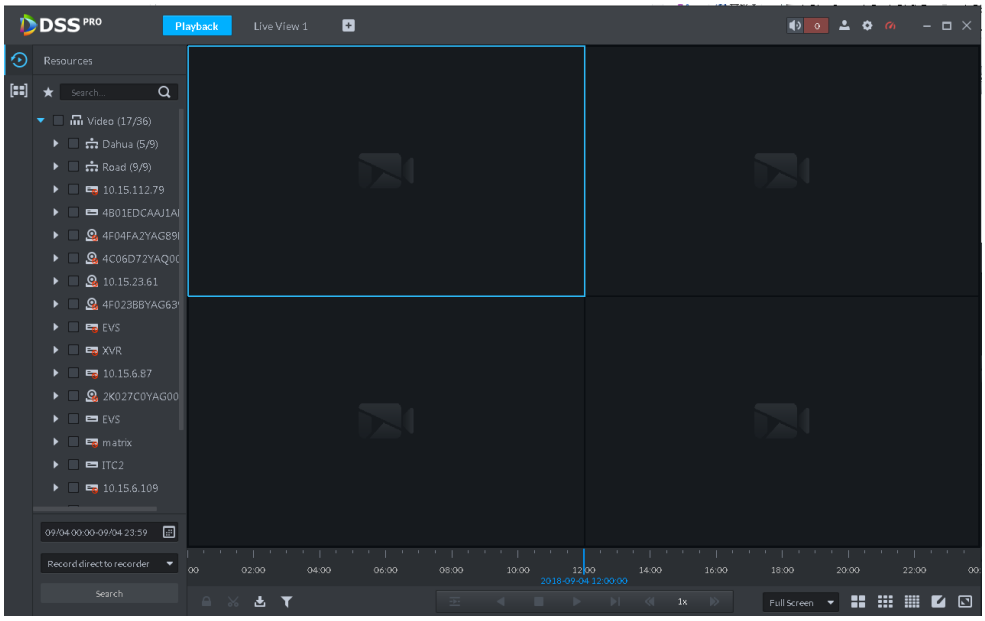
5.4.3.1 Search Record

It is to search record of today, specified date or specified period.

Step 1 Click +, on the New tab interface select Playback.

The Playback interface displayed. See Figure 5-38.

Figure 5-38



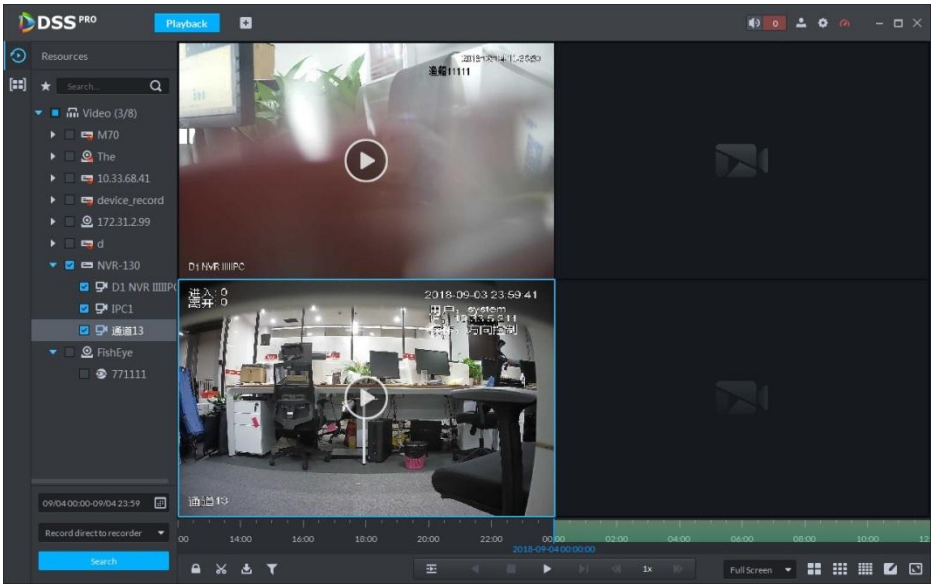
Step 2 Select a channel on the device tree.

Step 3 Select date and record storage position. Click Search.

Step 4 Select a video window that has the record and then click .

Corresponding window begins playback the record of current channel. See Figure 5-39.

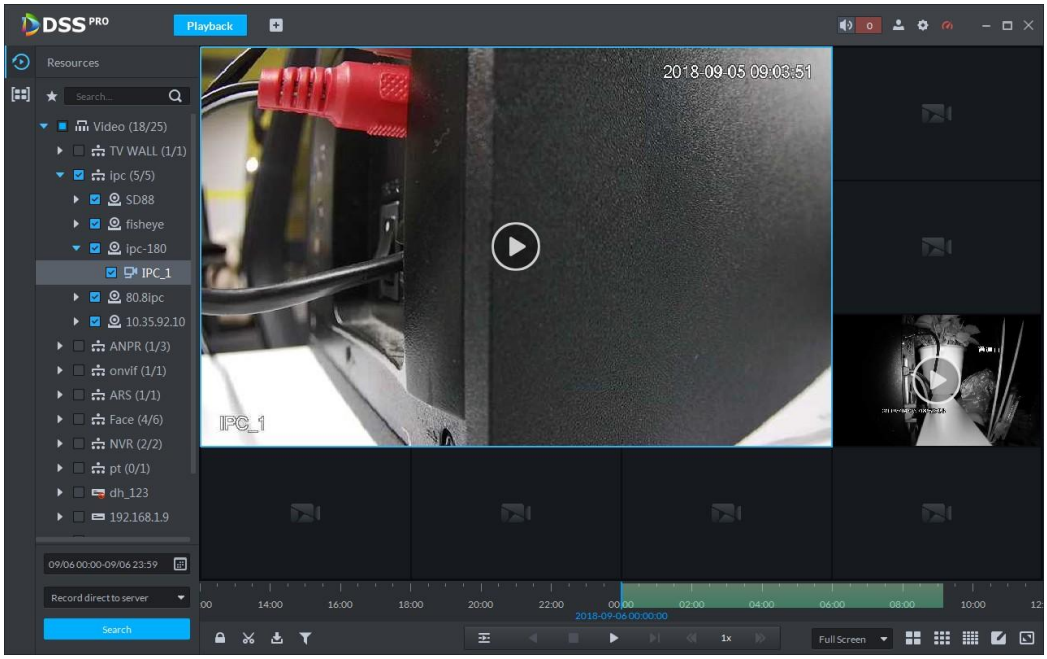
Figure 5-39



5.4.3.2 Record Type Filter

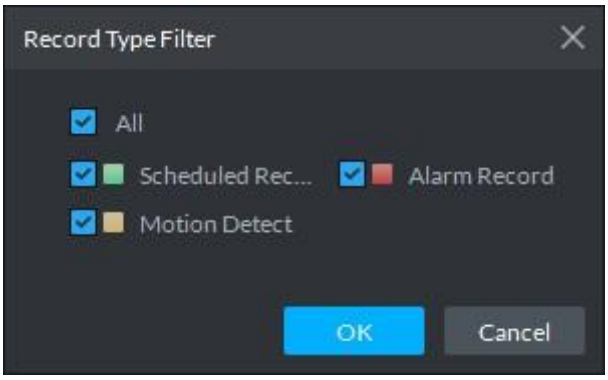
Step 1 On Playback interface, click . See Figure 5-40.

Figure 5-40



System pops up Record type filter interface. See Figure 5-41.

Figure 5-41



Step 2 Select a record type (or types) and then click OK.

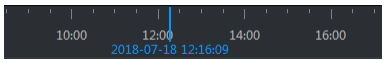
The record type includes schedule record, alarm record, motion detect record.

5.4.3.3 Record Control

Refer to Figure 5-15 for buttons at the bottom of record playback interface and the description

Table 5-15

Icon	Note
	It is to lock record
	It is to cut record
	It is to download record
	Playback record files of the same period from different channels on selected windows.
	Stop/pause playback
	Frame by frame playback/frame by frame backward.
1x	Fast/slow playback. Max. supports 64X or 1/64X.

Icon	Note
	During playback, you can drag time progress bar to play back record at the specific time.

5.4.3.4 Lock Record

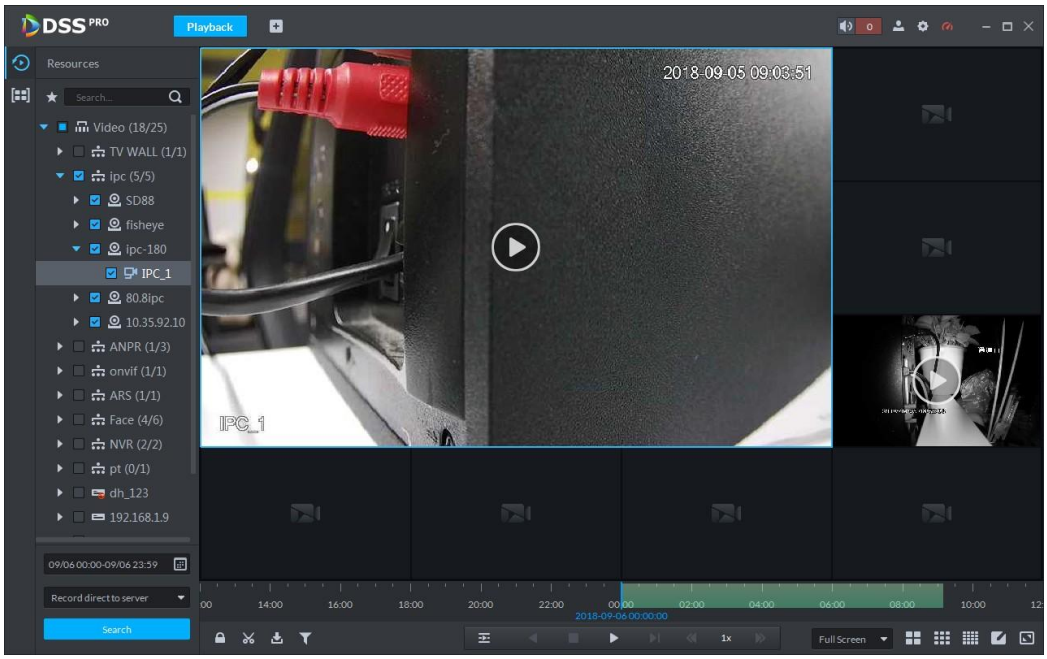
NOTE

You can only lock center records stored on the server

Step 1 Click at the bottom of the “Playback” interface (make sure the window has the record).

Move the mouse to the timeline. See Figure 5-42.

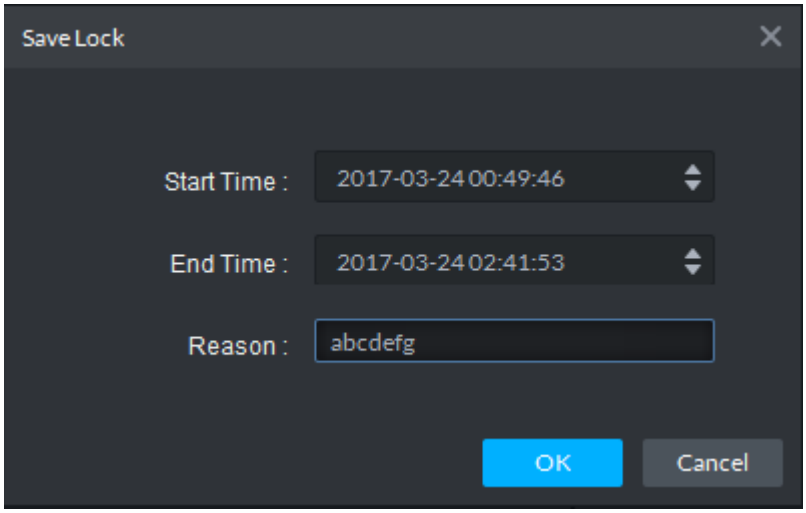
Figure 5-42



Step 2 Click the time progress bar to select lock start time, then drag mouse, and then click to select end time.

System pops up “Save Lock Record” dialogue box. See Figure 5-43.

Figure 5-43



Step 3 Click OK.

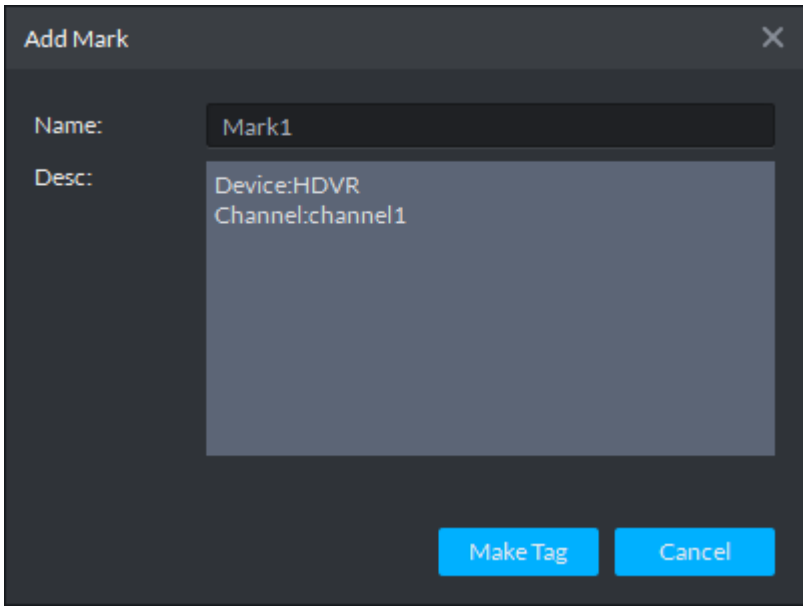
5.4.3.5 Add Mark

You can mark records that interest you by “Add Mark” for a subsequent search and location.

Step 1 On Playback interface, move mouse to the window that is playing record. Click at the top left corner.

System pops up Add mark interface. See Figure 5-44.

Figure 5-44



Step 2 Input “Name” and “Description”, then click “Make Tag”.

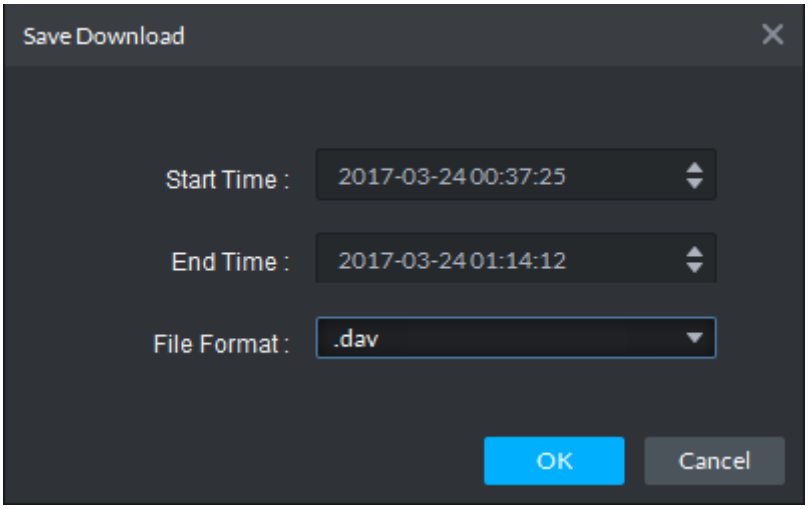
System prompts “Tag Creation Successful”.

5.4.3.6 Clip Record

Step 1 Click at the bottom of the “Record Playback” interface (make sure the window has the record).

Step 2 During the timeline, click to start clip and then drag the mouse, click to stop clip. The Save download interface is displayed. See Figure 5-45.

Figure 5-45



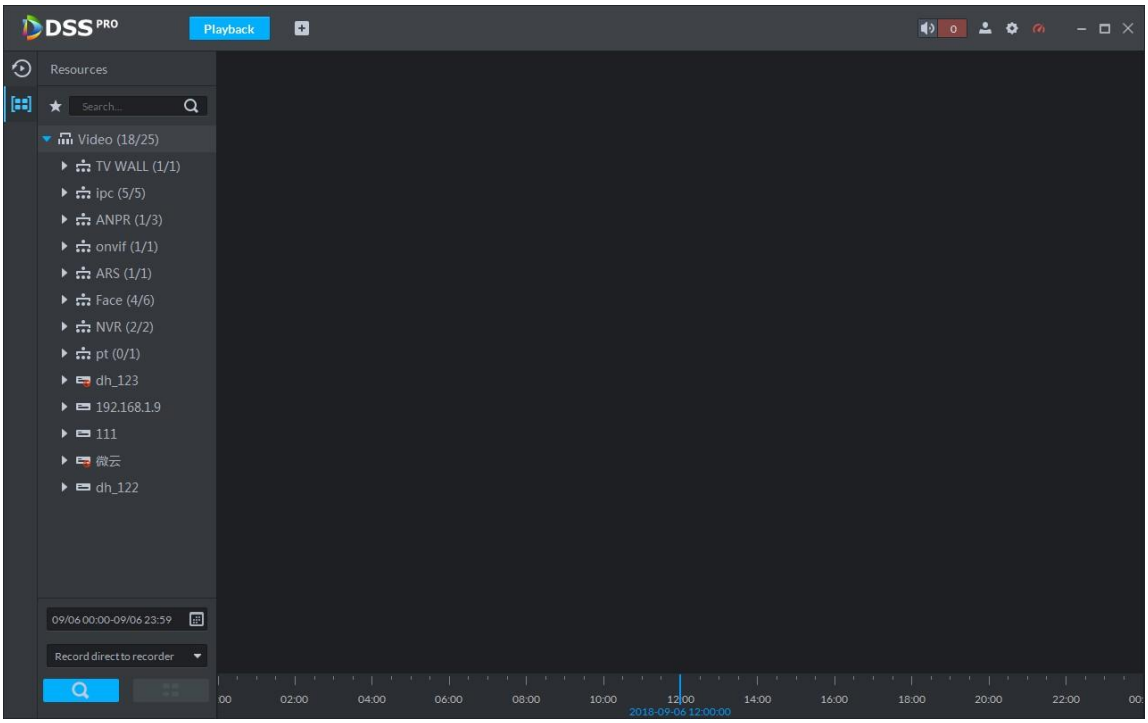
Step 3 Set file format and then click OK.

5.4.4 Search Thumbnail

System supports platform and device record thumbnail search. It is a convenient way for user to search record.

Step 1 On Playback interface, click . See Figure 5-46.

Figure 5-46



Step 2 On organization tree, select a video channel and then set search period and record position. Click .

NOTE

There is a blue dot at the date top left corner if the channel has a record. See Figure 5-47.

Figure 5-47

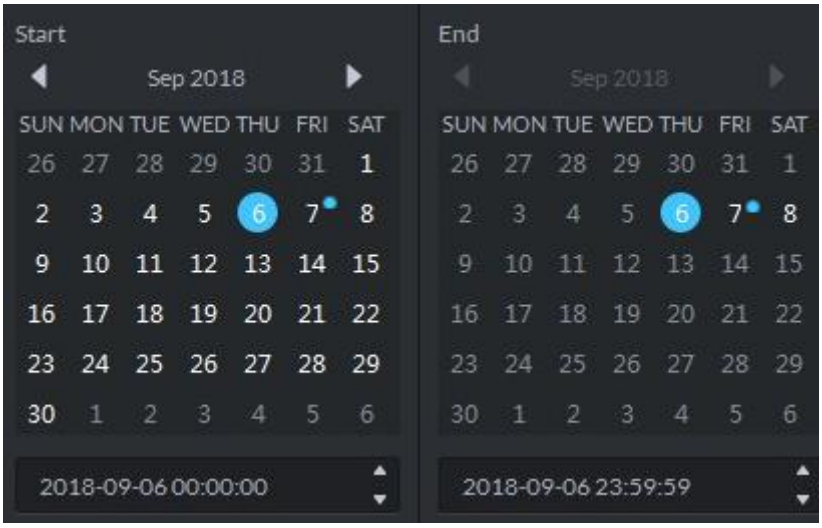
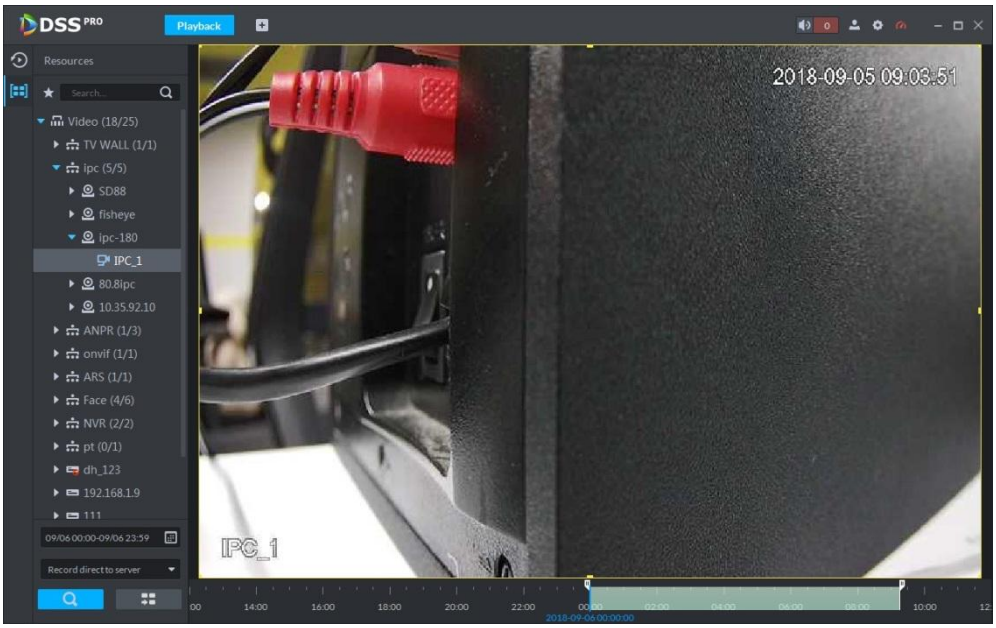


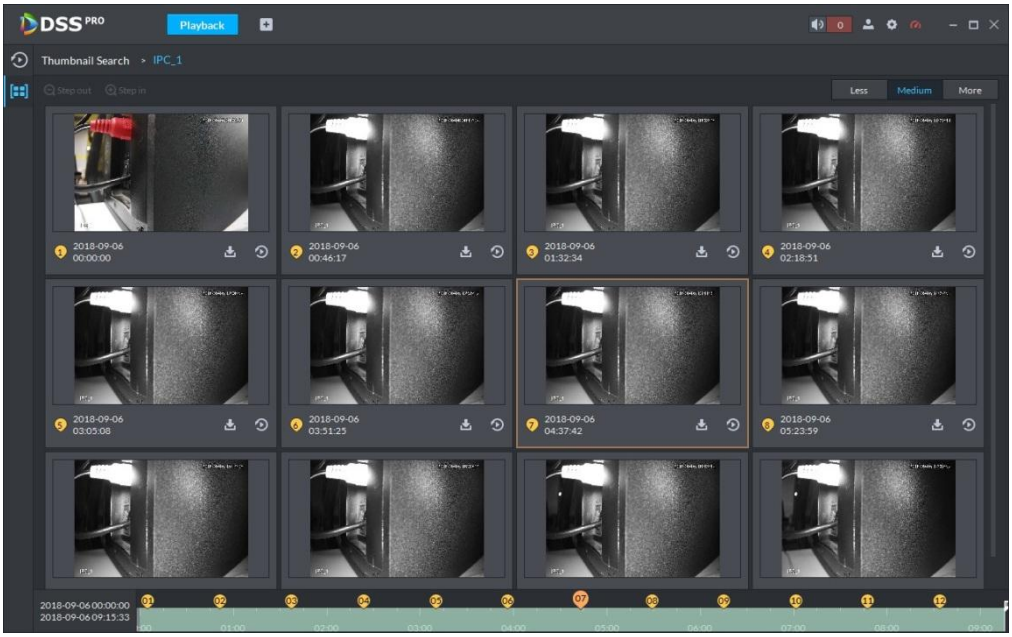
Figure 5-48



Step 3 Drag the yellow frame on the right to set thumbnail range. Click .

System displays the video of current range. See Figure 5-49.

Figure 5-49

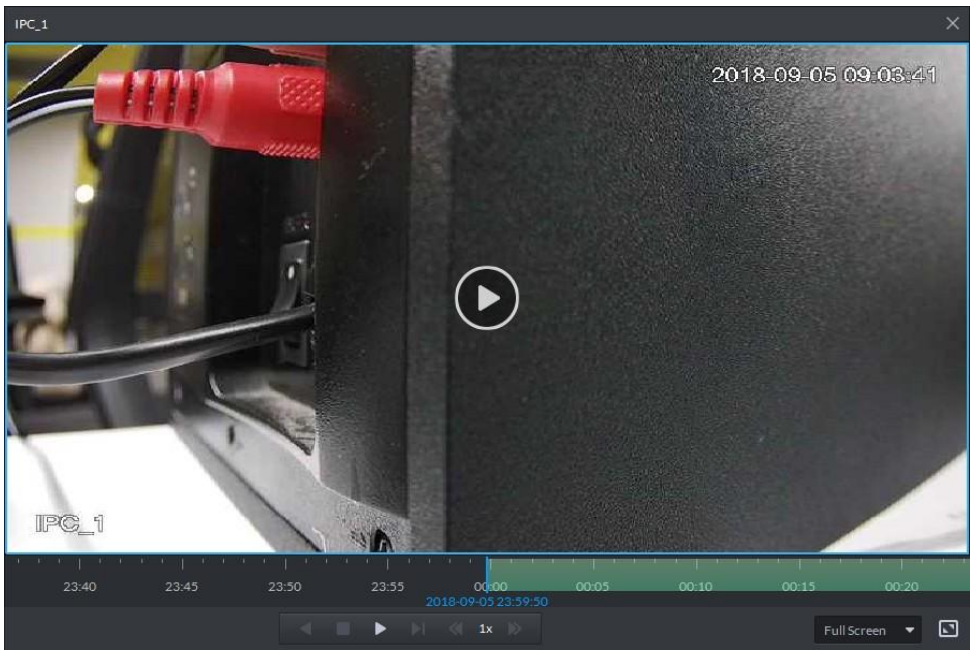


NOTE

- System displays search results in suitable mode by default. Click Less, suitable, more to see proper mode.
- Double click the thumbnail, system search again for the record between current image and the next image.

Step 4 Click the at the bottom right corner of the thumbnail, you can view the corresponding video related to the thumbnail. See Figure 5-50.

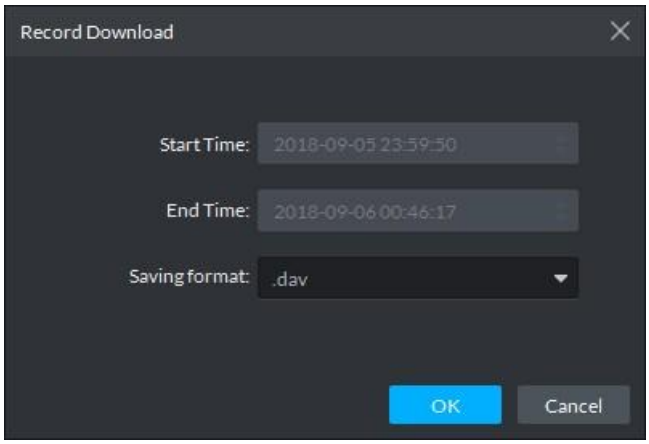
Figure 5-50



Step 5 Download Record

5) Click at the right corner of the thumbnail, system downloads the record between current image and the next image. See Figure 5-51.

Figure 5-51



6) Select file format and then click OK.
Go to the Download center to view download detailed information. Refer to chapter 5.4.5 Download for detailed information.

5.4.5 Download

Go to the Download center of the DSS client to download the corresponding records. You can download by the timeline, by selection or download marked file.

5.4.5.1 Timeline

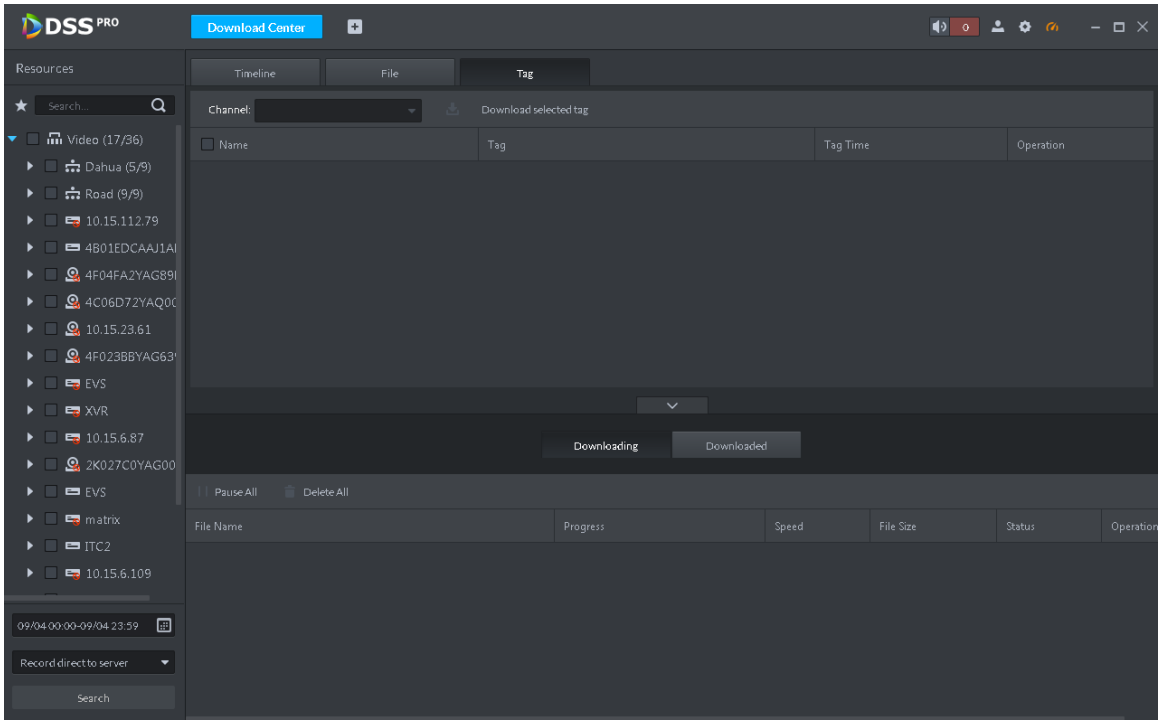
Step 1 Go to Download center.

There are two ways to go to the download center.

- Click at the bottom of the Playback.
- Click , on the New tab interface, select Download center.

The Download interface is displayed. See Figure 5-52.

Figure 5-52

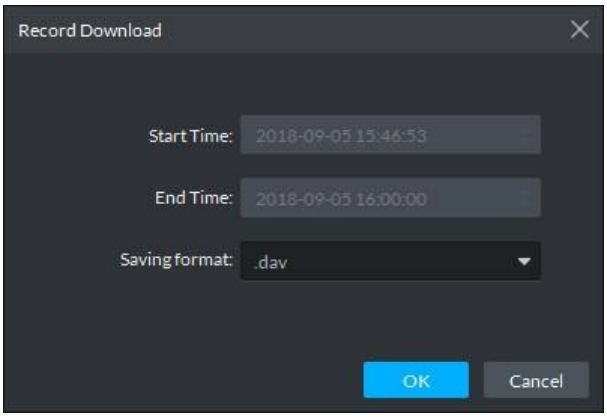


Step 2 Click Timeline.

Step 3 Select device channel, set search period and record storage position. Click Search.

Step 4 Select the period on the timeline, system pops up download dialogue box. See Figure 5-53.

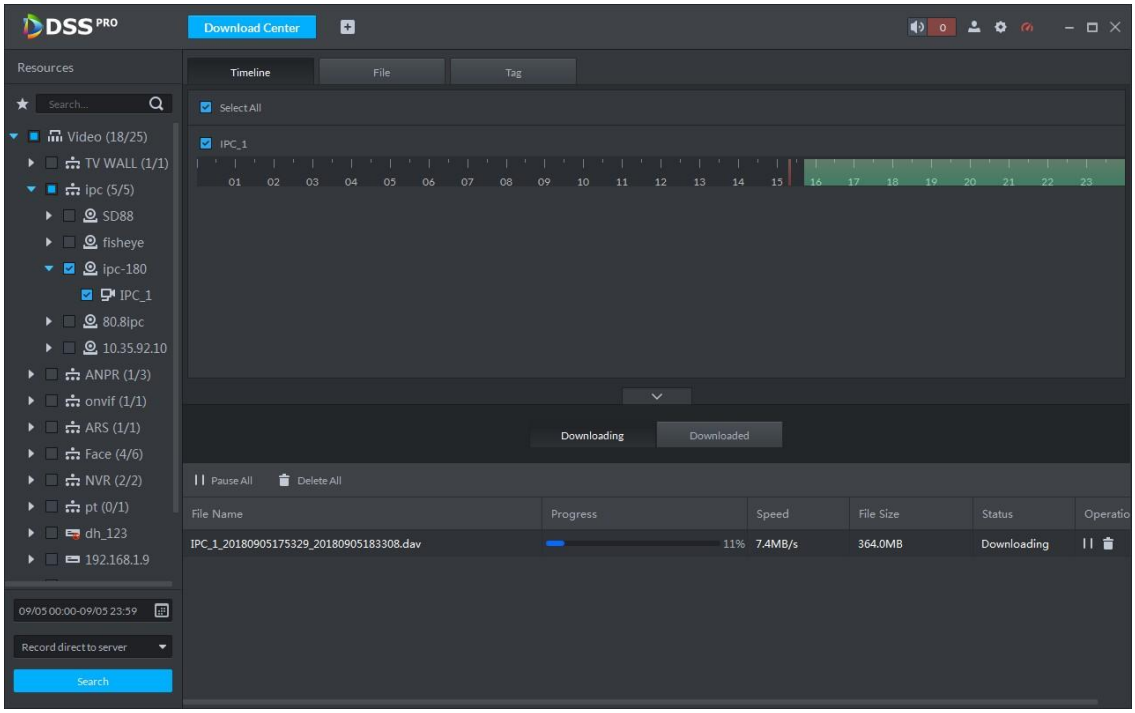
Figure 5-53



Step 5 Set file format and then click OK.

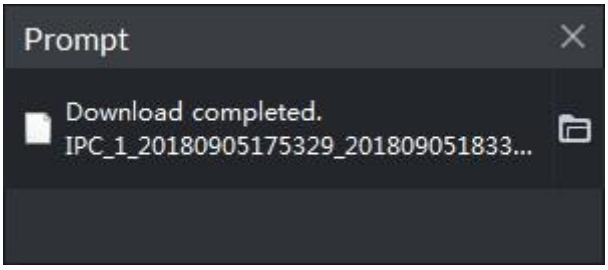
You can view the download process at the bottom of the interface. See Figure 5-54.

Figure 5-54



System pops up the following dialogue box once the download is complete. See Figure 5-55.

Figure 5-55

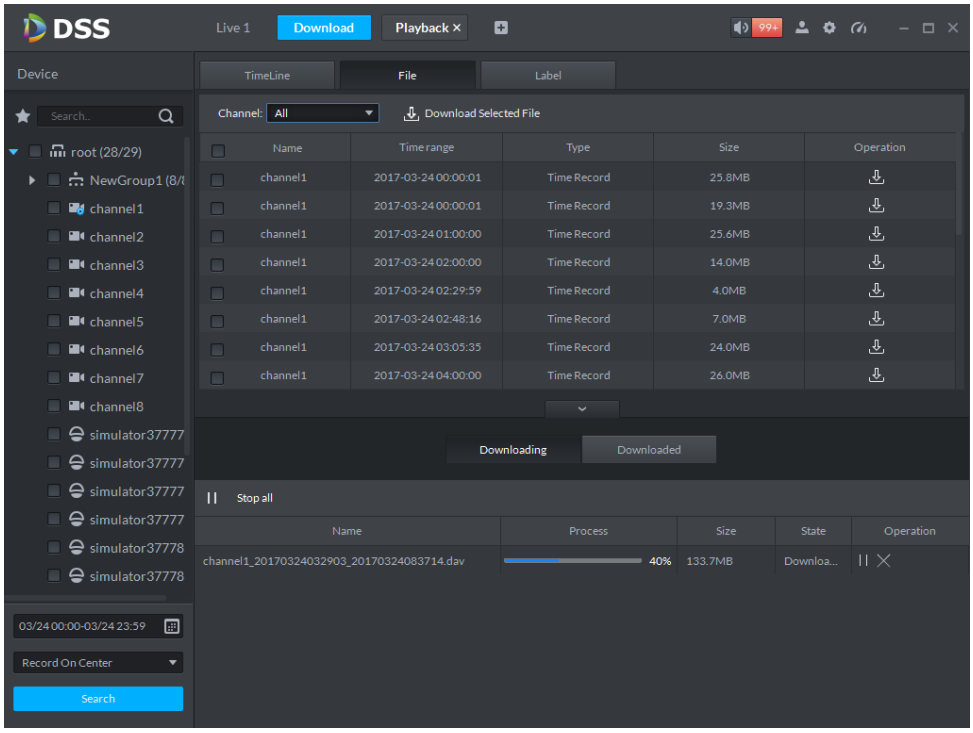


5.4.5.2 File List

Step 1 On Download interface, click File tab.

System displays record files. See Figure 5-56.

Figure 5-56



Step 2 Directly click in the record file list, or check multiple files and click “Download Selected Files”

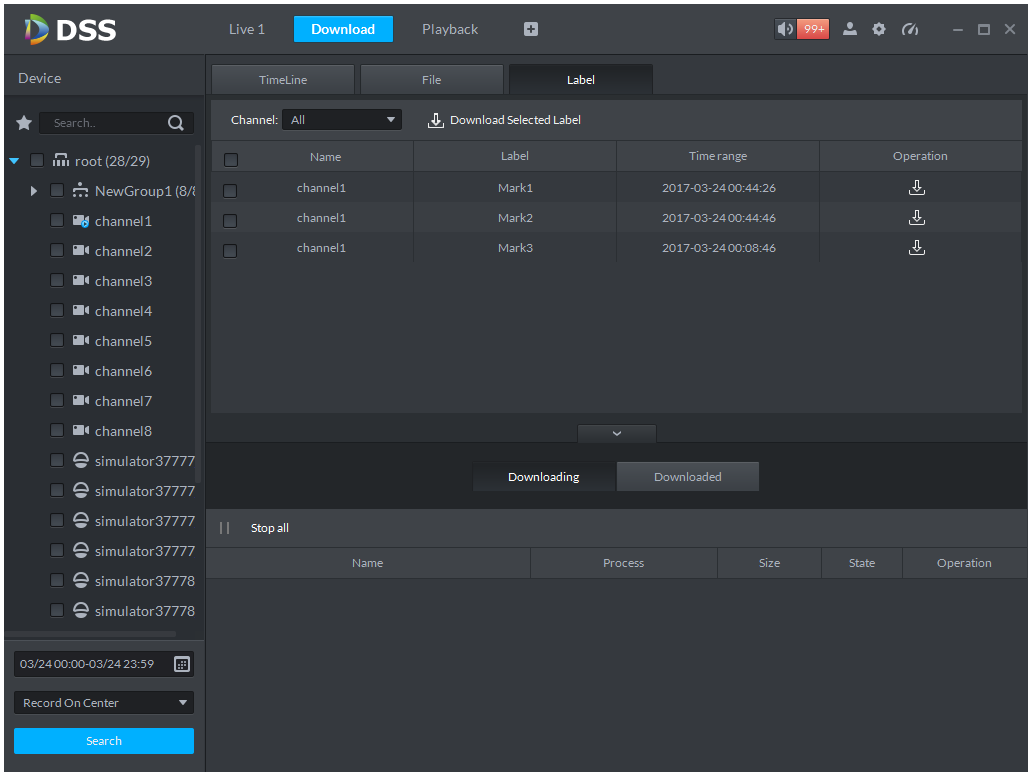
System displays download process at the bottom of the interface. System pops up dialogue box once the download is complete.

5.4.5.3 Label

Step 1 On Download interface click Label tab.

System displays marked record files. See Figure 5-57.

Figure 5-57



Step 2 Directly click in the record file list, or check multiple files and click “Download Selected Files”

System displays download process at the bottom of the interface. System pops up dialogue box once the download is complete.

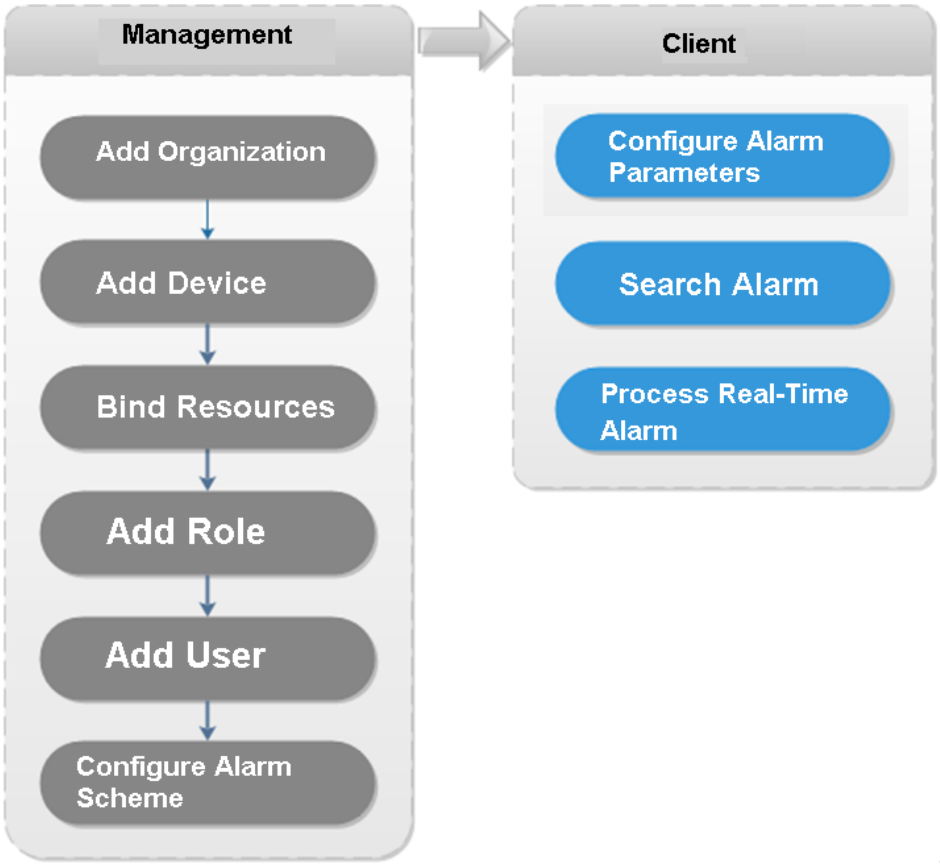
5.5 Event Center

5.5.1 Preparations

- Make sure you have added corresponding devices on the manager. Refer to chapter 4.6 Adding device for detailed information.
- You have completed event management settings on the manager. Refer to chapter 4.8 Configuring Event for detailed information.

Refer to Figure 5-58 for event management flows.

Figure 5-58

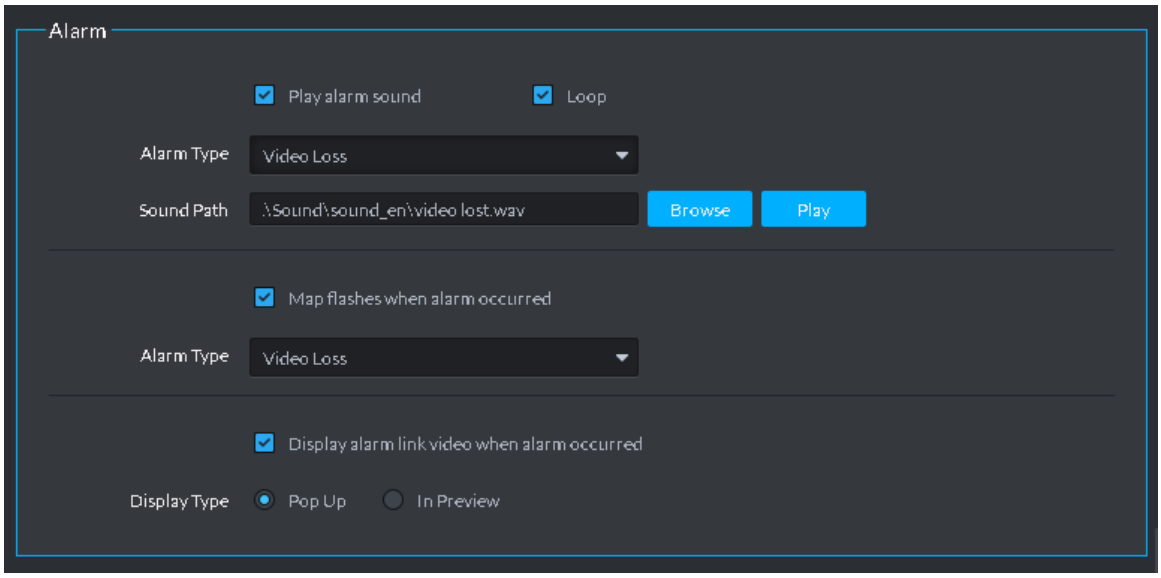


5.5.2 Configuring Alarm Parameters

It is to set alarm mode on the client. It includes alarm audio, alarm flashing on the map or not, etc.

Step 1 Click at the top right corner, from General>Alarm, the interface is shown as below. See Figure 5-59.

Figure 5-59



Step 2 Set alarm parameters and then click Save.

Refer to Table 5-16 for detailed information.

Table 5-16

Parameters	Note
Play alarm sound	Check the box, system generates a sound when an alarm occurs.
Loop	Check the box; system plays alarm sound repeatedly when an alarm occurs. **NOTE** This item is only valid when Play alarm sound function is enabled.
Alarm type	It is to set alarm type. System can play sound when corresponding alarm occurs. **NOTE** This item is only valid when Play alarm sound function is enabled.
Sound path	It is to select alarm audio file path.
Map flashes when alarm occurred	Check the box and then select alarm type. When the corresponding alarm occurs, the device on the emap can flash.
Display alarm link video when alarm occurred	Check the box, system automatically opens linkage video when an alarm occurs.
Display type	System automatically opens linkage video when an alarm occurs. You can view on the pop-up window or on the preview interface.

5.5.3 Searching and then Processing Real-Time Alarm

NOTE

The customized alarm supports modification and deletion.

- If the alarm scheme has used the customized alarm type, you can only modify the alarm. You cannot delete it.
- If the alarm scheme has not used the customized alarm type, the alarm input channel and alarm type restores default value if you delete the alarm type.
- Once you modified the customized alarm type, the previous data still uses the original name; the new data uses the modified name.

5.5.3.1 Processing Real-Time Alarm

Steps

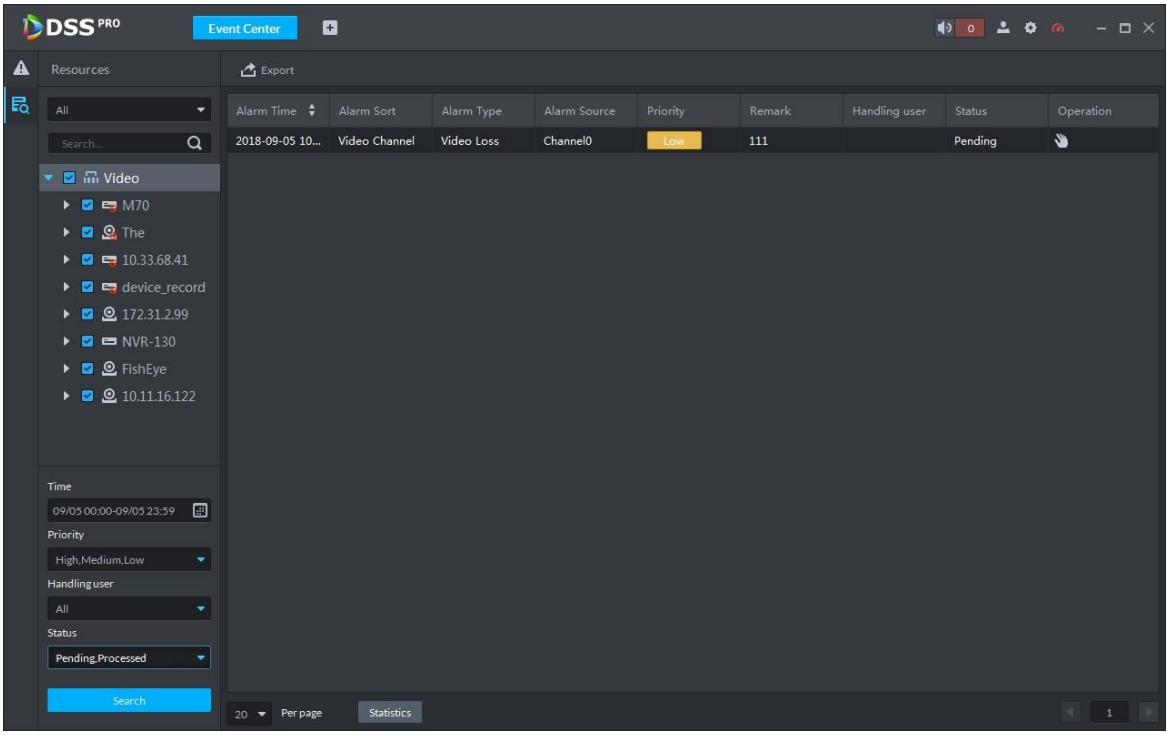
Step 1 Click ,on the New tab interface select Event center.

Enter Event center interface.

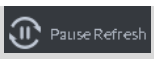
Step 2 Click on the left navigation bar.

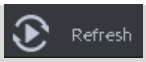
System displays alarm processing interface. See Figure 5-60.

Figure 5-60



NOTE

System refreshes to display real-time alarm by default. Click 

to pause refresh, click 

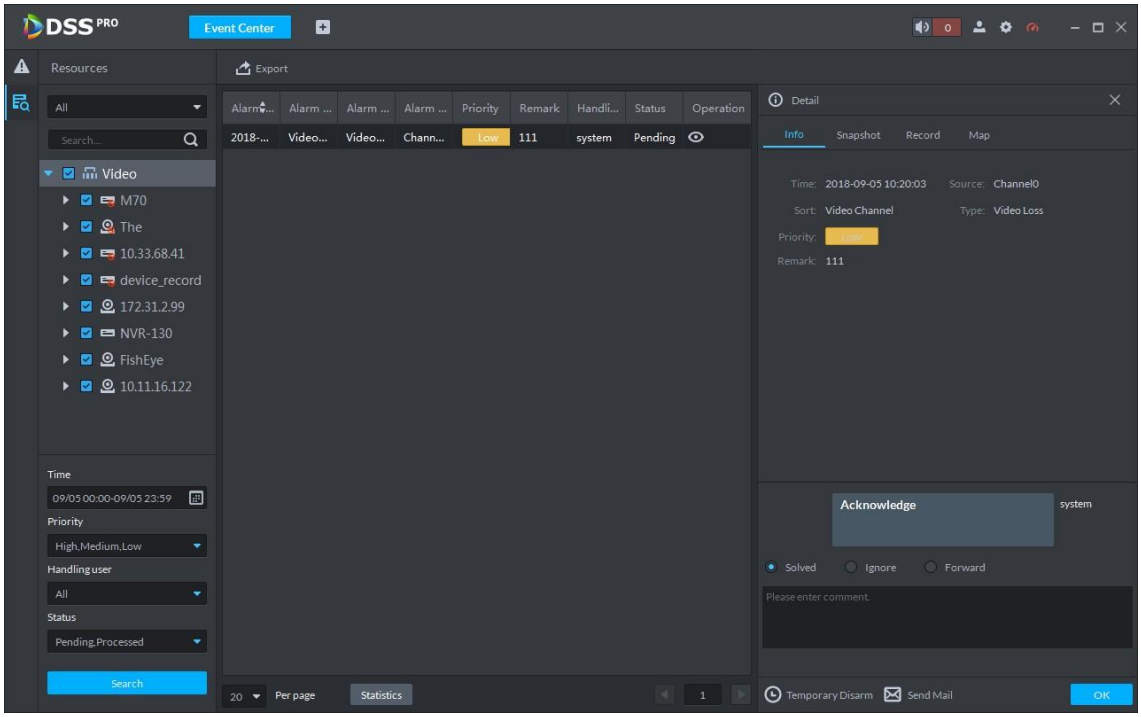
to continue refresh.

Step 3 Click of an alarm item.

The logged in user can claim the alarm. After claimed, the system displays user name on the user column.

Step 4 Click to view details and process the alarm. See Figure 5-61.

Figure 5-61



Step 5 Click Message, Snapshot, Record, and Map tag, it is to view corresponding alarm information.

Step 6 Select processing results such as processed, ignored, transferred and then input comments.

NOTE

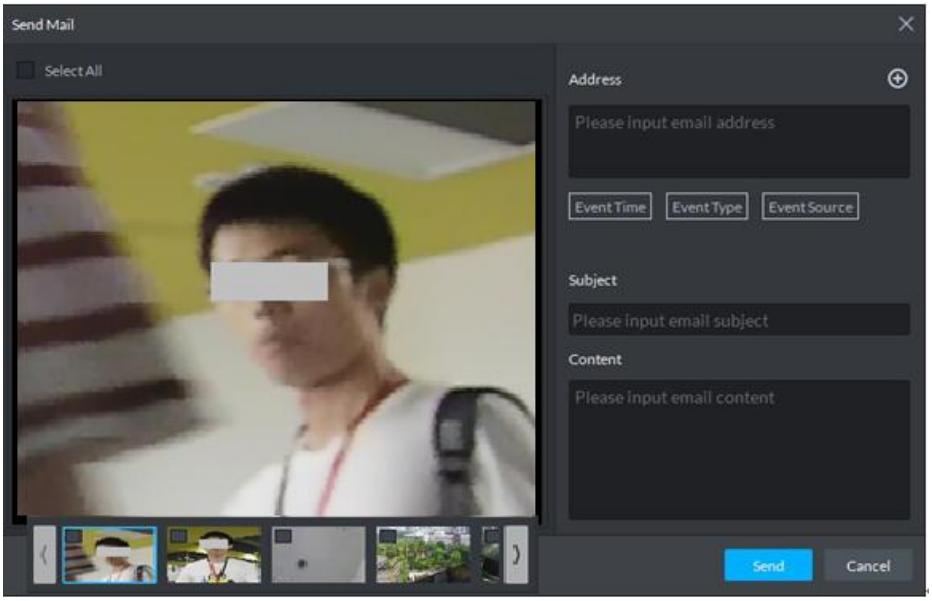
When you are selecting Forward, you can select other user on the dialogue box. It is to send current event to specified user to process.

Step 7 Click OK.

Operations

- Disarm temporarily: Click disarm temporarily, and then set disarm time on the pop-up window. Click OK.
- Send email: Click Send email, and then set email information on the pop-up window. Click Send, the interface is shown as below. See Figure 5-62.

Figure 5-62



5.5.3.2 Searching Alarm Record

Steps

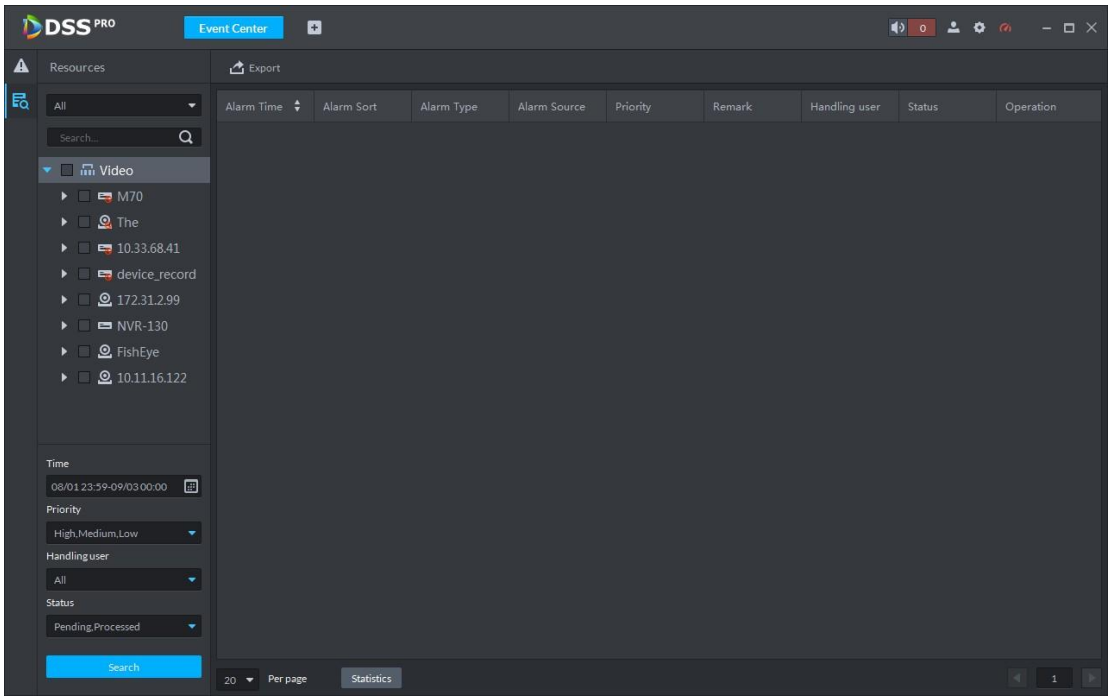
Step 1 Click , on the New tab interface select Event center.

Enter Event center interface.

Step 2 Click on the left navigation bar.

System displays search interface. See Figure 5-63.

Figure 5-63

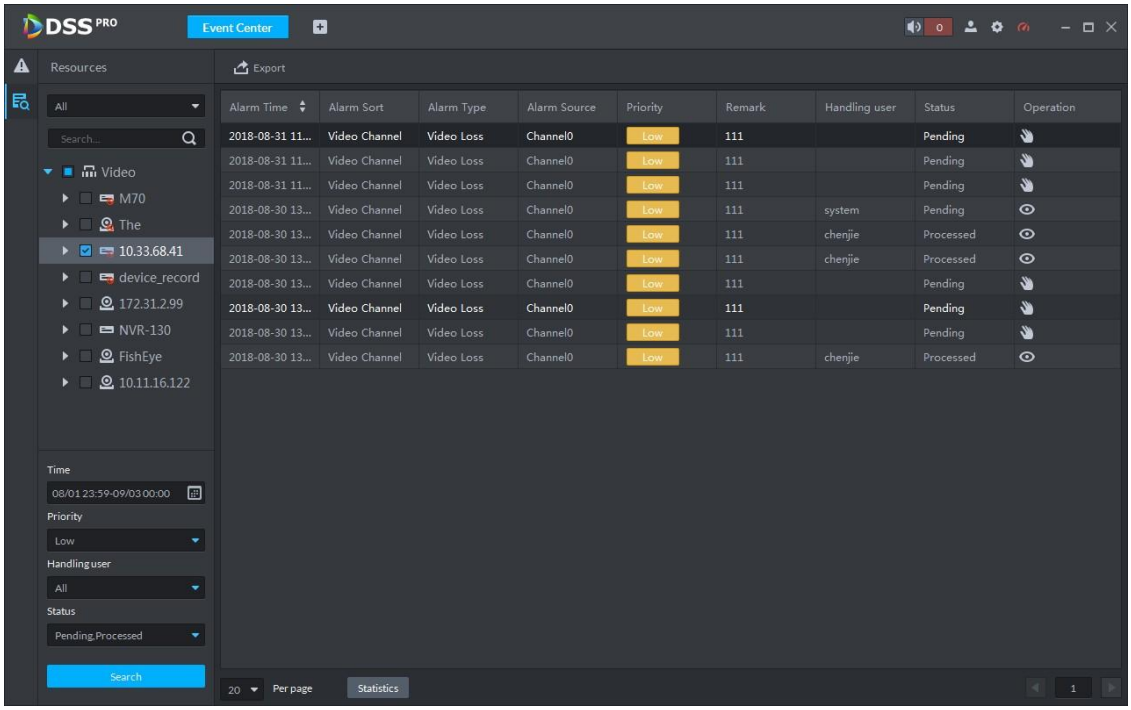


Step 3 Select device channel, search time, alarm level, user or alarm status.

Step 4 Click Search.

System displays corresponding alarm information. See Figure 5-64.

Figure 5-64



Operations

- Select amount on Per page, it is to set displayed alarm message amount each time.
- Click Statistics, it is to display the total alarm message amount of corresponding device.
- Click Export, it is to export device alarm message.

- Click to claim alarm, click to process alarm. Refer to chapter 5.5.3.1 Processing Real-Time Alarm for detailed information.

5.6 Video Wall

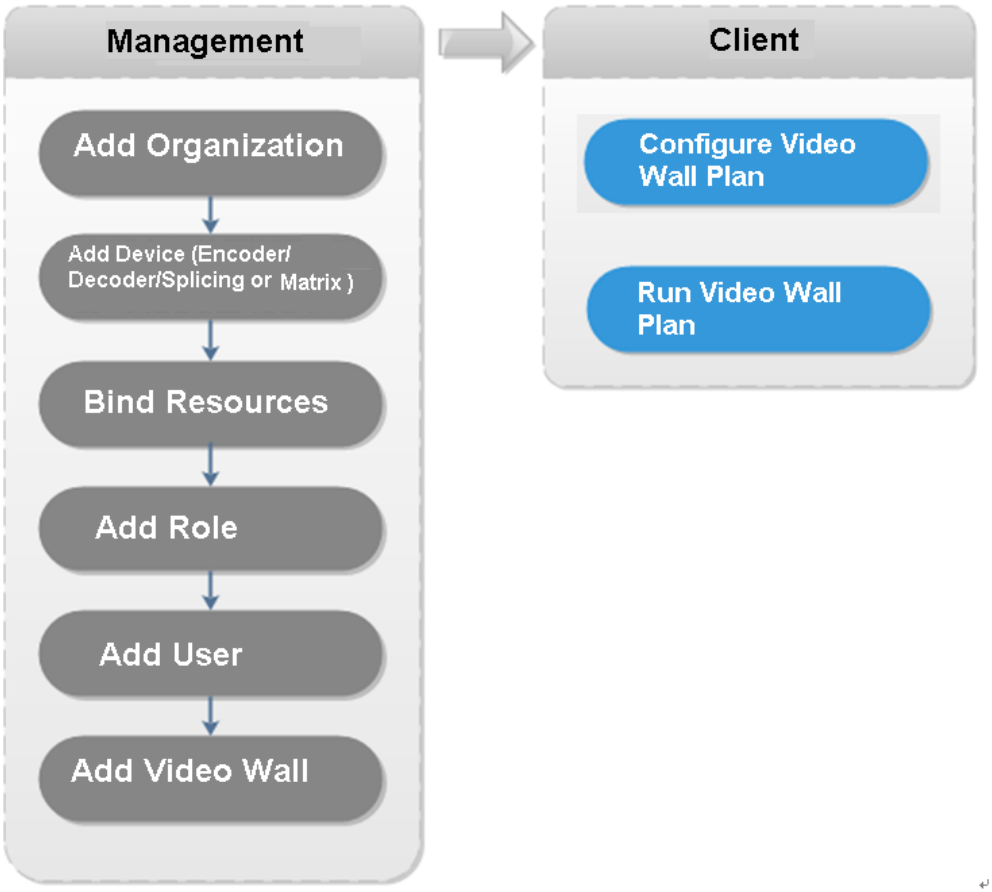
5.6.1 Preparations

It is to view the video on the video wall on the client. It needs to complete the following settings.

- Adding corresponding device: It includes decoder, encoder or matrix device. Refer to chapter 4.6 Adding device for detailed information.
- Refer to chapter 4.11 Adding Video Wall to add the video wall first.

Refer to Figure 5-65 for video wall flows.

Figure 5-65



5.6.2 Output to the Wall

Step 1 Click , on the New tab interface select Video wall, system displays Video wall interface. See Figure 5-66.

Figure 5-66

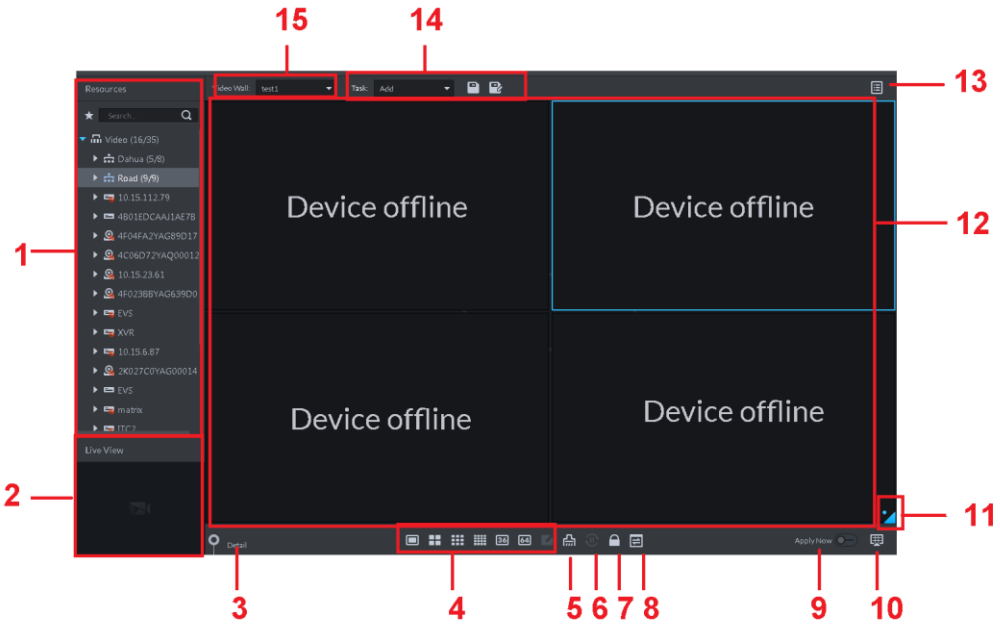


Table 5-17

SN	Name	Function
1	Device tree	From Local config> General, if you enable Show device node, device tree displays all channels of current device. If you cancel the box, system display all channels of all device. Click ★ to view the channels on the favorites folder. Search is supported by input device name or channel name in Search.. here.
2	Preview	View channel video.
3	Detailed information	Click to view the screen, window, and channel bound information. ● Click to preview the video at the bottom left pane. It is to check current channel is what you want or not. ● Click to adjust sequence. ● Click to delete the video channel that adds to current window. ● Click Stay time column or click, it is to modify signal interval on current channel when tour. ● Click Stream column or, it is to modify video bit stream.
4	Window split	It is to set window split mode.
5	Clear	It is to clear information on all screens.
6	Start/stop all tours	Start or stop all tours.

SN	Name	Function
7	Lock window	Click to lock the window. You cannot operate on the locked window.
8	Display layout	It is to view current layout.
9	Apply now	If you enable the function, system automatically outputs the video to the wall after you set the task.
10	Decode to wall	Click to manually output the video to the wall.
11	Eagle eye	View current video wall layout
12	Video wall	Video wall area.
13	Video wall task	It is to schedule task and tour task. Refer to chapter 5.6.3 Video wall plan for detailed information.
14	Task management pane	It is to add, save delete task.
15	Video wall selection	It is to select a video wall to configure.

Step 2 Select a video wall and then select a window.

Step 3 Double click the video channel or drag the video channel to the window.

The window displays “Bound one video source”

NOTE

- Input device name or channel name to search.
- One window can bind several video channels at the same time.

Step 4 Click to output the video to the wall.

Once one window has bound several video channels at the same time, the window automatically begins tour operation after you output the video to the wall.

- Right click mouse or on the Detail pane, you can modify channel stay time and bit stream.
- Click to change tour sequence.

Right click mouse and then select Stop all tour, or click to stop all tour.

5.6.3 Video Wall Plan

5.6.3.1 Configuring Schedule plan

After set schedule plan, you can play video file on the video wall at the specified time.

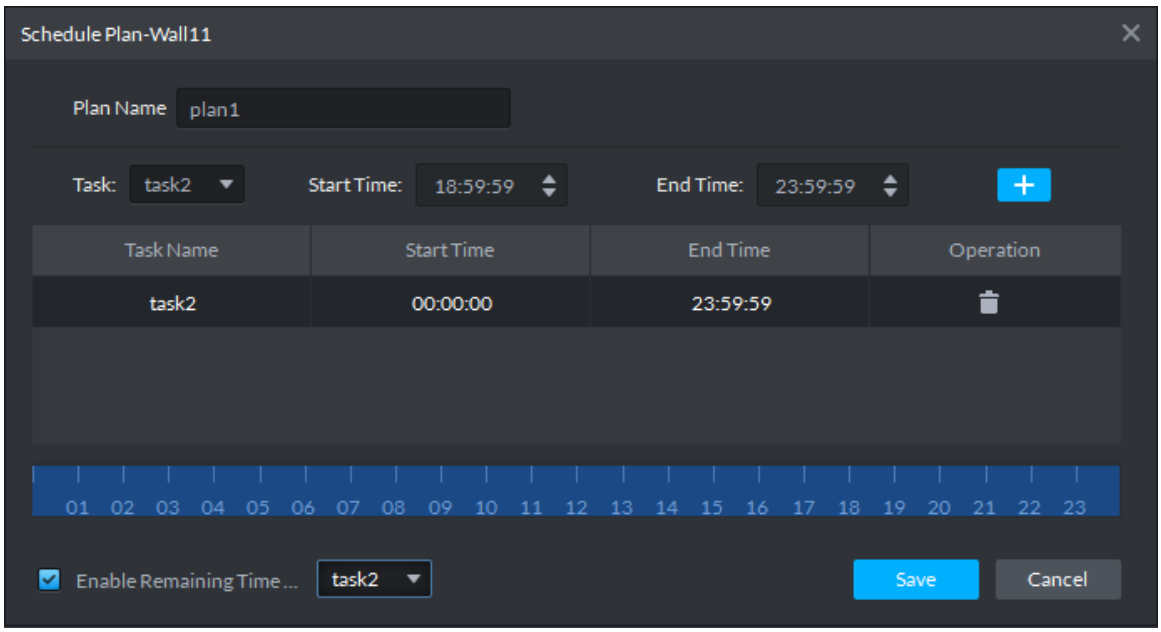
Steps

Step 1 On the Video Wall interface, click at the top right corner.

Step 2 Select .

Enter Schedule plan interface. See Figure 5-67.

Figure 5-67



Step 3 Input the plan name.

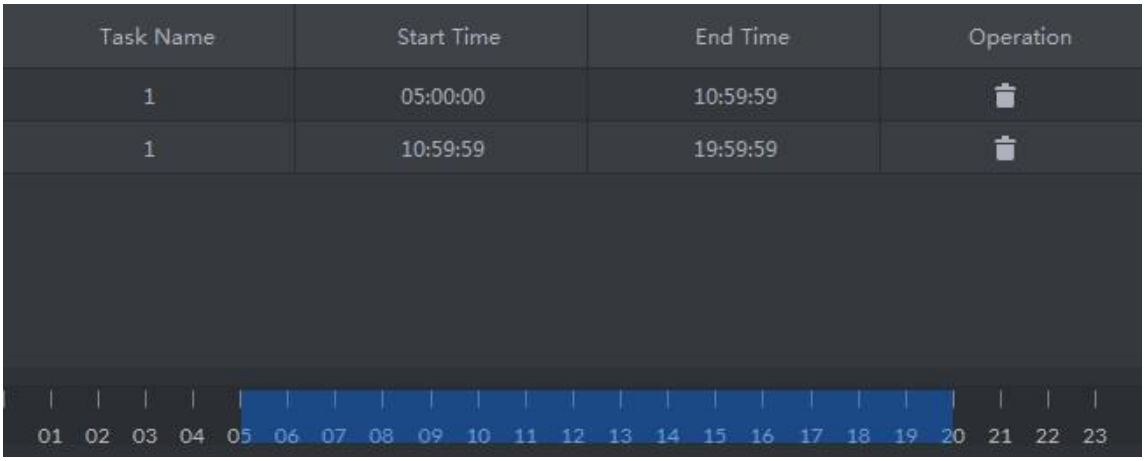
Step 4 Select a video task, and then set start time and end time, click .

The list displays detailed plan information. The specified period on the timeline is highlighted as blue. See Figure 5-68.

NOTE

Check the Enable remaining time schedule function and set the task. The video wall displays corresponding video if it is not in the scheduled plan period.

Figure 5-68



Step 5 Click Save

Enter Video wall interface.

Step 6 Click to start the plan.

Operations

- Modify plan: Click of the corresponding plan, it is to modify plan.，
- Delete plan：Click of the corresponding plan, it is to delete the plan.

5.6.3.2 Configuring Tour Plan

After setting tour plan, you can output several plans to the TV wall.

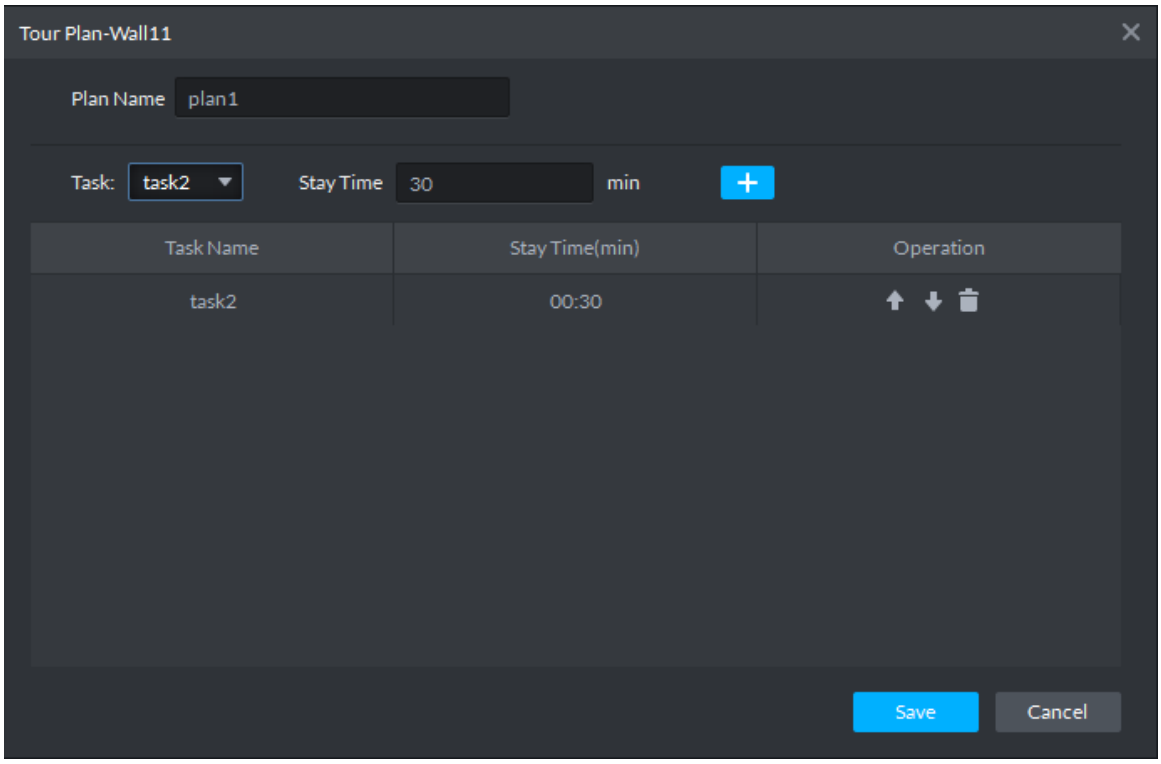
Steps

Step 1 On the Video Wall interface, click at the top right corner.

Step 2 Click 。

Enter Tour plan interface. See Figure 5-69.

Figure 5-69



Step 3 Input task name.

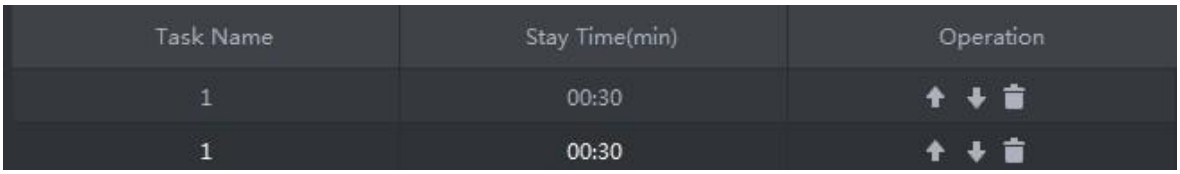
Step 4 Select a video task and then set stay time. Click .

The list displays tour information. See Figure 5-70.

NOTE

Click to adjust task sequence, click to delete task.

Figure 5-70



Step 5 Click Save.

Enter Video wall plan interface.

Step 6 Click to start the plan.

Operations

- Modify plan: Click of the corresponding plan, it is to modify plan.，
- Delete plan：Click of the corresponding plan, it is to delete the plan.

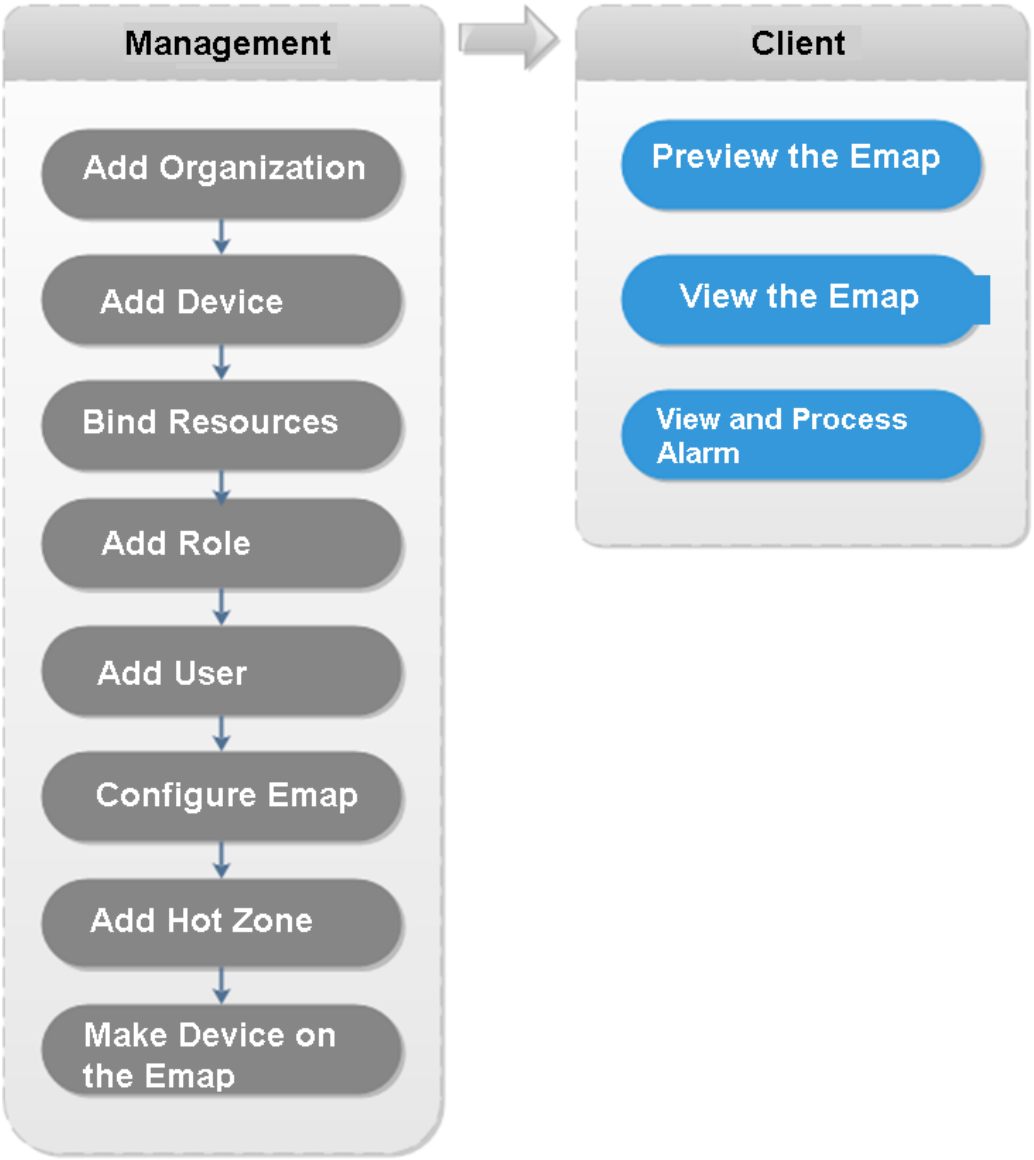
5.7 Emap

On the DSS client, you can view the configured e-map and corresponding device information.

5.7.1 Preparations

Refer to chapter 4.10 Configuring Emap to add emap and hot zone on the platform manager and mark the device on the map. Refer to Figure 5-71 for flows information.

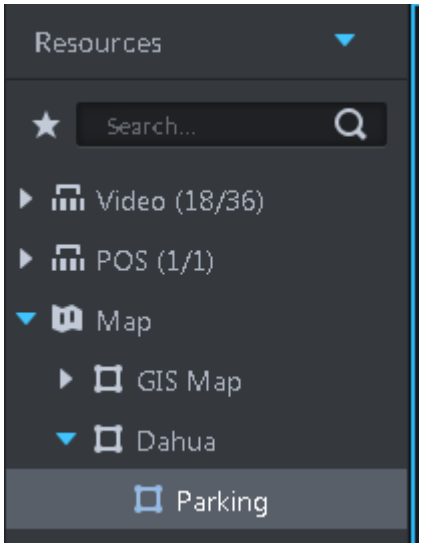
Figure 5-71



5.7.2 Open Emap on the Real-Time Preview

Step 1 On the Live view interface, click the Map at the bottom of the device tree on the left. System displays map and hotspot map on the manager. See Figure 5-72.

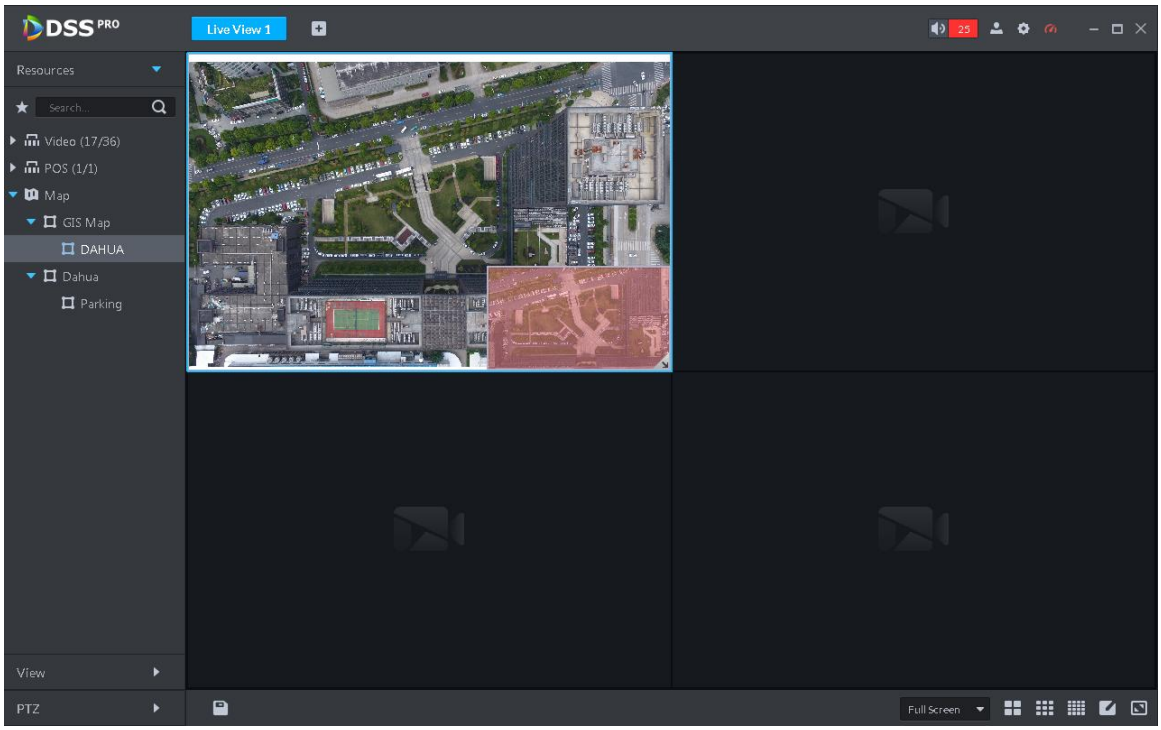
Figure 5-72



Step 2 Double click the map, you can view the map and the added devices.

On the map, you can record real-time video, playback record file, cancel alarm, etc. See Figure 5-73.

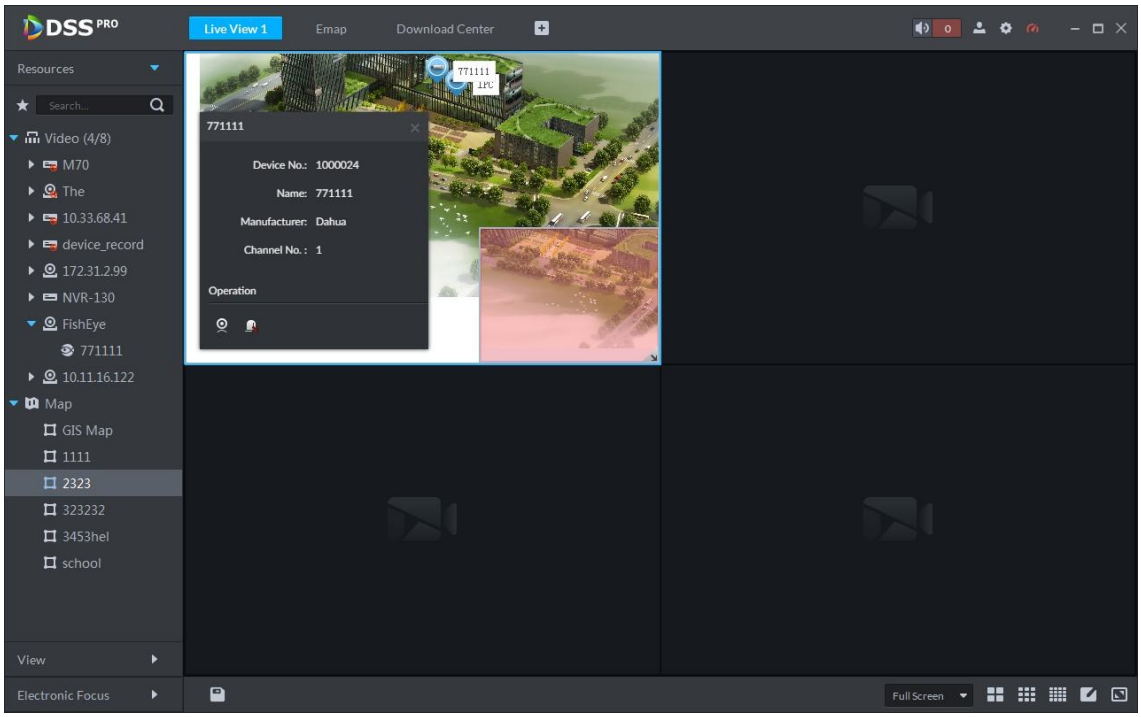
Figure 5-73



Step 3 Click the marked channel.

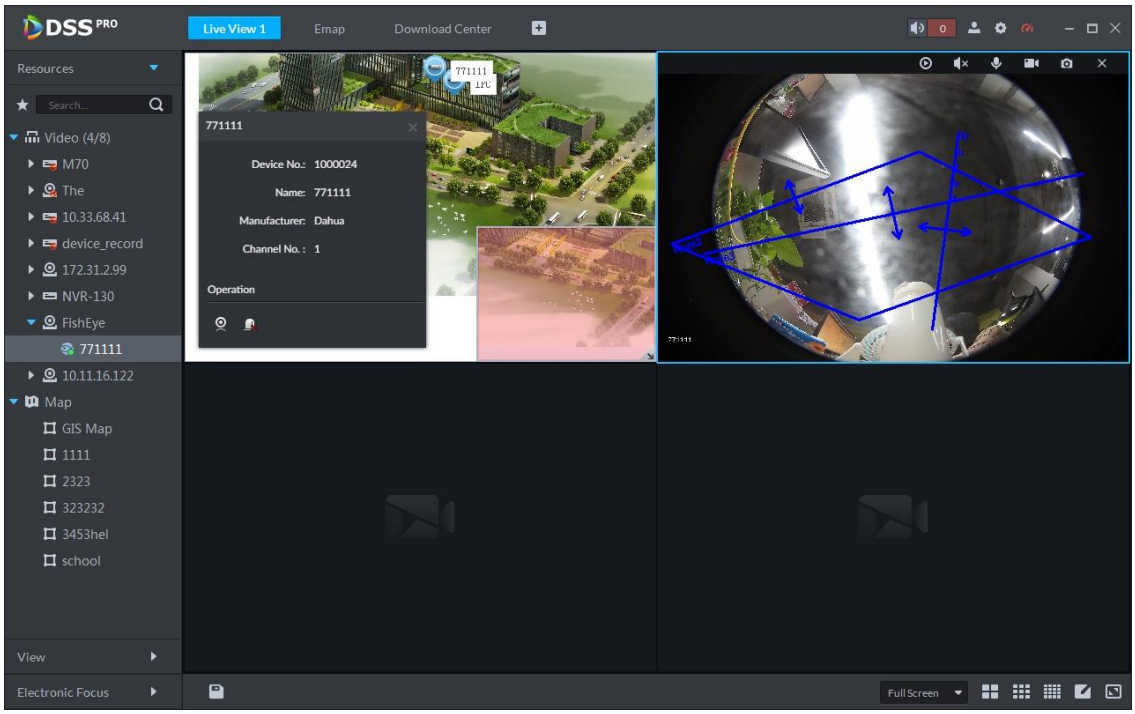
System displays channel information. See Figure 5-74.

Figure 5-74



Step 4 Click to playback real-time video on the window. See Figure 5-75.

Figure 5-75



5.7.3 Viewing Map

It is to display the map setting on the manager. The e-map and the raster map are not the same. Here we use Google map to continue.

Step 1 Click , on the New tab interface select Emap.

Step 2 Select Google map or raster map.

Enter Emap interface. See Figure 5-76.

Figure 5-76

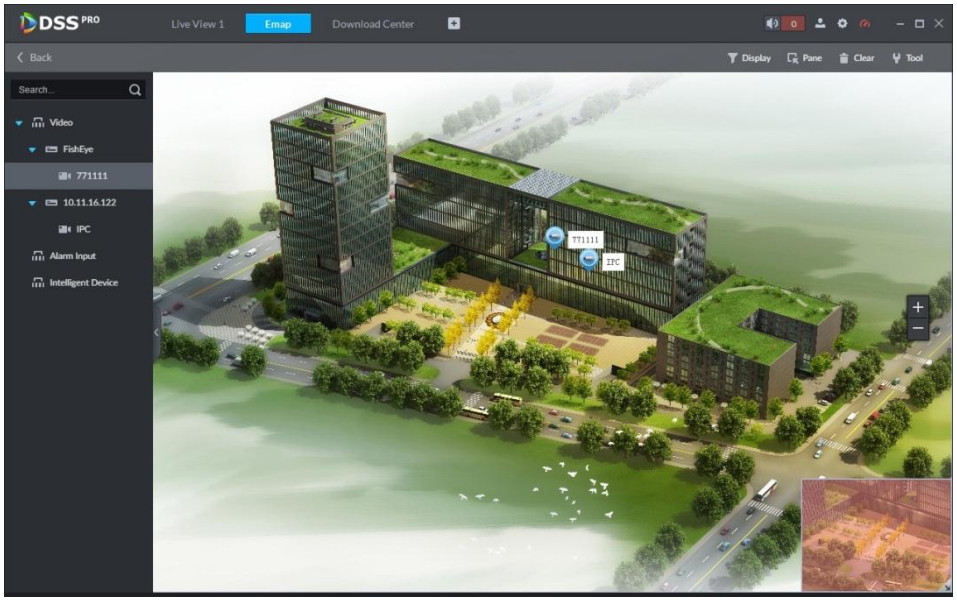


Table 5-18

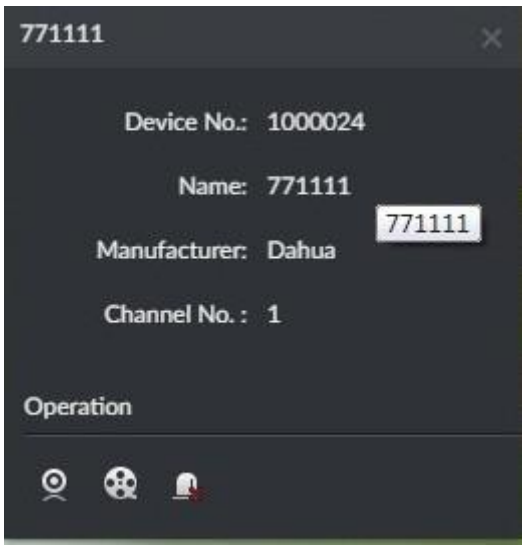
SN	Name	Note
1	Display device	It is filter to display video device, alarm input channel.
2	Use frame to select	Use frame to select a device.
3	Clear data on the screen	Clear selection track on the screen.
4	Tools	It includes mark, reset, and video relay. ● Mark: It is to give a mark on the map. ● Reset: The map restores default position. ● Video relay: This function is null right now.

Step 3 Double click the channel on the device tree on the left, you can view the channel position on the map.

Step 4 Click the channel on the map.

System displays device SN, channel name, manufacture, channel information, etc. See Figure 5-77.

Figure 5-77



- Click to playback video of current channel.
- Click to playback record.
- Click to cancel alarm.

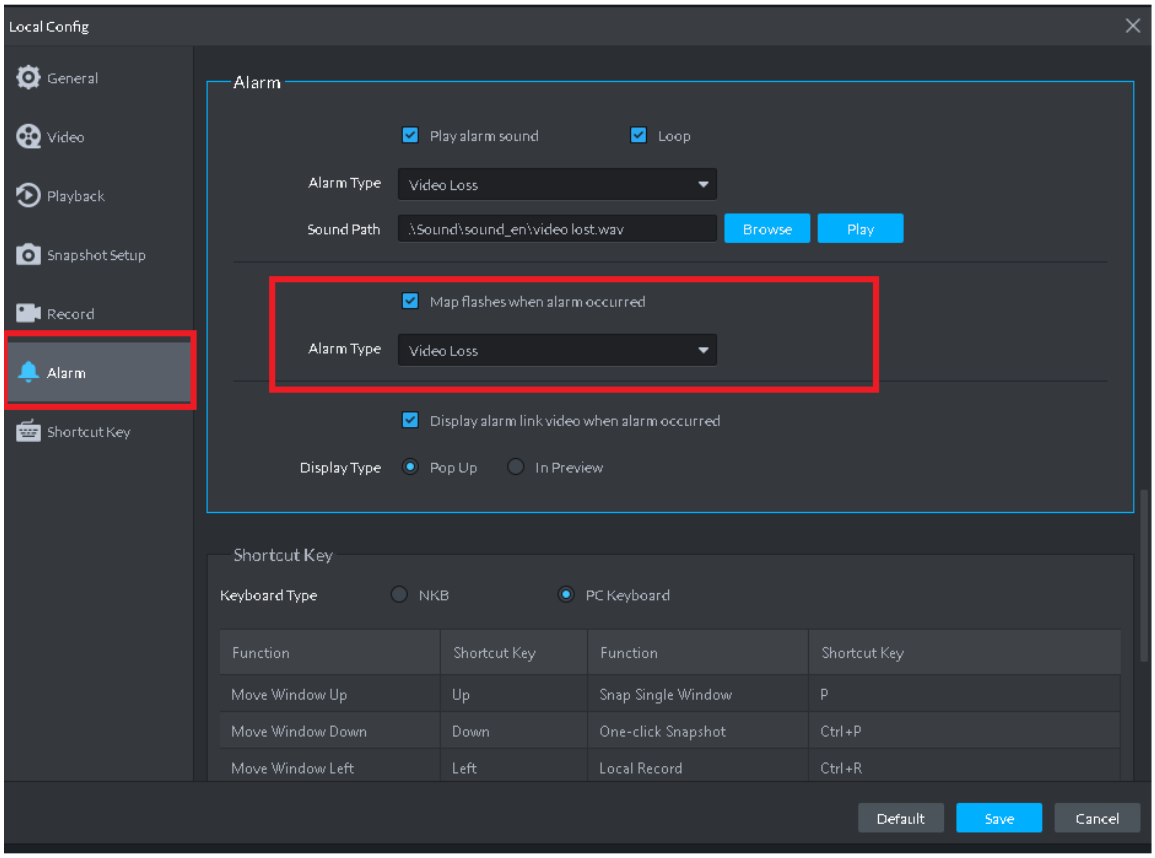
5.7.4 Alarm Flashing on the Map

5.7.4.1 Configuring Alarm Flashing on the Client

Step 1 Click at the top right corner, it is to open General interface.

Step 2 Click Alarm tab, select “Map flashes when an alarm occurs” and then set alarm type from the dropdown list. See Figure 5-78.

Figure 5-78



Step 3 Click Save.

5.7.4.2 Client Triggering Alarm

Step 1 Click , on the New tab interface select Emap.

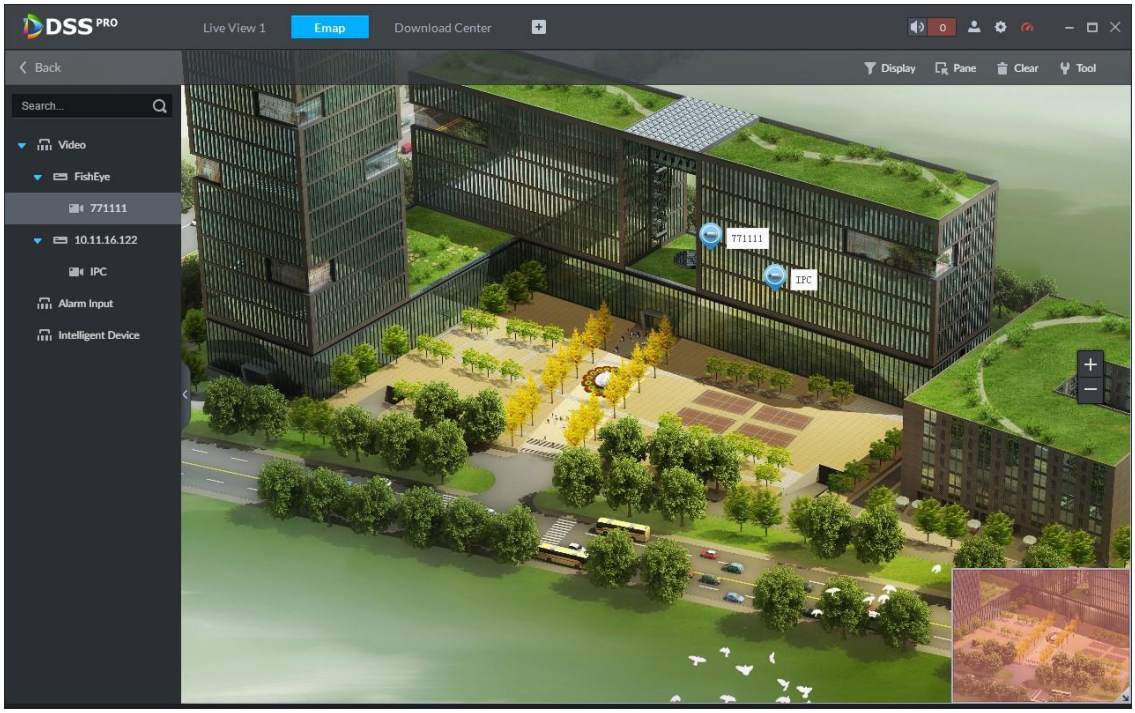
Enter Map interface.

Step 2 Click to go to Google map or Raster map.

Here we use raster map to continue.

Step 3 The channel is flashing when an alarm occurs. See Figure 5-79.

Figure 5-79



5.8 People Counting

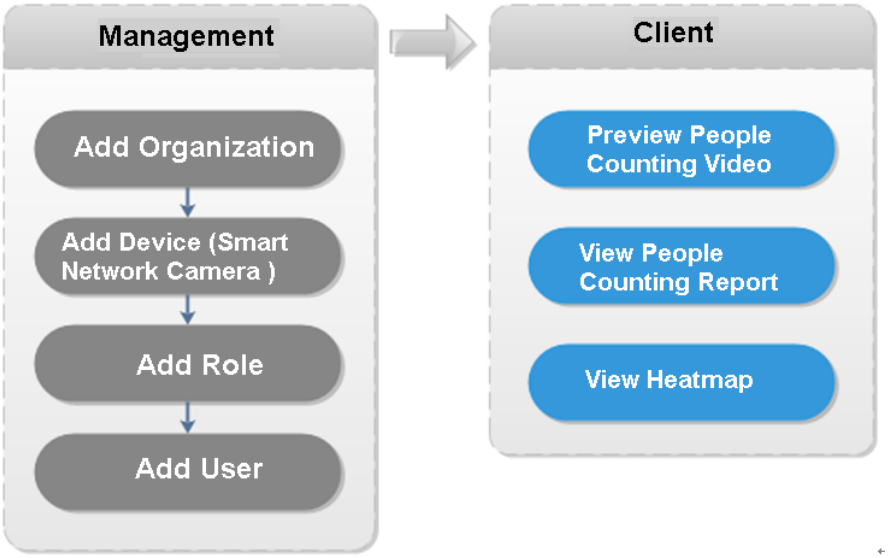
System supports people counting and heatmap function.

5.8.1 Preparations

- Refer to chapter 4.6 Adding Device to register the smart network camera that supports people counting function on the client.
- Refer to the network camera user's manual to set camera intelligent rules.

Refer to Figure 5-80 for flows information.

Figure 5-80

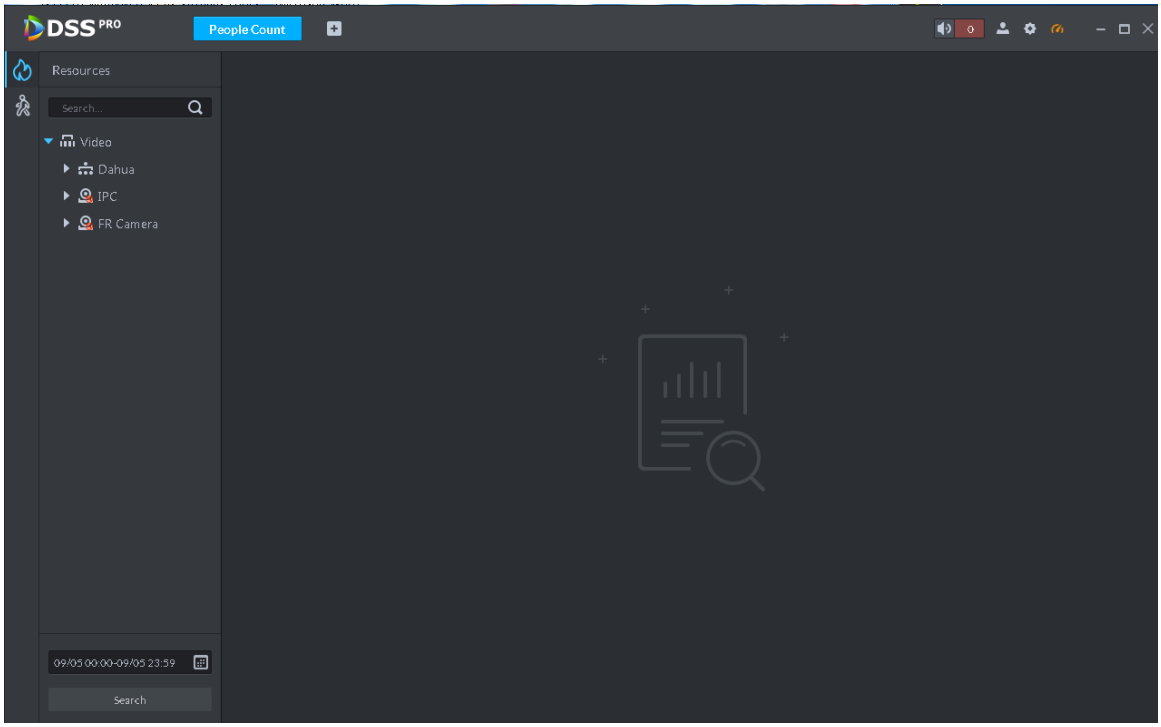


5.8.2 People Counting Report

Step 1 Click ,on the New tab interface select People Count.

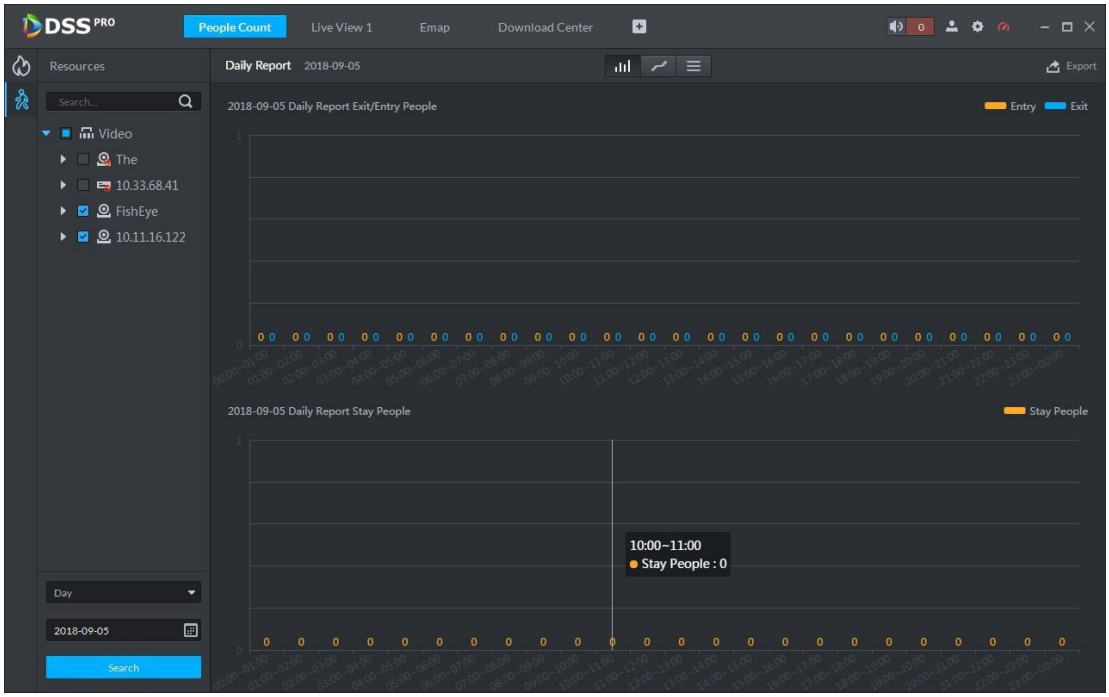
Enter People counting interface. See Figure 5-81.

Figure 5-81



Step 2 Click on the left and then select a channel, select the report type, statistics time, and then click Search. It is to search people counting report. See Figure 5-82.

Figure 5-82

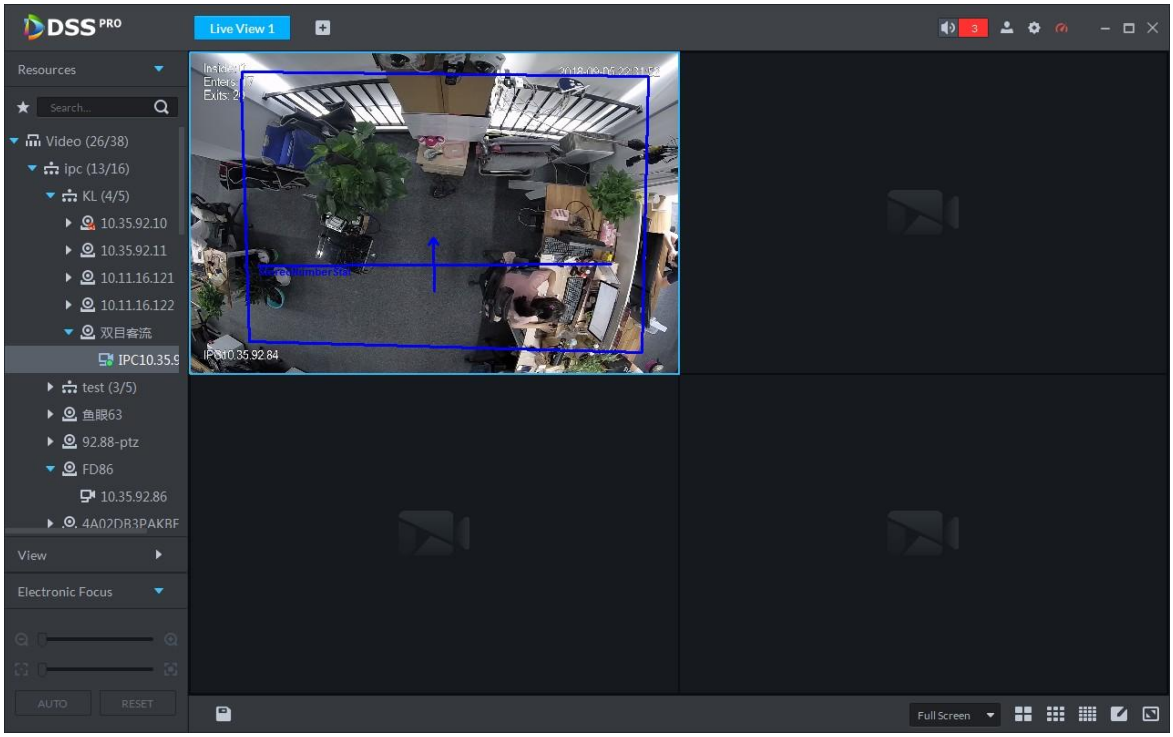


Or you can click to view line chart, or list .

5.8.3 Viewing People Counting Statistics on Live View Interface

On Live View interface, you can view the video of the smart network camera, and view the statistics people amount at the top left corner. See Figure 5-83.

Figure 5-83



Entry/exit count is shown at the top left corner. See Figure 5-84.

Figure 5-84

5.8.4 Heatmap

Step 1 Click tab.

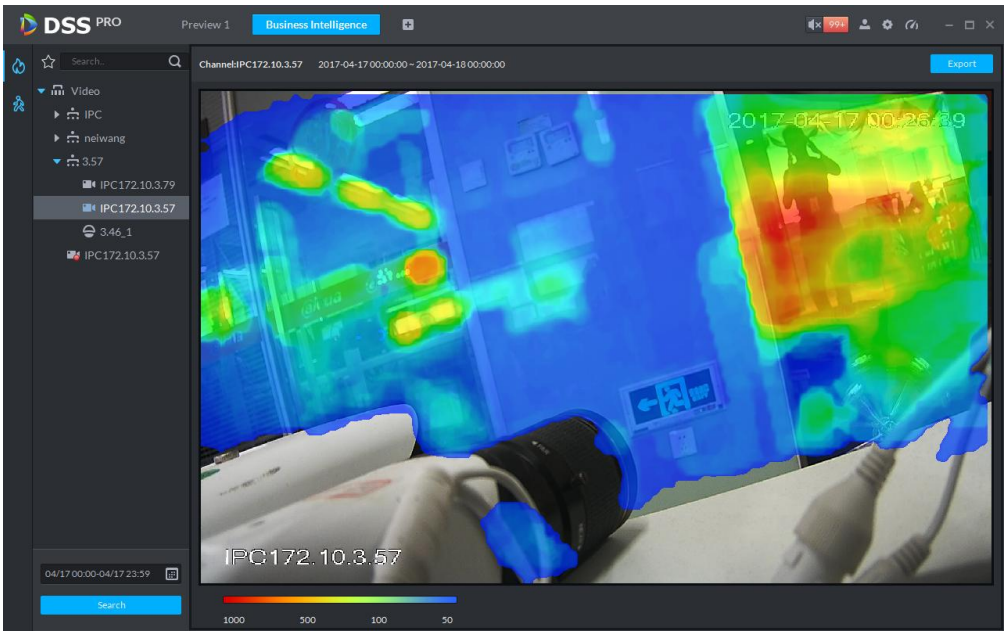
Step 2 Select a channel to show heat map, and select time, click Search

System displays heatmap interface. See Figure 5-85.

NOTE

The device sends heat map data to platform on a real-time basis. Starting when device is added to platform, you can search heat map data uploaded. Unit of search is week (interval between start time and end time cannot exceed 1 week).

Figure 5-85



Step 3 Click Export at the top right corner, you can export heat map in bmp format.

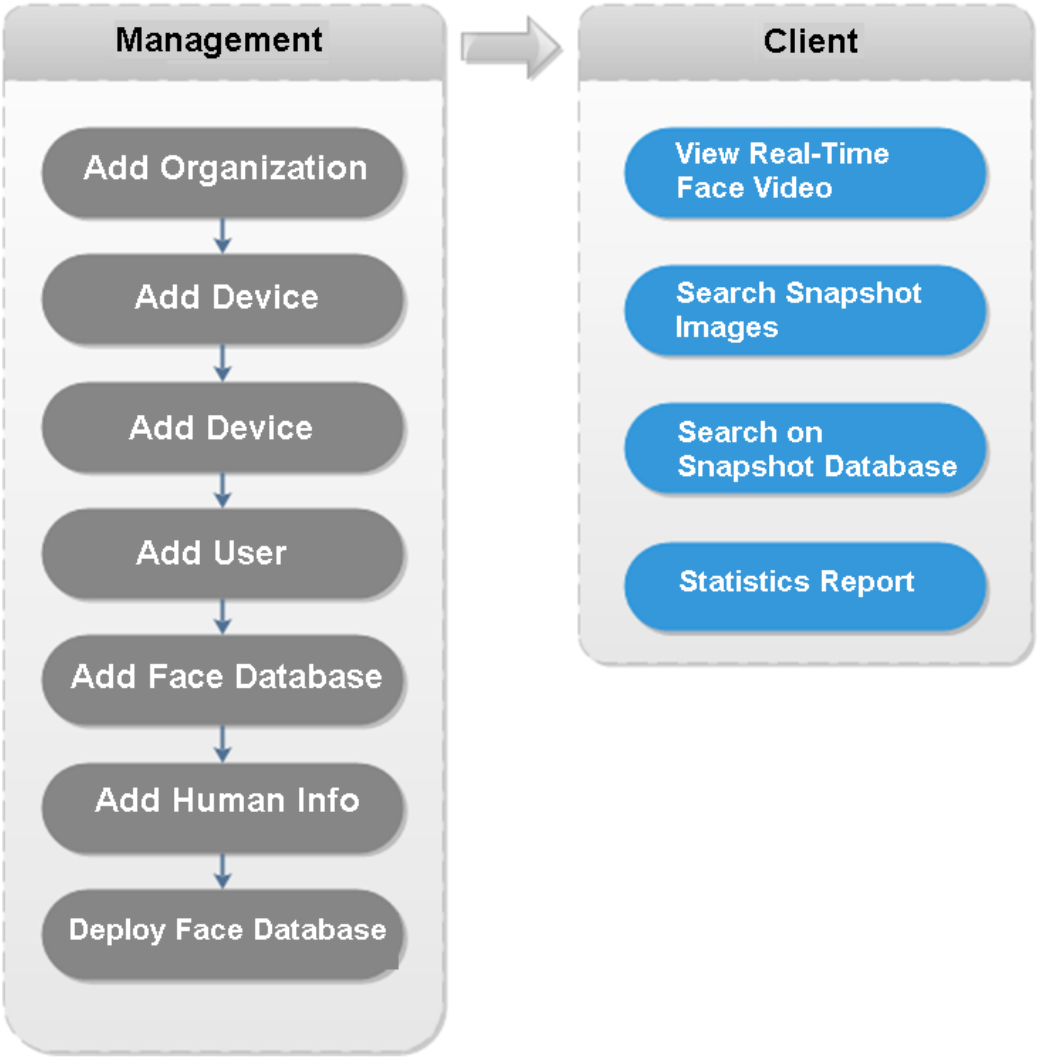
5.9 Human Face Recognition

5.9.1 Preparations

- Refer to chapter 4.12.1Creating face database to create human face database on the manager.
- Refer to chapter 4.12.2 Configuring arm to arm human face database on the platform manager.

Refer to Figure 5-86 for flows information.

Figure 5-86



5.9.2 Real-Time Human Face Video

Human face recognition function is applied to real-time video and snapshot human face image.

Step 1 Click ,on the New tab interface select Face recognition.

Step 2 Click .

System displays real-time video. See Figure 5-87.

Figure 5-87

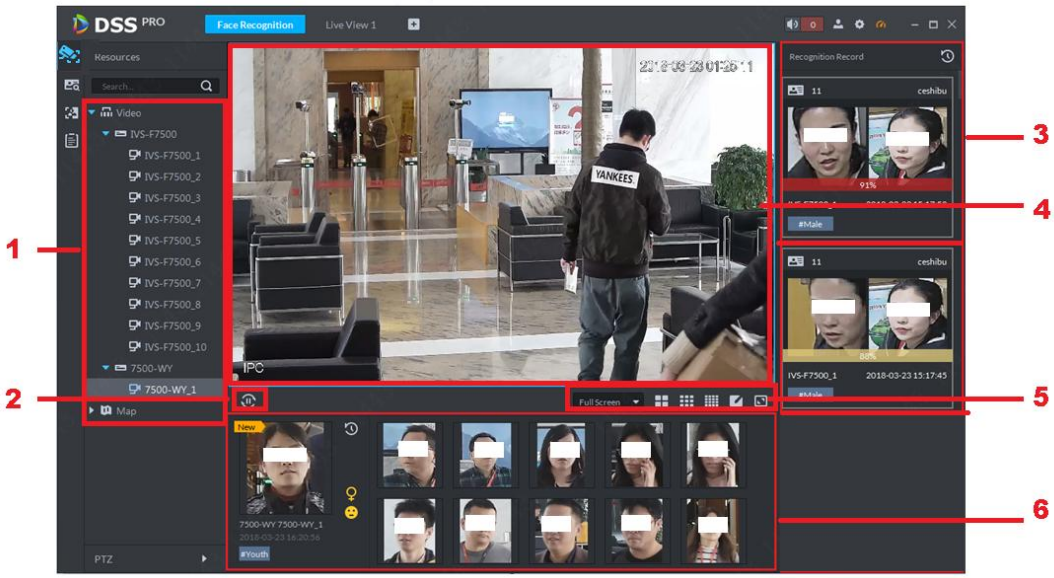


Table 5-19

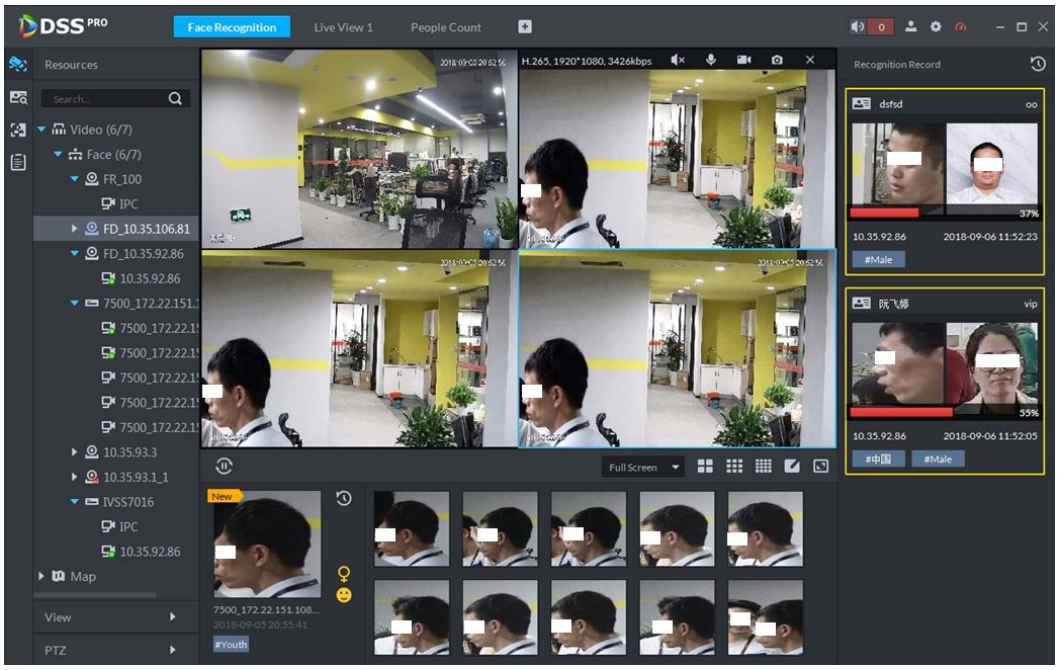
SN	Name		Note
1	Device tree		It is to display device information.
2	Pause refresh/start refresh		• : When this icon is on the interface, the snapshot display pane does not refresh human face snapshot image. Click the icon, system displays real-time face image. • : When this icon is on the interface, the snapshot display pane refresh human face snapshot image. Click the icon, system refreshes human face snapshot image.
3	Recognition history record		It is to display the snapshot human face image of the video.
4	Monitor window		It is to display channel preview video. In multiple-window display mode, double click the window to switch to 1-window display mode. Double click the window again to restore original mode.
5	Full Screen	Image display rate	• There are two modes: full screen, original scale. The full screen refers to one window at the full screen.
		Window split switch	It is to display switched window amount. System supports customized settings.
		Full screen display	The system displays window at full screen.
6	Snapshot human face image display pane		It is to display snapshot human face image.

Step 3 Enable video preview.

- Select a monitor window (white frame means it is the checked window). Double click a channel or record file to enable real-time surveillance.
- Drag the channel or the video file to the monitor window.

It is to enable video preview interface. See Figure 5-88.

Figure 5-88



Step 4 Double click snapshot human image.

System displays human detailed information interface.

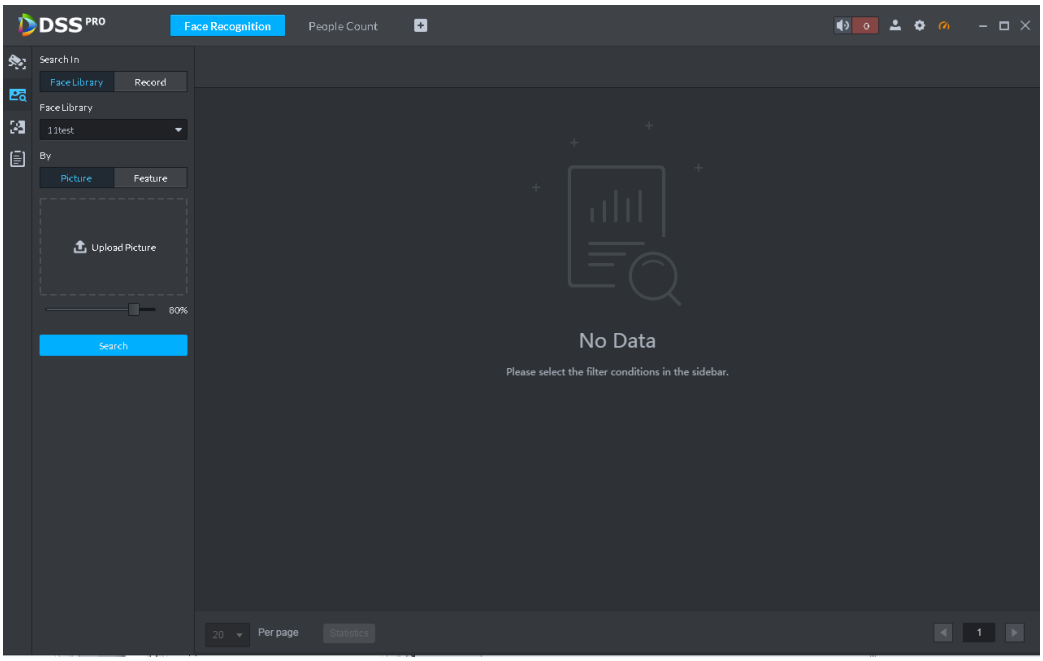
5.9.3 Searching Snapshot Images

The human face recognition function can search the specified person from the human face database or the snapshot image database. Or you can use the image to search the corresponding person.

Step 1 On the Face recognition interface, click .

Enter Search face library interface. See Figure 5-89.

Figure 5-89



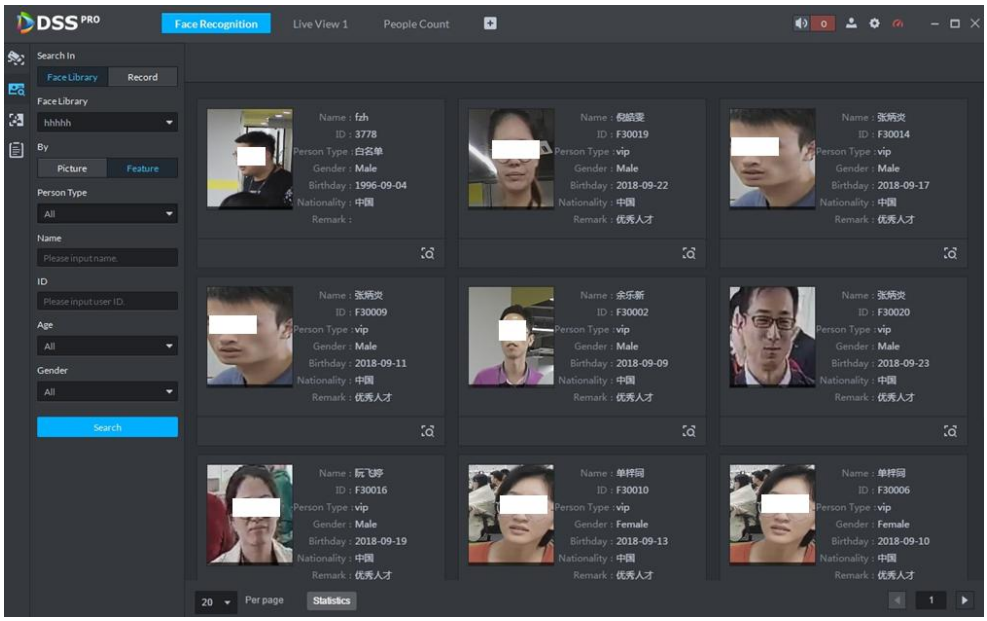
Step 2 Set search criteria.

- You can search on human face database or records.
- Select a human face database already exists.
- The search criteria can be Picture or Feature.

Step 3 Click Search.

The search interface is displayed. See Figure 5-90.

Figure 5-90



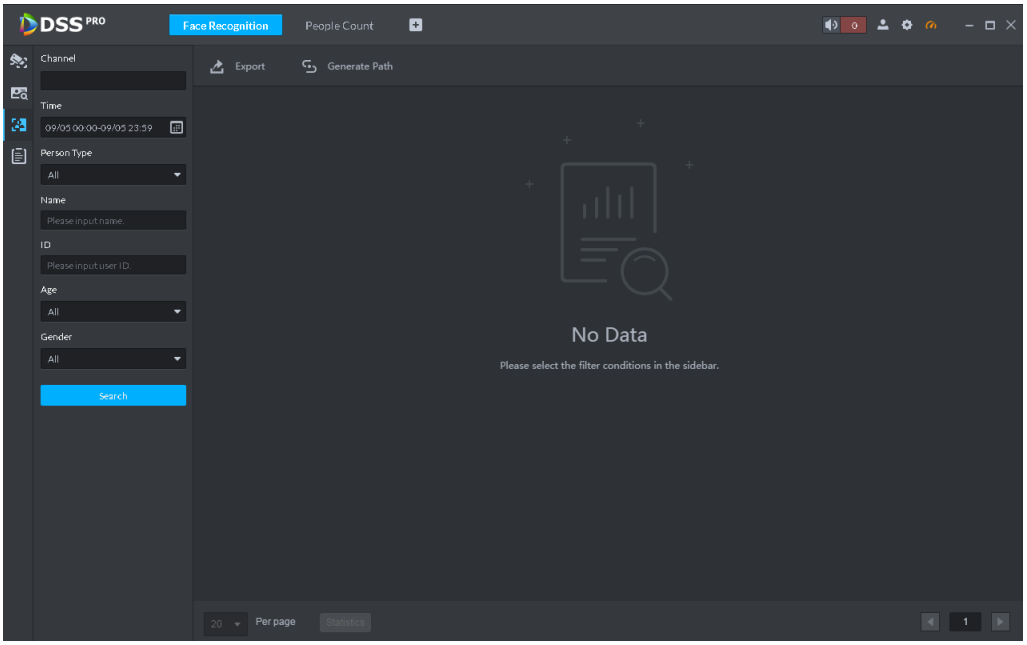
5.9.4 Searching on the Snapshot Database

The human face recognition function can search images of specified period or search the image on the image database .

Step 1 On Face recognition interface, click .

The snapshot database search interface is displayed. See Figure 5-91.

Figure 5-91



Step 2 Set search criteria.

System supports search by channel, time, human face features, name, ID, age, gender, etc.

Step 3 Click Search.

Step 4 Double click the search result

System displays human information. See Figure 5-92. There is no image on the left if you do not upload image when setting search criteria. Refer to Table 5-20 for detailed operation information.

Figure 5-92

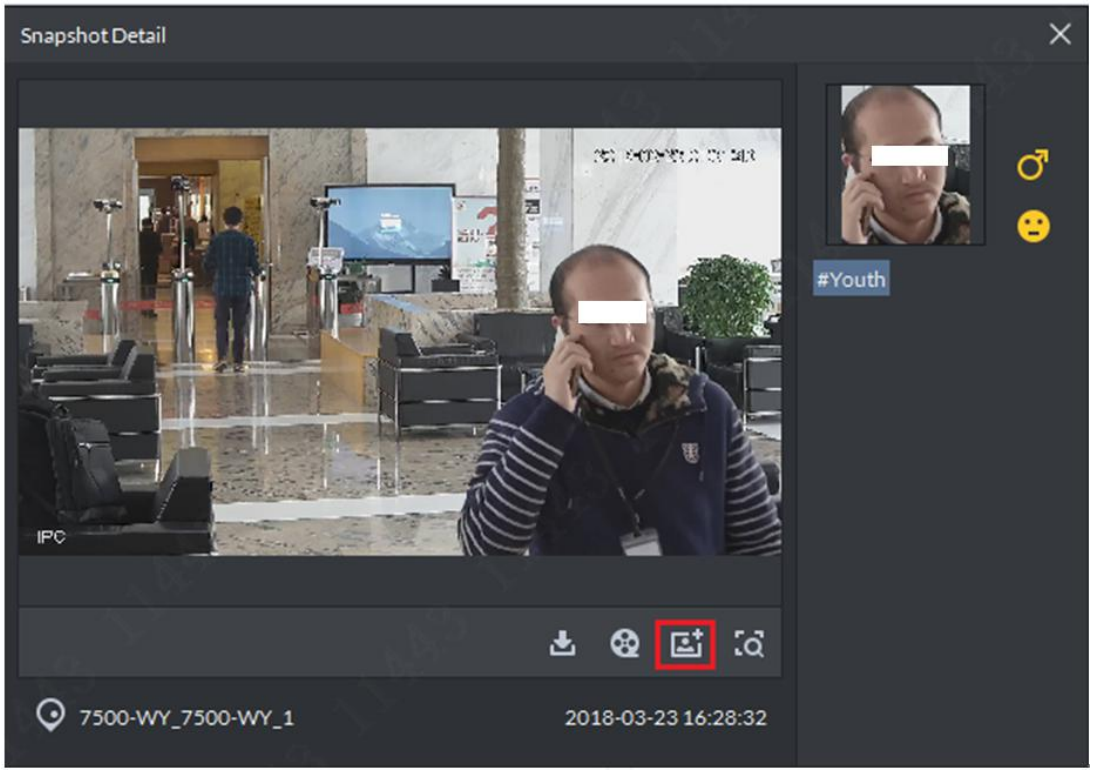


Table 5-20

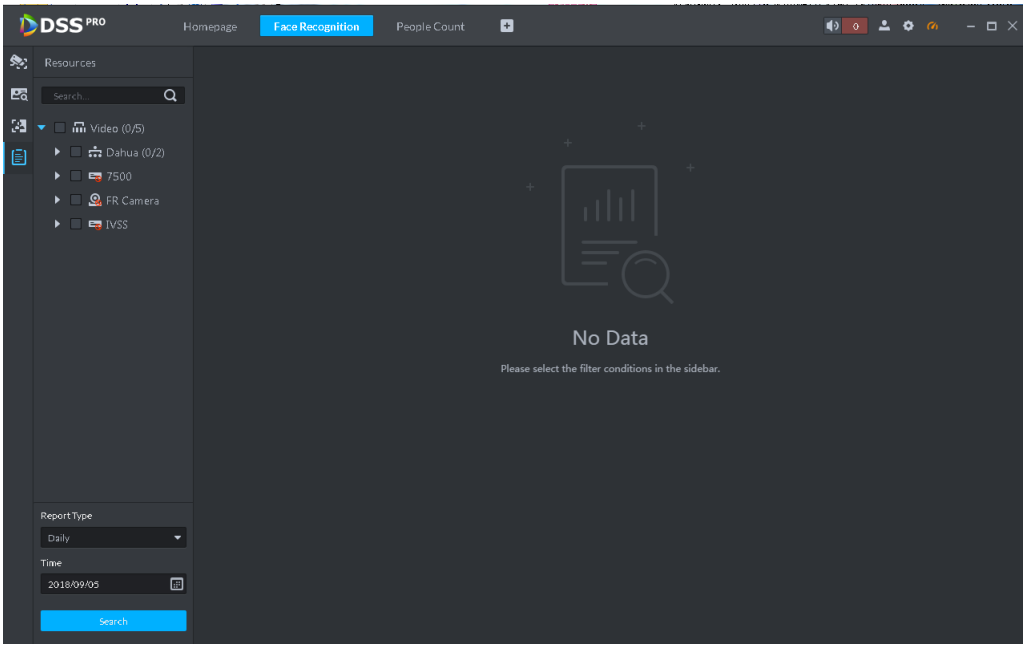
Operation	Note
Download Record	Click , it is to save RAR file on the specified path. The .RAR file contains the human face snapshot image and snapshot panorama images.
Playback record	Click to playback the 15-seconds video record before and after the snapshot.
Add person	It is to add the snapshot person to the database. 1. Click, system displays View interface. 2. Set person information and then click OK.
Search record	You can use the snapshot image to search on the registration database. 1. Click, system goes to human face search interface with the snapshot image. 3. Click Search, system displays search result.

5.9.5 Statistics Report

Step 1 On Face recognition interface, click .

Enter Registration database search interface. See Figure 5-93.

Figure 5-93



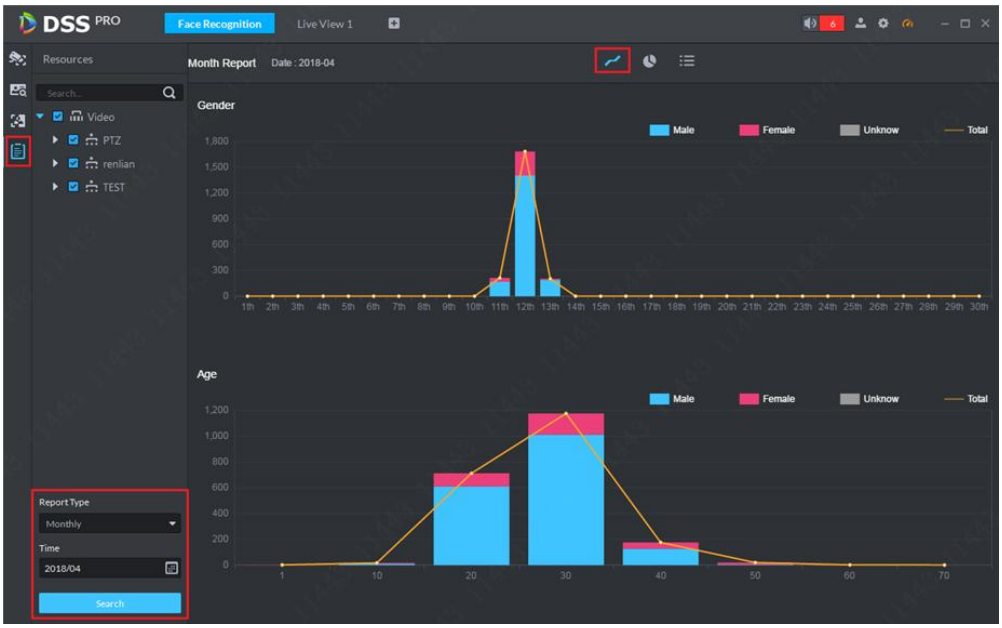
Step 2 Set search criteria.

Set video channel, report type and time.

Step 3 Click Search.

The statistics search result is displayed. See Figure 5-94.

Figure 5-94



- System displays results by line chart.
- Click to display by pie chart.
- Click to display by list.
- Click Export, it is to export statistics result to .pdf file.

5.10 Road Monitoring Applications

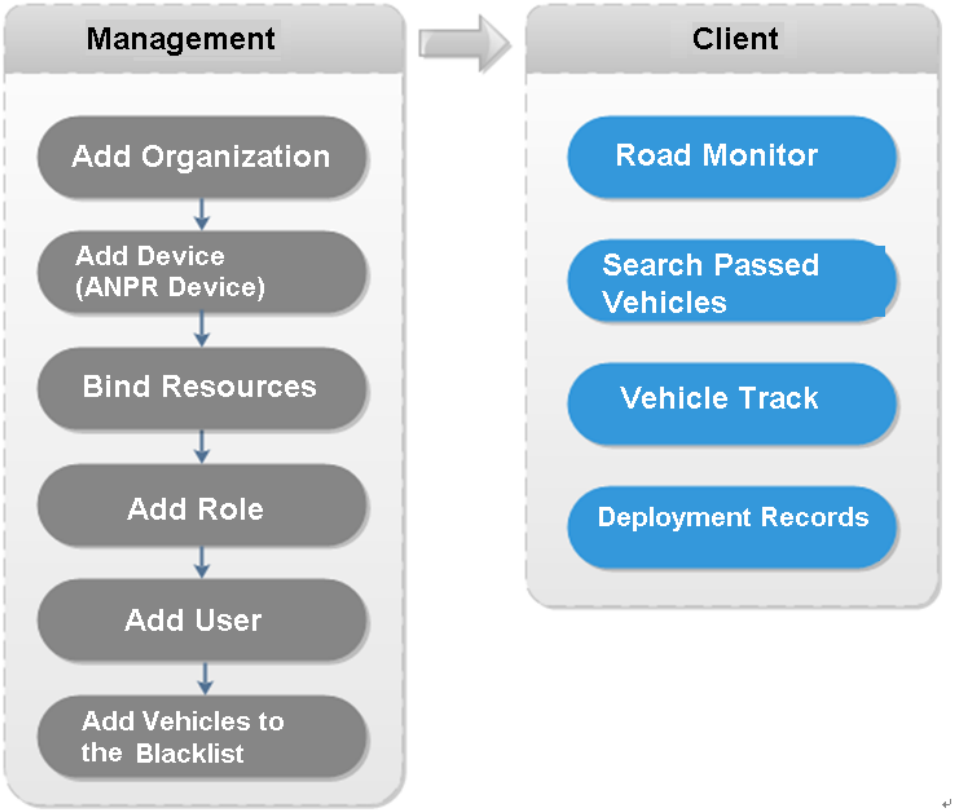
The platform integrates vehicle module. It can search passed vehicles and search violation records and alarm.

5.10.1 Preparations

- Refer to chapter 4.6 Adding device to add ANR device on the platform manager.
- Refer to chapter 4.13 Adding vehicle blacklist to add vehicle blacklist on the platform manager.

Refer to Figure 5-95 for road monitor flows.

Figure 5-95



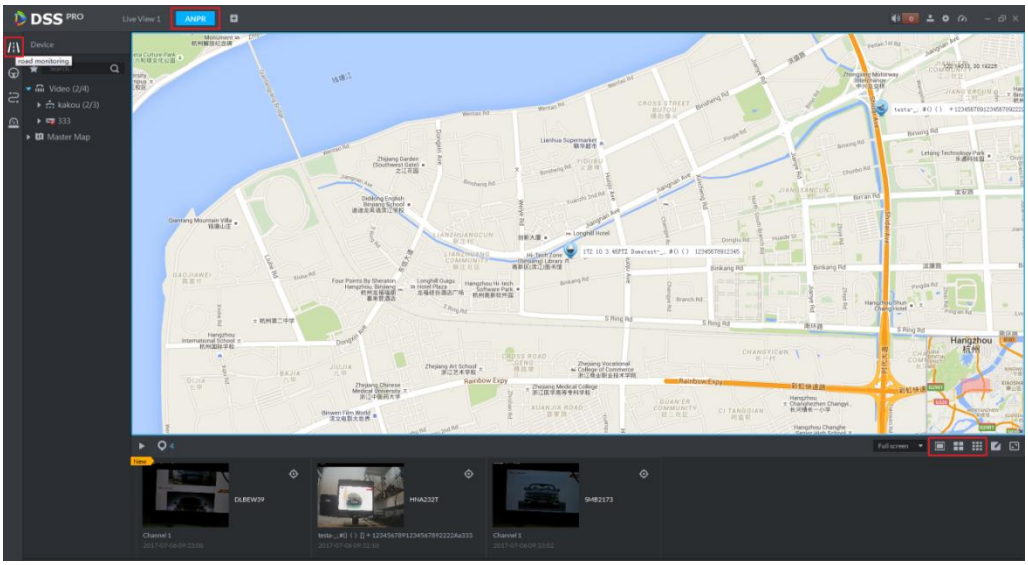
5.10.2 Road Monitor

Step 1 Click ,on the New tab interface select ANPR.

Step 2 Click , system displays road monitor interface.

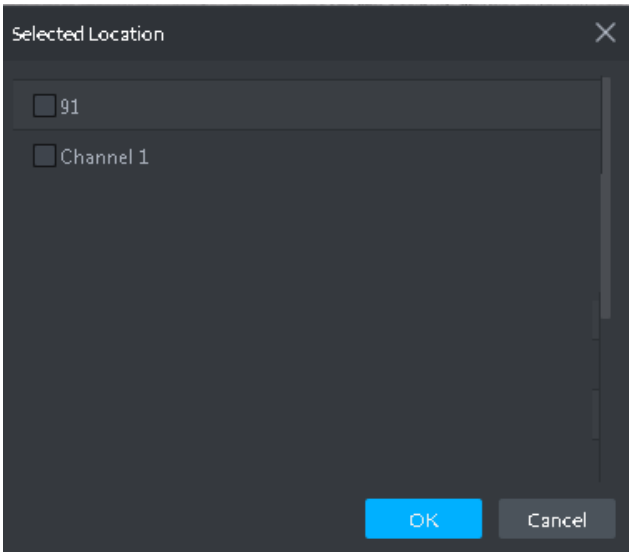
System displays emap in 1-window by default. You can manually switch window amount. See Figure 5-96.

Figure 5-96



Step 3 Click to select the ANPR channel. See Figure 5-97.

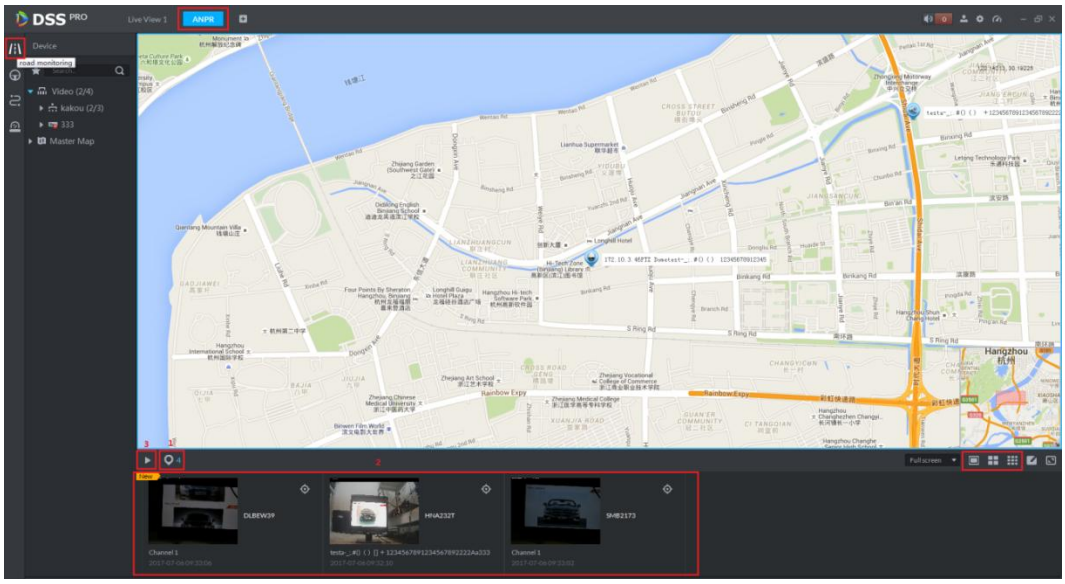
Figure 5-97



Step 4 Select ANPR device and then click OK.

System displays the selected channel amount and the latest passing vehicle image on the rolling pane. See Figure 5-98.

Figure 5-98



Step 5 Double click the image to view image details. It includes plate number, snapshot time, ANPR channel name, vehicle logo, vehicle color.

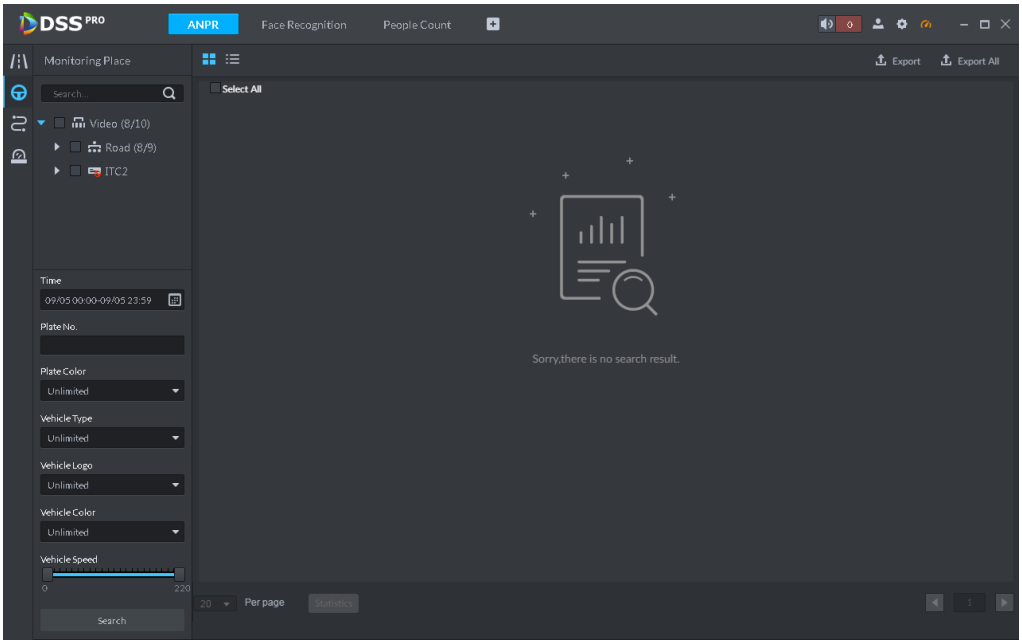
5.10.3 Searching Passed Vehicle

It is to search passing vehicle.

Step 1 Click .

Enter Passed vehicle interface. See Figure 5-99.

Figure 5-99

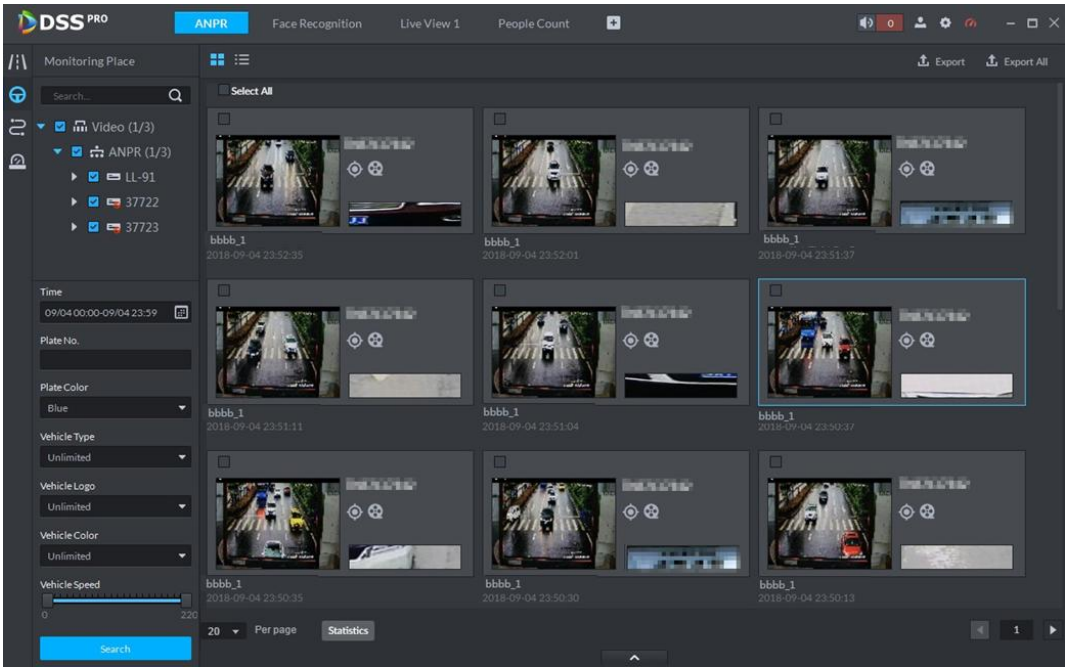


Step 2 Select video channel and search criteria. It includes time, plate number, plate color, plate type, vehicle logo, vehicle body color and lane.

Step 3 Click Search.

System displays search result. See Figure 5-100.

Figure 5-100



For the passed vehicle, you can view its detailed information, record and running track. Refer to the operations listed below.

- Click View mode ( ) or list mode ( ), it is to select different display mode.
- Select a snapshot image and then click or double click the image, system displays detailed information. See Figure 5-101. Move the cursor to the middle to select the specified zone, you can zoom in it. See Figure 5-102.

Figure 5-101

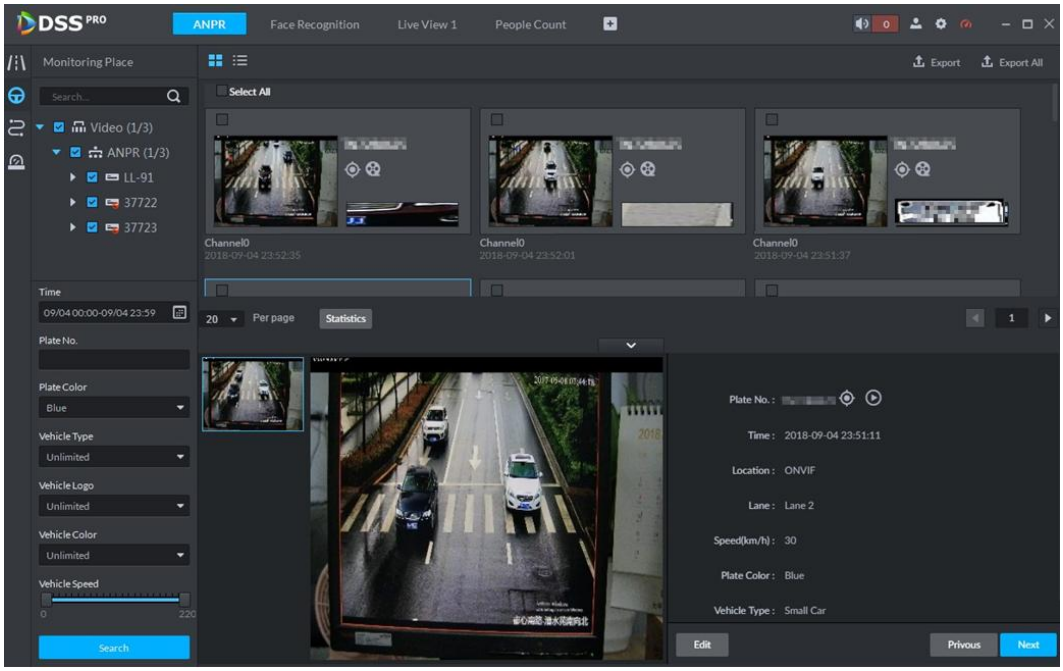
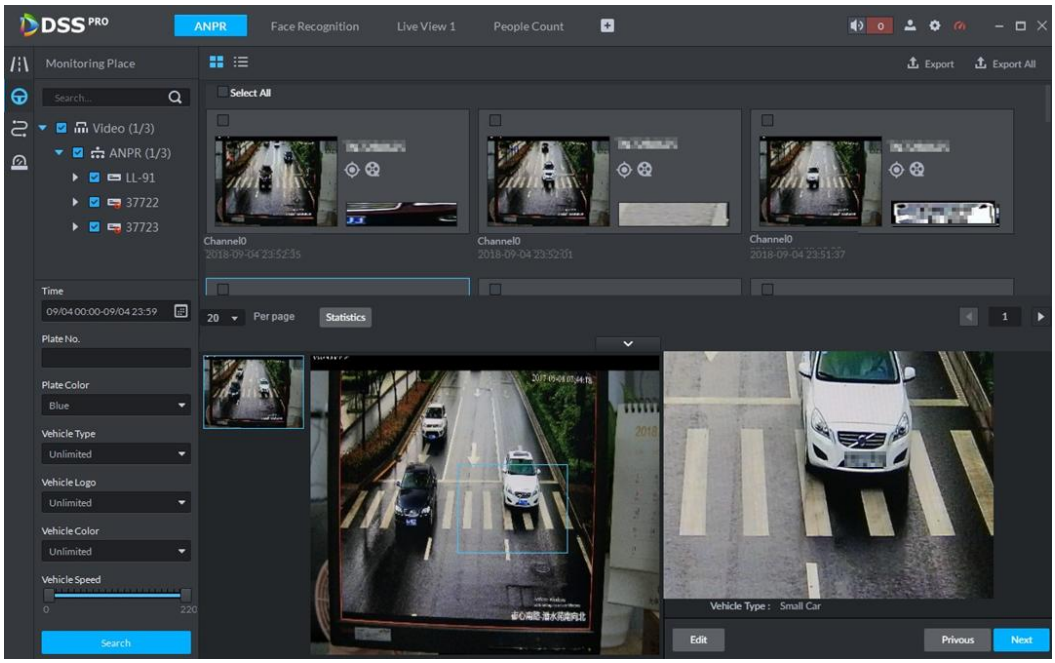


Figure 5-102



- Click to playback the 15-second video before and after the vehicle passed time. See Figure 5-103. The video file is total 30 seconds. It is to display the 15-second video before and after the vehicle passed.

Figure 5-103

- Click to view the vehicle running track. Refer to chapter 5.10.4 Vehicle Track for detailed information.
- Export: Select the passed vehicle information and then click Export. It is to export selected passed vehicle. Click Export all, it is to export all searched passed vehicle information.

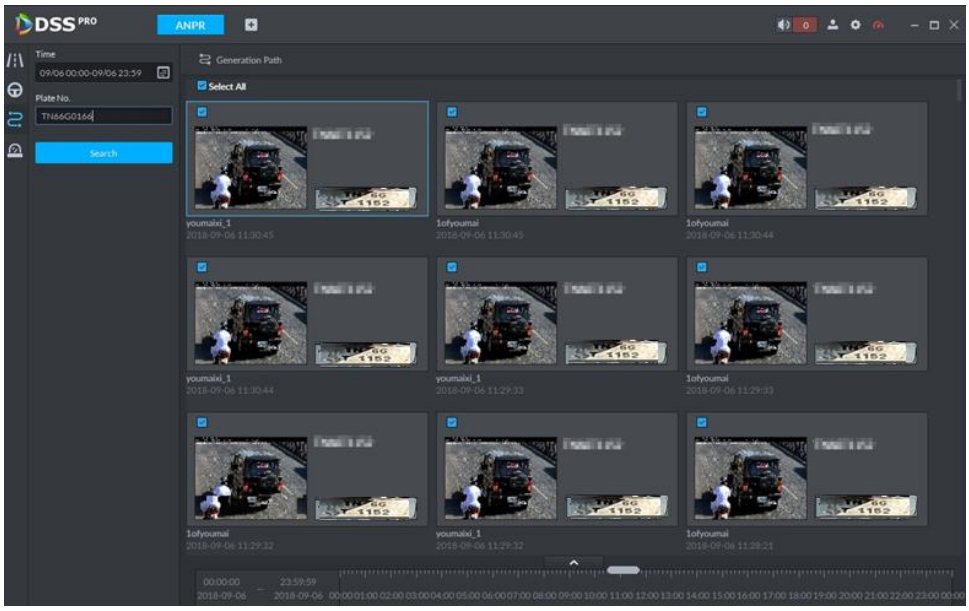
5.10.4 Vehicle Track

Step 1 Click , system displays Road monitor interface.

Step 2 Select time and then input plate number. Click Search.

Enter Vehicle track search result. See Figure 5-104.

Figure 5-104



Refer to the operations listed below.

- Select the snapshot image and then click or double click the image, you can view snapshot vehicle detailed information. See Figure 5-105. Move the cursor to the middle to select the specified zone, you can zoom in it. See Figure 5-106.

Figure 5-105

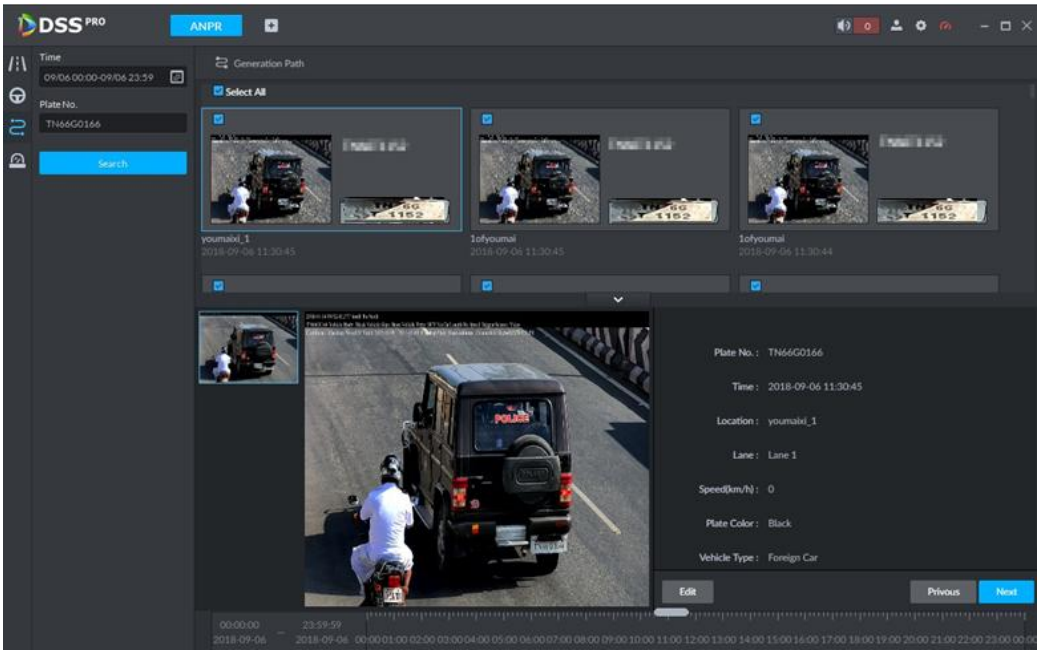
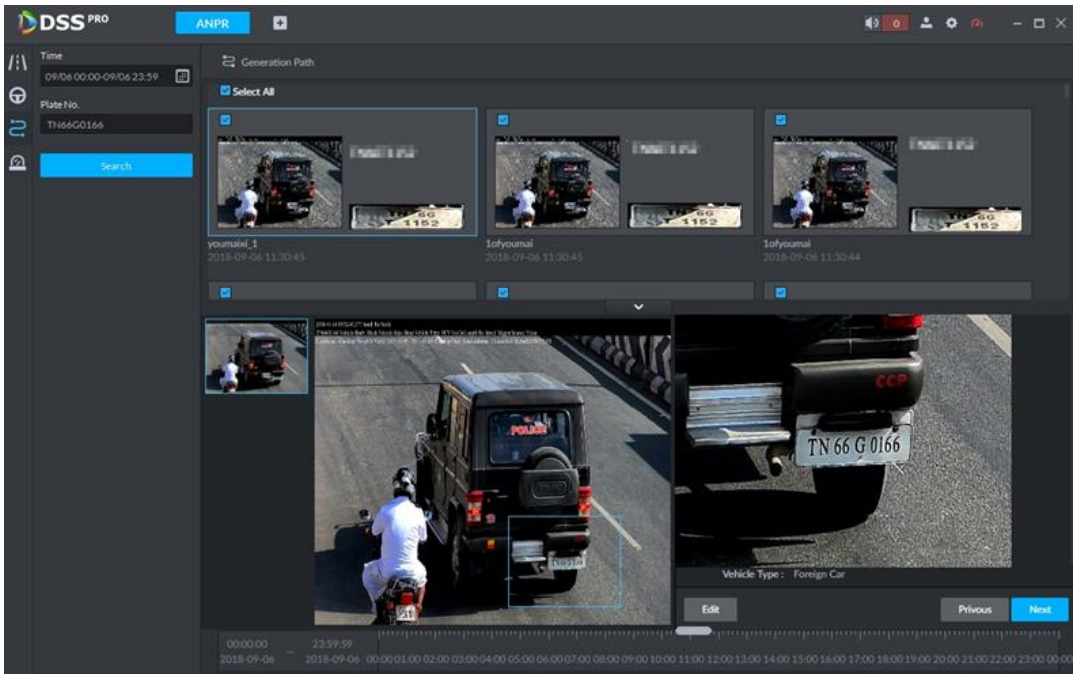
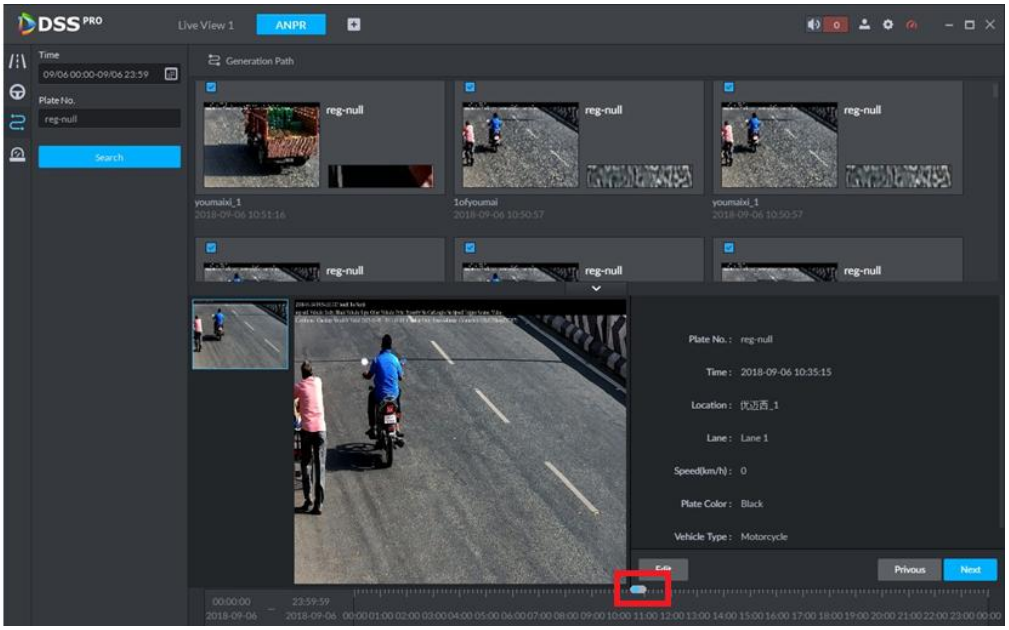


Figure 5-106



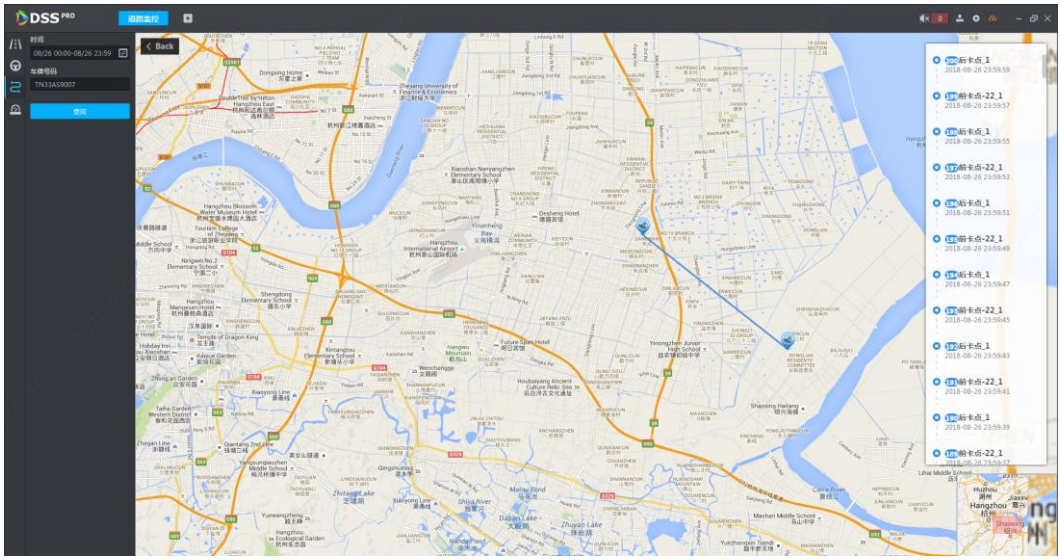
- Click Edit, it is to edit vehicle basic information.
- Click Previous or Next to view the previous or the next search item.
- Click the timeline that has the records, you can view the vehicle information of the specified time. See Figure 5-107.

Figure 5-107



- Select the snapshot image and then click the Generation path (track), you can view the vehicle track on the map. See Figure 5-108.

Figure 5-108



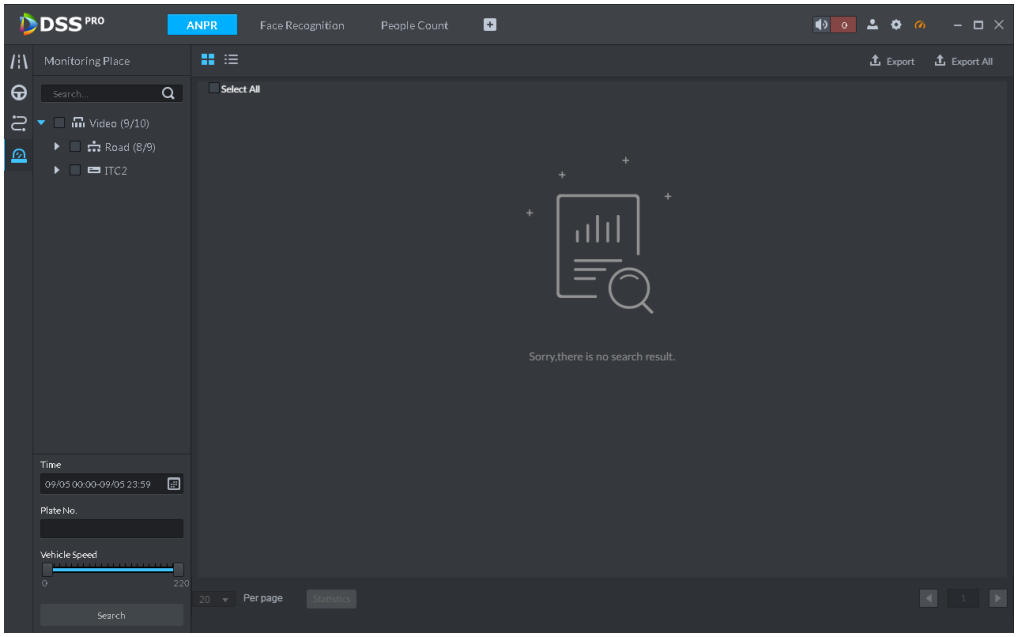
5.10.5 Monitor Place

It is to view and confirm the alarm information.

Step 1 Click 。

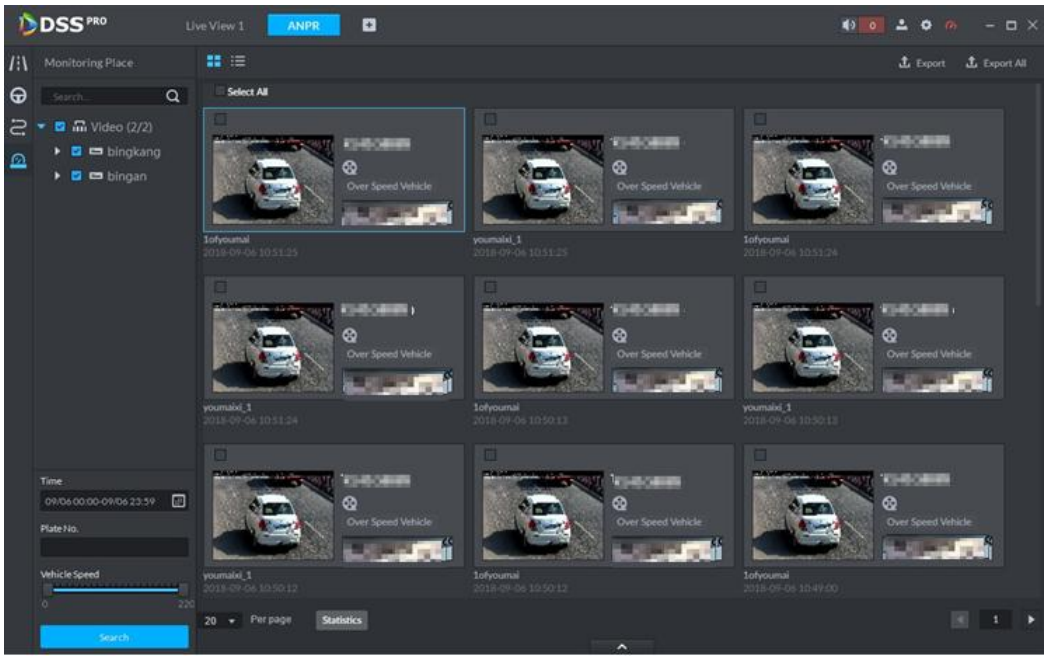
Enter Monitor place interface. See Figure 5-109.

Figure 5-109



Step 2 Select device channel, and then set time, plate number, speed. Click Search. System displays search result. See Figure 5-110.

Figure 5-110



For the monitor record, you can view vehicle detailed information, corresponding video, edit vehicle information. Refer to the operations listed below.

- Click View mode（ ）or List mode（ ），it is to select different display mode.
- Select the snapshot image and then click or double click the image, you can view snapshot vehicle detailed information. See Figure 5-111. Move the cursor to the middle to select the specified zone, you can zoom in it. See Figure 5-106.

Figure 5-111

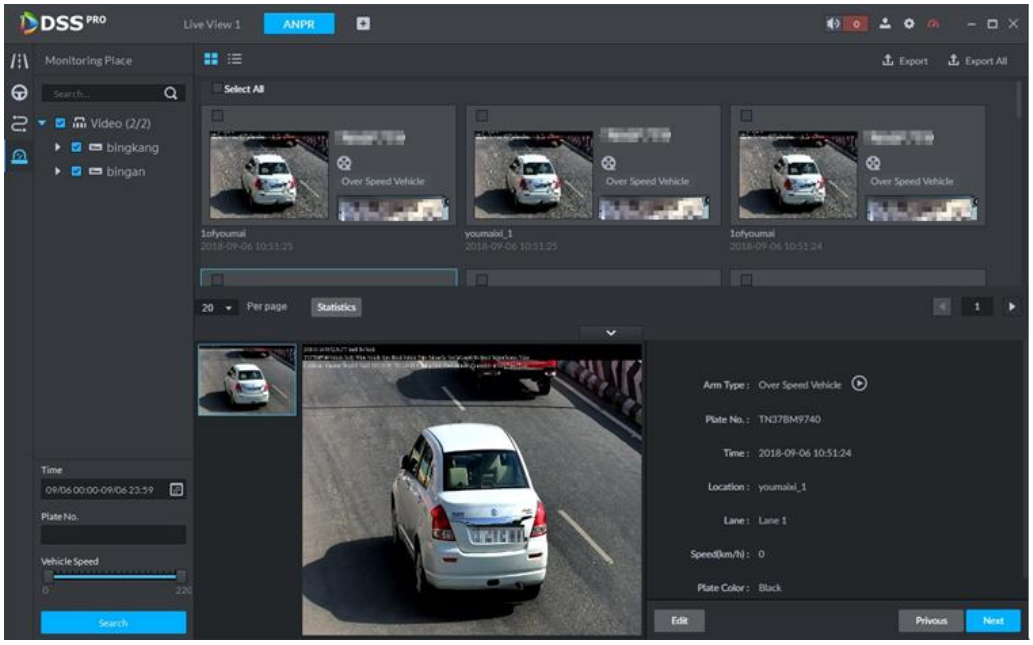
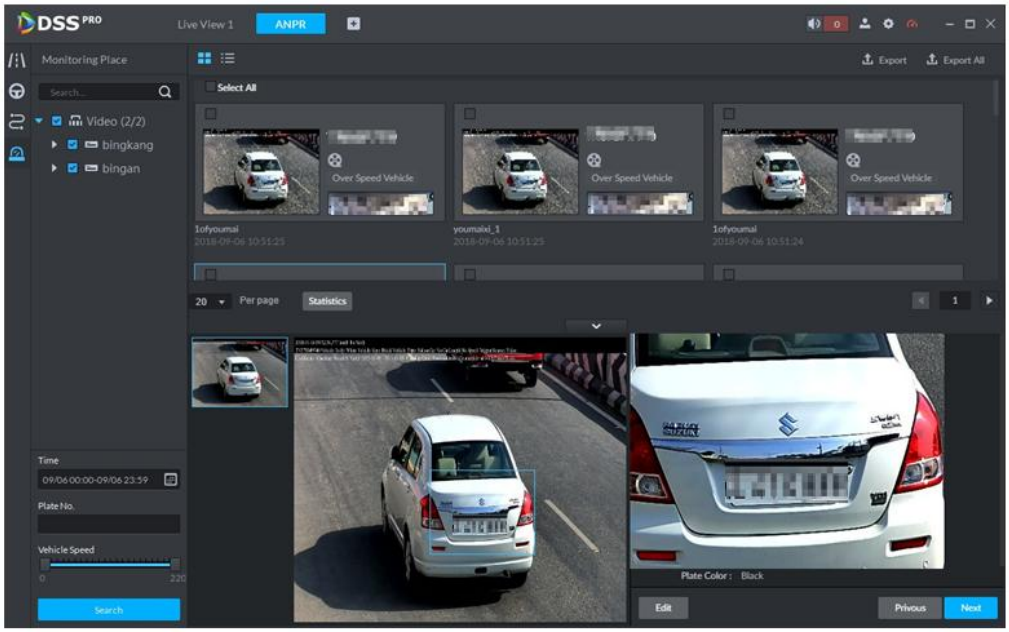


Figure 5-112



- Click to playback the 15-second video before and after the vehicle passed time. See Figure 5-113. The video file is total 30 seconds. It is to display the 15-second video before and after the vehicle passed.

Figure 5-113

- Click to view the vehicle running track. Refer to chapter 5.10.4 Vehicle Track for detailed information.
- Export: Select the passed vehicle information and then click Export. It is to export selected monitor position information. Click Export all, it is to export all monitor position information.

5.11 Traffic

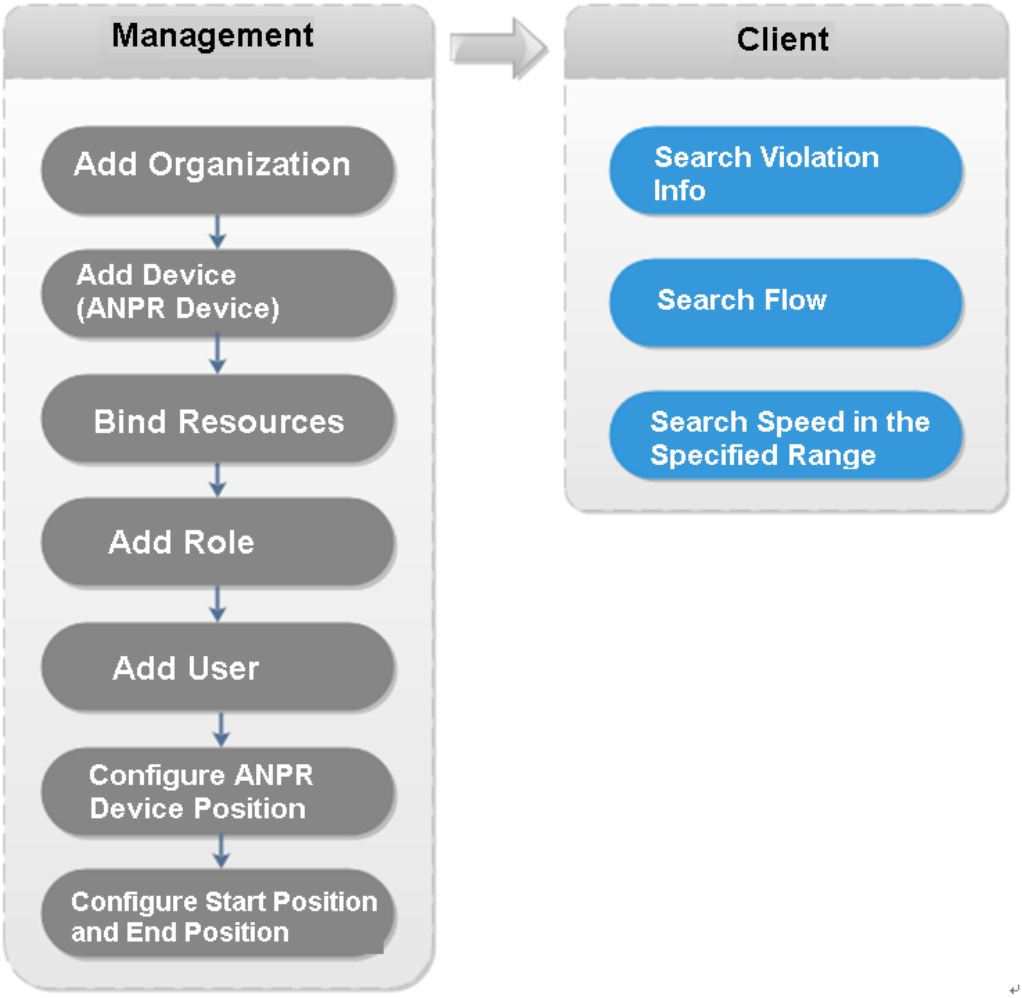
It is to search the vehicle traffic violation information from the ANPR device and vehicle flow statistics. You can search speed measurement result from the specified range.

5.11.1 Preparations

- Refer to chapter 4.6 Adding device to add ANPR device on the platform manager.
- Refer to chapter 4.9 Configuring speed measurement on the range to set speed measurement positions and its distance.

Refer to Figure 5-114 for flows information.

Figure 5-114



5.11.2 Searching Violation Information

It is to search vehicle violation information. The violation information is from the ANPR camera.

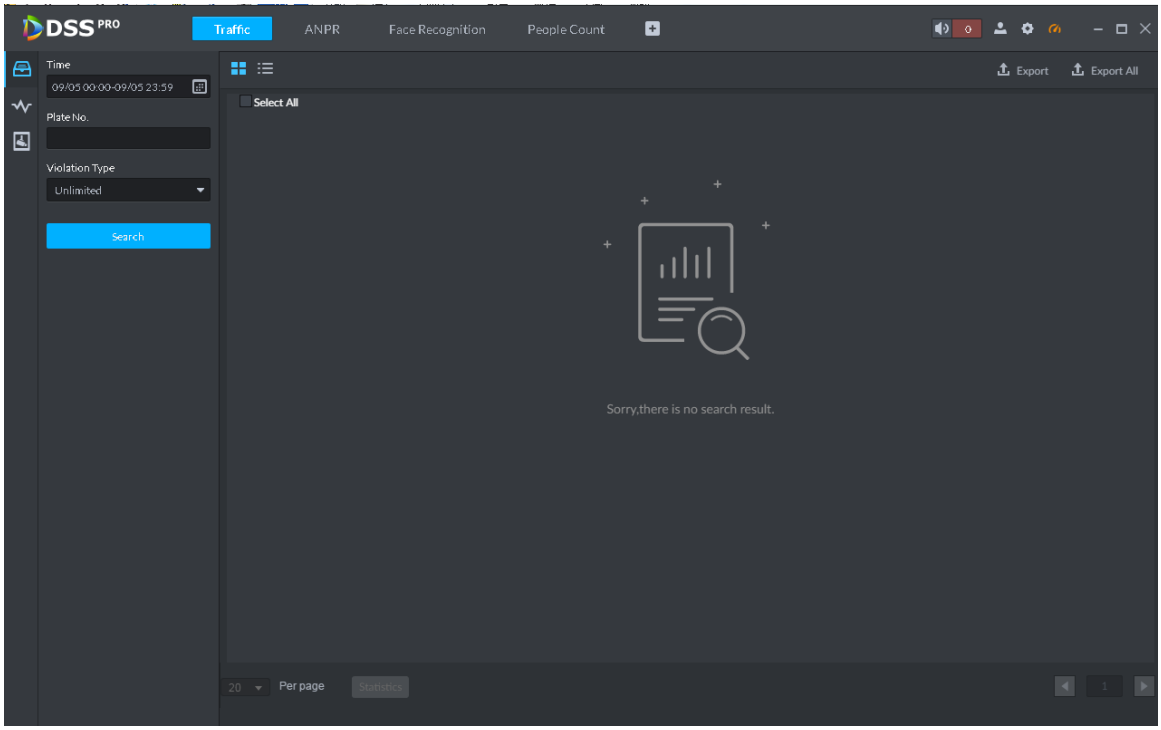
Step 1 Click + ,on the New tab interface select Traffic.

Enter Traffic interface.

Step 2 Click 。

Enter Violation management interface. See Figure 5-115.

Figure 5-115

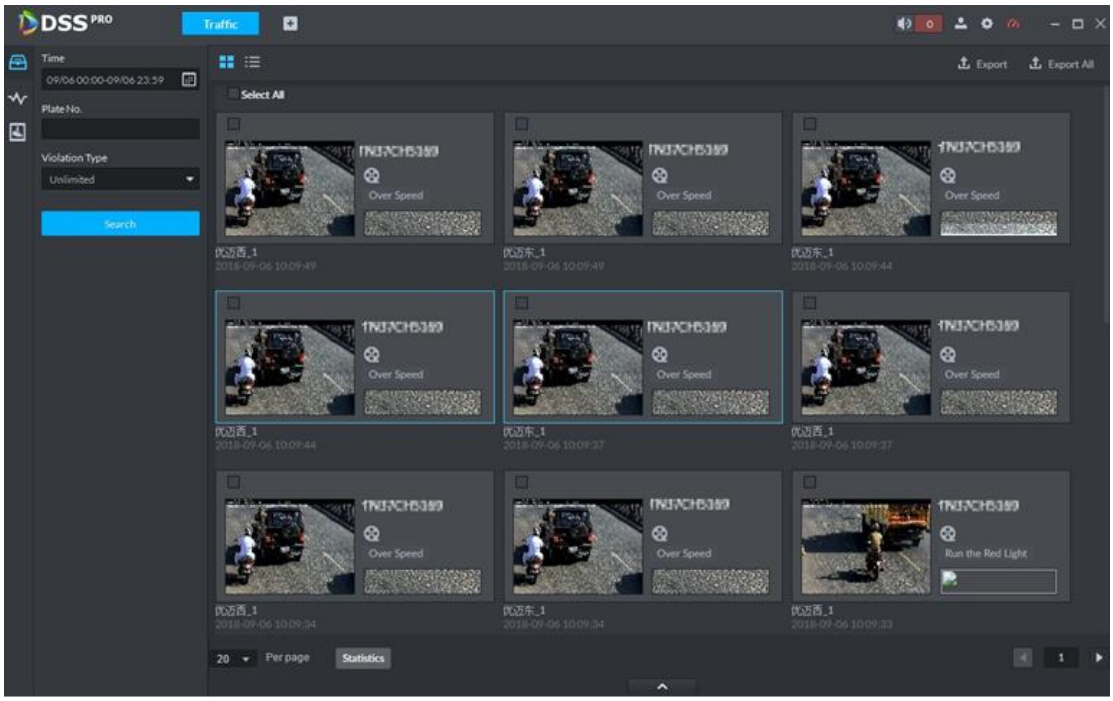


Step 3 Set search criteria. It includes time, plate number, and violation type.

Step 4 Click Search.

System displays search result. See Figure 5-116.

Figure 5-116

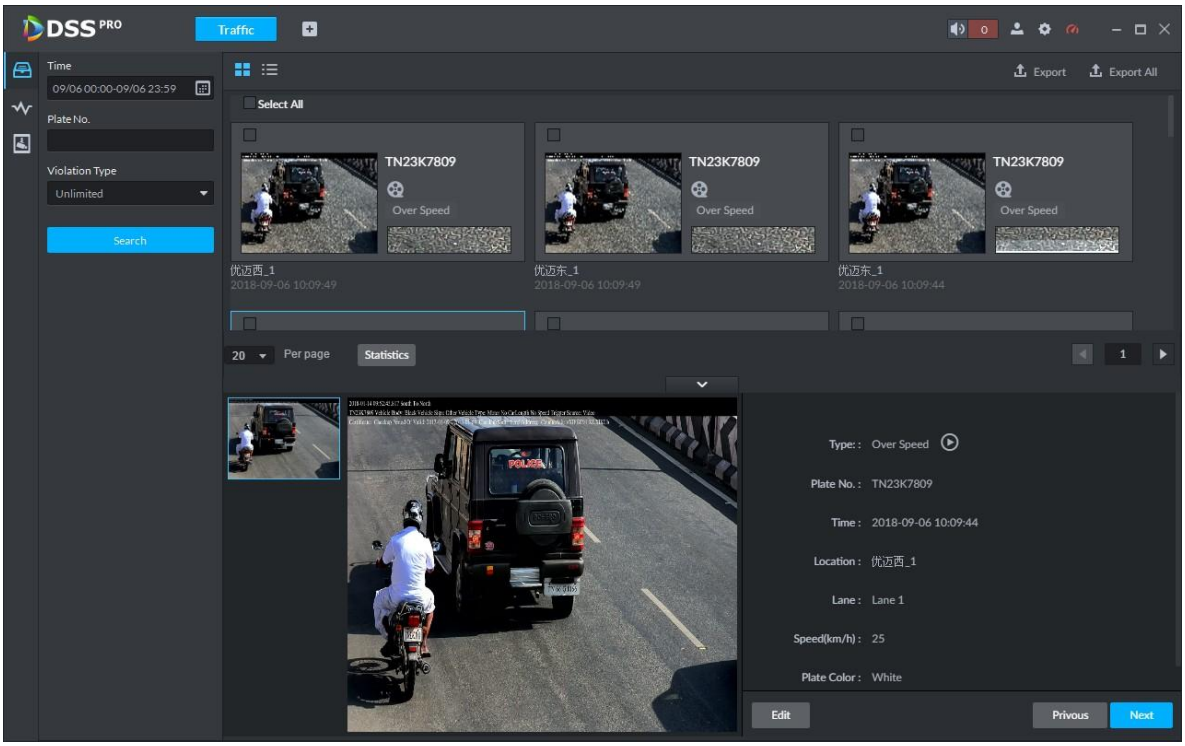


For a violation item, you can view vehicle detailed information and violation record video. Refer to the operations listed below.

- Click View mode（ ）or List mode（ ），it is to select different display mode.

- Double click a violation item, you can view detailed vehicle information. See Figure 5-117.

Figure 5-117



- Select a violation item and then click Export. It is to export selected violation information. Click Export all, it is to export all searched violation results.

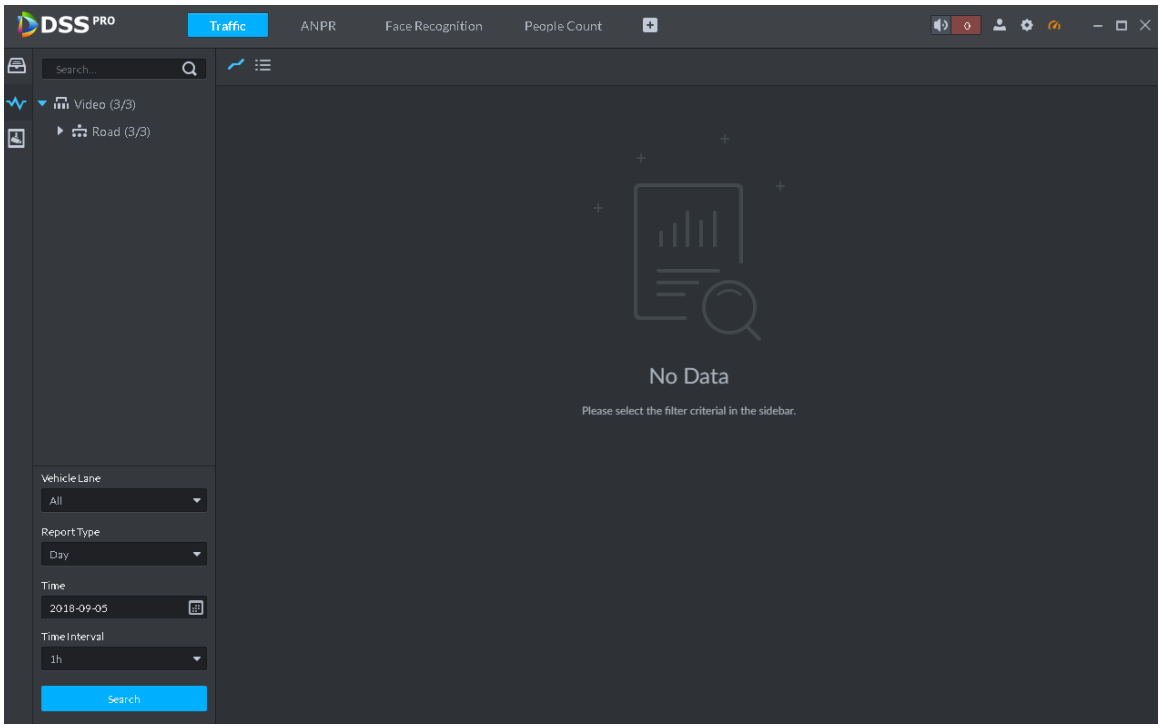
5.11.3 Search Vehicle Flows

It is to search the vehicle flow of one lane of one channel. The violation information is from the ANPR camera. The default upload interval is 1 time/ minute (device supports 1~250 minute(s)/time). The vehicle flows include vehicle total flow, average speed, lane occupation rate, flows of different vehicle types. The vehicle type includes small vehicle, passage vehicle, small van and heavy-duty vehicle. The vehicle flow data can be saved for at least 2 years.

Step 1 Click 。

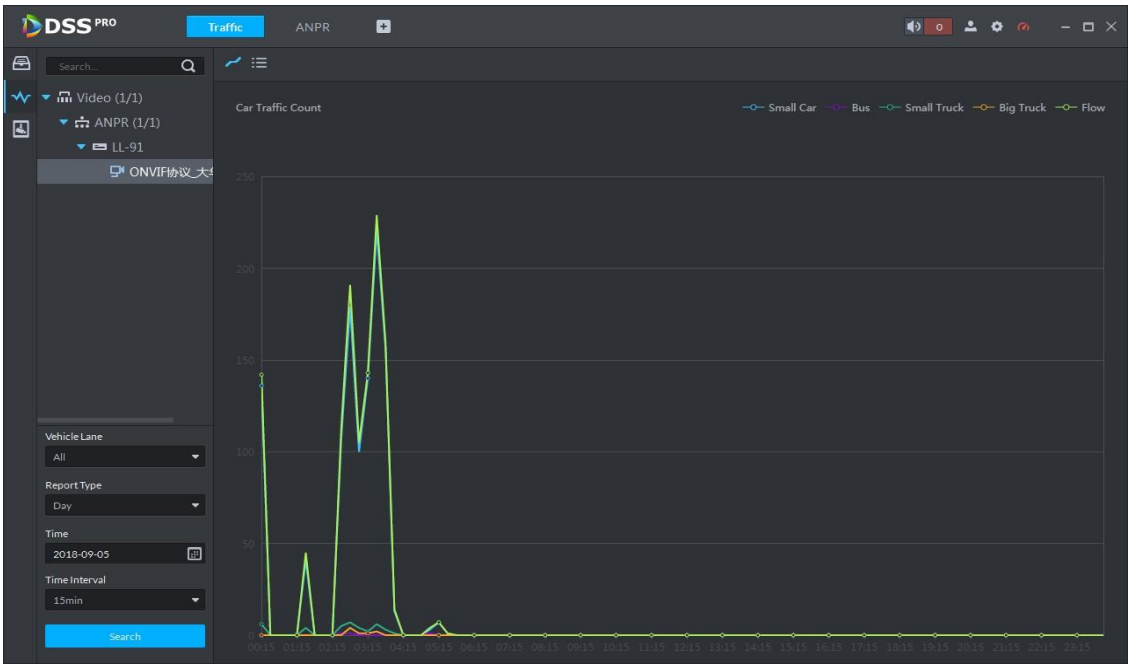
Enter Flow Searching interface. See Figure 5-118.

Figure 5-118



Step 2 Select device channel, plate number, report type, interval, and then click Search. System displays search result. See Figure 5-119.

Figure 5-119



For a flow record, you can view vehicle detailed information and corresponding record file. Refer to the operations listed below.

- Click Line chart mode（ ）or List mode（ ），it is to select different display mode.
- Click Export all, it is to export all searched flow results.

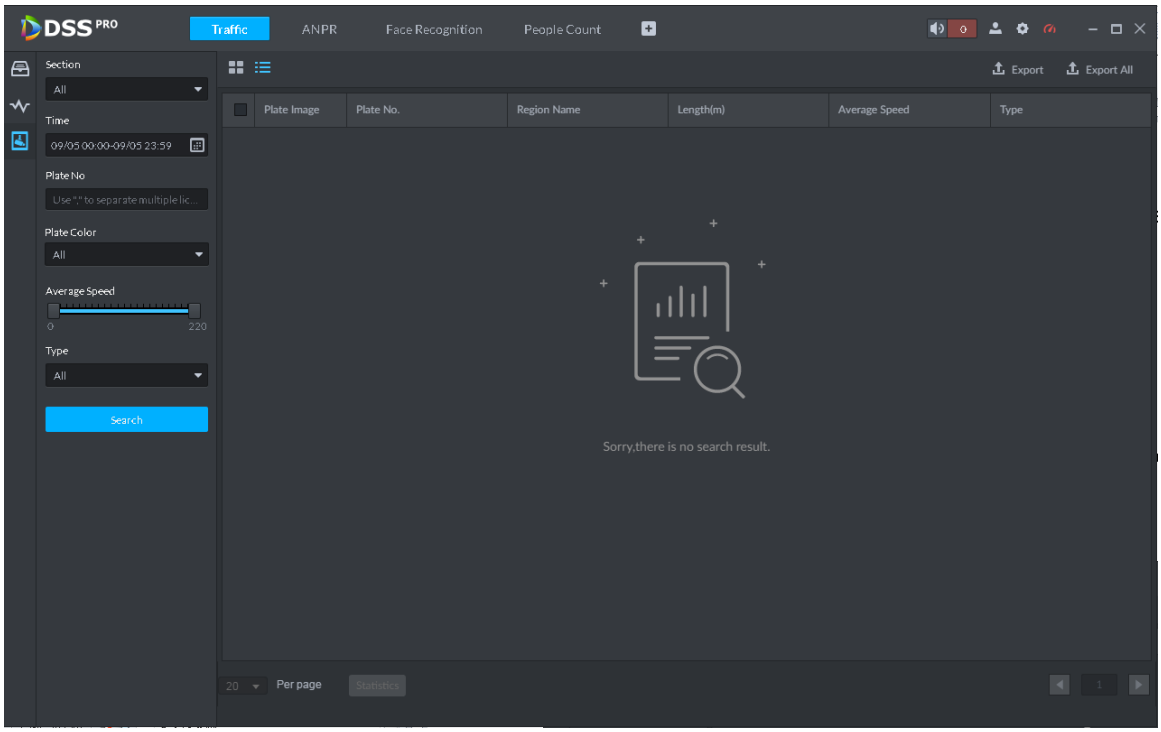
5.11.4 Searching Speed during a Specified Range

It is to search the speed between the specified range.

Step 1 Click .

Enter range speed interface. See Figure 5-120.

Figure 5-120



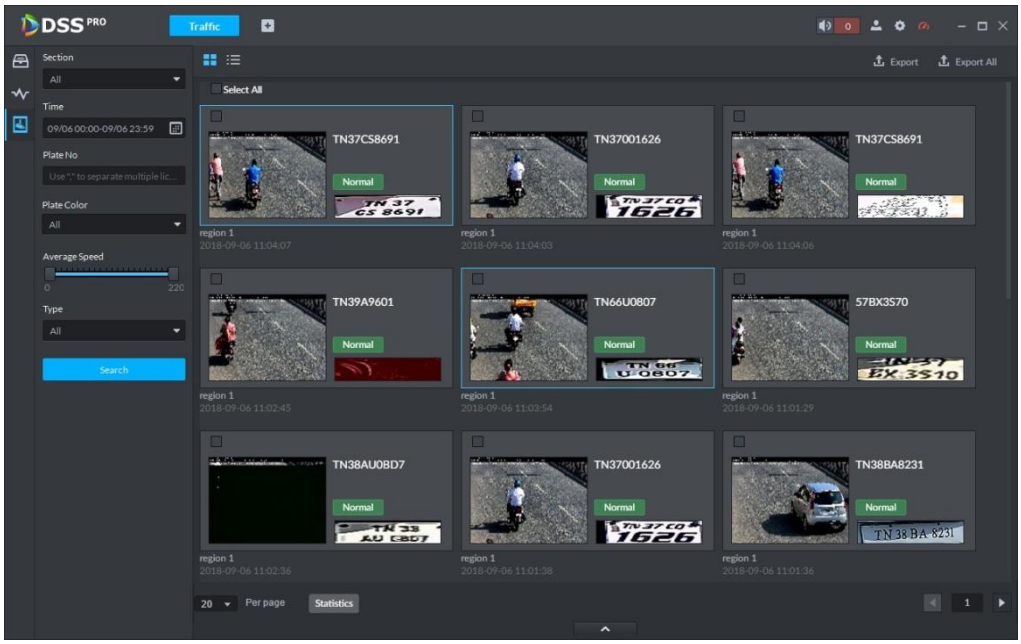
Step 2 Select search range, time, lane number, plate color, average speed, type, and then click Search.

System displays search result. See Figure 5-121.

NOTE

On thumbnail mode, system displays the earliest image of the current range as the master image by default.

Figure 5-121



Refer to the operations listed below.

- Click View mode（ ）or List mode（ ），it is to select different display mode.
- Double click the range speed measurement, you can view vehicle detailed information. See Figure 5-122. Move the cursor to the middle to select the specified zone, you can zoom in it. See Figure 5-123.

Figure 5-122

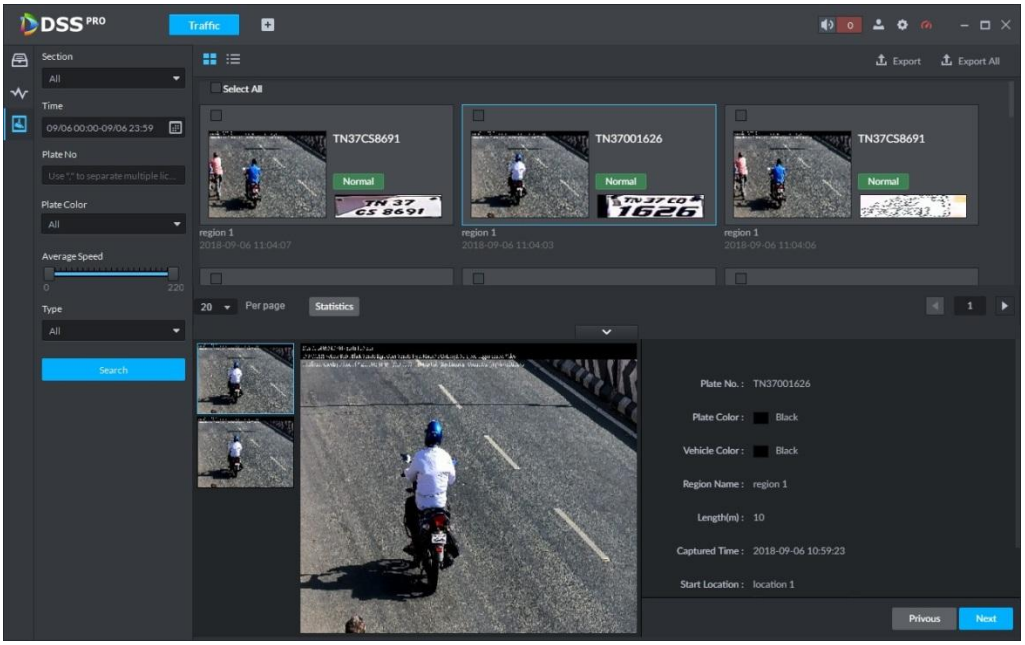
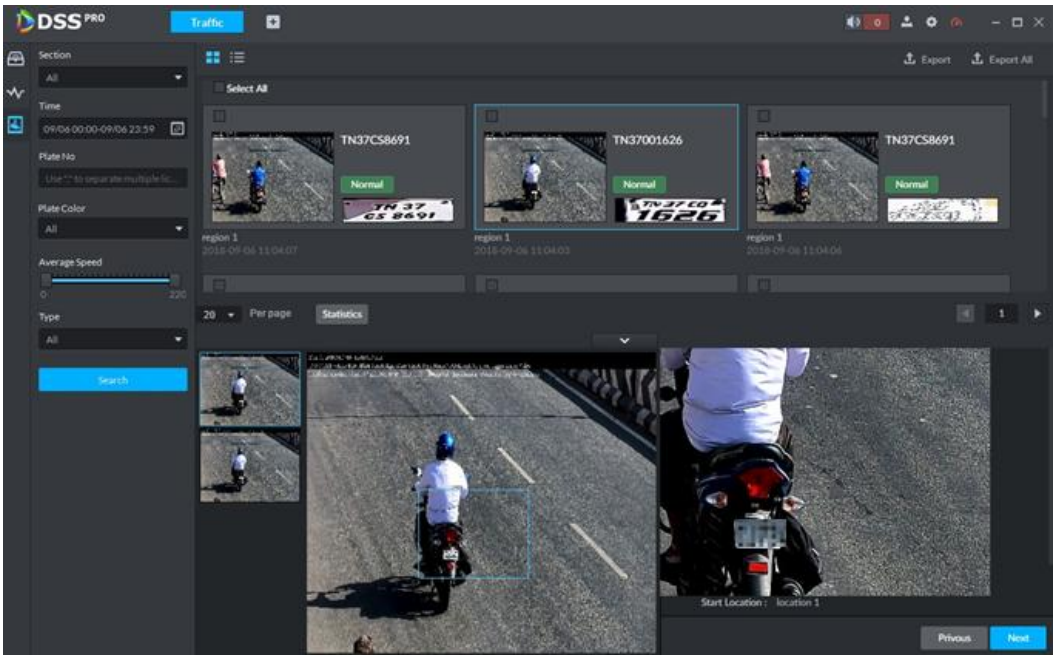


Figure 5-123



- Select a range speed measurement search results, click Export to export selected passed vehicle information. Click Export all, it is to export all searched passed vehicle information.

5.12 Business Intelligence

NOTE

Refer to the general operations in current function module：

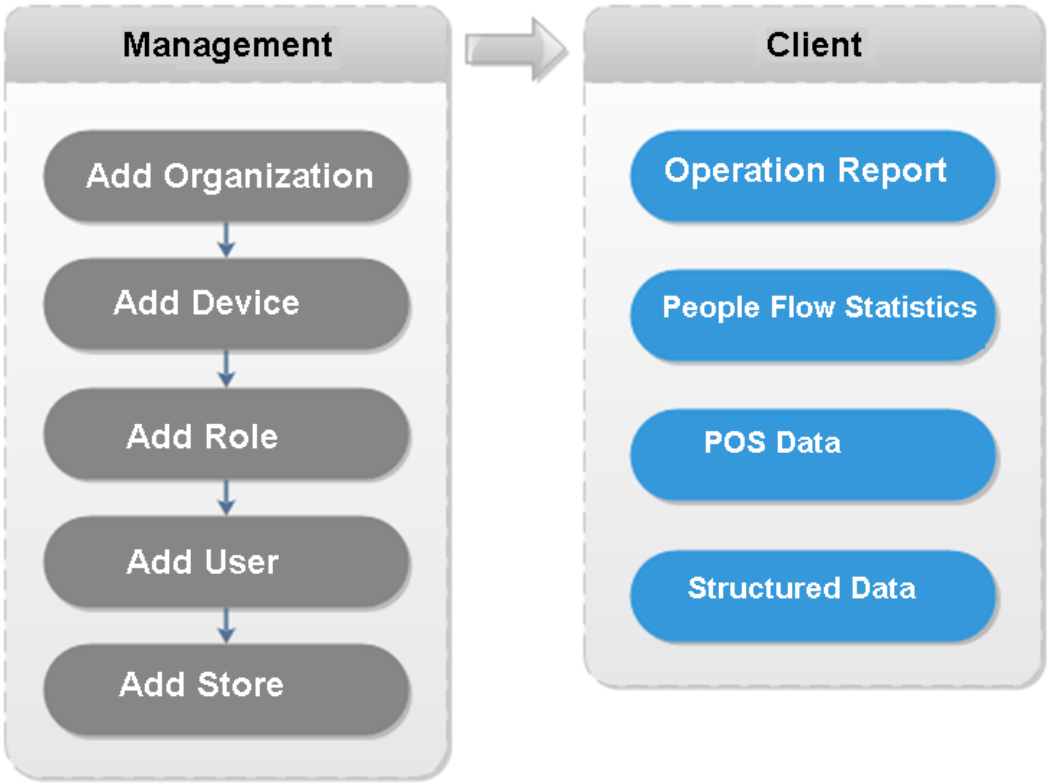
- Click to display the value from the statistics report.
- Click to zoom in the statistics of current zone. Click to zoom out the statistics.

5.12.1 Preparations

- Refer to chapter 4.6 Adding device to register the smart network camera that supports people counting function. Refer to the smart network camera user's manual to set camera intelligent rule.
- Refer to chapter 4.6 Adding device to add POS device and bind the video channel.
- Refer to chapter 4.14 Adding store to add store information on the manager.

Refer to Figure 5-124 for business intelligence flows.

Figure 5-124



5.12.2 Business Report

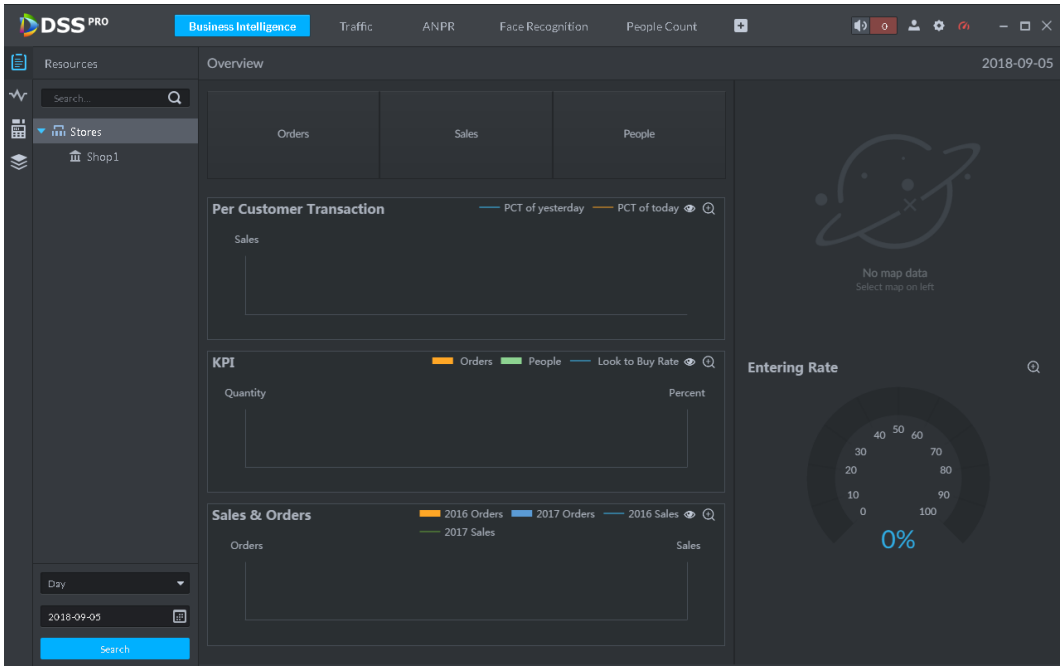
Step 1 Click , on the New tab interface select Business intelligence.

Enter Business intelligence interface.

Step 2 Click .

Enter Operation report interface. See Figure 5-125.

Figure 5-125



Step 3 Select a store from the organization tree and then set search date.

You can search by year, month, and date.

Step 4 Click Search.

System displays search result. See Figure 5-126.

Figure 5-126

The report displays the selected store business running status.

- Overview: It includes the store order amount of current period, sales amount and entry/exit people amount.
- Per customer transaction=Sales amount/order amount.
- KPI=Purchased amount/total people amount.

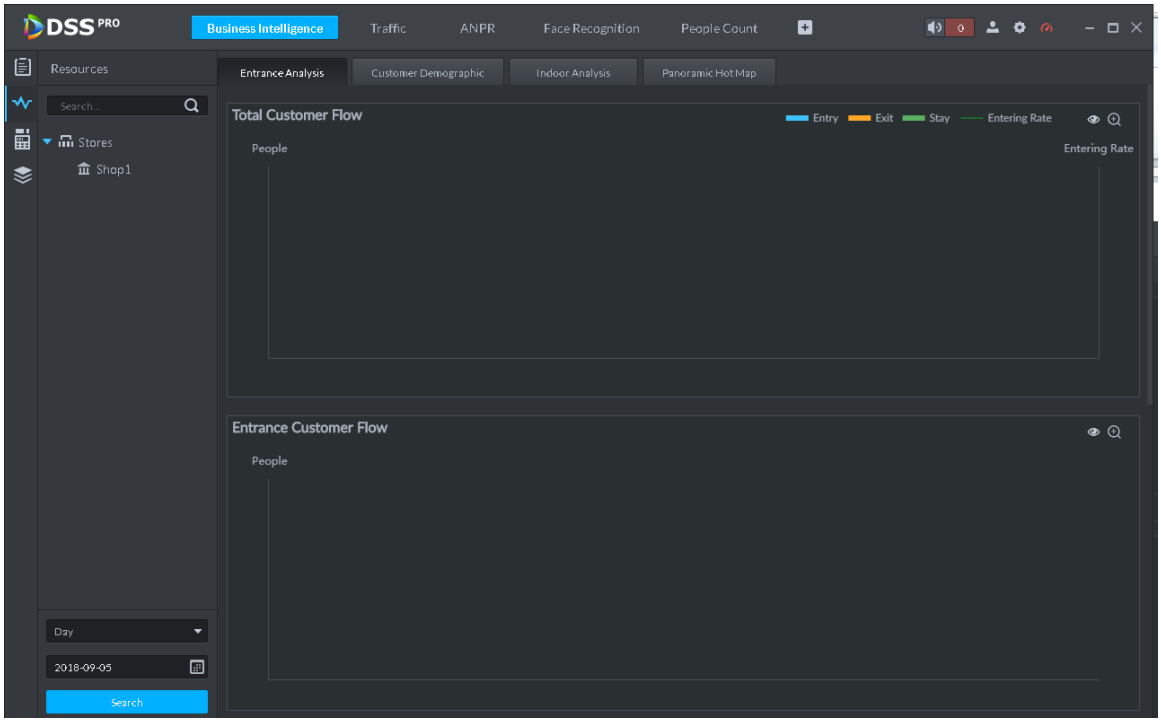
- Sales and orders：It is to display order amount and sales amount of current period and previous period. For example, right now it is to searching the general status of the August 2018, it displays the order amount and sales amount of August 2018 and July 2018.
- Store entering rate=Entering store amount/Passing store amount.
- Store map: It is to display the corresponding map information of the added store. Refer to chapter 4.14 Adding store.

5.12.3 People Flows Analysis

Step 1 Click 。

Enter people flow analysis interface. See Figure 5-127.

Figure 5-127



Step 2 Select a store from the organization tree and then set selection date.

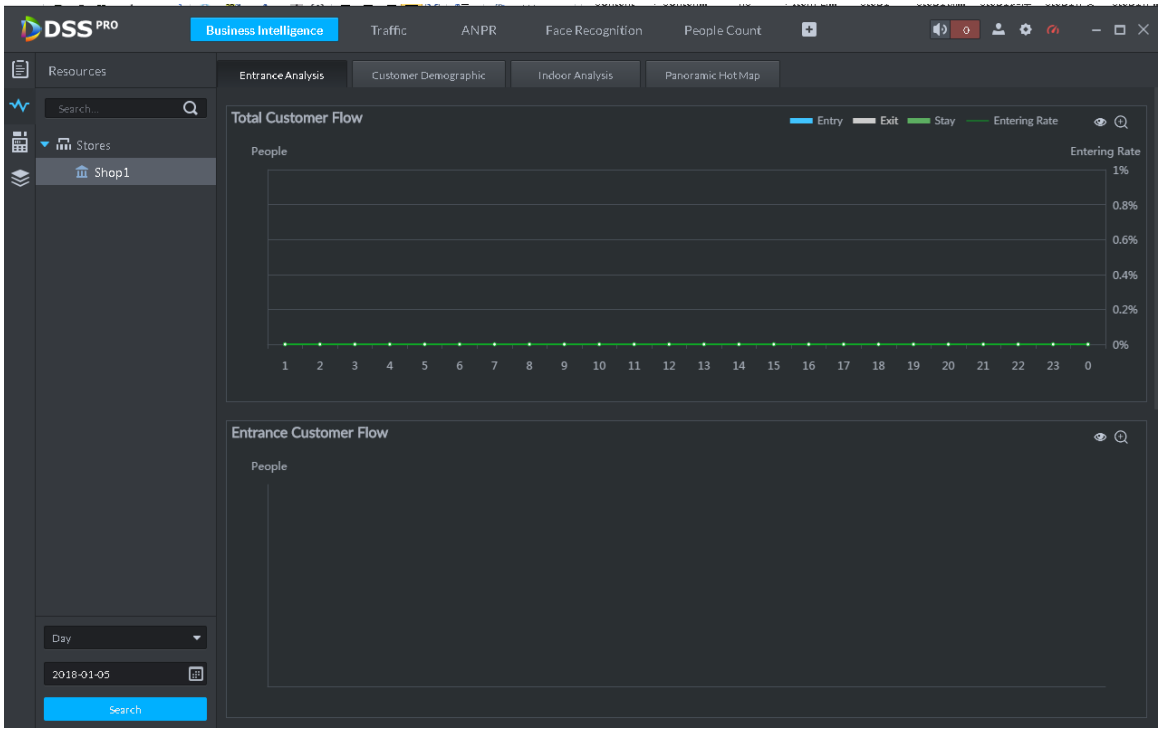
System supports search by date/month/year.

Step 3 Click Search, system displays analysis result.

- System displays Entrance analysis interface by default. See Figure 5-128.

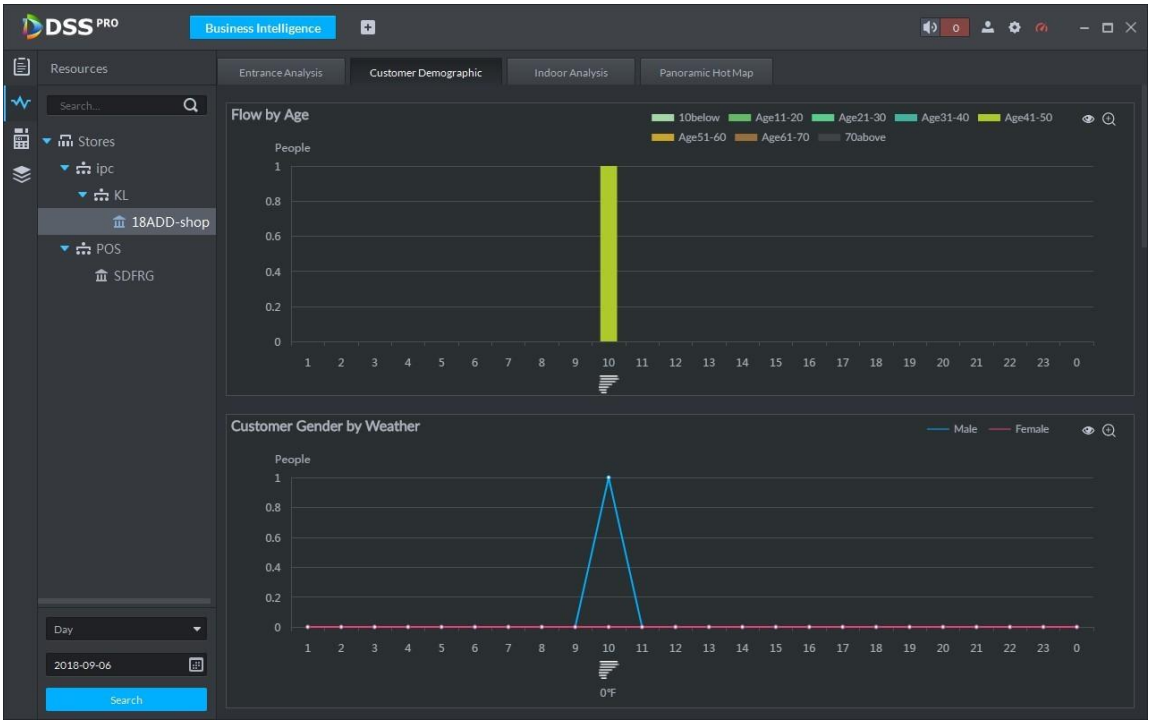
  System analyzes by enter/exit/stay/entering store rate.

Figure 5-128



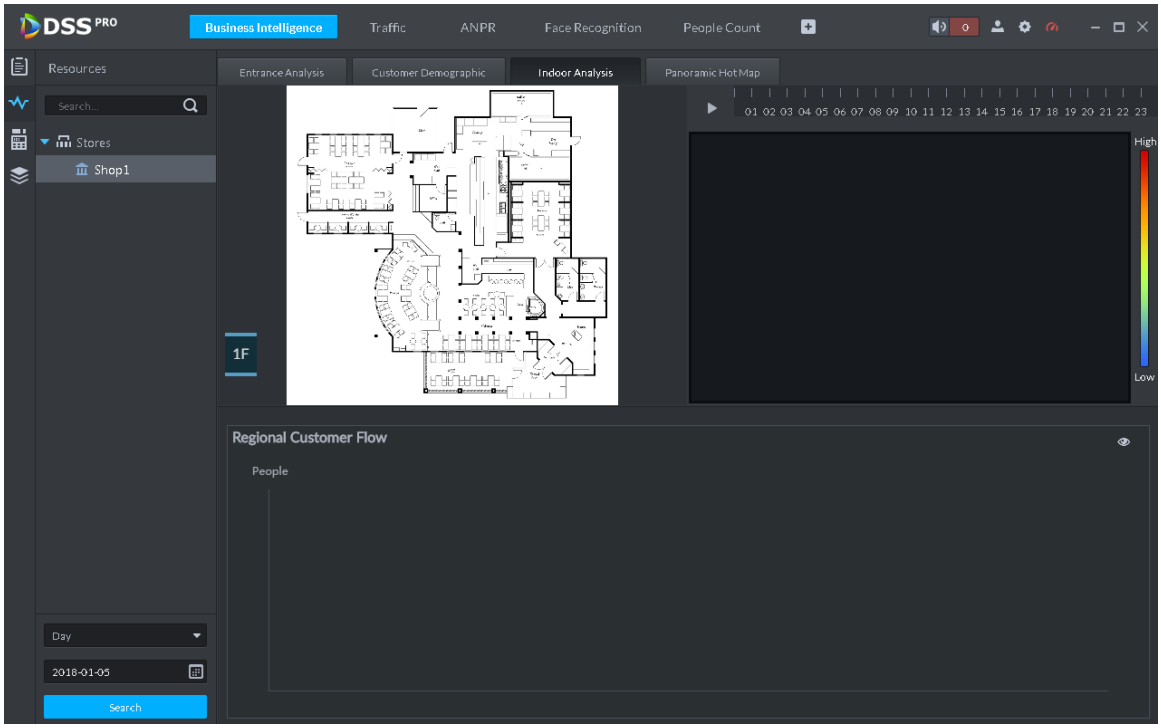
- Click Customer statistics tab. The interface is shown as in Figure 5-129. System analyzes flows by age, gender and weather.

Figure 5-129



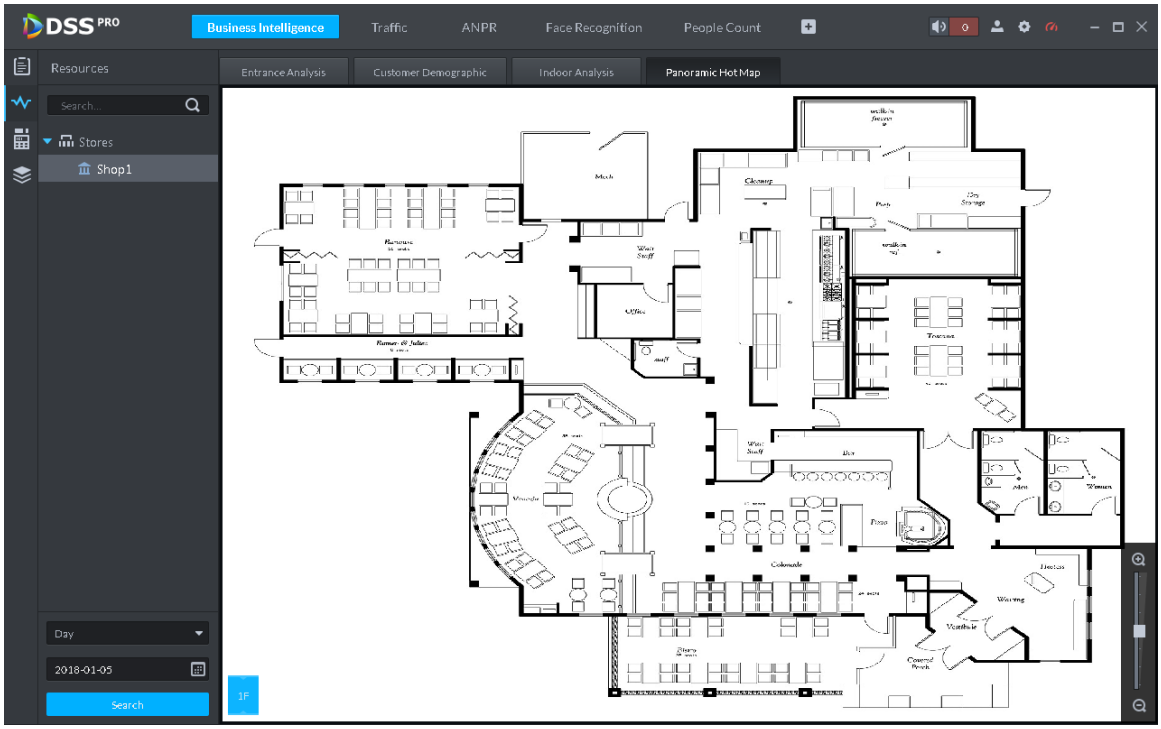
- Click Indoor analysis tab, the interface is shown as below. See Figure 5-130.

Figure 5-130



- Click Panoramic heatmap tab, the interface is shown as below. See Figure 5-131.

Figure 5-131

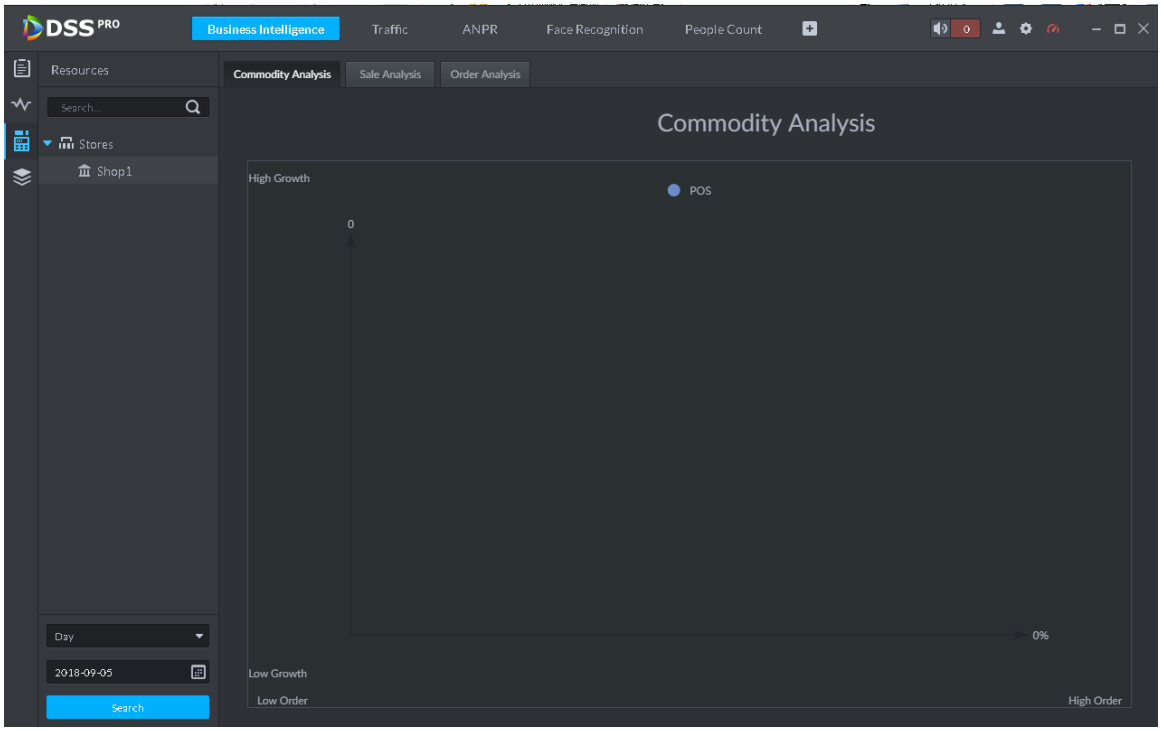


5.12.4 POS Data

Step 1 Click .

Enter POS data interface. See Figure 5-132.

Figure 5-132



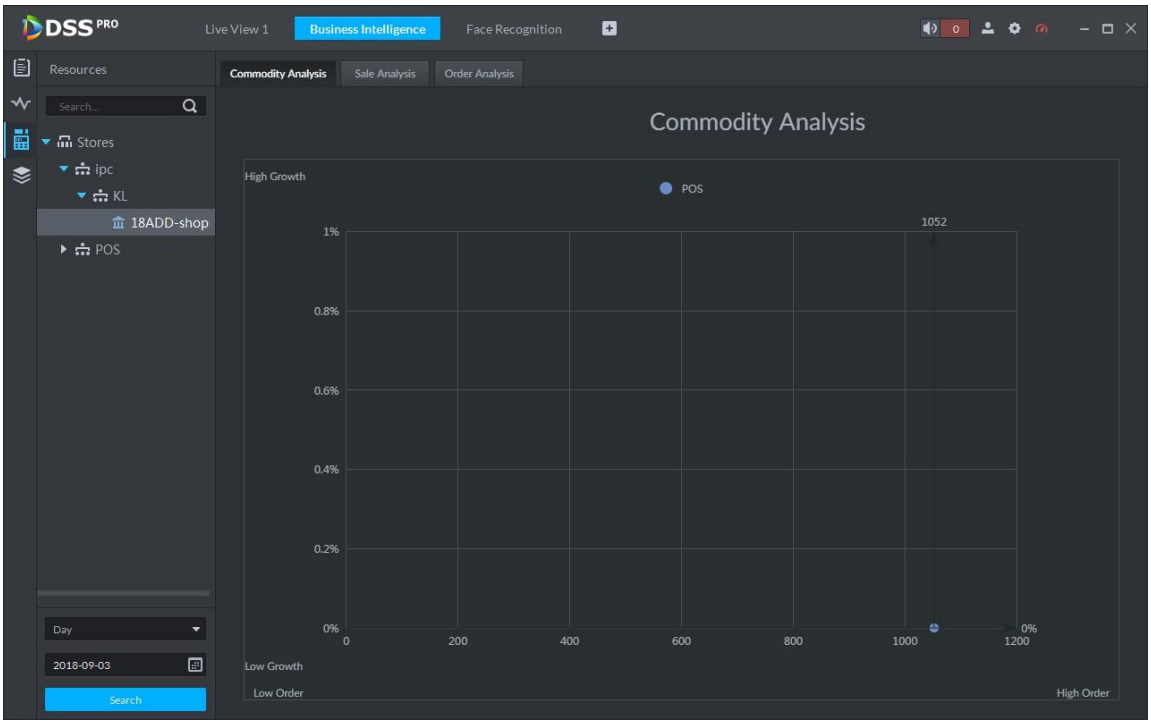
Step 2 Select a store from the organization tree and then set selection date.

System supports search by date/month/year.

Step 3 Click Search, system displays search results.

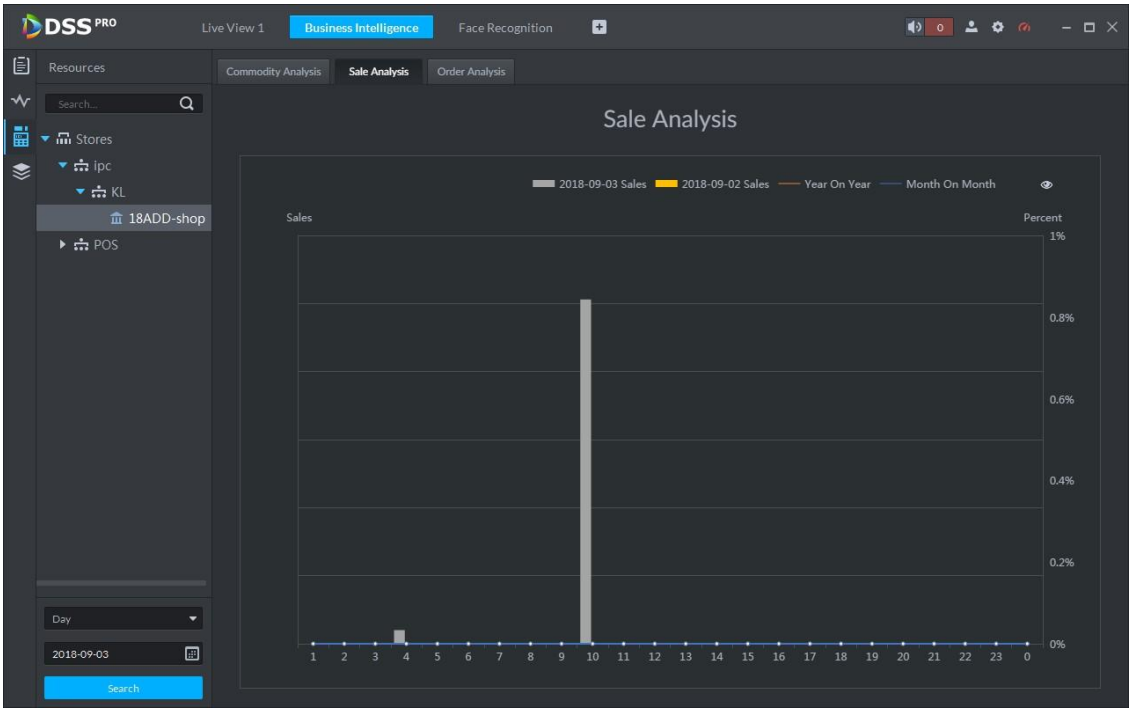
- System displays Commodity analysis interface by default. See Figure 5-133.

Figure 5-133



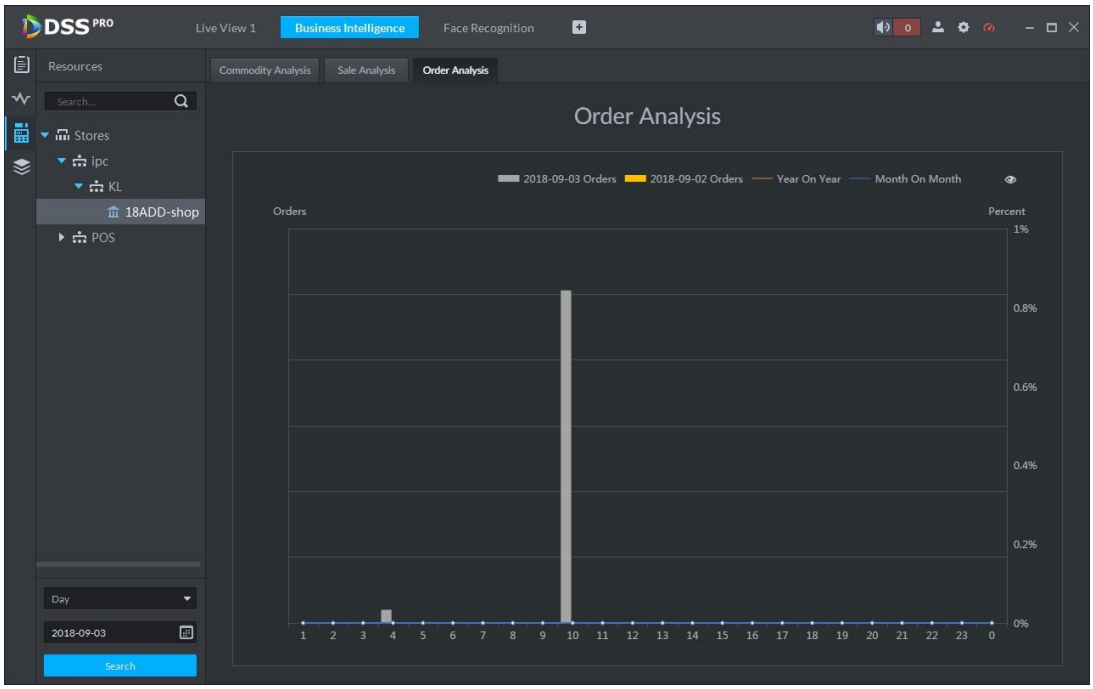
- Click Sales analysis tab, the interface is shown as below. See Figure 5-134.

Figure 5-134



- Click Order analysis tab, the interface is shown as below. See Figure 5-135.

Figure 5-135

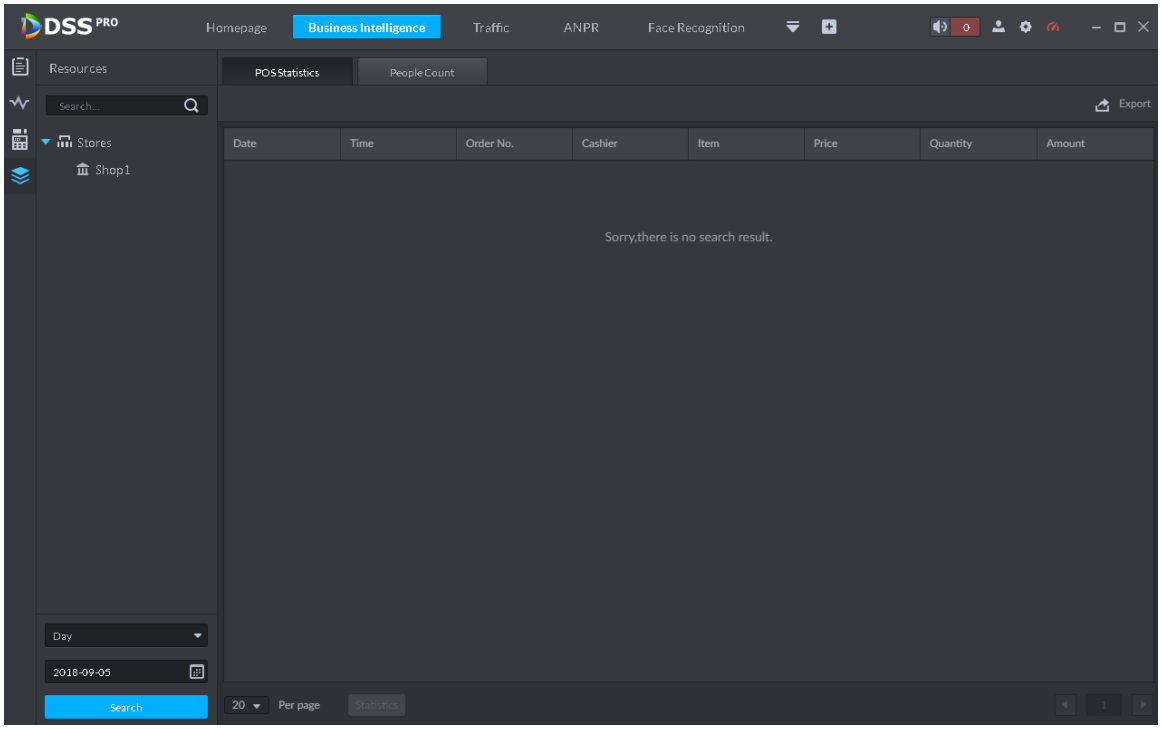


5.12.5 Structured Data

Step 1 Click .

Enter structured data interface. See Figure 5-136.

Figure 5-136



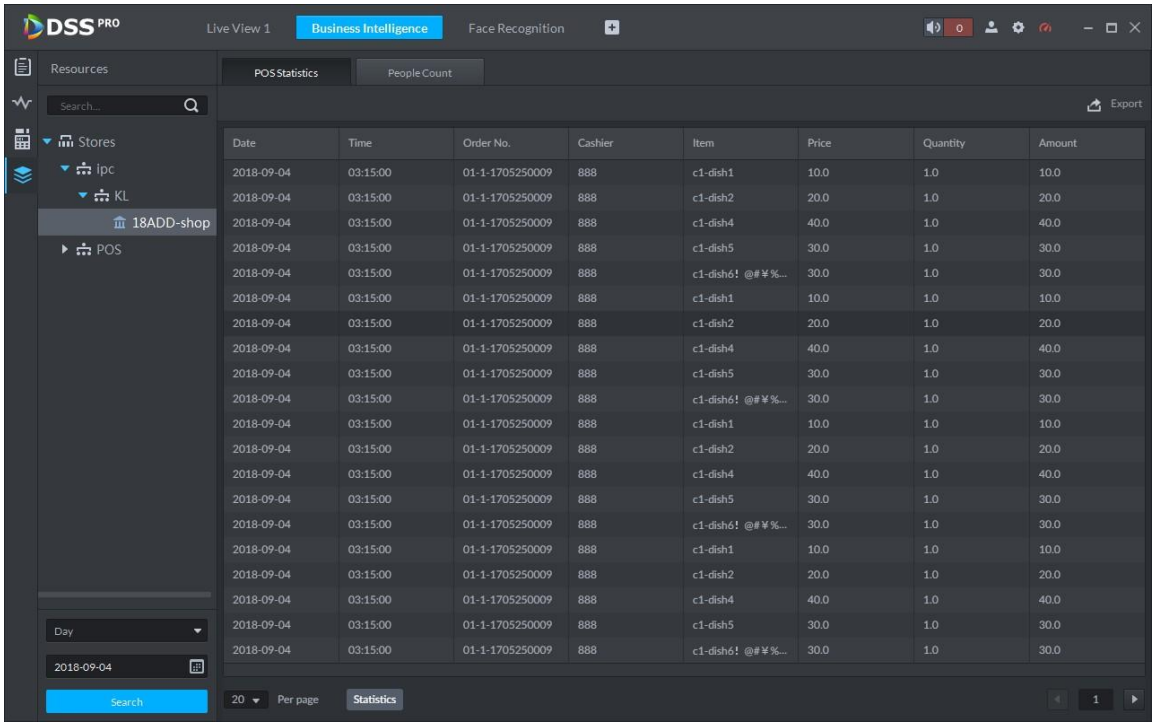
Step 2 Select a store from the organization tree and then set selection date.

System supports search by date/month/year.

Step 3 Click Search, system displays search results.

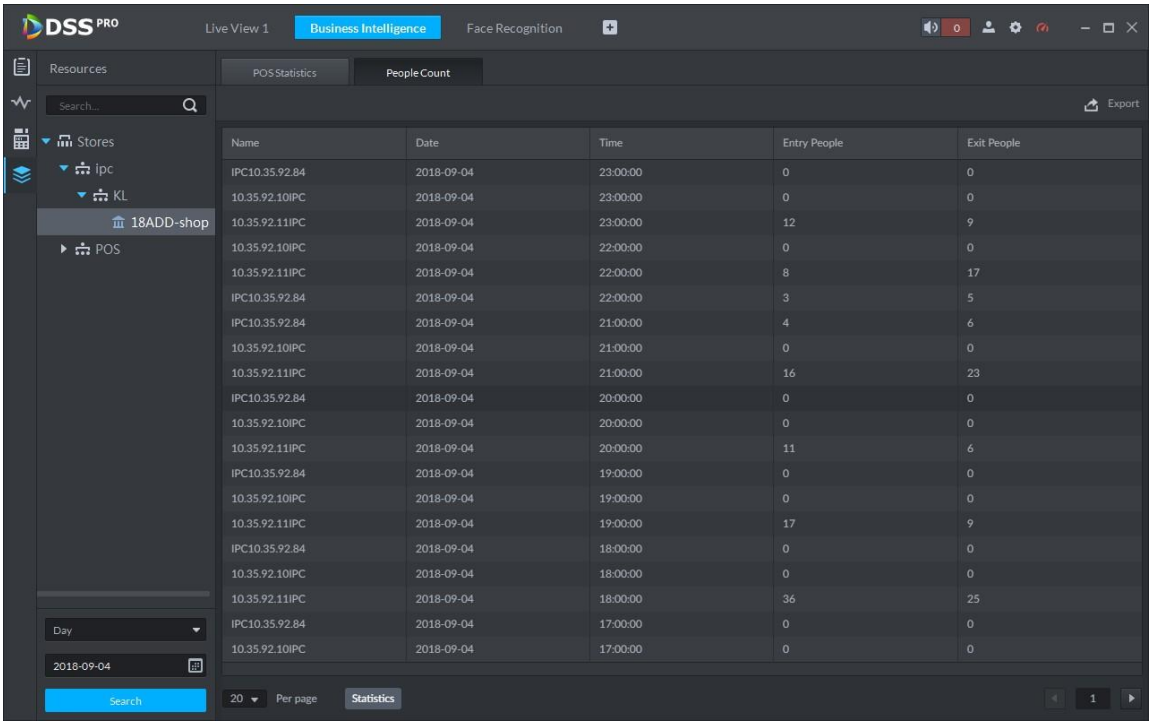
- System displays POS statistics interface by default. See Figure 5-137.

Figure 5-137



- Click People count tab, the interface is shown as below. See Figure 5-138.

Figure 5-138



- ◇ Click Export, it is to export search results.
- ◇ Click Statistics, it is to view search results amount.

5.13 Time Synchronization

5.13.1 Device Time Synchronization

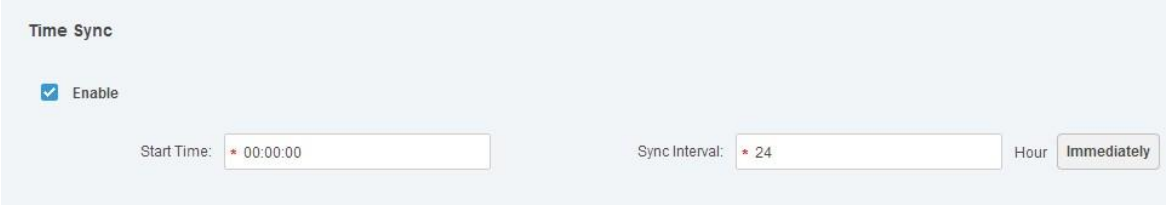
Device time synchronization is to synchronize front-end device time with platform server. The platform server time is the basic time. DSS platform supports devices of Dahua, and ONVIF protocol to synchronize time. It supports auto time synchronization function and manual time synchronization function. The auto time synchronization refer to synchronize time with the server at the specified interval and time. Manual time synchronization is to start time synchronization manually, system responds immediately and then execute time synchronization.

5.13.1.1 Auto Sync Time

Step 1 Click + and then on the New tab interface select System settings.

Step 2 Click Time Sync and then check the box to enable the function. Set time synchronization parameters. See Figure 5-139.

Figure 5-139



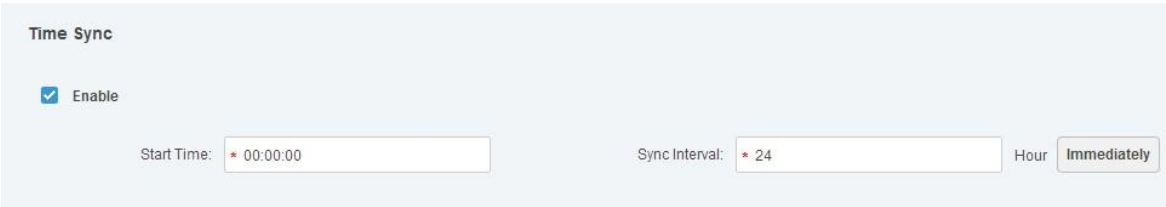
Step 3 Click Save to save configuration information.

5.13.1.2 Manual Sync Time

Step 1 Click + and then on the New tab interface select System settings.

Step 2 Click Immediately box. See Figure 5-140.

Figure 5-140



5.13.2 Time Synchronization on the Client

Time synchronization on the client is to synchronize client installed PC's time with platform server. The platform server time is the basic time. It supports auto time synchronization function and manual time synchronization function. The auto time synchronization refers to server starts time synchronization at the specified interval and time. Manual time synchronization is to start time synchronization manually, system responds immediately and then execute time synchronization.

5.13.2.1 Auto Sync Time

Step 1 Login DSS client.

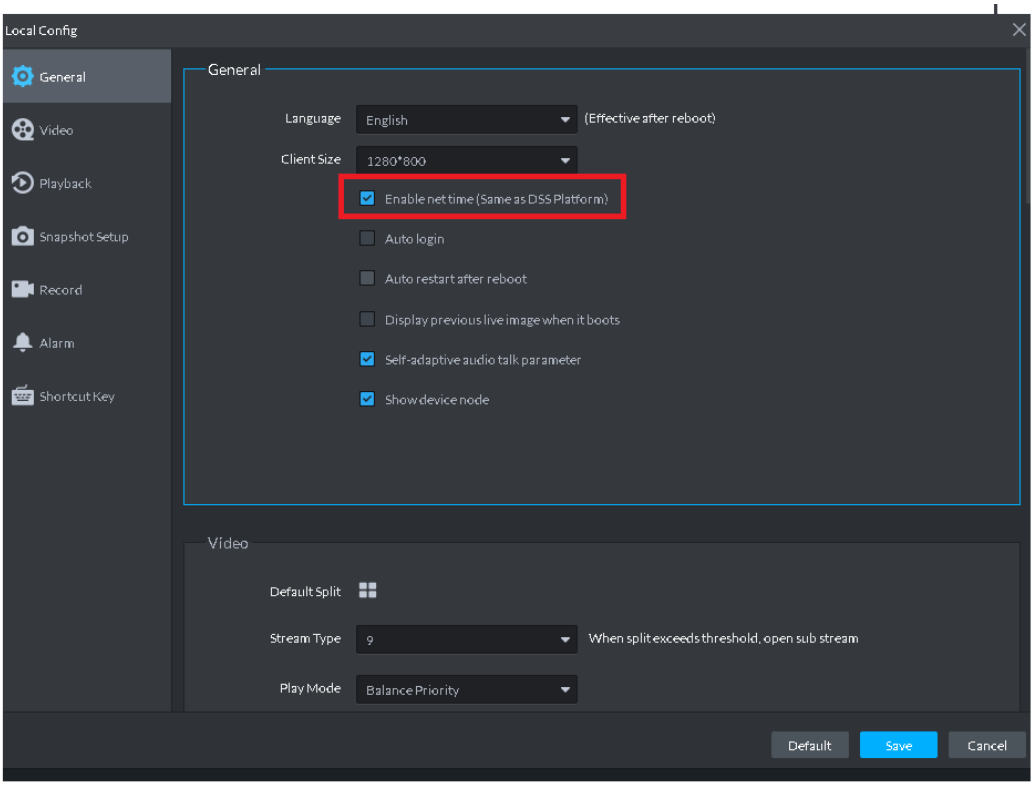
Step 2 Click ⚙ at the top right corner. Enter Local config interface.

Step 3 Click General tab and then enable client time sync function. Click Save. See Figure 5-141.

NOTE

After you enabled time sync function on the General interface, client begins the request to the server immediately. It is to complete the time synchronization.

Figure 5-141

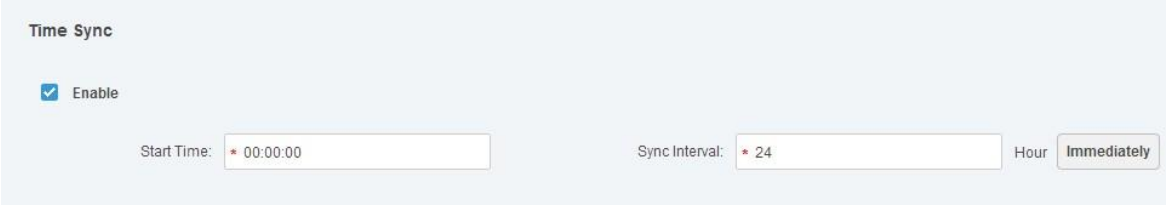


Step 4 Click Save.

Step 5 Login DSS manager, and then on the New tab interface select System settings.

Step 6 Click Time sync and then check the box to enable the function. See time sync parameters. See Figure 5-142.

Figure 5-142



Step 7 Click Save to save configuration information.

5.13.2.2 Manual Time Sync

Step 1 Login DSS client.

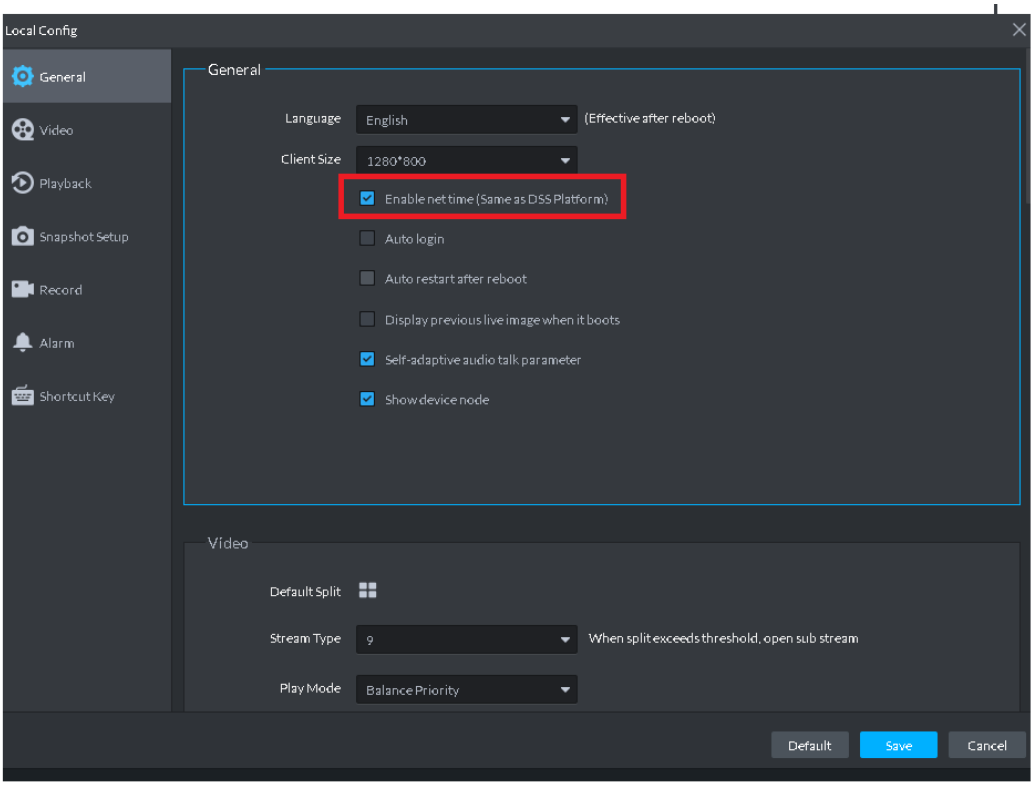
Step 2 Click at the top right corner. Enter Local config interface.

Step 3 Click General tab and then enable client time sync function. Click Save. See Figure 5-143.

NOTE

After you enabled time sync function on the General interface, client begins the request to the server immediately. It is to complete the time synchronization.

Figure 5-143

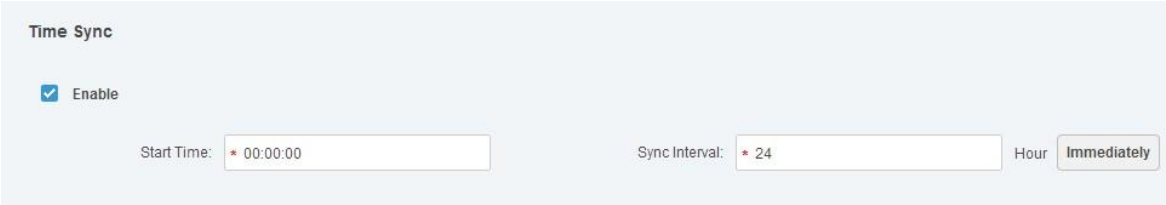


Step 4 Click Save.

Step 5 Login DSS manager, and then on the New tab interface select System settings.

Step 6 Click Immediately box. See Figure 5-144.

Figure 5-144



Appendix 1 Service Module Introduction

Service Name	Service Name	Function Description	Port	Protocol Type
Center Management Service	DSS_WEB	Center management service is to manage each service and provide accessing port.	HTTPS：443	TCP
Message Queue Service	DSS_MQ	Message queue service is to transfer messages between the platforms.	61616	TCP
DMS (Device Management Service)	DSS_DMS	Device management service is to register front-end encoder, receive alarm, transfer alarm and send out sync time command.	9200	TCP
MTS (Media Transmission Service)	DSS_MTS	Media transmission service is to get the audio/video bit stream from the front-end device and then transfer these data to the SS, client and decoder.	9100	TCP
SS (Storage Service)	DSS_SS	Storage service is to storage/search/playback record.	9320	TCP
VMS (Video Matrix Service)	DSS_VMS	Video matrix service is to login the the decoder and send out task to the decoder to output to the TV wall.	Not fixed, do not need to be mapped to the outside.	TCP
MGW (Media Gateway Service)	DSS_MGW	Media gateway service is to send out MTS service to the decoder.	9090	TCP
ARS (Auto Register Service)	DSS_ARS	Auto register service is to listen, login, or get bit streams to send to MTS.	9500	TCP
PCPS (ProxyList control Proxy Service)	DSS_PCPS	ProxyList control Proxy Service is to login Hikvision device, Onvif device, and then get the stream and transfer the data to MTS.	5060 14509	UDP TCP

ADS (Alarm Dispatch Service)	DSS_ADS	Alarm dispatch service is to send out alarm information to different objects according to the plans.	9600	TCP