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.

<table>
<thead>
<tr>
<th>Signal Words</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>★ DANGER</td>
<td>Indicates a high potential hazard which, if not avoided, will result in death or serious injury.</td>
</tr>
<tr>
<td>★ WARNING</td>
<td>Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.</td>
</tr>
<tr>
<td>★ CAUTION</td>
<td>Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.</td>
</tr>
<tr>
<td>☛ TIPS</td>
<td>Provides methods to help you solve a problem or save you time.</td>
</tr>
<tr>
<td>☞ NOTE</td>
<td>Provides additional information as the emphasis and supplement to the text.</td>
</tr>
</tbody>
</table>

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 include but not limited to: providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact.

Revision History

<p>| No. | Version | Revision Content | Release Time |
|-----|---------|------------------|--------------|--------------|</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Version</th>
<th>Revision Content</th>
<th>Release Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>V1.0.0</td>
<td>First Release.</td>
<td>August 2018</td>
</tr>
<tr>
<td>2</td>
<td>V 1.0.1</td>
<td>Optimized the chapter of ANPR Surveillance, added the chapters of Attendance Management and Flow Analysis.</td>
<td>November 2018</td>
</tr>
</tbody>
</table>

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 disassemble 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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General Introduction

The product is positioned as a lightweight application for small and medium-sized projects, it can be applied to simple, easy to use and reliable VMS for single-service deployment, provides basic video monitoring services required for small and medium-sized projects, it also provides solutions for organizations that need integrated access control and VDP devices., which can be widely used in residential areas, supermarkets, factories and casinos.

Product Highlights

- Supports GPU decoding, supports preview of several HD cameras at the same time.
- Interface adopts vector graphic design and supports 4K display perfectly.
- The administrator and the operator use the client operation uniformly, realize stronger control experience.
- Supports LAN cross-network segment device automatic search and display device list, one-click add management, effectively save deployment time.
- Supports mobile phone client, it can be accessed any time even if not on site.
- Supports auto add manual backup database. It can be quickly restored when system abnormality occurs.
- Supports video locking, for important video footage, it can be kept forever and will not be overwritten due to storage space.
The config system is used to quickly configure network parameters, basic parameters, safety parameters, hot standby etc. of integrated monitoring and management all-in-one device, as well as system upgrade and self-check.

⚠️

Please make sure that the device installation and deployment has been completed before logging into the config system. For detailed deployment process, please refer to DSS General Surveillance Management Center Applications and Deployment Guide for more details.

### 2.1 Config System Login and Initialization

⚠️

Make sure that the PC and server are in the same network segment. If not, please change the IP address of the PC. The default IP address of the server is 192.168.1.108.

**Step 1** Enter “DSS platform IP address/config” into the browser, press Enter button. The “Config System” interface is displayed. See Figure 2-1.

![Figure 2-1](image)

**Step 2** Enter user name and password (Default user name is admin, default password is 123456), click “Login”. The reset password interface is displayed. See Figure 2-2.
Step 3 Enter old password, new password and set three security questions.
Step 4 Click “OK” to complete initialization.
Service is restarted and you need to log in the system again.

2.2 Quick Guide

Users can quickly configure the platform’s network, internal and external network mapping and hot standby via quick guide.

2.2.1 Network Card Setting

Select network mode and configure IP info.
Step 1 Click “Quick Guide”. The “Network Card Config” interface is displayed. See Figure 2-3.
Step 2 Configure parameters of network card; please refer to Table 2-1 for more details.

Table 2-1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
</table>
| Network Mode    | **Multi-address**  
It is multi-network card mode, which can configure different network segments, realize multi network segment access and apply to the scenario with high requirements for network reliability. For example, configure double hot standby, it needs to use network card 2 to configure standby heartbeat IP; it can also be used in scenarios with ISCSI extended storage. The network port is planned as follows: network port 1 is used to service communication, network port 2 is reserved, and network port 3 and 4 are used for ISCSI storage.  
**Fault tolerance**  
Multiple network cards use one IP address, normally there is only one network card is working. When the working network card fails, a normal network card is automatically activated to ensure network smoothness.  
**Load Balance**  
Several network cards use one IP address, these network cards work together and share network load, provide network load capacity over the bandwidth of a single network card. When a network card becomes abnormal, the load is redistributed to other available network cards to provide network reliability.  
**Link aggregation**  
Through network card binding and external communication, all the bound network ports participate in the work and share the network load. It can realize a network card forwarding greater than 1K stream; for example: 2 IP bound, another 2 multi-address, than there are 3 IP for the server, the bandwidth of bound IP is 2K and the other 2 is 1K; It can be...
applied to the scenario of pure forward code stream (Storage is not recommended).

<table>
<thead>
<tr>
<th>Add Bound Network Card</th>
<th>It needs to set network card binding when network mode is set as fault tolerance, load balancing or link aggregation. Click “Add Bound Network Card”, select the network cards which need to be bound, users can set two bound network cards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Network Card</td>
<td>Selects default network card, the network card will forward data package of non-adjacent network segment as default port (such as external network and public network)</td>
</tr>
<tr>
<td>Select Network Card</td>
<td>After selecting network card or binding network card, it will display the info of the network card or bound network card below.</td>
</tr>
<tr>
<td>MAC Address</td>
<td>It displays the MAC address of platform server.</td>
</tr>
<tr>
<td>IP Address</td>
<td>After selecting network card, you can set IP address, subnet mask, default gateway, preferred DNS server address and alternate DNS server address.</td>
</tr>
</tbody>
</table>

**Step 3** Click ‘Save and Restart’, save network card config and restart server. Click “Skip” not to save the modification of current interface, enter the setting interface of LAN/WAN mapping.

### 2.2.2 LAN/WAN Mapping

It is to realize external network access function via LAN/WAN mapping.

**Step 1** Click “Quick Guide”, and then click “Skip”.

The “LAN/WAN Mapping” interface is displayed. See Figure 2-4.

![Figure 2-4](image)

**Step 2** Configure WAN address and port info; please refer to Table 2-2 for more details.

Table 2-2
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Address</td>
<td>Sets the address of DSS platform.</td>
</tr>
<tr>
<td>Web Service Port</td>
<td>Default WEB service port is 80, it needs to use IP: Port to access WEB if it is not 80. For example, port 81; enter <a href="http://172.7.54.35:81/config">http://172.7.54.35:81/config</a> to access config system.</td>
</tr>
<tr>
<td>Router Address</td>
<td>Sets WAN access IP address of router.</td>
</tr>
<tr>
<td>CMS</td>
<td>Center management service, which is responsible for registration and signaling scheduling of other services, it is 9010 by default.</td>
</tr>
<tr>
<td>SS</td>
<td>Storage playback service, which is in charge of video storage, query and playback, it is 9320 by default.</td>
</tr>
<tr>
<td>ARS</td>
<td>Active registration service, which is responsible for actively registering the device to monitor, log in and forward stream to MTS, it is 9500 by default.</td>
</tr>
<tr>
<td>MQ</td>
<td>MQ service, which is responsible for information interaction, it is 61616 by default.</td>
</tr>
<tr>
<td>DMS</td>
<td>Device management service, which is responsible for logging into the front-end encoder, receiving alarm, forwarding alarm and sending timing command, it is 9200 by default.</td>
</tr>
<tr>
<td>ADS</td>
<td>Alarm distribution service, which is responsible for sending alarm info to different objects according to the plan, it is 9600 by default.</td>
</tr>
<tr>
<td>MGW</td>
<td>Media gateway, which is responsible for sending MTS address to decoding device, it is 9090 by default.</td>
</tr>
<tr>
<td>WEB</td>
<td>Web application service, responsible for administrator config, providing web service interface, providing client embedded function, it is 801 by default.</td>
</tr>
<tr>
<td>MTS</td>
<td>Media distribution service, which is responsible for acquiring audio and video streams from front-end devices and distributing them to SS, client and decoder devices. It is 9100 by default.</td>
</tr>
<tr>
<td>PES</td>
<td>Power environment surveillance service, which is responsible for managing MCD (including POS, alarm host, radar, access control and so on), it is 9400 by default.</td>
</tr>
<tr>
<td>PTS</td>
<td>Picture transmission service, which is responsible for receiving, storing and forwarding ANPR pictures, it is 8081 by default.</td>
</tr>
</tbody>
</table>

2.2.3 Configuring Hot Spare

After configuring hot spare, the backup server will replace the host server when the host server crashes, which is to maintain steady operation for the system.

**Step 1** Click “Save and Next”.

The “Hot Spare Config” interface is displayed. See Figure 2-5.
Configure the parameters of hot spare server; please refer to Table 2-3 for more details.

### Table 2-3

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual IP</td>
<td>After setting virtual IP, you can have access to the platform via the virtual IP.</td>
</tr>
<tr>
<td>Mask</td>
<td>It is in accordance with the mask of network port 1.</td>
</tr>
<tr>
<td>Spare IP</td>
<td>The IP address of spare server network port.</td>
</tr>
<tr>
<td>Spare Heartbeat IP</td>
<td>The IP address of spare server network port.</td>
</tr>
<tr>
<td>Spare Config System Username</td>
<td>The login username and password of spare server config system.</td>
</tr>
<tr>
<td>Spare Config System Password</td>
<td>Both the host and spare servers have to keep the login password of config system the same, and it is not allowed to modify password after setting double hot spare.</td>
</tr>
<tr>
<td>One-key Check</td>
<td>Click “One-key Check” to confirm if the username and password are correct.</td>
</tr>
<tr>
<td>Clear Alarm Data</td>
<td>It will clear all the alarm data after it is selected.</td>
</tr>
</tbody>
</table>

**Step 2**

**Step 3**

2.3 Segment Setup

It is used to set network card and LAN/WAN mapping, please refer to 2.2.1 Network Card Setting and 2.2.2 LAN/WAN Mapping for more details.

2.4 Basic Config

2.4.1 Account Management

It is to modify the login password of admin user.
It will restart all services after modifying password. Please make sure if the services have been restarted successfully during use.

**Step 1** Select “Basic > Manage Account”.

The “Manage Account” interface is displayed. See Figure 2-6.

**Step 2** Enter “Old Password”, “New Password” and “Confirm Password”.

**Step 3** Click “Apply” to complete modification.

### 2.4.2 Maintenance

It is used to reboot device, shutdown and restore device to default status, meanwhile it can restore user password of config system and root user password of Linux system back to default status.

**Step 1** Selects “Basic > Maintenance”.

The “Maintenance” interface is displayed. See Figure 2-7.
Step 2 Click relevant operation to realize corresponding functions.
Reboot: server reboot.
Shutdown: server shutdown.
Restore default: restore server to default status.
Reset password: restore the login password of server config system back to default 123456.

2.4.3 Time Setup

It is to set the time zone and time of the server’s location.

⚠️ If the system enables double hot spare or sets master slave server, it has to set NTP server for time sync:

Step 1 Selects “Basic > Time Setup”.
“Time Setup” interface is displayed. See Figure 2-8.

Step 2 Configure time parameter; please refer to Table 2-4 for more details.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DST</td>
<td>After selecting “DST”, it will enable DST function.</td>
</tr>
<tr>
<td>Time Zone</td>
<td>Selects the time zone where the device is located.</td>
</tr>
</tbody>
</table>
The system provides two methods to set data and time. 
- Click display box to select data and time.
- Click “Sync PC” and it will synchronize system time to local PC time.

**Sync PC**
- Click “Sync PC” and it will synchronize system time to local PC time.

**NTP Setup**
- Selects “NTP Setup” and then it enables the function of NTP timing update time.

**NTP Server**
- Enter NTP server domain name or IP address; click “Manual Update” to synchronize the time of NTP time.

**Manual Update**
- The interval between platform server and NTP server sync time. The maximally updates period is 65535 minutes.

**Update Period**

**Step 3** Click “Apply” to complete setting.

### 2.4.4 Route Setup

Add static route and realize the access of LAN and WAN.

**Step 1** Selects “Basic > Route Setup”.

The “Route Setup” interface is displayed. See Figure 2-9.

**Figure 2-9**

![Route Setup Interface](image)

**Step 2** Click “Manually Add”.

The “Add Static Router” interface is displayed. See Figure 2-10.
Step 3 Enter router IP address, subnet mask and default gateway. Click “OK”.

2.4.5 PING Check

It is to check if network between platform and input IP are interconnected.

**Step 1** Selects “Basic > PING Check”.

The “PING Check” interface is displayed. See Figure 2-11.

**Step 2** Enter IP address, click “Apply”.

Then it starts to check if the platform and the IP address are interconnected. See Figure 2-12.
2.4.6 Log

It is to download CMS, DMS, MTS, SS and other service log.

**Step 1**  Click “Log”.

The “Log” interface is displayed. See Figure 2-13.

**Step 2**  Selects date, click “Download” to download log file.

2.5 Security Config

After enabling SSH connection, the debugging terminal can log in platform server to debug device via SSH protocol.

**Step 1**  Selects “Security Setup > SSH Connection Setup”.

The “PING Check” interface is displayed. See Figure 2-14.
System Settings

2.6 Self-check

It is to check the detection results of background application, CPU module, network and disk. Click “Self-check”, the self-check result interface is displayed. See Figure 2-15.
Click the “+” on the upper right corner of each module or click the icon on the top left corner of the interface, the interface of detailed detection result is displayed. See Figure 2-16, Figure 2-17, Figure 2-18 and Figure 2-19.
2.7 System Upgrade

Supports system upgrade via WEB one click, meanwhile it is compatible with upgrade tool and mode.

**Step 1** Click “System Upgrade”.
- The upgrade interface is displayed. See Figure 2-20.

**Figure 2-20**

**Step 2** Click “Browse” and select upgrade package (.bin).
**Step 3** Click “Apply” and the system starts to upgrade.

- When using Config Tool to upgrade, enter IP address of the platform. The user name and password are the ones of login config system and the port is 3800.
- Config Tool can be downloaded by clicking “Config Tool Download” on the login interface.

2.8 Advanced

Configure hot spare server, make sure that the spare server can continue to keep system operating normally when the master server crashes.

⚠️

Before hot spare is configured, please make sure both master and spare servers have enabled NTP server timing function and NTP server clock sync.

**Step 1** Selects “Advanced > Hot Spare”.
- The interface of “Hot Spare” is displayed. See Figure 2-21.
Step 2  Configure the parameters of hot spare server. Please refer to Table 2-5 for more details.

Table 2-5

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual IP</td>
<td>After setting virtual IP, users can access the platform via the virtual IP.</td>
</tr>
<tr>
<td>Mask</td>
<td>It is in accordance with network port 1.</td>
</tr>
<tr>
<td>Spare IP</td>
<td>IP address of spare server network port.</td>
</tr>
<tr>
<td>Spare Heartbeat IP</td>
<td>IP address of spare server network port.</td>
</tr>
<tr>
<td>Spare Config System Username</td>
<td>Login user name and password of spare server config system.</td>
</tr>
<tr>
<td>Spare Config System Password</td>
<td>The login password of both master and spare devices has to be the same, and it is not allowed to modify password after setting double hot spare.</td>
</tr>
<tr>
<td>One-key Check</td>
<td>Click “One-key Check” to confirm if the user name and password are correct.</td>
</tr>
<tr>
<td>Clear Alarm Data</td>
<td>It will clear all the alarm data after selecting it.</td>
</tr>
</tbody>
</table>

Step 3  Click “Dual Hot Spare” to enable the function of dual hot spare. Please click “Remote Dual Hot Spare” if you want to disable the function.
3 DSS Client Operations

3.1 PC Configuration Requirements

Please refer to Table 3-1 for PC config of client installation.

Table 3-1

<table>
<thead>
<tr>
<th>DSS Client PC Config Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended Config</strong></td>
</tr>
<tr>
<td>CPU: i5-6500</td>
</tr>
<tr>
<td>Dominant frequency: 3.20GHz</td>
</tr>
<tr>
<td>Memory: 8GB</td>
</tr>
<tr>
<td>VGA card: Intel® HD Graphics 530</td>
</tr>
<tr>
<td>Network card: 1Gbps</td>
</tr>
<tr>
<td>DSS client installation directory space: 100GB</td>
</tr>
<tr>
<td><strong>Min. Config</strong></td>
</tr>
<tr>
<td>CPU: i3-2120</td>
</tr>
<tr>
<td>Memory: 4GB</td>
</tr>
<tr>
<td>VGA card: Intel® Sandbridge Desktop Gra</td>
</tr>
<tr>
<td>Network card: 1Gbps</td>
</tr>
<tr>
<td>DSS client installation directory space: 50GB</td>
</tr>
</tbody>
</table>

3.2 Downloading and Installing Client

**Step 1** Input **DSS Platform IP Address** into the browser, press Enter button. The interface of downloading client is displayed. See Figure 3-1.
Click to download installation package.
The client installation package is DSSClient.exe.

Step 2  Click to download installation package.
The client installation package is DSSClient.exe.

Step 3  Double click installation package to enter installation mode. See Figure 3-2.

Step 4  Select I have read and agree the DSS agreement, click Next.
The interface of installation path is displayed. See Figure 3-3.
Step 5  Click **Browse**, select installation path, click **Install** to start installation.

The interface of installation progress is displayed. See Figure 3-4.

- The system default installation path is C:\DSS\Client.
- Please select “Add Desktop Shortcut” if it needs to create shortcut mode on the desktop, it is selected by default.
Click Run if you need to enter client and click on the upper right corner if it is unnecessary.

### 3.3 Logging in Client

**Step 1** Click Run when installation is completed, or double click shortcut icon on the desktop.

The login interface is displayed. See Figure 3-6.

**Step 2** Enter username, password, platform IP address and WEB service port number, click "Login" to enter client interface.
• The default user name is system, default password is 123456, it needs to initialize and modify user password for the first login.
• WEB service port number is 443 by default; if it is not correct, please check the actual port number on the interface of WAN/LAN mapping in the config system.
• After selecting “Remember Password”, it does not need to enter password when you open the client next time.
• After selecting “Auto Login”, it will log in client automatically when you open client next time.

3.4 Modifying Initialization Password

It needs to initialize password and set security question when it is the first time to log in client.

**Step 1**  Log in the client; please refer to **3.3 Logging in Client** for more details.

The interface of **Set Password** is displayed. See Figure 3-7.

*Figure 3-7*

**Step 2**  Enter new password and confirm password, click **Next**.

The interface of **Security Question** is displayed. See Figure 3-8.
3.5 Homepage

The home page of DSS client is displayed. See Figure 3-9. Please refer to Table 3-2 for more details of each module.

Table 3-2

<table>
<thead>
<tr>
<th>SN</th>
<th>Name</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Function Tab</td>
<td>It displays “Homepage” tab and <img src="image" alt="tab" /> in the default status. The “Homepage” tab will be hidden when you enter other function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>interface, at this moment you can click <img src="image" alt="tab" /> to display “Homepage” tab and enter homepage interface.</td>
</tr>
<tr>
<td>SN</td>
<td>Name</td>
<td>Note</td>
</tr>
<tr>
<td>----</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 2  | Alarm        | ● ![Alarm Symbol](image) The switch of event alarm prompt tone, the prompt tone is enabled by default, click the icon and it switches to ![Alarm Symbol](image), and then the prompt tone is disabled.  
   |               | ● ![Alarm Number Symbol](image) Number of alarm, when the number is not zero, you can click and quickly enter the event center interface to check alarm information. |
| 3  | User Info    | Click the icon ![User Info Symbol](image) and the interface will be display in Figure 3-10.  
   |               | ● Display the system login user name and platform IP address.  
   |               | ● Click "Modify Password", enter “Old Password”, “New Password” and “Confirm Password”, click “OK” to modify current login password.  
   |               | ● Click “Lock Client”, enter user password and it can lock the current client.  
   |               | ● Click “Help” to open help document.  
   |               | ● Click “About” to check the client version info and release data.  
   |               | ● Click “Logout”, it will return to client login interface after it is confirmed. |
| 4  | Config       | Click the icon and it can realize the local setting functions such as basic setting, video setting, playback setting, snapshot setup, record, alarm and shortcut key. Please refer to chapter 3.6 Local Config for more details. |
| 5  | System Status| Click the icon and you can check the application status of server network, CPU and RAM. |
| 6  | Function     | It displays live view, playback, Emap, event center, video wall, download center, personnel management, access control and video intercom etc., click to enter the operation interface of corresponding function. |
| 7  | Management   | It displays the device management, user management, config management and log management, click to enter the specific management interface.  
   |               | Click the arrow above to conceal the area.  
   |               | General users do not have the operation authority of management area. |
3.6 Local Config

⚠️
The parameters of local config are in one interface, you can directly set other parameters; click “Save” after all the settings are completed.

3.6.1 Basic Setting

It is to set the client language, client size, timing, auto restart, self-adaptive and display device node etc.

**Step 1**  Select 🛠️ > **General** on the upper right corner of the client.

The interface of “General” is displayed. See Figure 3-11.

![Figure 3-11](image)

**Step 2** Sets relevant parameters, please refer to Table 3-3 for more details.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Note</th>
</tr>
</thead>
</table>
### Language

It supports simplified Chinese and English, it needs to reboot the client after modification and make it valid.

### Client Size

Selects client display resolution, supports 960×680、1024×768、1280×800、1280×1024、1440×900 and 1680×1050.

### Enable timing (in accordance with server time)

After it is selected, the time between the platform server and the client can be calibrated when the system is timed or immediately calibrated.

### Auto Login

After selected, open client and the system will be automatically logged in with the last user.

### Auto Restart after Reboot

After selected, the client login interface will be opened automatically after PC starts. You will enter the client interface directly if you also select "Auto Login".

### Display previous live image when it starts

After selected, the window status of preview video is recorded at that time when the software is closed. When you log in again and open the preview interface, video will be restored before closing.

### Self-adaptive audio talk parameter

After selected, when the channel intercom is opened, no popup box is needed and each parameter value is automatically adjusted.

### Display device node

After selected, the device node will be displayed in the device organization tree of the real-time preview interface; otherwise the included channel will be displayed directly under the organization node.

***Step 3*** Click **Save** to complete settings.

### 3.6.2 Video

It is to set the parameters of client video split, stream type, play mode, video buffer time, instant playback time, enable hardware acceleration and double click video to maximize window and switch main stream.

***Step 1*** Select 📺 > **Video** on the upper right corner of the client.

The interface of Video is displayed. See Figure 3-12.
Step 2  Sets relevant parameters, please refer to Table 3-4 for more details.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Split</td>
<td>Click split icon, and select window default split of the real-time live image.</td>
</tr>
<tr>
<td>Stream Type</td>
<td>Selects stream type, supports 1, 4, 6, 8, 9, 13, 16, 20, 25 and 36. When number of split is bigger than the stream type, open video preview, video stream will be automatically switched to sub stream.</td>
</tr>
<tr>
<td>Play Mode</td>
<td>Sets the video play mode, it supports balance priority, real-time priority, fluency priority and customize.</td>
</tr>
<tr>
<td>Instant Playback Time</td>
<td>It is the time of instant video playback on the preview interface.</td>
</tr>
<tr>
<td>Enable hardware acceleration (Effective after reopen video)</td>
<td>Enable hardware acceleration function, it needs to reopen the video and make it valid.</td>
</tr>
<tr>
<td>Double click video to maximize window and exchange to main stream</td>
<td>After selected, it will switch to max when double click the video window, it will be automatically switched to main stream.</td>
</tr>
</tbody>
</table>

Step 3  Click “Save” to complete setting.

3.6.3 Playback

It is to set the default split and DVR stream type on the playback interface.

Step 1  Select 💾 > Playback on the upper right corner of the client.

The interface of “Playback” is displayed. See Figure 3-13.
Step 2  Set relevant parameters. Please refer to Table 3-5.

Table 3-5

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default split</td>
<td>Click split icon and select the default split of playback interface.</td>
</tr>
<tr>
<td>DVR stream type</td>
<td>Selects the stream type of playback, supports all stream, main stream and sub stream.</td>
</tr>
<tr>
<td>Enable HD Adjustment</td>
<td>After selected, it will adopt HD network frame extraction for playback.</td>
</tr>
</tbody>
</table>

Step 3  Click Save to complete setting.

3.6.4 Snapshot

It is to set the picture format, path, name and snapshot mode etc.

Step 1  Select > Snapshot on the upper right corner of client.

The interface of Snapshot is displayed. See Figure 3-14.

Figure 3-14

Step 2  Sets relevant parameters, please refer to Table 3-6 for more details.

Table 3-6

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format</td>
<td>It is to set the picture format, supports BMP and JPEG.</td>
</tr>
<tr>
<td>Picture Path</td>
<td>Click Browse to set picture path.</td>
</tr>
<tr>
<td>Picture Name</td>
<td>It is to set the name when the picture is saved; it supports channel name_time, channel number_time, time_channel name, time_channel number.</td>
</tr>
<tr>
<td>Snapshot Interval</td>
<td>It is to set the interval between each picture when setting taking several snapshots continuously.</td>
</tr>
</tbody>
</table>
### 3.6.5 Record

It is to set record path, name and size.

**Step 1** Select 🔄 > **Record** on the upper right corner of client.

The “Record” interface is displayed. See Figure 3-15.

![Record Interface](image)

**Step 2** Set relevant parameters. Please refer to Table 3-7 for more details.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Path</td>
<td>Click &quot;Browse&quot; to set the record path.</td>
</tr>
<tr>
<td>Record Name</td>
<td>It is to set name rule when it is saved, supports channel name_time, channel number_time, time_channel name, time_channel number.</td>
</tr>
<tr>
<td>Record Size</td>
<td>It is to set the size of each record file.</td>
</tr>
</tbody>
</table>

**Step 3** Click **Save** to complete setting.

### 3.6.6 Alarm

It is to set alarm play mode, audio file path, alarm type and display type etc.

**Step 1** Select 🔄 > **Alarm**.

The **Alarm** interface will be displayed. See Figure 3-16.
It is to set relevant parameters, please refer to Table 3-8 for more details.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play Alarm Sound</td>
<td>After selecting <strong>Play Alarm Sound</strong>, it means that it will play alarm sound when alarm occurs, at this moment, you can set if it is loop, alarm type and audio file.</td>
</tr>
<tr>
<td>Loop</td>
<td></td>
</tr>
<tr>
<td>Alarm Type</td>
<td>The play alarm sound here is synchronized with the alarm tone switch in the upper corner of the client.</td>
</tr>
<tr>
<td>Sound Path</td>
<td>Map flashes when alarm occurs After selecting <strong>Map flashes when alarm occurs</strong> and setting alarm type, the alarm device will flash on the map when alarm like this occurs.</td>
</tr>
<tr>
<td>Display alarm link video</td>
<td>After selecting <strong>Display alarm link video</strong> and setting video display type, it will display device relevant video via the selected mode when alarm occurs.</td>
</tr>
<tr>
<td>Video Display Type</td>
<td></td>
</tr>
</tbody>
</table>

**Step 2**  Click **Save** to complete setting.

**3.6.7 Shortcut Key**

Select > **Shortcut Key** on the upper right corner of client, the **Shortcut Key** interface is displayed. See Figure 3-17. It can check the corresponding shortcut keys provided by system.
3.7 Device Management

It is used to add access control, encoder, decoder, video wall, ANPR, matrix and so on, it supports manual add and auto add.

In the management area, click Device and device management interface is displayed. See Figure 3-18. The device is online when the status is green while it is offline when the status is red.
3.7.1 Creating Organization

Creating organization is to deploy, organize and manage users or device level, and make it convenient to manage. It does not have to add organization because the added user or device can be categorized into default organization. The first organization of system is Root by default, and the newly added organization will be displayed on the next level of Root.

Step 1  Click on the interface of device management.

The interface of “Create Organization” is displayed. See Figure 3-19.

Figure 3-19

Step 2  Enter organization name and click OK.

The interface of new organization is displayed. See Figure 3-20.

Figure 3-20

- Right-click root organization and it supports following operations.
  - Select subordinate organization of root.
  - Set display mode, it can display by name or display by IP.
  - Set sorting mode, it supports ascending, descending and default.

Figure 3-21

- Right-click subordinate organization and it supports Create Organization, Delete and Rename. The Delete option will not be displayed if there is device in the organization.
Select organization, click above and delete the selected organization and subordinate organization. It cannot be deleted if there is device in the organization.

Enter content in the text box, click and search relevant device or organization.

3.7.2 Adding Device

3.7.2.1 Auto Search

It is recommended to add device via auto search when it needs to add devices in batch and the devices are in the same segment, or only the device segment is acquired without knowing IP.

Step 1 Click Auto Search on the interface of device management. The interface of Auto Search is displayed. See Figure 3-23.

- Click Refresh to update device info. You can enter device segment if there are too many devices. Click Search and filter the devices from the segment.
- Select device, click Modify IP to modify device IP address. Please refer to 3.7.8 Modifying Device IP Address for more details.
- Select the uninitialized devices and click Initialize Device to realize device initialization. Please refer to 3.7.9 Initializing Device for more details.
Step 2  Select the device which needs to be added and click **Add**. The interface of Add Device is displayed. See Figure 3-24.

Step 3  Enter device **Username** and **Password**, and click **OK**.

Please make sure the username and password of all the added devices are the same if the devices are added in batches.

After devices are added, the system will continue to stay in the interface of Auto Search, you can continue to add devices or click Cancel to exit the Auto Search interface.

After the device is added, the platform automatically logs in the device, it will display **Online** if it logs in successfully otherwise it is “Offline”. Online devices can edit, delete and configure device.
3.7.3 Adding All Devices

You can add devices via manual adding if you have acquired device info.

**Step 1**  Click **Add** on the interface of device management.

The **Add All Devices** interface is displayed. See Figure 3-25.

![Add All Devices Interface](image)

**Figure 3-25**

**Step 2**  It is to set parameters, please refer to Table 3-9 for more details.

- It has to fill in the item with *, it needs to set different parameters according to different access devices.
- Click after device info setting is completed, preview the device video. See Figure 3-26.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Name</td>
<td>It is to name and distinguish the device.</td>
</tr>
<tr>
<td>Register Mode</td>
<td>Supports IP address and serial number.</td>
</tr>
<tr>
<td></td>
<td>Only the device which supports P2P can support serial number registration.</td>
</tr>
<tr>
<td>Device Category</td>
<td>Select according to the type of added device.</td>
</tr>
<tr>
<td>IP Address</td>
<td>Enter device IP address.</td>
</tr>
<tr>
<td>Port</td>
<td>The port that TCP protocol communication provides service, it can be set according to the users' requirements, it is 37777 by default.</td>
</tr>
<tr>
<td>Organization</td>
<td>Select the organization node of the device.</td>
</tr>
</tbody>
</table>

Table 3-9
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username/Password</td>
<td>Enter username and password to log in device.</td>
</tr>
<tr>
<td>Decode Mode</td>
<td>Select decode mode according to the access device.</td>
</tr>
<tr>
<td></td>
<td>- Pull: decoder acquires stream from platform via URL address, the decode mode of the device is pulling stream.</td>
</tr>
<tr>
<td></td>
<td>- Direct: Decoder acquires stream from front-end coding device directly, the decode mode of device end is direct. In this mode, it needs to add the decoder IP when adding white list.</td>
</tr>
<tr>
<td></td>
<td>- Push: VMS pushes stream directly to decoder; currently it only supports NVD without fusion screen. Matrix, video wall and NVD with fusion mode fail to support push mode.</td>
</tr>
<tr>
<td>Support Fusion</td>
<td>If it is to support fusion function select according to access device.</td>
</tr>
<tr>
<td>Picture Server</td>
<td>Select picture server.</td>
</tr>
</tbody>
</table>

![Figure 3-26](image)

**Step 3** Click **Add** to complete adding devices.

Please click **Continue to add** if it needs to add other devices continuously, add other devices in turn.

### 3.7.4 Importing Device

If device info is already exported from SmartPSS, then device info can be quickly imported onto the platform and device is added successfully.

**Step 1** Click **Import** on the interface of device management.

The **Device Import** interface is displayed. See Figure 3-27.
Step 2 Click **Browse**, and select device info file, click **Import**.

### 3.7.5 Editing Device

It is to modify device IP address, username, password, device port and organization etc. in the list.

**Step 1** Click ☑ in the device info line on the **Device Management** interface.

The interface of **Edit Device** is displayed. See Figure 3-28.

**Figure 3-28**

Step 2 Modify device basic info.

- Click **Basic Info** on the left.
  The system displays the interface of Basic Info.
- Modify device IP address, username, password, device port, organization, device name and type etc. according to requirements.

**Step 3** Modify video channel.

- Click Video Channel on the left.
  The **Video Channel** interface is displayed. See Figure 3-29.
- Modify channel number, stream type and so on.

**Step 4** Modify the info of **Alarm Input Channel**.
- Click **Alarm Input Channel** on the left.
The Alarm Input Channel is displayed. See Figure 3-30.

![Figure 3-30](image)

- Modify the alarm input channel number of platform access.

**Step 5** Modify the info of **Alarm Output Channel**.
- Click the **Alarm Output Channel** on the left.
The Alarm Output Channel is displayed. See Figure 3-31.
Modify the alarm output channel number of platform access.

Step 6: Click OK to complete modification.

3.7.6 Deleting Device

It can delete device singly or in batch.

- Single
  
  Click in the device info line on the interface of Device Management, and delete the corresponding device.

- Batch
  
  Select several devices on the interface of Device Management, click Delete and delete the selected devices.

3.7.7 Moving Device

You can move the devices to other organization nodes.

Select the devices you need to move on the Management interface, click Move to and select organization node, click OK to complete moving the device. See Figure 3-32.
3.7.8 Modifying Device IP Address

It can modify device IP address via auto search interface.

**Step 1**  Click **Auto Search** on the **Management** interface.

The system will pop out the dialog box of **Auto Search**.

**Step 2**  Set device segment, and click **Search**.

The system will display search result. See Figure 3-33.

**Step 3**  Select the device whose IP address needs to be modified, and click **Modify IP**.
The system will pop out the dialog box of **Modify Device IP**.

**Step 4** Modify device IP info and click **OK**.
- When selecting one device, the system will pop out the dialog box of **Modify Device IP**. See Figure 3-34.

![Figure 3-34](image)

- When selecting several devices, the system pops out the dialog box of **Batch Modify Device IP**. See Figure 3-35.

![Figure 3-35](image)

**Step 5** Set the new IP address or start IP, subnet mask and gateway.
When modifying in batch, the IP address increases sequentially. For example, the start address is 192.168.1.2, and then the address of the second device is 192.168.1.3.

**Step 6** Click **OK** to complete IP address modification.

### 3.7.9 Initializing Device

If the device is not initialized, you can initialize the device on the **Auto Search** interface.

**Step 1** Click **Auto Search** on the device management interface.
The **Auto Search** interface is displayed.

**Step 2** Select the uninitialized device, and click **Initialize Device**.
The **Set Password** interface is displayed. See Figure 3-36.
If you select several devices to initialize together, then the passwords for those devices will be set as the same.

**Figure 3-36**

![Password Security Interface](image)

**Step 3** Enter password, and click **Password Security**. The **Password Security** interface is displayed. See Figure 3-37.

**Figure 3-37**

![Modify IP Interface](image)

**Step 4** Select email or phone, enter corresponding email address or phone number, and click **Modify IP**. The **Modify IP** interface is displayed. See Figure 3-38.
Email or phone number is used to reset password when you forget password, please make sure it is correct and remember it.

**Figure 3-38**

Step 5  Enter the new IP Address, Subnet Mask and Gateway, and click **Finish** to complete initialization.

### 3.8 User

It is used to manage login user of client, it can realize the operation of adding user, modifying user, deleting user and setting user permission etc.

The system provides 3 types of users, which are admin, advanced user and general user. Different type of user has different permissions; each type of user can make adjustment over permission within certain range.

- Admin: Owns all control permissions.
- Advanced user: Owns all the permissions excluding system config.
- General user: Owns some other permission excluding device management, user management, system config, config management, video wall config, Emap config and log management etc.

In management area, click ![User](image) to enter user management interface. See Figure 3-39.
3.8.1 Adding User

**Step 1** Select user type on the left of the list, and click the above. The interface of adding user is displayed on the right. See Figure 3-40.

**Step 2** Sets user info, please refer to Table 3-10 for more details.

<table>
<thead>
<tr>
<th><strong>Parameter</strong></th>
<th><strong>Note</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>Enter username, only Chinese character, letter, number and symbol (-, ., ;#()[]+\ and blank) are allowed.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter user password and confirm password, supports strong password.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MAC Address</td>
<td>Select <strong>MAC Address</strong>, enter MAC address of PC, it needs to verify the MAC address of PC when users log in.</td>
</tr>
<tr>
<td>Password Expiry</td>
<td>Select <strong>Password Expiry</strong>, click ![Date Icon], select date, and then the user can be used during the validity period.</td>
</tr>
<tr>
<td>Email Address</td>
<td>Enter email address.</td>
</tr>
<tr>
<td>Remark</td>
<td>Enter remark info.</td>
</tr>
</tbody>
</table>

**Step 3** Select the device that can be used by users in device permission.

**Step 4** Select the permission that the user owns in control permission.

- It can select different permission with different user type.

**Step 5** Click **Add** to add user.

- After it is added, click the user under the user type on the left, it will display user basic info, device permission and control permission on the right. See Figure 3-41.

**Figure 3-41**

### 3.8.2 Modifying User Info

It can only modify user basic info and permission but not the the category to which the user belongs. It needs to delete and add again if it needs to modify user type.

**Step 1** Select user on the left list, click ![Edit Button].

- The interface of “Edit User Info” is displayed on the right. See Figure 3-42.

- If there are too many users, which is not convenient to search, so you can enter username keyword in the search box and click ![Search Button] to search.
Step 2. Modify use info, device permission and control permission.
Step 3. Click OK to complete modification.

3.8.3 Deleting User

⚠️ System user cannot be deleted.

Select users on the left list, click the above and it can be deleted after it is confirmed.

3.9 Config

3.9.1 Configuring Server

It is used to backup and restore server data, set server FTP, message storage, time sync, Email, storage and license etc.

Click in the homepage management area, the interface of Config Management is displayed. See Figure 3-43. Server node and device organization tree are on the left while config area is on the right.
3.9.1.2 Backup

In order to guarantee the security of user data, the platform provides the function of data backup. Backup mode includes manual backup and auto backup.

3.9.1.2.1 Auto Backup

The system can auto back up data according to the backup mode and time.

Step 1 Select Server > Backup in the config interface.

The backup interface is displayed. See Figure 3-44.

Step 2 Enable the switch of Auto Backup, select Cycle and Time.
Cycle includes backup by day, backup by week and backup by month. Time is
different according to the selected cycle, the time set is the point at which the backup
is performed.

**Step 3** Click **OK** to save config.
The system pops out the interface of **Backup File Password**.

**Step 4** Enter password, click **OK** to complete config.
It is to guarantee backup data security via setting file password. Please remember
password after setting, it needs to verify password to open or restore backup file. The
storage path of backup file is "/DSS/Client/Backup File".

### 3.9.1.2.2 Manual Backup

It is to manually back up current system data.

**Step 1** Select **Server > Backup** in the interface of config management.
The backup interface is displayed. See Figure 3-44.

**Step 2** Click **Manual Backup**.
The interface of **Manual Backup** is displayed. See Figure 3-45.

![Figure 3-45](image)

**Step 3** Enter password, select backup path, and click **OK**.
It will prompt the backup progress in the lower right corner of PC. See Figure 3-46.

Click ![icon](image) to check backup file. See Figure 3-47.

![Figure 3-46](image)

It is to guarantee backup data security via setting file password. Please remember
password after setting. It needs to verify password to open or restore backup file.
3.9.1.3 Restore

When the user database is abnormal, the system restore function can be used to restore the data to the time point of the last backup, which can quickly restore the system and reduce the user loss.

⚠️ When performing system restore, you need to stop other users from using the system. Use with caution since the feature can change data information.

3.9.1.3.1 Local

Restore files that the user manually backed up to the server.

**Step 1** Select **Server > Restore** in the config interface. The **Restore** interface is displayed. See Figure 3-48.

**Step 2** Click **Browse** and select backup data file.

**Step 3** Click **Restore**.

The system pops out the **Restore** prompt box. See Figure 3-49.
Step 4  Enter admin password and file password, click OK to restore.
It will display progress during data restoration, it will prompt that it is successfully restored on the lower right corner of PC after restoration is successful. See Figure 3-50. The system service will reboot after restoration.

3.9.1.3.2 Server

Please make sure the auto backup function of the system has been enabled when it is to restore data from the backup file of the server end. The server end backs up database according to the set cycle and then forms backup file.

Step 1  Select Server > Restore in the config interface.
The restore interface is displayed. See Figure 3-51.
Step 2  Select backup file in the list, click **Restore**.
        The system pops out **Restore** prompt box. See Figure 3-52.

**Figure 3-52**

Step 3  Enter admin password and file password, click **OK** to restore.
        It will display progress during data restoration, it will prompt that it is successfully
        restored in the lower right corner of PC after it is successfully restored. See Figure
        3-53. The system service will reboot after restoration.

**Figure 3-53**
3.9.1.4 FTP

Enable FTP and the device uploads alarm snapshot to FTP. FTP can be equipped by platform itself, it can also configure user to establish FTP server.

**Step 1** Select **Server > FTP** in the config interface.
   The FTP interface is displayed. See Figure 3-54

![FTP Interface](image)

**Step 2** Set FTP address, username and password.

It has to fill in the items with 
*:* the standard format of FTP address is **ftp://x.x.x.x/**.

The FTP address is the IP address of platform server; both username and password are dss/dss.

**Step 3** Click **OK** to complete setting.

After FTP server is configured, you can input FTP address **ftp://x.x.x.x/** into the PC’s address bar, press Enter, input username and password, and then enter FTP directory.

3.9.1.5 Message Storage

It is to set the storage duration and reserved storage of operator log, A&C log, and video talk log, alarm info; passed vehicle record, face recognition, picture storage and so on.

**Step 1** Select **Server > Message Storage** on the config interface.

The interface of **Message Storage** is displayed. See Figure 3-55
Set storage duration and reserved storage of various logs.

If reserved storage is less than the threshold, then it will remove all the pictures of the earliest date according to time sequence until the storage is bigger than the threshold. For example, the reserved storage is 10G, and the pictures from day 1 to day 20 are stored on the platform. If the storage is less than 10G when saving the pictures of day 21, then the pictures of day 1 will be removed, all the pictures of day 2 will be removed as well if the storage is still not big enough, until the storage exceeds 10G. Set the storage time of log, alarm info and heatmap.

**Step 3** Click OK to complete config.

### 3.9.1.6 Time Sync

#### 3.9.1.6.1 Device Time Sync

Take the system time of platform server as the base time when the front-end equipment is calibrated with the platform server time. The platform supports time correction for all devices connected by Dahua and Onvif protocol. It supports automatic time correction and manual time correction. Auto time sync means that the system automatically initiates time sync within designated period and time. Manual time sync means that it initiates time sync request manually, the system responds to the request immediately and then time sync is implemented.

**Auto Time Sync**

**Step 1** Select Server > Time Sync on the interface of config management. The interface of Time Sync is displayed. See Figure 3-56.
Enable the switch and set start time and sync interval.

Step 2 Click OK and save config.

Manual Time Sync

Step 1 Click Time Sync on the config interface.

The Time Sync interface is displayed. See Figure 3-56.

Step 2 Click OK to save config.

3.9.1.6.2 Client Time Sync

Take the system time of platform server as base time when it is to synchronize time between client and platform server. Client enables time sync, which means that it enables time sync for both device and client at the same time, but it needs to enable separately in the local config of client if client is to accept the time sync of platform server.

Auto Time Sync

Step 1 Click the \button\ on upper right corner of the client, and open Local Config.

Step 2 Click Basic Setting tab, enable client time sync, and click Save to save config info.

Enable the client time sync in local config, the client will make time sync request to server immediately and then complete time sync.
Step 3  Select **Server > Time Sync** on the interface of config management. The interface of time sync is displayed. See Figure 3-58.

Step 4  Enable time sync and set start time and interval.

Step 5  Click **OK** to save config.

**Manual Time Sync**

**Step 1**  Click **Config** on the upper right corner of client and open **Local Config**.

**Step 2**  Click the tab of **Basic Setting**, enable client time sync, and click **Save** to save config info. See Figure 3-59.
Enable the client time sync in local config, the client will make time sync request to server immediately and then complete time sync.

Figure 3-59

Step 3  Select Server > Time Sync on the config interface. 
The Time Sync interface is displayed. See Figure 3-60.
Figure 3-60

Step 4  Click Sync Time and the system will synchronize time upon front-end device immediately.
3.9.1.7 Email

It is to configure email server. It can activate and send alarm info to other users when alarm event occurs.

**Step 1**  Select Server > Email on the interface of config management. The interface of Email Server is displayed. See Figure 3-61.

![Email Server Interface](image)

**Step 2**  Enable the function, select SMTP server type and set email info. As for encryption mode, it is recommended to adopt TSL encryption mode which is more secure.

**Step 3**  Click Email Test to verify if config is successful.

**Step 4**  After config succeeded, click OK to complete config.

3.9.1.8 Storage

After all-in-one device is started, DSS service automatically identifies the local disks that are not partitioned on all-in-one device.

Select Server > Storage in the config interface. The interface of storage management is displayed. See Figure 3-62.

- The capacity bar is black: It indicates that storage space is not used.
- The capacity bar is green: It indicates that there is still storage space.
- The capacity bar is red: It indicates that storage space is fully occupied.
3.9.1.8.1 Local Disk

The local disk is equipped by server itself; the platform will automatically detect disk info of the server (disk info of non PC client). See Figure 3-63.

![Figure 3-62](image)

Click 🗃️ and select the storage space type of the disk, which is the storage purpose of the disk. See Figure 3-64.

![Figure 3-63](image)

It needs to set storage space type as picture if it needs to store pictures of ANPR device.
3.9.1.8.2 Net Disk

Net disk can be added and deleted freely; meanwhile it can use the net disk of other devices.

**Step 1** Click +.

The interface of **Add Net Disk** is displayed. See Figure 3-65.

**Figure 3-65**

![Add Net Disk Interface](image)

**Step 2** Enter IP address of net disk.
**Step 3** Click **OK** to complete adding.

See Figure 3-66 for adding results.

Click ![Modify Disk Type](image) to modify the storage space type of disk.

Click ![Rob Disk](image) to rob net disk from other devices and make it use for local device. Please make sure other devices stop recording or snapshot before robbing, otherwise it may cause video or picture loss.

Click ![Delete Disk](image) to delete net disk, please make sure it has stopped recording or snapshot before it is deleted, otherwise it may cause video or picture loss.
3.9.1.9 License

Select Server > License on the interface of config management. The license interface is displayed. See Figure 3-67. It is to check the channel number of each module and usage status, and the list of licensed functions.

3.9.2 Configuring Residence

If it is to use the video intercom of platform, then the building and unit enable of platform is required to be the same as the device, otherwise the device is offline after adding device. The building and unit enable setting can influence dialing rule. Take room 1001 unit 2 building 1 as an example, the dialing rule is shown as follows after it is enabled.

- If building is enabled and unit is not, then the number is 1#1001.
- If both building and unit are enabled, then the number is 1#2#1001.
If building is not enabled, then the unit cannot be enabled either, the number is 1001.

**Step 1** Click **Residence Config** on the config interface.

The interface of **Residence Config** is displayed. See Figure 3-68.

![Figure 3-68](image)

Step 2  Enable building and unit of the platform according to the device; make sure it is in accordance with that of the device.

Step 3  Click **OK** and complete config.

### 3.9.3 Configuring Device/Channel

It is used to check device info, configure time info and configure device parameters.

Click **Config** on the homepage management area. The interface of config management is displayed. See Figure 3-69. The server node and device organization tree are displayed on the left while the config area is displayed on the right.

![Figure 3-69](image)
3.9.3.1 Event

The supported alarm event type is different according to different accessed device type, but the event parameter which needs to be configured is the same. In this chapter, it will take “Disk Full” as an example to introduce event attribute, link parameter and some other config processes.

⚠️
- Each alarm type needs to be configured separately.
- The link item is independent, which can be configured individually or together as well.

3.9.3.1.1 Enabling Alarm Switch

Enable alarm switch, the platform synchronizes alarm when the accessed device generates alarm.

**Step 1** Select device or device channel from device tree which is on the left of config management interface, click Event. The interface of Event is displayed. See Figure 3-70.

![Figure 3-70]

**Step 2** Select alarm event type as disk full.

**Step 3** Click to enable disk full event, the switch is.

At this moment, the alarm event type on the left list displays.

3.9.3.1.2 Configuring Event Attribute

It is to configure level of alarm event and valid period triggered by time.

**Step 1** Click Event Attribute. See Figure 3-70.

**Step 2** Select priority.
Priority is only used to recognize alarm message.

**Step 3** Select time template.

Time template system includes all-period template, weekday template and weekend template by default. It will display the time info of the template below after it is selected. Please add new template according to the following steps if the default template fails to meet the requirements.

1) Select **Manage Time Template**.

   The interface of **Time Template** is displayed. See Figure 3-71.

   ![Figure 3-71](image)

2) Click **Add Time Template**

   The interface of **Time Template Details** is displayed. See Figure 3-72

   ![Figure 3-72](image)

3) Enter time template name and set time according to the three following modes.
Select **Copy**, select the existing default template and copy time directly from the default template.

Use mouse to drag time line directly. It will display eraser if the time is already set, it will erase the time of drag location; it will display pen if time is not set and add the time of drag location.

Click to see Figure 3-73. Set time period and week, click to add several time periods.

Click to delete time period. Click **OK** after setting is completed, save and return to the interface of **Time Template Details**.

4) Click **OK** to complete adding time template.

**Step 4** Click **OK** to complete setting.

### 3.9.3.1.3 Configuring Link PTZ

The link PTZ device will move to the preset location and realize monitoring when alarm event occurs.

**Step 1** Click **Link PTZ**.

The interface of **Link PTZ** is displayed. See Figure 3-74.
Select PTZ device from the device tree.
Click drop-down box and select PTZ preset.
Click OK to complete setting.

3.9.3.1.4 Configuring Link Video

It will link relevant devices to record, snapshot and client to pop out video when alarm event occurs.

Step 1 Click Link Video.
The interface of Link Video is displayed. See Figure 3-75.

Step 2 Select window; drag the device channel which needs to be linked to the window. See Figure 3-76.
- Click the icon under the window to select window split.
After dragging channel to the window, click to display real-time video, click to delete channel. Please move the mouse to window and click to delete it if it is already played.

**Figure 3-76**

Step 3 Set link parameters; please refer to Table 3-11 for more details.

**Table 3-11**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>It is to set the storage location of record and snapshot, it supports storage on server, on device or no storage.</td>
</tr>
<tr>
<td>Stream Type</td>
<td>It is to select the video stream of channel, supports main stream, sub stream 1 and sub stream 2.</td>
</tr>
<tr>
<td>Record Time</td>
<td>It is to set the time of linking video after alarm time is triggered.</td>
</tr>
<tr>
<td>Prerecord Time</td>
<td>It is to set the prerecord time before linking video.</td>
</tr>
<tr>
<td>Take camera snapshot after alarm is triggered</td>
<td>After it is selected, it will link corresponding camera to capture after alarm event is triggered.</td>
</tr>
<tr>
<td>Open camera on client when alarm is triggered</td>
<td>After it is selected, it will open camera real-time video in client after alarm output is triggered.</td>
</tr>
</tbody>
</table>

Step 4 Click “OK” to complete setting.

### 3.9.3.1.5 Configuring Alarm Output

When alarm event occurs, it will link external alarm output device and output alarm info.

**Step 1** Click **Alarm Output**.

The interface of **Alarm Output** is displayed. See Figure 3-77.
Step 2  Select alarm output device.

Step 3  Click the drop-down box of **Duration** in the right list, select alarm duration.

Step 4  Click **OK** to complete setting.

### 3.9.3.1.6 Configuring Email

When alarm event occurs, you can remind relevant personnel to deal with alarm event via sending email.

Step 1  Click **Email**.

The interface of **Email** is displayed. See Figure 3-78.
**Step 2** Enter email address of receiver into the address bar directly, or click **Address** to select the email address of receiver.

It needs to make sure that the email address has been set when adding user if it clicks **Address** to select email address of receiver, otherwise, it will not displayed in the list.

**Step 3** Enter email theme.

**Step 4** Click the option and set email content or enter email content directly.

For example: Select **Event Time**, then the message sent to the receiver will have the time of the event.

**Step 5** Click **OK** to complete setting.

### 3.9.3.1.7 Configuring Link AC

When alarm event occurs, it will link several AC channels to open or close, each channel can be set status individually.

**Step 1** Click **Link AC**.

The interface of **Link AC** is displayed. See Figure 3-79.
Select the channel of AC device.

Select the action of AC channel in the action list on the right.
It supports open, close, NO and NC.
- Open: The door is linked to open when alarm event is triggered.
- Close: The door is linked to close when alarm event is triggered.
- NO: Link door is always open when alarm event is triggered.
- NC: Link door is always close when alarm event is triggered.

Click the in the list, or cancel selecting device to delete AC channel.

Click OK to complete setting.

### 3.9.3.2 Configuring Record

It can configure record plan if the accessed device supports record function. The system will record automatically during this period after config.

**Step 1** Select device or device channel from the device tree in the left of config management interface, click **Record Config**.

The “Record” interface is displayed. See Figure 3-80.
Step 2 Click enable switch to enable record function.

Step 3 Select Position, Stream Type and Time Template. Storage position supports storing on server and storing in device. Time template system provides default option. It can create new template if it fails to meet requirements. Please refer to 3.9.3.1.2 Configuring Event Attribute for more details.

Step 4 Click OK to complete record config. See Figure 3-81.

Click to enable or disable record.

Click to modify record info.

Click to delete record info.

3.10 Log

The system supports operator log query, it can select type, time and search via key word during query. Besides, it can export log as well, supporting xls and txt.

Step 1 Click Log on the homepage.

The interface of Operator Log is displayed. See Figure 3-82.
Step 2  Select Event Type, Time, or enter key word and click Search.

The search result is shown in Figure 3-83. The total record quantity will be displayed in the lower left corner.

Step 3  Click Export, select export format and save path, click OK and export log info.

After it is exported successfully, the system will generate prompt that it is exported successfully and supports viewing in the save path.
4.1 Live View

It is to view the real-time video data from the camera. During the live view process, system can record local video file, snapshot, enable audio, bidirectional talk, instantly playback video record, switch bit stream, PTZ control, tour operation, etc. It supports multiple-window preview too.

4.1.1 Function Flows

Refer to the following figure to realize live view function. See Figure 4-1.

The above function flows are for reference only. You can skip some steps according to your actual situation.
4.1.2 Adding Device

It is to add device organization tree and add the corresponding device. Refer to chapter 3.7 Device management for detailed information.

4.1.3 Entering Preview Interface

On function zone, click Live view button, enter Preview interface. See Figure 4-2. Refer to Table 4-1 for more details.

Table 4-1

<table>
<thead>
<tr>
<th>SN</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
</table>
| 1  | Resources | It is to display device organization tree and added e-map.  
|    |      | • On the node of the organization tree, it displays device total amount and online amount.  
<p>|    |      | • The map preview includes GIS map and raster map. |
| 2  | View | It is to save current video window to the view as the scheme. It supports 3 levels. The first level is the root, the second level is group and the third level is view. It supports root, group node video tour. The tour interval includes 10s, 30s, 1min, 2min, 5min, 10min. System maximally supports 100 views. |
| 3  | PTZ | It is to display PTZ control panel. It is to operate the PTZ devices. |
| 4  | Save | It is to save current preview scheme as view. |</p>
<table>
<thead>
<tr>
<th>SN</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>It is to adjust preview window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Full/original scale: It is to select window height/width rate. It supports two play video modes: by actual rate or full-window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Original scale: The preview window is at original scale to display.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <img src="image.png" alt="Image" />: 4-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <img src="image.png" alt="Image" />: 9-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <img src="image.png" alt="Image" />: 16-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <img src="image.png" alt="Image" />: Select other split mode or customized split mode.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <img src="image.png" alt="Image" />: Switch to full screen. Click 【Esc】 to exit.</td>
</tr>
</tbody>
</table>

4.1.4 Open Live Preview

Drag organization tree node to video window and the system will open video channel according to window splits.

**Step 1** In the adjustment area of live window, set window split, such as 4.

**Step 2** Drag the organization node of left device organization tree to the right window. See Figure 4-3.

- If the split amount is smaller than the current online channel of organization, system displays online channel from front to the back.
- If the split amount is larger than the current online channel of organization, system displays video channel on the window one by one.

![Figure 4-3](image.png)
4.1.4.1 Organization Preview

Drag the organization tree node to the video window, you can open video channel according to window split amount.

**Step 1** Click the icon at the right bottom corner, and then set window split amount such as 4.

**Step 2** Drag the organization node on the left device tree to the window on the right side.

- The system opens the first 4 online channels of current organization on the right side. See Figure 4-4.
- If the split amount is smaller than the current online channel of organization, system displays online channel from front to the back.
- If the split amount is larger than the current online channel of organization, system displays video channel on the window one by one.

![Figure 4-4](image)

4.1.4.2 Device Preview

Drag the device node to the video window, you can open video channel according to window split quantity.

**Step 1** At the upper right corner, select > **Basic Setting**, enable **Show Device Node**. See Figure 4-5.

- means that it has enabled the function of show device node. If not, please enable it and reboot client effective.
In the adjustment area of live window, set window splits, such as 4.

Drag the device node of the left organization tree to the right window, and it will display the first four online channels of the device on the right. See Figure 4-6.

- If the split quantity is smaller than the online channels of device, system displays online channels from front to the back.
- If the split quantity is larger than the online channels of device, system displays video on the window one by one.

4.1.4.3 Channel Preview

Drag the video channel to the video window for preview.
Step 1  At the upper right corner, select <Basic Setting, enable Show Device Node, see Figure 4-7. 
☑ means that it has enabled the function of show device node. If not, please enable it and reboot client effective.

Step 2  Select the window which is to play video on the interface of live view.

Step 3  Drag the video channel of device organization tree on the left to the window. Open the video of the channel. See Figure 4-7.

Figure 4-7

4.1.4.4 Map Preview

It is to open the added e-map, view the device installation position on the map and video.

Step 1  Refer to chapter 4.10 EMap Application to add e-map and device.

Step 2  On the Live view interface, select a window.

Step 3  On the e-map list on the left, select a map.

It is to open the map. See Figure 4-8.
Step 4  Click the online device on the map. See Figure 4-9. Select .
Select an idle window to open the channel video to view. See Figure 4-10.
4.1.4.5 View Preview

Open the view and live view includes the video channel image.

**Step 1** Finish creating view. Please refer to **4.1.5.6 Saving View** for more details.

**Step 2** On the Live interface, switch to the view list. Double click the view you want to see. It will open video of all the channels of current view. See Figure 4-11.

4.1.5 Preview Operations

4.1.5.1 Tour

System supports organization node tour, device node tour, view node tour. All tour operations are the same. Here we use organization node tour to continue.
Step 1  On the Live view interface, select window split amount.
Step 2  Right click organization node and then select Tour, and then select tour interval.
        System displays channel video by current window split amount. From window 1 to window N, it is called one tour period. The tour period interval supports 10s, 30s, 1min, 2min, 5min, 10min. During the tour process, system displays tour icon. Click the icon to stop tour.

4.1.5.2 Sort

The device organization tree supports descending, ascending, default sequence. On Live view interface, right click root and then select Sort, you can select sort type. The organization tree displays by the specified sequence.

4.1.5.3 Display Type

When Show device node function is enabled, you can set display type of device node. The display type includes by device name or device IP address.

Step 1  At the top right corner, select > General.
        Make sure the show device node is checked. See 0. If not, please check the box and then reboot client. See Figure 4-12.

        Figure 4-12

Step 2  One Live view interface, right click root and then select display type. The organization tree will be displayed at the specified type.

4.1.5.4 Hide Offline Node

It is to hide offline node or offline channel of the device organization tree. So that it is easy for you to view the online node or channel.

On Live view interface, right click node, and then select Hide offline, system displays online nodes only. On hide mode, right click node, select Display offline, system displays all node information.
4.1.5.5 Add Favorite

It is to add video channel to Favorites to view.

**Step 1** On Live view interface, right click the channel on the left, select **Add Favorite**. **Add Favorites** interface is displayed. See Figure 4-13.

![Add Favorite Interface](Figure 4-13)

**Step 2** Select a group from the dropdown list and then click **OK**.

**Step 3** If you want to add new favorites group, click **New Folder** and then select a group.

After adding the video channel to the favorites, click ✗ to open the favorites folder to view.

4.1.5.6 Saving View

It is to save current live interface as view. The next time, you can open the view to see the channel video.

⚠️

- System provides view node. You can save view to the root, or you can create sub-node of current root.
- **Cannot save view if system is in tour process.**

**Step 1** On Live view interface, click **View**.

**Step 2** Right click view root, and then select **New Folder**.

The **New Folder** interface is displayed. See Figure 4-14.

![New Folder Interface](Figure 4-14)

**Step 3** Input a folder name and then click **OK**. It is to create view group.

**Step 4** On live view status, click the 📦 at the bottom of the interface.

The **Save View** interface is displayed. See Figure 4-15.
Input view name and then select view group. Click **OK** to save new view.

### 4.1.5.7 Preview Window Operations

Move the mouse to the **Live** window, you can view bit stream, instantly play file, set audio, bidirectional talk, record local file, snapshot, etc.

In the status of realtime preview, move the mouse to the preview window, system displays window information. See Figure 4-16. Please refer to Table 4-2 for more details.

#### Figure 4-16

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.264, 1920*1080, 6480kbps</td>
<td>It is to display encode format, resolution, bit stream information.</td>
</tr>
<tr>
<td>Icon</td>
<td>Function</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>🎥</td>
<td>It is to playback record file of current channel. During playback process, click 📡 to go back to live view status.</td>
</tr>
<tr>
<td>🎧</td>
<td>Make sure there is record file on the center or on the device. The record file on the center has higher priority. Go to Local Config&gt;General to set playback time.</td>
</tr>
<tr>
<td>🎨</td>
<td>Enable/disable audio of the channel. Enable/disable device bidirectional talk. If the Self adaptive audio tall parameter item is checked (Local Config&gt;General), system is automatically self-adaptive all parameters when you enable bidirectional talk, there is no pop-up window.</td>
</tr>
<tr>
<td>🎥</td>
<td>Enable/disable local record and then save on the local PC.</td>
</tr>
<tr>
<td>🎨</td>
<td>Snapshot an image. Enable regional zoom, and you can scroll mouse wheel to zoom in or out.</td>
</tr>
<tr>
<td>🜈</td>
<td>Close window video.</td>
</tr>
</tbody>
</table>

In the status of real-time preview, right-click video window. See Figure 4-17. Please refer to Table 4-3 for more details.

.temp

Slight difference may be found on the following interface. Different camera series supports different functions.
**Table 4-3**

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>It is to close current video window.</td>
</tr>
<tr>
<td>Close all</td>
<td>Close all video windows.</td>
</tr>
<tr>
<td>Enable audio</td>
<td>Enable/disable camera audio function. It is the same as the function of</td>
</tr>
<tr>
<td>Enable talk</td>
<td>Enable/disable device bidirectional talk function. It is the same as the function of</td>
</tr>
<tr>
<td></td>
<td>If the Self adaptive audio talk parameter item is checked (Local Config&gt;General), system is automatically self-adaptive all parameters when you enable bidirectional talk, there is no pop-up window.</td>
</tr>
<tr>
<td>Start local record</td>
<td>It is to record audio/video of current video window and then save on the local PC. It is the same as the function of</td>
</tr>
<tr>
<td>Start remote record</td>
<td>It is to record audio/video of current video window and then save on the remote storage server (such as FTP).</td>
</tr>
<tr>
<td>Snapshot</td>
<td>It is to save current video on the image folder (Click it, system snapshots one image by default.) It is the same as the function of</td>
</tr>
<tr>
<td>Continuous snapshot</td>
<td>It is to save current video on the image folder (Click it, system snapshots three images by default.)</td>
</tr>
<tr>
<td>Set alarm window</td>
<td>It is to set current video channel as alarm channel.</td>
</tr>
<tr>
<td>Name</td>
<td>Function</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stream type</td>
<td>It supports main stream, sub stream 1, sub stream 2.</td>
</tr>
<tr>
<td></td>
<td>If you select sub stream 1, sub stream 2, when you are adding encoder</td>
</tr>
<tr>
<td></td>
<td>on the manager, select sub stream 1, sub stream 2 from the bit stream</td>
</tr>
<tr>
<td></td>
<td>dropdown list.</td>
</tr>
<tr>
<td>Play mode</td>
<td>It includes real-time priority/fluency priority/balance priority/customize.</td>
</tr>
<tr>
<td>Video adjustment</td>
<td>It is to set video brightness, contrast, saturation and hue.</td>
</tr>
<tr>
<td>Split mode</td>
<td>It supports window standard mode, 1+3 mode, 1+5 mode.</td>
</tr>
<tr>
<td>Alarm output control</td>
<td>It is to control alarm output.</td>
</tr>
<tr>
<td>Add to favorites</td>
<td>It is to add current channel or all channel(s) to the favorites.</td>
</tr>
<tr>
<td>Full screen</td>
<td>It is to switch current video window to full screen. Double click the</td>
</tr>
<tr>
<td></td>
<td>video window again or right click mouse and then select exit to exit.</td>
</tr>
<tr>
<td>Switch to playback</td>
<td>It is to quickly switch to playback interface. There is no need to go</td>
</tr>
<tr>
<td></td>
<td>back to the homepage.</td>
</tr>
</tbody>
</table>

### 4.2 Record Settings and Playback

It is to set record file storage position and record schedule, search, playback and download file.

### 4.2.1 Function Flows

It is to realize record settings and playback function. Refer to Figure 4-18 for more details.
4.2.2 Configuring Local HDD

If you want to save record file on the device, refer to chapter 3.9.1.8.1 **Local Disk** for detailed information.

4.2.3 Configuring Network HDD

If you want to save record file on the server, refer to chapter 3.9.1.8.2 **Net Disk** for detailed information.

4.2.4 Configuring Record Schedule

**Step 1** On Homepage management interface, click ![Config interface is displayed. See Figure 4-19.](image)
Step 2  Select a device channel on the left.
Channel setting interface is displayed. See Figure 4-20.

Step 3  Click Record configuration.
Record configuration interface is displayed. See Figure 4-21.
Step 4 Click the Enable to enable record function. Select storage position, stream type, and time template.

- If you want to save the record file on the server, make sure you have set network HDD.
- If you want to save the record file on the device, make sure the device has installed the HDD.
- If the default time template is not suitable for your actual requirements, select Manage time template from the time template dropdown list to create new one. Refer to chapter 3.9.3.1.2 Configuring Event Attribute for more details.

Step 5 Click OK to complete record schedule settings. See Figure 4-22.

4.2.5 Go to Playback Interface

After configuring and starting record schedule, system can record file and then save on the corresponding HD. You can go to the playback interface to search the record file and playback.

On Function pane, click Playback, the playback interface is displayed. See Figure 4-23. Refer to Table 4-4 for more details.
Table 4-4

<table>
<thead>
<tr>
<th>SN</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Device organization tree</td>
<td>It is to display device organization node, and device/channel information.</td>
</tr>
<tr>
<td>2</td>
<td>Search record</td>
<td>It is to search the record file on current channel.</td>
</tr>
<tr>
<td>3</td>
<td>Lock record</td>
<td>It is to lock the record file. The locked record file cannot be overwitten.</td>
</tr>
<tr>
<td>4</td>
<td>Click footages</td>
<td>Click footages.</td>
</tr>
<tr>
<td>5</td>
<td>Download</td>
<td>Download record file.</td>
</tr>
<tr>
<td>6</td>
<td>Timeline</td>
<td>It is to display file recorded period.</td>
</tr>
<tr>
<td>7</td>
<td>Playback control</td>
<td>It is to control playback speed, process during playback process.</td>
</tr>
<tr>
<td>8</td>
<td>Window settings</td>
<td>It is to set playback window amount.</td>
</tr>
</tbody>
</table>

4.2.6 Search and Playback

⚠️

The searched record bit stream is the same as the Device record stream on the Playback.

Step 1 On device organization tree, select a device channel.

Step 2 Click , set start time and end time.

The blue highlighted date means current date has record. See Figure 4-24.
Step 3  Select search position.
Step 4  Click Search.
System displays searched results on the window. See Figure 4-25. If the selected channel amount is larger than the window amount, click the window adjust icon at the right bottom corner to adjust window amount.

**Figure 4-25**

Step 5  Click the Playback button, system begins playback record file from the earliest date. During the playback process, move the mouse to the video window and then click the corresponding icon to mark the record file, save local record file, snapshot, etc.

Click ⬇️ to filter record type.

### 4.2.7 Record Operations

During the playback process, you can lock some record file, clip footages, download record file, control playback speed and process, and locate the playback position.
4.2.7.1 Locating the Playback Position

During the playback process, move the mouse on the timeline to zoom in and then drag the timeline to select playback start time.

4.2.7.2 Control Playback

During record file playback process, click the icon at the bottom of the interface. See Figure 4-26.

Figure 4-26

- Click , synchronization playback.
- Click , backward playback.
- Click , stop playback.
- Click , pause/resume playback.
- Click , frame by frame playback.
- Click , slow/fast playback.

4.2.7.3 Lock Record File

It is to lock the record file on the platform only.

Step 1 Click , the icon becomes.

Step 2 On the timeline that has the record file, use the mouse to drag and the click the timeline to select a record file.

The local record interface is displayed. See Figure 4-27.

Figure 4-27
Step 3 Set start time and end time, click OK to lock the record files on current period. The locked files will not be overwritten when system is overwriting old record files once the HDD is full.

4.2.7.4 Clip Footages

It is to clip footages from the record file.

Step 1 Click , the icon becomes .

Step 2 On the timeline that has the record file, use the mouse to drag and the click the timeline to select a record file.

The download interface is displayed. See Figure 4-28.

Figure 4-28

Step 3 Select time and then select record format such as dav, avi, mp4, flv, asf. Click OK to download the footages.

The download interface is displayed. See Figure 4-29. The record file is saved on the Record folder of the client installation path.
4.2.7.5 Download File

Click 🔗 to enter download center. You can download record files according to record tab or list. Refer to chapter 4.3 Download Center for detailed information.

4.3 Download Center

The download center supports three download modes: edit the timeline, by the record list, by the tab record. You can pause, delete download files, etc.

4.3.1 Function Flows

It is to download record files. Refer to Figure 4-30 for more details.
The above function flows are for reference only. You can skip some steps according to your actual situation.

4.3.2 Go to Download Center Interface

On the function pane, click Download center, enter download center interface. See Figure 4-31.
4.3.3 Search

⚠️ The searched record bit stream is the same as the Device record stream on the >Playback.

Before you download the record file, you need to select channel, time, storage position to search record file according to actual requirements.

Select a device channel, set record time and storage position on the left pane, click Search button, the search interface is displayed. See Figure 4-32.

Figure 4-32

4.3.4 Download

4.3.4.1 Download by Editing Timeline

**Step 1** After searching record file, click **Timeline** tab.
System displays record file by timeline. See Figure 4-32.

**Step 2** Move the cursor to the timeline, you can see a cursor like a pair of scissors, click the timeline to set start time and end time. See Figure 4-33.
System pops up the following dialogue box. See Figure 4-34.

**Figure 4-34**

Step 3  Select time range and then select record file format.
- There are five file formats: .dav, .avi, .mp4, .flv and .asf.

Step 4  Click OK. System begins downloading record file. See Figure 4-35.
- During the download process, you can pause/resume/delete download.
4.3.4.2 Download by File

**Step 1** After searching record file, click File tab. System displays record file by list. See Figure 4-36.

![Figure 4-36](image1.png)

**Step 2** Click the ![download](image2.png) of the record file, it is to download one file. Or you can select several record files at the same time, and then click the ![download](image3.png) at the top to download at the same time.

![Figure 4-35](image4.png)
The process status is shown as in Figure 4-37. You can pause/resume/delete download file(s) according to the actual requirements.

Figure 4-37

4.3.4.3 Tag Record

⚠️ When system is playing back the record file, move the mouse to the window and then click to mark the tag. Only the tag record is displayed on the tag record file list.

Step 1 After searching the record file, click Tag tab. System displays tag file. See Figure 4-38.

Figure 4-38
Step 2 Click of the record file, it is to download one file. Or you can select several record files at the same time, and then click at the top to download at the same time. The record download interface is displayed. See Figure 4-39. Figure 4-39

![Record Download Interface](image)

Step 3 Select the time period before and after the tag. Select the file format. Step 4 Click OK to download. System begins downloading record files. See Figure 4-40. During the download process, you can pause/resume/delete download process. Figure 4-40

![Download Progress](image)

4.3.5 Download Manager

4.3.5.1 Download Completed

After the download is complete, system automatically pops up a dialogue box at the right bottom corner. See Figure 4-41. Click the folder icon to view the downloaded record files.
4.3.5.2 Pause/Resume Download

On Downloading tab, click \( \text{Pause All} \) to pause all download tasks. Click \( \text{Pause} \) to pause one download task. If you want to resume download, click the corresponding icon.

4.3.5.3 Delete Download Task

On Downloading tab, click \( \text{Delete All} \) to delete all download tasks. Click \( \text{Delete} \) to delete a download task.

4.4 Output Video to the Wall

It is to output the device video signal to the corresponding window of the TV wall. You can view the signal video on the screen.

4.4.1 Function Flows

It is to output video to the video wall. Refer to Figure 4-42 for more details.
The above business flows are for reference only. You can skip some steps according to your actual situation.

### 4.4.2 Adding Decoder

On the device management interface, you can create device organization tree and add the corresponding decoder. Right now, system supports decoder (NVD), matrix device (M60/M70-E/M70-D) and video wall (DSCON3000/DSCON1000, DSCON1000(so called M30)). Refer to chapter 3.7 Device Management for more details.

After adding the decoder, system automatically generates Decoder interface. You can view decoder information on current tab. See Figure 4-43.
4.4.3 Go to Video Wall

⚠️ Please set a video wall task first if you want to see a task after you enter the interface.

On the function pane, click Video Wall, the video wall interface is displayed. See Figure 4-44. Refer to Table 4-5 for more details.
<table>
<thead>
<tr>
<th>SN</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Video wall</td>
<td>Click the dropdown list to add or select video wall plan.</td>
</tr>
<tr>
<td>2</td>
<td>Task</td>
<td>Click the dropdown list to add or select a task.</td>
</tr>
<tr>
<td>3</td>
<td>Save task</td>
<td>Click to save current video wall setup as a task.</td>
</tr>
<tr>
<td>4</td>
<td>Save as task</td>
<td>Click to save current video wall setup as another task.</td>
</tr>
<tr>
<td>5</td>
<td>Video wall task</td>
<td>Select a task and then click ![output icon] to output the video to the video wall.</td>
</tr>
<tr>
<td>6</td>
<td>Start/stop task</td>
<td>Click ![stop icon] to stop outputting the video to the video wall.</td>
</tr>
<tr>
<td>7</td>
<td>Video wall task</td>
<td>Click the icon, add/modify/delete/enable video wall task and video wall tour task.</td>
</tr>
<tr>
<td>8</td>
<td>Device organization tree</td>
<td>It is to display device organization node, device channel information, etc.</td>
</tr>
<tr>
<td>9</td>
<td>Preview</td>
<td>It is to display channel real-time video.</td>
</tr>
<tr>
<td>10</td>
<td>Detail</td>
<td>Click the icon; it is to display the video channel information of current window. You can set interval time, bit stream type, preset and display sequence.</td>
</tr>
<tr>
<td>11</td>
<td>Window adjustment</td>
<td>It is to set video wall display window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![1-split icon] 1-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![4-split icon] 4-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![9-split icon] 9-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![16-split icon] 16-split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![customized icon] Select other split mode, or customized split mode.</td>
</tr>
<tr>
<td>12</td>
<td>Screen/video wall control</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![clear icon] Clear all binding video channel on the screen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![enable icon] Enable/disable all tours.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![lock icon] Once system is open a window on the splicing screen, all windows are locked if you select to lock the window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![frame icon] Add frame to the window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![decode icon] On the decoded window of the video wall to display the real-time video from the corresponding channel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ![decode enable icon] Enable/disable some(all) screens of the decode matrix.</td>
</tr>
<tr>
<td>SN</td>
<td>Name</td>
<td>Function</td>
</tr>
<tr>
<td>----</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>13</td>
<td>Apply Now</td>
<td>Click to output the video to the wall immediately.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When system is outputting video to the wall by schedule, the system automatically stops Apply now function.</td>
</tr>
<tr>
<td>14</td>
<td>Output to the wall</td>
<td>You changed the binding video channel when system is outputting the video to the wall; you need to click the icon to output again.</td>
</tr>
<tr>
<td>15</td>
<td>Eagle eye</td>
<td>When you are setting channels to output to the video wall, you can click the icon to view details of the video wall if the screen amount is too much.</td>
</tr>
</tbody>
</table>

### 4.4.4 Adding Video Wall

It is to create video wall and bind the decoded channel on the screen.

**Step 1** Select Video wall dropdown list, and then select **Add New Video Wall**.

**Add New Video Wall** interface is displayed. See Figure 4-45.

![Figure 4-45](image)

**Step 2** Input **Video Wall Name** and then select screen quantity at the bottom of the interface.

Click any place on the screen to add.

- System supports 1/4/9/16-screen. Click to set customized screen amount.
- Click to delete current screen setup and then add again.

**Step 3** (Optional) Press **[Shift]** button and then select several screens, click to set as splicing scene. See Figure 4-46.
• Skip the above step if you do not want to set splicing screen.

• Select a splicing screen and then click to cancel the splicing video wall setup.

Figure 4-46

Step 4 Click Next.

The Select Decode Channel interface is displayed. See Figure 4-47.

Figure 4-47
Step 5 Drag the decoded channel on the left to the screen on the right to bind. See Figure 4-48.

- Each screen of the splicing wall shall bind a decoded channel.
- One video wall can bind several decoded channels.

Figure 4-48

Step 6 Click Finish. The adding video wall process is complete.

4.4.5 Outputting Video to the Wall

System can output video to the wall according to task, apply manually or by schedule plan.

4.4.5.1 Apply Now (Manually Outputting)

It is to drag the video channel to the video wall so that to output the video to the wall.

Step 1 Select a video wall from dropdown list.

Step 2 Click Apply Now to output the video to the wall immediately.

Step 3 Drag the video channel on the left to the screen on the right to bind. See Figure 4-49.
Select a screen and then click the Detail at the bottom of the interface. System displays channel setup interface. See Figure 4-50. It is to view screen binding channel information. At the same time, you can set the each channel stay period, bit stream type, preset and display sequence, etc.

Click , it is to open real-time video of current channel.

When there are several binding channels, click  to adjust video channel display sequence.

Click  to delete video channel.

4.4.5.2 Output Task to the Wall

It is to save current video wall setup as task. Next time, you can select the task to output the corresponding video to the video wall directly.

Step 1  From the Task dropdown list, select Add.
Step 2  Drag the video channel on the left to the screen on the right.
Step 3 Click Save. The Save interface is displayed. See Figure 4-51.

If you have selected a task, drag the video channel to bind and then click it is to save it as another task.

**Figure 4-51**

![Save interface](image)

Task Name: [Input field]

OK Cancel

Step 4 Input task name and then click OK.

System automatically outputs current task to the video wall. See Figure 4-52.

- If you have selected a task, drag the video channel to bind and then click it is to save it as another task. The newly saved task will be output to the wall automatically.

- After outputting the task to the video wall, you can click at the bottom right corner to manually output video to the wall if you have changed the binding video channel.

- After outputting the task to the video wall, click at the bottom, you can enable/disable tour.
4.4.6 Configuring Video wall Plan

The video wall plan is to set several video wall tasks together according to their working time and length.

Click the at the top right corner, the video wall plan interface is displayed. See Figure 4-53. You can set schedule plan and tour plan according to actual requirements.

- Schedule plan: It is to set start time/end time of each task. If the specified task is not for one day (24 hours), you can set to run other task.
- Tour plan: It is to set the interval of each task and sequence of the tasks. System outputs these tasks repeatedly.
4.4.6.1 Adding Schedule Plan

Step 1 Move the cursor to the and then select Schedule. See Figure 4-54.

The Schedule plan interface is displayed. See Figure 4-55.

Figure 4-54
Step 2  Input a plan name.
Step 3  Select a task and then input task start time/end time. Click + to add to the list. Repeat the above operations to add more tasks. Make sure the start time/end time of each task is not the same. See Figure 4-56.

If the specified task is not for one day (24 hours), you can check the box to Enable Remaining Time Plan at the bottom left corner to run other task.

Step 4  Click Save to complete the adding process.
Step 5  On the plan list, click to output the video by schedule plan. See Figure 4-57.

- Cannot output video of several plans to the video wall at the same time. Once one plan is valid, the previous one is null.
- Click 🔧 to modify plan.
- Click 🗑️ to delete plan.

![Figure 4-57](Image)

When the video wall plan is working, click 🔴 to stop current plan. See Figure 4-58.

The icon becomes 🎥, click to output the video to the wall again. If you want to use another video wall plan, go to the schedule list to enable other plan.

![Figure 4-58](Image)

4.4.6.2 Adding Tour Plan

**Step 1** Move the cursor to the + and then select **Tour**. See Figure 4-59.

The **Tour Plan** interface is displayed. See Figure 4-60.
Step 2  Input a plan name.
Step 3  Select a task, input interval, click + to add to the list.
Repeat the above steps to add more tasks. See Figure 4-61.

Click ⬆️ ⬇️ it is to adjust task display sequence.
Step 4 Click **Save** to complete adding process.

Step 5 On the plan list, click **to output the video by tour plan. See Figure 4-62.**

- Cannot output video of several plans to the video wall at the same time. Once one plan is valid, the previous one is null.

- Click **to modify plan.**

- Click **to delete plan.**

When the video wall plan is working, click **to stop current plan. See Figure 4-63.**

The icon becomes **, click to output the video to the wall again. If you want to use another video wall plan, go to the schedule list to enable other plan.
4.5 Access Control

Carry out remote control of access control (A&C) devices; support door group authorization and unlock rule setup.

4.5.1 Function Flows

To realize access control, please complete the following flow. See Figure 4-64.

Figure 4-64

- Start
- Admin/advanced user logs in the client
- Add access control device
- Enter access control interface
- Add time template
- Console operation
- Configure channel and bond resources
- Door group setting (according to need)
- Advanced function (according to need)
- Finish
The above function flows are for reference only. You can skip some steps according to your actual situation.

### 4.5.2 Adding Access Control Device

On **Device** interface, set up device tree and add access control devices. Please refer to chapter 3.7 **Device Management** for more details. After adding, **Device** interface generates **Access Control** tab automatically, which displays access control device info. See Figure 4-65.

![Figure 4-65](image)

### 4.5.3 Entering Access Control Interface

At function zone, click **Access Control** to enter access control interface. See Figure 2-6. Click tabs in the left, to enter corresponding setting interface.

![Figure 4-66](image)
4.5.4 Adding Time Template

**Step 1** Click ![Access Control](image) in the left of Access Control interface.

The system displays **Time Template** interface. See Figure 4-67. Default time template includes all-period template, weekday template and weekend template.

![Figure 4-67](image)

**Step 2** Click **Add Time Template**.

The system displays **Time template details** interface. See Figure 4-68.

![Figure 4-68](image)

**Step 3** Enter time template name and set the time in three ways.

Tick **Copy from**, select existing default template and copy time from the default template.

Drag the time axis with mouse directly. If the time has been set, an eraser will be displayed, which will erase the time at the dragged position. Otherwise, a pen will be displayed, which will add the time at the dragged position.
Click . See Figure 4-69. Set period and week, click to add multiple periods, or click to delete them. On completion, click OK, save and return to Time template details interface.

![Figure 4-69](image)

**Step 4** Click OK,
A time template has been added. See Figure 4-70.

![Figure 4-70](image)

### 4.5.5 Configuring Access Control Channel

Set channel parameter and bind video.

**Step 1** Click in the left of Access Control interface.
The system displays Console interface. See Figure 4-71.
Step 2 In the left device tree, click right mouse button on a channel, and select **Door Configuration**. See Figure 4-72.
The system displays **Door Configuration** interface. See Figure 4-73.
According to actual conditions, set reader direction, door status, NO/NC period, alarm enable, door sensor enable, unlock length, unlock timeout, unlock method and inter-door lock.

Click OK to save the settings.

Switch to Config interface. See Figure 4-74. Click Copy to, so this parameter config can be applied to other channels.

Step 3  According to actual conditions, set reader direction, door status, NO/NC period, alarm enable, door sensor enable, unlock length, unlock timeout, unlock method and inter-door lock.

Step 4  Click OK to save the settings.

Switch to Config interface. See Figure 4-74. Click Copy to, so this parameter config can be applied to other channels.

Step 5  Click Resource Bind.

The system displays Resource Bind interface. See Figure 4-75.
Step 6 Select a video channel and click OK.

4.5.6 Console Operation

4.5.6.1 Channel Control

Control the doors to be open or closed.

Click in the left of Access Control interface. In the left device tree, click right mouse button on a channel. See Figure 4-76.

- When a door is closed, click to open it. See Figure 4-77. After certain period (which is set in config. It is 5 seconds by default. It is 10 seconds in this example), the
door will be closed automatically, and a record is generated in Event Information column. See Figure 4-78.

- When a door is open, click 🛠️ to close it. See Figure 4-79.
• Click , preview video channel that is bonded with this channel. See Figure 4-80. Card swiping info can be overlaid on the video.

4.5.6.2 View Event Information

Click 📸 in event list, and view details about this event, including event information, real-time video, snapshot and recording.

- The access control channel shall bind video channel in door config, in order to view real-time video.
Select to configure linkage video in plan management, in order to generate snapshot and recording. Please refer to **4.5.6.4 Plan Management** for more details.

Figure 4-81

### 4.5.6.3 Global Control

Select one or multiple channels to be always open, always close and restore to normal.

**Step 1** At the lower left corner of **Console** interface, click ![Configuration Icon](image).

The system displays **Access control global control** interface. See Figure 4-82.

Figure 4-82
Step 2  Select channels for global control, and click OK.
If all doors are closed, click **Always Open** and enter password. See Figure 4-83. Click OK to open all doors of the selected channel. See Figure 4-84.

![Figure 4-83](image)

If all doors are open, click “Always Close” and enter password. See Figure 4-83. Click “OK” to close all doors of the selected channel.

Doors that are opened in global control won’t be closed at the set time, but shall be closed by clicking **Recover** or **Always Close** manually.

Step 3  Click **Recover** to exit global control.

4.5.6.4 Plan Management

Configure alarm event of access control channel, including alarm type, priority, time template, link PTZ, link video, link snapshot & recording, link alarm output, Email and link AC to be always open or always closed.

In link config, every alarm type shall be configured independently.
Step 1  Click \[ \text{Access Control} \] in the left of Access Control interface. The system displays Console interface. See Figure 4-85.

Figure 4-85

Step 2  In the left device tree, click right mouse button on a channel, and select Event Configuration. See Figure 4-86.

The system displays Event interface. See Figure 4-87.

Figure 4-86
Step 3 Select alarm event type, click to enable the event, and the switch turns to . In the left list, this alarm event type displays . See Figure 4-88.

Step 4 Refer to 3.9.3.1.2 Configuring Event Attribute to 3.9.3.1.7 Configuring Link AC, configure event attribute, link PTZ, link video, alarm output, Email and link AC. On completion, event info is displayed. See Figure 4-89.
4.5.7 Door Group Setting

⚠️

Door group and door rule can be configured according to the user’s needs.

4.5.7.1 Door Group

Set up a group of multiple doors.

**Step 1** Click in the left of Access Control interface to enter door group management interface.

**Step 2** Click Door Group tab.

The system displays Door Group interface. See Figure 4-90.
Step 3  Click Add. The system displays **New/Edit Door Group** interface. See Figure 4-91.

![Figure 4-91](image)

Step 4  Enter door group name; select time template and channel. Click **OK** to finish.

Step 5  See Figure 4-92. Select a door group, and the bonded channel and user list are displayed in the right.

If the door group hasn't been authorized and bonded by user, there will be no user info in the user list.

![Figure 4-92](image)
4.5.7.2 Add User

Add user info and issue card. Please refer to 4.6 Personnel Management for details.

4.5.7.3 Door Rule

It is to bond users with door groups in order to authorize them.

⚠️

If door groups have been authorized when adding users, it is unnecessary to add again in door rule.

**Step 1** Click  in the left of Access Control interface to enter authority management interface.

**Step 2** Click Door Rule tab.

The system displays Door Rule interface. See Figure 4-93.

![Door Rule Interface](image)

**Step 3** Click Add.

The system displays Add door rule interface. See Figure 4-94.
4.5.8 Advanced Function

4.5.8.1 First Card Unlock

After configuring first card unlock, other cards can be swiped to unlock the door, only after the first card is swiped. If multiple first cards are configured, other cards can be swiped to unlock the door, as long as one first card is swiped.

Step 1  Click in the left of Access Control interface to enter advanced function interface.

Step 2  Click First Card Unlock tab.

The system displays First Card Unlock interface. See Figure 4-95.
Step 3  Click Add.

The system displays **First Card Unlock Configuration** interface. See Figure 4-96.

Step 4  Select door, time template, status and user.
Step 5  Click **OK** to add the first card. See Figure 4-97.
4.5.8.2 Multi-card Unlock

One door can be unlocked after multiple groups of users swipe cards according to group sequence. Moreover, each group has set valid quantity; as long as valid unlocking quantity is reached, the door can be unlocked. Max. 4 groups can be selected, and max. valid quantity of user is 5.

**Step 1** Click 📝 in the left of **Access Control** interface to enter advanced function interface.

**Step 2** Click **Multi-card Unlock** tab.

The system displays **Multi-card Unlock** interface. See Figure 4-98.

**Step 3** Click **Add User Group**.
The system displays **User Group Manager** interface. See Figure 4-99.

**Figure 4-99**

---

**Step 4** Click **Add**.

The system displays **User Group Configuration** interface. See Figure 4-100.

**Figure 4-100**
Step 5  Set group name, select users and click OK to create user group.
Return to Multi-card Unlock interface.

Step 6  Click Add.
The system displays Multi-card Unlock interface. See Figure 4-101.

Figure 4-101

Step 7  Select door and user group; adjust group sequence, valid quantity, unlock mode (card, password and fingerprint), and click OK to finish. See Figure 4-102.

Figure 4-102
4.5.8.3 Anti-Pass Back

Set unlock route for one person/multiple persons, who can unlock only according to the preset group sequence.

After 1, 2 and 3 anti-pass back have been set, anti-pass back alarm will be triggered if 1 is swiped and followed by 3 (after ordinary access alarm, the door can still be unlocked in sequence). The door cannot be unlocked even if 1, 2 and 3 are swiped, until the card is swiped after the reset time.

**Step 1** Click 🏛️ in the left of **Access Control** interface to enter advanced function interface.

**Step 2** Click **Anti-pass Back** tab.

The system displays **Anti-pass Back** interface. See Figure 4-103.

![Figure 4-103](image.png)

**Step 3** Click **Add**.

The system displays **Anti-pass back config** interface. See Figure 4-104.
Step 4  Select device and enter the anti-pass back name.
Step 5  Click Add to set group quantity.
Step 6  Select group and reader, to bond them.
Step 7  Select user (support multiple choice), and click OK to finish adding the anti-pass back plan. For list display, see Figure 4-105.
4.5.8.4 Inter-lock

Ordinary access owns inter-lock in the group, whereas master controller owns inter-lock among groups.

- Ordinary access: if one door is opened in the inter-lock group, other doors cannot be opened.
- Master controller: channels in the groups are not affected by inter-lock; all of them can be opened. However, as long as any one channel of one group is opened, channels of other groups cannot be opened.

Take Master Controller for example.

**Step 1** Click in the left of Access Control interface to enter advanced function interface.

**Step 2** Click Inter-lock tab.

The system displays Inter-lock interface. See Figure 4-106.
Step 3  Click Add.

The system displays **Inter-lock Config** interface. See Figure 4-107.

Step 4  Select device; enter inter-lock name and remark.

The system displays inter-lock list and group. See Figure 4-108.
Select group and then select access control channel. Add channels in each group. If 2 default groups fail to meet needs, please click **Add** to add more groups.

**Step 6** Click **OK** to finish.

For successfully added plans, see Figure 4-109. It is enabled by default.
4.5.8.5 Remote Verification

Set remote verification device. When the user opens the door with card, fingerprint or password within the set time period, the user of platform client shall confirm in the pop-up confirmation box at the client, and then the door can be opened.

**Step 1** Click  in the left of Access Control interface to enter advanced function interface.

**Step 2** Click Remote Verification tab.

The system displays Remote Verification interface. See Figure 4-110.

Figure 4-110

**Step 3** Click Add.

The system displays Add remote verification interface. See Figure 4-111.
Step 4  Select remote verification time and channels that can be opened only after remote verification. Click **OK**.

For the added plan list, see Figure 4-112. Enabled and disabled status of each channel can be controlled independently.

**Figure 4-112**

Step 5  When a channel is opened with card, fingerprint or password, a dialog box will pop up at the client. See Figure 4-113. The user can select to open the door or ignore; the dialog box will be closed automatically after corresponding button is clicked.
4.5.9 Access Control Log Query

It supports following two methods to view access control log.

- Click on the console interface and it will skip to the interface of AC log query, then you can set conditions and search the log info which conforms to the conditions. See Figure 4-114 and Figure 4-115. Click Export on the upper right corner of the interface and export log and save it locally.

- After entering AC control module, click and enter the interface of AC log query. See Figure 4-115. Click Export on the upper right corner of the interface and then export log and save it locally.
4.6 Personnel Management

Add personnel and details, support to issue card, fingerprint and private password.

4.6.1 Entering Personnel Management Interface

At function zone, click Personnel Management to enter the interface. See Figure 4-116.

4.6.2 Adding Department

Step 1  Select department node and click + on the left.

The system displays New Department interface. See Figure 4-117.
Step 2  Enter department name and click **OK** to finish. See Figure 4-118.

4.6.3 Adding User Singly

Step 1  Click **Add**

The system displays **Add User** interface. See Figure 4-119.
Set user ID, name, gender, property and department info. Upload or capture user photo.

- The uploaded picture supports clipping, personnel picture supports jpg.
- Client PC is required to be equipped with camera for capture.

Step 3 Click User Details to set details.

When the property is Guest, card times shall be set at User Details interface.

Step 4 Click Authentication.

The system displays Authentication interface. See Figure 4-120.

1) Click Change. See Figure 4-121. Change password and click OK to save.

2) Click Add. See Figure 4-122. Enter card number and click OK to save, or click Reader Manager to add a reader, and read card info via the reader. It can add max 5 cards for one person.
3) Click **Fingerprint Collector Manager**, and select the device. See Figure 4-123.

4) Click **Add Fingerprint**, put your finger onto the selected reader and collect fingerprint. The fingerprint needs to be collected for three times. After beep sound, lift your finger and put it down, repeat it for three times and fingerprint is registered, and then the status of client fingerprint will be changed. See Figure 4-124, Figure 4-125 and Figure 4-126. It supports max 10 fingerprints for one person.
5) Upload face recognition picture. Click **Reupload** on the interface of **Face Comparison**, select the face picture to be uploaded according to system prompt. See Figure 4-126.

**Figure 4-126**

**Face Comparison**

![Face Comparison Interface](image)

- This picture is used for face recognition by the device.
- Please ensure that the picture can accurately identify the facial features.

**Step 5** Click **Authorize**.
The system displays **Authorize** interface. See Figure 4-127. Select authorized channel or door group. For door group setting, please refer to **4.5.7 Door Group Setting**.

![Figure 4-127](image)

**Step 6** Click **OK** to finish adding personnel. See Figure 4-128.

![Figure 4-128](image)

- **⚠️**: It means issue error, click to view details or issue again.
- **➡️**: It means the card is already issued, click to view the trajectory generated by swiping card.
• : It means the card is not issued.

• : It means the fingerprint is already collected, click to view the trajectory generated by fingerprint unlock.

• : It means the fingerprint is not registered.

• : Click to delete personnel.

4.6.4 Batch Add User

During batch adding, only card can be authorized, rather than password and fingerprint. If necessary, edit corresponding user authorization independently.

⚠️ Batch adding is to add user, batch issue card and batch authorize. You can save and exit after any one operation is finished.

Step 1 Click .

The system displays Batch Add User interface. See Figure 4-129.

Figure 4-129

Step 2 Set user ID, department and number; click Next.

The system displays Batch issue card interface. Figure 4-130.
Step 3  Select user from the list, enter card number or read the card number via reader, and click **Issue Card**.
Repeat the operation, until all users’ cards are issued.

Step 4  Set validity time and expiration, and click **Next**.
The system displays **Batch authorize** interface. See Figure 4-131.

Figure 4-131

Step 5  Select authorized channel or door group, and click **Finish**. See Figure 4-132.

If there is no door group, please add door group by reference to **4.5.7 Door Group Setting**.
To edit user info, click at the bottom, so as to display user info and edit. See Figure 4-133. Upload or change the user’s photo, complete basic info, update authorization mode (adding password and fingerprint) and update channel. After completion, click to refresh user list.

4.6.5 Deleting User

The system supports to delete one/multiple/all users.

Select a user, and click to delete the selected user.
4.6.6 Batch Issue Card

The system supports to batch issue card to users.

**Step 1** Select users and click **Issue Card**.

The system displays **Batch Issue Card** interface. See Figure 4-134.

![Batch Issue Card Interface](image)

**Step 2** Select users from the list, enter card number or read the card number via reader, and click **Issue Card**.

Repeat the operation, until all users’ cards are issued.

**Step 3** Set validity time and expiration, and click **Next**.

The system displays **Batch Authorize** interface. See Figure 4-135.

![Batch Authorize Interface](image)
Step 4  Authorize the channel or door group, and click **Finish**.

### 4.6.7 Generating Path

The platform supports to view the record of personnel passing access control, and generate movement trajectory.

It is required to drag access control device onto the map if you need to view trajectory. Refer to **4.10 EMap Application** for more details.

**Step 1**  The system will display personnel list after entering personnel management module. See Figure 4-136.

**Figure 4-136**

Step 2  Click ![card](image) or ![fingerprint](image) (It means card is not issued or fingerprint unregistered if the icon is gray), the system will display History Record. See Figure 4-137.
Step 3 Click **Generate Trajectory**, the system will display map interface, and personnel movement trajectory is displayed as well. The trajectory can be exported.

### 4.7 Face Recognition

Application of face recognition client includes
- **Live preview**
  - Live preview interface supports to view live video, user snapshot and recognition record. Meanwhile, view panorama and video related with user snapshot, download related video and register the snapshot user.
- **Snapshot search**
  - According to feature info or photo, search corresponding users in the library or snapshot record.
- **Recognition search**
  - According to the set feature info, search corresponding recognition record.
- **Report**
  - Provide the snapshot number report according to snapshot time and user’s age in a channel.

### 4.7.1 Function Flows

To realize face recognition, please complete the following flow. See Figure 4-138.
The above function flows are for reference only. You can skip some steps according to your actual situation.

### 4.7.2 Setting Storage Plan

#### 4.7.2.1 Picture Storage

- Snapshot pictures are stored under installation path of the server: `..\DSS\Server\WEBCLIENT\webclient\apache-tomcat\webapps\upload\face`.
- Storage capacity: 2 pictures can be captured each time, one is face snapshot and the other is panoramic picture. The picture size is about 100KB.
- They are stored for 30 days by default. Please set reasonable storage days according to scene snapshot frequency and server storage capacity. Modification method: at installation path of the server, `..\DSS\Server\WEBCLIENT\webclient\apache-tomcat\bin\webapps-conf\config`, open configurations.properties to modify storage days.

```
#Face ClearDays
face.clearDays=30R
```

#### 4.7.2.2 Record Storage

If recording storage plan has been configured, and recordings before and after the snapshot time have been stored, the platform supports to play back recordings 10s before and 10s after snapshot picture (with 20s recordings in total). Otherwise, no recording can be played back.

Enter recording configuration interface in two ways.

- On the **Face Recognition** interface, right click the device channel and select **Record Configuration**. See Figure 4-139. Enter record plan configuration interface.
Configure record plan. Please refer to 3.9.3.2 Configuring Record for more details.

Figure 4-139

At management zone of homepage, click Config to enter Config interface. Right click the device channel and select Record Configuration. See Figure 4-140. Configure record plan. Please refer to 3.9.3.2 Configuring Record for more details.

4.7.3 Adding Face Recognition Device

At Device interface, set up device tree and add face recognition devices. Please refer to 3.7 Device Management for more details.

After adding, Device interface generates Encoder tab automatically, which displays face recognition device info. See Figure 4-141.
- Support to add IVSS and face recognition camera according to actual conditions.
- If IVSS is added, camera shall be added at IVSS config interface. Please refer to IVSS user’s manual for more details.

**Figure 4-141**

### 4.7.4 Entering Face Recognition Interface

At function zone, click **Face Recognition** to enter the interface. See Figure 4-142. Click tabs in the left to enter face recognition, face search, recognition search, report and face database interface.

**Figure 4-142**
4.7.5 Face Library

Face library management includes the following functions.

- Add face library, in order to store user info and carry out further arm of face library. Edit and delete face library.
- Add person to the face library. Support to edit and delete person.
- Arm and disarm the face library. After arm, face recognition device (such as face recognition camera and IVSS) will compare the snapshot with pictures in the face library. If it is judged that similarity is \( \geq \) set value, face recognition device (such as face recognition camera and IVSS) will regard them to be the same person, and upload the comparison record to the platform.

4.7.5.1 Adding Face Library

**Step 1** At **Face Recognition** interface, click \( \text{Add} \) in the left.

The system displays **Face Database** interface. See Figure 4-143.

*Figure 4-143*

**Step 2** Click **Add**.

The system displays **Add Face Library** interface. See Figure 4-144.
4.7.5.2 Adding Person

If person info (including person picture) has been collected, the platform supports to add one person or batch add persons to face library. Meanwhile, the platform supports to register the snapshot persons in face library.
4.7.5.2.1 Adding One Person

**Step 1** Enter the person adding interface in two ways.

At **Face Database** interface, click on the face library. The system displays **Add Person** interface. See Figure 4-146.

[Figure 4-146]

At **Face Database** interface, click face library to enter person list interface. See Figure 4-147. Click **Add**, and the system displays **Add Person** interface. See Figure 4-146.

[Figure 4-147]

**Step 2** According to interface prompt, upload the person’s picture and fill in the info.
- Picture can be jpeg and jpg format.
- At person type, click the drop-down box to select **Add Person Type**, or click Person Type Config at the top right corner of Figure 4-147, See Figure 4-148. Click **Add** to manage person type.

![Person Type Config](image)

**Step 3** Click **Close** to finish adding.

### 4.7.5.2.2 Batch Add Persons

**Step 1** At **Face Database** interface, click face library to enter person list interface. See Figure 4-149.
Click Download Template, and save templates in local device. A package is download, including excel form (face-CN.xls) and picture (Face.jpg).

Step 3 Fill in person info in excel form. See Figure 4-150. Info in the face picture column shall be consistent with picture file name.

Step 4 Excel form and all face pictures are packed and compressed to zip/rar/7z pack.

Step 5 Click Import.

The system displays **Import** interface. See Figure 4-151.

Step 6 Click Import File to select packages.

After uploading is finished, close the interface.

### 4.7.5.2.3 Registering Snapshot Persons in Face Library

Step 1 Enter the registration interface in the following ways.
At **Face Recognition** interface, double click the snapshot pictures. See Figure 4-152. Enter **Person Detail** interface. See Figure 4-153. Click to enter **Registration** interface. See Figure 4-154.

*Figure 4-152*

*Figure 4-153*
At **Face Recognition** interface, move the mouse to snapshot, right click and select **Registration**. See Figure 4-155. Enter **Registration** interface. See Figure 4-154.

If there are recognition records about the snapshot person, the person is in the library already. Right click and registration option won’t appear.

Among record search results at **Face Search** interface, click  to enter **Registration** interface, or double click the search result, enter person detail, and click  to enter **Registration** interface.
For user search operation, please refer to 4.7.6.2 Record Search.

Step 2 Select the library, input person info and click OK to finish.

4.7.5.3 Modify Person Info

At person list interface of the library, modify and delete person info. See Figure 4-156.

Figure 4-156

- Click . See Figure 4-157. Click the picture to replace it, and modify info in the right.

Figure 4-157

- Click , or select multiple persons and click Delete to delete them.
To delete all persons (there are many persons), it is recommended to tick **Check All**, in order to select all of them at once.

### 4.7.5.4 Library Arm

**Step 1** At **Face Recognition** interface, click 🤖 in the left.
Enter **Face Database** interface. See Figure 4-158.

![Figure 4-158](image)

**Step 2** Click **Start Arm** or 🧨.

The system displays **Face Device Config** interface. See Figure 4-159.
Step 3 Select device channel and set similarity.
Report the recognition record when actual comparison is larger than or equal to this similarity.

Click to disarm.

Click to modify library info.

Click to delete library.

Step 4 Click OK to finish.

4.7.6 Face Device Config

Application of face recognition client includes:

- **Live preview**
  Live preview interface supports to view live video, user snapshot and recognition record. Meanwhile, view panorama and video related with user snapshot, download related video and register the snapshot user.

- **Snapshot search**
  According to feature info or photo, search corresponding users in the library or snapshot record.

- **Recognition search**
  According to the set feature info, search corresponding recognition record.

- **Report**
Provide the snapshot number report according to snapshot time and user’s age in a channel.

4.7.6.1 Face Recognition

4.7.6.1.1 Live Preview

**Step 1** At **Face Recognition** interface, click 📺 in the left.

The system displays preview interface. See Figure 4-160.

![Figure 4-160](image)

**Step 2** Select a monitoring window, double click device channel in the left, or drag the device channel to the window.

Open live monitoring interface. See Figure 4-161.

![Figure 4-161](image)
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1   | Resource   | Display device tree and the added E-map.  
  - Every node displays its total number of devices and online devices.  
  - Map preview supports GIS map and raster map. |
| 2   | View       | Save the present video window to the view, as preview plan. Support three-level catalog: the first level is root node, the second level is group and the third level is view. Support tour video of root node and group node. Tour time can be 10s, 30s, 1min, 2min, 5min and 10min. Support to create max. 100 views. |
| 3   | PTZ        | Display PTZ console, to control PTZ device.                                                                                                                                                                  |
| 4   | Snapshot   | Display the snapshot face pictures.  
  Right click the snapshot,  
  - If this person is only snapshot person,  
    - Select Register, and register the person in library according to interface prompt.  
    - Select Record Search, and jump to snapshot search interface. Search the person’s all snapshot records in the snapshot history.  
    - Select Export to save snapshot to local client. Default path is `..\DSS\Server\WEBCLIENT\webclient\apache-tomcat\webapps\upload\face`.  
  - If this person is recognition person,  
    - Select Recognition Record Search, and jump to recognition search interface. Search the person’s all recognition records in the snapshot history.  
    - Select Export to save snapshot and library picture to local client. Default path is `..\DSS\Server\WEBCLIENT\webclient\apache-tomcat\webapps\upload\face`.  
  - Double click snapshot to view details, including cutout and panorama. Please refer to “4.7.6.1.2 Viewing and Processing Snapshot Detail”. |
| 5   | Pause/Start Refresh |  
  - When this icon appears, snapshot display zone doesn’t refresh face snapshot. Click this icon to refresh snapshot in a real-time way.  
  - When this icon appears, snapshot display zone refreshes face snapshot. Click this icon to pause. |
<p>| 6   | Proportion | Support full screen and original proportion.                                                                                                                                                                |
|     | Window     | Support to switch window quantity, which can be self-defined.                                                                                                                                               |
|     | Full screen | Display in full screen.                                                                                                                                                                                   |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| 7   | Recognition Record Display Zone   | Display recognition record.  
   - Right click the snapshot,  
     ◦ Select Recognition Record Search, and jump to recognition search interface. Search the person’s all recognition records in the snapshot history.  
     ◦ Select **Export** to save snapshot and library picture to local client. Default path is `\DSS\Server\WEBCLIENT\webclient\apache-tomcat\webapps\upload\face`.  
     ◦ Double click recognition record to view details, including cutout and panorama, together with picture in library and person info. Please refer to “4.7.6.1.3 Viewing and Processing Recognition Record”.  
   - Click 🗻 at the top right corner, and jump to recognition search interface. |
| 8   | Monitoring Window                 | Display channel preview video.  
   - Multi-window/single window switch  
     In multi-window display mode, double click the designated window and switch to single window display mode. Double click it again to return to multi-window display mode.  
   - Full screen mode  
     Right click the window to enter full screen mode. In full screen mode, right click to exit the full screen.  
   - Exit tour  
     To stop tour, right click the preview picture, and select **Stop Tour**. |

4.7.6.1.2 Viewing and Processing Snapshot Detail

View Snapshot Detail

At Snapshot Record Display Zone, double click snapshot to view details, including cutout and panorama. See Figure 4-162.
Register Snapshot Person

Step 1  Click at snapshot detail window. Enter registration interface. See Figure 4-163.

Step 2  Select library and fill in info according to actual conditions. * is required item.

Step 3  Click OK to finish.

View/Download Recording
- At snapshot detail window, click 📀 to enter download center, and download recording according to needs. Please refer to **4.3 Download Center** for more details.

- At snapshot detail window, click 🎤 to enter recording playback interface. If the snapshot owns recordings, play back the recordings. Otherwise, it prompts no recording file.

**Search Record**

At snapshot detail window, click 📜 to enter search interface. See Figure 4-164. Set search time and channel, and click **Search**.

![Figure 4-164](image_url)

**4.7.6.1.3 Viewing and Processing Recognition Record**

**View Recognition Detail**

At Recognition Record Display Zone, double click recognition record to view details, including cutout and panorama, together with picture in library and person info. See Figure 4-165.
View/Download Recording

- At recognition detail window, click to enter download center, and download recording according to needs. Please refer to 4.3 Download Center for more details.

- At recognition detail window, click to enter recording playback interface. If the snapshot owns recordings, play back the recordings. Otherwise, it prompts no recording file.

Search Record

At recognition detail window, click to enter search interface. See Figure 4-166. Set search condition, and click Search.
4.7.6.2 Record Search

Search qualified persons in snapshot records, according to feature info or picture.

4.7.6.2.1 Search with Picture

- If the device doesn’t support to search qualified persons in snapshot records according to picture, the platform cannot search with picture.
- If the device doesn’t support to search with picture, when selecting a channel, the platform prompts that the channel doesn’t support either.

Step 1  At Face Recognition interface, click in the left.

Enter snapshot search interface. See Figure 4-167.
Step 2  Click Record tab. Enter record search interface. See Figure 4-168.

Step 3  Select Picture, click Upload Picture to upload one picture, and set the similarity.

Step 4  Select a channel (or multiple channels), set search time period and click Search. For search result, see Figure 4-169.
- Double click the picture to view details.

- Click  to download recordings related with the picture.

- Click  to display recording playback interface. If the snapshot owns recordings, play back the recordings. Otherwise, it prompts no recording file.

- Click  to display person interface. The person can be registered.

- View trajectory on the map.

To view trajectory, it needs to drag the device onto the map in advance. Please refer to 4.10 EMap Application for more details.

Click Generate Path and display trajectory map. See Figure 4-170.
Double click the device capture info on the map; it will display all the capture records of the device, the device record in the left capture list is marked as blue. See Figure 4-171.

Click  to play movement trajectory; click  to stop playing movement trajectory; click  to replay.

Click  to playback video in the left capture record list.
The video stored on the face recognition device is called as playback video. It fails to playback video if there is no related video stored on the device.

Export trajectory diagram.

Click **Export**, press left mouse button on the map, drag the mouse and select area. See Figure 4-172.

![Figure 4-172](image)

### 4.7.6.2.2 Search according to Condition

**Step 1** At **Face Recognition** interface, click ![search icon] in the left.

Enter snapshot search interface. See Figure 4-173.

![Figure 4-173](image)

**Step 2** Click **Record** tab.

Enter record search interface.

**Step 3** Select **Feature**. See Figure 4-174.
Step 4  Select a channel (or multiple channels), set search time period, age and gender, and click Search. For search result, see Figure 4-175.

- Double click the picture to view details.
- Click to download recordings related with the picture.
- Click to display recording playback interface. If the snapshot owns recordings, play back the recordings. Otherwise, it prompts no recording file.
- Click to display person interface. The person can be registered.

View trajectory info on the map. To view trajectory, it needs to drag the device onto the map in advance. Please refer to 4.10 EMap Application for more details.

Click Generate Trajectory and display trajectory map. See Figure 4-176.
Double click the device capture info on the map; it will display all the capture records of the device, the device record in the left capture list is marked as blue. See Figure 4-177.

Click to play movement trajectory; click to stop playing movement trajectory; click to replay.

Click to playback video in the left capture record list.
The video stored on the face recognition device is called as playback video. It fails to playback video if there is no related video stored on the device.

✧ Export trajectory diagram.
✧ Click **Export**, press left mouse button on the map, drag the mouse and select area. See Figure 4-178.

**Figure 4-178**

4.7.6.3 **Library Search**

Search qualified persons in the library, according to feature info or picture.

4.7.6.3.1 **Search with Picture**

- If the device doesn’t support to search qualified persons in snapshot records according to picture, the platform cannot search with picture.
- If the device doesn’t support to search with picture, when selecting a channel, the platform prompts that the channel doesn’t support either.

**Step 1** At **Face Recognition** interface, click 📈 in the left.

Enter snapshot search interface. See Figure 4-179.
Step 2  Click **Face Library** tab. Enter library search interface.

Step 3  Select the face library.

Step 4  Select **Picture**, click **Upload Picture** to upload one picture, and set the similarity.

Step 5  Click **Search**.

For search results, see Figure 4-180. Click **on the found picture, and jump to recognition search interface. Set search conditions and search recognition records within the scope of condition.**

### 4.7.6.3.2 Search according to Condition

Step 1  At **Face Recognition** interface, click **in the left.**
Enter snapshot search interface. See Figure 4-181.

**Figure 4-181**

![Image of snapshot search interface]

**Step 2**  Click **Face Library** tab.
Enter library search interface.

**Step 3**  Select the face library.
**Step 4**  Select **Feature**. See Figure 4-182. Select a channel (or multiple channels), set search time period, age and gender, and click **Search**.

**Figure 4-182**

![Image of face library search interface]

**Step 5**  Click **Search**.
For search results, see Figure 4-183. Click on the found picture, and jump to recognition search interface. Set search conditions and search recognition records within the scope of condition.
4.7.6.4 Recognition Search

Set conditions, and search qualified recognition records.

**Step 1** At Face Recognition interface, click in the left.

Enter recognition search interface. See Figure 4-184.

Figure 4-184

**Step 2** Set the channel and time, person type, name, ID, age and gender, and click Search.

For search results, see Figure 4-185.
- Double click the picture to view details.
- Click 📋 to download recordings related with the picture.
- Click 🎧 to display recording playback interface. If the snapshot owns recordings, play back the recordings. Otherwise, it prompts no recording file.
- Select a recognition record and click Export to export the result.
- View trajectory info on the map.

To view trajectory, it needs to drag the device onto the map in advance. Please refer to 4.10 EMap Application for more details.

Click Generate Trajectory and display trajectory map. See Figure 4-186.
Double click the device capture info on the map; it will display all the capture records of the device, the device record in the left capture list is marked as blue. See Figure 4-187.

![Figure 4-187](image)

Click [to play movement trajectory; click [to stop playing movement trajectory; click [to replay.

- Click [ to playback video in the left capture record list.
- The video stored on the face recognition device is called as playback video. It fails to playback video if there is no related video stored on the device.
- Export trajectory diagram.
  Click Export, press left mouse button on the map, drag the mouse and select area. See Figure 4-188.
4.7.6.5 Report

**Step 1**  At **Face Recognition** interface, click 📂 in the left.

The system displays **Report** interface. See Figure 4-189.

**Figure 4-189**

**Step 2**  Select device channel, report type and time, and click **Search**.

Generate a report according to the data in the selected cycle. Click 📊 📊 📊 at the top, to switch display mode.

- For line chart, see Figure 4-190.
For pie chart, see Figure 4-191.

For list, see Figure 4-192.
4.8 Video Intercom

You can configure video intercom function on the platform, which require complete debugging and config on the device, please refer to device user’s manual.

4.8.1 Function Flows

It supports video intercom, with the following business flow. See Figure 4-193.

The above function flows are for reference only. You can skip some steps according to your actual situation.

4.8.2 Configuring Residence

See “2.7 System Upgrade.” for more details. System Settings
4.8.3 Adding Intercom Device

Add unit VTO, VTH, fence station to the platform, for communication with the platform. In device manager page, you may create device organization tree and add video intercom device. Please refer to chapter 3.7 Device Management. After you add device, the system auto create Video Intercom tab in device manager page, see Figure 4-194.

![Figure 4-194]

Add VTH will lead to auto creation of user. According to room number extracted by SIP of VTH, create fixed user. User ID is the room no. Added user can be viewed, edited in User page.

4.8.4 Sync Device Info

If you modify the unit enable item, or modify SIP ID or SIP password, the device will not push info to the platform, and you need to manually get device info on the client.

**Step 1** In Management area in homepage, click ![Device].

System shows device manager page.

**Step 2** Click Video Intercom tab.

System shows video intercom device list, see Figure 4-195.
Step 3  Click  of a device in this page.

The interface of **Edit Device** is displayed. See Figure 4-196.

Figure 4-196

Step 4  Click **Get Info** to get the latest device info.

Step 5  Click **OK** and complete device info sync.

**4.8.5 Sync Contacts**

Sync contacts on the platform with VTO, and you can view the contacts on screen of VTO of its WEB page.

Step 1  In management area in homepage, click .
System shows config manager page, see Figure 4-197.

Figure 4-197

Step 2  Select VTO device on the left.
System shows device config page, see Figure 4-198.

Figure 4-198

Step 3  Click Contacts
System shows Release Contacts page, see Figure 4-199.
Step 4 Select VTH (Only show VTH under this VTO).
Step 5 Click OK to complete config.
After it is released, you can view the contacts on screen of VTO of its WEB page.

4.8.6 Enter Video Intercom Page

In function area, click Call Center, enter video intercom page, see 错误!未找到引用源。. Click tab on the left, and enter corresponding video intercom page.
4.8.7 Call

It supports to create device group, management group and relation group. These groups can call each other within certain group.

⚠️
Only default system account supports config of this function.

4.8.7.1 Device Group Config

When VTH and VTO are added into the same device group, they can call each other. When you add VTH, second confirmation VTH, fence station to the platform, the platform auto creates corresponding device group.

- Add VTO, auto create one device group, and add VTH from the same unit into this group, to provide intercom between VTH and VTO in this group.
- Add second confirmation VTH, auto create one device group, and add VTH from the same room no. into this group, to provide intercom between VTH and second confirmation VTH in this group.
- Add fence station, auto create one device group, add all existing VTH on the platform into this group, provides intercom between fence station and all VTH.
- Add VTH, if VTH connects to unit VTO, second confirmation VTH, fence station, then auto add into device group created by these device to provide communication among VTH, unit VTO, second confirmation VTH and fence station.

Call among VTH is not limited by device group, which means VTH in different groups may call each other.

4.8.7.2 Management Group Config

4.8.7.2.1 Add Management Group

Management group groups platform administrators, contributing to simpler binding relationship as one-to-one, one-to-multiple, and multiple-to-multiple bindings. Platform administrator includes user, VTS, administrator APP. When you add VTS, if there is default management group, the platform auto add it into management group.

⚠️
- Before you set management group, you shall create new user, and select video intercom menu right and device right. Add new user into management group.
- Set group relationship via system user, you shall switch to new user account and log in. You cannot call as system administrator.

Step 1  Click on the left in video intercom page.
Step 2  Click Management Group Config tab.

System shows Management Group Config page, see Figure 4-201.
Step 3   Click **Add Group**.

The interface of **Edit Manager Group** is displayed, see Figure 4-202.

Figure 4-202
Step 4  Set management group name, select administrator account or VTS.
Step 5  Click OK, complete adding of management group, see Figure 4-203.

Figure 4-203

4.8.7.2.2 Move Member of Group

When multiple groups exist, you can move member of one group to another group.

Click , select group, move member to corresponding group, see Figure 4-204. If the group only has one member who is being moved now, the entire group will be automatically deleted.

Figure 4-204
4.8.7.2.3 Restore Default Group

Default group is that all administrators are in the same group.

Click .restore default group see Figure 4-205. Restored see Figure 4-206.

4.8.7.2.4 Edit Management Group

Add or delete member of management group.

Click  enter edit management group page, add or delete member of management group, click OK. See Figure 4-207.
4.8.7.2.5 Delete Management Group

Click 🔴, page will prompt you to delete management group.

4.8.7.3 Group Relation Config

Group relation config is to add device group and management group into one relation group as the two groups are linked. Thus VTO or VTH in the same relation group can call manager device or VTA within this group only.

There are two types of relations:

- **Device group can only bind one management group**
  Click any one device in the device group to call administrator, and all its bound administrator who is online will be rung. Now if one of these administrator answer the call, all other calls will be ended. Only if all administrators reject this call, call from the device will be rejected.

- **Device group binds to multiple management groups**
  Between management groups, there are priority applied. Click any one device in the device group to call administrator, only administrator in management group with the highest priority among all management groups will be rung. If none of these administrator answer the call, the call goes to the next management group. Interval of
call is 30 seconds with a max of two groups will be called. In case both groups did not answer, device will prompt call is timeout, no one answers.

**Step 1** Click **on the left in video intercom page.**
System shows call management page.

**Step 2** Click Group Relation tab Config tab.
System shows Group Relation Config page, see Figure 4-208.

**Figure 4-208**

**Step 3** Click Add.
System shows Edit Relation Group page, see Figure 4-209.
**Step 4** Set relation group name, select device group and management group.

**Step 5** Click OK, complete adding of relation group, see Figure 4-210.

If there are multiple management groups, you can adjust priority by ↑ or ↓.
4.8.8 Video Intercom Application

4.8.8.1 Call Center

**Step 1**  Click ☎️ on the left in video intercom page.

Enter call center page.

**Step 2**  Click device on device tree.

System shows contacts, see Figure 4-211.

- According to info reported by fence station or VTO, auto create contacts.
- In ☀️, you can quickly search contacts. It supports fuzzy search of building no., unit no., room no. For example, enter 1#1#, to search all devices below building 1 unit 1: enter 1#1#10, to search building 1 unit 1. Room no. includes 10 all VTH.
Step 3 In **Contacts** page, you can call VTO, VTH and etc.

- Client calls VTO

  In device list area, click of corresponding VTO to call this VTO. System pops up call page, to have a video intercom, see Figure 4-212.
Client calls VTH

Click of VTH card or dial VTH number on directly (i.e. enter 1#1#101, to call building 1, unit 1 room 101). System pops up “Calling, please wait…” box, see Figure 4-213.

Figure 4-213

After VTH is connected, client and VTH can have start intercom, see Figure 4-214.

If the VTH has a camera, then it shows video during intercom.

- If VTH has not answered the call over 30 seconds, or VTH is busy or hang up the call, then client will show line is busy.

- After call is answered, click to hang up.
VTO is calling client.
Client pops up VTO call box, see Figure 4-215.

- Click ‡ to unlock.

- Click †, accept VTO call, after being answered, you can start intercom.
After being answered, click [hang up] to hang up.

- VTH is calling client.

Client pops up VTH call box, see Figure 4-216. Click [hang up] to have intercom with VTH.

![Figure 4-216](image)

- Click [answer call] from VTH, and then when call is answered, you can start intercom.

- After being answered, click [hang up] to hang up.

- Call via contacts.

In Video Intercom page, at the lower right corner, it shows all call records. See Figure 4-217. Move mouse to record, click [call] to dial back.
4.8.8.2 Release Information

Step 1  Click on the left in Video Intercom page. Enter release information page, see Figure 4-218.

Step 2  Click Add New Message.

Step 3  Select VTH, add message. Click Send, see Figure 4-219. After being successfully sent, VTH receives release message.
4.8.9 Video Intercom Log Search

**Step 1** There are two ways to enter the interface of video intercom log search.

- On the interface of Call Center, click 📖 and the system skip to the interface of Video Intercom Log. See Figure 4-220.

- On the interface of Intercom Management, click 📖 and the system display the interface of Video Intercom Log. See Figure 4-221.
Step 2  Set search condition, click Search. The system displays the search result. See Figure 4-222.

Step 3  Click Export, and export log and save it locally according to prompt.

4.9 ANPR Surveillance

The platform accurately identifies vehicles through the license plate recognition camera, and supports data search of traffic record.
4.9.1 Function Flow

To realize access control, the following flow shall be completed. See Figure 4-223.

The above function flows are for reference only. You can skip some steps according to your actual situation.

4.9.2 Adding ANPR Device

Build organization tree on the Device interface and register the needed ANPR device. After the adding, the ANPR tab automatically appears on the Device interface and the detailed ANPR information is displayed on the tab. See Figure 4-224.
4.9.3 Setting Picture Storage Disk

ANPR channel has to be configured with corresponding storage disk before realizing road surveillance, if not; all the pictures will fail to display. See “3.9.1.8 Storage” for more details.

4.9.4 Entering ANPR Interface

On the homepage, click ANPR to enter the ANPR interface. See Figure 4-225. Click the tab on the left to enter the corresponding interface of road monitoring and vehicle record search. The road monitoring interface displays the electronic map in a single window by default. You can manually switch the window number. Click the ANPR channel on the left to preview video.
4.9.5 Passing Vehicles

4.9.5.1 Real-time Preview ANPR

Step 1  Click on the left of ANPR interface. See Figure 4-225.

Step 2  Click .

The Selected Location interface is displayed. See Figure 4-226.

Step 3  Select the channel you need to view the vehicle pictures and then click OK.

The platform displays the selected channel number and shows the latest passing vehicle picture. See Figure 4-227.
Step 4 Double-click the picture to view the detailed information. It includes plate number, snapshot time, ANPR channel name, car logo and color. See Figure 4-228.

Step 5 Click ⌁ to stop refreshing vehicle records.

4.9.5.2 Searching Passing Vehicle Records

In practical application, you can search the passed vehicle records according to the actual needs.

Step 1 Click 📣 on the left of ANPR interface. The passing vehicle record interface is displayed. See Figure 4-229.
Step 2  Select the channel to search and configure the time, plate No., plate color, vehicle type, vehicle logo, vehicle color and vehicle speed. Click Search.

The search results are displayed. See Figure 4-230. Click  to view in thumbnail mode and click  to view in list mode.

Step 3  Double-click the picture to view details, including local zoom to view vehicle picture, plate number, snapped time, ANPR channel name, lane, speed, plate color, vehicle type, vehicle logo and vehicle color. See Figure 4-231.
If some information in the vehicle details recognized by the platform is incorrect, click Edit to modify them manually. See Figure 4-232. The information you can edit includes plate No., plate color, vehicle type, vehicle logo and vehicle color, and click Save after the editing or click Cancel to cancel the editing. See Figure 4-232.
4.9.5.3 Viewing Related Video of Passing Vehicle

⚠️ CAUTION

Before searching passing vehicle records, you need to configure general record schedule for the ANPR channel. The way to configure record schedule is the same as video channel. See “4.2.4 Configuring Record Schedule” for more details.

In the search result list, select the corresponding vehicle record and then click 🎬 or click 🎬 you can view the video before and after the snapshot record. See Figure 4-234.
4.9.5.4 Exporting Passing Vehicle Records

You can export all or part of the selected vehicle records according to the actual needs.

**Step 1**  In the search result list, select the records you need to export, and then click **Export** or **Export All**. See Figure 4-235.

**Figure 4-235**

**Step 2**  Select the save path according to the platform prompt.

After it is exported successfully, the platform pops up a box. See Figure 4-236.

**Figure 4-236**

**Step 3**  Click the open button in the prompt box to view the exported file. See Figure 4-237.

**Figure 4-237**
4.9.6 Blacklist Vehicle

4.9.6.1 Adding Blacklist Vehicle

Arm means monitoring vehicles, it will trigger alarm when capturing and recognizing the vehicle with designated license plate.

**Step 1** Click .

The interface of Blacklist Vehicle is displayed. See Figure 4-238.

![Figure 4-238](image)

**Step 2** Click **Add**.

The interface of **Add** is displayed. See Figure 4-239.
Step 3  Set parameters of armed vehicle, including plate No., plate type, arm time, arm reason and arm type etc.

Step 4  Click OK.

    The system displays the information of adding blacklist vehicle, and then it is considered as armed status by default.

Related Operations

- Export blacklist vehicle information
  Click Export All on the top of the interface, and then it exports all the information of blacklist vehicle according to the interface prompt, and it is saved locally; or select blacklist vehicle, it supports selecting several vehicles, click Export Select, and it exports the information of blacklist vehicles according to interface prompt, and then it is saved locally.

- Import Blacklist Vehicle Information
  If blacklist vehicle information is backed up or filled in according template via export and vehicle information function, then you can add blacklist vehicle quickly via import function.

  Click Import on the top of the interface, select the local blacklist vehicle file, click Import and blacklist vehicle information is imported. If there is no blacklist vehicle file, then you can click Click to download template on the import interface, download template and fill in blacklist vehicle information.

- Modify blacklist vehicle information

  Click and modify blacklist vehicle information.

- Search Blacklist Vehicle Information
Select search conditions, including time, plate No., plate type, arm status and arm type, click Search.
It supports fuzzy search upon license plate. For example, if you enter 5, it will display all the vehicles whose license plate includes 5.

- **Delete Blacklist Vehicle**
  
  Click □ in the line of blacklist vehicle, and delete corresponding blacklist vehicle according to prompt; select blacklist vehicle, it can select several vehicles, click Delete on the top of the interface, and then you can delete selected blacklist vehicle according to prompt.

**4.9.6.2 Arming Blacklist Vehicle**

On the interface of Vehicle Blacklist, click □ in the line of blacklist vehicle, the icon becomes ○ and arming is enabled; select one or several blacklist vehicles, click Arm on the top of the interface, then the icon becomes ○, arming is enabled.

**Related operations**

Cancel arm, on the interface of Vehicle Blacklist, click □ in the line of blacklist vehicle, the icon becomes ○ and arming is cancelled; select one or several blacklist vehicles, click Disarm on the top of the interface, then the icon becomes ○, arming is cancelled.

**4.9.6.3 Searching Arm Record**

- **Step 1** On the interface of Vehicle Blacklist, click □
  
  The interface of Arm Record is displayed. See Figure 4-240.
Step 2 Set search conditions, including time, plate No., and speed.
Step 3 Click Search.

The system displays search result. Click 📈 and view by thumbnail; click 📄 and view by list.
Step 4 Double click the picture and you can view details, including viewing vehicle picture via regional zoom, plate No., snapshot time, snapshot location, lane, speed, plate color, vehicle type, logo, vehicle color. See Figure 4-241.
If there is any error for the vehicle information, you can click Edit and modify manually. See Figure 4-242. You can modify plate No., plate color, vehicle type, logo and vehicle color. Click **Save** after modification is finished and click **Cancel** to cancel modification. See Figure 4-243.
4.9.6.4 Viewing Related Video of Arm Record

⚠️

It needs to configure ANPR channel with general record plan before searching vehicle video, the config method of record plan is the same as that of video channel. See “4.2.4 Configuring Record Schedule” for more details.

Select corresponding arming record from the result, click 📽️ or click 📽️ from the details, and view the captured video of both front and back scenarios. See Figure 4-244.

Figure 4-244

4.9.6.5 Exporting Arm Record

Users can export all or some selected vehicle records according to actual requirement.

Step 1 Select the records which need to be exported from the searched results, click Export or Export All. See Figure 4-245.
Step 2 Select save path according to the system prompt.
The system will pop up prompt box after it is exported successfully. See Figure 4-265

Figure 4-246

Step 3 Click the open button in the box.
View export file. See Figure 4-247.

Figure 4-247

4.10 EMap Application

It is to import the raster map into the platform, and then add the device to the map to simulate the actual application environment.
On the homepage, click **Emap** and the **Emap** interface is displayed. See Figure 4-248 and Figure 4-249.

![Figure 4-248](image1)

**Figure 4-248**

![Figure 4-249](image2)

**Figure 4-249**

### 4.10.1 Adding Maps

The platform supports to add multiple maps.

**Step 1**  Click **Here** if you operate it for the first time. Click + on the left of the window if you have operated it before.

The **Add Main Map** interface is displayed. See Figure 4-250.
Step 2 Enter the name and remark, and click ![image] to select the picture.

**NOTE**
- The platform supports raster map and pictures in the format of PNG, JPG, JPEG, etc.
- After adding the picture, the platform displays the added picture on the preview interface.

Step 3 Click **OK** to import to the platform. See Figure 4-251.
- You can zoom in and out the Emap by rotating the middle button of the mouse.
- If the picture is too large to display completely, you can move the red module in the lower right corner by dragging the mouse.
4.10.2 Adding Device Channel

You can add the video channel, access control channel or alarm channel to the map according to the actual needs.

In the resource list, select the device channel and drag it to the appropriate position on the map. See Figure 4-252.

**NOTE**

In edit mode, this operation takes effect in real time. If you are in non-edit mode, click **Edit** on the upper right corner to switch to edit mode.
4.10.3 Adding Submaps

A map can contain multiple layers. Click 📐 in edit mode to add submaps.

**Step 1** Click **Edit** on the upper right corner to switch to the map edit mode.

**Step 2** Click 📐 and the cursor becomes a map icon. Select a position on the map and click the left button of the mouse.

The **Add Sub Map** interface is displayed. See Figure 4-253.

![Add Sub Map Interface](image)

**Step 3** Enter name and remark, and click 📝 to select picture.

- **NOTE**
  - The platform supports raster map and pictures in the format of PNG, JPG, JPEG, etc.
  - After adding the picture, the platform displays the added picture on the preview interface.

**Step 4** Click OK to import to the platform. See Figure 4-254.

The list on the left displays the map hierarchy and the map on the right displays the submap icons. Click the submap name on the left or the submap icon on the right to open the submap. See Figure 4-255.

- **NOTE**
  - On the submap, you can follow the above operations to continually adding a submap.
4.10.4 Managing Maps

4.10.4.1 Setting Main Map

In the map list on the left, click 🗺️ on the bottom to set the map as the main map. The main map is marked yellow on the upper left corner. See Figure 4-256.
4.10.4.2 Modifying Map Information

In the map list on the left, click 🖋️ on the bottom of a map to modify the map information. See Figure 4-257.
4.10.4.3 Deleting Maps

In the map list on the left, click \( \square \) on the bottom of a map to delete the map.

4.10.4.4 Moving Device Position

On the upper right corner, click \( \square \) and the icon becomes \( \square \), and then you can drag the device to change the position on the map. Click \( \square \) to close the moving mode.

4.10.4.5 Selecting Devices

On the upper right corner, click \( \square \) and the icon becomes \( \square \). You can select a region on the map and the platform displays the device list in this region. Select a device and click the corresponding icon to preview videos, play back records or delete the device.
4.10.4.6 Filtering Devices

On the upper right corner, click \( \downarrow \) to select the device type and the platform displays the devices of the selected type. By default, the platform selects all types.

4.10.4.7 Marking Position

On the upper right corner, click \( \downarrow \) select Mark, and then you can add mark to a position.

4.10.4.8 Resetting Maps

On the upper right corner, click \( \downarrow \) and select Reset to reset the map to the default size.

4.11 Alarm Event Management

⚠️ CAUTION

The precondition for generating alarm record is to set various alarm events and event linkage conditions for the device channel.

When alarm occurs, you can view the alarm number on the upper right corner. See Figure 4-259. Click this prompt or click Event Center on the homepage, you can enter the alarm event management interface to view live alarms and alarm records. See Figure 4-260.
4.11.1 Live Alarms

On the alarm management interface, click ⚠️ on the left and you can enter the interface to view live alarms. See Figure 4-260.
4.11.1.1 Refreshing Alarm Records

Click to refresh alarm records.

4.11.1.2 Claiming Alarm Events

**Step 1** Click  to claim and deal with the alarm event.

The handling user is displayed and the icon becomes . See Figure 4-261.

![Figure 4-261]

**Step 2** Click .

The detailed alarm information is displayed. See Figure 4-262.

**NOTE**

If the alarm event is claimed, it will not appear in the live alarm interface of other users. But it can be viewed in alarm search.
Step 3 Click **Information** tab to view the alarm occurrence time, alarm type, alarm source (channel/device) and alarm level. See Figure 4-262.

Step 4 Click **Preview** tab to view the video information of the corresponding channel when the alarm occurs. See Figure 4-263.

Step 5 Click **Snap** tab to view the snapshot information of the corresponding channel when the alarm occurs. See Figure 4-264.
Step 6  Click Record tab to view the record of the corresponding channel when the alarm occurs. See Figure 4-265.

Step 7  Click Map tab to view the map in which the corresponding channel locates when the alarm occurs. See Figure 4-266.
Step 8 Select the alarm handling way and enter the remark information. See Figure 4-267.

Step 9 Click Temp Disarm to disarm the specified alarm in the corresponding channel for a certain period.

Step 10 Click Send Email. See Figure 4-268.
1) Select the picture.
2) Enter the email address and configure the email subject and contents.
3) Click **Send** to manually send email to the relevant personnel.

**Step 11** Click **OK** to save the results.

### 4.11.1.3 Clearing Alarm Records

Click **Clear Alarm** to delete the alarm records on the current interface. The alarm records still exist on the system and you can search the alarm records on the search interface.

### 4.12 Attendance Management

#### 4.12.1 Adding Attendance Device

Currently it only supports access control as attendance device. See "4.5.2 Adding Access Control Device" for more details.

#### 4.12.2 Personnel Management

See "4.6 Personnel Management" for more details.

#### 4.12.3 Entering Attendance Interface

Click Attendance Management on the function interface, and then enter the interface of attendance management. See Figure 4-269.
4.12.4 Attendance Setting

Attendance setting includes the following two items.

- **Set attendance terminal**
  When there are several access control devices, make sure some devices are used as attendance devices, which are used for collecting attendance data.

- **Set statistical rule**
  The minimum timing unit is minute when swiping card, the method of confirming second for statistics rule round up or round down. For example, the swiping card time is 09:00:01, and the statistics time will be 09:00 if the rule is set as round down; the statistics time will be 09:01 if the rule is set as round up.

4.12.4.1 Setting Attendance Terminal

**Step 1** Click in the lower left corner of the interface.

The interface of **Attendance Config** is displayed. See Figure 4-270.
Step 2  Click the tab of Attendance Terminals.  Enter the config interface of attendance terminals.

Step 3  Select access control channel in the left channel list, click Save.

- It can rapidly find the device you need via search function, the system supports fuzzy search;

- If it needs to cancel attendance terminal, click the next to the attendance terminal on the right list and delete it according to prompt; or you can click the on top of the interface, then it can delete all the configured attendance terminals.

### 4.12.4.2 Setting Statistical Rule

Step 1  Click in the lower left corner of the interface.

The interface of Attendance Config is displayed. See Figure 4-270.

Step 2  Click the tab of Statistical Rule.

The interface of Statistical Rule is displayed. See Figure 4-271.
Step 3  Select statistical rule, and click **Save**.

### 4.12.5 Setting Attendance Period

Set attendance period and it can be used as time basis to judge if the person is present, late or leaves early.

**Step 1**  Click **on the interface of attendance management.**

The interface of **Attendance Period** is displayed. See Figure 4-272.
Click Add on the upper left corner of the interface. The interface of Attendance Period is displayed. See Figure 4-272. The information displayed on the interface is the default attendance period.

Enter period name and set parameters. See Figure 4-272. See Table 4-7 for more parameter details.

**Table 4-7**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period Name</td>
<td>Customize period name, used to recognize time period, such as morning shift, night shift.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Color</td>
<td>Sets the corresponding color of the period, later it will directly display color of corresponding period on the calendar when staff making shift arrangement.</td>
</tr>
<tr>
<td></td>
<td><strong>Working Time</strong> Sets corresponding working time of period, meanwhile selects the number of corresponding working days of this working time. The rule is shown as follows: Start to sign in time &lt; start working time, start working time &lt;= end sign in time &lt; start sign out time. End sign in time &lt; start sign out time &lt; end working time, end sign out time &gt; end work time. Attendance time supports spanning days, but it does not exceed 24 hours. One attendance period supports max two attendance time. If attendance time needs to be divided into twice, such as morning and afternoon, then it needs to click +, set second working time sign in/sign out period. If it sets two working time, then it needs to operate according to the requirement of two configured working time sign in and sign out, which can be recorded as normal attendance.</td>
</tr>
<tr>
<td></td>
<td><strong>Working Hour</strong> Please fill in according to actual situation about how many working hours can be calculated by one working time.</td>
</tr>
<tr>
<td></td>
<td><strong>Valid Sign-in Time</strong> It is considered as valid sign in only it punches in during the set time.</td>
</tr>
<tr>
<td></td>
<td><strong>Valid Sign-out Time</strong> It is considered as valid sign out only it punches out during the set time.</td>
</tr>
<tr>
<td></td>
<td><strong>Work sign in within_minutes recorded as late</strong> Defines the concept of late, absence and early leave. Suppose “Work late within_minutes is recorded as late” is set as 5 minutes; “late sign in over _ minutes is recorded as absence” is set as 60 minutes; “off work early than_minutes is recorded as early leave” is set as 10 minutes; “early leave exceeds _ minutes is recorded as absence” is set as 30 minutes, which is shown as follows: Late When work sign in later than start time of working time, and 5 minutes &lt; period ≤ 60 minutes, which is recorded as late. Early leave When off work sign out is earlier than the end time of working time, and 10 minutes &lt; period ≤ 30 minutes, which is recorded as early leave. Absence When work sign in is later than start time of working time, and</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>period &gt; 60 minutes, which is recorded as absence.</td>
</tr>
<tr>
<td></td>
<td>When off work sign out time is earlier than end time of working</td>
</tr>
<tr>
<td></td>
<td>time, and period &gt; 30 minutes, which is recorded as absence</td>
</tr>
<tr>
<td>Work over_minutes later sign out</td>
<td>Define overtime</td>
</tr>
<tr>
<td>recorded as overtime</td>
<td>Suppose “Off work sign out after _minutes is recorded as overtime”</td>
</tr>
<tr>
<td></td>
<td>is set as 120 minutes, it means that off work sign out time is</td>
</tr>
<tr>
<td></td>
<td>later than end time of working time, and period &gt; 120 minutes,</td>
</tr>
<tr>
<td></td>
<td>recorded as overtime, overtime duration is “period-120 minutes”.</td>
</tr>
</tbody>
</table>

**Step 4** Click **Save** to save period config.

- Modify attendance period; click the **next** to the period and modify the attendance period info.
- Delete the unused attendance period; select attendance period and click **to delete period** according to the prompt on the interface.
- Delete the in-use attendance period; please enter “Attendance Shift” interface, check all the attendance shifts if there is relevant period which needs to be deleted, if yes, you need to dissociate first and then delete it.

### 4.12.6 Setting Attendance Shift

Set attendance shift according to attendance period, and it can be used for shift arrangement for both department and personnel.

**Step 1** Click **on the attendance management interface.**

The interface of **Attendance Shift** is displayed. See Figure 4-274.

**Figure 4-274**

**Step 2** Click **Add** in the upper left corner of the interface. The system displays the interface of adding new attendance shift.
Step 3  Enter shift name, select cycle mode and set cycle period. Select data, click Apply next to time interval, arrange attendance period for date. See Figure 4-275. See Table 4-8 for more parameter details.

Press left mouse button to drag mouse in the date display region, then you can select application of several dates. means that the date has been selected.

![Figure 4-275](image)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift Name</td>
<td>Custom period name, used to recognize shift.</td>
</tr>
<tr>
<td>Cycle Mode</td>
<td>Cycle by day: It starts cycle from day 1; the cycle period can be set as any number from 1 to 31 by day. For example, if it sets 2, then 2 days is considered as a cycle period.</td>
</tr>
<tr>
<td></td>
<td>Cycle by week: It is 7 days a week by default, starts cycle from Sunday, the first day is required to set as Sunday. Cycle period can be set as any number from 1 to 4 by week. For example, if it sets 2, then 2 weeks is considered as a cycle period.</td>
</tr>
<tr>
<td>Cycle Period</td>
<td>Cycle by month: There are 31 days in a month by default, it starts cycle from the date of the current day (It can be directly abandoned if the date does not exist), and the cycle period can be set as any number from 1 to 3 by month. For example, if it sets 2, then two months can be considered as a cycle period.</td>
</tr>
</tbody>
</table>

Step 4  Click Save and save shift config. See Figure 4-276.
Modify attendance shift: click next to shift and modify the information of attendance shift.

Delete unused attendance shift: select attendance shift, click and delete shift according to interface prompt.

Delete the in-use attendance shift: enter the interface of “Personnel Shift”, check if the entire staff scheduling situation are related, if yes, then you need to remove the relevance and then delete it.

4.12.7 Personnel Shift Arrangement

The system supports shift arrangement for personnel or department. The operation between personnel shift and department shift is similar. In this chapter it takes personnel shift as an example to introduce configuration.

If it configures department shift, then all the personnel under the department conform to the shift.

If both personnel and department are configured with shift, then the latest personnel shift should prevail. For example, it makes shift for the department where the person belongs to after making personnel shift arrangement, then the latest department shift should prevail.

If the department has made shift, then the shift of newly-added person should conform to the department shift.

Step 1  Click on the interface of attendance management.
The interface of Personnel Shift Arrangement is displayed. See Figure 4-277.

Figure 4-277

Click on the upper left corner of the interface.

The interface of Viewing Personnel Shift Arrangement is displayed. See Figure 4-278.

Click in the upper left corner if it needs to make shift arrangement for department, enter the interface of Department Shift, and the operation is the same as personnel shift.

- It can view personnel shift on the interface of personnel shift arrangement.
- Click to view the details of personnel shift arrangement.
Step 3  Click **Edit**.

The **Edit** interface is displayed.

Click **Return** to go back to the interface of personnel shift.

Step 4  Select shift personnel; click **Add** to add shift information. See Figure 4-279. See Table 4-9 for more parameter details.

![Figure 4-279](image)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Time</td>
<td>It is to set start time and end time of personnel shift. Click</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>End Time</td>
<td>the corresponding location of “Start Time” in the shift info line and display calendar, select date and time, click “OK” to complete date setting.</td>
</tr>
<tr>
<td>Shift</td>
<td>Select the shift you need. Shift selection range is all the attendance shifts set in &quot;错误!未找到引用源。 4.12.6 Setting Attendance Shift&quot;.</td>
</tr>
</tbody>
</table>

**Step 5** Click Save and save the information of personnel shift.

### 4.12.8 Attendance Report

It supports query of card-swiping record list, attendance report and abnormity list.

**Step 1** Click on the attendance interface.

The interface of **Attendance Report** is displayed. See Figure 4-280.

**Figure 4-280**

**Step 2** Enter the corresponding search tab, set searching condition, click **Search** to search report data.

- The card swiping report is shown in Figure 4-280. Searching conditions include time, ID/name, department and attendance event (Including punch in, punch out and all). Click **Export** and save the record locally in the form of excel, it supports to export max 10,000 records.

The attendance event in the report includes punching in and punching out. Clock in during sign in time is considered as punch in and clock out during sign out time is considered as punch out.
Attendance report is shown in Figure 4-281. Searching condition includes time, ID/name and department. Click **Export** and save the records locally in the form of excel, it supports exporting max 10,000 records.

The description of sign-in time and sign-out time in the report is shown as follows:

Sign-in time: If there are several times of sign in, then it will take the earliest sign in time.

Sign-out time: if there are several times of sign out, then it will take the latest sign out time.

Failed to swipe card, the working hour cannot be calculated when sign in/out time is empty, both will display empty.
Attendance abnormality list is shown in Figure 4-282. Searching condition includes time, ID/name, department and abnormality type (including late, leave early, absent, late and leave early and all). Click Export and save records locally in the form of excel, it supports exporting max 10,000 records.

It is required to add and enable people counting function of smart IPC if you want to use flow analysis, otherwise it cannot be enabled.

4.13 Flow Analysis

4.13.1 Adding Smart IPC with People Counting

Create device organization tree on the device management interface and add encoder with the function of people counting. See 3.7 Device Management for more details. The device management interface will display the added device after adding is completed. See Figure 4-283
4.13.2 Entering Flow Analysis Interface

Click **Flow Analysis** in the function area, and the interface of Flow Analysis is displayed. See Figure 4-284.

4.13.3 Flow Analysis Report

**Step 1** Click **tab** on the interface of Flow Analysis.

The system displays the interface of flow analysis function.

**Step 2** Select device channel, select report type on the bottom and statistics time, and then click **Search**. The flow analysis report is displayed. See Figure 4-285.
You can also click [line chart or list statistics] to view line chart or list statistics.

**Step 3** Click **Export** on the top right corner of the interface, save report data locally according to prompt.

### 4.13.4 Heat Map

**Step 1** Click [Heat Map] on the interface of **Flow Analysis**.

The interface of **Heat Map** is displayed.

**Step 2** Select the channel which is to display heat map, select time and click **Search**.

The heat map is displayed. See Figure 4-286

The device uploads realtime heat map statistics data to platform; it starts from adding device from platform, the uploaded heat statistics data can be searched by week (the interval between start time and end time is no longer than one week)
Step 3 Click Export on the upper right corner and export the heat map as a picture in the form of bmp.