



# **iVMS-4200 VS Client Software**

**User Manual**

## Legal Information

### User Manual

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## Port List

For more details about port list, enter Hikvision official website.

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>Danger</b>	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 <b>Caution</b>	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 <b>Note</b>	Provides additional information to emphasize or supplement important points of the main text.

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## Chapter 1 Introduction

iVMS-4200 VS Client Software is a versatile security management software for the DVRs, NVRs, IP cameras, encoders, decoders, etc.

The software provides multiple functionalities, including real-time live view, video recording, remote search and playback, file backup, alarm receiving, etc., for the connected devices to meet the needs of monitoring task. With the flexible distributed structure and easy-to-use operations, the client software is widely applied to the surveillance projects of medium or small scale.

This user manual describes the functions, configurations and operation steps of the client software. To ensure the properness of usage and stability of the software, refer to the contents below and read the manual carefully before installation and operation.

## Chapter 2 Service Management


iVMS-4200 VS Service is mainly applicable for data storage, data management, and data calculation. With continuous running and processing, it can manage the data, such as event records, received by the iVMS-4200 VS Client Software. iVMS-4200 VS Service also provides management for user permissions, devices, groups, logs, etc.

You can view the module running status and edit its HTTP port. You need to restart the iVMS-4200 VS Service to take effect.

Check **Auto-Launch** to enable launching the iVMS-4200 VS Service automatically after the PC started up.

---

### Note

- The iVMS-4200 VS Service will not show after running it. Enter the system tray and click  to open the service window.
  - After closing the service window, the client will logout and return to the login page. You need to run the service and then login again.
  - The service and the client should be installed on the same PC.
-

## Chapter 3 Device Management

You can manage devices on the client, including adding, editing, and deleting the devices. You can also perform operations such as checking device's online users and checking devices' QR codes.

### 3.1 Activate Devices

For some devices, you are required to create the password to activate them before they can be added to the software and work properly.

#### Before You Start

Make sure the device to activate is connected to the network and is in the same subnet with the PC running the client.

#### Steps



#### Note

This function should be supported by the device.

1. Enter the Device Management page.
2. Click **Device** tab on the top of the right panel.
3. Click **Online Device** to show the online device area at the bottom of the page.

The searched online devices are displayed in the list.

4. Check the device status (shown on **Security Level** column) and select an inactive device.

IP	Device Model	Firmware Version	Security Level	Port	Serial No.	Boot Time	Added	Support Hik-Connect	Hik-Connect Status	Operation
192.168.1.64	VS-4/build 100218		Inactive	8000	20141119CCWR801400758	2019-03-26 15:...	No	N/A	N/A	<input type="button" value="Activate"/> <input type="button" value="Add"/> <input type="button" value="Close"/>

Figure 3-1 Online Inactive Device

5. Click **Activate** to open the Activation dialog.
6. Create a password in the password field, and confirm the password.



#### Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

7. **Optional:** For the NVR device connecting with inactive network camera(s), create a password in **Network Cameras' Default Password** field and enter the confirm password for activating the network camera(s) via NVR.
8. **Optional:** Enable Cloud P2P service when activating the device if the device supports.
  - 1) Check **Enable Cloud P2P** to open the Note dialog.
  - 2) Create a verification code.
  - 3) Confirm the verification code.
  - 4) Click **Terms of Service** and **Privacy Policy** to read the requirements.
  - 5) Click **OK** to enable the Cloud P2P service.Go back to the Activate panel.
9. Click **OK** to activate the device.

### 3.2 Add Device

After launching the client, devices including network cameras, video encoders, DVRs, NVRs, etc., should be added to the client for the remote configuration and management, such as live view, playback, event management, etc.

#### 3.2.1 Add Online Device

The active online devices in the same local subnet with the client software will be displayed on the **Online Device** area. You can click **Refresh Every 60s** to refresh the information of the online devices.

#### Add an Online Device

You can add an online device to the client.

##### Steps

1. Enter the Device Management module.
2. Click **Device** tab on the top of the right panel.
3. Click **Online Device** to show the online device area.

The searched online devices are displayed in the list.
4. Select an online device from the **Online Device** area.

---

##### **Note**

For the inactive device, you need to create the password for it before you can add the device properly. For detailed steps, refer to **Activate Devices** .

---

5. Click **Add** to open the device adding window.
6. Enter the required information.

##### **Name**

Enter a descriptive name for the device.

## IP Address

Enter the device's IP address. The IP address of the device is obtained automatically in this adding mode.

## Port

The port number of the device is obtained automatically in this adding mode.

## User Name

By default, the user name is *admin*.

## Password

Enter the device password.



### Caution


The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

7. Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
8. **Optional:** Check **Import to Group** to create a group by the device name.
9. Click **Add** to add the device.
10. **Optional:** Perform the following operation(s).

### Remote Configuration

Click  on Operation column to set remote configuration of the corresponding device.




### Note


For detail operation steps for the remote configuration, see the user manual of the device.

---


### Device Status


Click  on Operation column to view device status, including cameras, recording status, signal status, hardware status, etc.

### Edit Device Information

Click  on Operation column to edit the device information, such as IP address, user name, and password.

### Check Online User

Click  on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.

<b>Refresh</b>	Click  on Operation column to get the latest device information.
<b>Delete Device</b>	Select one or multiple devices and click <b>Delete</b> to delete the selected device(s) from the client.

### Add Multiple Online Devices

You can add multiple online devices to the client in a batch.

#### Before You Start

Make sure the to-be-added devices are online.

#### Steps

1. Enter the Device Management module.
2. Click **Device** tab on the top of the right panel.
3. Click **Online Device** to show the online device area at the bottom of the page.

The searched online devices are displayed in the list.

4. Select multiple devices.



#### Note

For the inactive device, you need to create the password for it before you can add the device properly. For detailed steps, refer to **Activate Devices** .

---

5. Click **Add** to open the device adding window.
6. Enter the required information.

#### User Name

By default, the user name is **admin**.

#### Password

Enter the device password.

---



#### Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---


7. Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
8. **Optional:** Check **Import to Group** to create a group by the device name.



9. Click **Add** to add the devices.

10. **Optional:** Perform the following operation(s).

**Remote Configuration**

Click  on Operation column to set remote configuration of the corresponding device.


---

 **Note**


For detail operation steps for the remote configuration, see the user manual of the device.

---


**Device Status**

Click  on Operation column to view device status, including cameras, recording status, signal status, hardware status, etc.


**Edit Device Information**

Click  on Operation column to edit the device information, such as IP address, user name, and password.

**Check Online User**

Click  on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.

**Refresh**

Click  on Operation column to get the latest device information.

**Delete Device**

Select one or multiple devices and click **Delete** to delete the selected device(s) from the client.

## 3.2.2 Add Device by IP Address or Domain Name

When you know the IP address or domain name of the device to add, you can add devices to the client by specifying the IP address (or domain name), user name, password, etc.

### Steps

1. Enter Device Management module.
2. Click **Device** tab on the top of the right panel.  
The added devices are displayed on the right panel.
3. Click **Add** to open the Add window, and then select **IP/Domain** as the adding mode.
4. Enter the required information.

#### Name

Create a descriptive name for the device. For example, you can use a nickname that can show the location or feature of the device.

#### Address

The IP address or domain name of the device.

#### Port

The devices to add share the same port number. The default value is **8000**.

#### User Name

Enter the device user name. By default, the user name is **admin**.

### Password

Enter the device password.

---



#### Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

### 5. **Optional:** Add the offline devices.

- 1) Check **Add Offline Device**.
  - 2) Enter the required information, including the device channel number and alarm input number.
- 



#### Note

When the offline device comes online, the software will connect it automatically.

---

### 6. **Optional:** Check **Transmission Encryption (TLS)** to enable transmission encryption using TLS (Transport Layer Security) protocol for security purpose .

---



#### Note

- This function should be supported by the device.
  - If you have enabled Certificate Verification, you should click **Open Certificate Folder** to open the default folder, and copy the certificate file exported from the device to this default directory to strengthen the security. See **Certificate Verification for Transmission Encryption** for details about enabling certificate verification.
  - You can log into the device to get the certificate file by web browser.
- 

### 7. Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.


### 8. **Optional:** Check **Import to Group** to create a group by the device name.

### 9. Finish adding the device.

- Click **Add** to add the device and back to the device list page.
- Click **Add and New** to save the settings and continue to add other device.

### 10. **Optional:** Perform the following operation(s).

#### Remote Configuration





Click  on Operation column to set remote configuration of the corresponding device.



## Note

For detail operation steps for the remote configuration, see the user manual of the device.

---

<b>Device Status</b>	Click  on Operation column to view device status, including cameras, recording status, signal status, hardware status, etc.
<b>Edit Device Information</b>	Click  on Operation column to edit the device information, such as IP address, user name, and password.
<b>Check Online User</b>	Click  on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.
<b>Refresh</b>	Click  on Operation column to get the latest device information.
<b>Delete Device</b>	Select one or multiple devices and click <b>Delete</b> to delete the selected device(s) from the client.

### 3.2.3 Add Devices by IP Segment

If the devices share the same port No., user name and password, and their IP addresses are sharing an IP segment. You can specify the start IP address and the end IP address, port No., user name, password, etc of the devices to add them to the client.

#### Steps

1. Enter the Device Management module.
2. Click **Device** tab on the top of the right panel.  
The added devices are displayed on the right panel.
3. Click **Add** to open the Add window.
4. Select **IP Segment** as the adding mode.
5. Enter the required information.

#### Start IP

Enter a start IP address.

#### End IP

Enter an end IP address in the same network segment with the start IP.

#### Port

Enter the device port No. The default value is **8000**.

#### User Name

By default, the user name is **admin**.

#### Password

Enter the device password.

 **Caution**

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

**6. Optional:** Add the offline devices.

- 1) Check **Add Offline Device**.
  - 2) Enter the required information, including the device channel number and alarm input number.
- 

 **Note**

When the offline device comes online, the software will connect it automatically.

---

**7. Optional:** Check **Transmission Encryption (TLS)** to enable transmission encryption using TLS (Transport Layer Security) protocol for security purpose .

---

 **Note**

- This function should be supported by the device.
  - If you have enabled Certificate Verification, you should click **Open Certificate Folder** to open the default folder, and copy the certificate file exported from the device to this default directory to strengthen the security. See **Certificate Verification for Transmission Encryption** for details about enabling certificate verification.
  - You can log into the device to get the certificate file by web browser.
- 

**8.** Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.


**9. Optional:** Check **Import to Group** to create a group by the device name.

**10.** Finish adding the device.

- Click **Add** to add the device and back to the device list page.
- Click **Add and New** to save the settings and continue to add other device.

**11. Optional:** Perform the following operation(s).

**Remote Configuration**





Click  on Operation column to set remote configuration of the corresponding device.

---

 **Note**

For detail operation steps for the remote configuration, see the user manual of the device.

---

<b>Device Status</b>	Click  on Operation column to view device status, including cameras, recording status, signal status, hardware status, etc.
<b>Edit Device Information</b>	Click  on Operation column to edit the device information, such as IP address, user name, and password.
<b>Check Online User</b>	Click  on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.
<b>Refresh</b>	Click  on Operation column to get the latest device information.
<b>Delete Device</b>	Select one or multiple devices and click <b>Delete</b> to delete the selected device(s) from the client.

### 3.2.4 Add Device by Cloud P2P

You can add the devices to the client via Cloud P2P domain.

#### Before You Start

Log in to Cloud P2P account first.

#### Steps

1. Enter Device Management module.

The added devices are displayed on the right panel.

2. Click **Device** tab on the top of the right panel.
3. Click **Add** to open the Add window.
4. Select **Cloud P2P** as the adding mode.
  - If you log in for the first time, you will be required to log into the Cloud P2P account.  
The logged-in Cloud P2P account is displayed.
5. Select a region to login in the drop-down list of **Select the Region to Login** and then log into the Cloud P2P account, or enter the device serial number.
  - Enter the serial number which you can find on the device label.
  - If the IP address of the device is in the same local subnet with the client, click **Online Device** and select an online device to get its serial number automatically.
6. Enter the verification code created when activating the device and enabling the Cloud P2P service.
7. **Optional:** Enable **DDNS** to access the device by Cloud P2P Domain.

#### Device Domain Name

Customize the device domain name, which is used to get the IP address and port of the device registered on Cloud P2P server.

#### UPnP Mode

**Auto**

Select **Auto** as the UPnP Mode to get the port number of the device automatically.

## Manual

Select **Manual** as the UPnP Mode, and you need to input the port number of the device manually.

## User Name

Enter the device user name. By default, the user name is **admin**.

## Password

Enter the device password, which is created when you activate the device.

---



## Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---



## Note

If DDNS function is disabled, you cannot do some operations for the added device through client, such as viewing the device status, downloading the video files during remote playback, generating QR codes of devices, etc.

---

**8. Optional:** Check **Import to Group** to create a group by the device name.

**9.** Add device to the client software and Cloud P2P account.

- Click **Add** to add the device and return to the device list.
  - Click **Add and New** to add the device and continue to add the next device.
- 




## Note

If the client cannot connect the DDNS for three times, the device will be added by P2P.

---

**10. Optional:** Perform the following operation(s).

### Remote Configuration

Click  on Operation column to set remote configuration of the corresponding device.

---




### Note

For detail operation steps for the remote configuration, see the user manual of the device.

---

### Edit Device Information

Click  to edit the device details.

---

### Delete Device

Select one or multiple devices and click **Delete** to delete the selected device(s) from the client.

### 3.2.5 Add Device by HiDDNS

HiDDNS is a DNS server of Hikvision providing users free services. If you have no enough IP addresses for the devices, you can add device by HiDDNS to assign dynamic IP addresses to the devices for a good-quality connection to network.

#### Steps

1. Enter Device Management module.

The added devices are displayed on the right panel.

2. Click **Device** tab on the top of the right panel.
3. Click **Add** to open the Add window.
4. Select **HiDDNS** as the adding mode.
5. Enter the required information.

#### Server Address

[www.hik-online.com](http://www.hik-online.com)

#### Domain

Enter the device's domain name registered on HiDDNS server.

#### User Name

Enter the device user name.

#### Password

Enter the device password.



#### Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

6. **Optional:** Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
7. **Optional:** Check **Import to Group** to create a group by the device name.
8. **Optional:** Add the offline devices.
  - 1) Check **Add Offline Device**.

- 2) Enter the required information, including the device channel number and alarm input number.

---

 **Note**

When the offline device comes online, the software will connect it automatically.


---

**9. Finish adding the device.**

- Click **Add** to add the device and back to the device list page.
- Click **Add and New** to save the settings and continue to add other device.

**10. Optional:** Perform the following operation(s).

**Remote Configuration**

Click  on Operation column to set remote configuration of the corresponding device.


---

 **Note**


For detail operation steps for the remote configuration, see the user manual of the device.

---


**Device Status**

Click  on Operation column to view device status, including cameras, recording status, signal status, hardware status, etc.


**Edit Device Information**

Click  on Operation column to edit the device information, such as IP address, user name, and password.

**Check Online User**

Click  on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.

**Refresh**

Click  on Operation column to get the latest device information.

**Delete Device**

Select one or multiple devices and click **Delete** to delete the selected device(s) from the client.

## 3.2.6 Import Devices in a Batch

You can add multiple devices to the client in batch by entering the device parameters in a pre-defined CSV file.

### Steps

1. Enter the Device Management module.
2. Click **Device** tab on the top of the right panel.
3. Click **Add** to open the Add window, and then select **Batch Import** as the adding mode.
4. Click **Export Template** and then save the pre-defined template (CSV file) on your PC.
5. Open the exported template file and enter the required information of the devices to be added on the corresponding column.

### Adding Mode



Enter **0** or **1** or **2**. **0** refers to adding a device by IP address or domain name; **1** refers to adding a device by HiDDNS; **2** refers to adding a device by EHome protocol.

### Address

Edit the address of the device. If you set IP/Domain as the adding mode, enter the IP address or domain name of the device here; if you set HiDDNS as the adding mode, enter **www.hik-online.com** here.



### Note

If you set EHome as the adding mode, this parameter is not required.

---

### Port

Enter the device port number. The default port number is **8000**.

### Device Information

If you set IP/Domain as the adding mode, this parameter is not required; if you set HiDDNS as the adding mode, enter the device domain name registered on HiDDNS server; if you set EHome as the adding mode, enter the EHome account here.

### User Name

Enter the device user name. By default, the user name is **admin**.

### Password

Enter the device password.



### Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

### Add Offline Device

Enter **1** to enable adding an offline device, and then the software will automatically connect it when the device is online. Enter **0** to disable adding an offline device.

### Import to Group


Enter **1** to create a group by the device name. All the channels of the device will be imported to the corresponding group by default. Enter **0** to disable this function.

### Channel Number


If you enable **Add Offline Device**, enter the channel number of the device. If you disable **Add Offline Device**, this field is not required.

### Alarm Input Number

If you enable **Add Offline Device**, enter the alarm input number of the device. If you disable **Add Offline Device**, this field is not required.

6. Click  and select the template file.
7. Click **Add** to import the devices.
8. **Optional:** Perform the following operation(s).

#### Remote Configuration

Click  on Operation column to set remote configuration of the corresponding device.


---

#### Note


For detail operation steps for the remote configuration, see the user manual of the device.

---


#### Device Status

Click  on Operation column to view device status, including cameras, recording status, signal status, hardware status, etc.


#### Edit Device Information

Click  on Operation column to edit the device information, such as IP address, user name, and password.

#### Check Online User

Click  on Operation column to check the online users who access the device, such as user name, user type, user's IP address, and login time.

#### Refresh

Click  on Operation column to get the latest device information.

#### Delete Device

Select one or multiple devices and click **Delete** to delete the selected device(s) from the client.

## 3.3 Edit Device's Network Information

After activating device, you can edit the network information (including IP address, port number, gateway, etc.) for the online device.


### Before You Start

Activate the device if the device status is inactivated.

### Steps

1. Enter Device Management page.
2. Click **Device** tab on the top of the right panel.
3. Click **Online Device** to show the online device area.

All the online devices sharing the same subnet will be displayed in the list.

4. Select an activated device in **Online Device** area.
5. Click  on the Operation column to open the Modify Network Parameter window.



### Note

This function is only available on the **Online Device** area.

---

6. **Optional:** Change the device IP address to the same subnet with your computer if you need to add the device to the client.
    - Edit the IP address manually.
    - Check **DHCP** to set the IP address as a static IP address.
  7. Enter the password created when you activate the device.
- 



### Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

8. Click **OK** to complete the network settings.


## 3.4 Restore/Reset Device Password

If you forgot the password of the detected online devices, you can restore the device's default password or reset the device's password through the client.

### 3.4.1 Reset Device Password

If you forgot the password of the detected online devices, you can reset the device password via the client.

#### Steps

1. Enter Device Management page.
  2. Click **Device** tab on the top of the right panel.
  3. Click **Online Device** to show the online device area.
    - All the online devices sharing the same subnet will be displayed in the list.
  4. Select the device from the list and click  on the Operation column.
  5. Reset the device password.
    - Click **Export** to save the device file on your PC and then send the file to our technical support.
- 



### Note

For the following operations for resetting the password, contact our technical support.

---

- Click **Generate** to pop up the QR Code window and click **Download** to save the QR code to your PC. You can also take a photo of the QR code to save it to your phone. Send the picture to our technical support.



For the following operations for resetting the password, contact our technical support.

- Select the Safe Mode according to actual needs.



For the following operations for resetting the password, contact our technical support.



### **Caution**

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.


Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

### 3.4.2 Restore Device's Default Password

If you forget the password of the detected online devices, you can restore their default password via the client.

#### **Steps**

1. Enter Device Management page.
2. Click **Device** tab on the top of the right panel.
3. Click **Online Device** to show the online device area at the bottom of the page.  
All the online devices sharing the same subnet will be displayed in the list.
4. Select a device and click  on the Operation column to open the Reset Password window.
5. Restore the device password.
  - Enter the security code, and then you can restore the default password of the selected device.



For getting the security code, contact our technical support.

- Click **Export** to save the device file on your PC and send the file to our technical support.

---

 **Note**

For the following operations for resetting the password, contact our technical support.

---

**What to do next**

The default password (12345) for the admin account is for first-time login purposes only. You must change this default password to better protect against security risks, such as the unauthorized access by others to the product that may prevent the product from functioning properly and/or lead to other undesirable consequences.

---

 **Caution**

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

## 3.5 Check Device's QR Code

The client can generate a QR code of the added device(s). You can add the device(s) to your mobile client after scanning the QR code.

**Steps**

---

 **Note**

- Devices added via EHome protocol do not support this function.
  - Devices added via Cloud P2P with **DDNS** enabled do not support this function.
- 

1. Enter Device Management module.
2. Click **Device** tab on the top of the right panel.  
The added devices are displayed in the list.
3. Select one or more device and click **QR Code** to open the QR Code window.

**What to do next**

Add the device to mobile client after scanning the QR code. For details, see user manual of the mobile client.

### 3.6 Upgrade Device Firmware Version

When there is a new firmware version available for the added device, you can upgrade its firmware version via the client.

#### Steps



#### Note

- The device should support this function.
- You can view and configure upgrading mode in System Configuration. See **Set General Parameters** for details.

1. Perform the following operations according to different upgrading modes.

**Table 3-1 Upgrade Device Firmware Version**

Upgrading Modes	Operation
<b>Disable</b>	<p>On the Device for Management panel, if there is a new firmware version available, the status in the Firmware Upgrade column of the device will turn to <b>Upgradeable</b>. Select the upgradeable device and click <b>Upgrade</b> to start upgrading the device firmware.</p> <p> <b>Note</b> The upgrade progress will show. When the upgrade is completed, the status in the Firmware Upgrade column of the device will turn to <b>Upgraded</b>.</p>
<b>Prompt Me If Download and Upgrade</b>	If there is a new firmware version available, a prompt window will pop up. Click <b>Upgrade</b> to start downloading and upgrading.
<b>Download and Prompt Me If Upgrade</b>	A dialog will pop up for selecting whether to upgrade after downloading package of new version. Click <b>Upgrade</b> to start upgrading the device firmware.
<b>Download and Prompt Automatically</b>	None.

#### Not Available Version


No new firmware version available.

#### Upgradeable

A new firmware version available.

---

 **Note**

Move the cursor on  to view the current version, latest version, and upgrade content of the firmware version.

---

**Waiting**

The device is waiting for upgrade.

**Downloading**

The client is downloading the package of the new firmware version.

**Upgrading**

The upgrading of the device firmware is going on.

**Upgraded**

Upgrade completed.

**Upgrading Failed**

Upgrading the device to a new firmware version failed.

## Chapter 4 Group Management

The resources added should be organized into groups for convenient management, including encoding channels and alarm inputs. You can get the live view, play back the video files, and do some other operations of the device through the group.

### 4.1 Add Group

You can add group to organize the added device for convenient management.

#### Steps

1. Enter the Device Management module.
2. Click **Device Management** → **Group** to enter the group management page.
3. Create a group.
  - Click **Add Group** and enter a group name as you want.
  - Click **Create Group by Device Name** and select an added device to create a new group by the name of the selected device.



The encoding channels and alarm inputs of this device will be imported to the group by default.

---

### 4.2 Import Resources to Group

You can import the device resources (such as encoding channels and alarm input) to the added group in a batch.

#### Before You Start

Add a group for managing devices. Refer to **Add Group** .

#### Steps



Up to 256 encoding channels can be added to one group.



---

1. Enter the Device Management module.
2. Click **Device Management** → **Group** to enter the group management page.
3. Select a group from the group list and select the resource type as **Encoding Channel** or **Alarm Input**.
4. Click **Import**.
5. Select the thumbnails/names of the encoding channels or alarm inputs in the thumbnail/list view.



---

## Note

You can click  or  to switch the camera display mode to thumbnail view or to list view.

---

6. Click **Import** to import the selected resources to the group.


## 4.3 Edit Resource Parameters

After importing the resources to the group, you can edit the resource parameters. For encoding channel, you can edit the channel name, stream type, protocol type, etc. For alarm input, you can edit the resource name. Here we take encoding channel as an example.

### Before You Start

Import the resources to group. Refer to *Import Resources to Group* .

### Steps

1. Enter the Device Management module.
2. Click **Device Management** → **Group** to enter the group management page.  
All the added groups are displayed on the left.
3. Select a group on the group list and click **Encoding Channel**.  
The encoding channels imported to the group will display.
4. Click  in the Operation column to open the Edit Camera window.
5. Edit the camera information, including the camera name, the stream type, etc.

### Video Stream

Select the stream type for live view of the camera as desired.

---

## Note

You should start live view again to take effect.

---

### Playback Stream Type

Select the stream type for playback of the camera as desired.

---

## Note

- This field will display if the device supports dual-stream.
  - You should start live view again to take effect.
- 

### Rotation Type

Select the rotate type for the live view or playback of the camera as desired.

### Protocol Type

Select the transmission protocol for the camera.

---

### Note

You should start live view again to take effect.

---

### Streaming Protocol

Select the protocol as RTSP or private for getting stream when live view.

---

### Note

You should start live view again to take effect.

---

### Stream Media Server

Get stream of the camera via stream media server. You can select and manage the available stream media server.

### Copy to...

Copy the configured parameters to other camera(s).

### Refresh

Get a new captured picture for the live view of the camera.

6. Click **OK** to save the new settings.

## 4.4 Remove Resources from Group

You can remove the added resources from the group.

### Steps

1. Enter the Device Management module.
2. Click **Device Management** → **Group** to enter the group management page.  
All the added groups are displayed on the left.
3. Click a group to show the resources added to this group.
4. Select the resource(s) and click **Delete** to remove the resource(s) from the group.

## Chapter 5 Cloud P2P

The client software also supports to register a Cloud P2P account, log into your Cloud P2P account and manage the devices which support the Cloud P2P service.

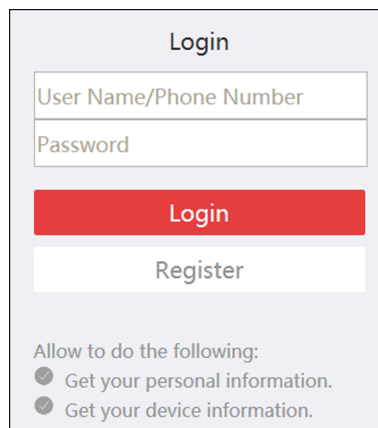
### 5.1 Register a Cloud P2P Account

The client supports registering a Cloud P2P account to manage devices which supports Cloud P2P service.

#### Steps

1. Enter the login page of Cloud P2P.
  - Click **Log in** in the upper-right corner of the client.
  - a. Click **Device Management** → **Device** to enter the Device Management page.
  - b. Click **Add** to open the Add Device panel.
  - c. Select **Cloud P2P** as the adding mode.
  - d. Click **Login**.

The Login window pops up.



**Figure 5-1 Login Window**

2. Click **Register** to open the Register Account window.
3. Enter the required information, including user name, password, confirm password, and phone number/email address.

---

#### **Caution**

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your

password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

4. Click **Send Message** to get a verification code.

The system will send verification code to your phone or email.

5. Enter the received verification code in the **Verification Code** text field.
6. Check **I have read and agreed Terms of Service Privacy Policy**.
7. Click **Register** to finish the registration.

## 5.2 Log into Cloud P2P Account

You can log into Cloud P2P account via the client, so as to operate devices managed by Cloud P2P account.

### Before You Start

Register a Cloud P2P account.

---



For details, refer to *Register a Cloud P2P Account* .

---

### Steps

1. Enter the login page of Cloud P2P.
  - Click **Log in** in the upper-right corner of the client.
  - a. Click **Device Management** → **Device** to enter the Device Management page.
  - b. Click **Add** to open the Add Device panel.
  - c. Select **Cloud P2P** as the adding mode.
  - d. Click **Login**.

The Login window pops up.

2. Enter user name/phone number, and password.
3. Click **Log in** to log into your account.

**Log in** will turn to **Logged in**.

4. **Optional:** Click **Logged in** → **Log out** to log out of your account.
- 



- Devices added by Cloud P2P will be hidden after logging out the Cloud P2P.
  - Alarm-related pictures saved in Cloud P2P will be valid for 2 hours.
-

## Chapter 6 Live View

For the surveillance task, you can view the live video of the added network cameras and video encoders on the Main View page. And some basic operations are supported, including picture capturing, manual recording, window division, PTZ control, etc.

### 6.1 Start Live View

You can start the live view of one camera or all cameras in a group. You can also start the live view in custom view mode.



#### 6.1.1 Start Live View for One Camera

You can start the live view of only one camera.

##### Before You Start

A camera group is required to be defined for live view.

##### Steps


1. Open the Main View page.
2. **Optional:** Click  in live view toolbar to select a window division mode for live view.
3. **Optional:** Click  in the live view toolbar to set the parameters such as view scale, play performance, picture saving path, etc.

---

##### Note

You can also set the parameters in System Configuration. For details, refer to **System Configuration** .

---

4. Do one of the following operations to start the live view of one camera.
  - Drag a camera in the group from camera list to a display window to start the live view.
  - Double-click the camera name after selecting a display window to start the live view.
  - Move the cursor to the camera name and click  near the camera name to start live view after selecting a display window.

---


##### Note

If the device supports stream encryption, and the stream of its live view is encrypted, you are required to enter a stream key for double verification.

---

The live video of the camera will start playing in the selected window. The next window will be selected automatically.

5. **Optional:** Drag the video of the camera in live view to another window to change the display window for live view.

6. **Optional:** Move the cursor to the camera name and click  → **Stream** near the camera name to switch the stream type according to actual needs.

---

 **Note**

You can click **All Stream Types** to select the frequently used stream types to display on the right-click menu.

---


### 6.1.2 Start Live View for Camera Group

You can start the live view for all cameras in one group synchronously.

#### Before You Start

A camera group is required to be defined for live view.

#### Steps


1. Open the Main View page.
2. **Optional:** Click  in the live view toolbar to set the parameters such as view scale, play performance, picture saving path, etc.

---

 **Note**

You can also set the parameters in System Configuration. For details, refer to **System Configuration**.


---

3. Perform one of the following operations to start the live view of all cameras in a group.
  - Drag a camera group from camera list to the display window to start the live view.
  - Double-click the group name to start the live view.
  - Move the cursor to the group name and click  near the group name to start live view for all the cameras in the group.

---

 **Note**

- The display window number is self-adaptive to the number of cameras in the group.
  - If the device supports stream encryption, and the stream of its live view is encrypted, you are required to enter a stream key for double verification.
- 

4. **Optional:** Move the cursor to the group name and click  → **Stream** near the group name to switch the stream type for the cameras in the group according to actual needs.

---

 **Note**



Before switching to the sixth, seventh, eighth, ninth, and tenth stream, you should set these stream type in the device's web configuration page. For details, refer to the user manual of the device.

---

## 6.1.3 Add Custom View

A view is a window division with cameras configured to each window; View mode enables you to save the window division and the correspondence between cameras and windows as favorite to quickly access the related cameras later. For example, you can link camera 1, camera 2, and camera 3 located in your office to display windows and save them as a view called office. Besides the pre-defined default views, you can customize views for further operations.

### Steps




1. Open the Main View page.
2. Move the cursor to the Custom View in the View panel and click  to create a new view.
3. Enter a name for the view.
4. **Optional:** Click  in the live view toolbar to set window division mode for the new view.

---

### Note

By default, the new view is in 4-window division.

---

5. Start live view for specified camera in specified window according to actual needs.
6. Click  to directly save the view.
7. **Optional:** Perform the following operations after adding the custom view.
  - Edit View Name** Move the cursor over the new view and click  to edit the view name.
  - Delete View** Move the cursor over the new view and click  to delete the view.


## 6.1.4 Start Live View in Custom View Mode

After adding a custom view, you can start live view for the cameras in the custom view.

### Before You Start

Customize a view which containing information such as window division, camera and correspondence between cameras and windows. See **Add Custom View** for details.

### Steps


1. Open the Main View page.
2. **Optional:** Click  in the live view toolbar to set the parameters such as view scale, play performance, picture saving path, etc.

---

### Note



You can also set the parameters in System Configuration. For details, refer to **System Configuration** .

---

3. Click  to expand the custom view list in the View panel.
4. Click a custom view to start live view.

The video of the added cameras in the selected view displays.

5. **Optional:** Perform the following operation(s) after starting live view in custom view mode.

<b>Start Instant Playback</b>	Move the cursor over the new view and click  to start instant playback for the cameras in the view. See <b>Instant Playback</b> for details.
<b>Start Auto-Switch of All Custom Views</b>	Move the cursor over Custom View and click  to start switching all views in the custom view list automatically. See details in <b>Auto-Switch in Live View</b> .

## 6.2 Auto-Switch in Live View

You can display live view of cameras or display the custom views in turn, which is called "auto-switch".


When auto-switching in live view, three modes are available:

- Auto-Switch All Cameras in Default View
- Auto-Switch Cameras in a Group
- Auto-Switch Custom Views

### 6.2.1 Auto-Switch All Cameras

The video of all the cameras in the camera list can switch automatically in a self-adaptive mode. If you start auto-switch of all cameras, the live view of all cameras can be displayed quickly, which is an effective way for live view. The auto-switch is performed with an interval which can be configured. You can also switch to playback and perform other operations on the auto-switch window.

#### Steps

1. Open the Main View page.
2. Click **Auto-Switch** → **Multi-Window Auto-Switch** on the left panel.
3. Hover the cursor on **Auto-Switch All Cameras**, and then click  .  
All cameras in the camera list start auto-switching in a self-adaptive mode.
4. **Optional:** Click **20 Seconds** at the bottom of the page to change the auto-switch interval.

#### Example

If you set the interval as 10 seconds, the image of each camera will be displayed for 10 seconds and then switch to next camera.


### 6.2.2 Auto-Switch Cameras in a Group

The video stream of the cameras from the same group can switch automatically in a selected display window. For example, if you start auto-switch of a group containing 5 cameras, the live



view of the 5 cameras will be displayed in turn with an interval which can be configured. You can also switch to playback and perform other operations on the display window.

### Steps

1. Open the Main View page.
2. Click **Auto-Switch** → **Single Window Auto-Switch** on the left panel to show the groups.
3. Select a display window on the right panel.
4. Hover the cursor on a group name and click .

The cameras in the selected group starts auto-switch in the display window.

---

### Note

The audio is off by default after auto-switch starts.

---

5. **Optional:** Click **20 Seconds** at the bottom of the page to change the auto-switch interval.

### Example

If you set the interval as 10 seconds, the image of each camera will be displayed for 10 seconds and then switch to next camera.

## 6.2.3 Auto-Switch Custom Views

A view is a window division with resource channels (e.g., cameras and access points) linked to each window. View mode enables you to save the window division and the correspondence between cameras and windows as favorite so that you can quickly access these channels later. If you saved a view containing all cameras on a floor beforehand, you can view the live view of all the cameras on the floor in turn by a one-stop operation. In this way, you do not have to search these cameras in the camera list every time you login. The auto-switch performs with an interval which can be configured manually.

### Before You Start

Add the custom views. See **Add Custom View** for details.

### Steps

1. Open the Main View page.
2. Click **Resource** → **Multi-Window Auto-Switch** on the left panel.
3. Hover the cursor on **Auto-Switch All Views** and click .

All custom views starts auto-switching.

4. **Optional:** Click **20 Seconds** at the bottom of the page to change the auto-switch interval.

### Example

If you set the interval as 10 seconds, the image of each camera will be displayed for 10 seconds and then switch to next camera.

## 6.3 PTZ Control

The software provides PTZ control for cameras with pan/tilt/zoom functionality. During the PTZ control, you can set preset, patrol, and pattern, and you can also open a new window for controlling the PTZ.









### Note











Cloud P2P device only supports the PTZ movements to the directions of up, down, left, and right.




Enter the **Main View** module, and select **PTZ Control** to open the PTZ control panel.

The following icons are available on the PTZ control panel.

**Table 6-1 Icons on the PTZ Control Panel**

Icon	Name	Description
	Direction Buttons	Click or hold the left mouse button to turn the PTZ around. Click  to turn around the PTZ horizontally and continuously; click again to stop turning.
	Speed Control	Drag the slider to adjust the PTZ moving speed.
	Zoom in/out	Zoom in to view close image for details; zoom out to view a panoramic image.
	Focus +/-	Click <b>Focus +</b> to move the focal point forward, and click <b>Focus -</b> to move the focal point backward.
	Iris +/-	Used for adjusting the luminance of the image. The larger the iris is, the more the light enters, and the brighter the image will be.
	3D Positioning	Use the left key of mouse to click on the desired position in the video image and drag a rectangle area in the lower right direction, then the dome system will move the position to the center and allow the rectangle area to zoom in. Use the left key of mouse to drag a rectangle area in the upper left direction to move the position to the center and allow the rectangle area to zoom out.
	Auxiliary Focus	Click to focus automatically.

Icon	Name	Description
	Lens Initialization	Initialize the lens and focus again for a clear image.
	Light	Click to fill light.   <b>Note</b> This function needs to be supported by the device.
	Wiper	Use the wiper to clear the dust on the camera lens.
	Manual Tracking	For speed dome with auto-tracking function, enable the auto-tracking (via right-click menu) for it and click the icon to manually track the target by clicking on the video.
	Menu	For analog speed dome, click the icon to display its local menu. For detailed operation of the menu, refer to user manual of the speed dome.
	One-Touch Patrol	For speed dome with one-touch patrol function, click the icon and the speed dome starts patrol from the predefined preset No.1 to preset No.32 in order after a period of inactivity (park time). For setting the park time, refer to user manual of the speed dome.
	One-Touch Park	For the speed dome with one-touch park function, click the icon and the speed dome saves the current view to the preset No.32. The device starts to park at preset No. 32 automatically after a period of inactivity (park time). For setting the park time, refer to user manual of the speed dome.
	Enable Manual De-Icing Heater	Enable this function to ensure the camera performance in environment under 0°C.
	Manual Face Capture	Click this button, and hold the left mouse button to select a face in the image to capture it. The picture will be uploaded to the server for viewing.

Icon	Name	Description
	Synchronize FOV	For thermal cameras. Click to synchronize the optical channel's field of view with that of the thermal channel.
	Regional Exposure	For speed domes, click the icon and draw a rectangle on the image to optimize the exposure effect in this region.
	Regional Focus	For speed domes, click the icon and draw a rectangle on the image to optimize the focus effect in this region.

### 6.3.1 Configure Preset

A preset is a predefined image position which contains information of pan, tilt, focus and other parameters. After setting preset, you can quickly locate the desired camera's position by calling the preset.

#### Steps

1. Open the Main View page and start the live view of the PTZ camera.
2. Click **PTZ Control** on the left to expand the PTZ Control panel.
3. Unfold the PTZ control panel in the lower-left corner of the page.

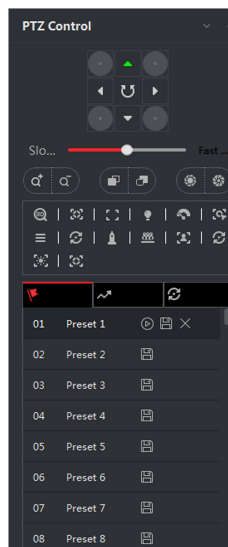






Figure 6-1 PTZ Control Panel

4. Select one PTZ window from the main view windows.
5. **Optional:** On the PTZ control panel, click the preset name (e.g. Preset 1) to edit the preset name.
6. On the PTZ control panel, click the direction button and function button on the PTZ control panel, to adjust the scene to the place you want to mark as a preset.

7. Click  to save the preset settings.

8. **Optional:** Perform the following operation(s) after setting the preset.

- |                      |  |
|----------------------|--|
| <b>Call Preset</b>   | Select the preset and click  to call the preset. You can also press the number key (e.g., <b>4</b> ) on keyboard to call the preset 1 to 9, and press <b>[, number keys</b> (e.g., <b>124</b> ), and <b>J</b> on keyboard to call the other preset. |
| <b>Edit Preset</b>   | Adjust the direction, position and view of the PTZ camera, and then and click  to save the preset again. The old preset settings will be replaced.  |
| <b>Delete Preset</b> | Select the configured preset from the list and click  to delete it.   |

## 6.3.2 Configure Patrol

A patrol is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable.

### Before You Start

Add two or more presets for one PTZ camera.



### Steps





---

#### Note

For Cloud P2P device, patrol is not supported.

---

1. Open the Main View page and start the live view of PTZ camera.
2. Click **PTZ Control** on the left to expand the PTZ Control panel.
3. Click  tab to enter the PTZ patrol configuration panel.
4. Select a path No. from the drop-down list.
5. Click  to open Add Patrol No. dialog.
6. Select a preset from the drop-down list and set the dwell time and patrol speed for the preset in the dialog.
7. Click **OK**.
8. Repeat step 5, 6, and 7 to add other presets to the patrol.
9. **Optional:** Perform the following operation(s) after setting the patrol.

- |                                  |  |
|----------------------------------|--|
| <b>Call Patrol</b>               | Click  to call the patrol.  |
| <b>Stop Calling Patrol</b>       | Click  to stop calling the patrol.  |
| <b>Edit Preset in Patrol</b>     | Select a preset in the patrol path and click  to edit the preset.                   |
| <b>Remove Preset from Patrol</b> | Select a preset in the patrol path and click  to remove the preset from the patrol. |

## 6.3.3 Configure Pattern

A pattern is a memorized, repeating series of pan, tilt, zoom, and preset functions.




### Steps

---

#### Note

For Cloud P2P device, pattern is not supported.

---

1. Open the Main View page and start the live view of the PTZ camera.
2. Click **PTZ Control** on the left to expand the PTZ Control panel.
3. Click  tab to enter the PTZ pattern configuration panel.
4. Click  to start the recording of this pattern path.
5. Use the direction buttons to control the PTZ movement.
6. Click  to stop recording and save the recorded pattern.
7. **Optional:** Perform the following operation(s) after setting the pattern.

**Call Pattern**                      Click  to call the pattern.

**Stop Calling Pattern**          Click  to stop calling the pattern.

**Delete Pattern**                      Select one pattern and click  to delete the pattern.

**Delete All Patterns**              Click  to delete all the patterns.

## 6.4 Customize Window Division

The client software provides multiple kinds of predefined window divisions. You can also set custom the window division as desired.


### Steps

---

#### Note

Up to 5 window divisions can be customized.

---


1. Open the Main View or Remote Playback page.
  2. Click  on the live view or playback toolbar to open the window division panel.
  3. Click **Add** to open the Add Custom Window Division dialog.
  4. Enter the window numbers in both horizontal and vertical dimension in the Dimension field, and then press **Enter** on your keyboard.
- 

#### Note

For remote playback, up to 16 windows can be played at the same time, so the custom window division with more than 16 windows is invalid.

---

5. **Optional:** Drag your mouse to select the adjacent windows, and click **Joint** to joint them as a whole window.

6. **Optional:** Select the joint window and click **Restore** to cancel the joint.
7. Click **Save**.
8. **Optional:** Click or drag a division mode to the displaying window to apply the mode for displaying.
9. **Optional:** Edit a customized window division mode.
  - 1) Click  on the live view or playback toolbar to open the window division panel.
  - 2) Click **Edit** to open the Add Custom Window Division.
  - 3) Select a customized division mode and perform operations including renaming, setting dimension, jointing/undo jointing windows.

### 6.5 Manually Record and Capture

During live view, you can record videos and capture pictures manually, and then view the recorded video files and captured pictures in the local PC.

#### 6.5.1 Manually Record Video

Manual recording function allows to record the live video on the Main View page manually, and you can store the video files in the local PC.


##### Steps

---

##### **Note**

Manual recording is not supported by Cloud P2P device during live view.

---

1. Open the Main View page.
2. Start the live view.
3. Perform one of the following operations to start manual recording.
  - Move the cursor to the display window in live view to show the toolbar and click  on the toolbar.
  - Right-click on the display window and click **Start Recording** on the right-click menu.

The icon  turns to . An indicator  appears in the upper-right corner of the display window.

4. Click  to stop the manual recording.

The recorded video file is automatically saved to the local PC, and a small window with the saving path information appears in the lower-right corner of desktop.

---

##### **Note**

The saving path of the recorded video files can be set on the System Configuration page. See **Set File Saving Path** for details.

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
## 6.5.2 View Local Videos

You can view the recorded video files stored in your local PC.

### Before You Start

Record the live video.

### Steps

1. Click  → **File** → **Open Video File** in the upper-right corner to open the Video Files page.
2. Select the camera to search the recorded video files from the Camera Group list.
3. Specify the start time and end time in the lower-left corner for the searching.
4. Click **Search**.

The video files recorded between the start time and end time displays in thumbnail format on the page.

5. **Optional:** Perform the following operation(s) after the search.

<b>Delete Video File</b>	Select the video file, and click <b>Delete</b> to delete the video file.
<b>Send Email</b>	Select the video file, and click <b>Email</b> to send an email notification with the selected video file attached.

---

### Note

To send an email notification, the email settings need to be configured before proceeding. For details, refer to **Set Email Parameters** .

---


<b>Save Local Video</b>	Select the video file, and click <b>Save as</b> to save a new copy of the video file.
<b>Playback</b>	Double-click the video file to start the local playback.

## 6.5.3 Capture Pictures

You can capture pictures during the live view.

Perform this task when you need to capture pictures during the live view.

### Steps

1. Open Main View page and start the live view of a camera.
2. Perform one of the following operations to capture pictures.
  - Move the cursor to the display window in live view to show the toolbar and click  on the toolbar.
  - Right-click the display window and click **Capture** on the right-click menu.

The captured picture is automatically saved to the local PC, and a small window with the picture preview and saving path information appears in the lower-right corner of desktop.





## Note

The saving path of the captured pictures can be set on the System Configuration page. For details, refer to **Set File Saving Path**.

---


## 6.5.4 View Captured Pictures

The pictures captured in the live view are stored in the PC running the software. You can view the captured pictures if needed.

### Before You Start

Capture pictures in the live view.

### Steps

1. Click  → **File** → **Open Captured Picture** in the upper-right corner to open the Captured Picture page.
2. Select the camera to search the captured pictures from the Camera Group list.
3. Specify the start time and end time in the lower-left corner for the searching.
4. Click **Search**.

The pictures captured between the start time and end time display in thumbnail format on the page.

5. **Optional:** Perform the following operation(s) after the search.

- |                        |   |
|------------------------|---|
| <b>Enlarge Picture</b> | Double-click the picture thumbnail to enlarge it for a better view.   |
| <b>Print Picture</b>   | Select the captured picture, and click <b>Print</b> to print the selected picture.                                    |
| <b>Delete Picture</b>  | Select the captured picture, and click <b>Delete</b> to delete the selected picture.                                  |
| <b>Send Email</b>      | Select the captured picture, and click <b>Email</b> to send an email notification with the selected picture attached. |
| <b>Save Picture</b>    | Select the captured picture, and click <b>Save as</b> to save a new copy of the selected picture.                     |



## 6.6 Instant Playback

Instant playback shows a piece of the video which is remarkable, or which is unclear on the first sight. So you can play the video files instantly on the Main View page and get an immediate review if needed.

### Before You Start

Record the video files and store them on the storage devices, such as the SD/SDHC cards and HDDs on the DVRs, NVRs, network cameras, etc., or on the storage servers.

## Steps

1. Open Main View page and start the live view.
2. Perform one of the following operations to show the pre-play durations' list of instant playback.
  - Move the cursor to the display window to show the toolbar and click .
  - Right-click the display window and select **Switch to Instant Playback** on the right-click menu.
  - Move the cursor to default view or custom view node on the View panel and click .A list with pre-play durations of 30s, 1 min, 3 min, 5 min, 8 min, and 10 min displays.
3. Select a time period from the appeared list to start the instant playback.

### Example

If you select 3 min, and the current time of the live view is 09:30:00, then the instant playback will start from 09:27:00.

During the instant playback, an indicator  appears in the upper-right corner of the display window.

4. **Optional:** Click  again to stop the instant playback and go back for the live view.





## 6.7 Live View for Fisheye Camera

For fisheye cameras, you can start the live view in fisheye mode, set presets and patrols, and perform PTZ control.

### 6.7.1 Perform Live View in Fisheye Mode

During live view of fisheye cameras, the whole wide-angle distorted view will be displayed. But you may have difficulty to view some details. To solve this problem, you can play the live videos in fisheye expansion mode. Fisheye expansion can expand images in various modes: 180° panorama, 360° panorama, PTZ, half sphere, etc. So that you can view the image clearly.

#### Steps

1. Open the Main View page and start the live view of fisheye camera.
2. Enter the Fisheye Expansion mode.
  - Right-click on the video and select **Fisheye Expansion**.
  - Click  in the toolbar. See **Set Icons Shown on Toolbar** for details about setting the toolbar. turns to .
3. Click  in the lower-left corner of the displaying window to open the Mounting Type & Expanding Mode Selection panel.
4. Select the mounting type of the fisheye camera according to its actual mounting position.
5. Select the expanding mode for live view as desired.

#### Fisheye

In the Fisheye view mode, the whole wide-angle view of the camera is displayed. This view mode is called Fisheye because it approximates the vision of a fish's convex eye. The lens

produce curvilinear images of a large area, while distort the perspective and angles of objects in the image.

## Panorama

In the Panorama view mode, the distorted fisheye image is transformed to normal perspective image by some calibration methods.

## PTZ

The PTZ view is the close-up view of some defined area in the Fisheye view or Panorama view, and it supports the electronic PTZ function, which is also called e-PTZ.



### Note

Each PTZ view is marked on the Fisheye view and Panorama view with a specific navigation box. You can drag the navigation box on the Fisheye view or Panorama view to adjust the PTZ view, or drag the PTZ view to adjust the view to the desired angle.

---

## Half Sphere

By the half sphere mode, you can drag the image and rotate it centering on the diameter, in order to adjust the view to the desired angle.

## AR Half Sphere

AR half sphere mode overlaps images far and near, so that you can view a dimensional image in a wide angle.

## 6. Optional: Perform the following operation(s) after starting live view in fisheye mode.

<b>Capture</b>	Right-click on the window and select <b>Capture</b> to capture the picture in the live view process.
<b>Enter Full Screen</b>	Right-click on a playing window and switch the selected window to full-screen mode.

## 6.7.2 PTZ Control in Fisheye Mode

In fisheye mode, you can control the PTZ to adjust the PTZ window.






### Note

The PTZ panel varies according to different devices.

---

The following functions are available on the PTZ control panel.

- Select a PTZ window, and click the direction buttons to adjust view angle. Or drag the No. label in the fisheye or panorama window to change the view angle of the PTZ window.
- Select a PTZ window, click  to start auto-scan (the camera rotates in a horizontal direction) , and click it again to stop auto-scan.
- Drag the slider on  to adjust the speed for PTZ movement.
- Click  , or scroll the mouse wheel to zoom in or zoom out the selected PTZ window.

## Configure Preset

In fisheye mode, you can configure the preset which is a user-defined monitor position/point and simply call the preset No. to change the monitor scene to the defined position.

### Steps

---







Only the specific fisheye cameras support configuring the preset, and up to 256 presets can be configured in fisheye mode.

---

1. Open Main View page and start the live view of fisheye camera.
2. Right-click on the video and select **Fisheye Expansion** to enter the Fisheye Expansion window.
3. Unfold the PTZ control panel in the lower-left corner of the page.



4. Select one PTZ window from the main view windows.
5. **Optional:** On the PTZ control panel, click the preset name (e.g. Preset 1) to edit the preset name.
6. On the PTZ control panel, click the direction button and function button on the PTZ control panel, to adjust the scene to the place you want to mark as a preset.
7. Click  to save the preset settings.
8. **Optional:** Perform the following operation(s) after setting the preset.
  - Call Preset** Select the preset and click  to call the preset. You can also press the number key (e.g., **4**) on keyboard to call the preset 1 to 9, and press **[, number keys (e.g., **124**), and **J**** on keyboard to call the other preset.
  - Edit Preset** Adjust the direction, position and view of the PTZ camera, and then and click  to save the preset again. The old preset settings will be replaced.
  - Delete Preset** Select the configured preset from the list and click  to delete it.

### Configure Patrol

In fisheye mode, you can configure the patrol, which is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable.

#### Before You Start






Configure two or more presets.

#### Steps




#### Note

Only the specific fisheye cameras support configuring the patrol, and up to 32 patrols can be configured in fisheye mode.

1. Open Main View page and start the live view of fisheye camera.
2. Right-click on the video and select **Fisheye Expansion** to enter the Fisheye Expansion window.
3. Click  tab to enter the patrol configuration panel.
4. Select a path No. from the drop-down list.
5. Click  to open Add Patrol No. window.
6. Click **OK**.
7. Repeat step 5, 6, and 7 to add other presets to the patrol.
8. **Optional:** Perform the following operation(s) after configuring the patrol.
  - Edit Preset in Patrol** Select a preset in the patrol path and click  to edit the preset.
  - Remove Preset from Patrol** Select a preset in the patrol path and click  to remove the preset from the patrol.
  - Call Patrol** Click  to call the patrol.

## Stop Calling Patrol

Click  to stop calling the patrol.

## 6.8 Perform Master-Slave Linkage

The box or bullet camera which supports master-slave tracking function can locate or track the target according to your demand.

---

### Note

- This function is only supported by the specific box or bullet camera.
  - A speed dome with the auto-tracking function is required to be installed near the box or bullet camera.
- 



### 6.8.1 Configure Master-Slave Tracking Rule

Before performing master-slave tracking during live view, you should configure the master-slave tracking rules for the box or bullet camera, including setting VCA detection rule, linking to a speed dome, and calibrating camera and speed dome.

#### Set Intrusion Detection Rule

You should set the VCA detection rule for the bullet or box camera, and when the VCA event is triggered, the client can trigger speed dome to track the target. Here we take intrusion detection as an example.

##### Steps

1. Open Device Management page and select a box or bullet camera.
2. Click  → **Advanced Configuration** → **VCA Config** → **Rule** → **Rule Settings** to enter rule settings page.
3. Click **Add** in Rule List panel to add a rule.
4. Select **Intrusion** as the event type.
5. Click  to draw a detection region on the live video.
6. Click **Save**.


#### Link Speed Dome

When configuring the master-slave tracking for the box or bullet camera, you can link the camera to a speed dome and set the PTZ position for the speed dome for tracking.

Perform this task to link the box or bullet camera to a speed dome for master-slave tracking.

##### Steps

1. Open Device Management page and select a box or bullet camera.

2. Click  → **Advanced Configuration** → **Master-Slave Tracking** to enter master-slave tracking settings page.
3. Click **Login** on the display window to open the speed dome login window.
4. Input the speed dome's IP address, port No., user name, and password.
5. Click **Login** to log in to the speed dome.
6. Click **PTZ** and use the direction arrows to adjust the speed dome to a horizontal position.

### What to do next

Calibrate the box or bullet camera and the linked speed dome, see ***Calibrate Camera and Speed Dome Automatically*** or ***Calibrate Camera and Speed Dome Manually*** for details.


## Calibrate Camera and Speed Dome Automatically

When setting the bullet or box camera's master-slave tracking rule, you should calibrate the camera and the speed dome. Two calibration modes, including auto and manual, are available, here we introduce the auto calibration.

### Before You Start

Link the camera to a speed dome, see ***Link Speed Dome*** for details.

### Steps

1. Open Device Management page and select a box or bullet camera.
2. Click  → **Advanced Configuration** → **Master-Slave Tracking** to enter master-slave tracking settings page.
3. Select the calibration mode as **Auto Calibrating** in the lower-right corner of Calibration panel.
4. Move and zoom in/out the view of speed dome to make sure the live views of dome and camera are mostly same.
5. Click **Save**.



## Calibrate Camera and Speed Dome Manually

When setting the bullet or box camera's master-slave tracking rule, you should calibrate the camera and the speed dome. Two calibration modes, including auto and manual, are available, here we introduce the manual calibration.

### Before You Start

Link the camera to a speed dome. See ***Link Speed Dome*** for details.

### Steps


1. Open Device Management page and select a box or bullet camera.
2. Click  → **Advanced Configuration** → **Master-Slave Tracking** to enter master-slave tracking settings page.
3. Select the calibration mode as **Manual Calibrating** in the lower-right corner of Calibration panel.
4. Select site No. 1 from the list and click .



A blue cross appears in the center of the live view page, and the digital zoom view of the selected site appears on the right.

5. Repeat step 4 to add other manual calibration sites.
6. Adjust the distances among the four calibration sites evenly in the live view page.
7. Select the calibration site No. 1.

The digital zoom view of site No. 1 appears at the right.

8. Move and zoom in or out the view of speed dome to make sure the live views of speed dome and the digital zoom view of selected site are mostly same.
9. Click  to save the current site position information.
10. Repeat step 7, 8, and 9 to set other sites' position.
11. Click **Save**.

### 6.8.2 Enable Master-Slave Tracking

During live view, you can enable the master-slave tracking to locate or track the target appeared in the view of bullet or box camera with a speed dome.

#### Before You Start

Configure the master-slave tracking rules for the box or bullet camera.

Perform this task when you need to enable the master-slave tracking for box or bullet camera.

#### Steps

1. Enter the Main View page and start the live view of box or bullet camera.
2. Right-click on the live view window and click **Enable Master-Slave Tracking**.

When the configured VCA rule is triggered by target, the linked speed dome performs the automatic master-slave tracking and the target frame turns from green into red.

### 6.9 Live View for Thermal Camera

For thermal camera, you can view the fire source information and temperature during live view. You can also measure the temperature manually to get temperature information in the live view image.

#### 6.9.1 View Fire Source Information during Live View

During the live view, you can view the detected fire source information.

#### Before You Start

Configure the alarm rules for the thermal device, see the user manual of the device for details.

Perform this task when you need to view the fire source information during live view.

#### Steps

1. Enter Main View page and start the live view of a thermal camera.

---

## Note

For starting and stopping live view, refer to *Start Live View for One Camera* and .

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2. Right-click on the live view image and select **File Source Information** in the right-click menu to show the list of information types.
3. Select a information type in the list to display the information.

### **Fire Source Region**

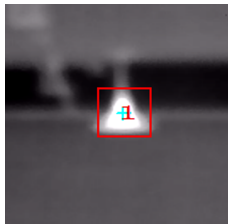
The region in which the temperature is higher than the configured alarm threshold.

### **Maximum Temperature Region**

Mark the region in which the temperature is highest in the fire source region. It is marked in green.

### **Fire Source Target**

Display the target location information.



**Figure 6-3 Fire Source Information on Live View Image**

## **6.9.2 Show Temperature Information on Live View Image**

You can show or hide the real-time temperature information of the monitoring scene when viewing the live video.

### **Before You Start**

- Switch the device VCA source type as **Temperature Measurement + Behavior Analysis**.
- Enable the device temperature measurement function and set the temperature measurement rules, see the user manual of the device for details.

Perform this task when you need to show the temperature information on the live view image.

### **Steps**

1. Enter Main View page and start the live view of a thermal camera.

---

## Note

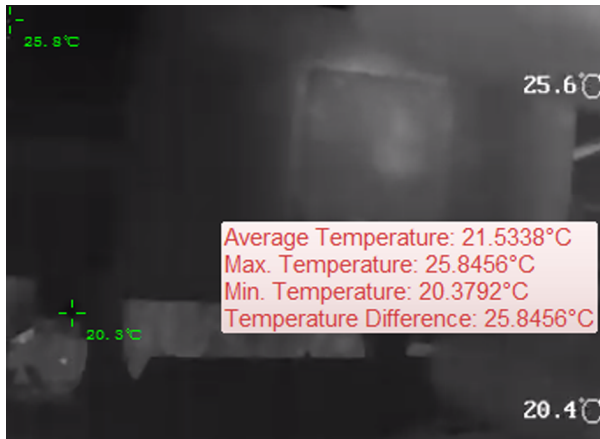
For starting live view, refer to *Start Live View for One Camera* .

---

2. Adjust the scene to the area configured with temperature measurement rule.
3. Right-click on the live view image and select **Show Temperature Information** in the right-click menu.

The temperature displays on the live view image.

4. Click on the image to view the detailed temperature information.



**Figure 6-4 Temperature Information on Live View Image**

5. **Optional:** Right-click on the live view image and select **Hide Temperature Information** to hide the temperature information.

### 6.9.3 Manually Measure Temperature

During the live view of thermal camera, you can click anywhere on the live view image to show the temperature of different points to locate the fire resource quickly.

#### Steps

---

##### **Note**

- The measured temperature will be displayed on the image for 5 seconds.
  - Only one point's temperature can be displayed.
  - When multiple clients are getting the live video of one camera, if one client adds or deletes the measurement points, other clients' live view will be affected as well. The measurement points will be cleared if all users stop live view of the camera.
- 

1. Enter Main View page and start the live view of a thermal camera.
- 

##### **Note**

For starting and stopping live view, refer to **Start Live View for One Camera** and .

---

2. Right-click on the live view image and select **Show Temperature Information**.
3. Click on the live view image to show the temperature of this position.  
The temperature of the clicked points is shown on the image.

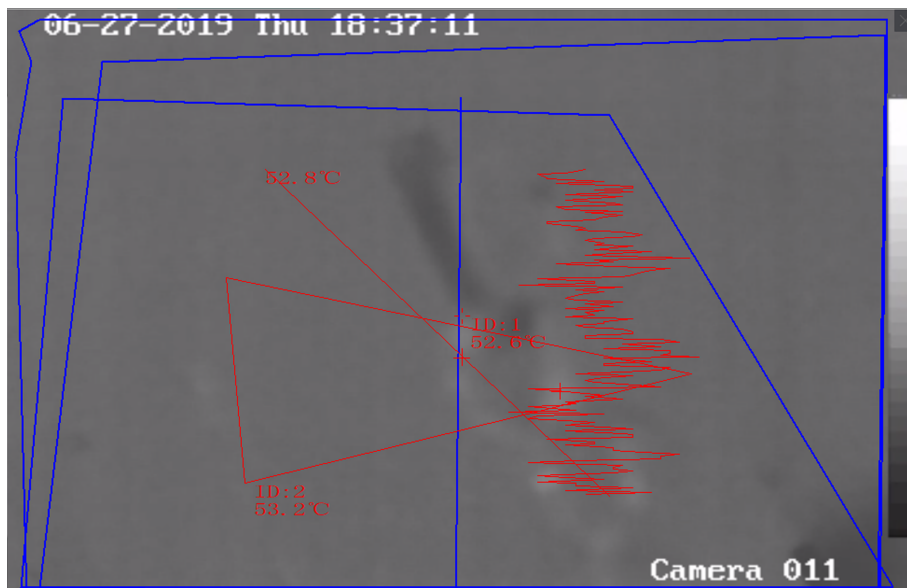


Figure 6-5 Manually Measure Temperature on Points

4. **Optional:** Right-click on the live view image and select **Hide Temperature Information** on the menu.

## 6.10 Live View in Low Bandwidth

In situation of low network bandwidth, the speed of video streaming might be much slower due to the bandwidth limit. To provide normal quality in less streaming speed for low bandwidth users, the client provides live view in low bandwidth mode. Before that, you need to set the streaming protocol and perform other operations first.

For details about the settings, refer to ***How to get better performance of live view and playback when network bandwidth is low?*** .

## 6.11 More Functions

There are some more functions supported in the live view, including auxiliary screen preview, digital zoom, channel-zero, two-way audio, camera status, and synchronization.

### Auxiliary Screen Preview

Display the live video on different auxiliary screens for the convenient preview of multiple monitoring scenes.

---

#### Note

Up to 3 auxiliary screens are supported.

---

### Digital Zoom

Drag the mouse to draw a rectangle area in the lower-right/upper-left direction to zoom in or out the drawn area. Or use the mouse wheel to zoom in or out the view in digital zoom mode.

### Channel-Zero

For the channel-zero of the device, hold the **Ctrl** key and double-click to display the specific channel. Hold the **Ctrl** key and double-click again to restore.

### Two-Way Audio

Two-way audio function enables the voice talk of the camera. You can get not only the live video but also the real-time audio from the camera. If the device has multiple two-way audio channels, you can select a channel to start two-way audio.



#### Note

- The two-way audio can be used for only one camera at one time.
  - Cloud P2P device doesn't support selecting channel during two-way audio.
- 

### Camera Status

The camera status, such as recording status, signal status, connection number, etc., can be detected and displayed for checking. The status information refreshes every 10 seconds.

### Synchronization

The synchronization function provides a way to synchronize the device clock with the PC which runs the client software.

## Chapter 7 Remote Storage Configuration

The video files and captured pictures can be stored on the HDDs, Net HDDs, or SD/SDHC cards on the local device, or on the storage server connected.

### 7.1 Store Picture and Video on DVR, NVR, or Network Camera

Some local devices, including the DVRs, NVRs, and Network Cameras, provide storage devices such as the HDDs, Net HDDs and SD/SDHC cards for video and picture files. You can set a recording schedule or capture schedule for the channels of the local devices.

#### Before You Start

Make sure the newly installed storage devices have been formatted. Refer to *Format Storage Server's HDD* for details.

Perform this task when you need to store the picture and video files on the encoding device such as DVR, NVR, or network camera.

#### Steps

---



#### Note

The pictures captured through the capture schedule are stored on the local device and can be searched on the remote configuration page of the device.

---

1. Enter the Storage Schedule module.
2. Select the camera in the Camera Group list.
3. Set **Recording Schedule** switch or **Capture Schedule** switch to ON on **Storage on Encoding Device** area to enable device local recording or capture.
4. Select the recording or capture schedule template from the drop-down list.

#### All-day Template

All-day continuous recording.

#### Weekday Template

Working-hours continuous recording from 8:00 AM to 8:00 PM.

#### Event Template

All-day event triggered recording.

#### Template 01 to 08

Fixed templates for specific schedules. You can edit the templates if needed.

#### Custom

Customize a template as you want.

---

 **Note**

If you need to edit or customize the template, refer to ***Configure Recording Schedule Template*** or ***Configure Capture Schedule Template***.

---

5. Click **Advanced** of Recording Schedule to set the recording advanced parameters.
- 

 **Note**

The displayed items vary according to the devices.

---

**Pre-record**

Normally used for the event triggered record, when you want to record before the event happens.

**Post-record**

After the event finished, the video can also be recorded for a certain time.

**Keep Video Files for**

The time for keeping the video files in the storage device, once exceeded, the files will be deleted. The files will be saved permanently if the value is set as 0.

**Redundant Recording**

Save the video files not only in the R/W HDD but also in the redundant HDD.

**Record Audio**

Record the video files with audio or not.

**Video Stream**

Select the stream type for the recording.

---

 **Note**

For specific type of devices, you can select **Dual-Stream** for recording both main stream and sub-stream of the camera. In this mode, you can switch the stream type during remote playback. Refer to ***Normal Playback*** for stream switch during playback.

---

6. Click **Advanced** of Capture Schedule to set the capture advanced parameters.

**Resolution**

Select the resolution for the continuous or event captured pictures.

**Picture Quality**

Set the quality for the continuous or event captured pictures.

**Interval**

Select the interval which refers to the time period between two capturing actions.

**Captured Picture Number**

Set the picture number for event capture.

7. **Optional:** Click **Copy to...** to copy the recording schedule settings to other channels.
-

8. Click **Save** to save the settings.

## 7.2 Store Video on Storage Device

You can store the video files recorded by the added encoding devices on the storage devices managed in the client.

You can add storage device to the client for storing the video files of the added encoding devices and you can search the files for remote playback. The storage device can be iVMS-4200 Storage Server, CVR (Center Video Recorder), or other NVR.

Here we take the settings of iVMS-4200 Storage Server as an example.



The iVMS-4200 Storage Server application software needs to be installed and it is packed in the client installation package. After running the installation package, select **Storage Server** to enable the installation of iVMS-4200 Storage Server.


---

### 7.2.1 Activate Storage Server

If it is the first running the iVMS-4200 Storage Server, you are required to active the storage server.

Perform this task when you need to activate storage server.

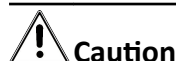
#### Steps

1. Click  on the desktop to run the iVMS-4200 Storage Server.



- If the storage server port (value: 8000) is occupied by other service, a dialog will pop up. You should change the port No. to other value to ensure the proper running of the storage server.
  - You can also record the video files on the iVMS-4200 Storage Server installed on another PC.
- 

2. Enter the **New Password** and **Confirm Password**.



The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

3. Click **OK** to change the password.



After changing the password, the storage server will run automatically.

### 7.2.2 Add Storage Server to Client

You can add storage server to the client for storing the video files of the added encoding devices.

#### Steps

1. Enter the Device Management module.
2. Click **Device** tab.

The added devices are displayed in the list.

3. Add iVMS-4200 Storage Server.
  - You can add online storage server. For details, refer to **Add an Online Device** .
  - You can add storage server via IP address or domain name. For details, refer to **Add Device by IP Address or Domain Name**

### 7.2.3 Format Storage Server's HDD

You should format the HDDs of the storage server for the video file storage.

Perform this task to format storage server's HDD.


#### Steps



Formatting the HDDs is to pre-allocate the disk space for storage and the original data of the formatted HDDs will not be deleted.

---

1. Enter the Device Management module.
2. Click **Device** tab.

The added devices are displayed in the list.
3. Select the added storage server from the list.
4. Click  .
5. Click **Storage** → **General** to enter the HDD Formatting window.
6. Select the HDD from the list and click **Format**.

You can check the formatting process from the process bar and the status of the formatted HDD changes from **Unformatted** to **Normal Status**.

### 7.2.4 Configure Storage Settings

When the storage server is available, you can set the recording schedule for the cameras.

#### Before You Start

The newly installed storage devices need to be formatted.

## Steps

1. Enter **Storage Schedule** module.
2. Select the camera in the Camera Group list.
3. Select a storage server from the **Storage Server** drop-down list.
4. Set **Recording Schedule** switch to ON to enable storing the video files.
5. Select the schedule template for recording from the drop-down list.

---

### Note

If you need to edit or customize the template, refer to ***Configure Recording Schedule Template***.

---

6. **Optional:** For Recording Schedule, click **Advanced** to set the pre-record time, post-record time, video stream, and other parameters.

---

### Note

The iVMS-4200 Storage Server only supports main-stream.

---

7. Click **Save** to save the settings.

## 7.3 Store Picture and Additional Information on Local PC

You can store the pictures and the additional information, such as the heat map, people counting data, and road traffic data, to the local PC.

Perform this task when you need to store pictures and additional information on local PC.

### Steps

1. Enter **Storage Schedule** module.
2. Select the camera in the Camera Group list.

---

### Note

This function should be supported by the device.

---

3. Select storage content.

#### **Picture Storage**

Store the alarm pictures of the camera when event occurs. You can click **System Configuration** → **File** to modify the saving path of pictures.

#### **Additional Information Storage**


Store the additional information (e.g., heat map, people counting data, etc.) on local PC.

4. Click **Save** to save the settings.


## 7.4 Configure Recording Schedule Template

You can edit the recording schedule template, or customize a recording schedule template.


## Steps

1. Enter the Storage Schedule module.
2. Open the template settings window.
  - Select **Template 01** to **Template 08** from the drop-down list and click **Edit**.
  - Select **Custom** from the drop-down list.
3. Drag on the time-line to set the time periods for the selected template when the cursor turns to  .

### Continuous

Normal and continuous recording. The schedule time bar is marked with  .

### Event Recording

The recording is triggered by event. The schedule time bar is marked with  .

### Command

The recording triggered by command. The schedule time bar is marked with  .



#### Note

Command triggered recording is only available for the ATM transactions when the ATM DVR is added to the client.

---








#### Note

Up to 8 time periods can be set for each day in the recording schedule.

---

4. **Optional:** After setting the time periods, you can do one or more of the following:

<b>Move</b>	Drag a time period to move it when the cursors turns to  .
<b>Lengthen or Shorten</b>	Select a time period and then lengthen or shorten it when the cursor turns to  .
<b>Set Accurate Time</b>	Click a time period to set the accurate start time and end time of the period.
<b>Delete</b>	Select the configured schedule time period and click  to delete it.
<b>Delete All</b>	Click  to delete all the configured time periods.
<b>Copy to</b>	Select one date and click  to copy the date's time period settings to the other dates.
5. **Optional:** For template 01 to 08, you can edit the template name as you want.
6. Click **OK** to save the settings.



#### Note


If you select **Custom** to customize a template, you can click **Save as Schedule Template**, and then the custom template can be saved as template 01 to 08.

---


## 7.5 Configure Capture Schedule Template

You can edit the capture schedule template, or customize a capture schedule template.


### Steps

1. Enter the Storage Schedule module.
2. Open the template settings window.
  - Select **Template 01** to **Template 08** from the drop-down list and click **Edit**.
  - Select **Custom** from the drop-down list.
3. Drag on the time-line to set time periods for the selected template when the cursor turns to .






### Continuous Capture

Normal and continuous capture. The schedule time bar is marked with .

### Event Capture

The capture is triggered by event. The schedule time bar is marked with .

4. **Optional:** After setting the time period, you can do one or more of the followings

- |                            |  |
|----------------------------|--|
| <b>Move</b>                | When the cursor turns to  , you can move the time period you just edited. You can also edit the displayed time point to set the accurate time period. |
| <b>Lengthen or Shorten</b> | When the cursor turns to  , you can lengthen or shorten the selected time period.   |
| <b>Delete</b>              | Select a time period and click  to delete it.   |
| <b>Delete All</b>          | Click  to delete all the configured time periods.   |
| <b>Copy to</b>             | Select one date and click  to copy the date's time period settings to the other dates.  |

5. **Optional:** For template 01 to 08, you can edit the template name as you want.

6. Click **OK** to save the settings.



### Note

If you select **Custom** to customize a template, you can click **Save as Schedule Template**, and then the custom template can be saved as template 01 to 08.

---

## Chapter 8 Remote Playback

You can search the video files stored in the local device or the storage server by camera or triggering event, and then play them remotely.


### Note

You can set to play back the video files stored in the local device, in the storage server, or both in the storage server and local device. For details, refer to ***Set Live View and Playback Parameters***.

### 8.1 Normal Playback

You can search video files by camera or group for normal playback and download found video files to local PC. You can also add a tag to mark important video footage, and so on.

You can right-click the playback window to select the required operations from the shortcut menu. Some are listed as follows:

Name	Description
Show/Hide Temperature Information	Show/Hide Temperature Information   <b>Note</b> The temperature information overlay is only supported by thermal camera.
Tag Control	Add default (the default tag name is TAG) or custom tag (the tag name is customized) for the video file to mark the important video point. You can also edit the tag or go to the tag position conveniently.
Other Capture Modes	<ul style="list-style-type: none"> <li>• <b>Print Captured Picture:</b> Capture a picture and print it.</li> <li>• <b>Send Email:</b> Capture the current picture and then send an Email notification to one or more receivers. The captured picture can be attached.</li> <li>• <b>Custom Capture:</b> Capture the current picture. You can edit its name and then save it.</li> </ul>

---



## Note

- The Cloud P2P device only supports normal playback and it also does not support the functions of reverse playback, slow forward or fast forward, and adding tag.
  - For NVR which is added to the client by device's other user name (except admin), if **Double Verification** is enabled on this NVR, when playing back videos on the client, you are required to enter the user name and password created for double verification. For details about double verification, refer to the user manual of the NVR.
- 



## 8.1.1 Search Video Files

You can search the video files by date, and you can also enter keyword to filter the matched results for normal playback.

### Steps

1. Enter the Remote Playback module.
  2. Click  on the left to enter the Event Playback page.
  3. **Optional:** Click  to set the start date and end date of searching time period.
- 

## Note

In the calendar, the date which has video files recorded by schedule will be marked with , and the date which has video files recorded based on event will be marked with .

---

4. Start the playback of camera (s) to search the video files of the selected camera (s). You can do one of the followings to start the playback.
- 

## Note

Up to 16 cameras can be searched simultaneously.

---

- Drag the camera or group to a display window.
  - Select a display window and double-click the camera or group to start playback in the selected window.
  - Double-click the cameras in turn to select the display window automatically and start playback in the windows.
- 

## 8.1.2 Play Video Files

After searching the video files for the normal playback, you can play the video via time line.



### Steps

1. Enter the Remote Playback module.
  2. Search the video files.
  3. Play video via time line.
-







The video files will play automatically. You can click on the time line to position the desired video segment of specified time for normal playback.

---

## Note

- The time line indicates the time duration for the video files, and the video files of different types are color coded.
  - You can use mouse wheel or click  /  to scale up or scale down the time line bar.
- 

4. **Optional:** Perform the following operations on the toolbar to control the playback.

<b>Single Frame (Reverse)</b>	Click  or scroll down the mouse wheel to play the video files frame by frame (reverse).
<b>Audio Control</b>	Click  or  to turn off/on the sound. You can also adjust the volume when turning on.
<b>Download for Multiple Cameras</b>	Click  to download video files of multiple cameras at the same time.
	<hr/> <h2> Note</h2> <p>For more details, refer to <b><i>Download for Multiple Cameras</i></b> .</p> <hr/>
<b>Download Video Files by Date</b>	Click  to download the video files of the camera by date and store them to local PC.
<b>Accurate Positioning</b>	Click <b>2018/10/19 08:56:11</b> to set the accurate time point to play the video file.

## 8.2 Alarm Input Playback

When the alarm input is triggered and the linked video can be searched for alarm input playback. This function requires the support of the connected device.

For the description of the alarm input playback toolbar and right-click menu of display window, refer to ***Normal Playback*** .

---

## Note


Some icons may be not available for alarm input playback.


---

### 8.2.1 Search Video Files

You can search the video files by date, and you can also enter keyword to filter the matched results for alarm input playback.

#### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the Event Playback page.

3. Select an alarm input channel at the left.
4. **Optional:** Click  to set the start date and end date of searching time period.
5. Select **Alarm Input** from the drop-down list as the event type.
6. Click **Search** to start the search.


The matched video files of the selected alarm input will display on the right page in chronological order. And by default, the first video file will play automatically.

7. **Optional:** Enter keyword in the **Search** field to filter the results.

### 8.2.2 Play Video Files

After searching the video files for the alarm input playback, you can play the video via file list or timeline.

#### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the Event Playback page.
3. Search the video files of the alarm input.



#### Note



See **Search Video Files** for details about searching video files of the alarm input.

---

4. Play video via file list or timeline.
  - Double-click the video file to play the video in the playback display window.
  - Click on the timeline to positioning the desired video segment of specified time for alarm input playback.



#### Note

- The timeline indicates the time duration for the video files, and the video files of different types are color coded.
  - You can use mouse wheel or click  /  to scale up or scale down the timeline bar.
- 

## 8.3 Event Playback

The recorded video files triggered by event, such as motion detection, VCA detection, or behavior analysis, can be searched for event playback. This function requires the support of the connected device.

For the description of the event playback toolbar and right-click menu of display window, refer to **Normal Playback**.



#### Note

Some icons may be not available for event playback.



---



## 8.3.1 Search Video Files



You can search the video files by date and by event type. And you can also enter keyword to filter the matched results for event playback.

### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the Event Playback page.
3. Select the camera at the left.
4. **Optional:** Click  to set the start date and end date of searching time period.

---

### Note

In the calendar, the date which has video files recorded by schedule will be marked with , and the date which has video files recorded based on event will be marked with .

---


5. Select an event type from the drop-down list.
6. Click **Search** to start the search.

The matched video files will display on the right page in chronological order. And by default, the first video file will play automatically.
7. **Optional:** Enter keyword in the **Search** field to filter the results.

## 8.3.2 Play Video Files



After searching the video files for the event playback, you can play the video via file list or timeline.

### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the Event Playback page.
3. Search the video files recorded based on event.
4. Play the video file.
  - Double-click the video file to play the video in the playback display window.
  - Click on the timeline to positioning the desired video segment of specified time for event playback.

---

### Note

- The timeline indicates the time duration for the video files, and the video files of different types are color coded.
  - You can use mouse wheel or click  /  to scale up or scale down the timeline bar.
-

## 8.4 ATM Playback

You can search the video files of ATM DVR for ATM playback. This function requires the support of the connected device which is configured with transaction rule.

For the description of the ATM playback toolbar and right-click menu of display window, refer to **Normal Playback**.





Some icons may be not available for ATM playback.

---

### 8.4.1 Search Video Files

You can search the video files of ATM DVR by card number, by transaction type, by transaction amount, by file type, or by date. And you can also enter keyword to filter the matched results for ATM playback.

#### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the ATM Playback page.
3. Select the camera of ATM DVR at the left.
4. **Optional:** Click  to set the start date and end date of searching time period.
5. Set the search conditions.

#### by Card Number

Enter the card number contained in the ATM information.

#### Search by Transaction Type

Select transaction type for search, and enter the related transaction amount.

#### File Type

Select the type of video files for search.

6. Click **Search** to start searching.

The matched video files of selected ATM DVR will display on the right of the Remote Playback page in chronological order. By default, the first video file will play automatically.


7. **Optional:** Enter keyword in the **Search** field to filter the results.

### 8.4.2 Play Video Files

After searching the video files of the cameras connected with ATM DVR, you can play the video via file list or timeline.



#### Steps

1. Enter the Remote Playback module.

2. Click  on the left to enter the ATM Playback page.
3. Search the video files of cameras connected with ATM DVR.
4. Play the video file.
  - Double-click the video file to play the video in the playback display window.
  - Click on the timeline to positioning the desired video segment of specified time for ATM playback.

---

### Note

- The timeline indicates the time duration for the video files, and the video files of different types are color coded.
  - You can use mouse wheel or click  /  to scale up or scale down the timeline bar.
- 

## 8.5 POS Playback

You can search the video files which contain POS information for POS playback. This function requires the support of the connected device which is configured with POS text overlay.

For the description of the POS playback toolbar and right-click menu of display window, refer to **Normal Playback** .

---

### Note



Some icons may be not available for POS playback.

---

### 8.5.1 Search Video Files

You can search the video files which contain POS information by keywords or by date.

#### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the POS Playback page.
3. Select the camera at the left.
4. **Optional:** Click  to set the start date and end date of searching time period.
5. Set the search conditions.

#### Keywords

Enter the card number contained in the ATM information.

---

### Note

Up to three keywords can be entered for once. And each two keywords should be separated with a comma.

---

#### Combination Mode

For more than one keyword, you can select "or (|)" to search the POS information containing any of the keywords, or select "and(&)" to search the POS information containing all of the keywords.

### Case Sensitive

Check **Case Sensitive** to search the POS information by case-sensitive keywords.

6. Click **Search** to start searching.

The video files contain POS information will display on the right of the POS Playback page in chronological order. And by default, the first video file will play automatically.

7. **Optional:** Enter keyword in the **Search** field to filter the results.


### 8.5.2 Play Video Files

After searching the video files which contain POS information, you can play the video via file list or timeline.

#### Before You Start



Start the normal playback of cameras configured with POS information overlay.

#### Steps

1. Enter the Remote Playback module.
2. Click  on the left to enter the POS Playback page.
3. Search the video files which contain POS information.
4. Play video via file list or timeline.
  - Double-click the video file to play the video in the playback display window.
  - Click on the timeline to positioning the desired video segment of specified time for POS playback.



#### Note

- The timeline indicates the time duration for the video files, and the video files of different types are color coded.
  - You can use mouse wheel or click  /  to scale up or scale down the timeline bar.
- 

### 8.6 VCA Playback

You can set VCA rule to the searched video files and find the video that VCA event occurs, such as motion detection, line crossing detection, and intrusion detection. This function helps to search out the video that you may be more concerned and mark it with red color.


## Steps

---

### Note

For some devices, you can filter the searched video files by setting the advanced attributes, such as the gender and age of the human and whether he/she wears glasses.

---

1. Enter the Remote Playback module.
  2. Click  on the left to enter the Camera Playback page.
  3. Select the camera and start the normal playback.
- 

### Note

Refer to **Play Video Files** for details.

---

4. Right-click the display window to pop up the shortcut menu.
5. Click **VCA Search** and enable the VCA Type, draw the detection region and set the sensitivity.

#### **Motion Detection**

Get all the related motion detection events that occurred in the pre-defined region.

#### **Line Crossing Detection**

Bi-directionally detect people, vehicles and other moving objects that cross a virtual line.

#### **Intrusion Detection**


Detect whether there are people, vehicles and other moving objects intruding into the pre-defined region.

---

### Note

You can click **VCA Settings** to set the sensitivity and filter the searched video files by setting the target characters, such as the gender and age of the human and whether he/she wears glasses. This function should be supported by the device.

---

6. **Optional:** Click  to set the start date and end date of searching time period.
7. Start the VCA playback.

The VCA events occurred in the defined area will be red marked on the timeline.

---

### Note

- By default, the playback speed of concerned video will be 1X, and the playback speed of unconcerned video will be 8X.
  - You can set to skip the unconcerned video during VCA playback in System Configuration and the unconcerned video won't be played during VCA playback. Refer to **Set Live View and Playback Parameters** for details.
-

## 8.7 Synchronous Playback

In synchronous playback, the video files can be played back in synchronization.

Perform this task when you need to play the video files in synchronization.



### Steps

---

#### Note

Video files from up to 16 cameras can be played back simultaneously.

---

1. Enter the Remote Playback module.
2. Start playback of at least two cameras.
3. Click  in the toolbar to enable the synchronous playback.  
The camera under playback will start synchronous playback.
4. Click  to disable the synchronous playback.

## 8.8 Fisheye Playback

You can play the video files of a fisheye camera in fisheye expansion mode.

### Steps

---

#### Note

For other playback control instruction, refer to **Normal Playback** . Some icons may not be available for fisheye playback.


---

1. Enter the Remote Playback module.
  2. Select a fisheye camera to start playback.
- 

#### Note

For detailed configuration about playback and playback control, refer to **Normal Playback** .



---

3. Enter the Fisheye Expansion mode.
    - Right-click on the display window and select **Fisheye Expansion**.
    - Click  in the toolbar. See **Set Icons Shown on Toolbar** for details about setting the toolbar.
- 

#### Note

The mounting type in playback of fisheye expansion is set according to the mounting type in live view. For details, refer to **Perform Live View in Fisheye Mode**

---

 turns to .

4. Select the expanding mode for playback as you desired.  
**Fisheye**

In the Fisheye view mode, the whole wide-angle view of the camera is displayed. This view mode is called **Fisheye** because it approximates the vision of a fish's convex eye. The lens produces curvilinear images of a large area, while distorting the perspective and angles of objects in the image.

### **Panorama / Dual-180° Panorama / 360° Panorama**

In the Panorama view mode, the distorted fisheye image is transformed to normal perspective image by some calibration methods.

### **PTZ**

The PTZ view is the close-up view of some defined area in the Fisheye view or Panorama view, and it supports the electronic PTZ function, which is also called e-PTZ.

---

#### **Note**

Each PTZ view is marked on the Fisheye view and Panorama view with a specific navigation box. You can drag the navigation box on the Fisheye view or Panorama view to adjust the PTZ view, or drag the PTZ view to adjust the view to the desired angle.

---

### **Half Sphere**

By the half sphere mode, you can drag the image and rotate it centering on the diameter, in order to adjust the view to the desired angle.

### **AR Half Sphere**

AR half sphere mode overlaps images far and near, so that you can view a dimensional image in a wide angle.

- 5. Optional:** Right-click on a playing window in the Fisheye view mode and you can switch the selected window to full-screen mode.

---

#### **Note**

You can right-click on the window and select **Quit Full Screen** to exit the full-screen mode.

---

## **8.9 Playback in Low Bandwidth**

In situation of low network bandwidth, the speed of video streaming might be much slower due to the bandwidth limit. To provide normal quality in less streaming speed for low bandwidth users, the client provides playback in low bandwidth mode. Before that, you need to set the streaming protocol and perform other operations first.

For details about the settings, refer to ***How to get better performance of live view and playback when network bandwidth is low?*** .

## Chapter 9 Download Video Footage

During playback, you can download the video files of one camera or multiple cameras to the local PC.

---

### Note

- You cannot download the video files of Cloud P2P device.
  - For NVR which is added to the client by device's other user name (except admin), if **Double Verification** is enabled on this NVR, when playing back videos on the client, you are required to enter the user name and password created for double verification. For details about double verification, refer to the user manual of the NVR.
- 

### 9.1 Download Video Footage by Date

During playback, you can download the video footage of the camera and save in the local PC.

#### Steps

1. Enter Remote Playback page and select a camera to start playback.

---

### Note

For details about starting playback, refer to *Remote Playback* .

---

2. Right click on the image and click **Download**.
3. Set the start and end time of the video footage to download.
4. Enter a name for the video footage.
5. Click **OK** to start downloading the video footage to the local PC.

### 9.2 Download for Multiple Cameras

During the playback of multiple cameras, you can download the video files of multiple cameras by date simultaneously.

#### Steps


1. Enter Remote Playback page and select multiple cameras to start playback.

---

### Note

For details about starting playback, refer to *Remote Playback* .

---

2. Click  to open the Download for Multiple Cameras window.  
All the cameras in playback will be displayed.
3. Select the cameras you want to download video files for.
4. Set the start time and end time of video duration for each camera.



5. **Optional:** Check **Download Player** to download the player.
6. Click **Download** to start downloading the video files of the configured duration(s) to the local PC.

The progress bar shows the downloading process of each camera's video files.

7. **Optional:** Click **Stop** to stop downloading manually.



### **Note**

Up to 16 cameras' video files can be downloaded simultaneously.

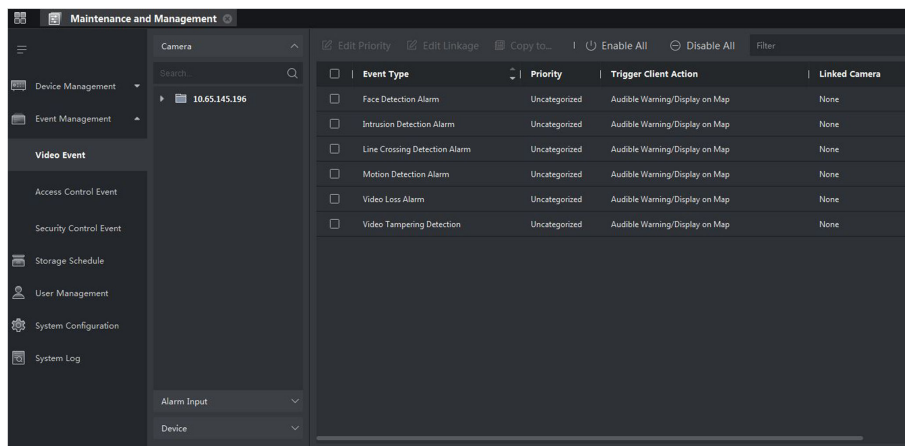
---

## Chapter 10 Configure Video Event

Even if you are far away from the video device (cameras, alarm inputs and encoding devices, decoding devices), you can still know what happens and how urgent the event is by configuring linked actions of video event on the client. You will be notified on the client once an event is triggered, so that you can response to the event instantly. You can also configure client actions of video devices in a batch at a time.

### Steps

1. Click **Event Management** → **Video Event** to enter the video event configuration page.



**Figure 10-1 Video Event Configuration**

2. On the left panel, select the event source type: **Camera**, **Alarm Input**, or **Device**, and then select the specific source in the device list.

#### **Note**

Make sure the device is online.

All the events supported by the selected device will be displayed.

3. **Optional:** Turn on the switch on the Enable column to enable the event, or click **Enable All** to enable all the events of this device.

#### **Note**

After enabled, the event can be received by the software client and trigger the linkage action(s).

4. **Optional:** Turn off the switch on the Enable column to disable this event, or Click **Disable All** to disable all the events of this device.

#### **Note**

After disabled, the event received by the software client can not trigger the linkage action(s).

5. **Optional:** Select the event(s), and then click **Edit Priority** to edit the priority of the event(s).

---

### **Note**

Priority represents the emergency degree of the event.


---

6. Select the event(s), and then click **Edit Event Linkage** to edit the linkage action(s) of the event(s).

#### **Audible Warning**

Trigger the client's audible warning when the event is triggered.

You can select the audio file on the drop-down list, or click **Add** to add new audio file (in WAV format).

You can click  to make an audition of the selected audio file.

#### **Send Email**

Send an email notification of the alarm information to one or more receivers.

For details about setting email parameters, refer to **Set Email Parameters** .

#### **Pop-up Window**

Pop-up window to display the event related information (including event details, live video of the source camera, captured pictures of the linked camera, process record, and process field) on the software client when the event is triggered.

#### **Linked Camera**

Link the selected camera to capture picture when the event is triggered.

Select the camera in the drop-down list.

7. **Optional:** Select the event(s), and then click **Copy to** to copy the event settings of this device to other device(s).

---

### **Note**

You can only copy the event settings to the device(s) with the same device type.

---

## Chapter 11 Event Center

In the Event Center, you can view the real-time events, search the historical events and view the pop-up alarm information.


Before the client can receive the event information from the device, you need to arm the device first. For details, refer to *Enable Receiving Events from Devices* .

Before the you can view the pop-up alarm information, you need to enable alarm triggered pop-up image in the event center. For details, refer to *View Pop-up Alarm Information* .

### 11.1 Enable Receiving Events from Devices

Before the client can receive the event information from the device, you need to arm the device first.

#### Steps

1. Click  → **Tool** → **Device Arming Control** open Device Arming Control page.  
All the added devices display on this page.
2. In the Operation column, turn on the switch to enable auto-arming, or click **Arm All** to arm all the devices.

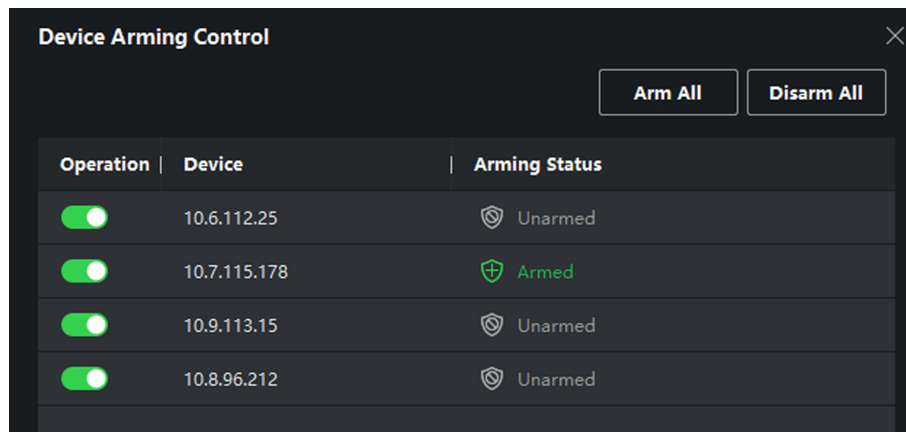


Figure 11-1 Device Arming Control

3. View the arming status of each device in the Arming Status column.

#### Result

The events of armed device(s) are automatically uploaded to the client when the event is triggered.

## 11.2 View Real-Time Events

In the Real-time Event module of the event center page, you can view the real-time event information, including event source, event time, priority, event key words, etc.

### Before You Start

Enable receiving events from devices before the client can receive event information from the device, see *Enable Receiving Events from Devices* for details.

### Steps

1. Click **Event Center** → **Real-time Event** to enter the real-time event page and you can view the real-time events received by the client.

#### Event Time

For video device, event time is the client time when it receives the event.

2. Set the filter conditions or enter the event key word in the Filter text field to display the required events only.

#### Device Type

The type of device that occurred the event.

#### Priority

The priority of the event that indicates the urgent degree of the event.

3. **Optional:** Right click the table header of the event list to customize the event related items to be displayed in the event list.
4. View the event information details.
  - 1) Select an event in the event list.
  - 2) Click **Expand** in the right-lower corner of the page.
  - 3) View the related picture, detail description and handing records of the event.
  - 4) **Optional:** Hover the cursor on the related picture, and then click the download icon on the upper-right corner of the picture to download it to the local PC. You can set the saving path manually.
5. **Optional:** Perform the following operations if necessary.

#### Handle Single Event

Click **Handle** to enter the processing suggestion, and then click **Commit**.

---

#### Note

After an event is handled, the **Handle** button will become **Add Remark**, click **Add Remark** to add more remarks for this handled event.

---

#### Handle Events in a Batch

Select events that need to be processed, and then click **Handle in Batch**. Enter the processing suggestion, and then click **Commit**.

- Enable/Disable Alarm Audio** Click **Enable Audio/Disable Audio** to enable/disable the audio of the event.
- Select the Latest Event Automatically** Check **Auto-Select Latest Event** to select the latest event automatically and the event information details is displayed.
- Clear Events** Click **Clear** to clear the all the events in the event list.
- Send Email** Select an event and then click **Send Email**, and the information details of this event will be sent by email.

 **Note**

You should configure the email parameters first, see **Set Email Parameters** for details.

## 11.3 Search Historical Events

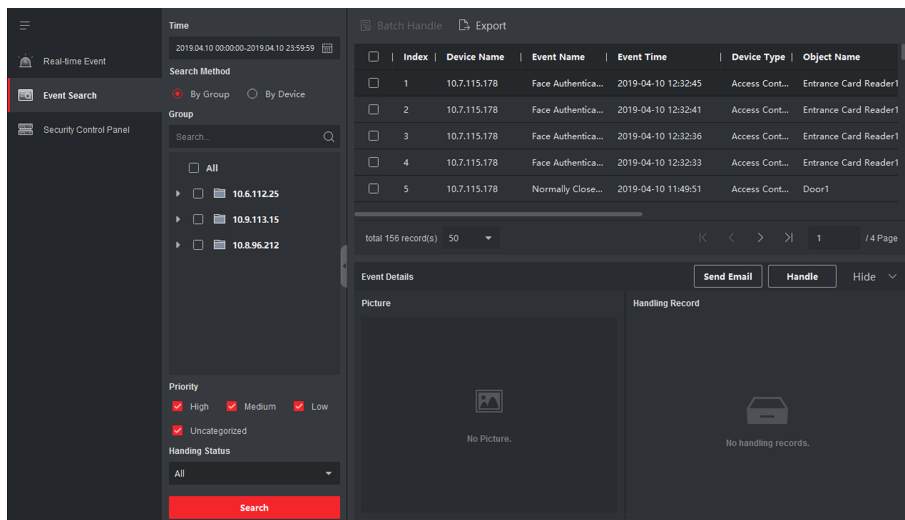
In the Event Search module of the event center page, you can search the historical events via time, device type, and other conditions according to the specified device type, and then process the events.

### Before You Start

Enable receiving events from devices before the client can receive event information from the device, see **Enable Receiving Events from Devices** for details.

### Steps

1. Click **Event Center** → **Event Search** to enter the event search page.



**Figure 11-2 Search History Event**

2. Set the filter conditions to display the required events only.

### Time

The client time when the event starts.

### Search by

**Group:** Search the events occurred on the resources in the selected group.

**Device:** Search the events occurred on the selected device.

### Device Type

The type of device that occurred the event.

### Group

The group of the device that occurred the event. You should set the group as condition only when you select the Device Type as **All**.

### Device

The device that occurred the event.

### Priority

The priority including low, medium, high and uncategorized which indicates the urgent degree of the event.

### Status

The handling status of the event.

3. Click **Search** to search the events according the conditions you set.
4. **Optional:** Right click the table header of the event list to customize the event related items to be displayed in the event list.

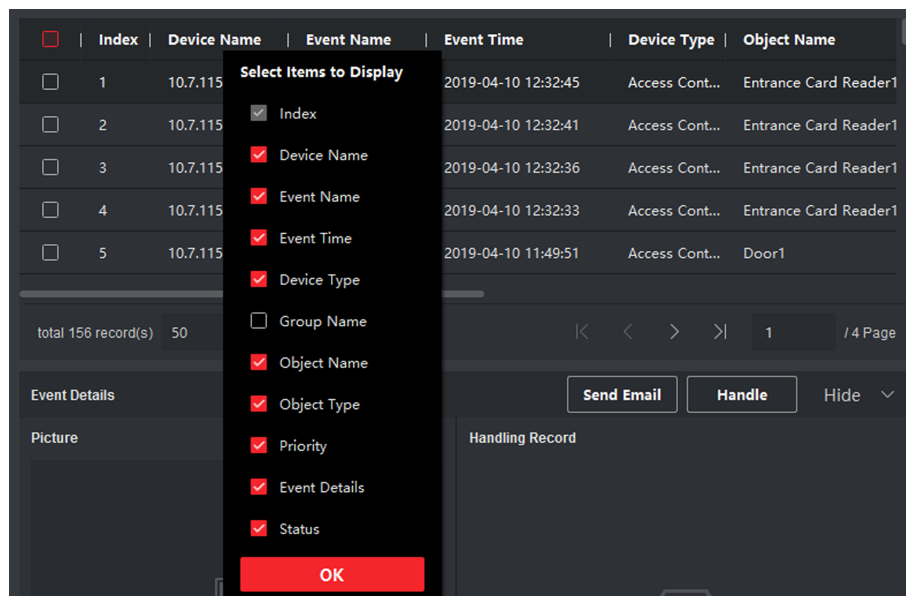


Figure 11-3 Customize Event Related Items to be Displayed

5. **Optional:** Handle the event(s).
  - Handle single event: Select one event that need to be processed, and then click **Handle** in the event information details page, and enter the processing suggestion.

- Handle events in a batch: Select the events which need to be processed, and then click **Handle in Batch**, and enter the processing suggestion.



### Note

After an event is handled, the **Handle** button will become **Add Remark**, click **Add Remark** to add more remarks for this handled event.

---

6. **Optional:** Select an event and then click **Send Email**, and the information details of this event will be sent by email.



### Note

You should configure the email parameters first, see **Set Email Parameters** for details.

---

7. **Optional:** Click **Export** to export the event log or event pictures to the local PC in CSV format. You can set the saving path manually.
8. Hover the cursor on the related picture, and then click the download icon on the upper-right corner of the picture to download it to the local PC. You can set the saving path manually.

## 11.4 View Pop-up Alarm Information

For the alarm configured with pop-up image, the alarm videos and pictures can display on a pop-up window when the corresponding alarm is triggered.

### Before You Start

Configure the alarm linkage action as Alarm Triggered Pop-up Image.

### Steps

1. Click **Event Center** on the control panel to enter the event center.
2. Click **Real-Time Event** on the left panel.
3. Click **Enable Alarm Triggered Pop-up Image** to enable alarm triggered pop-up function.
4. Trigger the alarm.



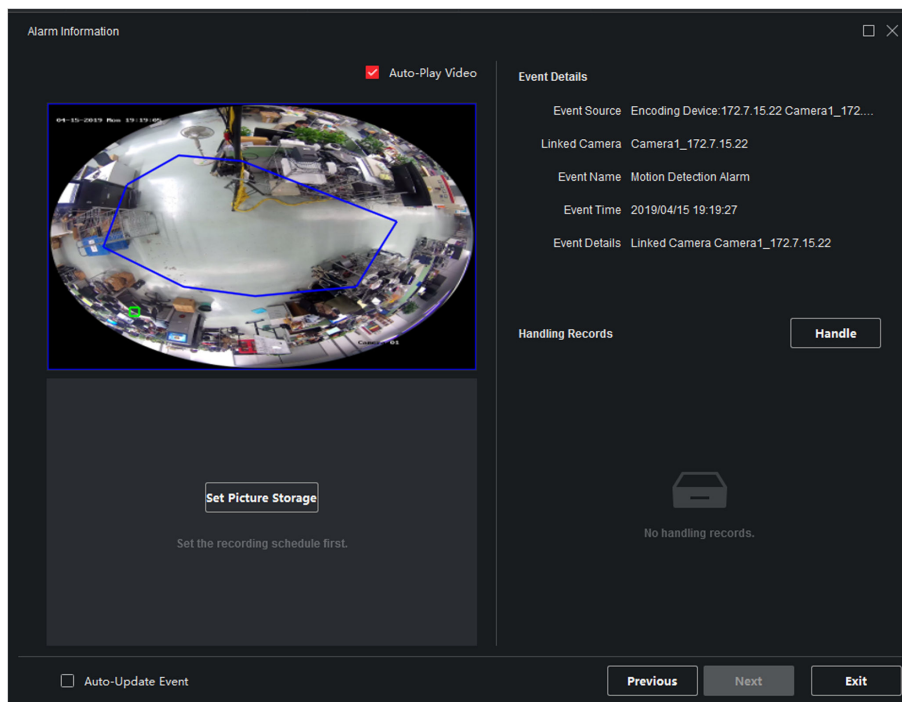



Figure 11-4 Result


A window, showing the alarm video, alarm picture, and alarm details, will pop up.


5. Perform the following operation(s) after popping up the image.

**View Alarm Video**

You can view the live video of the camera configured in Camera Linkage.

Move the cursor over the video and click  to view instant playback to see what happens when the alarm is triggered.

Click  to capture a picture of the live video and save the snapshot on the PC running the client.

Click  to record the live video and save the recorded video footage on the PC running the client.

Right-click on the alarm video to perform other operations. For details, refer to **Live View** .

**View Alarm Picture**

The alarm picture captured by the camera configured in Camera Linkage will display on the field below the alarm video.

**View Previous or Next Alarm**

Click **Prev Page** or **Next Page** to view the previous or next alarm information.

**Handle Alarm**

For the first time to handle the alarm, click **Handle** to enter the handling suggestion.

For the handled alarm, click **Add Remark** to add more the handling suggestions.

## Chapter 12 Forward Video Stream through Stream Media Server

There is always a limit of the device remote access number. When there are many users wanting to get remote access to the device to get the live view, you can add the stream media server and get the video data stream from the stream media server, thus to lower the load of the device.

---

### Note

The stream media server application software needs to be installed and it is packed in the client installation package. After running the installation package, check **Stream Media Server** to enable the installation of stream media server.



---

### 12.1 Import Certificate to Stream Media Server

Before adding the stream media server to the client, you should import the client's security certificate to the stream media server first to perform security authentication and ensure data security.

Perform the following steps to import the security certificate to the stream media server.

#### Steps

1. Export the certificate from the client.
  - 1) Open client service.
  - 2) Click **Export**.
2. Copy the certificate to the PC which has installed with stream media server.
3. Click  on the desktop of the PC installed with stream media server to run it.
4. Import the certificate to the stream media server.
  - 1) Right click  on the task bar and click **Display**.
  - 2) Click **Configuration** to enter the Configuration window.
  - 3) In the security certificate field, click **Import** and select the certificate file you export from client in Step 1.
  - 4) Click **OK**.
5. Restart the stream media server to take effect.

---

### Note

If the client's security certificate is updated, you should export the new certificate from the client and import it to the stream media server again to update.

---

## 12.2 Add Stream Media Server by IP Address


You can add stream media server by IP address one by one.

### Steps



For one client, up to 16 stream media servers can be added.

---

1. Click  on the desktop to run the stream media server.



- You can also forward the video through the stream media server installed on other PC.
  - If the stream media server port (value: 554) is occupied by other service, a dialog box will pop up. You should change the port No. to other value to ensure the proper running of the stream media server.
- 

2. In the client software, enter the Device Management page.
  3. Enter **Device → Stream Media Server**
  4. Click **Add** to open the Add window.
  5. Select **IP Address** as the adding mode.
  6. Enter the nickname and IP address of the stream media server.
- 



The default port value is 554.

---

7. Finish adding the stream media server.
    - Click **Add** to add the server and back to the list page.
    - Click **Add and Continue** to save the settings and continue to add other server.
- 



If the added Stream Media Server's security certificate doesn't match with the client's, it will prompt you. You can view exception message and follow the provided steps to keep certificates consistent.


---

## 12.3 Add Cameras to Stream Media Server to Forward Video Stream

To get the video stream of a camera via stream media server, you need to connect the camera to the stream media server.

### Steps

1. Enter the Device Management module.
2. Enter **Device → Stream Media Server**

3. Select a server and click  on Operation column to open Stream Media Server Settings window.
4. Select the cameras of which the video stream is to be forwarded via the stream media server.
5. Click **OK**.
6. Go the Main View page and start the live view of the cameras again.

On the stream media server control panel, check the channel number of the video stream forwarded through or sent from the stream media server.

---

 **Note**

- For one stream media server, up to 64 channels of video stream can be forwarded through it and up to 200 channels of video stream can be sent to clients from it.
  - If the camera is offline, the client can still get the live video via the stream media server.
-

## Chapter 13 Statistics

Reports, created for a specified period, are essential documents, which are used to check whether a business runs smoothly and effectively. In this software, reports can be generated daily, weekly, monthly, annually, and by custom time period. You can use reports as basis in creating decisions, addressing problems, checking tendency and comparison, etc.

### 13.1 People Counting Report

People counting statistics is to calculate the number of line crossing people in a specific area and a certain time period by the people counting camera(s), which can help the storekeeper to analyze the customers flow and number in different time, and the storekeeper can flexibly do some business adjustment according to the report. You can view the people counting statistics in a line chart or histogram, and generate reports for exporting the detailed data to local storage.

#### Before You Start

Add a people counting device to the software and properly configure the corresponding area. The added device should have been configured with people counting rule. Refer to **Add Device** for details about adding people counting device.

#### Steps

1. Click **Report** → **People Counting** to enter People Counting page.
2. Select daily report, weekly report, monthly report, or annual report as the report type.

#### Daily Report

Daily report shows data on a daily basis. The system will calculate the number of people in a each hour of one day.

#### Weekly Report, Monthly Report and Annual Report

As compared to daily report, weekly report, monthly report and annual report can be less-time consuming, since they are not to be submitted every day. The system will calculate the number of people in each day of one week, in each day of one month, in each month of one year.

3. Select the statistics time type and click  to set the time.

#### One Period

Generate the statistics in one time period.

#### Multiple Periods

Generate the statistics in two time periods, which can help you to compare the people flow and number in two time periods.

For example, if you set the report type as month report, and set the March and April as the statistic time, the people counting results in March and April will be displayed in a same chart with different color, and you can compare the data in different day of each month.

4. On the upper-right corner of the page, select **Display by Device** or **Display by Camera**.

### **Display by Device**

Display the report by device.

For example, if you select one NVR (with 4 people counting cameras), the report will display the total number of people summed by the 4 people counting cameras.

### **Display by Camera**

Display the report by camera.

For example, if you select one NVR (with 4 people counting cameras), the report will display the each camera's statistics respectively, namely display the statistics in 4/8 colors (each/2 color represent one camera).

5. On the upper-right corner of the page, select **Display by Device** or **Display by Camera**.

### **Display by Device**

Display the report by device.

You can select only one device with multiple people counting cameras inside, or select only one people counting camera to be displayed.

For example, if you select one NVR with 2 people counting cameras inside, the report will display the total number of people summed by the 2 cameras.

### **Display by Camera**

Display the report by camera.

You can only select one people counting camera to be displayed.

6. Select the people counting camera(s) to be displayed.

7. Select the direction for statistics.

### **Entered**

The people entered will be counted.

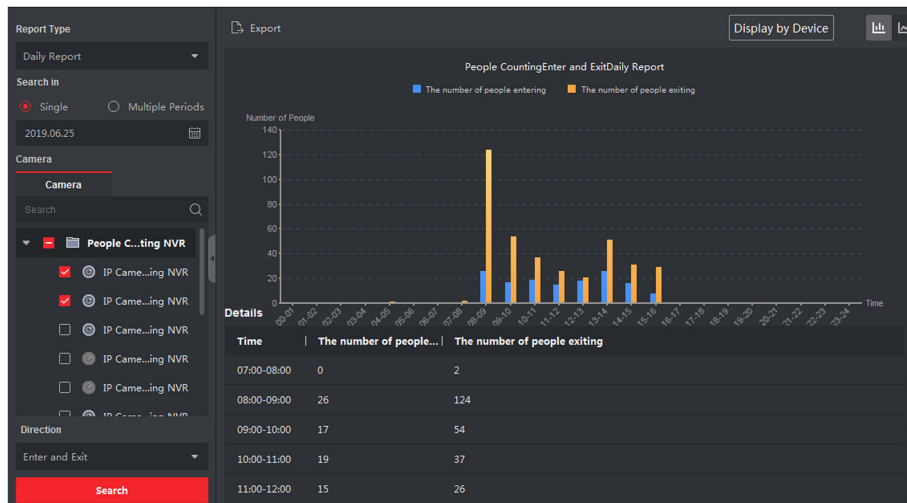
### **Exited**

The people exited will be counted.

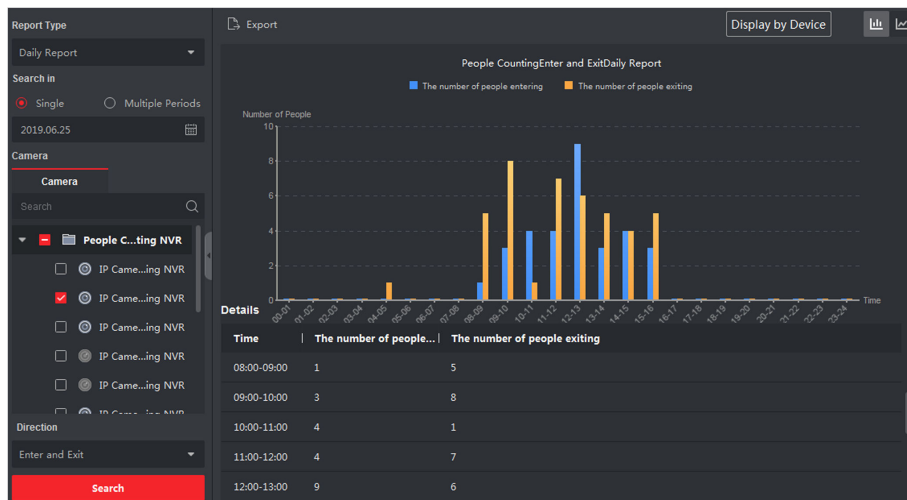
### **Passed**

Both people entered and exited will be counted.

8. Click **Search** to get the people counting statistics and detailed data for each hour, day, or month.



**Figure 13-1 Display by Device**



**Figure 13-2 Display by Camera**

By default, the statistics are shown in histogram form.

**9. Optional:** Perform the following operations after search.

**Switch to Line Chart** Click  to switch it to line chart.

 **Note**

By default, the statistics are shown in bar chart.

**Switch to Bar Chart** Click  to switch it to bar chart.

**Save to Local PC** Click **Export** to save the detailed data of people counting to your PC.

## 13.2 View People Counting in Intersections Report

Intersection analysis is used to monitor people flow and number in an intersection-like scene. The arrows in the image refer to different directions. By selecting one direction (e.g. A) as the entrance, the other directions will be set as the exits by default, so that multiple paths are generated (e.g., A to A, A to B, A to C, and A to D). You can view the people counting who passed by each path, respectively, which can help the shopkeeper to analyze the people flow in different door. The statistics result can show in daily, weekly, monthly, and annual report.

### Before You Start

Make sure a fisheye camera which supports intersection analysis function has been configured properly and be added to the software. Refer to **Add Device** for details about adding the device.

### Steps

---



Up to 10 intersections can be analyzed.

---

1. Click **Report → Intersection Analysis** to enter the intersection analysis module.
2. Select daily report, weekly report, monthly report, or annual report as the report type.

#### Daily Report

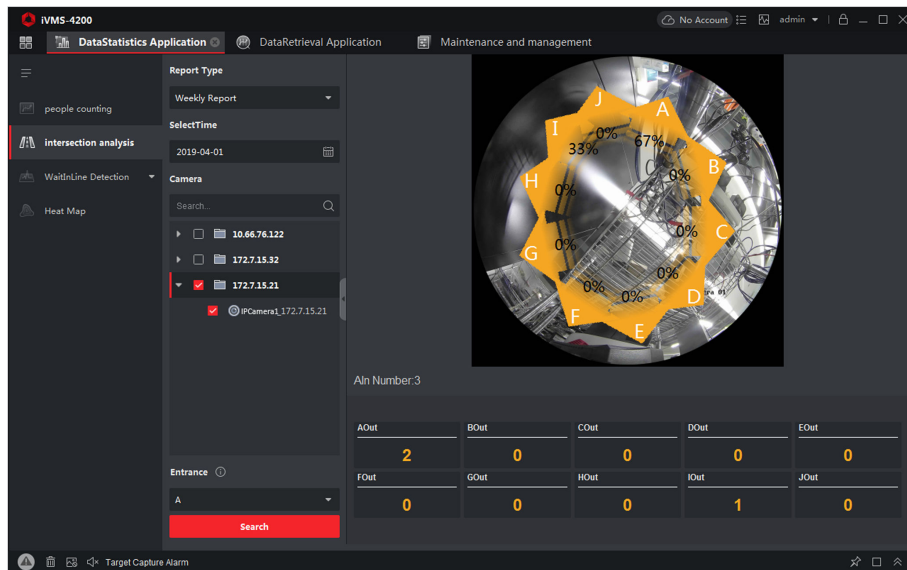
Daily report shows data on a daily basis. The system will calculate the number of people in intersection report in a each hour of one day.

#### Weekly Report, Monthly Report and Annual Report

As compared to daily report, weekly report, monthly report and annual report can be less-time consuming, since they are not to be submitted every day. The system will calculate the number of people in intersection report in each day of one week, in each day of one month, in each month of one year.

3. Set the start time for the report.
4. Select the camera for generating the report.
5. Select one direction as the entrance from the drop-down list in the **Flow in** filed.
6. Click **Search** to get the statistics result.





**Figure 13-3 Results**

The people number for each path will show on the right.

## 13.3 Queue Management

Queue management supports data analysis and report output from multiple dimensions.

Commonly Used Data Analysis

- To see queuing-up people number of a certain waiting time level in a queue/region, use queuing-up time analysis, check a target region and set a waiting time level.
- To compare queuing-up people number of a certain waiting time level in multiple queues/regions, use queuing-up time analysis, check target regions and set a waiting time level.
- To compare queuing-up people number of different waiting time levels in multiple queues/regions, use queuing-up time analysis, check target regions and set waiting time levels.
- To see the time and duration that a queue stays a certain length in a queue/region, use queue status analysis, check a target region and set a queue length level.
- To compare the time and duration that a queue stays a certain length in multiple queues/regions, use queue status analysis, check target regions and set a queue length level.
- To compare the time and duration that a queue stays at different length in multiple queues/regions, use queue status analysis, check target regions and set queue length levels.

### 13.3.1 Queuing-Up Time Analysis

Queuing-Up Time Analysis calculates people number of different waiting time levels. Regional comparison and multiple waiting time level comparison are supported.

## Compare Queuing-up People Amount for Different Regions

You can search the queuing-up people amount for a certain waiting time level, and compare the people amount in different regions, which can help the storekeeper to analyze the customers' interested area (e.g, the regions with larger people amount are more popular than the regions with lower people amount, and you can arrange more goods in these regions.) . The statistics data can show in daily report, weekly report, or monthly report.

### Before You Start

Add the device to the software and properly configure the corresponding settings. See **Add Device** for details about adding the device.

### Steps

---



This function should be supported by the connected device.

---


1. Click **Report** → **Queue Management** to enter the queue management page.
2. Click **Queuing-up Time Analysis** Tab.
3. Select the report type including **Daily Report**, **Weekly Report** and **Monthly Report**.

#### Daily Report

Daily report shows data on a daily basis. The system will calculate the people amount for different regions in a each hour of one day.

#### Weekly Report, Monthly Report

As compared to daily report, weekly report and monthly report can be less-time consuming, since they are not to be submitted every day. The system will calculate the people amount for different regions in each day of one week, in each day of one month.

4. Set the statistic time.
  5. Click  to unfold the region list and select the region(s).
- 

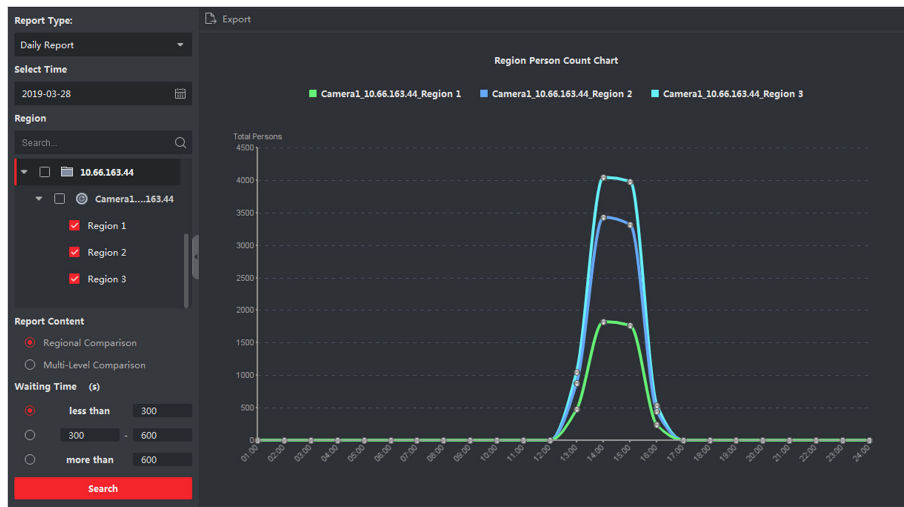


Up to 6 regions can be selected.

---

6. Select **Regional Comparison** as the report content.
7. Select a waiting time level and enter the seconds for calculating people amount waiting for the specified time period.
8. Click **Search** to generate the statistics result.

The line chart of the calculated people amount in the specified waiting time will show on the result area. The lines with different colors indicate the people from the selected regions.



**Figure 13-4 Result**

**9. Optional:** Click **Export** to export the data in Excel file.

## Compare Queuing-up People Amount for Different Waiting Time Levels

For a certain region, the queuing-up people amount can be calculated according to the waiting time level (e.g. the waiting time is shorter than the specified seconds.). You can search and compare the people amount for the multiple waiting time levels, which can help the customers to analyze the cashier efficiency. The statistics data can show in daily report, weekly report, or monthly report.

### Before You Start

Add the device to the software and properly configure the corresponding settings. See **Add Device** for details about adding the device.

### Steps

#### Note

This function should be supported by the connected device.

1. Click **Report** → **Queue Management** to enter the queue management page.
2. Click **Queuing-up Time Analysis** Tab.
3. Select the report type including **Daily Report**, **Weekly Report** and **Monthly Report**.


#### **Daily Report**

Daily report shows data on a daily basis. The system will calculate the queuing-up people amount for different waiting time levels in a each hour of one day.

#### **Weekly Report, Monthly Report**

As compared to daily report, weekly report and monthly report can be less-time consuming, since they are not to be submitted every day. The system will calculate the queuing-up

people amount for different waiting time levels in each day of one week, in each day of one month.

4. Set the statistic time.
5. Click  to unfold the region list and select the region(s).
6. Select **Multi-level Comparison** as the report content.
7. Select the waiting time level and enter the seconds for calculating people amount waiting for the specified time period.
8. Click **Search** to generate the statistics result.

The line chart of the calculated people amount in the same region will show on the result area. The lines with different colors match the waiting time levels.

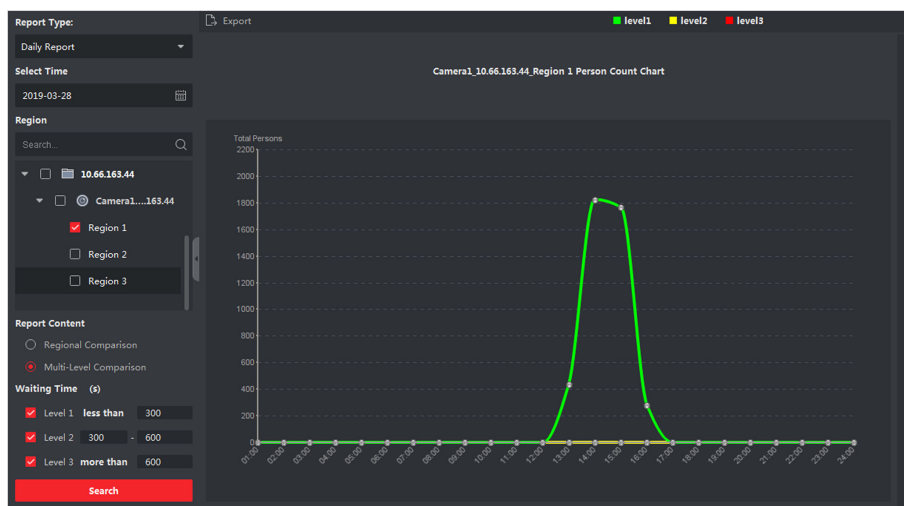


Figure 13-5 Result

9. **Optional:** Click **Export** to export the data in Excel file.

## 13.3.2 Queue Status Analysis

Queue Status Analysis calculates the time and duration that a queue stays with a certain length. Regional comparison and multiple queue length level comparison are supported.

### Compare Queuing-up Duration for Different Regions

When the queue stays at a certain length, you can search and compare the durations in different regions, which can help the customers to analyze the cashier efficiency for different regions (e.g., the region with the shorter queuing-up duration has the higher efficiency than the region with the longer queuing-up duration). The statistics data can show in daily report, weekly report or monthly report.

## Before You Start

Add the device to the software and properly configure the corresponding settings. See **Add Device** for details about adding the device.

## Steps



### Note

This function should be supported by the connected device.

1. Click **Report** → **Queue Management** .
2. Click **Status Analysis** Tab.
3. Select the report type including **Daily Report**, **Weekly Report** and **Monthly Report**.

### Daily Report

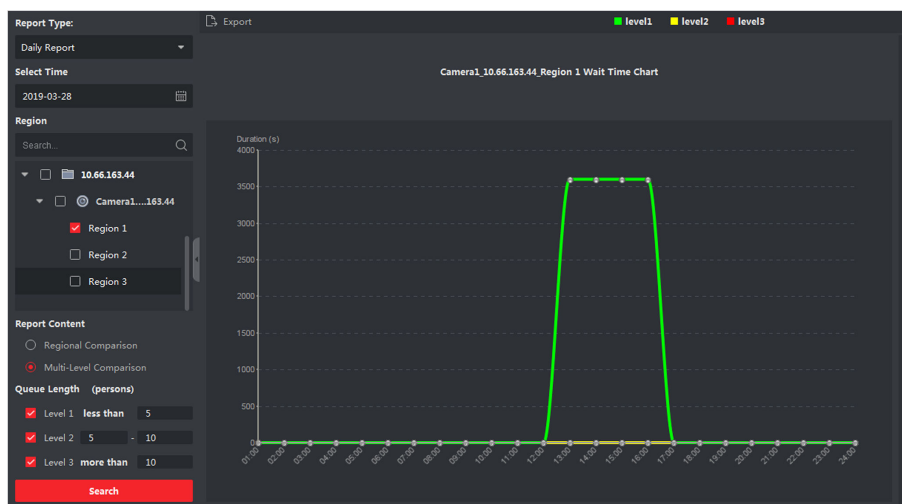
Daily report shows data on a daily basis. The system will calculate the queuing-up duration for different regions in a each hour of one day.

### Weekly Report, Monthly Report

As compared to daily report, weekly report and monthly report can be less-time consuming, since they are not to be submitted every day. The system will calculate the queuing-up duration for different regions in each day of one week, in each day of one month.

4. Set the statistic time.
5. Click to unfold the region list and select the region(s).
6. Select **Regional Comparison** as the statistics type.
7. Select a queue length level and enter the value for calculating duration when the queue stays at the length.
8. Click **Search** to generate the statistics result.

The line chart of the calculated duration for staying the specified queue length will show on the result area. The lines with different colors match the selected regions.



**Figure 13-6 Result**

9. **Optional:** Click **Export** to export the data in Excel file.

## Compare Queuing-up Duration for Different Queue Length Levels

For the queue in a certain region, you can search the duration when a queue stays a certain length and compare the durations for different queue length levels, which can help the customers to analyze the cashier efficiency of different queue length levels. The statistics data can show in daily report, weekly report, or monthly report.

### Before You Start

Add the device to the software and properly configure the corresponding settings. See **Add Device** for details about adding the device.

### Steps



#### Note

This function should be supported by the connected device.

---


1. Click **Report** → **Queue Management** .
2. Click **Status Analysis** Tab.
3. Select the report type including **Daily Report**, **Weekly Report** and **Monthly Report**.

#### Daily Report

Daily report shows data on a daily basis. The system will calculate the queuing-up duration for different queue length levels in a each hour of one day.

#### Weekly Report, Monthly Report

As compared to daily report, weekly report and monthly report can be less-time consuming, since they are not to be submitted every day. The system will calculate the queuing-up duration for different queue length levels in each day of one week, in each day of one month.

4. Set the statistic time.
5. Click  to unfold the region list and select the region(s).
6. Select **Multi-level Comparison** as the report content.
7. Select the queue length level and enter the value for calculating duration when the queue stays at the length.
8. Click **Search** to generate the statistics result.

The line chart of the calculated duration in the same region will show on the result area. The lines with different colors match the queue length levels.



Figure 13-7 Result

9. **Optional:** Click **Export** to export the data in Excel file.

## 13.4 Heat Map Report

Heat map is a graphical representation of data represented by colors and the heat map data can be displayed in line chart. You can use the heat map function of the camera to analyze the visit times and dwell time of customers in a configured area, which can help the storekeeper analyze the customers' interested area and make the arrangement of goods.

### Before You Start

Add a heat map network camera to the software and properly configure the corresponding area. The added camera should have been configured with heat map rule. See **Add Device** for details about adding heat map network camera.

### Steps

1. Click **Report** → **Heat Map** to enter the heat map page.
2. Select daily report, weekly report, monthly report, or annual report as the time type for the report.

#### Daily Report

Daily report shows data on a daily basis. The system will calculate the data of heat map in a each hour of one day.

#### Weekly Report, Monthly Report and Annual Report

As compared to daily report, weekly report, monthly report and annual report can be less-time consuming, since they are not to be submitted every day. The system will calculate the data of heat map in each day of one week, in each day of one month, in each month of one year.

3. Select **By Dwell Time** or **By People Number** as the statistics type.

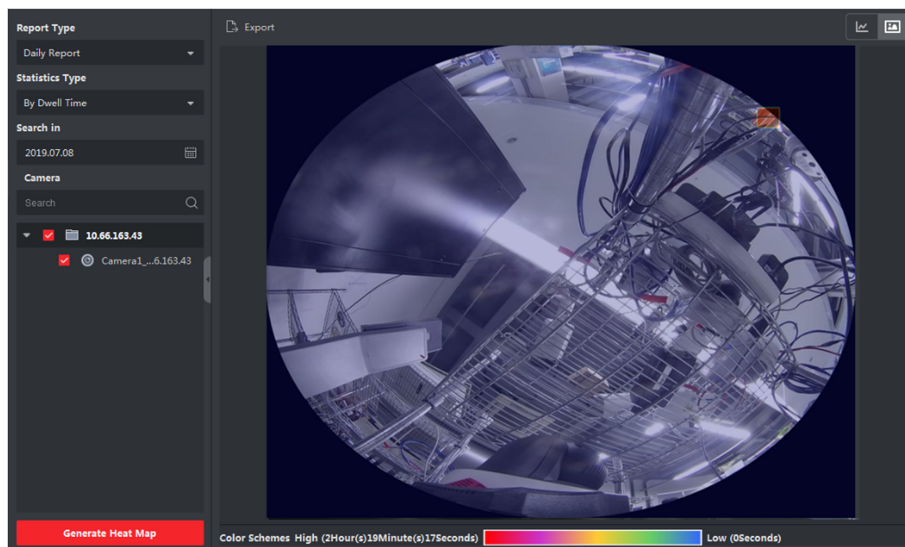
## By Dwell Time

The system calculates the heat map value (the ordinate value in the line chart or the color in pictures) according to the people's dwell time.

## By People Number


The system calculates the heat map value (the ordinate value in the line chart or the color in pictures) according to the people number.


4. Set the start time.
5. Select a heat map camera in the camera list.
6. Click **Generate Heat Map** to show the heat map of the camera.



**Figure 13-8 Results**

7. **Optional:** After generating heat map report, you can perform the following operations.

**Display in Line Chart** Click  to display the statistics in line chart.

**Display in Picture Mode** Click  to display the statistics in picture mode.

The red color block (255, 0, 0) indicates the most welcome area, and blue color block (0, 0, 255) indicates the less-popular area.

**Save Statistics Data** Click **Export** to save the detailed data of heat map to your PC.



## Chapter 14 Data Retrieval

In the Data Retrieval module, you can search the face pictures captured by the face recognition camera, search the human body pictures captured by DeepinMind device, view behavior analysis related pictures and videos, search the vehicle pictures captured by DeepinMind device, search the frequently appeared person pictures captured by DeepinMind device, and search the not wearing hard hat pictures.

### 14.1 Face Picture Retrieval

When the connected device (e.g. NVR or HDVR) supports face search, you can search the related picture and play the picture related video file.

#### 14.1.1 Search Face Picture by Uploaded Picture

You can upload a face picture from your PC and compare the uploaded picture with the captured face pictures.

##### Before You Start

Add the device to the software and properly configure the corresponding settings. Refer to **Add Device** for details about adding the device.


##### Steps

---

##### Note

This function should be supported by the connected device.

---

1. Click **Data Retrieval** → **Face Picture Retrieval** to enter the face picture retrieval page.
  2. Click  to set the start time and end time for searching the captured face pictures or video files.
  3. Select device(s) in the camera panel.
  4. Select **Picture** from the drop-down list to search by picture.
  5. Select a face picture for search.
    - 1) Click **Select Picture** to upload the pictures from your PC.
    - 2) Select a detected face from uploaded picture for matching the captured face pictures.
- 

##### Note

- The resolution of the picture should be smaller than 4096×4080.
  - Only JPG and JPEG formats are supported.
- 

6. Set the similarity level.

## Example

If you set the similarity as 40, the captured pictures have no less than 40% similarity with the uploaded face picture will list.

7. Set the maximum number of displayed results.

8. Click **Search** to start searching.

The search results of the pictures are displayed in list.

9. Export the pictures and save them in your PC.

### Export Picture

Select the pictures to be exported and save them in local PC.

### Export Current Page

Export all the pictures in the current page.

### Export Segment

You can download the pictures by packages. Each package contains up to 1,000 pictures.

10. **Optional:** Perform secondary search based on the search result.

1) Move to the searched picture and click 

All the faces in this picture will be analyzed and displayed.

2) Select a face you want to do secondary search.

3) Set the similarity and time period.

4) Click **Search**.

The client will search and compare the faces in the captured pictures based on the face picture you selected.

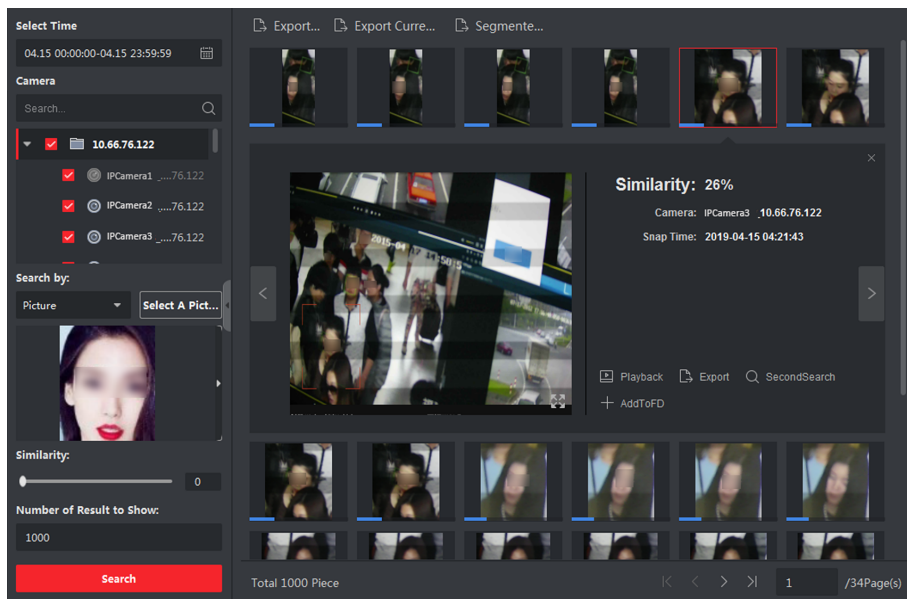




Figure 14-1 Result






11. **Optional:** After searching, you can do one or more the following operations.

**View Details** Click on a picture from the list to view details. You can also click  to show the large picture, and click  to restore.

**Play Related Videos** Click **Playback** to play the picture's related video file (5s before and 5s after the capture) in the view window on the bottom right.

---

 **Note**

- You can click  to show the large video, and click  to restore.
  - You can click  to adjust the play speed of the playback, click  to play back the video files frame by frame, click  to enable audio, double-click the playback window to maximize the window.
- 

**Save Pictures to PC** Click **Export Picture** and select the pictures as desired to export to local PC.

## 14.1.2 Search Face Picture by Event

You can search the device's captured face pictures by filtering different event types.

### Before You Start

Add the device to the software and properly configure the corresponding settings. Refer to **Add Device** for details about adding the device.


### Steps

---

 **Note**

This function should be supported by the connected device.

---

1. Click **Data Retrieval** → **Face Search** to enter the face picture retrieval page.
2. Click  to set the start time and end time for searching the captured face pictures or video files.
3. Select device(s) in the camera panel.
4. Select **Event Type** from drop-down list to search by event type.
5. Select event type.

#### All

Search all captured face pictures.

#### Face Picture Comparison

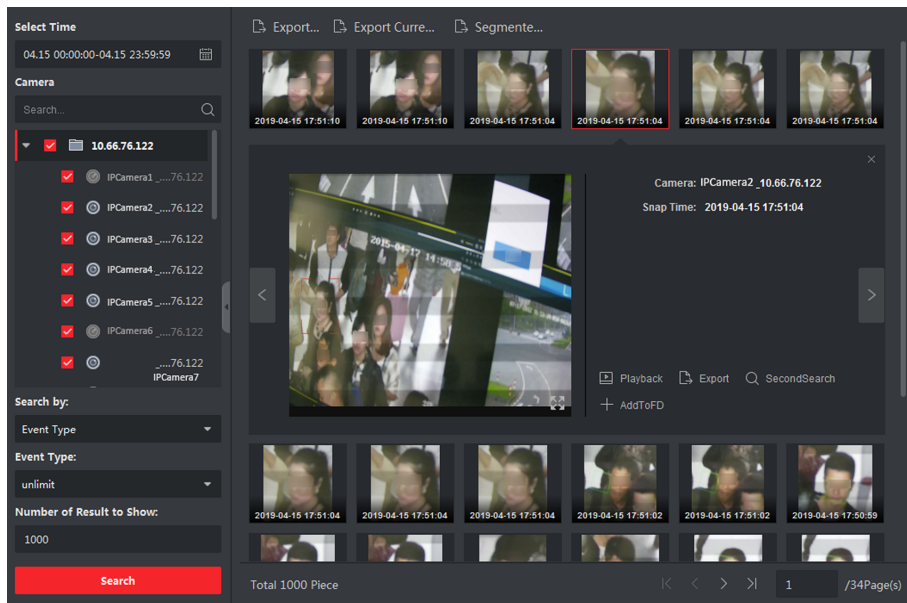
Search the captured pictures which match with the face pictures in face picture library.

#### Stranger Detection Alarm

Search the pictures captured when the stranger detection alarm is triggered.

6. Set the maximum number of displayed results.
7. Click **Search** to start searching.

The search results of the pictures are displayed in list.



**Figure 14-2 Search Result**

8. Export the pictures and save them in your PC.

### Export Picture

Select the pictures to be exported and save them in local PC.

### Export Current Page

Export all the pictures in the current page.

### Export Segment

You can download the pictures by packages. Each package contains up to 1,000 pictures.

9. **Optional:** Perform secondary search based on the search result



- 1) Move to the searched picture and click 

All the faces in this picture will be analyzed and displayed.

- 2) Select a face you want to do secondary search.
- 3) Set the similarity and time period.
- 4) Click **Search**.

The client will search and compare the faces in the captured pictures based on the face picture you selected.






10. **Optional:** After searching, you can do one or more the following operations.

**View Details** Click on a picture from the list to view details. You can also click  to show the large picture, and click  to restore.

**Play Related Videos** Click **Playback** to play the picture's related video file (5s before and 5s after the capture) in the view window on the bottom right.

---

## Note

- You can click  to show the large video, and click  to restore.
  - You can click  to adjust the play speed of the playback, click  to play back the video files frame by frame, click  to enable audio, double-click the playback window to maximize the window.
- 

## Save Pictures to PC

Click **Export Picture** and select the pictures as desired to export to local PC.

### 14.1.3 Search Face Picture by Person Name

You can search the device's captured face pictures by person name.

#### Before You Start

Add the device to the software and properly configure the corresponding settings. Refer to **Add Device** for details about adding the device.


#### Steps

---

## Note

This function should be supported by the connected device.

---

1. Click **Data Retrieval** → **Face Search** to enter the face picture retrieval page.
2. Select device(s) in the camera panel.
3. Select **Name** from the drop-down list to search by person name.
4. Click  to set the start time and end time for searching the captured face pictures or video files.
5. Enter a keyword for the person name.
6. Set the maximum number of displayed results.
7. Click **Search** to start searching.

All the persons whose name match the search condition (fuzzy match is supported) will be displayed.

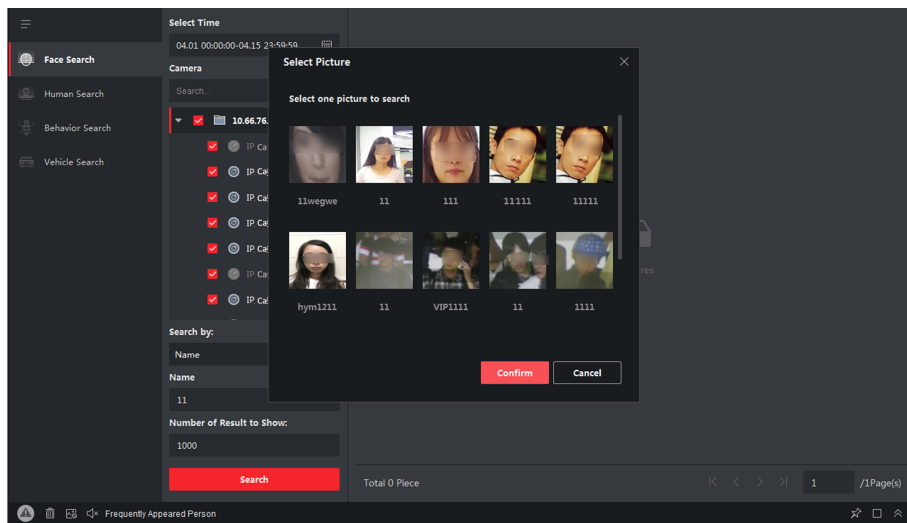


Figure 14-3 Results

8. Select one picture to search, and then click **Confirm**.

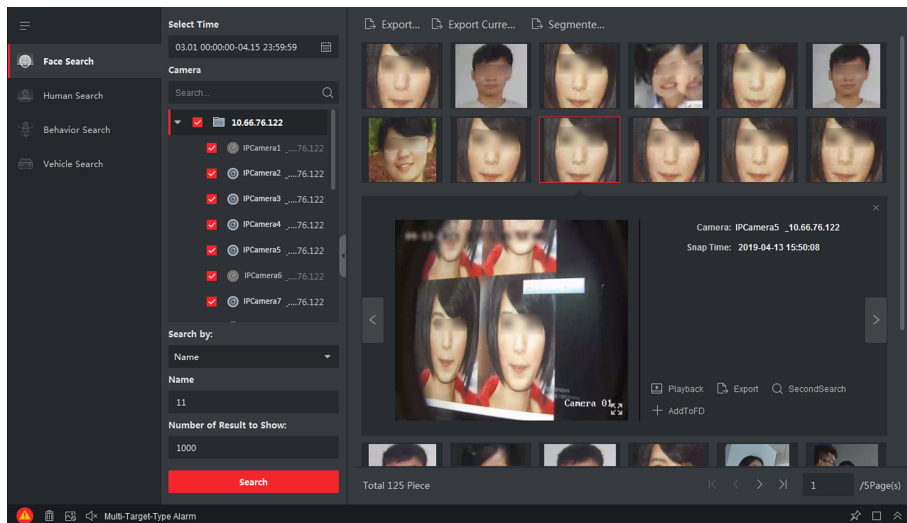


Figure 14-4 Results

The search results of the pictures are displayed in list.

9. Export the pictures and save them in your PC.

#### Export Picture

Select the pictures to be exported and save them in local PC.


#### Export Current Page

Export all the pictures in the current page.

#### Export Segment

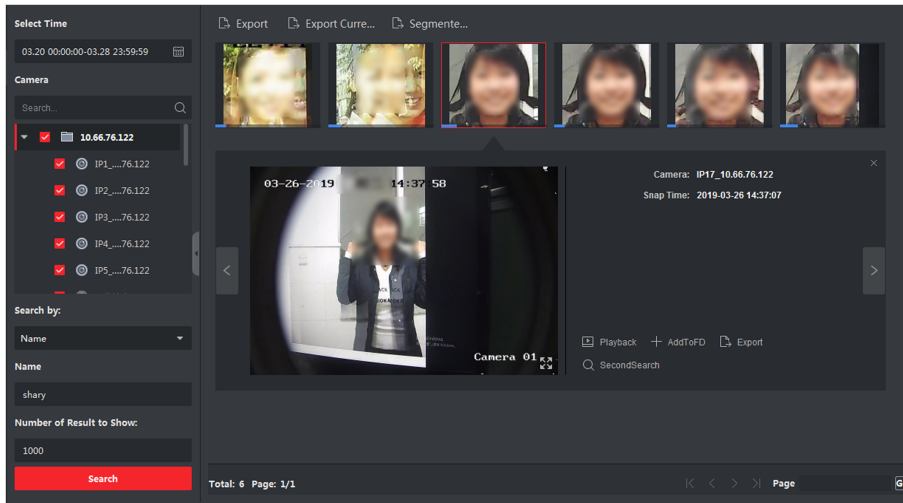
You can download the pictures by packages. Each package contains up to 1,000 pictures.

10. Perform secondary search based on the search result.

1) Move to the searched picture and click 



- All the faces in this picture will be analyzed and displayed.
- 2) Select a face you want to do secondary search.
  - 3) Set the similarity and time period.
  - 4) Click **Search**.

The search results of the pictures are displayed in list.








**Figure 14-5 Search Result**

**11.** After searching, you can do one or more the following operations.

**View Details** Click on a picture from the list to view details. You can also click  to show the large picture, and click  to restore.

**Play Related Videos** Click **Playback** to play the picture's related video file (5s before and 5s after the capture) in the view window on the bottom right.

### **Note**

- You can click  to show the large video, and click  to restore.
- You can click  to adjust the play speed of the playback, click  to play back the video files frame by frame, click  to enable audio, double-click the playback window to maximize the window.

**Save Pictures to PC** Click **Export Picture** and select the pictures as desired to export to local PC.

## 14.2 Human Body Picture Retrieval

For the DeepinMind device, you can upload a human body picture from local PC and compare the uploaded picture with the device's captured human body pictures, or search all the human body pictures captured by the specific camera(s) during a specific time.

## Before You Start

Add the device to the software and properly configure the corresponding settings. Refer to **Add Device** for details about adding the device.


## Steps

---

### Note

This function should be supported by the connected device.

---

1. Click **Data Retrieval** → **Human Search** to enter the face picture retrieval page.
2. Click  to set the start time and end time for searching the captured human body pictures or video files.
3. Select device(s) in the camera panel.
4. Select the search condition in the Search by field.

### Picture

Upload a picture to compare the uploaded picture with the device's captured human body pictures. All the human bodies in this picture will be analyzed and displayed.

- a. Click **Select Picture** to select a picture for comparison from local PC.
- 

### Note

- The picture should be smaller than 4 MB.
  - The resolution of the picture should be smaller than 4096\*4080.
  - Only JPG and JPEG formats are supported.
- b. Set the similarity level. For example, if you set the similarity as 40, the captured pictures have no less than 40% similarity with the uploaded human body picture will list.
- 

### None

Search all the pictures captured by the selected camera(s) during the time duration.

5. Set the maximum number of displayed results.
- 

### Note

If the number of pictures captured by the selected cameras(s) during the selected time duration exceeds the number of maximum number to be displayed, only the lasted pictures will be displayed.

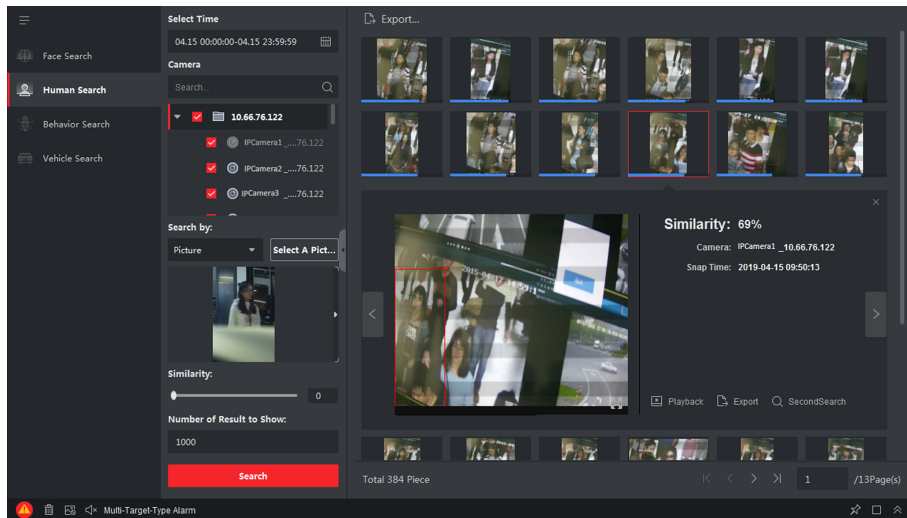
For example, if the number of pictures captured by the selected cameras during the selected time duration is 2000, and the maximum number to be displayed is 1000, only the lasted 1000 pictures will be displayed.

---

6. Click **Search** to start searching.

The search results of the pictures are displayed in list.





**Figure 14-6 Search Result**

**7. Optional:** Perform secondary search based on the search result

- 1) Move to the searched picture and click

All the human bodies in this picture will be analyzed and displayed.

- 2) Select a human body you want to do secondary search.
- 3) Set the similarity and time period.
- 4) Click **Search**.

The client will search and compare the human bodies in the captured pictures based on the human body picture you selected.

**8. Optional:** After searching human body, you can do one or more the following operations.

**View Details** Click on a picture from the list to view details. You can also click to show the large picture, and click to restore.

**Play Related Videos** Click **Playback** to play the picture's related video file (5s before and 5s after the capture) in the view window on the bottom right.

**Note**

- You can click to show the large video, and click to restore.
- You can click to adjust the play speed of the playback, click to play back the video files frame by frame, click to enable audio, double-click the playback window to maximize the window.

**Save Pictures to PC** Click **Export Picture** and select the pictures as desired to export to local PC.


### 14.3 View Behavior Analysis Related Pictures and Videos

When the connected device supports behavior search (e.g., line crossing, people gathering and loitering), you can search the related picture and view the related pictures and video files.

#### Before You Start

Add the device to the software and properly configure the corresponding settings. See **Add Device** for details about adding the camera.

#### Steps

1. Click **Data Retrieval** → **Behavior Analysis** to enter the behavior analysis page.
2. Click  to set the start time and end time for searching the matched pictures.
3. Select a camera in the camera list.



---

#### Note

This function should be supported by the connected device (NVR or HDVR).

---






4. Select event type for behavior analysis report.
5. Click **Search** to start searching.
6. **Optional:** After searching the behavior, you can perform the following operations.

**View Details** Click on a picture from the list to view details. You can also click  to show the large picture, and click  to restore.

**Play Related Videos** Click **Playback** to play the picture's related video file (5s before and 5s after the capture) in the view window on the bottom right.

---

#### Note

- You can click  to show the large video, and click  to restore.
  - You can click  to adjust the play speed of the playback, click  to play back the video files frame by frame, click  to enable audio, double-click the playback window to maximize the window.
- 

**Save Pictures to PC** Click **Export Picture** and select the pictures as desired to export to local PC.

### 14.4 Vehicle Retrieval

For the DeepinMind device, you can search the device's captured vehicle pictures by setting the search conditions, such as plate number, captured time, etc.

#### Before You Start

Add the device to the software and properly configure the corresponding settings. See **Add Device** for details about adding the device.


## Steps

---

### **Note**

This function should be supported by the connected device.

---

1. Click **Data Retrieval** → **Vehicle Retrieval** to enter the vehicle retrieval page.
2. Click  to set the start time and end time for searching the captured vehicle pictures or video files.
3. Select the search type.

#### **Vehicle**

Search and display the captured vehicle pictures by entering the vehicles' license plate number.

#### **Plate**

Search and display the captured license plate number pictures by entering the vehicles' license plate number.

#### **Mix-traffic Detection**

Search and display the mix-traffic detection related pictures of the specific vehicle by entering the vehicle's license plate number.

---

### **Note**

The camera should support mix-traffic detection.

---

#### **Traffic Violations**

Search and display the traffic violation related pictures of the specific vehicle by entering the vehicle's license plate number.

---

### **Note**

The camera should support traffic violation.

---

4. Select device(s) in the camera panel.
5. Enter the keyboard of license plate number for search.
6. Set the maximum number of displayed results.
7. Click **Search** to start searching.

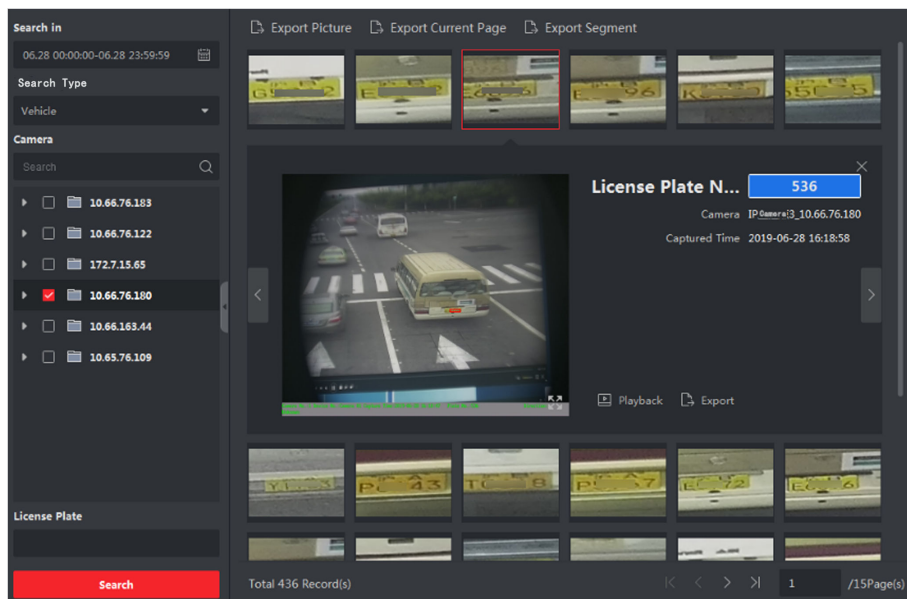


Figure 14-7 Results

The search results of the pictures are displayed in list.

8. **Optional:** Click the picture to view the whole captured picture, the captured time, etc.
9. **Optional:** Export the picture(s) to the local PC.
  - Click **Export Picture**, and then select the picture to be exported, and then click **Export**.
  - Click **Export Current Page** to export all the pictures and information on the current page.
  - Click **Export Segment** to download the pictures and capturing information by packages. Each package contains up to 1000 pictures.
10. **Optional:** Perform the following operations if needed.
 

<b>Add to Face Picture Library</b>	Click <b>Add to face picture library</b> to add current face picture to the library .
<b>View Detailed Information</b>	Click <b>View</b> to view the historical captured pictures of this person, the captured time.
<b>Playback</b>	Click <b>Playback</b> to play back the video of 5-seconds before and after the capturing time.
<b>Export</b>	Click the picture to be exported, and then click <b>Export</b> to export this picture.

## 14.5 Hard Hat Retrieval

After adding the hard hat detection device to the client, when the device detects a person who doesn't wear a hard hat, it will trigger an event and capture some pictures to notify the managers. You can search the alarm pictures in which the detected person doesn't wear a hard hat. By this way, you can remind the builders to wear hard hat, thus to improve builders' safety awareness.

### Before You Start

Add the device(s) with hard hat detection function to the client.

### Steps

1. Click **Data Retrieval** → **Hard Hat Search** to enter the hard hat search page.
2. Set the start time and end time for searching.
3. Select the camera for searching.
4. Click **Search**.

The captured pictures for hard hat alarm is displayed on the right panel. Up to 30 pictures can be displayed in one page.

5. Perform the following operations if needed.

**Export Picture** a. Click **Export Picture**.

b. Select one or more picture(s), or check **Select All** on the page below.

c. Click **Export** on the page below to export the selected picture(s).

**View the Whole Picture** Click a picture, and then the whole picture and captured time be displayed in the middle of the page.

**Play Back Video** Click a picture, and then click **Playback** to play back the video of 5-seconds before and after the capturing time.

## 14.6 Frequently Appeared Person Retrieval

The person's captured face picture can be compared with the face pictures in the face picture library. If mismatched, he/she will be judged as frequently appeared person, and trigger an event to notify the security person. For example, in some high-safety demanded scene (e.g. bank), if a stranger appears frequently, the event can be triggered to notify the security person or related person. If matched, he/she will be judged as a person in whitelist and will not trigger frequently appeared person alarm.. You can search the event information in a certain time, such as the captured pictures, captured time, and you can view the detailed pictures and play back the related video.

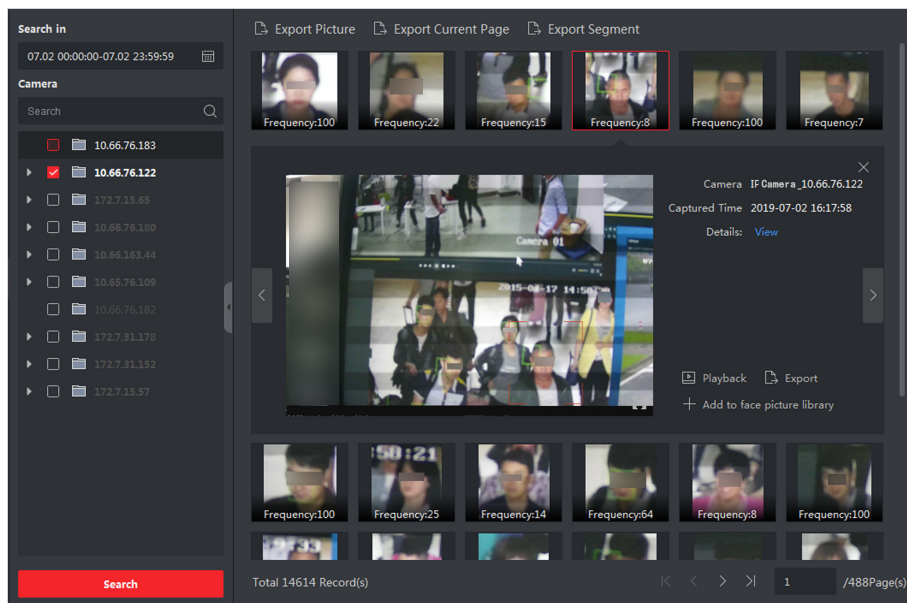
### Before You Start

- Make sure the frequently appeared person alarm has been configured on the device.
- Make sure the device has been armed.

### Steps

1. Click **Data Retrieval** → **Frequently Appeared Person** to enter the frequently appeared person page.
2. Set the start time and end time for searching.
3. Select the camera(s) for searching.
4. Click **Search**.

The frequently appeared person alarm related pictures will be displayed on the right panel.



**Figure 14-8 Results**

5. **Optional:** Click the picture to view the whole captured picture, the captured time, etc.
6. **Optional:** Export the picture(s) to the local PC.
  - Click **Export Picture**, and then select the picture to be exported, and then click **Export**.
  - Click **Export Current Page** to export all the pictures and information on the current page.
  - Click **Export Segment** to download the pictures and capturing information by packages. Each package contains up to 1000 pictures.
7. **Optional:** Perform the following operations if needed.

**Add to Face Picture Library**

Click **Add to face picture library** to add current face picture to the library .

**View Detailed Information**

Click **View** to view the historical captured pictures of this person, the captured time.

**Playback**

Click **Playback** to play back the video of 5-seconds before and after the capturing time.

**Export**

Click the picture to be exported, and then click **Export** to export this picture.

## Chapter 15 AI Dashboard


The client provides AI Dashboard module through which you can experience the advanced functions of the devices with AI features, such as face comparison and linked capture of fixed camera and panoramic camera.

### 15.1 Face Application

For some devices, such as DeepinMind series, DeepinView series, and dual-lens camera, Face Application function provides showing face comparison alarm for the persons in the blacklist, VIP or regular costumers during live view. If the detected face pictures are matched with the persons in the blacklist or VIP face picture library, the security center will receive relative alarms to take appropriate actions quickly and effectively. It can also help you to evaluate the regular costumers, which is widely used in the hospital, supermarket, shopping mall and so on.

#### 15.1.1 Set List Types for Face Picture Libraries

You can configure list type for each face picture library of the device(s), so that the software can check whether the persons detected during live view are in the blacklist, very important person, or the regular costumers.

Click **AI Dashboard** → **Face Application** , and then click  in the upper-right corner to select the list type for each face picture library on the devices.

##### **Blacklist**

If the alarm type is set to **Blacklist**, AI dashboard will show the blacklist alarm once the captured pictures are matched with the ones in the face picture library.

##### **VIP**

If the face picture library is set to **VIP** , AI dashboard will show the VIP alarm once the captured pictures are matched with the ones in the face picture library.

##### **Normal**

The face pictures libraries which belong to neither the blacklist nor the VIP can be set to **Normal**. AI dashboard will not show any alarms when the captured face pictures are matched with the ones in the face picture library.




##### **Note**

This function should be supported by the device and the face picture library need be configured in the device firstly.

---

### 15.1.2 Set Cameras for Showing AI Information

You can specify the displaying camera(s) or other cameras in the camera list to show AI information during live view. For example, if you select a camera (not in live view in the displaying window) for showing VIP information, this camera will perform static detection in the background and show the AI information about VIP.

Click **AI Dashboard** → **Face Application** , and then click  in the upper-right corner to select cameras for showing the AI information in real-time.

Select the alarm type to be displayed for different cameras: Blacklist Alarm, VIP Alarm or Regular Customer Alarm.

#### All Cameras in Live View

If check **All Cameras in Live View**, only the AI information of the camera(s) in live view in the displaying window can be shown.

#### Custom Cameras

If check **Custom Cameras** and select the desired cameras, the AI information of the selected camera(s) can be shown, whether the cameras are in live view or not.

### 15.1.3 Show AI Information

After setting the cameras for showing AI information and list type for face picture libraries, you can view the AI information.

Click **AI Dashboard** → **Face Application** , and then select the camera(s) from the camera list to start live view and show AI information.



#### Note

This function should be supported by the device.

---

#### Camera List

The camera list on the left panel shows all the resources added to the client software, and you can select the appropriate window division and desired camera(s) to show AI information.



#### Note

The channels for live view at the same time are limited by the performance of the PC running the client.



---

Right-click the camera in the camera list, you can switch stream type between main stream and sub-stream.

#### Display Intelligent Information on Live View

You can view the real-time video of the selected camera(s).



Click  in the global toolbar of the live view area and select the window to enable the desired intelligent display. For example, if the line crossing detection is enabled for all live view windows, the recognized targets will be marked dynamically on the images of all windows. You can also click  at the bottom of each window to enable the intelligent display for the camera in this window.

## Face Comparison

If you set **Face Comparison** switch to ON, when detecting blacklist person, VIP, or regular customer, the related alarm notification with corresponding colors will list on the right panel. You can view the alarm time, camera, and other details of the alarm.

## Historical Captured Picture

You can view the historical captured pictures at the bottom of the page.

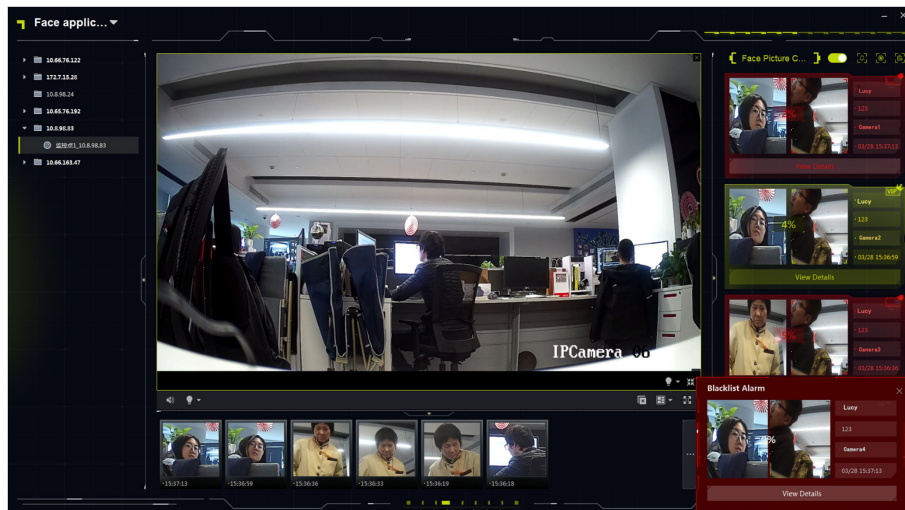



Figure 15-1 Show AI Information

## Enable Alarm Triggered Pop-up Window

Click  to enable alarm triggered pop-up window, and after that, a window will be pop up when the blacklist alarm is triggered, including the captured pictures and alarm details information.

## 15.2 Linked Capture Alarm

This function allows the users to view two different channels (one fixed channel and one PTZ channel) of a device simultaneously. Therefore, you can view the panoramic image and captured details at the same time when an alarm is triggered.

---

### Note


This function needs to be supported by the device.

---

### 15.2.1 Set Basic Parameters

The capture saving function can be enabled or disabled manually, and you can also set the saving path of the captured picture, so that you can view the captured pictures in your PC.

#### Steps

1. Enter the AI Dashboard module.
2. Select **Linked Capture Alarm** to open the Linked Capture Alarm window.
3. Click  to open the setting window.

The introduction of the displayed content shows.



4. Switch **Save Picture** on to enable picture saving function.
5. Click the **Saving Path** to select a saving path of the captured pictures.
6. Click **Save** to save the settings.

The pictures captured when events and alarms are triggered will be saved in the configured path.

### 15.2.2 View Live View and Alarms

When fixed camera triggers an alarm, the fixed camera will capture a panoramic picture related to the alarm, which will be displayed in the panoramic linked alarm window; and the linked PTZ camera will capture a picture with details about the alarm, and the picture will be displayed in the linked channel alarm window. In this way, the user views the panoramic image with details displayed simultaneously.

Generally speaking, Panoramic Channel Live View window is used to display the live view of fixed camera, while Linked Channel Live View window is used to display the live view of PTZ camera connected to the fixed camera.

1. Enter the **AI Dashboard** and select **Linked Capture Alarm** to open the Linked Capture Alarm window.
2. Click  to expand the device list.
3. Select a window and double-click a camera to start live view, or drag a camera from the device list to a window, or hover the cursor on a camera name and then click .

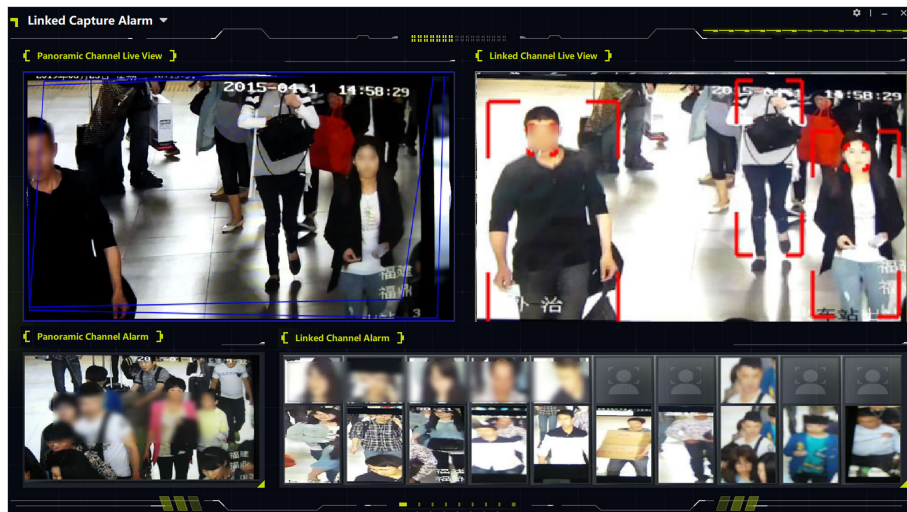



Figure 15-2 View Live View and Alarms

## Chapter 16 Log Search

Two log types are provided: operation log and system log. The operation logs refer to the normal operations that the user did on the client, such as add device, reset password, and start live view; and the system logs record the system information, such as login, logout, log and unlock. You can search the log files and view the log details, including time, user, etc.

Perform the following steps to search the log files.

### Steps

1. Enter the Log Search module.
2. Click  to specify the start time and end time.



### Note


You can search the logs within one month.

---

3. Select a user to search the log files which are generated when this user log into the client.
4. Select **Operation Log** or **System Log** as log type.
5. Click **Search**.

The log files between the start time and end time will be displayed on the list. You can check the operation time, type and other information of the logs.

6. **Optional:** Perform the following operations if there are too many log files.

**Filer** Click  on each table header and select to filter the logs.

**Sort** Click the table header to sort the logs by the time or letter sequence.

## Chapter 17 User Management

To improve the system security, the administrator should create different account for different user, and assign different permissions to the user. To avoid different people sharing the same user account, we recommend you manage the user accounts periodically.

### 17.1 Add User

The super user and administrator can add new users, and assign different permissions for different users if needed.

Perform this task to add an user account.

#### Steps

---



The user account you registered to log in the software is set as the super user.

---

1. Enter the User Management module.
2. Click **Add User** to show user information area.
3. Select the user type from the drop-down list.

#### **Administrator**

The administrator account has all permissions by default, and can modify the passwords and permissions of all operators and its own.

#### **Operator**

The operator account has no permission by default and you can assign the permissions manually. An operator can only change the passwords of its own account and the accounts which are added by it.

4. Enter the user name, password, and confirm password as desired.
- 



The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

---

5. Check the checkboxes to assign the permissions to the created user.
  6. **Optional:** Click **Default Value** to restore the default permissions of this user.
-

### 7. Click **Save**.



Up to 50 user accounts can be added for the client software.

---

After created user account successfully, the user account is added to the user list on the Account Management page.

### 8. **Optional:** Perform the following operations after the user account is created.

**Edit User** Click a user from the list to edit the user information.

---



Only the password of the super user can be edited.

---

**Delete User** Select the user from the list and click **Delete User**.

---



You cannot delete the super user.

---

## 17.2 Change User's Password

The administrator can change normal user's password without entering the old password, while the administrator should enter the old password when changing the password of itself.

### Before You Start

Add user to the software client.

### Steps

1. Enter the User Management module.
  2. Select the user need to be change password, click **Change**.
  3. **Optional:** Enter the old password.
- 



When changing the administrator's password, you need to enter the old password first.

---

4. Enter the new password and confirm the password.
5. Click **OK**.

## Chapter 18 System Configuration

The system parameters, including general parameters, live view and playback parameters, image parameters, file saving paths, etc., can be configured.

### 18.1 Set General Parameters

You can configure the frequently-used parameters, including log expired time, network performance, etc.

#### Steps

1. Enter the System Configuration module.
2. Click **General** tab to enter the General Settings page.
3. Configure the general parameters.

#### Log Expiry Date

The time for keeping the log files. Once exceeded, the files will be deleted.

#### Maximum Mode

Select **Maximize** or **Full Screen** as the maximum mode. **Maximize** mode can maximize the display and show the taskbar. **Full Screen** mode can display the client in full-screen mode.

#### Network Performance

Set the network conditions to **Normal**, **Better** or **Best**.

#### Enable Keyboard and Joystick

Enable the keyboard or joystick. After enabled, you can set the shortcuts for the keyboard and joystick.



#### Note

For details, refer to ***Set Keyboard and Joystick Shortcuts*** .

---

#### Detect New Software Version

After enabled, the client can automatically detect the new software version and remind the user to upgrade the software.

#### Automatic Time Synchronization

Automatically synchronize the time of the added devices with the time of the PC running the client at a specified time point.

#### Auto-Upgrade Device

Set the upgrading mode after the new version of device are detected.

#### Disable

After enabled, the client will not download the firmware package and upgrade even if the client detects a new version of the client.

### **Prompt Me If Download and Upgrade**

After the client detects a new version of the device, it will prompt the user whether to download the firmware package and upgrade.

### **Download and Prompt Me If Upgrade**

After the client detects the new version of the device, it will download the firmware package automatically, and prompt the user whether to upgrade.

### **Download and Prompt Automatically**

After the client detects the new version of the devices, it will download the firmware package and upgrade the new version automatically.

You need to set a schedule in the **Upgrade Time** field, during which the client upgrades the new version automatically.

### **Cloud P2P Region**

Select the server's region for cloud P2P, you can select the region you belong to or the nearest region around.

4. Click **Save**.

## **18.2 Set Live View and Playback Parameters**

You can set the parameters for live view and playback, including picture format, pre-play duration, etc.

### **Steps**

1. Enter the System Configuration module.
2. Click **Live View and Playback** tab.
3. Configure the live view and playback parameters.

### **Picture Format**

Select **JPEG** or **BMP** as the image format for storing pictures.



### **Note**

If **Display Temperature on Captured Pictures** switch is set to ON, JPEG is selected as the image format by default and cannot be changed.

---

### **Merge Downloaded Video Files**

Set the maximum size of merged video file for downloading the video file by date.

### **Search Video Files Stored in**

Search the video files stored in the local device, in the storage server, or both in the storage server and local device for playback.

### **Pre-play for**



Set the pre-play time for event playback. By default, it is 30s.

### **Prioritize Playback of Video Files on Storage Server**

Play back the video files recorded on the storage server preferentially. Otherwise, play back the video files recorded on the local device.

### **Resume Latest Live View Status After Restart**

Resume the latest live view status after you log into the client again.

### **Disconnect Background Videos in Single Live View**

In multiple-window division mode, double-click a live video to display it in 1-window division mode, and the other live videos will be stopped for saving the resource.

### **Enable Wheel for Zoom**

Use the mouse wheel for zoom in or out of the video in PTZ mode, or for zoom in or restoring of the video in digital zoom mode. In this way, you can directly zoom in or out (or restore) the live video by scrolling the mouse.

### **Skip Unconcerned Video during VCA Playback**

Skip the unconcerned video during VCA playback and the unconcerned video will not be played during VCA playback.

4. Click **Save**.

## **18.3 Set Image Parameters**

The image parameters of the client can be configured, such as view scale, play performance, etc.

### **Steps**

1. Open the System Configuration page.
2. Click **Image** tab to enter the Image Settings interface.
3. Configure the image parameters.

### **View Scale**

The view scale of the video in live view or playback. It can be set as **Full Screen**, **4:3**, **16:9**, or **Original Resolution**.



### **Note**

You can also set the view scale in Live View module. For details, refer to *Live View* .

---

### **Play Performance**

The play performance of the live video. It can be set as **Shortest Delay**, **Balanced**, or **Fluency**. You can also select **Custom** and specify the frames according to actual needs.

### **Auto-change Stream Type**

Change the video stream (main stream or sub-stream) automatically in live view according to the size of the display window.

---

 **Note**

When the window division is larger than 9, it will switch to sub-stream automatically.

---

### **Hardware Decoding Preferred**

Set to enable decoding by hardware for live view and playback. Hardware Decoding can provide better decoding performance and lower CPU usage when playing the HD videos during live view or playback.

### **Enable Highlight**

Mark the detected objects with green rectangles in live view and playback.

### **Display Transaction Information**

Display the transaction information on the live view image.

### **VCA Rule**

Display the VCA rule in the live view.

### **Enable Frame Extracting for High-speed Playback**

When play back the video in high-speed (8x speed and above), you can disable this function to make the image of playback more fluent to view the details.

### **Display Target's Pattern**

After enabled, you can view the target person's motion track on the view window.

The device should support this function.

### **Overlay Rules on Captured Picture**

For the thermal device, set to display the temperature information and fire source information on the captured pictures.

---

 **Note**

After enabled this function, the Picture Format in **System Configuration → Live View and Playback** will change to JPEG and is not editable.

---

4. Click **Save**.

## **18.4 Set Picture Storage**

The captured pictures triggered by the events on the devices, can be saved in the PC running the iVMS-4200 VS Service. The picture storage location can be manually set.

### **Steps**

1. Enter the System Configuration module.
2. Click **Event Picture Storage**.
3. Set the **Store Pictures in Server** switch to on.

All the disks of the PC running the service will show.

4. Select the disk to save the pictures.



### Note

The default saving path is: Disk/iVMS-4200 VSAlarmPicture





---

5. Click **Save**.

## 18.5 Set Alarm Sound

When the event, such as motion detection event, is triggered, the client can be set to give an audible warning and the sound of the audible warning can be configured.

### Steps

1. Open the System Configuration page.
2. Click **Alarm Sound** tab to enter the Alarm Sound Settings page.
3. **Optional:** Click  and select the audio files from the local path for different events.
4. **Optional:** Add customized alarm sound.
  - 1) Click **Add** to add customized alarm sound.
  - 2) Double click the **Type** field to customize the alarm sound name as desired.
  - 3) Click  and select the audio files from the local path for different alarms.
5. **Optional:** Click  for a testing of the audio file.
6. **Optional:** Click  in the Operation column to delete the custom sound.
7. Click **Save**.



### Note

The format of the audio file can only be WAV.


---

## 18.6 Set File Saving Path

The video files from manual recording and the captured pictures are stored on the local PC. The saving paths of these files can be set.

Perform the following task when you need to set the file saving path.

### Steps

1. Open the System Configuration page.
2. Click **File** tab to enter the File Saving Path Settings page.
3. Click  and select a local path for the files.
4. Click **Save**.

## 18.7 Set Icons Shown on Toolbar









The icons and the order on the toolbar in the live view and playback window can be customized. You can set to display what icons and set the icon order.

Perform the following task when you need to set icons shown on Toolbar.





### Steps



1. Enter the System Configuration module.
2. Click **Toolbar** tab to enter the Toolbar Settings page.
3. Set **Enable Screen Toolbar Display** switch to ON to enable displaying the toolbar on in the live view and playback window.
4. Click the required icon to display on the toolbar.
5. **Optional:** Drag the icon to set the icon order when displaying on the toolbar.

**Table 18-1 Icons on Live View Toolbar**

	<b>Stop Live View</b>	Stop the live view in the display window.
	<b>Capture</b>	Capture the picture in the live view process. The capture picture is stored in the PC.
	<b>Record</b>	Start manual recording. The video file is stored in the PC.
	<b>PTZ Control</b>	Start PTZ mode for speed dome. Click and drag in the view to perform the PTZ control.
	<b>Two-way Audio</b>	Start the two-way audio with the device in live view.
	<b>Digital Zoom</b>	Enable the digital zoom function. Click again to disable the function.
	<b>Instant Playback</b>	Switch to the instant playback mode.
	<b>Remote Configuration</b>	Open the remote configuration page of the camera in live view.

**Table 18-2 Icons on Playback Toolbar**

	<b>Capture</b>	Capture the picture in the live view process. The capture picture is stored in the PC.
	<b>Record</b>	Start manual recording. The video file is stored in the PC.
	<b>Digital Zoom</b>	Enable the digital zoom function. Click again to disable the function.
	<b>Download</b>	Download the video files of the camera and the video files are stored in the PC.

	<b>VCA Playback</b>	Set the VCA rules. For more details, refer to <b><i>VCA Playback</i></b> .
	<b>Tag Control</b>	Add default or custom tag for the video files to mark the important video point. You can also edit the tag.

6. Click **Save**.

## 18.8 Set Keyboard and Joystick Shortcuts

The keyboard can be connected to the client and be used to control the PTZ cameras. You can set the shortcuts for keyboard and joystick to get quick and convenient access to the commonly used actions.

Perform this task when you need to set keyboard and joystick shortcuts.

### Steps

---

#### **Note**

This configuration page will display after enabling keyboard and joystick in General Settings. For details, refer to ***Set General Parameters*** .

---

1. Enter the System Configuration module.
  2. Click **Keyboard and Joystick** to show the Keyboard and Joystick Shortcut Settings area.
  3. Select the COM port from the drop-down list for keyboard if the keyboard is connected to the PC installed with the client.
- 

#### **Note**

You can enter the Device Manger of the PC to check the COM port, which the keyboard is connected to.

---

4. Set shortcuts for keyboard and joystick.
  - 1) Select a certain function name on Function column.
  - 2) Double-click the item field under the PC Keyboard, USB Joystick or USB Keyboard column.
  - 3) Select the compound keys operation or number from the drop-down list to set it as the shortcuts for the function of the keyboard or USB joystick.
5. Click **Save**.

### Example

For the **Focus (+)** function, if you set **Home**, **1**, and **F1** as the shortcuts of the PC Keyboard, USB Joystick and USB Keyboard, you can press the Home key on PC keyboard, control the joystick to the 1 direction, or press F1 key on USB keyboard to zoom in.

## 18.9 Set Email Parameters

An email notification can be sent when an event occurs. To send the email to some specified receivers, the settings of the email need to be configured before proceeding.

### Steps

1. Enter the System Configuration module.
2. Click **Email** tab to enter the Email Settings interface.
3. Enter the required information.

#### SMTP Server

The SMTP server IP address of host name (e.g., smtp.263xmail.com)

#### Encryption Type

You can check the radio to select **Non-Encrypted**, **SSL**, or **STARTTLS** .

#### Port

Enter the communication port used for SMTP. The port is 25 by default.

#### Sender Address

The email address of the sender.

#### Security Certificate (Optional)

If your email server requires authentication, check this checkbox to use authentication to log into the server and enter the login user name and password of your email account.

#### User Name

Enter the user name of the sender email address if **Server Authentication** is checked.

#### Password

Enter the password of the sender Email address if **Server Authentication** is checked.

#### Receiver 1 to 3

Input the email address of the receiver. Up to 3 receivers can be set.

4. **Optional:** Click **Send Test Email** to send an email to the receiver for test.
5. Click **Save**.

## 18.10 Manage Security Authentication

For the data security purpose, the security certificate of clients and added servers (stream media server) should be same. You can set the verify certificate is required or not when enabling transmission encryption using TLS (Transport Layer Security) protocol.

Before adding the stream media server to the client, you should export the service certificate from the client service, and import it to the stream media server. If multiple clients use the same server, you should make the security certificates of the clients and the server same with each other.

### 18.10.1 Export Certificate from Service Management

You can export the security certificate from the current client service and import the exported certificate file to the stream media server or other clients.

#### Steps

1. Enter the Service Management.
2. Click **Export** to save the certificate file in the local PC.



#### Note

The certificate file is in XML format.

---

#### What to do next

After exporting the certificate, you can copy the certificate to the PC installed with the client and import it to the stream media server, or to other clients.

For importing to the stream media server, refer to ***Import Certificate to Stream Media Server*** .

### 18.10.2 Import Certificate to Client

If there are multiple clients accessing the same steam media server, you should import the same certificate to the clients and server.

#### Before You Start

Make sure you have exported the security certificate from one of the client service.



#### Note

For details, refer to ***Export Certificate from Service Management*** .

---

#### Steps

1. Copy the certificate file exported from other client to the local PC.
2. Enter the System Configuration module.
3. Click **Security Authentication** tab to enter the security authentication setting interface.
4. Click **Import**.
5. Select the certificate file from your local PC and click **Open**.



#### Note

Please restart the client to take effect.

---

### 18.10.3 Certificate Verification for Transmission Encryption

On the Security Authentication page, you can set the device certificate verification is required or not for transmission encryption.

Click **System Configuration** → **Security Authentication** to enter the security authentication interface. Select the Verify Certificate as **Yes** or **No**.

### **Yes**

You must put the device certificate to the designed directory if you enable transmission encryption when adding device. And the device will be added with transmission encryption and the certificate will be verified, which improves the security level.


### **No**

The device certificate is not required if you enable transmission encryption when adding device. And the device will be added with transmission encryption.



## Chapter 19 Operation and Maintenance

You can perform maintaining operations in the menu to ensure a smooth and convenient usage of the client.

Click  in the upper-right corner, and then click **File/System/Tool** to perform the following operations.

### **Open Log File**

You can open a log file saved in your local PC or log files of the client.

### **Import/Export Configuration File**

You can import configuration files from local PC to the client if needed, and vice versa.

### **Auto Backup**

Select day and time to backup configuration files and data in database, or restore the backed up data.

### **Skin**

Change the skin of the client, including bright-color series and black-color series.

### **Batch Time Sync**

Synchronize selected devices' time with your PC time.

### **Message Queue**

After configuring email linkage, the triggered event(s) will be displayed here. Select an event and cancel sending the an email to the receiver.

## Appendix A. Troubleshooting

Here are some common symptoms when operating the client software. We provide the possible causes and corresponding solutions to solve the problems.

### A.1 Failed to get the live view of a certain device.

#### Problem

Failed to get the live view of a certain device.

#### Possible Reasons

- Unstable network or the network performance is not good enough.
- The device is offline.
- Too many accesses to the remote device cause the load of the device too high.
- The current user has no permission for live view.
- The version of the client software is below the needed version.

#### Solutions

- Check network status and disable other not in use process on your PC.
- Check the device network status.
- Restart the device or disable other remote access to the device.
- Log in with the admin user and try again.
- Download the client software of the latest version.

### A.2 Local recording and remote recording are confused.

#### Problem

Local recording and remote recording are confused.

#### Solutions

- The local recording in this manual refers to the recording which stores the video files on the HDDs, SD/SDHC cards of the local device.
- The remote recording refers to the recording action commanded by the client on the remote device side.

### A.3 Failed to download the video files or the downloading speed is too slow.

### **Problem**

Failed to download the video files or the downloading speed is too slow.

### **Possible Reasons**

- Unstable network or the network performance is not good enough.
- The NIC type is not compatible.
- Too many accesses to the remote device.
- The current user has no permission for playback.
- The version of the client software is below the required version.

### **Solutions**

- Check network status and disable other not in use process on your PC.
- Directly connect the PC running the client to device to check the compatibility of the NIC card.
- Restart the device or disable other remote access to the device.
- Log in with the admin user and try again.
- Download the client software of the latest version.

## Appendix B. FAQ (Frequently Asked Questions)

Here are some frequently asked questions when operating the client software. We provide the corresponding answers to help the users to solve the problems.

### B.1 During live view, why an error message with error code 91 prompts ?

#### Question

During live view, why an error message with error code 91 prompts ?

#### Answer

For live view of multiple windows, the channel may not support sub stream. You should disable the function of **Auto-change Stream Type** in **System Configuration** → **Image** , and select the appropriate steam type for live view.

### B.2 During live view, why the image is blurred or not fluent?

#### Question

During live view, why the image is blurred or not fluent?

#### Answer

Check the driver of video card. We highly recommend you update the driver of video card to the latest version.

### B.3 Why the memory leaked and the client crashed after running for a while?

#### Question

Why the memory leak and the client crashed after running for a while?

#### Answer

In the installation directory of the client software, open the **Setup.xml** file with Notepad and modify the value of **EnableNetandJoystickCheck** to **false**. Restart the client, and if the problem is still not solved, contact our technique support.

## **B.4 During live view, when getting stream via the Stream Media Server, why an error message with error code 17 prompts?**

### **Question**

During live view, when getting stream via the Stream Media Server, why an error message with error code 17 prompts?

### **Answer**

Check the port mapping of Stream Media Server, especially RTSP port.


## **B.5 How to get better performance of live view and playback when network bandwidth is low?**

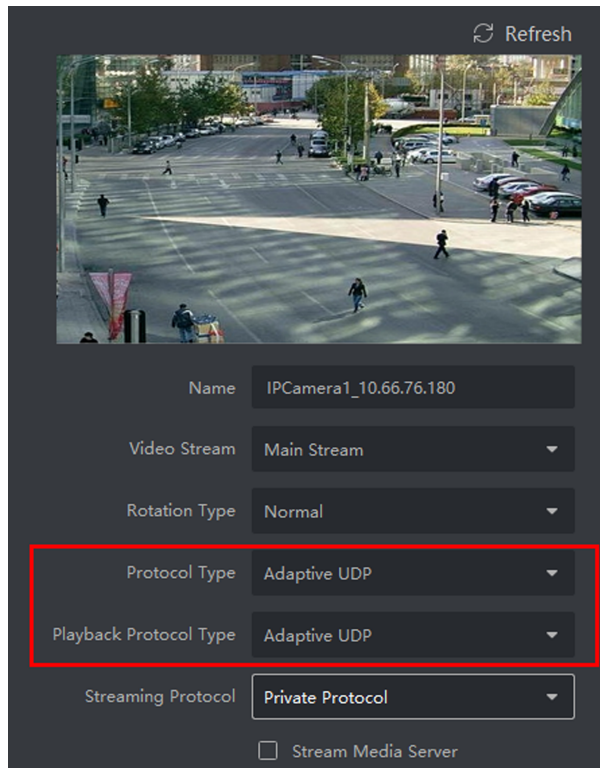
### **Question**

If the network bandwidth is low, how to get better performance of live view and playback?

### **Answer**

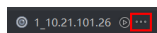
This function should be supported by the device. You can perform the following operations to realize live view in low bandwidth:

- Firstly, after adding the encoding devices to the client, you need to set the camera's streaming protocol.
  1. Enter **Device Management** → **Group**
  2. Select the camera in the Encoding Channel list and click .
  3. In the Edit Camera window, set the **Protocol Type** (for live view) and **Playback Protocol Type** (for playback) as **Adaptive UDP**.



**Figure B-1 Set Protocol Type**

4. Click **OK** to save the settings.
- Then you need to disable the Auto-change Stream Type function.
  1. Enter **System Configuration** → **Image** .
  2. Disable the switch of **Auto-change Stream Type** function.
- Select stream type for live view.
  1. Enter Main View module.
  2. In the device list on the left, move the cursor to the camera name and click **⋮** → **Stream** .



**Figure B-2 Select Stream Type**

3. For network camera, set the stream type as **Third Stream**.  
For DVRs or NVRs, set the stream type as **Virtual Stream**.
4. Start live view.

## Appendix C. Error Code

Code	Error Name	Description
<b>iVMS-4200</b>		
317	No videos.	It will be prompted when the user has no permission to play back.
<b>HCNetSDK.dll</b>		
1	Invalid user name or password.	
2	No permission.	The user in the device has no enough permission.
4	Invalid channel number.	It will be prompted in the live view of remote screen control.
5	No more devices can be connected.	
7	Failed to connect the device.	
23	Not supported.	
29	Operation failed.	
43	No buffer.	It will be prompted when adding a device and the device port is occupied by a web server.
55	Invalid IP address.	
56	Invalid MAC address.	
91	The channel does not support the operation.	It will be prompted when failed to get the sub stream.
96	The device is not registered on the DDNS.	
153	The user is locked.	
250	The device is not activated.	
404	Channel No. error or the device does not support the sub stream.	It will be prompted when failed to get the sub stream or the sub stream does not exist.
424	Failed to receive the data for RTSP SETUP.	It will be prompted when adding the live view for the software DVS via external network.
800	No more bandwidth can be used.	
<b>Playctrl.dll</b>		

<b>Code</b>	<b>Error Name</b>	<b>Description</b>
2		The stream is not a Video & Audio stream.
6		The playback window turns black when adopting H.265 in the 64-bit operating system.
<b>SMS</b>		
3		The connection problem between the software and the stream media server.
17		The streaming problem between the stream media server and the device.





See Far, Go Further