

TRENDnet[®]

User's Guide

Mira VMS

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Chapter 1 Introduction

Mira is a versatile security management software for TRENDnet IP cameras and NVRs. This software provides multiple functionalities, including real-time live view, video recording, remote search and playback, file backup, alarm receiving, security control, time & attendance, 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 Management

You can manage devices on the client, including adding, editing, and deleting the devices.

2.1 Activate Devices

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

Before You Start

Make sure the device to activate is connected to the network and is in the same subnet as 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.
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.

2.2 Add Device

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

2.2.1 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.

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.

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.



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.



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.

2.2.2 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.



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.
-



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 .



- 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.

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.

2.2.3 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.

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.

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.

2.3 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.

2.4 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.

2.4.1 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 left 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.
-

Note

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

- Select the Safe Mode according to actual needs.
-

Note

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.

2.4.2 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 left 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 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.

Note

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.

2.5 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.

Note

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

Enter the Device Management module, and then click **Device** tab to show the device list. Perform the following operations according to different upgrading modes.

Disable

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 **Upgradeable**.

Select the upgradeable device and click **Upgrade** to start upgrading the device firmware.

Note

The upgrade progress will show. When the upgrade is completed, the status in the Firmware Upgrade column of the device will turn to **Upgraded**.

Prompt Me If Download and Upgrade

If there is a new firmware version available, a prompt window will pop up. Click **Upgrade All** to start downloading and upgrading.

Download and Prompt Me If Upgrade

A dialog will pop up for selecting whether to upgrade after downloading package of new version. Click **Upgrade All** to start upgrading the device firmware.

Note

After clicking **Upgrade All**, a prompt will pop up for viewing details. If you are not in Device Management page, click **View Details** to jump to Device Management page; if you are in Device Management page, close the prompt.

Download and Update Automatically

After the client detects the new version of the devices, it will download the new version and upgrade the new version without noticing the user.

On the device management page, the following updating status will be shown in the Firmware Update column.

No Available Version

No new firmware version available.

Upgradeable

A new firmware version available.



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

Hover the cursor on **Upgraded** to show the version after upgrading.

Upgrading Failed

When the upgrade fails, a prompt will pop up for viewing details. If you are not in Device Management page, click **View Details** to jump to Device Management page; if you are in Device Management page, close the prompt. Hover the cursor on **Upgrading Failed** to show the error details, and click **Upgrade Again** to try again.

Chapter 3 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.

3.1 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.

Note

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

3.2 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

Note

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.

3.3 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.

3.4 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 4 Cloud Account

The client software also supports to register a Cloud account, log into your Cloud account (created from the Mira app) and manage the devices which support the Cloud service.

4.1 Register a Cloud Account

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

Steps

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

The Login window pops up.

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.

4.2 Log into Cloud Account

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

Before You Start

Register a Cloud P2P account.

Note

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.
 1. Click **Device Management** → **Device** to enter the Device Management page.
 2. Click **Add** to open the Add Device panel.
 3. Select **Cloud P2P** as the adding mode.
 4. 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.
-

Note

- 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 5 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.

5.1 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.

5.1.1 Start Live View

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.

5.1.2 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.

5.1.3 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.

5.1.4 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.

Start Instant Playback Move the cursor over the new view and click  to start instant playback for the cameras in the view. See *Instant Playback* for details.

Start Auto-Switch of All Custom Views Move the cursor over Custom View and click  to start switching all views in the custom view list automatically. See details in *Auto-Switch in Live View*.

5.2 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

5.2.1 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.

5.2.2 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.

5.2.3 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.

5.3 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 Focus + to move the focal point forward, and click Focus - 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.
	Lens Initialization	Initialize the lens and focus again for a clear

Icon	Name	Description
		image.
	Light	<p>Click to fill light.</p> <hr/> <p> Note This function needs to be supported by the device.</p> <hr/>
	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.

5.3.1 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.
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 **]** 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.

5.3.2 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



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.

Call Patrol	Click to call the patrol.
Stop Calling Patrol	Click to stop calling 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.

5.3.3 Configure Pattern

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

Steps



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.

5.4 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.

5.5 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.

5.5.1 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



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.



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

5.5.2 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.

- | | |
|--------------------------|--|
| Delete Video File | Select the video file, and click Delete to delete the video file. |
| Send Email | Select the video file, and click Email to send an email notification with the selected video file attached. |



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

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

5.5.3 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.



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

5.5.4 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.

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

5.6 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.

5.7 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?***

5.8 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 6 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.

6.1 Store Picture and Video on NVR, or Network Camera

Some local devices, including the 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



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.



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.
-



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.



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.

6.2 Store Pictures 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.



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.

6.3 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 .



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



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:

- Move** Drag a time period to move it when the cursors turns to .
- Lengthen or Shorten** Select a time period and then lengthen or shorten it when the cursor turns to .
- Set Accurate Time** Click a time period to set the accurate start time and end time of the period.
- Delete** Select the configured schedule time period and click  to delete it.
- Delete All** Click  to delete all the configured time periods.
- Copy to** 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.



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.

6.4 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

- Move** 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.
- Lengthen or Shorten** When the cursor turns to , you can lengthen or shorten the selected time period.
- Delete** Select a time period and click  to delete it.
- Delete All** Click  to delete all the configured time periods.
- Copy to** 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 7 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***.

7.1 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 <hr/>  Note 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"> ● Print Captured Picture: Capture a picture and print it. ● Send Email: Capture the current picture and then send an Email notification to one or more receivers. The captured picture can be attached. ● Custom Capture: Capture the current picture. You can edit its name and then save it.

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.
-

7.1.1 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.

7.1.2 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.

Single Frame (Reverse) Click  or scroll down the mouse wheel to play the video files frame by frame (reversely).

Audio Control Click  or  to turn off/on the sound. You can also adjust the volume when turning on.

Download for Multiple Cameras Click  to download video files of multiple cameras at the same time.

 **Note**

For more details, refer to ***Download for Multiple Cameras***.

Download Video Files by Date Click  to download the video files of the camera by date and store them to local PC.

Accurate Positioning Click  **09:25:46** to set the accurate time point to play the video file.

7.2 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.

7.2.1 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.

7.2.2 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.



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.



- 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.
-

7.3 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.

7.3.1 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.

7.3.2 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.
-

7.4 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.
-

7.5 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



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.

7.6 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 8 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.
-

8.1 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.

8.2 Download Videos from 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 9 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.
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.

Display on Map

When the event source is added as a hot spot on the map, the hot spot will be displayed with  twinkling aside when the event is triggered, which helps to security guard to view the location of the event.

You can also click the hot spot to view the event details and the live video of the linked camera.

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 10 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*.

10.1 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.
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.

10.2 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. For none-video device, event time is the time when the event is triggered.

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.

10.3 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.
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.

All

All the device types, and you can set the following filter conditions: group, priority, and status.

Security Control Panel

For the events of security control panel, you can set the following filter conditions: device, priority, acknowledgement status and event type.

Video Intercom

For the events of video intercom, you need to select searching scope: All Record and Only Unlocking.

- All Records
- : You can filter the events from all the video intercom events, and you need to set the following filter conditions: device, priority, status.
- Only Unlocking
- : You can filter the events from all the video intercom unlocking events, and you need to set the following filter conditions: device, unlocking type.

Access Control

For the events of access control, you can set the following filter conditions: device, priority, status, event type, card reader type, person name, card no., organization.

 **Note**

Click **Show More** to set the event type, card reader type, person name, card no., organization.

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.
 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.
-

10.4 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.

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 11 Map Management

The E-map function gives a visual overview of the locations and distributions of the installed cameras and alarm input devices. You can get the live view of the cameras on the map, and you will get a notification message from the map when alarm is triggered.

E-map is a static image (it do not have to be geographical maps, although they often are. Depending on your organization's needs, photos and other kinds of image files can also be used as e-maps) which gives you a visual overview of the locations and distributions of the hot spots (resources (e.g., camera, alarm input) placed on the map are called hot spots). You can see the physical locations of the cameras and alarm inputs, and in what direction the cameras are pointing. With the function of hot region, e-maps can be organized into hierarchies to navigate from large perspectives to detailed perspectives, e.g., from floor level to room level.

11.1 Add Map

You should add a map as the parent map for the hot spots and hot regions.

Steps



Only one map can be added to one group.

1. Open the E-map page.
2. Select a group for which you want to add a map.



For details about setting the group, refer to **Group Management**.

3. Click **Add Map** to open the map adding window.
4. Enter a descriptive name of the added map.
5. Select a map picture from the local path.



The picture format of the map can only be PNG, JPEG or BMP.

6. Click **OK**.
7. Optional: Perform the following tasks after adding the map.

Zoom in/out Use the mouse wheel or click + or - to zoom in or zoom out on the map.

Adjust Map Area Drag the yellow window in the lower-right corner or use the direction

buttons and zoom bar to adjust the map area for view.

11.2 Edit Map Scale

The scale of a map is the ratio of a distance on the map to the corresponding distance on the ground. The client can calculate two locations' distance on the map according to the distance on the ground. An accurate map scale is essential for defining radar's monitoring range.

Before You Start

Make sure you have added a map. See **Add Map** for details.

Perform this task if you need to add a security radar to the map.

Steps

1. Enter the E-map module.
2. Click **Edit** on the E-map toolbar to enter the map editing mode.
3. Click **Edit Scale** to select two locations on the map.
The cursor will turn to  if you hover it on the map.
4. Click on the map to select two locations.
The Edit Scale window pops up.
5. Enter the ground distance between the two locations, and then click **OK**.
The client will calculate the map scale automatically.

11.3 Manage Hot Spot

The devices added to the map are called hot spots. The hot spots show the locations of the devices, and you can also get the live view or alarm information of the surveillance scenarios through the hot spots. The devices can be added to the map as hot spots includes: camera, alarm input/output, access point, security radar, and zone.

11.3.1 Add Camera as Hot Spot

You can add cameras to the map as hot spots.

Before You Start

Make sure you have added an e-map and a camera to the client. See **Add Map** and **Device Management** for details.

Steps

1. Enter the E-map page.
2. Click **Edit** in the upper-right corner to enter the map editing mode.
3. Click **Add Hot Spot** → **Camera Hot Spot** to open the Add Hot Spot window.
4. Select the cameras to be added to the map.

- Optional: Edit the hot spot name, select the name color and select the hot spot icon.
- Click **OK** to save the settings.

 **Note**

You can also drag the camera icons from the group list to the map directly to add the hot spots.

The camera icons are added on the map as hot spots and the icons of the added cameras in the group list change from  to . The sector indicates the camera's field of view.

- Perform the following operation(s).

Move the Hot Spot Drag the hot spot to move it to a certain position.

Change the FOV Angle Drag  and revolve to change the camera's field of view.

Change the FOV Size Drag  to change the FOV size.

11.3.2 Add Alarm Input as Hot Spot

You can add the alarm inputs to the map as hot spots.

Steps

- Enter the E-map module.
- Click **Edit** in the upper-right corner to enter the map editing mode.
- Click **Add Hot Spot** → **Alarm Input Hot Spot** to open the Add Hot Spot window.
- Select the alarm inputs to be added to the map.
- Optional: Edit hot spot name, select the name color and select the hot spot icon by double-clicking the corresponding field.
- Click **OK**.

 **Note**

You can also drag the alarm input icons from the group list to the map directly to add the hot spot.

The alarm input icons are added to the map as hot spots and the icons of the added alarm inputs in the group list change from  to .

- Optional: Drag the hot spot to move it to a certain position.

11.3.3 Add Alarm Output as Hot Spot

You can add alarm outputs to the map as hot spots for management. After that, you can enable or disable it in a quick manner. If you enable an alarm output on the map, the security control devices (e.g. sirens, bells) connected to it will alarm for attention.

Before You Start

Make sure you have added an e-map and alarm output to the client. See **Add Map** and **Device Management** for details.

Steps

1. Enter the E-map module.
2. Click **Edit** on the E-map toolbar to enter the map editing mode.
3. Click **Add Hot Spot** → **Alarm Output Hot Spot** to open the Add Hot Spot panel.
4. Select the alarm output to be added to the map.
5. Optional: Edit the hot spot name, select the name color, and select the hot spot icon.
6. Click **OK**.



You can also drag an alarm output icon from the alarm output list to the map to add the hot spot.

The alarm output is added to the map as a hot spot and its icon in the group list changes from  to .

7. Optional: Drag the alarm output to move it to a certain position.

11.3.4 Add Zone as Hot Spot

You can add zones to the map so that you can quickly locate the zone when an alarm is triggered.

Before You Start

Make sure you have added a map and zone to the client. See **Add Map** and **Add Device** for details.

Steps

1. Enter the E-map module.
2. Click **Edit** on the E-map toolbar to enter the map editing mode.
3. Click **Add Hot Spot** → **Zone Hot Spot** to open the Add Hot Spot panel.
4. Select the zone(s) to be added to the map.
5. Optional: Edit the hot spot name, select the name color, and select the hot spot icon.
6. Click **OK**.

 **Note**

You can also drag the alarm output icons from the alarm output list to the map to add the hot spot.

- The zone is added to the map as a hot spot and its icon in the group list changes from  to .
7. Optional: Drag the zone hot spot to move it to a certain position.
When alarms are triggered, the number of the newest alarms will be displayed on the zone's icon. You can click the number to see the alarms details.
-

 **Note**

No more than 10 newest alarms can be displayed.

8. Optional: Click **Clear Alarms** to mark the alarms of the zones on the current map as read.

11.3.5 Add Security Radar as Hot Spot

For an effective monitoring, you can add a security radar to the map as a hot spot and paint zones in its monitoring field. So that when someone intrudes the zone, an alarm will be triggered for attention.

Before You Start

Make sure you have added an e-map and a security radar to the client. See **Add Map** and **Device Management** for details.

Steps

1. Enter the E-map module.
2. Click **Edit** on the E-map toolbar to enter the map editing mode.
3. Optional: Edit map scale. See **Edit Map Scale**.
4. Select a security radar in the device list and drag it to the map.
5. Optional: Click the added radar and then click  to edit the hot spot name, select the hot spot color, and select the hot spot icon.
6. Click **OK**.

The security radar is added to the map as a hot spot and its icon in the group list changes from  to . The sector indicates the monitoring field of the radar.

 **Note**

- Orange sector indicates an armed radar, while black sector indicates a disarmed radar.
 - Red point indicates the detected intruder.
-

7. Add zone to the monitoring field of the security radar.
-

 **Note**

Make sure the security radar is disarmed.

- 1) Click **Edit** → **Add Radar Zone** to start painting a zone.
- 2) Optional: Switch the **Field Assistance** onto enable zone painting assistance function.

Example

Person A takes an on-site walk in the field which needs to be painted as a zone, which will be indicated as a moving pattern consists with red points and dashed lines. And then Person B paints a zone on the map according to the moving pattern.

- 3) Click in the sector to paint a zone and right-click to complete painting. Zone Settings window pops up.
- 4) Enter a zone name and select a zone type.

Warning Zone

Defined by red line. If someone intrudes the warning zone, an alarm will be triggered with the whole zone turning to red. And the intruder's location and moving pattern will be displayed with a red point connected by a red dashed line. Only if the intruder goes out of the zone, the zone restores.

Pre-Warning Zone

Defined by blue line. If someone intrudes the warning zone, an alarm will be triggered and you can view the event details in the Event Center.

Disabled Zone

Defined by purple line. If someone intrudes the warning zone, no alarm will be triggered, and moving pattern will not be displayed.

- 5) Optional: Edit a zone: double-click a zone to enter editing mode of the zone (a dashed-line frame will be displayed around the zone). Hover the cursor on the edge of the zone to show a blue +, click to add a point for the zone. Drag a point to change the zone. Click any other place to quit editing mode.
8. Optional: Drag the security radar to move it to a certain position.

11.3.6 Add Access Point as Hot Spot

You can add access points to the map as hot spots, so that you can find the hot spots and view their status and alarm numbers.

Before You Start

Make sure you have added a map and an access point to the client. See **Add Map** and **Add Device** for details.

Steps

1. Enter the E-map module.
2. Click **Edit** on the E-map toolbar to enter the map editing mode.

3. Click **Add Hot Spot** → **Access Point Hot Spot** to open the Add Hot Spot window.
4. Select the access point(s) to be added to the map.
5. Optional: Edit the hot spot name, select the name color, and select the hot spot icon.
6. Click **OK**.

 **Note**

You can also drag an access point icon from the access point list to the map.

The access point is added to the map as a hot spot and its icon in the group list changes from  to .

7. Optional: Drag the access point hot spot to move it to a certain position.
When alarms are triggered, the number of the newest alarms will be displayed on the hot spot icon. You can click the number to see the alarms details.
-

 **Note**

No more than 10 newest alarms can be displayed.

11.3.7 Edit Hot Spot

You can edit the information of the added hot spots on the map, including the name, the color, the icon, etc.

Steps

1. Enter the E-map module.
2. Click **Edit** in the upper-right corner to enter the map editing mode.
3. Select the hot spot icon on the map and then click  to open the Edit Hot Spot window.
4. Edit the hot spot name in the text field, select the hot spot name's color and hot spot icon shown on the map.
5. Check **Apply to Other Camera Hot Spots/Apply to Other Alarm Input Hot Spots/Apply to Other Alarm Output Hot Spots/Apply to Other Zone Hot Spots** to apply the color and icon settings to other hot spots.
6. Click **OK**.
7. Optional: Select the hot spot icon and click  to delete the hot spot.

11.3.8 Preview Hot Spot

After adding hot spots (including camera, alarm input/output, zone, security radar, and zone) to the map, you can view the live view of the camera hot spot and the triggered alarm information of all the types of hot spots on the map.

Before You Start

Make sure you have added hot spots to the map. See *Manage Hot Spot* for details.

Steps

1. Enter the E-map module.



If you are in the editing map mode, click **Exit** on the upper-right corner to enter the map preview mode.

2. Click **Display** to show the hot spots on the map.



Hot spot type with  will be shown on the map.

3. Click a hot spot to perform the following operation(s).

Hot Spot
TypeOperationsCame
ra

Live View: Click  to pop up the live view window of the camera.



- When an alarm is triggered during live view, the client will play a video file of 30 s first.
 - You can capture, start recording and instant playback during live view.
-

Alarm Output

Click an alarm output, and select **Open/Close**.



The security control channels managed by the alarm output will also be opened/closed.

Access Point

View door status: the current door status of the access point is displayed on the icon. Click the icon to switch the door status.

Open Door

When the door is locked, unlock it and it will be open for once. After the open duration, the door will be closed and locked again automatically.

Close Door

When the door is unlocked, lock it and it will be closed. The person who has the access authorization can access the door with credentials.

Remain Open

The door will be unlocked (no matter closed or open). All the persons can access the door with no credentials required.

Remain Closed

The door will be closed and locked. No person can access the door even if he/she has the authorized credentials, except the super users.

Arm/Disarm zones in the monitoring field of the radar: After exiting editing, click the icon of a security radar, and then select **Arm/Disarm**.

4. Optional: Perform the following operation(s).

View Alarm Information

Click the alarm number on a hot spot icon to open the alarm information page to view the alarm type and triggering time.

Clear Alarm

Click **Clear Alarm** on the top of the map to mark all the alarms of the hot spot as read.

View Multiple Cameras' Live View on the Map

1. Click **Live View** to show 4 small windows on the bottom of the client.
2. Drag a camera from the device list to a window to start the live view.



Note

Up to 4 cameras' live view is supported at the same time.

11.4 Manage Hot Region

The hot region function links a map to another map. When you add a map to another map as a hot region, an icon of the link to the added map is shown on the main map. The added map is called child map while the map to which you add the hot region is the parent map.

After linking a child map to a parent map, a hot region icon will display on the parent map. You can click it to enter the child map to view the resources on the child map for convenience.

With the function of hot region, e-maps can be organized into hierarchies to navigate from large perspectives to detailed perspectives, e.g., from floor level to room level.

11.4.1 Add Hot Region

You can add a map to another map as a hot region and an icon of the link to the added map is shown on the main map. The added map is called child map while the map to which you add the

hot region is the parent map.

Before You Start

At least two maps should be added. Refer to **Add Map** for details about adding maps.

Steps



A map can only be added as the hot region for once.

1. Enter the E-map page.
2. Click **Edit** on the upper-right corner to enter the map editing mode.
3. Select an added map as the parent map.
4. Click **Add Hot Region** to open the Add Hot Region window.
5. Select the child map.
6. Optional: Edit the hot region name, and select the hot region color and icon by double-clicking the corresponding field.
7. Click **OK**.
The child map icons are added on the parent map as the hot regions.

11.4.2 Edit Hot Region

You can edit the information of the hot regions on the parent map, including name, color, icon, etc.

Steps

1. Enter the E-map module.
2. Click **Edit** on the upper-right corner to enter the map editing mode.
3. Select a hot region icon on the parent map and click  to open the Edit Hot Region window.
4. Edit the hot region name in the text field, select the hot region name's color and hot region icon.
5. Check **Apply to Other Hot Regions** to apply the color and icon settings to other hot regions.
6. Click **OK**.

11.4.3 Preview Hot Region

After adding a hot region, you can click the hot region icon on the parent map to enter the child map. You can view the resources and alarms on the child map.

Steps

1. Enter the E-map page.

 **Note**

If you are in the editing map mode, click **Exit** on the upper-right corner to enter the map preview mode.

2. Click the hot region icon on the parent map to enter the linked child map.
You can view the resources on the child map. If there is any alarm triggered on the child map, you can view the alarm details.
3. Optional: Click **Back to Parent Map** on the upper-left corner to go back to the parent map.
4. Optional: Click **Clear Alarm Info.** on the upper-right corner to clear the alarm information triggered by the resources on the current map.

Chapter 13 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.

13.1 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.

13.2 Add Stream Media Server by IP Address

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

Steps

Note

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

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

Note

- 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.
-

Note

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.
-

Note

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.

13.3 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 14 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.

14.1 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.

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.



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.

14.2 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.

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

14.3 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.

14.3.1 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.
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



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

14.3.2 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



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.
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



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

14.4 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.

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 15 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.

15.1 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.

15.1.1 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.

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.

15.1.2 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



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.
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.

15.1.3 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.
8. Select one picture to search, and then click **Confirm**.

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.

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.

15.2 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



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.

1. Click **Select Picture** to select a picture for comparison from local PC.
-



- 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.
-

2. 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.
-



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.
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.

15.3 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.

15.4 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.



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.



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.
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.

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.

15.5 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

1. Click **Export Picture**.
2. Select one or more picture(s), or check **Select All** on the page below.
3. 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.

15.6 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.
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 16 Security Control Panel

A security control panel detects people, vehicle (etc.) entering a pre-defined virtual region, triggers events, and reports events information (such as event location) to security personnel. The Event Center module provides event management and remote control of partitions and zones via the client. After configuring client actions in event management page, you will receive notifications on the client when an event occurs. You can also manage the partitions and zones by the client even if you cannot operate the security control panel manually.



Permissions are required for Event Management, remote control of security control panel, and device arming & disarming. For details about setting user permissions, refer to **Add User**.

16.1 Configure Client Linkage for Zone Event

Even if you are far away from a zone, you can still know what happens and how urgent the event is in a zone by configuring linked actions of zone 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 multiple zones in a batch at a time.

Before You Start

- Make sure you have added a security control panel.
- Make sure zones have been defined beforehand.
- Make sure events have been configured beforehand.

Steps

1. Click **Event Management** → **Security Control Event**.
2. Expand the zone list of a security control panel, and then select a zone from the list.
3. Check one or more event.
4. Click **Edit Linkage** to configure client actions.

Audible Warning

The client software gives an audible warning when an event is triggered. You can select the alarm sound for audible warning.



Click **Add** to enter the alarm sound name and select a sound in your PC. For details, refer to **Set Alarm Sound**.

Send Email

Send an email 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, captured pictures of the linked camera, process record, and process field) on the software client when the event is triggered.

Display on Map

When the event source is added as a hot spot on the map, the hot spot will be displayed with red number (indicates the number of events, and the maximum number is 10) aside when the event is triggered, which helps the security guard to view the location of the event.

You can also click the hot spot to view the event details and the live video of the linked camera (s).

Linked Camera

Link the selected camera(s) to capture picture when the zone event is triggered.

Select the camera(s) in the drop-down list.



Up to 4 cameras can be selected as the linked cameras for a zone event.

5. Optional: Click **Edit Priority** to set event priority as Uncatergorized/Low/Medium/High.
6. Optional: Click **Copy to...** to copy the event settings (including event priority, triggered client actions, and enabling/disabling the event) to other zones.
7. Enable or disable client actions for zone event.
 - Click **Enable All** or **Disable All** to enable or disable client actions of all zone events.
 - Switch **Enable** to ON/OFF to enable or disable client actions of one zone event.

Enable Client Actions

When client actions are enabled, client actions will be triggered when client receives zone event.

Disable Client Actions

When client actions are disabled, client actions will not work and actions will not be triggered when client receives zone event.

8. Click **Save**.

16.2 Remotely Control Security Control Panel

After adding the security control panel to the client, you can remotely control the partitions, zones, and relays of security control panel via the client software. For instance, you can arm, disarm, bypass, group bypass, etc. for both partitions and zones. You can also enable or disable

relays.

 **Note**

- The displayed interface is subject to the types of added security control panels.
 - By default, axiom hub device uses HTTP port, and it does not support private ports.
-

16.2.1 Remotely Control Partitions

You can perform operations remotely on security control panel's partitions using the client such as away arming, stay arming, instant arming, disarming, clearing alarm, group bypass, and recovering group bypass.

Steps

 **Note**

- The supported functions are subject to the added devices.
 - If a zone of a partition does not work, you should bypass it before arming/disarming the partition, and then recover bypass when the zone works.
-

1. Click **Event Center** → **Security Control Panel**.
2. Select a security control panel and click **Partition**.
The name, status, arming status and linked zone of the partitions will be displayed in the list.
3. Select one or more partition and click the following button(s).

Away Arming

An arming mode that works when all persons are absent from the monitored region. When away arming is enabled, all zones of the partition work properly.

Stay Arming

An arming mode that works when persons stay in the monitored region. When stay arming is enabled, zones inside of the region are armed while zones outside of the region will be bypassed where you can move in the zones without triggering any event.

Instant Arming

After arming a partition, its zone will alarm instantly when an event is triggered.

Disarming

All the zones (except 24-hour zones) in the partitions does not work any more after clicking, so that no event will be triggered in the disarmed zones.

 **Note**

24-hour zones (e.g. 24-hour annunciating zones, 24-hour silent alarm zone, etc.) still can detect events and then alarm even if the partition is disarmed.

Clear Alarm

Stop the alarming of alarming devices.

Group Bypass

Bypass all the zones in one or more partition so that no event will be triggered in the bypassed zones before group bypass recovery.



You should disarm the partition before bypassing it.

Group Bypass Recovery

Recover a group bypass to make all the zones in a partition work, so that you can arm the group.

16.2.2 Remotely Control Zones

You can use the client to remotely control the security control panel's zones including bypassing and recovering bypass.

Steps

1. Click **Event Center** → **Security Control Panel**.
2. Select a security control panel and click **Partition**.
The name, status, arming status and linked zone of the partitions will be displayed in the list.
3. Click  to open the Zone Operation panel.

The zones linked with the partition, zone No., zone name, zone status, zone alarm status, battery will be displayed. **Zone Status**

Zone status can be unassociated, armed, disarmed, fault, shield, tamper-proof, etc.

Battery

The power of a zone's detector.

4. Check one or more zone in the list and click the following buttons.

Bypass

When a zone is bypassed, no event will be triggered in the zone, and you are not allowed to arm or disarm the zone, while other zones can be armed or disarmed.



You should disarm the zone before bypassing it.

Bypass Recovery

After recovering bypass for a zone, you can arm it.

16.2.3 Remotely Control Relay

You can use the client to remotely change the on/off status of relay, and view the linked event of the relay.

Steps

1. Click **Event Center** → **Security Control Panel**.
2. Select a security control panel, and then click **Relay**.
The name, status, and linked event of the relay will be displayed.
3. Check one or more relay and click **Open** or **Close**.

Note

For Axiom Hub, you should set the **Relay Associated Event** as **Manual Control** in Device Management module.

Chapter 17 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.

Filter 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 18 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.

18.1 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.

18.2 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 19 System Configuration

The system parameters, including general parameters, live view and playback parameters, image parameters, file saving paths, etc., can be configured.

19.1 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**.

19.2 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.



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**.

19.3 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**.



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.



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.



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**.

19.4 Set Picture Storage

The captured pictures triggered by the events on the devices, can be saved in the PC running the Mira 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/MiraalarmPicture

5. Click **Save**.

19.5 Set Alarm Sound

When the event, such as access control 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.

19.6 Set Access Control and Video Intercom Parameters

You can configure the access control and video intercom parameters according to actual needs.

Steps

1. Open the System Configuration page.
2. Click the **Access Control & Video Intercom** tab.
3. Input the required information.

Ringtone

Click and select the audio file from the local path for the ringtone of indoor station. Optionally, you can click for a testing of the audio file.

Max. Ring Duration

Specify the seconds that the ring will last for at most. The maximum ring duration can be set from 15s to 60s.

Max. Speaking Duration with Indoor Station

Specify the seconds that the call with indoor station will last for at most. The maximum speaking duration between indoor station and the client can be set from 120s to 600s.

Max. Speaking Duration with Door Station

Specify the seconds that the call with door station will last for at most. The maximum speaking duration between door station and the client can be set from 90s to 120s.

Max. Speaking Duration with Access Control Device

Specify the seconds that the call with access control device will last for at most. The maximum speaking duration between access control device and the client can be set from 90s to 120s.

4. Click **Save**.

19.7 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**.

19.8 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 24-1 Icons on Live View Toolbar

	Stop Live View	Stop the live view in the display window.
	Capture	Capture the picture in the live view process. The capture picture is stored in the PC.
	Record	Start manual recording. The video file is stored in the PC.
	PTZ Control	Start PTZ mode for speed dome. Click and drag in the view to perform the PTZ control.
	Two-way Audio	Start the two-way audio with the device in live view.
	Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Instant Playback	Switch to the instant playback mode.
	Remote Configuration	Open the remote configuration page of the camera in live view.

Table 24-2 Icons on Playback Toolbar

	Capture	Capture the picture in the live view process. The capture picture is stored in the PC.
	Record	Start manual recording. The video file is stored in the PC.
	Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Download	Download the video files of the camera and the video files are stored in the PC.
	VCA Playback	Set the VCA rules. For more details, refer to VCA Playback .

	Tag Control	Add default or custom tag for the video files to mark the important video point. You can also edit the tag.
---	--------------------	---

6. Click **Save**.

19.9 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 Manager 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.

19.10 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**.

19.11 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.

19.11.1 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.



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.***

19.11.2 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.



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**.



Please restart the client to take effect.

19.11.3 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 20 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.

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.

Error Code

Code	Error Name	Description
Mira		
317	No videos.	It will be prompted when the user has no permission to play back.
HCNetSDK.dll		
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.

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Code	Error Name	Description
800	No more bandwidth can be used.	
Playctrl.dll		
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.
SMS		
3		The connection problem between the software and the stream media server.
17		The streaming problem between the stream media server and the device.

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