

Guarding Expert Client Software

User Manual

UD02162N

User Manual

About this Manual

This Manual is applicable to Guarding Expert Client Software.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website.

Please use this user manual under the guidance of professionals.

Legal Disclaimer

REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. OUR COMPANY SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, OUR COMPANY WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. OUR COMPANY SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

Contents

Chapter 1	Overview.....	6
1.1	Description	6
1.2	Running Environment	6
1.3	Function Modules.....	6
1.4	Updates Instruction	9
Chapter 2	User Registration and Login.....	11
Chapter 3	Device Management.....	13
3.1	Adding the Device.....	13
3.1.1	Creating the Password.....	13
3.1.2	Adding Online Devices	15
3.1.3	Adding Devices Manually	19
3.1.4	Adding Devices by IP Segment	20
3.1.5	Adding Devices by IP Server	21
3.1.6	Adding Devices by HiDDNS.....	22
3.1.7	Batch Adding Devices	23
3.1.8	QR Code of Encoding Devices	25
3.1.9	Checking Device's Online Users.....	25
3.2	Group Management	26
Chapter 4	Live View.....	30
4.1	Starting and Stopping the Live View	33
4.2	Auto-switch in Live View.....	35
4.3	PTZ Control in Live View	36
4.4	Manual Recording and Capture	38
4.5	Instant Playback.....	41
4.6	Custom Window Division.....	43
4.7	Live View in Fisheye Mode	45
4.8	Starting Master-slave Linkage.....	47
4.9	Other Functions in Live View	51
Chapter 5	Remote Storage Schedule Settings and Playback	52
5.1	Remote Storage	52
5.1.1	Storing on Storage Device on the DVR, NVR, or Network Camera	52
5.1.2	Storing on Storage Device	55
5.2	Remote Playback	58
5.2.1	Normal Playback.....	59
5.2.2	Alarm Input Playback	65
5.2.3	Event Playback.....	66
5.2.4	ATM Playback	68
5.2.5	POS Playback	69
5.2.6	Synchronous Playback	70
5.2.7	VCA Playback.....	70
5.2.8	Fisheye Playback	72
Chapter 6	Event Management	74

6.1	Configuring Motion Detection Alarm	74
6.2	Configuring Video Tampering Alarm.....	77
6.3	Configuring PIR Alarm.....	78
6.4	Configuring Video Loss Alarm.....	80
6.5	Configuring Audio Exception Alarm.....	81
6.6	Configuring Defocus Detection Alarm	82
6.7	Configuring Face Detection Alarm.....	83
6.8	Configuring Line Crossing Detection Alarm	85
6.9	Configuring Intrusion Detection Alarm.....	86
6.10	Configuring Scene Change Alarm	88
6.11	Configuring VCA Detection Alarm	89
6.12	Configuring Alarm Input Linkage	90
6.13	Configuring Device Exception Linkage	92
6.14	Viewing Alarm and Event Information.....	92
6.14.1	Viewing Alarms Information.....	94
6.14.2	Viewing Events Information	95
6.14.3	Viewing Pop-up Alarm Information.....	95
Chapter 7	E-map Management	97
7.1	Adding an E-map	97
7.2	The Hot Spot Function.....	99
7.2.1	Adding Hot Spots.....	99
7.2.2	Modifying Hot Spots.....	100
7.2.3	Previewing Hot Spots	101
7.3	The Hot Region Function	102
7.3.1	Adding Hot Regions	102
7.3.2	Modifying Hot Regions	103
7.3.3	Previewing Hot Regions.....	103
Chapter 8	Cloud P2P.....	105
8.1	Registering a Cloud P2P Account	105
8.2	Logging into Cloud P2P Account	106
8.3	Device Management.....	106
Chapter 9	VCA Devices Management	108
Chapter 10	Transcoder Management.....	110
10.1	Adding Encoding Device to the Transcoder	110
10.1.1	Adding the Transcoder to the Client Software	110
10.1.2	Importing the Encoding Channel to the Transcoder	111
10.2	Configuring the Transcoded Stream Parameters	112
10.3	Operating the Transcoded Stream.....	113
Chapter 11	Forwarding Video Stream through Stream Media Server	114
11.1	Adding the Stream Media Server	114
11.2	Adding Cameras to Stream Media Server to Forward Video Stream	115
Chapter 12	Decoding and Displaying Video on Video Wall	117
12.1	Adding the Encoding Device	117
12.2	Adding the Decoding Device.....	119

12.3	Configuring Video Wall Settings	120
12.3.1	Linking Decoding Output with Video Wall	120
12.3.2	Multi-Screen Display	122
12.3.3	Configuring Background	123
12.3.4	Configuring Virtual LED	124
12.4	Displaying Video on Video Wall	125
12.4.1	Decoding and Displaying	125
12.4.2	Windowing and Roaming Settings	127
12.4.3	Configuring Playback	129
12.4.4	Configuring Cycle Decoding	129
12.5	Configuring Video Wall Controller	130
12.5.1	Adding the Video Wall Controller	130
12.5.2	Linking Output with Video Wall	131
12.5.3	Configuring Virtual LED	131
12.5.4	Configuring Video Wall Screens	132
12.5.5	Displaying Video on Video Wall	133
12.5.6	Configuring Plan	134
Chapter 13	Security Control Panel	136
13.1	Device Management	136
13.1.1	Adding Security Control Panel	136
13.1.2	Editing Security Control Panel	137
13.1.3	Deleting Security Control Panel	137
13.2	Zone Event Configuration	138
13.3	Remote Control	139
13.3.1	Partition System Remote Control	139
13.3.2	Zone Remote Control	141
13.4	Displaying Zone on E-map	141
Chapter 14	Video Intercom	144
14.1	Device Management	144
14.2	Live View	145
14.3	Picture Storage	146
14.4	Group Management	146
14.5	Intercom	150
14.5.1	Video Intercom with Guarding Expert via Indoor Station	150
14.5.2	Video Intercom with Indoor Station via Guarding Expert	151
14.5.3	Video Intercom with Guarding Expert via Door Station	153
14.5.4	Call Log	154
14.6	Card Management	154
14.6.1	Adding Card	155
14.6.2	Encrypting Card	156
14.6.3	Issuing Card	157
14.6.4	Batch Importing Unauthorized Cards	160
14.6.5	Batch Exporting Unauthorized Cards	161
14.7	Notice Management	161

14.7.1	Create Notice Information	161
14.7.2	Query Notice Information	162
14.7.3	Query Call Logs	163
14.7.4	Query Unlocking Log	164
14.8	Device Arming Control	165
Chapter 15	Access Control	166
15.1	Importing from Access Control Client	166
15.2	Access Control Device Management	167
15.2.1	Group Management for Access Control Device	167
15.2.2	Deleting Video Access Control Terminal	168
15.2.3	Adding Video Access Control Terminal	169
15.3	Video Access Control Terminal	170
15.3.1	Live View	170
15.3.2	Video Intercom with Guarding Expert	170
15.4	Access Control Event Configuration	171
15.5	Displaying Access Control Point on E-map	172
Chapter 16	Log Management	175
Chapter 17	Account Management and System Configuration	178
17.1	Account Management	178
17.2	System Configuration	179
17.2.1	General Settings	180
17.2.2	Live View and Playback Settings	181
17.2.3	Image Settings	183
17.2.4	File Saving Path Settings	183
17.2.5	Toolbar Settings	184
17.2.6	Keyboard and Joystick Shortcuts Settings	185
17.2.7	Alarm Sound Settings	186
17.2.8	Email Settings	187
17.2.9	Video Intercom Settings	188
Chapter 18	Statistics	189
18.1	Heat Map	189
18.2	People Counting Statistics	192
18.3	Counting Statistics	193
18.4	Road Traffic	195
18.5	Face Retrieval	197
18.6	License Plate Retrieval	199
18.7	Behavior Analysis	200
18.8	Face Capture	201
Troubleshooting	203
FAQ	204
Error Code	205

Chapter 1 Overview

1.1 Description

Guarding Expert is a versatile video management software for the DVRs, NVRs, IP cameras, encoders, decoders, VCA device, security control panel, video intercom device, etc. It provides multiple functionalities, including real-time live view, video recording, remote search and playback, file backup, alarm receiving, etc., for the connected devices to meet the needs of monitoring task. With the flexible distributed structure and easy-to-use operations, the client software is widely applied to the surveillance projects of medium or small scale.

This user manual describes the function, configuration and operation steps of Guarding Expert software. To ensure the properness of usage and stability of the software, please refer to the contents below and read the manual carefully before installation and operation.

1.2 Running Environment

Operating System: Microsoft Windows 7/Windows 8.1/Windows 10 (32-bit or 64-bit),
Microsoft Windows XP SP3 (32-bit),
Microsoft Windows 2008 R2/Windows Server 2012 (64-bit).

CPU: Intel Pentium IV 3.0 GHz or above

Memory: 2G or above

Video Card: RADEON X700 Series or above

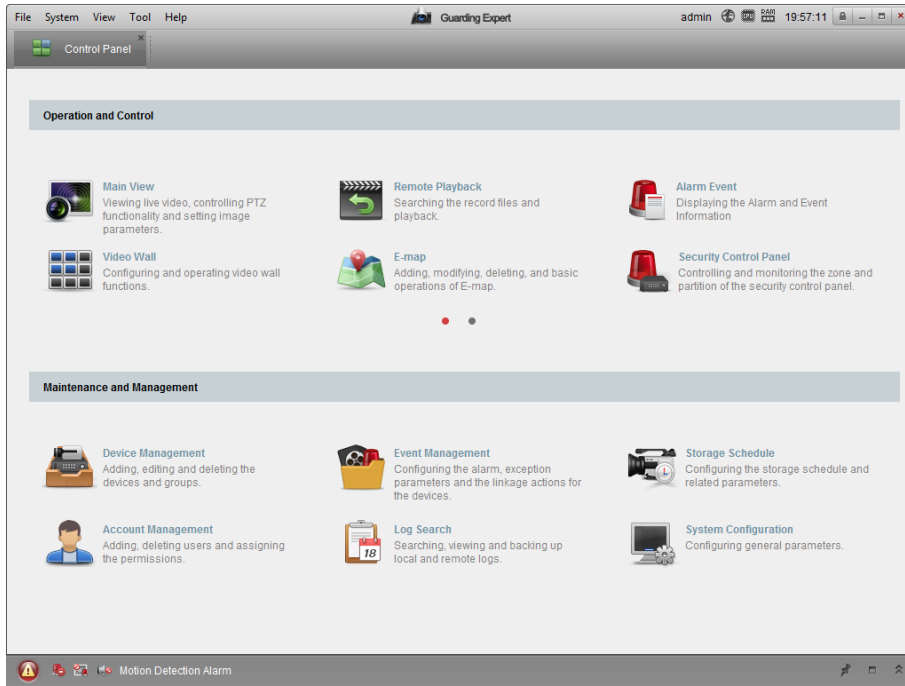
GPU: 256 MB or above

Notes:

- For high stability and good performance, these above system requirements must be met.
- The software does not support 64-bit operating system; the above mentioned 64-bit operating system refers to the system which supports 32-bit applications as well.
- Hardware decoding function is only supported by operating systems the version of which is after Windows XP.

1.3 Function Modules

Control Panel of Guarding Expert:



Menu Bar:

File	Open Image File	Search and view the captured pictures stored on local PC.
	Open Video File	Search and view the video files recorded on local PC.
	Open Log File	View the backup log files.
	Exit	Exit the Guarding Expert client software.
System	Lock	Lock screen operations. Log in the client again to unlock.
	Switch User	Switch the login user.
	Import System Config File	Import client configuration file from your computer.
	Export System Config File	Export client configuration file to your computer.
	Import from Access Control Client	Import the access control data (including access control devices, access control points, alarm inputs, and cameras of access control terminal) of the Guarding Expert Access Control client to the Guarding Expert client software.
View	1024*768	Display the window at size of 1024*768 pixels.
	1280*1024	Display the window at size of 1280*1024 pixels.
	1440*900	Display the window at size of 1440*900 pixels.
	1680*1050	Display the window at size of 1680*1050 pixels.
	Maximize	Display the window in maximum mode.
	Control Panel	Enter Control Panel interface.
	Main View	Open Main View page.
	Remote Playback	Open Remote Playback page.
	Video Wall	Open Video Wall page.
	E-map	Open E-map page.
	Security Control Panel	Open Security Control Panel page.
Video Intercom	Open Video Intercom page.	

	Auxiliary Screen Preview	Open Auxiliary Screen Preview window.
Tool	Device Management	Open the Device Management page.
	Event Management	Open the Event Management page.
	Storage Schedule	Open the Storage Schedule page.
	Account Management	Open the Account Management page.
	Log Search	Open the Log Search page.
	System Configuration	Open the System Configuration page.
	Broadcast	Select camera to start broadcasting.
	Device Arming Control	Set the arming status of devices.
	Alarm Output Control	Turn on/off the alarm output.
	Batch Wiper Control	Batch starting or stopping the wipers of the devices.
	Batch Time Sync	Batch time synchronization of the devices.
	Player	Open the player to play the video files.
	Message Queue	Display the information of Email message to be sent.
	Help	Open Wizard
Open Video Wall Wizard		Open the guide for the video wall configuration.
User Manual (F1)		Click to open the User Manual; you can also open the User Manual by pressing F1 on your keyboard.
About		View the basic information of the client software.
Language		Select the language for the client software and reboot the software to activate the settings.

The Guarding Expert client software is composed of the following function modules:



The Main View module provides live view of network cameras and video encoders, and supports some basic operations, such as picture capturing, recording, PTZ control, etc.



The Remote Playback module provides the search, playback, export of video files.



The Alarm Event module displays the alarm and event received by the client software.



The Video Wall module provides the management of decoding device and video wall and the function of displaying the decoded video on video wall.



The E-map module provides the displaying and management of E-maps, alarm inputs, hot regions and hot spots.



The Security Control Panel module provides operations such as arming, disarming, bypass, group bypass, and so on for both the partitions and zones.



The Video Intercom module provides video intercom with Guarding Expert via indoor station, group management, card management and notice management.



The Statistics module provides functions of heat map, people counting statistics, counting statistics, road traffic, face retrieval, license plate retrieval, behavior analysis, and face capture statistics.



The Device Management module provides the adding, modifying and deleting of different devices and the devices can be imported into groups for management.



The Event Management module provides the settings of arming schedule, alarm linkage actions and other parameters for different events.



The Storage Schedule module provides the schedule settings for recording and pictures.



The Account Management module provides the adding, modifying and deleting of user accounts and different permissions can be assigned for different users.



The Log Search module provides the query of system log files and the log files can be filtered by different types.



The System Configuration module provides the configuration of general parameters, file saving paths, alarm sounds and other system settings.

The function modules are easily accessed by clicking the navigation buttons on the control panel or by selecting the function module from the **View** or **Tool** menu.

You can check the information, including current user, network usage, CPU usage, memory usage and time, in the upper-right corner of the main page.

1.4 Updates Instruction

Multiple newly-designed functions are offered in the latest Guarding Expert client software. You can get a brief view of the updates instruction from the following contents.

- **High DPI Compatible**
Compatible with High DPI Screen.
- **POS Playback**
Support searching the video files which contain POS information.
- **Communication with Access Control Client**
Support communication with the Access Control Client, and it provides further functions after importing the access control devices, including access control event configuration, displaying access control point on E-map, alarm/event linkage, and so on.
- **Display Zone and Access Control Point on E-map**
Support displaying the zone of security control panel and access control point of access control device on the E-map.
- **New Structure of System Configuration**
Provide new structure in System Configuration module.
- **Set Icon on Live View and Playback Toolbar**
Set the icon display on the toolbar of live view and playback window.
- **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.
- **Prioritize to View Latest Alarm**
Set to view the latest alarm in priority when viewing the alarm information in the pop-up alarm window.
- **Customize Alarm Sound**
Support custom alarm sound as desired.

- **Search Video File in 31 Days**

Support searching video files during up to 30 days.

- **Provide Player**

Provide Player in the installation directory to view the downloaded video file.

Chapter 2 User Registration and Login

For the first time to use Guarding Expert client software, you need to register a super user for login.

Steps:

1. Input the super user name and password. The software will judge password strength automatically, and we highly recommend you to use a strong password to ensure your data security.
2. Confirm the password.
3. Optionally, check the checkbox **Enable Auto-login** to log into the software automatically.
4. Click **Register**. Then, you can log into the software as the super user.



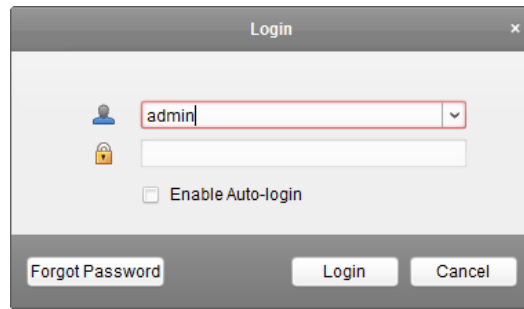
- ◆ A user name cannot contain any of the following characters: / \ : * ? " < > |. And the length of the password cannot be less than 6 characters.
- ◆ For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product.
- ◆ Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

When opening Guarding Expert after registration, you can log into the client software with the registered user name and password.

Steps:

1. Input the user name and password you registered.

Note: If you forget your password, please click **Forgot Password** and remember the encrypted string in the pop-up window. Contact your dealer and send the encrypted string to him to reset your password.
2. Optionally, check the checkbox **Enable Auto-login** to log into the software automatically.
3. Click **Login**.



After running the client software, a wizard will pop up to guide you to add the device and do some basic settings. For detailed configuration about the wizard, please refer to the *Quick Start Guide of Guarding Expert*.

Chapter 3 Device Management


3.1 Adding the Device

Purpose:

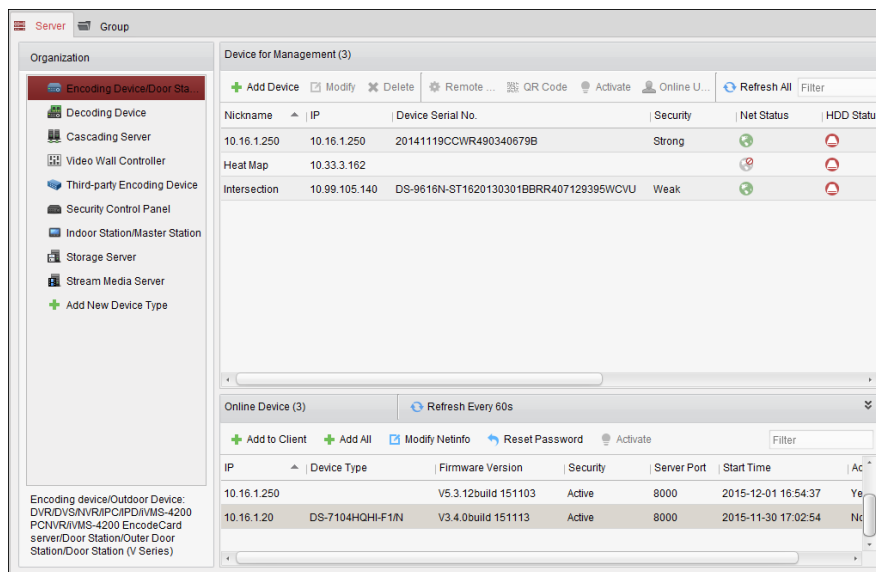
After running the Guarding Expert, devices including network cameras, video encoders, DVRs, NVRs, decoder, security control panel, video intercom device, etc., should be added to the client for the remote configuration and management, such as live view, playback, alarm settings, etc.

Perform the following steps to enter the Device Adding interface.

Steps:

1. Click the  icon on the control panel, or click **Tools->Device Management** to open the Device Management page.
2. Click the **Server** tab.
3. Click **Encoding Device/Door Station** to enter Encoding Device/Door Station Adding interface.

Note: Here we take the adding of encoding device as an example.



You can add the device in the following ways:

- By detecting the online devices, see *Section 3.1.2 Adding Online Devices*.
- By specifying the device IP address or domain name, see *Section 3.1.3 Adding Devices Manually*.
- By specifying an IP segment, see *Section 3.1.4 Adding Devices by IP Segment*.
- By IP Server, see *Section 3.1.5 Adding Devices by IP Server*.
- By HiDDNS, see *Section 3.1.6 Adding Devices by HiDDNS*.
- Adding Devices in batch, see *Section 3.1.7 Batch Adding Devices*.

3.1.1 Creating the Password

Purpose:

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

Note: This function should be supported by the device.

Steps:

1. Enter the Device Management page.
2. On the **Device for Management** or **Online Device** area, check the device status (shown on **Security** column) and select an inactive device.

IP	Device Type	Firmware Version	Security	Server Port	Start Time	Ac
10.16.1.102	DSI-6701HFHV	V1.0.0build 150730	Active	8000	2015-08-17 14:57:51	Nc
192.168.1.64	DS-2ZMN3006(YF)	V5.3.0build 150323	Inactive	8000	2015-08-17 16:01:02	Nc
10.16.1.93		V5.3.10build 150729	Active	8000	2015-08-17 09:02:35	Nc

3. Click the **Activate** button to pop up the Activation interface.
4. Create a password in the password field, and confirm the password.



STRONG PASSWORD RECOMMENDED– We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including 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.

Activation ✕

User Name:

Password:

Strong

Valid password range [8-16]. You can use a combination of numbers, lowercase, uppercase and special character for your password with at least two kinds of them contained.

Confirm Password:

5. Click **OK** to create the password for the device. A “The device is activated.” window pops up when the password is set successfully.
6. Click **Modify Netinfo** to pop up the Modify Network Parameter interface.

Note: This function is only available on the **Online Device** area. You can change the device IP address to the same subnet with your computer if you need to add the device to the software.
7. Change the device IP address to the same subnet with your computer by either modifying the IP address manually or checking the checkbox of DHCP.
8. Input the password set in step 4 and click **OK** to complete the network settings.

Modify Network Parameter

Device Information:

MAC Address: 44-19-b7-2f-be-48 Copy

Software Version: V5.1.0build 131202 Copy

Device Serial No.: DS-2CD2412F-IW20140118CCCH450047294 Copy

Network Information:

DHCP

Port: 8000

IPv4(Don't Save)

IP Address: 10.16.1.251

Subnet Mask: 255.255.255.0

Gateway: 10.16.1.254

IPv6(Don't Save)


Password:

OK Cancel

3.1.2 Adding Online Devices

Purpose:

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

Note: You can click  to hide the **Online Device** area.

Online Device (4) Refresh Every 60s

+ Add to Client + Add All 🔗 Modify Netinfo ↺ Reset Password 💡 Activate Filter

IP	Device Type	Firmware Version	Security	Server Port	Start Time	Ac
10.16.1.102	DSI-6701HFH/V	V1.0.0build 150730	Active	8000	2015-08-17 14:57:51	Nc
192.168.1.64	DS-2ZMN3006(YF)	V5.3.0build 150323	Inactive	8000	2015-08-17 16:01:02	Nc
10.16.1.93		V5.3.10build 150729	Active	8000	2015-08-17 09:02:35	Nc

Steps:

1. Select the devices to be added from the list.

Note: For the inactive device, you need to create the password for it before you can add the device properly. For detailed steps, please refer to *Chapter 3.1.1 Creating the Password*.

2. Click **Add to Client** to open the device adding dialog box.
3. Input the required information.

Nickname: Edit a name for the device as you want.

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

Port: Input the device port No.. The default value is 8000.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

- Optionally, you can check the checkbox **Export to Group** to create a group by the device name. All the channels of the device will be imported to the corresponding group by default.

Note: Guarding Expert also provides a method to add the offline devices. Check the checkbox **Add Offline Device**, input the required information and the device channel number and alarm input number, and then click **Add**. When the offline device comes online, the software will connect it automatically.

- Click **Add** to add the device.

Add Multiple Online Devices

If you want to add multiple online devices to the client software, click and hold *Ctrl* key to select multiple devices, and click **Add to Client** to open the device adding dialog box. In the pop-up message box, enter the user name and password for the devices to be added.

Add All the Online Devices

If you want to add all the online devices to the client software, click **Add All** and click **OK** in the pop-up message box. Then enter the user name and password for the devices to be added.

Modify Network Information

Select the device from the list, click **Modify Netinfo**, and then you can modify the network information of the selected device.

Note: You should enter the admin password the device in the **Password** field of the pop-up window to modify the parameters.

Reset Password

According to the different devices, the software provides three different methods for restoring the default password or resetting the password.

Select the device from the list, click **Reset Password**.

Option 1:

If the window with security code field pops up, input the security code, and then you can restore the default password of the selected device.

Note: The security code is returned after you send the data and serial No. of the device to the manufacturer.

Option 2:

If the window with import file and export file buttons pops up, perform the following steps to restore the default password:

1. Click **Export** to save the device file on your PC.
2. Send the file to our technical engineers.
3. Click **Import** and select the file received from the technical engineer.
4. Click **OK** to restore the default password of the device.




- ◆ *The default password (12345) for the Admin account is for first-time log-in 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.*
- ◆ *For your privacy, we strongly recommend changing the password to something of your own*

choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product.

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

Option 3:

If the window with import file and export file buttons, password and confirm password field pops up, follow the steps below to reset the password:

1. Click **Export** to save the device file on your PC.
2. Send the file to our technical engineers.
3. Our technical engineer will send you a file or an eight-digit number to you.
 - If you receive a file from the technical engineer, select **Import File** from Key Importing Mode drop-down list and click  to import the file.
 - If you receive an eight-digit number from the technical engineer, select **Input Key** from Key Importing Mode drop-down list and input the number.
4. Input new password in text fields of **Password** and **Confirm Password**.
5. Click **OK** to reset the password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

Option 4:

If the dialog with Generate buttons, password and confirm password field pops up, follow the steps below to reset the password:

1. Click **Generate** to pop up the QR Code dialog.
2. Click **Download** and select a saving path to save the QR code to your PC. You can also take a photo of the QR code to save it to your phone.
3. Send the picture to our technical engineers and you will receive an eight-digit number from the technical engineer
4. Select **Input Key** from Key Importing Mode drop-down list and input the number.
5. Input new password in text fields of **Password** and **Confirm Password**.
6. Click **OK** to reset the password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

Synchronizing the Password

Purpose:

You can reset the password for the NVR or HDVR and use the new password as the password of the connected network cameras and encoders.

Note: This function should be supported by the device.

Steps:

1. Select a device on the Online Device panel and click **Reset Password**.
2. Perform the password reset steps and check **Use New Password as Camera Password** checkbox.
3. Click **OK** to save the settings.

3.1.3 Adding Devices Manually

Steps:

1. Click **Add Device** to open the device adding dialog box.
2. Select **IP/Domain** as the adding mode.
3. Input the required information.

Nickname: Edit a name for the device as you want.

Address: Input the device's IP address or domain name.

Port: Input the device port No.. The default value is 8000.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

4. Optionally, you can check the checkbox **Export to Group** to create a group by the device name. All the channels of the device will be imported to the corresponding group by default.

Note: Guarding Expert also provides a method to add the offline devices. Check the checkbox **Add Offline Device**, input the required information and the device channel number and alarm input number, and then click **Add**. When the offline device comes online, the software will connect it automatically.

5. Click **Add** to add the device.

3.1.4 Adding Devices by IP Segment

Steps:

1. Click **Add Device** to open the device adding dialog box.
2. Select **IP Segment** as the adding mode.
3. Input the required information.

Start IP: Input a start IP address.

End IP: Input an end IP address in the same network segment with the start IP.

Port: Input the device port No.. The default value is *8000*.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

4. Optionally, you can check the checkbox **Export to Group** to create a group by the device IP. All the channels of the device will be imported to the corresponding group by default.

Note: Guarding Expert also provides a method to add the offline devices. Check the checkbox **Add Offline Device**, input the required information and the device channel number and alarm input number, and then click **Add**. When the offline device comes online, the software will connect it automatically.
5. Click **Add**, and the device of which the IP address is between the start IP and end IP will be added to the device list.

3.1.5 Adding Devices by IP Server

Steps:

1. Click **Add Device** to open the device adding dialog box.
2. Select **IP Server** as the adding mode.
3. Input the required information.

Nickname: Edit a name for the device as you want.

Server Address: Input the IP address of the PC that installs the IP Server.

Device ID: Input the device ID registered on the IP Server.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

4. Optionally, you can check the checkbox **Export to Group** to create a group by the device name. All the channels of the device will be imported to the corresponding group by default.

Note: Guarding Expert also provides a method to add the offline devices. Check the checkbox **Add Offline Device**, input the required information and the device channel number and alarm input number, and then click **Add**. When the offline device comes online, the software will connect it automatically.

5. Click **Add** to add the device.

3.1.6 Adding Devices by HiDDNS

Steps:

1. Click **Add Device** to open the device adding dialog box.
2. Select **HiDDNS** as the adding mode.
3. Input the required information.

Nickname: Edit a name for the device as you want.

Server Address: www.hiddns.com.

Device Domain Name: Input the device domain name registered on HiDDNS server.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

4. Optionally, you can check the checkbox **Export to Group** to create a group by the device name. All the channels of the device will be imported to the corresponding group by default.

Note: Guarding Expert also provides a method to add the offline devices. Check the checkbox **Add Offline Device**, input the required information and the device channel number and alarm input number, and then click **Add**. When the offline device comes online, the software will connect it automatically.

5. Click **Add** to add the device.

3.1.7 Batch Adding Devices

Purpose:

The devices can be added to the software in batch by inputting the device information in the pre-defined CSV file.

Steps:

1. Click **Add Device** to open the device adding dialog box.
2. Select **Batch Import** as the adding mode.
3. Click **Export Template** and save the pre-defined template (CSV file) on your PC.
4. Open the exported template file and input the required information of the devices to be added on the corresponding column.

Nickname: Edit a name for the device as you want.

Adding Mode: You can input 0, 2, or 3 which indicated different adding modes. 0 indicates that the device is added by IP address or domain name; 2 indicates that the device is added via IP server; 3 indicates that the device is added via HiDDNS.

Address: Edit the address of the device. If you set 0 as the adding mode, you should input the IP address or domain name of the device; if you set 2 as the adding mode, you should input the IP address of the PC that installs the IP Server; if you set 3 as the adding mode, you should input *www.hiddns.com*.

Port: Input the device port No.. The default value is *8000*.

Device Information: If you set 0 as the adding mode, this field is not required; if you set 2 as the adding mode, input the device ID registered on the IP Server; if you set 3 as the adding mode, input the device domain name registered on HiDDNS server.

User Name: Input the device user name. By default, the user name is *admin*.

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we


strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including 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.

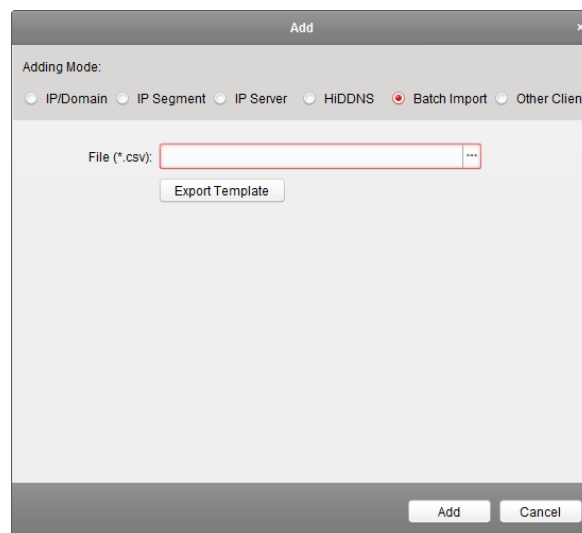
Add Offline Device: You can input 1 to enable adding the offline device, and then the software will automatically connect it when the offline device comes online. 0 indicates disabling this function.

Export to Group: You can input 1 to create a group by the device name (nickname). All the channels of the device will be imported to the corresponding group by default. 0 indicates disabling this function.

Channel Number: If you set 1 for Add Offline Device, input the channel number of the device. If you set 0 for Add Offline Device, this field is not required.

Alarm Input Number: If you set 1 for Add Offline Device, input the alarm input number of the device. If you set 0 for Add Offline Device, this field is not required.

5. Click  and select the template file.
6. Click **Add** to import the devices.



The devices will be displayed on the device list for management after added successfully. You can check the resource usage, HDD status, recording status, and other information of the added devices on the list.

Click **Refresh All** to refresh the information of all added devices. You can also input the device name in the filter field for search.

Select device from the list, click **Modify/Delete**, and then you can modify/delete the information of the selected device.

Select device from the list, click **Remote Configuration**, and then you can do some remote configurations of the selected device if needed. For detailed settings about the remote configuration, please refer to the *User Manual* of the devices.

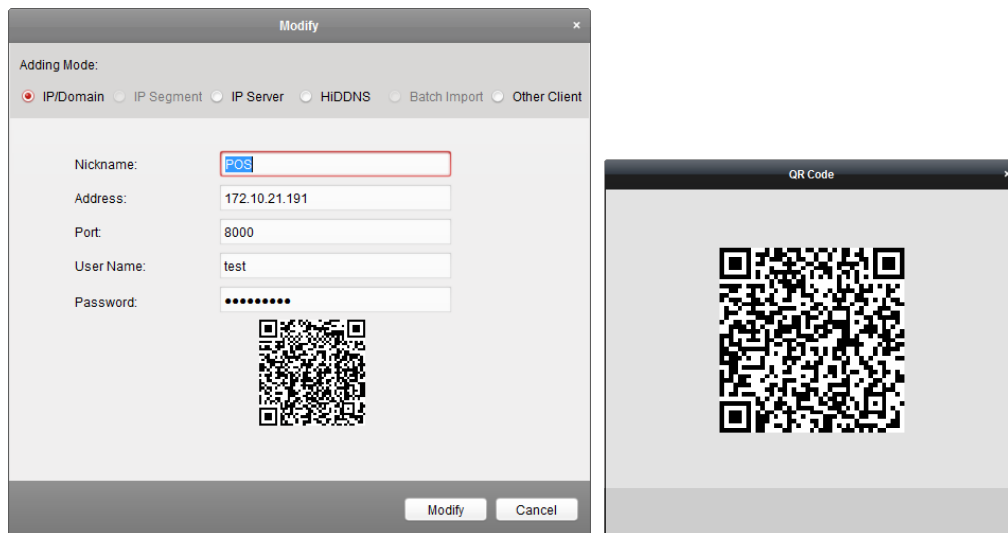
3.1.8 QR Code of Encoding Devices

Purpose:

For encoding devices, the QR code of the devices can be generated. You can add the device to your mobile client software by using the mobile client software to scan the QR code. For adding the devices to your mobile client software, please refer to the *User Manual* of the mobile client software.

Check the QR Code

On the device list, double-click a device, the information and QR code of the device will be displayed. Or you can click to select a device and click **QR Code** to pop up the QR code window of the device. You can also click and hold the Ctrl key to select multiple devices, and click **QR Code** to pop up the QR code window of the devices. In this way, you can add multiple devices at the same time by scanning the QR code.



3.1.9 Checking Device's Online Users

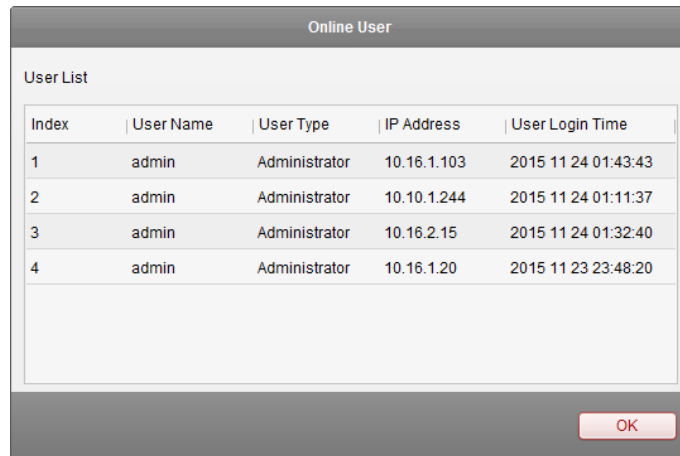
Purpose:

When any user accesses the device, the client can record and show the connection information, including user name, user type, user's IP address, and login time.

Note: This function should be supported by the device.

Steps:

1. Click to select an added and online device.
2. Click **Online Users** to pop up the Online Users dialog.



3. Check the information of the users that log into the device.
4. Click **OK** to close the dialog.

3.2 Group Management

Purpose:

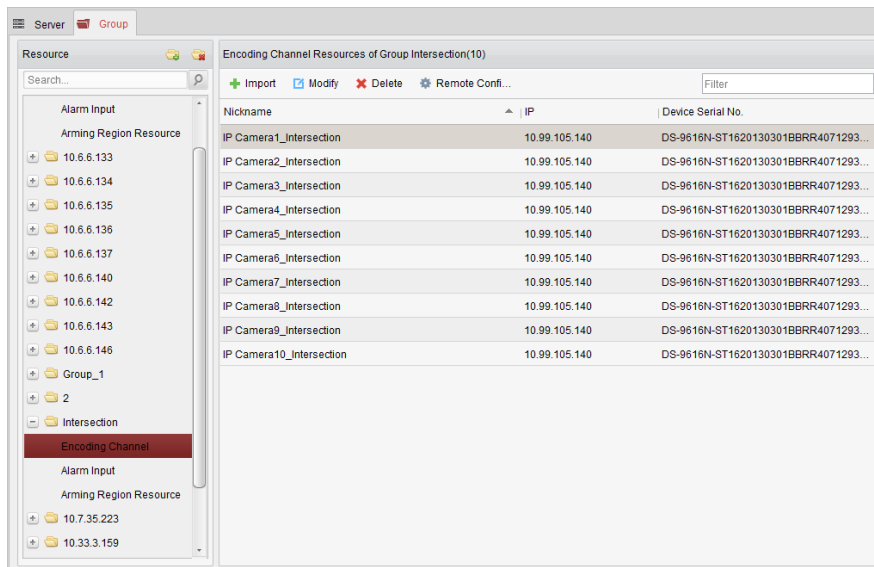
The devices added should be organized into groups for a convenient management. You can get the live view, play back the video files, and do some other operations of the device through the group.

Before you start:

Devices need to be added to the client software for group management.


Perform the following steps to enter the Group Management interface:

1. Open the Device Management page.
2. Click the **Group** tab to enter the Group Management interface.

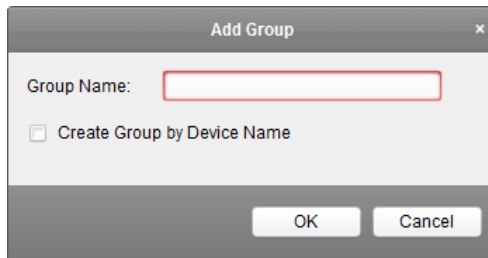


Adding the Group

Steps:

1. Click  to open the Add Group dialog box.

2. Input a group name as you want.
3. Click **OK** to add the new group to the group list.
You can also check the checkbox **Create Group by Device Name** to create the new group by the name of the selected device.




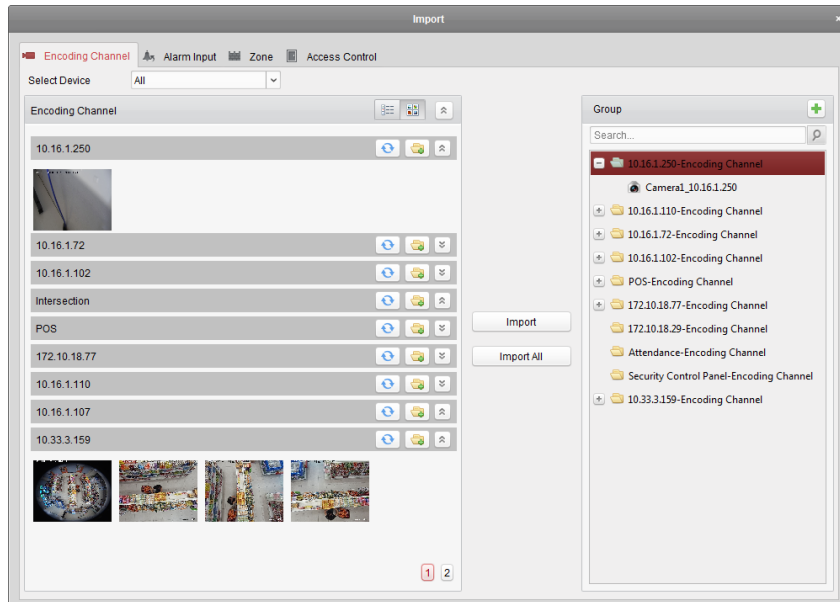
Importing Encoding Device to Group

Steps:

1. Click **Import** on Group Management interface, and then click the **Encoding Channel** tab to open the Import Encoding Channel page.
Note: You can also select **Alarm Input** tab and import the alarm inputs to group.
2. Select the thumbnails/names of the cameras in the thumbnail/list view.
3. Select a group from the group list.
4. Click **Import** to import the selected cameras to the group.
You can also click **Import All** to import all the cameras to a selected group.

Notes:

- You can also click the icon  on the Import Encoding Channel page to add a new group.
- Up to 256 cameras can be added to one group.



The following buttons are available on the Import Encoding Channel page:






List View

View the camera in list view.




Thumbnail View

View the camera in thumbnail view.

	Refresh	Refresh the latest information of added cameras.
	Import	Create a group named as <i>device name-Encoding Channel (Alarm Input)</i> and import the device to group.
	Collapse/Expand	Collapse/Expand the thumbnails of cameras.

Modifying the Group/Camera

Steps:

1. Select the group/camera from the group list on the Import page.
Move the mouse to the camera/group and click , or double-click the group/camera name to open Modify Group/Camera dialog box.

2. Edit the group/camera information, including the group/camera name, the stream type, etc.

Video Stream: Select the stream for the live view or playback of the camera as desired.

Rotate 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.


Stream Media Server: Configure to get stream of the camera via stream media server. You can select and manage the available stream media server.

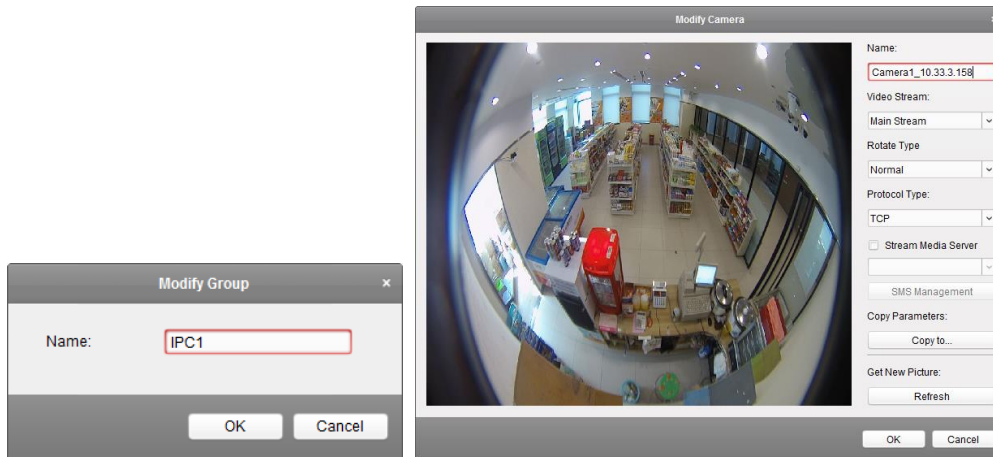
Copy to...: Copy the configured parameters to other camera(s).

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

Note: For video stream and protocol type, the new settings will take effect after you reopen the live view of the camera.

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

You can also double click the encoding channel on the Resource list in the Group Management interface after encoding channels encoded, or select the encoding channel and click  **Modify** to open the Modify Camera dialog box.





Notes:

For the IP channel of NVR which supports decoding function:

- After decoding and displaying on video wall, there will be a new channel in the Encoding Channel Resources list whose protocol type is decoding on video wall.
- After closing the corresponding roaming window, the new channel will be removed from the Encoding Channel Resources list.


Removing Cameras from the Group

Steps:

1. Select the camera from the group list on the Import Encoding Channel page.
2. Move the mouse to the camera and click  to remove the camera from the group.
You can also select the camera on the Group Management interface, and then click **Delete** to remove the camera from the group.
3. Select the group from the group list on the Import Encoding Channel page, move the mouse to the group and click  and you can remove all the cameras from the group.

Deleting the Group

Steps:

1. Select the group on the Group Management interface
2. Click **Delete Group**, or move the mouse to the group and click the icon , the selected group and the resource under it will be deleted.

Chapter 4 Live View


Purpose:

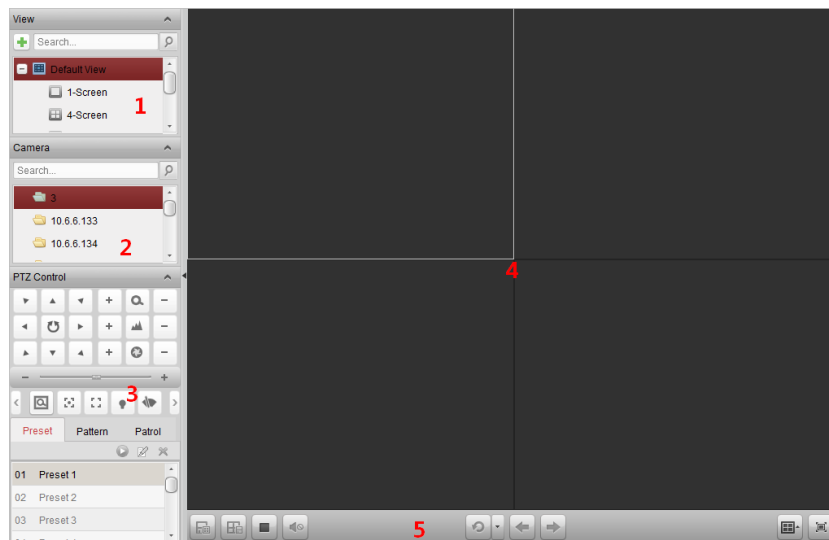
For the surveillance task, you can view the live video of the added network cameras, video encoders and video intercom device on the Main View page. And some basic operations are supported, including picture capturing, manual recording, PTZ control, etc.

Before you start:

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

You can set the rotate type if necessary in the Group Management. For details, refer to *Modifying the Group/Camera of Chapter 3.2 Group Management*.





Click the  icon on the control panel, or click **View->Main View** to open the Main View page.




Main View Page


- 1 View List
- 2 Camera List
- 3 PTZ Control Panel
- 4 Display Window of Live View
- 5 Live View Toolbar


Camera Status:

-  The camera is online and works properly.
-  The camera is in live view.
-  The camera is in recording status.
-  The camera is offline.

Notes:

- If event (e.g., motion detection) is detected for the camera, the camera icon will display as 












and the group icon will show as .

- If the camera is offline, the client can still get the live video via the stream media server if the stream media server is configured. The camera icon will display as . For configuring the stream media server of the camera, refer to *Chapter 11 Forwarding Video Stream through Stream Media Server*.

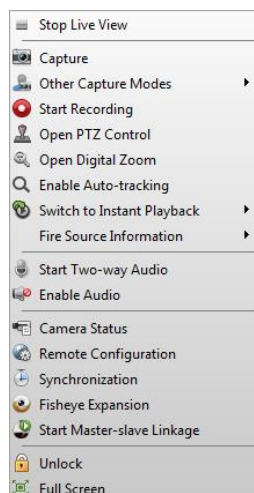
Live View Toolbar:





















On the Main View page, the following toolbar buttons are available:

	Save View	Save the new settings for the current view.
	Save View as	Save the current view as another new view.
	Stop Live View	Stop the live view of all cameras.
	Mute/Audio On	Turn off/on the audio in live view
	Resume/Pause	Click to resume/pause the auto-switch in live view.
	Auto-switch	
	Show/Hide the Menu	Show/Hide the configuration menu of auto-switch. Click again to hide.
	Previous	Go for live view of the previous page.
	Next	Go for live view of the next page.
	Window Division	Set the window division. Display the live view in full-screen mode. Press Esc , or you can move the mouse to the top of the screen and click Quit Full Screen button to exit.
	Full Screen	You can click Lock button to lock the screen, and you can click Unlock and input the client admin password to unlock it. For full screen auto-switch, you can click Previous or Next button to view the previous or next camera.

Right-click on the display window in live view to open the Live View Management Menu:



The following buttons are available on the right-click Live View Management Menu:

	Stop Live View	Stop the live view in the display window.
	Capture	Capture the picture in the live view process. 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.
	Other Capture Modes	Custom Capture: Capture the current picture. You can edit its name and then save it.
	Start/Stop Recording	Start/Stop the manual recording. The video file is stored in the PC.
	Open PTZ Control	Enable PTZ control function on the display window. Click again to disable the function.
	Open Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Enable Auto-tracking	Enable the auto-tracking function of the speed dome. Then the speed dome will track the object appearing on the video automatically. This button is only available for the speed dome that supports the auto-tracking function.
	Switch to Instant Playback	Switch to instant playback mode.
	Fire Source Information	For thermal camera, click to display the fire source region, display the maximum temperature information, locate the maximum temperature region, or display the fire source target.
	Start/Stop Two-way Audio	Click to start/stop the two-way audio with the device in live view.
	Start/Stop IP Two-way Audio	Click to start/stop the two-way audio with the camera in live view. This button is only available for the camera that supports the IP two-way audio function.
	Enable/Disable Audio	Click to enable/disable the audio in live view.
	Camera Status	Display the status of the camera in live view, including the recording status, signal status, connection number, etc.
	Remote Configuration	Open the remote configuration page of the camera in live view.
	VCA Configuration	Enter the VCA configuration interface of the device if it is VCA device.
	Synchronization	Sync the camera in live view with the PC running the client software.
	Fisheye Expansion	Enter the fisheye expansion mode. Only available when the device is fisheye camera. For details, please refer to <i>Chapter 4.7 Live View in Fisheye Mode</i> .
	Start/Stop Master-slave Linkage	Click to start/stop locating or tracking the target according to your demand. Only available when the device is fisheye camera or box/bullet camera. For details, please refer to <i>Chapter 4.8 Starting Master-slave Linkage</i> .
	Unlock	Click to remote unlock the door if the device is door station, outer

door station or door station (V series).




Full Screen

Display the live view in full screen mode. Click the icon again to exit.

4.1 Starting and Stopping the Live View

Starting Live View for One Camera

Steps:

1. Open the Main View page.
2. Optionally, click the  icon in live view toolbar to select the window division mode for live view.
3. Click-and-drag the camera to the display window, or double-click the camera name after selecting the display window to start the live view.

Note: You can click-and-drag the video of the camera in live view to another display window if needed.

Starting Live View for Camera Group

Steps:

1. Open the Main View page.
2. Click-and-drag the group to the display window, or double-click the group name to start the live view.


Note: The display window number is self-adaptive to the camera number of the group.


Starting Live View in Default View Mode

Purpose:

The video of the added cameras can be displayed in different view modes. 4 frequently-used default view modes are selectable: 1-Screen, 4-Screen, 9-Screen and 16-Screen.

Steps:

1. Open the Main View page.
2. In the View panel, click the icon  to expand the default view list.
3. Click to select the default view mode and the video of the added cameras will be displayed in a sequence in the selected view.

Note: Click , and you can save the default view as a custom view.

Move the mouse to the view and the following icons are available:



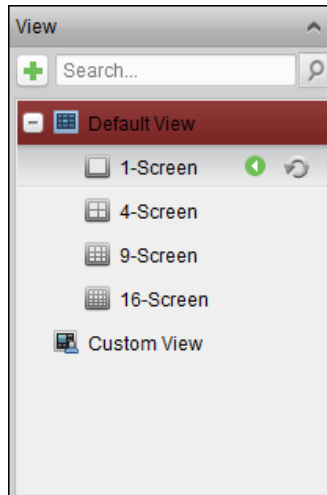
Start Instant Playback

Start the instant playback of the view.



Start Auto-switch

Start switching automatically of the view. For details, please refer to *Chapter 4.2 Auto-switch in Live View*.








Starting Live View in Custom View Mode




Purpose:

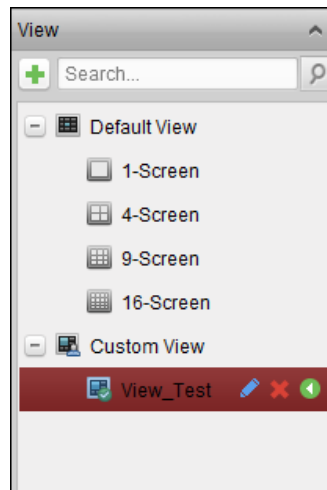
The view mode can also be customized for the video live view.

Steps:

1. Open the Main View page.
2. In the View panel, click the icon  to expand the custom view list. If there is custom view available, you can click to start live view of the custom view.
3. Click  to create a new view.
4. Input the view name and click **Add**. The new view is of 4-Screen mode by default.
5. Optionally, click the  icon in live view toolbar and select the screen layout mode for the new view.
6. Click-and-drag the camera/group to the display window, or double-click the camera/group name in custom view mode to start the live view.
7. Click the icon  to save the new view. You can also click  to save the view as another custom view.



Move the mouse to the custom view and the following icons are available:

- | | | |
|---|-------------------------------|---|
|  | Edit View Name | Edit the name of the custom view. |
|  | Delete View | Delete the custom view. |
|  | Start Instant Playback | Start the instant playback of the view. |



Stopping the Live View

Steps:

1. Select the display window.
2. Click the icon  that appears in the upper-right corner when the mouse pointer is over the display window,
or click **Stop Live View** on the right-click menu to stop the live view of the display window.
You can also click the button  in live view toolbar to stop all the live view.






4.2 Auto-switch in Live View

Camera Auto-switch

Purpose:

The video stream of the cameras from the same group will switch automatically in a selected display window in camera auto-switch.

Steps:






1. Open the Main View page.
2. Select a display window for camera auto-switch.
3. Click the icon  in the toolbar and select or customize the switching interval.
4. Select a group and click the icon  on the group node.
5. You can click the icon  to pause/resume the camera auto-switch.
6. You can click  or  to view the live video of previous or next camera.

Single View Auto-switch

Purpose:

The video of all the cameras on the camera list will switch automatically in a selected default view in single view auto-switch.

Steps:



1. Open the Main View page.
2. Click the icon  in the toolbar and select or customize the switching interval.
3. Select a default view and click the icon  on the selected view node.
4. You can click the icon  to pause/resume the single view auto-switch.
5. You can click  or  to view the live video of previous or next camera.




Multi-view Auto-switch

Purpose:

The custom views will switch automatically in multi-view auto-switch. The custom views need to be added before proceeding.


Steps:

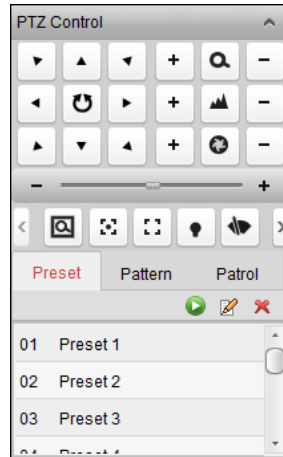
1. Open the Main View page.
2. Click the icon  in the toolbar and select the switching interval.
3. Click the icon  on the custom view node.

4. You can click the icon  to pause/resume the multi-view auto-switch.
5. You can click  or  to view the live video of previous or next camera.












4.3 PTZ Control in Live View

The software provides PTZ control for cameras with pan/tilt/zoom functionality. You can set the preset, patrol and pattern for the cameras on the PTZ Control panel. And you can also open window PTZ control for the operations of PTZ cameras.





Click the icon  to expand the PTZ Control panel.



The following buttons are available on the PTZ Control panel:

	Zoom
	Focus
	Iris
	3D Positioning
	Auxiliary Focus
	Lens Initialization
	Light
	Wiper
	Manual Tracking
	Menu
	One-touch Patrol
	One-touch Park

Notes:


- For the analog speed dome, you can click  to display its local menu. For detailed operation of the menu, please refer to the *User Manual* of the speed dome.
- For the speed dome with auto-tracking function, you can enable the auto-tracking (via right-click menu) for it and then click  to manually track the target by clicking on the video.
- For the one-touch patrol function, you can click  and the speed dome will start 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, please refer to the *User Manual* of the speed dome.
- For the speed dome with one-touch park function, you can enable the one-touch park by clicking  and the speed dome will save 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 parking time, please refer to the *User Manual* of the speed dome.

Configuring the Preset

A preset is a predefined image position which contains information of pan, tilt, focus and other parameters.

Perform the following steps to add a preset:


1. Click the **Preset** button to enter the PTZ preset configuration panel.
2. Click the direction buttons and other buttons on the PTZ control panel to steer the camera to the desired view.
3. Select a PTZ preset number from the preset list and click .
4. Input the name of the preset in the pop-up dialog box.
5. Click **OK** to save the settings.


To call a configured preset, double-click the preset, or select the preset and click the icon .

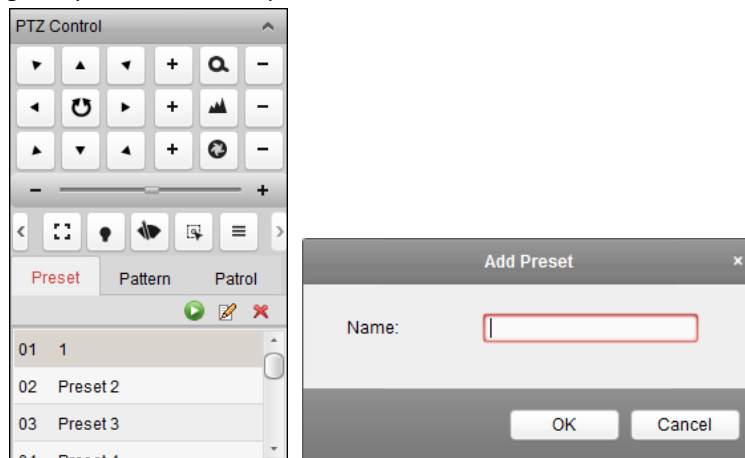
You also perform the following steps to call the preset.

Steps:

1. Click to select a live view window.
2. For preset 1 to 9, click the corresponding number key (e.g., 4) to call the preset.
For other presets, click “[”, number keys (e.g., 124), and “]” to call the preset.

To modify a configured preset, select the preset from the list and click the icon .






To delete a configured preset, select the preset from the list and click the icon .



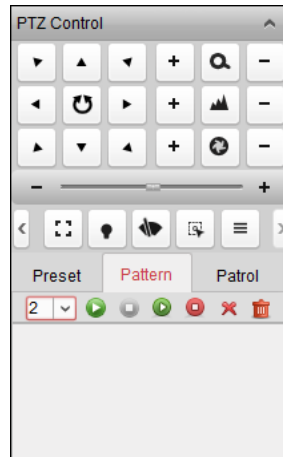
Configuring the Pattern

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

Perform the following steps to add a pattern:

1. Click the **Pattern** button to enter the PTZ pattern configuration panel.
2. Click  to start recording of this pattern path.
3. Use the direction buttons to control the PTZ movement.
4. Click  to stop and save the pattern recording.
5. Click the icon  to call the pattern. To stop calling the pattern, click .
6. (Optional) You can click  to delete the selected pattern.

Click  to delete all the patterns.








Configuring the 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.

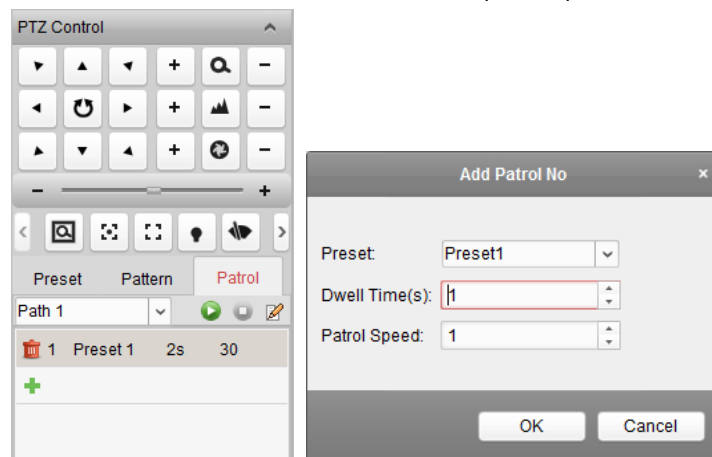
Before you start:

Two or more presets for one PTZ camera need to be added.

Perform the following steps to add and call a patrol:

1. Click the **Patrol** button to enter the PTZ patrol configuration panel.
2. Select a track number from the drop-down list.
3. Click  to add a preset, and set the dwell time and patrol speed for the preset.
4. Repeat the above operation to add other presets to the patrol.
5. Optionally, you can click  or  to edit or delete a preset in the patrol path.
6. Click the icon  to call the patrol. To stop calling the patrol, click .

Note: The preset dwell time can be set to 1 to 30 sec, and the patrol speed can be set to level 1 to 40.











4.4 Manual Recording and Capture

Toolbar in Each Live View Display Window:



In each live view display window, the following toolbar buttons are available:

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





Note: You can customize the icons and the icons' order as desired in System Configuration. For details, refer to *Chapter 17.2.5 Toolbar Settings*.

Manual Recording in Live View


Purpose:

Manual Recording function allows you to record the live video on the Main View page manually and the video files are stored in the local PC.

Steps:


1. Move the mouse pointer to the display window in live view to show the toolbar.
2. Click  in the toolbar of the display window or on the right-click Live View Management Menu to start the manual recording. The icon  turns to .
3. Click the icon  to stop the manual recording.
A prompt box with the saving path of the video files you just recorded will pop up if all the operations succeed.

Notes:

- During the manual recording, an indicator  appears in the upper-right corner of the display window.
- The saving path of video files can be set on the System Configuration interface. For details, see *Section 17.2.4 File Saving Path Settings*.
- For Cloud P2P device, the manual recording is not supported during live view.

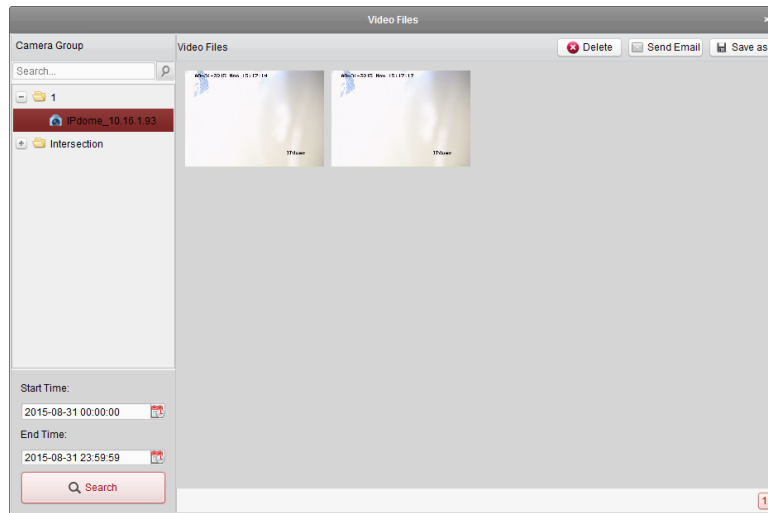
Viewing Local Video Files

Steps:

1. Click **File->Open Video File** to open the Video Files page.
2. Select the camera to be searched from the Camera Group list.
3. Click the icon  to specify the start time and end time for the search.
4. Click **Search**. The video files recorded between the start time and end time will be displayed. Select the video file, and click **Delete**. You can delete the video file.
Select the video file, and click **Send Email**. You can send an Email notification with the selected video file attached.

Select the video file, and click **Save as**. You can save a new copy of the video file.











Note: To send an Email notification, the Email settings need to be configured before proceeding. For details, see *Section 17.2.8 Email Settings*.



Double-click the video file and the video file can be played back locally.




The following buttons are available on the local playback page:

	CIF/4CIF	Display the video in cif/4cif resolution.
	Full Screen	Display the local playback page in full screen mode.
	Close	Close the local playback page of the video files.
	Pause/Play	Pause/Start the playback of the video files.
	Stop	Stop the playback of the video files.
	Speed	Set the playback speed.
	Single Frame	Play back the video files frame by frame.
	Digital Zoom	Enable the digital zoom function. Click again to disable.
	Enable/Disable Audio	Click to enable/disable the audio in the local playback.
	Capture	Capture the picture in the playback process.

Capturing Picture in Live View

Steps:

1. Move the mouse pointer to the display window in live view to show the toolbar.
2. Click the  in the toolbar of the display window or on the right-click Live View Management Menu.


A small window of the captured picture will be displayed to notify whether the capturing operation is done or not.

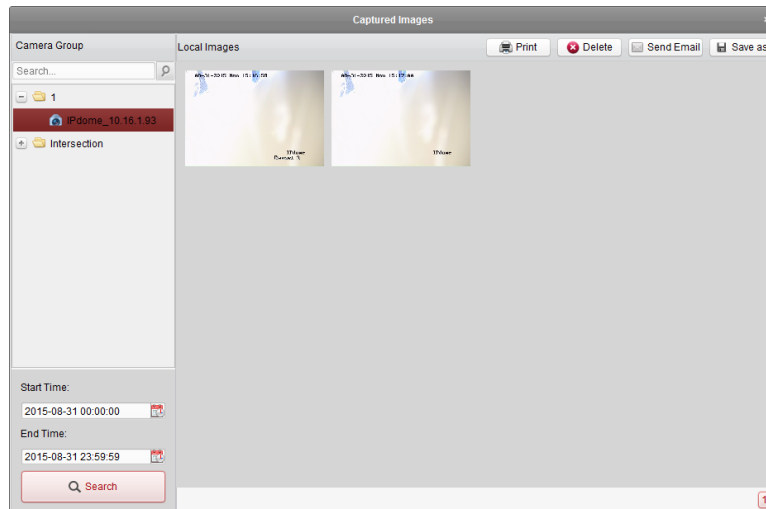
Note: The saving path of the captured pictures can be set on the System Configuration interface. For details, see *Section 17.2.4 File Saving Path Settings*.

Viewing Captured Pictures

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

Steps:

1. Click **File->Open Image File** to open the Captured Images page.
 2. Select the camera to be searched from the Camera Group list.
 3. Click the icon  to specify the start time and end time for the search.
 4. Click **Search**. The pictures captured between the start time and end time will be displayed.
 5. Double-click the captured picture to enlarge it for a better view.
- Select the captured picture, and click **Print**. You can print the selected picture.
- Select the captured picture, and click **Delete**. You can delete the selected picture.
- Select the captured picture, and click **Send Email**. You can send an Email notification with the selected picture attached.
- Select the captured picture, and click **Save as**. You can save a new copy of the selected picture.



4.5 Instant Playback

Purpose:



The video files can be played back instantly on the Main View page. Instant playback shows a piece of

the video which was remarkable, or which was unclear on the first sight. Thus, you can get an immediate review if needed.

Before you start:


The video files need to be recorded 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. Start the live view and move the mouse to the display window to show the toolbar. You can also move the mouse to default view or custom view and click  to enable the instant playback of the selected view.
2. Click the icon  in the toolbar and a list of time periods pops up. 30s, 1 min, 3 min, 5 min, 8 min, and 10 min are selectable.
3. Select a time period to start the instant playback.






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

4. Click the icon  again to stop the instant playback and go back for the live view.

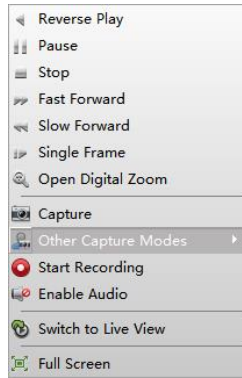
Note: During the instant playback, an indicator  appears in the upper-right corner of the display window.















On the instant playback page, the following toolbar buttons are available:

- | | | |
|---|----------------------------------|---|
|  | Reverse Playback | Play back the video file reversely. |
|  | Pause/Start Playback | Pause/Start the playback of the video files. |
|  | Stop Playback | Stop the playback of all cameras. |
|  | Slow Forward/Fast Forward | Decrease/Increase the play speed of the playback. |
|  | Single Frame (Reverse) | Play back the video files frame by frame (reversely). |

Right-click on the display window to open the Instant Playback Management Menu:



The following buttons are available on the right-click Instant Playback Management Menu:



	Reverse Playback	Play back the video file reversely.
	Pause/Play	Pause/Start the instant playback in the display window.
	Stop	Stop the instant playback and return to the live view mode.
	Fast Forward/Slow Forward	Increase/Decrease the play speed of the instant playback.
	Single Frame (Reverse)	Play back the video file frame by frame (reversely).
	Open Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Capture	Capture the picture in the instant playback process. 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.
	Other Capture Modes	Custom Capture: Capture the current picture. You can edit its name and then save it.
	Start/Stop Recording	Start/Stop clipping the video files.
	Enable/Disable Audio	Click to turn on/off the audio in instant playback.
	Switch to Live View	Switch to live view mode.
	Full Screen	Display the instant playback in full screen mode. Click again to exit.

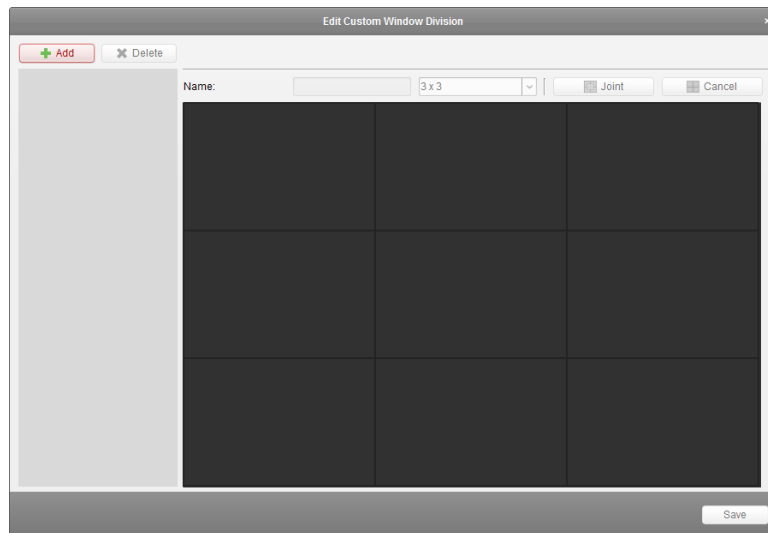
4.6 Custom Window Division

Purpose:

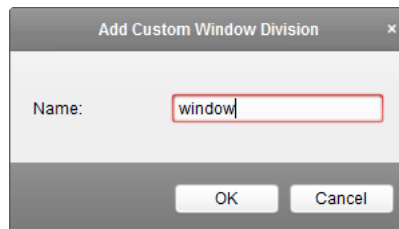
The client software provides multiple kinds of pre-defined window division. You can also set custom window division as desired.

Steps:

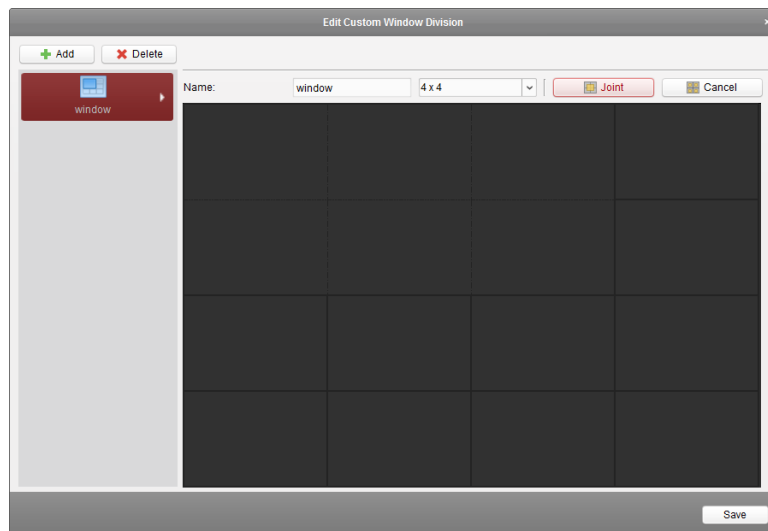
1. Click  on the live view toolbar and select  to pop up the custom window division dialog box.




2. Click **Add** to open the custom window division adding dialog box.
Note: Up to 5 custom window divisions can be added.
3. Set a name for the new window division as desired and click **OK** to save the settings.



4. You can edit the name, window division (3x3, 4x4, 5x5) for it.
5. Click-and-drag you mouse to select the adjacent windows, and click **Joint** to joint them as a whole window. You can also click **Cancel** to cancel the jointing.



6. Click **Save** to confirm the settings. Click **X** to back to the Main View page. Then you can click  and select the custom window division for playing live video.

Notes:

- You can also enter the Remote Playback page and perform the steps above to configure the custom window division.
- For remote playback, up to 16 windows can be played back at the same time. The custom

window division with more than 16 windows is invalid for playback.

4.7 Live View in Fisheye Mode

Purpose:

The live video of the camera can be played in fisheye expansion mode.

Steps:

1. Start the live view (refer to *Chapter 4.1 Starting and Stopping the Live View*).
2. Right-click on the video and select **Fisheye Expansion** to enter the Fisheye Expansion window.
3. Select the mounting type of the fisheye camera according to the actual mounting position.
4. You can select the expand mode for live view as desired.

Note: For some devices, you can select the mounting type of the device and the related expand mode will be listed.









- **Fisheye:** In the Fisheye view mode, the whole wide-angle view of the camera is displayed. This view mode is called Fisheye because it approximates the vision of a fish's convex eye. The lens produces curvilinear images of a large area, while distorting the perspective and angles of objects in the image.
 - **Panorama/Dual-180° Panorama/360° Panorama:** In the Panorama view mode, the distorted fisheye image is transformed to normal perspective image by some calibration methods.
 - **PTZ:** The PTZ view is the close-up view of some defined area in the Fisheye view or Panorama view, and it supports the electronic PTZ function, which is also called e-PTZ.
- Note:** Each PTZ view is marked on the Fisheye view and Panorama view with a specific navigation box. You can drag the navigation box on the Fisheye view or Panorama view to adjust the PTZ view, or drag the PTZ view to adjust the view to the desired angle.
5. You can right click on the window and select **Capture** to capture the picture in the live view process. The capture picture is stored in the PC.
 6. Right-click on a playing window and you can switch the selected window to full-screen mode Press **ESC** key on the keyboard or right-click on the window and select **Quit Full Screen** to exit the full-screen mode.

PTZ Control

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

Note: The PTZ panel varies according to different devices.


- Select a PTZ window, and click one of the direction buttons to adjust the view angle.
Note: Click-and-drag the No. label in the fisheye or panorama window will change the view angle of the PTZ window as well.
- Select a PTZ window, and click  to start auto-scan, and click it again to stop auto-scan.
-  +: Drag the slider to adjust the speed for PTZ movement.
-   -: Zoom in or zoom out the selected PTZ window by clicking  or . Or you can scroll the mouse wheel to zoom in or zoom out.

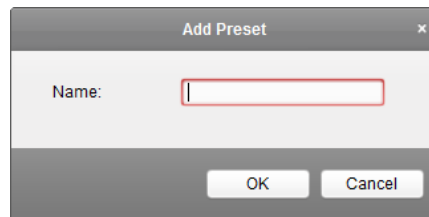
Preset



Note: The preset is only supported by specific fisheye camera.

A preset is a user-defined monitor position/point. You can simply call the preset No. to change the monitor scene to the defined position. Please follow the steps below to configure the preset.

Steps:

1. Click **Preset** tab to enter the preset configuration interface.
2. Select a PTZ window, and adjust the scene to the place you want to mark as a preset.
3. Click , input the preset name, and click **OK** to save a preset.



4. (Optional) Click  to call the configured preset.
5. (Optional) Click  to delete the configured preset.

Patrol


Note: The preset is only supported by specific fisheye camera.

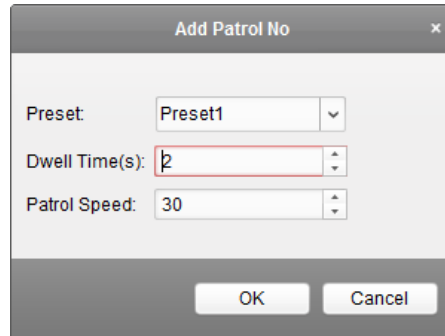
A patrol is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable. Please follow the steps below to configure the patrol.





Note:

At least 2 presets have to be configured before you configure the patrol.

Steps:

1. Click patrol tab to enter the patrol configuration interface.
2. Select a path No. from the drop-down list.
3. Click  to add the configured presets, and set the dwell time and patrol speed for the preset.
4. Repeat the above operation to add other presets to the patrol.



5. Click  to start the patrol, and click  to stop patrol.
6. Optionally, you can click  or  to edit or delete a preset in the patrol path.

Notes:

- Up to 256 presets can be configured.
- Up to 32 patrols can be set.
- The dwell time ranges from 1 to 120s.
- The patrol speed ranges from 1 to 40.

4.8 Starting Master-slave Linkage

Purpose:

The fisheye camera and box/bullet camera support master-slave linkage function so as to locate or tracking the target according to your demand.

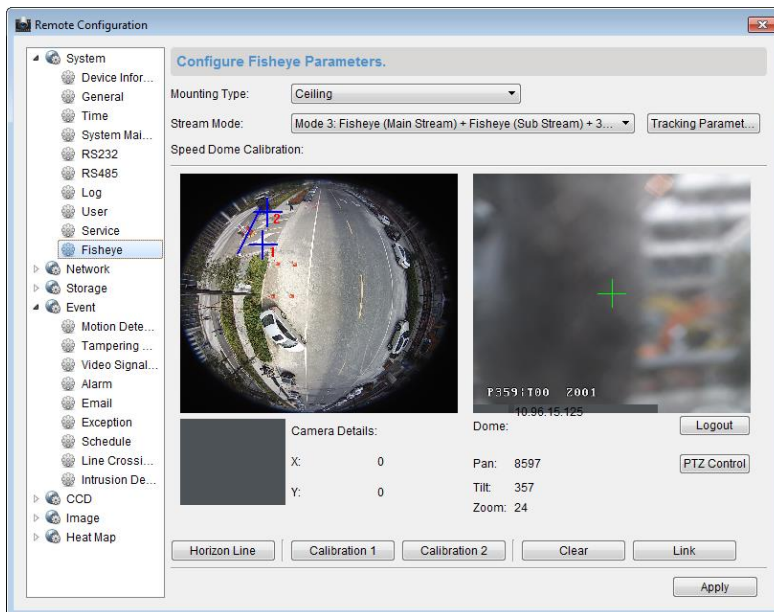
Notes:

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

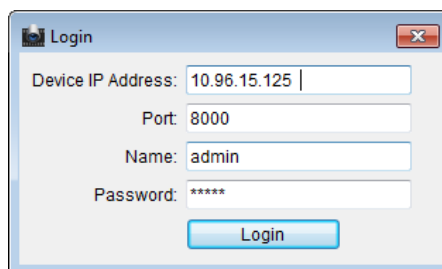
Master-slave Linkage for Fisheye Camera

Steps:

1. Right click on the panorama view of fisheye camera and select **Remote Configuration** to enter the Remote Configuration interface.
2. Click **Fisheye** menu to enter the following interface.



3. Select the mounting type of the speed dome, and select the stream mode for the fisheye camera.
4. Click **Login** to add the speed dome.



Input the device IP address, port No., user name, password, and click **Login**.

5. Click **PTZ Control**, and use the direction arrows to adjust the speed dome to a horizontal position.
Note: If the speed dome is adjusted to the horizontal position, the tilt degree is close to 0.
6. Click **Horizon Line** to set a horizon line, and a message of "Setting horizontal line succeeded" pops up if the line is set.
7. Move the No.1 calibration cross to the middle area of the fisheye camera, and you will see a small picture under the fisheye camera. Use the PTZ to adjust the speed dome to the same position, and click **Calibration 1** to finish a calibration setting.
8. Move the No.2 calibration cross to the second position, and use the PTZ to adjust the speed dome to the same position, and click **Calibration 2** to finish the second calibration setting.
Note: You can click **Clear** to delete the configured calibrations.
9. Click **Link** to link the speed dome to the fisheye camera.
10. Click **Tracking Parameters** to select the tracking method.

Notes:

- The speed dome linkage works as the linkage method of the intrusion detection and line crossing detection if any of those alarms is triggered.
 - Right click on the live view window of fisheye camera, and go to Remote Config >Event >Intrusion/Line Crossing to check the checkbox **Smart Tracking** to enable the tracking function.
11. Click **Save** to save the settings


12. (Optional) You can also right click on the panorama view and select **Start Master-slave Linkage**.

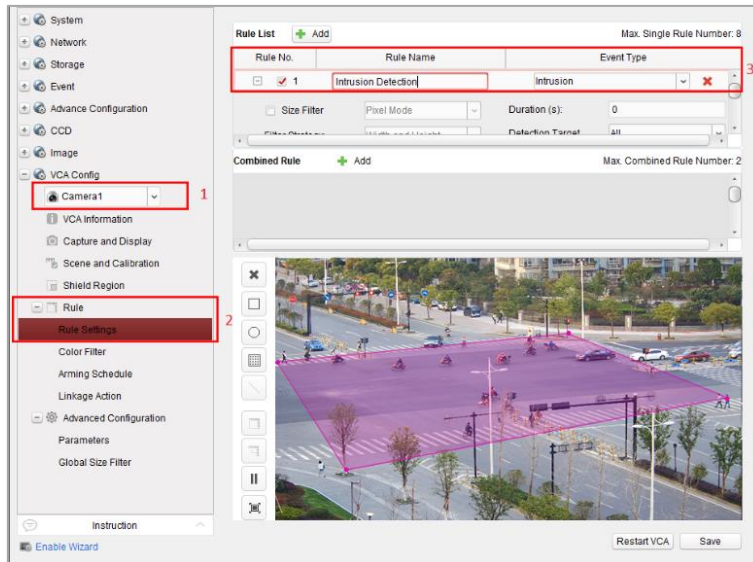
Then you can make the speed dome to track target manually by clicking the target on the live view of fisheye camera.

Note: If you want to see the speed dome linkage, you should add the speed dome to the software (Section 3.1 Adding the Device) and start live view (Section 4.1 Starting and Stopping the Live View) of it.

Master-slave Linkage for Box/Bullet Camera

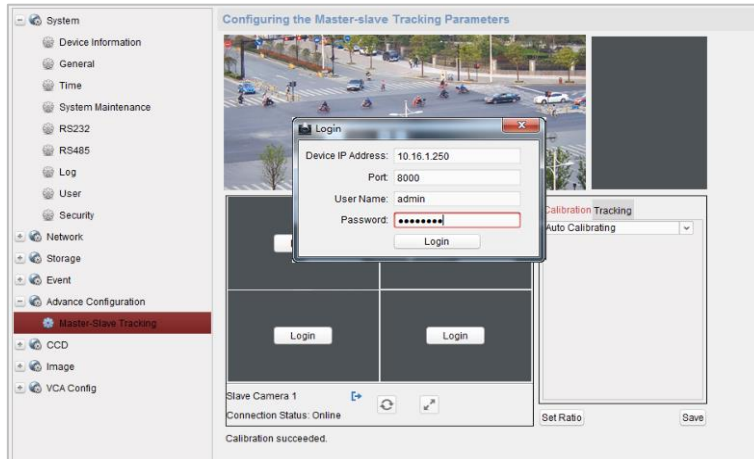
Steps:

1. Enter **Remote Configuration -> VCA Config -> Rule -> Rule Settings**.
2. Select Camera No.1, and click **+** of Rule List to add rule.
3. Select **Intrusion** as Event Type, and then click  to draw the zone of intrusion rule and click **Save** to save the settings.

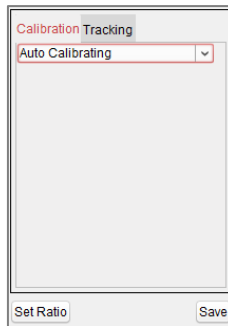


4. Login the speed dome.

- 1) In the Remote Configuration interface, select **Advanced Configuration->Master-Slave Tracking** to show the login interface.
- 2) Click **Login** button to pop up the speed dome login dialog box.
- 3) Input the required information.



5. Click **PTZ**, and use the direction arrows to adjust the speed dome to a horizontal position.
6. Click to select the calibration tab page.

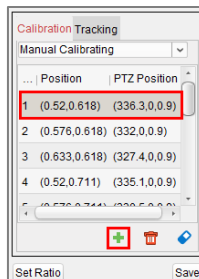


For Auto Calibrating:

- 1) Select **Auto Calibrating** from the calibration list.
- 2) Perform the calibration operation.
Move and zoom in/out the speed dome to make sure the live views of dome and camera is mostly the same.
- 3) Click **Save** to save the calibration settings.


For Manual Calibrating:

- 1) Select **Manual Calibrating** from the calibration list.
- 2) Select No. 1 from the list and click **+**, a blue cross appears in the center of the live view page, and the digital zoom view of the selected site appears on the right.
- 3) Select No. 2 to No. 4, and repeat the step above to add the manual calibration sites.



- 4) Perform the calibration operation.
Adjust the distances between the four calibration sites evenly in the live view page.
Select calibration site No. 1 and the digital zoom view of site No. 1 appears on the right.
Move and zoom in/out the speed dome to make sure the live views of dome and the digital

zoom view of selected site is mostly the same.

Click  to save the current site position information.

Select No. 2 to No. 4, and repeat the steps above to save the site position information.

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

7. Right-click on the live view window of camera to show the menu and click **Enable Master-slave Tracking**.
8. When configured VCA rule is triggered by target, the speed dome performs the automatic master-slave tracking and the target frame turns from green into red.

4.9 Other Functions in Live View

There are some other functions supported in the live view, including digital zoom, two-way audio, camera status and synchronization.

Auxiliary Screen Preview

The live video can be displayed on different auxiliary screens for the convenient preview of multiple monitoring scenes. Up to 3 auxiliary screens are supported.

Digital Zoom

Use the left key of mouse to drag a rectangle area in the lower-right/upper-left direction, and then the rectangle area will zoom in/out. You can also use the mouse wheel for zooming in or restoring of the video in digital zoom mode.

Channel-zero

For the channel-zero of the device, you can 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 the channel to start two-way audio.

The two-way audio can be used for only one camera at one time.

Camera Status

The camera status, such as recording status, signal status, connection number, etc., can be detected and displayed for check. 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 5 Remote Storage Schedule Settings and Playback

When the video storage devices are the HDDs, Net HDDs, SD/SDHC cards on the local device, or the remote storage server connected, you can set the recording schedule or capture schedule for the cameras for the continuous, alarm triggered or command triggered recording or capture. And the video files can be searched for the remote playback.

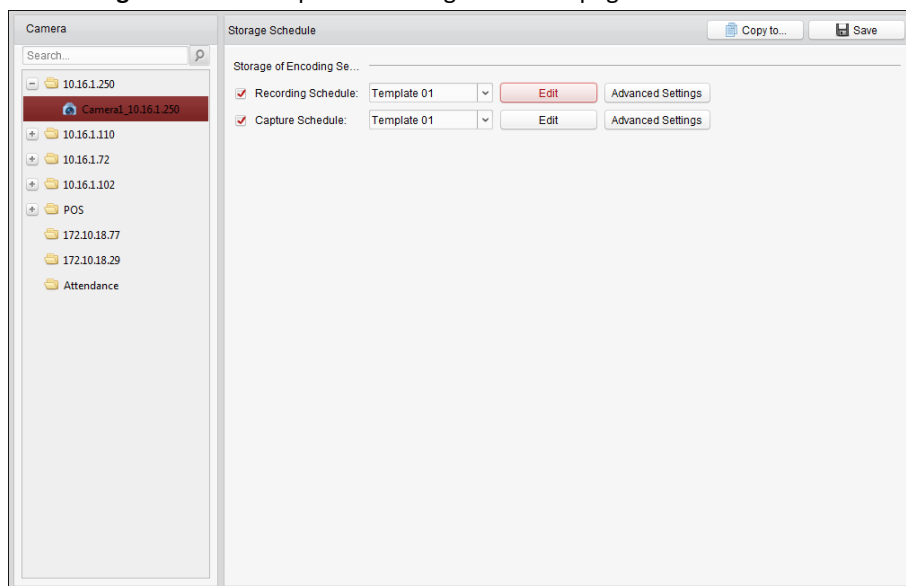
5.1 Remote Storage

Purpose:

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

Click the  icon on the control panel,

or click **Tool->Storage Schedule** to open the Storage Schedule page.



5.1.1 Storing on Storage Device on the DVR, NVR, or Network Camera

Purpose:

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

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

Before you start:

The newly installed storage devices need to be formatted. Go to the remote configuration page of the device, click **Storage->General**, select the HDD or SD/SDHC card, and click **Format** to initialize the selected storage device.

Steps:

1. Open the Recording Schedule page.
2. Select the camera in the Camera Group list.
3. Check the checkbox **Recording Schedule/Capture Schedule** under **Storage of Encoding Server** to enable device local recording or capture.



4. Select the record or capture schedule template from the drop-down list.

All-day Template: for all-day continuous recording.

Weekday Template: for working-hours continuous recording from 8:00 AM to 8:00 PM.

Event Template: for the event triggered recording.

Template 01 to 08: fixed templates for specific schedules. You can edit the templates if needed.

Custom: can be customized as desired.

If you need to edit or customize the template, see *Configuring Recording Schedule Template*.

5. Click **Advanced Settings** to set the recording parameters. For details, see *Table 5.1 Advanced Recording Settings* and *Table 3.2 Advanced Capture Settings*.

Note: The displayed items vary with the devices.

6. Optionally, click **Copy to...** to copy the recording schedule settings to other channels.
7. Click **Save** to save the settings.

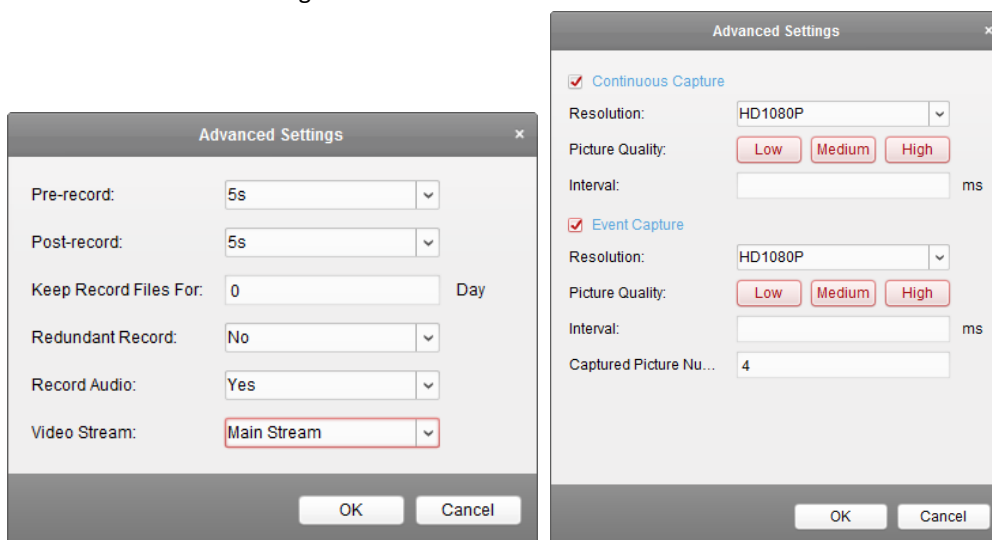


Table 5. 1 Advanced Recording Settings

Parameters	Descriptions
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 Record 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 Record	Save the video files not only in the R/W HDD but also in the redundant HDD.
Record Audio	Record the video files with audio or not.
Video Stream	Select the stream type for the recording. Note: For specific type of devices, you can select Dual-Stream for recording both main stream and sub-stream of the camera. In this mode, you can switch the stream type during remote playback. Refer to <i>Chapter 5.2.1 Normal Playback</i> for stream switch during playback.

Table 5. 2 Advanced Capture Settings

Parameters	Descriptions
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.

Configuring Recording Schedule Template



Perform the following steps to configure the recording schedule template:



If **Template 01 to 08** is selected from the drop-down list, start from step 1;

If **Custom** is selected from the drop-down list, start from step 2.

- Click **Edit** to enter the Templates Management interface. Select the template to be set and you can edit the template name.
- Set the time schedule for the selected template.


 **Schedule Recording** refers to normal schedule record. The schedule time bar is marked with .

 **Event Recording** refers to the schedule record for the event. The schedule time bar is marked with .




 **Command** refers to the schedule record triggered by command. The schedule time bar is marked with .

Note: Record triggered by command is only available for the ATM transactions when the ATM DVR is added to Guarding Expert.

When the cursor turns to , you can set the time period.

When the cursor turns to , you can move the selected time bar you just edited. You can also edit the displayed time point to set the accurate time period.

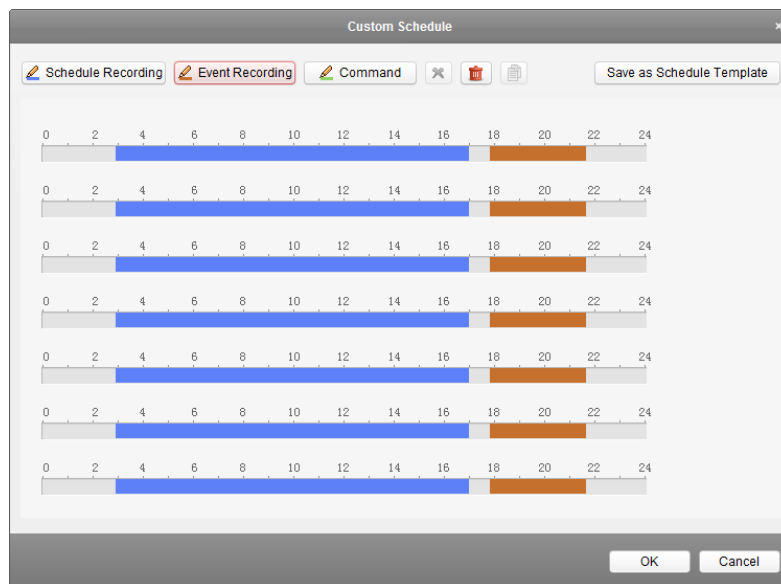
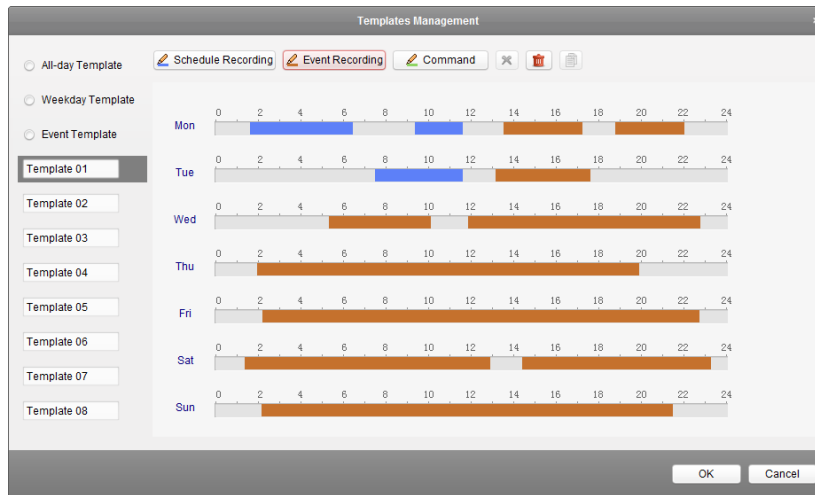
When the cursor turns to , you can lengthen or shorten the selected time bar.

- Optionally, you can select the schedule time bar, and then click the icon  to delete the selected time bar, or click the icon  to delete all the time bars, or click the icon  to copy the time bar settings to the other dates.

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

You can click **Save as Schedule Template** on the Custom Schedule interface, and then the custom template can be saved as template 01 to 08.

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



5.1.2 Storing on Storage Device

Purpose:


You can add storage device to the client for storing the video files and pictures of the added encoding devices and you can search the files for remote playback. The storage device can be storage server, CVR (Center Video Recorder) or other NVR. Here we take the settings of storage server as an example.

Before you start:

The storage server application software needs to be installed and it is packed in the Guarding Expert software package. When installing the Guarding Expert, check the checkbox **Storage Server** to enable the installation of storage server.

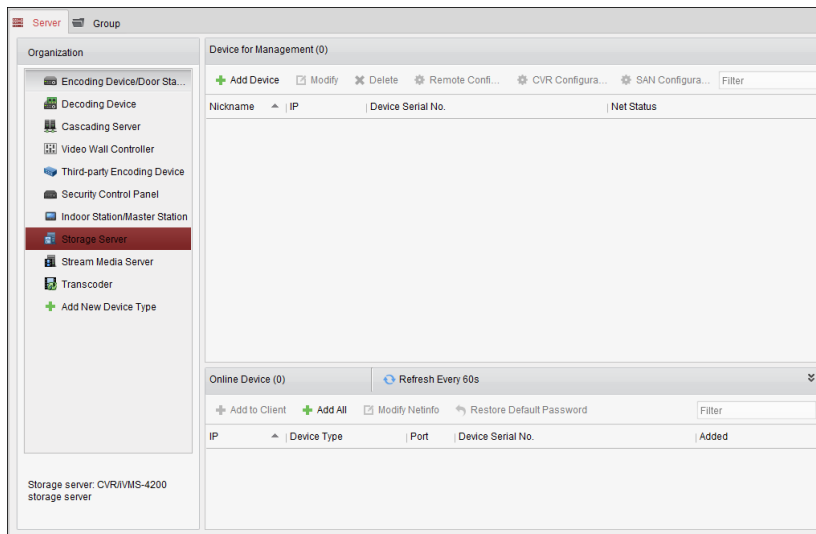
Adding the Storage Server

Steps:

1. Click the shortcut icon  on the desktop to run the storage server.

Notes:

- You can also record the video files on the storage server installed on other PC.
 - If the storage server port (value: 8000) 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 storage server.
2. Open the Device Management page and click the **Server** tab.
 3. Click **Add New Device Type**, select **Storage Server** and click **OK**.
 4. Click **Storage Server** on the list to enter the Storage Server Adding interface.



5. You can add the storage server in the following ways:
 - By detecting the online storage server, see *Section 3.1.2 Adding Online Devices*.
 - By specifying the storage server IP address or domain name, see *Section 3.1.3 Adding Devices Manually*.
 - By specifying an IP segment, see *Section 3.1.4 Adding Devices by IP Segment*.
 - By IP Server, see *Section 3.1.5 Adding Devices by IP Server*.

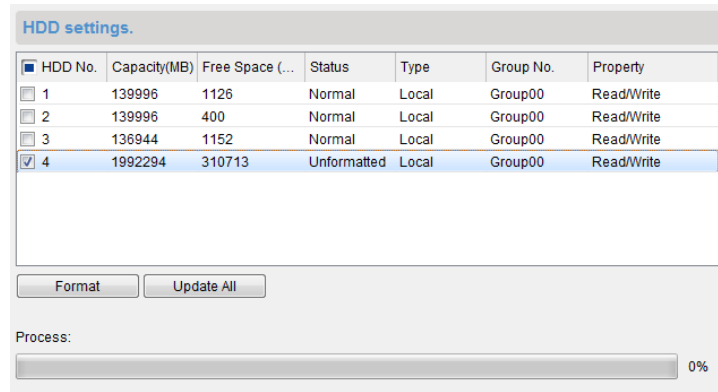
Formatting the HDDs

The HDDs of the storage Device server need to be formatted for the video file and picture storage.

Steps:

1. Select the added storage server from the list and click **Remote Configuration**.
2. Click **Storage->General**, to enter the HDD Formatting interface.
3. Select the HDD from the list and click **Format**. You can check the formatting process from the process bar and the status of the formatted HDD changes from *Unformatted* to *Normal Status*.

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



SAN and CVR Configuration

Purpose:

Client provides SAN configuration and CVR configuration to conveniently set the logical volume and CVR function for CVR device. For detailed introduction about SAN configuration and CVR configuration, refer to the *User Manual* of the CVR.

Note: This function should be supported by the device.

Select the added CVR from the list and click **CVR Configuration** or **SAN Configuration**.

Configuring Storage Schedule

Before you start:

The storage server needs to be added to the client software and the HDDs need to be formatted for the video file storage.

Steps:

1. Open the Storage Schedule page.
2. Select the camera from the Camera Group list.
3. Select the storage server from the **Storage Server** drop-down list.

Note: You can click **Storage Server Management** to add, edit or delete the storage server.

4. Check the checkbox **Recording Schedule** to enable storing the video files.

You can also check the checkbox **Picture Storage** to store the alarm pictures of the camera when event occurs.

For the network cameras with the function of heat map or people counting, the **Additional Information Storage** checkbox is available. You can click **VCA Config** to set the VCA rule for the camera, and check the **Additional Information Storage** checkbox and the heat map, people counting data and road traffic data will be uploaded to the storage server. Please refer to *Chapter 18.1 Heat Map*, *Chapter 18.2 People Counting Statistics* and *Chapter 18.4 Road Traffic* for checking the data.

Note: For detailed configuration about setting the VCA rule, please refer to the *User Manual* of the camera.

5. Select the schedule template for recording from the drop-down list.
If you need to edit or customize the template, see *Configuring Recording Schedule Template*.
6. Click **Advanced Settings** to set the pre-record time, post-record time and other parameters for recording.

7. Click **Set Quota** to enter the HDD management interface of the storage server. You can set the corresponding quota ratio for record, picture and additional information.
Example: If you set the record quota as 60%, then the 60% of the storage space can be used for storing the video files.
8. Click **Save** to save the settings.

Note: The storage server supports storage of line crossing detection alarm, intrusion detection alarm, region entrance detection alarm, region exiting detection alarm, fast moving detection alarm, people gathering detection alarm, loitering detection alarm, parking detection alarm, object removal detection alarm, and unattended baggage detection alarm recording. For details, refer to *Chapter 6 Event Management*.

5.2 Remote Playback


Purpose:

The video files stored on the local device or the storage server can be searched by camera or triggering event, and then can be played back remotely.

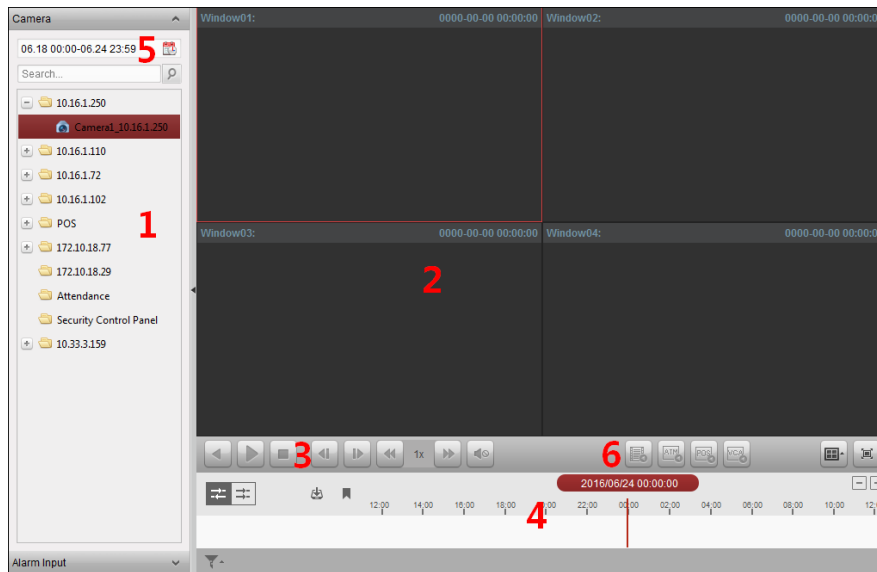
Before you start:

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 *Chapter 17.2.2 Live View and Playback Settings*. Optionally, you can set the cameras rotate direction for playback in Group Management. Refer to *Modifying the Group/Camera of Chapter 3.2 Group Management*.



Click the  icon on the control panel,

or click **View->Remote Playback** to open the Remote Playback page.



Remote Playback Page

- 1 Camera List
- 2 Display Window of Playback
- 3 Playback Control Buttons
- 4 Timeline
- 5 Calendars
- 6 Search Condition

5.2.1 Normal Playback

Purpose:

The video files can be searched by camera or group name for the Normal Playback.

Switching Video Stream for Playback

Purpose:

Optionally, you can switch between main stream and sub-stream for playback.

Before you start:

Set the video stream for recording as Dual-Stream, refer to *step 5 of Chapter 5.1.1 Storing on Storage Devices on the DVRs, NVRs, or Network Cameras* for details.

Note: This function should be supported by the device.


Steps:

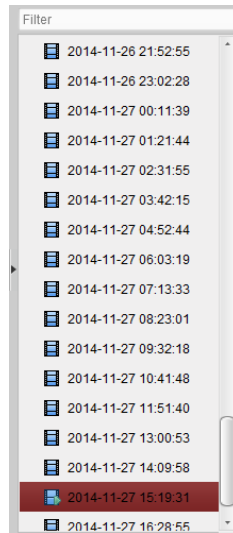
1. Enter Group Management interface and open the Modify Camera dialog (refer to *Modifying the Group/Camera of Chapter 3.2 Group Management*).
2. Set the video stream of the camera to main stream or sub-stream.

Searching Video Files for Normal Playback



Steps:

1. Open the Remote Playback page.

2. Click the calendars icon  to activate the calendars dialog.
Select the start and end date and set the accurate time.
Click **OK** to save the searching period.
3. Click-and-drag the camera or group to the display window,
or double-click the camera or group to start the playback.
4. The found video files of the selected group or camera will be displayed on the right of the interface in chronological order. You can filter the results through the **Filter** text field.
The first video file will be played back automatically by default.







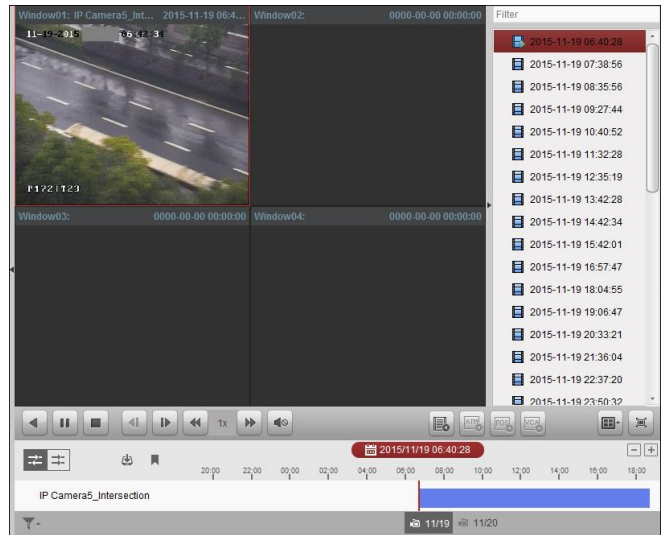
Notes:

- Up to 16 cameras can be searched simultaneously.
- In the calendar, the date which has scheduled records will be marked with  and the date with event records will be marked with .

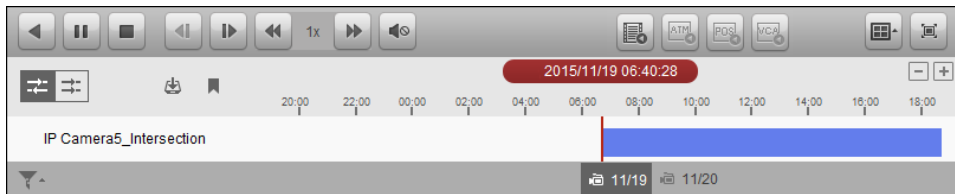
Playing Back Video Files

After searching the video files for the normal playback, you can play back the video files in the following two ways:















- **Playback by File List**
Select the video file from the search result list, and then click the icon  on the video file, or double-click the video file to play the video on the display window of playback.
You can also select a display window and click the icon  in the toolbar to play back the corresponding video file.
- **Playback by Timeline**
The timeline indicates the time duration for the video file, and the video files of different types are color coded. Click on the timeline to play back the video of the specific time.
You can click  or  to scale up or scale down the timeline bar.
You can drag the timeline bar to go to the previous or the next time period.
You can use the mouse wheel to zoom in or zoom out on the timeline.




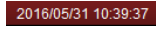
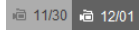



Normal Playback Toolbar:

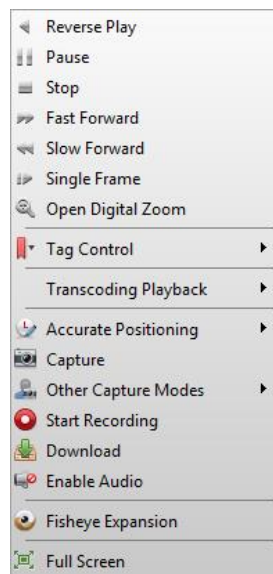


On the Normal Playback page, the following toolbar buttons are available:












- | | | |
|---|----------------------------------|---|
|  | Reverse Playback | Play back the video file reversely. |
|  | Pause/Start Playback | Pause/Start the playback of the video files. |
|  | Stop Playback | Stop the playback of all cameras. |
|  | Single Frame (Reverse) | Play back the video files frame by frame reversely. You can also scroll down the mouse wheel to play the video file frame by frame reversely. |
|  | Single Frame | Play back the video files frame by frame. You can also scroll down the mouse wheel to play the video file frame by frame. |
|  | Slow Forward/Fast Forward | Decrease/Increase the play speed of the playback. |
|  | Volume | Click to turn on/off the audio and adjust the audio volume. |
|  | Event Playback | Search the recordings triggered by event, such as motion detection, video loss or video tampering. |
|  | ATM Playback | Search the recordings of ATM devices. |
|  | POS Playback | Search the recordings which contain POS information. |
|  | VCA Playback | Set the VCA rule to the searched video files that VCA event occurs, including VCA Search, Intrusion and Line Crossing. |
|  | Window Division | Set the window division. |
|  | Full Screen | Display the video playback in full-screen mode. Press ESC to exit. |
|  | Async/Sync | Click to play back the video files synchronously/asynchronously. |

	Playback	
	Download	Download the video files of the camera and the video files are stored in the PC. You can select to download by file, by date, or by tag.
	Tag	Add default tag for the video file to mark the important video point. You can edit the tag or go to the tag position via the right-click menu.
	Filter	Display the record types as desired. E.g., you can select to display only the event recording.
	Accurate Positioning	Set the accurate time point to play back the video file.
	Date	The day that has video files will be marked with  .

Right-click on the display window in playback to open the Playback Management Menu:








The following items are available on the right-click Playback Management Menu:


	Reverse Playback	Play back the video file reversely.
	Pause/Start	Pause/Start the playback.
	Stop	Stop the playback.
	Fast Forward	Play back the video file at a faster speed.
	Slow Forward	Play back the video file at a slower speed.
	Single Frame (Reverse)	Play back the video file frame by frame (reversely).
	Open Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Tag Control	Add default (default tag name <i>TAG</i>) or custom tag (customized tag name) for the video file to mark the important video point. You can also edit the tag or go to the tag position conveniently.
	Accurate Positioning	Set the accurate time point to play back the video file.
	Capture	Capture the picture in the playback process.
	Other Capture Modes	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.

- 
Start/Stop Recording Start/Stop the manual recording. The video file is stored in the PC.
- 
Download Download the video files of the camera and the video files are stored in the PC. You can select to download by file or by date.
- 
Enable/Disable Audio Click to enable/disable the audio in playback.
- 
Fisheye Expansion Enter the fisheye playback mode. For details, please refer to *Chapter 5.2.8 Fisheye Playback*.
- 
Full Screen Display the playback in full-screen mode. Click the icon again or press *Esc* key to exit.

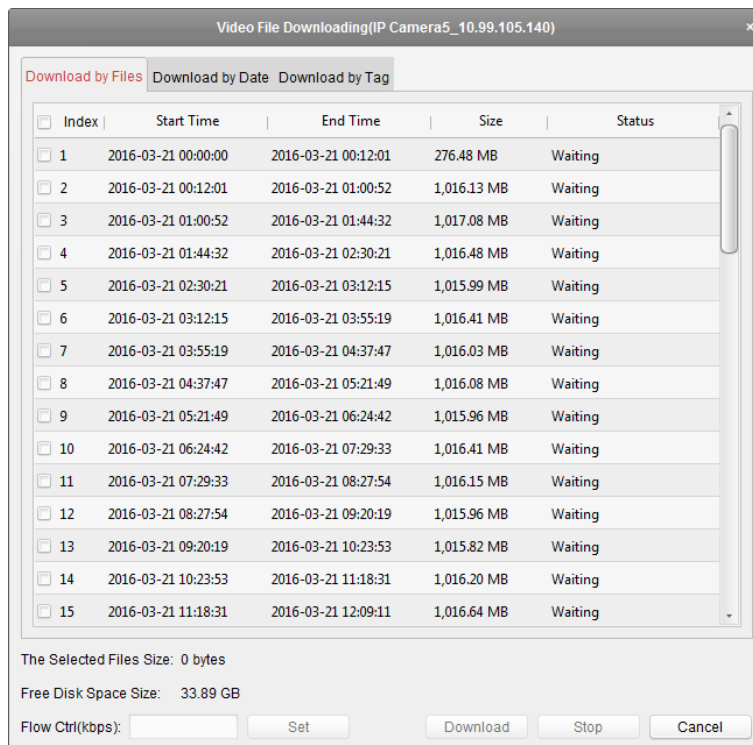
Downloading Video Files

During playback, you can click  on the toolbar to download the video files of the camera to the local PC. You can select to download by file, by date, or by tag.

Download by Files


Steps:

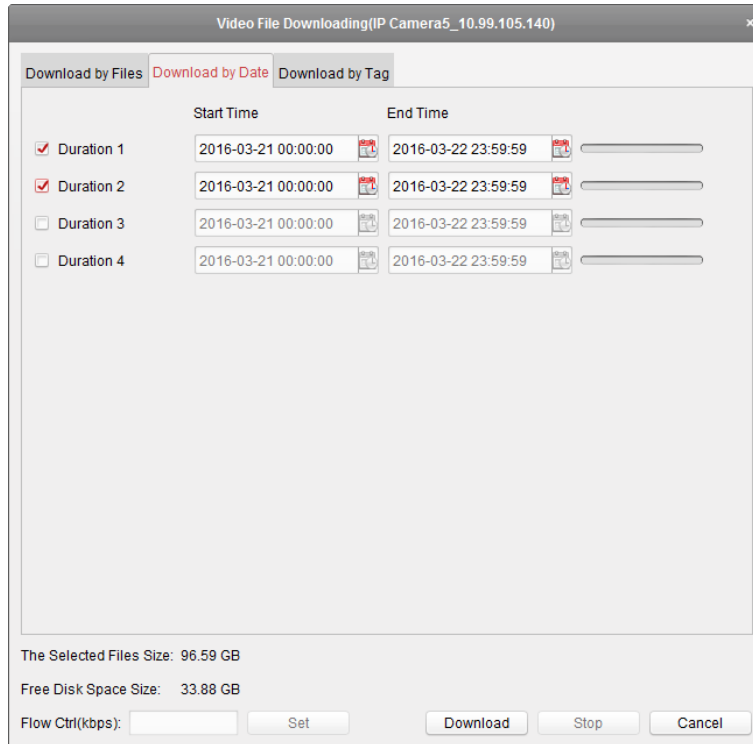
1. Click **Download by Files** tab in the File Download interface. You can view the video files information of selected camera.
2. Check the checkbox of the video file and the total size of the selected files will be shown below.
3. Click **Download** to start downloading the file to the local PC.
You can input the flow (0 to 32768 kbps) and click **Set** to control the downloading speed.
4. Optionally, you can click **Stop** to stop downloading manually.



Download by Date

Steps:

1. Click **Download by Date** tab in the File Download interface.
2. Check the checkbox of the time duration to enable it, and click  to set the start and end time.
3. Click **Download** to start downloading the file to the local PC. The progress bar shows the downloading process.
You can input the flow (0 to 32768 kbps) and click **Set** to control the downloading speed.
4. Optionally, you can click **Stop** to stop downloading manually.

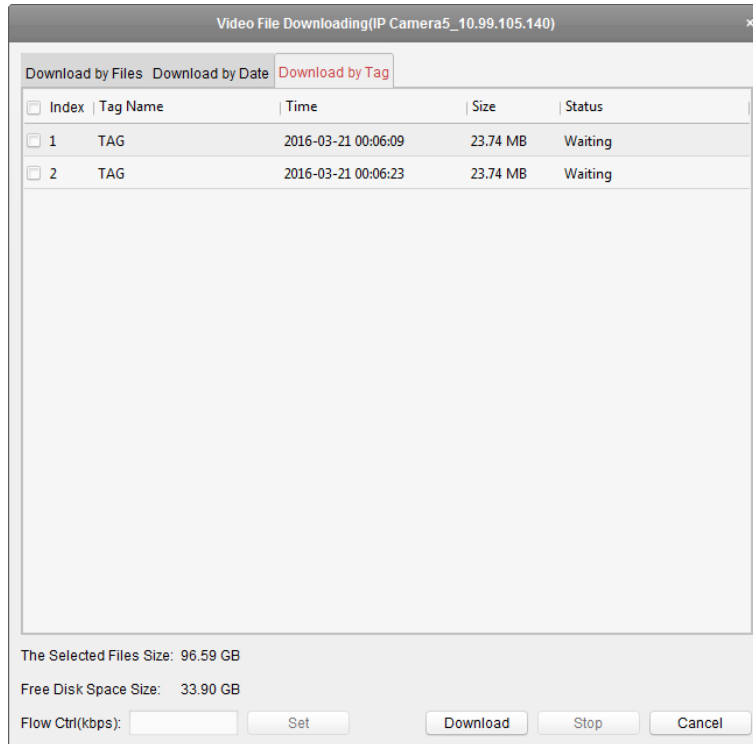


Note: When downloading video file of one time duration, you can set to merge the video files. The video files in the set time duration can be merged for downloading. For configuring merging downloaded video files, refer to *17.2.2 Live View and Playback Settings*.

Download by Tag

Steps:

1. Click **Download by Tag** tab in the File Download interface. The added tags will be displayed.
2. Check the checkbox of the tag and the total size of the selected files will be shown below.
3. Click **Download** to start downloading the selected file (30 seconds before the selected tag to 30 seconds after the tag) to the local PC. You can input the flow (0 to 32768 kbps) and click **Set** to control the downloading speed.
4. Optionally, you can click **Stop** to stop downloading manually.





5.2.2 Alarm Input Playback

Purpose:

When the alarm input is triggered and the linked video can be searched for Alarm Input Playback and this function requires the support of the connected device.

Searching Video Files for Alarm Input Playback


Steps:


1. Open the Remote Playback page.
2. Click  to show the Alarm Input panel on the left.
3. (Optional) Click the calendars icon  to activate the calendars dialog. Select the start and end date and set the accurate time, and click **OK**.
4. Click-and-drag the alarm input to the display window, or double-click the alarm input to start the playback.
5. The found video files of the selected alarm input will be displayed on the right of the interface. You can filter the results through the **Filter** text field.

Playing Back Video Files

After searching the video files triggered by alarm input, you can play back the video files in the following two ways:

- **Playback by File List**



Select the video file from the search result list, and then click the icon  on the video file, or double-click the video file to play the video on the display window of playback.

You can also select a display window and click the icon  in the toolbar to play back the

corresponding video file.

- **Playback by Timeline**

The timeline indicates the time duration for the video file, and the video files of different types are color coded. Click on the timeline to play back the video of the specific time.

You can click  or  to scale up or scale down the timeline bar.

You can drag the timeline bar to go to the previous or the next time period.

You can use the mouse wheel to zoom in or zoom out on the timeline.

Please refer to *Chapter 5.2.1 Normal Playback* for the description of the playback control toolbar and right-click menu. Some icons may not available for Alarm Input playback.







5.2.3 Event Playback

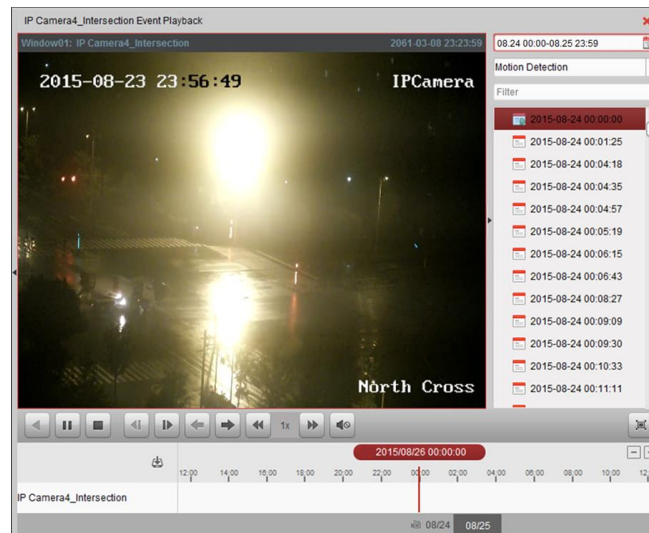
Purpose:

The recordings triggered by event, such as motion detection, VCA detection or behavior analysis, can be searched for Event Playback and this function requires the support of the connected device.

Searching Video Files for Event Playback

Steps:



1. Open the Remote Playback page.
2. Select the camera and start the normal playback. Refer to *Chapter 5.2.1 Normal Playback*.
3. Click  and the motion detection triggered recording will be searched by default.
4. Click the calendars icon  to activate the calendars dialog box.
Select the start and end date and set the accurate time.
Click **OK** to save the searching period.
Note: In the calendar, the date which has scheduled records will be marked with  and the date with event records will be marked with .
5. Select the event type from the drop-down list and the found video files will be displayed. You can filter the results by inputting the keyword in the **Filter** text field. Or you can click  to go back to the normal playback.
6. Select the video file from the search result list, and then click the icon  on the video file, or double-click the video file to play the video on the corresponding display window of playback.



Playing Back Video Files



After searching the recordings triggered by the event, you can play back the video files in the following two ways:

- **Playback by File List**

Select the video file from the search result list, and then click the icon  in the toolbar, or click the icon  on the video file, or double-click the video file to play the video on the corresponding display window of playback.

- **Playback by Timeline**

The timeline indicates the time duration for the video file. Click on the timeline to play back the video of the specific time.

You can click  or  to scale up or scale down the timeline bar.










You can drag the timeline bar to go to the previous or the next time period.




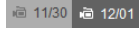

You can use the mouse wheel to zoom in or zoom out on the timeline.

Event Playback Toolbar:



On the Remote Playback page, the following toolbar buttons are available:

	Reverse Playback	Play back the video file reversely.
	Pause/Start Playback	Pause/Start the playback of the video files.
	Stop Playback	Stop the playback of all cameras.
	Single Frame (Reverse)	Play back the video files frame by frame reversely.
	Single Frame	Play back the video files frame by frame.
	Previous Event	Go to the playback of the previous event.
	Next Event	Go to the playback of the next event.
	Slow Forward/Fast Forward	Decrease/Increase the play speed of the playback.
	Volume	Click to turn on/off the audio and adjust the audio

		volume.
	Full Screen	Display the video playback in full screen mode. Press ESC to exit.
	Download	Download the video files of the camera and the video files are stored in the PC.
	Accurate Positioning	Set the accurate time point to play back the video file.
	Date	The day that has video files will be marked with  .

Please refer to *Chapter 5.2.1 Normal Playback* for the description of the right-click menu. Some icons may not be available for event playback.

Note: You can set the pre-play time for event playback in System Configuration. By default, it is 30s. For configuring the pre-play time, refer to *17.2.2 Live View and Playback Settings*.

5.2.4 ATM Playback


Purpose:

Search the video files for ATM DVR.

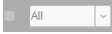
Note: This function should be supported by the device and the device should be configured with transaction rules. For details, please refer to the *User Manual* of the device.

Searching Video Files for ATM Playback



Steps:

1. Open the Remote Playback page.
2. Select the camera of the ATM DVR and start the normal playback. Refer to *Chapter 5.2.1 Normal Playback*.
3. Click  to enter the ATM playback interface.
4. Enter the search conditions.

 By Card Nu... : Input the card number that is contained in the ATM information.

 All : Check the checkbox and select the transaction type for query, and input the related transaction amount.



File Type: Select the type of the video file to be searched.

5. Click the calendars icon  to activate the calendars dialog. Select the start and end date and set the accurate time. Click **OK** to save the searching period.
6. Click **Search** and the matched files will be displayed. You can filter the results through the Filter text field.
7. Double-click a file for playback. Or you can click  to go back to the normal playback.

Playing Back Video Files

After searching the recordings, you can play back the video files in the following two ways:



● **Playback by File List**

Select the video file from the search result list, and then click the icon  in the toolbar, or click the icon  on the video file, or double-click the video file to play the video on the

corresponding display window of playback.

- **Playback by Timeline**

The timeline indicates the time duration for the video file. Click on the timeline to play back the video of the specific time.

You can click  or  to zoom in or zoom out the timeline bar.

You can drag the timeline bar to go to the previous or the next time period.

You can use the mouse wheel to zoom in or zoom out on the timeline.

Please refer to *Chapter 5.2.1 Normal Playback* for the description of the playback control toolbar and right-click menu. Some icons may not available for ATM playback.

5.2.5 POS Playback

Purpose:


Search the video files which contain POS information.

Note: This function should be supported by the device and the device should be configured with POS text overlay. For details, please refer to the User Manual of the device.

Searching Video Files for POS Playback

Steps:

1. Open the Remote Playback page.
2. Select the camera and start the normal playback. Refer to *Chapter 5.2.1 Normal Playback*.


3. Click  to enter the POS playback interface.

4. Enter the search conditions.

Keywords: Input the keywords that are contained in the POS information. You can input up to 3 keywords by separating each one with a comma.

Filter: If you input more than one keyword for query, you can select “or(|)” to search the POS information containing any of the keywords, or select “and(&)” to search the POS information containing all of the keywords.


Case Sensitive: Check the checkbox to search the POS information with case-sensitivity.

7. Click the calendars icon  to activate the calendars dialog box.

Select the start and end date and set the accurate time.

Click **OK** to save the searching period.



5. Click **Search** and the matched files will be displayed. You can filter the results through the **Filter** text field.

6. Double-click a file for playback. Or you can click  to go back to the normal playback.

Playing Back Video Files



After searching the recordings, you can play back the video files in the following two ways:

- **Playback by File List**

Select the video file from the search result list, and then click the icon  in the toolbar, or click the icon  on the video file, or double-click the video file to play the video on the corresponding display window of playback.

- **Playback by Timeline**

The timeline indicates the time duration for the video file. Click on the timeline to play back the video of the specific time.

You can click  or  to zoom in or zoom out the timeline bar. You can also use the mouse wheel to zoom in or zoom out on the timeline.

You can drag the timeline bar to go to the previous or the next time period.

Please refer to *Chapter 5.2.1 Normal Playback* for the description of the playback control toolbar, right-click menu and downloading record files. Some icons may not be available for POS playback.


5.2.6 Synchronous Playback

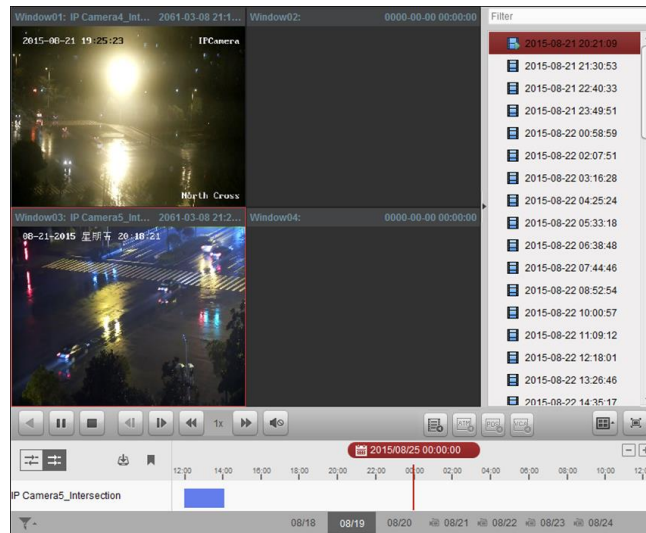
Purpose:


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

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

Steps:

1. Search the video files for the normal playback (*Section 3.2.1 Normal Playback*). At least two cameras are during playback.
2. Click  in the toolbar to enable the synchronous playback. The camera under playback will start synchronous playback.



3. To disable the synchronous playback, click the icon .

5.2.7 VCA Playback

Purpose:

You can set VCA rule to the searched video files and find the video that VCA event occurs, including VCA Search, Intrusion and Line Crossing. This function helps to search out the video that you may be more concerned and mark it with red color.


- **VCA Search:** Get all the related motion detection events that occurred in the pre-defined region.
- **Intrusion Detection:** Detect whether there are people, vehicles and other moving objects

intruding into the pre-defined region.





- **Line Crossing Detection:** Bi-directionally detect people, vehicles and other moving objects that cross a virtual line.

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.



Steps:

1. Open the Remote Playback page.
2. Select the camera and start the normal playback. Refer to *Chapter 5.2.1 Normal Playback*.
3. Click  to enter the VCA playback interface.
4. Select the VCA Type, draw the detection region and set the sensitivity.

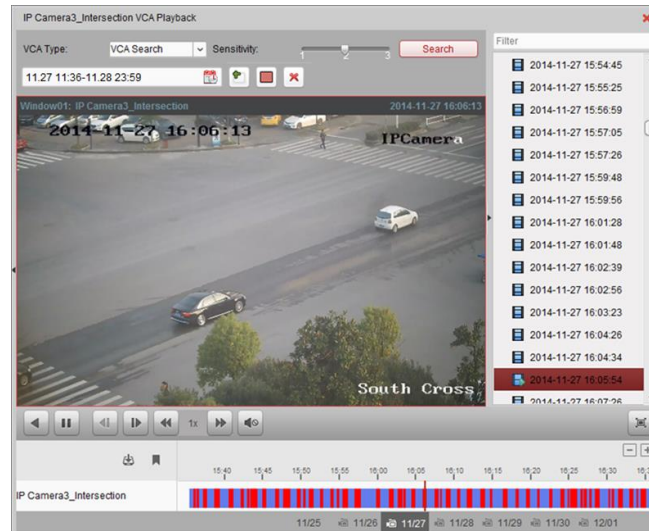
Notes:

- For VCA Search, click , and then click and move on the playback window to set the grid rectangle as the detection region. Or you can click  to set all the area shot by the camera as the detection region.
- For Intrusion, click , and then click on the playback window to set the vertex for the detection region.
- For Line Crossing, click , and then click-and-drag on the playback window to set the detection line.

Note: For Intrusion and Line Crossing, you can click **Advanced Attributes** and check the checkbox to 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.

- To delete the drawn region or line, click  to remove it.
5. Click the calendars icon  to activate the calendars dialog box. Select the start and end date and set the accurate time. Click **OK** to save the searching period.
 6. Click **Search** and the VCA events occurred in the defined area will be red marked on the timeline. By default, the playback speed of concerned video will be 1X, and the playback speed of unconcerned video will be 8X.



Note: 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 *17.2.2 Live View and Playback Settings*.



Playing Back Video Files



After searching the recordings, you can play back the video files in the following two ways:

- **Playback by File List**

Select the video file from the search result list, and then click the icon  in the toolbar, or click the icon  on the video file, or double-click the video file to play the video on the corresponding display window of playback.

- **Playback by Timeline**

The timeline indicates the time duration for the video file. Click on the timeline to play back the video of the specific time.

You can click  or  to zoom in or zoom out the timeline bar.

You can drag the timeline bar to go to the previous or the next time period.

You can use the mouse wheel to zoom in or zoom out on the timeline.

Please refer to *Chapter 5.2.1 Normal Playback* for the description of the playback control toolbar and right-click menu. Some icons may not be available for VCA playback.

5.2.8 Fisheye Playback

Purpose:

The video files can be played back in fisheye expansion mode.

Steps:

1. Open the Remote Playback page.
2. Select the camera and start the normal playback. Refer to *Chapter 5.2.1 Normal Playback*.
3. Right-click on the playback video and select **Fisheye Expansion** to enter the Fisheye Expansion Mode.

Note: The mounting type of fisheye expansion in playback is set according to the mounting type in live view. For details, please refer to *Chapter 4.7 Live View in Fisheye Mode*.

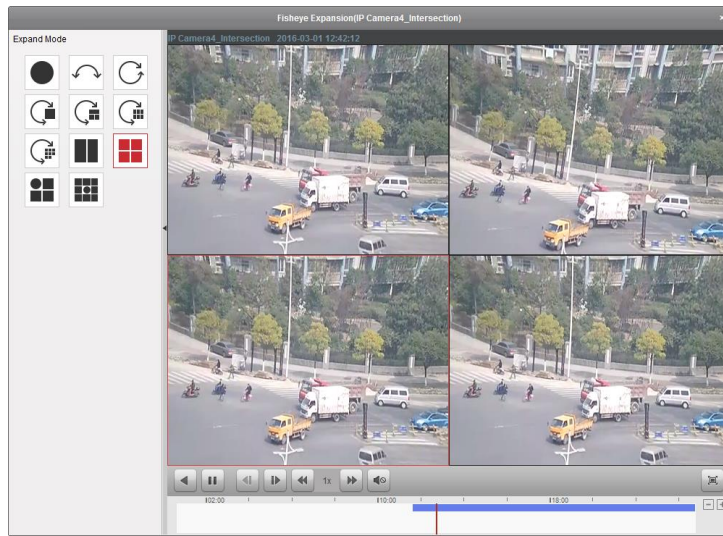
4. You can select the expand mode for playback as desired.

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

The lens produces curvilinear images of a large area, while distorting the perspective and angles of objects in the image.








- **Panorama/Dual-180° Panorama/360° Panorama:** In the Panorama view mode, the distorted fisheye image is transformed to normal perspective image by some calibration methods.
- **PTZ:** The PTZ view is the close-up view of some defined area in the Fisheye view or Panorama view, and it supports the electronic PTZ function, which is also called e-PTZ.

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



Right-click on a playing window and you can switch the selected window to full-screen mode. Press *ESC* key on the keyboard or right-click on the window and select **Quit Full Screen** to exit the full-screen mode.

On the Normal Playback page, the following toolbar buttons are available:

	Reverse Playback	Play back the video file reversely.
	Pause/Start Playback	Pause/Start the playback of the video files.
	Single Frame (Reverse)	Play back the video files frame by frame reversely.
	Single Frame	Play back the video files frame by frame.
	Slow Forward/Fast Forward	Decrease/Increase the play speed of the playback.
	Volume	Click to turn on/off the audio and adjust the audio volume.
	Full Screen	Display the video playback in full-screen mode. Press ESC to exit.

Chapter 6 Event Management

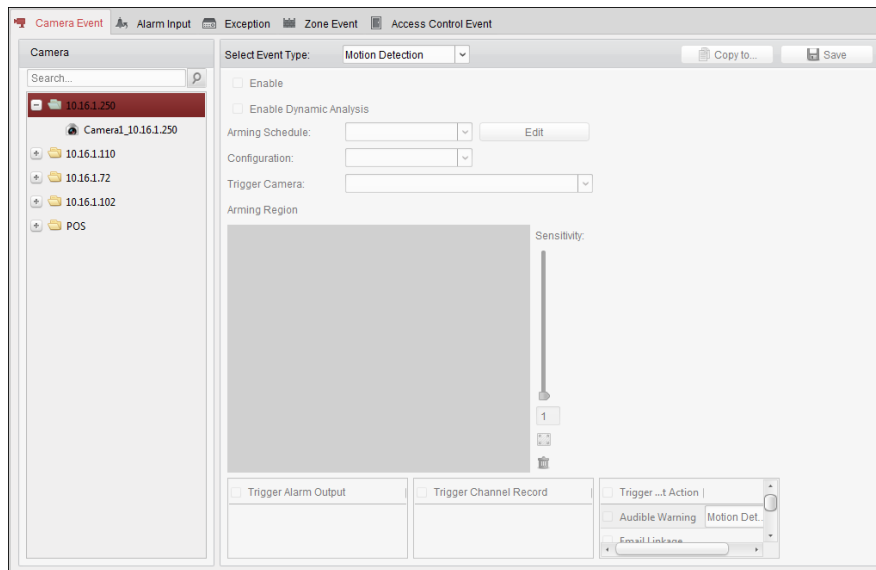
Purpose:

In Guarding Expert client software, rules can be set up for triggers and linkage actions. You can assign linkage actions to the trigger by setting up a rule. For example, when motion is detected, an audible warning appears or other linkage actions happen.



Click the icon on the control panel,

or click **Tool->Event Management** to open the Event Management page.



You can set different linkage actions for the following triggers:

Note: The event detection should be supported by the device before you can configure it.

- Camera Event
- Alarm Input
- Exception
- Zone Event (For details, please refer to *Chapter 13.2 Zone Event Configuration*.)
- Access Control Event (For details, please refer to *Chapter 15.4 Access Control Event Configuration*.)

Note: The event types of Camera Event vary according to different devices. Here we take the configuration of some event types as examples. For other types, please refer to the *User Manual* of the device.



6.1 Configuring Motion Detection Alarm

Purpose:

A motion detection alarm is triggered when the client software detects motion within its defined area. The linkage actions, including alarm output, channel record and client action can be set.

Note: The configuration varies according to different devices. For details, please refer to the *User Manual* of the devices.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Motion Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of motion detection. Check the checkbox **Enable Dynamic Analysis** to mark the detected objects with green rectangles in live view and playback.
4. Select the arming schedule template from the drop-down list.
All-day Template: For all-day continuous arming.
Weekday Template: For working-hours continuous arming from 8:00 AM to 8:00 PM.
Template 01 to 09: Fixed templates for special schedules. You can edit the templates if needed.
Custom: Can be customized as desired.
 If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Select the Configuration as desired.
Note: For some camera, you can select **Normal** or **Expert** as the configuration type. Expert mode is mainly used to configure the sensitivity and proportion of object on area of each area for different day/night switch. For details, please refer to the *User Manual* of the device.
6. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when motion detection alarm occurs.
 To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
7. Click-and-drag the mouse to draw a defined area for the arming region.
 You can click the icon  to set the whole video area as detection area, or click the icon  to clear all the detection area.
8. Drag the slider on the sensitivity bar to adjust the motion detection sensitivity. The larger the value is, the more sensitive the detection is.
9. Check the checkboxes to activate the linkage actions. For details, see *Table 6.1 Linkage Actions for Motion Detection Alarm*.
10. Optionally, click **Copy to...** to copy the event parameters to other channels.
11. Click **Save** to save the settings.

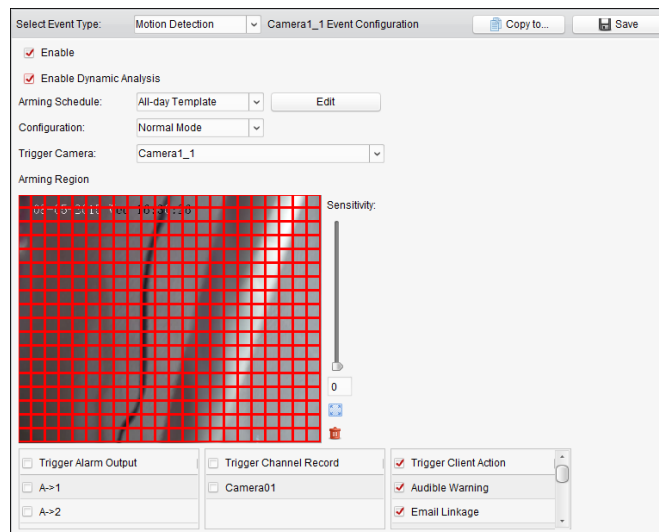


Table 6. 1 Linkage Actions for Motion Detection Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image with alarm information pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.



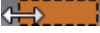



Configuring Arming Schedule Template

Perform the following steps to configure the arming schedule template:

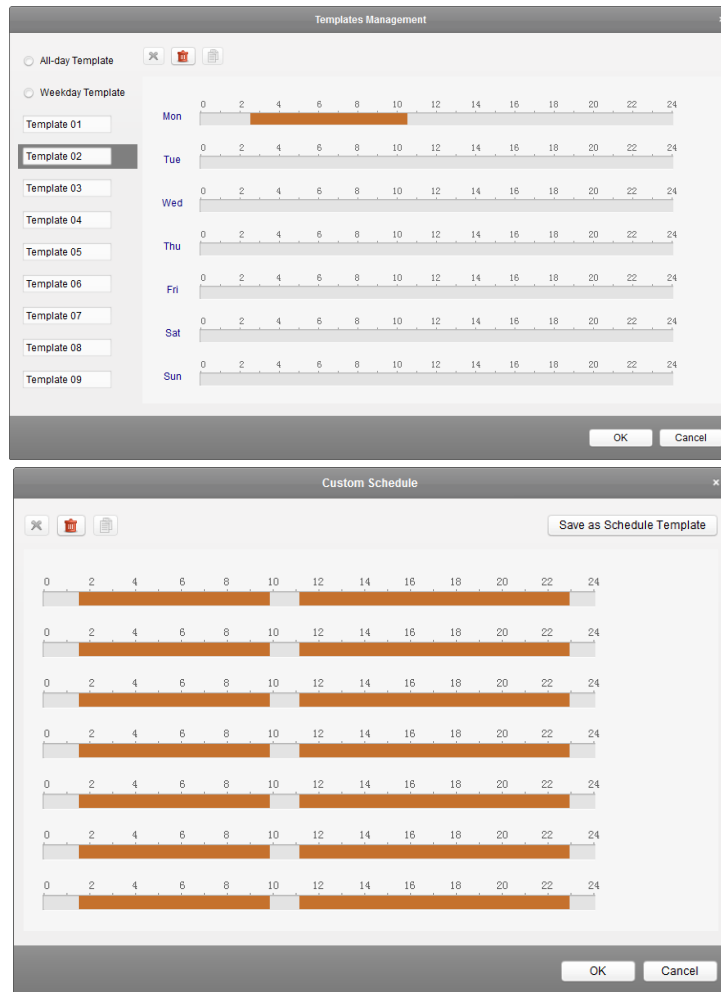
If **Template 01 to 09** is selected in the drop-down list, start from step 1;

If **Custom** is selected in the drop-down list, start from step 2.

Steps:

- Click **Edit** to enter the Templates Management interface. Select the template to be set and you can edit the template name.
- Set the time schedule for the selected template.
When the cursor turns to , you can set the time period.
When the cursor turns to , you can move the selected time bar you just edited. You can also edit the displayed time point to set the accurate time period.
When the cursor turns to , you can lengthen or shorten the selected time bar.
- Optionally, you can select the schedule time bar,
and then click the icon  to delete the selected time bar,
or click the icon  to delete all the time bars,
or click the icon  to copy the time bar settings to the other dates.
- Click **OK** to save the settings.
You can click **Save as Schedule Template** on the Custom Schedule interface, and then the custom template can be saved as template 01 to 09.

Note: Up to 8 time periods can be set for each day in the arming schedule template.



6.2 Configuring Video Tampering Alarm

Purpose:

A video tampering alarm is triggered when the camera is covered and the monitoring area cannot be viewed. The linkage actions, including alarm output and client action can be set.

Steps:



1. Open the Event Management page and click the **Camera Event** tab.
2. Select the camera to be configured and select **Video Tampering Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of video tampering.
4. Select the arming schedule template from the drop-down list.

If you need to edit or customize the template, see *Configuring Arming Schedule Template*.

5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when video tampering alarm occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

6. Click-and-drag the mouse to draw a defined area for the arming region.

You can click the icon  to set the whole video area as detection area, or click the icon  to clear the detection area.

7. Drag the slider on the sensitivity bar to adjust the tampering alarm sensitivity.
8. Check the checkboxes to activate the linkage actions. For details, see *Table 6.2 Linkage Actions for Tampering Alarm*.
9. Optionally, click **Copy to...** to copy the event parameters to other cameras.
10. Click **Save** to save the settings.

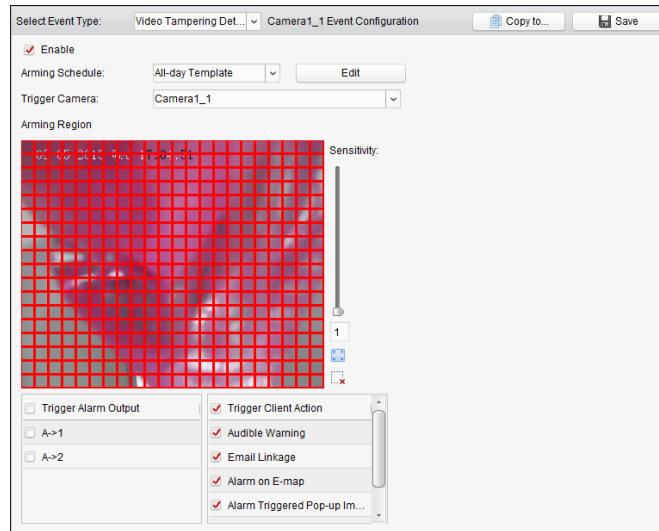


Table 6. 2 Linkage Actions for Tampering Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.3 Configuring PIR Alarm

Purpose:

A PIR (Passive Infrared) alarm is triggered when an intruder moves within the detector's field of view. The heat energy dissipated by a person, or any other warm blooded creature such as dogs, cats, etc., can be detected.

Note: The PIR Alarm function requires the support of connected device.

Steps:

1. Open the Event Management page and click the **Camera Event** tab.
2. Select the camera to be configured and select **PIR Alarm** as the event type.
3. Check the checkbox **Enable** to enable the function of PIR alarm.
4. Input a descriptive name of the alarm.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when PIR alarm occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

6. Check the checkboxes to activate the linkage actions. For details, see *Table 6.3 Linkage Actions for PIR Alarm*.
7. Optionally, click **Copy to...** to copy the event parameters to other channels.
8. Click **Save** to save the settings.

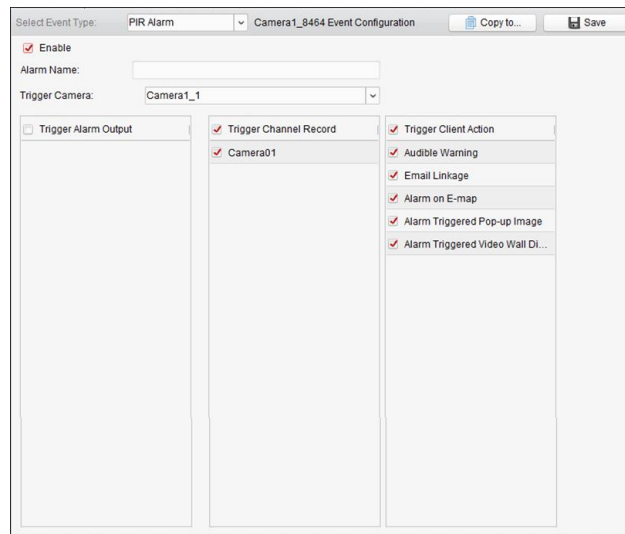


Table 6. 3 Linkage Actions for PIR Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image with alarm information pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.4 Configuring Video Loss Alarm

Purpose:

When the client software cannot receive video signal from the front-end devices, the video loss alarm will be triggered. The linkage actions, including alarm output and client action can be set.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Video Loss** as the event type.
3. Check the checkbox **Enable** to enable the function of video loss alarm.
4. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when video loss alarm occurs.
To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
6. Check the checkboxes to activate the linkage actions. For details, see *Table 6.4 Linkage Actions for Video Loss Alarm*.
7. Optionally, click **Copy to...** to copy the event parameters to other cameras.
8. Click **Save** to save the new settings.

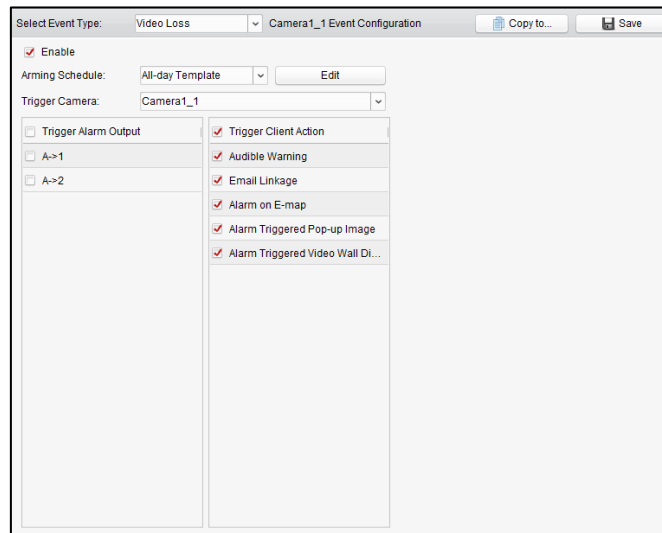


Table 6. 4 Linkage Actions for Video Loss Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.

Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.5 Configuring Audio Exception Alarm

Purpose:

The abnormal sounds, such as the silence detection, environment noise detection, and current noise detection, can be detected.

Enabling the **Audio Input Detection** can detect the exceptions of audio input condition.

Enabling the **Sudden Increase of Sound Intensity** can detect the sudden increase of the sound intensity, and it consists of the following two settings.

- Sensitivity: Range [1 to 100], the smaller the value the more severe the change should be to trigger the detection.
- Sound Intensity Threshold: Range [1 to 100], it can filter the sound in the environment, the louder the environment sound, the higher the value should be. You can adjust it according to the real environment.

Enabling the **Sudden Decrease of Sound Intensity** can detect the sudden decrease of the sound intensity, by which you can find the abnormal silent. E.g.: The electric generator makes loud noise when it's working, while it should be paid attention if the loud noise drops suddenly.

You can set the sensitivity level [0 to 100] according to the actual environment.

Note: The Audio Exception function requires the support of connected device.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Audio Exception Detection** as the event type.
3. Check the related checkbox to enable the related function of audio detection alarm.
4. Set the sensitivity and sound intensity threshold.
5. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
6. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when audio exception alarm occurs.
To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 6.5 Linkage Actions for Audio Detection Alarm*.
8. Optionally, click **Copy to...** to copy the event parameters to other cameras.
9. Click **Save** to save the new settings.

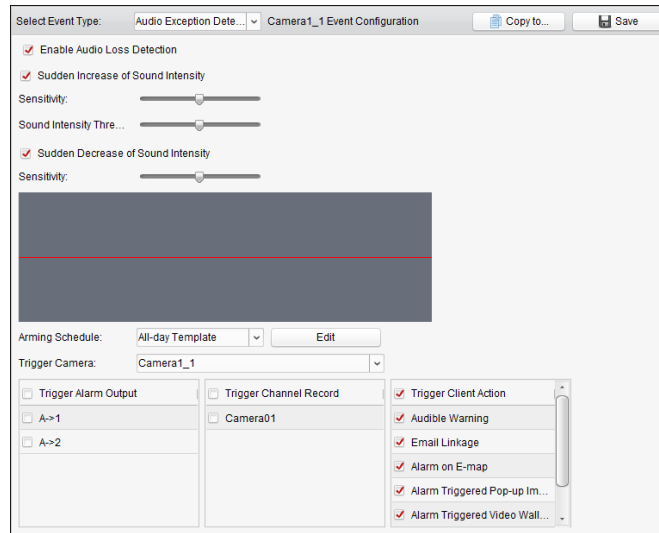


Table 6. 5 Linkage Actions for Audio Detection Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.6 Configuring Defocus Detection Alarm

Purpose:

The image blur caused by defocus of the lens can be detected and a series of alarm action can be triggered.

Note: The Defocus Detection function requires the support of connected device.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Defocus Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of defocus detection alarm.
4. You can set the sensitivity level [0 to 100] according to the actual environment.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when defocus alarm occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

6. Check the checkboxes to activate the linkage actions. For details, see *Table 6.6 Linkage Actions for Defocus Detection Alarm*.
7. Optionally, click **Copy to...** to copy the event parameters to other cameras.
8. Click **Save** to save the new settings.

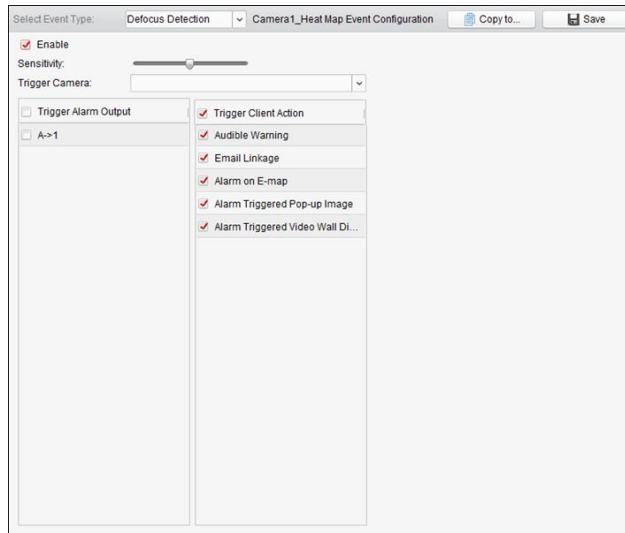


Table 6. 6 Linkage Actions for Defocus Detection Alarm

Linkage Actions	Descriptions
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.7 Configuring Face Detection Alarm

Purpose:

The camera will detect human faces within the monitoring area automatically if the function is enabled. A series of alarm action will be triggered if the alarm is triggered.

Note: The Face Detection function requires the support of connected device.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Face Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of face detection alarm.

4. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when face detection alarm occurs.
To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
6. Set the sensitivity for face detection.
7. Check the checkbox **Enable Dynamic Analysis for Face Detection** if you want the detected face get marked with rectangle in the live view.
8. Check the checkboxes to activate the linkage actions. For details, see *Table 6.7 Linkage Actions for Face Detection Alarm*.
9. Optionally, click **Copy to...** to copy the event parameters to other cameras.
10. Click **Save** to save the new settings.

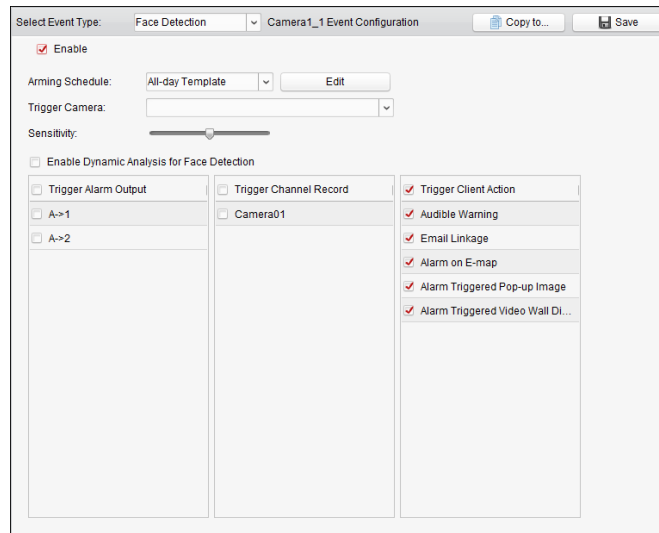


Table 6.7 Linkage Actions for Face Detection Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.8 Configuring Line Crossing Detection Alarm

Purpose:

This function can be used for detecting people, vehicles and objects crossing a pre-defined virtual line. The crossing direction can be set as bidirectional, from left to right or from right to left. And a series of linkage method will be triggered if any object is detected.

Note: This line crossing detection function requires the support of connected device.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Line Crossing Detection** as the event type.
3. Check the checkbox **Enable** to enable the function.

Note: For the specific speed dome, you can click **Lock** to prevent the speed dome from moving automatically during the configuration.
4. Select the arming schedule template from the drop-down list.




If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when line crossing detection alarm occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
6. Configure the arming region.

Virtual Line ID: Click the drop-down list to choose an ID for the virtual line.

Note: For some specific speed dome, you can click **PTZ** to move the speed dome to the desired scene which corresponds to a virtual line ID. In this way, you can configure the different line crossing detection alarms for multiple views.

Virtual Line Direction: You can select the directions as A<->B, A ->B, and B->A.

 - **A<->B:** When an object going across the line with both directions can be detected and alarms are triggered.
 - **A->B:** Only the object crossing the virtual line from the A side to the B side can be detected.
 - **B->A:** Only the object crossing the virtual line from the B side to the A side can be detected.
7. Set the sensitivity [1 to 100].
8. Click  and draw a virtual line on the preview window. Optionally, you can click  and drag the virtual line to adjust its position, click  to delete the selected line.

Note: Select another virtual line ID and draw another one. Up to 4 lines can be drawn.
9. Check the checkboxes to activate the linkage actions. For details, see *Table 6.8 Linkage Actions for Line Crossing Detection Alarm*.
10. Optionally, click **Copy to...** to copy the event parameters to other cameras.
11. Click **Save** to save the settings.

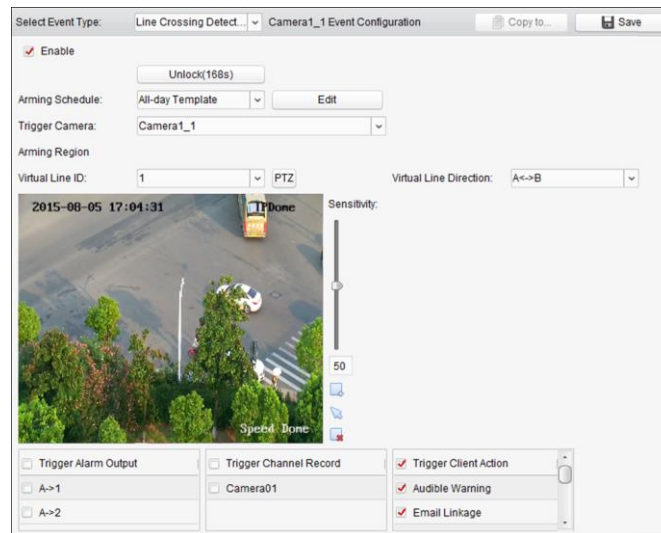


Table 6. 8 Linkage Actions for Line Crossing Detection Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.9 Configuring Intrusion Detection Alarm

Purpose:

You can set a detection area in the surveillance scene for Intrusion and once the area is been entered longer than the set time duration, a set of alarm action is triggered.

Note: The Intrusion Detection function requires the support of connected device.




Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Intrusion Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of intrusion detection alarm.

Note: For the specific speed dome, you can click **Lock** to prevent the speed dome from moving automatically during the configuration.

4. Select the arming schedule template from the drop-down list.

If you need to edit or customize the template, see *Configuring Arming Schedule Template*.

5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when intrusion detection alarm occurs.
To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
6. Configure the arming region.
 - **Region ID:** Click the drop-down list to choose a region ID for the arming region.
Note: For some specific speed dome, you can click **PTZ** to move the speed dome to the desired scene which corresponds to a region ID. In this way, you can configure the different Intrusion detection alarms for multiple views.
 - **Trigger Time Threshold:** Range [0 to 10s], the threshold for the time of the object loitering in the region. If you set the value as 0, alarm is triggered immediately after the object entering the region.
 - **Sensitivity:** Range [1 to 100]. The value of the sensitivity defines the size of the object which can trigger the alarm, when the sensitivity is high, a very small object can trigger the alarm.
7. Click  and draw a quadrangle on the preview window. Optionally, you can click  and drag the quadrangle to adjust its position, or click  to delete the selected region.
Notes:
 - When you draw the quadrangle, click on the preview window to set the vertex to set the quadrangle.
 - Select another region ID and draw another one. Up to 4 quadrangles can be drawn.
8. Check the checkboxes to activate the linkage actions. For details, see *Table 6.9 Linkage Actions for Intrusion Alarm*.
9. Optionally, click **Copy to...** to copy the event parameters to other cameras.
10. Click **Save** to save the new settings.

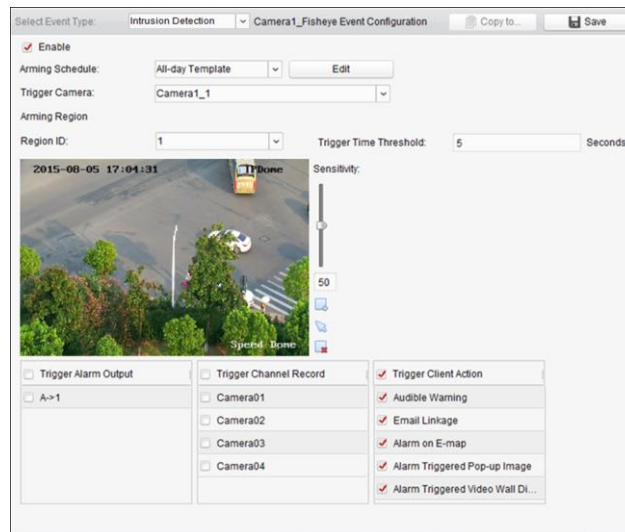


Table 6.9 Linkage Actions for Intrusion Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can

	select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.10 Configuring Scene Change Alarm

Purpose:

Scene change detection is used to detect the change of surveillance environment affected by the external factors; such as the intentional rotation of the camera.

Note: The Scene Detection function requires the support of connected device.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Scene Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of audio detection alarm.
Sensitivity: Range [1 to 100]. The higher the sensitivity, the easier the change of scene can trigger the alarm.
4. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when scene change alarm occurs.
To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.
6. Check the checkboxes to activate the linkage actions. For details, see *Table 6.10 Linkage Actions for Scene Change Alarm*.
7. Optionally, click **Copy to...** to copy the event parameters to other cameras.
8. Click **Save** to save the new settings.

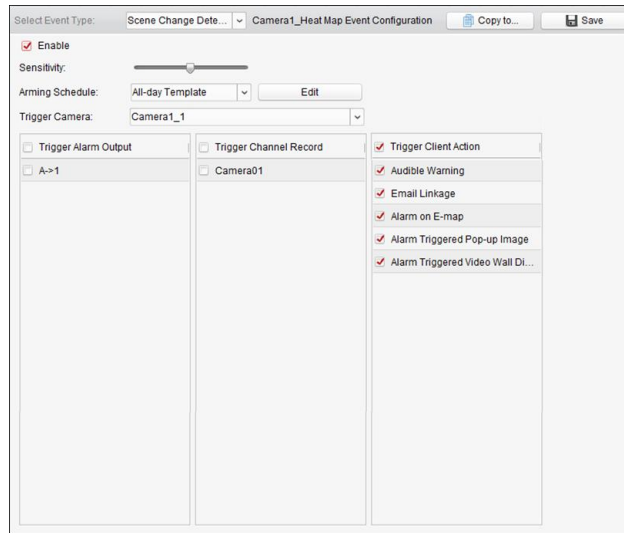


Table 6. 10 Linkage Actions for Scene Change Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.11 Configuring VCA Detection Alarm

Purpose:

When the VCA alarm of the connected device occurs, a series of linkage actions can be triggered.

Note: The VCA Detection function requires the support of connected device.

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **VCA Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of VCA Detection alarm.
4. Select the arming schedule template from the drop-down list.
If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when VCA detection alarm occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

6. Check the checkboxes to activate the linkage actions. For details, see *Table 6.11 Linkage Actions for VCA Detection Alarm*.
7. Optionally, click **Copy to...** to copy the event parameters to other cameras.
8. Click **Save** to save the new settings.

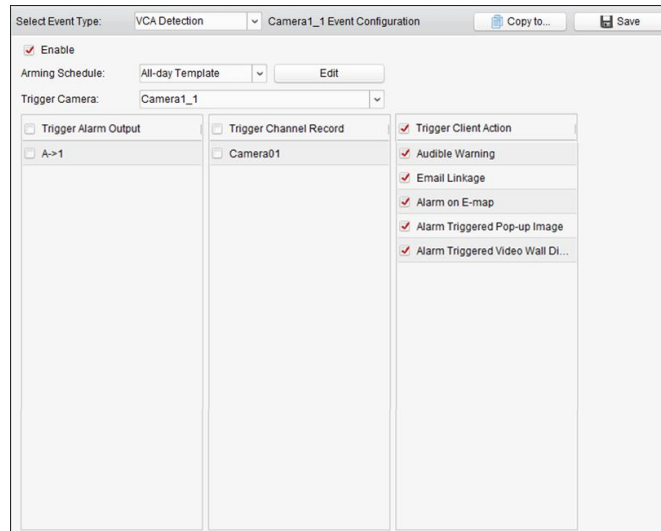


Table 6. 11 Linkage Actions for VCA Detection Alarm

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

6.12 Configuring Alarm Input Linkage

Purpose:

When a device's alarm input port receives a signal from an external alarm device, such as smoke detector, doorbell, etc., the alarm input linkage actions are triggered for notification.

Before you start:

Add the alarm inputs to the client, click **Import** on the Group Management interface, click the **Alarm**

Input tab and import alarm inputs into groups for management.

Steps:

1. Open the Event Management page and click the **Alarm Input** tab.
2. Select the alarm input channel to be configured.
3. Check the checkbox **Enable**.
4. Input a descriptive name of the alarm.
5. Set the alarm status according to the alarm input device.
6. Select the arming schedule template from the drop-down list.

If you need to edit or customize the template, see *Configuring Arming Schedule Template*.

7. Select the triggered camera. The image or video from the triggered camera will pop up or be displayed on the Video Wall when alarm input occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

8. Check the checkboxes to activate the linkage actions. For details, see *Table 6.12 Linkage Actions for Alarm Input*.
9. Optionally, click **Copy to...** to copy the event parameters to other alarm inputs.
10. Click **Save** to save the settings.

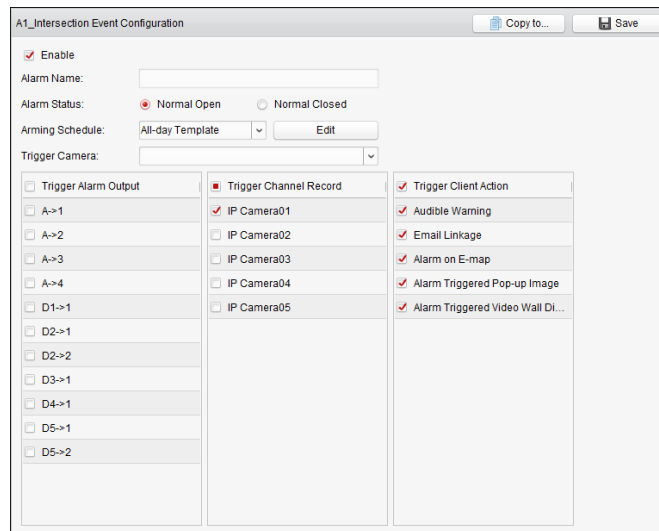


Table 6. 12 Linkage Actions for Alarm Input

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image with alarm information pops up when alarm is triggered.

Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.
---	--

6.13 Configuring Device Exception Linkage

Steps:

1. Open the Event Management page and click the **Exception** tab.
2. Select the device to be configured.
3. Select the device exception type, including HDD full, HDD exception, illegal login, device offline, etc.
4. Check the checkbox **Enable**.
5. Check the checkboxes to activate the linkage actions. For details, see *Table 6.13 Linkage Actions for Device Exception*.
6. Optionally, click **Copy to...** to copy the event parameters to other devices.
7. Click **Save** to save the settings.

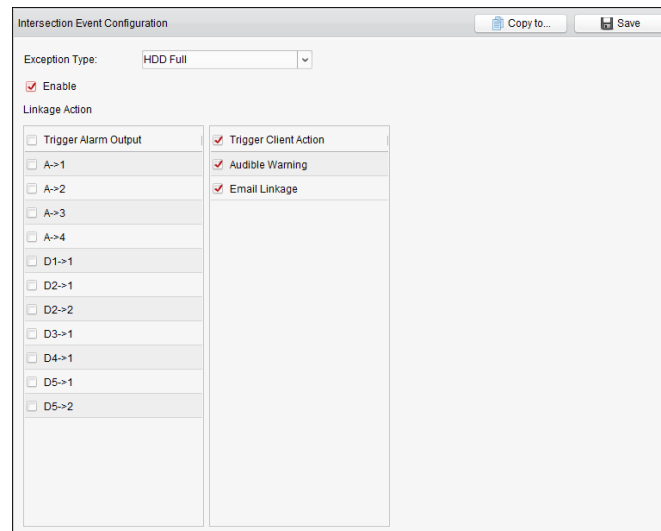

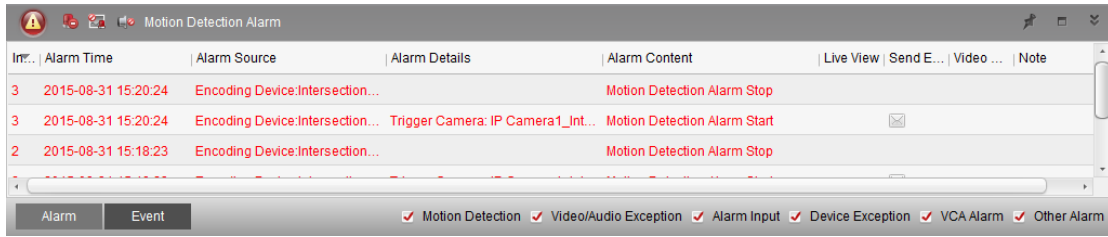



Table 6. 13 Linkage Actions for Device Exception

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled. Note: Alarm Output is not available for Device Offline exception.
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.

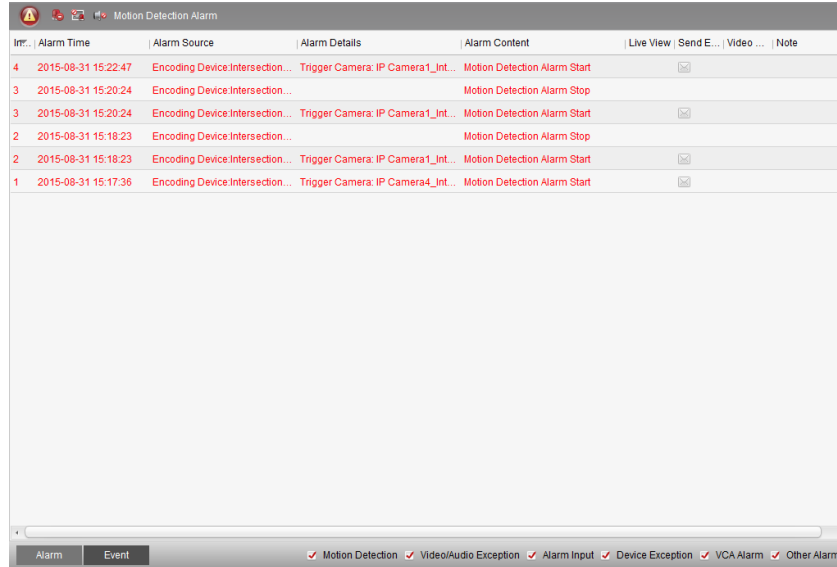
6.14 Viewing Alarm and Event Information

The information of recent alarms and events can be displayed. Click the icon  in Alarms and Events Toolbar to show the Alarms and Events panel.

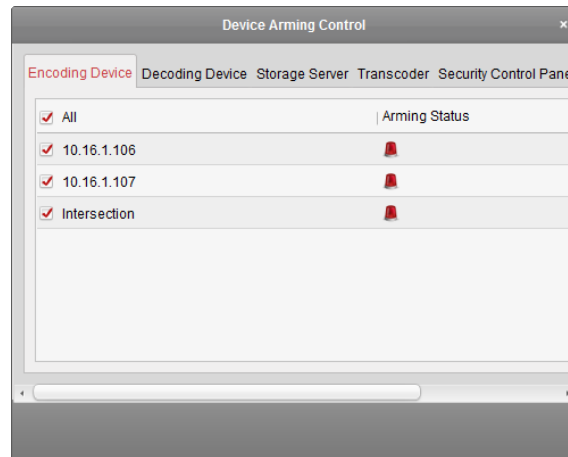


You can click  to display the Alarm Event interface.





Or click  icon on the control panel to enter the Alarm Event interface.



Note: Before you can receive the alarm information from the device, you need to click **Tool->Device Arming Control** and arm the device by checking the corresponding checkbox.



On the Alarms and Events panel, the following toolbar buttons are available:

-  **Clear Info** Clear the information of alarms and events displayed on the list.
-  **Enable/Disable Alarm Triggered Pop-up Image** Click to enable/disable image pop-up when alarms occur.
-  **Enable/Disable Audio** Click to enable/disable the audio warning for the alarm.
-  **Auto Hide/Lock** Click to hide automatically/lock the Alarms and Events panel.

**Maximize**

Maximize the Alarms and Events panel in a new tab page.

**Show/Hide**

Click to show/hide the Alarms and Events panel.



6.14.1 Viewing Alarms Information

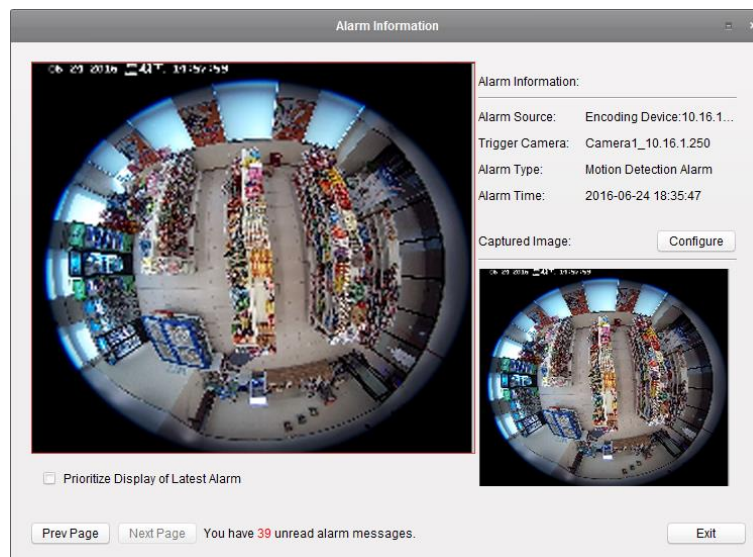
Different alarm types can be displayed on the panel: Motion Detection, Video/Audio Exception, Alarm Input, Device Exception, VCA Alarm and Other Alarm. You can check the checkbox to enable the displaying of that type alarm.

Before you start:

To display the alarms, the event parameters need to be configured.



Steps:

1. Click the **Alarm** tab.
2. Check the checkboxes of different alarm types.
3. When an alarm occurs, the icon  twinkles to call attention. The alarm information, including the time, source, details and content will be displayed.
4. Click  to get a live view of the alarm triggered camera.



You can view the live video of the triggered camera. You can click **Prev Page** or **Next Page** button to view the next alarm information.

Notes:

- The **Picture Storage** should be checked for storing the alarm pictures of the camera on the storage server. You can click **Configure** to set the parameters. For details, please refer to *Chapter 5.1.2 Storing on Storage Device*.
 - The **Prioritize Display of Latest Alarm** is unchecked by default. You can check this checkbox to switch to view the latest triggered alarm. The alarm window is in 4-window division. The latest alarm will replace the earliest alarm window of the displayed four windows.
5. Click  to send an email notification of the alarm to one or more receivers if the email settings are properly configured (*Section 17.2.6 Email Settings*).
 6. Click  to display the video of alarm triggered camera on the Video Wall. You can enter the

Video Wall interface to check the alarm triggered video playing on the screen which set as the alarm window. The physical video wall also displays the video.

Note: You should add decoding device and configure the video wall. For details, please refer to *Chapter 12 Decoding and Displaying Video on Video Wall*.

Click under the **Note** column to input the description for the alarm.


- To clear the alarm information, click the icon , or right-click on an alarm log and then click **Clear**.

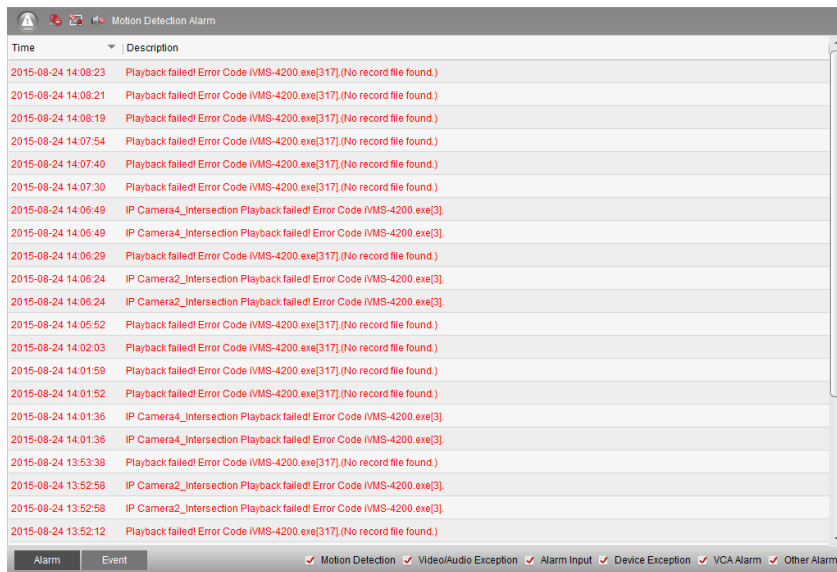
6.14.2 Viewing Events Information

Purpose:

The abnormal events of the client software, such as the live view failure, device disconnection, can also be displayed.

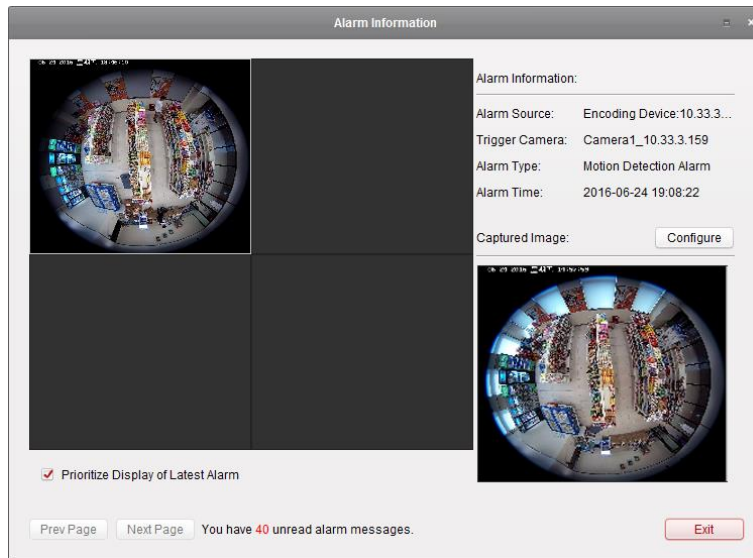
Steps:

- Click the **Event** tab.
The event information, including the time and detailed description will be displayed.
- To clear the event information, click the icon , or right-click on the event log and then click **Clear**.



6.14.3 Viewing Pop-up Alarm Information

After enabling the event linkage of **Alarm Triggered Pop-up Image**, and enabling the **Enable Alarm Triggered Pop-up Image** function on the client, the alarm image will pop up when the corresponding event/alarm is triggered.



You can view the live video of the triggered camera. In the right panel, the alarm picture displays. You can click **Prev Page** or **Next Page** button to view the next alarm information.


Notes:

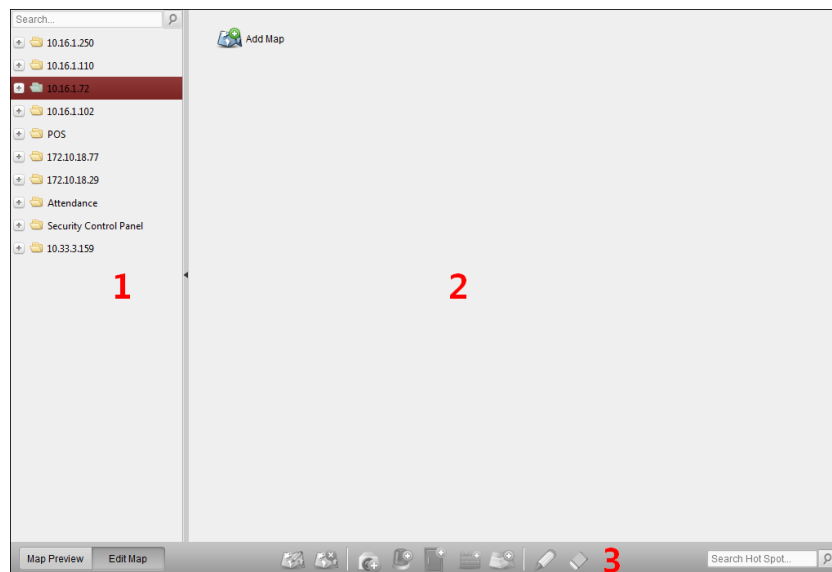
- The **Picture Storage** should be checked for storing the alarm pictures of the camera on the storage server. You can click **Configure** to set the parameters. For details, please refer to *Chapter 5.1.2 Storing on Storage Device*.
- The **Prioritize Display of Latest Alarm** is checked by default and the alarm window is in 4-window division. The latest alarm will replace the earliest alarm window of the displayed four windows. You can uncheck this checkbox to switch to view the current triggered alarm. You can click **Prev Page** or **Next Page** button to view the next alarm information.

Chapter 7 E-map Management

Purpose:

The E-map function gives a visual overview of the locations and distributions of the installed cameras, alarm input devices, zones, and access control points. 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. You can also control the access control points on the E-map such as opening and closing door.

Click the  icon on the control panel,
or click **View->E-map** to open the E-map page.



E-map Page



- 1 Group List
- 2 Map Display Area
- 3 E-map Toolbar

7.1 Adding an E-map

Purpose:

An E-map needs to be added as the parent map for the hot spots and hot regions.

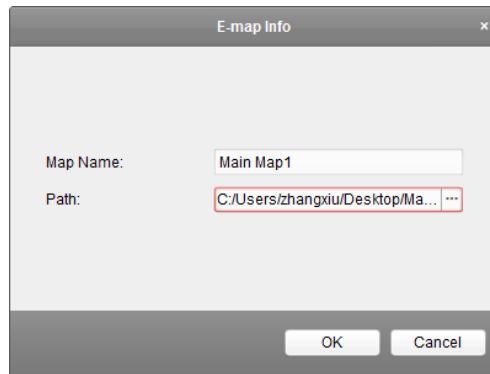
Steps:

1. Open the E-map page.
2. Select a group for which you want to add a map.
3. Click the icon  in the Map Display Area to open the map adding dialog box.
4. Input a descriptive name of the added map as desired.
5. Click the icon  and select a map file from the local path.
6. Click **OK** to save the settings.

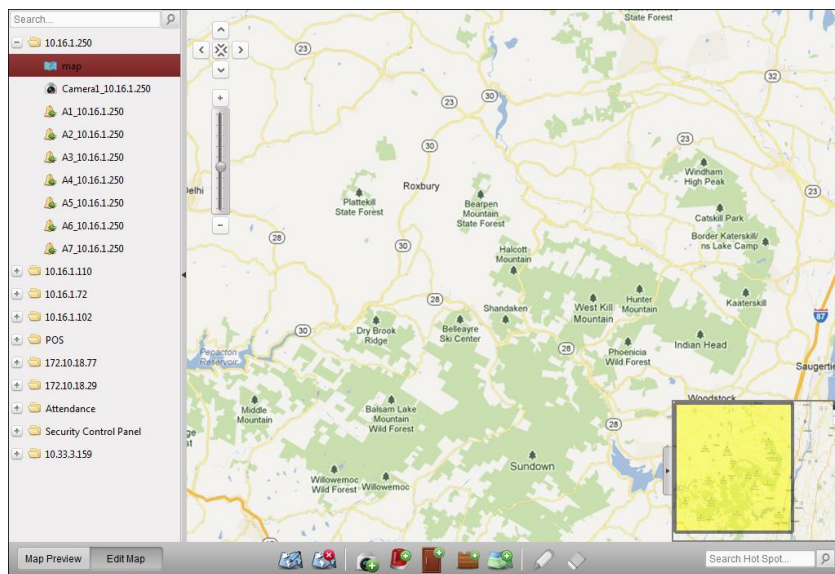
Notes:

- The picture format of the map can only be *.png, *.jpg or *.bmp.

- Only one map can be added to a group.



The map added is displayed in the Map Display Area. Use the mouse wheel or click or , to zoom in or zoom out on the map. You can click-and-drag the yellow window in the lower-right corner or use the direction buttons and zoom bar to adjust the map area for view.



Click the button **Edit Map** or **Map Preview** in the E-map toolbar to enter the map editing mode or map preview mode.

E-map Toolbar in Map Editing Mode:








E-map Toolbar in Map Preview Mode:



On the E-map page, the following toolbar buttons are available:

- | | | |
|--|---------------------------------|---|
| | Modify Map | Modify the map information, including the map name and file path. |
| | Delete Map | Delete the current map. |
| | Add Camera | Add a camera as the hot spot on the map. |
| | Add Alarm Input | Add an alarm input sensor as the hot spot on the map. |
| | Add Access Control Point | Add an access control point as the hot spot on the map. |
| | Add Zone | Add a zone as the hot spot on the map. |

	Add Hot Region	Add a map as the hot region on the current map.
	Modify	Modify the information of the selected hot spot or hot region.
	Delete	Delete the selected hot spot or hot region.
	Clear Alarm Info	Clear the alarm information displayed on the map.
	Back to Parent Map	Go back to the parent map.

7.2 The Hot Spot Function

Purpose:

The cameras and alarm inputs can be added on the map and are called the hot spots. The hot spots show the locations of the cameras and alarm inputs, and you can also get the live view and alarm information of the surveillance scenarios through the hot spots.




Notes:

- For managing and previewing the access control point hot spot, please refer to *Chapter 15.5 Displaying Access Control Point on E-map*.
- For managing and previewing the zone hot spot, please refer to *Chapter 13.4 Displaying Zone on E-map*.

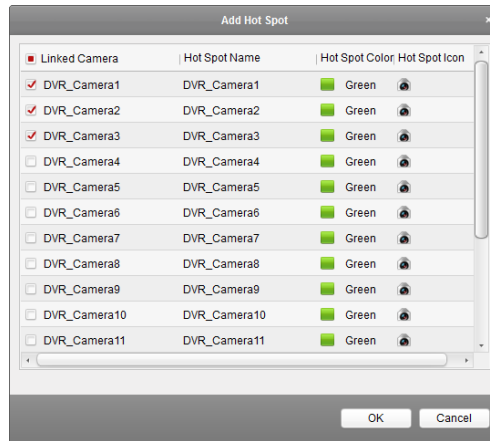
7.2.1 Adding Hot Spots

Adding Cameras as Hot Spots

Steps:

1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Click the icon  in the toolbar to open the Add Hot Spot dialog box.
3. Check the checkboxes to select the cameras to be added.
4. Optionally, you can edit hot spot name, select the name color and select the hot spot icon by double-clicking the corresponding field.
5. Click **OK** to save the settings. The camera icons are added on the map as hot spots and the icons of added cameras changes from  to  in the group list. You can click-and-drag the camera icons to move the hot spots to the desired locations.

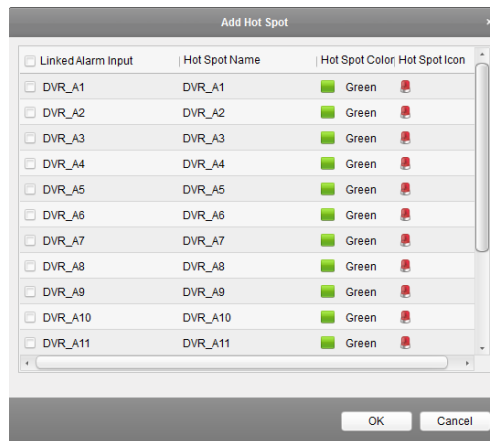
You can also click-and-drag the camera icons from the group list to the map directly to add the hot spots.



Adding Alarm Inputs as Hot Spots

Steps:

1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Click the icon in the toolbar to open the Add Hot Spot dialog box.
3. Check the checkboxes to select the alarm inputs to be added.
4. Optionally, you can edit hot spot name, select the name color and select the hot spot icon by double-clicking the corresponding field.
5. Click **OK** to save the settings. The alarm input icons are added on the map as hot spots and the icons of added alarm inputs changes from to in the group list. You can click-and-drag the alarm input icons to move the hot spots to the desired locations. You can also click-and-drag the alarm input icons from the alarm input list to the map directly to add the hot spot.





7.2.2 Modifying Hot Spots

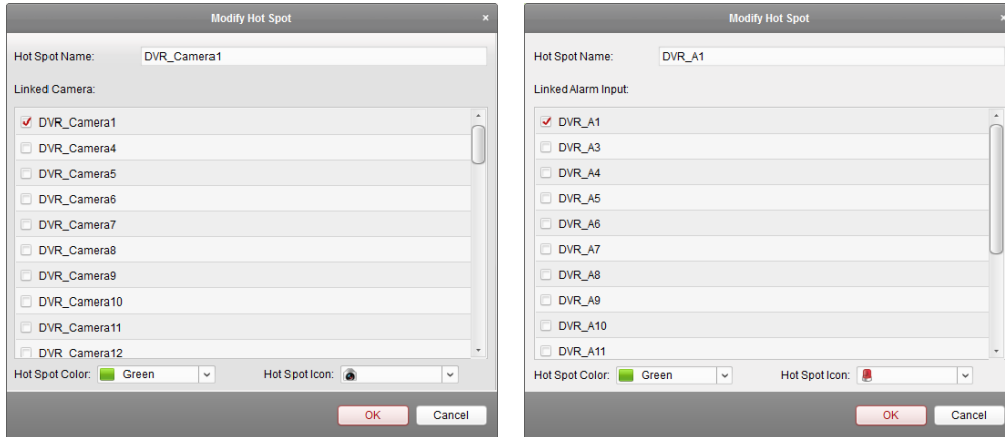
Purpose:

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

Steps:


1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Select the hot spot icon on the map and then click  in the toolbar, right-click the hot spot icon and select **Modify**, or double-click the hot spot icon on the map to open the Modify Hot Spot dialog box.
3. You can edit the hot spot name in the text field and select the color, the icon and the linked camera or alarm input.
4. Click **OK** to save the new settings.

To delete the hot spot, select the hot spot icon and click  in the toolbar, or right-click the hot spot icon and select **Delete**.

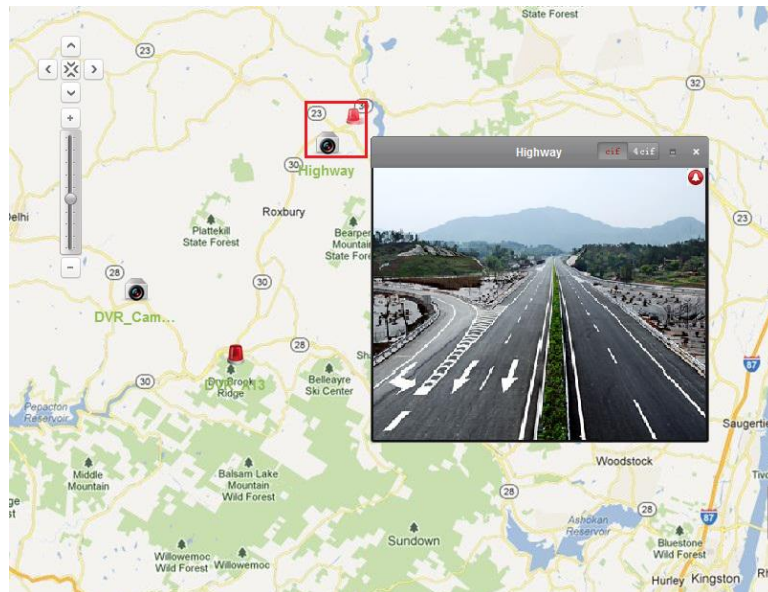


7.2.3 Previewing Hot Spots

Steps:

1. Click the **Map Preview** button in the E-map toolbar to enter the map preview mode.
2. Double-click the camera hot spots or right-click it and select **Live View**, and you can get the live view of the cameras.
3. If there is any alarm triggered, an icon  will appear and twinkle near the hot spot. Click the alarm icon, and then you can check the alarm information, including alarm type and triggering time.

Note: To display the alarm information on the map, the Alarm on E-map functionality needs to be set as the alarm linkage action. For details, refer to *Chapter 6 Event Management*.



7.3 The Hot Region Function

Purpose:

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.


Note: A map can only be added as the hot region for one time.

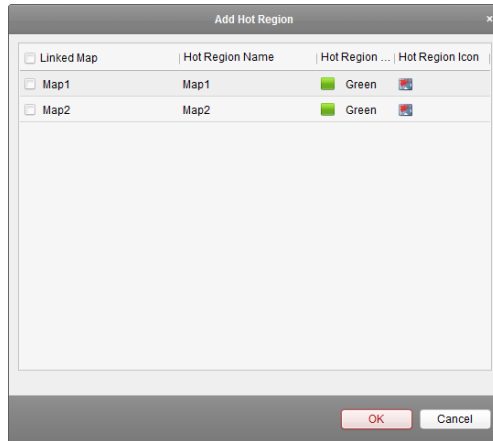
7.3.1 Adding Hot Regions

Before you start:

Add a map to another group.

Steps:

1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Select an added map as the parent map.
3. Click the icon  in the toolbar to open the Add Hot Region dialog box.
4. Check the checkbox to select the child map to be linked.
5. Optionally, you can edit the hot region name, and select the hot region color and icon by double-clicking the corresponding field.
6. Click **OK** to save the settings. The child map icons are added on the parent map as the hot regions. You can click-and-drag the child map icons to move the hot regions to desired locations.





7.3.2 Modifying Hot Regions

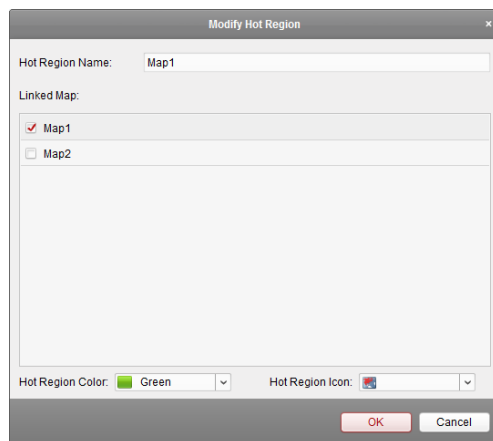
Purpose:

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

Steps:



1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Select the hot region icon on the parent map and then click  in the toolbar, right-click the hot spot icon and select **Modify**, or double-click the hot region icon to open the Modify Hot Region dialog box.
3. You can edit the hot region name in the text field and select the color, the icon and the linked child map.
4. Click **OK** to save the new settings.

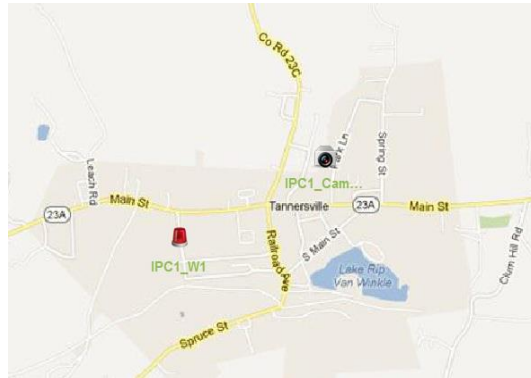
To delete the hot region, select the hot region icon and click  in the toolbar, or right-click the hot spot icon and select **Delete**.



7.3.3 Previewing Hot Regions

Steps:

1. Click the **Map Preview** button in the E-map toolbar to enter the map preview mode.
2. Click the hot region icon to go to the linked child map.
3. The hot spots can also be added on the hot regions.
4. You can click the icon  in the toolbar to go back to the parent map.
You can also click the icon  in the toolbar to clear the alarm information.



Chapter 8 Cloud P2P

Purpose:

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

8.1 Registering a Cloud P2P Account


Purpose:

If you do not have a Cloud P2P account, you can register one.

Steps:

1. Open the Device Management page and click the **Server** tab.
2. Click **Add New Device Type**, select **Cloud P2P Device** and click **OK**.
3. Click **Cloud P2P Device** on the list and then click **Register**.

The screenshot shows two windows. On the left is the 'Device for Management (0)' window with a 'Hik Cloud P2P Account: Not Logged in' status and 'Login' and 'Register' buttons. On the right is the 'Register Cloud P2P Account' dialog box with the following fields and buttons:

- Cloud P2P Account:
- Password:
- Confirm Password:
- Email:
- Verification Code: 
-
- Email Verification Code:
-

4. Enter the required information to register an account.

Cloud P2P Account: Edit a user name for your account as desired.

Password and **Confirm:** Enter the password for your account and confirm it.

Email: Enter your email account to register the account.

Verification Code: Enter the verification code shown in the picture. If it is not clear, you can click **Refresh** to get a new one.

Email Verification Code: Click **Get Verification Code** and enter the verification code received by your email.



- ◆ *For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product.*
- ◆ *Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.*

5. Click **Register** to get a Cloud P2P account.

8.2 Logging into Cloud P2P Account

Steps:

1. Click **Login** and enter the Cloud P2P account and password.
2. Click **Login** to log into your account.

Notes:

- The software will login the Cloud P2P account automatically next time.
- If you forget your password, click **Forgot Password** to verify your account and reset your password.

Cloud P2P Account: Edit user name of your account.

Security Code: Enter the security code shown in the picture. If it is not clear, you can click **Refresh** to get a new one.

Email Verification Code: Click **Get Verification Code** and enter the verification code received by your email.

Password and Confirm: Click **Next** and enter a new password for your account and confirm it.



- ◆ *For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product.*
- ◆ *Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.*

3. After login, you can click **Login** to switch to another account or click **Logout** to log out of your Cloud P2P account.

8.3 Device Management

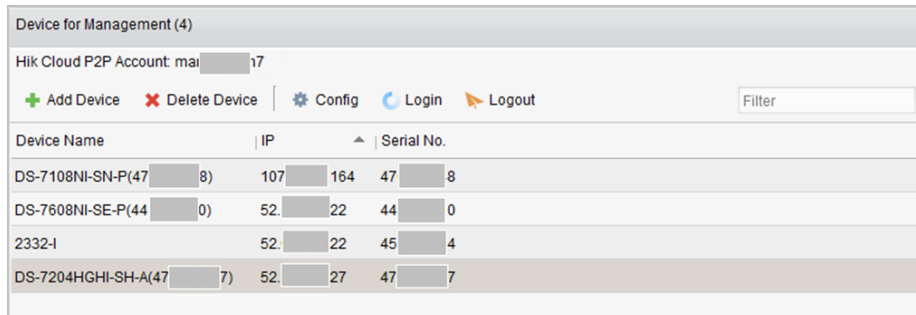
Steps:

1. Click **Add Device** and input the serial No. and verification code of the device.

Notes:

- Only the device that supports the Cloud P2P service can be added.
- The serial No. and the verification code is marked on the label of you device.

- The device can only be added to one Cloud P2P account.
2. Click **OK** to add the device and the successfully added device will list on the device management interface.
Note: A group named as your account name is created by default, you can import the cameras of the added devices to the default group or other groups. For group management, please refer to *Chapter 3.2 Group Management*.
 3. For live view, please refer to *Chapter 4 Live View*; for playback, please refer to *Chapter 5.2 Remote Playback*; for e-map settings, please refer to *Chapter 7 E-map Management*.
 4. Click to select a device and click **Config** to pop up the remote configuration interface of the device. You can do some remote configurations for the device. For detailed settings about the remote configuration, please refer to the *User Manual* of the device.
Note: This function should be supported by the device.
 5. If you want delete the device, select the device(s) and click **Delete Device**. You can also enter the keyword of the device name in the **Filter** field to filter the required devices.



Device Name	IP	Serial No.
DS-7108NI-SN-P(478)	107.164.47.8	8
DS-7608NI-SE-P(440)	52.22.44.0	0
2332-I	52.22.45.4	4
DS-7204HGHI-SH-A(477)	52.27.47.7	7

Chapter 9 VCA Devices Management

Purpose:

The VCA (Video Content Analysis) devices can be added to the client for VCA configuration, including VCA resource allocation, rule settings, VQD (Video Quality Diagnostics), etc.

Allocating VCA Resource

Before you start: You should add the VCA device to the software. Please refer to *Chapter 3.1 Adding the Device* for adding the VCA device as Encoding Device.

Purpose: Before you can set the VCA configuration for the added device, you need to configure the VCA resource of the device which means to enable the VCA function of the corresponding cameras.

Option 1

Steps:

1. In the Device Management Configuration interface, select **Server** tab.
2. Click to select the VCA device and click **Remote Configuration** to activate the Remote Configuration window.
3. In the Remote Configuration window, click **VCA Config** to expand the VCA configuration list. In the camera dropdown list, select **VCA Resource Allocation** to allocate the VCA resource.
4. In the Resource Information area, you can view the VCA type and VCA resource usage of the device.

Example: In the figure shown below, the VCA type of the device is Heat Map and four cameras are available for configuring VCA settings. The camera1 has been enabled with VCA function.

Camera No.	Heat Map
Camera1 (Current Camera)	<input checked="" type="checkbox"/>
Camera2	<input type="checkbox"/>
Camera3	<input type="checkbox"/>
Camera4	<input type="checkbox"/>

5. In the VCA Resource Allocation panel, check checkbox to enable the VCA function of the camera.

6. Click **Save** to save the setting.

Configuring VCA Settings

After allocating the VCA resource, you can configure the VCA settings for the camera.

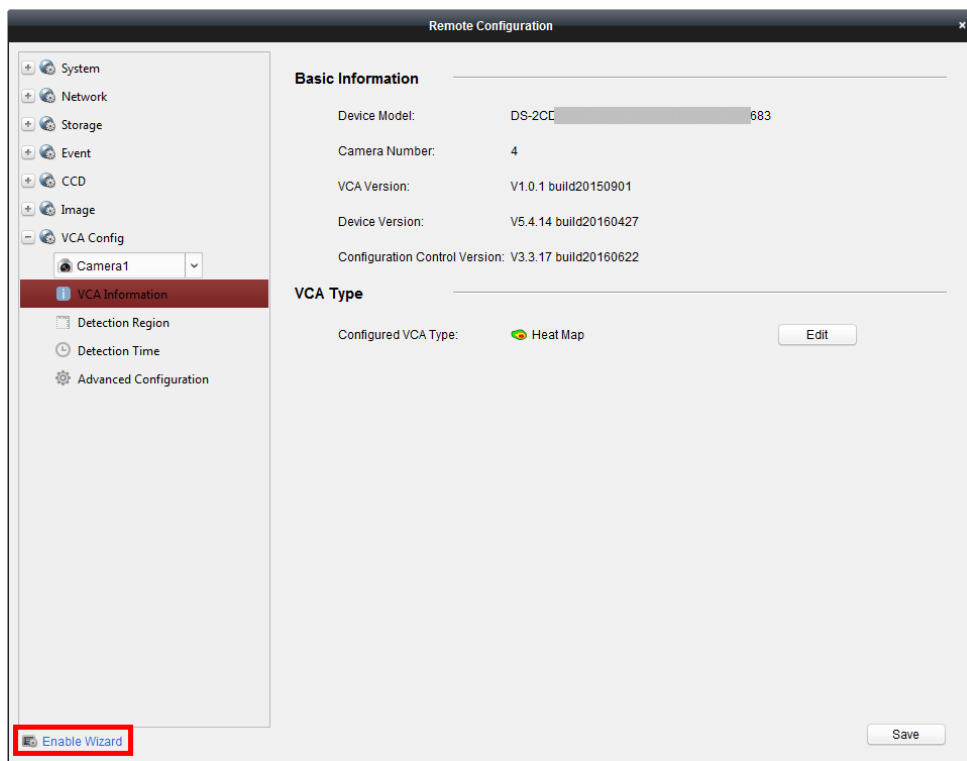
Steps:

1. In the Device Management Configuration interface, select **Server** tab.
2. Click to select the VCA device and click **Remote Configuration** to activate the Remote Configuration window.
3. In the Remote Configuration window, click **VCA Config** to expand the VCA configuration list.

Note: The VCA configuration list varies according to different VCA devices.

You can set the VCA configuration for the camera according to the provided instruction.

Click **Enable Wizard** and the wizard will guide you to set the quick VCA configuration for the camera.



Chapter 10 Transcoder Management


Purpose:

Transcoder is designed for real-time transcoding of different streams. With the use of transcoder, streams and control signals from different manufactures and different surveillance systems can be effectively integrated and standardized. Guarding Expert client software supports to add transcoder and configure the transcoding function for it.

10.1 Adding Encoding Device to the Transcoder

10.1.1 Adding the Transcoder to the Client Software

Steps:

1. Click the  icon on the control panel to enter the Device Management interface and click the **Server** tab.
2. Click **Add New Device Type** on the Organization list and select **Transcoder**.
3. Click **OK** to save the settings, and the added transcoder type is displayed on the Organization list.



4. Click **Transcoder** and click **Add Device** to add the transcoder to the management list of the software.

Select the adding mode by IP/Domain or by IP segment, and configure the corresponding settings for the device.

For the detailed configuration about the adding modes, please refer to the following sections:

- By specifying the device IP/Domain address, see *Section 3.1.3 Adding Devices Manually*.
- By specifying an IP segment, see *Section 3.1.4 Adding Devices by IP Segment*.

5. The successfully added transcoder can be viewed in the list:

Nickname	IP	Device Serial No.	Net Status
Transcoder	10.7.36.222	DS-6864T0020140108BCRR428258400WU	

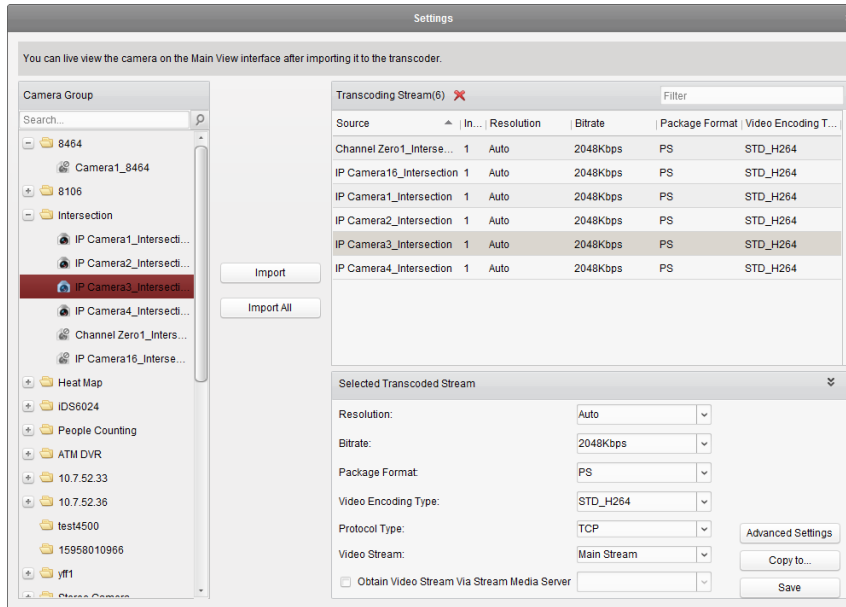
10.1.2 Importing the Encoding Channel to the Transcoder

Before you start:

The cameras of encoding devices should be organized into groups before being imported to the transcoder. For detailed configuration, please refer to *Chapter 3.2 Group Management*.

Steps:

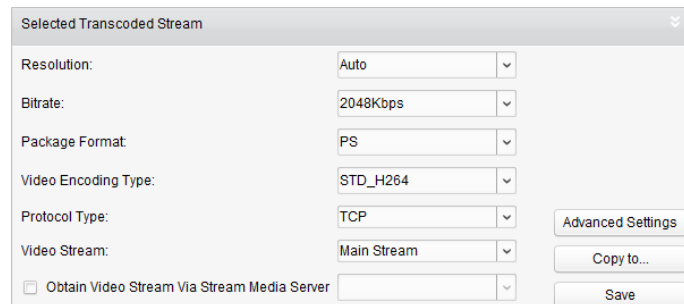
1. On the Device Management interface, select a transcoder from the device list and click **Settings** to enter the transcoder settings interface.
2. Select a group or a camera from the Group list and click the **Import** button to import the selected camera or the cameras of the group, or click **Import All** to import the cameras of all groups to the transcoder on the right.
3. Optionally, you can click to select the stream and click to remove it from the transcoding list.



10.2 Configuring the Transcoded Stream Parameters

Steps:

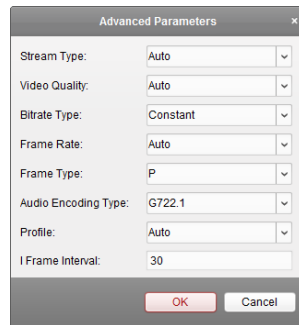
1. On the Transcoder Settings interface, select a stream from the list and you can configure its parameters in the Selected Transcoded Stream area.



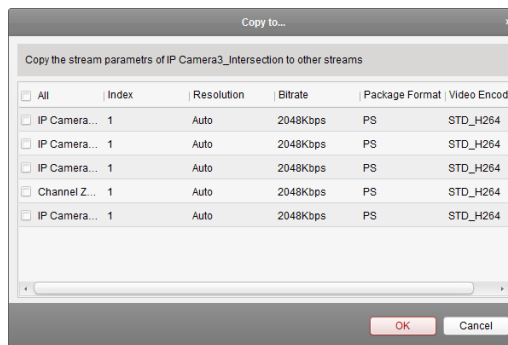
2. Configure the parameters of the transcoded stream as needed, including the resolution, bitrate, package format, video encoding type, protocol type and video stream from the drop-down list.
3. (Optional) Check the checkbox of **Obtain Video Stream Via Stream Media Server** if you want to use the stream media server to forward the video stream.

Note: You should add a stream media server to the client before you can select the stream media server.

4. Click **Advanced Settings** to enter the advanced settings of the selected transcoded stream.
 - (1) Edit the parameters of the transcoded stream on demands, including the stream type, video quality, bitrate type, frame rate, frame type, audio encoding type, profile and I frame interval. You can also remain the default parameters of the stream.



- (2) Click **OK** to save the settings.
5. (Optional) Click the **Copy to** on the Selected Transcoded Stream settings area to copy the settings of the current stream to other stream(s).



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

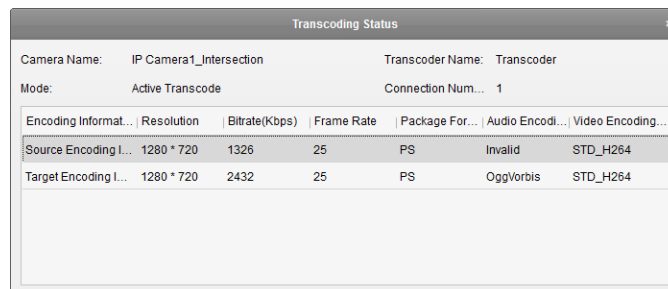
10.3 Operating the Transcoded Stream

Purpose:

After successfully transcoding, the live view of the camera uses transcoded stream.

Steps:

1. Enter the Main View interface and select a transcoded camera for live view. For detailed configuration, please refer to *Chapter 4 Live View*.
Note: If the camera is in live view before transcoding, please stop the live view first and then start the live view again to view the live video of the camera via transcoded stream.
2. During the live view, you can right-click on the camera node and select **Transcoding Status** to view the transcoding status.



3. For e-map settings, please refer to *Chapter 7 E-map Management*; for displaying on video wall, please refer to *Chapter 12 Decoding and Displaying Video on Video Wall*.

Note: Displaying the transcoded stream on video wall should be supported by the decoder.

Chapter 11 Forwarding Video Stream through Stream Media Server

Purpose:


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.

11.1 Adding the Stream Media Server

Before you start:

The stream media server application software needs to be installed and it is packed in the Guarding Expert software package. When installing the Guarding Expert, check the checkbox **Stream Media Server** to enable the installation of stream media server.

Steps:

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

Notes:

- 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. Open the Device Management page and click the **Server** tab.
 3. Click **Add New Device Type**, select **Stream Media Server** and click **OK**.
 4. Click **Stream Media Server** on the list and then click **Add Device**.

You can add the stream media server in the following two ways:

- **Adding Stream Media Server by IP Address**

Perform the following steps to add the stream media server:

- 1) Select **IP Address** as the adding mode.
- 2) Input the nickname and IP address of the stream media server. The default port value is 554.
- 3) Click **Add** to add the stream media server to the client software.



- **Adding Stream Media Server by IP Segment**

Perform the following steps to add the stream media server by IP segment:

- 1) Select **IP Segment** as the adding mode.
- 2) Input the start IP and end IP. The default port value is 554.
- 3) Click **Add** to add the stream media server to the client software. The stream media server of which the IP address is between the start IP and end IP will be added to the client.



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

11.2 Adding Cameras to Stream Media Server to Forward Video Stream

Purpose:

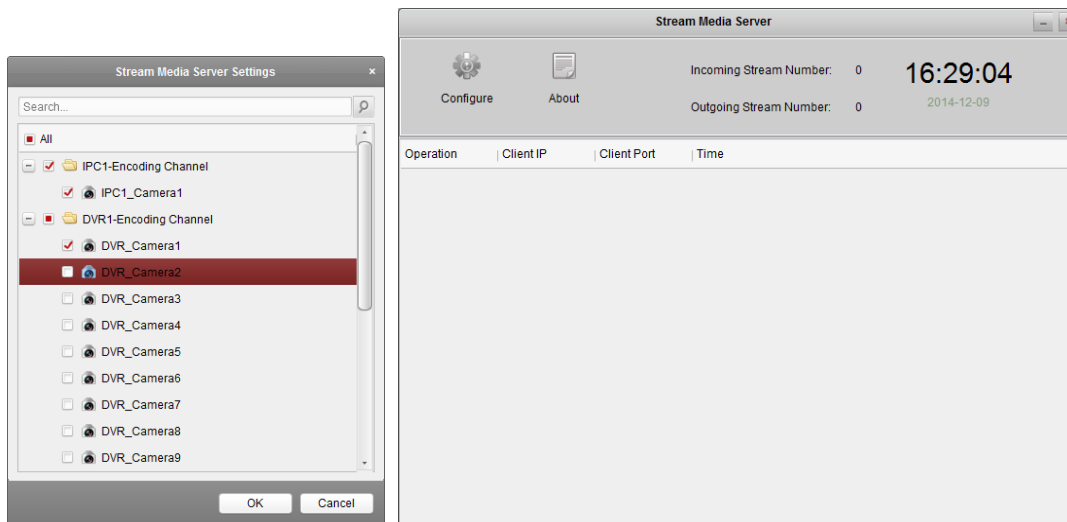
To get the video stream of a camera via stream media server, you need to connect the camera to the stream media server.

Steps:

1. Select the stream media server from the list.
2. Click **Configure** to enter the Stream Media Server Settings interface.
3. Select the cameras of which the video stream is to be forwarded via the stream media server.
4. Click **OK** to save the new settings.
5. Go the Main View page and start the live view of the cameras again. You can check the channel number of the video stream forwarded through or sent from the stream media server.

Notes:

- 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.



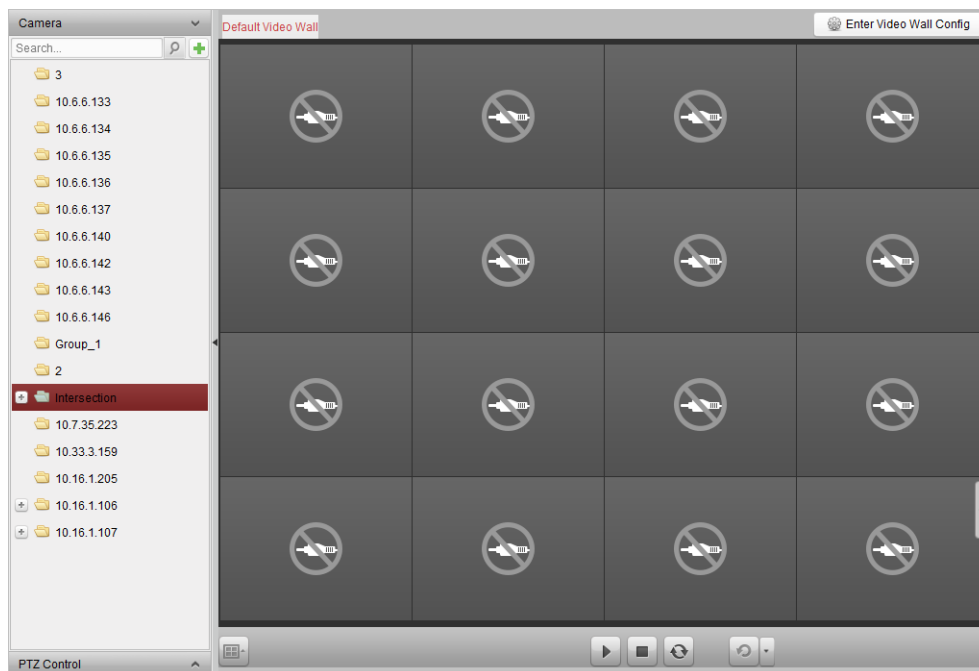
Chapter 12 Decoding and Displaying Video on Video Wall

Purpose:

The Video Wall module provides the video decoding functionality, and the decoded video can be displayed on the Video Wall for an attention-grabbing performance.



Click the icon on the control panel, or click **View->Video Wall** to open the Video Wall page.




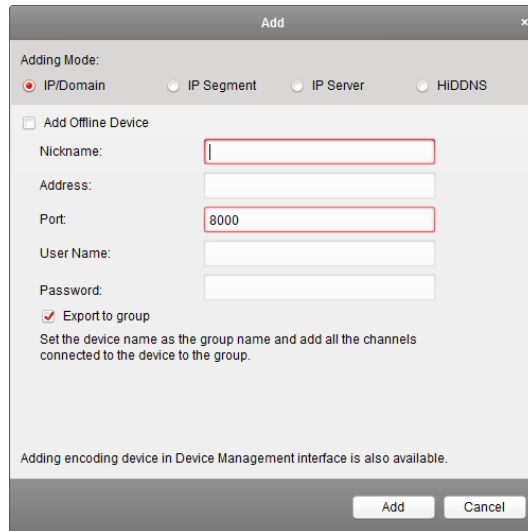
12.1 Adding the Encoding Device

Purpose:

You should add the encoding device for decoding and displaying on the video wall. If you do not add the encoding devices in the Device Management page, you can add them in Video Wall page.

Steps:

1. In the Camera area, click  to activate the adding device window.

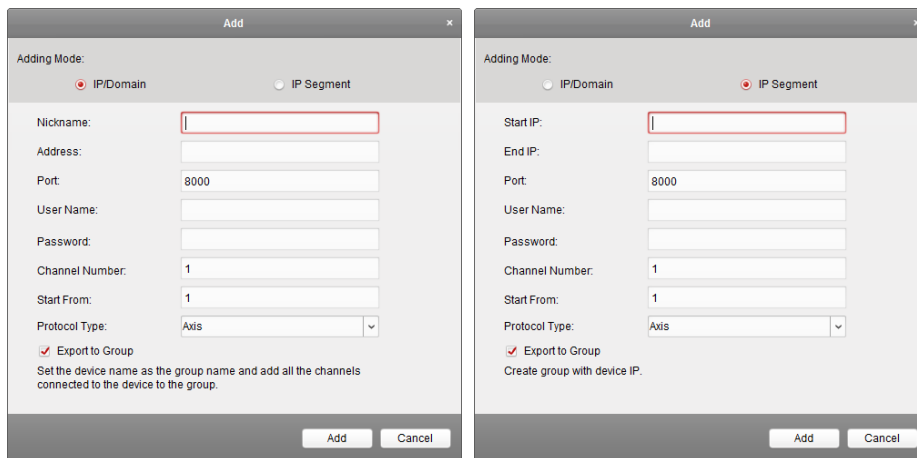


2. Select the adding mode and configure the corresponding settings for the device.
For the detailed configuration about the 4 adding modes, please refer to the following sections:
 - By specifying the device IP address, see *Section 3.1.3 Adding Devices Manually*.
 - By specifying an IP segment, see *Section 3.1.4 Adding Devices by IP Segment*.
 - By IP Server, see *Section 3.1.5 Adding Devices by IP Server*.
 - By HiDDNS, see *Section 3.1.6 Adding Devices by HiDDNS*.

(Optional) If you want to add the third-party encoding device, please perform the following steps:

1. Go to the Device Management page and click the **Server** tab.
2. Click **Add New Device Type**, select **Third-party Encoding Device** and click **OK**.
3. Select Third-party Encoding Device in the organization panel and click **Add Device** to activate the Add Device window.
 - For IP/Domain: Edit the nickname, IP address/domain name, port No., user name, password, channel number, start from and protocol for the device.
 - For IP Segment: Edit the start IP, end IP, port No., user name, password, channel number, start from and protocol for the device.

Note: If you edit 4 in **Start From** field, it means that the starting channel No. is 4.




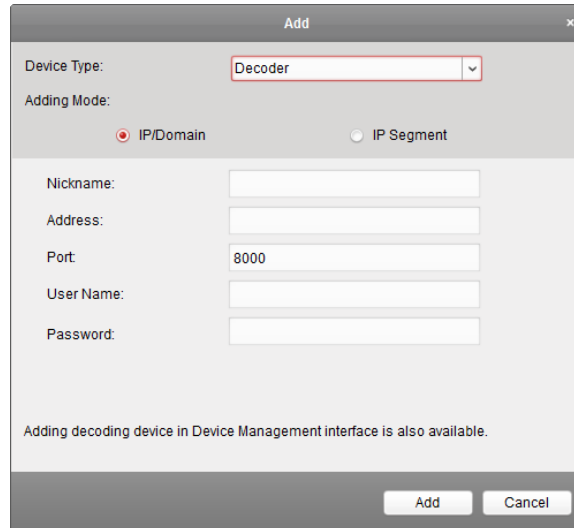
12.2 Adding the Decoding Device

Purpose:

To decode the video of the encoding device and display the decoded video on the Video Wall, the decoding device needs to be added to the client.

Steps:

1. Click **Enter Video Wall Config** to enter the decoding device and video wall configuration interface.
2. In the Decoding Output area, click  to activate the Quick Adding of Decoding Device window.



3. Set the device type as **Decoder** or **Cascading Server**.

Note: To add a cascading server here, please enter the Device Management page and click the **Server** tab. Click **Add New Device Type**, select **Cascading Server** and click OK.

For **Decoder**, there are two adding modes available. Select the adding mode and configure the corresponding settings for the device.


For the detailed configuration about the two adding modes, please refer to the following sections:

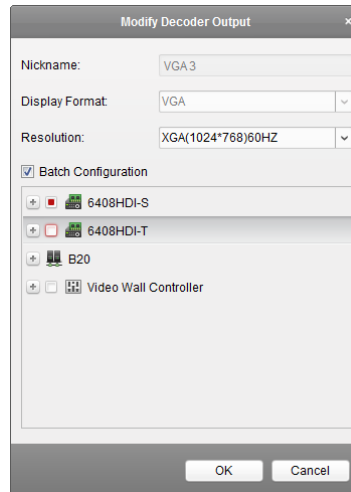
- By specifying the device IP address or domain, see *Section 3.1.3 Adding Devices Manually*.
- By specifying an IP segment, see *Section 3.1.4 Adding Devices by IP Segment*.

For **Cascading Server**, you can add the device via IP address. For detailed configuration, see *Section 3.1.3 Adding Devices Manually*.

Edit the Output of the Decoding Device

Steps:

1. In the Decoding Output area, click  before the decoding device to list the outputs of it.
2. Double-click an output and you can edit the parameters for it. Or you can right-click a decoding output in the video wall area and select **Decoding Output Configuration** to edit its parameters.
Note: For HDMI and VGA outputs, the resolution can be configured; for BNC output, the video standard can be configured.
3. (Optional) you can check the checkbox of **Batch Configuration** and select other outputs to copy the settings to.
4. Click **OK** to save the settings.

**Notes:**

With the extension HDMI output board, NVR also supports decoding function:

- It can link with the video inputs and display them on the video wall without through decoding device.
- It can realize the video wall display, windowing and roaming of images of the cameras directly via the HDMI outputs.
- You can also edit the parameters of the decoding output.
- For details, please refer to the *User Manual* of the NVR.

12.3 Configuring Video Wall Settings

Purpose:


After the encoding device and decoding device have been added, the parameters of Video Wall need to be configured for video display.

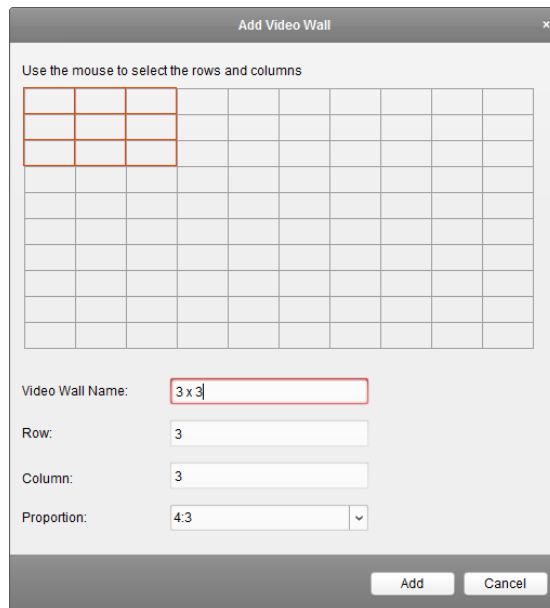
12.3.1 Linking Decoding Output with Video Wall

Steps:

1. Click **Enter Video Wall Config** to enter the decoding device and video wall configuration interface.
2. A default video wall view with the window division of 4*4 is provided. You can edit the default video wall or add a new video wall as desired.

Task 1: Add a Video Wall

- 1) Right-click the video wall and select **Add Video Wall**, or click  to activate the Add Video Wall window.
- 2) Enter the name, row number, column number and proportion of the video wall.



3) Click **Add**.


Task 2: Edit a Video Wall


- 1) Right-click the video wall and select **Modify Video Wall** to edit it.
- 2) In the pop-up window, you can edit the name, row number, column number and proportion of the video wall.

Note: You can also drag your mouse to set the needed video wall.

3) Click **Modify** to save the settings.

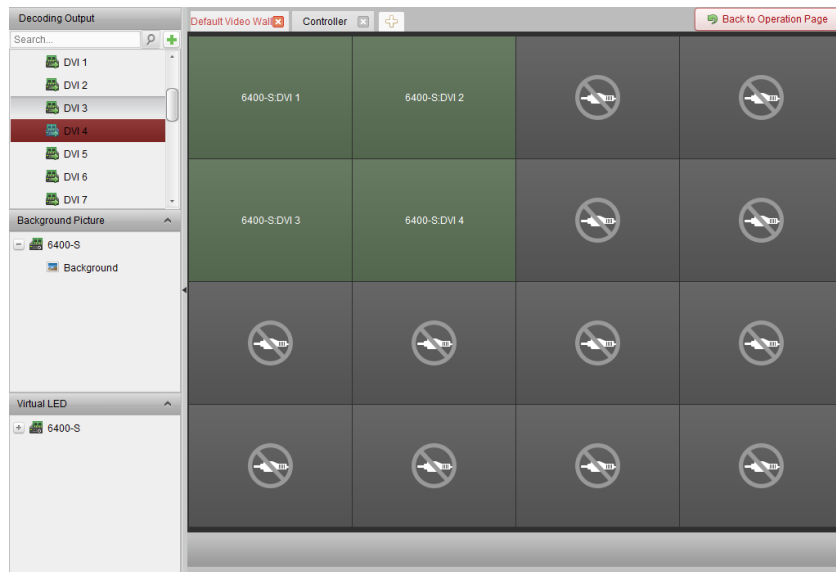
Task 3: Delete a Video Wall

To delete the video wall, right-click the video wall and select **Delete Video Wall**, or click  of the video wall.

3. Click-and-drag the decoding output on the left-side list to the display window of video wall, to configure the one-to-one correspondence. You can also click and hold the *Ctrl* or *Shift* key to select multiple outputs and then drag them to the video wall for configuring linkage in batch. You can click  in the upper-right corner of the display window to release the linkage.

Notes:

- Up to 4 video walls can be added to the client software.
- The total number of the display windows of the video wall should be no more than 100.
- The ranges of the row number and column number are both between 1 and 10.



12.3.2 Multi-Screen Display

Purpose:

For DS-6400HDI-T series decoder, you can joint multiple screens as a whole window. In this way, the decoded video of one camera can be shown on the jointed window.

Before you start:

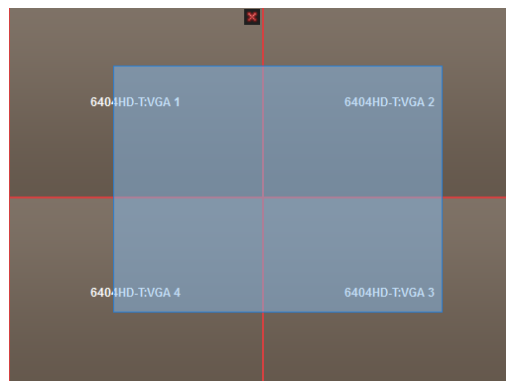
You should add DS-6400HDI-T series decoding device to the client. Please refer to *Chapter 12.2 Adding the Decoding Device* for detailed configuration about adding decoding device.

Steps:

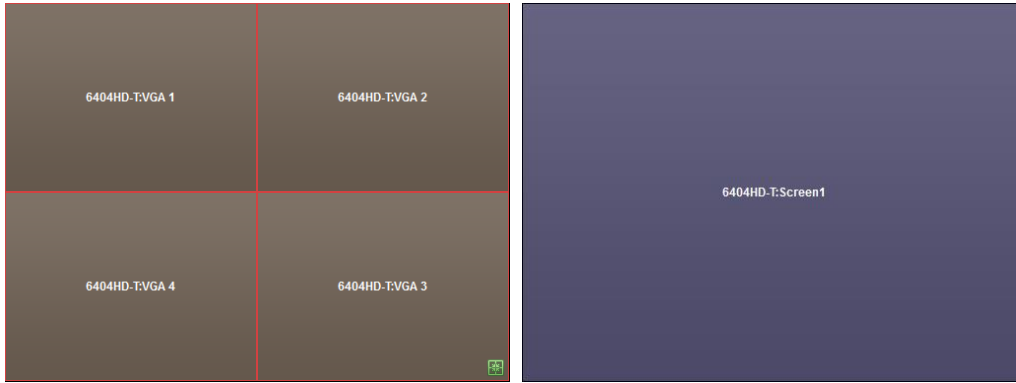
1. Perform the step 3 of *Chapter 10.3.1 Linking Decoding Output with Video Wall* to configure the linkage between the decoder and video wall.
2. Click-and-drag you mouse to select the adjacent display windows for jointing.

Notes:

- You can only joint the same output interfaces as a whole window. E.g., you can only joint 4 VGA interfaces or HDMI interfaces.
- BNC interface does not support jointing.

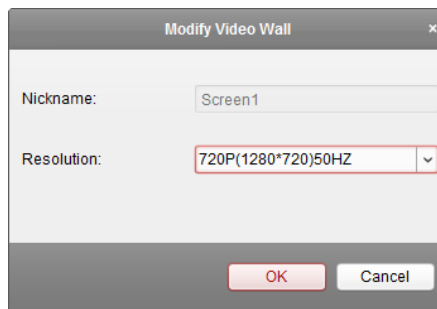


3. Click  to confirm jointing the screens.



- (Optional) You can set the resolution for the jointed window by right-clicking on it and select **Decoding Output Configuration**.

To cancel the multi-screen display, click in the upper-right corner of the display window.



12.3.3 Configuring Background

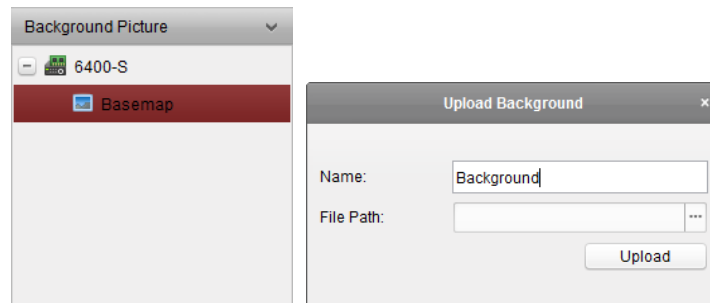
Purpose:

You can upload pictures for showing as the background of the video window.

Note: The function should be supported by the decoding device.

Steps:

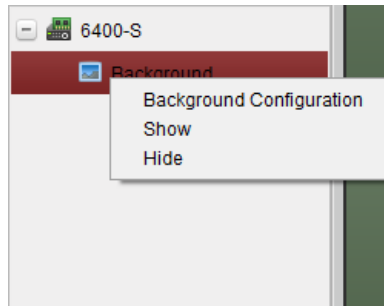
- Click to expand the Background Picture panel.
- Select a background picture and double-click (or right-click and select **Background Configuration**) it to activate the background uploading window.



- Set a user-defined name for the background picture and click to select a picture file.
- Click **Upload** to upload the picture.
- Click and drag the configured background picture to the desired position of the video wall.
- You can move the window when the cursor becomes and adjust its size when the cursor

becomes directional arrow. Right-click on the background picture and select **Show** or **Hide** to show or hide the background picture.

Note: The picture will be displayed on the physical video wall after you upload the background.



12.3.4 Configuring Virtual LED

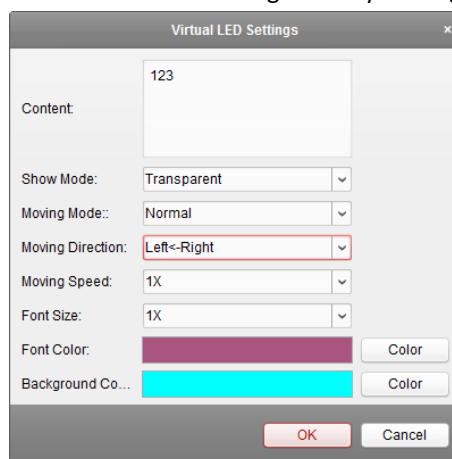
Purpose:

You can display the required contents on the video wall by using virtual LED.

Note: The function should be supported by the decoding device.

Steps:

1. Click **Enter Video Wall Config** to enter the configuration interface.
2. Click to display the Virtual LED panel, click to expand the added video wall controller.
3. Click-and-drag the virtual LED to the video wall.
4. You can move the window when the cursor becomes and adjust its size when the cursor becomes directional arrow.
5. Right-click the virtual LED in the panel and select Virtual LED Settings to set the parameters for it.
 - **Content:** Set the content that you want to display on the video wall.
 - **Show Mode:** Select the mode of the virtual LED as desired.
 - **Moving Mode:** Set the scrolling effect for the displayed text.
 - **Moving Direction:** Set the scrolling direction for the displayed text.
 - **Moving Speed:** Set the moving speed for the displayed text.
 - **Font Size:** Set the size of the displayed text.
 - **Font Color:** Set the color of the displayed text by clicking Color.
 - **Background Color:** Set the color of the background by clicking Color



12.4 Displaying Video on Video Wall

Purpose:




After the settings of the encoding device, decoding device and video wall, the video stream from the encoding devices can be decoded and displayed on the Video Wall.

Notes:




- After enable decoding and displaying, the captured picture of the video from the encoding device displays on the Video Wall interface. And the real-time live view is shown on the physical video wall.
- For some kinds of decoder, the video stream from the signal source (which refers to the video signal (e.g., PC) connected to the decoder via the local interfaces) can also be displayed on the video wall. For detailed configuration, please refer to the *User Manual* of the device.

12.4.1 Decoding and Displaying


Steps:


1. Click **Back to Operation Page** to go back to the Video Wall Operation interface.
2. Click  to save the linkage settings for the current scene. Or click  (beside ) and select a scene to save the settings for.





Notes:


- Scene settings are only supported by the cascading server. For setting the decoder, please skip step 2 and 3.
 - 8 scenes can be set for a video wall. Each scene can be configured with different linkage settings and window divisions.
 - For editing the name of a scene, select a scene and click  to define a new name for it. You can also click  to clear all the settings for the scene.
3. Select a scene which is configured with linkage settings and click  to enable the scene.
 4. Click-and-drag the camera on the left-side list to the display window of video wall. The video stream from the camera will be decoded and displayed on the Video Wall. You can also select a decoding window and then double-click a camera to decode and display the video. You can also click and hold the *Ctrl* or *Shift* key to select multiple cameras and then drag them to the video wall.

Note: For DS-6400HDI-T decoder, you can select the signal source on the Signal Source panel for video wall display.

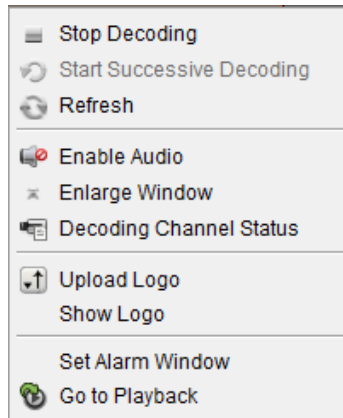
5. Select a playing window and click the icon  to get a preview of the video in the lower-right corner of the screen. Or you can directly drag a camera to the preview window for live view. You can also double-click the preview window to get a full-screen view.

Note: You can move the mouse to the window and click  in the lower-right corner to stop decoding.

6. (Optional) Select a decoding window and click  to set the window division for it. Click  to save the settings for the current scene. Or click  (beside ) and select a scene to save the settings for.

7. If the decoded camera supports PTZ control, you can click  beside **PTZ** to activate the PTZ control panel. For detailed configuration, please refer to *Chapter 4.3 PTZ Control in Live View*.
8. Right-click on a playing window to activate the decoding management menu, as shown below:

Note: The menu differs depending on the devices.



Stop/Start Decoding: Stop/Start the decoding.

Start/Pause Successive Decoding: Start/Pause the cycle decoding. This function is only supported by decoder.

Refresh: Refresh the decoding.

Open/Close Digital Zoom: Enable/Disable digital zoom.

Enable Audio: Turn on/off the audio of the decoding video.

Enlarge Window: Display the window in full-screen mode.

Decoding Channel Status: View the status of the decoding channel, such as decoding status, stream type.

Upload Logo: Upload a picture as the logo to the video window and set the display parameters for it. After setting, the logo shows in the defined position of the window on physical video wall.

Show/Hide Logo: Show/Hide the logo.

Stick on Top: Always stick the window on the top layer. This function is only supported by cascading server.

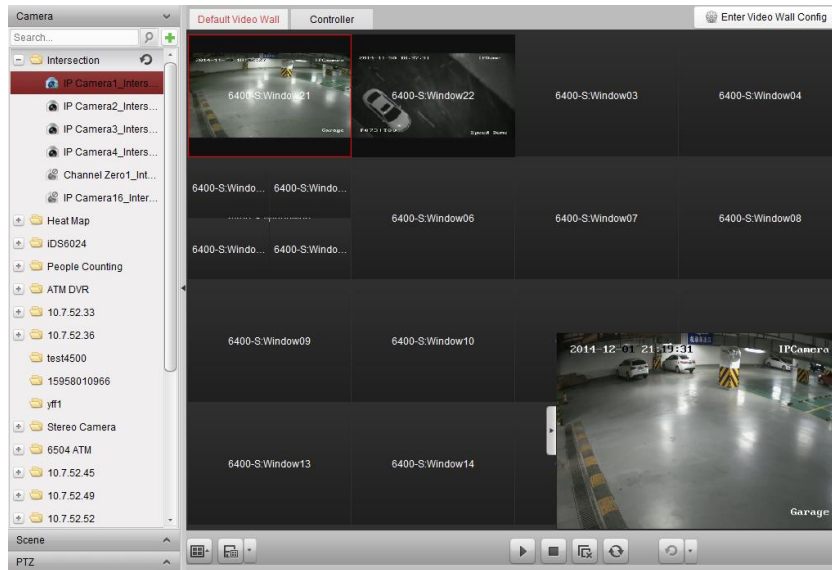
Stick at Bottom: Always stick the window at the bottom layer. This function is only supported by cascading server.

Lock: Lock the window to disable the roaming function.

Set Alarm Window: Display the video triggered by event or alarm input on Video Wall.

Decoding Delay: Set the delay degree of the decoding according to the actual needs. This function is only supported by cascading server.

Go to Playback: Enter the playback mode. This function is only supported by decoder.



Icon	Description
	Start all the decoding
	Stop all the decoding
	Stop all the roaming windows
	Refresh all the decoding windows
	Set cycle decoding and switching interval

12.4.2 Windowing and Roaming Settings

Purpose:

Windowing is to open a new window on the screen(s). The window can be within a screen or span multiple screens. You can move the playing window within the video wall as desired and this function is called roaming.

Note: The windowing and roaming function should be supported by the decoding device.

Steps:

1. Click-and-drag on a screen which links to a decoding output to open a window. The window can be within a screen or span multiple screens. If you want to open a window on the opened window, click-and-drag and hold the *Ctrl* key to create one. And for the locked window (refer to step 6), you can click-and-drag to create a new window on it.

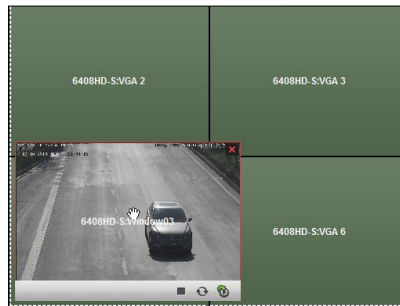
Note: At least one camera should be selected before opening window.



2. You can move the window when the cursor becomes and adjust its size when the cursor

becomes directional arrow. You can also hold the *Shift* key to scale the window in proportion.

3. During moving the window, the dotted borders will display. The window will be adjusted to align with the borders if it is moved to the location near the dotted borders.



4. Double-click the window and it will enlarge to fill the spanning screens and display on the top layer. You can double-click again to restore.



5. (Optional) Select a window and click to set the window division for it. Click to save the settings for it.
6. Right-click on a window and select **Lock** in the right-click menu to disable the roaming function, and the icon shows on the top-right corner of the window. In this way, the window cannot be moved and resized. You can right-click on the window and select **Unlock** in the right-click menu to recover the roaming function.
7. Right-click on a window and select **Stop Decoding** in the right-click menu, or move the mouse to the window and click in the upper-right corner to stop the decoding of the window and it will be closed. You can also click to close all the roaming windows.
8. The window only shows a captured picture of the decoded video. You can right-click on a window and select **Refresh** in the right-click menu, or move the mouse to the window and click in the lower-right corner to capture a latest picture of the decoded video and display on the window.
9. If you want to view the specific area of the video in details, you can right-click on a window and select **Open Digital Zoom** (if available) in the right-click menu and the cursor becomes . Use the mouse to drag on the video to realize digital zoom. You can check the effect on the physical video wall
10. Select a playing window and click the icon to get a preview of the video in the lower-right corner of the screen. Or you can directly drag a camera to the preview window for live view. You can also double-click the preview window to get a full-screen view.
11. Right-click on a playing window and you can control decoding management via the right-click menu.




12.4.3 Configuring Playback

Purpose:

The video file is supported to be played back on the video wall.

Note: Playback function is only supported by decoder.







Steps:

1. Click-and-drag the camera on the left-side list to the display window of video wall, or you can open a window if supported.
2. Move the mouse to the window and click  in the upper-right corner. Or you can right-click on the window and select **Go to Playback** in the right-click menu.
3. If there is video file of current day, the video file will be played back automatically. If not, you can set the search condition on the search panel which shows in the left area of the interface (click  to show more search options, and then click the icon  to specify the start time and end time for the search), and click **Search** to find the video file.
4. Right-click on the playback window and you can control the playback through the right-click menu, such as pause, stop, fast forward, slow forward, capture, start recording and full-screen playback.

Note: The saving path for the captured pictures and recorded files can be configured on System Configuration page. Please refer to *Chapter 17.2.4 File Saving Path Settings* for detailed settings.

When you move the mouse to the screen, the icons will display as shown below.



Icon	Description
	Pause the playback
	Stop the playback
	Capture the playback video
	Record the playback video
	Back to live view mode
	Playback speed.





12.4.4 Configuring Cycle Decoding

Purpose:

The cycle decoding refers that you can configure multiple video streams of encoding devices to one decoding output and you can set the switching interval for the decoding.

Note: The cycle decoding is only supported by decoder.

Steps:

1. Click  beside  and set the switching interval for the cycle decoding.
2. Click-and-drag the camera on the left-side list to the display window of video wall, or you can open a window if supported.
Note: The cycle decoding is not supported by the signal source of DS-6400HDI-T.
3. Move the mouse to the group node and click  to start cycle decoding (the decoding output under cycle decoding will be marked with ). Right-click on the window and you can control decoding management via the right-click menu.



12.5 Configuring Video Wall Controller

Purpose:

The client provides the function of managing the added video wall controller.

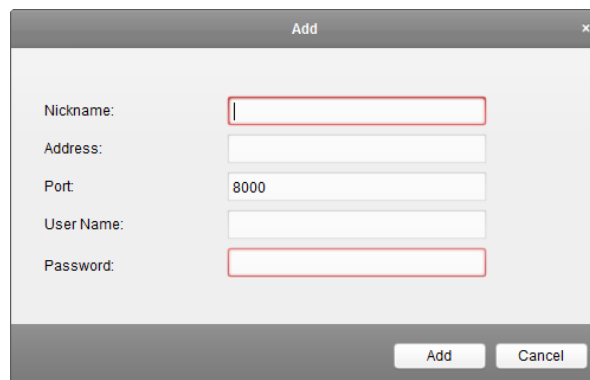
12.5.1 Adding the Video Wall Controller

Purpose:

You should add the video wall controller to the client for management.

Steps:

1. Go to the Device Management page and click the **Server** tab.
2. Click **Add New Device Type**, select **Video Wall Controller** and click **OK**.
3. Select Video Wall Controller in the organization panel and click **Add Device** to activate the Add Device window.
4. Edit the nickname, IP address/domain name, port No., user name and password for the device.
5. Click **Add** to save the settings.




Nickname:	<input type="text"/>
Address:	<input type="text"/>
Port:	8000
User Name:	<input type="text"/>
Password:	<input type="password"/>

Add Cancel

6. For edit the output, please refer to *Chapter 12.2 Adding the Decoding Device*.

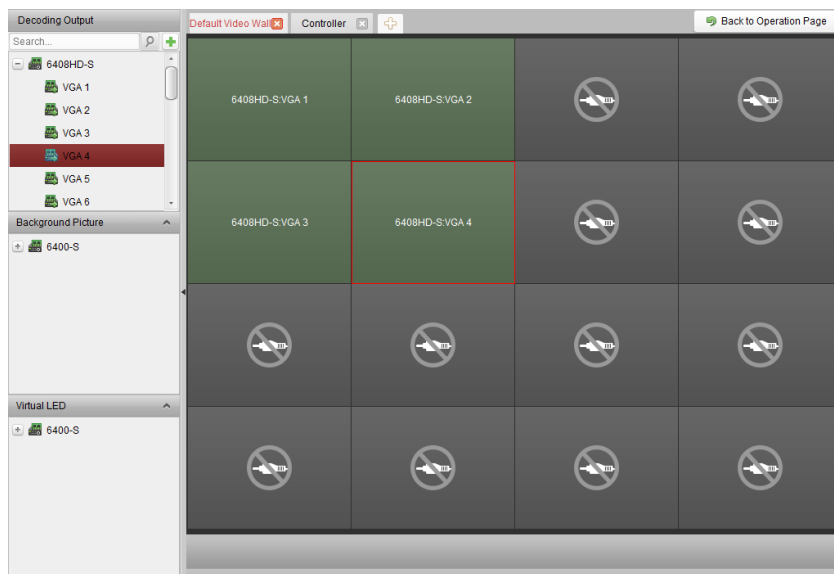
12.5.2 Linking Output with Video Wall

Steps:

1. Click **Enter Video Wall Config** to enter the configuration interface.
2. A default video wall with the added video wall controller name is provided. You can edit the default video wall as desired. For details, please refer to *Chapter 12.3.1 Linking Decoding Output with Video Wall*.
3. Click-and-drag the output of the added video wall controller on the left-side list to the display window of video wall, to configure the one-to-one correspondence. You can also click and hold the *Ctrl* or *Shift* key to select multiple outputs and then drag them to the video wall for configuring linkage in batch. You can click  in the upper-right corner of the display window to release the linkage.
4. For background settings, please refer to the *Section 12.3.3 Configuring Background*.

Notes:

- The total number of the display windows of the video wall should be no more than 100.
- The ranges of the row number and column number are both between 1 and 10.






12.5.3 Configuring Virtual LED

Purpose:

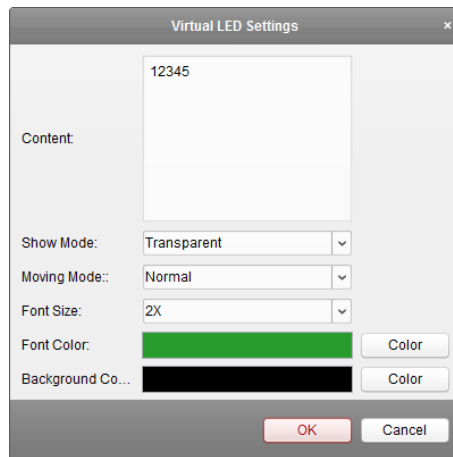
You can display the required contents on the video wall by using virtual LED.

Steps:

1. Click **Enter Video Wall Config** to enter the configuration interface.
2. Click  to display the Virtual LED panel, click  to expand the added video wall controller.
3. Click-and-drag the virtual LED to the video wall.
4. You can move the window when the cursor becomes  and adjust its size when the cursor

becomes directional arrow.

5. Right-click the virtual LED in the panel and select Virtual LED Settings to set the parameters for it.
 - **Content:** Set the content that you want to display on the video wall.
 - **Show Mode:** Select the mode of the virtual LED as desired.
 - **Moving Mode:** Set the scrolling effect for the displayed text.
 - **Font Size:** Set the size of the displayed text.
 - **Font Color:** Set the color of the displayed text by clicking **Color**.
 - **Background Color:** Set the color of the background by clicking **Color**




12.5.4 Configuring Video Wall Screens

Purpose:

The screens of the video wall can be configured, including screen type, opening screen, closing screen, input source and image parameters.

Steps:





1. Click **Back to Operation Page** to go back to the Video Wall Operation interface.
2. Click  to activate the Screen Control window.
3. Click-and-drag on the video wall to select the screens and configure the parameters for them.

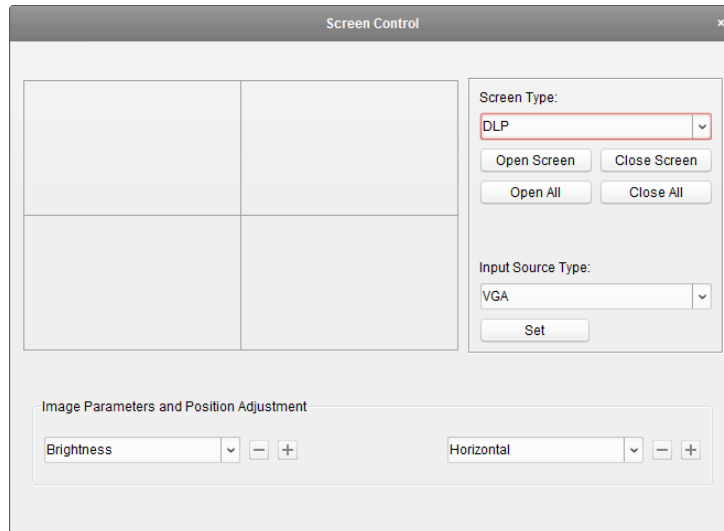
Screen Type: Select the type for the selected screens for different screen type adopting different communication protocols.

Open Screen/Close Screen: Open or close the selected screens.

Open All/Close All: Open or close all the screens.

Input Source Type: Select the input source for the screen and click **Set** to save the settings.

Image Parameters and Position Adjustment: Select brightness or contrast and click  or  to adjust the image parameters. Select horizontal or vertical and click  or  to adjust the image position on the screen.



12.5.5 Displaying Video on Video Wall



Purpose:

After adding the video wall controller and linking the output with the video wall, the video stream from the encoding devices or the signal source can be displayed on the video wall.




Notes:

- Encoding devices refer to the devices connected to Guarding Expert client via network.
- Decoding module should be connected to the video wall controller before the video of the encoding devices can be decoded and displayed.
- Signal source refers to the video signal (e.g., analog camera) connected to the video wall controller via the local interfaces of the controller.
- After enable decoding and displaying, the captured picture of the video from the encoding device displays on the Video Wall interface. And the real-time live view is shown on the physical video wall.
- For signal source, no captured pictures displaying on the output window. You can check the live video on the physical video wall.




Steps:

1. Click **Back to Operation Page** to go back to the Video Wall Operation interface.
2. Select a scene which is configured with linkage settings and click  to enable the scene.
3. Click-and-drag the camera or signal source on the left-side list to the display window of video wall. The video stream from the camera or signal source will be displayed on the Video Wall. You can also select a decoding window and then double-click a camera to decode and display the video. You can also click and hold the *Ctrl* or *Shift* key to select multiple cameras and then drag them to the video wall.
4. Or you can select a camera or signal source, then click-and-drag on a screen which links to an output to open a window. The window can be within a screen or span multiple screens. If you want to open a window on the opened window, click-and-drag and hold the *Ctrl* key to create one. For details, please refer to *Chapter 12.4.2 Windowing and Roaming Settings*.
5. Select a playing window and click the icon  to get a preview of the video in the lower-right

corner of the screen. Or you can directly drag a camera to the preview window for live view. You can also double-click the preview window to get a full-screen view.

- Click  to save the current settings as a scene. Or click  (beside ) and select a scene or create a new scene to save the settings for.

Notes:

- 32 scenes can be set for a video wall controller.
 - For editing the name of a scene, select a scene and click  to define a new name for it. You can also click  to clear all the settings for the scene. For calling a scene, select a scene and click  to enable the scene.
- Right-click on a playing window to activate the decoding management menu.

Note: The menu differs depending on the devices. Please refer to *Chapter 12.4.1 Decoding and Displaying* for detailed introduction.
 - For displaying the video files of the encoding device on the video wall, please refer to *Chapter 12.4.3 Configuring Playback*.


12.5.6 Configuring Plan

Purpose:

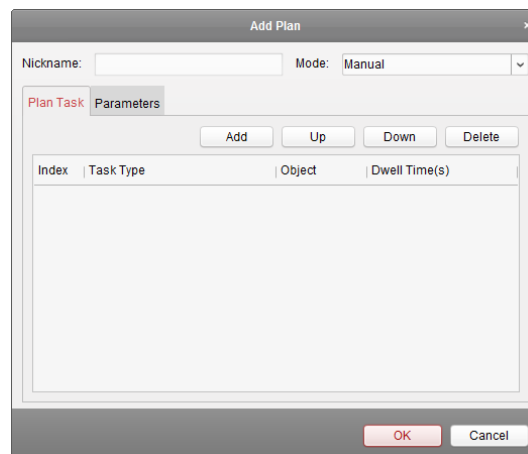
The plan function of video wall controller provides the switching the configured scene(s) and turning on or off the screens at a certain time. You can also set the time schedule for switching the operations (such as scene, close screens) and the plan can also be auto-switched.

Before you start: Scene(s) should be added for the video wall controller. Please refer to *Chapter 12.5.5 Displaying Video on Video Wall* for adding scenes.

Steps:

- Click **Back to Operation Page** to go back to the Video Wall Operation interface.
- Click  to display the Plan panel, click **Add Plan** or right-click on the panel and select **Add Plan** to pop up the Add Plan window.

Note: Up to 16 plans can be added to a video wall controller.



- Set the parameters for the plan:

Nickname: Edit a name for the plan as desired.

Mode: Select the mode to execute the plan. Manual, Auto and Auto-switch are selectable.

- Manual: Automatically execute the plan until you stop calling the plan manually.

- Auto: Execute the plan according to the configured start time and execution times in Parameters panel.
- Auto-switch: Execute the plan according to the configured time schedule and execution times in Parameters panel.




Plan Task: Set the operations for the plan. The plan will be execute the added operations in order.

- Add: Add an operation for the plan. If you select the **Task Type** as Display Scene, you can select the configured scene in the Scene drop-down list and set the dwell time. If you select the **Task Type** as Open Screen or Close Screen, you can select the screen type for opening or closing and set the dwell time.
- Up: Move the selected operation up.
- Down: Move the selected operation down.
- Delete: Remove the selected operation.

Parameters:

If you select Auto as the mode, you can set the Start Time and Execution Times. E.g., you set the Start Time as 2014-06-04 00:00:00 and Execution Times as 4, then the plan will be executed from 2014-06-04 00:00:00 and continuously for 4 times before stopping.

If you select Auto-switch as the mode, you can set the Weekday Settings and Execution Times. E.g., you set the Weekday Settings as 10:30:00 of Mon and 08:30:00 of Wed, and Execution Times as 6, the plan will be executed from 10:30:00 of Monday and continuously for 6 times, then from 08:30:00 of Wednesday and continuously for 6 times. The next week, the plan will be executed at the configured time.

4. Click **OK** to save the settings.
5. To call a plan, select a plan and click  to enable the plan. For editing the plan, select a plan and click  to edit the settings for it. You can also click  to clear all the settings for the plan. To stop the plan, right-click a plan and select **Stop Plan**.

Note: Please stop the plan before you want to configure the video wall controller.

Chapter 13 Security Control Panel

Purpose:

The Security Control Panel module provides remote control and configuration via the Guarding Expert client software.

- Before remote configure and control the security control panel, you are required to add the device to the software first. Refer to *Chapter 13.1 Device Management*.
- For setting the event linkage of the zone, refer to *Chapter 13.2 Zone Event Management*.
- For remote control of security control panel via the Guarding Expert client software, refer to *Chapter 13.3 Remote Control*.
- For managing the zones on E-map, please refer to *Chapter 13.4 Displaying Zone on E-map*.


13.1 Device Management

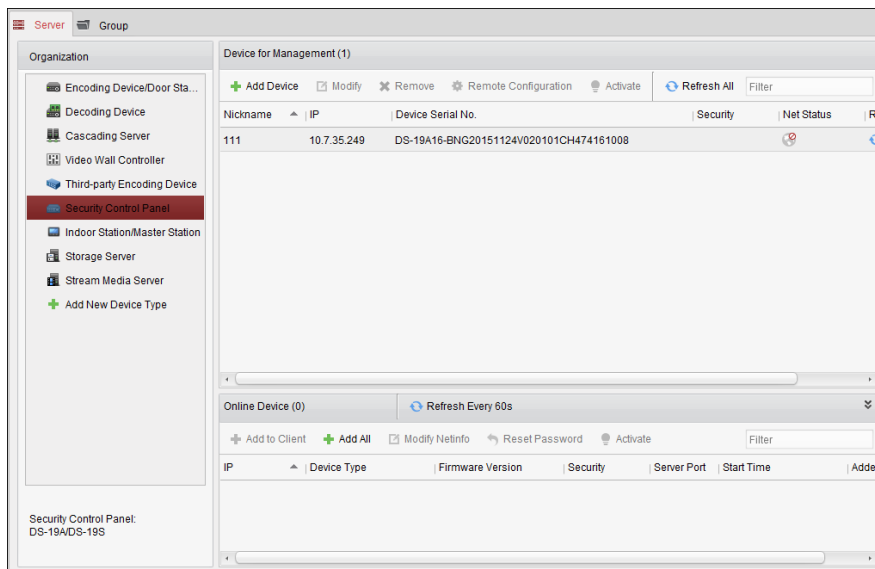
Purpose:

In this section, you can add the security control panel for further configuration.

13.1.1 Adding Security Control Panel

Steps:

1. Click the  icon on the control panel to enter the Device Management interface and click the **Server** tab.



2. Click **Add New Device Type** on the Organization list and select **Security Control Panel**.
3. Click **OK** to save the settings, and the added security control panel type is displayed on the Organization list.
4. Click **Security Control Panel** and click **Add Device** to add the security control panel to the

management list of the software.

5. You can add the active online devices in the same local subnet with the client software, or select the adding mode by IP/Domain, by IP segment, by IP Server, or by HiDDNS, and configure the corresponding settings for the device.

Note: For activating the device, see *Chapter 3.1.1 Creating the Password*.

For the detailed configuration about the adding modes, please refer to the following chapters:

- By adding the online devices, see *Chapter 3.1.2 Adding Online Devices*.
- By specifying the device IP/Domain address, see *Chapter 3.1.3 Adding Devices Manually*.
- By specifying an IP segment, see *Chapter 3.1.4 Adding Devices by IP Segment*.
- By IP Server, see *Section 3.1.5 Adding Devices by IP Server*.
- By HiDDNS, see *Section 3.1.6 Adding Devices by HiDDNS*.

13.1.2 Editing Security Control Panel

Purpose:

You can edit the device information in this section, including the device name, address and port number.

Steps:

1. On the **Device Management** interface, click and select a security control panel in the device list.
2. Click the **Modify** button on the upper side of the list to enter the device modify interface.

3. Edit the device information according to the adding mode.
4. Click **Modify** to save the changes.

13.1.3 Deleting Security Control Panel


Select device from the list, click **Remove**, and then you can delete the information of the selected device.

13.2 Zone Event Configuration

Purpose:

For security control panel, you can configure its zones linkage including siren, trigger, client linkage, and triggered cameras.

Steps:

1. Click the  icon on the control panel, or click **Tool->Event Management** to open the Event Management page.
2. Click the **Zone Event** tab.

Note: The Zone Event tab is available when the device type of Security Control Panel is added.
3. Select the security control panel and zone to be configured.
4. You can edit the zone name and zone type.
5. Select the linked trigger on the **Linked Trigger** panel.
6. Select the linked siren on the **Linked Siren** panel.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 13.1 Linkage Actions for Zone Event*.
8. Select the triggered camera to be triggered in the camera list for popping up image or displaying on the video wall when the alarm is triggered.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

Note: Up to four cameras can be set as triggered camera.
9. Optionally, click **Copy to...** to copy the event parameters to other zones.
10. Click **Save** to save the settings.

Note: The zone should be disarmed before configuring the zone event linkage.

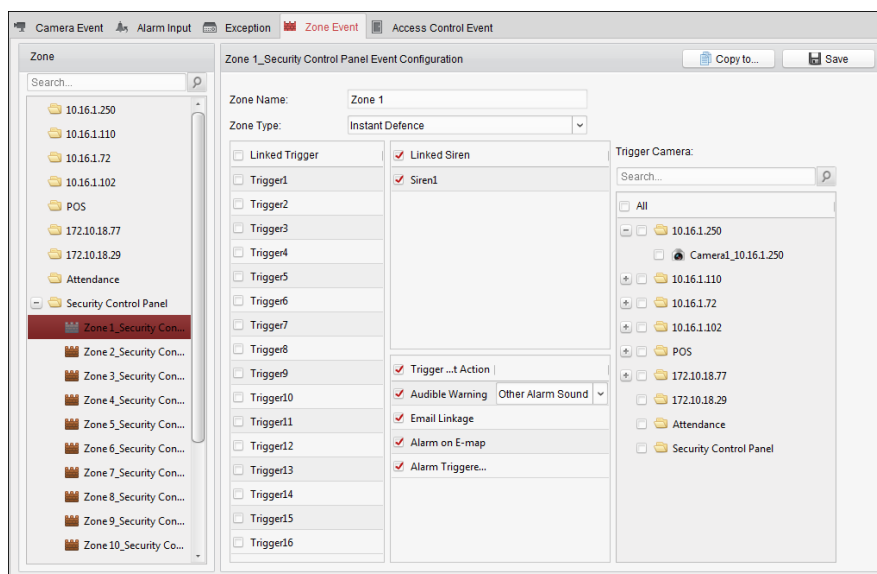


Table 13. 1 Linkage Actions for Zone Event

Linkage Actions	Descriptions
-----------------	--------------


Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map.
Alarm Triggered Pop-up Image	The image with alarm information pops up when alarm is triggered.
Alarm Triggered Video Wall Display	Display the video on the Video Wall when alarm is triggered.

13.3 Remote Control

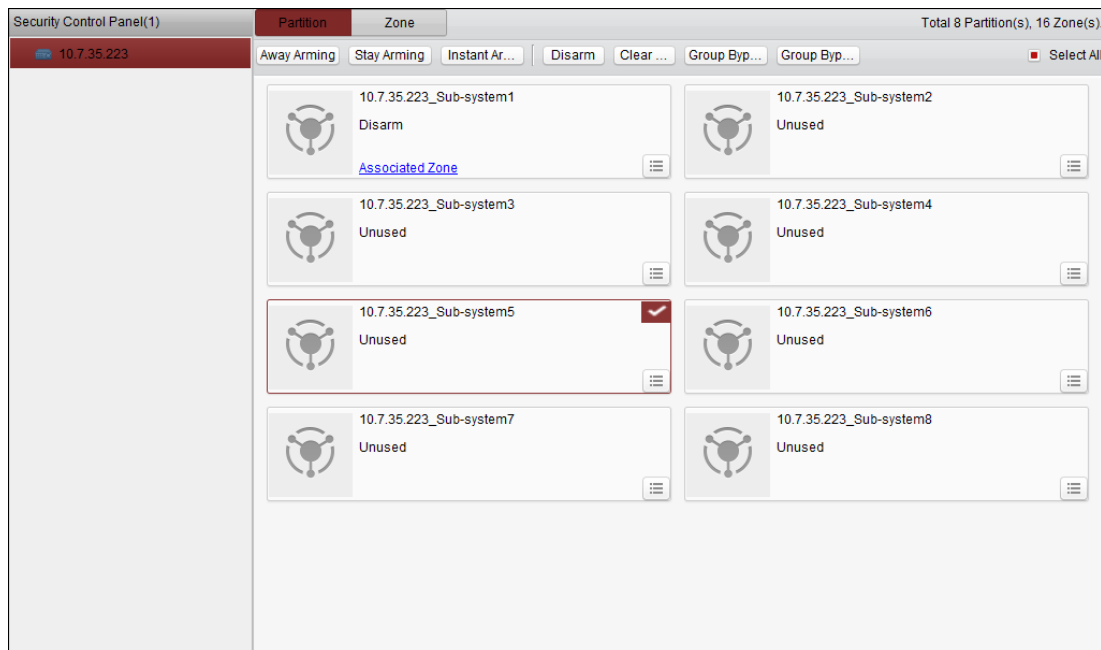
Purpose:

In this section, you can control the panel remotely to implement operations such as arming, disarming, bypass, group bypass, and so on for both the partitions and zones.



Click the  icon on the control panel,

or click **View->Security Control Panel** to open the Security Control Panel page.



The added security control panels are listed in the Security Control Panel on the left. Select one for further operations.


13.3.1 Partition System Remote Control

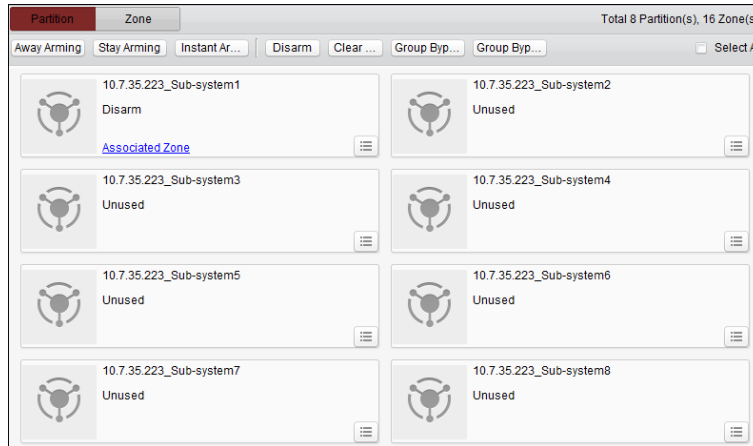
Purpose:

In this section, you can remotely implement operations of away arming, stay arming, instant arming, disarming, clearing alarm, group bypass, and recovering group bypass for the configured partitions.

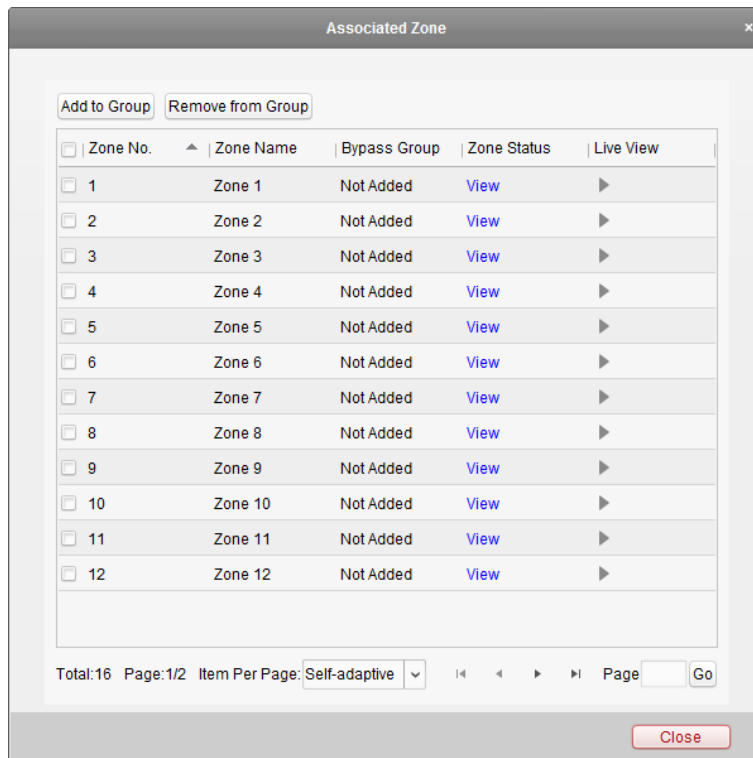
Steps:

1. On the **Partition** page, click to select one or more partitions to be controlled, or check the check box of **Select All** on the upper-right side of the page to select all partitions.
2. Click the operations buttons (away arming, stay arming, instant arming, disarming, clearing alarm, group bypass, and group bypass recovery) on the upper side of the page.

Note: You can also click the  icon to get the operation menu for each partition.




3. Click **Associated Zone** to view the zones of the current partition.



You can add/remove the selected zones into/from the group.

Click **View**, and you can view the status of the zone.

Click  to view the live view of the zone's triggered camera.

Note: You can set the triggered camera of the zone in Event Management. Refer to *Chapter 13.2 Zone Event Configuration*.

13.3.2 Zone Remote Control

Purpose:

In this section, you can remotely implement bypass, or recovering bypass for the zones.

Steps:

1. Click **Zone** tag to enter the interface.

Zone No.	Zone Name	Partition	Zone Status	Bypass/Recovery	Arming/DisAr...	Live View
1	Zone 1	Partition1	View			
2	Zone 2	Partition1	View			
3	Zone 3	Partition2	View			
4	Zone 4	Partition2	View			
5	Zone 5	Partition0	View			
6	Zone 6	Partition0	View			
7	Zone 7	Partition0	View			
8	Zone 8	Partition0	View			
9	Zone 9	Partition0	View			
10	Zone 10	Partition0	View			
11	Zone 11	Partition0	View			
12	Zone 12	Partition0	View			
13	Zone 13	Partition0	View			
14	Zone 14	Partition0	View			
15	Zone 15	Partition0	View			
16	Zone 16	Partition0	View			

2. Click and select one or more zones to be controlled.
3. Click **Bypass/Bypass Recovery** on the upper side of the page to control the selected zones.
4. Click **View**, and you can view the status of the zone.
5. Click the / icon to bypass or recover a zone separately.
 - : The zone is bypassed.
 - : The zone is recovered.
6. Click the / icon to arm or disarm the zone.
 - : Click to disarm the zone.
 - : Click to arm the zone.
7. Click icon to view the live view of the zone's triggered camera.

Note: You can set the triggered camera of the zone in Event Management. Refer to *Chapter 13.2 Zone Event Configuration*.

13.4 Displaying Zone on E-map


Purpose:

You can add the zone on the E-map, and when the alarm in the zone is triggered, you can view the alarm notification on the E-map and check the alarm details.



Note: For detailed operations of E-map, please refer to *Chapter 7 E-map Management*.

Adding Zones as Hot Spots

Steps:

1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Click the icon  in the toolbar to open the Add Hot Spot dialog box.



3. Check the checkboxes to select the zones to be added.
4. Optionally, you can edit hot spot name, select the name color and select the hot spot icon by double-clicking the corresponding field.
5. Click **OK** to save the settings. The zone icons are added on the map as hot spots and the icons of added zones change from  to  in the group list. You can click-and-drag the zone icons to move the hot spots to the desired locations.


You can also click-and-drag the zone icons from the group list to the map directly to add the hot spots.


Modifying Hot Spots

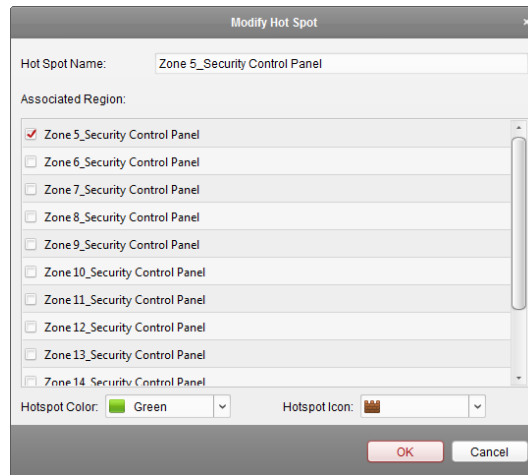
Purpose:

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

Steps:


1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Select the hot spot icon on the map and then click  in the toolbar, right-click the hot spot icon and select **Modify**, or double-click the hot spot icon on the map to open the Modify Hot Spot dialog box.
3. You can edit the hot spot name in the text field and select the color, the icon and the linked zone.
4. Click **OK** to save the new settings.

To delete the hot spot, select the hot spot icon and click  in the toolbar, or right-click the hot spot icon and select **Delete**.




Previewing Hot Spots

Steps:

1. Click the **Map Preview** button in the E-map toolbar to enter the map preview mode.
2. If there is any alarm triggered in the zone, an icon  will appear and twinkle near the hot spot. Click the alarm icon, or you can right click the zone icon and select **Display Alarm Information**, to check the alarm information, including alarm type and triggering time.

Note: To display the alarm information on the map, the Alarm on E-map functionality needs to be set as the alarm linkage action. For details, refer to *Chapter 13.2 Zone Event Configuration*.

3. To clear the alarm information displayed on the map, click  on the toolbar, or right click the zone icon and select **Clear Alarm Information** to clear the alarms of the selected zone.

Chapter 14 Video Intercom

Purpose:

The Video Intercom module provides remote control and configuration via the Guarding Expert client software.

- Before remote configure and control the video intercom, you are required to add the device to the software first. Refer to *Chapter 14.1 Device Management*.
- For the live view of video intercom via the Guarding Expert client software, refer to *Chapter 14.2 Live View*.
- For the picture storage on Storage Server, refer to *Chapter 14.3 Picture Storage*.
- For remote control of video intercom, please refer to *Chapter 14.4 to 12.8*.


14.1 Device Management

Purpose:

Device management includes device activation, adding device, editing device, deleting device and remote configuration.

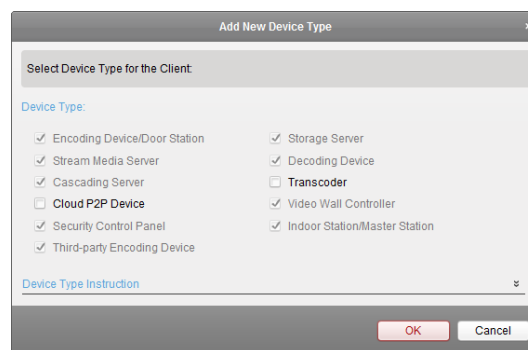
After running the Guarding Expert, door stations, indoor stations, master stations and other video intercom devices should be added to the client for remote configuration and management.

Steps:

1. Click the  icon on the control panel, or click **Tools->Device Management** to open the Device Management page.
2. Click the **Server** tab.

To add indoor station or master station:

- 1) Click **Add New Device Type** to enter add new device type interface.
Select **Indoor Station/Master Station** and click **OK**.



- 2) In the Server tab, Indoor Station/Master Station will display, select **Indoor Station/Master Station** and click **Add Device** to add the indoor station and master station.

To add door station:

In the Server tab, select **Encoding Device/Door Station** to add door station.

Note: Up to 16 door stations can be added, and up to 512 indoor stations or master stations can be added.

- You can add the active online devices in the same local subnet with the client software, or select the adding mode by IP/Domain, or by IP segment, and configure the corresponding settings for the device.

Note: For activating the device, see *Chapter 3.1.1 Creating the Password*.

For the detailed configuration about the adding modes, please refer to the following chapters:

- By adding the online devices, see *Chapter 3.1.2 Adding Online Devices*.
- By specifying the device IP/Domain address, see *Chapter 3.1.3 Adding Devices Manually*.
- By specifying an IP segment, see *Chapter 3.1.4 Adding Devices by IP Segment*.

Add Multiple Online Devices

If you want to add multiple online devices to the client software, click and hold *Ctrl* key to select multiple devices, and click **Add to Client** to open the device adding dialog box. In the pop-up message box, enter the user name and password for the devices to be added.

Add All the Online Devices

If you want to add all the online devices to the client software, click **Add All** and click **OK** in the pop-up message box. Then enter the user name and password for the devices to be added.

Modify Network Information

Select the device from the list, click **Modify Netinfo**, and then you can modify the network information of the selected device.

Note: You should enter the admin password of the device in the **Password** field of the pop-up window to modify the parameters.

Restore Default Password

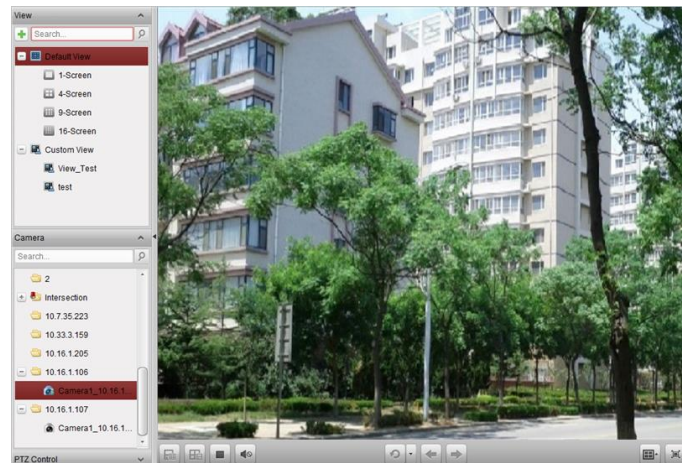
Select the device from the list, click **Restore Default Password**, input the security code, and then you can restore the default password of the selected device.

Note: The security code is returned after you send the data and serial No. of the device to the manufacturer.

14.2 Live View

Steps:

- Enter the main view interface of Guarding Expert client software to display the live view of door station (V Series).




- Right click on the live view interface to display the menu and select **Unlock Door** to remote unlock the door.

14.3 Picture Storage

When the device is under armed status, it will auto capture after unlocking the door. If the storage server is installed together with Guarding Expert client software, the captured picture will be uploaded to the storage server.

Note: The device refers to V Series door station and D Series door station.

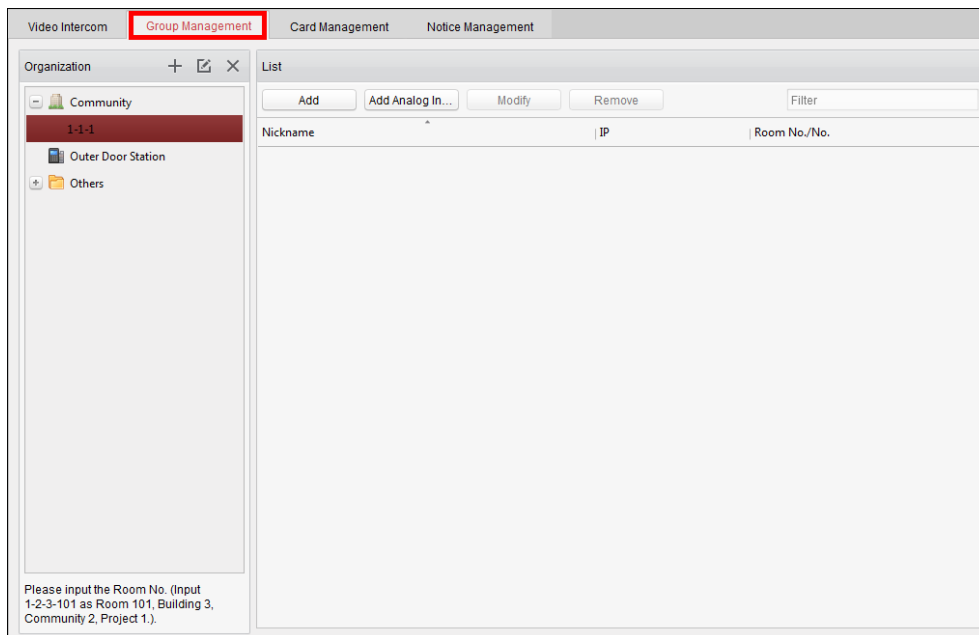
14.4 Group Management


Click the  icon on the control panel, or click **View->Video Intercom** to open the Intercom page.

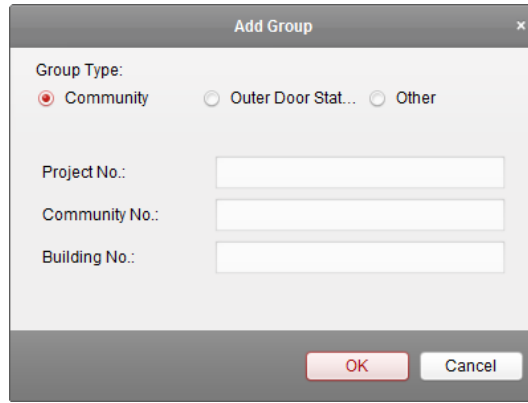
Click **Group Management** tab to add, edit, and delete groups. Three group types can be selected: building, outer door station and other. Here we take the building as an example.

Steps:

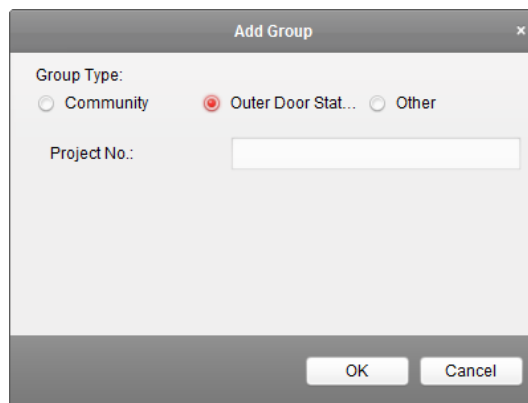
- The group of the community is listed on the left, as shown in the figure below.



- Select the group type and click  to add group, input the corresponding information accordingly.
 - Select group type as **Community** and then Input the Project No., Community No., and Building No. to set the community structure, as shown in the figure below.



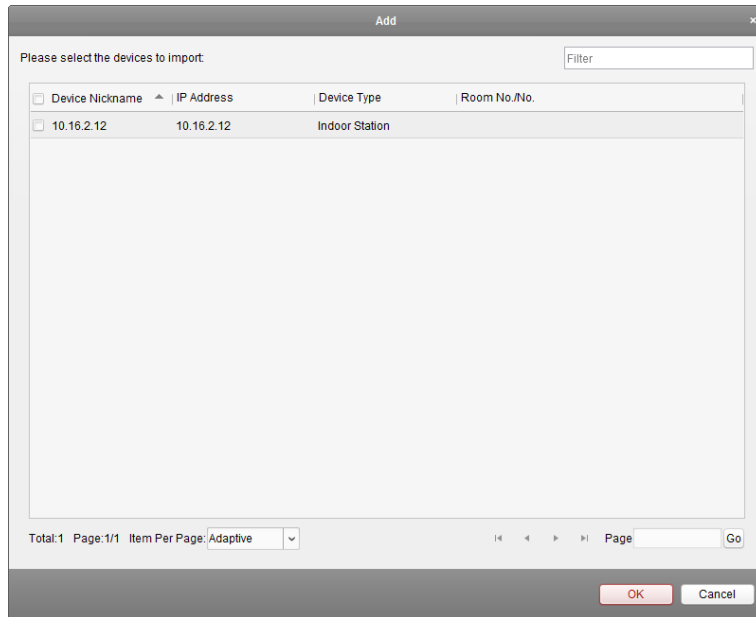
- Select group type as **Outer Door Station** and then input the outer door station name (Range: 1 to 9) to set the outer door station, as shown in the figure below.



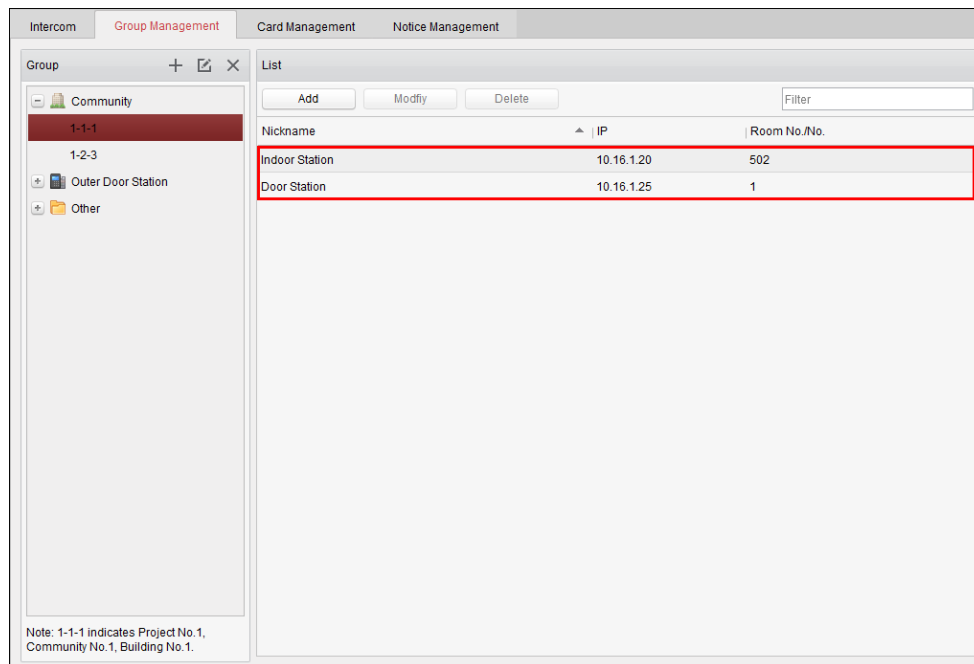
- Select group type as **Other** and then input the group name. For example, you can set group as administrator, entrance guard and cleaning staff, etc.

Note: You can add group to **Other** and set different groups to assign cards to staff other than residents, such as administrator, security guard and cleaning staff, etc. So you can assign corresponding cards and configure their different permissions.

3. After setting the community, you can add devices to the list on the right.
 - **Adding Network Video Intercom Device:**
 - 1) Select the added community in the organization list and click **Add** to enter the following interface. The video intercom devices added to the client software will be listed, as shown in the figure below.

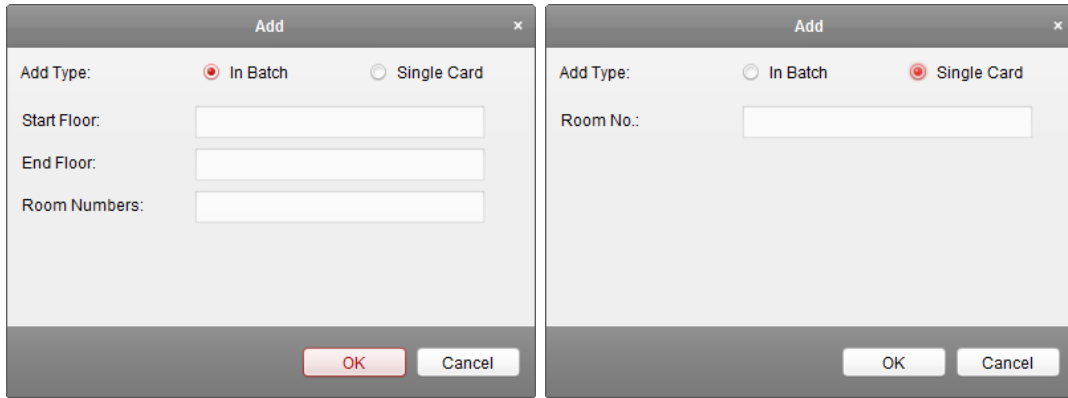


- 2) Check the checkboxes of devices and input the Room No. of indoor stations and door station No. to assign the devices to the community.
- 3) Click **OK** to save the setting.



● **Adding Analog Indoor Station**

- 1) Select the added community in the organization list and click **Add Analog Indoor Station** to enter the following interface.



2) You can select the adding method as **Single Adding** or **Batch Adding**.

For Single Adding, you are required to input the room No. for the analog indoor station to add.

For Batch Adding, you are required to input:

Start Floor: The start floor No. for the analog indoor stations to add.

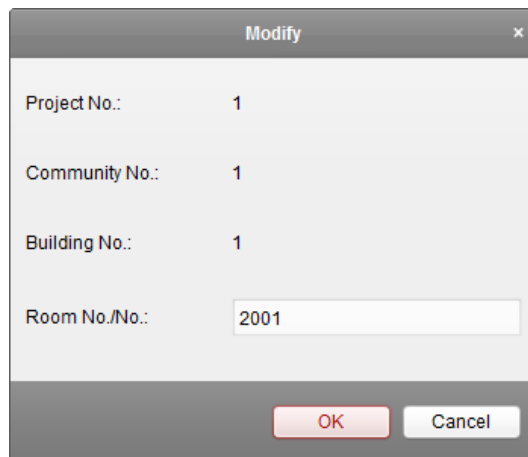
End Floor: The start floor No. for the analog indoor stations to add.

Room Number: The number of the rooms of each floor.

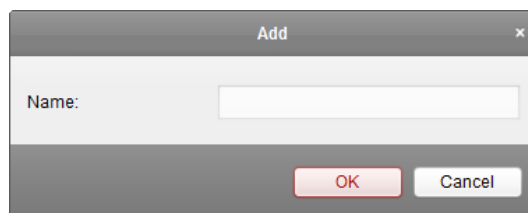
Note: For configuring the floor No. and Room No. of the analog indoor station, please refer to the *User Manual* of the analog indoor station.

3) Click **OK** to add the analog indoor station(s).

2. Select the indoor station or door station and click **Modify** to modify the room No. or the door station No.. If you want to delete the assigned device, select the device and click **Remove** to delete it.



3. To add person in other groups, you should select a sub group from **Other** and then click **Add** to add a person.

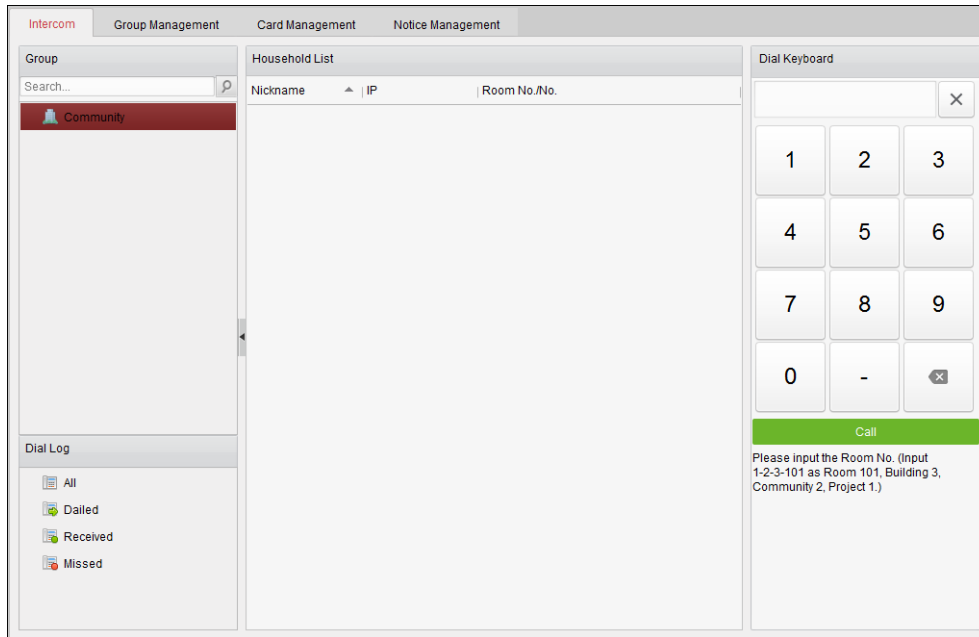


Input the name of the added person, and click **OK** to save the settings.

After adding the person, select the person and click **Modify** to modify the person's name. If you want to delete the assigned person, select the person and click **Remove** to delete it.

14.5 Intercom

Click **Intercom** tab to open the Intercom page.



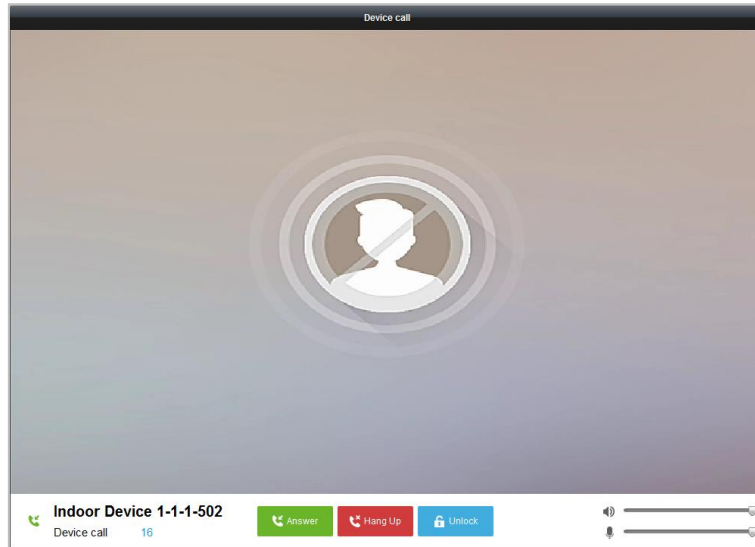
14.5.1 Video Intercom with Guarding Expert via Indoor Station

Purpose:

When the indoor station has been added to the client software, the video intercom with Guarding Expert via indoor station can be realized.

Steps:

1. Add the indoor station to the Guarding Expert client software.
2. Make sure the SIP Server IP of the indoor station is not configured (or abnormal).
3. Press **Center** on the main interface of the indoor station.



Note: When the SIP server IP of the indoor station is configured, press **Center** on the main interface of the indoor station to call the master station.

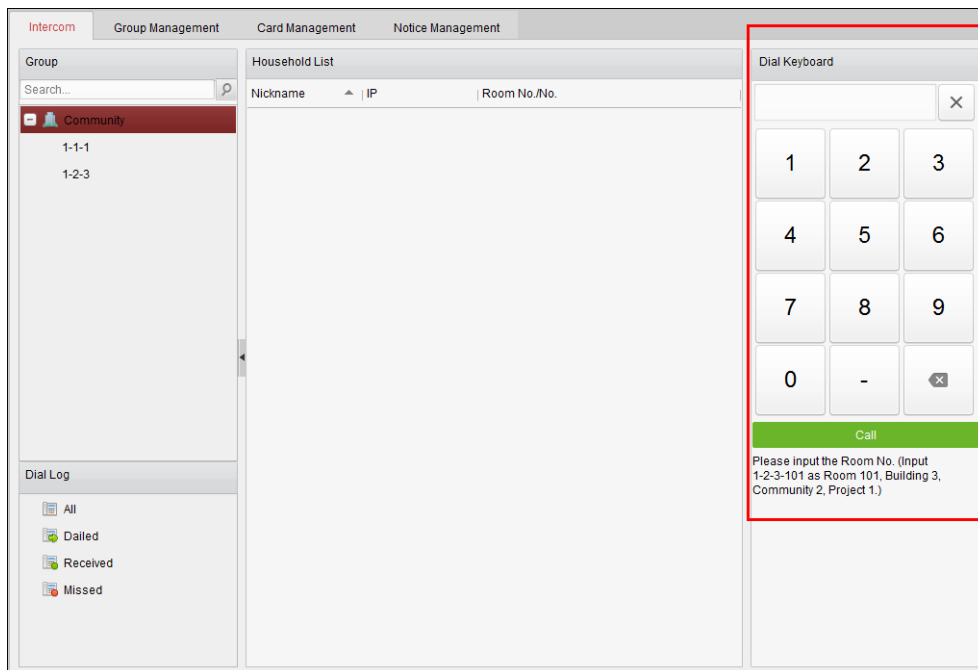
14.5.2 Video Intercom with Indoor Station via Guarding Expert

Enter **Control Panel-> Video Intercom-> Intercom** tab page.


Three ways of video calling indoor stations via Guarding Expert can be realized.

Calling Resident by Room No.

1. Input the room No. of the indoor station in the dial keyboard on the right.

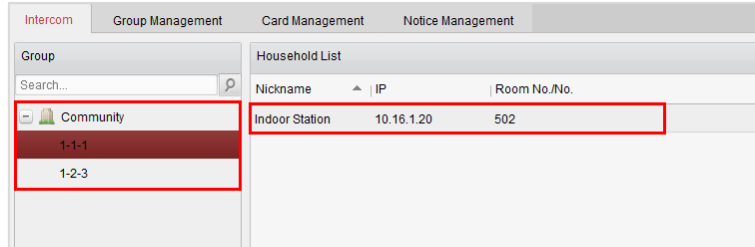


Note: The room No. should be in correct format. For example, 1-2-3-101 as Room 101, Building No.3, Community No.2, Project No.1.

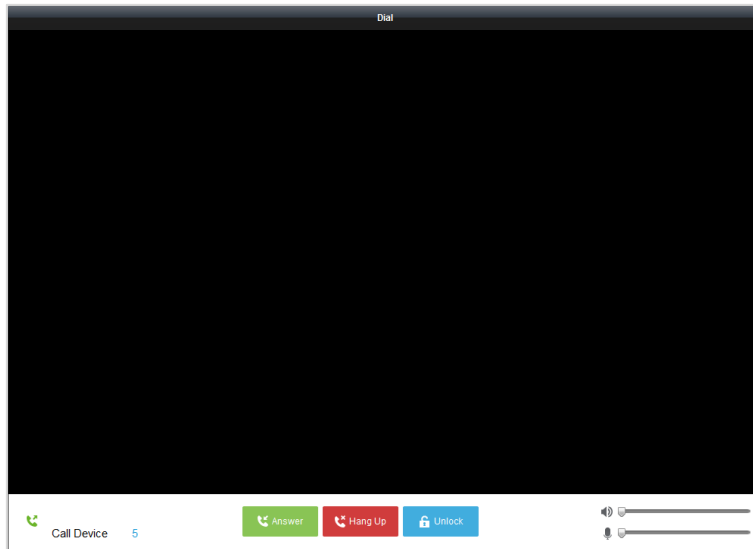
2. Click  to start video call with the indoor station.

Calling Resident from Community

1. Select the community from the groups on the left.

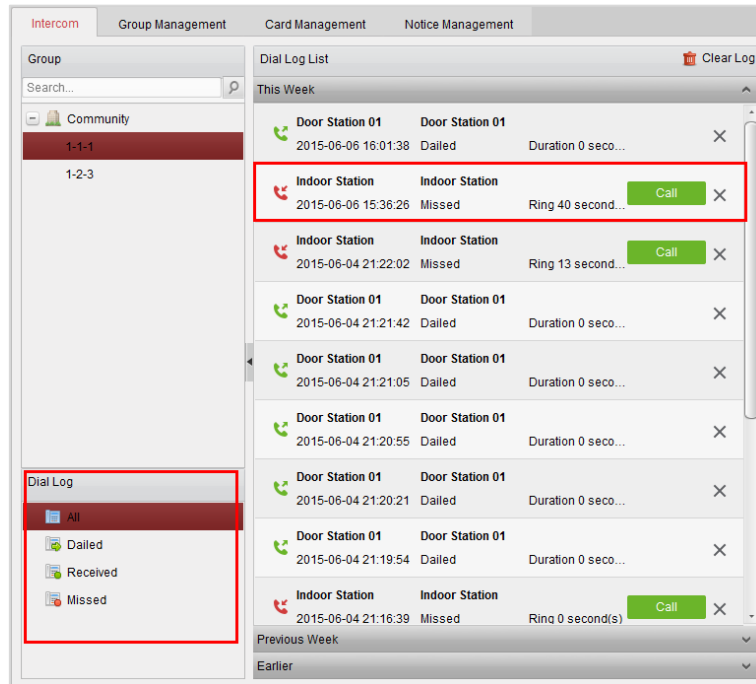


2. Double click the added resident from the resident list to call the resident.
3. The video call from client software with resident will be realized.



Calling Resident from Call Log

1. Click the dial log on the below and select the log type to enter the dial log interface.



2. Click the Call button from the call logs to start video call with the indoor station.

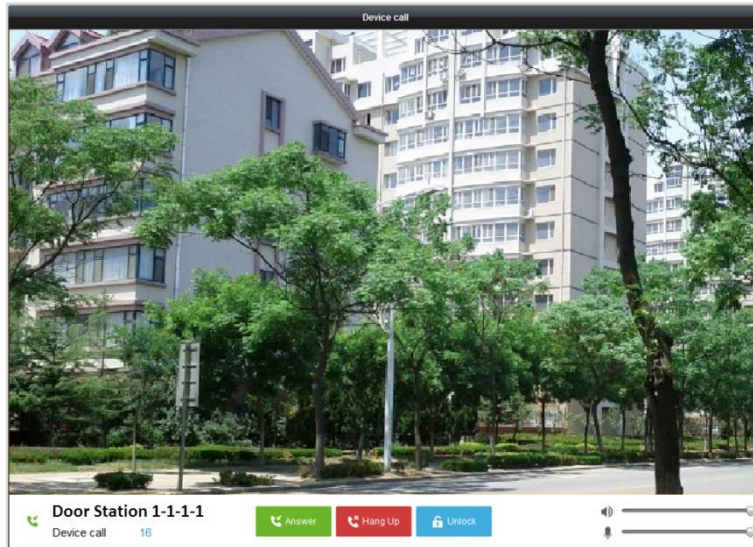
14.5.3 Video Intercom with Guarding Expert via Door Station

Purpose:

When the door station has been added to the client software, the video intercom with Guarding Expert via door station can be realized.

Steps:


1. Add the door station to the Guarding Expert client software.
2. Make sure the SIP Server IP of the door station is not configured (or abnormal).
3. Press **Calling Center Key** on the door station.

**Notes:**

- When the SIP server IP of door station is configured, press **Calling Center Key** of the door station to call the master station.
- You can press the **Unlock** key to remote unlock the door station via Guarding Expert while video call is started by the door station. Answering the video call is optional for remote unlocking the door station.

14.5.4 Call Log

Steps:

1. Enter **Control Panel-> Operation and Control-> Video Intercom-> Intercom tab** page.
2. Click to select the log type from the dial log and the selected dial logs will be listed in the dial log list.
3. Click **Call** button to start video call with the indoor station.
4. Click  **Clear Log** to clear all logs (optional).

14.6 Card Management

Purpose:

You can add unauthorized cards to the community and then you can assign the cards to the corresponding indoor station and outdoor stations.

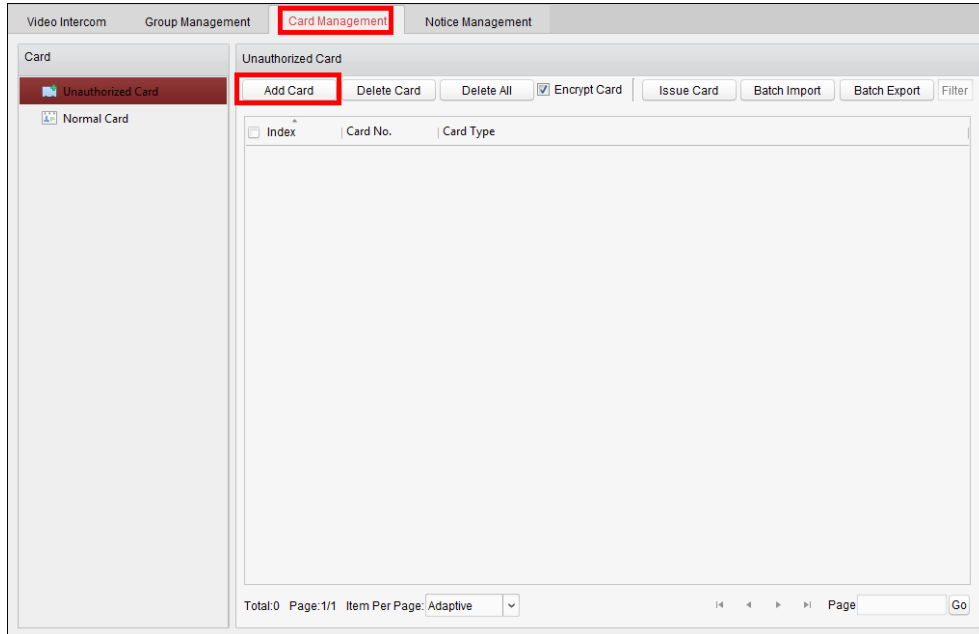
For example, if there are 3 residents living in Room 401, you can assign 3 cards to No. 401 Indoor Station.

For each indoor station, you can assign multiple cards, and you can assign these cards to the door station from same building.

14.6.1 Adding Card

Steps:

1. Select **Card Management** to enter the card management tab page.



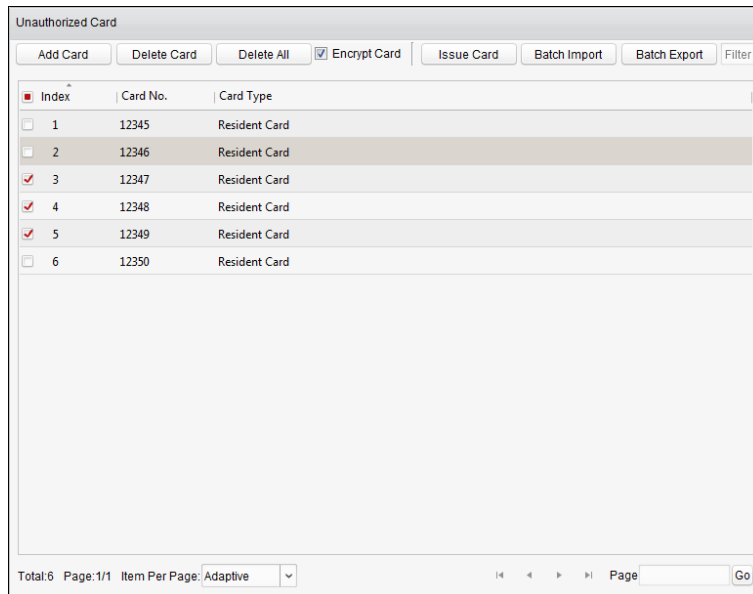
2. Select **Unauthorized Card** and click **Add Card** to add unauthorized cards.

3. Select adding mode to add cards in batch, add single card or with card reader. You can select card type as resident card or other card.

Note: To add cards with card reader, a card reader is required (purchased separately). For setting the card reader type, please refer to *Chapter 17.2.7 Video Intercom Settings*.

4. Input the start card No. and end card No., click **OK** to accomplish the adding.

The added cards information are listed in the unauthorized card interface, as shown in the figure below.



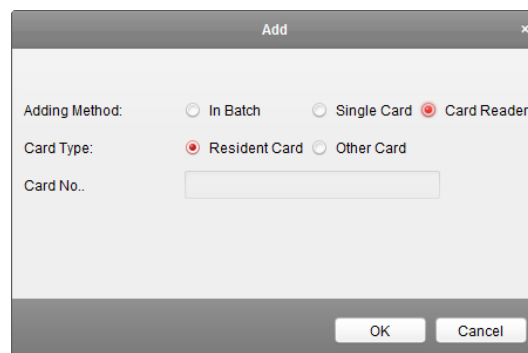
- To delete the unauthorized card, you can check to select the card and click **Delete Card** to delete the selected unauthorized card, or click **Delete All** to clear all the added unauthorized cards.

14.6.2 Encrypting Card

You can encrypt the card to improve the card security and prevent it from being copied.

Steps:

- Connect the card reader with the PC for reading the card information.
- Check the **Encrypt Card** checkbox and click **Add Card** button to add unauthorized cards.
- Select the adding method as **Card Reader** and select the card type to add.



- Get the card No. with the connected card reader.
- Click **OK** to add the card and the added card will be encrypted.

Note: Enabling the card encryption can improve the card security to prevent it from being copied. But at the same time, the default key of all the available sectors of the card is modified.

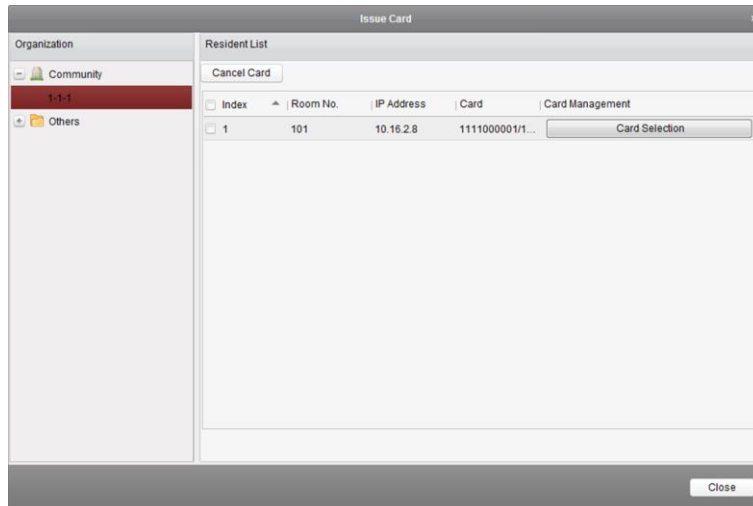
14.6.3 Issuing Card

Click **Issue Card** to enter the issue card interface.

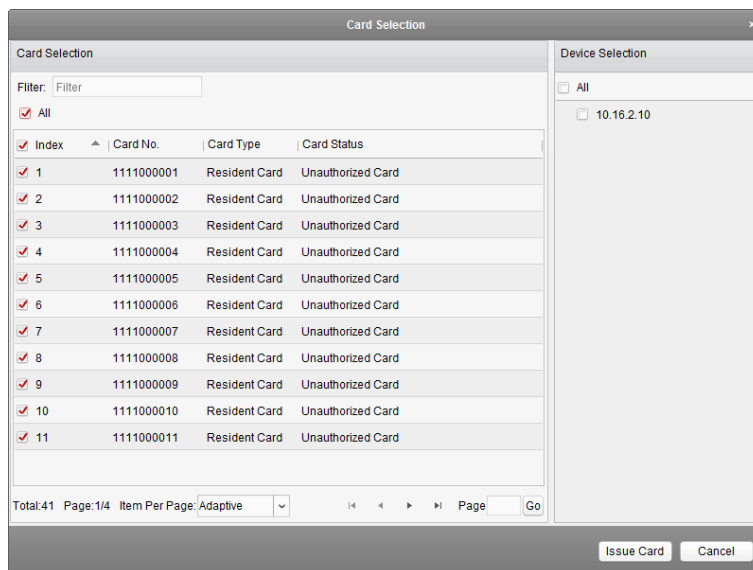
To Assign Resident Cards:

Steps:

1. Select **Community** from the group list and the indoor stations of the community will be listed in the resident list.



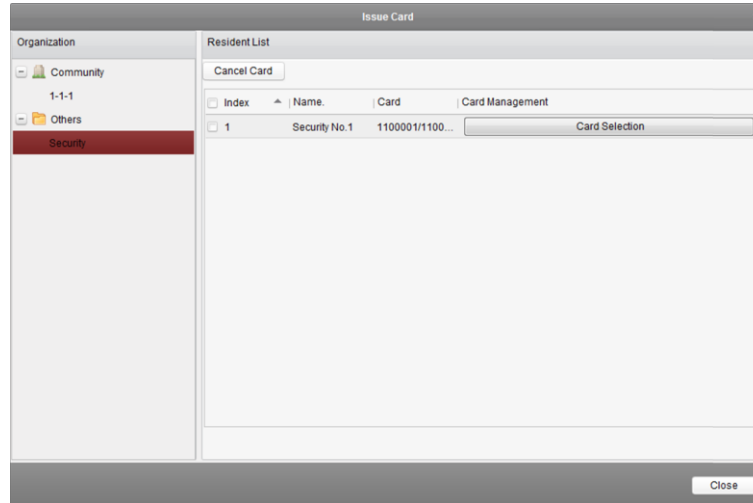
2. Click **Card Selection** to assign cards to the indoor station. You can assign multiple cards to one indoor station.
3. Check the checkboxes of the cards you need to assign to the indoor station, and check the checkbox of door stations, doorphones and outer door stations (only resident cards can be assigned to indoor stations).
4. Click **Issue Card** to complete the card issuing operation.



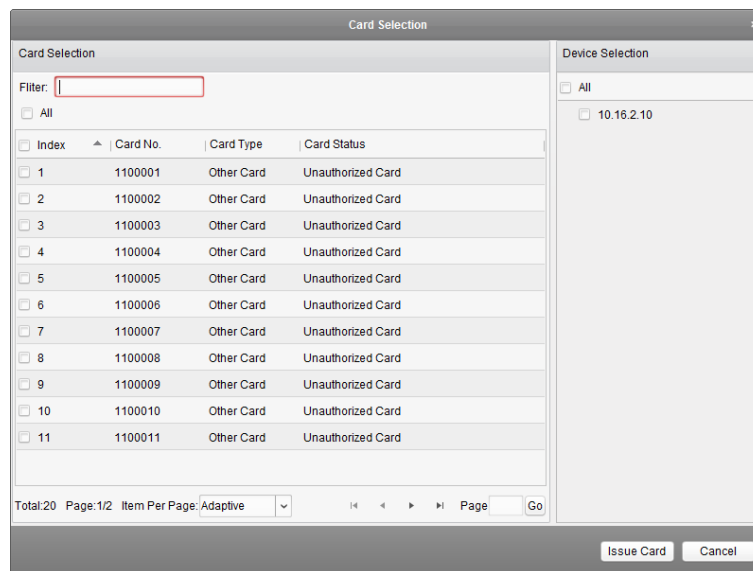
To Assign Other Cards:

Steps:

1. Select **Other** from the group list and the added persons of the community will be listed in the resident list.



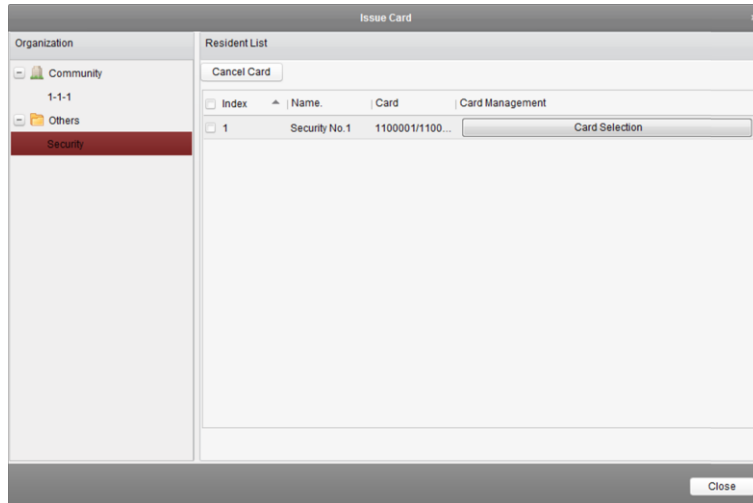
2. Click **Card Selection** to assign cards to the organization. You can assign multiple cards to one person.
3. Check the checkboxes of the cards you need to assign to the person, and check the checkbox of door stations, doorphones and outer door stations (only other cards can be assigned to person).
4. Click **Issue Card** to complete the card issuing operation.



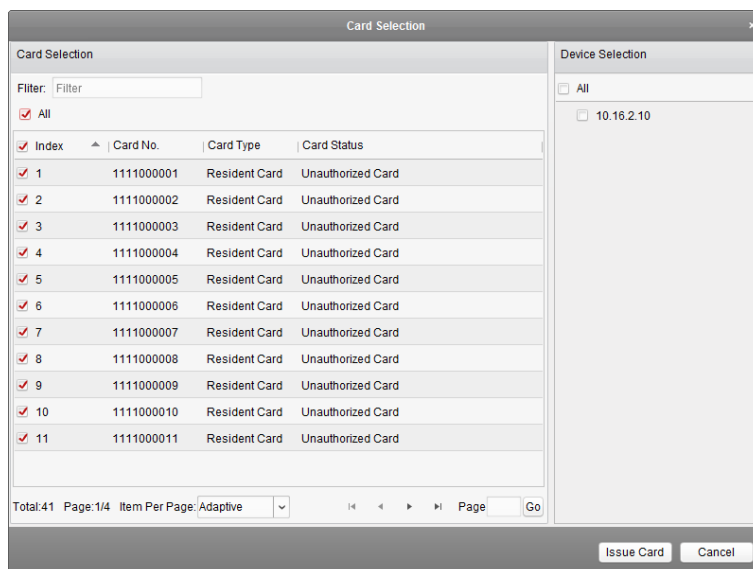
To Delete Cards:

Steps:

1. Click **Issur Card** to enter the card issuing interface.



2. Select the **Community** from groups to delete normal cards, and select **Other** from groups to delete other cards.
3. To cancel certain cards or single card, click the **Card Selection** to enter the card selection interface.



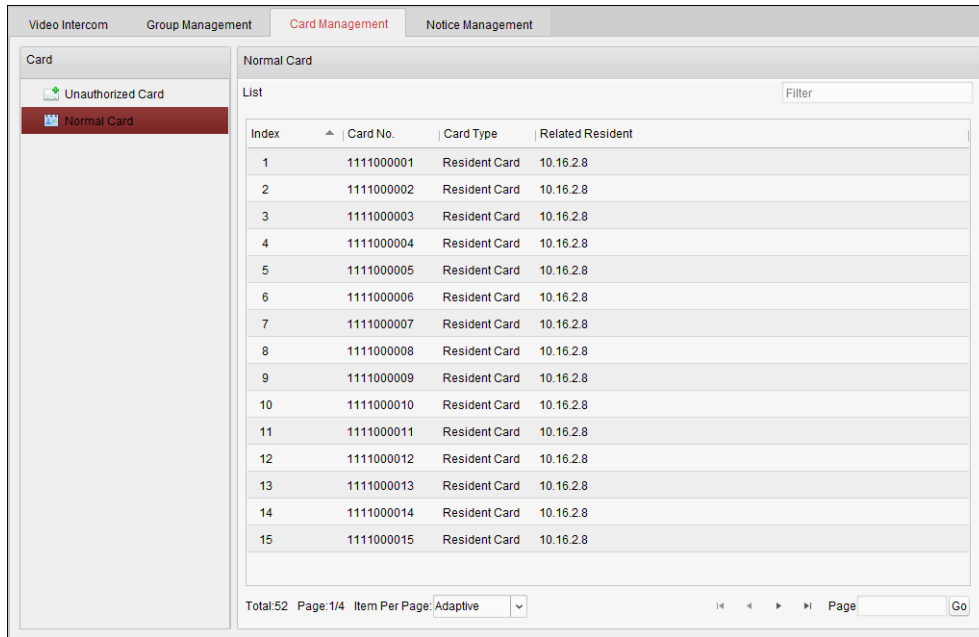
4. Cancel the checkbox(es) of assigned cards and check the checkbox(es) of door station(s) to cancel the card(s).
5. Click **Issue Card** to accomplish the operation.

Notes:

- You can cancel card from single or certain door stations by cancelling the checkboxes from the device list.
- To cancel all issued cards, check the checkboxes of Room No./name, and click **Cancel Card** to cancel all cards issued to the device. The card state will be reset to unauthorized card.

Normal Card

Click **Normal Card** to display normal card list. After issuing cards, the issued cards will be listed in the normal card list, as shown in the figure below.



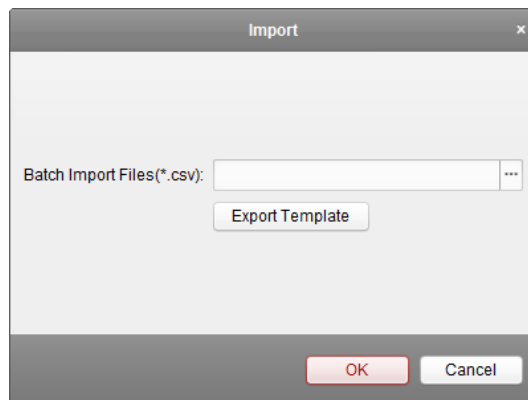
Notes:

- To assign the cards with card issuer, please connect the card reader DS-K1F100-D8 (purchased separately) to PC via USB interface. Open Guarding Expert and enter the directory of **Video Intercom->Card Management->Unauthorized Card->Add Card**. Swipe the unauthorized card in turn and the card No. will be read and added to the device automatically.
- After issuing each card via Guarding Expert, the device plays the voice prompt: Issuing card finished.


14.6.4 Batch Importing Unauthorized Cards

Steps:

1. Click **Batch Import** to enter the batch import interface, as shown in the figure below.



2. Click **Export Template** to export the template of the batch import file.
3. Fill in the template of the batch import file and save it.

4. Click  to select the batch import file and click **Open**.
5. Click **OK** to start importing the batch import file.

14.6.5 Batch Exporting Unauthorized Cards

Steps:

1. After adding unauthorized cards, and click **Batch Export**.
2. Select the saving file path and click **Save**.
3. After batch exporting the unauthorized cards, the excel will be generated in the saving directory.

14.7 Notice Management

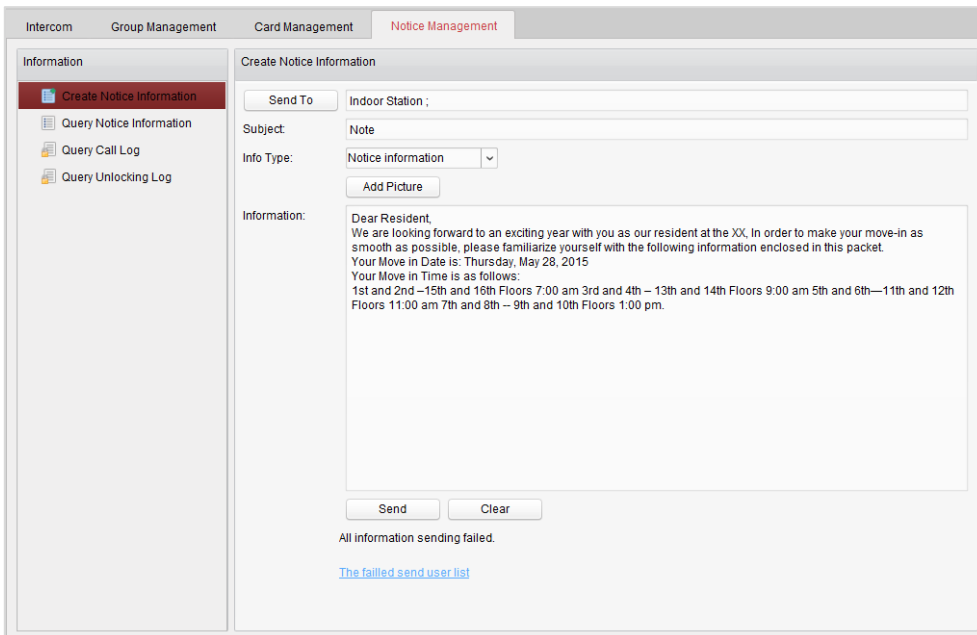
14.7.1 Create Notice Information

Purpose:

You can create notice information and send it to residents.

Steps:

1. Click **Create Notice Information** to enter the create notice information interface.

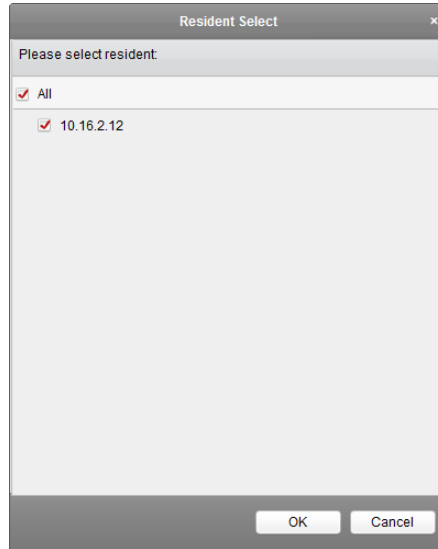


The screenshot displays the 'Create Notice Information' window. On the left, a sidebar lists options: 'Create Notice Information' (selected), 'Query Notice Information', 'Query Call Log', and 'Query Unlocking Log'. The main area contains the following fields and content:

- Send To:** Indoor Station ;
- Subject:** Note
- Info Type:** Notice information (dropdown menu)
- Information:**

Dear Resident,
 We are looking forward to an exciting year with you as our resident at the XX. In order to make your move-in as smooth as possible, please familiarize yourself with the following information enclosed in this packet.
 Your Move in Date is: Thursday, May 28, 2015
 Your Move in Time is as follows:
 1st and 2nd – 15th and 16th Floors 7:00 am 3rd and 4th – 13th and 14th Floors 9:00 am 5th and 6th—11th and 12th Floors 11:00 am 7th and 8th – 9th and 10th Floors 1:00 pm.
- Buttons:** Send, Clear
- Message:** All information sending failed. [The failed send user list](#)

2. Click **Send To** to enter the resident select interface.



3. Select the resident to send the notice information, and click **OK**.
4. Input the subject, select the info type and add the picture (optional).
5. Input the information and click **Send** to send the notice.

Notes:

- No more than 63 letters (including space) can be input in the field of subject.
- No more than 1023 letters (including space) can be input in the field of information.
- Only picture with size smaller than 512KB and with format of jpg. can be added to the notice, and no more than 6 pictures can be added to the same notice information.

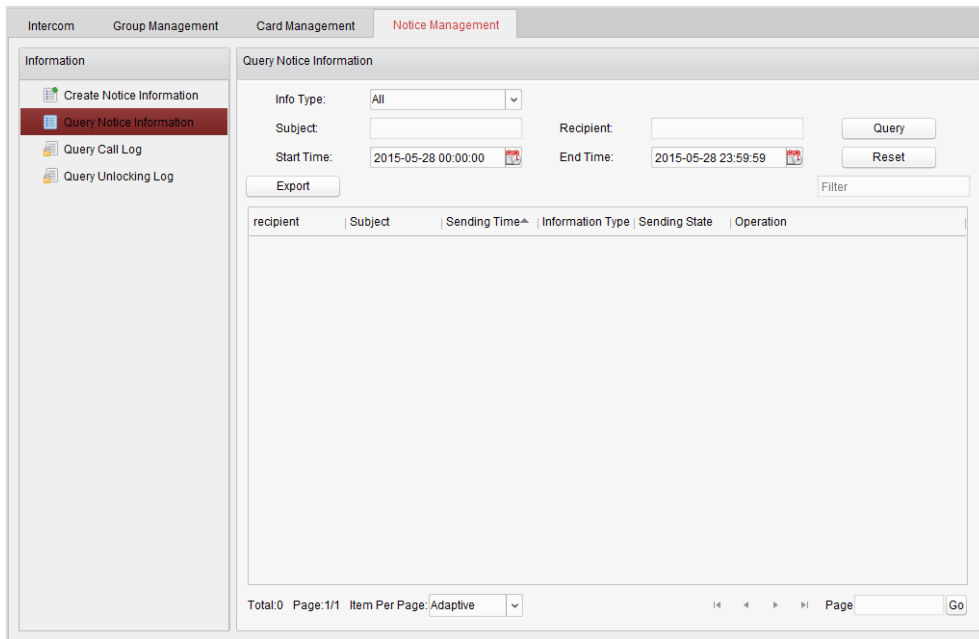
14.7.2 Query Notice Information


Purpose:

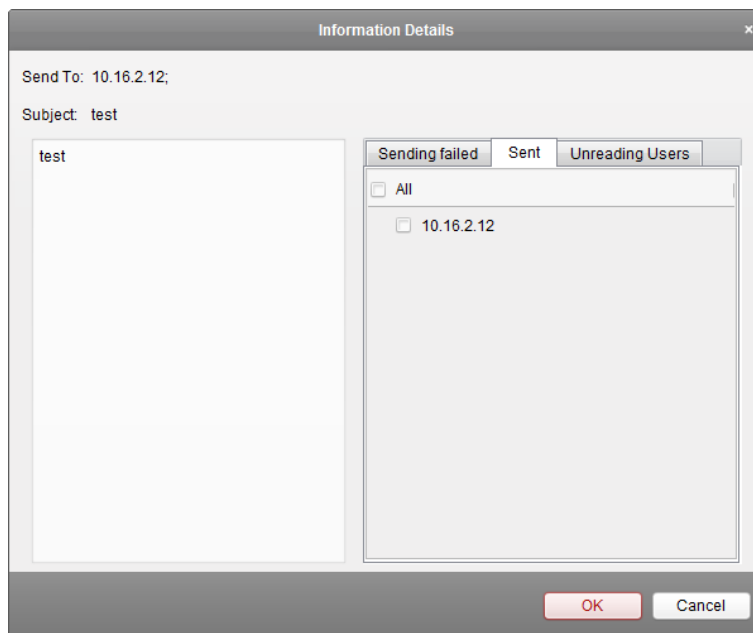
You can search the notice information send to residents.

Steps:

1. Select **Query Notice Information** to enter query notice information interface.
2. Select the info type, input the subject, recipient, and set the start time and end time.



3. Click **Query** to search the notice information.
4. Click  to view the detailed information of selected notice. You can resend the notice information failed to be received or unread by residents.



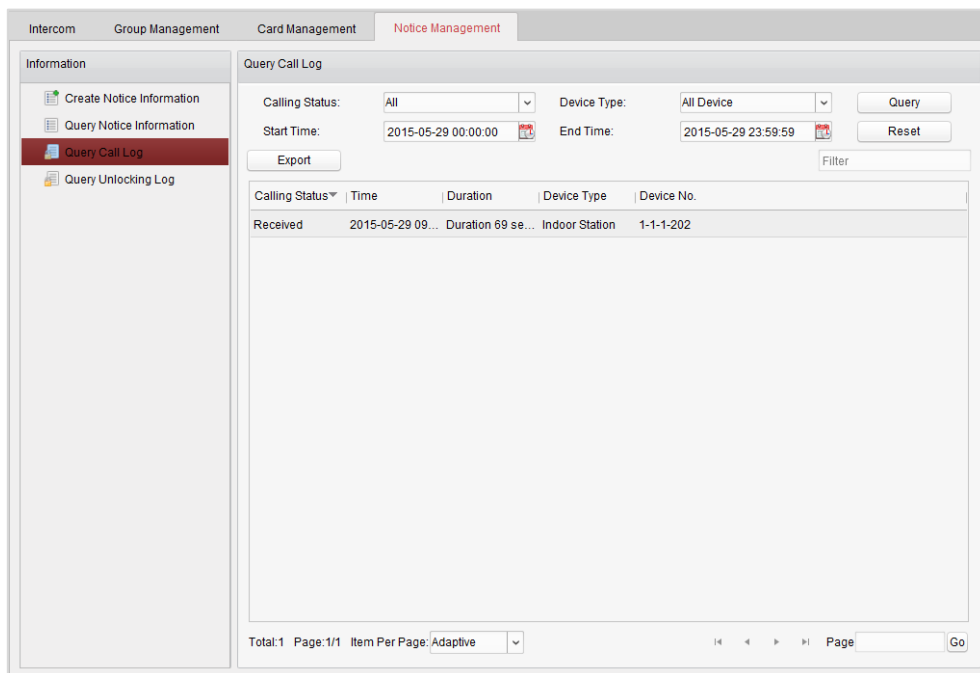
5. Click **Export** to export the notice information.

14.7.3 Query Call Logs

Steps:

1. Click **Query Call Logs** to enter query call logs interface.
2. Select the calling status, device type, and set the start time and end time.

3. Click **Query** to search the calling log.

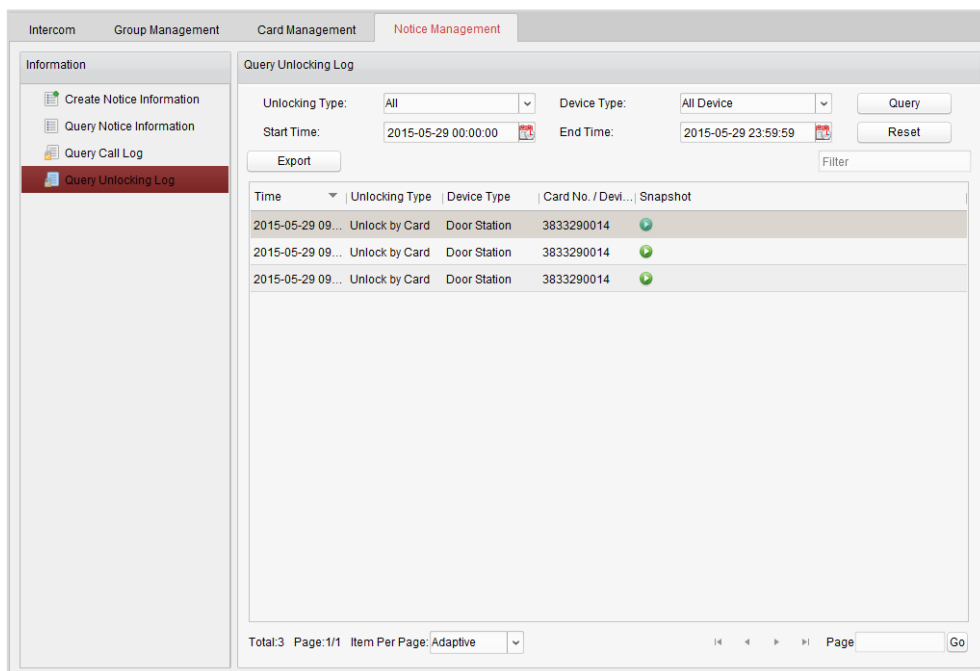


4. Click **Export** to export the calling logs.

14.7.4 Query Unlocking Log

Steps:

1. Click **Query Unlocking Logs** to enter query unlocking logs interface.
2. Select the unlocking type, device type, and set the start time and end time.



3. Click **Query** to search the unlocking log.
4. Click **Export** to export the unlocking logs.

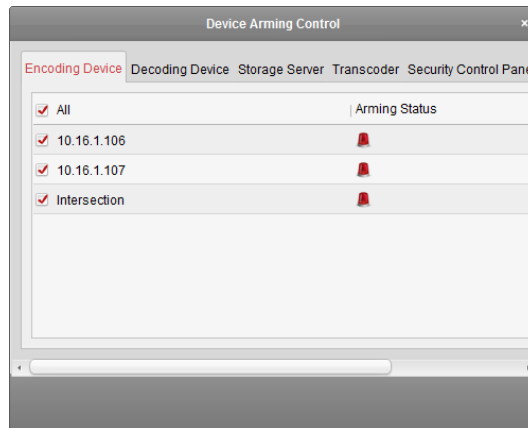
14.8 Device Arming Control

Steps:

1. Select **Tool->Device Arming Control** to enter the device arming control interface.



2. Set the arming status of the device as armed, and the alarm information will be auto uploaded to the client software when alarm occurs.



Inf...	Alarm Time	Alarm Source	Alarm Details	Alarm Content	Live View	Send E...	Video ...	N
2	2015-05-29 14:13:16	Encoding Device:10.7.33.228	Close Door Failed Alarm	Close Door Failed Alarm				
1	2015-05-29 14:12:57	Encoding Device:10.7.33.228...	Camera: Camera1_10.7.33.228 Trigger Came...	Video Intercom Event				

Note: After adding the device to the client software, it will be armed automatically.

Chapter 15 Access Control

Purpose:

The Guarding Expert Client Software can communicate with the Access Control Client, and it provides further functions after importing the devices added in the Access Control Client to the Guarding Expert Client Software, including access control event configuration, displaying access control point on E-map, alarm/event linkage, and so on.

- For importing the access control data from Access Control Client to Guarding Expert Client Software, refer to *Chapter 15.1 Importing from Access Control Client*.
- For managing the imported access control device, refer to *Chapter 15.2 Access Control Device Management*.
- For applications of the imported video access control terminal, refer to *Chapter 15.3 Video Access Control Terminal*.
- For setting the access control event, refer to *Chapter 15.4 Access Control Event Management*.
- For managing the access control points on E-map, please refer to *Chapter 15.5 Displaying Access Control Point on E-map*.

15.1 Importing from Access Control Client

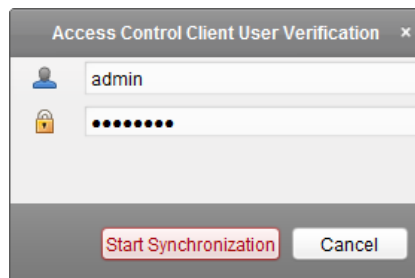
You can import the access control data (including devices which have been added to the Access Control Client, access control points, alarm inputs, and cameras of access control terminal) to the Guarding Expert client software.

Before you start:

Both Access Control Client and Guarding Expert Client Software should be installed on the same PC, and the Access Control Client should keep running when importing the access control devices from Access Control Client.

Steps:

1. Click **System -> Import from Access Control Client** in the menu to open the following dialog box.



2. Input the super user name and password of Access Control Client.
3. Click **Start Synchronization** to start importing the access control devices from the Access Control Client.
4. After importing, all the access control devices (including access controller, video access control terminal, and other access control devices) added in the Access Control Client will be added to the Guarding Expert Client Software. The access control point, card reader, and alarm input of

the devices will be imported to the Guarding Expert Client Software as well.

15.2 Access Control Device Management

Purpose:

After importing the access control devices, you can organize them into groups for a convenient management. You can also remove the imported Video Access Control Terminal from the Control Software, and if needed, you can add the terminal back to the software again.

15.2.1 Group Management for Access Control Device

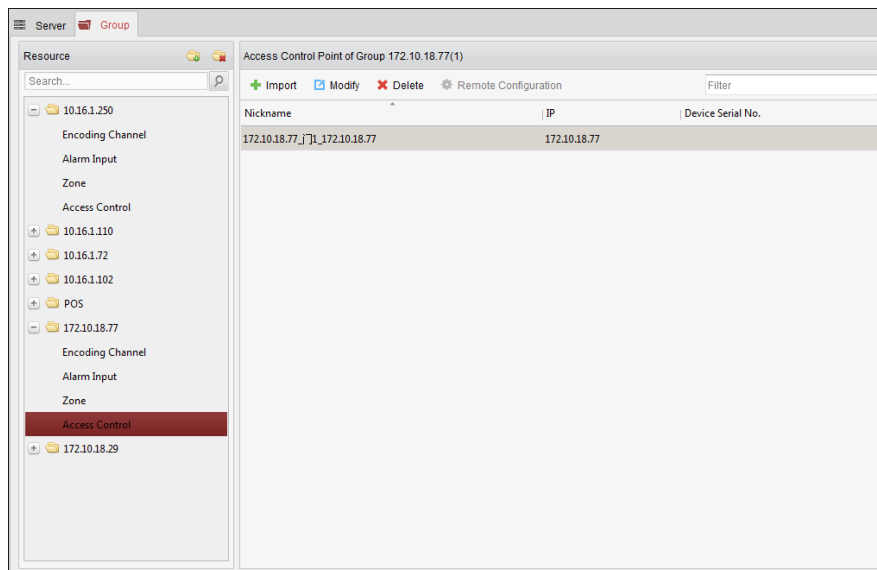
Purpose:


After importing the access control device, you are required to organize it into group for a convenient management. For managing the video access control terminal, you can enter **Device Management -> Server -> Encoding Device/Door Station** to manage the terminal. For details, refer to *Chapter 3.2 Group Management*.

Perform the following steps to create the group for the access control device:

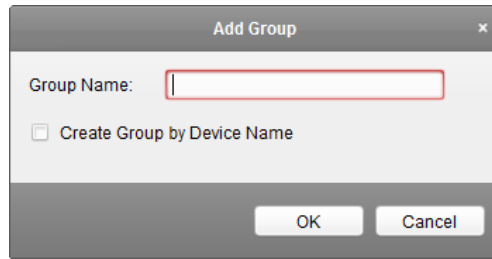
Steps:

1. Open the Device Management page.
2. Click the **Group** tab to enter the Group Management interface.



4. Perform the following steps to add the group.
 - 1) Click  to open the Add Group dialog box.
 - 2) Input a group name as you want.
 - 3) Click **OK** to add the new group to the group list.

You can also check the checkbox **Create Group by Device Name** to create the new group by the name of the selected device.

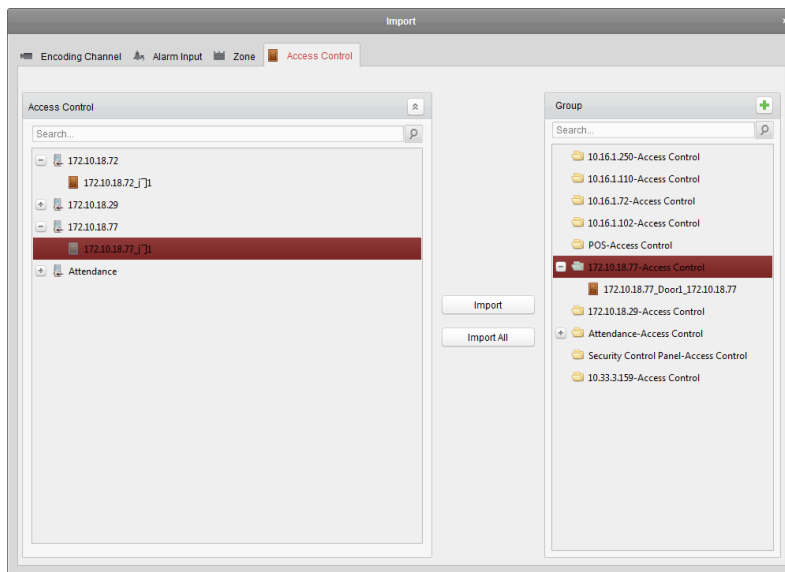



5. Perform the following steps to import the access control points to the group:
 - 1) Click **Import** on Group Management interface, and then click the **Access Control** tab to open the Import Access Control page.

Notes:

- You can also select **Alarm Input** tab and import the alarm inputs to group.
 - For the Video Access Control Terminal, you can add the cameras as encoding channel to the group.
- 2) Select the names of the access control points in the list.
 - 3) Select a group from the group list.
 - 4) Click **Import** to import the selected access control points to the group.

You can also click **Import All** to import all the access control points to a selected group.



6. After importing the access control points to the group, you can click , or double-click the group/access control point name to modify it.


For other detailed operations, please refer to *Chapter 3.2 Group Management*.

15.2.2 Deleting Video Access Control Terminal

Purpose:

After importing the access control devices, the Video Access Control Terminal will be displayed in the Encoding Device/Door Station of Device Management interface. You can remove it from the device list.


Steps:

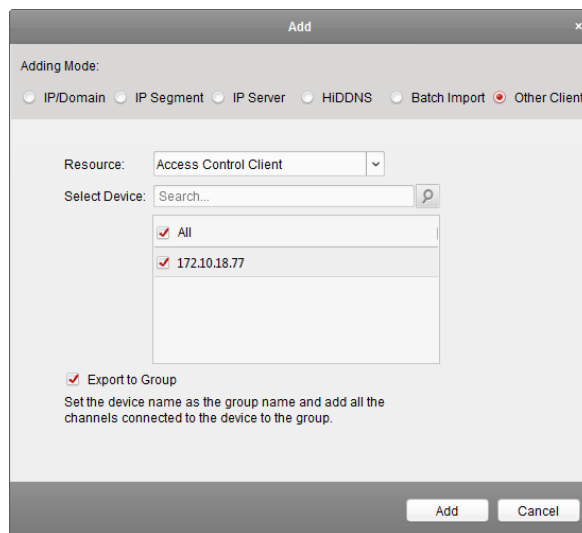
1. Click the  icon on the control panel,
or click **Tools->Device Management** to open the Device Management page.
2. Click the **Server** tab.
3. Click **Encoding Device/Door Station** to enter Encoding Device/Door Station Adding interface.
The imported Video Access Control Terminal will be displayed in the list.
4. Select the terminal and click **Delete** button to remove the terminal from the client software.

15.2.3 Adding Video Access Control Terminal

After deleting the terminal, if you want to add it to the client software again, perform the following steps.

Steps:

1. Click the  icon on the control panel,
or click **Tools->Device Management** to open the Device Management page.
 2. Click the **Server** tab.
 3. Click **Encoding Device/Door Station** to enter Encoding Device/Door Station Adding interface.
 4. Click **Add Device** to open the device adding dialog box.
 5. Select **Other Client** as the adding mode.
 6. Select the resource as Access Control Client.
Check to select the terminal from the list. You can input the keyword in the **Search** field to filter the device.
- Note:** Only the removed Video Access Control Terminal which is imported from the Access Control Client will be displayed.



6. Optionally, you can check the checkbox **Export to Group** to create a group by the device name. All the cameras and alarm inputs of the device will be exported to the corresponding group by default. The access control point will not be exported.
7. Click **Add** to add the selected terminal to the client software again.

15.3 Video Access Control Terminal


Purpose:

After importing the access control data from the Access Control Client, you can view and manage the imported Video Access Control Terminal in the Device Management. You can view the live video of the terminal, receive the video intercom from the terminal, and start two-way audio with the terminal.

15.3.1 Live View

You can view the live video of the imported Video Access Control Terminal.

Steps:

1. Open the Main View page.
2. Optionally, click the  icon in live view toolbar to select the window division mode for live view.
3. Click-and-drag the camera of the terminal to the display window, or double-click the camera name after selecting the display window to start the live view.

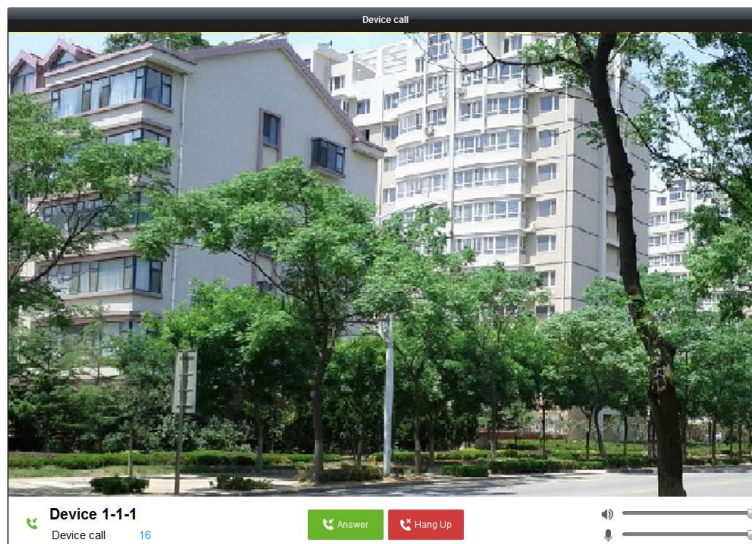
Note: You can click-and-drag the video of the camera in live view to another display window if needed.

15.3.2 Video Intercom with Guarding Expert

Purpose:

When the Video Access Control Terminal has been imported to the client software, the video intercom with Guarding Expert can be realized.

Press **Center** on the main interface of the Video Access Control Terminal.



The above window will pop up on the client software. You can click **Answer** to answer the call and start the video intercom. Or you can click **Hang Up** to cancel the video intercom.

15.4 Access Control Event Configuration


Purpose:

For the imported access control device, you can configure its access control event linkage including client linkage and triggered cameras.

Note: To receive the alarm/event of the imported access control device by the Guarding Expert Client Software, please keep the Access Control Client running on the same PC.

Steps:



1. Click the  icon on the control panel,
2. or click **Tool->Event Management** to open the Event Management page.
3. Click the **Access Control Event** tab.
4. The access control devices imported from Access Control Client will be displayed in the Access Control Device panel on the left.

Select the access control device to be configured and select the event type to set the linkage.

Note: You can select to set the event configuration of the access controller/terminal, its access control point, alarm input, or card reader.

5. Check the checkbox **Enable** to enable the function of the selected event.
6. Select the arming schedule template from the drop-down list.

All-day Template: For all-day continuous arming.

Weekday Template: For working-hours continuous arming from 8:00 AM to 8:00 PM.

Template 01 to 09: Fixed templates for special schedules. You can edit the templates if needed.

Custom: Can be customized as desired.

If you need to edit or customize the template, see *Configuring Arming Schedule Template* in *Chapter 4.1 Configuring Motion Detection Alarm*.

7. Select the triggered camera. The image or video from the triggered camera will pop up when the selected event occurs.

To capture the picture of the triggered camera when the selected event occurs, you can also set the capture schedule and the storage in Storage Schedule. For details, refer to *Chapter 5.1 Remote Storage*.

8. Check the checkboxes to activate the linkage actions. For details, see *Table 15.1 Linkage Actions for Access Control Event*.
9. Click **Save** to save the settings.

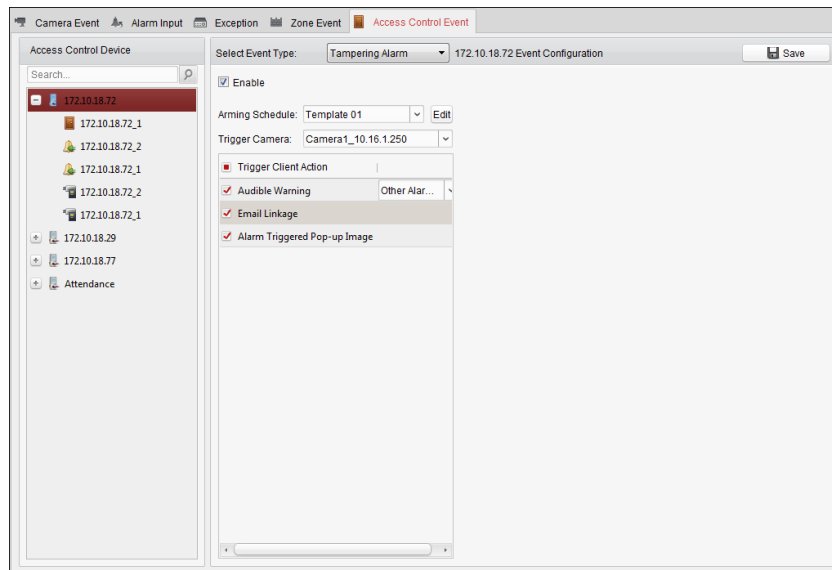


Table 15. 1 Linkage Actions for Access Control Event

Linkage Actions	Descriptions
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to <i>Chapter 17.2.7 Alarm Sound Settings</i> .
Email Linkage	Send an email notification of the alarm information to one or more receivers.
Alarm on E-map	Display the alarm information on the E-map. Note: This linkage is only available to access control point and alarm input.
Alarm Triggered Pop-up Image	The image with alarm information pops up when alarm is triggered.

15.5 Displaying Access Control Point on E-map




Purpose:

You can add the access control point on the E-map, and when the alarm of the access control point is triggered, you can view the alarm notification on the E-map, check the alarm details, and control the door.

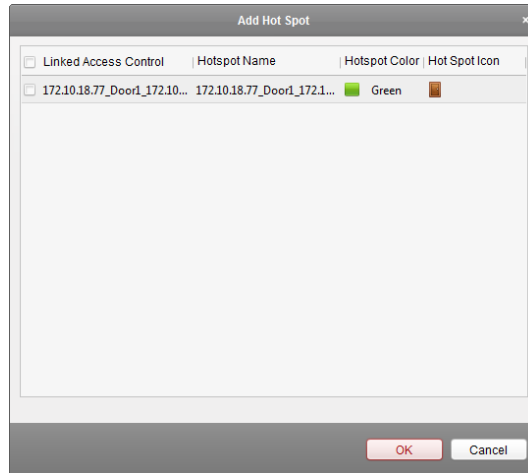
Note: For detailed operations of E-map, please refer to *Chapter 7 E-map Management*.

Adding Access Control Point as Hot Spots

Steps:

1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Click the icon  in the toolbar to open the Add Hot Spot dialog box.
3. Check the checkboxes to select the access control point to be added.
4. Optionally, you can edit hot spot name, select the name color and select the hot spot icon by double-clicking the corresponding field.
5. Click **OK** to save the settings. The door icons are added on the map as hot spots and the icons of added access control points change from  to  in the group list. You can click-and-drag the access control point icons to move the hot spots to the desired locations.

You can also click-and-drag the access control point icons from the group list to the map directly to add the hot spots.




Note: For Video Access Control Terminal, you can also add its camera to the E-map to view the live view of the camera.


Modifying Hot Spots

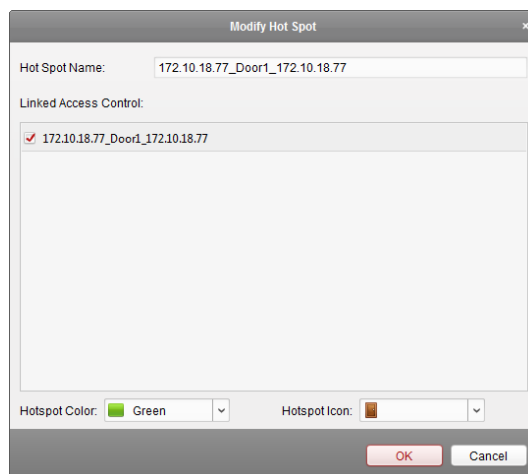
Purpose:

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

Steps:

1. Click the **Edit Map** button in the E-map toolbar to enter the map editing mode.
2. Select the hot spot icon on the map and then click  in the toolbar, right-click the hot spot icon and select **Modify**, or double-click the hot spot icon on the map to open the Modify Hot Spot dialog box.
3. You can edit the hot spot name in the text field and select the color, the icon and the linked access control point.
4. Click **OK** to save the new settings.

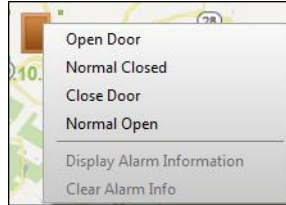
To delete the hot spot, select the hot spot icon and click  in the toolbar, or right-click the hot spot icon and select **Delete**.




Previewing Hot Spots


Steps:

1. Click the **Map Preview** button in the E-map toolbar to enter the map preview mode.
2. To control the access control point, you can right click the access control point icon on the map, and click **Open Door**, **Normal Closed**, **Close Door**, **Normal Open** to control the door.



3. If there is any alarm triggered, an icon  will appear and twinkle near the hot spot. Click the alarm icon, or you can right click the door icon and select **Display Alarm Information**, to check the alarm information, including alarm type and triggering time.

Note: To display the alarm information on the map, the Alarm on E-map functionality needs to be set as the alarm linkage action. For details, refer to *Chapter 15.4 Access Control Event Configuration*.


4. To clear the alarm information displayed on the map, click  on the toolbar, or right click the access control point icon and select **Clear Alarm Information** to clear the alarms of the selected zone.

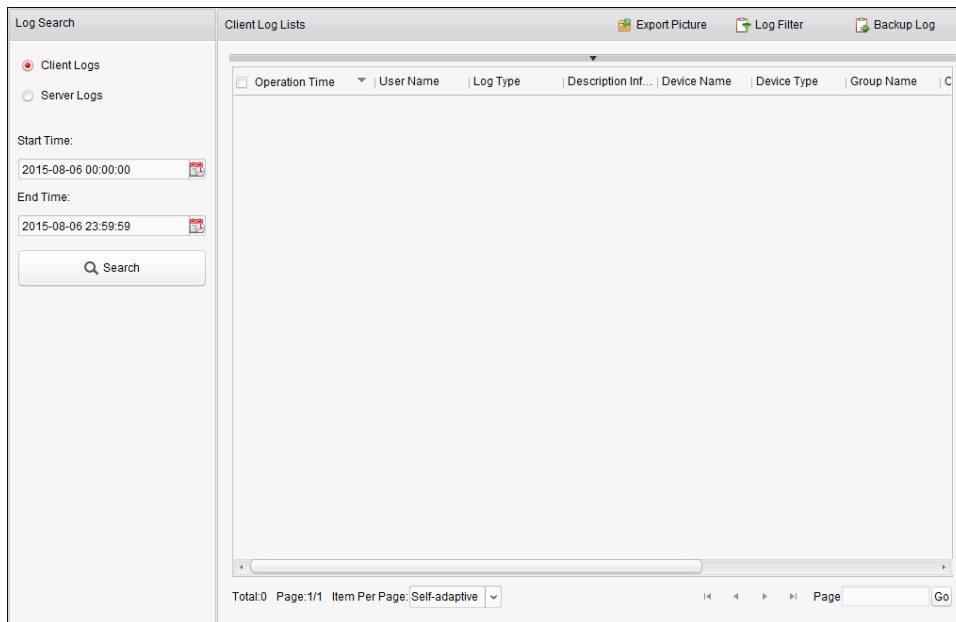
Note: To display the alarm information on the map, the Alarm on E-map functionality needs to be set as the alarm linkage action. For details, refer to *Chapter 6 Event Management*.

Chapter 16 Log Management

Purpose:


The log files of the client software are stored on the local PC and can be searched for checking. 2 types of log files are provided: client logs and server logs. The client logs refer to the log files of the client and are stored on the local PC; the server logs refer to the log files of the connected devices and are stored on the local device.

Click the  icon on the control panel to open the Log Search page.



Searching Log Files

Steps:

1. Open the Log Search page.
2. Select the log type. If **Server Logs** is selected, then click to specify the device for search.
3. Click the icon  to specify the start time and end time.
4. 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.

Note: Please narrow the time range or filter the log type for search if there are too many log files.


Operation Time	Major Type	Minor Type	Remote Operator, Local Operator	Remote HOST ...	Camera Name
2014-06-02 14:38:49	Operation	Remote Login	admin	10.28.7.20	
2014-06-02 14:38:49	Operation	Remote Login	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:47	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:46	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:46	Operation	Remote Logout	admin	10.28.7.20	
2014-06-02 14:38:46	Operation	Remote Logout	admin	10.28.7.20	

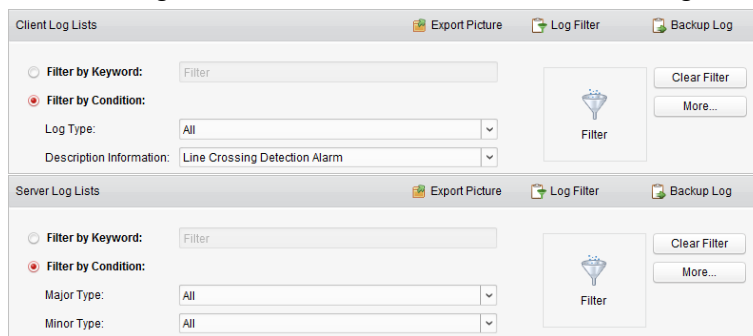
Filtering Log Files

Purpose:

After searched out successfully, the log files can be filtered by the keyword or condition, and thus you can find the logs as you want.

Steps:

1. Click **Log Filter** or the icon  on the Log Search page to expand the Log Filter panel.
2. Select **Filter by Keyword**, and then input keyword for filtering in the text field.
Or select **Filter by Condition**, and then specify log type in the drop-down list.
3. Optionally, you can click **More...** to filter the log files more accurately.
4. Click **Filter** to start filtering. You can click **Clear Filter** to cancel the filtering.




Backing up Log Files

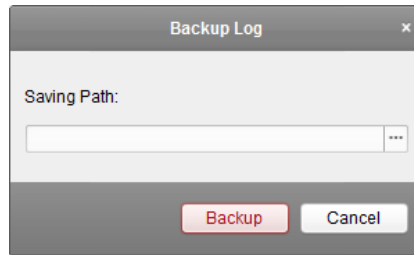
Purpose:

The log files, including the client logs and server logs, can be exported for backup.

Steps:

1. Set the condition and search the log file.
2. Click **Backup Log** to open the Backup Log dialog box.
3. Click the icon , select a local saving path and set a name for the file.
4. Click **Backup** to export the selected log file for backup.

You can click **File**→**Open Log File** to check the information of the backup log files on local PC.




Exporting Picture

Purpose:

The alarm pictures, which are stored in the storage server, can be exported to the local PC.

Steps:


1. Select the alarm pictures.
2. Click **Export Picture** to open the Export Picture dialog box.
3. Click the icon , select a local saving path and set a name for the file.
4. Click **Export** to export the selected pictures.

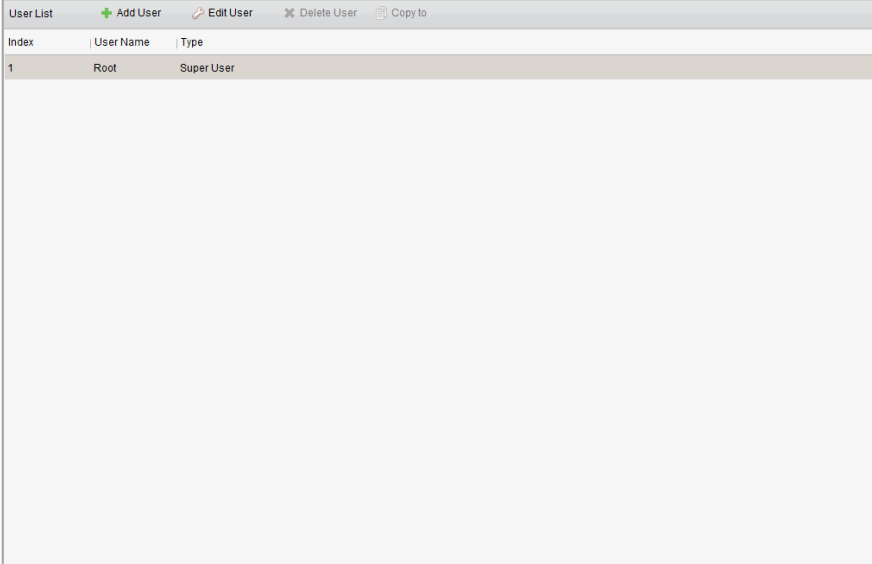
Chapter 17 Account Management and System Configuration

17.1 Account Management

Purpose:

Multiple user accounts can be added to the client software, and you are allowed to assign different permissions for different users if needed.

Click the  icon on the control panel, or click **Tool->Account Management** to open the Account Management page.



Index	User Name	Type
1	Root	Super User

Note: The user account you registered to log into the software is set as the super user.

Adding the User

Steps:

1. Open the Account Management page.
2. Click **Add User** to open the Add User dialog box.
3. Select the user type from the drop-down list. 2 types of user accounts are selectable:
 - Administrator:** The administrator account has all permissions by default, and can modify the passwords and permissions of all operators and its own account.
 - Operator:** The operator account has no permission by default and you can assign the permissions manually. An operator can only modify the password of its own account.
4. Input the user name, password and confirm password as desired. The software will judge password strength automatically, and we highly recommend you to use a strong password to ensure your data security.
5. Check the checkboxes to assign the permissions for the created user. Optionally, you can select a user in the **Copy from** drop-down list, to copy the permissions of the selected user.

6. Optionally, you can click **Default Permission** to restore the default permissions of this user.
7. Click **Save** to save the settings.



- ◆ A user name cannot contain any of the following characters: / \ : * ? " < > |. And the length of the password cannot be less than 6 characters.
- ◆ For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product.
- ◆ Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

Note: Up to 50 user accounts can be added for the client software.

Managing the User

Purpose:

After created successfully, the user account is added to the user list on the Account Management page. You can edit or delete the information of the user accounts.

To edit the information of the user, select the user from the list, and click **Edit User**.

To delete the information of the user, select the user from the list, and click **Delete User**.


For super and administrator user, you can click **Copy to** to copy the permissions to other user(s).

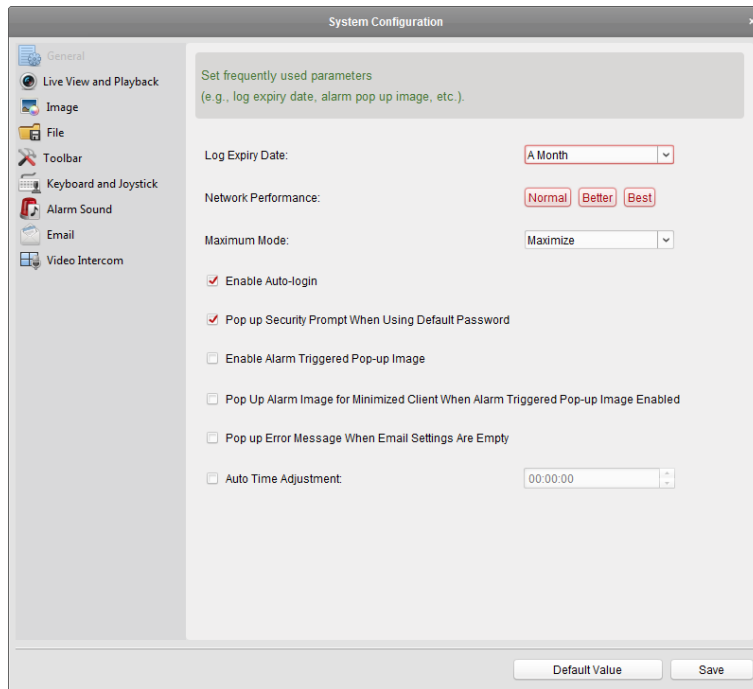
Note: The super user cannot be deleted and only the password of the super user can be edited.

17.2 System Configuration

Purpose:

The general parameters, live view and playback parameters, image parameters, file saving paths, icon of live view and playback toolbar settings, keyboard and joystick shortcuts, alarm sounds, email settings and video intercom parameters can be configured.

Click the  icon on the control panel,
or click **Tool->System Configuration** to open the System Configuration page.



Note: You can click **Default Value** to restore the defaults of all the system configurations.

17.2.1 General Settings



Purpose:

The frequently-used parameters, including the log expired time, network performance, etc., can be set.

Steps:

1. Open the System Configuration page.
2. Click the **General** tab to enter the General Settings interface.
3. Configure the general parameters. For details, see *Table 17.1 General Parameters*.
4. Click **Save** to save the settings.

Table 17. 1 General Parameters

Parameters	Descriptions
Log Expiry Date	The time for keeping the log files, once exceeded, the files will be deleted.
Network Performance	The current network conditions. It can be set as Normal, Better or Best.
Maximum Mode	Select Maximize or Full Screen as the maximum mode. For selecting Maximize, the software will be maximized and the taskbar will display. For selecting Full Screen, the software will be displayed in full-screen mode.
Enable Auto-login	Log into the client software automatically.
Pop up Security Prompt When Using Default Password	If the default password of the added device has not been changed, the prompt will pop up for notification.
Enable Alarm Triggered Pop-up Image	Enable the image pop-up when alarms occur. You can also click  or  to enable/disable the image pop-up in Alarm Event interface.
Pop Up Alarm Image for Minimized Client When Alarm Triggered Pop-up Image Enabled	Enable the alarm image popping up when the client is minimized if the Alarm Triggered Pop-up Image function is enabled. For enabling the Alarm Triggered Pop-up Image, refer to <i>Chapter 6 Event Management</i> .
Pop Up Error Message When Email Settings Are Empty	Set whether the client prompts the error message if the email is not configured. For setting the email, refer to <i>Chapter 17.2.8 Email Settings</i> .
Auto Time Adjustment	Adjust the time automatically at a specified time point.

17.2.2 Live View and Playback Settings

Purpose:

The parameters for live view and playback, including picture format, pre-play duration, etc., can be set.

Steps:

1. Open the System Configuration page.

2. Click the **Live View and Playback** tab to enter the Live View and Playback Parameter Settings interface.
3. Configure the live view and playback parameters. For details, see *Table 17.2 Live View and Playback Parameters*.
4. Click **Save** to save the settings.

Set the parameters of live view and playback
(e.g., picture format, merging mode of downloaded video files, etc.)

Picture Format: JPEG ▼

Merge Downloaded Video Files: Not Merged ▼

Search Video File Stored in: Storage Server and D... ▼

Pre-Play for: 30s ▼

Enable Screen Toolbar Display

Prioritize Playback of Video Files on Storage Server

Resume Latest Live View Status After Restart

Disconnect Background Videos in Single Live View

Enable Wheel for Zoom

Skip Unconcerned Video during VCA Playback

Table 17. 2 Live View and Playback Parameters

Parameters	Descriptions
Picture Format	Set the file format for the captured pictures during live view or playback.
Merge Downloaded Video Files	San set the maximum size of merged video file for downloading the video file by date.
Search Video Files Stored in	Set to 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.
Enable Screen Toolbar Display	Show the toolbar on each display window in live view or playback.
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	Enable to 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	Enable to skip the unconcerned video during VCA playback and the unconcerned video won't be played during VCA playback.

17.2.3 Image Settings

Purpose:

The image parameters of the software can be configured, such as view scale, play performance, etc.

Steps:

1. Open the System Configuration page.
2. Click the **Image** tab to enter the Image Settings interface.
3. Configure the image parameters. For details, see *Table 17.3 Image Parameters*.
4. Click **Save** to save the settings.

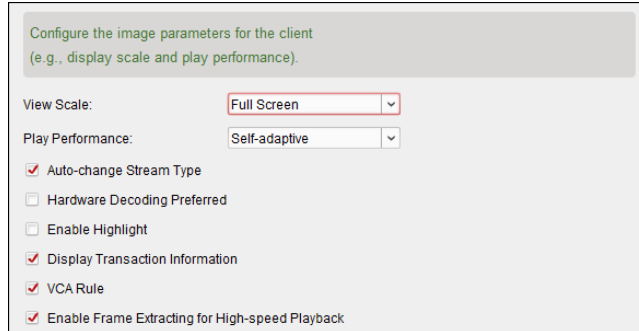


Table 17. 3 Image Parameters


Parameters	Descriptions
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.
Play Performance	The play performance of the live video. It can be set as Shortest Delay or Self-adaptive.
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.
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 in the live view.
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.

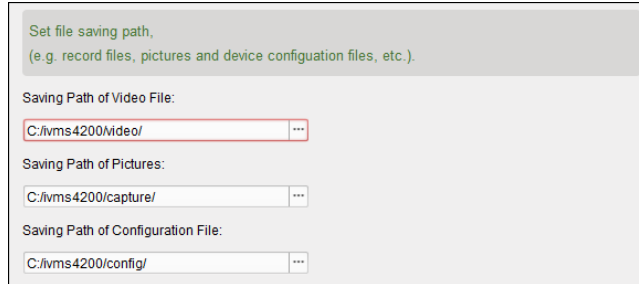
17.2.4 File Saving Path Settings

Purpose:

The video files from manual recording, the captured pictures and the system configuration files are stored on the local PC. The saving paths of these files can be set.

Steps:

1. Open the System Configuration page.
2. Click the **File** tab to enter the File Saving Path Settings interface.
3. Click the icon  and select a local path for the files.
4. Click **Save** to save the settings.



17.2.5 Toolbar Settings









Purpose:

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.





Steps:

1. Open the System Configuration page.
2. Click the **Toolbar** tab to enter the Toolbar Settings interface.
3. Click to select the icon to display on the toolbar. You can drag the icon to set the icon order when displaying on the toolbar.

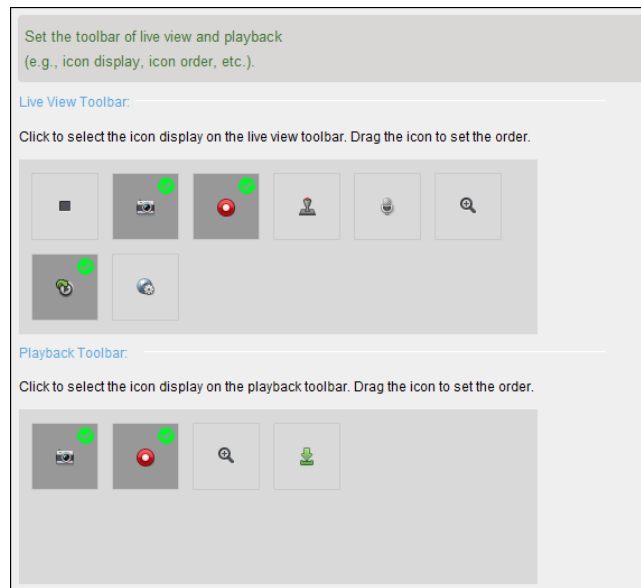
Icons on Live View Toolbar

-  **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.

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. You can select to download by file or by date.

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



17.2.6 Keyboard and Joystick Shortcuts Settings

Purpose:

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.

Steps:

1. For keyboard: Select the COM port from the drop-down list if the keyboard is connected to the PC installed with the client.
2. For keyboard and joystick:
 - 1) Select a certain function from the list.
 - 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.
3. Click **Save** to save the settings.



17.2.7 Alarm Sound Settings

Purpose:

When the alarm, such as motion detection alarm, video exception alarm, etc., is triggered, the client can be set to give an audible warning and the sound of the audible warning can be configured.

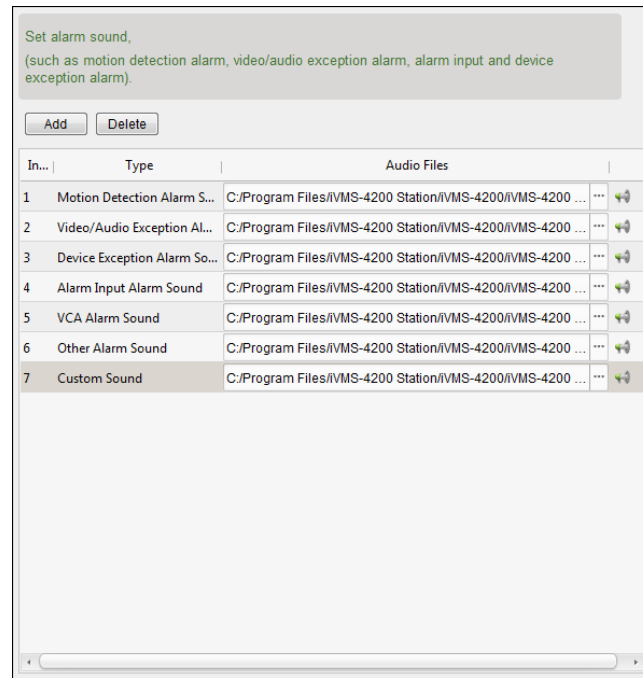
Steps:

1. Open the System Configuration page.
2. Click the **Alarm Sound** tab to enter the Alarm Sound Settings interface.
3. There are six pre-defined alarm sound type in the list. You can click the icon and select the audio files from the local path for different alarms.
4. You can also click **Add** button to add customized alarm sound.
Double click the Type field to customize the alarm sound name as desired.
Click the icon and select the audio files from the local path for different alarms.



5. Optionally, you can click the icon for a testing of the audio file.
6. You can select the added custom alarm sound and click **Delete** to delete it.
7. Click **Save** to save the settings.

Note: The format of the audio file can only be *.wav.



17.2.8 Email Settings

Purpose:

An email notification can be sent when a system alarm occurs. To send the email to some specified receivers, the settings of the email need to be configured before proceeding.

Steps:

1. Open the System Configuration page.
2. Click the **Email** tab to enter the Email Settings interface.
3. Input the required information.

Server Authentication (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.

SMTP Server: Input the SMTP Server address.

Port: Input the communication port of email service. The port is 25 by default.

User Name: Input the user name of the sender email address if **Server Authentication** is checked.

Password: Input the password of the sender Email address if **Server Authentication** is checked.

Sender Address: Input the email address of the sender.

Receiver 1 to 3: Input the email address of the receiver. Up to 3 receivers can be set.

4. Optionally, you can check the checkbox **Enable SSL** to increase the security of email sending.
5. Optionally, you can click **Send Test Email** to send an email to the receiver for test.
6. Click **Save** to save the settings.

Set email parameters including sender and recipient.

Server Authentication

SMTP Server:

Port:

User Name:

Password:

Sender Address:

Receiver 1:

Receiver 2:

Receiver 3:

Enable SSL

17.2.9 Video Intercom Settings

Purpose:

You can configure the video intercom parameters accordingly.

Steps:

1. Open the System Configuration page.
2. Click the **Video Intercom** tab to enter the Video Intercom Settings interface.
3. Input the required information.
 - Ringtone:** Click the icon and select the audio file from the local path for the ringtone of indoor station. Optionally, you can click the icon for a testing of the audio file.
 - Max. Ring Duration:** Input the maximum duration of the ringtone.
 - Max. Speaking Duration with Indoor Station:** Input the maximum duration of speaking with the indoor station.
 - Max. Speaking Duration with Door Station:** Input the maximum duration of speaking with the door station.
4. Select the card reader mode in the dropdown list according to the connected card reader type for reading the card information when adding the card.
Currently, the supported card reader models include: DS-K1F100-D8 and DS-K1F100-D8E.
5. Click **Save** to save the settings.

Configure Video Intercom Parameters.

Ringtone:

Max. Ring Duration:
 (s)

Max. Speaking Duration with Indoor Station:
 (s)


Max. Speaking Duration with Door Station:
 (s)

Card Reader Type:

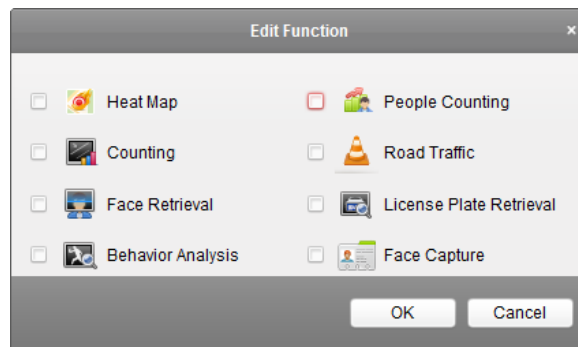
Chapter 18 Statistics

Purpose:

In Statistics, it provides eight modules for data statistics via the software: Heat Map, People Counting, Counting, Road Traffic, Face Retrieval, License Plate Retrieval, Behavior Analysis, and Face Capture.

Click the  icon on the control panel to open the Edit Function page to select the statistics functions.

Check the modules checkboxes and click **OK** to list the selected modules on the control panel.



The Heat Map module provides the display of the heat map statistics.



The People Counting module provides the display of the people counting statistics.



The Counting module provides the display of the counting statistics.



The Road Traffic module provides the display of the road traffic data.



Face Retrieval module provides the query of the picture of face.



License Plate Retrieval module provides the query of the license plate number.



Behavior Analysis module provides the query of behavior analysis.



Face Capture module provides the data search and statistics for captured faces pictures.

18.1 Heat Map

Purpose:

Heat map is a graphical representation of data represented by colors or the heat map data can be displayed in line chart. The heat map function of the camera usually be used to analyze the visit times and dwell time of customers in a configured area.

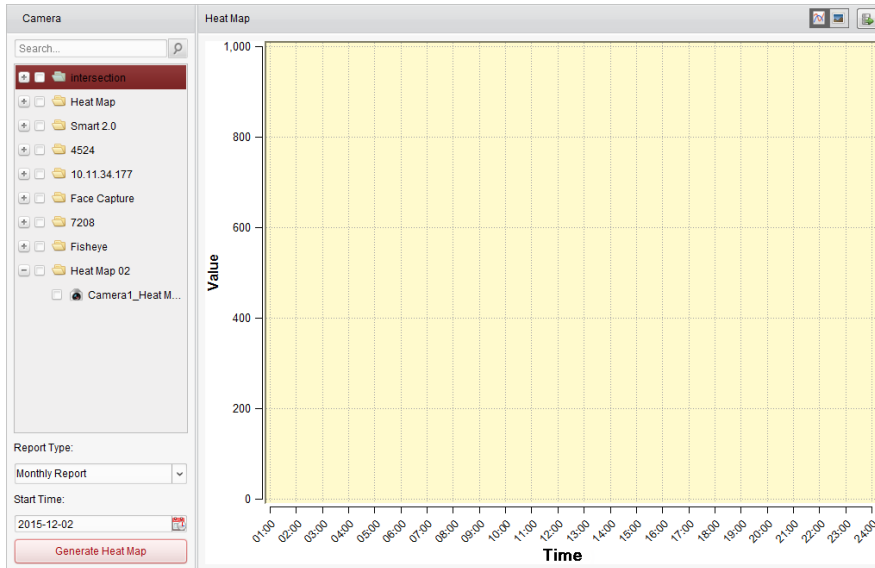
Before you start:

Please 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.




Note: The heat map network camera should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration. For configuring heat map rule, please refer to the *User Manual* of the heat map network camera.

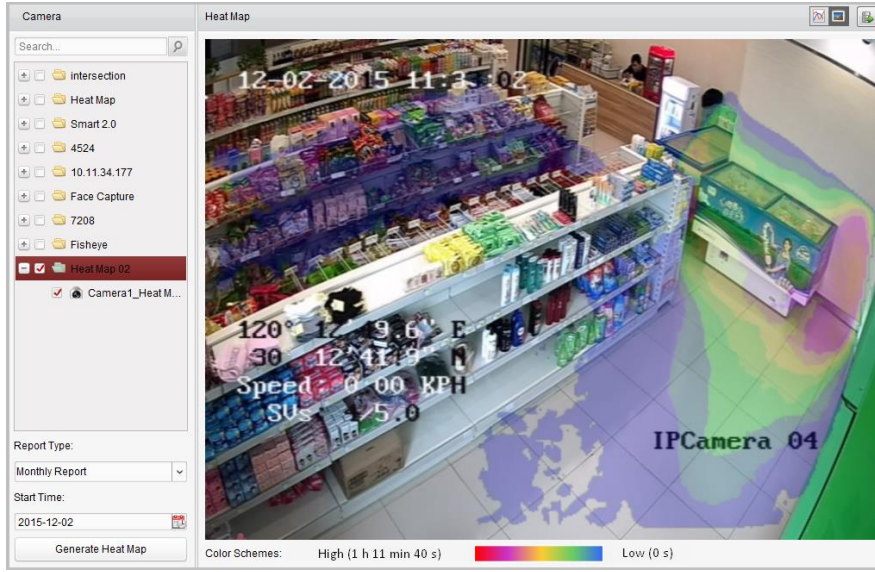


Click the icon on the control panel to open the Heat Map page.



Steps:

1. Open the Heat Map page.
2. Click to select a heat map camera in the area panel.
3. Select the report type as needed and set the start time.
4. Click **Generate Heat Map** and the heat map of the camera displays. You can click  or  to display the statistics in line chart or picture mode.
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.
5. (Optional) Click  to save the detailed data of heat map to your PC.



18.2 People Counting Statistics

Purpose:

You can check the people counting statistics of the added people counting device and the statistics can be displayed in line chart or histogram. The detailed data can be exported for local storage.

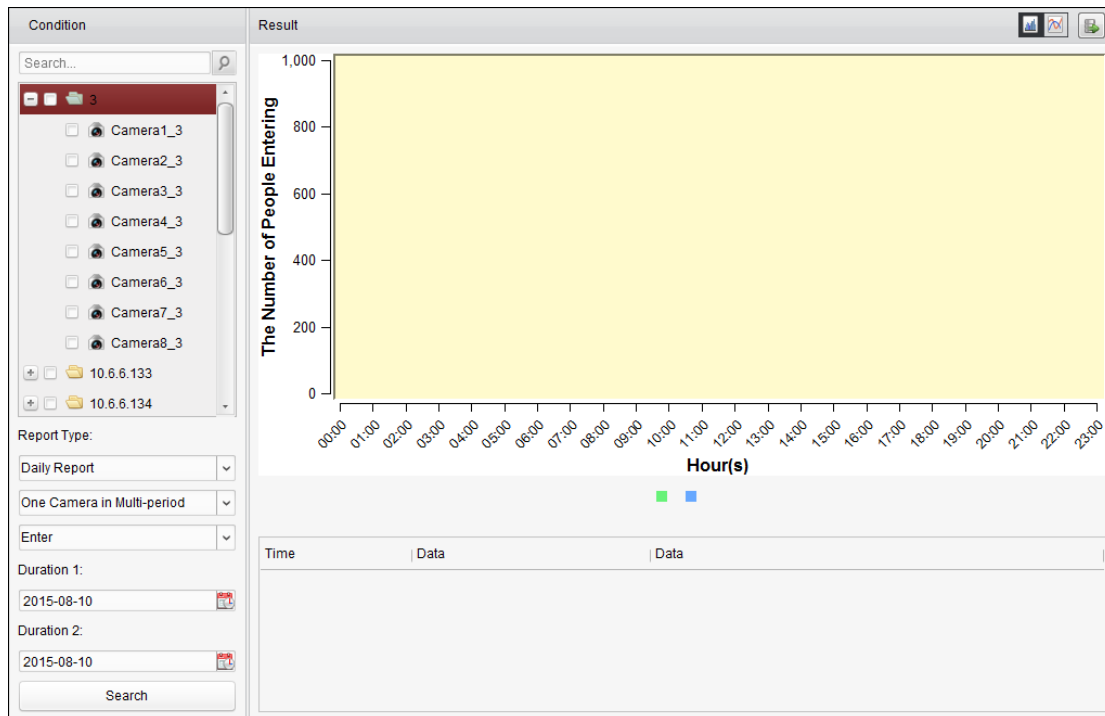
Before you start:

Please 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.

Note: The people counting device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration. For configuring people counting rule, please refer to the *User Manual* of the people counting device.





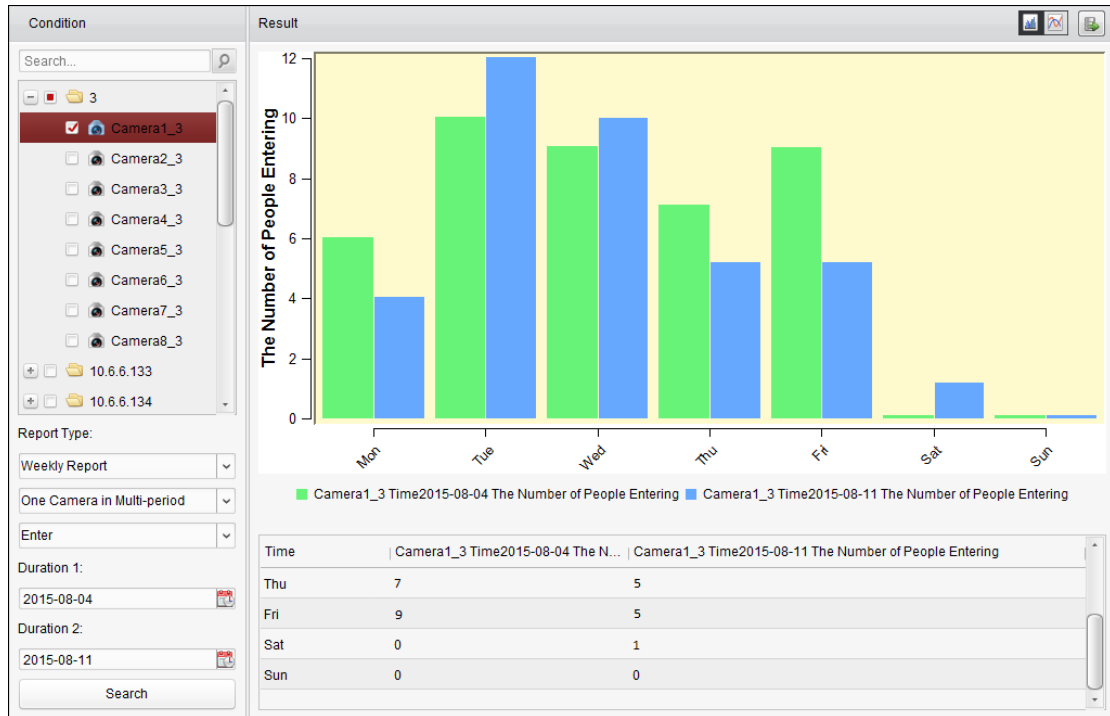
Click the icon on the control panel to open the People Counting page.



Steps:

1. Open the People Counting page.
2. Select the report type as needed and set the time.
 - 1) Select daily report, weekly report, monthly report or annual report as the time type for the report.
 - 2) Select One Camera in Multi-period or One Camera in One Period as the statistics type.
 - **One Camera in Multi-period:** One camera can be selected for generating the statistics for it of the two time periods.
 - **One Camera in One Period:** One camera can be selected for generating the statistics for it of one time period.
 - 3) Select Enter, Exit, or Enter and Exit as the data type.
 - **Enter:** The people entered will be counted.

- **Exit:** The people exited will be counted.
 - **Enter and Exit:** Both people entered and exited will be counted.
- 4) Set the time period(s).
 3. Select the camera for generating the report.
 4. Click **Search** and the statistics displays on the right panel. The detailed data for each hour, day or month will be also displayed.
By default, the statistics are shown in histogram form. You can switch it to line chart by clicking the .
 5. (Optional) Click  to save the detailed data of people counting to your PC.



18.3 Counting Statistics


Purpose:

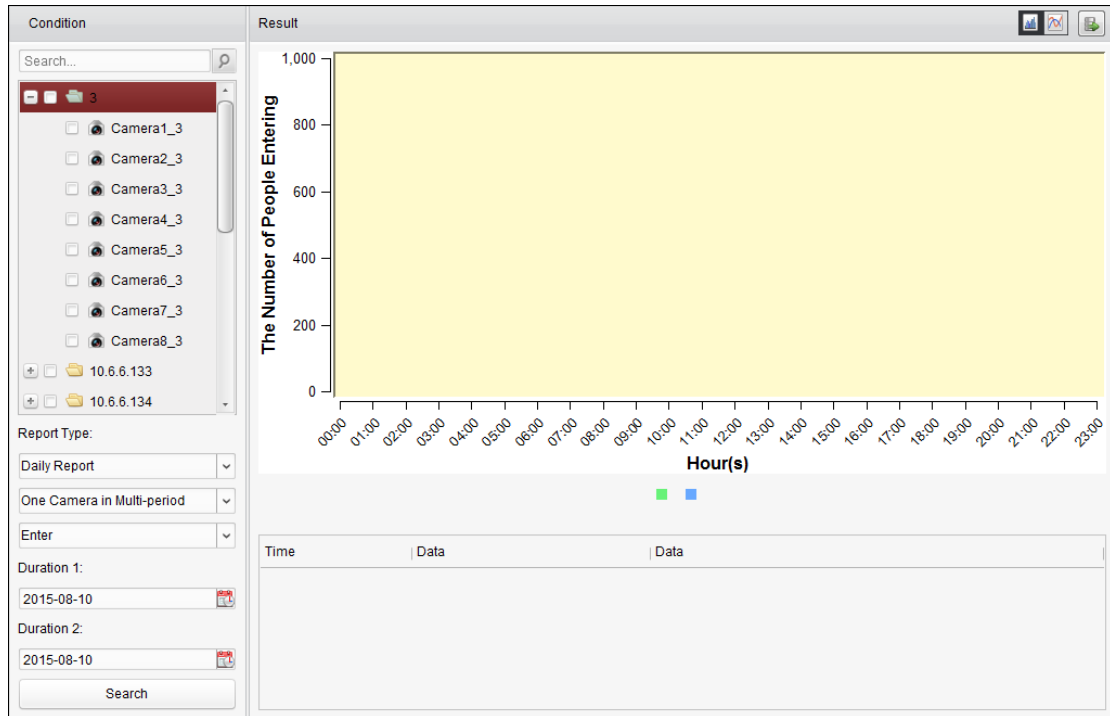
You can check the counting statistics of the added counting device and the statistics can be displayed in line chart or histogram. The detailed data can be exported for local storage.



Before you start:

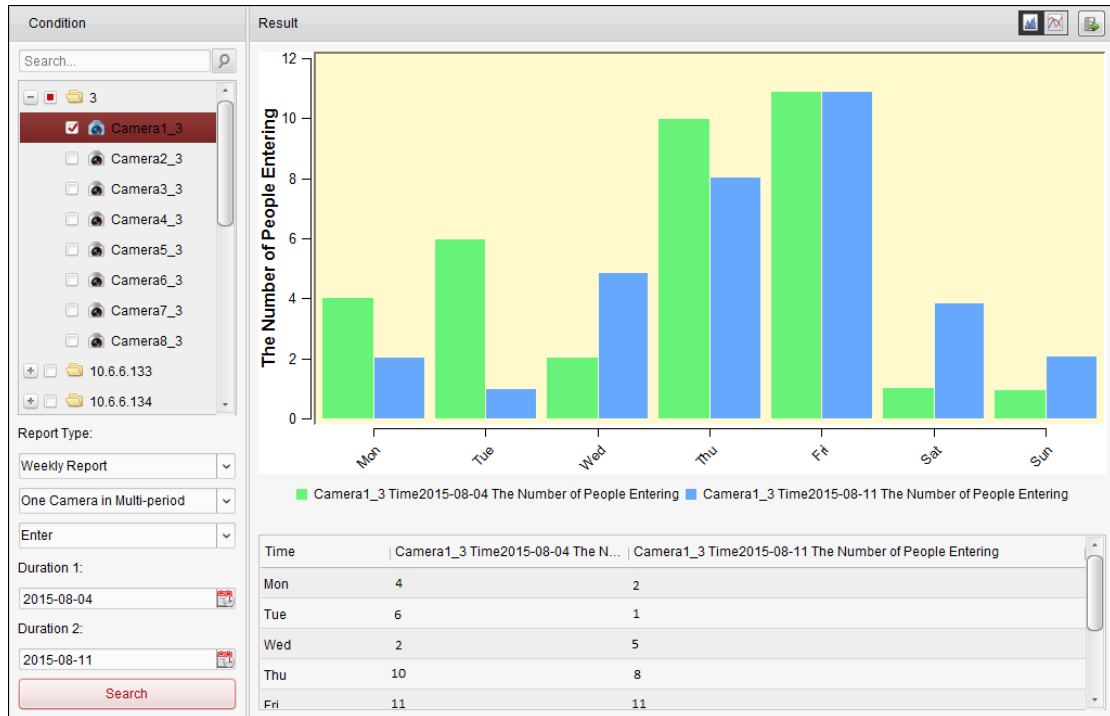
Please add a counting device to the software and properly configure the corresponding area. The added device should have been configured with counting settings.

Note: The counting device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration. For configuring counting settings, please refer to the *User Manual* of the counting device.

Click the  icon on the control panel to open the Counting page.

**Steps:**

1. Open the Counting page.
2. Select the report type as needed and set the time.
 - 1) Select daily report, weekly report, monthly report or annual report as the time type for the report.
 - 2) Select One Camera in Multi-period or One Camera in One Period as the statistics type.
 - **One Camera in Multi-period:** One camera can be selected for generating the statistics for it of the two time periods.
 - **One Camera in One Period:** One camera can be selected for generating the statistics for it of one time period.
 - 3) Select Enter, Exit, or Enter and Exit as the data type.
 - **Enter:** The people entered will be counted.
 - **Exit:** The people exited will be counted.
 - **Enter and Exit:** Both people entered and exited will be counted.
 - 4) Set the time period(s).
3. Select the camera for generating the report.
4. Click **Search** and the statistics displays on the right panel. The detailed data for each hour, day or month will be also displayed.
By default, the statistics are shown in histogram form. You can switch it to line chart by clicking the .
5. (Optional) Click  to save the detailed data of counting to your PC.



18.4 Road Traffic

Purpose:

If you add road traffic monitoring device, the captured pictures of the detected vehicle or license plate can be searched and checked. Three types are available for searching the corresponding pictures.


- **Vehicle Detection:** The passed vehicle can be detected and the picture of its license plate can be captured; besides, the vehicle color, vehicle logo and other information can be recognized automatically.
- **Mixed-traffic Detection:** The pedestrian, motor vehicle and non-motor vehicle can be detected, and the picture of the object (for pedestrian/non-motor vehicle/motor vehicle without license plate) or license plate (for motor vehicle with license plate) can be searched.
- **Traffic Violations:** The captured pictures of the vehicle that violates the traffic rules (such as illegal parking and congestion) can be checked.

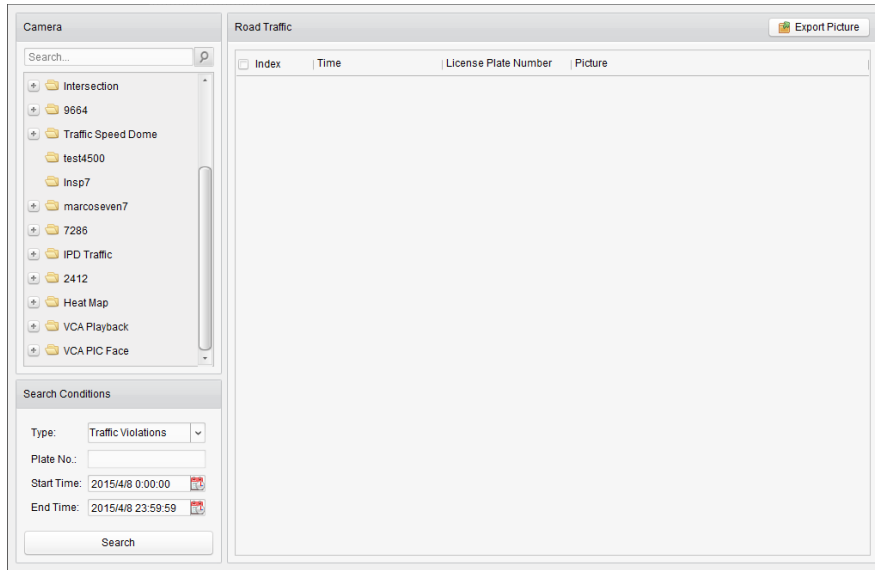
Before you start:

1. Please add a road traffic monitoring device to the software and properly configure the corresponding area. The added device should have been configured with corresponding settings for capturing pictures.
2. For Traffic Violations, the Storage Server should be added to software and you must configure the Storage Server for the device and check the checkbox of **Picture Storage** and **Additional Information Storage**. For details, please refer to *Chapter 5.1.2 Storing on Storage Device*.
3. For Vehicle Detection and Mixed-traffic Detection, if no storage server is configured, the software will search the related pictures from the storage device of the local device.

Note: The road traffic monitoring device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration. For configuring capture settings,

please refer to the *User Manual* of the device.

Click the  icon on the control panel to open the Road Traffic page.




Steps:

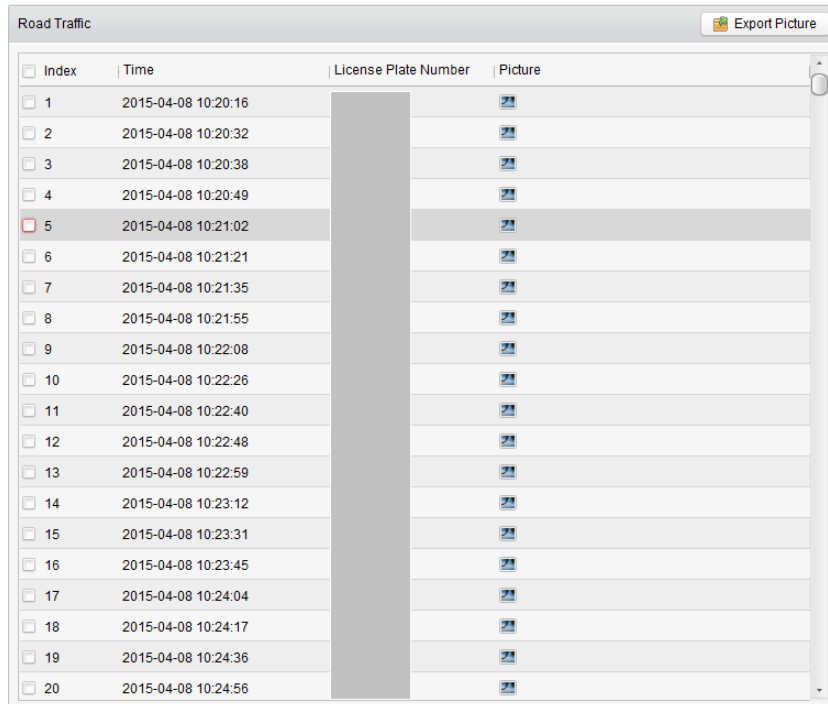
1. Open the Road Traffic page.
2. Click to select a road traffic monitoring camera in the camera panel.
3. Set the search condition for finding the related pictures.


Type: Select the query type and the pictures triggered by the event type can be found.

Plate No.: Input the license plate number for searching the pictures.

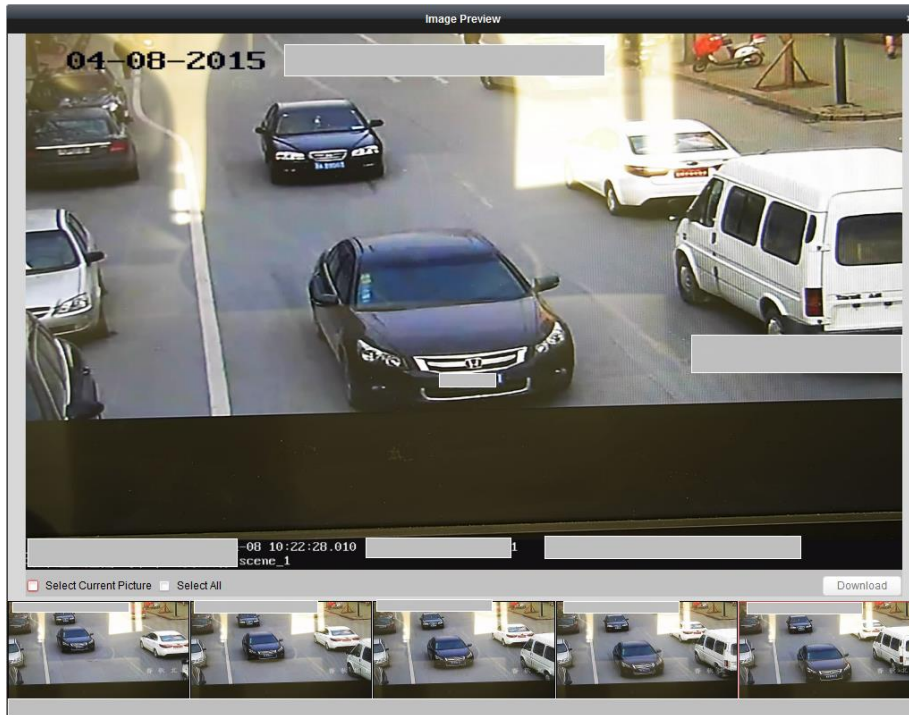
Start Time/End Time: Click  to set the start time and end time.

4. Click **Search** and the found picture items will list.



5. Click  to view the captured pictures and the related information. You can check the checkbox

of **Select Current Picture** or **Select All** and click **Download** to save the pictures to your PC.



- (Optional) Check the checkbox(es) to select the picture items and click **Export Picture** to save the pictures to your PC.

18.5 Face Retrieval


Purpose:

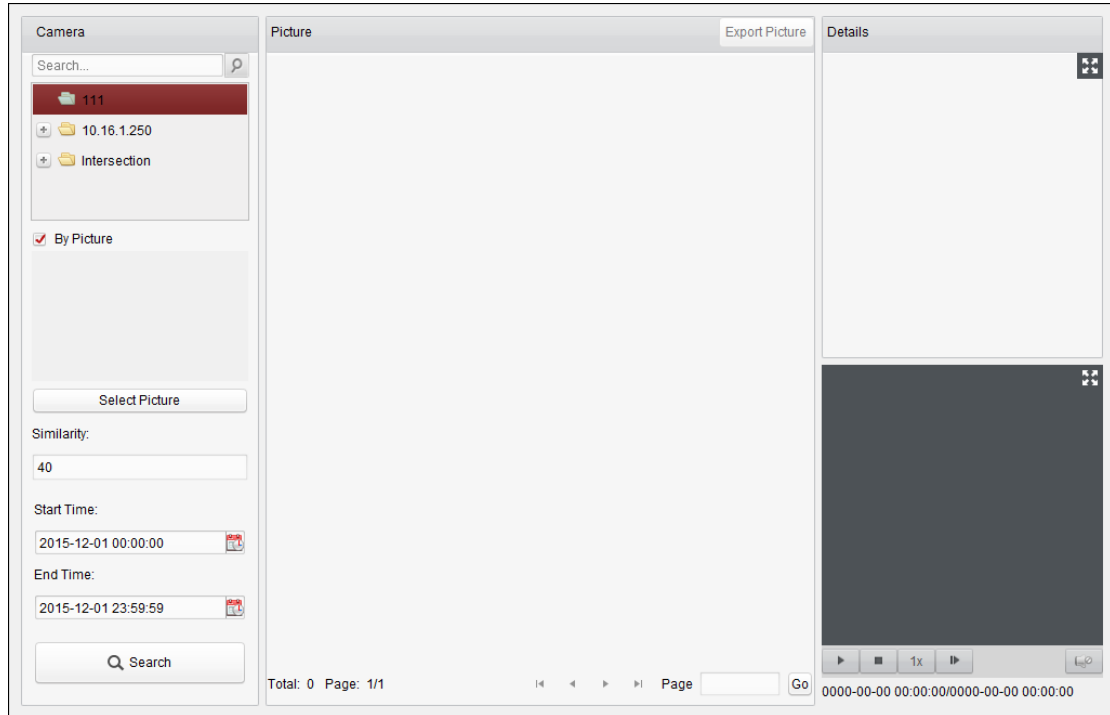
When the connected device (NVR or HDVR) supports face search, you can search the related picture and play the picture related video file.

Before you start:

Please add the device to the software and properly configure the corresponding settings. For detailed settings, please refer to the *User Manual* of the device.










Note: The device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration.

Click the  icon on the control panel to open the Face Retrieval page.

**Steps:**

1. Open the Face Retrieval page.
2. Click to select a device in the camera panel.

Note: This function should be supported by the connected device (NVR or HDVR).
3. Set the corresponding search condition.
 - (Optional) You can check the checkbox of **By Picture**, click **Select Picture** to upload the pictures from your PC and click to select a detected face from uploaded picture for matching the captured face pictures.
 - 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.
 - Click  to set the start time and end time for searching the captured face pictures or video files.
4. Click **Search** to start searching. The search results of the pictures are displayed in list.
5. You can click on a picture from the list to check the detailed information.
You can click  to show the large picture, and click  to restore.
6. To save the pictures to your PC:
 - 1) Click **Export Picture** and check the checkboxes to select the pictures to export. You can also click **Select All** to choose all the searched pictures.
 - 2) Click **Export**, and select a local saving path for the pictures.
 - 3) Click **Back** to leave the picture export mode.
7. Click  to play the picture's related video file in the view window on the bottom right.
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 the audio, double-click the playback window to maximize the window.

18.6 License Plate Retrieval


Purpose:

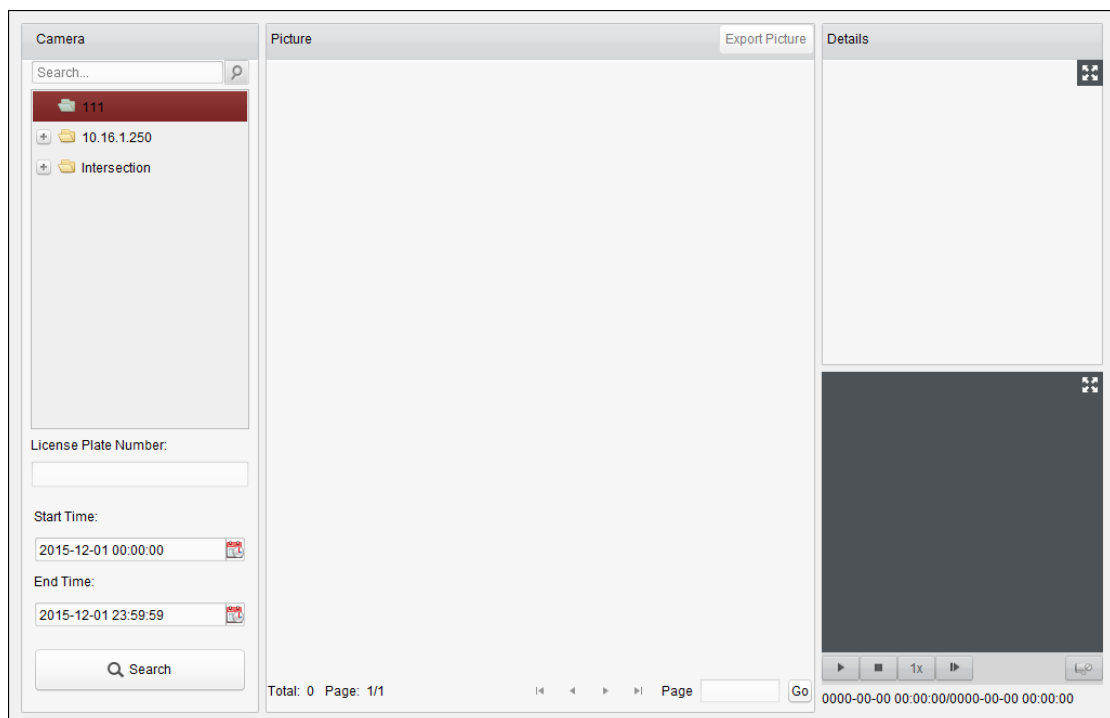
When the connected device (NVR or HDVR) supports license plate search, you can search the related picture and play the picture related video file.

Before you start:




Please add the device to the software and properly configure the corresponding settings. For detailed settings, please refer to the *User Manual* of the device.







Note: The device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration.

Click the  icon on the control panel to open the License Plate Retrieval page.



Steps:

1. Open the License Plate Retrieval page.
2. Click to select a device in the camera panel.
 - Note:** This function should be supported by the connected device (NVR or HDVR).
3. Set the corresponding search condition.
 - (Optional) Input the license plate number in the field for search.
 - Click  to set the start time and end time for searching the matched license plate pictures.
4. Click **Search** to start searching. The search results of the pictures are displayed in list.
5. You can click on a picture from the list to check the detailed information.
 - You can click  to show the large picture, and click  to restore.
6. To save the pictures to your PC:
 - 1) Click **Export Picture** and check the checkboxes to select the pictures to export. You can also

- click **Select All** to choose all the searched pictures.
- 2) Click **Export**, and select a local saving path for the pictures.
 - 3) Click **Back** to leave the picture export mode.
7. You can click  to play the picture's related video file in the view window on the bottom right. 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 the audio, double-click the playback window to maximize the window.

18.7 Behavior Analysis

Purpose:

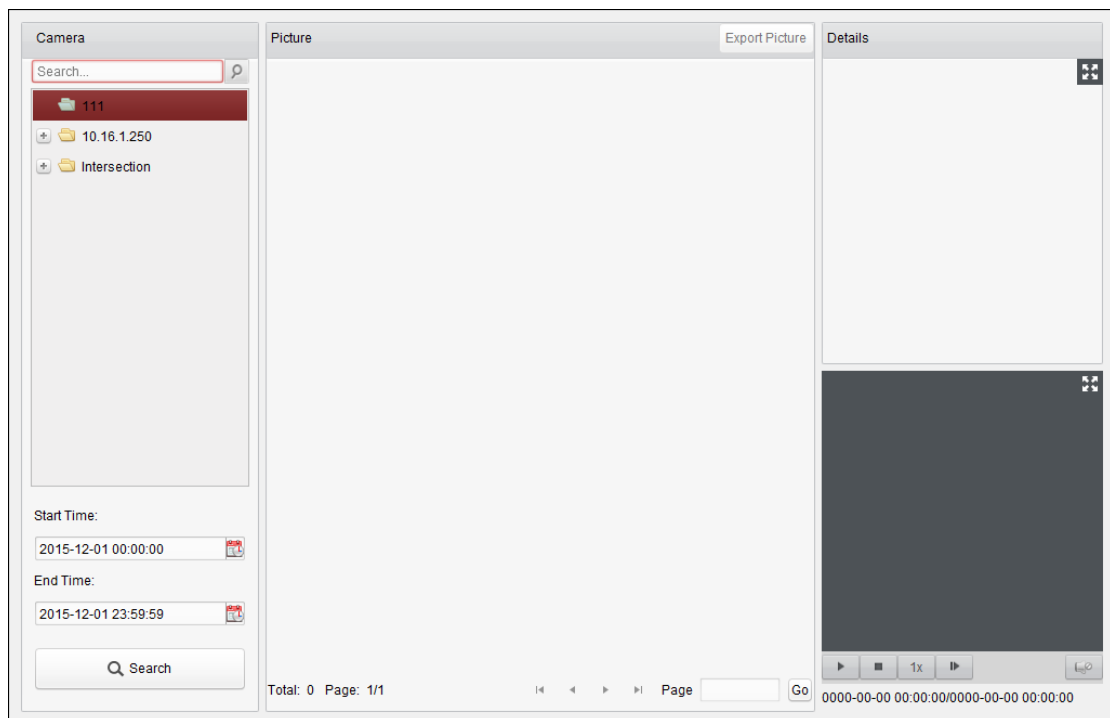
When the connected device (NVR or HDVR) supports behavior search, you can search the related picture and play the picture related video file.

Before you start:

Please add the device to the software and properly configure the corresponding settings. For detailed settings, please refer to the *User Manual* of the device.

Note: The device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration.


Click the  icon on the control panel to open the Behavior Analysis page.

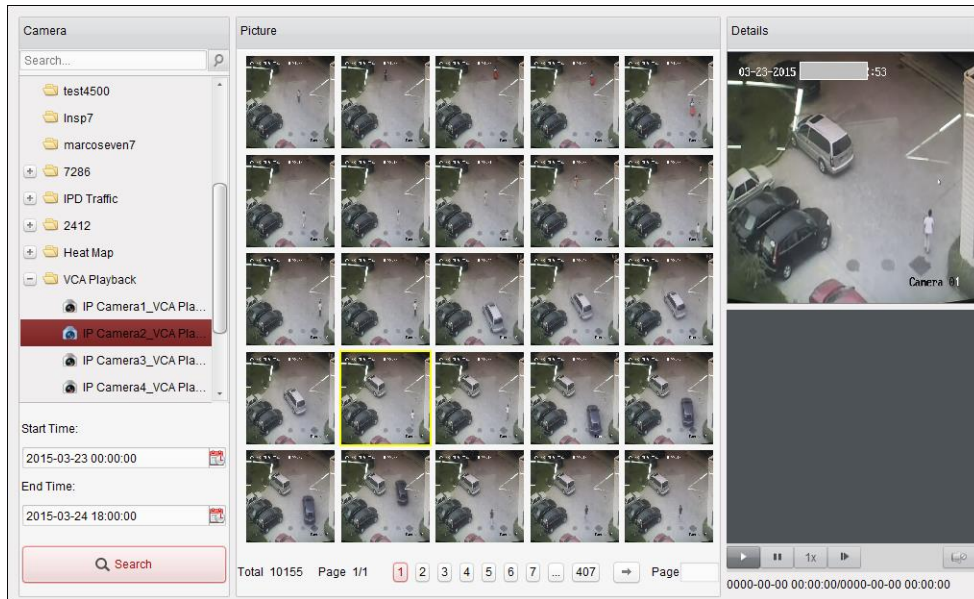










Steps:

1. Open the Behavior Analysis page.
2. Click to select a device in the camera panel.

Note: This function should be supported by the connected device (NVR or HDVR).

3. Click  to set the start time and end time for searching the matched pictures.
4. Click **Search** to start searching. The search results of the pictures are displayed in list.



5. You can click on a picture from the list to check the detailed information.
You can click  to show the large picture, and click  to restore.
6. To save the pictures to your PC:
 - 1) Click **Export Picture** and check the checkboxes to select the pictures to export. You can also click **Select All** to choose all the searched pictures.
 - 2) Click **Export**, and select a local saving path for the pictures.
 - 3) Click **Back** to leave the picture export mode.
7. Click  to play the picture's related video file in the view window on the bottom right.
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 the audio, double-click the playback window to maximize the window.

18.8 Face Capture


Purpose:

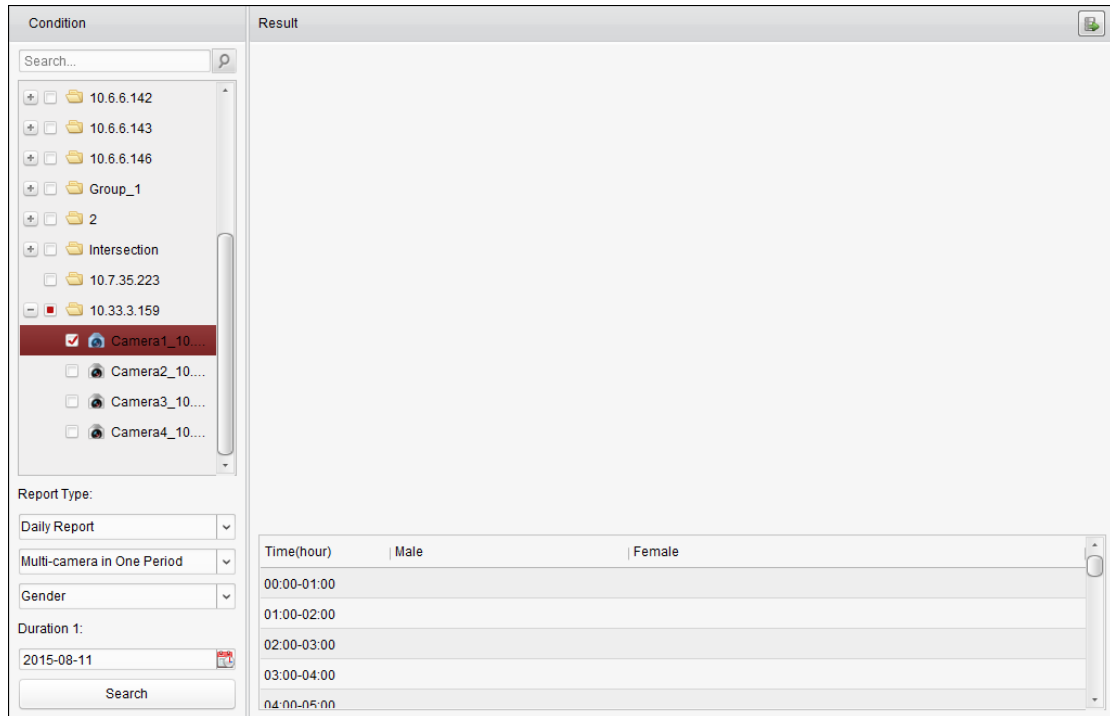
You can check the captured faces statistics of the added face capture device and the statistics can be displayed in table, line chart, pie chart or histogram. The detailed data can be exported for local storage.



Before you start:

Please add the face capture device to the software and properly configure the corresponding settings. For detailed settings, please refer to the *User Manual* of the device.

Note: The face capture device should be added to the software as Encoding Device, please refer to *Chapter 3.1 Adding the Device* for detailed configuration.

Click the  icon on the control panel to open the Face Capture page.

**Steps:**

1. Open the Face Capture page.
2. Select the report type as needed and set the time.
 - 1) Select daily report, weekly report, monthly report or annual report as the time type for the report.
 - 2) Select Multi-camera in One Period as the statistics type.
Multi-camera in One Period: Multiple cameras can be selected for generating the statistics for them of one time period.
 - 3) Select Age, Gender or Number of People as the data type.
 - 4) Set the time period.
3. Select the cameras for generating the report.
4. Click **Search** and the statistics displays on the right panel. The detailed data for each hour, day or month will be also displayed.
 For Age and Gender statistics, the statistics are shown in pie chart.
 For Number of People statistics, the statistics are shown in histogram form by default. You can switch it to line chart by clicking the .
5. (Optional) Click  to save the detailed data of captured face pictures to your PC.

Troubleshooting

Live View

Problem:

- Failed to get the live view of a certain device.

Possible Reasons:

- Unstable network or the network performance is not good enough.
- The device is offline.
- Too many accesses to the remote device cause the load of the device too high.
- The current user has no permission for live view.
- The version of the client software is below the needed version.

Solutions:

- Check network status and disable other not in use process on your PC.
- Check the device network status.
- Restart the device or disable other remote access to the device.
- Log in with the admin user and try again.
- Download the client software of the latest version.

Recording

Problem:

- Local recording and remote recording are confused.

Solutions:

- The local recording in this manual refers to the recording which stores the video files on the HDDs, SD/SDHC cards of the local device.
- The remote recording refers to the recording action commanded by the client on the remote device side.

Playback

Problem:

- Failed to download the video files or the downloading speed is too slow.

Possible Reasons:

- Unstable network or the network performance is not good enough.
- The NIC type is not compatible.
- Too many accesses to the remote device
- The current user has no permission for playback.
- The version of the client software is below the needed version.

Solutions:

- Check network status and disable other not in use process on your PC.
- Directly connect the PC running the client to device to check the compatibility of the NIC card.
- Restart the device or disable other remote access to the device.
- Log in with the admin user and try again.
- Download the client software of the latest version.

FAQ

Q: During live view, an error message prompts and the error code is 91.

A: For live of multiple window, the channel may not support sub stream. Please disable the function of **Auto-change Stream Type** in **System Configuration -> Image**, and select the appropriate steam type for live view.

Q: During live view, the image is blurred or influent.

A: Please check the driver of video card. We highly recommend you update the driver of video card to the latest version.

Q: Memory leak and the client crashed after running for a while.

A: In the installation directory of the client software, open the **Setup.xml** file with Notepad and modify the value of **EnableNetandJoystickCheck** to **false**. Restart the client, and if the problem is still not solved, please contact our technique support.

Q: During live view, when getting stream via the Stream Media Server, an error message prompts and the error code is 17.

A: Please check the port mapping of Stream Media Server, especially RTSP port.

Error Code

Code	Error Name	Description
317	No videos.	It will be prompted when the user has no permission to play back.
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	Do not support.	
29	Operating failed.	
43	No buffer.	It will be prompted when adding a device and the device port is occupied by a web server.
55	Invalid IP address.	
56	Invalid MAC address.	
91	The channel does not support the operation.	It will be prompted when failed to get the sub stream.
96	The device is not registered on the DDNS.	
153	The user is locked.	
250	The device is not activated.	
404	Channel No. error or the device does not support the sub stream.	It will be prompted when failed to get the sub stream or the sub stream does not exist.
424	Failed to receive the data for RTSP SETUP.	It will be prompted when adding the live view for the software DVS via external network.
800	No more bandwidth can be used.	
2		The stream is not a Video & Audio stream.
6		The playback window turns black when adopting H.265 in the 64bit operating system.
3		The connection problem between the software and the stream media server.
17		The streaming problem between the stream media server and the device.