

NVMS7000 Client Software

User Manual

User Manual

About this Manual

This Manual is applicable to NVMS7000 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.

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Chapter 1 Overview

1.1 Description

NVMS7000 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 NVMS7000 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 2008 (32-bit or 64-bit), Windows XP/Windows 2003 (32-bit), Windows 8/Windows 8.1/Windows Server 2012/Windows 10 (64-bit)

CPU: Intel Pentium IV 3.0 GHz or above

Memory: 1G 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.

1.3 Function Modules

Control Panel of NVMS7000:



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 NVMS7000 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.
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 the guide for the client configuration.
	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 NVMS7000 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 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 NVMS7000 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 NVMS7000 client software. You can get a brief view of the updates instruction from the following contents.

- **Add Face Capture Module**

You can check the captured faces statistics of the added face capture device and the detailed data can be exported for local storage.

- **Add Security Control Panel Module**

The Security Control Panel module provides the remote control and configuration for security control panel.

- **Add Video Intercom Module**

The Video Intercom module provides the remote control and configuration for video intercom device.

- **Support Skipping Unconcerned Video During VCA Playback**

You can set to skip the unconcerned video during VCA playback and the unconcerned video won't be played during VCA playback.

- **Support NVR Decoding Output**

For video wall display, the NVR device also supports decoding function. It can link with the video inputs and display them on the video wall without through decoding device. You can also edit the resolution of decoding out.

Note: This function should be supported by the device.

- **Support Smart H.264 and H.265**

For live view and playback, the software supports H.264+ and H.265 stream.

Chapter 2 Live View

2.1 User Registration and Login

For the first time to use NVMS7000 client software, you need to register a super user for login.

Note: If the port 80 of your PC 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 software.

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.



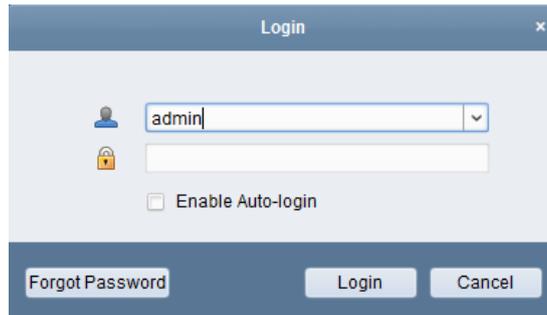
- ◆ A user name cannot contain any of the following characters: / \ : * ? " < > |. And the length of the password cannot be less than 6 characters.
- ◆ For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case 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 NVMS7000 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 NVMS7000*.

2.2 Adding the Device

Purpose:

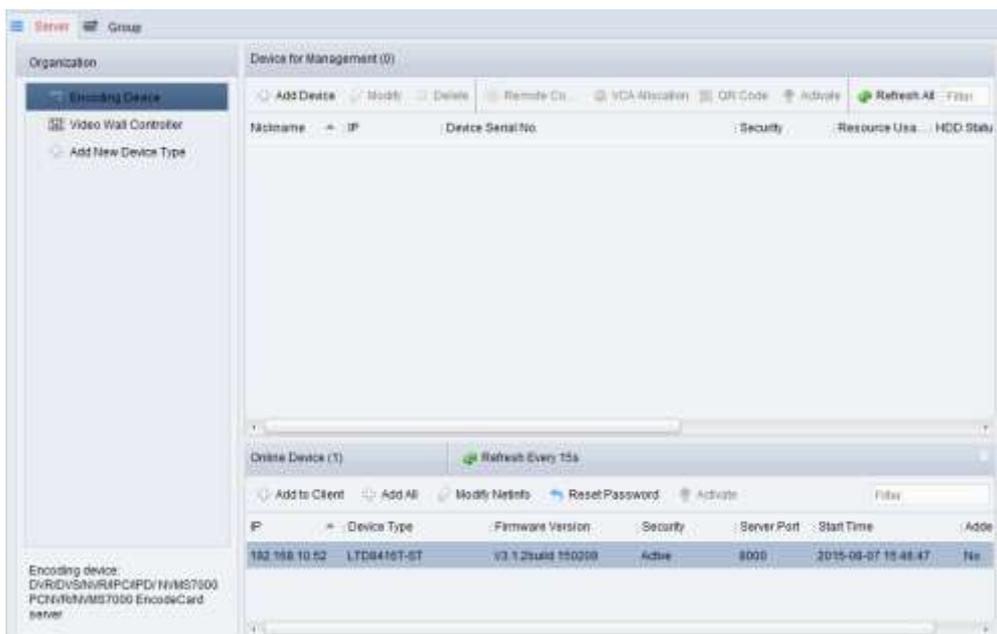
After running the NVMS7000, devices including network cameras, video encoders, DVRs, NVRs, decoder, security control panel, video intercom device, etc., should be added to the client for the remote configuration and management, such as live view, playback, alarm settings, etc.

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/Outdoor Device** to enter Encoding Device/Outdoor Device 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 2.2.2 Adding Online Devices*.
- By specifying the device IP address or domain name, see *Section 2.2.3 Adding Devices Manually*.
- By specifying an IP segment, see *Section 2.2.4 Adding Devices by IP Segment*.
- By IP Server, see *Section 2.2.5 Adding Devices by IP Server*.
- By HiDDNS, see *Section 2.2.6 Adding Devices by HiDDNS*.
- Adding Devices in batch, see *Section 2.2.7 Batch Adding Devices*.

2.2.1 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
192.168.1.64	CMIP7422W-M	V5.3.2build 150706	Inactive	8000	2015-08-12 03:38:21	Nc
192.168.1.133	CMIP8222	V5.2.0build 150728	Active	8000	2015-08-12 02:57:35	Nc
192.168.1.125	WH-N5204-P4	V3.3.1build 150811	Active	8000	2015-08-12 16:07:54	Nc

Nickname	IP	Device Serial No.	Security	Resource Usa...	HDD Statu
192.168.1.64	192.168.1.64	CMIP7422W-M20150731BBWR533331771	Inactive		
192.168.1.133	192.168.1.133	CMIP822220141025AAWR486220554	Weak		
192.168.1.125	192.168.1.125				

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

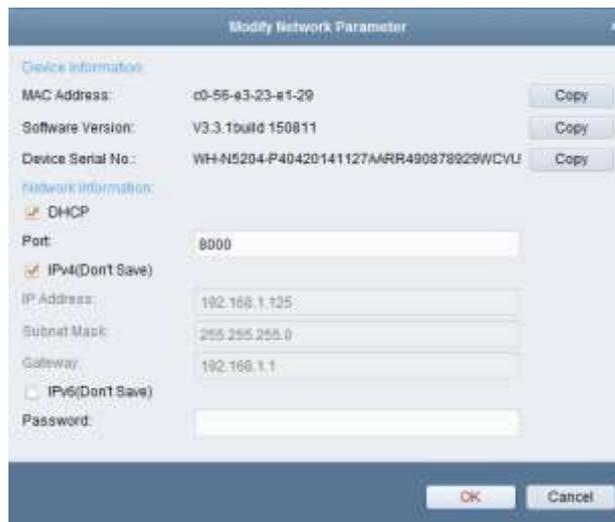


STRONG PASSWORD RECOMMENDED– We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.



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.



2.2.2 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.



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 2.2.1 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.

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: NVMS7000 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.

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. Click **Import** and select the file received from the technical engineer.
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.

2.2.3 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.

- 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: NVMS7000 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.

2.2.4 Adding Devices by IP Segment

Steps:

- Click **Add Device** to open the device adding dialog box.
- Select **IP Segment** as the adding mode.
- 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.

- 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: NVMS7000 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**, and the device of which the IP address is between the start IP and end IP will be added to the device list.

2.2.5 Adding Devices by IP Server

Steps:

- Click **Add Device** to open the device adding dialog box.
- Select **IP Server** as the adding mode.
- 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.

- 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: NVMS7000 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.

2.2.6 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: NVMS7000 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.

2.2.7 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:

- Click **Add Device** to open the device adding dialog box.
- Select **Batch Import** as the adding mode.
- Click **Export Template** and save the pre-defined template (CSV file) on your PC.
- 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.

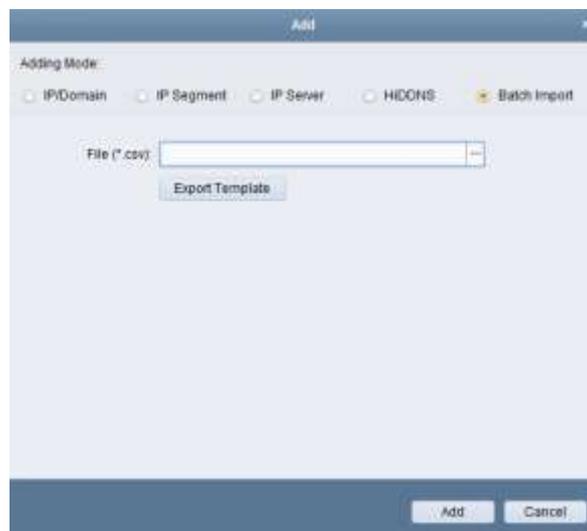
Add Offline Device: You can input 1 to enable adding the offline device, and then the software will automatically connect it when the offline device comes online. 0 indicates disabling this function.

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.

2.2.8 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.



2.3 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.

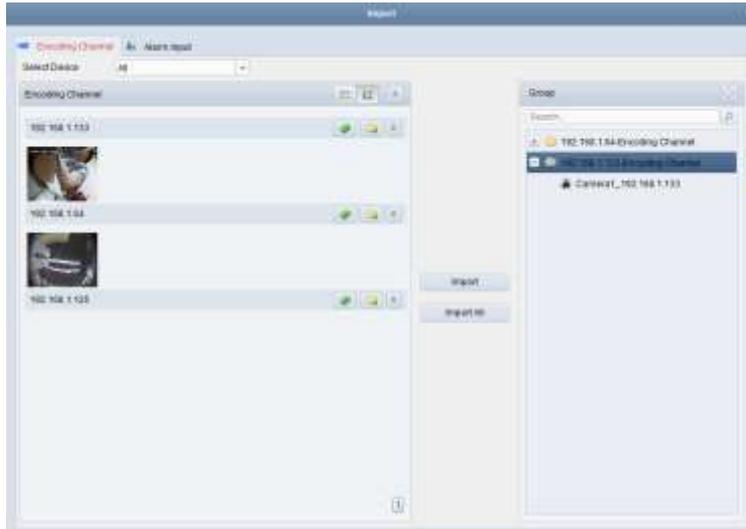
Note: You can also select **Alarm Input** tab and import the alarm inputs to group.

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:

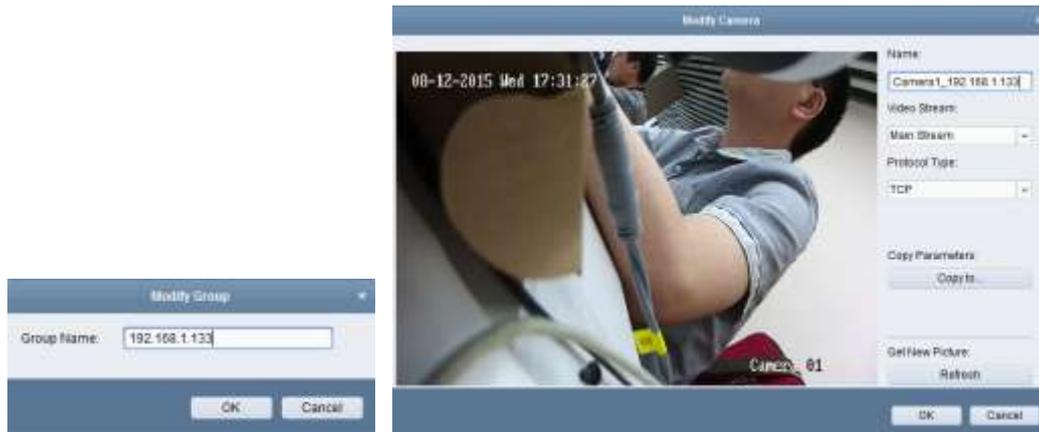
- | | | |
|--|------------------------|---|
|  | List View | View the camera in list view. |
|  | Thumbnail View | View the camera in thumbnail view. |
|  | Refresh | Refresh the latest information of added cameras. |
|  | Import | Create a group named as <i>device name-Encoding Channel (Alarm Input)</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 Encoding Channel page.
2. Move the mouse to the camera/group and click , or double-click the group/camera name to open Modify Group/Camera dialog box.
3. Edit the group/camera information, including the group/camera name, the stream type, etc.
 - Video Stream:** Select the stream for 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.
4. Click **OK** to save the new settings.
You can also double-click the group/camera name on the Group Management interface to open the Modify Group/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.

2.4 Basic Operations in Live View

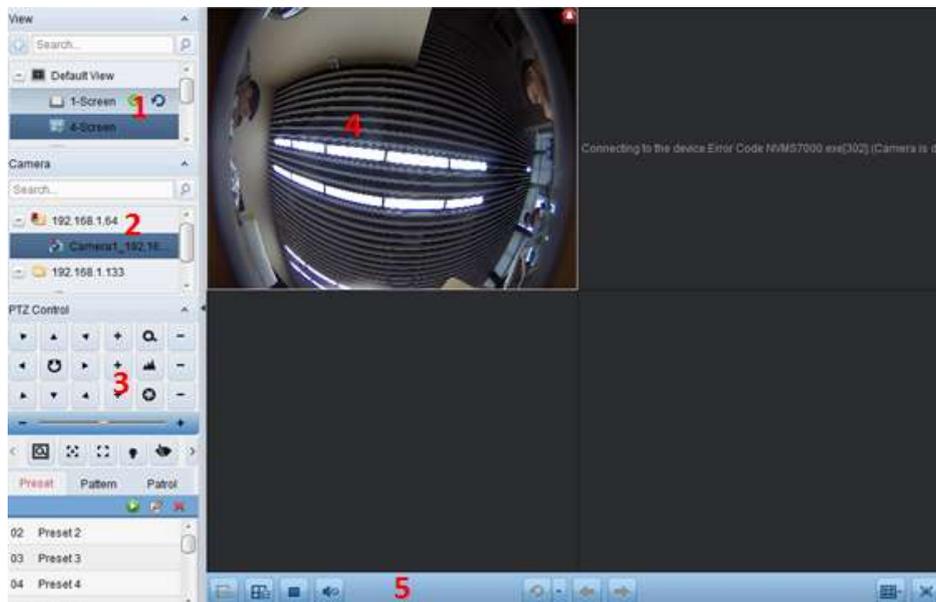
Purpose:

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.

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.

Note: If event (e.g., motion detection) is detected for the camera, the camera icon will display as  and the group icon will show as .

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.
	Full Screen	Display the live view in full-screen mode. Press ESC to exit.

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 the current picture and then print the picture.
	Send Email	Capture the current picture and then send an Email notification to one or more receivers. The captured picture can be attached.
	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.
	Switch to Instant Playback	Switch to instant playback mode.
	Start/Stop Two-way Audio	Click to start/stop the two-way audio with the device in live view.
	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.
	Batch Time Sync	Set time synchronization for devices in batch.
	Fisheye Expansion	Enter the fisheye expansion mode. Only available when the device is fisheye camera. For details, please refer to <i>Chapter 2.4.7 Live View in Fisheye Mode</i> .
	Start/Stop Speed Dome linkage	Click to start/stop locating or tracking the target according to your demand. Only available when the device is fisheye camera
	Unlock Door	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.

2.4.1 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:

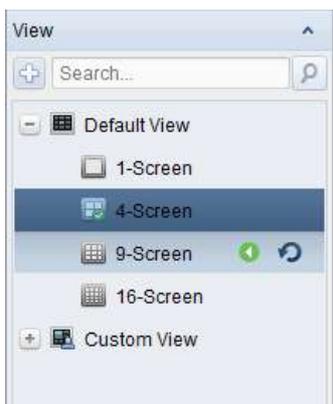
1. Open the Main View page.
2. In the View panel, click the icon  to expand the default view list.

- 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 2.4.2 Auto-switch in Live View*.



Starting Live View in Custom View Mode

Purpose:

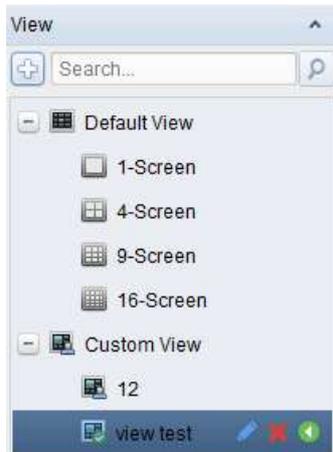
The view mode can also be customized for the video live view.

Steps:

- Open the Main View page.
- 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.
- Click  to create a new view.
- Input the view name and click **Add**. The new view is of 4-Screen mode by default.
- Optionally, click the  icon in live view toolbar and select the screen layout mode for the new view.
- 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.
- 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.

2.4.2 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.

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.

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.

2.4.3 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

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.

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 .

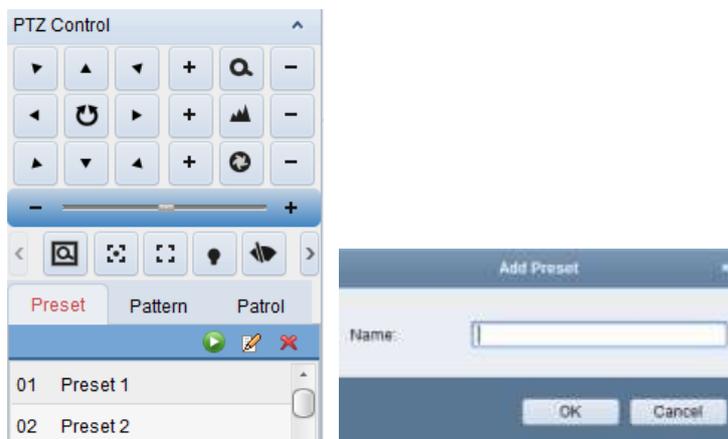
You also perform the following steps to call the preset.

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:

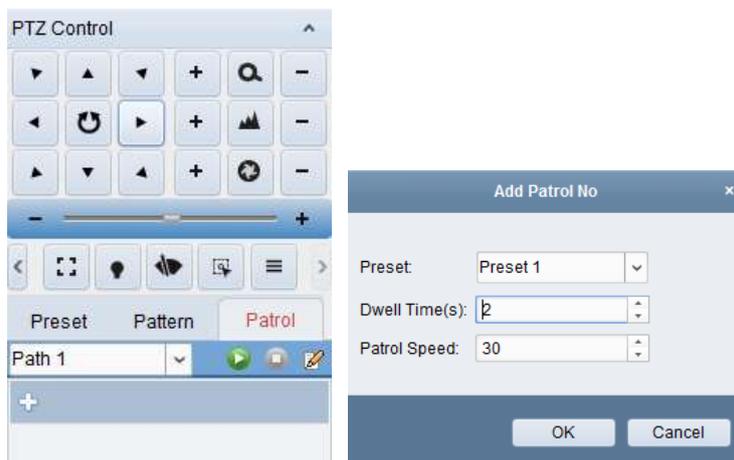
Two or more presets for one PTZ camera need to be added.

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 .

Notes:

- Up to 16 patrols can be configured.
- The preset dwell time can be set to 1 to 30 sec, and the patrol speed can be set to level 1 to 40.



2.4.4 Manual Recording and Capture

Toolbar in Each Live View Display Window:



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

	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.
	Switch to Instant Playback	Switch to the instant playback mode.

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:

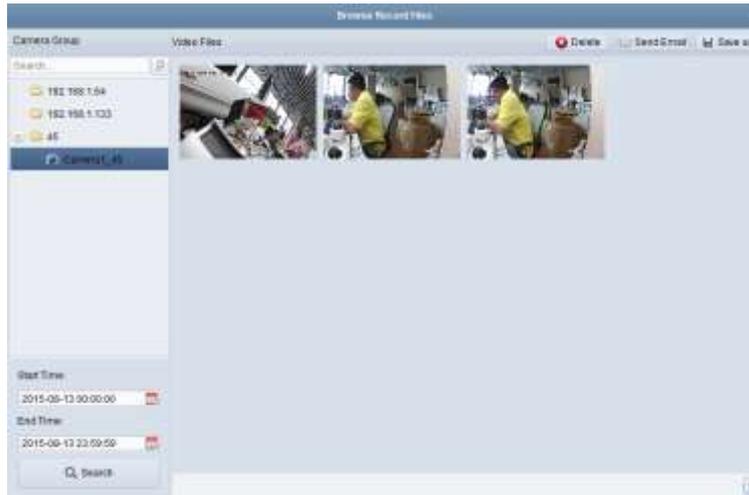
- During the manual recording, an indicator  appears in the upper-right corner of the display window.
- The saving path of video files can be set on the System Configuration interface. For details, see *Section 14.2.3 File Saving Path Settings*.
- For Cloud P2P device, the manual recording is not supported 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 14.2.6 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.

- Click the icon  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 14.2.3 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:

- Click **File->Open Image File** to open the Captured Images page.
- Select the camera to be searched from the Camera Group list.
- Click the icon  to specify the start time and end time for the search.
- Click **Search**. The pictures captured between the start time and end time will be displayed.
- 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.



2.4.5 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.

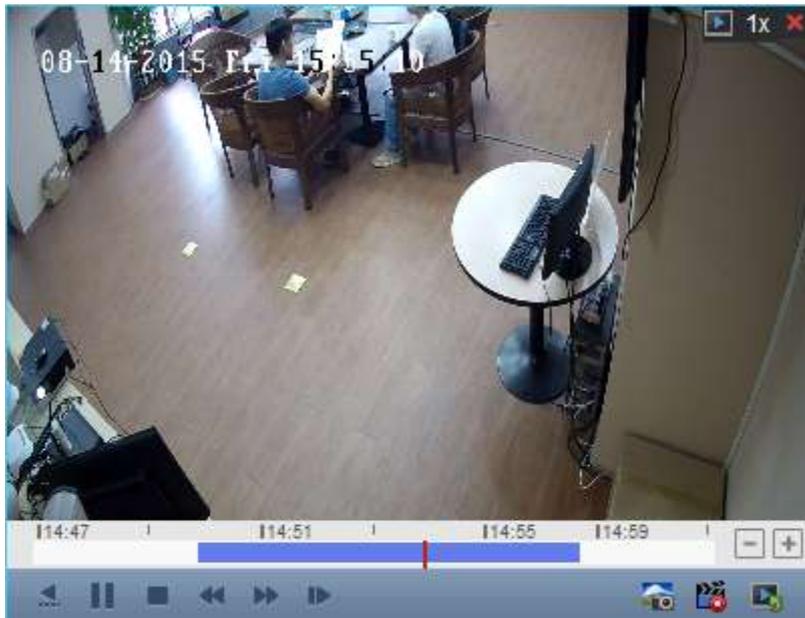
Steps:

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.

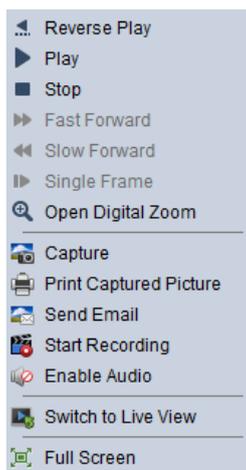
Note: During the instant playback, an indicator  appears in the upper-right corner of the display window.



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 the current picture and then print the picture.
	Send Email	Capture the current picture and then send an Email notification to one or more receivers. The captured picture can be attached.
	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.

2.4.6 Custom Window Division

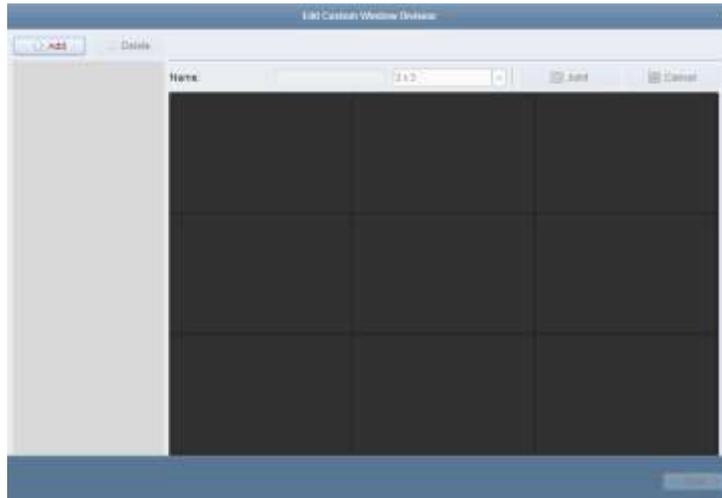
Purpose:

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

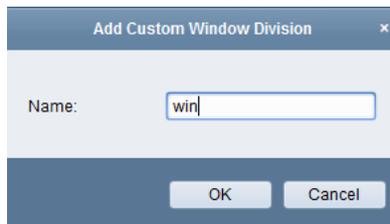
box.



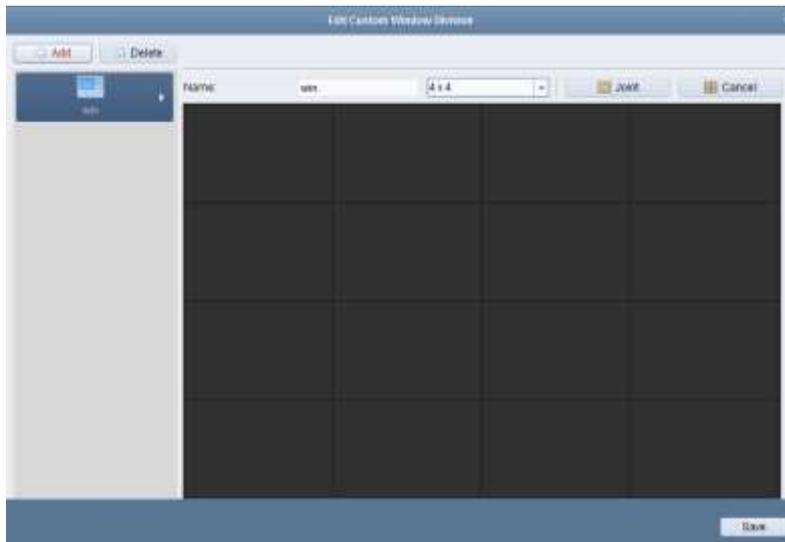
2. Click **Add** to open the custom window division adding dialog box.

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.

2.4.7 Live View in Fisheye Mode

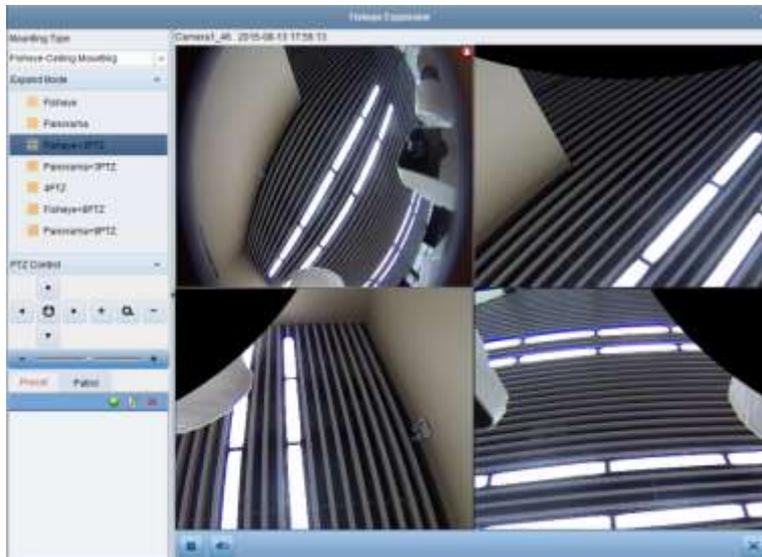
Purpose:

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

Steps:

1. Start the live view (refer to *Chapter 2.4.1 Starting and Stopping the Live View*).
2. Right-click on the video and select **Fisheye Expansion**. You can select the expand mode for playback 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-180o Panorama/360o 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.

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.

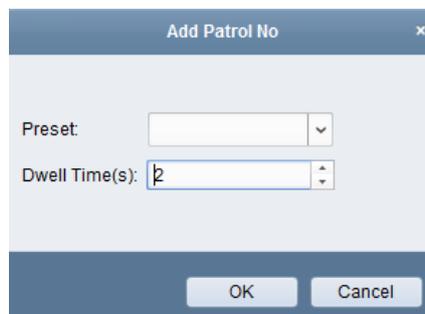
A patrol is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable. Please follow the steps below to configure the patrol.

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.

2.4.8 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.

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. This 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 3 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 record 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.

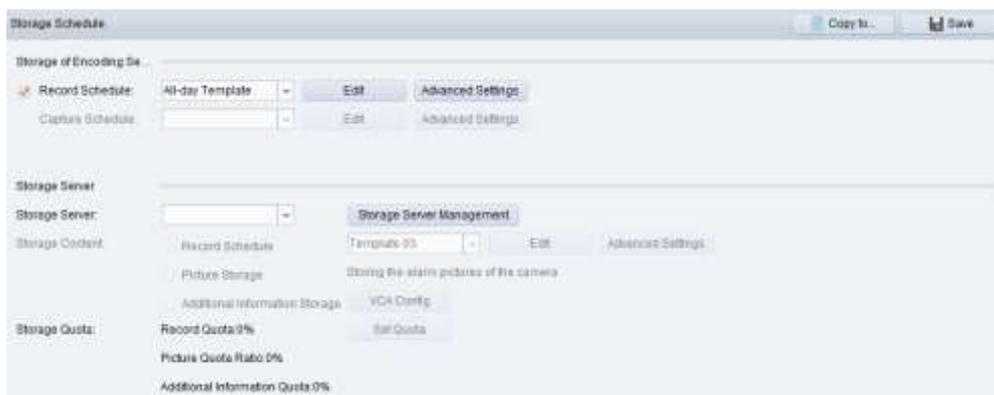
3.1 Remote Storage

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.



3.1.1 Storing on Storage Devices on the DVRs, NVRs, or Network Cameras

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 record 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 Record Schedule page.
2. Select the camera in the Camera Group list.
3. Check the checkbox **Record 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 Record Schedule Template*.
5. Click **Advanced Settings** to set the recording parameters. For details, see *Table 3.1 Advanced Recording Settings* and *Table 3.2 Advanced Capture Settings*.
6. Optionally, click **Copy to...** to copy the record schedule settings to other channels.
7. Click **Save** to save the settings.

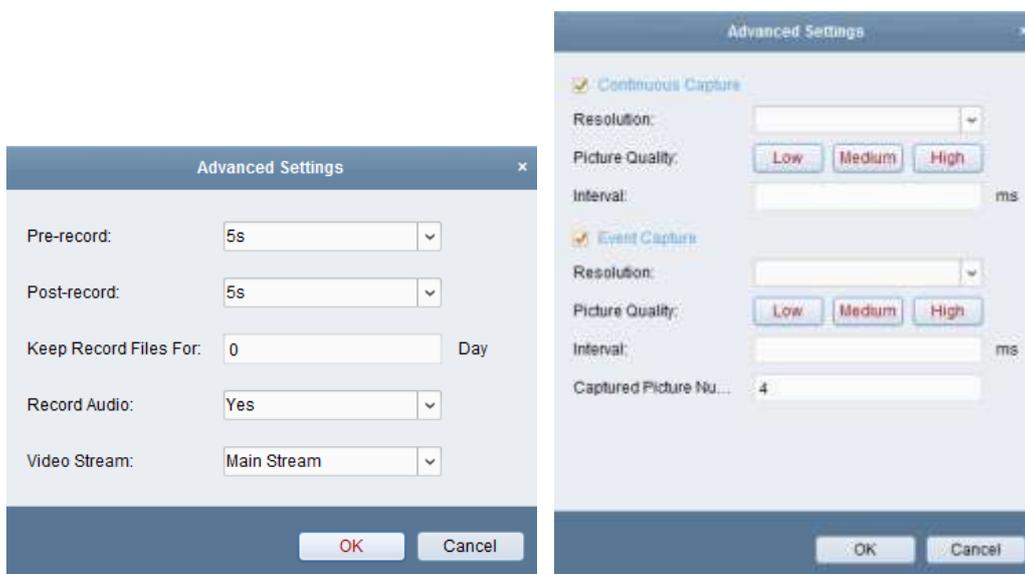


Table 3.1 Advanced Recording Settings

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.
Video Stream	Select the stream type for the recording.

Table 3.2 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 Record Schedule Template

Perform the following steps to configure the record 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.

1. Click **Edit** to enter the Templates Management interface. Select the template to be set and you can edit the template name.
2. 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 NVMS7000.

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.

3. 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.
4. 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 record schedule.



3.1.2 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 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 NVMS7000 software package. When installing the NVMS7000, 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 2.2.2 Adding Online Devices*.
 - By specifying the storage server IP address or domain name, see *Section 2.2.3 Adding Devices Manually*.
 - By specifying an IP segment, see *Section 2.2.4 Adding Devices by IP Segment*.
 - By IP Server, see *Section 2.2.5 Adding Devices by IP Server*.

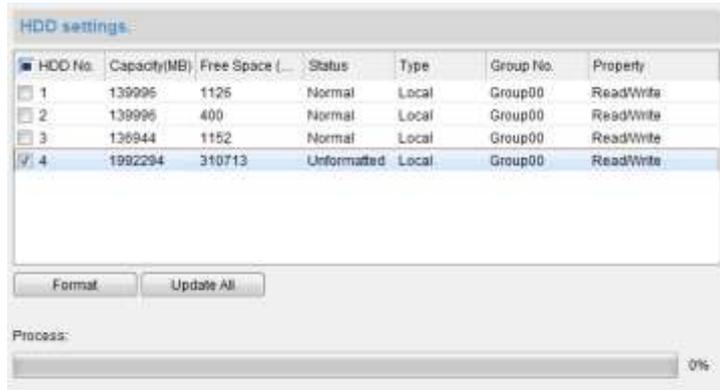
Formatting the HDDs

The HDDs of the storage 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.



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 **Record 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.

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 Record 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.



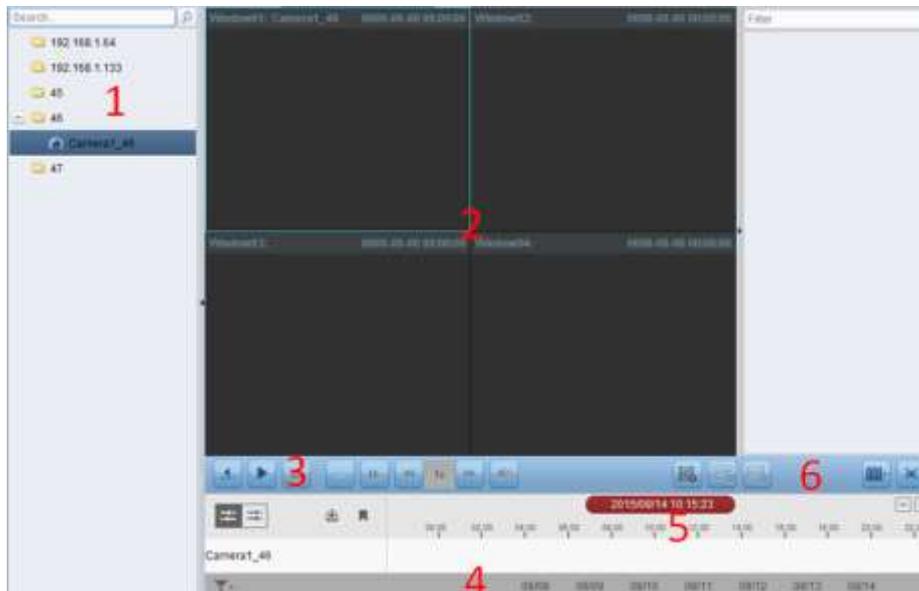
Note: The storage server supports storage of line crossing detection alarm, intrusion detection alarm, region entrance detection alarm, region exiting detection alarm, fast moving detection alarm, people gathering detection alarm, loitering detection alarm, parking detection alarm, object removal detection alarm, and unattended baggage detection alarm recording.

3.2 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.

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

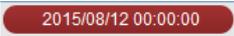
3.2.1 Normal Playback

Purpose:

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

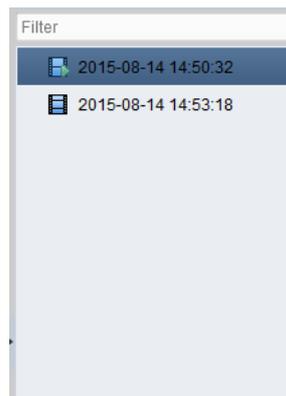
Searching Video Files for Normal Playback

Steps:

1. Open the Remote Playback page.
2. Click-and-drag the camera or group to the display window, or double-click the camera or group to start the playback.
3. The found video files of the selected group or camera will be displayed on the right of the interface. You can filter the results through the **Filter** text field.
4. (Optional) Click the calendars icon  to activate the calendars dialog box.

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

Click **OK** and the video files of the 7 days near to the configured date will be searched and displayed.



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.

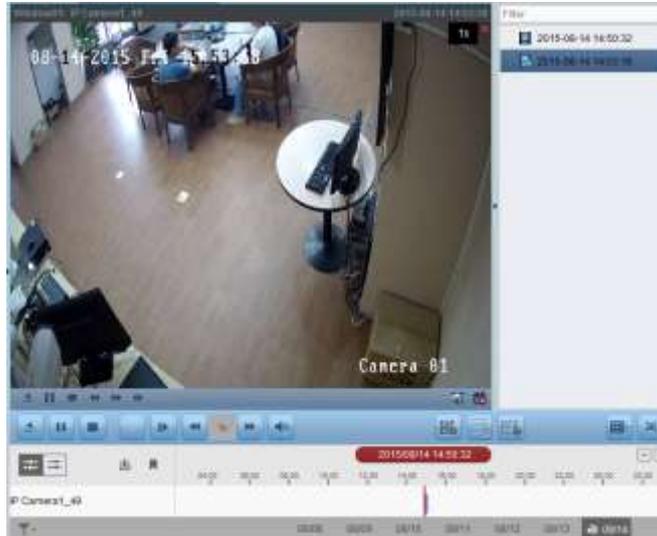
- **Playback by Timeline**

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:

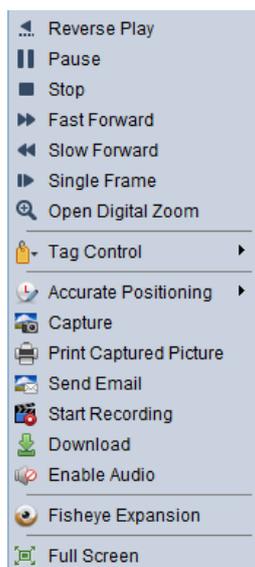


On the Normal Playback page, the following toolbar buttons are available:

	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.
	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.
	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.
	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 Playback	Click to play back the video files synchronously/asynchronously.
	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.
	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.
	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.
	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.
	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.
	Full Screen	Display the playback in full-screen mode. Click the icon again to exit.

3.2.2 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 3.2.1 Normal Playback*.
 3. Click  and the motion detection triggered recording will be searched by default.
 4. Select the event type from the drop-down list and the found video files will be displayed. You can filter the results through the **Filter** text field. Or you can click  to go back to the normal playback.
 5. (Optional) Click the calendars icon  **2015/08/12 16:06:10** to activate the calendars dialog box. Select the date and set the accurate time. Click **OK** and the video files of the 7 days near to the configured date will be searched and displayed.
- Note:** In the calendar, the date which has scheduled records will be marked with  and the date with event records will be marked with .
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.
	Date	The day that has video files will be marked with  .

Please refer to *Chapter 3.2.1 Normal Playback* for the description of the right-click menu. Some icons may not be available for event playback.

3.2.3 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 3.2.1 Normal Playback*.
3. Click  to enter the ATM playback interface.
4. Enter the search conditions.

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

: 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 **Search** and the matched files will be displayed. You can filter the results through the Filter text field.
6. (Optional) Click the calendars icon  to activate the calendars dialog box.
Select the date and set the accurate time. You can also click **Current Time** to get the current time. Click **OK** and the video files of the 7 days near to the configured date will be searched out and displayed.
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 3.2.1 Normal Playback* for the description of the playback control toolbar and right-click menu. Some icons may not available for ATM playback.

3.2.4 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.

- Click  in the toolbar to enable the synchronous playback. The camera under playback will start synchronous playback.



- To disable the synchronous playback, click the icon .

3.2.5 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:

- Open the Remote Playback page.
- Select the camera and start the normal playback. Refer to *Chapter 3.2.1 Normal Playback*.
- Click  to enter the VCA playback interface.
- 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 **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.



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 3.2.1 Normal Playback* for the description of the playback control toolbar and right-click menu. Some icons may not available for VCA playback.

3.2.6 Fisheye Playback

Purpose:

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

Steps:

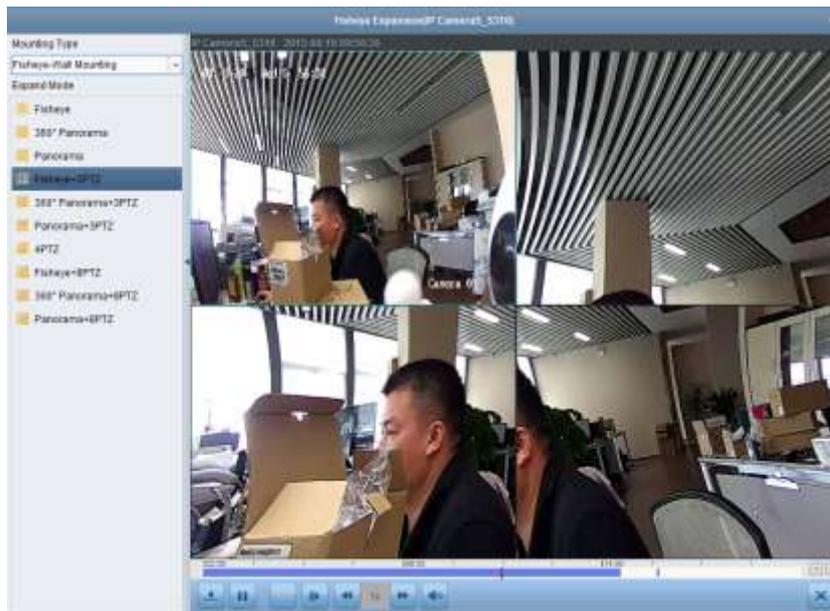
1. Open the Remote Playback page.

2. Select the camera and start the normal playback. Refer to *Section 3.2.1 Normal Playback*.
3. Right-click on the playback video and select **Fisheye Expansion** to enter the Fisheye Expansion Mode. You can select the expand mode for playback as desired.

Note: For some devices, you can select the mounting type of the device and the related expansion 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.



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 4 Event Management

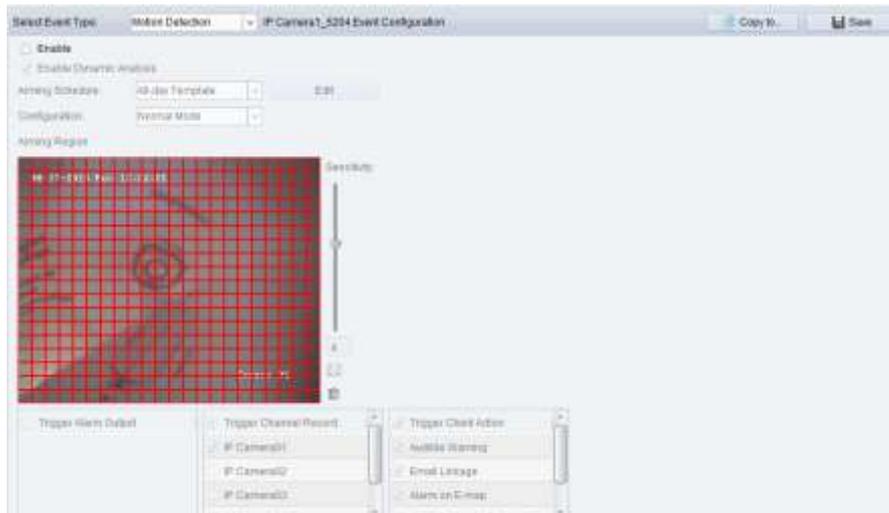
Purpose:

In NVMS7000 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
- Device Exception
- Zone Event
- **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.

4.1 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.
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 4.1 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.

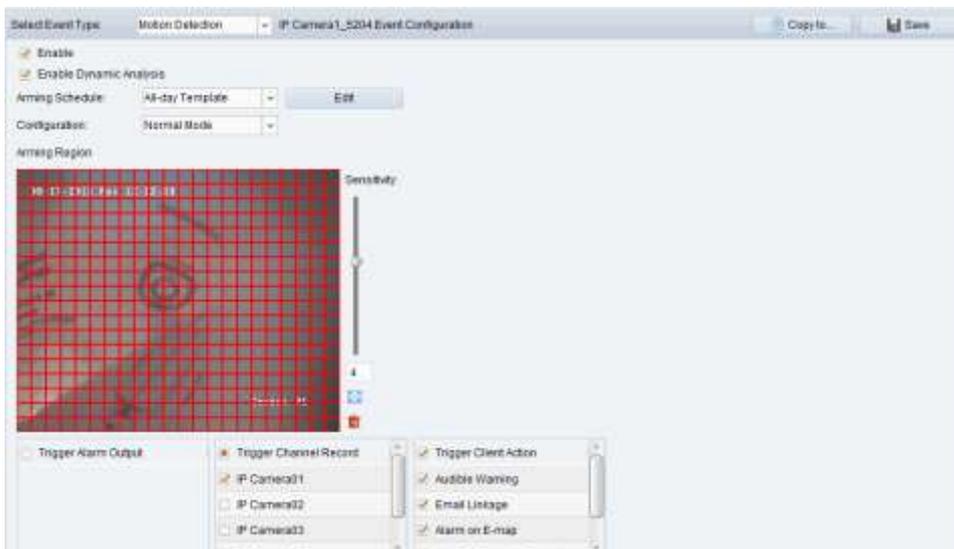


Table 4. 1 Linkage Actions for Motion Detection Alarm

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.

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:

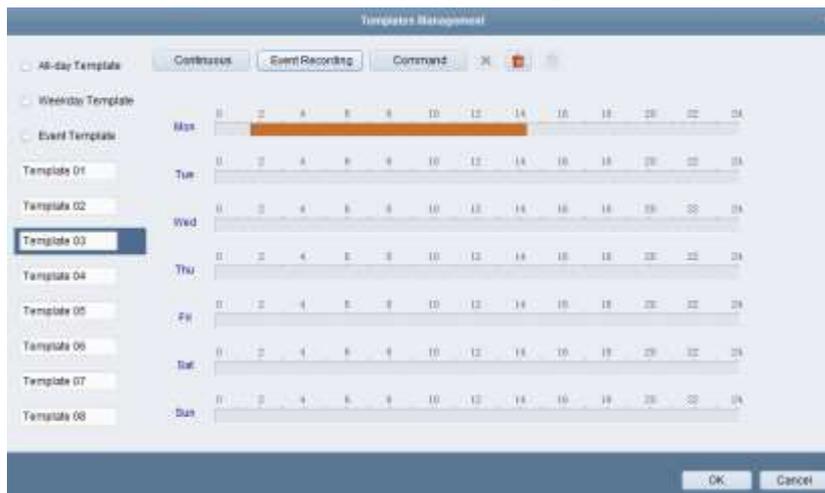
If **Template 01 to 09** is selected in the drop-down list, start from step 1;

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.



4.2 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.
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 4.2 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.

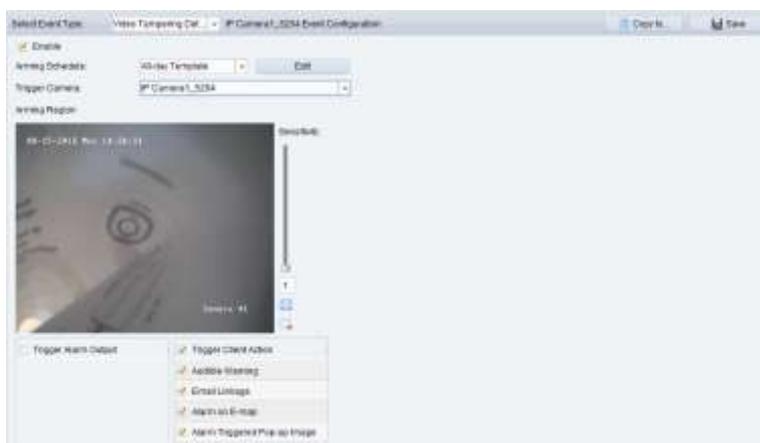


Table 4. 2 Linkage Actions for Tampering Alarm

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.
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.

4.3 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.
6. Check the checkboxes to activate the linkage actions. For details, see *Table 4.3 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 4.3 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.
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.

4.4 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.
6. Check the checkboxes to activate the linkage actions. For details, see *Table 4.4 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.

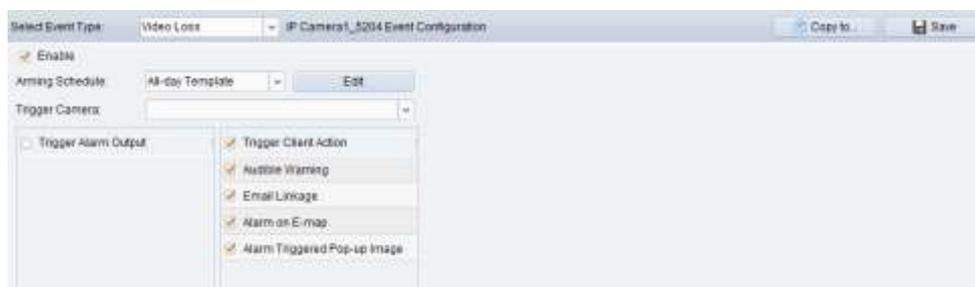


Table 4. 4 Linkage Actions for Video Loss Alarm

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.
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.

4.5 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.
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 4.8 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.

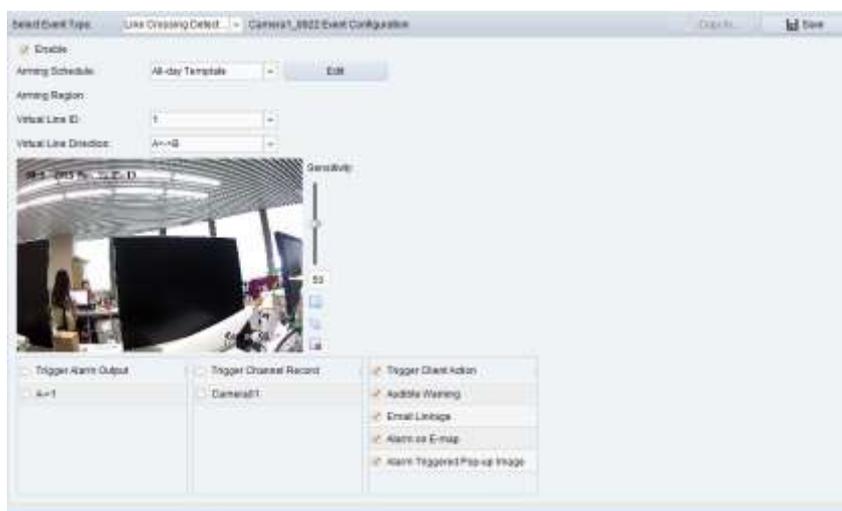


Table 4. 5 Linkage Actions for Line Crossing Detection Alarm

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.
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.

4.6 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.
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 4.9 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.

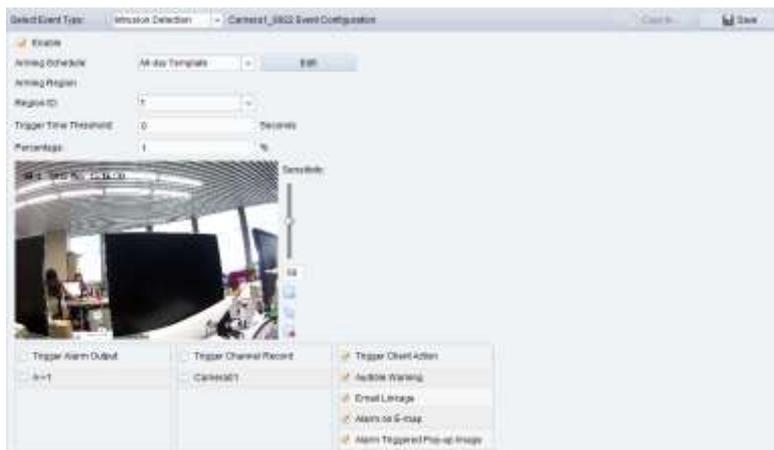


Table 4. 6 Linkage Actions for Intrusion Alarm

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.
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.
Alarm Triggered Pop-up Image	The image of the triggered camera pops up when alarm is triggered.

4.7 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.
8. Check the checkboxes to activate the linkage actions. For details, see *Table 4.20 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.

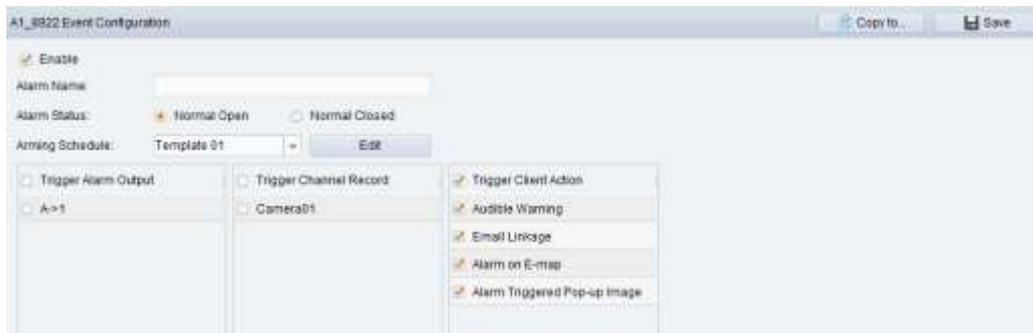


Table 4.7 Linkage Actions for Alarm Input

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.
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.

4.8 Configuring Device Exception Linkage

Steps:

1. Open the Event Management page and click the **Device Exception** tab.
2. Select the device to be configured.
3. Select the device exception type, including HDD full, HDD exception, illegal login, etc.
4. Check the checkbox **Enable**.
5. Check the checkboxes to activate the linkage actions. For details, see *Table 4.21 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.

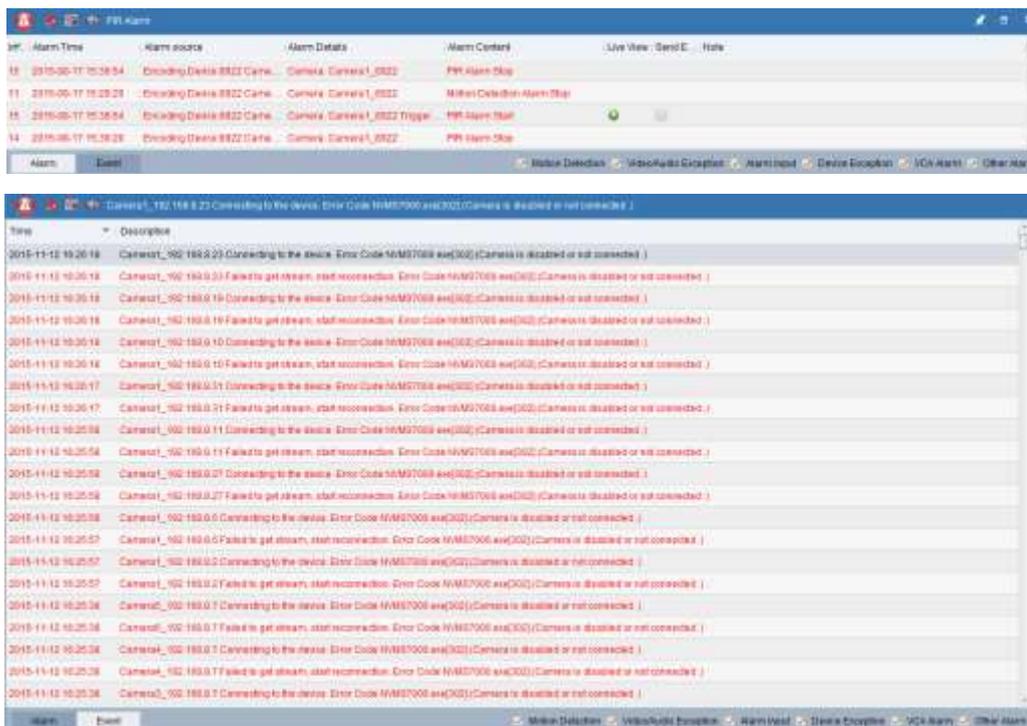


Table 4. 8 Linkage Actions for Device Exception

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.
Audible Warning	The client software gives an audible warning when alarm is triggered.
Email Linkage	Send an Email notification of the alarm information to one or more receivers.

4.9 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. Or click  to display 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.
 	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.

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:

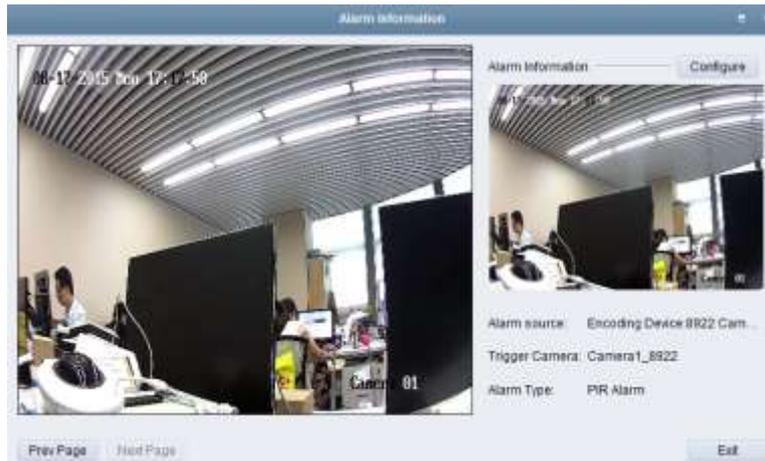
To display the alarms, the event parameters need to be configured.

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.

Click  to get a live view of the alarm triggered camera. The instant playback that is 30s before the alarm (if available) will start in the left window before playing the live video. In the right window, the alarm picture displays.

Note: 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 *Chapter3.1.2 Storing on Storage Device*.



Click  to send an Email notification of the alarm to one or more receivers if the email settings are properly configured (*Section 14.2.6 Email Settings*).

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.

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

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

Viewing Events Information

Purpose:

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

Steps:

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



Chapter 5 E-map Management

Purpose:

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



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

5.1 Adding an E-map

Purpose:

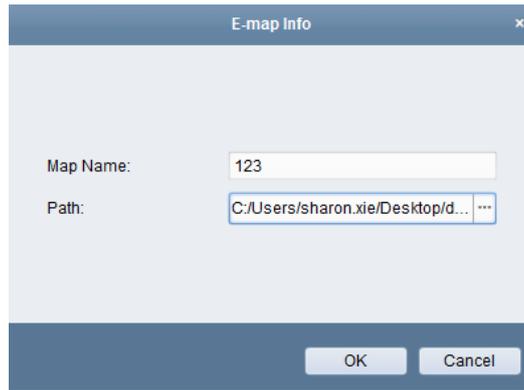
An E-map needs to be added as the parent map for the hot spots and hot regions.

Steps:

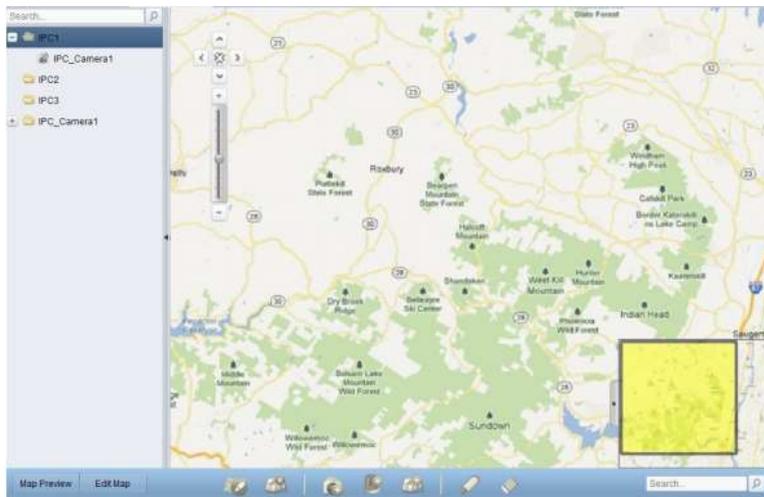
1. Open the E-map page.
2. Select a group for which you want to add a map.
3. Click the icon  in the Map Display Area to open the map adding dialog box.
4. Input a descriptive name of the added map as desired.
5. Click the icon  and select a map file from the local path.
6. Click **OK** to save the settings.

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 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. |

5.2 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.

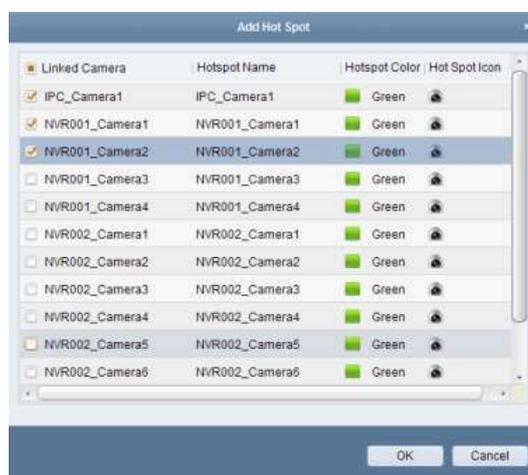
5.2.1 Adding Hot Spots

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.



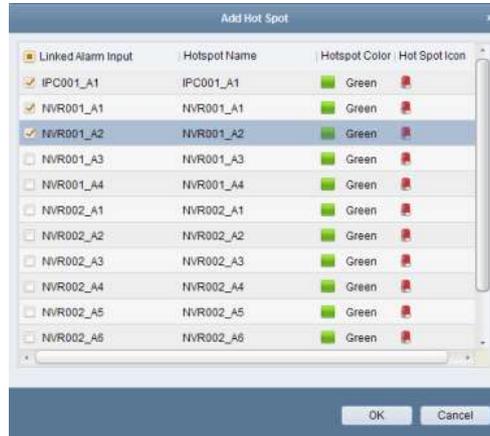
Adding Alarm Inputs as Hot Spots

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.



5.2.2 Modifying Hot Spots

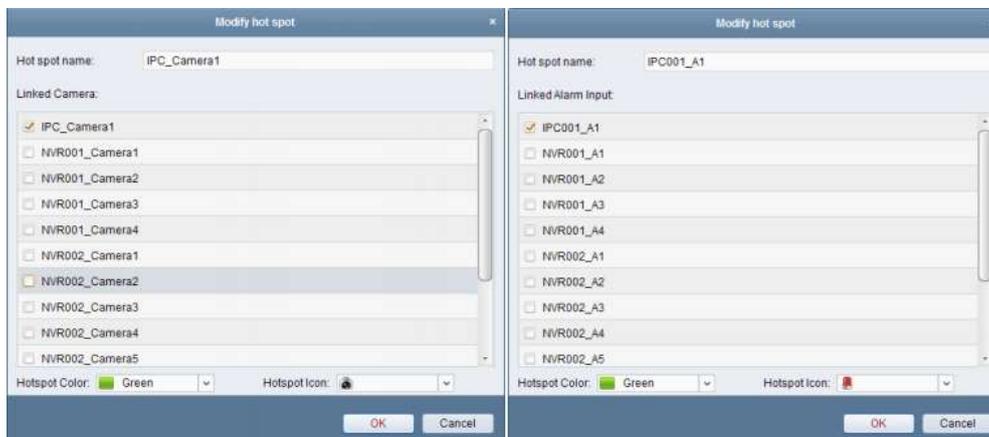
Purpose:

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**.



5.2.3 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 4 Event Management*.



5.3 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.

5.3.1 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 the desired locations.



5.3.2 Modifying Hot Regions

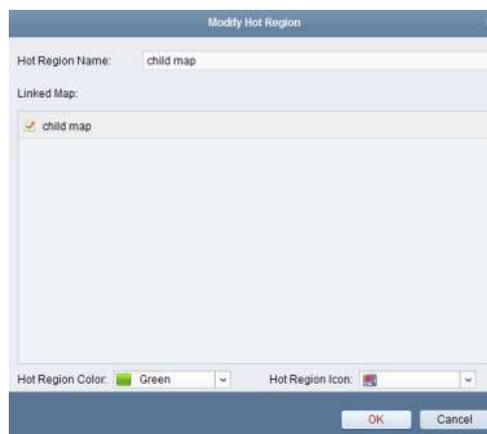
Purpose:

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**.



5.3.3 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 6 Cloud P2P

Purpose:

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

6.1 Registering an 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**.

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 an Cloud P2P account.

6.2 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.

Note:

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.

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.

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.

6.3 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 *Section 2.3 Group Management*.

3. For live view, please refer to *Section 2.4 Basic Operations in Live View*; for playback, please refer to *Section 3.2 Remote Playback*; for e-map settings, please refer to *Chapter 5 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.



Chapter 7 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.

7.1 Adding the Stream Media Server

Before you start:

The stream media server application software needs to be installed and it is packed in the NVMS7000 software package. When installing the NVMS7000, 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.

7.2 Adding Cameras to Stream Media Server to Forward Video Stream

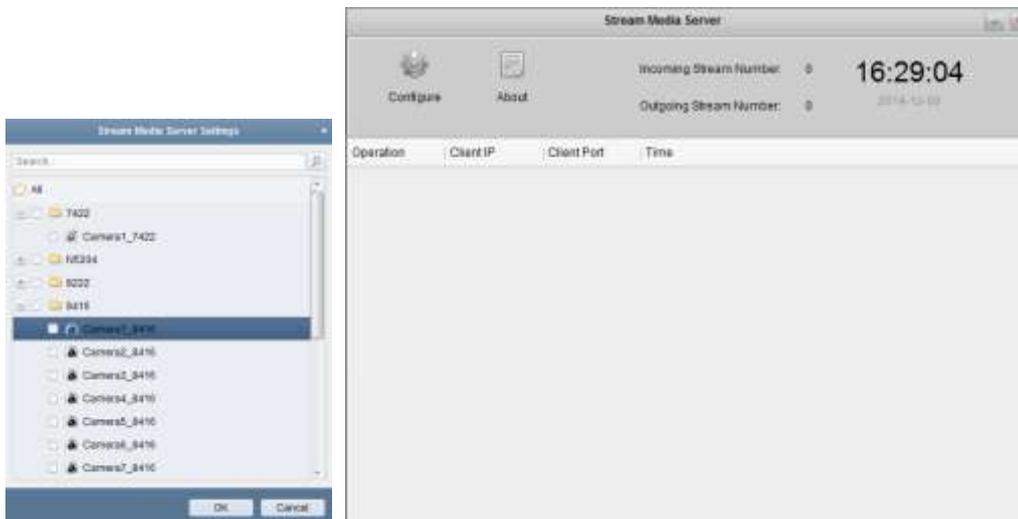
Purpose:

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.

Note: For one stream media server, up to 64 channels of video stream can be forwarded through it and up to 200 channels of video stream can be sent to clients from it.

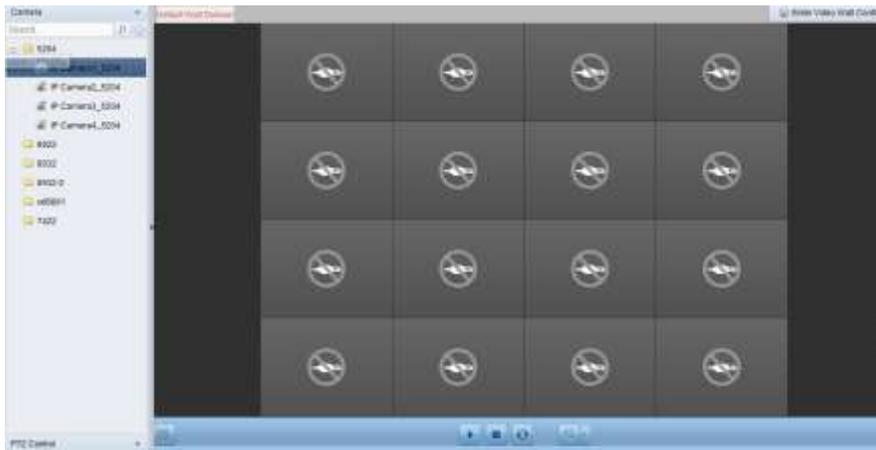


Chapter 8 Decoding and Displaying Video on Video Wall

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.



8.1 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 four adding modes, please refer to the following

sections:

- By specifying the device IP address, see *Section 2.2.3 Adding Devices Manually*.
- By specifying an IP segment, see *Section 2.2.4 Adding Devices by IP Segment*.
- By IP Server, see *Section 2.2.5 Adding Devices by IP Server*.
- By HiDDNS, see *Section 2.2.6 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 manufacturer for the device.
 - For IP Segment: Edit the start IP, end IP, port No., user name, password, channel number, start from and manufacturer for the device.

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

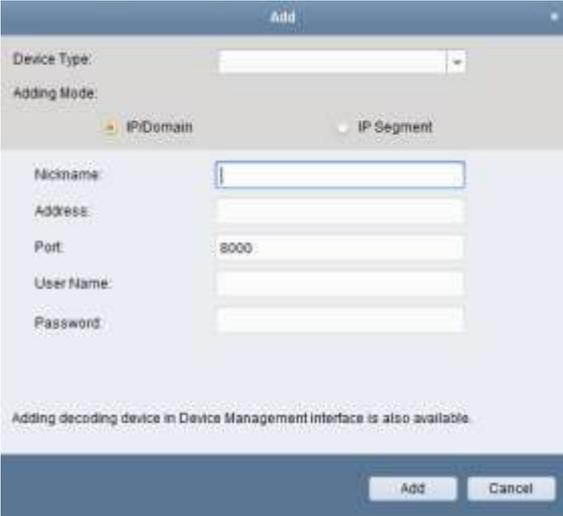
8.2 Adding the Decoding Device

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 added 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 2 adding modes, please refer to the following sections:

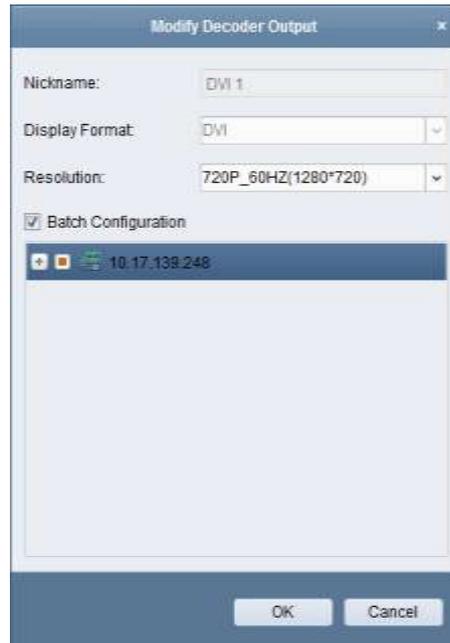
- By specifying the device IP address or domain, see *Section 2.2.3 Adding Devices Manually*.
- By specifying an IP segment, see *Section 2.2.4 Adding Devices by IP Segment*.

For **Cascading Server**, you can add the device via IP address. For detailed configuration, see *Section 2.2.3 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.

8.3 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.

8.3.1 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.

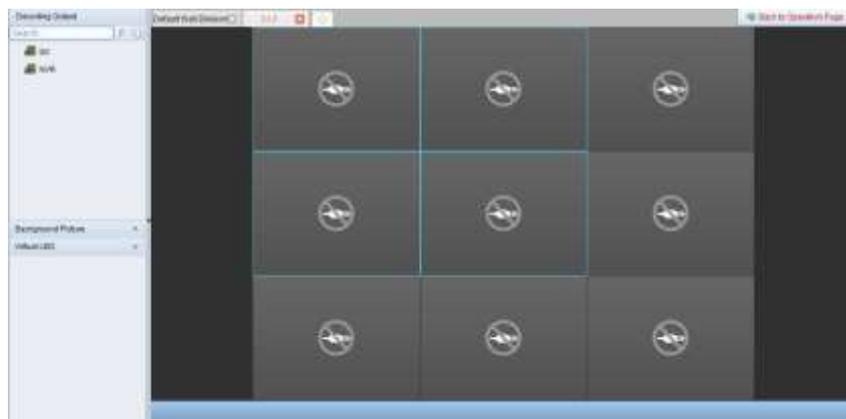
Task 3: Delete a Video Wall

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.



8.3.2 Multi-Screen Display

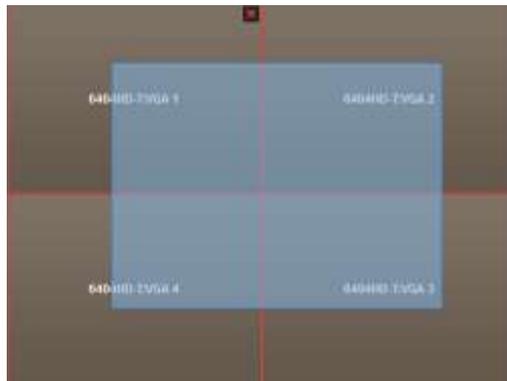
Purpose:

Steps:

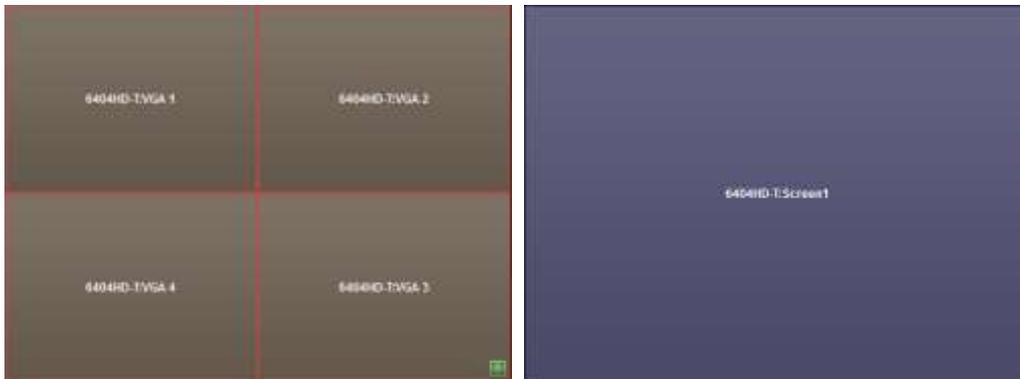
1. Perform the step 3 of *Section 8.3.1 Linking Decoding Output with Video Wall* to configure the linkage between the decoder and video wall.
2. Click-and-drag you mouse to select the adjacent display windows for jointing.

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.

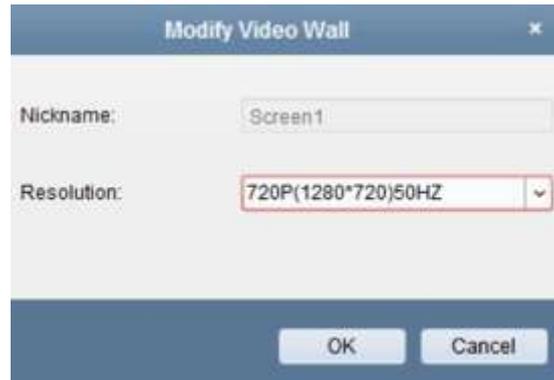


3. Click  to confirm jointing the screens.



4. (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.



8.3.3 Configuring Background

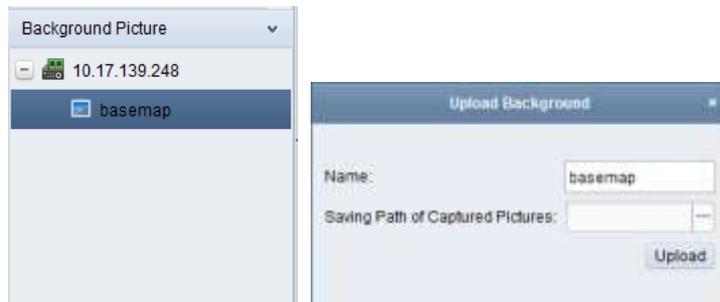
Purpose:

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

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

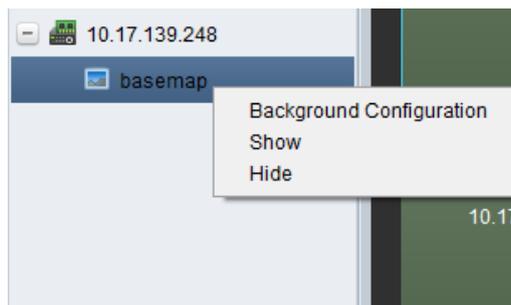
Steps:

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



3. Set a user-defined name for the background picture and click  to select a picture file.
4. Click **Upload** to upload the picture.
5. Click and drag the configured background picture to the desired position of the video wall.
6. 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.



8.3.4 Configuring Virtual LED

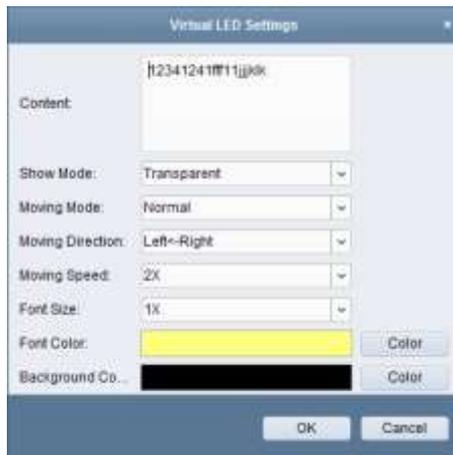
Purpose:

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



8.4 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.

8.4.1 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.

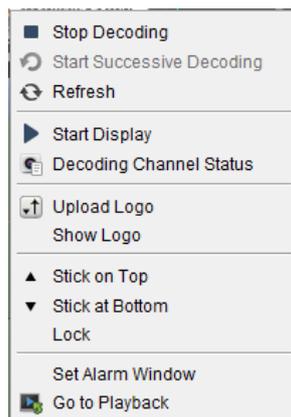
Notes:

- 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.
 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 2.4.3 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.

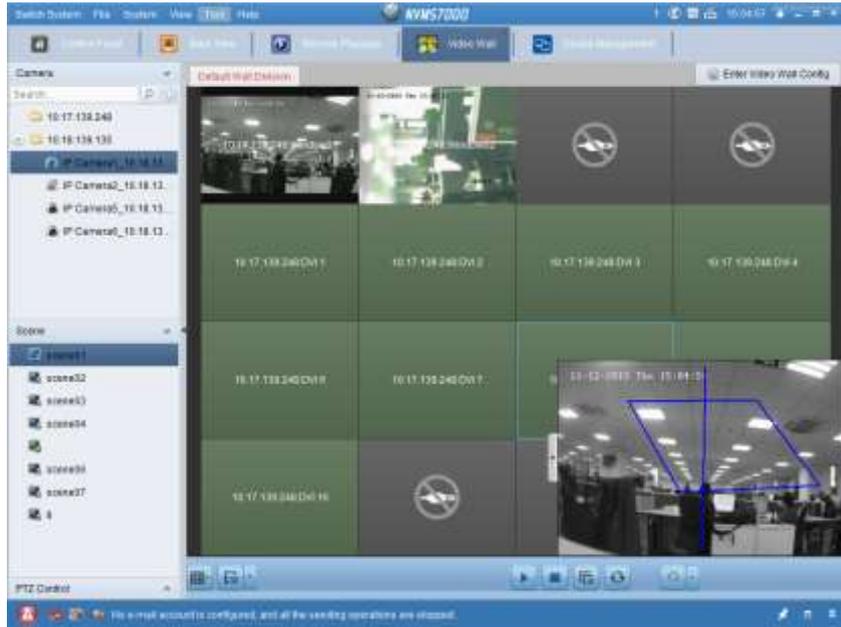
Stick at Bottom: Always stick the window at the bottom layer. This function is only supported by cascading server.

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

8.4.2 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.

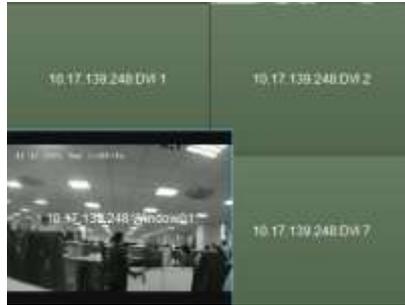
Steps:

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.

8.4.3 Configuring Playback

Purpose:

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

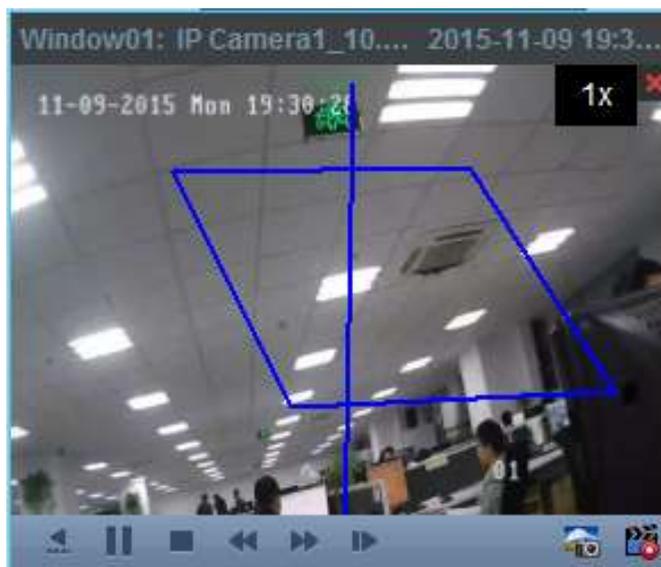
Note: Playback function is only supported by decoder.

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.

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
 1x	Playback speed.

8.4.4 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.
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.



8.5 Configuring Video Wall Controller

Purpose:

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

8.5.1 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.

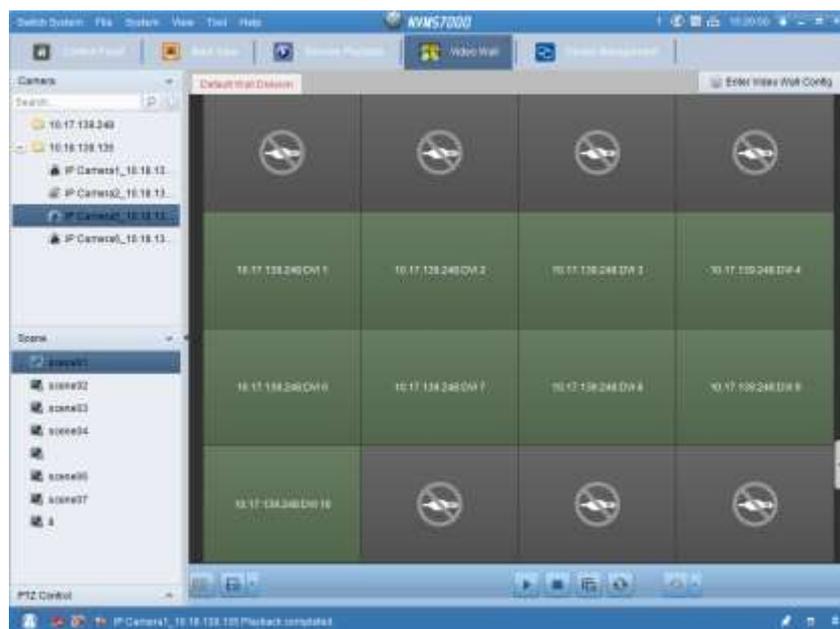
8.5.2 Linking Output with Video Wall

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.
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.

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.



8.5.3 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**



8.5.4 Configuring Video Wall Screens

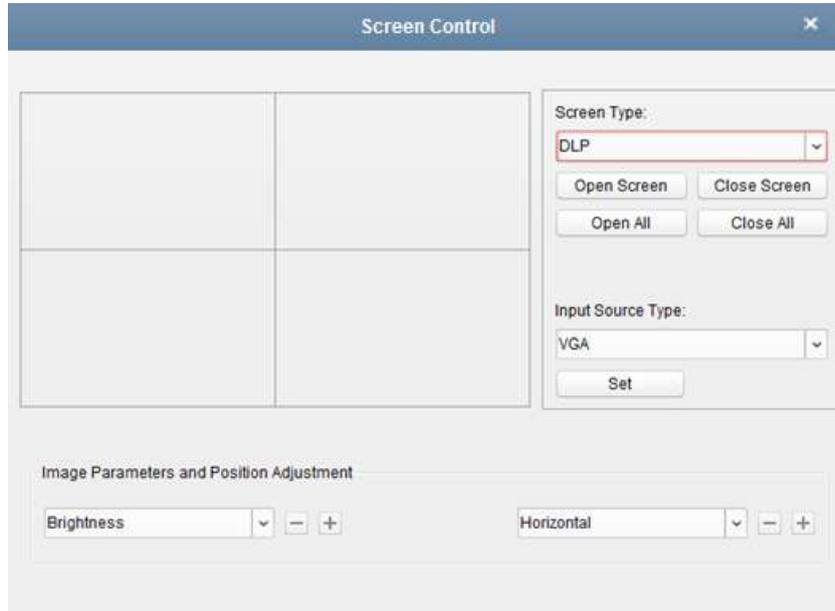
Purpose:

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.



8.5.5 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 NVMS7000 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.

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.
6. 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 .
7. Right-click on a playing window to activate the decoding management menu.

Note: The menu differs depending on the devices.

8.5.6 Configuring Plan

Purpose:

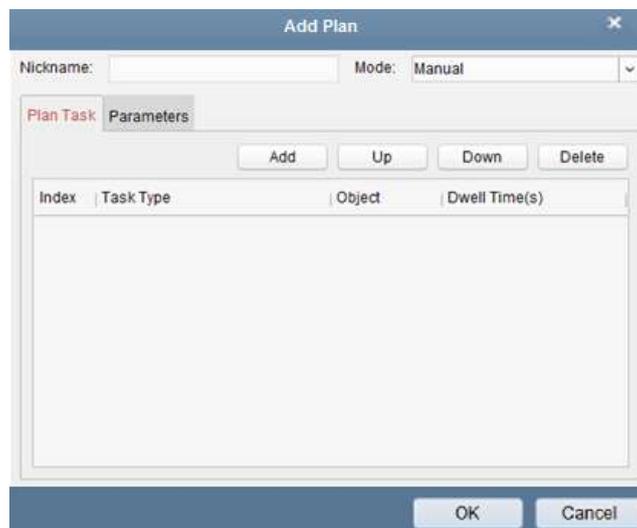
The plan function of video wall controller provides the switching the configured scene(s) and turning on or off the screens at a certain time. You can also set the time schedule for switching the operations (such as scene, close screens) and the plan can also be auto-switched.

Before you start: Scene(s) should be added for the video wall controller.

Steps:

1. Click **Back to Operation Page** to go back to the Video Wall Operation interface.
2. 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.



3. 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 9 Security Control Panel

Purpose:

The Security Control Panel module provides remote control and configuration via the NVMS7000 client software.

Before remote configure and control the security control panel, you are required to add the device to the software first.

For remote configuration of security control panel via the NVMS7000 client software, refer to the *User Manual* of security control panel.

9.1 Device Management

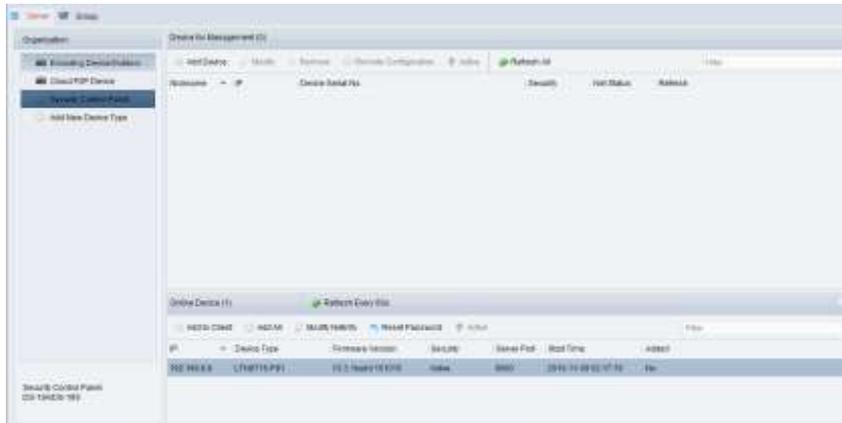
Purpose:

In this section, you are able to configure or view the basic parameters (such as the system information, alarm information, network data, device status and so on) of the security control panel.

9.1.1 Add a 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. 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 chapters:

- By specifying the device IP/Domain address, see *Chapter 2.2.3 Adding Devices Manually*.

- By specifying an IP segment, see *Chapter 2.2.4 Adding Devices by IP Segment*.
- Optionally, you can check the checkbox **Export to Group** to create a group by the device name. All channels and alarm inputs of the device will be imported to the corresponding group by default.
 - Click **Add** to add the device.

9.1.2 Edit a Security Control Panel

Purpose:

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

Steps:

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

- Enter the required nick name, address, and port number and then enter the admin user name and password.
- Click **Modify** to save the changes.

9.1.3 Delete a Security Control Panel

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

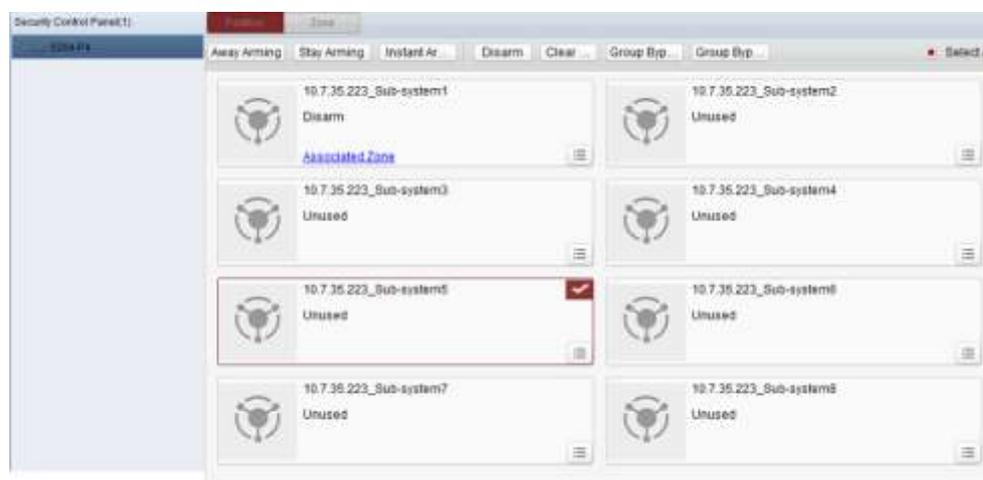
9.2 Remote Control

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.

9.2.1 Partition System Remote Control

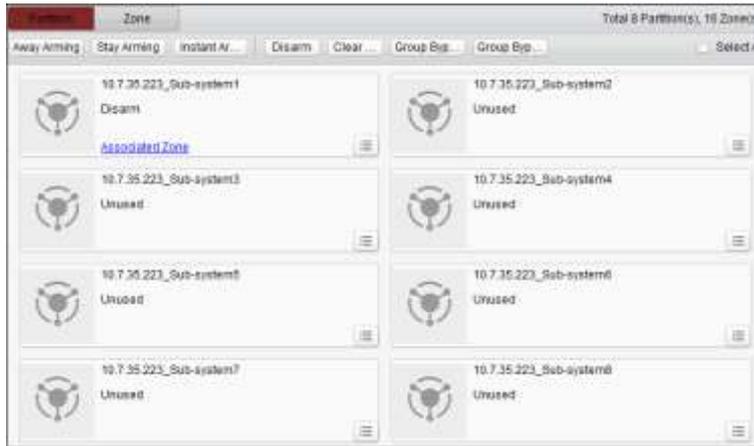
Purpose:

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.

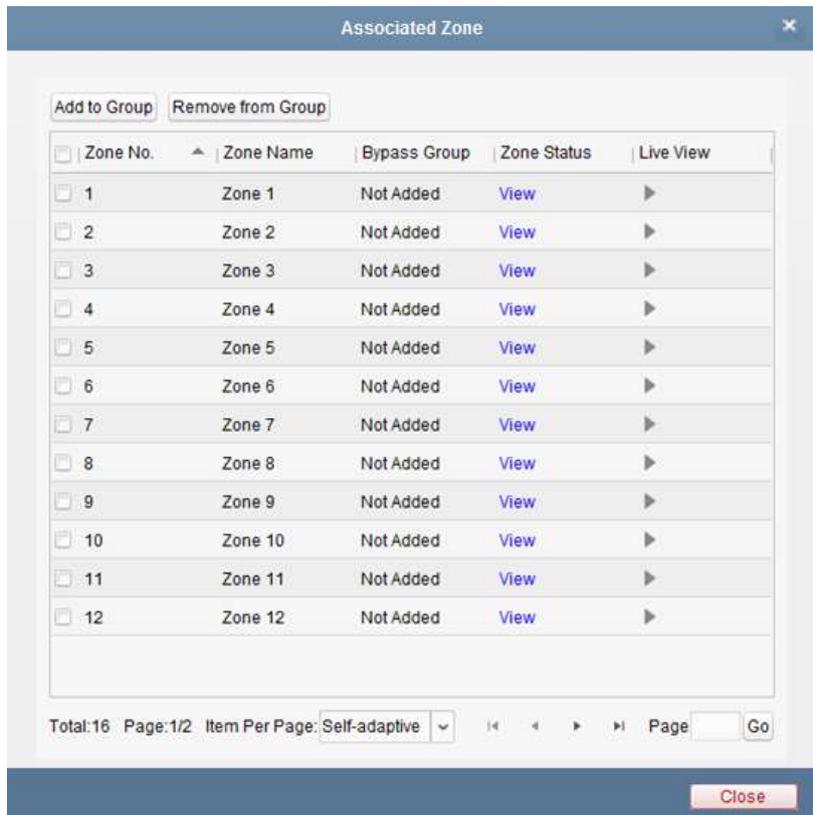
Steps:

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 linked camera.

9.2.2 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/Disarm	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	Partition2	View			
6	Zone 6	Partition2	View			
7	Zone 7	Partition2	View			
8	Zone 8	Partition2	View			
9	Zone 9	Partition2	View			
10	Zone 10	Partition2	View			
11	Zone 11	Partition2	View			
12	Zone 12	Partition2	View			
13	Zone 13	Partition2	View			
14	Zone 14	Partition2	View			
15	Zone 15	Partition2	View			
16	Zone 16	Partition2	View			

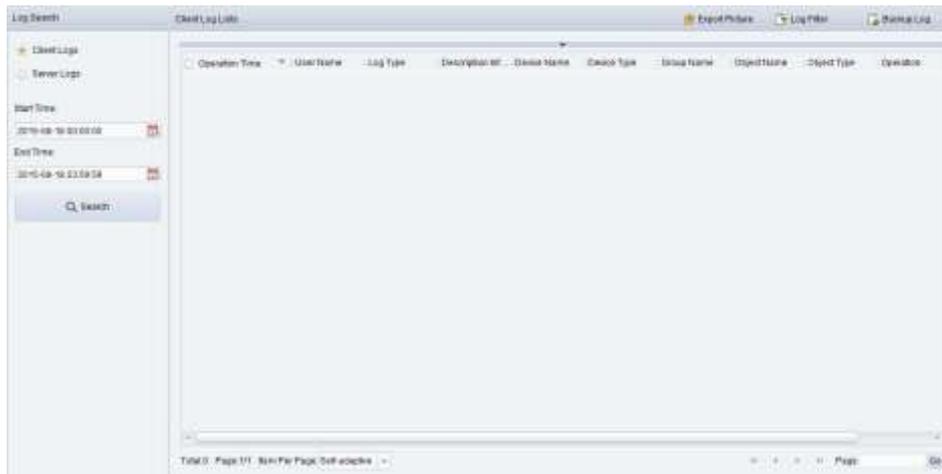
2. Click and select one or more zones to be controlled.
3. Click **Bypass/Bypass Recovery** on the upper side of the page to control the selected zones.
4. Click **View**, and you can view the status of the zone.
5. Click the / icon to bypass or recover a zone separately.
 - : The zone is bypassed.
 - : The zone is recovered.
6. The and icons indicates the arming/disarming status of the zone.
 - : Disarming Status.
 - : Arming Status
7. Click icon to view the live view of the zone’s linked camera.

Chapter 10 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	User Name	Log Type	Description	Device Name	Device Type	Group Name	Object Name	Object Type	Operation
2015-06-18 15:56:16	admin	Operation Log	Delete Device	7422	Encoding Device				
2015-06-18 15:55:02	admin	Operation Log	Add Transcoder	LV	Transcoder				
2015-06-18 15:46:24	admin	Alarm Log	Motion Detect	7422	Encoding Device	7422	Camera1_7422	Camera	
2015-06-18 15:35:30	admin	Alarm Log	Motion Detect	7422	Encoding Device	7422	Camera1_7422	Camera	
2015-06-18 15:26:14	admin	Operation Log	Stop Live View	5204	Encoding Device	5204	IP Camera1_5	Camera	
2015-06-18 15:19:05	admin	Operation Log	Report Camera	7422	Encoding Device	7422	Camera1_7422	Camera	
2015-06-18 15:19:04	admin	Operation Log	Add Device	7422	Encoding Device				
2015-06-18 15:19:04	admin	Operation Log	Add Group			7422			
2015-06-18 15:16:53	admin	Operation Log	Delete Device	8922	Encoding Device				
2015-06-18 15:16:30	admin	Operation Log	Delete Device	8922-2	Encoding Device				
2015-06-18 15:16:30	admin	Operation Log	Delete Device	8932	Encoding Device				
2015-06-18 15:06:33	admin	Alarm Log	Motion Detect	8922	Encoding Device	8922	Camera1_8922	Camera	
2015-06-18 15:05:38	admin	Alarm Log	Motion Detect	8922	Encoding Device	8922	Camera1_8922	Camera	
2015-06-18 15:05:22	admin	Alarm Log	Motion Detect	8922	Encoding Device	8922	Camera1_8922	Camera	
2015-06-18 15:04:13	admin	Alarm Log	Motion Detect	8922	Encoding Device	8922	Camera1_8922	Camera	
2015-06-18 15:03:42	admin	Alarm Log	Motion Detect	8922	Encoding Device	8922	Camera1_8922	Camera	
2015-06-18 15:02:50	admin	Alarm Log	Motion Detect	8922	Encoding Device	8922	Camera1_8922	Camera	

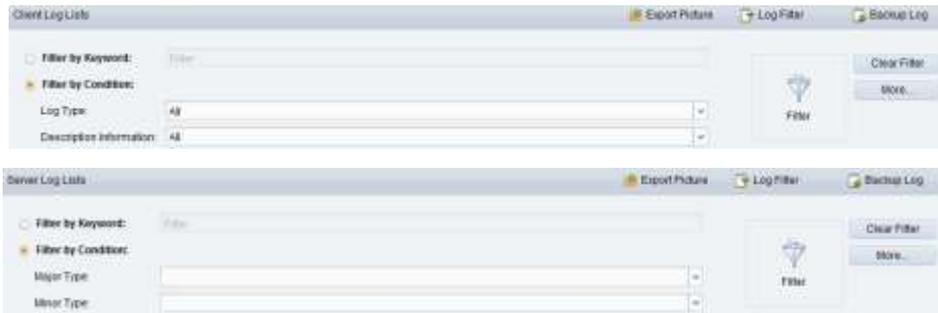
Filtering Log Files

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

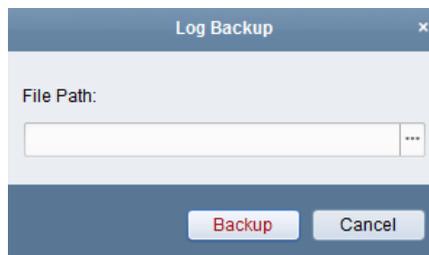
Purpose:

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.

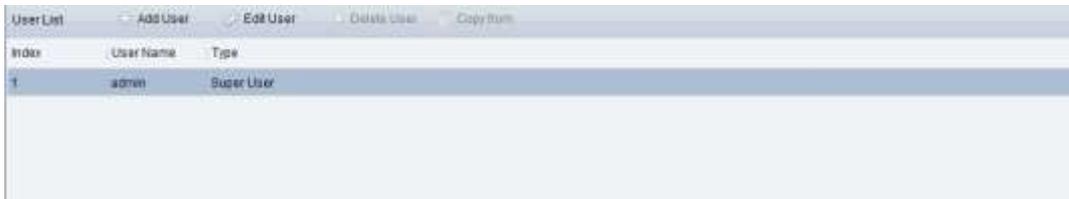
Chapter 11 Account Management and System Configuration

11.1 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.



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.

11.2 System Configuration

Purpose:

The general parameters, file saving paths, 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.

11.2.1 General Settings

Purpose:

The frequently-used parameters, including the log expired time, view scale, 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 14.1 General Parameters*.
4. Click **Save** to save the settings.

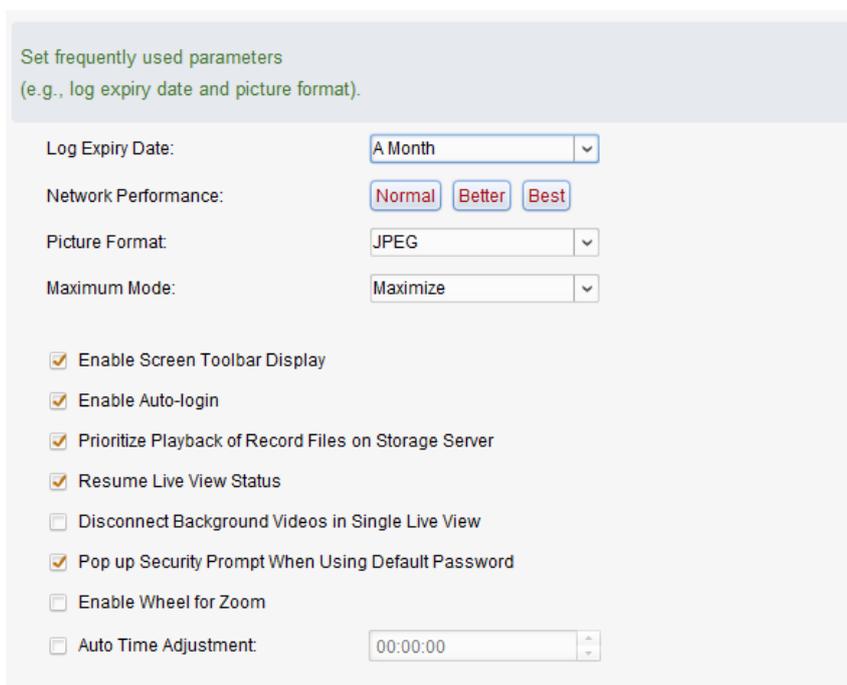


Table 11. 1 General Parameters

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.
Picture Format	Set the file format for the captured pictures during live view or playback.
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 Web Service	Enable this function to allow to access NVMS7000 client software via web browser. You can also set the web server port as desired. By default, it is 80. If the port No. of your PC running the NVMS7000 is occupied, you can change it to other value. After changing the port No., you should access the client via web browser by inputting <i>IP address of the PC running the client: new port No.</i>
Enable Screen Toolbar Display	Show the toolbar on each display window in live view or playback.
Enable Auto-login	Log into the client software automatically.
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 Live View Status	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.
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 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.
Auto Time Adjustment	Adjust the time automatically at a specified time point.

11.2.2 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 14.2 Image Parameters*.
4. Click **Save** to save the settings.



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 Video Stream	Change the video stream (main stream or sub-stream) automatically in live view according to the size of the display window.
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.

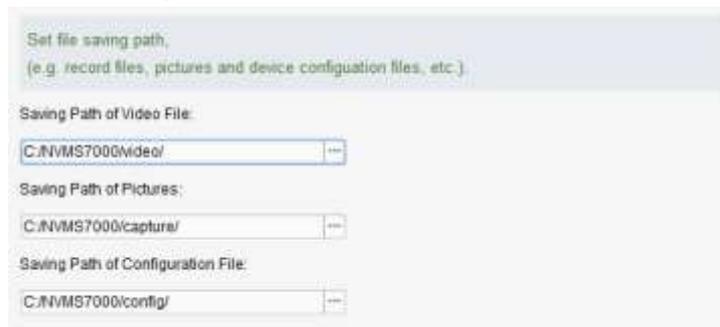
11.2.3 File Saving Path Settings

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.



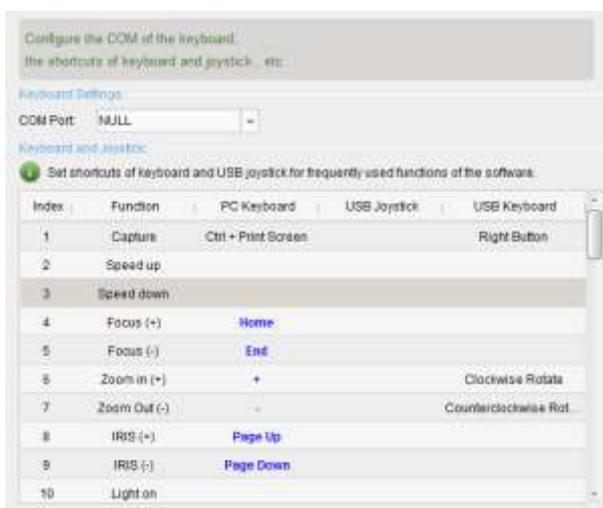
11.2.4 Keyboard and Joystick Shortcuts Settings

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.



11.2.5 Alarm Sound Settings

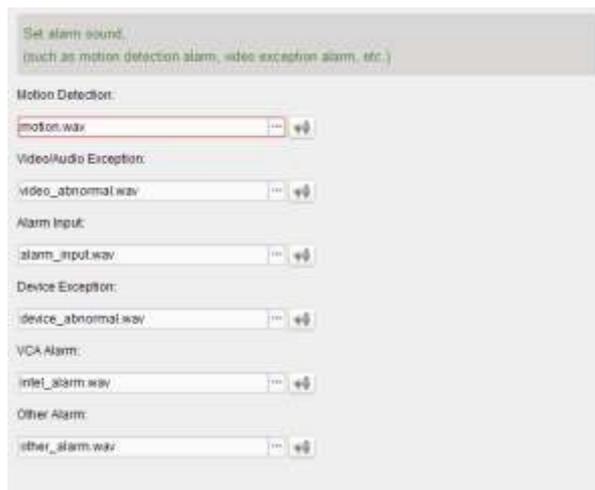
Purpose:

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. Click the icon  and select the audio files from the local path for different alarms.
4. Optionally, you can click the icon  for a testing of the audio file.
5. Click **Save** to save the settings.

Note: The format of the audio file can only be *.wav.



11.2.6 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

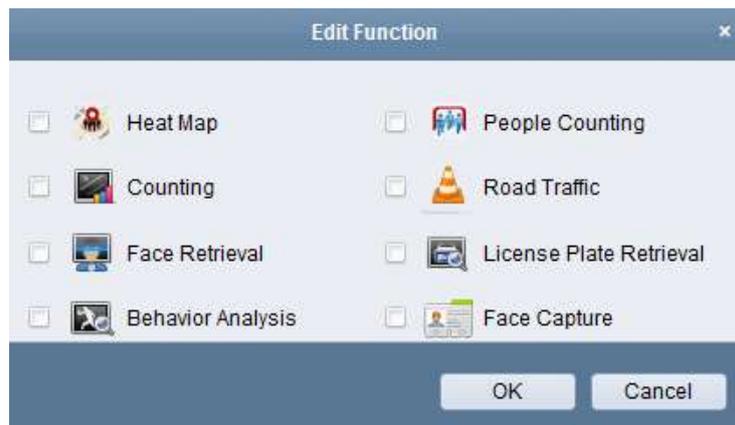
Chapter 12 Statistics

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.

12.1 People Counting Statistics

Purpose:

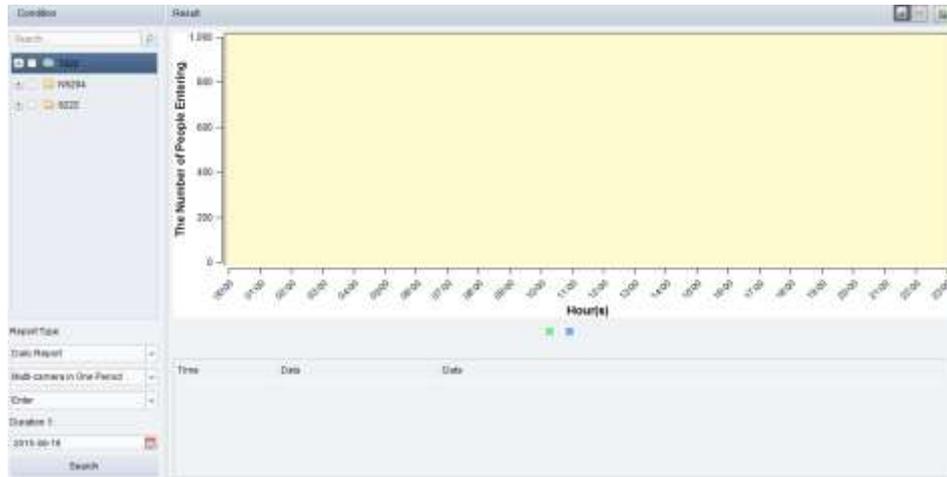
You can check the people counting statistics of the added people counting device and the statistics can be displayed in line chart or histogram. The detailed data can be exported for local storage.

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 2.2 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 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.
 - 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 periods.
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.



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.

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