iVMS-4200 Client Software

JULY 2014

Hikvision iVMS-4200 v2.02.00.04

User Manual

UD.6L0202D1536A01

Contents

Chapter 1 Overview

1.1 Description

iVMS-4200 is a versatile video management software for the DVRs, NVRs, IP cameras, encoders, decoders, VCA device, alarm host, 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 iVMS-4200 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.

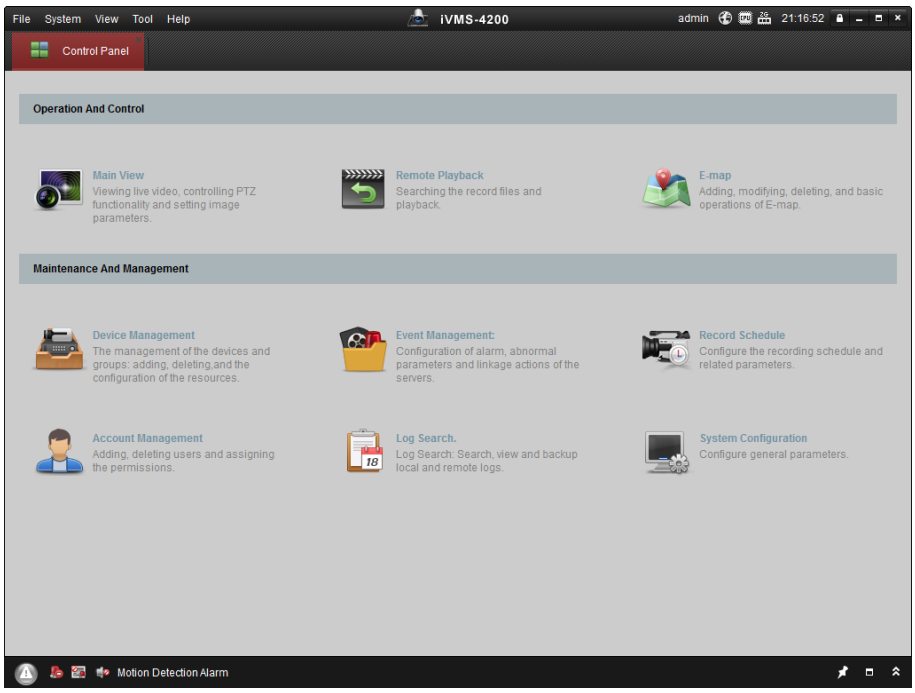
1.2 Running Environment

Operating System: Microsoft Windows 7 / Windows 2008 (32 / 64-bit), Windows 2003 / Windows XP (32-bit)
CPU: Intel Pentium IV 3.0 GHz or above
Memory: 1G or above
Display: 1024*768 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 iVMS-4200:



Menu Bar:

File	**Open Captured picture**	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 iVMS-4200 client software.
System	**Lock**	Lock screen operations. Log into 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.
	Full Screen	Display the window in full screen.
	Control Panel	Enter Control Panel interface.
	Main View	Open Main View page.
	Remote Playback	Open Remote Playback page.
	E-map	Open E-map page.
	Auxiliary Screen Preview	Open Auxiliary Screen Preview window.
Tool	**Device Management**	Open the Device Management page.
	Event Management	Open the Event Management page.
	Record Schedule	Open the Record 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.
	I/O Control	Turn on/off the alarm output.
	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 iVMS-4200 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 record 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 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 Record Schedule module provides the schedule settings for recording.


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.

Note: The Video Wall module only displays when decoding devices are added to the client. For adding device devices, please refer to *Section 12.2 Adding the Decoding Device*.

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 iVMS-4200 client software. You can get a brief view of the updates instruction from the following contents.

- **Support Management for Multiple New Device Types**
  Some new device types can be added and managed by the client, including the fisheye camera, device registered on Cloud service, VCA device, transcoder, video wall controller
- **Support VCA Playback**
  VCA rule can be set to the searched record 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 the playback speed of the concerned video and unconcerned video can be customized.
- **Newly Added Event Configuration**
  The event, such as audio detection, defocus detection, face detection and line crossing detection, can be configured via the client. And alarm linkage settings for the events are also configurable.
- **Alarm and Event Information Filter**
  The received alarm and event information can be filtered by selecting the needed event types. In this way, the important information can be searched quickly.

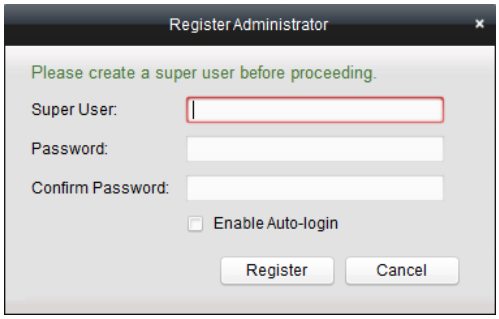
Chapter 2 Live View

2.1 User Registration and Login

For the first time to use iVMS-4200 client software, you need to register a super user for login.

Steps:

1. Input the super user name and password.
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.



Notes:

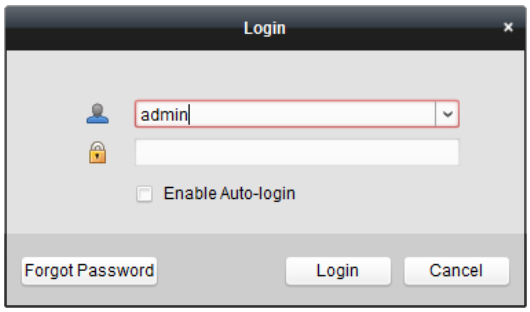
- A user name cannot contain any of the following characters: / \ : * ? " < > |
- The password cannot be empty and the length of the password should be no less than six characters.

When opening iVMS-4200 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.

2.2 Adding the Device

Purpose:

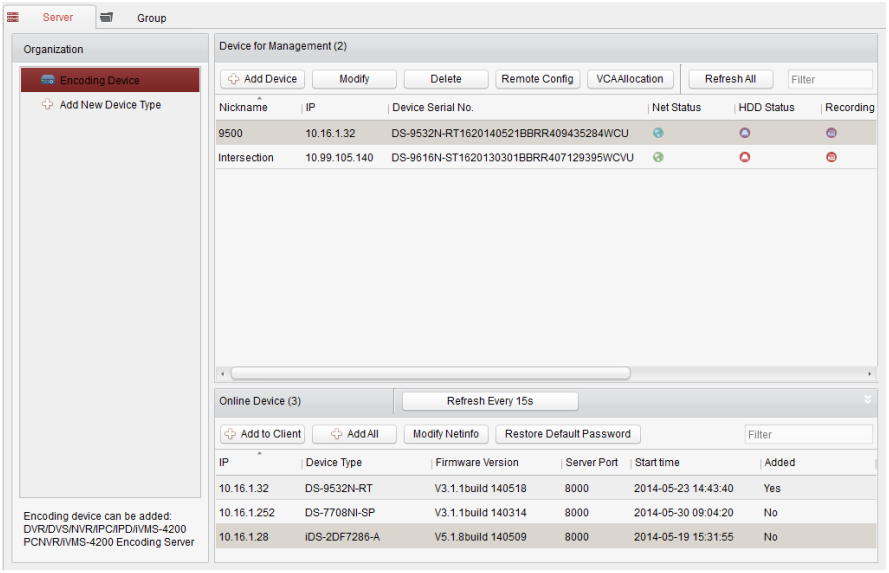
After running the iVMS-4200, devices including network cameras, video encoders, DVRs, NVRs, decoder, etc. should be added to the client for the remote configuration and management, such as live view, playback, alarm settings, etc.

Perform the following steps to enter the Device Adding interface:

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** to enter Encoding 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 2.2.1 Adding Online Devices.*
- By specifying the device IP address, see *Section 2.2.2 Adding Devices Manually.*
- By specifying an IP segment, see *Section 2.2.3 Adding Devices by IP Segment*.
- By IP Server, see *Section 2.2.4 Adding Devices by IP Server.*
- By HiDDNS, see *Section 2.2.5 Adding Devices by HiDDNS.*

2.2.1 Adding Online Devices

Purpose:

The active online devices in the same local subnet with the client software will be displayed on a list. You can click the **Refresh Every 15s** button to refresh the information of the online devices.

Steps:

1. Select the devices to be added from the list.
2. Click **Add to Client** to open the device adding dialog box.
3. Input the required information.

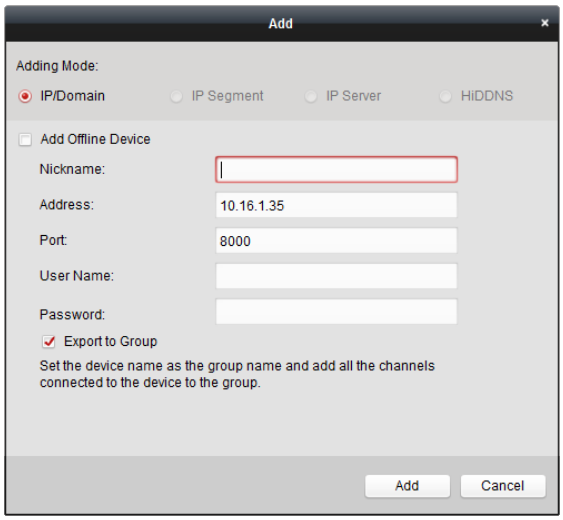
   Nickname: Edit a name for the device as you want.

   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*.

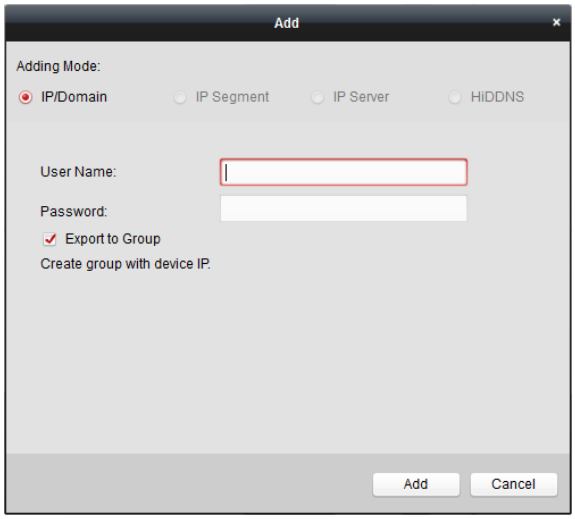
   User Name: Input the device user name. By default, the user name is *admin*.

   Password: Input the device password. By default, the password is *12345*.
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.
5. Click **Add** to add the device.



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 Parameters

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.

Restore Default Password

Select the device from the list, click **Restore Default Password**, input the security code, and then you can restore the default password of the selected device.

Note: The default admin password of the device is 12345, and the security code is returned after you send the data and serial No. of the device to the manufacturer.

2.2.2 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.

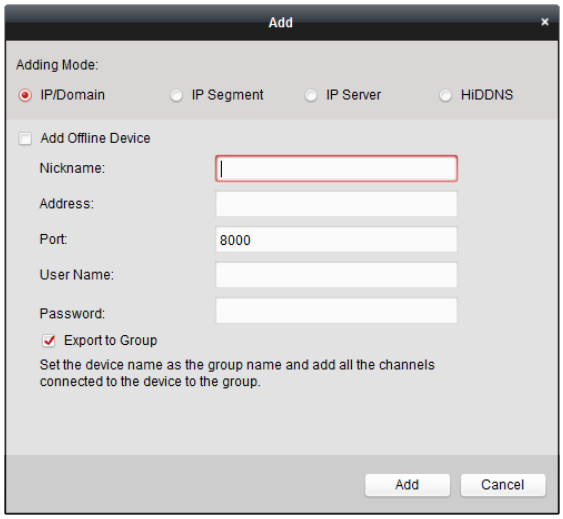
   Nickname: Edit a name for the device as you want.

   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. By default, the password is *12345*.
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.
5. Click **Add** to add the device.

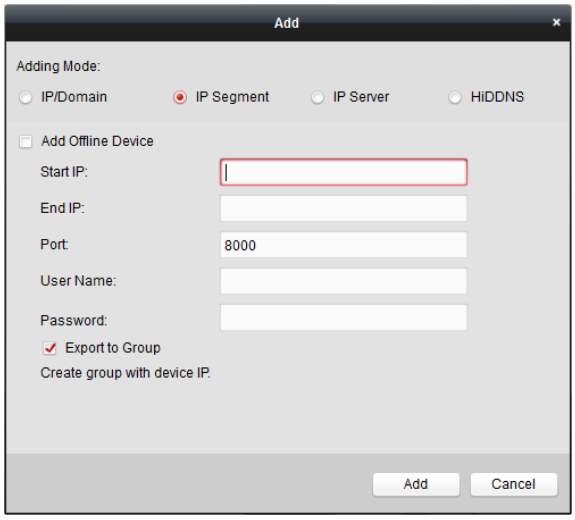


2.2.3 Adding Devices by IP Segment

Steps:

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

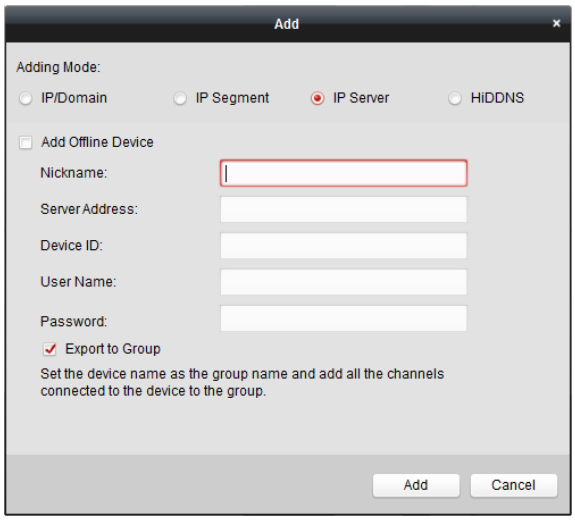
3. Input the required information.
   Start IP: Input a start IP address.
   End IP: Input an end IP address in the same network segment with the start IP.
   Port: Input the device port No.. The default value is *8000*.
   User Name: Input the device user name. By default, the user name is *admin*.
   Password: Input the device password. By default, the password is *12345*.
4. Optionally, you can check the checkbox **Export to Group** to create a group by the device IP. All the channels of the device will be imported to the corresponding group by default.
5. Click **Add**, and the device of which the IP address is between the start IP and end IP will be added to the device list.



2.2.4 Adding Devices by IP Server

Steps:

1. Click **Add Device** to open the device adding dialog box.
2. Select **IP Server** as the adding mode.
3. Input the required information.
   Nickname: Edit a name for the device as you want.
   Server Address: Input the IP address of the PC that installs the IP Server.
   Device ID: Input the device ID registered on the IP Server.
   User Name: Input the device user name. By default, the user name is *admin*.
   Password: Input the device password. By default, the password is *12345*.
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.
5. Click **Add** to add the device.



2.2.5 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.

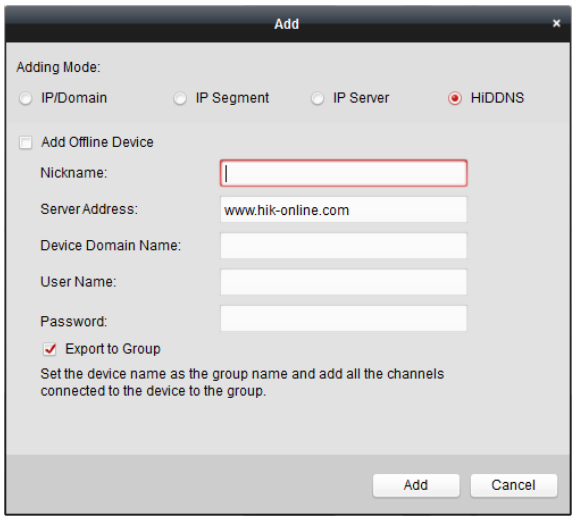
   Nickname: Edit a name for the device as you want.

   Server Address: *www.hik-online.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. By default, the password is *12345*.
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.
5. Click **Add** to add the device.



Note: iVMS-4200 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.

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 Config**, 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.

2.3 Group Management

Purpose:

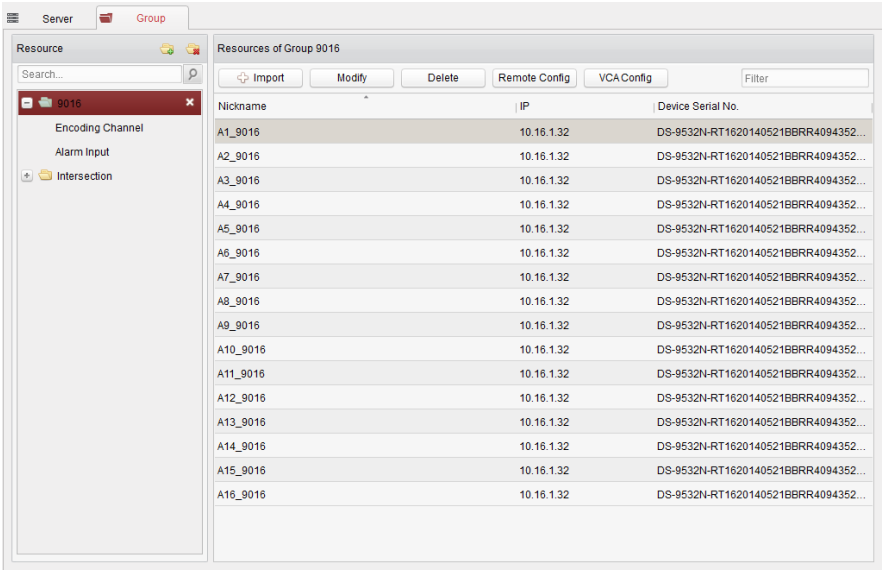
The devices added can be organized into groups for a convenient management. You can get the live view, play back the record files, and do some other operations of the device through the group.

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.

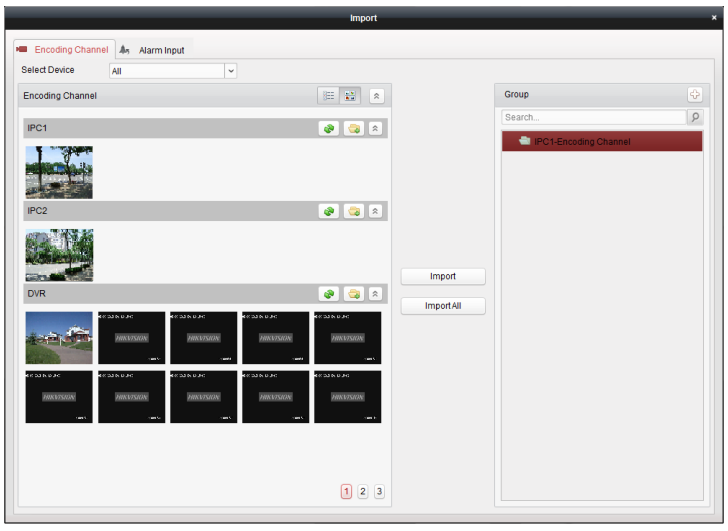
Importing Encoding Device to Group

Steps:

1. Click **Import** on Group Management interface, and then click the **Encoding Channel** tab to open the Import Encoding Channel page.
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 64 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 *device name-Encoding Channel*

(Alarm Input) 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. 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.

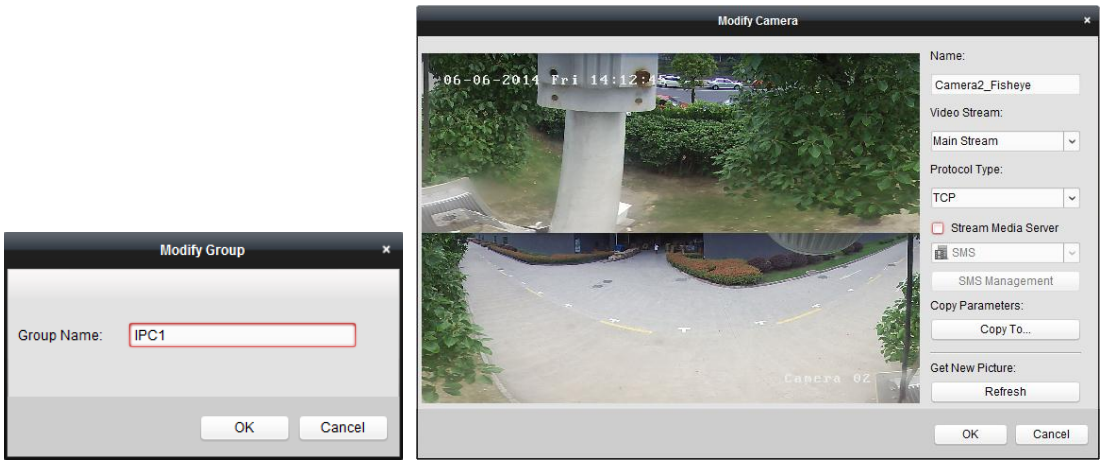
   Stream Media Server: Configure to get stream of the camera via stream media server. You can select and manage the available stream media server.

   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.



Removing Cameras from the Group

Steps:

1. Select the camera from the group list on the Import Encoding Channel page.
2. 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.

   Select the group from the group list on the Import Encoding Channel page, 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 click the icon , the selected group and the resource under it will be deleted.

2.4 Basic Operations in Live View

Purpose:

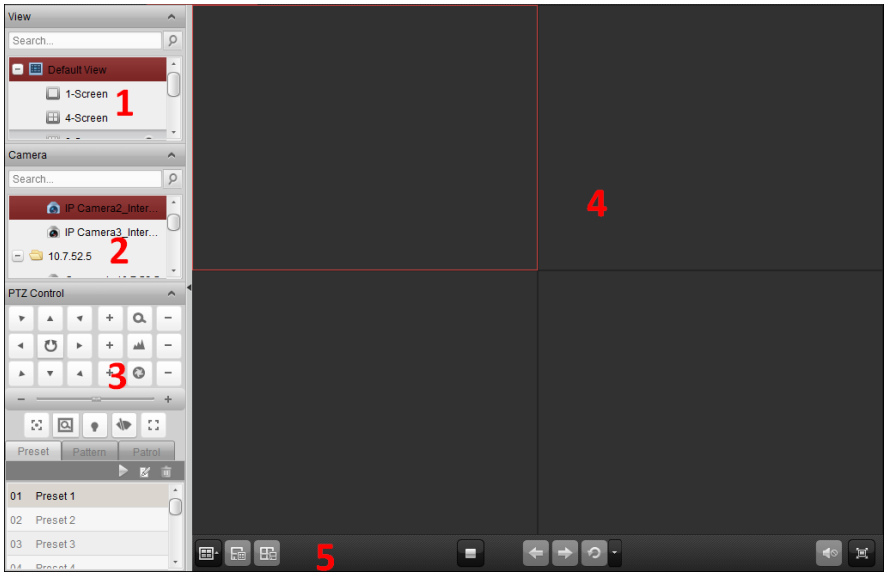
For the surveillance task, you can view the live video of the added network cameras and video encoders on the Main View page. And some basic operations are supported, including picture capturing, manual recording, PTZ control, etc.

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.

Live View Toolbar:

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

	Set Screen Layout	Set the screen layout mode.
	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.
	Previous	Go for live view of the previous page.
	Next	Go for live view of the next page.
	Resume/Pause Auto-switch	Click to resume/pause the auto-switch in live view.
	Show /Hide the Menu	Show/Hide the menu of auto-switch. Click again to hide.
	Mute/Audio On	Turn off/on the audio in live view
	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 record 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 of the camera 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 Config	Open the remote configuration page of the camera in live view.
	VCA Config	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 *Section 2.4.6 Live View of Fisheye Camera*.
	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 screen layout 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. Click the icon to expand the default view list.
3. Click to select the default view mode and the video of the added cameras will be displayed in a sequence in the selected view.

Note: Right-click the current default view name on the list and click **Save View As.** or click , and you can save the default view as a custom view.

Starting Live View in Custom View Mode

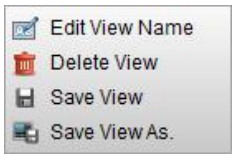
Purpose:

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

Steps:

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

Right-click the custom view name on the list, and a menu pops up as follows:



The following buttons are available on the right-click menu:

	Edit View Name	Edit the name of the custom view.
	Delete View	Delete the custom view.
	Save View	Save the new settings of the custom view.
	Save View As.	Save the current view as another custom 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.

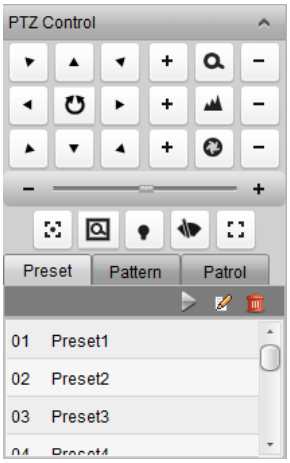
Steps:

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
Auxiliary Focus
3D Positioning
Light
Wiper
Lens Initialization

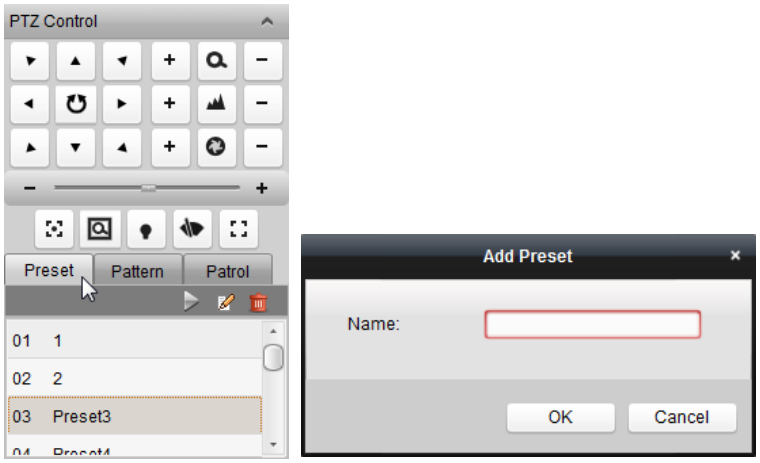
Configuring the Preset

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 .
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 .

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:

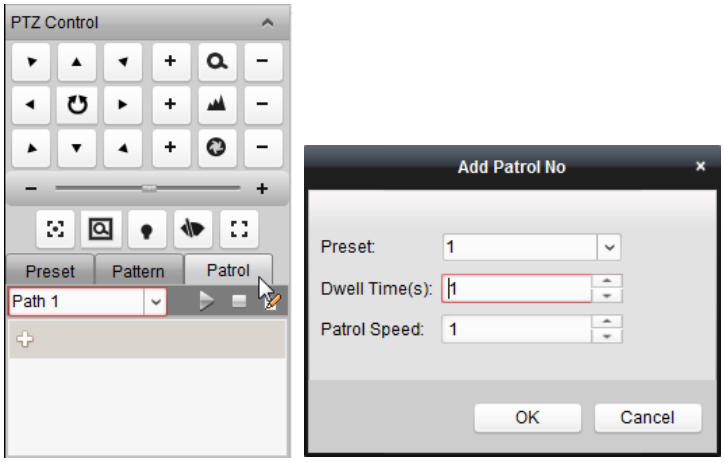
Two or more presets for one PTZ camera need to be added.

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 1~30 sec, and the patrol speed can be set to level 1~40.



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 record 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 record 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:

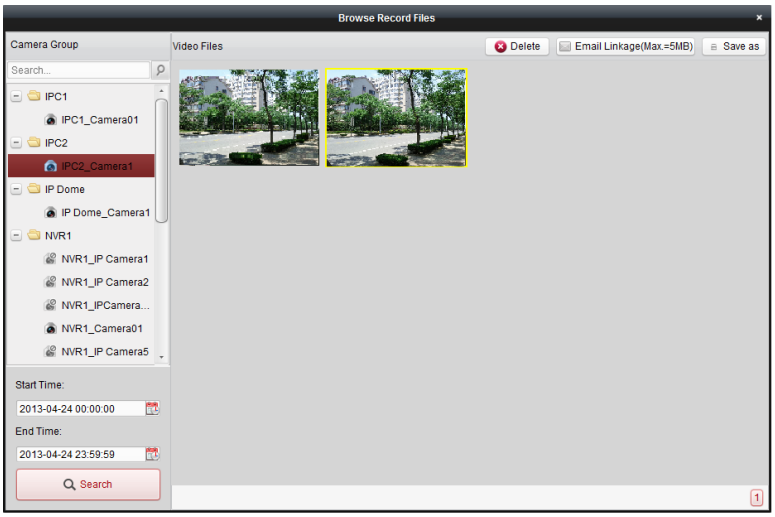
- During the manual recording, an indicator appears in the upper-right corner of the display window.
- The saving path of video files can be set on the System Configuration interface. For details, see *Section 10.2.2 File Saving Path Settings.*

Viewing Local Record Files

Steps:

1. Click **File**->**Open Video File** to open the Record 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 **Email Linkage**. 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 10.2.5 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	**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 record files.
	Pause/Play	Pause/Start the playback of the record files.
	Stop	Stop the playback of the record files.
1x	**Speed**	Set the playback speed.
	Single Frame	Play back the record files frame by frame.
	Digital Zoom	Enable the digital zoom function. Click again to disable.
	Enable/Disable Audio	Click to enable/disable the audio in the local playback.
	Capture	Capture the picture in the playback process.

Capturing Picture in Live View

Steps:

1. Move the mouse pointer to the display window in live view to show the toolbar.
2. Click the 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 10.2.2 File Saving Path Settings.*

Viewing Captured Pictures

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

Steps:

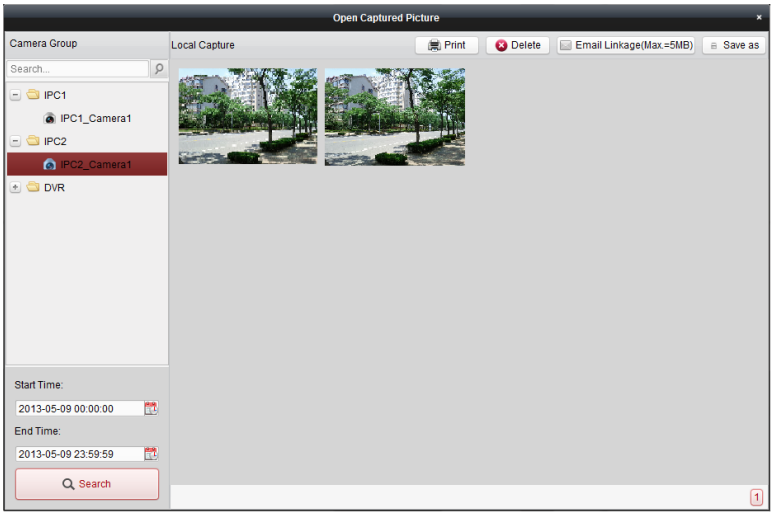
1. Click **File**->**Open Captured Picture** to open the Captured Picture page.
2. Select the camera to be searched from the Camera Group list.
3. Click the icon  to specify the start time and end time for the search.
4. Click **Search**. The pictures captured between the start time and end time will be displayed.
5. Double-click the captured picture to enlarge it for a better view.

   Select the captured picture, and click **Print**. You can print the selected picture.

   Select the captured picture, and click **Delete**. You can delete the selected picture.

   Select the captured picture, and click **Email Linkage**. 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 record files can be played back instantly on the Main View page. Instant playback shows a passage 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 pointer to the display window to show the toolbar.
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.

Notes:

- During the instant playback, an indicator appears in the upper-right corner of the display window.
- The live view process will continue after the instant playback completed.

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:

	Pause/Play	Pause/Start the instant playback in the display window.
	Stop	Stop the instant playback and return to the live view mode.

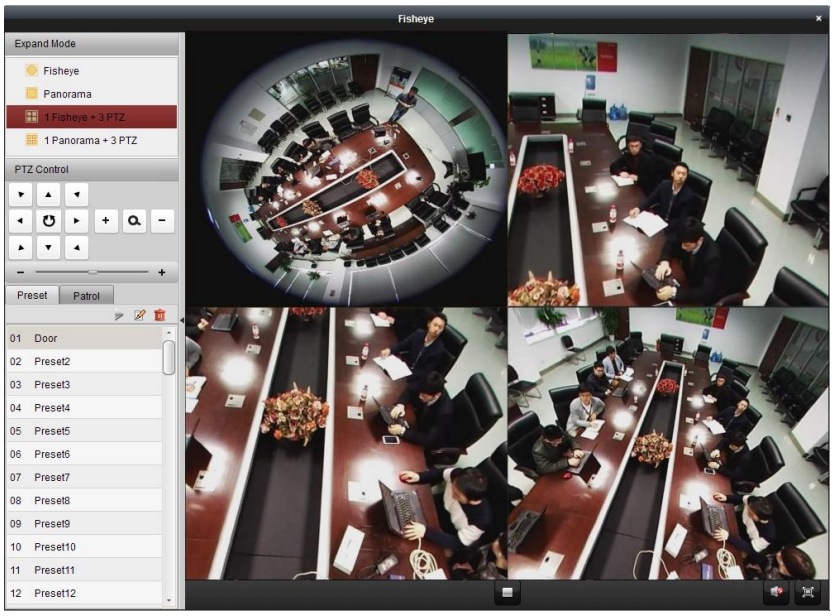
	Speed Up/Down	Increase/Decrease the play speed of the instant playback.
	Single Frame	Play back the record file frame by frame.
	Open Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Capture	Capture the picture in the instant playback process.
	Print Captured Picture	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 record 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 Live View of Fisheye Camera

Note: This section is only for the live view of the fisheye camera. A fisheye camera is a camera that uses an extremely wide-angle lens to capture a view of 360 degrees or 180 degrees.

Steps:

1. Add a fisheye camera to the iVMS-4200 client software. The fisheye should be added as encoding device. For details, please to *Section 2.2 Adding the Device*.
2. Click-and-drag the fisheye camera from the list to the display window, or double-click the camera name after one display window selected to get the live view.
3. Right-click on the playing window, and select **Fisheye Expansion** on the right-click menu.



Expand Mode

Fisheye, Panorama, 1 Fisheye + 3 PTZ, 1 Panorama +3 PTZ are selected for the expand mode, and the default expand mode is 1 Fisheye+3 PTZ.

PTZ Control

If 1 Fisheye+ 3 PTZ or 1 Panorama + 3 PTZ is selected, you can use the PTZ control to adjust the PTZ window.

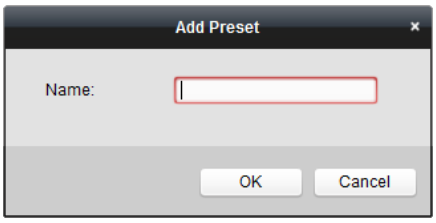
- Select a PTZ window, and click one of the eight direction buttons to adjust the view angle.
  Note: Click-and-drag the No. label in the fisheye window will change the view angle of the PTZ window as well.
- Select a PTZ window, and click to start auto-scan, and click it again to stop auto-scan.
- : 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

A preset is a user-defined monitor position/point. You can simply call the preset number 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

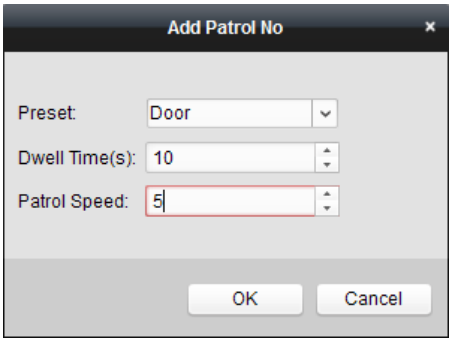
A patrol is a scanning track specified by a group of user-defined presets, with the scanning speed between two presets and the dwell time at the preset separately programmable. Please follow the steps below to configure the patrol.

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.

2.4.7 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.

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. You can also synchronize the clock of multiple devices with the PC which runs the client software in batch.

Chapter 3 Remote Record 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 for the cameras for the continuous, alarm triggered or command triggered recording. And the record files can be searched for the remote playback.

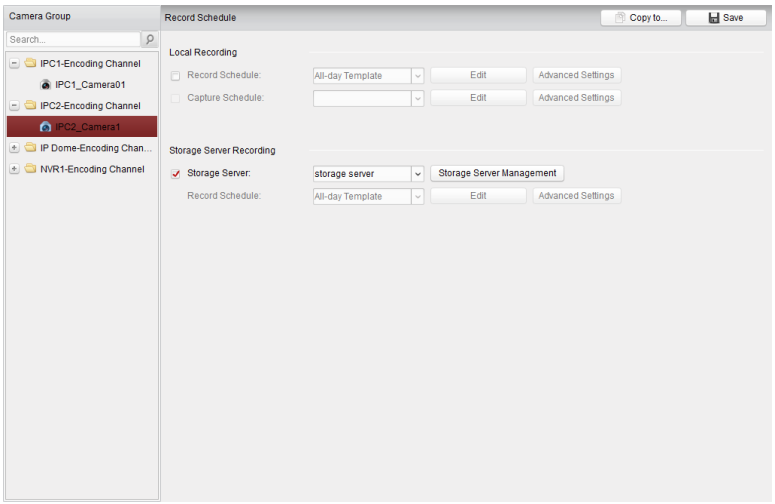
3.1 Remote Recording

Purpose:

The video files can be recorded 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**->**Record Schedule** to open the Record Schedule page.



3.1.1 Recording 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 record files. You can set a record schedule or capture schedule for the channels of the local devices.

Notes: 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 Local Recording to enable device local recording or capture.
4. Select the record 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 01-08: 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.

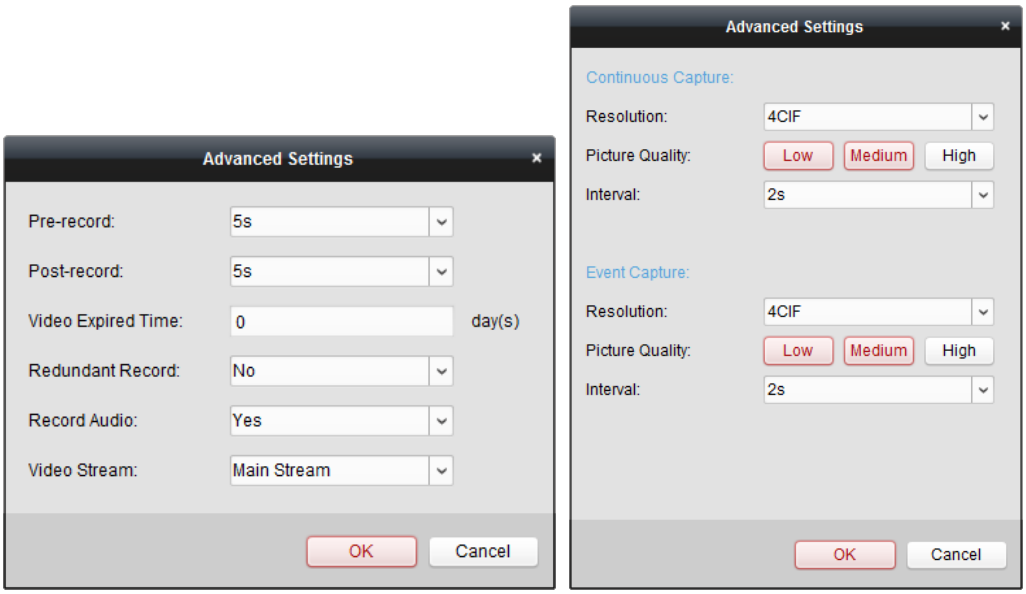


Table 3.1 Advanced Recording Settings

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

Redundant Record	Save the video files not only in the R/W HDD but also in the redundant HDD.
Record Audio	Record the video files with audio or not.
Video Stream	Select the stream type for the recording.

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.

Configuring Record Schedule Template

Perform the following steps to configure the record schedule template:

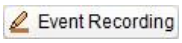
If **Template 01-08** is selected from the drop-down list, start from step 1;

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.

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

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

   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 iVMS-4200.

   When the cursor turns to  , you can edit the schedule time bar.

   When the cursor turns to  , you can move the selected time bar you just edited.

   When the cursor turns to  , you can lengthen or shorten the selected time bar.
3. Optionally, you can select the schedule time bar,

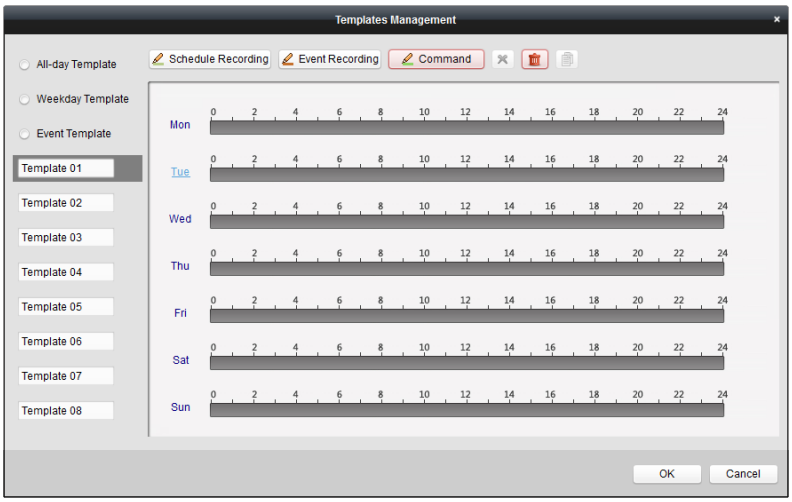
   and then click the icon  to delete the selected time bar,

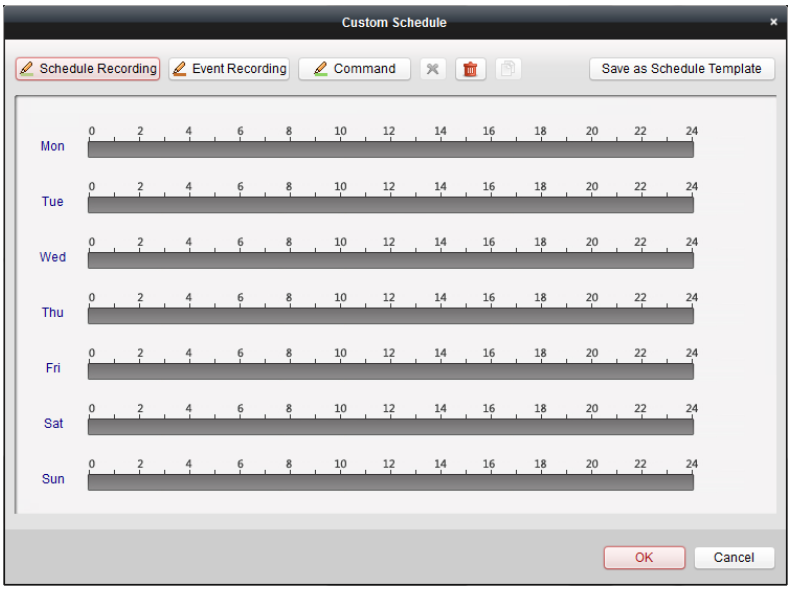
   or click the icon  to delete all the time bars,

   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--08.

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





3.1.2 Recording on Storage Device

Purpose:

You can add storage device to the client for storing the record files 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 iVMS-4200 software package. When installing the iVMS-4200, check the checkbox **Storage Server** to enable the installation of storage server.

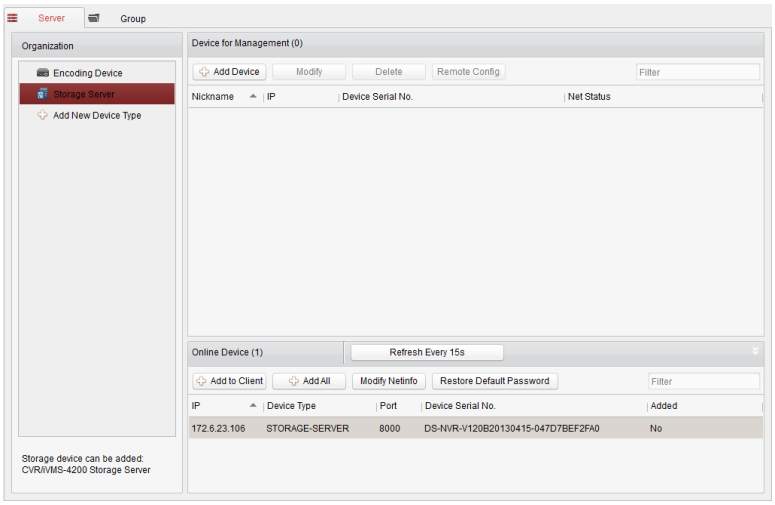
Adding the Storage Server

Steps:

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

   Note: You can also record the video files on the storage server installed on other PC.

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.



You can add the storage server in the following ways:

- By detecting the online devices, see *Section 2.2.1 Adding Online Devices.*
- By specifying the device IP address, see *Section 2.2.2 Adding Devices Manually.*
- By specifying an IP segment, see *Section 2.2.3 Adding Devices by IP Segment*.
- By IP Server, see Section *2.2.4 Adding Devices by IP Server.*

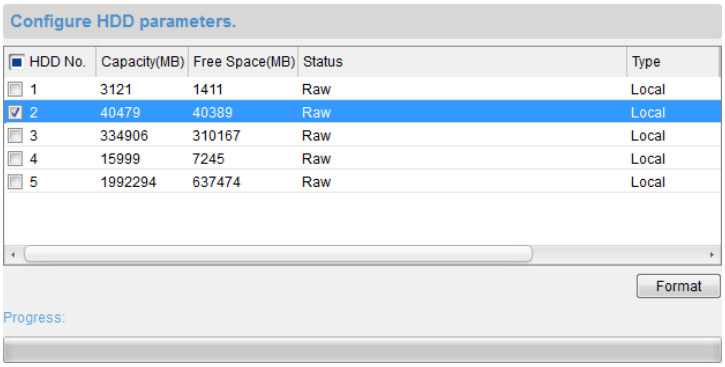
Formatting the HDDs

The HDDs of the storage server need to be formatted for the record file storage.

Steps:

1. Select the added storage server from the list and click **Remote Config**.
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 *Raw* 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 Server Record Schedule

Before you start:

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

Steps:

1. Open the Record Schedule page.
2. Select the camera from the Camera Group list.
3. Check the checkbox **Storage Server** to enable recording on storage server.
4. Select the storage server from the drop-down list.
5. Select the record schedule template 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 video expired time.
7. Click **Save** to save the settings.

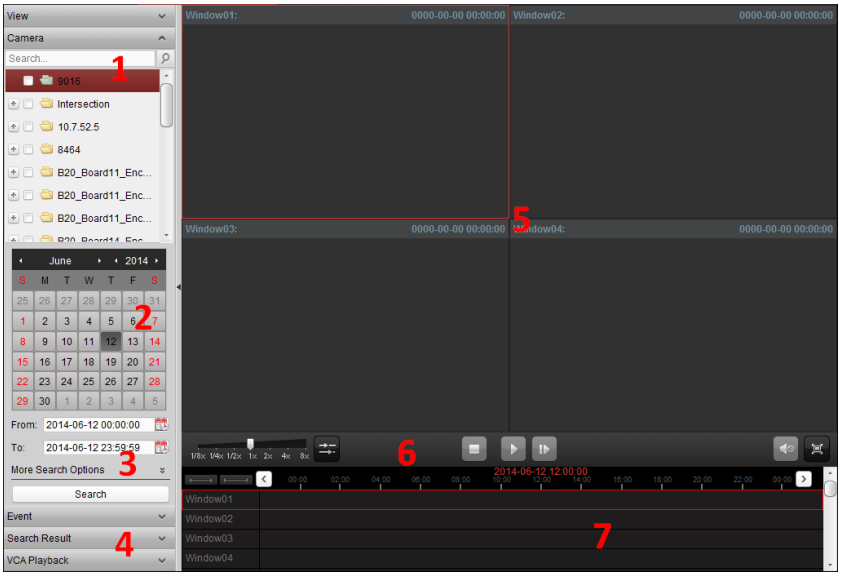
3.2 Remote Playback

Purpose:

The record files stored on the local device or the storage server can be searched by custom view, 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 View List, Camera List and Event List

2 Calendar

3 Search Options

4 Search Result List

5 Display Window of Playback

6 Playback Toolbar

7 Timeline

3.2.1 Normal Playback

Purpose:

The record files can be searched by custom view, camera or triggering event for the Normal Playback.

Searching Record Files for Normal Playback

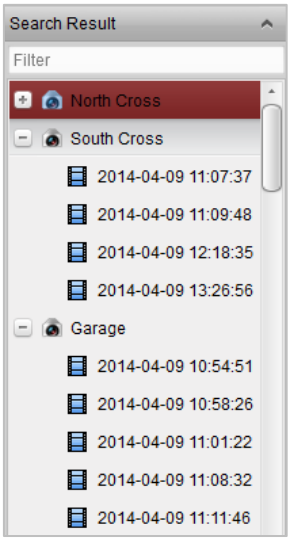
Steps:

1. Open the Remote Playback page.
2. Click  to expand the View List or Camera List on the left-side.
3. Select the view or camera to be searched from the list.
4. Select the day to be searched on the calendar.

   You can also click  to show more search options, and then click the icon  to specify the start time and end time for the search.
5. Click **Search**. The record files of the selected view or camera will be displayed on the Search Result list. You can filter the results through the Filter text field.

Notes:

- You can also search the record files by the ATM query (only applicable to ATM DVR) or by the file type.
- Up to 16 cameras can be searched simultaneously.



Playing Back Record Files

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

- **Playback by File List**

  Select the record file from the search result list, and then click the icon  on the record file, or double-click the record 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 record file.
- **Playback by Timeline**

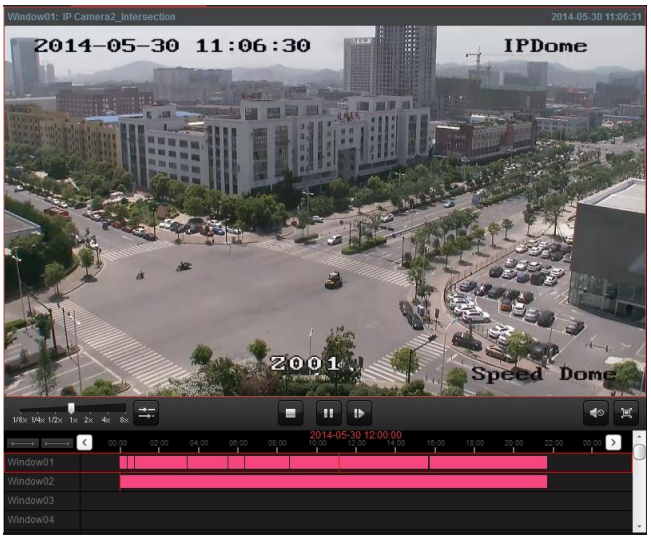
  The timeline indicates the time duration for the record file, and the record files of different types

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 click  or  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.

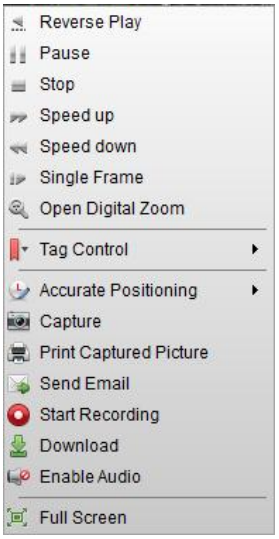


Normal Playback Toolbar:

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

	**Playback Speed**	Set the playback speed for the selected display window.
	**Async/Sync Playback**	Click to play back the record files synchronously/asynchronously.
	**Stop Playback**	Stop the playback of all cameras.
	**Pause/Start Playback**	Pause/Start the playback of the record files.
	**Single Frame**	Play back the record files frame by frame.
	**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.

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 record file reversely.
Pause/Start	Pause/Start the playback.
Stop	Stop the playback.
Speed Up	Play back the record file at a faster speed.
Speed Down	Play back the record file at a slower speed.
Single Frame	Play back the record file frame by frame.
Open Digital Zoom	Enable the digital zoom function. Click again to disable the function.
Tag Control	Add default (default tag name *TAG*) 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 record 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 record file is stored in the PC.
Download	Download the record files of the camera and the record 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.
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, video loss or alarm input, can be searched for Event Playback and this function requires the support of the connected device.

Searching Record Files for Event Playback

Steps:

1. Open the Remote Playback page.
2. Click to expand the Event List on the left-side.
3. Select the event type from the drop-down list, and select the cameras or alarm input sensors.
4. Select the day to be searched on the calendar.
   You can also click to show more search options, and then click the icon to specify the start time and end time for the search.
5. Click **Search**. The recordings from the selected cameras and sensors triggered by event will be displayed on the Search Result list.

Playing Back Record Files

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

- **Playback by File List**
  Select the record file from the search result list, and then click the icon on the record file, or double-click the record 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 record file.
- **Playback by Timeline**
  The timeline indicates the time duration for the record 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 click or 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:

	Playback Speed	Set the playback speed for the selected display window.
	Stop Playback	Stop the playback of all channels.
	Pause/Start Playback	Pause/Start the playback of record files.
	Single Frame	Play back the record files frame by frame.
	Previous Event	Go to the playback of the previous event.
	Next Event	Go to the playback of the next event.
	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.

3.2.3 Synchronous Playback

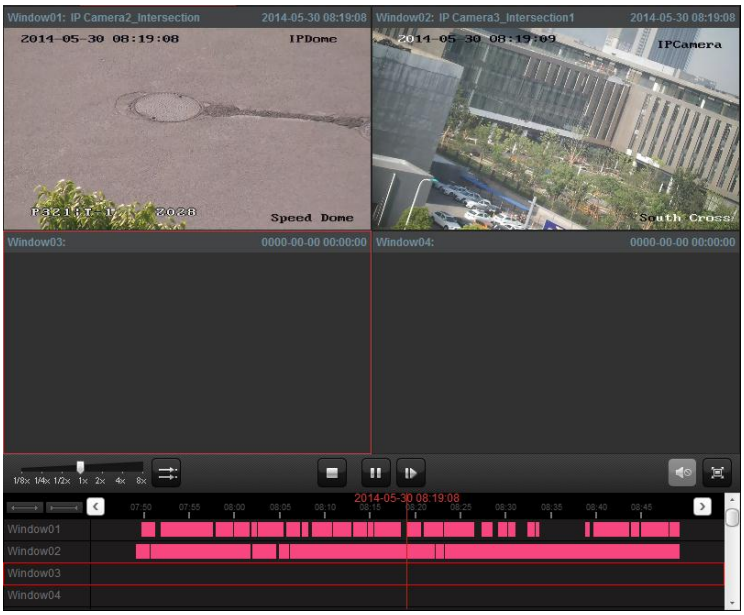
Purpose:

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

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

Steps:

1. Search the record files for the normal playback.
2. Click  in the toolbar to enable the synchronous playback. The icon  turns to  .
3. Select the record file from the list and click  ,
   or click on the timeline to start the synchronous playback for all searched cameras.
4. To disable the synchronous playback, click the icon  .



3.2.4 VCA Playback

Purpose:

You can set VCA rule to the searched record 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, mark it with red color and the playback speed of the concerned video and unconcerned video can be customized.

- **VCA Search**: Get all the related motion detection events that occurred in the pre-defined region.
- **Intrusion:** Detect whether there are people, vehicles and other moving objects intruding into the pre-defined region.
- **Line Crossing**: Bi-directionally detect people, vehicles and other moving objects that cross a virtual line.

Steps:

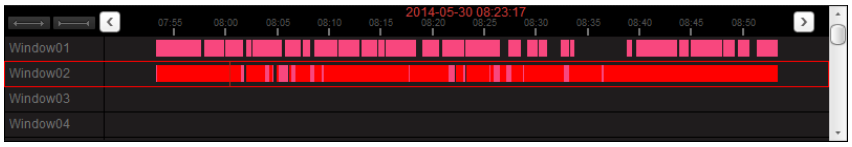
1. Search the record files for the normal playback and play back the record file(s).
2. Select a playback window and click  to expand the VCA Playback panel.
3. Select the VCA Type, draw the detection region and set the sensitivity.

   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 on the playback window to set the beginning point in the area and move the mouse and click again to set the end of the line.
- To delete the drawn region, click to remove it.

4. Optionally, click to expand the More Search Options panel. You can configure the advanced settings for the VCA Search.
   - **Skip Unconcerned Video**: Check the checkbox and the video that no VCA event occurs will be skipped during playback.
   - **Speed of Unconcerned Video:** Set the playback speed for the unconcerned video as desired.
   - **Speed of Concerned Video:** Set the playback speed for the concerned video as desired.
   - **Pre-play**: Set the time to play back before the VCA event. For example, when a VCA event occurs at 10:00, if you set the pre-play time as 5 seconds, the video plays back from 9:59:55.
   - **Post-play**: Set the time to play back after the VCA event. For example, when a VCA event ends at 11:00, if you set the post-play time as 5 seconds, the video plays back till 11:00:05.
5. Click **Search** and the VCA events occurred in the defined area will be red marked on the timeline.



3.2.5 Playback of Fisheye Camera

Note: This section is only for the playback of the fisheye camera.

Steps:

1. Open the Remote Playback page.
2. Click to expand the Camera List on the left-side.
3. Select the fisheye camera to be searched from the list.
4. Select the day to be searched on the calendar.

   You can also click to show more search options, and then click the icon to specify the start time and end time for the search.
5. Click **Search**. The record files of the selected view or camera will be displayed on the Search Result list. You can filter the results through the Filter text field.

Playing Back Record Files

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

- **Playback by File List**

  Select the record file from the search result list, and then click the icon on the record file, or double-click the record 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 record file.
- **Playback by Timeline**

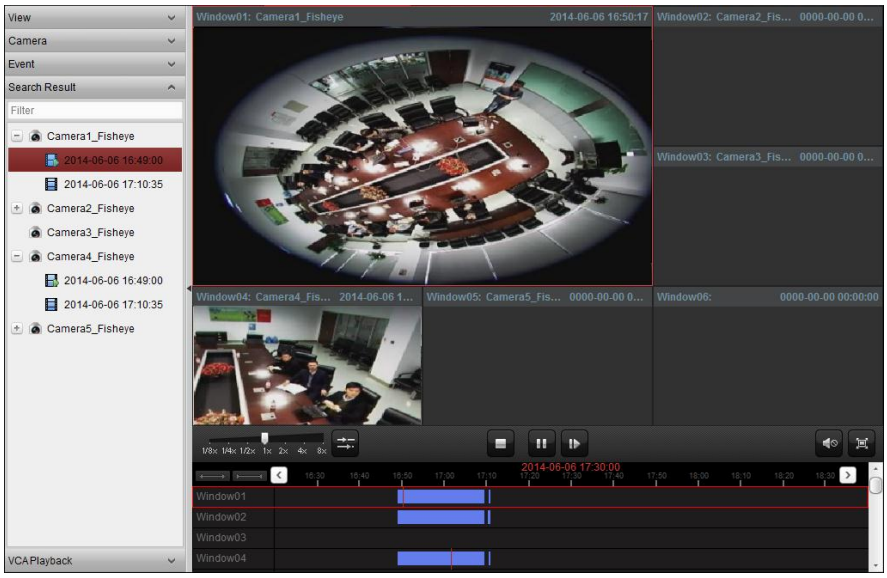
The timeline indicates the time duration for the record file, and the record files of different types are color coded. Click on the timeline to play back the video of the specific time.

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

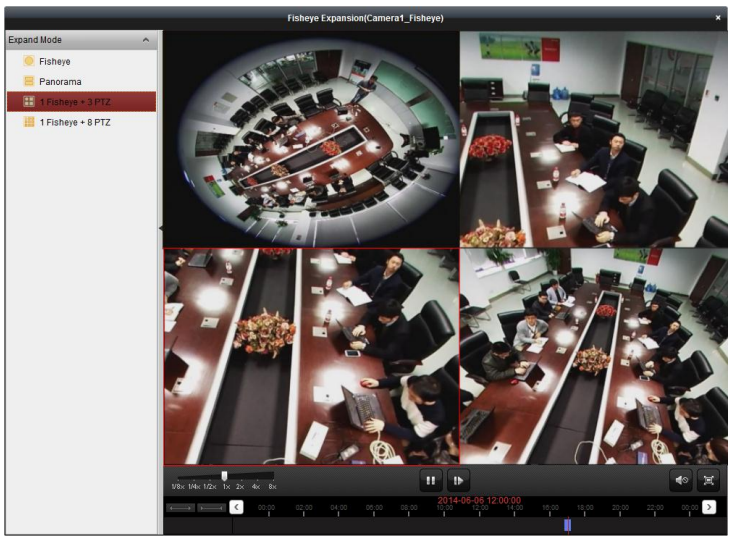
You can click or to go to the previous or the next time period.

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

Note: For the function of other icons, please refer to *Section 3.2.1 Normal Playback*.



Right-click on the PTZ window, and select **Fisheye Expansion** to go to the Expansion Mode. You can select the expand mode for playback as desired.



Right-click on a playing window and you can switch the selected window to fisheye mode, panorama mode or full screen.

Press *ESC* key on the keyboard or right-click on the window and select **Quit Full Screen** to exit the full screen mode.

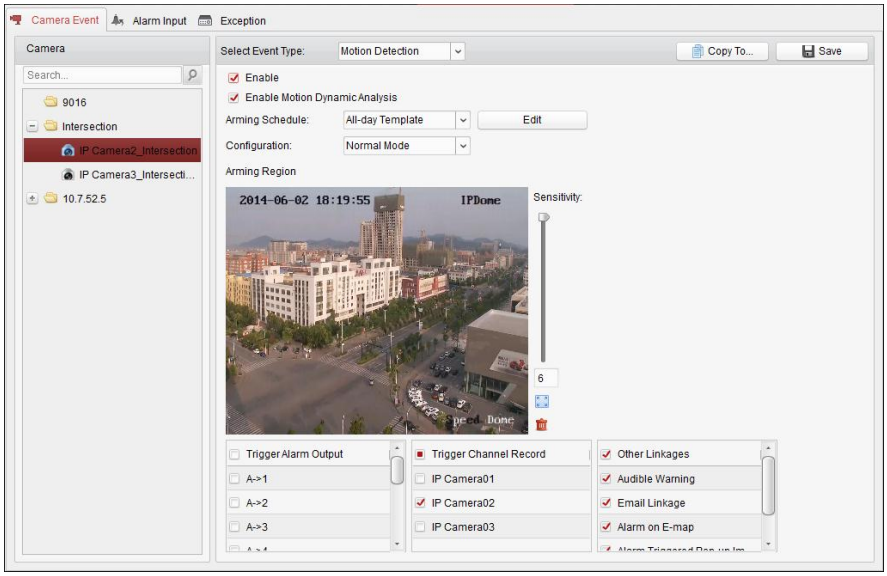
Chapter 4 Event Management

Purpose:

In iVMS-4200 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.

- Motion Detection
- Video Tampering Alarm
- PIR Alarm
- Video Loss
- Audio Detection
- Defocus Detection
- Face Detection
- Line Crossing
- Intrusion
- Scene Change
- Alarm Input
- Device Exception

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 Motion 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 01-09: 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. 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.
6. Drag the slider on the sensitivity bar to adjust the motion detection sensitivity. The larger the value is, the more sensitive the detection is.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 4.1 Linkage Actions for Motion Detection Alarm*.
8. Optionally, click **Copy to…** to copy the event parameters to other channels.
9. Click **Save** to save the settings.

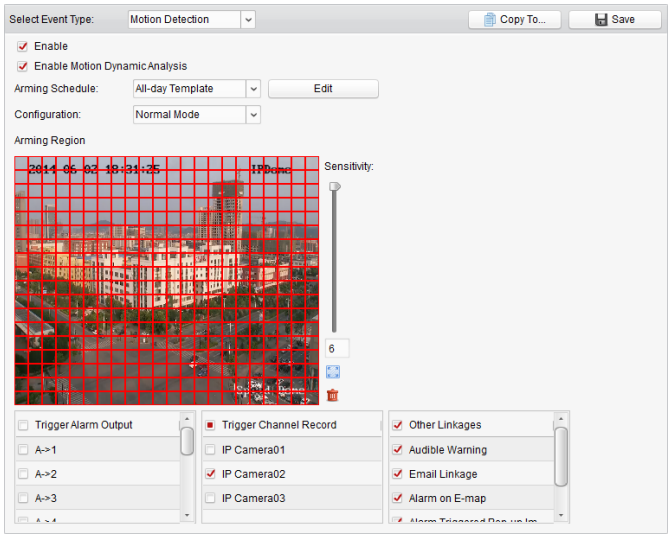


Table 4. 1 Linkage Actions for Motion Detection Alarm

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. ***Note:*** This option is only available when the decoding device is added.

Configuring Arming Schedule Template

Perform the following steps to configure the arming schedule template:

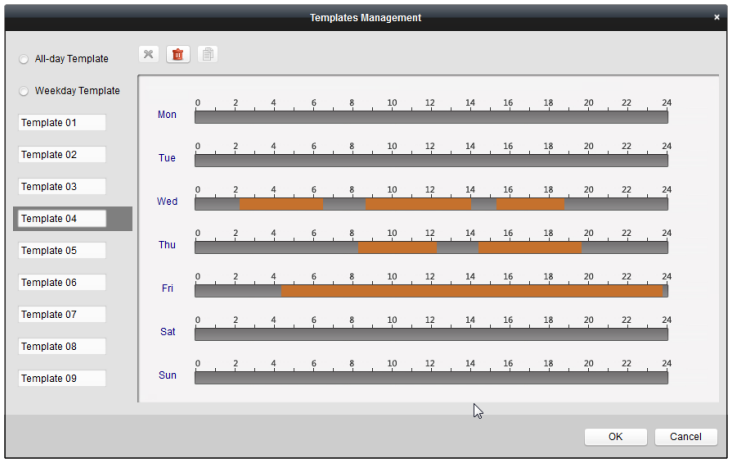
If **Template 01-09** is selected in the drop-down list, start from step 1;

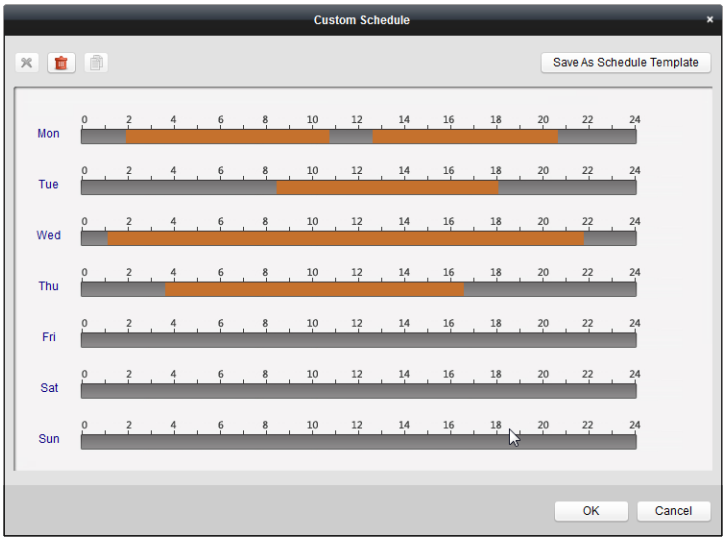
If **Custom** is selected in the drop-down list, start from step 2.

Steps:

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.
   When the cursor turns to  , you can edit the schedule time bar.
   When the cursor turns to  , you can move the selected time bar you just edited.
   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--09.

Note: Up to 4 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** 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 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.

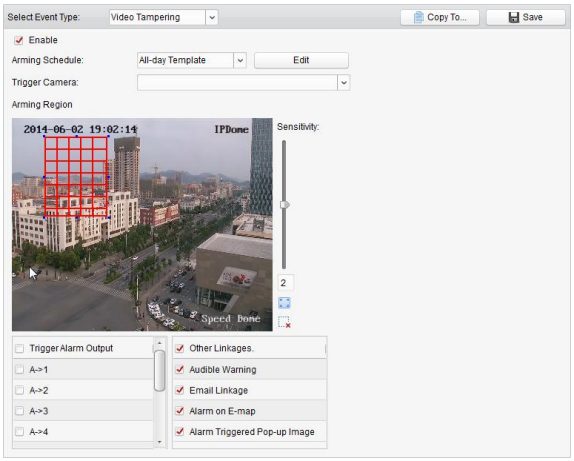


Table 4. 2 Linkage Actions for Tampering Alarm

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. ***Note:*** This option is only available when the decoding device is added.

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. Check the checkboxes to activate the linkage actions. For details, see *Table 4.3 Linkage Actions for PIR Alarm*.
6. Optionally, click **Copy to**... to copy the event parameters to other channels.
7. Click **Save** to save the settings.

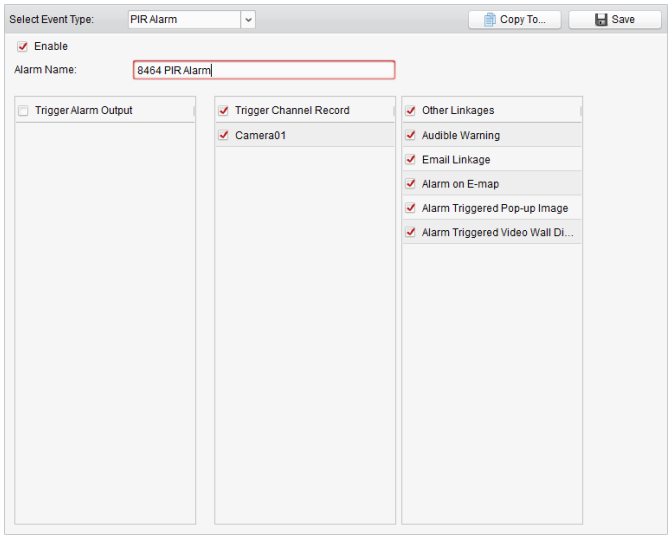


Table 4. 3 Linkage Actions for PIR Alarm

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. ***Note:*** This option is only available when the decoding device is added.

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.

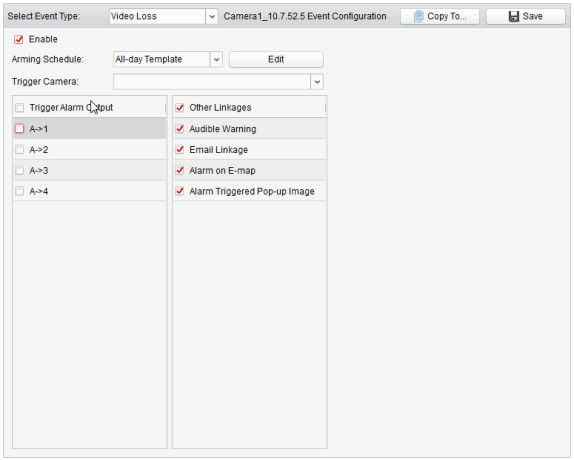


Table 4. 4 Linkage Actions for Video Loss Alarm

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. ***Note:*** This option is only available when the decoding device is added.

4.5 Configuring Audio Detection Alarm

Purpose:

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

Enabling the **Audio Input exception** can detects the exceptions of audio input condition.

Enabling the **Sudden Change of Sound Intensity** can detects the change of the sound volume and source in the environment.

Note: The Audio 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 **Audio Detection** as the event type.
3. Check the related checkbox to enable the function of audio detection alarm.
4. Set the sensitivity and sound intensity threshold.
   - **Sensitivity:** Range [1-100], the smaller the value the more severe the change should be to trigger the detection.

- **Sound Intensity Threshold:** Range [1-100], it can filter the sound in the environment, the louder the environment sound, the higher the value should be. You can adjust it according to the real environment.

5. Select the arming schedule template from the drop-down list.
   If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
6. Check the checkboxes to activate the linkage actions. For details, see *Table 4.5 Linkage Actions for Audio Detection Alarm.*
7. Optionally, click **Copy to…** to copy the event parameters to other cameras.
8. Click **Save** to save the new settings.

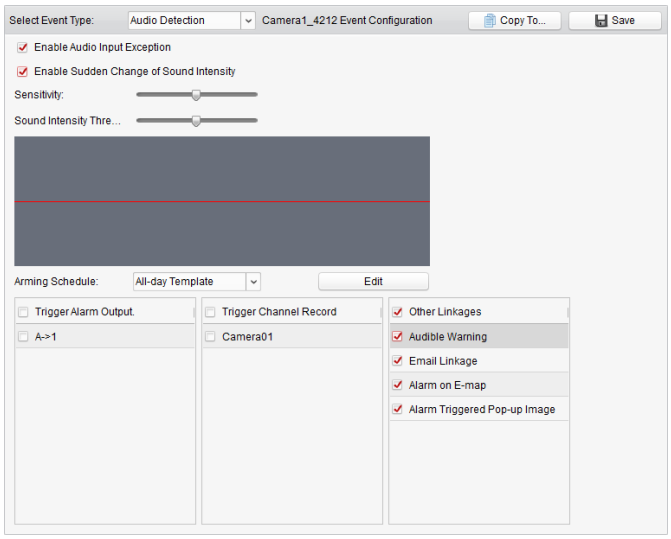


Table 4. 5 Linkage Actions for Audio Detection Alarm

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

4.6 Configuring Defocus Detection Alarm

Purpose:

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

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

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Defocus Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of defocus detection alarm.
4. Set the detection sensitivity by dragging the slider on the sensitivity bar.
5. Check the checkboxes to activate the linkage actions. For details, see *Table 4.6 Linkage Actions for Defocus Detection Alarm*.
6. Optionally, click **Copy to…** to copy the event parameters to other cameras.
7. Click **Save** to save the new settings.

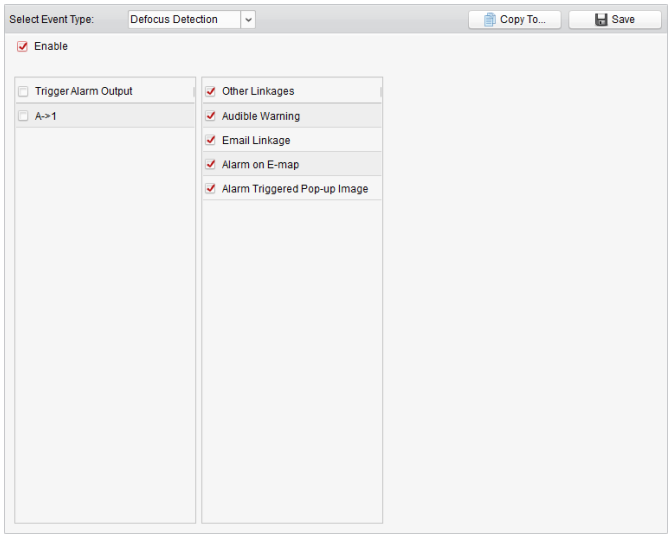


Table 4. 6 Linkage Actions for Defocus Detection Alarm

Linkage Actions	Descriptions
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. ***Note:*** This option is only available when the decoding device is added.

4.7 Configuring Face Detection Alarm

Purpose:

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

Steps:

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

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

5. Set the sensitivity for face detection.
6. Check the checkbox **Enable Dynamic Analysis for Face Detection** if you want the detected face get marked with rectangle in the live view.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 4.7 Linkage Actions for Face Detection Alarm*.
8. Optionally, click **Copy to…** to copy the event parameters to other cameras.
9. Click **Save** to save the new settings.

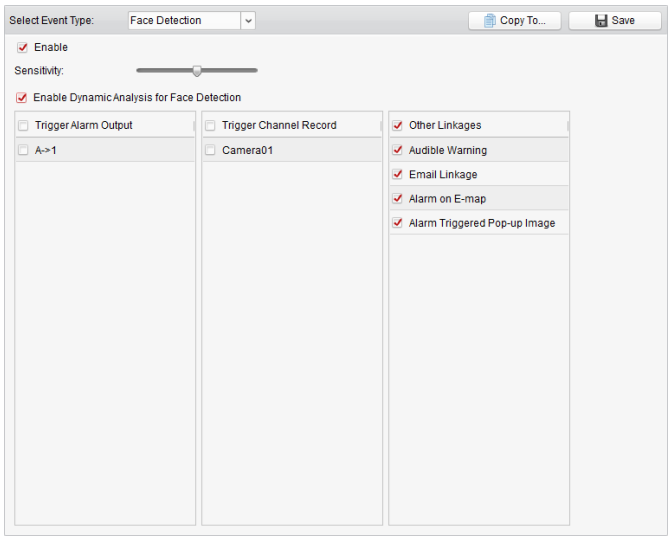


Table 4. 7 Linkage Actions for Face Detection Alarm

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

4.8 Configuring Line Crossing Detection Alarm

Purpose:

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

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Line Crossing** as the event type.
3. Check the checkbox **Enable** to enable the function.
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. Configure the arming region.
   Virtual Line ID: Click the drop-down list to choose an ID for the virtual line.
   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.
6. Set the sensitivity [1~100].
7. 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, or click to clear all the lines.
   Note: Select another virtual line ID and draw another one. Up to 4 lines can be drawn.
8. Check the checkboxes to activate the linkage actions. For details, see *Table 4.8 Linkage Actions for Line Crossing Detection Alarm*.
9. Optionally, click **Copy to…** to copy the event parameters to other cameras.
10. Click **Save** to save the settings.

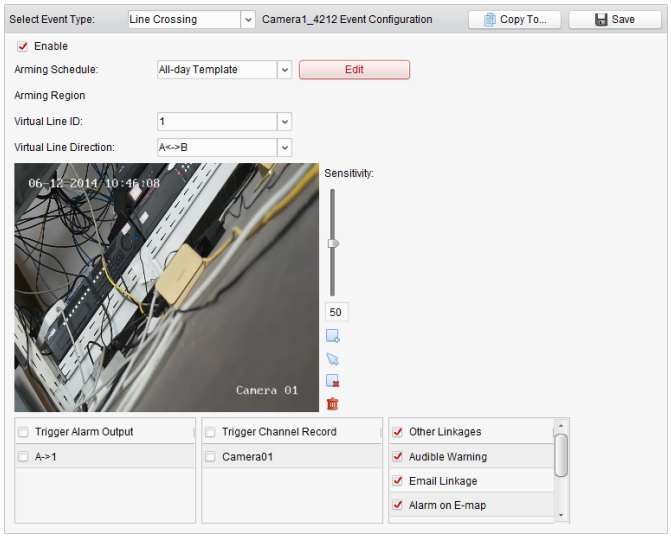


Table 4. 8 Linkage Actions for Line Crossing Detection Alarm

Linkage Actions	Descriptions

Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Channel Record	Start the recording of the selected cameras when alarm is triggered.
Audible Warning	The client software gives an audible warning when alarm is triggered.
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. ***Note:*** This option is only available when the decoding device is added.

4.9 Configuring Intrusion Detection Alarm

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** as the event type.
3. Check the checkbox **Enable** to enable the function of intrusion detection alarm.
4. Select the arming schedule template from the drop-down list.
   If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
5. Configure the arming region.
   Region ID: Click the dropdown list to choose a region ID for the arming region.
   Trigger Time Threshold: Range [0-10s], 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.
   Percentage: Range [1-100]. Percentage defines the ratio of the in-region part of the object which can trigger the alarm. For example, when you set the percentage as 50%, half of the object entering the region will trigger the alarm.
   Sensitivity: Range [1-100]. 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.
6. Click and draw a quadrangle on the preview window. Optionally, you can click and drag the virtual line to adjust its position, click to delete the selected line, or click to clear all the lines
   Note: When you draw the quadrangle, click on the preview window to set the vertex to set the quadrangle. Up to 4 areas are supported.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 4.9 Linkage Actions for Intrusion Alarm*.

8. Optionally, click **Copy to…** to copy the event parameters to other cameras.
9. Click **Save** to save the new settings.

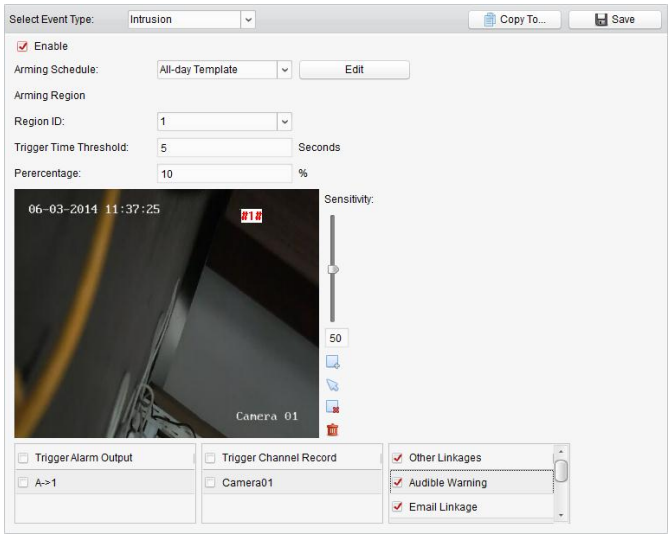


Table 4. 9 Linkage Actions for Intrusion Alarm

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

4.10 Configuring Scene Change Alarm

Purpose:

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

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

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **Scene Detection** as the event type.
3. Check the checkbox **Enable** to enable the function of audio detection alarm.
   Sensitivity: Range [1-100]. The higher the sensitivity, the easier the change of scene can trigger the alarm.
4. Select the arming schedule template from the drop-down list.

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

5. Check the checkboxes to activate the linkage actions. For details, see *Table 4.10 Linkage Actions for Scene Change Alarm*.
6. Optionally, click **Copy to…** to copy the event parameters to other cameras.
7. Click **Save** to save the new settings.

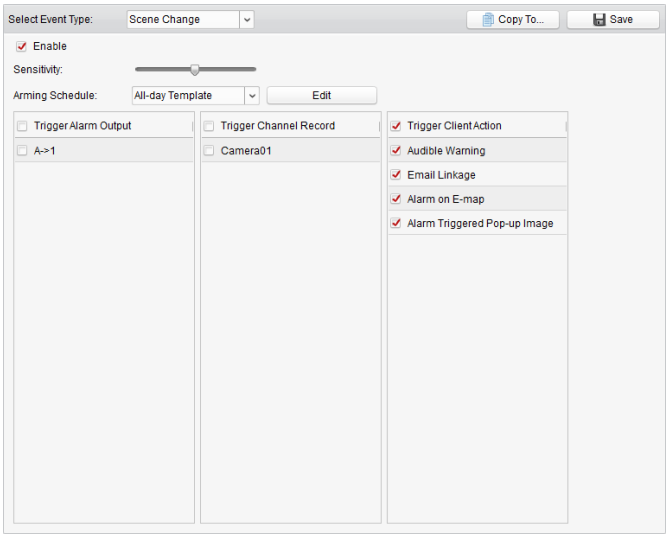


Table 4. 10 Linkage Actions for Scene Change Alarm

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

4.11 Configuring VCA Exception Alarm

Purpose:

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

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

Steps:

1. Open the Event Management page and click **Camera Event** tab.
2. Select the camera to be configured and select **VCA Exception** as the event type.
3. Check the checkbox **Enable** to enable the function of VCA Exception 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. Check the checkboxes to activate the linkage actions. For details, see *Table 4.11 Linkage Actions for VCA Exception Alarm*.
6. Optionally, click **Copy to…** to copy the event parameters to other cameras.
7. Click **Save** to save the new settings.

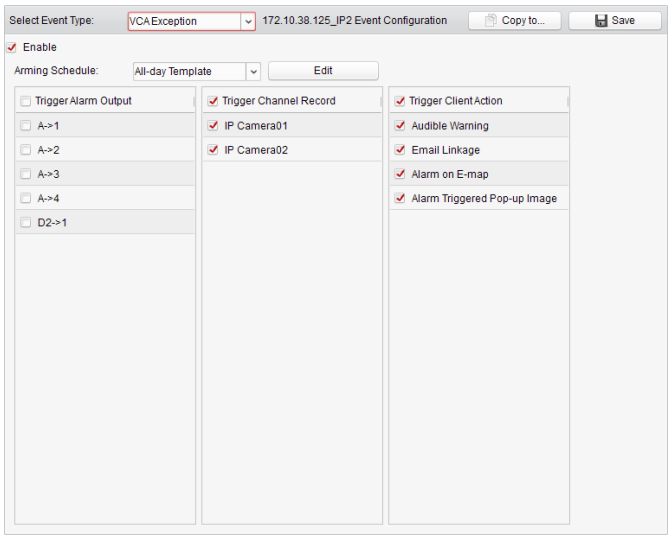


Table 4. 11 Linkage Actions for VCA Exception Alarm

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. ***Note:*** This option is only available when the decoding device is added.

4.12 Configuring Alarm Input Linkage

Purpose:

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

Before you start:

Add the alarm inputs to the client, click **Import** on the Group Management interface, click the **Alarm Input** tab and import alarm inputs into groups for management.

Steps:

1. Open the Event Management page and click the **Alarm Input** tab.
2. Select the alarm input channel to be configured.
3. Check the checkbox **Enable**.

4. Input a descriptive name of the alarm.
5. Set the alarm status according to the alarm input device.
6. Select the arming schedule template from the drop-down list.
   If you need to edit or customize the template, see *Configuring Arming Schedule Template*.
7. Check the checkboxes to activate the linkage actions. For details, see *Table 4.12 Linkage Actions for Alarm Input*.
8. Optionally, click **Copy to…** to copy the event parameters to other alarm inputs.
9. Click **Save** to save the settings.

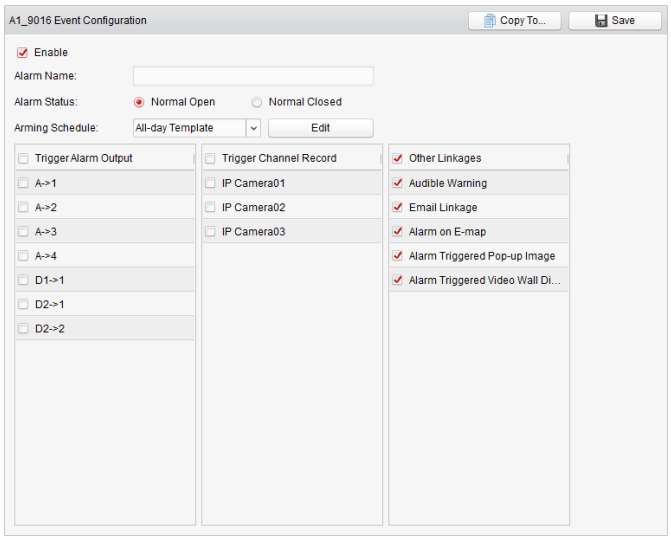


Table 4. 12 Linkage Actions for Alarm Input

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

4.13 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 4.13 Linkage Actions*

for Device Exception.

6. Optionally, click **Copy to…** to copy the event parameters to other devices.
7. Click **Save** to save the settings.

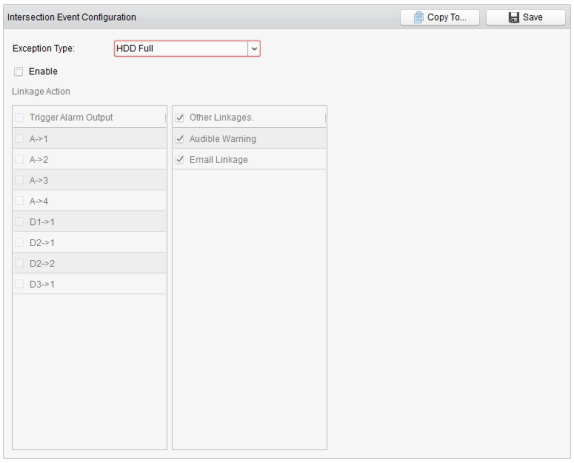
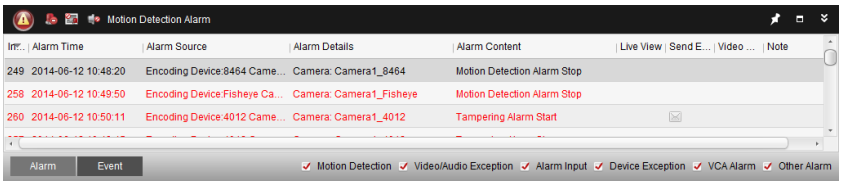


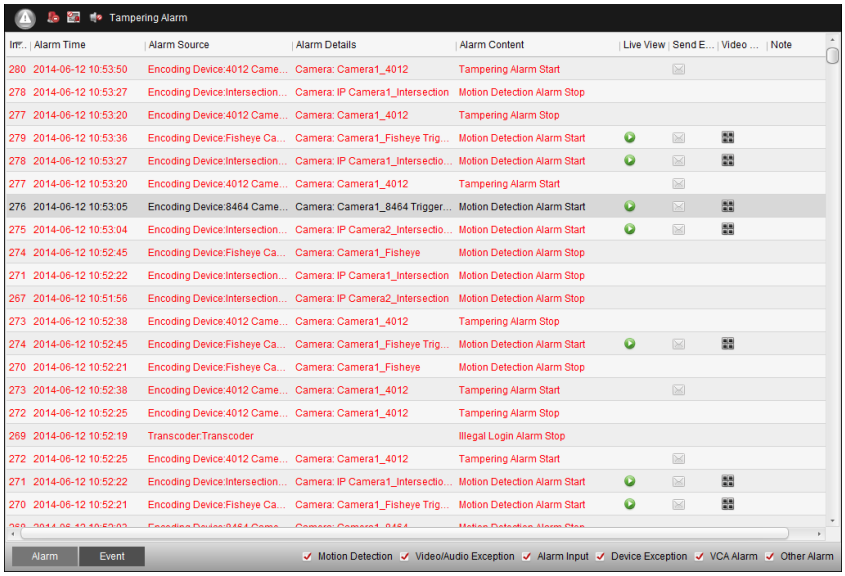
Table 4. 13 Linkage Actions for Device Exception

Linkage Actions	Descriptions
Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
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.

4.14 Viewing Alarm and Event Information

The information of recent alarms and events can be displayed. Click the icon in Alarms and Events Toolbar to show the Alarms and Events panel. Or click to display the Alarm Event interface.





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

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

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.

   Click to send an Email notification of the alarm to one or more receivers.

   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 display the video.

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

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

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**.

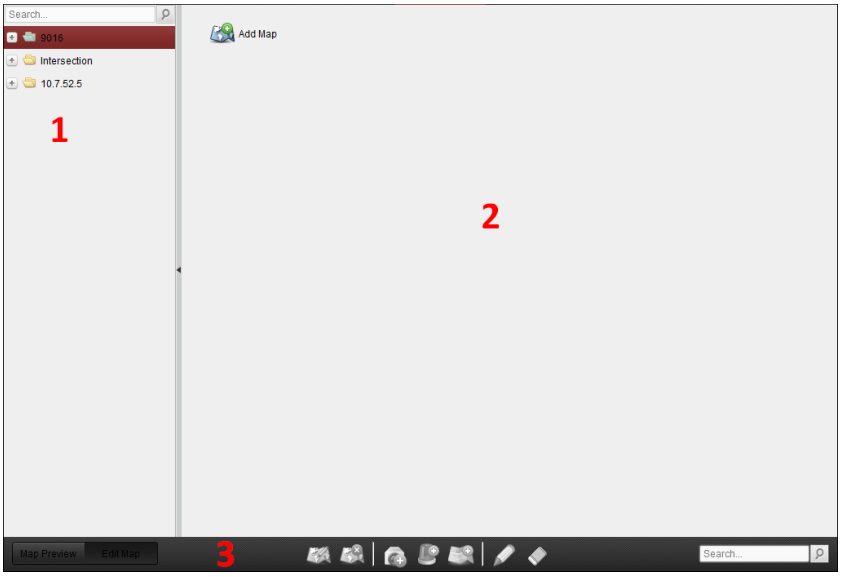
Chapter 5 E-map Management

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.

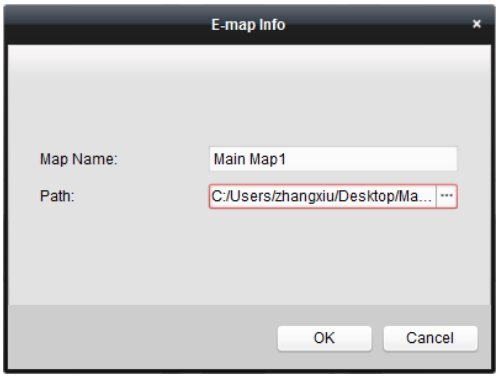
Steps:

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.

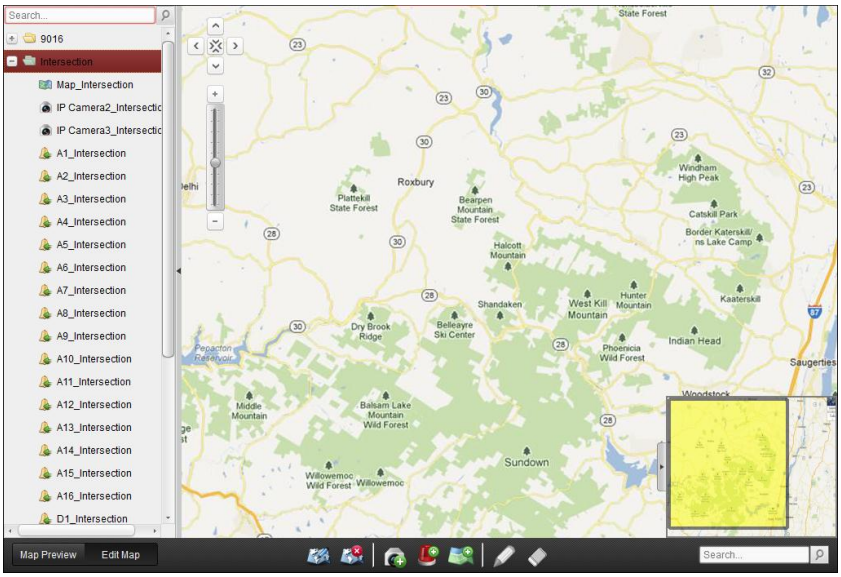
Notes:

- 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.

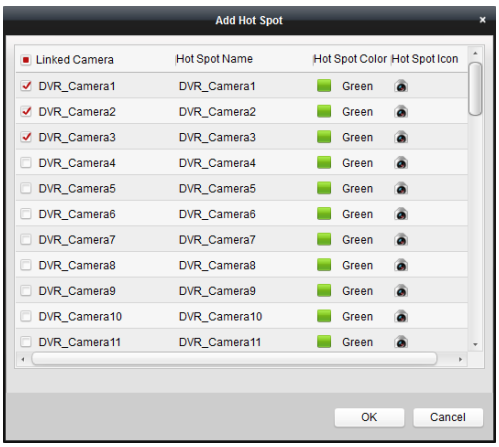
5.2.1 Adding Hot Spots

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.
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.



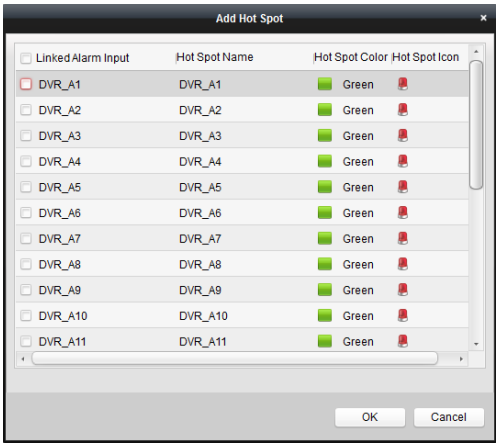
Adding Alarm Inputs as Hot Spots

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.
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

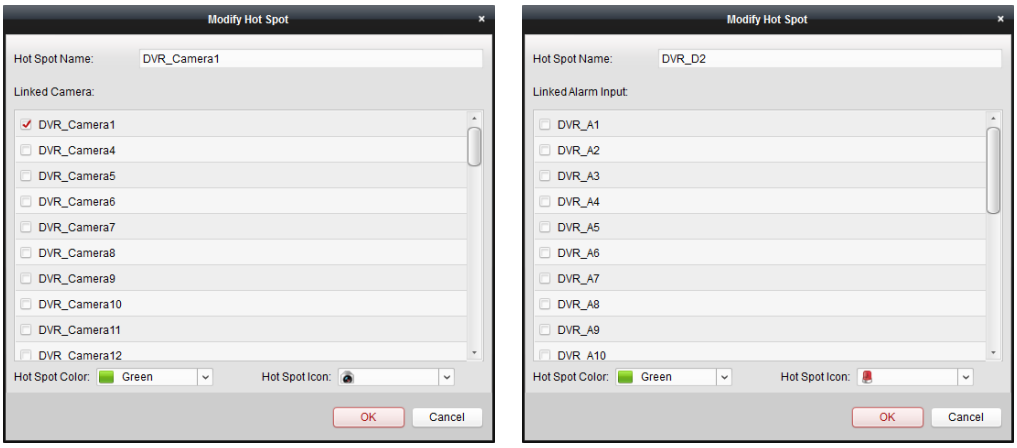
Purpose:

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**.

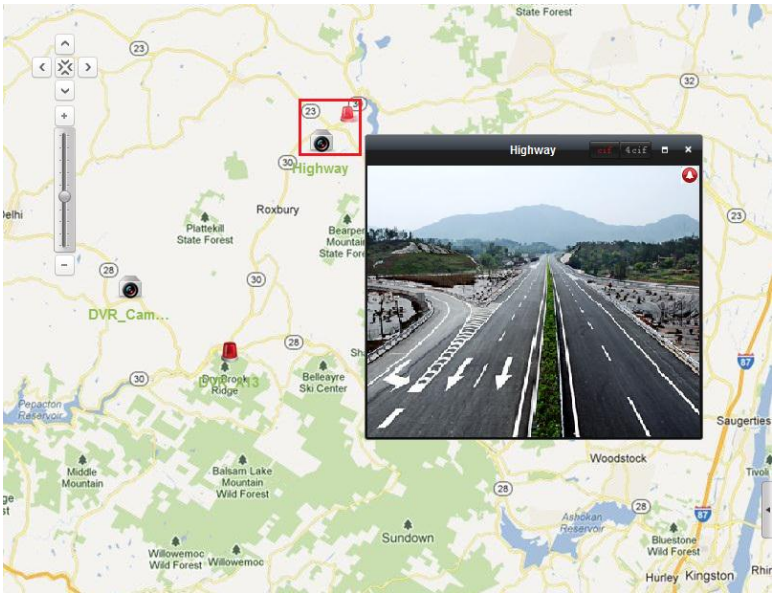


5.2.3 Previewing Hot Spots

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, 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.

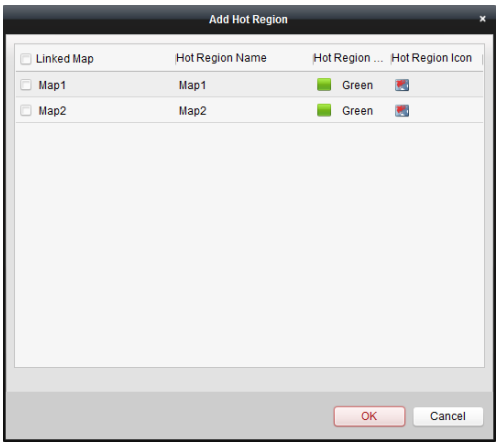
5.3.1 Adding Hot Regions

Before you start:

Add another map to the 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.
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:

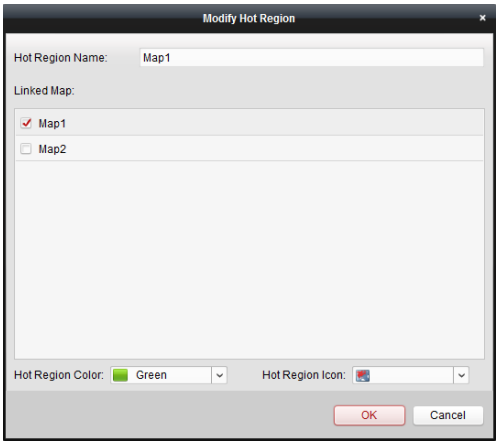
You can modify the information of the hot regions on the parent map, including the name, the color, the icon, etc.

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

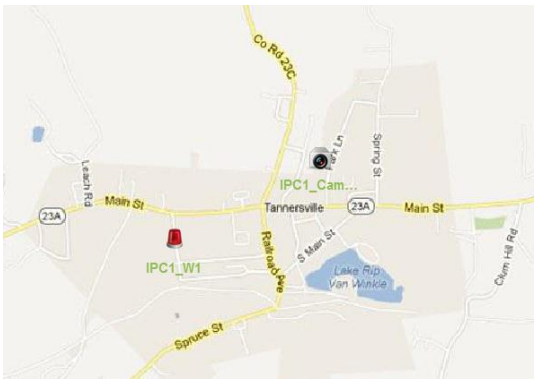
hot spot icon and select **Delete**.



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 Service

Purpose:

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

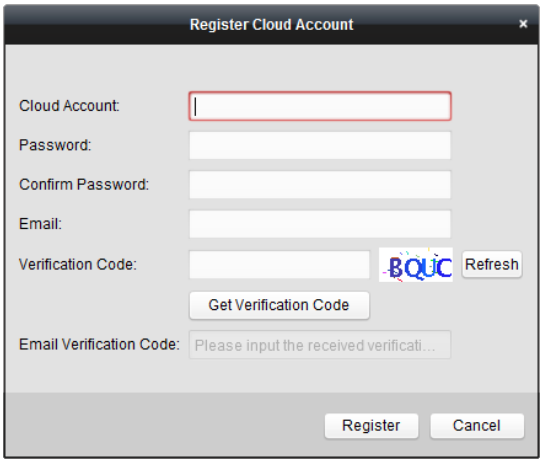
6.1 Registering a Cloud Account

Purpose:

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

Steps:

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



4. Enter the required information to register an account.

   Cloud Accout: 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.
5. Click **Register** to get a Cloud account.

6.2 Logging into Cloud Account

Steps:

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

   Note:

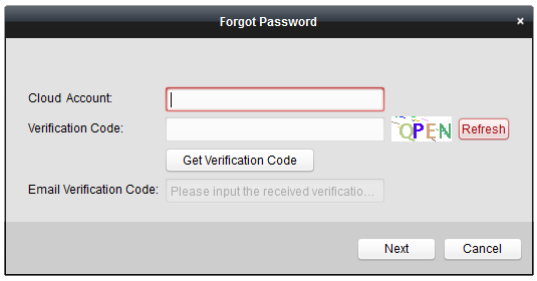
If you forget your password, click **Forgot Password** to verify your account and reset your password.

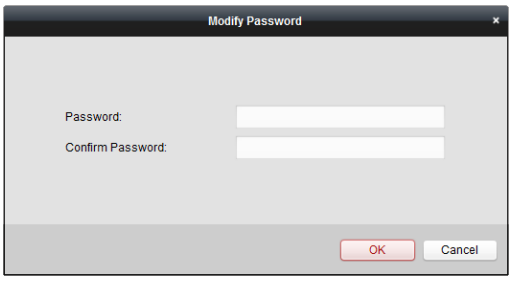
Cloud Accout: Edit user name of your account.

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.





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

6.3 Device Management

Steps:

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

   Notes:

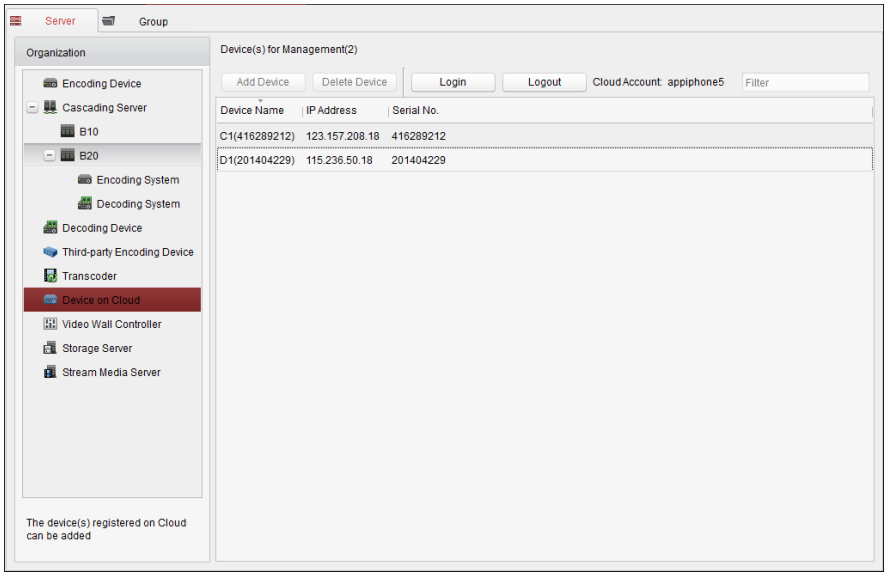
   - Only the device that supports the Cloud service can be added.
   - The serial No. and the verification code is marked on the label of you device.
   - The device can only be added to one Cloud account.

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. 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 VCA Devices Management

Purpose:

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

7.1 Allocating VCA Resource

Before you start: You should add the VCA device to the software. Please refer to *Section 2.2 Adding the Device* for adding the VCA device as Encoding Device.

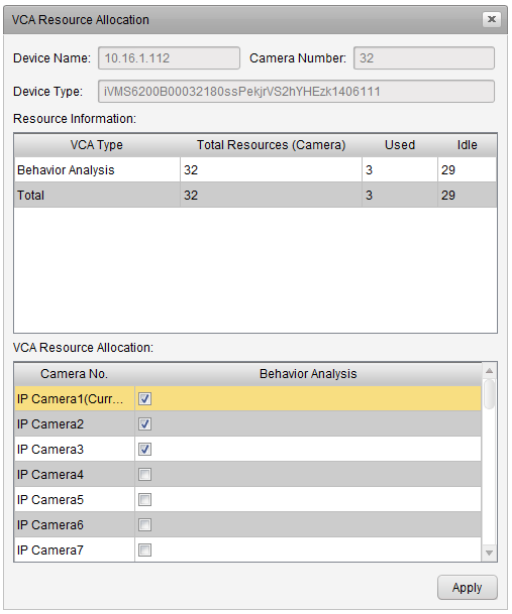
Purpose: Before you can set the VCA configuration for the added device, you need to configure the VCA resource of the device which means to enable the VCA function of the corresponding cameras.

Steps:

1. In the Device Management Configuration interface, select **Server** tab.
2. Click to select the VCA device and click **VCA Allocation** to activate the VCA Resource Allocation window.

   In the Resource Information panel, you can view the VCA type and VCA resource usage of the device.

   Example: In the figure shown below, the VCA type of the device is Behavior Analysis and 32 cameras are available for configuring VCA settings. And among the 32 cameras, the VCA functions of 3 cameras have been enabled and the others are disabled.



3. In the VCA Resource Allocation panel, check ☑ checkbox to enable the VCA function of the camera. Or you can uncheck ☐ checkbox to disable the VCA function.

7.2 Behavior Analysis Configuration

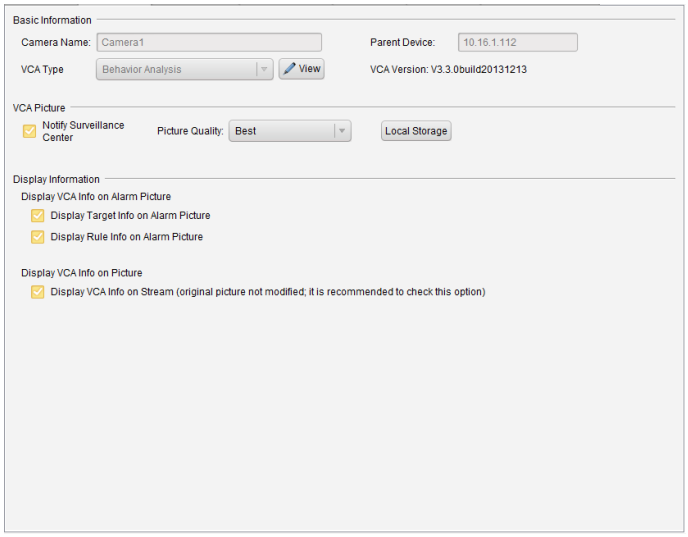
7.2.1 VCA DVR/DVS/IPC Configuration

Camera Configuration

Steps:

1. In the Device Management Configuration interface, select **Group** tab.
   Note: Before you can set the VCA configuration for the device, you should configure the group settings for it. For details, please refer to *Section 2.3 Group Management*.
2. Select a camera of the VCA device for configuration and click **VCA Config** to enter the VCA Configuration interface.
3. Click the **Camera** tab to enter the camera configuration interface.

Note: The supported functions may vary among different connected devices.



Basic Information

Click the **View** button to check the VCA type. If you need to edit it, please refer to *Section 7.1 Allocating VCA Resource* for details.

VCA Picture

Notify Surveillance Center: Upload the picture to the surveillance center when an VCA alarm occurs. And if supported, the quality and resolution of the picture can be separately configured.

Local Storage: The alarm triggered pictures can be stored in local PC when the network is disconnected.

Display Information

Displaying the target info and rule info on the alarm picture are supported; you can enable the functions by checking the corresponding checkbox on your demand.

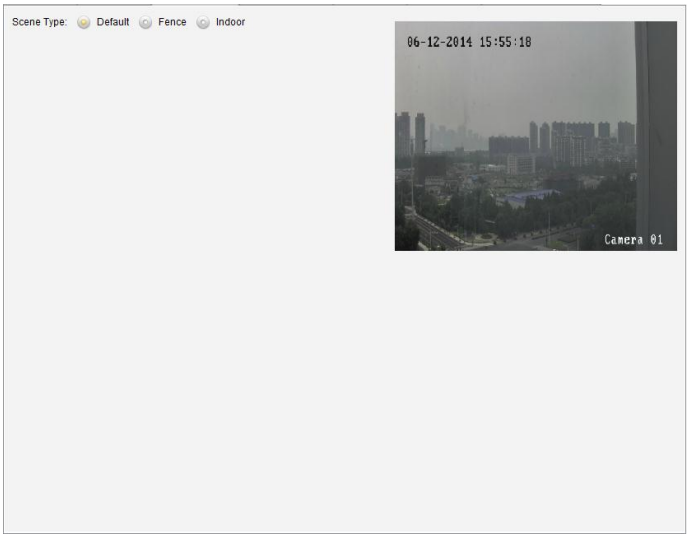
And if you check the checkbox of display VCA on stream, the information will be added to the video stream, and the overlay will be displayed if you get live view or play back by the VSPlayer.

Scene Description

Purpose:

Select the scene for the camera according to actual situation to increase the detection accuracy.

Click the **Scene Description** tab and click to select a scene.

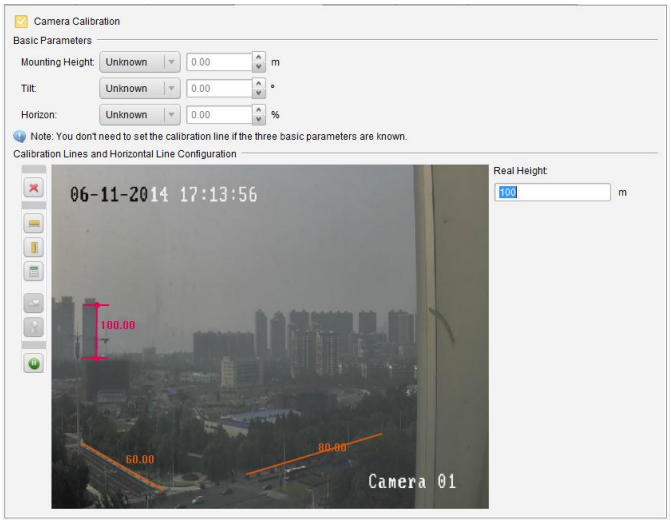


Camera Calibration

Purpose:

Perform the following steps to three-dimensionally measure and quantize the image from the camera, and then calculate the size of every target. The VCA detection will be more accurate if the camera calibration is configured.

Click the **Camera Calibration** tab and check the checkbox of **Camera Calibration** to enable the function.



Icon Description

Icon	Description	Icon	Description

	Delete the selected line on the image.		Draw the horizontal line.
	Draw the vertical line.		Calibrate
	Verify the calibrated height.		Verify the calibrated length.
/	Pause/Play live view		

Task1: Automatically Calculate

Steps:

1. Click the icon and drag the mouse to draw a line to calibrate the length of the object, and input the textbox of **Real Length**.
2. Click the icon and drag the mouse to draw a line to calibrate the height of the object, and input the texbox of **Real Height**.
3. Repeat the above 2 steps until there are at least 4 lines and click the **Save** button on the bottom right of the window to finish calibration.
4. Click the icon to finish drawing and the device will automatically generate the value of "Mounting Height", "Tilt" and "Horizon". You can check whether the calculated values are correct, if not, calibrate again.
5. Click the and icons to check the length and height of the object.

Note: It's highly recommended to set lines apart.

Task2: Manually Input

Steps:

1. Set the "Mounting Height", "Tilt" and "Horizon" as Known, and enter the value of corresponding option.

   Note: the "Horizon" is the boundary line between sky and earth, if it does not exist in the image, you may set the value of it as "100%".
2. Click the **Save** button and then click the icon to show the generated value of "Mounting Height", "Tilt" and "Horizon".
3. Click the and icons to check the length and height of the object.

Shield Region Configuration

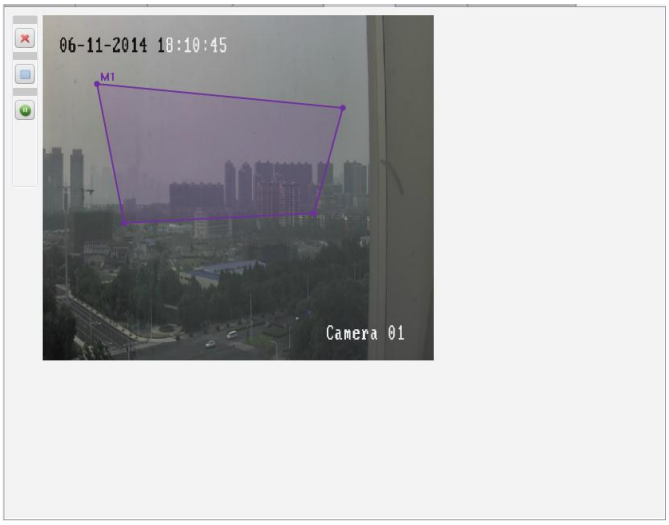
Purpose:

You can set the shield region in which all the VCA rules are invalid.

Steps:

1. Click the **Shield Region** tab to enter the shield region interface. Up to 4 shield regions can be set.
2. Click the icon, then click and drag the mouse to draw the region, and right-click to finish drawing.
3. (Optional) Click to select an added shield region, and click to delete it.

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



VCA Rule Configuration

Click the **Rule** tab to set the VCA rules.

Steps:

1. Check the corresponding checkbox to enable the rule.

   Notes:

   1) The related operation only takes effect after the rule is enabled.
   2) Up to 8 pieces of rules can be added.

2. To set the rule name, double-click the corresponding rule name area, and input the rule name on your demand.
3. Click the event type and select the type in the drop-down list.

   The selectable event type depends on the configured VCA type.

Rule and Attribute

Click the Rule and Attribute tab.

Note: The rule should be enabled if you want to modify the rule.

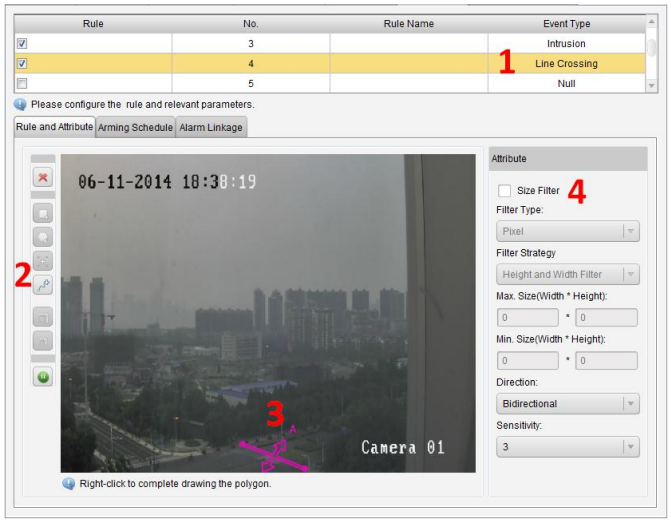
Icon	Description
	Delete the selected rule.
	Draw the rectangle arming area.
	Draw the polygon arming area.
	Set the full-screen arming area. ***Note:*** The event type is intrusion.
	Draw the virtual line. ***Note:*** The event type is line crossing.
	Draw the maximum size filter. ***Note:*** The rule and the size filter should be enabled.

	Draw the minimum size filter. ***Note:*** The rule and the size filter should be enabled.
	Start/Pause the live view of the camera.

Set the rule

Task1: Draw the virtual line (only for Line Crossing)

Steps:

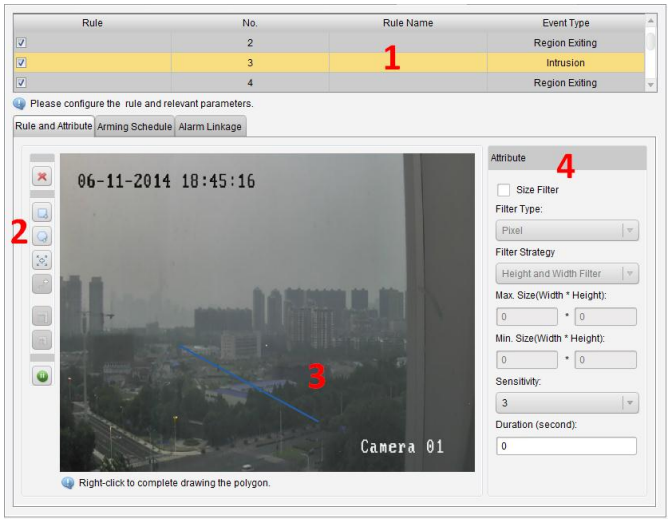


1. Please make sure the rule is enabled and the Rule Type is set as the “Line Crossing” in the area 1 in the above figure.
2. Click the  icon in the area 2 and click to set the beginning point in the area 3 and move the mouse to the end of the line and click again to set another line. Right-click to finish setting the virtual line.

   Note: You can click the  icon to draw again.

Task2: Draw the arming region

Steps:



1. Please make sure the rule is enabled in the area 1 in the above figure.

2. To draw a rectangle, click the icon in the area 2 and click to set the top left corner (bottom right corner) of the region in the area 3 and move the mouse to the bottom right corner (top left corner) and click again.

   To draw a polygon, click the icon and click to select the first corner of the region in the area 3 and move mouse to one after another corner and click, right-click to finish drawing.

   Note: The decagonal region can be supported, and once the tenth point is located, the system will connect it to the first one with a line automatically.

Attribute

Line Crossing: The detection direction can be modified as “Bidirectional”, “From A to B”, and “From B to A”, and the detection sensitivity can set.

Intrusion: The detection sensitivity and duration can be modified according to the actual demand.

Arming Schedule

1. Click the **Arming Schedule** tab and edit the arming time segment.
2. (Optional) Copy to Whole week and Copy to All Rules are available.
3. Click the **Save** button to save the settings

   Note: The arming schedule can be modified for each rule separately.

Alarm Linkage

Click the **Alarm Linkage** tab and check the checkbox of corresponding linkage actions to enable it.

Note: The alarm linkage methods may vary according to the device types.

Video Quality Diagnostics

Purpose:

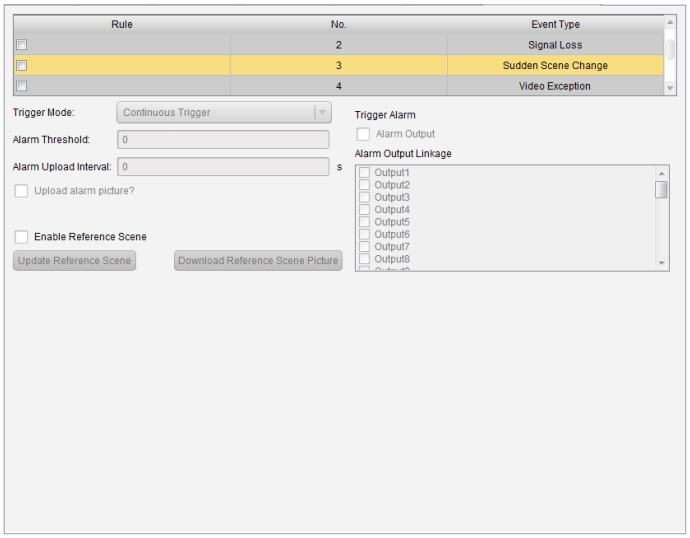
The video quality of the camera can be checked and alarm actions will be triggered when the video is exceptional.

Note: This function is only available for the VCA server.

Steps:

1. Click the **Video Quality Diagnostics** tab.

2. Check the checkbox to enable the related quality detection of the video.
3. Set the corresponding parameters for the quality detection.
4. Click **Save** to saving the settings.



Advanced Settings

Click the **Advanced Configuration** to configure the advanced parameters.

■ **Global Size Filter**

Click the Global Size Filter tab.

Task1: Pixel Size Filter

Steps:

1. Check the checkbox of Size Filter and select the filter type as Pixel.
2. Click the icon to edit the size of maximum size filter.
   Click the icon to edit the size of minimum size filter.
   You can click and drag your mouse to draw a rectangle, and the corresponding value changes when drawing. And release when it reaches to the proper size.
   Note: The height and the width of the maximum size must be larger than the ones of the minimum size respectively.

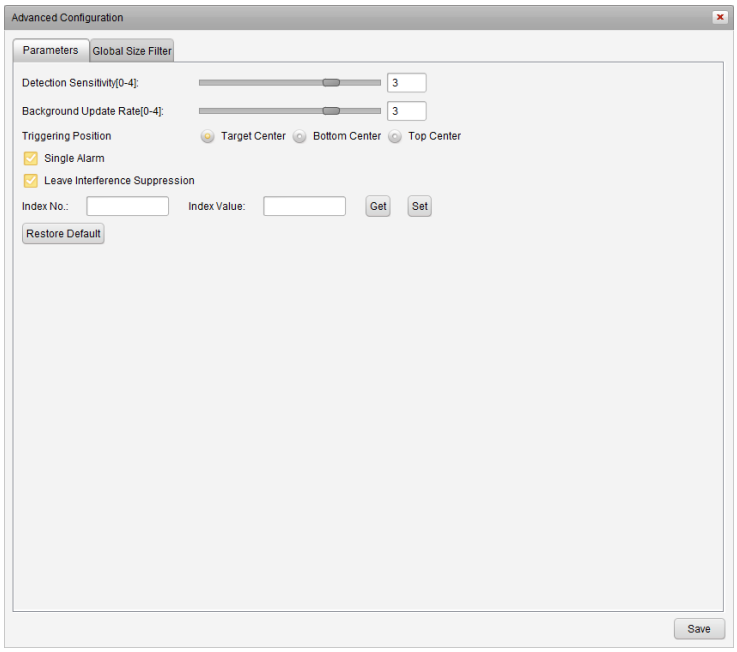
Task2: Meter Size Filter

Steps:

1. Check the checkbox of Size Filter and select the filter type as Meter.
   Note: Please set the camera calibration first.
2. Input the value in the corresponding textbox and click **Save** button to finish editing.
   And when the size of target is in the defined range, the alarm will be triggered.
   Note: The height and the width of the maximum size must be larger than the ones of the minimum size respectively.

■ **Parameters**

Click the **Parameter** tab, and the interface is shown in the following figure.

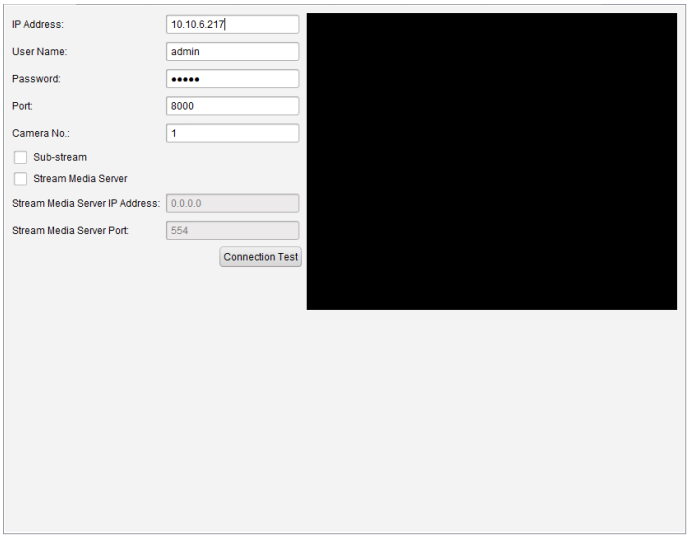


Parameter	Description
Detection Sensitivity	The greater the sensitivity is, the easier the target will be detected.
Background Update Rate	If a detected target remains in the monitoring scene for a certain time, the system will count the target as the background automatically. The greater the value is, the faster the target will be counted as the background.
Triggering Position	The position of the target which breaks the rule.
Single Alarm	If the function is enabled, a single alarm will be triggered when the same target breaks the same rule.
Leaves Interference Suppression	Suppress the interference caused by the swing of leaves.

Note: The index number and value are for the debugging; please do not configure it without authorization.

7.2.2 VCA Server Configuration

The VCA server can get the video stream from the normal device to do video content analysis, and then forward the result to the client software.



Steps:

1. In the Device Management Configuration interface, select **Group** tab.

   Note: Before you can set the VCA configuration for the device, you should configure the group settings for it. For details, please refer to *Section 2.3 Group Management*.
2. Select a camera of the VCA device for configuration and click **VCA Config** to enter the VCA Configuration interface.
3. Click the **Streaming** tab to enter the stream getting interface.
4. Configure the target device information. Target device refers to the normal device that connects with the VCA server via netwrok.

   Input the IP address of the target device, user name, password, port No. and camera No. in the corresponding textbox.
5. (Optional) Check the **sub-stream** checkbox to enable getting the sub-stream from the device.
6. Configure the server to get the video stream from stream media server.
   (1) Check the checkbox to get the stream from the stream media server.
   (2) Input the IP address and the port of the stream media server.
   (3) (Optional) You can click the **Connection Test** button to test the settings of the target device.
7. Click the **Save** button to save the settings.

7.3 Configuring Face Capture IPC

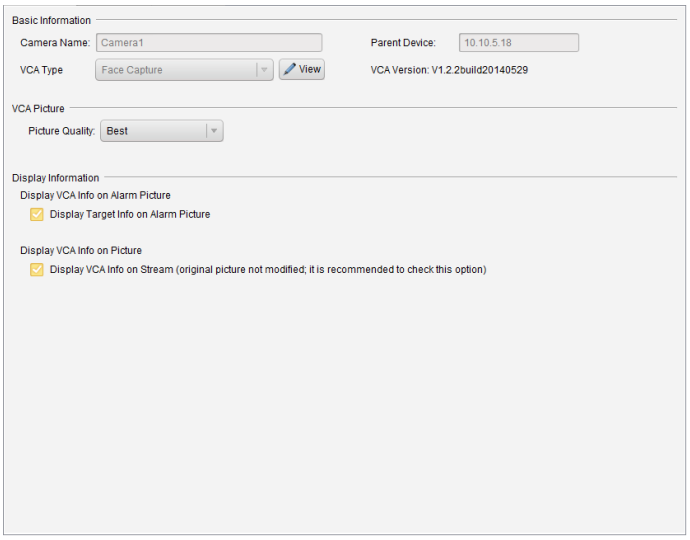
In the Device Management Configuration interface, select **Group** tab. Select a camera of the VCA device for configuration and click **VCA Config** to enter the VCA Configuration interface.

Note: Before you can set the VCA configuration for the device, you should configure the group settings for it. For details, please refer to *Section 2.3 Group Management*.

7.3.1 Camera Configuration

Click **Camera** tab to enter the camera configuration interface.

Note: The supported functions may vary among different connected devices.



Basic Information

You can view the basic information of the camera. Parent Device refers the VCA device that the camera connects with. For face capture IPC, it refers to the camera itself. While for other camera like the camera connecting to behavior analysis DVR (e.g. iDS-8100HFI-ST), parent device refers to the DVR.

Click the **View** button to check the allocation the VCA resource, you may refer to *Section 7.1 Allocating VCA Resource* for details.

VCA Picture

Picture Quality: Configure the quality of the picture as good, better or best.

Display Information

If you check the checkbox, the VCA info will be added to the alarm picture or video stream, and the information will be displayed if you get live view or play back by the VSPlayer.

7.3.2 Shield Region Configuration

Click the **Shield Region** tab to enter the shield region interface. Up to 4 shield regions can be set.

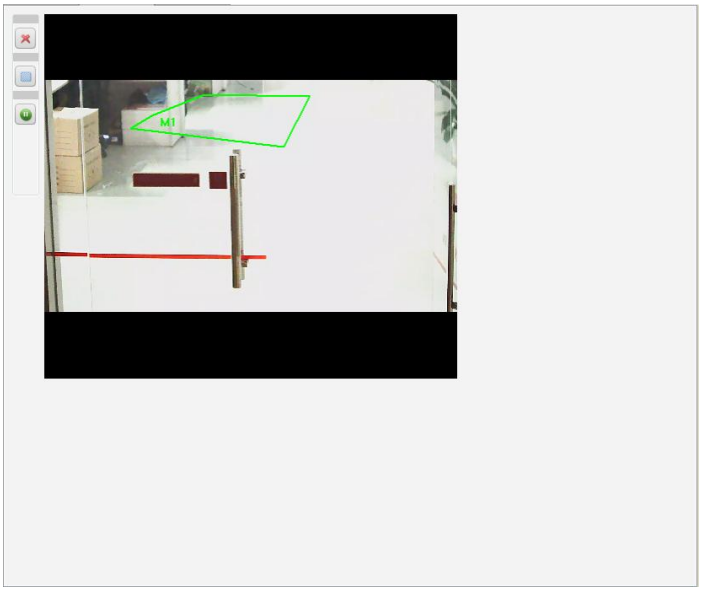
You can set the shield region of the VCA rule, in which all the VCA rules are invalid.

Click the icon, and then click and drag the mouse to draw the region, right-click to finish drawing.

Click to select the added shield region, and click to delete it.

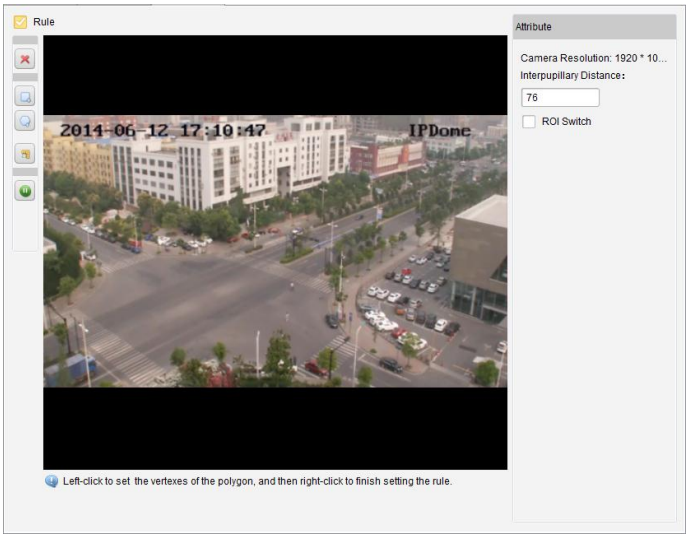
You can also click to pause the live view and click to resume.

Click **Save** to save the settings.



7.3.3 VCA Rule Configuration

Click the **Rule** tab to enter the VCA rules settings interface.



Steps:

1. Check **Rule** checkbox to enable the rule settings.

   Note: The related operation only takes effect after the rule is enabled.

2. Click to draw a rectangle detection rule or click to draw a polygon detection rule. People will be detected when passing through this region.

   Note:

   1) To draw a polygon, click in the live view area to set the vertex of the polygon and then drag

the mouse to other place and click to set another vertex. After set all the vertexes, right-click to finish drawing the polygon rule.

2) The decagonal region can be supported, and once the tenth point is located, the system will connect it to the first one with a line automatically.

3) The height of the detection rule should be no larger than 2-thirds of the live view height.

3. Click to draw the minimum detection size.

   Note: The face size greater than the minimum size will be detected.

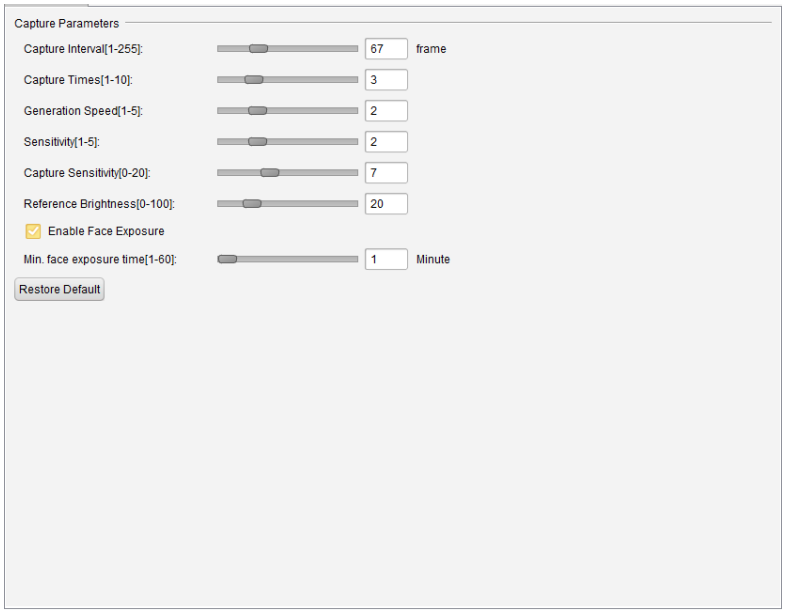
4. Optionally, you can check the ROI Switch checkbox to enable this function if supported by the device.

To delete the drawing rule, click to select the rule and click to delete it.

You can also click to pause the live view and click to resume.

7.3.4 Advanced Configuration

Click **Advanced Configuration** to enter the advanced configuration interface.



Parameter	Description
Capture Interval	The interval between two capture actions. E.g., if it is set as 5, then the capture action executes every 5 frames.
Capture Times	The times for capturing the person who passes through the detection region. If the person passes very fast, the capture times may be less than the set parameter.
Generation Speed	The speed for generating the target frame (green) when the person enters the detection region. If you increase this parameter, the target will generate faster and also the false detection rate will rise. In general, it is recommended to use the default value.
Sensitivity	The sensitivity for face detection. Larger value means higher sensitivity, more faces will be detected and also false detection rate will rise. In general, it is recommended to use the default value. Decrease the value if

	the false detection rate is high.
Capture Sensitivity	The grade for face which is used for decreasing the false capture actions. If you increase this value, then the face with better quality and clarity will be captured.
Reference Brightness	The exposure adjustment for face capture. If the brightness of the face in the image is lower than the set value, the face capture IPC will increase the brightness of the image and vice versa.
Enable Face Exposure	Set the exposure time for face capture.

7.4 VCA Speed Dome Configuration

In the Device Management Configuration interface, select **Group** tab. Select a camera of the VCA device for configuration and click **VCA Config** to enter the VCA Configuration interface.

Note: Before you can set the VCA configuration for the device, you should configure the group settings for it. For details, please refer to *Section 2.3 Group Management*.

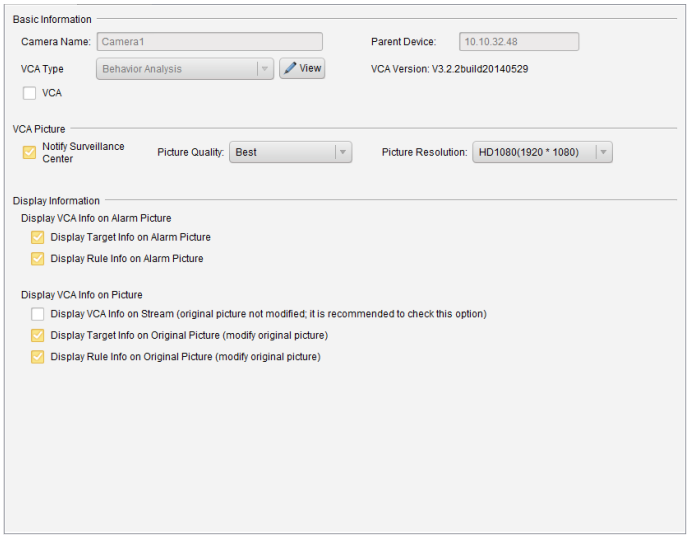
7.4.1 Behavior Analysis

If you set the VCA resource as Behavior Analysis, perform the following steps to configure the VCA settings.

Basic Parameters Configuration

When having enabled the VCA resource of behavior analysis, the speed dome can auto-track the object which triggers the configured rules. Before configure the auto-tracking settings for the speed dome, you need to configure the basic parameters first.

In the VCA configuration interface, click **Camera** tab to enter the camera configuration interface. Refer to the description below for the configuration of each item.



VCA Checkbox: Check the checkbox to enable the auto-tracking function.

VCA Picture: Enable/disable the upload of captured pictures to the software when the VCA rule is triggered. The quality and resolution of the captured picture are adjustable.

Display Target Info on Alarm Picture: Enable/disable the function of overlaying target information on an alarm picture.

Display Rule Info on Alarm Picture: Enable/disable the function of overlaying rule information on an alarm picture.

Display VCA Info on Stream: Enable/disable the function of overlaying target and rule information on steam.

Display Target Info on Original Picture: Enable/disable the function of overlaying target information on original picture.

Display Rule Info on Original Picture: Enable/disable the function of overlaying rule information on original picture.

Note: If you check the checkbox of display target info and rule on stream, the information will be added to the video stream, and the overlay will be displayed only when you get live view or play back by the VSPlayer.

Auto-tracking Configuration

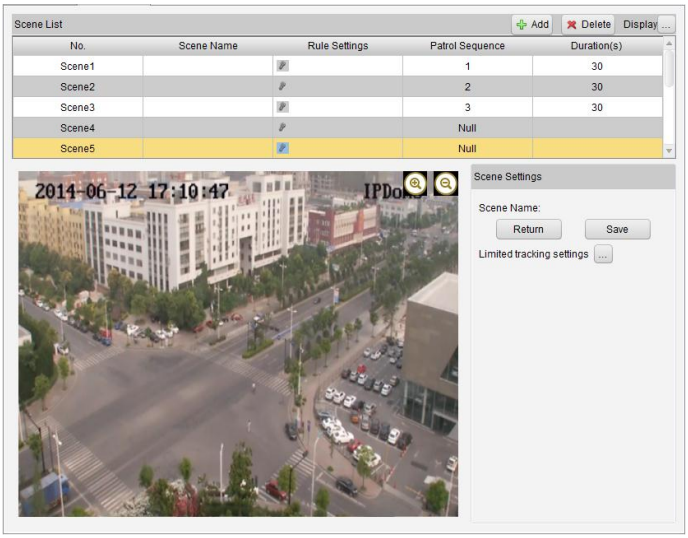
Setting Single Scene Auto-tracking

Enable VCA function. Operate the PTZ of speed dome to select a scene for auto-tracking. Set rules for the scene and save the settings. The speed dome will track the detected target automatically.

The specific steps are as follows:

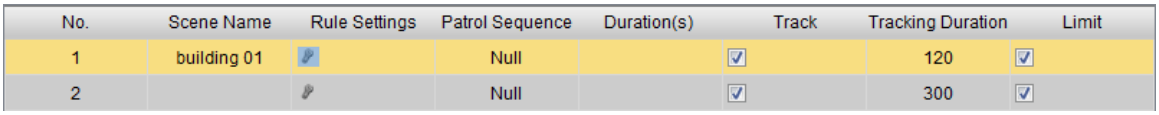
Steps:

1. In the camera configuration interface, check **VCA** checkbox to enable the VCA function.
2. Click **Auot-tracking** to enter the **Auto-tracking** interface.



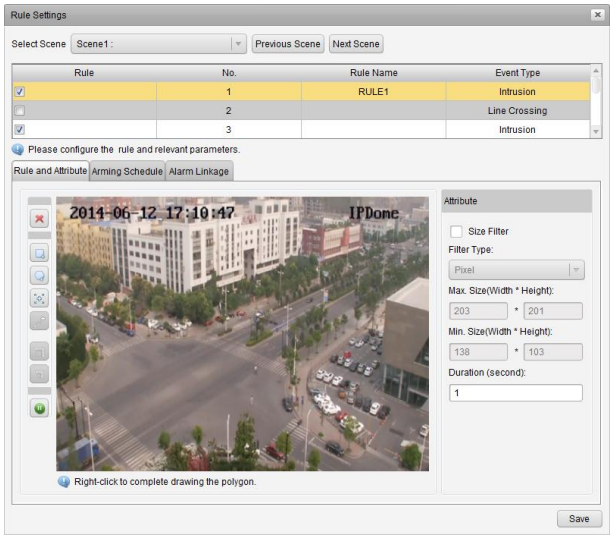
3. Click on the live view image to adjust the scene and click **Add** to add the scene to the **Scene List**.
4. Double-click the **Scene Name** filed and edit a name for the scene.
5. Set PTZ limit to restrict the tracking region (Optional).
   1) Click **Display** to unfold the **Limit** column in **Scene List**.
   2) Check the checkbox under **Limit** to enable the limit function.
   3) Click ... to display the limit settings panel.
   4) Control the PTZ and set the Top, Bottom, Left and Right limit for limiting the tracking area. Click **Set** to configure the current position as the limit position. And you can click **Return** to go to the corresponding limit position.

6. Click **Save** under **Scene Settings** to save the scene settings. You can also click **Return** to go to the scene.
7. If you set the **Tracking Duration**, the speed dome stops tracking the target after the duration time.
8. Click **Rule Settings** field to enter the **Rule Settings** interface.



9. Check to enable a rule. Double-click the **Rule Name** field and edit a name for the rule. Click the **Event Type** field and select a type for the rule.

   Note: Up to 8 rules can be set for each scene.



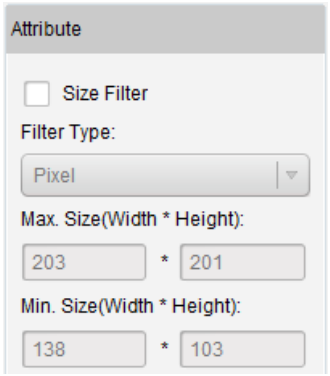
10. Click  or  . Draw a rectangle or polygon on the live view image. (If you want to delete the rule, click to select the rule and click  to delete it.)

Notes:

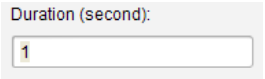
1) To draw a polygon, click in the live view area to set the vertex of the polygon and then drag the mouse to other place and click to set another vertex. After set all the vertexes, right-click to finish drawing the polygon rule.
2) The decagonal region can be supported, and once the tenth point is located, the system will connect it to the first one with a line automatically.

11. Set size filter (Optional).
    1) Check **Size Filter** checkbox.
    2) Click  and draw rectangle to filter the maximum size objects.
    3) Click  and draw rectangle to filter the minimum size objects. The specific size will be displayed on **Attribute** column as follows.

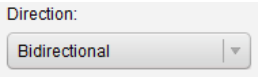
    Note: The object size that is between the maximum size and minimum size will be detected.



12. Set the tracking duration for the rule. This item is only available for Intrusion event type. If you set 10 for this item, then the speed dome will track an object that intrudes into the pre-defined region longer than the 10 seconds.



13. Set the direction for the rule. This item is only available for Line Crossing event type. You can set unidirectional or bidirectional line crossing detection.



14. Click **Save** to save the settings.
15. Repeat the steps from 8 to 13 to enable more rules for this scene. Then click to exit the rule settings interface.
16. Click **Advanced Configuration** on the VCA Configuration interface to enter the **Advanced Configuration** interface.
17. Click **Zooming Ratio Settings** tab.
18. Click to set the zoom ratio and click **Set Zoom Ratio** to save the settings.
19. Click **Save** to save the settings. The speed dome tracks the objects according this zoom ratio.

Setting Multiple Scenes Auto-tracking

Steps:

1. To set more scenes, repeat the steps from 1 to 19 of ***Setting Single Scene Auto-tracking*** section.

Scene List — Add | Delete

No.	Scene Name	Rule Settings	Patrol Sequence	Duration(s)
1	scene 1		Null	
2	Builing 1		Null	
3	Building 2		Null	
4	Building 3		Null	
5	Building 4		Null	

2. Set the patrol sequence and duration for the scenes as follows. The speed dome patrols according to the sequence No.. After the duration time, the speed dome patrols to the next scene.

Scene List — Add | Delete

No.	Scene Name	Rule Settings	Patrol Sequence	Duration(s)
1	scene 1		1	30
2	Builing 1		2	30
3	Building 2		3	30
4	Building 3		4	30
5	Building 4		5	30

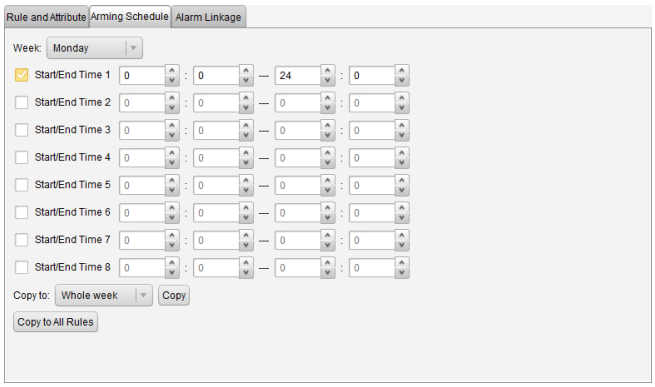
3. Click **Save** to save the settings.

Arming Schedule of a Rule

When you set the arming schedule, the configured rule takes effect only in the time segment. You can set up to 8 time segments for each rule.

Steps:

1. In the VCA Configuration interface, select a scene and click Rule Settings field to enter the Rule Settings interface.
2. Select a rule in the rule list panel and click the **Arming Schedule** tab to edit the arming schedule for the rule.



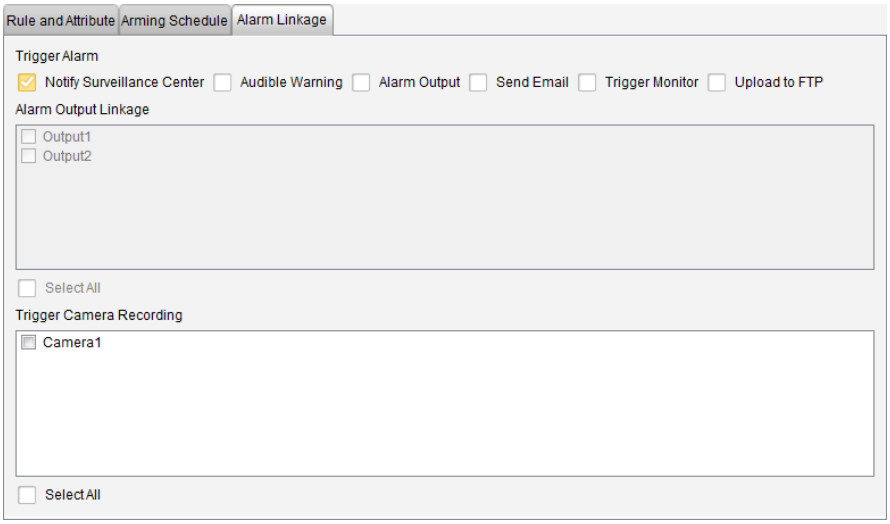
3. Choose the day you want to set the arming schedule in the **Week** field.
4. Check the checkbox to enable a time segment and enter a start time and end time.
5. After you set the arming schedule, you can click **Copy** to copy the schedule to other days (Optional).
6. Click **Copy to All Rules**, if you want to copy this arming schedule to other rules of one scene (Optional).
7. Click **Save** to save the settings.

Auto-tracking Alarm Linkage

Purpose:

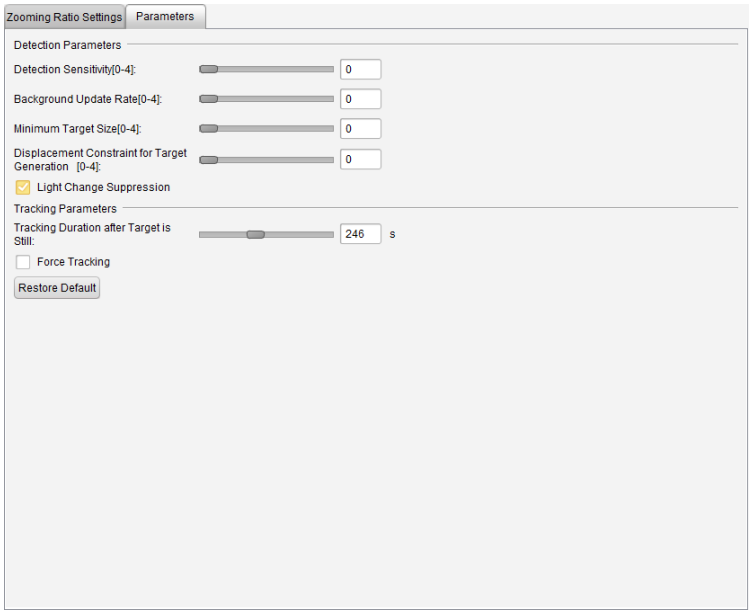
After you set the alarm linkage, the alarm will be triggered when speed dome tracks objects automatically.

Check the checkbox to select the linkage method.



Advanced Parameters Configuration

In the VCA Configuration interface, click **Advanced Configuration** to enter the VCA parameters interface



The parameter description is as follows.

Parameter	Description
Detection Sensitivity	The sensitivity of detecting a target. The target can be detected more easily when the sensitivity is set higher.
Background Update Rate	It is used to adjust the rate of blending static object into the detected scene. The rate is higher, the blending is faster.
Minimum Target Size	When the target size is smaller than this minimum size, the target will not be analyzed.
Displacement Constraint for Target Generation	It is used to constraint the speed of generating a target. The value is larger, the target generates harder and the false alarm will be fewer.
Triggering Position	The rules can be triggered according to the target center, bottom or top.
Light Change Suppression	If there is a quick change of scene light, enable this function to suppress the change.
Tracking Duration after Target is Still	The default value is 5s. You can set the duration to 2s, 3s, 4s, 5s, 6s, 7s or 8s.
Force Tracking	After enabling this function, the speed dome will find the target and the tracking continues after the target is blocked for a while.

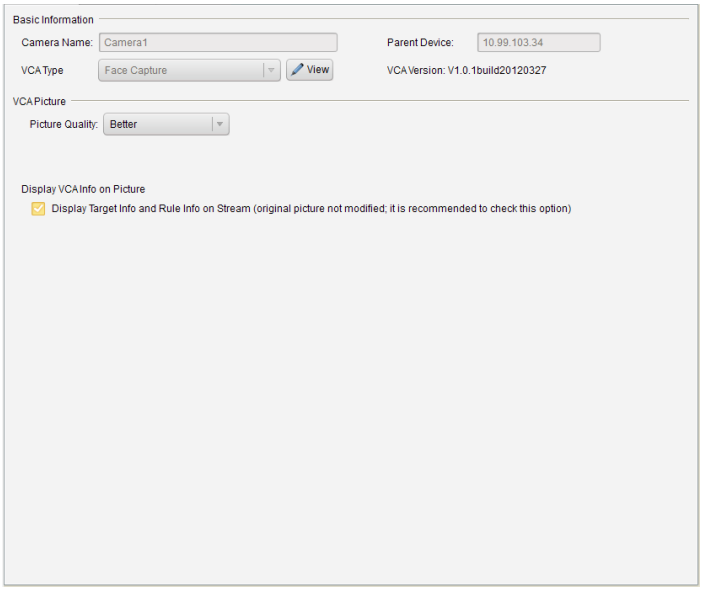
7.4.2 Face Capture

If you set the VCA resource as Face Capture, perform the following steps to configure the VCA settings for capturing the face of the people who trigger the configured rules in the pre-defined region.

Camera Configuration

Click **Camera** tab to enter the camera configuration interface.

Note: The supported functions may vary among different connected devices.



Basic Information

You can view the basic information of the camera. Parent Device refers the VCA device that the camera connects with. For face capture speed dome, it refers to the camera itself. While for other camera like the camera connecting to behavior analysis DVR (e.g. iDS-8100HFI-ST), parent device refers to the DVR.

Click the **View** button to view the VCA resource.

VCA Picture

Picture Quality: Configure the quality of the picture as good, better or best.

Display VCA Info on Picture

If you check the checkbox, the VCA info will be added to the video stream, and the information will be displayed if you get live view or play back by the VSPlayer.

Shield Region Configuration

Click the **Shield Region** tab to enter the shield region interface. Up to 4 shield regions can be set.

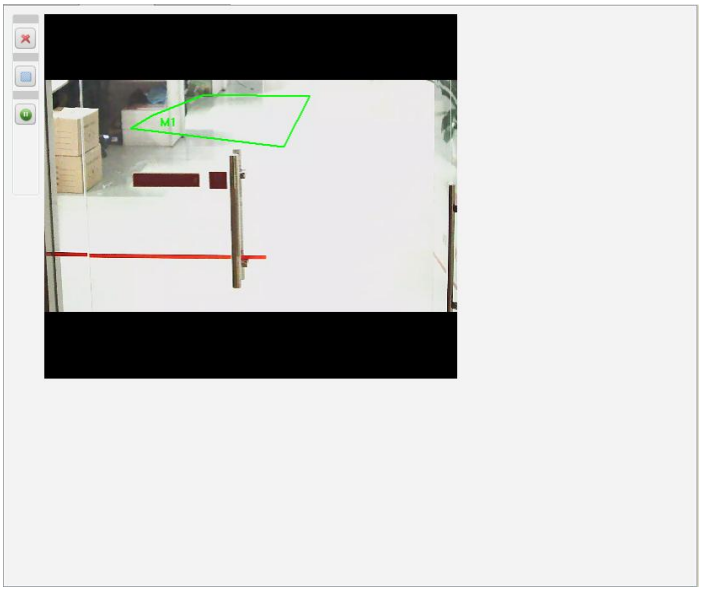
You can set the shield region of the VCA rule, in which all the VCA rules are invalid.

Click the icon; click and drag the mouse to draw the region; right-click to finish drawing.

Click to select the added shield region, and click to delete it.

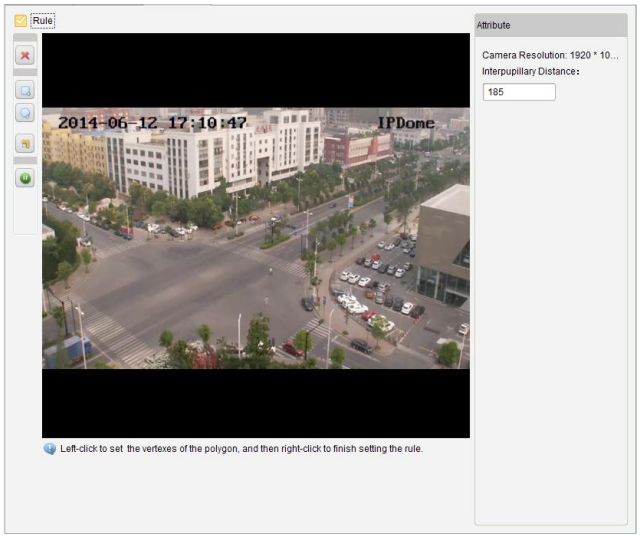
You can also click to pause the live view and click to resume.

Click **Save** to save the settings.



VCA Rule Configuration

Click the **Rule** tab to enter the VCA rules settings interface.



Steps:

1. Check Rule checkbox to enable the rule settings.

   Note: The related operation only takes effect after the rule is enabled.

2. Click to draw a rectangle detection rule. Click on the live view image to set a vertex, move the mouse and click again to finish drawing the rectangle. People will be detected when passing through this region.

   You can also click to draw a polygon. Click in the live view area to set the vertex of the polygon and then drag the mouse to other place and click to set another vertex. After setting all the vertexes, right-click to finish drawing the polygon rule. People will be detected when passing through this region.

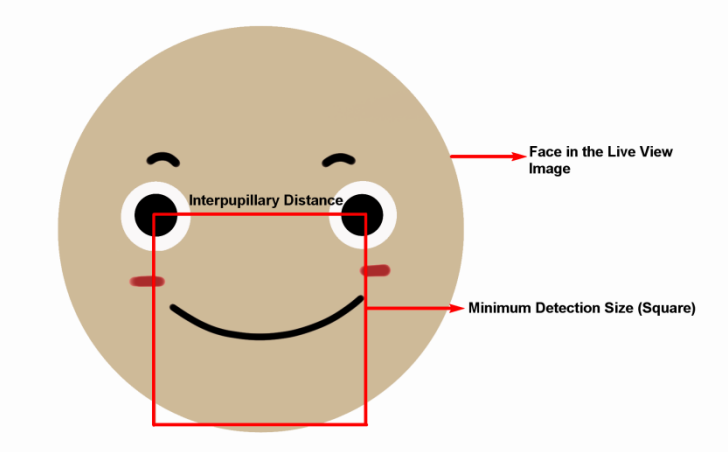
   Note: The height of the detection rule should be no larger than 2/3 of the live view height.

3. Click to draw the square minimum detection size. Click on the live view image to set a vertex, move the mouse and click again to finish drawing the minimum detection size. Or you can set the

minimum detection size in the attribute area.

Notes:

- The following figure shows the recommended way for setting the minimum detection size (square). The face should be clear enough to be recognized.



- The face size that is between the maximum size and minimum size will be detected.

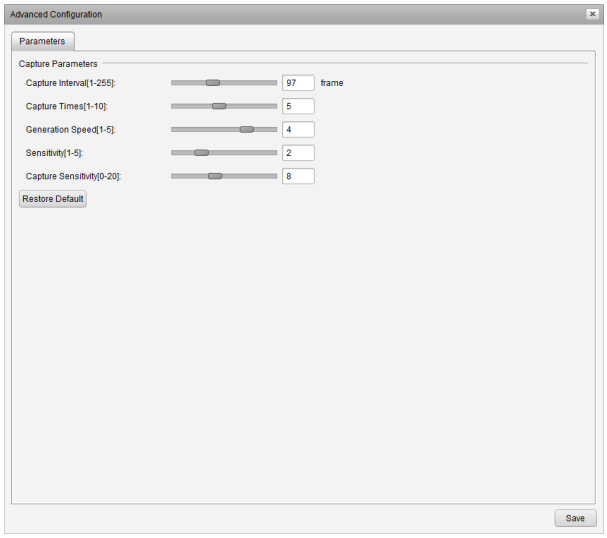
To delete the drawing rule, click to select the rule and click to delete it.

You can also click to pause the live view and click to resume.

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

Advanced Parameters Configuration

In the VCA Configuration interface, click **Advanced Configuration** to enter the advanced configuration interface.



Parameter	Description
Capture Interval	The interval between two capture actions. E.g., if it is set as 5, then the capture action executes every 5 frames. Default value: 1.
Capture Times	The times for capturing the person who passes through the detection region. If the person passes very fast, the capture times may be less than the set parameter. Default value: 1.

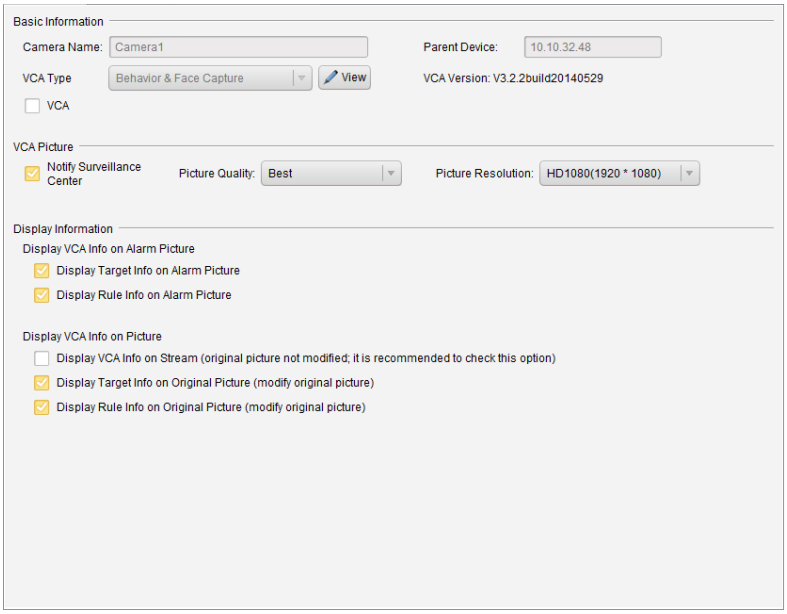
Generation Speed	The speed for generating the target frame (green) when the person enters the detection region. If you increase this parameter, the target will generate faster and also the false detection rate will rise. In general, it is recommended to use the default value. Default value: 3.
Sensitivity	The sensitivity for face detection. Larger value means higher sensitivity, more faces will be detected and also false detection rate will rise. In general, it is recommended to use the default value. Decrease the value if the false detection rate is high. Default value: 3.
Capture Sensitivity	The grade for face which is used for decreasing the false capture actions. If you increase this value, then the face with better quality and clarity will be captured. Default value: 4.

7.4.3 Behavior & Face Capture

If you set the VCA resource as Behavior& Face Capture, the speed dome provides the capability of both behavior analysis and face capture. Perform the following steps to configure the VCA settings.

Basic Parameters Configuration

In the VCA configuration interface, click **Camera** tab to enter the camera configuration interface. Please refer to the Basic Parameters Configuration section of *Section 7.4.1 Behavior Analysis* for the description of each item in this interface.



Note: If you check the checkbox of display target info and rule on stream, the information will be added to the video stream, and the overlay will be displayed only when you get live view or play back by the VSPlayer.

Behavior Analysis and Face Capture Configuration

For auto-tracking function configuration, you can set single auto-tracking and multiple scenes auto-tracking. Please refer to Auto-tracking Configuration section of *Section 7.4.1 Behavior Analysis* for detailed settings.

Face Capture Settings

The speed dome can capture the face of the people who trigger the configured rules in the pre-defined region.

Steps:

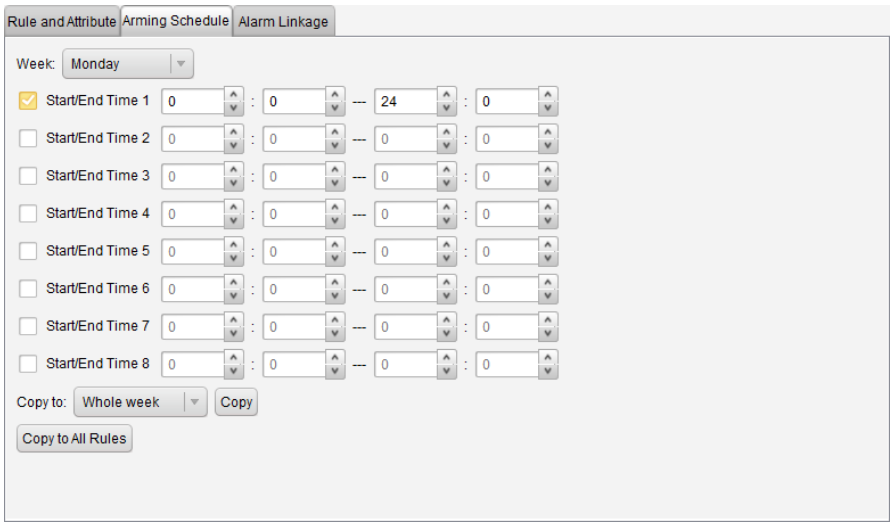
1. In the camera configuration interface, check **VCA** checkbox to enable the VCA function.
2. Click **Face Capture Configuration** to enter the **Face Capture** interface.
3. Check **Face Capture** checkbox to enable this function.
4. Set the parameters for this function, including the following items:
   Capture Interval: The interval between two capture actions. E.g., if it is set as 5, then the capture action executes every 5 frames. Default value: 1.
   Capture Times: The times for capturing the person who passes through the detection region. If the person passes very fast, the capture times may be less than the set parameter. Default value: 1.
   Sensitivity: The sensitivity for face detection. Larger value means higher sensitivity, more faces will be detected and also false detection rate will rise. In general, it is recommended to use the default value. Decrease the value if the false detection rate is high. Default value: 3.
   Capture Sensitivity: The grade for face which is used for decreasing the false capture actions. If you increase this value, then the face with better quality and clarity will be captured. Default value: 4.
5. Click **Save** to confirm the settings.

Arming Schedule of a Rule

When you set the arming schedule, the configured rule takes effect only in the time segment. You can set up to 8 time segments for each rule.

Steps:

1. In the VCA Configuration interface, select a scene and click Rule Settings field to enter the Rule Settings interface.
2. Select a rule in the rule list panel and click the **Arming Schedule** tab to edit the arming schedule for the rule.

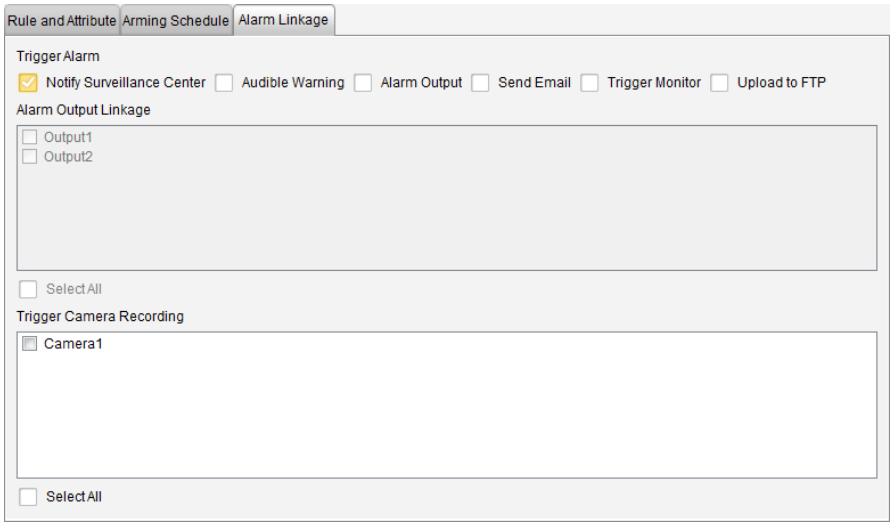


3. Choose the day you want to set the arming schedule in the **Week** field.
4. Check the checkbox to enable a time segment and enter a start time and end time.
5. After you set the arming schedule, you can click **Copy** to copy the schedule to other days (Optional).
6. Click **Copy to All Rules**, if you want to copy this arming schedule to other rules of one scene (Optional).
7. Click **Save** to save the settings.

Alarm Linkage Settings

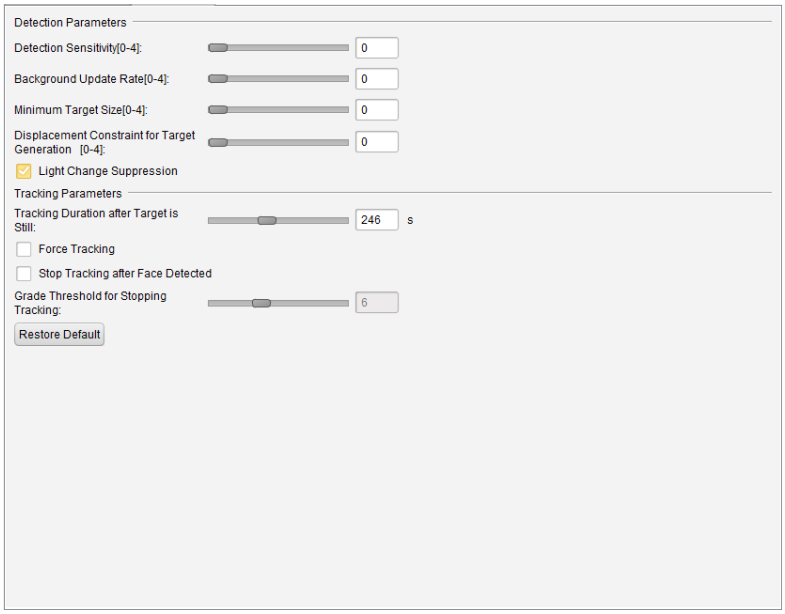
Purpose:

After you set the alarm linkage, the alarm will be triggered when speed dome detects the object(s). Check the checkbox to select the linkage method.



Advanced Parameters Configuration

In the VCA Configuration interface, click **Advanced Configuration** to enter the VCA parameters interface.



The parameter description is as follows.

Parameter	Description
Detection Sensitivity	The sensitivity of detecting a target. The target can be detected more easily when the sensitivity is set higher.
Background Update Rate	It is used to adjust the rate of blending static object into the detected scene. The rate is higher, the blending is faster.
Minimum Target Size	When the target size is smaller than this minimum size, the target will not be analyzed.
Displacement Constraint for Target Generation	It is used to constraint the speed of generating a target. The value is larger, the target generates harder and the false alarm will be fewer.
Triggering Position	The rules can be triggered according to the target center, bottom or top.
Light Change Suppression	If there is a quick change of scene light, enable this function to suppress the change.
Tracking Duration after Target is Still	The default value is 5s. You can set the duration to 2s, 3s, 4s, 5s, 6s, 7s or 8s.
Force Tracking	After enabling this function, the speed dome will find the target and the tracking continues after the target is blocked for a while.
Stop Tracking after Face Detected	If you can enable this function, the speed dome stops tracking the target after it is captured by the speed dome.
Grade Threshold for Stopping Tracking	The grade for the captured face. If you want to capture a clear face before stopping tracking, you should set a higher grade threshold. After the speed dome gets a face picture which meets the grade requirement, the auto-tracking stops. Default value: 6.

Chapter 8 Transcoder Management

Purpose:

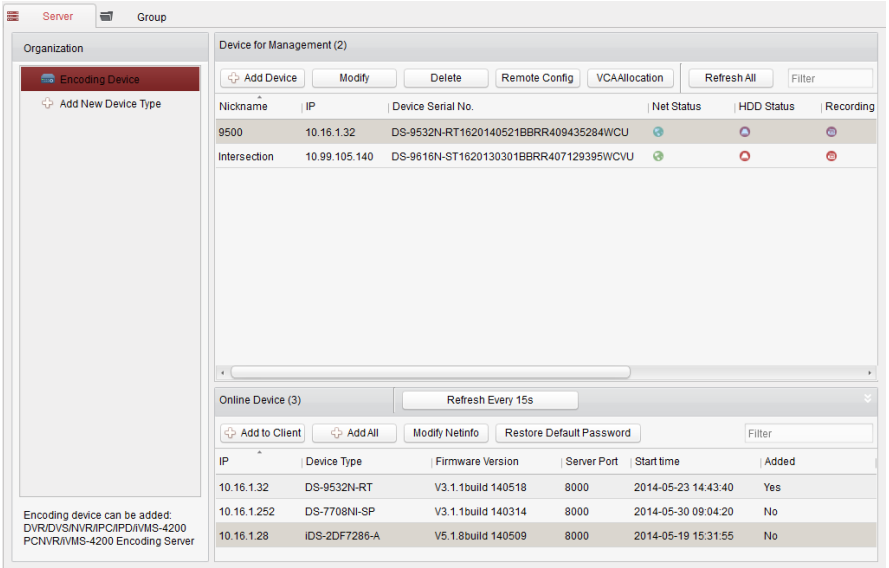
Transcoder is designed for real-time transcoding of different streams. With the use of transcoder, streams and control signals from different manufactures and different surveillance systems can be effectively integrated and standardized. iVMS-4200 client software supports to add transcoder and configure the transcoding function for it.

8.1 Adding Encoding Device to the Transcoder

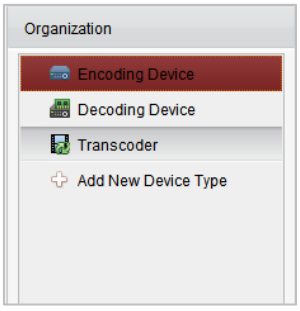
8.1.1 Adding the Transcoder to the Client Software

Steps:

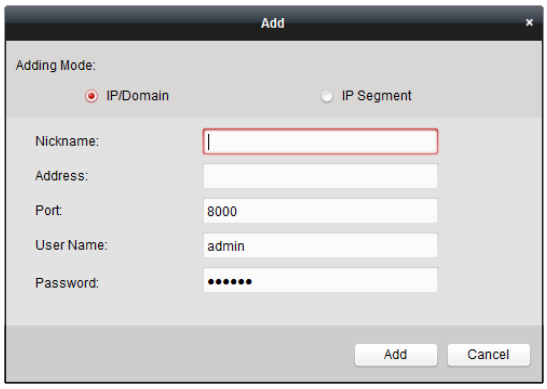
1. Click the  on the control panel to enter the Device Management interface and click the **Server** tab.



2. Click **Add New Device Type** on the Organization list and select **Transcoder**.
3. Click **OK** to save the settings, and the added transcoder type is displayed on the Organization list.



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

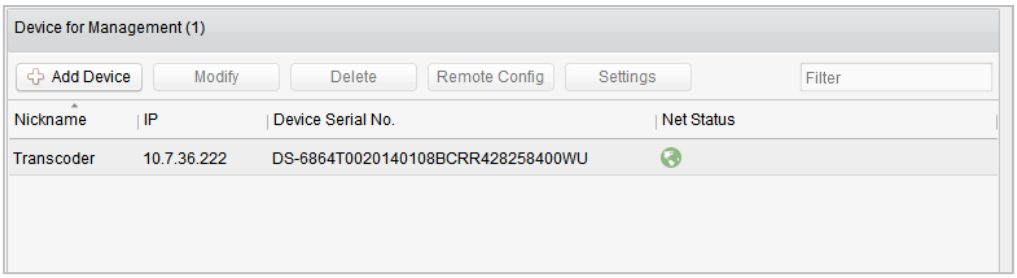


Select the adding mode by IP/Domain or by IP segment, and configure the corresponding settings for the device.

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

- By specifying the device IP/Domain address, see *Section 2.2.2 Adding Devices Manually.*
- By specifying an IP segment, see *Section 2.2.3 Adding Devices by IP Segment*.

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



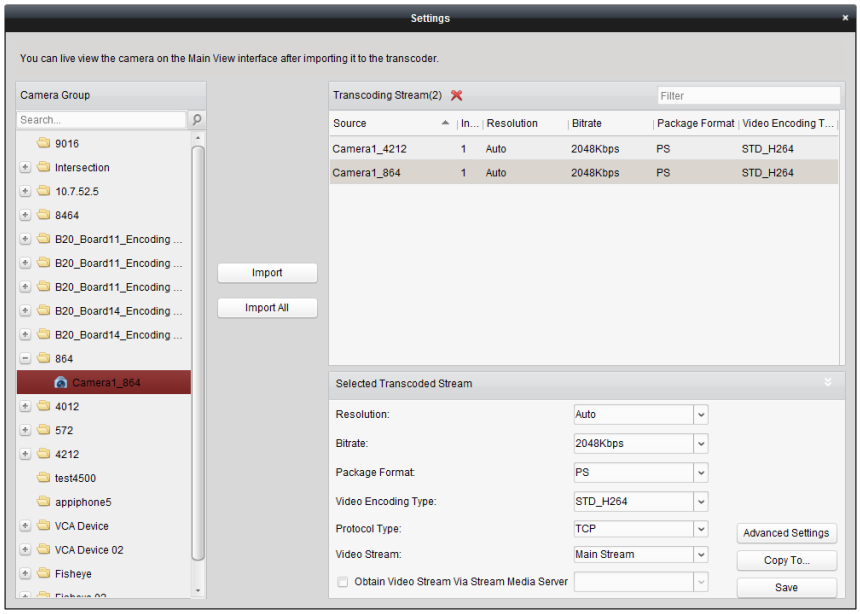
8.1.2 Importing the Encoding Channel to the Transcoder

Before you start:

The cameras of encoding devices should be organized into groups before being imported to the transcoder. For detailed configuration, please refer to *Section 2.3 Group Management*.

Steps:

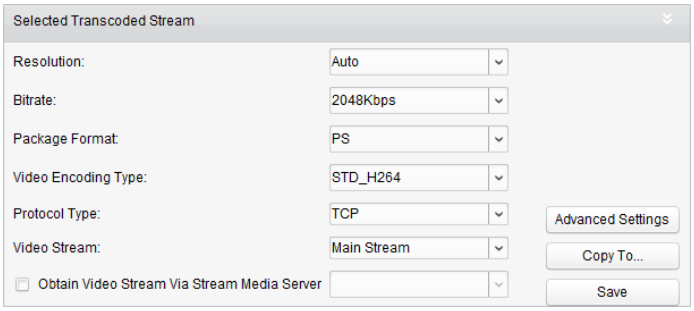
1. On the Device Management interface, select a transcoder from the device list and click Settings to enter the transcoder settings interface.
2. Select a group or a camera from the Group list and click the **Import** button to import the selected camera or the cameras of the group, or click **Import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



8.2 Configuring the Transcoded Stream Parameters

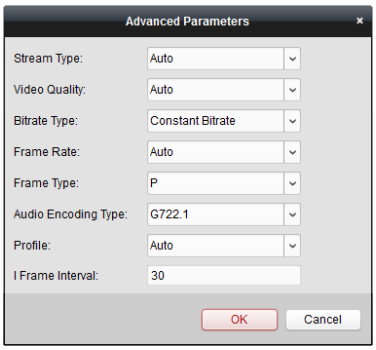
Steps:

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



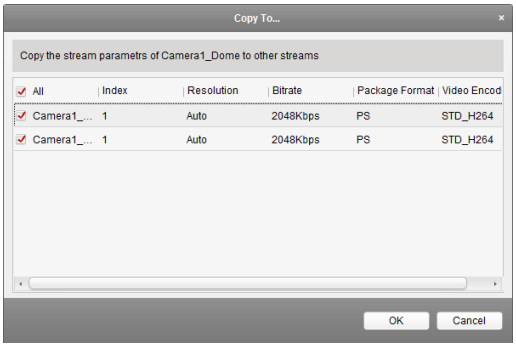
2. Configure the parameters of the transcoded stream as needed, including the resolution, bitrate, package format, video encoding type, protocol type and video stream from the drop-down list.
3. (Optional) Check the checkbox of **Obtain Video Stream Via Stream Media Server** if you want to use the stream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

   Note: You should add a stream media server to the client before you can select the stream media server.
4. Click **Advanced Settings** to enter the advanced settings of the selected transcoded stream.
   (1) Edit the parameters of the transcoded stream on demands, including the stream type, video quality, bitrate type, frame rate, frame type, audio encoding type, profile and I frame interval. You can also remain the default parameters of the stream.



(2) Click **OK** to save the settings.

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



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

8.3 Operating the Transcoded Stream

Purpose:

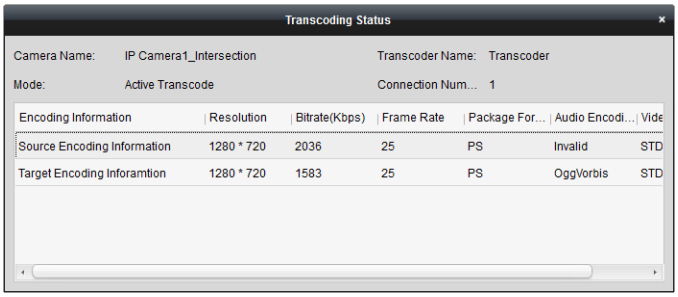
After successfully transcoding, the live view of the camera uses transcoded stream.

Steps:

1. Enter the Main View interface and select a transcoded camera for live view. For detailed configuration, please refer to *Section 2.4 Basic Operations in Live View*.

   Note: If the camera is in live view before transcoding, please stop the live view first and then start the live view again to view the live video of the camera via transcoded stream.

2. During the live view, you can right-click on the camera node and select **Transcoding Status** to view the transcoding status.



3. For e-map settings, please refer to *Chapter 5 E-map Management*; for displaying on video wall, please refer to *Chapter 12 Decoding and Displaying Video on Video Wall*.

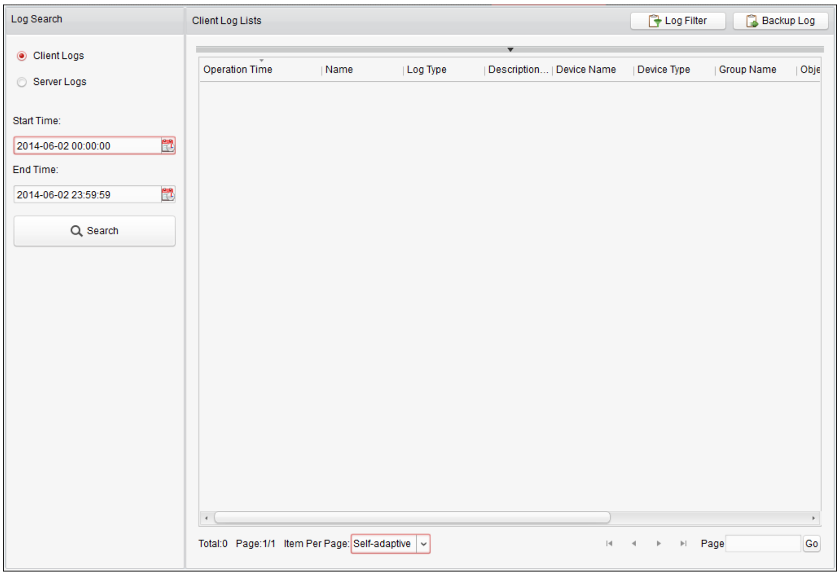
   Note: Displaying the transcoded stream on video wall should be supported by the decoder.

Chapter 9 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.

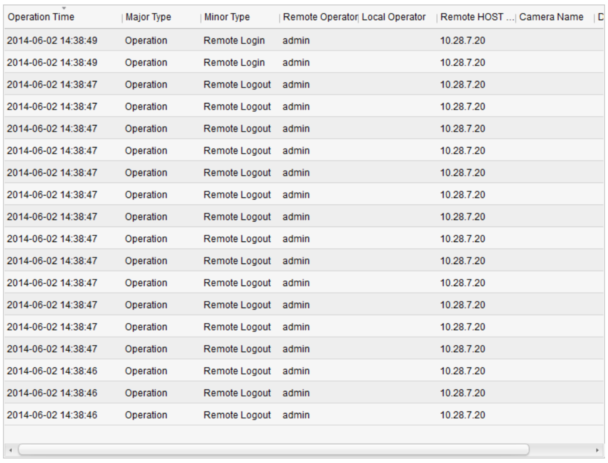


Searching Log Files

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, description and other information of the logs.

Note: Please narrow the time range or filter the log type for search if there are too many log files.



Operation Time	Major Type	Minor Type	Remote Operator	Local Operator	Remote HOST ...	Camera Name	D
2014-06-02 14:38:49	Operation	Remote Login	admin		10.28.7.20		
2014-06-02 14:38:49	Operation	Remote Login	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:47	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:46	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:46	Operation	Remote Logout	admin		10.28.7.20		
2014-06-02 14:38:46	Operation	Remote Logout	admin		10.28.7.20		

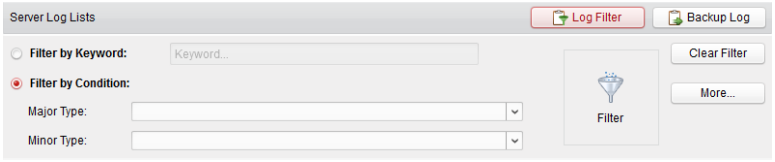
Filtering Log Files

Purpose:

After searched out successfully, the log files can be filtered by the keyword or condition, and thus you can find the logs as you want.

Steps:

1. Click **Log Filter** or the icon on the Log Search page to expand the Log Filter panel.
2. Select **Filter by Keyword**, and then input keyword for filtering in the text field; or select **Filter by Condition**, and then specify log type in the drop-down list.
3. Optionally, you can click **More…** to filter the log files more accurately.
4. Click **Filter** to start filtering. You can click **Clear Filter** the cancel the filtering.



Backing up Log Files

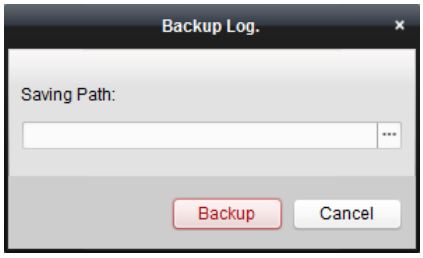
Purpose:

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.



Chapter 10 Account Management and System Configuration

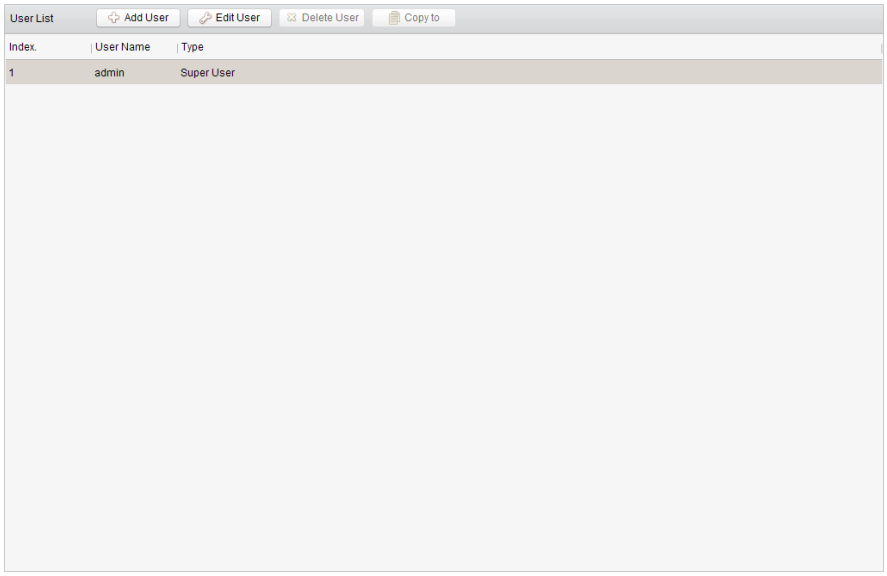
10.1 Account Management

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:

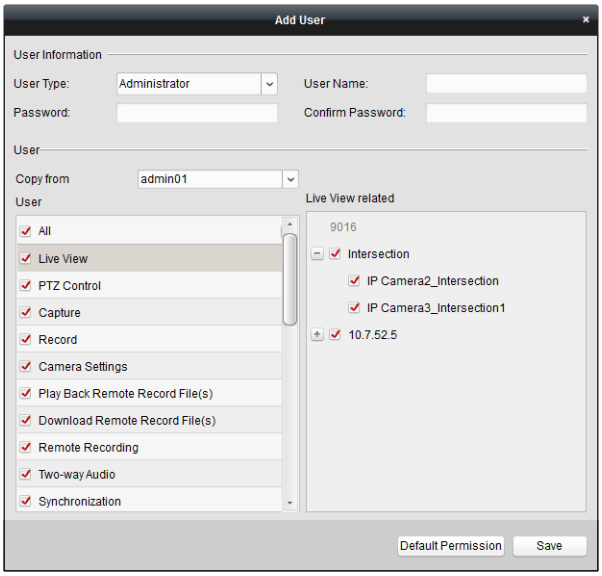
   Administrator: The administrator account has all permissions by default, and can modify the passwords and permissions of all operators and its own account.

   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.
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.

Notes:

- A user name cannot contain any of the following characters: / \ : * ? " < > |. And the length of the password cannot be less than 6 characters.
- 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.

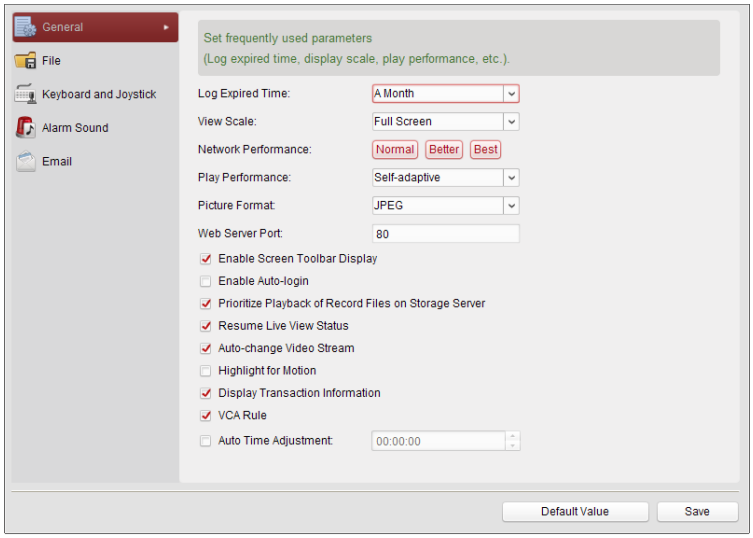
10.2 System Configuration

Purpose：

The general parameters, file saving paths, keyboard and joystick shortcuts, alarm sounds and Email settings 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.

10.2.1 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 7.1 General Parameters*.
4. Click **Save** to save the settings.

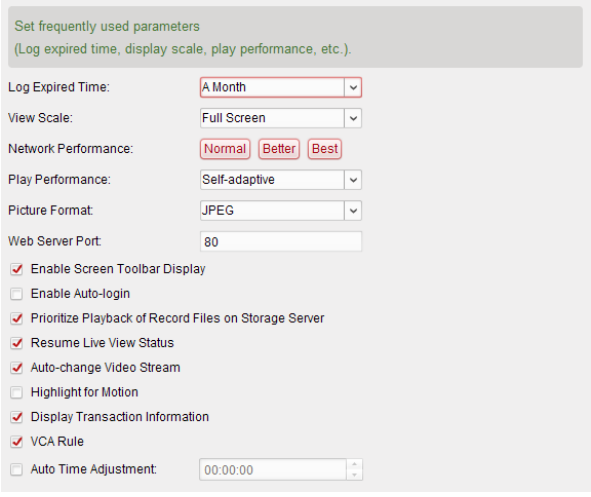


Table 7.1 General Parameters

Parameters	Descriptions
Log Expired Time	The time for keeping the log files, once exceeded, the files will be deleted.
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.

Network Performance	The current network conditions. It can be set as Normal, Better or Best.
Play Performance	The play performance of the live video. It can be set as Shortest Delay or Self-adaptive.
Picture Format	Set the file format for the captured pictures during live view or playback.
Web Server Port	The server port for accessing iVMS-4200 client via web browser. By default, it is 80. If the port No. of your PC running the iVMS-4200 is occupied, you can modify it. After changing the port No., you should access the client via web browser by inputting *IP address of the PC running the client : new port No.*. Please refer to *Section 13.1 Login* for details.
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 Record 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.
Auto-change Stream Type	Change the stream type automatically in live view according to the size of the display window.
Highlight for Motion	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.
Auto Time Adjustment	Adjust the time automatically at a specified time point.

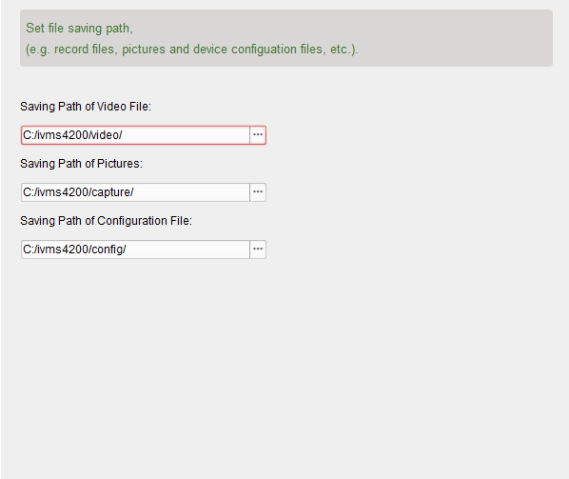
10.2.2 File Saving Path Settings

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.



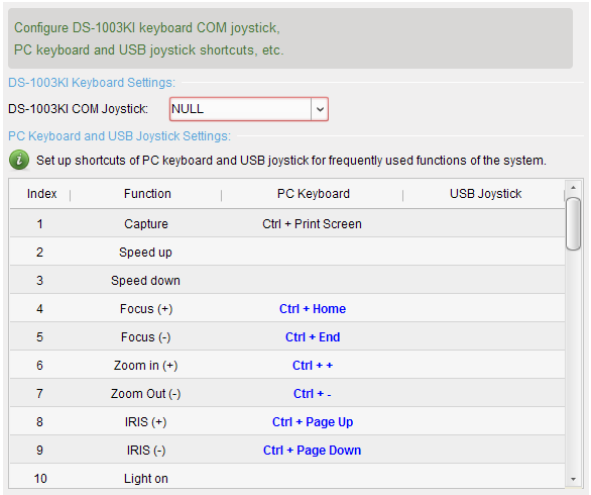
10.2.3 Keyboard and Joystick Shortcuts Settings

Purpose:

DS-1003KI keyboard can be connected to the client and be used to control the PTZ cameras. You can set the shortcuts for PC keyboard and USB 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 DS-1003KI keyboard is connected to the PC installed with the client.
2. For PC keyboard and USB joystick:
   1) Select a certain function from the list.
   2) Double-click the item field under the PC Keyboard or USB Joystick 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 PC keyboard or USB joystick.
3. Click **Save** to save the settings.



10.2.4 Alarm Sound Settings

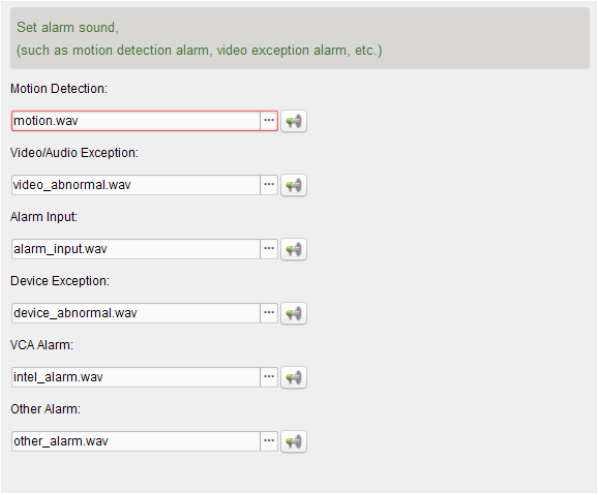
Purpose:

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.



10.2.5 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.

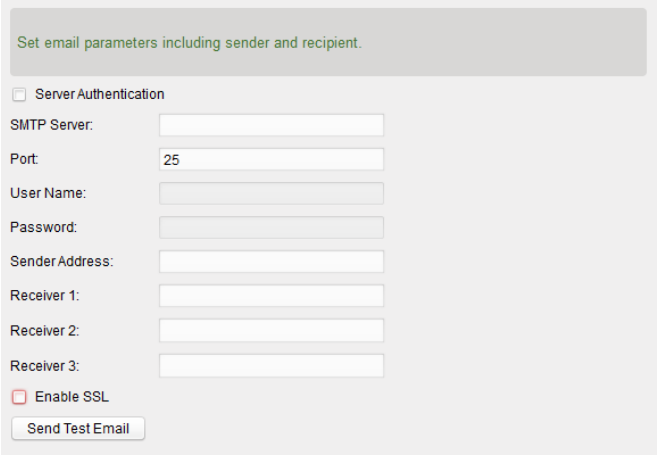
   User Name: Input the user name of the sender Email address if **Server Authentication** is checked.

   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—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.



Chapter 11 Forwarding Video Stream through Stream Media Server

Purpose:

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

11.1 Adding the Stream Media Server

Before you start:

The stream media server application software needs to be installed and it is packed in the iVMS-4200 software package. When installing the iVMS-4200, 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.

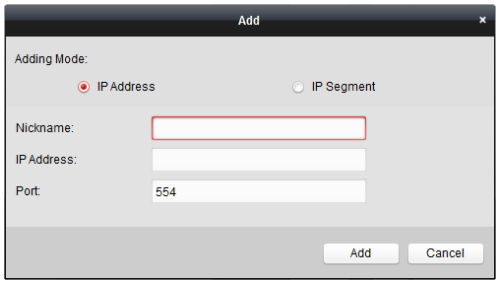
   Note: You can also forward the video through the stream media server installed on other PC.
2. Open the Device Management page and click the **Server** tab.
3. Click **Add New Device Type**, select **Stream Media Server** and click **OK**.
4. Click **Stream Media Server** on the list and then click **Add Device**.

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

   - Adding Stream Media Server by IP Address

     Perform the following steps to add the stream media server:

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

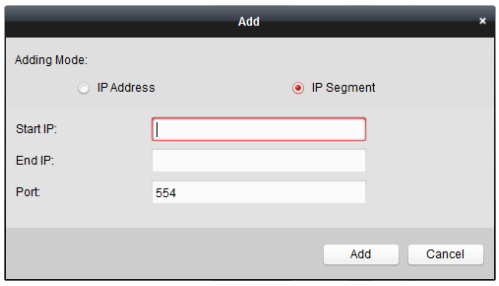


   - Adding Stream Media Server by IP Segment

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

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

server of which the IP address is between the start IP and end IP will be added to the client.



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

11.2 Adding Cameras to Stream Media Server to Forward Video Stream

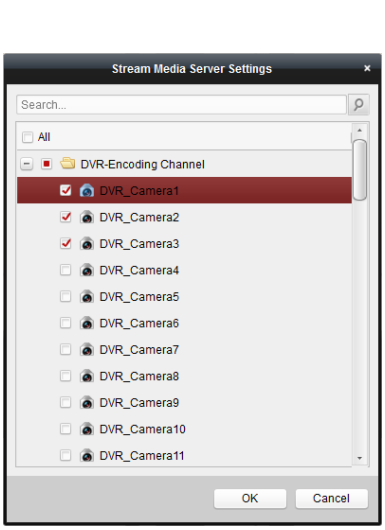
Purpose:

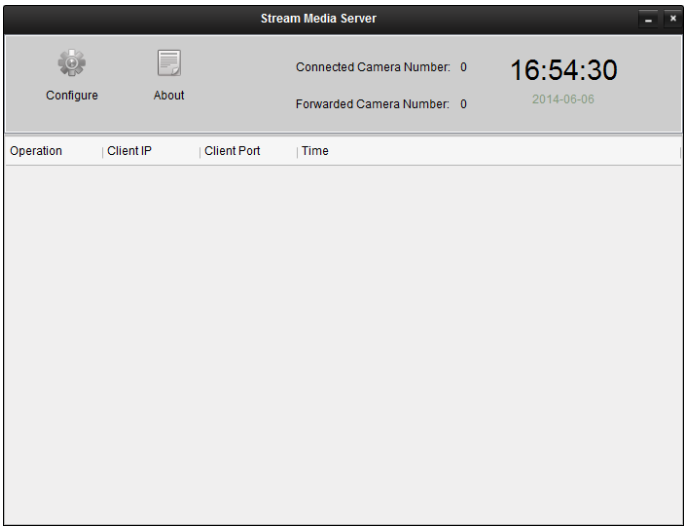
To get the video stream of a camera via stream media server, you need to connect the camera to the stream media server.

Steps:

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

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.

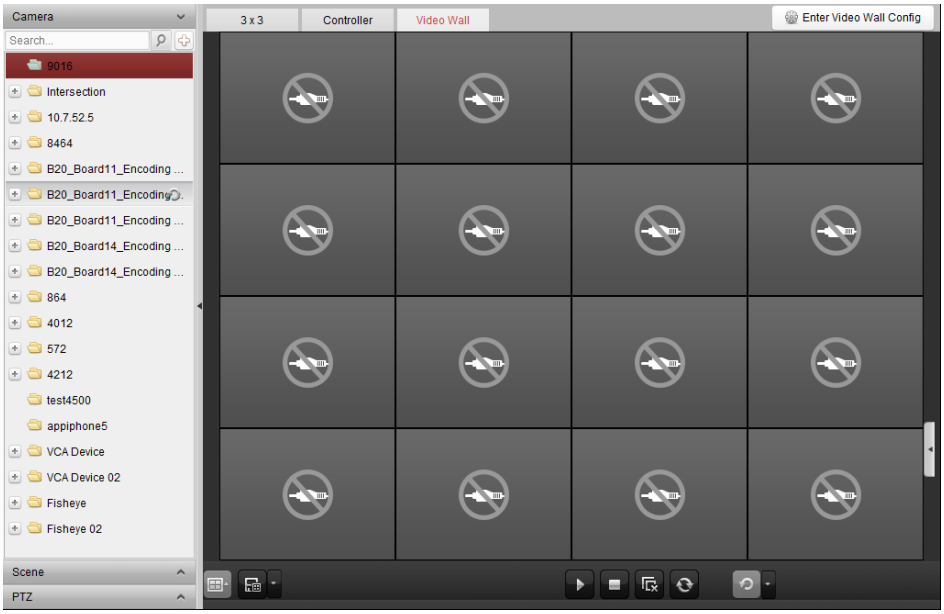




Chapter 12 Decoding and Displaying Video on Video Wall

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

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



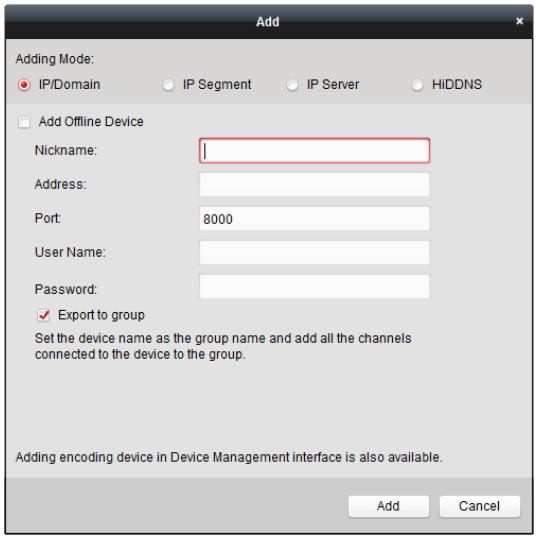
12.1 Adding the Encoding Device

Purpose:

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

Steps:

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



2. Select the adding mode and configure the corresponding settings for the device.

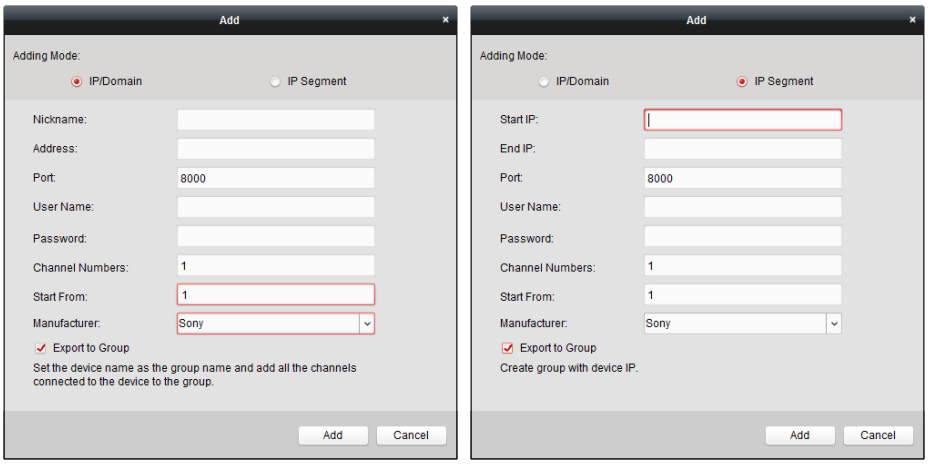
For the detailed configuration about the 4 adding modes, please refer to the following sections:

- By specifying the device IP address, see *Section 2.2.2 Adding Devices Manually.*
- By specifying an IP segment, see *Section 2.2.3 Adding Devices by IP Segment*.
- By IP Server, see *Section 2.2.4 Adding Devices by IP Server.*
- By HiDDNS, see *Section 2.2.5 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, the software will get stream from the device since the fourth channel.



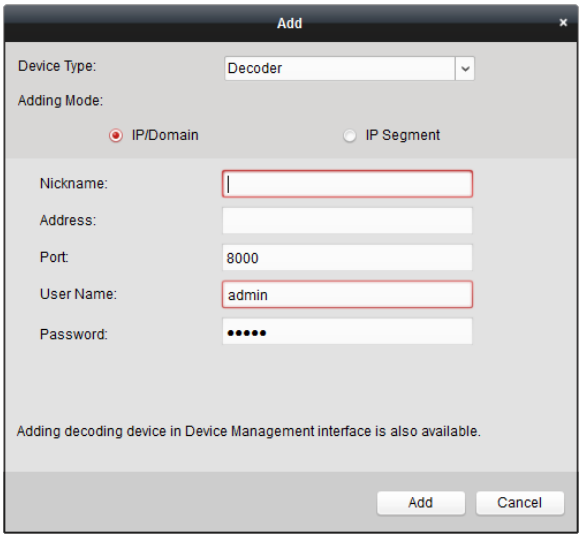
12.2 Adding the Decoding Device

Purpose:

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

Steps:

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



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

   For **Decoder**, there are 2 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, see *Section 2.2.2 Adding Devices Manually.*
   - By specifying an IP segment, see *Section 2.2.3 Adding Devices by IP Segment*.

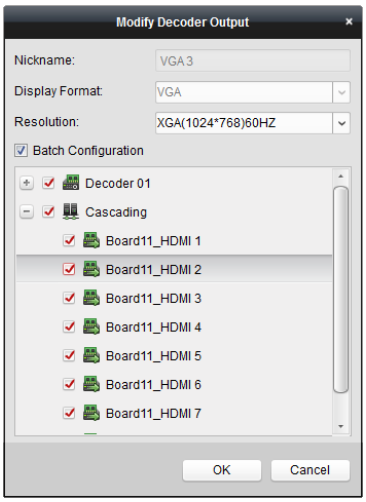
   For **Cascading Server**, you can add the device via IP address. For detailed configuration, see *Section 2.2.2 Adding Devices Manually.*

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.



12.3 Configuring Video Wall Settings

Purpose:

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

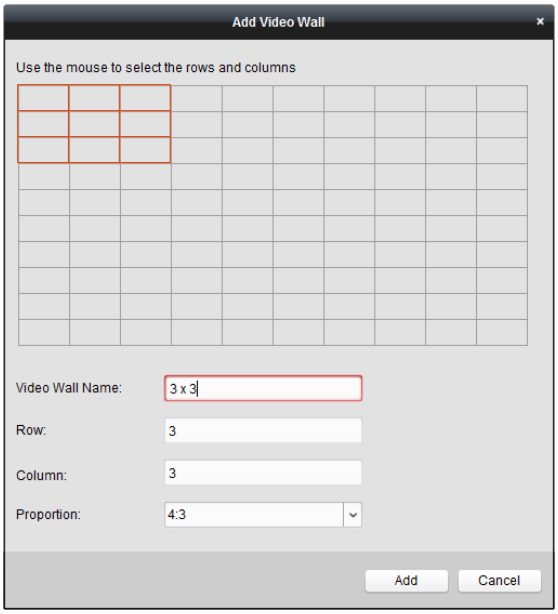
12.3.1 Linking Decoding Output with Video Wall

Steps:

1. Click **Enter Video Wall Config** to enter the decoding device and video wall configuration interface.
2. A default video wall view with the window division of 3*3 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.

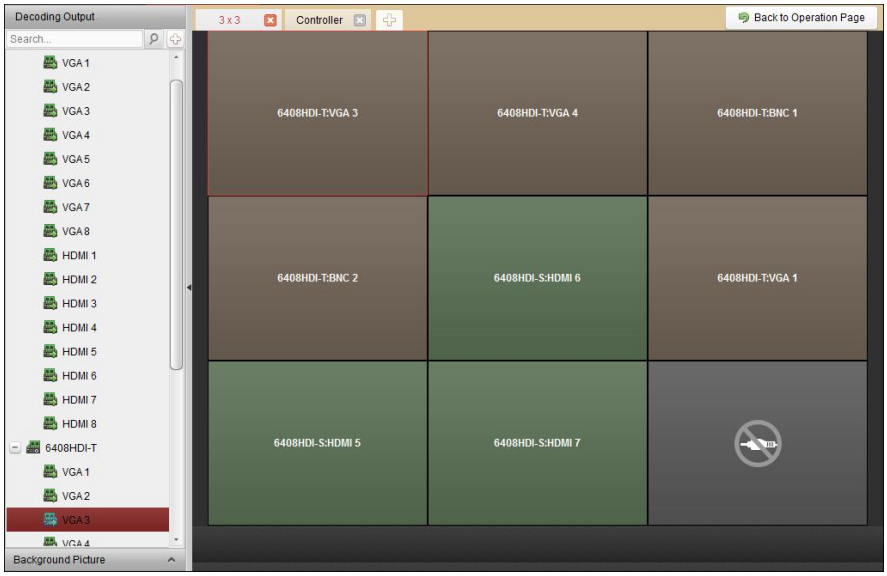
Task 3: Delete a Video Wall

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

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

Notes:

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



12.3.2 Multi-screen Display

Purpose:

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

Before you start:

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

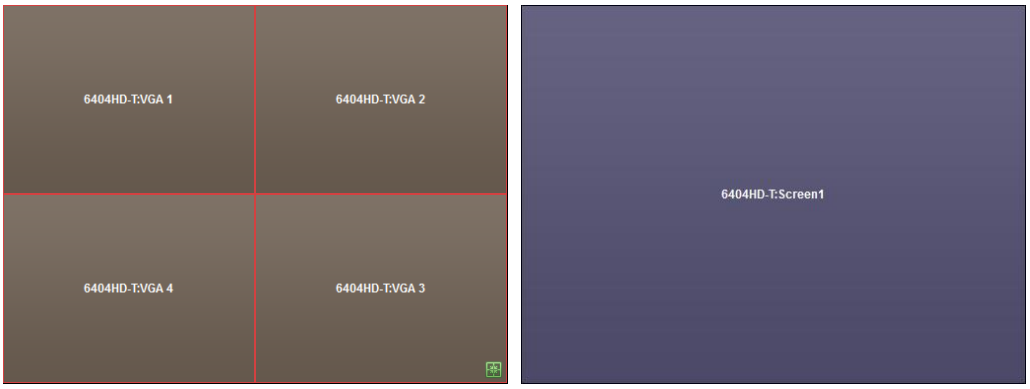
Steps:

1. Perform the step 3 of *Section 12.3.1 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.

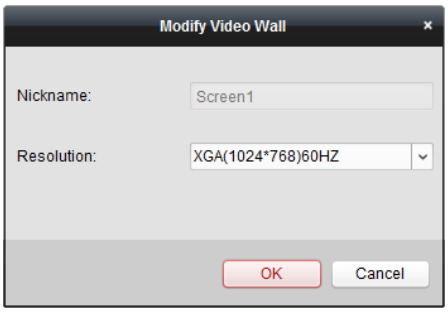
   Notes:

   1. You can only joint the same output interfaces as a whole window. E.g., you can only joint 4 VGA interfaces or HDMI interfaces.
   2. 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.



12.3.3 Configuring Background

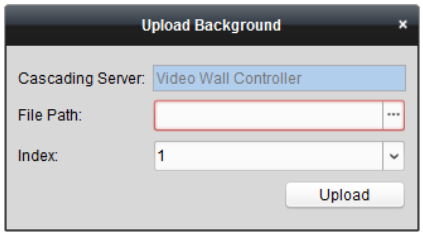
Purpose:

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

Note: Only the cascading server supports background configuration.

Steps:

1. Click to expand the Background Picture panel.
2. Select a background picture and click to activate the background uploading window.



3. Click to select a picture file.
4. Select an index for the picture. Each index is related to a picture.
5. Click **Upload** to upload the picture.
6. Click and drag the configured background picture to the desired position of the video wall.
7. 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 **Background Picture** you can control the background picture.
   Note: The picture will be displayed on the physical video wall after you upload the background.

12.4 Displaying Video on Video Wall

Purpose:

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

Note: 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.

12.4.1 Decoding and Displaying

Steps:

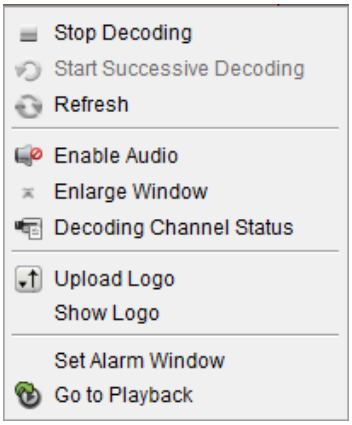
1. Click **Back to Operation Page** to go back to the Video Wall Operation interface.
2. Click  to save the linkage settings for the current scene. Or click  (beside ) and select a scene to save the settings for.

   Notes:

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

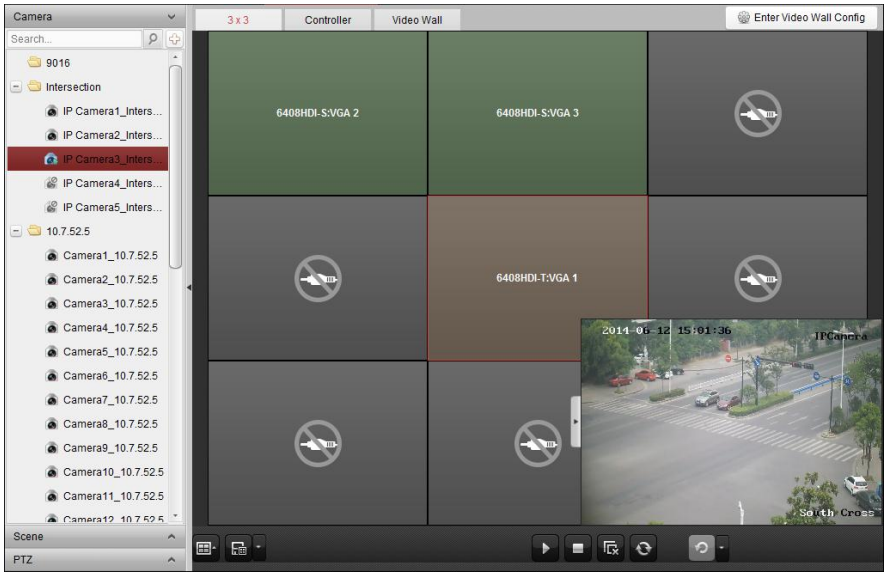
Stick at Bottom: Always stick the window at the bottom layer. This function is only supported by cascading server.

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

12.4.2 Windowing and Roaming Settings

Purpose:

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

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

Steps:

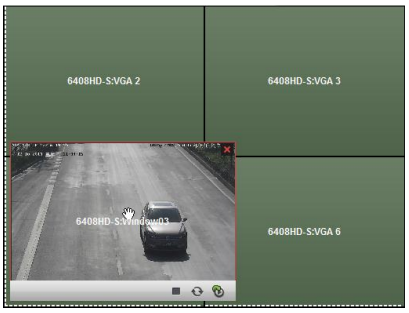
1. Click-and-drag on a screen which links to a decoding output to open a window. The window can be within a screen or span multiple screens. If you want to open a window on the opened window, click-and-drag and hold the *Ctrl* key to create one. And for the locked window (refer to step 6), you can click-and-drag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

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

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

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

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



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

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

12.4.3 Configuring Playback

Purpose:

The record 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 record file of current day, the record 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, and click **Search** to find the record file. For detailed configuration about searching record files, please refer to *Section 3.2.1 Normal Playback*.
4. Right-click on the playback window and you can control the playback through the right-click menu, such as pause, stop, fast forward, slow forward, capture, start recording and full-screen playback.

   Note: The saving path for the captured pictures and recorded files can be configured on System Configuration page. Please refer to *Section 10.2.2 File Saving Path Settings* for detailed settings.

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

Icon	Description
	Pause the playback
	Stop the playback
	Capture the playback video
	Record the playback video
	Back to live view mode
1x	Playback speed.

12.4.4 Configuring Cycle Decoding

Purpose:

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

Note: The cycle decoding is only supported by decoder.

Steps:

1. Click beside and set the switching interval for the cycle decoding.
2. Click-and-drag the camera on the left-side list to the display window of video wall, or you can open a window if supported.
3. Move the mouse to the group node and click to start cycle decoding. Right-click on the

window and you can control decoding management via the right-click menu.

12.5 Configuring Video Wall Controller

Purpose:

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

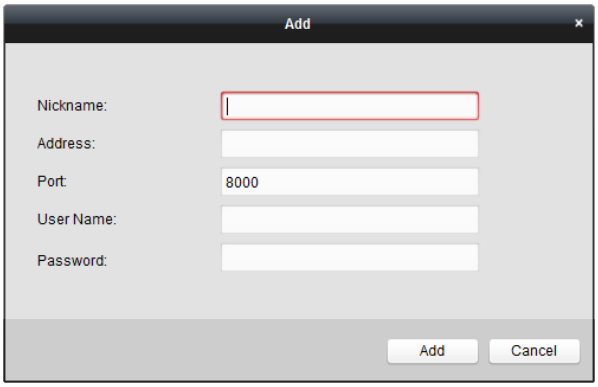
12.5.1 Adding the Video Wall Controller

Purpose:

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

Steps:

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



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

12.5.2 Linking Output with Video Wall

Steps:

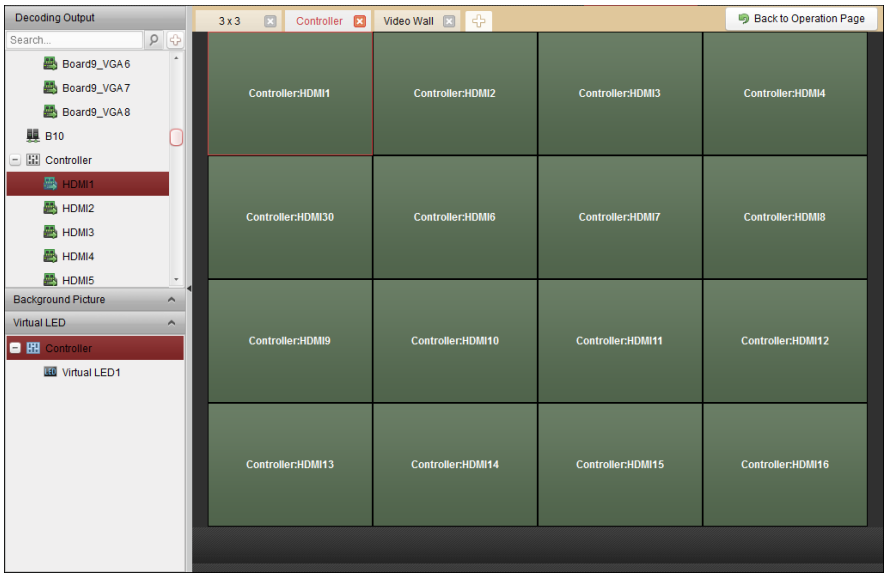
1. Click **Enter Video Wall Config** to enter the configuration interface.
2. A default video wall with the added video wall controller name is provided. You can edit the default video wall as desired. For details, please refer to *Section 12.3.1 Linking Decoding Output with Video Wall*.
3. Click-and-drag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

configuring linkage in batch. You can click in the upper-right corner of the display window to release the linkage.

4. For background settings, please refer to the *Section 12.3.3 Configuring Background*.

Notes:

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



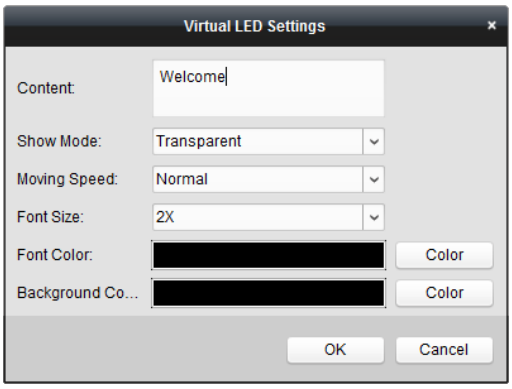
12.5.3 Configuring Virtual LED

Purpose:

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

Steps:

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



12.5.4 Configuring Video Wall Screens

Purpose:

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

Steps:

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

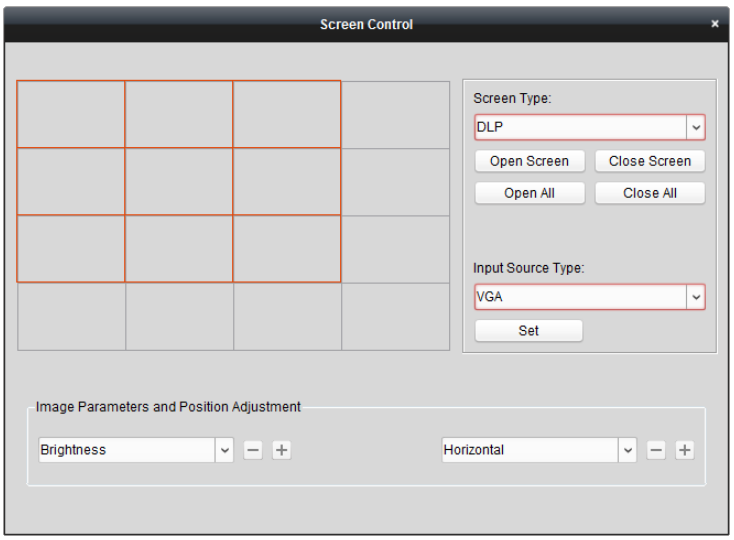
   Screen Type: Select the type for the selected screens for different screen type adopting different communication protocols.

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

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

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

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



12.5.5 Displaying Video on Video Wall

Purpose:

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

Notes:

- Encoding devices refer to the devices connected to iVMS-4200 client via network.
- Decoding module should be connected to the video wall controller before the video of the encoding devices can be decoded and displayed.
- Signal source refers to the video signal (e.g., analog camera) connected to the video wall controller via the local interfaces of the controller.
- After enable decoding and displaying, the captured picture of the video from the encoding device displays on the Video Wall interface. And the real-time live view is shown on the physical video wall.
- For signal source, no captured pictures displaying on the output window. You can check the live video on the physical video wall.

Steps:

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

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

12.5.6 Configuring Plan

Purpose:

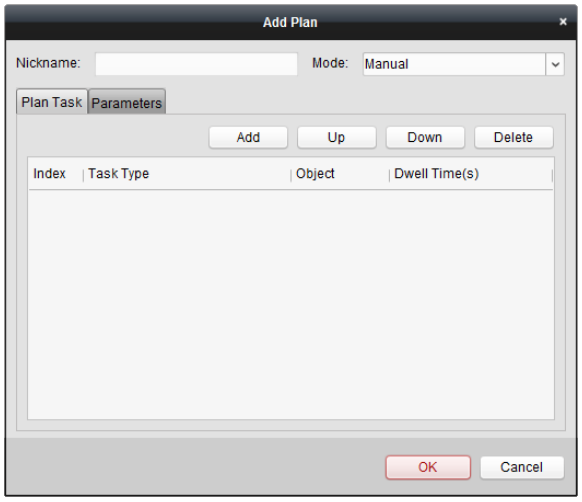
The plan function of video wall controller provides the switching the configured scene(s) and turning on or off the screens at a certain time. You can also set the time schedule for switching the operations (such as scene, close screens) and the plan can also be auto-switched.

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

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 13 Web Browsing

Purpose:

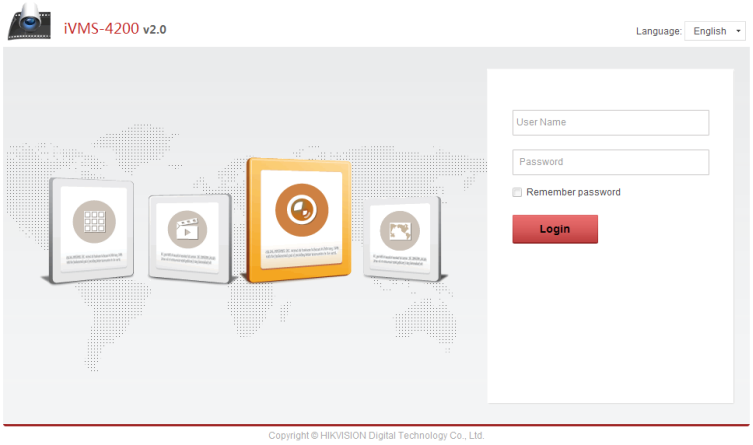
The iVMS-4200 client software can also be accessed through web browsing. It provides the functionalities of live view, playback, device management, account management, system configuration, etc.

13.1 Login

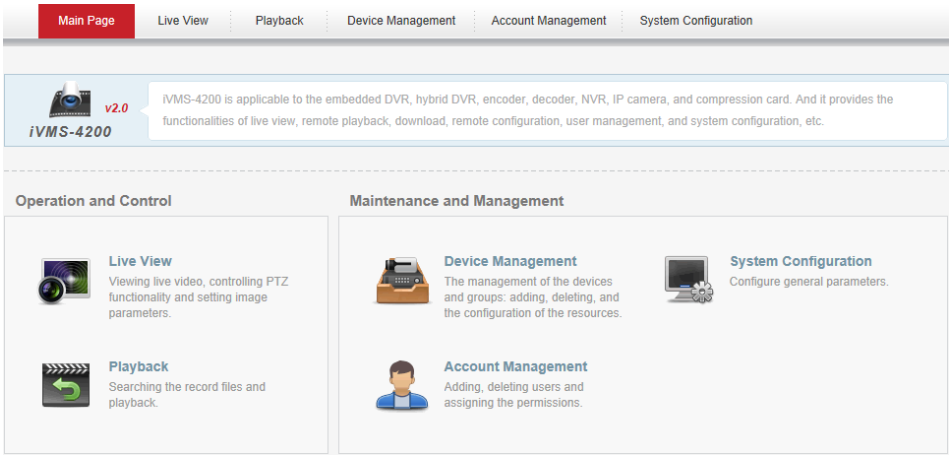
Steps:

1. Input the IP address of the PC running the iVMS-4200 in the address bar of the web browser, and press the **Enter** key. A login window will pop up.
2. Input the user name and password of iVMS-4200.
3. Optionally, check the checkbox **Remember password** to save the password.
4. Click **Login**.

Note: You can set the language as Chinese or English in the upper-right corner of the login interface.



The homepage of the web browser after you login is shown as below.



13.2 Device Management

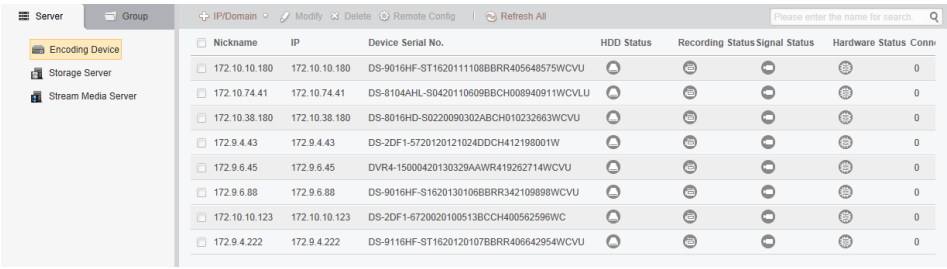
Purpose:

Before doing any operations via the web browser, devices need to be added to the system for monitoring and management. You can add devices through the web browser.

Adding the Encoding Device

Steps:

1. Click the **Device Management** tab to open the Device Management page.
2. Click the **Server** tab.
3. Click **Encoding Device** to enter Encoding Device Adding interface.



You can add the encoding device in the following ways:

- *Adding Devices Manually.*
- *Adding Devices by IP Segment*.
- *Adding Devices by IP Server.*
- *Adding Devices by HiDDNS.*

Adding Devices Manually

Steps:

1. Click the icon to open the device adding dialog box.
2. Select **IP/Domain** as the adding mode from the drop-down list.
3. Input the required information.

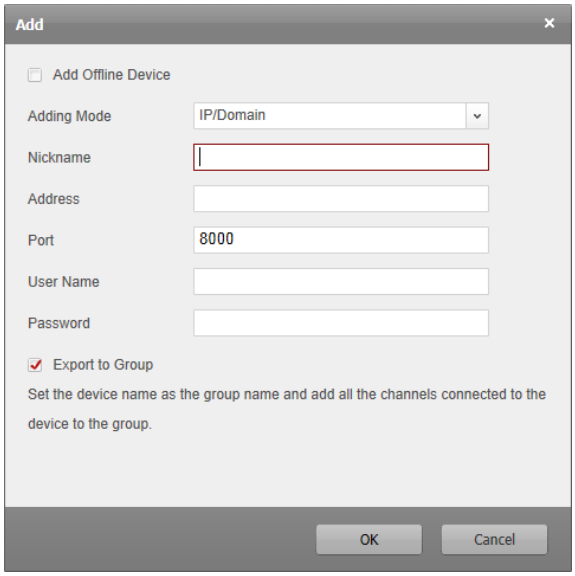
   Nickname: Edit a name for the device as you want.

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

   Port: Input the device port number. The default value is *8000*.

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

   Password: Input the device password. By default, the password is *12345*.
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.
5. Click **OK** to add the device.



Adding Devices by IP Segment

Steps:

1. Click the icon to open the device adding dialog box.
2. Select **IP Segment** as the adding mode from the drop-down list.
3. Input the required information.

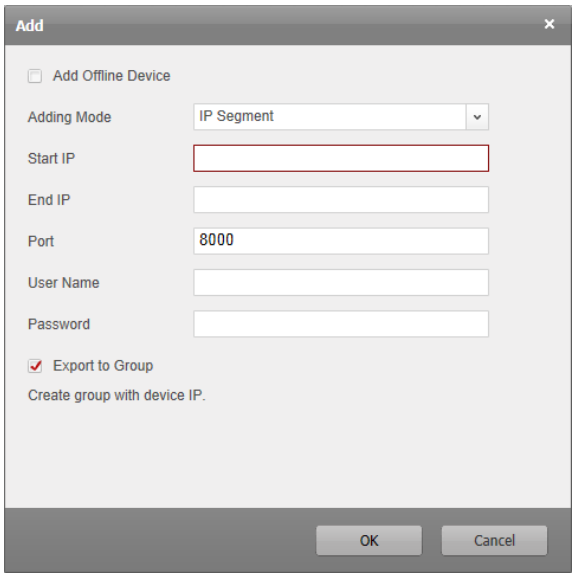
   Start IP: Input a start IP address.

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

   Port: Input the device port number. The default value is *8000*.

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

   Password: Input the device password. By default, the password is *12345*.
4. Optionally, you can check the checkbox **Export to Group** to create a group by the device IP. All the channels of the device will be imported to the corresponding group by default.
5. Click **OK**, and the device of which the IP address is between the start IP and end IP will be added to the device list.



Adding Devices by IP Server

Steps:

1. Click the icon to open the device adding dialog box.
2. Select **IP Server** as the adding mode from the drop-down list.
3. Input the required information.

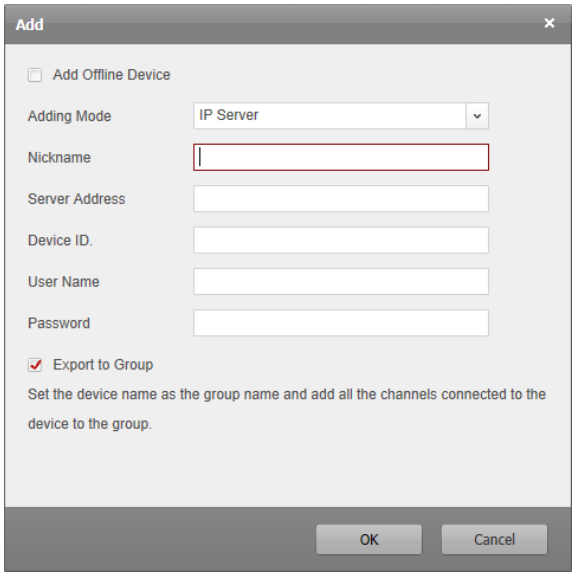
   Nickname: Edit a name for the device as you want.

   Server Address: Input the IP Server address.

   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. By default, the password is *12345*.
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.
5. Click **OK** to add the device.



Adding Devices by HiDDNS

Steps:

1. Click the icon to open the device adding dialog box.
2. Select **HiDDNS** as the adding mode from the drop-down list.
3. Input the required information.

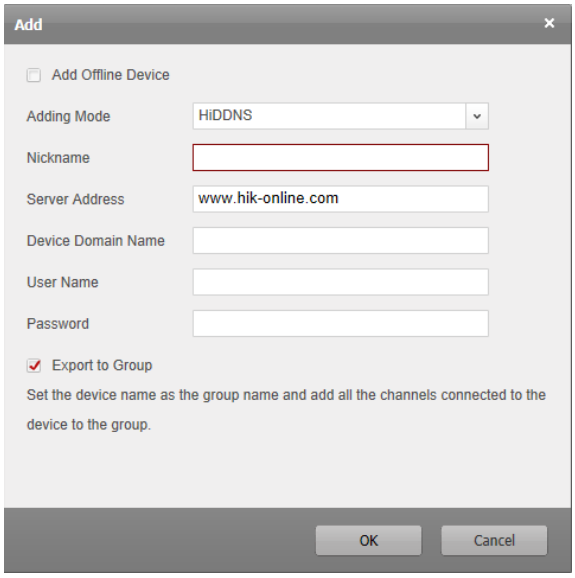
   Nickname: Edit a name for the device as you want.

   Server Address: *www.hik-online.com*.

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

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

   Password: Input the device password. By default, the password is *12345*.
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.
5. Click **OK** to add the device.



Note: Check the checkbox **Add Offline Device**, input the required information and the device channel count, and then click **Add**. When the offline device comes online, the software will connect it automatically.

The devices will be displayed on the device list for management after added successfully. You can check the nickname, IP address, serial No., 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 Config**, and then you can do some remote configurations of the selected device if needed.

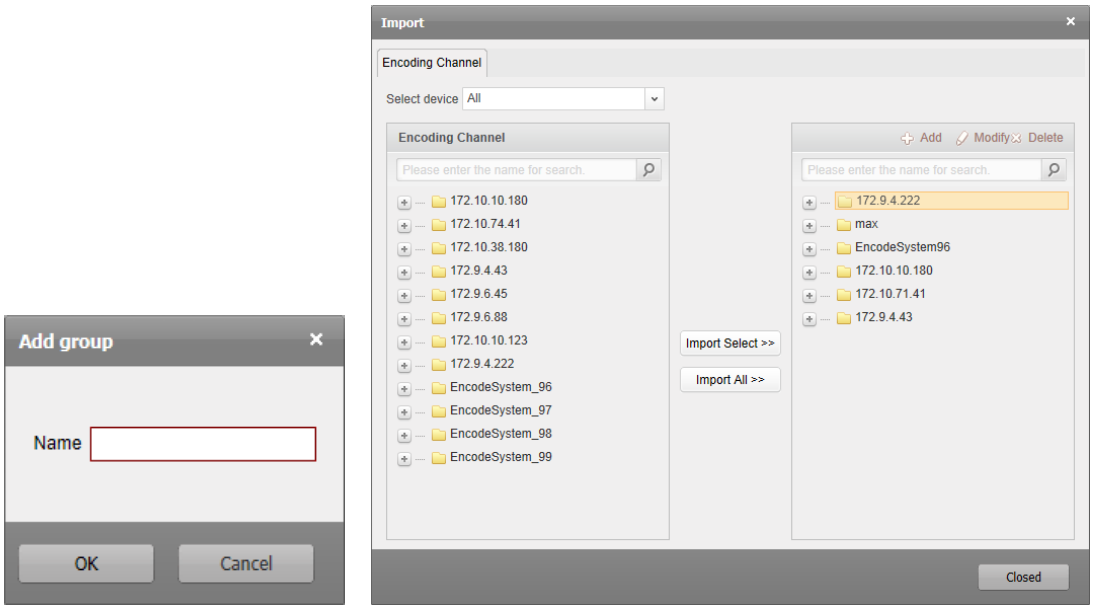
Importing Devices to Groups

Purpose:

After the devices added successfully, you can import the devices into groups for a convenient management.

Steps:

1. Open the Device Management page.
2. Click the **Group** tab to enter the Group Management interface.
3. Click **Add Group** to open the Add Group dialog box.
4. Input the group name and click **OK** to create a new group.
5. Click **Import** to enter the Import Device interface.
6. Select the encoding channels from the device list and then select a group from the group list.
7. Click **Import Select** to import the selected encoding channels to the group.
   You can also click **Import All** to import all the encoding channels to a selected group.



Click **Add**, and you can add a new group to the group list.

Click **Modify** after selecting a group/camera, and you can modify the group/camera information.

Click **Delete** after selecting a group/camera, and you can remove all cameras/the selected camera from the group.

To delete a group, select the group from the list on the Group Management interface and click the **Delete Group** button

13.3 Live View

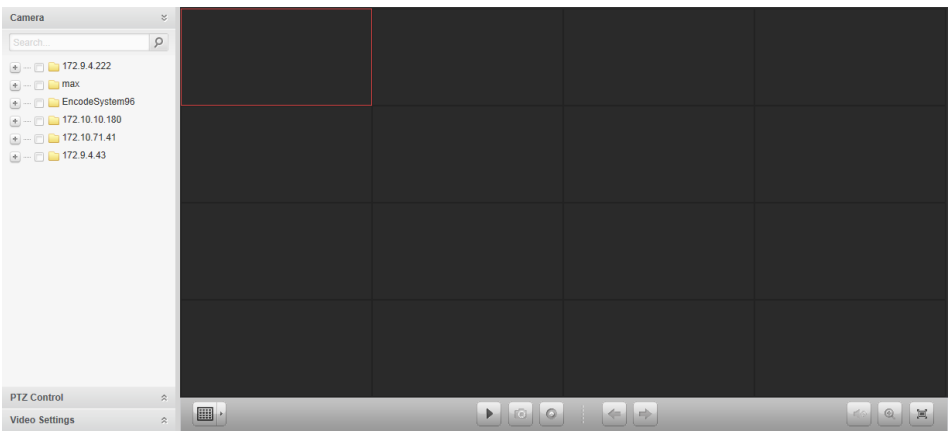
Purpose:

On the Live View page, you can view the live video of the added cameras and do some basic operations, including picture capturing, recording, PTZ control, etc.

Before you start:

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

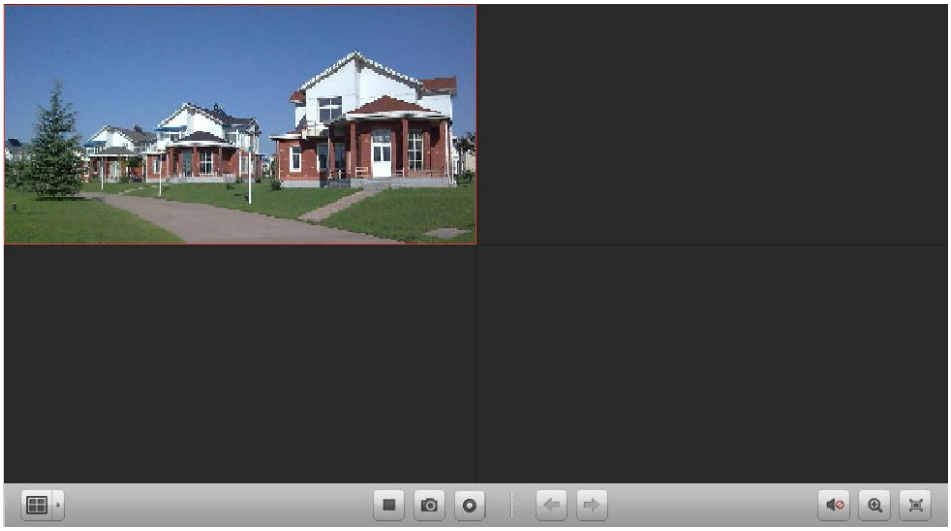
Click the **Live View** tab to open the Live View page.



Starting Live View

Steps:

1. Open the Live View page.
2. Optionally, click the icon in the live view toolbar, and select the screen layout mode.
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.



Live View Toolbar:

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

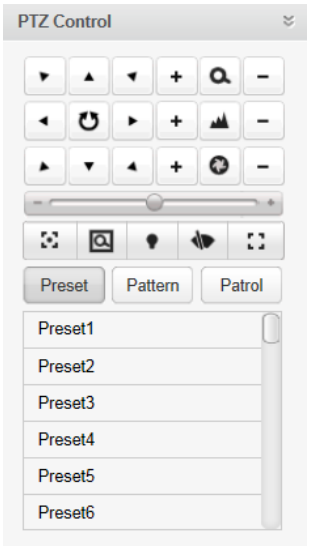
	Set View	Set the screen layout mode. 4 types of screen layout modes are selectable: 1-Screen, 4-Screen, 9-Screen and 16-Screen.
	Stop/Start Live View	Stop/Start the live view of all cameras.
	Capture	Capture the picture in the live view process.
	Start/Stop Recording	Start/Stop the manual recording. The record file is stored in the PC.
	Previous	Go for live view of the previous page.
	Next	Go for live view of the next page.
	Mute/Audio On	Turn off/on the audio in live view
	Digital Zoom	Enable/Disable the digital zoom function.
	Full Screen	Display the live view in full screen mode. Press **ESC** to exit.

PTZ Control Functionality

Purpose:

Cameras with the pan/tilt/zoom functionality can be controlled through the web browser. You can also set the preset, patrol and pattern for the cameras.

Click the icon to expand the PTZ Control panel on the Live View page.



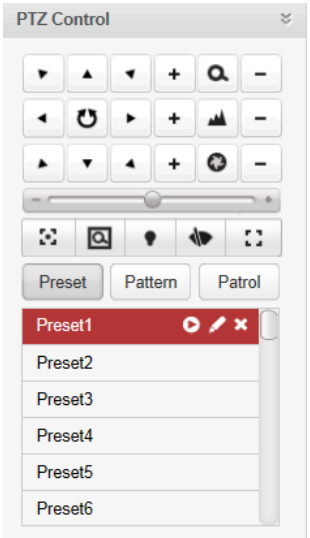
Configuring the Preset

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 to steer the camera to the desired view.
3. Select a PTZ preset number from the preset list and click the icon .

To call 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 .

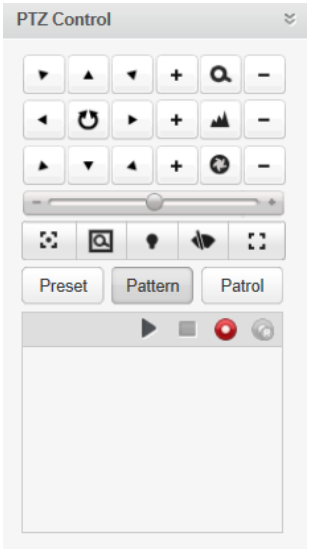


Configuring the Pattern

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 .

Note: Only one pattern can be configured, and the newly-defined pattern will overwrite the previous

pattern.



Configuring the Patrol

Before you start:

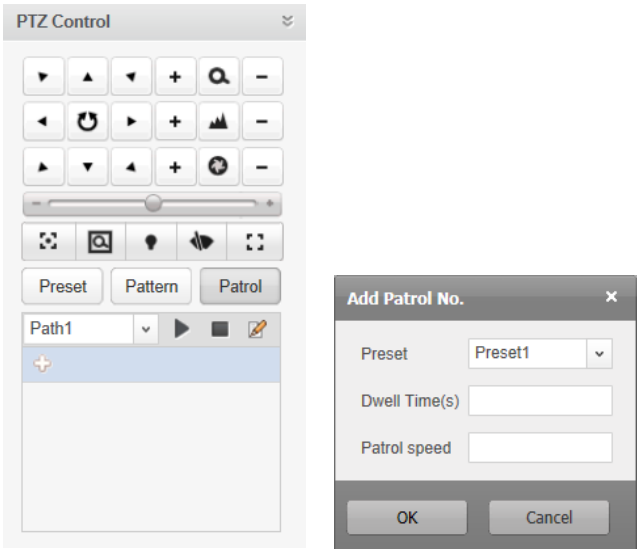
Two or more presets for one camera need to be added.

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 the 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 1~255 sec, and the patrol speed can be set to level 1~40.



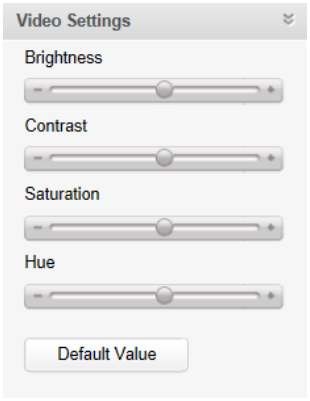
Video Settings Functionality

Purpose:

The video parameters, including the brightness, contrast, saturation and hue, can be configured to create better visual effects.

Steps:

1. Click the icon to expand the Video Settings panel on the Live View page.
2. Move the slider to adjust the brightness, contrast, saturation or hue of the live video.
3. Click **Default Value**, and you can restore the defaults of the video parameters.

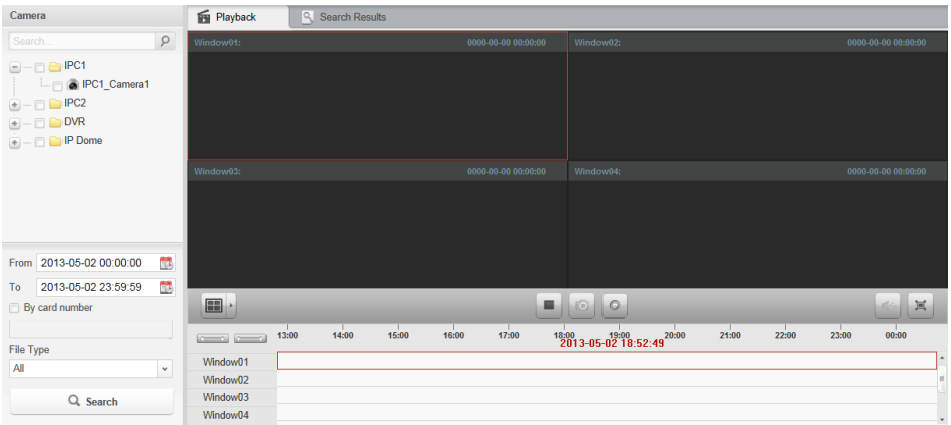


13.4 Playback

Purpose:

The record files stored on the storage devices such as the HDDs, Net HDDs and SD/SDHC cards on the local device can be searched and played back remotely through the web browser.

Click the **Playback** tab to open the Playback page.



Playback Toolbar:

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

Set View Set the screen layout mode. 4 types of screen layout modes are

		selectable: 1-Screen, 4-Screen, 9-Screen and 16-Screen.
	Stop/Start Playback	Stop/Start the playback of all channels.
	Capture	Capture the picture in the playback process.
	Start/Stop Clipping	Start/Stop clipping the record files.
	Mute/Audio On	Turn off/on the audio in playback.
	Full Screen	Display the playback in full screen mode. Press **ESC** to exit.

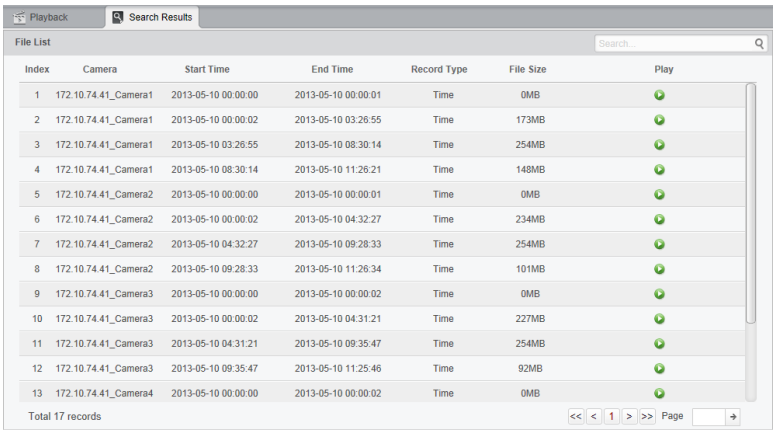
Searching Record Files

Steps:

1. Open the Playback page.
2. Select the cameras to be searched from the list.
3. Click the icon to specify the start time and end time for the search.
4. Click **Search**. The record files of the selected cameras will be displayed on the Search Result tab page.

Notes:

- You can also search the record files by the card number (only applicable to ATM DVR) or by the file type.
- Up to 16 cameras can be searched simultaneously.

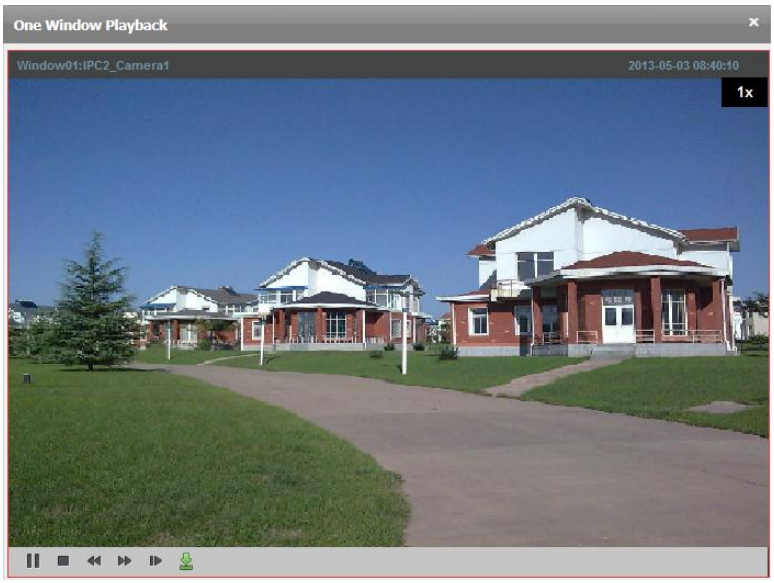


Playing Back Record Files

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

- **Playback by File List**

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

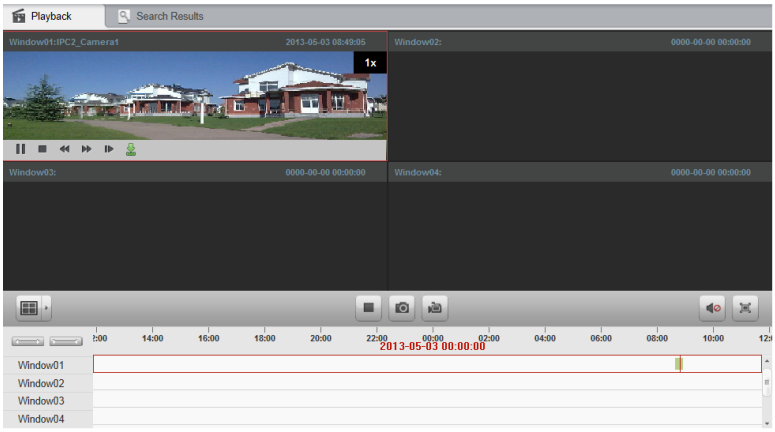


- **Playback by Timeline**

  The timeline indicates the time duration for the record 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 use the mouse wheel to zoom in or zoom out on the timeline.



Move the mouse pointer to the display window in playback to show the toolbar.

Toolbar in Each Playback Display Window:

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

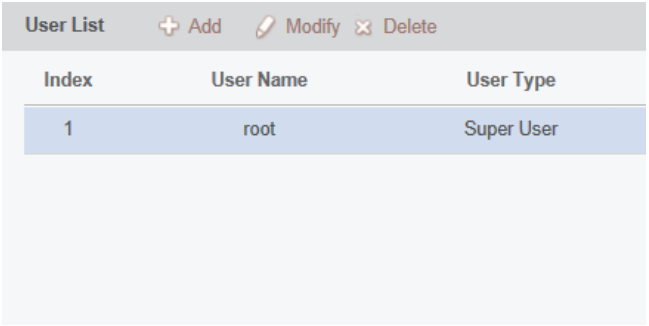
	**Pause/Start Playback**	Pause/Start the playback of the record files.
	**Stop Playback**	Stop the playback of all cameras.
	**Speed Down**	Decrease the playback speed of the record files.
	**Speed Up**	Increase the playback speed of the record files.
	**Single Frame**	Play back the record files frame by frame.
	Download	Download the record file for backup.

13.5 Account Management

Purpose:

Different user accounts can be added for the client through the web browser and you can also assign permissions for the added users. The user you registered is set as the super administrator.

Click the **Account Management** tab to open the Account Management page.



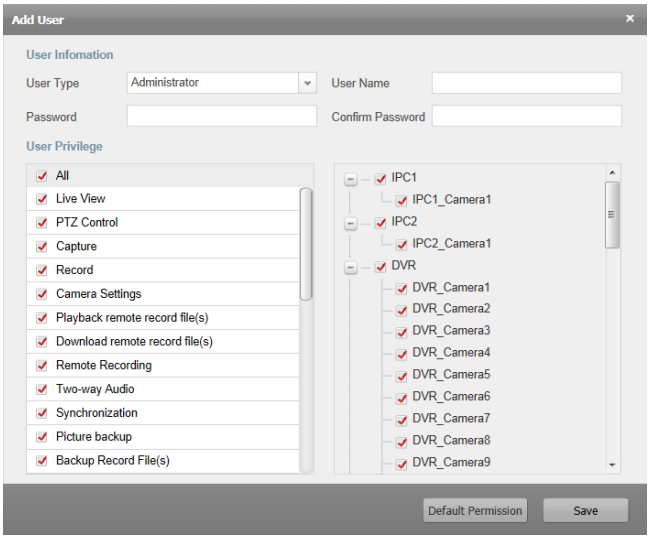
Adding the User

Steps:

1. Open the Account Management page.
2. Click **Add** to open the Add User dialog box.
3. Select the user type. You can set the user type as Administrator or Operator.
4. Input the user name, password and confirm password as desired.
5. Check the checkboxes to assign the permissions for the created user.
6. Optionally, you can click **Default Permission** to restore the default permissions of this user.
7. Click **Save** to save the settings.

Notes:

- A user name cannot contain any of the following characters: / \ : * ? " < > |. And the length of the password cannot be less than 6 characters.
- Up to 50 user accounts can be added for the client software.



Managing the User

Purpose:

The newly created user account is added to the user list. You can edit or delete the information of the user accounts.

To edit the information of the user, select the user from the user list, and click **Modify**.

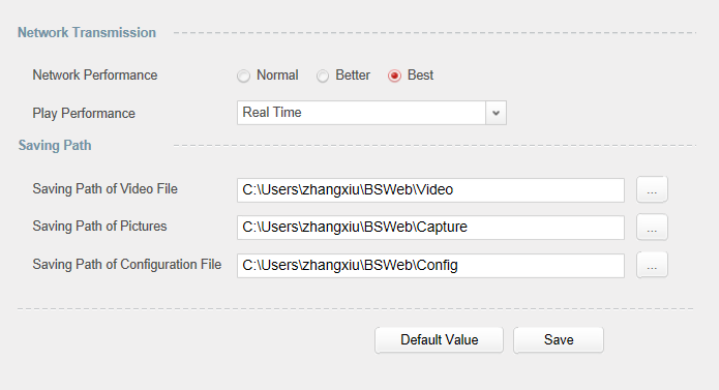
To delete the information of the user, select the user from the user list, and click **Delete**.

13.6 System Configuration

Purpose:

The general parameters, including network performance, play performance and saving paths of files can be configured through the web browser.

Click the **System Configuration** tab to open the System Configuration page.



Steps:

1. Open the System Configuration page.
2. Set the network performance and play performance. Click the icon ... to select a local saving path for the files. For details, see *Table 10.1 System Parameters*.
3. Optionally, you can click **Default Value** to restore the defaults of all system parameters.
4. Click **Save** to save the settings.

Table 10.1 System Parameters

Parameters	Descriptions
Network Performance	The current network conditions. It can be set as Normal, Better or Best.
Play Performance	The play performance of the live video. It can be set as Shortest Delay, Real Time, Balanced or Fluency.
Saving Path of Video Files	The saving path of video files recorded by manual recording.
Saving Path of Pictures	The saving path of the captured pictures in live view or playback.
Saving Path of Configuration File	The saving path of the system configuration files.

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 record 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 record 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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