Northern

NVRPOE Series Network Video Recorders
TVIDVR Series Digital Video Recorders
HDDVR Series Digital Video Recorders
IP3 & IP4 Series Cameras

CMS MANUAL FOR MAC

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User Manual

About this Manual

This Manual is applicable to Guarding Vision Client Software.

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

Please use this user manual under the guidance of professionals.

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Chapter 1 Overview

1.1 Description

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

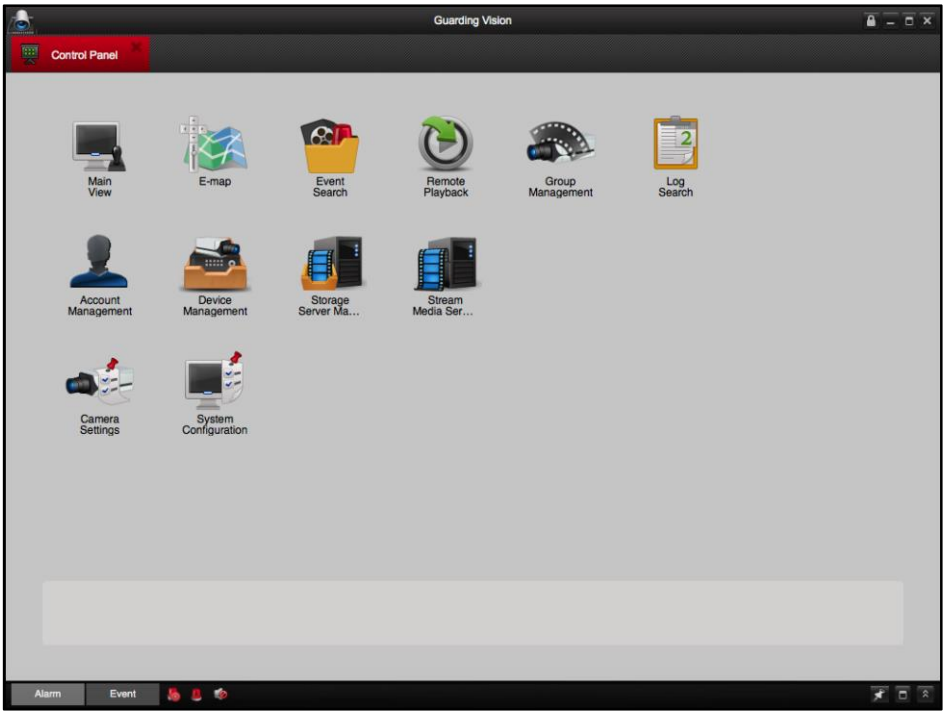
This user manual describes the function, configuration and operation steps of Guarding Vision software. To ensure the properness of usage and stability of the software, please refer to the contents below and read the manual carefully before installation and operation.

1.2 Running Environment

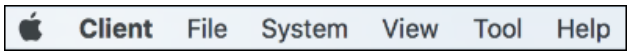
Operating System: Mac OS X 10.9 to 10.12
CPU: 3.00 Ghz Intel Dual-Core or above
Memory: 1G or above
Video Card: NVIDIA Geforce 9400 or above
GPU: 256 MB or above

1.3 Function Modules

Control Panel of Guarding Vision:



Menu Bar:



Client	**About Client**	Click to view the client version and view the manageable device quantity.
	Quit Client	Click to exit the client.
File	**Open Captured Picture**	Enter the Capture page to select the folder location of the exported captured picture file (s).
	Open Video File	Enter the video player and select the folder location of the exported video file (s), You can also capture pictures during the playing of the video file.
	Open Log File	Enter the Log File page to select the folder location of the exported log file (s)
System	**Lock**	Lock screen operations. Log in the client again to unlock.
	Switch User	Switch the login user.
	System Configuration	Open the System Configuration page.
	Import Configuration File	Import client configuration file from your computer.
	Export Configuration 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.
	Most Adaptive Screen	Display the window in most adaptive mode.
	Control Panel	Enter Control Panel page.
	Main View	Open Main View page.
	E-map	Open E-map page.
	Event Search	Open Event Search page.
	Remote Playback	Open Remote Playback page.
Tool	**Group Management**	Open the Group Management page.
	Camera Settings	Open the Camera Setting page.
	Account Management	Open the Account Management page.
	Device Management	Open the Device Management page.
	Storage Server Management	Open the Storage Server Management page.
	Stream Media Server Management	Open the Stream Media Server Management page.
	Device Arming Control	Set the arming status of devices.
Help	**Open Wizard**	Open the guide for the client configuration.
	User Manual	Click to open the User Manual; you can also open the User Manual by pressing **F1** on your keyboard.

The Guarding Vision 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 **E-map** module provides the displaying and management of E-maps, hot regions and hot spots.
	The **Event Search** module provides searching and playing back the alarm video file of motion detection and alarm input.
	The **Remote Playback** module provides the search, playback, export of video files.
	The **Camera Management** module provides adding, modifying, or deleting the camera groups, and importing/exporting cameras to the groups.
	The **Log Search** module provides the query of alarm logs, operation logs, and system logs and the log files can be filtered by different types.
	The **Account Management** module provides the adding, modifying, and deleting of user accounts and different permissions can be assigned for different users.
	The **Device Management** module provides the adding, modifying and deleting of different devices.
	The **Storage Server Management** module provides adding, modifying, or deleting the storage server.
	The **Stream Media Server Management** module provides adding, modifying, or deleting the stream media server.
	The **Camera Settings** module provides configuring camera parameters (e.g., image quality, recording schedule, motion detection, etc.).
	The **System Configuration** module provides the configuration of the general parameters (e.g., saving path of files, alarm sound, Email, etc.).

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.

1.4 Updates Instruction

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

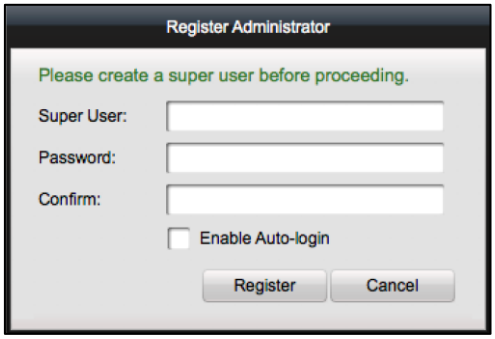
- **Add Device via Guarding Vision Domain**
  Support adding device via Guarding Vision Domain.
- **View Online Status after Adding Device**
  Support viewing the online status after adding devices.
- **Perform Live View and Playback in Full Screen Mode**
  Support viewing live video and playing video files in full screen mode.
- **Customize Window Division for Live View and Playback**
  Support setting a custom window division for live view and playback.
- **Auto-change Stream Type**
  Support switching stream type automatically.
- **Encrypt for Email**
  Support setting encryption for email.
- **Improve Security**
  Encrypt the database sensitive information.

Chapter 2 User Registration and Login

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

Steps:

1. Input the super user name and password.
   We highly recommend you to use a strong password to ensure your data security.
2. Confirm the password.
3. (Optional) Check **Enable Auto-login** checkbox to log in to the software automatically.
4. Click **Register**.
   Then, you can log in to the software as the super user.

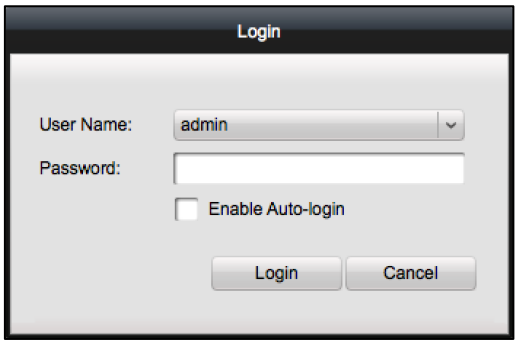


- *A user name cannot contain any of the following characters: / \ : * ? " < > |. And the length of the password cannot be less than 6 characters.*
- *For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case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

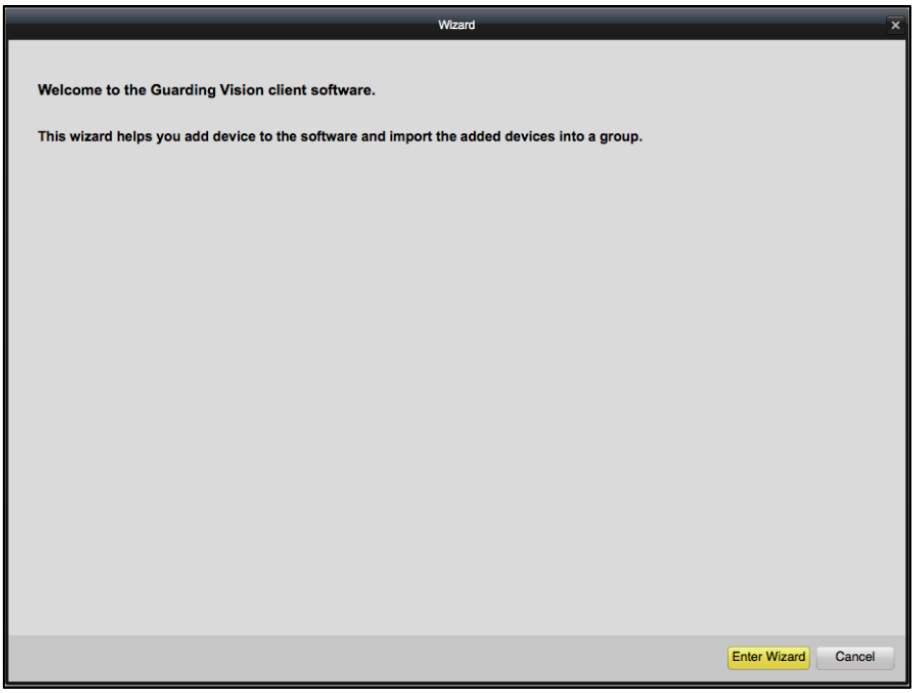
When opening Guarding Vision after registration, you can log in to the client software with the registered user name and password.

Steps:

1. Input the user name and password you registered.
2. Optionally, check **Enable Auto-login** checkbox to log in to the software automatically.
3. Click **Login**.



After running the client software, a wizard will open to guide you to add the device and do some basic settings.



Click **Enter Wizard** to start the wizard and add the device, or click **Cancel** to exit the wizard.

Chapter 3 Device Management

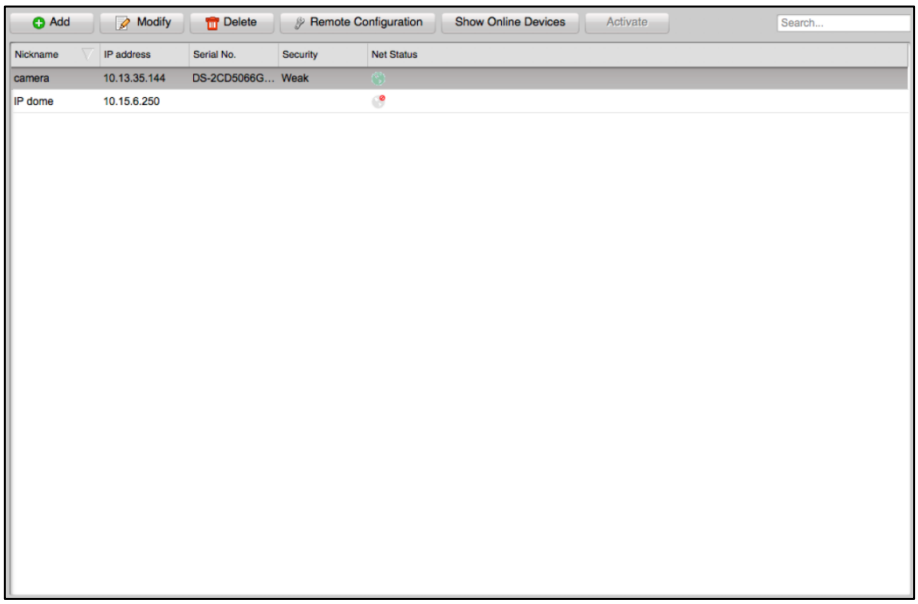
3.1 Adding the Device

Purpose:

After running the Guarding Vision, you can add the devices, including network cameras, DVRs, NVRs, etc., 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 Management page.

Click  on the control panel, or click **Tools**->**Device Management** to open the Device Management page.



3.1.1 Activating Device

Purpose:

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

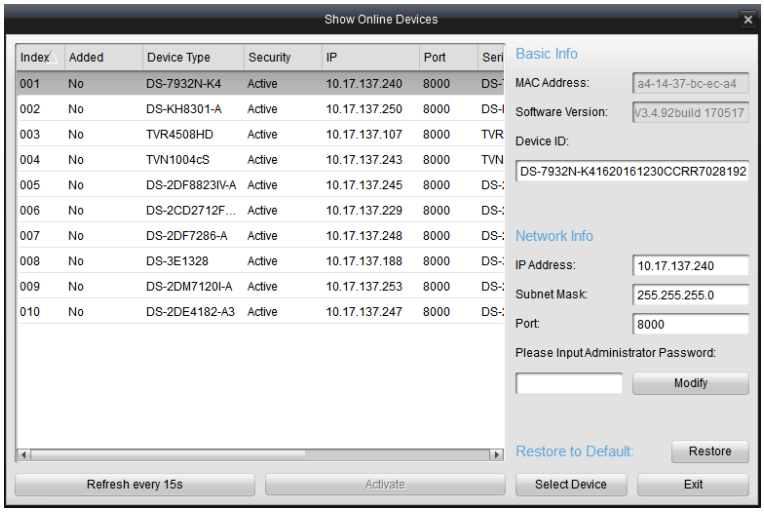
Note: This function should be supported by the device.

Steps:

1. Enter the Device Management page.
2. In the device list, check the device status (shown on **Security** column) and select an inactive device.

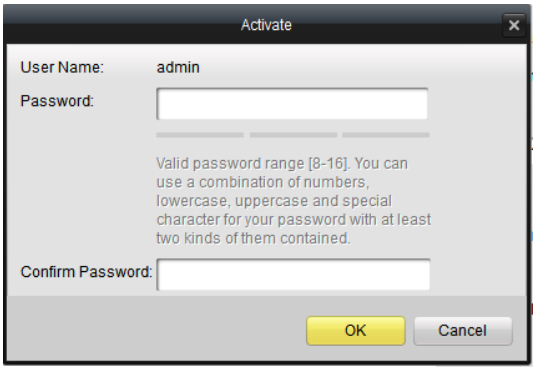
   Or you can click **Show Online Devices** button to open the following page.

   All the online devices are displayed in the device list.



3. Select the inactive device.
4. Click **Activate** to open the Activation page.
5. Create a password in the password field, and confirm the password.

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



6. Click **OK** to create the password for the device.

   A "The device is activated." window pops up when the password is set successfully.

After activating the device, the Safe Status of the device will turn to **Active**.

In the Show Online Devices page, select the activated device and you can edit its network parameters.

Note: This function is only available on the Show Online Devices window. You can change the device IP address to the same subnet with your computer if you need to add the device to the software.

Steps:

1. Change the device IP address to the same subnet with your computer by modifying the IP address manually.
2. Edit the subnet mask and port No. according to the actual needs.

3. Input the password set in step 4 and click **Modify** to complete the network settings.

3.1.2 Adding Online Devices

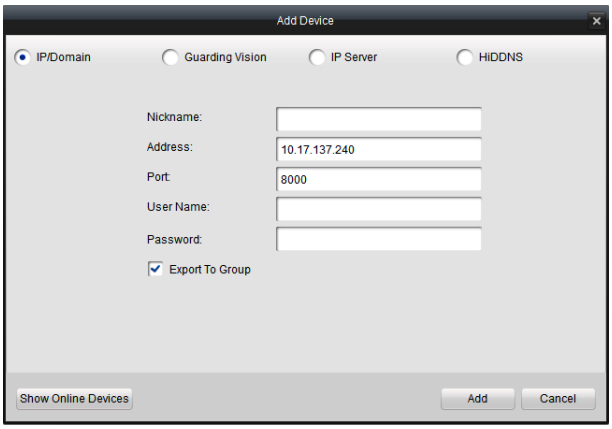
Purpose:

The active online devices in the same local subnet with the client software will be displayed in the **Show Online Devices** page. You can click the **Refresh every 15s** button to refresh the information of the online devices.

Add Single Device

Steps:

1. Click **Show Online Devices** button to open Show Online Devices window.
   All the active online devices in the same local subnet with the client software will be displayed.
2. Select one device.
   Note: For the inactive device, you need to create the password for it before you can add the device properly. For details, please refer to *Chapter 3.1.1 Activating Device*.
3. Click **Select Device**, and click **OK** in the pop-up window to open Add Device window.



4. Input the required information.
   Nickname: Edit a name for the device as you want.
   Address: Input the device's IP address. The IP address of the device is obtained automatically in this adding mode.
   Port: Input the device port No.. The default value is *8000*.
   User Name: Input the device user name. By default, the user name is *admin*.
   Password: Input the device password.



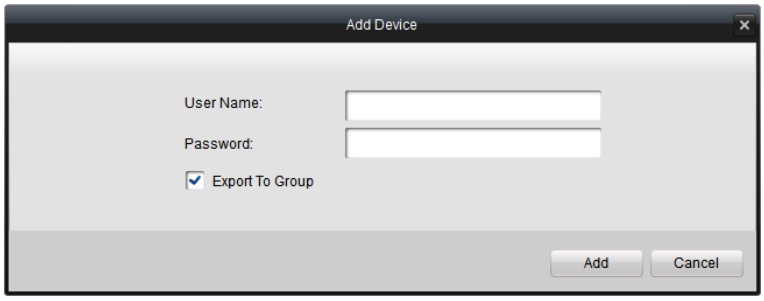
The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

5. (Optional) Check **Export to Group** checkbox to create a group by the device name.
   All the channels of the device will be imported to the corresponding group by default.
6. Click **Add** to add the device.

Add Multiple Devices

Steps:

1. Click **Show Online Devices** button to open Show Online Devices window.
   All the active online devices in the same local subnet with the client software will be displayed.
2. Select devices you want to add.
   Note: For the inactive device, you need to create the password for it before you can add the device properly. For details, please refer to *Chapter 3.1.1 Activating Device*.
3. Click **Select Device**, and click **OK** in the pop-up window to open Add Device window.



4. Input the required information.
   User Name: Input the device user name. By default, the user name is *admin*.
   Password: Input the device password.

   The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.
5. (Optional) Check **Export to Group** checkbox to create a group by the device name.
   All the channels of the device will be imported to the corresponding group by default.
7. Click **Add** to add the devices.

Modify Network Information

In the **Show Online Devices** page, select the activated device and you can edit its network parameters in the Network Info area.

Steps:

1. Change the device IP address, subnet mask, and port No. according to the actual needs.
2. Input the administrator password of the device.
3. Click **Modify** to complete the network settings.

Reset Device Password

You can reset the device password in the Show Online Devices page.

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

Select the device from the list, click **Restore**.

Option 1:

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

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

Option 2:

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

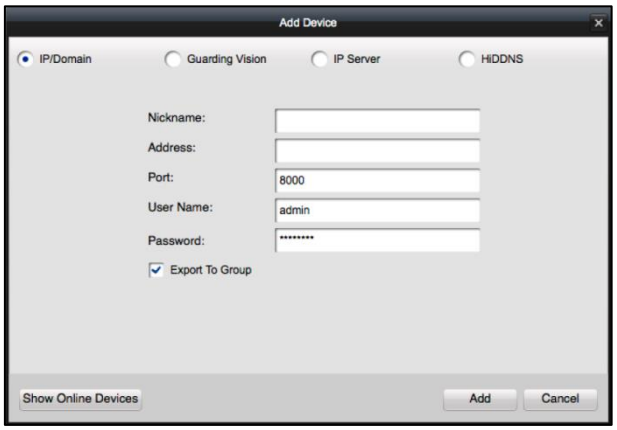
1. Click **Export** to save the device file on your PC.
2. Send the file to our technical engineers.
3. Our technical engineer will send you a file to you.
   Click **Import** button and select the file sent by the technical engineer and import it.
4. Input new password in text fields of **Password** and **Confirm Password**.
5. Click **OK** to reset the password.

The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

3.1.3 Adding Devices by IP or Domain Name

Steps:

1. In the Device Management page, click **Add** to open Add Device window.
2. Select **IP/Domain** as the adding mode.



3. Input the required information.

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

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

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

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

Password: Input the device password.



The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

4. (Optional) Check **Export to Group** checkbox 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.

3.1.4 Adding Devices by Guarding Vision

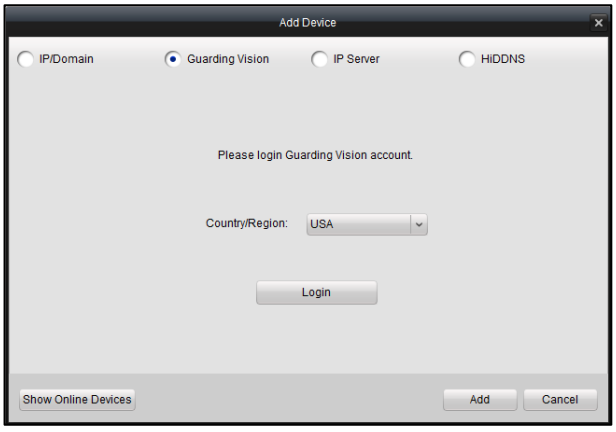
Purpose:

You can add the devices which have been added to the Guarding Vision account to the client.

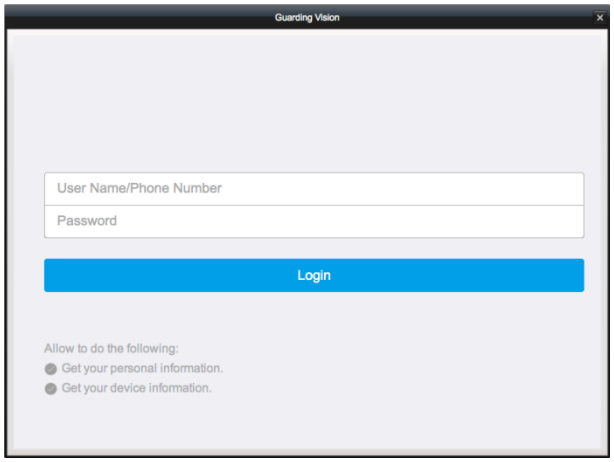
Before you start: Add the devices to Guarding Vision account via Guarding Vision first. See the *User Manual of Guarding Vision Mobile Client* for details.

Steps:

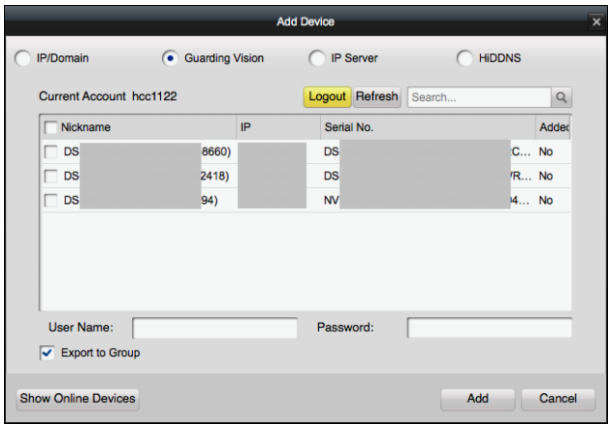
1. In the Device Management page, click **Add** to open Add Device window.
2. Select **Guarding Vision** as the adding mode.



3. Select the country or region.
4. Click **Login** to enter the Login page.



5. Input the Guarding Vision account and password.
6. Click **Login** to log in to your account.
   All the devices added in this account will display.
   Note: The account information will keep 7 days. After 7 days, you are required to log in to the account again.

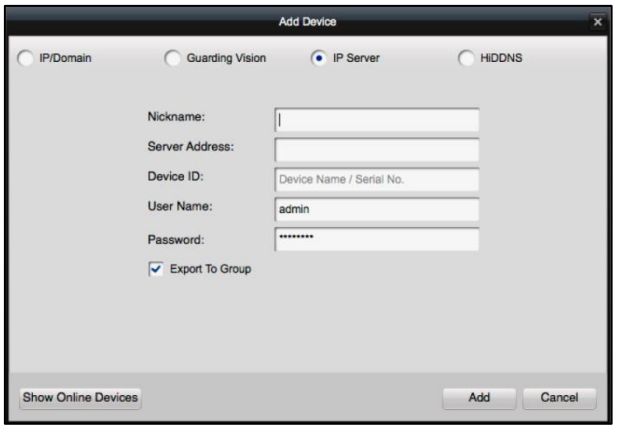


7. Check the checkbox(es) to select the device(s).
8. Input the user name and password of the selected device(s).
9. (Optional) Check **Export to Group** checkbox to create a group by the device name.
   All the channels of the device will be imported to the corresponding group by default.
10. Click **Add** to add the device(s).

3.1.5 Adding Devices by IP Server

Steps:

1. In the Device Management page, click **Add** to open Add Device window.
2. Select **IP Server** as the adding mode.



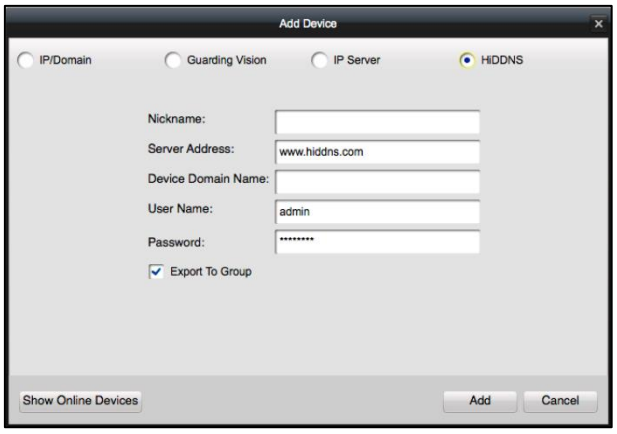
3. Input the required information.
   Nickname: Edit a name for the device as you want.
   Server Address: Input the IP address of the PC that installs the IP Server.
   Device ID: Input the device ID registered on the IP Server.
   User Name: Input the device user name. By default, the user name is *admin*.
   Password: Input the device password.

   The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.
4. (Optional) Check **Export to Group** checkbox 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.

3.1.6 Adding Devices by HiDDNS

Steps:

1. In the Device Management page, click **Add** to open Add Device window.
2. Select **HiDDNS** as the adding mode.



3. Input the required information.
   Nickname: Edit a name for the device as you want.
   Server Address: *www.hiddns.com*.
   Device Domain Name: Input the device domain name registered on HiDDNS server.
   User Name: Input the device user name. By default, the user name is *admin*.
   Password: Input the device password.

   The password strength of the device can be checked by the software. For your privacy, we strongly recommend changing the password to something of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.
4. (Optional) Check **Export to Group** checkbox 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.

3.2 Group Management

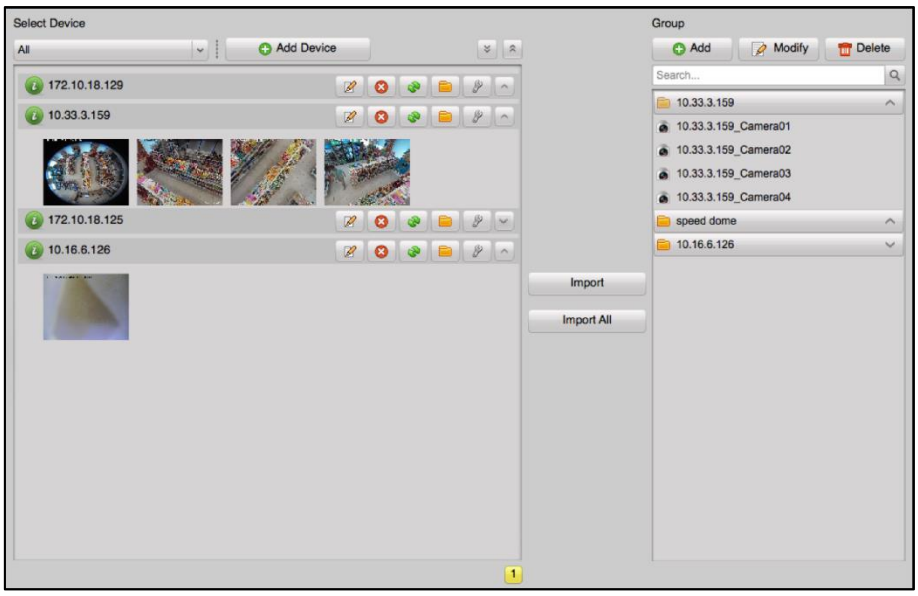
Purpose:

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

Before you start:

Encoding devices need to be added to the client software for group management.

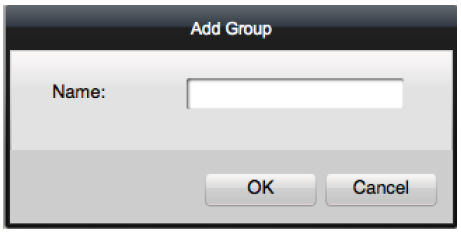
Click  on the Control Panel, or you can click **Tool** -> **Group Management** to enter the Camera Group page as follows.



Adding Group

Steps:

1. Click **Add** on the Group List on the right to open the Add Group window.
2. Input a group name as you want.
3. Click **OK** to add the new group to the group list.



Importing Camera to Group

Steps:

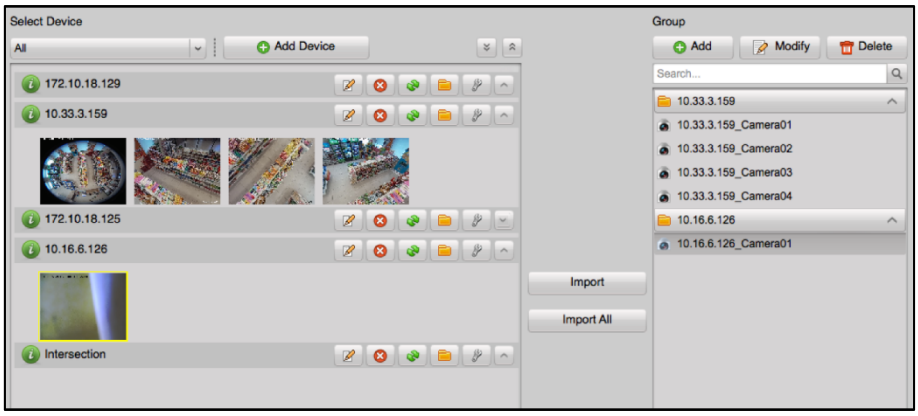
1. In the Select Device panel on the left, click to select the device and the thumbnails of the cameras of the device will be displayed below.

   Note: You can click **Add Device** to add a new device. For details, refer to *Chapter 3.1 Adding the Device*.
2. Select the thumbnails of the cameras.

   You can double-click the thumbnail of the camera to view the live video of the camera.
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 the selected group.

   Note: Up to 64 cameras can be added to one group, and up to 1024 cameras for all the groups are allowed in total.



The following buttons are available on the Select Device panel:

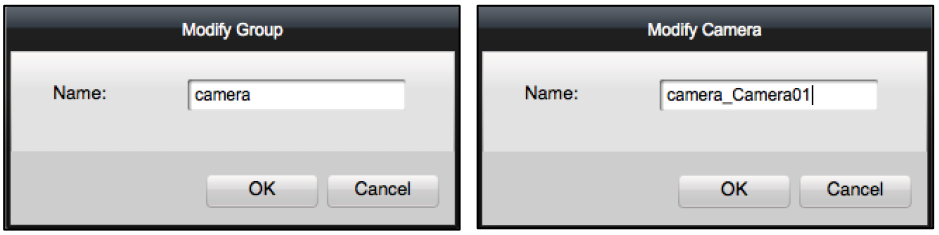
	Modify	Modify the connection parameters of the device.
	Delete	Delete the device.
	Refresh	Refresh the latest information of added cameras.
	Export to Group	Create a group named as *device name* and import the device to group.
	Remote Configuration	Open the Remote Configuration window of the device.
	Fold All/Expand All	Collapse/Expand all the thumbnails of cameras.
	Fold/Expand	Collapse/Expand the thumbnails of camera.

Modifying the Group/Camera

After adding the group and importing the camera to the group, you can edit the group name and the imported camera name as desired.

Steps:

1. Select the group/camera from the group list on the right, and click **Modify**, or double-click the group/camera name to open Modify Group/Camera window.
2. Edit the group/camera information, including the group/camera name, the stream type, etc.
3. Click **OK** to save the new settings.



Removing Cameras from the Group

Steps:

1. Click to select the imported camera from the group list.
2. Click **Delete** to remove the camera from the group.

Deleting the Group

Steps:

1. Select the group in the Group list on the right.
2. Click **Delete**, and click **OK** in the pop-up window to confirm the deleting.

The selected group and the cameras under it will be deleted.

Chapter 4 Camera Settings

Purpose:

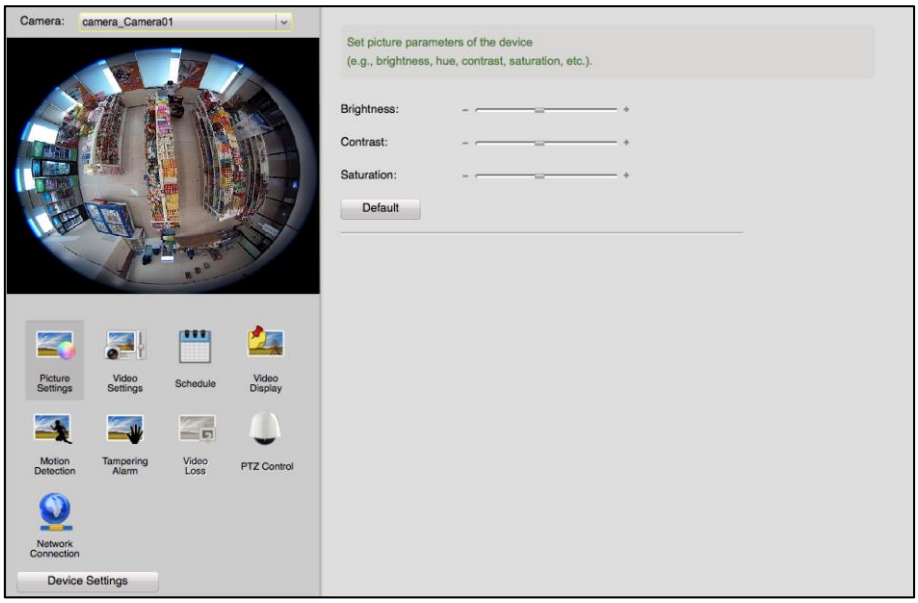
Before remote playback, you should set the schedule first.

You can also configure the event (including motion detection alarm, tampering alarm, video loss) of the device.

You can also configure the parameter for the image and video to get different performance for actual needs.

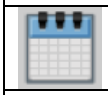
Meanwhile, you can set the PTZ parameters and network connection parameters in this section.

Click  on the control panel to enter the Camera Settings page.



Select the camera on the dropdown list on left side of the page, and the video image of that camera will be displayed below.

Click on icons in the lower left area to enter different configuration pages, such as the image settings page, the video quality setting page and so on.

	Video picture parameters configuration
	Video encoding quality configuration
	Recording schedule configuration
	Video display parameters configuration
	Motion detection configuration
	View tampering alarm configuration
	Video loss alarm configuration

	PTZ configuration
	Network parameter configuration for the camera

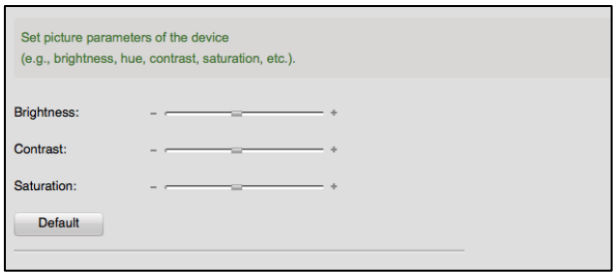
Note: You can click **Device Settings** to enter the Remote Configuration page of the device. For details, please refer to the user manual of the device.

4.1 Picture Settings

In Picture Settings page, you can adjust the brightness, contrast, saturation, and hue of the video image.

Note: The available parameters may be different from the camera types.

Drag the slider to adjust the level from lowest to highest.



You can click **Default** to restore default settings.

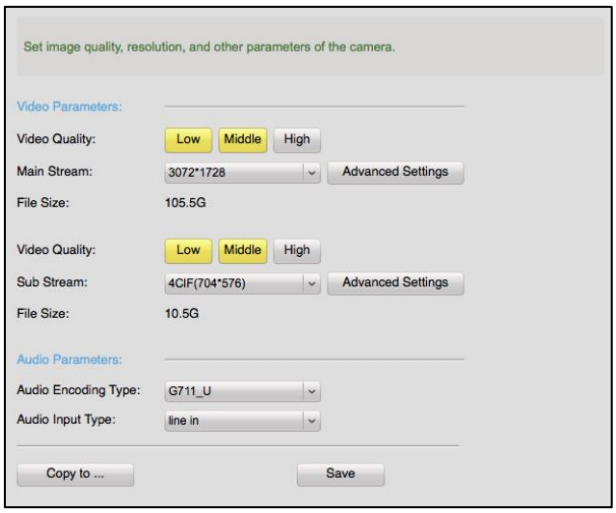
4.2 Video Settings

Purpose:

You can set video parameters, such as video quality, resolution, and other parameter settings.

Steps:

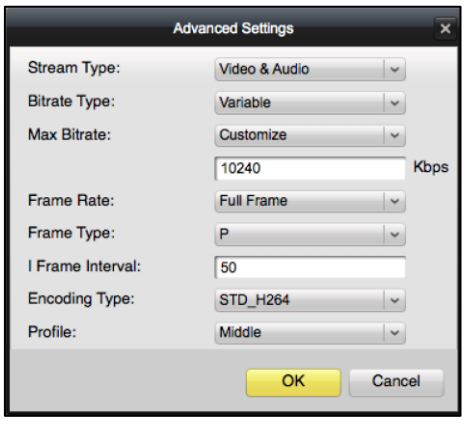
1. Click **Video Settings** to enter the Video Settings page.



2. Set video parameters, including video resolution and video quality for main stream and sub

stream separately.

You can click **Advanced Settings** to open Advanced Settings window and set the related parameters, such as stream type, bitrate type, and so on.



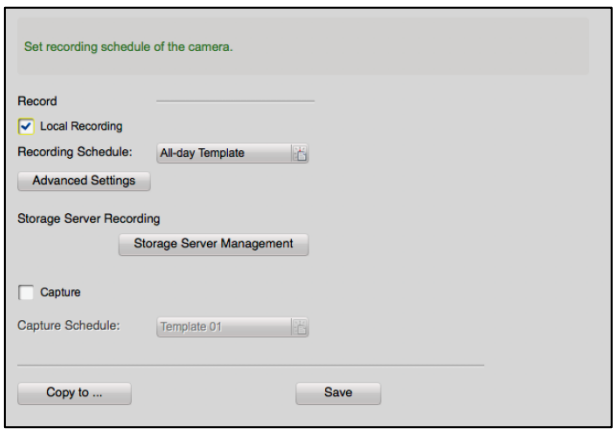
3. Set the event parameters.
   1) Check **Enable Event Parameters** checkbox.
   2) Set the video quality and resolution for event video.
   3) (Optional) Click **Advanced Settings** to open Advanced Settings window and set the related parameters, such as stream type, bitrate type, and so on.
   4) Click **OK** to save the settings.
4. Click **Copy to** to copy the settings to other cameras in the group.
5. Click **Save** to save the settings.

4.3 Schedule

Purpose:

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

Click **Schedule** to enter the recording schedule page.



4.3.1 Storing on the DVR, NVR, or Network Camera

Purpose:

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

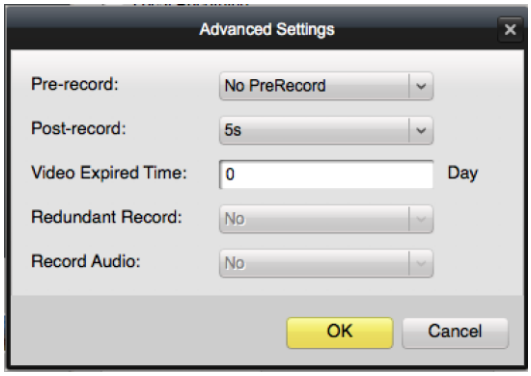
Before you start:

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 Schedule page in Camera Settings.
2. Select the camera in the Camera Group dropdown list.
3. Check **Local Recording** or **Capture** checkbox to enable device local recording or capture.
4. Select the recording or capture schedule template from the drop-down list.
   - **All-day Template**: for all-day continuous recording.
   - **Weekday Template**: for working-hours continuous recording from 8:00 AM to 8:00 PM.
   - **Alarm Template**: for the alarm triggered recording.
   - **Template 01 to 08**: fixed templates for specific schedules. You can edit the templates if needed.
   - **Customized**: can be customized as desired.

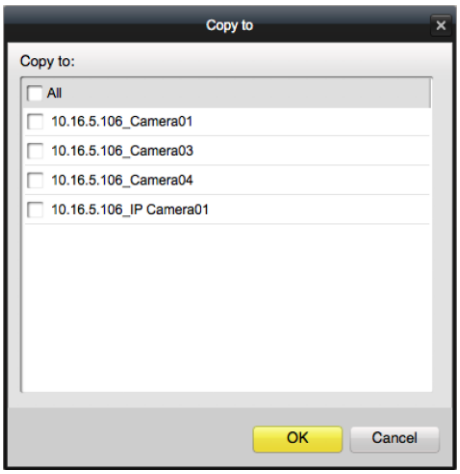
     If you need to edit or customize the template, refer to *Configuring Recording Schedule Template*
5. Click **Advanced Settings** to set the recording parameters.



Note: The displayed items vary with the devices.

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 video files in the storage device, once exceeded, the files will be deleted. The files will be saved permanently if the value is set as *0*.
Redundant Record	Save the video files not only in the R/W HDD but also in the redundant HDD.
Record Audio	Record the video files with audio or not.

6. (Optional) Click **Copy to…** to copy the recording schedule settings to other channels.



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

Configuring Recording Schedule Template

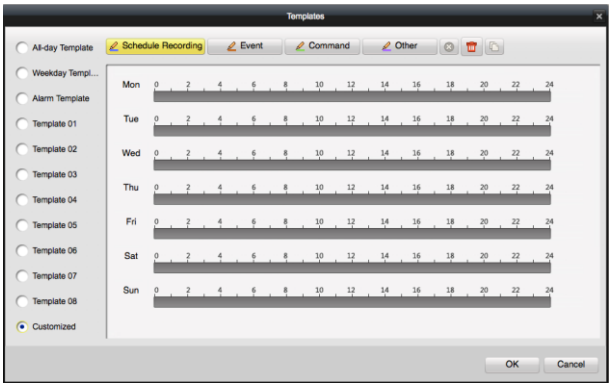
Perform the following steps to configure the recording schedule template:

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

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

1. Click **Edit** to edit the template and select the template to be set.
   You can edit the template name.
2. Set the time schedule for the selected template.
   Schedule recording refers to normal schedule record. The schedule time bar is marked with .
   Event refers to the schedule record for the event. The schedule time bar is marked with .
   Command refers to the schedule record triggered by command. The schedule time bar is marked with .
   Note: Recording triggered by command is only available for the ATM transactions when the ATM DVR is added to Guarding Vision.
3. (Optional) After setting the time schedule, you can perform the following operations to adjust the time period.
   - When the cursor turns to , you can set the time period.
   - When the cursor turns to , you can move the selected time bar you just edited. You can also edit the displayed time point to set the accurate time period.
   - When the cursor turns to , you can lengthen or shorten the selected time bar.
4. (Optional) Delete or copy the time schedule.
   Select the schedule time bar and click to delete the selected time bar.
   Select the schedule time bar and click to delete all the time bars.
   Select the schedule time bar and click to copy the time bar settings to the other dates.
5. Click **Save** to save the settings.

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



4.3.2 Storing on Storage Server

Purpose:

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

Before you start:

The storage server application software needs to be installed on other PC running Windows OS. When installing the Guarding Vision, check **Storage Server** checkbox to enable the installation of storage server.

Adding the Storage Server

To assign a Storage Server for the recording schedule, add at least one storage server to the client.

Steps:

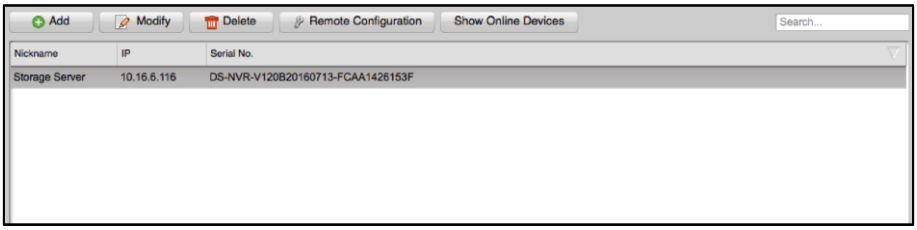
1. Click  on the desktop to run the storage server.

   Notes:

   - The Storage Server can only be installed on the PC running Windows OS.
   - If the storage server port (value: 8000) is occupied by other service, a window will open. You should change the port No. to other value to ensure the proper running of the storage server.

2. On the Guarding Vision Client, click  on the control panel to enter the Storage Server Management page.

   You can also click **Storage Server Management** in Schedule page of Camera Settings to enter the Storage Server Management page.



3. Click **Add** to add the storage server.

   You can add the storage server in the following ways:

   - By detecting the online storage server, refer to *Chapter 3.1.2 Adding Online Devices.*

- By specifying the storage server IP address, refer to *Chapter 3.1.3 Adding Devices by IP or Domain Name*.
- By IP Server, refer to *Chapter 3.1.5 Adding Devices by IP Server.*

4. (Optional) Select the added server and click **Modify** to edit its information.
   You can click **Delete** to delete it.

Formatting the HDDs

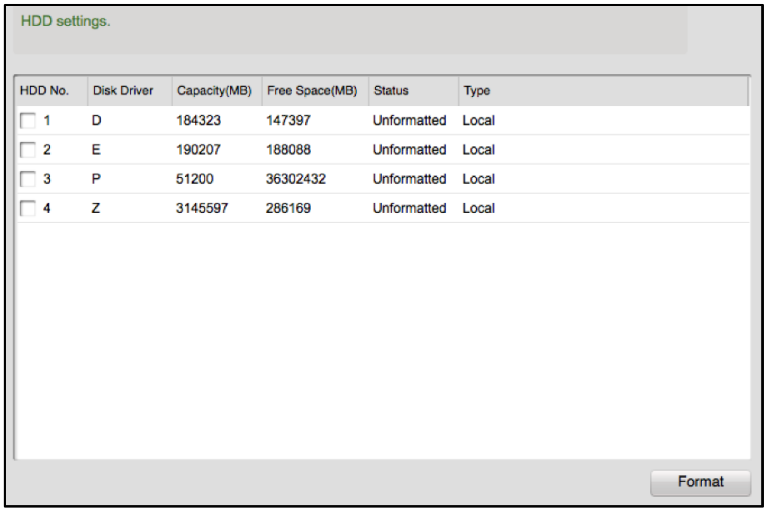
Purpose:

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

Steps:

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

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



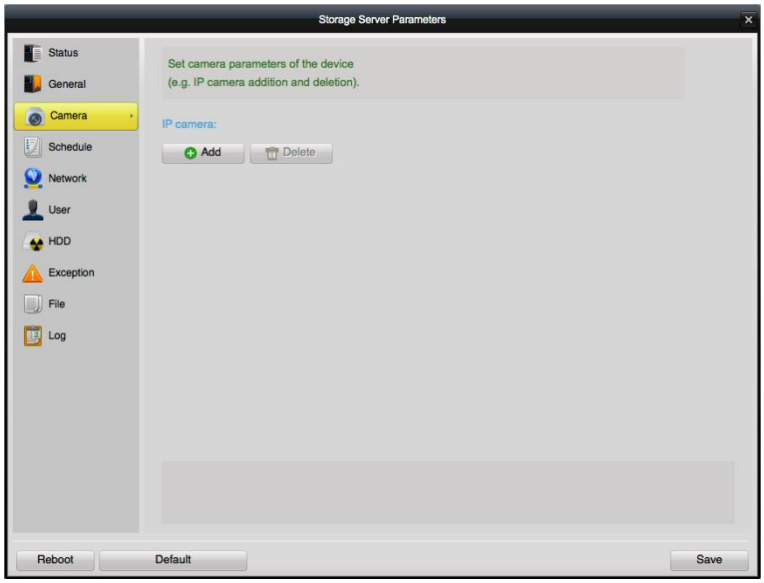
Configuring Storage Schedule

Before you start:

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

Steps:

1. Add the camera to the storage server first.
   (1) In the Storage Server Management page, select the added storage server and click **Remote Configuration**.
   (2) Click **Camera** tab to enter the following page.



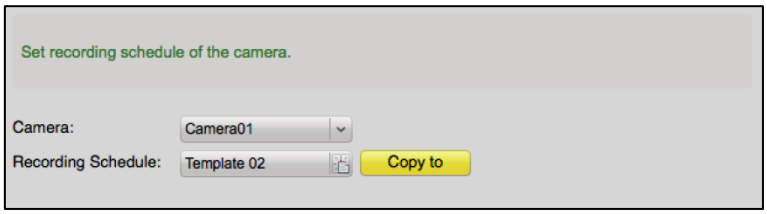
(3) Click **Add** and select a camera from the group to add the camera to the storage server.

(4) (Optional) Select the added camera and click **Delete** to delete the camera from the storage server.

(5) Click **Save** to save the settings.

2. Configure the recording schedule for the added cameras.

(1) In the Remote Configuration page, click **Schedule** tab to enter the following page.



(2) Select the added camera from the dropdown list.

(3) Select one recording schedule.

- **All-day Template**: for all-day continuous recording.
- **Weekday Template**: for working-hours continuous recording from 8:00 AM to 8:00 PM.
- **Alarm Template**: for the alarm triggered recording.
- **Template 01 to 08**: fixed templates for specific schedules. You can edit the templates if needed.
- **Customized**: can be customized as desired.

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

After adding the camera to the storage server and setting the recording schedule, the recording schedule on storage server function will be enabled.

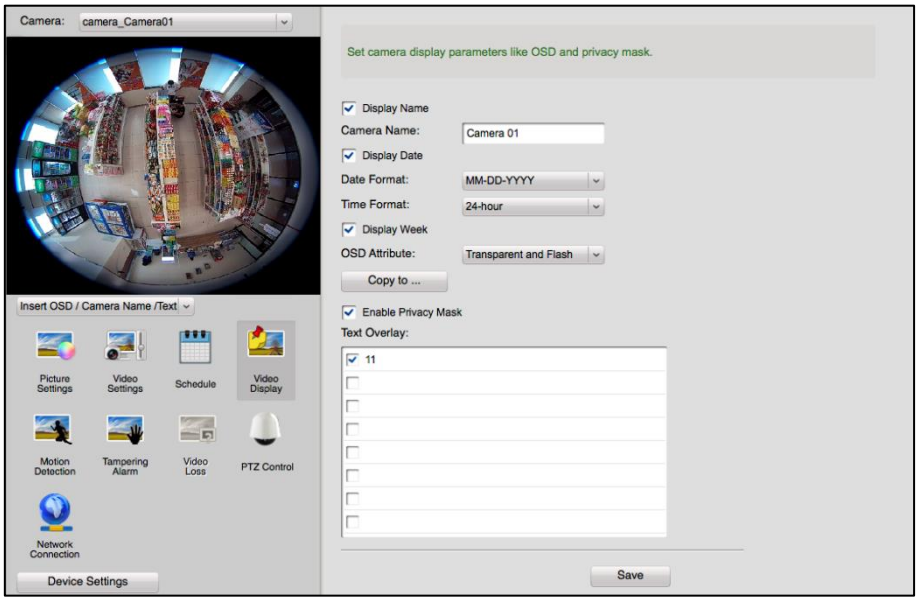
Notes:

- To change the recording resolution, bit rate or other recording parameters, please refer to *Chapter 4.1 Picture Settings.*
- To ensure that event recording works properly, please set motion detection and video tampering area and arming schedule first. For details, refer to *Chapter 4.5 Motion Detection* and *Chapter 4.6 Tampering Alarm*.

4.4 Video Display

The Display menu allows you to configure the display settings for the camera, including:

- **Display Name**: the camera name displayed on the live video.
- **Display Date**: the date displayed on the live video.
- **Display Week**: Display the week on the live video.
- **Enable Privacy Mask**: Enable privacy mask function on the live video.
- **Text Overlay:** Edit user-defined text to be displayed on the live video.



Steps:

1. Click **Video Display** to enter the video display settings page.
2. Check the checkboxes to display the name, date, or week to the video image.
3. Set the OSD Attribute.
4. (Optional) Click **Copy to…** and select other cameras to copy the video display settings to other cameras.
5. Display privacy mask on the video image.
   1) Check **Enable Privacy Mask** checkbox.
   2) Select **Draw Privacy Mask Area** option from the drop-down list.
   3) Drag your cursor to draw a rectangle as privacy mask.



You can click to remove the selected privacy mask area, or click to clear all privacy mask areas on the live video.

Note: Up to four privacy mask areas can be configured.

6. Set the text overlay.
   1) Check the checkbox in the Text Overlay.
   2) Input the text content.
7. Configure the OSD location and the privacy mask location & size on the video image.
   1) Select **Insert OSD/Camera Name/Text** option from the drop-down list.
   2) Move the OSD to the desired location on the video image.



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

4.5 Motion Detection

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. Click **Motion Detection** to enter the motion detection alarm settings page.

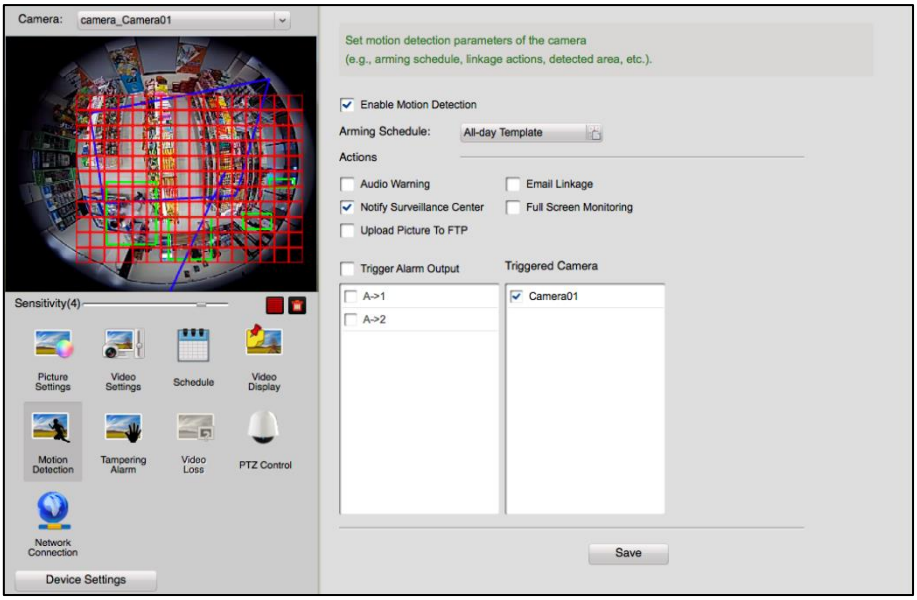
2. Check **Enable Motion Detection** checkbox.
3. Select the arming schedule template from the drop-down list.
   - **All-day Template**: For all-day continuous arming.
   - **Weekday Template**: For working-hours continuous arming from 8:00 AM to 8:00 PM.
   - **Template 01 to 09**: Fixed templates for special schedules. You can edit the templates if needed.
   - **Customized**: Can be customized as desired.

     If you need to edit or customize the template, see *Configuring Arming Schedule Template*
4. Drag the mouse on the live video image to draw a defined area for the arming region.

   You can click  to set the whole video area as detection area, or click  to clear all the detection area.
5. Drag the slider on the sensitivity bar to adjust the motion detection sensitivity. The larger the value is, the more sensitive the detection is.
6. Check the checkboxes to activate the linkage actions.

Linkage Actions	Descriptions
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to *Chapter 10.2.4 Alarm Sound Settings.*
Email Linkage	Send an email notification of the alarm information to one or more receivers. For setting the email parameters, refer to *Chapter 10.2.5 Email Settings.*
Notify Surveillance Center	Upload alarm information to the client software when motion detection is triggered.
Full Screen Monitoring	Switch to full screen to monitor the motion detection video.
Upload Captured Picture to FTP	When motion alarm is triggered, pictures will be captured and uploaded to FTP server.
Tigger Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.
Triggered Camera	Start the recording of the selected cameras when alarm is triggered.

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



Configuring Arming Schedule Template

Perform the following steps to configure the arming schedule template:

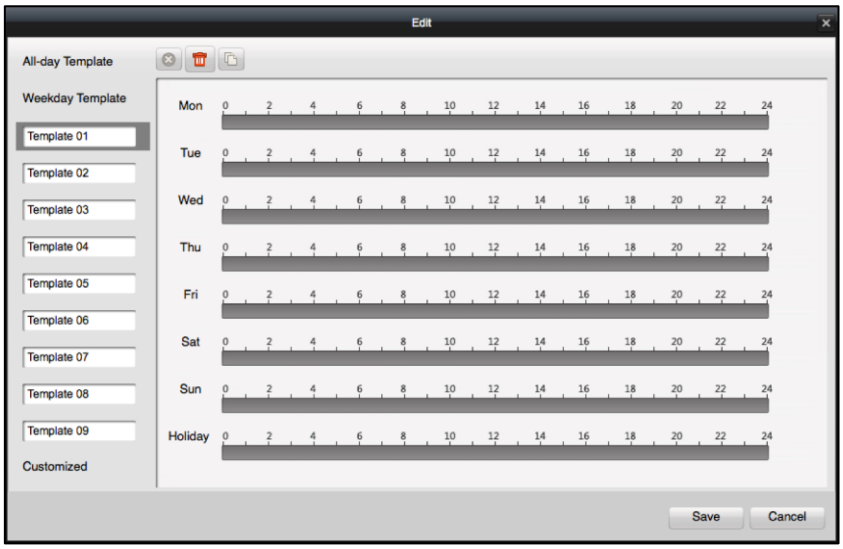
If **Template 01 to 09** is selected in the drop-down list, start from step 1;

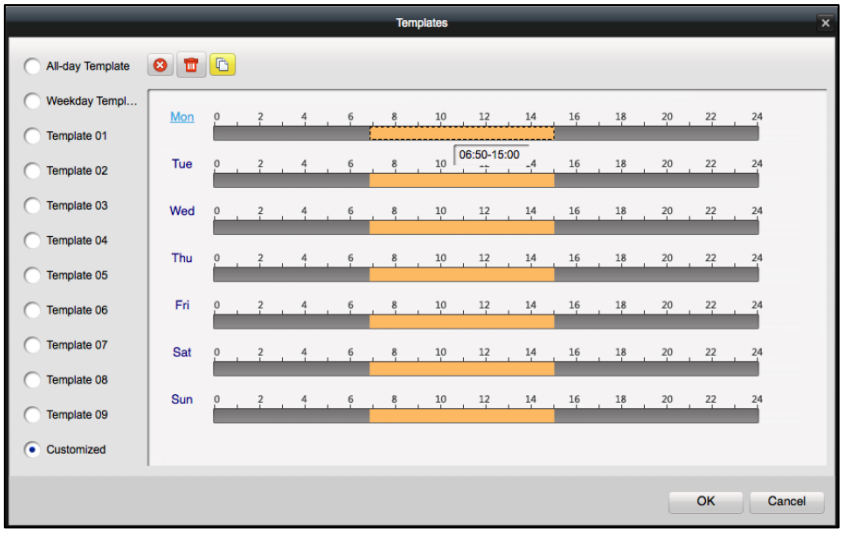
If **Custom** is selected in the drop-down list, start from step 2.

Steps:

1. Click **Edit** to enter the Templates Management page. 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 set the time period.
   When the cursor turns to , you can move the selected time bar you just edited. You can also edit the displayed time point to set the accurate time period.
   When the cursor turns to , you can lengthen or shorten the selected time bar.
3. Optionally, you can select the schedule time bar,
   and then click  to delete the selected time bar,
   or click  to delete all the time bars,
   or click  to copy the time bar settings to the other dates.
4. Click **OK** to save the settings.

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





4.6 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:

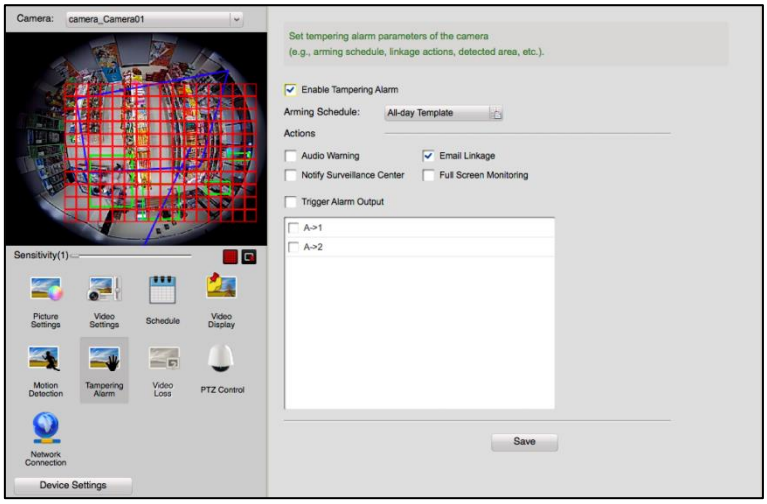
1. Click **Tampering Alarm** to enter the tempering alarm settings page.
2. Check **Enable Tampering Alarm** checkbox.
3. Select the arming schedule template from the drop-down list.
   - **All-day Template**: For all-day continuous arming.
   - **Weekday Template**: For working-hours continuous arming from 8:00 AM to 8:00 PM.
   - **Template 01 to 09**: Fixed templates for special schedules. You can edit the templates if needed.
   - **Customized**: Can be customized as desired.

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

4. Drag the mouse on the live video image to draw a defined area for the arming region.
   You can click  to set the whole video area as detection area, or click  to clear all the detection area.
5. Drag the slider on the sensitivity bar to adjust the tampering alarm sensitivity. The larger the value is, the more sensitive the detection is.
6. Check the checkboxes to activate the linkage actions.

Linkage Actions	Descriptions
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to *Chapter 10.2.4 Alarm Sound Settings.*
Email Linkage	Send an email notification of the alarm information to one or more receivers. For setting the email parameters, refer to *Chapter 10.2.5 Email Settings.*
Notify Surveillance Center	Upload alarm information to the client software when motion detection is triggered.
Full Screen Monitoring	Switch to full screen to monitor the motion detection video.
Tigger Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.

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



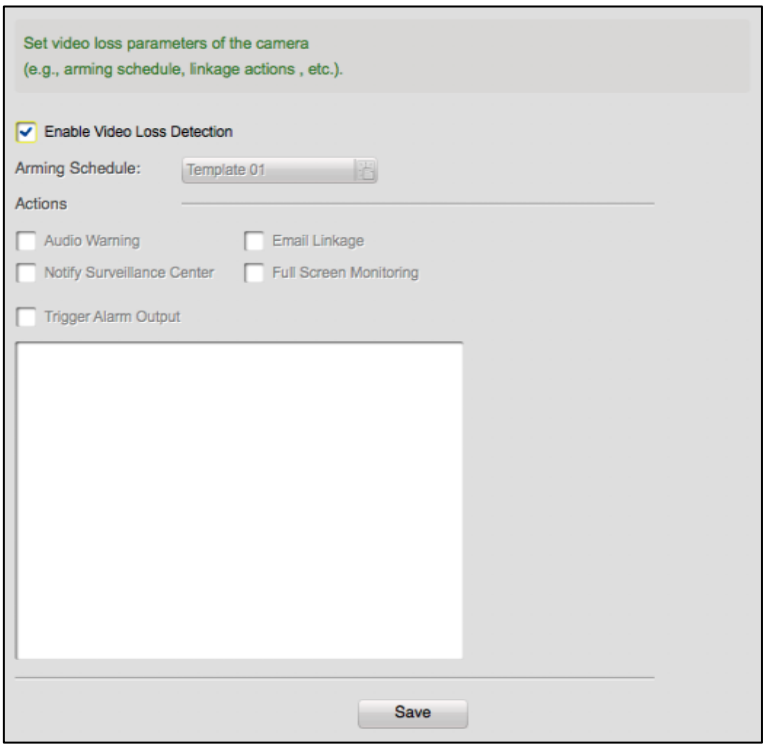
4.7 Video Loss

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. Click **Video Loss** to enter the video loss alarm settings page.



2. Check **Enable Video Loss Detection** checkbox.
3. Click the arming schedule and select the arming schedule template.
   - **All-day Template**: For all-day continuous arming.
   - **Weekday Template**: For working-hours continuous arming from 8:00 AM to 8:00 PM.
   - **Template 01 to 09**: Fixed templates for special schedules. You can edit the templates if needed.
   - **Customized**: Can be customized as desired.

     If you need to edit or customize the template, see *Configuring Arming Schedule Template*
4. Check the checkboxes to activate the linkage actions.

Linkage Actions	Descriptions
Audible Warning	The client software gives an audible warning when alarm is triggered. You can select the alarm sound for audible warning. For setting the alarm sound, please refer to *Chapter 10.2.4 Alarm Sound Settings.*
Email Linkage	Send an email notification of the alarm information to one or more receivers. For setting the email parameters, refer to *Chapter 10.2.5 Email Settings.*
Notify Surveillance Center	Upload alarm information to the client software when motion detection is triggered.
Full Screen Monitoring	Switch to full screen to monitor the motion detection video.
Tigger Alarm Output	Enable the alarm output function. Select the alarm output port and the external device connected to the port can be controlled.

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

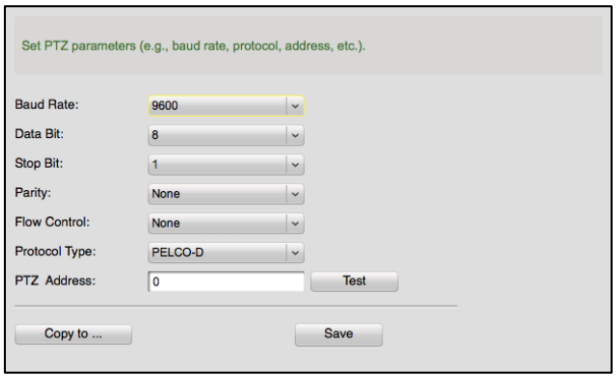
4.8 PTZ Control

Purpose:

In the PTZ Control configuration page, you can specific the PTZ connection parameters, such as baud rate, data bits, stop bits, parity, and so on.

Steps:

1. Click **PTZ Control** to enter the PTZ control configuration page.



2. Set the PTZ parameters, such as baud rate, data bits, stop bits, parity, flow control, PTZ protocol, and PTZ address.

   Note: All these PTZ parameters should be consistent with the local settings on the PTZ to ensure valid PTZ control.

3. (Optional) Click **Copy to…** to copy all the PTZ settings to other cameras.
4. Click **Save** to save the settings.

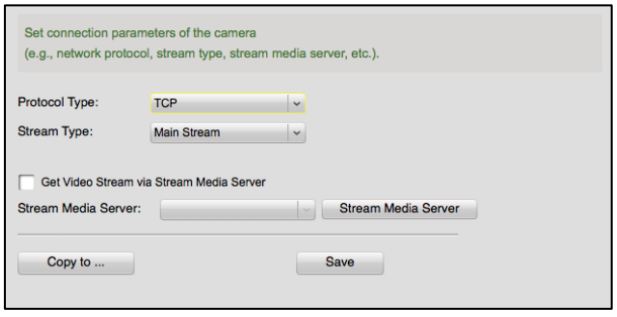
4.9 Network Connection

In the Network Connection configuration page, you can specify the protocol and select the stream type of the camera. You can also configure stream media server.

4.9.1 Network Parameter Settings

Steps:

1. Click **Network Connection** to enter the Network Connection configuration page.



2. Set the protocol as **TCP**, **UDP**, **MCAST**, or **RTP**.
3. Select **Main Stream** or **Sub-Stream** as the stream type of the camera.

Note: The stream type settings will take effect after start live view again. You can also set the stream type in Main View module. For details, refer to *Chapter 5 Live View.*

4. Check **Get Video Stream via Stream Media Server** checkbox to enable the stream media server.
   Note: You should add the stream media server first. For details, refer to *Chapter 4.9.1 Network Parameter Settings.*
5. Select the stream media server.
6. (Optional) Click **Copy to…** to copy all the network connection settings to other cameras.
7. Click **Save** to save the settings.

4.9.2 Stream Media Server Management

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.

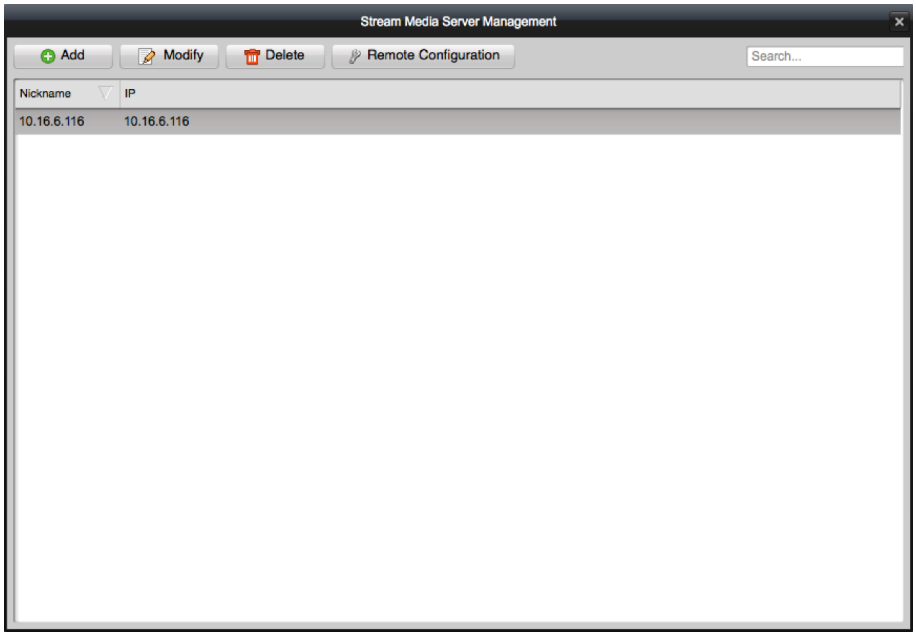
Adding the Stream Media Server

Before you start:

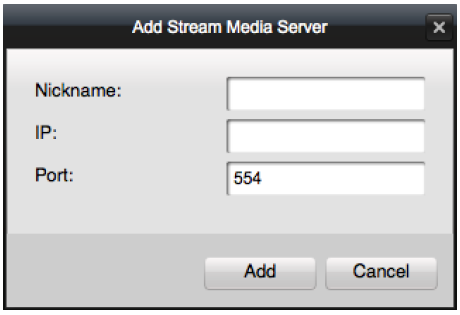
The stream media server application software needs to be installed on other PC running Windows OS. When installing the Guarding Vision, check **Stream Media Server** checkbox to enable the installation of stream media server.

Steps:

1. Click  on the desktop to run the stream media server.
   Notes:
   - The Stream Media Server can only be installed on the PC running Windows OS.
   - If the stream media server port (value: 554) is occupied by other service, a window will open. You should change the port No. to other value to ensure the proper running of the stream media server.
2. On the Guarding Vision Client, click  to open the Stream Media Server Management page. Or you can click **Stream Media Server** on Network Connection page of Camera Settings to enter the Stream Media Server Management page.



3. Click **Add** to open the following page.



4. Input the required information, including nickname, IP address, and port.
   Note: The default port value is *554*.
5. Click **Add** to add the stream media server to the client software.
   Note: For one client, up to 16 stream media servers can be added.

After adding the stream media server, you can perform the following operations.

- Select the stream media server and click **Modify** to edit its information.
- Select the stream server and click **Delete** to delete it.

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.

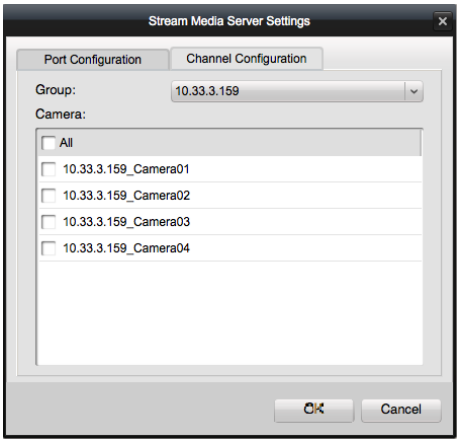
Steps:

1. Select the stream media server from the list.
2. Click **Remote Configuration** to enter the Stream Media Server Settings page.
3. Click **Channel Configuration** tab.
4. Select the camera group and select cameras of which the video stream is to be forwarded via the stream media server.
5. Click **OK** to save the new settings.

6. Go the Main View page and start the live view of the cameras again. You can check the channel number of the video stream forwarded through or sent from the stream media server.

Notes:

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



Chapter 5 Live View

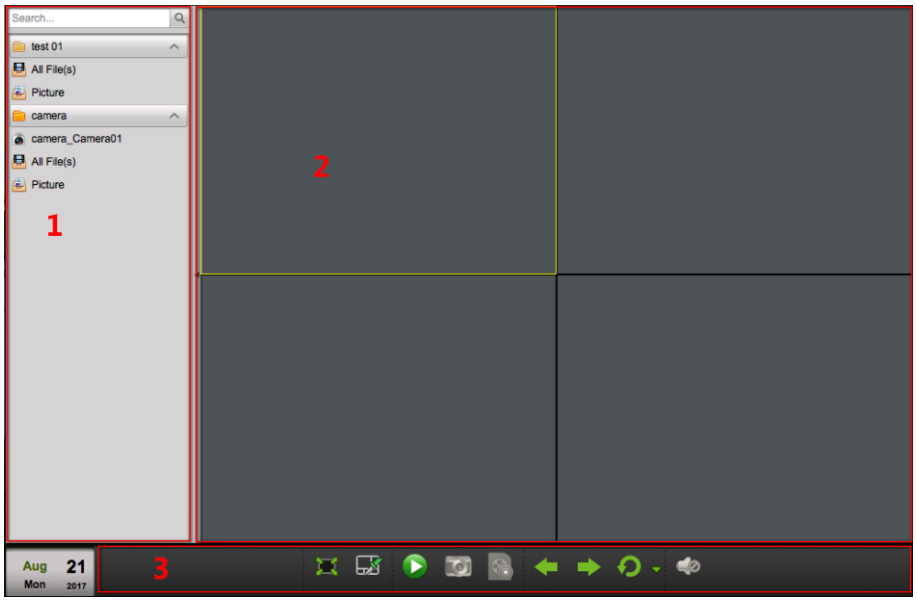
Purpose:

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

Before you start:

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

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



Main View Page

1 *Camera List*

2 *Display Window of Live View*

3 *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:

	Full Screen	Display the live view in full screen mode. Press *ESC* to exit.
	Window Division	Set the window division.

	Start/Stop	Start or stop the live view of all cameras.
	Capture	Capture the current image of the camera.
	Start Recording	Start manual recording for the corresponding cameras, click again to stop.
	Previous	Go for live view of the previous page.
	Next	Go for live view of the next page.
	Start/Stop Auto-switch	Click to resume/pause the auto-switch in live view.
	Show/Hide Menu	Show/Hide the configuration menu of auto-switch. Click again to hide.
	Volume	Turn off/on the audio in live view and you can adjust the volume.

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:

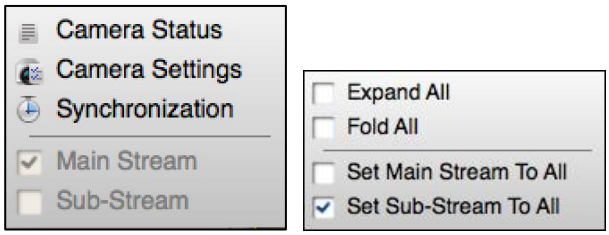
	Capture	Capture the picture in the live view process.
	Start/Stop Recording	Start/Stop the manual recording. The video file is stored in the PC.
	PTZ Control	Enable PTZ control function on the display window.
	Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Camera Status	Display the status of the camera in live view, including the recording status, signal status, connection number, etc.
	Camera Settings	Open the Camera Settings page of the camera. Refer to *Chapter 4 Camera Settings.*
	Synchronization	Sync the camera in live view with the PC running the client software.
	Audio On/Mute	Click to enable/disable the audio in live view.
	Stop Live View	Stop the live view in the display window.
	Fisheye Expansion	Enter the fisheye expansion mode. Only available when the device is fisheye camera.
	Switch to Instant Playback	Switch to Instant playback mode.
	Full Screen	Display the live view in full screen mode. Press *ESC* to exit.

5.1 Starting and Stopping the Live View

Starting Live View for One Camera

Steps:

1. Open the Main View page.
2. (Optional) Click  in live view toolbar to select the window division mode for live view.
3. 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 drag the video of the camera in live view to another display window if needed.
4. (Optional) In the device list on the left, you can right-click on the camera group name, or on the camera name to open the right-click menu.



   For camera group, you can check to expand or fold all the cameras display in the group. And you can also switch the stream between main stream and sub stream for all the cameras in the group.
   For camera, you can click to view the camera status, to enter the camera settings page to configure the camera, and sync the camera time with the PC. And you can also switch the stream between main stream and sub stream.
   Note: The stream settings will take effect after starting live view again.

Starting Live View for Camera Group

Steps:

1. Open the Main View page.
2. 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.

Stopping the Live View

Steps:

1. Select the display window.
2. Click **Stop Live View** on the right-click menu to stop the live view of the display window.
   You can also click  in live view toolbar to stop all the live view.

5.2 Auto-switch in Live View

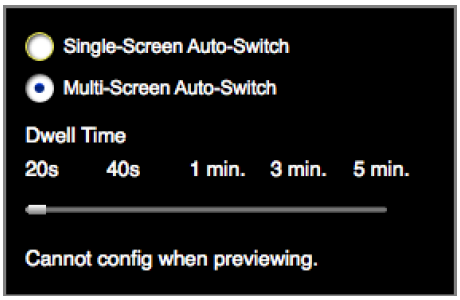
Purpose:

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 in the toolbar and select the auto-switch in single screen or multiple screens. Set the dwell time for the auto-switch.



4. Select a group, and select the window for auto switch.
5. Click on the toolbar to start the camera auto-switch.
6. Click or to view the live video of previous or next camera.

5.3 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.

Note: The PTZ Control function should be supported by the device.

Right-click on the live view window, and click **PTZ Control** to open the PTZ Control panel.



The following buttons are available on the PTZ Control panel:

	Zoom
	Focus
	Iris
	3D Positioning
	Light
	Wiper

	**Directional buttons, click**  **to start/stop auto-scan.**
	**Speed adjustment for PTZ function**

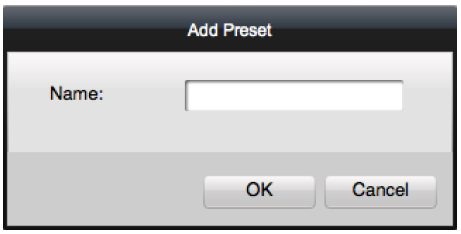
5.3.1 Configuring the Preset

Purpose:

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

Steps:

1. Click **Preset** tab 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 window.
5. Click **OK** to save the settings.

To call a configured preset, double-click the preset, or select the preset and click .
You also perform the following steps to call the preset.

Steps:

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

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

5.3.2 Configuring the Pattern

Purpose:

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

Steps:

1. Click **Pattern** tab 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 to call the pattern.
   To stop calling the pattern, click .

5.3.3 Configuring the Patrol

Purpose:

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:

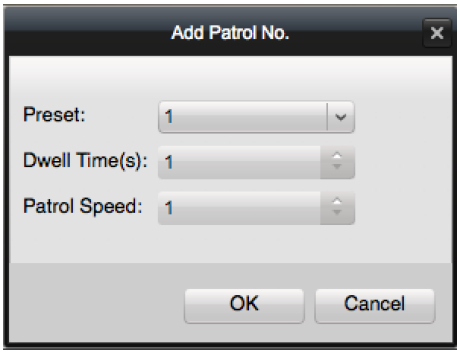
Two or more presets for one PTZ camera need to be added.

Steps:

1. Click **Patrol** tab to enter the PTZ patrol configuration panel.



2. Select a path 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  to call the patrol.
   To stop calling the patrol, click .

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

5.4 Local Recording and Capture

5.4.1 Manual Recording in Live View

Purpose:

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

Steps:

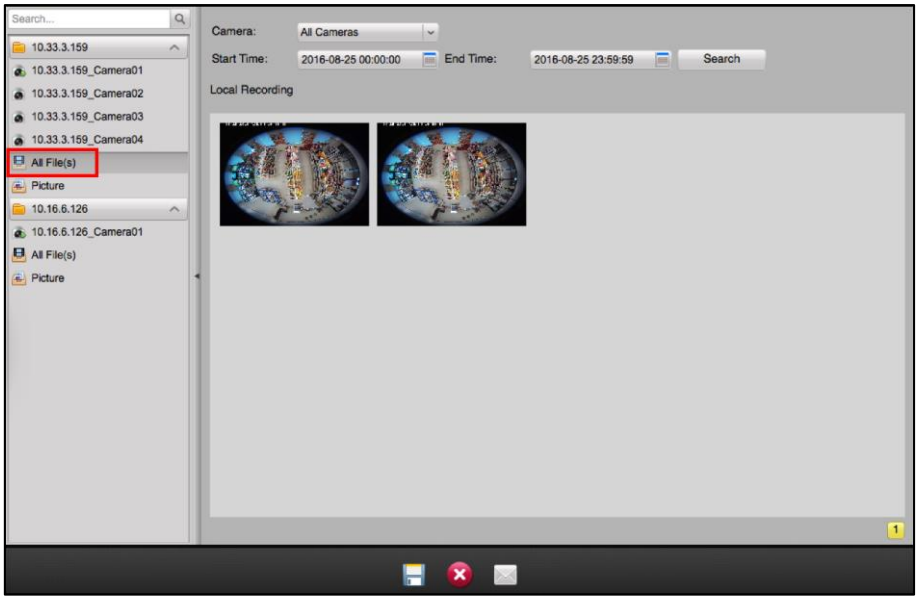
1. Select the live view window, and click  on the toolbar,
   or right-click on the live view window and select **Start Recording** to start the manual recording.
   The icon  on the right-click menu turns to .
2. Click the  button on the toolbar again,
   or click **Stop Recording** on the right-click menu to stop the manual recording.
   A prompt with the saving path of the video files you just recorded will open if all the operations succeed.

Note: The saving path of video files can be set on the System Configuration page. For details, refer to *Chapter 10.2.3 File Saving Path Settings.*

5.4.2 Viewing Local Video Files

Steps:

1. In the Main View page, click **All Files(s)** under the device to view all the recorded video files of the device.



2. Select the camera to be searched from the Camera list.
3. Click to specify the start time and end time for search.
4. Click **Search**.

   The video files recorded locally between the start time and end time will display.

The following buttons are available at the bottom of the page for each video file.



- 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.

  Note: To send an Email notification, you should set the Email settings before proceeding. For details, refer to *Chapter 10.2.5 Email Settings*.
- Select the video file, and click **Save as**. You can save a new copy of the video file.

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



The following buttons are available on the local playback page:

cif 4cif	**CIF/4CIF**	Display the video in cif/4cif resolution.

	Close	Close the local playback page of the video files.
	Pause/Play	Pause/Start the playback of the video files.
	Stop	Stop the playback of the video files.
	Speed Down/Up	Set the playback speed.
	Single Frame	Play back the video files frame by frame.
	Digital Zoom	Enable the digital zoom function. Click again to disable.
	Audio On/Mute	Click to enable/disable the audio in the local playback.
	Capture	Capture the picture in the playback process.

5.4.3 Capturing Picture in Live View

Select the live view window, and click  in the toolbar, or right-click on the live view window and select **Capture** to capture the current image of the live view window.

A small window of the captured picture will display 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 page. For details, refer to *Chapter 10.2.3 File Saving Path Settings.*

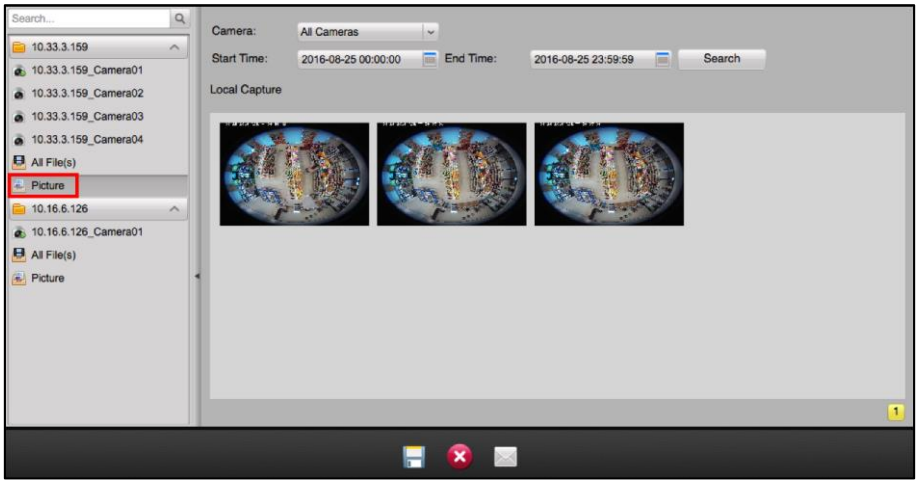
5.4.4 Viewing Captured Pictures

Purpose:

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

Steps:

1. In the Main View page, click **Picture** under the device to view all the captured pictures of the device.



2. Select the camera to be searched from the Camera list.
3. Click  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.

The following three buttons are available at the bottom of the page for each 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.

5.5 Instant Playback

Purpose:

The video files can be played instantly on the Main View page. Instant playback shows a piece of the video which was remarkable, or which was unclear on the first sight. Thus, you can get an immediate review if needed.

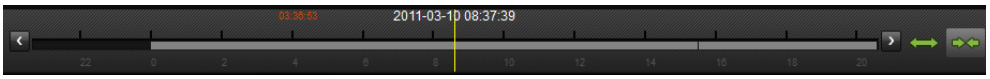
Note: You can set the pre-play time for instant playback in System Configuration. By default, it is 3 minutes. For configuring the pre-play time, refer to *Chapter 10.2.1 General Settings*.

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.

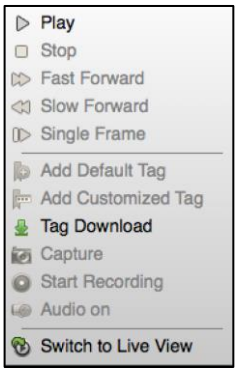
Steps:

1. Start the live view.
2. Right-click on the window to show the Live View Management menu.
3. Click **Switch to Instant Playback** to switch to instant playback mode.
   A simple timeline will appear near the live view toolbar. Move the mouse to the simple timeline and a complete timeline will appear as follows:



4. Drag the timeline at the bottom to adjust the playback progress. You can also click  or  to scale up or down the time bar to choose a more accurate playback time.
5. Right-click on the playback window and click **Live View** to stop the instant playback and go back for the live view.

During instant playback, 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/Resume	Pause/start the instant playback in the display window.
	Stop	Stop the instant playback and return to the live view mode.
	Fast Forward/Slow Forward	Increase/decrease the play speed of the instant playback.
	Single Frame	Play back the video file frame by frame.
	Add Default Tag	Add a default tag to the current timeline of the video file.
	Add Custom Tag	Add a custom tag to the current timeline of the video file and you can set the tag name.
	Tag Download	Download the files by added tags.
	Capture	Capture the picture in the instant playback process.
	Start/Stop Recording	Start/Stop clipping the video files.
	Audio on/Mute	Click to turn on/off the audio in instant playback.
	Switch to Live View	Switch to live view mode.

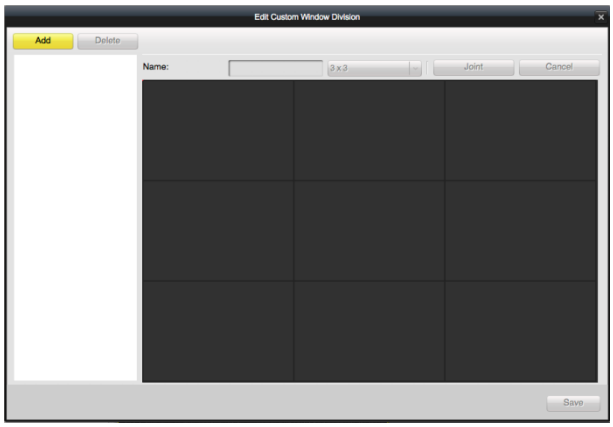
5.6 Custom Window Division

Purpose:

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

Steps:

1. Click on the live view toolbar and select **Edit** to open Edit Custom Window Division window.



2. Click **Add** to open Add Custom Window Division window.
   Note: Up to 5 custom window divisions can be added.
3. Set a name for the new window division as desired.
4. Click **OK** to save the settings.
5. Drag your mouse to select the adjacent windows, and click **Joint** to joint them as a whole window. You can also click **Cancel** to cancel the jointing.
6. Click **Save** to confirm the settings.
7. Click to back to the Main View page.
   Then you can click and select the custom window division for playing live video.

Notes:

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

5.7 Live View in Fisheye Mode

Purpose:

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

Note: The Fisheye Expansion is suitable for the fisheye camera. If you enable Fisheye Expansion for other cameras, the image may be distorted.

Steps:

1. Start the live view (refer to *Chapter 5.1 Starting and Stopping the Live View*).
2. Right-click on the video and select **Fisheye Expansion** to enter the Fisheye Expansion window.
3. Select the mounting type of the fisheye camera according to the actual mounting position.
4. You can select the expanding mode for live view as desired.

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



- **Fisheye:** In the Fisheye view mode, the whole wide-angle view of the camera is displayed. This view mode is called Fisheye because it approximates the vision of a fish's convex eye. The lens produces curvilinear images of a large area, while distorting the perspective and angles of objects in the image.
- **Panorama/Dual-180° Panorama/360° Panorama:** In the Panorama view mode, the distorted fisheye image is transformed to normal perspective image by some calibration methods.
- **PTZ:** The PTZ view is the close-up view of some defined area in the Fisheye view or Panorama view, and it supports the electronic PTZ function, which is also called e-PTZ.

  Notes:

- Each PTZ view is marked on the Fisheye view and Panorama view with a specific navigation. You can drag the navigation on the Fisheye view or Panorama view to adjust the PTZ view, or drag the PTZ view to adjust the view to the desired angle.
- The navigation will be hidden after 5 seconds of inactivity.



PTZ Control

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

Note: The PTZ panel varies according to different devices.

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

Preset

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

Purpose:

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

Steps:

1. Click **Preset** tab to enter the preset configuration page.
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.

Note: Up to 256 presets can be configured.

Patrol

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

Purpose:

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:

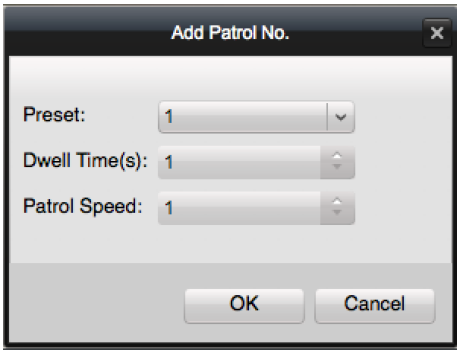
At least 2 presets have to be configured before you configure the patrol.

Steps:

1. Click **Patrol** tab to enter the patrol configuration page.
2. Select a patrol No. from the drop-down list.
3. Click to add the configured presets, and set the dwell time and patrol speed for the preset.

   Notes:

   - The dwell time ranges from 1 to 30s.
   - The patrol speed ranges from 1 to 40.



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.

Note: Up to 32 patrols can be set.

5.8 Other Functions in Live View

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

Digital Zoom

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

Camera Status

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

Synchronization

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

Chapter 6 Remote Playback

Purpose:

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

Before you start:

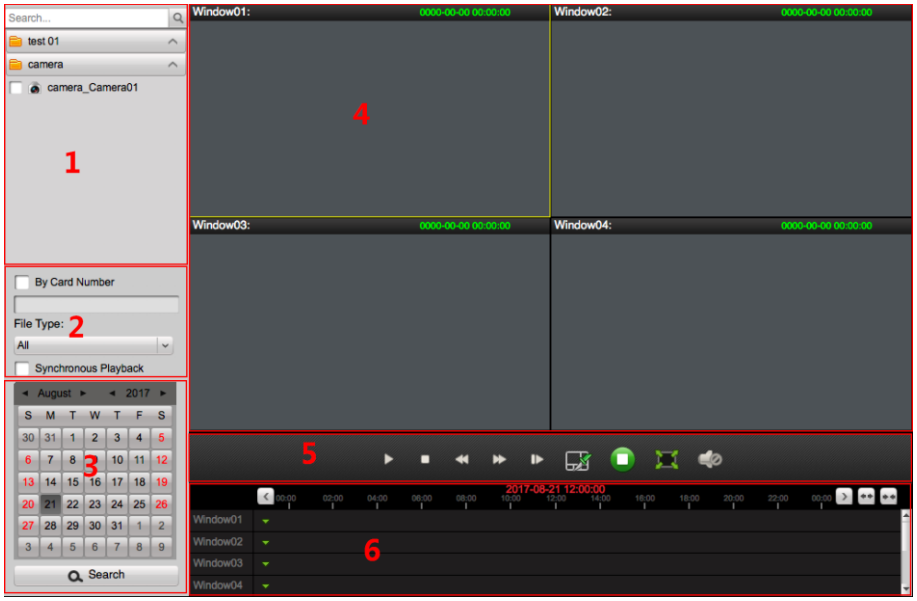
You should set the recording schedule first so that the videos will be recorded and can be played. For setting the recording schedule, refer to *Chapter 4.3 Schedule.*

6.1 Normal Playback

Purpose:

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

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



Remote Playback Page

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

6.1.1 Searching Video Files

Steps:

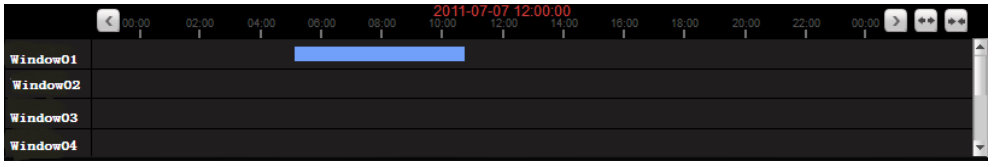
1. Open the Remote Playback page.
2. In the camera list, check to select the cameras for playback.

Note: Up to 16 cameras can be searched simultaneously.

3. In the File Type dropdown list, you can select the file type to narrow down the search scope and search for only the video files for certain types.
4. In the calendar panel, select the date you want to search.
   Note: If there are video files for that camera in that day, the date which has video files will be marked with .
5. Click **Search** to search the video files and the playback will start.
   Or you can select the date in the calendar panel and drag the camera to the display window to play the video files of the single camera.

6.1.2 Playing Video Files

After searching the video files for the normal playback, the playback will start in the display window. The timeline indicates the time duration for the video file.



Click on the timeline to play back the video of the specific time.

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

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

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

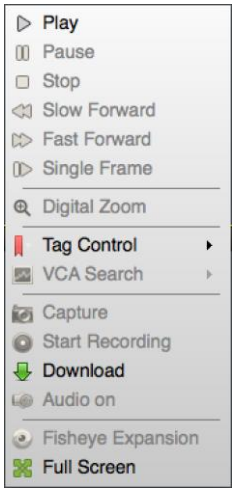
Normal Playback Toolbar:



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

	Pause/Play	Pause/start the playback of the video files of the selected camera.
	Stop	Stop the playback of the selected camera.
	Slow Forward/Fast Forward	Decrease/Increase the play speed of the playback.
	Single Frame	Play back the video files frame by frame. You can also scroll down the mouse wheel to play the video file frame by frame.
	Window Division	Set the window division.
	Stop All	Stop playback of all cameras.
	Full Screen	Display the video playback in full-screen mode. Press *ESC* to exit.
	Volume	Click to turn on/off the audio and adjust the audio volume.

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:

	Play	Start the playback.
	Pause	Pause the playback.
	Stop	Stop the playback.
	Slow Forward	Play the video file at a slower speed.
	Fast Forward	Play the video file at a faster speed.
	Digital Zoom	Enable the digital zoom function. Click again to disable the function.
	Tag Control	You can add tag for the video file to mark the important video point. **Add Default Tag:** Add tag and the default tag name is *TAG*. **Add Custom Tag:** Add the tag and you can customize the tag name. **Edit Tag:** You can view all the added tags, edit the tag name as desired, delete the added tag, and play back the video from the tag.
	VCA Search	Search the VCA event during playback. For details, refer to *Chapter 6.5 VCA Playback*
	Capture	Capture the picture in the playback process.
	Start/Stop Recording	Start/Stop the manual recording. The video file is stored in the PC.
	Download	Download the video files of the camera and the video files are stored in the PC. You can select to download by file or by date.
	Enable/Disable Audio	Click to enable/disable the audio in playback.
	Fisheye Expansion	Enter the fisheye playback mode. For details, please refer to *Chapter 6.6 Fisheye Playback*.
	Full Screen	Display the playback in full-screen mode. Press *Esc* key to exit.

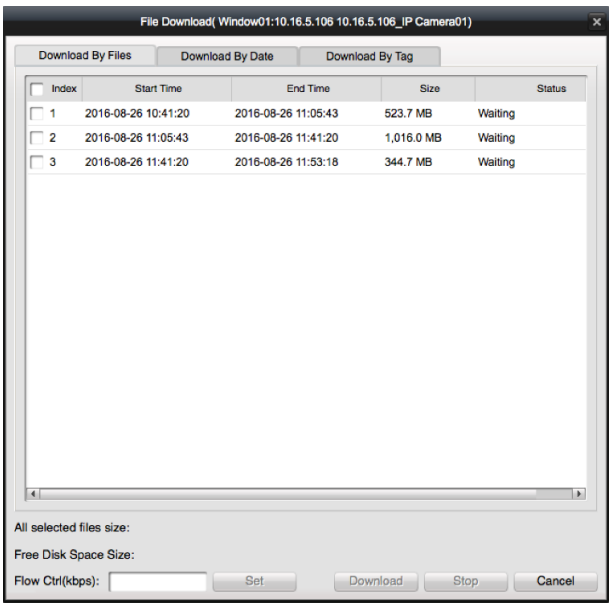
6.1.3 Downloading Video Files

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

Download by Files

Steps:

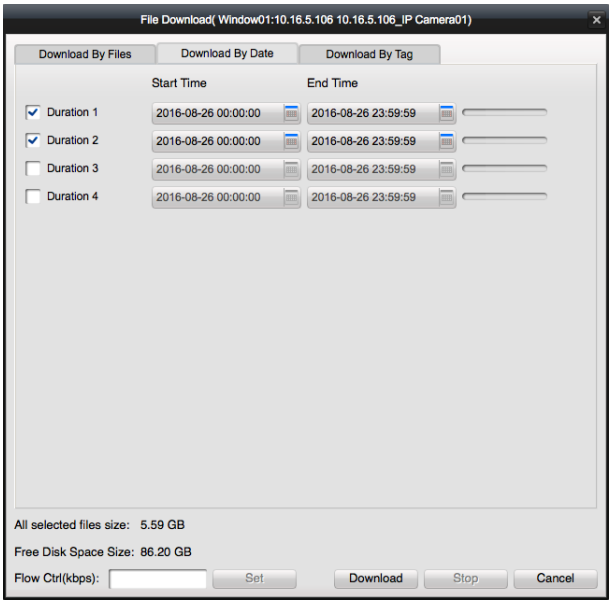
1. Click **Download by Files** tab in the File Download page. You can view the video files information of selected camera.
2. Check the checkbox of the video file and the total size of the selected files will be shown below.
3. Click **Download** to start downloading the file to the local PC.
   You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



Download by Date

Steps:

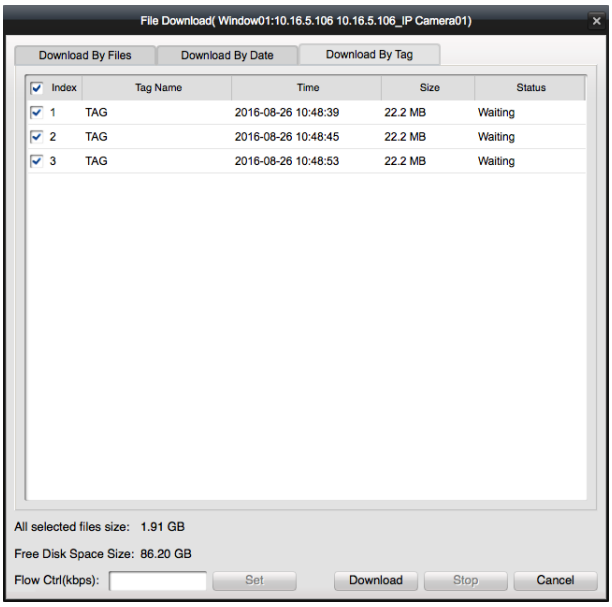
1. Click **Download by Date** tab in the File Download page.
2. Check the checkbox of the time duration to enable it, and click  to set the start and end time.
3. Click **Download** to start downloading the file to the local PC. The progress bar shows the downloading process.
   You can input the flow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



Download by Tag

Steps:

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



6.2 Event Playback

Purpose:

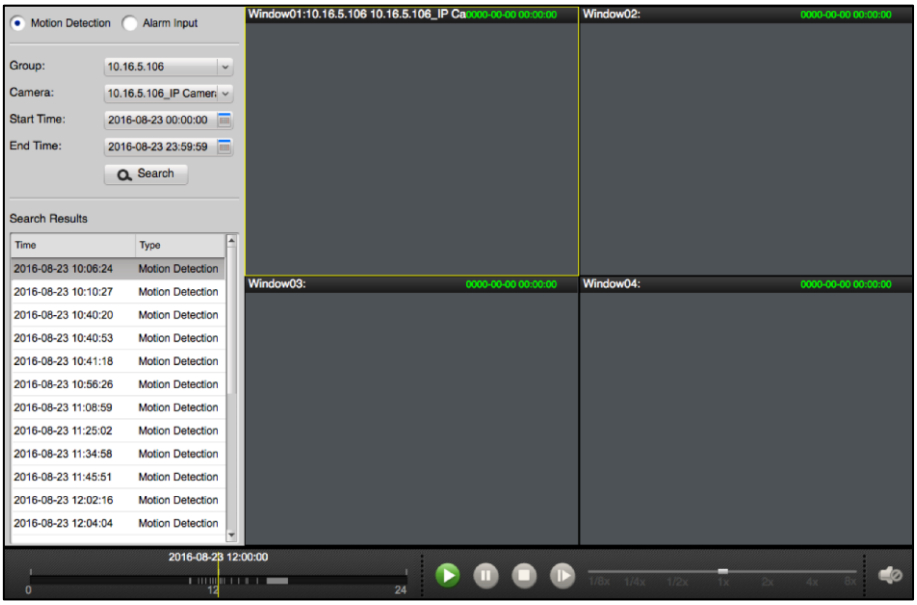
The recordings triggered by event, such as motion detection and alarm input, can be searched for

Event Playback and this function requires the support of the connected device.

Notes:

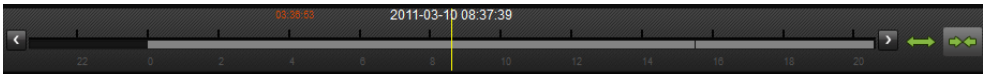
- Event playback function is only available for NVR/DVR which support event recording.
- Please import all the cameras to the group in **Group Management** page before search.
- It is also required to enable continuous recording on all the alarm/motion-triggered channels before event playback.

Click  on the control panel,
or click **View -> Event Search** to enter the Event Search page.



Steps:

1. Select an event type: **Motion Detection** or **Alarm Input**.
2. Select a camera group and select the camera or alarm input in the group to search.
3. Click  to set the start time and end time for the search.
4. Click **Search** to start search.
   All the video files that matching the search conditions will display in the Search Results panel.
5. Click to select a display window and then double-click the video file in the Search Result panel to start playing the file.
   A simple timeline will appear near the playback toolbar. Move the mouse to the simple timeline and a complete timeline will appear as follows:



6. Drag the timeline at the bottom to adjust the playback progress. You can also click  or  to scale up or scale down the timeline bar to choose a more accurate playback time.

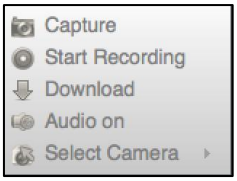
The following icons are available on the playback toolbar in the Event Search page.



	**Play**	Start playing the video file.
	**Pause**	Pause playing the video file.

	Stop	Stop playing all the video files.
	Single Frame Play	Play the video file frame by frame.
1/8x 1/4x 1/2x 1x 2x 4x 8x	**Playback Speed**	Change playback speed
	Volume	Turn off/on the audio in live view and you can adjust the volume.

During playback, you can right-click to get the Event Playback Management menu as below.



	Capture	Capture the picture in the playback process.
	Start/Stop Recording	Start/Stop the manual recording. The video file is stored in the PC.
	Download	Download the video files of the camera and the video files are stored in the PC. You can select to download by file or by date.
	Audio On/Mute	Click to enable/disable the audio in playback.
	Select Camera	Select a recording-triggered channel for playback

6.3 ATM Playback

Purpose:

Search the video files for ATM DVR.

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

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

6.3.1 Searching Video Files for ATM Playback

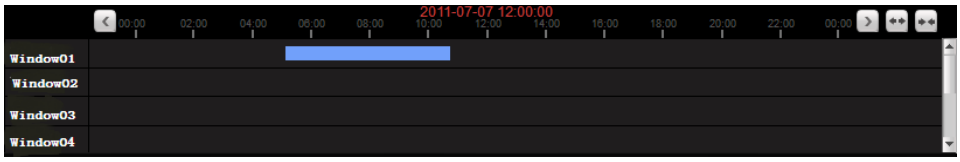
Steps:

1. Open the Remote Playback page.
2. Select the camera of the ATM DVR.
3. Check **By Card Number** checkbox and input the card number that is contained in the ATM information.
4. In the **File Type** dropdown list, you can select the file type to narrow down the search scope and search for only the video files for certain types.
5. In the calendar panel, click to select date you want to search.

   Note: If there are video files for that camera in that day, the date which has video files will be marked with .
6. Click **Search** to search the video files and the playback will start.

6.3.2 Playing Video Files for ATM Playback

After searching the video files for the normal playback, the playback will start in the display window. The timeline indicates the time duration for the video file.



Click on the timeline to play back the video of the specific time.

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

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

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

Please refer to *Chapter 6.1 Normal Playback* for the description of the playback control toolbar and right-click menu. Some icons may not available for ATM playback**.**

6.4 Synchronous Playback

Purpose:

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

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

Steps:

1. Open the Remote Playback page.
2. In the camera list, check to select the cameras for playback.
   Note: At least two cameras are during playback.
3. In the **File Type** dropdown list, you can select the file type to narrow down the search scope and search for only the video files for certain types.
4. Check **Synchronous Playback** checkbox to enable playing the video files synchronously.
   Note: Set the window division in multi-window division so that you can enable this function.
5. In the calendar panel, click to select date you want to search.
6. Click **Search** to search the video files and the camera under playback will start synchronous playback.



6.5 VCA Playback

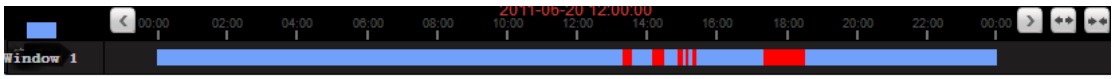
Purpose:

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

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

Steps:

1. Open the Remote Playback page.
2. Select the camera and start the normal playback. Refer to *Chapter 6.1 Normal Playback*.
3. Right-click on the display window and click **VCA Search** to open the VCA Search sub menu.
4. Draw the detection region.
   1) Click **Draw Area**.
   2) Click and move on the playback window to set the grid rectangle as the detection region.
      Or you can click **All Regions** to set all the area shot by the camera as the detection region.
5. In the VCA Search sub menu, set the sensitivity as 1, 2, or 3.
6. (Optional) To delete the drawn region or line, click **Delete Area** to remove it.
7. Click **Search**.
   The VCA events occurred in the defined area will be red marked on the timeline.



8. (Optional) Click **Previous Event** or **Next Event** or view the previous and next event.

6.6 Fisheye Playback

Purpose:

You can play the video files in fisheye expansion mode.

Steps:

1. Open the Remote Playback page.

2. Select the camera and start the normal playback. Refer to *Chapter 6.1 Normal Playback.*
3. Right-click on the video and select **Fisheye Expansion** to enter Fisheye Expansion Mode.
   Note: The mounting type of fisheye expansion in playback is set according to the mounting type in live view.
4. You can select the expanding mode for playback as desired.
   - **Fisheye:** In the Fisheye view mode, the whole wide-angle view of the camera is displayed. This view mode is called Fisheye because it approximates the vision of a fish's convex eye. The lens produces curvilinear images of a large area, while distorting the perspective and angles of objects in the image.
   - **Panorama/Dual-180° Panorama/360° Panorama:** In the Panorama view mode, the distorted fisheye image is transformed to normal perspective image by some calibration methods.
   - **PTZ:** The PTZ view is the close-up view of some defined area in the Fisheye view or Panorama view, and it supports the electronic PTZ function, which is also called e-PTZ.
     Note: Each PTZ view is marked on the Fisheye view and Panorama view with a specific navigation. You can drag the navigation on the Fisheye view or Panorama view to adjust the PTZ view, or drag the PTZ view to adjust the view to the desired angle.



Please refer to *Chapter 6.1 Normal Playback* for the description of the playback control toolbar and right-click menu.

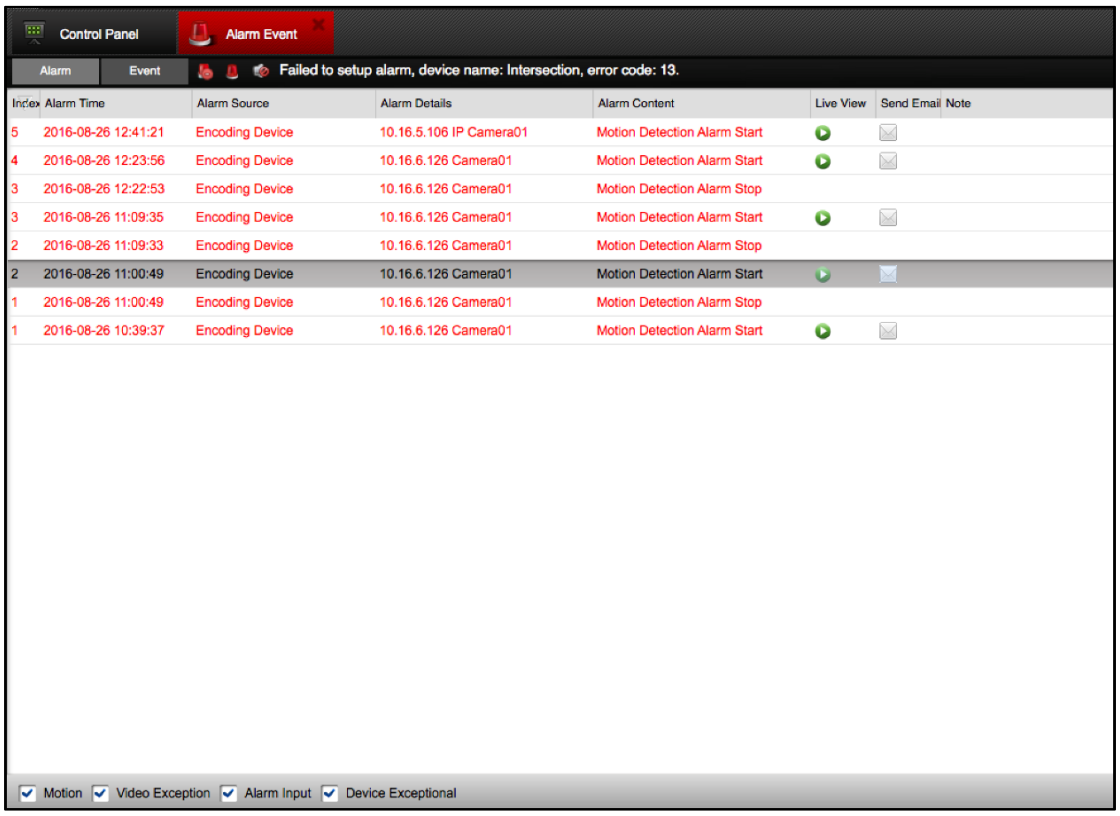
Chapter 7 Event and Alarm Center

The information of recent alarms and events can display in the Event and Alarm Center.

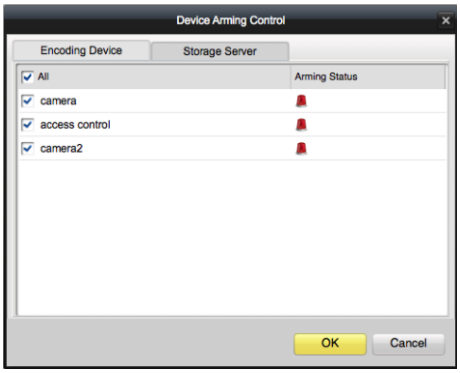
Click in Alarms and Events Toolbar to show the Alarms and Events panel.



You can click to display the Alarm Event page.



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



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

	Clear Info	Clear the information of alarms and events displayed on the list.
	Enable/Disable Alarm Triggered Pop-up Image	Click to enable/disable image pop-up when alarms occur.
	Audio On/Mute	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.

7.1 Viewing Alarms Information

Purpose:

Different alarm types can display on the panel: Motion Detection, Video Exception, Alarm Input, and Device Exception. 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 **Alarm** tab.
2. Check the checkboxes of different alarm types in the bottom of the page.
   When an alarm occurs, the alarm information, including the time, source, details and content will display.
3. Click to get a live view of the alarm triggered camera.



   You can view the live video of the triggered camera. You can click **Previous** or **Next** to view the previous or next alarm information.
4. Click to send an email notification of the alarm to one or more receivers if the email settings are properly configured (*refer to Chapter 10.2.5 Email Settings*).
5. Click under the **Note** column to input the description for the alarm.
6. (Optional) To clear the alarm information, click , or right-click on an alarm log and click **Clear**.

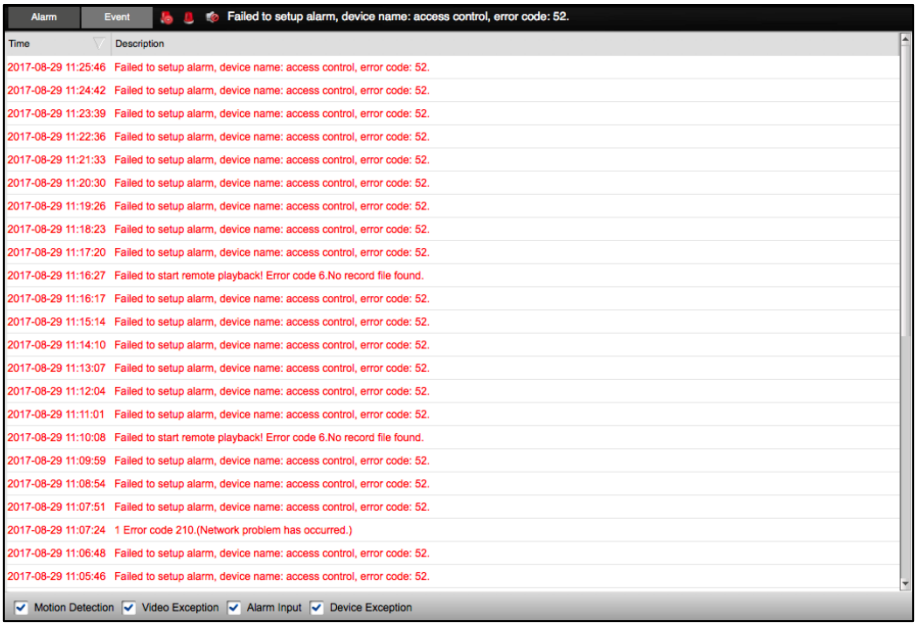
7.2 Viewing Events Information

Purpose:

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

Steps:

1. Click **Event** tab.
2. Check the checkboxes of different alarm types in the bottom of the page.
   The event information, including the time and details will display.
3. (Optional) To clear the event information, click , or right-click on the event log and click **Clear**.



7.3 Viewing Pop-up Alarm Information

After enabling the linkage action of **Notify Surveillance Center** in Camera Settings, and enabling the **Enable Alarm Triggered Pop-up Image** function in Alarm Event page, the alarm image will open when the corresponding event/alarm is triggered.



You can view the live video of the triggered camera.

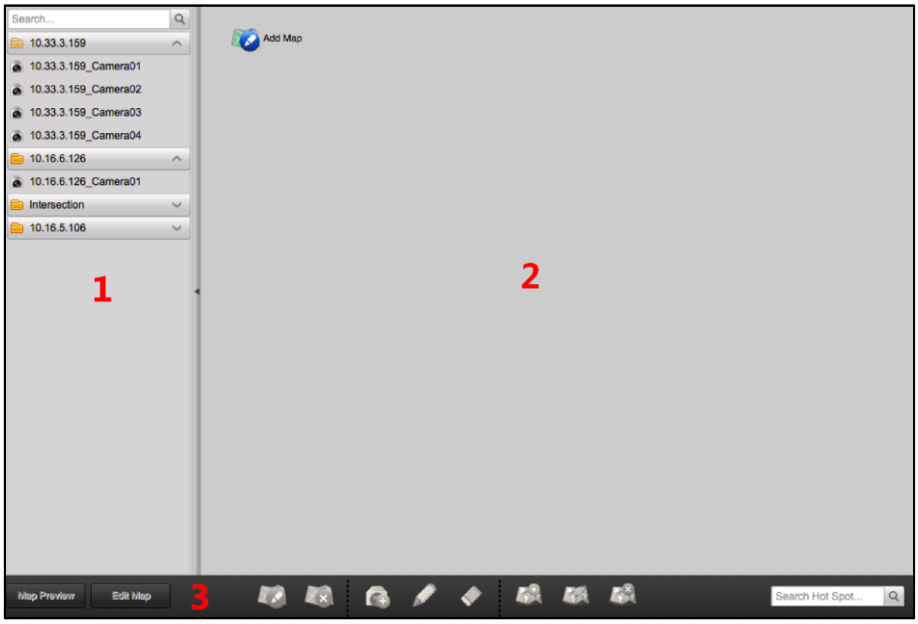
You can click **Previous** or **Next** to view the previous or next alarm information.

Chapter 8 E-map Management

Purpose:

The E-map function gives a visual overview of the locations and distributions of the installed cameras. 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  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

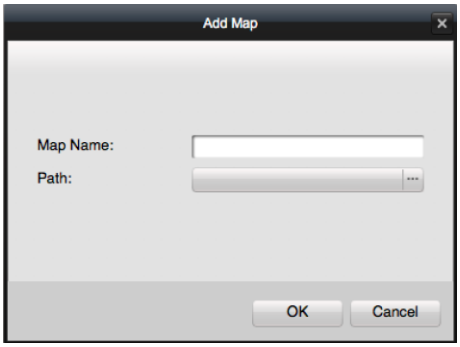
8.1 Adding an E-map

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 **Add Map** in the Map Display Area to open the map adding window.

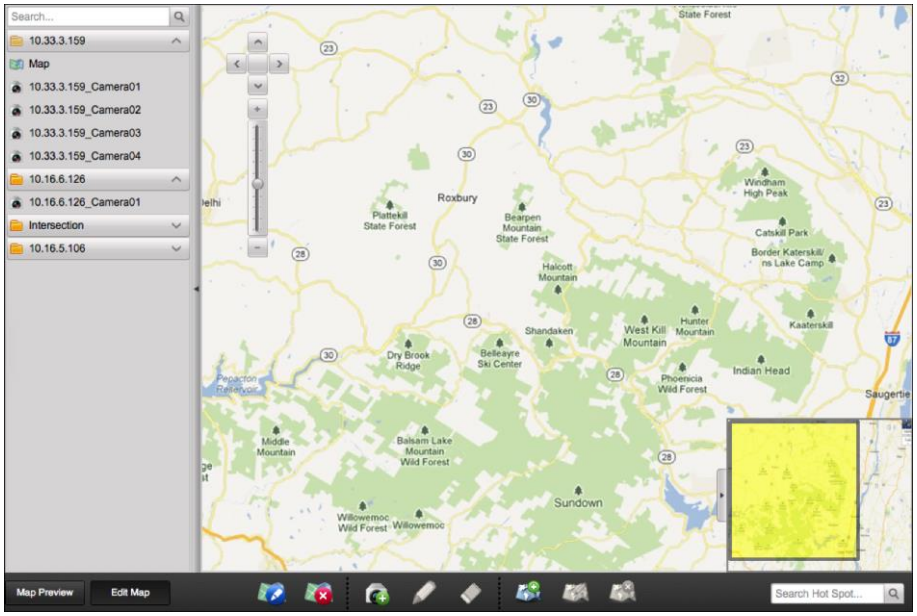


4. Input a descriptive name of the added map as desired.
5. Click ... and select a map file from the local path.
6. Click **OK** to save the settings.

Notes:

- The picture format of the map can only be *.png, *.jpg or *.bmp.
- Only one map can be added to a group.

The added map displays in the Map Display Area. Use the mouse wheel or click + or −, to zoom in or zoom out on the map. You can 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 **Modify 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 Hot Spot	Add a camera as the hot spot on the map.
	Modify Hot Spot	Modify the information of the selected hot spot.
	Delete Hot Spot	Delete the selected hot spot.
	Add Hot Region	Add a map as the hot region on the current map.
	Modify Hot Region	Modify the information of the selected hot region.
	Delete Hot Region	Delete the selected hot region.
	Clear Alarm Info	Clear the alarm information displayed on the map.
	Back to Parent Map	Go back to the parent map.

8.2 The Hot Spot Function

Purpose:

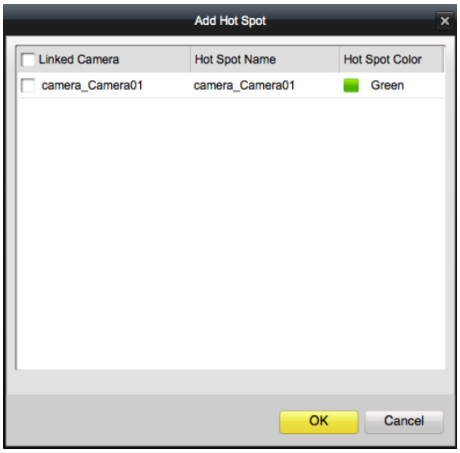
You can add the cameras as hot spots on the map. The hot spots show the locations of the cameras, and you can also get the live view and alarm information of the surveillance scenarios through the hot spots.

8.2.1 Adding Hot Spots

Adding Cameras as Hot Spots

Steps:

1. Click **Edit Map** in the E-map toolbar to enter the map editing mode.
2. Click  in the toolbar to open the Add Hot Spot window.



3. Check the checkboxes to select the cameras to be added.
4. (Optional) Click the Hot Spot Name or Hot Spot Color field to edit the name and color.
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 drag the camera icons to move the hot spots to the desired locations.

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

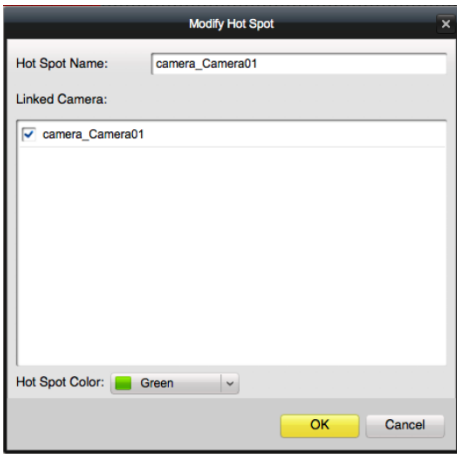
8.2.2 Modifying Hot Spots

Purpose:

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

Steps:

1. Click **Edit Map** in the E-map toolbar to enter the map editing mode.
2. Select the hot spot icon on the map and click  in the toolbar, or 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 window.



3. Edit the hot spot name in the text field and select the color, and the linked camera.
4. Click **OK** to save the new settings.

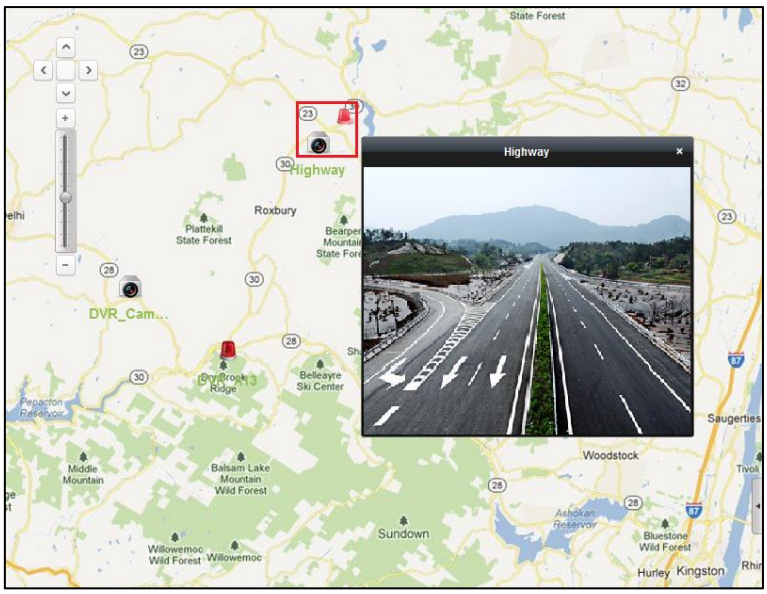
   To delete the hot spot, select the hot spot icon and click  in the toolbar, or right-click the hot spot icon and select **Delete**.

8.2.3 Previewing Hot Spots

Steps:

1. Click **Map Preview** in the E-map toolbar to enter the map preview mode.
2. Double-click the camera hot spots, or right-click it and select **Live View** to start 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 you can check the alarm information, including alarm type and triggering time.

Note: To display the alarm information on the map, the Notify Surveillance Center action needs to be set as the alarm linkage action for the camera. For details, refer to *Chapter 4* Camera Settings.



8.3 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.

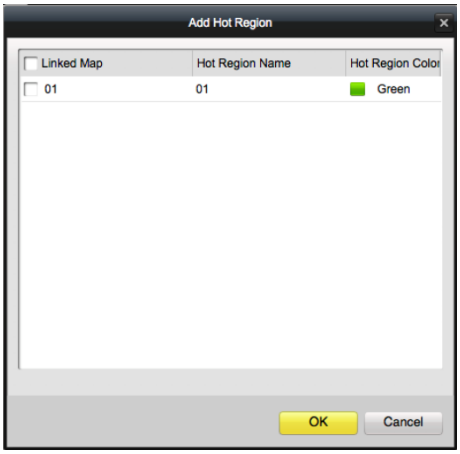
8.3.1 Adding Hot Regions

Before you start:

Add a map to another group.

Steps:

1. Click **Edit Map** in the E-map toolbar to enter the map editing mode.
2. Select an added map as the parent map.
3. Click  in the toolbar to open the Add Hot Region window.



4. Check the checkbox to select the child map to be linked.
5. (Optional) Click the Hot Spot Name or Hot Spot Color field to edit the name and color.
6. Click **OK** to save the settings.
   The child map icons are added on the parent map as the hot regions. You can drag the child map icons to move the hot regions to desired locations.

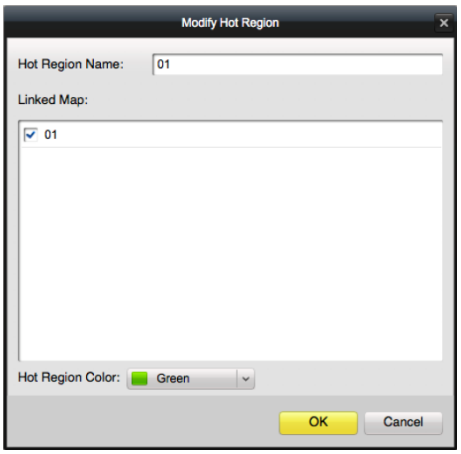
8.3.2 Modifying Hot Regions

Purpose:

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

Steps:

1. Click **Edit Map** in the E-map toolbar to enter the map editing mode.
2. Select the hot region icon on the parent map and click  in the toolbar, or right-click the hot spot icon and select **Modify**, or double-click the hot region icon to open the Modify Hot Region window.



3. Edit the hot region name in the text field and select color, icon and 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**.

8.3.3 Previewing Hot Regions

Steps:

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

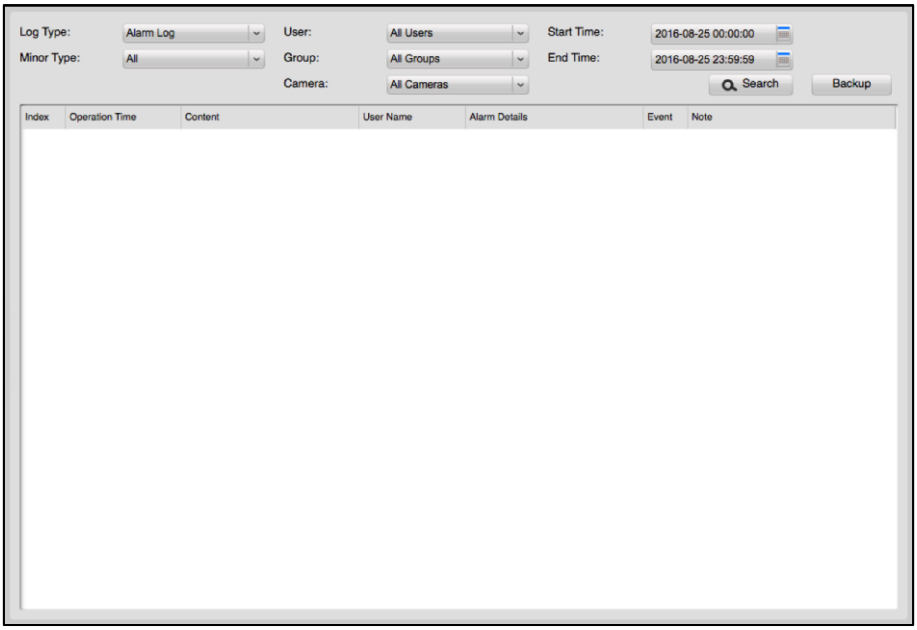
Chapter 9 Log Search

Purpose:

You can search and check the log files of the client software stored on the local PC. Three types of log files are provided: alarm log, operation log, and system log.

- **Operation Log:** The log files of the operations of Guarding Vision Client Software, such as starting live view, starting playback, etc.
- **System Log:** The log files of user login and logout.
- **Alarm Log:** The log files of all the alarms received by the client.

Click  on the control panel to open the Log Search page.



9.1 Searching Log Files

Steps:

1. Open the Local Log Search page.
2. Select the log type as Operation Log, System Log, or Alarm Log.
3. According the log type, select the minor type for the log.
4. Set the user, camera group, and camera for the logs to search.
5. Specify the start time and end time for search
6. Click **Search**.

   The log files between the start time and end time will display on the list.

   You can check the operation time, content 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.

Index	Operation Time	Content	User Name	Server Name	Camera Name	Event
498	2016-08-26 14:58:19	Stop Live View	admin	10.16.6.126	Camera01	
499	2016-08-26 15:11:20	Start Live View	admin	10.16.6.126	Camera01	
500	2016-08-26 15:35:24	Stop Live View	admin	10.16.6.126	Camera01	
501	2016-08-26 15:48:15	Add Map	admin			
502	2016-08-26 15:54:43	Add Map	admin			
503	2016-08-26 15:55:13	Add Hot Region	admin			
504	2016-08-26 15:58:14	Add Hot Spot	admin	10.16.6.126	Camera01	
505	2016-08-26 16:03:39	Add Hot Spot	admin	10.33.3.159	Camera01	
506	2016-08-26 16:03:55	Start Live View	admin	10.33.3.159	Camera01	
507	2016-08-26 16:03:58	Stop Live View	admin	10.33.3.159	Camera01	
508	2016-08-26 16:05:49	Start Live View	admin	10.16.6.126	Camera01	
509	2016-08-26 16:06:07	Stop Live View	admin	10.16.6.126	Camera01	
510	2016-08-26 16:06:27	Add Map	admin			
511	2016-08-26 16:06:30	Add Hot Spot	admin	10.16.5.106	IP Camera01	
512	2016-08-26 16:06:33	Modify Hot Spot	admin	10.16.5.106	IP Camera01	
513	2016-08-26 16:06:50	Add Hot Region	admin			
514	2016-08-26 16:07:12	Start Live View	admin	10.16.5.106	IP Camera01	
515	2016-08-26 16:11:15	Motion Detection Settings	admin	10.16.5.106	IP Camera01	
516	2016-08-26 16:15:24	Stop Live View	admin	10.16.5.106	IP Camera01	
517	2016-08-26 16:16:36	Add Hot Region	admin			
518	2016-08-26 16:24:05	Local Log Search	admin			

9.2 Backing up Log Files

Purpose:

You can export the log files for backup.

Steps:

1. Set the condition and search the log file.
2. Click **Backup** to open the Log Backup window.



3. Click ... and 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.

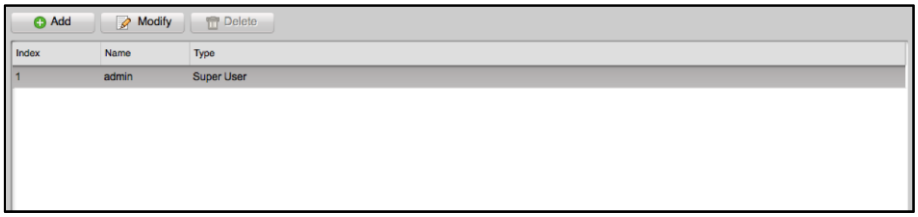
Chapter 10 Account Management and System Configuration

10.1 Account Management

Purpose:

You can add multiple user accounts to the client software, and assign different permissions for different users if needed.

Click  on the control panel, or click **Tool**->**Account Management** to open the Account Management page.

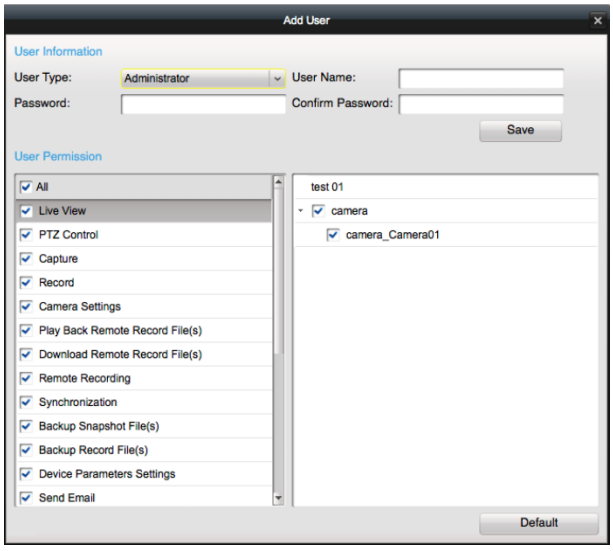


Note: The user account you registered to log in to the software is set as the super user.

10.1.1 Adding the User

Steps:

1. Open the Account Management page.
2. Click **Add** to open the Add User window.



3. Select the user type from the drop-down list.

   Two 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.
   We highly recommend you to use a strong password to ensure your data security.
5. Check the checkboxes to assign the permissions for the created user.
6. (Optional) Click **Default** to restore the default permissions of this user.
7. Click **Save** to save the settings.



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

Note: Up to 50 user accounts can be added for the client software.

10.1.2 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 **Modify**, or double-click the user name to enter the Modify User window.

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

Note: The super user cannot be deleted and only the password of the super user can be edited.

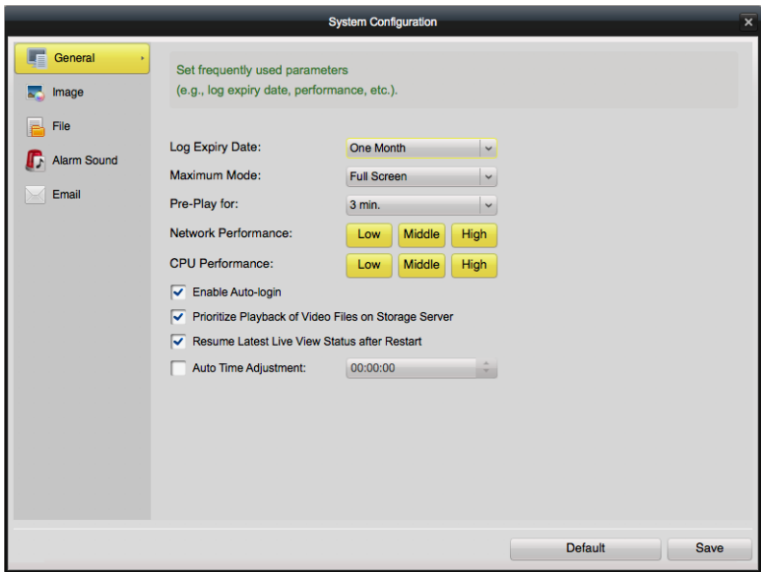
10.2 System Configuration

Purpose:

The general parameters, live view and playback parameters, image parameters, file saving paths, icon of live view and playback toolbar settings, keyboard and joystick shortcuts, alarm sounds, email settings and video intercom parameters can be configured.

Click  on the control panel,

or click **System**->**System Configuration** to open the System Configuration page.



Note: You can click **Default** to restore the defaults of all the system configurations.

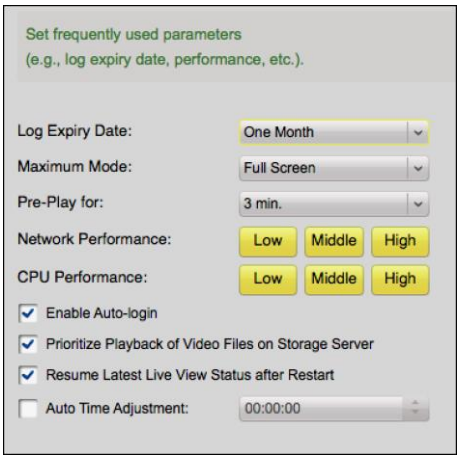
10.2.1 General Settings

Purpose:

You can set the frequently-used parameters, including the log expiry time, network performance, etc.

Steps:

1. Open the System Configuration page.
2. Click **General** tab to enter the General Settings page.



3. Configure the general parameters.

Parameters	Descriptions
Log Expiry Date	The time for keeping the log files, once exceeded, the files will be deleted.
Maximum Mode	The maximum mode of the video in live view or playback. It can be set as Full Screen, 4:3, or 16:9.
Pre-Play for	Set the pre-play time for instant playback. By default, it is 3 minutes.
Network Performance	The current network conditions. It can be set as Low, Middle, or High.
CPU Performance	The CPU performance. It can be set as Low, Middle, or High.
Enable Auto-login	Log into the client software automatically.

Prioritize Playback of Video Files on Storage Server	Play back the video files recorded on the storage server preferentially. Otherwise, play back the video files recorded on the local device.
Resume Latest Live View Status after Restart	Resume the latest live view status after you log in to the client again.
Auto Time Adjustment	Adjust the time automatically at a specified time point.

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

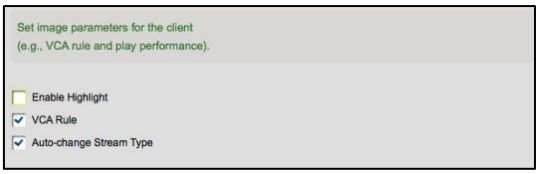
10.2.2 Image Settings

Purpose:

You can set the image parameters for live view and playback, such as highlight, VCA rule, etc.

Steps:

1. Open the System Configuration page.
2. Click **Image** tab to enter the Image Settings page.



3. Configure the image parameters.

Parameters	Descriptions
Enable Highlight	Mark the detected objects with green rectangles in live view and playback.
VCA Rule	Display the VCA rule in the live view.
Auto-change Stream Type	Change the video stream (main stream or sub-stream) automatically in live view according to window division. When the window division is larger than 9, it will switch to sub-stream automatically. Or it remains main stream.

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

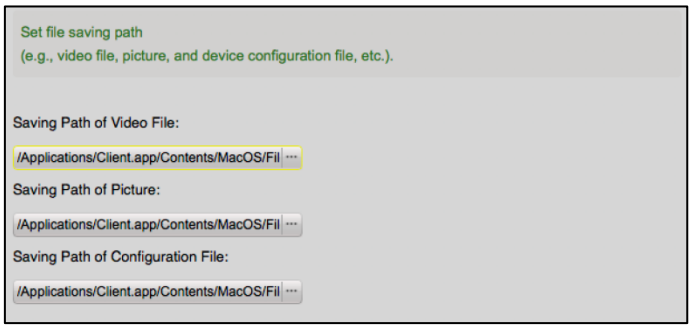
10.2.3 File Saving Path Settings

Purpose:

The video files from manual recording, the captured pictures and the system configuration files are stored on the local PC. You can set the saving paths of these files.

Steps:

1. Open the System Configuration.
2. Click **File** tab to enter the File Saving Path Settings page.



3. Click ··· and select a local path for the files.
4. Click **Save** to save the settings.

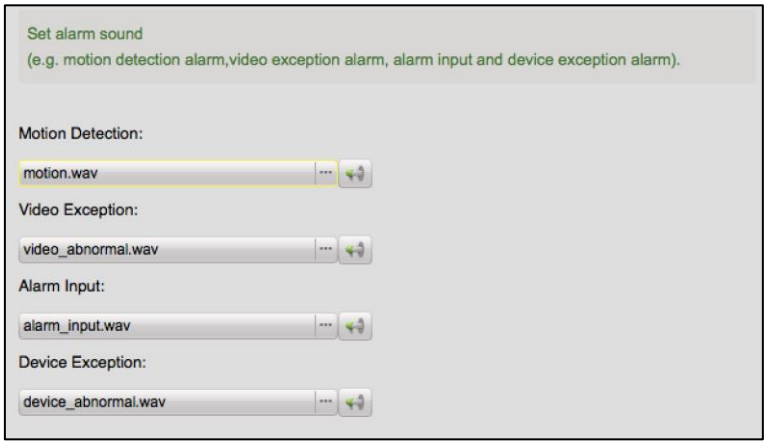
10.2.4 Alarm Sound Settings

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 **Alarm Sound** tab to enter the Alarm Sound Settings page.



3. Select the alarm sound.

   There are four pre-defined alarm sound type in the list. You can click ··· and select the audio files from the local path for different alarms.
4. (Optional) Click 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.

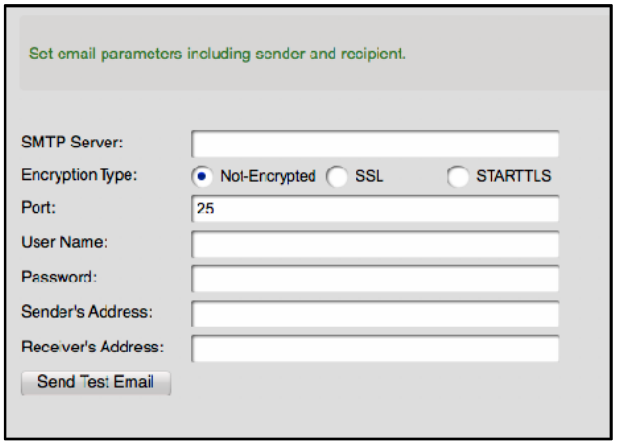
10.2.5 Email Settings

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 **Email** tab to enter the Email Settings page.



3. Input the required information.

   SMTP Server: Input the SMTP Server address.

   Encryption Type: Select the encryption type.

   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's Address: Input the email address of the sender.

   Receiver's Address: Input the email address of the receiver.
4. (Optional) Check **Enable SSL** checkbox to increase the security of email sending.
5. (Optional) Click **Send Test Email** to send an email to the receiver for test.
6. Click **Save** to save the settings.

Appendix

System Requirements

- **Client Requirements**

Recommended	**Processor**	Intel® Core™ i3 3GHz
	Memory	4 GB of RAM
	Video Card	AMD Radeon HD 6470M 256M
High Performance	**Processor**	Intel® Core™ i7 2GHz
	Memory	4 GB of RAM
	Video Card	AMD Radeon HD 6490M 256M

- **Maximum Number of Cameras Viewed per Client under Different System Requirements**

Encoding Format	Resolution	Bit Rate (Mbps)	Frame Rate (fps)	Maximum Number of Cameras Viewed Simultaneously	
				Recommended	High Performance
H.264	720P	1	25	13	18
	1080p	4	25	4	5
	8 MP	16	25	1	2
H.264+	720p	1	25	11	19
	1080p	3	25	5	6
	3 MP	4	25	3	6
H.265	720p	1	25	3	7
	1080p	3	25	1	3
	3 MP	4	25	1	3
H.265+	720p	0.5	25	7	15
	1080p	1	25	3	6
	3 MP	2	25	1	3

Note: The above parameters are estimated and for reference only. Under the same resolution and frame rate, the bitrate of different camera manufacturers may be different. Moreover, the decoding performance may also be different for different manufacturers.

Specifications

Model			Guarding Vision
Database			SQLite
Client	**General**	**User**	Support up to 50 users and one super user
		E-map	Support up to 256 maps
		Encoding Device	Support up to 256 encoding devices
		Decoding Device	Support up to 64 decoding devices

		Group	Support up to 256 groups Support up to 64 channels for each group
		Channel	Support up to 1024 channels for all groups
		Storage Server	Support up to 16 Storage Servers
		Stream Media Server	Support up to 16 Stream Media Servers
	Video	**Live View**	Support up to 64-ch live view at a time
		Playback	Support up to 16-ch playback at a time
		Synchronous Playback	Support up to 16-ch synchronous playback

FAQ

Live View

Question:

How to get the live view for the channels in the remote client?

Answer:

Steps:

1. Add the device into the software device list; please refer to *Chapter 3.1 Adding the Device* for more details.
2. Add cameras into a group. Please refer to *Chapter 3.2 Group Management* for detailed information.
3. Open the Main View page from the Control Panel, and drag the camera from the group list on the left side to the display window. Refer to *Chapter 5.1 Starting and Stopping the Live View.*

Playback

Question: How to search for video files recorded of certain event mode?

Answer:

Steps:

1. Go to **Event Search** page and select an event type: motion or alarm (i.e. alarm input).
2. Choose a camera in the group and specify a start time, then click **Search**.
3. Select a window, and double-click a video file from the search results list to play the video of that channel.

Configuration

Question: How to set encoding parameters in the device configuration?

Answer:

The encoding parameters should be set separately for each camera, and it is configured in Camera Settings setup page. Click  on the control panel to enter the Camera Settings page.

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