# Video Surveillance Management Software NVClient V5

**User Manual** 

Version: V5.0

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## Welcome

Thanks for using the Company's digital video surveillance management software. Please read this document carefully before use. During operation, if you're unable to solve the problems according to the descriptions in this manual, please contact our technical support or product suppliers.

As a user manual describes the use of IP Camera, DVR use is consistent with the IP Camera

Contents of this document will be updated from time to time without notice.

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## Part I Overview

#### 1.1 Software Overview

The video surveillance management software is used for achieving centralized monitoring, storage, management and control of all the front-end network video surveillance equipment (including network video server, network camera, and video decoder) and network video recorder (DVR). This management software can simultaneously display 36 audio and video screens, able to set up, control, and remote upgrade either device;

Support the functions of 1/4/9/16/20/36 screen switching, two-way voice intercom, electronic maps, log retrieval, alarm control, remote retrieval playback and others. It is functionally powerful, user-friendly and easy to operate, especially convenient for the users to realize networking applications of small and medium-sized remote network monitoring systems.

#### 1.2 Main functions of the software

#### The main functions of the video surveillance management software include:

- Maximum support 36-way audio and video channels at the same time
- Able to achieve centralized monitoring, storage, data forwarding, management and control for all the front-end network video surveillance equipment (including network video servers, network cameras and network DVR)
- ➤ Electronic map display
- ➤ Real-time video surveillance preview
- > Two-way voice intercom, voice broadcast
- ➤ Video recording (pre-recording, manual recording, alarm linkage recording, timer recording)
- Provide channel, date video search playback
- Provide time search playback, accurate to the second
- > PTZ control; preset, call, PTZ cruise
- > Support the function of packet switching display, automatic reincarnation display
- Support the alarm function for video loss, video mobile, network abort and front-end sensor trigger
- Log management
- Front-end capture, and back-end capture
- > DDNS (Dynamic domain analysis)
- ➤ Support P2P network
- Support transparent data transmission

### Part II Environment Requirements for Software Running

### 2.1 Operating system configuration

32/64-bit simplified Chinese / English Windows 2000/2003/XP/Vista, Windows 7 and other operating systems.

#### 2.2 Minimum hardware configuration

CPU: Pentium 2.0GHz

Memory: 512 MB

Graphics: TNT2

Sound card: necessary for voice monitoring and two-way intercom

Hard disk: no less than 40G in case of recording images

## 2.3 Recommended hardware configuration

CPU: Intel Core2 Duo E7400 2.8G

Memory: 2G

Graphics: 128bit, 1GB memory

Hard disk: SATA hard disk, over 8M cache, 2000G

## 2.4 Software configuration

IE 7.0 or above versions

DirectX9.0 or above versions

TCP / IP network protocol

## Part III Software Installation and Uninstall

#### 3.1 Software access

Pathway I: put the companion CD-ROM in the box of IP camera or video server into your computer's CD-ROM drive, locate the setup file for the video surveillance management software, copy it to your computer, double click it to run the installation; after installation, find the NVClient software under 「Start menu →All programs → NVClient\_V5』, or directly double-click "NVClient" on the desktop to run the main program.

**Pathway II**: contact our technical support department to transfer the video surveillance management software through remote QQ, MSN, E-mail or any other means.

Pathway III: Visit our official website to download from the Download Center.

#### 3.2 Software installation

Check and double-click the setup file of video surveillance management software, and the dialog box appears

as shown below:

click "OK"



Figure (1)

Select the language you want to use in the installation: English、简体中文、Português、РУССКИЙ,

Follow the prompts and click "Next"

Until the "Finish" button appears, click "Finish" to complete the installation.

#### 3.3 Removing the software

There are two ways to remove the video surveillance management software:

- ➤ On the Start menu, select "Programs" → "NVClient V5" → "Uninstall" to uninstall the software.
- > Open the "Add / Remove Programs" dialog box on the "Control Panel"; in the list of programs, select to delete" NVClient Version "option.

Delete the dialog box shown below:

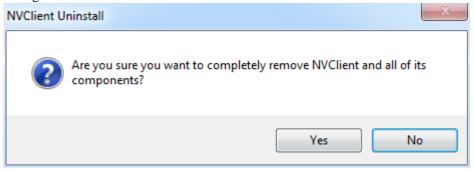


Figure (2)

## 3.4 Software landing

Double-click the video surveillance management software icon NVGlient, then pop-up the Login dialog box of video surveillance management software, as shown below:

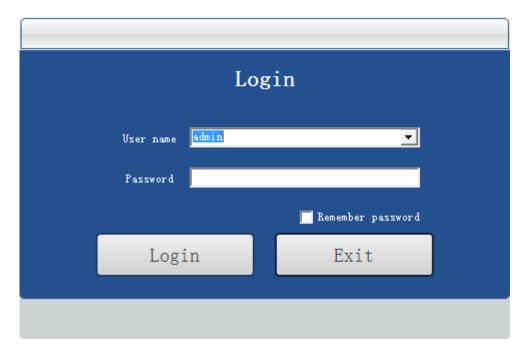


Figure (4)

"User name" default: admin

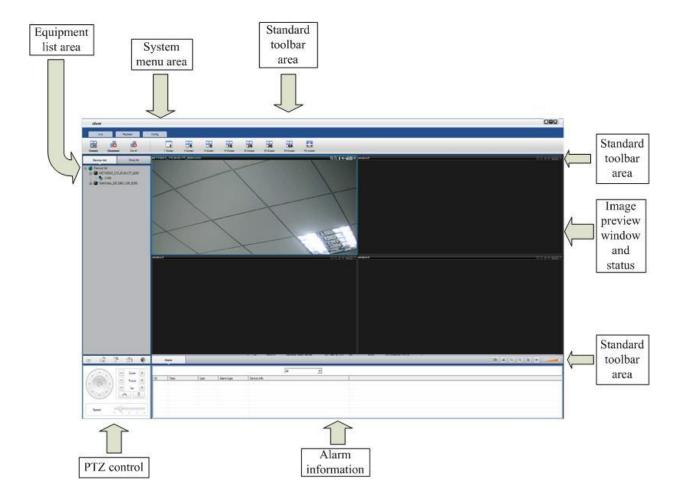
"Password" default: empty

Check the "Remember Password" option; when re-entering the management software, there is no need to re-enter the password to log video surveillance management software interface.

## Part IV: Introduction of the Main Interface

The main interface of management software can only single-screen display up to 36-way image. You can manually switch the pages as needed, or it can be set to automatically switch pages to polling the connected channels.

**Composition of the interface**: System menu area, image preview window and status, standard toolbar area, equipment list area, Close and Minimize composition.

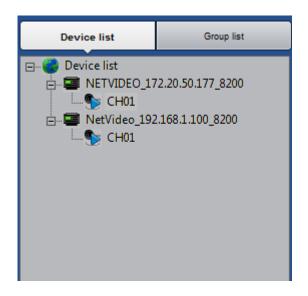


## 4.1 System menu area

The system menu area is described in the following table:

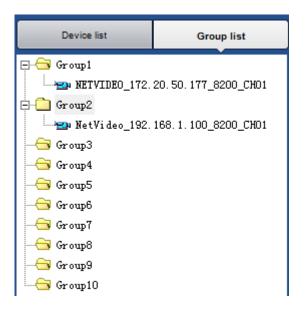
Icon	Text	Function Description
Live	Real-time preview	Click this button to check video real-time preview
Playback	Video playback	Click this button to enter the video playback interface

## 4.2 Device list area



System configuration

This area displays the added device information, as well as preview open or close



This area displays the added packet device information and packet player

## 4.3 Standard toolbar

The standard toolbar is described as following:

Icon	Text	Function Description
Live Connect	Connect the video	Click this button to connect the selected preview device
Disconnect	Turn off the video	Click this button to turn off video preview of the selected device
Dis.All	Turn off all	Click this button to turn off video preview of all devices

1 Screen	1 split screen	Video preview of 1 spilt screen window
4 Screen	4 split screen	Video preview of 4 spilt screen window
9 Screen	9 split screen	Video preview of 9 spilt screen window
16 Soreen	16 split screen	Video preview of 16 spilt screen window
20 20 Soreen	20 split screen	Video preview of 20 spilt screen window
36 36 Screen	36 split screen	Video preview of 36 spilt screen window
Fill screen	Multi-image full-screen	Full-screen preview
Sequence	Sequence	Group Sequence
@ @ <b>∲</b> - <b>(</b> × <b>i</b> i + <b>i</b> ii × )	Window toolbar	Toolbar for all windows, local zoom in, local zoom out, intercom, sound, video, capture, stop preview playing
0	Capture	Click this button to capture the selected image; the captured images will be stored in the specified directory of the computer
<b>8</b>	Video recording	Click this button to turn on / off video
Q	Electronic zoom out	Click this button for electronic zoom out function
Q	Electronic zoom in	Click this button for electronic zoom in function
٥	Voice intercom	Click this button to turn on / off the voice intercom function
<b>■</b> ×	Sound	Two states, Open / Close sound output
	Sound adjustment	Adjust the sound output size
	Window control	Window lock / minimize window / window close
	· · · · · · · · · · · · · · · · · · ·	

## 4.4 Shortcut functional area

# The shortcut functional area contains PTZ control, PTZ preset point, PTZ cruise path and color settings.

Icon	Text	Function Description
$\odot$	Shrink	Close / open the PTZ control
	PTZ control	PTZ control
	Preset point	Set the PTZ preset position, call / remove PTZ preset position
:5	Cruise path	Set the cruise path
•	Color settings	Color settings

## 4.4.1 PTZ control

Icon	Text	Function Description
- Zoom +	Zoom	Enlarge or reduce the video image
- Focus +	Focus	Adjust the focal length of the lens
- Iris +	Aperture	Adjust the size of the aperture
1 0 1	Direction	Control PTZ up, down, left, right, automatic scanning
~	Wiper	Turn on/off wiper function
9	Light	Turn on / off light
Speed	PTZ speed	Adjust the PTZ speed

## 4.4.2 PTZ preset point

Control the PTZ function of the channel you choose in the view screen.

Through the rotation of the direction key to control PTZ camera eight direction, by dragging to control PTZ rotation speed.

Click, PTZ will automatic scanning, the next click will stop the scanning.

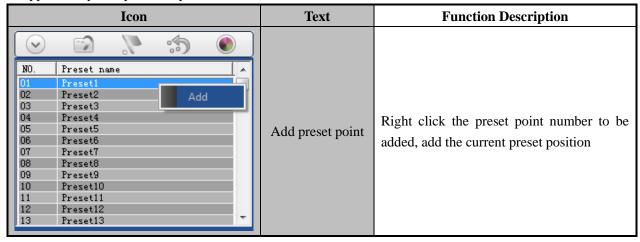
Click the right side of the function keys to adjust Zoom,

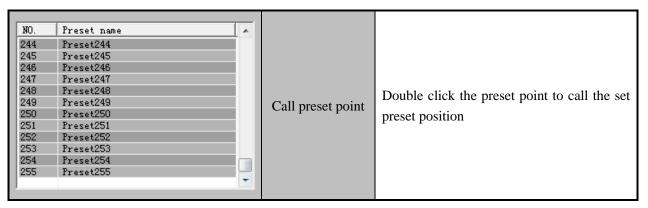


Icon	Text	Function Description
- Zoom +	Zoom	Enlarge or reduce the video image
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- Iris +	Aperture	Adjust the size of the aperture
	Direction	Control PTZ up, down, left, right, automatic scanning
	Wiper	Turn on/off wiper function
9	Light	Turn on / off light
Speed	PTZ speed	Adjust the PTZ speed

## 4.4.3 PTZ preset point setting

Support 255 preset point setup and call.





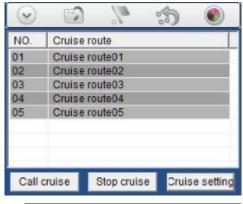
### 4.4.4 Cruise path

Set the cruise path

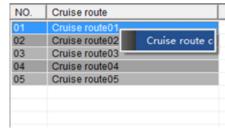
Add 2 or more preset points to the view channel, you can set these preset points in a new cruise path. The interface is shown as in below.

Step 1: Choose the channel which need set cruise path, click

in PTZ control panel, according to cruise path settings window.



Step 2: Right click the cruise route name, click"Cruise route configuration", enter "Cruise route configuration". Double click also can enter "Cruise route configuration".

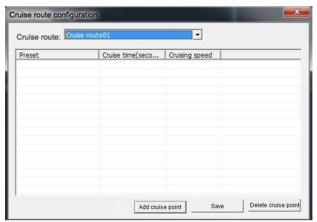


Step 3: Click Call cruise to add cruise point, in the preset point list you can choose the preset point.

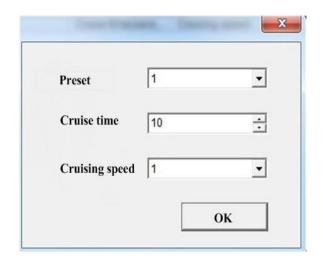
Step 4: Set the preset point cruise time and speed.

Click Save save add cruise point.

Note: the range of cruise time:  $1 \sim 3600$  seconds, cruising speed range of  $1 \sim 7$ .



Step 5: Repeat step 3 and step 4, add to cruise to cruise route list.



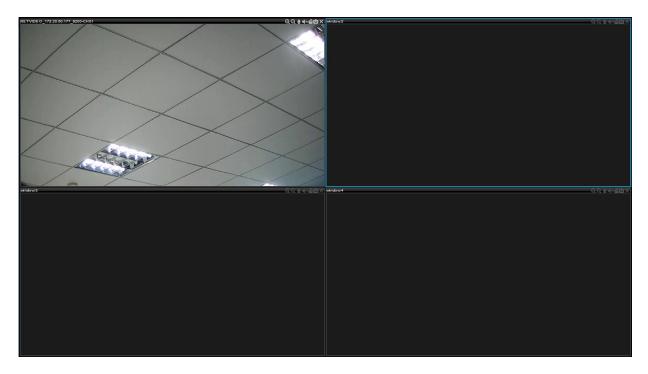
Choose the cruise route you set, click I to call cruise route, click Stop cruise to stop cruise route.

## **4.4.5** Color settings

Icon	Text	Function Description
*	Brightness	Adjust the brightness of the front-end IPC, DVS, DVR video preview
0	Contrast	Adjust the contrast of the front-end IPC, DVS, DVR video preview
•	Saturation	Adjust the saturation of the front-end IPC, DVS, DVR video preview
	Sharpness	Adjust the sharpness of the front-end IPC, DVS, DVR video preview
Default	Default value	Default front-end IPC, DVS, DVR color parameters

Icon	Text	Function Description
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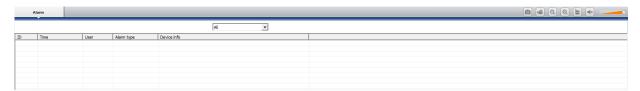
## 4.5 Preview Window

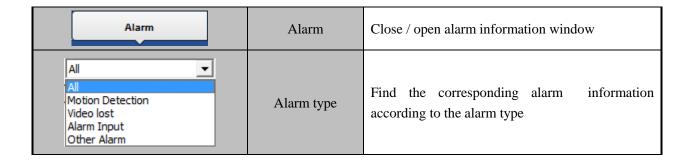


The preview windows can be inter-exchanged.

## 4.6 Alarm information

The alarm information window displays motion detection, video loss, alarm input, other alarms and so on. You can query the relative types of alarm information.





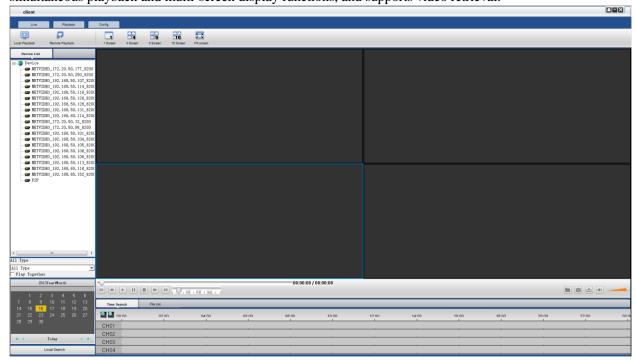
## Part V Detailed Description of the Software Function Set

The client management system features include several functional modules such as video playback, loop switching, packet switching, equipment management, group management, basic configuration, user management, remote setting and lock, which will be discussed one by one as follows.

## 5.1 Video playback

Video playback includes options like local playback, remote playback, type retrieval, time / file list retrieval, playback control, playback tool and multi-screen display.

**Function Description**: Video playback can playback the video files, supports the multi-channel, multi-file, simultaneous playback and multi-screen display functions, and supports video retrieval.



**Function Introduction** 

<sup>&</sup>quot;Local playback": detect disk video files of the local computer and local video playback

<sup>&</sup>quot;Remote playback": test disk video files of the front-end equipment and local video playback

<sup>&</sup>quot;Type Search": retrieve disk video files of the local computer or front-end equipment according to video file types

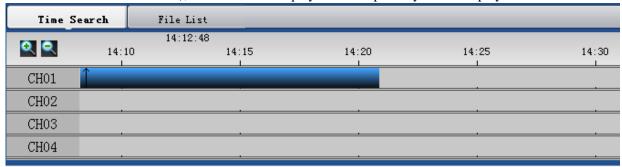
<sup>&</sup>quot;Synchronous playback": search playback and simultaneous playback by time



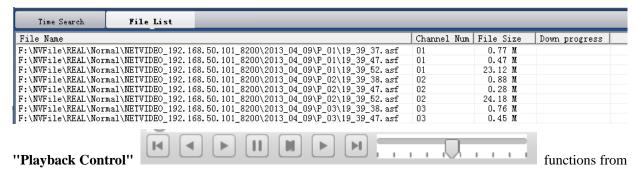
"Time / file list retrieval": search playback by time

zoom in and out by time,

accurate to the second retrieval), select the desired playback time point by mouse to playback video.



Search playback by file, select the desired playback video files to playback video.



left to right: previous file, frame rewind, play, pause, stop, frame forward, next file, playback speed.



video downloads, volume switch and volume size.

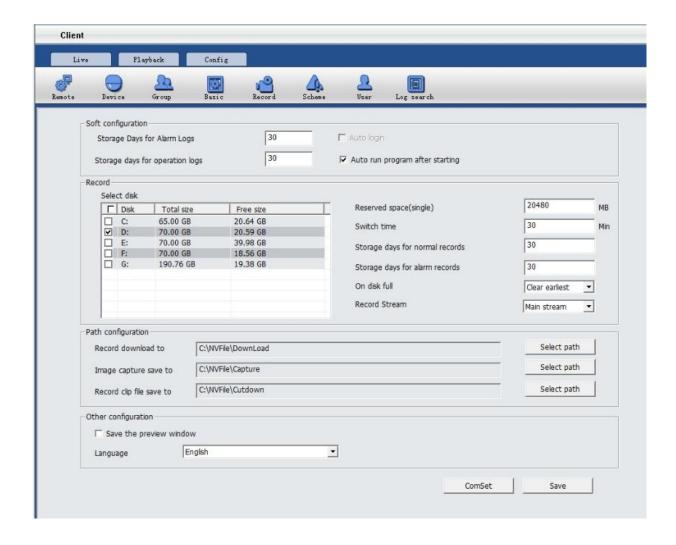
## **5.2 System Configuration**

The system configuration features include options of remote configuration, device management, group management, basic configuration and user management.

## **5.2.1 Basic configuration**

This option is mainly focused on software configuration, video configuration, path configuration, and other configurations, as shown in the following interface.

<sup>&</sup>quot;Multi-screen display": multi-screen playback display at the same time



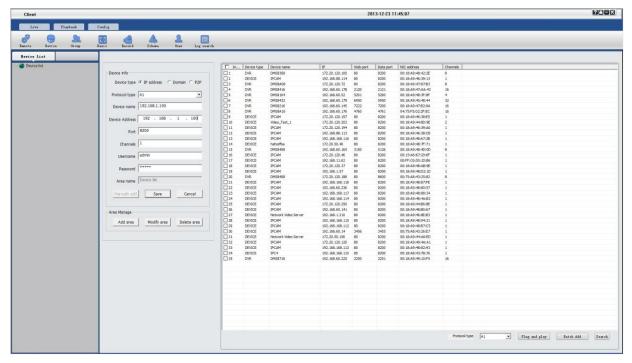
## Basic configuration described in the following table:

Item	Function Description
Alarm and operation log preservation days	This refers to the number of days that client generates alarm information and operation information stored in the local log (default 30 days)
Power on automatically	Select this item for the system to be restarted and automatically run the client program
Video storage path	For example, preserving the recorded videos in C disk, as follows: "check" C disk, the system will create folder <b>NVFile</b> in the root directory of C disk, and all video files and other information concerning the client software will be saved in this directory (saved in C disk by default)
Disk reserved space	This item refers to the certain empty disk space to be reserved during video recording; the default size is 10240MB; the minimum reserved space is 10240MB
Video switching time	This refers to the video package length of time; default 10 minutes to generate a video file; switching time ranges from 10 minutes to 60

	minutes
	This refers to the number of days for normal recording, motion
Preservation days of normal	detection recording and I / O alarm recording preserved in the local (the
recording and alarm recording	ordinary recording default for 30 days, alarm recording is kept for 60
	days by default)
	This refers to the selection mode when the video storage disk is full in
Diele full emenation	files; default in two ways: first, delete the oldest video files for loop
Disk full operation	recording when the disk is full; second, stop recording operation
	immediately after the disk is full
D-4 4	Check this item, re-visit the client, real-time preview the window, and it
Restore the preview state	will be restored to the preview state on exit
Language	Support English, Simplified Chinese, Português, русский switch
Configure	configure the PC COM port for keyboard configuration 323

## **5.2.2 Device management**

This option focuses on the configuration of "device information", "area management" and so on. The interface is as follows:

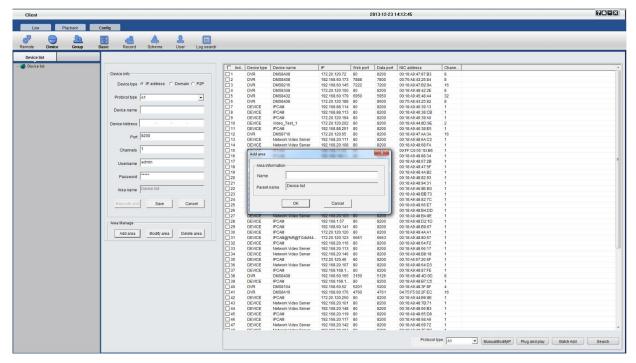


Device management is described in the following table:

	<u> </u>
Item	Function Description
Area add	Add new area information
Area modification	Modify the name of the area has been added
Area deletion	Delete the name of the area has been added

Search	Check "Search" to display the information of all devices in the LAN
Type of device	Network video device and P2P device to be selected
Add a device manually	Add the specified device to the specified device area (double-click the device in the search list to add a device to the designated area)
Bulk add	Select the box in front of the number, add all the searched device information to the specified area

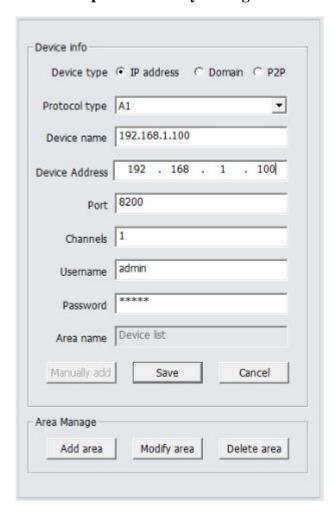
## 5.2.2.1 Steps for adding an area



Step 1: Click the Add button in area management

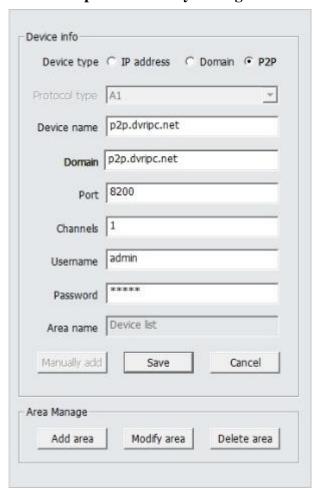
Step 2: Enter the name of the area for preservation

#### 5.2.2.2 Steps for manually adding network video devices



- **Step 1**: Select the IP address of the device type, and then select the protocol type. A1: IPC Type A2: DVR Type A3: TOPSEE protocol A4: ONVIF protocol;
- Step 2: Enter the name of the device (users can input any custom name in either Chinese or English)
- Step 3: Enter the address of the device in the address bar (you can fill in the IP address or domain name)
- **Step 4**: In the port number, set the device's data port number, DVS / IP Camera / default as 8200; this port can be custom, filling in according to the data port in network settings
- **Step 5**: Set the number of channels for front-end DVS / IP Camera (determined according to the channel number of front-end DVS / IP Camera)
- Step 6: Input the user name and password of front-end DVS / IP Camera (determined as the front-end device)
- Step 7: Click "Save" to complete adding the device

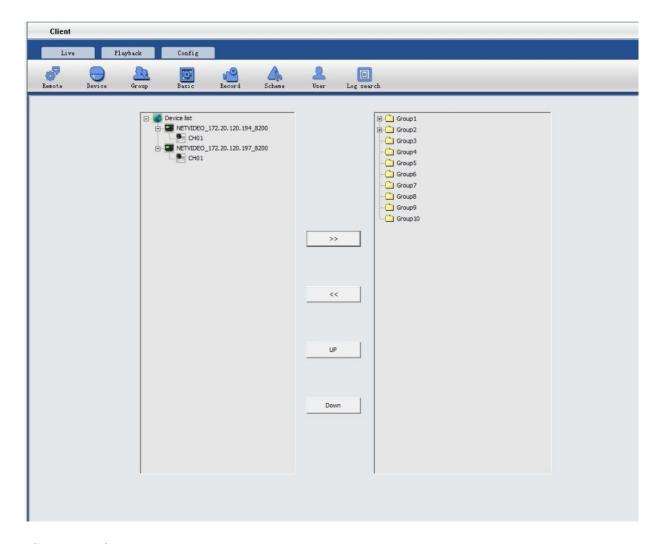
#### 5.2.2.3 Steps for manually adding P2P devices



- **Step 1**: Select the device type P2P
- Step 2: Enter the name of the device (users can input any custom name in either Chinese or English)
- Step 3: Enter the name of the device in P2P device name (user-definable enter any name in English)
- **Step4**: Enter the P2P domain in the domain name, the domain name that is MY-EYE (MY-EYE domain can view the DDNS settings)
- **Step 5**: Set the number of channels for front-end DVS / IP Camera (determined according to the channel number of front-end DVS / IP Camera)
- Step 6: Input the user name and password of front-end DVS / IP Camera (determined as the front-end device)
- Step 7: Click "Save" to complete adding the device

## **5.2.3** Group management

User may set up more than one grouping as needed, grouping or loop switching display the videos; the interface is as follows:

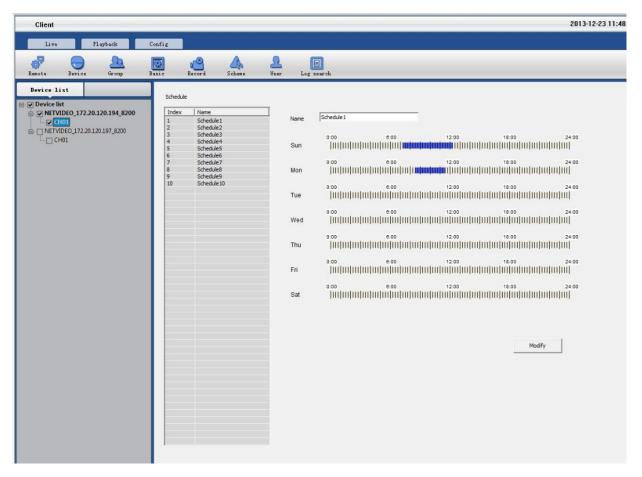


### Setup steps for group management

- Step 1: Select the desired group for adding device; the maximum default of 10 groups
- Step 2: Select a device channel in the device list, click to add a channel (remove the device channel in the selected group by
- **Step 3:** Select group 1, right-click to modify the group information, set the residence time of a group, the number of split-screens, Allow polling and other parameters. The shortest switching time interval is 10S.

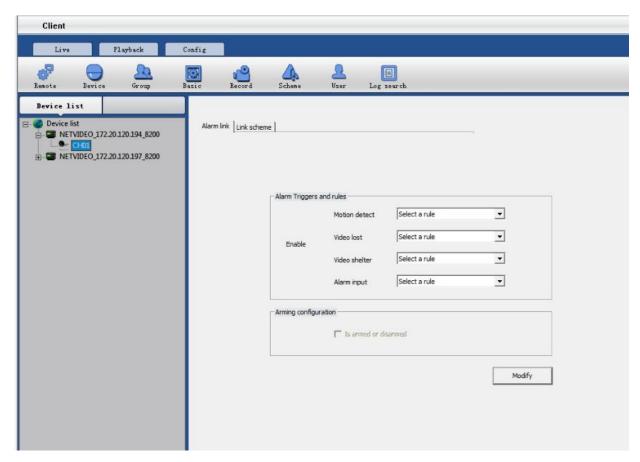
## **5.2.4 Record**

Set the record schedule



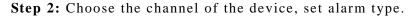
- Step 1: Choose the device you want sent record,  $\checkmark$  this device.
- Step 2: Set the schedule, NVClient support Max. 10 schedule list.
- Step 3: Set the record time in the schedule. (Monday to Sunday)

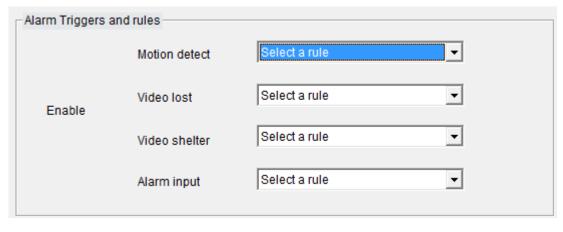
## **5.2.5** Scheme



#### Alarm link set up

Step 1: Choose the device you want set, check

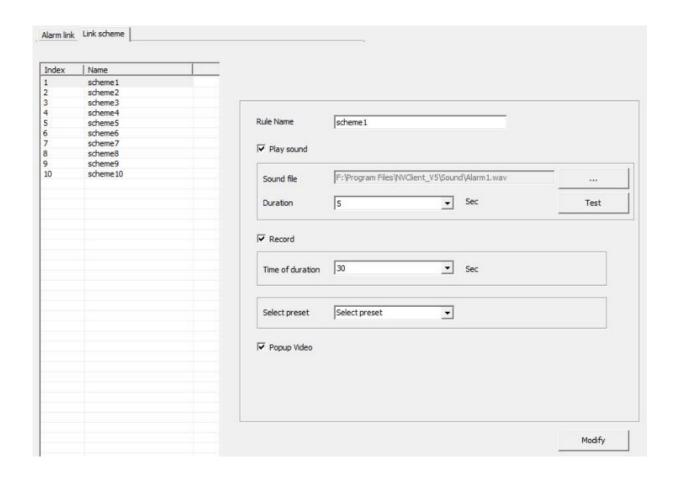




Step 3: Modify and save the setting.

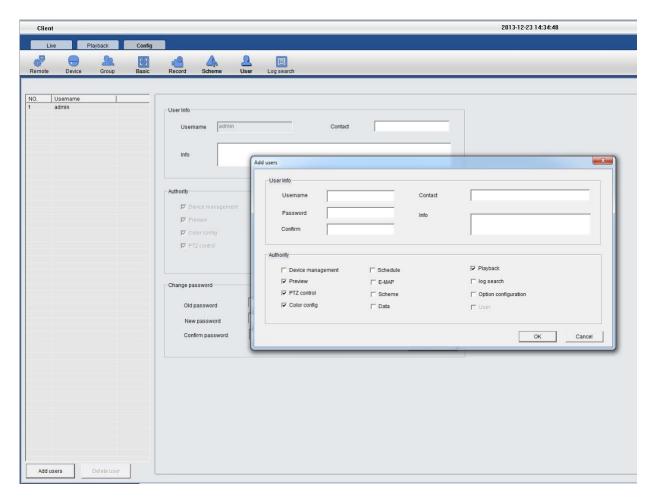
#### Link scheme set up

- Step 1: According to the demand, you can choose scheme 1 to scheme 10.
- Step 2: Set the rule name, play sound, duration, record, PTZ preset point, pop up video.



## 5.2.6 User management

Users can be given different operating authorities according to the actual needs of different users, the interface as follows:



#### Setup steps for a new user:

- Step 1: Select the "Add User" button
- Step 2: Set a new username and new password
- Step 3: Authorize the user specific operating authority
- Step 4: Check the OK button to complete adding a new user. You can visit the client by this username for operation.

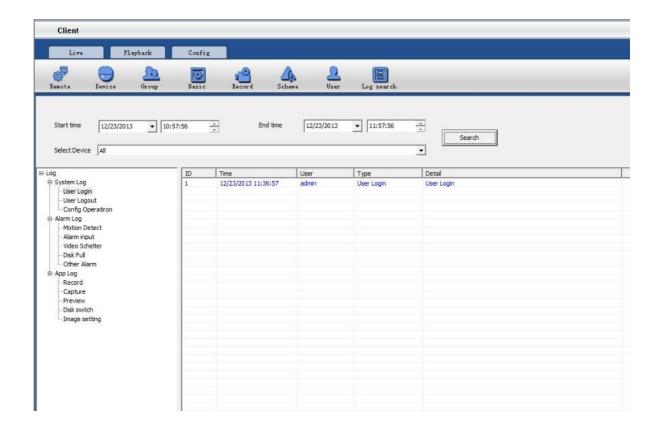
## **5.2.7** Remote setup

Remote setup mainly focuses on the configuration of the parameters for various functions of the front-end equipment.

For detailed configuration, refer to the user manual of video server and DVR.

## 5.2.8 Log Search

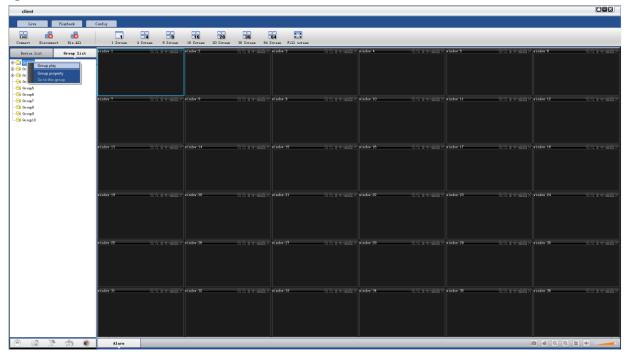
Users can search system log, alarm log and APP log information, as below shown.



## 5.3 Group switching

The user can set up multiple groups as needed for video group display or loop switching display.

For detailed setting procedures of packet switching, please refer to section 5.2.3 --- Group management.



Set up groups, select the group list in the real-time preview screen and right click the group list; the functions

are as follows:

Item	Function Description
Grouping play	Manual grouping play
Grouping attribute	Check the residence time, number of split-screens and other related information of group settings
Polling to this group	Allow polling in the group management, set the polling to this group

## Part VI Video Surveillance Management Software FAQ

## 6.1 Unable to access the network monitoring equipment through the video surveillance management software

Possible cause: no network?

Solution: access the network by computer to test whether the network access is working properly; first troubleshoot the cable failure, network failure caused by computer viruses and firewall blocking until able to Ping between the computers.

Possible cause: IP address is occupied by other devices?

Solution: disconnect the network monitoring device to the network, connect the network monitoring device to the computer separately, and then set the IP address following the correct operation.

Possible cause: the computer's IP address and network equipment are located in different segments or different subnets?

Solution: check IP address, subnet mask and gateway settings.

Possible cause: unknown?

Solution: press the reset button on the server to restore to the factory default state, and then reconnect; default IP address for the DVS / IP Camera system is 192.168.1.100, subnet mask 255.255.255.0.

#### 6.2 Image display color is not normal

Possible cause: poor site light?

Solution: check whether the site ambient light is normal, increase auxiliary light source.

Possible cause: the video frequency system setting is not correct?

Solution: test whether the equipment video format (PAL or NTSC) is correct.

Possible cause: bright color adjustable parameters are not set correctly?

Solution: adjust the color values of the bright parameters depending on the site environment.

#### 6.3 PTZ camera cannot be controlled

Possible cause: the signal cable is not connected or not connected properly?

Solution: reconnect the control line that connects PTZ or dome camera to the server.

Possible causes: not correctly set the corresponding decoder protocol, address or baud rate?

Solution: please carefully check whether the settings are correct.

Possible cause: the control line is too long?

Solution: bold the control line.

Possible cause: the equipment power is not enough?

Solution: use the standard power adapter to increase power.

#### 6.4 No sound while monitoring

Possible cause: no audio input device connected?

Solution: check the audio connections.

Possible cause: the audio option of the front-end device is not open?

Solution: check the audio parameter settings of the front-end equipment to see if the audio is open.

#### 6.5 Audio ineffective

Possible cause: when the audio sounds to have a lot of cacophony and serious sound distortion, please check whether the input signal level is inputted from the line. Most of the time when the input signal is not inputted from the line (such as a zoom back microphone), the server does not match the input level, resulting in saturation distortion.

Solution: use the appropriate line input in accordance with the acceptable range of the video server.

## **Part VII Factors that Affect System Performance**

When you build your system, you must consider the overall system performance, the factors that affect your system, and how to set up your system to achieve optimal performance. The bandwidth issues are usually issues to consider, namely, how to set the bit rate, and other issues such as: frame rate issues; when the video surveillance management software is connected too much, it will affect the frame rate of the server.

The followings are some general factors for us to consider in the construction of the system, which may affect the server efficiency:

1. First is the problem of your network bandwidth. It is usually OK for the LAN, but if it is WAN or any private network, we must consider the network upload bandwidth. If the upload bandwidth is narrow, such as ceiling 512kbps, you would rather not to set the server output stream over 512kbps, otherwise it will lead to the phenomenon of audio or video interrupt.

2. For the ADSL to be stressed, we usually concern about the downstream bandwidth of ADSL, but when we use the video server, it is the upstream bandwidth to be used. At this time we should concern about its upstream bandwidth when designing system, such as: for general ADSL2M, the downstream bandwidth is about 1.5Mbps, but its upstream bandwidth is only 512Kkbps or less. Therefore, the network upstream bandwidth is what we should be concerned with.

- 3. About how to set the image parameters according to the network, please refer to the image settings of video server and DVR user manual.
- 4. Too much video surveillance management software simultaneously watching the images of the same video server image will affect the performance of the server, resulting that the video frame rate drops. Therefore, we recommend the pathways simultaneously connected to the video server and open the videos of not exceeding 9.
- 5. Capture function provided by the video server applies the means of front snapping pictures. Therefore too frequent capture will affect the performance of the server, resulting that the video frame rate drops.
- 6. Heavy network load will affect the performance of the system, probably resulting in the phenomenon of audio and video interrupt.
- 7. Not enough CPU performance for the video surveillance management software host can also lead to the phenomenon of audio and video interrupt.