Video Surveillance Management Software
NVClient V6

User Manual

Version: V6.1
Update Date: 2016/10/10

Preface

Thank you for using the company's products, please read this manual carefully before using, have any questions please contact us

Statement

- We will according to product function enhancement or change and update the contents of this manual, and will improve and update regularly the hardware and software products described in this manual. Updates will join in the new version of this manual, without prior notice.

- The content of this manual is only for the user to provide a reference guide, does not guarantee the kind of complete agreement, please prevail in kind.

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

Sign contract

The following symbols may arise in the article, meaning they are as follows.

Note: said there are potential risks, if you ignore these text, may lead to wrong or unpredictable results

Contents

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 hard disk video recorder (NVR) and hard disk 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
- For front end all network video monitoring equipment (including network video server, network cameras, DVR and NVR) for centralized monitoring, storage, data forwarding, management and control
- 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
- 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

Microsoft Windows XP/Vista / 7/8/10 (32/64 bit operating system in both English,简体中文, Português ,русский,繁體中文)

2.2 Minimum hardware configuration

CPU: 2.20 GHZ 32-bit or 64-bit processors

Memory: 2 GB or more

Graphics: 256M or more

Hard disk: 20GB or more(free)

2.3 Recommended hardware configuration

CPU: 3.10GHz 32-bit or 64-bit processors

Memory: 4GB or more

Graphics: 1024MB or more

Hard disk: 100GB or more(free)

2.4 Software configuration

IE8 or higher version of the browser

DirectX9.0 or above versions

TCP / IP network protocol

⚠ Preview the multi-channel video or high resolution video at the same time when need higher hardware configuration

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_V6』, 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:

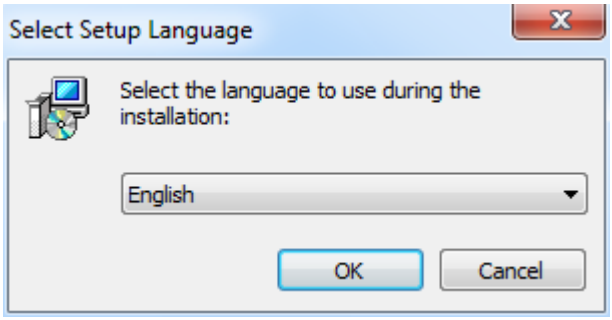


Figure (1)

Select the language you want to use in the installation: Automatically match the current language of the operating system, Supper: English,简体中文,Português,русский,繁體中文.

Follow the prompts and click "Next"

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

3.3 uninstall the software

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

- On the Start menu, select "**Programs" → "NVClient_V6" → "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 is will pop up as shown in the figure below dialog box, select "yes" will uninstall the software:

:

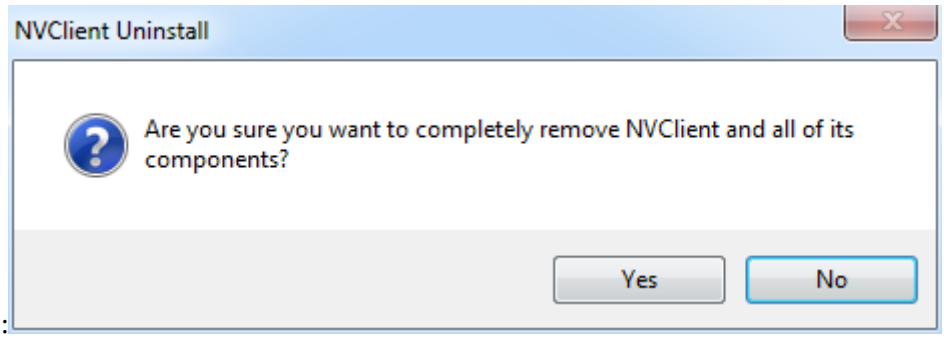


Figure (2)

3.4 Software landing

Double-click the video surveillance management software icon 

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

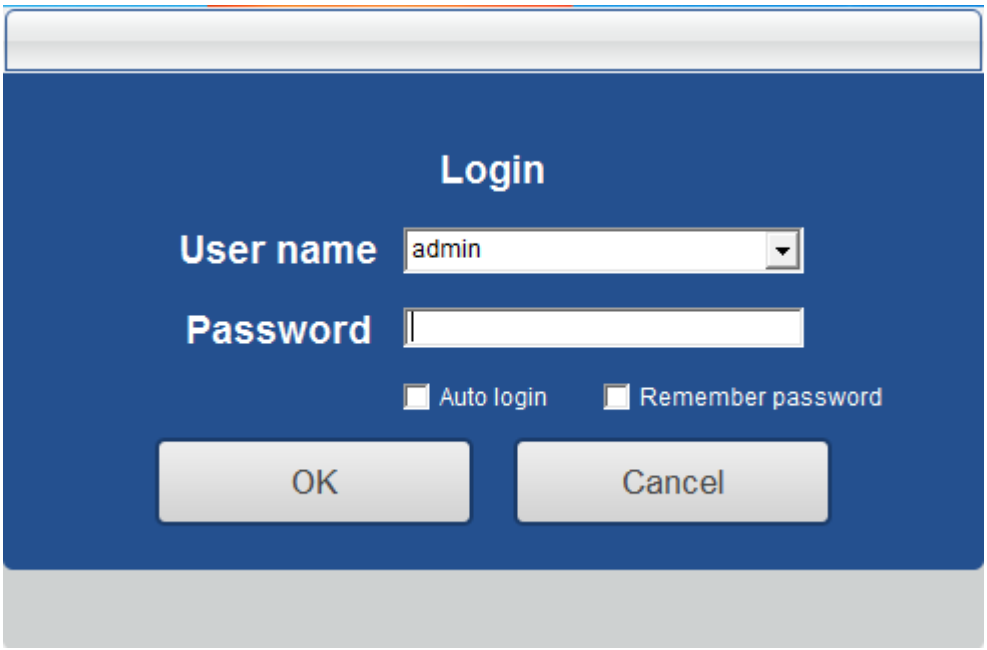


Figure (4)

"User name" default: admin

"Password" default: empty

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

"Auto login" Checked, run the client will automatically log in.

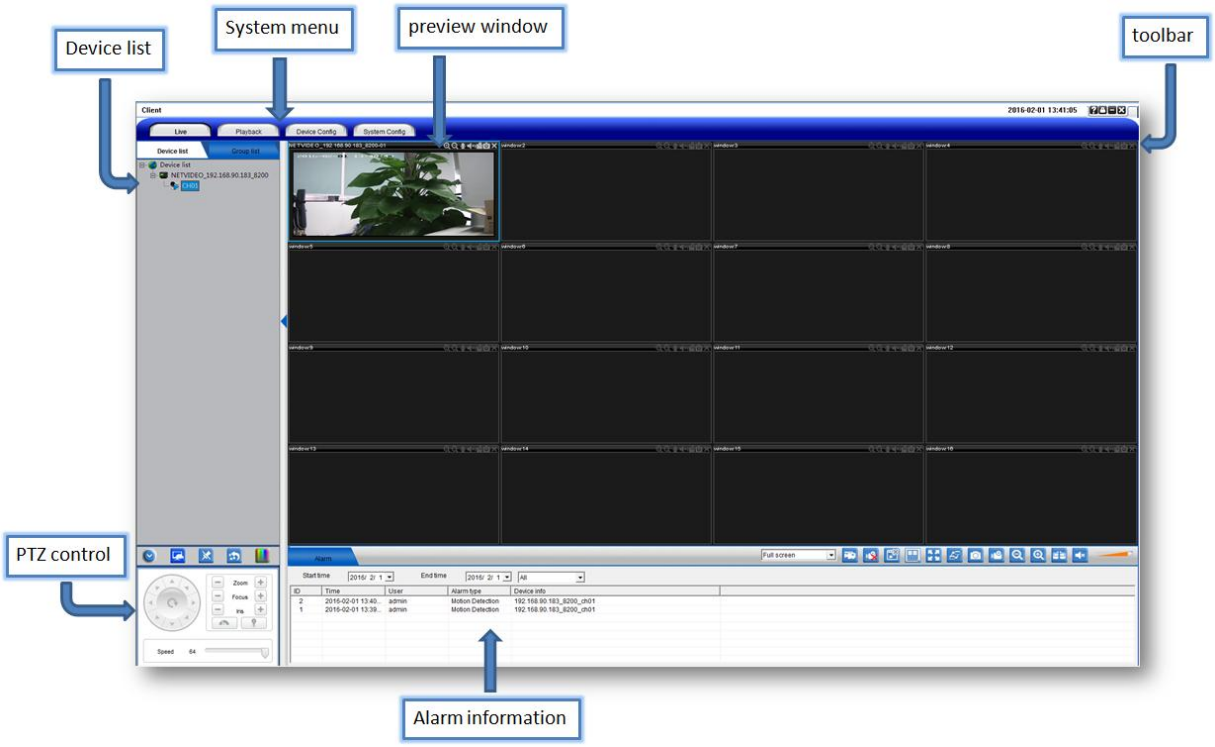
"Auto login" Cooperate with "boot automatically run" can realize boot automatically

Note: the user name cannot contain ~, @, #, $, $,!, (), -, +, = {}, symbols, etc

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.

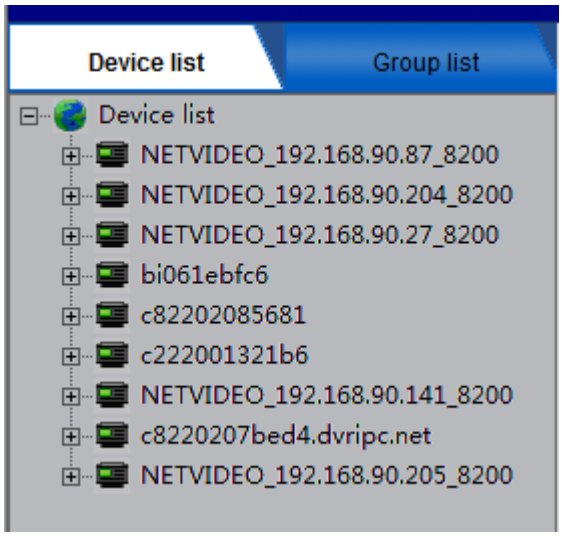


4.1 System menu area

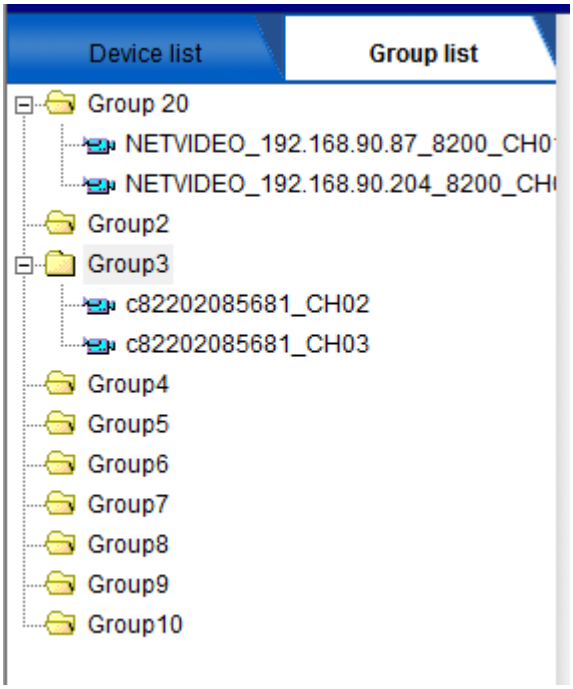
The system menu area is described in the following table:

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
Device Config	Device Config	Click this button to enter Device Configuration interface
System Config	System configuration	Click this button to enter the system configuration interface

4.2 Device list area



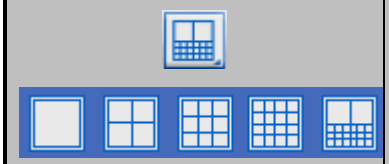
This area displays the added device information, as well as preview open or close



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
	Connect the video	Click this button to connect the selected preview device
	Turn off the video	Click this button to turn off video preview of the selected device
	Turn off all	Click this button to turn off video preview of all devices
	Display windows	1,4,9,16,20,36 display windows
	Full Screen	Full Screen live

	Sequence	Group Sequence
	Window toolbar	Toolbar for all windows, local zoom in, local zoom out, intercom, sound, video, capture, stop preview playing
	Capture	Click this button to capture the selected image; the captured images will be stored in the specified directory of the computer
	Video recording	Click this button to turn on / off video
	Electronic zoom out	Click this button for electronic zoom out function
	Electronic zoom in	Click this button for electronic zoom in function
	Voice intercom	Click this button to turn on / off the voice intercom function
	Sound	Two states, Open / Close sound output
	Sound adjustment	Adjust the sound output size
	Window control	Imprint / Window lock / minimize window / window close

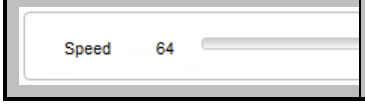
4.4 Shortcut functional area

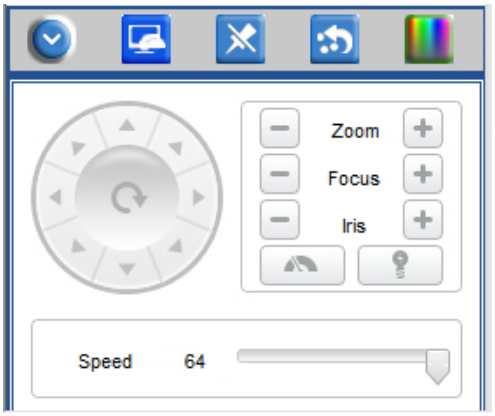
The shortcut functional area contains PTZ control, PTZ preset point, PTZ cruise path and color settings.

Icon	Text	Function Description
	Shrink	Hide/show yuntai control area
	PTZ control	Control yuntai rotation direction
	Preset point	Set the PTZ preset position, call / remove PTZ preset position
	Cruise path	Set the cruise path, call/stop the cruise
	Color settings	Set up separately display colors

4.4.1 PTZ control

Icon	Text	Function Description
	Zoom	Enlarge or reduce the video image
	Focus	Adjust the focal length of the lens

	Aperture	Adjust the size of the aperture
	Direction	Control PTZ up, down, left, right, automatic scanning
	Wiper	Turn on/off wiper function
	Light	Turn on / off light
	PTZ speed	Adjust the PTZ speed



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.

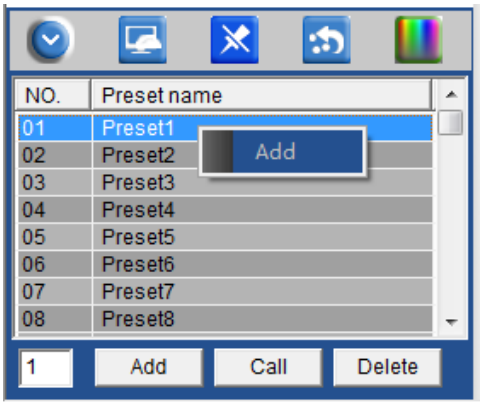
Click  , PTZ will automatic scanning, the next click will stop the scanning.

Click the right side of the function keys to adjust Zoom, Focus and Iris.

The software also provides another kind of PTZ control - the window PTZ control. The user can move the mouse to the current channel video peripheral up and down the left and right direction, the mouse pointer will change to the direction of the shape, you can achieve control of the head up and down direction.

4.4.2 PTZ preset point setting

Support 255 preset point setup and call.



Click  the PTZ control panel button to enter the preset edit window.

Select the video window for presetting, and move the PTZ to the desired position .Right click the preset point number to be added, add the current preset position.

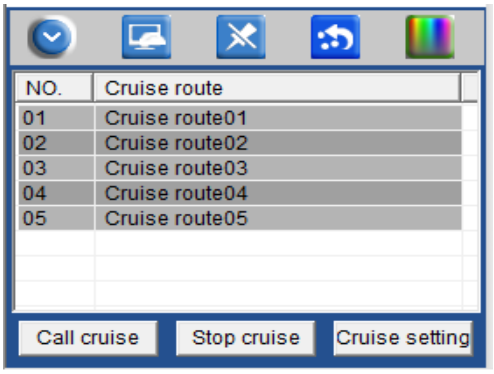
Double click the preset point to call the set preset position.

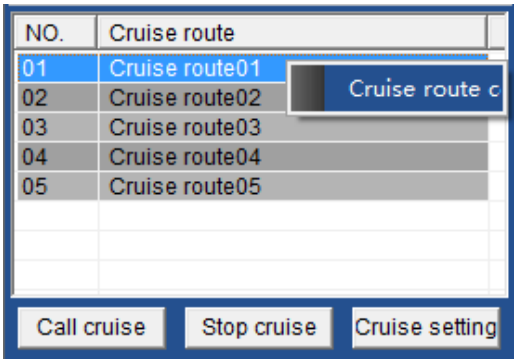
Enter the preset point number, you can add, modify and delete operations.

4.4.3 PTZ Cruise route

Cruise route Editing

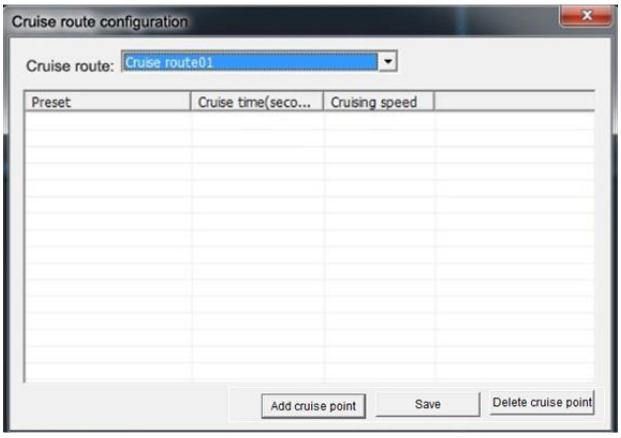
Add 2 or more preset points to the view channel, you can set these preset points in a new cruise path. The interface is shown as in below.

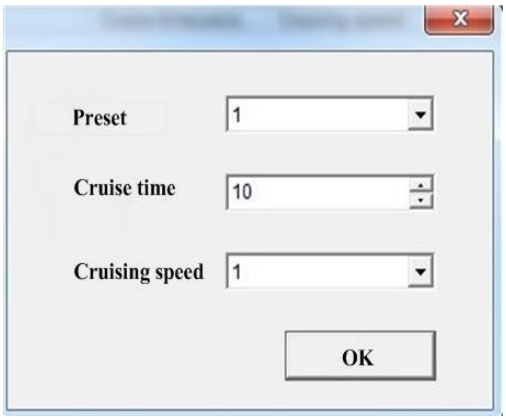




Step 1: Choose the channel which need set cruise path, click  in PTZ control panel, according to cruise path settings window.

Step 2: choose to cruise after click the following path Cruise setting or right-click to choose "Settings" cruising path, enter "cruise path Settings" dialog box.Double-click on the cruise route list also





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.

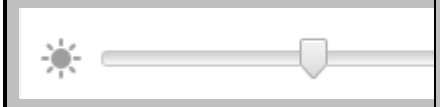
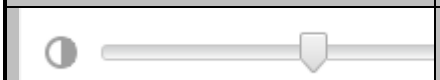
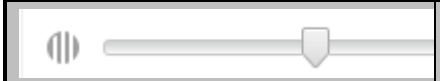
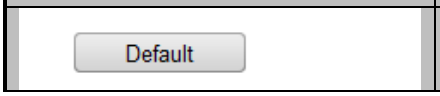
Note: the range of cruise time: 1 ~ 160 seconds, cruising speed range of 1 ~ 7.

Cruise route calls and stop calls

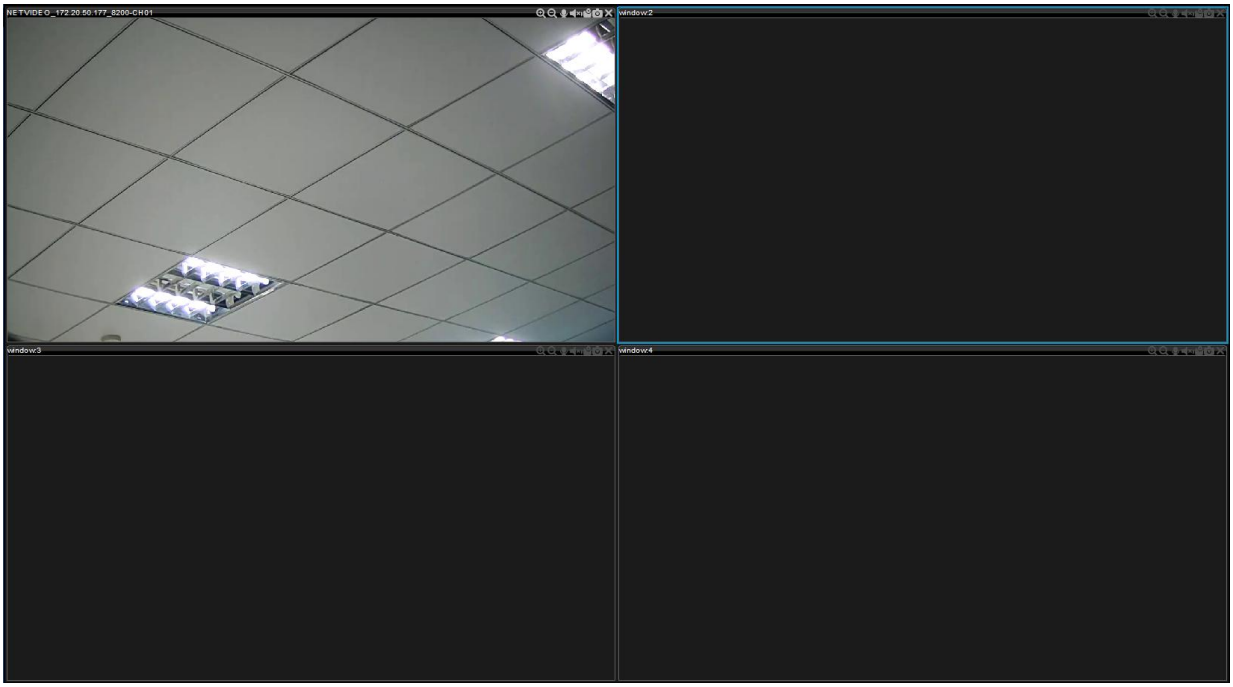
Choose the cruise route you set, click ll the cruise ro to call cruise route.

click Stop cruise to stop cruise route.

4.4.4 Color settings

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

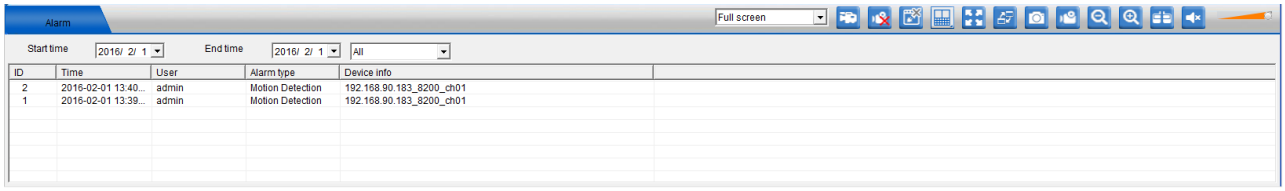
4.5 Preview Window

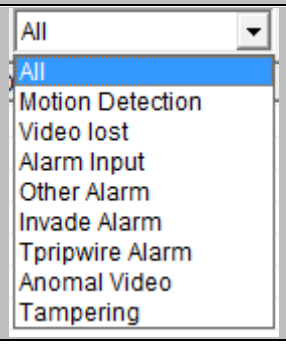


Choose a preview picture, hold the left mouse button drag to any a split screen, can realize exchange of split screen picture.

4.6 Alarm information

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



Icon	Text	Function Description
	Alarm	Close / open alarm information window
	Alarm type	Find the corresponding alarm information according to the alarm type

Part V Detailed Description of the Software Function Set

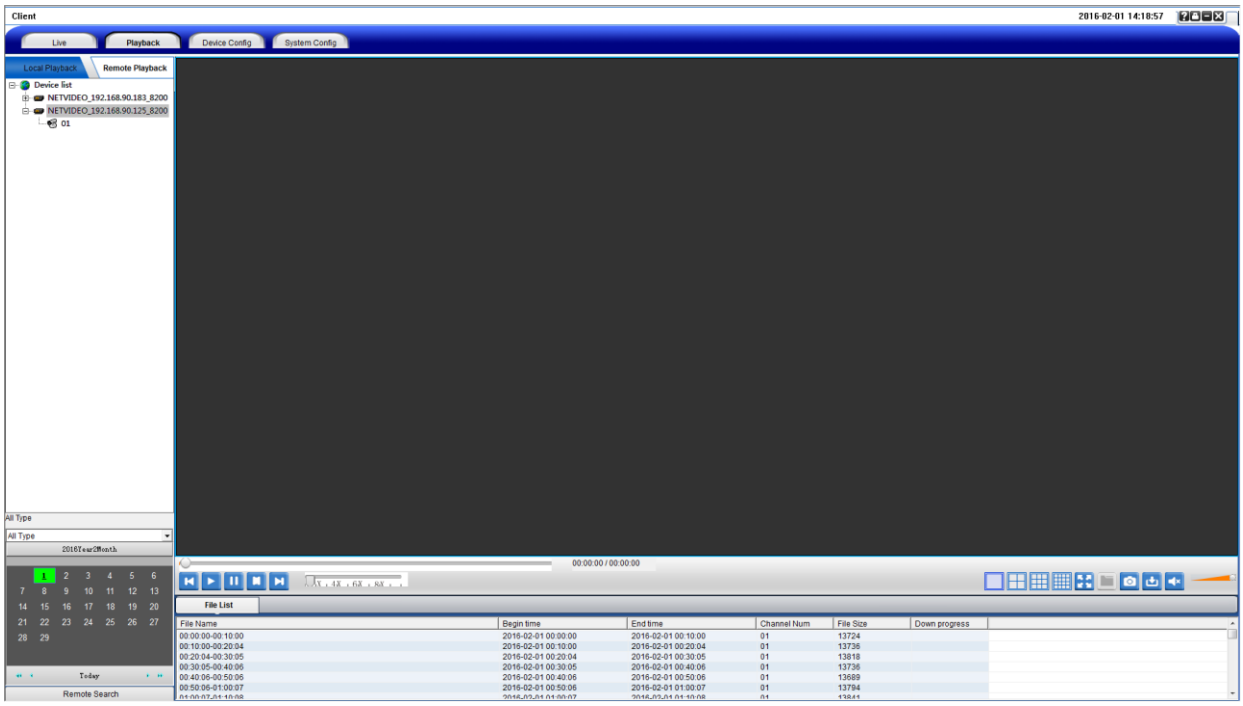
This client management system functions include "video playback, equipment management, joint configuration, basic configuration, group management, video configuration and log query, user management, remote Settings" several function modules, such as the following item in detail one by one

5.1 Video playback

Video playback includes options like local playback, remote playback, type retrieval, ile 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.

5.1.1 Local playback



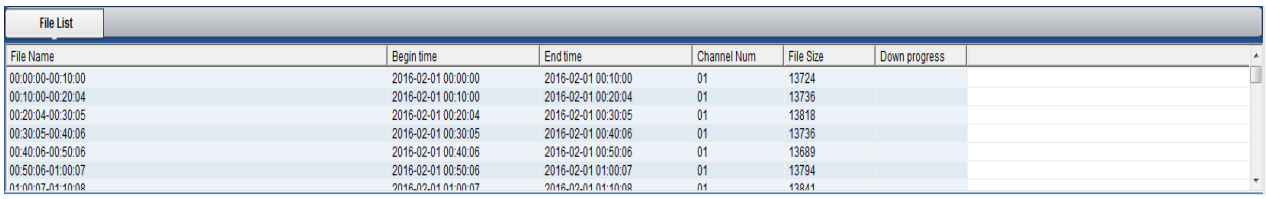
Function Introduction

"Local playback": detect disk video files of the local computer and local video playback

"Type Search ": According to the different types of search video file

"Date of retrieval": video file can be searched according to the different date

"file list retrieval": Search playback by file, select the desired playback video files to playback video.

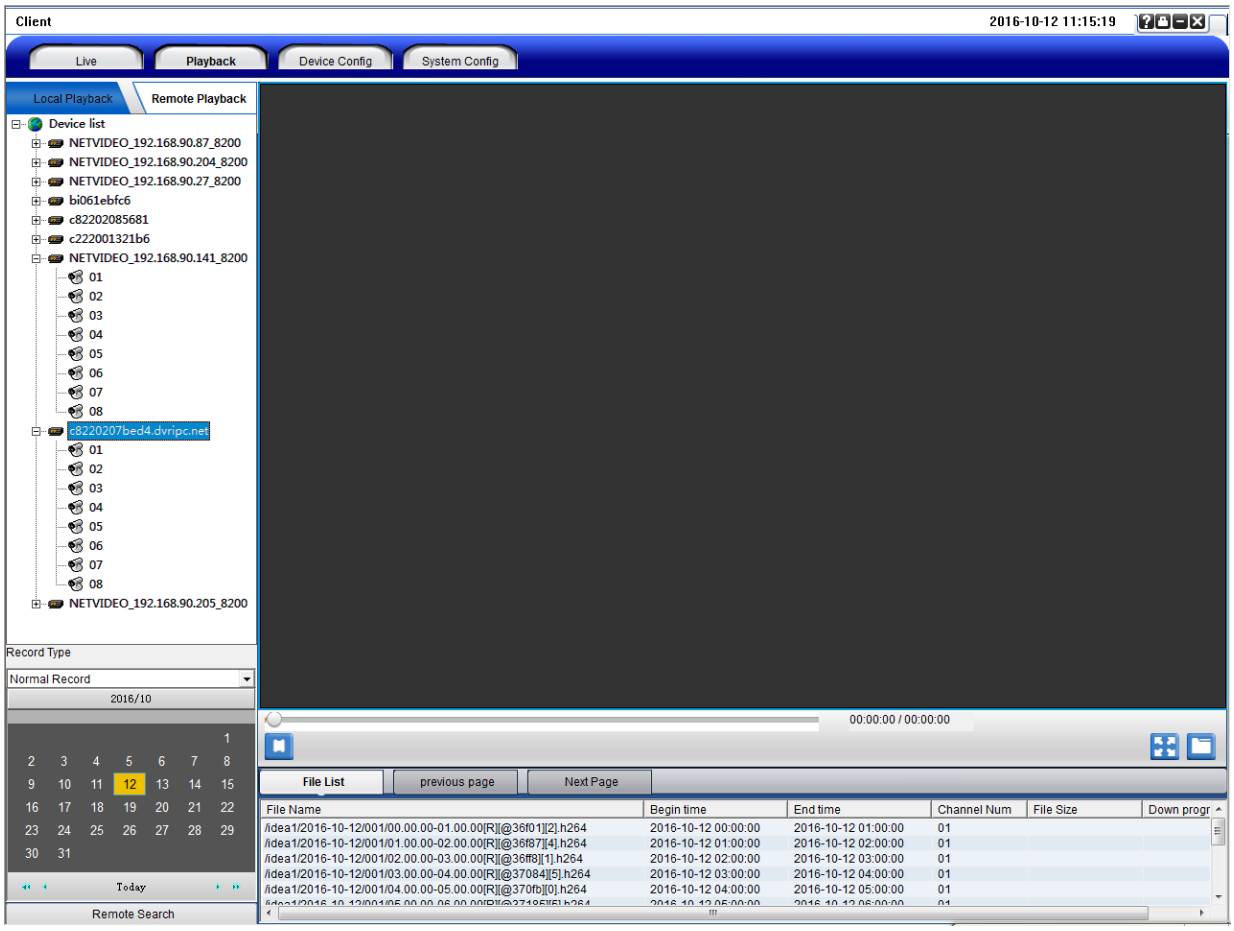


"Playback Control"  functions from left to right: previous file, frame rewind, play, pause, stop, frame forward, next file, playback speed.

"Playback Tool"  functions from left to right: 1 screen,4 screen,9 screen,16 screen, full screen, add files, capture, video downloads, volume switch and volume size.

"Multi-screen display": multi-screen playback display at the same time

5.1.2 remote video playback



If IP add equipment, remote search playback with local search playback, if the P2P or add a domain name, playback as follows：

『**Type Search**』 Using IP add equipment, according to any type of search of video files are the same, using the UID or domain name to add equipment and search local files can be according to the type of search, search the file filename shows one-to-one correspondence with the search type。

『**Date of retrieval**』**:** video file can be searched according to the different date

『**file list retrieval**』**:** Search playback by file, select the desired playback video files to playback video.

『**Playback Control**』  only play to stop this option

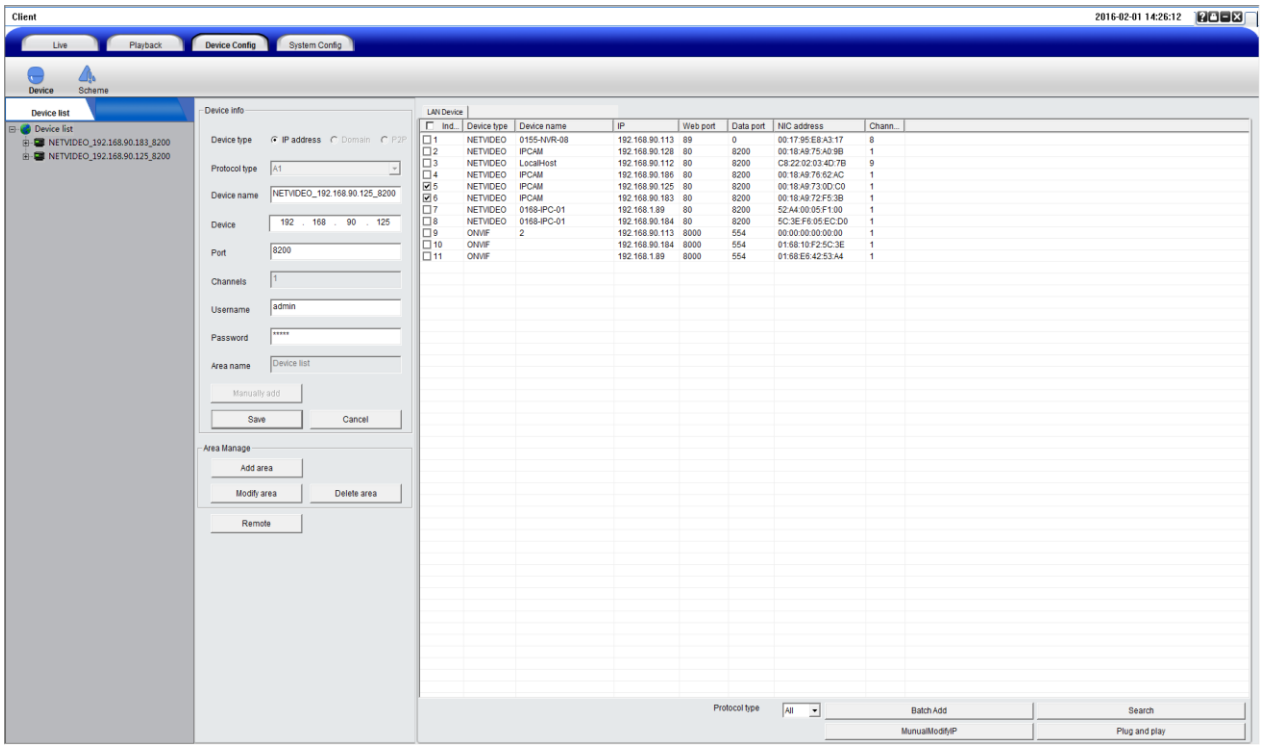
『**Playback Tool**』  Function respectively from left to right: full screen, open the local file

『**Single display**』 Only support one replays showed

5.2 System Configuration

5.2.1 Device management

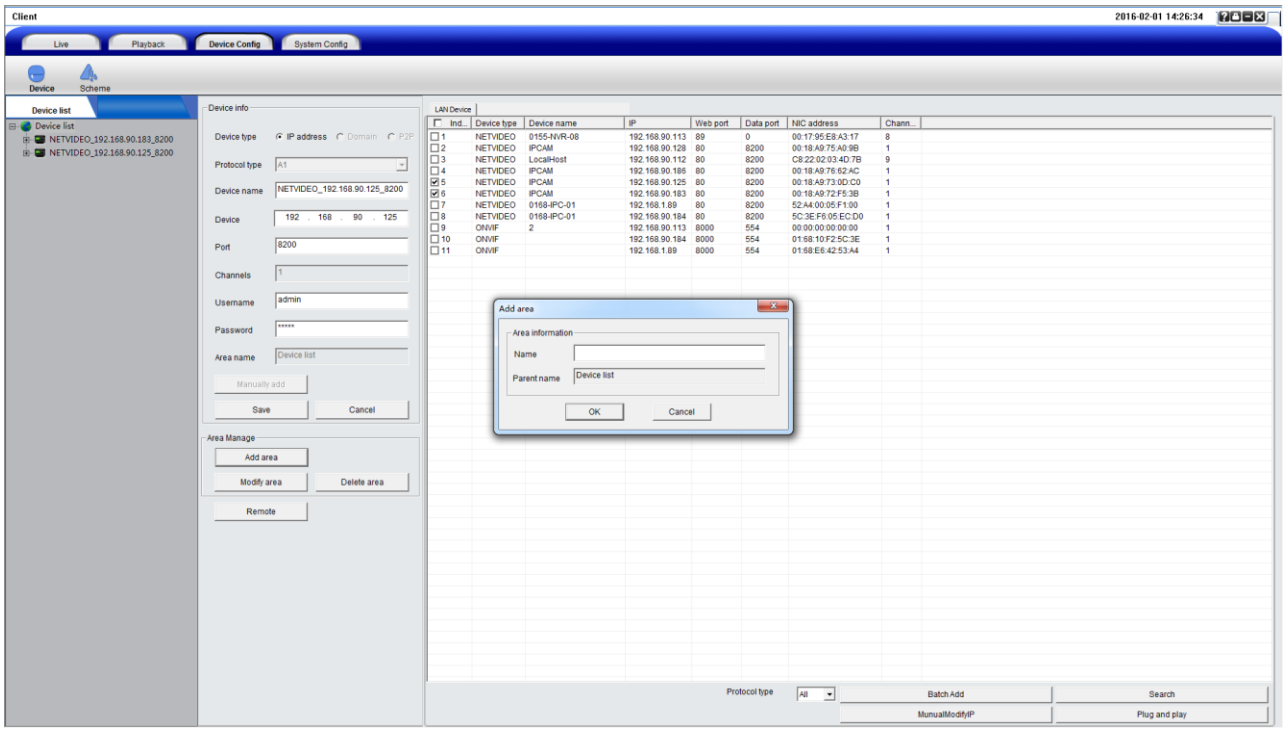
This option focuses on the configuration of "device information", "area management" and so on. The interface is as follows:



Device management is described in the following table:

Item	Function Description
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)
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
Remote configuration	Inside the equipment list on the left side of the choose to use IP add equipment, and then click remote configuration to enter remote configuration menu
Protocol type	A1: IPC types and hd DVR, NVR, AHD A2: standard definition DVR type A4: ONVIF A5: wisdom, A6: male MPH
Batch add	Before choosing the serial number of the lattice search out all the equipment information can be added to the specified area
Search	Check "Search" to display the information of all devices in the LAN
Manually modify IP	To manually modify the selected search equipment, IP, **does not support across the network segment changes**
Automatically change the IP	The selected search equipment automatically modify IP, **support across a network segment changes.An IP address automatically modified to random IP network segment to the PC.**

5.2.1.1 Steps for adding an area

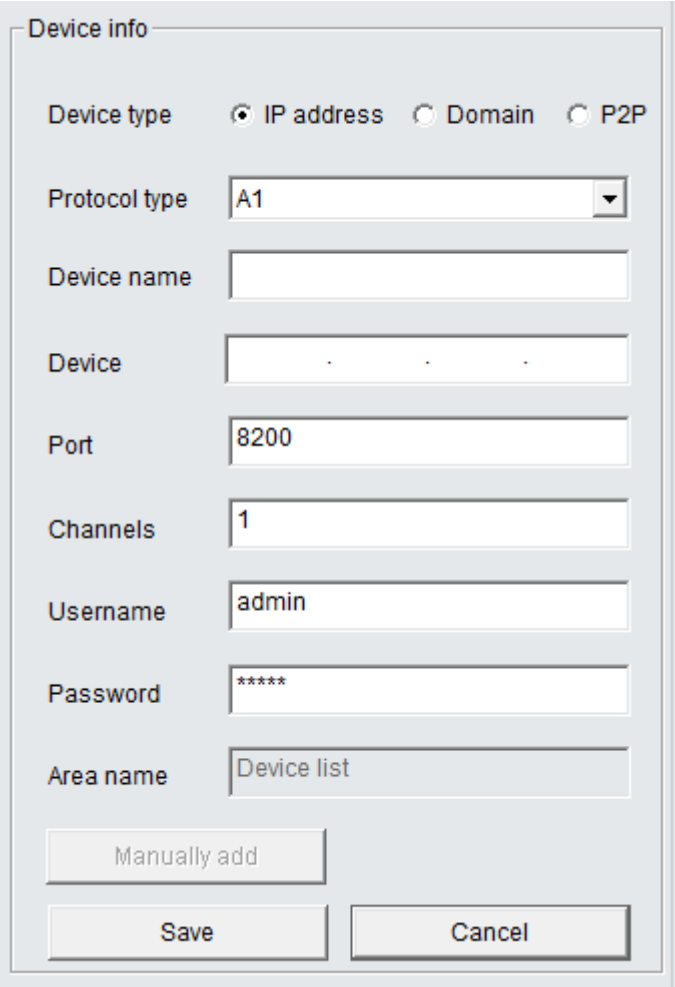


Step 1: Click the Add button in area management

Step 2: Enter the name of the area for preservation

Note: the area name cannot contain ~, @, #, $, $,!, (), -, +, = {}, symbols, etc

5.2.1.2 Steps for manually adding network video devices



Step1:Select the IP address of the device type, and then select the protocol type. A1: IPC Type A2: DVR Type A4: ONVIF protocol;

Step2: Enter the name of the device (users can input any custom name in either Chinese or English)

Step3: Enter the address of the device in the address bar (you can fill in the IP address or domain name)

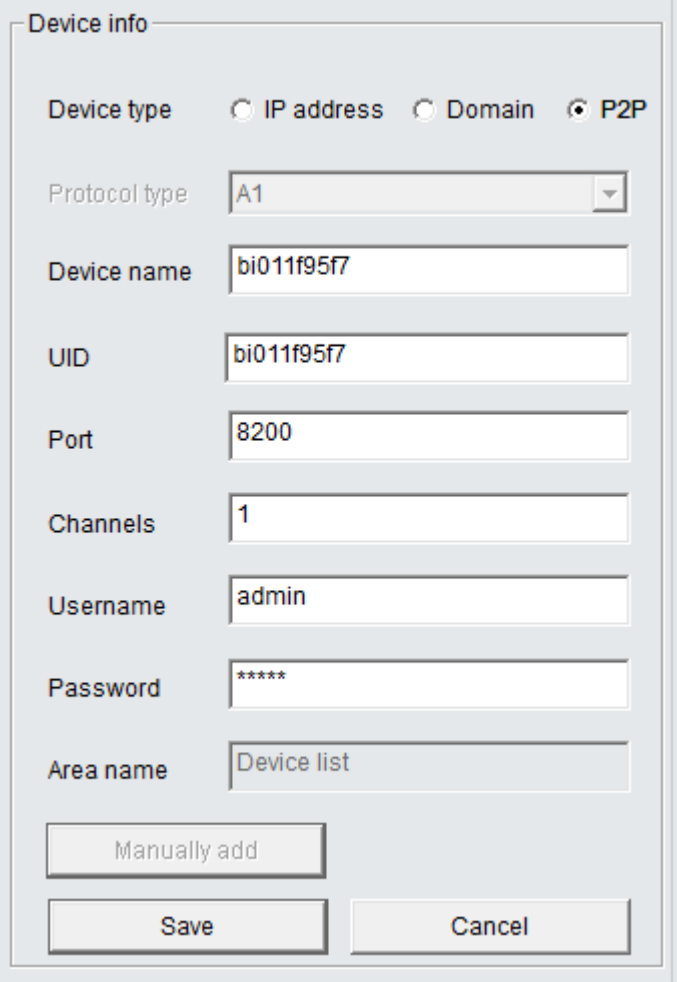
Step4:In the port number, set the device's data port number, DVS / IP Camera / default as 8200; this port can be custom, filling in according to the data port in network settings

Step5:Set the number of channels for front-end DVS / IP Camera (determined according to the channel number of front-end DVS / IP Camera)

Step6:Input the user name and password of front-end DVS / IP Camera (determined as the front-end device)

Step7:Click “Save” to complete adding the device

5.2.1.3 Steps for manually adding P2P devices



Step1: Select the device type P2P

Step2: Enter the name of the device (users can input any custom name in either Chinese or English)

Step3: Enter the name of the device in P2P device name (user-definable enter any name in English)

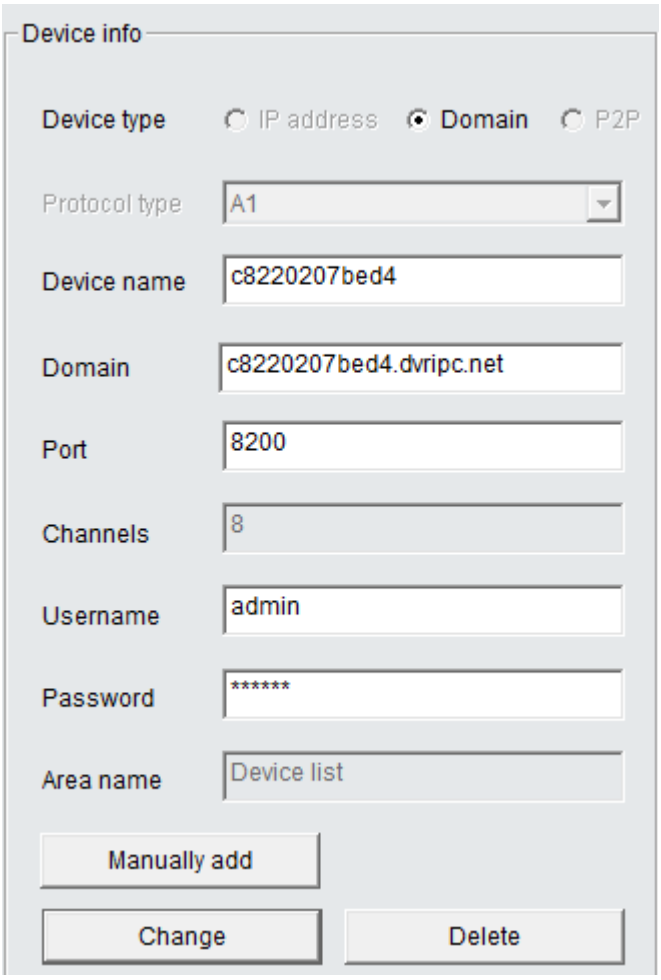
Step4: Enter the P2P UID in the UID name.

Step5:Set the number of channels for front-end DVR/IP Camera/NVR (determined according to the channel number of front-end DVR/IP Camera/NVR)

Step6: Input the user name and password of front-end DVS / IP Camera (determined as the front-end device)

Step7: Click "Save" to complete adding the device

5.2.1.4 manually add domain equipment steps



Step1: Select the device type domain

Step2: Enter the name of the device (users can input any custom name in either Chinese or English)

Step3: Enter the name of the device in domain device name (user-definable enter any name in English)

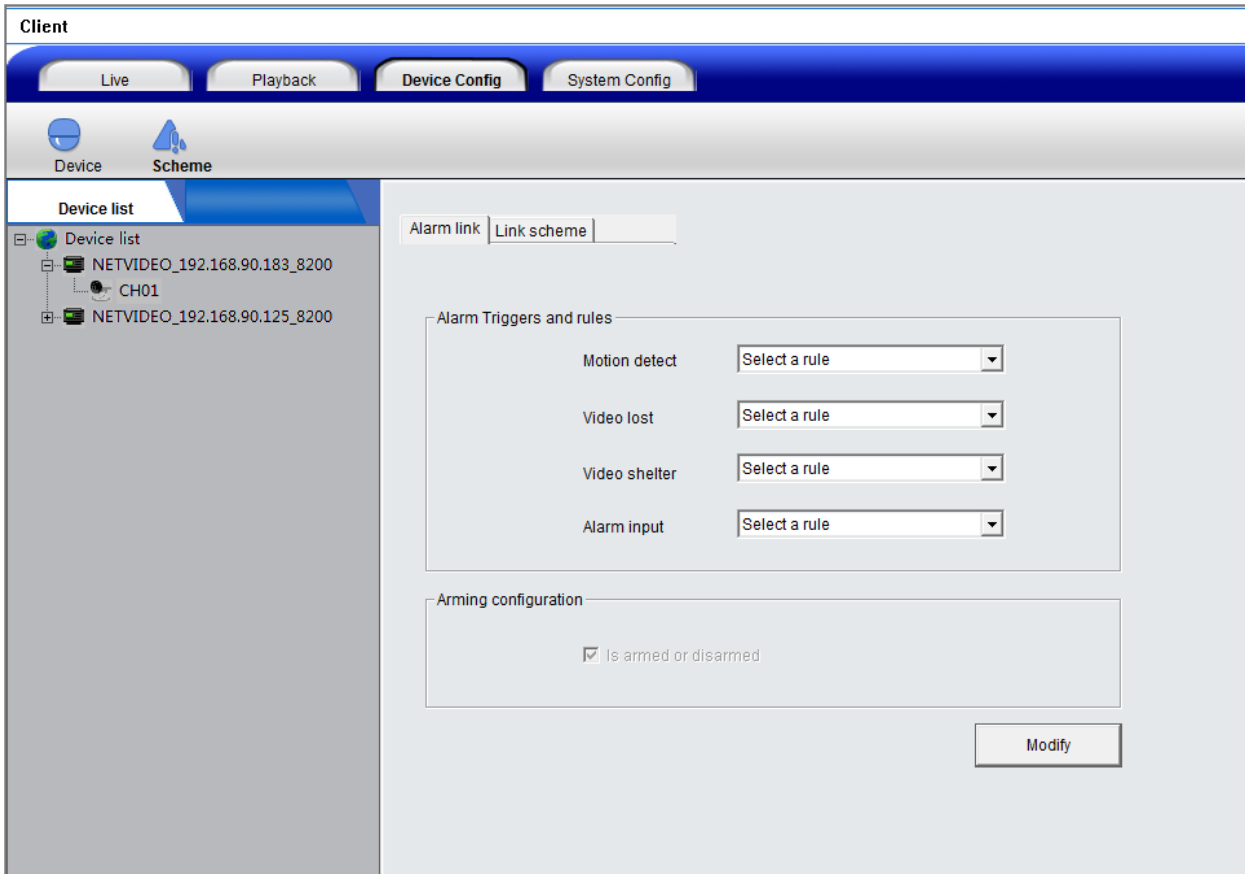
Step4: Enter the domain in the domain name.

Step5: Set the number of channels for front-end DVR/IP Camera/NVR (determined according to the channel number of front-end DVR/IP Camera/NVR)

Step6: Input the user name and password of front-end DVS / IP Camera (determined as the front-end device)

Step7: Click "Save" to complete adding the device

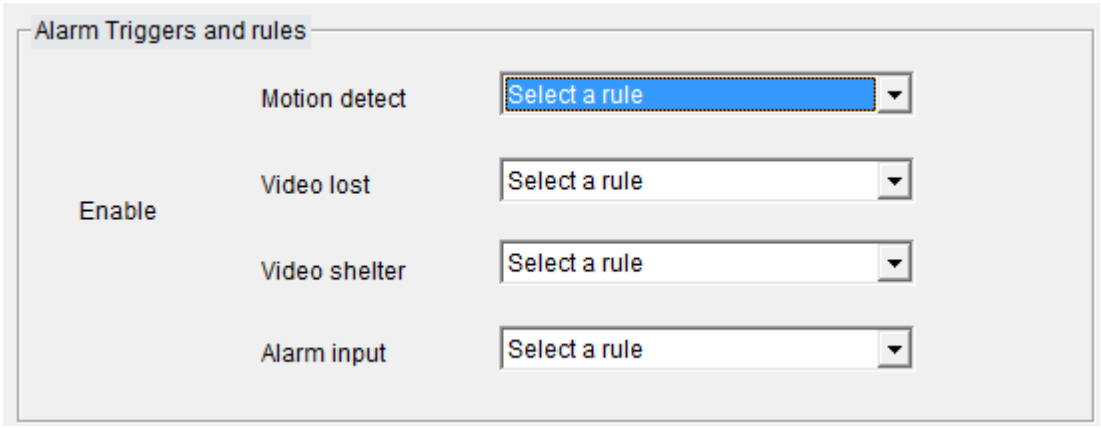
5.2.2 Scheme

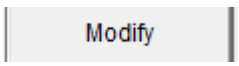


Alarm link set up

Step1: Choose the device you want set, check 

Step2: Choose the channel of the device, set alarm type.



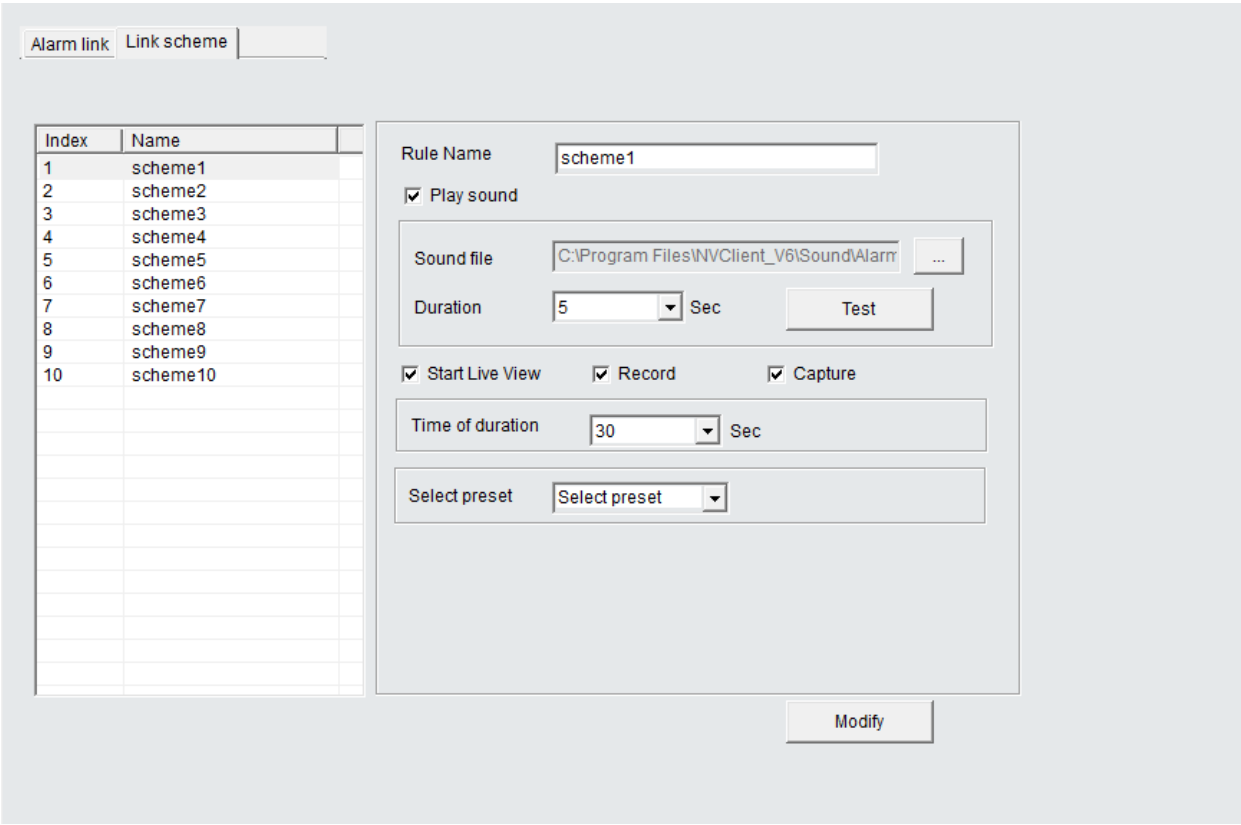
Step3: 

Modify and save the setting.

Link scheme set up

Step1: According to the demand, you can choose scheme 1 to scheme 10.

Step2: Set the rule name, play sound, duration, record, PTZ preset point, pop up video.



5.2.3 Remote setup

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

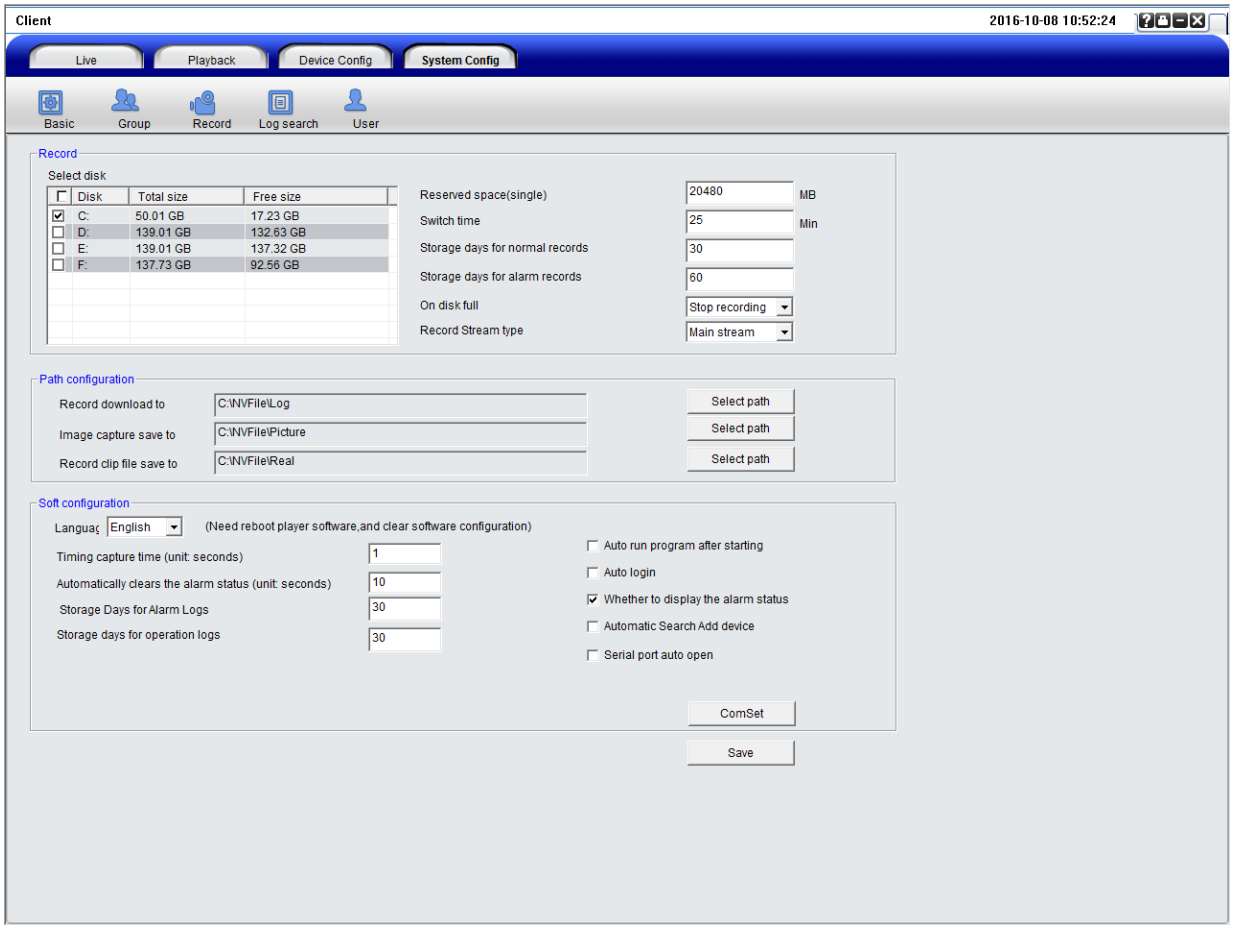
For detailed configuration, refer to the user manual of video server and DVR.

5.3 System Configuration

The system configuration features include options of basic configuration, group management, record configuration, log search, user management.

5.3.1 Basic configuration

This option is mainly focused on software configuration, record configuration, path configuration, as shown in the following interface.



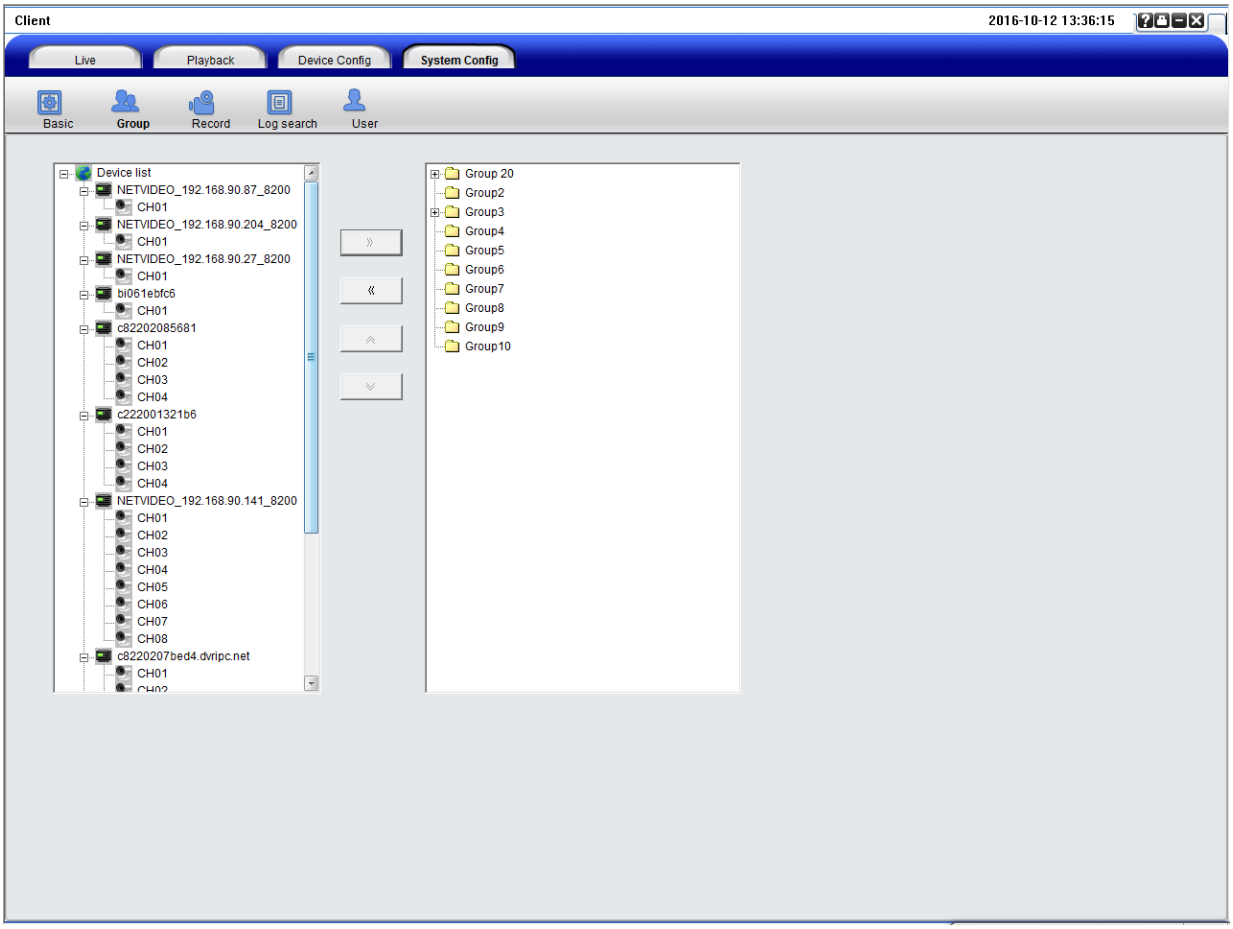
Basic configuration described in the following table:

Item	Function Description
Video storage path	For example, preserving the recorded videos in C disk, as follows: "check" C disk, the system will create folder **NVFile** 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 20240Mb
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
Ordinary video save days	This refers to the normal videos stored on the local storage days time (the default save 30 days)
Alarm video to save days	Motion detecting video, the I/O alarm videos stored in local storage days time (the default save 60 days)
Disk full operation	This refers to the video store option after the disk file, the default there

	are two ways: one is to delete the first video file to disk full cycle video, the second is when to immediately stop the video disk full operation
Video stream type	When this option is on the local video stream, with the main stream and the stream of two options.The default is the main stream
The path configuration	Set up a remote file download, image capture, video clips of save the path
language	Support English、简体中文、Português、русский、繁體中文 character
Timing capture time	Is set automatically capture timer, set a time range is 1 ~ 1800 seconds
Automatically remove alarm status	Can be set up alarm after the alarm to maintain time, can be set up between 3 ~ 180 seconds
Alarm log to save days	Can be set up 1 ~ 365 days
The operation log to save days	Can be set up to save days 1 ~ 365 days
Configure	configure the PC COM port for keyboard configuration 323
Preservation days of normal recording and alarm recording	This refers to the number of days for normal recording, motion detection recording and I / O alarm recording preserved in the local (the ordinary recording default for 30 days, alarm recording is kept for 60 days by default)

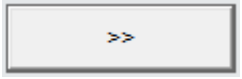
5.3.2 Group management

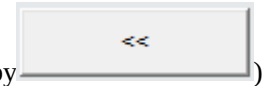
User may set up more than one grouping as needed, grouping or loop switching display the videos; the interface is as follows:



Setup steps for group management

Step1: Select the desired group for adding device; the maximum default of 10 groups

Step2: Select a device channel in the device list, click 

to add a channel (remove the device channel in the selected group by 

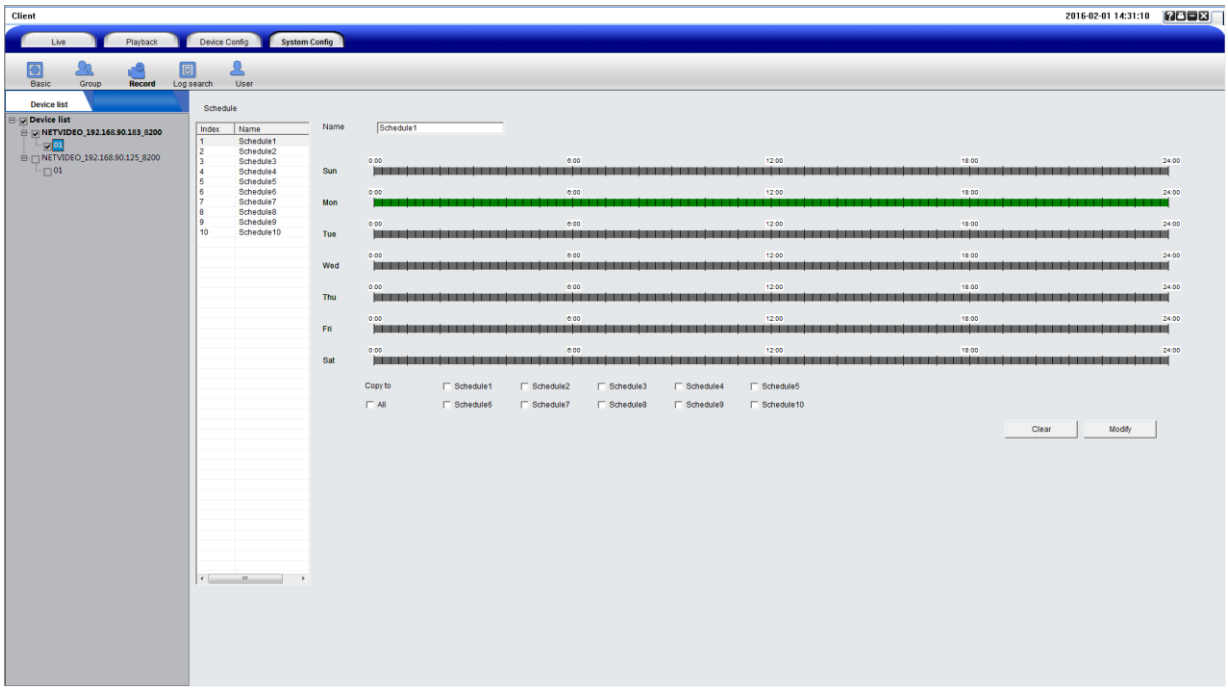
)

Step3: 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 20S.

Step4: the inside of the group the order of the channel Settings, select a group of a channel, click  or  to adjust in the order of the group

5.3.3 Record

Set the record schedule



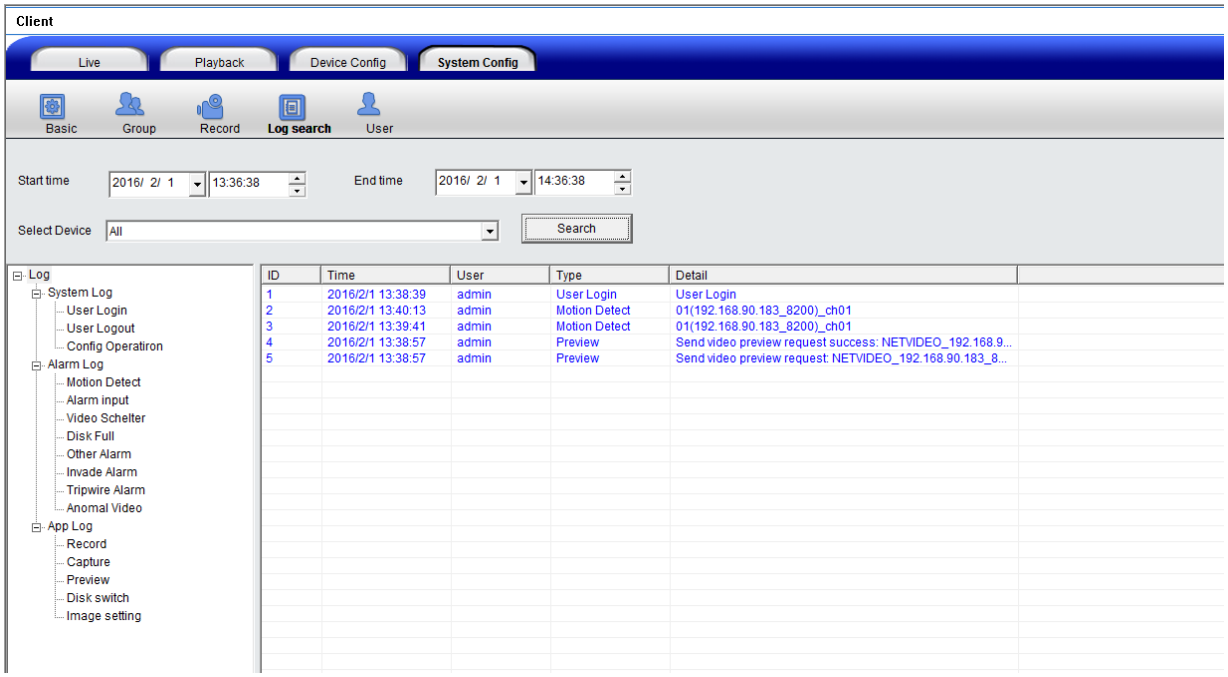
Step 1: Choose the schedule, Sets the video plan time. NVClient support Max. 10 schedule list.

Step 2: Choose the device you want sent record, √ this device.

Step 3: Set the record time in the schedule. （Monday to Sunday）

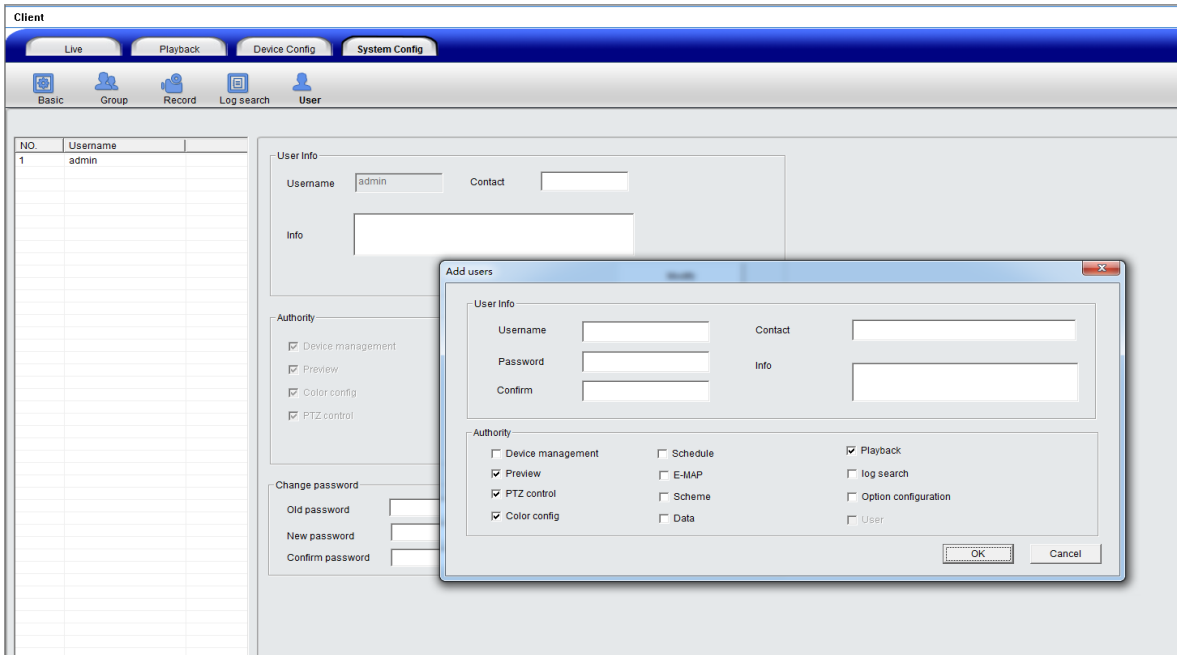
5.3.4 Log Search

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



5.3.5 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.

5.4 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 device

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.

6.6 Storage capacity calculation

Video file size calculation formula:

One day video file size（Gbps）= Stream（Kbps）÷8*3600*One day video hour(s)÷1024÷1024

Resolution	Stream （Full frame）	Hour	Day	Required storage space		
				Week	Month	Half a year
5M(2592×1944)	10Mbps	4.4GB	105.5GB	738GB	3.09TB	18.54TB
4M(2592×1520)	8Mbps	3.5GB	84.4GB	590GB	2.47TB	14.82TB
300H(2048×1520)	6Mbps	2.6GB	63.3GB	443GB	1.85TB	11.10TB
1080P(1920×1080)	6Mbps	2.6GB	63.3GB	443GB	1.85TB	11.10TB
960P(1280×960)	3Mbps	1.3GB	31.6GB	221.5GB	0.93TB	5.55TB
720P(1280×720)	3Mbps	1.3GB	31.6GB	221.5GB	0.93TB	5.55TB
SVGA(800×600)	1536Kbps	675MB	15.8GB	110.6GB	474GB	2.78TB
D1(704×576)	512Kbps	225MB	5.3GB	36.9GB	158GB	0.93TB
VGA(640×480)	512Kbps	225MB	5.3GB	36.9GB	158GB	0.93TB
360P(640×360)	512Kbps	225MB	5.3GB	36.9GB	158GB	0.93TB
CIF(352×288)	512Kbps	225MB	5.3GB	36.9GB	158GB	0.93TB
QCIF(176×144)	224Kbps	98MB	2.3GB	16GB	70GB	420GB

Other resolutions not included in the table can be calculated according to the formula.

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.