NVMS1000

User Manual

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1 Software Introduction

1.1 Summary

Network Video Monitoring System (hereinafter referred to as "NVMS1000") is a monitoring client which is specially designed for network video surveillance. After the network video monitoring system is well built, the super administrator can control the video input signal devices, such as cameras, domes, etc., to achieve live monitor, video record and backup by configuring the video parameters and viewing the live in the control panel. Users can choose the menu to control video surveillance system in the control panel.

The main functions of the control panel include live view, playback, E-map, device management, group and scheme settings, user account and permission, local log, basic configuration and alarm management.

1.2 Operation Environment

1) Operating System Requirement

| System | Recommendation | | |
|------------|--|--|--|
| Windows 7 | Windows 7 (32bit/64bit, support SP1), Direct 11.0 or above | | |
| Windows 8 | Windows 8 (32bit/64bit), Direct 11.0 or above | | |
| Windows 10 | Windows 10 (32bit/64bit), Direct 12.0 or above | | |

Note: The system which is 64bit supports GPU hardware decoding.

2) Hardware Requirement

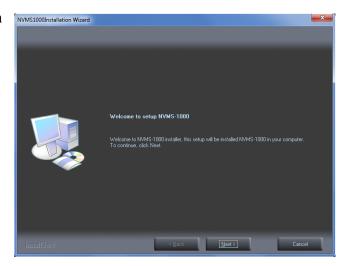
| Item Recommendation | |
|---------------------|---|
| CPU | Intel Core Dou, 2.6GHz or higher |
| Memory | WIN7/ WIN 8/ WIN 10 2GB or above |
| HDD | 250GB or above |
| Graphics Card | Independent graphics card; 512M graphics memory or higher |

3) When running NVMS1000, you need to ensure that all the running antivirus software and firewall are closed, so that the program of the NVMS1000 can be installed.

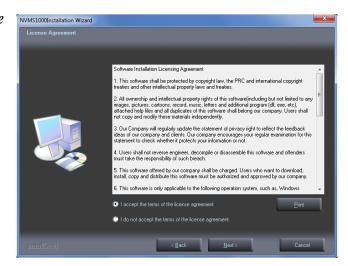
1.3 Install and Uninstall

1.3.1 Install the Software

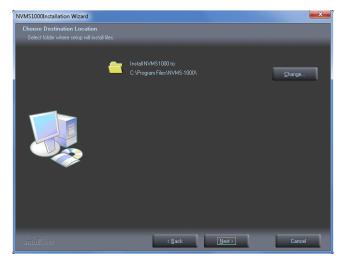
Double click *setup.exe* to go to the installation wizard. Click "Next" to continue.



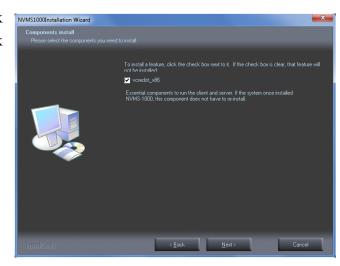
Select *I accept the terms of the license agreement* and then click "Next" to continue.



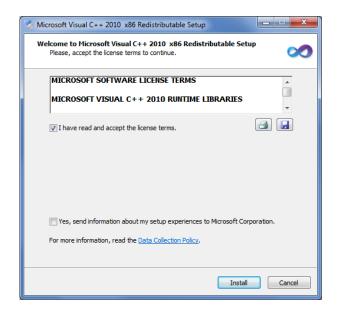
Click "Change" to change the installation path. Click "Next" to continue.

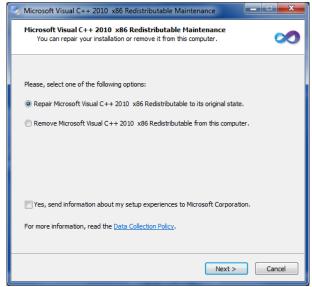


Check "vcredist_x86" (or check "vcredist_x64" for 64bit system) and then click "Next" to install this plug-in.



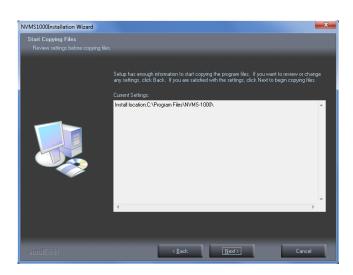
Check *I have read and accept the license terms* and then click "Install" to start installing vcredist_x86; click "Finish" to complete the installation. Refer to the following pictures.



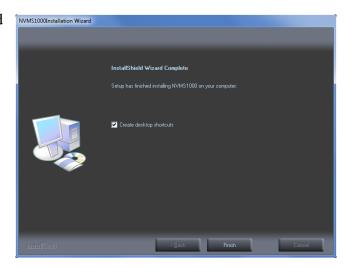


Note: If vcredist_x86 has been installed, please select "Repair Microsoft Visual C++ 2010 x86 Redistributable to its original state" and then click "Next" to repair it. Click "Finish" to finish repairing.

Click "Next" to continue.

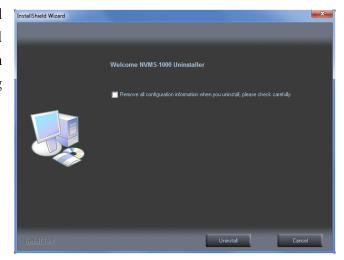


At last, check *Create desktop shortcuts* and then click "Finish" to complete the installation.

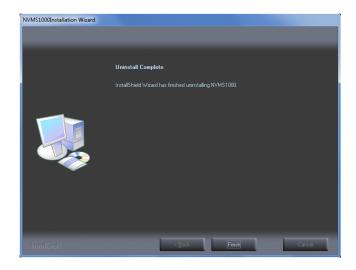


1.3.2 Uninstall the Software

Click *Start* menu on the desktop and then find the shortcut of NVMS-1000. Click "Uninstall NVMS-1000" to pop up a window as shown on the right. Click "Uninstall" to begin uninstalling NVMS1000.



Click "Finish" to end the uninstallation.



2 Login Software

2.1 Login

First time to login:

- If you run NVMS1000 for the first time, you need to register a super administrator. You shall self-define the username and password.
- To avoid forgetting the password, you can set some questions and answers to help you find the password quickly.
- After you set the username, password and the questions and answers, please click "Register" to register the super administrator.



Input the registered username and password and then click "Login" to enter into the software.

If checking "Remember Password", there will be no need to input the password when you log in next time.

If checking "Auto Login", it will log in as current user next time automatically.

If you enter the wrong password, a window will show up reminding you of it. Please click "Yes" button to retrieve the password. Refer to the interface as shown on the right. Enter the right answer of the question you set when registering the account, set the new password for the account and then click "Retrieve Password" button to save the new password.

If you forget the answer of the question, you can reset the password by dynamic password.





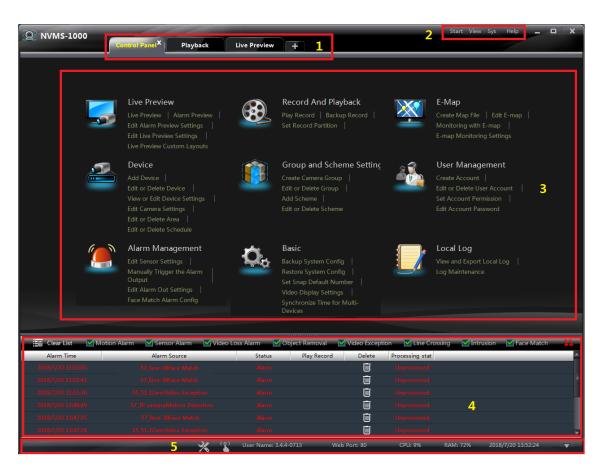
Click "Dynamic Password" to view the CPU ID, MAC address and current time and then send them to your software provider. Then you will get the dynamic password.

After successful login, a window will pop up. Check the partition for storing record files and then click "OK" to save the settings.



2.2 Control Panel Instruction

The control panel of NVMS1000 is shown as below.



The main interface of NVMS1000 consists of five areas. The descriptions of each area are as follows.

| Area | Description | Area | Description |
|------|---|--------|---------------------------|
| 1 | Tab Bar (displaying the operated functions) | 2 | Menu Bar |
| 3 | Function Area | 4 | Alarm Information List |
| _ | Status Bar | Device | e button |
| 5 | Status Dai | Manua | ally trigger alarm button |

Descriptions of Menu Bar

| Menu | Description | |
|--|---|--|
| Start | Including "Control Panel", "Live Preview", "Playback", "Lock" and "Quit". | |
| View | Including "Live Preview", "Control Panel", "Local Log", "E-map", "Alarm Preview", "Playback" and "Organize View". | |
| System Including "Lock", "Broadcast", "Switch User", "Edit Password", "Edi | | |
| Help | Including "User Manual" and "About NVMS1000". | |

Descriptions of Function Area

| Menu | Description | |
|------|--|--|
| | Live Preview. To view live images and to record, snap and control PTZ, etc. | |
| | Record And Playback. To remotely play the local record. | |
| | E-map. To manage and display maps, hot zones and hot spots. | |
| | Device. To create, modify or delete devices, areas and cameras. | |
| | Group and Scheme Settings. To create, modify or delete camera groups and schemes. | |
| | User Management. To add, modify or delete user and user permission. | |
| | Alarm Management. To add or remove the sensor of the area; to set up alarm trigger and modify the area of the sensor; to set alarm out; to set face match alarm. | |

| Menu | Description | |
|--|---|--|
| O to | Basic. To setup record partition and path, system startup and maintenance & backup and restoration. | |
| Local Log. To search, view and backup local log. | | |

Descriptions of Other Buttons

| Button | Description | |
|--|--|--|
| - | Click it to hide the interface. | |
| | Click it to zoom in/out the interface. | |
| X | Click it to exit NVMS1000. | |
| Click it to extend or shrink the window (eg. Extend or shrink the information list). | | |

3 Device Management

Click in the control panel or in the status bar to go to the device management interface as shown below. In the interface, you can view the device type, IP address/domain name, model, version, online status, disk status, record status and alarm status of all the added devices.



Click disk status icon to view the abnormal records of the device's HDDs; click view the video records; click to view the alarm records and then click the unprocessed alarm record to handle it.

Click "Select Offline Alarm WAV" to select an audio file in .wav format and then tick "Play Offline Alarm WAV". After that, the corresponding audio will be played when the device is offline. If the offline alarm WAV is not select, the default audio file will be played after you tick "Play Offline Alarm WAV".

Right click a title bar of the device list to pop up a menu list. You can check the menu in the list to show other device information including "Number of Camera", "Number of Alarm Input", "Number of Alarm Output", "Device Number" and "Port".

3.1 Add Device

Click "Add Device" button in the above interface to pop up the following window. The NVMS1000 system will automatically search the online device in the same local area network. You may click "Manually Add" to add third party devices.



Click "Version", "Device Identifier" or title bar to show icon or the sequence of the device in the list will be changed by clicking or to.

3.1.1 Quickly Add

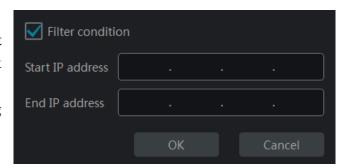
In the above interface, click the "Refresh" button on the top right corner to quickly refresh the online device in the same local area network.

Check the searched devices, select the area on the down left corner and then click "Add" to add the device. If you want to create a new area, please see 3.3.1 Area Management for details.

➢ Filter IP Address

- Click on the "IP Address" title bar.
- Check "Filter condition", input the "Start IP address" and "End IP address" and then click "OK" button to save the settings.

The device list will filter the devices according to your settings.



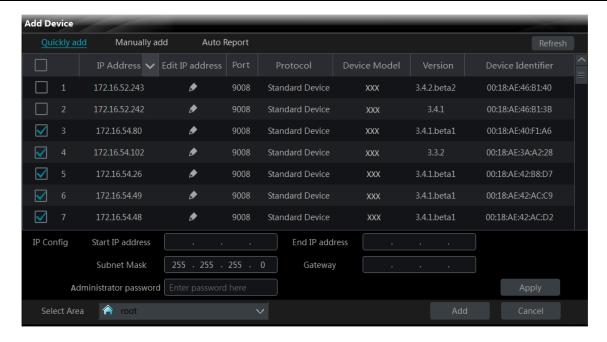
Edit IP Address

Click to edit the IP address of the device. Refer to the following figure. Input the "IP Address", "Subnet Mask" and "Administrator password" (the password of the device) and then click "OK" button to save the settings.



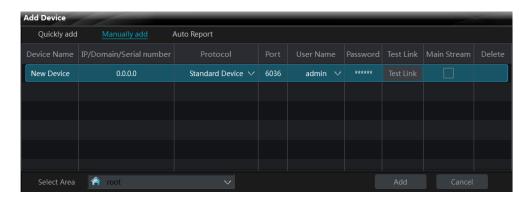
Edit a Batch of IP Addresses

A batch of IP addresses can be modified simultaneously by the bottom of the "Quickly add" interface as shown below. Check the IPCs (please make sure all the IPCs you selected have the same password and they are modified to be in a same network segment) of which the IP addresses need to be modified and then input the start IP address, end IP address, subnet mask, gateway and the administrator password of the IPC and finally click "Add" button to save the settings.



3.1.2 Manually Add

Click "Manually add" menu to go to the window as shown below.

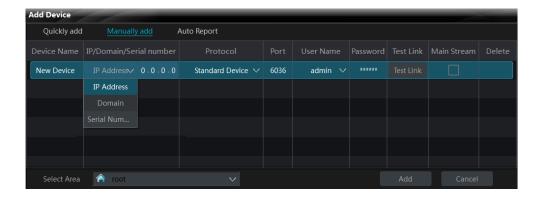


There are three modes available for you to add device ("IP Address", "Domain name" and "Serial number"). You can add the device which supports NAT function through "Serial number".

IP Address: The IP address of the device.

Domain Name: The domain name of the device.

Serial Number: The MAC address of the device. The MAC address is case insensitive.



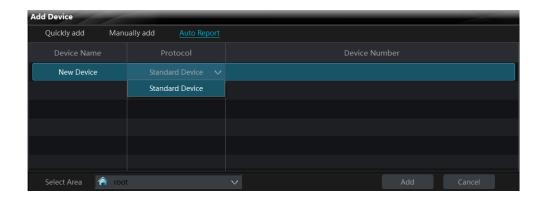
- ① Input the "Device Name", "IP / Domain / Serial number", "Port", "User Name" and "Password" of the device.
- ② Select the "Protocol" and the area. Click "Test Link" button to test the connection of the device.

Click in the "Delete" column to delete the device. Check "Main Stream" according to the actual network situation. Checking it or not will affect the record stream of live preview.

③ Click "Add" button to add the device.

3.1.3 Auto Report

Click "Auto Report" menu to go to the window as shown below.

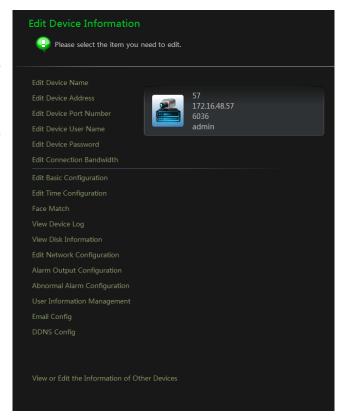


- ① Input the device name and then select the device protocol.
- If you want to add DVR, please enter Network→Sever tab of the DVR. Check "Enable", input the IP address and port (2009) of NVMS1000 and then set the device number of the DVR.
- If you want to add IP camera, please enter Network Configuration → Server Configuration of the IP camera. Check "Do you want IPCamera to connect Server", input the IP address and port of NVMS1000 and then set the device number of the IP camera.
- ② Input the device number you set in the DVR or IP camera.
- 3 Select the device area and then click "Add" button to add device.

3.2 Edit Device Information

Select a device in the "Add, Edit or Delete Device" interface and then click "Delete" button to delete the device.

Select a device and then click "Edit" button to go to the interface as shown below.



Edit Device Name

Click *Edit Device Name* to go to the interface as shown on the right. Set a new device name and then click "OK" button to save the settings.



Edit Device Address

Click *Edit Device Address* to go to the interface as shown on the right. Input the new IP address or domain if you check "Domain". Click "OK" button to save the settings.

Edit Device Port Number

Click *Edit Device Port Number* to go to the interface as shown on the right. Input the new port number and then click "OK" button to save the settings.

Edit Device User Name

Click *Edit Device User Name* to go to the interface as shown on the right. Input the new username and then click "OK" button to save the settings.

Edit Device Password

Click *Edit Device Password* to go to the interface as shown on the right. Set the new password and then click "OK" button to save the settings.

Edit Connection Bandwidth

Click *Edit Connection Bandwidth* to go to the interface as shown on the right. Check "Use the main stream" as required. Checking it or not will affect the record stream of live preview.

Edit Basic Configuration

Click *Edit Basic Configuration* to go to the interface as shown on the right. Set the device name and then click "Save" to save the settings.













Edit Time Configuration

Click *Edit Time Configuration* to go to the interface as shown on the right. Set the date format, time format and time zone of the device and check "DST" as required. Synchronize the time of the device manually or by NTP server and then click "Save" to save the settings.

Manually: Click "Manual Input" button to pop up a window and then manually input the time in the window. You can also check "Sync Time with PC" to synchronize the time with PC. Click "Save" to save the settings.

By NTP Server: Check "Sync Time with NTP Server" and then input the NTP server address.



> Face Comparison

Note: The following interfaces will be displayed only when the added NVR supports these functions.

Click "Face Match" to the interface as shown on the right. Target database, face search, face detection, face match parameters as well as alarm linkage can be set up here.

Target Database

Add target database: click "Add Target DB" to add a new target database name. Click "Copy to" to copy the database name to other devices with face comparison functions.



Add Target

Select a target database you want to add new targets and then click "Add Target" as shown below.



Click "Browse" to add the face pictures saved in the local PC. Click "Add Picture" to add captured faces. Select the start and end time, cameras and click "Search" to search faces. Then choose a searched face and click "OK" to add a target.

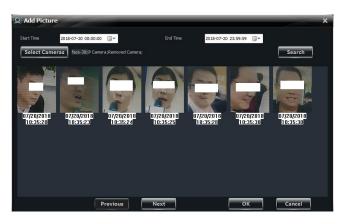
After that, fill out the detailed information of the target and then click "OK" to save.

Click "Copy to" and select devices to copy the target to these devices' target databases whose ID must be the same with the current target's, or this copy will not succeed.

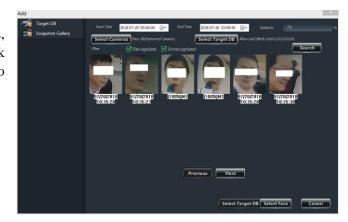
Face Search

- 1. Go to face search interface. Then select the start and end time, set similarity and result limit.
- 2. Click to add a face from the target database or snapshot gallery.
- 3. Add a face from the target DB: click "Select Target DB" to select database and then enter the target name.
- 4. Click "Search" to search faces.
- 5. Select a face and click "Select Face".
- 6. Click "Search to search faces.

Add a face from snapshot gallery: Select cameras, target database and filter condition and then click search. Then choose a face and click "Select Face" to add a face.







Face Detection

Click "Face Detection" to go to the interface as shown on the right. Record, snapshot, alarm output, PTZ, Buzzer, Pop-up window and email can be triggered when a face is detected by the camera.



Face Match Parameter

In this interface, users can set the similarity of face match and enable the face comparison channel.



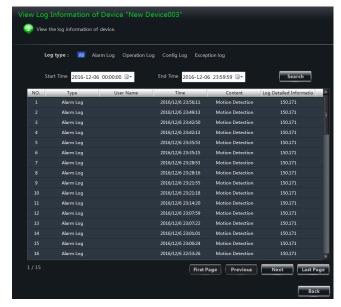
Alarm Linkage

When the similarity of the detected faces exceeds the set value, it will trigger the corresponding items (checked as needed).

➢ View Device Log

Click *View Device Log* to go to the interface as shown on the right. Select the log type, set the start time and end time and then click "Search" button to search the log. The searched log will be displayed in the list.





View Disk Information

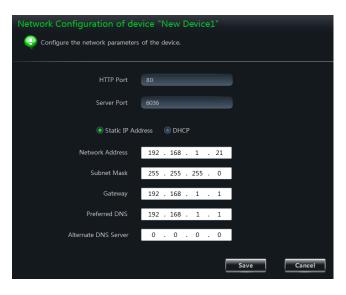
Click *View Disk Information* to go to the interface as shown on the right. Click "Refresh" button to refresh the disk information.



Edit Network Configuration

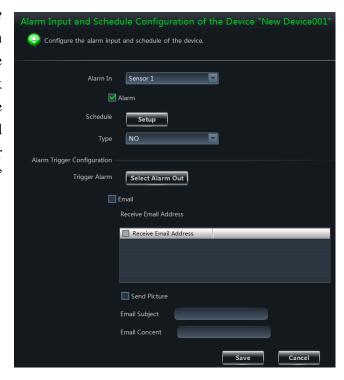
Click *Edit Network Configuration* to go to the interface as shown on the right. Set the HTTP port and server port. You can select "Static IP Address" and then input the network parameters manually or select DHCP to obtain the network parameters automatically.

Note: If the port and the IP address are changed here, the device will be offline. You need to modify the port and IP address of the device. See *Edit Device Address* and *Edit Device Port Number* for details.



> Alarm Input Trigger and Schedule Configuration

Click Alarm Input Trigger and Schedule Configuration to go to the interface as shown on the right. Select a sensor according to the alarm input. Check "Alarm" and then click "Setup" button to set the alarm schedule (please see 3.3.2 Camera Management for the detailed schedule setting operations). Select the sensor type and configure alarm trigger. Click "Save" to save the settings.



> Alarm Output Configuration

Click *Alarm Output Configuration* to go to the interface as shown on the right. Select an alarm output and set alarm holding time for it. Click "Setup" button to set the schedule of the alarm out. Click "Save" to save the settings.



> Abnormal Alarm Configuration

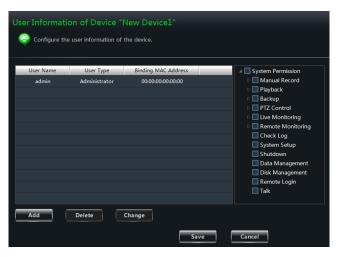
Click *Abnormal Alarm Configuration* to go to the interface as shown on the right. Select the alarm type and then check "Buzzer" and "Email" as needed. Click "Select Alarm Out" to set the alarm out. Set the disk alarm (the alarm will be triggered if the remaining disk capacity is equal to the alarm capacity you set). Click "Save" to save the settings.

| Other Alarm (| Configuration of Device | "New Device1" | | |
|---|-------------------------|---------------|--|--|
| Configure the abnormal alarm of the device. | | | | |
| Alarm Type | Disk Full | l | | |
| | Buzzer | | | |
| Trigger Alarm | Select Alarm Out | | | |
| Disk Alarm | 128 MB | l | | |
| | Email | | | |
| | Save | Cancel | | |

User Information Management

Click *User Information Management* to go to the interface as shown on the right. Click "Add" button to add a new user.

Select a user in the list. Then select the system permission on the right side of the list. You can check or uncheck the corresponding items to change the user permission. Click "Delete" button to delete the selected user. Click "Change" button to change the user information. The password of all the users can be changed



while the username and user type are changeable for all the users except *admin*. Click "Save" to save the settings.

Email Configuration

Click *Email Configuration* to go to the interface as shown on the right. Input the SMTP server and SMTP port and then enable the security connection as required. Input the "From Email", username and password. Click "Add" to add a receiver address. Select an address in the list and then click "Change" to change the address. Click "Delete" to delete the selected receiver address. Click "Save" to save the settings.

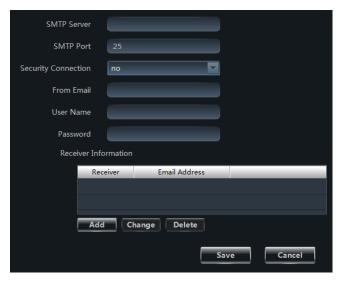
> DDNS Configuration

Click *DDNS Configuration* to go to the interface as shown on the right. Check "Enable DDNS" and then select the DDNS protocol type. Take www.meibu.com as an example. You should input the username and password. Click "Save" to save the settings.

Change the DDNS Configuration of Device "New Device1" Set the basic information of DDNS. Enable DDNS Protocol Type www.meibu.com User Name User Password Confirm Save Cancel

Check Online Users

Click *Check Online Users* to go to the interface as shown on the right. All the online users will be displayed in the list.



| Cł | Check Online User Information of the Device "New Device1" [] Check the device online user information. | | | | |
|----|---|---------------|------|--|--|
| | User Name | IP Address | | | |
| | admin | 192.168.13.67 | | | |
| | | | | | |
| | | | | | |
| | | | Back | | |

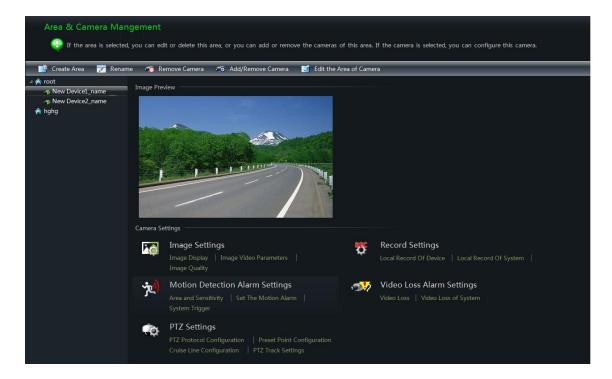
Reboot Device

Click *Reboot Device* to go to the interface as shown on the right. Click "Reboot Device" button and then click "OK" button in the popup dialog window. The device will reboot automatically.

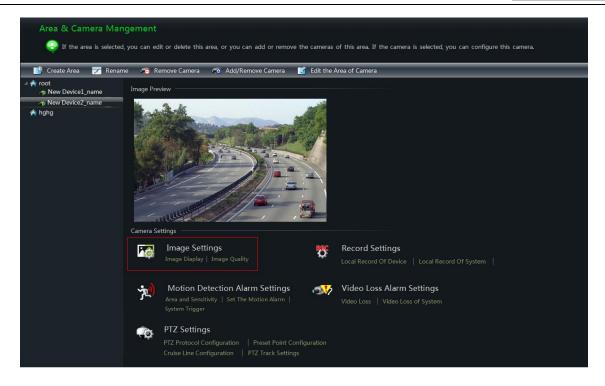


3.3 Area and Camera Management

Click *Edit Camera Settings* under the *Device* in the control panel to go to the interface as shown below and then select a camera in the interface to show its camera settings.



The camera without some functions will not display the relative setting sheets and links. Refer to the following figure.



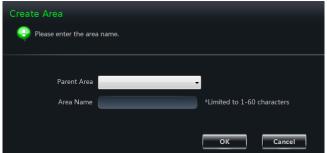
3.3.1 Area Management

Click "Create Area" to create an area. Refer to the figure on the right.

Select an area and then click "Rename" button to change its name. Select an area and then click "Delete Area" button to delete it.

Select an area and then click "Add/Remove Camera" to go to the interface as shown on the right. Check the camera on the left and then click to add the camera to the area. Check the camera on the right and then click to remove the camera from the area.

Select a camera and then click "Edit the Area of Camera" to change the area of this camera.





3.3.2 Camera Management

The real-time image will be displayed after selecting a camera. You can set up the parameters of this camera.

> Image Settings

Image settings include image display, image video parameters, image quality, video block and ROI configuration.

Click *Image Display* to go to the interface as shown on the right.

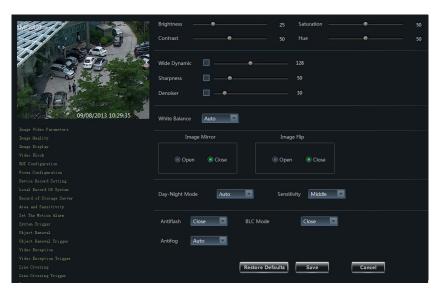


Create the camera's name and set up its display position on the OSD including the time stamp. Click "Copy to" button to apply the settings to the selected channel.

Click *Image video parameters* to go to the interface as shown on the right.

Adjust the brightness, contrast, saturation and chroma of the image. The advanced functions of some cameras can be configured such as anti-flash, BLC, anti-fog, etc.

Clicking "Restore Default" will restore the above parameters to factory default settings.



Click *Image Quality* to go to the interface as shown on the right.

Choose the resolution, fps, stream, image and bitrate according to practical situation.

Click *Video Block* to go to the interface as shown on the right.

Enable video block. Click "Draw" and then drag the mouse on the image to set the video block area. Click "Delete" button to all the video block areas. Click "Save" to save the settings.



Click *ROI Configuration* to go to the interface as shown on the right.

Enable ROI configuration. Set the level (a greater level indicates the higher definition ROI areas). Click "Draw" button and then drag the mouse on the image to set the ROI area. Click



"Delete" button to delete all the ROI areas. Click "Save" to save the settings.

Click *Focus Configuration* to go to the interface as shown on the right.

Two focus modes: automatic and manual.

In automatic mode, you can select the focus time. If *Auto focus when switching Day-Night mode* is checked, the camera will focus



automatically when Day-Night mode is switching.

Click to increase the focal length and click save the settings.

In manual mode, you must adjust the focus and zoom of camera manually.

As to some auto-focusing cameras, you can click "One Key Focus" button to focus them.

Focus Mode Manual Focus + - One Key Focus Zoom + -

to decrease the focal length. Click "Save" to

Record Settings

You can set the local record of device and local record of system.

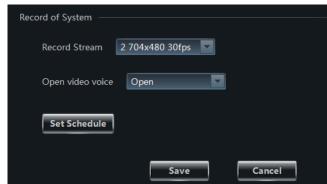
Click *Local Record of Device* to go to the interface as shown on the right.

Choose pre-recording time, duration and record save time. Click "Copy to" button to save the settings to the selected channel.

Click *Local Record of System* to go to the interface as shown on the right.

You can set schedule and record stream. Choose to open video voice or not when recording.





How to set schedule?

The schedule setting between local record of device and local record of system is different.

Schedule Setting of Local Record of Device

You should check the "Enable" in the Record of Device interface and then click "Setup" button to pop up the window as shown on the right.

- Click and then move the cursor to select the time. Click and then move the cursor to delete the selected time.
- Click "Manually" to manually input the time. Click "All" / "reverse" to quickly select the time. Click "Empty" to clear all the time.
- Click "System Schedule" to select the system schedule.

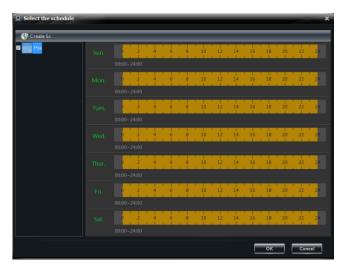


• Click "OK" button to save the settings.

Schedule Setting of Local Record of System

Click "Set Schedule" button to pop up the window as shown on the right.

Check "7x24" or click "Create Schedule" button to set schedule.

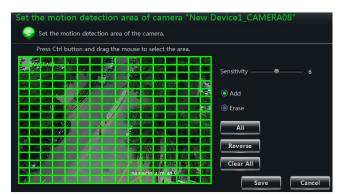


▶ Motion Detection Alarm Settings

Click *Area and Sensitivity* to go to the interface as shown on the right.

Drag the slide bar to set the sensitivity value. The higher the value is, the more sensitive it is. Click "Add"/"Erase" and then hold press "Ctrl" and left click mouse to add / delete the area you want.

Click "All"/"Reverse"/"Clear All" button to select area or clear all the area quickly.



Click *Set The Motion Alarm* to go to the interface as shown on the right. You can set the motion alarm and linkage configuration.

Note: Please refer to the user manual of the device for device linkage configuration.

Click *System Trigger* to go to the interface as shown on the right.

Check "Trigger to Play Audio File". If the motion alarm of a certain channel is triggered, a sound like "beep" will give out.



Click "Trigger the Big Screen" button to select channel. If the motion alarm of the selected channel is triggered, a big picture will pop up on the screen.

Click "Trigger the Record Channel" button to select channel. If the motion alarm of the selected channel is triggered, the channel's record will be opened automatically.

> Intelligent Event Settings

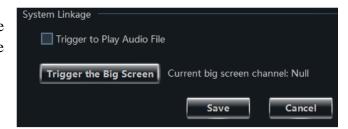
Please refer to <u>8.4 Intelligent Event Alarm</u> for details.

Video Loss Alarm Settings

Click *Video Loss* to go to the interface as shown on the right. The steps of configuring video loss are the same with the device settings; please refer to the video loss chapter of device user manual.



Click *Video Loss of System* to go to the interface as shown on the right. You can set the video loss of system.



PTZ Settings

Click *PTZ Protocol Configuration* to go to the interface as shown on the right. You can enable or disable PTZ. Set the protocol, address and baud rate and then click "Save" to save the settings.



Click *Preset Point Configuration* to go to the interface as shown on the right. Adjust the dome direction, speed, etc by clicking the buttons. Click "Add" to add a new preset point. Choose a preset point in the list and then click "Change Name" to change the name of the preset point. Choose a preset point and then click "Delete" to delete the preset point. Click "Save" to save the settings.

The definitions of the buttons are as below.



| Buttons | Description | | | | | |
|-----------------------|---|--|--|--|--|--|
| Ö. | to rotate the dome upwards; to rotate the dome diagonally up-right; to rotate the dome downwards; to rotate the dome diagonally up-right; to rotate the dome diagonally down-left; to rotate the dome diagonally down-right; to rotate the dome towards left; to rotate the dome towards left; to rotate the dome | | | | | |
| + | Drag the slider bar to adjust rotation speed of the dome | | | | | |
| Focus + | Focus button. Click to decrease the focal length; click to increase the focal length | | | | | |
| — | Iris button. Click ■ to decrease the iris of the dome; click to increase the iris of the dome | | | | | |
| — (€) Zoom (+ | Zoom button. Click to zoom out the camera image; click to zoom in the camera image | | | | | |
| * | Track | | | | | |
| 0 | Auto Scan | | | | | |
| | Wiper button | | | | | |
| 10 | Light button | | | | | |

Click *Cruise Line Configuration* to go to the interface as shown on the right. You can add/change/preview/delete cruise.



Click *PTZ Track Settings* to go to the interface as shown on the right. You can set the PTZ track.

> Remove camera

Select a camera in the Area and Camera Management interface and then click "Remove Camera" button to pop up a dialog window. Click "OK" button to remove the camera.



Face Match Alarm Configuration

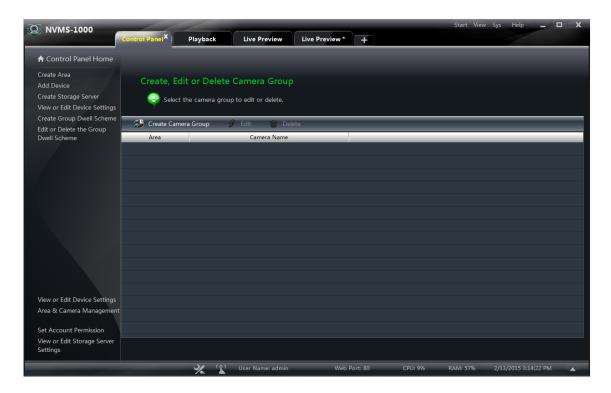
In the camera management interface, click "Face Match Alarm Config" to go to the interface as shown on the right. Audio, big screen and record can be triggered when a face match alarm occurs.



4 Group and Scheme Setting

4.1 Camera Group Setting

Click *Group and Scheme Setting* in the home page to go to the interface as shown below.



4.1.1 Create, Edit or Delete Camera Group

Click "Create Camera Group" in the above interface to create a group.

Select a group in the group list and then click "Delete" button to delete it.

Select a group and then click "Edit" button to go to the interface as shown on the right. You can change the group name and dwell time interval.



4.1.2 Add or Remove the Camera Group

Select a group, click "Edit" button and then click *Add or Remove the Camera Group* in the interface to pop up the window as shown on the right.

Check cameras on the left and then click to add the selected cameras to the group on the right.

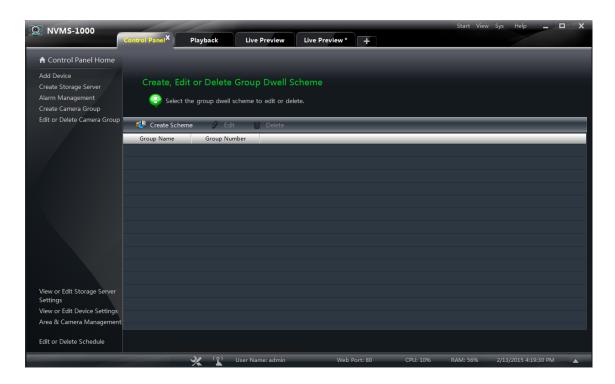


Check cameras on the right and then click

to remove them from the group.

4.2 Group Scheme Setting

Scheme is used for viewing group in sequence. Therefore, at least one group should be created. Click *Edit or Delete the Group Dwell Scheme* on the left side of the menu to go to the interface as shown below.



4.2.1 Create Scheme

Click "Create Scheme" button to create a scheme. You should set the scheme name, the dwell time interval and the group. Click "OK" button to save the settings. The added scheme will be displayed in the scheme list.

4.2.2 Edit and Delete Group Dwell Scheme

Select a scheme in the scheme list and then click "Delete" button to delete it.

Select a scheme and then click "Edit" button to go to the interface as shown on the right. You can change the name of scheme and the dwell time interval.

Click *Add or Remove Group of the Scheme* to go to the interface as shown on the right. Check group on the left and then click to add the selected group to the scheme on the right. Check group on the right and then click to remove the group.

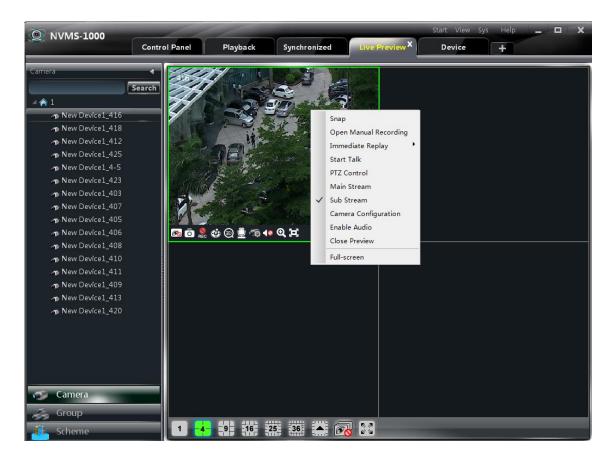




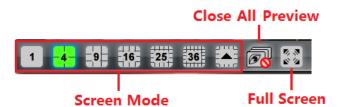


5 Live Preview

Click *Live Preview* in the control panel to go to the interface as shown below.



Buttons description of live preview:



Toolbar on the display window:

| Icon | Description | Icon | Description | |
|----------|-----------------------------|------------|--|--|
| € | Close image | 0 | Snap | |
| REC | Start/stop manual recording | Ġ : | PTZ control. Clicking the icon will display the control panel of PTZ | |
| ® | 3D zoom(only for dome) | Ē | Start/stop talk | |
| ·** | Camera configuration | | Open/close audio | |
| Q | Zoom in | O | Fit to window | |

Right button functions:

| Menu | Description | Menu | Description |
|-------------------------|--|--------------------------|---------------------------|
| Snap | Snap picture | Open Manual Recording | Start manual record |
| Immediate Replay | Click it to set the immediate replay time | Start talk | Start or stop talk |
| PTZ Control | To display the control panel of PTZ | Stream | Choose stream to view |
| Camera Configuration | Enter the interface of the area and Camera configuration | Enable Audio | Enable or close audio |
| Close Preview | Close single channel preview | Full Screen | To display in full screen |

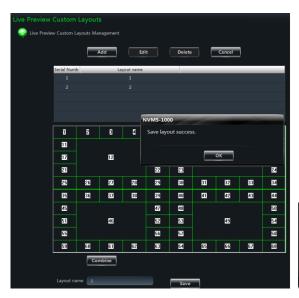
5.1 Preview

5.1.1 Edit Live Preview Settings

Live Preview Custom Layouts

Click *Live Preview Custom Layouts* under *Live Preview* in the control panel to go to the following interface.

Click "Add" and then combine the screens chosen by dragging the mouse. Input the layout name and click "Save" to save the layout added. The user can also click "Edit" to modify the layout settings.





Note: Click button in the live preview interface and then click button to quickly add layouts. There would be no button showed here after adding the layout for the maximum number of 10. Please click *Live Preview Custom Layouts* to edit or delete layouts.

Edit Live Preview Settings

Click *Edit Live Preview*Settings under Live

Preview to go to the interface as shown on the right.

The listen status will not change if you check "Keep listen status when change monitor spots".



The system will save the live preview layout if you check "Auto save live preview layout" (the layout will be saved every 30s by default). You will have to save the layout manually if you disable the function.

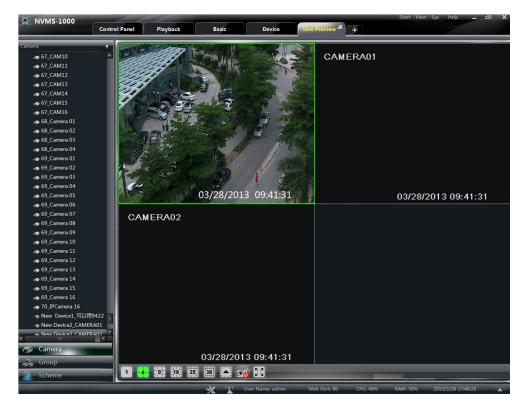
The system will enter full-screen live preview when you start it next time if you check "Enter full-screen live preview when start the software".

The system will prevent the new camera from being previewed or automatically adjust its stream in order not to exceed the upper limits which you set for the CPU, memory and virtual memory if the resource overload has reached the upper limits. Click "OK" button to save the settings.

5.1.2 Monitory Point Preview

To start the live preview, please drag the cameras from the list to the right display window or select a window and then double click the camera to display the live image.

You can drag the image to any window at random.



Node unfold rule: After you set the device and area for the first time, you shall obey the following rule to view all tree nodes. When the tree node number is more than 64, the system will unfold the upper node by default.

For example: A (There is camera group AC under A; sub-area a under AC; camera group ac under sub-area a). If the node number is more than 64, A will be unfolded and AC will be displayed, but a will not be unfolded and ac will not be displayed. If the node number of A is less than 64, A will be folded and all nodes need to be unfolded manually.

5.1.3 Stop Preview

Close Preview of Channel

Place your mouse on the window to display the menu toolbar and then click to close the preview of this channel.

Close All Preview

Click on the main menu toolbar to close all the windows.

Close Preview by Right-clicking

Choose *Close Preview* by right-clicking the display window to close the preview of this channel. Refer to the figure on the right.

5.2 View in Sequence

After setting up group or scheme (please refer to chapter 4 for creating group), go to the live preview interface and then click "Group" or "Scheme" button on the left bottom of the interface to display the group list or scheme list.

5.2.1 Camera View in Sequence

Start Camera View in Sequence

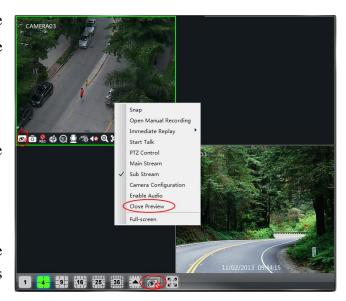
Go to the live preview interface and then click

"Group" button to display the group list. Drag a group to any window (icon stands for group). The cameras of this group will be played one by one in the window according to the dwell time interval.

Right click the display window to pop up a drop-down list. Click "Next Channel" or "Previous Channel" to view the video of next or previous channel manually.

> Stop Camera View in Sequence

Right click the display window to select "Close Preview" to close the preview of this channel or click on the main menu bar to close all windows for stopping camera view in sequence.







Edit the Group of Cameras

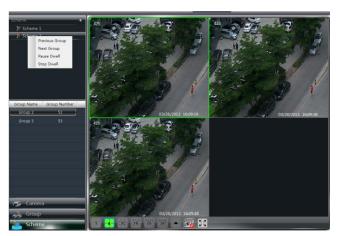
Select a camera under a camera group and then double click the group name circled on the right picture. Then the group of the camera can be changed through the pop-up window.

5.2.2 Group View in Sequence

Start Group View in Sequence

Go to the live preview interface and then click "Scheme" button to display the scheme list. Drag a scheme to any window (icon stands for scheme). The screen mode will be distributed automatically according to the number of the cameras in the group. Videos will be switched group by group.

Note: To achieve auto-switch between devices, you should set device as a unit when adding group and then add all the groups into one scheme.



A drop-down list will pop up by right clicking on the scheme name. Select "Previous Group" or "Next Group" to manually play the videos of the previous or next group. Select "Pause Dwell" to give a pause for the group switch, that is, only playing the video of the current group.

> Stop Group View in Sequence

Right click on the scheme name and choose "Stop Dwell" or click to close all the windows for stopping group view in sequence.

5.3 Preview Control

> Multiple Screen Mode

Click button on the live preview interface (Please refer to <u>5.1.1 Edit Live Preview Settings</u> to add more screen modes).



> Full Screen

Click button on the live preview interface or right click on any preview window and then click "Full Screen" to view in full screen.

Right click on the full screen interface and then click "Exit Full Screen" to exit full screen.

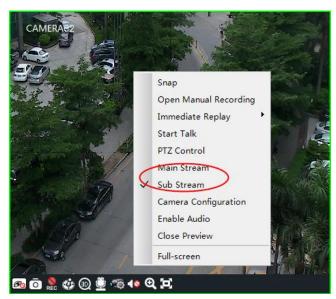
> Single Channel Displaying

Double click the selected window to view in single channel mode. Double click the window again to recover the window.

> Stream of Live Preview

Right click on the preview window to choose recording stream as shown on the right. Live preview adopts stream self-adaptive rule.

Modify Device Stream: Click button on the preview window to enter the Area and Camera Management interface. Click Image Quality under Image Setting to modify device stream. Please refer to 3.3.2 Camera Management for details.



> Audio

Right click on the preview window to choose "Enable Audio" or click icon to enable audio of this channel.

Note: Only one audio can be enabled at the same time. If you enable another channel's audio, the enabled audio will be closed automatically.



Zoom In

Click button on the toolbar in the preview window to zoom in the image; click to recover the image.

5.4 Snap

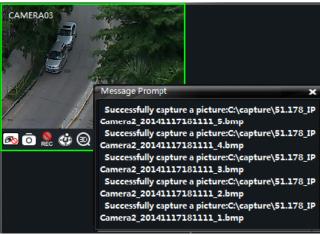
5.4.1 Snap

Click button on the toolbar in the selected preview window or right click the window to choose *Snap* to capture the pictures. After snapping pictures, a message prompt box will pop up to remind you the pictures are captured successfully and where the pictures are stored.

Note: Capturing pictures can be realized only in live preview or playback.







5.4.2 Snapshot Number

Click Set Snap Default Number under Basic in the control panel to set the snapshot number.

5.4.3 Record and Snapshot Path

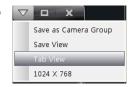
Click *Basic* in the control panel to go to the interface and then click *Partition and Path* to select a folder to save the record files. Click *Set the Default Path of Snap* under Partition and Path to set up the path to save the snapshot files.

5.5 Multi-screen Preview

Click button in any interface to plus a tab of live preview. Drag any tab of live preview or right click the tab of live preview to select "Float" to pop up an independent live preview interface as shown below. Multi-screen preview can be realized by dragging the independent interface to other screen (graphics card should support multi-screen output at the same time).



Click button in the live preview interface and then choose "Tab view" to embed this tab in the main interface.



Note: 1. 20 live preview tabs can be added.

2. Live preview interface can be displayed on multiple screens.

5.6 Talk and Broadcast

5.6.1 Talk

Click button on the toolbar in the selected preview window or right click to pop up a menu bar. Choose "Start Talk" to enable bidirectional audio.

Note: Since NVMS1000 only allows opening one device's talk at the same time, the system will stop talk with the current device for enabling new talk with another device which is launching talk.



5.6.2 Broadcast

Click *System* on the menu bar of the software at the upper right and then choose *Broadcast* to go to the interface as shown on the right.



Click "Add Broadcast Device" button to pop up a window and then check the devices you want to broadcast. Click "OK" button to save the setting. Click "Start Broadcasting" to start broadcasting.



5.7 PTZ Control

5.7.1 Parameter Configuration of PTZ

Please confirm the parameter of PTZ has been configured correctly before operating PTZ. Click button in preview window or *Edit Camera Setting* under *Device* to go to the interface. Click *PTZ Setting* to enable PTZ and set up protocol, baud rate and address of PTZ.

Note: The protocol, baud rate and address of PTZ here must be consistent with the PTZ decoder.

5.7.2 PTZ control

Return to the live preview interface after configuring parameter of PTZ. Select the channel and then click or right click the preview window and then choose *PTZ Control* to open the control panel of PTZ.

• Click the direction buttons to control its rotational direction; drag the slider to control its speed.



- Click and buttons to adjust focus, iris and zoom.
- Select a preset point and then click to operate this preset point or double click the preset point to operate it.
- Click "Cruise" button to list the cruises. Select a cruise and click button to cruise; click button to stop cruising. PTZ can also support track, auto scan, wiper and light function.

3D zoom

In the live preview interface, select a preview window of a dome and then click to enable 3D zoom. Click to disable 3D zoom.

Enable 3D zoom and then drag the mouse to draw a frame from left to right in the preview window and then take the frame center as the focus center to zoom in the selected image area; drag the mouse to draw a frame from right to left and then take the frame center as the focus center to zoom out the selected image area.

6 Record Management

NVMS1000 supports manual recording, schedule recording, motion detection recording and sensor alarm recording. This chapter will introduce the above four record types respectively.

6.1 Manual Recording

Select a channel and then click button or right click to choose "Open Manual Recording" to start recording. Click button or right click to choose "Close the Manual Recording" to stop recording.

Note: If a channel is recording, closing preview will give rise to stopping it.

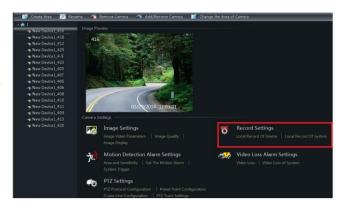
6.2 Schedule Recording

Click *Edit Camera Settings* under Device in the control panel to go to the interface as shown on the right.

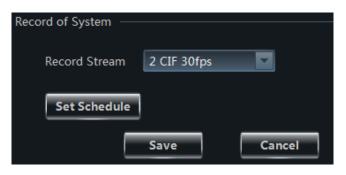
Select a camera and then click *Local Record of Device* to go to the interface as shown on the right.

Enable Schedule Record and set schedule and pre-recording time, record duration, etc.

Click *Local Record of System* to go to the interface as shown on the right. You can choose record stream and set record schedule. Please refer to 3.3.2 Camera Management for details.

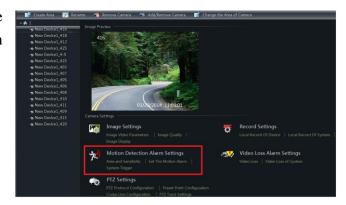




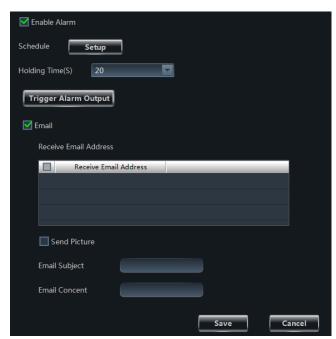


6.3 Motion Detection Recording

Click *Edit Camera Settings* under Device in the control panel to go to the interface as shown on the right.



Select a camera and then click *Set The Motion Alarm* under Motion Detection Alarm Settings to go to the interface as shown on the right. Enable the alarm and set the relevant trigger.



Click *System Trigger* under Motion Detection Alarm Settings to go to the interface as shown on the right.

Click "Trigger the Record Channel" to select channel. The selected channel whose motion detection alarm is triggered will be recorded automatically.



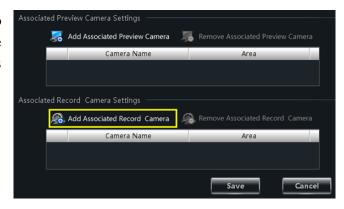
6.4 Sensor Alarm Recording

Click *Edit Camera Settings* under Device in the control panel to go to the interface.

Select a sensor and then click "Set the Alarm Trigger" as shown on the right.



Click "Add Associated Record Camera" to choose associated record cameras. When the sensor alarm is triggered, the selected cameras will be recorded automatically.



6.5 Intelligent Event Alarm Recording

Intelligent Event Alarm recording includes object removal recording, video exception recording, line crossing recording and intrusion recording. Please refer to <u>8.4 Intelligent Event Alarm</u> for details.

6.6 Set Record Partition

As the new video data getting more and more till it takes up all the partition space, to write data circularly, the new data will overwrite the old data. If you do not want the old data to be overwritten, you should change the record partition of the new data. Click *Set Record Partition* under Playback in the control panel to go to the interface as shown below. Choose a partition for storing record.



7 Playback Management

Click *Playback* in the control panel to go to the interface. You can play back the local stored record files.

Record playback interface has two types: synchronous and asynchronous. Here we take the synchronous as an example.



Area Descriptions:

| Area | Description | Area | Description |
|------|------------------|------|---|
| 1 | Playback Area | 2 | Toolbar |
| 3 | Record time Area | 4 | Resources Area, Time search or type search Area |

Toolbar on Playback Window:

| Icon | Description | Icon | Description |
|----------|------------------|------|-------------|
| <u> </u> | Close playback | 0 | Snap |
| 48 | Open/close audio | Ø | Zoom in |
| Θ | Fit to window | | |

Buttons Description of Area 2:

| Icon | Description |
|--------------|--|
| 1 4- 9 16 | Screen mode. 1,4,9,16 channels are optional. You can get more screen mode by clicking |
| | Close playback of all channels |
| | Full screen |
| | Stop |
| 11 | Pause |
| > | Playback speed bar |
| | Playback by single frame. When playback, click button firstly and then click this button to play frame by frame. |
| <u></u> | Forward 30s or backward 30s |
| >8 | Backup the start time |
| 3 | Backup the end time |
| 1 | Download |
| | Event list. Click this button to pop up the event list |
| Synch Asynch | Record playback model. Synchronous and asynchronous |
| ↑ @ ▼ | Playback source setup |

Right button functions:

| Menu | Description | Menu | Description |
|-------------------------|------------------------------------|---------------|------------------------------|
| 4:3 | 4:3 proportion | 16:9 | 16:9 proportion |
| Original Proportions | Recover to the original proportion | Full Screen | Full screen mode |
| Snap | ap Snap picture E | | Enable or close audio |
| Download By Time | To download record by time search | Close Channel | Close single channel preview |
| Full-Screen | To display in full screen | | |

7.1 Playback

Set record date, record type (for some devices, you can check "Main Stream" to play the record by main stream, or by sub stream if you don't check it) and the record playback source in the playback interface.

The way to set record playback source: click in on the toolbar of record playback interface; choose the record playback source in the drop-down menu stands for local playback; stands for remote playback; stands for all playback). Drag the camera on the right side to playback window for playing. You can also select a camera and then click "Search" button to search the record file. Click button or "Play" button to play back the record.

Playback record type includes manual recording, motion detection recording, schedule recording, sensor recording, object removal recording, video exception recording, intrusion recording and line crossing recording.

In the calendar area, the dark black date indicates that there are record files on that day.

In the timeline, different color bars stand for different record types. For instance, green bar stands for manual recording data; yellow bar stands for motion recording data; blue bar stands for schedule recording data; red bar stands for sensor record data, etc.



You can zoom in the time scale by clicking on the lower right corner, zoom out the time scale by clicking and recover the time scale to 24 hours by clicking. When the time scale is zoomed in, you can drag the timeline to see the time spots. By pressing the Ctrl key and scrolling up or down the mouse you can also zoom in or zoom out the time scale.

7.1.1 Playback Synchronously

Synchronous Playback: in a certain time, all channels play back its record at the same time spot together; if one channel has no record data at this time spot, this channel will be waiting.

Click on the toolbar in the playback interface to go to the synchronous playback interface.

You can play the record according to the ways introduced in <u>8.1 Playback</u>. In synchronous mode, one camera can only have one play window. You can view all cameras' record information at the same time. When playing record file in synchronous mode or asynchronous mode, clicking will be useless unless you close all the playback windows.

7.1.2 Playback Asynchronously

Asynchronous Playback: when playing some channels' record at the same time, each channel is independent from the others and each channel's playback time can be different.

Click Asynch to go to the asynchronous playback interface. You can play the record according to the ways introduced in <u>8.1 Playback</u>.



Note:

Asynchronous mode: if remote playback or all playback source is selected, due to the remote channel number restriction of the device, one device can only play back up to 4 channels' record at the same time generally.

Synchronous mode: if remote playback or all playback sources is/are selected, it has no restriction in the playback channel number of one device at the same time. For example, a 16 channels' DVR can play back16 channels' record at the same time.

7.1.3 Playback by Setting Time

Right click the color bar on the time scale to pop up the *Play time precise positioning of the channel X* box. Click the box to pop up a window as shown on the right. Input time manually or click \square button to set time. The channel record will be played from the time you set.

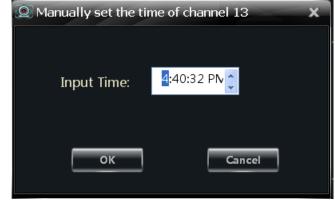
7.1.4 Playback by Searching Event

Click button to display the event list. Double click an event to play this event record.

Note: By clicking the timeline, you can choose a more accurate playback time. You may also click and then select the speed in the popup bar with the popup bar to change the playback speed.

7.1.5 Playback by Record Player

If your system has installed the previous version of NVMS1000 and you need to install the latest version, a prompt which telling you that you need to back up the video data of the previous version will show if the previous version has not been uninstalled before you install the new version.



After successfully backing up, you should uninstall the previous version manually and then install the new version. The shortcuts of NVMS1000 and the Record Player will show on the PC desktop if you successfully installed the new version. The Record Player is used to play the record of v2.1.5 version and it is useful for v2.1.5 only.

If you uninstall the previous version before you back up the record data, the Record Player will not show after you install the new version of NVMS1000.

7.2 Snap When Playback

Click button on the playback window to capture pictures. A message prompt will pop up after

snapping.

7.3 Clip and Backup Record

7.3.1 Clip and Backup Record

When playing back record file, click button to set the start time; click button to set the end time. Click button to download the video files within the configured time.

Note: The default path is C:\backup\.

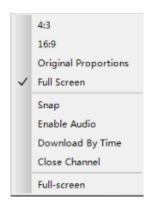
7.3.2 Backup Path Configuration

Click *Basic* in the control panel to go to the interface and then click *Path of Backup File* to set the backup path as shown on the right.

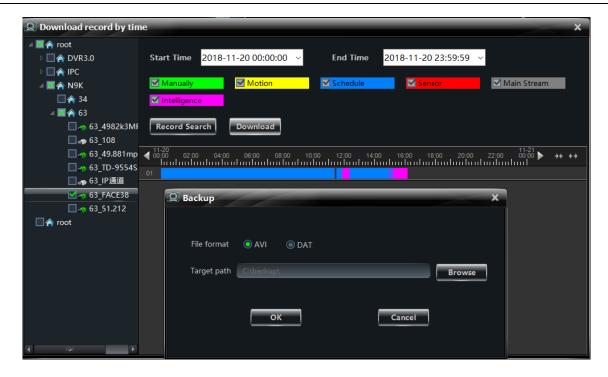


7.4 Download Record By Time Search

Right click the playback window in the playback interface to pop up a drop-down list as shown on the right.



Click *Download By Time* to pop up a window as shown below. Select record channel, start time and end time, check event type and then click "Record Search" button to search record. If the record is searched, click "Download" button to pop up the backup window as shown above. AVI and DAT backup formats are available (the DAT format is the private format of DVR and the backup files of this format should be played by SuperPlay or RPAS, the player of the DVR). Click "Browse" button to set path. Click "OK" button to back up record.



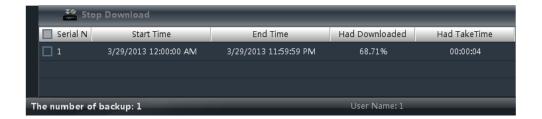
For some devices, you can check "Main Stream" to backup the record by main stream, or by sub stream if you don't check it. The "Main Stream" is enabled by default.

7.5 Download Record by Event Search

Click button to show event information list. Choose an event and then right click it to download this event record.

7.6 View the Progress of Downloading

Move the mouse to the toolbar at the bottom of the interface for download progress viewing. Refer to the figure as shown below. You can also manually stop downloading.



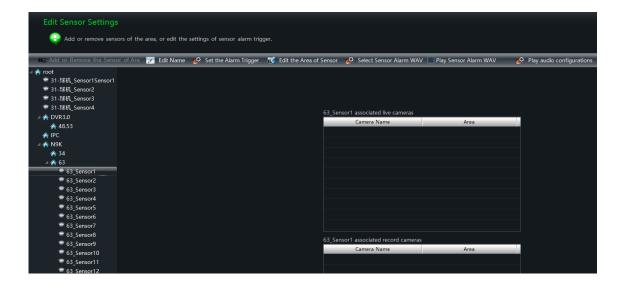
A popup window will show up if you exit the software when a backup task is going. Refer to the figure on the right.

| Are you sure | to exit the program? | |
|---|----------------------|--|
| Has downloading task of backup, it will be clear if exit the program. | | |
| User Name | admin | |
| Password | | |
| | OK Cancel | |

8 Alarm Management

8.1 Sensor Alarm

Click Alarm Management in the control panel to go to the interface as shown below.



> Add or Remove the Sensor of Area

Choose an area in the above interface and then click "Add or Remove the Sensor of Area" button to go to the interface as shown on the right.

Check the sensor under the area on the right and then click button to remove the sensor.

Check the sensor on the left and then click button to add the sensor.



Rename or Change Area

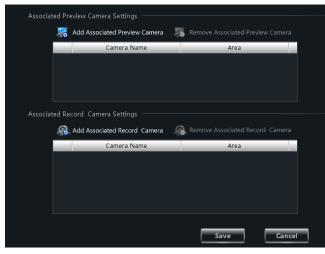
Choose a sensor and then click "Edit Name" button to change its name. Click "Edit the Area of Sensor" button to change the area of sensor.

> Alarm Link Setup

Choose a sensor and then click "Set the Alarm Trigger" button to go to the interface as shown on the right.

♦ Add Associated Preview Camera

Click *Add Associated Preview Camera* to pop up a window. Check cameras and then click "OK" button to save the setting. When sensor alarm is triggered, the alarm preview and e-map preview



will pop up automatically. Select the added camera and then click *Remove Associated Preview Camera* to remove the camera.

♦ Add Associated Record Camera

Click *Add Associated Record Camera* to go to the interface. Check the associated cameras and then click "OK" button to save the setting. When the sensor alarm is triggered, the selected channels will be recorded automatically. Select the added camera and then click *Remove Associated Record Camera* to remove the camera

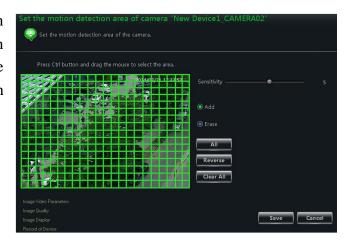
> Sensor Alarm WAV Setting

- ① In the alarm management interface, click "Select Sensor Alarm WAV" to choose the desired WAV audio file.
- ② Click "Play audio configurations" to set audio playing time. 10/20/30 seconds can be selected.
- 3 Check "Play Sensor Alarm WAV".

After you complete the above configurations, the audio file will be played when a sensor alarm is triggered. If you only check "Play Sensor Alarm WAV but don't select sensor alarm audio, the system will play the default audio file.

8.2 Motion Detection Alarm

Click *Edit Camera Settings* under Device in the control panel. Select a camera and then click *Area and Sensitivity* to go to the interface as shown below. You can adjust the detection sensitivity and set up the motion area.

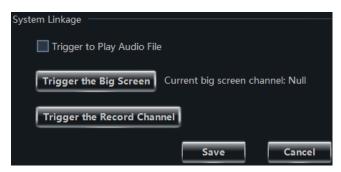


Click *Set the Motion Alarm* to go to the interface as shown on the right.



Click *System Trigger* to go to the interface as shown on the right.

Note: Please refer to <u>3.3.2 Camera</u> <u>Management</u> for details.

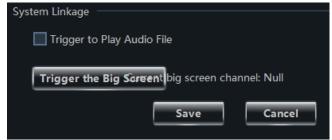


8.3 Video Loss Alarm

Click *Edit Camera Settings* under Device in the control panel. Select a camera and then click *Video Loss* to go to the interface as shown on the right. The video loss configuration steps are the same with the device setting. Please refer to the video loss chapter of the device user manual.

Select a camera and then click *Video Loss of System* to go to the interface as shown on the right. Please refer to 3.3.2 Camera Management for details.





8.4 Intelligent Event Alarm

8.4.1 Object Removal Alarm

Click *Edit Camera Settings* under Device in the control panel to go to area & camera management interface. Select a camera on the left and then click "Object Removal" under Intelligent Event Settings to go to the interface as shown on the right.

Enable object removal detection, select the detection type (Left Detection or Item Missing Detection), alarm area and alarm holding time



and set the alarm name and then click "Start Draw" button to draw the alarm detection area (click around the area where you want to set as the alarm area in the image on the left side to draw a closed area; click "Stop Draw" button if you finish the drawing) and finally click "Save" to save the settings.

Enable Left Detection: The relevant alarms will be triggered if there are items left in the alarm area drew by the users.

Enable Item Missing Detection: The relevant alarms will be triggered if there are items missing in the alarm area drew by the users.

Select a camera on the left and then click "Object Removal Trigger" under Intelligent Event Settings to go to the interface as shown on the right.

Set the alarm trigger linkage (trigger to play audio file, trigger the big screen or the record channel) and then click "Save" to save the settings.



8.4.2 Video Exception Alarm

Click *Edit Camera Settings* under Device in the control panel to go to area & camera management interface. Select a camera on the left and then click "Video Exception" under Intelligent Event Settings to go to the interface as shown on the right.

Set the detection sensibility and alarm holding time after enabling the detections (Scene Change Detection, Video Blur Detection and Video Cast Detection) and click "Save" to save the settings.



Scene Change Detection: The relevant alarms will be triggered if the scene of the monitor video has changed.

Video Blur Detection: The relevant alarms will be triggered if the monitor video is blurred.

Video Cast Detection: The relevant alarms will be triggered if color cast happens to the monitor

video.

Select a camera on the left and then click "Video Exception Trigger" under Intelligent Event Settings to go to the interface as shown on the right.

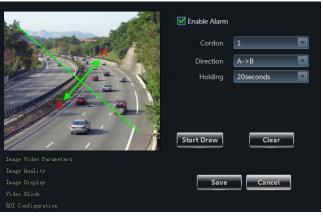
Set the alarm trigger linkage (trigger to play audio file, trigger the big screen or the record channel) and then click "Save" to save the settings.

8.4.3 Line Crossing Alarm

Line Crossing: Alarms will be triggered if someone or something crosses the alarm lines drew by the users.

Click *Edit Camera Settings* under Device in the control panel to go to area & camera management interface. Select a camera on the left and then click "Line Crossing" under





Intelligent Event Settings to go to the interface as shown on the right.

Select the cordon number, direction, alarm holding time after enabling the line crossing alarm and then click "Start Draw" button to draw the cordon (drag the mouse to draw a cordon in the image on the left side; click "Stop Draw" button if you finish the drawing) and finally click "Save" to save the settings.

Direction: A<->B, A->B and A<-B are optional. It is the crossing direction of the intruder who crosses over the alarm line.

A < -> B: the alarm triggers when the intruder crosses over the alarm line from B to A or from A to

A->B: the alarm triggers when the intruder crosses over the alarm line from A to B.

A<-B: the alarm triggers when the intruder crosses over the alarm line from B to A.

Select a camera on the left and then click "Line Crossing Trigger" under Intelligent Event Settings to go to the interface as shown on the right.

Set the alarm trigger linkage (trigger to play audio file, trigger the big screen or the record channel) and then click "Save" to save the settings.



8.4.4 Intrusion Alarm

Click Edit Camera Settings under Device in the control panel to go to area & camera management interface. Select a camera on the left and then click "Intrusion" under Intelligent Event Settings to go to the interface as shown on the right.

Select the alarm area number and alarm holding time after enabling region intrusion detection and then click "Start Draw" button to draw the alarm area (click around the area where you



want to set as the alarm area in the image on the left side to draw a closed area; click "Stop Draw" button if you finish the drawing) and finally click "Save" to save the settings.

Select a camera on the left and then click "Intrusion Trigger" under Intelligent Event Settings to go to the interface as shown on the right.

Set the alarm trigger linkage (trigger to play audio file, trigger the big screen or the record channel) and then click "Save" to save the settings.



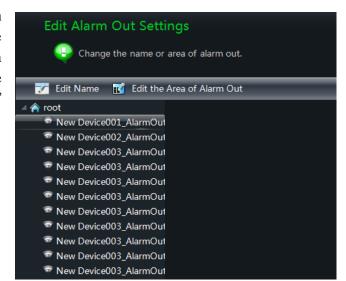
8.5 Manual Alarm



in the status bar to pop up the following window. Check the alarm outputs which need to be triggered manually, select the alarm time and then click "Open Alarm" button to trigger the alarm. You can close the alarm by clicking "Close Alarm" button.



Click *Edit Alarm Out Settings* under Alarm Management in the control panel to go to the interface as shown on the right. Select an alarm output and then click "Edit Name" to change the name, or click "Edit the Area of Alarm Out" to change the area of the alarm output.



8.6 Face Match Alarm Configuration

Click "Face Match Alarm" in the camera management interface. Here you can enable Pop-up window when face match alarm happens and set the duration time of pop-up window.

Note: If the added device has no such function, please skip the instruction.



8.7 Alarm Preview

The alarm preview interface will automatically pop up if the relevant alarm page and alarm preview have been configured already.

8.7.1 Alarm Preview Configuration

♦ Motion Detection Alarm

Click *Edit Camera Settings* under *Device* in the control panel to go to the interface. Select a camera and then click *System trigger* under Motion Detection Alarm Settings to go to the interface. Click "Trigger the Big Screen" button under system linkage to select channel.

♦ Video Loss Alarm

Click *Video Loss of System* to go to the interface and then click "Trigger the Big Screen" button under System Linkage to select channel.

♦ Sensor Alarm

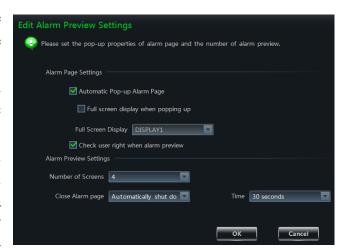
Click *Alarm Management* in the control panel to go to the interface and then click "Set the Alarm Trigger" button to add the associated preview cameras.

Click *Edit Alarm Preview Settings* under Live Preview to go to the interface as shown on the right.

Alarm preview will pop up automatically when alarm is triggered if checking "Automatic Pop-up Alarm Page".

Alarm preview will pop up automatically in full screen when alarm is triggered if checking "Full screen display when popping up". Choose a display monitor in the "Full Screen Display" drop-down menu. The alarm image will display

on the designated monitor when alarm is triggered.

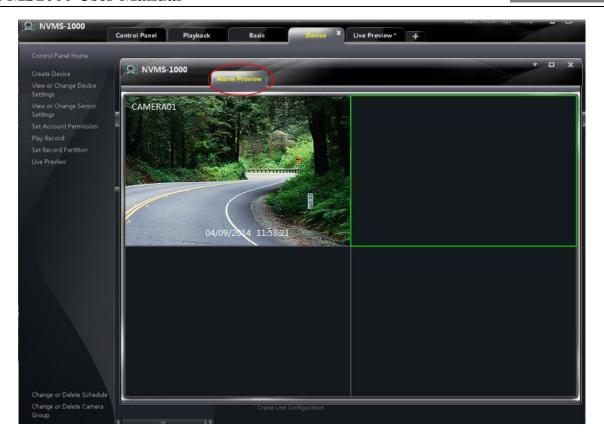


The system will check whether the user which cannot view the live video has the permission to see the alarm preview when an alarm is triggered if the "Check user right when alarm preview" is enabled.

Set the number of screens. You can choose to close the alarm page automatically or manually. You can set the time if auto mode is selected.

8.7.2 Alarm Preview

After configuring the alarm, the alarm preview will automatically pop up if the alarm of the selected channel is triggered. The default pop-up window of the system is an independent interface. Please refer to the figure as shown below.



Click button on the upper right corner of the sub interface and then select *Tab View* to embed the sub interface in the main interface.



8.7.3 Alarm Information

You can extend the alarm information list at the bottom of the NVMS1000 interface. Refer to the below picture. You can view the alarm time, alarm source, status and processing status in the alarm information list. These alarm information can be deleted. You can play the record of alarm (there will be no playback button if the trigger record has not been configured).



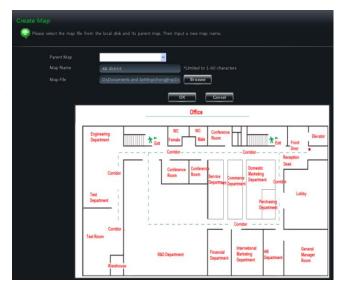
9 E-Map

Click **E-Map** in the control panel to go to the interface as shown below.



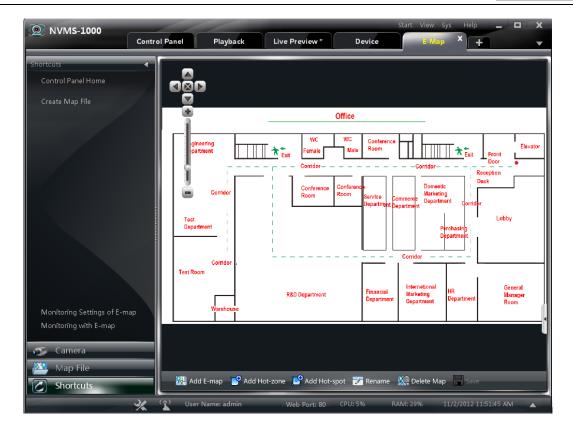
9.1 Create map

Click "Shortcuts" button on the left side of the E-Map interface to show the shortcut menu. Click *Create Map File* to go to the interface as shown on the right. Import a map and set a name for it.



9.2 Modify or Delete Map, Hotspot and Hotzone

In the E-Map interface, click *Edit E-map* on the left side to go to the interface as shown below.



9.2.1 Change or Delete Map

In the above interface, click *Map File* to show the map files on the left side. Select a map and then click "Rename" to set a new name for it.

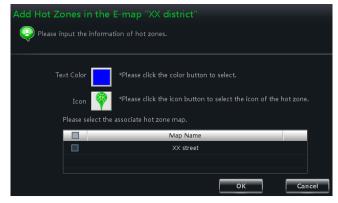
9.2.2 Add, Change and Delete Hotzone

> Add Hotzone

Click *Map File*, select a map and then click "Add Hot-zone" to go to the interface as shown on the right.

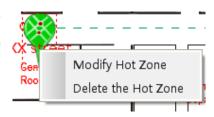
- ① Check a map related to the hotzone.
- ② Click to select the text color displaying under the hotzone icon.
- ③ Click to select icons for the hotzone.

 After finishing adding the hotzone, double click the hotzone icon to go to the map related to the hotzone.



Modify and Delete Hotzone

Right click a hotzone on the map and then click *Modify Hot Zone* or *Delete the Hot Zone* to change font color, icon or name or delete it.



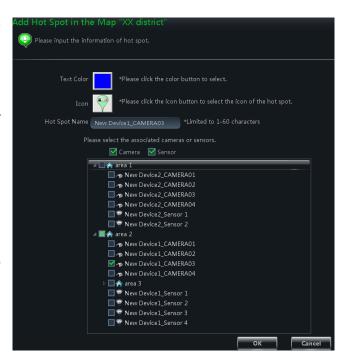
9.2.3 Add, Change and Delete Hotspot

In the E-Map interface, select a map and then click "Add Hot-spot" to go to the interface as shown on the right.

- ① Check the associated cameras and sensors.
- ② Click to select the text color displaying under the hotspot icon.
- ③ Click to select an icon for the hotspot.
- 4 Set a name for the hotspot.

There is another way to add hotspot.

Select a map and then double click the camera or drag the camera to the map for adding hotspot.



Note: The hot zones or hotspots will focus on the map in the same position after being added. You should drag them to the corresponding positions on the map. Click "Save" to save the settings.

9.3 E-map Monitoring Settings

In the E-Map interface, click *Monitoring Settings of E-map* on the left side to go to the interface as shown on the right.

Check "Automatic pop-up alarm preview window" and then click "OK" button to save the setting. If the configured hot spots raise the alarm, the preview image will pop up automatically

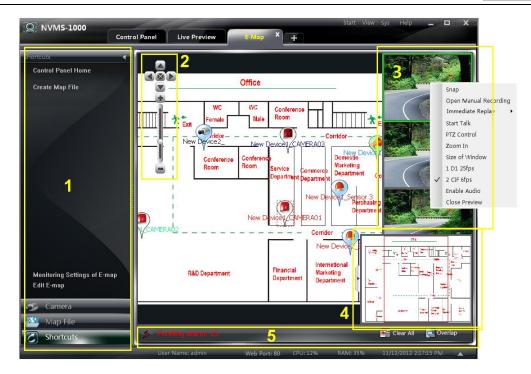


9.4 E-map Live Preview

In the E-Map interface, click *Monitoring with E-map* on the left side to go to the interface.

Note: If the item "Edit E-map" appears on the bottom of the menu bar in the E-Map interface, the current interface is monitoring with E-map interface. Double click a hotspot to go to its map.

The icon of the hotspot will become a flashing light if this hotspot raises the alarm. What's more, there will be preview windows on the right side if you had checked "Automatic pop-up alarm preview window". Click the alarm preview image to go to the map whose hotspot raises the alarm.



Area Description:

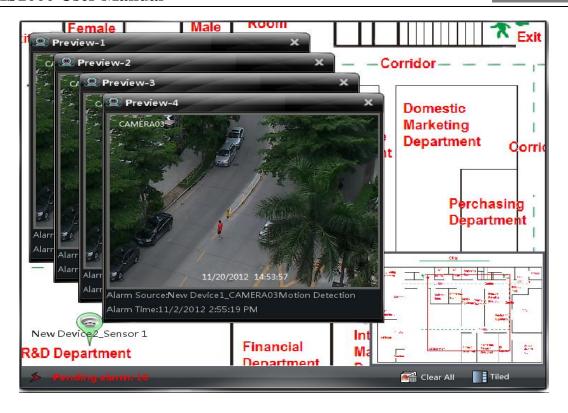
| Area | Description |
|------|--------------------------------------|
| 1 | Menu bar |
| 2 | Zoom in/out the map |
| 3 | Alarm preview |
| 4 | Overall display of map(suppressible) |
| 5 | Alarm message prompts |

Right Click on the Alarm Preview Window:

| Item | Description | Item | Description |
|------------------|---|--------------------------|--------------------------------|
| Snap | Picture capture | Open Manual Recording | Start manual record |
| Immediate replay | Click it to set the immediate replay time | Start Talk | Start talk |
| PTZ Control | Click to display PTZ control panel | Zoom In | Zoom in the image |
| Size of Window | Recover the image size | Stream | Choose stream to view |
| Enable Audio | Enable audio | Close Preview | Stop preview of single channel |

Click "Clear All" to clear all the alarms.

Click "Overlap" to make the alarm preview windows to overlap together. You can drag each window to view respectively.



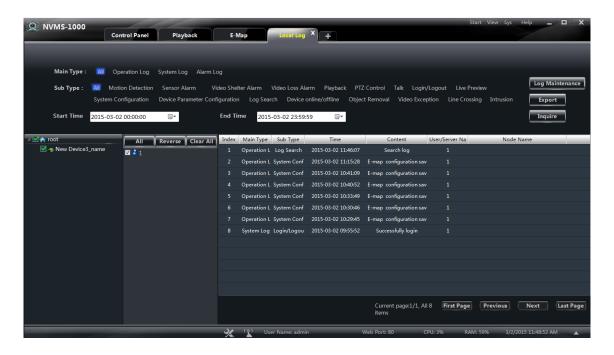
Click "Tiled" button to tile the alarm preview windows on the right side.



Right click on the map to pop up a menu bar. Click "Full Screen" to view the image in full screen. Right click on the map and then click "Exit Full Screen" to exit.

10 Local Log

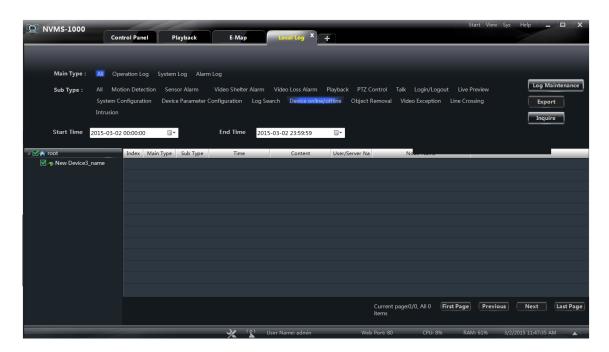
Click *Local Log* in the control panel to go to the interface as shown below.



10.1 Search log

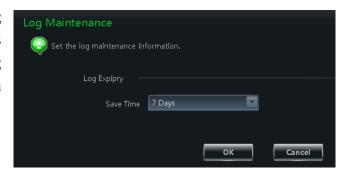
Select main type and sub type, set the start time and end time and then click "Inquire" button to search the relevant log information. Click "First Page", "Previous", "Next" and "Last Page" to view the information on different pages.

For example, if you want to view the online/offline information of devices, you should select **Device online/offline** under Sub Type in the above interface. Click "Inquire" to view the online/offline information of devices.



10.2 Log Maintenance

In the local log interface, click "Log Maintenance" button to go to the interface as shown on the right. You can save the log information for a certain time by configuration in this interface.



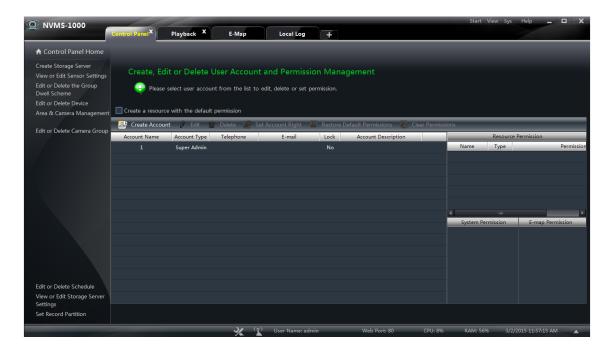
10.3 Export

In the local log interface, click "Export" button and then set a storage path to export the log information.

11 User Management

Click *User Management* in the control panel to go to the interface as shown below.

There is only one super user registered by you when you log in the system for the first time. You can add several users and set right for them through the function of "Set Account Right".



11.1 Create a Resource with the Default Permission

In the above interface, *Create a resource with the default permission* means that permission of new resources will be given to all the users if you are going to create new resources.

11.2 Create, Change and Delete Users

> Create Account

In the interface of User Management, click "Create Account" to go to the interface as shown on the right. Input account name and password. Set account type and the default permission.

You can bind the account by e-mail or telephone and add description to the account.



Notes:

- Two types of user: administrator and operator. Administrator enjoys all the system permissions except account and permission management. Operator only enjoys the permissions of broadcast, searching and exporting log.
- If you have checked "Default Permission" under initial permission when creating new account, all the resource permissions and system permissions will be added for the user.

Change Account

In the interface of User Management, select a user and then click "Edit" button to go to the interface as shown on the right. You can change account name, password, e-mail address, etc.

Delete Account

In the interface of User management, select a user and then click "Delete" button to delete it.



11.3 Account Right Configuration

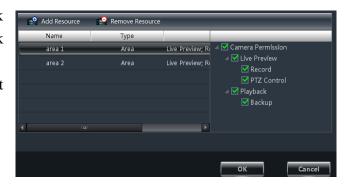
In the interface of User Management, select a user and then click "Set Account Right" to go to the interface as shown below.



Camera Permission

In the interface of Camera Permission, click "Add Resource" button to add resources. Check camera permissions on the right.

You can add different permissions for different users.

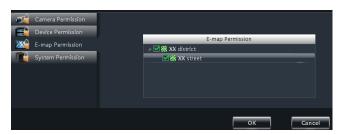


Device Permission

Click *Device Permission* to go to the interface as shown on the right. Select the permissions on the right.



Click *E-map Permission* to go to the interface as shown on the right. Add map permission for the selected user.



> System Permission

Click *System Permission* to go to the interface as shown on the right. Select the system permission for the user.



> Restore Default Permission

In the interface of User Management, select a user and then click "Restore Default Permissions" to restore the default permission of the user.

Clear Permission

In the interface of User Management, select a user and then click "Clear Permissions" to clear the permissions of the user.

12 Basic

Click *Basic* in the control panel to go to the interface as shown below. System startup and maintenance, backup and restore will be introduced in this chapter. Partition and Path configuration have been introduced in the above chapter, here we do not repeat again.

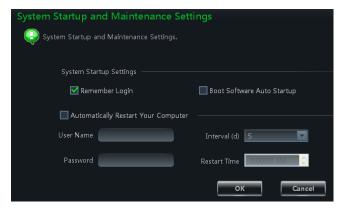


12.1 System Startup and Maintenance

Click *System Startup and Maintenance* to go to the interface as shown on the right.

You can set auto login and auto startup of NVMS1000 by checking the two options under "System Startup Settings".

If checking "Automatically Restart Your Computer", the user name and password of the computer need to be input; time interval and restart time need to be selected.



Click *Edit Port* to edit the HTTP port and data port. Click *Select Language* to change the display language of NVMS1000 (NVMS1000 needs to be restarted before language changing takes effect). Click "Function Customization" to set password requirement when exiting the software (you need to input the password when exiting the software if "Check Password When Exit" is enabled) and the

lowest security level of password. Middle and strong level needs more complicated password setting.

Click "Message Prompt Configuration" to set whether to close message prompt window manually.

12.2 Backup and Restore

When upgrading the software to a new version, you should firstly export the data of the previous version and then import them to the new version so that the repeated addition and settings could be avoided.

12.2.1 Backup System Configuration Data

In the interface of Basic Configuration, click *Backup System Configuration* to export the configuration data.



12.2.2 Restore System Configuration Data

In the interface of Basic Configuration, click *Restore System Configuration* to import the configuration data.

Note: The password information cannot be imported when you import the system



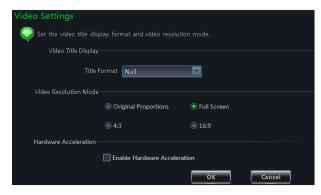
configuration data into the latest version for security purpose.

12.3 Video Display Settings

Click *Video Display Settings* under *Basic* in the control panel to go to the interface as shown on the right. Set the video title display and video resolution mode.

Hardware Acceleration: Set the decoding way by checking "Enable Hardware Acceleration" or not.

If you check it, the system will firstly use NVIDIA



GPU hardware decoding; If it doesn't support NVIDIA, the system will use Intel GPU hardware decoding; If you don't check it, the system will use CPU software decoding. Click "OK" button to save the settings.

12.4 Synchronize Time for Multi-Devices

Click *Synchronize Time for Multi-Devices* under *Basic* in the control panel to go to the interface as shown on the right. Click "Synchronize" button to synchronize time for all the devices.

If Auto Synchronize Time for Multi-Devices is checked, then the time will be synchronized



automatically every three hours. The device will be timed when it gets online.

13 Web Client Login

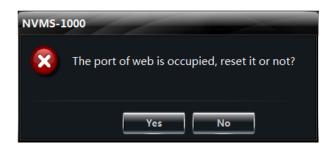
You can login NVMS1000 by web client. The default port number is 80. In web client, you can do live preview and record playback and so on. The browsers which web client supports are IE7, IE8, IE9, IE10, IE11, firefox, google and opera. Here we take IE11 as an example.

13.1 Login

You can login the web client through LAN or WAN.

13.1.1 Change the Port of Web Client

A popup window will be shown if you start NVMS1000 when port 80 is being used. Refer to the below left figure. Click "Yes" button to change the web port. Refer to the below right figure. You can go to Basic → Edit Port interface to change the port.





13.1.2 LAN Login

If you login NVMS1000 via LAN, you need to input the LAN IP address of the PC. If the web port is not 80, you need to input the LAN IP address plus port number in the address bar as shown below.



13.1.3 WAN Login

Port mapping needs to be done if you log in NVMS1000 via WAN. Please refer to the following steps.

- ① Obtain the LAN IP address of the PC.
- ② Log into the management interface of the router by browser. Forward the LAN IP address and port to the router. Port mapping settings may be different in different routers, so please refer to the user manual of the router for details. The web port is shown at the bottom of NVMS1000 software as shown below.



③ Get the WAN IP address from the router after port mapping. Input the WAN IP address plus web port in the IE address bar to login NVMS1000.

Note: When port mapping, you need to map port 6063 as well. 6063 is used to log in NVMS1000 via ocx WAN. Please refer to the above steps to map 6063.

13.1.4 The Download and Installation of Plugins

Input the IP address plus port in the IE address bar and then click "Enter" key to go to the interface as shown below. You can change the display language manually at the top right corner of the login interface.



Input the username and password and then click "Login" to log in NVMS1000. The username and password are the same with which you registered in the PC software. If you log in the NVMS1000 web client for the first time, you will need to download and install the relative plug-ins for normal use of the live preview and record playback. Please download and install the plug-ins according to the tips in the interface.

13.2 Live Preview

The live preview interface is shown as below.



The *admin* on the right top of the interface is the username. Click *Logout* to log out the system. Click *Change password* to pop up the window as shown on the right. Input the current password, set a new password and then click "OK" button to save the settings.

| Change password | × |
|------------------|-----------|
| Password | |
| New password | |
| Confirm password | |
| | OK Cancel |
| | OK Cancel |
| | |

Click on the left side of the interface to hide the left panel; click to show it. Click one camera on the left panel to preview its image on the right side of the interface as shown below.



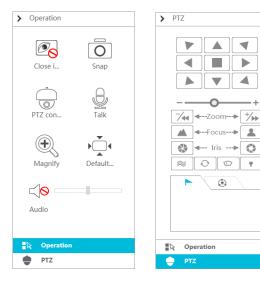
There are some function buttons under the live preview window as shown below.





| Button | Description |
|--------------------|---|
| 1 -4 - 9 - 16 - 25 | Screen mode button |
| | More screen mode buttons will be shown by clicking it |
| | Full Screen |
| 6 | Open all previews |
| 6 | Close all previews |

Click on the right side of the interface to show the right panel as shown below. You can switch the interface between operation and PTZ panel by clicking or operation or prz. The PTZ panel is shown below. Click to hide the panel.



The PTZ panel is introduced as follows.

| Button | Description |
|-------------------|---|
| Close i | Click it to close the preview window |
| O Snap | Click it to snap picture |
| PTZ con | Click it to go to PTZ panel |
| <u>J</u> | Click it to open the remote talk, click it again to close the talk |
| Magnify | Click it to zoom in the image |
| Default | Click it to recover the image to its original size |
| ⊠ Audio | Click it to enable audio and adjust the volume; click it again to disable audio |

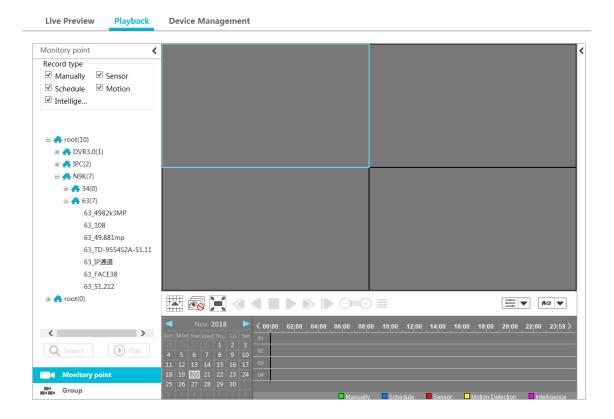
The operation panel is introduced as follows.

| Button | Description |
|------------|---|
| | ▲ to rotate the dome upwards; ■ to rotate the dome diagonally up-right; ▶ to rotate the dome towards right; ■ to rotate the dome diagonally down-right; ▼ to rotate the dome downwards; ▶ to rotate the dome diagonally down-left; ■ to rotate the dome diagonally up-left; ■ to stop rotating the dome |
| | Drag the slider to adjust the rotate speed of the dome |
| -Zoom> +/→ | Zoom button. Click to zoom in camera image; click to zoom out camera image |

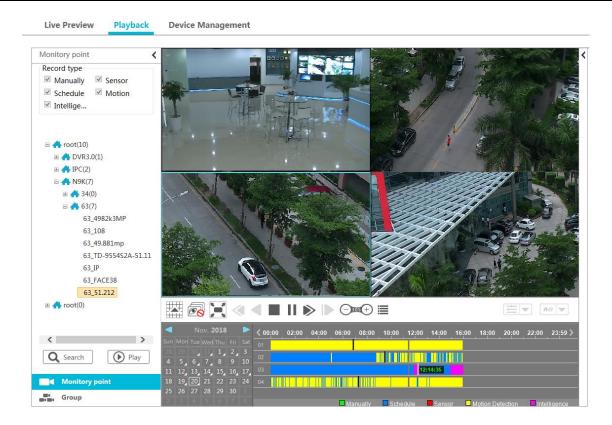
| Button | Description | |
|--|--|--|
| ▲Focus> ▲ | Focus button. Click to increase the focal length; click to decrease the focal length | |
| Iris button. Click to increase the iris of the dome to decrease the iris of the dome | | |
| * | Click it to start track | |
| ○ | Click it to enable automatic scan | |
| | Click it to enable the windshield wiper (Not supported right now) | |
| ** | Click it to enable the light (Not supported right now) | |
| 1 | Click it to view the preset | |
| Click it to view the cruise line | | |

13.3 Record Playback

Click *Playback* on the left top of the interface to go to playback interface as shown below.



Select the record start time, record type and then click the device to play back the record of the device on the right side of the playback interface. You can also click Search button to search the record and then click play to play the searched record.



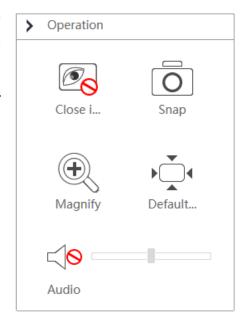
The playback control buttons are introduced as follows.

| Button | Description |
|-------------|--|
| | Click it to show screen mode button |
| 6 | Click it to close all the playback channels |
| Ξ | Full Screen |
| « | Retreat (Not supported right now) |
| 4 | Play backwards (Not supported right now) |
| | Stop |
| Ш | Pause |
| > | Playback speed bar |
| I ▶ | Playback frame by frame. When playing back, click if firstly and then click this button to play frame by frame |
| - | Forward 30s or backward 30s |
| | Event list. Click this button to pop up the event list |
| ₩ | Record playback model: synchronous or asynchronous |
| A | Playback source setup. Local playback \ Online playback \ Local and online playback |



Click to zoom in the proportion; click to zoom out the proportion; click to recover the proportion to 24 hours' proportion. When time scale is zoomed in, you can view the other time points by dragging the timeline

Click on the right side of the playback interface to show the operation panel as shown on the right. The buttons on the operation panel in the playback interface are the same with that of the live preview interface. Please refer to section 13.2 for details.



13.4 Device Management

Click *Device Management* to go to device management interface. Click to add device by *Quickly add*, *Manually add* and *Auto Report*. The operations are similar to that of the NVMS1000 main program.

