

Center Management Services Software  
2.0 (VMS)

user's manual

2019

# catalogue

I. Product brief introduction.....	-1-
1. Introduction.....	-1-
2. System requirements.....	-1-
.12 Hardware requirements.....	-1-
.22 Software requirements.....	-2-
.32 System environment.....	-2-
2. Procedure introduction.....	-2-
1. Equipment management.....	-7-
.11 Add equipment and batch modification.....	-7-
.21 Add the decoder.....	-13 -
.31 Channel grouping.....	-14 -
.41 Layout.....	-16 -
.51 Storage server.....	-18 -
.61 Decode grouping.....	-21 -
2. Real-time monitoring.....	-21 -
2.1 Device / channel right-key function.....	-23 -
.22 Preview the window toolbar.....	- 24 -
2.3 Introduction of the function button on the right side of the preview interface.....	- 25 -
.42. Equipment group round patrol.....	- 26 -
.52. Equipment layout and wheel patrol.....	- 26 -
.62 Cloud platform.....	- 27 -

2.7 Image parameters.....	- 28 -
.82 Preview of the electronic amplification.....	- 29 -
.92. Preview of the multi-screen display.....	- 29 -
3. Video playback.....	- 30 -
3.1 Video recording retrieval.....	- 30 -
3.2 Video recording playback.....	- 31 -
.33. Video file download.....	- 32 -
.43. Toolbar Introduction.....	- 32 -
4. Map configuration.....	- 33 -
.14 Map creation.....	- 33 -
4.2 Map tree right-key function.....	- 34 -
.34 Map cloth defense.....	- 35 -
5 Map management.....	- 35 -
6. Decode configuration.....	- 36 -
6.1 Layout settings.....	- 37 -
.26 Screen input binding.....	- 38 -
7. Decoding management.....	- 39 -
.17 Decode the wall.....	- 40 -
.27 Decoding the packet round patrol.....	- 41 -
.37. Decoding plan round patrol.....	- 41 -
.47 Preview operation page function button introduction.....	- 42 -
.57 Decoder playback.....	- 43 -

.67 Introduction of the function button of the playback operation page.....	- 44 -
8. Am configuration.....	- 44 -
.18 New linkage rules.....	- 45 -
.28. Modify the alarm rules.....	- 48 -
.38 Delete the alarm rule.....	- 48 -
9. Warning management.....	- 48 -
10. Log management.....	- 49 -
11. User management.....	- 50 -
11.1 New Subusers.....	- 50 -
11.2 Sub-user permission assignment.....	- 51 -
.311 Subuser modify and delete.....	- 53 -
12. Local configuration.....	- 54 -
13. Face configuration.....	- 56 -
13.1 Add a face library.....	- 56 -
13.2, Add human faces.....	- 57 -
13.3 Add a channel face library.....	- 58 -
14. Face detection.....	- 59 -
<b>14.1 Preview.....</b>	<b>- 59 -</b>
14.2 Capture capture and alarm record inquiry....	- 60 -
14.3 Sample library query.....	- 61 -
Three, the storage space calculation.....	- 61 -
1. Storage and calculation.....	- 61 -

four. P 2P protocol introduction and fisheye camera access -  
**63 -**

1. Introduction of the P 2 P protocol.....- **63 -**

2. Access and use of the fisheye camera.....- **63 -**

# I. Product brief introduction

## 1. Introduction

Center Management Service Software- PC version (VMS2.0, VMS2.0), is a specialized software for the centralized management of front-end network monitoring equipment, including NVR, DVR, IPC, MDI, SDI, etc. It can mainly realize real-time preview, video playback, electronic map, alarm linkage, decoding wall and other functions, and support WEB terminal access and mobile phone client access.

VMS 2.0 program uses an independent installation package, easy installation, contains the basic functions to be used, generally used in small projects, VMS to take data directly from the device end, —

It is not recommended to use multiple clients to connect to the same device, which increases the pressure on the device side.

VMS 2.0 currently supports five protocols: Register, I8H, I8, SLINK, ONVIF, and GB28181. Register— I8H Including,, SLINK and I8 for our private agreement, and onvif agreement does not limit authorized road and use time, free open, agreement probation for one month, free probation during the probation period, calculated from the installation date,—

~~authorization expires, the equipment will not be able to  
normal online, if you want to obtain permanent  
authorization, please contact the dealer to purchase dongle  
and authorization. —GB28181~~ Now VMS2.0 is completely free  
of use

## **2. System requirements**

### **.12 Hardware requirements**

CPU: Intel (R) Core (TM) i 5 6500 @2.6GHZ or above

Memory: 4G or higher

Video card: Intel HD 630 above integrated graphics card or  
NVIDIA GTX 750 above independent graphics card

Network card: gigabit network card or above

Optical drive: DVD-R

Hard disk: 250G or above, guarantee 20G free space

Switch: gigabit switch or above

## **.22 Software requirements**

1) server2008 and above, windows 7, windows 8, windows 10  
(XP system is not supported)

2) Microsoft Visual C++2010 X 86 Redistributable Setup

3) Microsoft Visual C++2015 X 86 Redistributable Setup

## **.32 System environment**

The program operation requires database, ports 5252 and 6666. One PC can only run one database. Make sure that no other databases are running and two data ports are not occupied, otherwise it may cause the program to run properly.

## **two. Program introduction**

Installation introduction, double-click Run Setup to open the installation wizard:

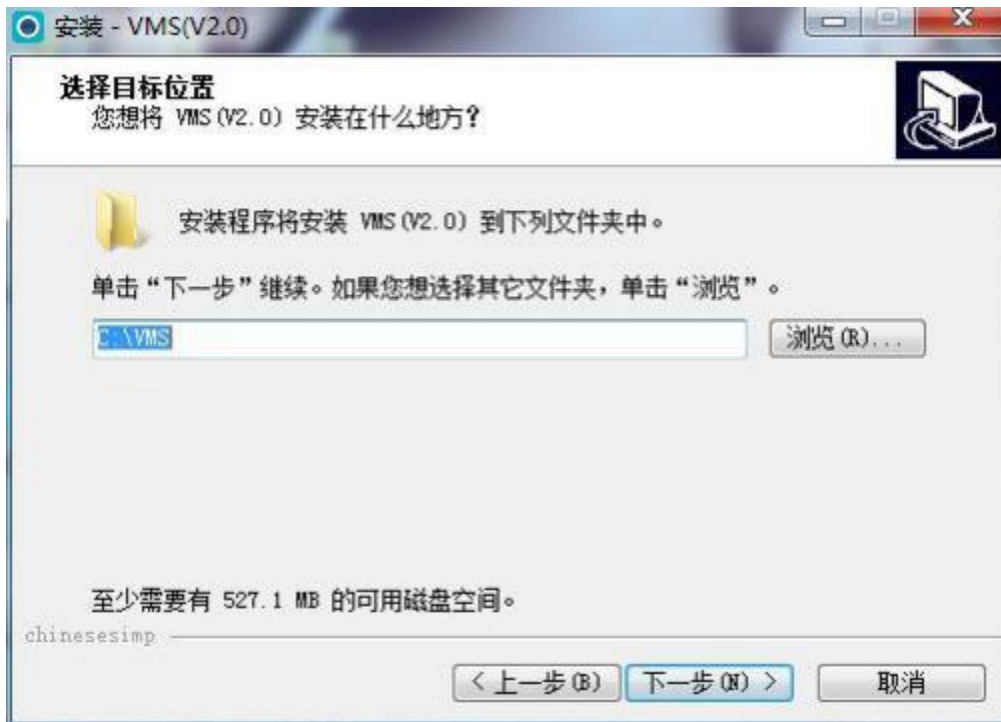




Select the installation language, the program will automatically recognize the system language as the default option, if you need to install other languages, you can choose in the drop-down box, the neutral program supports simplified Chinese and English, if you need to support other languages, please contact the dealer to do the corresponding translation and language import, select Click to confirm after installing the language (take simplified Chinese as an example):



Click Next to select the installation path:



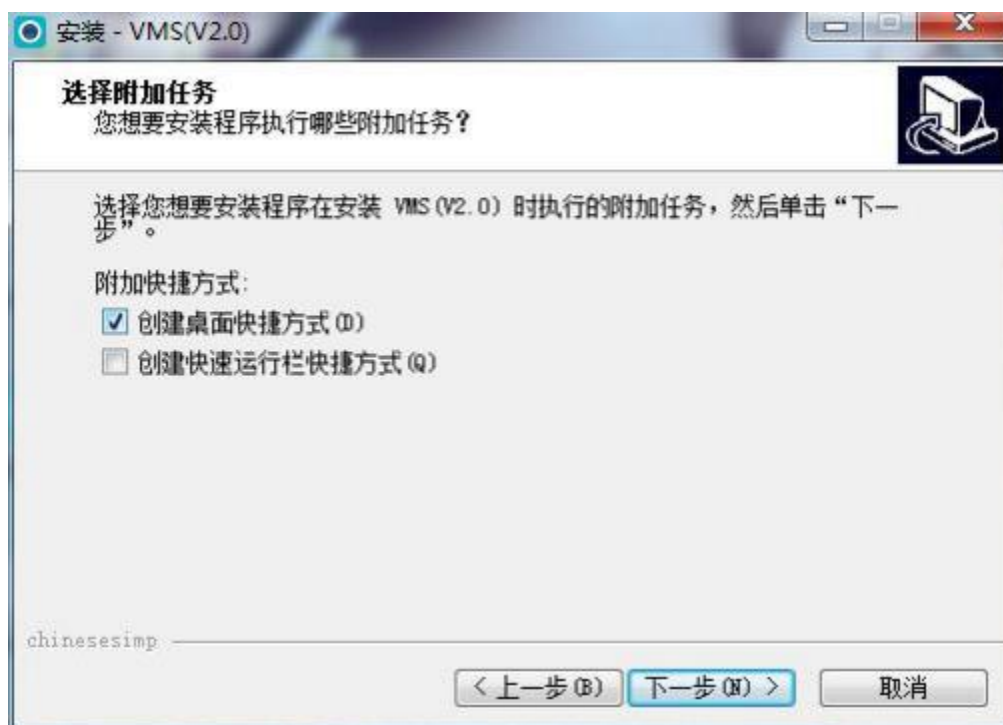
The default path is C: \ VMS, users can change according to the actual situation, click Next to continue:



As shown in the figure above, the map, decoder, and alarm installation are optional. Cancel the installation

check hides the corresponding module in the client, and the function will not be deleted.

After the selection, click Next:



Confirm to create a desktop shortcut, continue the installation (note: the computer with anti-virus software installed may pop up prompt, for the program can normally install and start up, please choose permission),

Program installation is completed, run the program, as shown below:




The user can manually switch the language, the initial user name is admin, the initial password is 123456,

Enter the password, click login, check the password to remember the password next login will not need to enter the password, check the automatic login, run the program will automatically log in, the automatic login function can be unchecked in the local configuration. If you forget the login password, you can click the "forget the password" below, which will generate a series of temporary secret keys, which will provide the secret key to the technician, who can retrieve the login password.

Enter the program main interface, as shown below:



- 1) Display the current user, user rights, current time, system CPU memory consumption, and real-time network data traffic, and click to log off the current login. 

2) Display real-time alarm information and event information, double-click the alarm information, can

Open the preview of the current alarm channel to facilitate users to view the alarm in real time.



3) The toolbar functions from left to right is to clear alarm / event information and turn on / off alarm sound.

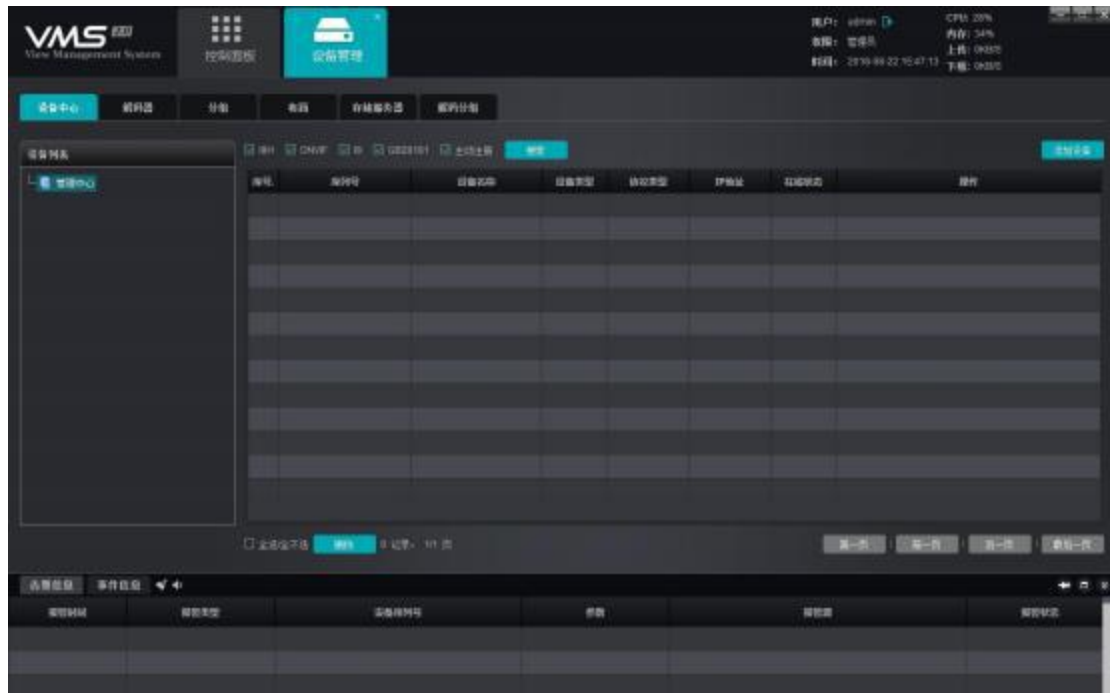


4) The toolbar from left to right is fixed window, full screen and hidden window.

## 1. Equipment management

### .11 Add equipment and batch modification

Click the main interface "Device Management" to enter the main interface of device management



The equipment management interface will display the relevant information of all devices that have been added to VM S, including device type, protocol type and up and down status, etc. Click the upper right corner and pop up the add device interface:



添加设备

IP地址:

端口:

设备名称:

用户名:

密码:

区域:

协议:

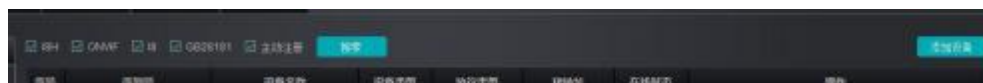
Fill in the IP address, port number, device name, user name, and password of the device to be added. Select a protocol, The Register protocol is an active registration agreement, This agreement is our independent development agreement, Front-end devices are required to support this protocol to add devices through this protocol; I8H, I 8, SLINK protocols are private agreements independently developed by us, I 8 for older version devices, Devices that do not support the I8H protocol, Available through this protocol, The SLINK protocol is an improvement made over the I8H base, Both are basically the same, Can be used in connection with each other; The ONVIF agreement is a public agreement, To access the third-party devices that support this protocol; The

GB28181 protocol is a national standard protocol, Access to third-party devices that support this protocol. Among them, active registration, I8H, SLIN K and I 8 agreements do not need to purchase authorization, but can be accessed at will. ONVIF protocol and GB28181 protocol can be tried free of charge during the probation period, and purchase authorization is required to be used normally after the probation period. The P 2P connection agreement is listed below the protocol drop-down list (see Chapter 4 for details).

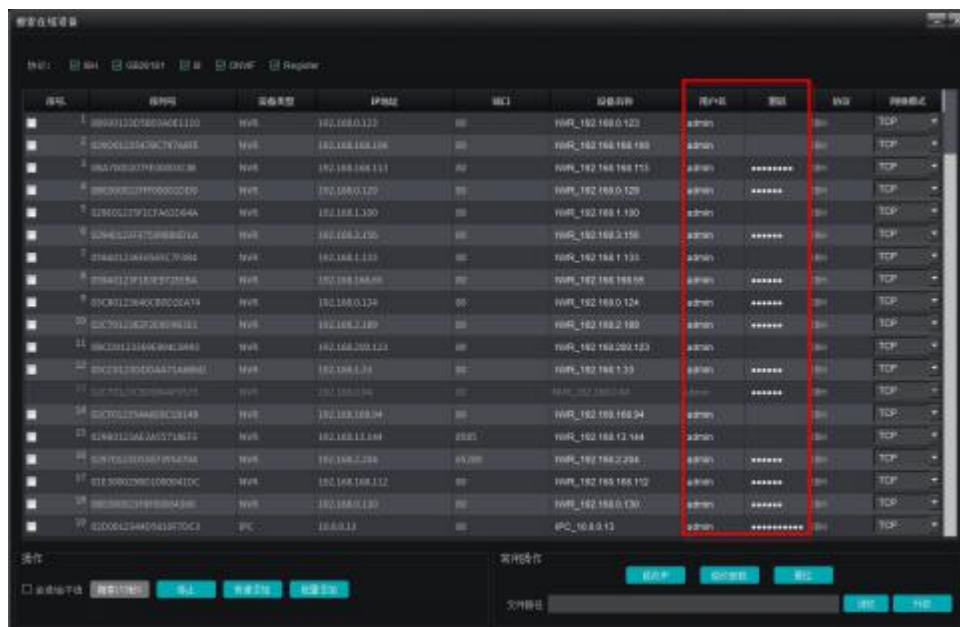
After the device is added, as shown below:

序号	序列号	设备名称	设备类型	协议类型	IP地址	在线状态	操作
1	02C70123C8D0844F0375	NVR_192.168.0.94	NVR	HTTP-TCP	192.168.0.94	在线	删除 删除 添加设备 设备列表

Check the protocol to be searched in the device management interface,



Click "Search" as shown in the figure below:



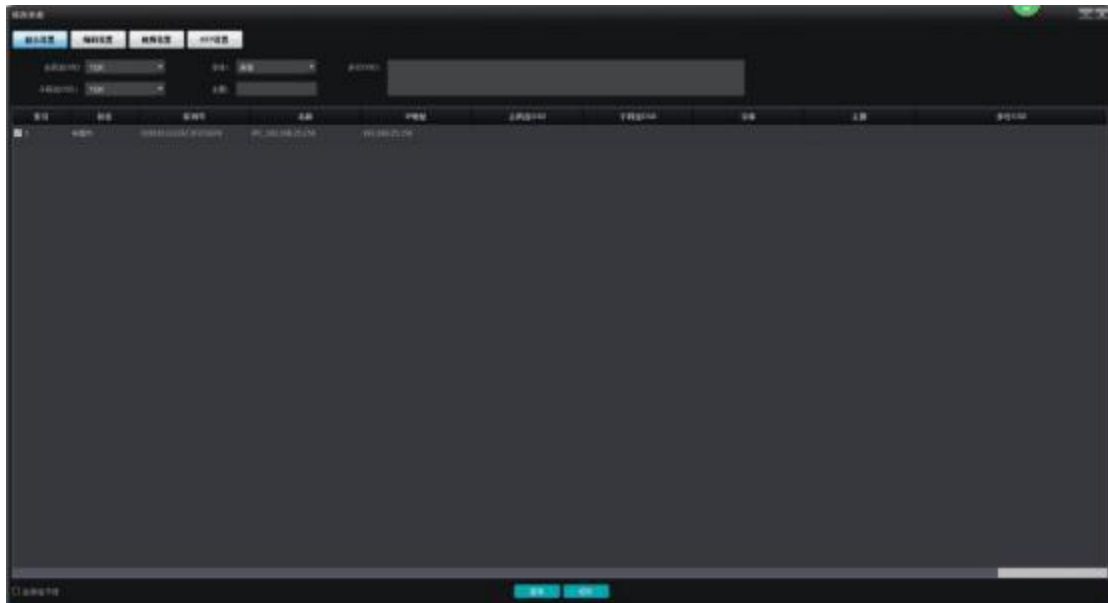
Fill in the user name and password of the corresponding device in the red box of the above figure, check the device and click the batch to add the device, and you can add the device list normally. Quickly add devices that can simultaneously add the same user name and password.

The search interface can batch modify IP, parameters, one-key restore, batch upgrade (NVR only support Holding a batch upgrade).

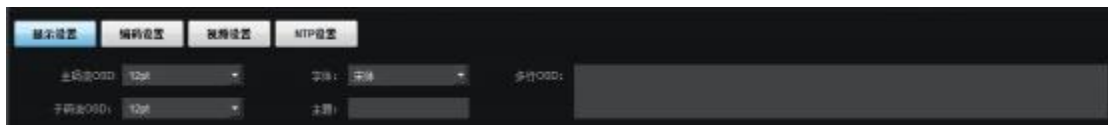


Modify IP: the function is used to batch modify the device IP address, which only supports I8H and SLINK protocol, check the device that needs to modify the IP, click Modify I P, fill in the starting address, the device IP will be modified in turn, and quit after the modification.

Modify parameters: To modify the general settings for the front end of an IPC device.



Display settings to modify the font and size of the master child stream OSD, title content, and multiple Line-OSD settings.



Encoding settings can modify the type of IPC, resolution, type of encoding, Bit rate type, bit rate.



Video settings switches the day and night mode of IPC



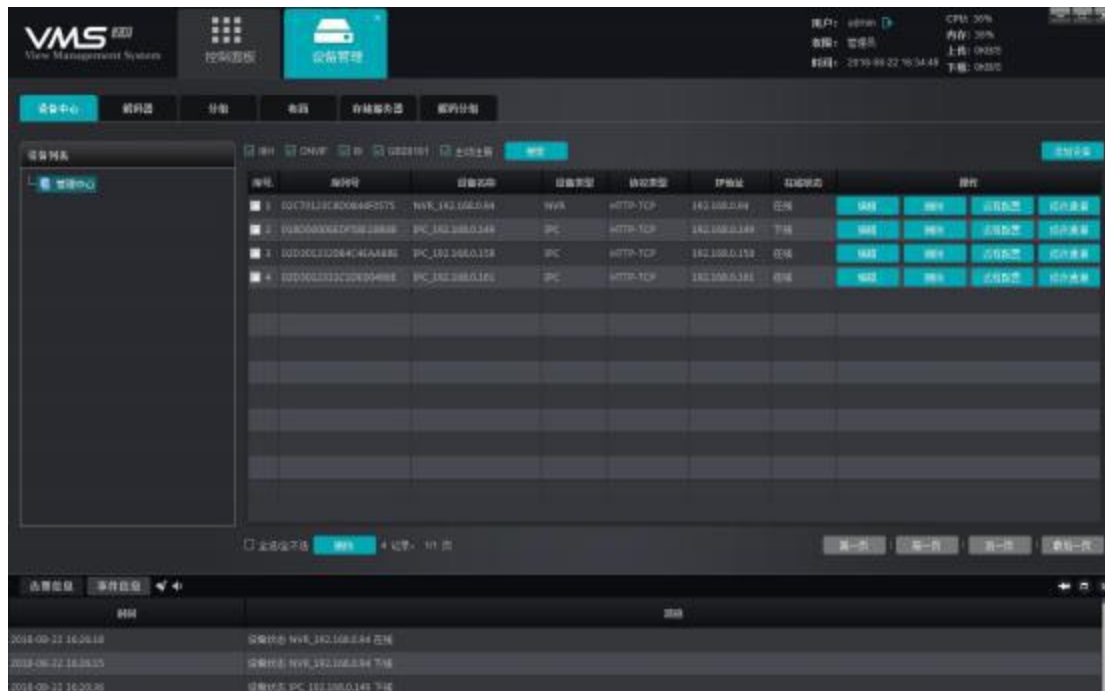
NTP Settings Close and close the NTP service for the IPC



Reset function to restore the device to the initial value with one key. After successful recovery, "reset successfully, the device will restart". The upgrade failure will prompt the corresponding error code.

Batch upgrade function, click browse to select the correct update package and check the corresponding model of equipment click upgrade, after the successful will prompt "the upgrade is successful, the device will restart". The upgrade failure will prompt the corresponding error code.

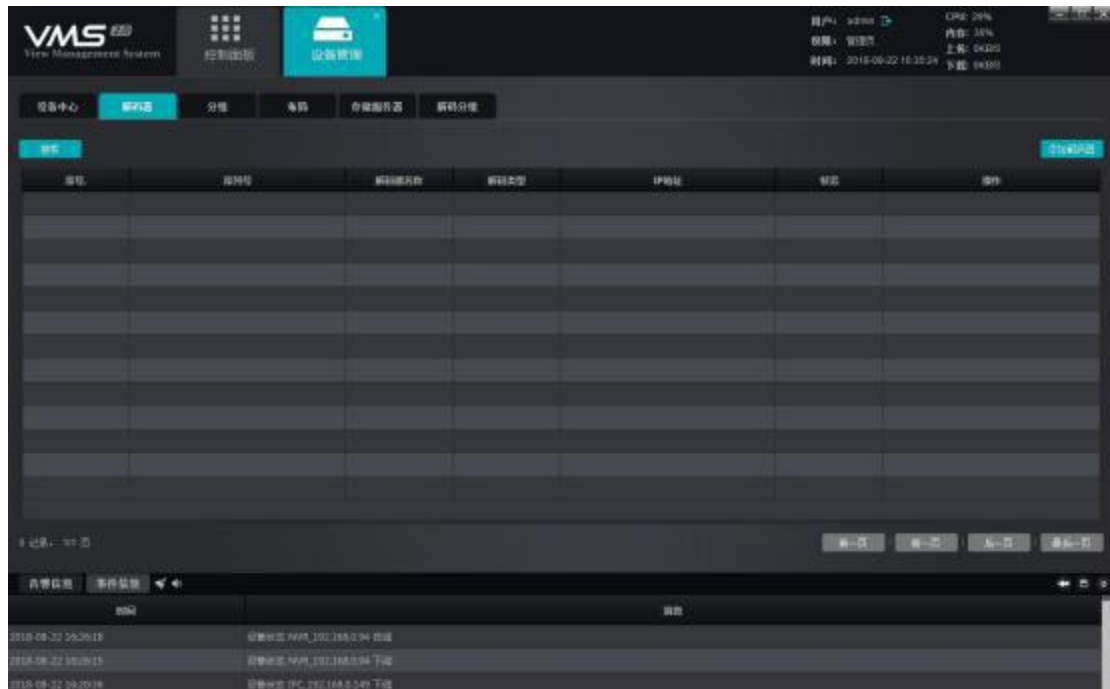
After the device is added, as shown below:



In the device list, you can manually edit, delete devices, call the remote configuration, and modify the channel name. Where the remote configuration is only supported by I8H, SLINK protocol, calling the remote configuration can view or modify the front-end device related parameters. Modify the channel name with I8H, SLINK, and I8 protocols support, called after you can quickly and easily modify the channel name of the front-end device. (Call IE to open the plug-in version)



## 1.2 Add the decoder



Switch to the decoder page that, as with the added device, displays the up and down status of all decoders and decoders currently added to the server, available for the added decoders

Edit and delete. to add a new decoder, click on the top right



push-button:

添加解码器

确定

IP地址:

端口:

解码器名称:

用户名:

密码:

保存 取消

Click "Search" to search for all online decoders in the LAN. Similarly, the decoders already added to the decoder list will appear in gray, and can not be added repeatedly:



### **.31 Channel grouping**

In the Device Management module, switch to the Group page split, as shown:



In the blank area on the right right click to select Add Group:

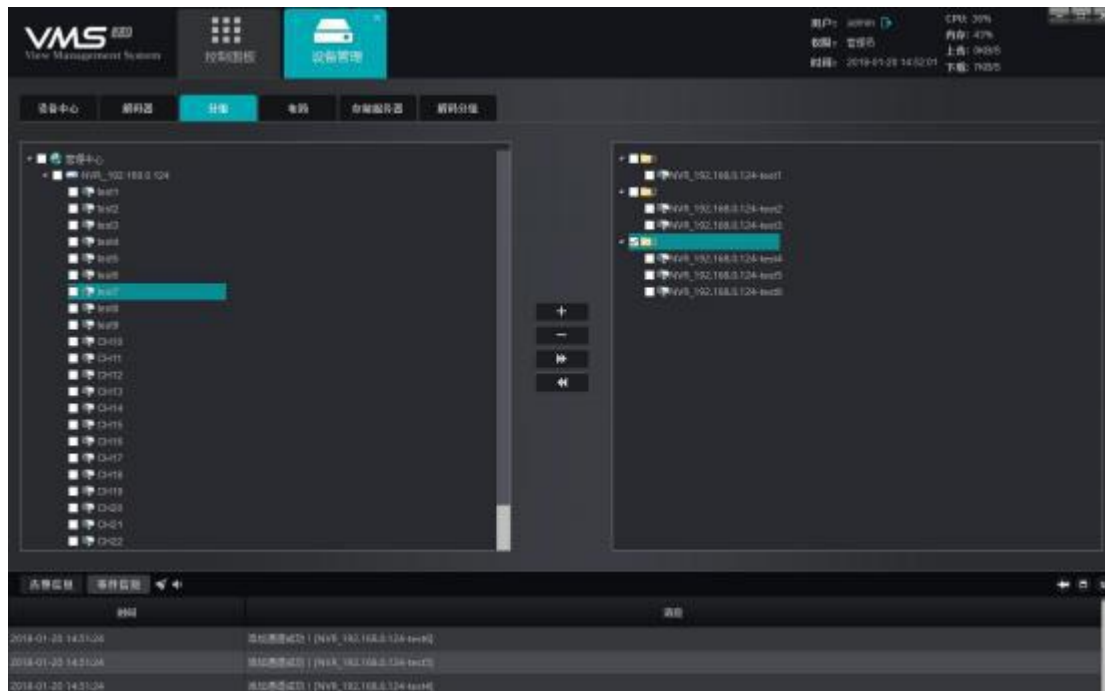



Fill in the group name and click save to create the group. After the group is successfully created, check the left first

Side device channel, then select group, click, button, to add the corresponding channel



To the corresponding group, the actual application of the group will be explained in the preview module, and the addition is completed. The effect is shown in the figure:



Similarly, check the channel  group and click to delete the channel from the group

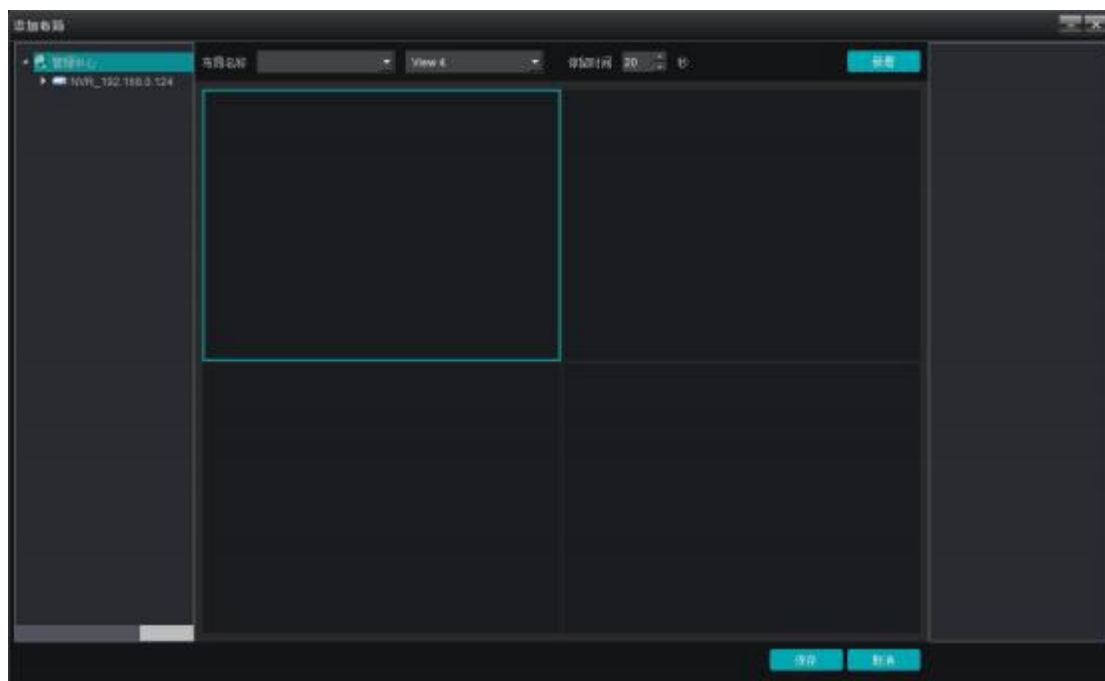
g 。

## .41 Layout

In the Device Management module, switch to the Layout page division, as shown below:

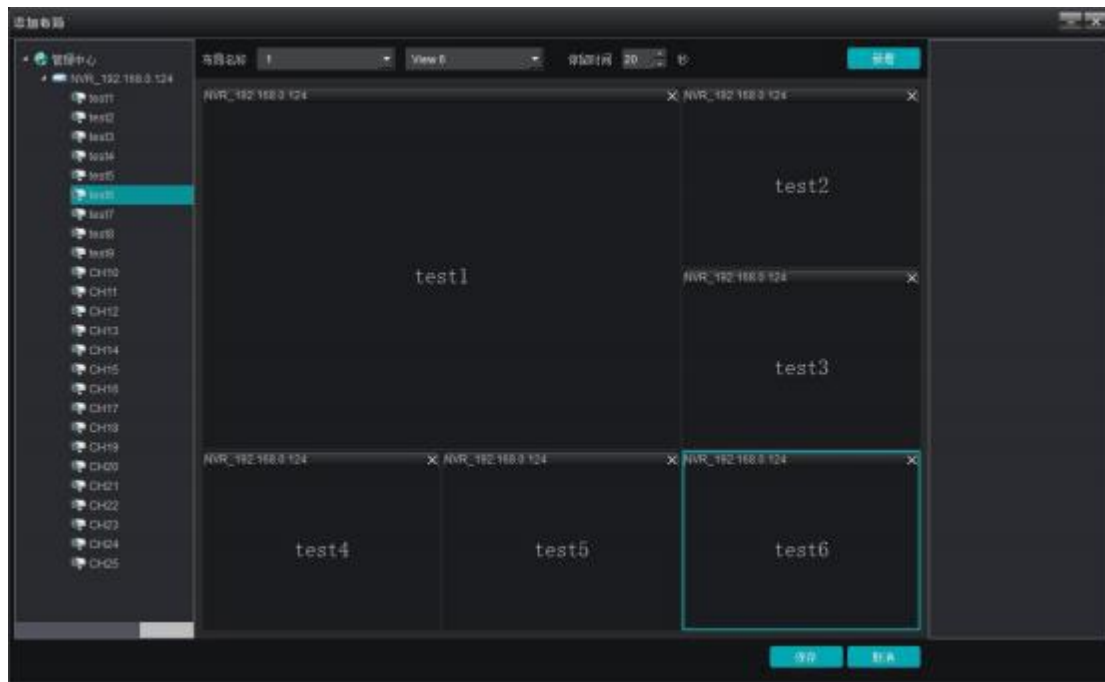


Click the Add Layout button to pop up:



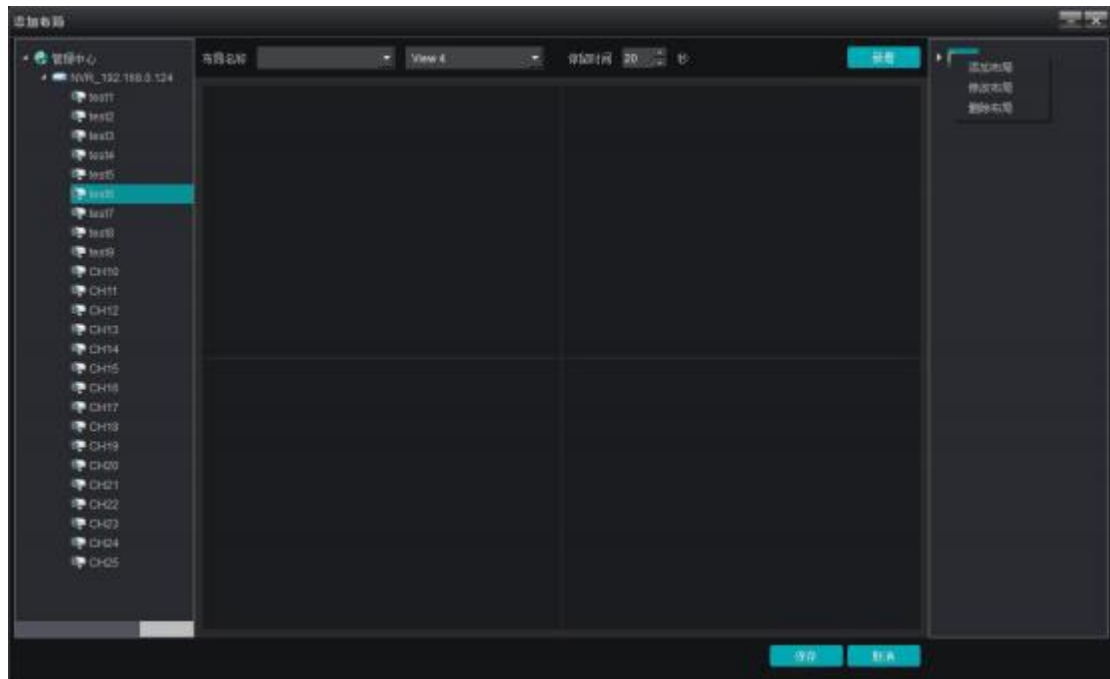
Fill in the layout name, according to the actual situation, select the number of split screen, split screen contains standard segmentation and widescreen segmentation, the ordinary split screen at 16:9 display, wide screen at 1:1 display, select the stay time, and then drag the channel for layout, take 6 split screen as an example:





Click Save after the layout or Add-Save, and on the right

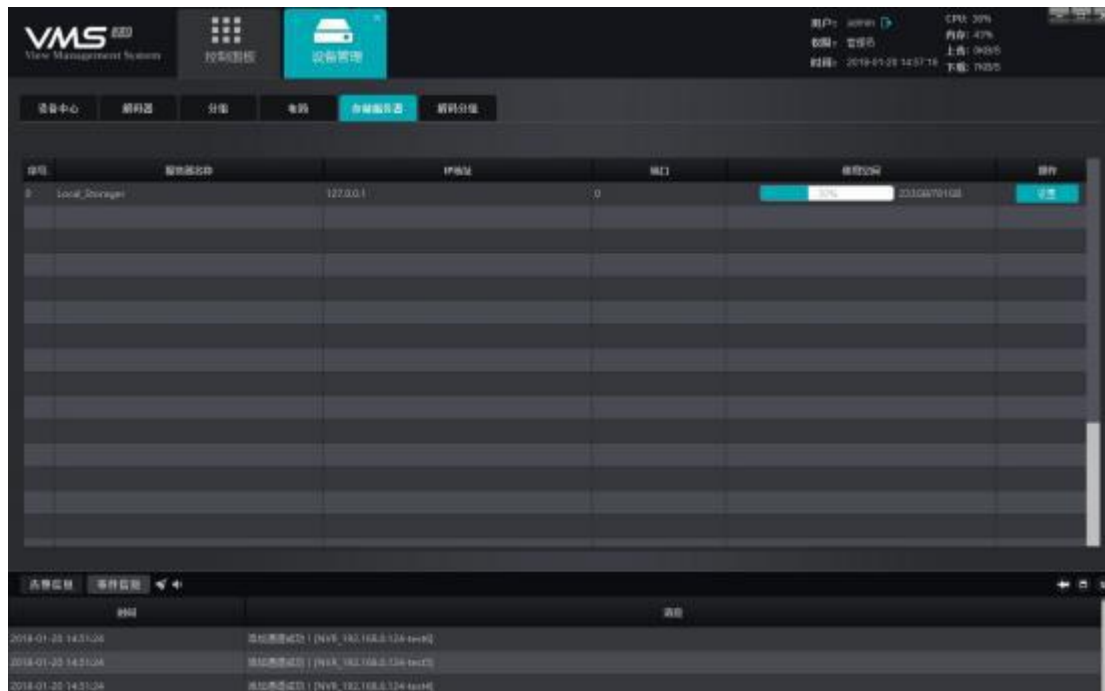
Displays the saved layout information:



Right-click on the existing layout to edit the layout, and then explain the application of the layout function in the preview module.

## 1.5 Storage Server

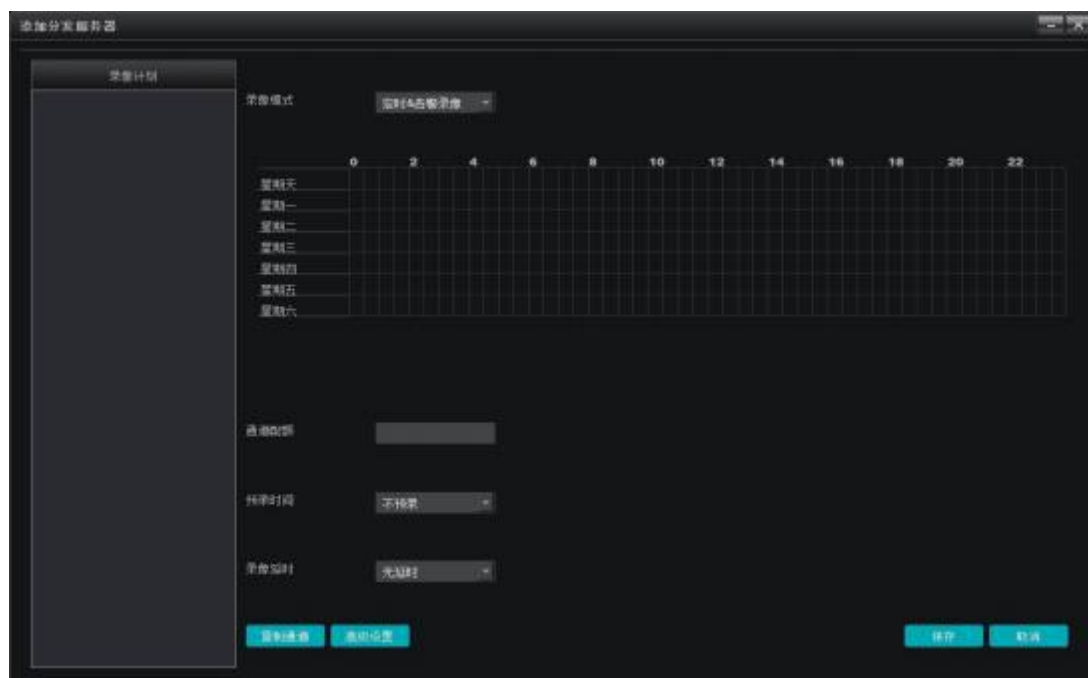
In the device management module, switch to the storage server paging, as shown below:



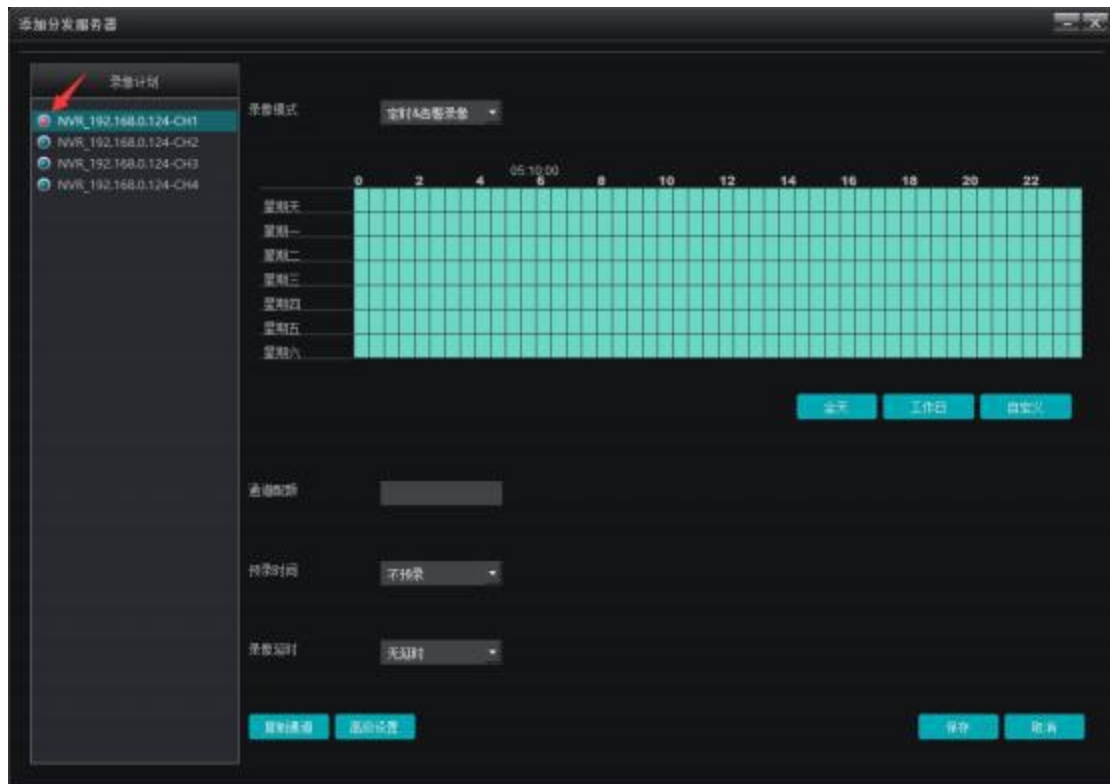
This page displays information about the storage server, including the server name, and the server address



And disk space, click Configure storage server, as shown:



Right-click the blank area of the left video plan, add the channel to the storage server, and select the channel to set the video plan after adding the completion



Video plan default to a full day template and working day template, if the user needs to set other video plan template, can click custom to add, set the video plan, video open, the red arrow mark in the video state of the channel, red means the channel is video, blue is not in the video.

The video mode includes timing & alarm video, timing video, alarm video and stop video, The timing & alarm video refers to the timing of the alarm video, That is, when the video is recorded without alarm, Record the alarm video when the alarm trigger video, Timed video refers to recording only scheduled video, Am video refers to only alarm triggered video, Stop recording refers to not

recording; Pre-recording and time-lapse functions are only for the timing & alarm video and alarm video modes, Mainly for the alarm-triggered video recording; Channel quota refers to specifying storage space to a channel; replication channels can copy a video plan for one channel to another channel that has been added to the storage server; Which partitions can be set up for video recording, Which partitions are not used for

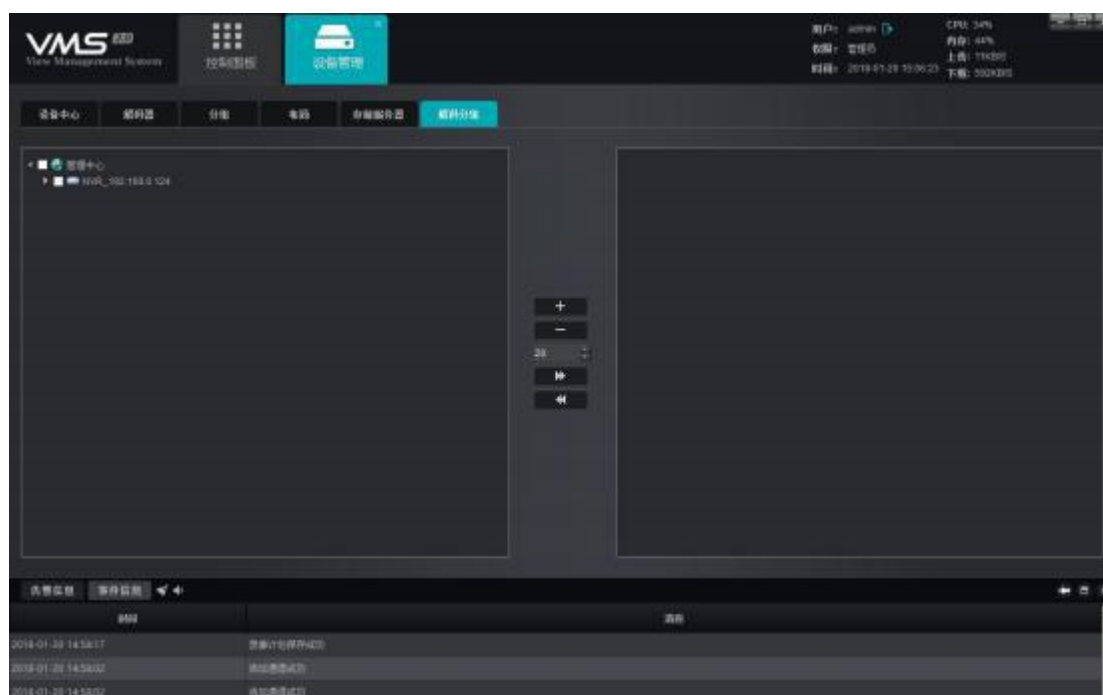
Video, by default, except for the system disk, other disk are used for recording. After the setting is complete, click [Bao](#)

The Save the button takes effect.

To modify the channel that has been added to the storage server, right-click the added channel, and you can add channels, delete single channels, and delete all channels. After setting, click Save and open the video.

## .61 Decode grouping

In the device management module, switch to the decoding component page, as shown below:

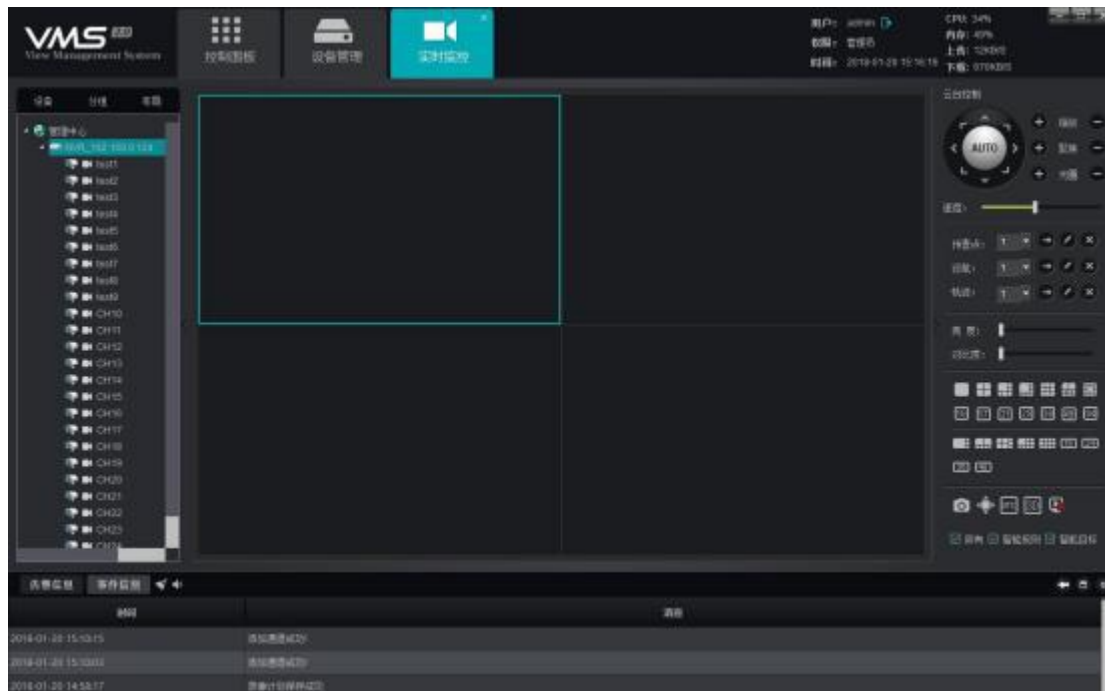


This group operation is configured similar to the aforementioned preview group, but this group is used to patrol the inner group rounds on the decoder. Please refer to the post-text decoding management module for details.

## **2. Real-time monitoring**

Click "Real-time monitoring" on the main interface to enter the real-time monitoring module:

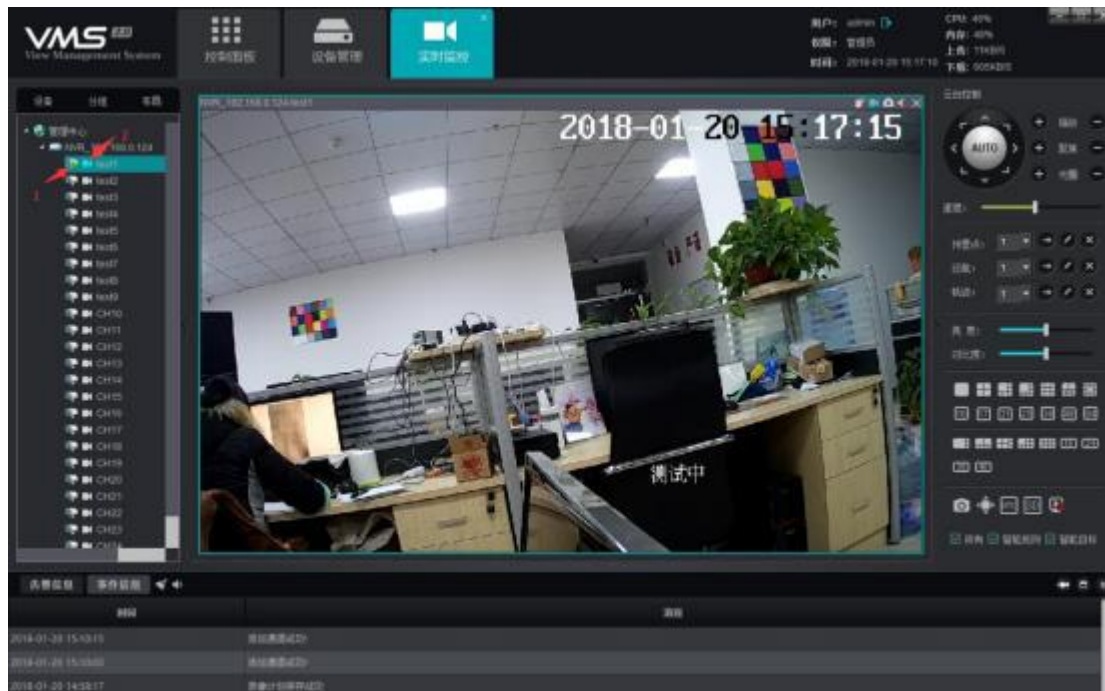





As shown, on the left is the device list that displays the up and down status of all devices and devices currently added. On the right side is the Yuntai control interface and the video parameter control interface. Below the video parameter control interface is the split screen switch button, so that users can manually switch the number of split screens with more actual requirements. The split screen mode is divided into two kinds: standard segmentation and widescreen segmentation. The corresponding window ratio is different. The layout module has introduced the difference between the two, which will not be introduced separately here. In addition, in addition to the regular number of screen, but also divided into a variety of different shape segmentation,

customers can choose the corresponding number of screen according to the actual use.

Double-click or drag the channel to the window in the left device list to enable a preview of the device channel (open the preview channel with a triangle icon showing that the channel is being previewed):



 Description: In Figure 1, the green triangle on the channel indicates that the channel is being viewed; in Figure 2, the icon indicates the local video status of the channel, white indicates that the channel has not opened the local video, and blue indicates that the channel has opened the local video and is recording. Right click the channel to open / close the local video.

## 2.1 Device / channel right-key function

1) Open all of the main code streams

For the device, open the main code stream of the device with one key, and limit the main code stream of up to 16 channels in one operation;

2) Open all subcode streams

For devices, open the device substream with one click, and limit the substream of up to 16 channels in one operation;

### 3) Close all previews

For the device, close all the open previews of the device with one key;

4) Turn on the video recording

For the device, open the local video of all the channels of the device with one key;

5) Talk on / off

For the device, open the PC end and the device of the intercom

6) Video recording on / off

Open / close the channel local video recording for the channel;

6) Main code stream (this option is only available in non-automatic code stream mode)

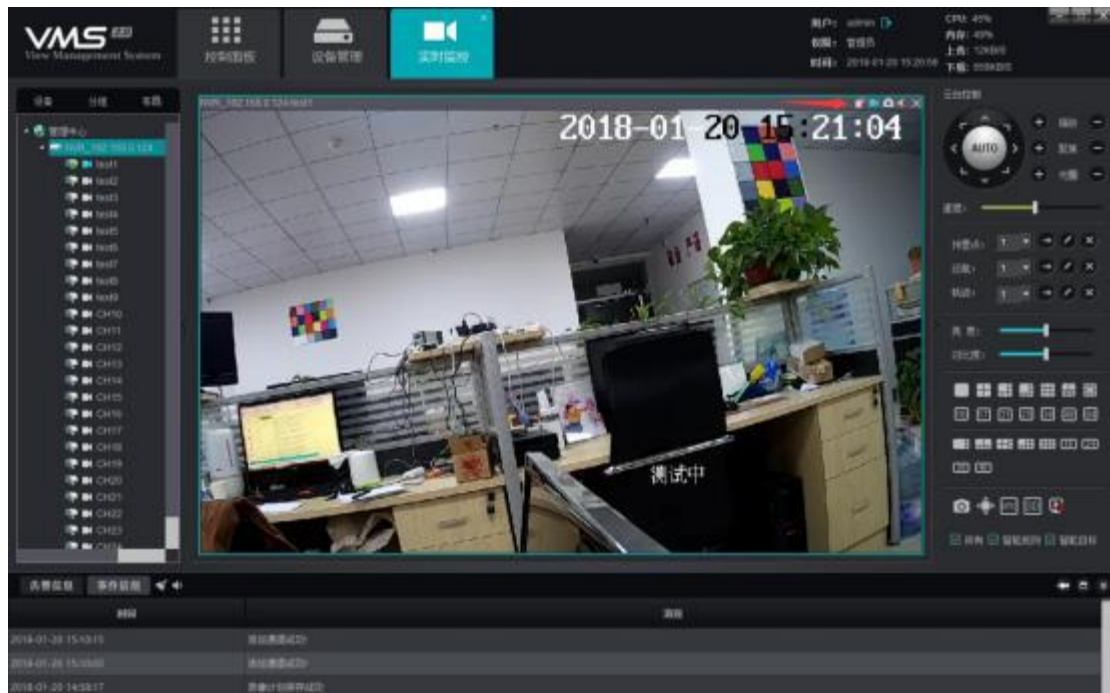
For the channel, manually switch the code flow as the main code flow;

7) Substream (this option is only available in nonautomatic stream mode)

For channels, you manually switch code streams to subcode streams.



## **.22 Preview the window toolbar**


Open the preview, above the preview, there is a row of shortcut bar, at the mark:






1) For the channel intercom switch, for the channel, click to open / close the PC terminal and the pass

Intertalk of Tao;

2) For the equipment video switch. For the channel, click to open / close the local video of the channel, where blue indicates the open state and white indicates the unopen state; 

3) To grab the picture button, click on the channel to grab the current picture of the channel;

4) The audio preview switch, for the channel, click to open / close the channel audio, which indicates the closed state, indicates the open state; 

5) To close the preview button, click on the channel to close the current preview of the channel.


## 2.3 Introduction of the function button on the right side of the preview interface


On the lower right side of the preview interface, there

is a row of function buttons, which



centre:

1) The button is the grab button. Select the preview window and click the button to grab the picture of the window;

2) The button is full screen button, click to make the selected window full screen;



3) Button is to open / close UTC function button, click to open UTC function, requiring the support of front-end equipment

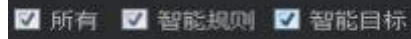


4) The button is to turn on / off 3D positioning function button, which can turn on 3D positioning function, which requires the support of front-end equipment and is connected through I8H and SLIN K association



5) To close all current preview buttons, click to close

all currently open previews.



Intelligent detection, for the front-end support of intelligent detection

Prepare, including NVR and IP C, check, can preview the screen to display the set intelligent rules

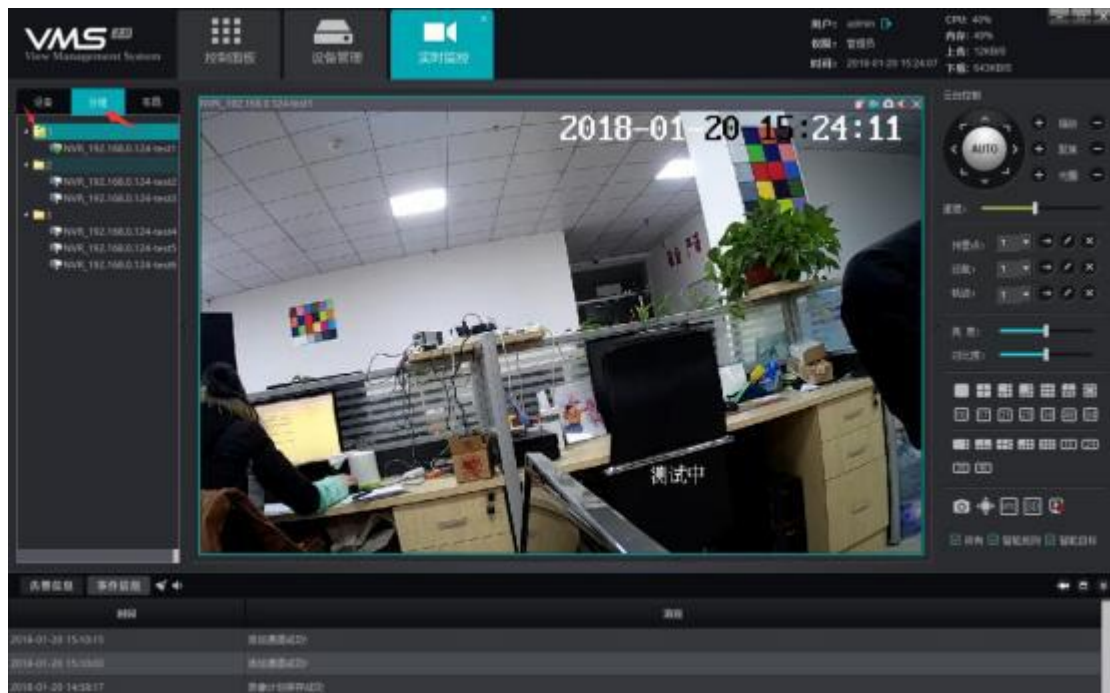
Then, when a target triggers a smart alert, the alarm-triggered target can also be displayed in the preview screen.



## .42. Equipment group round patrol

Add two or more groups (refer to Device Management-Group for details)

After the group creation is completed, switch to the group page in the preview interface, as shown below:

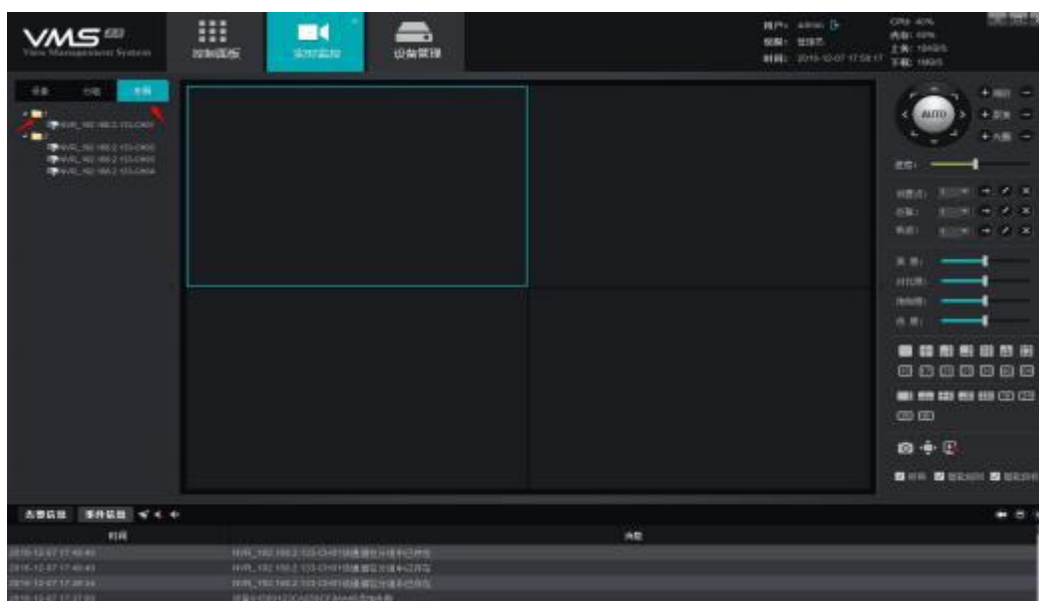


Right-click the group to operate "Open Wheel Patrol" and "Stop Wheel Patrol". The wheel patrol time interval can be set in the local configuration (described in detail later) module, and the default time interval is 30 seconds.

## .52. Equipment layout and wheel patrol

Add two or more layouts (please refer to Equipment Management-Layout for details). After layout setting,

switch to layout layout in preview interface, as shown  
below:



Right-click the layout to open the preview of the layout with one click. Select "Open Wheel Patrol" to open the wheel patrol between multiple layouts. The wheel patrol time interval is set when setting the layout. Select "Stop All" to stop the wheel patrol or close the current preview.

## 2.6 Cloud head

### 2.6.1 Cloud head control


There are 8 directions to control the lens: top, down, left, right, top left, left, left, right, top and right; zoom can control the lens to close or far, adjust the visual angle; focus the adjustable lens to ensure clear picture; aperture amplification and reduction, ensure the brightness



and depth of field; Yuntai control speed setting, adjust the rotation speed of the ball machine; click the AUTO button, Ball opportunities automatically start to cruise; as shown:





## .6.22 Preset points, cruise, and tracks



1) Preset point: When the ball machine turns to set the position to set 255 preset points; If you want to call the preset point, select the preset point, click to call; delete the preset point and click. 

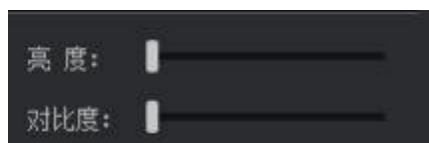
 2) Cruise: After the preset point is set, click to edit and set the cruise path, which can set up to 255 cruise paths; call the set cruise path, click; delete the set cruise path, click. 

 3) Track: Click to edit the set track; call the set track, click; delete the set track, click. 

## .72 Image parameters

After opening the preview, the image parameters of the modified screen can be adjusted, and the IPC is not changed here

Front-end parameters, just adjust the display effect of the screen on the client, as shown in the figure:



Users can adjust the brightness and contrast according to the needs.

## **.82 Preview of the electronic amplification**

After opening the preview, select the opposite window and slide the middle mouse pulley to adjust the electronic zoom and zoom of the current screen.

## **.92. Preview of the multi-screen display**

Real-time monitoring module can be opened multiple, and each module is active without affecting each other. If the user's graphics card supports multi-display output, it can meet the needs of multi-screen display. Considering the actual situation, limit the number of open preview modules to up to five, such as opening two real-time monitoring modules, and drag one of them out (drag out after the same operation can drag the module

Go back), placed in another display screen, the specific effect is shown below:



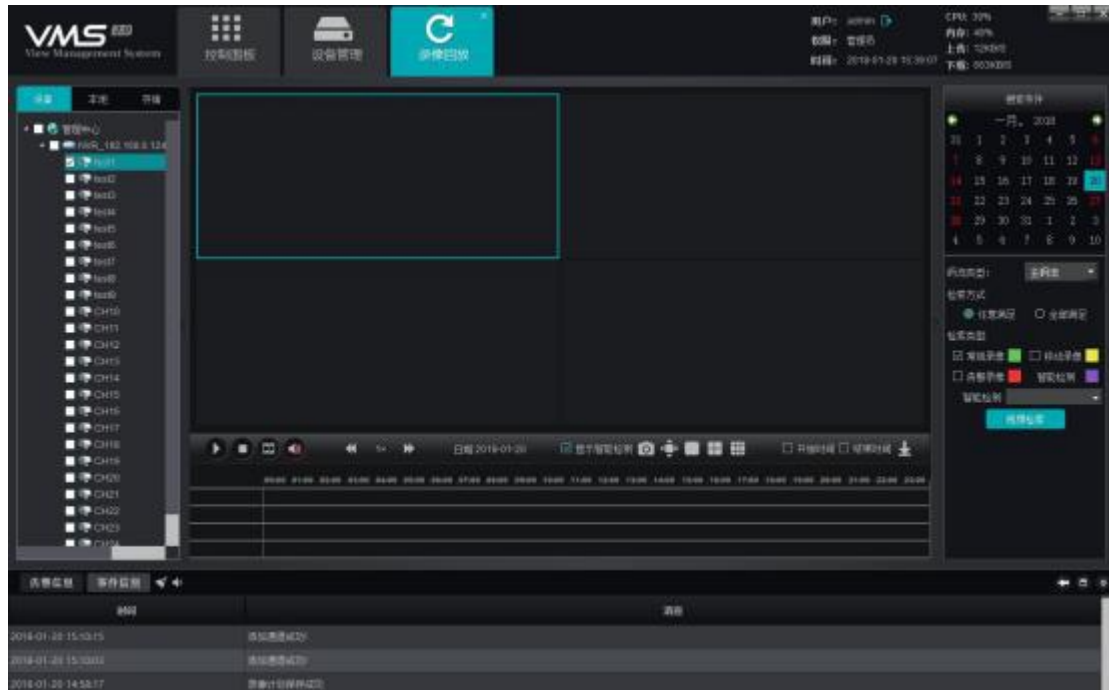
The left main screen, right for auxiliary screen, two screen operation preview between each other, close

auxiliary screen will not affect the home screen, but close the home screen, auxiliary screen will close together, the actual application, users can choose the number according to the actual demand open preview screen, for example can choose a screen open wheel tour, alone as for a monitor to display, another screen for temporary preview, listening, intercom, etc.



### 3. Video playback

Click the "Video Playback" button on the main interface to enter the video playback module:

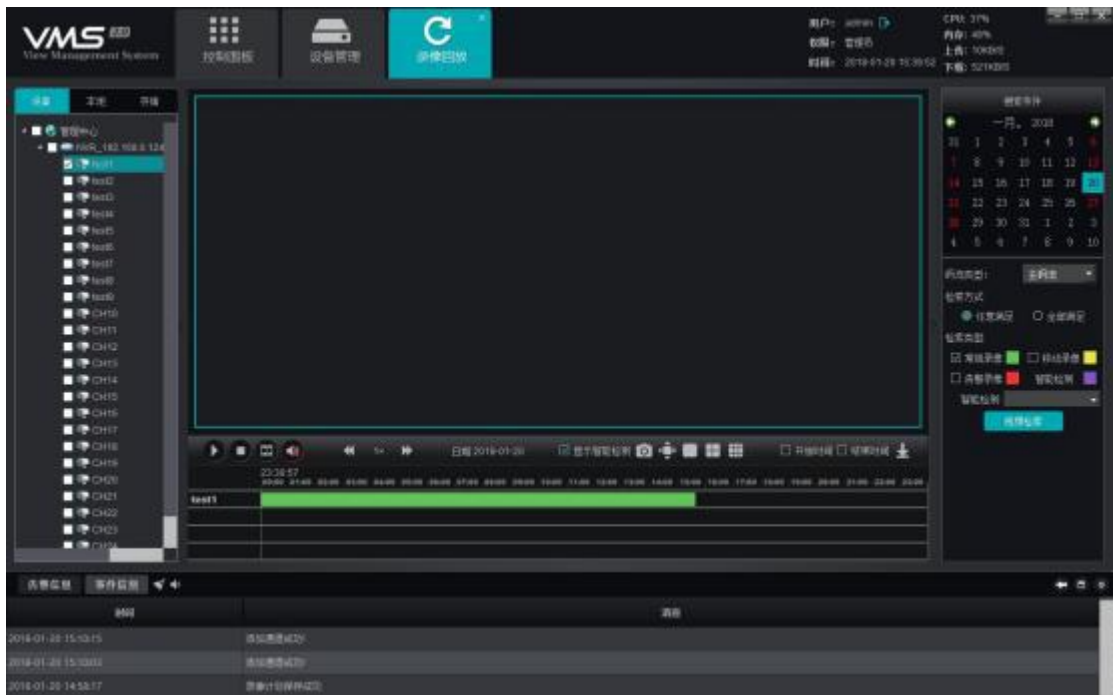


#### .13 Video retrieval

Check the device channel to replay video on the left device tree (note: only playback video on the same device or the same storage server at the same time, select up to 9 channels at a time), first select the video storage path on the left, and then in the "code stream type" column, select the code stream type to replay video, select the date on the calendar, click "video retrieval", the system starts to search for video, and display the search results in the search results panel. The video path is divided into "device"

and "local" and "storage", where the device-end video refers to the video stored in the hard disk or SD card of the front-end device, the local video refers to the video stored on the PC where the client is located, and the stored video refers to the video stored in the storage server. Code stream type is divided into the main code stream and subcode stream. When the customer opens the dual code stream video recording, it can make the corresponding video recording according to the need

retrieval. The search results are shown in Fig.:

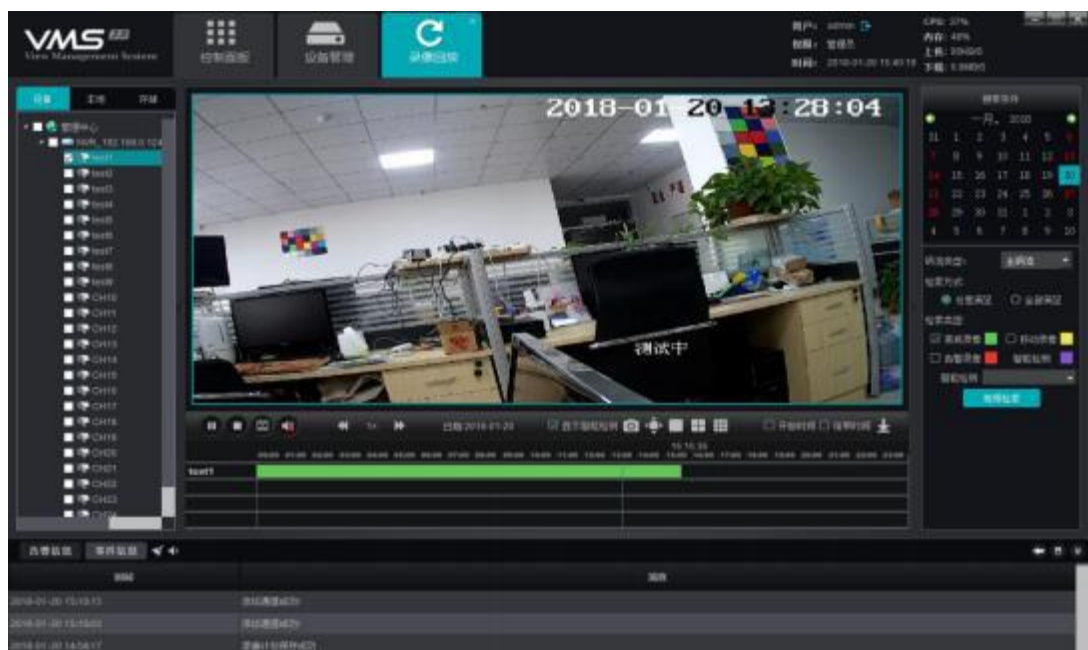


## .23 Video playback



Click on the interface to start / pause the play,  
to stop playing, the mouse in the record  
Like the slide middle pulley can zoom in / out of the  
strip scale, double-click the left on the strip

Key, can locate the play, playback process can switch  
through double-click mouse positioning, as shown in the  
figure:



During multi-channel playback, select a window and double-click the left mouse button to make the window full screen, place the mouse in a window, slide the middle mouse pulley, and operate the window for electronic amplification.

### .33. Video file download



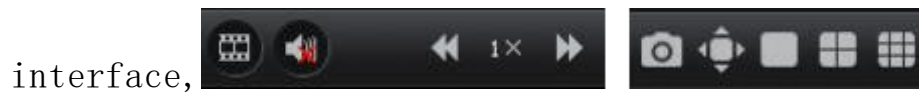
Click the button on the interface will enter the video file download interface, as shown in the figure:






Select the video location (divided into device video and storage server video), channel, range (i. e., video download time interval), file preservation path, click the "Start" button to start the download, the progress bar reaches 100%, the download is completed after 100%.

## 3.4 Toolbar Introduction



Function button on the



 Which is the frame broadcast, click the frame broadcast button, the playback will play in the form of a frame, click on the broadcast

 Put a frame; for audio switch, turn on / off playback audio; for 

Play speed adjustment button, the user can adjust the play speed between 1 / 16 times speed and 16 times speed;

 To grab the picture button, click the picture through this button to switch to the full screen (in full screen mode, click the right mouse button to exit all 



Screen); For the split screen switch button, users can manually switch 1 split screen, 4, split screen and 9 split screen according to the requirements; start

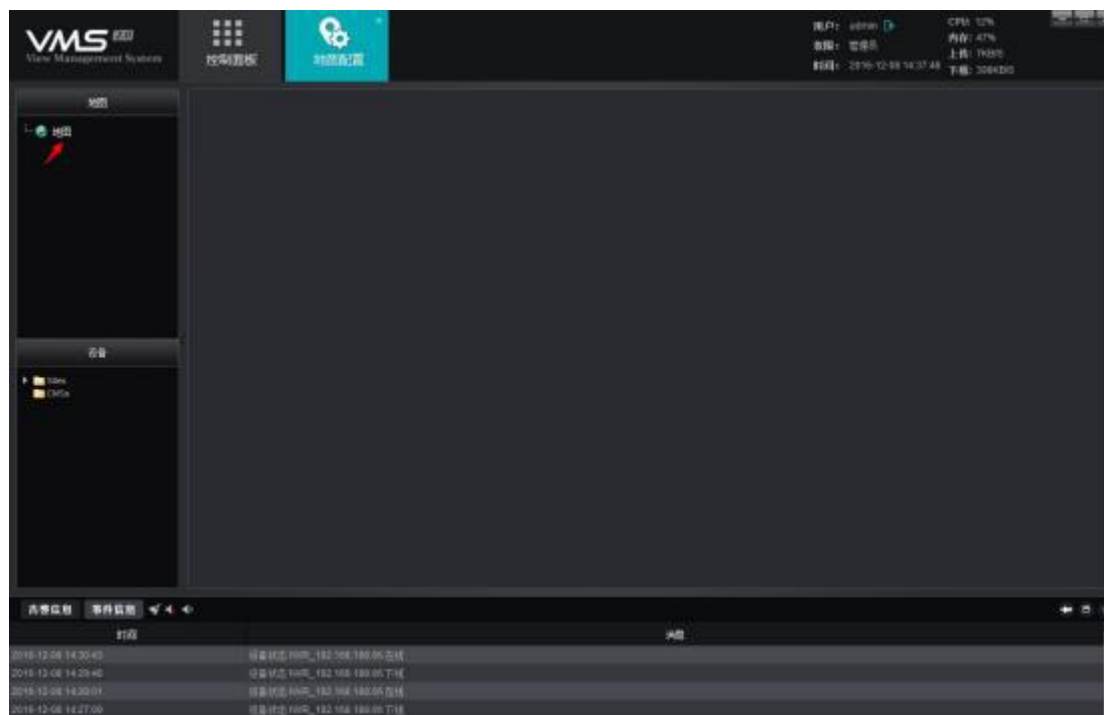
time and end time, set

■ 开始时间 ■ 结束时间

To a certain play point, check the start time, will add a mark on the video bar, similarly, the end time is the same, after choosing the start time and the end time, click to download, can quickly download the video between the two labels, convenient for user operation.

## 4. Map configuration

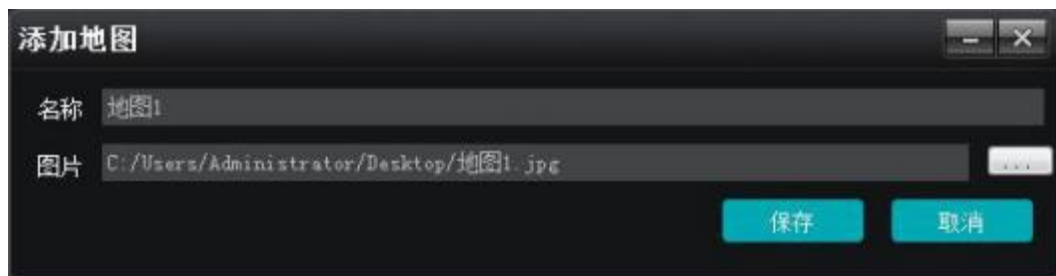
Click the "Map Configuration" button to enter the map configuration module, as shown in the figure:



## **.14 Map creation**

Right-click on the mark in the figure, select "Add Map", and pop up the Add box:





Fill in the name, select the picture, click Save to add a map, you can add multiple maps,

At the same time, you can also add a submap under the map, as shown in the figure:



The open map is marked in yellow as a



distinction

## .24 Map tree right key function

1) Add a map: Add a new map

- 2) Delete the map: Delete the currently selected map
- 3) Add submap: add submap under the current map directory, a map can be added more

Zhang and multi-level submap, add the submap, drag the submap to the main map to complete the association,



The submap will be displayed with the icon on the main map. Double-click this icon on the main map to switch to the corresponding submap, and click the button on the submap to go back to the main map.



### .34 Map cloth defense

Drag and drop the lower left equipment channel to the map to complete the layout, as shown in the figure:



Note: After the channel drags and puts it to the map, you can drag it again to adjust the position. Right-click on the deployed channel, and you can choose the icon (gun machine, hemisphere, ball machine) or delete it. Place the mouse on the map, and slide the middle mouse pulley to zoom in / out of the map. The channel deployed to the map cannot

be dragged and dropped repeatedly. If the mouse stays on the deployed channel, the channel information will be displayed.

## **5 Map management**

Click the "Map Management" button on the main interface to enter the map management module, as shown in the figure:



Double-click the map to display the configured map and layout channels, the module

Block, you cannot make relevant configuration and changes to the map, in the right-click on the map of the deployed channel, you can open the preview and playback of the corresponding channel. In actual use, users can compare the map, quickly retrieve the preview and playback screen of the corresponding position, the operation is more concise and clear. When an alarm is triggered and the linked channel is deployed on the map, the channel icon on the map flashes.

## 6. Decoding the configuration

Click the "Decode configuration" button on the main interface to enter the decoding configuration module:



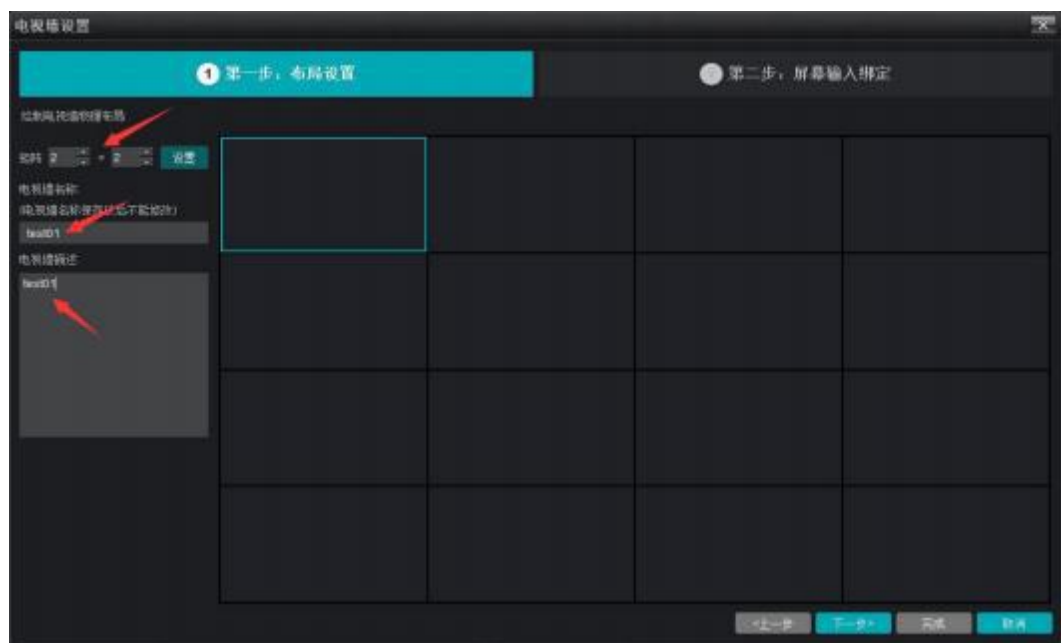
The decoding configuration will display the current configuration of the TV wall scheme and scheme enabled shape

Status, operates Modify, Delete, and Disable / enable for existing TV wall schemes. Add a new TV wall scheme, and click the "Add TV Wall" button in the top right corner:



## .16 Layout Settings

Set up the TV wall layout, and fill in the corresponding information:

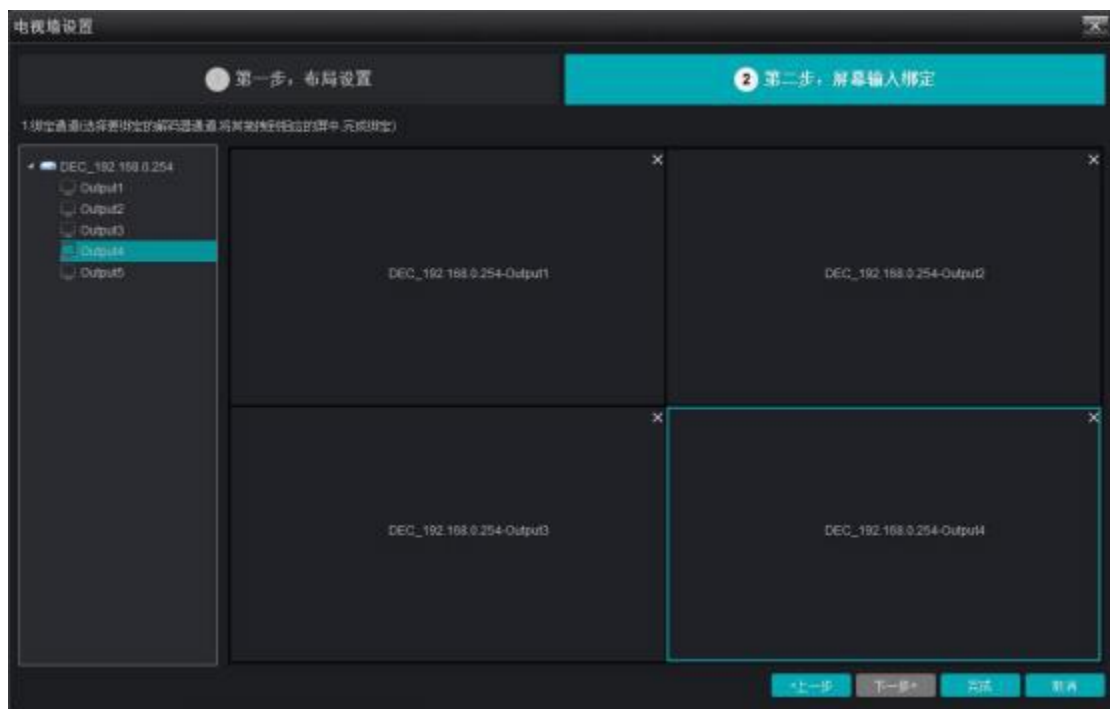




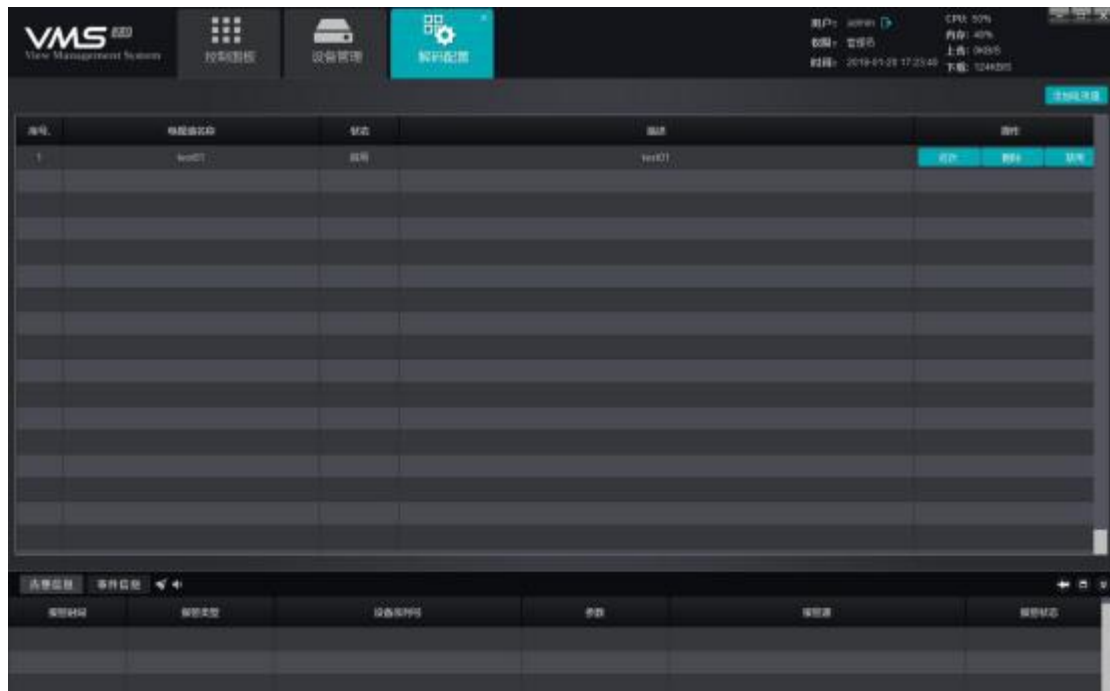
1) Matrix layout setting: users can make matrix layout according to the actual needs, and support up to 8x 8 layout. After selecting the layout, click "Settings" to take effect. 2) Fill in the name of the TV wall scheme: users can customize the name of the TV wall scheme according to the requirements (note: after the name is determined, the modification is not supported, please note). 3) TV wall scheme description: the user describes the scheme, which is easy to distinguish, do not fill in. Fill out done, click Next.

## .26 Screen input bindings

Drag and drop the added decoder onto the set layout, as shown:



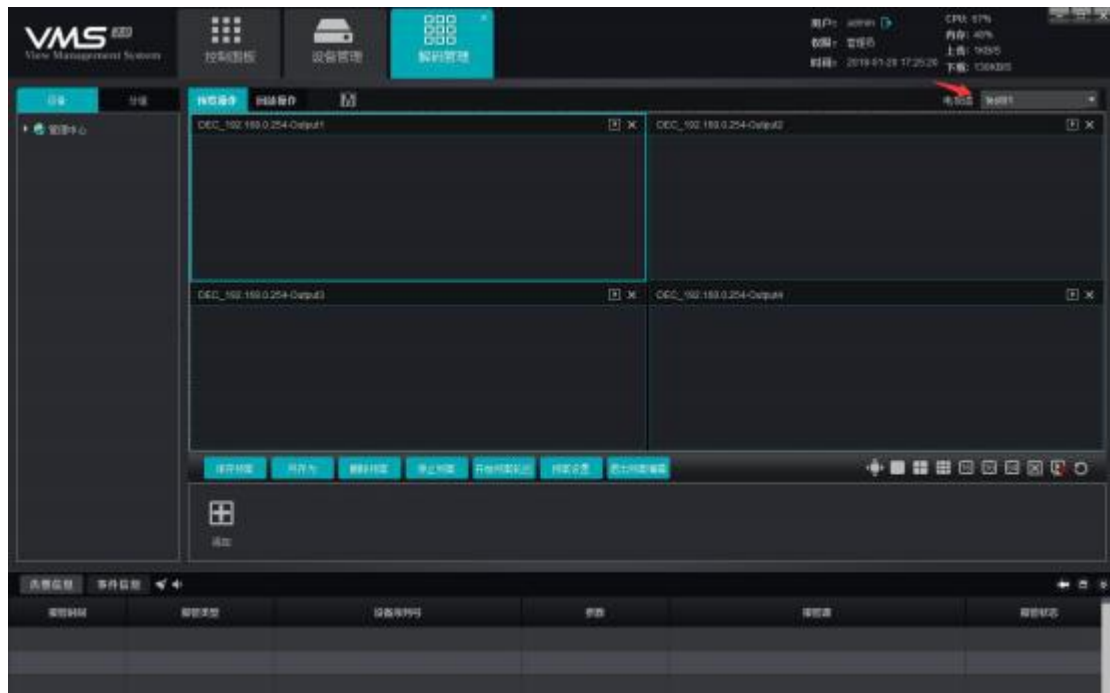
In this interface, users can layout according to the actual situation, correspond the decoder to the TV wall matrix layout, complete the setting, click the complete button, as shown in the figure:



After the setting is complete, on the decoding configuration page, you can see the saved TV wall, modify, delete, and disable / enable the saved TV wall.

## 7. Decoding management

Click the "Decode Management" button on the main interface to enter the decoding management module, as shown in the figure:

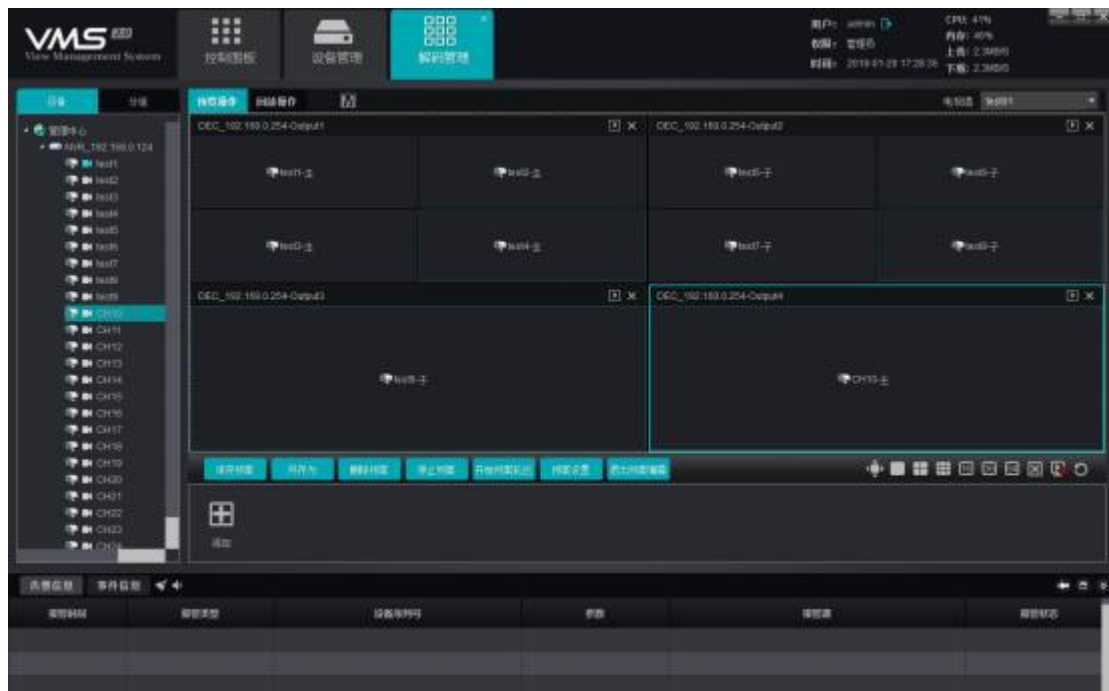


In the figure, at the mark in the figure, pull down the check box, select the TV wall, and all the set and enabled TV wall rules are displayed in this check box.

## .17 Decode the wall

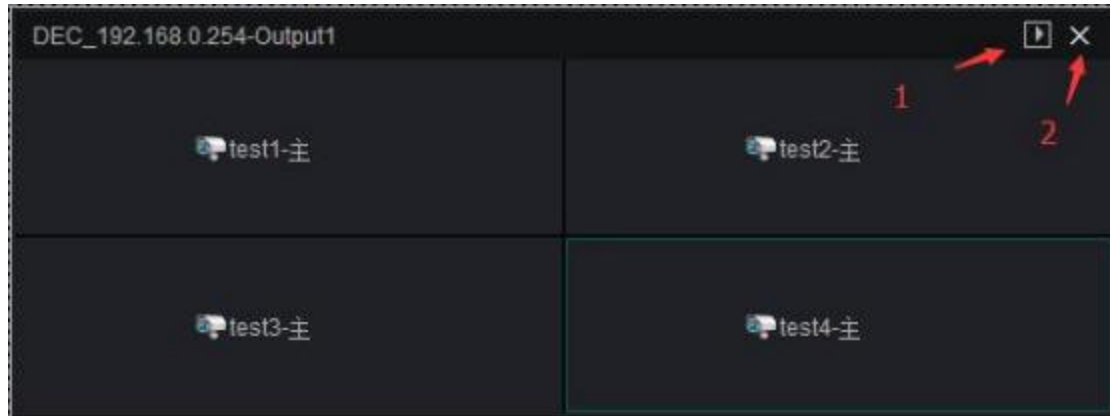
After selecting the scheme, select the channel that needs to be decoded on the wall in the left list of devices, and drag and drop it to the decoding screen of the corresponding decoder to complete the decoding on the wall. Before dragging, you can switch the decoded stream type on the wall through the button, select whether the main code stream is on the wall or the subcode stream is on the

wall: 



For the channels that have been dragged and dropped to the decoded screen, you want to replace them with other channels, and directly use other channels

Drag, drag and drop it to the corresponding window.



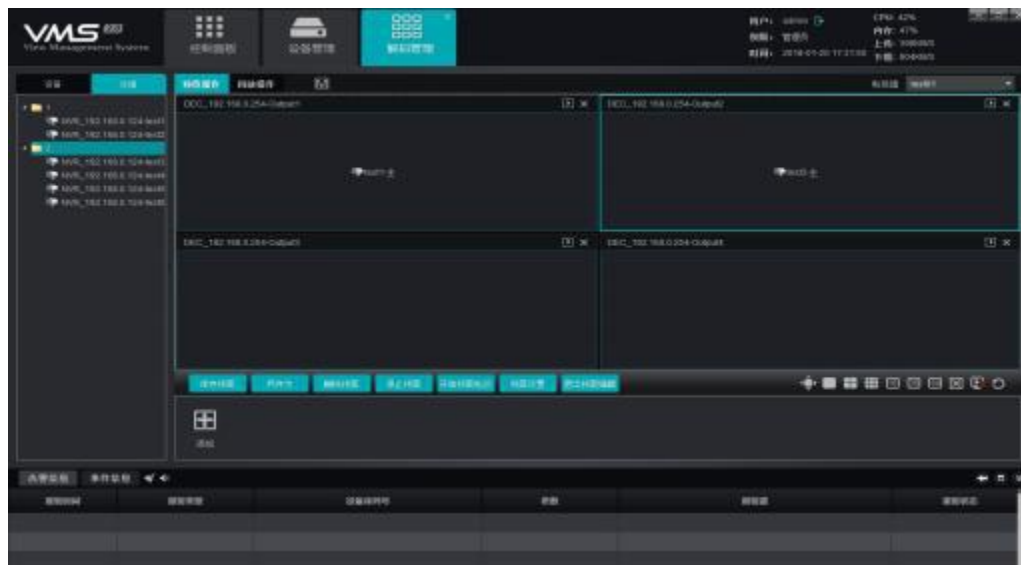
1) In order to open the decoding module preview button, and then the preview will be opened on the current page after clicking, so that customers can view the picture on the wall

2) In order to delete the channel button, the decoding channel of the current split screen will be deleted after clicking

## .27 Decoding the packet round patrol

The above device management module mentioned the decoding packet, the decoding packet set, in

Decoding management module, you can directly drag the group on the wall, as shown in the figure:



Drag the group to the output of the TV wall will automatically open the round patrol within the group. The round patrol time interval can be set when configuring the decoding packet. The default is 20S.

### .37 Decode plan round patrol

Click the Add button below to add the plan:



预案设置

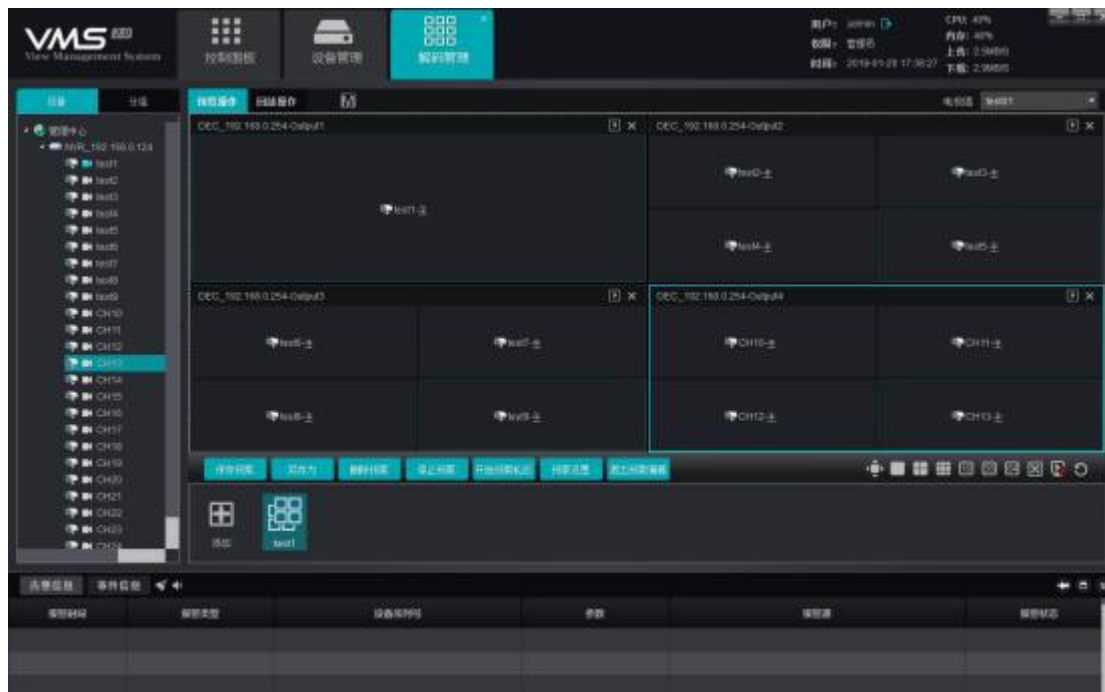
预案名称

停留时间  s

确定



Set the name of the plan and the stay time of the plan, which is the stay time of the plan during the plan round patrol. The default time is 15S, and the minimum time is 10S. After filling in, click OK, Enter the preplan editing mode:



Configure the plan, select the decoder split screen, decoding stream type and channel for the plan

Compilation, editing completed, click "Save plan" to complete the editing.

After the configuration is completed, click on the plan, can directly to the plan on the wall, without manual operation, facilitate the user operation, the saved plan, can delete, stop, set up multiple plans, click "start plan wheel tour", decoder will be according to the configured plan began to wheel tour.

## 7.4 Preview of the operation page function button introduction

On the preview operation page, there is a row of function buttons below



For the split screen, switch the control button. After the user selects the decoding split screen, they can switch the points through this button



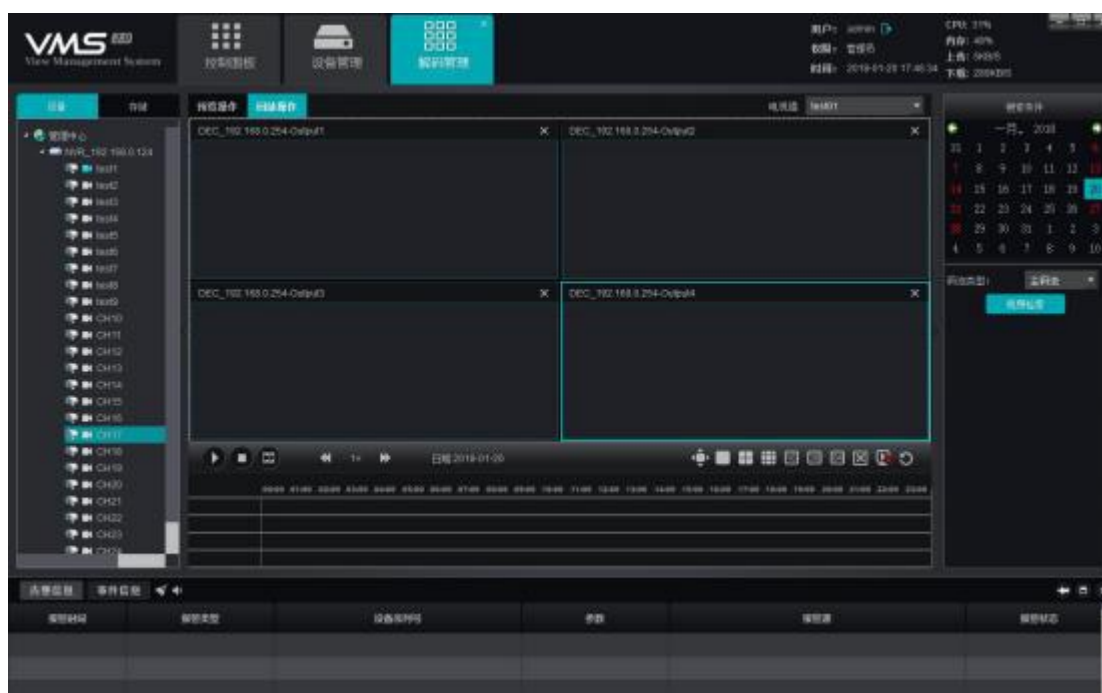
Screen number 1,4,9,16,36,64; for full screen control button for full screen mode, right click for full screen mode; for splicing control button for turning on / close decoder splicing; clear button for channel, for clearing all decoding channels on a decoder split screen with one key, and for clearing the whole TV wall scheme with one key



All the decoding channels of the.


## 7.5 Decoder playback

Switch to the playback operation page, as shown below:

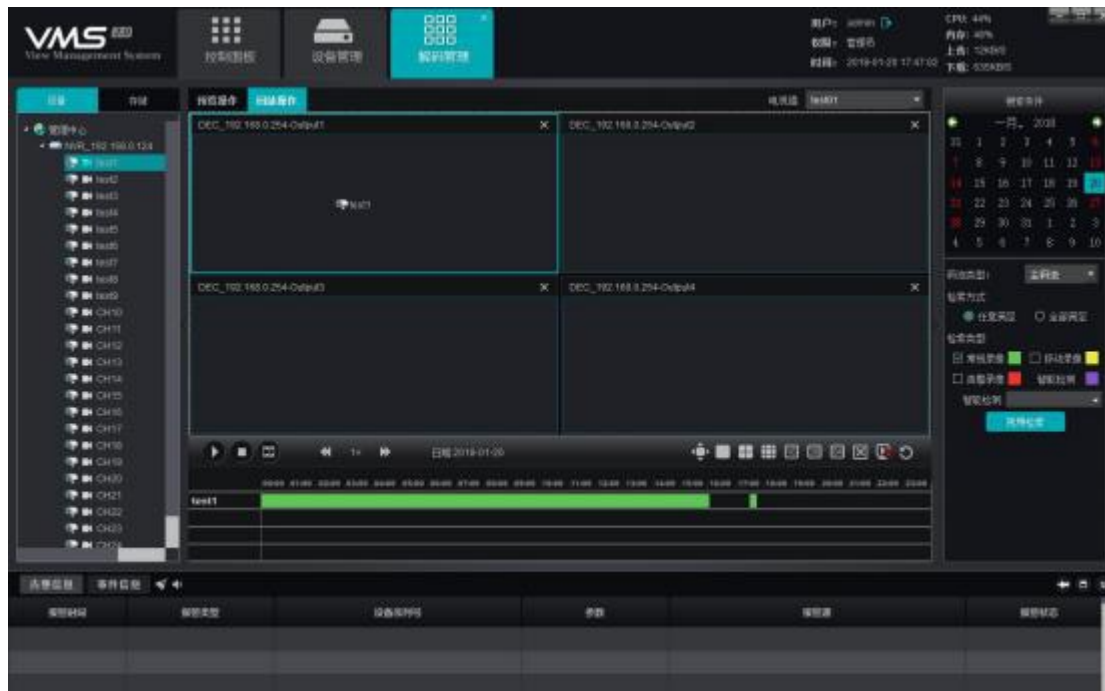


Drag and drop the channel to be played back to the decoder, and then select the search criteria (date and video path), click the "Video Retrieval" button below to retrieve the video files of the corresponding channel,

The operation here is similar to the video playback module.  
All playback channels must belong to the same set

Prepare, and up to 9 road playback at the same time. The  
video retrieval is complete, click the button below or  
operate 

Double click the mouse to play, and double click to  
relocate, as shown in the figure:



## 7.6 Introduction of the function button of the playback operation page



Due to the detailed introduction above, it will not be repeated here, its functions are: play / pause, stop, frame broadcast, playback speed adjustment, full screen, split screen number adjustment button, splicing open and close, decoder split screen clear screen, TV wall clear screen.

## 8. Alarm configuration

Click the "Warning Configuration" button on the main interface to enter the alarm configuration interface. The

alarm is configured as the alarm rule setting module. If users want to realize the alarm linkage in the client side, they must first set the alarm linkage rule, as shown in the figure:



The alarm configuration page displays the enabled status of the currently set linkage rules and rules,

## .18 New linkage rules

Add the new alarm linkage rules, please click "Add" in the upper left corner, as shown in the figure:

添加联动规则

规则名称

报警类型

☒报警输入

☐移动侦测

☐遮挡报警

☐视频丢失

☐计数检测

☐区域检测

☐物品检测

☐跨线检测

报警源

>

联动动作

☒地图

☒抓图

☒云台

☒录像

☒弹出图像

☒电视墙

动作参数

批注

保存

取消



- 1) Rule name, alarm linkage rule name, the user can customize.
- 2) Alarm type, 8 alarm types are currently supported, namely alarm input, mobile detection, occlusion alarm, video loss, count detection, area detection, item detection and cross-line detection. The latter four devices with intelligent detection, please refer to the NVR instructions for the definition of 8 alarm types.
- 3) Alarm source, namely the alarm source, click on the check box to select all the channels of all the devices currently added to the CMS.
- 4) Linkage action, including map, grab picture, cradle head, video recording, pop-up image and TV wall, all of which are defined as follows:  
  
Map: display the alarm in the map interface, want to link the map alarm, the first linkage channel must be deployed on the map, when the alarm triggers, the channel icon on the map will become red; grab the picture: grab the picture of the linkage channel;  
  
Yuntai: to control the linkage channel of Yuntai, you can choose to go to a preset point, call a certain cruise or call a certain track, only the front-end equipment that support Yuntai control can link the Yuntai;

Video: After the alarm triggers, the linkage video channel will start the local and storage server video (the storage server needs to configure the video plan), and can search and view the video in the playback module; after the alarm trigger, the preview window will pop up on the main interface to display the real-time preview of the linkage channel;

TV wall: Select the channel and TV wall to be set up. After the alarm is triggered, the real-time preview screen of the channel will be uploaded to the TV wall for display.

Note: When setting the linkage action as map, video, pop-up image and TV wall, you need to choose the end mode. The automatic end mode is the alarm end

After that, the linkage action is no longer connected, and the scheduled linkage action is ended at the agreed time.

The time can be selected between 1 second and 36,000 seconds.

5) Action parameters, that is, the set linkage action, can be displayed in this bar.

6) Note: used to indicate the relevant information of this linkage rule, user customization, can not filled in.

Complete the filling out, the effect is shown in the figure:

**添加联动规则**

规则名称: test1

报警类型: ☒ 报警输入 ☐ 移动侦测 ☐ 遮挡报警 ☐ 视频丢失  
☐ 计数检测 ☐ 区域检测 ☐ 物品检测 ☐ 跨线检测

报警源: DEVICES-NVR\_192.168.189.128-NetAI01

联动动作: ☒ 地图 ☒ 抓图 ☒ 云台  
☒ 录像 ☒ 弹出图像 ☒ 电视墙

动作参数:

-----地图-----  
[通道]  
(1)NVR\_192.168.189.22\_CH01  
[停止方式]  
自动停止

-----电视墙-----  
[通道]  
(1)NVR\_192.168.189.128\_CH01 DEC\_192.168.38.234  
[停止方式]  
自动停止

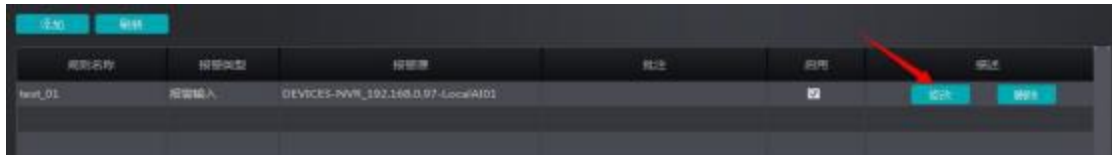
-----弹出图像-----

批注:

保存 取消

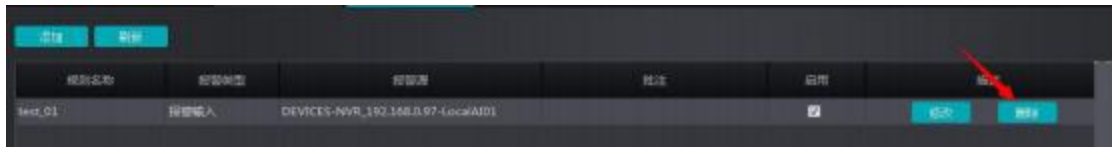
Click the "Save" button below, and the setting is successful.

## .28. Modify the alarm rules



After the alarm rule is added, users can click the "Modify" button at the mark in the figure to edit the existing rules.

## .38 Delete the alarm rule



To delete existing rules, click the "Delete" button in the picture. If it is not enabled temporarily enabled, remove the "check" button in the picture.

## 9. Warning management

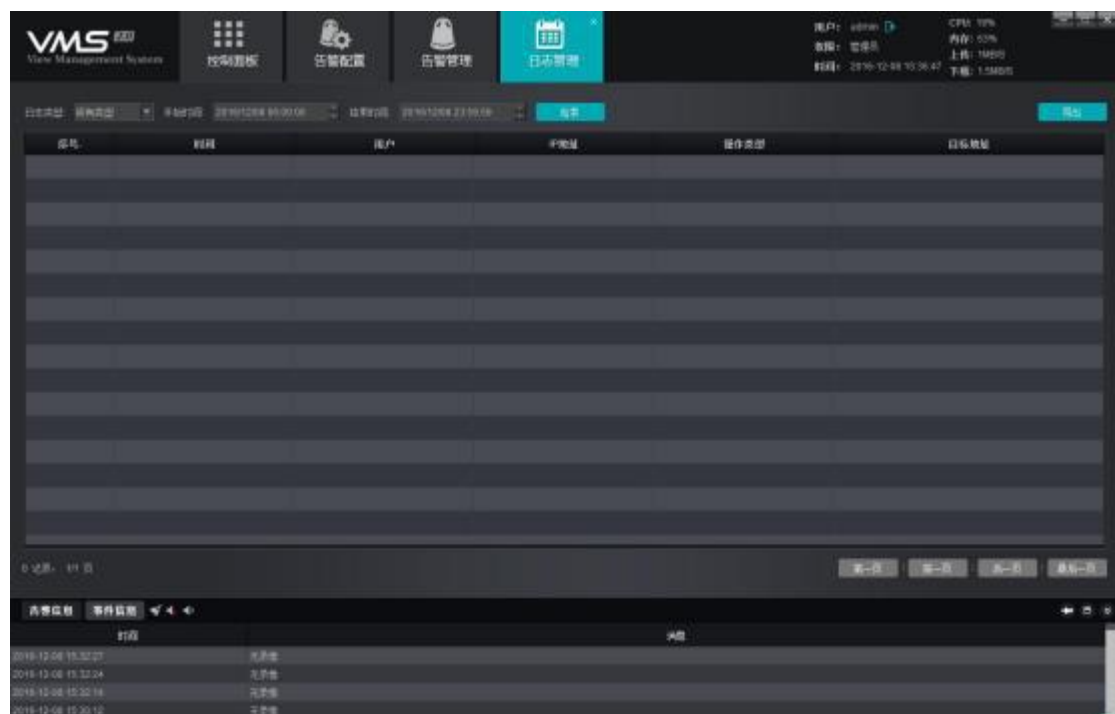
Click the "alarm management" button on the main interface to enter the alarm management interface:



The alarm management interface can display all the alarm information that has been pushed to the VMS, select the search time period and the alarm type, and then click the "Search" button to retrieve all the relevant alarm information as required. The alarm types are divided into eight categories: alarm input, mobile detection, occlusion alarm, video loss, count detection, area detection, item detection and cross-line detection.

## 10. Log management

Click the "Log Management" button on the main interface to enter the log management interface:



Log management interface is used to display all the important operation records of users, select the log type

and time, and click the "retrieval" button. The log type can be divided into login / logout, device management, open / stop video recording, linkage management and remote configuration.

- 1) Login / log out: the user login / log out server records.
- 2) Equipment management: the users add, modify and delete the records of the devices.
- 3) Open / stop the video recording: the user operates on / stop the local video recording record.



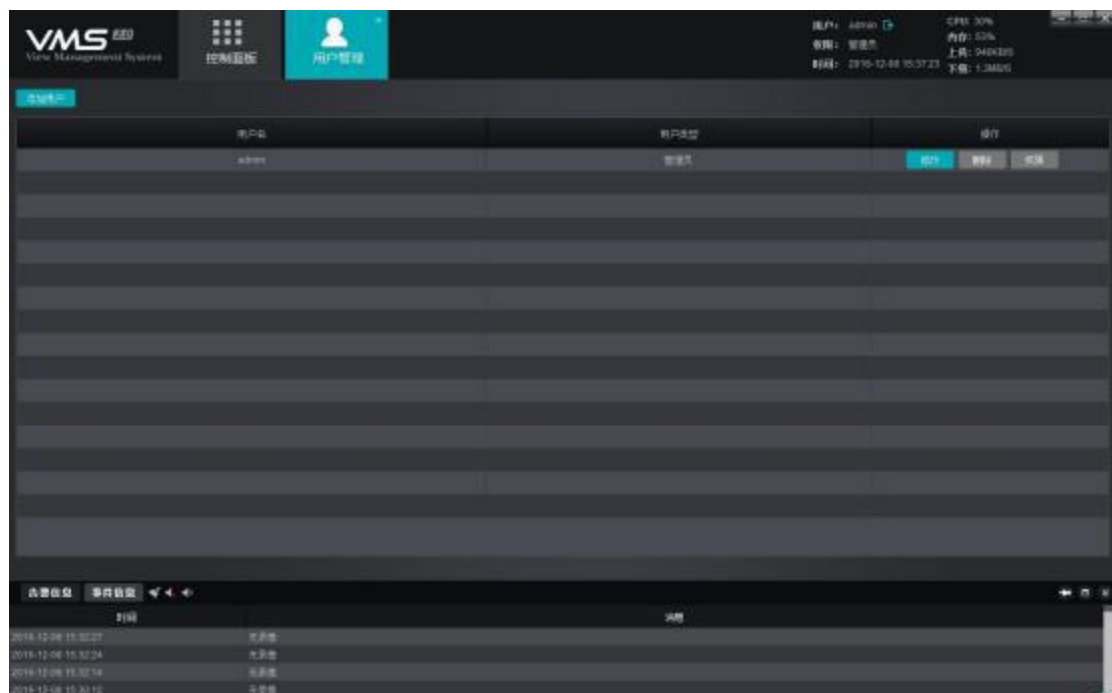
4) Linkage management: records added, modified and deleted by user operation linkage rules

5) Remote configuration: users operate the remote configuration and modify the record of front-end equipment parameters

The log will record the operation time, operation user, operation IP address, operation type, and target address of the relevant important operations in detail, which helps the administrator to find problems.

## 11. User management

Click the "User Management" button on the main interface to enter the user management interface:



User management interface user administrator assigns users and user rights, software installation will

automatically generate super user admin, for super users, cannot be deleted, enjoy the highest permission, click "Modify" to modify the password of super user.

### **11.1, New subusers**

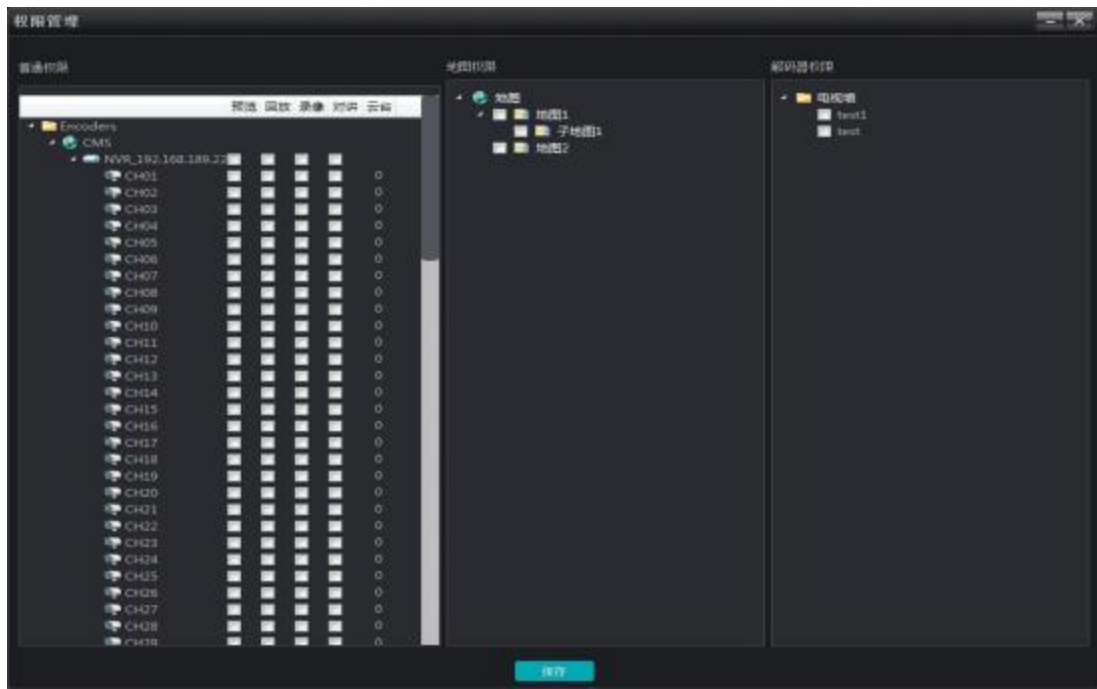
Click "Add Users" in the upper left corner to add new users:

User type is Guest, that is, a non-administrator user, the user type cannot be changed, please fill in the user name, password, confirm the password successively, click save to generate new users, fill in the process, please ensure that the password and confirm the password is consistent.

## 11.2 Sub-user permission assignment

用户名	用户类型	操作
admin	管理员	<a href="#">添加</a> <a href="#">删除</a> <a href="#">权限</a>
test_01	普通用户	<a href="#">添加</a> <a href="#">删除</a> <a href="#">权限</a>

For the added subusers, if you want to assign permissions, click "Permissions" at the figure mark Button to assign rights:

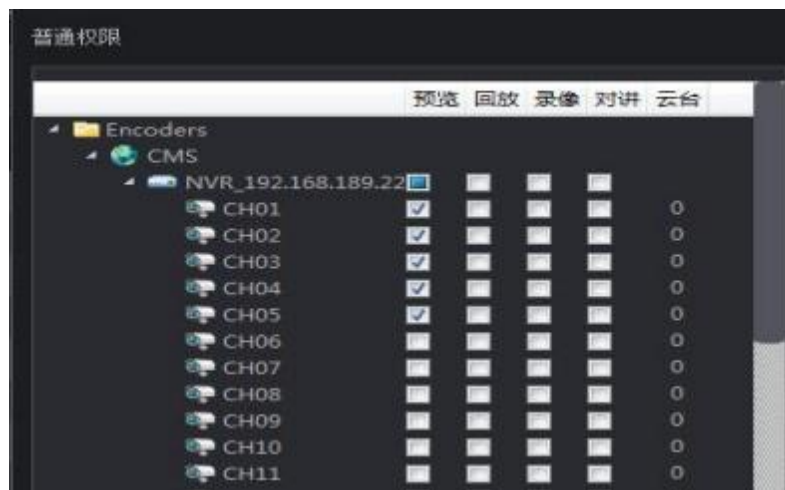


Permission is divided into three parts, ordinary permission, map permission, decoder permission.

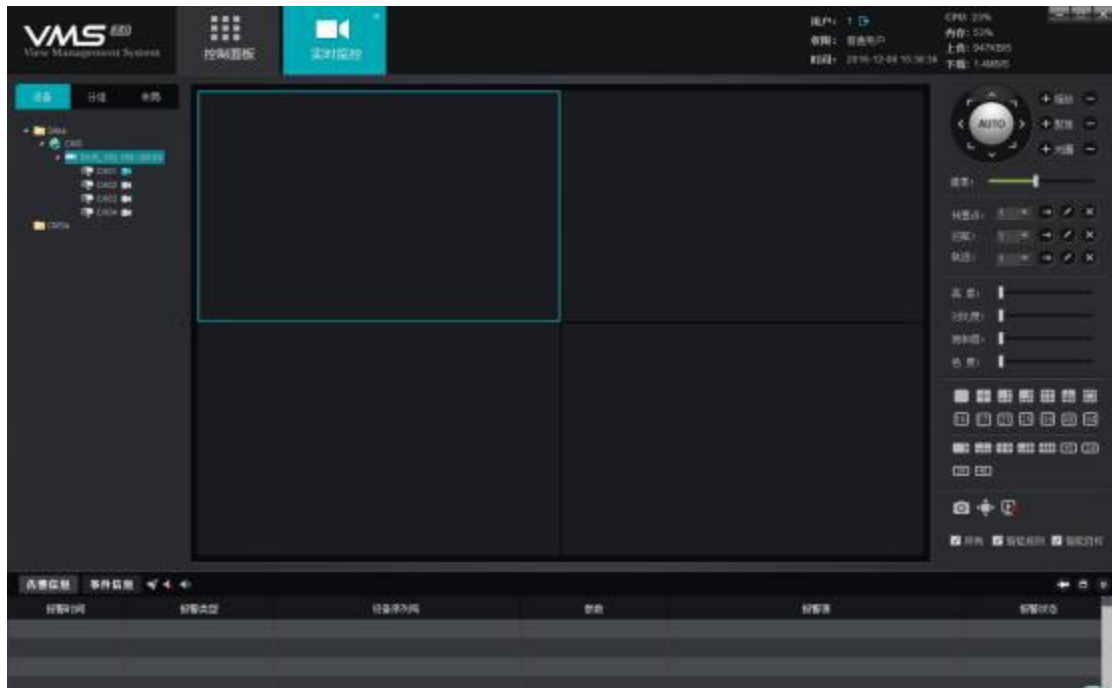
1) Ordinary rights: ordinary rights include preview, playback, video, intercom and cloud head control, accurate to the channel, the administrator can assign the corresponding channel to the corresponding sub-users. The number corresponding to the cloud head indicates the cloud head control priority, double-click to edit, select between 0 and 10, 0 indicates the cloud head control authority, 1 to 10 indicates the control authority, the greater the number, the higher the priority, that is, 10 enjoys the highest priority of cloud head control, and 1 enjoys the lowest priority.

channels without preview permission will be hidden when subusers log in (playback, recording, like, intercom, etc. are similar, channels without permission will not use the corresponding function), for example

For example, only five channels of the test subusers are assigned the preview permission, as shown in the figure:

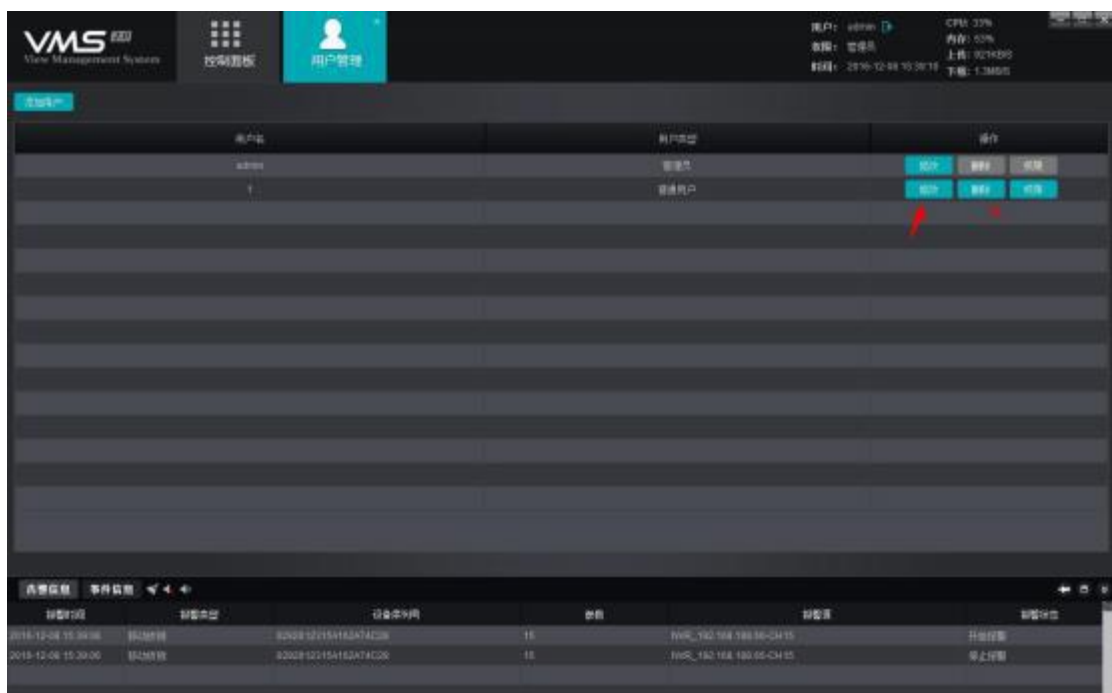


Logging on the server with subuser test will see only see 5 channels, as shown:



Note: Super user admin has the highest permissions and cannot be modified.

## 11.3 Subuser modification and deletion



### 1) Modify the subusers

Click the "Modify" button shown in the figure to pop up the editing interface





Users can change the password according to their needs, and click the "Save" button after completing the repair.2)

Delete the subusers

In the user management interface, click the "Delete" button to delete the corresponding user, in which the super user admin cannot be deleted.

## 12. Local configuration

Click the "Local Configuration" button on the main interface to enter the local configuration interface:



1) Automatic login: Run the client to the selected server site.

2) Open the self-start: open the opportunity to automatically run the client program after checking.

3) Automatic code stream, checked as shown in the figure, divided into top speed mode and bandwidth saving mode:



mode

Next, open preview will open the main code stream and subcode stream by default, but only display one, so that switching will be faster and consume more bandwidth; bandwidth saving mode is only open one code stream at the same time, close the existing code stream, open the other, be relatively slower and save bandwidth, and the user can choose the corresponding mode according to the actual situation. In addition, in the case of automatic code flow, you can choose how much to automatically switch to the main code stream below the split screen, optional 1,4,9.

4) Window ratio: preview or playback window ratio, optional full screen, 4:3,16:9.

5) Preview wheel tour interval: Preview wheel tour time interval, the default is 30S, which can be selected between 30 and 600 seconds.

- 6) Catch picture path: grab picture picture save path, including preview grab map, playback grab map and alarm linkage grab map.
- 7) Download path: the video file download and save path.
- 8) Export the log path: Export the log file save path.
- 9) Equipment calibration: when the server corrects the added equipment, it is divided into manual calibration and automatic calibration.
- 10) Alarm sound: alarm sound selection, used for alarm linkage sound, can be customized.
- 11) Video storage path setting: set the storage path of local video.
- 12) Database backup and restore: users back up and restore the database to prevent data loss.

13) Start the web: Start the web service, and enable the I E login access, behind the port, divided into http port and https port, for two different ways of I E access.

14), Total number of channels: display the number of authorized roads owned by all agreements. The initial installation will have a one-month probation period, with no limit on the number of roads. After the probation period, the number of channels with non-private agreement will become 0, indicating that the agreement authorization has expired and cannot be used again.

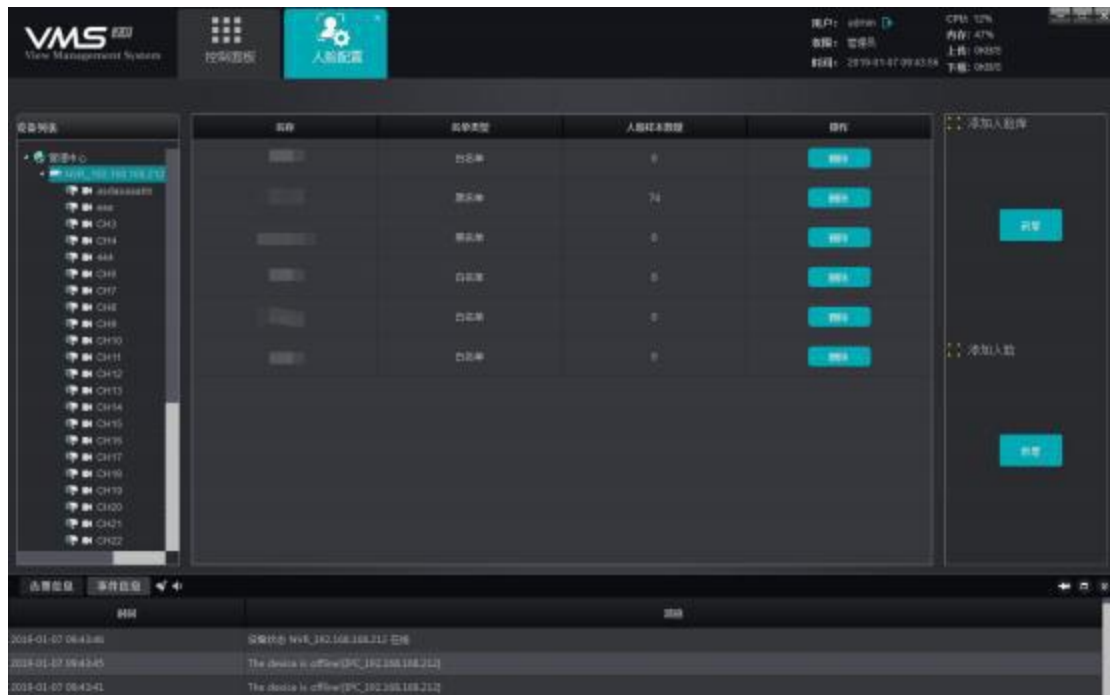
15) Video color: Define the color of different types of video recording.

16) Version number: the version number of the current program (not modifiable).

After modifying the relevant parameters, click the "Save" button below to save them.

## **13. Face configuration**

### **13.1, Add a face library**



As shown, the list of devices in this interface shows only the face devices that have been added. The the device intermediate list displays the All face Library under the current device. Click to add to the right

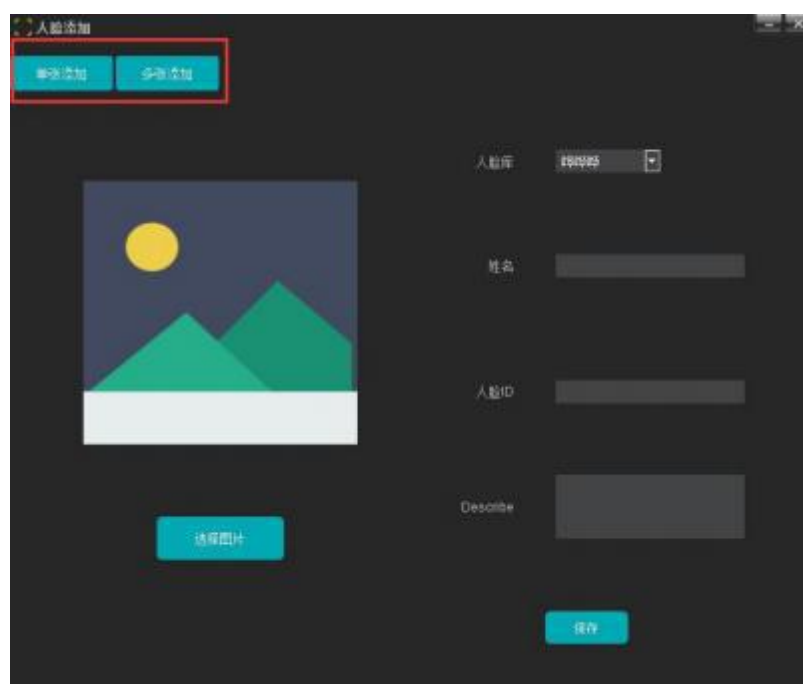
Face library to the device.



## 13.2, Add human faces

Face addition is divided into single addition and multiple addition, the maximum number of single face sample import according to

Model decision of the front-end IPC or NVR.



Single addition: select the required picture, the picture will only support JPG format, fill in the corresponding information and upload it to the corresponding face library.



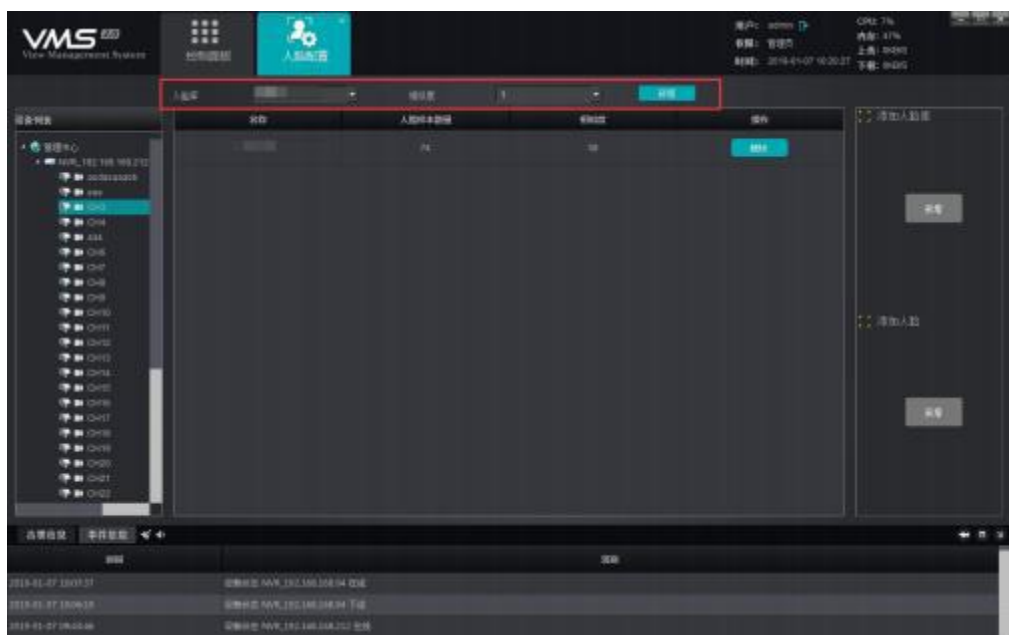
Multiple add: multiple pictures batch import, picture naming support the following form: "Name.description.human face ID. A jpg "or" Name \_ Description \_ face ID. The jpg ", allows for no description and the face ID, if not, the description as empty, and the face ID is generated automatically. Batch upload the required face picture to the same face library, you can export the upload failed picture information.



### **.313 Add the channel face library**

Select the device channel displays the face library information currently added to the channel, above the list (As shown in the red box) will display the everyone face

library created by the device. Select the face library to set the acquaintance degree to add the control to the current channel.

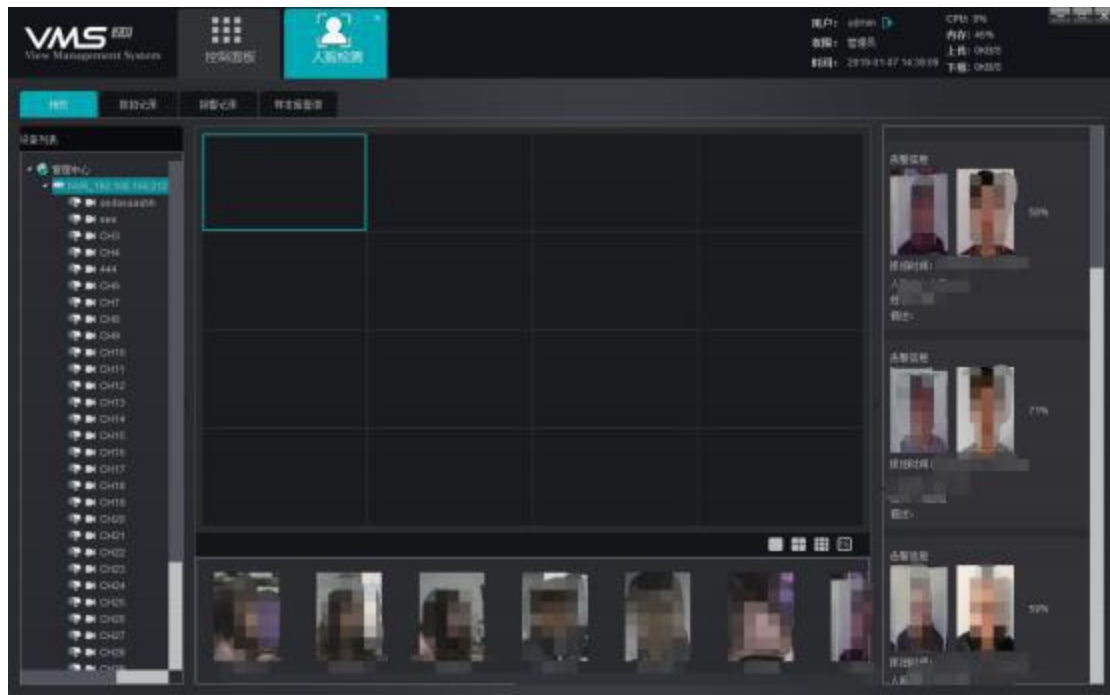



# 14. Face detection

## .114 Preview

Open the channel preview, VMS can push the corresponding capture comparison image. The snap images under the preview shows only the last 10. After switching the VMS interface, preview the snap comparison image

It stays in the last 10 copies before the switch (VMS stops pushing).



The top right  of the channel preview supports fast search, which searches for the last 5 points of the current channel

A capture record of the clock.



## 14.2 Capture capture and alarm record inquiry

Search records show up to 10,000 results.

Snap records support a face library search only for a single device or channel.

Support for the black and white list. Export search results can be saved in a excel table.



Alarm record search results for a certain face library for a single device or channel. Similarly exported, the results are saved in a excel table.



### 14.3, Sample library query

You can search a sample query for a face library of the currently selected device or channel. Support to graph search map, fuzzy query. Can export the sample library search results, and save them in the form of pictures.

## 3. Storage space calculation

### 1. Storage and calculation

There is currently no limit on the number of devices a server can manage, but it is recommended to be within 200 units. The number of device channels for a host is limited by network and disk writing. The maximum write speed is 200Mb / s, that is, the code stream is 4Mb p s camera, up to 50 storage.

The time to store the video is limited by the disk space size, For example, video cameras with 4Mbps code streams, Video file size =  $(4 * 3600) / 8MB = 1800MB$ , That is, a code stream of 4Mbps, the camera of an hour of video file size is about 1,800 M B, That is, 1.8GB, Video file size for the day =  $1.8G * 24 = 43.2GB$ , One-month video file size =  $43.2GB * 30 = 1296GB = 1.296TB$ , and the like, By using this formula, Can be the root of the root



The time of video storage is calculated according to the total disk space connected, the number of video camera paths connected, and the code stream size of the video camera.

resolution ratio	code check	Required storage space				
		hour	sky	circumference	moon	half a year
2560x1920	10Mbps	4.4GB	105.5GB	738GB	3.09TB	18.54TB
2048x1536	8Mbps	3.5GB	84.4GB	591GB	2.47TB	14.82TB
2048x1536	7Mbps	3.1GB	73.8GB	516.6GB	2.16TB	12.61TB
1600x1200	6Mbps	2.6GB	63.3GB	443GB	1.85TB	11.10TB
1920x1080	5Mbps	2.2GB	52.7GB	369GB	1.54TB	9.27TB
1280x960	4Mbps	1.8GB	42.2GB	295.3GB	1.24TB	7.42TB
1280x720	3Mbps	1.3GB	31.6GB	221.5GB	949.2GB	5.56TB
1280x720	2Mbps	900MB	21.1GB	147.7GB	632.8GB	3.71TB
640x360	1Mbps	450MB	10.5GB	73.8GB	316.4GB	1.85TB

## four. P 2P protocol introduction and fisheye camera access

### 1. Introduction of the P 2 P protocol



The screenshot shows a window titled "添加设备" (Add Device). It contains the following fields and controls:

- 设备名称: (Device Name) - Text input field
- 用户名: (Username) - Text input field
- 密码: (Password) - Text input field
- 序列号: (Serial Number) - Text input field
- 协议: (Protocol) - Dropdown menu with "UMEYE" selected
- 保存 (Save) - Button
- 取消 (Cancel) - Button

At present, P2P has TUTK and Umeye protocol, which can be added to the platform separately, so that clients can connect to the device through P2P protocol ID (the device supports the protocol). P2P protocol breaks the limitation of LAN, and enables the platform and device can be connected through the external network. In the added device interface, the protocol selects the protocol of P 2P, and saves the corresponding parameters as

required. Except the protocol uses the same connection as the LAN protocol.

## **2. Access and use of the fisheye camera**

Connect the camera camera through I8H or SLINK protocol, open the preview screen and select the camera device.

The display channel is shown in the following figure:



Right click the drop-down menu



Select the camera setting interface as shown in the figure below:



Remind the device to restart to take effect.