

# User Manual

## ZKBioSecurity VMS and Client

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The product will be updated from time to time without prior notice. The latest operation procedures and relevant documents are available on <http://www.zkteco.com>.

If there is any issue related to the product, please contact us.

## About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques.

With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry

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owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

## About the Manual

This manual introduces the operations of ZKBioSecurity VMS and Client product.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

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# 1 VMS and Client Function Description

## 1.1 VMS and Client

### 1.1.1 Function Description

VMS function and VMS Plugin (client program) are software function and application based on video service launched by ZKTeco. It can be used with DVR, NVR, IPC, network storage devices, etc. It supports multiple functions such as device management, preview, playback, event reception, decoding management, video alarm, log query, and access control video linkage. It provides flexible and diverse deployment solutions to meet the needs of various environments in small and medium projects.

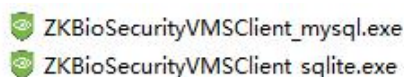
### 1.1.2 Install the VMS and Client

- **Install the VMS**

VMS module will be installed by default.

- **Install the VMS client**

There are two versions of the VMS client program, MySQL and Sqlite. There is no difference in use. Please choose one to install.



### 1.1.3 Configure the VMS Client

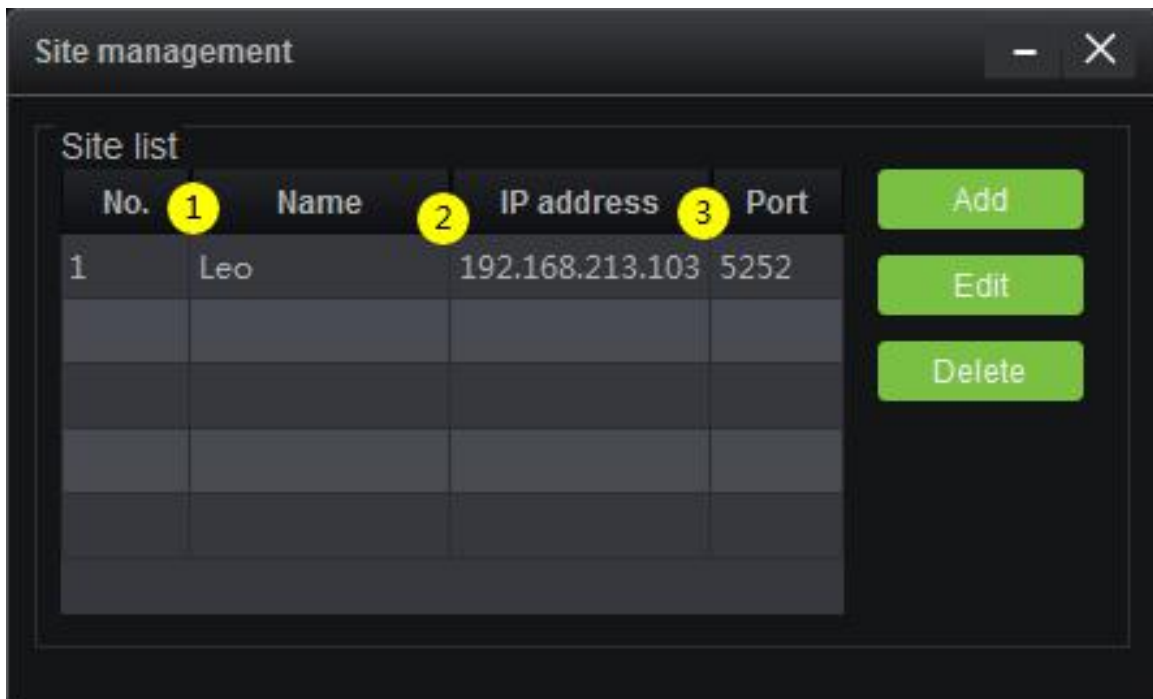
- **Configure the VMS Client**

After the VMS client is installed, double-click to open the client application. Before logging in, you need to configure the server site. Click **Choose site** -> **Site management** to enter the site configuration page.



Configure the information about the server (site):

- ① Site name, arbitrary name.
- ② Server address. If the client and server are on the same computer, the address can be filled in: 127.0.0.1.
- ③ The port number is fixed as 5252.



- Login to the VMS Client

The login user name and password of the VMS client are the same as that of the VMS server.



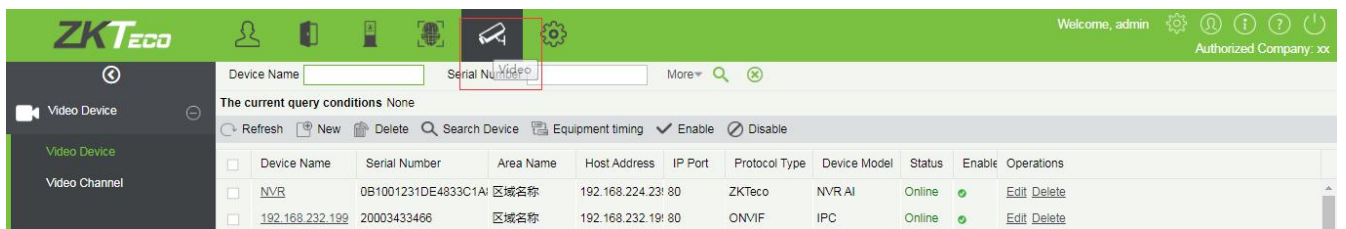
The image shows a login window for the ZK BioSecurity VMS Plugin. The window has a dark background with a light green accent color. At the top left is the ZK BioSecurity logo, which consists of a shield icon with a lowercase 'i' inside, followed by the text 'ZK BioSecurity' in a white sans-serif font, and 'VMS Plugin' below it in a smaller white font. In the top right corner, there is a small 'x' icon and a link labeled 'Choose site'. The main form area contains three input fields: a 'User Name' field with a person icon and the text 'admin', a 'Password' field with an asterisk icon and a masked password of ten dots, and a language selection dropdown menu with a globe icon and the text 'English'. Below these fields are two checkboxes: 'Remember password' and 'Auto login'. At the bottom center is a large green button with the text 'Login' in white. Yellow circles with the numbers '1' and '2' are placed over the 'User Name' and 'Password' fields respectively, likely indicating the order of input.

## 1.1.4 Login to the VMS Server

Enter the server's IP address and port number in the browser address bar to access the VMS server.



Enter the username and password, login to the VMS server webpage, and click the Video icon to enter the VMS module management interface:



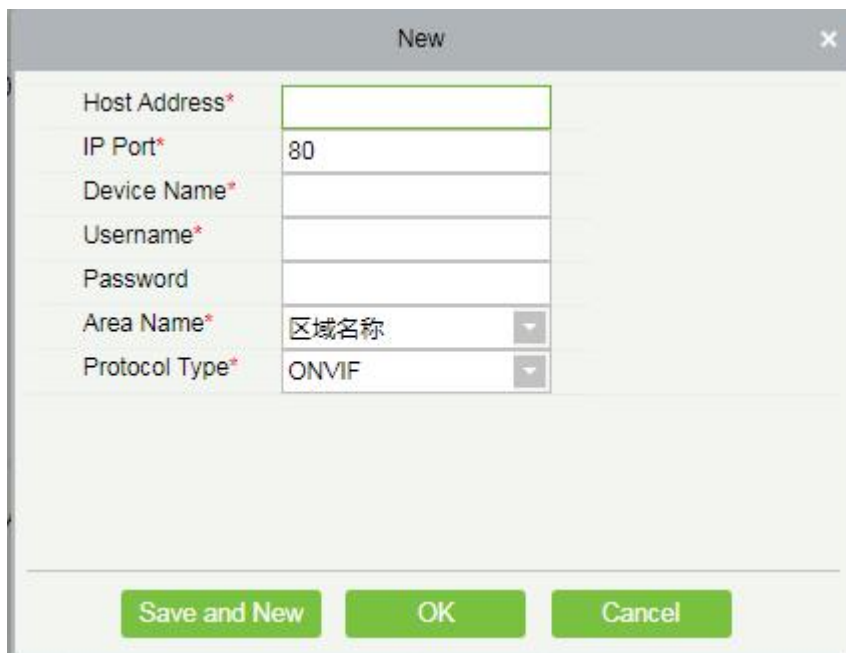
## 2 VMS Module Function Description

### 2.1 Video Device

#### 2.1.1 Video Device Management

- Add video device

Click **[Video]**> **[Video Device]** > **[Video Device]** > **[New]** to open the interface for manually adding video device, fill in the relevant fields with the corresponding values. Click **OK** to add the device.



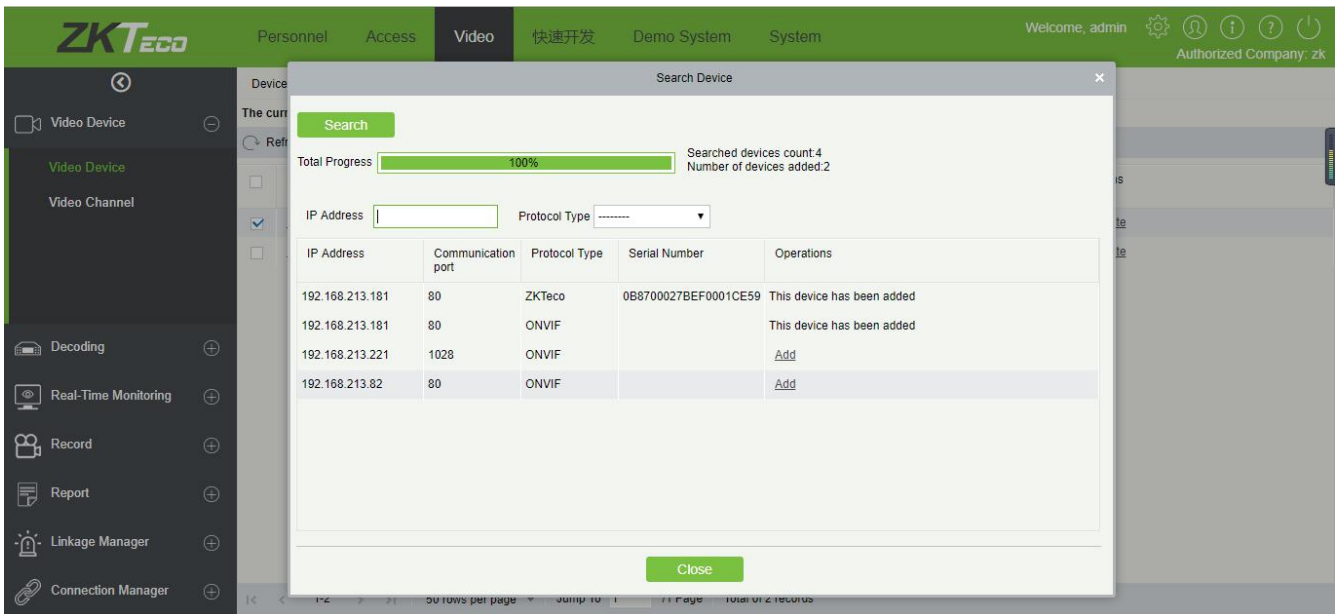
The image shows a 'New' dialog box with the following fields and values:

Field	Value
Host Address*	
IP Port*	80
Device Name*	
Username*	
Password	
Area Name*	区域名称
Protocol Type*	ONVIF

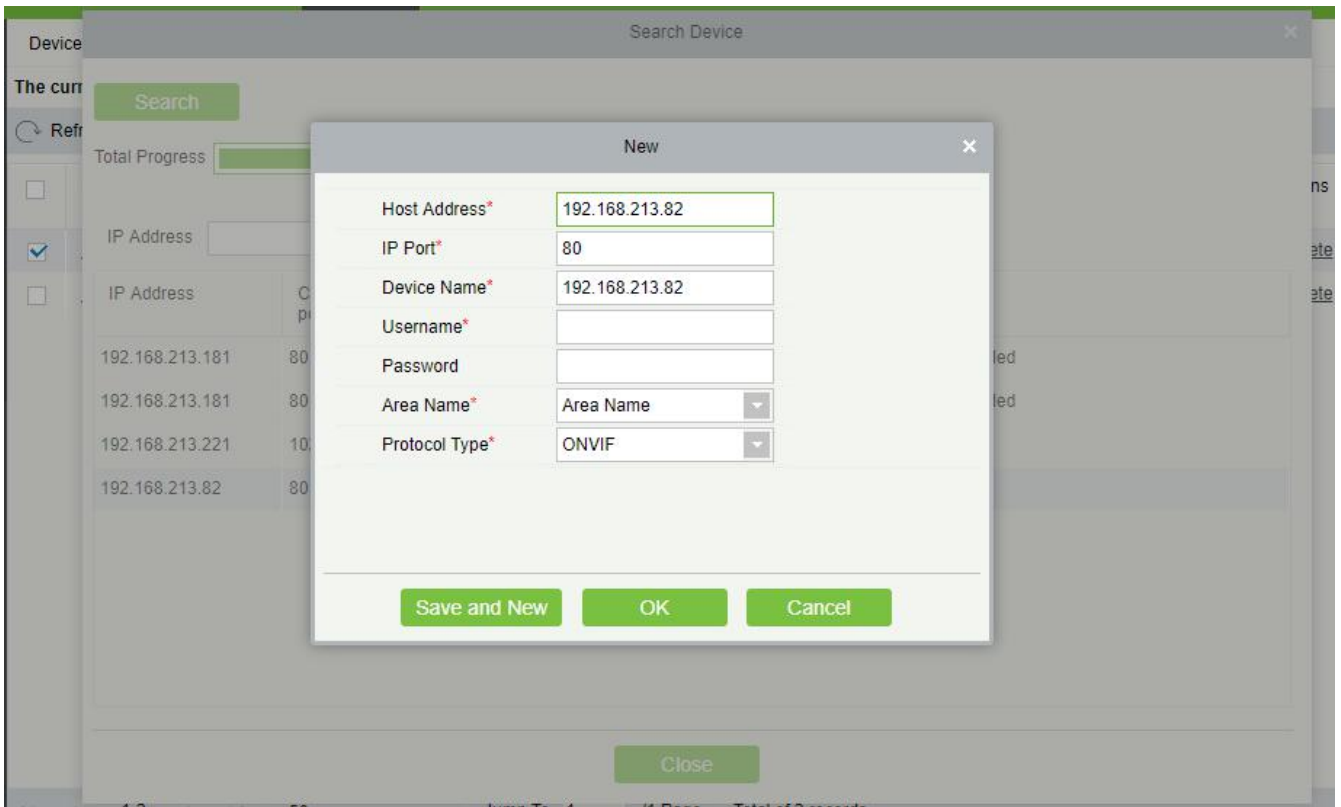
At the bottom of the dialog box, there are three buttons: 'Save and New', 'OK', and 'Cancel'.

- Add video device by searching

Click the **[Search Device]** button to pop up the device search box. Click the **Search** button in the upper left corner to start searching for devices. The search results are as follows. At present, the device of onvif protocol will not display the serial number when it is searched out, which can only be seen after adding.

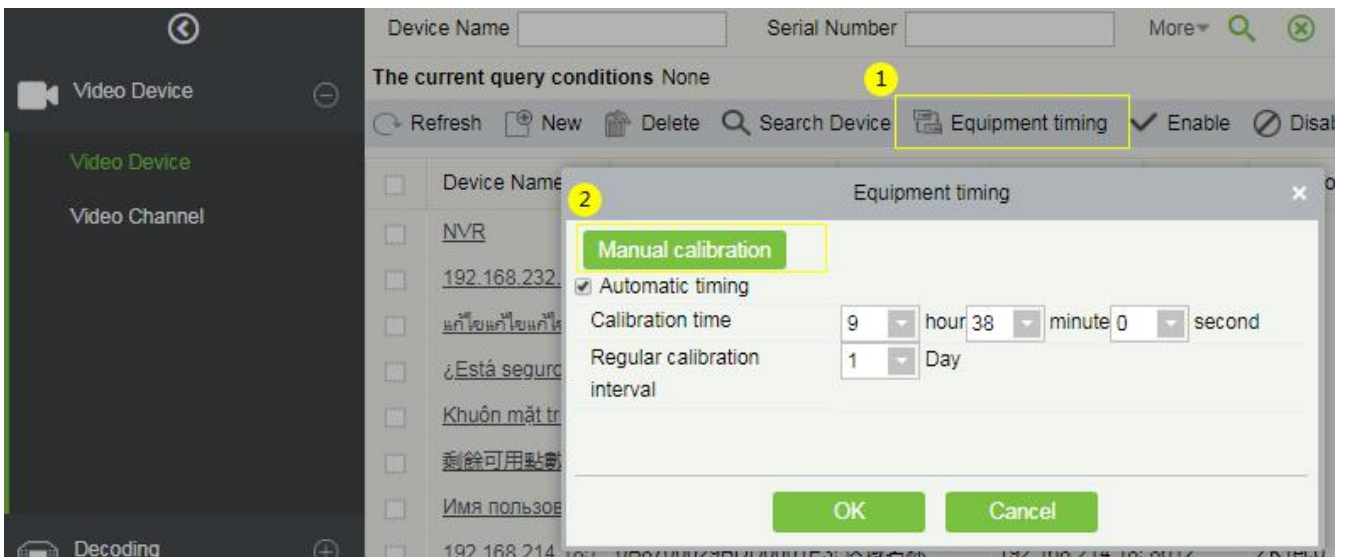


There is no add button for the device that has been added. Select the device not added and click the **Add** button. A window for adding device pops up. Other information has been filled in by default. Just fill in the username and password of the device and click **OK**.



- Equipment Timing

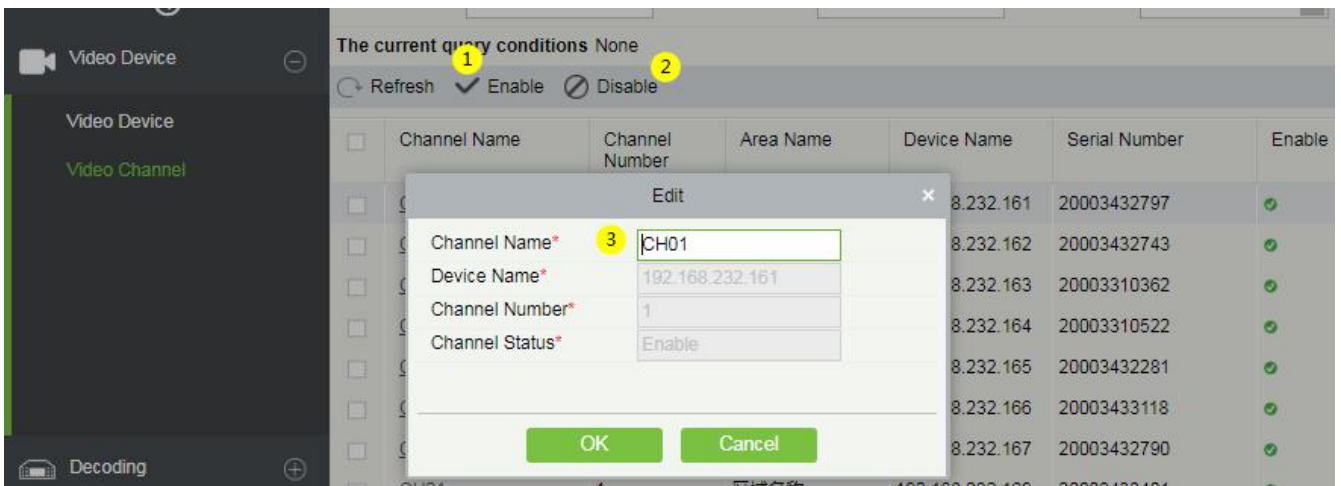
You can select the manual calibration or set the automatic timing.



## 2.1.2 Video Channel

- Enable / Disable channel

In the video channel interface, you can edit the channel name, enable and disable the video channel.





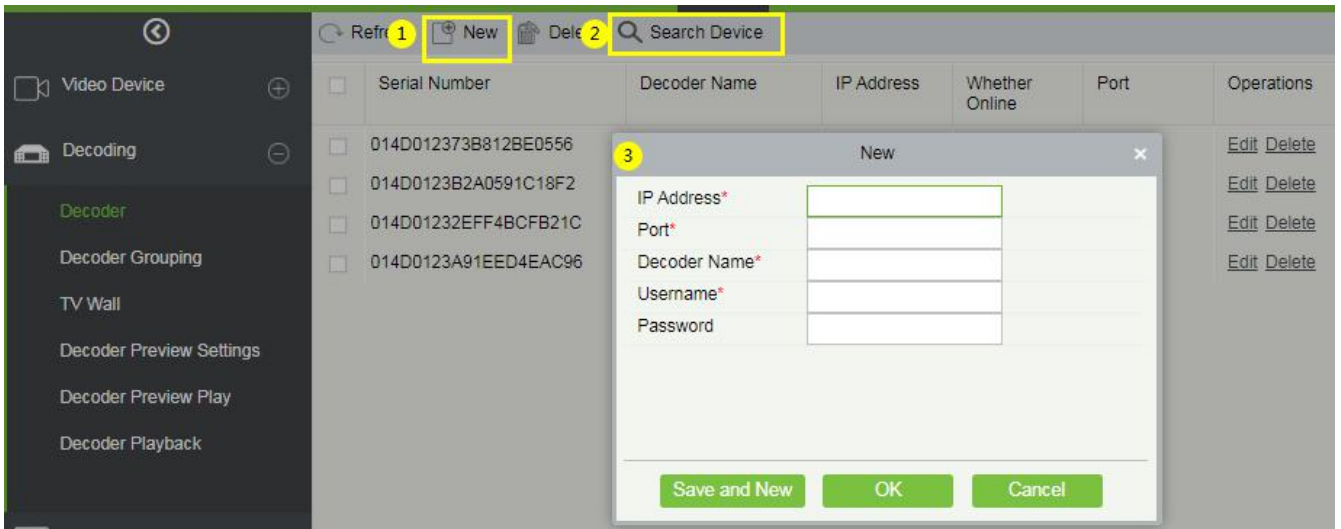
## 2.2 Decoding

The decoder can transmit the video images to the screen, which is used to set the TV wall and the soon.

### 2.2.1 Decoder

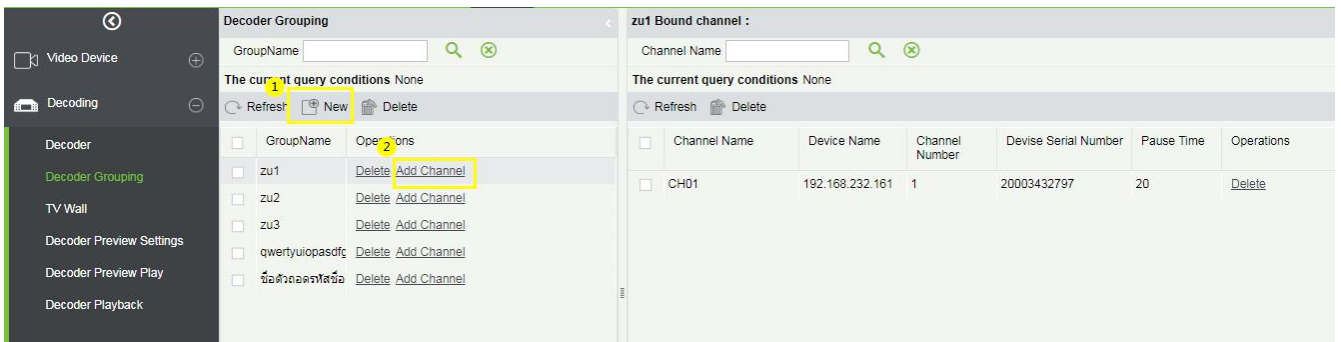
- Add video device

Click **[Video]**> **[Decoding]** > **[Decoder]** > **[New]** or **[Search Device]** to add a decoder.

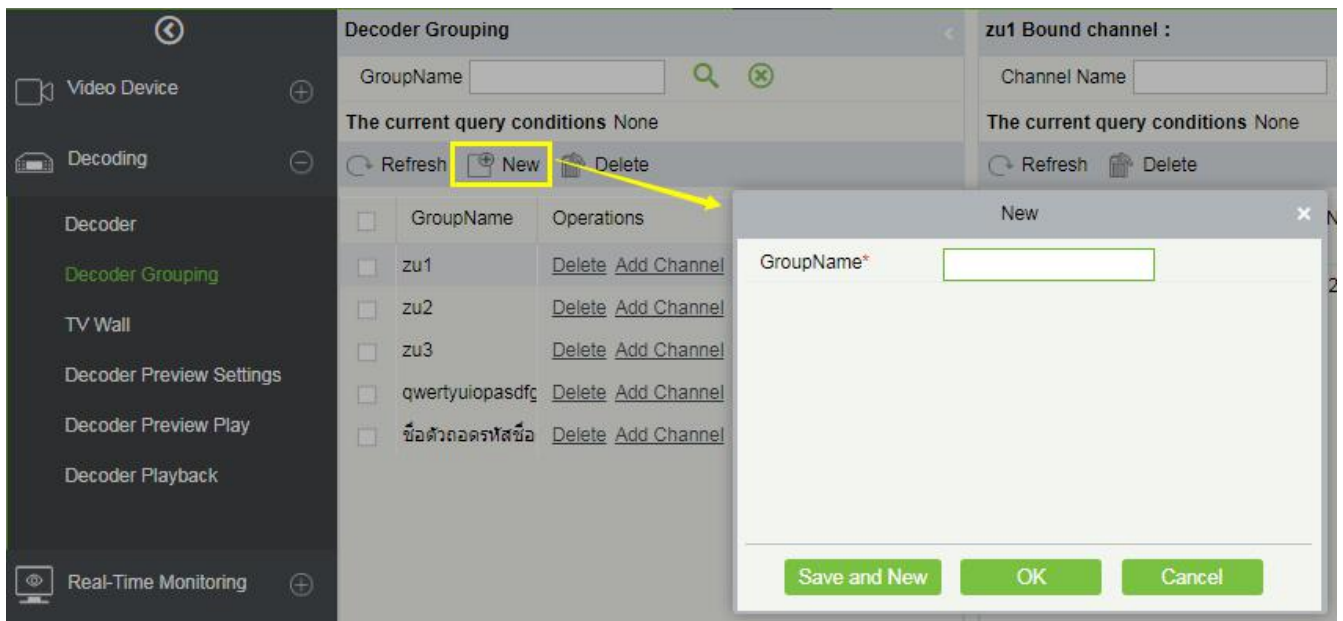


### 2.2.2 Decoder Grouping

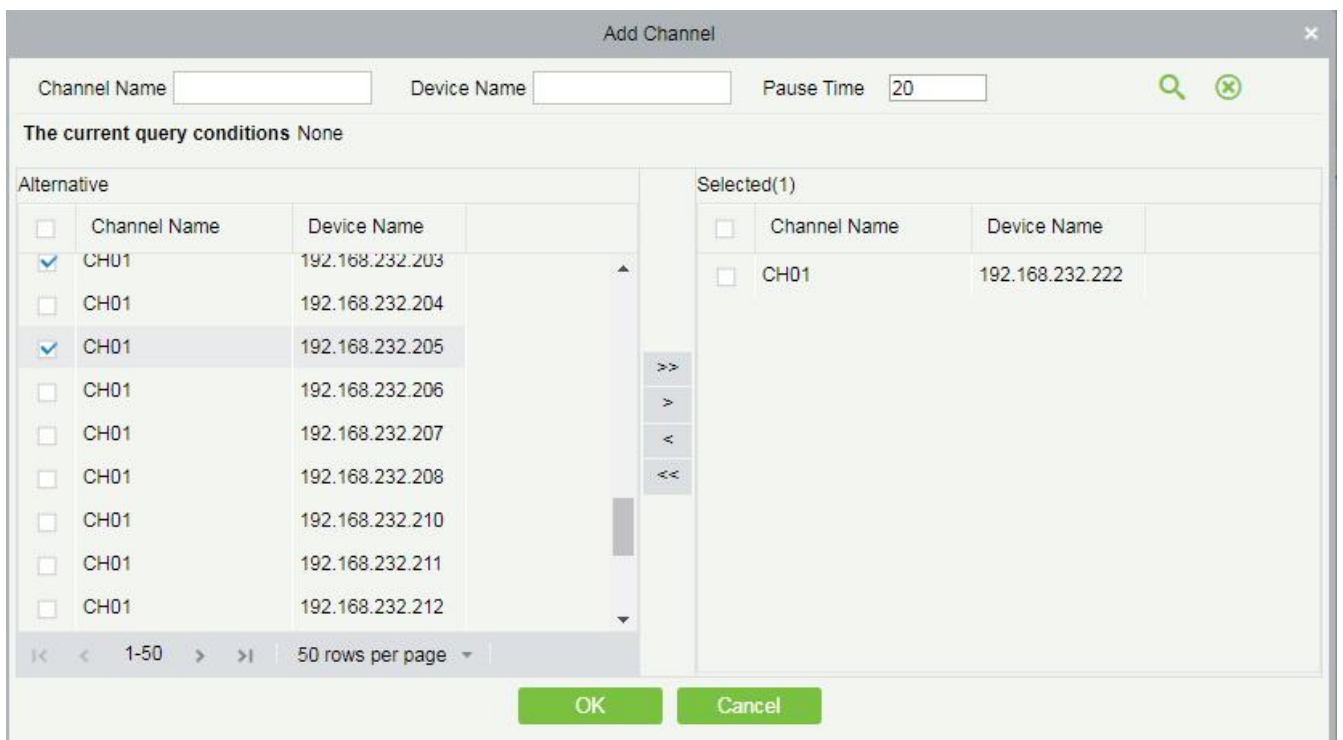
Decoder grouping can be set for different video channels. The left is the group list, and the right is the video channel corresponding to the group.



- 1 Click **[New]** to add a decoder group.

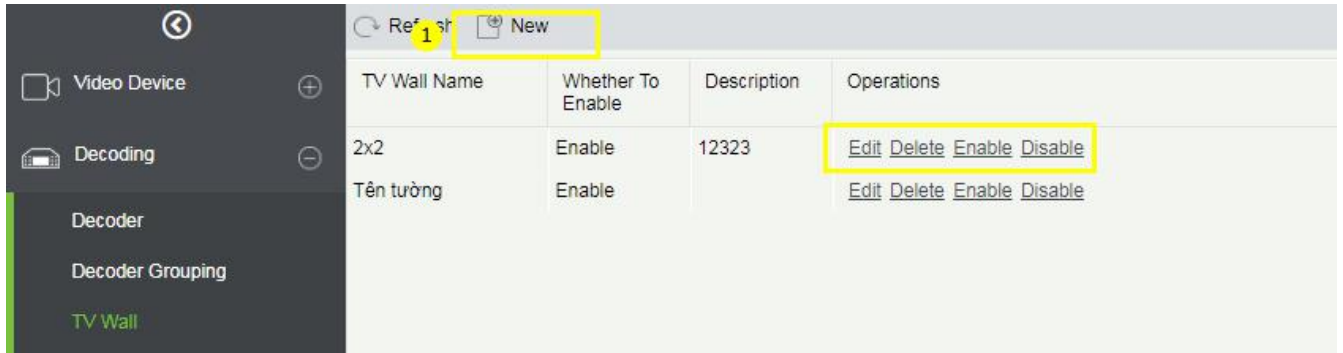


- 2 Click **[Add Channel]** to add a video channel to the decoder group. Select the video channel to be added to the group from the list on the left side of the pop-up window.



## 2.2.3 TV Wall

The TV wall is used to set the size of the display that is spliced together by the display screen. It can be added, edited, enabled, disabled in the TV Wall menu.



Click **[New]** to add new TV wall settings.

- ① Fill in the TV wall name. The name cannot be changed after it is saved.
- ② Set the Matrix (here, the matrix refers to the number of the wide and high sides of the TV wall).
- ③ TV wall description, add a description of the TV wall.
- ④ Click **[Next Step]** to enter the next setting.

Edit ✕

TV Wall Name :  
(The TV wall name cannot be modified after it is saved)

TV WALL A 1 \*

Matrix 2  x 2 2 Set up

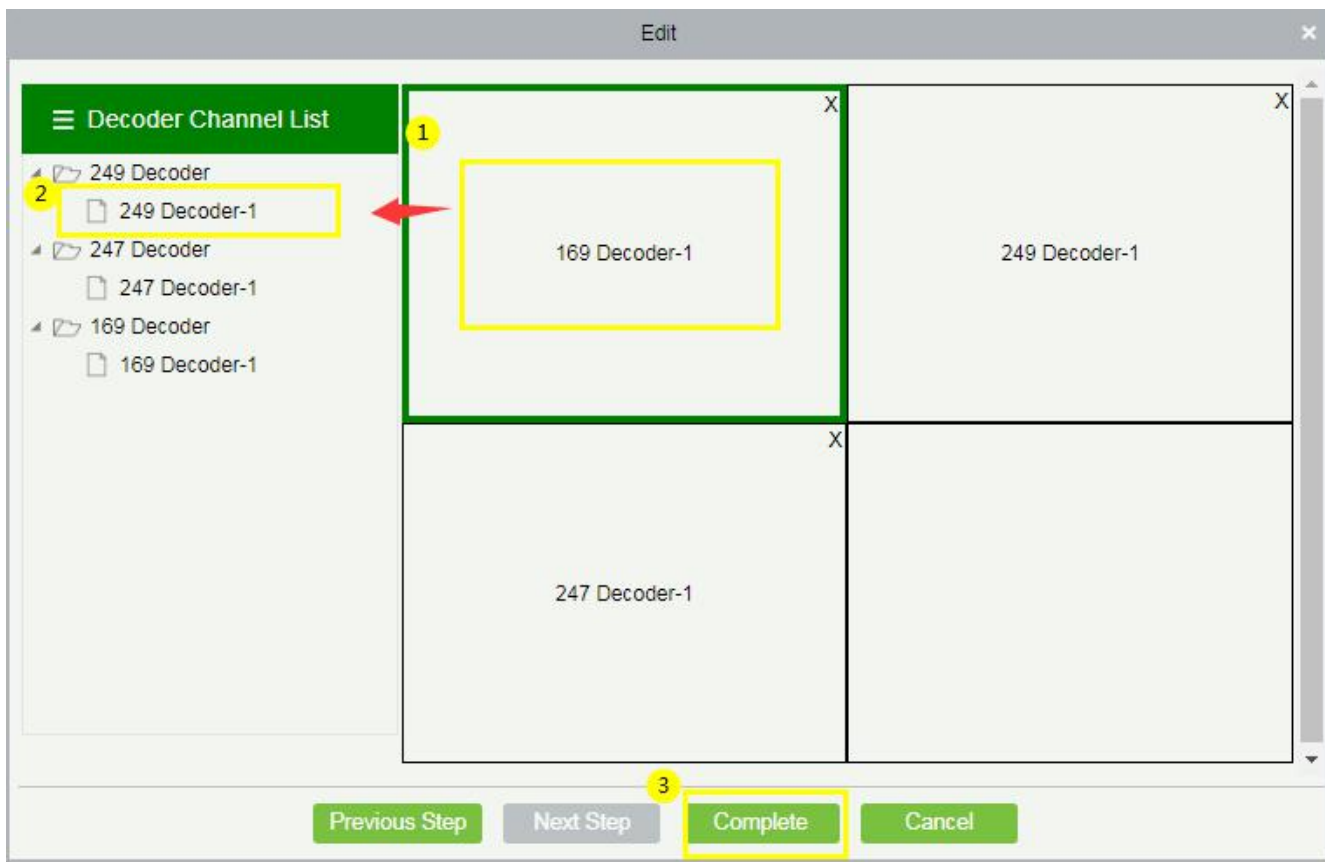
TV Wall Description :

TV WALL A .| 3

Previous StepNext StepCompleteCancel

4

First click to select a ① screen, then select a ② decoder to be bound, and click ③ to complete the setting.



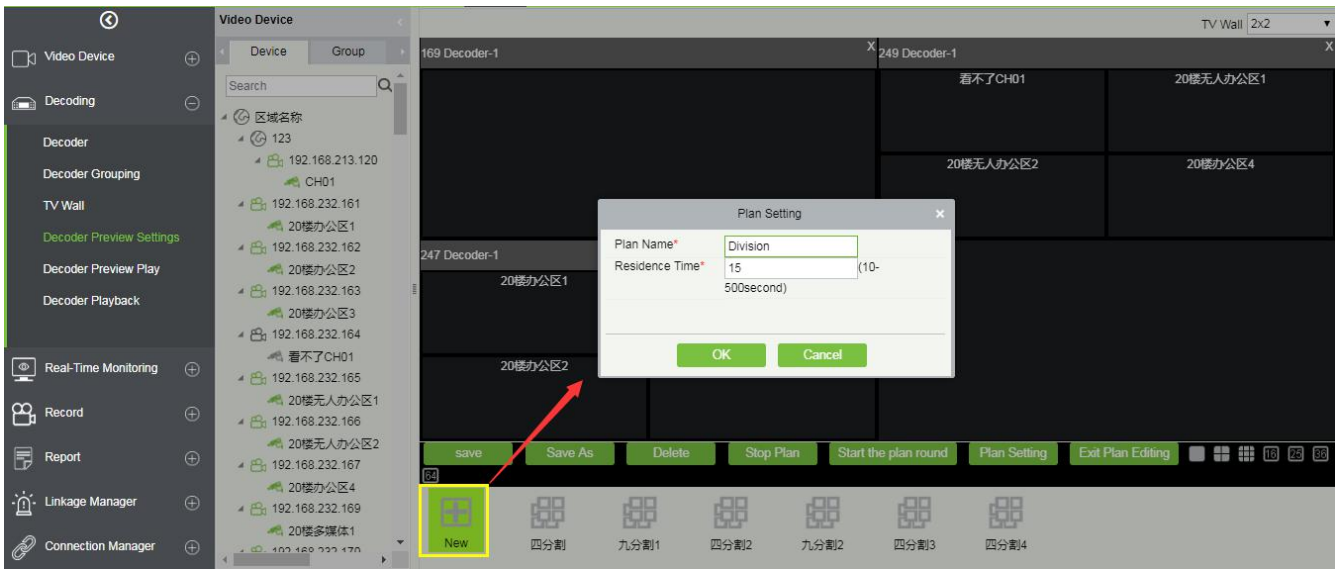
## 2.2.4 Decoder Preview Settings

- Decoder Preview Settings Interface
- ① Click to enter the decoder preview settings interface
  - ② Select the TV wall to be previewed
  - ③ Save the preview settings plan
  - ④ Save preview settings as
  - ⑤ Delete the preview settings
  - ⑥ Stop plan
  - ⑦ Start the plan round
  - ⑧ Plan setting
  - ⑨ Exit plan editing



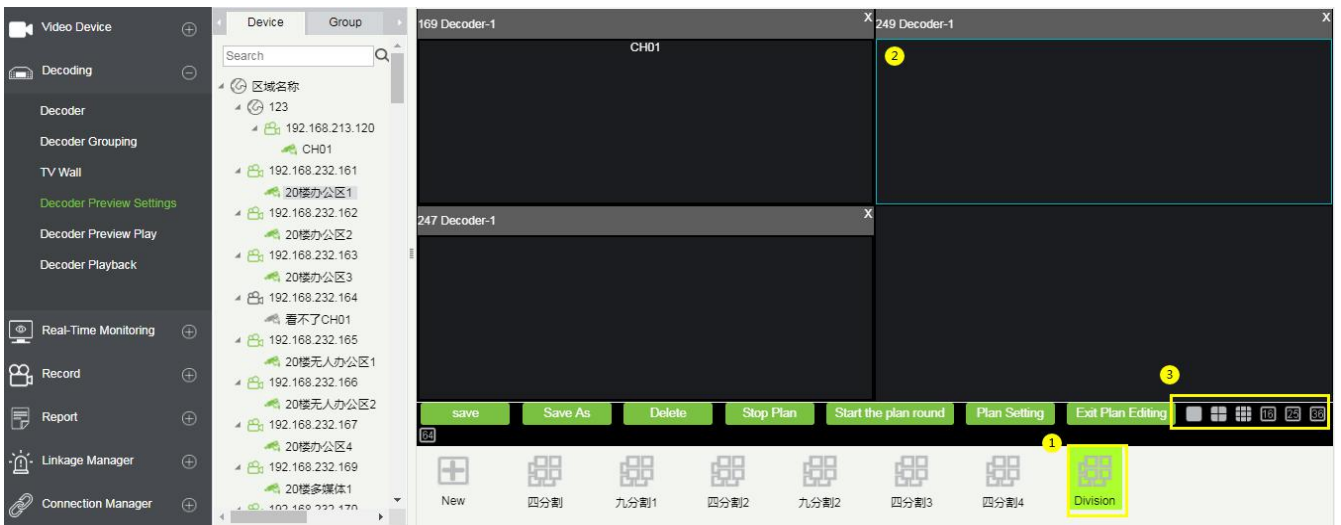
- New plan

Click **New** to create the plan, fill in the **Plan Name** and **Residence Time**, and click **OK** to save.

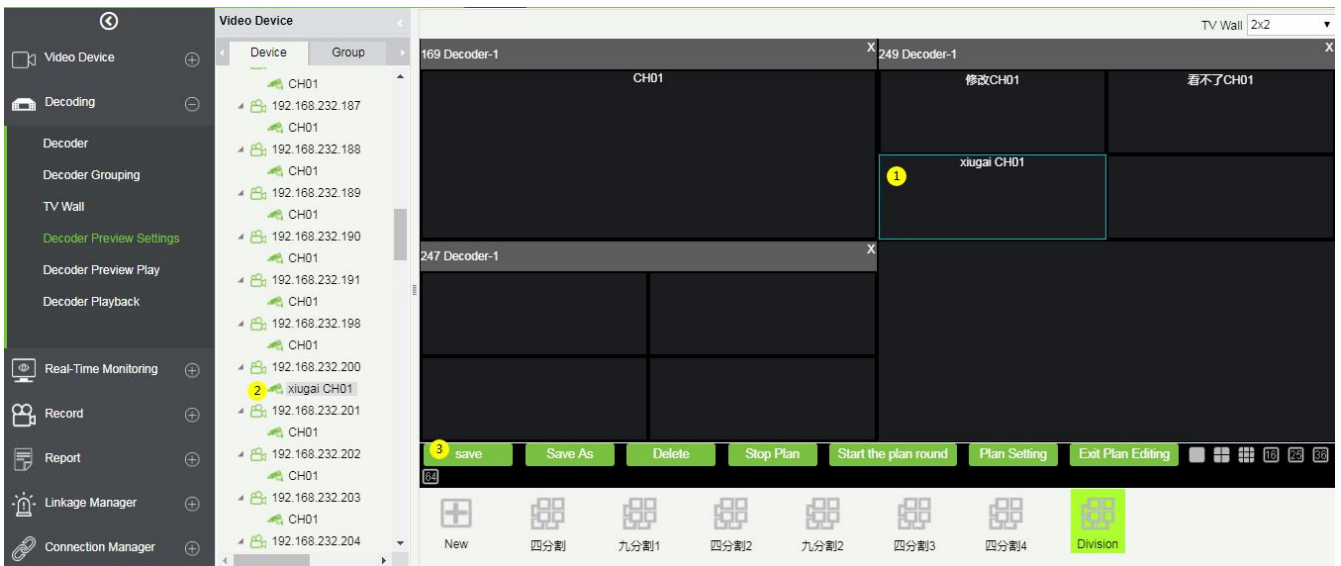


- Plan setting

- ① Select the plan
- ② Select the decoder
- ③ Select the split screen.



- ① Select the split screen box,
- ② select the video channel on the left for binding,
- ③ save the plan settings.

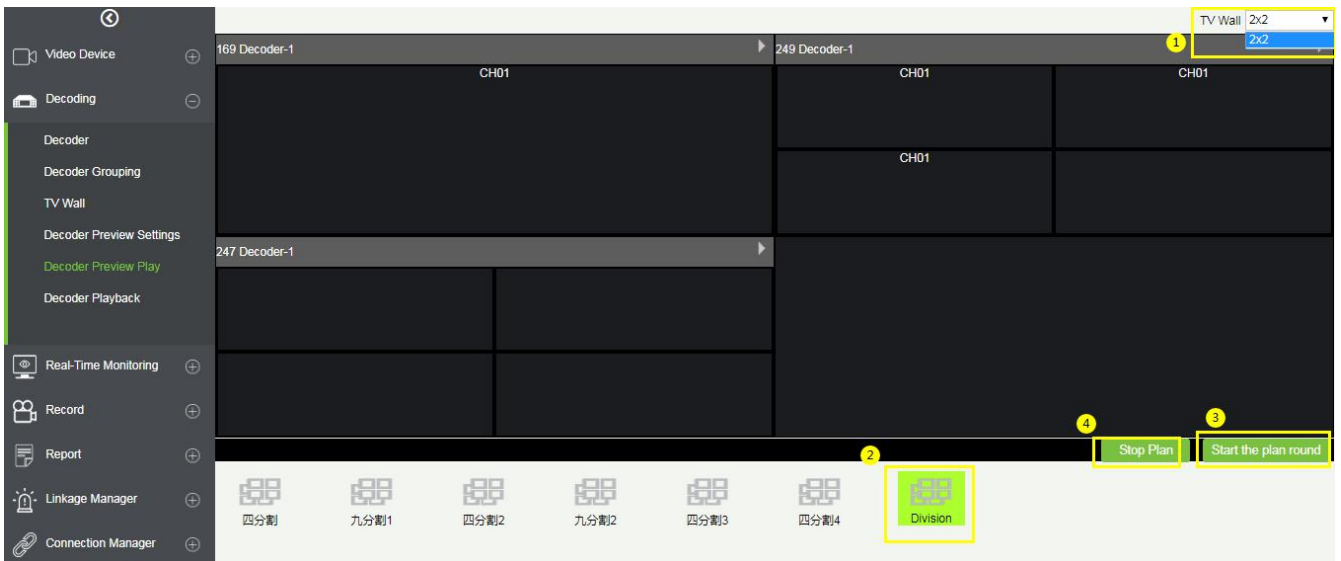




## 2.2.5 Decoder Preview Play

- ① Select the TV wall.
- ② Click to select the preview plan.
- ③ Click to start the plan round. The display connected to the decoder will perform video roving.

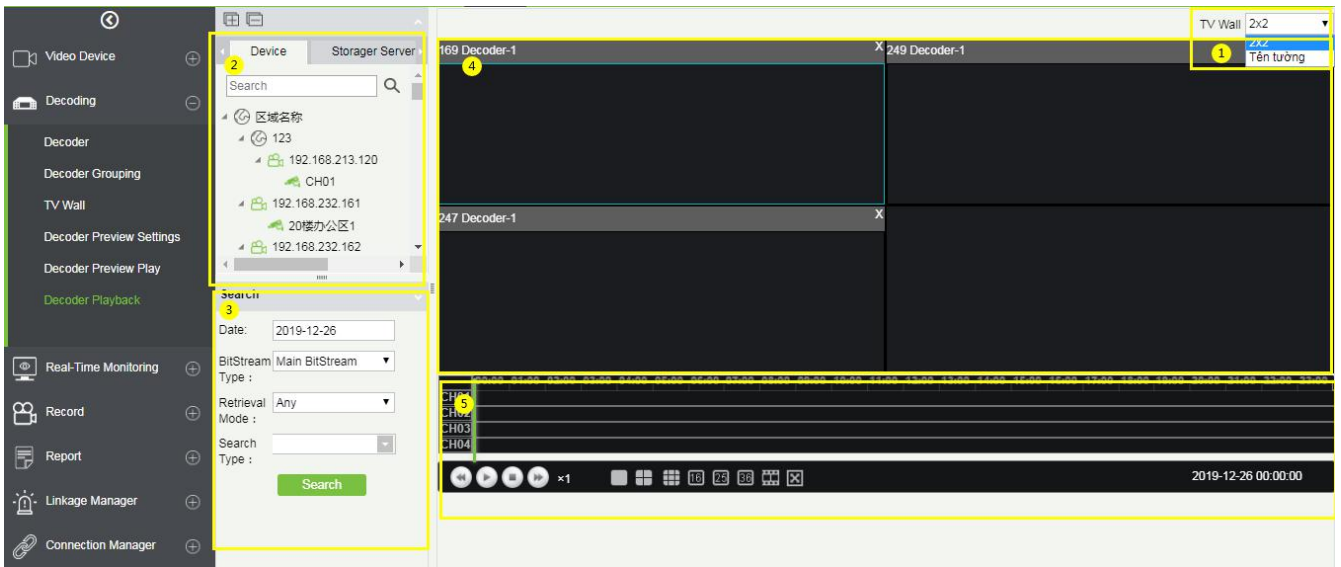
**Note:** The video is not available on the software.



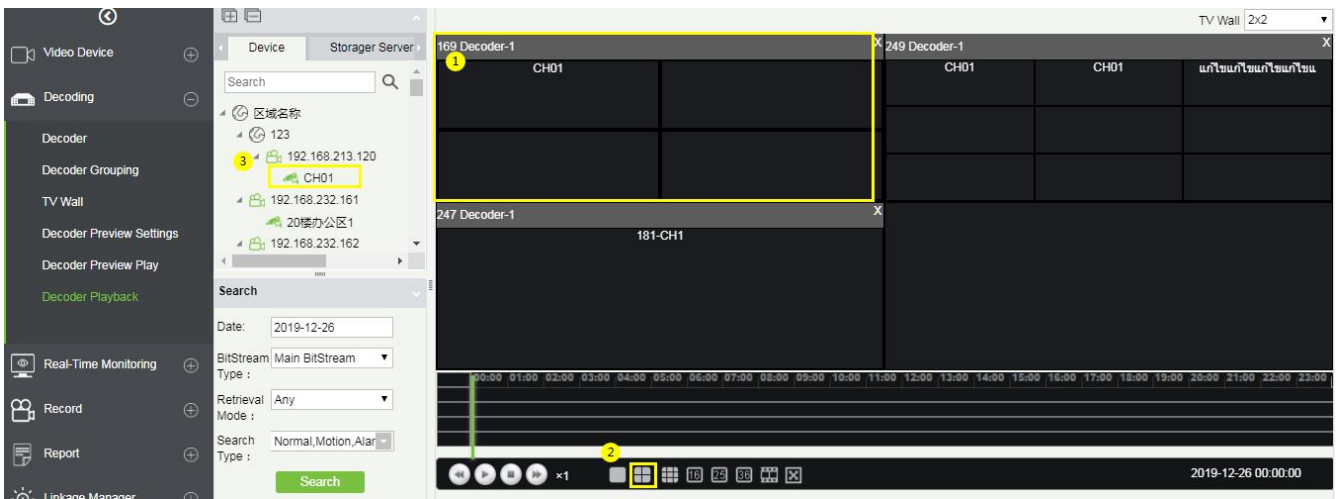
## 2.2.6 Decoder Playback

The decoder playback page consists of four parts.

- ① Select the TV wall.
- ② Device list and storage server device list.
- ③ At the bottom left is the search function, which filters the search video types.
- ④ The upper right corner is the TV wall, and the binding relationship between the TV wall and the video device can be selected.
- ⑤ The lower right corner is the playback control panel.



Select the decoder, you can choose the number of split screens of the decoder, click the video channel on the left, and you can add it to the corresponding split screen.



You can search for different videos according to four different conditions: Date, BitStreamType, Retrieval Mode, and Search Type.

The screenshot shows a 'Search' window with the following fields and callouts:

- 1**: Date field containing '2019-12-26'.
- 2**: BitStream Type dropdown menu showing 'Main BitStream'.
- 3**: Retrieval Mode dropdown menu showing 'Any'.
- 4**: Search Type dropdown menu (empty).

A green 'Search' button is located at the bottom of the form.

① Date

② BitStreamType: Main BitStream and Sub BitStream.

This screenshot shows the 'Search' window with the 'BitStream Type' dropdown menu open. The menu contains two options: 'Main BitStream' (highlighted in blue) and 'Sub BitStream'. A red rectangular box highlights the entire dropdown menu area.

Other fields in the form include: Date: 2019-12-26, Retrieval Mode: Any, and Search Type: Normal. A green 'Search' button is at the bottom.

③ Retrieval Mode: Any and All. Please note that if the retrieval mode is All, then ④ all alarm types are checked for the search type, then only the video meets all the checked alarm types will it be searched correctly. If you select Any, you can search for videos as long as one search type is met.

Date:

BitStream:

Type :

Retrieval:

Mode :

Search:

Type :

④ Search Type: You can choose Normal, Motion, Alarm, Counting Alarm, Cross Line Alarm, Area Alarm and Object Alarm.

Clear

- Normal
- Motion
- Alarm
- Counting Alarm
- Cross Line Alarm
- Area Alarm
- Object Alarm

Select All

Date:

BitStream:

Type :

Retrieval:

Mode :

Search:

Type :

CH04

## 2.3 Real-Time Monitoring

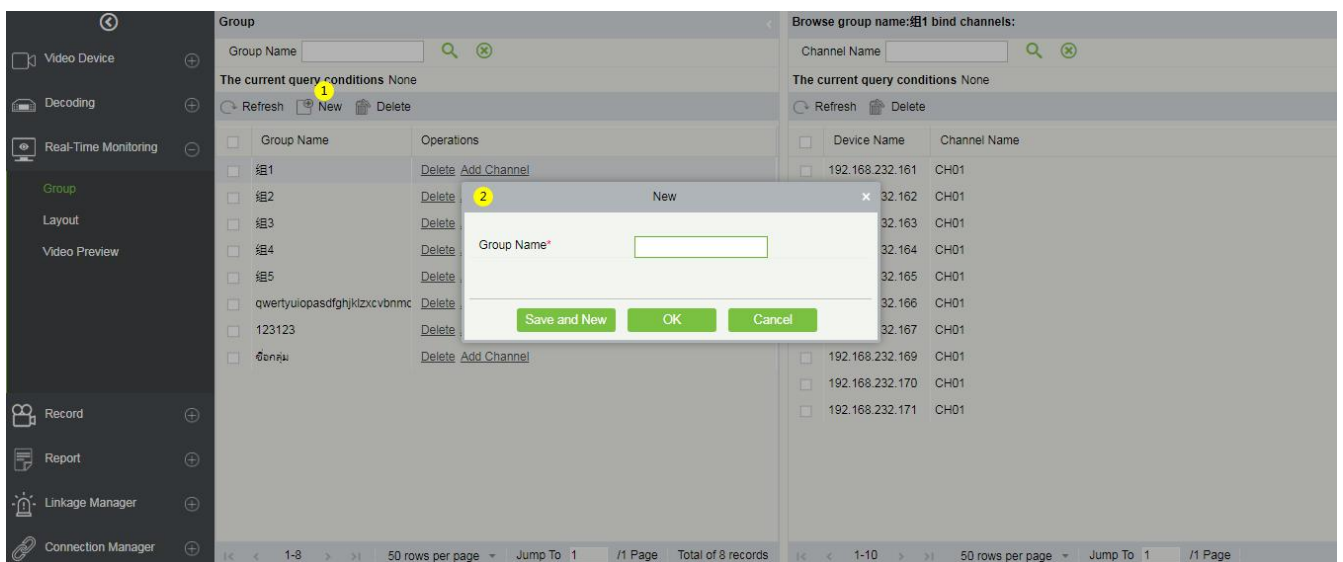
The real-time monitoring menu has three sub-menus, Group, Layout, and Video Preview.

The group and layout settings are for the third menu-preview. You can choose to preview in the form of group and layout.

### 2.3.1 Group

It can manage video channels in groups.

Click **[Group]** -> **[New]** to add a new group, fill in the **Group Name**, and click **[OK]** to confirm.



Click **[Add Channel]** to add video channels to this group.

Add Channel ✕

Device Name  Channel Name  🔍 ✕

**The current query conditions** None

Alternative			Selected(1)		
<input type="checkbox"/>	Device Name	Channel Name	<input type="checkbox"/>	Device Name	Channel Name
<input type="checkbox"/>	192.168.232.177	CH01	<input type="checkbox"/>		
<input type="checkbox"/>	192.168.232.178	CH01	<input type="checkbox"/>	192.168.232.176	CH01
<input checked="" type="checkbox"/>	192.168.232.179	CH01			
<input type="checkbox"/>	192.168.232.180	CH01			
<input type="checkbox"/>	192.168.232.181	CH01			
<input type="checkbox"/>	192.168.232.182	CH01			
<input type="checkbox"/>	192.168.232.183	CH01			
<input type="checkbox"/>	192.168.232.184	CH01			

<< < 1-50 > >> | 50 rows per page ▾

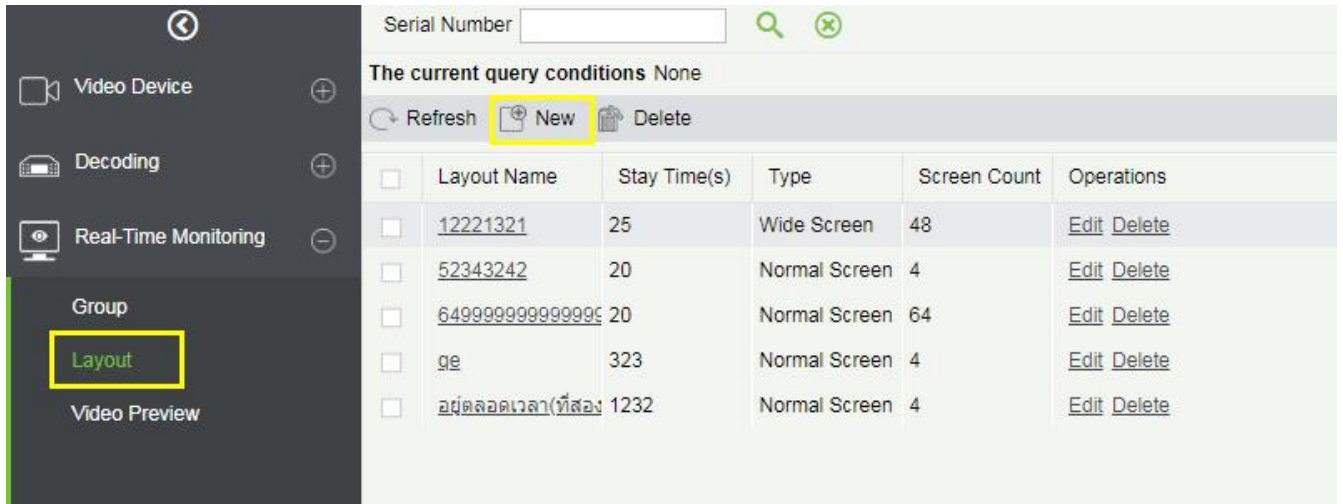
>> > ^ < <<

OK Cancel

## 2.3.2 Layout

It sets the display style of the OCX, and displays the bound video channels.

Click **[Layout]** -> **[New]** to add layout settings.

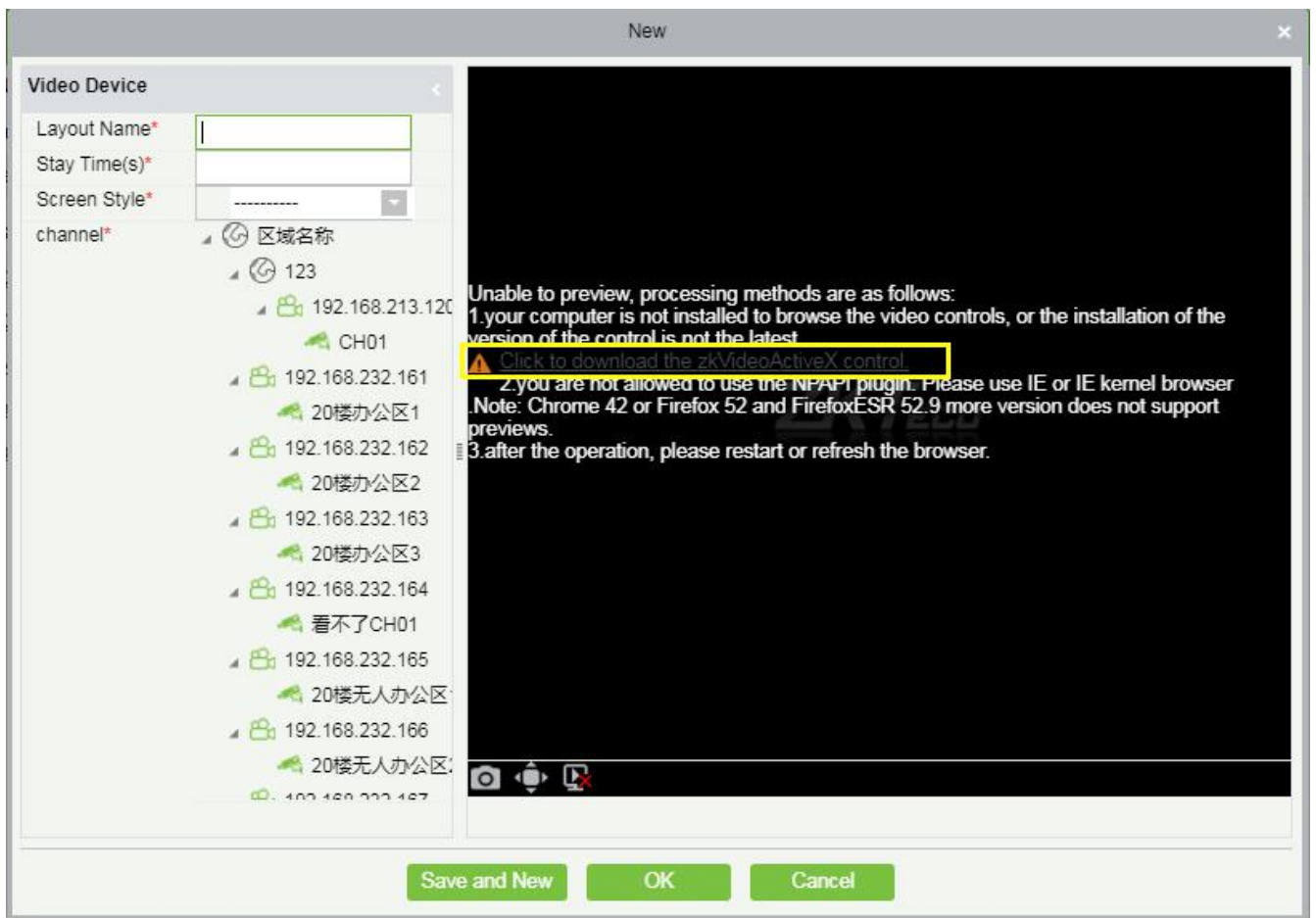


The screenshot shows the ZKBioSecurity VMS interface. On the left sidebar, the 'Layout' menu item is highlighted with a yellow box. In the top toolbar, the 'New' button is also highlighted with a yellow box. The main area displays a table of layout settings.

<input type="checkbox"/>	Layout Name	Stay Time(s)	Type	Screen Count	Operations
<input type="checkbox"/>	<a href="#">12221321</a>	25	Wide Screen	48	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	<a href="#">52343242</a>	20	Normal Screen	4	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	<a href="#">64999999999999999999</a>	20	Normal Screen	64	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	<a href="#">๑๑</a>	323	Normal Screen	4	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	<a href="#">สมุดจดเวลา(ที่สง)</a>	1232	Normal Screen	4	<a href="#">Edit</a> <a href="#">Delete</a>

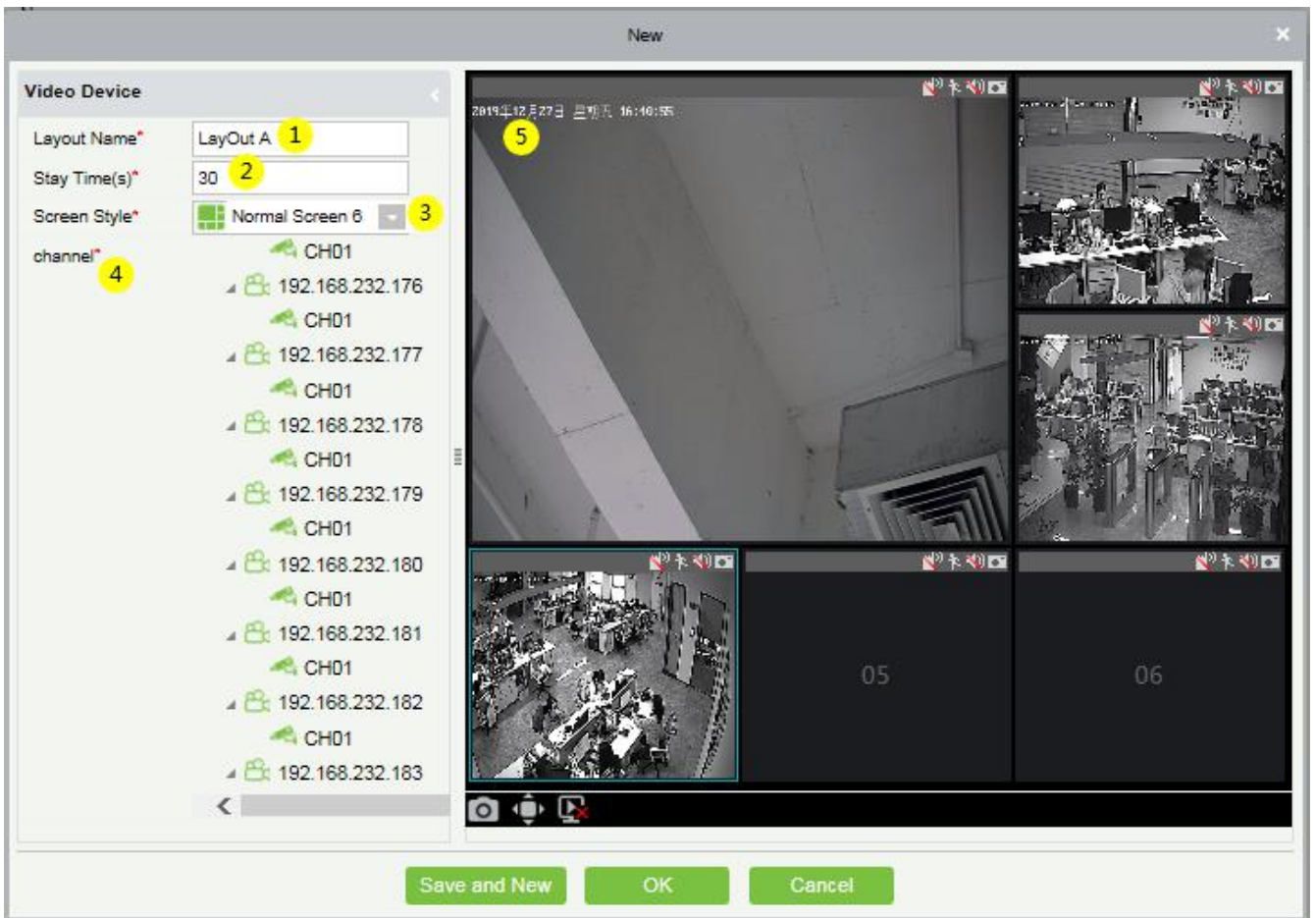
The adding page of the layout is as follows:

For the first time, you need to click to download and install the plugin "zkVideoActiveX".



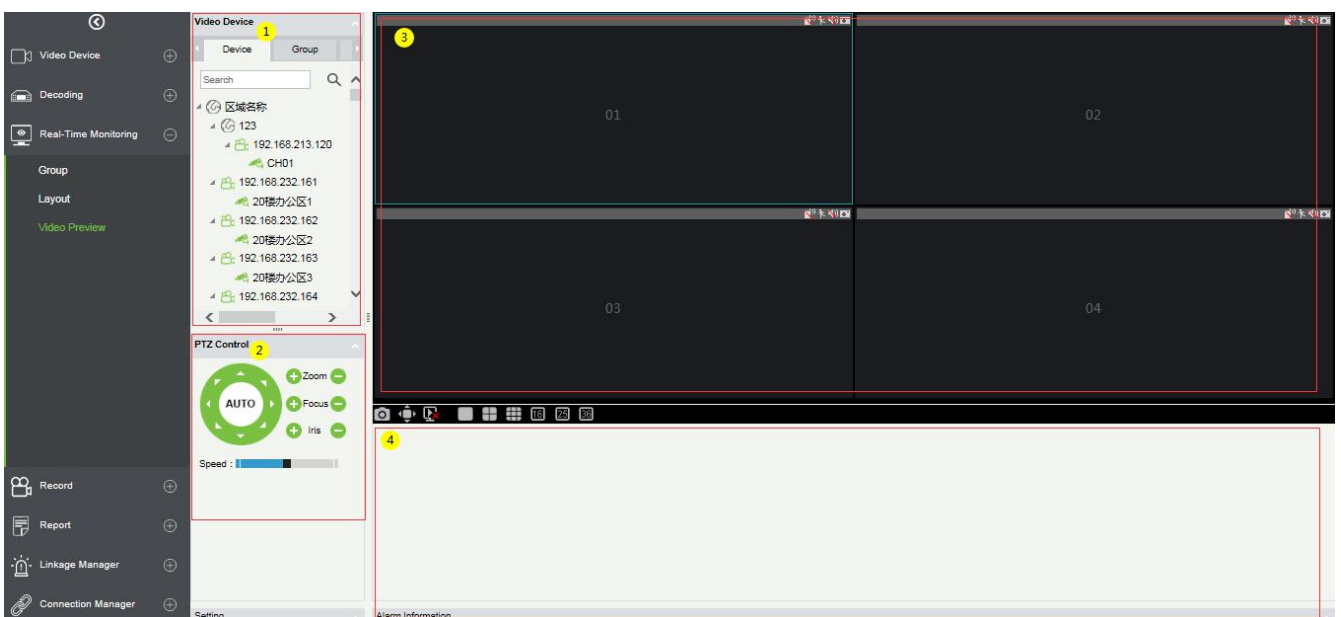
Add layout settings: ① Fill in the **Layout Name** on the left, ② Fill in the **Stay Time**, that is, the preview time of the video channel set by this layout. ③ Select the **Screen Style** of the layout. There are **Normal Screen** and **Wide Screen** and a variety of screen number options. ④ Click on the video **channel** on the left to bind it to the screen on the right ⑤. After binding the screen, a screen will be displayed, click **[OK]** to save.





### 2.3.3 Video Preview

Click **[Real-Time Monitoring]** -> **[Video Preview]** to enter the video preview interface. The video preview interface is divided into four parts.



① Video device selection area.

② Video preview display interface.



**i:** take a screenshot of the blue frame of the selected screen,

**ii:** display the preview screen in full screen preview,

**iii:** stop all the preview screens, **iv:** select different split screens,

**iv:** select different split screens.

③ PTZ Control: This function is only available for dome camera.



④ Alarm Information list.

- There are three tabs in the video device selection area, which are device list, group, and layout.

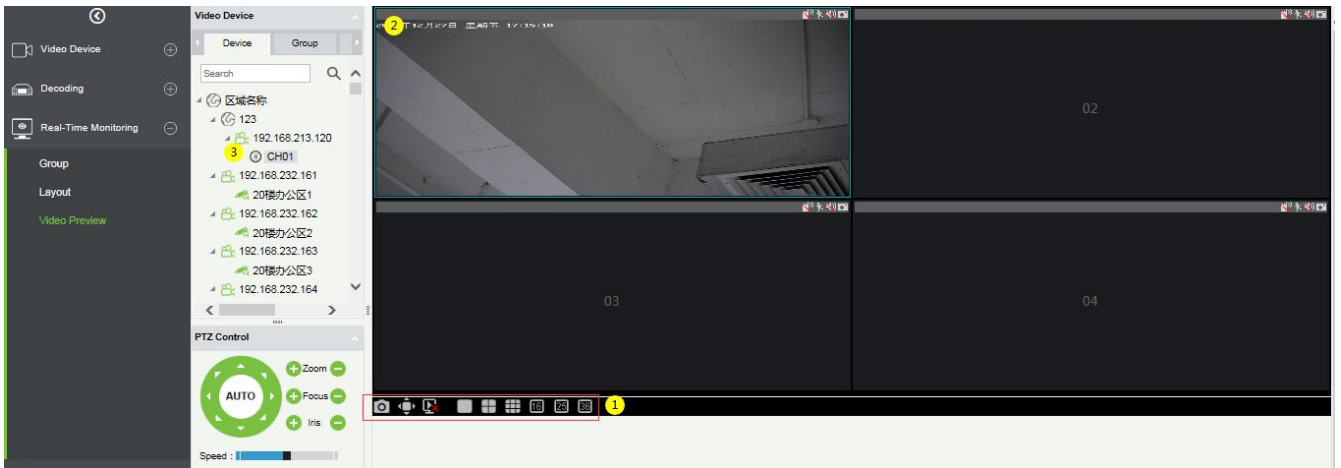
Online devices are green and offline are gray.

- Video list for video preview:

The device list has three levels, which are area, device, and channel under the device. ① Select the

layout to be previewed. ② ③ Left-click an online channel to play the corresponding channel's screen

on the right preview window (blue frame). Click again to stop playback.



- Group Video Preview:

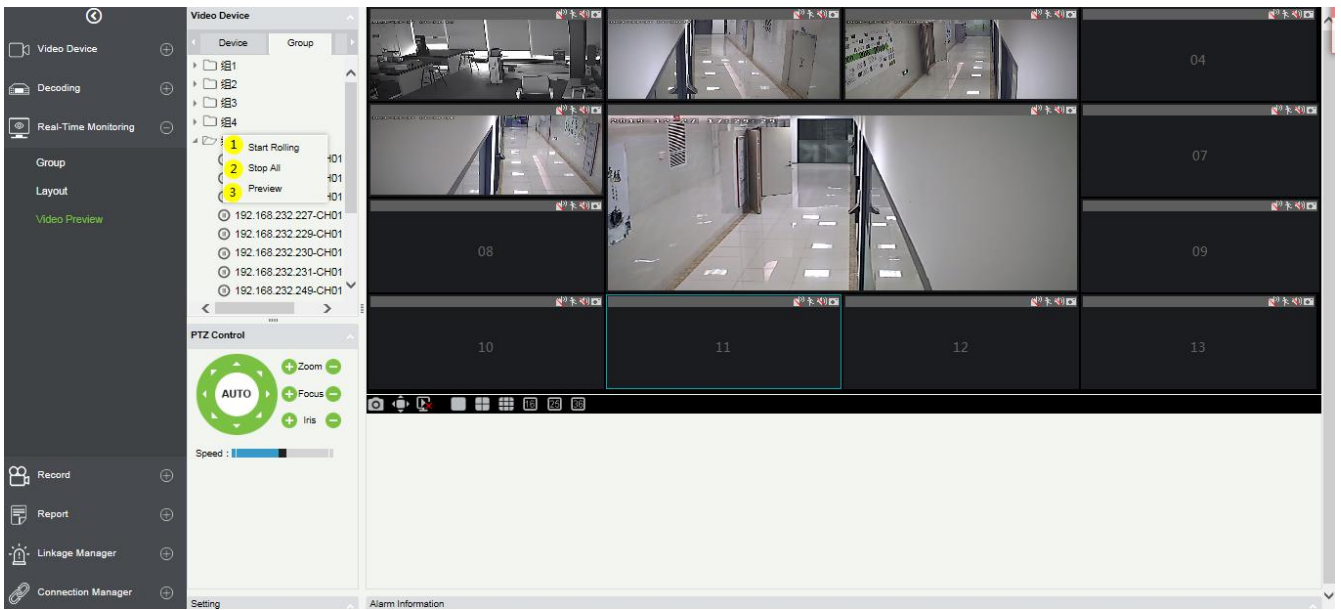
Click **[Group]** in the tab page, here is a list of all the groups set in the **[Group]** menu. Right-click a group and three options will appear, which are **[Start Rolling]**, **[Stop All]**, and **[Preview]**.

① Start Rolling: After the round starts, it will automatically start timing (15 seconds) to start the group switching preview from the selected group.

For example, group 5 is currently selected. The preview screen on the right will preview this group first, and then switch to preview group 1 after 15 seconds, and then preview group 2, group 3 ... group 5 ... group 1 after 15 seconds, and keep looping.

② Stop All: Click to stop rolling and preview.

③ Preview: Play the group monitoring screen on the preview screen on the right. Offline devices will not display the preview screen.

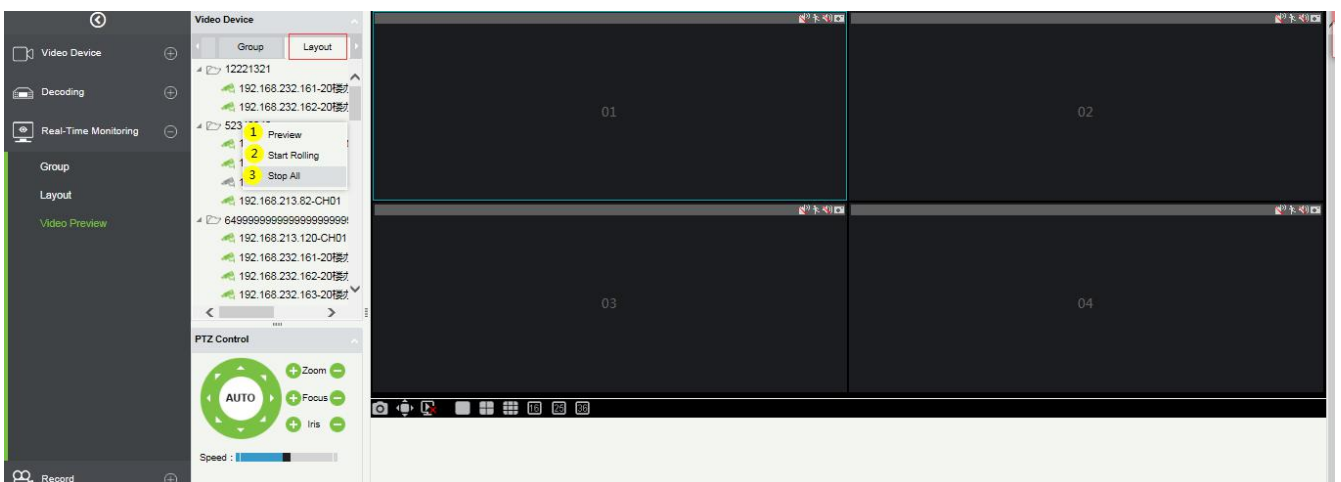


- Layout Video Preview

Click **[Layout]** in the tab page, here is a list of all the layout settings that have been set in the **[Layout]** menu.

Right-click a layout and three options will appear: **[Preview]**, **[Start Rolling]**, and **[Stop All]**.

- ① Preview: Play the layout monitoring screen on the preview screen on the right. The offline devices will not display the preview screen.
- ② Stop all: Click to stop rolling and preview.
- ③ Start Rolling: After the round starts, it will automatically start timing (can be set in Layout) to start the layout switching preview from the selected layout, and keep looping.



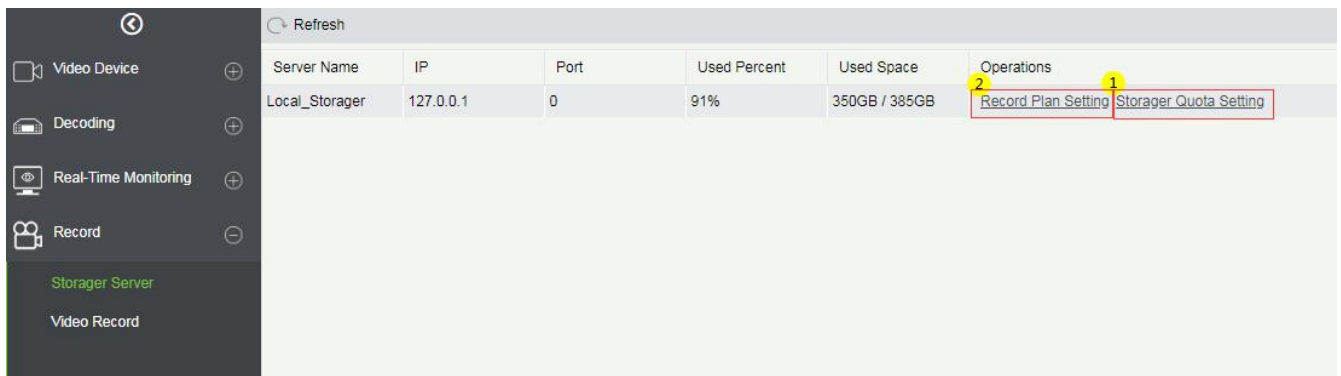
## 2.4 Record

The record function is mainly used to configure the record plan and view the related video records of the device.

### 2.4.1 Storage Server

- Configure the record plan

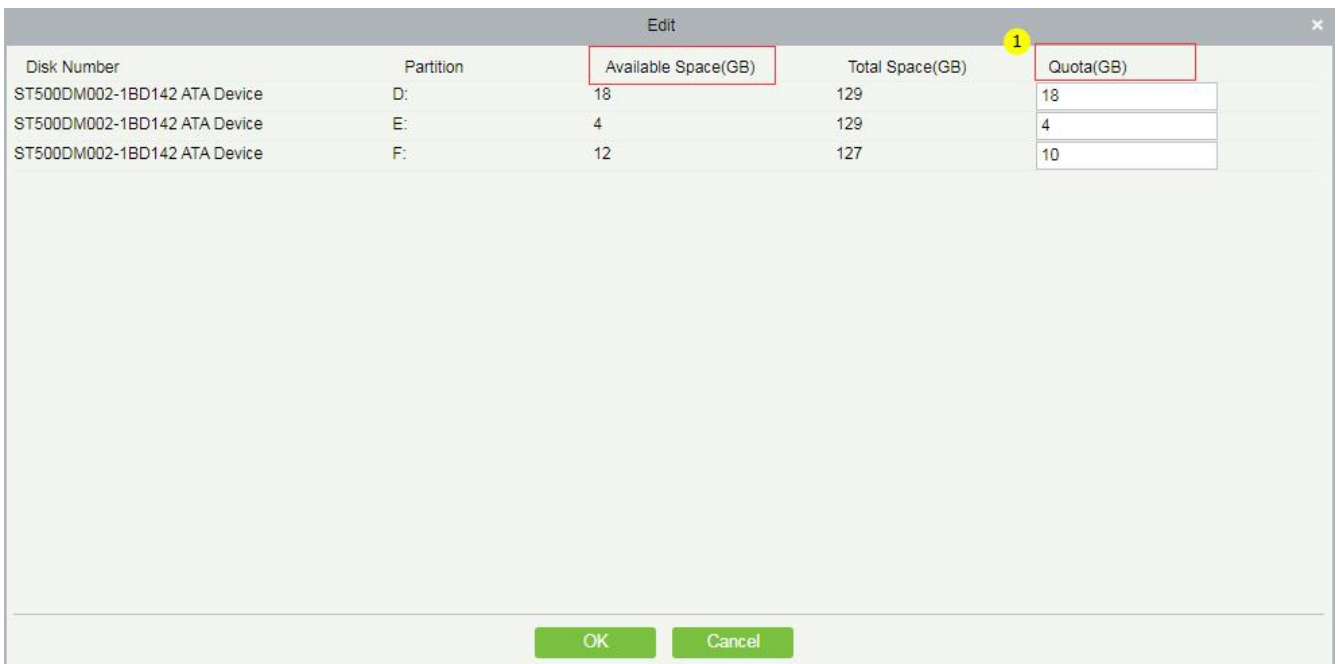
Before setting the record plan, you must first configure the storage capacity, otherwise the corresponding records will not be generated.



Server Name	IP	Port	Used Percent	Used Space	Operations
Local_Storage	127.0.0.1	0	91%	350GB / 385GB	Record Plan Setting Storage Quota Setting

Click ① **[Storage Server]** -> **[Storage Quota Setting]** to configure the record storage capacity of the VMS server.

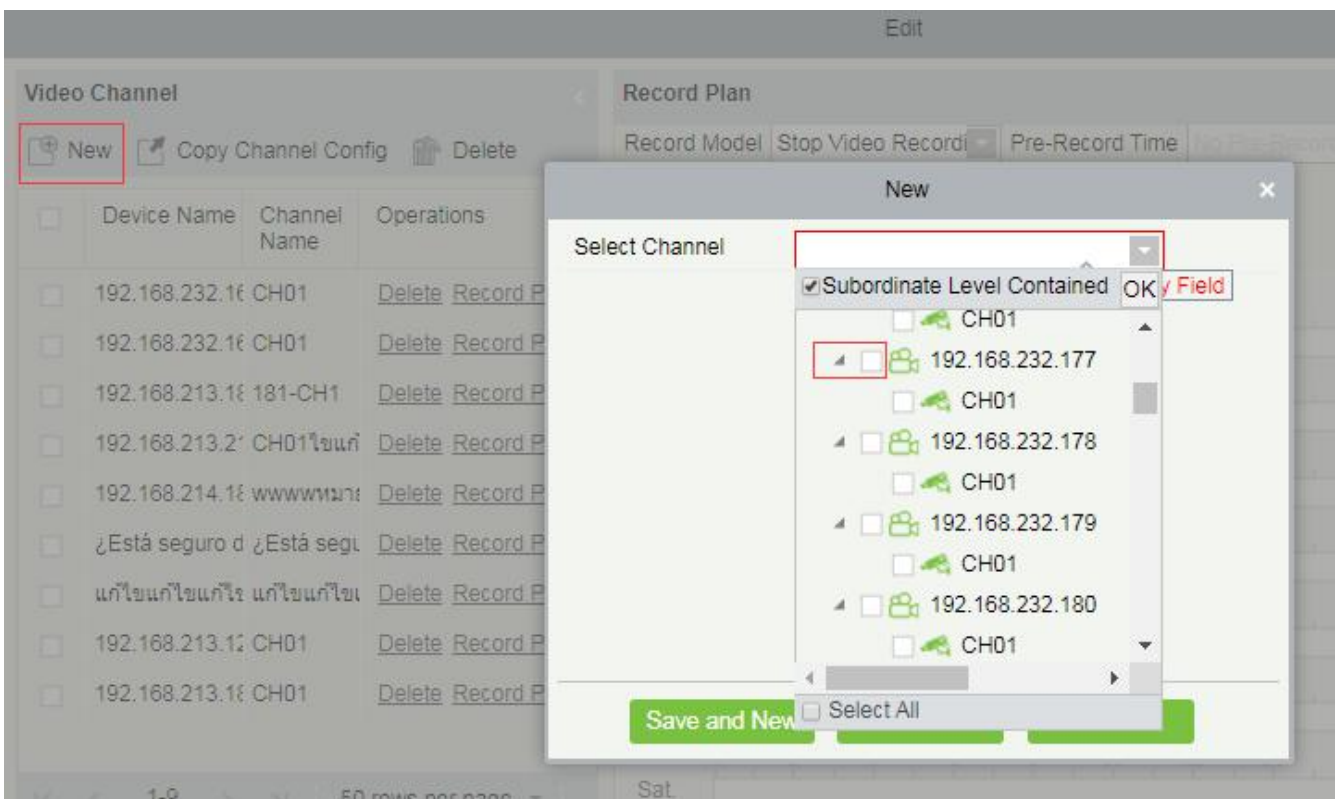
It will obtain the available capacity of the hard disks of the VMS server other than the system disk, and configure the disk space for storing videos.



- Record Plan Setting

Click ② **[Record Plan Setting]** to enter the record plan setting page.

Click **[New]** to select a video channel to set the record plan.



After selecting the video channel, you can set the corresponding record plan, as shown below:



① Add a record video channel;

② Copy Channel Config can copy the record plan of the ⑦ record panel to the selected video channel;

③ Delete the selected record plan;

④ Record Model:

**i:** Stop Video Recording;

**ii:** Timing Video;

**iii:** Alarm Video;

**iv:** Timing Video + Alarm Video.



⑤ Select Pre-Record Time: When the record model is Stop Video Recording and Timing Video, the pre-record time can only be "No Pre-Record" by default.



⑥ Select DelayRecord Time: When the recording type is Stop Video Recording and Timing Video, the default delay record time can only be "No Delay".



⑦ Record plan panel, drag to select the record time.

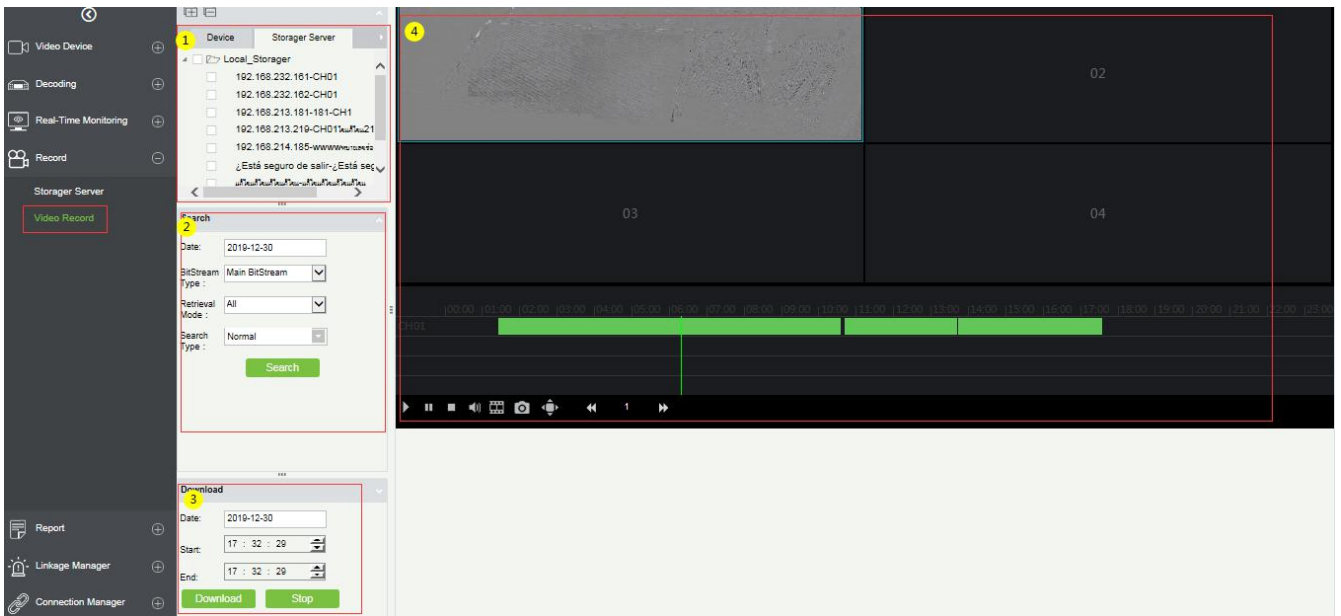
## 2.4.2 Video Record

Video playback can be viewed on the **[Video Record]** interface.

The video playback interface is divided into four areas:

- ① In the device area, there are two tab pages, the device list interface and the local storage server;
- ② Video search area;
- ③ Video download area;
- ④ Video playback area.





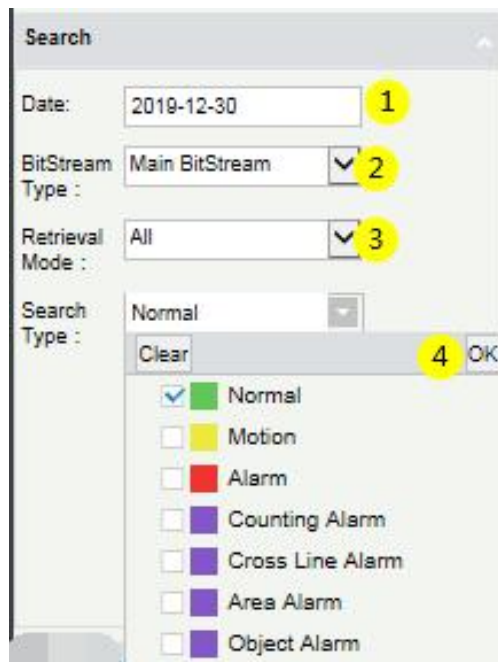
- Device area:

Video device selection area, there are 2 tab pages, which are device and local storage server. Online devices are shown in green and offline devices are shown in gray.

Select the video channel to be searched in ①, select the conditions for video search in ②, and click **[Search]** to search for video. If there is a video, it will display the video segment that can be played; if there is no video, it will pop up **[No data]**.

- Video search conditions:

There are four search filter conditions: ①Date, ②BitStream Type (Main or sub BitStream), ③Retrieval Mode (Any and All), ④Search Type (there are 7 options, multiple options can be selected)



- Video download area:

Before downloading, select the device in the device area, select the date and start/end time of the video ① ②③, click Download, if there is no data, it will pop up **[No data]**; If there is a video will directly start to download and show the ④ download progress. After the download is completed, the progress will display **[Download Completed]**.



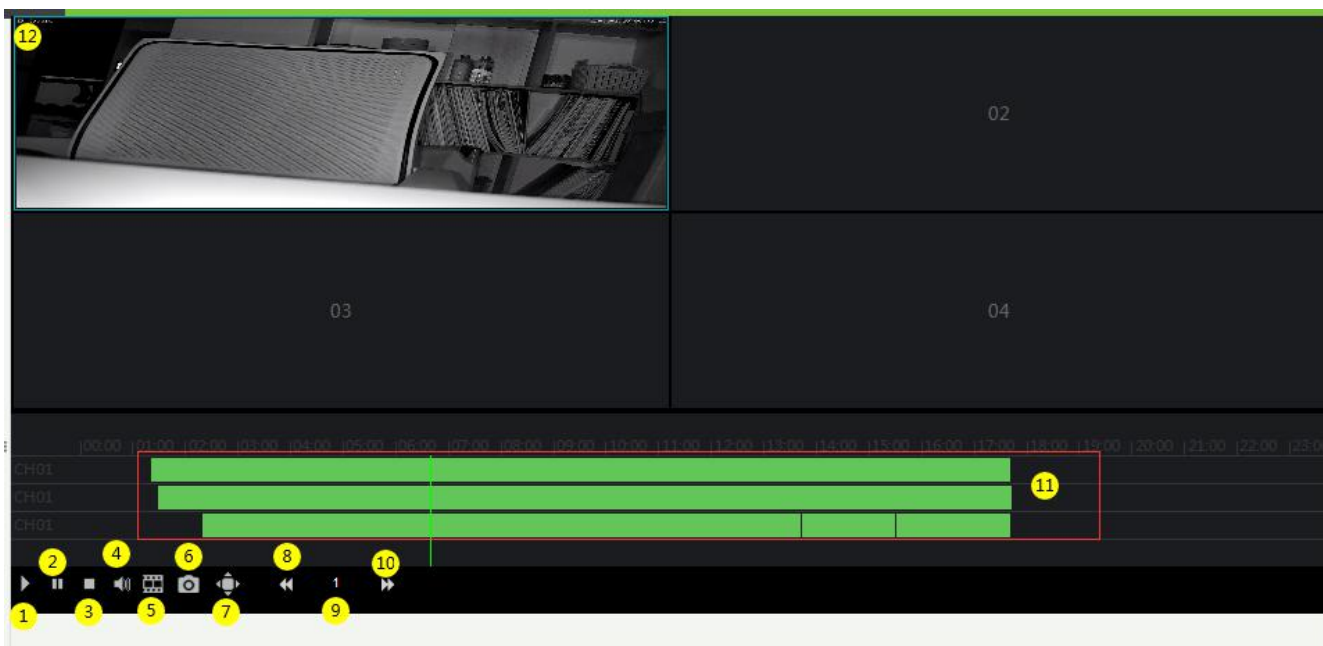
- Video playback area:

① Play button; ② Pause button; ③ Stop button; ④ Mute button; ⑤ Play by frame; ⑥ Screenshot button;

⑦ Full screen playback button; ⑧⑨⑩ Double speed adjustment button;

⑪ Play video clips; ⑫ Video playback window.

**Note:** The video playback area can only play up to 4 videos at the same time.



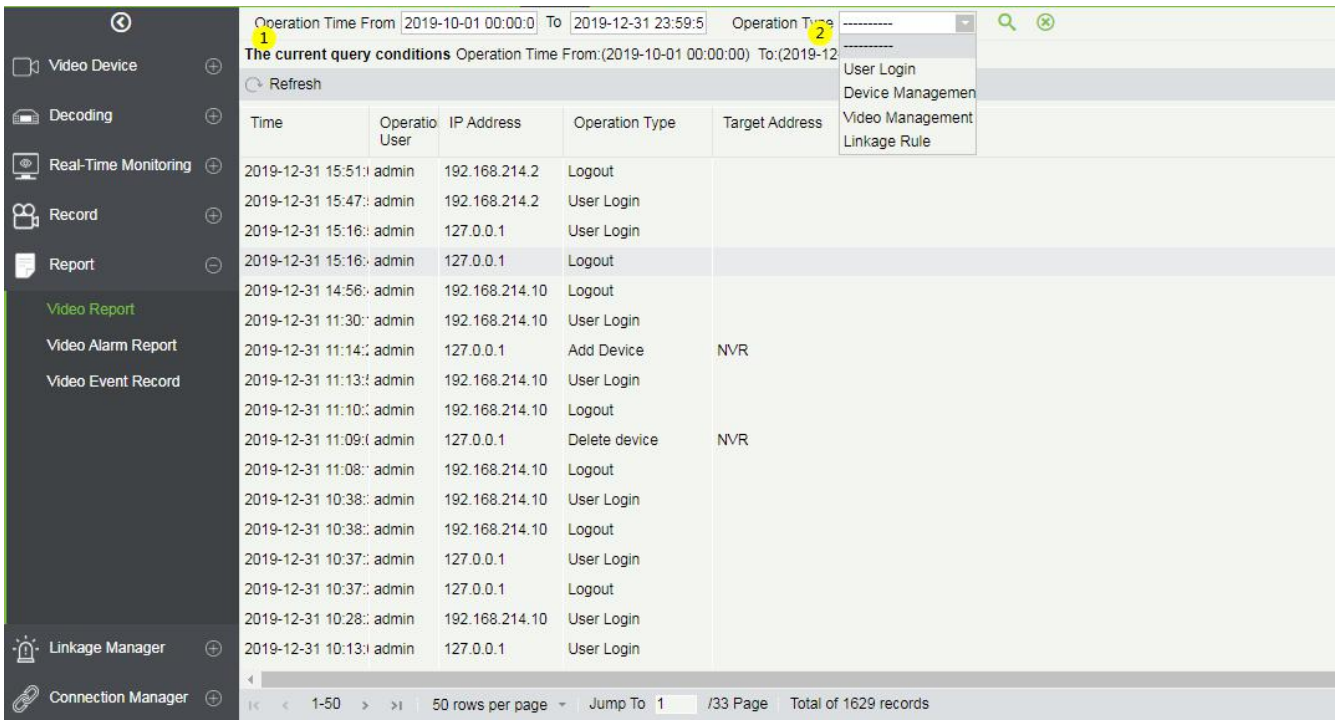
## 2.5 Report

The report function of the video module can query operation records of the system user on the video device, the video alarm records, and the video linkage records.

### 2.5.1 Video Report

It is mainly used to query the operation records of system users on video device.

You can choose ① start time, ② operation type (User Login / Device Management / Linkage Rule) and other conditions to filter the report.

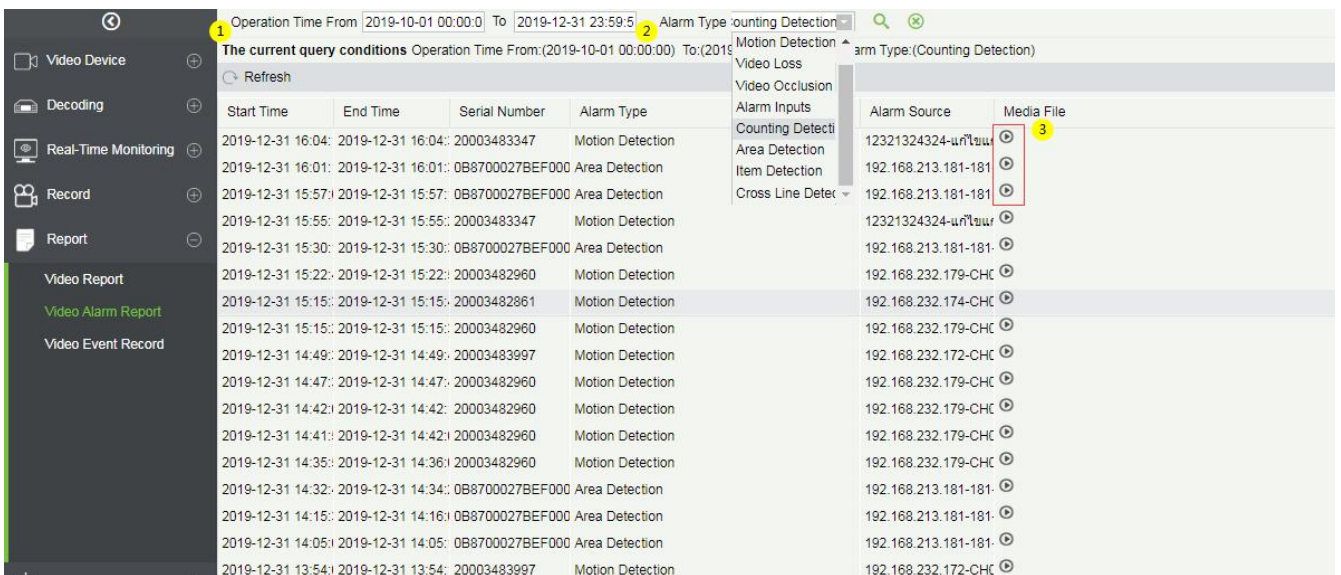


## 2.5.2 Video Alarm Report

It is mainly used to query all video alarm record reports.

You can select ① the start time, the serial number of the video channel, and ② different alarm types to filter the report. There are 8 types of alarms that can be filtered: Motion Detection, Video Loss, Video Occlusion, Alarm Inputs, Counting Detection, Area Detection, Item Detection, Cross-Line Detection. Click ③

**Media File** to view the alarm video.



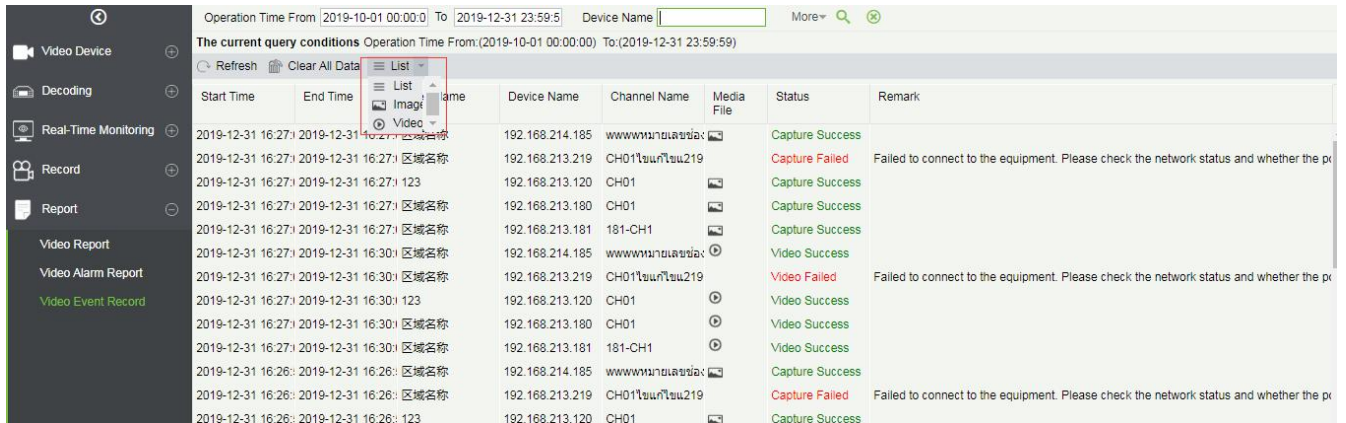


## 2.5.3 Video Event Report

The video event report data comes from the capture and video recording data generated by the linkage between the access control and the video module.

Search event report data based on the time period and device name. You can choose to display data types:

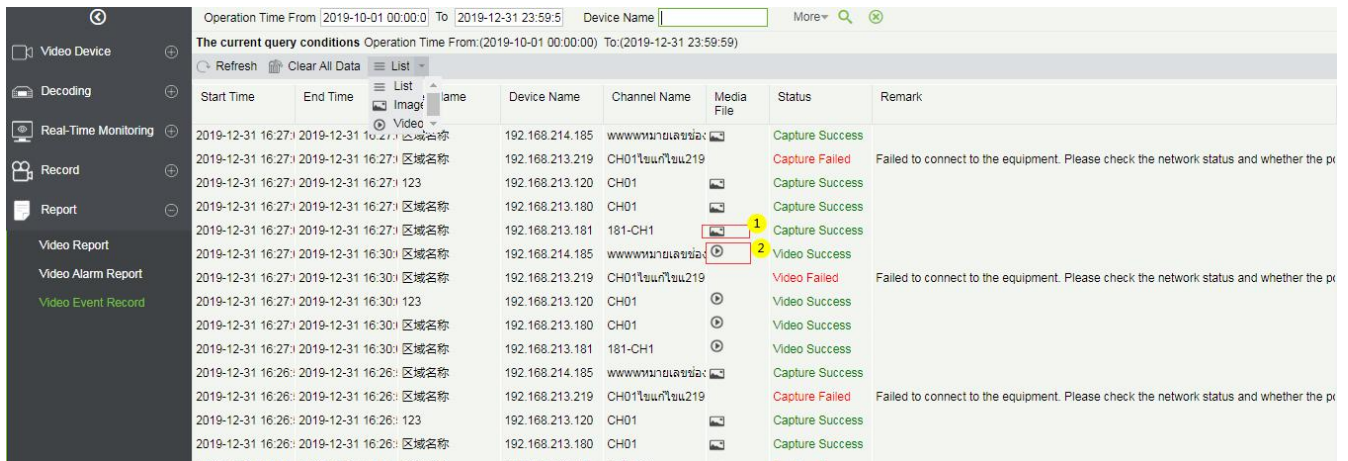
List, Image, Video.



The screenshot shows the 'Video Event Report' interface. At the top, there are search filters for 'Operation Time From' (2019-10-01 00:00:00) and 'To' (2019-12-31 23:59:59), and a 'Device Name' field. Below the filters, a dropdown menu is open, showing options: 'List' (selected), 'Image', and 'Video'. The main table displays event data with columns: Start Time, End Time, Device Name, Channel Name, Media File, Status, and Remark. The table contains 15 rows of data, including entries for 'Capture Success', 'Capture Failed', and 'Video Success'.

Start Time	End Time	Device Name	Channel Name	Media File	Status	Remark
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.214.185	www.พจนานุกรมศัพท์		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.219	CH01โซนกึ่งโซน219		Capture Failed	Failed to connect to the equipment. Please check the network status and whether the p
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.120	CH01		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.180	CH01		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.181	181-CH1		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.214.185	www.พจนานุกรมศัพท์		Video Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.219	CH01โซนกึ่งโซน219		Video Failed	Failed to connect to the equipment. Please check the network status and whether the p
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.120	CH01		Video Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.180	CH01		Video Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.181	181-CH1		Video Success	
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.214.185	www.พจนานุกรมศัพท์		Capture Success	
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.213.219	CH01โซนกึ่งโซน219		Capture Failed	Failed to connect to the equipment. Please check the network status and whether the p
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.213.120	CH01		Capture Success	

① Click on the location of the image to display it; ② Click on the video play button to play it.



This screenshot is identical to the one above, but with two red boxes and numbers highlighting specific buttons in the 'Media File' column. Box 1 points to the image icon, and box 2 points to the video play button icon.

Start Time	End Time	Device Name	Channel Name	Media File	Status	Remark
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.214.185	www.พจนานุกรมศัพท์		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.219	CH01โซนกึ่งโซน219		Capture Failed	Failed to connect to the equipment. Please check the network status and whether the p
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.120	CH01		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.180	CH01		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:27:10	192.168.213.181	181-CH1		Capture Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.214.185	www.พจนานุกรมศัพท์		Video Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.219	CH01โซนกึ่งโซน219		Video Failed	Failed to connect to the equipment. Please check the network status and whether the p
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.120	CH01		Video Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.180	CH01		Video Success	
2019-12-31 16:27:10	2019-12-31 16:30:10	192.168.213.181	181-CH1		Video Success	
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.214.185	www.พจนานุกรมศัพท์		Capture Success	
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.213.219	CH01โซนกึ่งโซน219		Capture Failed	Failed to connect to the equipment. Please check the network status and whether the p
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.213.120	CH01		Capture Success	
2019-12-31 16:26:10	2019-12-31 16:26:10	192.168.213.180	CH01		Capture Success	

## 2.6 Linkage Manager

Alarm linkage management is mainly used to configure the alarm linkage trigger conditions and action types of video device in the management system.

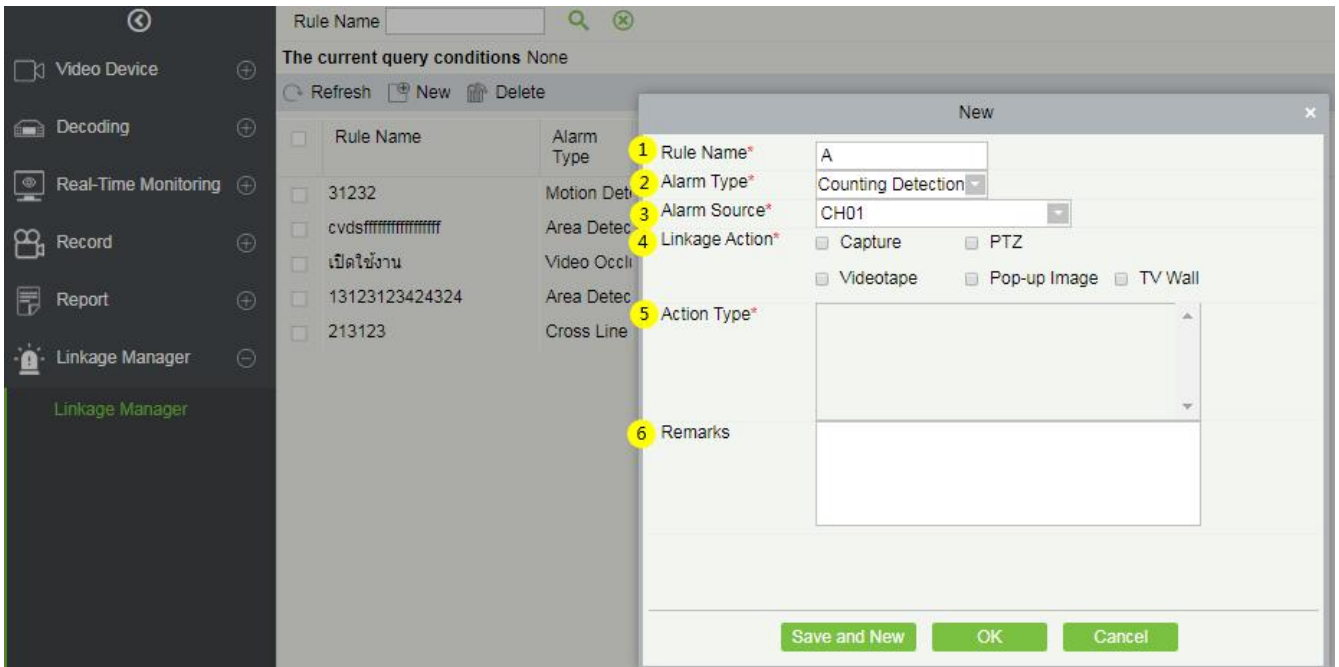
### 2.6.1 Linkage Manager

Click **[Linkage Manager]** to enter the linkage management interface, and click **[New]** to add an alarm

management.

- ① Enter Rule Name;
- ② Alarm Type, there are 8 options (Motion Detection, Video Loss, Video Occlusion, Alarm Inputs, Counting Detection, Area Detection, Item Detection, Cross-Line Detection);
- ③ Select the Alarm Source, that is, select a video channel;
- ④ Linkage Action: there are five options: Capture, PTZ, Videotape, Pop-up image, TV wall;
- ⑤ Action type;
- ⑥ Remarks.

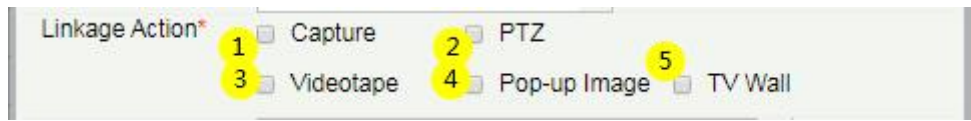
**Note:** When the alarm type is selected as Alarm inputs, the pull-down option of the alarm source will become the alarm input. Not all devices have alarm inputs. There are two types of alarm input: local alarm source and network alarm source. IPC devices have only local alarm source and no network alarm source. NVR devices have network alarm source.



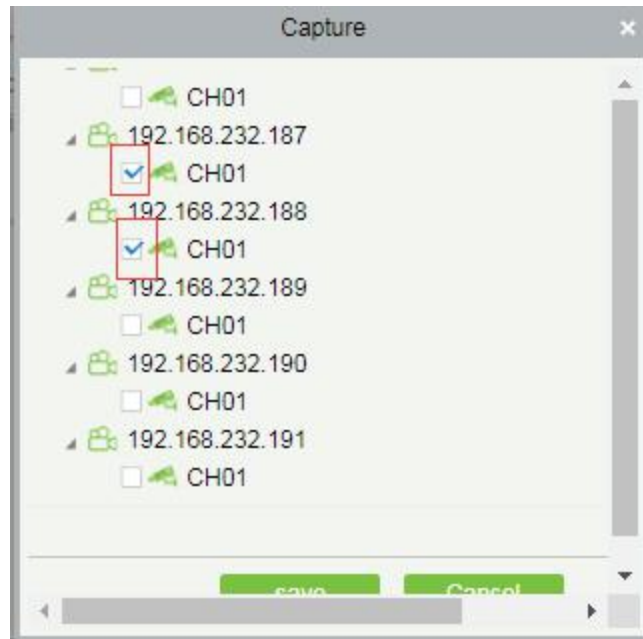
There are five options for linkage actions:

- ① Capture, ② PTZ, ③ Videotape, ④ Pop-up Image, ⑤ TV Wall.

You can select multiple options, but you can only configure the actions one by one.

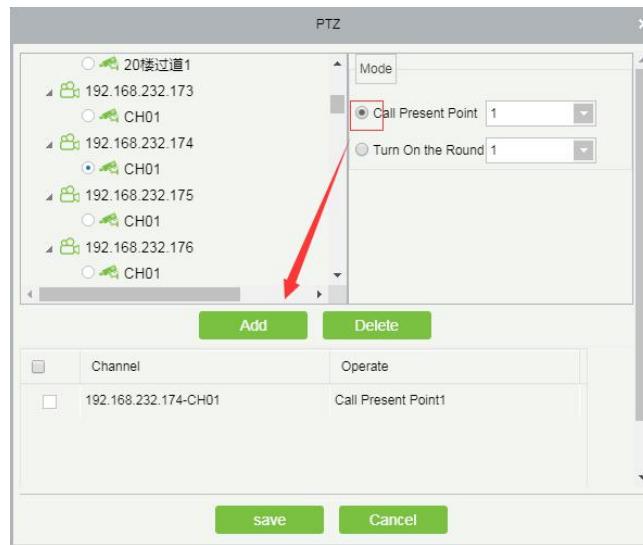


- When selecting **Capture**, select the video channel that needs to capture.

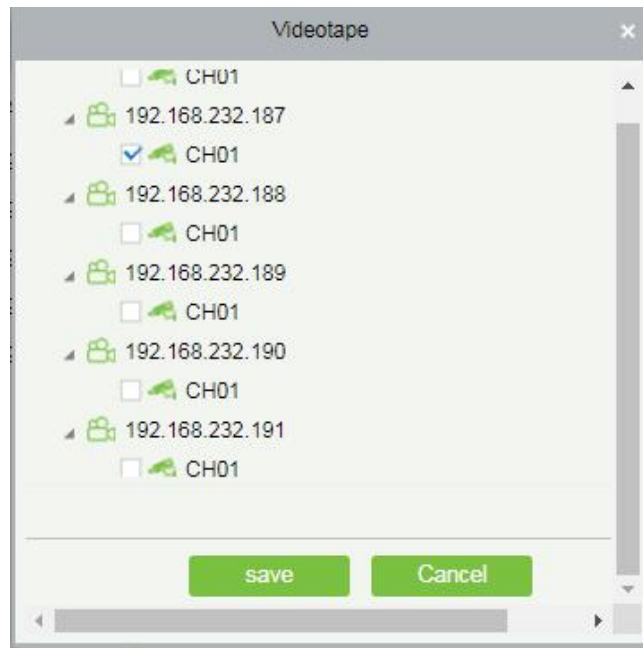




- When selecting **PTZ**, you can choose to call the present point or turn on the round.



- When selecting **Videotape**, select the video channel that needs video; multi-channel can be selected.

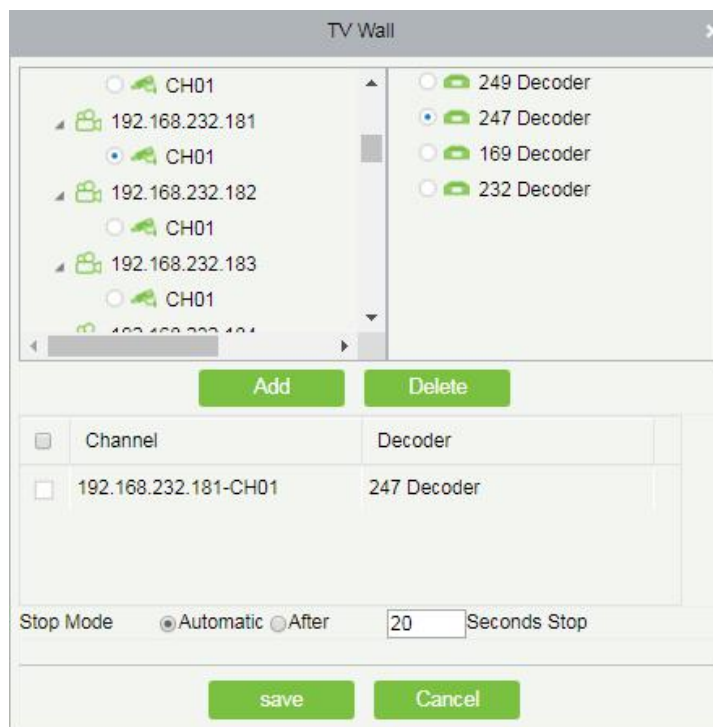


- When **Pop-up image** is selected, select the output channel and set the duration of the pop-up image.

There are Automatic (stop when the alarm stops) and pop-up time setting.



- When **TV-Wall** is selected, you can select the corresponding alarm linkage output video channel. You need to add a decoder first.

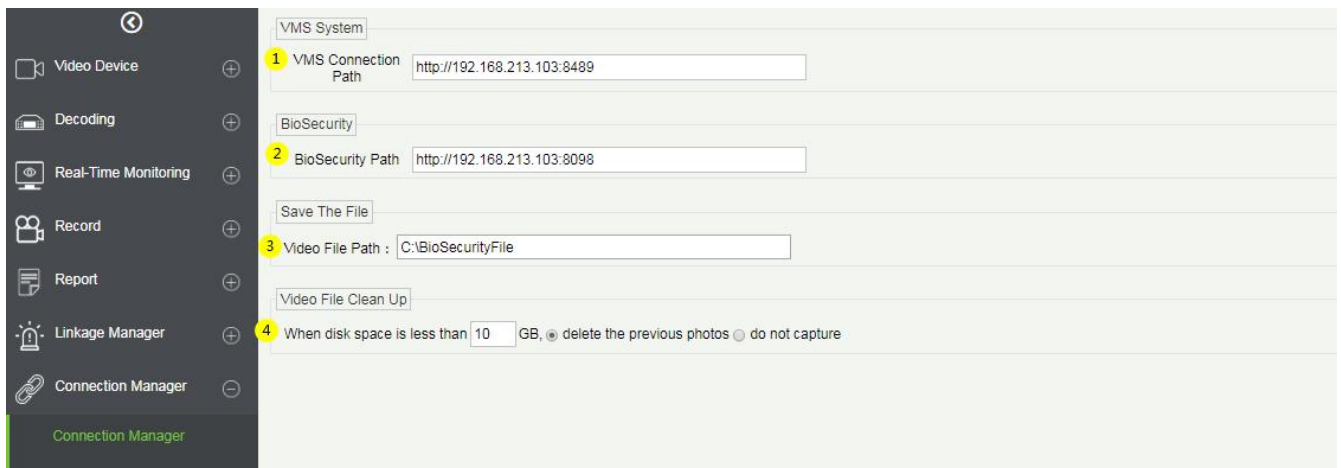


## 2.7 Connection Manager

### 2.7.1 Connection Manager

Click **[Connection Manager]** to enter the connection management configuration interface:

- ① The address and port number of the VMS client;
- ② Configure the access address of ZKBioSecurity;
- ③ Configure the storage address of the video linkage captured pictures and video files;
- ④ Configure the size of the space where the video linkage media files are stored. When the media file capacity reaches the configured space size, there are two options: "Delete old files" and "No longer capture".



# 3 Access Control Module and VMS Video Linkage Function Description

## 3.1 Access Control and Video Linkage Function

### 3.1.1 Function Description

VMS video function can replace the original Video module to make a video linkage with access control module. The setting method is the same as the original setting linkage method of access control and video module.

The steps to set up the linkage between access control and VMS video are as follows:

- 1) Under VMS device interface, add video device.



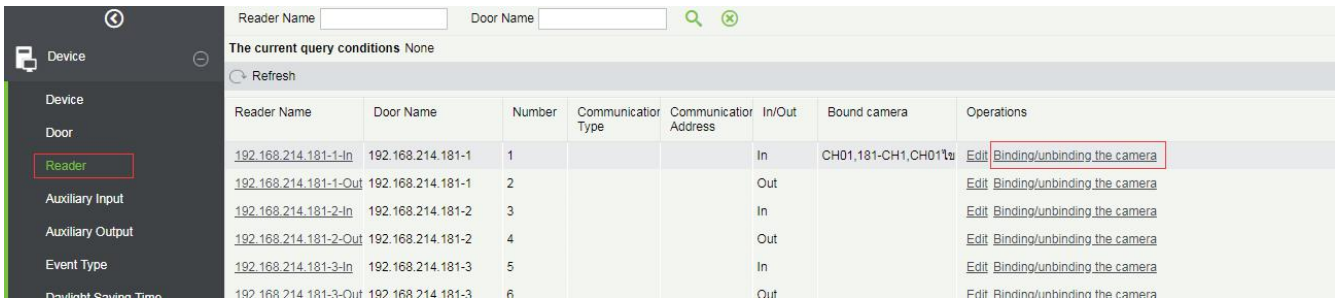
- 2) Add the access control device under the device interface of the access control module.



- 3) Under the Reader interface of the access control module, bind the reader of the access control device to the VMS video channel that needs video linkage. A reader can bind up to 5 video channels.

**Note:** The bound channel must first set the alarm video in the [Storage Server-Record Plan Setting](#), so that

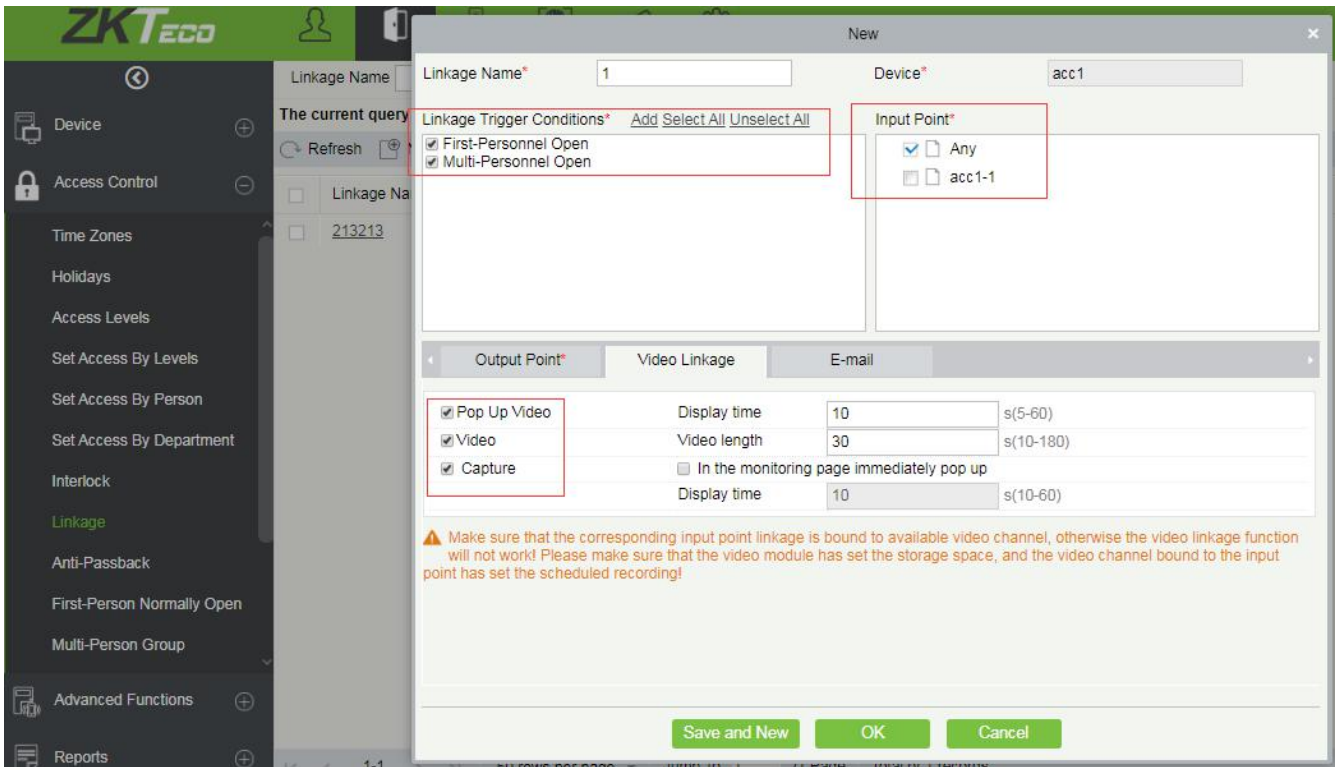
the access control linkage can produce the video.



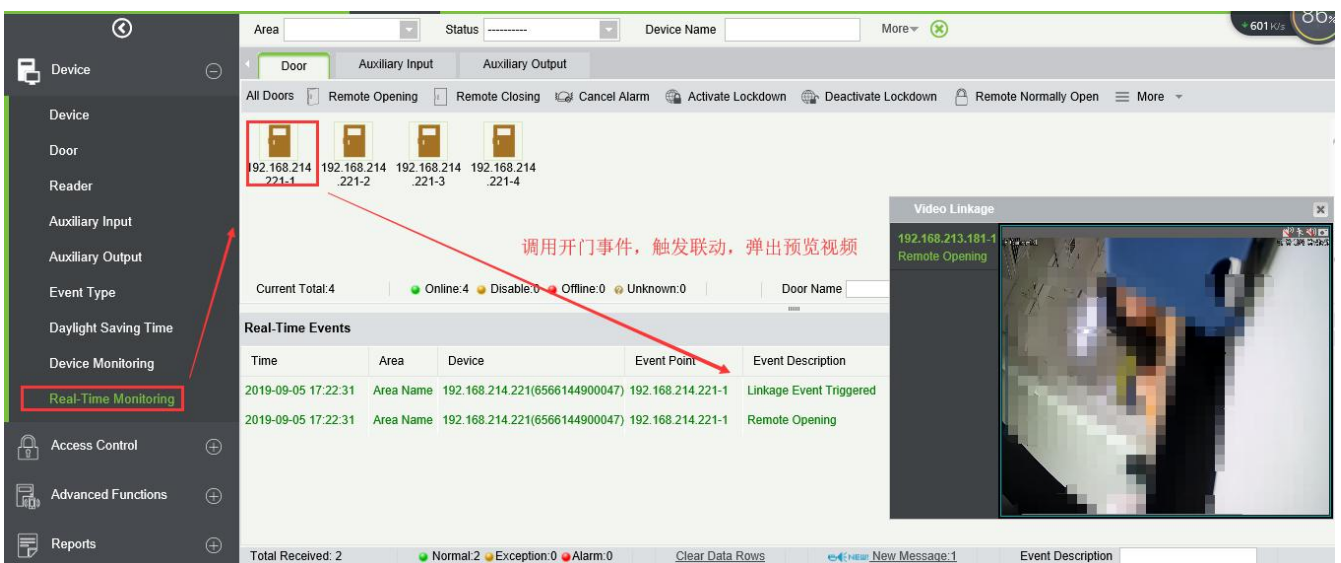
The screenshot shows a web-based interface for managing access control devices. On the left is a dark sidebar with a menu containing 'Device', 'Door', 'Reader', 'Auxiliary Input', 'Auxiliary Output', 'Event Type', and 'Daylight Saving Time'. The 'Reader' item is highlighted with a red box. The main area has search filters for 'Reader Name' and 'Door Name', a search icon, and a refresh button. Below this is a table with the following columns: Reader Name, Door Name, Number, Communication Type, Communication Address, In/Out, Bound camera, and Operations. The table contains six rows of data, with the first row's 'Operations' cell containing a link 'Edit Binding/unbinding the camera' highlighted with a red box.

Reader Name	Door Name	Number	Communication Type	Communication Address	In/Out	Bound camera	Operations
<a href="#">192.168.214.181-1-In</a>	192.168.214.181-1	1			In	CH01,181-CH1,CH011w	<a href="#">Edit Binding/unbinding the camera</a>
<a href="#">192.168.214.181-1-Out</a>	192.168.214.181-1	2			Out		<a href="#">Edit Binding/unbinding the camera</a>
<a href="#">192.168.214.181-2-In</a>	192.168.214.181-2	3			In		<a href="#">Edit Binding/unbinding the camera</a>
<a href="#">192.168.214.181-2-Out</a>	192.168.214.181-2	4			Out		<a href="#">Edit Binding/unbinding the camera</a>
<a href="#">192.168.214.181-3-In</a>	192.168.214.181-3	5			In		<a href="#">Edit Binding/unbinding the camera</a>
<a href="#">192.168.214.181-3-Out</a>	192.168.214.181-3	6			Out		<a href="#">Edit Binding/unbinding the camera</a>

- 4) Set the linkage trigger conditions, input point, output point, etc., click **[OK]** to save. For details, please refer to **[Linkage]** setting instructions of access control module.



- 5) Real-time monitoring interface preview linkage effect is as follows: linkage triggered, pop up the video playback window.




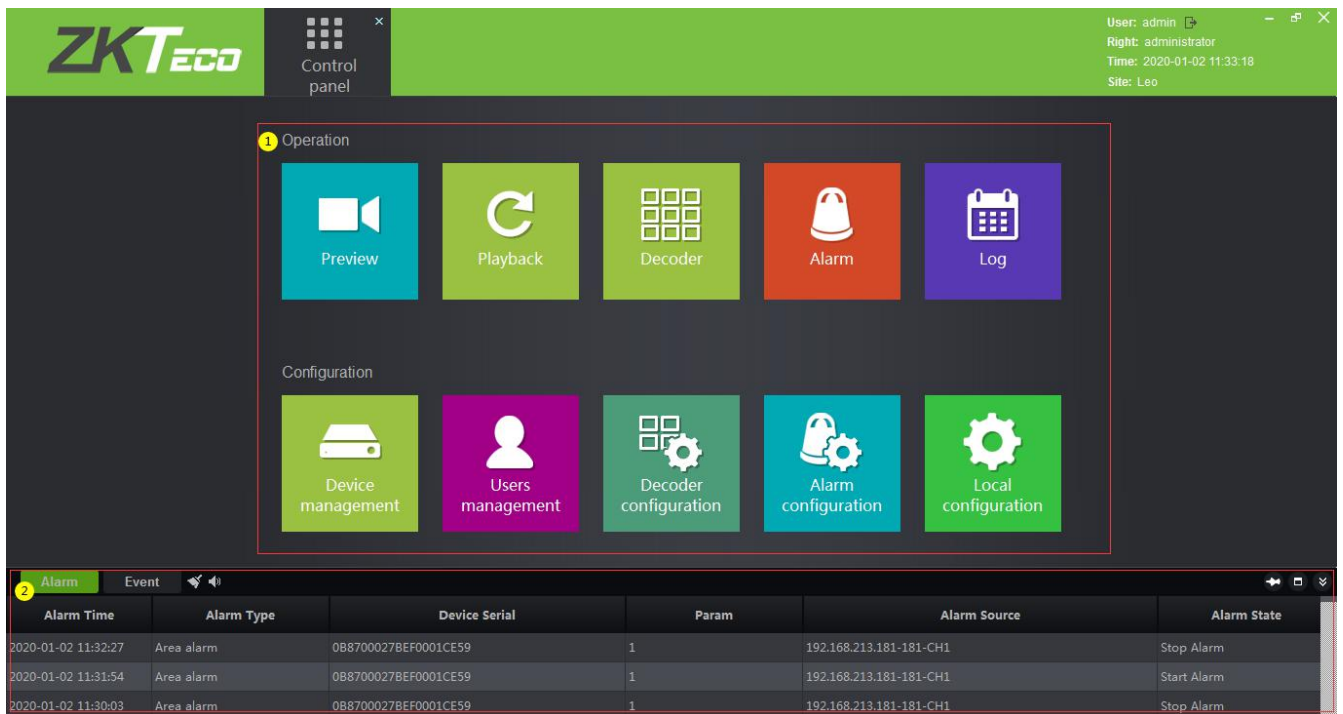
# 4 VMS Client Instructions

## 4.1 VMS Client

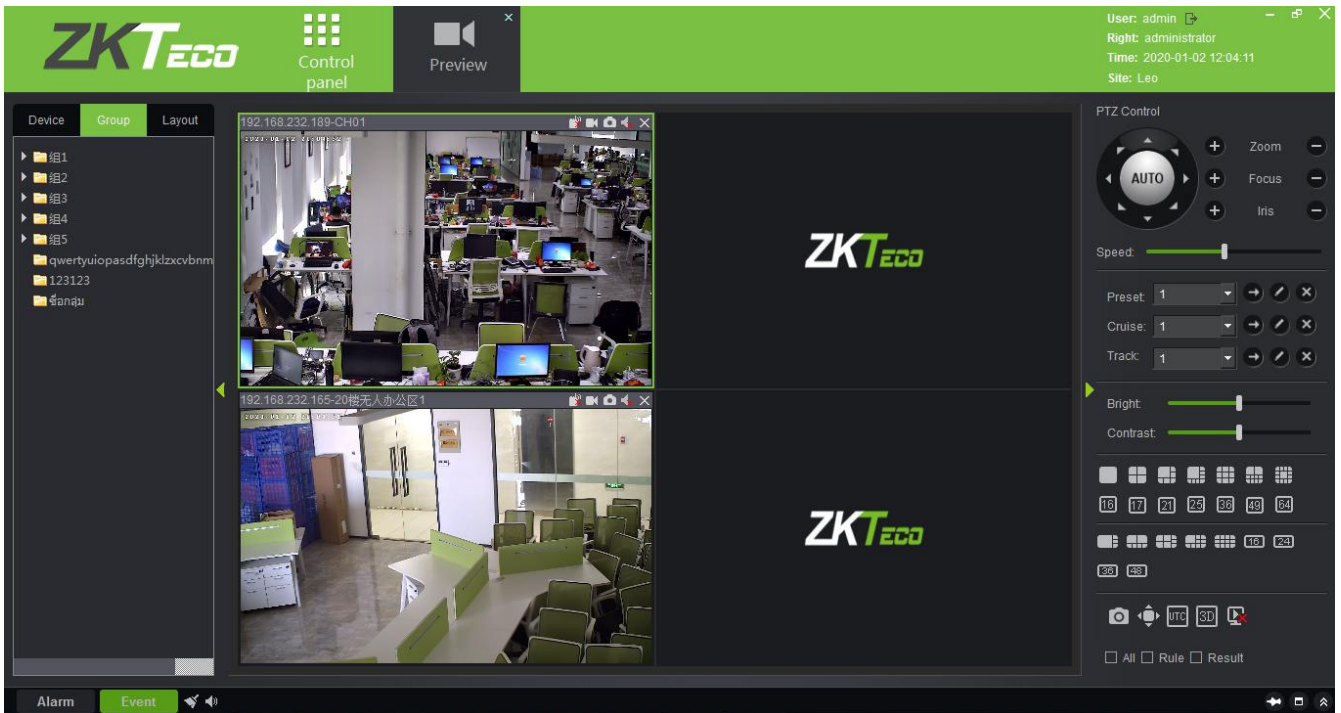
### 4.1.1 VMS Client Module Function Description

The VMS client is called ZKBioSecurity VMS Plugin, and its functionality is similar to that of the VMS server.

After logging into the VMS client, the main control panel lists ①10 common function modules (Preview, Playback, Decoder, Alarm, Log, Device management, User management, Decoder configuration, Alarm configuration, Local configuration) and ②alarm event center. Click the  icon in the upper right corner to log out of the system.



Click **[Preview]** to open the client preview interface, and you can select video channel, group and layout for screen preview. For the operation of preview interface, please refer to [2.3.3 Video Preview](#).

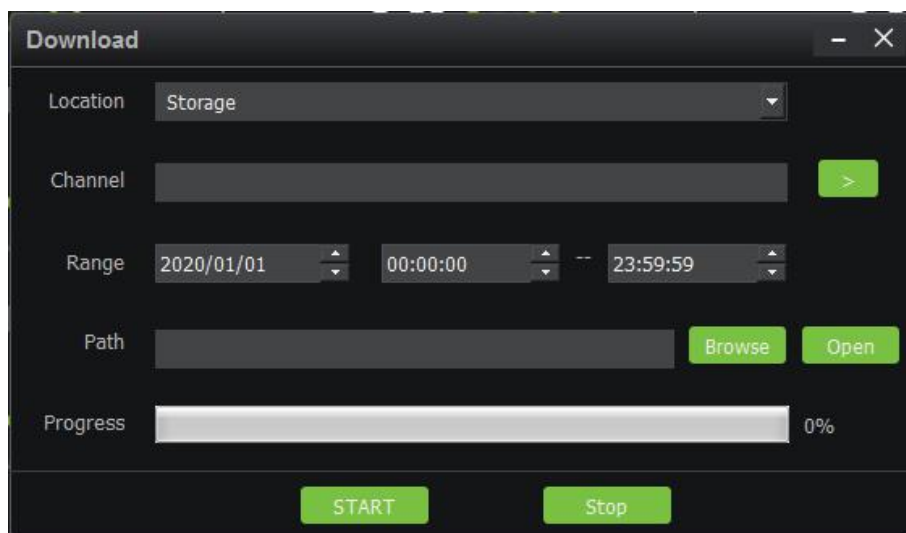


Click **[Playback]** to open the client playback interface. The function of the playback interface is basically the same as that of the VMS server. Please refer to [2.4.2 Video Record](#) for the operation method.





There are two differences: ①On the client side, you can replay nine video channels at the same time, while on the server, you can only replay four channels at the same time. ② Add a download configuration interface.



Click **[Decoder]** to enter the decoder operation interface. The decoder interface of VMS client integrates the three functions of decoder preview settings, decoder preview play and decoder playback on the VMS server into one interface. Please refer to [2.2.4 Decoder Preview Settings](#), [2.2.5 Decoder Preview Play](#) and [2.2.6 Decoder Playback](#).



Click **[Alarm]** to enter the alarm report interface. It's the same as the report on VMS, except you can't immediately view the alarm video. If you need to view the alarm video, you can go to the [2.5.2 Video Alarm Report](#) on the VMS server.

The screenshot displays the ZKTeco VMS Alarm Report interface. The top navigation bar includes icons for Control panel, Preview, Playback, Decoder, and Alarm. The user information shows: User: admin, Right: administrator, Time: 2020-01-02 16:49:54, Site: Leo.

The main area shows a search filter for the time range 2020/01/02 00:00:00 to 2020/01/02 16:30:24, with a search button. Below is a table of alarm logs:

ALARM SOURCES	Alarm Type	START TIME	END TIME
192.168.232.230-CH01	Motion detection	2020-01-02 16:28:06	2020-01-02 16:28:17
192.168.232.205-CH01	Motion detection	2020-01-02 16:19:29	2020-01-02 16:19:40
192.168.232.172-20楼过道1	Motion detection	2020-01-02 16:19:08	2020-01-02 16:19:19
192.168.232.230-CH01	Motion detection	2020-01-02 16:18:44	2020-01-02 16:18:55
12321324324-未知设备1未知设备	Motion detection	2020-01-02 16:17:16	2020-01-02 16:17:27
192.168.213.181-181-CH1	Area alarm	2020-01-02 16:10:35	2020-01-02 16:11:40
192.168.232.174-CH01	Motion detection	2020-01-02 16:08:18	2020-01-02 16:08:29
192.168.232.172-20楼过道1	Motion detection	2020-01-02 16:08:14	2020-01-02 16:08:25
192.168.232.172-20楼过道1	Motion detection	2020-01-02 16:07:31	2020-01-02 16:07:42
192.168.232.179-CH01	Motion detection	2020-01-02 16:02:08	2020-01-02 16:02:14
192.168.232.205-CH01	Motion detection	2020-01-02 15:52:38	2020-01-02 15:52:49
192.168.232.229-CH01	Motion detection	2020-01-02 15:44:58	2020-01-02 15:45:04
192.168.232.172-20楼过道1	Motion detection	2020-01-02 15:44:53	2020-01-02 15:45:05
192.168.232.172-20楼过道1	Motion detection	2020-01-02 15:44:13	2020-01-02 15:44:24
192.168.232.174-CH01	Motion detection	2020-01-02 15:33:26	2020-01-02 15:33:37

The interface also shows a status bar at the bottom with "170alarm logs, 1/12pages" and navigation buttons for First, Prev, Next, and Last.

Click **[Log]** to query the user's operation record of the video device. The content is the same as that seen in the [2.5.1 Video Report](#).

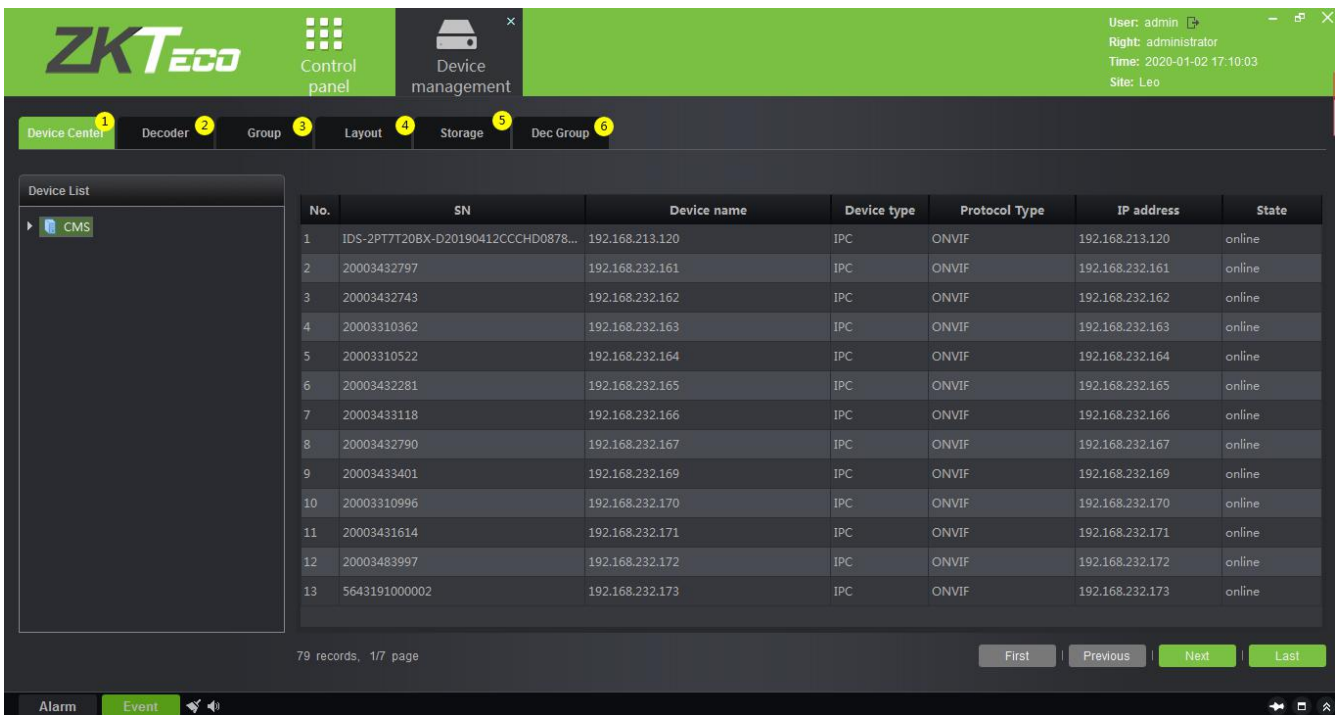
Log type: AllType Start time: 2020/01/02 00:00:00 End time: 2020/01/02 23:59:59 Search Export

No.	Time	User	IP address	Operation type	Target
1	2020-01-02 15:22:41	admin	192.168.213.133	Login	
2	2020-01-02 14:56:46	admin	192.168.213.133	Logout	
3	2020-01-02 14:00:20	admin	192.168.213.15	Login	
4	2020-01-02 13:56:20	admin	192.168.214.10	Logout	
5	2020-01-02 12:05:49	admin	192.168.213.15	Logout	
6	2020-01-02 11:17:34	admin	192.168.213.15	Login	
7	2020-01-02 10:51:26	admin	127.0.0.1	Login	
8	2020-01-02 10:51:24	admin	192.168.214.10	Login	
9	2020-01-02 10:51:24	admin	127.0.0.1	Login	
10	2020-01-02 10:51:24	admin	192.168.213.133	Login	
11	2020-01-02 10:51:04	admin	127.0.0.1	Logout	
12	2020-01-02 10:50:50	admin	127.0.0.1	Login	
13	2020-01-02 10:50:49	admin	127.0.0.1	Login	
14	2020-01-02 10:50:49	admin	192.168.213.133	Login	

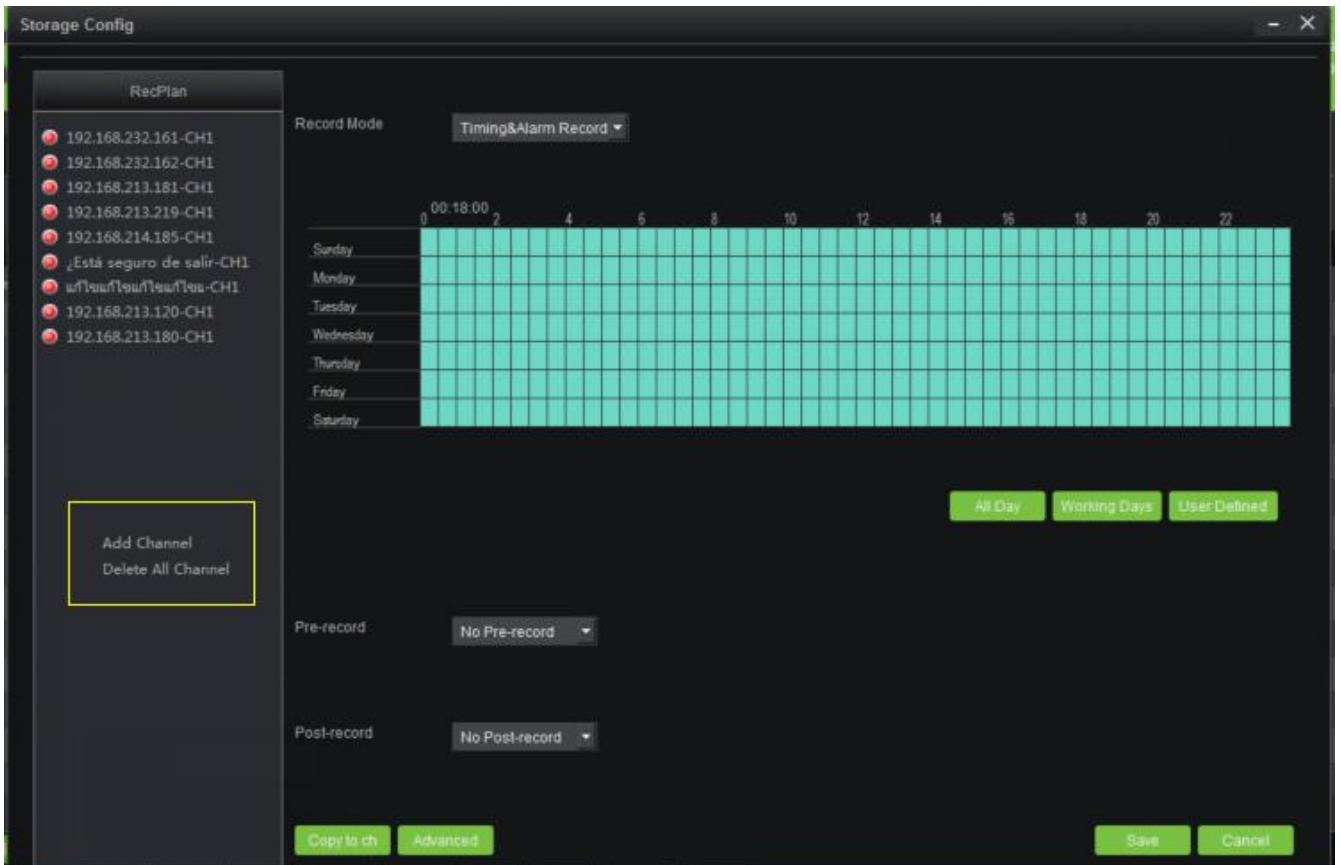
21 records, 1/2 page

First Previous Next Last

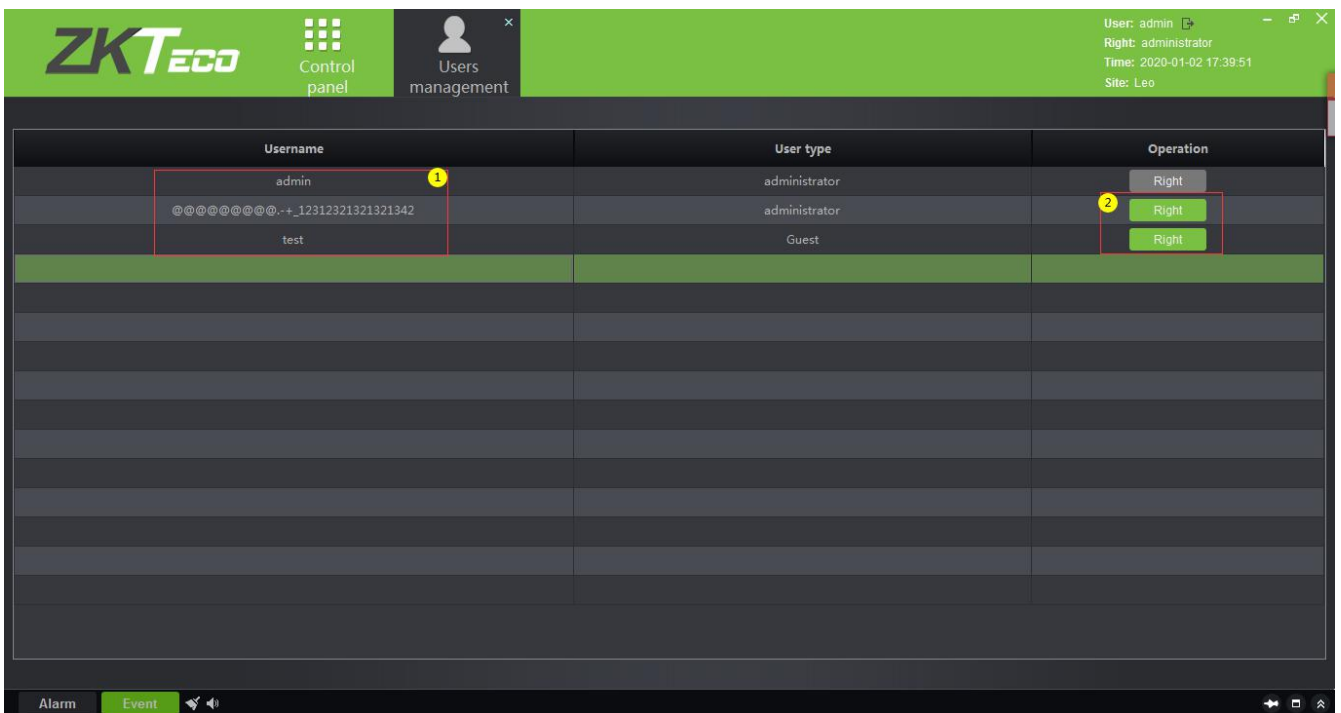
Click **[Device management]** to enter the device management interface of VMS client.

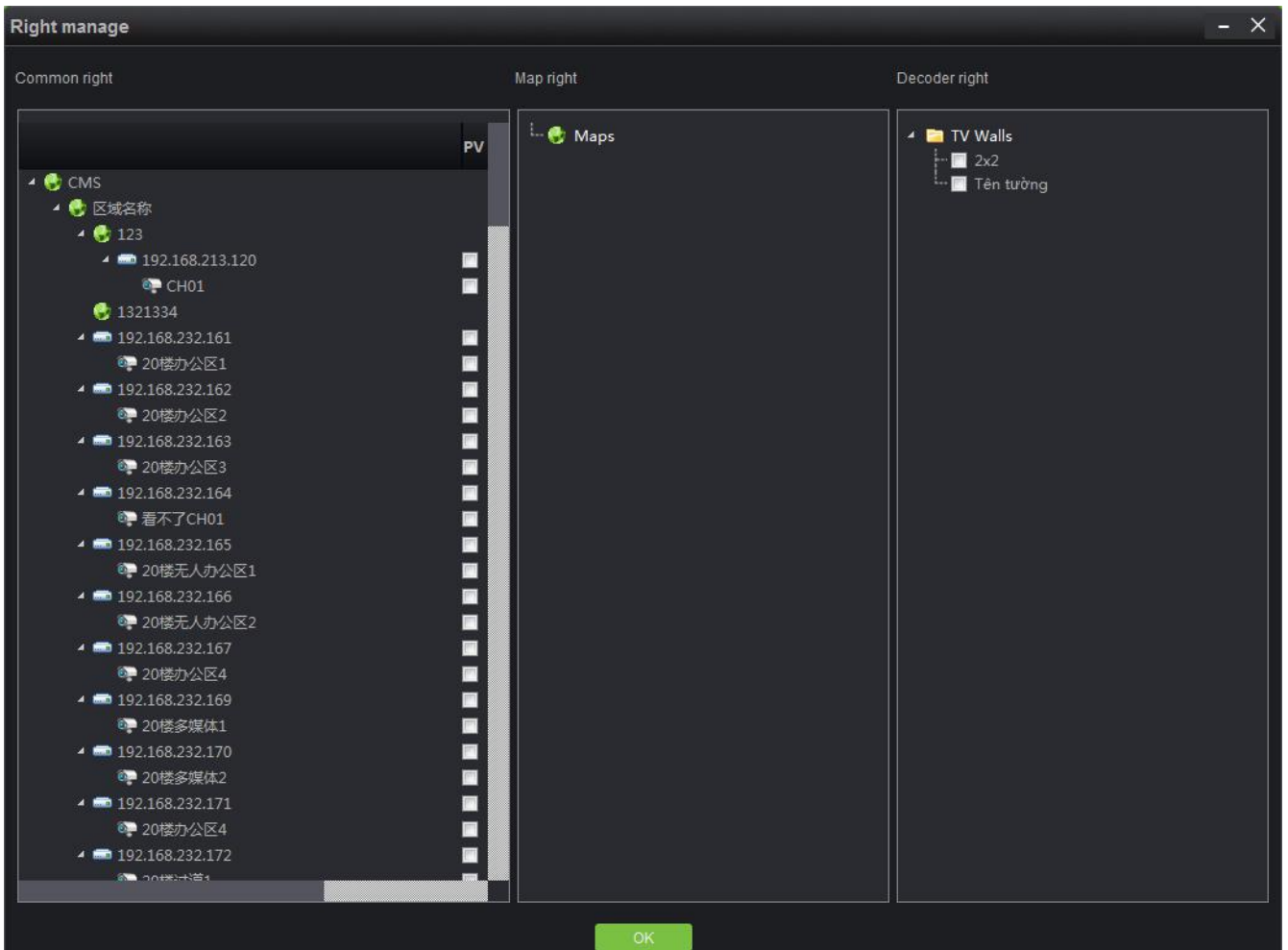


Including: ① is the Device monitoring interface, which is the same as the information listed in the Video Device interface on the VMS server. ② Decoder management interface, the same as the content of [2.2.1 Decoder](#). ③ Video group management interface, please refer to [2.3.1 Group](#). ④ Video channel layout management interface, please refer to [2.3.2 Layout](#). ⑤ Storage service configuration interface, please refer to [2.4.1 Storage Server](#). In the record plan module, right-click to add or delete the record plan. See figure 1 below. ⑥ Decoder group, please refer to [2.2.2 Decoder Grouping](#).

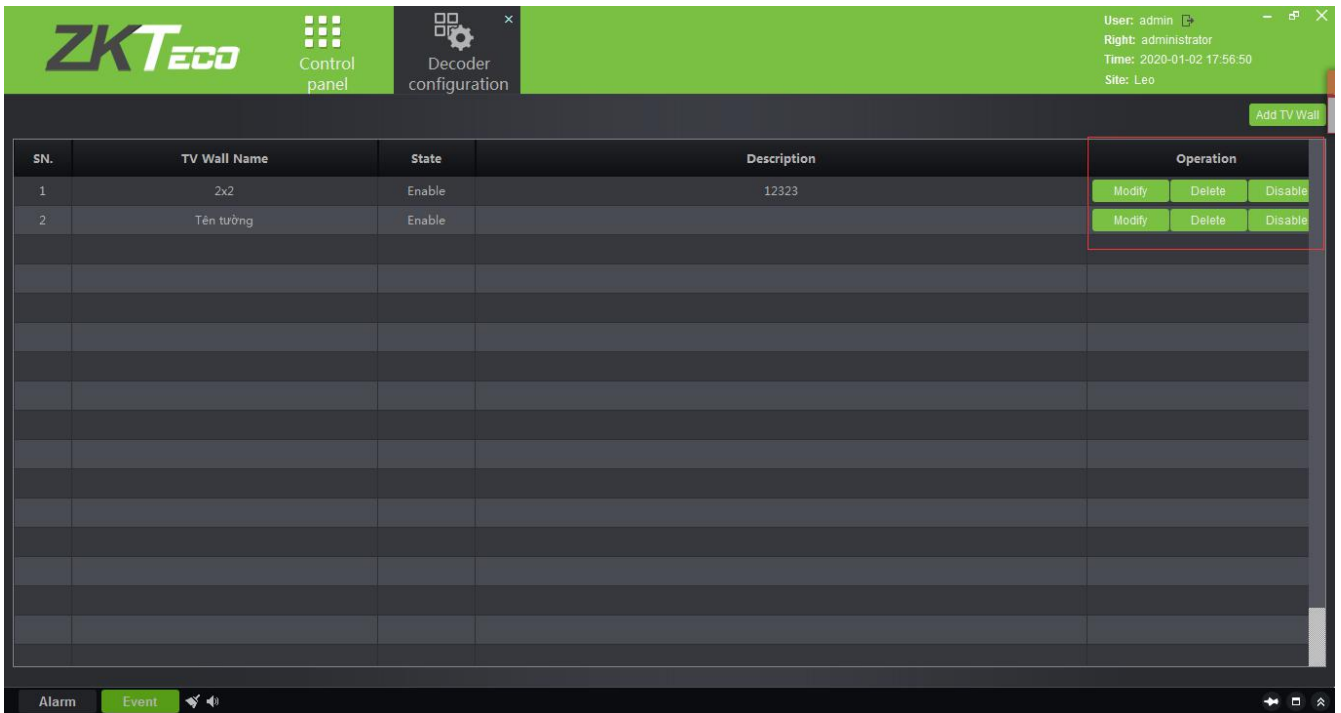


Click **[User management]** to enter the user management interface of the system. This interface lists ① all the users of VMS system, click ② to set different permissions for each user to access the device, map, TV wall. The admin has all permissions by default.

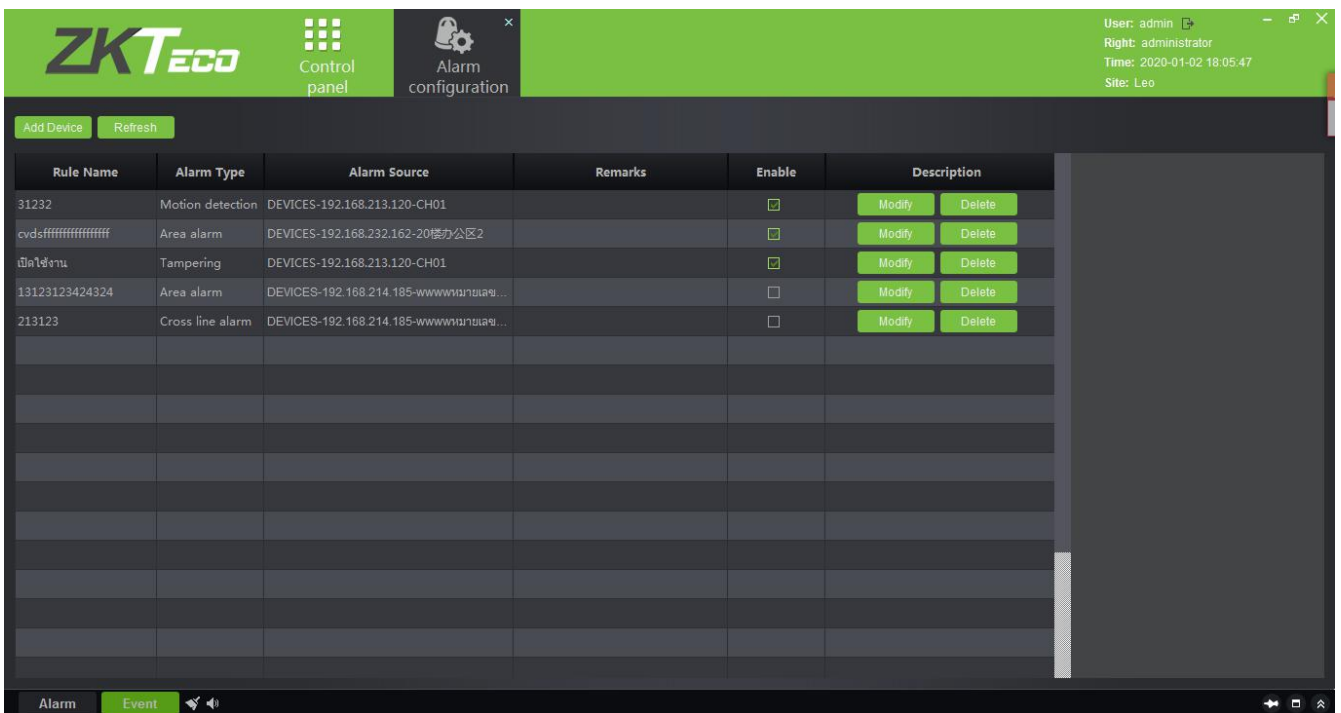




Click [**Decoder configuration**] to enter the management interface of TV wall. Please refer to [2.2.3 TV Wall](#) for specific setting steps.



Click **[Alarm configuration]** to enter the alarm linkage management interface of the client, and the alarm linkage setting is the same as [2.6.1 Linkage Manager](#).

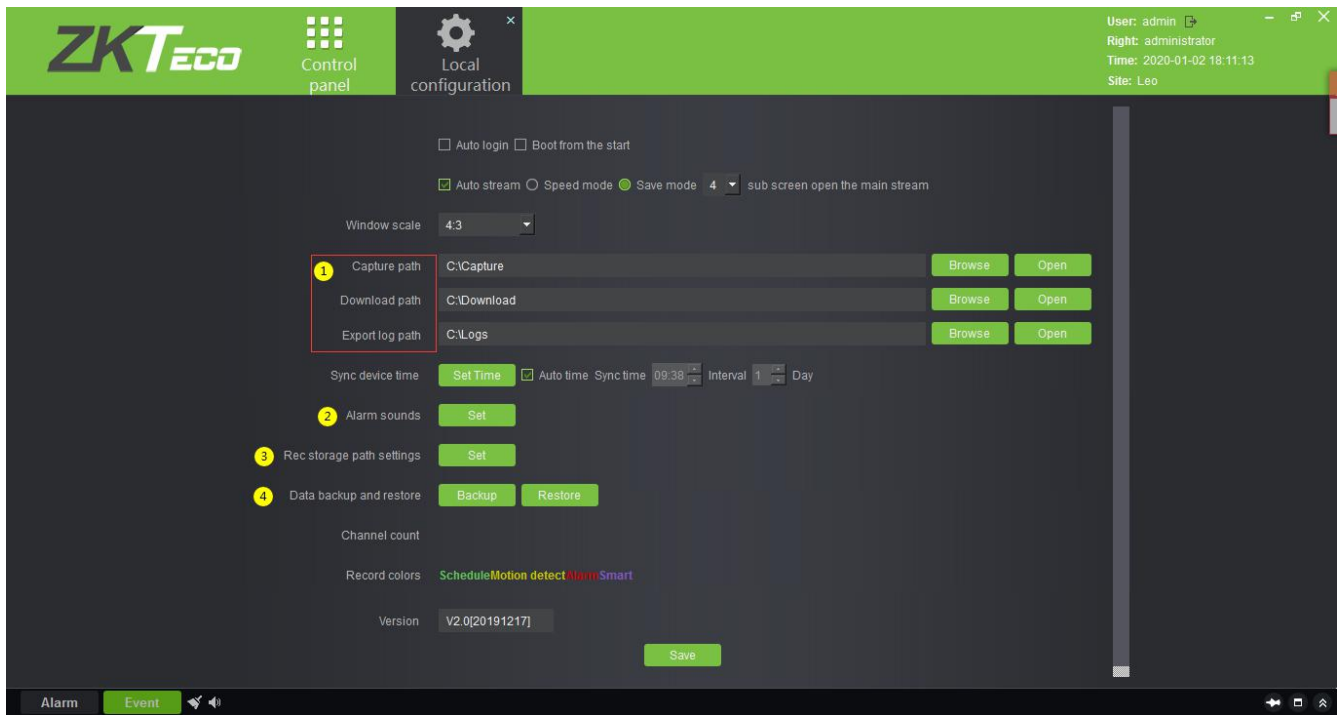




Click **[Local configuration]** to enter the system configuration interface of the client. ① Capture, download, export log path can be set. ② Different alarm sounds can be set. ③The record storage path can be set. ④

The client database can be backed up and restored.

Click **[Save]** to save the configuration.



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