

Visualization Intelligent Control Platform (Simplified Mode) User Manual

Manual Version: V1.08

Disclaimer and Safety Warnings

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- This manual is intended for multiple software versions, and the illustrations and descriptions in this manual may be different from the actual GUI and functions of the software.
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Network Security

Please take all necessary measures to enhance network security for your device.

The following are necessary measures for the network security of your device:

- **Change default password and set strong password:** You are strongly recommended to change the default password after your first login and set a strong password of at least nine characters including all three elements: digits, letters and special characters.
- **Keep firmware up to date:** It is recommended that your device is always upgraded to the latest version for the latest functions and better security. Visit Uniview's official website or contact your local dealer for the latest firmware.

The following are recommendations for enhancing network security of your device:

- **Change password regularly:** Change your device password on a regular basis and keep the password safe. Make sure only the authorized user can log in to the device.
- **Enable HTTPS/SSL:** Use SSL certificate to encrypt HTTP communications and ensure data security.
- **Enable IP address filtering:** Allow access only from the specified IP addresses.
- **Minimum port mapping:** Configure your router or firewall to open a minimum set of ports to the WAN and keep only the necessary port mappings. Never set the device as the DMZ host or configure a full cone NAT.
- **Disable the automatic login and save password features:** If multiple users have access to your computer, it is recommended that you disable these features to prevent unauthorized access.
- **Choose username and password discretely:** Avoid using the username and password of your social media, bank, email account, etc, as the username and password of your device, in case your social media, bank and email account information is leaked.
- **Restrict user permissions:** If more than one user needs access to your system, make sure each user is granted only the necessary permissions.
- **Disable UPnP:** When UPnP is enabled, the router will automatically map internal ports, and the system will automatically forward port data, which results in the risks of data leakage. Therefore, it is recommended to disable UPnP if HTTP and TCP port mapping have been enabled manually on your router.
- **SNMP:** Disable SNMP if you do not use it. If you do use it, then SNMPv3 is recommended.
- **Multicast:** Multicast is intended to transmit video to multiple devices. If you do not use this function, it is recommended you disable multicast on your network.
- **Check logs:** Check your device logs regularly to detect unauthorized access or abnormal operations.
- **Physical protection:** Keep the device in a locked room or cabinet to prevent unauthorized physical access.
- **Isolate video surveillance network:** Isolating your video surveillance network with other service networks helps prevent unauthorized access to devices in your security system from other service networks.

Learn More

You may also obtain security information under Security Response Center at Uniview's official website.

Safety Warnings

The device must be installed, serviced and maintained by a trained professional with necessary safety knowledge and skills. Before you start using the device, please read through this guide carefully and make sure all applicable requirements are met to avoid danger and loss of property.

Storage, Transportation, and Use

- Store or use the device in a proper environment that meets environmental requirements, including and not limited to, temperature, humidity, dust, corrosive gases, electromagnetic radiation, etc.
- Make sure the device is securely installed or placed on a flat surface to prevent falling.
- Unless otherwise specified, do not stack devices.
- Ensure good ventilation in the operating environment. Do not cover the vents on the device. Allow adequate space for ventilation.
- Protect the device from liquid of any kind.
- Make sure the power supply provides a stable voltage that meets the power requirements of the device. Make sure the power supply's output power exceeds the total maximum power of all the connected devices.
- Verify that the device is properly installed before connecting it to power.
- Do not remove the seal from the device body without consulting Uniview first. Do not attempt to service the product yourself. Contact a trained professional for maintenance.
- Always disconnect the device from power before attempting to move the device.
- Take proper waterproof measures in accordance with requirements before using the device outdoors.

Power Requirements

- Install and use the device in strict accordance with your local electrical safety regulations.
- Use a UL certified power supply that meets LPS requirements if an adapter is used.
- Use the recommended cordset (power cord) in accordance with the specified ratings.
- Only use the power adapter supplied with your device.
- Use a mains socket outlet with a protective earthing (grounding) connection.
- Ground your device properly if the device is intended to be grounded.

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1 Introduction

The visualization intelligent control platform (hereinafter referred to as “software”) is mainly designed for decoders, video wall controllers, distributed video wall controllers and KVM console management system, and central control devices for unified management, so as to control the screen, audio, and environment.

This manual mainly introduces software operations in simplified mode to help you understand how to use it.

**NOTE!**

The interface and function operations may vary with software version.

2 Log In to Software

Check the following items before you log in to the software:

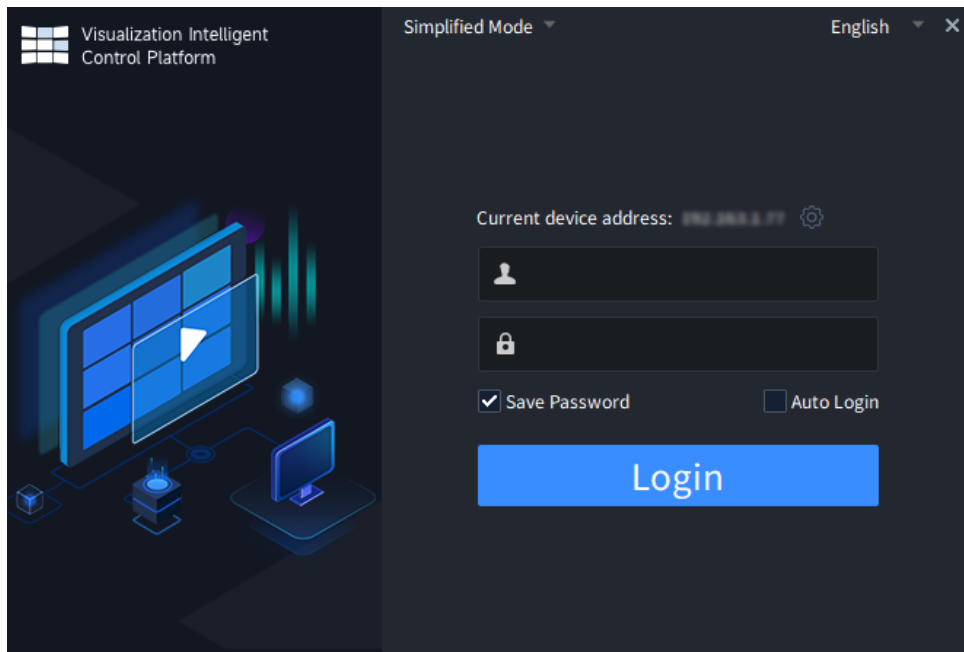
- The device to be managed runs normally.
- The device to be managed has a network connection to your PC.
- Please log in to the device's Web interface, set the running mode, and set the protocol to ONVIF.

**NOTE!**

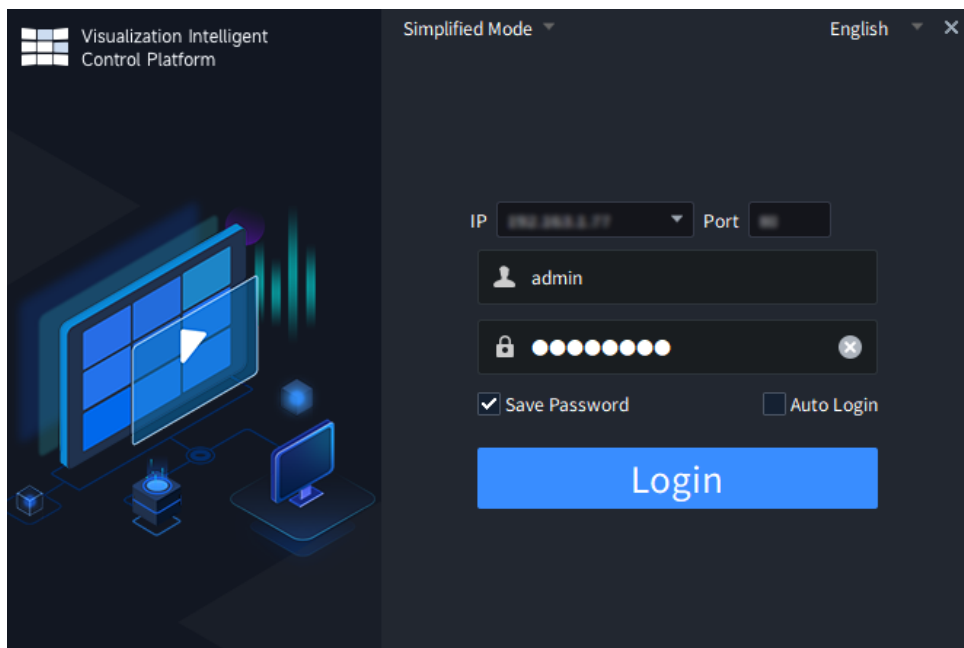
The distributed output device can log in to the software via any protocol.

2.1 Software Login

1. Double-click  to start the software, and the login page appears. Choose **Simplified Mode**.

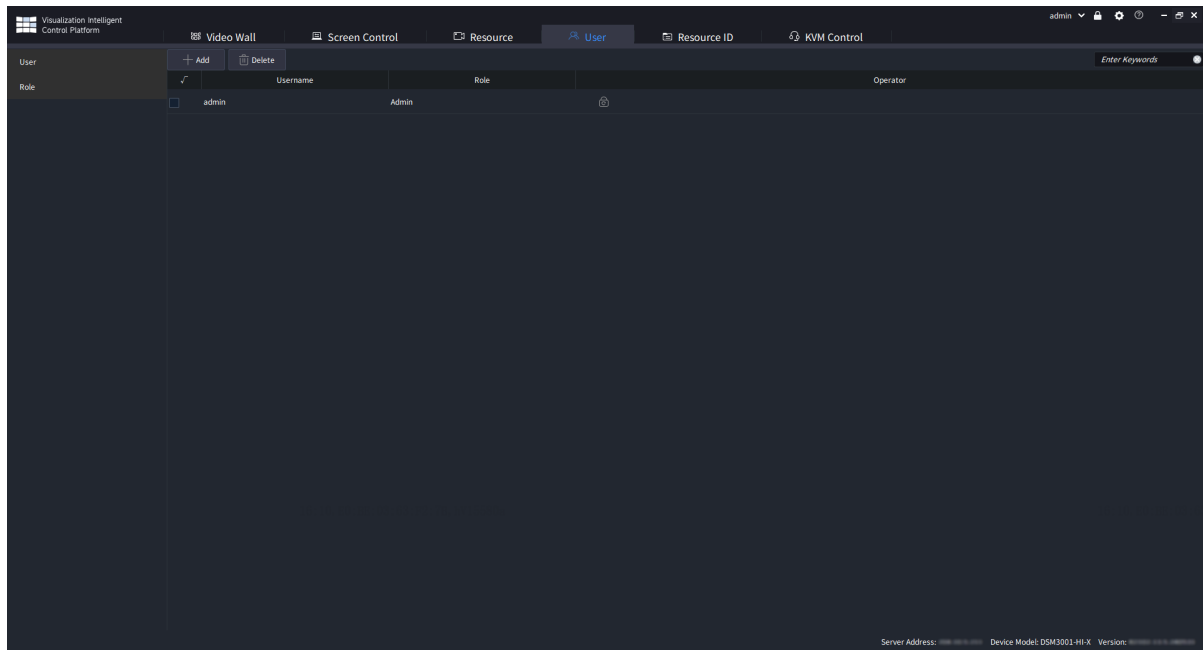


2. Click , enter the device's IP address and port, and then input the username and password.
 - **Save Password:** When enabled, the username and password of the currently logged-in device will be automatically filled in the next time you run the software.
If all devices log in to the software successfully and their passwords are saved, the login information of all devices will be saved automatically. When you click the **IP** drop-down list and choose another IP address, the username and password of the corresponding device are automatically fill in.
 - **Auto Login:** When enabled, the device will automatically log in to the software the next time you run the software.



3. Click **Login** to enter the software interface.

2.2 Interface Introduction

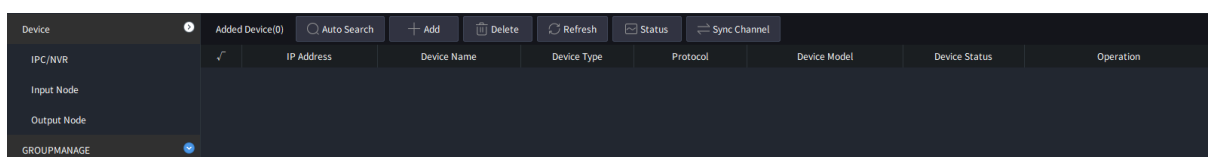


Item	Description
	The currently logged-in user. ● Change password: Change the password of the currently logged-in user. ● Switch user: Switch to other user of the device. ● Return: Return to the login page.
	Lock: Lock the current interface, and the interface cannot be operated until it is unlocked by entering the user password.
	Client Config Auto Login Wall Client Auto Login Windows Username Password Selected window always on top Preview Stream Transmission Protocol UDP OK Cancel ● Auto Login (Wall Client): When enabled, start the client, and the most recent server will automatically log in to the client. ● Auto Login (Windows): When enabled, enter the username and password of your Windows operating system, and the client starts automatically after the computer enters Windows. If Auto Login (Wall Client) is also enabled, the most recent server will automatically log in to the client after the computer enters Windows.

Item	Description	
		- Selected window always on top: When enabled, click a window on the Video Wall page, and the window will be automatically displayed on the top (when multiple windows overlap). - Preview Stream Transmission Protocol: Set the transmission protocol when you preview the video source. On the Screen Control or Operator Control page, you can click  to preview the transmission protocol used by the video source.
	Exit	Exit and close the software.
	Help. View the software's version information, operation video, etc.	
	Minimize, zoom out, close the software interface. The interface cannot be moved when maximized, and can only be moved when zoomed out.	
Resource	Add IPC, NVR, and other resources on the same LAN to the software for unified management. See Resource Management for details. Note: This function is available to certain devices only.	
Video Wall	Create and manage video walls based on the physical video wall layout and operate on the video wall, for example, play the video of IPC on the video wall. See Video Wall Control for details.	
KVM Control	Create and manage KVMs based on the actual KVM screen layout and operate on the KVM screen, for example, play the video of IPC on the KVM screen. See KVM Control for details. Note: This function is available to distributed output devices only.	
Screen Control	After connecting the managed device to the serial port of the screen, the screen can be turned on/off on the software. See Screen Control for details.	
User	Add users and assign permissions for classified management. See User Management for details. Note: This function is only available to the admin user of distributed output devices and certain video wall controllers.	
Resource ID	Display the ID of signal sources (IPC, NVR, etc.), video walls, and sequence resources. After the network keyboard connects to the display device, you can control the signal sources, video walls, and sequence resources via the corresponding resource ID with the keyboard. See Resource ID for details.	

3 Resource Management

Add IPC, NVR, and other resources on the same LAN to the software. You can import the added resources to different groups based on the actual networking and layout for unified management.



3.1 Resource

Added Device(0) Auto Search Add Delete Refresh Status Sync Channel

√	IP Address	Device Name	Device Type	Protocol	Device Model	Device Status	Operation



NOTE!

- This function is available to certain devices only.
- The input node and output node tabs are available to distributed output devices only.
- The methods to add and manage resources are similar. The following takes IPC/NVR as an example.

1. Add Resource

You can add resources manually or by auto search.

If the username or password is incorrect, the resource can be added to the list, but it is offline and cannot be operated.

Auto Search

1. Click **Auto Search**, and the auto search page appears. The system automatically searches for resources on the same LAN with the managed device. You can perform the accurate search by setting the conditions including start and end IP address, status, and device type.

Auto Search

+

Batch Add

IP Address

0 . 0 . 0 . 0

-

0 . 0 . 0 . 0

Status

All

Device Type

All

Search

✓	Added	IP Address	Port	Device Type	Device Model	Serial No.	Operation
☐	No	2004.205.0.250	80	NVR	DS-7932N-R4	DS-7932N-R41620201209CCRRF24264403WC...	+
☐	No	2008.102.0.240	80	IPC	DS-7808NB-K2	DS-7808NB-K20820181118CCRRF70525516WC...	+
☐	No	2008.100.0.010	80	IPC	DS-2CD2687G2T-LZS	DS-2CD2687G2T-LZS20230922AAWRAH0254423	+
☐	No	2008.100.0.030	80	IPC	DS-2CD3646FWDA2/F-IZS	DS-2CD3646FWDA2/F-IZS20210222AACHF54331092	+
☐	No	2008.100.0.010	80	IPC	DS-2DE7430IW-A	DS-2DE7430IW-A20201112AACHF06695299W	+
☐	No	2008.100.0.010	80	IPC	DS-2CD2336WD-I	DS-2CD2336WD-I20181030AACHC63245154	+
☐	No	2008.100.0.000	80	IPC	DS-2CD1763G2-LIZSU	DS-2CD1763G2-LIZSU20231016AAWRAH9120297	+
☐	No	2008.100.0.00	80	IPC	DS-2XE3147FWD	DS-2XE3147FWD20221213AACHL0...	+
☐	No	2002.2008.0.00	80	NVR	NVR304-32EP-B-DT	210235C2P13181000020	+
☐	No	2008.100.0.010	80	IPC	DS-2CD2336WD-I	DS-2CD2336WD-I20181030AACHC63245156	+
☐	No	2008.100.0.000	80	NVR	NVR-B200-R8@32-B	210235C2P53188000019	+
☐	No	2008.100.0.000	80	NVR	NVR-S200-R16@64	210235C29XJ182000063	+
☐	No	2008.100.0.002	80	IPC	HIC5681-L-U	210235C293319C000003	+
☐	No	2008.100.0.010	80	IPC	HIC6881-X22IR@A-WS-GB	210235C2813187000005	+
☐	No	2008.100.0.000	80	IPC	IPC325LR3-VSPF28-D	210235C35RF188000275	+

2. Add desired resources. You can add one by one or in batches. If the access protocol, username, and password of resources are the same, you can add them in batches.

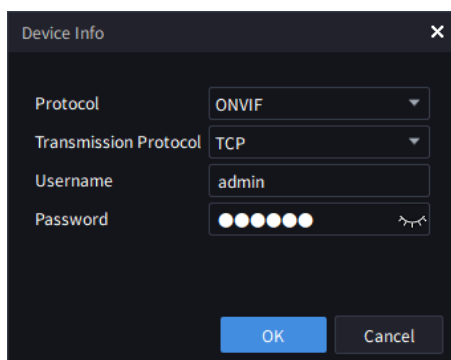
- Add one by one: Click  to enter the **Device Info** window. Input the resource information, and click **OK**.



The 'Device Info' dialog box is a dark-themed window with a close button (X) in the top right corner. It contains several input fields: 'Protocol' (dropdown menu with 'ONVIF' selected), 'Transmission Protocol' (dropdown menu with 'TCP' selected), 'Device Type' (dropdown menu with 'IPC' selected), 'Device Name' (text input field with 'IPC-1'), 'IP' (text input field with a dotted pattern), 'Port' (text input field with '80'), 'Username' (text input field with 'admin'), and 'Password' (password input field with six dots and a visibility toggle icon). At the bottom, there are two buttons: 'OK' (blue) and 'Cancel' (gray).

Item	Description
Protocol	● ONVIF: Open standard protocol, an international general protocol. ● GB28181: National standard protocol. Before use, configure the local server on the managed device's Web interface, and GB server on the resource's Web interface. Make sure the SIP server ID and IP address of the resource are the same as those of the managed device.
Transmission Protocol	Obtain live video via the TCP or UDP protocol. Compared with UDP, TCP provides higher quality image, but has higher network requirements. ● TCP: Transmission control protocol, provides connection-oriented and reliable communication, with low transmission efficiency. ● UDP: User datagram protocol, provides connectionless-oriented and unreliable communication, with high transmission efficiency.
Device Type	Resource type.
Device Name	Resource name, supports custom name.
IP/Port	Resource's IP address and port.
Username/Password	Used to log in to the resource's Web interface.

- Add in batches: Select the resource(s) you want to add or click  to select all resources, click **Batch Add**, and then the **Device Info** window appears. Enter the resource information, and click **OK**.



This is a cropped version of the 'Device Info' dialog box shown above. It displays the 'Protocol' (ONVIF), 'Transmission Protocol' (TCP), 'Username' (admin), and 'Password' fields, along with the 'OK' and 'Cancel' buttons at the bottom.

Add Manually

Click **Add**, and the **Device Info** window appears. Select the access protocol and device type as needed, enter the resource information, and click **OK**.

Device Info

Protocol

ONVIF

Device Type

IPC

Transmission Protocol

TCP

Device Name

IP

0 . 0 . 0 . 0

Port

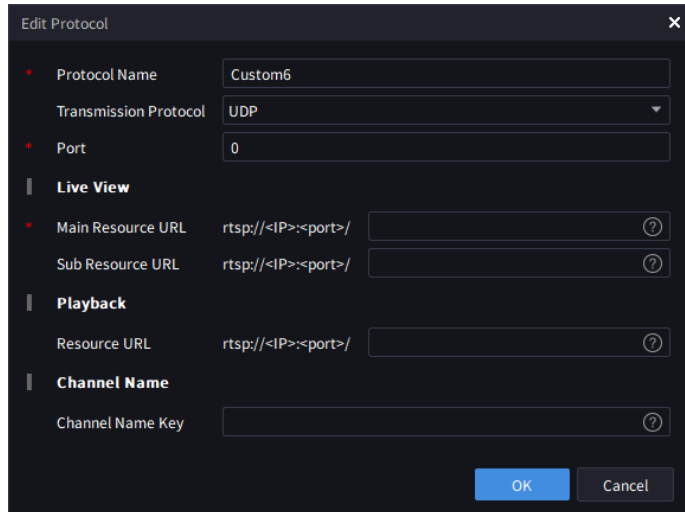
Username

Password

OK

Cancel

Protocol	Description
ONVIF	ONVIF: Open standard protocol, an international general protocol.
GB28181	National standard protocol. Before use, configure the local server on the managed device's Web interface, and GB server on the resource's Web interface. Make sure the SIP server ID and IP address of the resource are the same as those of the managed device.
RTSP	Real-time stream protocol. You can add resources one by one or in batches. Device Info Protocol RTSP Device Type IPC Custom Protocol Custom6 Edit Batch Add On Off Start IP End IP Port 0 Username admin Password Select Device ↓ Selected Dev ↑ Add Selected D Number of Chan Apply to All ✓ Device No. IP Add or Not Number of Channel 1 192.168.1.1 2 192.168.1.2 3 192.168.1.3 OK Cancel Select the device type. When adding NVR resources one by one, some custom protocols support enabling PTZ control of the NVR channel, and then the PTZ camera can be controlled (It is available for the device that connects to the NVR via the RTSP protocol, and the IPCs of the NVR are controllable PTZ cameras).

Protocol	Description
	- Select the existing custom protocol or customize other protocol, and click Edit to set the protocol parameters. You can click  to view the prompts. - Protocol Name: The custom protocol name can be edited. - Transmission Protocol: Obtain live video via the TCP or UDP protocol. Compared with UDP, TCP provides higher quality image, but has higher network requirements. - Port: Resource's port. - Live View: Live view URL address, used to obtain the main stream and sub stream live video. - Playback: Playback URL address, used to obtain the playback video. - Channel Name: Channel name key, used to obtain the channel name.  - Enable or disable Batch Add. Click On, and you can add resources in batches. Click Off, and you need to add resources one by one. The following takes adding resources in batches as an example. - Enter the start IP and end IP, and then the resources in the address segment will be automatically displayed in the list. - Enter the username and password of the resource. - Enter the channel number of resources. - Enter one by one: Click the empty area of the Number of Channels column, and then enter the number of resource channels separately. - Enter in batches: If the number of channels is the same for all resources in the list, enter the number of channels, and click Apply to All to automatically fill in the number for all resources. - If you do want to add resource(s) in the list, you can select the resource(s) and click Not Add Selected Device, or disable the Add or Not button for the resources one by one. - Click OK, and the resources are added successfully.

2. Manage Resource

View and manage the added resources.

Added Device(4) Auto Search + Add Delete Refresh Status Sync Channel							
✓	IP Address	Device Name	Device Type	Protocol	Device Model	Device Status	Operation
☐	192.168.1.101	IPC-1	IPC	ONVIF	HIC3531-IR@D-IR1-F20-AU-VA	Online	   
☐	192.168.1.102	IPC-2	IPC	ONVIF	IPC334S-IR3-PF36-DT	Online	   
☐	192.168.1.103	IPC-3	IPC	ONVIF	DS-2CD2145F-I	Offline(incorrect username or password)	   
☐	192.168.1.104	NVR-1	NVR	ONVIF	NVR501-16B-DT	Online	   

Item	Description																												
Delete	You can delete resources one by one or in batches. ● Delete one by one: Select the resource you want to delete, and then click . ● Delete in batches: Select the resources(s) you want to delete or click  to select all resources, and click Delete.																												
Refresh	Refresh all resource information.																												
Status	View the running status of the resources. Click  to view the status of all IPCs connected to the NVR. Status <table><thead><tr><th>Device Name</th><th>Device Type</th><th>IP Address</th><th>Status</th></tr></thead><tbody><tr><td>IPC-1</td><td>IPC</td><td>192.168.1.101</td><td> Online</td></tr><tr><td>IPC-2</td><td>IPC</td><td>192.168.1.102</td><td> Online</td></tr><tr><td>IPC-3</td><td>IPC</td><td>192.168.1.103</td><td> Online</td></tr><tr><td> NVR-1</td><td>NVR</td><td>192.168.1.104</td><td> Online</td></tr><tr><td> NVR-1_1</td><td>Camera</td><td></td><td> Online</td></tr><tr><td> NVR-1_2</td><td>Camera</td><td></td><td> Online</td></tr></tbody></table> Cancel	Device Name	Device Type	IP Address	Status	IPC-1	IPC	192.168.1.101	 Online	IPC-2	IPC	192.168.1.102	 Online	IPC-3	IPC	192.168.1.103	 Online	 NVR-1	NVR	192.168.1.104	 Online	NVR-1_1	Camera		 Online	NVR-1_2	Camera		 Online
Device Name	Device Type	IP Address	Status																										
IPC-1	IPC	192.168.1.101	 Online																										
IPC-2	IPC	192.168.1.102	 Online																										
IPC-3	IPC	192.168.1.103	 Online																										
 NVR-1	NVR	192.168.1.104	 Online																										
NVR-1_1	Camera		 Online																										
NVR-1_2	Camera		 Online																										
Sync Channel	Sync the latest channel information if it is changed.																												
	Edit the resource information, including resource name, IP address, username, password, etc. If the resource is offline due to the incorrect username or password, enter the correct user information, and then the resource will be online.																												
	Go to the resource's Web interface for remote control.																												
	Edit the channel name. The names of IPC and all channels connected to the NVR can be modified. After modification, the corresponding channel name on other interfaces will be changed synchronously. Channel Edit Device Name NVR-1 IP/Domain 192.168.1.104 ChannelNum: 2 1Channel Name: NVR-1_1 2Channel Name: NVR-1_2 OK Cancel																												

3.2 Resource Group

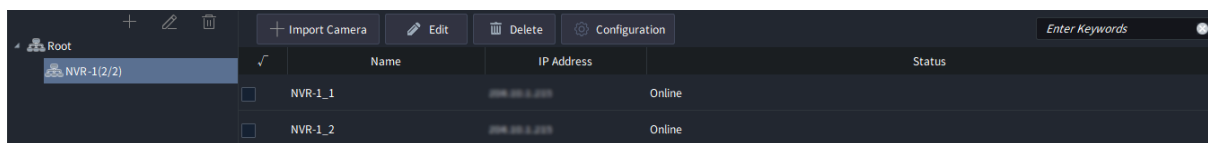
You can import the added IPCs, NVRs, and input nodes to various groups based on the actual networking and layout for unified management.

All IPCs will be assigned to the same group named as **IPC**. Every NVR will be assigned to an individual group, and the connected IPCs will be automatically imported to the corresponding NVR group.



NOTE!

This function is available to distributed output devices only.

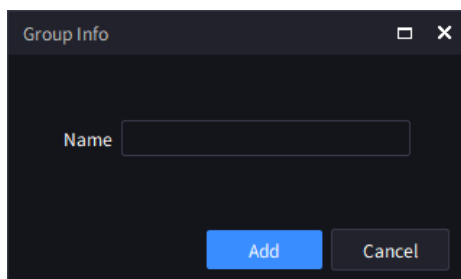


	Name	IP Address	Status
☐	NVR-1_1	2000.000.0.000	Online
☐	NVR-1_2	2000.000.0.000	Online

3.2.1 Add Group

You can add groups, assign resources to different groups, and manage them by groups. A same resource can be imported to various groups.

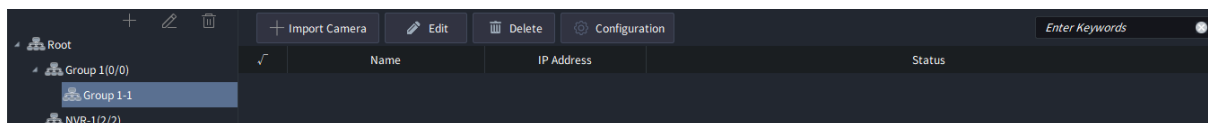
1. Choose an existing group, and then click . The **Group Info** page appears.



Group Info

Name

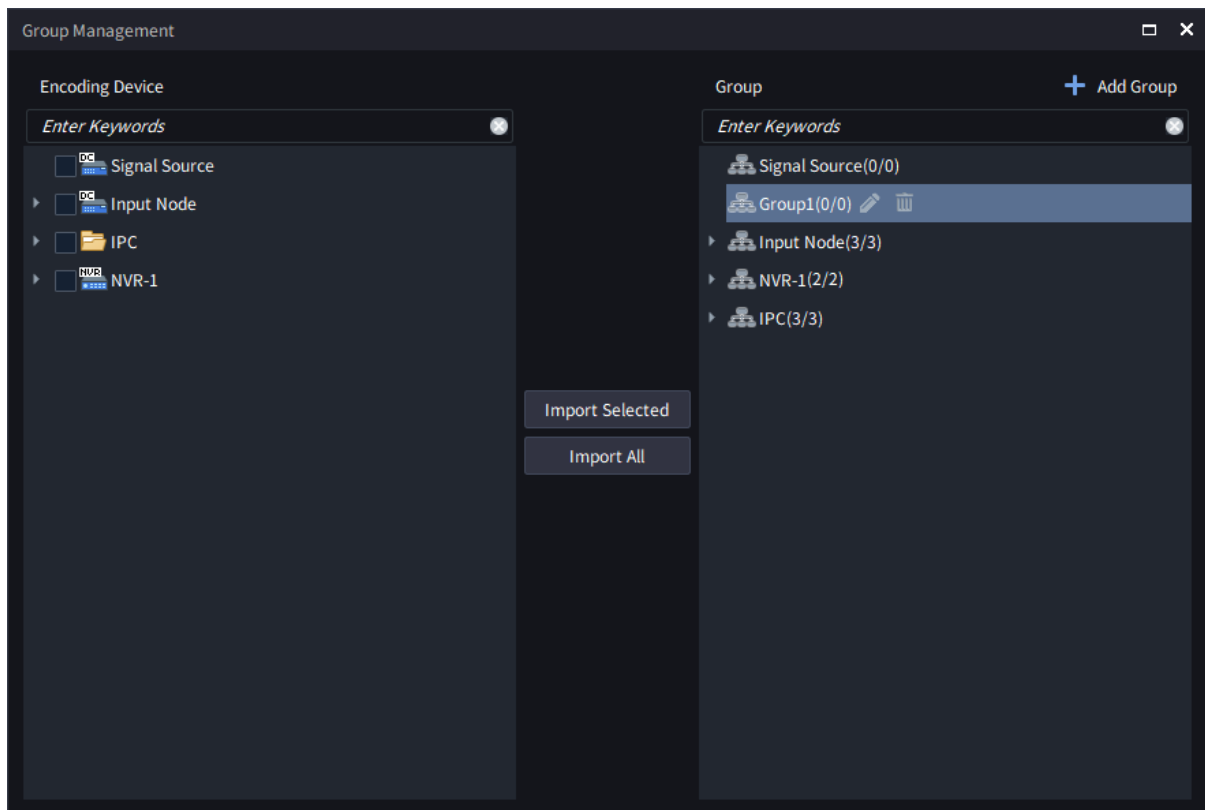
2. Enter a name for the group, click **Add**, and the new group will be added to the existing group.



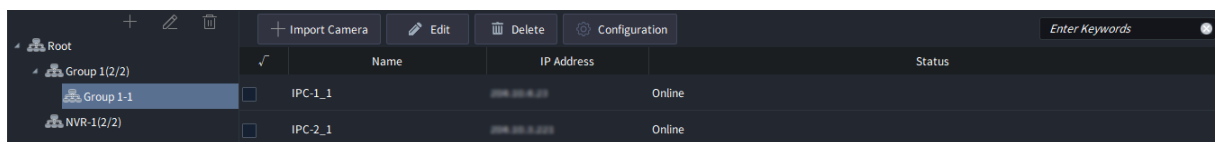
	Name	IP Address	Status
☐	Group 1(0/0)		
☐	Group 1-1		
☐	NVR-1(2/2)		

3. Click **Import Camera**. The **Group Management** window appears.

To add groups, click **Add Group** and then proceed to configure. In the **Group** area, choose a group/resource, and then click  or  to edit the group/resource name or delete it.

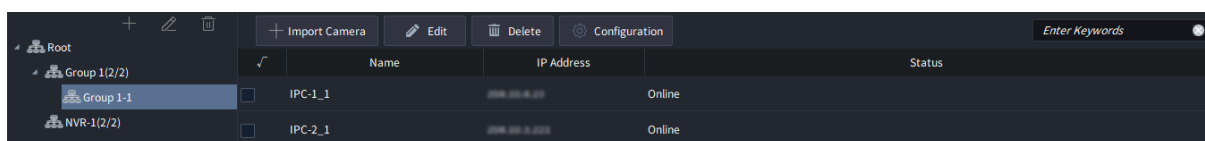


4. Select the resource(s) in the left list, select a group in the right list, click **Import Selected**, and the selected resources are imported to the specified group. To import all resources to a specified group, click **Import All**.



3.2.2 Manage Group

View and manage the added groups and resources of the groups.



Item	Description
	Edit the group name. The root name cannot be edited.
	Delete the group(s). The root group cannot be deleted.
Edit	Edit the channel name.
Delete	Delete the selected resource(s) from the group.

4 Video Wall Control

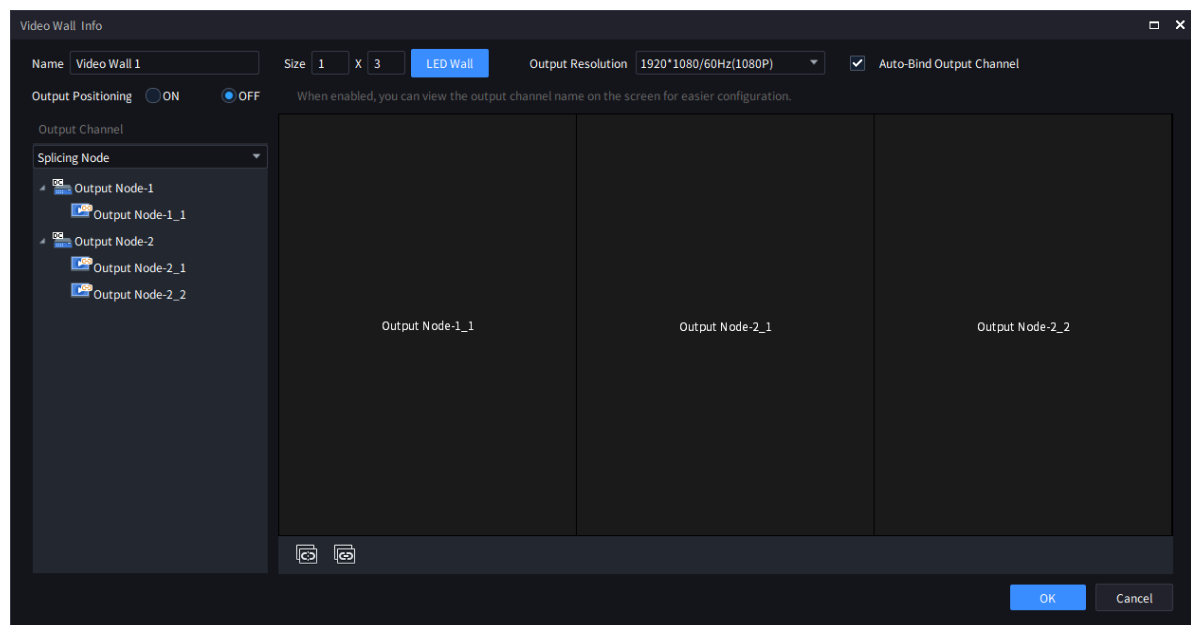
Create and manage video walls based on the actual wiring of managed devices (decoders, video wall controllers, distributed output-splicing nodes) and screens, and then operate them on the video wall, for example, play live video of IPCs added on the **Resource** tab on the video wall.

4.1 Video Wall Management

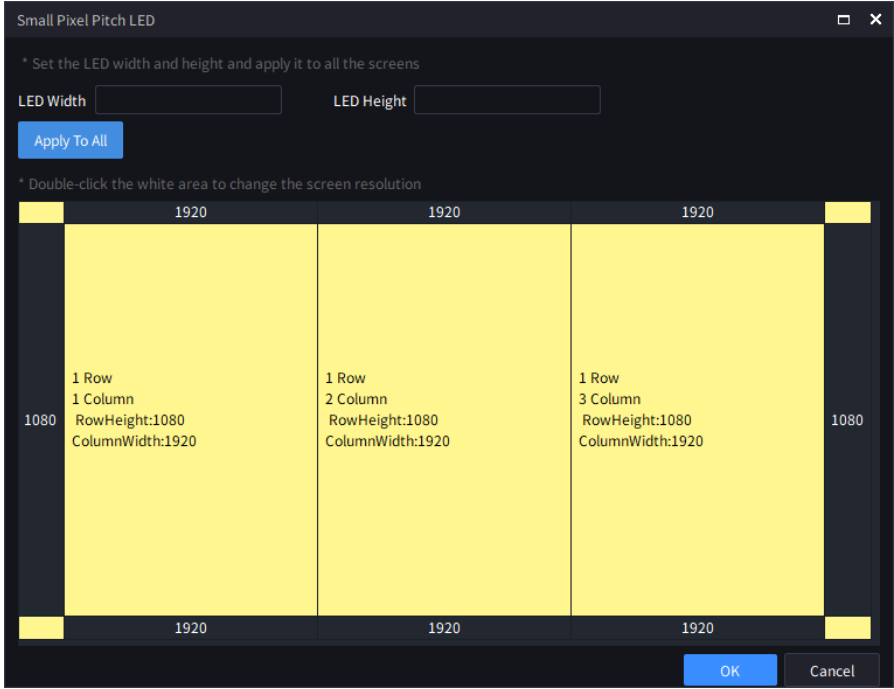
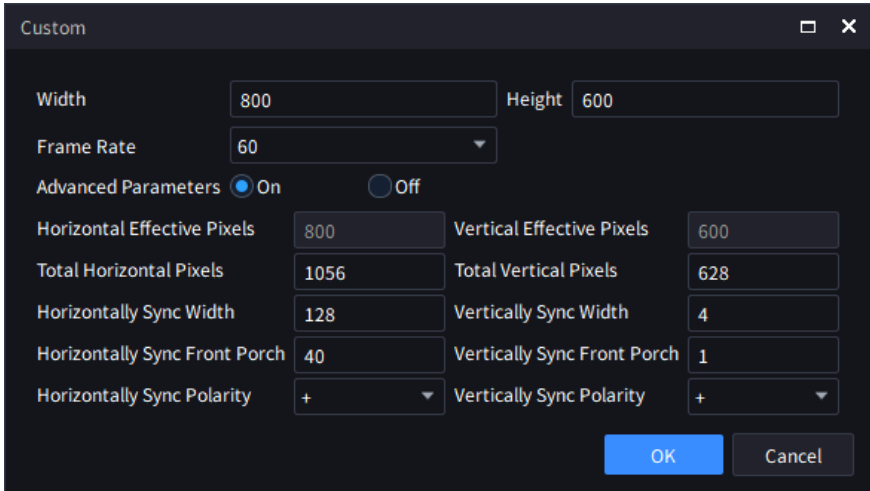
Create and manage video walls on the **Video Wall** tab.

4.1.1 Create Video Wall

- Click **+ Video Wall** to enter the **Video Wall Info** page, and set the video wall parameters. By default, the video wall size is automatically generated based on the number of output channels, and the output channels are bound to the video wall.



Item	Description
Name	Customize the video wall name to be displayed on the top side the Video Wall tab.
Size	By default, the video wall size is automatically generated based on the number of output channels. You can also set the layout based on the physical video wall, and the corresponding video wall will be displayed. ● LCD screen: Set the LED width and LED height according to the number of screens arranged horizontally and vertically on the video wall. ● LED screen: When using small pixel pitch LED screens, if some of the screen sizes differ from others, you can click LED Wall, and set the LED width and LED height for each row and column. ➢ Configure all: Enter the LED width and LED height, and click Apply To All. ➢ Configure row and columns separately: Double-click the resolution on video wall's rows and columns, and edit the parameters.

Item	Description
	
Output Resolution	Output channel resolution. Set it based on the resolution of the screen and sender card. Only certain devices support customizing the resolution, including width, height, frame rate, and advanced parameters. 
Auto-Bind Output Channel	It is enabled by default. When you create a video wall, the available output channels will be automatically bound to the video wall.
Output Positioning	When enabled, the actual connected ports will be displayed on the video wall, which helps to quickly bind the output channel to the video wall.
Output Channel	Each video output interface of the device corresponds to an output channel, which is bound to the video wall. The videos of IPC, PC, and other resources are decoded by the device and then displayed on the video wall screens through the video output interface.
	Unbind All: Cancel all bindings between output channels and windows.
	Bind All: Bind all the available output channels to the windows on the video wall.

2. Bind the output channels to the video wall screens according to the actual wiring.

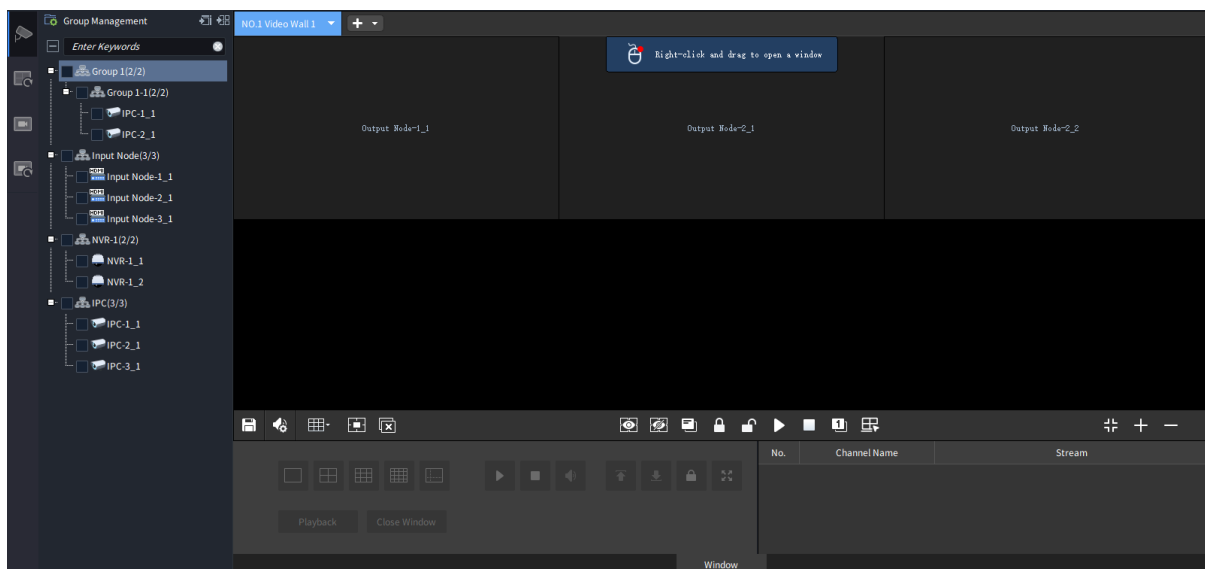
- Bind: Drag an output channel to a window for binding; or click  to bind all the available channels to the windows on the video wall.
- Rebind: Drag an output channel to an already bound window for rebinding.
- Unbind: Click  in the upper right corner of the bound window to cancel the binding; or click  to cancel all bindings.

**NOTE!**

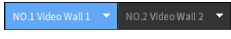
- Please bind the output channels to the windows on the video wall based on the actual wiring, otherwise the videos on the video wall may be disordered.
- Each output channel can only be bound to one video wall at the same time.

3. Click **OK**, and then the video wall is created.

4.1.2 Video Wall Introduction



Item	Description
	Video channel. Display resources in groups including video channels and input nodes added on the Resource tab. Drag a video channel to a window to start its live video on the physical video wall.
	Sequence resources. Add and manage sequence resources. Save multiple video channels in the set order and time interval as a sequence resource.
	Scenes. Add and manage scenes. Save the layout and video of the video wall as a scene. You can one-click to play the scene video on the video wall when needed.
	Scene sequence. Add and manage scene sequence plans. Save multiple scenes in the set order and time interval as a scene sequence plan.
Group Management	Click  , and import video channels to various groups for management. See Resource Group for details.

Item	Description
	Select a video channel, a video channel of sequence resource, or a sequence resource, and play it in one window/split window on the video wall.
	Play multiple video channels in multiple windows/split windows on the video wall.
	Video wall list. Click to select a video wall. The highlighted list in blue is the current video wall. Click  , and choose to edit or delete the video wall.
	Create a video wall. See Create Video Wall for details.
Video Wall Toolbar (upper side of the bottom toolbar)	Control and manage all windows on the video wall. : Save the current layout and video as a scene. : Audio management. Set the video output channel of the video wall. : Splice multiple windows to display one image. : Open windows. Open windows on the video wall or on the existing window. : Open a window by inputting the exact coordinates and size. : Close all windows. : Start live videos of the video channels in all the software windows. : Close live videos of the video channels in all the software windows. : Show window numbers on the physical video wall. : Lock all windows. The positions and sizes of windows cannot be adjusted. : Unlock all windows. : Start decoding to start live video or sequence in all windows. : Stop decoding to stop live video or sequence in all windows. : Renumber all windows according to the sequence from left to right and from top to bottom. : Pre-operate mode. Pre-set the window layout on the video wall, which will not affect the live video playing on the physical video wall. : Restore the original size after you zoom in or out on the video wall. : Zoom in on the window on the software. This operation does not affect the live video playing on the video wall. : Zoom out on the window on the software after zooming in (to the original ratio of the video wall for the minimum). This operation does not affect the live video playing on the video wall.
Window Toolbar (lower side of the bottom toolbar)	Control and manage the selected window. : Set the number and layout of split windows in the selected window, and operate the split windows. : Playback: Play back video in the selected window. : Close Window: Close the selected window. : Start decoding to start live video or sequence in the selected window. : Stop decoding to stop live video or sequence in the selected window. : Enable or disable audio output in the selected window. : The window will be displayed on the top.

Item	Description
	• : The window will be displayed on the bottom. • : Lock the selected window, and the window position and size cannot be adjusted. • : Unlock the selected window. • : Magnify a selected window/split window to full screen, and play it on the physical video wall. Click  to restore the original size. Note: Right-click the desired window and choose the operation from the pop-up toolbar, such as display the window on the top/bottom, lock the window, etc.
Virtual LED	Overlay the virtual LEDs on the video wall. See Virtual LED for details. Note: This function is available to certain devices only.
Background Image	Set the background image for the video wall. See Background Image for details. Note: This function is available to certain devices only.

4.2 Window Management

All video operations on the video wall are performed based on windows.

A video wall that is not bound to any output channel cannot display videos.

Videos cannot be decoded on the video wall if the video wall is not bound to any output channel.

If part of the video wall is bound to output channels, then bound windows will play videos, while the unbound windows will not play videos.

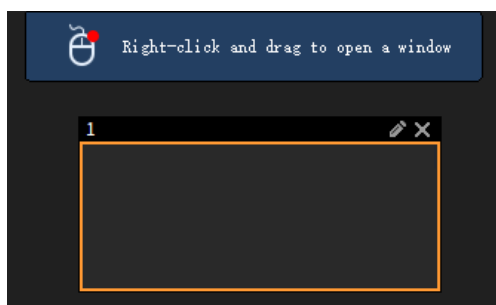
4.2.1 Open Window

When opening windows on a video wall, the window serial number will be automatically generated in the upper-left corner according to the order in which the windows are opened. You can open windows one by one or in batches.

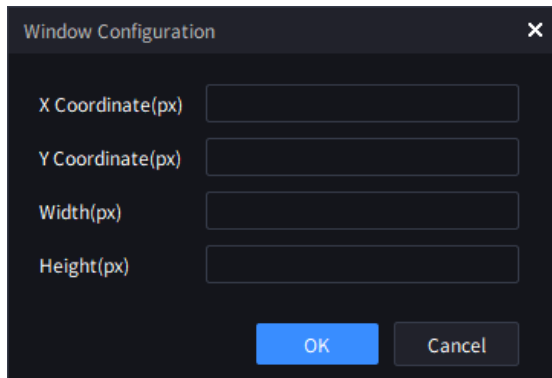
Open a Window

- Press and hold the right mouse button and drag to open a window.

If the window you want to open is too small, it will be automatically magnified to the minimum window size (generally 174*144, may vary depending on the device).



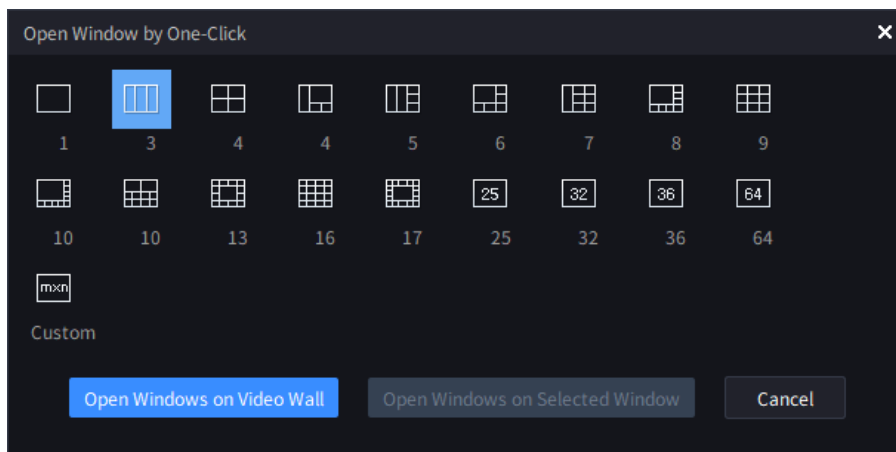
- Open window by coordinates: Click , set the window coordinates and size on the **Window Configuration** page, and click **OK** to open the window.
 - X/Y coordinate: The coordinates in the upper-left corner of the window.
 - Width/Height: The width and height of the window.



Open Windows in Batches

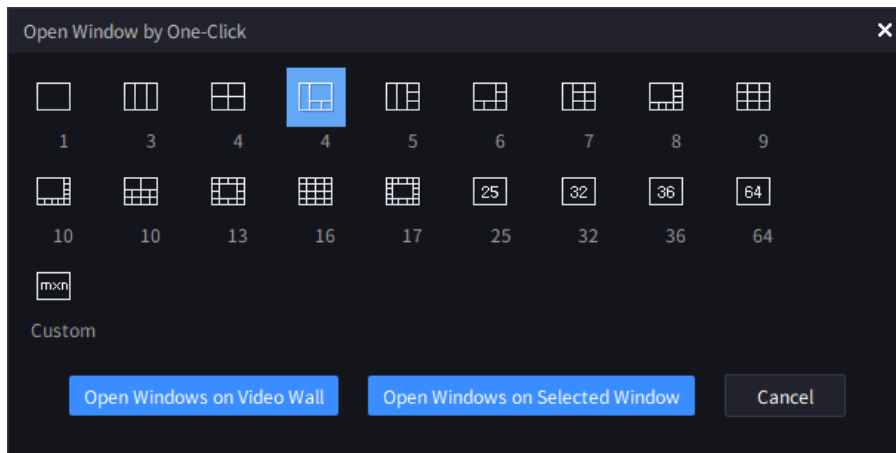
- Open Windows on Video Wall: Click , choose an existing layout or click  to customize a layout, and click **Open Windows on Video Wall**, then the windows will be opened on the whole video wall.

If there are existing windows on the video wall, opening windows in batches will close the existing windows and open new windows based on the set layout.



- Open Windows on Selected Window: Choose an existing window, click , choose an existing layout or click  to customize a layout, and click **Open Windows on Selected Window**, then the windows will be opened on the selected window.

If the window you want to open is too small, it will be automatically magnified to the minimum window size (generally 174*144, may vary depending on the device).

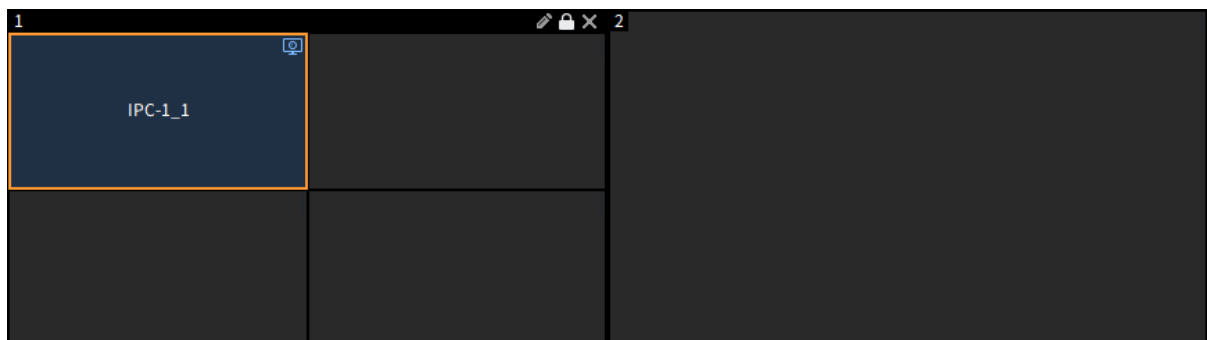


4.2.2 Split a Window

Split a window into multiple windows to play different videos.

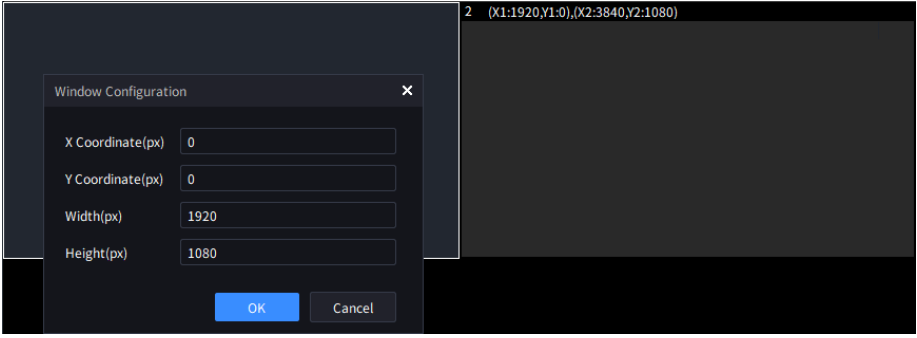
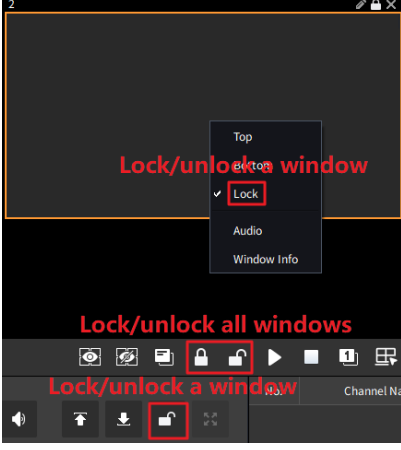
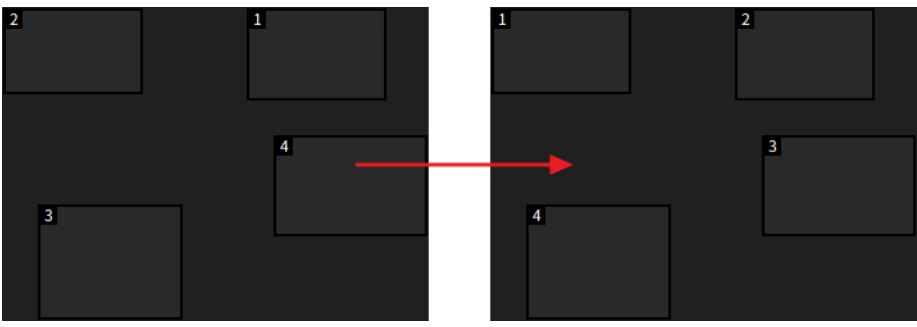
Select a window, choose a layout from , and then the window will be split into multiple windows. Or click  to choose other layout.

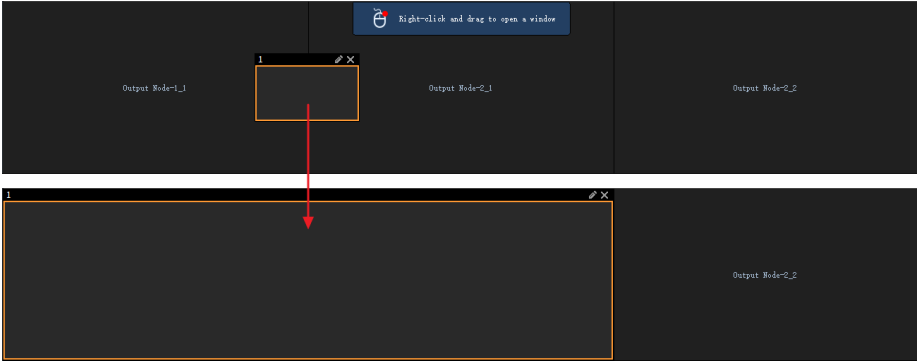
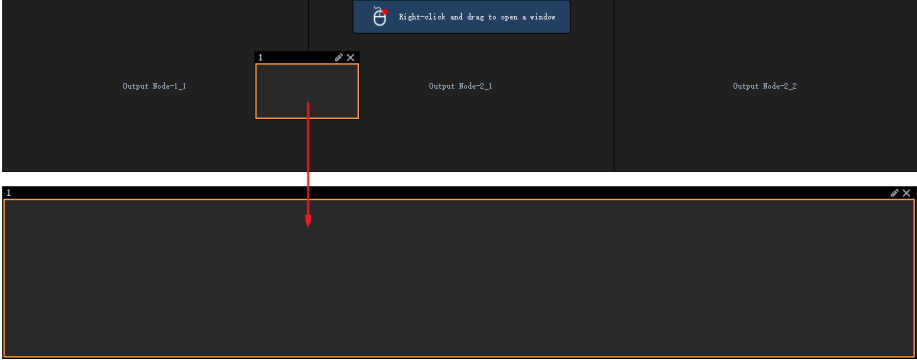
If video is playing in a window, splitting the window will not close the video; it will continue to play in a split window.

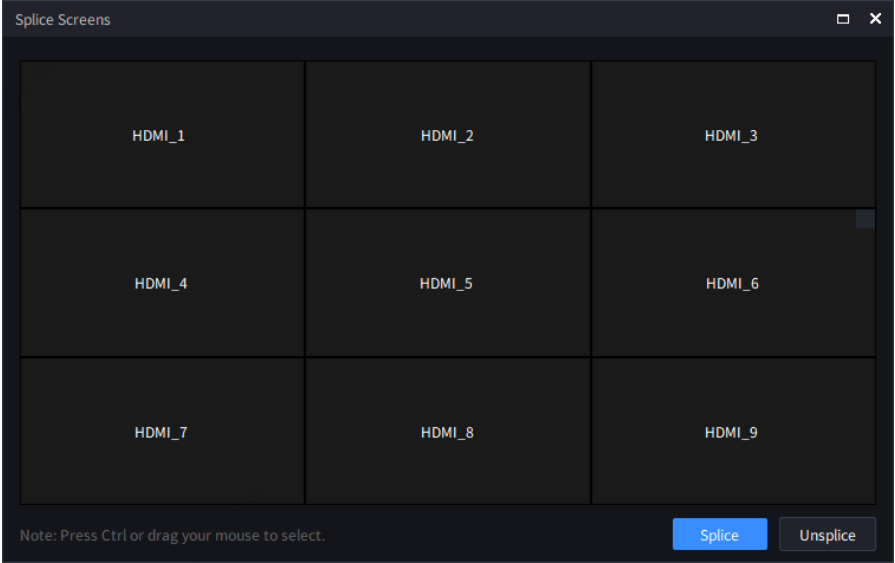


4.2.3 Manage Window

Item	Description
Adjust window position and size	● Direct adjustment: ➢ Select the window and drag it to adjust the position. ➢ Move the mouse cursor to the window border until it changes to a two-way arrow, then click and drag the arrow to adjust the window size. ● Precise adjustment: Click  in the upper-right corner of the window, and then the Window Configuration dialog box appears. Edit the coordinates and width/height, click OK, and the window will change in the set coordinates and size.

Item	Description
	 Note: The window position and size cannot be adjusted if the window is locked.
Lock window position and size	- Lock all windows: Click  to lock all windows on the video wall. Click  to unlock all windows. - Lock a window: Choose a window, click , or right-click and choose Lock, and the window will be locked. To unlock it, click , or right-click and choose Lock. 
Renumber windows	The windows are automatically numbered when created. Click  to renumber all the windows in accordance with the window positions, from left to right, from top to bottom. 
Zoom in on the video wall on the software	Zoom in on the video wall on the software for easy operation. This operation does not affect the display effect on the physical video wall. - Zoom in on the video wall: Click , or press and hold Ctrl and scroll up the mouse wheel to zoom in on the video wall. Drag the slider on the bottom and right of the video wall to adjust its position. - Zoom out on the video wall: After the video wall is magnified, click , or press and hold Ctrl and scroll down the mouse wheel to zoom out on the video wall. - Restore video wall size: Click  to restore the original size.
Overlay Windows	Set the window arrangement position when multiple windows overlay.

Item	Description
	Click a window, and then click ; or right-click and select Top/Bottom to display the window on the top/bottom. If you enable Selected window always on top on the Client Config window, click a window, and the window will be displayed on the top.
Magnify window/split window	Click a window/split window and then click ; or double-click a window/split window; or right-click a window/split window and then choose Full to magnify the window/split window; click  to restore the original size. The magnified effect depends on the window zoom in mode set in the device's Web interface. ● Magnify a window: ➢ Normal mode: The window will be magnified to fill the currently occupied output channel(s).  ➢ Full screen mode: The window will be magnified to fill all output channels on the video wall.  ● Magnify a split window: The split window will be magnified to fill the currently occupied window. 
Splice windows	Splice multiple windows to display one image. Four methods are available to select windows. ● Drag to select multiple windows. ● Click a window, press and hold the Shift key, and then click another window to select all the windows in between. ● Press and hold Ctrl, and click to select multiple windows. ● Press <Ctrl+A> to select all windows. After selecting multiple windows, the Splice Screens page appears and displays the splicing effect. Click Splice to complete the screen splicing.

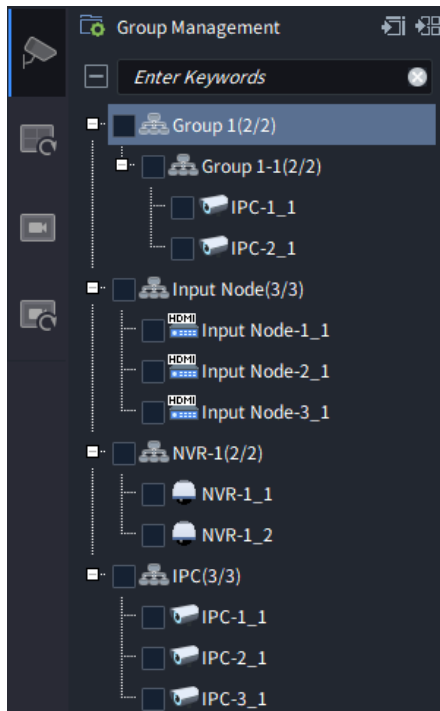
Item	Description
	You can also click  to enter the Splice Screens page, select multiple windows based on the four methods above, and then click Splice.  To cancel the splicing, select a split window on the video wall, and right-click to choose Unsplice; or select a split window on the Splice Screens page, and click Unsplice. Note: Only certain devices that does not support customizing the window layout allow to splice windows.
View window/split window information	Select a window or split window, and right-click to choose Window Info .
Close window	● Close a window: Choose a window, and click  in the upper right corner or click Close Window to close it. ● Close all windows: Click  to close all the windows on the video wall.

4.3 Video Wall

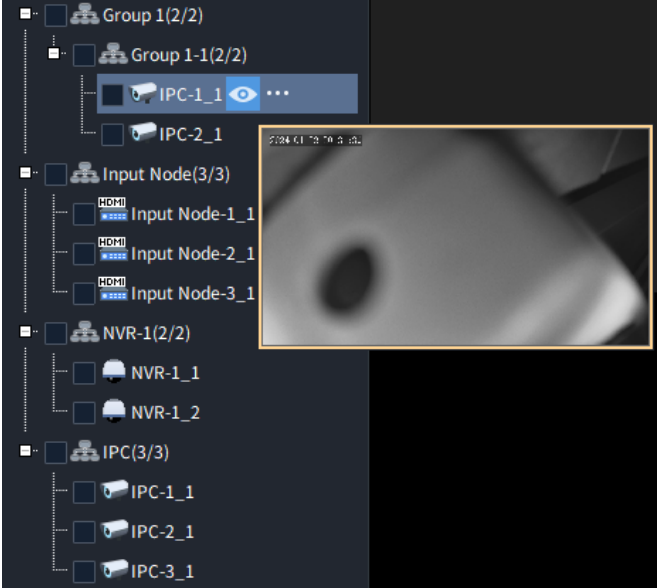
Operate on the video wall, such as viewing live video, playing sequence resources, etc. The **Video Wall** page shows the name of video channels, and the corresponding video will be played on the physical video wall.

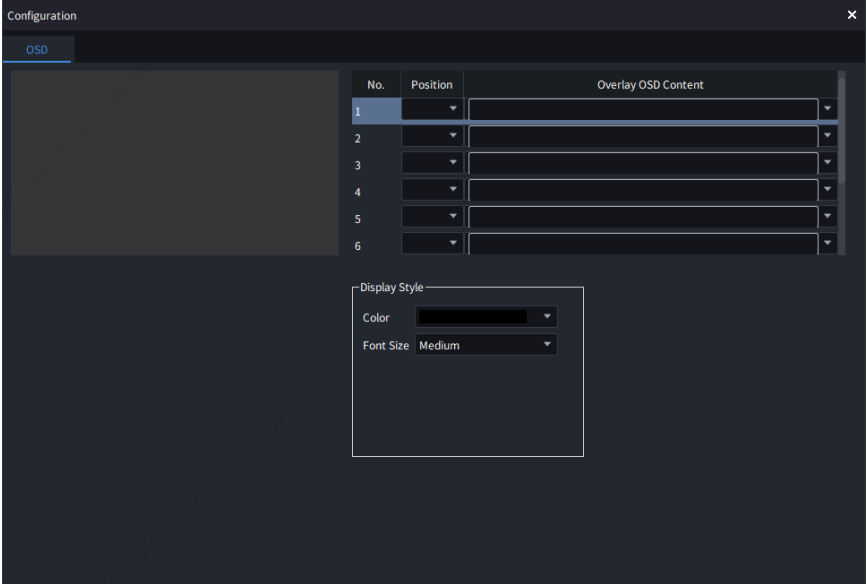
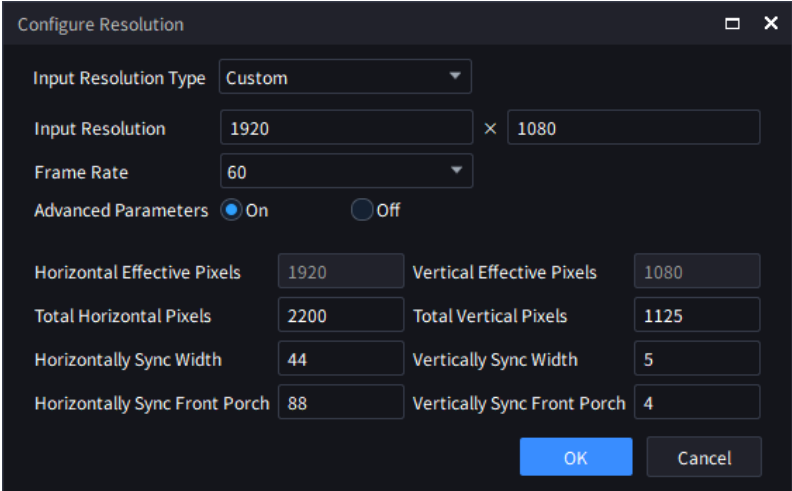
4.3.1 Video Channel

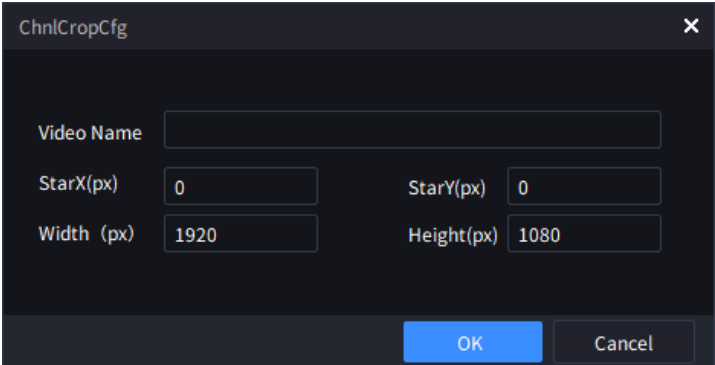
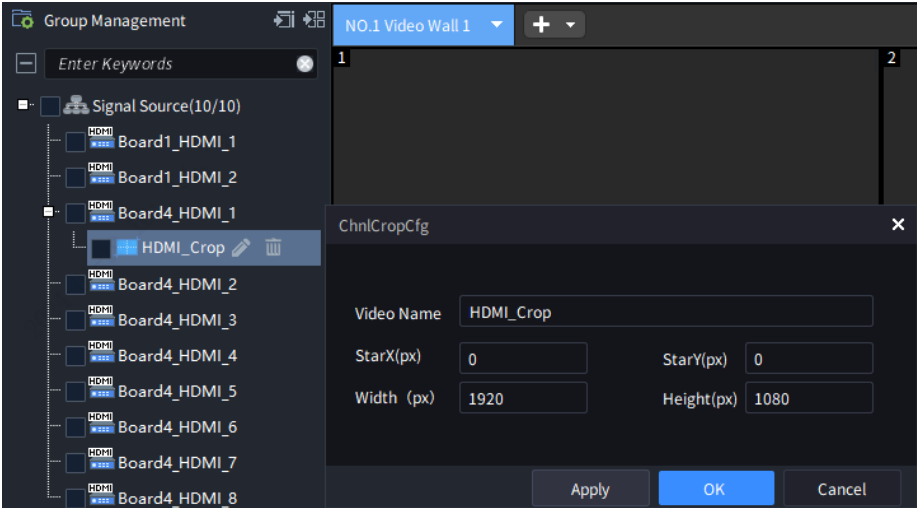
The left-side list shows resources in groups, including video channels and input nodes added on the **Resource** tab. Drag a video channel to a window to start its live video on the physical video wall.



1. Video Channel Management

Item	Description
Group management	Click  , and import video channels to various groups for management. See Resource Group for details.
Preview	Choose a video channel, and click  to preview the live video. Note: This function is available to certain devices only. 
Channel Management	Choose a video channel, and click  to manage it. ● Edit Channel Name: Edit the name of the video channel. ● OSD Configuration: If the video channel is a distributed input node, you can configure the OSD content and style, and then the OSD content will overlay on the live video of the corresponding video wall or KVM screen.

Item	Description
	➤ Display position: Set the display position of OSD. Up to 1 OSD is allowed for each area. You can drag the OSD area box to adjust its position, and preview the OSD position on the left window. ➤ Overlay OSD Content: Customize the OSD content. ➤ Display Style: Set the OSD font size and color.  ● Audio: If the video channel is an input node, enable Audio Input and configure it on the Web interface of the input node, and then the audio input channel can be configured on the software. Supports independent audio and HDMI audio. ➤ Independent: Uses the audio collected from the audio input interface of the independent audio device, such as the sound pick-up. ➤ HDMI audio: Uses the audio collected from the HDMI input interface. ● Configure Resolution: When the video channel is a local signal source, you need to configure the input resolution according to the actual signal source size. ➤ Self-adaptive: The video channel automatically adapts to the resolution of the local signal source. Only certain resolutions can be self-adaptive, such as 1080P and 720P. If the resolution is a special value, please set the resolution type to Custom. ➤ Custom: Supports customizing the resolution, frame rate, and advanced parameters.  ● Crop signal source: When the video channel is a local signal source, the video size can be cropped. Enter the video name after cropping, set the video position and size to be cropped, click OK, and then the cropped video will be displayed below the original signal source.

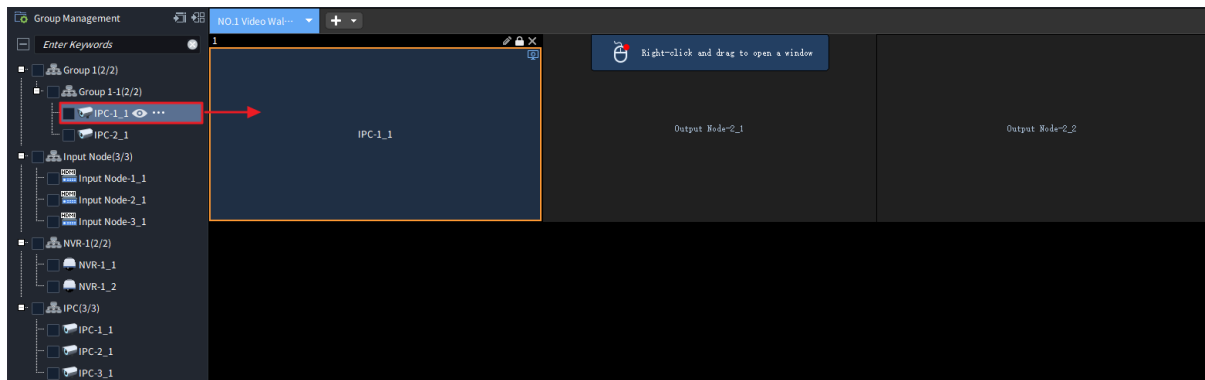
Item	Description
	➤ Start coordinate X/Y: The coordinates in the upper-left corner of the video. ➤ Width/Height: The width and height of the video.  After the cropped video is displayed on the window, you can edit the video size as needed, and click Apply to view the cropped effect on the window. After you determine the suitable size, click OK to complete the setting. 

2. Play Live Video on Video Wall

Select the video channel(s) to the window(s) and play the live videos on the physical video wall. Four methods are available.

- Drag video channel(s) to window(s): Select video channel(s), and drag to play it or them on video wall window(s).

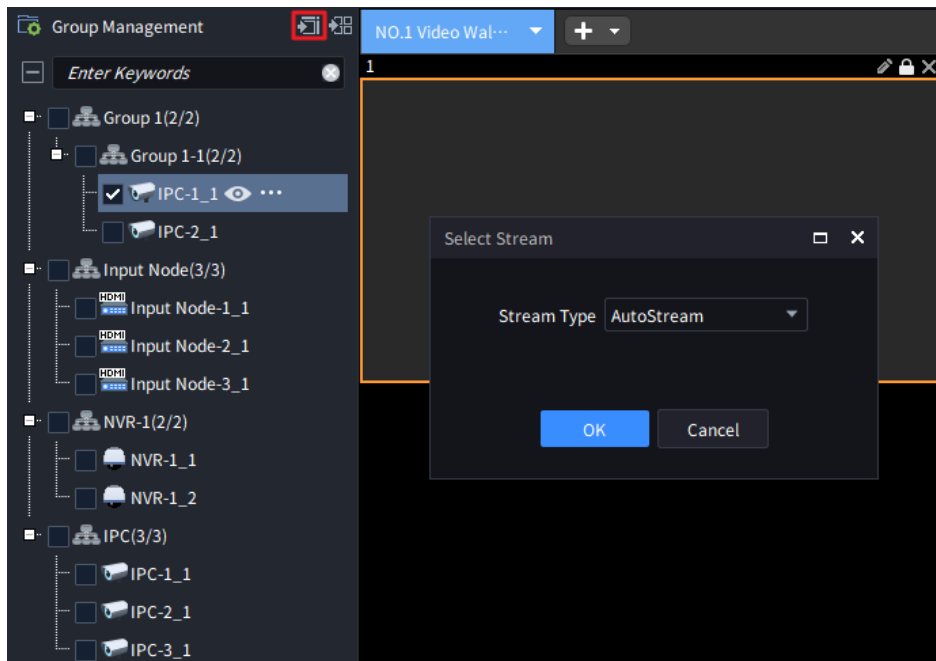
If video channels are dragged to the position where the window is not opened, windows will be automatically opened according to the size of the output channel and play the video of the video channels. If the number of selected video channels is more than the number of windows or output channels, the redundant video channels are not displayed.



- Click a window/split window to play:

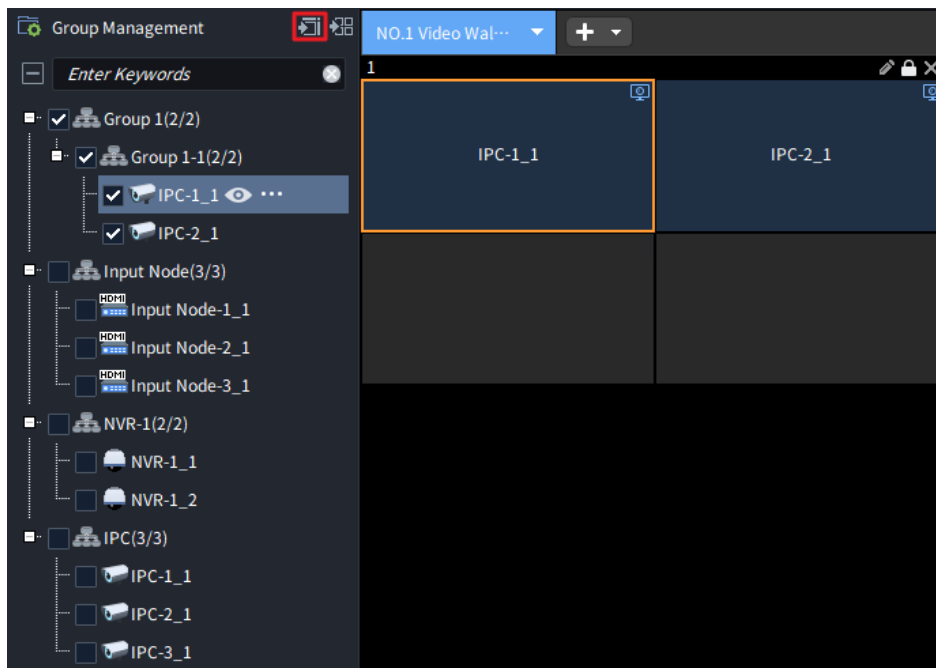
- Click a window, select a video channel, click , select the stream type, and then the video will be displayed on the selected window.

The stream type includes main stream, sub stream, and third stream, and the live video effect decreases in order. If you select **AutoStream**, the system will adaptively output the main or sub stream video based on the set window stream threshold, and the number of windows and split windows of the output channels.



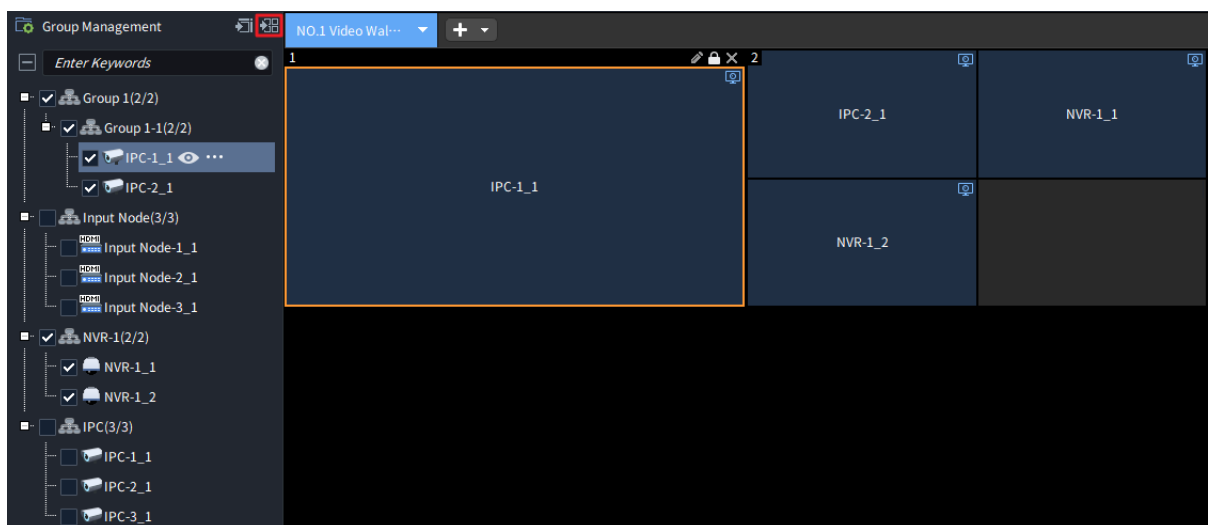
- Click a split window, select video channel(s), click , select the stream type, and then the selected video(s) will be played on the split window in order.

If the selected number of video channels is more than the number of split window, the extra video channels are not displayed.

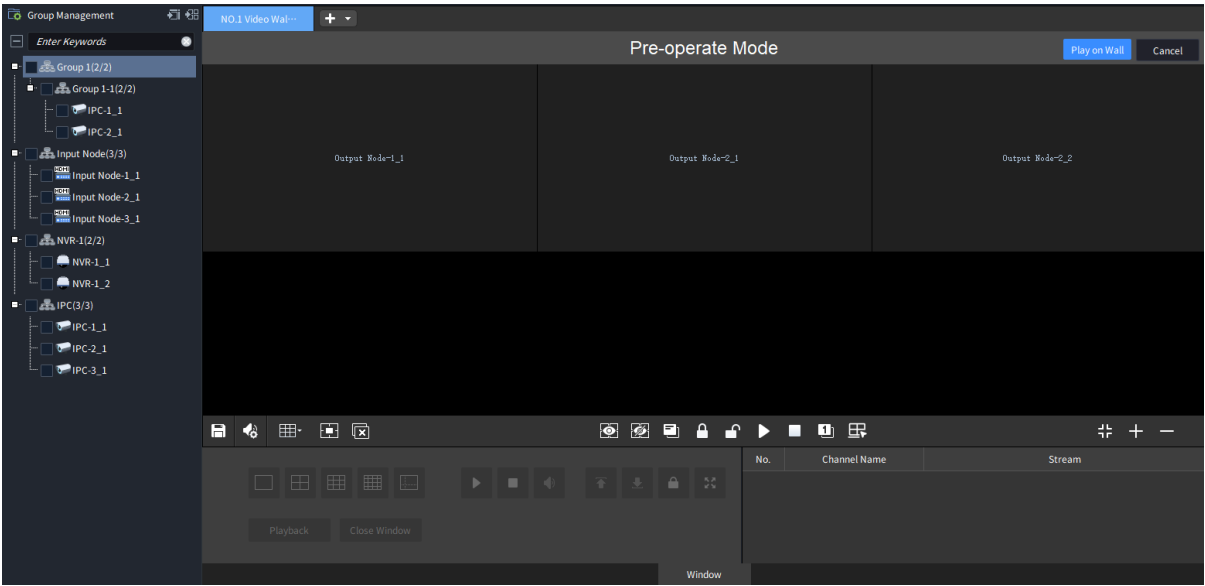


- Play on the whole video wall: Click a window/split window, select multiple video channels, click , select the stream type, and then the selected videos will be played on the selected window/split window in order.

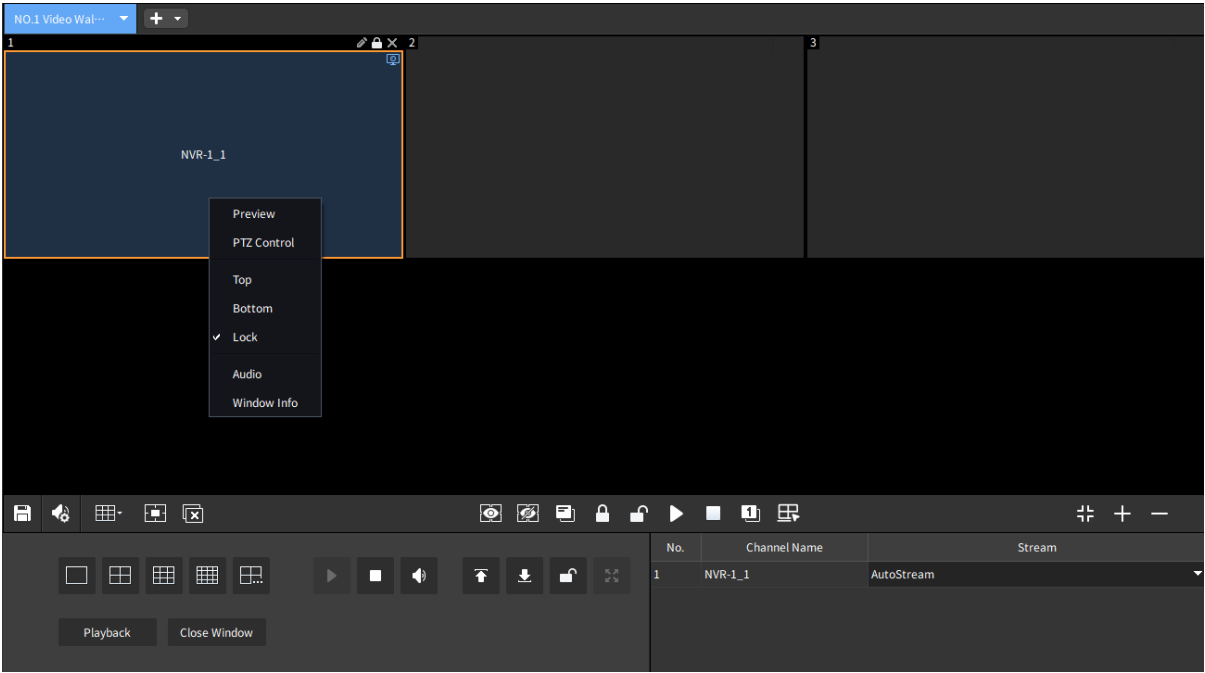
If the selected number of video channels is more than the number of window/split windows, the extra video channels are not displayed.



- Pre-operate: Click  to enter the **Pre-operate Mode** page. Pre-set the window layout, and click **Play on Wall** to play the video on the physical video wall.

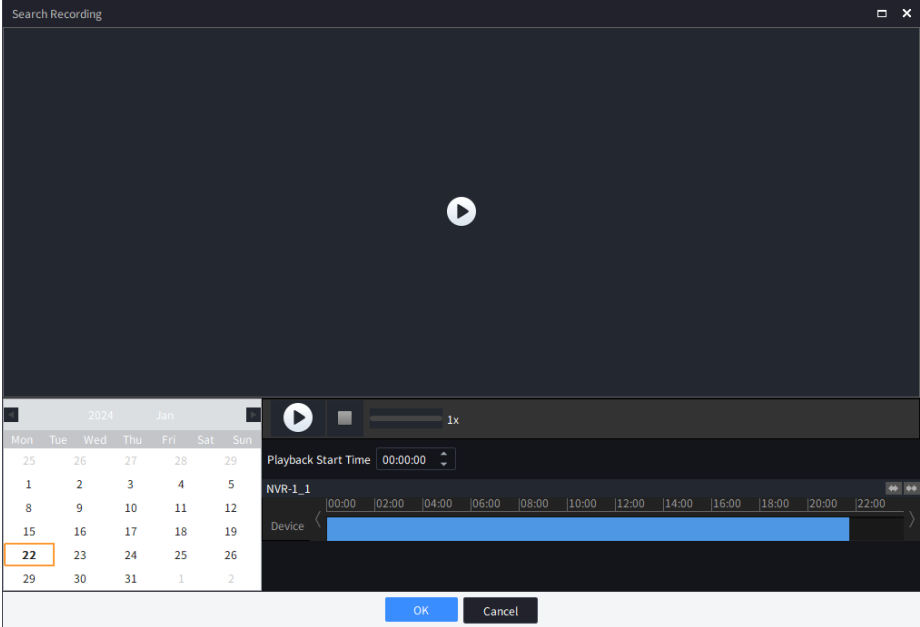
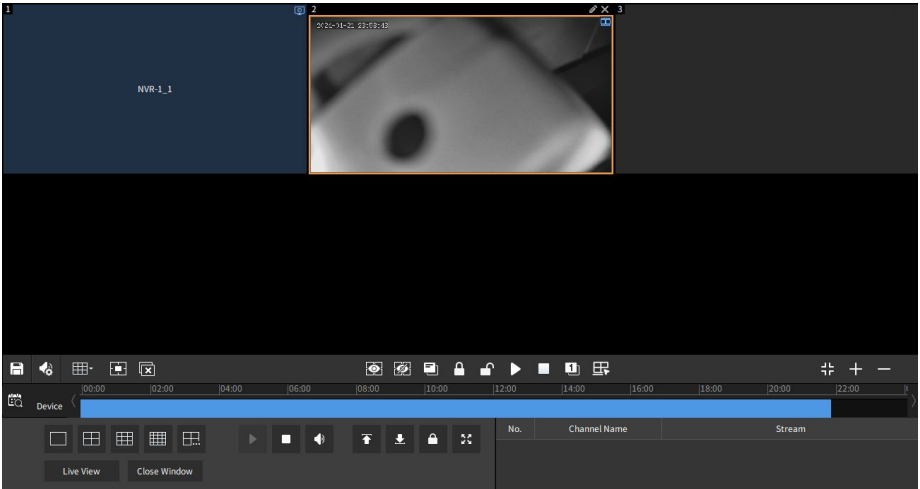


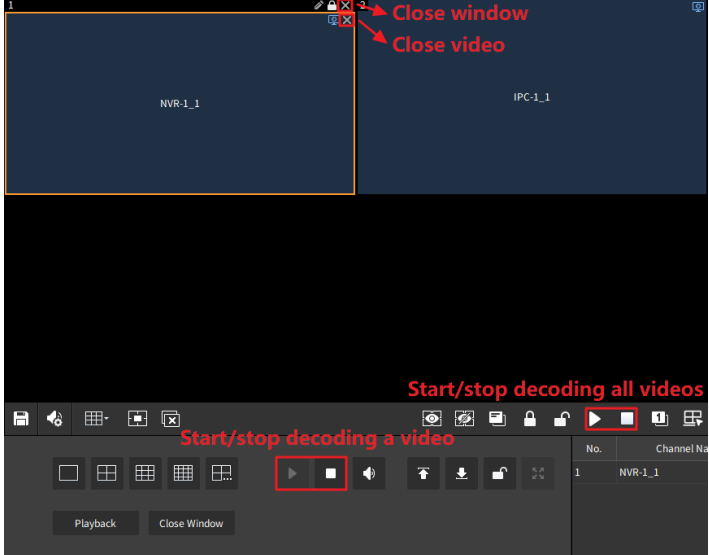
3. Manage Videos on Video Wall



Item	Description
Preview	Preview live video of video channels in windows on the video wall. - Preview video one by one: Right-click the window you want to preview, and click Preview. - Preview all live videos: Click . To close all live videos, click .

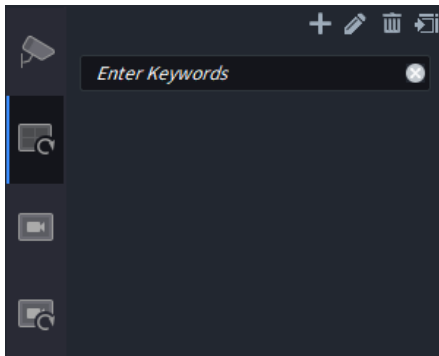
Item	Description																		
	1 NVR-1_1 2 2024-11-13 22:01:24																		
Stream	Click a window/split window, and change the stream type in the lower-right corner. ● Auto stream: Adaptively output the main or sub stream video based on the set window stream threshold, and the number of windows and split windows of the output channels. ● Main stream, sub stream, third stream: The live video effect decreases in order. <table><tr><th>No.</th><th>Channel Name</th><th>Stream</th></tr><tr><td>1</td><td>NVR-1_1</td><td>AutoStream</td></tr><tr><td></td><td></td><td>Main</td></tr><tr><td></td><td></td><td>Sub</td></tr><tr><td></td><td></td><td>Third</td></tr><tr><td></td><td></td><td>AutoStream</td></tr></table>	No.	Channel Name	Stream	1	NVR-1_1	AutoStream			Main			Sub			Third			AutoStream
No.	Channel Name	Stream																	
1	NVR-1_1	AutoStream																	
		Main																	
		Sub																	
		Third																	
		AutoStream																	
Audio output channel management	Click a window/split window and then click ; or right-click to choose Audio to set the audio output channel for the video channel. You can disable the audio output, and play the audio from the external audio device, for example, speaker. Click a window, and click to enable/disable audio output. The icon in the top-right corner of the window shows the audio output is enabled. When the audio is outputting, hover over to adjust the audio volume by dragging the slider. Note: If the video channel is an input node, enable Audio Input and configure it on the Web interface of the input node, and then the audio input channel and audio output channel can be configured on the software. See Video Channel Management for details.																		
PTZ Control	If the video channel is a PTZ camera, you can control the camera to rotate, zoom, focus, turn on light, enable wiper, etc. The PTZ functions may vary with camera model. Click a window/split window, and right-click to choose PTZ Control to control the PTZ camera. NVR-1_1 速度: + ● : ➢ Direction keys: Control the rotation direction of the camera. ➢ : Rotate the camera automatically. ● : Focus far/near for sharp images at a distance/at close range. ● : Zoom in or out on images. ● : Adjust the rotation speed of the camera. ● : Light, used for illumination at night. ● : Wiper. Remove obstructions from the lens, for example, rain.																		

Item	Description
	● : Heat mode. Heat the lens to remove fog from the lens. ● : Snow removal mode. Shake the camera to remove snow.
Playback	If the video channel on the video wall supports playback, click a window/split window, and click Playback to view the recording on the Search Recording page.  Choose a desire date, click the time on the right progress bar, and click OK to play the corresponding recording on the video wall.  Click , and Search Recording page appears. You can search the recording of other dates. Click Live View, then the playback will be closed, and the live video will be played. Note: The timeline in blue indicates the there is recording at this time, while the timeline in gray shows there is no recording at this time.
Stop playing on video wall	Click a window/split window, and you can play or stop live video(s) of video channel(s) via three methods: ● Stop decoding: Stop decoding live video(s) of the video channel(s), and then the windows will be black or show the last frame before stopping decoding. Click  to stop decoding. Click  to resume decoding, and  is displayed in the upper-right corner of the window/split window.

Item	Description
	● Close video: Choose a window/split window, click  in the upper right corner to close the video. ● Close window: Choose a window/split window, click  in the upper right corner to close the window. 

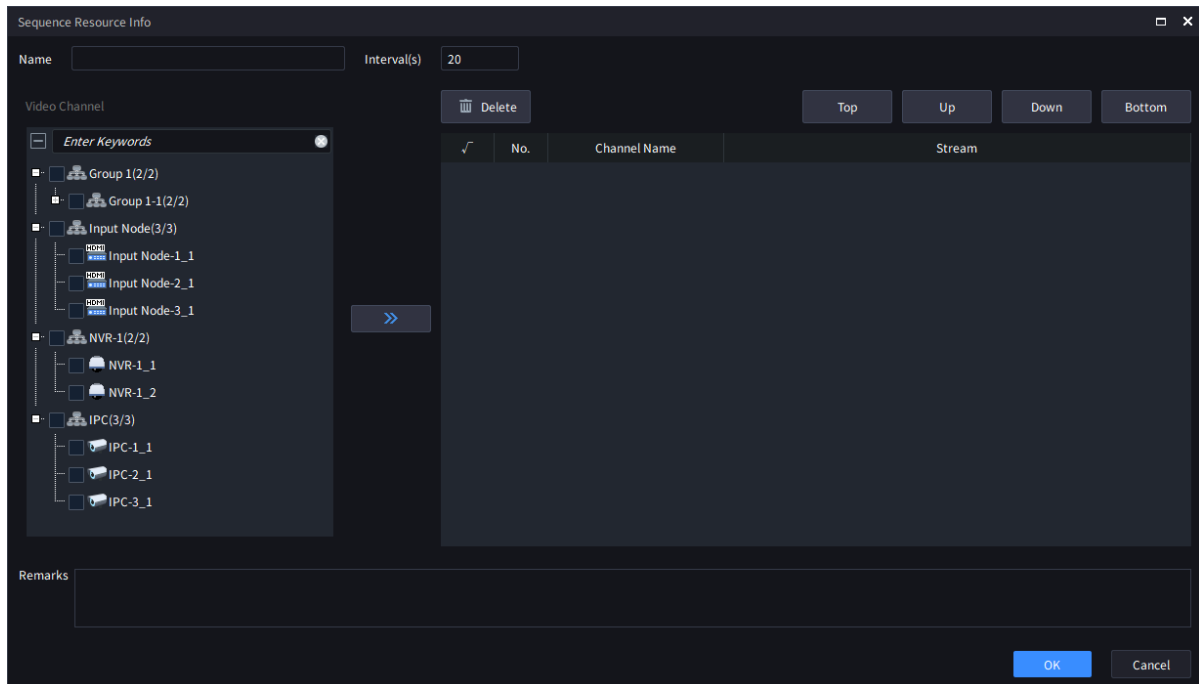
4.3.2 Sequence Resource

Add and manage sequence resources. You can save multiple video channels in the set order and time interval as a sequence resource, and play the sequence resource on a window or multiple windows.

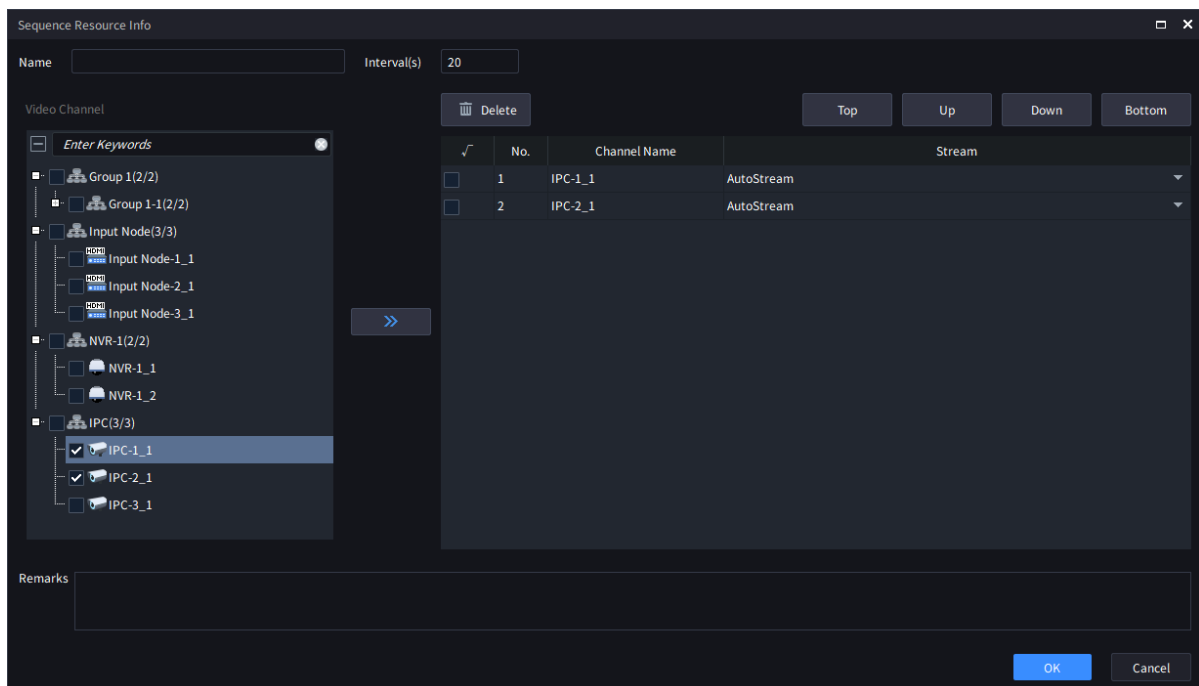


1. Add Sequence Resource

1. Click , and the **Sequence Resource Info** page appears.



2. Enter a sequence resource name, set the play interval of video channels, select video channels, and click  to add them to the sequence resource.

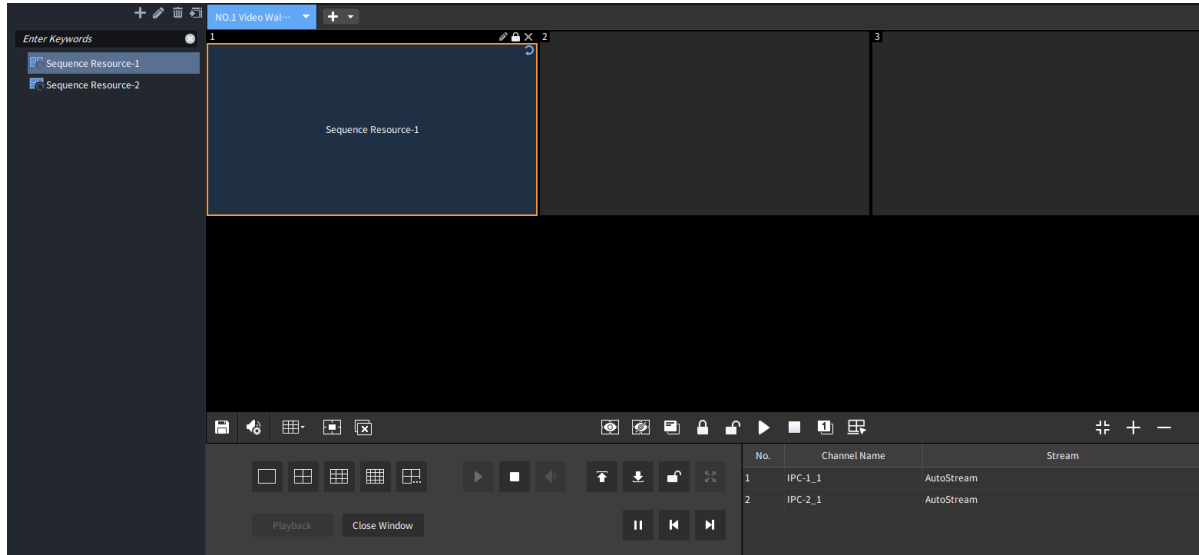


3. Adjust the sequence resource.
 - Adjust play order: Choose a video channel, and click **Top/Up/Down/Bottom** to adjust the play order.
 - Change stream type: Click  from the **Stream**, and change the stream type as needed.
 - Delete video channel: Select the channel(s) or check  to select all channels, and click **Delete**.
4. Click **OK**. The added sequence resource will be displayed in the left list.

2. Play Sequence Resource on Video Wall

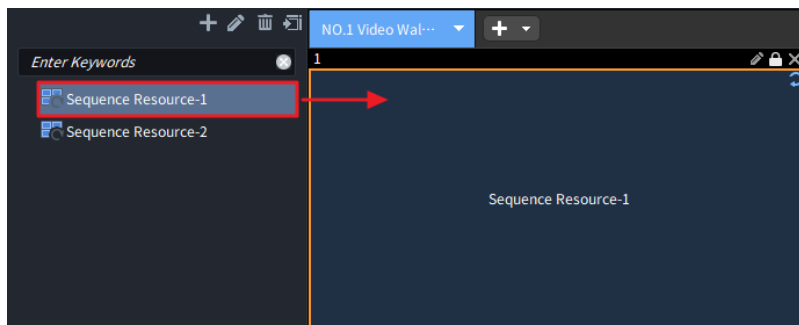
Start multiple videos of a sequence resource in window(s) on the video wall in the set order at the set interval.

Supports playing videos in one window or multiple windows.



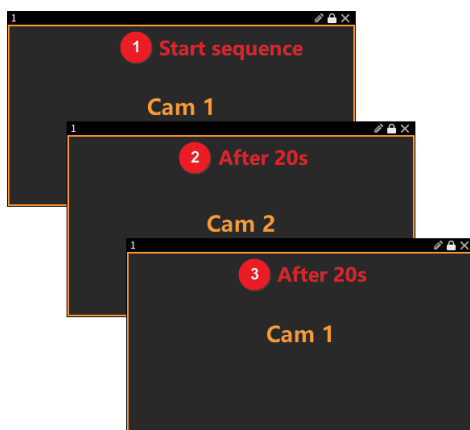
Sequence in One Window

Drag a sequence resource to the window(s) on the video wall.



Example 1

Sequence 2 video channels (Cam 1, 2) on a window (with one split window) at an interval of 20 seconds.

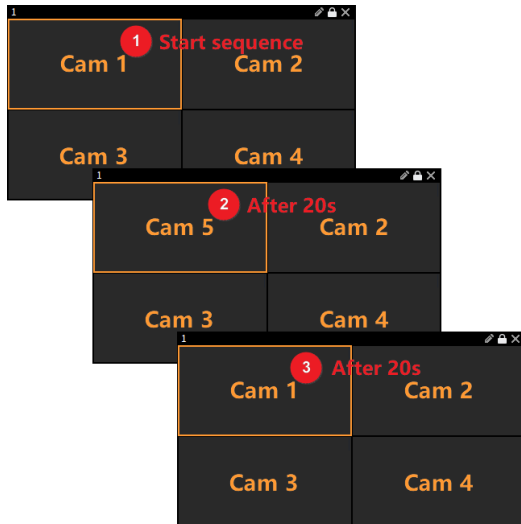


1. Start sequence: play Cam 1.

2. Switch in 20 seconds: play Cam 2.
3. Complete a round after 20 seconds and start over: play Cam 1.

Example 2

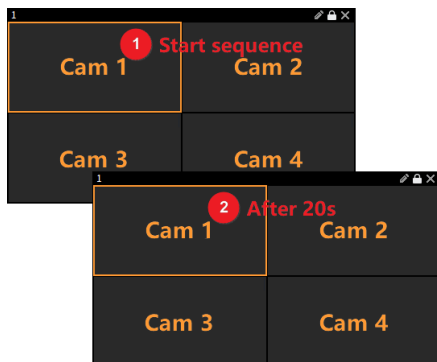
Sequence 5 video channels (Cam 1, 2, 3, 4, 5) on a window (with four split windows) at an interval of 20 seconds.



1. Start sequence: play Cam 1, 2, 3, 4 on the four split windows.
2. Switch in 20 seconds: play Cam 5 on the split-window 1, and other split windows remain the same (Cam 2, 3, 4).
3. Complete a round after 20 seconds. Repeat the process, and play Cam 1, 2, 3, 4 on the four split windows.

Example 3

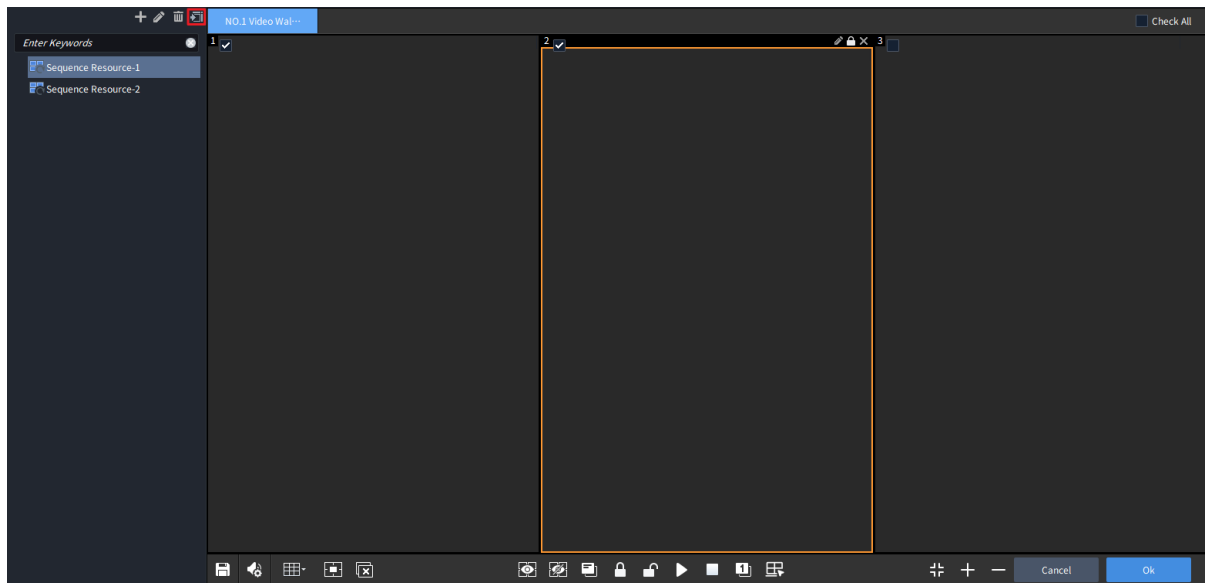
Sequence 4 video channels (Cam 1, 2, 3, 4) on a window (with four split windows) at an interval of 20 seconds.



1. Start sequence: play Cam 1, 2, 3, 4 on the four split windows.
2. Switch in 20 seconds: remain unchanged and continue to play Cam 1, 2, 3, 4 on the four split windows.

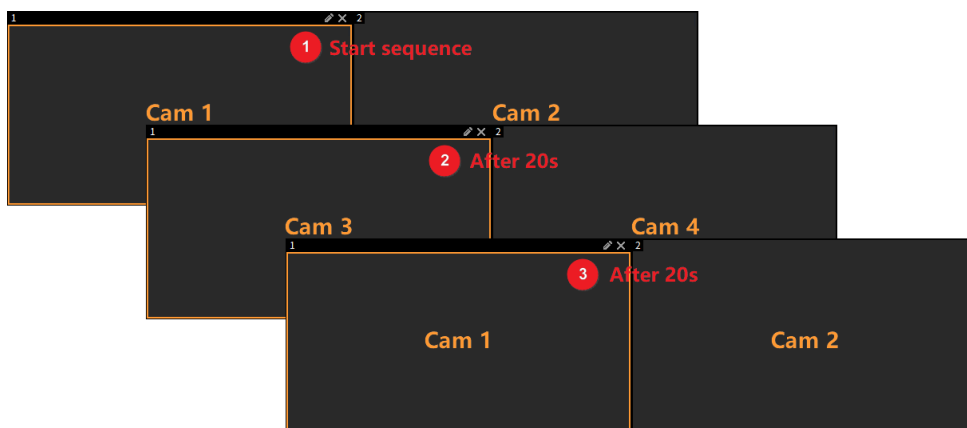
Sequence in Multiple Windows

Choose a sequence resource, click , and click a window or select **Check All** to select all windows, and click **OK**, then the videos will be played in sequence on the selected window(s).



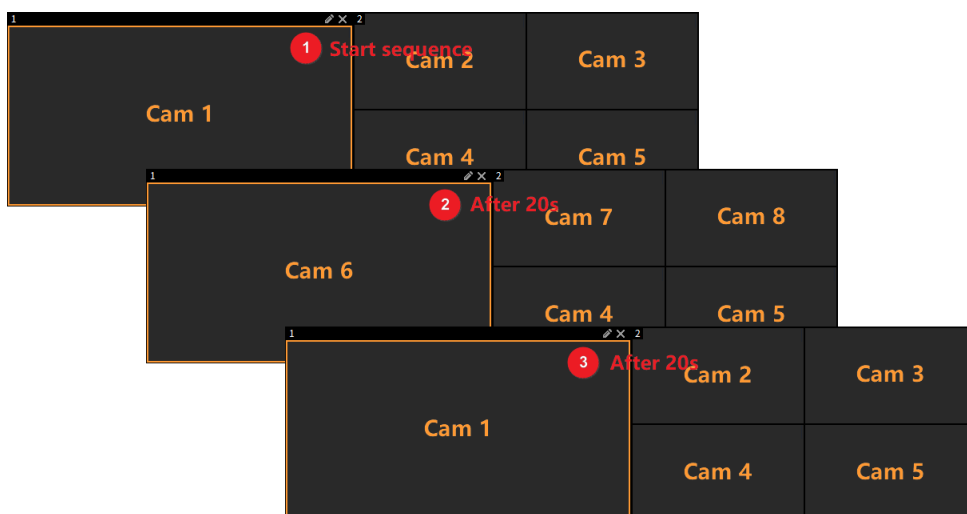
Example 1

Sequence 4 cameras (Cam 1, 2, 3, 4) on 2 windows at an interval of 20 seconds.



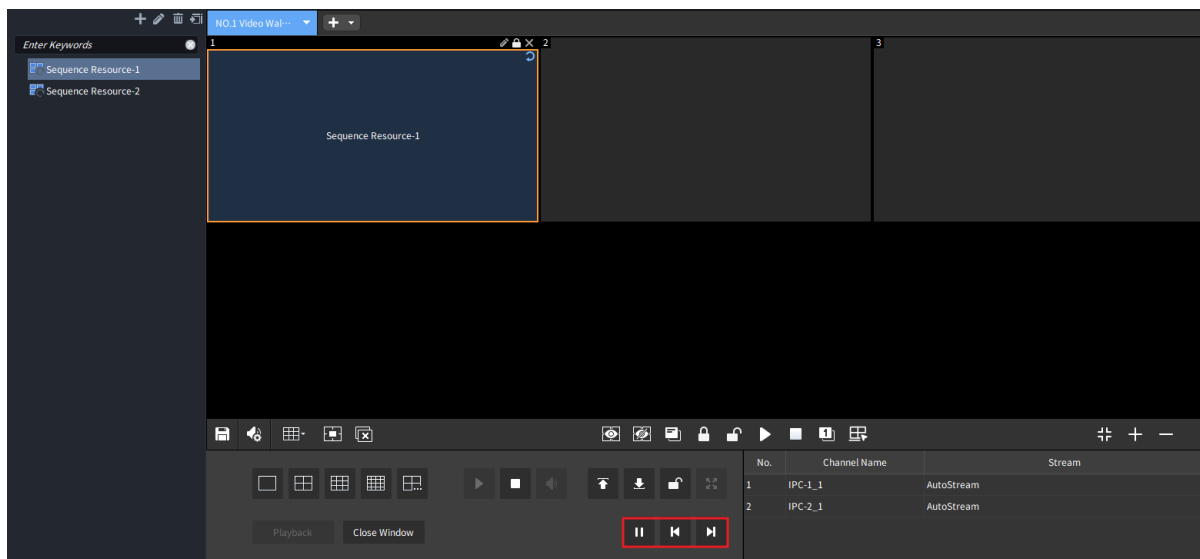
Example 2

Sequence 8 cameras (Cam 1 to 8) on two windows (window 1 with one split window, window 2 with four split windows) at an interval of 20 seconds.

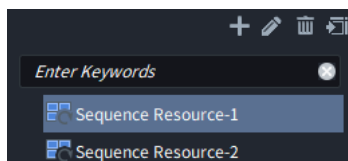


3. Manage Sequence Resource

After the sequence starts, choose a window, click  to pause/resume playing, and click  to play the previous/next video channel.



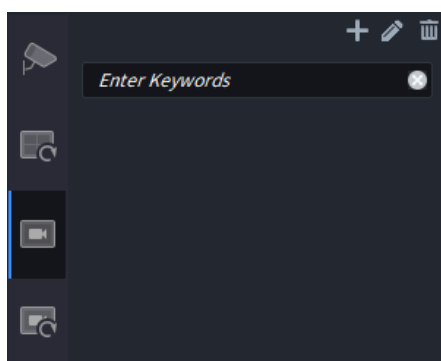
Choose a sequence resource, and click  to edit or delete the sequence resource.



4.3.3 Scene

Add and manage scenes. Save the layout and live view of the video wall as a scene. You can one-click to play the saved scene on the video wall when needed.

Before saving the scene, perform operations on the video wall as needed, such as opening a window, playing the live video on the video wall, etc.



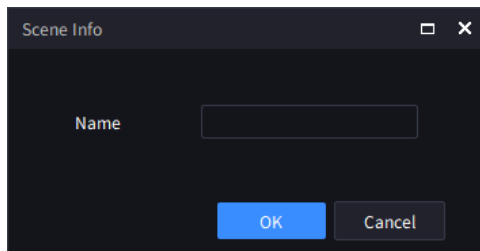
1. Save Scene

You can create a new scene or replace an old scene.

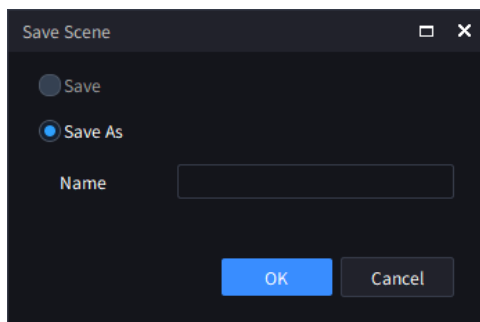
Save a New Scene

Two ways are available:

- Click , and the **Scene Info** dialog box appears. Enter a scene name, and click **OK** to save the scene.



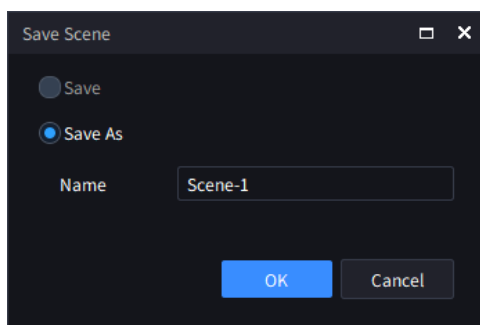
- Click , and the **Save Scene** dialog box appears. Click **Save As**, enter the name for the new scene, and click **OK** to save the scene.



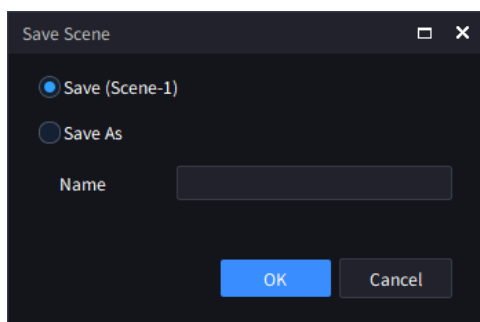
Replace an Old Scene

Two ways are available:

- Click , and the **Save Scene** dialog box appears. Click **Save As**, enter the name of the existing scene, and click **OK**. Then the new scene will overwrite the previous one.



- Start an existing scene, operate on the scene, and click  to enter the **Save Scene** dialog box. Click **Save**, and click **OK**, then the new scene will overwrite the previous one.

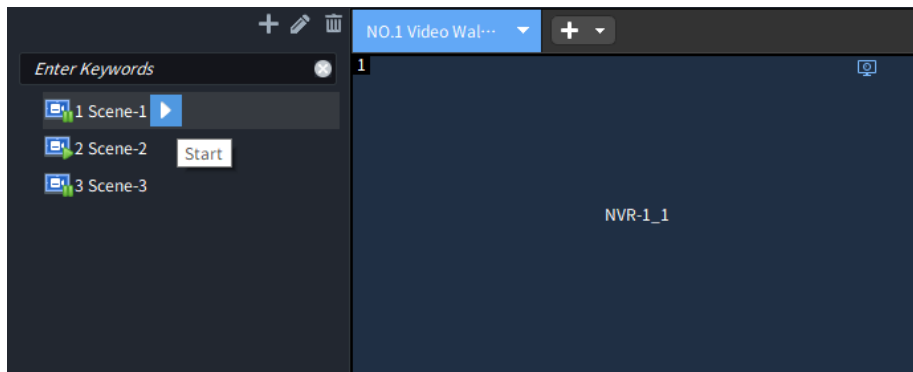


2. Start Scene

Choose a scene, click  on the right to start the scene.

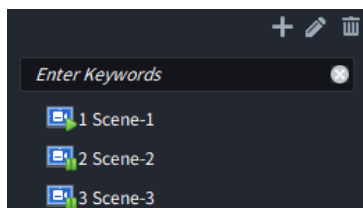
The icon for the started scene is displayed as , and icons for other unstarted scenes are displayed as .

After the scene is started, the window layout and videos saved in the scene are displayed on the video wall, and overwrite the previous layout and videos.



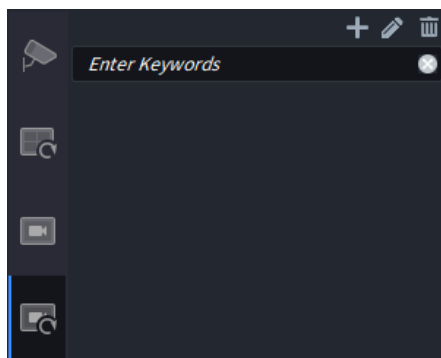
3. Manage Scene

Choose a scene, click / to edit the scene name or delete the scene.



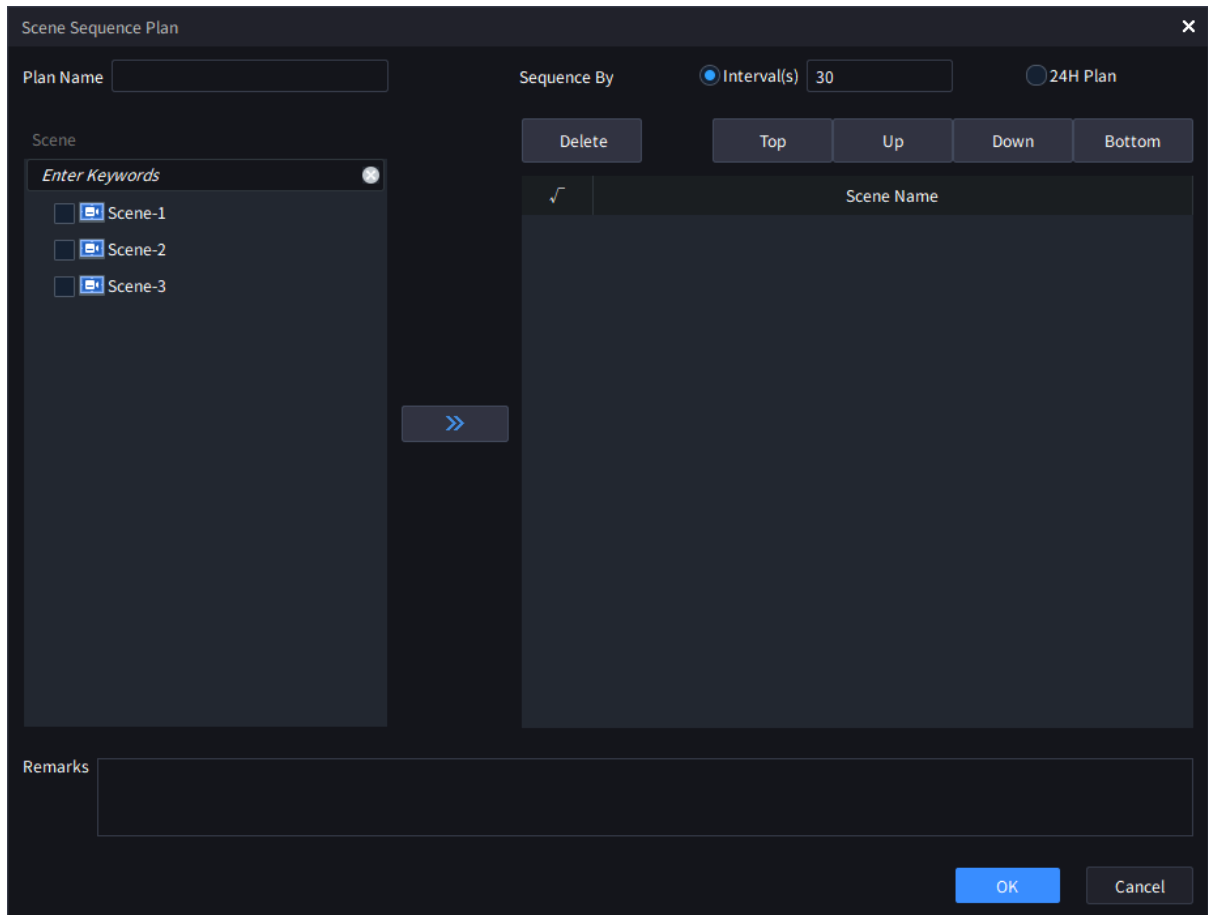
4.3.4 Scene Sequence

Add and manage scene sequence plans. Save multiple scenes in the set order and time interval as a scene sequence plan. You can one-click to start the plan to play videos on the video wall when needed.

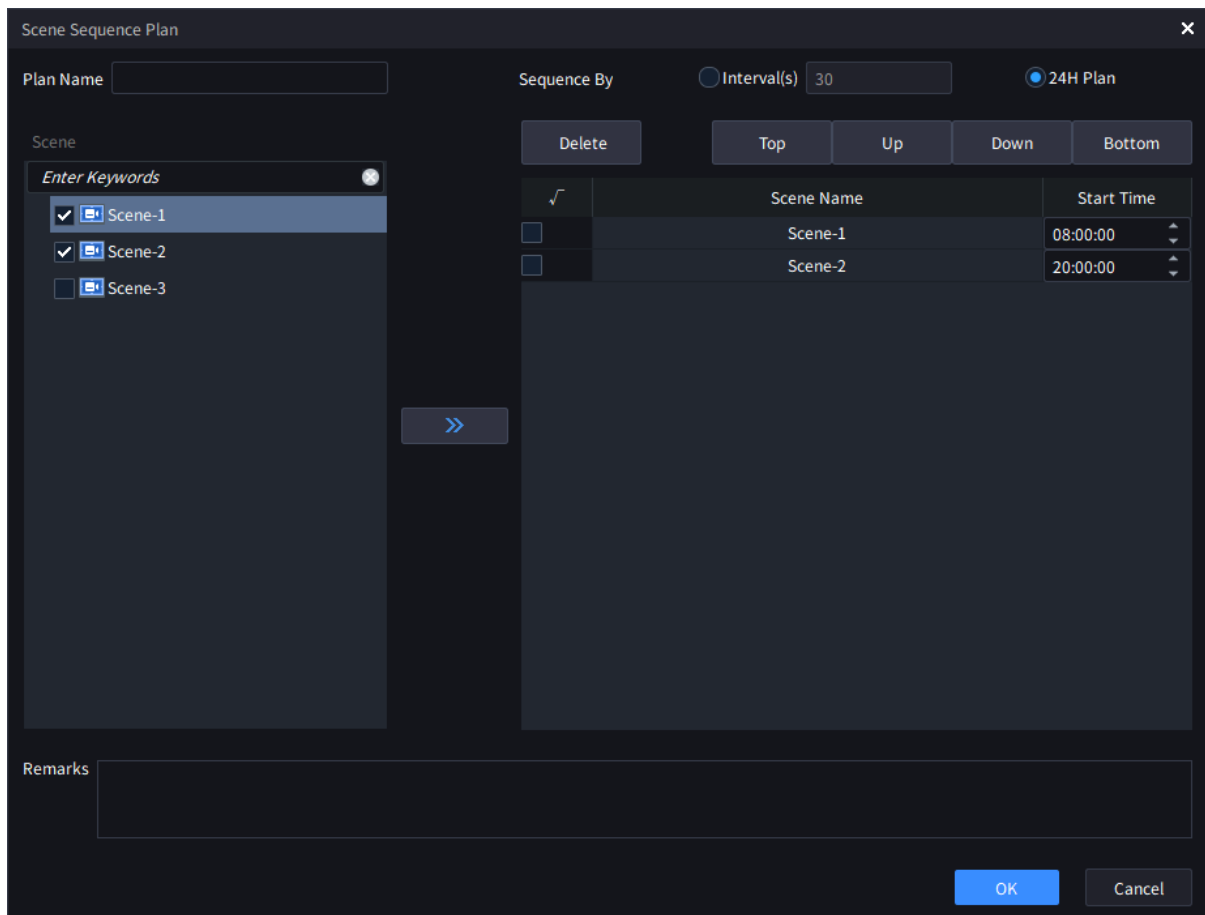


1. Add Scene Sequence Plan

1. Click  above the scene sequence list, and the **Scene Sequence Plan** page appears.



2. Enter a plan name and sequence interval, select scenes in the left list, and click  to add them to the scene sequence plan.
 - Interval: The scenes will switch continuously at the set interval.
 - 24H Plan: When enabled, the scenes will play at the set start time every day.



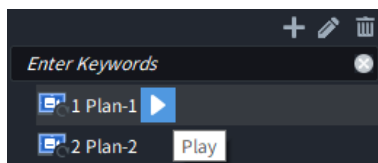
3. Adjust the scene sequence plan as needed.

- Adjust play order: Select a scene, and click **Top/Up/Down/Bottom** to adjust the play order.
- Delete scene: Select the scene(s) you want to delete, or check ☒ to select all scenes, and then click **Delete**.

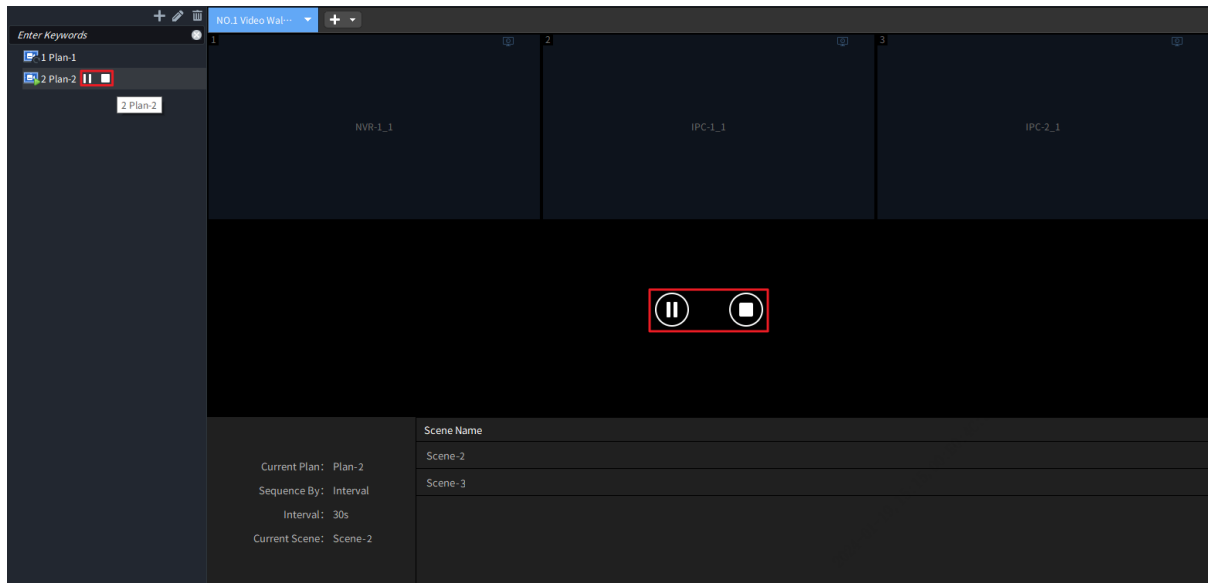
4. Click **OK**. The added scene sequence plan will be displayed in the left list.

2. Play Scene Sequence Plan on Video Wall

Choose a plan, click  on the right to play the scenes on the video wall in the set order and at the set interval.

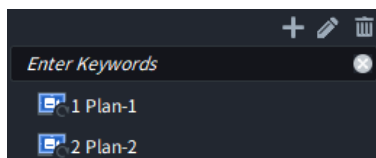


The other operations of the video wall cannot be used when the scene sequence starts. Click  to stop the scene sequence; click  to pause the scene sequence; click  to resume the scene sequence; click  to stop the scene sequence.



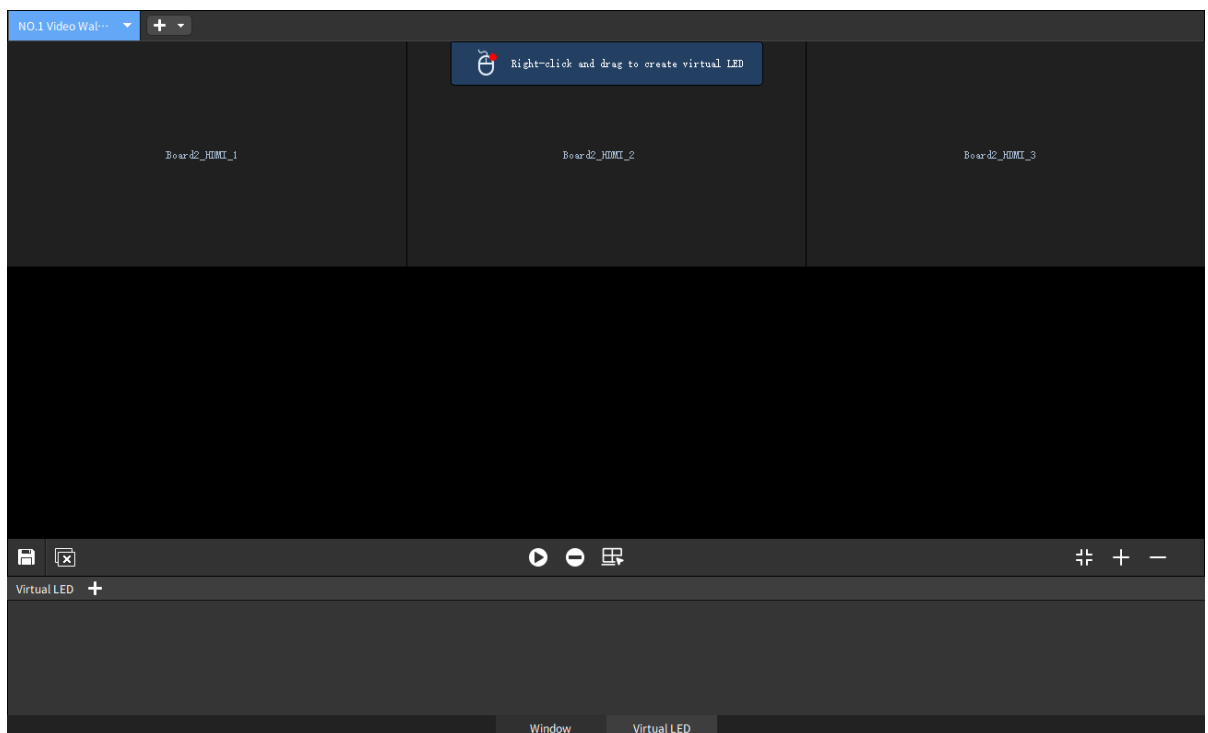
3. Manage Scene Sequence Plan

Choose a plan, and click   to edit the plan name or delete the plan.



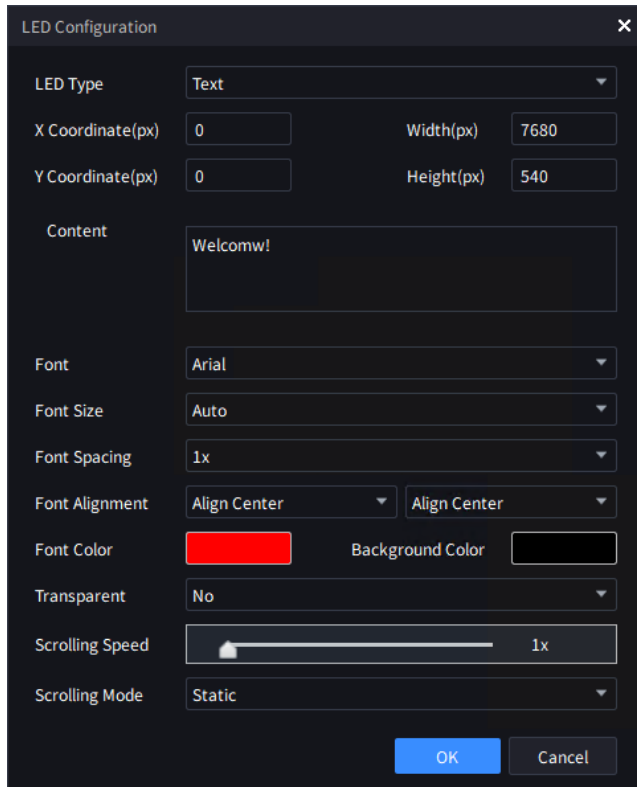
4.3.5 Virtual LED

Click the **Virtual LED** tab at the bottom, and set the virtual LED content (text or time) overlaid on the video wall.



1. Add Virtual LED

1. Click  on the bottom left corner, or right-click and drag it to the desired size and then release the mouse, and then the **LED Configuration** dialog box appears.

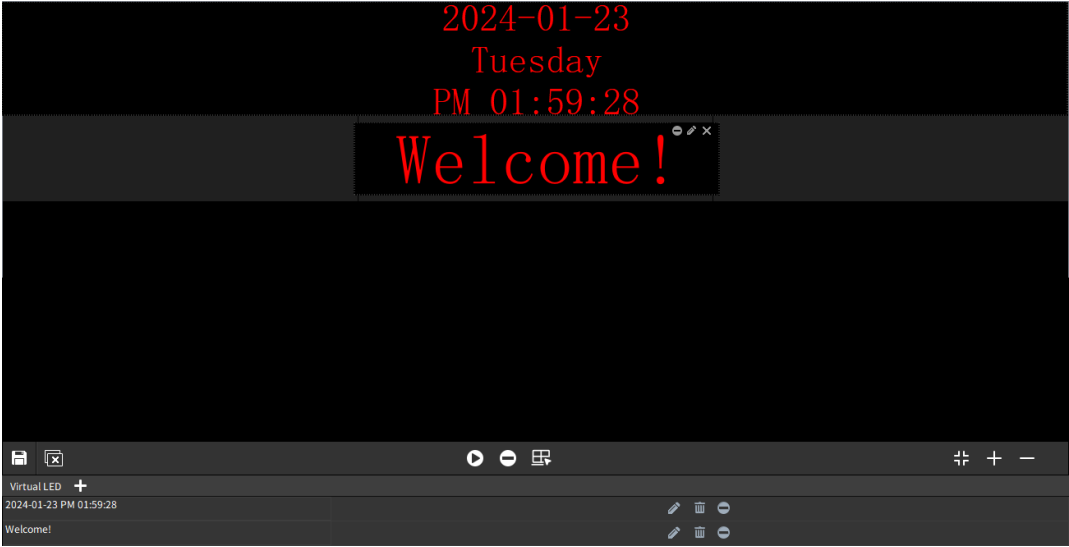


The LED Configuration dialog box is a dark-themed window with a title bar and a close button. It contains several configuration options for a virtual LED:

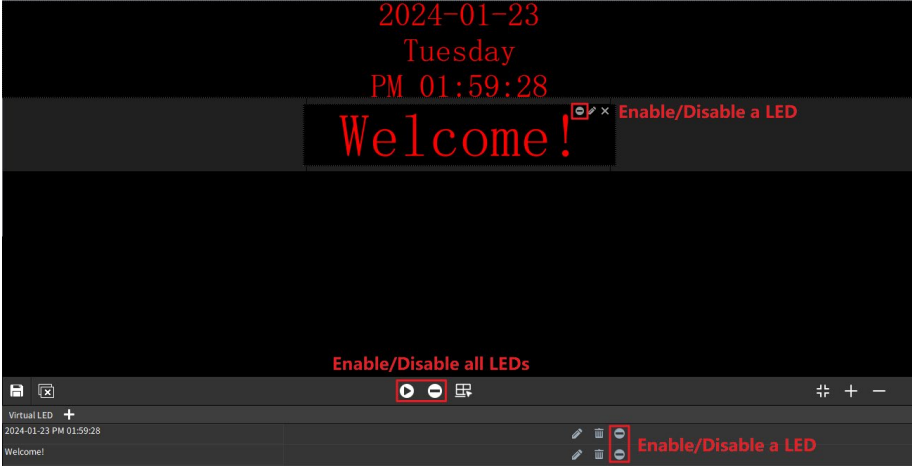
- LED Type:** A dropdown menu set to "Text".
- X Coordinate(px):** A text input field with the value "0".
- Y Coordinate(px):** A text input field with the value "0".
- Width(px):** A text input field with the value "7680".
- Height(px):** A text input field with the value "540".
- Content:** A text area containing the text "Welcomw!".
- Font:** A dropdown menu set to "Arial".
- Font Size:** A dropdown menu set to "Auto".
- Font Spacing:** A dropdown menu set to "1x".
- Font Alignment:** Two dropdown menus, both set to "Align Center".
- Font Color:** A color picker showing a red color.
- Background Color:** A color picker showing a black color.
- Transparent:** A dropdown menu set to "No".
- Scrolling Speed:** A slider control set to "1x".
- Scrolling Mode:** A dropdown menu set to "Static".
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

Item	Description
LED Type	Text: Virtual LED text. You can set the text content, font style, and display effect. Time: Virtual LED time. You can set the time format, font style, and display effect. Note: The text can be displayed in line breaks.
X/Y Coordinate	The coordinates of the virtual LED in the upper left corner.
Width/Height	The width/height of the virtual LED.

2. Select the virtual LED type and set the LED type as needed, and then click **OK**.



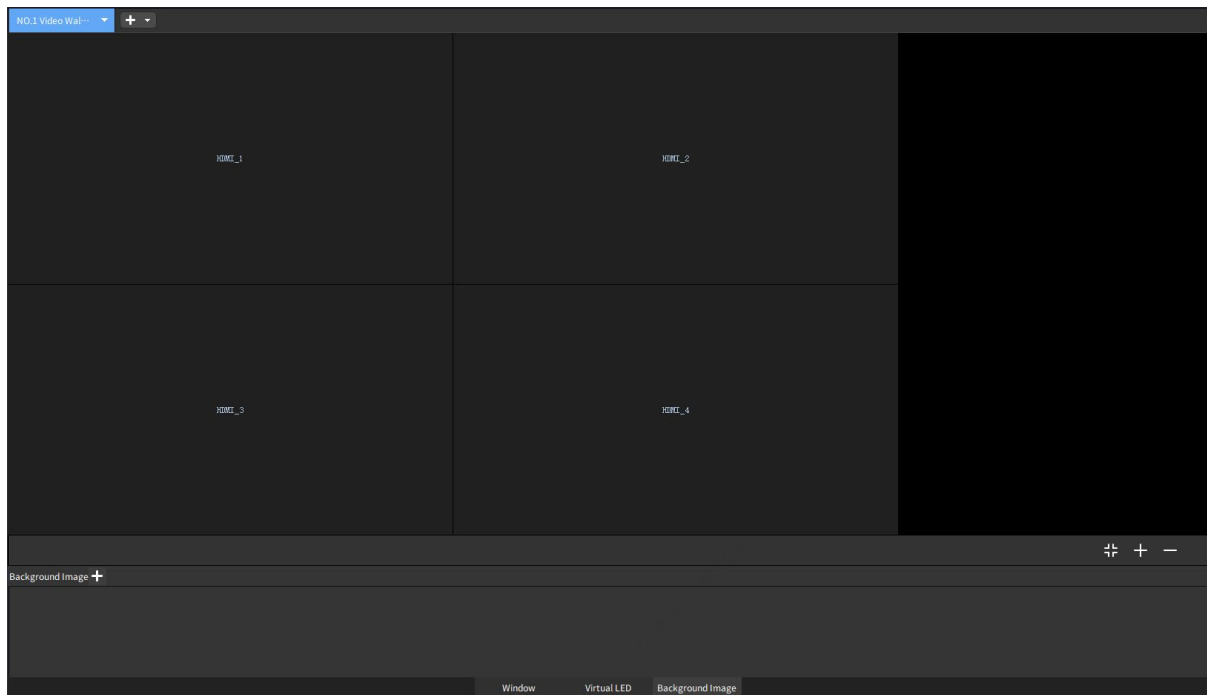
2. Manage Virtual LED

Item	Description
Adjust position and size	● Direct adjustment: ➢ Select the virtual LED and drag it to adjust the position. ➢ Move the mouse cursor to the virtual LED border until it changes to a two-way arrow, then click and drag the virtual arrow to adjust the LED size. ● Precise adjustment: Click  in the upper-right corner of the virtual LED, or click  in the virtual LED list, then the LED Configuration dialog box and the coordinates information of other virtual LEDs appear. Edit the coordinates and width/height of the virtual LED, click OK, and the LED will change in the set position and size. Note: The virtual LEDs cannot be overlapped.
Edit content and style	Click  in the upper-right corner of the virtual LED, or click  in the virtual LED list below, then the LED Configuration appears, and you can set the content and style as needed.
Enable/disable	● Enable/disable virtual LED one by one: To disable a virtual LED, click  in the upper-right corner of the virtual LED, or click  in the virtual LED list, and then the LED is gray out. To enable it, click . ● Enable/disable all virtual LEDs: Click  to disable all virtual LEDs, and the LEDs are gray out. To enable them again, click . 

Item	Description
Close	Click  in the upper-right corner of the virtual LED, or click  in the virtual LED list to close it.

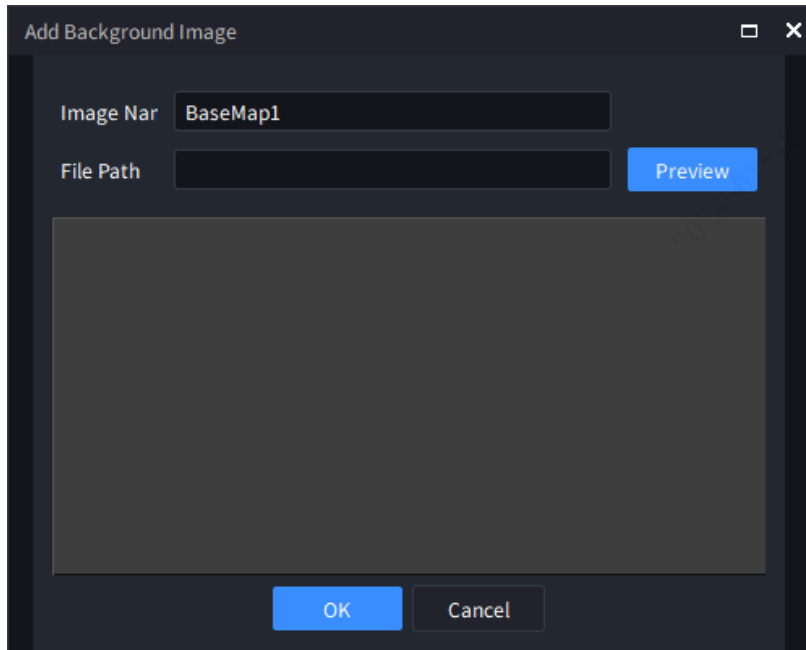
4.3.6 Background Image

Click the **Background Image** tab, and set the background image of the video wall, which will be displayed on the physical video wall. The background image will be obscured if you open a window on it.

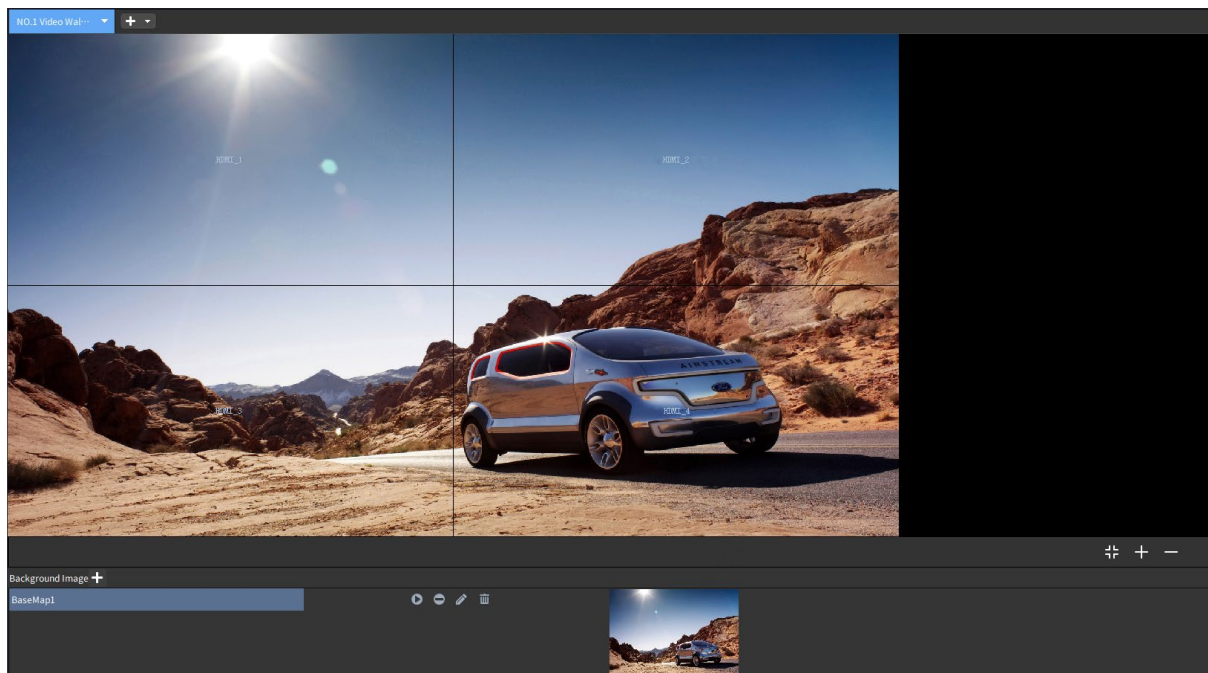


1. Add Background Image

1. Click  in the bottom left corner, and the **Add Background Image** dialog box appears.

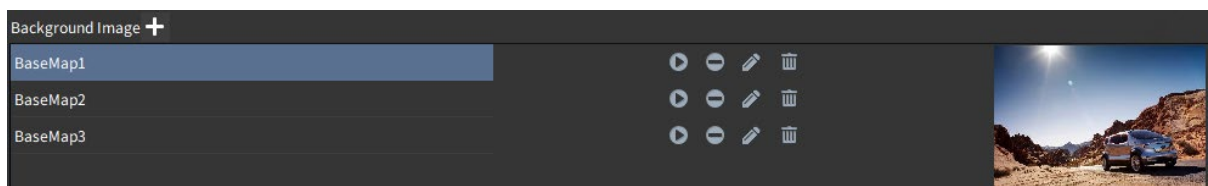


2. Enter a name for the image, click **Preview** to select a JPG image from your PC, and click **OK**. Then the image will be the background image.



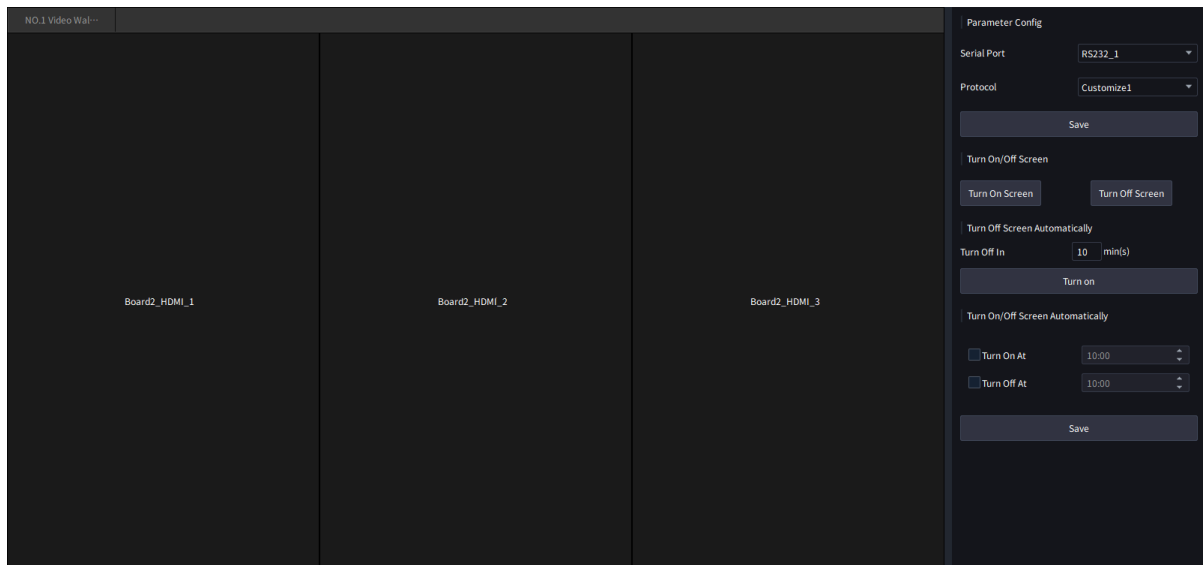
2. Manage Background Image

Choose a background image, and click     to start/stop/edit/delete it.



4.4 Screen Control

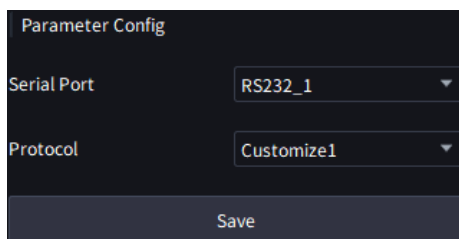
Connect the device to the serial port of LCD screen, or connect to the LED screen via the serial port of the power distribution box. Configure the screen control protocol (command to turn on/off the screen) on the device's Web interface, and you can remotely turn on/off screens on the software.



4.4.1 Configure Screen Parameters

Choose the serial port used by the device and screen, select an existing protocol or custom protocol (consistent with that on the device's Web interface), and click **Save**.

After correct configuration, you can remotely turn on or turn off the screen via the corresponding command on the software.

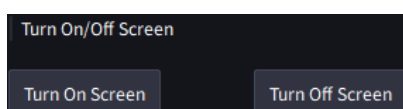


4.4.2 Turn On/Off Screen Remotely

The client can remotely turn on/off the screen by manual control, delayed control, and scheduled control.

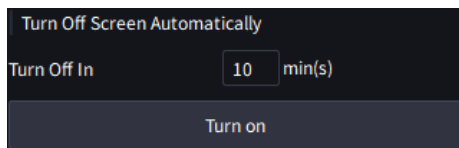
1. Manual Control

Click **Turn On Screen** or **Turn Off Screen** to turn the screen on/off.



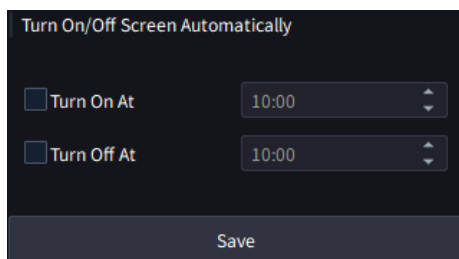
2. Delayed Control

Set a delay time for turning off the screen, click **Turn on**, and then the screen will automatically turn off at the end of the set time.



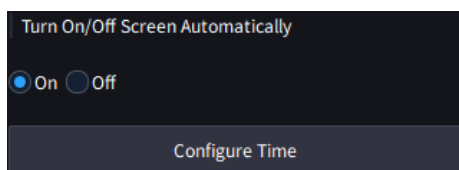
3. Scheduled Control

Select **Turn On At** or **Turn Off At** to set the time for the screen to automatically turn on or off, click **Save**, and then the screen will be turn on or off at the specified time.



Certain devices allow to turn on/off the screen automatically by week and holiday.

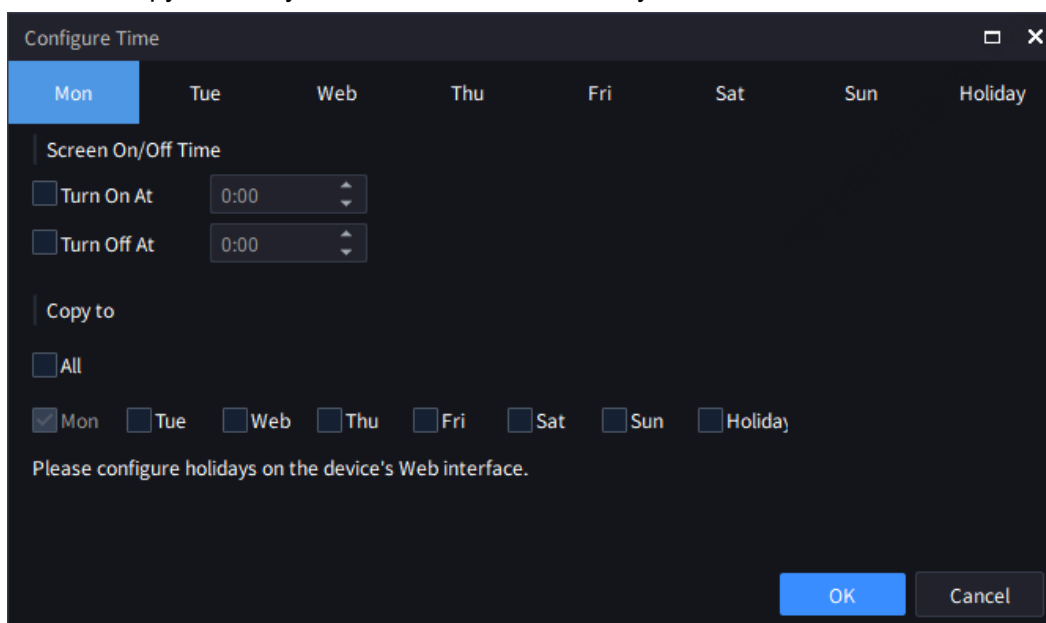
1. Select **On** under **Turn On/Off Screen Automatically**, and click **Configure Time**.



2. Choose a day, select **Turn On At** or **Turn Off At**, and set the screen on/off time.

Then, you can quickly configure the screen on/off time for other days via the following methods:

- Copy to a specific day: Select the day(s) you want to copy the same settings to.
- Copy to all days: Select **All** to select all days.



- Click **OK** to save the time configuration. The screen will turn on and off at the set time each week or during holidays.

**NOTE!**

- The holidays should be configured on the device's Web interface.
- The holiday schedule has a higher priority than the week schedule. If a day is set as both weekly plan and holiday plan, the on/off time follows the holiday configuration.

5 KVM Control

Create and manage KVMs based on the actual wiring of managed devices (distributed output-KVM nodes) and KVM screens, and then perform related operations, for example, play live video of IPCs added on the **Resource** tab on the KVM screens.

The KVM screen manager can operate the local interface on the KVM screen with the keyboard and mouse. See the *Distributed KVM Local Interface User Manual* for details.

**NOTE!**

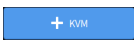
This function is available to distributed output devices only.

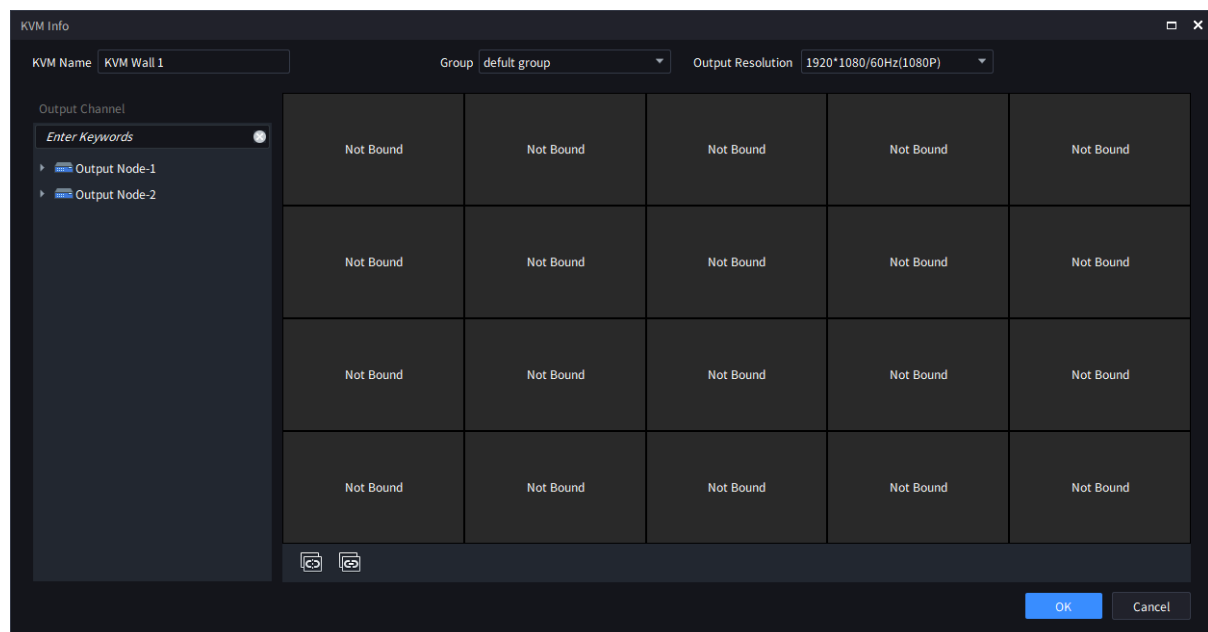
5.1 KVM Management

Connect the video output interface of distributed KVM node (for example, HDMI output interface) to the KVM screen, and play the video from IPC or PC on the KVM screen.

Create and manage KVM s based on the wiring of distributed KVM nodes and KVM screens.

5.1.1 Create KVM

- Click  on the **KVM Control** tab, and then the **KVM Info** page appears.



Item	Description
KVM Name	Customize the KVM name to be displayed on the top side of the KVM Control page.
Group	Add KVMs to various groups. See Manage Operator Group for details. All KVMs will be automatically assigned to the default group.
Output Resolution	Output channel resolution. Set it based on the resolution of the physical KVM screen.
Output Channel	Each video output interface of the KVM nodes corresponds to an output channel, which is bound to the KVM. The videos of resources such as IPC and computer are decoded by the device and then displayed on the KVM screens through the video output interface. Videos cannot be decoded on the KVM if the KVM is not bound to any output channel such as IPC, PC, or other resources. The windows are automatically opened on the KVM according to the binding relation when you create a KVM.
	Unbind All: Cancel all bindings between output channels and KVMs.
	Bind All: Bind all the available output channels to the KVMs.

2. Bind the output channels to KVMs according to the actual wiring.

Binding should start from the first window in the upper-left corner of the KVM window, and two output channels must be bound adjacently without nonadjacent binding.

- Bind: Drag an output channel to a KVM window for binding; or click  to bind all the available channels to windows on the KVM.
- Rebind: Drag an output channel to an already bound window on the KVM for rebinding.
- Unbind: Click  in the KVM window's upper right corner to cancel the binding; or click  to cancel all binding.



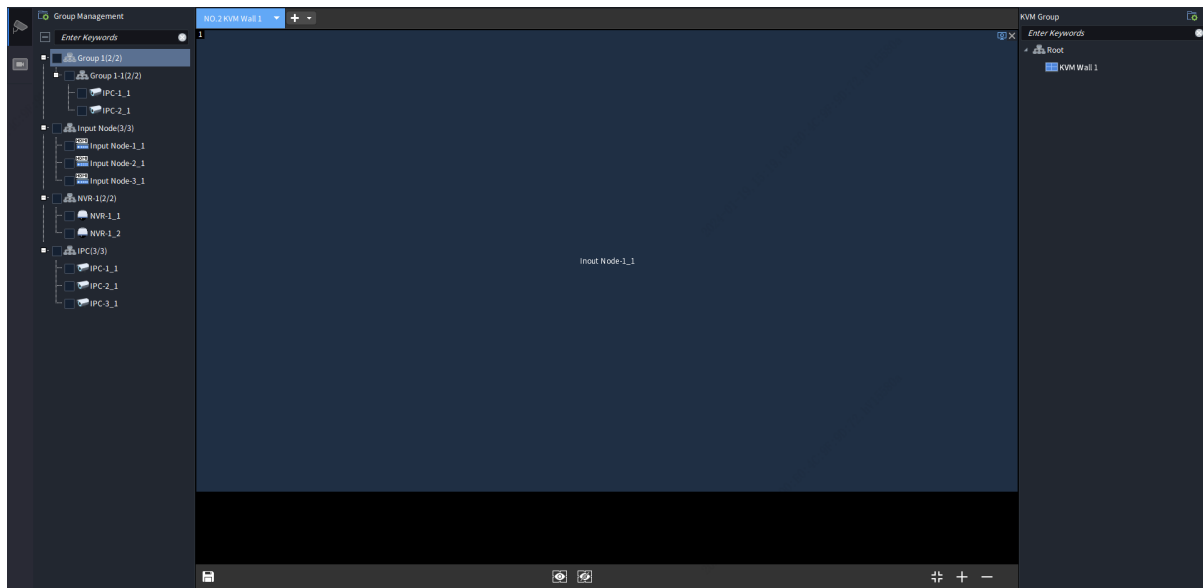
NOTE!

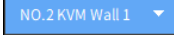
Each output channel can only be bound to one KVM at the same time.

First window	Adjacent window ✓	Nonadjacent window ✗
Adjacent window ✓	Nonadjacent window ✗	
Nonadjacent window ✗		

3. Click **OK**, and the KVM is created.

5.1.2 KVM Introduction

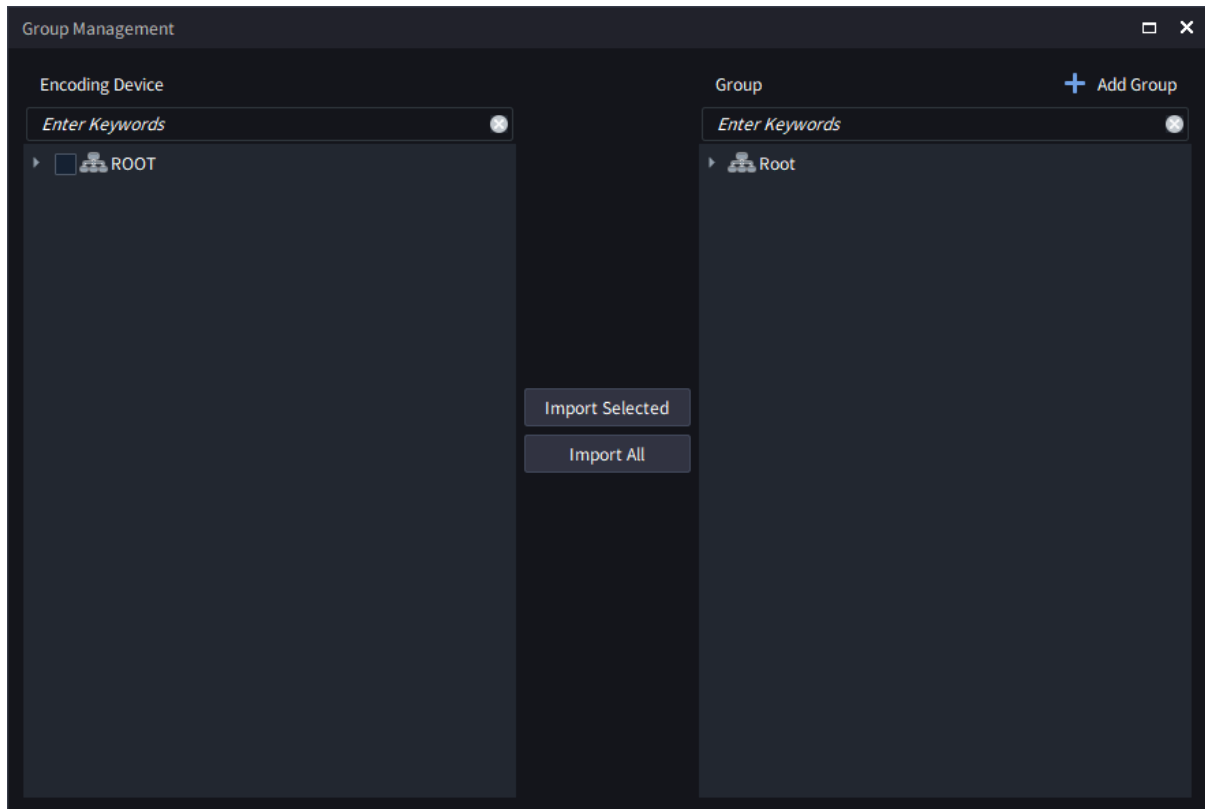


Item	Description
	Video channel. Display resources in groups including video channels and input nodes added on the Resource tab. Drag a video channel to a window on the KVM to start its live video on the physical KVM screen.
	Pre-arranged plan. Add and manage pre-arranged plans. Save the current layout and video of the KVM as a pre-arranged plan. You can one-click to play the plan video on the KVM screen.
Group Management	Click  , and import video channels to various groups for management. See Resource Group for details.
	Add, edit, or delete the pre-arranged plan.
	KVM list. Click to select a KVM. The highlighted list in blue is the current KVM. Click  , and choose to edit or delete the KVM.
	Create a KVM. See Create KVM for details.
KVM Group	Click  , and import KVMs to various groups for management. See Manage KVM Group for details.
KVM Toolbar	Automatically play the live video on the KVM screens according to the bound relation of video channels and KVMs. : Save the current layout and video as a pre-arranged plan. : Start live videos of the video channels in all the software windows. : Close live videos of the video channels in all the software windows. : Restore the original size after you zoom in or out on the KVM. : Zoom in on the KVM on the software. This operation does not affect the live video playing on the KVM. : Zoom out on the KVM on the software (to the original ratio of the KVM for the minimum). This operation does not affect the live video playing on the KVM.

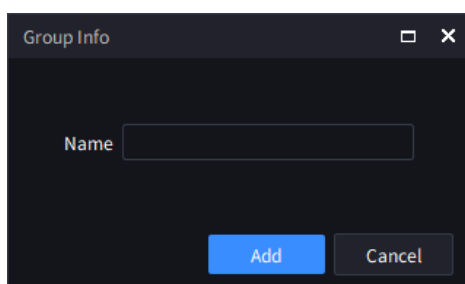
5.1.3 Manage KVM Group

You can import the added KVM to various groups based on the actual networking and layout for unified management.

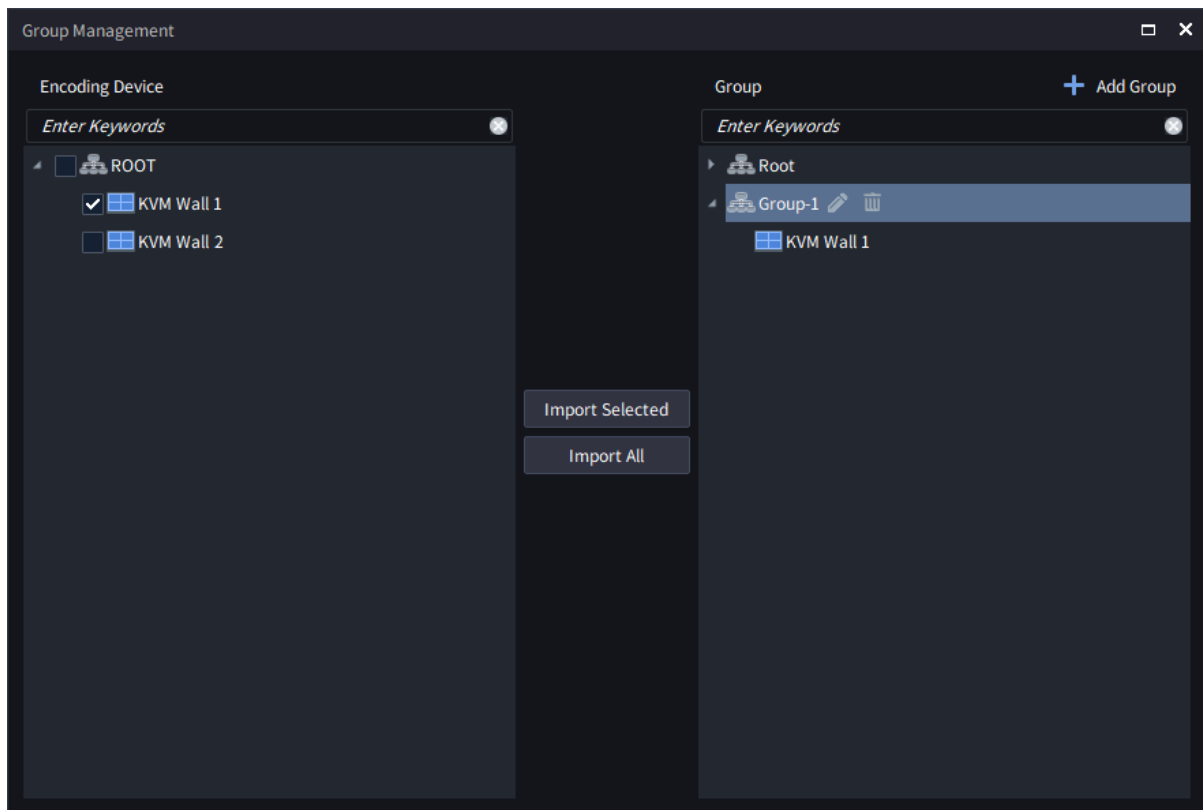
1. Click  beside **KVM Group**, and the **Group Management** window appears.



2. Click . A dialog box appears. Enter a name for the KVM, and click **Add**.



3. Select KVM(s) in the left list, choose a group in the right list, click **Import Selected**, and the selected KVMs are imported to the specified group. To import all KVMs to a specified group, click **Import All**.



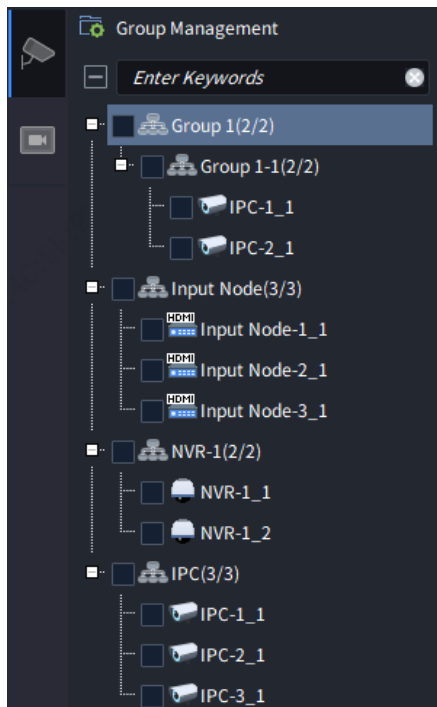
5.2 KVM Screen

After logging in to the device on the KVM screen, you can operate the device on the software or the local interface, for example, view the live video of IPC. The video channel name is displayed on the KVM window, and the live video is played on the KVM screen synchronously. For detailed operations on the local interface, see the *Distributed KVM User Manual*.

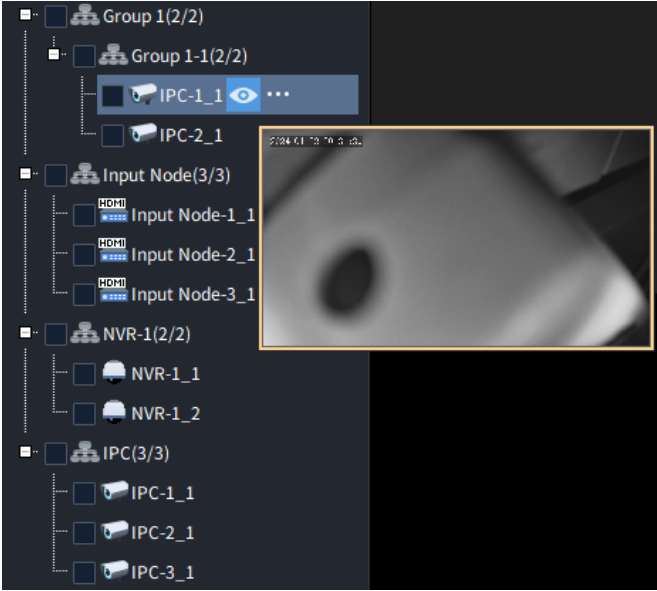
The windows are automatically displayed on the KVM according to the binding relation when created.

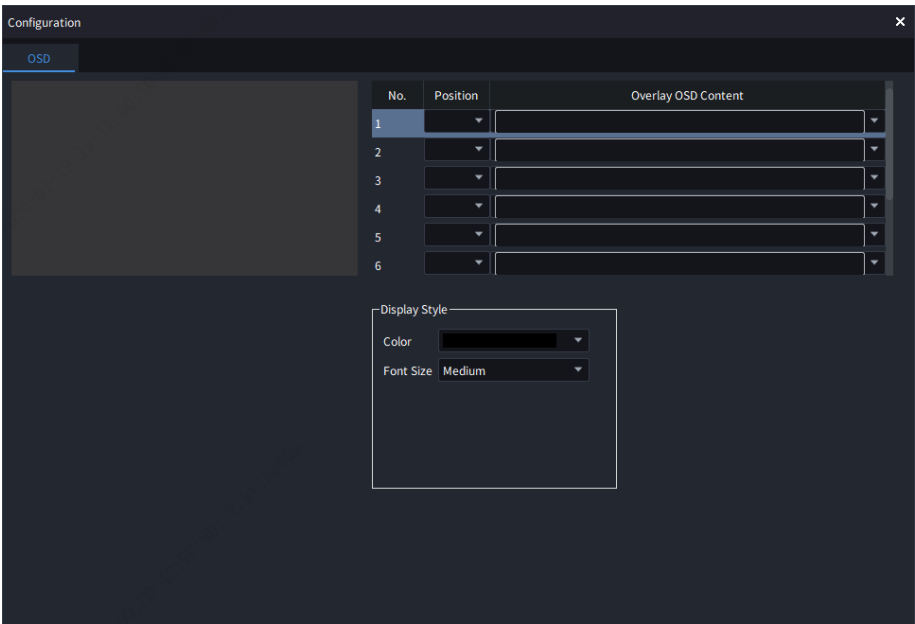
5.2.1 Video Channel

The left-side list shows resources in groups, including video channels and input nodes added on the **Resource** tab. Drag a video channel to a window on the KVM to start its live video on the physical KVM screen.



1. Video Channel Management

Item	Description
Group management	Click  , and import video channels to various groups for management. See Resource Group for details.
Preview	Choose a video channel, and click  to view the live video. 
Channel Management	Choose a video channel, and click  to manage it. ● Edit Channel Name: Edit the name of the video channel. ● OSD Configuration: When the video channel is a distributed input node, you can configure the OSD content and style, and then the OSD content will overlay on the live video of the corresponding screen or KVM screen. ➢ Display position: Set the display position of OSD. Up to 1 OSD is allowed for each area. You can drag the OSD area box to adjust its position, and preview the OSD position on the left window. ➢ Overlay OSD Content: Customize the OSD content.

Item	Description
	➤ Display Style: Set the font size and color of OSD.  ● Audio Configuration: When the video channel is an input node, enable Audio Input and configure it on the Web interface of the input node, and then the audio input channel can be configured on the software. Supports independent audio and HDMI audio. ➤ Independent: Uses the audio collected from the audio input interface of the independent audio device, such as the sound pick-up. ➤ HDMI audio: Uses the audio collected from the HDMI input interface.

2. Play Live Video on KVM Screen

Select video channel(s), drag to KVM window(s), and the live video(s) will be played on the physical KVM screen(s).

If the number of selected video channels is more than the number of windows, the redundant video channels are not displayed.

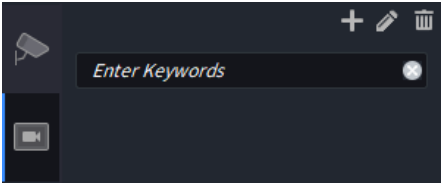
3. Manage KVM Window

Item	Description
Play videos on KVM windows	Play the live videos of video channels in the software windows. - Preview video one by one: Right-click the window you want to preview, and click Preview. - Preview all live videos: Click . To close all live videos, click . 
Zoom in on the KVM on the software	Zoom in on the software KVM for easy operations. This operation does not affect the display effect on the physical KVM screen. - Zoom in on the KVM: Click , or press and hold Ctrl and scroll up the mouse wheel to zoom in on the KVM. Drag the slider on the bottom and right of the KVM to adjust the KVM position. - Zoom out on the KVM: Click , or press and hold Ctrl and scroll down the mouse wheel to zoom out on the KVM after zooming in on the KVM. Click  to restore the original size
Close the video	Choose a window, click  in the upper right corner to close the video.

5.2.2 Pre-arranged Plan

Add and manage pre-arranged plans. Save the layout and live video on a KVM as a pre-arranged plan. You can one-click to play the saved pre-arranged plan on the KVM when needed.

Before saving the plan, perform operations on the KVM as needed, for example, play the video of channel on the KVM.



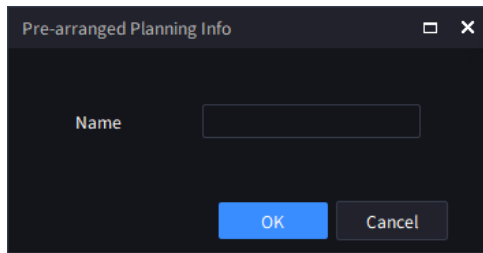
1. Save Pre-arranged Plan

You can create a new pre-arranged plan or replace an old pre-arranged plan.

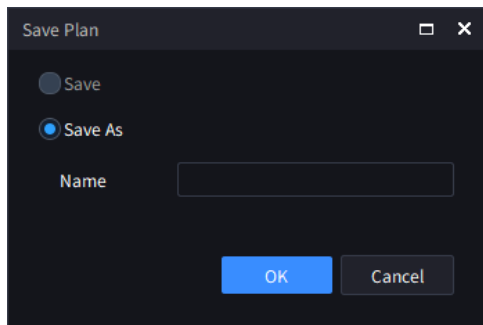
Save a New Pre-arranged Plan

Two ways are available:

- Click , and the **Pre-arranged Planning Info** dialog box appears. Enter a name for the plan, and click **OK** to save the plan.



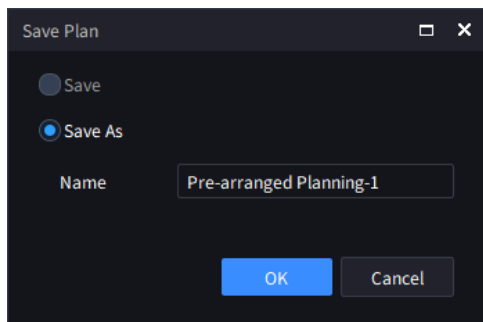
- Click , and the **Save Plan** dialog box appears. Click **Save As**, enter the plan name, and click **OK** to save the plan.



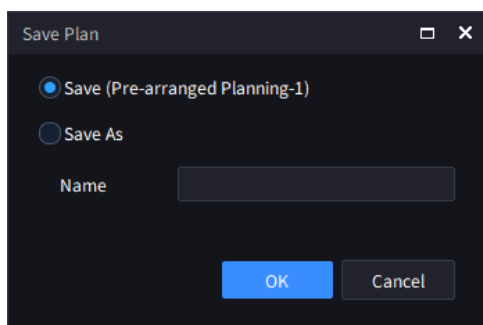
Replace an Old Pre-arranged Plan

Two ways are available:

- Click , and the **Save Plan** dialog box appears. Click **Save As**, enter the existing plan name, and click **OK**. Then the new plan will overwrite the previous one.



- Start an existing plan, operate on the plan, and click . On the **Save Plan** dialog box, click **Save**, and click **OK**, then the new plan will overwrite the previous one.

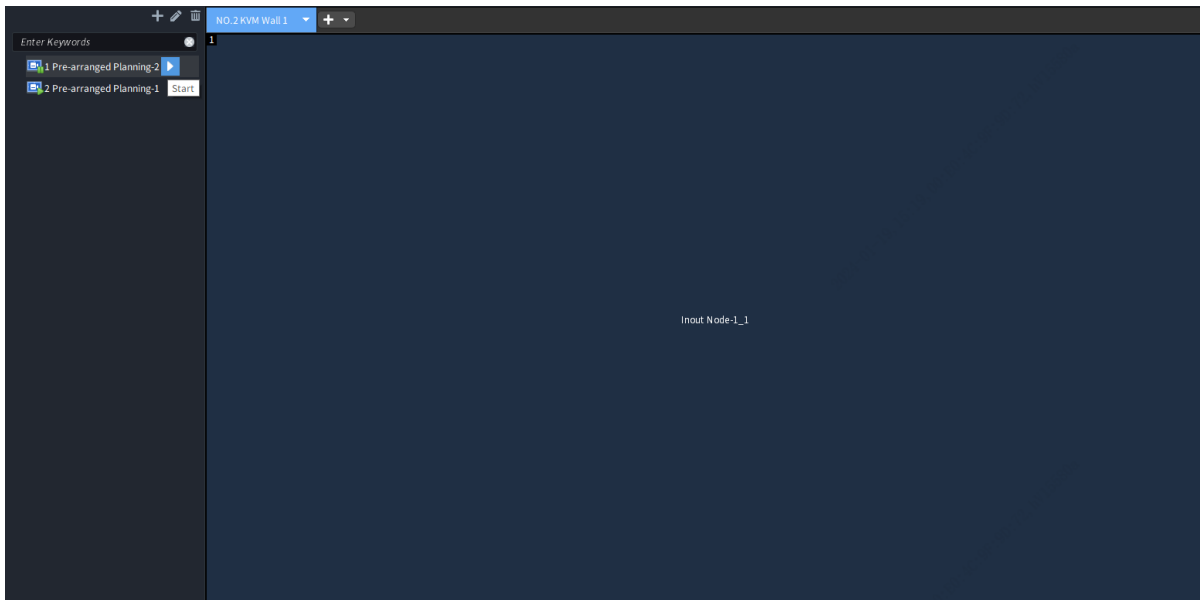


2. Start Pre-arranged Plan

Choose a pre-arranged plan, and click  on the right to start the plan.

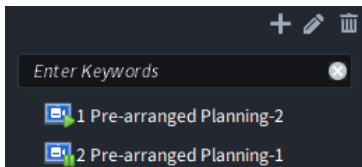
The icon for the started plan is displayed as , and icons for other unstarted plans are displayed as .

After the plan is started, the plan layout and images are displayed, and the previous KVM window will be overwritten.



3. Manage Pre-arranged Plan

Choose a plan, and click   to edit the plan name or delete the plan.



6 User Management

Add users and assign different permissions to users. When users with different permissions log in to the software or the local interface of the distributed system, the interface and supported operations may vary with the user type.



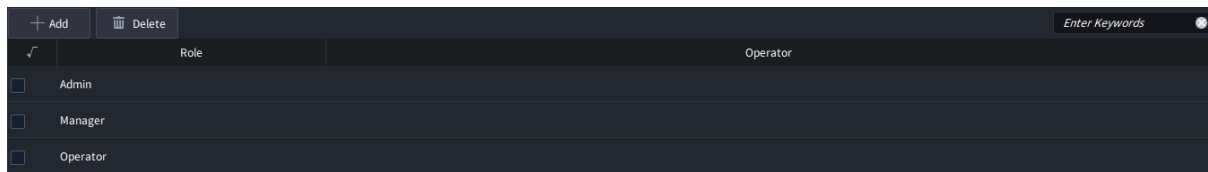
NOTE!

This function is only available to the admin user of distributed output devices and certain video wall controllers.



6.1 Role

Add and manage roles, and configure role permissions. You can assign roles in [User](#).

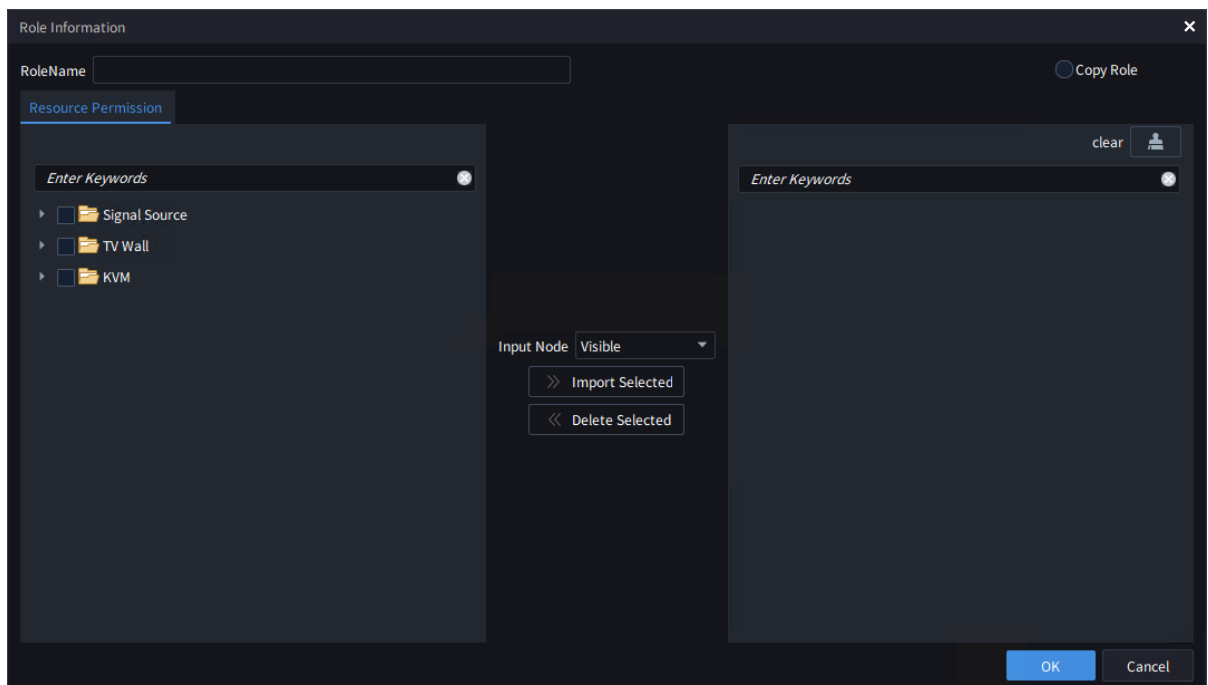


The system has three default roles (Admin, Manager, Operator), which can neither be edited nor be deleted. Double-click a role to view the role information.

Role	Description
Admin (super administrator)	Has all system permissions and resource permissions. It can manage and operate all users, resources, and video walls. Only the default user admin is the Admin role.
Manager (administrator)	Has all permissions except user management. It can manage and operate all resources and video walls.
Operator	Has all resource permissions but no system permission. It can manage and operate all resources and video walls.
Added role	Only has assigned resource permissions, but no system permission. It can only operate resources and video walls with the assigned permissions.

1. Add Role

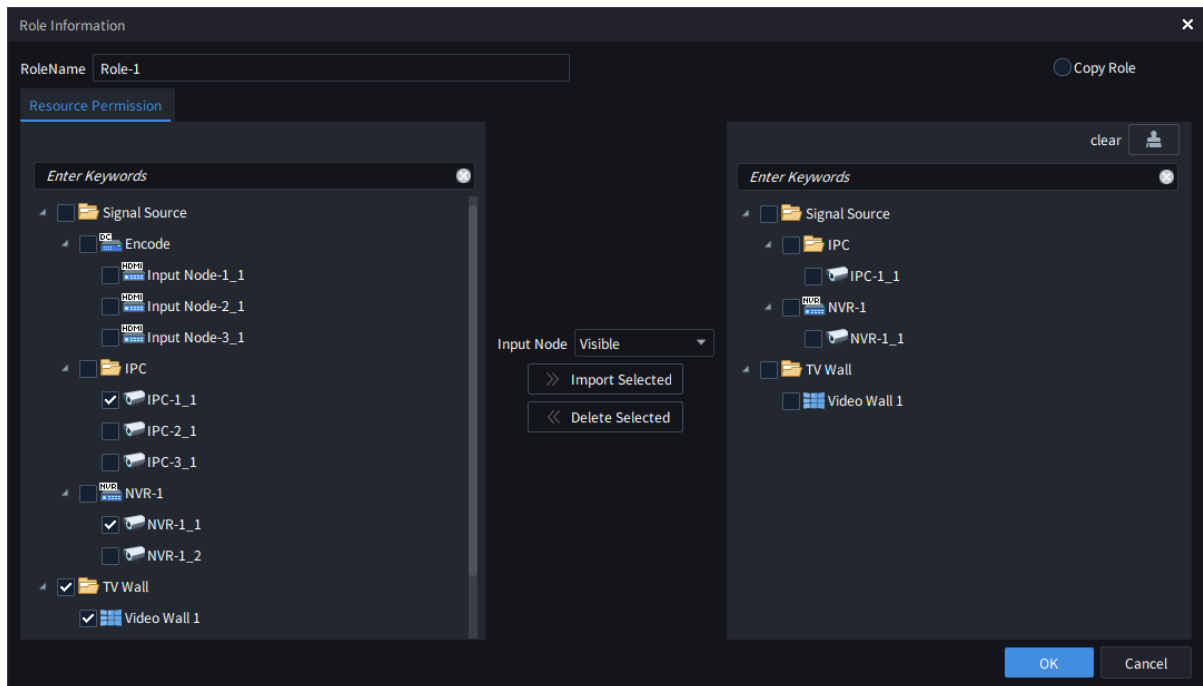
1. Click **Add**, and the **Role Information** window appears. Enter a name for the role.



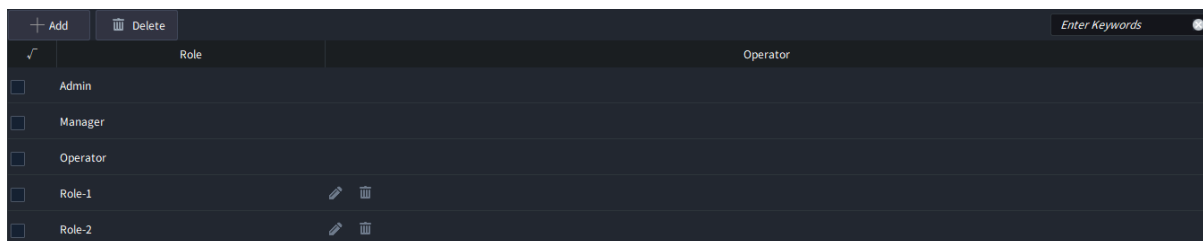
2. Select device(s) from the left list (folded by default, it can be expanded as needed), and then click **Import Selected** to add them to the right list. You may also select **Copy Role** to copy the resource permissions of an existing role.

For the distributed system, If the selected devices have an input node, you need to set the role permissions from the **Input Node** drop-down list.

- Invisible: The input node will not be displayed and is uncontrollable.
- Visible: The input node will be displayed but is uncontrollable.
- Controllable/Fully Controllable: The input node will be displayed and is controllable.



3. Click **OK** to add the new role.



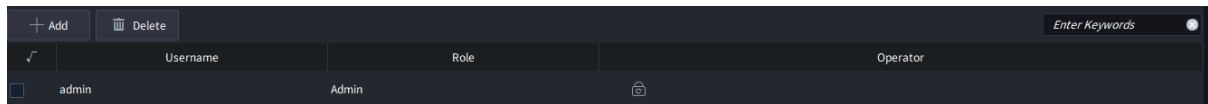
2. Manage Role

Item	Description
Edit	Click  to edit the role permissions.
Delete	You can delete roles one by one or in batches. ● Delete one by one: Select the role you want to delete, and then click . ● Delete in batches: Select the role(s) you want to delete or click  to select all roles (uncheck the default roles as they cannot be deleted), and then click Delete. Note: A role that is being used by a user cannot be deleted. To delete the role, please delete all the users of the role in User.

6.2 User

Add and manage users, and configure permissions for users.

The default role **Admin** cannot be edited and deleted.

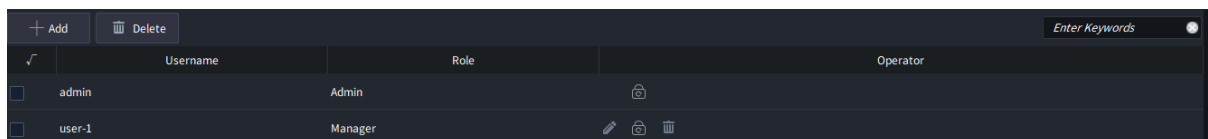


1. Add User

1. Click **Add**, and the **User Information** window appears. Enter user information, and assign a role for the user.

The user password must be a strong one of 9 to 32 characters, including at least three types of the following elements: uppercase and lowercase letters, digits, underscores, hyphens, and @.

2. Click **OK** to add the new user.



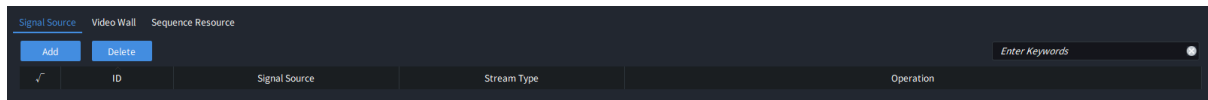
2. Manage User

Item	Description
Edit	Click  to edit the username and role.
Reset Password	Click  to reset the password.
Delete	You can delete users one by one or in batches. ● Delete one by one: Select the user you want to delete, and then click . ● Delete in batches: Select the user(s) you want to delete or click  to select all users, and then click Delete.

7 Resource ID

Display the ID of resources (signal sources, video walls, and sequence resources) of devices (decoders, video wall controllers, and distributed output devices).

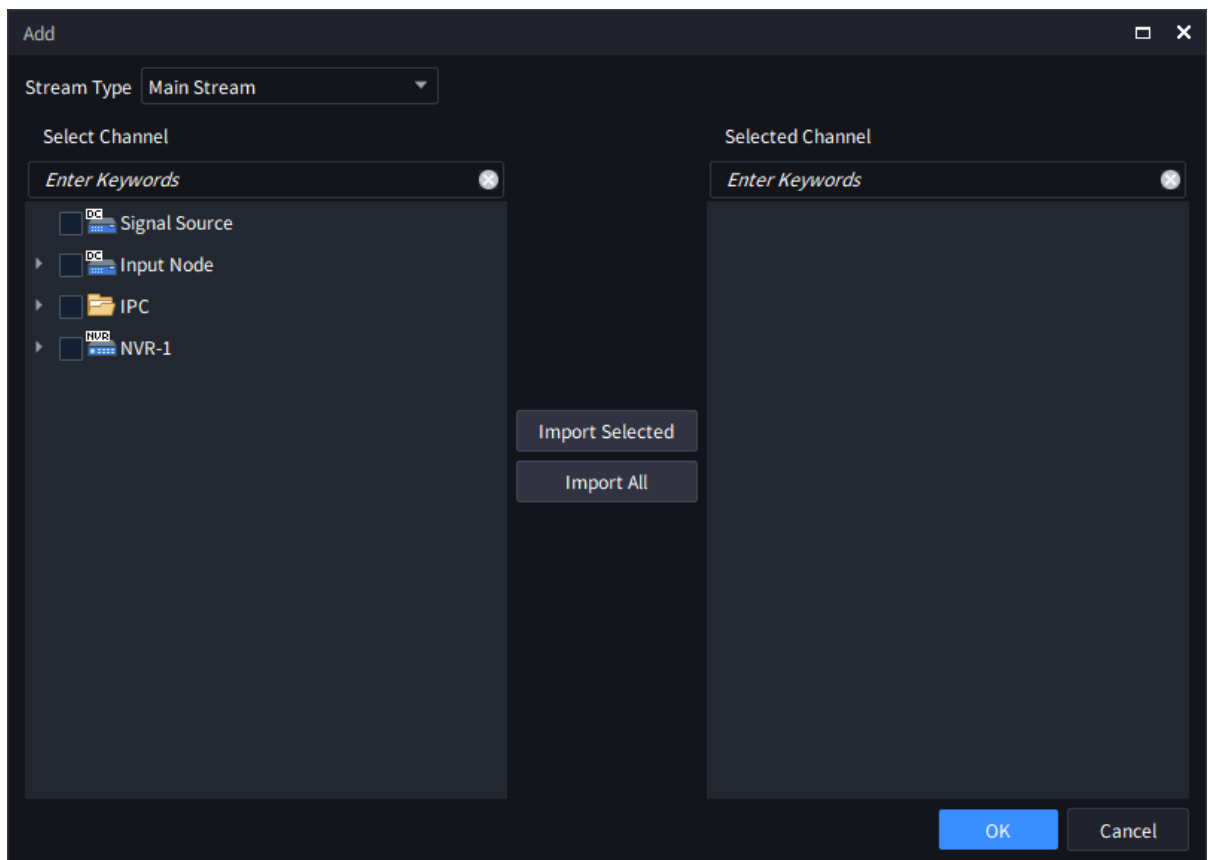
If the network keyboard connects to the managed device, you can use the keyboard to select and control the resources via the corresponding ID, play live view on the video wall, etc. See the *Network Keyboard User Manual* for details.



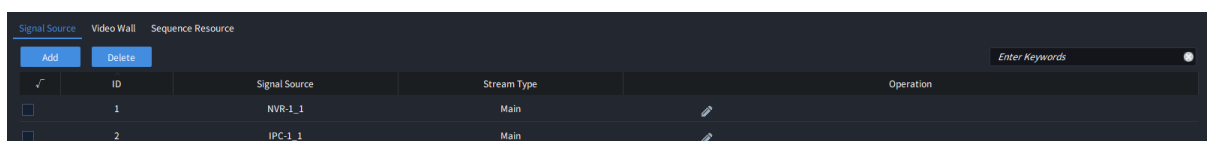
1. Assign ID

The video walls and sequence resources added on the [Screen Control](#) page are automatically displayed on the **Resource ID** page, and their IDs are automatically assigned. However, the video channels added on the **Resource** page should be manually added to the **Resource ID** page.

1. Click **Add**.



2. Select the desired video channels from the left list, click **Import Selected**, and the channels will be imported to the right list. To import all channels in the left list to a specified group in the right list, click **Import All**.
3. Click **OK**. The video channels are added successfully and their IDs are automatically assigned in the order they were added.



2. Edit ID

You can click  to edit the assigned ID.

The ID of devices (signal sources, video walls, and sequence resources) in the same category must be unique as these devices are controlled by the network keyboard via the corresponding ID.