

EZWall 2.0
Client Software
User Manual




Manual Version: V1.06

Disclaimer

- Contents of this document are subject to change without prior notice.
- Best effort has been made to verify the integrity and correctness of the contents in this document, but no statement, information, or recommendation in this manual shall constitute formal guarantee of any kind, expressed or implied. We shall not be held responsible for any technical or typographical errors in this manual.
- The illustrations in this manual are for reference only. The UI displayed and functions available may vary depending on the software version and the server you log in to.

Conventions

Convention	Description
Boldface font	Commands, keywords, parameters and GUI elements such as window, tab, dialog box, menu, button, etc.
<i>Italic font</i>	Variables for which you supply values.
>	Separate a series of menu items, for example, Device Management > Add Device .

Symbol	Description
 WARNING!	Indicates a hazardous situation which, if not avoided, could result in bodily injury or death.
 CAUTION!	Indicates a situation which, if not avoided, could result in damage, data loss or malfunction to product.
 NOTE!	Indicates useful or supplemental information about the use of product.

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1 Introduction

EZWall client software (also referred to as the client in this document) is mainly used in small-scale display & control device-centered systems to manage encoding devices and operate video walls.



NOTE!

- Unless otherwise stated, the display & control device that you log in to from the client software is also referred to as the "server" in this manual.
 - The GUI, features, and operations may vary, depending on the server that you log in to.
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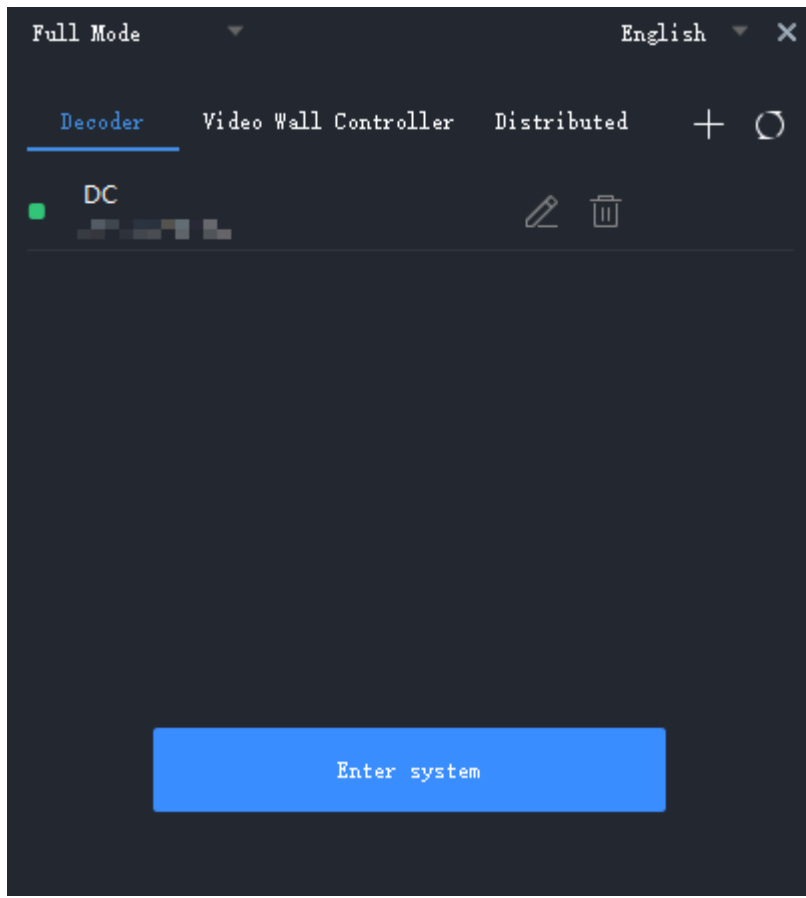
2 Log In to the Client


Login

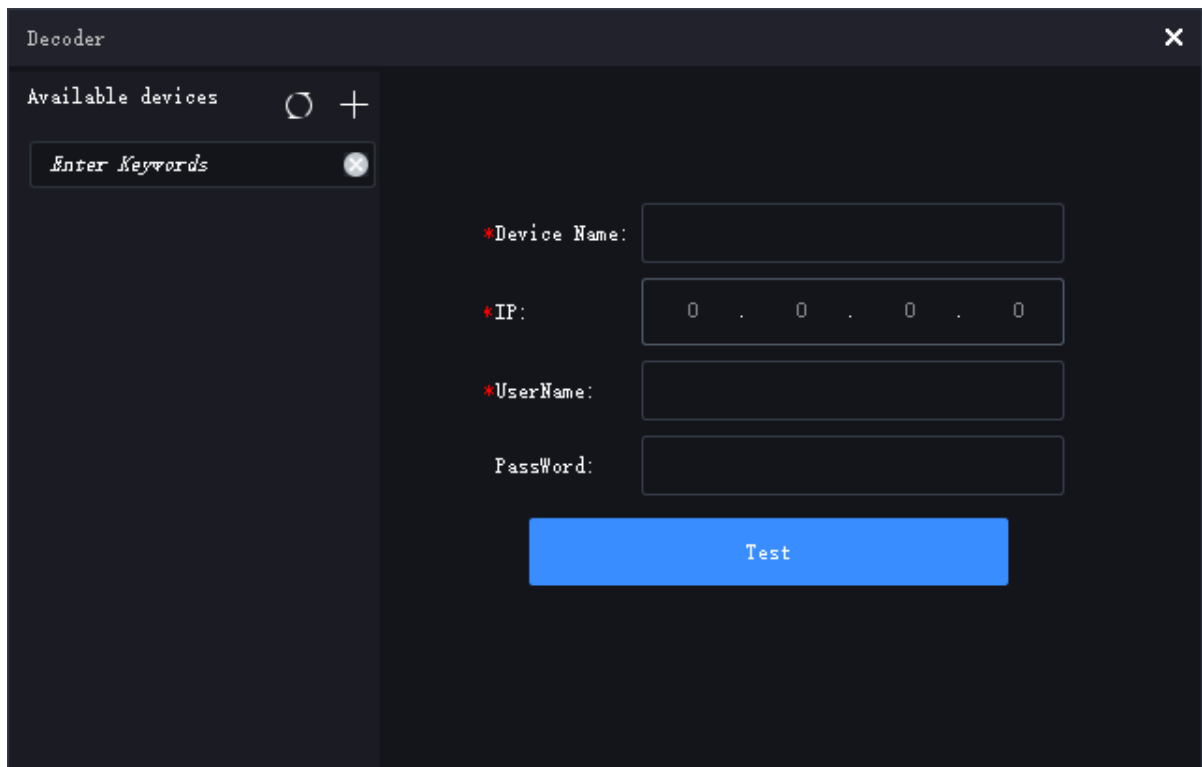
Full Mode


Add Device

1. Start the software. The login page appears. Choose **Full Mode**.



2. Choose the device type. The supported device types include decoder, video wall controller, and distributed device.
3. Click  in the top right corner. Choose a method to add devices.



- The left side displays a list of available devices in the current local area network. Select the device(s) you want to add from the list and then click . The selected name and IP of the device(s) will be automatically filled into the input box on the right side. Enter the username and password to proceed.
- Enter the device name, IP, username and password.
- 4. Click **Check**. If the device can be connected, click **Add** to add the device information to the login page.
- 5. (Optional) Repeat the above steps to add all the devices.

Log In to Device

1. Start the software, open the login page, and select **Full Mode**.
2. Select the device type, select the name of the device you want to log in to, and click **Enter System**.

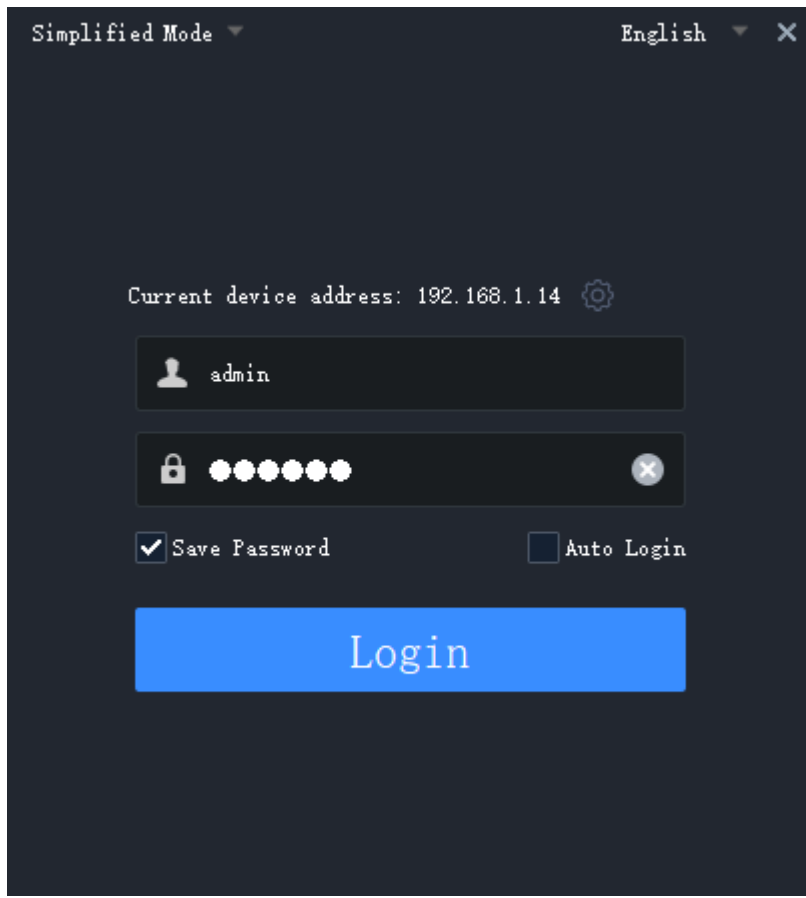


NOTE!

If you are logging in to a KVM device, you need to set it as a management node in the device's web interface first; otherwise, you will not be able to configure other nodes after logging in.

Simplified Mode

1. Run the software. On the login page, choose **Simplified Mode** above.




2. Complete the required information and then log in.


Parameter	Description
IP	<p>Enter the server's IP address. 192.168.1.14 is an example.</p> <p>IPs of the servers that the client has successfully logged in to are saved in the drop-down list.</p> <p>Note:</p> <p>If you are logging in to a KVM device, you need to set it as a management node in the device's web interface first; otherwise, you will not be able to configure other nodes after logging in.</p>
Port	<p>Enter the port number of the server.</p> <p>The default is 80; if it has been modified, please enter the actual port number.</p>
Username/password	Username and password of the server.
Save Password	When selected, the client software automatically fills in the current username/password at your next login.
Auto Login	When selected, the client software automatically logs in with the current account at the next startup.

3. The main page appears when you are logged in.

Lock the Client

Click  in the top right corner to lock the client. A username and password is required to unlock the client.

Switch User or Server


Click  in the top right corner. To switch servers, you need to complete the server information on the login page in advance.

Client Configuration

Click  in the top right corner, choose **Client Configuration** to set automatic login and stream type.

Parameter	Description
Enable Auto Login to EZWall	If enabled, the client will automatically log in to the most recent server at the next startup. If Enable Auto Login to Windows is enabled, the client starts automatically after the computer enters Windows.
Enable Auto Login to Windows	Select the check box and then enter the username and password of your Windows operating system, so that the computer automatically enters Windows after startup. Note: In order for this feature to work, you also need to add EZWall to the Windows Startup folder. The steps may vary with system version, here we take Win 7 as an example: click Start > All Programs , find Startup , right-click it, choose Open , and then drag the EZWall shortcut icon to the Startup folder.
Selected window always on top	If enabled, when you click a window on the Video Wall tab, the window will automatically display on top (when multiple windows overlap).

View Software Version

Click  in the top right corner for the operation video, open source notice, user manual, and software version information.

3 User Management

Add, edit, delete users and configure permissions.

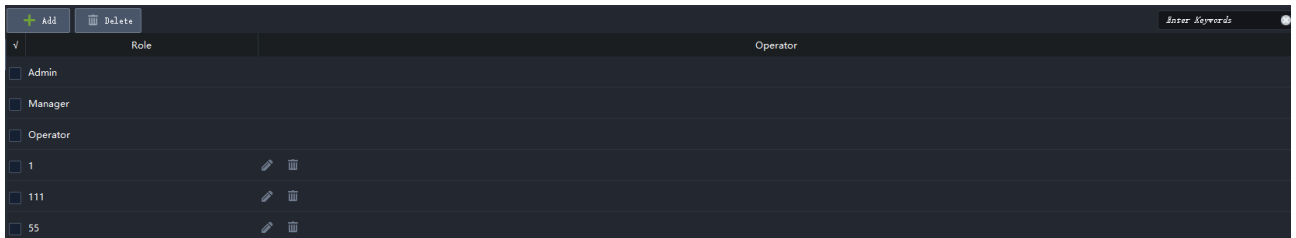


NOTE!

This module is visible only to admin who has logged in to a KVM device set as a management node.

Roles

Go to **User Management > Role** to add and manage roles, and configure role permissions. You can assign roles on the **User** page. The system has three default roles (Admin, Manager, Operator), which can neither be edited nor be deleted.



Role	Description
Admin (super administrator)	Has all system permissions and resource permissions.
Manager	Has all permissions except user management.
Operator	Has resource permissions, that is, can only operate on the devices that have already been added.

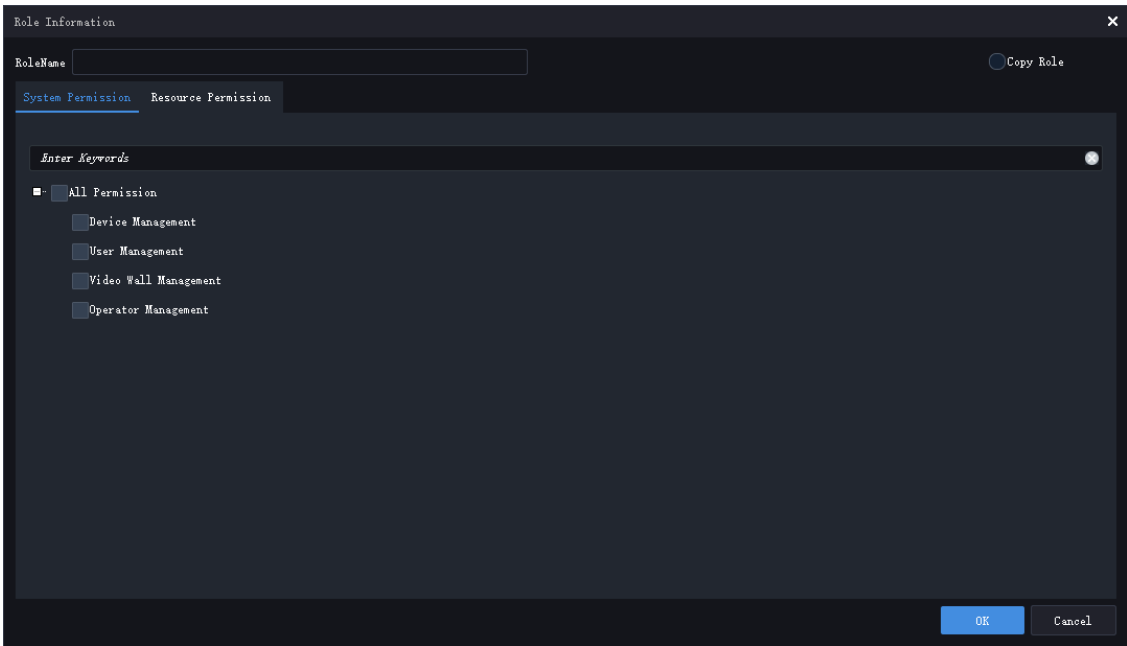
Add Role

1. Click **Add**. A window appears. Enter a name for the role.

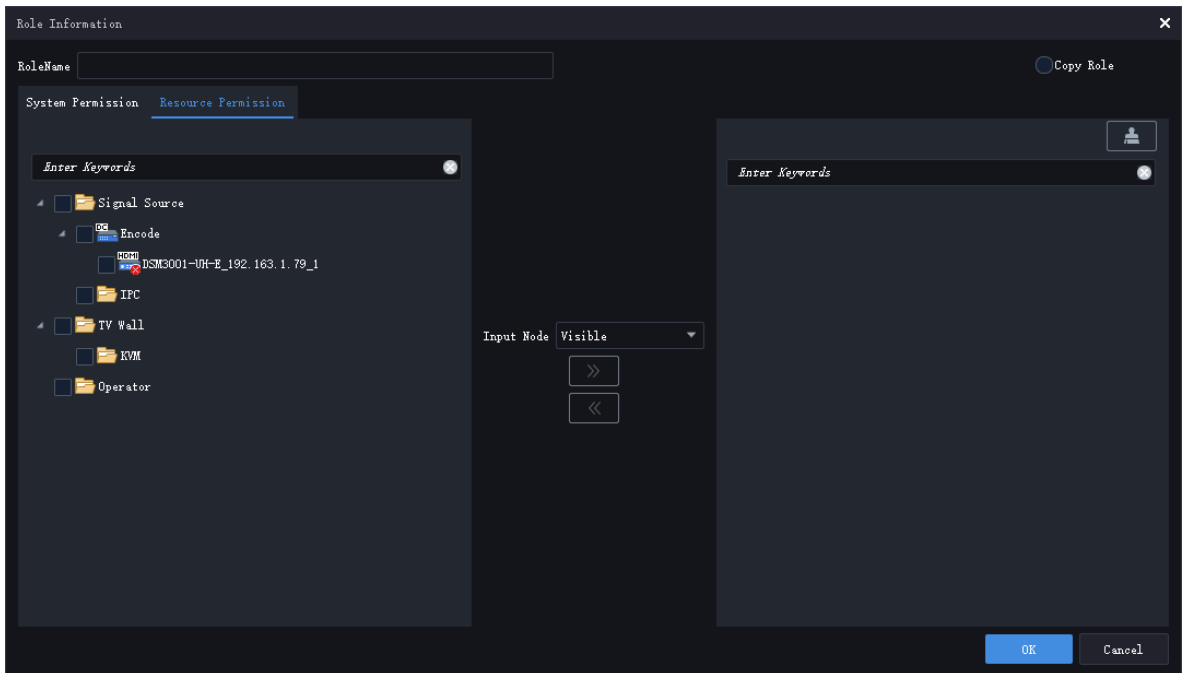


NOTE!

The added role cannot be assigned system permissions; it can only be assigned resource permissions. Users who are assigned this role can only operate specified devices.




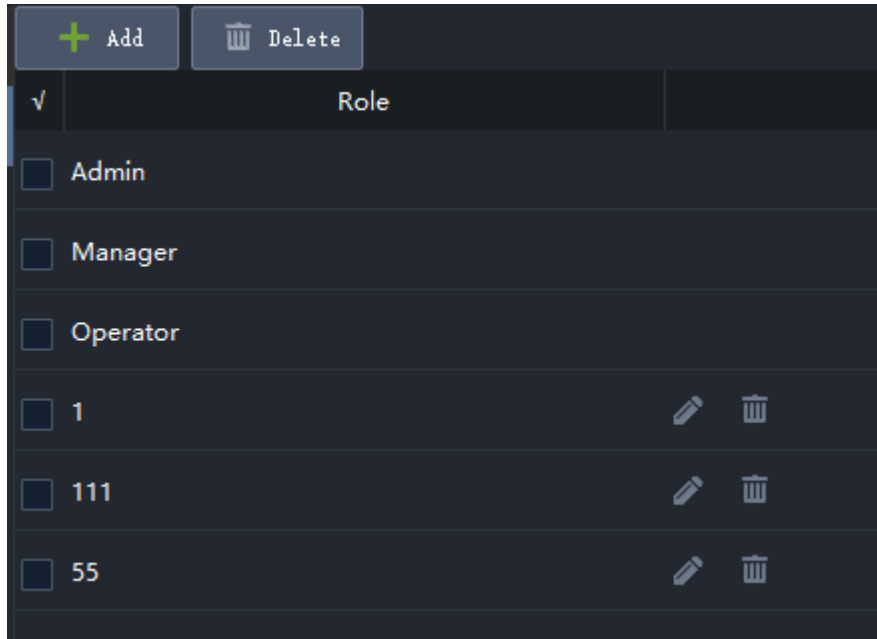
- Click the **Resource Permission** tab, select device(s) on the left. Select permissions from the **Input Node** drop-down list, and then click **>>** to add the selected device(s). You may also select **Copy Role** and copy resource permission from an existing role.




Role	Description
Permission	<ul style="list-style-type: none"> Visible: The device will be displayed but is uncontrollable. Controllable: The device will be displayed and is controllable with a mouse.

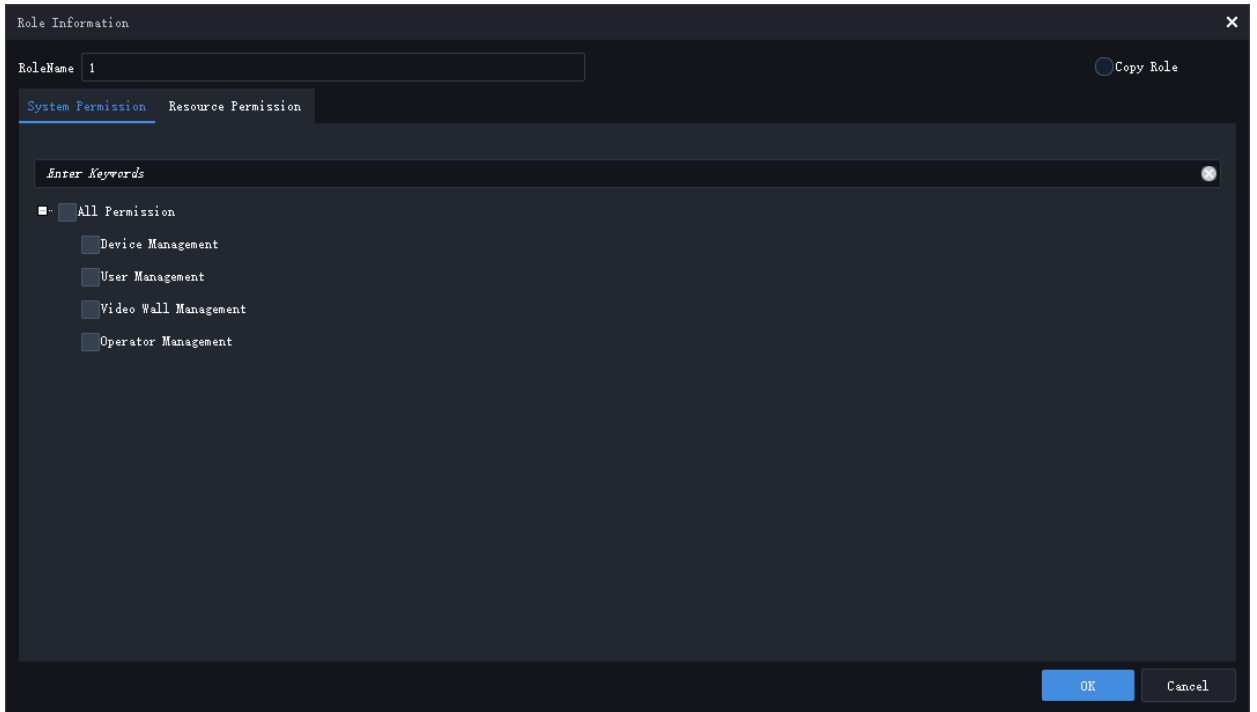
Role	Description
	<ul style="list-style-type: none"> Fully Controllable: In addition to the Controllable permission, the device also allows file transfer using a USB flash drive.

- (Optional) To edit permissions for an added device, click the corresponding button and choose from the list. To clear the added device list, click .
- Click **OK**. The role is added.




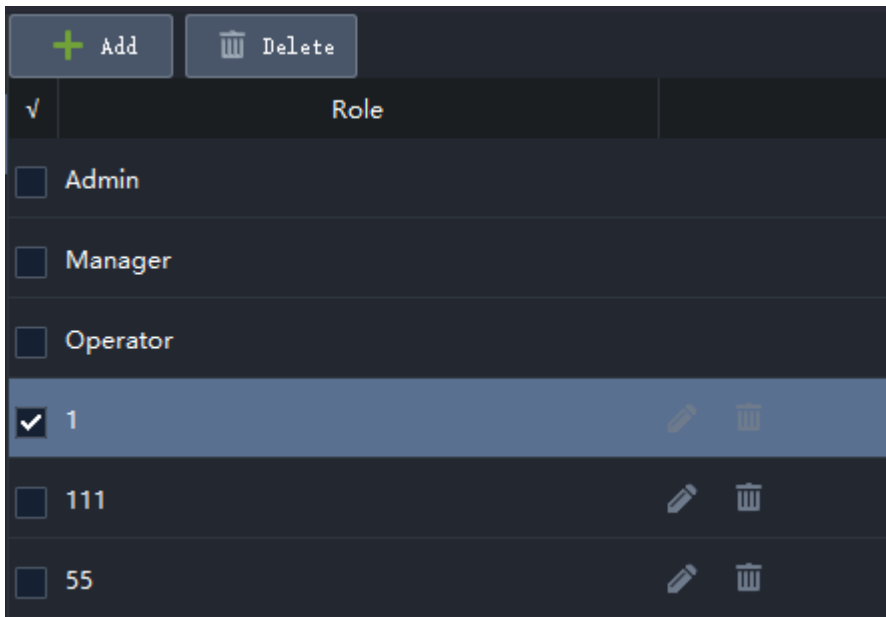
Edit Role

Click . A window as shown below appears. Edit the role as needed, and then click **OK** to save the changes.



Delete Role

- Delete one role: Click , and then confirm the delete in the pop-up window.
- Delete multiple roles: Select the roles you want to delete and then click the **Delete** button on the top. Confirm the delete in the pop-up window.



Users

Click **User Management** > **User** to add and manage users. The default user “admin” can neither be modified nor be deleted.

	Username	Role	Operator
<input type="checkbox"/>	admin	Admin	
<input type="checkbox"/>	11	Manager	

Add User

1. Click **Add**. A window as shown below appears. Enter user information. The password must be a strong password.

User Information ✕

Username

Role

Password

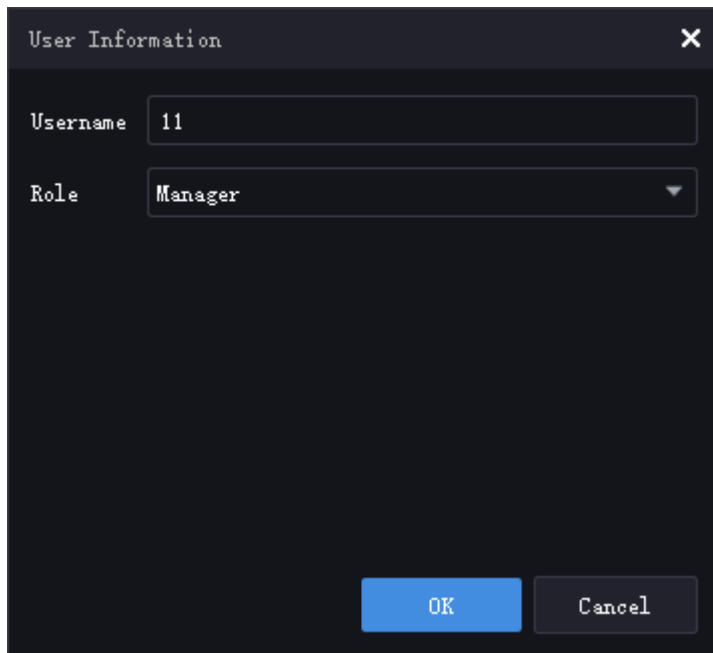
Confirm Password

2. Click **OK**. The user is added.

	Username	Role	Operator
<input type="checkbox"/>	admin	Admin	
<input type="checkbox"/>	11	Manager	


Edit User

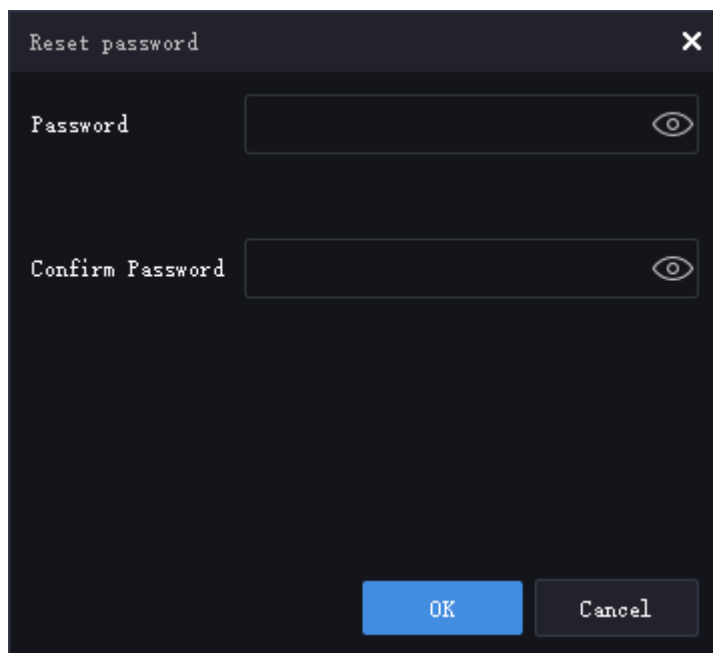
Click . A window as shown below appears. Edit user information, and then click **OK** to save the changes.



A dialog box titled "User Information" with a close button (X) in the top right corner. It contains two input fields: "Username" with the value "11" and "Role" with a dropdown menu showing "Manager". At the bottom, there are two buttons: "OK" (highlighted in blue) and "Cancel".


Reset User Password

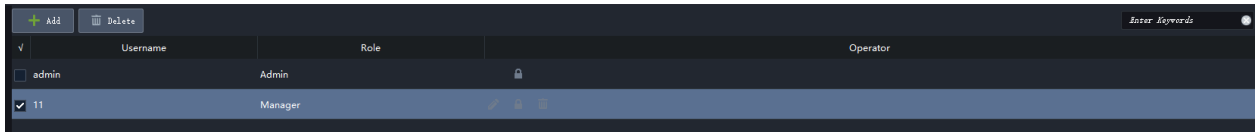
Click . A window as shown below appears. Enter the new password, confirm the new password, and then click **OK**. The password is reset.



A dialog box titled "Reset password" with a close button (X) in the top right corner. It contains two input fields: "Password" and "Confirm Password", each with a toggle icon (an eye) to the right. At the bottom, there are two buttons: "OK" (highlighted in blue) and "Cancel".

Delete User

- Delete one user: Click , and then confirm the delete in the pop-up window.
- Delete multiple users: Select the users you want to delete, click the **Delete** button on the top, and then confirm the delete in the pop-up window.



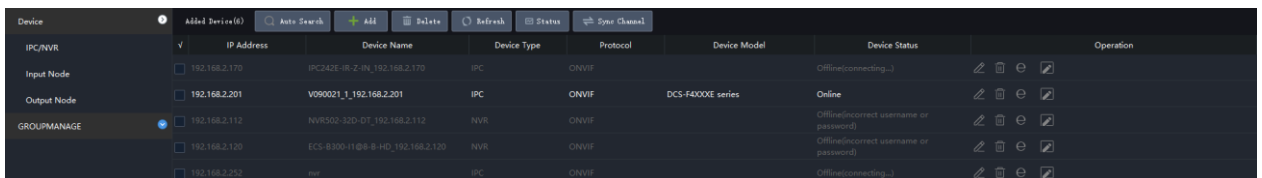
4 Device Management

Add IPCs, NVRs, input/output nodes on the server and manage them.

Device	Description
IPC/NVR	One IPC occupies one channel. One NVR can connect multiple IPCs (each IPC occupies one channel). You can view live videos from IPCs and play them on a video wall.
Input node	Input nodes can be connected to signal source devices such as PCs, allowing user to view live video from the signal source devices and play live video on a video wall.
Output node	<ul style="list-style-type: none"> Splicing node: Used for creating and managing video walls, displaying live video from IPCs and input nodes on a video wall, and screen splicing. Operator node: Used for creating and managing operators, displaying live video from IPCs and input nodes on an operator. Users can use a mouse to control the user interface and manage the operator.

Add Device

Choose the type of device you want to add on the left. There are two ways to add devices.

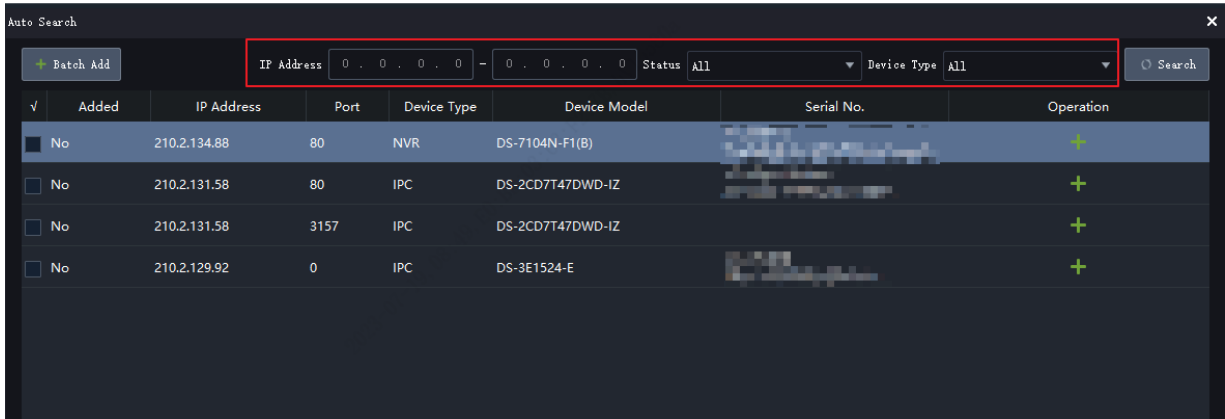


Choose a way to add devices:

- Auto Search: Search devices and add the discovered devices in batches. See Search.
- Add: Add a device with a known IP address.



Search

1. Click the **Auto Search** button to search for devices on the same network segment as the server.
2. You can set search criteria to narrow the search results.



Add

1. Select the device(s) to add.

- Select the devices to add and then click the **Batch Add** button. Clicking  will select all.
- Click  to add a device.

2. Choose the management protocol, transmission protocol, and then enter the device username and password.

Protocol	Description
Onvif	Add the device via Onvif.
RTSP	<p>Add the device via RTSP. You may choose Custom as the transmission protocol and add devices in batches.</p> <ol style="list-style-type: none"> 1) Choose the device type and custom protocol. <p>If you are adding an NVR, certain custom protocols allow you to enable PTZ control for a PTZ camera connected to the NVR and allow you to control the pan/tilt/zoom of the PTZ camera (see PTZ Control). The availability of this feature depends on the server version.</p> <ol style="list-style-type: none"> 2) Enable batch device adding. 3) Enter the start and end IP addresses. Devices in the IP range are displayed automatically at the bottom. 4) Enter the device username and password. 5) Set the channel number. You may input a channel number for a device and then click Apply to All to apply the same channel number to all the listed devices. To change the channel number for a device, double-click the number. 6) If the set IP range includes devices that you don't want to add, select the devices and then click the Not Add Selected Device button on the top, or click the corresponding Add or Not button. 7) Click OK.
IPLAT	Add the device via the IPLAT protocol. The IPLAT protocol allows you to add all the devices on the Baoxin platform directly.

3. Check whether the devices are added to the server.
4. Close the window. View the device status displayed in the **Status** column.



NOTE!

- If **Offline(Incorrect username or password)** is displayed, it means the username/password used to add the device in step 2 is incorrect. In this case, click to modify.
- To view the status of an NVR channel, click the **Status** button.

Added Device(s)							Auto Search			+ Add			Delete			Refresh			Status			Sync Channel		
✓	IP Address	Device Name	Device Type	Protocol	Device Model	Device Status	1			2			3			Operation								
<input type="checkbox"/>	192.168.2.201	V090021_1_192.168.2.201	IPC	ONVIF	DCS-F4XXXE series	Online																		







- To delete device(s), select the device(s) and then click the **Delete** button.
- To edit device information, including device name, management protocol, transmission protocol, device username and password, click the edit button (2) or double-click the line. Note that you cannot change a device's IP address in this way. To change a device's IP address, click the web browser icon (3), and then enter the device's username and password to log in.

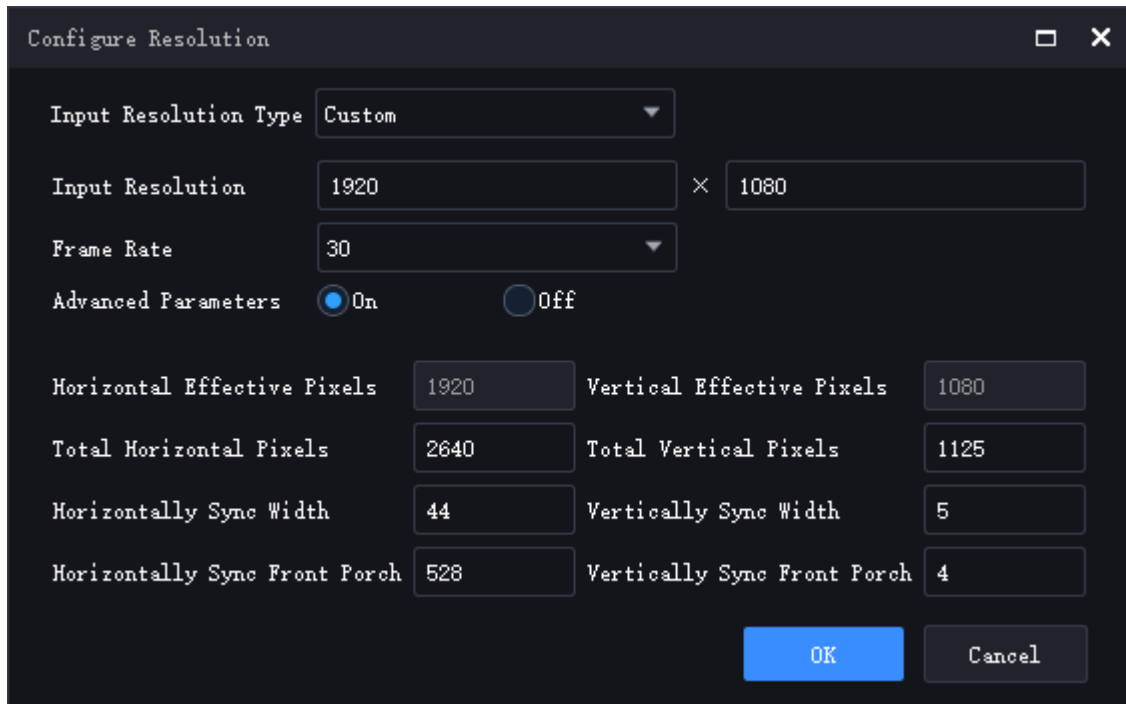
Other Operations

- Select device(s) in the list and then click **Sync Channel Info** to get the latest channel information.

Device		Added Device(s)											Auto Search			+ Add			Delete			Refresh			Status			Sync Channel		
IPC/NVR	✓	IP Address	Device Name	Device Type	Protocol	Device Model	Device Status	1			2			3			Operation													
Input Node	<input type="checkbox"/>	192.168.2.201	V090021_1_192.168.2.201	IPC	ONVIF	DCS-F4XXXE series	Online																							
Output Node	<input type="checkbox"/>	192.168.2.112	NVR502-320-DT_192.168.2.112	NVR	ONVIF		Offline(incorrect username or password)																							
GROUPMANAGE	<input type="checkbox"/>	192.168.2.130	192-8200-01-00-0-0-00_192.168.2.130	NVR	ONVIF		Offline(incorrect username or password)																							

- To edit channel information, click . A dialog box as shown below appears. Edit device information and then click **OK**.

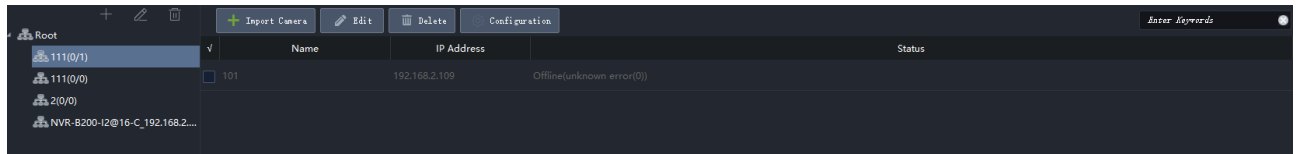
- Click  to open the device's web interface.
- Click  in the **Operation** column to rename a device or channel.
- On the video wall page, preview the live video of an online channel or signal source by hovering over  behind the online channel/signal source.
- On the video wall page, change a channel name by hovering over the channel/signal source and clicking .
- On the video wall page, configure OSD by hovering over the input node and clicking .
- On the video wall page, select a resolution by hovering over a signal source and clicking . This feature is only available to certain local signal sources.



Group

Groups are only visible on KVM management nodes.

Click **Device Management** > **Group** to add groups. Once groups have been added, you can assign devices to different groups and manage devices by groups.

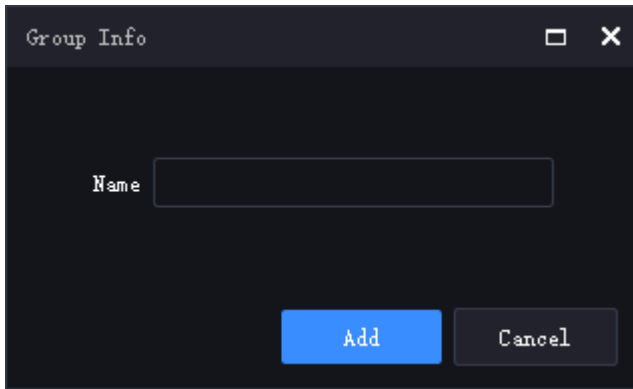


Group Management

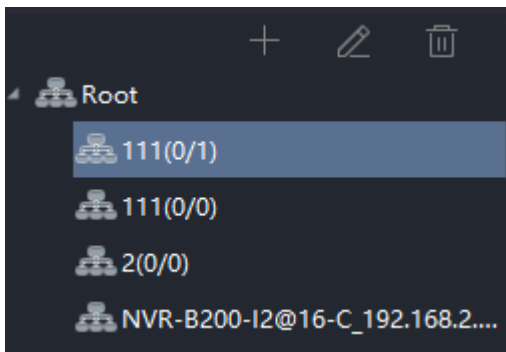
Add and manage groups.

Add Group

1. Choose an existing group, and then click **+**. A dialog box as shown below appears.




2. Enter a name for the group, and then click **Add**. The new group is added under the group you selected.

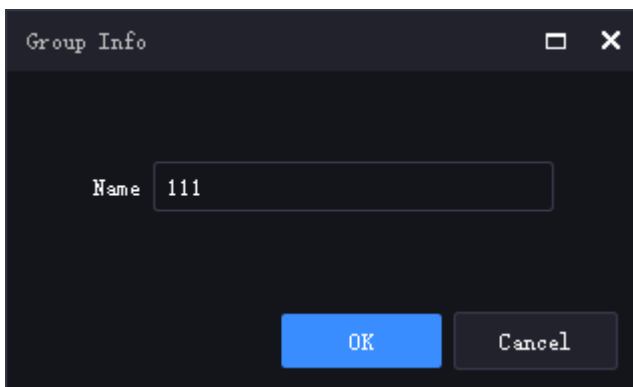


NOTE!


- If you click **+** without specifying a group, the new group will be added under the root node.
- Up to five levels of groups can be added under the root node.

Edit Group

Choose the group you want to edit, and then click . A dialog box as shown below appears. Enter the new name and then click **OK**.



Delete Group

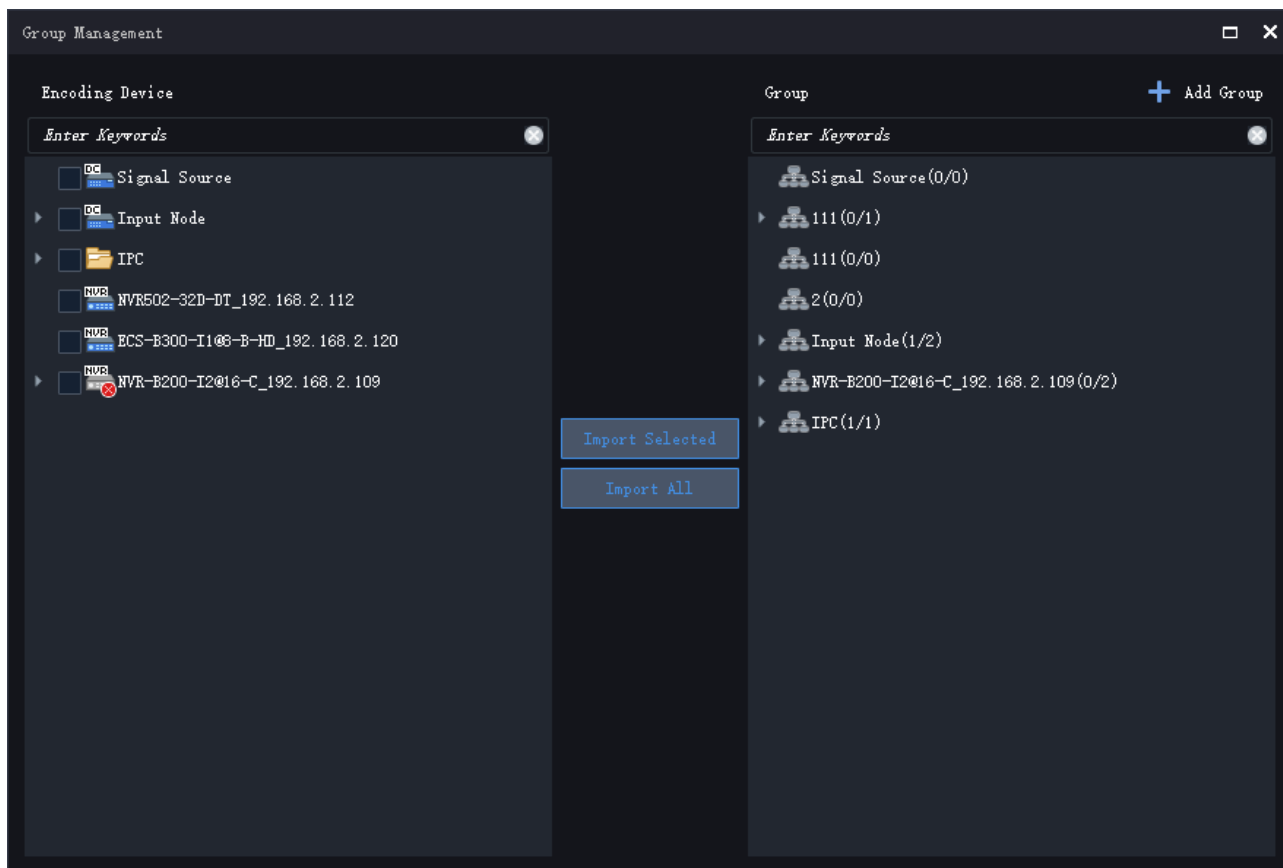
Choose the group you want to edit, and then click . A dialog box as shown below appears. Enter the new name and then click **OK**.

Camera Management

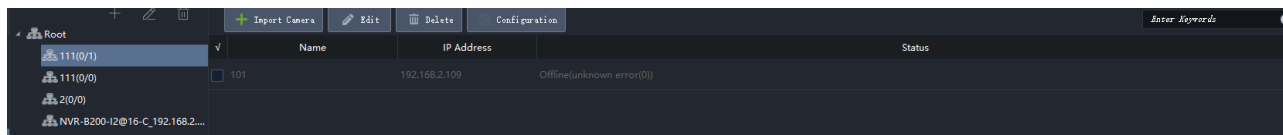
Assign the added devices to different groups.



Import Device

1. Click **Import Camera**. A window appears.



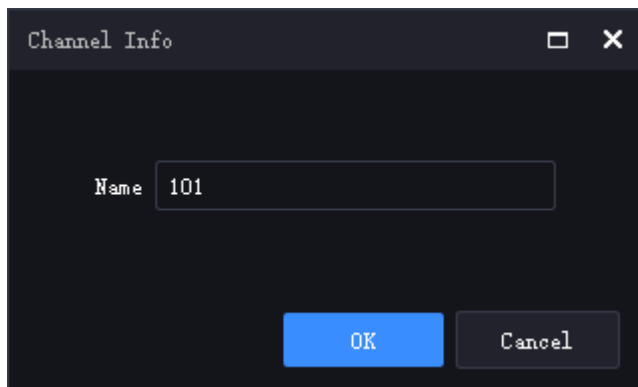
2. (Optional) Click **Add Group**. A dialog box appears. Enter a name for the group, click **Add**. The group is added.
3. Select devices on the left, choose a group on the right, click **Import Selected**. The selected devices are imported to the specified group. To import all the devices on the left, click **Import All**.



- (Optional) In the **Group** area, choose a group or a device, and then click  or  to edit or delete the group or device.

Edit Device

Select the device you want to edit, click **Edit**. A dialog box appears. Enter the new name and then click **OK**.



Delete Device

Select the device(s) you want to delete, click **Delete**. A dialog box appears. Click **Yes** to confirm the delete.

5 Video Wall

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






NOTE!

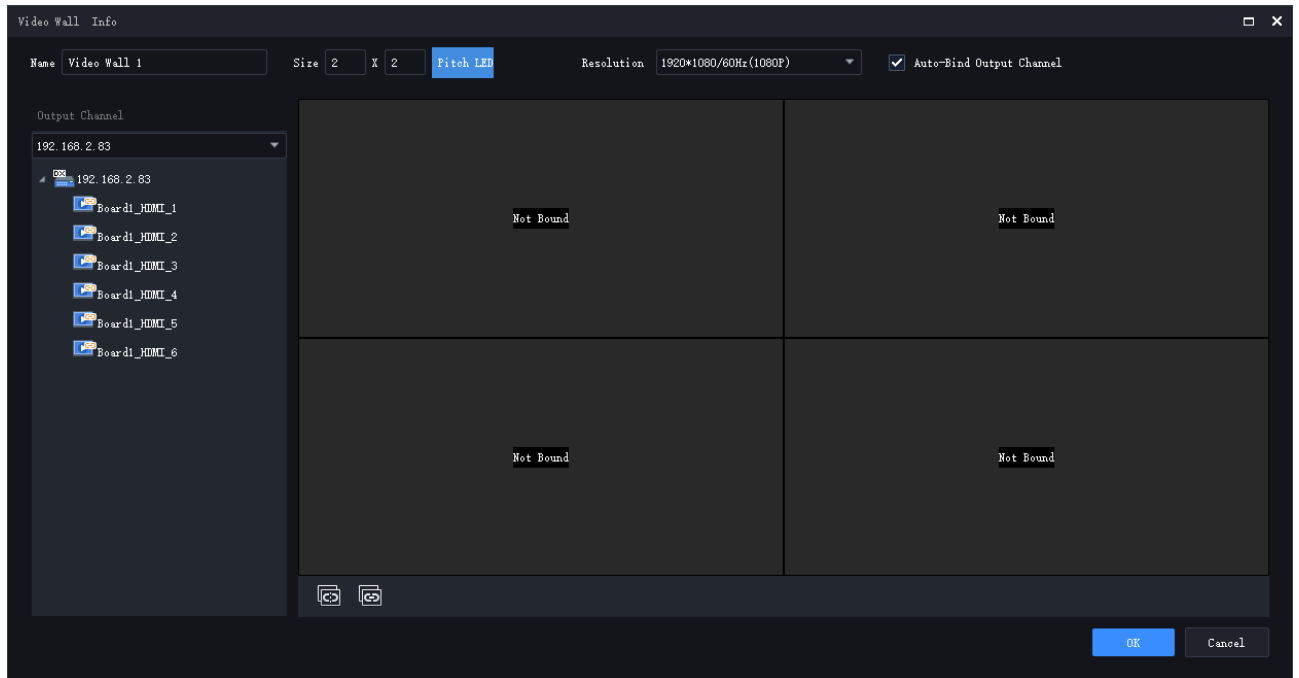
- The GUI, features, and user operations on the **Video Wall** tab may vary depending on the server you are logged in to. For example, you can open windows and drag windows on a video wall created with an ADU, and splice screens on a video wall created with DC-B20X. The functions described in this chapter are not intended for a specific server model.
- If the server is an output node and the private protocol has been configured as the access protocol in its operation mode, the client does not display the **Video Wall** tab.

Create a Video Wall

Basic Operations

- For first time use, click  on the center; otherwise, click the **Add** button  on the right side of the video wall name .
- Complete video wall settings.

- (Optional) Enable output locating as needed. If enabled, the actual connected HDMI ports will be displayed on the video wall. To ensure consistency between the physical wiring of the video wall and the channel binding on the client, you can adjust the physical wiring according to the channel names displayed on the client after binding channels and enabling output locating on the client.



NOTE!

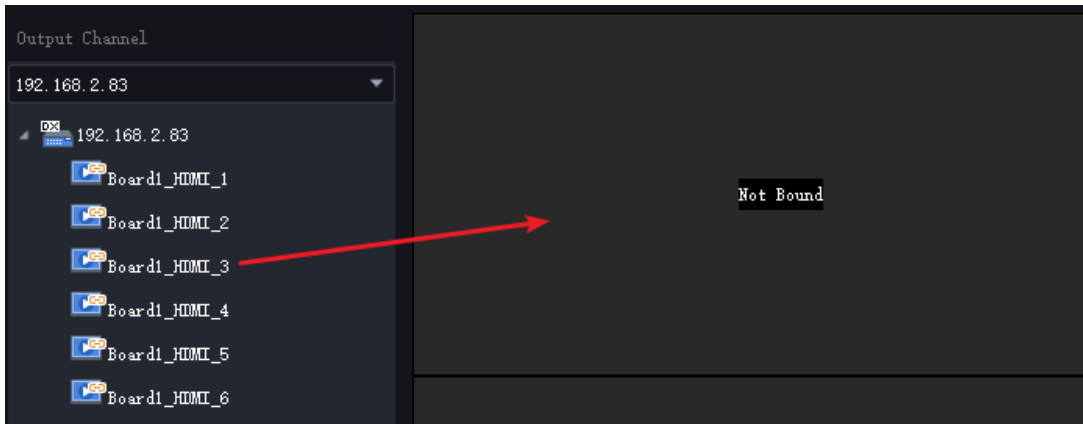
- The size refers to the number of screens arranged horizontally and vertically on the video wall. If small pixel pitch LED screens are used, you need to configure **Small Pixel Pitch LED**. See Small Pixel Pitch LED.
- Auto-Bind Channel** is enabled by default, so that decoding channels are bound automatically to video wall screens for you when you create a new video wall. See Bind and Unbind.
- Only certain devices support output locating. Please refer to the actual GUI of the device.

Bind and Unbind

Binding refers to the correspondence between a decoding channel and a window or split window. After video signals are decoded through the decoding channel, they are transmitted to play in the corresponding window or split window. Unbinding is the opposite operation of binding, which means the cancellation of the correspondence between the two.

Bind Manually

Drag a decoding channel to a window or split window.



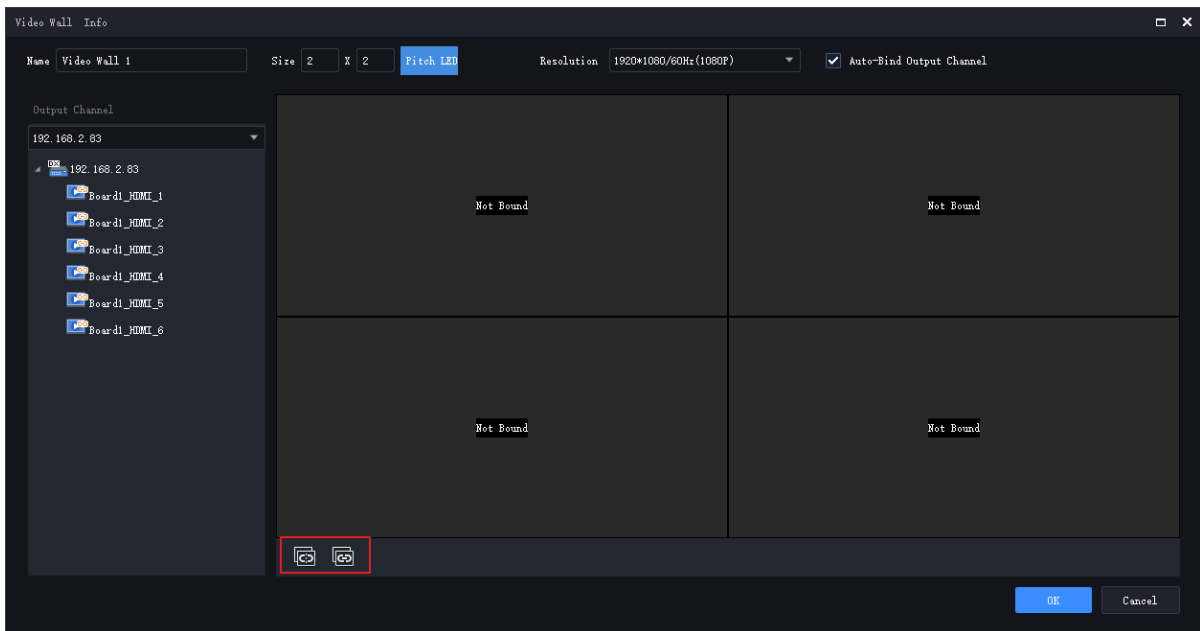
Unbind

Click the **Close** button to cancel the binding.



Unbind All

Click the **Unbind All** button to cancel all bindings. Click **Bind All** to bind all available decoding channels automatically.

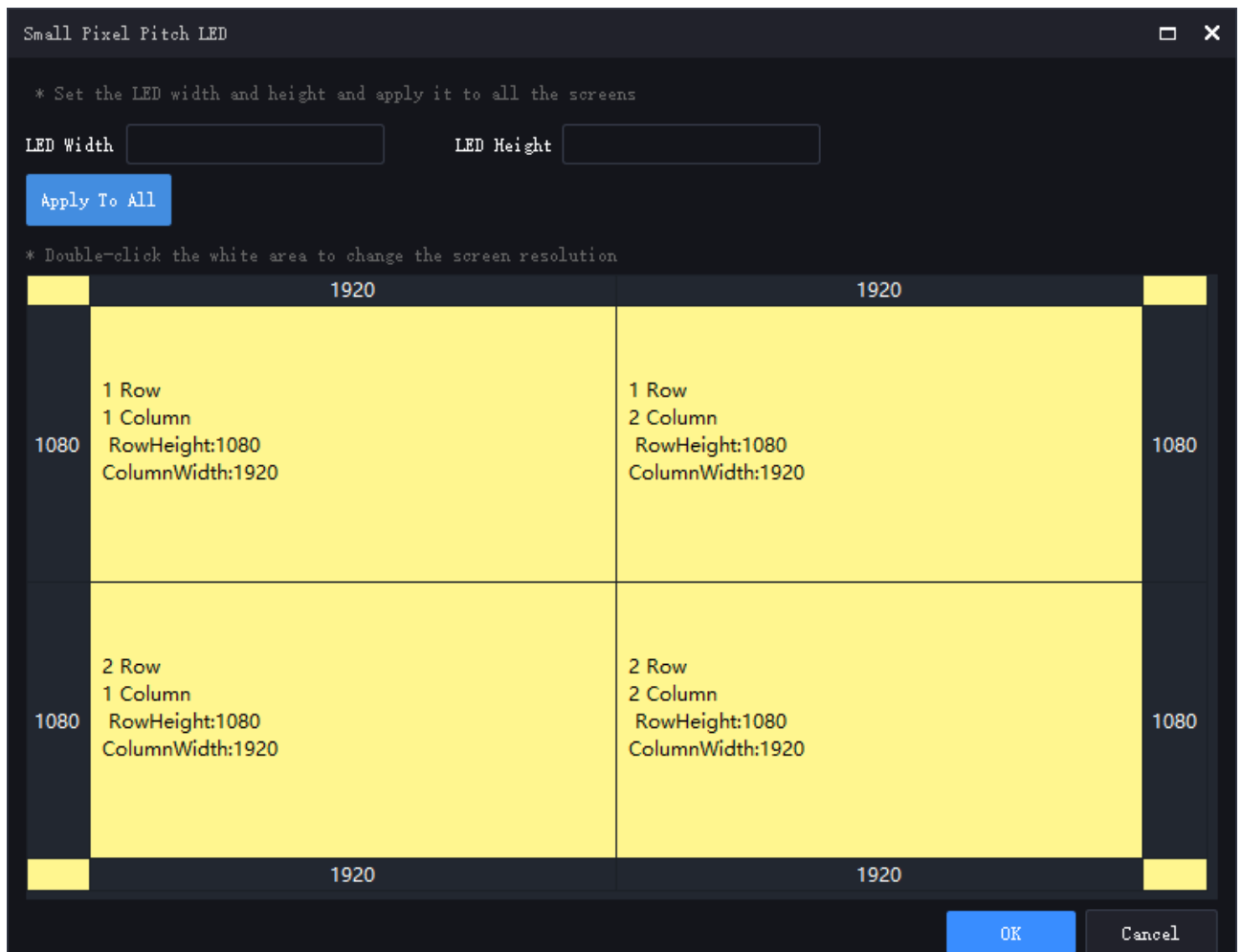


Small Pixel Pitch LED

When using small pixel pitch LED screens, if some of the screen sizes differ from others, you can set the screen width and height for each row and column under **Small Pixel Pitch LED**.

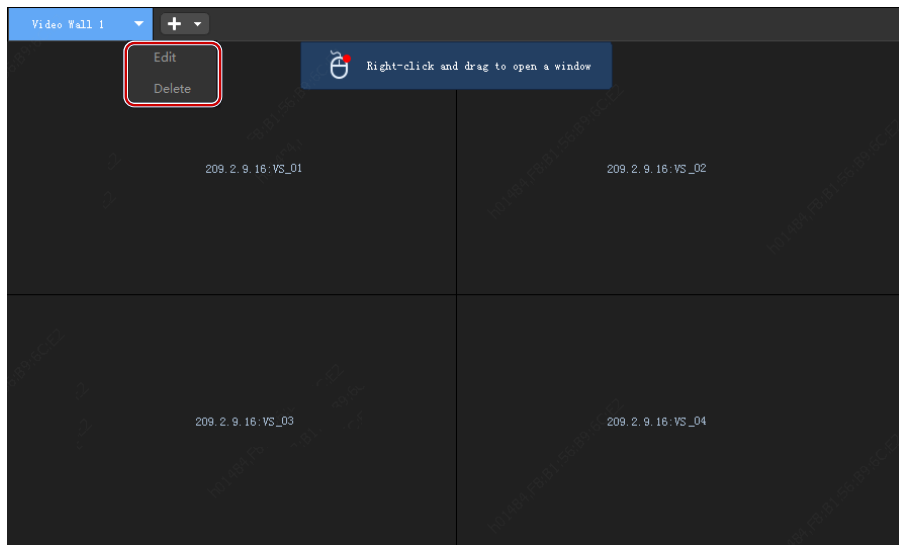
If special configuration for the width and height of the LED screen is required, the small pixel pitch LED (in unit of pixel) should be set correctly in video wall specification. In the figure below, the red area indicates the LED screen, which can be configured for all or individual rows/columns.

- Configure all: Enter the LED width and LED height, and click **Apply To All**.
- Configure row and columns separately: After you change the values for LED width and LED height, the width and height of the white area change accordingly.



Edit or Delete Video Wall

Click the arrow on the right side of the video wall name to edit or delete the video wall.



Splice Screens

Join multiple screens to display one image.

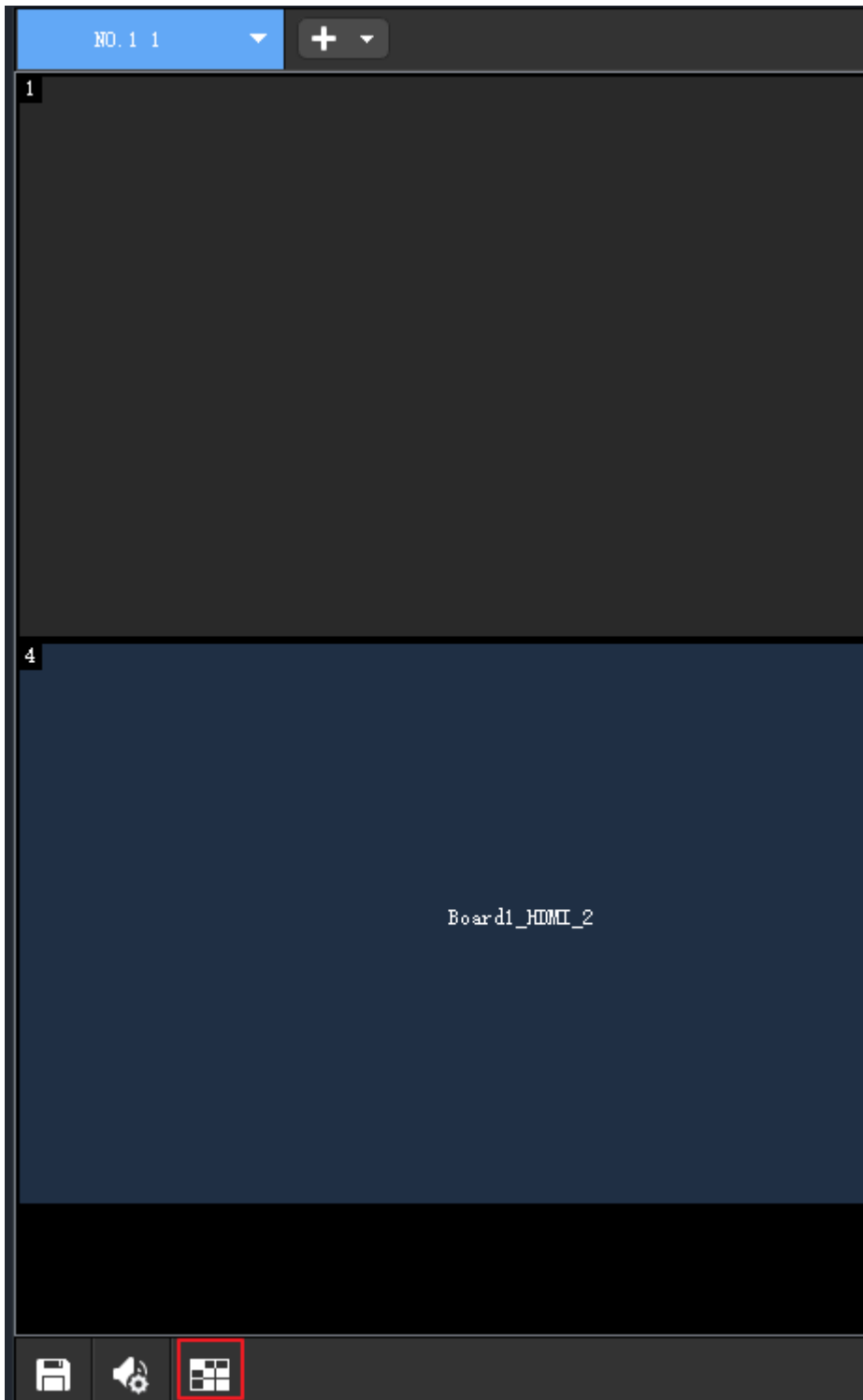


NOTE!

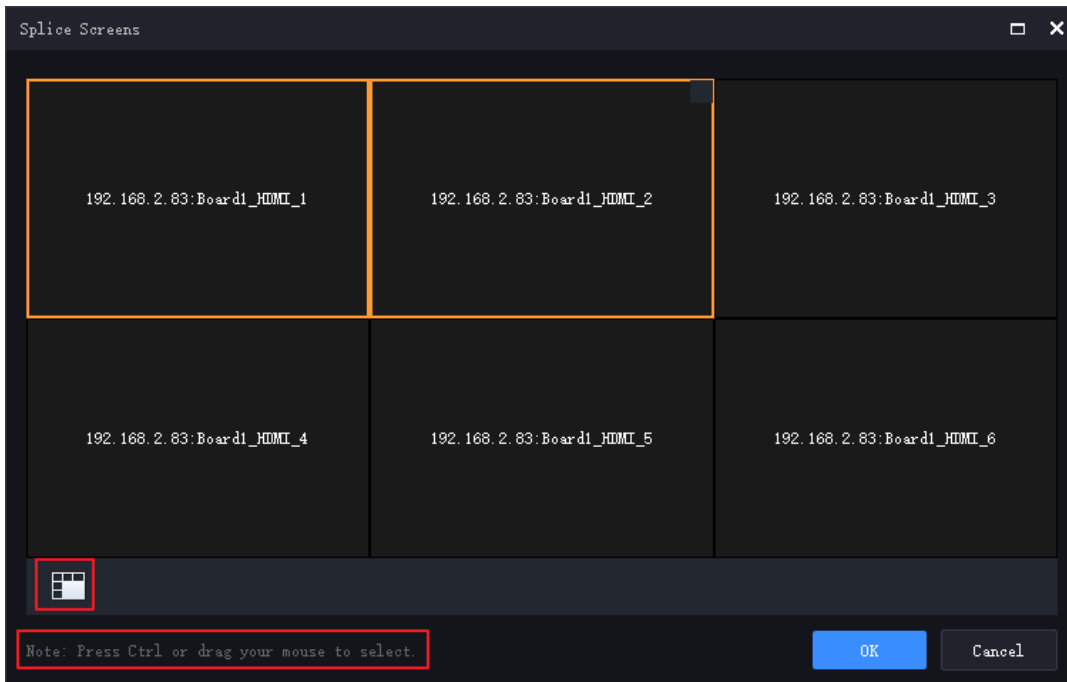
This function is not available to all devices.

For example, splice screens 1, 2, 4 and 5.

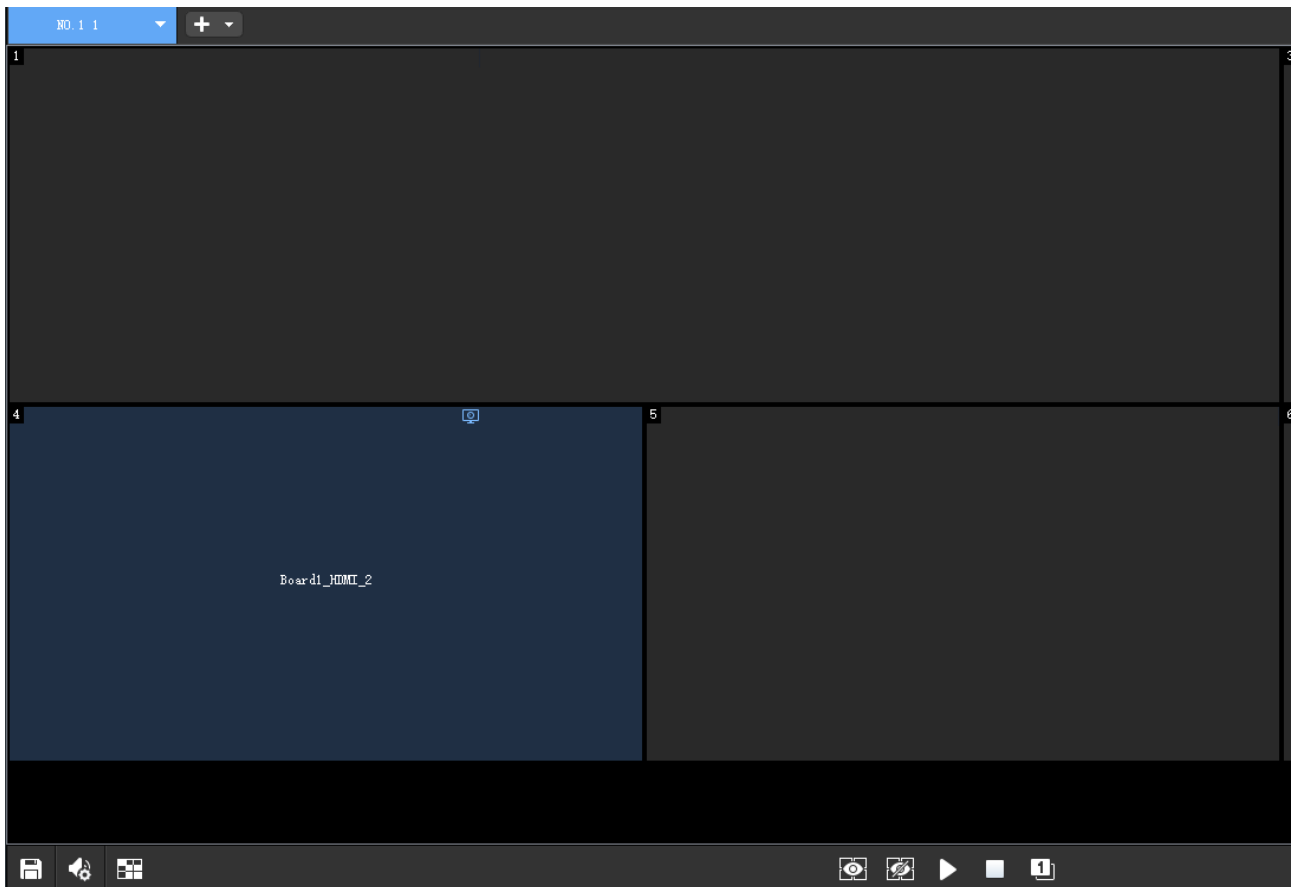
1. Click **Splice Screen**.




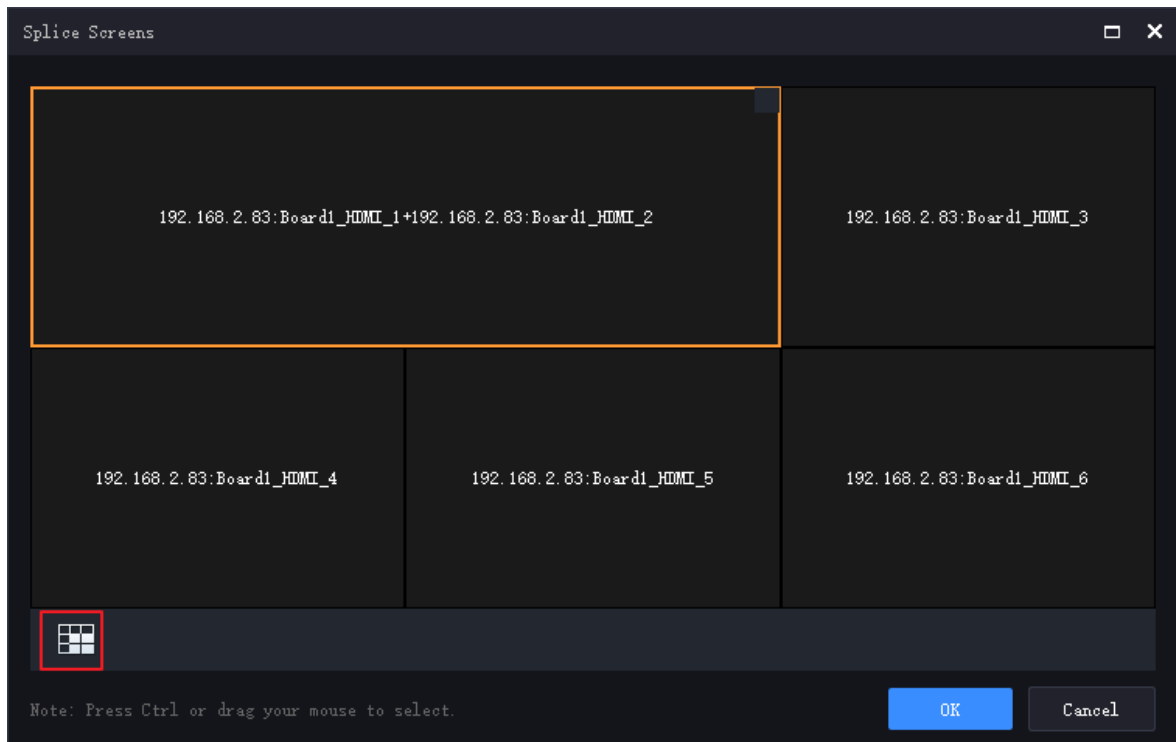
2. Select screens and then click  in the bottom left corner, and then click **OK**.



3. The spliced screens are displayed as one.



4. To unsplice screens and restore the previous state, select the screens, click  and then click **OK**.



Open Windows

There are multiple ways to open windows on a video wall. Choose the appropriate way to open windows.

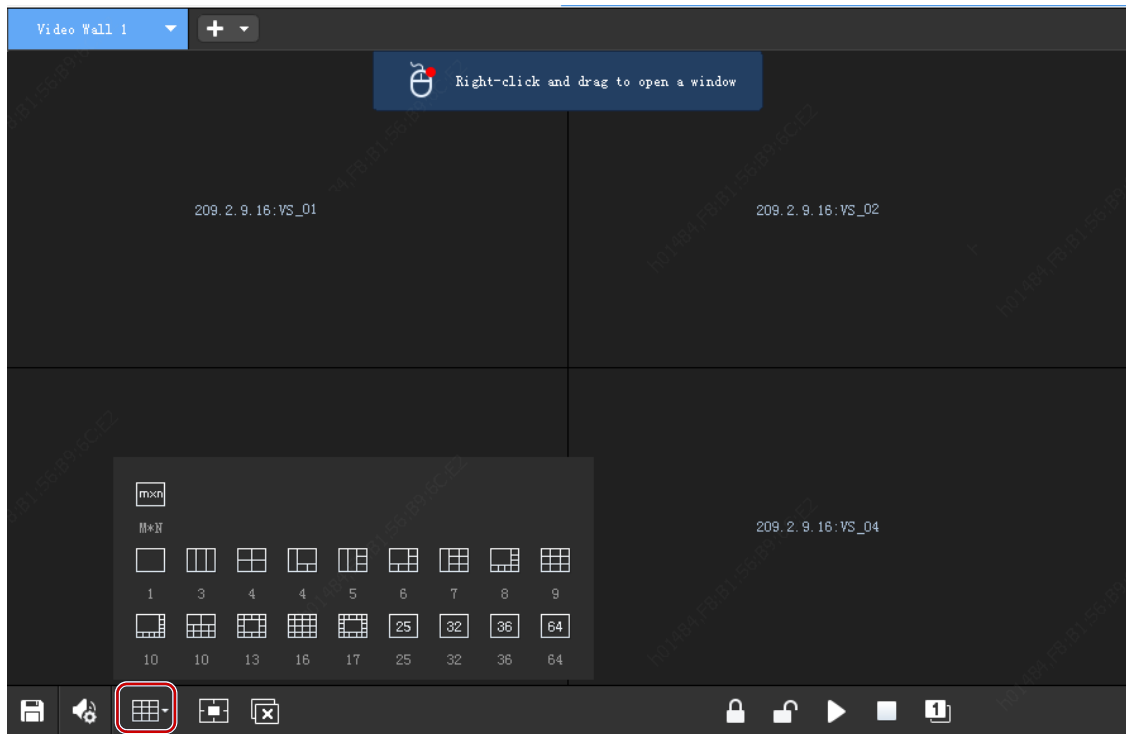
Click a Button to Open Window



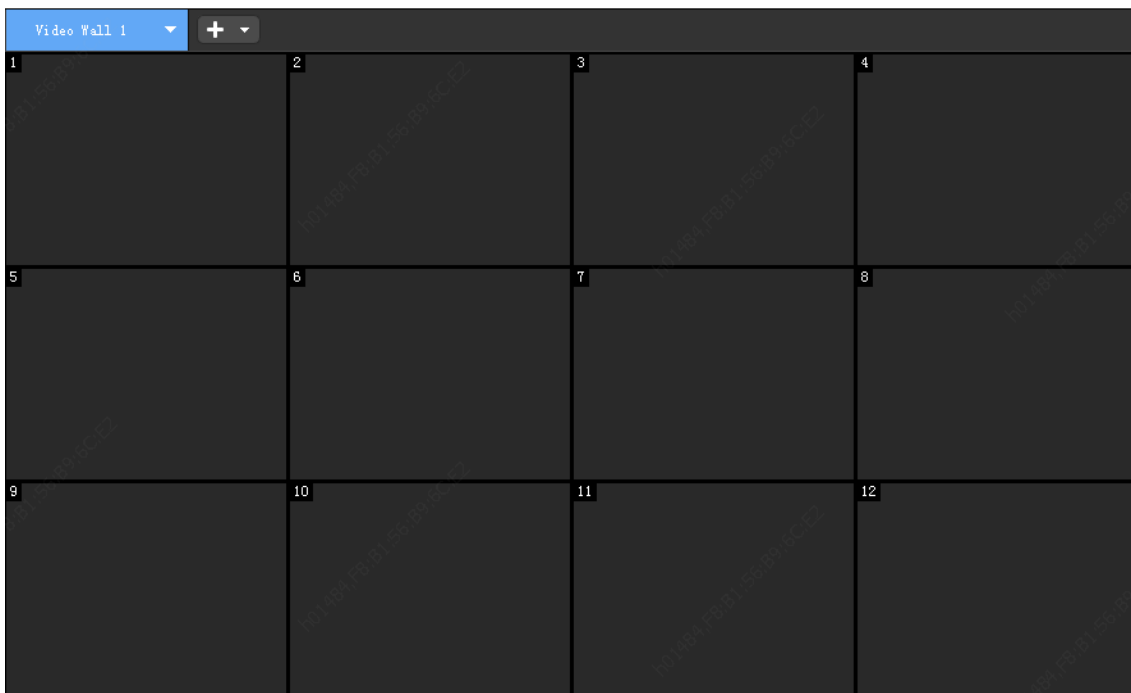
NOTE!

Windows opened in this way are locked when created. See Lock/Unlock Windows.

1. Click **Open Window** and then choose a layout.

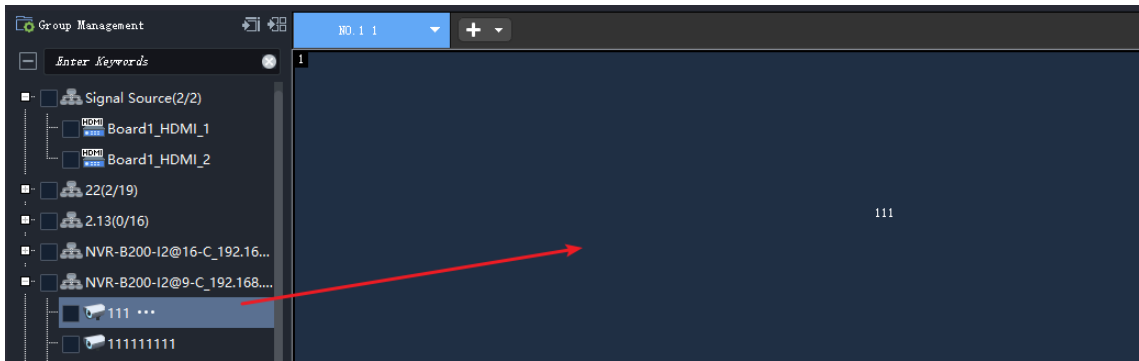


2. By choosing **M*N** you can customize a layout, for example, 3x4 (3 columns x 4 rows).



Drag a Camera to Open Window

1. Drag a camera to the video wall to open a window.

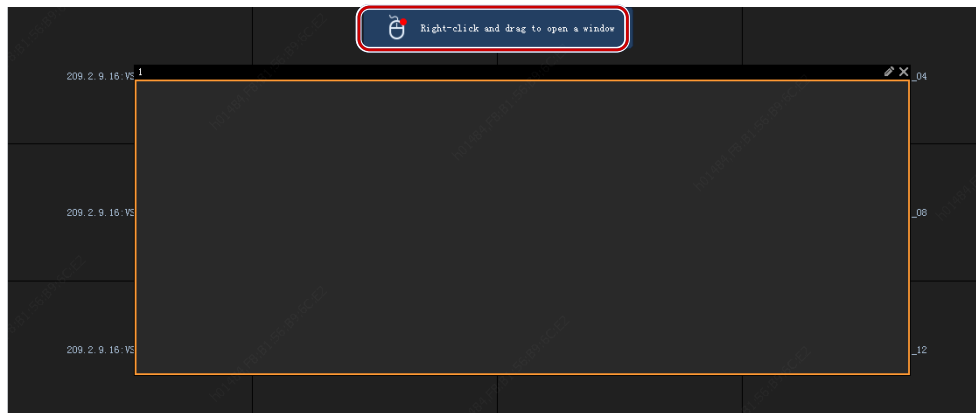


2. Camera information is displayed on the computer screen, and live video is started automatically on the video wall.



Right-click and Drag to Open Window

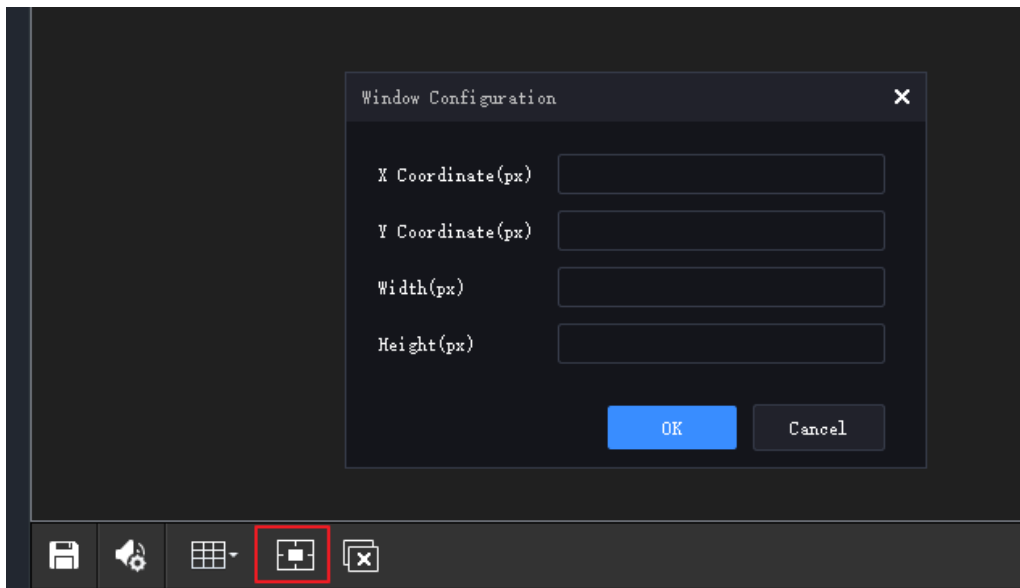
Follow the instructions on the video wall: press and hold the right button of the mouse, and drag to open a window.



Set Coordinates to Open Window

Opening a window by coordinates allows precise placement and sizing of the window on the video wall. This method is especially useful for irregular window layouts.

1. Click **Open Window by Coordinates**.

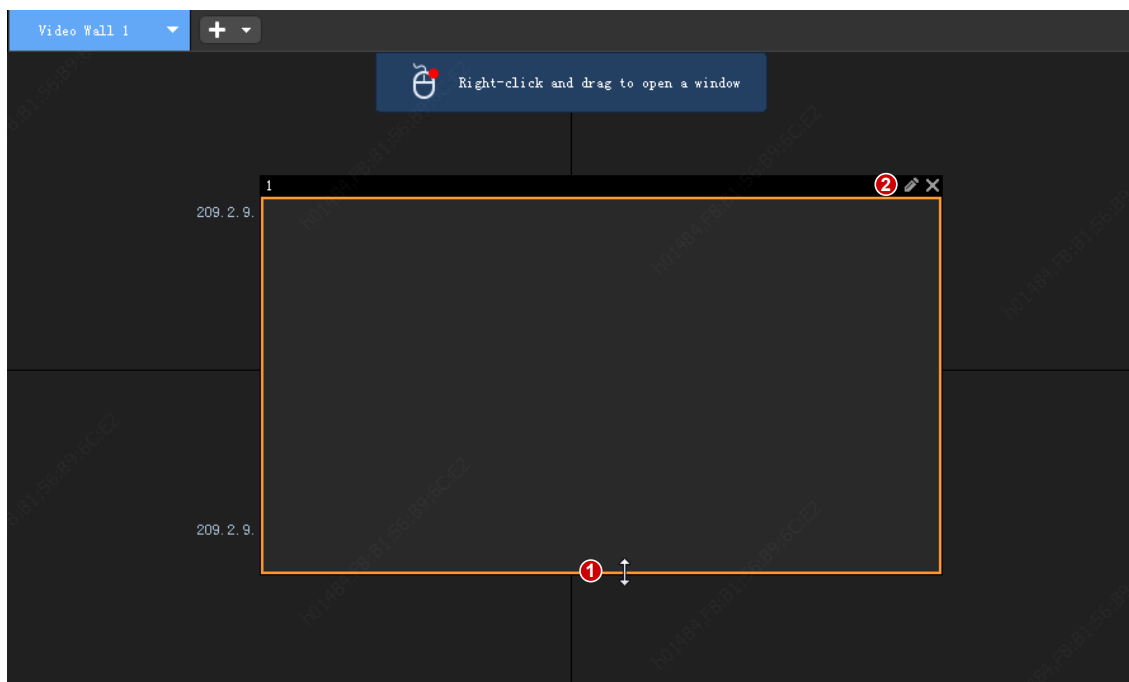


2. Set the position and size (in unit of pixel) of the window.
 - Starting coordinates (X and Y): Position of the top left corner of the window.
 - Width and height: Width and height of the window.

Adjust Window Position and Size

You can adjust the position and size of a window when it is unlocked (see Lock/Unlock Windows).

- Drag a window to adjust its position (known as roaming).
- Hover over the window border, and drag to resize the window when the cursor shape changes (1).

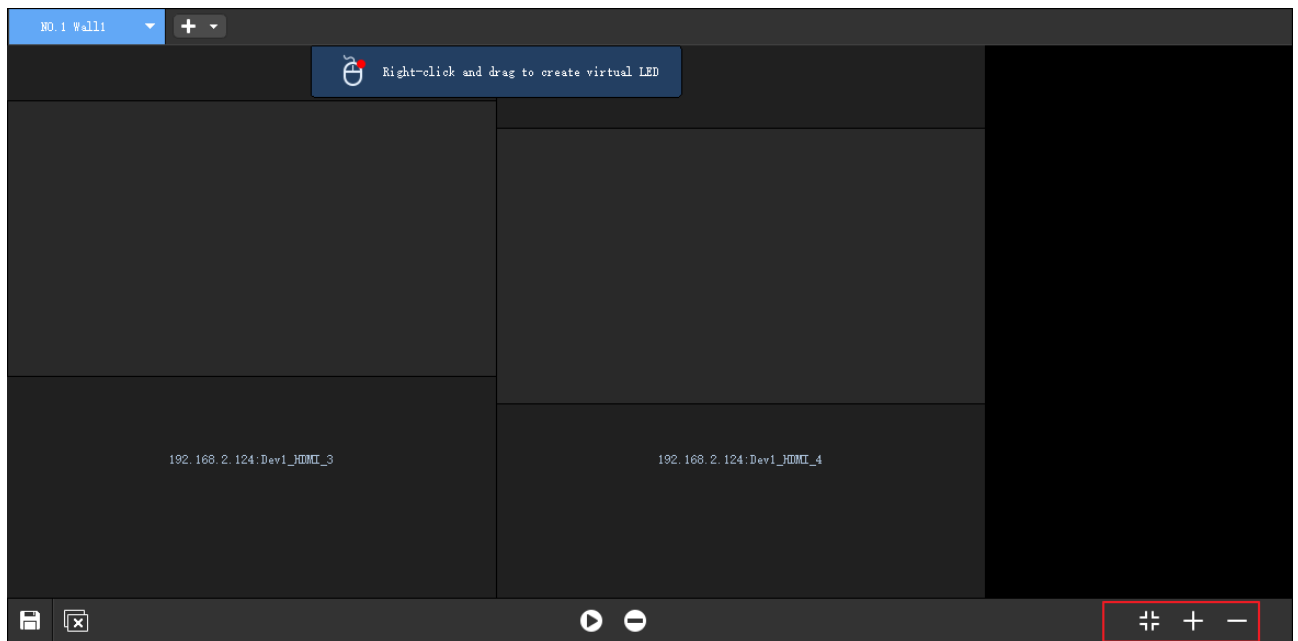


- You can also adjust a window's position and size by clicking the **Edit** button in the top right corner (2). The window's top left corner is determined by its X and Y coordinates, and the width and height are measured in pixels.





Zoom In or Out on Video Wall Screen

You can zoom in on or out on the video wall for easy operation. Zooming in or out on the client side does not affect video playing on the video wall.



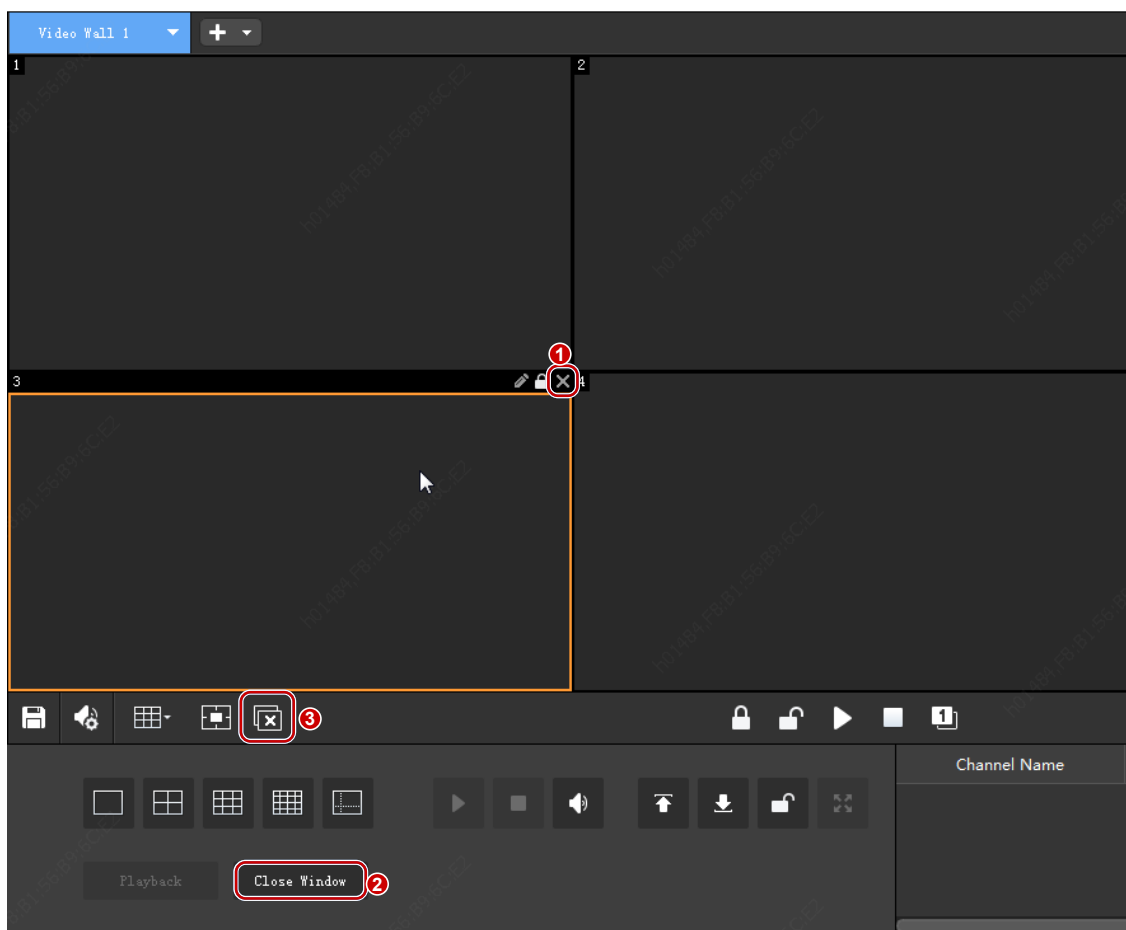
Choose a way to zoom in or out on the video wall image:

- Press and hold **Ctrl** while scrolling the mouse wheel to zoom in or out on the video wall image.
- Click  or  to zoom in or out on the video wall image.

Click  to restore the original ratio.

Close a Window

Closing a window is the opposite action of opening a window. If a video is playing in a window and you close it, the video will stop.



- Click the **Close** button (1) in the window's top right corner.
- Click a window to select it and then click the **Close Window** button (2).
- Click the **Close All** button to close all windows on the video wall.

Group

Default Group

The software creates default groups based on device type:

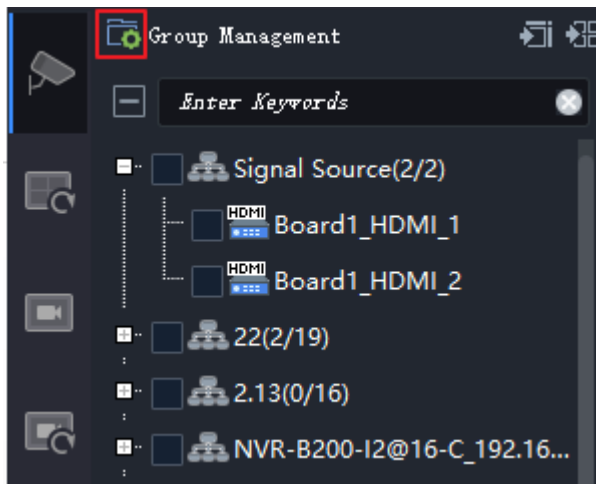
- Each NVR is a group and the group name is the device name of the NVR.
- All IPCs are a group and the group name is "IPC".

Custom Group

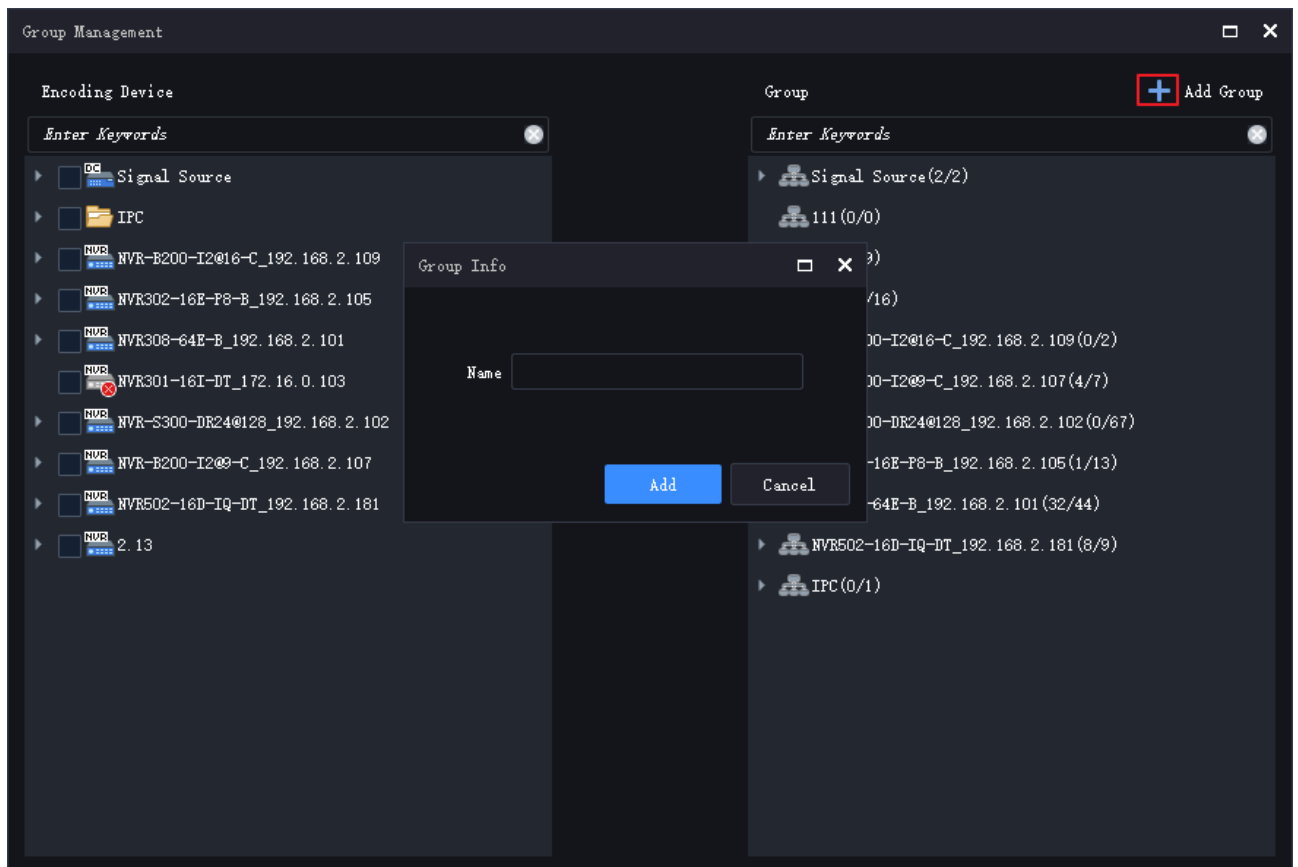
The custom group feature allows you to assign IPCs to different groups for easy management. You can:

- Assign IPCs under an NVR to different groups.

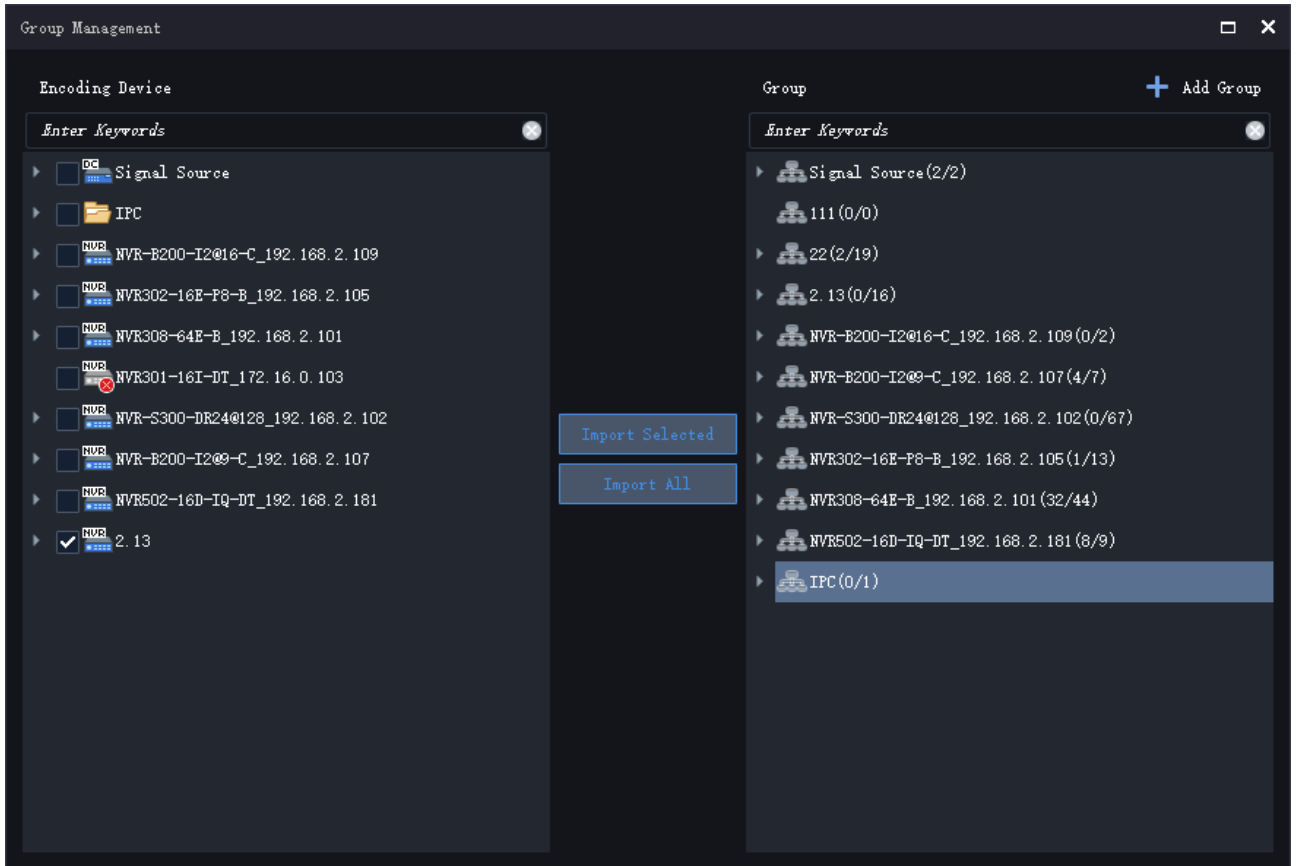
- Assign IPCs under different NVRs to the same group.
 - Assign an IPC to multiple groups at the same time.
1. Click **Group Management** on the **Video Channel** tab.



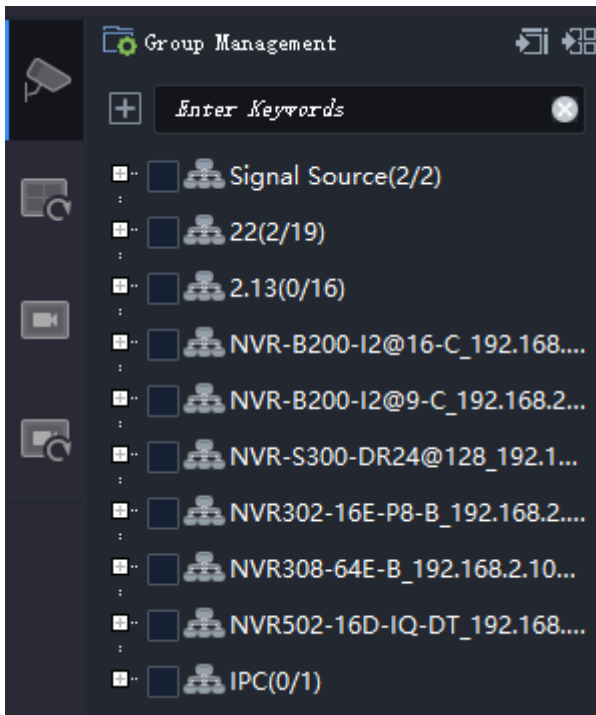
2. Create a group.



3. Assign IPCs to the group.



4. The selected IPCs are added to the group. You may rename or delete the group or IPCs.
5. The new group appears in the organization tree. The organization tree displays groups in the order of signal source nodes, custom group nodes, NVR nodes, and IPC nodes.

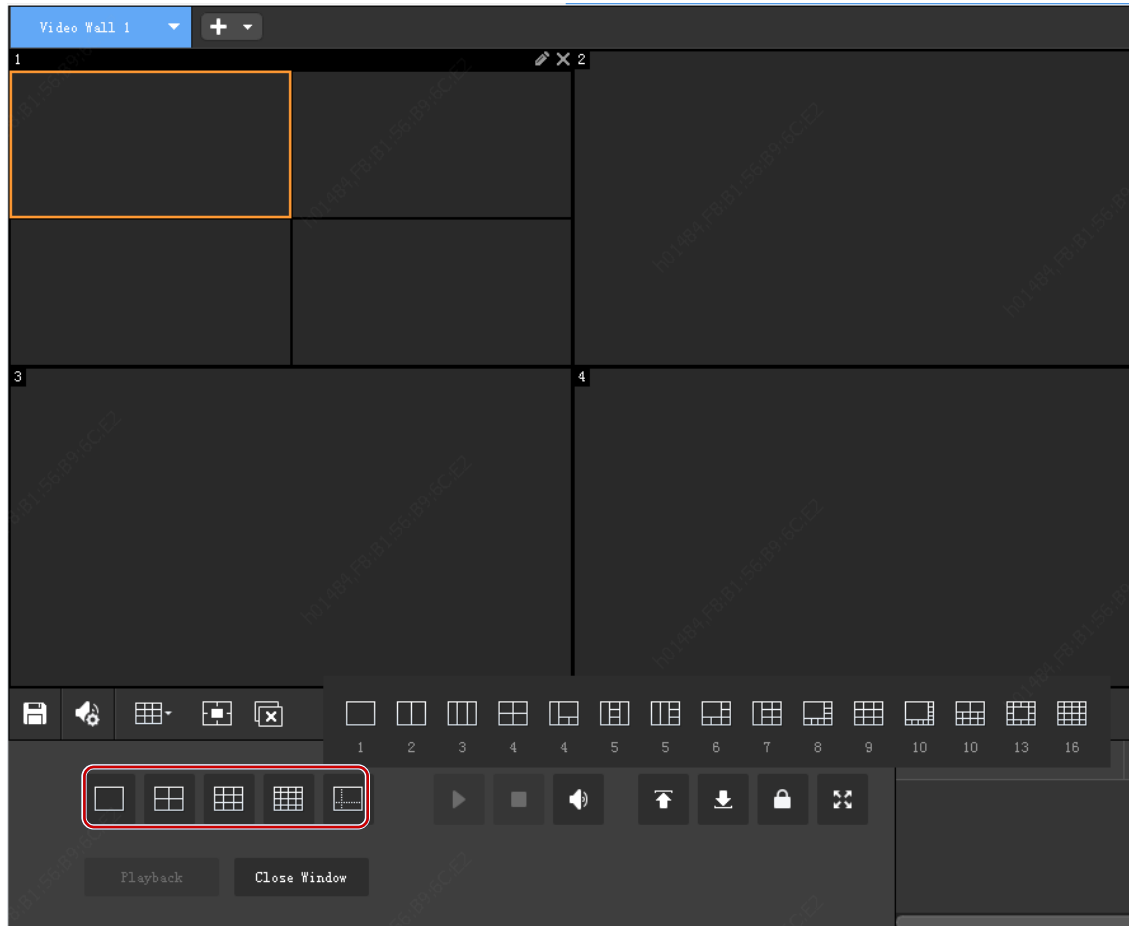


Split a Window

After a window is split, multiple videos can be played in the window simultaneously. You need to open window(s) first (see Open Windows).

Each window has a number in its top left corner (1, 2, 3 ...) known as window ID.

1. Click the window to split.
2. Choose a layout. The options available may vary depending on the server.

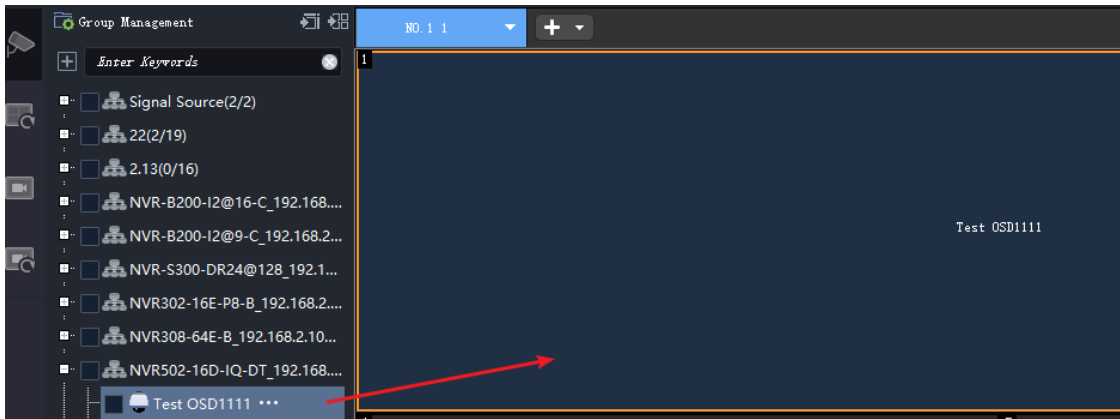


Play Video on a Video Wall

Play videos on a video wall one by one or in batches.

Start One by One

1. On the **Video Channel** tab, drag the camera to a window or a split window.



2. Camera information is displayed on the computer screen, and live video is started on the video wall.



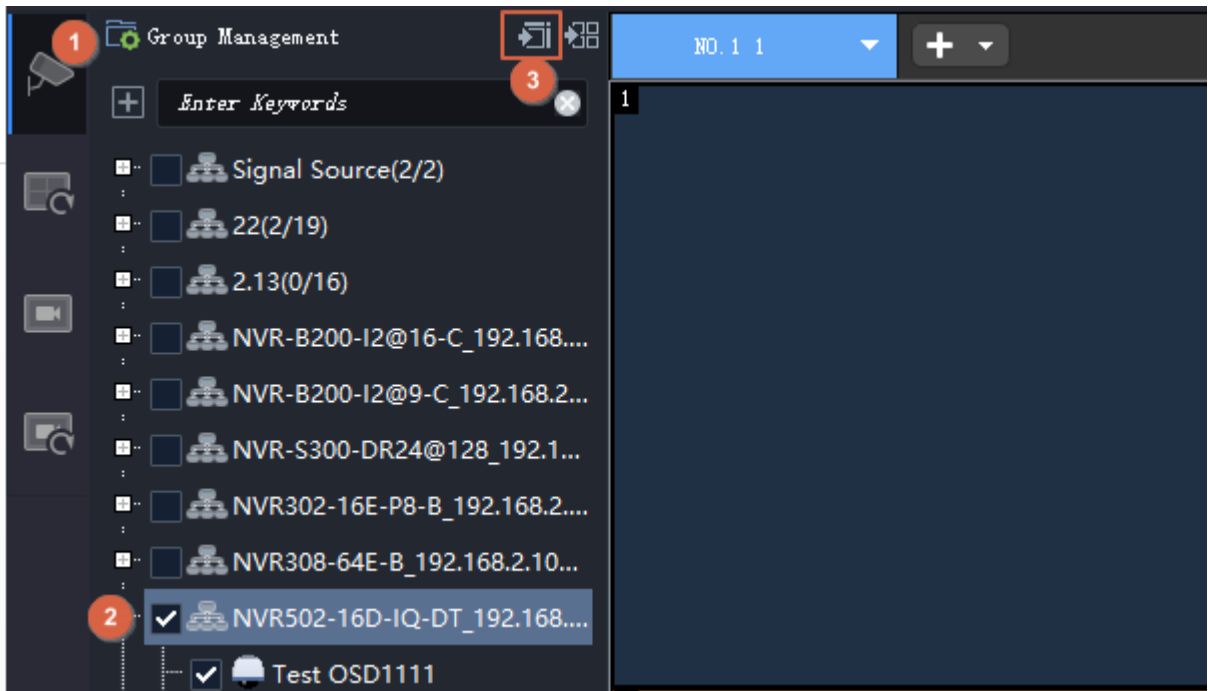
Start in Batches

1. On the **Video Channel** tab, select IPCs.
2. Click **Play on Screen** or **Play on Wall**.

Play on Screen

Play video on a specified screen.

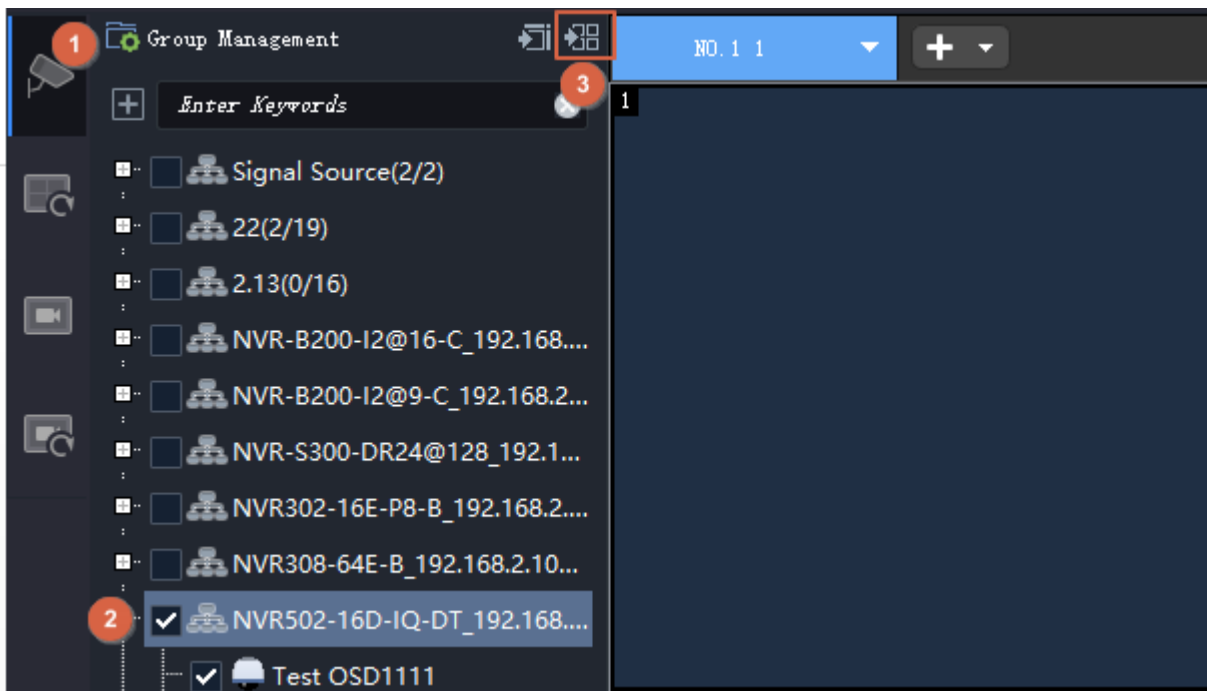
Example: Play video of 4 IPCs on 1 screen that is split into 4.



Play on Wall

Play video on multiple screens.

Example: Play video of 7 IPCs on 4 screens, among which, one screen is split into 4.

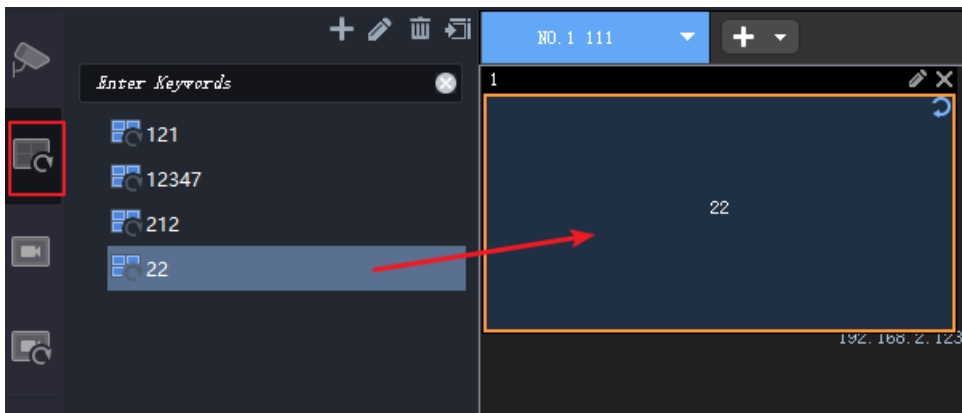


Sequence in One Window

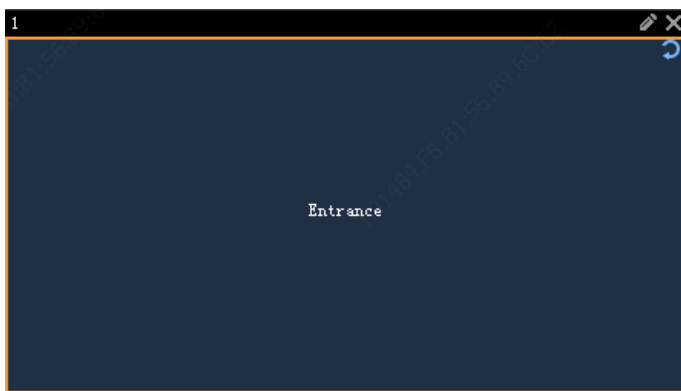
Play video in sequence in one window.


Steps

1. Create a sequence resource. See Sequence Resource.
2. On the **Sequence Resource** tab, drag the resource to a window.



3. The name of the sequence resource is displayed on the computer screen, and sequence starts on the video wall in the set order at the set interval.



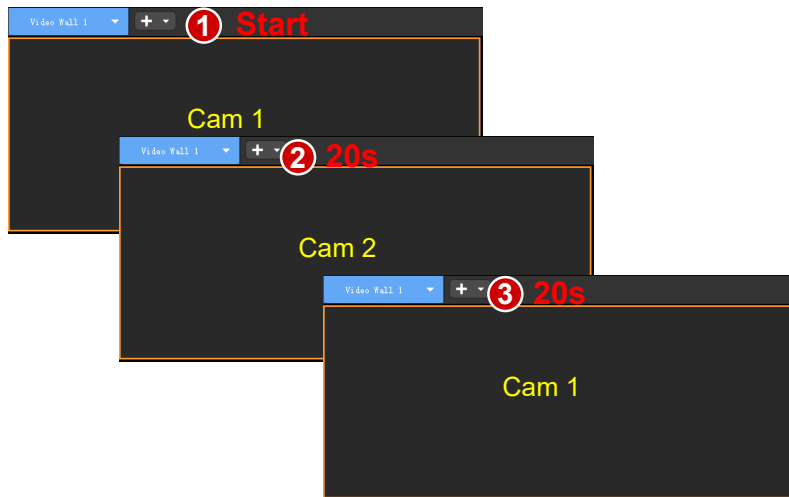
4. Use the buttons at the bottom () to pause the sequence or play the previous or next.

Examples

The following examples show two different sequence resources in different screen layouts, and the sequence interval is set to 20 seconds for both.

Example 1

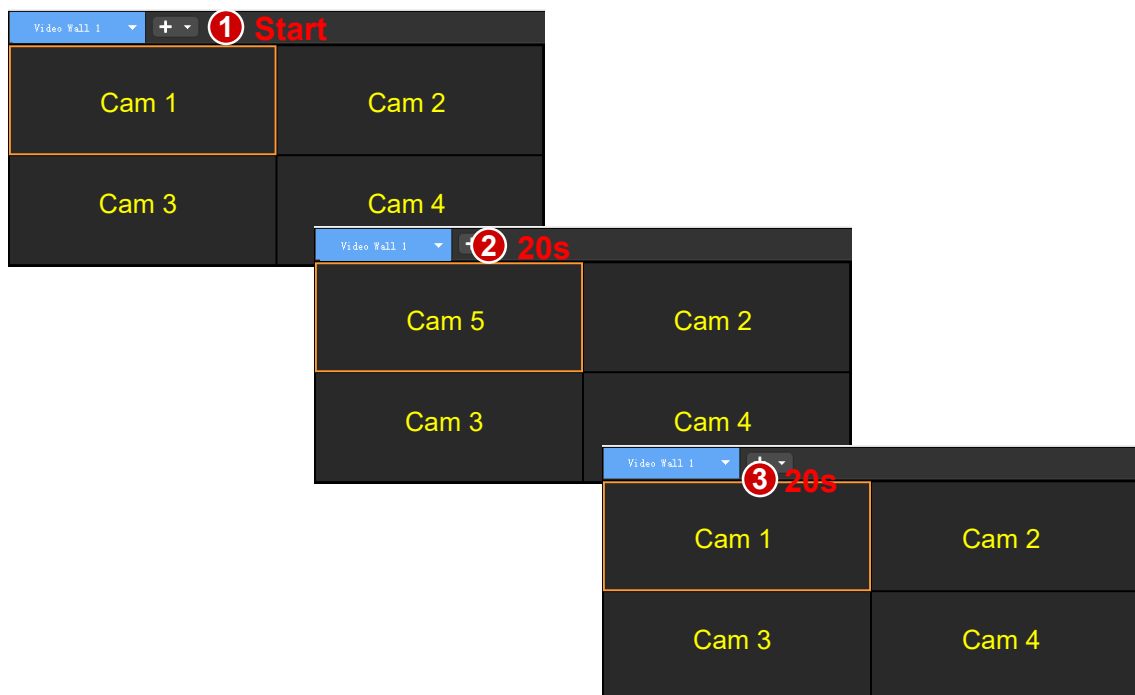
Sequence 2 cameras (Cam 1, 2) on 1 screen



1. Start sequence: play Cam 1.
2. Switch in 20 seconds: play Cam 2.
3. Complete a round and start over: play Cam 1.
4. Repeat the process...

Example 2

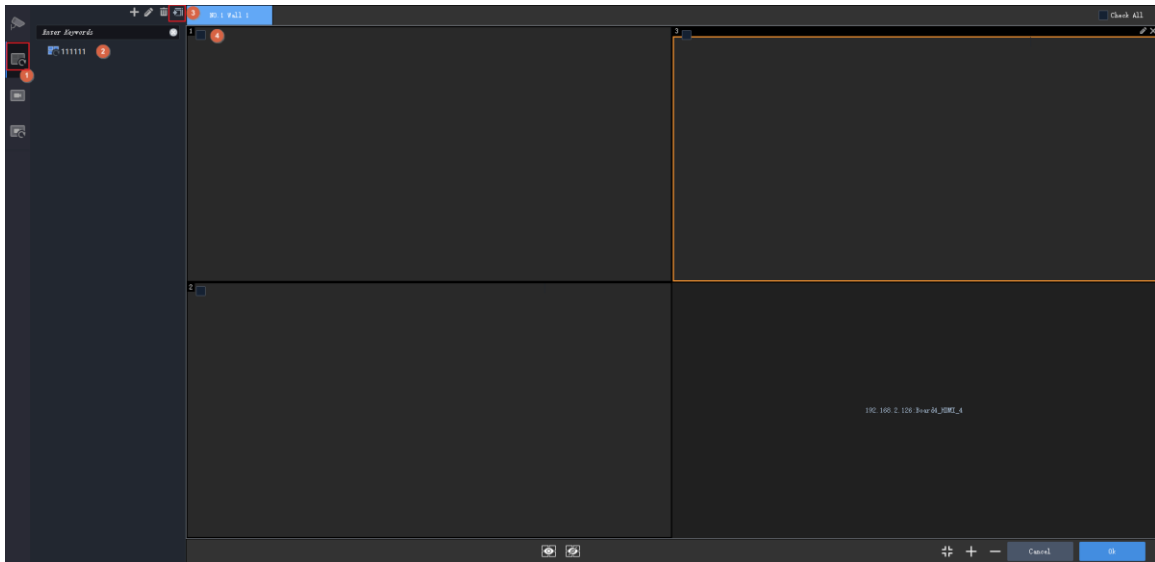
Sequence 5 cameras (Cam 1, 2, 3, 4, 5) on 4 screens



1. Start sequence: play Cam 1, 2, 3, 4.
2. Switch in 20 seconds: play Cam 5 on screen 1, and other screens remain the same (Cam 2, 3, 4).
3. Switch in 20 seconds: complete a round and start over (play Cam 1, 2, 3, 4).
4. Repeat the process...

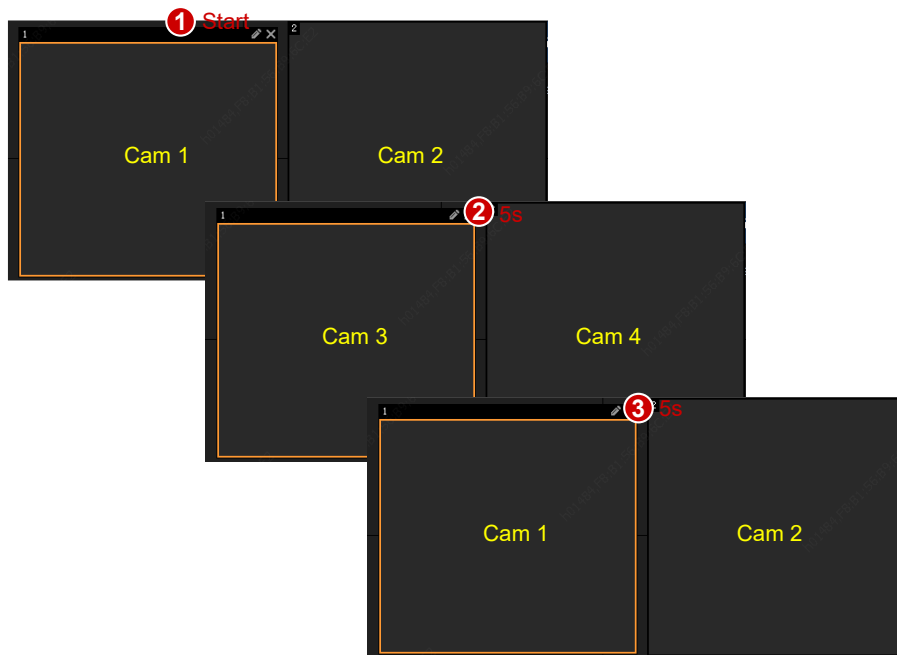
Sequence in Multiple Windows

Play video in sequence in multiple windows. You need to open windows first (see Open Windows).



Example 1

Sequence 4 cameras (Cam 1, 2, 3, and 4) in 2 windows at the interval of 5 seconds.



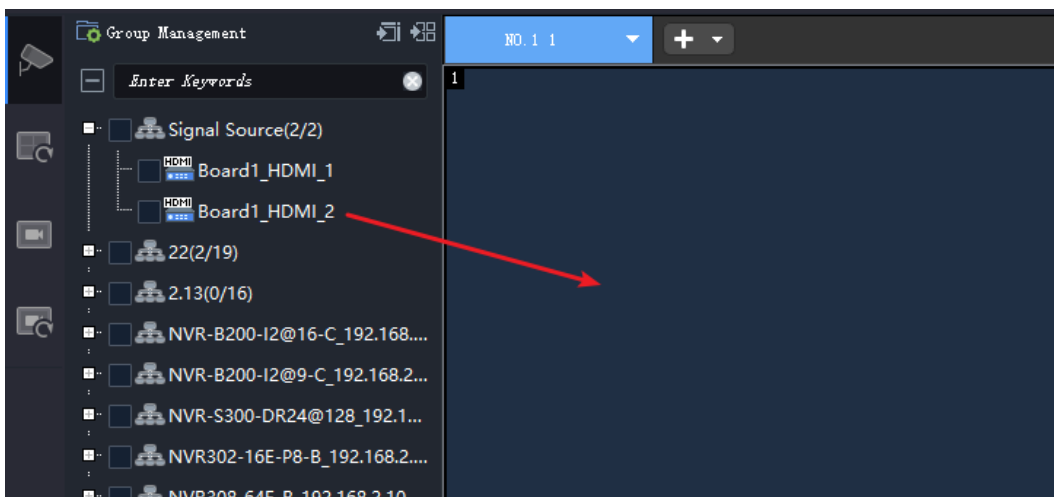
Example 2

Sequence 8 cameras (Cam 1-8) in 2 windows at the interval of 5 seconds, among which, window 2 is split into 4.



Play Signal Source

Signal source refers to the signal input through the physical video input port (such as DVI-D, VGA) on the server. Drag the signal source to a window to start the video on the video wall.



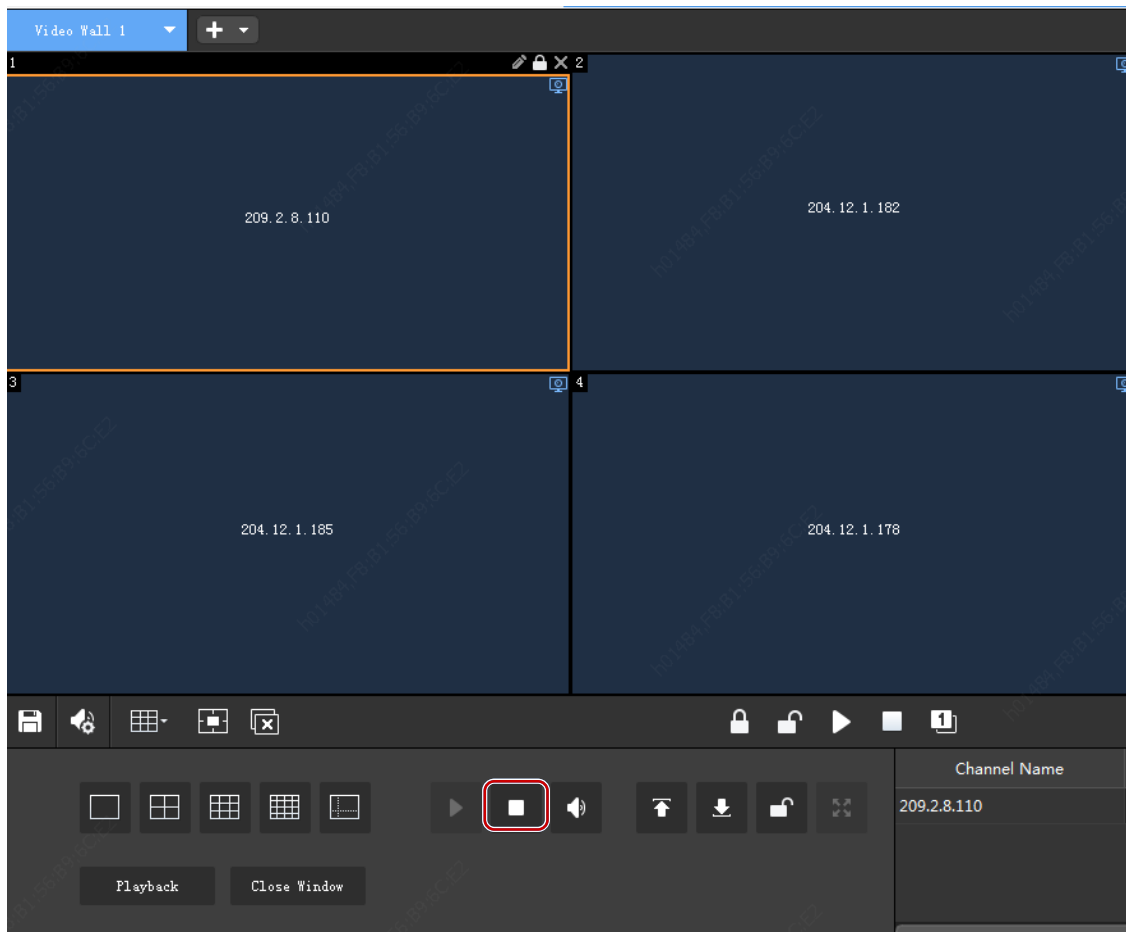
Stop Video on Video Wall

Stop Live Video or Sequence in a Window

- Click the **Close** button.

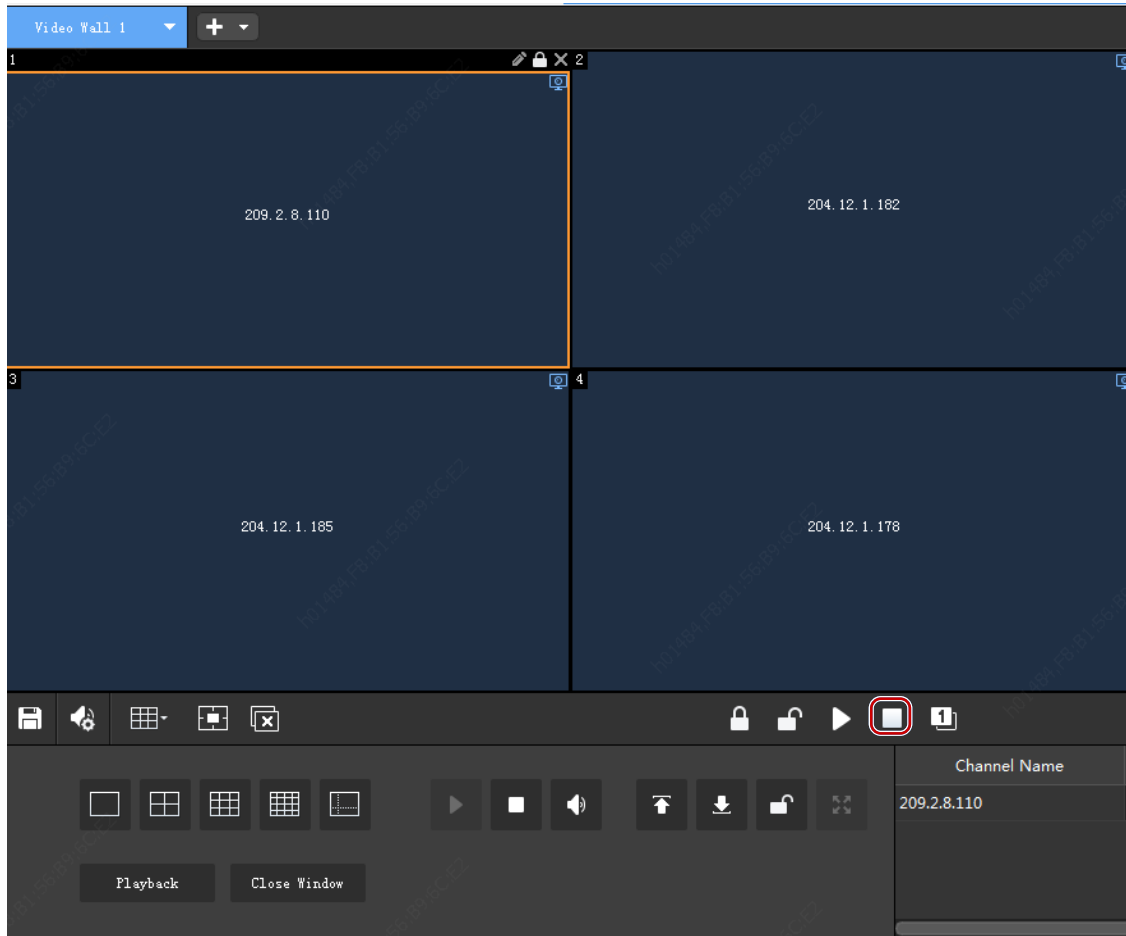


- Or click the **Stop Decoding** button. You can resume live video by clicking **Start Decoding** on the left. Sequence cannot resume in this way.



Stop Live Video or Sequence in all Windows

Click the **Stop All Decoding** button to stop all live video and sequence on the video wall. You can resume live video by click **Start All Decoding** on the left. Sequence cannot resume in this way.

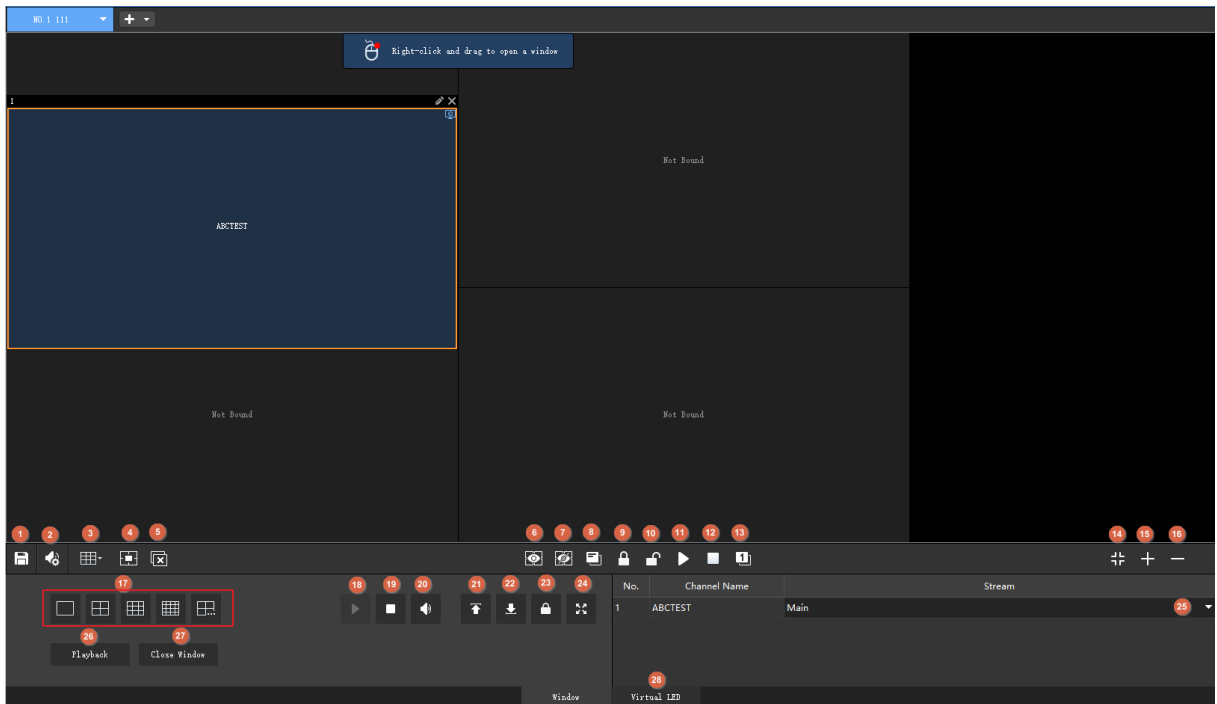


Video Wall Toolbar



NOTE!

The GUI, features, and user operations may vary depending on the server. The following takes ADU-8612 as an example.



The video wall toolbar is described below. Buttons 1-14 are effective to all windows on the video wall. For buttons 17-27, you need to select the window first.

No.	Description
1	Save the current window layout. See Scene.
2	Audio management. Set whether to output audio. See Output Audio.
3	Create windows. You can choose the number of windows as needed. See Open Windows.
4	Create a window by inputting coordinates. See Set Coordinates to Open Window.
5	Close all windows.
6	Start live video in all windows. See One-click Preview.
7	Close live video in all windows.
8	Show/hide window codes. By default, the windows on the client and video wall display window IDs in the upper left corner. You can click this button to switch window IDs to window codes for connecting to a central control device. To switch back to window IDs, click the button again.
9	Lock the position and size of all windows. See Lock/Unlock Windows.
10	Unlock the position and size of all windows. See Lock/Unlock Windows.
11	Start decoding to resume live video or sequence in all windows.
12	Stop decoding to stop live video or sequence in all windows.

No.	Description
13	Renumber all windows according to the sequence from top to bottom and from left to right. See Renumber Windows.
14	Restore the original size after you zoom in or out on the video wall.
15	Zoom in on the window on the client. This operation does not affect the live video playing on the video wall.
16	Zoom out on the window on the client. This operation does not affect the live video playing on the video wall.
17	Split a selected window according to the live video you want to play.
18	Start decoding to resume live video or sequence in a selected window.
19	Stop decoding to stop live video or sequence in a selected window.
20	Set to enable or disable audio output in a selected window. You can adjust the volume when audio is turned on.
21	Set a window to display on top of all other windows. See Always Display a Window on Top or Bottom.
22	Set a window to display at the bottom of all other windows. See Always Display a Window on Top or Bottom.
23	Lock/unlock the position and size of a selected window. See Lock/Unlock Windows.
24	Magnify a selected split-window or window. See Maximize a Window/Split Window to Full Screen.
25	Set the stream type for a selected window: main stream, sub stream or auto.
26	Play back video in a selected window.
27	Close a selected window.
28	Click to overlay virtual LED on the video wall. See Virtual LED.

Other Features



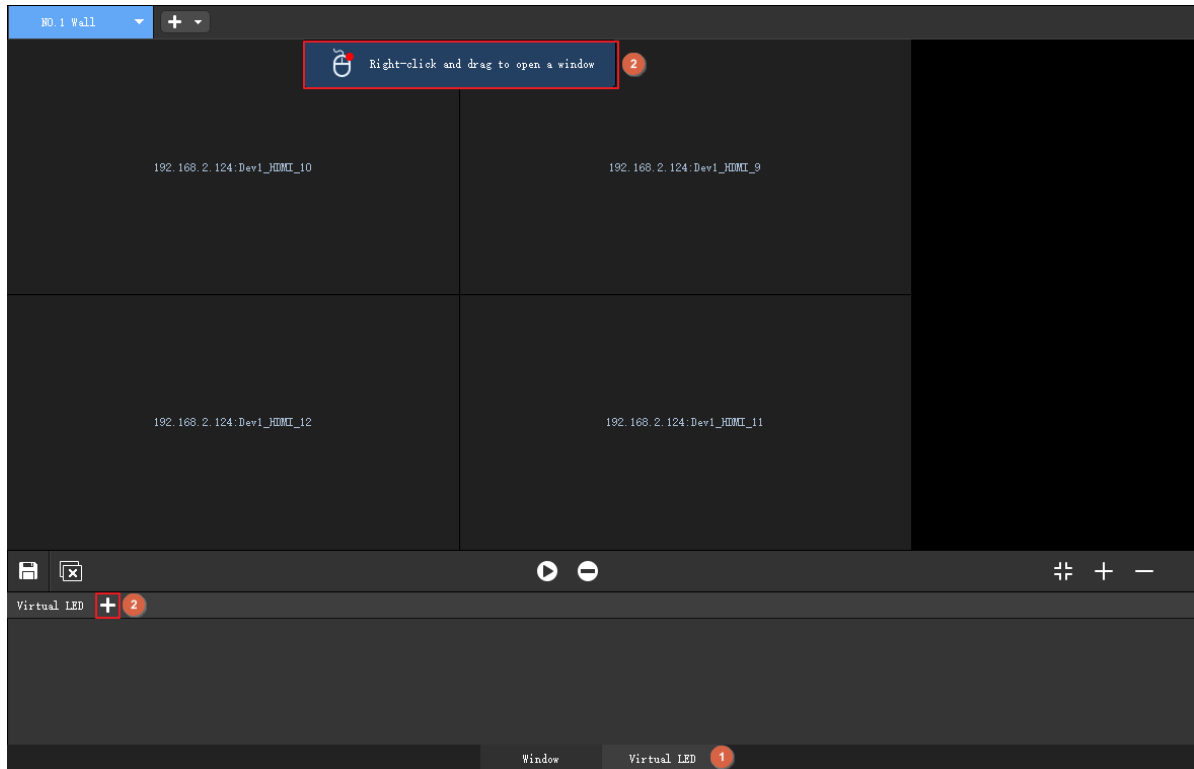
NOTE!

The GUI, features, and user operations may vary depending on the server. The following takes ADU-8612 as an example.

Virtual LED

Virtual LED is the text or time that overlay on video images.

1. Click the **Virtual LED** tab at the bottom, and then click the **Add** button to create a virtual LED. You may also create one by referring to the tip.

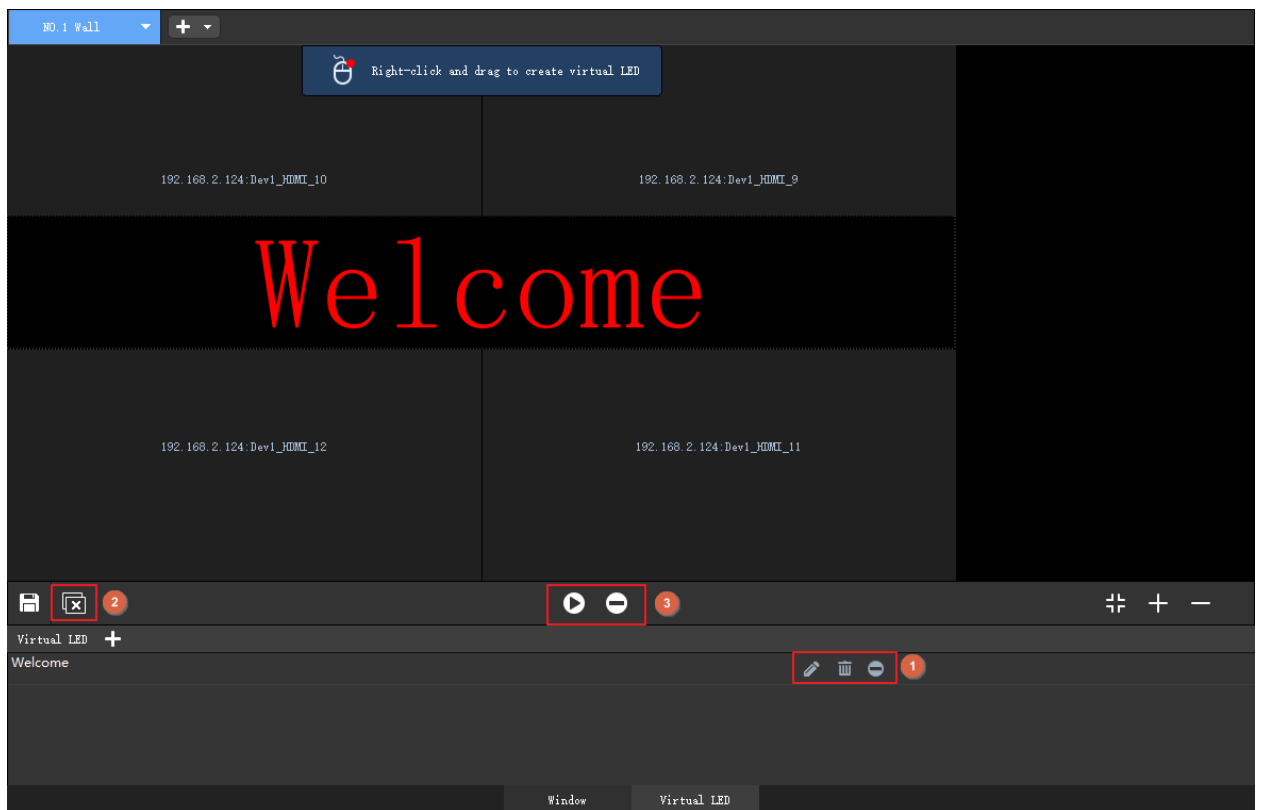


2. Set the LED. Configure the LED by referring to the table below. Some parameters are applicable to text LEDs, and some to time LEDs. The number of virtual LEDs supported by a video wall may vary depending on the server model.

Item	Description
Type	<ul style="list-style-type: none"> • Text • Time
X Coordinate (px)	Set the X coordinate of the virtual LED on the video wall.
Y Coordinate (px)	Set the Y coordinate of the virtual LED on the video wall.
Width	Set the width of virtual LED.
Height	Set the height of virtual LED.
Text Content	Set the text that appears on the video wall.
Time Format	Set the time format as needed.
Date Format	Set the date format as needed.
Display Style	<ul style="list-style-type: none"> • Single-line display • Multi-line display
Font	Set the font on the video wall.
Font Size	<ul style="list-style-type: none"> • Auto • Custom

Item	Description
Font Spacing	<ul style="list-style-type: none"> • Auto • 1-10x: 1x means a spacing of 0 characters, 2x means a spacing of 0.5 characters, and so on. The character size is the same as the set font size.
Font Alignment	Set the font alignment horizontally and vertically.
Font Color	Set the font color on the screen.
Background Color	Set the background color of the virtual LED.
Transparency	Set the background transparency of virtual LED. <ul style="list-style-type: none"> • Yes: Do not show the background color of the virtual LED. • No: Show the background color of the virtual LED.
Scrolling Speed	Set the scrolling speed of the text on the video wall.
Scrolling Mode	Set the scrolling mode of the text on the video wall.

3. The virtual LED is created. Here is an example.



Other operations:

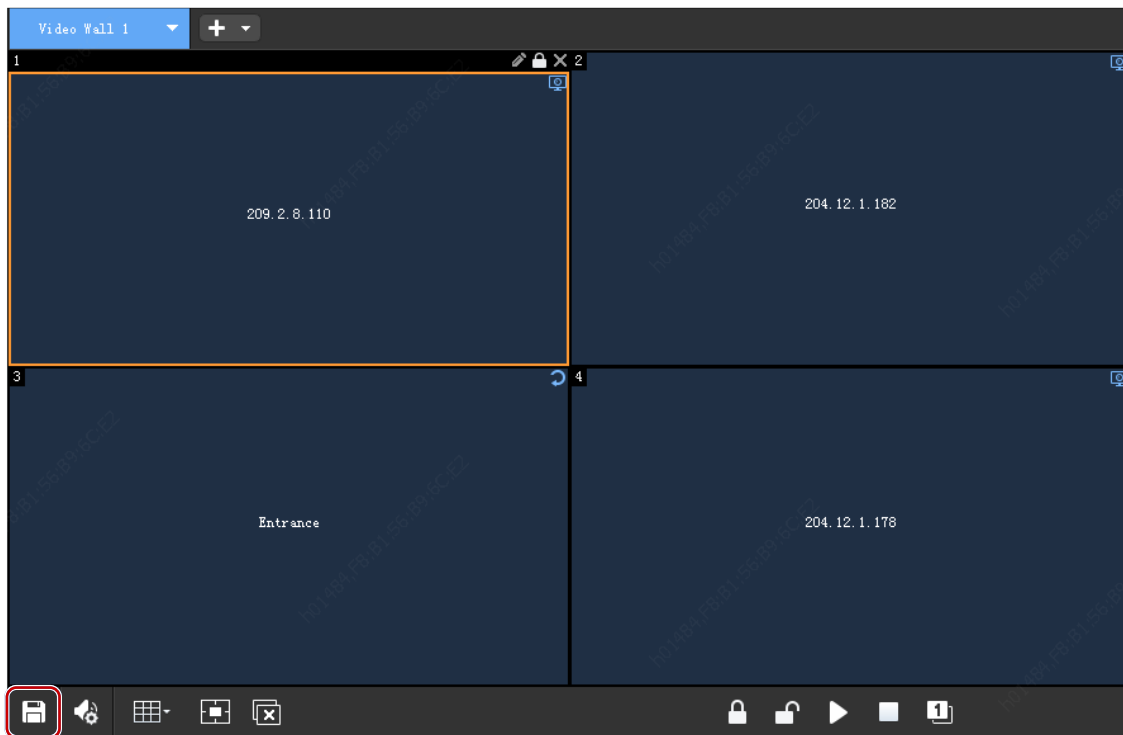
- You can drag the LED to change its position.
- Place the mouse cursor on the background border. When the cursor shape changes, you can drag to resize the background.
- Enable/disable, edit or delete the current virtual LED (1).

- Delete all virtual LEDs (2).
- Enable/disable all virtual LEDs (3).

Scene

Save the layout, live view or sequence settings, and virtual LED of the video wall as a scene. When needed, you can click a button to restore it without the need for reconfiguration.

1. Click the **Save Scene** button.



NOTE!

You need to choose **Save** or **Save As** after clicking the **Save Scene** button. By choosing **Save As**, you can quickly create a similar scene based on the current scene.

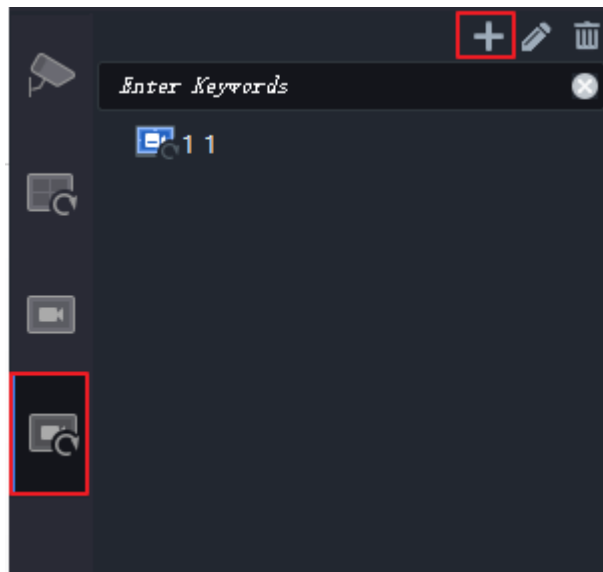
2. Click the **Scene** tab (1). You can click the button (2) to start the scene, or use the buttons (3) to add, edit or delete scenes.



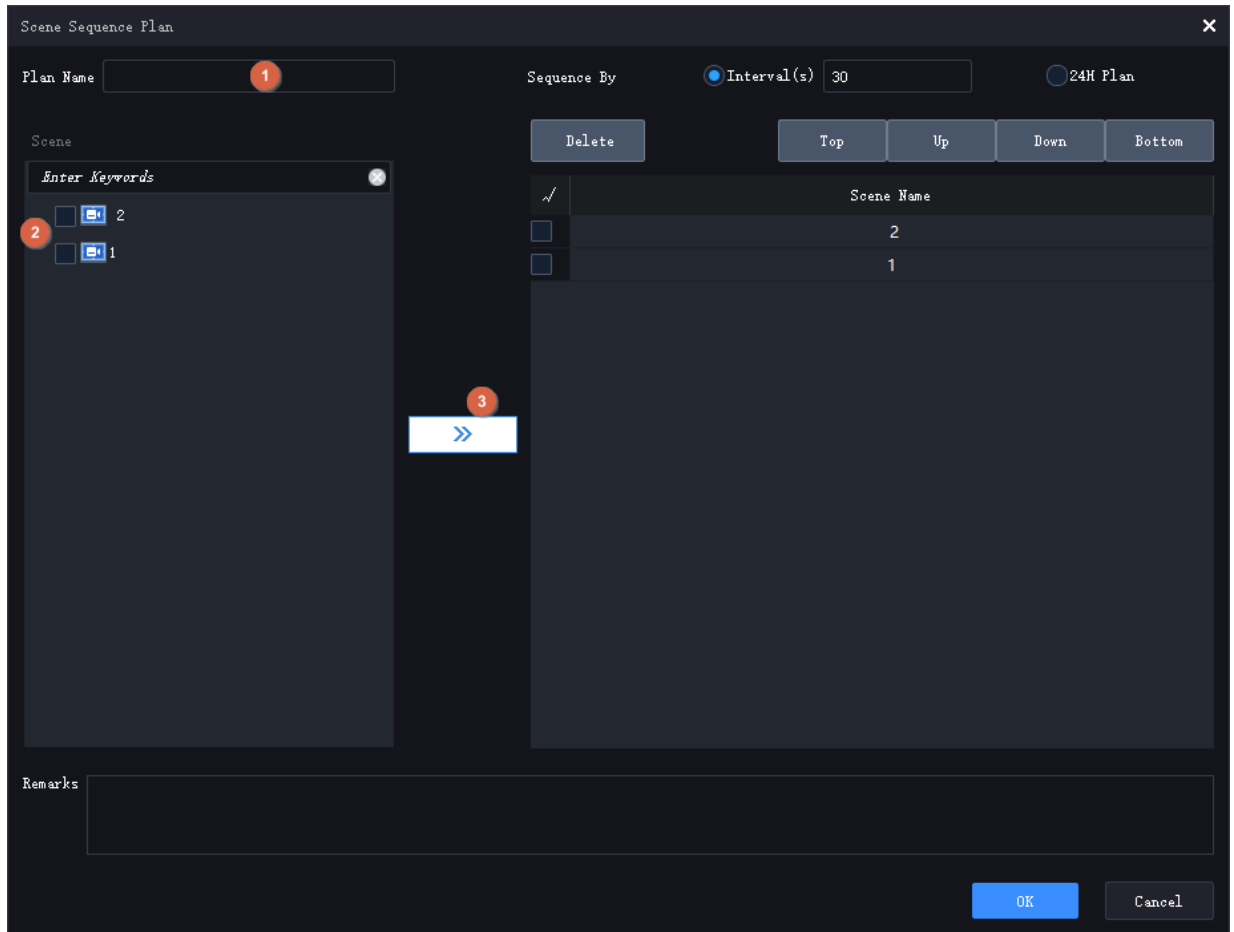
Scene Plan

Set up a plan to apply different scenes at different times. Please create the scenes first and then follow the steps to add a scene plan.

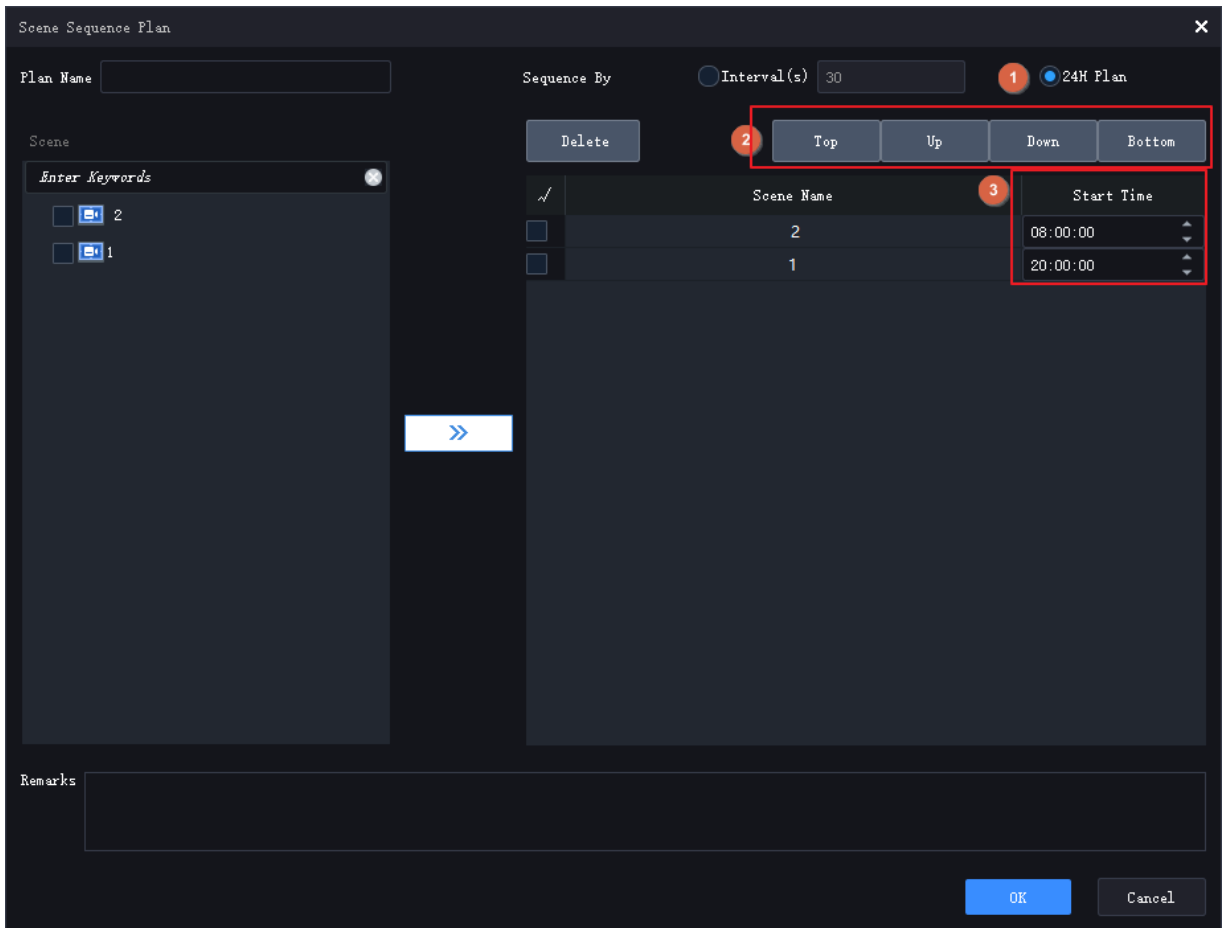
1. Click the **Scene Plan** tab, and then click + to create a scene plan.



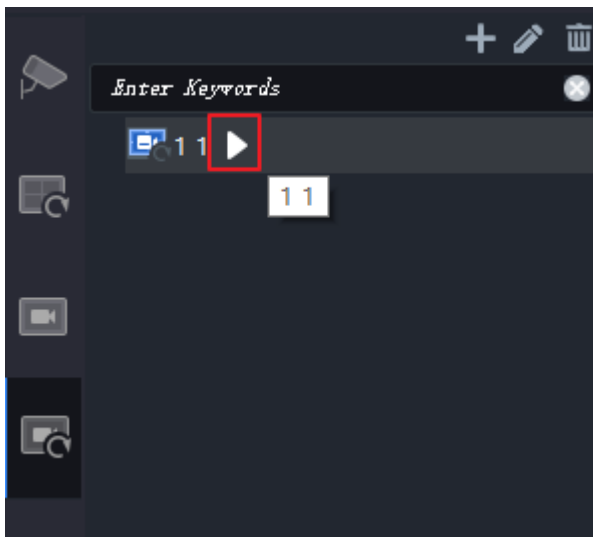
2. Enter a plan name, and then select scenes to add to the plan.



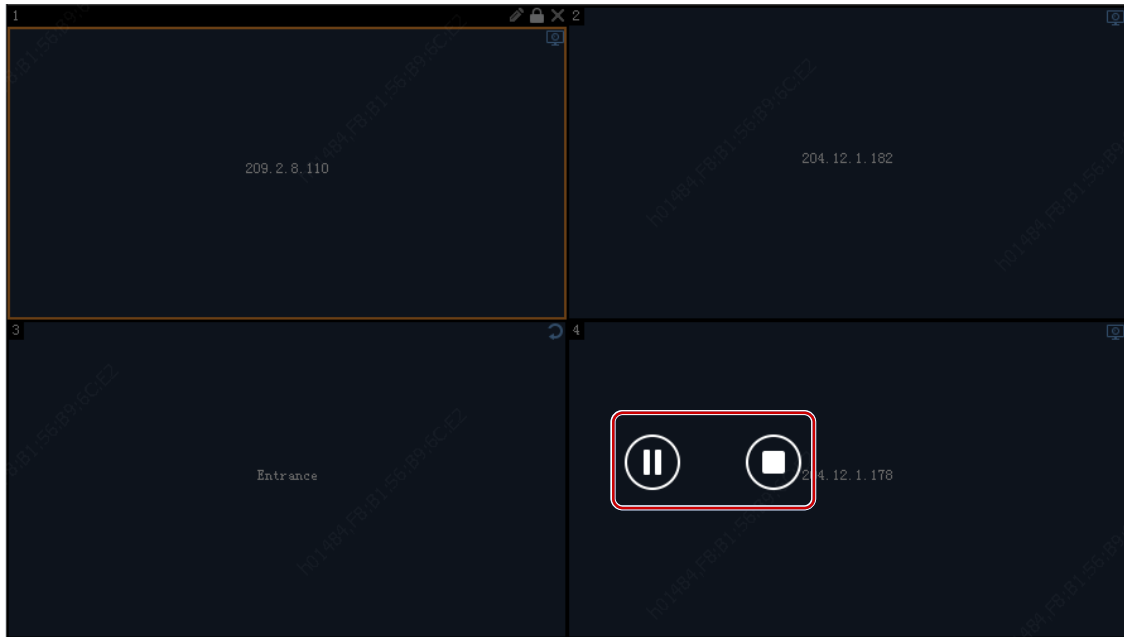
3. By default, the scenes switch based on the set interval. You can choose to switch scenes based on specified times and have the system automatically switch to the corresponding scene at the set times.



4. Click to start the scene plan.



5. Click the buttons to pause or stop the plan.

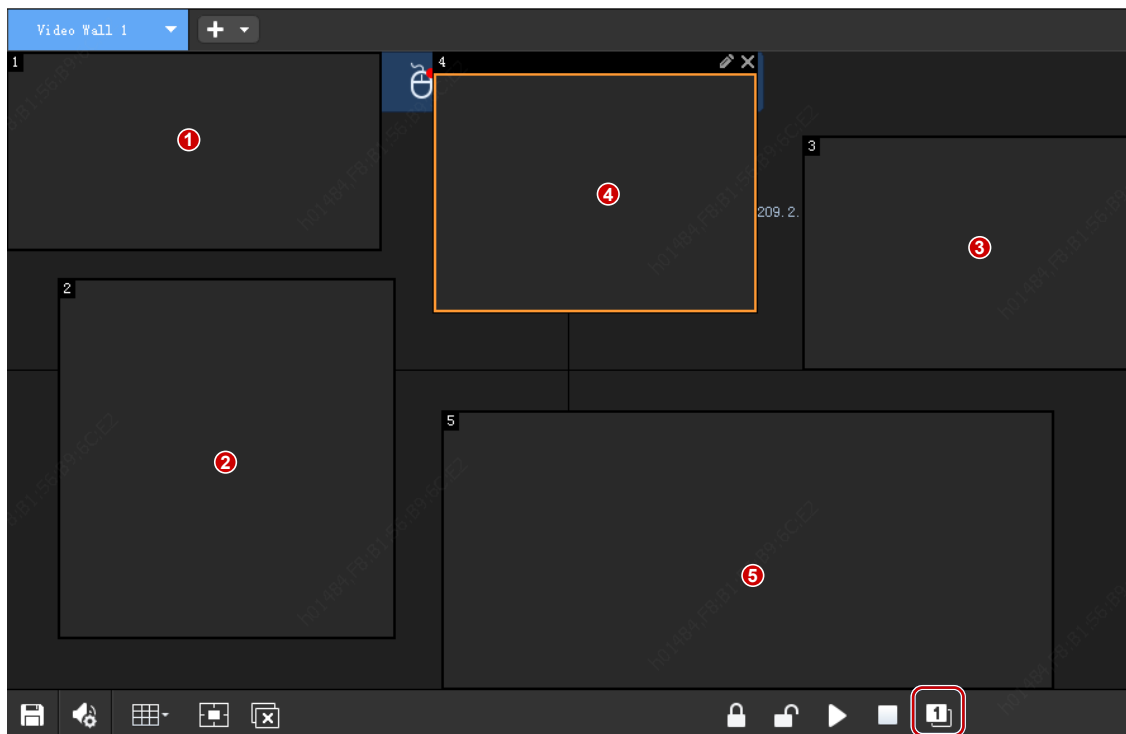


Renumber Windows

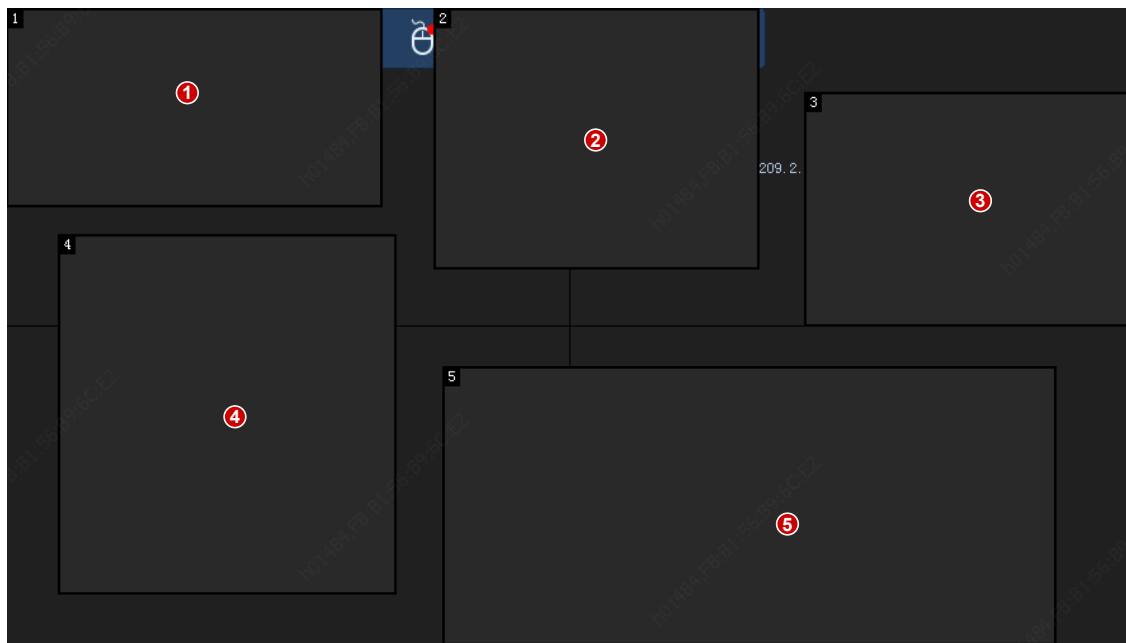
The software assigns window IDs (numbers displayed in the top-left corner of the windows) based on the order in which the windows are opened. To reassign window IDs based on their positions (from top to bottom, and from left to right), click the **Renumber Windows** button.

Example

Current window ID: 1, 4, 3, 2, 5

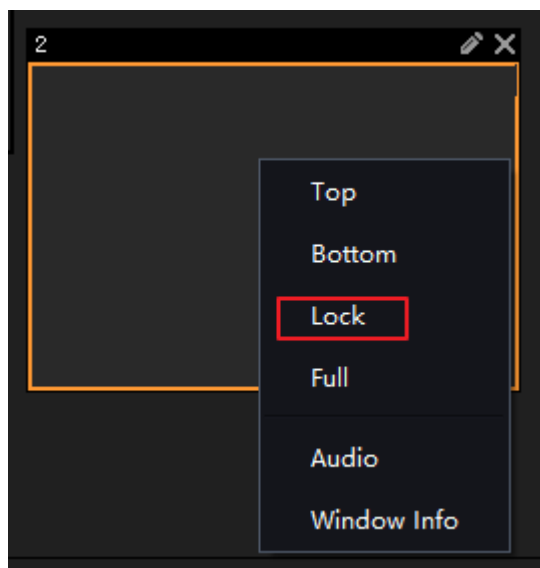


Renumbered: 1, 2, 3, 4, 5



Lock/Unlock Windows

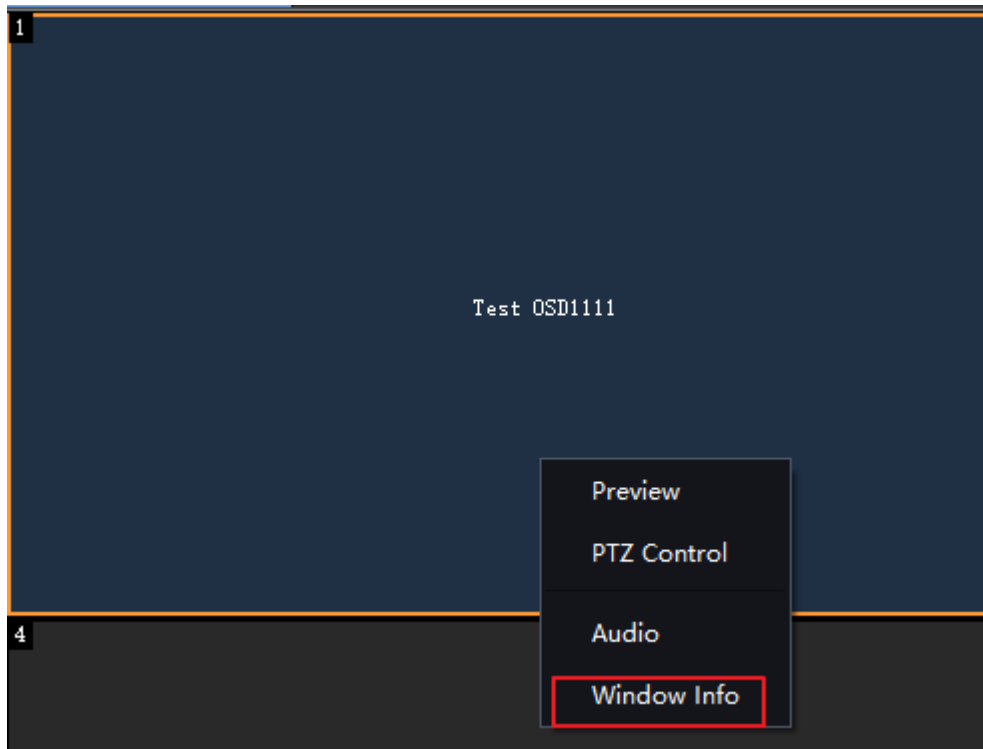
Lock the position and shape of a window.



- Right-click the window to lock and then choose **Lock Window**. A lock icon appears in the window's top right corner. To unlock, uncheck **Lock Window**.
- Click the button (1) to lock or unlock a specified window; click the buttons (2) to lock or unlock all the windows on the video wall.

View Window Info

1. Right-click a window, and then choose **Window Info**.



2. If a window is split, you can choose an ID to view information about the corresponding split window.

Window Info ✕

Win Code	690801735		
Split ID	1		
Task ID	0x0c000000		
Stream Status	Established		

Stream Source	0.0.0.0	Transmission Protocol	
Source Port	0	Destination Port	0
Encoding Device		Decoding Device	0.0.0.0
Encoding Channel	Board4_HDMI_122		

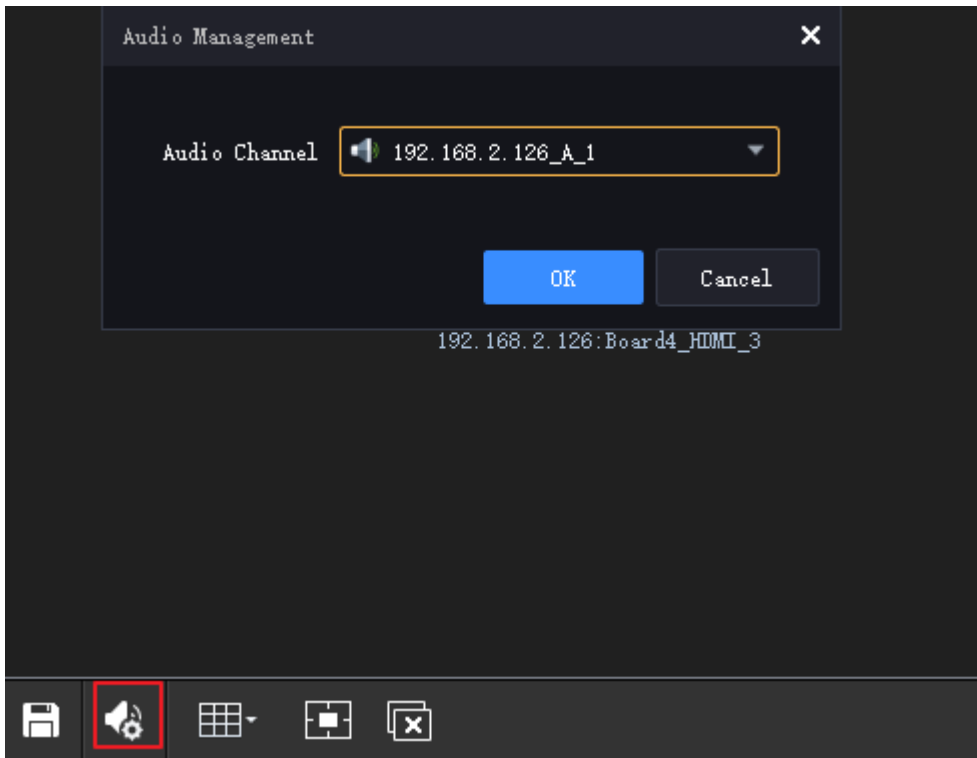
Audio	Resolution	1920X1080	
Video	Frame Rate	60	
Stream	Camera Packet Loss Rate	0.00%	

[Refresh](#)

Output Audio

Use the server's audio output channel or an output node to play audio.

1. Click **Audio Management**, and then choose an audio channel.

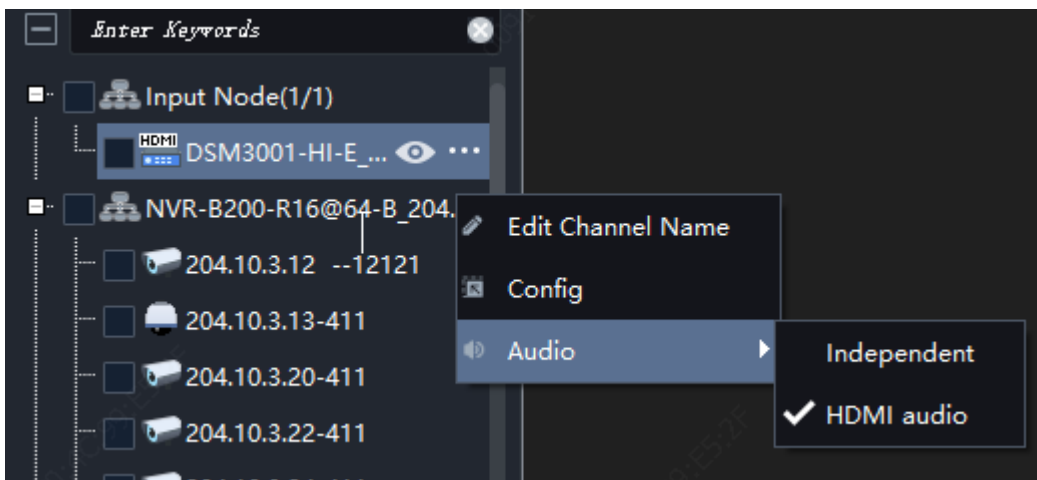


If you choose an input node's audio channel, you can configure the audio source.

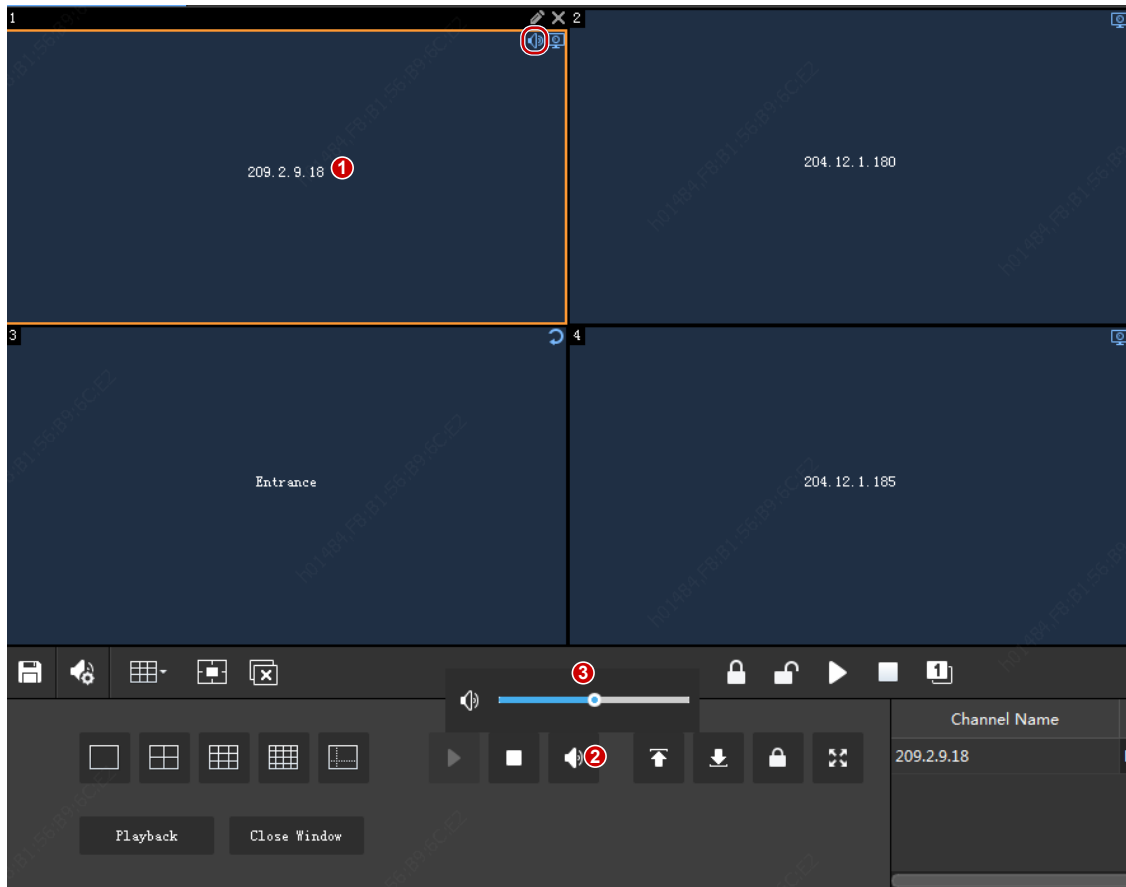


NOTE!

You need to enable audio input on the input node's web interface first.





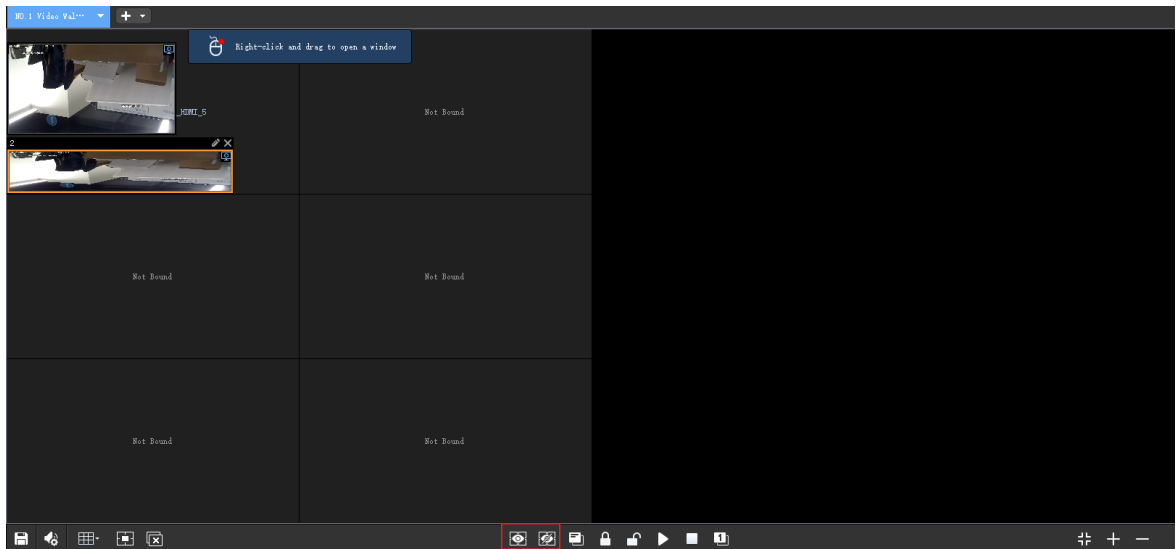
- HDMI audio: The audio comes from the HDMI interface with video.
 - Independent: The audio comes from the 3.5mm audio input interface of the input node, and can play the input audio independently.
2. Click the window (e.g., window 1) and then click the **Audio** button. The audio icon in the window's top right corner means audio is turned on. You can adjust the volume or mute the sound.



3. To stop audio output for the window, click the **Audio** button (2); or right-click the window and then uncheck **Audio**.

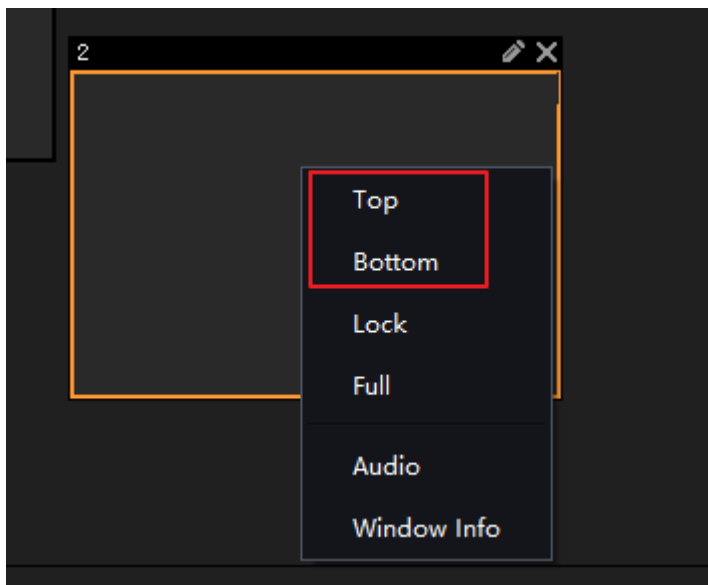
One-click Preview

When video in multiple windows are playing on the video wall, you can click  in the toolbar to view the real-time video of all windows on the client, and click  to close all the real-time videos on the client, without affecting video playing on the video wall.



Always Display a Window on Top or Bottom

Use this feature to keep a window on top or bottom when multiple windows overlap.



- Click a window and then click **Top** or **Bottom**.
- Right-click the window and choose from the pop-up menu.



NOTE!

If **Selected window always on top** is enabled in Client Configuration, clicking a window will display it on the top, regardless of whether it is set to display at the bottom or if another window has been set to display on top.

Maximize a Window/Split Window to Full Screen

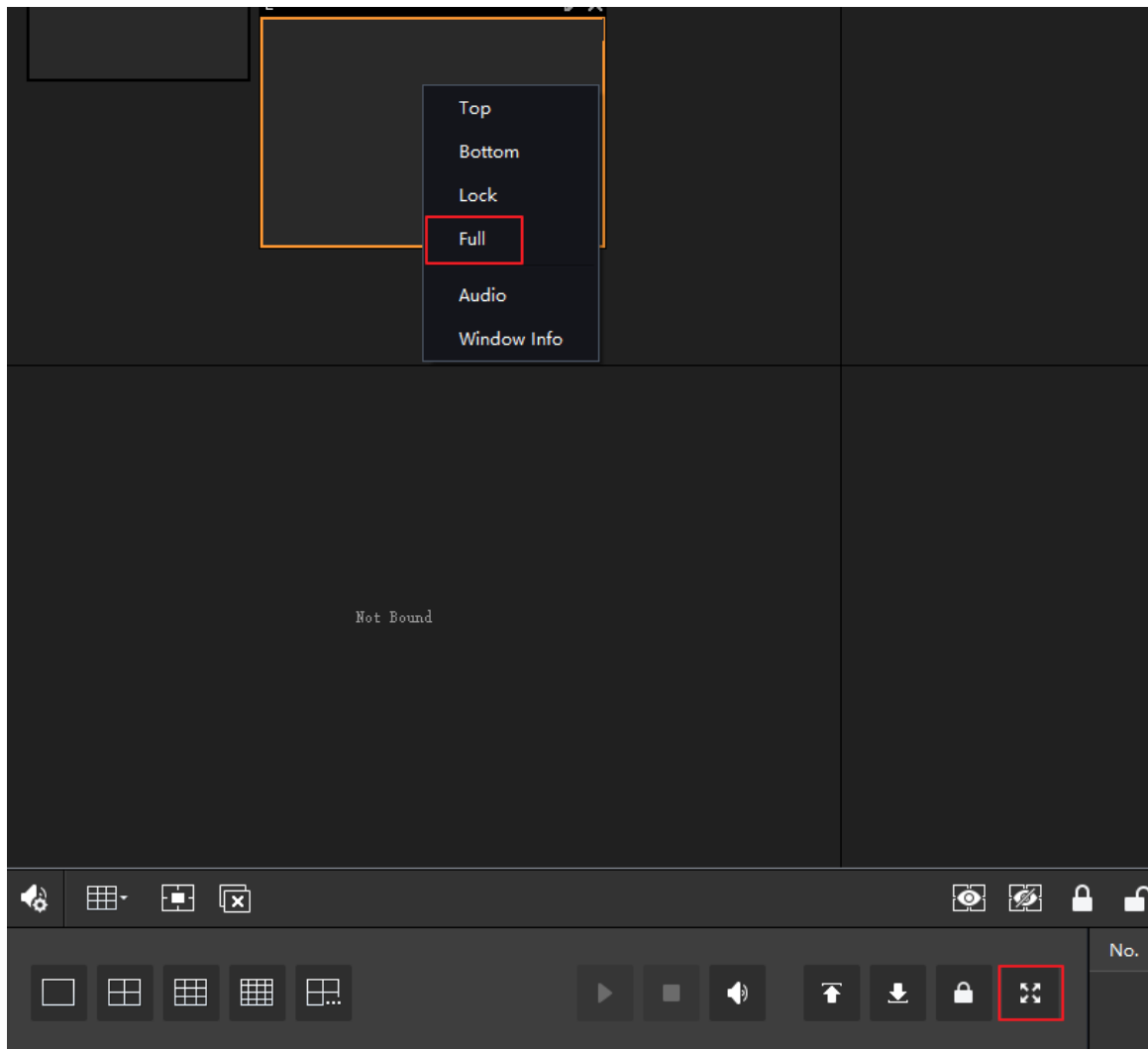


NOTE!

If a window is locked, you need to unlock it first.

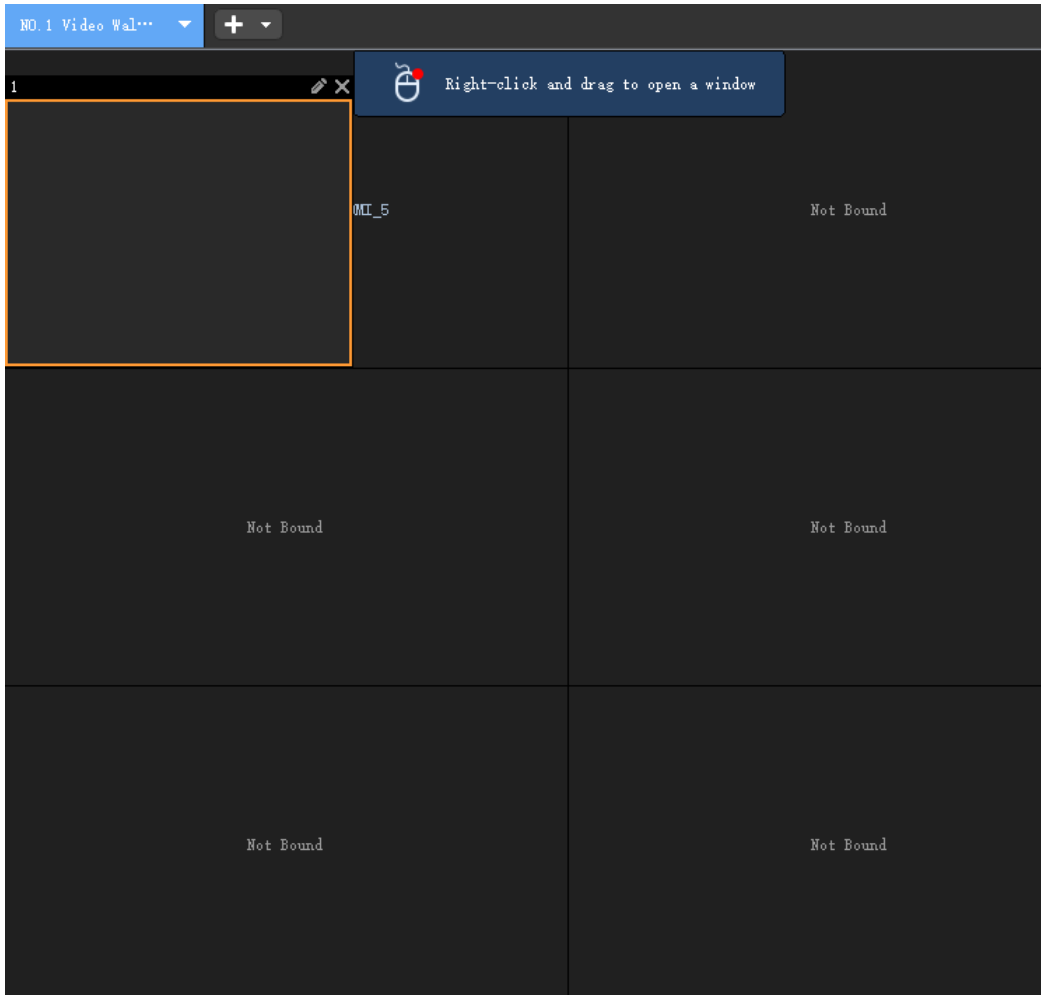
Maximize a Window

There are two full-screen modes, depending on the settings on the logged-in server:



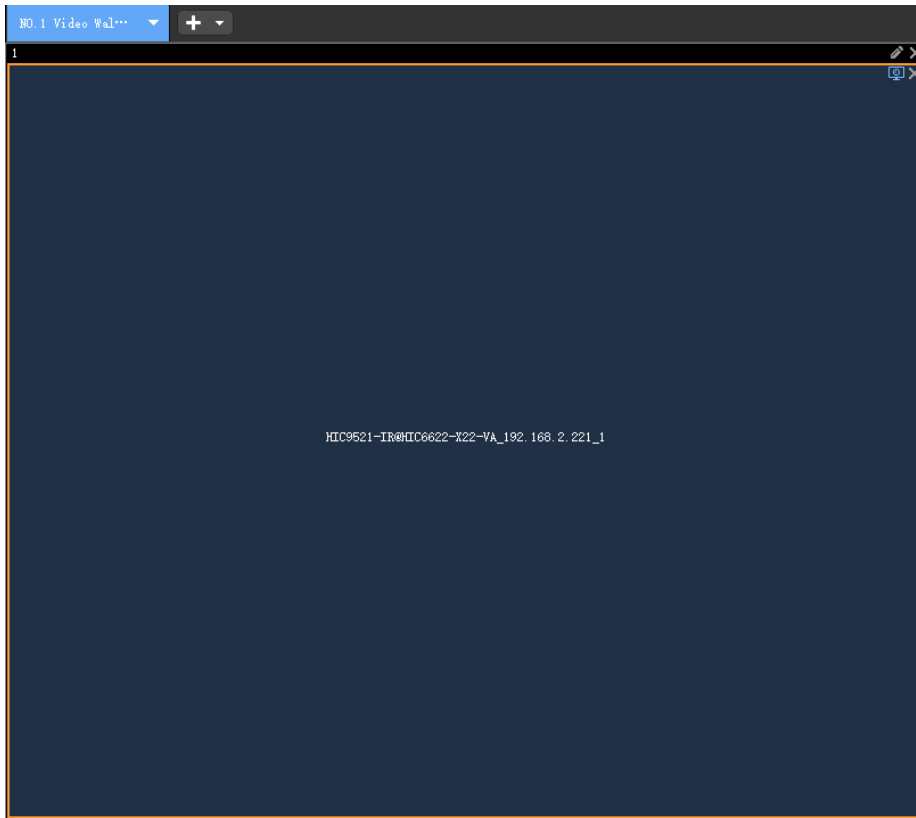
- If normal mode has been enabled on the server's web interface, clicking the **Full Screen** button (or use the right-click menu or by a double-click) magnifies the window to fill the currently occupied window.

Example:



- If full screen mode has been enabled on the server's web interface, clicking the **Full Screen** button (or use the right-click menu or by a double-click) magnifies the selected window to fill all windows on the video wall.

Example:



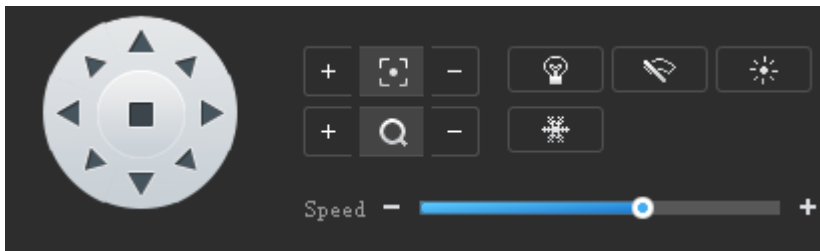
Maximize a Split Window









Magnify a split window to fill the entire window. The operations are similar to Maximize a Window.

PTZ Control

When the live video of a PTZ camera is started successfully on the video wall, you can right-click the window and then choose **PTZ Control** to open the PTZ control panel. PTZ control operations include rotating the PTZ, adjusting the rotation speed, zoom, focus, and enable/disable the light, wiper, heater and snow removal function.


The PTZ control operations available depend on PTZ configuration and the device connection protocol.

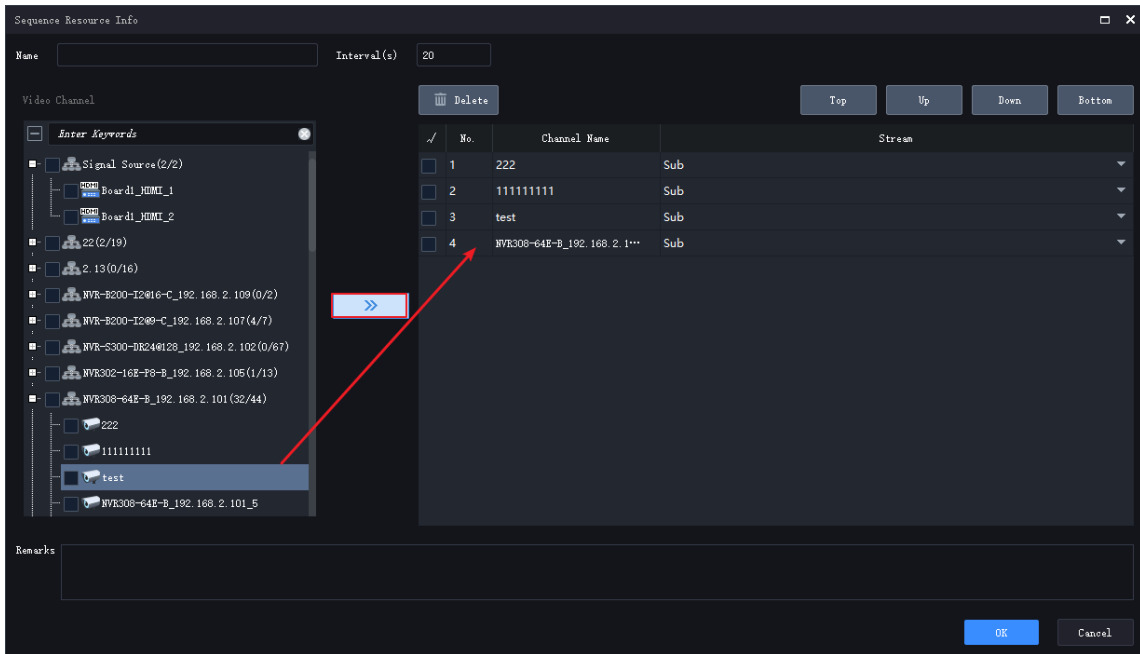


Parameter	Description
	Control the rotation direction of the camera or stop rotation.
	Adjust the focus of the lens.
	Adjust the zoom of the lens.
	Adjust the rotation speed of the camera.
	Turn on/off the illuminator.
	Turn on/off the wiper.
	Turn on/off heater.
	Turn on/off the snow removal mode.

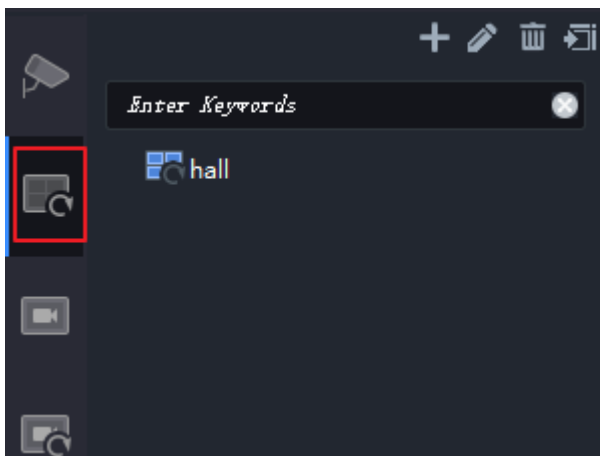
6 Sequence Resource

Add, edit or delete sequence resources on the **Sequence Resource** tab.

1. Click the **Add** button, enter a name for the sequence resource.
2. Select cameras and then click  to add them to the list.



3. Set the sequence resource, including:
 - Time interval at which the IPCs in the resource switch from one to the next
 - Use the buttons to adjust the sequence
 - Stream type: main stream, sub stream, or auto.
4. The resource appears on the **Sequence Resource** tab and is ready to play on the video wall. See Sequence in One Window and Sequence in Multiple Windows.



7 Resource ID

You can use a network keyboard to perform live view, playback, PTZ control and sequence on a video wall.

Connect a network keyboard to the PC properly by referring to the Network Keyboard User Manual, and then select the **Resource ID** tab and follow the steps below.

1. Add a signal source. Click **Add** under the **Signal Source** tab, and select a signal source that needs to be displayed on the video wall. Click **OK**, and the signal source appears in the list.



NOTE!

The signal source keyboard ID (1) in the following example will be used for network keyboard operation.

ID	Signal Source	Stream Type	Operation
1	Board1_HDMI_1	Main	
2	Board1_HDMI_2	Main	

2. Add a video wall. Click **Add** under the **Video Wall** tab, and select a desired video wall. Click **OK**, and the video wall name appears in the list. Please configure the video wall first, see [Video Wall](#) for more details.



NOTE!

The video wall keyboard ID (1) in the following example will be used for network keyboard operation.

ID	Video Wall	Operation
1		

3. Add a sequence resource. Click **Add** under the **Video Wall** tab, and select a desired sequence resource. Click **OK**, and the sequence resource appears in the list. Please configure the sequence resource first, see [Sequence Resource](#) for more details.



NOTE!

The sequence resource ID (1) in the following example will be used for network keyboard operation.

ID	Sequence Resource	Operation
4	hall	

See the *Network Keyboard User Manual* for details.

8 Operator Control

Configure and operate operators.



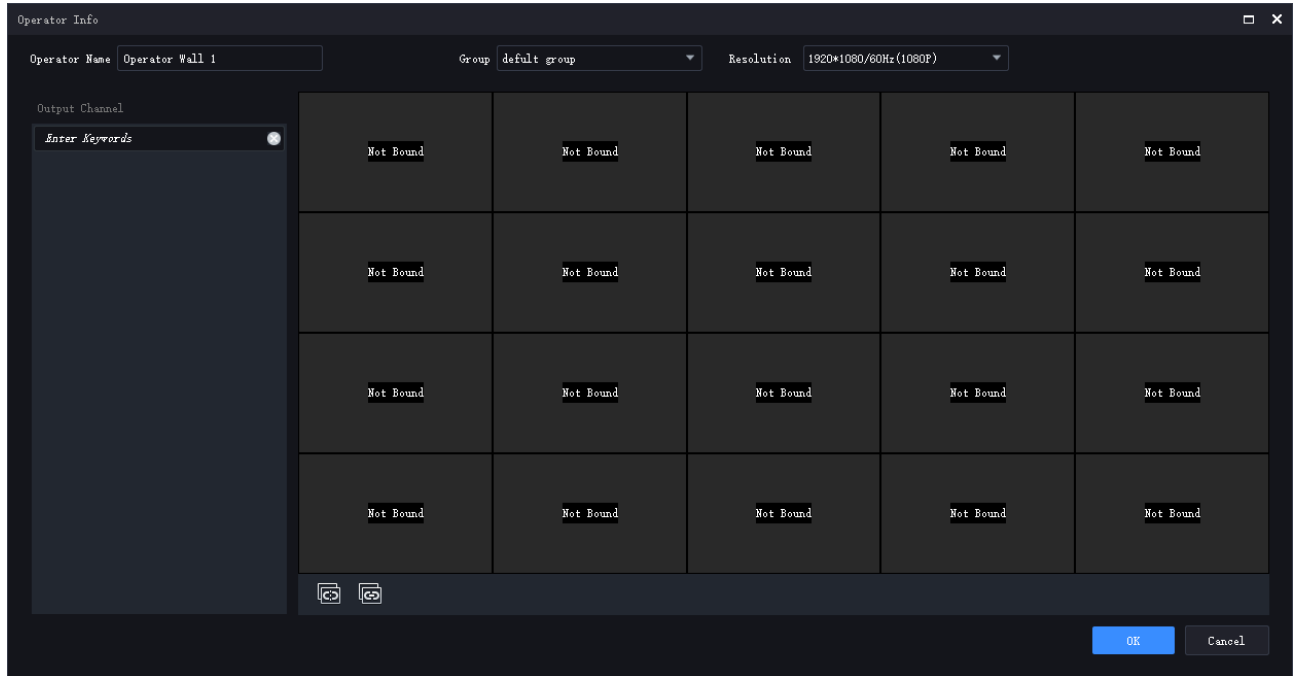
NOTE!



This module is displayed only after you log in to the KVM management node.

Operator Management




Create an Operator

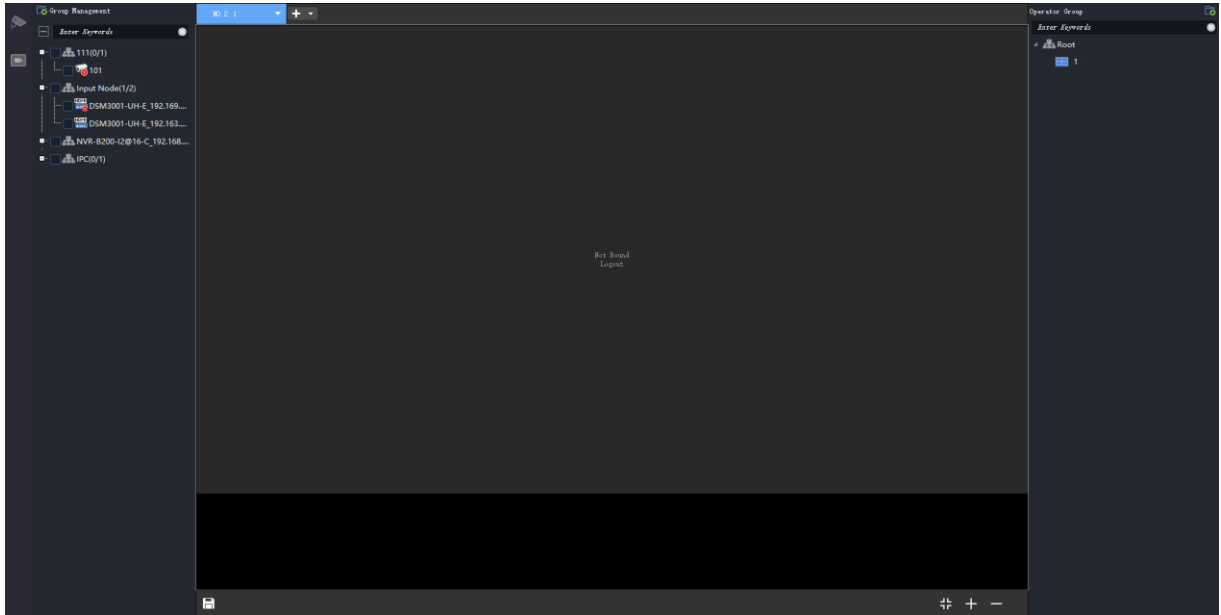
1. Go to the **Operator Control** page, click . A window as shown below appears.










Item	Description
Name	Enter the operator name.
Group	Select a group for the operator.
Resolution	Choose a resolution for the operator.
Output Channel	<p>All the output channels (operator nodes) under the current management node are displayed on the left side. You can drag an output channel from the left side to bind it to a window on the right side.</p> <p>Note: Binding should start from the first window of the operator, and two output channels must be bound adjacently without gaps or diagonal binding.</p>
	Click to unbind all operators with output channels.
	Click to bind all available output channels with the operator.

2. Set the parameters and bind the operator to an output channel.

- Bind: Drag an output channel to a window to complete binding. To cancel the binding, click .
 - Rebind: Drag an output channel to an already bound window to rebind.
 - Unbind: Click  in the window's upper right corner to unbind; or click  to unbind all.
3. Click **OK** to create the operator.




Item	Description
	Add and manage video resource groups.
	Play on screen (reserved), used to play a video resource in a window.
	Play on wall (reserved), used to play multiple video resources in multiple windows.
	All the output channels (operator nodes) under the current management node are displayed on the left side. You can drag an output channel from the left side to bind it to a window on the right side.
	Create an operator.
	Add and manage operator groups.
	Save the current layout and live view settings to the current scene or as a new scene.

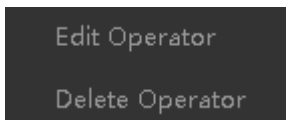
Edit an Operator



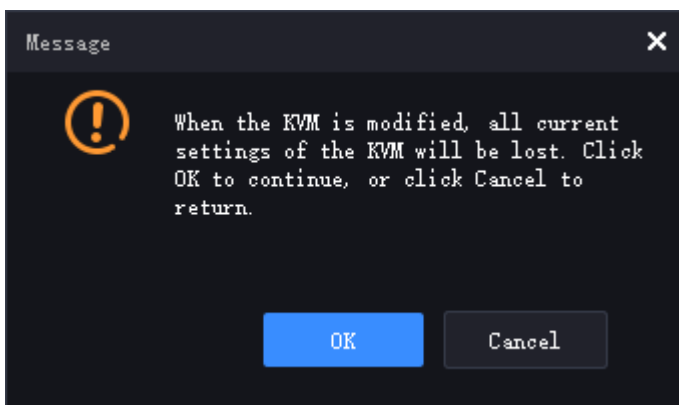
NOTE!

Editing an operator will delete all configurations.

1. Click the button to the right of the operator you want to edit (for example, ) to bring up the toolbar.



2. Click **Edit Video Wall**. A message appears. Click **OK** to proceed.




3. You can change the operator name, resolution, and bound output channel. Click **OK** when you complete.

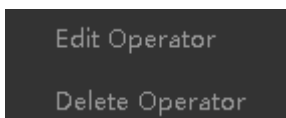
Delete an Operator



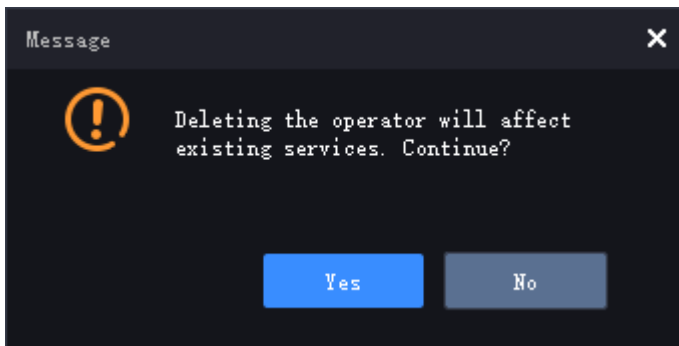
NOTE!

Deleting an operator may affect the existing service.


1. Click the button to the right of the operator you want to delete (for example, ) to bring up the toolbar.

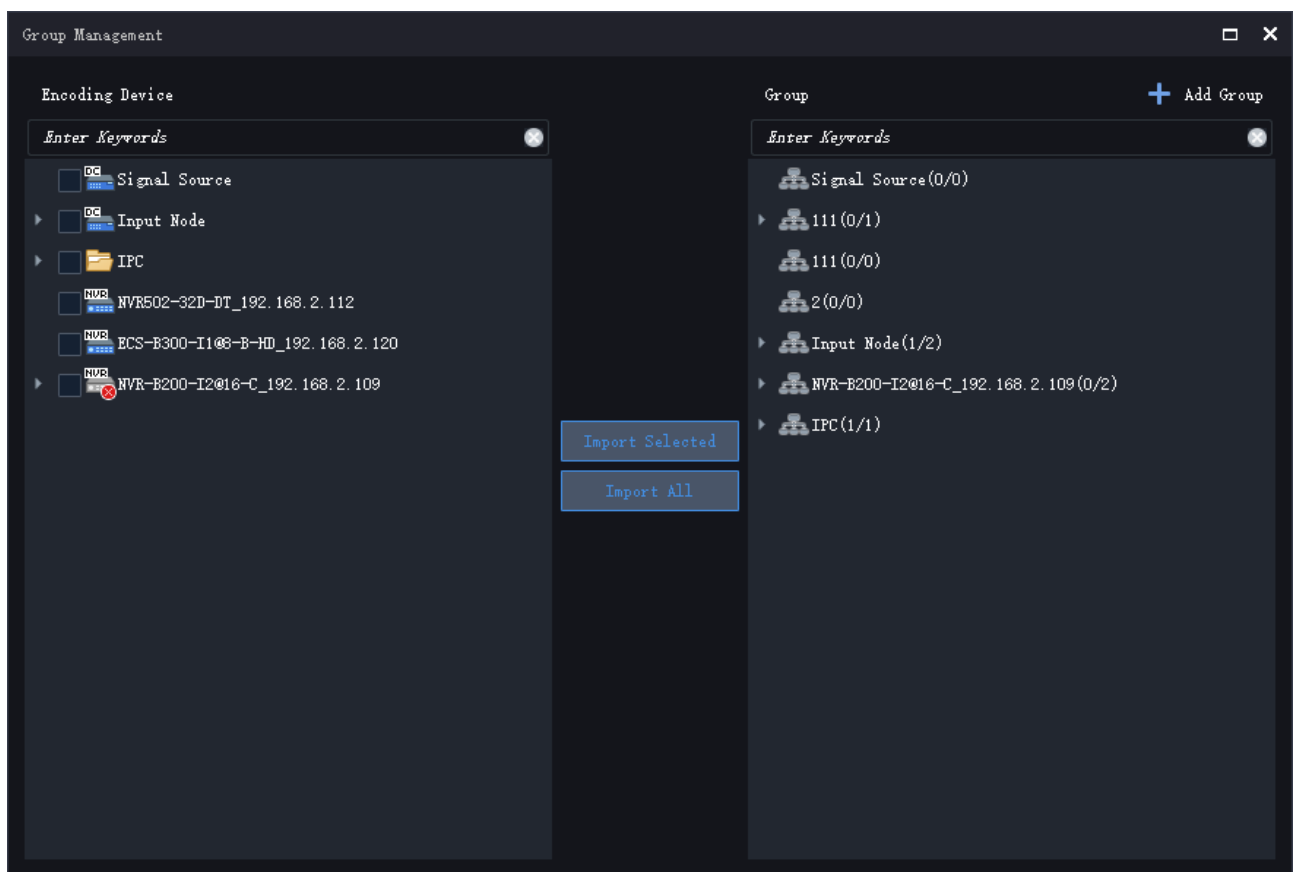


2. Click **Delete Video Wall**. A message appears. Click **Yes** to confirm the delete.

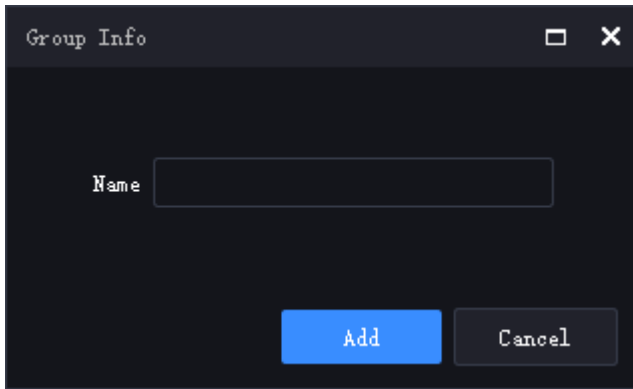


Manage an Operator Group

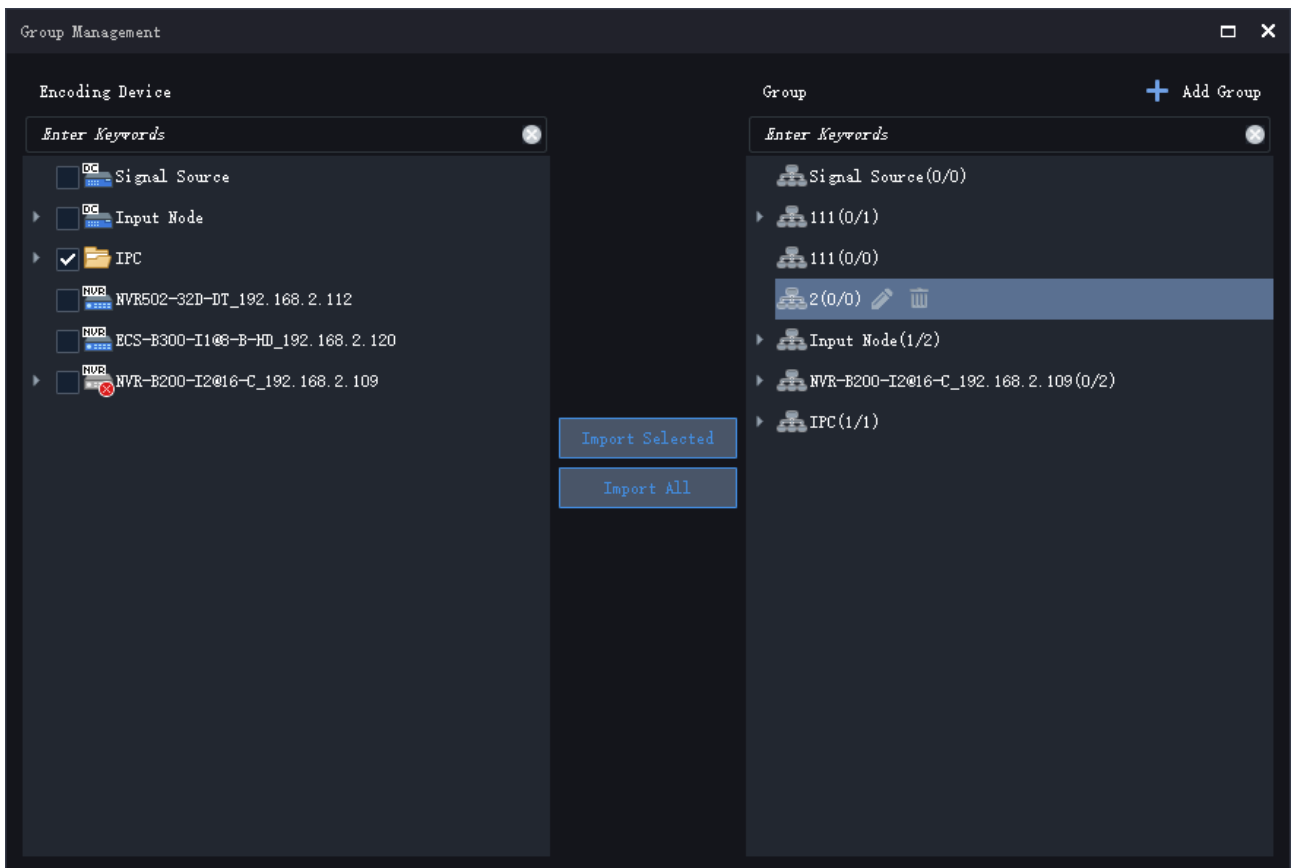
1. Click  on the right side. A window as shown below appears.





2. (Optional) Click **Add Group**. A window as shown below appears. Enter the group name, and then click **OK** to add the group.




3. Select operators on the left side, and then select a group on the right side, click **Import Selected**. The selected operators are added to the group. Clicking **Import All** will add all the operators on the left to the specified group.



4. (Optional) In the **Group** area, select a group or an operator, and then click  to edit or click  to delete.

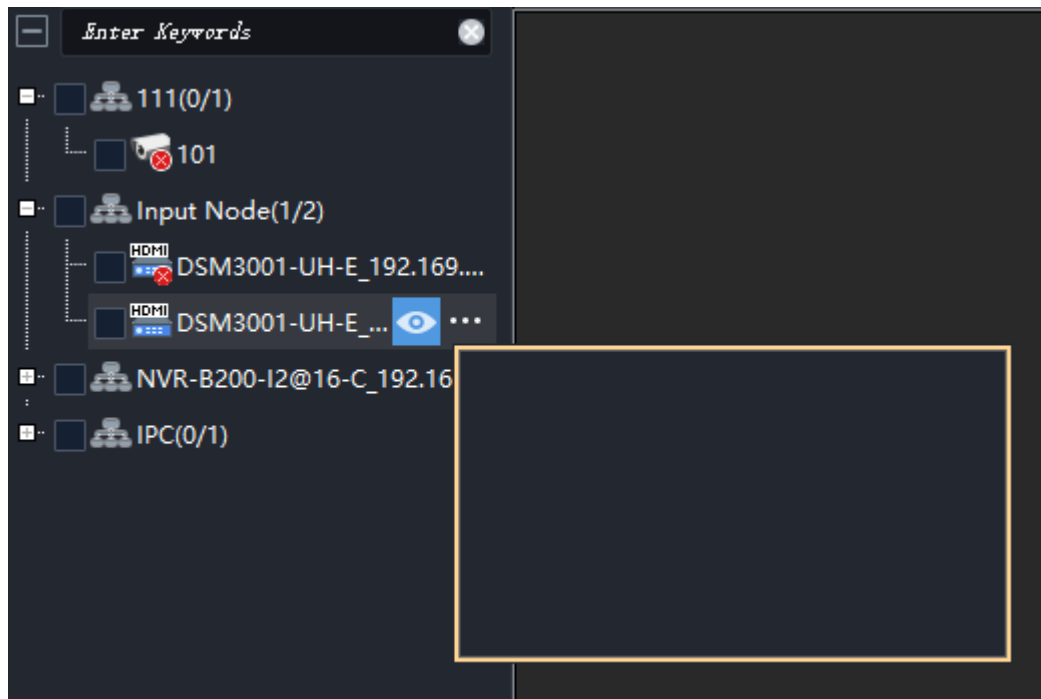
Video Channel



Click  on the left side. The **Video Channel** page appears, where you can view live video and play video on the video wall.

View Live Video


Select a video resource and then click  to view the live video.



Play Live Video on Video Wall


Drag a video resource to a window to play the video on the video wall.

Stop Video on Video Wall


Click  in the top right corner of the window to close the window and stop the live video on the video wall.

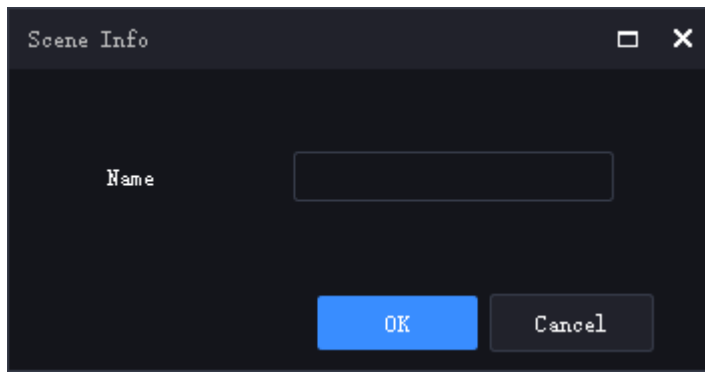
Scene



Click  on the left side. The **Scene** window appears, where you can display the saved layout and live video on an operator.


Add a Scene

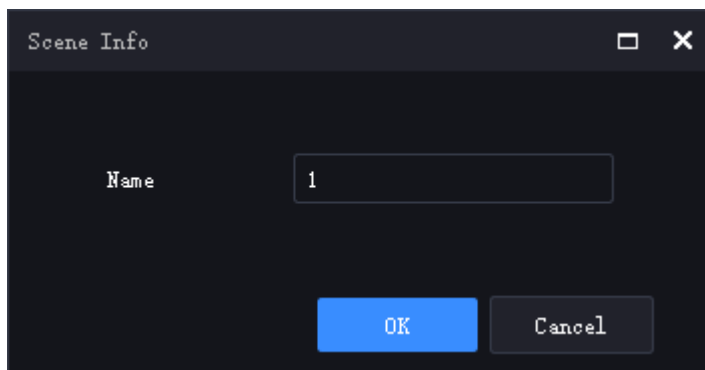
1. Click  on the scene list. A dialog box as shown below appears.



2. Enter the scene name, and then click **OK**.


Edit a Scene

1. Select a scene, click . A window as shown below appears.





2. Modify the scene name, and then click **OK**.

Save a Scene

In the **Video Channel** window, perform operations such as playing live video on the video wall. Click  to save the current operator layout and live video settings the current scene or as a new scene.

Start a Scene

Choose a scene, click  on the right to start the scene. The scene icon changes to . After the scene is started, the scene images are displayed.

Delete a Scene

Select a scene and then click . A message appears. Click **Yes** to confirm the delete.

9 Screen Control

On the **Screen Control** tab, you can turn on/off Uniview video wall screens including small pixel pitch LED screens.

Before you operate on the client, make sure the screen, the power distribution box (for LED screen), and the server are properly connected.

Configure Serial Port and Protocol

Configure the serial port and protocol in accordance with the server model and screen type. Select the serial port and protocol that are consistent with those configured on the server's web interface.



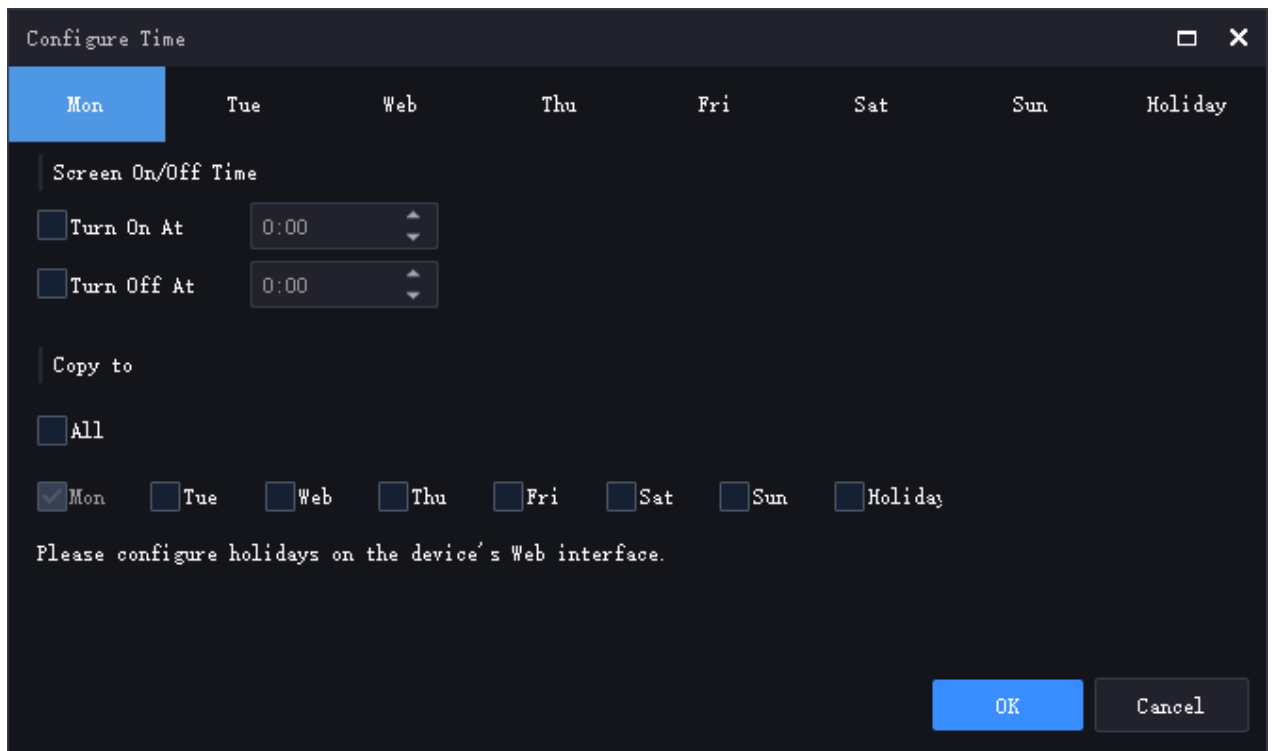
Turn On or Off Screen Automatically at a Set Time

Use this function to turn on or off screens automatically at the time you specified.



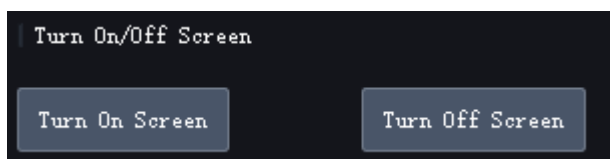
Select **Turn On At** or **Turn Off At** to set the time for automatically turning on or off the screen. After you complete the settings, the screen will turn on or off at the specified time. Some devices support weekly scheduling, please refer to the instructions below for operation.

1. Select **On** under **Turn On/Off Screen Automatically**. The **Configure Time** button appears.
2. Click **Configure Time**. A window as shown below appears.



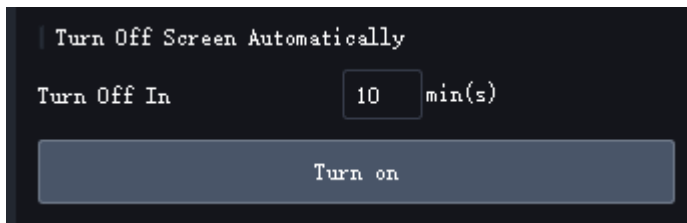
3. Configure the daily on/off time for the screens on a weekly and holiday basis. After configuring the on/off time for a day, you can quickly complete configuration for other dates using the following methods:
 - Copy to a specific date: Select the date(s) that need to apply the same settings.
 - Copy all: Click **Select All** to select all dates below.
4. Click **OK** to save the time configuration. The screens will turn on and off at the set time every day, repeating weekly. When holiday settings are configured, the on/off time during holidays will be followed.

Turn On or Off Screen Manually

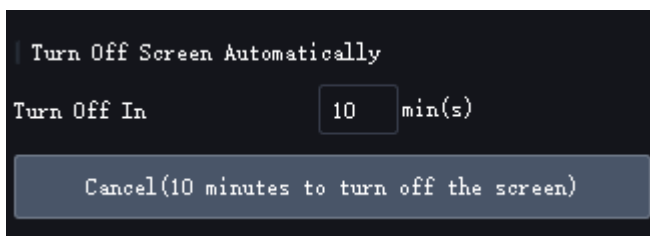


1. Click **Turn On Screen**. The screen turns on immediately.
2. Click **Turn Off Screen**. The screen turns off immediately.

Turn Off Screen with Delay



1. Set a delay time for turning off the screen in the **Turn Off In** box.
2. Click **On** to start counting down from the current time, and the screen will automatically turn off at the end of the set time.



10 Environment Control

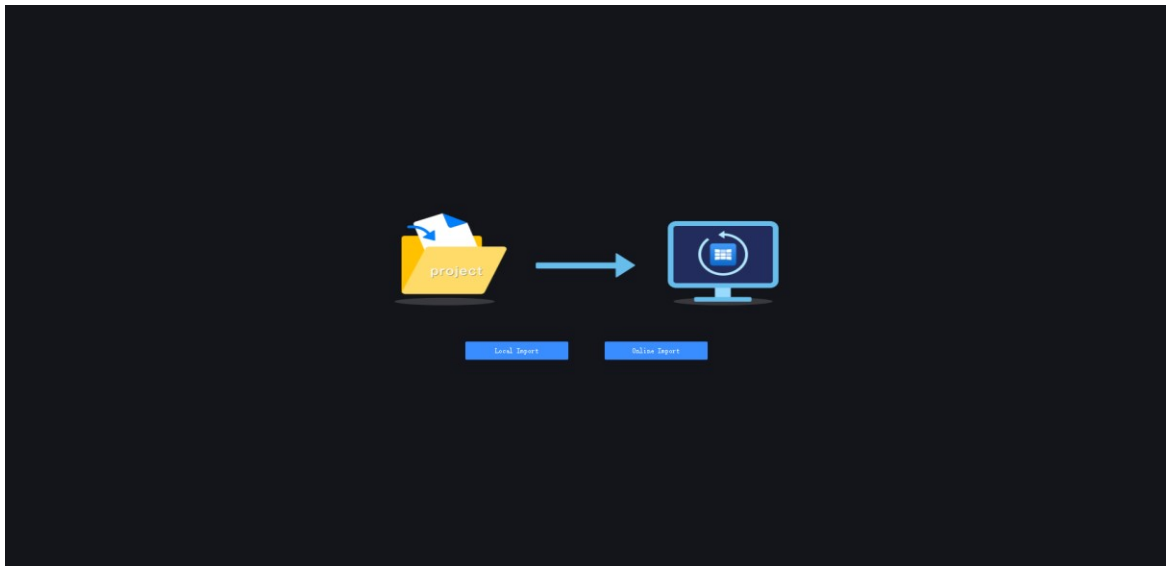
The environment control function needs to be used with the project package exported from the visual programming platform. Please contact our technical support to create and obtain the project package. After completing the customized central control page, import the project package into the client. Then, you can quickly operate in the customized web interface using the environment control tab in the client and remotely control the central control device. For example, you can click buttons to remotely control the central control device to open or close curtains, adjust the volume of the audio system, etc.

You only need to import the project package once. The project package page always displays on the client after you log in, regardless of the display control device.

Import Project

Import the project package provided by our technical support to remotely control the central control device.

1. Click the **Environment Control** tab.




2. Choose an import method:

- Local import: Import a local project package.
- Online import: Enter the IP, port, and password of the visual programming platform, and then click **Download** to download the project package from the visual programming platform for import.

Re-import

Follow the steps to re-import a project to replace the current one.

1. Click  in the top right corner, choose Import Project. A page appears.
2. The re-import process is the same as the first-time import.