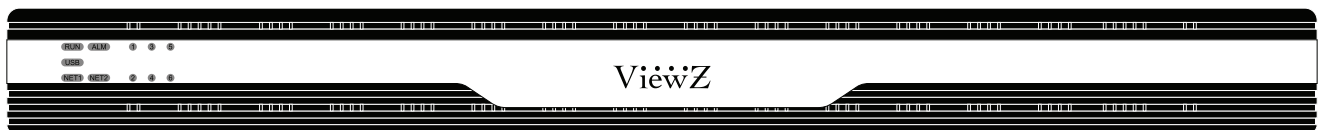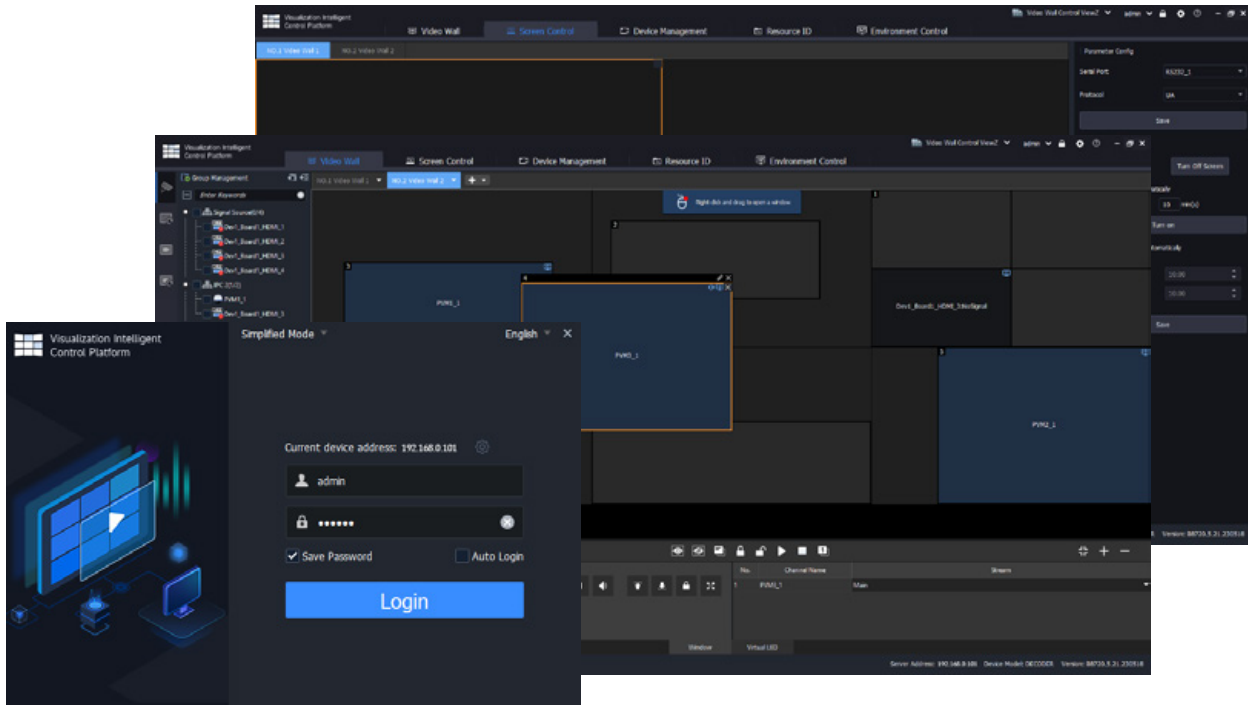# VZ-PRO SERIES

4K IP DECODED VIDEO WALL CONTROLLER

EZWALL SOFTWARE USER MANUAL ver. 2.0.

ViewZ®
www.viewzusa.com

Please read this manual thoroughly before use, and keep it handy for future reference.
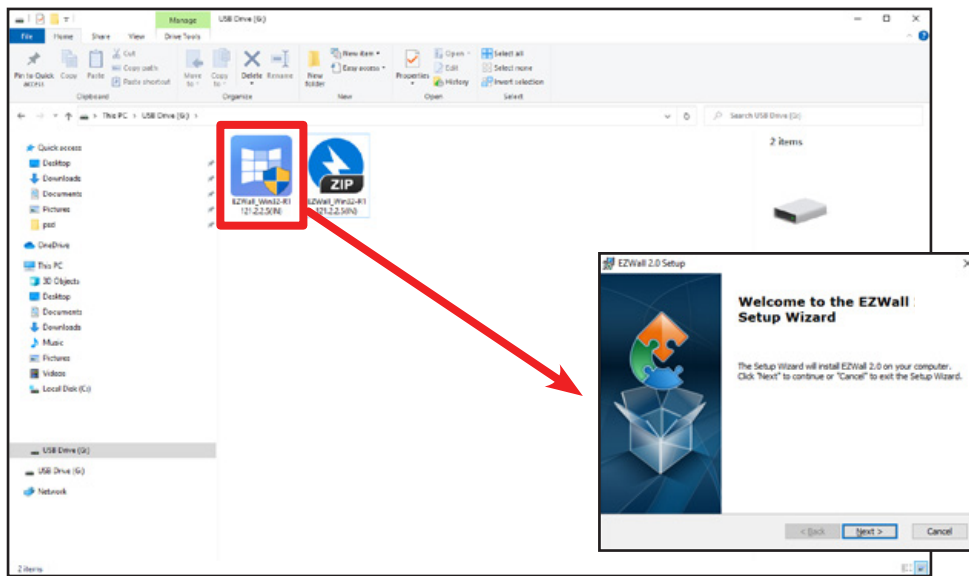
CONTENTS

CONTENTS

CONTROL AND FUNCTION

Initial Setup - Installation

- When user get the ViewZ's server package, please find the USB or media to install software to user's PC or server. Our software (EZWall_XXXXX) does not need to connect to the online (or web) and only need to located at the same network of PC (or server). But, if user wants to add & display the IPC/Signal Source on the video wall monitor, plz think about the connection & security/firewall.

⚠️ **Caution !**

The default id & password is simple for your first login (**admin / 123456**). For security reason, we strongly recommend to change the strong password after your first login, for ex. the combination of numbers, uppercase & lowercase characters, and special characters. Please keep the password safe and change it regularly.

- 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.
- Due to uncertainties such as physical environment, discrepancy may exist between the actual values and reference values provided in this manual. The ultimate right to interpretation resides in our company.
- We are not responsible about any security reach of server or program. This software & server can work under local or online circumstance and does not provide any security improvement.

CONTROL AND FUNCTION
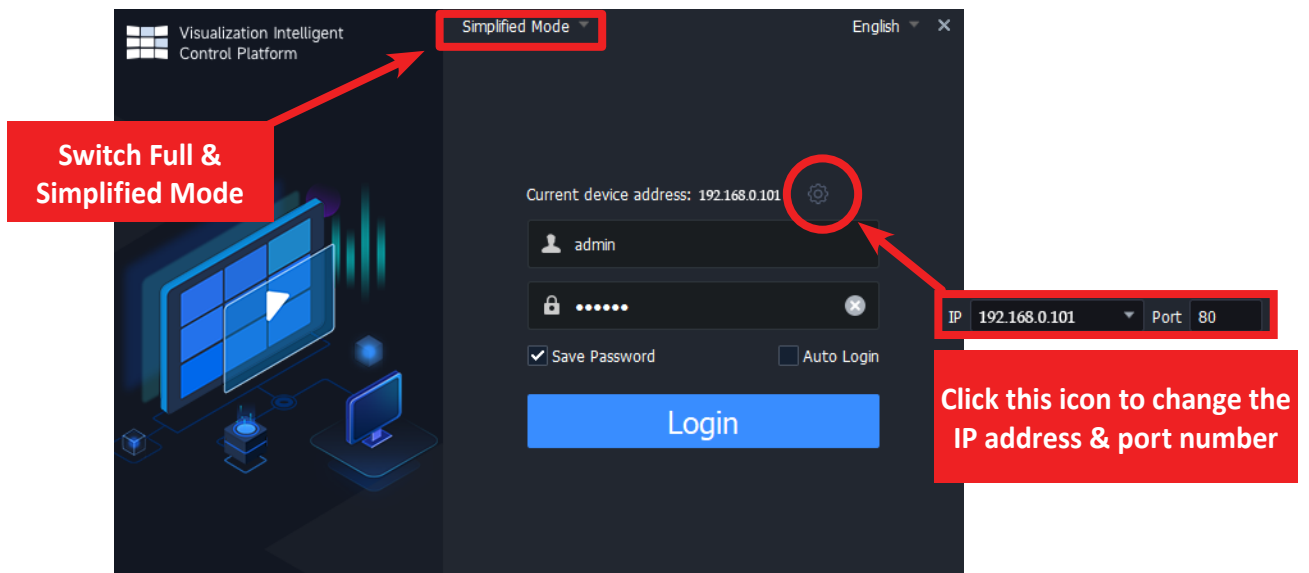
Intro & Initial Setup - Access Setup

EZWall client software is mainly used in small-scale display & control device-centered systems to manage encoding devices and operate video walls.

Note

- When user get the device & installation software,
- The GUI, features, and operations may vary, depending on the server that you log in to.

- Click [icon] icon to launch the program

- When user see the login window, user can **switch** the simplified & full mode, **change** the IP address & port to connect to the device and **setup** the auto-login.
- **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

CONTROL AND FUNCTION

Intro & Initial Setup - Access Setup
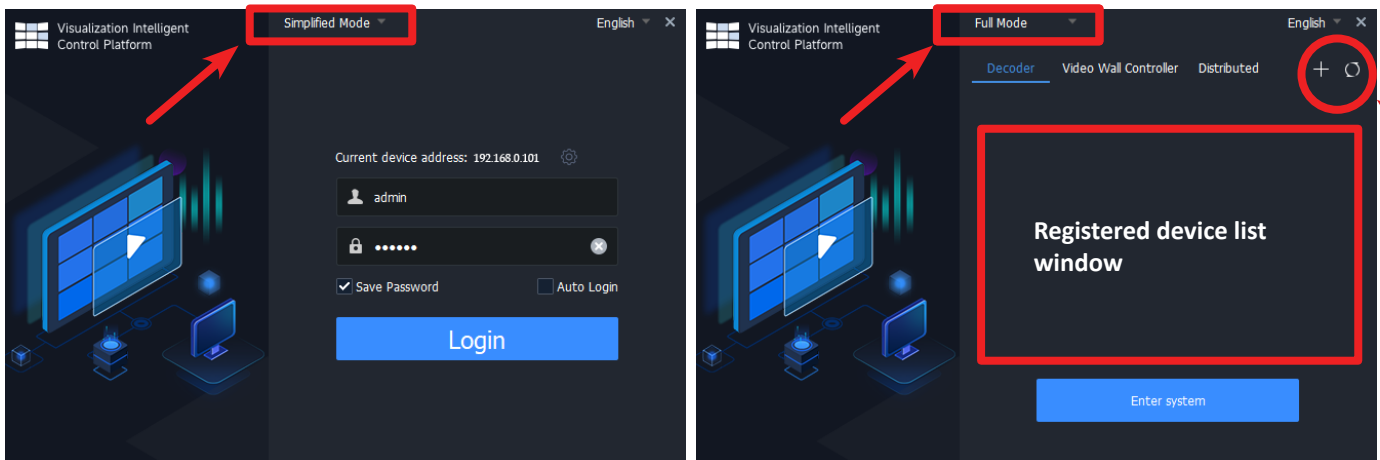
- When user see the login window, user can switch between **Simplified** & **Full Mode**.
- If user selects the **Full Mode**, user will see the right-top window. If any device already connected to the server, then user will see the device in the list.
  To add the device, select one of tabs among '**Decoder**, **Video Wall Controller** & **Distributed**'.
  For VZ-PRO-IP series, select the '**Decoder**' tab and click the '**+**' icon at the top right corner.
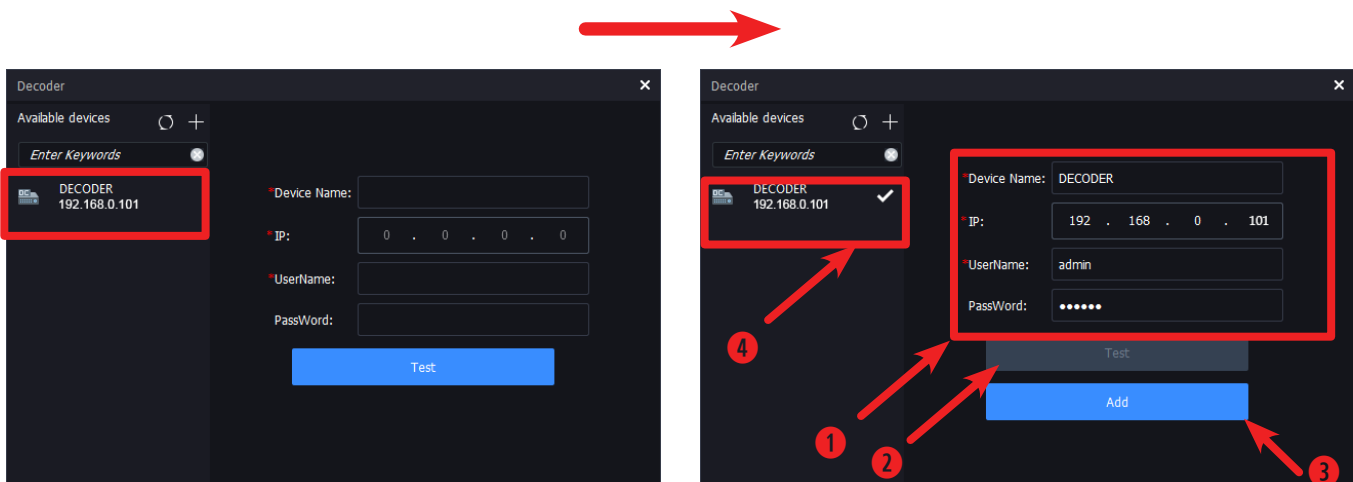

- When user clicks the '**+**' icon on the login window, the above left-window will pop up. User will see the available device on left side

  1. Select a device which you want to add, and type the info - username, password and device name (default device username & password is **admin / 123456**
  2. Click 'Test' button and if there is no issue, the 'Add' button popup below 'Test' button
  3. Click 'Add' button
  4. The added device will be shown on the left side (with checked mark)

CONTROL AND FUNCTION
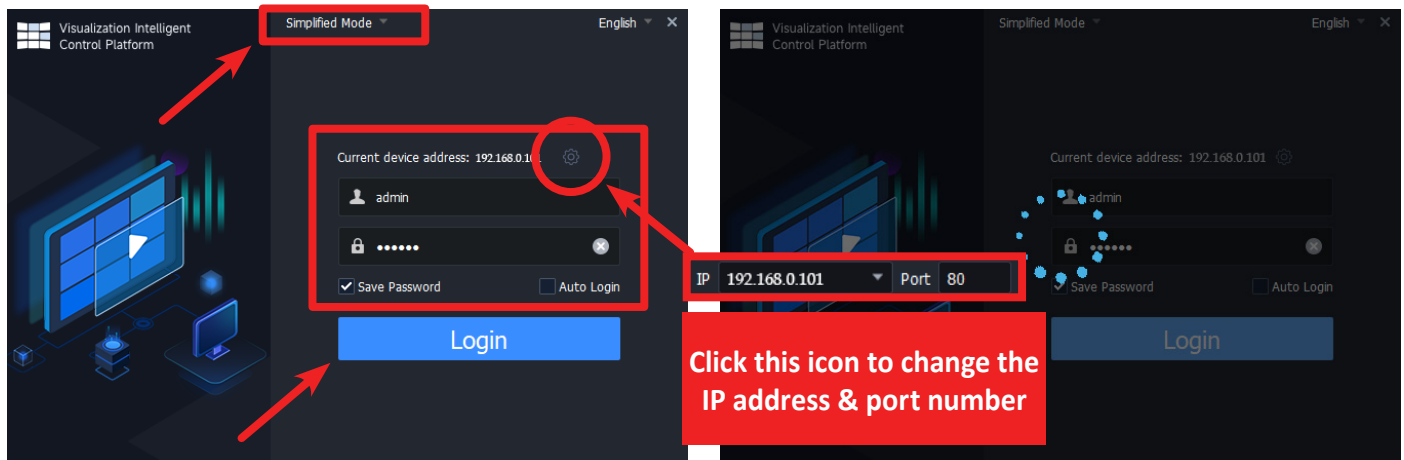
Intro & Initial Setup - Access Setup
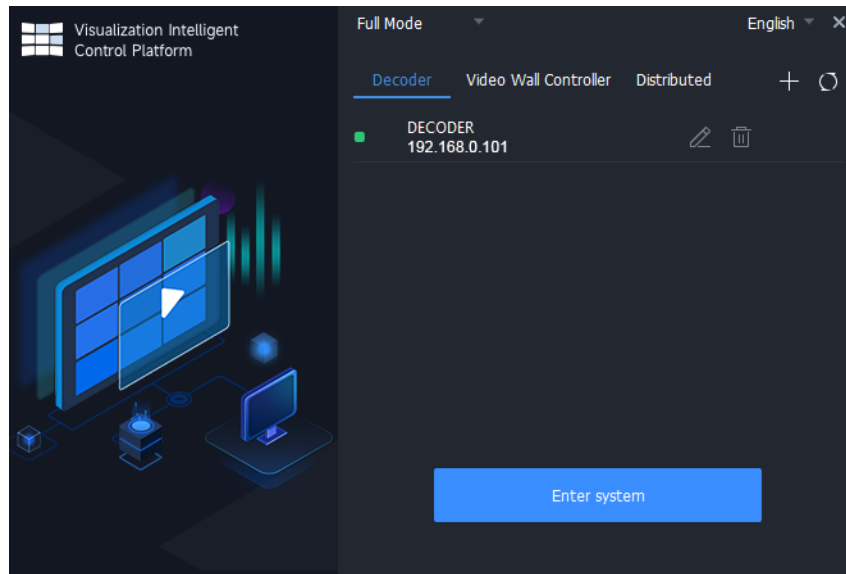
- The added device will be shown on the '**Full Mode**' window
- Select the added device and click '**Enter System**' button or double click to access
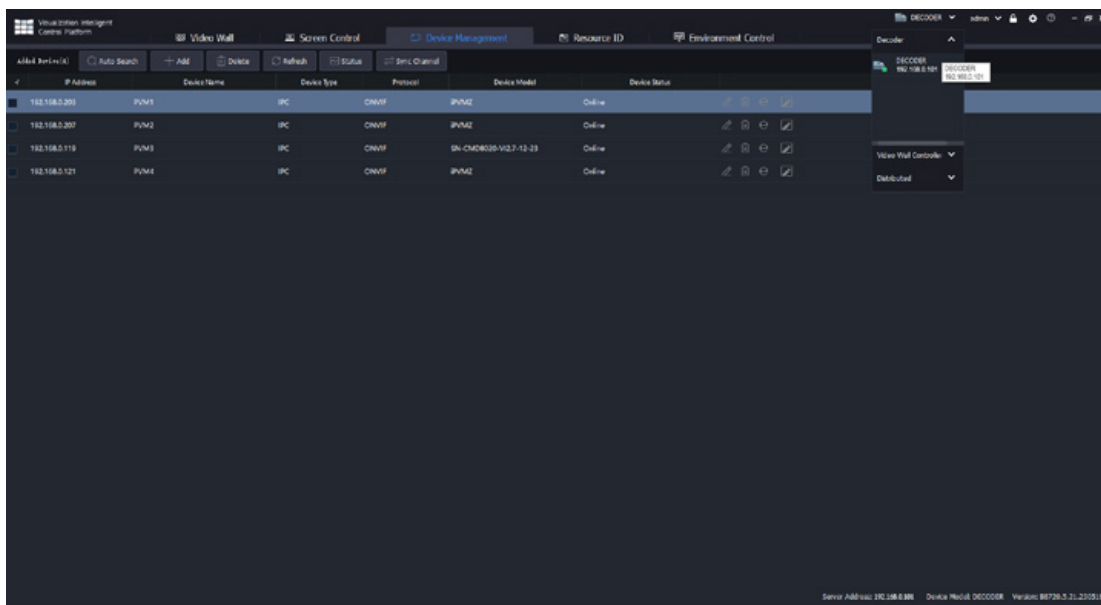
- When user successfully login to the device, user will see the above window.

CONTROL AND FUNCTION

Intro & Initial Setup - Access Setup

- If user selects the **Simplified Mode**, user will see the left-top window at the above screenshot. Type the username and password, then click '**Login**' button to access the device.
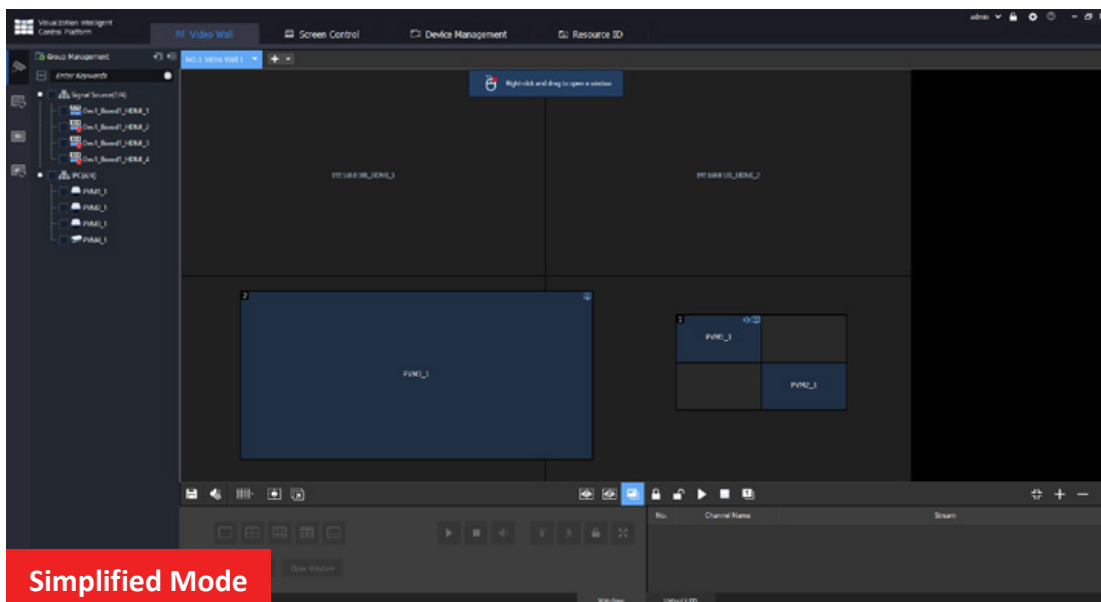
DESCRIPTION	
ID / Password	Type the ID & password - default value is 'admin / 123456'
Current Device Address	Display the current or typed device address
IP	Enter the IP address of the server. IP address of the server that the client has successfully logged in to are saved in the drop-down list. The default IPO address is **192.168.0.101**
Port	Port number of the server. The default is 80; enter the correct port if it has been changed.
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

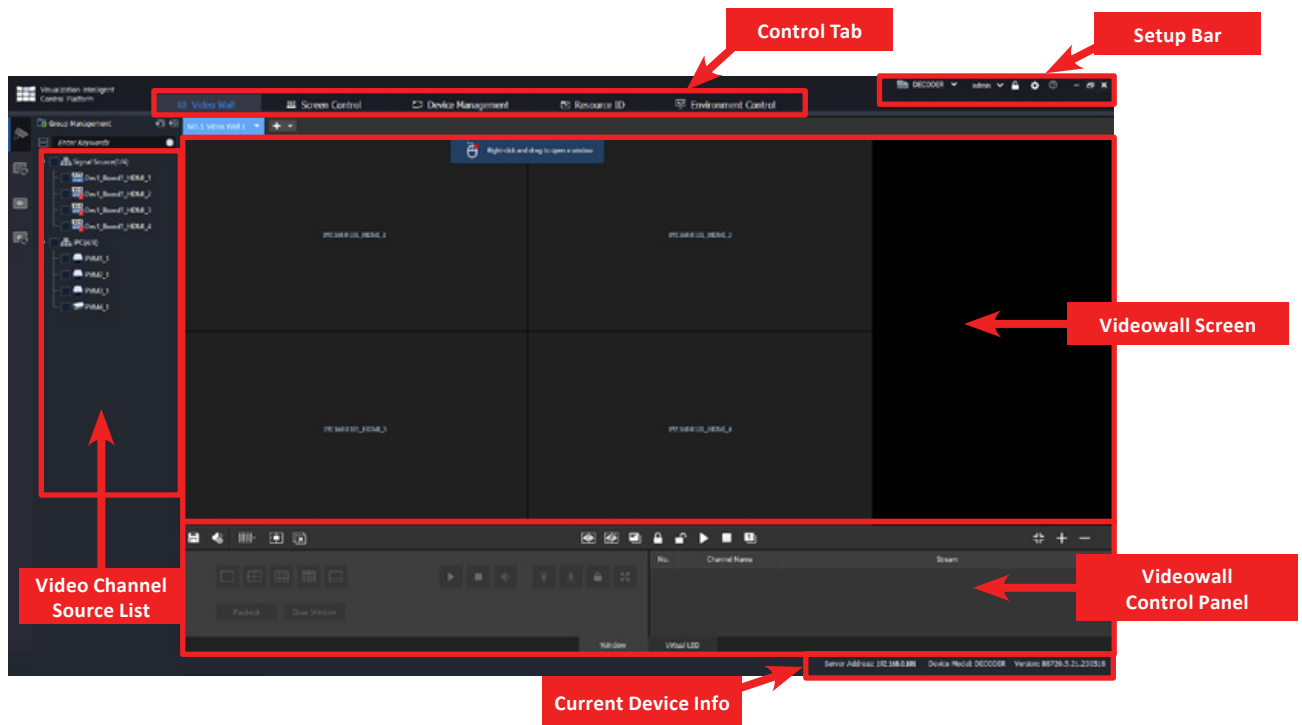# CONTROL AND FUNCTION

Intro & Initial Setup - Access Setup
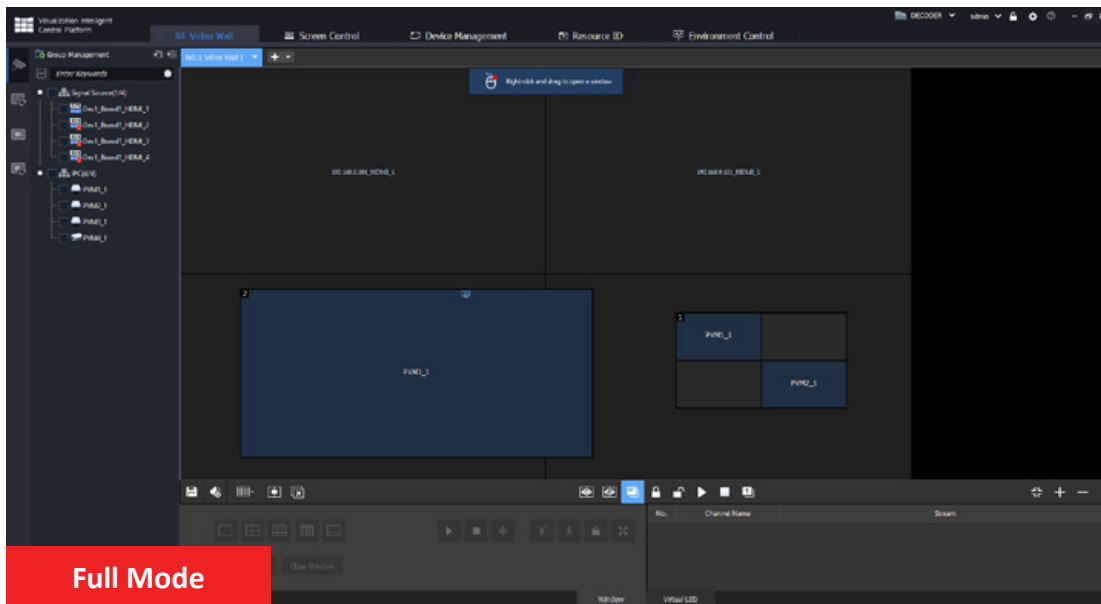
Full Mode

- When user successfully log in, the control platform window will be displayed at the **Full Mode**

Simplified Mode

- When user successfully log in, the control platform window will be displayed at the **Simplified Mode**

CONTROL AND FUNCTION

Control Platform Window

- **Control Tab**

    Video Wall - create & control video walls

    Screen Control - turn on & off video wall screen

    Device Management - add & delete IPCs or Signal Sources, input/output nodes on the server and manage them

    Resource ID - add a network device such as IP camera, network keyboard,

    Environment Control - import & export the videowall profile setup

- **Setup Bar** - lock the control program, switch user or device and configure the client info (auto login and stream transmission protocol)

- **Videowall Screen** - setup & design the videowall display

- **Videowall Control Panel** - assign & control video. Also, user can display scrolling or static text

    Window - insert, delete and control the video display

    Virtual LED - display scrolling or static text

- **Video Channel** - add or remove video source (IPC/Signal Source, input & output node)

- **Current Device Info** - display the server address, model name and version information
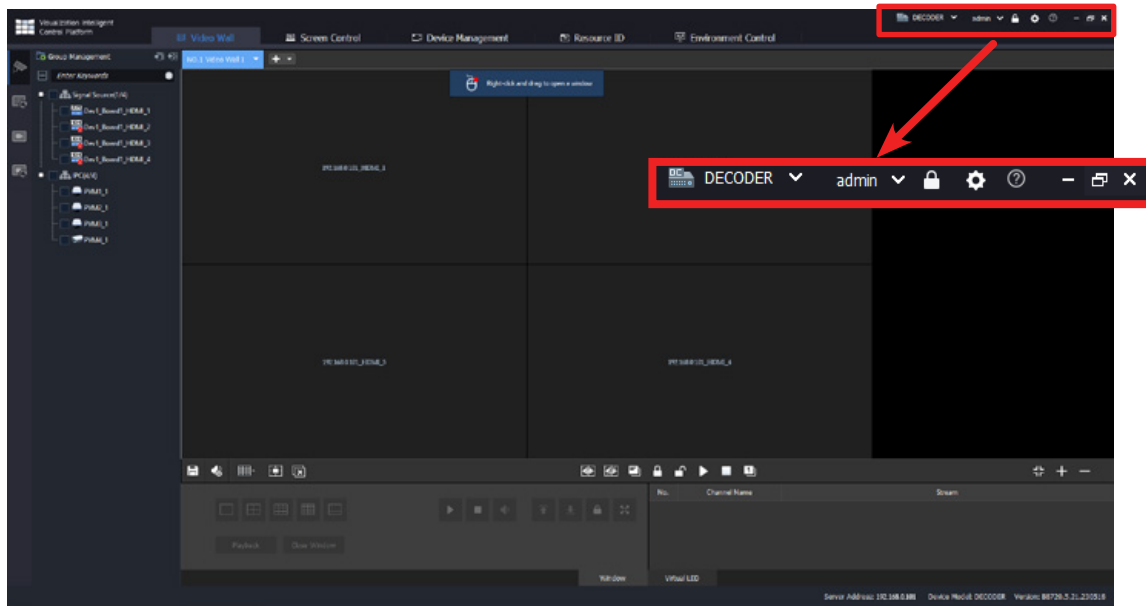
# CONTROL AND FUNCTION

Control Platform Window - Zoom
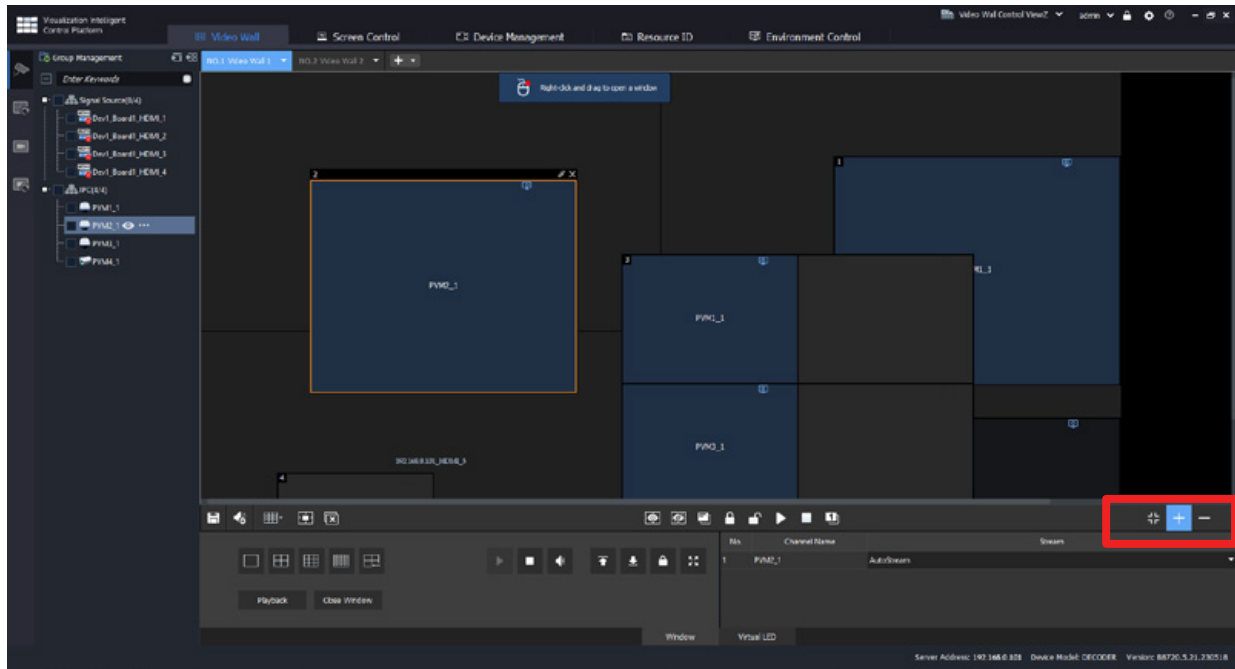
- User can zoom in & out the video wall preview to fine control
- Press and hold Ctrl key while scrolling the mouse wheel to zoom in or out on the video wall image.
- Click ➕ or ➖ to zoom in or out on the video wall image.
- Click ✛ to restore the original ratio.

# CONTROL AND FUNCTION

Control Platform Window - Basic Setup

- Click [DECODER ▾] to switch the device among **Decoder**, **Video Wall Controller** & **Distributed**
- Click [admin ▾] to change the user or logout
- Click 🔒 to lock or unlock the control screen. When screen is lock, user needs to type username & password for unlock
- Click ⚙ to load profile setting, logout the program and configure the automatic login and stream type.
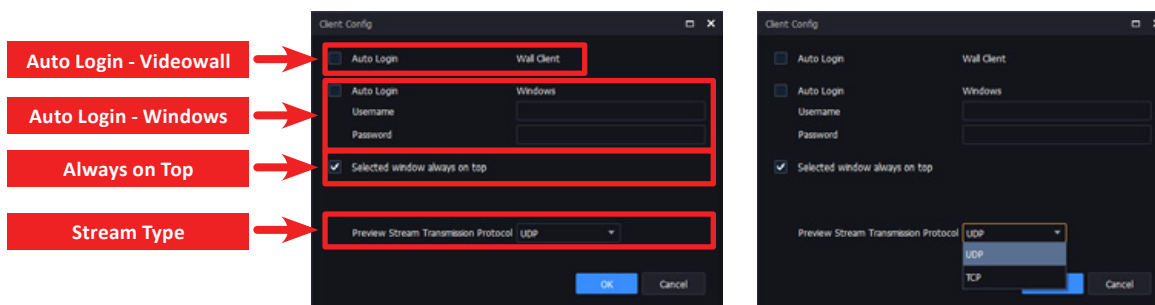
- **Auto Login (Videowall)** - If enabled, the client will automatically login to the latest using device at the next login
- **Auto Login (Windows)** - If enabled & user type the username and password of your WIN OS if user's WIN OS need to type the password for loading WIN OS, this videowall controller program will automatically start when WIN OS launching
- **Selected Windows Always on Top** - when user check this, the selected tab is always on the top among other windows
- **Preview Stream Transmission Protocol** - select the preview stream between UDP and TCP

CONTROL AND FUNCTION

Control Platform Window - Baic Setup
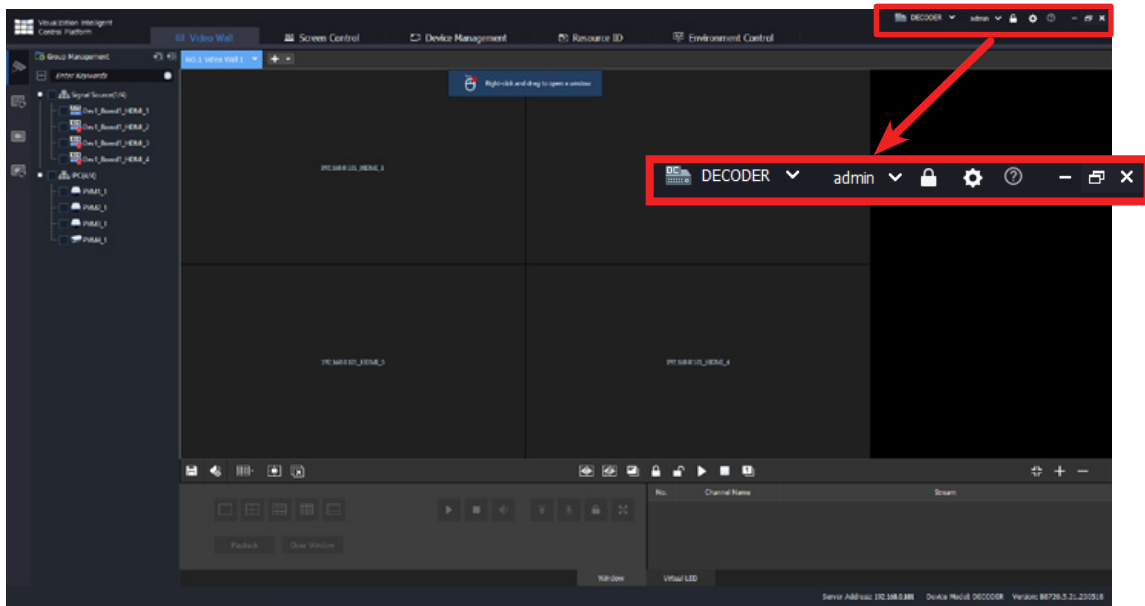
- Click ⊙ to see **Operation Video**, open **Source Notice**, open **User Manual**, and see **Software Version Information**
- Click ▬ ⊡ ✕ to minimize or maxmize the control platform window. Or user can shutdown this program. When the control platform window launched and user only see 2 or 3 tabs, please maximize the window for convinient usage.

CONTROL AND FUNCTION

Device Management
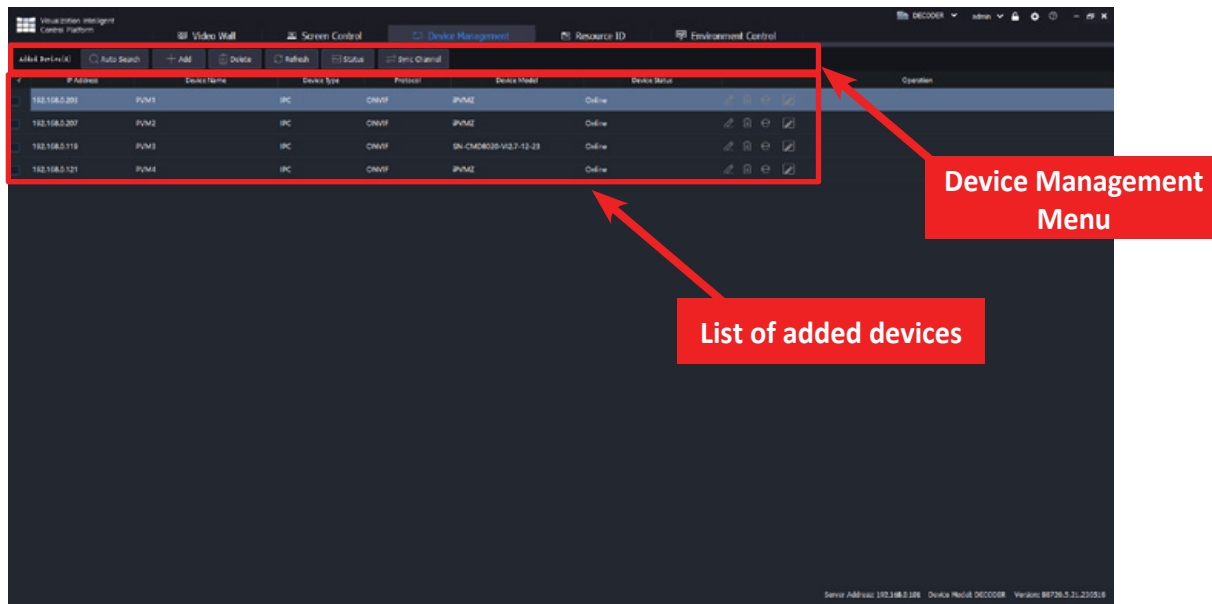
- User can add IPCs, Signal Sources and input/output nodes on the server and manage them.
- **IPC / Signal Source** - One IPC occupies one channel. One Signal Source can connect multiple IPCs (each IPC occupies one channel).

  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**

  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.
- **Added Device**: display the added device
- **Auto Search**: search the IP or connected device in the same network
- **Add**: add a device manually
- **Delete**: delete the device which is added on the system
- **Refresh**: refresh the added or deleted device list
- **Status**: display the device name, type, IP address and connection status (online or offline)
- **Sync Channel**: synchronize between IP devices and control program

CONTROL AND FUNCTION

Device Management - Shortcut Icons
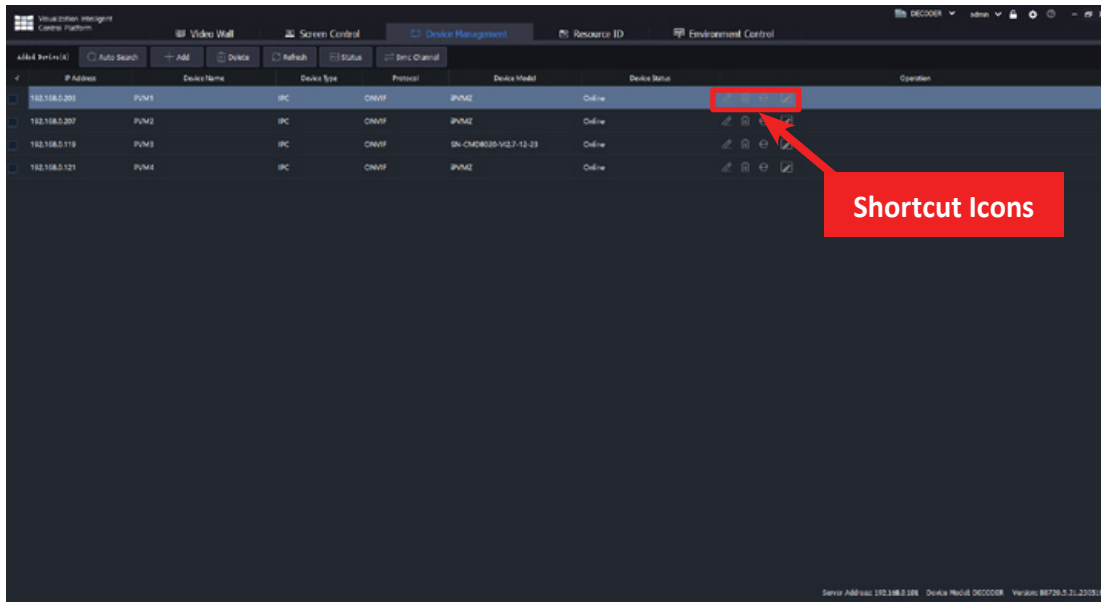
- Click ✏ to edit the registered device information - protocol, transmission protocol (TCP, UDP), device type (IPC or Signal Source), device name, port number, username & password (to access the IP device).
  The IP address is not editable in this mode.

- Click 🗑 to delete the registered device
- Click ⊖ to access IP device directly
- Click ✏ to edit channel name

CONTROL AND FUNCTION

Device Management - Auto Search to Add IP Devices

- Before adding the device, user need to know what kind of type (IPC or Signal Source), network address, username & password to access camera.
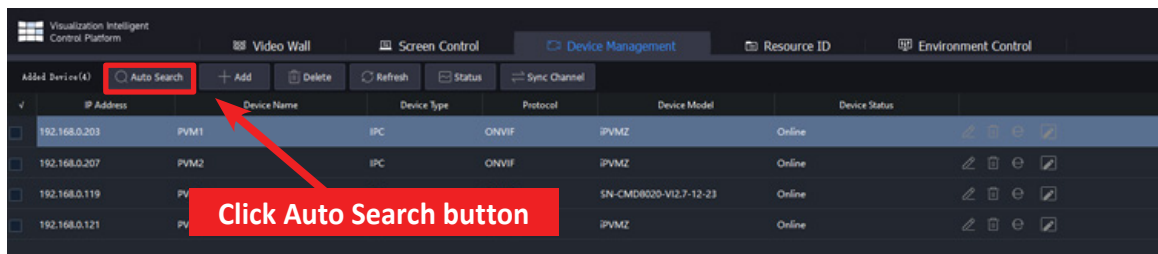

- User has two ways to add devices;

  Auto Search: search devices and add the discovered devices in batches

  Add: Add a device with a known information - IP address, device type, protocol, username & password
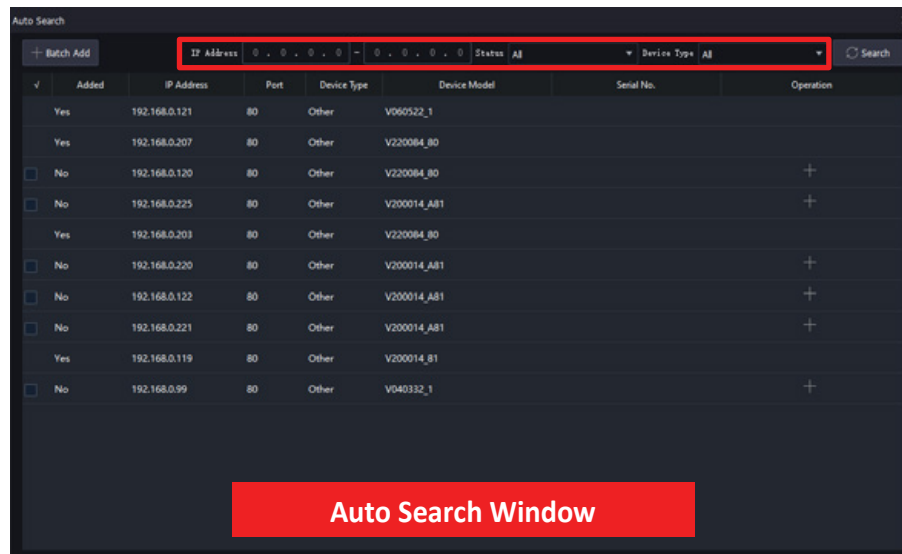
- Auto Search

  Click the 'Auto Search' button to search for devices on the same network, and select the desired devices. Or you can set search criteria to narrow the search results

CONTROL AND FUNCTION

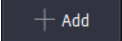## Device Management - Add IP Devices
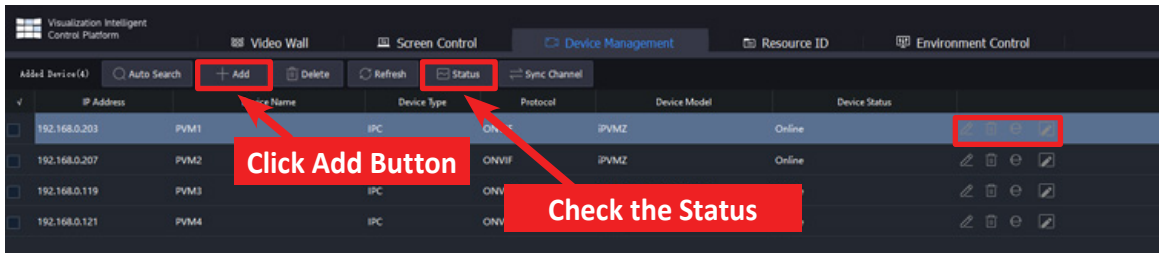
Click Add Button

Check the Status

Device Info - Add Window

- Add

1. Click [+ Add] to add a device.
2. Choose the management protocol, device type, transmission protocol, and then enter IP address, port number, the device username and password.
3. Check whether the devices are successfully added to the control program.
4. Close the window. View the device status displayed in the Status column.

Note

- If the device show it as offline - incorrect username or password, or the device is not connected, check the device connection and click [ ] to modify.
- To check the status of an IPC/Signal Source channel, click the Status button.

CONTROL AND FUNCTION

Device Management - Delete, Refresh, Sync Channel
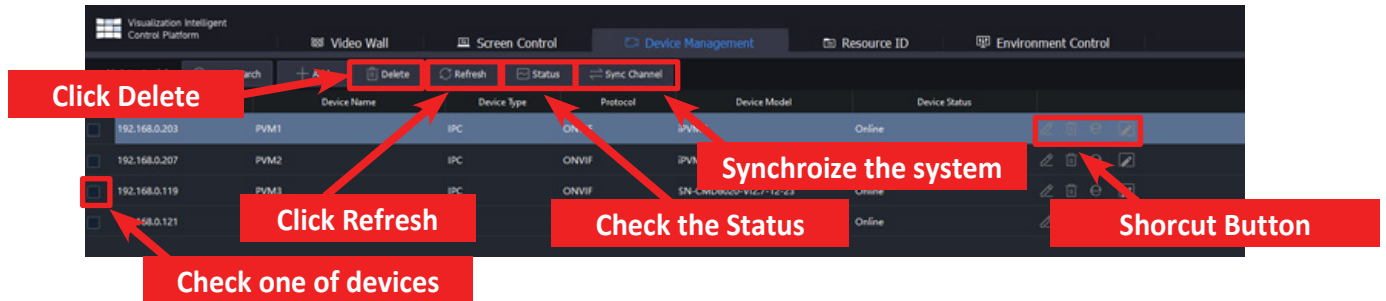
		DESCRIPTION nissan altima market share
Delete	🗑 Delete	Select a device(s) from the device list, and click **'Delete'** button to remove the device from the system
Refresh	🔄 Refresh	Click **'Refresh'** button to get the latest device information
Status	✉ Status	Click **'Status'** button to check up the latest device information
Sync. Channel	⇌ Sync Channel	Select a device(s) from the device list, and then click **'Sync Channel'** button to get the latest channel information
Edit	✎	Select a device(s) from the device list, and click **'Edit'** button to configure the device information - transmission protocol, device type, IP address, port number, username & password
Delete	🗑	Click **'Delete'** button to delete a device
Remote	e	Click **'Remote'** button to access the device interface directly
Channel Name	✎	Click **'Channel Name'** button to edit the channel name

Channel Name Window

Device Info Window

CONTROL AND FUNCTION

Group - Default
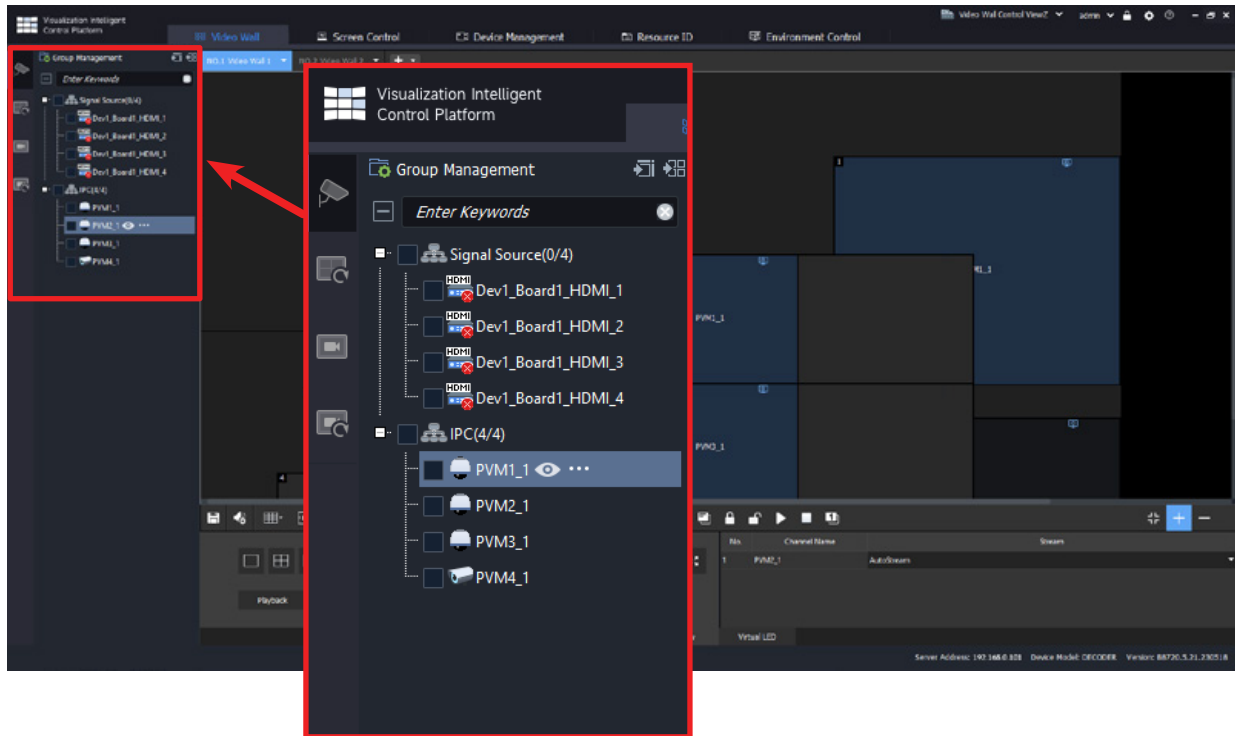
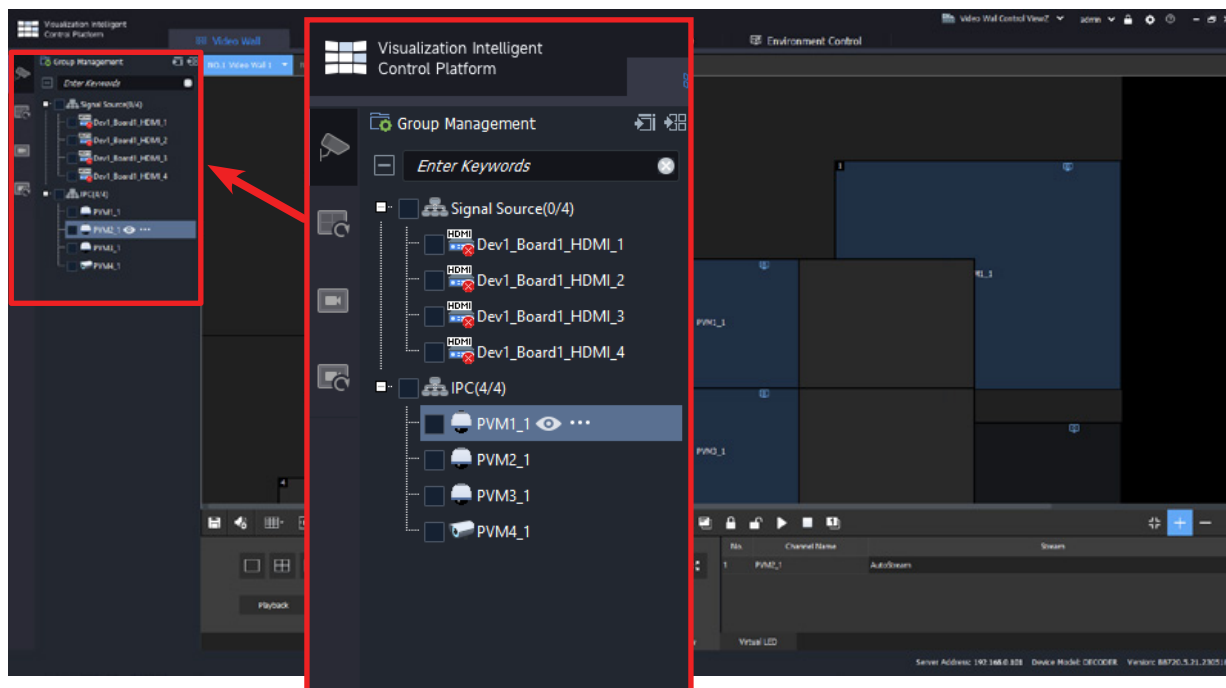- The software creates default group based on the device type, when it is launching;

1. All IPC sources are under IPC group.
2. If some of HDMI input sources are directly connected to the controller, user can see under the **Signal Source** group.
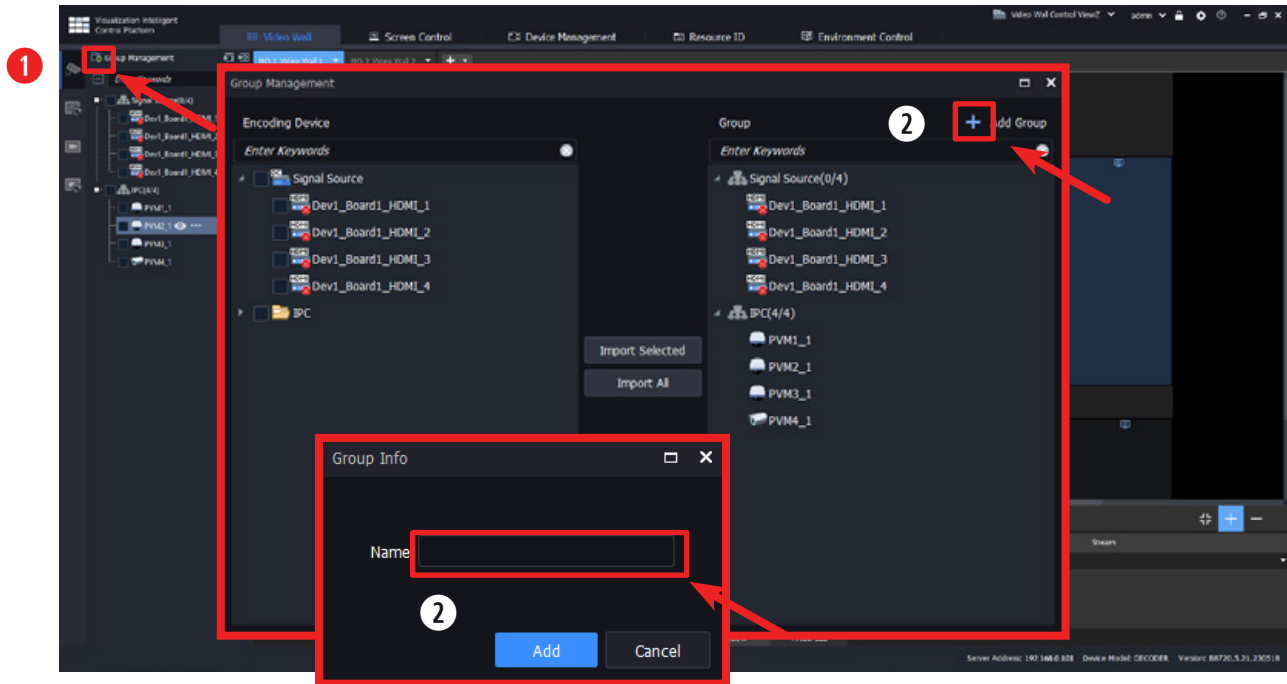
CONTROL AND FUNCTION

Group - Custom

- The custom group feature allows user to assign IPCs to different groups for easy management. User can;

  - Assign IPCs under an Signal Source to different groups.

  - Assign IPCs under different Signal Sources to the same group.

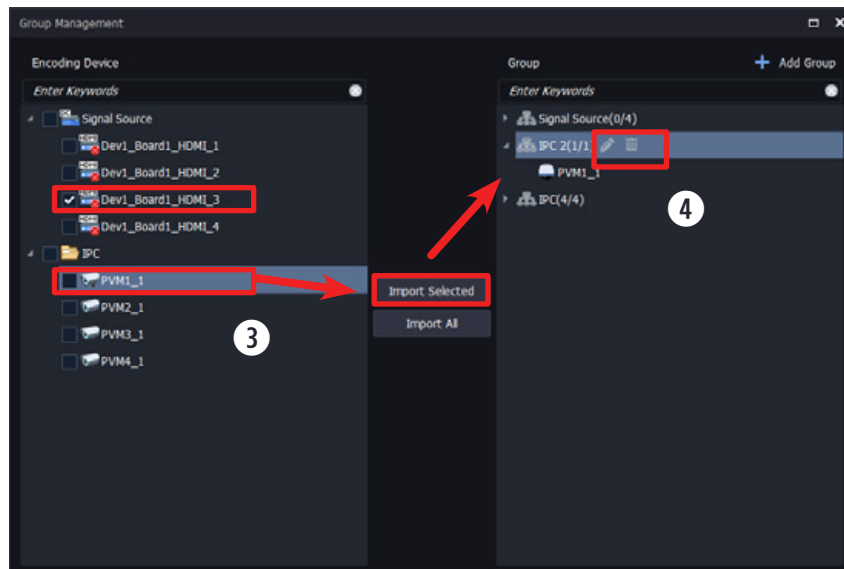 - Assign an IPC to multiple groups at the same time.
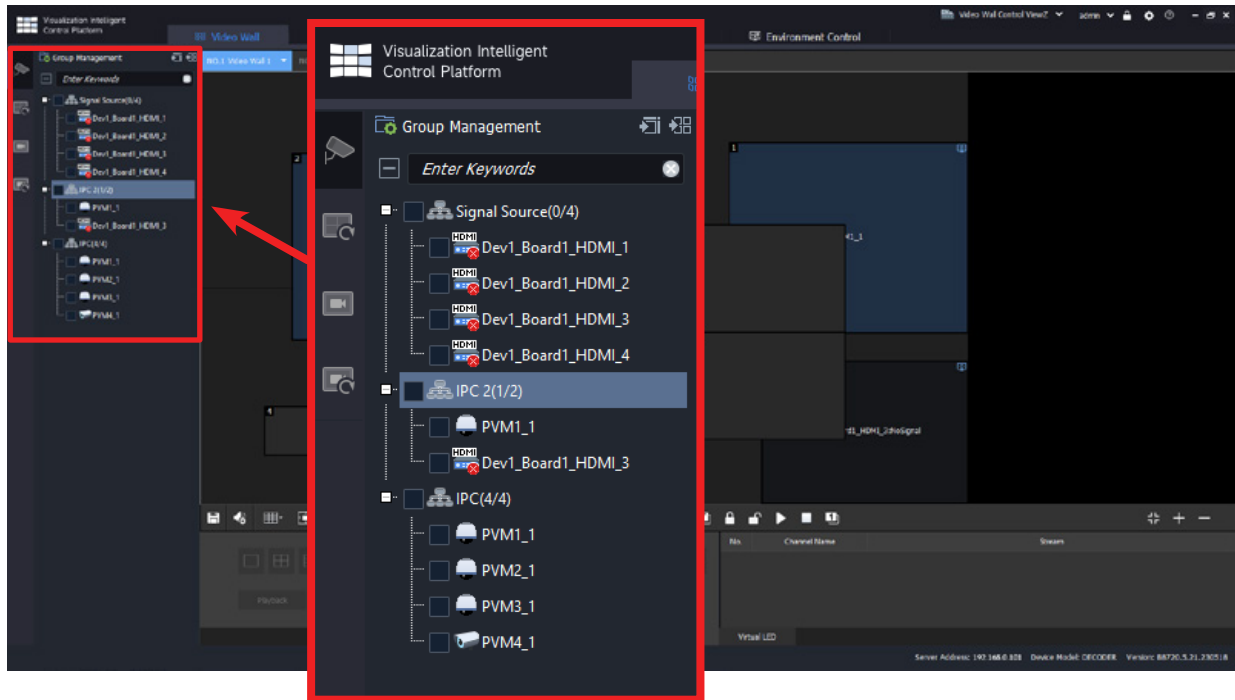
CONTROL AND FUNCTION

Group - Custom

To create & manage the group;

1. Click Group Management button on the Video Channel tab.

2. Click '+' button and type the group name to create a group.

3. Select an encoding device and click 'Import Selected' button to add a device to the selected group.

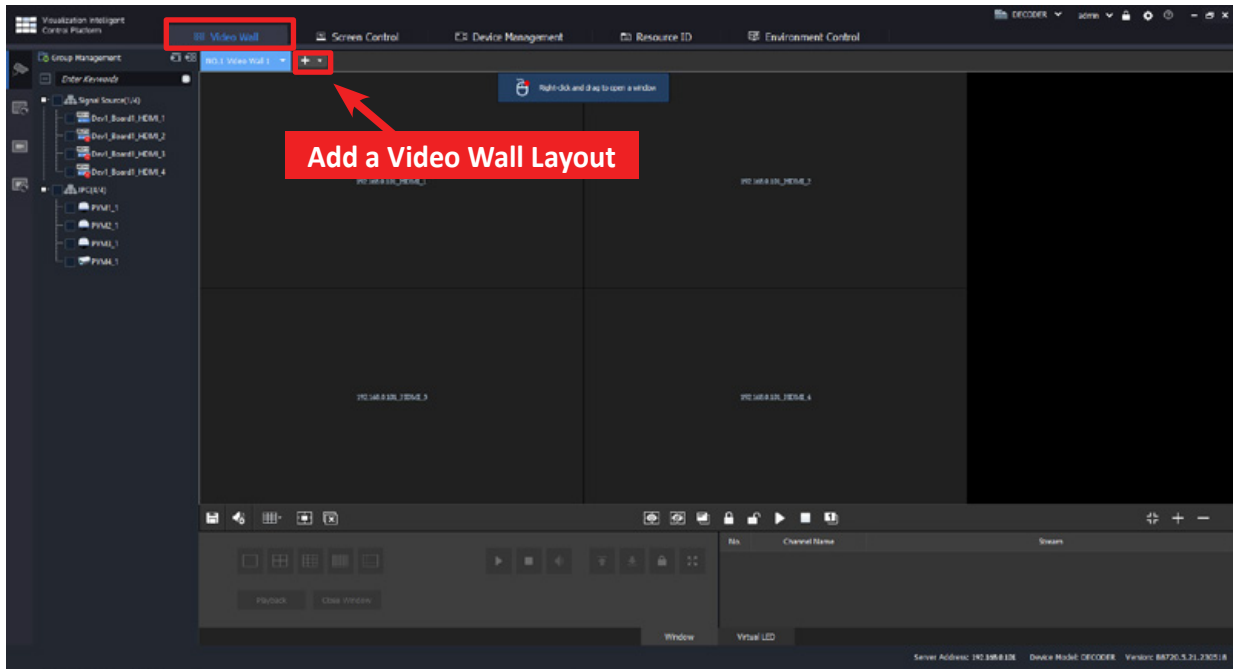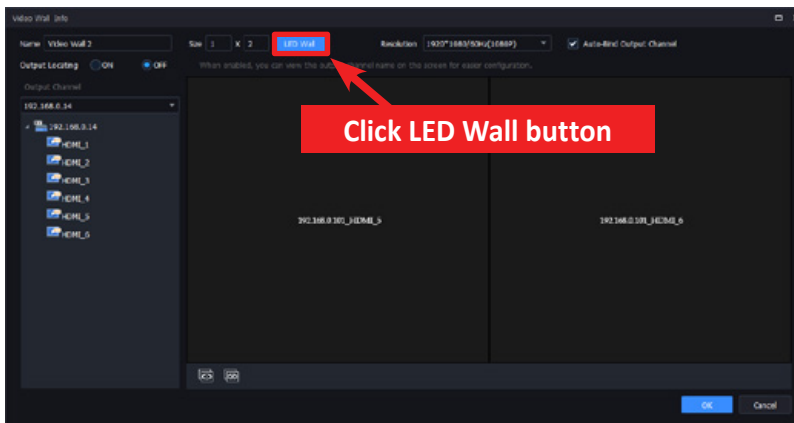# CONTROL AND FUNCTION

Group - Custom

4. The selected IPC are added to the group and user can rename or delete the group or IPCs.
5. The new group will be shown at **Group Management** tree. The **Group Management** tree will be dsiplayed as the order of signal source nodes, custom group nodes, Signal Source nodes and IPC nodes.
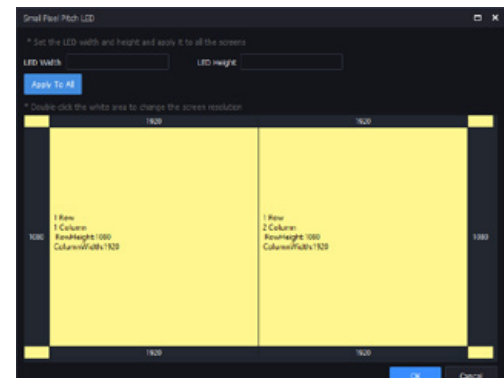
CONTROL AND FUNCTION

Video Wall - Create a Video Wall

- User can create & manage the video walls on the **Video Wall** tab.

  1. For the first time usage, click the **Video Wall** tab and click + to create a video wall layout.
  2. When user click + button, the **Video Wall** Info window will popup and user can setup the video wall layout.
  3. If user use LED wall, click **LED Wall** button. Then, '**Small Pixel Pitch LED**' window will popup to setup LED wall.
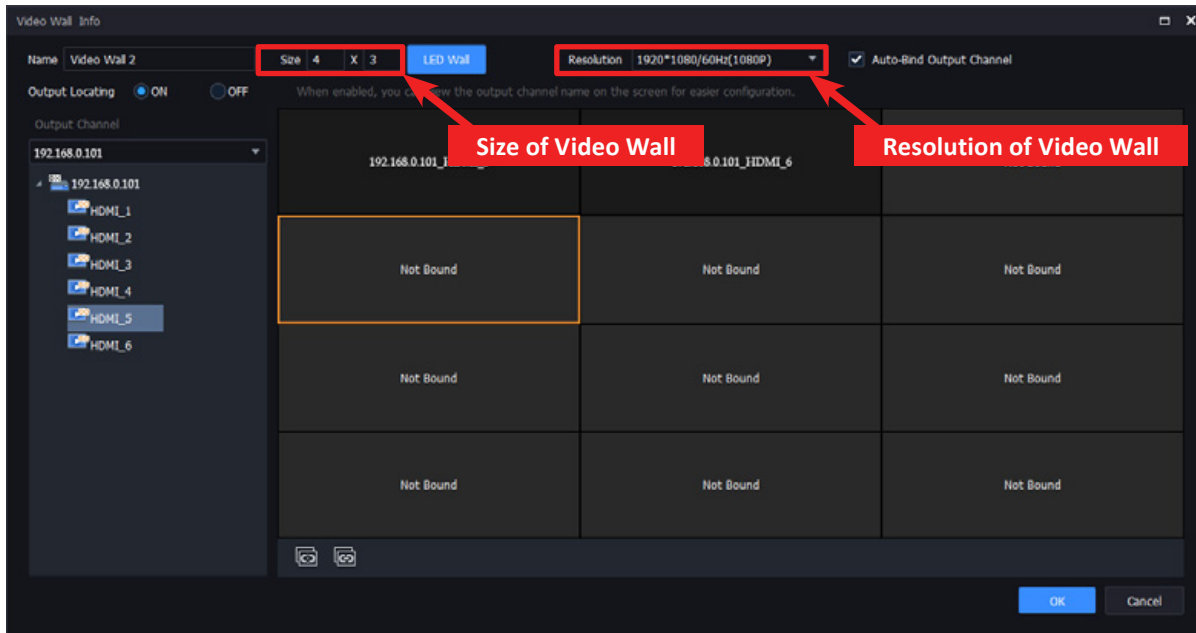

Video Wall Info Window

Small Pixel Pitch LED Window

CONTROL AND FUNCTION

Video Wall - Create a Video Wall

4.   Enable output locating as needed. If enabled, the actual connected HDMI ports of video wall controllers will be displayed in 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'** is the number of refers to the number of row & column. **'Resolution'** is the max resolution of video wall .
- Auto-Bind channel is enabled by default setting. It means the decoding channels are bound automatically to video wall screens for user when user creates a new video wall. See Bind and Unbind.
- Only certain devices support output locating. Please refer to the actual GUI of the device.
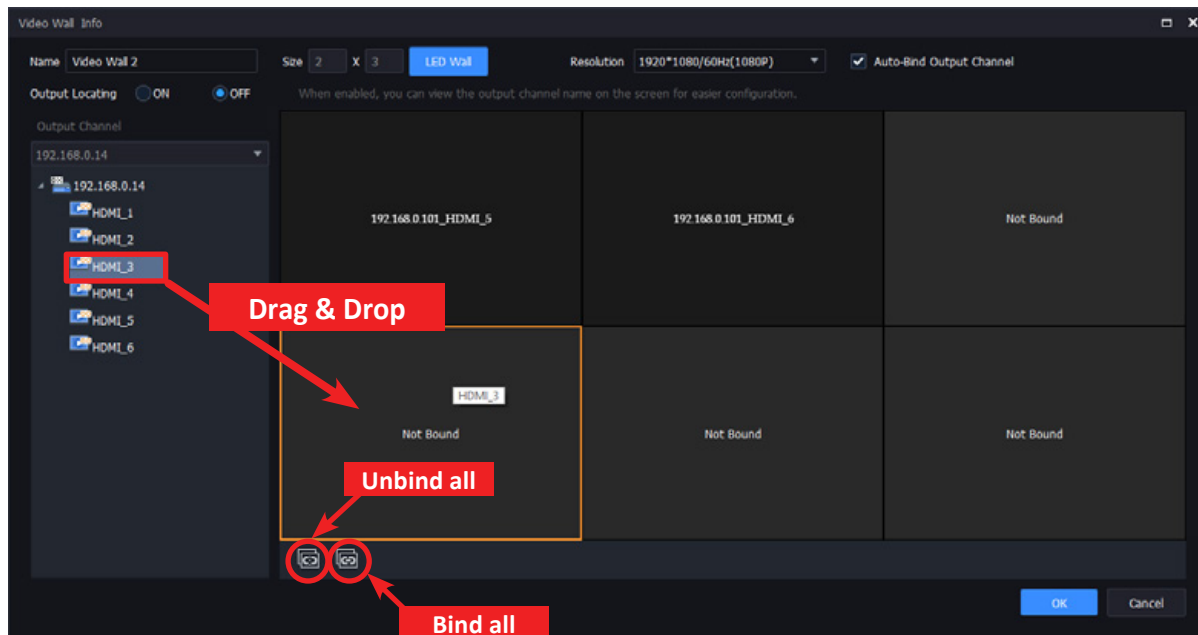
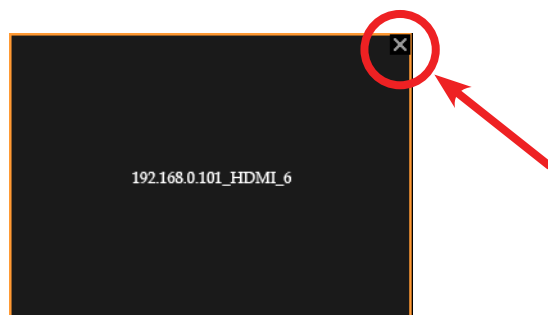# CONTROL AND FUNCTION

Video Wall - Edit or Delete a Video Wall
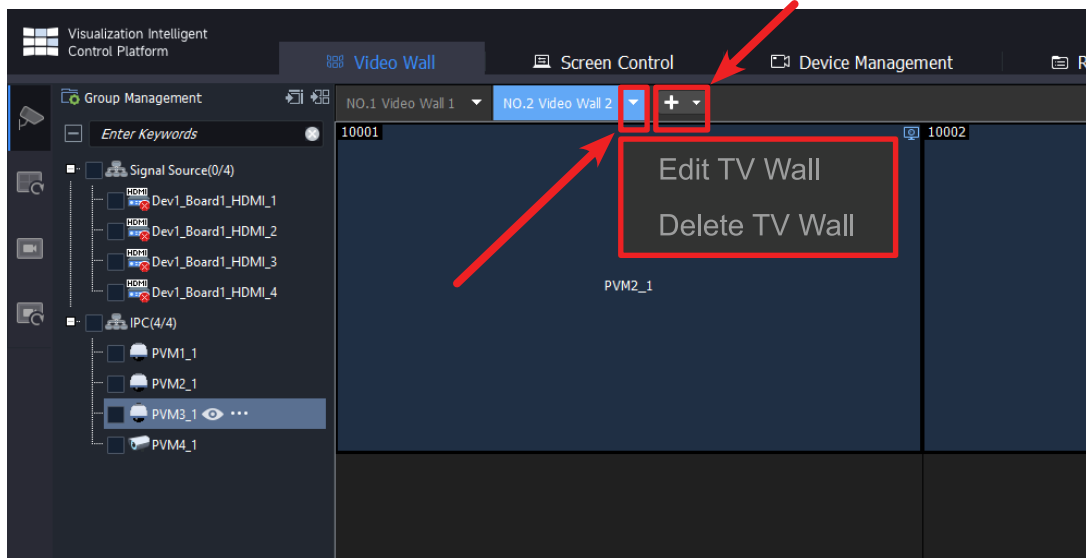
- Click the arrow on the right side of the Video Wall name to edit or delete the video wall configuration.
- Click [+] to add a new video wall.
- User can add many videowall controlled by controller.

CONTROL AND FUNCTION

Video Wall - Create a Video Wall - Bind & 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.
- User can simply drag & drop from one of output channel or split window to video wall layout
- To unbind, user simply click '**X**' button of binded window

- On the Video Wall Info window, user can simply **Bind All** or **Unbind All**. Plz refer the above screenshots.

CONTROL AND FUNCTION

## Video Wall - Create a Video Wall - Small Pixel Pitch LED
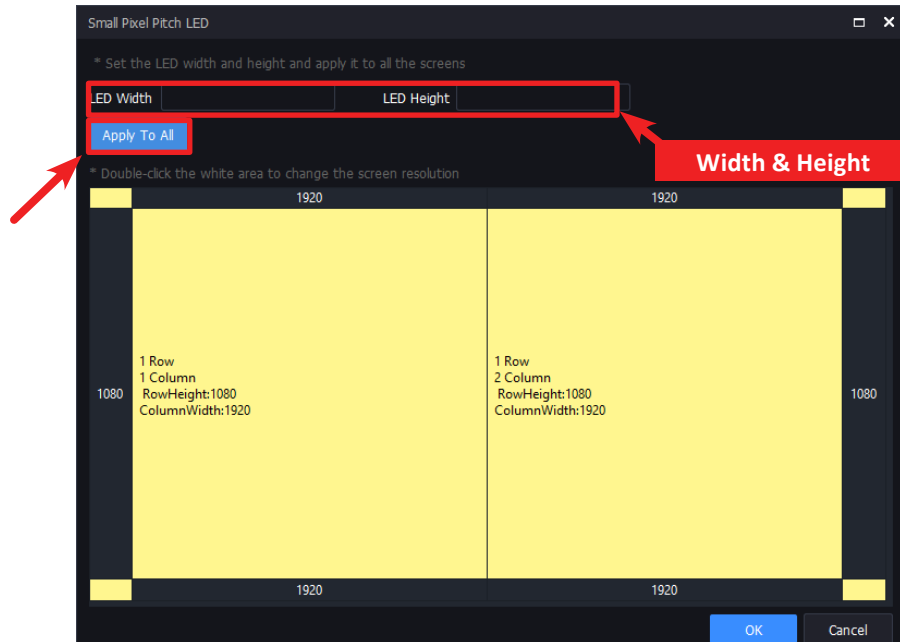
- If some monitors have different size from other monitors, it is hard to fit the size. In this case, user can utilize the **Small Pixel Pitch LED** function. User can set the screen width and height for each row and columns.
- If special configuration for the width and height of the LED screen is required, the **Small Pixel Pitch LED** (in unit of pixel) should be set up 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** button.
- 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.

CONTROL AND FUNCTION

Video Wall - Video Channel, Sequence Resource, Scene & Scene Sequence

See the live video of input source
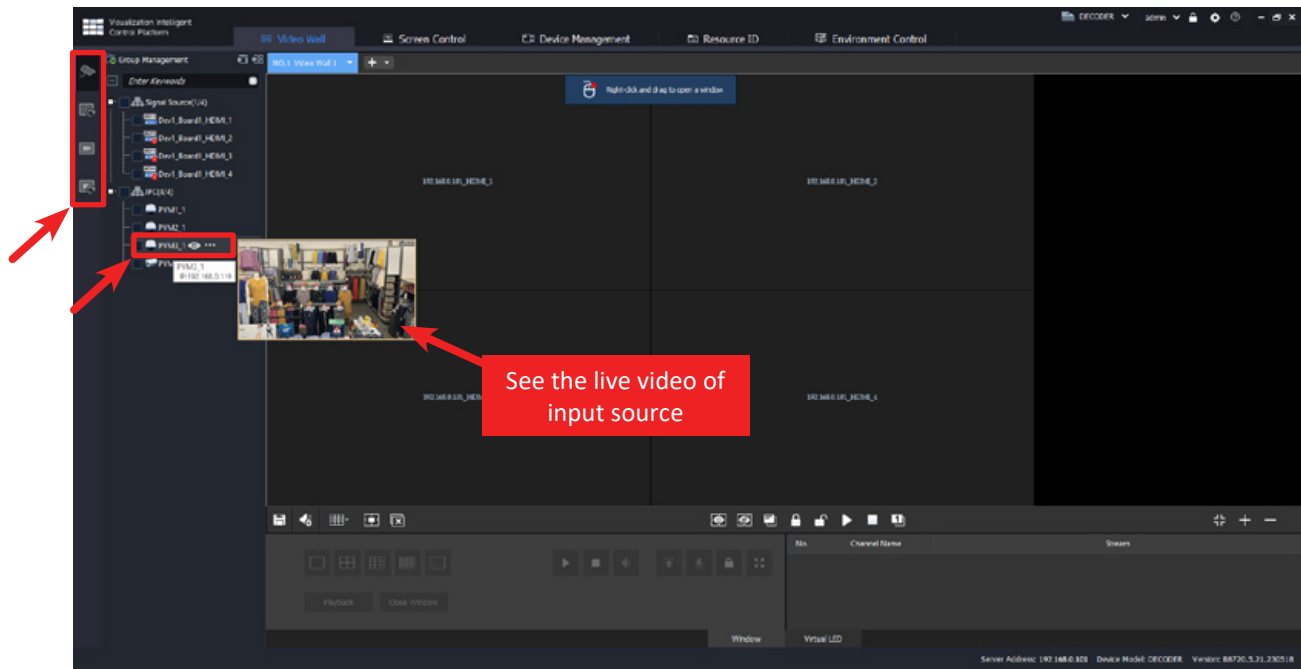
- Click ![camera icon] button to load the **Video Channel** on the left side at **Video Wall tab**. Or user will initially see the Video Channel page and user can drag & drop the IPC or Signal Source content to the Video Wall screen.

  1. View Live Video - select a video resource and mouse over the icon ![eye icon] to see the live video of IPC or Signal Source input.
  2. Play Live Video on the Video Wall screen - drag & drop a signal source or IPC device to the open window
  3. Stop Live Video on the Video Wall screen - click ![X icon] button to close the open window

- Click ![icon] button to load the **Sequence Resource** on the left side at **Video Wall tab**. User can create (save) / edit / delete a **Sequence Resource** which has scheduled input source loop - composed by **IPC** or **Signal Source** loop - see page 52.

- Click ![icon] button to load the **Scene** on the left side at Video Wall tab. User can create (save) / edit / delete a **Scene** (open window layout) - see page 56.

- Click ![icon] button to load the **Scene Sequence** on the left side at Video Wall tab. User can create (save) / edit / delete a **Scene Sequence** - see page 57.

CONTROL AND FUNCTION

Video Wall - Create Custom Display Window
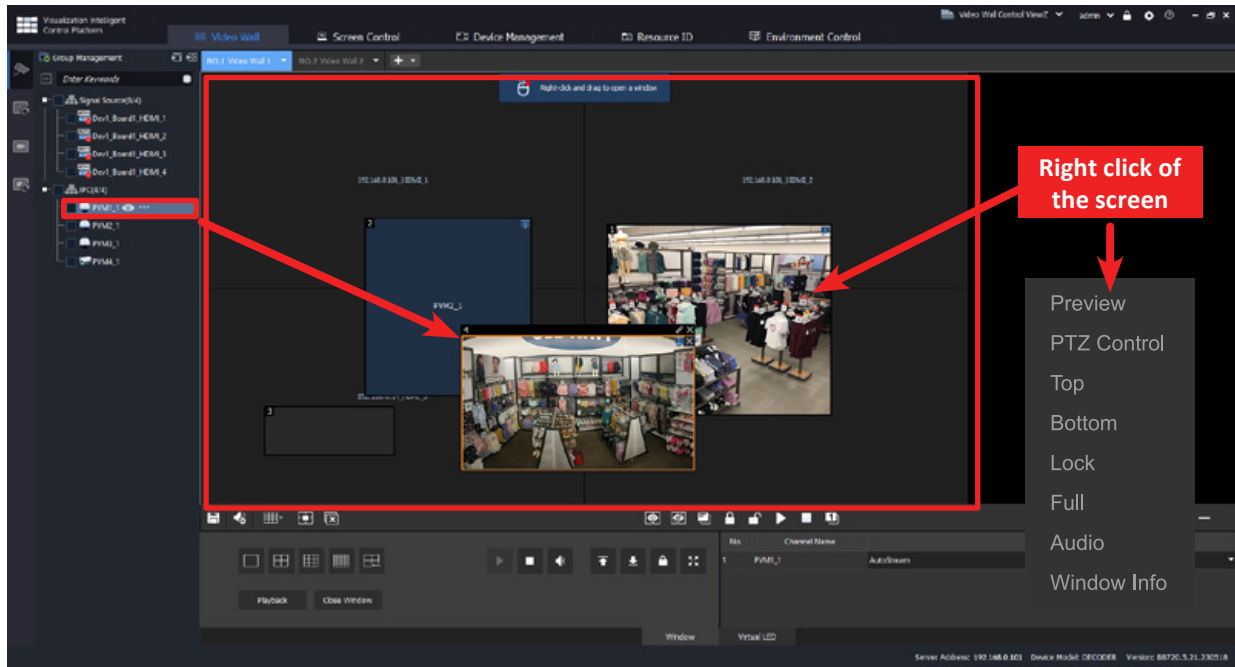
- User can also make the various size of window or edit the preset.

1. Hold the right-click of mouse and drag & drop the desired window size on the video wall area.
   When a window is created, the window is automatically locked. To edit the size & location of selected winow, select and right click the window. When a window popup and select 'Lock/Unlock' button.

2. Select one of IPC devices and drag & drop onto the desired window. Then, user can see the preview and which window is assigned or not.

Note - Popup Window Operation

- Preview - load the live video on the selected window
- PTZ Control - control the PTZ, if selected IPC device is supported
- Top / Bottom - arrange the window layer order
- Lock / Unlock - lock & unlock the display window
- Full - make the selected window as full screen
- Audio - turn on/off the selected window preview
- Window Info - show ID, stream source, transmission protocol, source port, resolution, video codec, frame rate & etc.

CONTROL AND FUNCTION

Video Wall - Basic Setup - Lock / Unlock
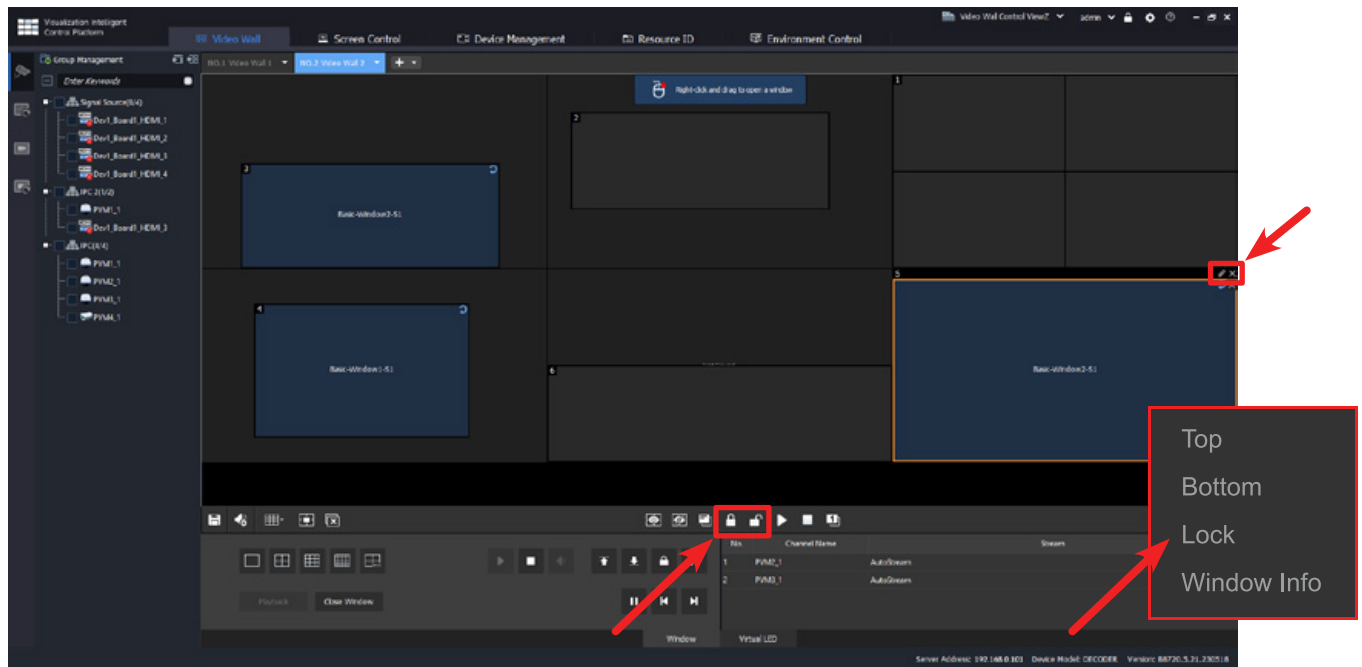
- User can lock the position & shape of a window.
  When user right-click of the open window, user can see a popup window and lock/unlock the selected window. When user lock the selected window, a lock icon will be shown at the window's top right corner. To unlock, right-click the locked window and clock 'Lock' button on the popup window.

  Click 🔒 button to lock the open window.

 Click 🔓 buttons to unlock the locked window on the video wall.
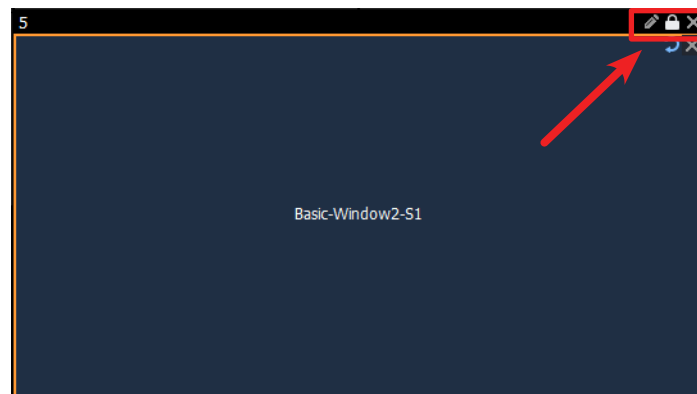
CONTROL AND FUNCTION

Video Wall - Basic Setup - Window Info
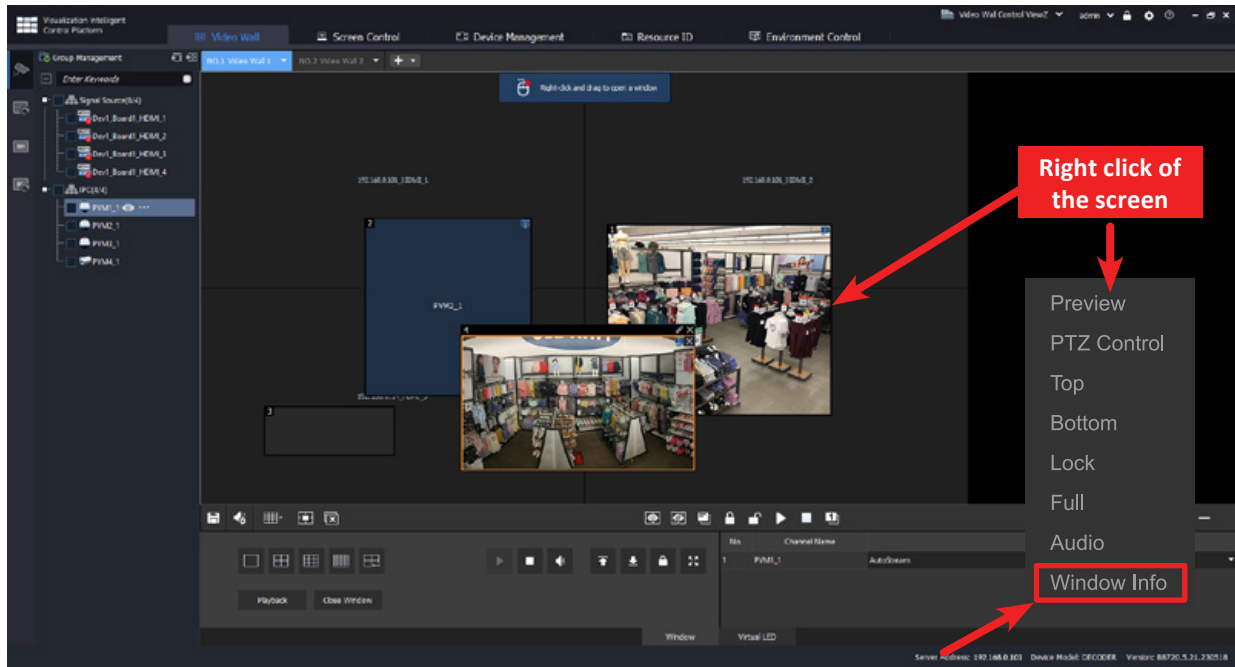
- User can see an open window information.

1. Right-click of mouse and click **Window Info**.
2. Then, user will see the **Window Info** window including the information of Window Code, Split ID, Task ID, Stream Status, Stream Source, Tranmission Protocol, Source Port, Destination Port, Encoding Device, Decoding Device, Encoding Channel, Audio, Resolution, Video, Frame Rate, Stream and Camera Packet Loss Rate.
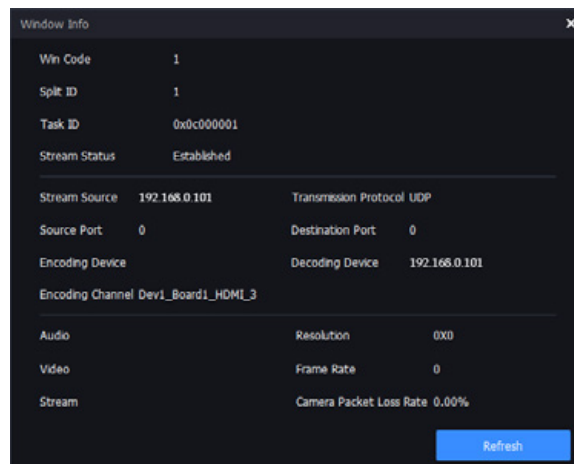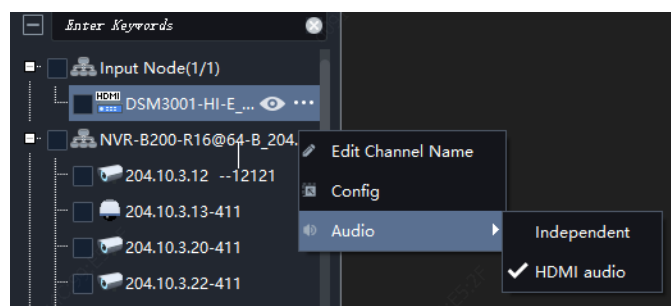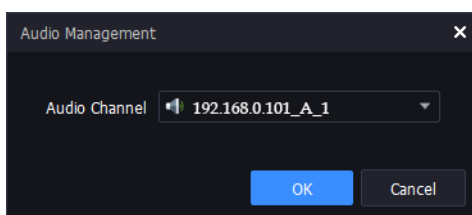
CONTROL AND FUNCTION

Video Wall - Basic Setup - Audio
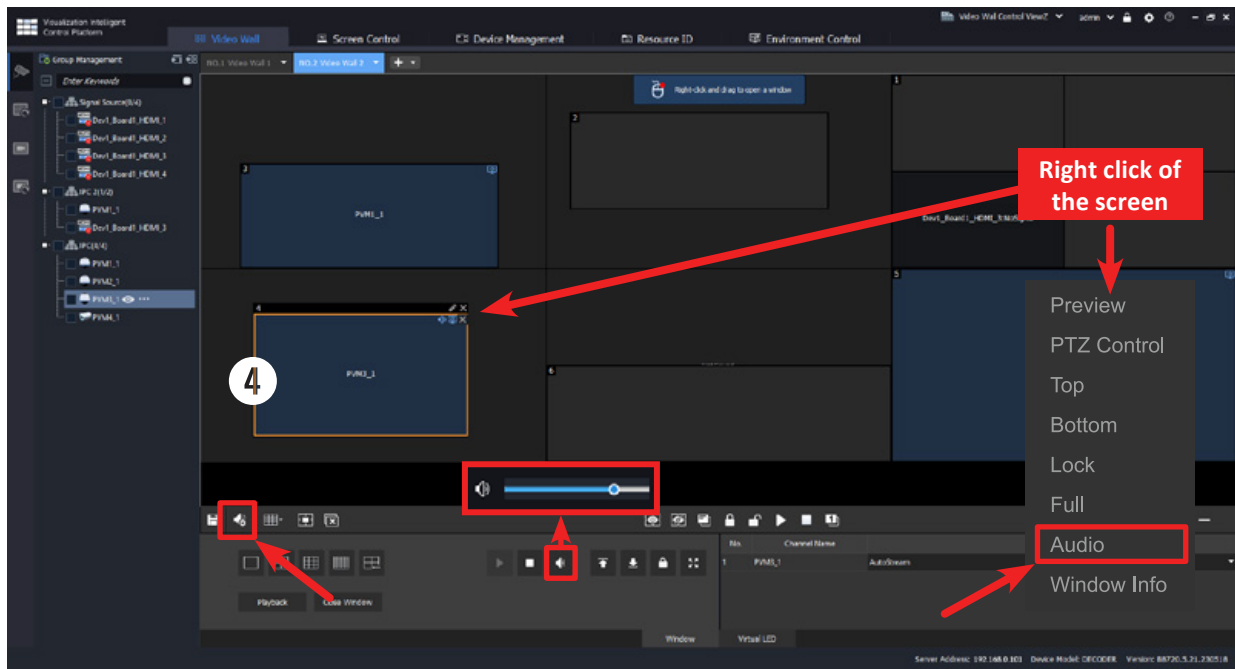
- User can make the audio sound for video wall by using the audio output channel of server or an output node.

1. Click ![icon] (**Audio Management**) button or select **Audio** button on the right-click popup of selected window.
   If you choose an input node's audio channel, you can configure the audio source.
   HDMI audio: the audio comes from the HDMI interface (of server) with video.
   Independent: The aduio comes from the 3.5mm audio input inteface of the input node, and can play the input audio independently.

2. Click the window (e.g., window 4) 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 ![icon] button or right-click the window and then uncheck **Audio** button.
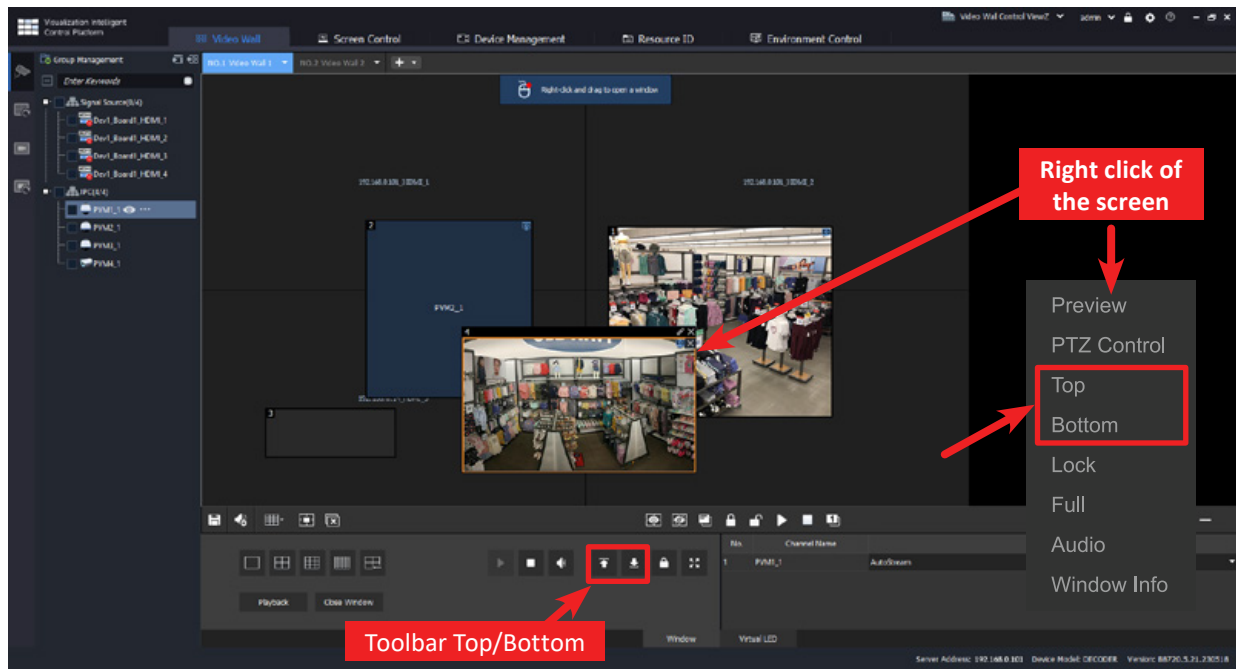
CONTROL AND FUNCTION

Video Wall - Basic Setup - Preview
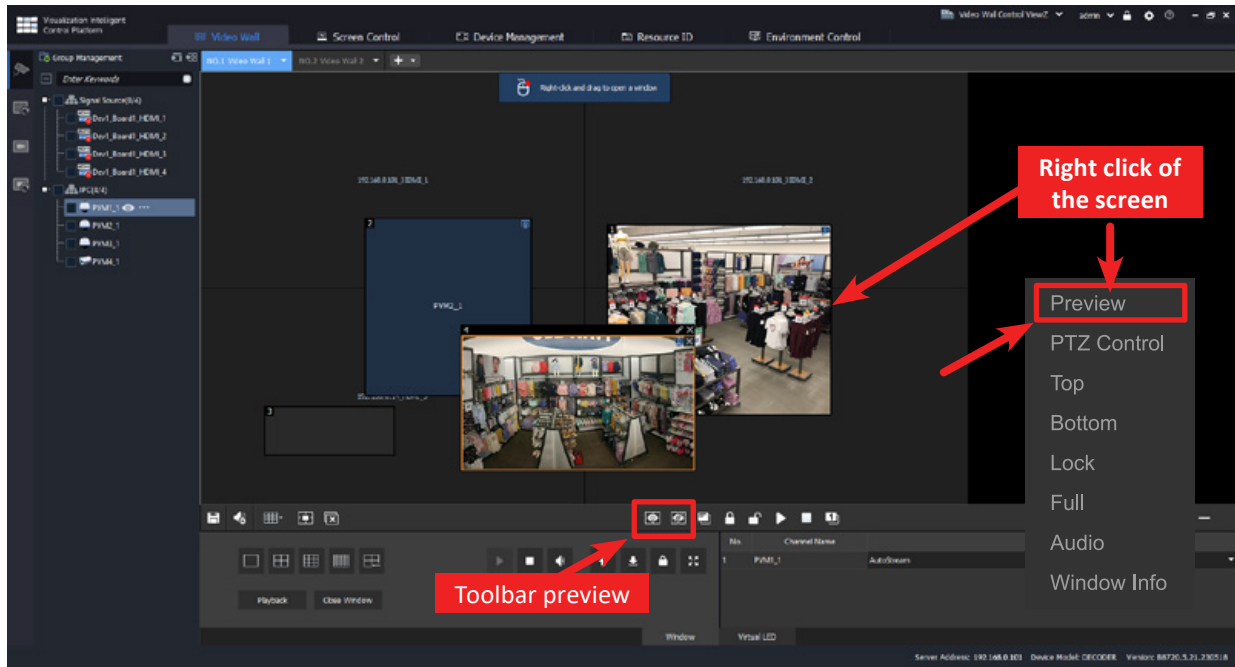
- When videos are playing on multiple open windows at the video wall, user can click [ ] button on the toolbar to display the real-time video of all windows, and click [ ] button to close all the real-time videos, without affecting video playing on the video wall.

- Also, user can display the preview at the selected open window.
  Right-click at the selected open window and click **'Preview'** at the popup window. Then, user can see the preview on the selected window.
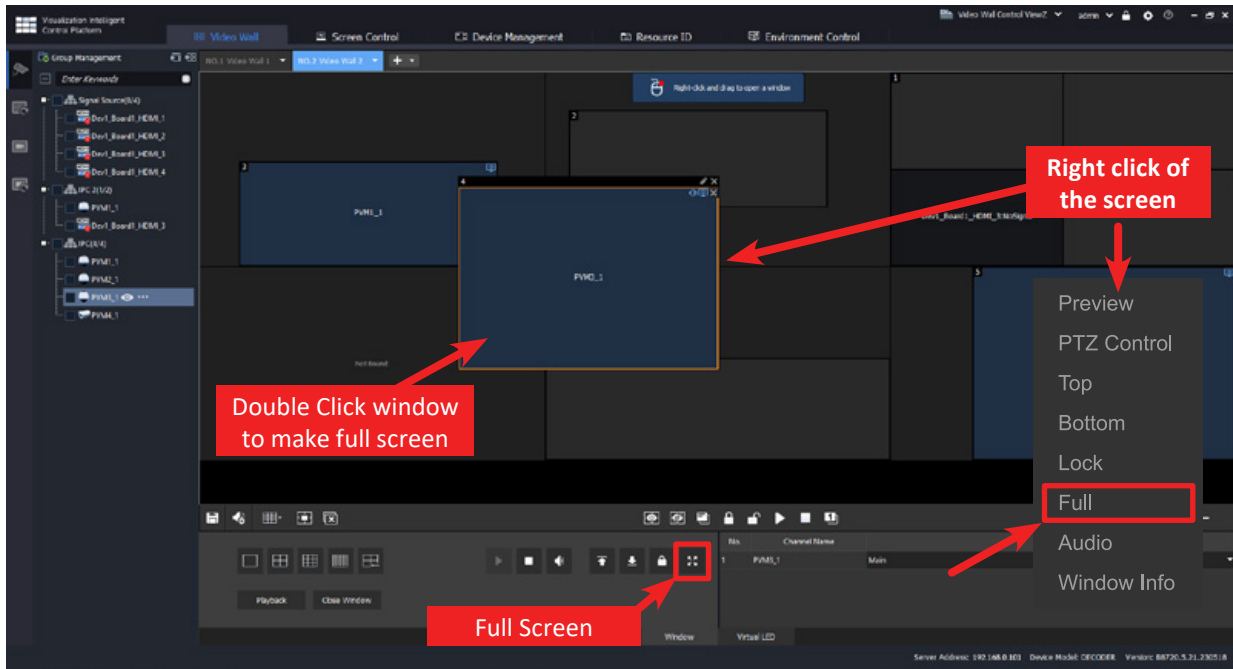
CONTROL AND FUNCTION
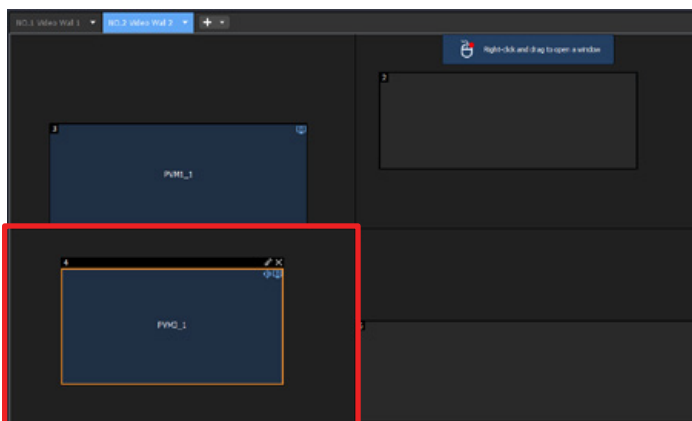
Video Wall - Basic Setup - Window Hierarchy

- User can setup the hierarchy of open windows.

1. Click or select an open window and click ⬆ to move up, or click ⬇ to move down.
2. Right-click the open window and choose '**Top**' or '**Bottom**' from the pop-up menu.

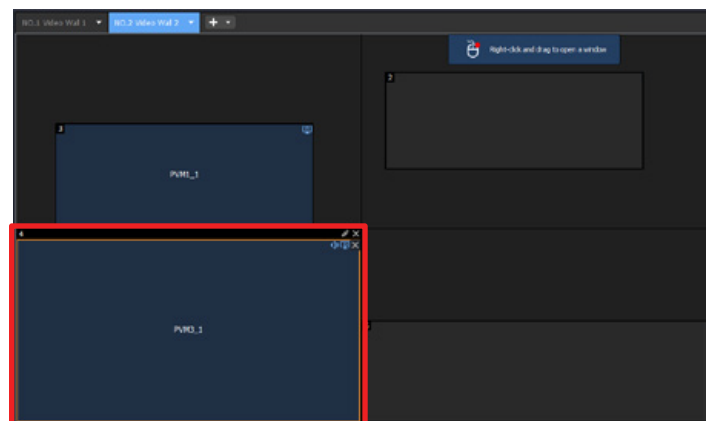# CONTROL AND FUNCTION

Video Wall - Basic Setup - Full Screen

- There are two full-screen modes, depending on the location of open window;

1. If the selected window is located in a monitor area, clicking the Full Screen button (or use the right-click menu or by a double-click) maximize the window to fill the currently occupied window.
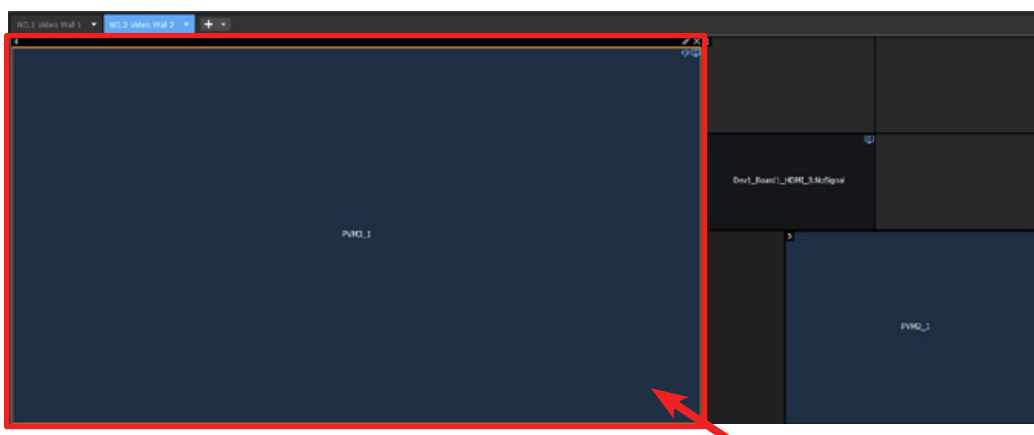

1 open window with
1 monitor area

1 monitor area

CONTROL AND FUNCTION

Video Wall - Basic Setup - Full Screen

1 open window with 4 monitor areas

2. If the selected window is located on all monitor areas, clicking the Full Screen button (or use the right-click menu or by a double-click) maximize the selected window to fill all windows on the video wall.
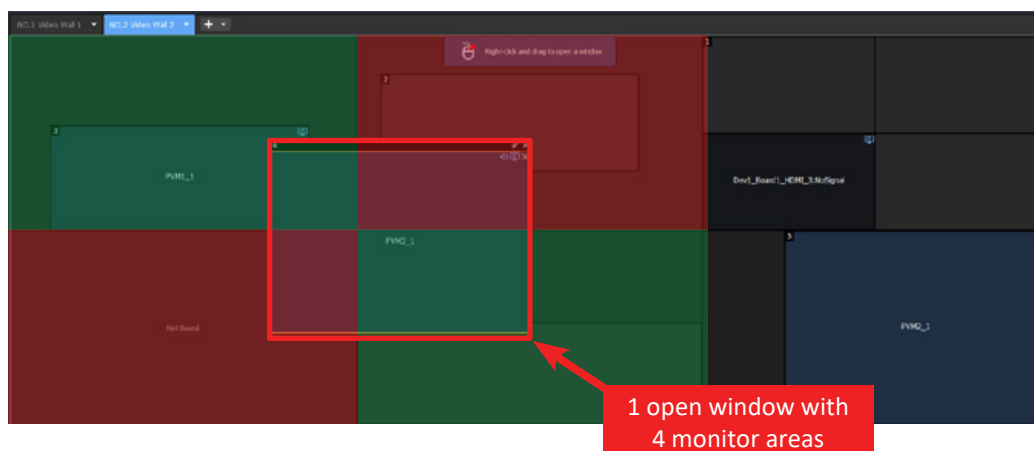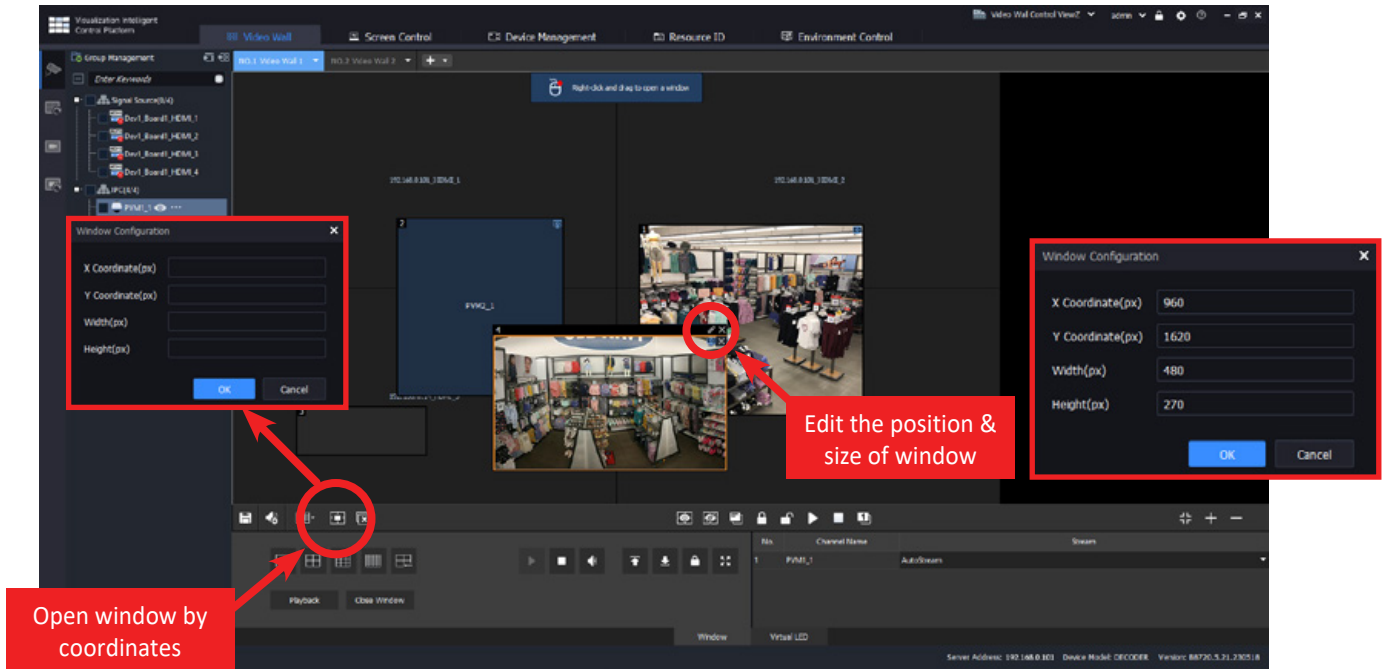

4 split window on 1 monitor area
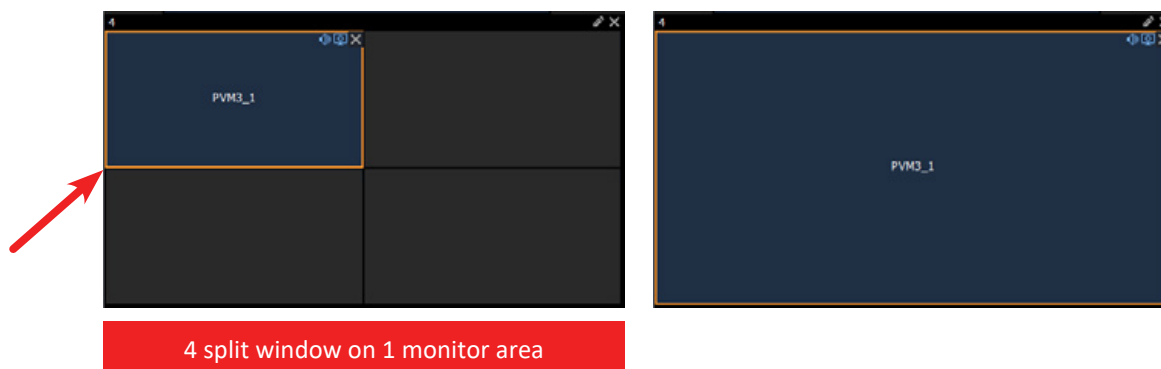
3. Maximize a split window to fill the entire window. The operations are similar to Maximize a Window.

CONTROL AND FUNCTION

Video Wall - Basic Setup - Adjust Position & Size

Edit the position & size of window

Open window by coordinates

- Click [icon] button to '**Open Window by Coordinates**'.

  When '**Window Configuration**' window popup, user can make the presize window by typing X & Y starting coordinates

  (position of the top left cornet of the window) and width & height pixel.

- Click [icon] button to close all windows on the video wall.

Note - Adjust the Open Window

- Click [icon] button to adjust the position & size of existing window by editing X & Y coordinates and width & height. Also,
  user can reszie or relocate the selected window by drag & drop.
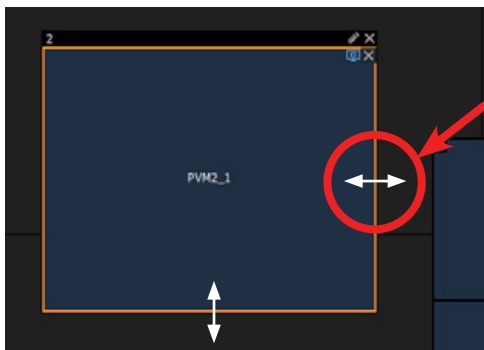
CONTROL AND FUNCTION

Video Wall - Basic Setup - Split an Open Window

Control the selected window
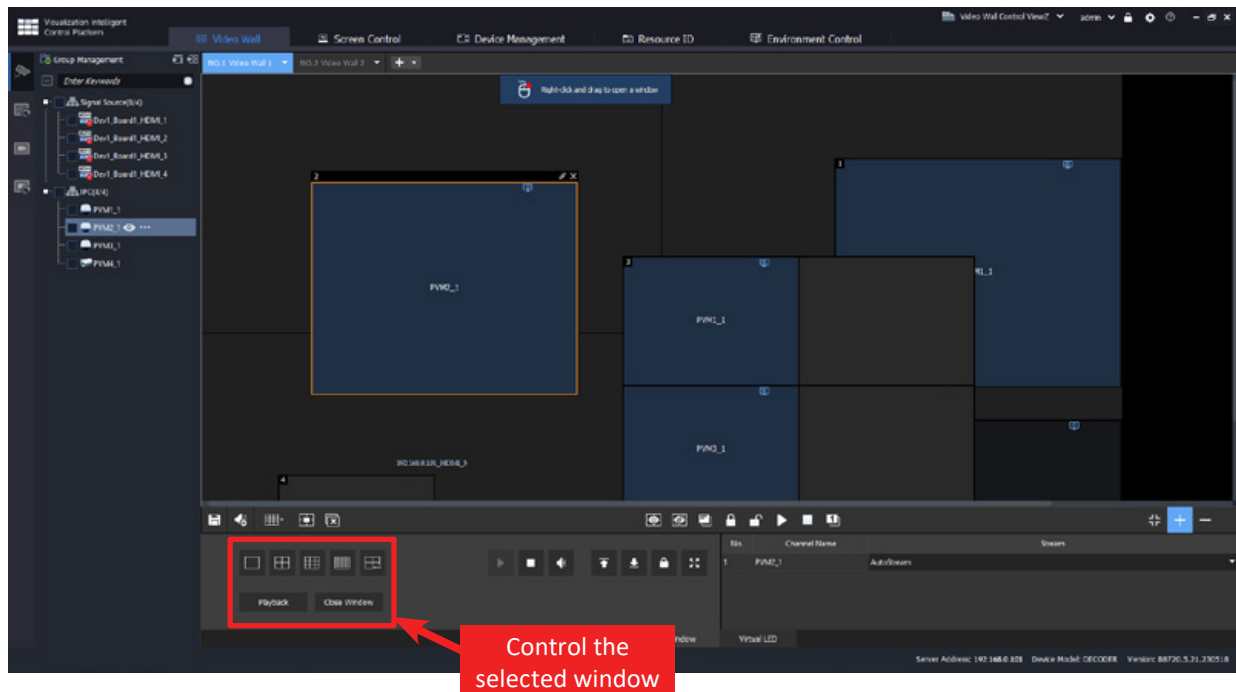
- When user select an open window, user can divide the screen, load the recorded video and close the selected window.
    - Click ☐ ⊞ ⊞ ⊞ ⊞ button to apply the preset to the selected window.
    - Click Playback button to load & playback the recorded video.
    - Click Close Window button to close the seleted window.
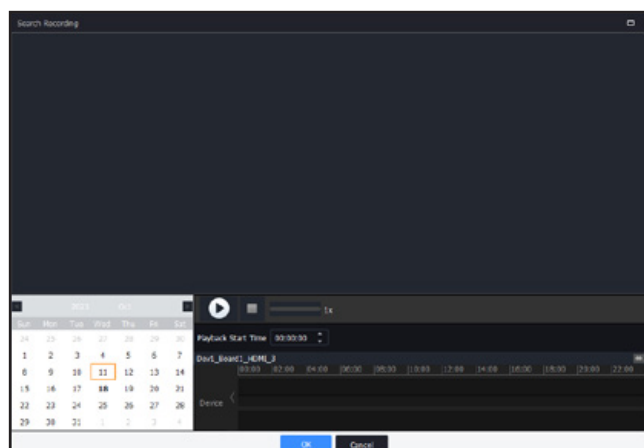
CONTROL AND FUNCTION

Video Wall - Basic Setup - PTZ Control
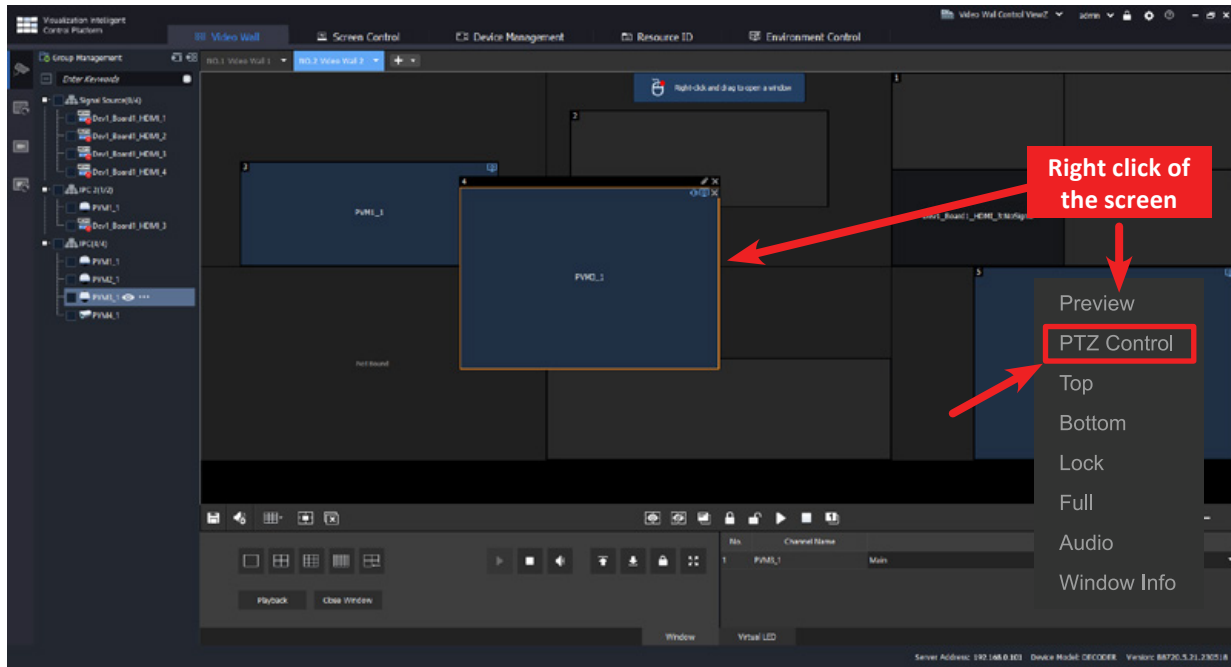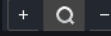
- If the added IPC device (IP Camera) works correctly and supports PTZ function, user can use the PTZ function via the video wall control program.
- Right-click the selected window and then choose PTZ Control to open the PTZ control panel.
- PTZ control operations include rotating the PTZ, adjusting 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.

CONTROL AND FUNCTION

Video Wall - Basic Setup - PTZ Control

- Click [image] to control the rotation direction of the camera or stop rotation.

- Click [image] button to adjust the focus of the lens.
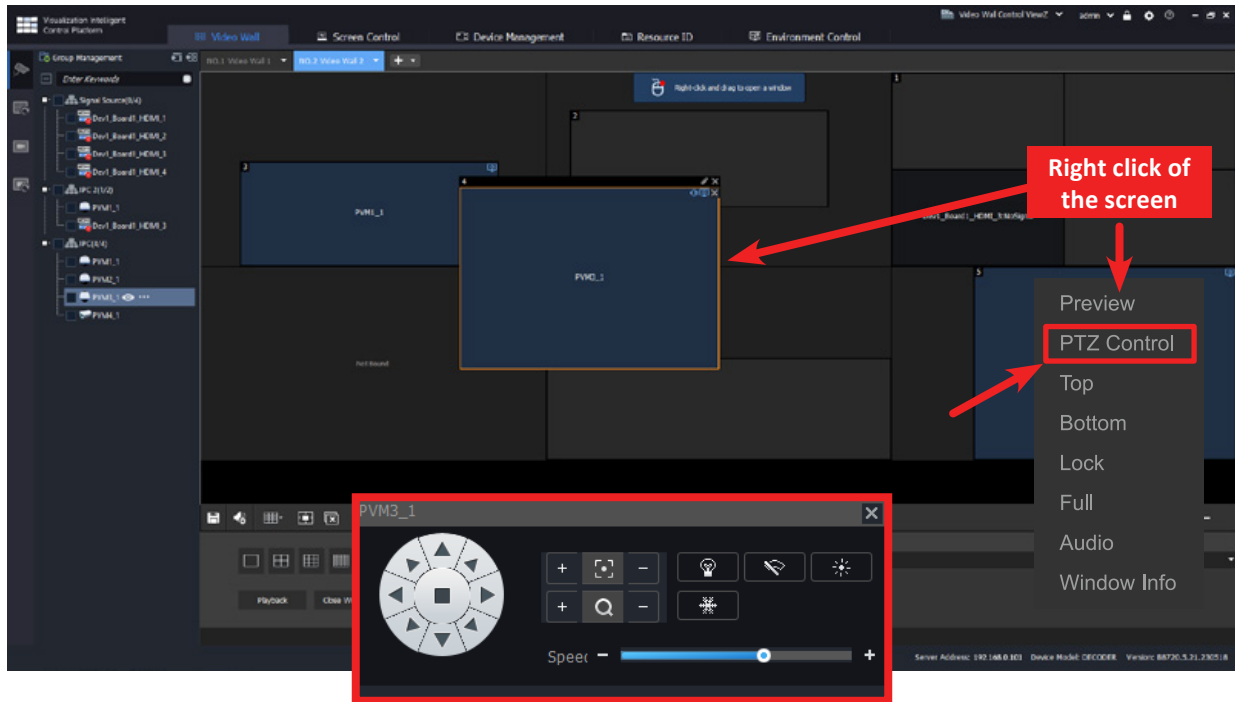- Click [image] button to adjust the zoom of the lens.
- Click [image] button to adjust the rotation speed of the camera.
- Click [image] button to turn on/off the illuminator.
- Click [image] button to turn on/off the wiper.
- Click [image] button to turn on/off heater.
- Click [image] button to turn on/off the snow removal mode.

CONTROL AND FUNCTION

Video Wall - All Open Window Control
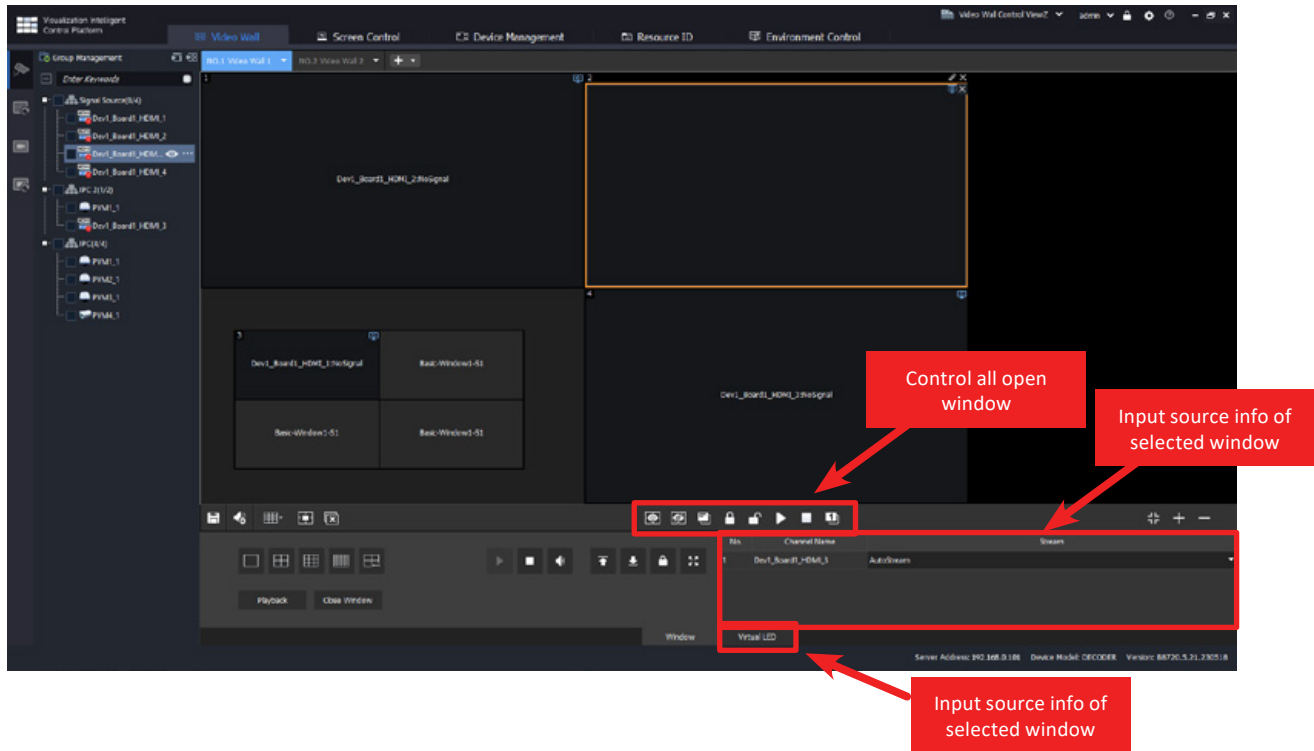
- To control all open windows;
  - Click ⊙ button to see the preview on all open window with Signal Source or **IPC/Signal Source** input.
  - Click ⊙ button to stop the preview on all open window with Signal Source or **IPC/Signal Source** input.
  - Click ⬚ button to show or hide window code (ID) on all open window with **IPC/Signal Source** input.
  - Click 🔒 button to lock the position and size of all open window with Signal Source or **IPC/Signal Source** input.
  - Click 🔓 button to unlock all open window with Signal Source or **IPC/Signal Source** input.
  - Click ▶ button to start the decoding of all window (of Signal Source or **IPC/Signal Source** input) on the video wall.
  - Click ■ button to stop the decoding of all window(of Signal Source or **IPC/Signal Source** input) on the video wall.
  - Click 🔢 button to renumbering on all open window with Signal Source or **IPC/Signal Source** input.
- When user select the window, the channel name and stream information will be shown at right bottom window.
- If user want to display the scrolling ticker board, user can use this function at the **Virtual LED** tab.

CONTROL AND FUNCTION

Video Wall - All Open Window Control - Renumber Windows
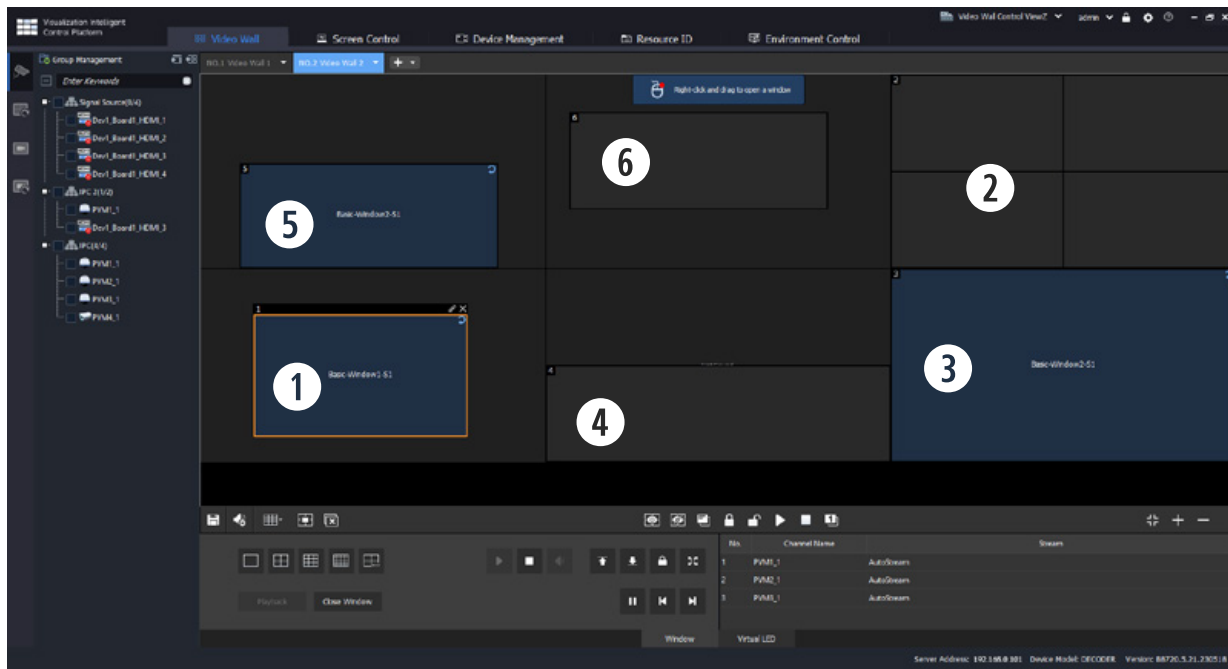
- The software assigns window IDs (numbers displayed in the top-left corner of windows) based on the order in which the windows are opened. To reassign window IDs based on their positions (from top to bottom, and from left to right), click **⊞** (**Renumber Windows**) button to renumber window ID.
- For example, if user click '**Renumber Windows**' button at the above screenshot, user will see the renumbered window ID like below screenshot.

CONTROL AND FUNCTION

Video Wall - Play - IPC/Signal Source Contents
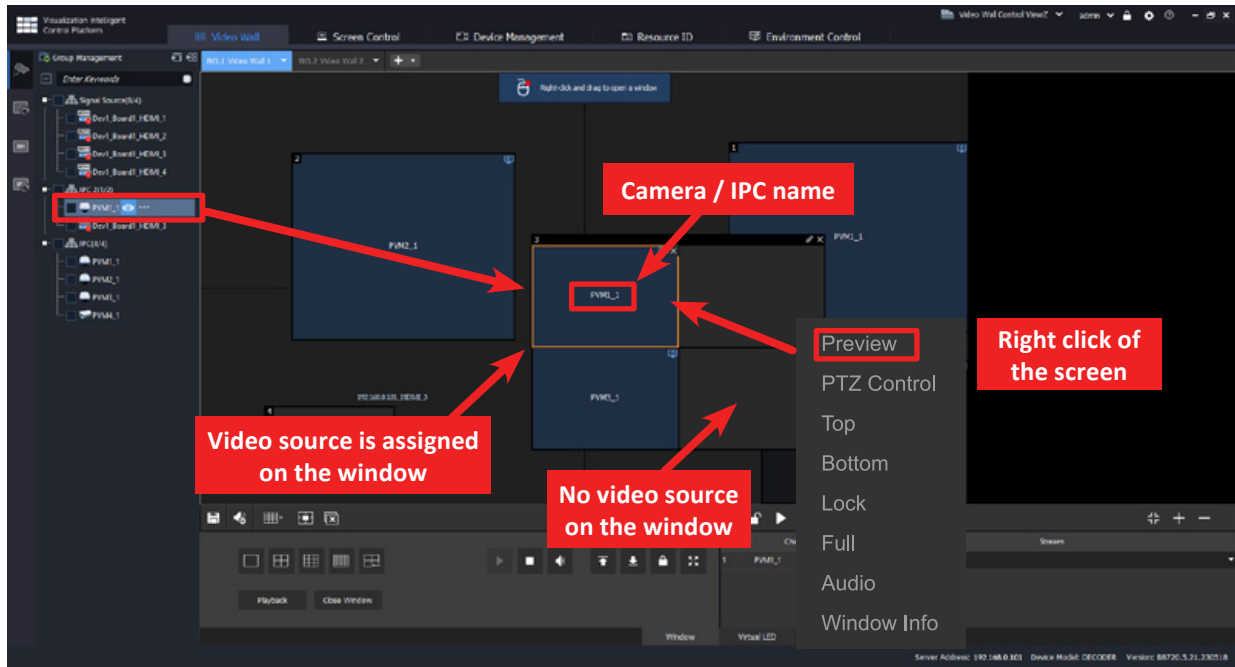
- User can play videos on a video wall one by one or in batches

1. On the Group Management, drag one of device (IPC or camera) to a window / split window.
2. User can see the camera or IPC name on the assigned window. And the live video will be displaying on the video wall.
   Also, user can see the preview on the program - right click on the selected window and click '**Preview**'

CONTROL AND FUNCTION

Video Wall - Play - IPC/Signal Source Contents
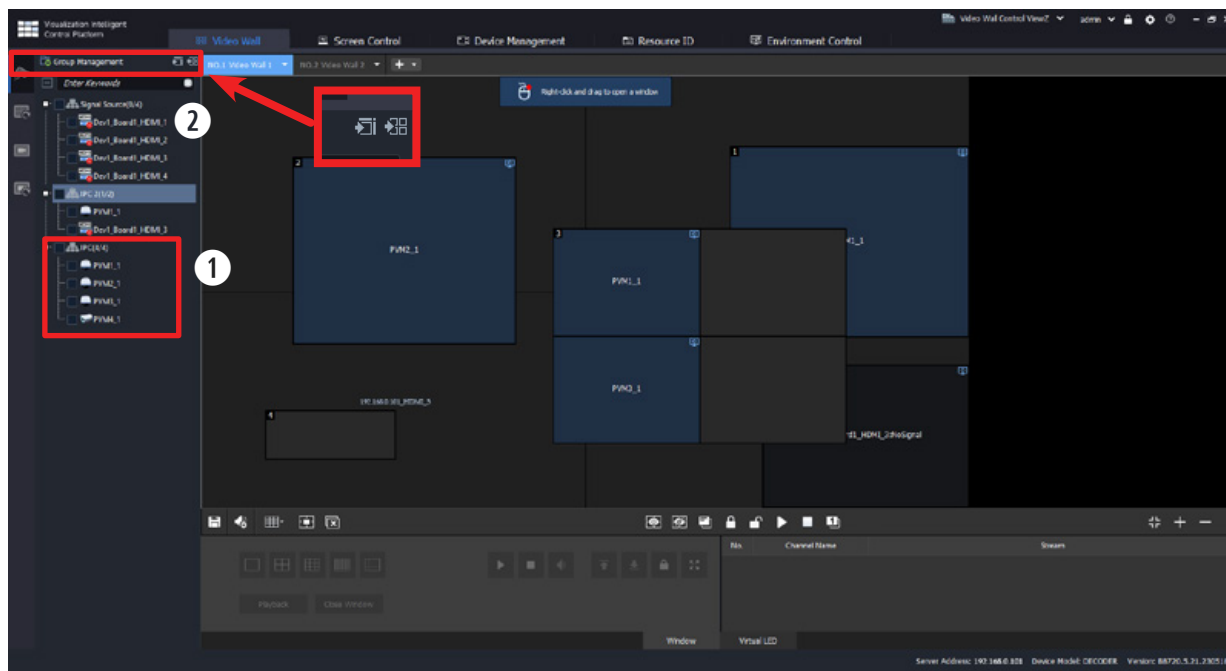
- User can start in batches.

1. On the Group Management tab, select devices (or IPCs).
2. Click [icon] to Play on Screen or [icon] to Play on Wall.

CONTROL AND FUNCTION

Video Wall - Play - IPC/Signal Source Contents on Screen
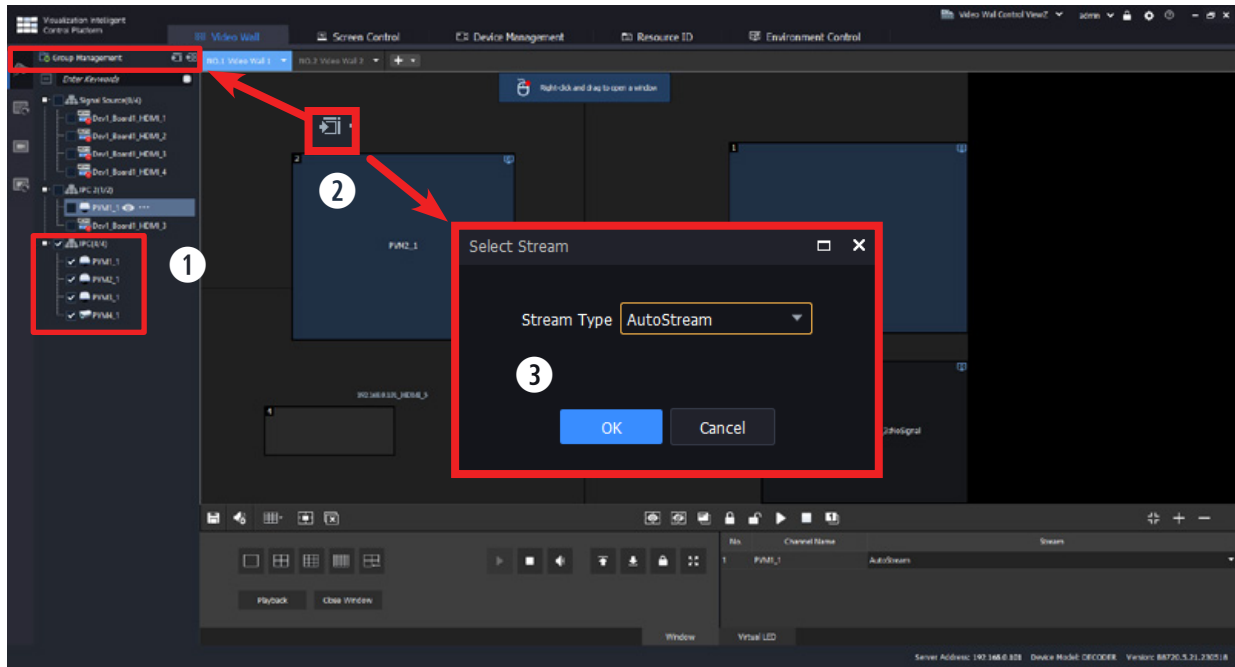
- Play on Screen - play the content on the selected screen.
  Example: Play video of 4 IPCs on 1 screen that is split into 4

1. Select the 4 devices from the **Group Management** tab.
2. Click ⊡ button to **Play on Screen**.
3. When '**Select Stream**' window popup, plz select a stream type among **Main**, **Sub**, **Third** or **AutoStream**. And then click '**OK**'.
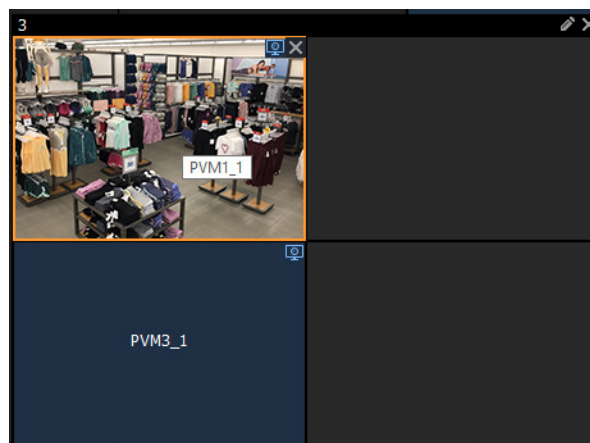
CONTROL AND FUNCTION

Video Wall - Play - IPC/Signal Source Contents on Wall
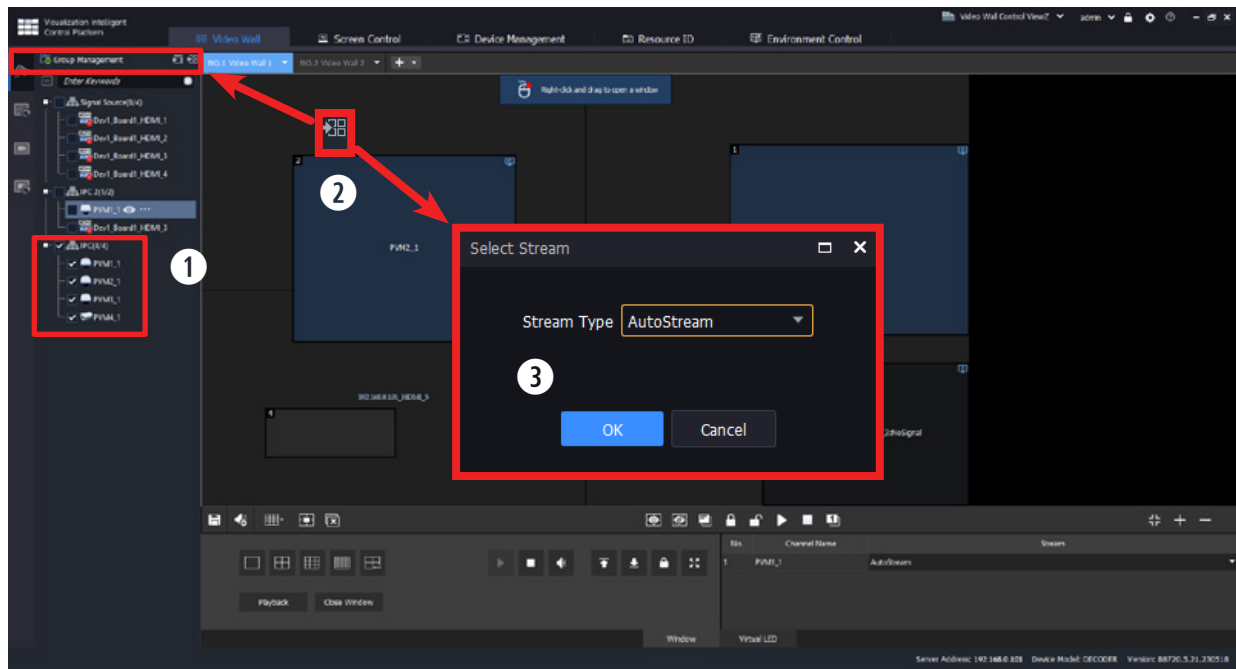
- Play on Wall - play the content on multiple screens.

  Example: Play video of 7 IPCs on 4 screens. Then, 3 screen will play 3 IPCs and 1 screen will play 4 IPC (2x2)

1. Select the 4 devices from the **Group Management** tab.
2. Click [icon] button to **Play on Wall (Play on Video Wall)**.
3. When '**Select Stream**' window popup, plz select a stream type among **Main**, **Sub**, **Third** or **AutoStream**. And then click '**OK**'.

CONTROL AND FUNCTION

Video Wall - Play - Signal Source
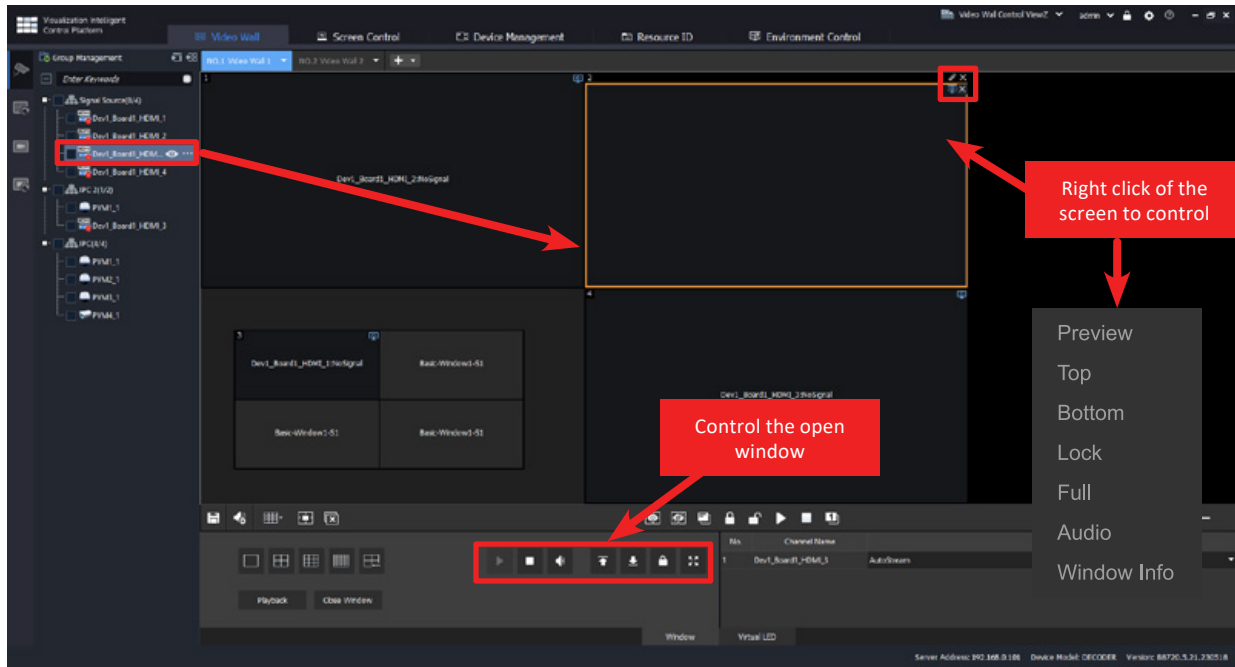
- Signal source is the actual video input source via controller's input port of the server (such as HDMI, DP, DVI-D or VGA). And user can simply see the direct input source on the videowall by drag & drop the signal source at **Group Management/ Video Channel,** to an open window.

1. The direct input source will be playing when it is applied. To stop/close the playing, click ☒ at the right top corner of the selected window.
2. Also, the basic control of open window (with Signal Source) can be controlled by popup window (right click) or window control buttons like above screenshot.

   - Click ▶ button to play direct video input display.
   - Click ■ button to stop direct video input display.
   - Click 🔊 button or '**Audio**' (on right-click popup) to mute or play the sound of direct video input.
   - Click ⬆ button or '**Top**' (on right-click popup) to locate the top layer.
   - Click ⬇ button or '**Bottom**' (on right-click popup) to locate the bottom layer.
   - Click 🔒 button or '**Lock**' (on right-click popup) to lock the open window (with direct video input display).
   - Click ⛶ button or '**Full**' (on right-click popup) to make the full screen of selected open window or divided screen area.
   - Click '**Preview**' (on right-click popup) to see the direct input source on the software.
   - Click '**Window Info**' (on right-click popup) to see the direct input source information.

CONTROL AND FUNCTION

Video Wall - Play - Virtual LED
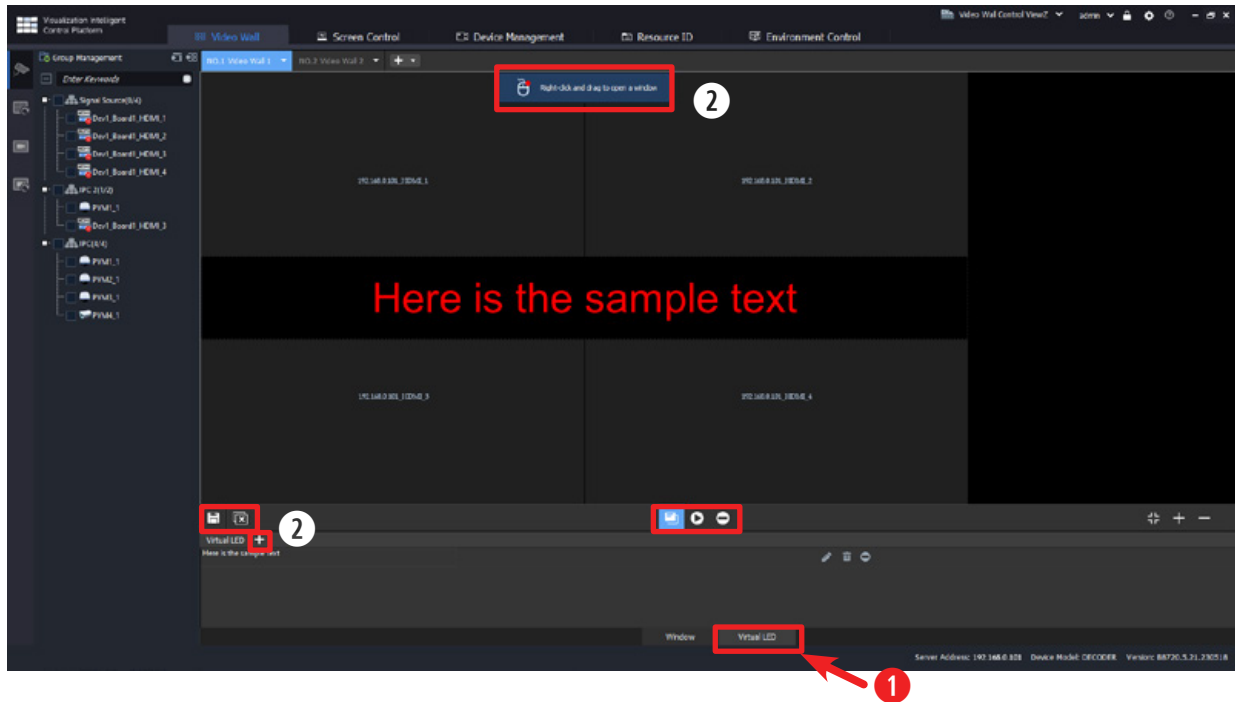
- Virtual LED is the text or time display that overlay on video images

1. Click the Virtual LED tab at the bottom, and then click the **'Add'** button or **right-click** (with drag & drop) on screen area, to create a virtual LED.
   - Click [Virtual LED +] button or right-click (with drag & drop) to create a virtual LED.
   - Click [🖫] button to save the current scene.
   - Click [🗙] button to delete all virtual LED display.
   - Click [🖭] button to show/hidh window code.
   - Click [▶] button to display all virtual LED.
   - Click [➖] button to disable all virtual LED.

CONTROL AND FUNCTION

Video Wall - Play - Virtual LED - Text LED Configuration

2. When user click **'Add'** button or **right-click** on screen are, user will see the LED Configuration window like above screenshots. Configure the value by referring to the below table. Some parameters are applicable to text LEDs or time LEDs. The number of virtual LEDs supported by a video wall may vary depending on the server model.

TEXT LED CONFIG.	FUNCTION	VALUE
LED TYPE	Select the display type	TEXT / TIME
X & Y COORDINATE	Set the horizontal & vertical starting position from the left	0 to Max resolution number
WIDTH x HEIGHT (PX)	Set the width & height of virtual LED	
CONTENT	Type the text to show at the video wall	TEXT
FONT	Select the font	
FONT SIZE	Set the display text size	AUTO / Custom (48~1024 pt)
FONT SPACING	Select the spacing size between character	AUTO / 1x ~ 10x
FONT ALIGNMENT	Set the horizontal & vertical alignment of text	Left-Center-Right for Horizontal Top-Middle-Bottom for Vertical
FONT COLOR	Set the font color	
BACKGROUND COLOR	Set the background color of display text / time	
TRANSPARENT	Set the background transparency of virtual LED window	YES / NO
SCROLLING SPEED	Set the scrolling speed of text	1x ~ 10x
SCROLLING MODE	Set the scrolling direction	Static/Top/Bottom/Left/Right

CONTROL AND FUNCTION

Video Wall - Play - Virtual LED - Time LED Configuration

| TEXT LED CONFIG.	FUNCTION	VALUE
LED TYPE	Select the display type	TEXT / TIME
X & Y COORDINATE	Set the horizontal & vertical starting position from the left	0 to Max resolution number
WIDTH x HEIGHT (PX)	Set the width & height of virtual LED	
TIME FORMAT	Set the display time format User can select which information will be displayed or not	12 / 24 - hour format Year / Month / Day / Hour / Minute / Second / Week / AM / PM
DISPLAY STYLE	Select the multiple or single line display	Single / Multiple Rows
FONT	Select the font	
FONT SIZE	Set the display text size	AUTO / Custom (48~1024 pt)
FONT SPACING	Select the spacing size between character	AUTO / 1x ~ 10x
FONT ALIGNMENT	Set the horizontal & vertical alignment of text	Left-Center-Right for Horizontal Top-Middle-Bottom for Vertical
FONT COLOR	Set the font color	
BACKGROUND COLOR	Set the background color of display text / time	
TRANSPARENT	Set the background transparency of virtual LED window	YES / NO

CONTROL AND FUNCTION

## Video Wall - Play - Virtual LED - Time LED Configuration
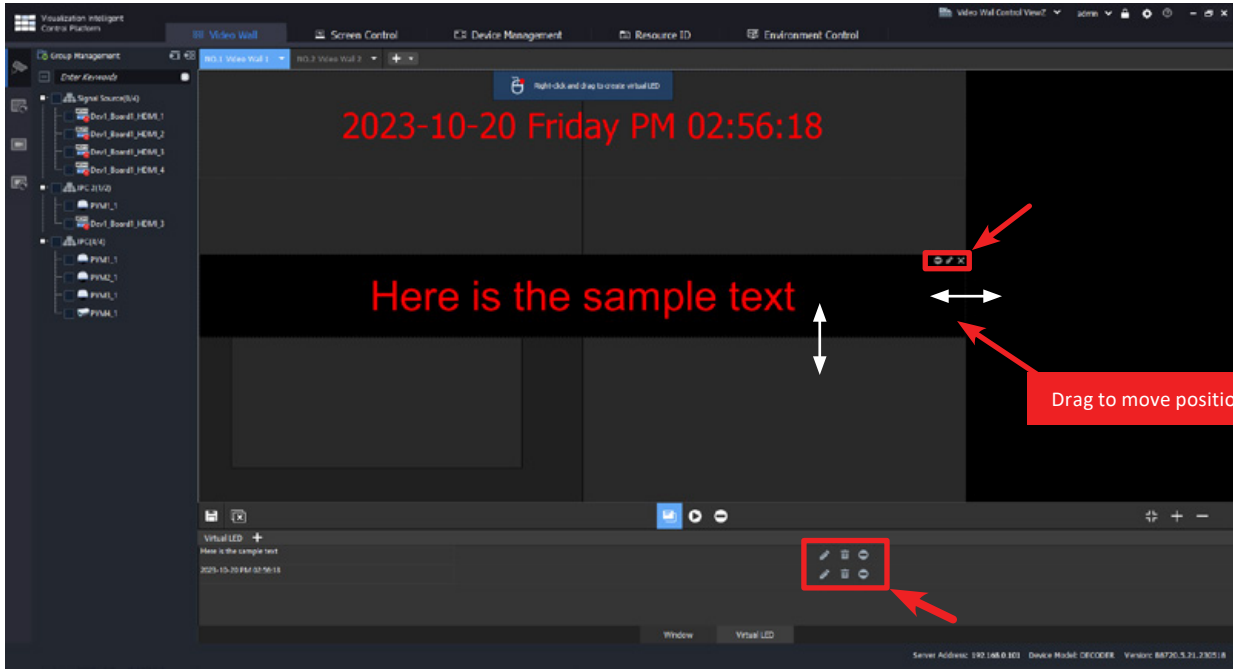
- Other operations:
  You can drag the virtual LED box to change its position and place the mouse cursor on the background border. When the cursor shape changes, you can drag to resize the background.

- When user creates a virtual LED, user can see the virtual LED content in the bottom window.
- User can edit, delete and enable/disable the added virtual LED

CONTROL AND FUNCTION

Sequence Resource - Create, Edit & Delete a Sequence Resource
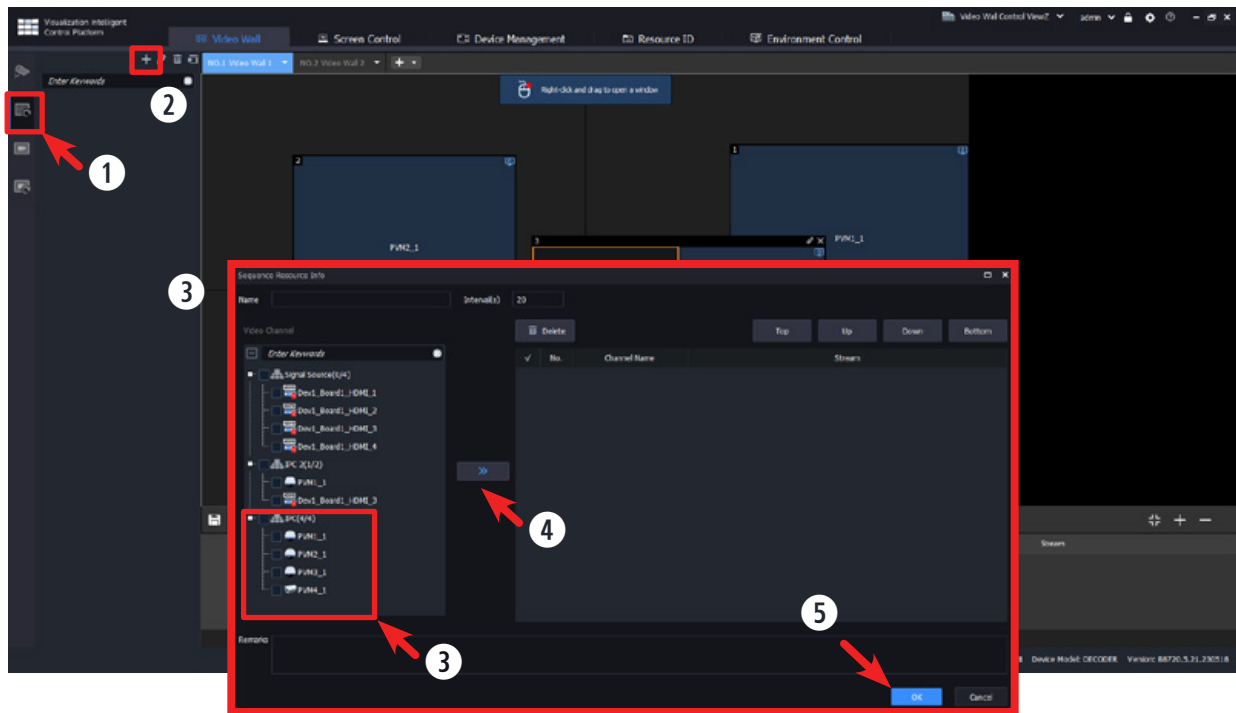
1. Select **Group Management/Sequence Resource** tab.
2. Click ➕ button to launch '**Sequence Resource Info**' window.
3. When '**Sequence Resource Info**' window popup, select IPCs or devices on the list of Video Channel.
4. Click 〉〉 button to add an IPC device on a sequence.
5. Click 'OK' to save this sequence.

CONTROL AND FUNCTION

Sequence Resource - Create, Edit & Delete a Sequence Resource
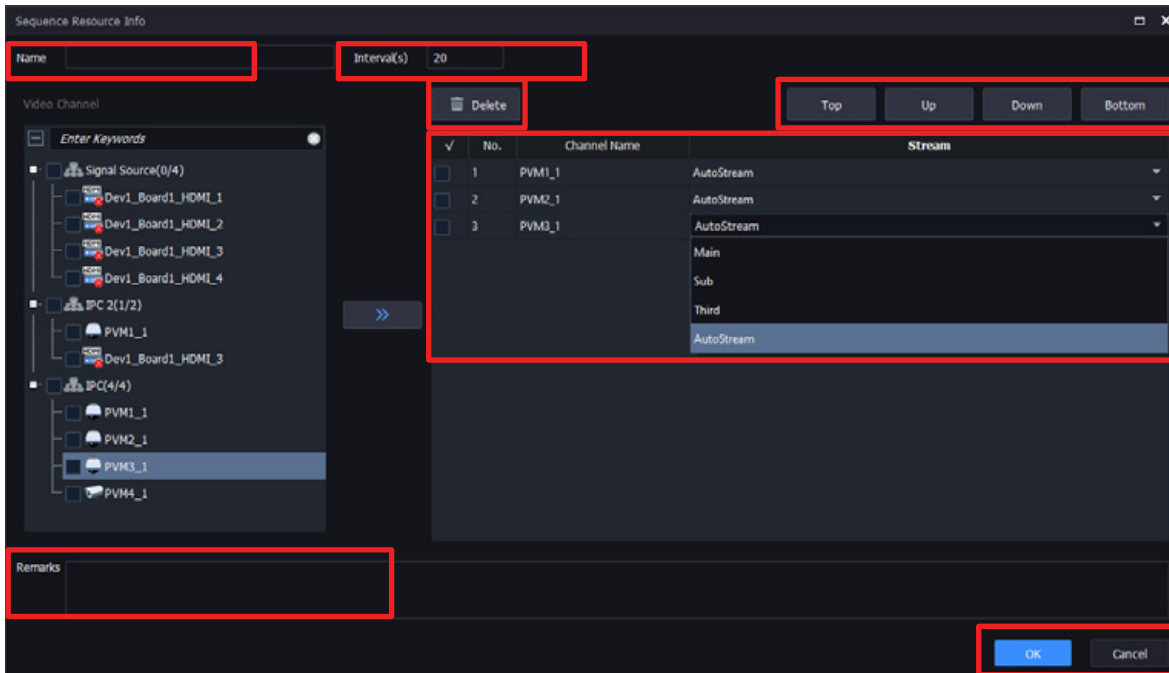
6. After saving, user can simply use the saved sequence. If user want to edit the existing seuqnce by clicking this ✏️ button, delete the selected sequence by clicking 🗑️ button or play the sequence on the selected screen by clicking this ⏩ button.

7. On the **Sequence Resource Info** window,
    - Enter/edit the resource name at | Name | Basic-Window1-S1 |
    - Enter/edit the time interval for switching from a IPC to the next at | Interval(s) | 15 |
    - Change the order of IPCs display by | Top | Up | Down | Bottom |
    - Click | 🗑️ Delete | button to delete the added IPC
    - Enter/edit the created sequence note at | Remarks | Test 1 |
    - Click | OK | Cancel | button to **OK(Save)** or **Cancel**
    - Change the stream type - **Main**, **Sub**, **Third** or **Auto**

CONTROL AND FUNCTION

Sequence Resource - Run on an Open Window
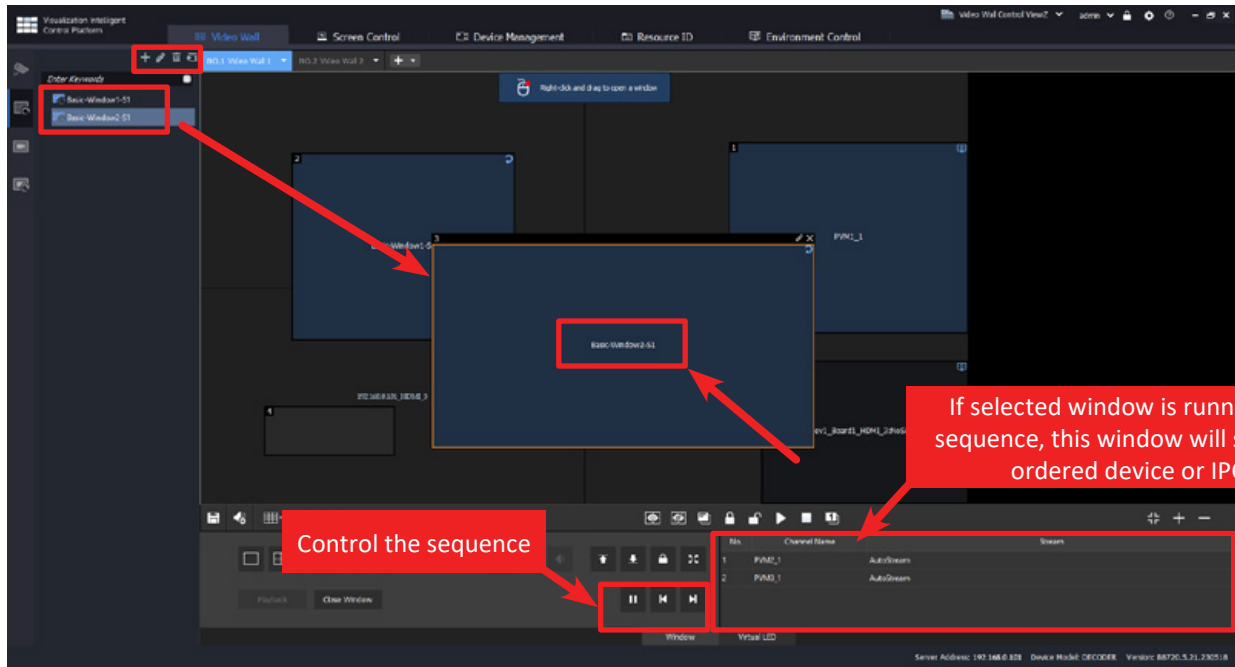
- Play a sequence video on a window

1. On **Group Management/Sequence Resource** tab, select one of sequences and drag & drop the selected sequence to the desired window.
2. The added sequence name is showing on the selected window, and the sequence will automatically play on the actual video wall.
3. Click [⏸ ⏮ ⏭] button to control the sequence - pause, play previous or next content.
4. For example, if a sequence has 2 camera sources & 20 seconds interval like above screenshot;
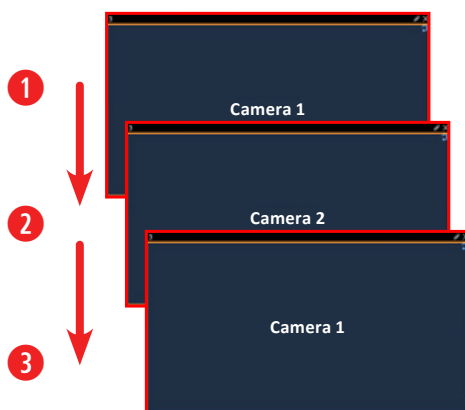
① Play camera 1 at the begin
② After 20 seconds, play camera 2
③ Complete a round & repeat - play camera 1

CONTROL AND FUNCTION

Sequence Resource - Run on the Multiple Window
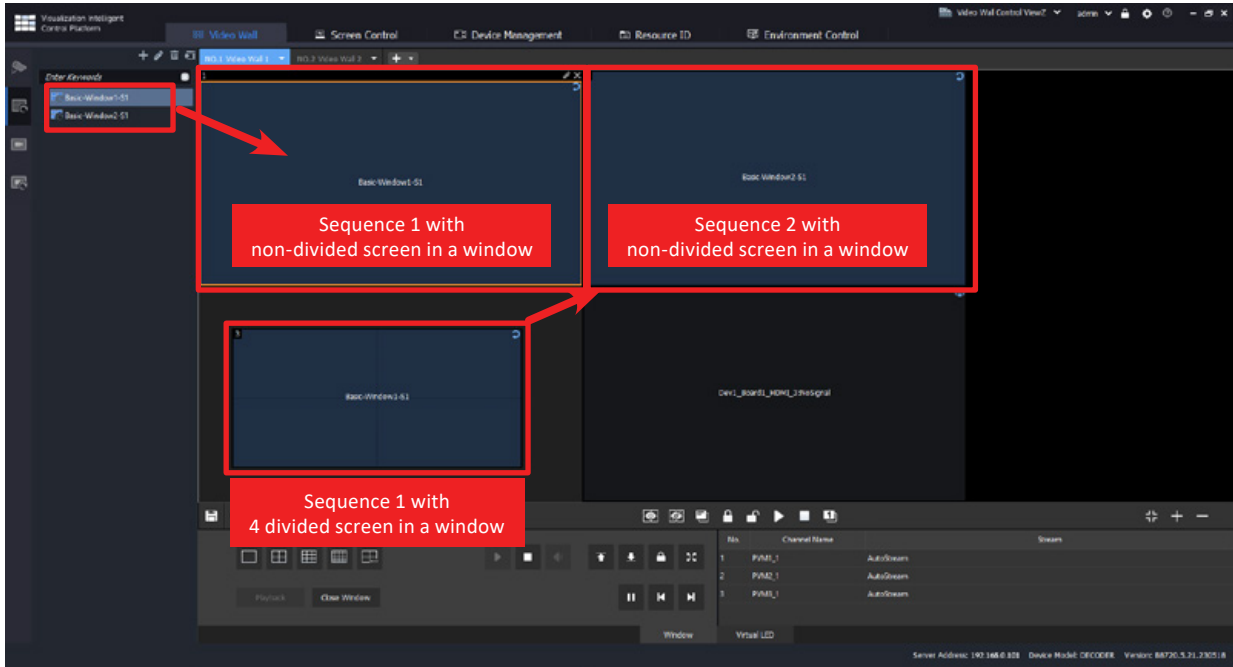
- A sequence is only applicable for an open window. If the open window has 4 or 8 devided screen, this window only display a sequence as full screen. It means an open window can only has 1 sequence display.
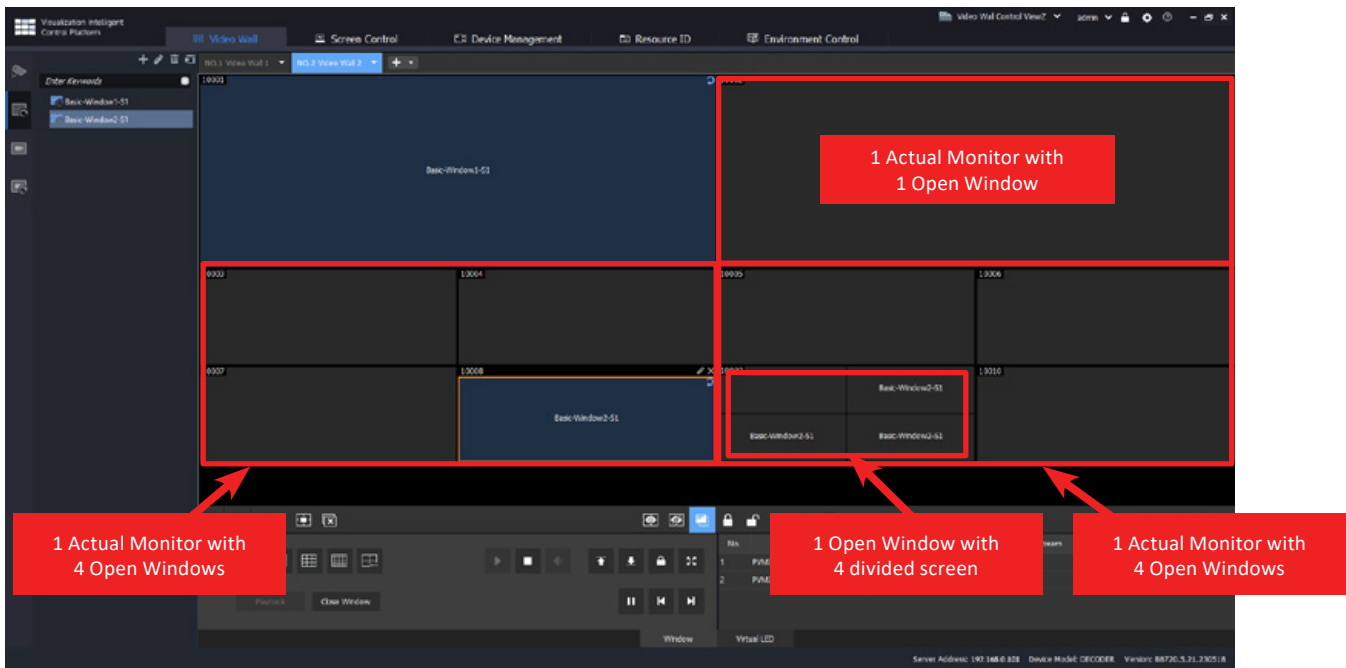
- For example, if the video wall has 4 actual monitors and 10 open windows like above screenshot, it means user can display 10 sequences.

CONTROL AND FUNCTION

Scene

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

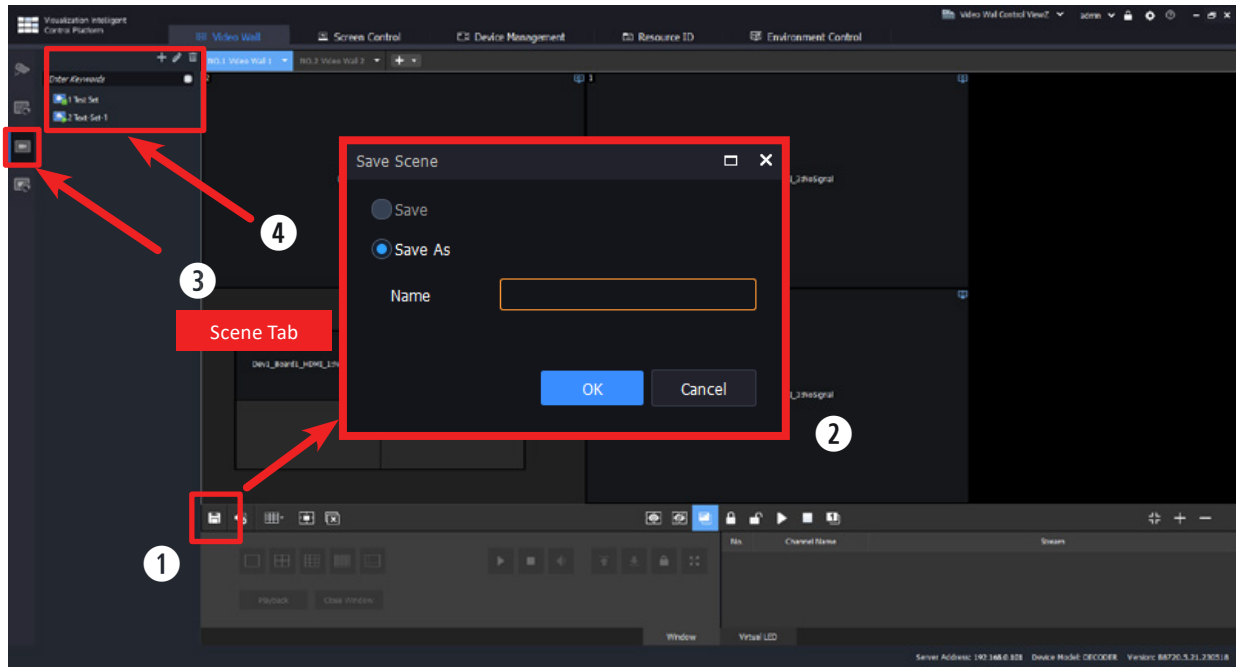1. Click 🖫 button to save a scene - sequence / IPX / CAM / live view layout or virtual LED layout
2. Type the saving scene name at the '**Save Scene**' window.
3. Select the tabe of **Group Management/Scene**
4. User can **load** the saved scene, **create** the new scene, **delete** the saved scene and **edit** the saved scene's title.
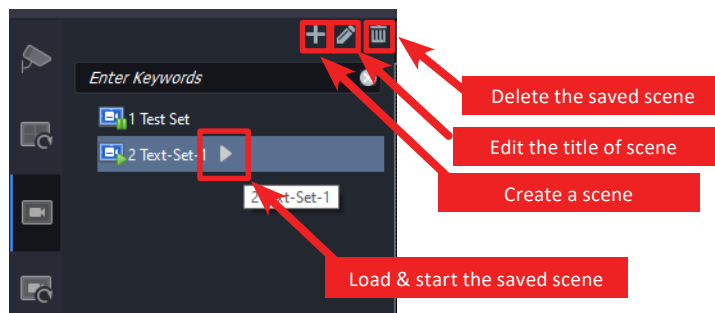
CONTROL AND FUNCTION
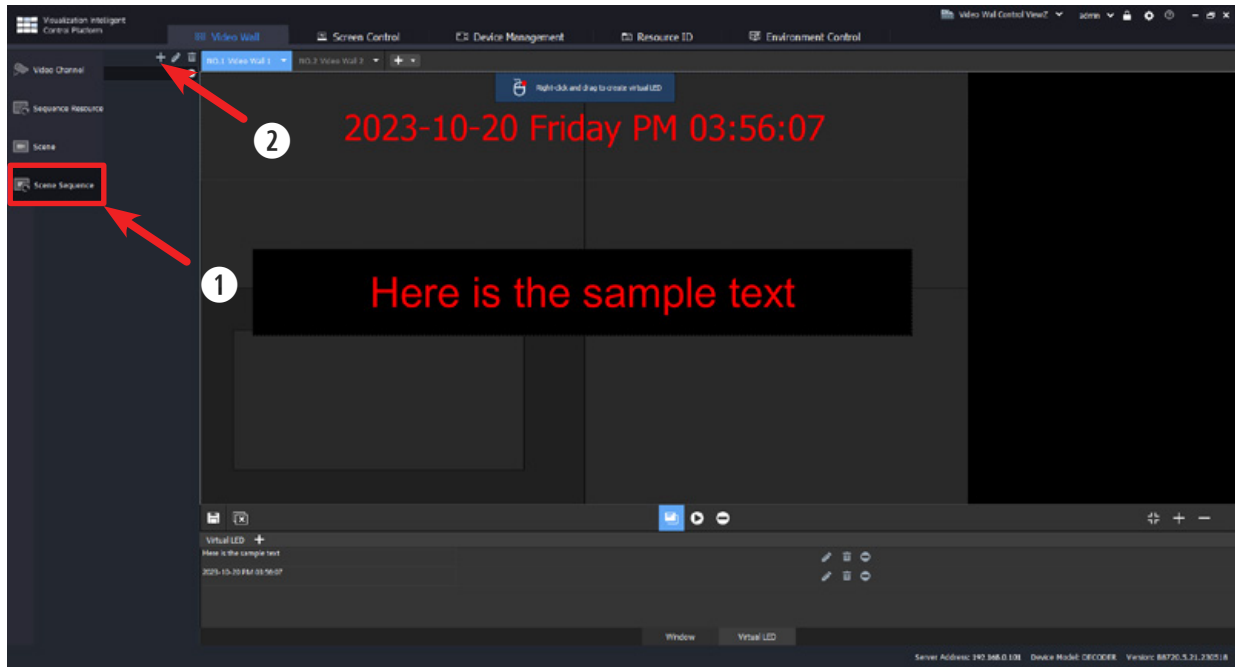
Scene Sequence

- User can set up a scene sequence to play the different scenes at different times. Please create the scenes first and then follow the steps to make a scene sequence.

1. Click the Scene Sequence tab
2. Click '+' button to create a scene sequence
3. When user click '+' button, user will see the Scene Sequence Plan window

CONTROL AND FUNCTION

Scene Sequence

- On **Scene Sequence Plan** window,

1. Type the plan name
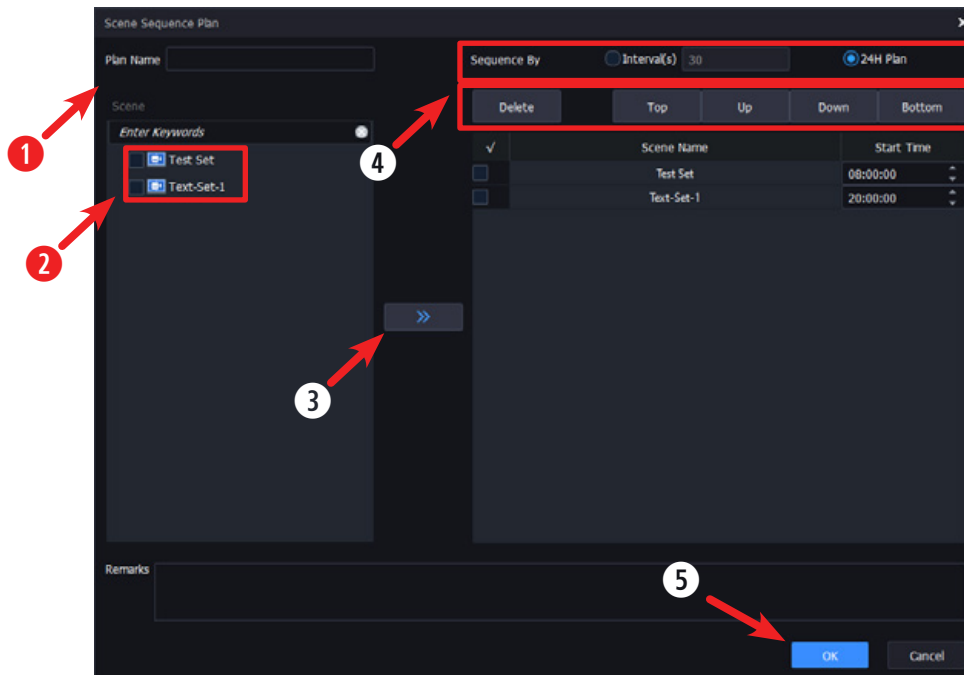2. Select the scene to create a loop of scenes
3. Click the arrow button to put scenes to the plan

Based on added scenes, user can setup the second or 24 hour interval

    Interval(s): setup the second interval

    24H Plan: setup the start time of each scene

    Delete: delete an added scene

   Top: move up the selected scene to the 1st of the list

    Up: move 1 step up the selected scene

    Down: move 1 step down the selected scene

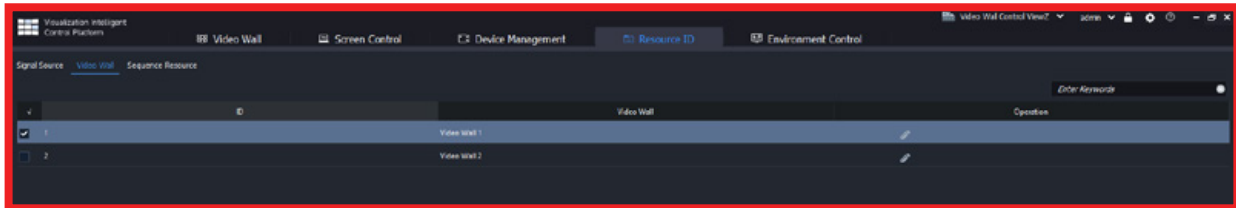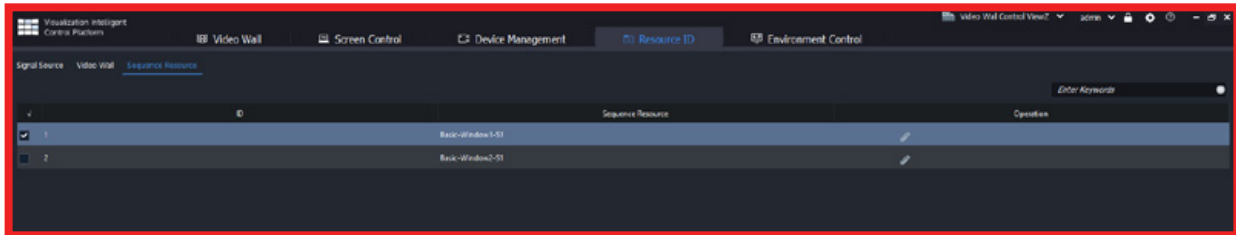   Bottom: move down the selected scene to the last of the list

4. Click 'OK' to save it.
5. When the Scene Sequence Plan is saved, user can see the saved scene sequence.

    Click ▶ button to play or start the scene sequence. Click ◻ button to stop the scene sequence.
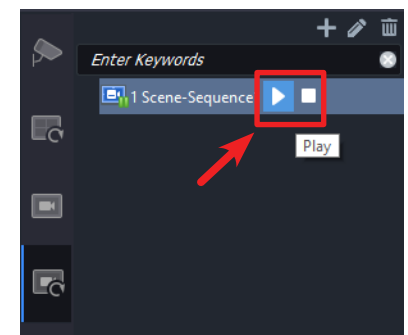
CONTROL AND FUNCTION

Resource ID
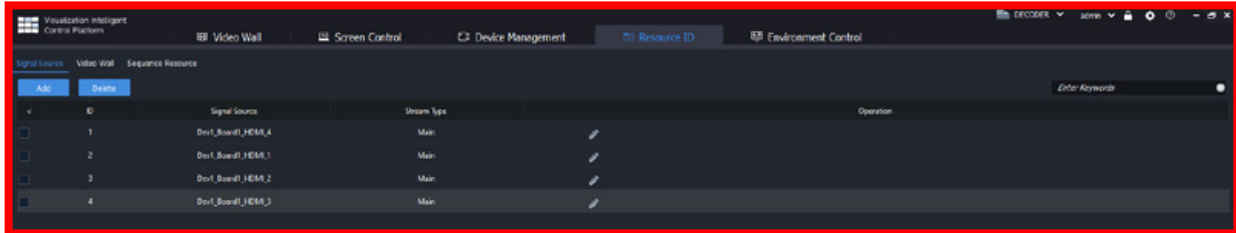
- User can use a network keyboard to perform live view, playback, PTZ control and sequence on a video wall. Connect a network keyboard to the PC, and properly by referring to the Network Keyboard, and then select the Resource ID tab and follow the steps below.
- User can edit Signal Source ID, Video Wall ID or Sequence Resource ID

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.

CONTROL AND FUNCTION

Screen Control - Serial Port
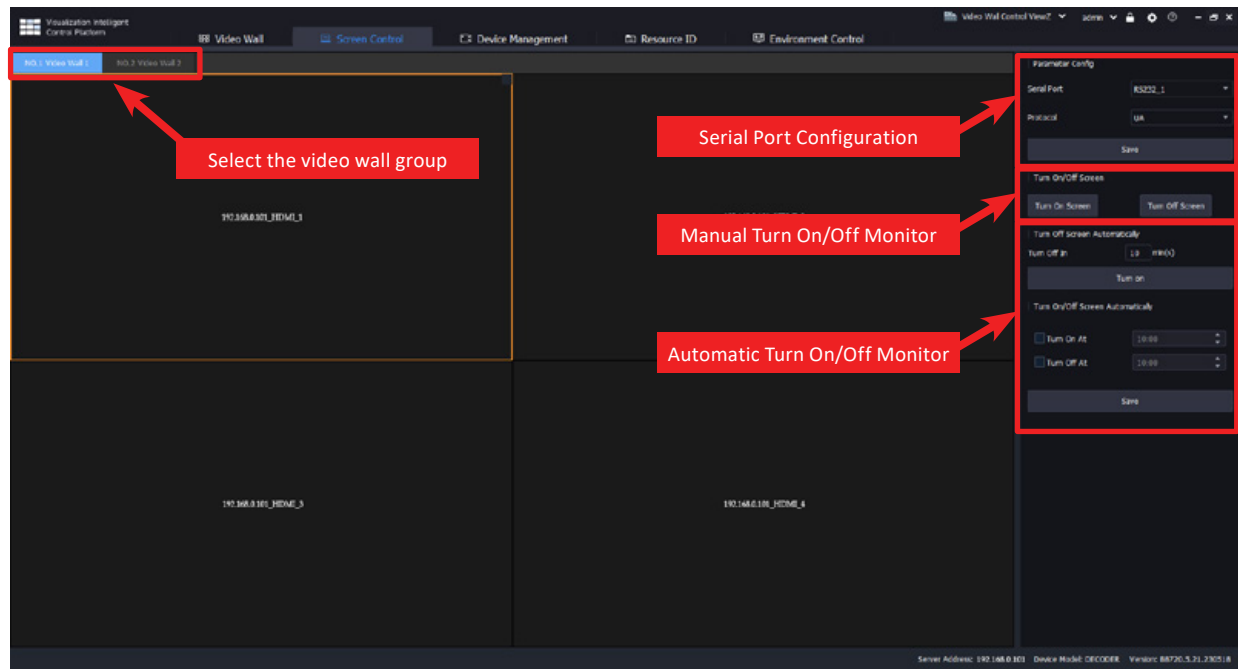
- On the **Screen Control,** user can select the video wall monitor and turn on/off video wall monitors. Before your operation, make sure about video wall monitors, power connection & and the control server are properly connected.

- Configure **Serial Port and Protocol** - configure the serial port and protocol in accordance with the control server and motnior type. Select the serial port and protocol that are consistent with those configured on the server's interface.

Note

- **Serial Port** - RS232, RS485
- **Porotocol** - UA, UA-A, MODBUS, RSKANGGUAN, SBL, YHANS, FLOWVIA, KINGWINGTAT, SUNVIEW, XKCQ, HIKVISION, DAHUA, LG, DAHUAFS, Customize1, Customize2

CONTROL AND FUNCTION

Screen Control - Turn On / Off
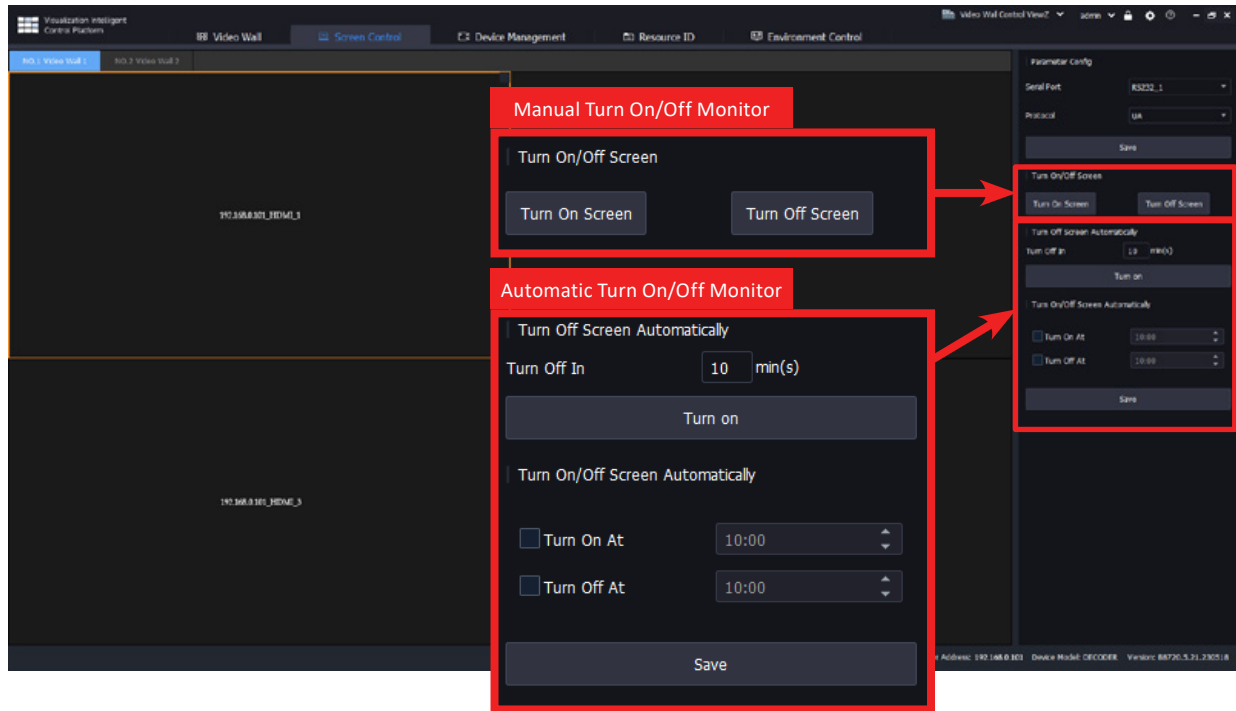
- **Manual Turn On/Off** Screen - Click 'Turn On Screen' or 'Turn Off Screen' to turn on/off the screen manually.
- **Automatic Turn Off** Screen (**delay turn off**) - User can turn off the screen within time (minutes)
- **Automatic Turn On/Off** Screen - User can setup the time (Hour) to turn on or off the screen.

CONTROL AND FUNCTION

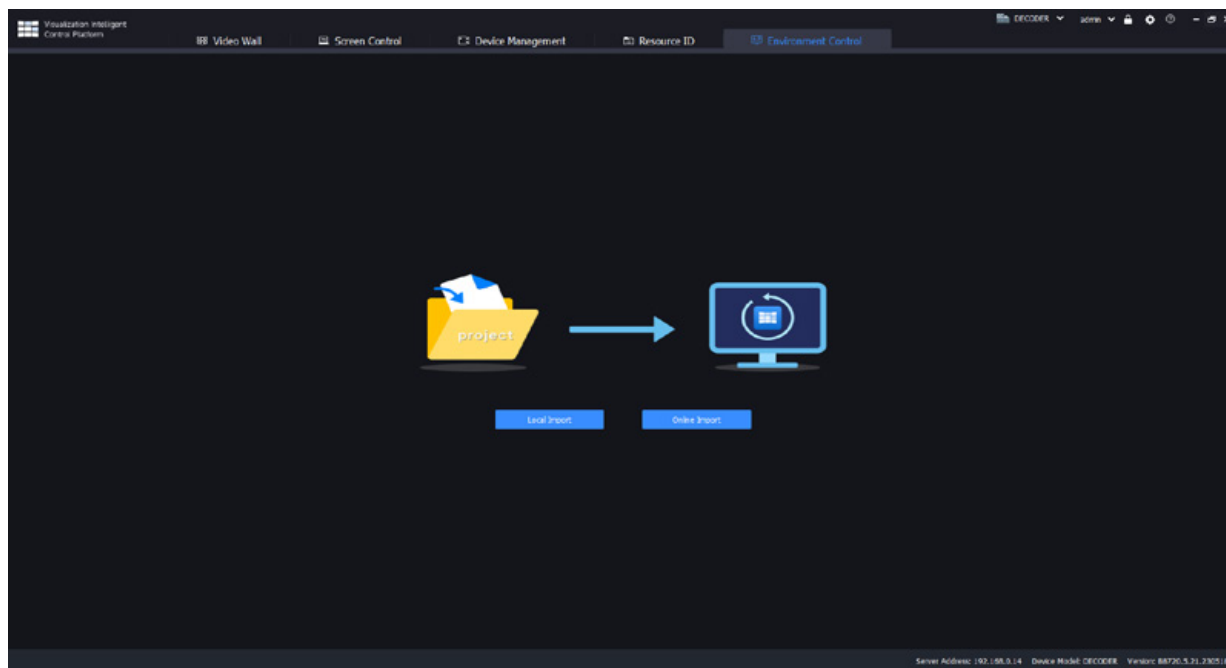## Environment Control

- The environment control function needs to be used with the project package exported from the designed visual platform. After completing the customized control, user can export the configured information or vise versa. This function can let user control easily.
- User can import the file from local or online storage.

CONTROL AND FUNCTION

Q & A

- **Cannot find or connect the server**

  A. Please check the network connection and the server address is grouped in the same local network

- **The screen of IPC/Signal Source is slow or lagging**

  A. Check the transmission protocol, port number, stream type of the IPC/Signal Source on the program. Thus, if the selected IPC/Signal Source's stream type is MJPEG, it might slow or lag because of the low fps (of MJPEG).

- **Cannot add/register the IPC/Signal Source on the server**

  A. Please check the network address of IPC/Signal Source devices. And if it is different with server, then match the network address. Some IPC/Signal Source's network address has different IP address system and it means ViewZ server or your IPC/Signal Sources cannot connect each other.

- **Cannot import / export**

  A. Please check the internal storage is not full.

- **Don't know the camera password**

  A. Contact the manufacturer of camera and try to restore factory default of camera. Then, try again.

- **The screen freeze suddenly**

  A. Check the network connection of IPC/Signal Source devices.

NOTE