

A large, abstract graphic on the left side of the page consists of several overlapping, rounded rectangular shapes in various shades of gray, creating a layered, geometric effect.

Video Insight Video WallPlus Administrative Guide

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Version 7.4

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Rev 04/18

1. INTRODUCTION

VI Video WallPlus allows the simultaneous monitoring of a high number of cameras, managing the content of multiple display devices (such as televisions or computer monitors) from a single console.

Each device can be used to display a single camera, a server or a customized layout.

Likewise, VI Video WallPlus can cycle multiple views and display a layout by request from VI MonitorPlus.

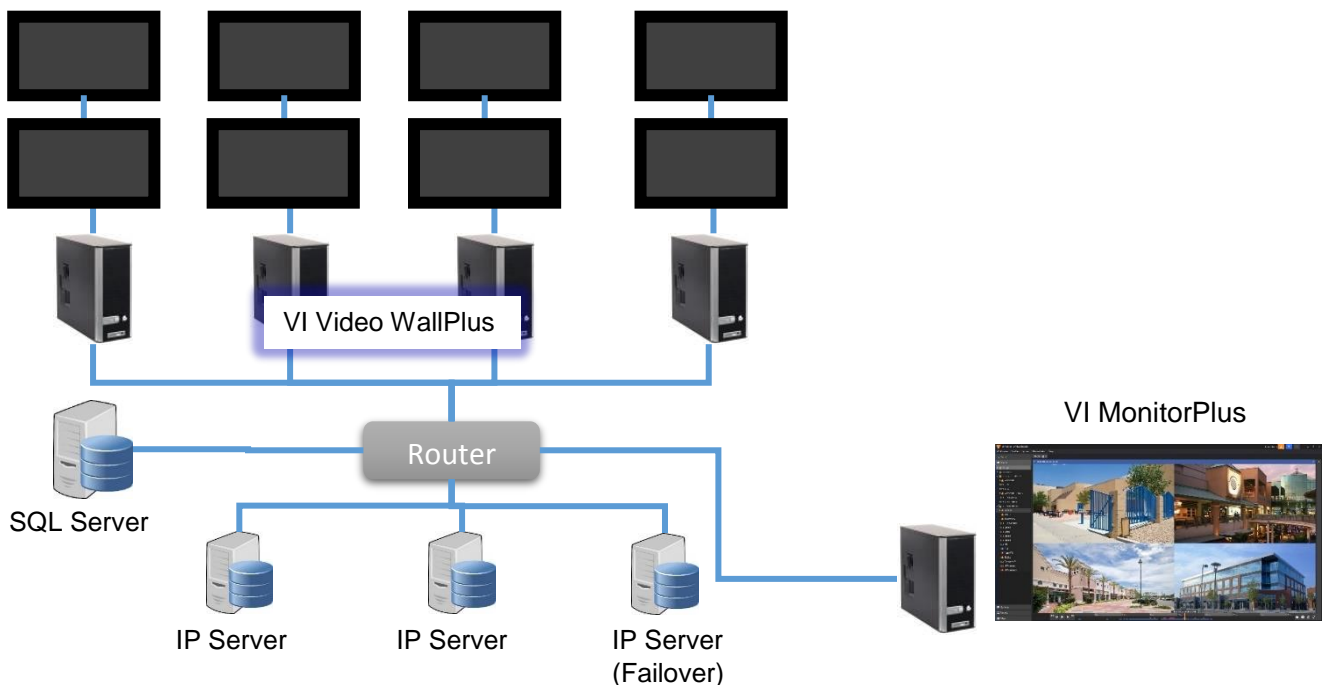
This document explains how to set up and operate VI Video WallPlus.

Key functions of VI Video WallPlus are:

- Windows OS automatic launch.
- Live view (Single / Multi).
- Cycle view for configured layout.
- Full Screen view (No title bar so that all space can be utilized).
- Hardware decoding (Intel HD and nVIDIA).
- Dual Streaming.
- Failover support.
- Direct camera connection.
- Controllable by Joystick.

1.1 SYSTEM OVERVIEW

VI Video WallPlus works under the Shared DB architecture (*see figure below*). With the Failover system set up, VI Video WallPlus can adjust camera display when IP server is down or up. VI Video WallPlus can manage display devices.



1.2 HARDWARE SPECIFICATIONS

The recommended hardware specifications are:

Component	Recommended
Processor	6th Generation or later, Intel Core processor (1 3.1 GHz quad-core+)
Memory	8GB+
Video	1GB+
Network	1GB/s+
Resolution	1920 X 1080+

1.2.A Hardware Decoding

For optimum use of H.265 and H.264 codec capable cameras, the following are the minimum recommended practices:

- 4th-Gen Intel HD Graphics Intel Core processor-based platforms (see table above).
- GPU: nVIDIA GTX 750Ti, 950, 1050, 1050Ti and 1060 (750Ti supports only H.264).
- Where a second graphics card is installed alongside the on-board Intel graphics card, it is necessary to configure the system BIOS to enable the second graphics card as the primary display.
- Separate graphics cards and on-board intel graphics cards connected to the monitor.
- Verify the correct driver for the on-board Intel graphics card with those found on the Intel website.
- IP Server will detect whether the on-board graphics card supports hardware acceleration automatically and will use the card when it is available. IP Server only enables it during live and recorded video playback and streaming for 4k or higher resolution.
- For all other instances that use server-side motion detection, thumbnails, snapshots or mobile device connectivity, the use of low speed (JPEG) hardware acceleration is due to asynchronous limitations.

Hardware decoding configuration for H.265 and H.264 is done within VI Video WallPlus. The following items must be selected:

- **Enable Hardware decoding** in **Option** is required.

1.3 SOFTWARE REQUIREMENTS

VI Video WallPlus runs on industry-standard hardware and works with both 32-bit and 64-bit versions of Microsoft Windows 7 or later (**64-bit version recommended**). It can be integrated with **Video Insight's** suite products **IP Server** and **VI MonitorPlus**.

2. INSTALLATION

2.1 PREREQUISITES

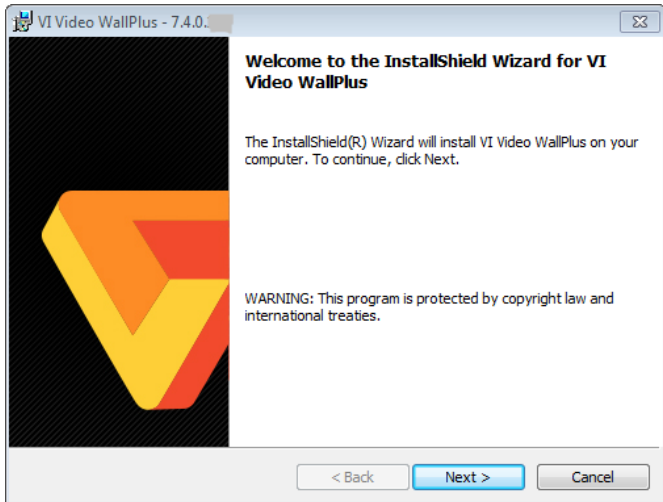
As prerequisite to install VI Video WallPlus, the following components must be previously installed:

- IP Server
- VI MonitorPlus
- SQL Server Express

NOTE - Shared DB architecture is required for Multi Servers environments.

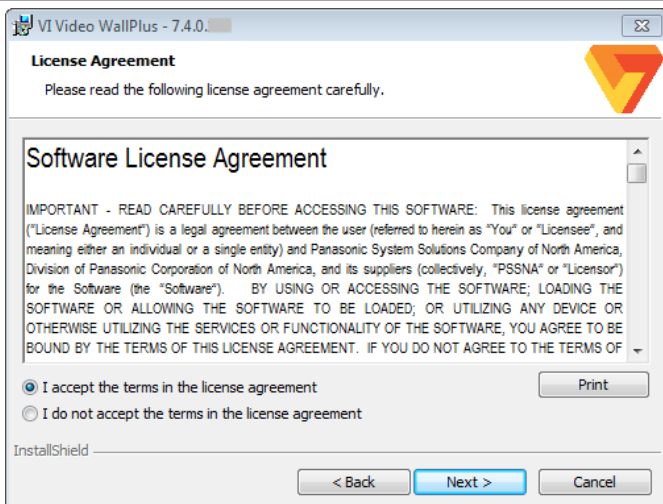
2.2 INSTALLATION PROCESS

Follow these steps to install VI Video WallPlus:



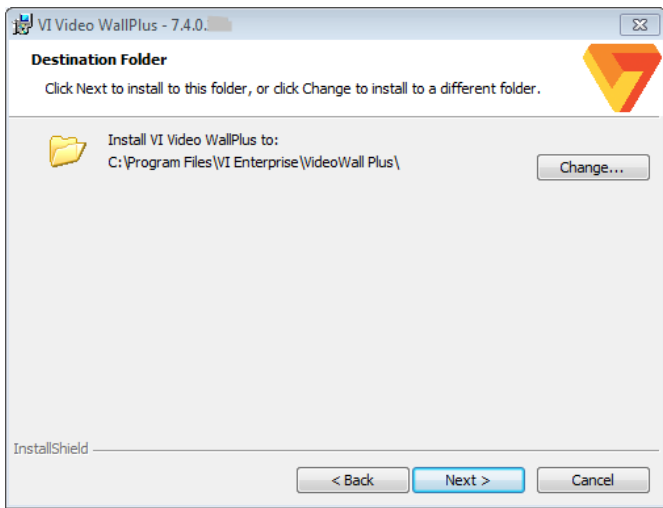
Step 1 - Download the VI Video WallPlus installer (32-bit or 64-bit) from DownloadVI.com.

Step 2 - Run the installer executable as **Administrator**, then click **Next**.



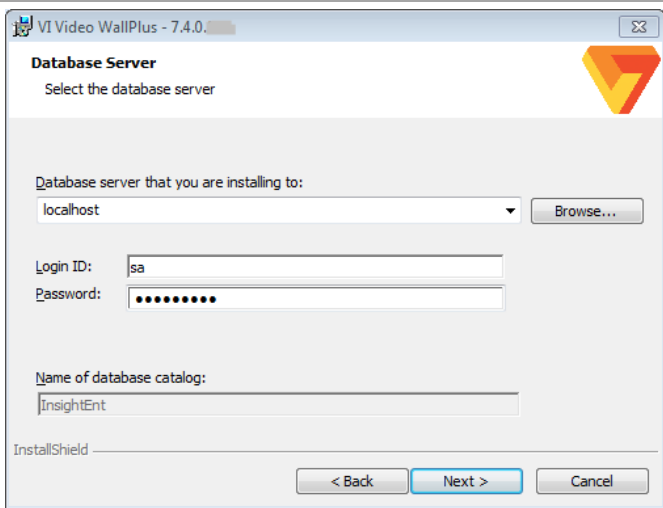
Step 3 - Click **Next**, then select "**I accept...**" to agree to the terms and continue the installation.

If you do not agree or do not want to continue the installation, click **Cancel**.

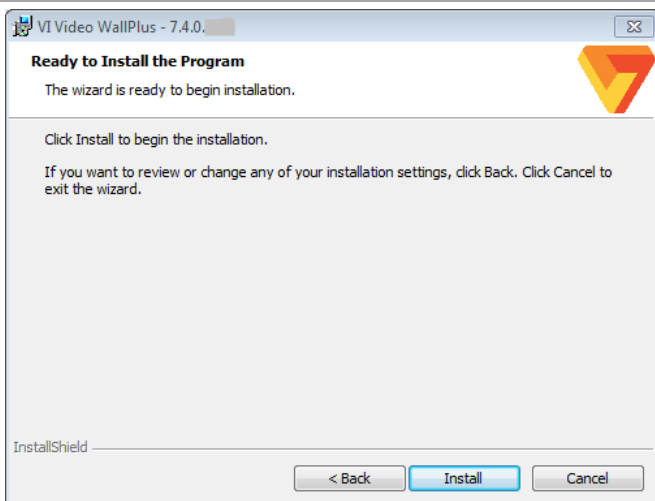


Step 4 - To accept the default destination folder, click **Next**.

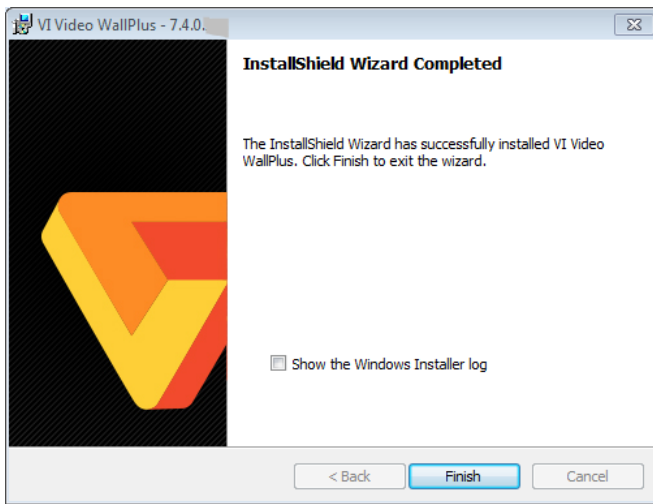
To choose another destination, click **Change** to open the Windows Explorer and start browsing.



Step 5 - Enter a *Database name* and a *credential* for the SQL database connection and click **Next**.



Step 6 - Click **Install** to begin the installation process.



Step 7 - To complete the installation, click **Finish**.

2.3 ACTIVATION

At the first application launch, the **Activation form** will be displayed.

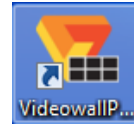
An **Activation Code** is required to activate the VI Video WallPlus license. Contact your Sales representative to obtain it, and use the above form to enter the corresponding information.

Demo Mode can also be activated to run the application for 60 days, license-free. **Online Activation is not currently available.**

3. OPERATION

3.1 LAUNCH APPLICATION

VI Video WallPlus can be configured to auto-run after launching Windows OS, or manually by clicking the Desktop icon.



3.2 CLOSE APPLICATION

To close VI Video WallPlus, follow these steps:

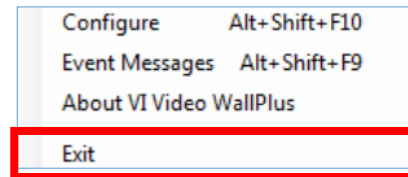
Step 1 – Press the **Alt+F4** key or the **Windows** key.



Step 2 - In the Task Bar, **Right-Click** the VI Video WallPlus icon.



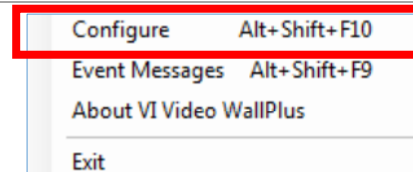
Step 3 - Select "**Exit**" from the pop-up Menu.



4. CONFIGURATION

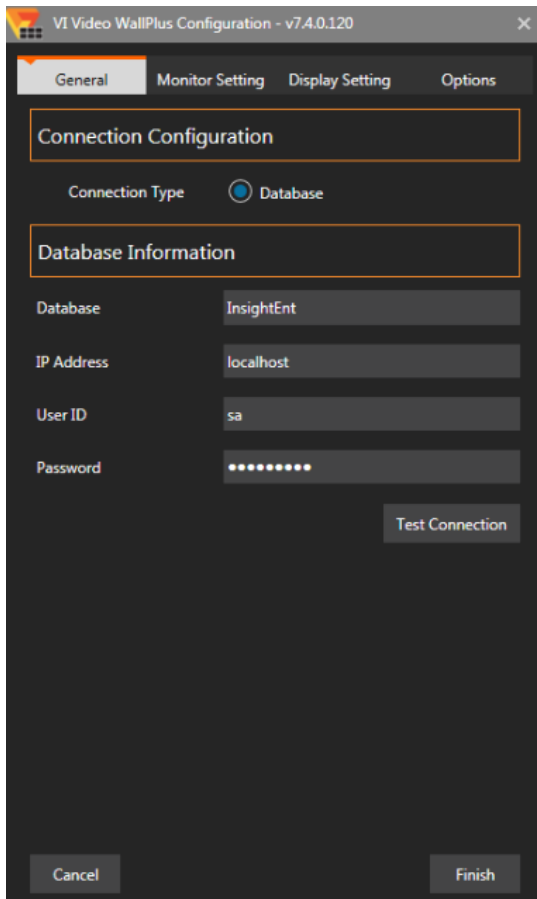
After installing VI Video WallPlus, use the Configuration option to adjust its settings according to your current platform for optimal operations and performance.

To begin the Configuration, **launch** VI Video WallPlus.
Right-click the application’s icon on the taskbar to open the Menu.



Select “**Configure**” to open the Configuration window.

4.1 GENERAL



Database Information

Database: Name of IP Server’s database.

IP Address: IP Address of the shared database used by IP Server.

User ID: Database’s User ID.

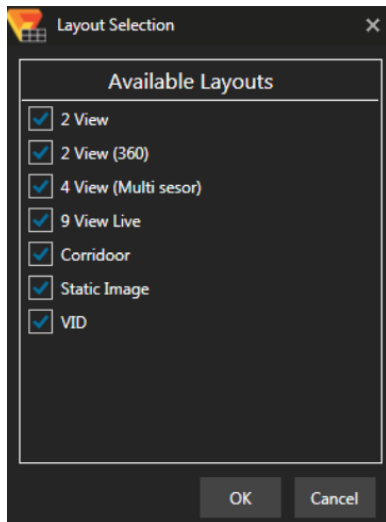
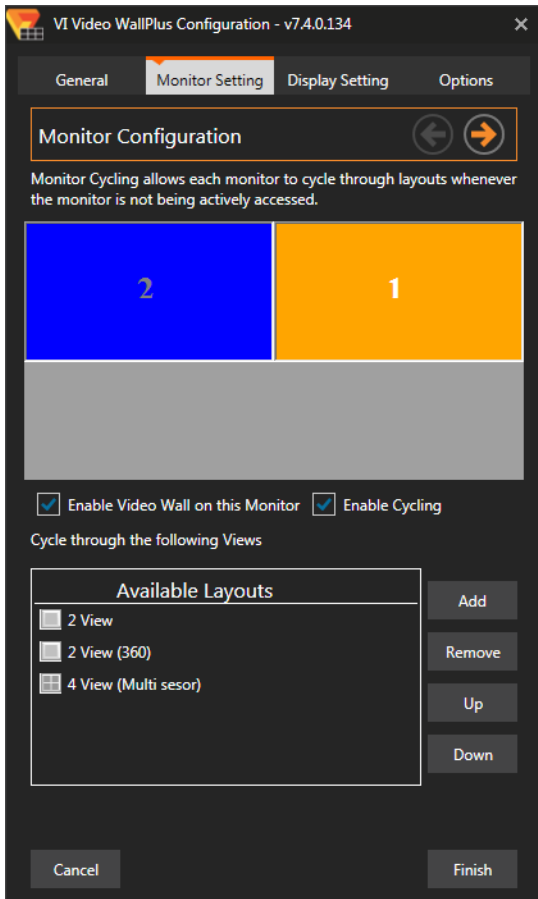
Password: Database’s Password.

Note - Before completing the Database configuration, click “**Test Connection**” to ensure all the parameters and data are correct.

The test **must be successful** in order to proceed to the next step.

Click **Finish** to apply the changes or **Cancel** to exit.

4.2 MONITOR SETTING



Monitor Configuration

Before configuring, select a monitor by clicking:



Enable Video Wall on this Monitor - Click checkbox if the specified monitor is selected.

Enable Cycling - Click checkbox if added layouts will be shown as Cycling.

Cycle through the following Views - This section allows setting up specific layouts. Use “Add” and “Remove” to select which layouts will be displayed on VI Video WallPlus. Use “Up” and “Down” to change the cycling order.

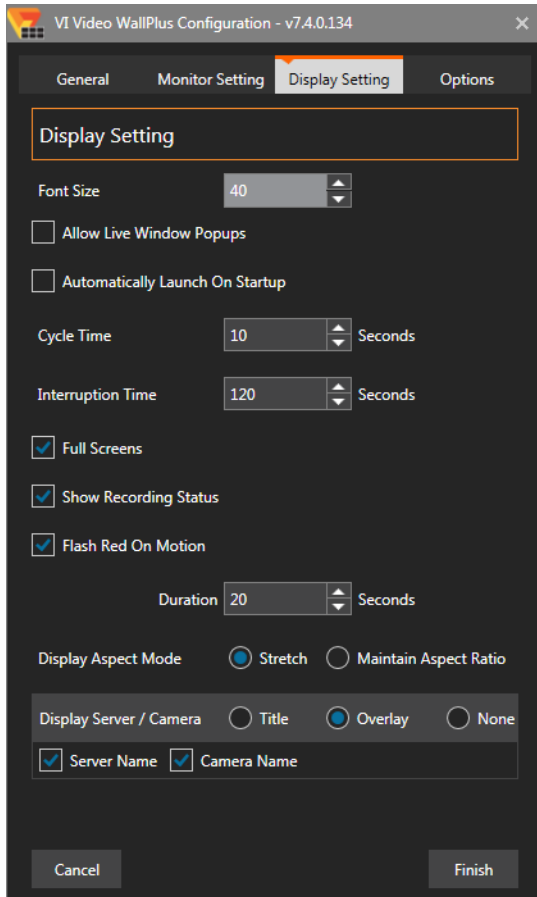
Click **Finish** to apply the changes or **Cancel** to exit.

Available Layouts

When clicking “Add”, a window will show the available layouts to be selected for the Monitor settings.

Click **OK** to close the window and apply the changes or **Cancel** to exit.

4.3 DISPLAY SETTING



Display Settings

Font Size - Adjusts the Font Size for the Server/Camera name. This option is useful on larger settings, where monitors are positioned further from the viewer.

Allow Live Windows Popups - Enables Rules that activate Live Pop-up windows on the display.

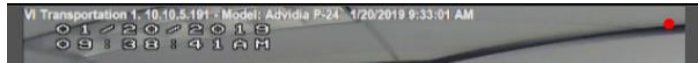
Automatically Launch On Startup - Ensures that the application launches when the user logs in to the workstation.

Cycle time - Defines the time interval between each change of layout while using Monitor Roaming.

Interruption Times - When the user drags and drops a camera, or layout onto a specific monitor, the roaming will pause. This value determines the length of the pause in seconds.

Full Screens - Hides the windows title bar when enabled.

Show Recording Status - Enables a red circle on the display when recording is on..



Flash Red On Motion - When motion is detected, the camera that detected motion will be highlighted with a red circle.

Duration - Time to highlight a camera that detected motion.

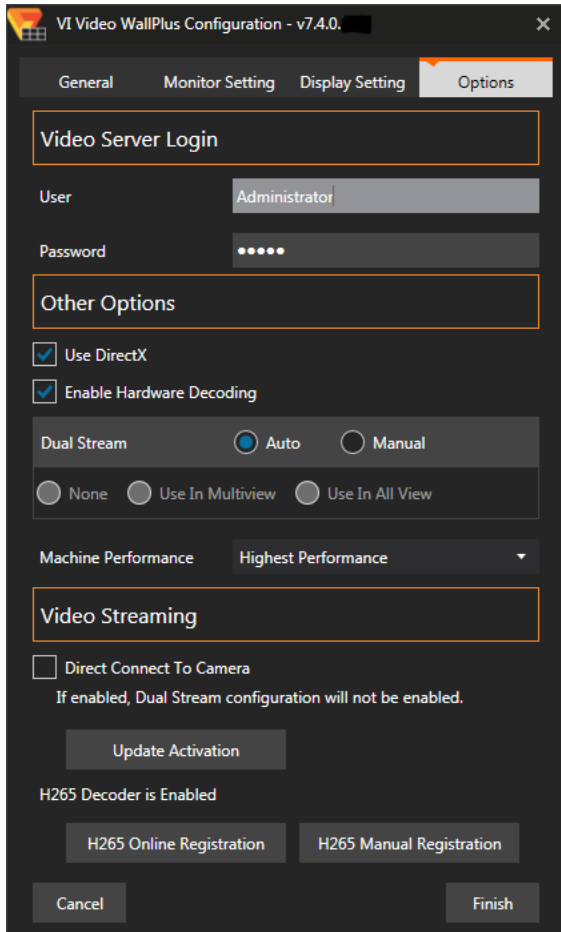
Display Aspect Mode - Configuration of the displayed aspect mode. Options are: **Stretch** and **Maintain Aspect Ratio**.

Display Server/Camera - Configuration for **Server Name** and **Camera Name** display.

- **Title:** Title can be show for each view.
- **Overlay:** The name can be shown as an overlay.
- **None:** No name is shown.

Click **Finish** to apply the changes or **Cancel** to exit.

4.4 OPTIONS



Video Server Login

This is the user information used by VI Video WallPlus when communicating with IP Servers.

Other Options

Use DirectX - Enables DirectX to manage specific video controllers within the display for cameras that require DirectX.

Enable Hardware Decoding - This feature enhances the performance of H.264 and H.265 video codecs. The checkbox is disabled when Hardware Decoding is not supported.

Dual Stream - If enabled, the second stream is utilized when enabled by camera configuration. If **"Auto"** is selected, the second stream will be utilized at 4 views or more. But if **"Use In All View"** is selected, all camera views are second stream if camera is available for second stream.

Machine Performance - Allows users to configure the performance settings for VI Video WallPlus servers.

Note - **"Highest Performance"** will switch to multithreaded streaming. It is recommended for high-end machines only.

Video Streaming

Direct Connect To Camera - If enabled, all views will be obtained directly from the cameras. In this case, Dual Stream configuration will not be enabled.

Update Activation - Opens Activation form.

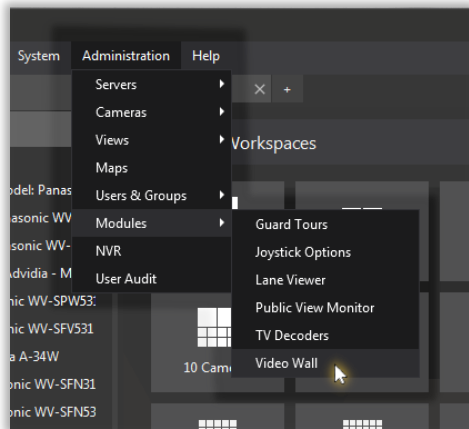
H.265 Registration - If H.265 decoder is enabled, registration can be either Online or via Manual form.

Click **Finish** to apply the changes or **Cancel** to exit.

5. INTERACTION WITH VI MONITORPLUS

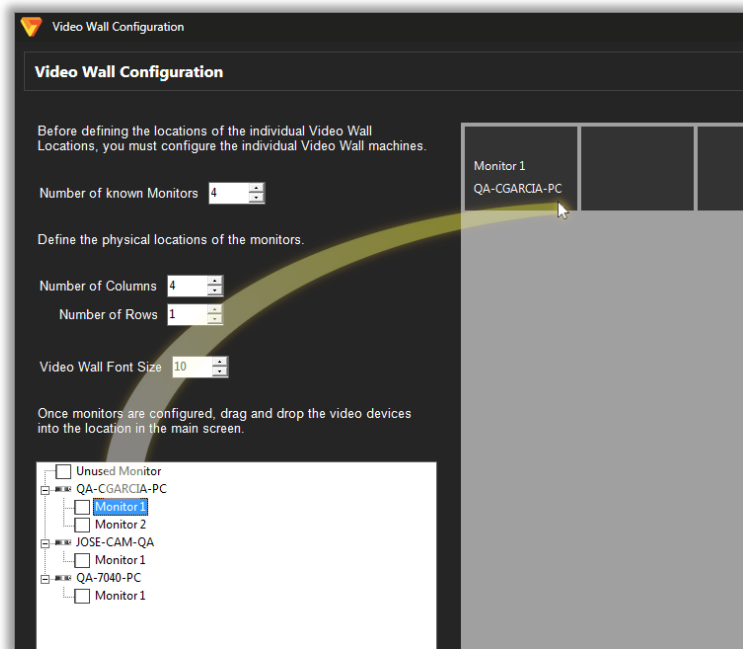
VI MonitorPlus 7+ features an easy to use interface to interact with VI Video WallPlus. The option to “Send to Video Wall” is available on several modules and instances.

5.1 VIDEO WALL CONFIGURATION



To configure Video WallPlus from VI MonitorPlus, it is necessary to *define the individual Video Wall machines* and, afterwards, the locations for each machine.

In VI MonitorPlus, open the “Administration” option from the Main Menu, then click on “Modules” and select “Video Wall”.



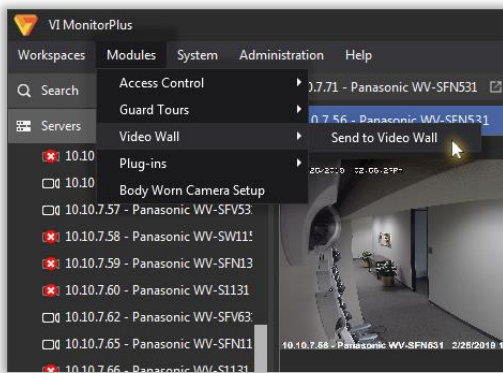
In the **Video Wall Configuration** window, enter the values for the following fields:

- **Number of known Monitors.**
- Physical locations of the monitors: **# of Columns** and **Rows.**
- **Video Wall Font Size.** (adjustable based on the distance of the Video Wall from the audience).

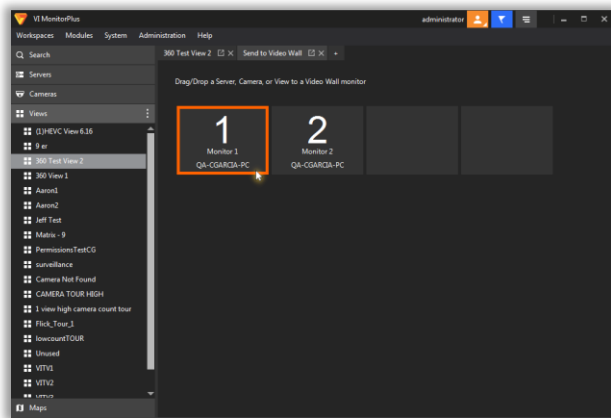
Once monitors are configured, **drag and drop** the video devices on the bottom left panel **into the main screen’s locations.**

You can add as many devices as defined by the Number of known Monitors variable.

5.2 SEND FROM MODULES

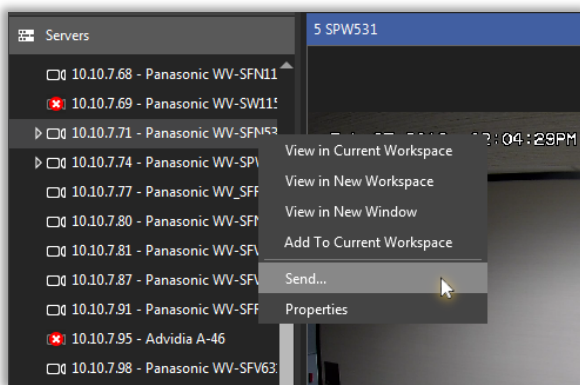


Once working on the desired **Server**, **Camera** or **View**, open the “**Modules**” option from the Main Menu, then hover on “**Video Wall**” and click on “**Send to Video Wall**”.



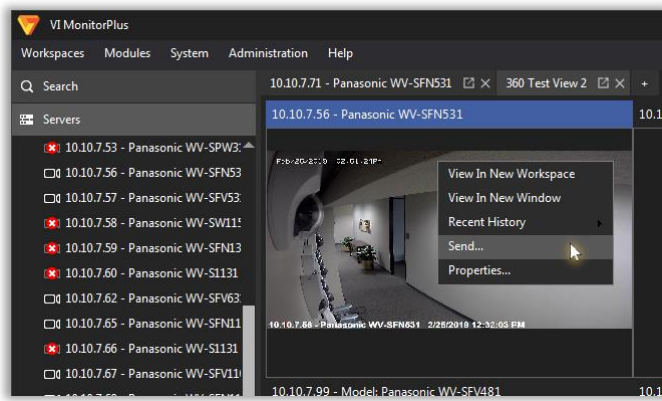
In the “**Send to Video Wall**” window, drag and drop a server, camera or view to the desired Video Wall monitor.

5.3 SEND FROM SERVER, CAMERA OR VIEW

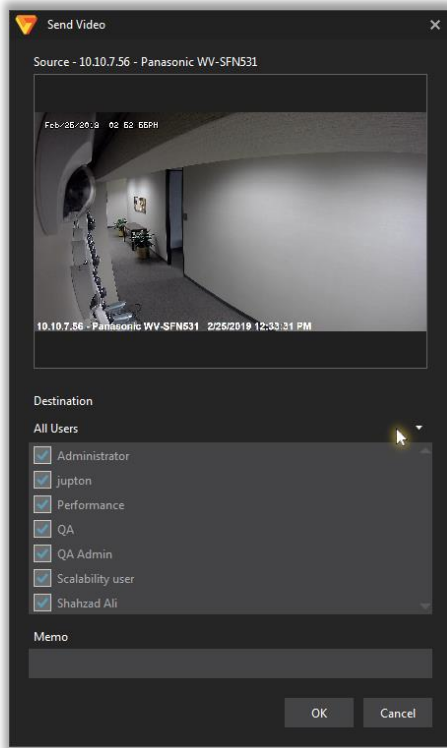


Live video can be sent to Video WallPlus **from the VI MonitorPlus’ Left Tree** by **right-clicking** on the desired Camera or Server or View.

Once the pop-up menu opens, click on “**Send**”.

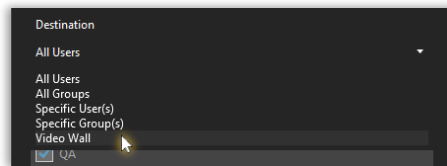


Also, the “Send” option can be invoked by right-clicking on a specific **Camera streaming** and opening the floating menu.

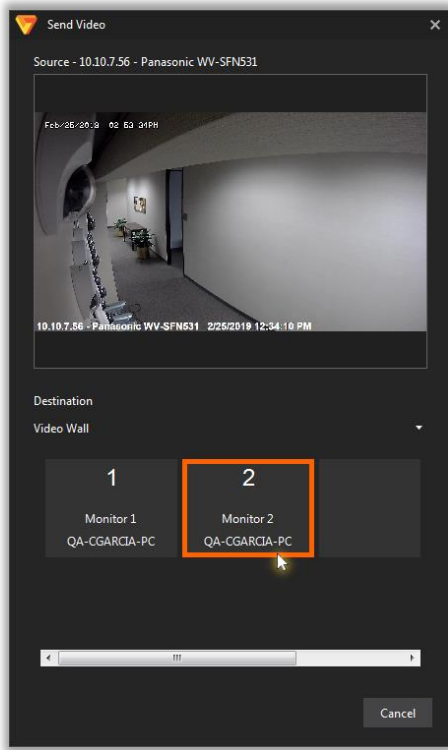


After clicking on the “Send” option, the “Send Video” window will open.

By default, the Destination to send the video will be “All Users”; To select a **Video Wall**, click on the “All Users” title to open the drop-down list of options.



In the drop-down list, click on “Video Wall”.



Click on the desired **Video Wall monitor** (orange box) to drop the selected video and to end the operation, or **"Cancel"** to exit.

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