

Quick Start Guide

GV-VMS V17.1



Thank you for purchasing GV-VMS. This guide is designed to assist the new user in getting immediate results from the GV-VMS. For advanced information on how to use the GV-VMS, please refer to *GV-VMS User's Manual* online.



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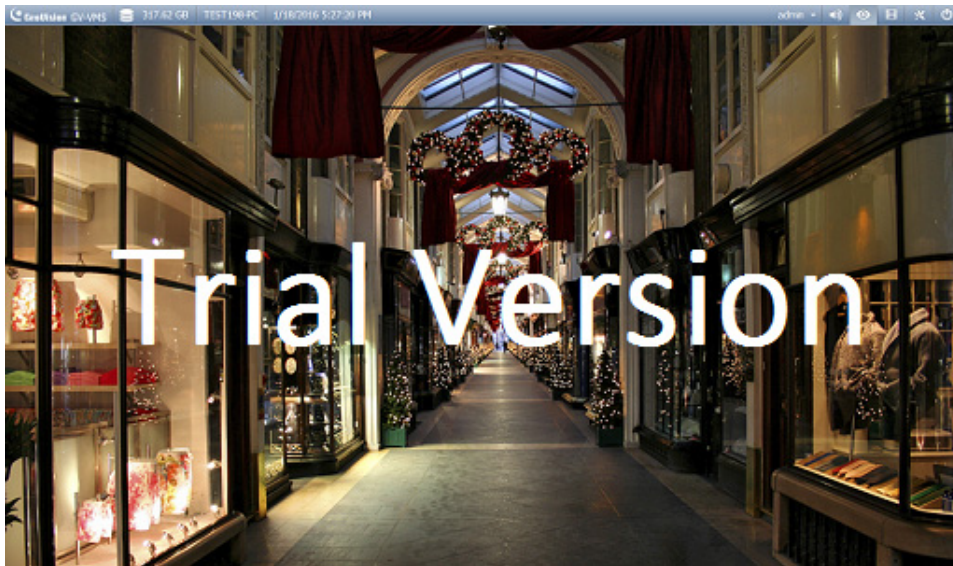
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GV-VMS Trial Version

GV-VMS is a comprehensive video management system that records up to 64 channels of GeoVision and/or third-party IP devices. GeoVision offers a **60-day trial** period that allows you to connect to **16 channels of third-party IP devices** without license. A “Trial Version” watermark will appear on the live view and recorded files for the 16 channels of third-party IP devices.




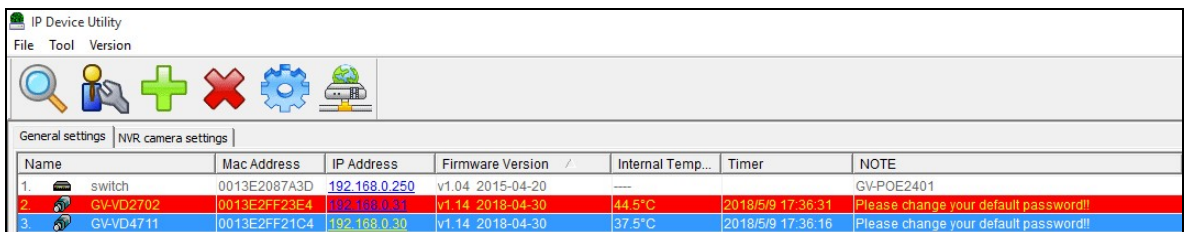
Note:

1. If you insert a dongle for third-party IP devices, the dongle license will override the trial version and the 16 trial channels will no longer be supported.
 2. Currently, you cannot remotely access the trial channels using remote applications such as GV-Control Center...etc.
-

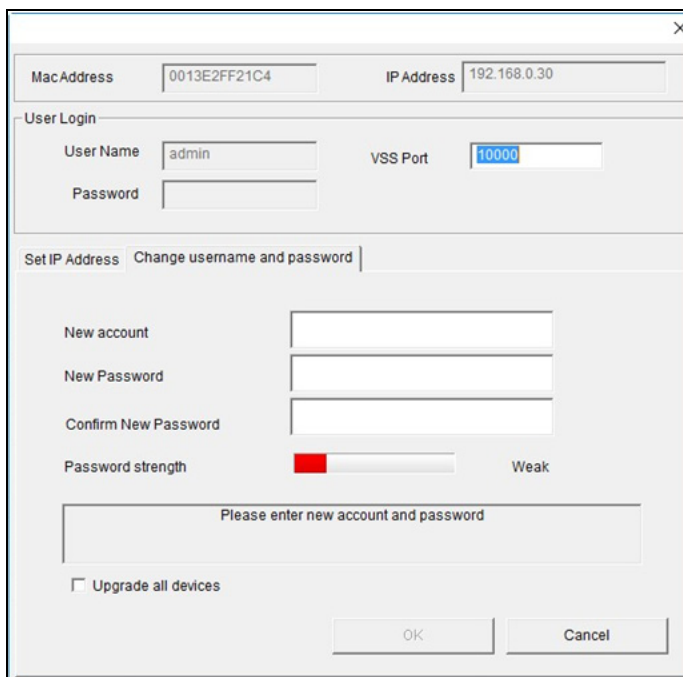
Creating GV-IP Camera's Login Credentials

In order to connect to GV-VMS, after purchasing a new GV-IP camera or factory resetting your GV-IP camera, you need to set up a login username and password for that camera.

1. Download and install GV-IP Device Utility from [GeoVision's Website](#).
2. On the GV-IP Device Utility window, click the **Search**  to search for your GV-IP camera.



3. Double-click your GV-IP camera in the GV-IP Device Utility list. This dialog box appears.



4. Click the **Change Username and Password** tab to type a new username and password.
5. Optionally click **Upgrade all devices** to use the same username and password on all other devices.

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Chapter 1 Introduction

Welcome to the *GV-VMS Quick Start Guide*. In this quick guide, you will learn about the basic settings of GeoVision Video Management System. For complete instructions, refer to *GV-VMS User's Manual*.

1.1 License

GV-VMS supports connection with up to 64 IP devices. You can connect up to 32 channels of GV-IP Devices for free. If you need to connect more than 32 channels of GV-IP Devices or connect with third-party IP devices, license is required.

Supported Devices	Channels	License
GV IP Devices Only	32 ch	No license required.
	64 ch	GV-VMS Pro license required, 32 ch per license.
GV + 3rd-Party IP Devices	16 ch	Trial Version: 16 channels of 3 rd -Party IP devices.
	32 ch	3rd-Party license required, in increments of 1 ch.
	64 ch	2 licenses required: <ul style="list-style-type: none"> • GV-VMS Pro license, 32 ch per license. • 3rd-Party license, in increments of 1 ch.
<p>Note: GV-USB Dongle comes in internal and external dongles. It is recommended to use the internal GV-USB Dongle to have the Hardware Watchdog function, which restarts the PC when Windows crashes or freezes.</p>		

For the list of supported third-party IP camera models, please visit [GeoVision's website](#).

1.2 Options

The following optional devices are available to expand your GV-VMS's capabilities and versatility. Contact your dealer for more information.

Optional Devices	Description
GV-IR Remote Control	GV-IR Remote Control allows you to control GV-VMS at the maximum operation distance of 7 m (22.97 ft).
GV-NET I/O Card V3.2	GV-NET/I/O card V3.2 provides 4 inputs and 4 relay outputs. It supports both DC and AC output voltages and provides a USB port as well.
Internal USB Dongle	The USB dongle can provide the Hardware Watchdog function to the GV-VMS by restarting the computer when Windows crashes. You need to connect the dongle internally on the motherboard.
GV-COM V3	GV-COM V3 can add 1 RS-232 / RS-485 serial port through the GV-VMS's USB port.
GV-IO Box 4E	GV-IO Box 4E provides 4 inputs and 4 relay outputs. It supports both DC and AC output voltages, PoE, TCP / IP and RS-485 port for PC connection.
GV-IO Box (4 Ports)	GV-IO Box 4 Ports provides 4 inputs and 4 relay outputs, and supports both DC and AC output voltages. A USB port is also provided for PC connection.
GV-IO Box (8 Ports)	GV-IO Box 8 Ports provides 8 inputs and 8 relay outputs, and supports both DC and AC output voltages. You can connect the unit to the PC either by using its USB port or through network by using its Ethernet module.
GV-IO Box (16 Ports)	GV-IO Box 16 Ports provides 16 inputs and 16 relay outputs, and supports both DC and AC output voltages. You can connect the unit to the PC either by using its USB port or through network by using its Ethernet module.
GV-Joystick V2	GV-Joystick V2 allows you to easily control PTZ cameras. It can be either plugged into the GV-VMS for independent use or connected to GV-Keyboard.
GV-Keyboard V3	GV-Keyboard V3 is used to program and operate GV-VMS and PTZ cameras. Through RS-485 configuration, it can control up to 36 GV-VMS. In addition, you can connect PTZ cameras directly to the keyboard for PTZ control.

1.3 Minimum System Requirements

Below are the recommended PC requirements for connecting GV-VMS with 32 and 64 channels of GV and 3rd party IP cameras (dual streams).

	GV-VMS (Up to 32 Channels)	GV-VMS Pro (Up to 64 Channels)
OS	64-bit Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012 R2 / Server 2016	
CPU	4th Generation i3-4130, 3.4 GHz	4th Generation i7-4770, 3.4 GHz
Memory	8 GB RAM	16 GB RAM
Graphic Card	To obtain the maximum frame rate possible, please see the GPU Decoding Specifications here .	
Note:		
<ol style="list-style-type: none"> 1. To use the fisheye dewarping function, the graphic card must support DirectX 10.1 or above. 2. H.265 decoding requires 6th Generation Intel Desktop Processor (Skylake) or above. 		

1.4 Minimum Network Requirements

The data transmitting capacity of GV-VMS depends on the number of Gigabit connections available. The numbers of Gigabit network cards required to connect **64** channels are listed below according to the resolution and codec of the source video.

Codec	Resolution	Bitrate Used (Mbps)	Total FPS for 64 ch	Gigabit Network Cards Required	Max. Channels Supported per Network Card
H.264	1.3 MP	5.05	1920	1	Max. 64 ch / card
	2 MP	7.01	1920	1	Max. 64 ch / card
	3 MP	10.48	1280	1	Max. 64 ch / card
	4 MP	11.65	960	2	Max. 50 ch / card
	5 MP	16.48	640	2	Max. 38 ch / card
	8 MP	17.14	1600	2	Max. 38 ch / card.
	12 MP	16.67	960	2	Max. 38 ch / card
H.265	3 MP	7.06	1920	1	Max. 64 ch / card
	4 MP	9.44	1600	1	Max. 64 ch / card
	5 MP	7.52	1920	1	Max. 64 ch / card
MJPEG	1.3 MP	32.36	1920	3	Max. 22 ch / card
	2 MP	44.96	1920	4	Max. 16 ch / card
	3 MP	38.73	1280	4	Max. 18 ch / card
	4 MP	40.35	960	4	Max. 17 ch / card
	5 MP	30.48	640	3	Max. 22 ch / card
	8 MP	58.52	1600	6	Max. 12 ch / card
	12 MP	65.98	960	6	Max. 11 ch / card
Note: The network requirements may vary depending on the bit rate of the streams.					

1.5 Installing GV-VMS

Before You Start

For optimal performance of your system, it is important to follow these recommendations before installing the GV-VMS:

- It is strongly recommended to use separate hard disks. One is for installing Windows OS and GV-VMS software, and the other is for storing recorded files and system logs.
- When formatting the hard disks, select NTFS as the file system.
- GV-VMS is a multi-channel video recording system. With normal use of the system, the drive containing video files will become fragmented. This is because GV-VMS constantly stores video files of multi channels simultaneously, and video files will be scattered all over the drive. It is not necessary to regularly perform disk defragmentation. Since GV-VMS software and video files are stored on separated hard disks, the performance of GV-VMS will not be affected.
- Since the size of transmitted data from IP cameras may be quite large and reach beyond the transfer rate of a hard disk, you should note the total of recording frame rates that you can assign to a single hard disk, as listed below:


Frame rate limit in a single hard disk

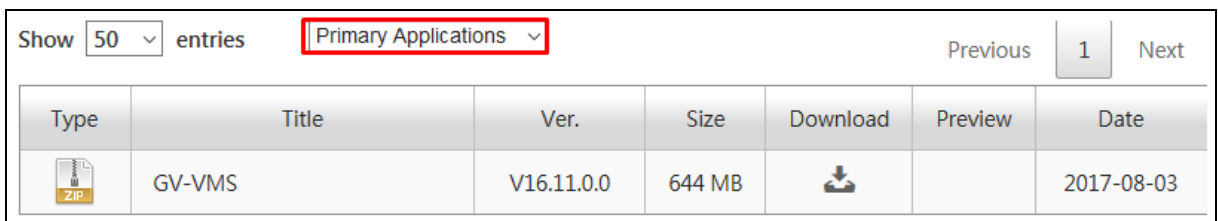
Video Resolution	H.264		H.265		MJPEG	
	Frame Rate	Bit Rate	Frame Rate	Bit Rate	Frame Rate	Bit Rate
12 MP	330 fps	14.47 Mbit/s	N/A	N/A	56 fps	65.98 Mbit/s
8 MP	660 fps	14.13 Mbit/s	N/A	N/A	96 fps	58.52 Mbit/s
5 MP	220 fps	16.48 Mbit/s	660 fps	6.73 Mbit/s	80 fps	30.4 Mbit/s
4 MP	330 fps	11.65 Mbit/s	550 fps	7.74 Mbit/s	105 fps	40.53 Mbit/s
3 MP	440 fps	10.48 Mbit/s	660 fps	5.35 Mbit/s	140 fps	38.67 Mbit/s
2 MP	660 fps	7.01 Mbit/s	N/A	N/A	210 fps	44.93 Mbit/s
1.3 MP	660 fps	5.05 Mbit/s	N/A	N/A	300 fps	32.26 Mbit/s

Note: The data above was determined using the bit rate listed above and hard disks with average R/W speed above 110 MB/s.

The frame rate limit is based on the resolution of video sources. The higher video resolutions, the lower frame rates you can assign to a single hard disk. In other words, the higher frame rates you wish to record, the more hard disks you need to install. For the information of recording frame rates, you may consult the user's manual of the IP camera that you wish to connect to.

Installing GV-VMS

1. To download GV-VMS, go to the Download page of [GeoVision Website](#):
2. To install GV-VMS, find the **Primary Applications** section, click the **Download** icon of **GV-VMS**  and follow the instructions to complete installation.






Type	Title	Ver.	Size	Download	Preview	Date
	GV-VMS	V16.11.0.0	644 MB			2017-08-03

Figure 1-1

3. If you are using a USB dongle, insert the dongle to your computer. The GV-USB dongle is needed if you want to connect to more than 32 channels of IP devices or to third-party IP devices.
4. To install USB driver, find the **Driver, FW, Patch** section and click the **Download** icon  of **GV-Series Card Driver / GV-USB Device Driver**.

If you are using the GV-USB dongle, verify that the driver is installed correctly after the steps above. Go to Windows Device Manager and expand **DVR-Devices**. You should see the **GV-Series USB Protector**.



Figure 1-2

1.6 Uninstalling and Upgrading GV-VMS

GeoVision will periodically release software updates on our website. **Before installing software upgrade, be sure to uninstall GeoVision Software first.** By default, GeoVision software and log files are stored on one drive, while video files are stored on a different drive. Uninstalling GV-VMS will not remove the video, log, and setting files previously saved in the computer.

To uninstall the GV-VMS, follow these steps:

1. Close any open programs because your computer will restart during the uninstalling process.
2. Click the **Start** button, click **Control Panel**, and then click **Uninstall a Program** under Programs.
3. In the list of currently installed programs, select **GV-VMS**, and then click **Uninstall/Change**.

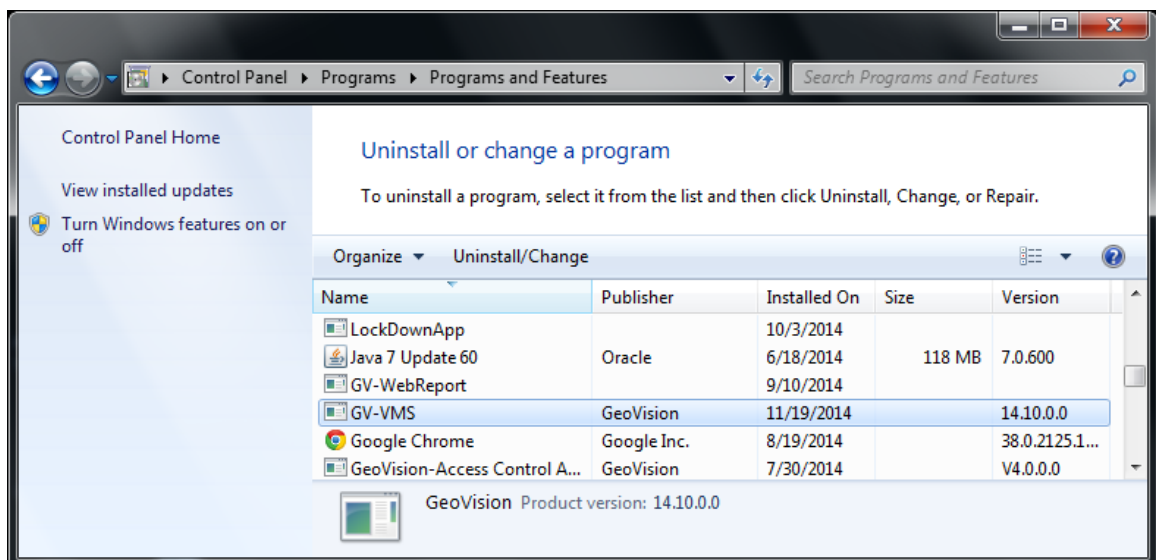


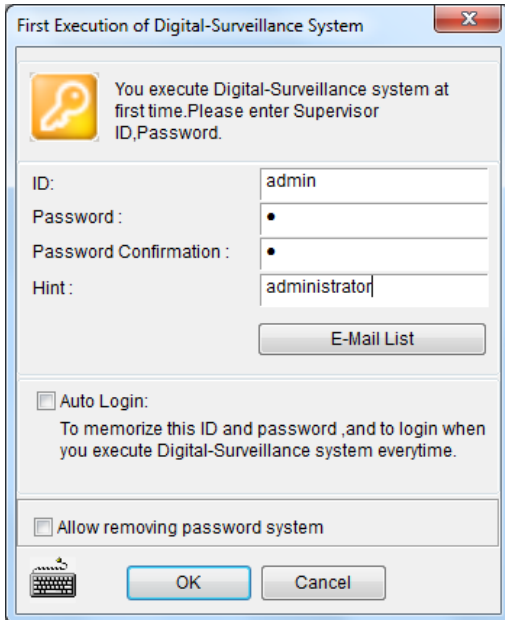
Figure 1-3

4. When you are prompted to confirm the program removal, click **Yes**.

To upgrade, download the newest GV-VMS from [GeoVision's website](#) and re-install on your computer. For details, see *[Installing GV-VMS]*, 1.5 *Installing GV-VMS* in this Quick Start Guide.

1.7 Running GV-VMS

1. To start the system, double-click the **GV-VMS**  icon on desktop or in the folder where you have installed it.
2. Type your login information.



First Execution of Digital-Surveillance System

You execute Digital-Surveillance system at first time. Please enter Supervisor ID, Password.

ID: admin

Password: •

Password Confirmation: •

Hint: administrator

E-Mail List

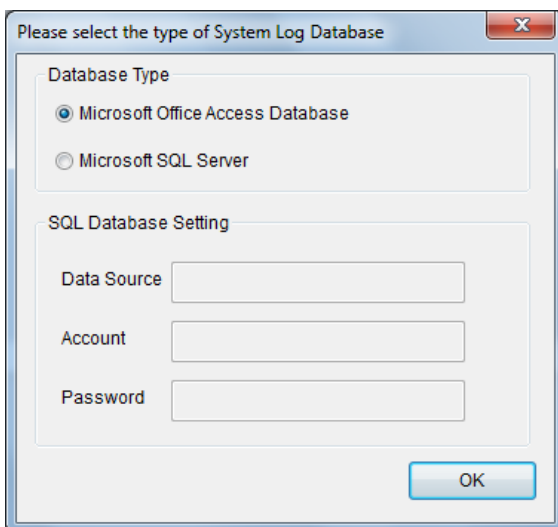
Auto Login:
To memorize this ID and password, and to login when you execute Digital-Surveillance system everytime.

Allow removing password system

OK Cancel

Figure 1-4

3. Click **E-Mail List** to set up an e-mail address so that you can recover a forgotten password when needed.
4. Click **OK**. The main screen of GV-VMS and a dialog box appears.
5. To choose how to save your system database, select **Microsoft Office Access Database** or select **Microsoft SQL Server** and fill out the required fields.



Please select the type of System Log Database

Database Type

Microsoft Office Access Database

Microsoft SQL Server

SQL Database Setting

Data Source

Account

Password

OK

Figure 1-5

In the main screen of GV-VMS, the main setting buttons are located in the top-right corner. When logging in for the first time, the **Automatic Setup** dialog box will appear to help you quickly add cameras to the GV-VMS. Refer to the next section for details.



Figure 1-6

Chapter 2 Getting Started

2.1 Adding IP Cameras to GV-VMS

When logging in for the first time after GV-VMS is installed, the **Automatic Setup** dialog box appears automatically. Follow the steps below to add IP cameras.

1. Click **Automatic Setup** to see the list of IP cameras detected on the LAN.

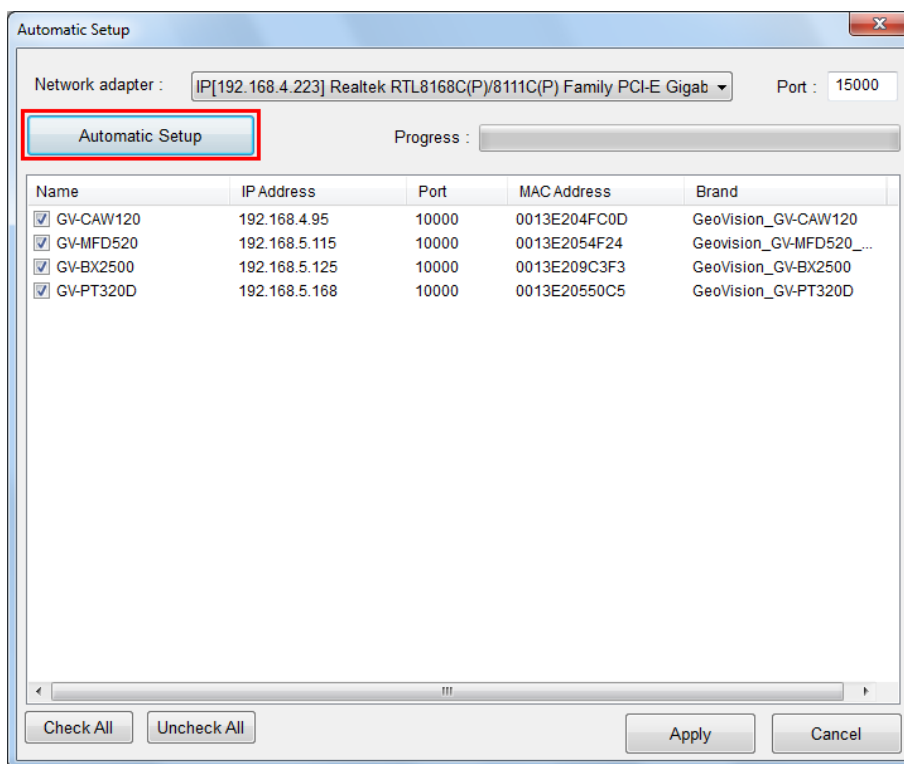


Figure 2-1

2. The default login information for cameras is **admin / admin**. Double-click the camera to type different ID and password in the dialog box below if needed.

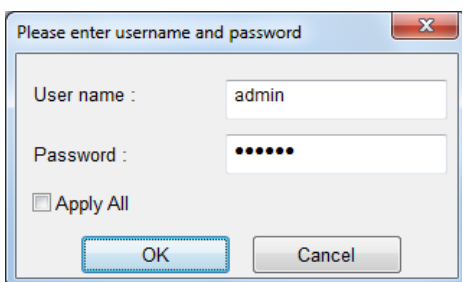


Figure 2-2

3. Make sure the cameras you want to add are selected and click **Apply**. The cameras added are now listed in the IP Device List.

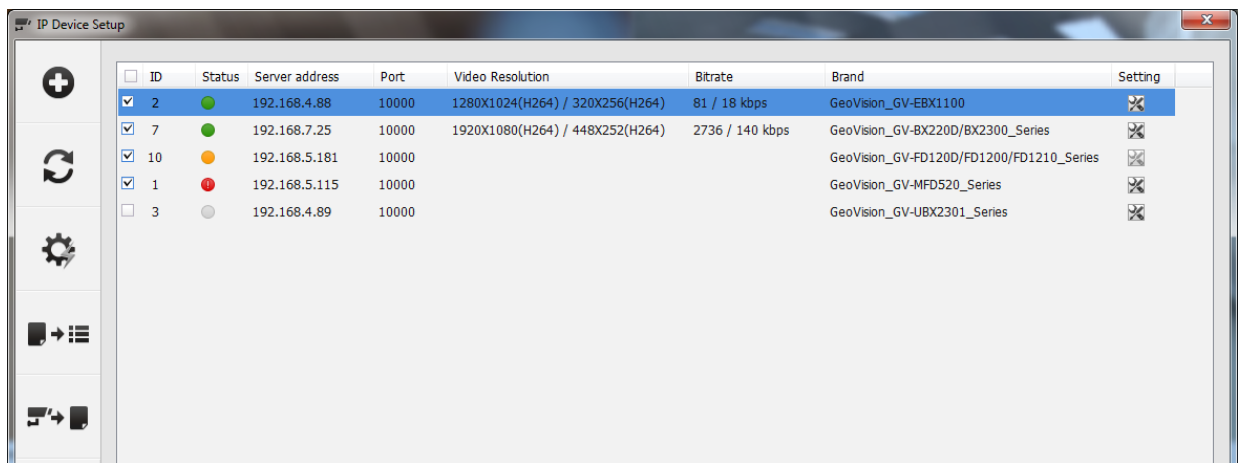


Figure 2-3

Status icons available:

- **Connected** The camera is connected.
- **Connecting** GV-VMS is trying to connect to the camera.
- **Connection Failed** Unable to connect to the camera. Place the cursor on the red icon to see the error message.
- **Inactive Camera** The camera is inactive. Click the checkbox to connect.
- Started Monitoring** The camera is under monitoring.
- Pre-Rec Enabled** Pre-recording is enabled.




4. To adjust camera settings, click the **Setup** button of a camera. Refer to 3.2 *Configuring Camera Settings* for details.
5. Close the dialog box by clicking X in the top-right corner. When adding camera for the first time, the cameras will be automatically assigned to the live view grid.

Note:

1. You can also access the IP Device Setup dialog box by clicking **Home** , selecting **Toolbar** , clicking **Configure** , selecting **Camera Install**.
2. If your camera was not detected during the scan in Automatic Setup, you can click the **Manual Setup** button to type the camera connection information manually.

2.2 Accessing Camera Live View

After adding cameras, you can access camera live view by dragging the camera in the Content List to the live view grid.

1. Click **Home** , select **Toolbar** , and select **Content List** . The Content List appears.
2. Click **Camera** in the content list to see the list of cameras added.
3. Drag the cameras to the live view grid.

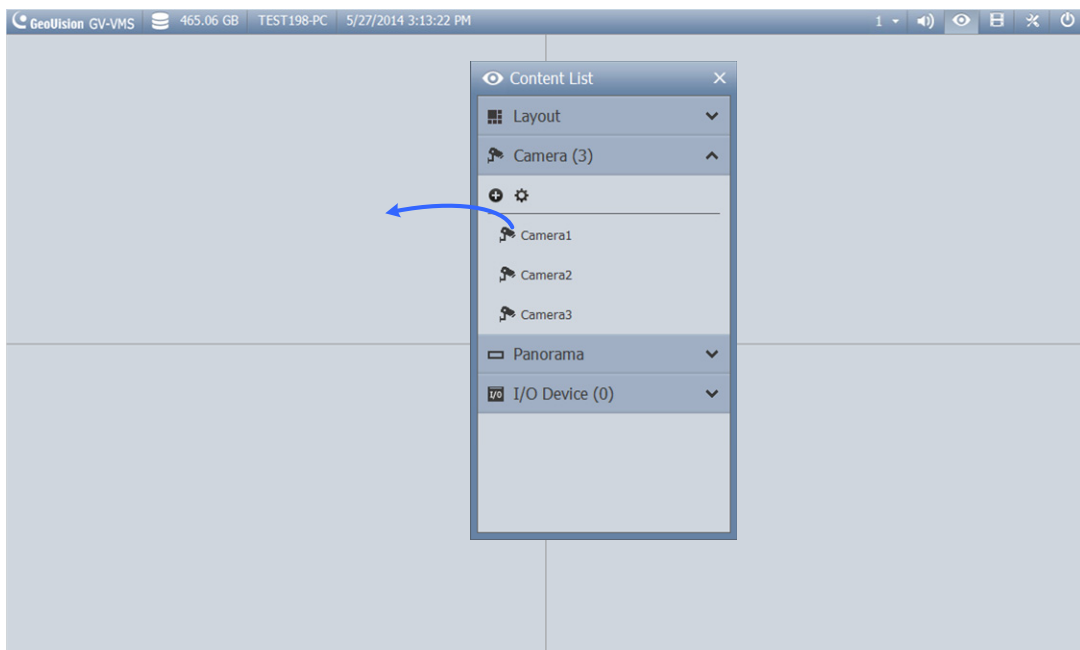




Figure 2-4

For details, see *Chapter 4 Live View* in this Quick Start Guide.

2.3 Start Monitoring

After setting up cameras and the live view, be sure to start monitoring the cameras to activate the following functions.

- Recording (See *Section 3.1*)
- Video Analysis (See *Chapter 5*)
- I/O Applications (See *Section 7.1*)

To start monitoring on connected cameras, click **Toolbar** , select **Monitor** , and select **Start All Monitoring** or select individual cameras.

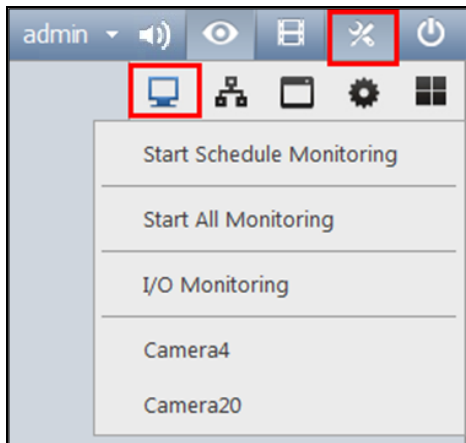





Figure 2-5

To see how to access recorded videos, refer to *Chapter 6 Video Playback and Backup* in this Quick Start Guide.

Note: If you have set a schedule, you can select **Start Schedule Monitoring**. The schedule takes precedence and the functions above will enable and disable accordingly. See *7.2 Setting Up Schedules* in this Quick Start Guide on how to set a schedule.

Chapter 3 Camera Setup

3.1 Configuring Recording Settings

After the cameras are added, you can configure the recording settings. Under **Home** , select **Toolbar** , click **Configure** , select **System Configure** and click **Record Setting**. This dialog box appears.

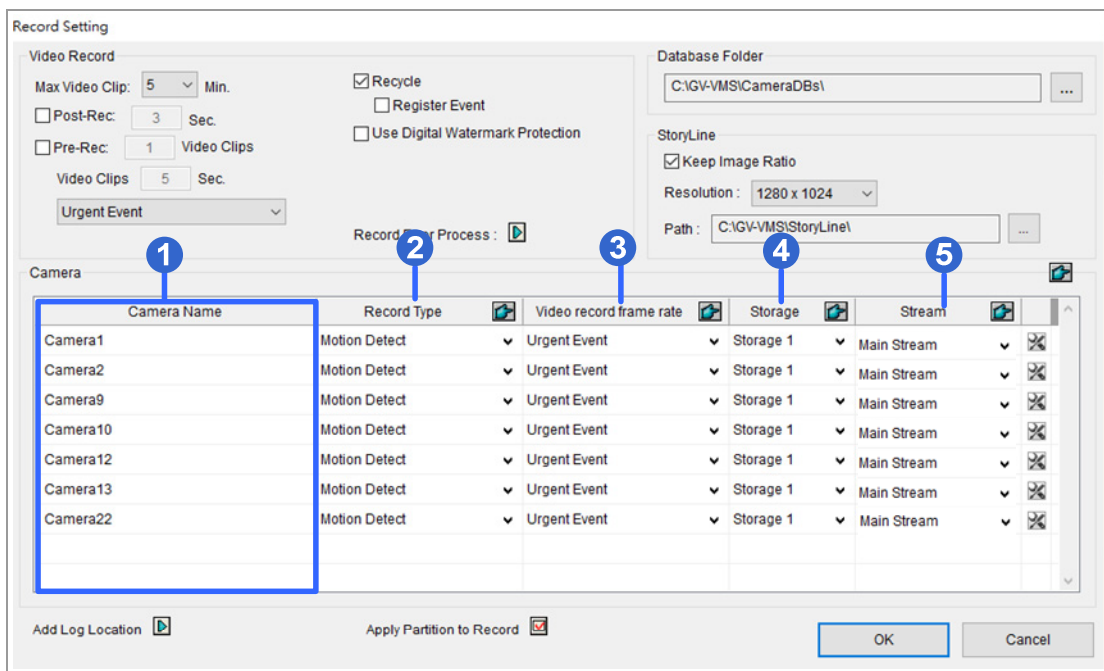


Figure 3-1

1. Select the camera you want to configure. Hold the Shift key to select multiple cameras if needed.
2. Under Record Type, select **Disable**, **Motion Detection** or **Round-the-Clock**.
3. You can set different recording frame rates. Select **Urgent Event** to record in full frame rate. Select **General Event** to record only the key frames.





The frame rate for General Event and Urgent Event can be defined in the camera's General Setting dialog box (Figure 3-4). Normally, you would set a higher frame rate for Urgent Events (e.g. full frame) and a lower frame rate for General Events (e.g. key frame only).


Note: By default, the recording mode is set to Motion Detection and the Recycle function is enabled with the Recycle Threshold set to 32 GB.

4. If there are more than one storage locations, click the Arrow button ▼ next to **Storage** to specify where to store the recorded videos. To configure storage settings, click **Add Log Location** button in the bottom-left corner.
5. Under **Stream**, select the stream(s) you want to record. Main stream recording takes up more hard drive storage than sub stream. By default, **Main Stream** is set to record high-resolution video images. Select **Sub Stream** to record lower-resolution video images. Select **Main Stream and Sub Stream** to record both streams simultaneously.

For details on Motion Detection settings, see *Setting Up Motion Detection*, Chapter 1, *GV-VMS User's Manual*.

3.2 Configuring Camera Settings

To configure camera settings such as codec and frame rates, click the **Setup** button  of an active camera in the IP Device List (**Home**  > **Toolbar**  > **Configure**  > **Camera Install**). The settings available vary depending on the camera's firmware and whether the camera is connected.

There are three setup dialog boxes in the left menu of the camera's setting dialog box: **Video Setting**, **Audio Setting**, and **General Setting**. Clicking the Finger button  will apply the setting to all the cameras.

[Video Setting]

In Video Setting, you can configure the camera name, codec, frame rate, GOP, bitrate, resolution and video attributes of the camera. Note that changes made to the Video Setting dialog box will change the settings on the IP camera.

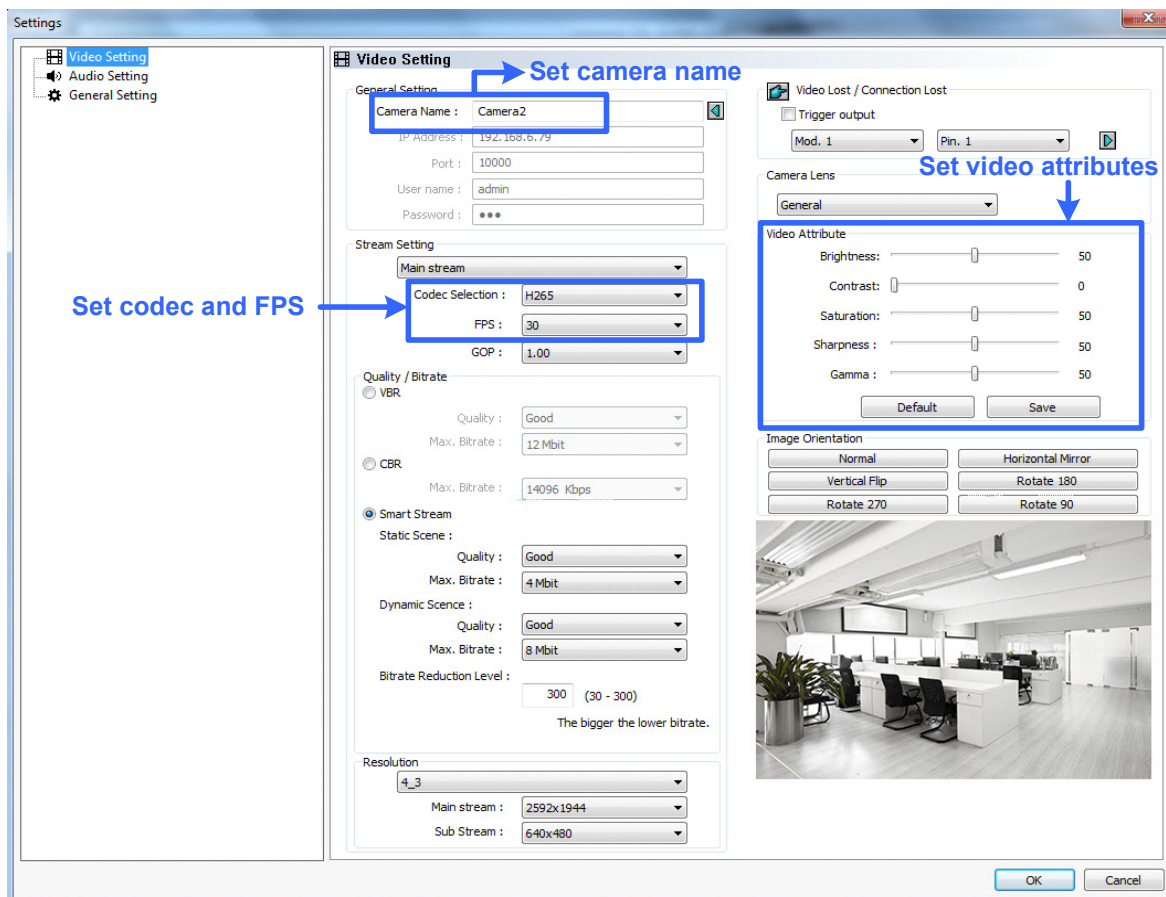


Figure 3-2

[Audio Setting]

In Audio Setting, you can enable audio functions for live view and recording, which are disabled by default.

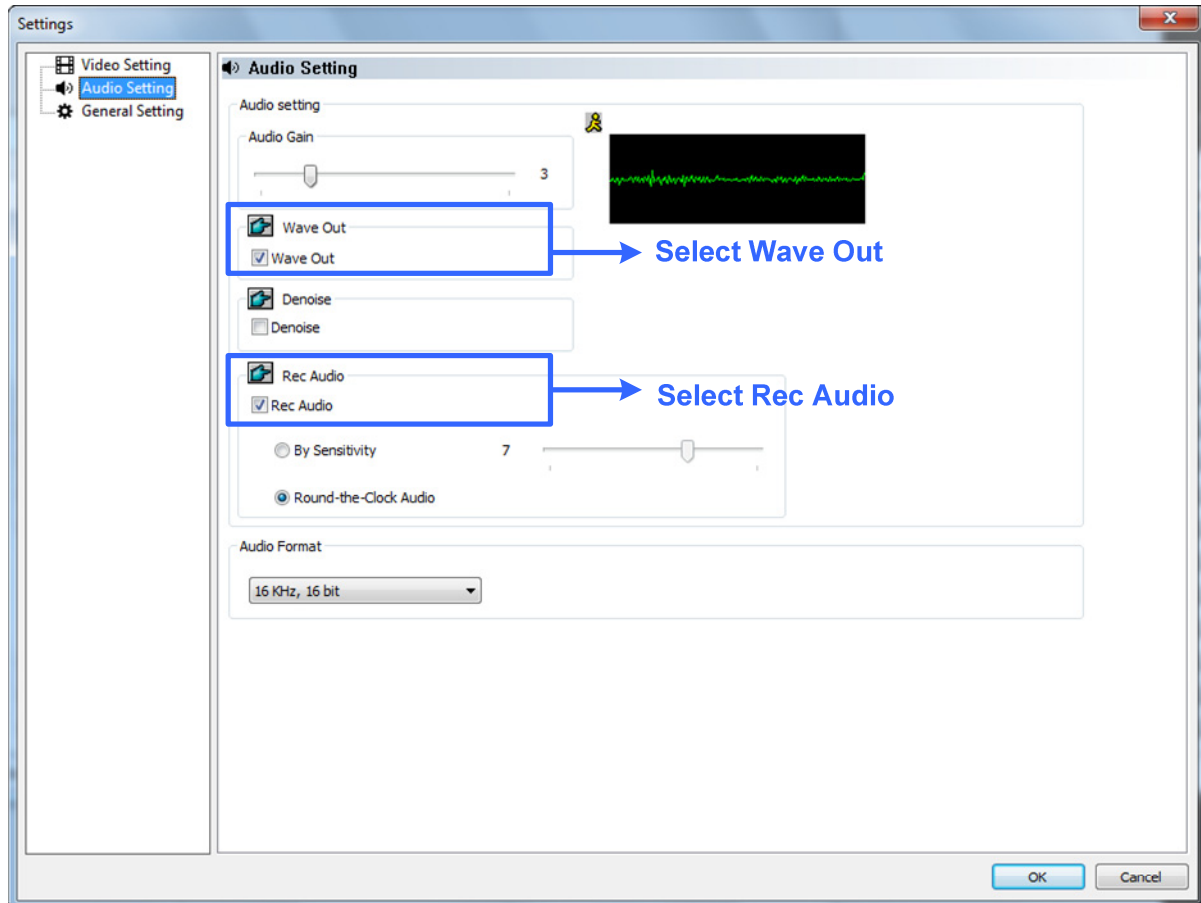



Figure 3-3

1. To enable audio in camera live view, select **Wave Out**.
2. To enable audio recording, select **Rec Audio** and then select **By Sensitivity** or **Round-the-Clock**.

Note: After Wave Out is enabled here, you can enable audio on the live view of the camera by clicking the **Tools** icon  and select **Set to Wave Out**.

[General Setting]

In General Setting, you can configure Network timeout setting, on-demand display, live view frame rate, and recording frame rate settings.

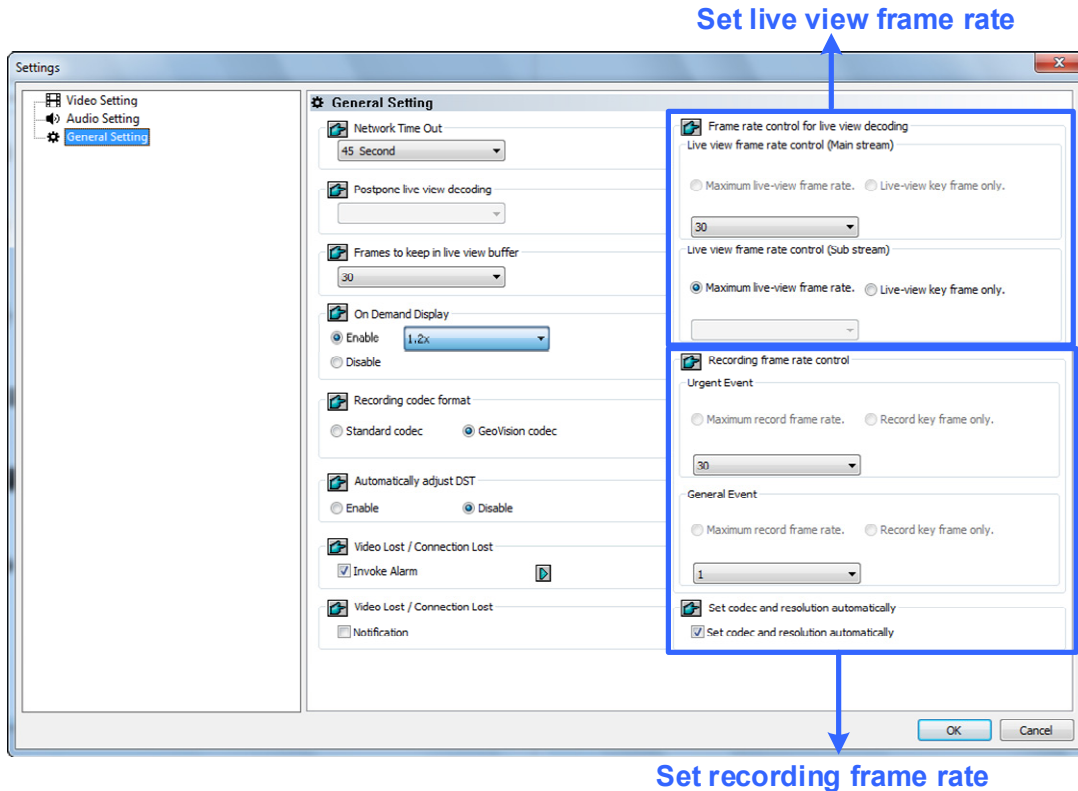


Figure 3-4

1. Under Live view frame rate control (Main / Sub Stream), you can set the live view frame rate.
 - When using **MJPEG**, every frame is a key frame, so you can specify the number of key frames to decode for live view.
 - When using **H.264 / H.265**, only 1 key frame is transmitted per Group of Pictures (GOP), so you can decode **Key frames only** to omit all intermediate frames or **Max. frame** to include key frames and all intermediate frames.

Note:

1. The **GOP** setting can be configured in the **Video Setting** dialog box (*Figure 3-2*). A GOP of 30 means that there is 1 key frame for every 30 frames, so an IP device with a frame rate of 30 fps will have 1 key frame per second.
 2. You can change the camera's main stream and sub stream to **H.264**, **H.265** or **MJPEG** in the **Video Setting** dialog box (*Figure 3-2*). After changing codec, you need to click **OK** to apply the change before switching to the General Setting. Note that changing the camera's main stream and sub stream to **H.264**, **H.265** or **MJPEG** will affect the frame rate setting options under General Setting.
-

2. Under Recording frame rate control, define the recording frame rates for **Urgent event** and **General event**. Refer to the step above for details on the options.

For example, if you are using H.264 / H.265, you can select **Max. frame** for Urgent events and select **Key frames only** for General events. Make sure the related settings are configured accordingly in the Recording Settings dialog box as described in step 5 of *3.1 Configuring Recording Settings* in this Quick Start Guide.

For details on Video Setting, Audio Setting, and General Setting, see *Configuring Individual IP Cameras*, Chapter 2, *GV-VMS User's Manual*.

Chapter 4 Live View

4.1 Arranging Live View Layouts

Follow the steps below to create new live view layouts.

1. In the Content List (**Home**  > **Toolbar**  > **Content List** ) , click **Layout**.



Figure 4-1

2. To add a layout, click the **Add** button  and click **Add Layout**. This dialog box appears.

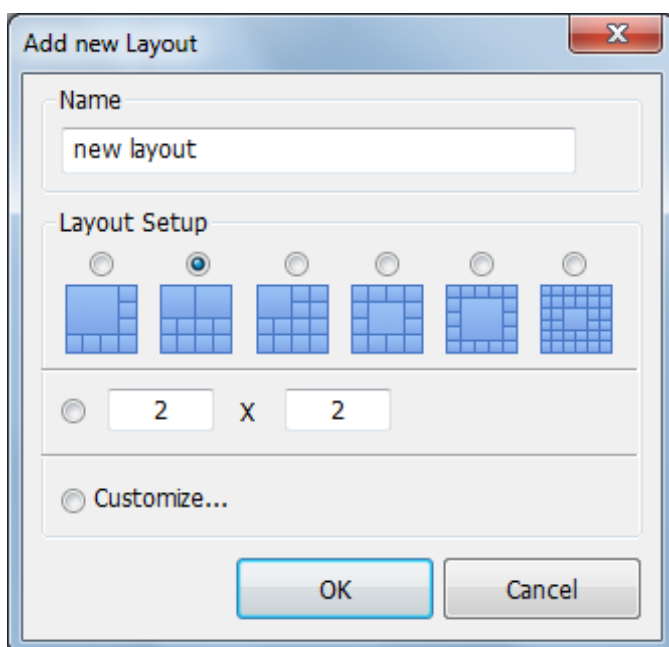


Figure 4-2

3. Name the new layout.

4. You can select an existing layout under **Layout Setup** or specify the number of live views in each row and column of the grid.
5. To create your own layout,
 - a. Select **Customize** and click **OK**.
 - b. Click the **Reset** button to specify a dimension for the grid.

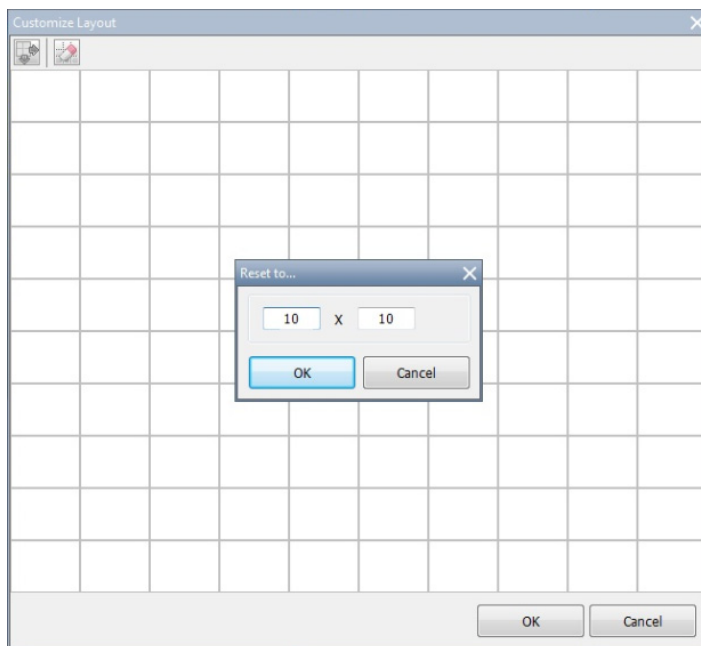


Figure 4-3

- c. Select multiple squares and click the **Merge** button to create a larger square.

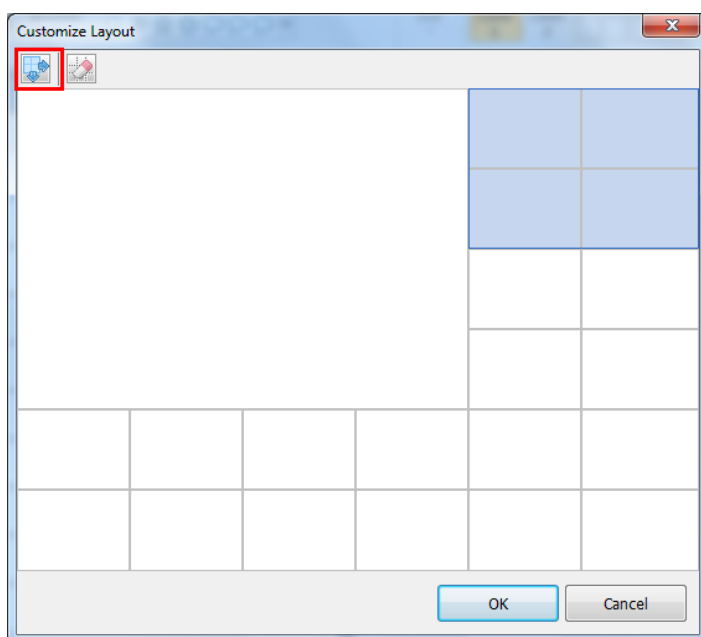


Figure 4-4

6. Click **OK** when you are done.

A message appears. Click **Yes** if you want to automatically assign the cameras to the new layout. Alternatively, you can click **Camera** in the content list and drag the cameras to the live view.

4.2 Functions on the Live View

Place the mouse cursor on the camera live view to see the icons below.

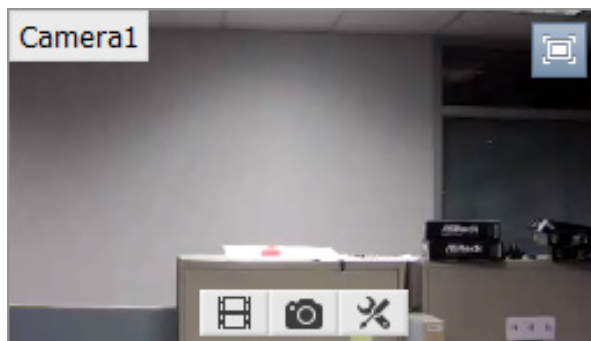






Figure 4-5

Icons	Functions
Instant Play 	Plays back the video recorded.
Snapshot 	Captures a snapshot of the current live view.
Tools 	<p>Includes the following options:</p> <ul style="list-style-type: none"> • Monitor: Starts monitoring the camera. • Talk Back Toggle: Talks to the surveillance site from the PC. Only one camera can be enabled at a time. • Properties: <ul style="list-style-type: none"> - Show Caption: Shows camera name on live view using the specified font size. - Keep Image Ratio: Locks aspect ratio of the camera image. • Close: Removes the camera from the layout grid. <p>The following options are available when related function is enabled:</p> <ul style="list-style-type: none"> • Set to Wave Out: Enables live view audio. (See [Audio Setting] in Section 3.2) • PTZ Control: Enables PTZ functions. (See Section 4.4) • Add to bookmark: Bookmarks a scene to watch later in ViewLog. This function is only available when the channel is recording.
Zoom 	Switches the live view to full screen. If there is a designated Zoom window, clicking the Zoom button will replace the live view in the zoom window instead.

The live view screen can be controlled using the actions below.

Actions	Functions
Mouse scroll	Zooms in or out on the live view.
Double-click	Displays the live view in full screen.

4.2.1 Zoom Window

You can designate a Zoom Window to quickly see a close-up view of the camera image without changing the live view layout.

1. In the Content List, select **Layout**, click **Windows** and drag **Zoom Window** to a live view grid.

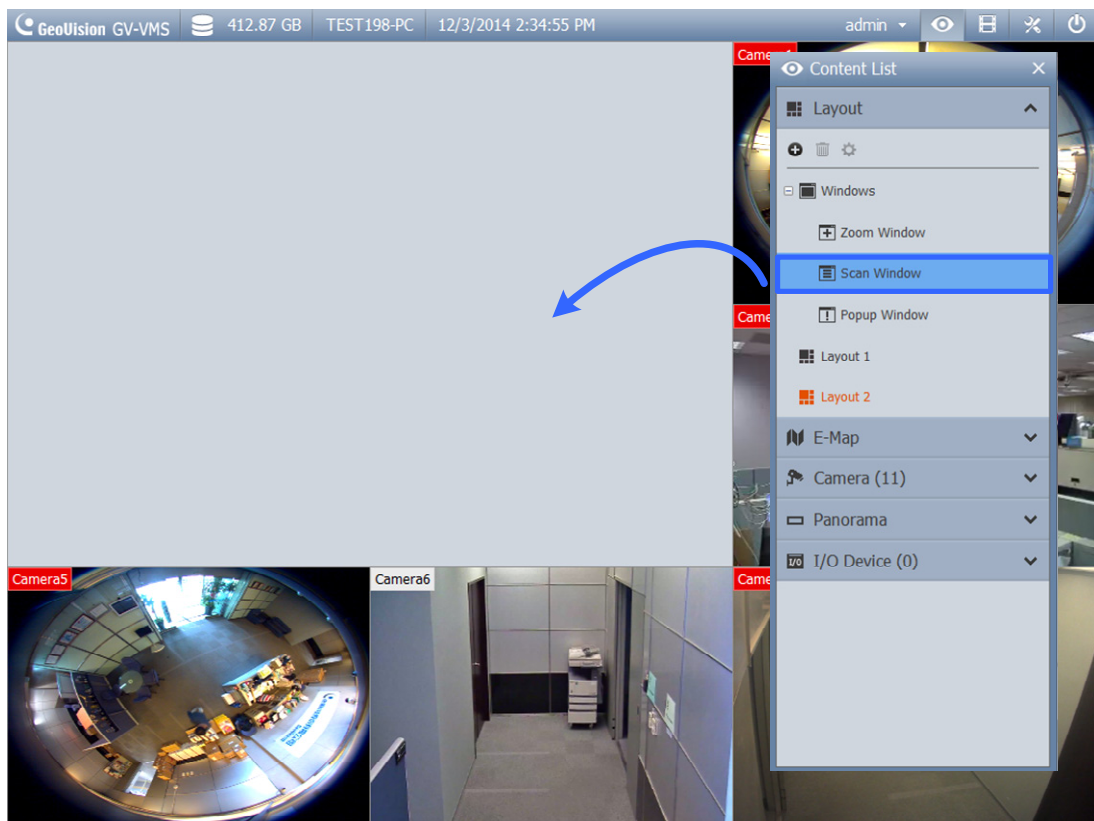



Figure 4-6

2. Move the mouse cursor to a camera live view and click the **Zoom** button  in the top-right corner. The camera live view is displayed in the Zoom Window.

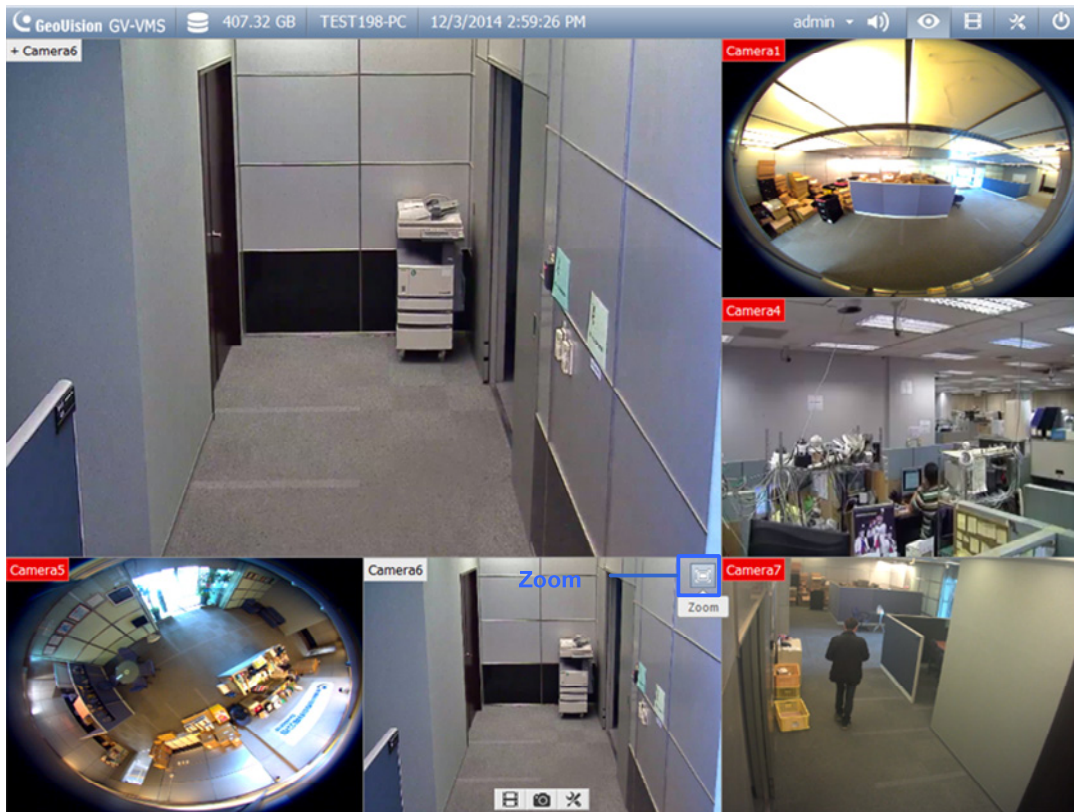



Figure 4-7

3. To remove the camera from the Zoom window, place the cursor on the live view, click the **Tools** icon  and select **Close**. To change the live view grid back to a normal window, repeat this step to close the Zoom Window.

4.2.2 Scan Window

You can assign multiple cameras to a Scan Window, and each camera will be shown in sequence for the Scan Interval specified.

1. In the Content List, select **Layout** and drag **Scan Window** to a live view square.
2. Drag multiple cameras into the Scan Window.

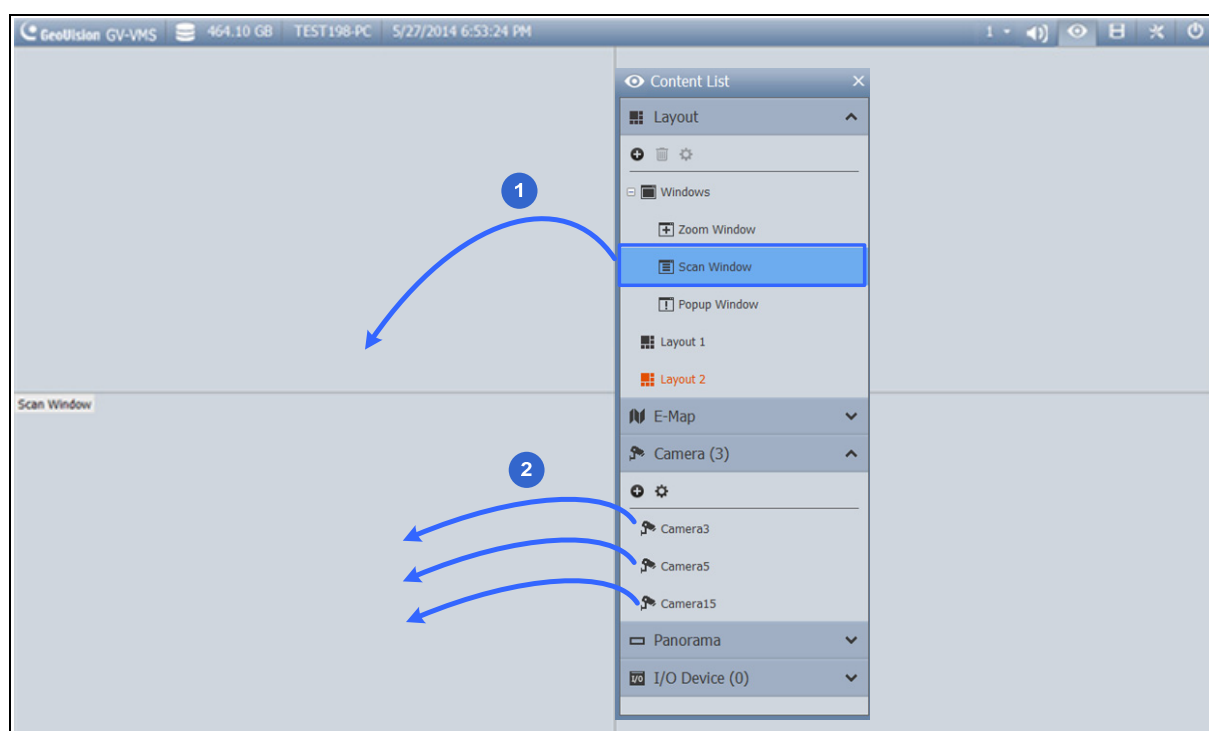


Figure 4-8

3. Move the cursor to the Scan Window, click the **Tools** icon , and select **Properties**.

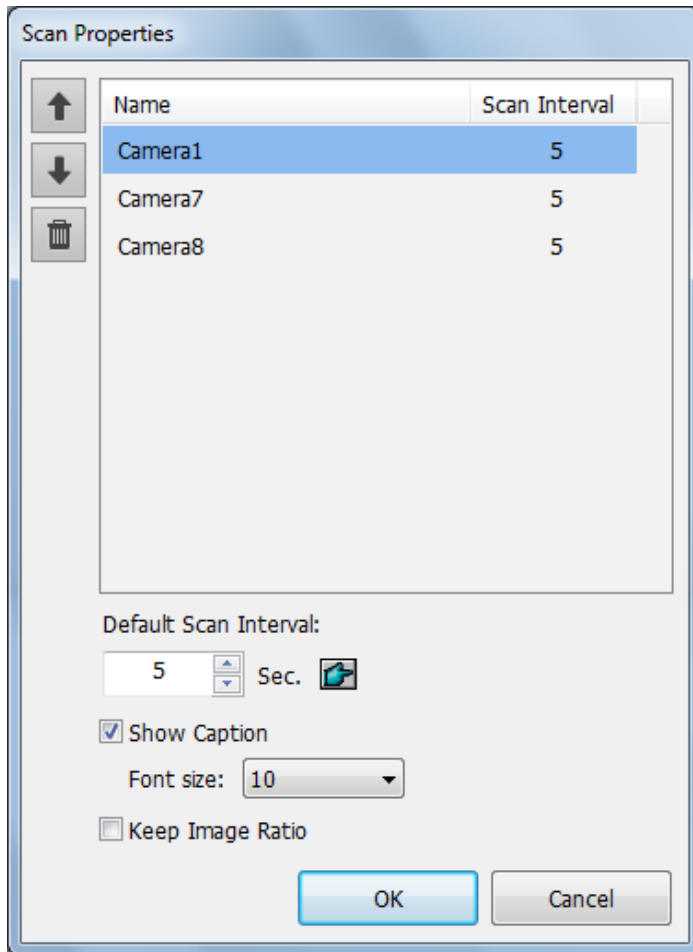






Figure 4-9

4. To adjust the order of a camera, click the Up and Down arrows.
5. To specify how many seconds to show the live view, click and adjust the **Scan Interval** of each camera. In the figure above, each camera will be shown for 5 seconds.

4.2.3 Popup Window

You can designate a Popup Window to display live images of cameras, upon motion detection or input trigger, on a separate monitor. For this function to work, you must first create a live view layout on another monitor.

1. In the Content List (**Home**  > **Toolbar**  > **Content List** ), click **Layout**.
2. Click the **Add** button  and click **Add Layout** to add, and name, a new layout as illustrated below.

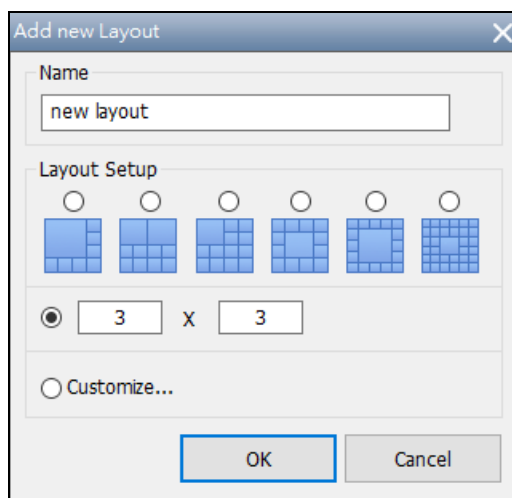



Figure 4-10

3. After clicking **OK**, select a desired monitor from the **Apply to...** list to activate the layout on the designated monitor.

- Click **Windows** from the Content List, click **Add**  and click **Add camera popup window** to select the cameras to be displayed in the Popup Window. This dialog box appears.

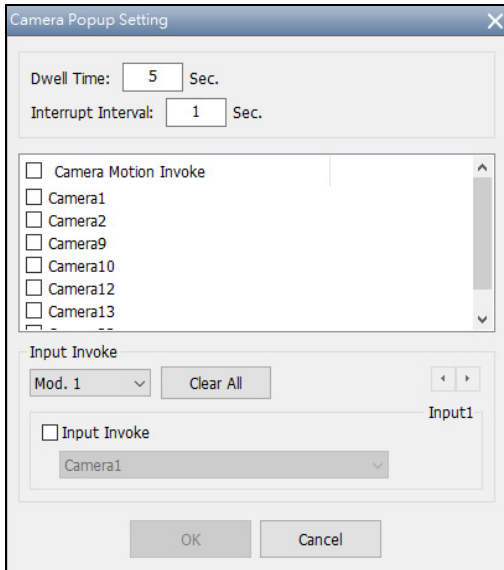


Figure 4-11

Note: For details on configuring the Camera Popup Setting, see [Setting Live View Pop-Up Video, Chapter 1, GV-VMS User's Manual](#).

- Name the Popup Window if necessary and drag the Popup Window from the Content List to the layout in Step 3.

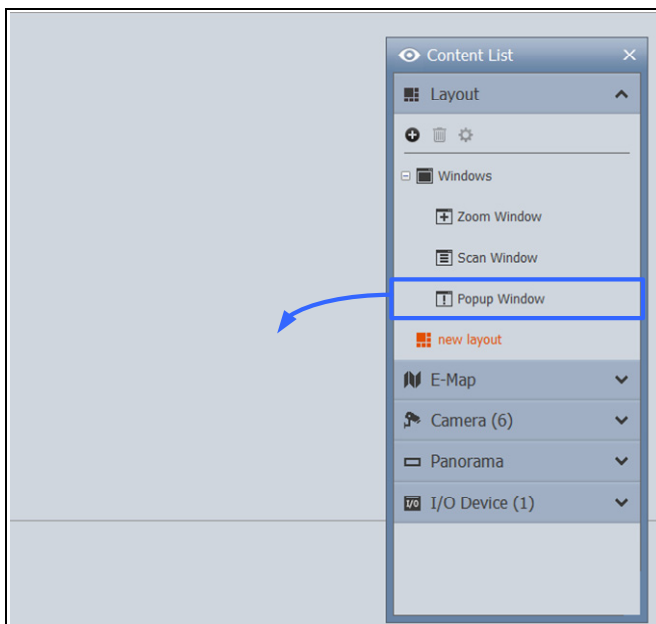


Figure 4-12

4.2.3 Focus View and PIP

Focus View

You can create up to 7 close-up views per camera and place these created close-up views inside live view grid. This function is not supported for Fisheye Cameras and PTZ Cameras.

1. In the Content List, right-click a camera and select **Focus View Setup**. A dialog box appears.

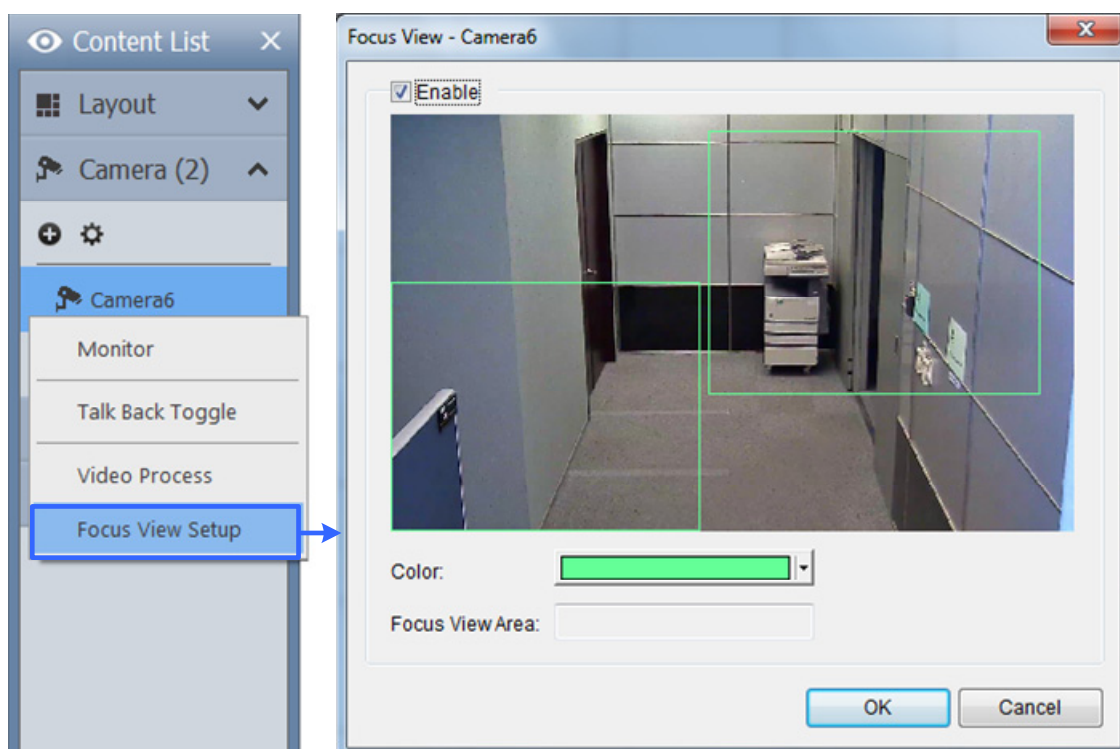


Figure 4-13

2. Click **Enable** and draw a box on the camera view to create a focus view. You can create multiple focus views if needed.
3. You can click the **Color** drop-down list to change the color of the box if needed.
4. Click **OK**. The created focus views are listed under the camera.

5. You can now drag the focus views to live view grids.



Figure 4-14

PIP View (Picture-in-picture)

1. You can zoom in on a camera by placing mouse cursor on its live view and scrolling the mouse. An inset window appears in the camera view with a navigation box inside.

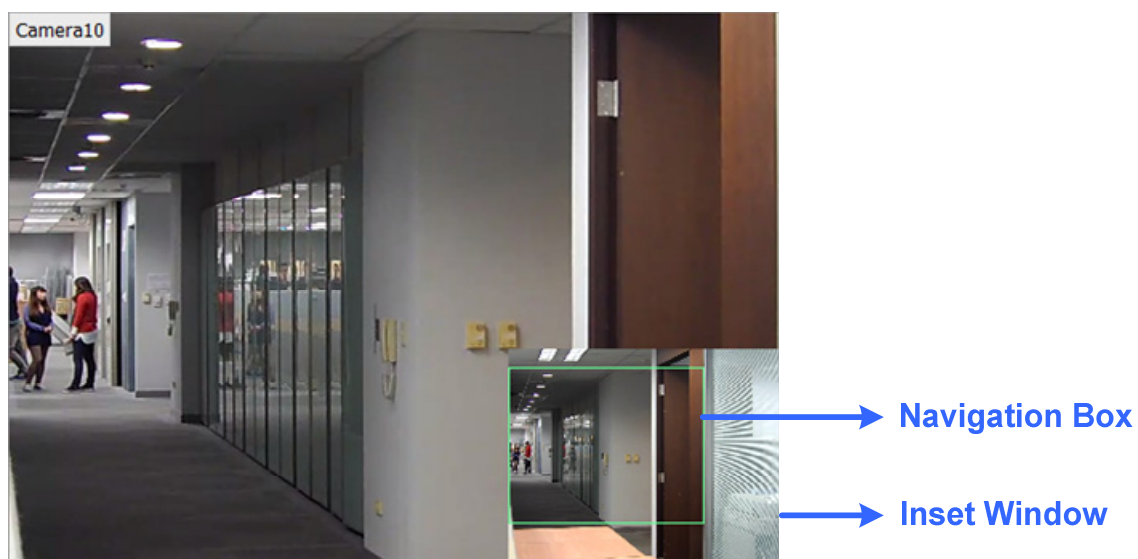


Figure 4-15

2. Move the navigation box around in the inset window to have a close-up view of the selected area.

4.3 Setting Up Fisheye Cameras

If you have added a fisheye camera, follow the steps below to access fisheye functions.

1. In the Content List, drag the entire fisheye camera (ex: Camera5) to the live view grid to see the circular source image or expand the camera and drag one of the dewarped fisheye images (ex: Quad View) to the live view grid.

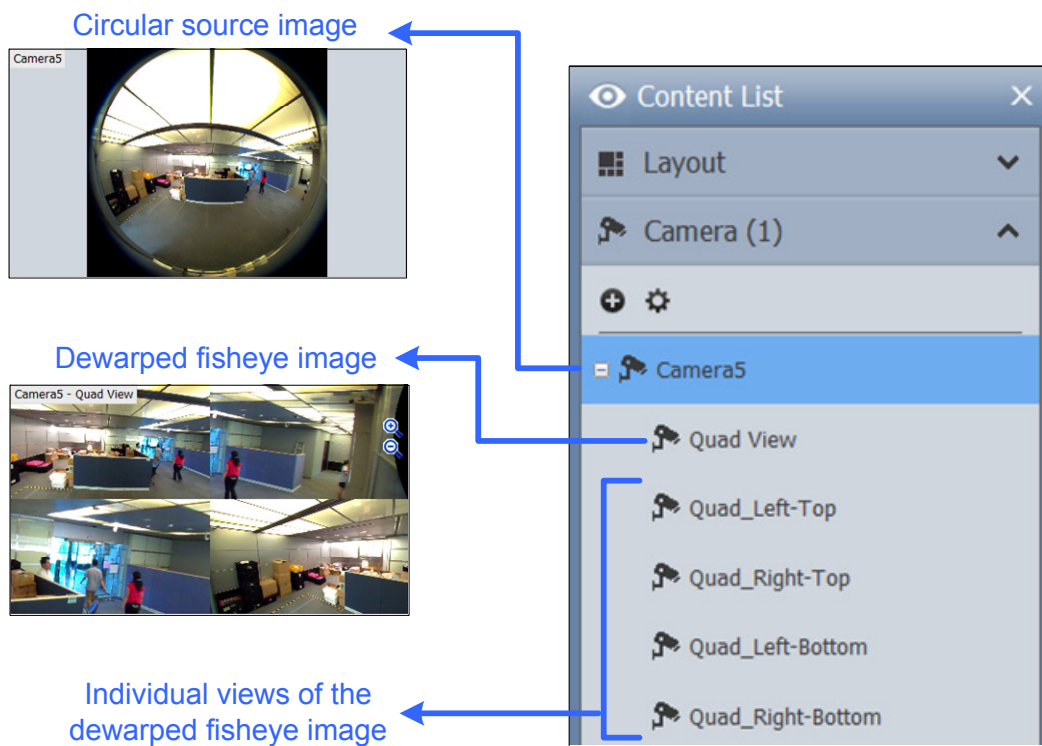


Figure 4-16

2. To change the fisheye mode or access other fisheye settings, right-click the fisheye camera (ex: Camera5) and select **Fisheye Settings**. A dialog box appears.

3. Right-click the camera view and select **Fisheye Option** to access the fisheye functions.

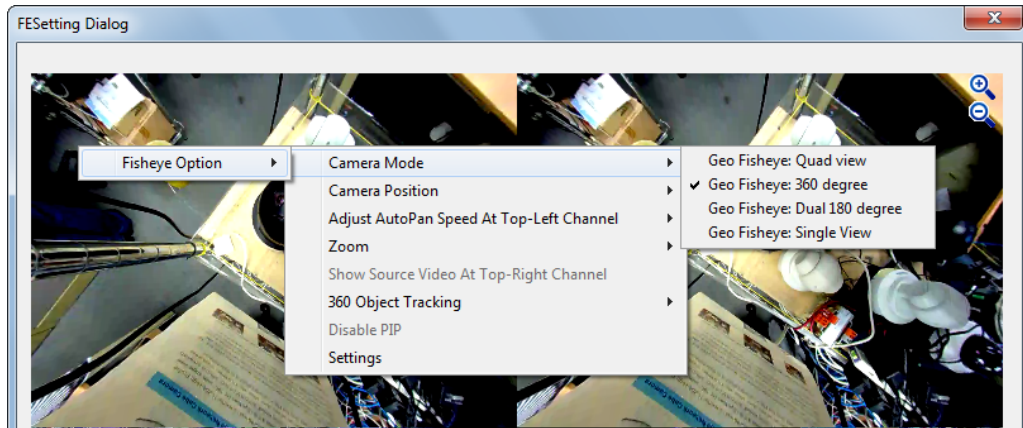


Figure 4-17

For details on the fisheye functions, see *Fisheye View*, Chapter 3, *GV-VMS User Manual*.

4.4 Setting Up PTZ Cameras

If you have added a PTZ camera, follow the steps below to enable PTZ functions.

1. Move the cursor to the camera live view and click the **Tools** button ✂.
2. Click **PTZ Control** to enable PTZ function.
3. Move the cursor to the live view to see the PTZ control panel.

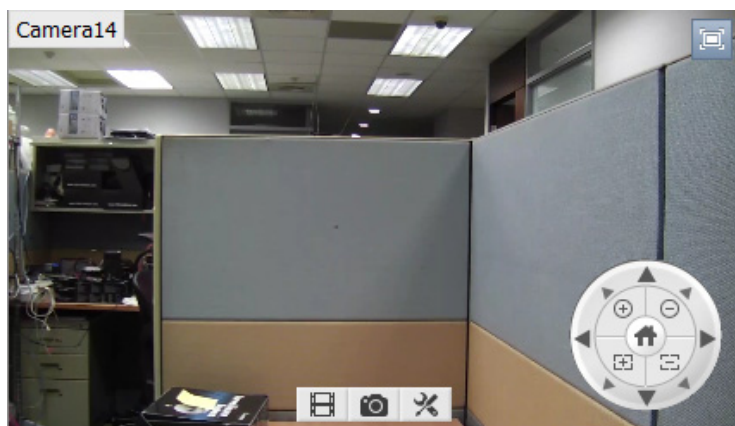



Figure 4-18

4. In the PTZ control panel, you can click the **Home** button (🏠) to access advanced PTZ functions such as Preset Go, Cruise, Sequence and Tour.
5. In the Content List, right-click a PTZ camera and select **PTZ Setup** to configure PTZ speed and PTZ Idle Protection functions.

For details on the PTZ functions, see *PTZ Camera*, Chapter 1, *GV-VMS User Manual*.

Chapter 5 Video Processing

GV-VMS offers a number of video processing functions. To configure video processing functions, follow the steps below.

1. Click **Home** , select **Toolbar** , click **Configure**  and then select **Video Process**. This dialog box appears.

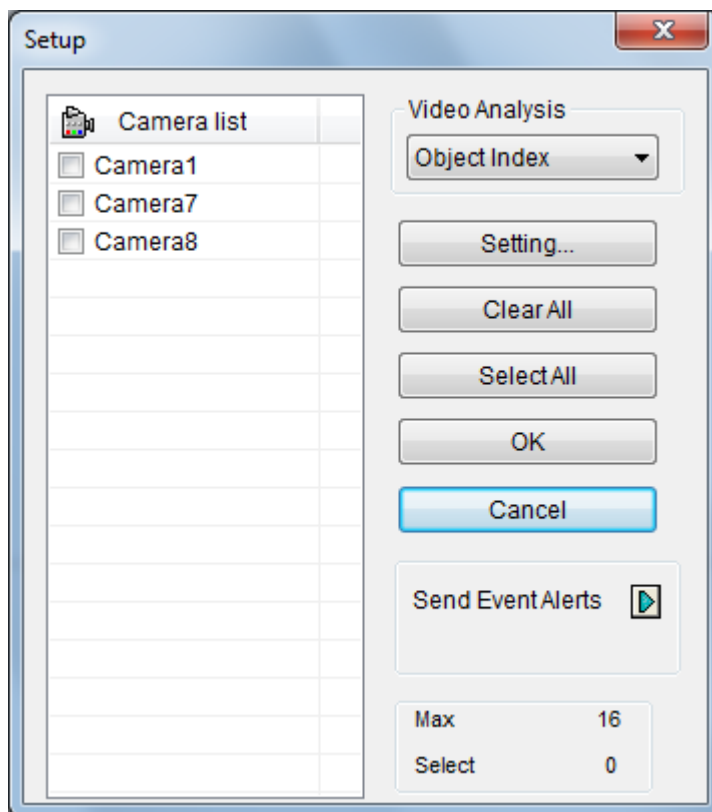



Figure 5-1

2. Select a function under **Video Analysis**.
3. In the Camera List, select the camera(s) you want to configure.
4. Click the **Setting** button to access the configuration page.
5. To send e-mail notification upon video analysis events, click the Arrow button  next to **Send Event Alerts**.

The following Video Processing functions will only be enabled when you **start monitoring** on the cameras.





- Object Index/Monitor Setup
- Counter / Intruder Alarm Setting
- Crowd Detection
- Advanced Unattended Object Detection
- Advanced Scene Change Detection
- Advanced Missing Object Detection
- Face Count
- Text Overlay Setting
- Heat Map
- Video Analysis by Camera (IPCVA)

If you have set an AVP schedule, Video Processing functions will be enabled and disabled according to the schedule whether the camera has started monitoring or not. See *7.2 Setting Up Schedules* in this Quick Start Guide on how to set a schedule.

For details on video processing functions, see *Chapter 3 Video Analysis, GV-VMS User's Manual*.

Chapter 6 Video Playback and Backup

6.1 Playing Back Recorded Videos

1. To access recorded videos, click the **ViewLog** icon  in the top-right corner.
2. Open the Content List by clicking **Toolbar**  and select **Content List** .
3. Click **Layout** in the Content List, click the **Add** button , and select **Add Layout** to create a new layout or select **Import from Live** to import existing layouts from live view.
4. You can also drag cameras onto the screen from the Content List if needed.

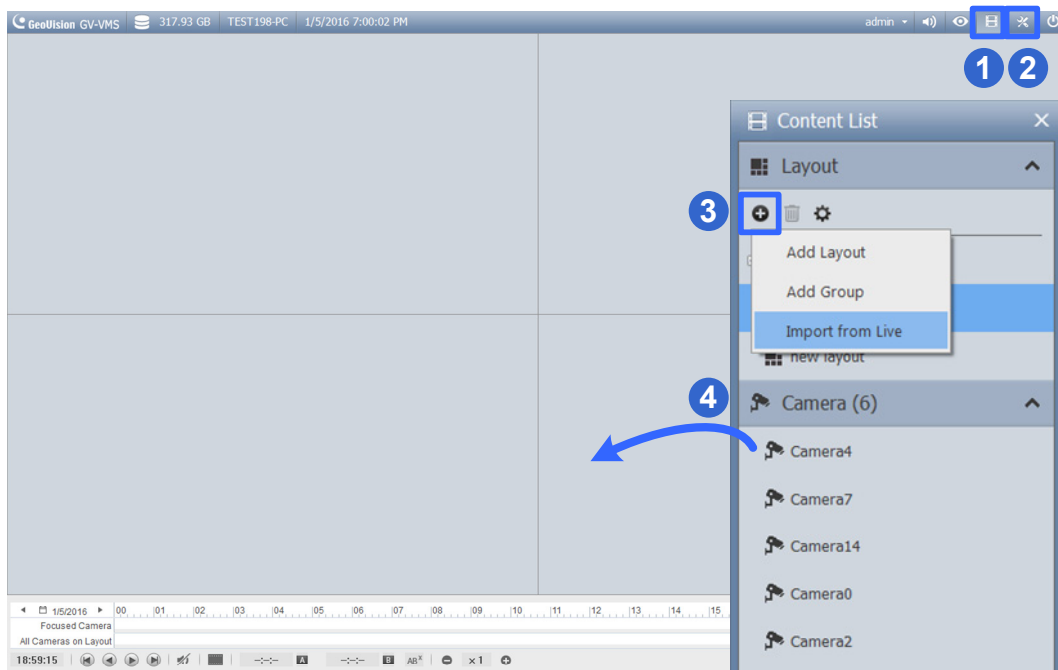


Figure 6-1

5. On the left of the timeline, select a date.

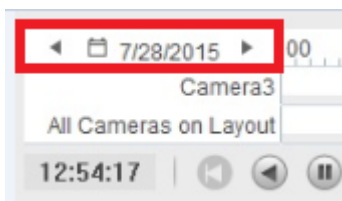




Figure 6-2

6.2 Backing Up Recorded Videos

1. In ViewLog, click **Toolbar** , select **Tools**  and select **Backup**. This dialog box appears.

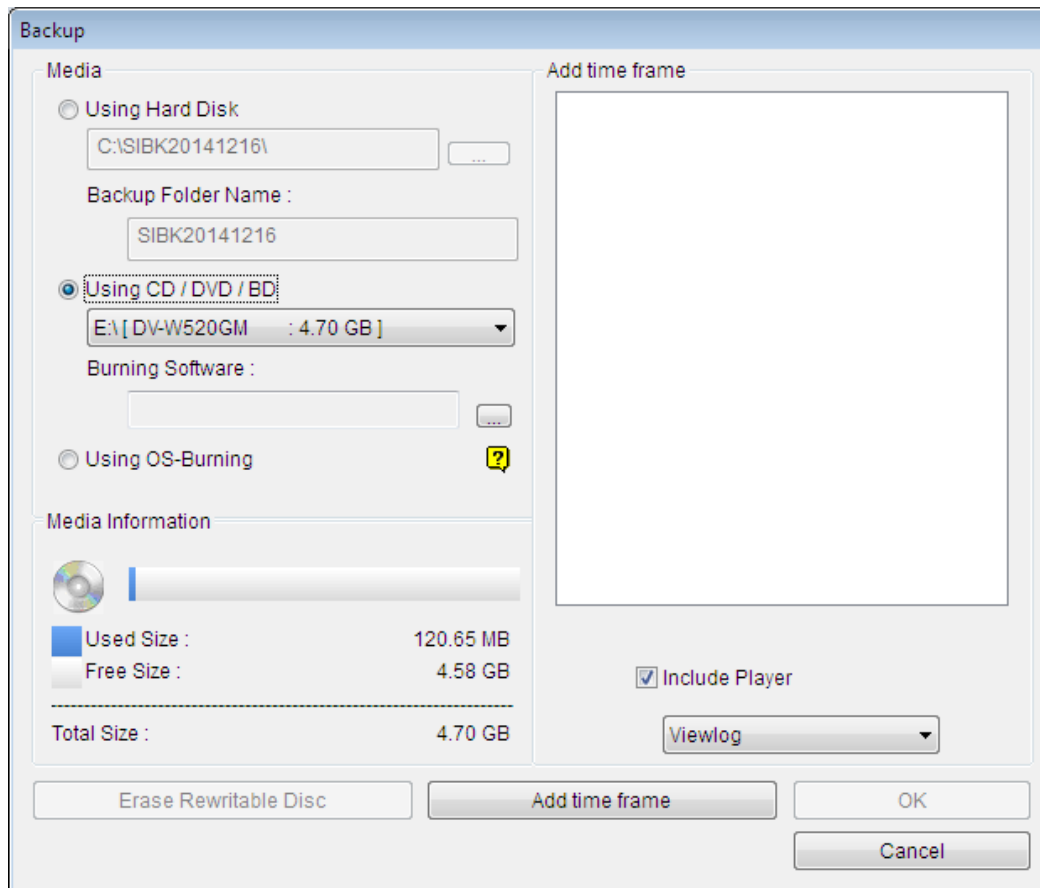





Figure 6-5

2. Click **Add time frame** to select the time period and the cameras you want to back up and click **OK**.
3. Select a media to back up the recorded files using **Hard Disk**, **CD / DVD / BD** or **OS-Burning**. The supported software for burning to CD / DVD / BD is Nero Burning Rom version 9 or before.
4. To include the ViewLog player to the backed up files, select **Include Player** at the bottom-right of the dialog box. If no player is selected, you can only play the recordings using computer installed with GV-VMS or GeoVision video codec.

Chapter 7 Other Important Features

7.1 Setting Up I/O Functions

Follow the steps below to set up I/O devices on GV-VMS:

1. Click **Home** , select **Toolbar** , click **Configure** , click **Accessories** (if available), click **I/O Device** (if available) and then select **I/O Device Setup**. This dialog box appears.

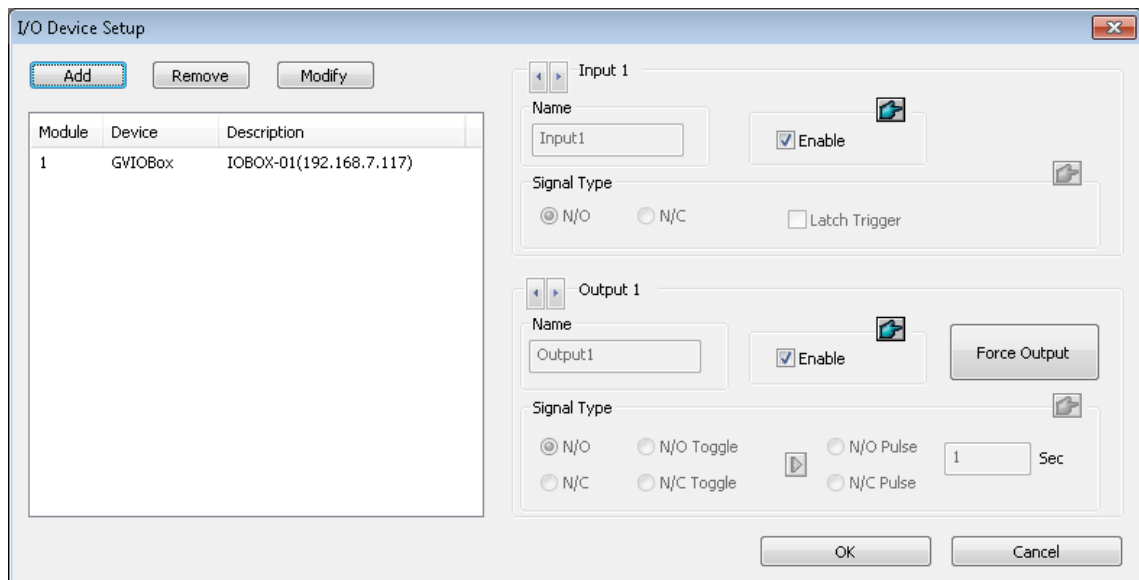




Figure 7-1

Note: The **Accessories** option only appears when GV-Keyboard or GV-Joystick has been set up on the GV-VMS. The **I/O Device** option only appears after at least one I/O device has been added.

2. Click the **Add** button.
3. Select the type of device you want to add and configure its connection settings.
4. For I/O devices connected through USB, you can configure **Signal Type** and **Latch Trigger** on GV-VMS.

- After the I/O devices are added, select **Toolbar** , click **Configure** , click **Accessories** (if available), click **I/O Device** and select **I/O Application Setup**. This dialog box appears.

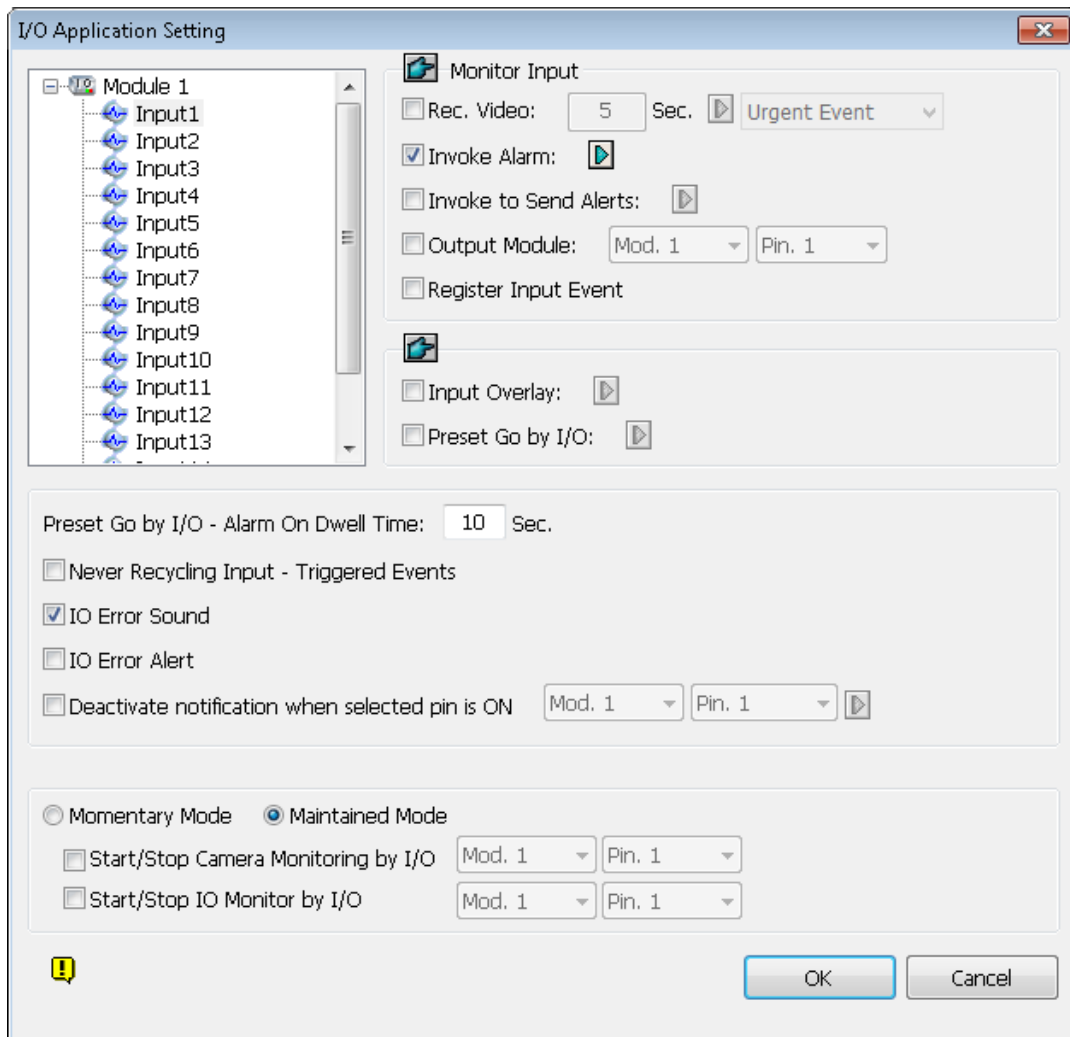








Figure 7-2

- Select an input and specify the actions to take when the input is triggered.
- Click **OK** to apply the settings.
- To activate I/O functions, click **Home** , select **Toolbar** , select **Monitor** , and then click **I/O Monitoring** or **Start All Monitoring**.

For details on I/O setup, see *Chapter 6 I/O Applications, GV-VMS User's Manual*.

7.2 Setting Up Schedules

You can create a schedule to enable and disable recording, video analysis, I/O monitoring, connection with Center V2 / Vital Sign Monitor / WebCam Server / Mobile Service / GV-Edge Manager and PTZ object tracking at specific times each day.

1. Click **Home** , select **Toolbar** , click **Configure**  and then select **Schedule Edit**. This dialog box appears.

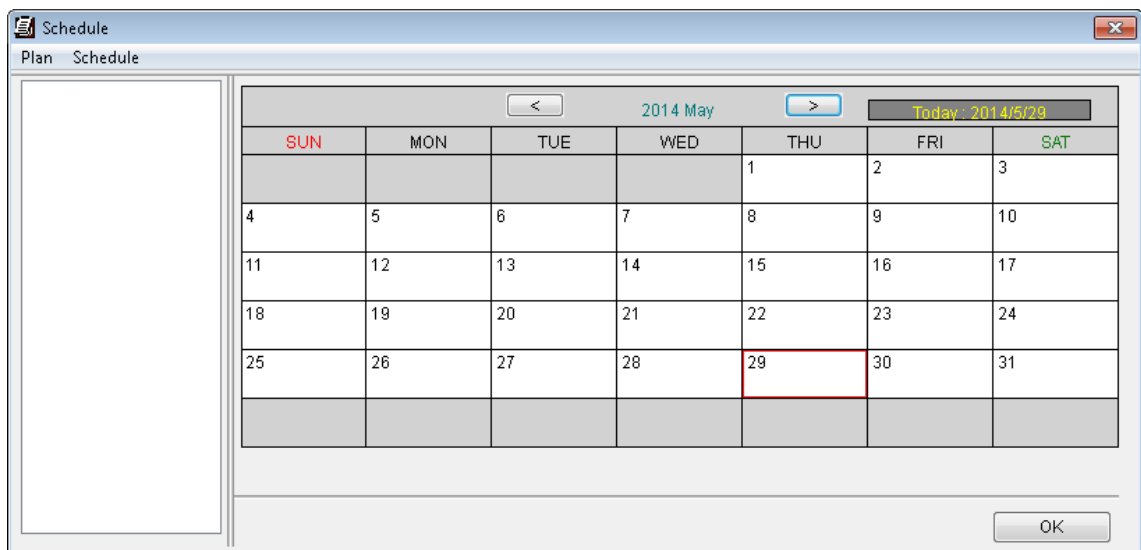


Figure 7-3

2. Click **Schedule** and select **Setup Wizard**. The Setup Wizard dialog box appears.
3. Select the days you want to apply the schedule and click **Next**.
4. Name the schedule plan and click **Next**.
5. Select a button on the left (**Camera**, **AVP**, **I/O Monitoring**, **Server** or **PTZ Object Tracking**) and drag across the timeline to enable it during that time.

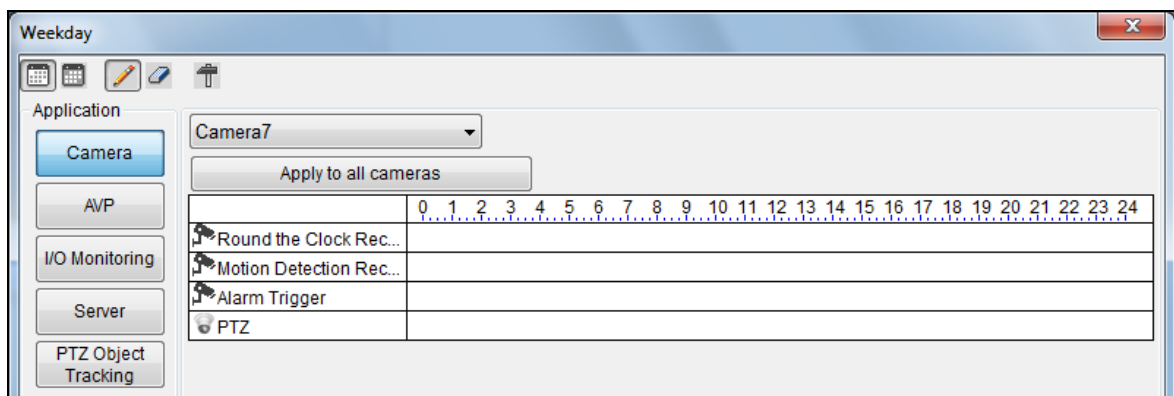


Figure 7-4

To set a recording schedule, click the **Camera** button and select a camera. Using the figure below as an example, 8 am to 5 pm are set to round-the-clock recording. The remaining hours are set to motion detection recording with a sensitivity level of 9.

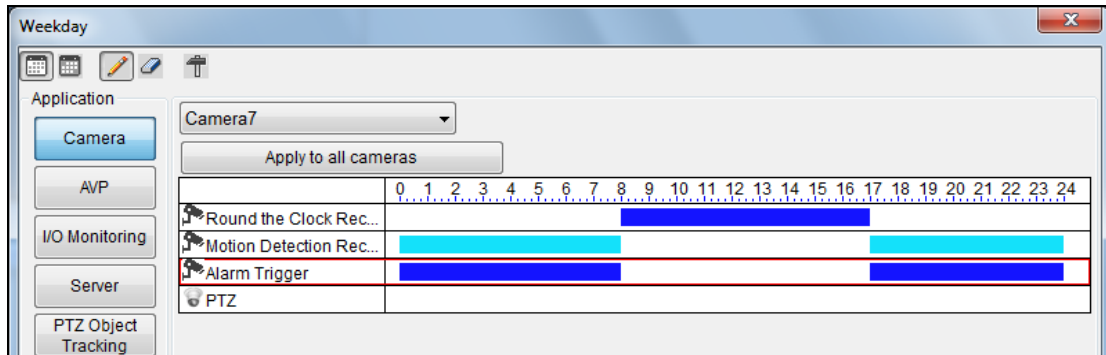


Figure 7-5

6. Click **Next** and **Finish** when you are done. The plan created appears on the calendar.

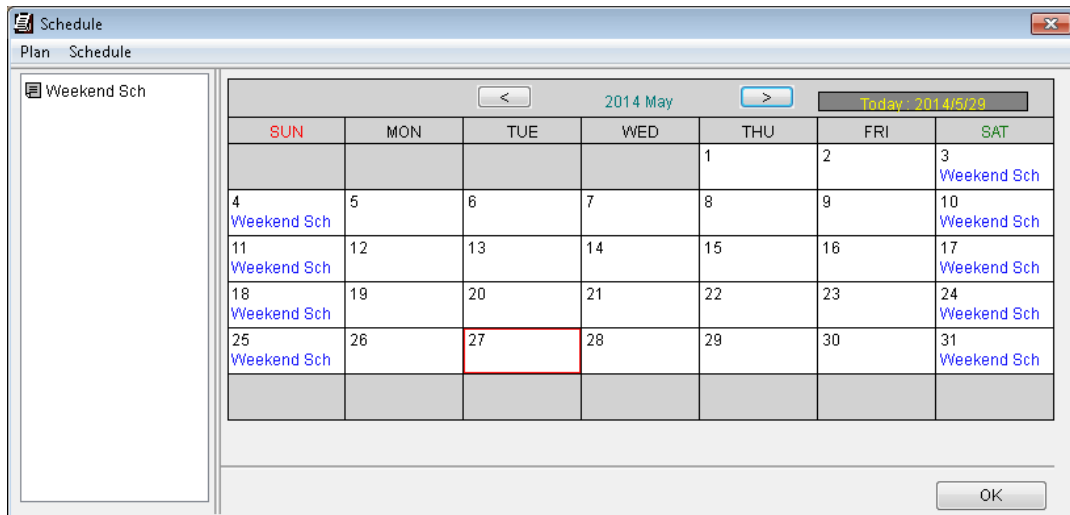





Figure 7-6

Tips:

1. You can add multiple plans to the calendar.
2. You can also add a plan to the calendar by dragging an existing plan and dropping it on a date in the calendar.

7. Click **Home** , select **Toolbar** , select **Monitor** , and then click **Start Schedule Monitoring**.

For details on setting schedule, see *Schedule*, Chapter 1, *GV-VMS User's Manual*.

7.3 Setting Up E-mail Alert Notifications

You can set up e-mail notification to receive alert upon motion, I/O trigger and video analysis events.

1. Click **Home** , select **Toolbar** , click **Configure** , select **System Configure**, and then select **Send Alerts Approach Setup**. This dialog box appears.

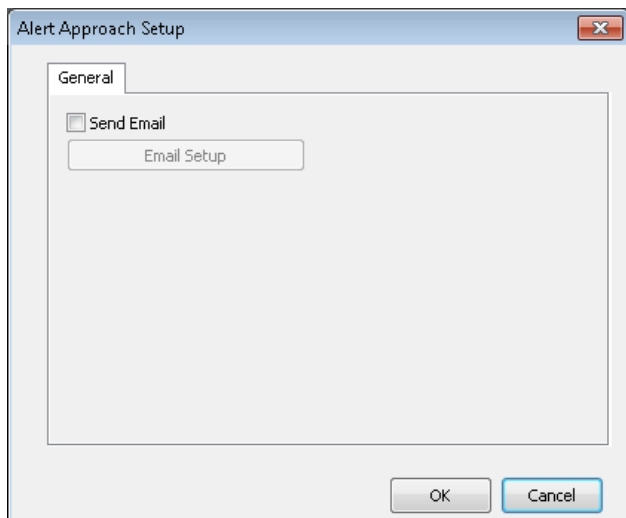


Figure 7-7

2. Select **Send Email**. The E-mail Setup dialog box appears.

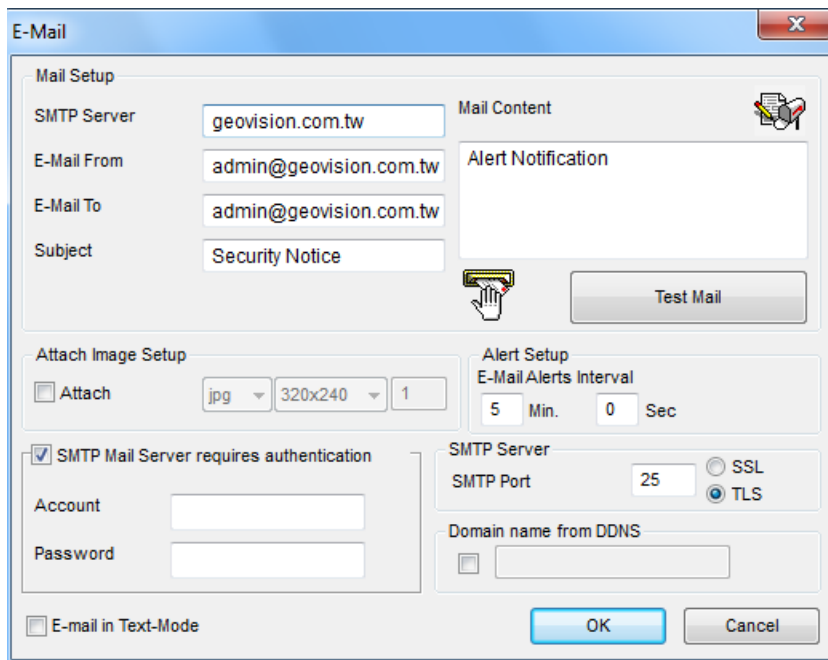


Figure 7-8

3. Set up your mail server and then send a test e-mail to make sure the setup is correct.