

Surveillance System

New Feature Guide V8.5.7.0



The Vision of Security



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Feature Guide for V8.5.7 GeoVision Surveillance System

This Guide provides an overview of key features in V8.5.7 GV-System. It also includes information about how the features differ from similar features in earlier versions.

Cards Supported

V8.5.7 only supports the following GV video capture cards:

- GV-600(S) V3.20 and later
- GV-650(S) V3.30 and later
- GV-800(S) V3.30 and later
- GV-804A V3.10 and later
- GV-600A, GV-600B
- GV-650A, GV-650B
- GV-800A, GV-800B
- GV-900A
- GV-1120, GV-1120A, GV-1120B
- GV-1240, GV-1240A, GV-1240B
- GV-1480, GV-1480A, GV-1480B
- GV-3008
- GV-4008, GV-4008A
- GV-5016
- GV-SDI-204

Note that GV-600 (V4), GV-650 (V4) and GV-800 (V4) and GV-804 (V4) Cards are renamed to GV-600A, GV-650A, GV-800A and GV-804A. These V4 and A Cards are the same video capture cards.

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1. New Supports and Specifications

1.1 Support for Windows 8 and Windows Server 2012

Starting from V8.5.7.0, GV-NVR System, the following GV-Video Capture Cards and remote applications now supports 32 and 64-bit Windows 8 operating system and 64-bit Windows Server 2012 operating systems.

GV-Video Capture Cards

- GV-600A, GV-600B
- GV-650A, GV-650B
- GV-800A, GV-800B
- GV-900A
- GV-1120A, GV-1120B
- GV-1240A, GV-1240B
- GV-1480A, GV-1480B
- GV-3008
- GV-4008, GV-4008A
- GV-5016
- GV-SDI-204

Remote Applications

- GV-Vital Sign Monitor
- GV-Center V2
- GV-Dispatch Server
- GV-Authentication Server
- GV-Audio Broadcast
- GV-E-Map Server
- GV-Bandwidth Control Client Site
- GV-Backup Viewer
- GV-Dynamic DNS Service
- GV-Multicast
- GV-Webcam Server
- GV-DMMultiview



1.2 Support for New IP Devices

The following GeoVision and third-party IP devices will now be supported in V8.5.7.

- Audio: A "O" mark indicates the GV-System supports the two-way audio communication with the device; "X" indicates the function is unavailable in the device.
- Codec: The video codec supported by GV-System are listed.
- **PTZ:** A "O" mark indicates the GV-System supports the PTZ function of the device; "X" indicates the function is unavailable in the device.

Brand	Model	Audio	Codec	PTZ
AXIS	M3007 *	Х	H.264 / MJPEG	Х
	P3354 *	Х	H.264 / MJPEG	Х
	P3364 *	0	H.264 / MJPEG	Х
	Q1604 *	0	H.264 / MJPEG	Х
	Q6035-E	Х	H.264 / MJPEG	0
Bosch	NBN-921-P *	0	H.264 / MJPEG	Х
GeoVision	GV-FE2301	0	H.264 / MJPEG	Х
	GV-FE4301	0	H.264 / MJPEG	Х
	GV-BL1200	0	H.264 / MJPEG	Х
	GV-BL1300	0	H.264 / MJPEG	Х
	GV-BL1210	0	H.264 / MJPEG	Х
	GV-BL2410	0	H.264 / MJPEG	Х
	GV-BL3410	0	H.264 / MJPEG	Х
	GV-BL5310	\circ	H.264 / MJPEG	Х
	GV-BL2400	0	H.264 / MJPEG	Х
	GV-BL3400	\circ	H.264 / MJPEG	Х
	GV-PT130D	\circ	H.264 / MJPEG	0
	GV-PT220D	\circ	H.264 / MJPEG	0
	GV-PT320D	\circ	H.264 / MJPEG	0
	GV-UBX1301 Series	\circ	H.264 / MJPEG	Х
	GV-UBX2301 Series	0	H.264 / MJPEG	Х
	GV-UBX3301 Series	\circ	H.264 / MJPEG	Х
	GV-UBL1211	Х	H.264 / MJPEG	Х
	GV-UBL2411	Х	H.264 / MJPEG	Х
	GV-UBL3411	Х	H.264 / MJPEG	Х
	GV-UBL1301 Series	Х	H.264 / MJPEG	Х
	GV-UBL2401 Series	Х	H.264 / MJPEG	Х

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Brand	Model	Audio	Codec	PTZ
	GV-UBL3401 Series	Х	H.264 / MJPEG	Х
VIVOTEK	FD8135H	\circ	H.264 / MJPEG / MPEG4	Х
	FD8162	\circ	H.264 / MJPEG / MPEG4	Х
	FD8372	\circ	H.264 / MJPEG / MPEG4	Х
	FE8172	\circ	H.264 / MJPEG / MPEG4	Х
	IP8172	\circ	H.264 / MJPEG / MPEG4	Х
	IP8335H	\circ	H.264 / MJPEG / MPEG4	Х
	IP8362	\circ	H.264 / MJPEG / MPEG4	Х
	IP8372	\circ	H.264 / MJPEG / MPEG4	Х
	MD8562	\circ	H.264 / MJPEG / MPEG4	Х
	SD8323E	0	H.264 / MJPEG / MPEG4	0
	SD8362E	0	H.264 / MJPEG / MPEG4	0

Note: IP devices marked with * were tested using ONVIF connection.



2. Main System

2.1 Advanced PIP Function for Fisheye Single View

In the original Picture-in-Picture (PIP) view, you can zoom in or crop the video for a close-up view. However, the PIP view in fisheye cameras can only be displayed on the hemispherical source image. In V8.5.7, an advanced PIP function in Fisheye Single View allows you to have a close-up dewarped image of any selected place within the surveillance area without missing the entire view. The advanced function includes navigating with a red point and cropping the live view for a closer image.



Figure 2-1 Fisheye Picture-in-Picture (PIP) View (without being dewarped)







V8.5.7 Single View (with PIP view)

Figure 2-2

- Click Camera Name and select Geo Fisheye, in which the default view mode is Quad View.
- 2. Right-click in Quad View mode, find **Fisheye Option**, select **Camera Mode** and select **Geo Fisheye: Single View**.
- 3. A round in-set window with a red point in the middle appears at the lower right corner. Within the round window, click any desired place to get the image on the live view.

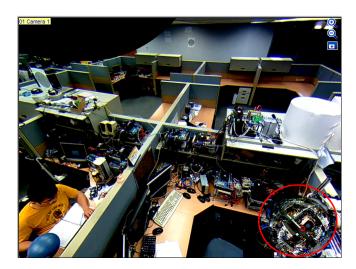


Figure 2-3

4. To get a close-up view, click the button at the top right corner, and the cursor will turn into a crisscross.



Figure 2-4

GeoUision

5. Move the crisscross to the selected area and drag to crop the video. When the cropping size is smaller than 1/4 camera view, zoom-in function will be applied. If the size of selected area is larger than 1/4 camera view, zoom-out function will be applied.



Figure 2-5

6. Roll the mouse wheel or click the Q / D button to zoom in / out.

To disable the cropping function, click the 🗓 button again.

2.2 Digital PTZ for Cameras without Physical PTZ Functions

In V8.5.6, Visual PTZ (Pan, Tilt and Zoom) is only available in PTZ Cameras and Speed Domes. GV-System now supports the Digital PTZ (DPTZ) function, allowing non-PTZ cameras to simulate the PTZ movement on the screen.

1. Right-click the live view, find **Camera Name** and select **Digital PTZ**. The **Visual Automation View** window for DPTZ control appears.



Zoom In Zoom Out
Home
(Not Functional)

Figure 2-6

2. To zoom in / out, click the corresponding buttons or use the mouse scroll. To bring the Visual Automation View back to its default image, click **Home**.



3. To pan and tilt the Visual Automation View, zoom in on the image first, and then click and hold the arrow. The arrow appears when you place the cursor in one of the eight directions, i.e. up, down, left, right, left up, left down, right up and right down.



Figure 2-7 Visual Automation View (zoom-in function applied)



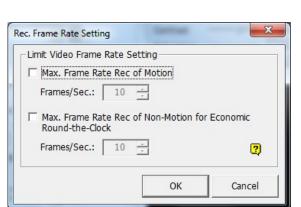
Figure 2-8 Visual Automation View (tilt function applied by holding the arrow in the upper left corner)

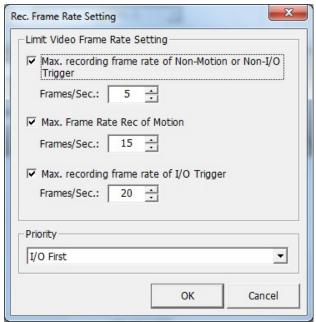
4. To adjust the transparency level of the Control Panel, click the green **DPTZ** button on the top left corner of the window and select **Transparency**. Ten levels range from 10% (fully transparent) to 100% (fully opaque).

Note: The functions of Focus In / Out and the speed level are not supported in Digital PTZ.

2.3 Maximum Recording Frame Rate upon I/O Trigger

In V8.5.7, a maximum recording frame rate can be set for recording during I/O trigger using software compression video capture cards. Previously, you can only set a maximum recording frame rate set for motion detected events and when there is no motion or I/O trigger. In addition, you can now specify whether to apply the setting for motion or I/O trigger when both I/O trigger and motion detection occur at the same time.





V8.5.6 Recording Frame Rate Setting

V8.5.7 Recording Frame Rate Setting

Figure 2-9

- 1. Click the Configure button, select System Configure, and select Camera Configure.
- Click the arrow button after Rec Video and select Rec. Frame Rate Setting. A dialog box appears.
- 3. To set a maximum recording frame rate during I/O trigger, select **Max. recording frame** rate of I/O Trigger and select a frame rate.
- 4. Under **Priority**, select **I/O First** if you want to apply the Max. recording frame rate of I/O Trigger when both I/O trigger and motion detection occur at the same time. Select **Motion First** if you want the maximum recording frame rate of motion to override the I/O trigger settings when both conditions occur at the same time.
- 5. Click **OK** to apply the settings.



2.4 Dual Streaming through ONVIF Protocol

Previously, third-party cameras connected through ONVIF protocol only support single stream. In V8.5.7, GV-System now supports dual streaming of IP cameras connected through ONVIF protocol. For each stream, you can set codec, resolution, maximum bit rate, maximum frame rate, image quality and GOV values.

To add and set up an IP camera through ONVIF protocol:

- 1. Click the **Configure** button, select **System Configure**, select **Camera Install**, and select **IP Camera Install**.
- 2. Click Add Camera. This dialog box appears.

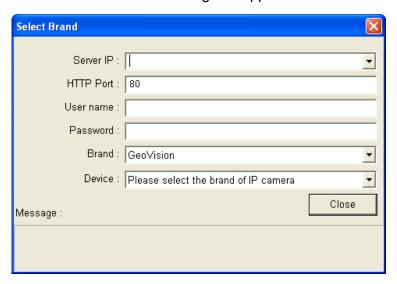


Figure 2-10

- 3. Type the **IP** address, **User name**, and **Password** of the camera.
- 4. For Brand, select **Protocol** and for Device, select **ONVIF**. A dialog box appears.

Dialog Setting **Dual Stream** ~ Stream Type: Record H264 Resolution: 1920*1080 Codec: 4096 30 Bitrate Limit Frame rate limit: (kbps): 50 Quality: 30 Gov: Preview Codec: H264 Resolution: 352*240 1024 30 Frame rate limit: Bitrate Limit Quality: 50 2 Gov: Apply

5. To set the second stream if available, select **Dual Stream** for Stream Type.

Figure 2-11

- 6. The following settings are available for each stream.
 - Codec: Select a codec type.
 - **Resolution:** Set a resolution. The maximum resolution for stream 2 is limited to 800 x 600.
 - **Bitrate Limit**: The current bit rate setting of the IP device will be displayed. You can adjust the bit rate limit within the device's supported bit rate range if needed.
 - Frame Rate Limit: Set a maximum frame rate.
 - Quality: Adjust the image quality. The range of image quality varies for different brands.
 - **Gov:** Set the number of frames between each key frame. For example, a Gov of 10 means there will be 1 key frame every 10 frames.
- 7. Click Submit. The IP camera is now added to the camera list.
- 8. You can right-click the device in the camera list to access additional settings.



2.5 Extended System Idle Protection Time

The maximum idle protection time is now extended from 300 seconds to 14400 seconds. If the system is idle for more than the specified time period, the system will be logged out or automatically start recording according to your setting.

To enable system idle protection:

 Click the Configure button, select System Configure and click System Idle Protection Setting. This dialog appears.



Figure 2-12

- 2. Select Auto Logout or Switch to Startup Login User if available or Auto Monitoring.
- 3. In the **System Idle Over** field, type a time between 10 and 14400 seconds.
- 4. Click OK.

For details on System Idle Protection, see *System Idle Protection*, Chapter 1, *GV-DVR User's Manual* on the Software *GV-DVR User's Manual*.

2.6 Frame Rate Setting for GV-SD200

You can now set the frame rate of GV-SD200 from GV-System. To access the frame rate settings, click the **Configure** button, select **System Configure**, select **Camera Install**, and select **IP Camera Install**. Next, add the GV-SD200 to the camera list, and then right-click the GV-SD200 to access the following new settings.

GV-SD200 in Dual Streams

- **Set frame rate (main stream):** Set a frame rate limit for the main stream of GV-SD200. The main stream is used for recording and watching live view in single view.
- Set frame rate (sub stream): Set a frame rate limit for the sub stream of GV-SD200. The sub stream is used when watching live view in multi-channel screen division with On-Demand display enabled.

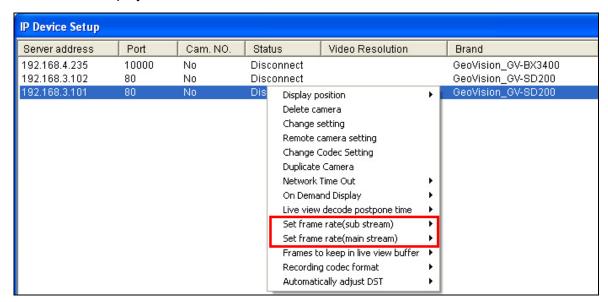


Figure 2-13

GV-SD200 in Single Stream

• Set frame rate (single stream): Set a frame rate limit for GV-SD200 when only single stream is connected.

The frame rate settings above will be applied to the GV-SD200 source video received by the GV-System, as well as the recorded videos. The settings are only available before the camera is connected.



2.7 Network Failure Detection

The Network Failure Detection function triggers an output device when network connection between GV-System and the specified network host has failed. You can set a time interval, which specifies how often GV-System will send a ping message to the network host to check if the connection is still active.

1. Click the **Configure** button, select **Tools** and click **Network failure detection**. This dialog appears.

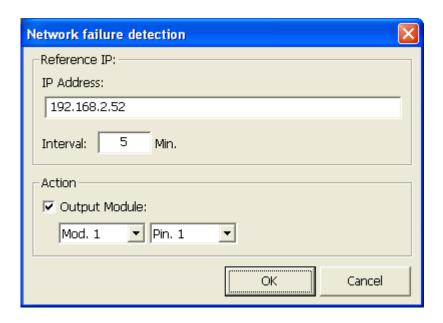


Figure 2-14

- 2. Under IP Address, type the IP address or domain name of a remote host.
- 3. Next to **Interval**, type the time interval between each ping in minutes. If the interval is 5 minutes, GV-System will ping the network host every 5 minutes.
- 4. Under Action, enable **Output Module** and select the output module and pin number.
- 5. Click **OK**.

The select output device will be triggered when the network host does not respond to GV-System's ping message.

3. ViewLog

3.1 Support for GV-Device Server in Remote ViewLog Service

You can now retrieve files from a remote GV-Recording Server, GV-Backup Server, and GV-Backup Center using Remote ViewLog Service. Previously, Remote ViewLog Service only supported remote playback of GV-System and GV IP devices.

- 1. Click the ViewLog button and select Video / Audio Log.
- In ViewLog, click Tools and select Remote Viewlog Service. The Connect to Remote ViewLog Service dialog box appears.
- 3. Type the IP Address, ID and Password of the remote server. Modify the default port 5552 if necessary.
- 4. For Host Type, select **GV-Server** to connect to GV-Recording Server, GV-Backup Server or GV-Backup Center.

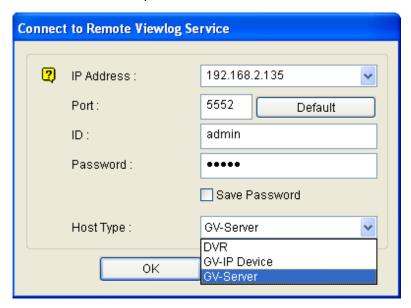


Figure 3-1

5. Click OK.

For details on Remote ViewLog Service, see Remote ViewLog Service, Chapter 4, *GV-DVR User's Manual* on the Software DVD.



3.2 PIP Mode When Video Resolution Exceeds ViewLog Panel

In ViewLog, if the resolution of the recorded video exceeds the panel resolution, the video will be automatically switched to Picture-in-Picture (PIP) mode when you zoom in. For recordings higher than D1 resolution, you can zoom up to 32 times the original image size. For recordings lower than D1 resolution, you can zoom up to 8 times the original image size.

When playing back videos in ViewLog, you can click the + or – buttons on the Playback Control Panel to zoom in or out.



Figure 3-2

When the video resolution is higher than the panel size, the PIP view will appear after clicking the zoom in button. You can drag navigation box inside the inset window to have a close-up view of the selected area.

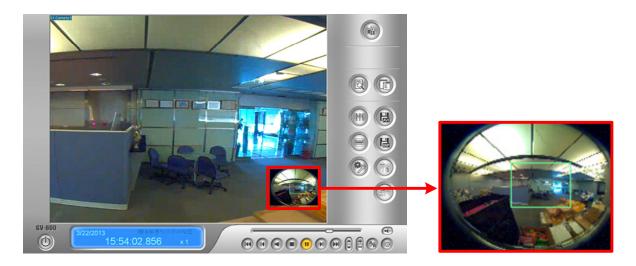


Figure 3-3

4. WebCam Server

4.1 Support for Multi Windows on Chrome, Safari and FireFox

The user can select and display up to 16 live views out of 32 channels through the WebCam server using Chrome, Safari and FireFox.

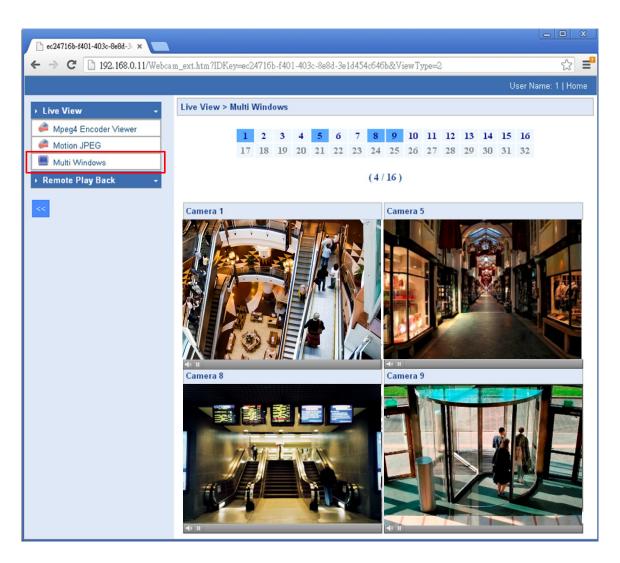


Figure 4-1



Before you start, make sure you:

1. Activate the WebCam server. Once enabled, the main screen shows "Web" and "CCS".



Figure 4-2

- 2. Enable the 3GPP function on the WebCam server.
- 3. Log in the WebCam server using Chrome, Safari or FireFox.

For details on WebCam server, see *WebCam Server Settings*, Chapter 8, *GV-DVR User's Manual* on the Software DVD

4.2 Enhancing Live View Quality on Mobile Devices

Apart from the CIF (320 x 240) display of live views since the previous versions, the latest **GV-AView V1.3.1** (for Android devices) and **GV-iView V2.3** (for iPhone and iPod Touch) also support live view in VGA (640 x 480). For details, see corresponding document from our web site http://www.geovision.com.tw/english/5-4.asp



5. Center V2

5.1 Notifying with Pre-Event and Post-Event Recordings

The Center V2 V8.5.6 can receive up to 15 minutes of pre-event and post-event recordings (respectively) in notifications when a Motion, I/O Trigger or Scene Change event occurs. With Center V2 V8.5.7, you can utilize this function for 9 more event types:

- Video Lost
- Video Signal Resumption
- Intruder
- Missing Object
- Unattended Object
- Crowd Detection
- Advanced Unattended Object
- Advanced Scene Change
- Advanced Missing Objection

Note:

- 1. Configurations for the following event types are not applicable:
 - Post-event recordings for Video Lost event
 - Pre-event recordings for Video Signal Resumption event
- 2. This feature is also supported by GV-Dispatch Server V8.5.7

Follow the steps below to access this feature:

- 1. Make sure you have configured the GV-System to be:
 - recording round-the-clock
 - connected to Center V2

For details, see *Adjusting Camera Configurations* and *Customize Startup Settings* respectively, Chapter 1, *GV-DVR User's Manual* on the Software DVD.

- 2. Access the subscriber settings on Center V2:
 - A. On Center V2's main window, select the **Accounts** button. This dialog box appears.



Figure 5-1

- B. Locate the subscriber from the tree on the left and select the **Subscriber Setting** button. The Subscriber Settings dialog box appears.
- 3. Configure the subscriber's record settings.
 - A. Select Attachment Mode and click the Settings button. The Record Settings –
 Attachment Mode dialog box appears.

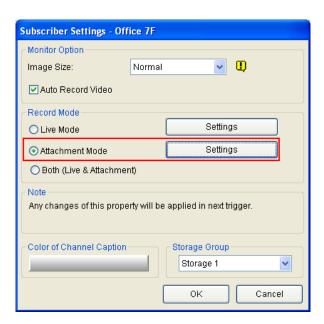


Figure 5-2



B. Under the **Subscriber's Recorded Files** section, select the Event Types and click to select the number of clips for Pre-Event and Post-Event attachment files from the drop-down menu. If the GV-System is set to record for 1 minute per clip, and the pre-event attachment is set to 15 (as illustrated in Figure 2-3), you will receive 15 notifications with attachments when the selected event occurs. However, if the GV-System is set to record for 5 minutes per clip, you will receive 3 notifications with attachments.

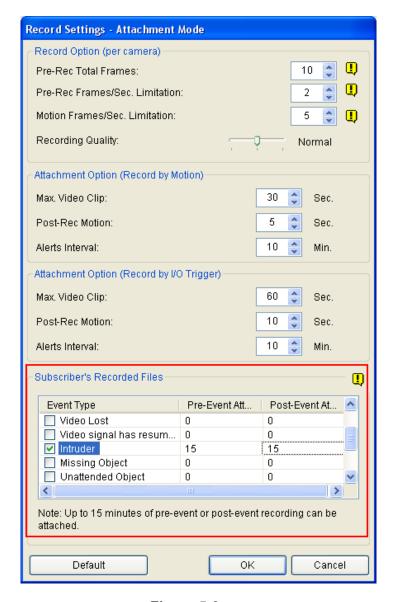


Figure 5-3

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C. Click **OK** to save the configuration. The configuration takes effect immediately. When the specified events occur, attachment notifications appear on the Event List and are indicated as "Pre-Event Attachment" and "Post-Event Attachment".

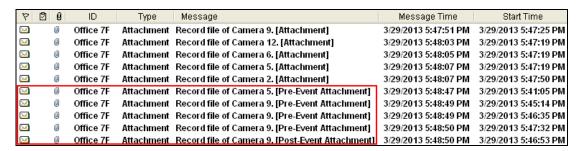


Figure 5-4



5.2 Scheduling Event Notifications

For the previous Center V2, you can restrict event notifications to be sent only when events occur within the defined times. However, this function is only accessible when at least an I/O device is installed at the subscriber's side. Now, with the latest Center V2, the user can set up a schedule for sending notifications without installing any I/O device.

Follow the steps below to access this feature:

 On the GV-System, select the **Network** button and select **Connect to Center V2**. This dialog box appears.

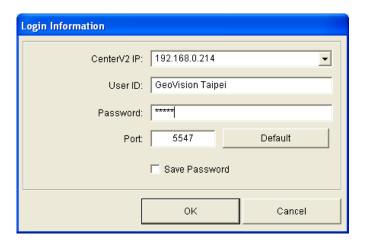


Figure 5-5

- Type the Center V2's IP address, subscriber's user ID and password, and only change the port setting when necessary. Click **OK**. The Connect to Center V2 dialog box appears.
- 3. Unselect the **Monitor all type events** option.

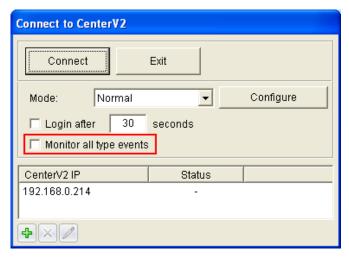


Figure 5-6

4. Click the **Configure** button and select **Advanced Settings**. The Advanced Settings dialog box appears.

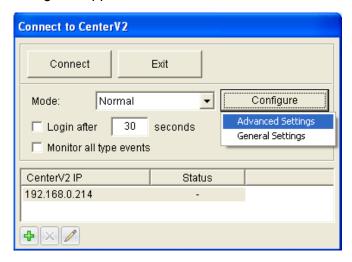


Figure 5-7

5. Select the **Monitoring Schedule** tab and click the **Schedule Setting** button. The Monitoring Schedule dialog box appears.

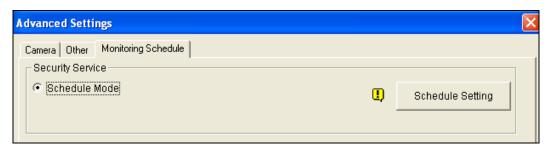


Figure 5-8



6. Set up a time schedule. Center V2 will only receive notifications when events occur within the defined times. You can set up to 4 time spans.

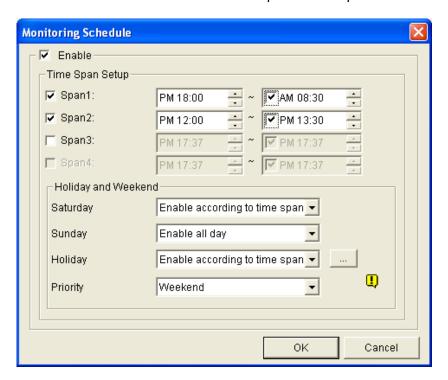


Figure 5-9

7. Click **OK** to save the settings.

6. Vital Sign Monitor

6.1 Scheduling Event Notifications

For the previous VSM, you can restrict event notifications to be sent only when events occur within the defined times. However, this function is only accessible when at least an I/O device is installed at the subscriber's side. Now, with the latest VSM, the user can set up a schedule for sending notifications without installing any I/O device.

Follow the steps below to access this feature:

- On the GV-System, select the **Network** button and select **Connect to VSM**. The Login dialog box appears.
- 2. Type the subscriber's IP address, user ID and password and select **OK**. The Connect to Vital Sign Monitor dialog box appears.

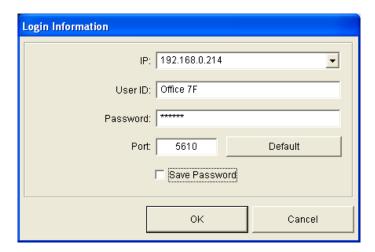


Figure 6-1



3. Unselect the **Monitor all type events** option and click the **Configure** button. The Advanced Settings dialog box appears.



Figure 6-2

4. Select the **Monitoring Schedule** tab and click the **Schedule Setting** button. The Monitoring Schedule dialog box appears.

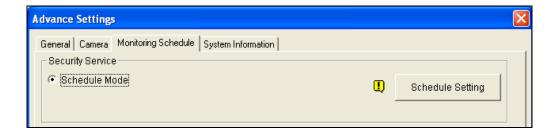


Figure 6-3

5. Set up a time schedule. VSM will only receive notifications when events occur within the defined times. For more details, see step 5 in 5.2 Scheduling Event Notifications.