GeoVision inc.
The Vision of Security

Surveillance System

New Feature Guide V8.3.3

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Feature Guide for
V8.3.3 GeoVision Surveillance System

Welcome to the Feature Guide for V8.3.3 GeoVision Surveillance System.

This Guide provides an overview of key features in V8.3.3 GV-System. It also includes information about how the features differ from similar features in earlier versions.

Cards Supported

The V8.3.3 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-650A
- GV-800A
- GV-1120, GV-1120A All Series
- GV-1240, GV-1240A All Series
- GV-1480, GV-1480A All Series
- GV-1008
- GV-4008

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

Contents

1.   New Supports and Specifications

1.1   Support Changes in Windows Versions

Starting from V8.3.3, GeoVision changes some supports in Windows versions.

1.1.1   Support for Windows 7 and Server 2008

Now the GV-System supports the 32-bit and 64-bit versions of Windows 7 and Windows Server 2008.

However, if your GV-Video Capture Card or GV-System works in conjunction with the following GV accessories, note the limitation that **these accessories do not support 64-bit Windows versions currently**.

● GV-Multi Quad Card

● GV-COM Box

● GV-Hub Box

● GV-I/O Box 4 / 8 / 16 Ports

● GV-NET/IO Card

● GV-Keyboard

● GV-Joystick

1.1.2   End of Compatibility Test for Windows 2000 and Server 2003

Starting from V8.3.3, GeoVision will end the compatibility test for the following Windows versions:

● Windows 2000 (32-bit)

● Windows Server 2003 (32-bit)

1.1.3 Supported Windows Versions

The following table provides a list of Windows versions and compatible video capture cards that fall into each version.

Windows Version	GV Video Capture Card	Support in V8.3.3
Windows 2000 (32-bit)	-	No (*Note 1*)
Windows 2000 (64-bit)	-	No
Windows XP (32-bit)	GV-600(S)/GV-650(S)/GV-800(S) GV-600A/GV-650A/GV-800A GV-1120/GV-1240/GV-1480 GV-1120A/GV-1240A/GV-1480A GV-1008 GV-4008	Yes
Windows XP (64-bit)	-	No
Windows Vista (32-bit)	GV-600(S)/GV-650(S)/GV-800(S) GV-600A/GV-650A/GV-800A GV-1120/GV-1240/GV-1480 GV-1120A/GV-1240A/GV-1480A GV-1008 GV-4008	Yes
Windows Vista (64-bit)	-	No
Windows 7 (32-bit)	GV-600(S)/GV-650(S)/GV-800(S) GV-600A/GV-650A/GV-800A GV-1120/GV-1240/GV-1480 GV-1120A/GV-1240A/GV-1480A GV-1008	Yes
Windows 7 (64-bit)	GV-600A/GV-650A/GV-800A GV-1120A/GV-1240A/GV-1480A GV-1008 (*Note 3*)	Yes (*Note 2*)
Windows Server 2003 (32-bit)	-	No (*Note 1*)
Windows Server 2003 (64-bit)	-	No
Windows Server 2008 (32-bit)	GV-600(S)/GV-650(S)/GV-800(S) GV-600A/GV-650A/GV-800A GV-1120/GV-1240/GV-1480 GV-1120A/GV-1240A/GV-1480A GV-1008 GV-4008	Yes (*Note 2*)

Windows Server 2008 (64-bit)	GV-600A/GV-650A/GV-800A GV-1120A/GV-1240A/GV-1480A GV-1008 (*Note 3*)	Yes (*Note 2*)

Note:

1. Starting from V8.3.3, GeoVision will end the compatibility test.

2. GV-4008 Card does not support Windows 7 and 64-bit Windows due to the driver and firmware limitations.

3. Versions of **GV-600A/GV-650A/GV-800A** Cards which support Windows 7 (64-bit) and Windows Server 2008 (64-bit) are V4.20, V4.21, V4.22, V4.23, V4.33, V4.47 and V4.45. Versions of **GV-1120A/GV-1240A/GV-1480A/GV-1008** Cards which support Windows 7 (64-bit) and Windows Server 2008 (64-bit) are V3.1, V4.2 and V4.21.

1.2 Support for New PTZ Cameras

In V8.3.3, more PTZ cameras are supported:

Brand	Model
COP	15-CD55W-1000

1.3 Support for New IP Devices

In V8.3.3, more Geovision and third-party IP devices are supported:

- **Audio:** A "O" mark indicates the GV-System supports the two-way audio communication with the device; otherwise, a "✕" mark is given.

- **Codec:** The video codecs supported by GV-System are listed.

- **PTZ:** An IP device with PTZ function is marked with "O"; otherwise, a "✕" mark is given.

- **Megapixel:** An IP device supporting megapixel resolution is marked with "O"; otherwise, a "✕" mark is given.

Brand	Model	Audio	Codec	PTZ	Megapixel
GeoVision	GV-MFD110	O	H.264 / MJPEG / MPEG-4	✕	O
	GV-BX010D	O	H.264 / MJPEG / MPEG-4	✕	✕
ACTi	ACTi ACD-2100	O	JPEG / MPEG-4	✕	✕
	ACTi ACM-3411	O	H.264 / JPEG / MPEG-4	✕	O
	ACTi ACM-4101	O	H.264 / JPEG / MPEG-4	✕	✕
	ACTi ACM-7411	O	H.264 / JPEG / MPEG-4	✕	O
Arecont Vision	AV_3155	✕	H.264 / JPEG	✕	O
	AV_5155	✕	H.264 / JPEG	✕	O
VIVOTEK	IP7161	✕	JPEG / MPEG-4	✕	O
	FD7160	✕	JPEG / MPEG-4	✕	O

Note: GV-MFD110 is GV-Mini Fixed Dome H.264 1.3M. **GV-BX010D** is GV-IPCAM H.264 VGA.

1.4   WebCam Live View Limitations

When you want to access the WebCam live view, note the following limitations on different versions of Windows operating systems and Internet Explorer.

- **Windows 7 and Vista**

For the user of Windows 7 and Vista, disable the **User Account Control** settings; otherwise, the OCX components cannot be downloaded and you cannot access the WebCam server.
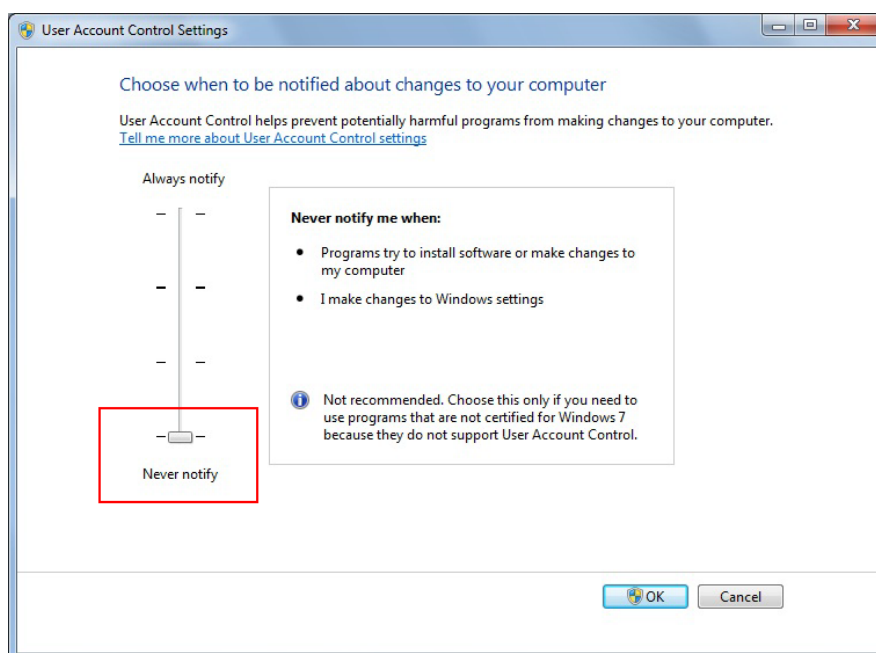

Figure 1

- **Internet Explorer 8**

For the user of Internet Explorer 8, follow the instructions below to adjust the Security Settings; otherwise the message of *Password Error* will pop up repeatedly and you cannot access the WebCam server.

1. To access the Security Settings, click the **Tools** button on the IE browser, select **Internet Options**, select **Security**, select **Custom Level**.

2. Enable **Allow previously unused ActiveX controls to run without prompt**.

3. Disable **Only allow approved domains to use Active without prompt**.

1.5   Improved Memory Limit for 64-bit Windows

The memory limit of GV-System is modified to support 64-bit Windows versions.

- For the users of 32-bit Windows, the memory limit remains 1.7 GB

- For the users of 64-bit Windows, the memory limit is **1.7 GB with 2 GB RAM** and **2.4 GB with 4 GB RAM.**

When the memory usage of GV-System exceeds the memory limit, the warning message will pop up. The system can become unstable and restart itself if the high memory issue persists.

2. Main System

This chapter introduces the new features and enhancements of Main System.

2.1 Enhanced Crowd Detection

The new method of disabling the alarms is added to the current **Alarm Options** of Crowd Detection. Previously when the alarms of crowd detection are triggered, you can disable them manually or the alarms will be disabled automatically after a pre-defined duration. Now you can choose the new option to disable the alarms automatically when the crowd disperses and the system also continues crowd detecting.
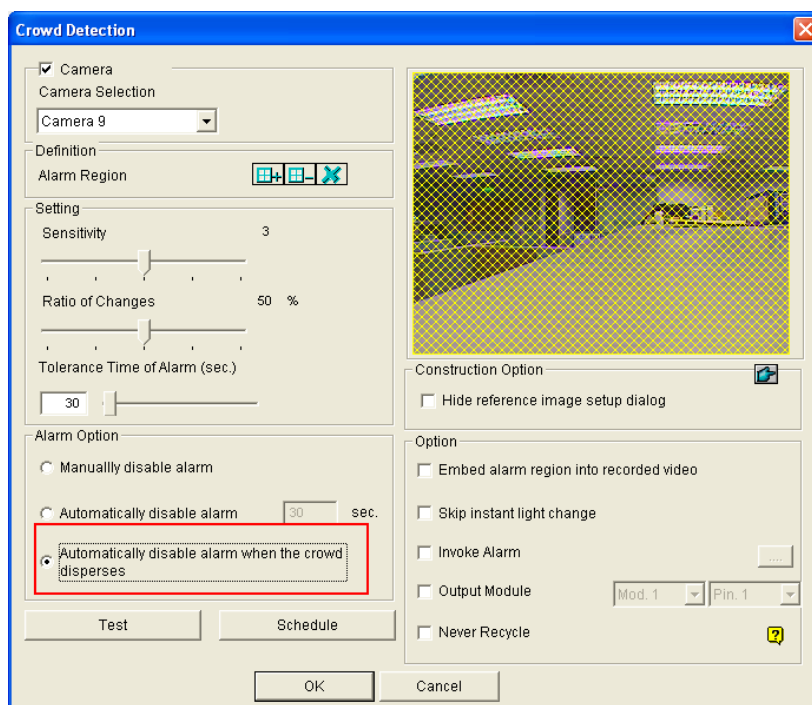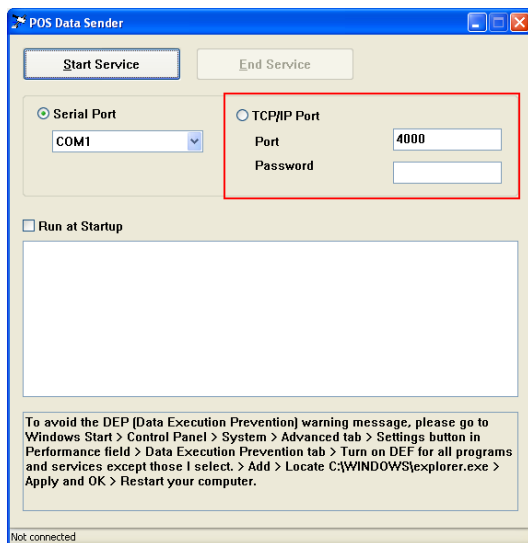

Figure 2-1
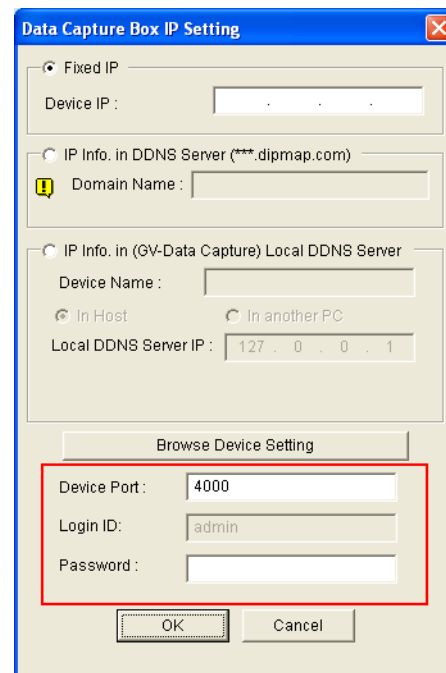
2.2 Support for Network Connection from Graphic-Mode POS Devices

The **POS Data Sender** program, which runs on graphic-mode POS devices for sending data to the GV-System, is enhanced to support network connection. Up to 16 graphic-mode POS devices can be connected to the GV-System through network.

In the TCP/IP Port settings, the default port value is 4000 and the Password field is left blank; the two values must match those on the GV-System. To configure the GV-System to receive the POS data, see *Setting a POS Device, Chapter 7, User's Manual* on the Surveillance System Software DVD.

Settings on POS Data Sender   Settings on GV-System

Figure 2-2

3. ViewLog

This chapter introduces the new features and enhancements of ViewLog player.

3.1 Advanced Merge Tool

Except the Save as AVI feature, now you have more powerful tool for merging and exporting videos. You can choose to merge several AVI files into a big single file or into a number of files of a set duration.

1. On the function panel, click the **Save as AVI** button and select **Advanced Merge**. This dialog box appears.
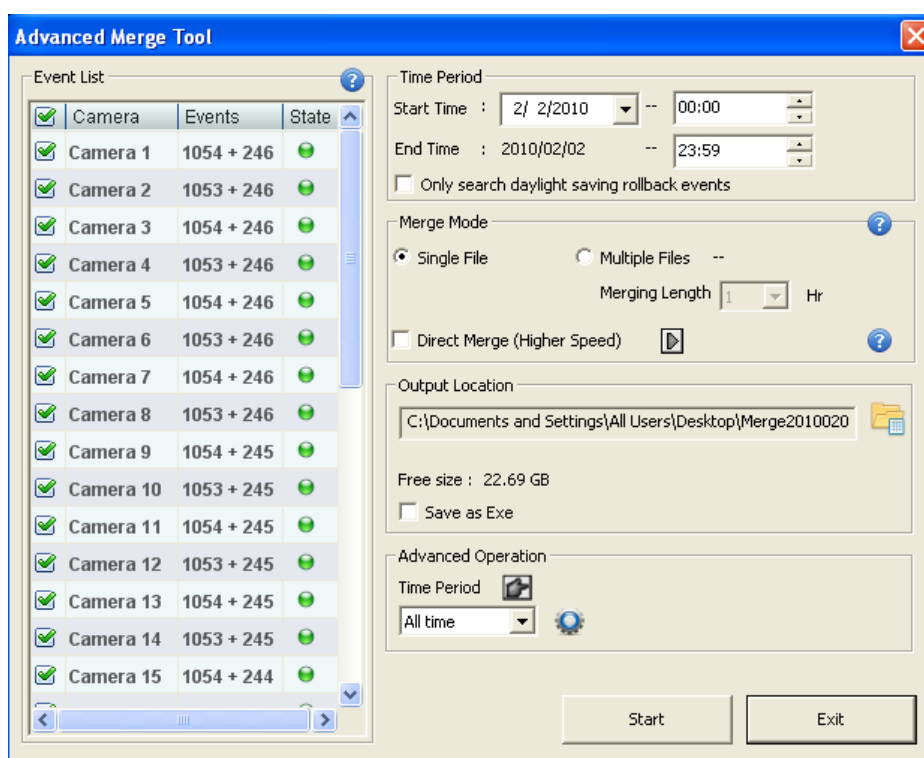

Figure 3-1

3 In the **Time Period** section, specify Start and End time to locate files. The number of video and audio files for each camera found within the specified time is displayed on the left camera list. For example, "Camera 1 1054+246" means the Camera 1 has created 1054 video files and 246 audio files within the specified time. By default you can only merge the files of one day.

4 In the **Merge Mode** section, select one of the merging methods:

■ **Single File:** Merges several AVI files into a single file. The maximum size of the merged file is 2 GB for FAT32 file system and 4 GB for NFTS file system. If the

merged file exceeds the limit of Windows file system, it will be split up into another file.

■ **Multiple Files:** Merges AVI files into several files of a specific duration. After specifying the duration, you can see the number of merged files will be created.

■ **Direct Merge (Higher Speed):** The merging method only joins video files together without the inclusion of their video effects, such as privacy masks, watermarks, time stamps, GPS data and etc.

● Using the Direct Merge to merge several AVI files into a single file, also select **Single File**.

● Using the Direct Merge to merge AVI files based on the specified duration, also select **Multiple Files**.

● To merge audio and video together, click the arrow button and select **Include Audio**.

Since the exclusion of video effects, the Direct Merge is faster than the other two merging methods.

5 In the **Output Location** section, specify the storage location of merged files, and select whether to save merged files in EXE format.

6 In the **Advanced Operation** section:

● If you select **Single File** at the step 4, click the button to configure video effects to merged files. For details, see *Merging and Exporting Video*, Chapter 3, *User's Manual* on the Surveillance System Software DVD
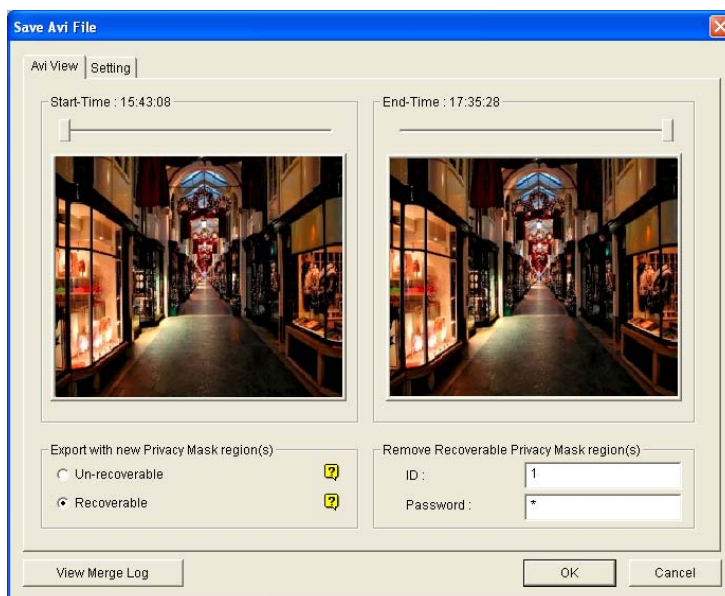

Figure 3-2

- If you select **Multiple File** at the step 2, you can define different video effects for each time segment. Select a period of time and click the 🔘 button to define the video effects to the specific time segment.

7   Click **Start** to begin merging files.

3.2 Merging Schedule

You can program the file merging and exporting to begin on a specific date or on a daily schedule.

The Merging Schedule can run independently without the startup of GV-System and ViewLog. Therefore it allows you to assign the file merging and exporting tasks after working hours when your computer sources are busy at surveillance monitoring or detection.

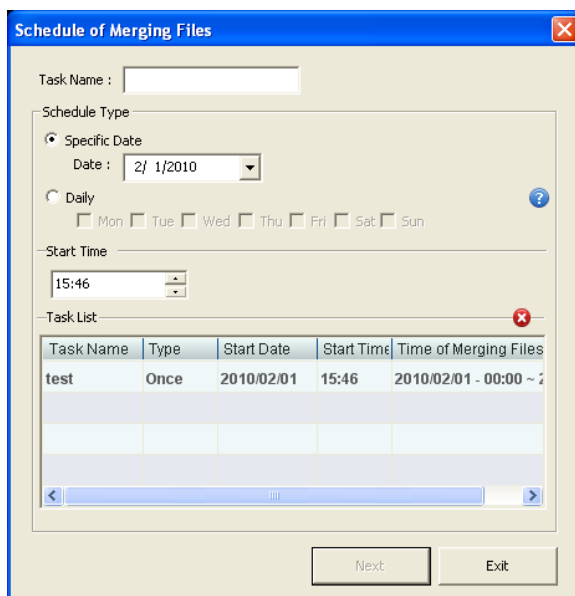1. On the function panel, click the **Save as AVI** button and select **Merging Schedule**. This dialog box appears.

Figure 3-3

2. In the **Task Name** field, name the schedule.

3. In the **Schedule Type** section, select one of the types:

   ■ **Specific Date:** The file merging only begins on the specified date. You can further define which day of files to be merged on the specified date at the step 5.

   ■ **Daily:** The file merging begins on the selected days every week. The Daily schedule merges the files of one day before the selected day. For example, if you select Tue, Thu and Sat to begin file merging. The files of Mon, Wed and Fri will be merged on those selected days respectively.

4. In the **Start Time** section, specify the time of day to begin the file merging.

5. Click **Next**. The Advanced Merge Tool dialog box (Figure 3-1) appears. For details on defining the merging contents, see *3.2 Advanced Merge Tool*.

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On the Advanced Merge Tool dialog box, note the following:

- If you select **Specific Date** at the step 3, you can specify which day of files to be merged at the **Start Time** field.

- If you select **Daily** at the step 3, only the files of one day before the selected day will be merged. Therefore, the **Start Time** field is inaccessible.

- If video files have not been created at the moment that you set the schedule, the **Advanced Operation** settings are inaccessible.

6. Click **Add** on the Advanced Merge Tool dialog box. The file merging task is created and the GVService icon appears on the taskbar as shown below.

7. Click **Exit**.

The GVService program will run at the background to perform the file merging tasks at a specified time. If you stop or remove the GVService, the file merging tasks will be terminated. When the Merging Schedule starts, the following window will pop up to indicate the merging process.
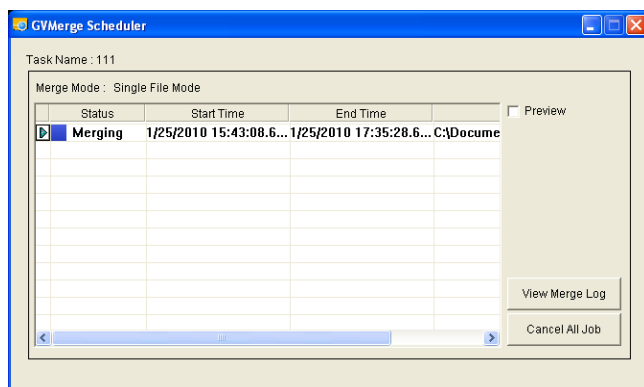

Figure 3-4

Note: If the GVService is removed, clicking the **Merging Schedule** button again can start the GVService.

GVService

When right-clicking the GVService icon, you can find the three options:

- **Status:** Indicates the GVService is running or stopped.

- **Start/Stop GVService:** Starts or stops the GVService and file merging tasks.

- **Remove GVService:** Removes the GVService program from the process list of Windows. Only administrators are allowed to remove the GVService.

3.3   Key Frame Playback

On the Playback Panel, the **Just Key Frame** option is added to playback modes. If you wish to only play the most representative frames of recordings or your network bandwidth is limited which affects the smoothness of playback, now you can choose the new playback option.
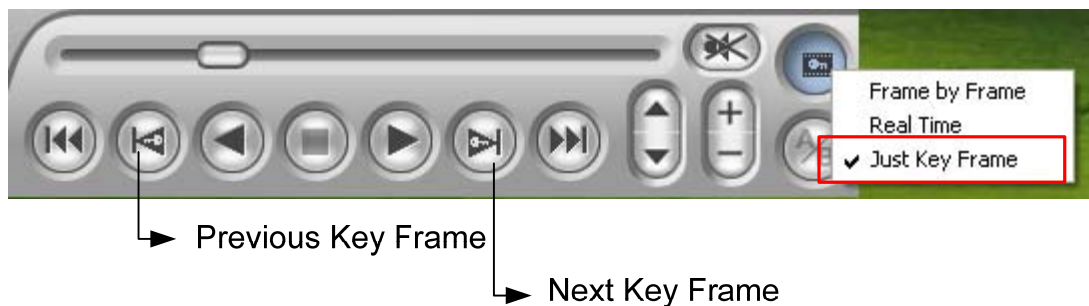

Figure 3-5

Note:

1.   For the MJPEG codec, every frame is key frame.

2.   The Key Frame function only works on V8.3.3 or later. If the version of connected GV-System, through Remote ViewLog, is earlier than V8.3.3, the Key Frame function is not accessible.

3.4 Enhanced Remote ViewLog for Object Index Search

The Remote ViewLog service is enhanced to support the playback of **Object Index** files. Through the Remote ViewLog service, now you can retrieve Object Index files from another GV-System on the network.

The Object Index files include the files of **Object Index**, **Face Detection** and **Video Snapshot**. For details on these features, see *Retrieving Images Using Object Index or Face Detection*, Chapter 3, *User's Manual* on the Surveillance System Software DVD.

1. Build the connection to another GV-System on the network using the Remote ViewLog service. See *Playing Back* over *Internet Using Remote ViewLog Service*, Chapter 3, *User's Manual* on the Surveillance System Software DVD.

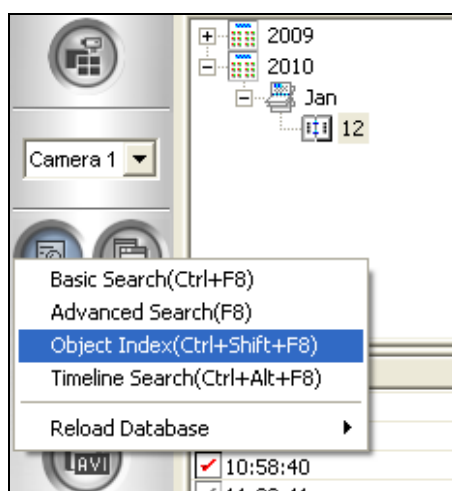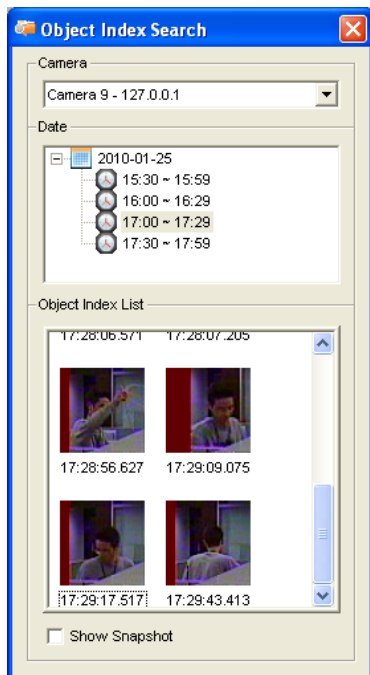2. Click the **Advanced** button and select **Object Index**.

Figure 3-6

3. On the Object Index Search window, select the desired camera and file date for playback.

4. To play images with the ViewLog player, double-click the desired frame on the **Object Index List**.

Figure 3-7

5. For the **Video Snapshot** files only, you can select **Show Snapshot** at the bottom of the dialog box and double-click the desired frame to display images with the default image viewer of Windows, e.g. Paint.

3.5   Video Export with GPS Data

Now you can export the recordings along with corresponding GPS data.

To access this function, click the **Save as AVI** button on the function panel, select **Save as AVI**, click the **Setting** tab and click the arrow button of GPS Export to specify the channel for GPS data export.
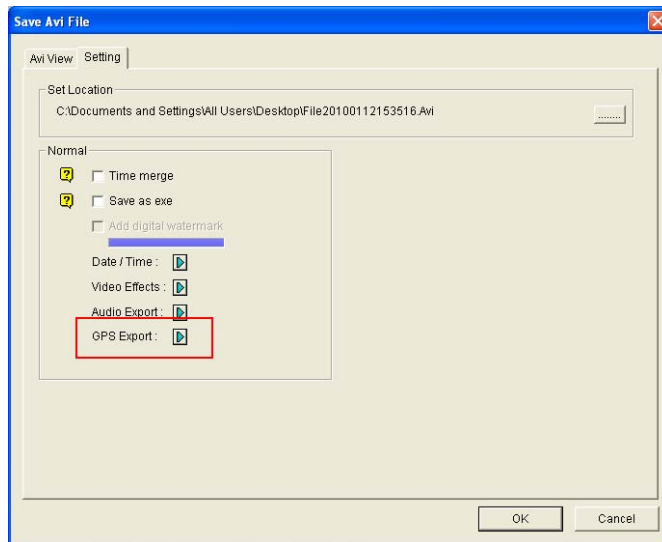

Figure 3-8

3.6 Enhanced Address Book for Importing Files

Before V8.3.2, the database files of Address Book can only be imported one by one. Now you can simultaneously import all database files stored in the same folder.

When the databases are exported, the Address Book will divide them into different types of file extensions as listed below. Previously when you want to import those databases again, you need to click the **Import/Export** button on the Address Book and select **Import a File** to import different types of database files one by one. Now you can place all the database files in the same folder, and select **Import a Folder** to import those files all at once.

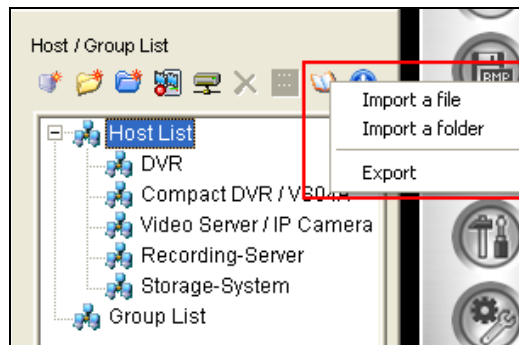| File Type	Description	File Type	Description
.hd	Host database	.sd	Storage database
.gd	Group database	.db	Database of version earlier than V8.3.2
.rd	Recording database	.dat	Database of Remote Playback

Figure3-9

4. Control Center

This chapter introduces the new features and enhancements of Control Center.

4.1 Enhanced I/O Control

In the I/O Control Panel, previously if there are several subgroups under one group, you must force the output at each subgroup to have all the inputs in the group to be triggered. Now the **Force Output** option is added to the group level to solve the inconvenience.

For this example, there are two subgroups "Door 1" and "Door 2" under the group "1". After you right-click the group "1" and select **Force Output**, all the outputs under the subgroups "Door 1" and "Door 2" will be activated.
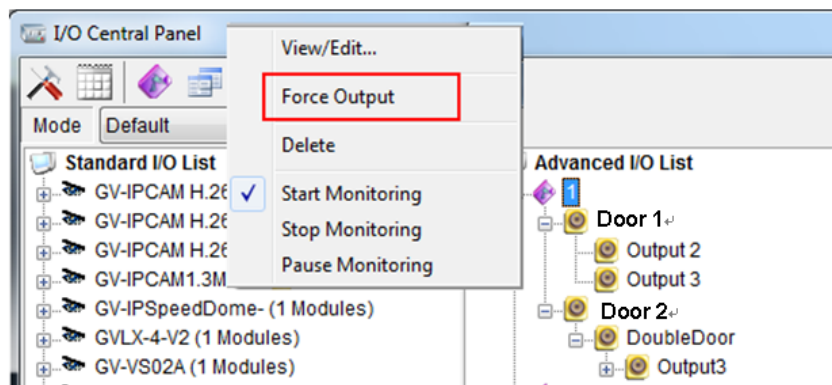

Figure 4-1