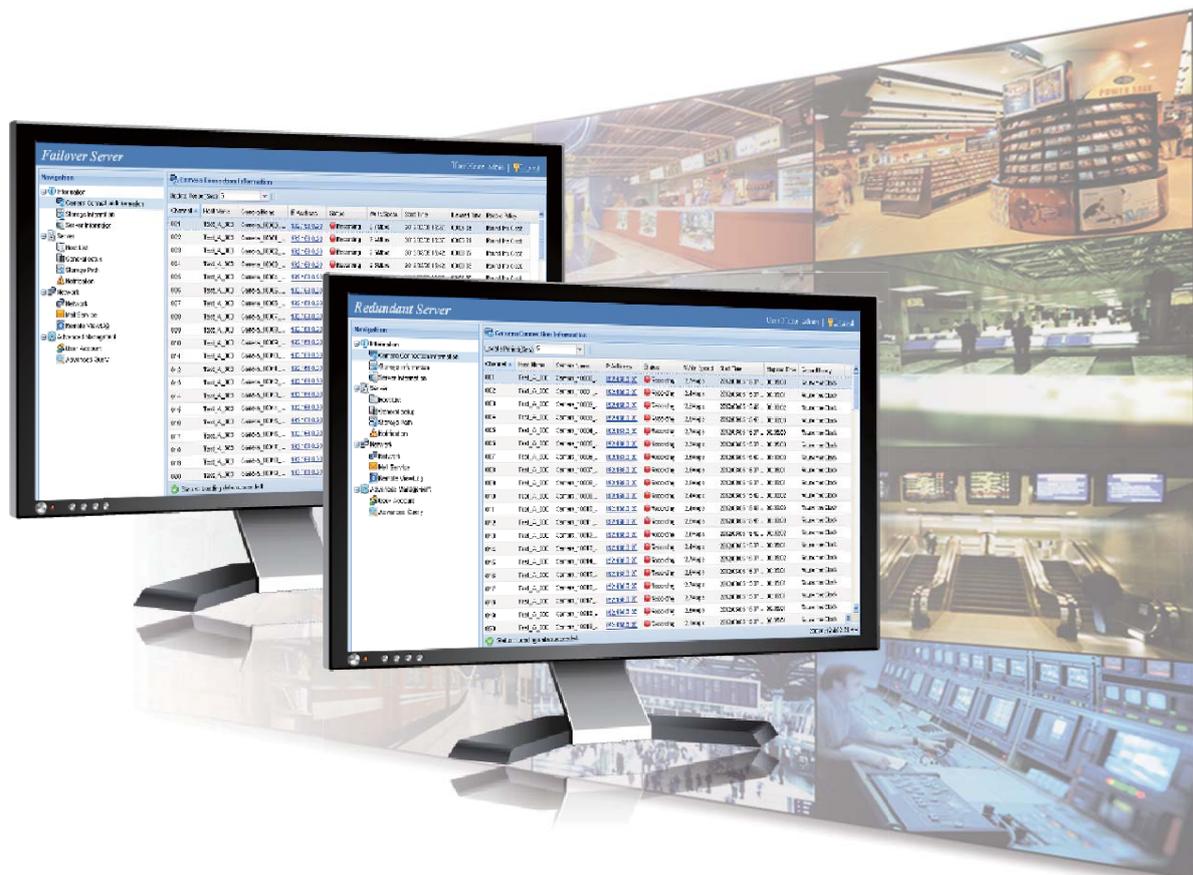


Quick Start Guide

GV-Redundant Server / GV-Failover Server



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

2014/11
English



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December 2014

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1. Introduction

Welcome to the *GV-Redundant Server / Failover Server Quick Start Guide*. In the following sections, you will be guided through the requirements and basic installation steps of the GV-Redundant Server / GV-Failover Server. For detailed information, see *GV-Redundant Server / GV-Failover Server User's Manual* on the Software DVD.

Note: The GV-Redundant Server / GV-Failover Server does not support backup of analog cameras.

Packing List

- Software DVD
- GV-USB Dongle for GV-Redundant Server or GV-Failover Server

2. System Requirements

2.1 Minimum System Requirements

Servers meeting the following minimum system requirements have the capacity to receive up to **128** channels.

OS	64-bit Windows 7 / 8 / 8.1 / Server 2008 R2 / Server 2012 R2
CPU	Core i5 750, 2.67 GHz
Memory	6 GB Dual Channels
Hard Disk	1 GB (for installation)
Browser	<ul style="list-style-type: none">• Internet Explorer 8.0.7600.16385• Internet Explorer 9.00.7930.16406• Firefox 3.6.13• Google Chrome 9.0.597.94• Safari 5.33.19.4
LAN	Gigabit Ethernet X 1
Hardware	Internal or external GV-USB Dongle
Software	.Net Framework 3.5 SP1 for Windows 7 / Server 2008 R2 .Net Framework 3.5 for Windows 8 / 8.1 / Server 2012 R2

Note:

1. Memory required varies depending on the number of channels and resolution of videos received.
 2. The 1 GB hard disk requirement applies for installation of GV-Redundant Server / GV-Failover Server only.
 3. Recordings can not be played back using Firefox, Google Chrome and Safari.
-

2.2 Recommended Hard Disk Requirements

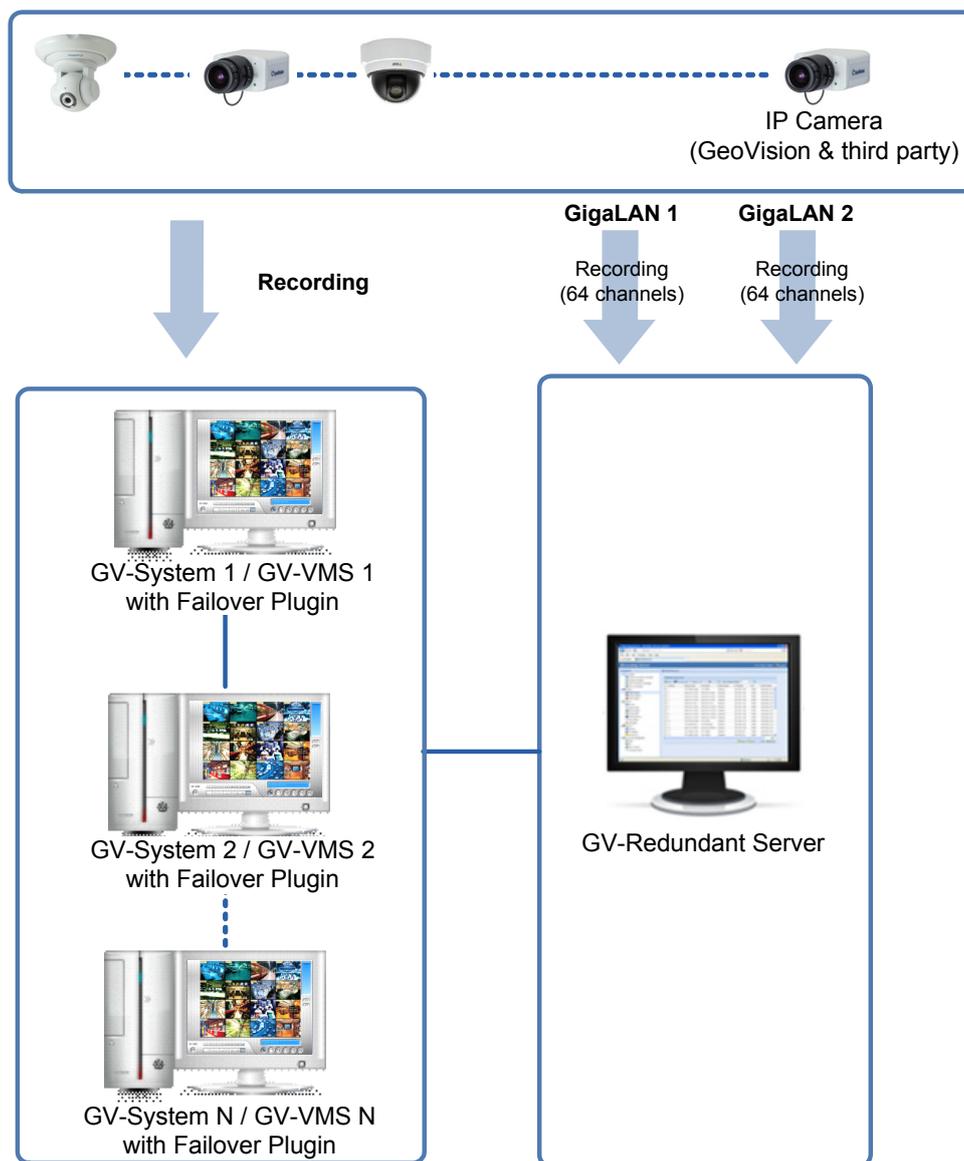
The recommended hard disk requirements for 24 hours of recording are listed as below.

Resolution	Frame rate	Codec	Max. channel per HDD and required HDD capacity	HDD capacity required for recording 128 ch for 24 hr	Recommended HDD requirements
1.3 MP	30 fps	H.264 / MPEG4	32 ch / 2.5 TB	10 TB	3 TB 7200RPM HDD x 4 (SATA3)
		JPEG	8 ch / 2.7 TB	43.2 TB	3 TB 7200RPM HDD x 16 (SATA3)
2.0 MP	30 fps	H.264	21 ch / 2.2 TB	13.5 TB	3 TB 7200RPM HDD x 7 (SATA3)
		JPEG	5 ch / 2.5 TB	64 TB	3 TB 7200RPM HDD x 26 (SATA3)
3.0 MP	20 fps	H.264	32 ch / 3 TB	12 TB	3 TB 7200RPM HDD x 4 (SATA3)
		JPEG	4 ch / 2 TB	64 TB	3 TB 7200RPM HDD x 32 (SATA3)

Note: The number of hard drives required varies depending on the write speed of the hard drive and the hard disk size required varies depending on the recorded file size. The recommended hard disk requirement is just for your reference.

2.3 Optimal Network Requirements

For optimal performance and processing efficiency, it is advisable to use two Giga bit connections, each assigned with 64 channels, and run through separate network. This is illustrated below:



Note: To avoid network bottleneck, each network card must be assigned with a different IP address, and subnet mask. For detail, see *Appendix C. How to Avoid Network Bottleneck, GV-Redundant Server / GV-Failover Server User's Manual* on the Software DVD.

2.4 GV-USB Dongle

A GV-USB Dongle is required to activate the GV-Redundant Server / GV-Failover Server.

- **GV-Redundant Server:** Internal or external USB dongle supporting a maximum of 128 GeoVision and third-party IP channels.
- **GV-Failover Server:** Internal or external USB dongle supporting a maximum of 128 GeoVision and third-party IP channels.

Note:

1. The GV-Redundant Server and GV-Failover Server can not be run in the one PC at the same time.
 2. One GV-System / GV-VMS can only connect to one GV-Redundant Server / GV-Failover Server.
 3. Optionally purchase an internal USB dongle for the Hardware Watchdog function. With this feature, the computer restarts itself when Windows crashes. To see how to install the internal GV-USB Dongle, refer to *Appendix B. Installing the Internal USB Dongle, GV-Redundant Server / GV-Failover Server User's Manual on Software DVD*.
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2.5 Compatible Versions of GeoVision Application

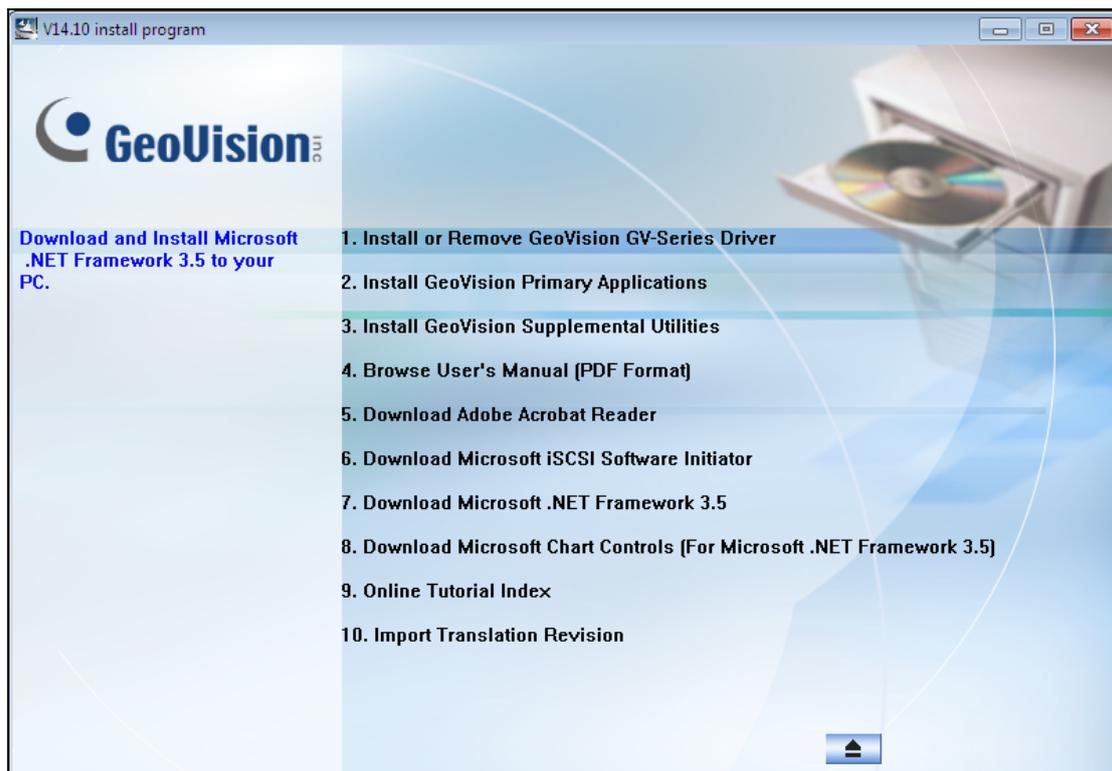
The GV-Redundant Server / GV-Failover Server is only compatible with the following version:

- **GV-System, GV-Remote ViewLog:** version 8.5.3 or later
- **GV-VMS:** version 14.1 or later

3. Installation

3.1 Installing the GV-Redundant Server / GV-Failover Server

1. Plug in the GV-Redundant Server / GV-Failover Server dongle.
2. Insert the Software DVD to the computer. This window pops up automatically.



3. To install USB driver, select **Install or Remove GeoVision GV-Series Driver** and click **Install GeoVision USB Device Drivers**.
4. To install GV-Redundant Server / GV-Failover Server
 - A. Select **Install GeoVision Primary Applications**, and click **Yes** to accept the license agreement.
 - B. Select **GV-Redundant and Failover Server** and then follow the on-screen instructions.

5. To install .Net Framework 3.5, select **Download Microsoft .NET Framework 3.5**.
-

Note:

1. If you are using Windows 8 or Windows Server 2012, you will need to install .Net Framework. See *Appendix D How to install .Net Framework 3.5 for Windows Server 2012 and Windows 8, GV-Redundant Server / GV-Failover Server User's Manual* on Software DVD.
 2. You may also download the latest software from our website. For details, see *Installation, Chapter 2, GV-Redundant Server / GV-Failover Server User's Manual* on the Software DVD.
-

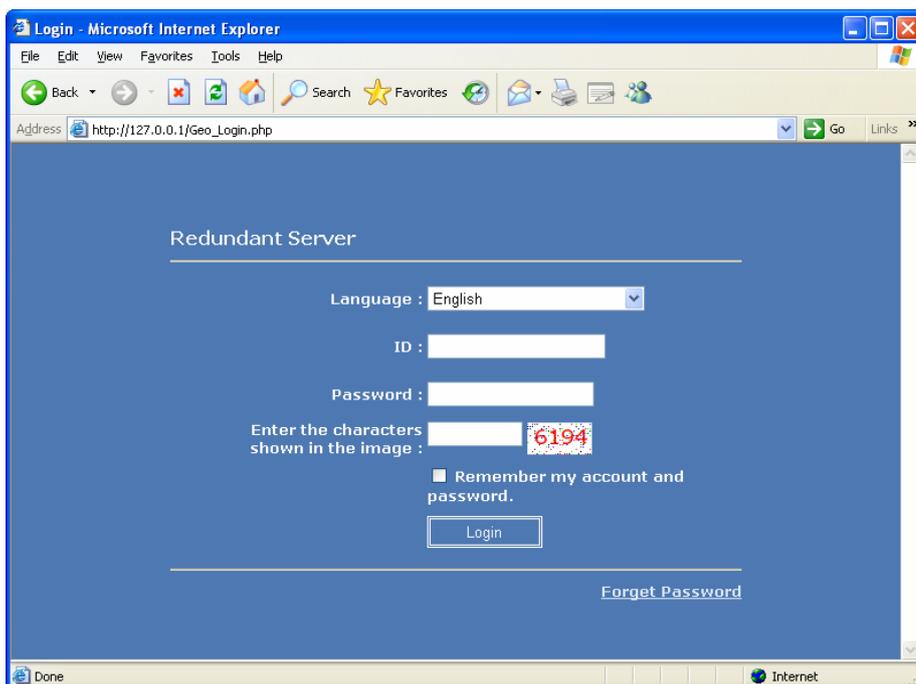
4. Getting Started

4.1 Starting the GV-Redundant Server / GV-Failover Server

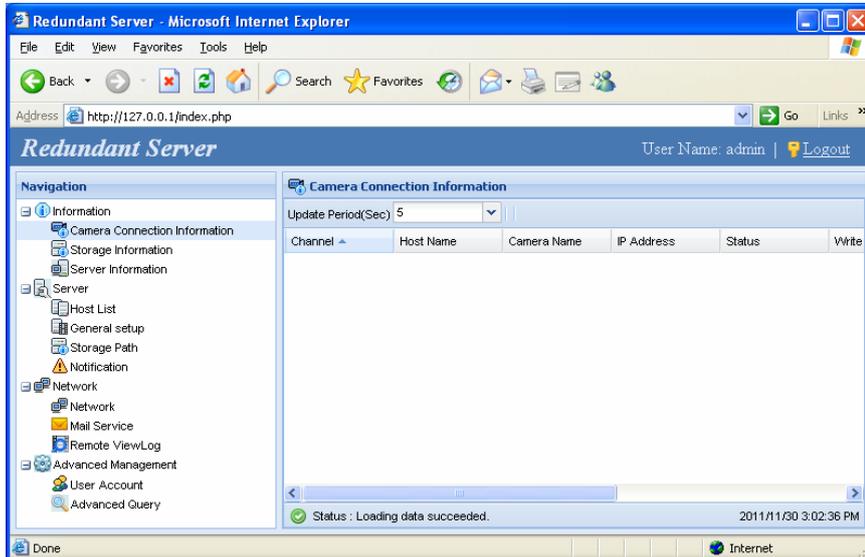
1. Log in the GV-Redundant Server / GV-Failover Server.
 - A. Right-click the **Server Service Manager** icon  in the system tray and select **Login**. This dialog box appears.



- B. Type the ID and password. The default ID and password are **admin**.
 - C. Click **OK**. The message "Login succeeded." appears.
2. Right-click the **Server Service Manager** icon  and select **Start Service**. The GV-Redundant Server / GV-Failover Server is started and the icon is indicated with a green tick .
 3. Access the Web interface.
 - A. Right-click the **Server Service Manager** icon  in the system tray and select **Access Web Interface**. This window appears



- B. Select the language using the drop-down list, type the ID, password and the verification number. The default ID and password are **admin**.
- C. Click **Login**. The Web interface appears



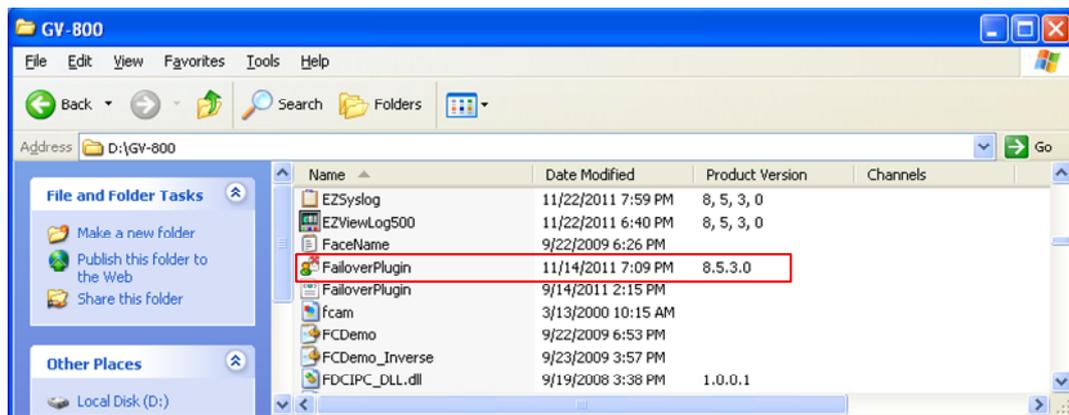
For more detail, see *GV-Redundant Server / GV-Failover Server User's Manual* on the Software DVD.

Note:

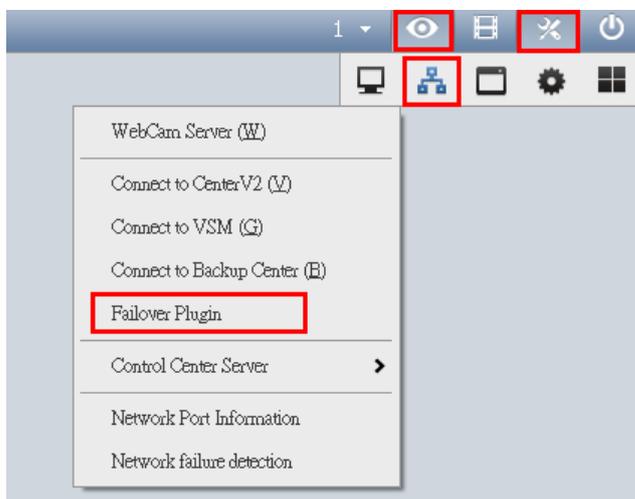
1. To enable the updating of images in Microsoft Internet Explorer, you must set your browser to allow ActiveX Controls and perform a one-time installation of GeoVision's ActiveX component onto your computer.
 2. If the GV-Redundant Server / GV-Failover Server is installed behind a firewall or router, you may need to open these default ports: HTTP port 80, remote playback (Remote ViewLog) port 5552 and Command port 20000 (GV-System / GV-VMS connection). See *Changing the HTTP and Command Ports, 3.1 Starting the GV-Redundant Server / GV-Failover Server, GV-Redundant Server / GV-Failover Server User's Manual* on Software DVD.
-

4.2 Connecting to GV-System / GV-VMS

1. **For GV-System**, follow the steps below to access the Failover Plugin program.
 - A. Execute the **Failover Plugin** program from GV-System folder. The **Failover Plugin** icon  appears in the system tray.

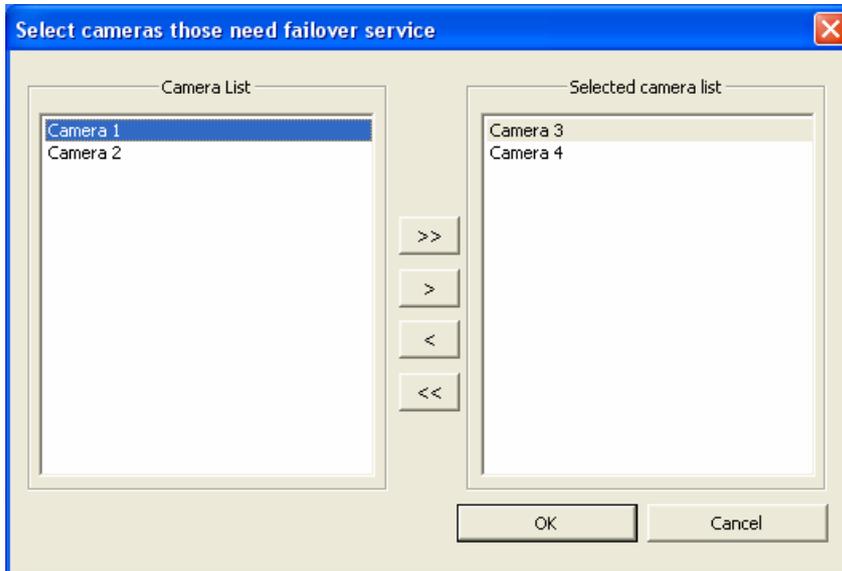


- B. Double-click the **Failover Plugin** icon . The Failover Plugin dialog box appears.
2. **For GV-VMS**, on the main screen, click **Home**, **Toolbar**, **Network** and then select **Failover Plugin**. The Failover Plugin dialog box appears.

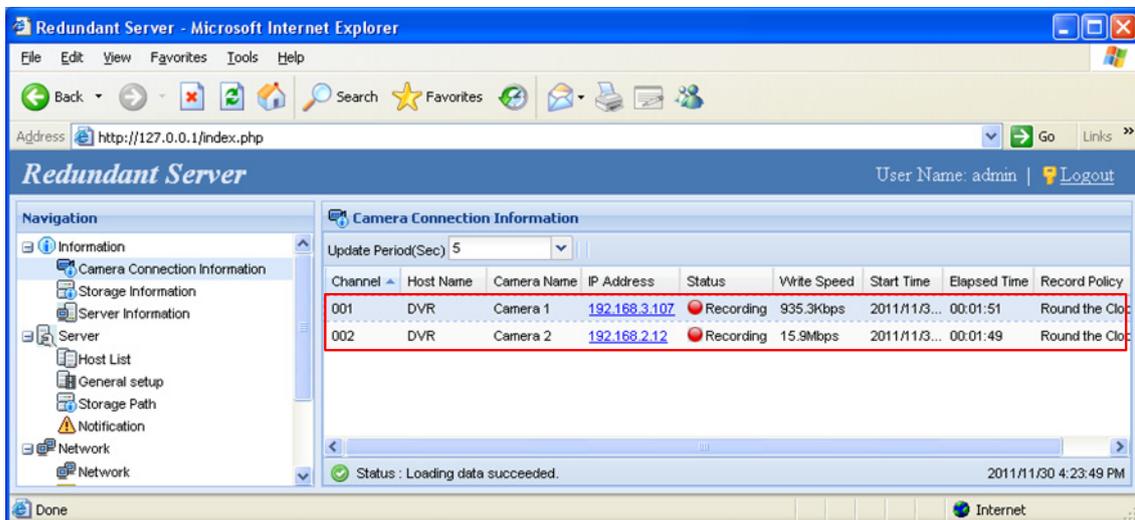


3. Type the IP address, ID and password of the GV-Redundant Server / GV-Failover Server. Keep the default Command port **20000** or change it to match the corresponding port on GV-Redundant Server / GV-Failover Server. See *3.1 Starting GV-Redundant Server / GV-Failover Server, GV-Redundant Server / GV-Failover Server User's Manual* on Software DVD.

- Click **Select IP Camera** to select the channels for connection. This dialog box appears.



- Click **Start service**. The GV-Redundant Server will start recording the selected IP channels of the host. The GV-Failover Server will start recording the selected IP channels under faulty conditions. The recordings on GV-Redundant Server / GV-Failover Server will be stopped when you click **Stop Service**.



For detailed settings on the Failover Plugin, see step 5 in 3.2 *Connecting to GV-System GV-VMS, GV-Redundant Server / GV-Failover Server User's Manual* on Software DVD.

IMPORTANT:

1. GV-Redundant / Failover Server do not support GV-VMS hosts when they are running in service mode. It is highly suggested not to enable “Service Mode”. For details on service mode, see *System Configuration, Configuring the Main System Chapter, GV-VMS User’s Manual*.
 2. Keep the Failover Plugin program running in the background to maintain the connection of the GV-System / GV-VMS to GV-Redundant Server / GV-Failover Server.
-

5. Web Interface

The Camera Connection Information page shows the connection status of all the IP cameras added to the Working Camera List.

The screenshot shows the 'Redundant Server' web interface. The main content area is titled 'Camera Connection Information'. It features a table with the following columns: Channel, Host Name, Camera Name, IP Address, Status, Write Speed, Start Time, Elapsed Time, and Record Policy. The table contains four rows of data for different cameras. Three callouts are present: 1 points to the 'Update Period(Sec)' dropdown menu, 2 points to the 'IP Address' column, and 3 points to the 'Status' column.

Channel	Host Name	Camera Name	IP Address	Status	Write Speed	Start Time	Elapsed Time	Record Policy
001	DVR	Camera 1	192.168.3.107	Connecting				Round the Clock
002	DVR	Camera 2	192.168.2.12	Recording	902.2Kbps	2011/12/08 14...	00:00:22	Round the Clock
003	DVR	Camera 3	192.168.0.6	Connecting				Round the Clock
004	DVR	Camera 4	192.168.3.161	Recording	388.9Kbps	2011/12/08 14...	00:00:23	Round the Clock

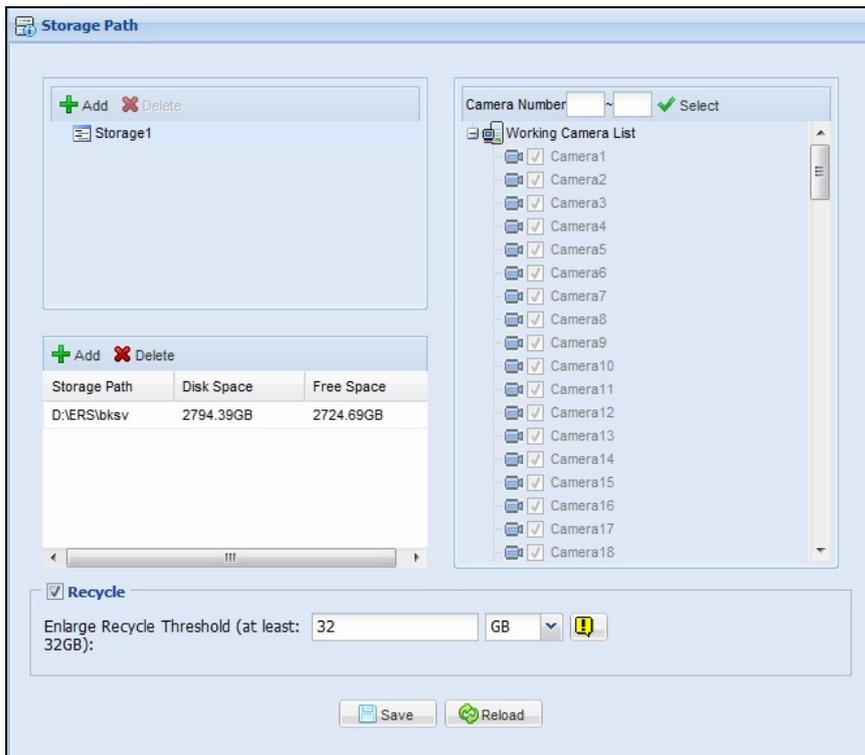
The controls in the window:

No.	Name	Description
1	Update Period	Shows the refresh frequency of the page. Use the drop-down list to customize.
2	IP Address	Click to access the Web interface of the camera.
3	Status	<ul style="list-style-type: none"> ● Recording : The camera is recording. ● Connected : The camera is connected. ● Connecting: Connecting to the camera. ● Connect Failed: Unable to connect to the camera. ● Disconnect: The camera is disconnected. ● VIDEO LOST: Unable to obtain video from the device. ● Login failed: Incorrect ID or password. ✘ Recording Failure: Unable to record video.

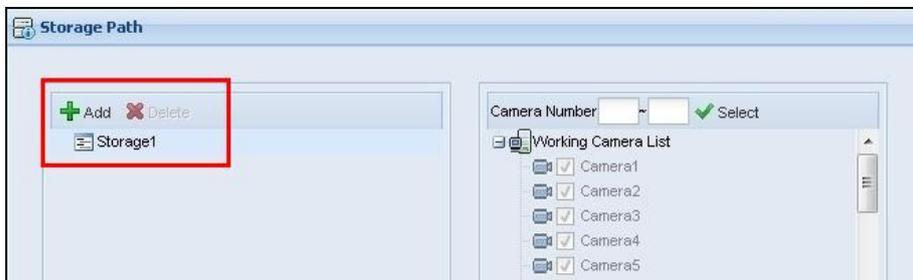
6. Setting Up the Storage

When logging in the GV-Redundant Server / GV-Failover Server for the first time, it is advisable that you configure the storage settings. The default storage path is `:\ERS\bksv`. To add a new storage group or storage path, follow the steps below.

1. On the main menu, select **Server** and **Storage Path**. This page appears.

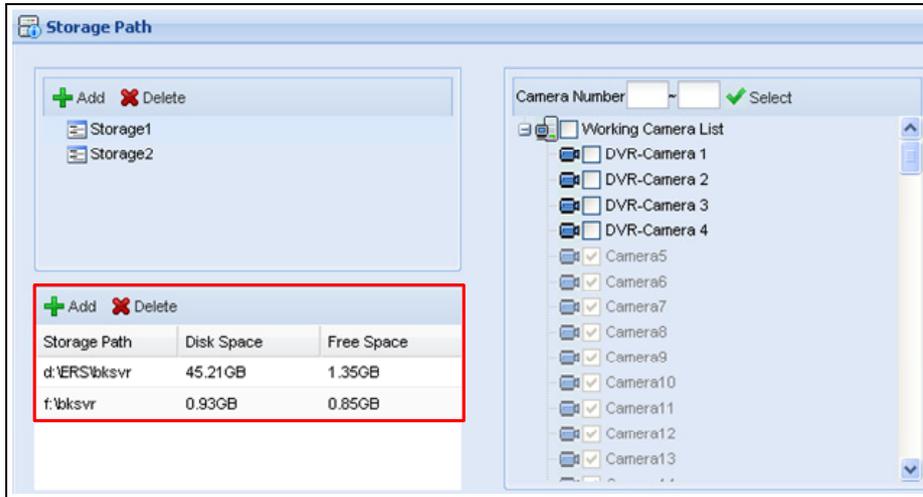


2. On the Storage Path page, click the **Add**  **Add** button to add a new storage folder in a different disk drive, or simply select an existing storage folder.



6 Setting Up the Storage

- Use the default storage path, or click the **Add** button to add a new storage path.



- In the Working Camera List section, type a range of camera number and click the **Select** button. You can also select cameras individually from the **Working Camera List**. The selected cameras will be recorded to the storage path indicated.
- To specify a recycle threshold, select **Recycle** and type a minimum free space. When the remaining free space falls below the threshold, the oldest files will be overwritten.



- Click **Save**. These settings are saved and applied instantly.

IMPORTANT:

- When multiple storage paths are added to a Storage Group, recycling of the oldest file will begin when the free space of every storage path in that Storage Group falls below the recycle threshold.
 - By default, the recorded files will be stored for 30 days unless the recycle threshold is met.
 - When assigning the storage path, ensure there is enough storage space on the disk drives to avoid storage overload. For details on the maximum channel supported for each hard disk, see *2. Recommended Hard Disk Requirements* in the *Quick Start Guide*.
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7. Establishing Accounts

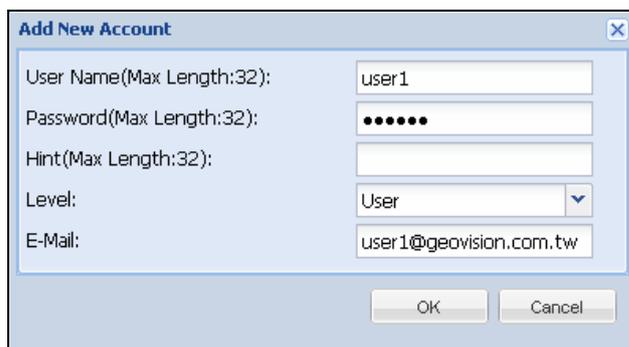
You can create up to **1000** User and Supervisor accounts to access GV-Redundant Server / GV-Failover Server.

- A supervisor account: full access to GV-Redundant Server / GV-Failover Server.
- A user account: limited access right.



7.1 Creating an Account

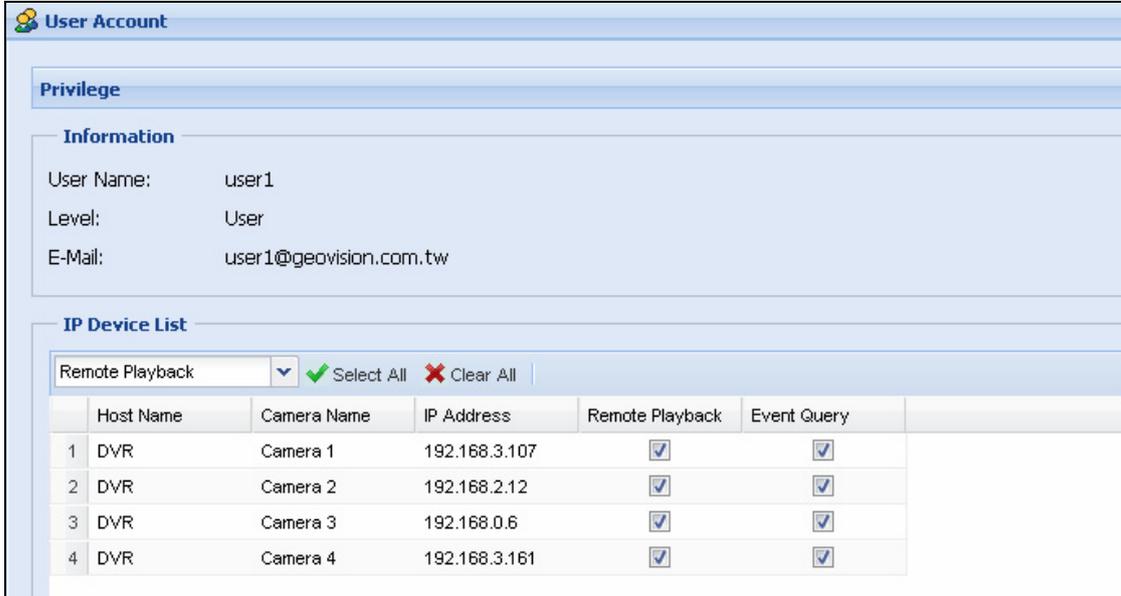
1. Click the **Add** button . This dialog box appears.

The screenshot shows a dialog box titled "Add New Account" with a close button (X) in the top right corner. It contains several input fields: "User Name(Max Length:32):" with the text "user1"; "Password(Max Length:32):" with masked characters "•••••"; "Hint(Max Length:32):" which is empty; "Level:" with a dropdown menu set to "User"; and "E-Mail:" with the text "user1@geovision.com.tw". At the bottom of the dialog box are "OK" and "Cancel" buttons.

2. Type the **User Name**, **Password** and a password **Hint** for the account.
3. Use the **Level** drop-down list to select **Supervisor** or **User**.
4. Optionally type an e-mail address for the account. When you forget the password, the password can be sent to your e-mail account using the Forget Password link in the login page.
5. Click **OK** to return to the User Account List. You can edit the account settings using the **Change Password** and **E-Mail** button.

7.2 Setting the Access Right

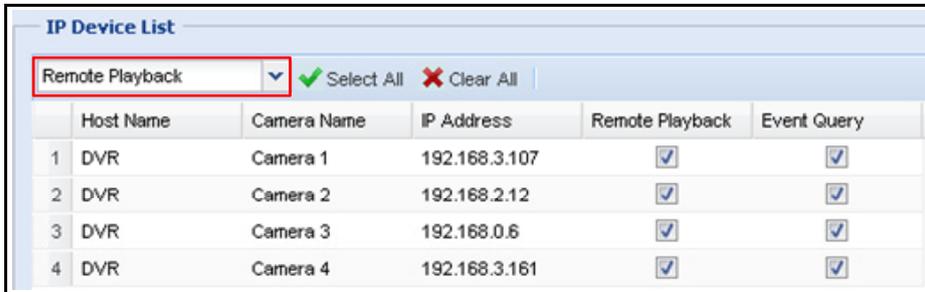
1. Select a user account and click the **Privilege** button  or simply double-click the account. This dialog box appears.



The dialog box titled "User Account" shows the "Privilege" section. Under "Information", the user details are: User Name: user1, Level: User, and E-Mail: user1@geovision.com.tw. Below is the "IP Device List" section, which includes a dropdown menu set to "Remote Playback", "Select All" (checked), and "Clear All" (unchecked) buttons. A table lists four DVR devices with their respective camera names and IP addresses, and checkboxes for "Remote Playback" and "Event Query" are checked for each.

	Host Name	Camera Name	IP Address	Remote Playback	Event Query
1	DVR	Camera 1	192.168.3.107	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	DVR	Camera 2	192.168.2.12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	DVR	Camera 3	192.168.0.6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	DVR	Camera 4	192.168.3.161	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

2. The cameras listed in the IP Device List are displayed. Select to allow the user to access the **Remote Playback** and **Event Query** functions.



This image is a close-up of the "IP Device List" section from the previous dialog box. A red box highlights the "Remote Playback" dropdown menu. The table below shows the same four DVR devices with their camera names and IP addresses, and checkboxes for "Remote Playback" and "Event Query" are checked for each.

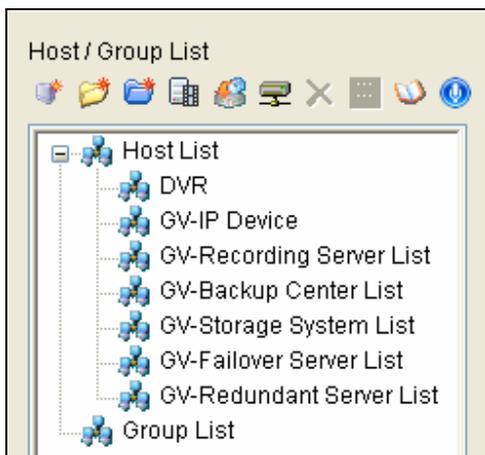
	Host Name	Camera Name	IP Address	Remote Playback	Event Query
1	DVR	Camera 1	192.168.3.107	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	DVR	Camera 2	192.168.2.12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	DVR	Camera 3	192.168.0.6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	DVR	Camera 4	192.168.3.161	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

3. Click **Save**.

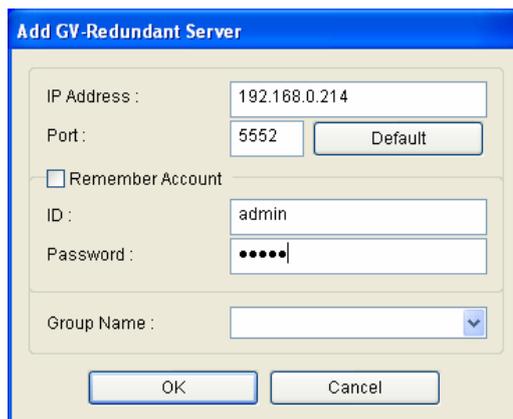
8. Playing Back Videos

The files recorded on the GV-Redundant Server / GV-Failover Server can be played back remotely using the Remote ViewLog program. Install the program from the Software DVD or download it through the Web interface of the GV-Redundant Server / GV-Failover Server.

1. On the Remote ViewLog's main screen, click the **Tools** button and select **Address Book**. This dialog box appears.



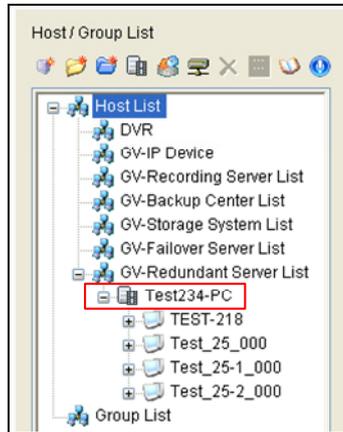
2. Add the GV-Redundant Server / GV-Failover Server.
 - A. Click **Add GV Device Server** button . This dialog box appears.



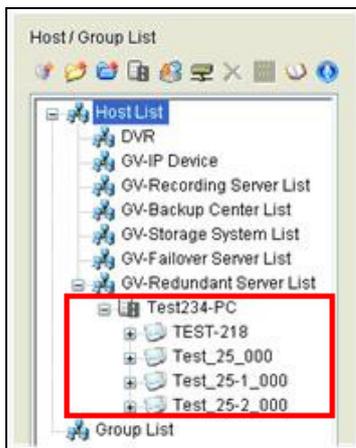
- B. Type the IP address or domain name of the GV-Redundant Server / GV-Failover Server in the **IP Address** field.
- C. Use the default connection port **5552** or modify to match the port value on GV-Redundant Server / GV-Failover Server. See *4.3.3 Remote ViewLog, GV-Redundant Server / GV-Failover Server User's Manual* on Software DVD.
- D. Type the ID and Password of the GV-Redundant Server / GV-Failover Server user account.

8 Playing Back Video

- E. To add the GV-Redundant Server / GV-Failover Server to address book under a group, select a **Group Name** or type a new name.
- F. Click **OK**. The GV-Redundant Server / GV-Failover Server is added to the address book.



- 3. Right-click a host under the GV-Redundant Server / Failover Server and select **Connect**. This dialog box appears.



- In the Remote ViewLog player, the recorded events will be listed for playback.

