

GV-Web Report

User's Manual





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This product includes iconv module (<http://www.gnu.org/software/libiconv/>).

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Chapter 1 Introduction

The GV-Web Report keeps track of and analyzes your people counts from GV-Smart Boxes and GV-Systems. The GV-Web Report creates the reports and graphs of daily, monthly and yearly people traffic statistics. Through the web browser, you can not only access those counting reports but also view the live video or the recordings from multiple locations.

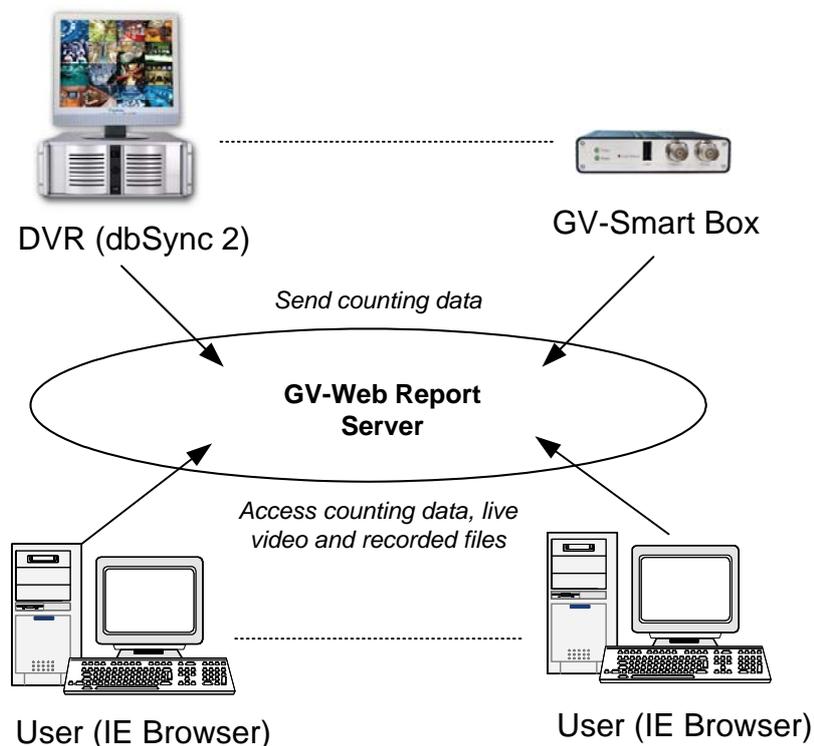


Figure 1-1

In overview, with the GV-Web Report you get:

- Monitor people traffic through the web browser
- Real-time, daily, monthly, yearly counting reports and graphs
- Group different cameras from different devices for traffic analysis
- Live video monitoring
- Remote playback of recordings from GV-Systems

1.1 Minimum System Requirements

The following are minimum system requirements for the server to run **GV-Web Report** and for the GV-System to run **dbSync 2**.

GV-System

GV-System	V8.3.2 or later
Software	.Net Framework 3.5 dbSync2
Note: .Net Framework and dbSync2 can be found in the accompanying software CD.	

GV-Web Report

OS	Windows XP, Vista, Server 2008 (Not support 64-bit version of Windows)
Software	.Net Framework 3.5
Browser	Internet Explorer 7.0 or later
Hardware	USB dongle
Note: .Net Framework can be found in the accompanying software CD.	

Note: In this manual, the term “GV-System” refers to GV-DVR, GV-NVR and GV-Hybrid DVR.

Chapter 2 Installation

2.1 Installing the GV-Web Report

The GV-Web Report program may be installed on a separate computer or the same computer with the GV-System, but it is recommended to install in on a dedicated computer.

Before installing the GV-Web Report, you need to install the USB dongle driver and .Net Framework first. Follow the steps below to install the programs.

1. Insert Software CD to the computer. This window pops up automatically.

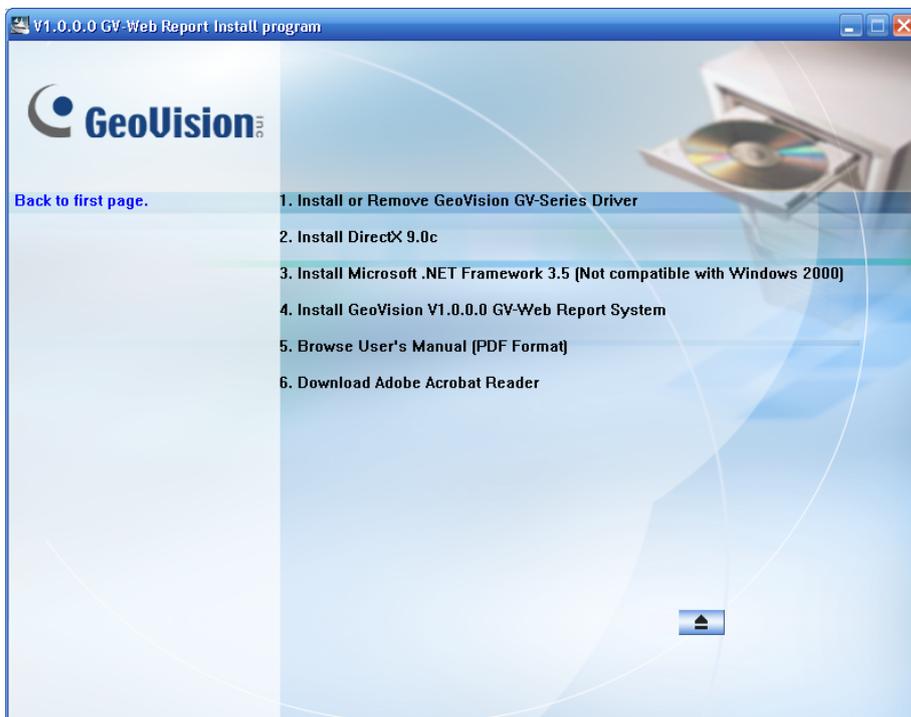


Figure 2-1

2. To install **USB driver**, select **Install or Remove GeoVision GV-Series Driver** and click **Install GeoVision USB Devices Driver** to start.
3. To install **.Net Framework**, select **Install Microsoft. NET Framework 3.5 (Not compatible with Windows 2000)**.
4. To install **GV-Web Report**, select **Install GeoVision V1.0.0.0 GV-Web Report System** and click **GeoVision GV-Web Report System**.

2.2 Installing dbSync2 on the GV-System

1. Insert Software CD to the computer and a window (Figure 2-1) will pop up automatically.
2. To install **.Net Framework**, select **Install Microsoft. NET Framework 3.5 (Not compatible with Windows 2000)**.
3. To install **dySync2**, select **Install GeoVision V1.0.0.0 GV-Web Report System** and click **dySync2**

Chapter 3 Getting Started

The GV-Web Report server is a dedicated computer on a network that receives and analyses the people counts from multiple units of GV-Systems and GV-Smart Boxes. The GV-Web Report server enables you to access the counts anywhere through a web browser.

3.1 Starting the GV-Web Report

To start the GV-Web Report service, follow these steps:

1. Run **GV-Web Report** (from Windows Start menu or from the desktop). For the first-time user, you will be prompted to enter a password. The default ID (account) is **admin**.
2. On the GV-Web Report window, click **Service** from the menu bar and select **Data Server** to start receiving data from connected GV-Systems and GV-Smart Boxes.

3.2 Connecting GV-System to GV-Web Report

To send people counts to the GV-Web Report server, you need to run the dbSync2 program on the computer of GV-System.

1. Run **dbSync2** (from Windows Start menu or from the desktop). The following dialog box appears.

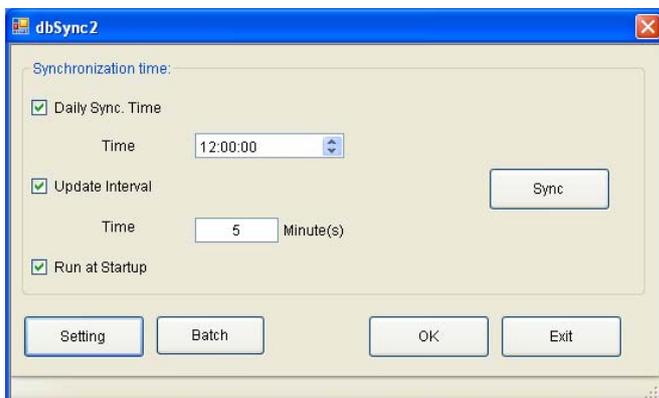


Figure 3-1

2. Click the **Setting** button. This dialog box appears.

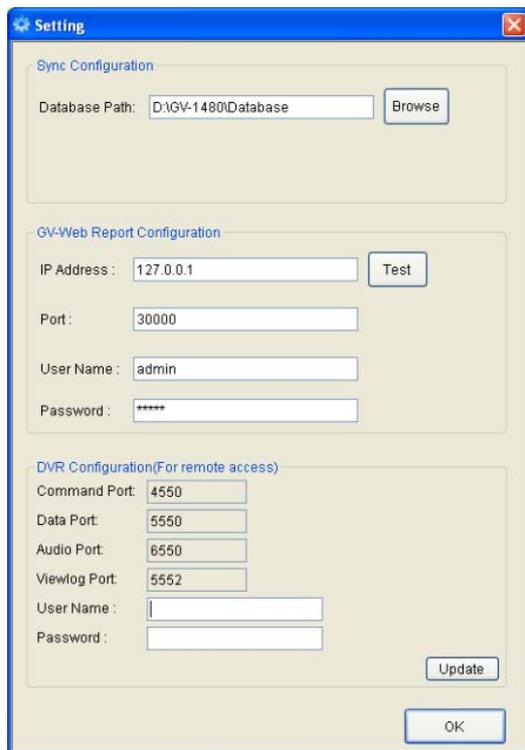


Figure 3-2

3. In the GV-Web Report Configuration section, type the IP address, username and password of the GV-Web Report server. Keep the port 30000 or modify it if necessary.
4. Click **Test** to connect to the GV-Web Report server. If the connection is established, a successful connection message will appear on both the GV-System and the GV-Web Report.

Note: Ensure that the GV-Web Report service has been started (see [3.1 Starting the GV-Web Report](#)). Otherwise, the connection attempt will fail.

5. Since the dbSync2 program only sends the logged counts to the GV-Web Report server, it is required to configure the **Update the log every x Min.** option in the Counter/Intrusion Alarm Setting on the GV-System. Based on the specified interval in minute, the counts are logged to the GV-System and will be sent to the GV-Web Report server through the dbSync2 program.

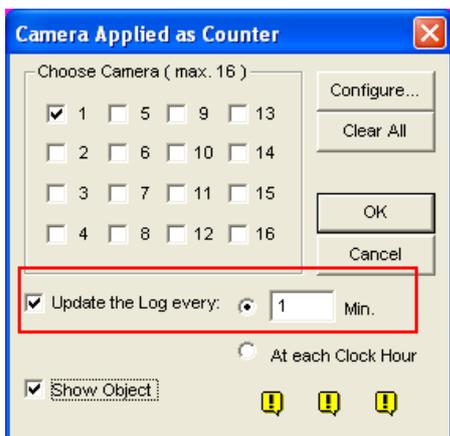


Figure 3-3

To define the time to send the counts to the GV-Report server, see *3.3 Configuring the dbSync2 Program*.

3.3 Configuring the dbSync2 Program

The dbSync2 program, installed on the computer of GV-System, sends people counts to the GV-Web Report server. It also enables remote access to the GV-System for live video and playback applications.

1. Run **dbSync2**. This dialog box appears.

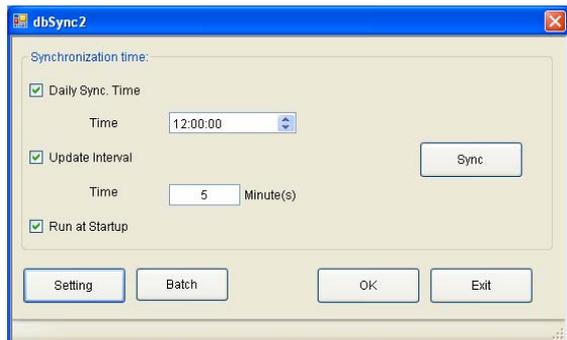


Figure 3-4

- **Daily Sync. Time:** Specify a time to send the counts to the GV-Web Report server automatically.
- **Update Interval:** Specify a time interval in minute to send the counts to the GV-Web Report server automatically.
- **Sync:** Click this button to send the counts to the GV-Web Report server immediately.
- **Batch:** Click this button, and select the desired data files to send to the GV-Web Report server. The files of people counts are named with prefix "sys", e.g. sys20071127. The default path for data files is: \GV folder\database.
- **Setting:** Click this button to configure connections to the GV-Web Report server.

- Click the **Setting** button. This dialog box appears.

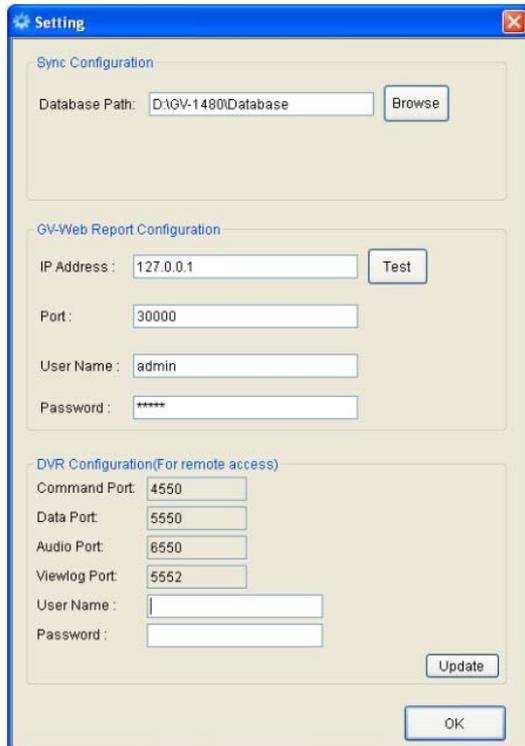


Figure 3-5

[Sync Configuration] Locate the database path. The default path for database is: \GV folder\database.

[GV-Web Report Configuration] Type the connection information of the GV-Web Report server, including its IP address, username and password. The default port value is 30000. Click **Test** to ensure the connection information is correct.

[DVR Configuration for Remote Access] The configuration allows remote access to the live video from and the recordings on the GV-System. To allow the remote access, you must enable **WebCam Server** on the GV-System first so that the dbSync2 program can automatically acquire the necessary port values (Common Port, Data Port, Audio Port and Viewing Port) from the GV-System. Type the username and password of the GV-System. Then click **Update** to send the configuration values to the GV-Web Report server.

- Click **OK**. The dbSync2 program is minimized to the notification area.



When people counts are logged to the GV-System, the dbSync2 program will send it to the GV-Web Report server at the specified time or time interval each day. You can not only query those counts, but also view live video and recordings through a browser anywhere.

3.4 The Main Screen of GV-Web Report

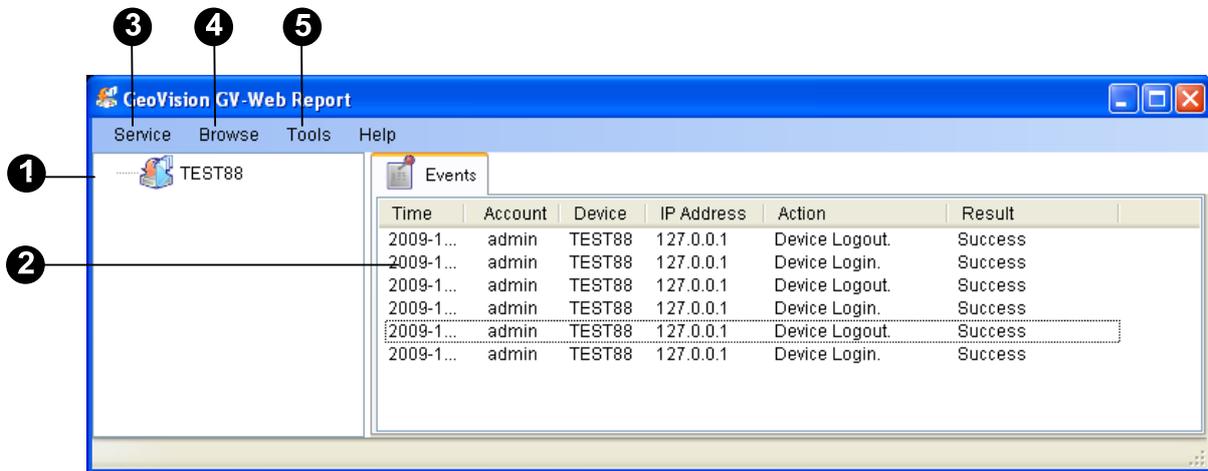


Figure 3-6

No	Name	Description
1	Host List	Displays connected hosts.
2	Event List	Displays the connection information.
3	Service	Enables and disables the GV-Web Report services. <ul style="list-style-type: none"> ■ Data Service: Allows connection to GV-Systems and GV-Smart Boxes. ■ Web Service: Accesses to the GV-Web Report's Web interface. Also allows remote access to live video and recordings of GV-Systems and GV-Smart Boxes.
4	Browse	Links to the Web interface of the GV-Web Report.
5	Tools	Accesses the advanced settings. See 3.5 <i>Configuring the GV-Web Report</i> .

3.5 Configuring the GV-Web Report

To access more settings of the GV-Web Report server, click **Tools** (No. 5, Figure 3-6) on the main screen. The following sections describe these advanced settings: General Settings, Account Settings, Remote Access Settings, Database Settings, and UPnP Port Mapping Settings.

3.5.1 General Settings

The General Settings allow you to configure the communication ports of the GV-Web Report server and automatic startup services.

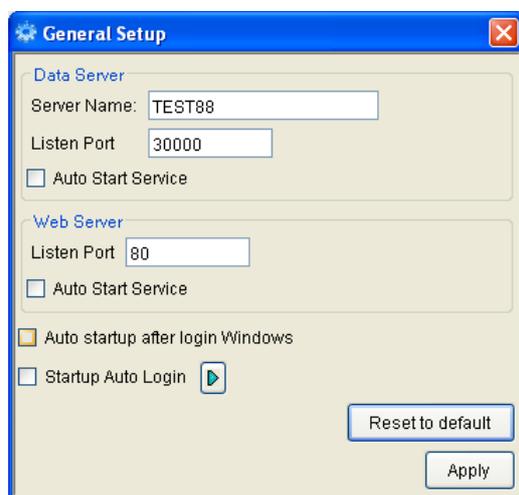


Figure 3-7

[Data Server]

- **Server Name:** Name the GV-Web Report server. The default value is the computer name.
- **Listen Port:** The default port value of the GV-Web Report server is 30000. The port value must match that of **GV-Web Report Configuration** on a GV-System.
- **Auto Start Service:** Automatically start connection to GV-Systems and GV-Smart Boxes once the GV-Web Report server is started.

[Web Server]

- **Listen Port:** The HTTP port enables connecting the GV-Web Report server to the Web.
- **Auto Start Service:** Automatically start the remote access to GV-Systems and GV-Smart Boxes.
- **Auto startup after login Windows:** Automatically start the GV-Web Report server after Windows startup.
- **Start Auto login:** Automatically log into the GV-Web Report server after Windows startup. Click the Arrow button to enter the login account and password.

3.5.2 Account Settings

Using the Account Settings, the GV-Web Report supervisor can create new accounts with different access rights.

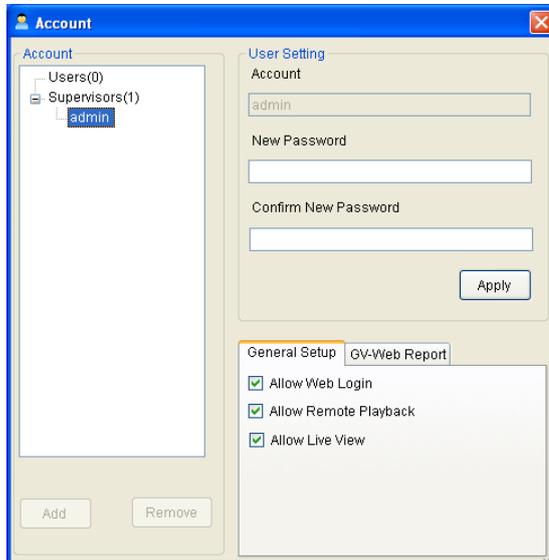


Figure 3-8

For details on the **Allow Group Setting** option in the **GV-Web Report** tab, see *4.3 Group Page*.

3.5.3 Remote Access Settings

The Remote Access Settings display the available GV-Systems and GV-Smart Boxes for remote access to their live video and recordings. The star mark * on the **State** column indicates that the account name and password are required for access to the specific device.

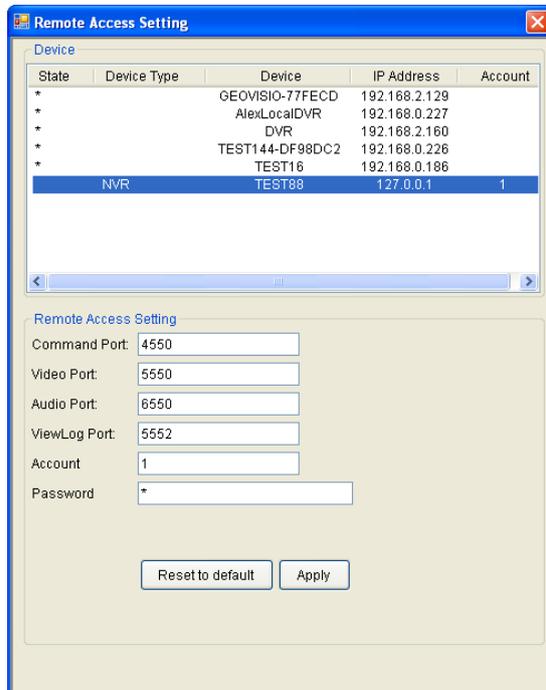


Figure 3-9

3.5.4 Database Settings

You can modify the storage path of the GV-Web Report's database and specify the number of days to keep the database. If the computer of the GV-Web Report server is of NTFS file system, you can select **Enable Database Compression** to save disk space.

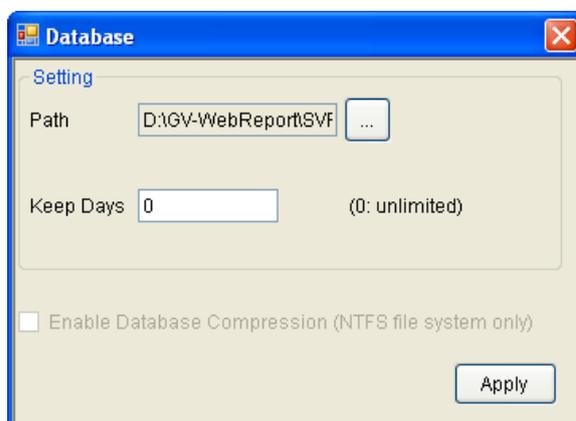


Figure 3-10

3.5.4 UPnP Port Mapping Settings

The GV-Web Report server supports UPnP technology (Universal Plug and Play) to allow automatic port configuration to your router.

In order for UPnP to be enabled, the following requirements must be met:

- Windows XP Service Pack 2 or above
- Windows operating system has been configured to use UPnP (see *Enabling UPnP in Windows XP, Appendix*)
- UPnP has been enabled on your router (consult your router's documentation)

To enable UPnP on the GV-Web Report:

1. Click **Tools** from the menu bar and select **UPnP Port Mapping Setting**. This dialog box appears.

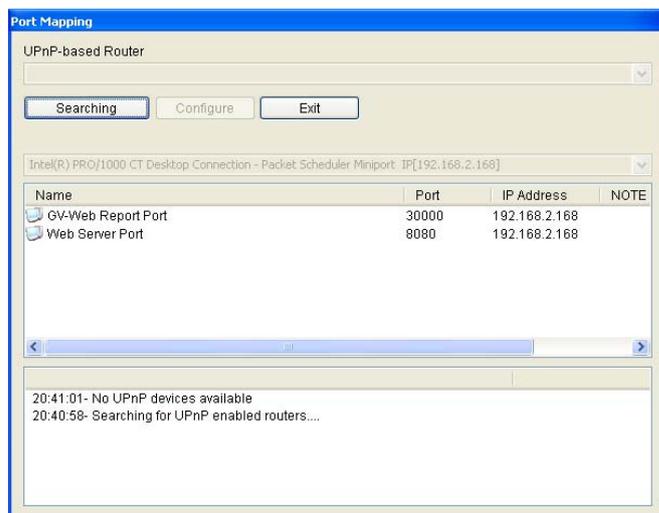


Figure 3-11

2. Click **Searching** to search the UPnP-enabled routers.
3. If your server is installed with more than one router, select a desired one from the UPnP-based Router drop-down list.
4. If you server is installed with more than one network adapter, select a desired one from the drop-down list.
5. Click **Configure** to automatically configure the communication ports on the router.

Tip: If you don't use the default ports, modify the related ports in the General Setup dialog box (Figure 3-7), re-open the UPnP port mapping dialog box and follow above steps to configure your router.

Chapter 4 Accessing the GV-Web Report

After the GV-Web Report service is started, people counts and live video are accessible on a network.

4.1 Accessing the Counts and Graphs

1. Start the Internet Explorer browser.
2. Enter the IP address or the domain name of the GV-Web Report server in the Location/Address field of your browser.

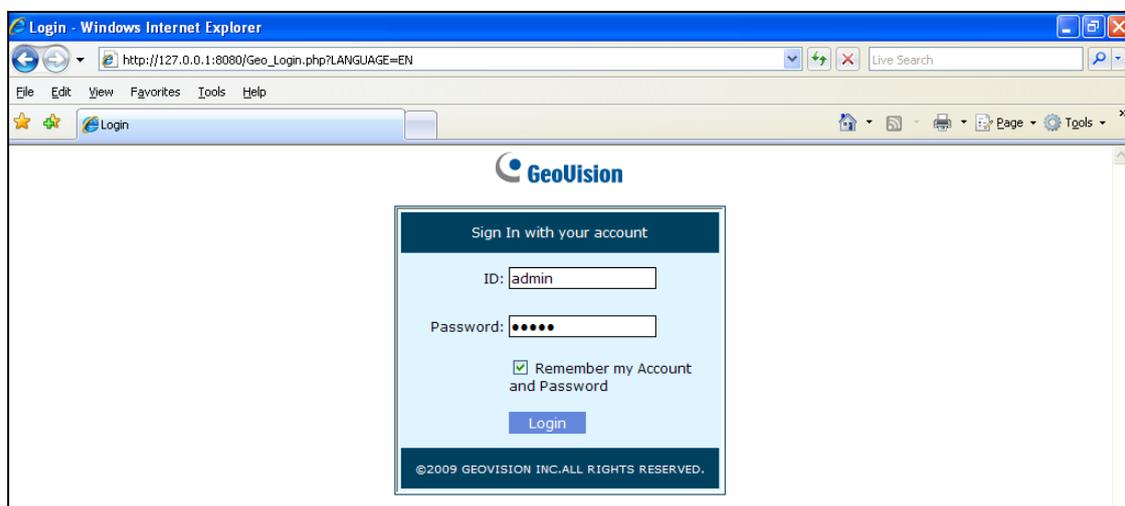


Figure 4-1

3. Enter the login ID and Password of the GV-Web Report server.

- Click **Apply**. The Web page similar to the following example is now displayed in your browser.

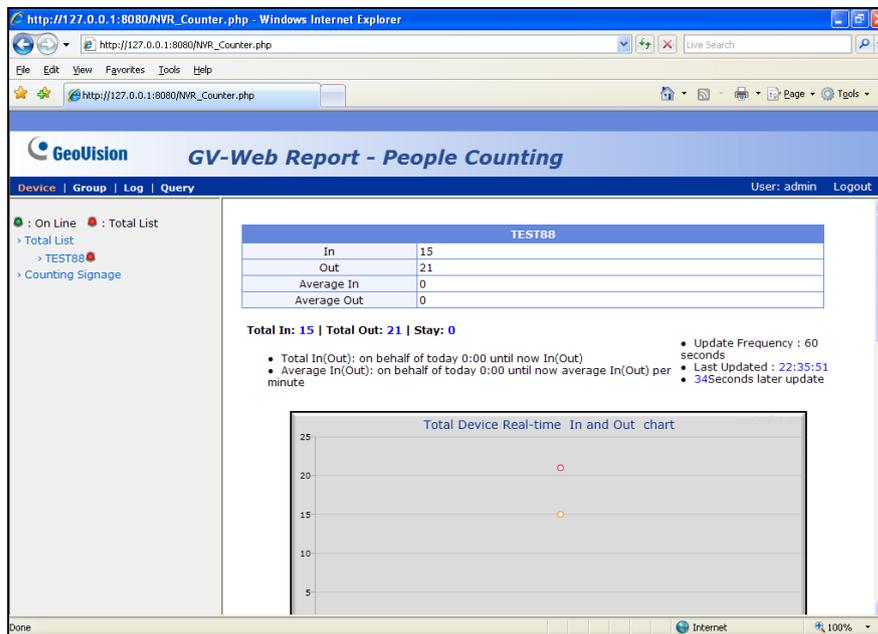


Figure 4-2

- To display the graphs, it is required to download **Microsoft Silverlight**. Click the link on the page to start downloading the program.

Note: Ensure that **Web Service** on the GV-Web Report server has been enabled; otherwise the login through the web browser will fail.

4.2 Device Page

On the Device page, you can access three types of people counts of the current day.

Main page	On the main page of the Device page, the counts of the current day are updated from the GV-Web Report server every minute. See 4.2.1 <i>Viewing the Counts Updated Every Minute</i> .
Counting Signage	On the Counting Signage page, the counts of the current day is updated from the GV-Web Report server immediately. See 4.2.2 <i>Viewing the Current Counts</i> .
Live View Window	On the Live View window, the counts are updated directly from a GV-System or GV-Smart Box . See 4.2.3 <i>Viewing Live Video</i> .

4.2.1 Viewing the Counts Updated Every Minute

The main page of the Device page is updated every minute from the GV-Web Report server. It displays the counts and graphs of all connected GV-Systems and GV-Smart Boxes

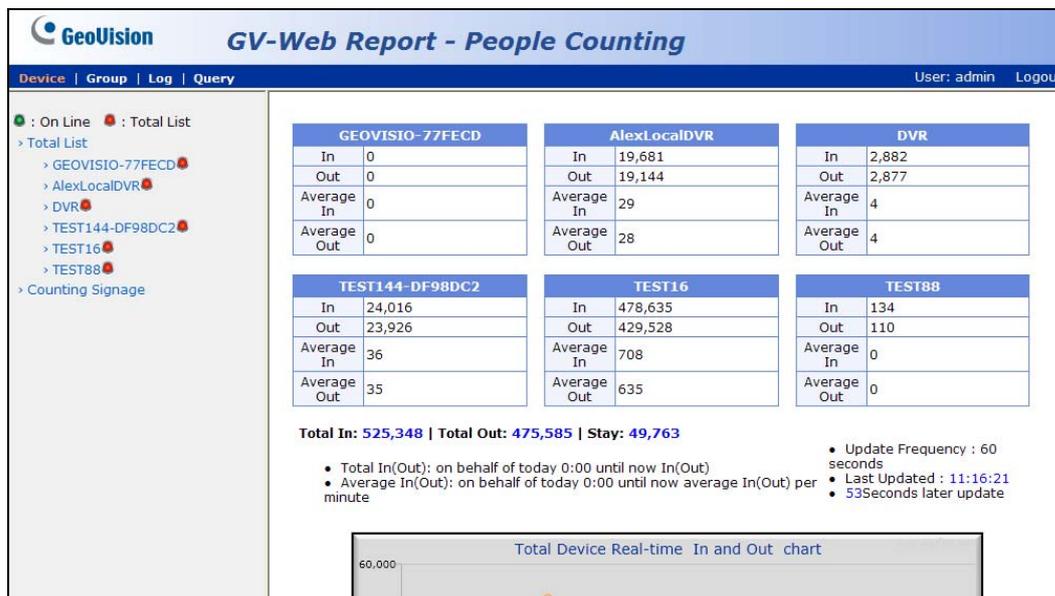


Figure 4-3

The counts on the main page show:

- **In:** The number of people entered during the day.
- **Out:** The number of people left during the day.
- **Average In:** The average number of people entered every minute during the day.
- **Average Out:** The average number of people left every minute during the day.
- **Total In:** The total number of entered people from multiple devices during the day.
- **Total Out:** The total number of left people from multiple devices during the day.

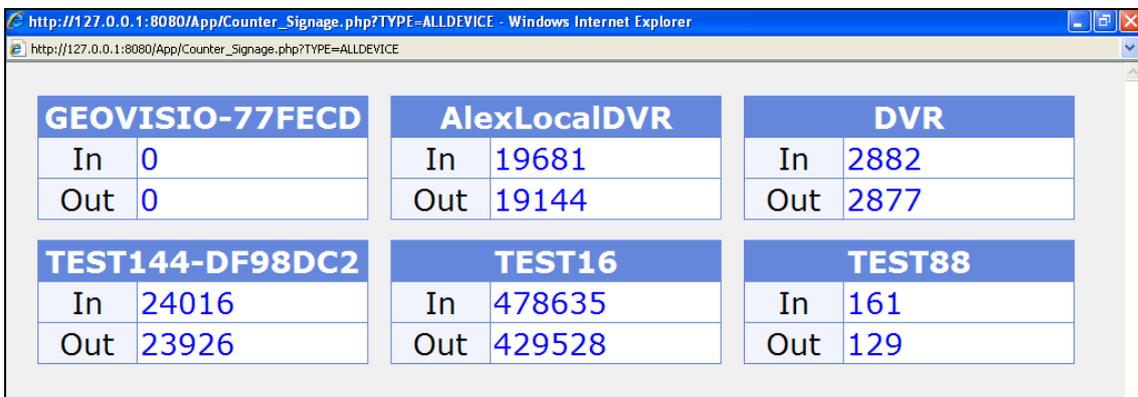
- **Stay:** The number of people remaining. That is subtracting the number of **Total Out** from the number of **Total In**.

On the left menu, you can find these options:

- **Total List:** Access the counts of all connected devices and their own cameras. A green mark indicates that the device is now updating data to the GV-Web Report server; otherwise a red mark appears. On the page, the counts of the current day are updated every minute from the GV-Web Report server.
- **Camera:** Access the live video if remote access is enabled on both the device and GV-Web Report server. See *4.2.3 Viewing Live Video* later in this chapter.
- **Counting Signage:** Access the counts of the current day updated immediately from the GV-Web Report server.

4.2.2 Viewing the Current Counts

To view the people counts of the current day continuously updated from the GV-Web Report server, select **Counting Signage** from the left menu of the Device page.



GEOVISIO-77FCD		AlexLocalDVR		DVR	
In	0	In	19681	In	2882
Out	0	Out	19144	Out	2877
TEST144-DF98DC2		TEST16		TEST88	
In	24016	In	478635	In	161
Out	23926	Out	429528	Out	129

Figure 4-4

4.2.3 Viewing Live Video

To access live video, select the desired camera from the left menu of the Device page. To have video streaming, ensure the following settings have been configured or enabled:

- **GV-Web Report:** Web Service
- **GV-System:** WebCam Server and DVR Configuration for Remote Access settings (Figure 3-5) on **dbSync2**
- **GV-Smart Box:** GV-Web Report Service



Figure 4-5

By clicking the **Start** button on the Live View window, you can view the updating counts from the GV-System or GV-Smart Box.

Note:

1. The **In** and **Out** counts on the Live View window is updated directly from the GV-System or GV-Smart Box, instead of the GV-Web Report server.
2. Once the counts are logged into the **GV-System**, the In and Out counts will become zero and the GV-System will start counting those numbers again.

4.3 Group Page

On the Group page, you can group different cameras from different GV-Systems and GV-Smart Boxes, and see the counts of the set group. You can also set up the maximum number of people entered, left and remaining to activate the computer alarm.

To set up a group:

1. Select **Add Group** from the left menu of the Group page. This page appears.



Figure 4-6

2. Name the group.
3. Select the cameras that you want to include in the group.
4. In the **Maximum In** field, you can set the maximum number of people entered during the day to activate the computer alarm.
5. In the **Maximum Out** field, you can set the maximum number or people left during the day to activate the computer alarm.
6. In the **Maximum Stay** field, you can set the maximum number of remaining people during the day to activate the computer alarm.
7. Click **Submit**.
8. From **Total List** in the left menu, select the set Group to see the sum of every count from those selected cameras.

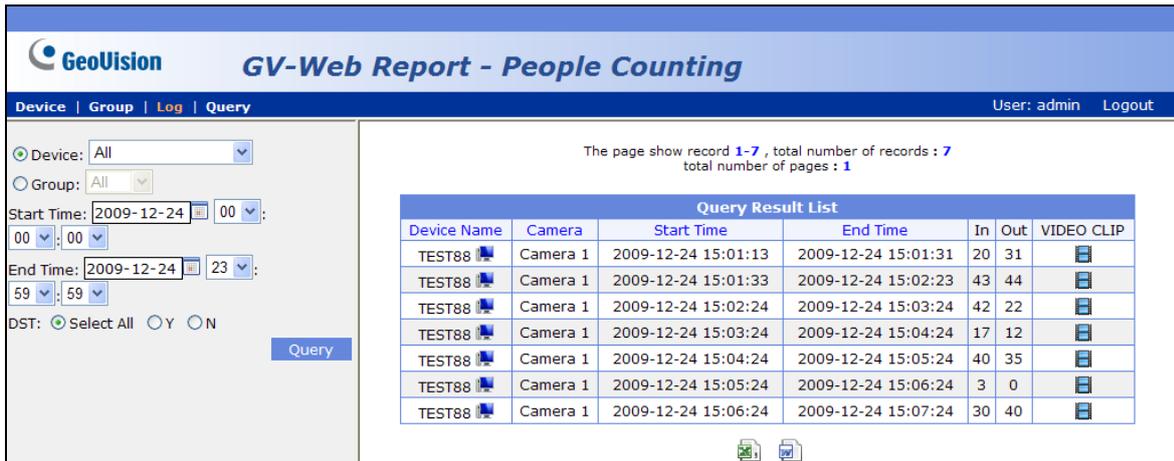
On the left menu of the Group page, you can find these options:

- **Total List:** Access the counts of the set groups updated every minute from the GV-Web Report server.
- **Counting Signage:** Access the counts of the set groups updated immediately from the GV-Web Report server. When the limit of **Maximum In**, **Maximum Out** or **Maximum Stay** is reached, the warning texts will be displayed on the page and the computer alarm will be activated too.

4.4 Log Page

On the Log page, you can view the people counts of a specified time period and retrieve the recordings from GV-Systems.

Note: The GV-Smart Box does not support the log and playback functions.



The screenshot shows the 'GV-Web Report - People Counting' interface. On the left, there is a search form with the following fields: Device (All), Group (All), Start Time (2009-12-24 00:00), End Time (2009-12-24 23:59), and DST (Select All). A 'Query' button is located below the form. The main area displays a table titled 'Query Result List' with the following data:

Device Name	Camera	Start Time	End Time	In	Out	VIDEO CLIP
TEST88	Camera 1	2009-12-24 15:01:13	2009-12-24 15:01:31	20	31	
TEST88	Camera 1	2009-12-24 15:01:33	2009-12-24 15:02:23	43	44	
TEST88	Camera 1	2009-12-24 15:02:24	2009-12-24 15:03:24	42	22	
TEST88	Camera 1	2009-12-24 15:03:24	2009-12-24 15:04:24	17	12	
TEST88	Camera 1	2009-12-24 15:04:24	2009-12-24 15:05:24	40	35	
TEST88	Camera 1	2009-12-24 15:05:24	2009-12-24 15:06:24	3	0	
TEST88	Camera 1	2009-12-24 15:06:24	2009-12-24 15:07:24	30	40	

Figure 4-7

To search the log data:

1. Select a specific GV-System from the **Device** drop-down list or a created group from the **Group** drop-down list.
2. Specify **Start Time** and **End Time** of the log data.
3. You can select whether to search the DST (Daylight Saving Time) data. **Select All** indicates searching all data including DST data, **Y** indicates searching only DST data and **N** indicates not searching DST data.
4. Click **Query** to display the search results.

To back up the found log data in EXCEL and WORD format, click the icons   .

4.4.1 Playing Back Recordings

To retrieve recordings, click the **Video Clip** icon on the Log page. The following playback window will appear. To have video streaming, ensure the following settings have been configured or enabled:

- **dbSync2:** DVR Configuration for Remote Access (Figure 3-5)
- **GV-System:** WebCam Server with the **Run Viewlog Server** option enabled
- **GV-Web Report:** Web Service

Note: The GV-Smart Box does not support the recording and playback functions.

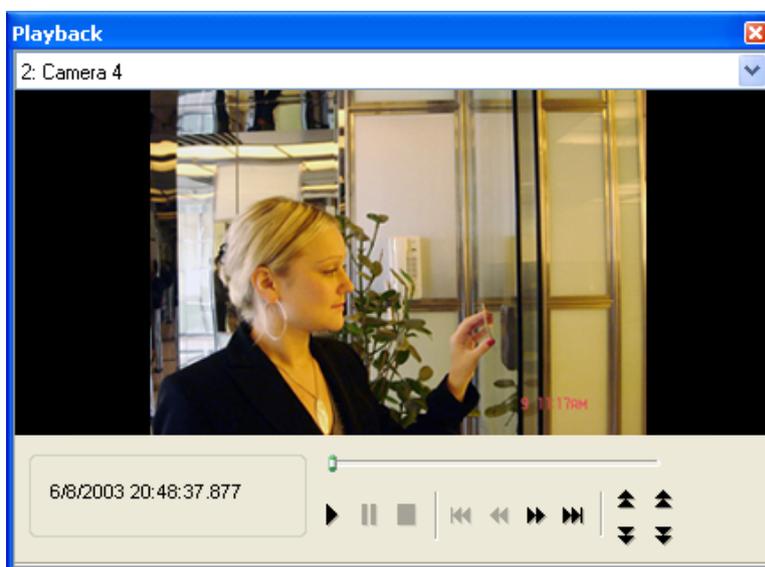
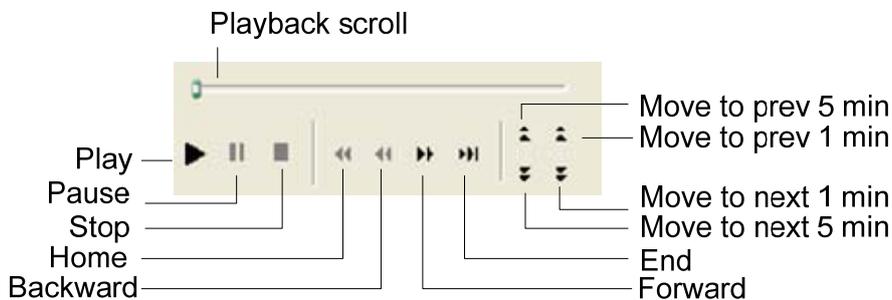


Figure 4-8



Right-click the playback window to have the following features:

Play Mode	<p>Includes these options:</p> <ul style="list-style-type: none"> ■ Frame by Frame: Play back video frame by frame. ■ Real Time: Play back video on real time. This mode saves waiting time for rendering, but drop frames to give the appearance of real-time playback. ■ Auto Play Next 5 Minutes: Play back video up to 5 minutes. ■ Audio: Turn on or off the video sound.
Render	<p>Includes these options:</p> <ul style="list-style-type: none"> ■ Deinterlace: Convert the interlaced video into non-interlaced video. ■ Scaling: Smoothen mosaic squares when enlarging a playback video ■ Deblocking: Remove the block-like artifacts from low-quality and highly compressed video. ■ Defog: Enhance image visibility. ■ Stabilizer: Reduce camera shake. ■ Text overlay's camera name and time: Overlay camera name and time onto the video. ■ Text overlay's POS/GV-Wiegand: Overlay POS or GV-Wiegand Capture data onto the video. ■ Full Screen: Switch to the full screen view.
Tools	<ul style="list-style-type: none"> ■ Snapshot: Save a video image. ■ Save as AVI: Save a video as avi format. ■ Download: Download the video clip to the local computer.

4.5 Query Page

The Query page provides you with the daily, weekly, monthly and yearly counting graphs.

To search the counting data, select a GV-System or GV-Smart Box from the **Device** drop-down list or a created group from the **Group** drop-down list, specify a date, and select the following options:

[Daily Report] Display the counting report of the specified date.

- **In/Out Counts per hour and Total Stay:** The hourly number of people entered and left, and the total number of people remaining until now.
- **Difference between In and Out per hour:** The hourly number of people remaining.
- **Total In, Out and Stay per hour:** The total number of people entered, left and remaining until now.

The following figure is an example of the **In/Out Counts per hour and Total Stay** option. The value 15, 49,749 indicates the count of remaining people until 15 pm is 49,749.

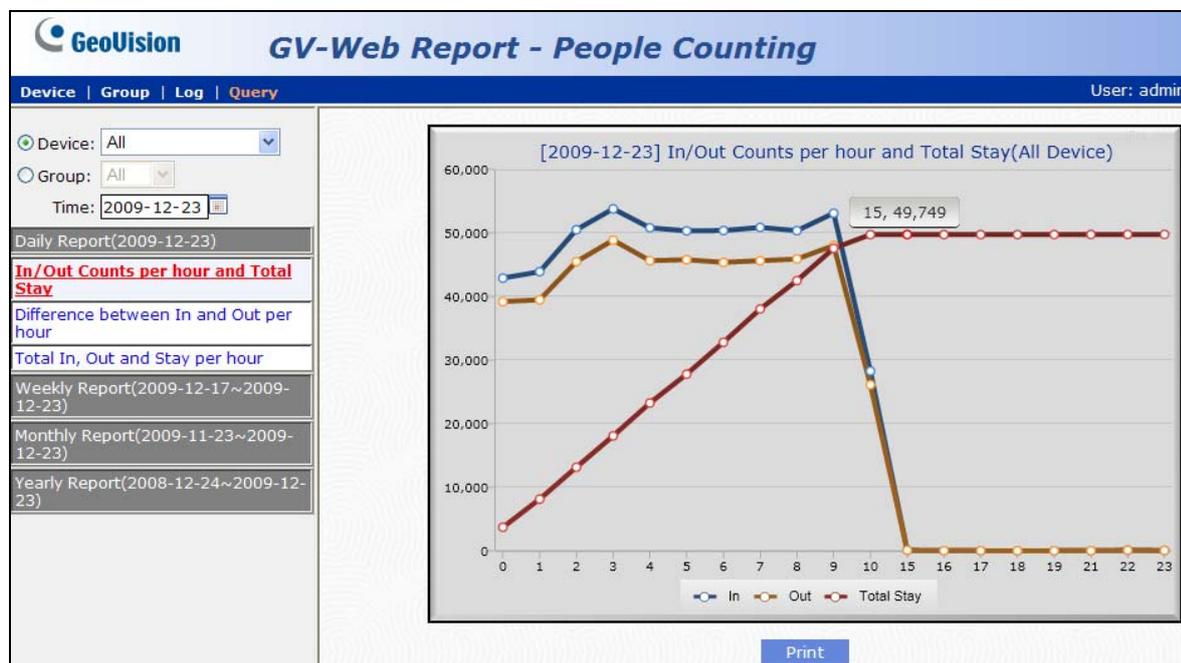


Figure 4-9

Note: For the value on the line graphs, the first number followed by a comma indicates the hour. For example, 15, 49,749 means the count is 49,749 people at or until 15 pm.

[Weekly Report] Display the weekly report that contains the data of 7 days before your specified date.

- **In Counts per hour:** The hourly number of people entered for the week.
- **Out Counts per hour:** The hourly number of people left for the week.
- **Total Stay per hour:** The hourly number of people remaining for the week.
- **In Percentage per hour:** The hourly percentage of people entered for the week.
- **Stay Percentage per hour:** The hourly percentage of people remaining for the week.

The following figure is an example of the **In Percentage per hour** option. The value 8:00, 50,360(6.54%) indicates the total number of entered people at 8 am every day for the week is 50,360. The number takes 6.54 percent of the total people entered for the week.

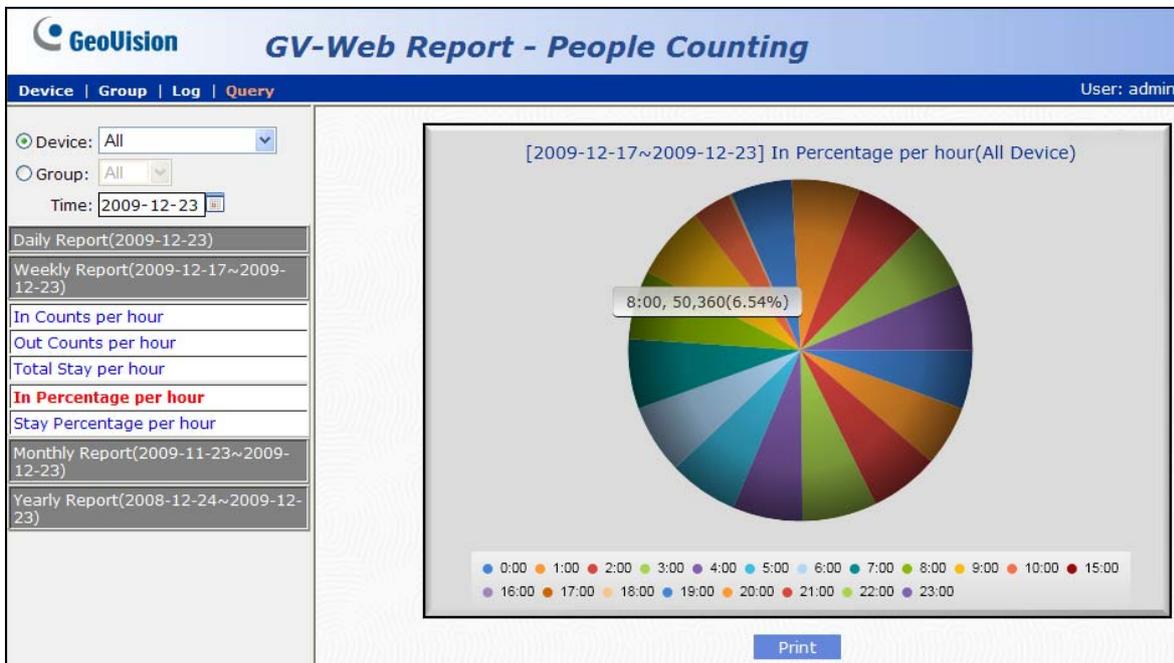


Figure 4-10

[Monthly Report]

- **In Percentage per day:** The daily percentage of people entered in the month.
- **In Percentage per hour:** The hourly percentage of people entered in the month.
- **Stay Percentage per hour:** The hourly percentage of people remaining in the month.

[Yearly Report]

- **In Percentage per month:** The monthly percentage of people entered in the year.
- **Out Percentage per hour:** The hourly percentage of people entered in the year.
- **Stay Percentage per hour:** The hourly percentage of people remaining in the year.

Appendix

A. Enabling UPnP in Windows XP

1. Go to Windows Start, click **Start** button, select **Settings**, and select **Network Connections**. This window appears.

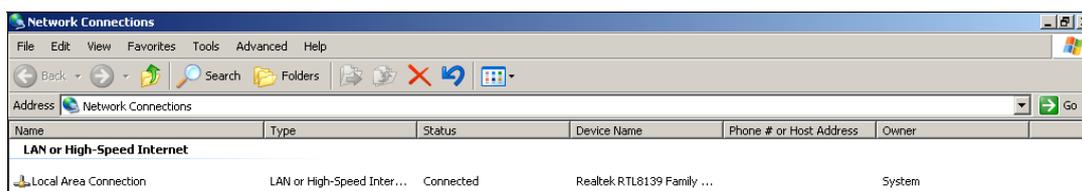


Figure 4-11

2. Right-click one **Local Area Connection**, select **Properties**, and click the **Advanced** tab. This dialog box appears.

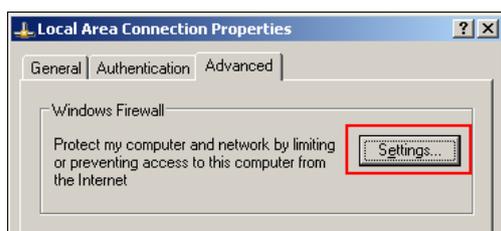


Figure 4-12

3. Click the **Settings** tab, and click **Exceptions** tab. This dialog box appears.

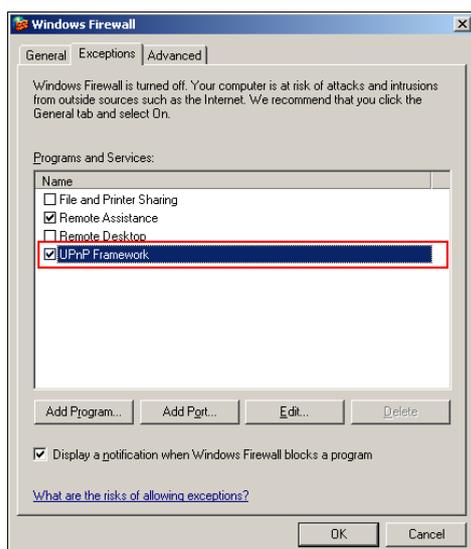


Figure 4-13

4. Select **UPnP Framework**, and click **OK**.

B. Modifying Port Number for running GV-Web Report on the same computer with GV-System

Since the **GV-Web Report** server and the **WebCam Server** of GV-System use the same HTTP port number of 80 to connect to the Web, it is required to modify the port number of either GV-Web Report or WebCam Server if the two are run on the same computer. If not, the following message will appear and you cannot access the Web interface of the GV-Web Report server:

Starting Web Server Failed

To modify the HTTP port number of GV-Web Report:

1. Click **Tools** from the menu bar and select **General Setting**.
2. In the Web Server section, change the default Listen Port of 80 to a different port number within the range of 1024 to 65535.
3. Click **Apply**.