

GV-Web Report

User's Manual V2.2.4





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Preface

Welcome to the *GV-Web Report User's Manual*.

This Manual is designed for the following software version:

Product	Version
GV-Web Report	V2.2.4.0

Note for Age and Gender Recognition Results:

In GV-Web Report, functions involving age and gender recognition results are only functional when connecting to GV-Smart Boxes with firmware version 1.0.

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Naming and Definition

GV-System	GeoVision analog and digital video recording software. In most documents, the GV-System also refers to Multicam System , GV-NVR System and GV-Hybrid DVR System at the same time.
GV-Smart Box	The GV-Smart Box is a standalone device featuring People Counting, Face Counting and Object Size Counting functions. Through the Web browser, the GV-Smart Box delivers live view, face snapshots and counting results.
GV-3D People Counter	The GV-3D People Counter integrates Asus Xtion Pro / Asus Xtion Pro Live to count and analyze the number of people passing by in the designated detection area. A built-in Web interface, the GV-Web Report Lite provides you with an easy setup and accurate people counting results.

Chapter 1 Introduction

The GV-Web Report is designed to integrate and analyze counting data from GV-3D People Counters, GV-Systems, and GV-Smart Boxes. Suitable for large-scale video surveillance deployments, it can receive data from up to 1000 units of GV-3D People Counters, GV-Systems and GV-Smart Boxes.

Through the Web interface of GV-Web Report, you can access the reports and graphs of real-time, hourly, daily, monthly and yearly statistics on people counts, vehicle counts and face counts. You can also view the live video and the recordings from multiple locations.

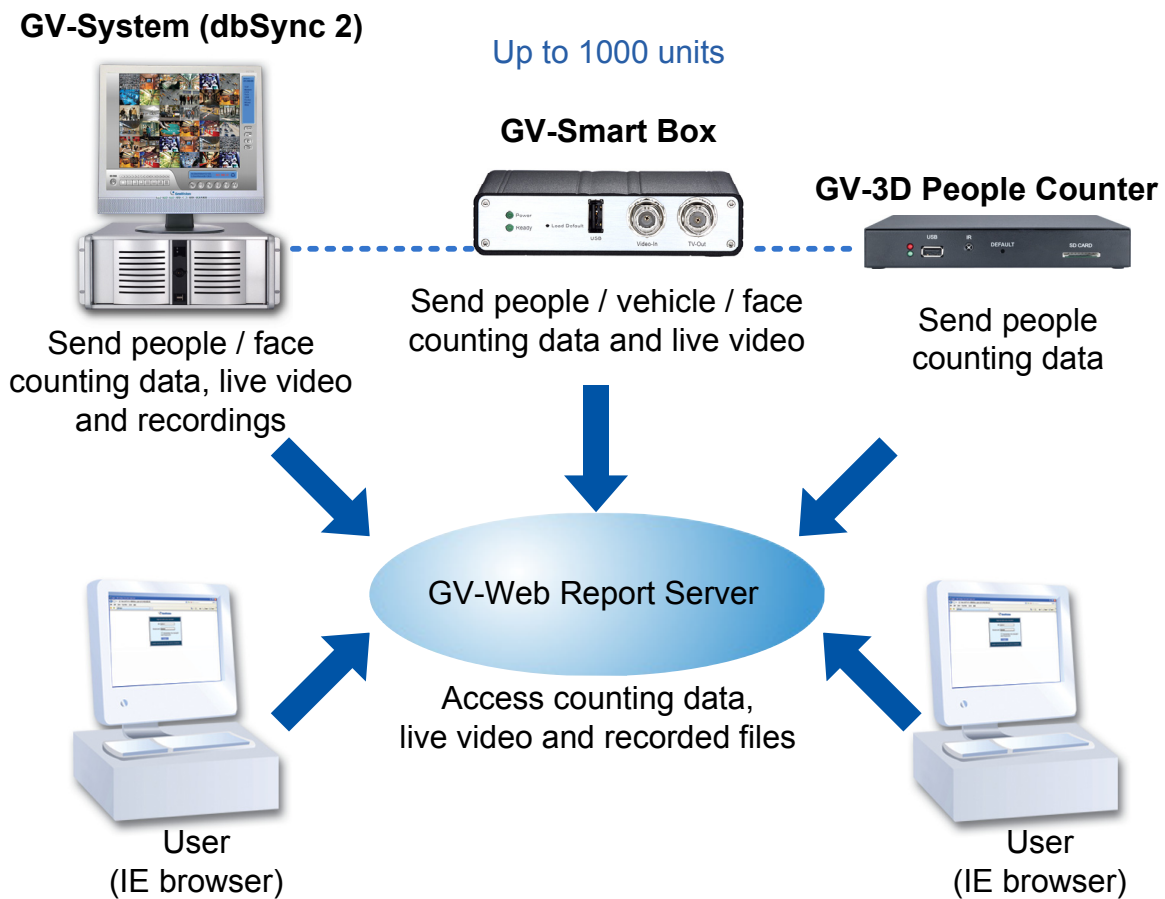


Figure 1-1

Features

- Support for up to 1000 units of GV-3D People Counters, GV-Systems and GV-Smart Boxes.
- People counting results from GV-3D People Counters, GV-Systems, and GV-Smart Boxes
- Face counting results and snapshots from GV-Systems and GV-Smart Boxes
- Vehicle counting results based on different object sizes from GV-Smart Boxes
- Real-time, daily, monthly, yearly counting reports and graphs
- E-mail notification and I/O trigger when the number of people remaining reaches the specified maximum
- Counting results query from iPhone, iPad and other Android-based mobile devices
- Grouping function to combine desired devices' cameras for data analysis
- Remote playback of recordings from GV-Systems
- 4 languages supported: English, Russian, Simplified Chinese, Traditional Chinese

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** in order to connect to GV-Web Report.

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 Supported	32-bit	Windows XP / Vista / 7 / Server 2003 / Server 2008
	64-bit	Windows 7 / Server 2008
Software	.Net Framework 3.5	
Browser	Internet Explorer 7.0 or later	
Hardware	External or Internal GV-USB Dongle	
Note:		
1. .Net Framework can be found in the accompanying software CD.		
2. It is recommended to use the internal GV-USB Dongle to have the Hardware Watchdog function which restarts the PC when Windows crashes or freezes.		

Software License

Free License	N/A
Maximum License	1000 clients
Increment for Each License	200, 500 or 1000 clients
Optional Combinations	N/A
Dongle Type	Internal or external
Note: The Maximum License is a paid service.	

Compatible Versions of GeoVision Application

The GV-3D People Counter compatible with GV-Web Report V2.2.3.0 and V2.2.4.0 are listed below.

	GV-3D People Counter
GV-Web Report V2.2.3.0	V1.01
GV-Web Report V2.2.4.0	V1.02 or later

Chapter 2 Installation

2.1 Installing the GV-Web Report

The GV-Web Report program can be installed on a separate computer or on the same computer with the GV-System. It is recommended to install 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.

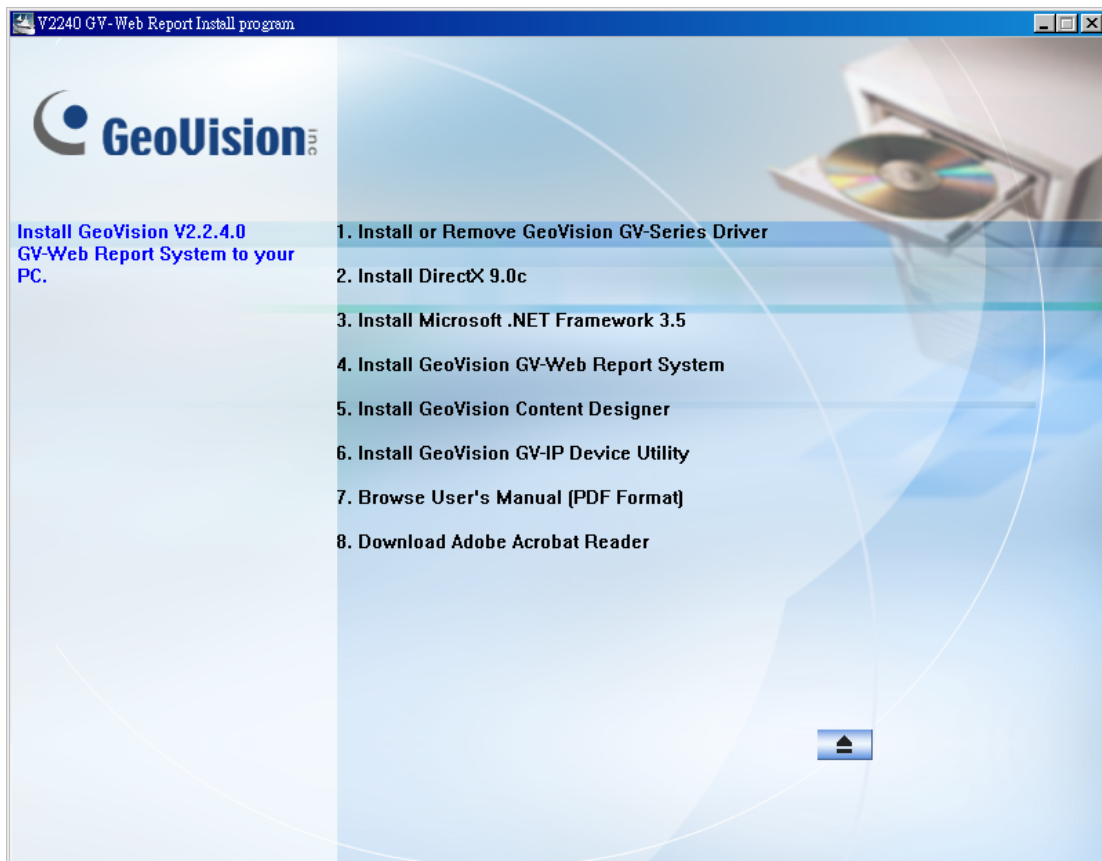


Figure 2-1

2. To install the **USB driver**, select **Install or Remove GeoVision GV-Series Driver** and click **Install GeoVision USB Devices Driver** to start.
3. To install the **.Net Framework**, select **Install Microsoft. NET Framework 3.5** to start.
4. To install the **GV-Web Report**, select **Install GeoVision GV-Web Report System** and click **GeoVision GV-Web Report System** to start.

2.2 Installing dbSync2 on the GV-System

To send people counting data from GV-System to GV-Web Report, it is required to install the **dbSync2** program on the GV-System. Follow the steps below to install the program.

1. Insert the Software CD to the computer. The **Install Program** window (Figure 2-1) pops up automatically.
2. To install the **.Net Framework**, select **Install Microsoft. NET Framework 3.5** to start.
3. To install **the dySync2**, select **Install GeoVision GV-Web Report System** and click **dySync2** to start.

Chapter 3 Getting Started

The GV-Web Report server is a dedicated computer on a network that analyzes the counting data from GV-3D People Counters, GV-Systems and GV-Smart Boxes. The GV-Web Report server enables you to access the analysis data anywhere through a Web browser.

3.1 Starting the GV-Web Report

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

1. Run the **GV-Web Report** (from Windows Start menu or from your desktop). For the first-time user, you will be prompted to type a password. The default ID (account) is **admin**.
2. On the GV-Web Report window, click **Service** from the menu bar and select **Data Service** to start receiving data from connected GV-3D People Counters, GV-Systems and GV-Smart Boxes.

3.2 Connecting GV-3D People Counter to GV-Web Report

To send people counts from a GV-3D People Counter to the GV-Web Report server, you need to configure the settings in the Web interface of the GV-3D People Counter to allow connection to the GV-Web Report. For details, see *Chapter 4 The Web Interface in GV-3D People Counter User's Manual*.

1. In the Web interface of the GV-3D People Counter, click the **Setup** tab on the top.
2. Under the Detection Setting page, select **Report to Server**.

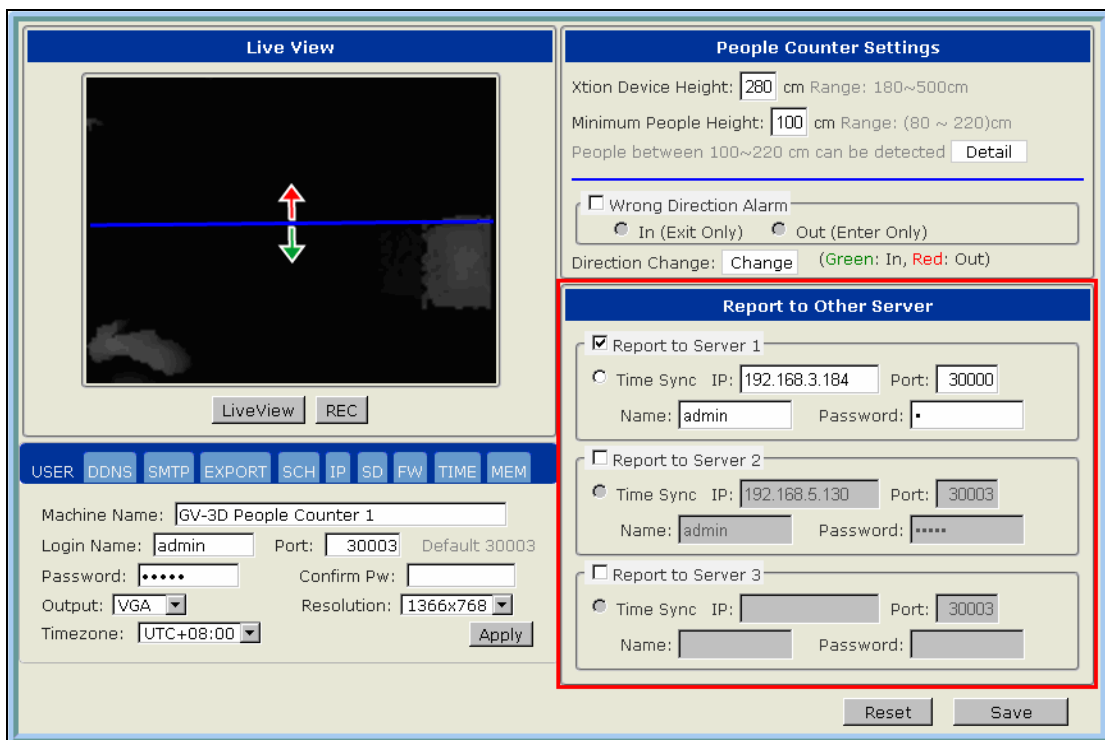


Figure 3-1

3. Type the **IP** address of the GV-Web Report, and modify the default **Port** 30003 if necessary.
4. Type the **Name** and the **Password** to access the GV-Web Report.
5. If you click **Time Sync** under one of the servers, the time of the current GV-3D People Counter will be synchronized with the selected server. To cancel time synchronization, double-click the selected radio button.

Note:

1. GV-Web Report V2.2.3.0 is only compatible with GV-3D People Counter V1.01, and GV-Web Report V2.2.4.0 is only compatible with GV-3D People Counter V1.02 or later.
 2. To access GV-3D People Counter through a Web browser, make sure your PC is in good network connection, and use one of the following web browsers:
 - Mozilla Firefox V16.0.2 or later
 - Google Chrome V22.0.1.1229.94 or later
-

3.3 Connecting GV-System to GV-Web Report

To send people counting results from a GV-System to the GV-Web Report server, you need to run the dbSync2 program on the computer of GV-System. To send face counting results from GV-Systems to the GV-Web Report, use the Face Count function of the GV-System.

Note: To send face counting results from a GV-Systems to the GV-Web Report, the GV-System must be of version 8.4.0.0 or later and an AVP dongle is required for GV-System version 8.4.0.0 to 8.5.5.0.

3.3.1 Configuring the dbSync2 Program on GV-System

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.

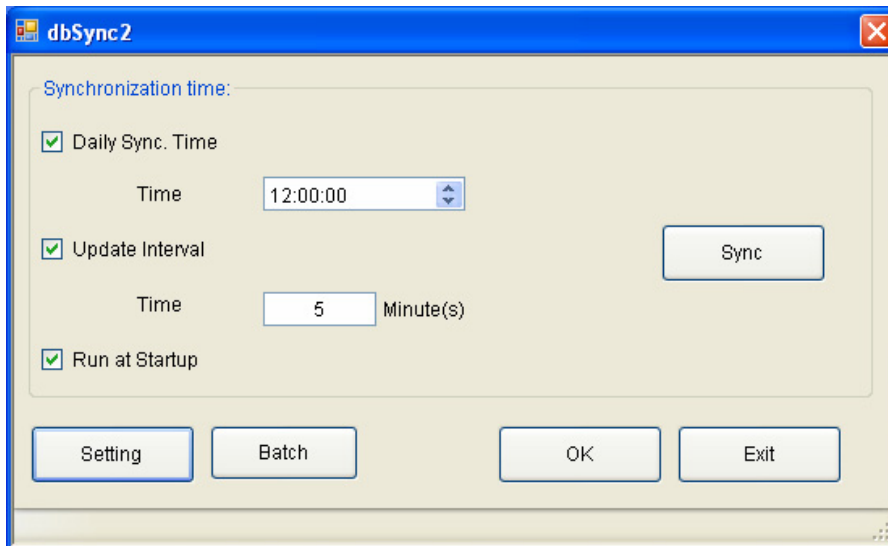


Figure 3-2

- **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 be sent 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.

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

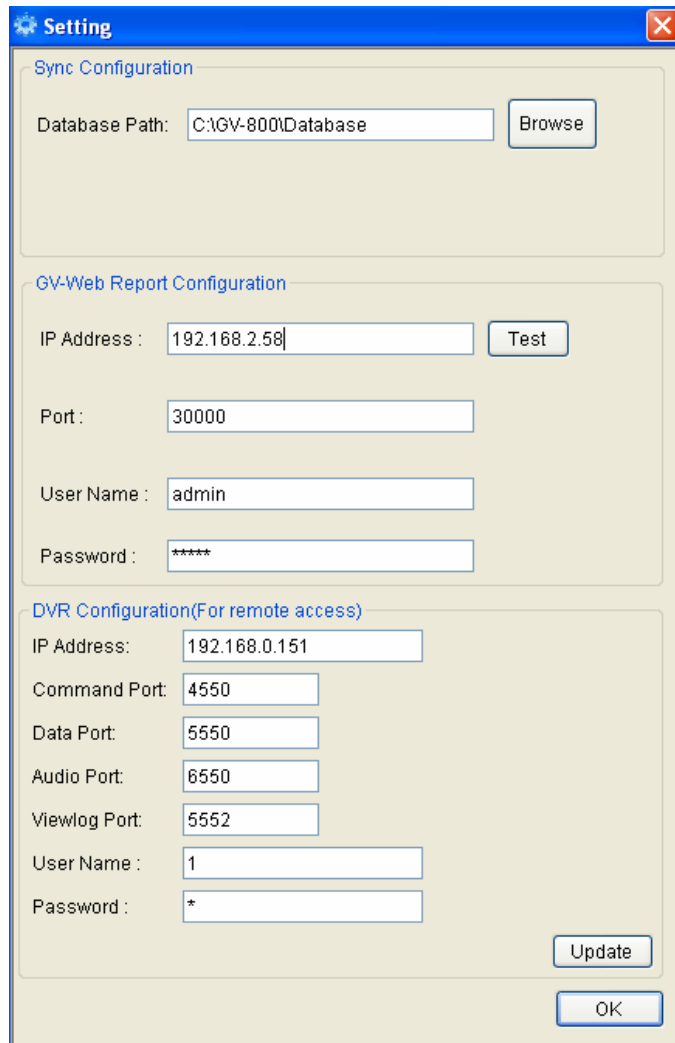


Figure 3-3

[Sync Configuration] Displays 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, login 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 and the recordings of GV-System. Before the configuration, 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. Enter the IP address, login username and password of the GV-System. Then click **Update** to send the configuration values to the GV-Web Report server.

3. 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 data to the GV-Web Report server at the specified time or time interval each day. You can not only query counting data, but also view live video and recordings through an IE browser anywhere.

3.3.2 Sending People Counting Results

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

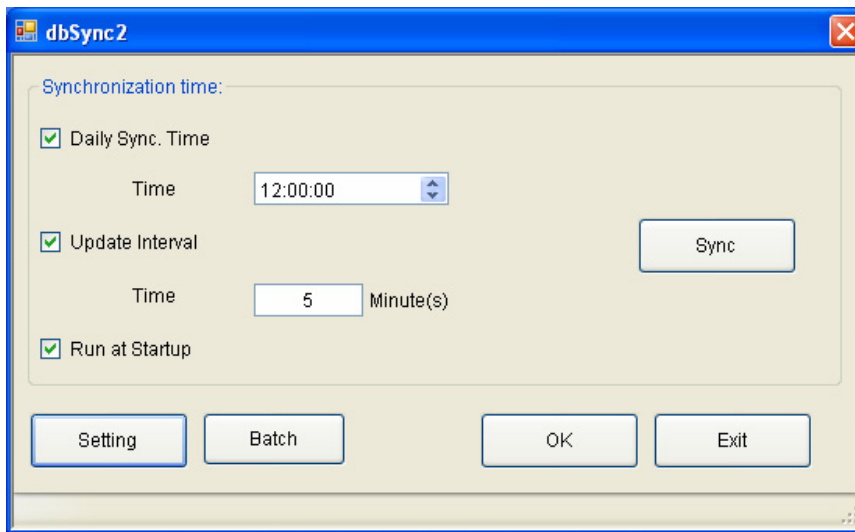


Figure 3-4

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

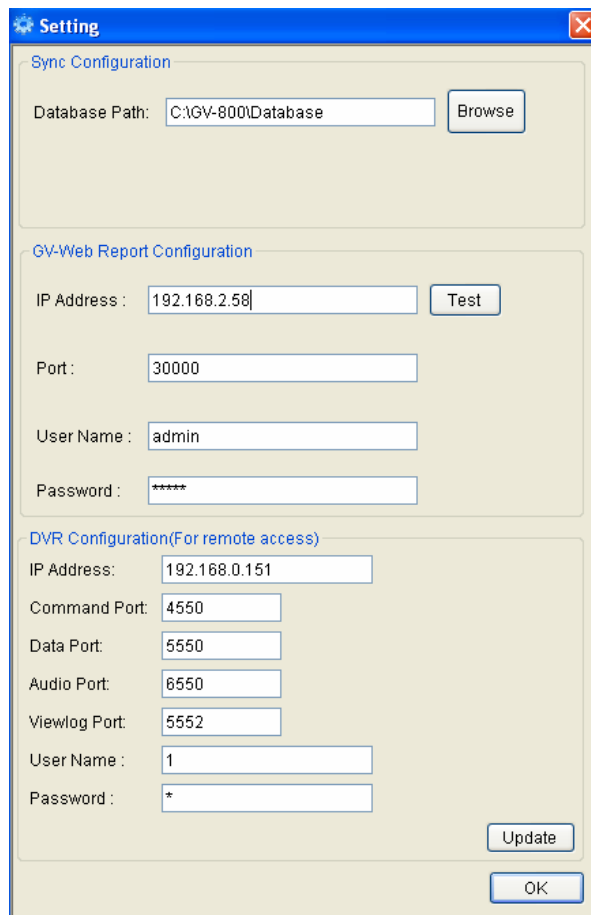


Figure 3-5

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. The port value must match the port of GV-Web Report server (Figure 3-10). For details on account settings on the GV-Web Report server, see *3.6.2 Account Settings*.
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.

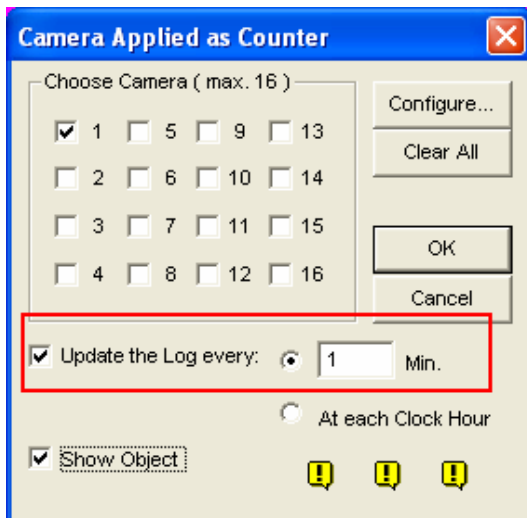


Figure 3-6

To define a specific time to send people counts to the GV-Web Report server, see *3.3.1 Configuring the dbSync2 Program on GV-System*.

3.3.3 Sending Face Counting Results

To send face counting results from GV-Systems to GV-Web Report, GV-System must be of version 8.4.0.0 or later and an AVP dongle is required for GV-System version 8.4.0.0 to 8.5.5.0. Make sure remote access to GV-Systems has been enabled on GV-Web Report. See 3.6.3 *Remote Access Settings* for details.

1. On the GV-System, click the **Configure** button, select **Advanced Video Analysis** and select **Face Count Setting**.
2. Select the cameras you want to configure and click **Configure**. This dialog box appears.

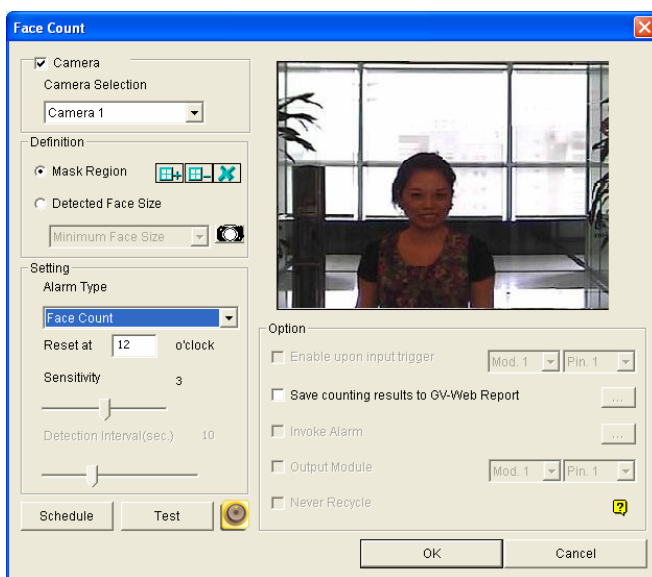


Figure 3-7

3. Select **Face Count** under Alarm Type.
4. In the Option section, select **Save counting results to GV-Web Report**. A dialog box appears.

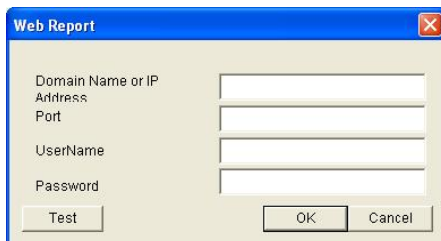


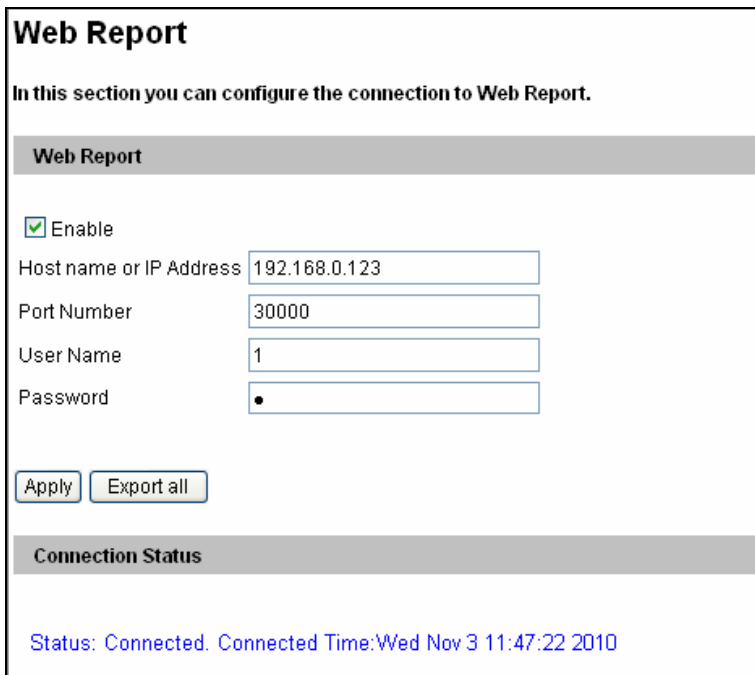
Figure 3-8

5. Type the **Domain Name or IP Address**, **Port**, **UserName**, and **Password** of the GV-Web Report. The default port number is 30000. For details on account settings on the GV-Web Report server, see 3.6.2 *Account Settings*.
6. Click **OK**.

3.4 Connecting GV-Smart Box to GV-Web Report

To send people counts, face counts, and object size counts from a GV-Smart Box to the GV-Web Report server, you need to configure the GV-Smart Box to allow connection to GV-Web Report. For details, see the *Connecting to GV-Web Report* section in *GV-Smart Box User's Manual*.

1. Select **Events and Alerts** and then **Web Report Setting** in the Web interface of the GV-Smart Box. This page appears.



The screenshot shows a web interface titled "Web Report". Below the title is a sub-header "Web Report" and a descriptive sentence: "In this section you can configure the connection to Web Report." The main configuration area includes a checked "Enable" checkbox, and four input fields: "Host name or IP Address" (192.168.0.123), "Port Number" (30000), "User Name" (1), and "Password" (masked with a dot). At the bottom of this section are "Apply" and "Export all" buttons. Below the configuration area is a "Connection Status" section showing "Status: Connected. Connected Time: Wed Nov 3 11:47:22 2010".

Figure 3-9

2. Enable the **Web Report** function.
3. Enter the IP address of the GV-Web Report server, and the login username and password.
4. Click **Apply**.

The **Connection Status** is shown on the bottom of the page displaying the GV-Web Report's connection status and the connection time.

3.5 The Main Screen of GV-Web Report

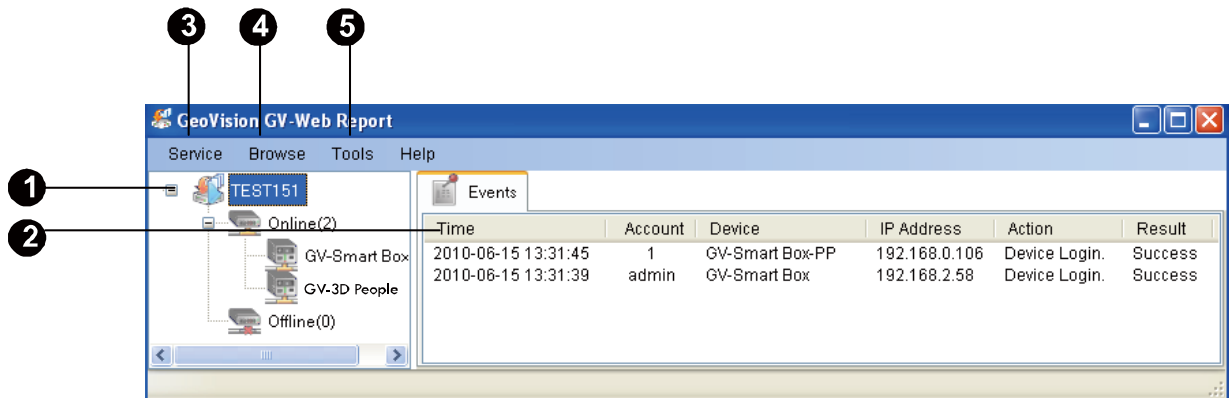


Figure 3-10

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-3D People Counters, GV-Systems and GV-Smart Boxes. ■ Web Service: Accesses to the GV-Web Report's Web Interface. Allows remote access to live video as well as recordings of GV-System, face snapshots captured from GV-Smart Boxes, and people counting data from GV-3D People Counters.
4	Browse	Links to the Web interface of the GV-Web Report.
5	Tools	Accesses the advanced settings. See 3.6 <i>Configuring the GV-Web Report</i> .

3.6 Configuring the GV-Web Report

To access more settings of the GV-Web Report server, click **Tools** (No. 5, Figure 3-9) on the main screen. The following sections describe advanced settings: General Settings, Account Settings, Remote Access Settings, Database Settings, E-Mail Settings, and UPnP Port Mapping Settings.

3.6.1 General Settings

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

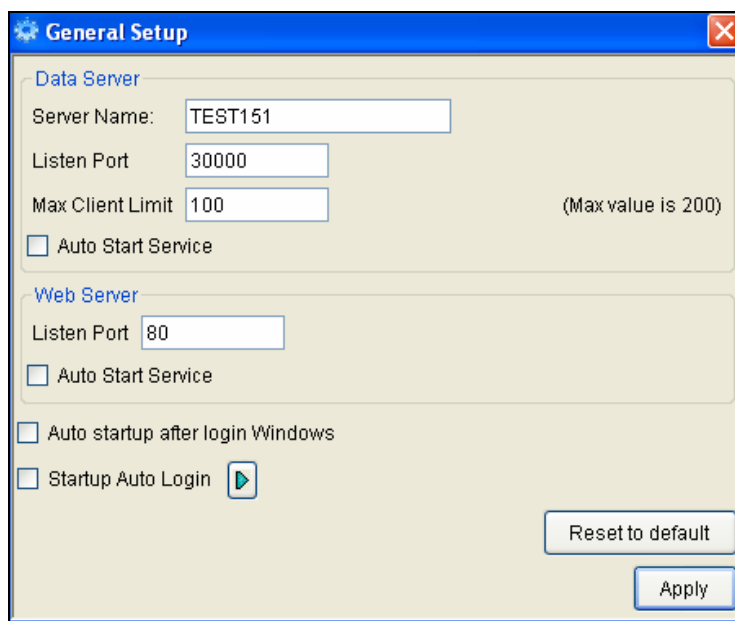


Figure 3-11

[Data Server]

- **Server Name:** Defines the name of 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 the GV-Web Report related port on a GV-3D People Counter (Figure 3-1), GV-System (Figure 3-2) and GV-Smart Box (Figure 3-8).
- **Max Client Limit:** Defines the maximum number of GV-3D People Counters, GV-Systems and GV-Smart Boxes that can be connected to the GV-Web Report. The maximum value is shown on the right.
- **Auto Start Service:** Automatically starts connection to GV-3D People Counters, GV-Systems and GV-Smart Boxes once the GV-Web Report server is started.

[Web Server]

- **Listen Port:** The default port value is 80. The HTTP port enables connecting the GV-Web Report server to the Web.
- **Auto Start Service:** Automatically starts the remote access to GV-Systems and GV-Smart Boxes.
- **Auto startup after Windows login:** Automatically starts 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.

3.6.2 Account Settings

The GV-Web Report supervisor can create new accounts with different access rights. The supervisor account has the privilege to log into the GV-Web Report and make configuration settings, while the user account is only allowed to access the GV-Web Report Web interface. The maximum account number for supervisor and user accounts is 100.

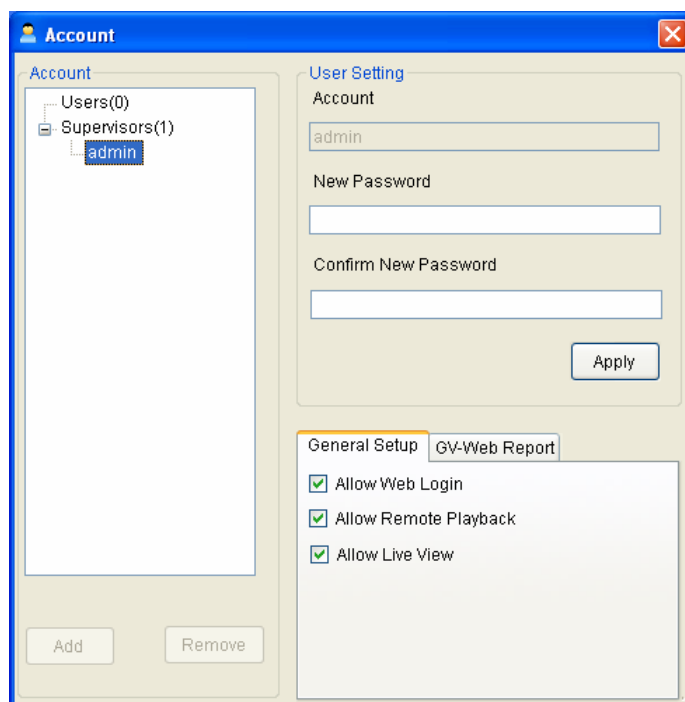


Figure 3-12

For details on the **Allow Group Setting** option in the GV-Web Report tab, see *4.2 Group Page*.

3.6.3 Remote Access Settings

The Remote Access Settings display the available GV-Systems and GV-Smart Boxes for remote access to their live video, recordings, and face snapshots through the Web browser. The asterisk * on the **State** column indicates that the account name and password are required for access to the specific device. To allow remote access to the GV-Systems or GV-Smart Boxes, select the device on the list and then type its login account name and password.

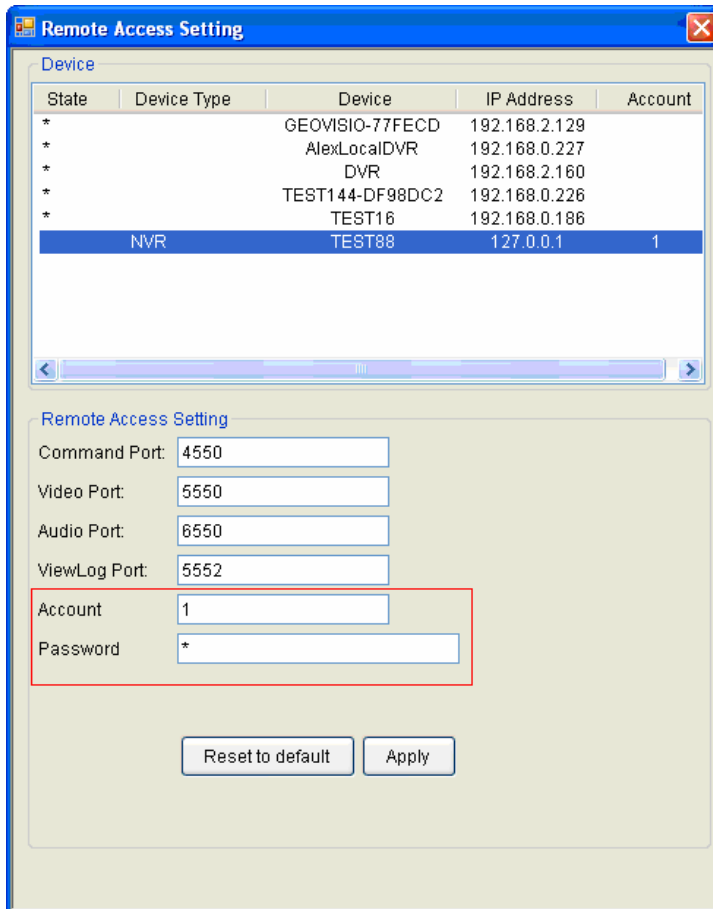


Figure 3-13

3.6.4 Database Settings

You can modify the storage path of the GV-Web Report database, specify the number of days to keep the database, and change the storage path of face snapshots from GV-Smart Boxes.

If the computer of the GV-Web Report server is of NTFS file system, you can select **Enable Database Compression** to save disk space.

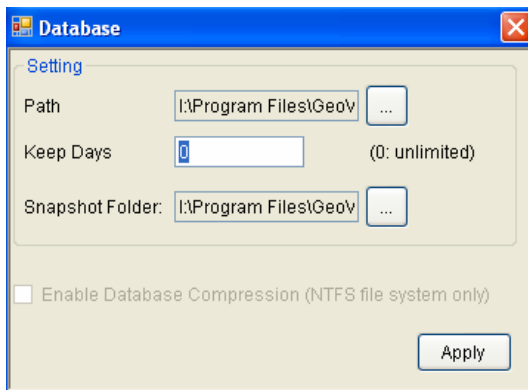


Figure 3-14

3.6.5 E-Mail Settings

You can send e-mails to the supervisor when the connection of any GV-3D People Counter, GV-System or GV-Smart Box is lost. You can also send e-mail notifications when the pre-defined maximum number of people is reached. See 4.2 *Group Page* on how to set the maximum.

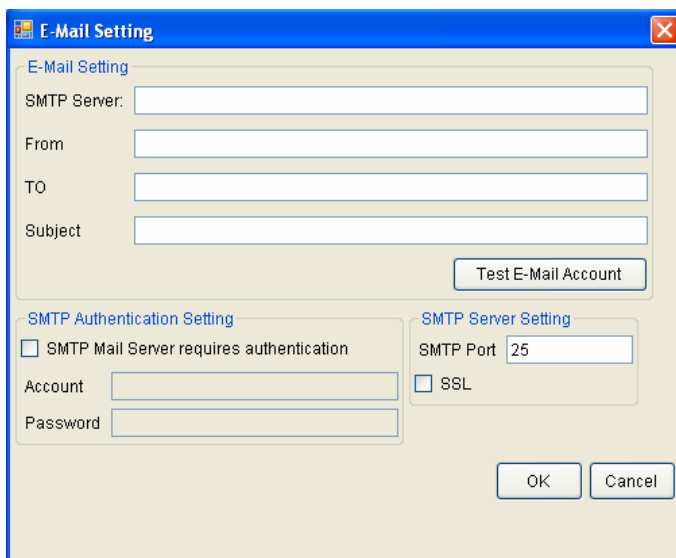


Figure 3-15

3.6.5.1 Setting Mail Server

1. Type URL or IP address of the SMTP server.
2. Type the sender e-mail address.
3. Type the recipient e-mail address. For multiple recipients, add a semicolon between each e-mail address.
4. Type a subject regarding an alert message.
5. Click **Test E-Mail Account** to send out a test e-mail to see whether the setup is complete. If not, you may also need to check the **SMTP Authentication Setting** and **SMTP Server Settings** described below.

Other options on the dialog box:

[SMTP Authentication Setting] If your e-mail service provider requires an authentication for sending e-mails, select this option and type your SMTP account ID and password.

[SMTP Server Setting]

- **SMTP Port:** Type the SMTP port value. The default value is 25.
- **SSL:** If your e-mail server requires an SSL (Secure Sockets Layer) authentication for connection, select this option.

3.6.5.2 Setting E-Mail Alert

When a GV-3D People Counter, GV-System or GV-Smart Box is disconnected from the GV-Web Report, the e-mail will be sent out to warn the supervisor. Follow the steps below to set the e-mail alert.

1. Right-click the host in the host list and select **Host Setting**.

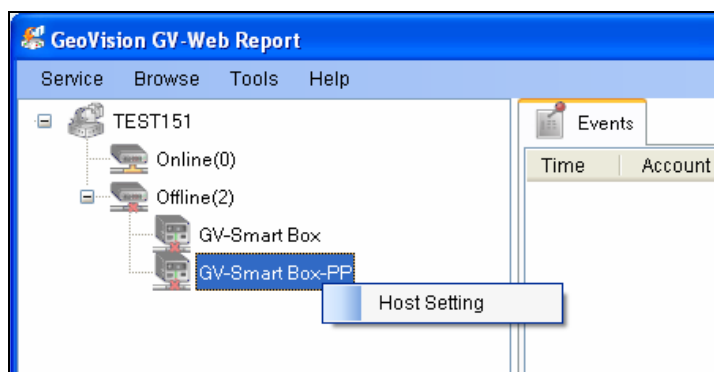


Figure 3-16

2. Enable **Send E-Mail Notification when disconnected**, and click **OK**.

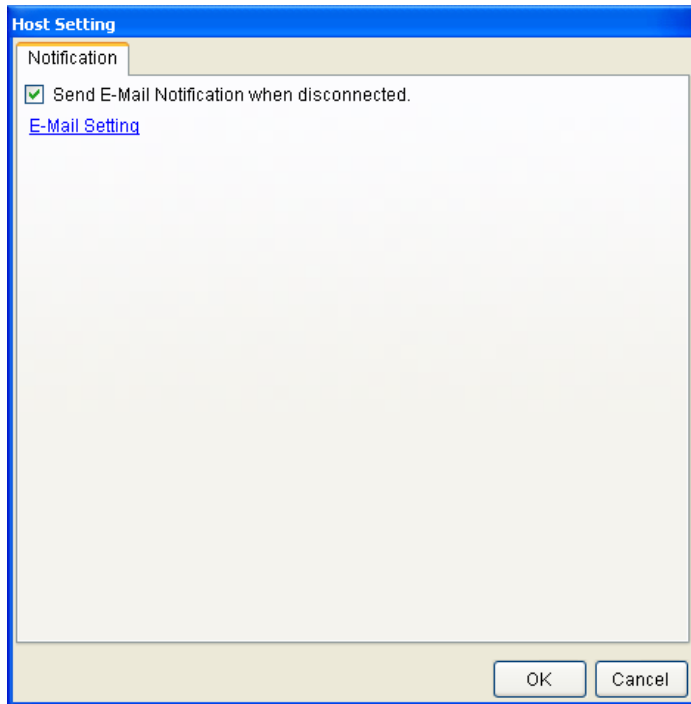


Figure 3-17

3.6.6 UPnP Port Mapping Settings

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

The following requirements must be met to enable UPnP:

- Windows XP Service Pack 2 or later
- 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.

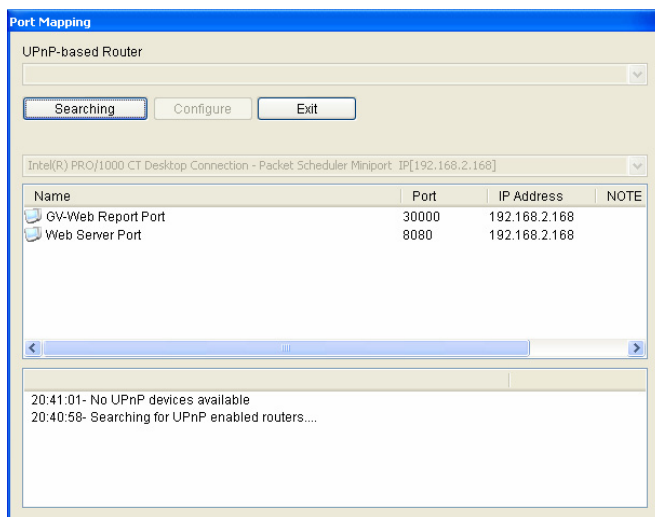


Figure 3-18

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 Settings dialog box (Figure 3-11), re-open the UPnP Port Mapping dialog box and follow the steps above to configure your router.

3.7 Accessing the Web Interface

To access counting results through the Web interface, ensure that **Web Service** on the GV-Web Report server has been enabled as shown below; otherwise the login through the Web browser will fail.

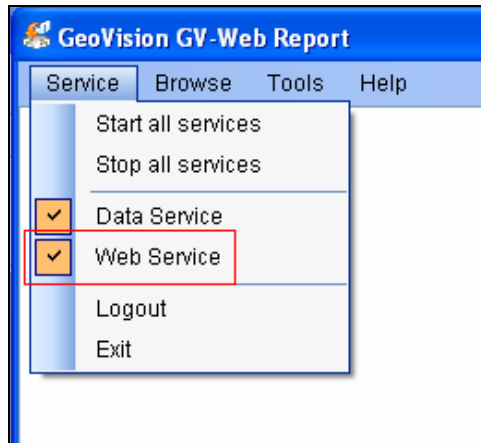


Figure 3-19

1. Two methods to access the Web interface of GV-Web Report:
 - A. If you are at the local GV-Web Report server, select **Browse** on the main screen of the GV-Web Report (Figure 3-9) and select **GV-Web Report Data**. The login page appears.

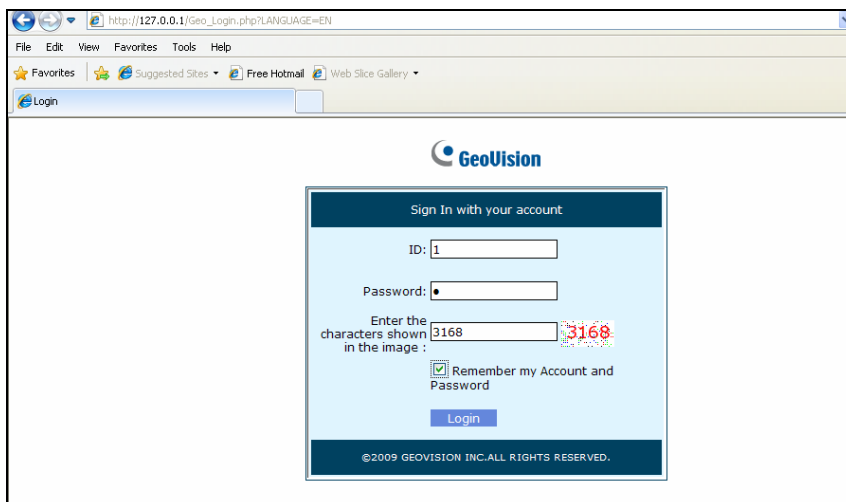


Figure 3-20

- B. If you are at a remote computer, open the Internet Explorer browser. Type the IP address or of the GV-Web Report domain name in the Location /Address field of your browser. The login page appears.

2. Type the login ID and Password of the GV-Web Report. The ID and Password should match any set account in the Account dialog box (Figure 3-11).
3. Type the characters shown in the image.
4. Click **Login**. The Web page is now displayed on your browser.

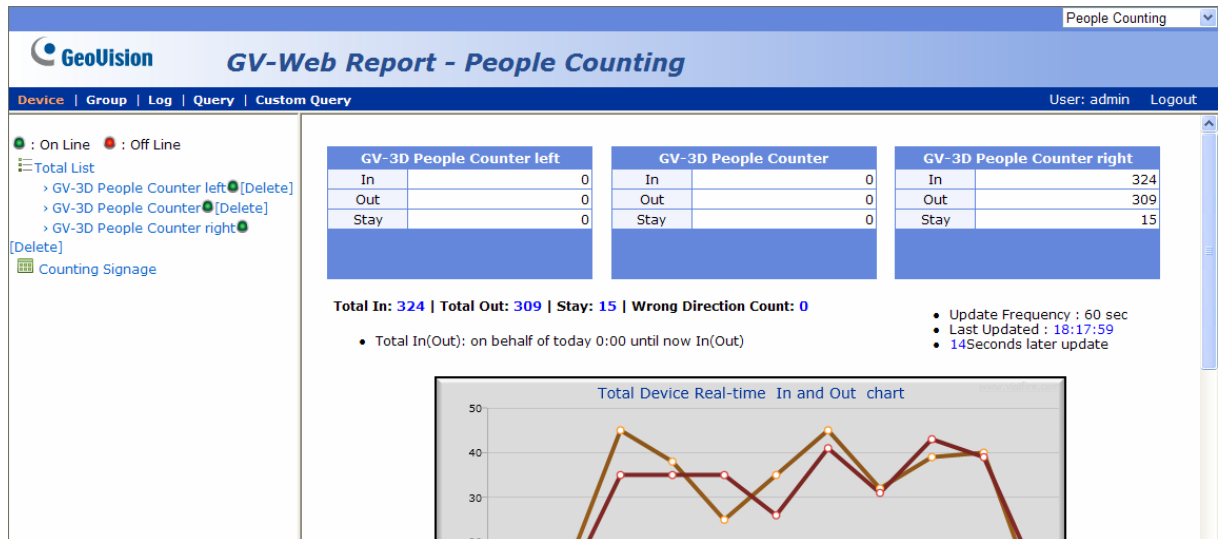


Figure 3-21

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

After starting GV-Web Report Service, you can access the counts, graphics and live video on the network. The GV-Web Report is shown in 3 pages, **People Counting** page, **Face Counting** page and **Object Size Counting** page.

- **People Counting page:** provides counting data regarding the number of people stepping in and out as well as the number of people remaining in the surveillance area from GV-3D People Counters, GV-Systems and GV-Smart Boxes.
- **Face Counting page:** provides face counting data, and gender and age recognition results of people in the surveillance area from GV-Systems and GV-Smart Boxes.
- **Object Size Counting page:** provides counting data of vehicles in the surveillance area sorted by different object sizes from GV-Smart Boxes.

Chapter 4 Accessing People Counting

Page

After the GV-Web Report Service is started, you can access the counts, graphics and live video on the network. The **GV-Web Report** is divided into 3 pages, **People Counting** page , **Face Counting** page and **Object Size Counting** page. This chapter describes the functions on the People Counting page in detail.

The **People Counting** page provides counting data regarding the number of people in, out of, and remaining in the surveillance area. The counting data can be acquired from GV-3D People Counters, GV-Systems and GV-Smart Boxes.

Note: For remote viewing through network, Internet Explorer 7.0 or later is required.

4.1 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 people counts of the current day are updated from the GV-Web Report server every minute. See <i>4.1.1 Viewing People Counts Updated Every Minute</i> .
Counting Signage	On the Counting Signage page, the people counts of the current day are updated from the GV-Web Report server immediately. See <i>4.1.2 Viewing the Current People Counts</i> .
Live View Window	On the Live View window, the people counts are updated directly from a GV-System . You can also view live video from a GV-System or GV-Smart Box. See <i>4.1.3 Viewing Live Video</i> .

4.1.1 Viewing People Counts Updated Every Minute

The data on the main page of the Device page is updated every minute from the GV-Web Report server. The page displays the people counts and graphs of all connected GV-3D People Counters, GV-Systems and GV-Smart Boxes.

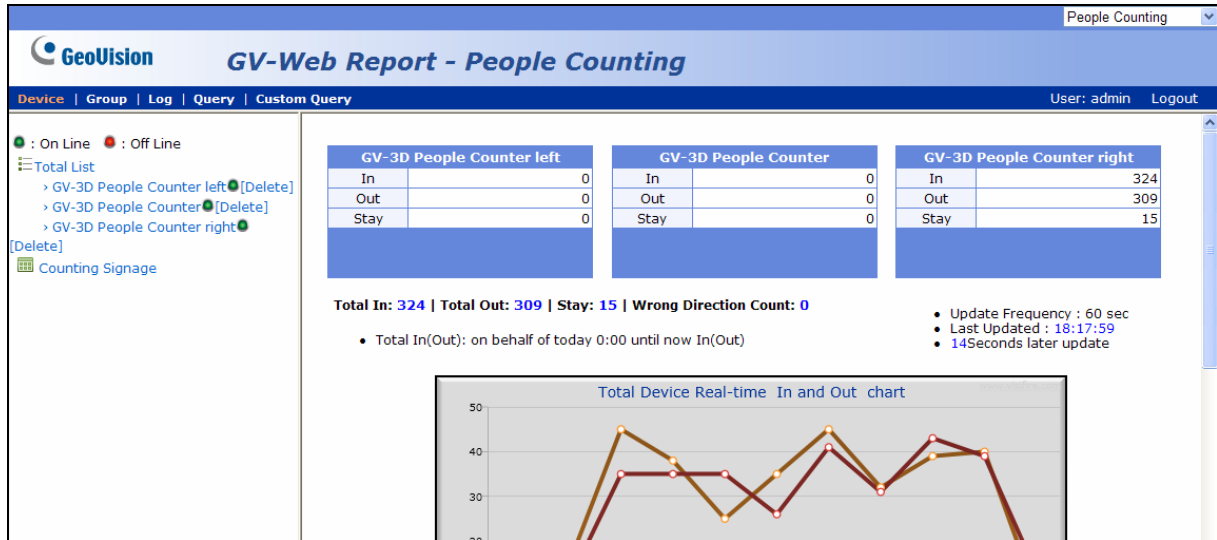


Figure 4-1

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.
- **Total In:** The total number of entered people detected from multiple devices during the day.
- **Total Out:** The total number of left people detected from multiple devices during the day.
- **Stay:** The number of remaining people, the subtraction of **Total Out** from the number of **Total In**.

On the left menu, you can find these options:

- **Total List:** Select one device under the list to access its individual counts. A green mark indicates that the device is now updating data to the GV-Web Report server; otherwise a red mark appears. On the individual device's page, the people counts of the current day are updated every minute from the GV-Web Report server. To remove a device from the list, click **Delete** next to the device name.
- ⊙ **Camera:** Access the live video if remote access function is enabled on both the device and GV-Web Report server. See 4.1.3 *Viewing Live Video* later in this chapter.

4 Accessing People Counting Page

- **Counting Signage:** Access the people counts of the current day updated immediately from the GV-Web Report server.

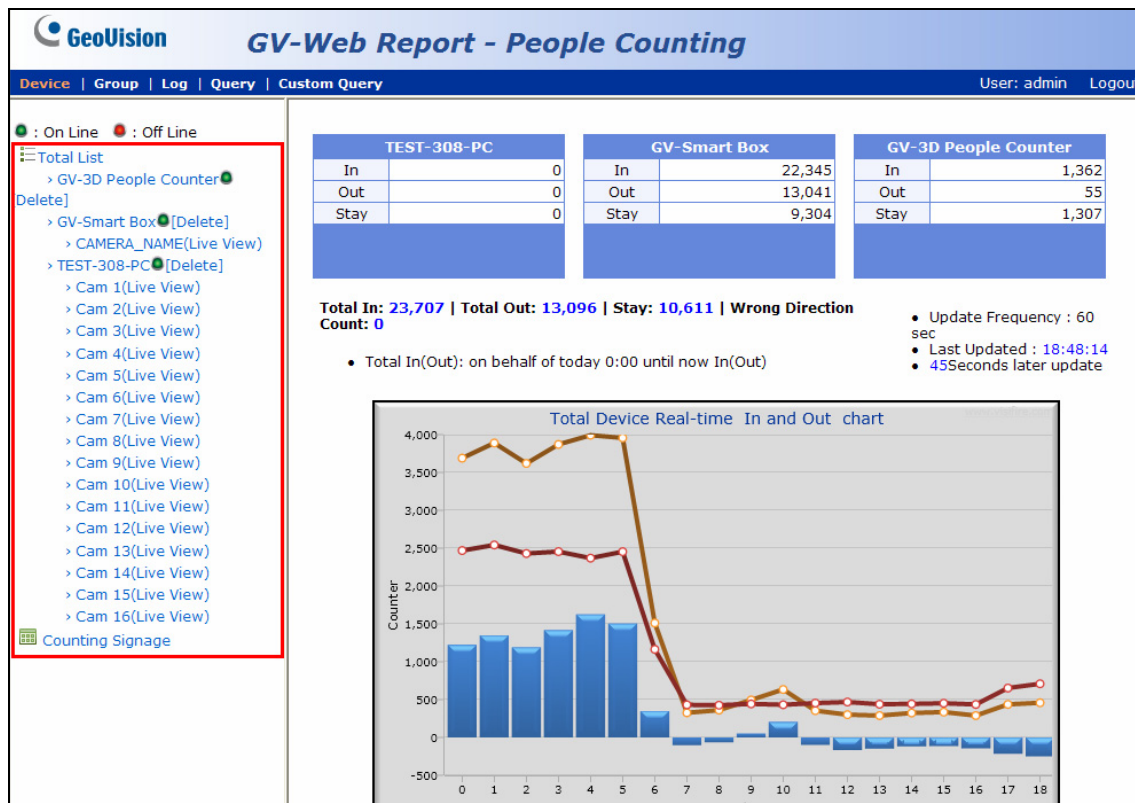


Figure 4-2

4.1.2 Viewing the Current People 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.

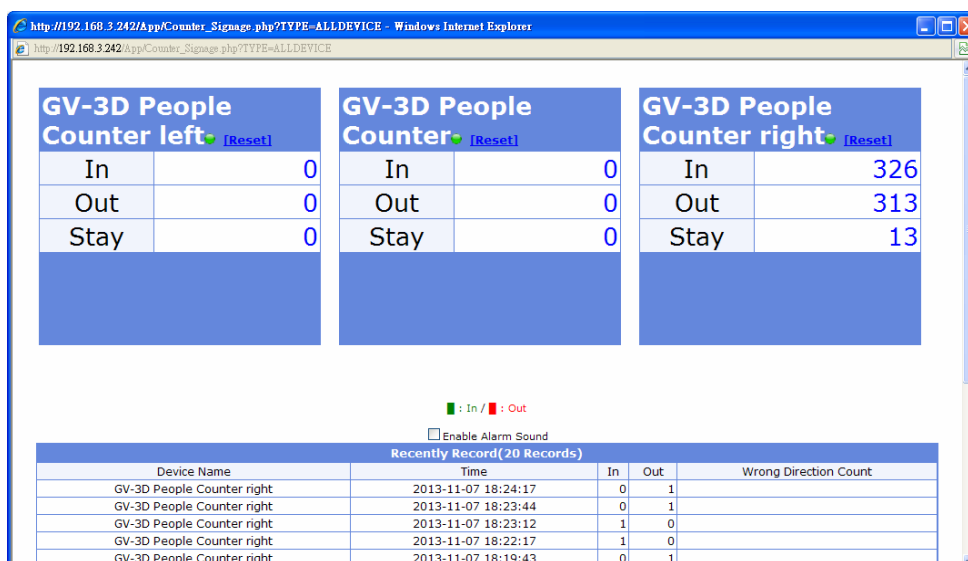


Figure 4-3

4.1.3 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-System:** WebCam Server and DVR Configuration for Remote Access settings (Figure 3-7) on **dbSync2**
- **GV-Web Report:** Configuration for Remote Access settings (Figure 3-12)



Figure 4-4

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

Note:

1. The **In** and **Out** counts on the Live View window is updated directly from the GV-System 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.
-

4.2 Group Page

On the Group page, you can group different cameras from different GV-3D People Counters, GV-Systems and GV-Smart Boxes, and see the people counts of the set group. You can also set up the maximum number of people entered, left and remaining to activate the computer alarm. The I/O trigger and e-mail notification can also be activated when the number of people remaining reaches the pre-defined maximum.

To set up a group:

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

Add Group	
Group	<input type="text"/>
Camera	GV-Smart Box <input type="checkbox"/> CAMERA_NAME
In Maximum	<input type="text"/>
Out Maximum	<input type="text"/>
Stay Maximum	<input type="text"/>
Country	<input type="text"/>
City	<input type="text"/>
Set email for reaching the maximum	<input type="radio"/> Yes <input checked="" type="radio"/> No
Set IO trigger for reaching the maximum	<input type="radio"/> Yes <input checked="" type="radio"/> No

Figure 4-5

2. Name the group.
3. Select the cameras that you want to include in the group.
4. In the **In Maximum** field, set the maximum number of people that can enter during the day before activating the computer alarm.
5. In the **Out Maximum** field, set the maximum number of people that can leave during the day before activating the computer alarm.
6. In the **Stay Maximum** field, set the maximum number of people that can remain during the day before activating the computer alarm, sending a notification e-mail or triggering an output device.
7. Select a **Country** and a **City** to specify your location if you are in Taiwan and China. You can later view count data according to the weather conditions on the day of the data recording. Note that this function is only supported for Taiwan and China.

8. To receive e-mail notifications when the maximum number of people remained is reached, select **Yes** for **Set email for reaching the maximum**.
9. To trigger an output device when the maximum number of people remained is reached, select **Yes** for **Set I/O trigger for reaching the maximum**.
10. Click **Submit**.
11. From **Total List** in the left menu, select the set **Group** to see the sum of every people count from the selected cameras.

To organize multiple groups into subgroups, click **Setting Group Relations** in the left menu. Drag and drop a group under another group to make it a subgroup.



Figure 4-6

To set up e-mail notifications:

To receive e-mail notifications when the maximum number of people remaining is reached, you must first set up the mail server on the GV-Web Report server, and then set up an e-mail group as below. To set up the mail server to send e-mails, see 3.6.5 *E-mail Settings*.

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






The screenshot shows the 'GV-Web Report - People Counting' interface. The top navigation bar includes 'GeoVision', 'GV-Web Report - People Counting', and 'User: 1 Logout'. Below the navigation bar is a menu with options: 'Device | Group | Log | Query'. The main content area is titled 'Add Email Group' and contains a form with the following fields:

- Email Group:** A text input field.
- Group member email:** A large text area with a warning icon and the text: 'More than one person , please separate with a semicolon'.

At the bottom of the form are two buttons: 'Submit' and 'Cancel'.

Figure 4-7

2. Name the group.
3. In the **Group member email** field, type the E-mail address to sent notification to. Separate multiple e-mail addresses with semicolons.
4. Click **Submit**.
5. Click **Maintain Group** to customize the e-mail subject and content. And then click the **Update Group** button . Type new e-mail subject and content.
6. Select **Maintain Email Group** to edit an existing e-mail group. And then click the **Update Group** button . Click the **Delete Group** button , to delete an existing group.

To set up I/O triggers:

The I/O trigger warns the onsite operator of the GV-Web Report server when the number of people remaining reaches the pre-defined maximum. The I/O trigger function only supports these GV I/O devices: GV-I/O Box 4 Ports, 8 Ports and 16 Ports.

Note: The I/O trigger function only supports one output device through a GV-I/O Box, and the GV-I/O Box needs to be connected to the COM port of the GV-Web Report server.

1. Select **Add I/O Device** from the left menu of the Group page. This page appears.



Output	Signal Type
<input checked="" type="checkbox"/> Output1	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output2	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output3	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output4	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output5	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output6	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output7	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec
<input checked="" type="checkbox"/> Output8	<input type="radio"/> N/O <input type="radio"/> N/C Pulse <input type="text"/> Sec <input type="radio"/> N/C <input type="radio"/> N/C Pulse 5 Sec

Figure 4-8

2. Select the device name from the drop-down list.
3. Select the corresponding COM port and address for the I/O device.
4. Select the output to trigger and select its signal type. For the Pulse type, specify the amount of time in second you want the output device to be triggered for.
5. Click **Submit**.

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

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

4.3 Log Page

On the Log page, you can view the people counts of a specified time period from GV-3D People Counters, GV-Systems and GV-Smart Boxes.

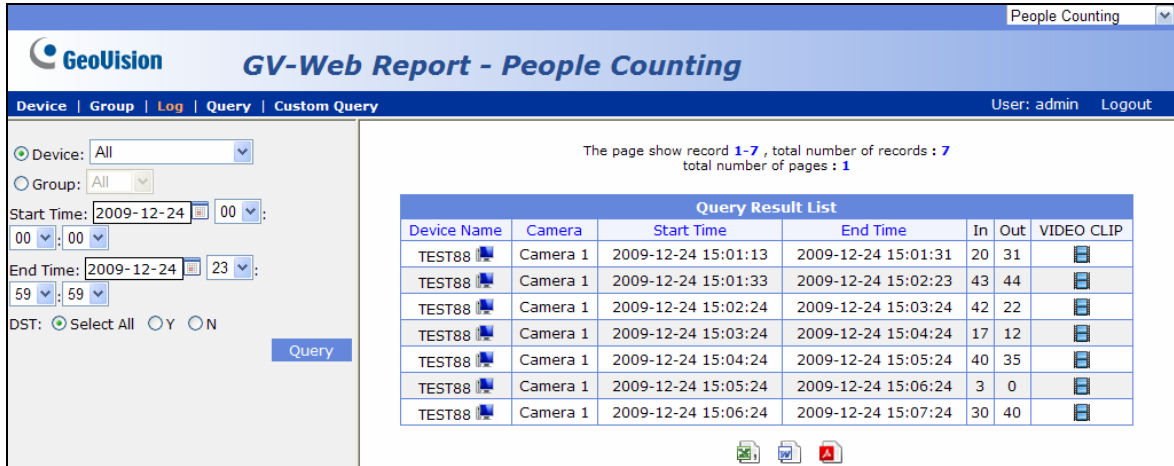


Figure 4-9

To search the log data:

1. Select a specific GV-3D People Counter, GV-System or a GV-Smart Box 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 search results in EXCEL, WORD or PDF format, click the icons at the bottom of the Query Result List.

4.3.1 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 configured. (Figure 3-7).
- **GV-System:** WebCam Server with the **Run Viewlog Server** option enabled
- **GV-Web Report:** Remote Access settings configured. (Figure 3-12)

Note: The GV-3D People Counter and the GV-Smart Box do not support the playback function.

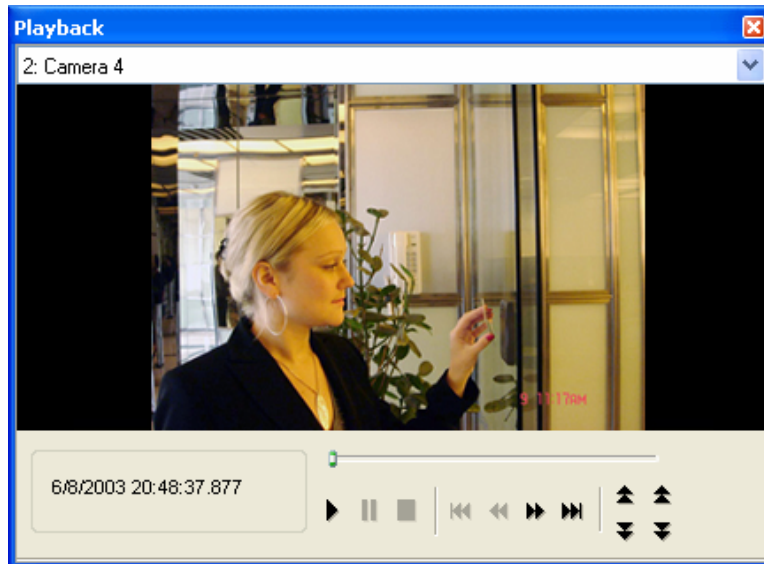
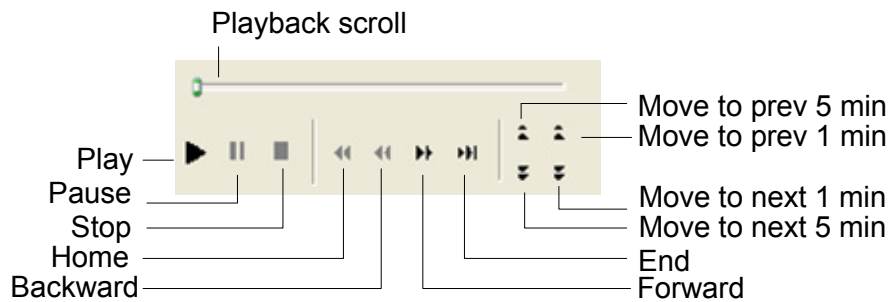


Figure 4-10



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

<p>Play Mode</p>	<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 time to wait for rendering, but may drop frames to provide the visual aspect of real-time playback. ■ Auto Play Next 5 Minutes: Play back video up to 5 minutes. ■ Audio: Turn on or off the video sound.
<p>Render</p>	<p>Includes these options:</p> <ul style="list-style-type: none"> ■ Deinterlace: Convert the interlaced video into non-interlaced video. ■ Scaling: Smoothen the possible 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.
<p>Tools</p>	<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.

4.4 Query Page

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

To search the counting data, select a GV-3D People Counter, 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 options below. Use the **Chart** drop-down list to choose to display the data in bar graph, pie graph or line graph.

Note: Pie graph is not available for the following types of data:

- In/Out Counts per hour and Total Stay
 - Total In, Out and Stay per Hour
 - In Counts per Hour
 - Out Counts per Hour
 - Total Stay per Hour
-

[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 during the day.

4 Accessing People Counting Page

The following figure is an example of the **In/Out Counts per hour and Total Stay** option. The value 16, 179 indicates the count of remaining people until 16 pm is 179.

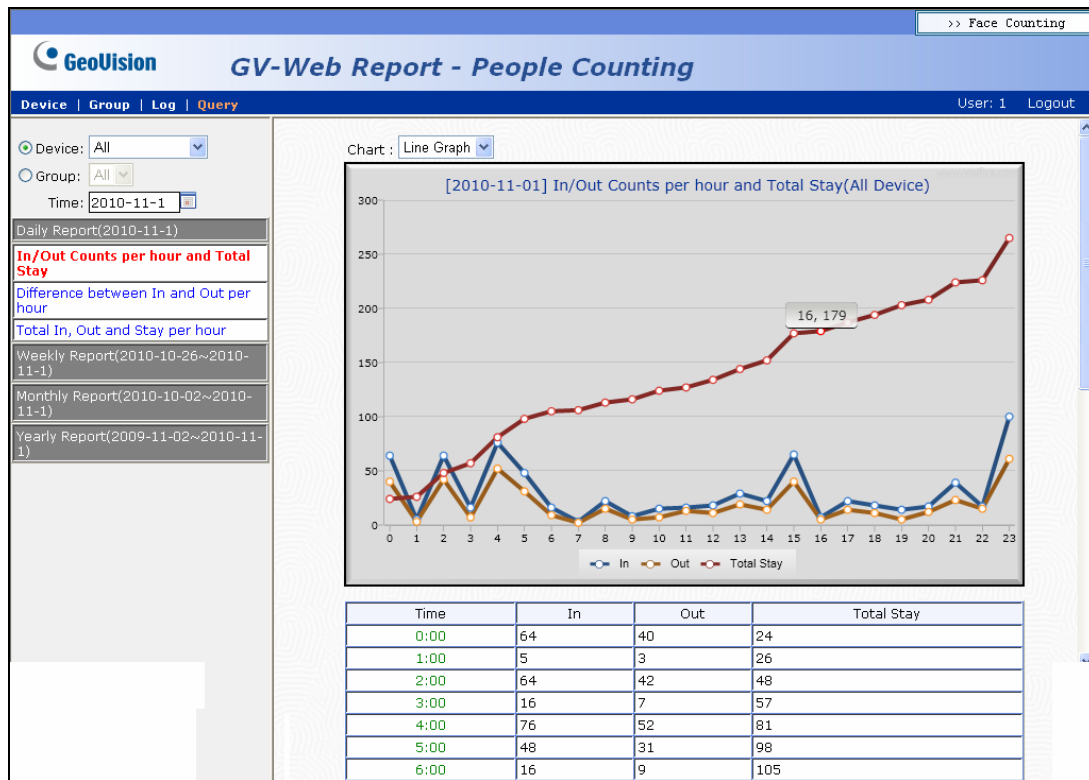


Figure 4-11

[Weekly Report] Displays 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 day:** The daily percentage of people entered 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 15:00, 65 (9.02%) indicates the total number of entered people at 15 pm every day for the week is 65. The number takes up 9.02 percent of the total people entered for the week.

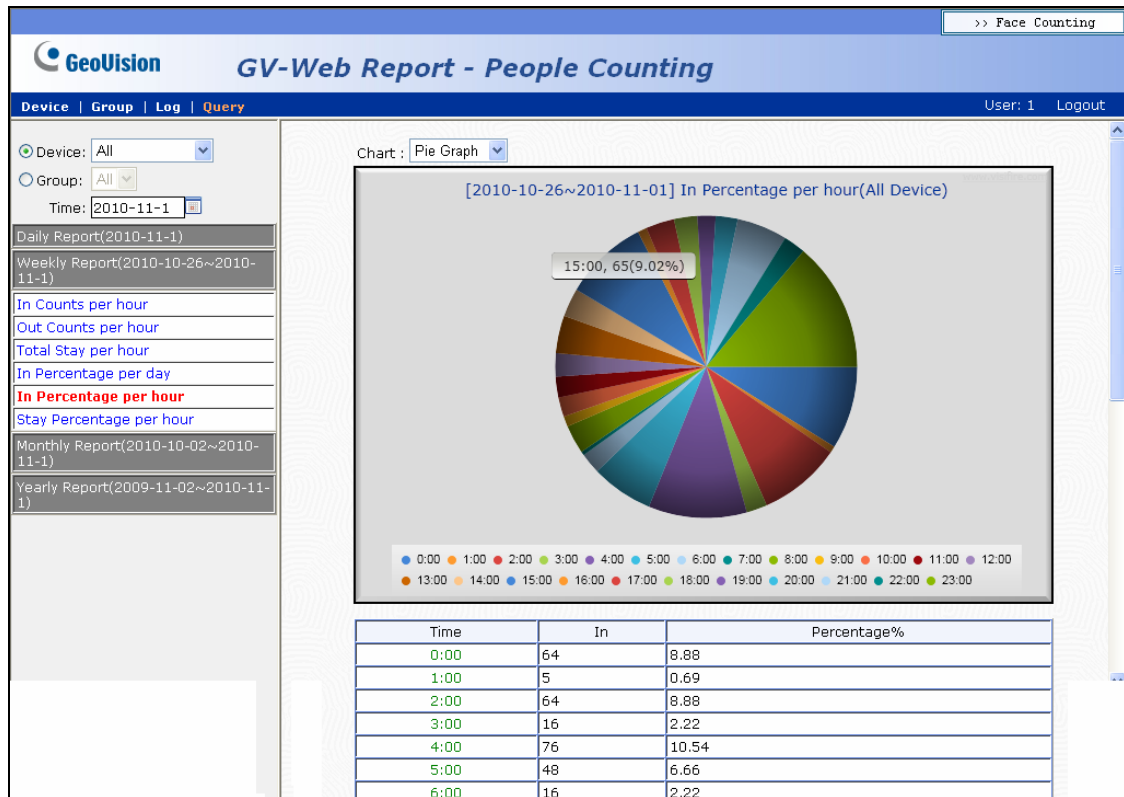


Figure 4-12

[Monthly Report] Displays the monthly report that contains the data of 30 days before your specified date.

- **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] Display the yearly report that contains the data of 365 days before your specified date.

- **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.

4.5 Custom Query Page

The Custom Query page allows you to look up the counting data during a specific period of time or according to different types of weather. You can customize the X Axis and Y Axis of the line graph.

1. Select a GV-3D People Counter, GV-System or GV-Smart Box from the **Device** drop-down list or select a created group from the **Group** drop-down list
2. Set a **Start Time** and **End Time** to filter the counting data.
3. To include only the data from specific time and days of the week, click **Setting** next to Work Date. This window appears.

Day	Start Time	End Time
<input checked="" type="checkbox"/> (Sun)	06 : 05 ~ 14 : 05	
<input checked="" type="checkbox"/> (Mon)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Tue)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Wed)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Thu)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Fri)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Sat)	00 : 00 ~ 24 : 00	

Buttons: Submit, Cancel, Close Window

Figure 4-13

4. Specify the days of week and time range to include and click **Submit**.
5. You can set the Y Axis of the line graph to the following options:
 - **In:** Shows the average number of people entered.
 - **Out:** Shows the average number of people exited.
 - **Stay:** Shows the average number of people remaining.
 - **Total In:** Shows the total number of people entered.
 - **Total Out:** Shows the total number of people exited.
 - **Total Stay:** Shows the total number of people remaining.
6. You can set the X Axis of the line graph to the following options:
 - **Per hour:** Shows the counting data per hour.
 - **Per day:** Shows the counting data per day.
 - **Per month:** Shows the counting data per month.
 - **Per year:** Shows the counting data per year.

- **Weather:** Shows the counting data according to different types of weather. This option is only supported for Taiwan and China.

Note:

- The **Weather** option is only available when
 - Group is selected in step 1.
 - The Country and City options are specified in the Group page. See [4.2 Group Page](#) for details.
 - GV-Web Report is connected to the Internet.
- The weather conditions are updated everyday at 12:00 noon.

7. Click **Query** to see the line graph.

In the example below, **In** is selected for Y Axis and **Weather** is selected for X Axis. The value Haze, 13 indicates that the number of people entered during hazy weather is 13.

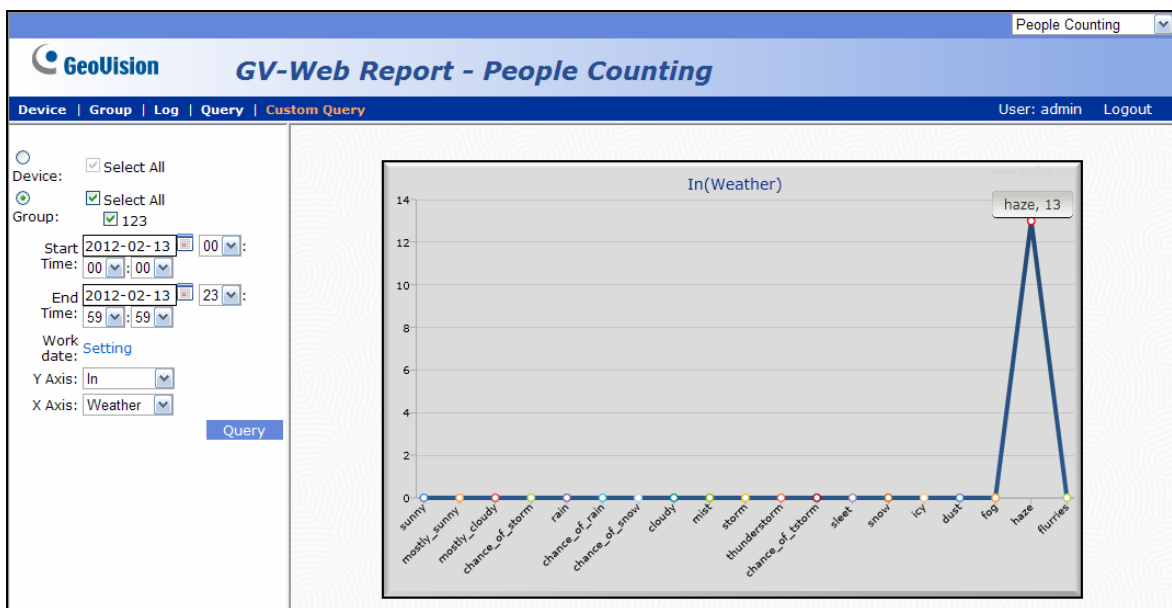


Figure 4-14

Chapter 5 Accessing Face Counting Page

After the GV-Web Report Service is started, you can access the counts, graphics and live video on the network. The GV-Web Report is divided into 3 pages, **People Counting** page, **Face Counting** page and **Object Size Counting** page. This chapter describes the functions on the Face Counting page in detail.

Face Counting page provides face counting data, and gender and age recognition results of people entered the surveillance area. The counting data can be from GV-Systems and GV-Smart Boxes.

After logging in the Web interface, click the **Face Counting** tab on the upper right corner of the Web page. The Web page is switched to the Face Counting page similar to the following example.

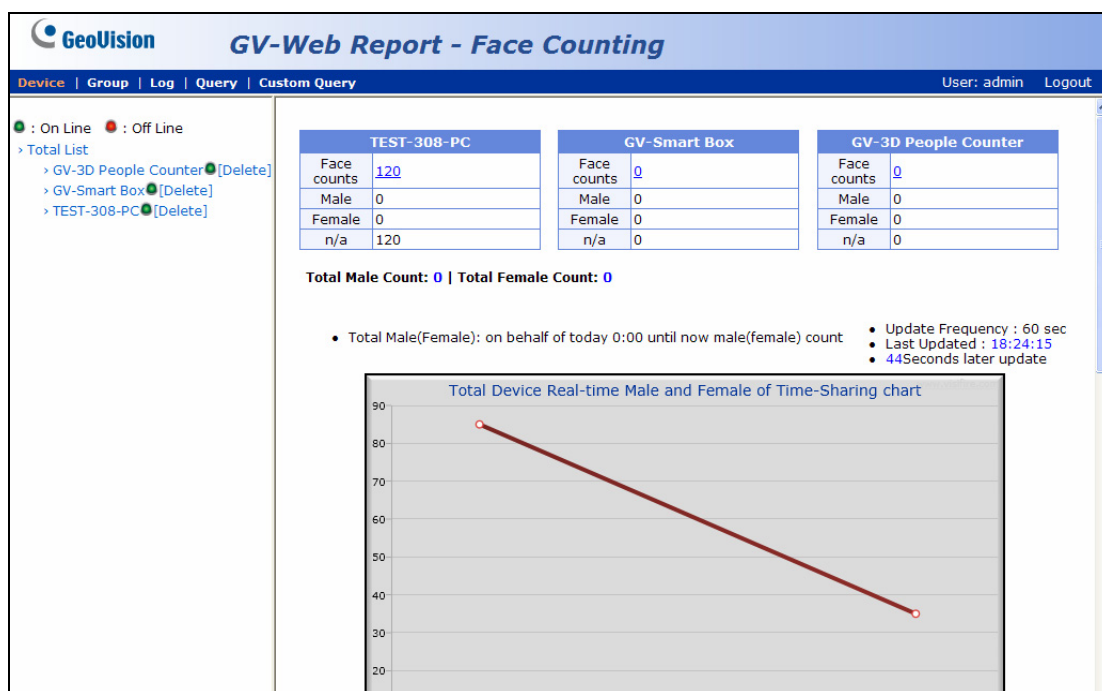


Figure 5-1

Note:

1. Functions involving age and gender recognition results are only functional when connecting to GV-Smart Boxes using firmware version 1.0.
2. The Face Counting function is only supported in GV-System version 8.4.0.0 or later.
3. For remote viewing through network, Internet Explorer 7.0 or later is required.

5.1 Device Page

On the Device page, you can access two types of face counts of the current day.

Main page	On the main page of the Device page, the face counts of the current day are updated from the GV-Web Report server every minute. See 5.1.1 <i>Viewing Face Counts Updated Every Minute</i> .
Live View Window	On the Live View window, you can view live video from a GV-Smart Box or GV-System. See 5.1.2 <i>Viewing Live Video</i> .

5.1.1 Viewing Face Counts Updated Every Minute

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

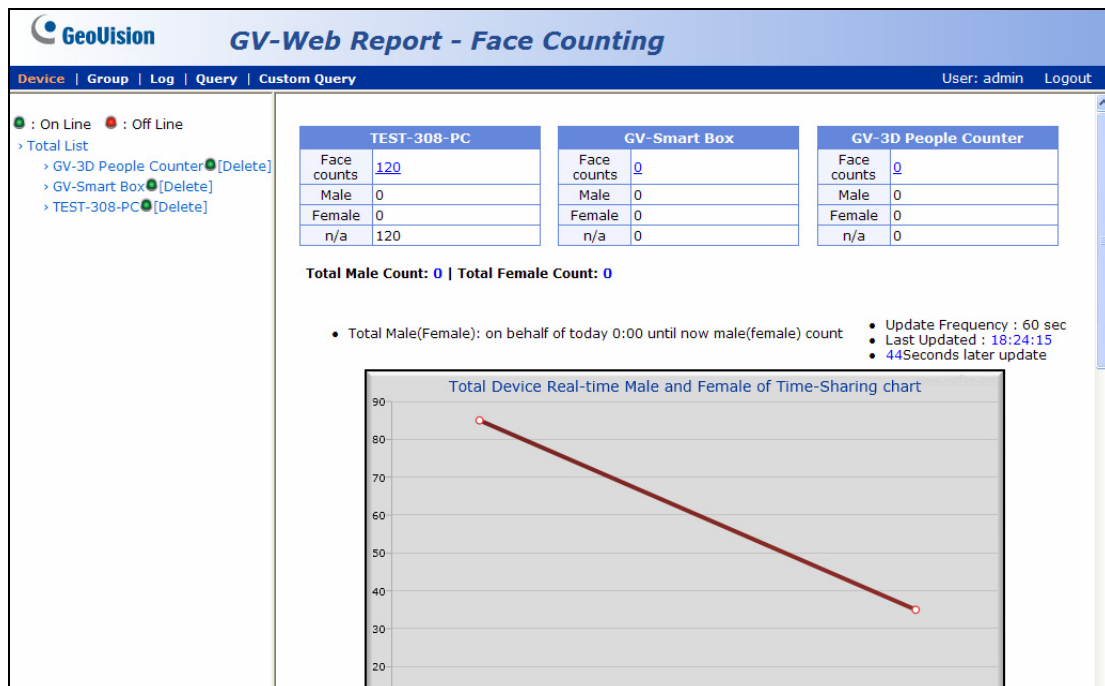


Figure 5-2

The counts on the main page show:

- **Face counts:** The number of people entered and counted based on face images during the day.
- **Male:** The number of males entered during the day.
- **Female:** The number of females entered during the day.
- **n/a:** The number of entered people whose gender failed to be recognized.

- **Total Male Count:** The total number of males entered from multiple GV-Smart Boxes during the day.
- **Total Female Count:** The total number of females entered from multiple GV-Smart Boxes during the day.

On the left menu, you can find these options:

- **Total List:** Select one GV-Smart Box or GV-System under the list to see its individual face counts. A green mark indicates that the device is now updating data to the GV-Web Report server; otherwise a red mark appears. On the individual device’s page, the face counts of the current day are updated every minute from the GV-Web Report server. To remove a device from the list, click **Delete** next to the device name.
- ⊙ **Camera:** Access the live video if remote access is enabled on both the device and GV-Web Report server. See 5.1.2 *Viewing Live Video*.

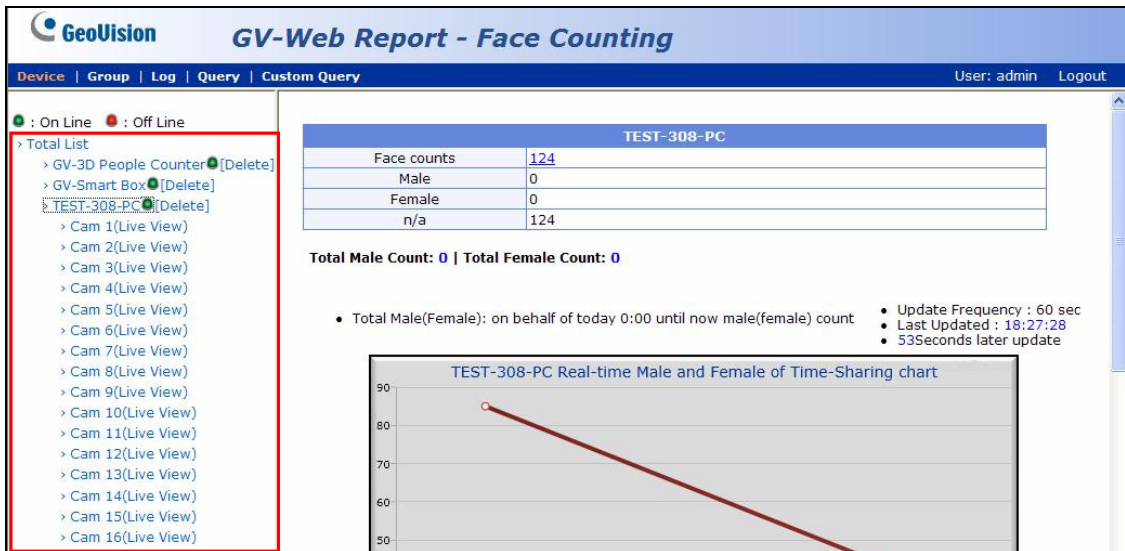



Figure 5-3

5.1.2 Viewing Live Video

To access live video, select the desired camera from the left menu of the Device page. Make sure remote access to GV-Systems and GV-Smart Boxes has been enabled on GV-Web Report. See 3.6.3 *Remote Access Settings* for details on how to allow remote access. You will also need to enable Webcam Server on the GV-System. See Chapter 8, *DVR User's Manual* on the Surveillance System Software DVD.



Figure 5-4

By clicking the  icon on the Live View window, you can view the live video from the GV-Smart Box or GV-System.

5.2 Group Page

On the Group page, you can group different cameras from different GV-Smart Boxes and GV-Systems, and then see the face counts of the set group.

To set up a group:

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

The screenshot shows the 'Add Group' form in the GeoUision GV-Web Report - Face Counting interface. The form has a blue header with the title 'Add Group'. Below the header, there are two rows of input fields. The first row is labeled 'Group' and contains a text input field with the value 'Group1'. The second row is labeled 'Camera' and contains a dropdown menu with the selected option 'GV-Smart Box' and a checked checkbox next to 'CAMERA_NAME'. At the bottom of the form, there are two buttons: 'Submit' and 'Cancel'. The left sidebar of the interface shows a menu with options: 'Total List', 'Manage Group', '> Add Group', '> Maintain Group', and '> Setting Group Relations'. The top navigation bar includes 'Device | Group | Log | Query | Custom Query' and 'User: admin Logout'.

Figure 5-5

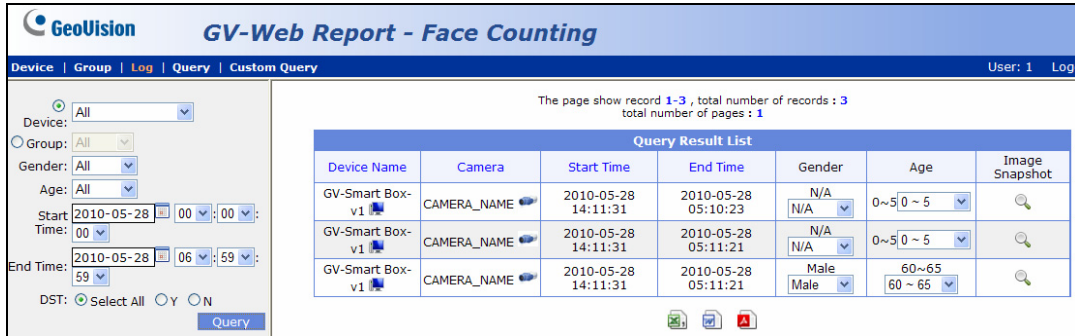
2. Name the group.
3. Select the cameras that you want to include in the group.
4. Click **Submit**.
5. From **Total List** in the left menu, select the set Group to see the sum of every face count from those selected cameras.

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

- **Total List:** Access the face counts of the set groups updated every minute from the GV-Web Report server.
- **Manage Group:**
 - ⊙ **Add Group:** Select this option to set a group.
 - ⊙ **Maintain Group:** Select this option to modify the group setting or delete a group.
 - ⊙ **Setting Group Relations:** Drag and drop a group under another group to make it a subgroup.

5.3 Log Page

On the Log page, you can view the gender and age recognition results of a specified time period and the snapshots from GV-Smart Boxes and GV-Systems.



The screenshot shows the 'GV-Web Report - Face Counting' interface. On the left, there are search filters for Device, Group, Gender, Age, Start Time, End Time, and DST. The main area displays a 'Query Result List' table with the following data:




Device Name	Camera	Start Time	End Time	Gender	Age	Image Snapshot
GV-Smart Box-v1	CAMERA_NAME	2010-05-28 14:11:31	2010-05-28 05:10:23	N/A	0~5	
GV-Smart Box-v1	CAMERA_NAME	2010-05-28 14:11:31	2010-05-28 05:11:21	N/A	0~5	
GV-Smart Box-v1	CAMERA_NAME	2010-05-28 14:11:31	2010-05-28 05:11:21	Male	60~65	




Figure 5-6

To search the log data:

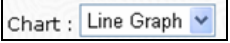
1. Select a specific GV-Smart Box or GV-System from the **Device** drop-down list or a created group from the **Group** drop-down list.
2. Specify **Gender** and **Age** of the log data.
3. Specify **Start Time** and **End Time** of the log data.
4. You can select whether to search the DST (Daylight 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.
5. Click **Query** to display the search results.
 - **Gender:** You can view the gender of the person entered. **N/A** appears when the GV-Smart Box fails to recognize the gender. You can also manually specify the gender with the drop-down list if necessary. The modified data will be updated to the database of the GV-Web Report.
 - **Age:** You can view the age range of the person entered. You can also manually specify the age group with the drop-down list if necessary. The modified data will be updated to the database of the GV-Web Report.
 - **Image Snapshot:** You can view the snapshot of the person entered by clicking the



icon.

To back up the search results in EXCEL, WORD or PDF format, click the icons    at the bottom of the Query Result List.

5.4 Query Page

The Query page provides you with the daily, weekly, monthly and yearly face counting graphs and tables. To search the face counting data, select a GV-Smart Box or GV-System from the **Device** drop-down list or a created group from the **Group** drop-down list, specify a date, and select the following options below. Use the **Chart** drop-down list  above the graphs to choose to display the data in bar graph, pie graph or line graph.

Note: Pie graph is not available for the following types of data.

- Male Female Count per 60 Minutes
 - Total Male and Female count per 60 Minutes
 - Age range Count per 60 Minutes
 - Total range Count per 60 Minutes.
-

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

- **Male/Female count per 60 minutes:** The hourly number of males and females entered during the day.
- **Total male and female count per 60 minutes:** The hourly accumulated number of males and females entered during the day.
- **Male and female percentage:** The total number and the percentage of males and females entered during the day.
- **Age range count per 60 minute:** The hourly number of people of each age range entered during the day.
- **Total Age range count per 60 minutes:** The hourly accumulated number of people of each age group entered during the day.
- **Age range percentage:** The total number and the percentage of people of each age range entered during the day.

The following figure is an example of the **Male/Female count per 60 minutes** option. The value 9, 5 indicates the count of males until 9 am is 5.

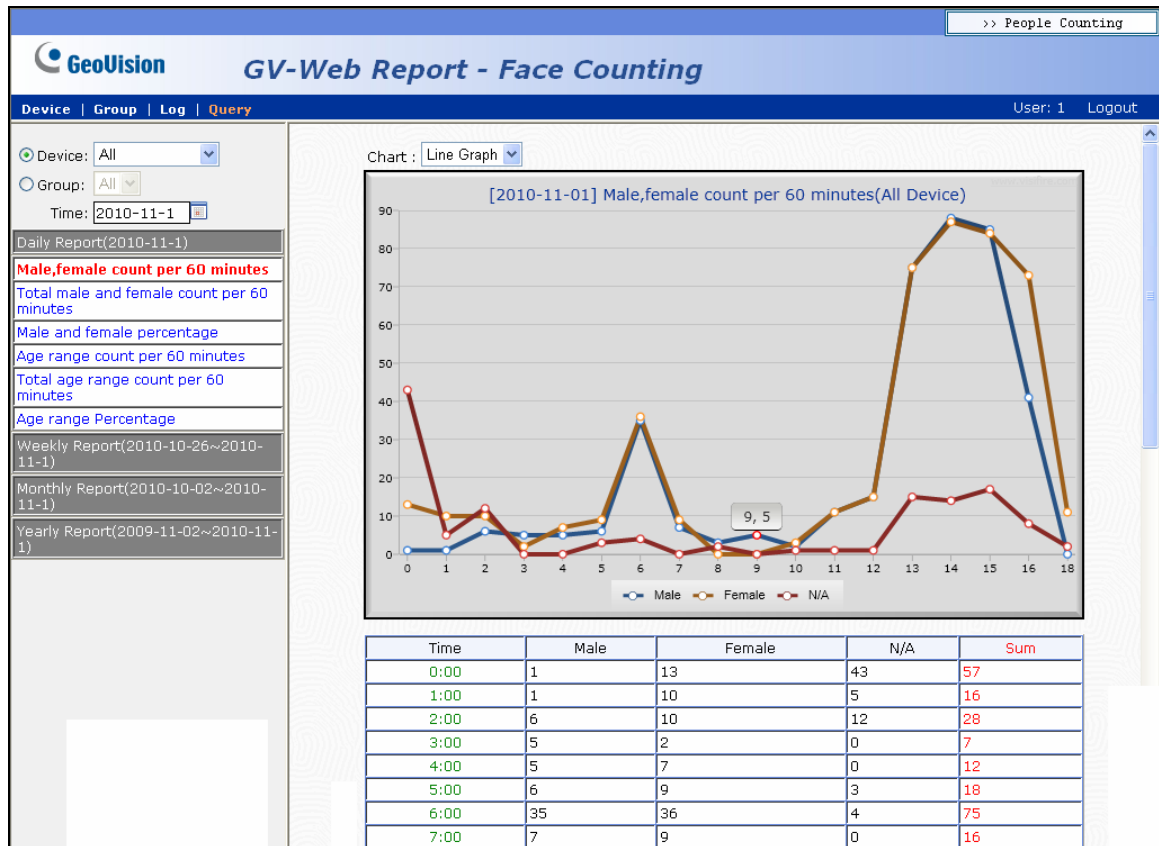


Figure 5-7

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

- **Male count percentage:** The daily number and the percentage of males entered for the week.
- **Female count percentage:** The daily number and the percentage of females entered for the week.
- **Male and female percentage:** The total number and the percentage of males and females entered for the week.
- **Age range percentage:** The total number and the percentage of people of each age range entered for the week.

The following figure is an example of the **Age range percentage** option. The value 30 ~ 35, 321 (32.96%) indicates the number of 30 ~ 35 year-olds entered is 321. 30 ~ 35 year-olds takes up 32.96 percent of all persons entered that week.

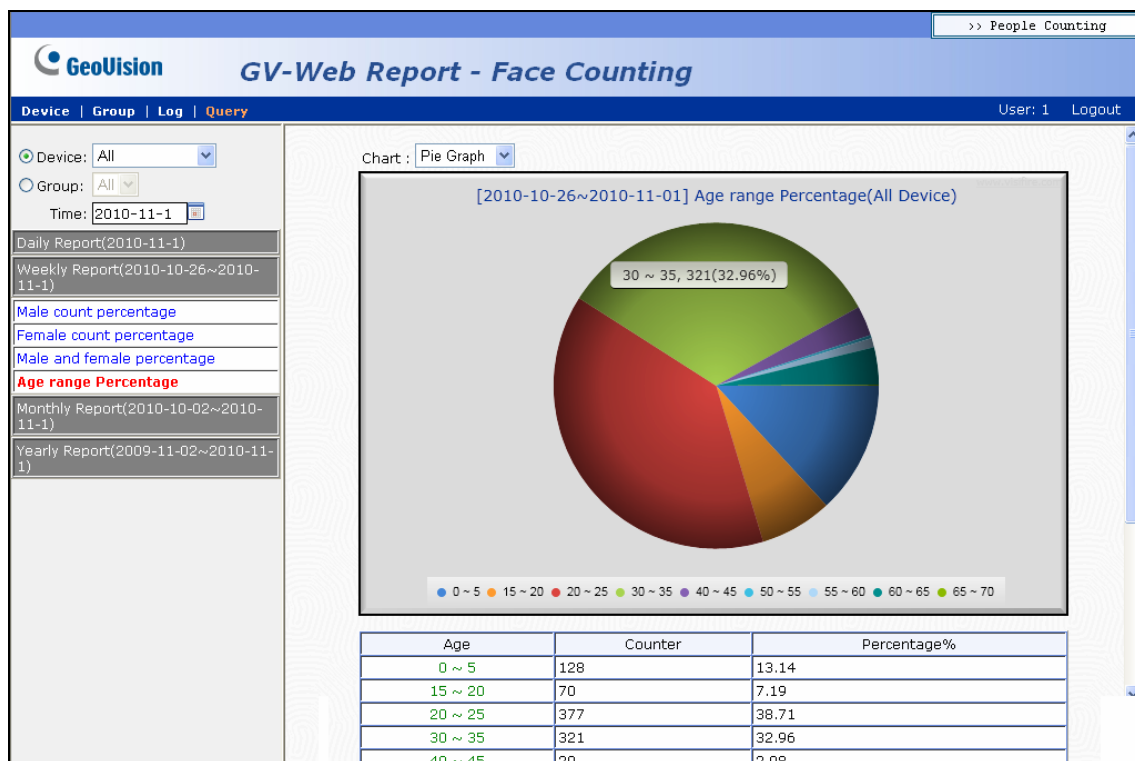


Figure 5-8

[Monthly Report] Display the monthly report that contains the data of a month before your specified date.

- **Male count percentage:** The daily number and the percentage of males entered for the month.
- **Female count percentage:** The daily number and the percentage of females entered for the month.
- **Male and female percentage:** The total number and the percentage of males and females entered for the month.
- **Age range percentage:** The total number and the percentage of persons of each age range entered for the month.

[Yearly Report] Display the yearly report that contains the data of a year before your specified date.

- **Male count percentage:** The monthly number and the percentage of males entered for the year.
- **Female count percentage:** The monthly number and the percentage of females entered for the year.
- **Male and female percentage:** The total number and the percentage of males and females entered for the year.
- **Age range percentage:** The total number and the percentage of people of each age range entered for the year.

5.5 Custom Query Page

The Custom Query page allows you to look up the male or female counting data of different age group during a specific time period. You can customize the X Axis and Y Axis of the line graph.

1. Select a GV-System or GV-Smart Box from the **Device** drop-down list or select a created group from the **Group** drop-down list.
2. Set a **Start Time** and **End Time** to include the counting data during that time period.
3. To include only the data from specific time and days of the week, click **Setting** next to Work Date. This window appears.

Day	Start Time	End Time
<input checked="" type="checkbox"/> (Sun)	06 : 05	~ 14 : 05
<input checked="" type="checkbox"/> (Mon)	00 : 00	~ 24 : 00
<input checked="" type="checkbox"/> (Tue)	00 : 00	~ 24 : 00
<input checked="" type="checkbox"/> (Wed)	00 : 00	~ 24 : 00
<input checked="" type="checkbox"/> (Thu)	00 : 00	~ 24 : 00
<input checked="" type="checkbox"/> (Fri)	00 : 00	~ 24 : 00
<input checked="" type="checkbox"/> (Sat)	00 : 00	~ 24 : 00

Buttons: Submit, Cancel, Close Window

Figure 5-9

4. Specify the days of week and time range to include and click **Submit**.
5. Select the **Age** groups to include or click **Select All**.
6. You can set the Y Axis of the line graph to the following options:
 - **Male Count:** Shows the average number of male counted.
 - **Female Count:** Shows the average number of female counted.
 - **Total Male Count:** Shows the total number of male counted.
 - **Total Female:** Shows the total number of female counted.
7. You can set the X Axis of the line graph to the following options:
 - **Per hour:** Shows the counting data per hour.
 - **Per day:** Shows the counting data per day.
 - **Per month:** Shows the counting data per month.
 - **Per year:** Shows the counting data per year.
8. Click **Query** to see the line graph.

In the example below, **Male Count** is selected for Y Axis and **Per Hour** is selected for X Axis. The value 18, 124 indicates that average number of males counted from 17:00-18:00 pm is 124.

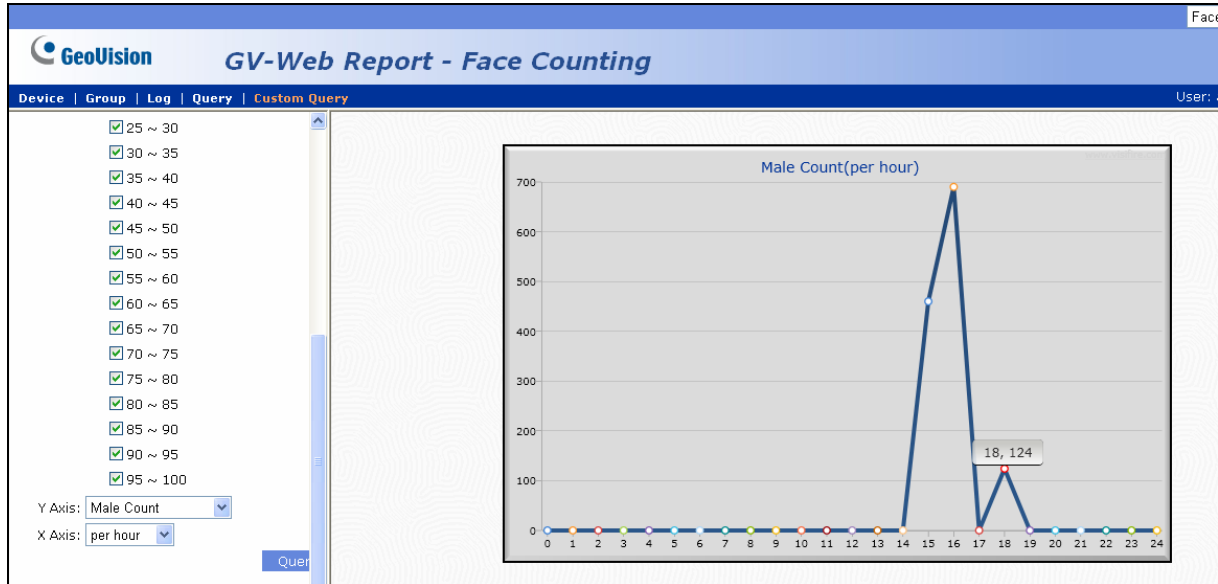


Figure 5-10

Chapter 6 Accessing Object Size

Counting Page

After the GV-Web Report Service is started, you can access the counts, graphics and live video on the network. The GV-Web Report is divided into 3 pages, **People Counting** page, **Face Counting** page and **Object Size Counting** page. This chapter describes the functions on the Object Size Counting page in detail.

Object Size Counting page provides counting data of vehicles that entered the surveillance area sorted by different object sizes. The counting data can be acquired from GV-Smart Boxes.

After logging in the Web interface, click the **Object Size Counting** tab on the upper right corner of the Web page. The Web page is switched to the Object Size Counting page similar to the following example.

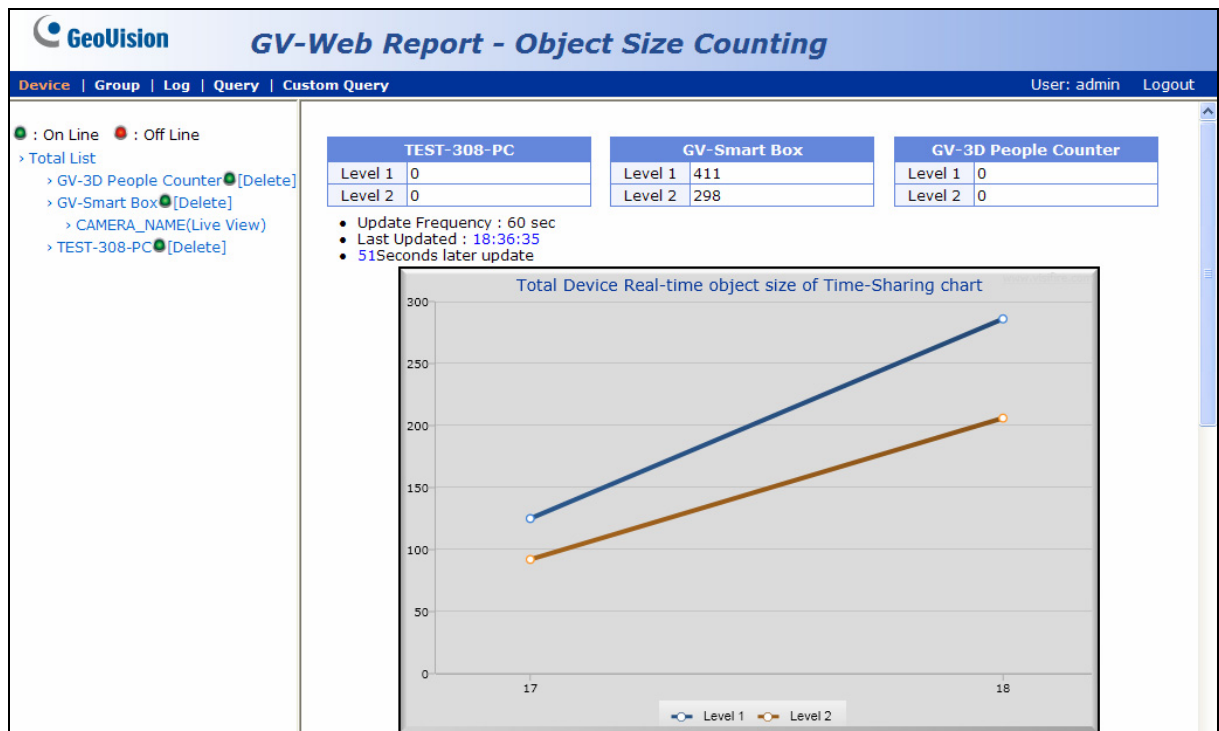


Figure 6-1

Note: For remote viewing through network, Internet Explorer 7.0 or later is required.

6.1 Device Page

On the Device page, you can access object size counts of the day and watch live view from a GV-Smart Box.

Main page	On the main page of the Device page, the object size counts of the current day are updated from the GV-Web Report server every minute. See 6.1.1 <i>Viewing Object Size Counts Updated Every Minute</i> .
Live View Window	On the Live View window, you can view live video from a GV-Smart Box. See 6.1.2 <i>Viewing Live Video</i> .

6.1.1 Viewing Object Size Counts Updated Every Minute

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

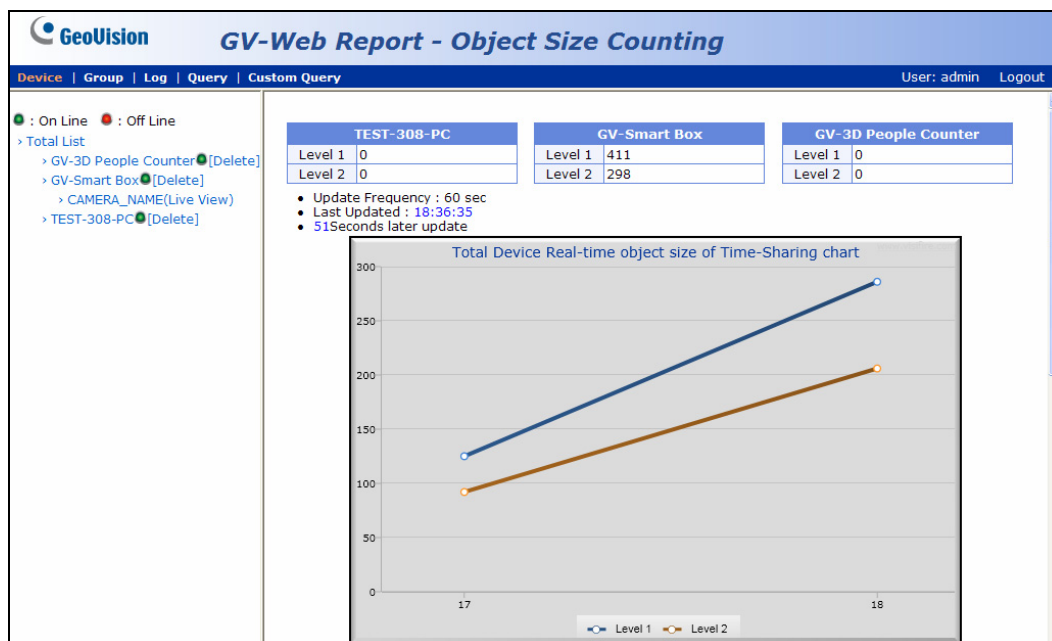


Figure 6-2

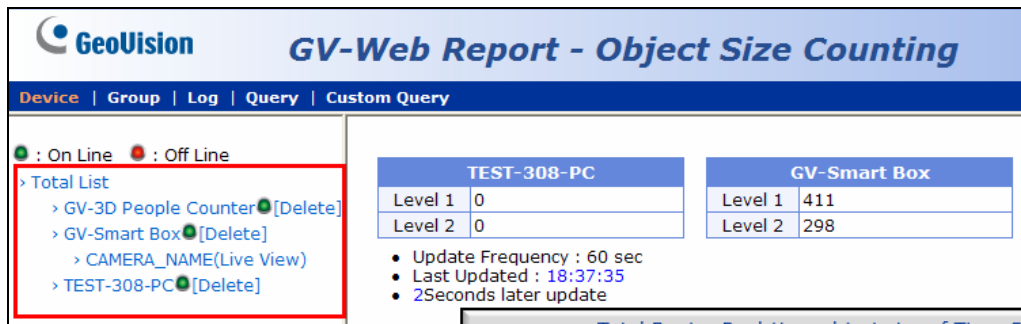
The table on the main page shows the number of objects counted for each size level. Three graphs are available.

- **Real-time object size:** The hourly number of objects from different size levels counted on that day is shown in a line graph.
- **Real-time total object size (All Device):** The accumulated number counts from different size levels for all connected device are shown during the day in a line graph.
- **Real-time total object size (Each Device):** The daily accumulated object counts of different size levels from each device are shown in a bar graph.

6 Accessing Object Size Counting Page

On the left menu, you can find these options:

- **Total List:** Select one GV-Smart Box under the list to see its individual object size counts. The green mark indicates that the device is now updating data to the GV-Web Report server; otherwise a red mark appears. The object size counts of the current day are updated every minute from the GV-Web Report server. To remove a device from the list, click **Delete** next to the device name.
- ⊙ **Camera:** Access the live video if remote access is enabled on both the device and GV-Web Report server. See 6.1.2 *Viewing Live Video*.



The screenshot shows the 'GV-Web Report - Object Size Counting' interface. On the left, a 'Total List' menu is highlighted with a red box, containing items: 'GV-3D People Counter [Delete]', 'GV-Smart Box [Delete]', 'CAMERA_NAME(Live View)', and 'TEST-308-PC [Delete]'. The main area displays two tables:

TEST-308-PC	
Level 1	0
Level 2	0

GV-Smart Box	
Level 1	411
Level 2	298

Below the tables, the following information is shown:

- Update Frequency : 60 sec
- Last Updated : 18:37:35
- 2Seconds later update


Figure 6-3

6.1.2 Viewing Live Video

To access live video, select the desired camera from the left menu of the Device page. Make sure remote access to GV-Smart Boxes has been enabled on the GV-Web Report. See 3.6.3 *Remote Access Settings* for details on how to allow remote access.



Figure 6-4

By clicking the  icon on the Live View window, you can view the live video from the GV-Smart Box.

6.2 Group Page

On the Group page, you can group different cameras from different GV-Smart Boxes, and then see the object size counts of the set group.

To set up a group:

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

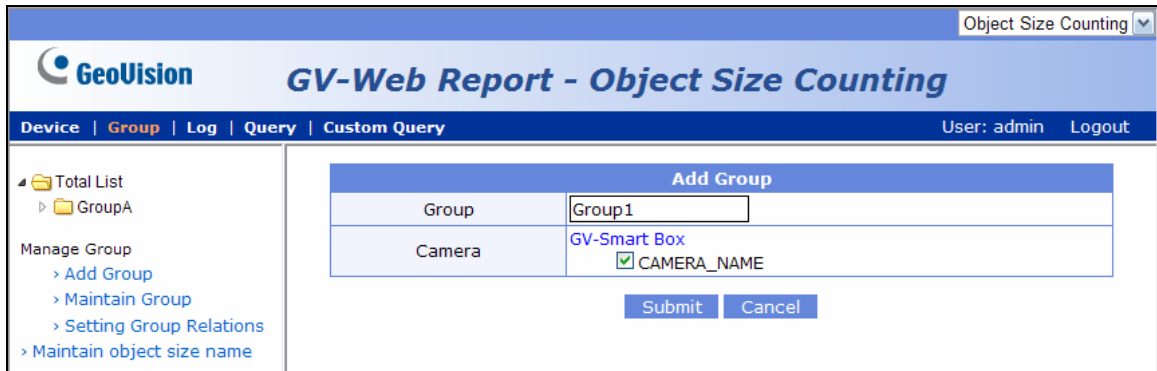


Figure 6-5

2. Name the group.
3. Select the cameras that you want to include in the group.
4. Click **Submit**.
5. From **Total List** in the left menu, select the set Group to see the sum of every object size count from those selected cameras.

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

- **Total List:** Access the object size counts of the set groups updated every minute from the GV-Web Report server.
- **Manage Group:**
 - ⊙ **Add Group:** Select this option to set a group.
 - ⊙ **Maintain Group:** Select this option to modify the group settings or delete a group.
 - ⊙ **Setting Group Relations:** Drag and drop a group under another group to make it a subgroup.
- **Maintain Object Size Name:** Modify the display names to 6 different object sizes defined for Traffic Counter in the GV-Smart Box.

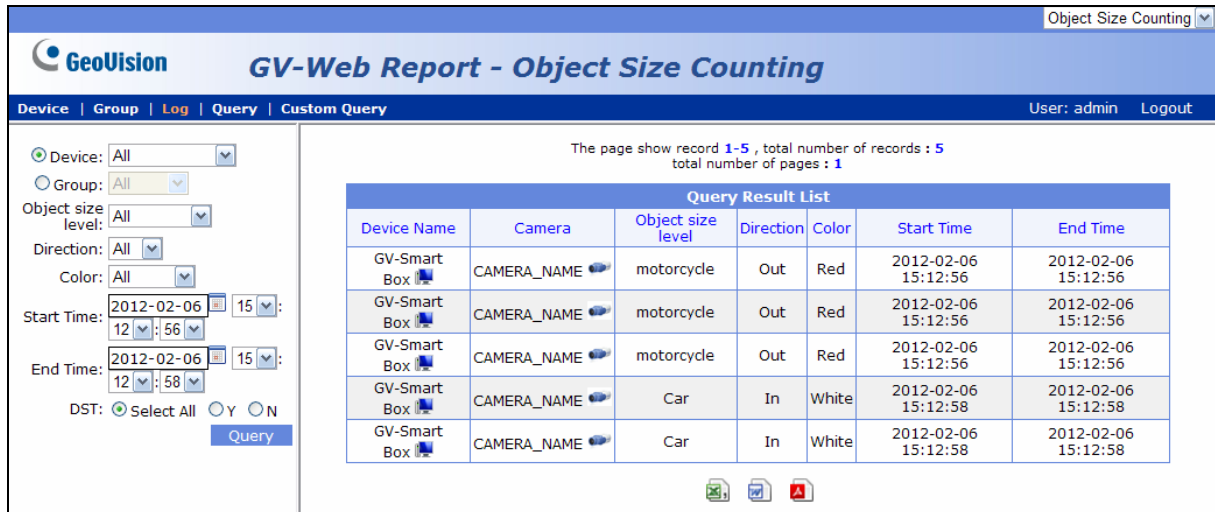
6 Accessing Object Size Counting Page

Maintain object size name	
Object size level	Name
1	<input type="text" value="Bus"/>
2	<input type="text" value="Bicycle"/>
3	<input type="text" value="Truck"/>
4	<input type="text" value="Motorcycle"/>
5	<input type="text" value="Vehicle"/>
6	<input type="text" value="Level 6"/>

Figure 6-6

6.3 Log Page

On the Log page, you can view the counting records according to different object sizes during a specified time period from GV-Smart Boxes.






The page show record 1-5 , total number of records : 5
total number of pages : 1

Query Result List						
Device Name	Camera	Object size level	Direction	Color	Start Time	End Time
GV-Smart Box	CAMERA_NAME	motorcycle	Out	Red	2012-02-06 15:12:56	2012-02-06 15:12:56
GV-Smart Box	CAMERA_NAME	motorcycle	Out	Red	2012-02-06 15:12:56	2012-02-06 15:12:56
GV-Smart Box	CAMERA_NAME	motorcycle	Out	Red	2012-02-06 15:12:56	2012-02-06 15:12:56
GV-Smart Box	CAMERA_NAME	Car	In	White	2012-02-06 15:12:58	2012-02-06 15:12:58
GV-Smart Box	CAMERA_NAME	Car	In	White	2012-02-06 15:12:58	2012-02-06 15:12:58

Figure 6-7

To search the log data:

1. Select a specific GV-Smart Box from the **Device** drop-down list or a created group from the **Group** drop-down list.
2. Specify the **Direction** to see the counting results of objects moving In or Out.
3. Specify **Start Time** and **End Time** of the log data.
4. 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.
5. Click **Query** to display the search results.
 - **Object Size Level:** You can view the size level of the object detected. You can define up to 6 object size levels in the GV-Smart Box and label the different object size levels under the Group Page. See *Figure 6-6*.
 - **Direction:** You can see whether the object is moving toward the In or Out direction defined in the GV-Smart Box.

To back up the search results in EXCEL, WORD or PDF format, click the icons    at the bottom of the Query Result List.

6.4 Query Page

The Query page provides you with the daily, weekly, monthly and yearly object size counting graphs and tables. To search the object size counting data, select a 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 below. Use the **Chart** drop-down list Chart : Line Graph above the graphs to choose to display the data in bar graph, pie graph or line graph.

Note: Pie graph is not available for the following types of data.

- Object size count per 60 minutes
- Total object size count per 60 minutes

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

- **Object size count per 60 minutes:** The number of objects from each object size level counted per hour.
- **Total object size count per 60 minutes:** The accumulated number of objects from each object size level counted per hour.
- **Object size percentage:** The total number and the percentage of objects from each object size level counted on that day.

The following figure is an example of the **Object size count per 60 minutes** option. The value 20, 6478 indicates the number of cars counted from 19:00-20:00 pm is 6478.

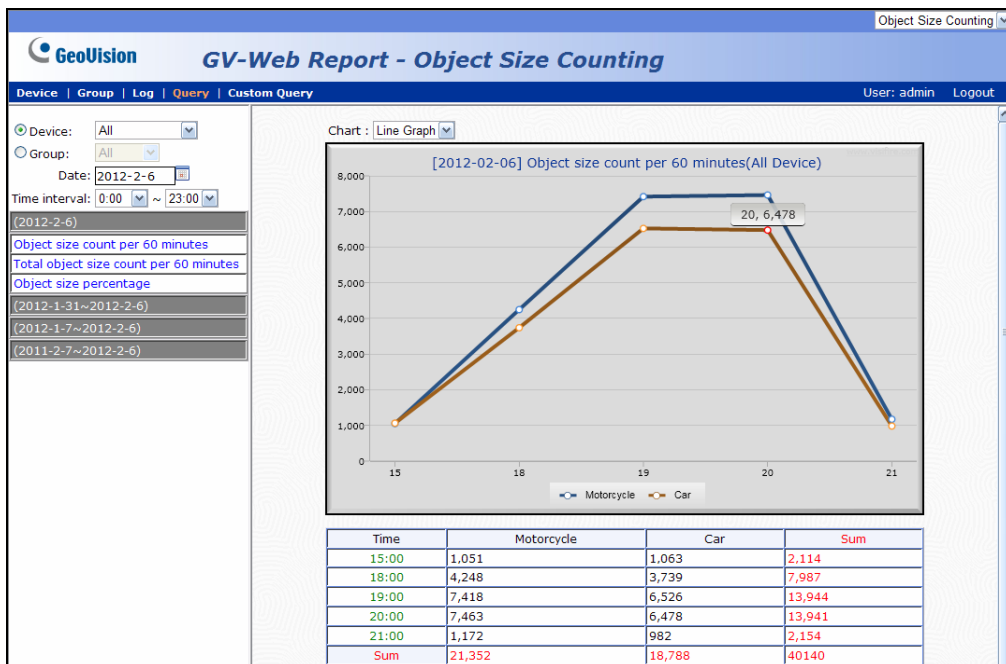


Figure 6-8

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

- **Object size percentage:** The daily number and the percentage of objects from each object size level counted for the week.
- **Level X percentage:** The daily number of objects from the selected object size level counted and the percent of total weekly count. If you have customized the name of the size level in the Group page, the modified name will be displayed here.

Below is an example of the weekly **Object size percentage**. The value Motorcycle, 1,176 (2.84%) indicates that the number of objects from the Motorcycle size level counted is 1,176 for that week. Motorcycles takes up 2.84 percent of all traffic counted that week.

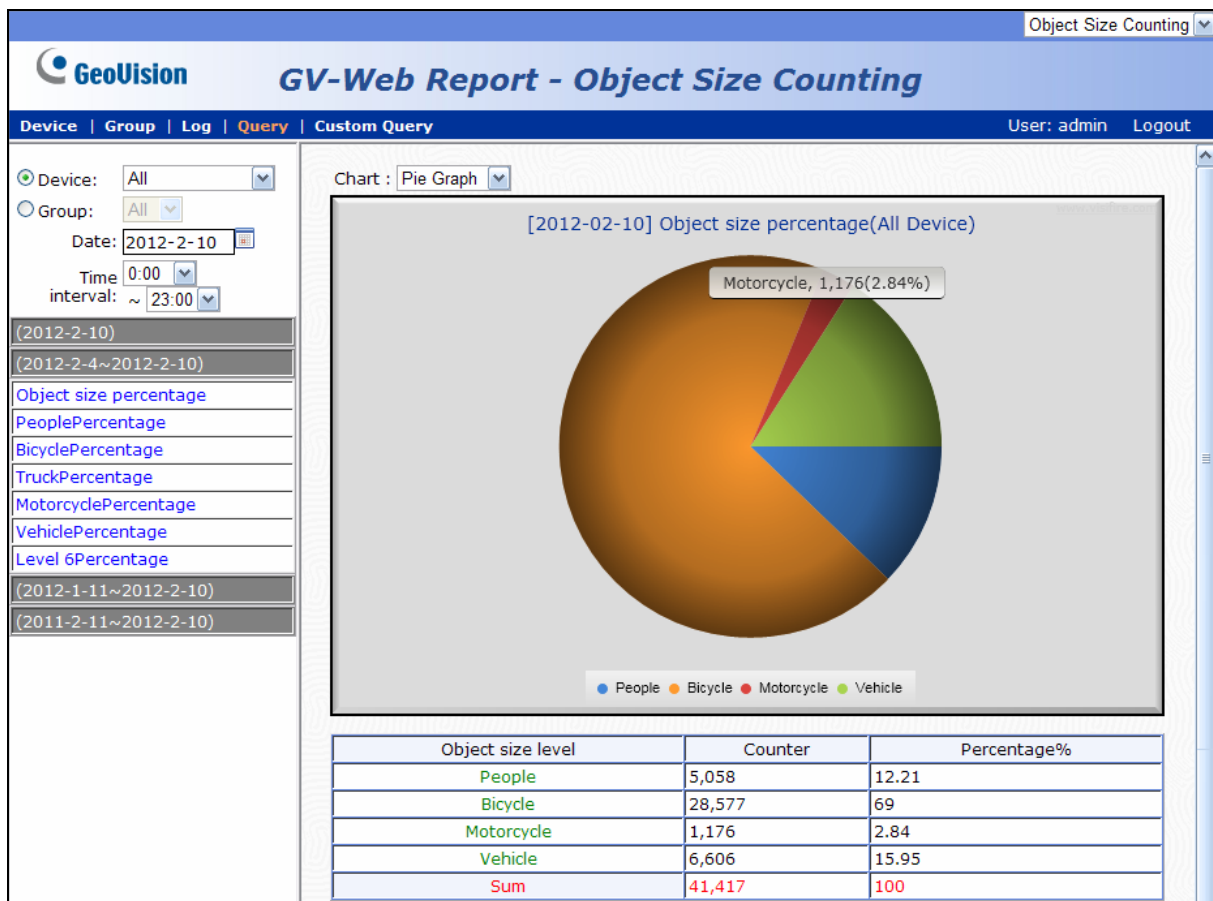


Figure 6-9

[Monthly Report] Display the monthly report that contains the data of a month before your specified date.

- **Object size percentage:** The total number and the percentage of objects from each object size level counted for the month.

6 Accessing Object Size Counting Page

- **Level X percentage:** The number of objects from that size level counted each day for a selected month is shown, as well as the percent of total monthly count. If you have customized the name of the size level in the Group page, the modified name will be displayed here.

Below is an example of the monthly **Car percentage**. Object size level 2 defined in GV-Smart Box was renamed to Car in the Group page. The value 12-02-06(Mon), 18,788 (96.95%) indicates that the number of objects from the Car size level counted is 18,788 on 2012/02/06 and it takes up 96.95 percent of all traffic counted that month.

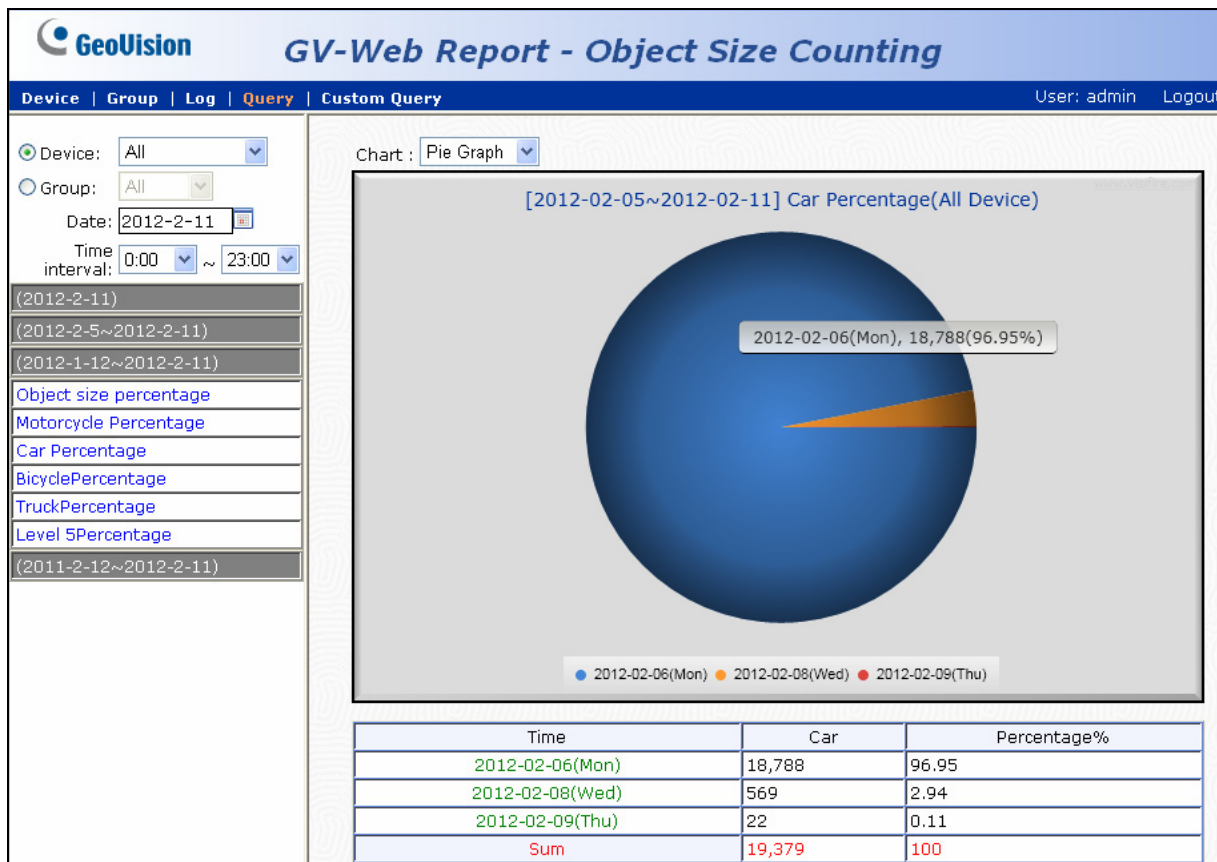


Figure 6-10

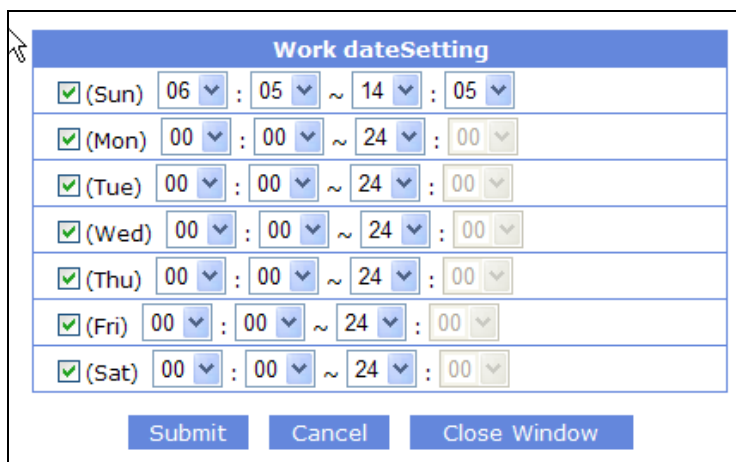
[Yearly Report] Display the yearly report that contains the data of a year before your specified date.

- **Object size percentage:** The monthly number and the percentage of objects from each object size level counted.
- **Level X percentage:** The number of objects from the selected object size level counted is shown by month as well as the percent of yearly count. If you have customized the name of the size level in the Group page, the modified name will be displayed here.

6.5 Custom Query Page

The Custom Query page allows you to look up the object counting data of different size levels during a specific time period. You can customize the X Axis and Y Axis of the line graph.

1. Select a GV-Smart Box from the **Device** drop-down list or select a created group from the **Group** drop-down list
2. Set a **Start Time** and **End Time** to include the counting data during that time period.
3. To include only the data from specific time and days of the week, click **Setting** next to Work Date. This window appears.



Day	Start Time	End Time
<input checked="" type="checkbox"/> (Sun)	06 : 05 ~ 14 : 05	
<input checked="" type="checkbox"/> (Mon)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Tue)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Wed)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Thu)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Fri)	00 : 00 ~ 24 : 00	
<input checked="" type="checkbox"/> (Sat)	00 : 00 ~ 24 : 00	

Buttons: Submit, Cancel, Close Window

Figure 6-11

4. Specify the days of week and time range to include and click **Submit**.
5. You can set the Y Axis of the line graph to the following options:
 - **Level 1-6:** Shows the number of objects from that size level counted. If you have customized the name of the size level in the Group page, the modified name will be displayed here.
6. You can set the X Axis of the line graph to the following options:
 - **Per hour:** Shows the counting data per hour.
 - **Per day:** Shows the counting data per day.
 - **Per month:** Shows the counting data per month.
 - **Per year:** Shows the counting data per year.
7. Click **Query** to see the line graph.

6 Accessing Object Size Counting Page

In the example below, the average hourly motorcycle count from 2/2 to 2/8 is shown in a line graph. The value 18, 4248 indicates that between 2/2 and 2/8, the average number of motorcycles counted from 17:00-18:00 pm is 4248.

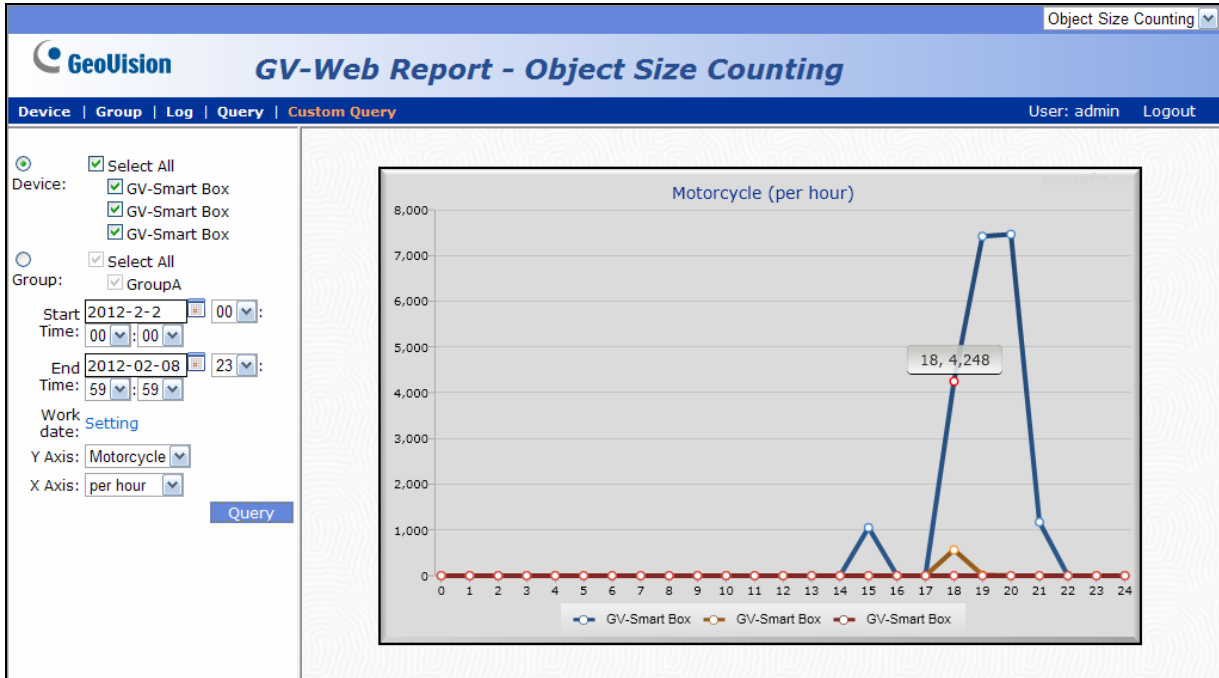


Figure 6-12

Chapter 7 Mobile Phone Connection

Using iPhone, iPad or other mobile devices with built-in Android OS, you can view people counting and face counting results on your mobile phone. After logging in, you can query the data and chart for people counting and face counting results.

1. On your mobile device, type the IP address of the GV-Web Report server in the address field of the browser. The login dialog box appears.

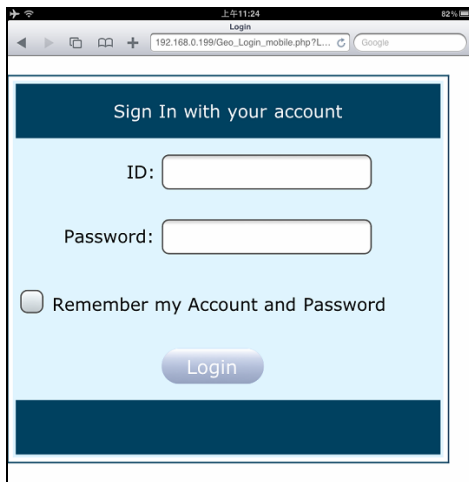


Figure 7-1

2. Type the account ID and password.
3. Click **Login**. The People Counting results for that day appear.

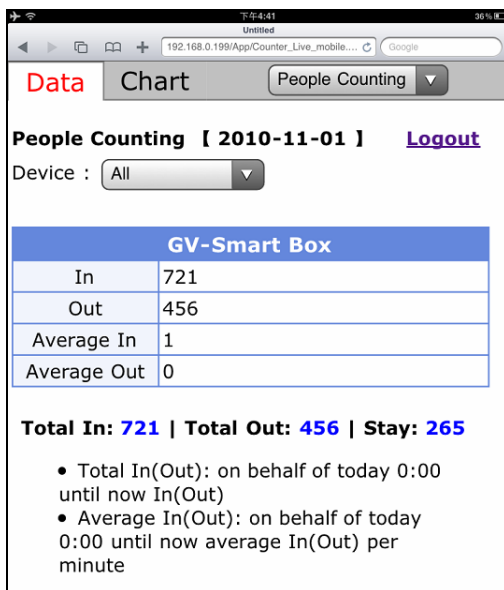


Figure 7-2

4. To see the data of other devices, tap the **Device** drop-down list.
5. To see graphs of the results, tap the **Chart** tab on the top. This window appears.

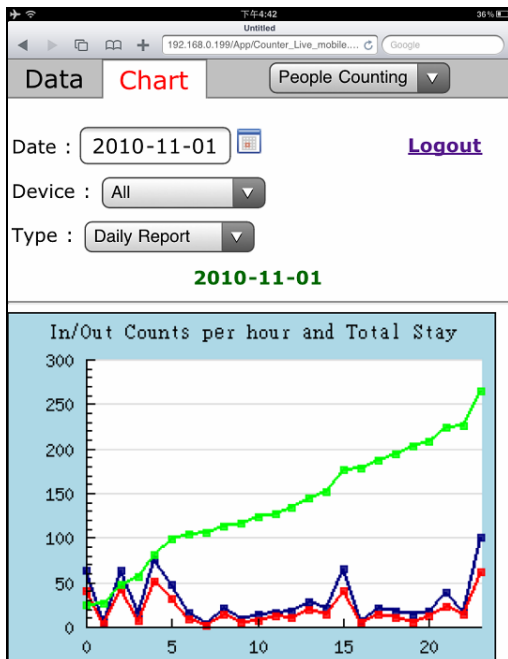


Figure 7-3

6. Tap the **Date** drop-down list to select a date and tap the **Device** drop-down list to select a device.
7. Use the Type drop-down list to display the results of that day, week, month or year.
8. To switch to Face Counting results, tap the **People Counting** button on the top-right corner and select **Face Counting**. The Face Counting results for that day appear.

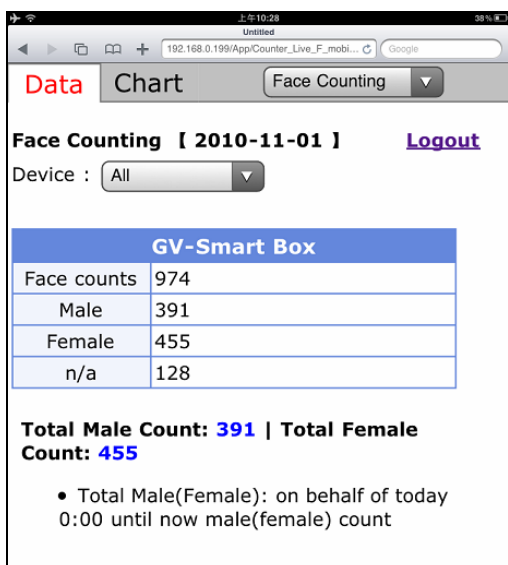


Figure 7-4

9. To see the data of other devices, tap the **Device** drop-down list.
10. To see graphs of the results, tap the **Chart** tab on the top. This window appears.

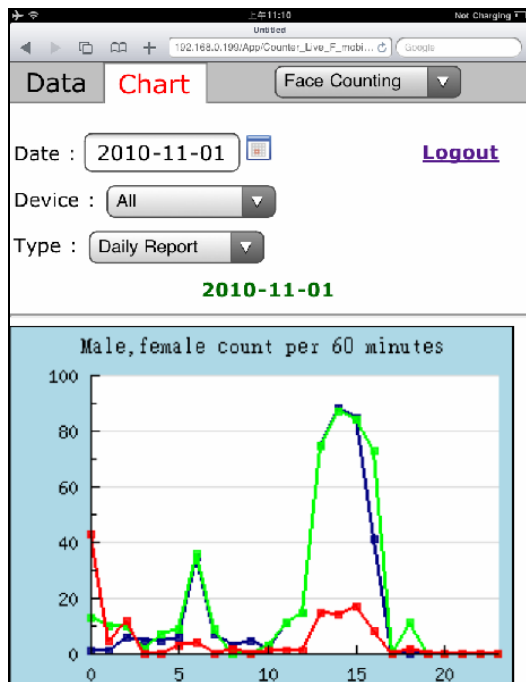


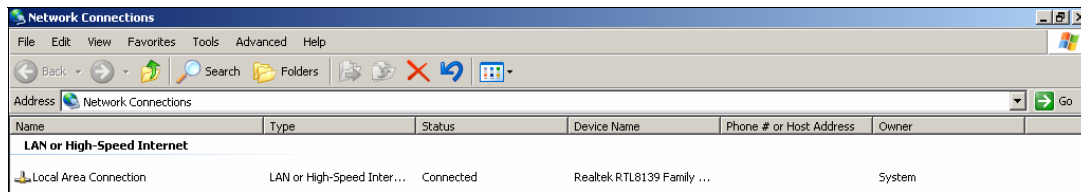
Figure 7-5

11. Tap the **Date** drop-down list to select a date and tap the **Device** drop-down list to select a device.
12. Use the **Type** drop-down list to display the results of that day, week, month or year.

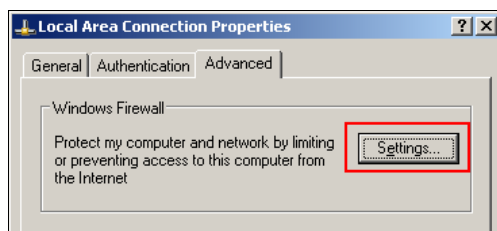
Appendix

A. Enabling UPnP in Windows XP

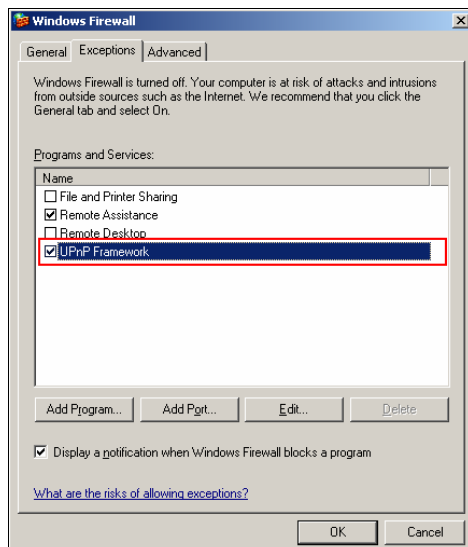
1. Go to Windows Start, click **Start** button, select **Settings**, and select **Network Connections**. This window appears.



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



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



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 share 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 both of them are running 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**.