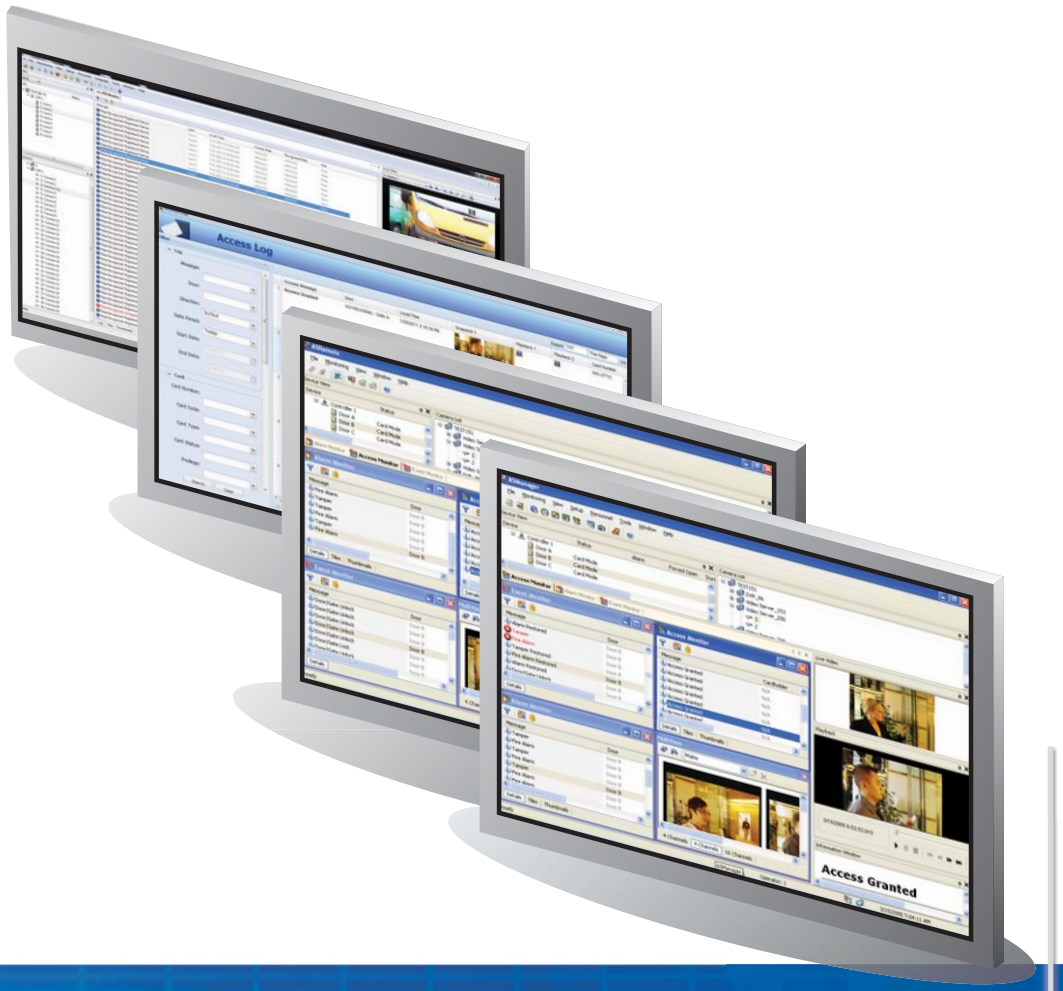
GeoVision inc
The Vision of Security

GV-ASManager

User's Manual V4.2.1



ASMV421-A-EN

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GeoVision, Inc.
9F, No. 246, Sec. 1, Neihu Rd.,
Neihu District, Taipei, Taiwan
Tel: +886-2-8797-8377
Fax: +886-2-8797-8335
http://www.geovision.com.tw

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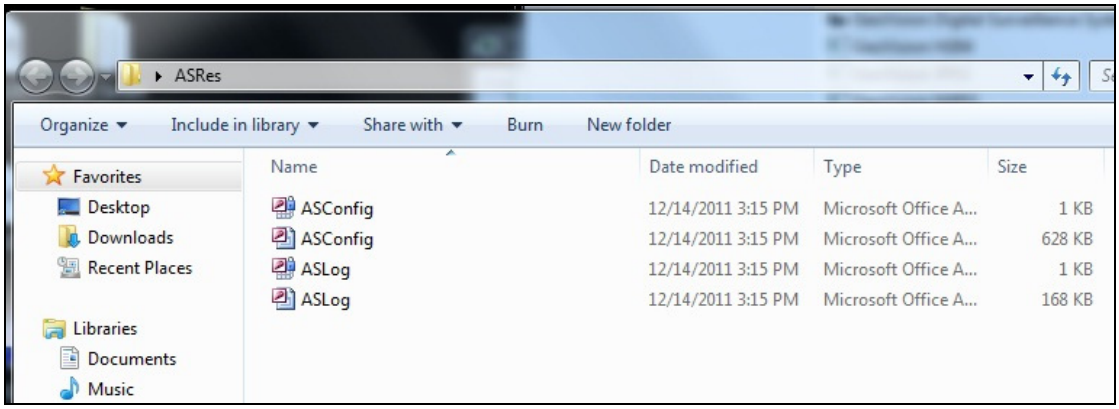
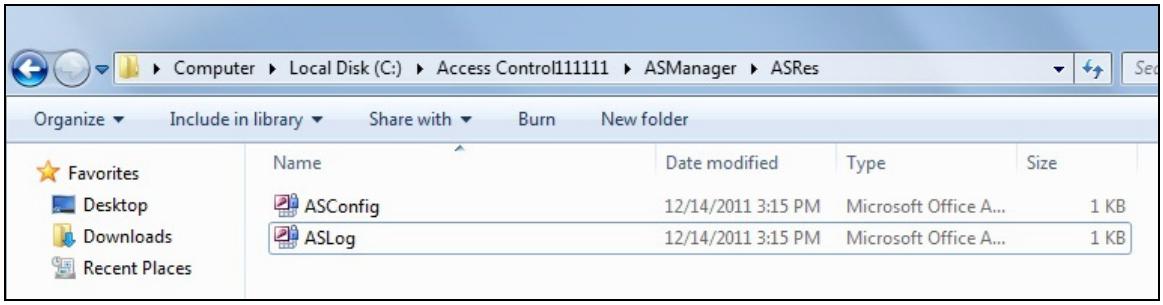
Note for Users Upgrading GV-ASManager

You can keep your current database when upgrading GV-ASManager to the latest version. Follow the steps below to back up the current database and restore it to the GV-ASManager after upgrading to the latest version.

1. Go to **:\Access Control\ASManager\ASRes** and there should be four files.

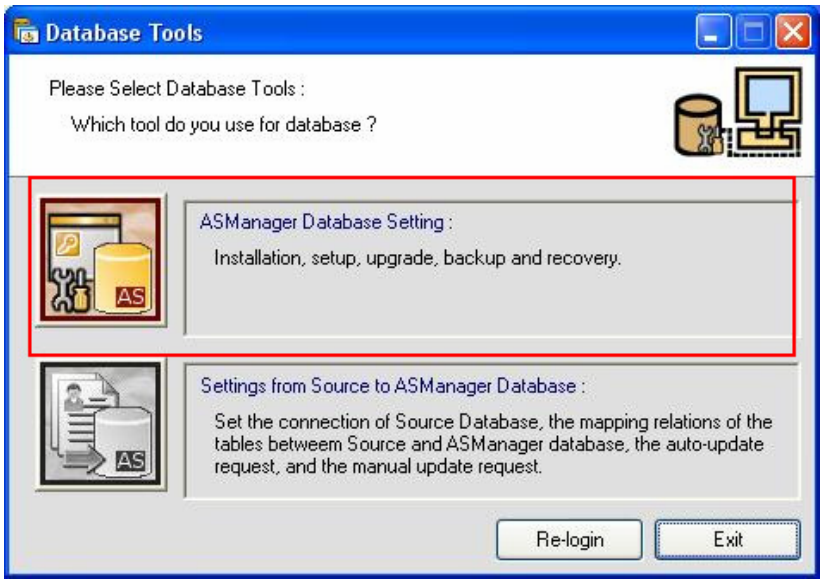


2. Back up the four files in the folder.
3. Uninstall the old **GV-ASManager**. After uninstalling, only two files remain in the ASRes folder.

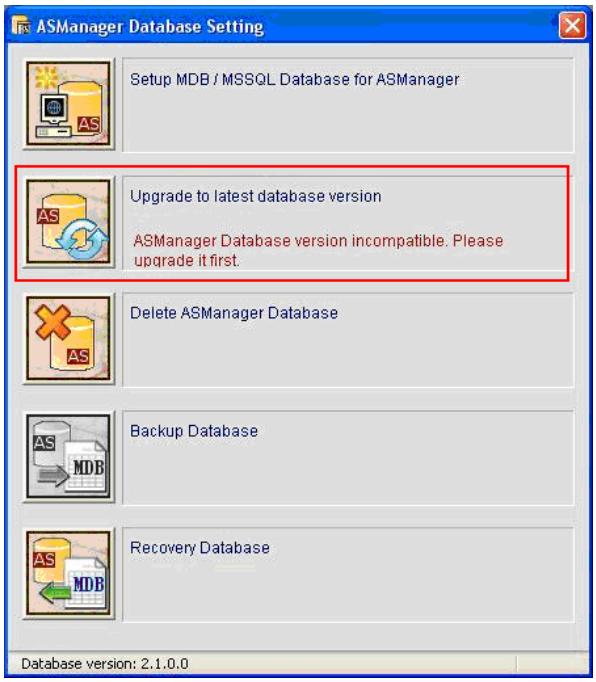


4. Install the latest **GV-ASManager**.
5. Copy and paste the four files you backed up back to **:\Access Control\ASManager\ASRes**.
6. Run **ASDBManager.exe** from the GV-ASManager program folder at **:\Access Control\ASManager**.

7. Select **ASManager Database Setting**.



8. Select **Upgrade to latest database version**.



9. The GV-ASManager starts upgrading the database. When the upgrade is complete and the message “Upgrade database successfully” appears, click **OK**.

Note: After you upgrade GV-ASManager, it is recommended to also upgrade the GV-AS / GV-EV Controller firmware. To upgrade the controller firmware, use the **Update to the latest firmware version** function in the Net Module Utility. See *Chapter 16*.

Software Compatibility

The GV-System versions compatible with GV-ASManager V4.0 - V4.2.1 are listed below.

GV-ASManager Version	Compatible GV-System Version
GV-ASManager V4.2.1	GV-System V8.5.9.0
GV-ASManager V4.2	GV-System V8.5.8.0
GV-ASManager V4.1	GV-System V8.5.7.0
GV-ASManager V4.0	GV-System V8.5.5.0 / V8.5.6.0

Chapter 1 Introduction

The integration of GV-ASManager and GV-AS / GV-EV Controller offers full control of the entrances of your premise. Up to 1000 units of GV-AS / GV-EV Controllers can be monitored and controlled by one GV-ASManager.

The following diagram is an example of how the GV-ASManager and GV-AS / GV-EV Controller can be set up.

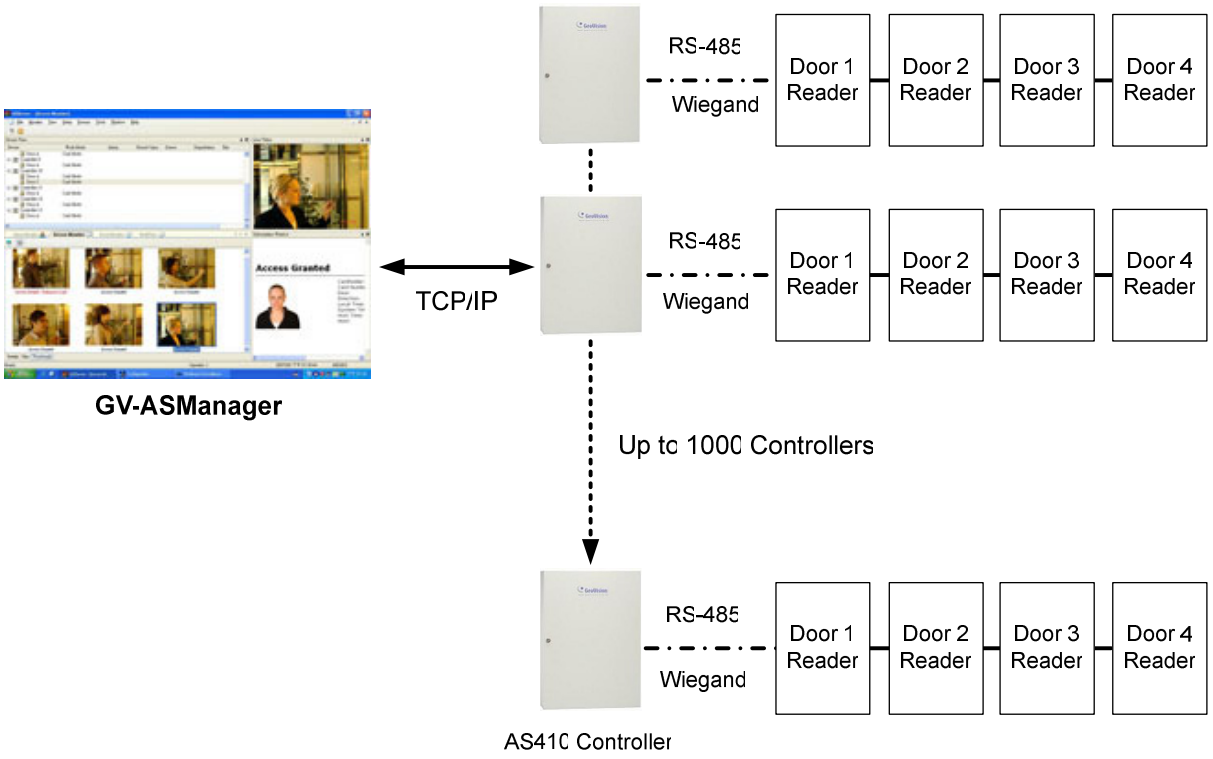


Figure 1-1

1.1 Main Features

GV-ASManager

- Control up to 1000 GV-AS / GV-EV Controllers
- Up to 256 time zones and weekly schedules
- Up to 40,000 cards
- Up to 1,000 system users
- Holiday planning for 14 months
- Multiple cards per user
- Four (4) access mode options: Card only mode, Card and PIN Code mode, Card or Common mode, Release mode
- Enroll cards in batch mode
- Door alarms: door held open, door forced entry, tamper, access denied
- Anti-Duress operation
- Anti-Passback capabilities
- Door interlock
- Man trap in double door configuration
- Import/export of card and user data in Access or Excel file format
- User-defined matrix of 16-channel multi-views
- User-defined screen layout and dual monitor display support
- SMS or E-Mail notification with user-defined content, video snapshot and user photo
- Video integration with GeoVision IP devices (GV-System, GV-NVR, GV-Video Server, GV-Compact DVR, GV-IP Camera) and third-party IP cameras
- Support for connecting to third-party IP devices using ONVIF, PSIA and RTSP protocols
- Support Microsoft Access, SQL database and Active Directory database
- Patrol Tour that requires security personnel to check in at the specified locations
- Vehicle hotlist to help locate stolen vehicles or other vehicles of interest
- User interface in English, French, Portuguese, Russian, Spanish, Traditional Chinese

GV-ASRemote

- Monitor unlimited GV-ASManagers over the Internet
- Remote door monitoring, video playback, door operation

GV-TAWeb

- Flexible workforce schedule arrangement
- Payroll calculation
- Attendance and payroll report search

GV-ASWeb

- Remotely watch live view from connected devices
- Remotely add or delete cards, users, controllers, access groups, cameras
- Web interface for historical log search with corresponding video and snapshot
- Log export in Excel, Text, HTML or Zip file formats
- View access data on Google Maps in the order of access time

GV-VMWeb

- Web interface for creating visitor database and granting access
- Visitor record search
- Visitor self registration

GV-LPR

- Control up to 255 GV-DVR LPR and / or GV-DSP LPR
- Up to 40,000 vehicles
- Multiple vehicles per user
- Import / export of vehicle data in Access or Excel file format
- GV-ASWeb: Remotely enroll vehicles and set up GV-DVR LPR or GV-DSP LPR
- GV-ASWeb: Remotely search detected vehicles, see license plate snapshots, watch recordings from connected GV-DVR LPR or GV-DSP LPR

GV-Access Mobile Applications

- Access up to 5 GV-ASManagers from iOS and Android mobile devices
- Watch live view from cameras associated with a door or lane
- Lock or unlock a door
- Check door status to see if any alarm events have occurred at a door
- Open LPR lanes

1.2 Concepts

Understanding the following concepts may help you read through the manual.

Weekly Schedule	A weekly schedule is certain days of the week when a user is granted access to a secure site. For details, see *4.4 Setting Weekly Schedule.*
Access Group	An access group is a group of users with identical location restrictions during the same time restraints. For details, see *4.5 Setting Access Group.*
Alarm Condition	An alarm condition is a monitored condition through sensing devices, and an alarm condition may activate alarms. For example, the AS100 Controller has the ability to monitor 3 sensors, such as door status sensor, smoke detector and tamper detector. The AS100 Controller also provides 3 output relays for activating and deactivating electric lock, siren and emergency door release when the alarm condition occurs. For settings of alarm conditions see *4.2.2 Step 2: Configuring the Doors*. For configuring inputs and outputs see *GV-AS / GV-EV Controller User's Manual.*
Anti-Duress	If a person is forced to open the door under threat, he or she can enter his or her PIN plus 1 to activate an alarm and send a signal to the ASManager to dispatch the police. For example, the PIN is 5555 and you enter 5556. The door will open normally (access granted) and the alarm will be activated. The function is enabled by default in the system.
Anti-Passback	The feature is designed to prevent card sharing and to enforce use of entry and exit readers. If a card was used at an entry reader, it must be used at an exit reader before it will be valid at an entry reader again. For settings, see *4.2.2 Step 2: Configuring the Doors*.
Interlock	The feature is also called "mantrap" or interlocking". The feature interlocks the selected door with one or multiple doors connected to the same controller. For example, if door A is set to interlock with Door B and C, neither of Door B or C will unlock when Door A is opened. When either of Door B or C is opened, Door A will not unlock. For settings, see *4.2.1 Step 1: Configuring a Controller*.

Two-person A/B rule	The door unlock only when two assigned cards are presented together. Two Person Card A must be presented before Two Person Card B. For settings, see *4.3.1 Adding a Single Card*.
IP device	The video device is connected to the ASManager through the network. The ASManager enables you to access the live video from not only GeoVision IP devices (GV-System, GV-NVR, GV-Video Server, GV-Compact DVR and GV-IP Camera) but also certain third-party IP cameras. Connections to IP devices through ONVIF, PSIA and RTSP protocols are also supported. For details, see *Chapter 5 Video Integration*.
Data Group	This feature allows the administrator to restrict a user account to only be able to read, write or execute the controllers, cards, users, access groups, time zones and weekly schedules assigned under a data group. For example, the administrator can create a data group for the sales department and assign sales department-related cards and controllers under that data group. Employees in the sales department will only have access to the cards and controllers of their own department. For details, see *8.1.1 Adding a New User*.
Door Group	When a large number of GV-AS / GV-EV Controllers are connected to the GV-ASManager, the controllers can be organized into different door groups, allowing you to quickly upload fingerprints to all the controllers in a door group instead of uploading to each controller one by one. For details, see *Uploading Fingerprints to Controllers Using Door Groups* section in Chapter 3 of *GV-GF Fingerprint Reader User's Manual*.

1.3 Optional Devices

Optional devices can expand the capabilities and versatilities of your GV-ASManager. Consult your sales representative for more information.

GV-GF1911 Fingerprint Reader	Fingerprints can be enrolled through a GV-GF1911 Fingerprint Reader installed on the computer of the GV-ASManager. The fingerprint data are distributed through GV-ASManager to the assigned fingerprint readers installed on GV-AS / GV-EV Controllers for access control.
GV-GF1921 / 1922 Fingerprint Reader	Fingerprints can be enrolled locally or remotely using a GV-GF1921 / 1922 Fingerprint Reader through TCP/IP connection with GV-ASManager. For **local fingerprint enrollment**, the user needs to register his or her fingerprints onsite using a reader connected with GV-ASManager. For **remote fingerprint enrollment**, empty fingerprints can be created on the GV-ASManager first, and the user can register his or her fingerprints later at a GV-GF1921 / 1922 with the assigned card.
GV-PCR310 Enrollment Reader	The GV-PCR310 is a USB card reader designed to assist with card enrollment to GV-ASManager. It reads and transfers the identification data of a detected card to GV-ASManager. The user can conveniently establish user accounts on GV-ASManager by inserting the cards in the GV-PCR310 Enrollment Reader.

Chapter 2 Installation

2.1 System Requirements

For GV-ASManager version 4.1 or later, the minimum hardware and software requirements are:

OS	32-bit	Windows XP / Vista / 7 / 8 / Server 2008
	64-bit	Windows Vista / 7 / 8 / Server 2008 / Server 2012
CPU		Core 2 Duo E8400, 3.0 GHz
Memory		2 x 1 GB Dual Channels
Hard Disk		500 GB
VGA		AGP or PCI-Express, 1280 x 1024 , 32-bit color and support DirectX 10
DirectX		End-User Runtimes (November 2008)
Software		.NET Framework 3.5 SQL Server 2005 Express (optional)
Browser		Internet Explorer 7.0 or later
Note: The software programs End-User Runtimes (November 2008) and .NET Framework 3.5 are required to run the GV-ASManager. The software programs can be found in the supplied software DVD.		

2.2 Installing the GV-ASManager

Starting from version 4.0, the GV-ASManager software supplied with GV-AS / GV-EV Controller can connect with up to 4 controllers for free. If you need to manage more than 4 controllers, a **USB dongle** is required. GV-ASManager can support connection with up to 1000 GV-AS / GV-EV Controllers.

Note: Starting from GV-ASManager 3.0, no USB dongle is needed to connect to IP cameras.

To install the USB Dongle drivers:

1. Insert the USB Dongle to your computer.
2. Insert Software DVD to your computer and a window will pop up automatically. Select **Install or Remove GeoVision GV-Series Driver** and click **Install Geovision USB Devices Driver**.

To install the GV-ASManager:

GV-ASManager V2.0 or later must run with DirectX End-User Runtimes (November 2008) and .NET Framework. Follow these steps to install the programs.

1. Insert Software DVD to your computer and a window will pop up automatically.
2. If you don't have DirectX 9.0c installed in your computer, select **Install DirectX 9.0c**.
3. Select **Install DirectX End-User Runtimes (November 2008)**.
4. Select **Install Microsoft .NET Framework Version 3.5**.
5. Select **Install GeoVision Access Control System**, click **GeoVision Access Control System** and follow on-screen instructions to complete the installation.

2.3 Logging in

Before using the GV-ASManager, you need to set the login ID and password, and create a database.

1. Click **Start**, point to **Programs**, select **Access Control** and click **ASManager**. When you start the system for the first time, the system will prompt you for a Supervisor ID and Password as below.

Figure 2-1

2. Type a name you wish to be the Supervisor in the ID field and type the password. This dialog box appears.

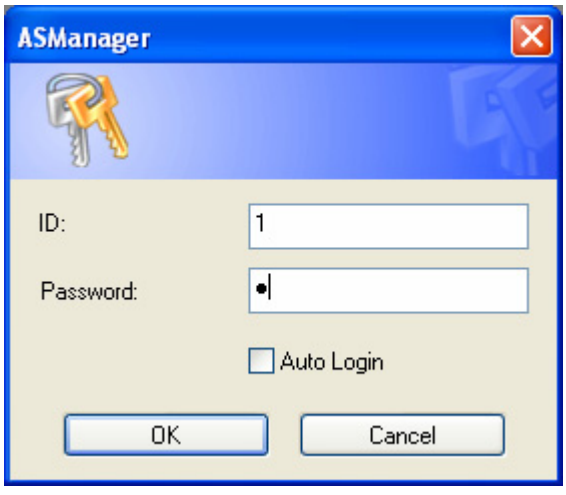


Figure 2-2

3. Re-type the **ID** and **Password**. If you want to skip the login process in the future, select **Auto Login**.

4. Click **OK**. The message "*Can't open database. Would you like to set up database?*" appears.
5. Select **Yes** to create a database. The ID and password you have configured in Step 1 are required to access the feature. This dialog box appears.

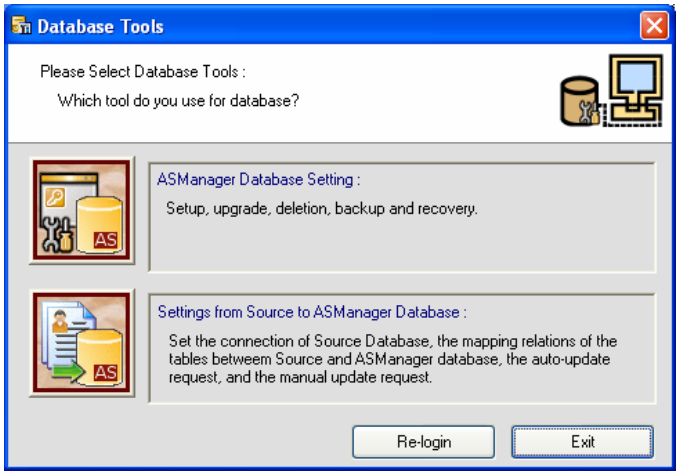


Figure 2-3

6. Select **ASManager Database Setting**. The ASManager Database Setting dialog box appears.
7. You can create either a Microsoft Access database or a Microsoft SQL database.
   - To create a Microsoft SQL database, see *Chapter 15 Database Settings*.
   - To create a Microsoft Access database for first-time users of GV-ASManager, Select **Setup MDB / MSSQL Database for ASManager**. The Setup Database Connection dialog box appears. Select **Microsoft Office Access Database**, and click **OK**. The program starts creating a database. When it is complete, the message "Setup database connection successfully" will appear.
8. Restart **ASManager**. You can see the main screen of the GV-ASManager.

Note: By default the Access database is created at C:\Access Control\ASManager\ASRes.

Chapter 3 The Main Screen of GV-ASManager

After you run the GV-ASManager, the following main screen will appear. Get yourself familiar with the main screen, as it will help you when you read further in the following sections.

3.1 Main Screen

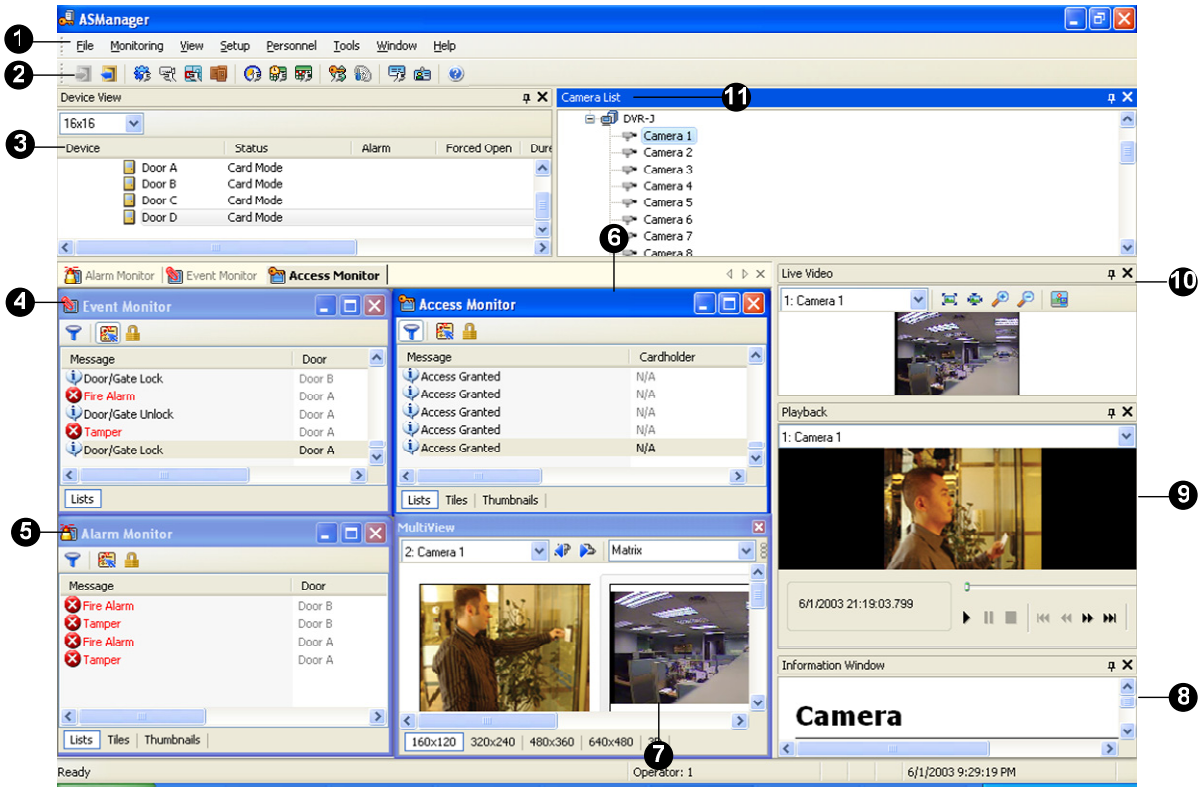


Figure 3-1

No.	Name	Function
1	Menu Bar	The Menu Bar includes the options of **File** (log in / out the GV-ASManager), **Monitoring** (display monitor windows of alarm, access and event), **View** (display the function windows), **Setup** (set up connected devices and schedules), **Personnel** (set up the users' accounts), **Language** (select language of user interface), **Tools** (set up for notification and log) and **Window** (arrange the display of different windows).
2	Toolbar	The Toolbar includes the options of Login, Logout, Devices, Areas, Door Groups, Time Zones, Weekly Schedules, Holidays, Access Groups, Cards, Vehicles, Users and About.

3	Device View	Displays a list of connected doors and their current status. You can change the size of icons to 16 x 16, 24 x 24 or 32 x 32 from the drop-down list.
4	Event Monitor	Displays monitored events of doors.
5	Alarm Monitor	Displays alarm events of doors.
6	Access Monitor	Displays access activities of doors.
7	MultiView	Displays live views of connected cameras from multiple IP devices. For details, see *5.4 The MultiView Window*.
8	Information Window	Displays the information of doors, card readers and monitored events.
9	Playback	Plays back recorded events from a compatible GeoVision IP device. For details, see *5.5 Retrieving Recorded Video*.
10	Live Video	Displays the live view of one connected camera. For details, see *5.2 Accessing a Live View*.
11	Camera List	Displays a list of connected cameras.

Note: After closing the main screen, GV-ASManager will continue to run in **Windows Task Manager**.

3.1.1 Toolbar

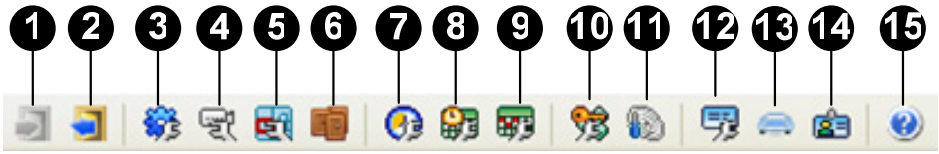


Figure 3-2

The buttons on the Toolbar of GV-ASManager:

No.	Name	Function
1	Login	Logs in the GV-ASManager.
2	Logout	Logs out the GV-ASManager.

3	Devices	Defines controllers and doors.
4	Cameras	Searches the GV IP devices on the same network. For details, see *Chapter 5 Video Integration*.
5	Areas	Configures Global Anti-Passback. For details, see *6.3 Global Anti-Passback.*
6	Door Groups	Assigns controllers into door groups to be able to quickly upload fingerprints to multiple controllers. For details, see *Uploading Fingerprints to Controllers Using Door Groups* section in Chapter 3 of *GV-GF Fingerprint Reader User's Manual*.
7	Time Zones	Defines the minutes and hours of the day when a user is granted access to a secure site. For details, see *4.4.1 Step 1: Setting Time Zones*.
8	Weekly Schedules	Defines the days of the week when a user is granted access to a secure site. For details, see *4.4.2 Step 2: Setting Weekly Schedules*.
9	Holidays	Defines the specific dates as holidays. For details, see *4.4.3 Step 3: Setting Holidays*.
10	Access Groups	Sets up different groups to define who can access what door at what time of a day. For details, see *4.5 Setting Access Groups*.
11	Fingerprint Access	Uploads the enrolled fingerprints to the controllers. For details, see *Chapter 3 Fingerprint Only Mode* in the *GV-GF Fingerprint Reader User's Manual*.
12	Cards	Creates and edits a database of card information. For details, see *4.3 Setting Cards*.
13	Vehicles	Creates and edits a database of vehicle information. For details, see *Chapter 13 License Plate Recognition*.
14	Users	Creates and edits a database of user information. For details, see *4.6 Setting Users*.
15	About	Displays the version of GV-ASManager.

3.2 Device View

The Device View displays the activity and status of the connected doors.

- To open the Device View window, click **View** on the menu bar and select **Controllers**.

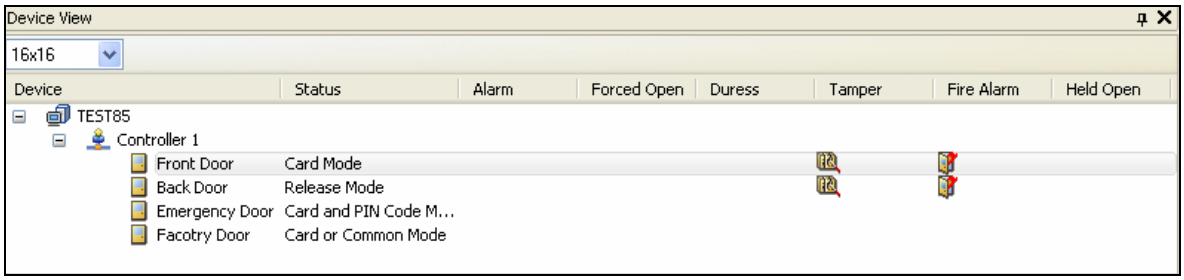


Figure 3-3

3.2.1 Controls on the Window

You can control a connected controller or door by right-clicking it in the Controller window.

The following control options are available for both doors and controllers:

Name	Function
Unlock Door, Lock Down, Force Unlock, Force Lock, Disable Door Lock Operation	Controls the selected door or all doors associated with the selected controller. The options of **Force Unlock** and **Force Lock** will let the door stay open or locked until you select **Disable Door Lock Operation**. The **Unlock Door** option will let the door open temporarily until the specified time is expired. See “Lock Reset Time” at Step 2 in *4.2.2 Step 2: Configuring the Doors*. The **Lock Down** function locks down the selected door or all doors associated with the selected controller. This function overrides the Authentication Schedule and the door(s) can only be opened by presenting the assigned access card.
Reset Anti-Passback	Clicking this option enables a user to re-access the entry or exit reader. See *Chapter 6 Anti-Passback*.
Settings	Accesses the setting page of the selected controller or door.

The following control options are only available when right-clicking a **Controller**:

Name	Function
Reset Anti-Passback	Clicking this option enables a user to re-access the entry or exit reader. See *Chapter 6 Anti-Passback*.
Reconnect	Reconnects with the controller.
Sync Controller	After the controller settings are modified, clicking **Sync Controller** can immediately renew the settings.

The following control options are only available when right-clicking a **Door**:

Name	Function
Stop Alarm, Clear Forced Open, Clear Duress, Clear Tamper, Clear Fire Alarm, Clear Held Open, Clear Access Denied	Clears the alarm conditions. For alarm settings, see Step 5 in *4.2.2 Step 2: Configuring the Doors*.
Sync GeoFinger	If fingerprint data failed to upload to the controllers, click **Sync GeoFinger** to re-upload the selected fingerprint data.

3.3 Monitoring Windows

Three monitoring windows are provided for users to oversee different types of door activities: Access Monitor, Alarm Monitor and Event Monitor.

- To open these windows, click **Monitoring** on the menu bar, and select the desired windows.

3.3.1 Controls on the Window

The three monitoring windows of Access Monitor, Alarm Monitor and Event Monitor have the same controls on the window.

We use the Access Monitor window as example to explain the controls.

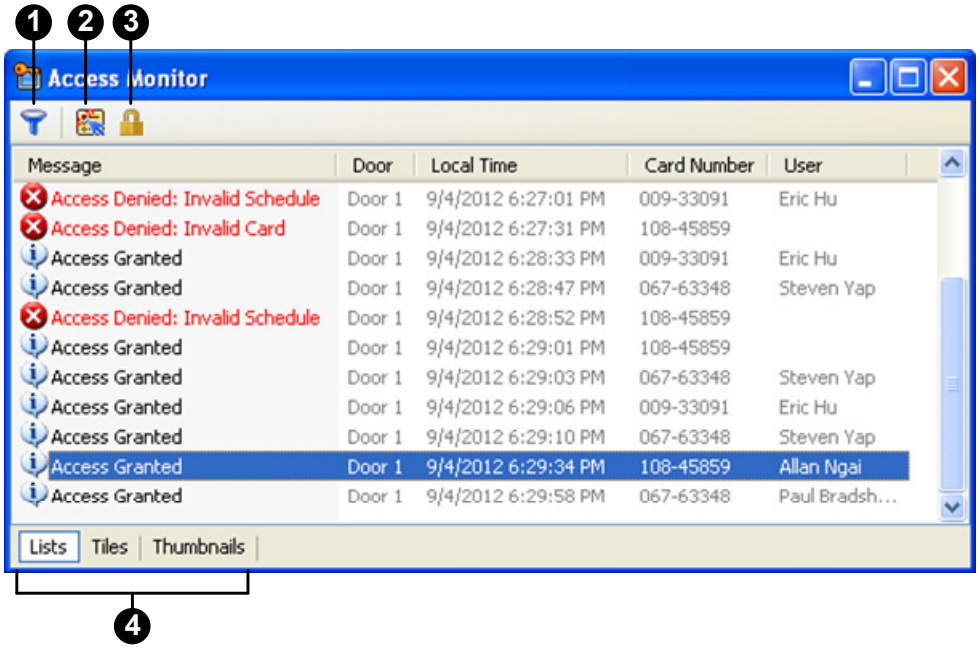


Figure 3-4

No.	Name	Function
1	Filter	Sets up criteria to only display the desired activity information.
2	Auto Select	Focuses on the latest data display.
3	Lock	Suspends the current data display.
4	Lists / Tiles / Thumbnails	Decides how events are displayed on the window.

The following options are only accessible on the **Access Monitor** window. Right-clicking one message allows you to access its detailed information.

Name	Function
New/Edit Card	Enrolls a new card or edits the card information.
Browse Card Information	Views the card information.
Browse User Information	Views the user information.
Show Image	If the camera monitors when the activity happened, the related image is available.

3.3.2 Customizing a Monitoring Window

You can customize the messages displayed on a monitoring window by defining filter criteria. Multiple custom monitoring windows can be added for your specific requirements.

1. To add one monitoring window, click **Monitoring** on the menu bar. Then select **New Alarm Monitor**, **New Access Monitor** or **New Event Monitor**.
2. Click the **Filter** button on the monitoring window. This dialog box appears.

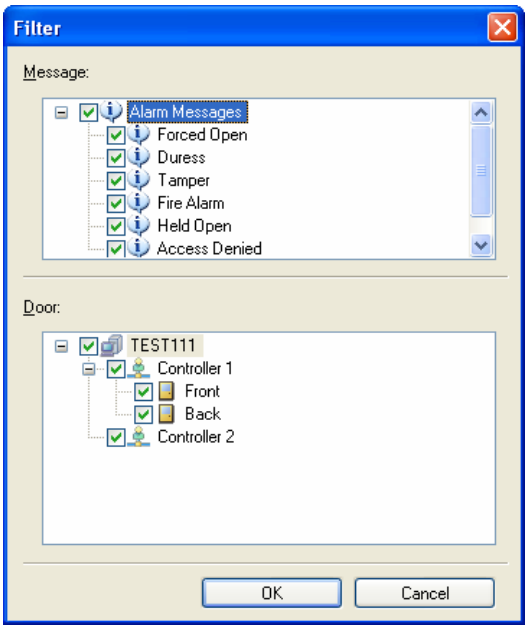


Figure 3-5

3. Select the desired messages and devices for monitoring, and click **OK**. The monitoring window will only display the messages based on the defined criteria.

4. Right-click the **Monitor** tab on the main screen, and select **Rename** to name the new monitoring window.

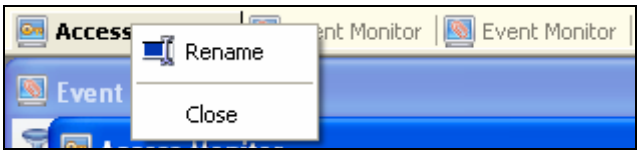


Figure 3-6

Note: The added windows are only for one-time use, and they cannot be saved after the monitoring window is closed.

3.3.3 Arranging Monitoring Windows

The monitoring windows can be arranged on screen in several ways.

On the menu bar, click **Window**, and select one of the following options to arrange the windows:

- **Cascade:** Overlaps the open windows and shows their title bars.
- **Tile Horizontally:** Arranges the open windows horizontally.
- **Tile Vertically:** Arranges the open windows vertically.
- **Arrange Icons:** Arranges the minimized windows on the bottom.

You can also open the monitoring windows in separate windows and place the monitoring windows on different monitors. On the menu bar, click **Window** and select **New Window**. On the menu bar of the new window, click **Monitoring** to open different monitor windows and click **Window** to arrange them.

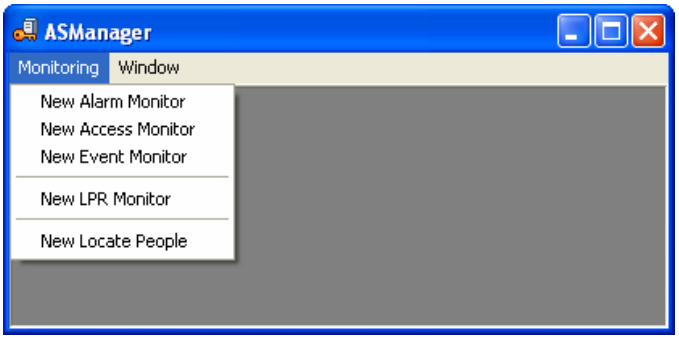


Figure 3-7

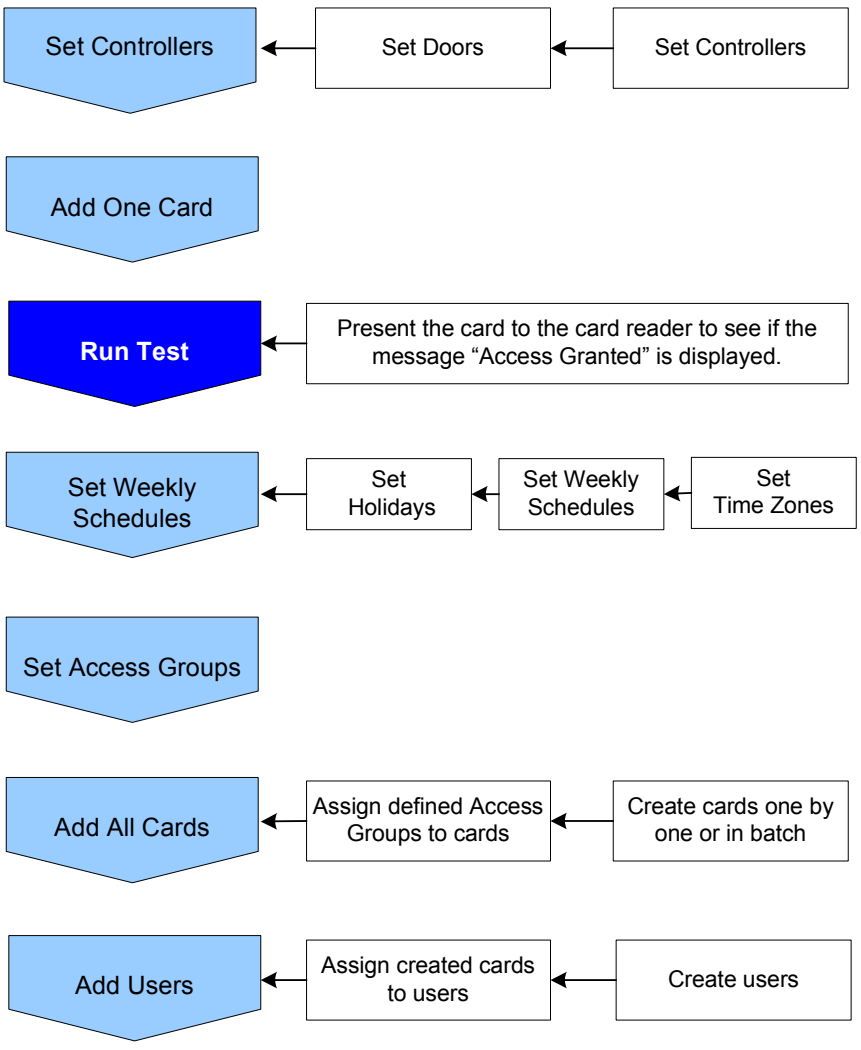
Chapter 4 Settings

This section describes the following settings:

- Setting Controllers
- Setting Cards
- Setting Weekly Schedules
- Setting Access Groups
- Setting Users

4.1 Setup Flowchart

To get started quickly with GV-ASManager settings, follow the process illustrated below.



4.2 Adding Controllers

To add the GV-AS / EV Controller to the GV-ASManager, follow these steps:

- **Step 1 Configuring a Controller**

  Establish the communication between the controller and GV-ASManager.

- **Step 2 Configuring the Doors or Elevator Floors**

  Define the doors on a door controller or the elevator floors on an elevator controller.

4.2.1 Step 1: Configuring a Controller

1. On the menu bar, click **Setup** and select **Device**. This dialog box appears.

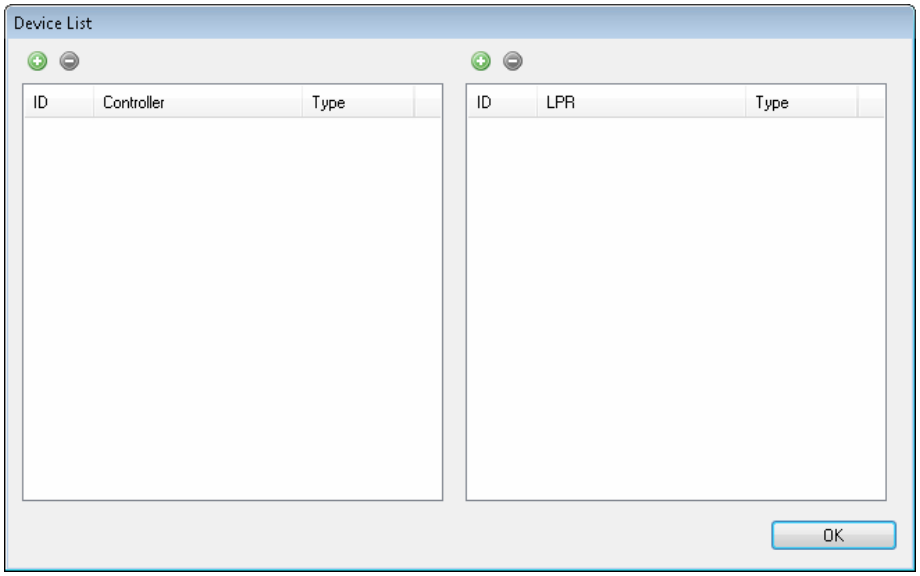


Figure 4-1

2. Click the **Add** icon on the top left corner. This dialog box appears.

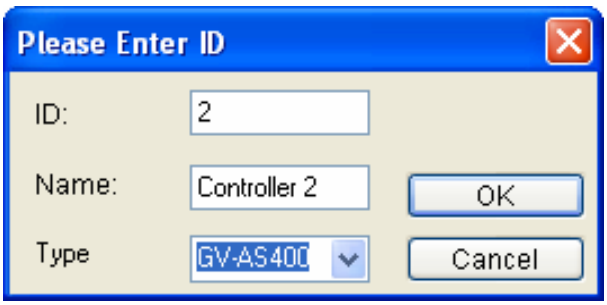


Figure 4-2

3. Enter **ID** and **Name** of the Controller, select **Type** of the Controller and click **OK**. This dialog box appears.

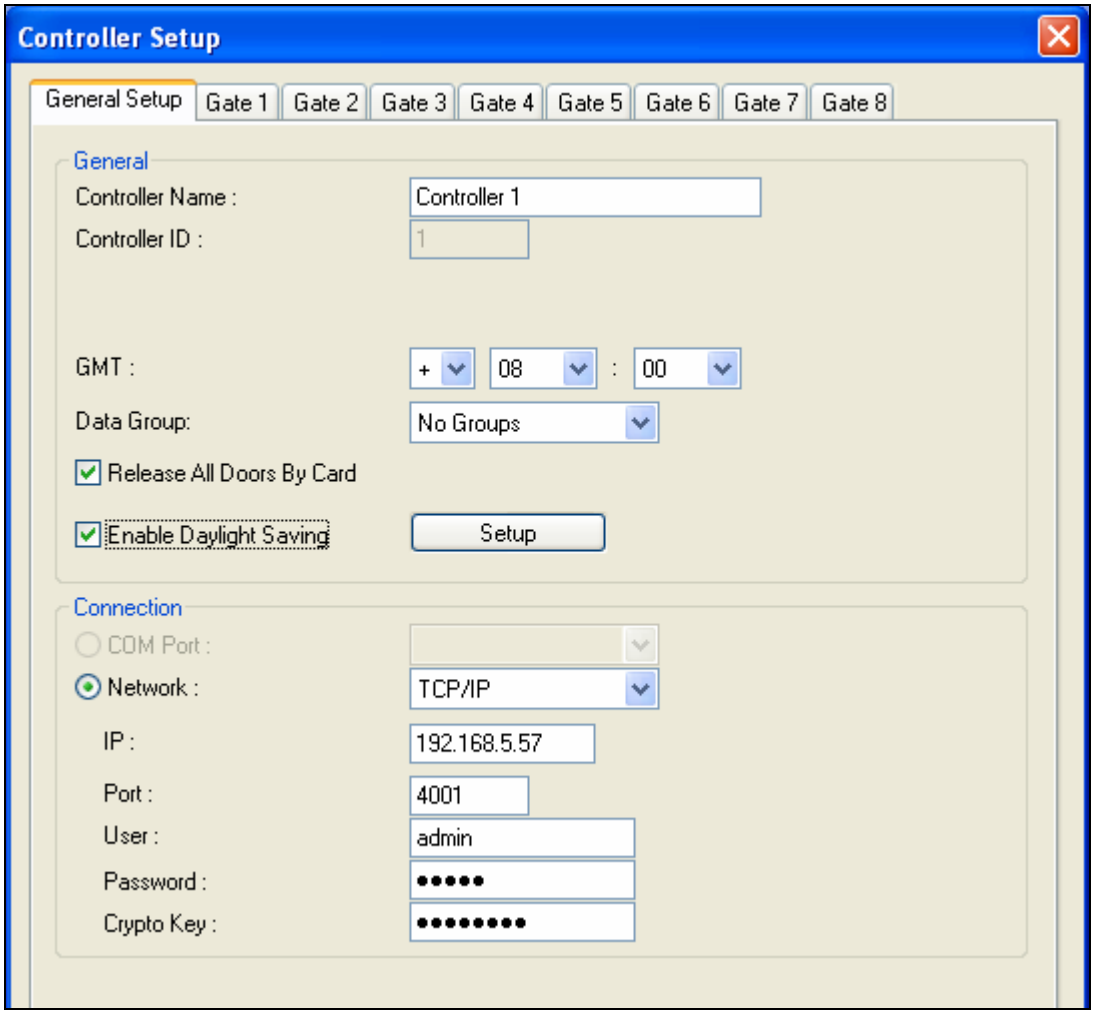


Figure 4-3

Note: The Controller ID must match the Controller ID set ahead with GV-ASKeypad or on the Web interface of the controller. Refer to *GV-AS / GV-EV Controller User's Manual*.

---

4. In Connection section, select the communication mode between the GV-AS / GV-EV Controller and GV-ASManager.
   - If using RS-485 connection, select **COM Port** that is used for connection.
   - If using Ethernet, select **Network** and select **TCP / IP** or **LocalDDNS**. Type the IP address, device name (if LocalDDNS is selected), port number, login user, login password and Crypto key (3DES code) of the controller.

Note: The default values of GV-AS / GV-EV Controller are: IP address **192.168.0.100**; username **admin**; password **admin**; Crypto key (3DES code) **12345678**.

5. To check if the above connection settings are correct, you can click **OK** at this step and back to the main screen. The icon  appearing on the Device View window indicates the connection is established.

Note: For the disconnection messages displayed on the Status column (Figure 4-6), see *D. Controller Status* in *Appendix*.

6. OPTIONAL settings in the General section:
   - **GMT:** The current time at the host computer.
   - **Data Group:** Assign the controller to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read / write / execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.
   - **Release All Doors by Card:** When a card is presented, all doors set to **Release by Card** mode will open and will remain open until the end of Release by Card mode set in the Authentication Schedule. For Authentication Schedule, see *4.2.2 Step 2: Configuring the Doors*.
   - **Enable Daylight Saving:** Enable the Daylight Saving Time function by selecting your time zone . The system will automatically adjust for daylight saving time.

Note: The **Interlock** and **Release All Doors by Card** functions are not available for GV-EV48.

4.2.2 Step 2: Configuring the Doors or Elevator Floors

A. GV-AS Controller: Doors

1. To define the doors on the controller, click the **Door / Gate** tab. This dialog box appears.

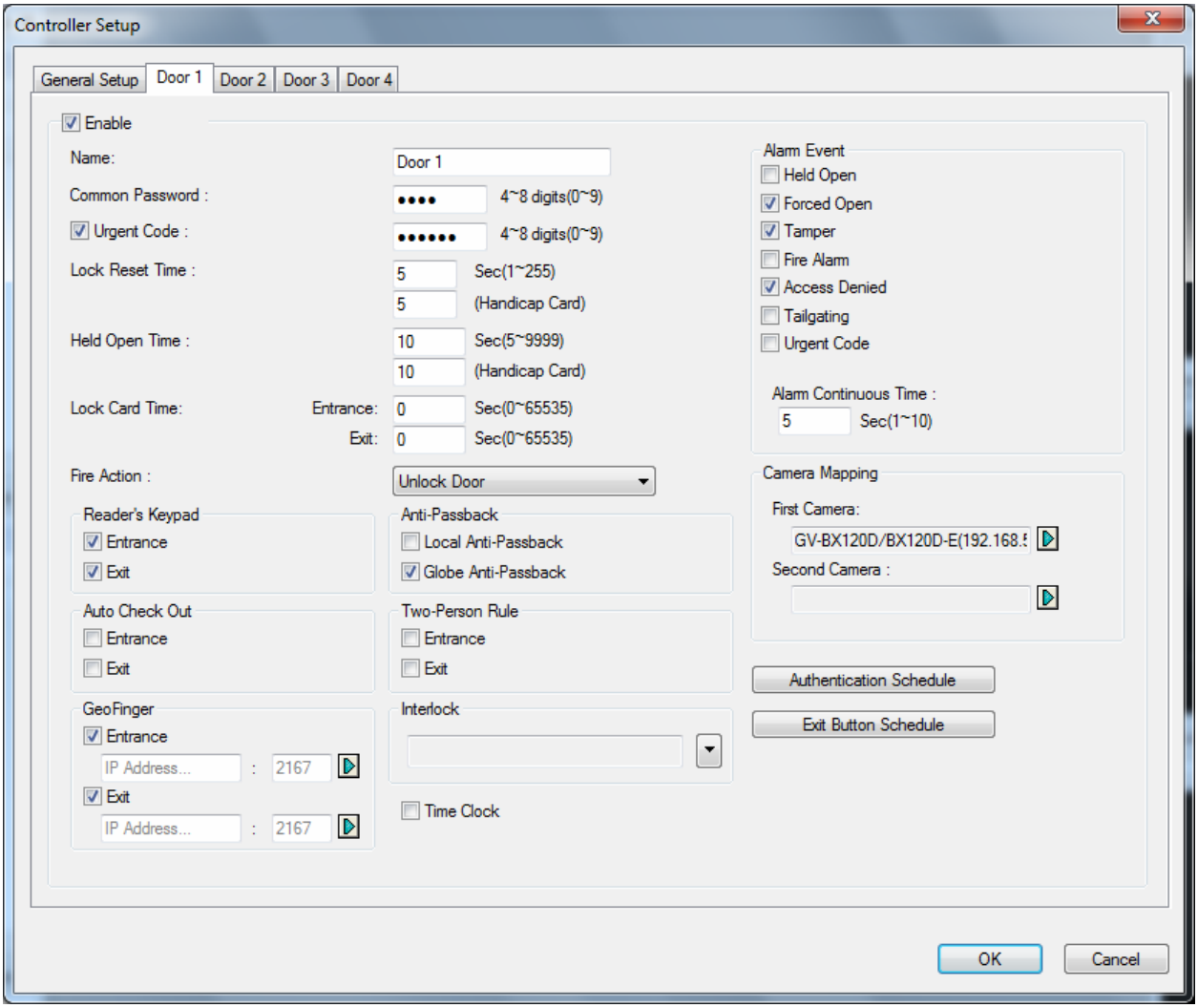


Figure 4-4

2. In the General section, select **Enable** to define the general settings for the door:
   - **Name:** Give a name to the door.
   - **Common Password:** Set a password for the door. When under **Card or Common Mode**, the user can gain access by entering this password using a keypad. The default password is 1234. See Step 6 for details on Card or Common Mode.
   - **Urgent Code:** When the Urgent Code is entered, the door with the urgent code will unlock. However, the door will not unlock if it is in Release by Card Mode. The Urgent Code function is only supported by GV-AS210 / 410 / 810.

- **Lock Reset Time:** If the door is monitored, type the number of seconds the door can be held open. After the specified time expired, the door will automatically be locked. Next to **Handicap Card**, type the number of seconds the door will be held open when a Handicap Card is swiped.
- **Held Open Time:** If the door is monitored, type the number of seconds the door can be held open before a Door Held Open alarm is generated. Next to **Handicap Card**, type the number of seconds the door can be held open after a Handicap Card is swiped before a Door Held Open alarm is generated.
- **Lock Card Time:** The user will be denied access if he or she tries to re-access the door more than 1 time within the specified Lock Card Time. For example, if the Lock Card Time of a cafeteria entrance is set to 7200 seconds, someone who entered the cafeteria at 9 am will be prevented from re-entering the cafeteria until 11 am.
- **Fire Action:** Set the door to be locked or unlocked when a fire alarm condition occurs.

3. The following settings are OPTIONAL and are only applicable when related settings are also configured:
   - **Reader's Keypad:** When the Card and PIN Code Mode is applied, normally both the access card and PIN code are required. But if the **Entrance** or **Exit** option is not selected, only the access card is required to unlock the door. For example, if only the **Entrance** option is selected, the user will be required to both present the card and enter the PIN code to unlock the entry door, but only the card will be required to unlock the exit door. To apply Card and PIN Code mode, see step 4 below.
   - **Anti-Passback:** To perform the Anti-Passback application, see *Chapter 6 Anti-Passback*.
   - **Auto Check Out:** Automatically checks out the Visitor Card when the visitor presents the card at the exit door. To set a card as Visitor Card, see *Adding a Single Card* section later in this chapter.
   - **Two Person Rule:** Select **Entrance** to require presenting Two Person A Card and then Two Person B Card before the entry door is unlocked. Select **Exit** to require presenting both cards in the right order before the exit door is unlocked. To set a card as Two Person A/B Card, see *Adding a Single Card* section later in this chapter.
   - **GeoFinger:** Allow GV-ASManager to upload enrolled fingerprints to the specified fingerprint reader. Refer to *Chapter 3 Fingerprint Only Mode* in the *GV-GF Fingerprint Reader User's Manual* for details.

- **Interlock:** Enable Interlock function with the selected doors. Doors that are interlocked cannot be open at the same time. The door only unlocks when the other door is close. Using the settings in *Figure 4-4* as an example, Gate 1 will not unlock if either of Gate 4 and 5 is opened, and when Gate 1 is opened, Gate 4 and 5 cannot be opened.
- **Time Clock:** This option must be selected to enable GV-TAWeb. See *Chapter 11 GV-TAWeb for Workforce Schedule* for more details.

4. The settings in the Alarm Event section are OPTIONAL unless an alarm device is installed on the GV-AS Controller. Enable the desired alarm conditions that will cause the alarm to occur: **Held Open**, **Force Open**, **Tamper**, **Fire Alarm**, **Access Denied**, **Tailgating** and **Urgent Code** entered.
   - **Alarm Continuous Time:** Type the duration of the alarm sounds in seconds for Access Denied alarm.
5. The settings in the Camera Mapping section are OPTIONAL unless a camera is installed at the secure site. For details see *Chapter 5 Video Integration*.
6. The **Authentication Schedule** is an OPTIONAL setting for specifying different access modes at different periods of time; otherwise the default access mode is **Card Mode** that requires users to present the card only to be granted access.

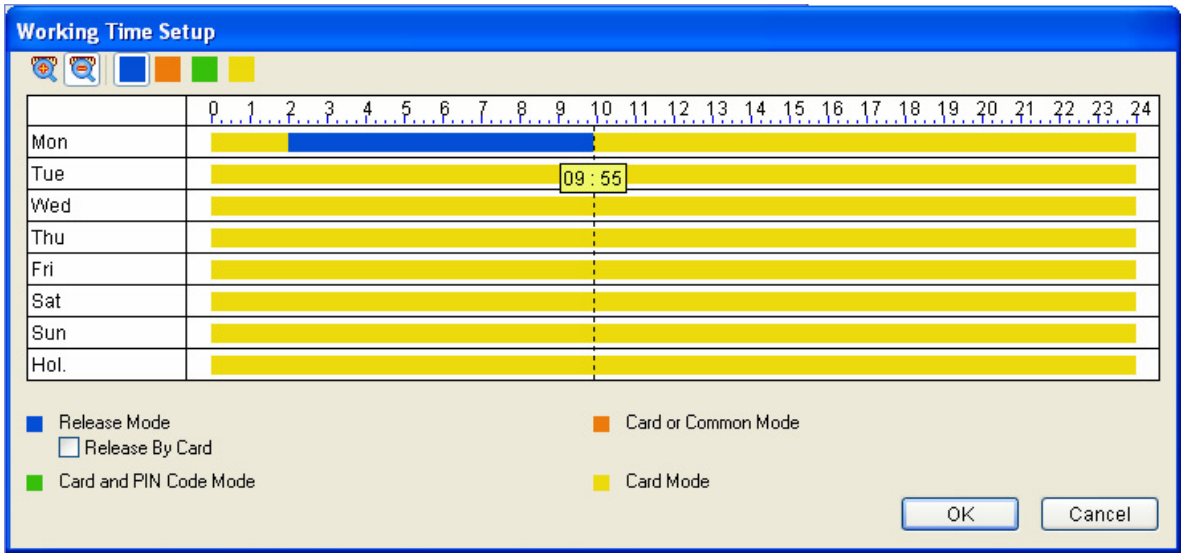


Figure 4-5

To define which kind of access mode should be applied at specific day and time, select one access mode on the toolbar and drag the mouse over the timelines. Four (4) access modes are available in the system:

- **Card Mode:** This is the default mode. This mode only requires the user to present his or her card to be granted access.

- **Release Mode:** Keep the door in an unlock status with the reader.
  - **Release by Card:** The door will unlock only after a card is presented and will remain unlocked during the time specified for Release Mode. This option is designed to prevent unattended doors from opening during the Release Mode.
- **Card and PIN Code Mode:** This mode requires the user to present the card and then enter the card's PIN code on the keypad. For the following controllers, the user can gain access by entering the card number and pin code:

Model	Supported Firmware	Command (Example: Card 12345678, Pin 0000)
GV-AS100	V1.04 or later	Card Number + Pin Code Example: 123456780000
GV-AS110	V1.04 or later	＊Card Number + Pin Code # Example: ＊123456780000#
GV-AS400	V1.04 or later	Pin Code + Card Number Example: 000012345678
GV-AS210 / 410 / 810	V1.0 or later	Pin Code + Card Number Example: 000012345678

- **Card or Common Mode:** This mode requires the user to present his or her card to gain access **OR** enter the door's password using the keypad to gain access.

7. The **Exit Button Schedule** is an OPTIONAL setting to specify when to allow access to the exit button. By default, access to the exit button is granted at all times. To set a schedule, click the **Delete Access Time** button and drag the mouse over the time periods when you want the exit button to be locked. This function is only supported by GV-AS210 / 410 / 810.

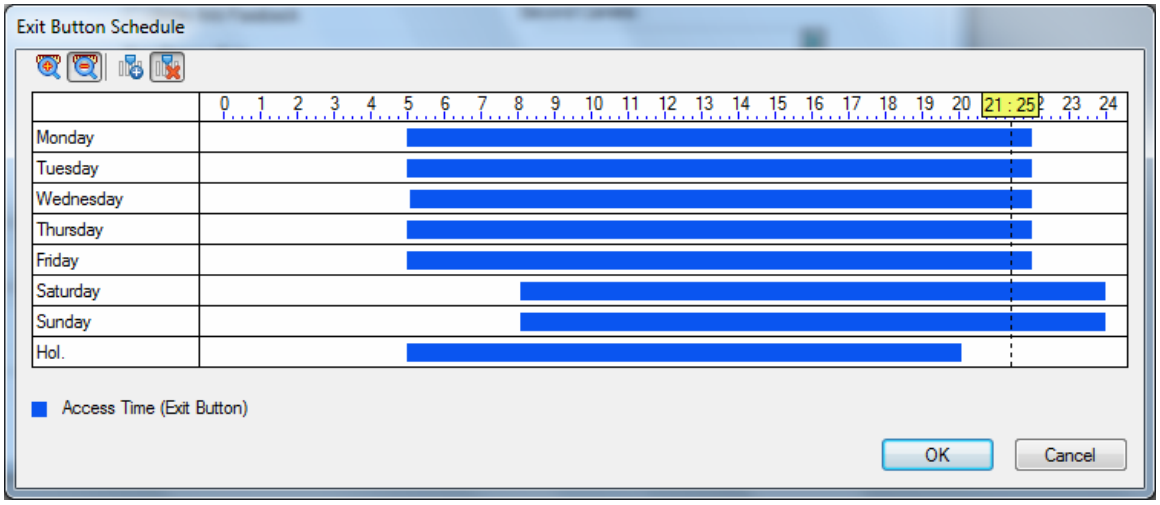


Figure 4-6

8. Click **OK** several times and return to the main screen. A controller folder tree will be displayed on the Device View window as example below.

   If the icon appears, it indicates the connection between the controller and GV-ASManager has been established. If the icon appears, it indicates the connection failed. Make sure the above connection setup is correctly configured.

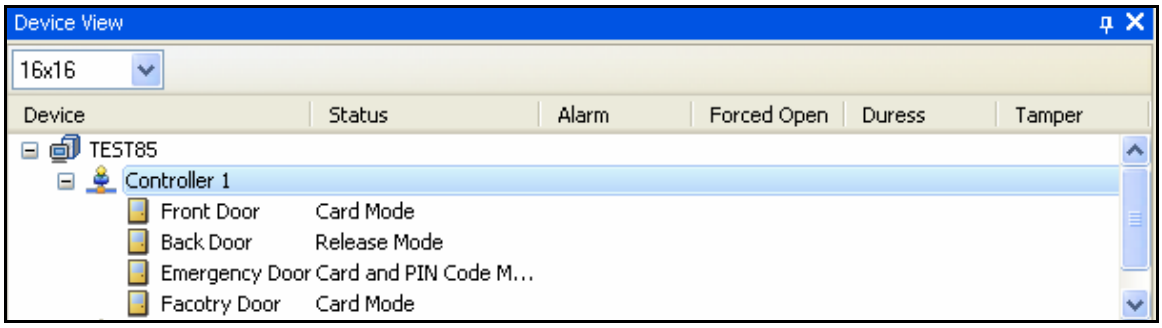


Figure 4-7

B. GV-EV Controller: Floors

1. To define the elevator floors on GV-EV48, click the **Floors** tab. This dialog box appears.

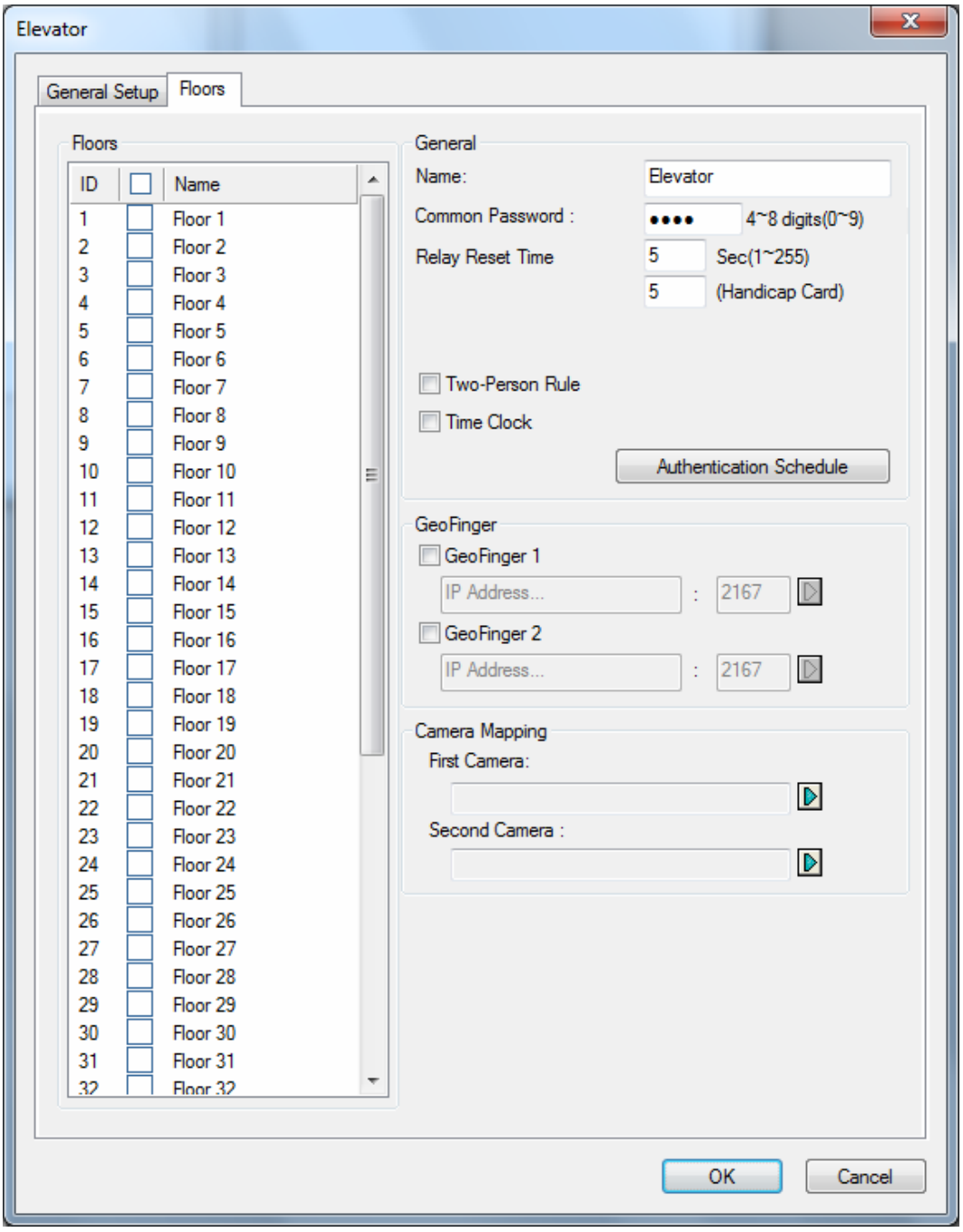


Figure 4-8

2. To enable elevator floors, select the floors on the left. For example, if your elevator only has 40 floors, you can clear the selection for floors 41 to 48.
3. In the General section, define the general settings for the elevator:
   - **Name:** Name the elevator.

- **Common Password:** Set a password for the elevator. When under **Card or Common Mode**, the user can gain access by entering this password using a keypad. The default password is 1234.
- **Relay Reset Time:** If the elevator access is restricted, type the number of seconds the buttons will remain accessible after card is presented. After the specified time expired, the elevator buttons will automatically be locked. Next to **Handicap Card**, type the number of seconds the elevator button will remain accessible when a Handicap Card is swiped.

4. The following settings are OPTIONAL and are only applicable when related settings are also configured:
   - **Two Person Rule:** Select to require presenting Two Person A Card and then Two Person B Card before the elevator floor is unlocked. If Two Person A Card and Two Person B Card have access to different floors, access will only be granted if both cards have access to that particular floor. To set a card as Two Person A/B Card, see *Adding a Single Card* section later in this chapter.
   - **Time Clock:** This option must be selected to enable GV-TAWeb. See *Chapter 11 GV-TAWeb for Workforce Schedule* for more details.
   - **GeoFinger:** Allow GV-ASManager to upload enrolled fingerprints to the specified fingerprint reader. Refer to *Chapter 3 Fingerprint Only Mode* in the *GV-GF Fingerprint Reader User's Manual* for details.
5. The **Authentication Schedule** is an OPTIONAL setting for specifying different access modes at different periods of time; otherwise the default access mode is **Card Mode** that requires users to present the card only to be granted access.

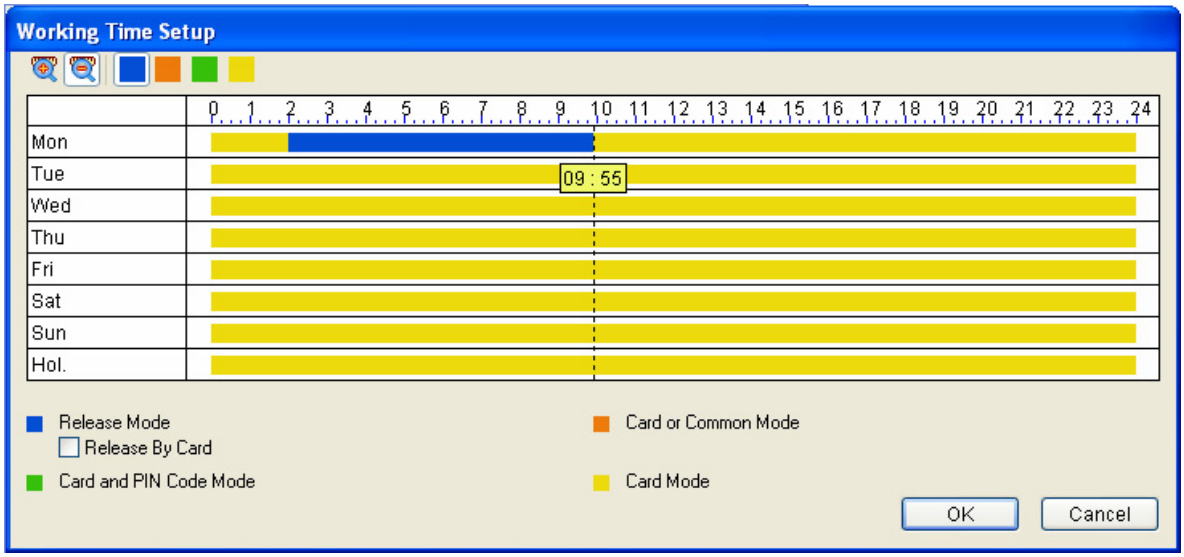


Figure 4-9

To define which kind of access mode should be applied at specific day and time, select one access mode on the toolbar and drag the mouse over the timelines. Four (4) access modes are available in the system:

- **Card Mode:** This is the default mode. This mode only requires the user to present his or her card to be granted access.
- **Release Mode:** Keep the door in an unlock status with the reader.
  - **Release by Card:** The floor will unlock only after a card is presented and will remain unlocked during the time specified for Release Mode. This option is designed to prevent unattended floors from opening during the Release Mode time.
- **Card and PIN Code Mode:** This mode requires the user to present his or her card and then enter the card's PIN code on the keypad. The user can also be granted access by entering **Pin Code + Card Number**. For example, if the card number is 12345678 and the Pin is 0000, the command will be **000012345678**.
- **Card or Common Mode:** This mode requires the user to present his or her card to gain access **OR** enter the door's password using the keypad to gain access.

6. The settings in the Camera Mapping section are OPTIONAL unless a camera is installed at the secure site. For details see *Chapter 5 Video Integration*.
7. Click **OK** several times and return to the main screen. A controller folder tree will be displayed on the Device View window.

   If the icon  appears, it indicates the connection between the controller and GV-ASManager has been established.

   If the icon  appears, it indicates the connection failed. Make sure the above connection setup is correctly configured.

4.3 Setting Cards

Once you have configured the controller, you may start enrolling cards. All new cards must be enrolled into the GV-ASManager before access is allowed. Up to 40,000 cards can be stored using a GV-AS / GV-EV Controller. If a card that was not enrolled is presented to the reader, the message *Access Denied: Invalid Card* will be displayed.

Depending on how many cards you need to program, you can simply add them one at a time or use the batch function to add a group of cards.

4.3.1 Adding a Single Card

1. To add one card, use one of these ways:
   - Present the card to the reader. The message *Access Denied: Invalid Card* is displayed. Right-click the message and select **New / Edit Card**. The New a Card dialog box appears with card number and code type entered (Figure 4-11). Then follow Step 3 to complete other settings.
   - On the menu bar, click **Personnel** and select **Cards**. This window appears.

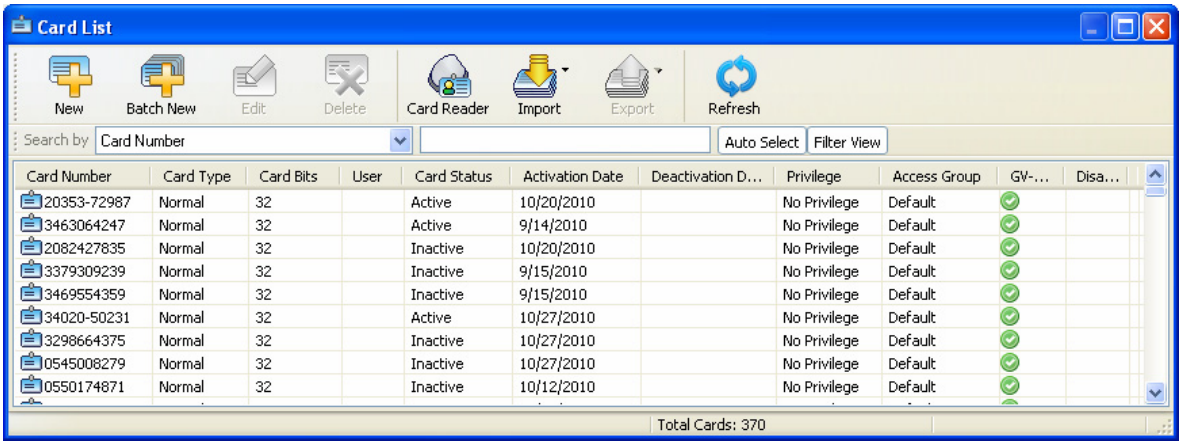


Figure 4-10

Note: You can also enroll card by installing the optional device GV-PCR310 Enrollment Reader to the PC running GV-ASManager. Refer to *GV-PCR310 Enrollment Reader's Installation Guide* for more details.

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2. Click the **New** button on the toolbar. This dialog box appears.

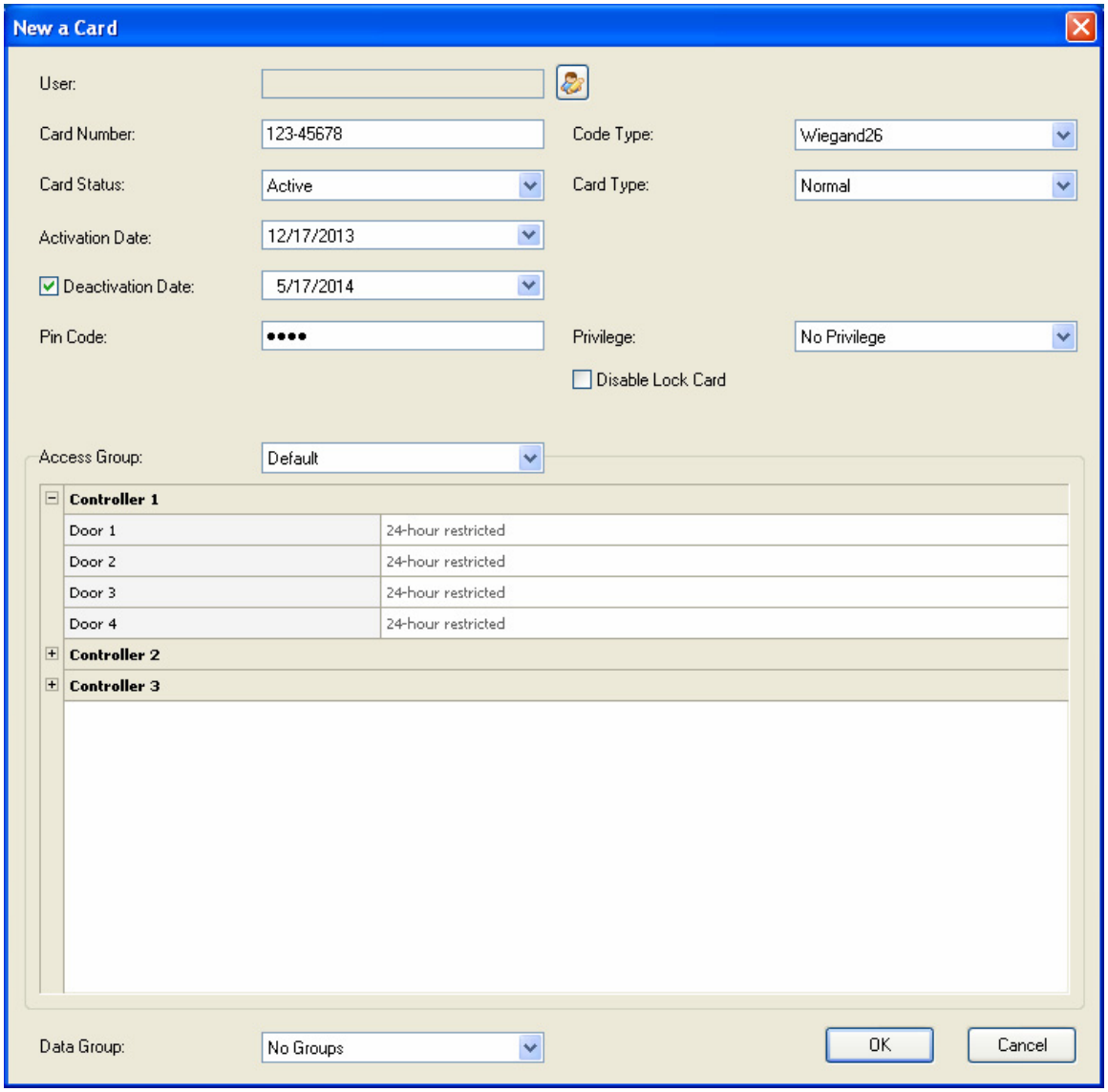


Figure 4-11

3. The settings are available for the card:

   - **Card Number:** Enter the card number.
   - **Code Type:** Select the code format of the card.
   - **Card Type:** Select one of the following card types.
     - **Normal:** The card opens the door when it is under Card Mode, the default mode.
     - **Patrol:** The card is assigned to the person in charge of patrolling a location, e.g. a guard. When the patrol card is presented to the reader, the access will be recorded but the door will NOT unlock. The feature may be set together with **Privilege** below. The patrol card user may have the privilege to stop alarm sounds and clear alarm events during patrolling.

- **Two-person A Card:** Two-person A/B rule. The card is defined as Card A. Card B must be presented after Card A to unlock the two-person-rule enabled door.
- **Two-person B Card:** Two-person A/B rule. The card is defined as Card B. Card A must be presented before Card B to unlock the two-person-rule enabled door.
- **Visitor:** This card is assigned to a visitor and the visitor's access can be managed using GV-VMWeb.
- **Security:** The security card can enable the Security Mode where no cards can be granted access. Only the security card can disable the Security Mode.
- **Handicap:** When the handicap card is used, the door will remain unlocked for the time specified in Lock Reset Time and Held Open Time for handicap card. To see how to set prolonged Lock Reset Time and Held Open Time for handicap card users, refer to *4.2.2 Step 2: Configuring the Doors or Elevator Floors*.

- **Activation/Deactivate Date:** Specify when the card is active or inactive.
- **PIN Code:** Enter a four-digit personal code for the card. The default setting is 1234.
- **Privilege:** Assign one of these privileges to the user:
  - **Stop Alarm:** The user can stop alarm sounds by presenting the card.
  - **Clear Event:** The user can clear alarm events by presenting the card. All alarms in the Device View window are erased. A record of these alarms is still kept in the Alarm Monitor.
- **Disable Lock Card:** When the option is selected, the card will be exempt from the Lock Card Time setting. For details on Lock Card Time, refer to *Step 2: Configuring the Doors or Elevator Floors* in Chapter 4.
- **Access Group:** Access Groups control which personnel can access which door and at what time. For details, see *4.5 Setting Access Groups.*

  For first-time user of the GV-ASManager, the access group is not yet established. Select **User Define** for test run.
- **Controller:** The Controller column displays the associated doors. The selection for each door will be automatically brought up when one access group was entered.

  For first-time user of the GV-ASManager, select **24-hour access** for each door for test run.
- **Data Group:** Assign the card to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read/write/execute the functions listed under the data group. Refer to *Adding a New User* in Chapter 8 for more details.

4. Present the enrolled card to the reader. Once the card has been accepted, the message *Access Granted* will be displayed.

Note: GV-AS200 only supports the first 10,000 cards. All other controllers can support up to 40,000 cards.

4.3.2 Adding a Group of Cards

Before you use the Batch function to enroll new cards, please note that the group of cards must be numbered sequentially.

1. On the menu bar, click **Personnel** and select **Cards**. The Card List dialog box appears.
2. Click the **Batch New** button on the toolbar. This dialog box appears.

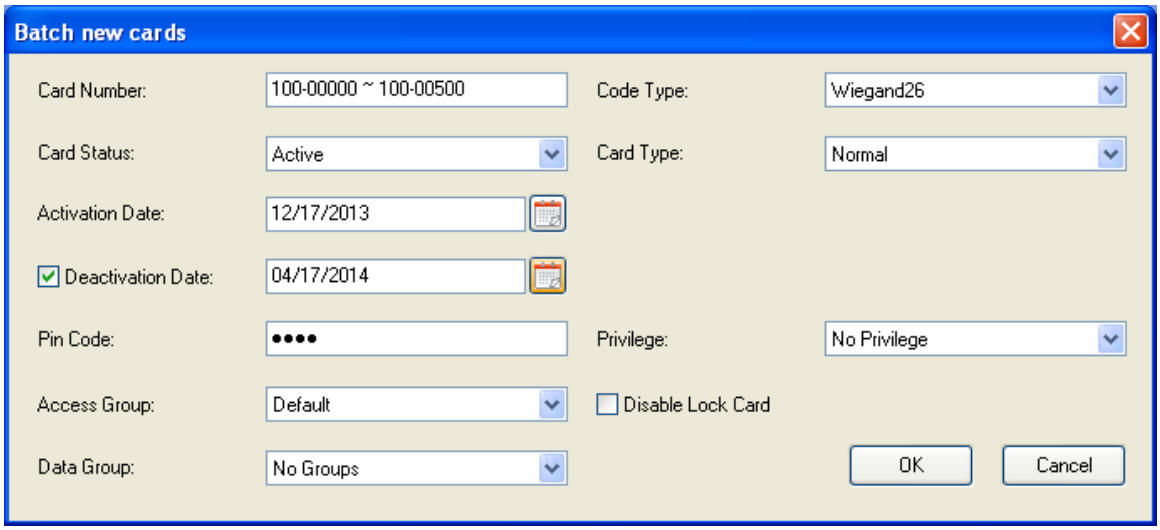


Figure 4-12

3. The settings in the dialog box are the same as those of adding a single card. See Step 3 in *4.3.1 Adding a Single Card*.

Note: Cards that were enrolled using the Batch function will have the same PIN. If you want to change the PINs of certain cards, you have to enter the PIN using the **Edit** function on the Card List dialog box.

4.3.3 Importing/Exporting Card Data

You can import and export card data in mdb or xls format.

To export card data:

1. On the Card List window (Figure 4-8), select desired cards using Ctrl + left click.
2. Click the **Export** button and select **Export to Access** or **Export to Excel**.
3. Assign the file path, and optionally enter password to export card data.

Note: The Excel file format does not support the password protection.

To import card data:

1. On the Card List window (Figure 4-10), click the **Import** button and select one of these options: **Import from Access** or **Import form Excel**.
2. Assign the file path and type the **Password** if necessary. Click **OK**. This dialog box appears.

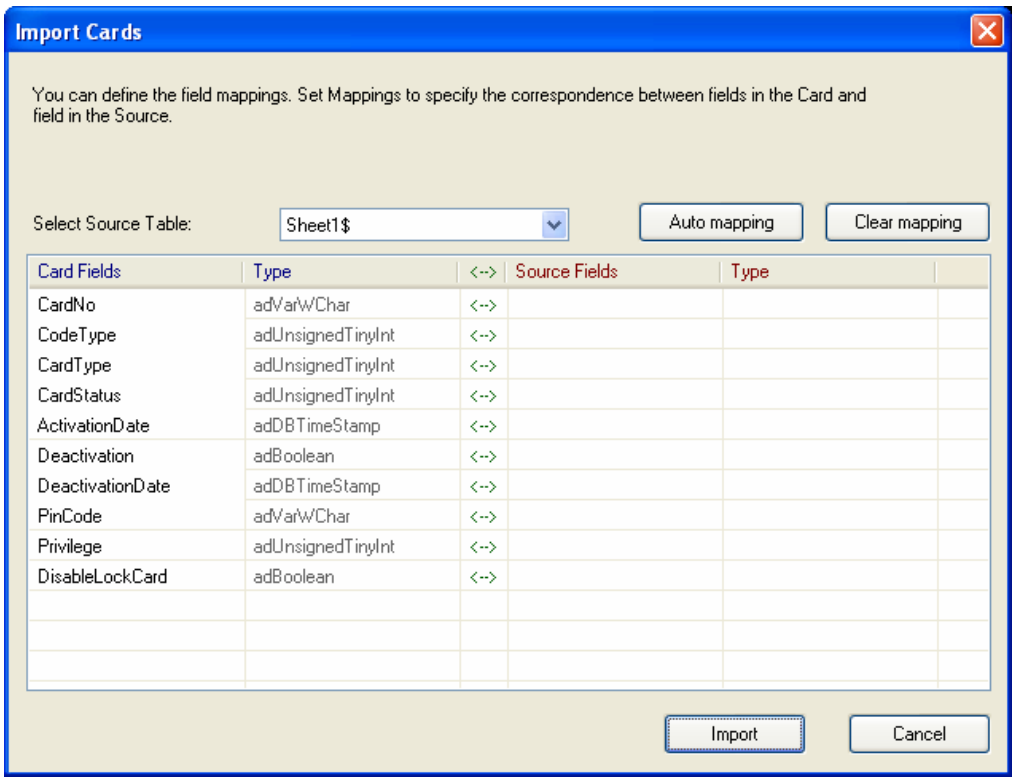


Figure 4-13

3. Select the **Source Table** you want to import.
4. Click the **Auto mapping** button to automatically map the Source fields to the current card data fields.
5. You can also manually map the fields by clicking the columns under **Source Fields**.
6. Click **Import** to import card data.

4.4 Setting Weekly Schedules

This section will help you define the daily and holiday access times. Up to 254 weekly schedules may be defined with two default weekly schedules for “deny access” and “full access”.

Before creating weekly schedules, it is helpful to map out all possible usages of weekly schedules for the site. For example: consider the variety of access hours for employees, consider requirements for janitorial personal who may need night access, consider requirements for service or repair personnel who may need all hours access, consider requirements for supervisory staff who may need extended hours access and etc.

- **Step 1 Setting Time Zones**

  Define the minutes and hours of the day when a user is granted access to a secure site. The minimum time duration is 5 minutes.

- **Step 2 Setting Weekly Schedules**

  Define the days of the week when a user is granted access to a secure site.

- **Step 3 Setting Holidays**

  Define specific dates as holidays.

4.4.1 Step 1: Setting Time Zones

This section provides examples of setting the following time zones:

- Day shift – 09:00 to 19:00 hours
- Night shift – 19:00 to 9:00 hours (cross midnight)
- Supervisor – 07:00 to 24:00 hours

1. On the menu bar, click **Setup** and select **Time Zones**. This dialog box appears.

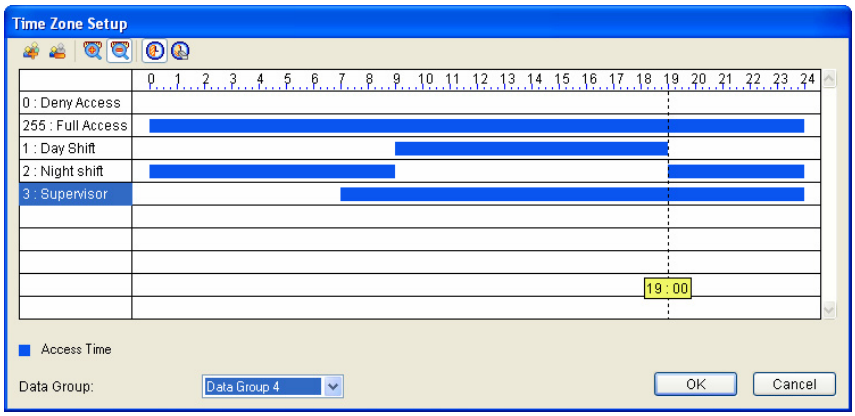


Figure 4-14

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

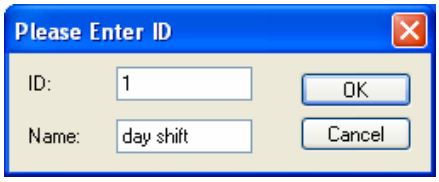


Figure 4-15

3. The **ID** is the number of the time zone. The system will automatically create the ID based on how many time zones have been added. Give a **Name** to the time zone you are going to define. Click **OK**.

   For example, name the Time Zone 1 as **day shift**.

4. Click the **Add Access Time** button . Then drag the mouse on the timeline to define a period of access time.

   For example, the time of day shift is **from 09:00 to 19:00**.

5. To create the second time zone, click the **Add** button and name it as **night shift**. Then click the **Add Access Time** button. Drag the mouse on the timeline to set the time **from 19:00 to 24:00** and **from 00:00 to 09:00**.

6. To create the third time zone, click the **Add** button and name it as **Supervisor**. Then click the **Add Access Time** button. Drag the mouse on the timeline to set the time **from 07:00 to 24:00**.

7. You can use the **Data Group** drop-down list to assign the time zone to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read/write/execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.

8. Click **OK**. The three time zones have been defined.

4.4.2 Step 2: Setting Weekly Schedules

This section provides examples of setting the following weekly schedules:

- Schedule-Day shift – Monday through Friday, 09:00 to 19:00 hours
- Schedule-Night shift – Monday through Friday, 19:00 to 9:00 hours
- Schedule-Supervisor – Monday through Sunday and Holidays, 07:00 to 24:00 hours

1. On the menu bar, click **Setup** and select **Weekly Schedules**. This dialog box appears.

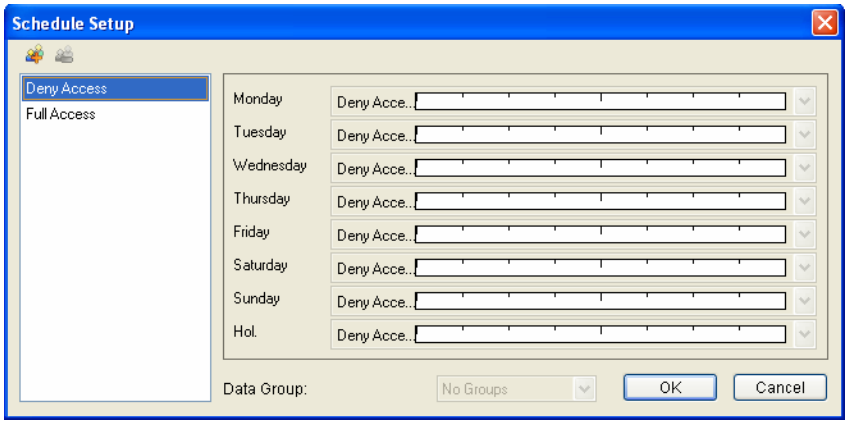


Figure 4-16

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

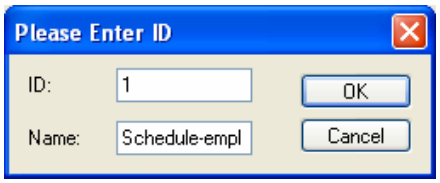


Figure 4-17

3. The **ID** is the number of the weekly schedule. The system will automatically create the ID based on how many time schedules have been added. Give a **Name** to the weekly schedule you are going to define. Click **OK**.

   For example, name the Weekly Schedule 1 as **Schedule-Day shift**.

4. From the drop-down lists of **Monday** to **Friday**, select the **Day shift** time zone we have created. No access is allowed on Saturday, Sunday and Holiday.

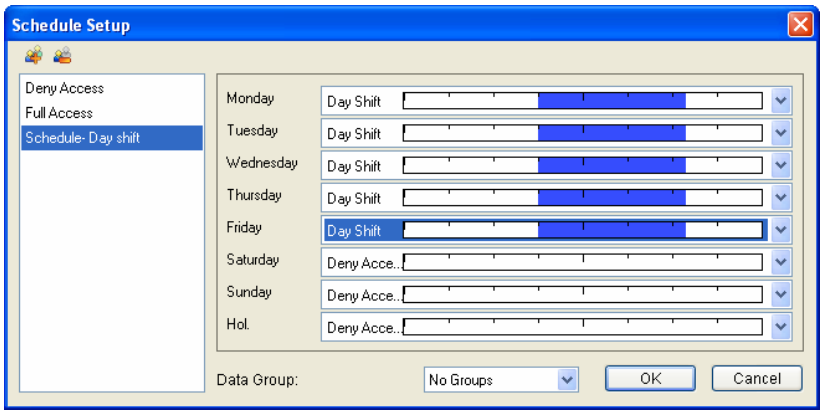


Figure 4-18

5. To create the second time schedule, click the **Add** button and name it as **Schedule-Night shift**. From the drop-down list of **Monday** to **Friday**, select the **Night shift** time zone we have created. No access is allowed on Saturday, Sunday and Holiday.

6. To create the third time schedule, click the **Add** button and name it as **Schedule-Supervisor**. From the drop-down lists of **Monday** to **Hol**, select the **Supervisor** time zone we have created.

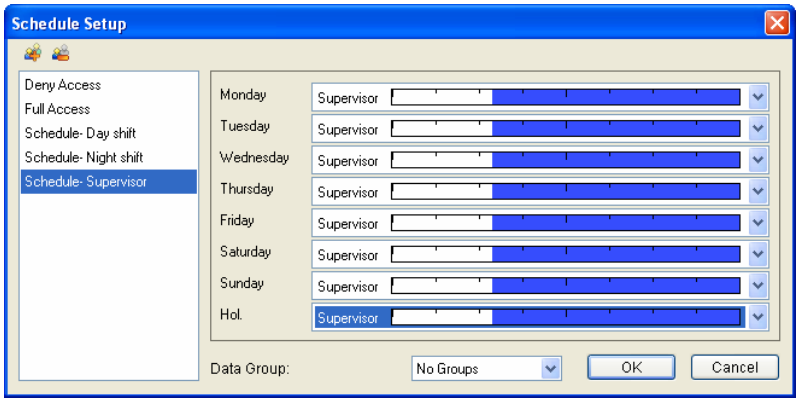


Figure 4-19

7. You can select a time schedule and use the **Data Group** drop-down list to assign the time schedule to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read/write/execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.

8. Click **OK**. The three weekly schedules have been defined.

4.4.3 Step 3: Setting Holidays

To designate specific dates as holidays on the system:

1. On the menu bar, click **Setup** and select **Holidays**. This dialog box appears.

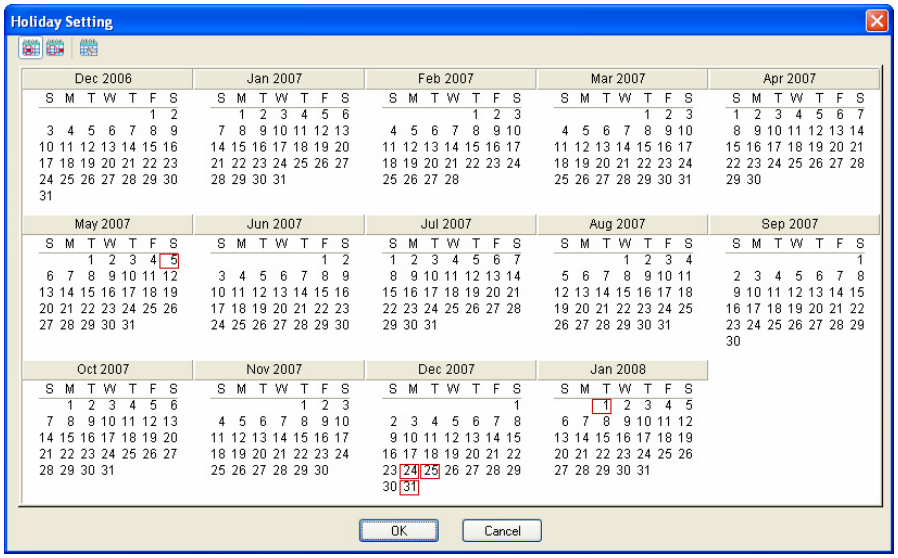


Figure 4-20

2. Click the **Holiday** icon and click the dates you want to set as holidays. For example,
   - Dec 24, 2007 – Christmas Eve
   - Dec 25, 2007 – Christmas Day
   - Dec 31, 2007 – New Year's Eve
   - Jan 01, 2008 – New Year's Day
3. To delete the holiday, click the **Non Holiday** icon and click the date you want to delete.

Note: Holiday dates can cross over to the following year, and certain holiday dates change from year-to-year. Administrators should review and update the holiday setting prior to the beginning of a new year to ensure proper holiday coverage.

4.5 Setting Access Groups

An access group defines which doors or lanes can be accessed at what times. You can create multiple access groups to suit the schedules of different groups of employees. Instead of setting the access rights of each card one by one, you can quickly assign a card to an access group and the access rights of that access group will be applied to the card.

This section describes how to create an access group and assign a card to the access group. In the example below, an access group was created to give office staff access to all 4 doors of Controller 1 during daytime shift.

1. On the menu bar, click **Setup** and select **Access Groups**. This dialog box appears.

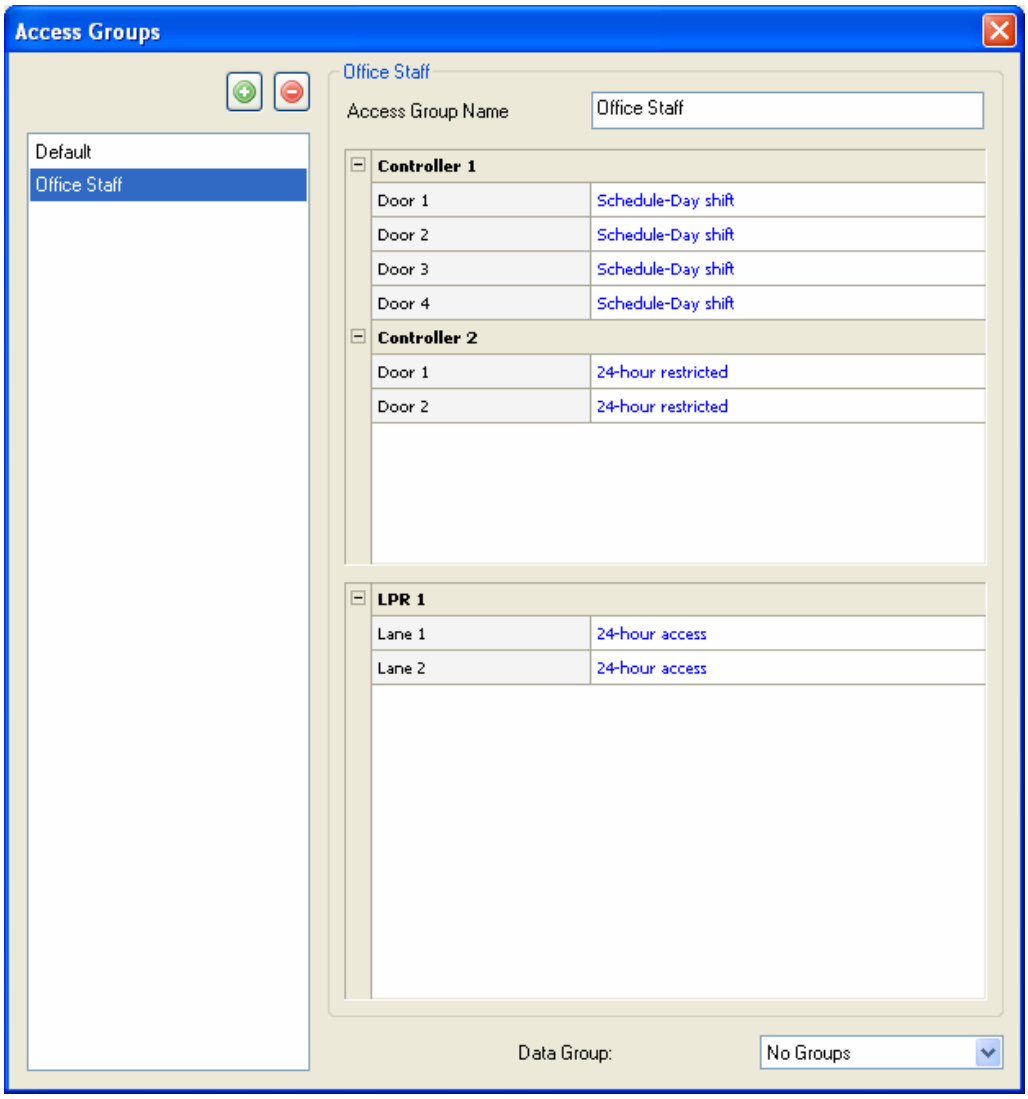


Figure 4-21

2. Click the **New** button , and give a **Name** to the new access group. For example, name the access group **Office Staff**.

3. To define door access for the access group, click the drop-down list next to each door and select one of pre-defined Weekly Schedules. For example, click the blue text next to **Door 1**, and then select **Schedule-Day Shift**.
4. You can use the **Data Group** drop-down list to assign the access group to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read/write/execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.
5. Click **OK**. The access group for office staff has been created.
6. To assign the criteria of the access group to a single card, click **Personnel** on the menu bar and select **Cards**. The Card List dialog box appears.
7. Double-click one listed card. This dialog box appears.

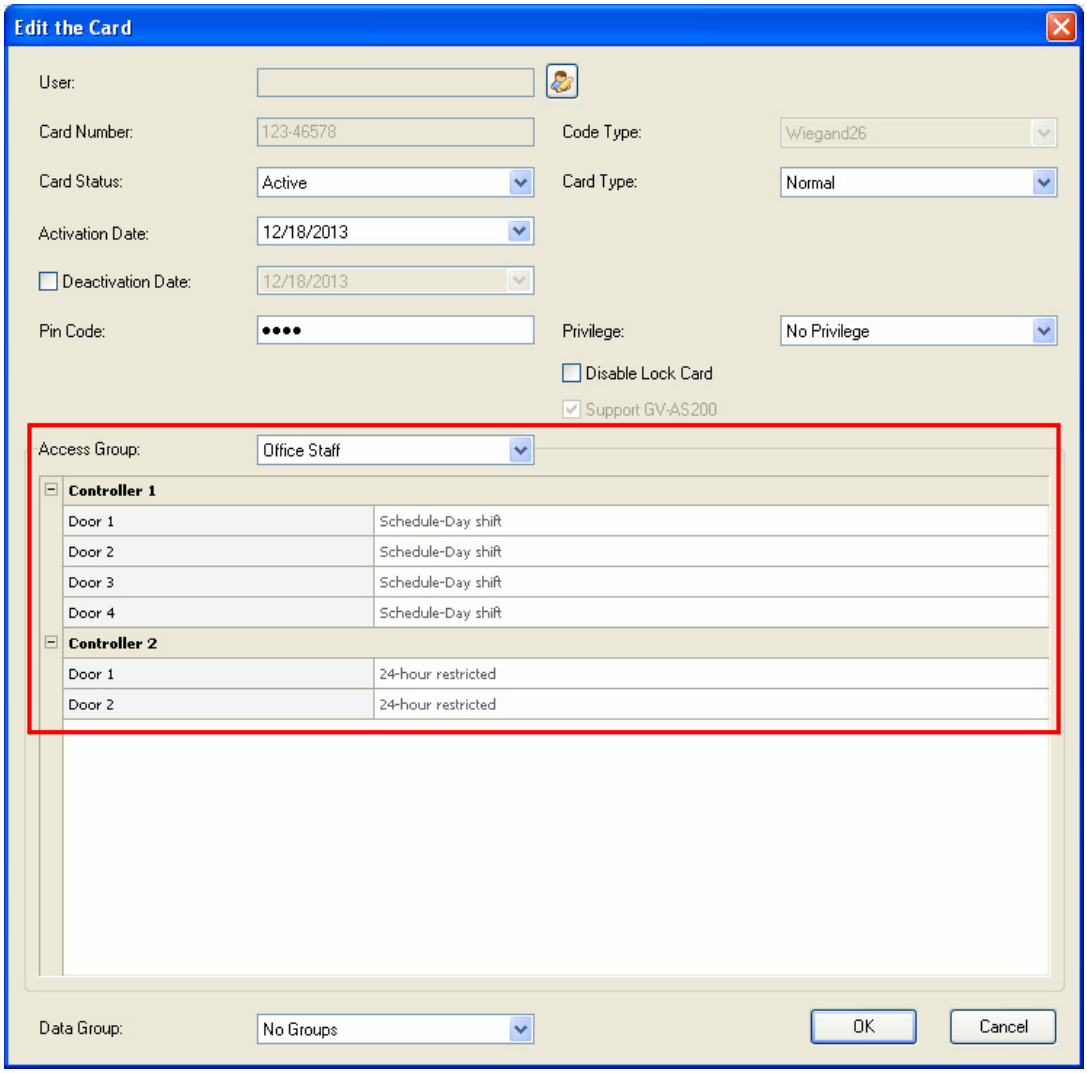


Figure 4-22

8. From the **Access Group** drop-down list, select one pre-defined access group, e.g. **Office Staff**. The assigned Weekly Schedule will be displayed on the associated door's field.

4.6 Setting Users

This section describes how to create a database of user information and assign cards to users.

4.6.1 Adding a User

1. On the menu bar, click **Personnel** and select **Users**. The User List window appears.
2. Click the **New** button on the toolbar. This dialog box appears.

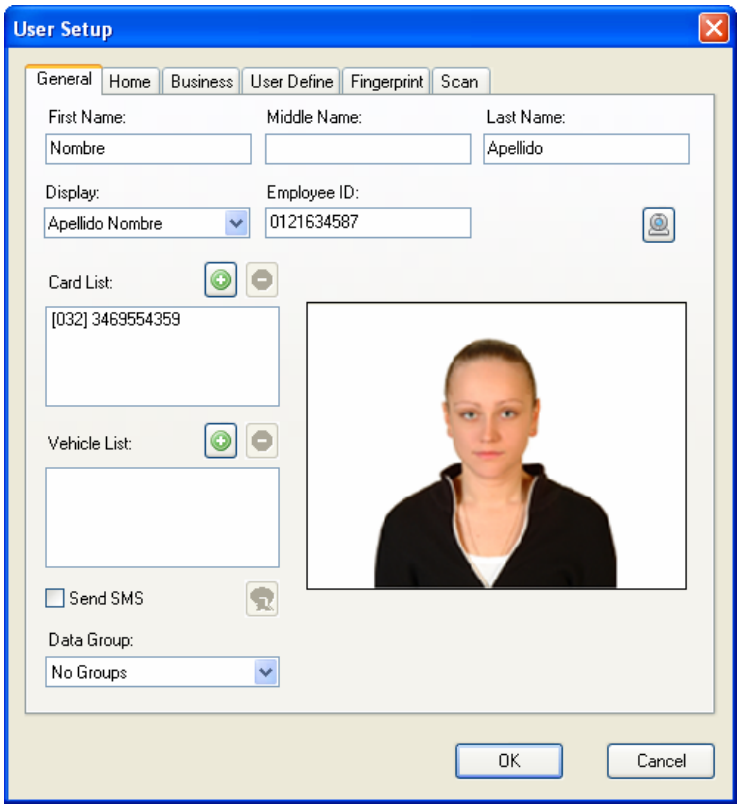


Figure 4-23

3. Type a name under **Display**, which is a required field. Other user information such as Employee ID, Photo, Home information and Company information are optional entries.
4. You can use the **Data Group** drop-down list to assign the user to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read/write/execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.

You can enroll fingerprints in the **Fingerprint** tab using GV-GF1911 / 1921 / 1922. For details, refer to *Chapter 3 Fingerprint Only Mode* in the *GV-GF Fingerprint Reader User's Manual*.

4.6.2 Assigning a Card to a User

There are two methods to assign a card to a user.

Note: At this step we assume that you have followed the instructions in *4.3 Setting Cards* to complete your card enrollment.

---

1. On the User Setup dialog box (Figure 4-23), click **Add** and double-click one listed card to assign the card to the user.
2. On the Edit Card dialog box (Figure 4-22), click the **Assign User** icon  and double-click one listed user to assign the user to that card.

4.6.3 Sending SMS Alerts

If you want to send SMS alerts whenever the card(s) assigned to the user is presented to the reader, select **Send SMS** in the User Setup dialog box.

Before sending the SMS, see *8.2.1 Setting SMS Server* to configure the SMS server. For how to set up SMS alerts, refer to the same settings “Send SMS Alert” at Step 3 in *8.2.3 Setting Notification*.

4.6.4 Customizing a Data Field

You can customize data fields for users. Up to ten data fields can be created for user data entry.

When a custom data field is created, the field label will be displayed in the User Define tab on the User Setup dialog box. The actual personal data for each user is entered in the User Define tab.

To customize a data field:

1. On the menu bar, click **Personnel** and select **User**. The User List window appears.
2. Click the **User Define Fields Setting** button on the toolbar. The User Define Fields Setting dialog box appears.

3. Select one **User Define** field, and type the text to be displayed as the field label. In this example, a Parking Space Number field was created.

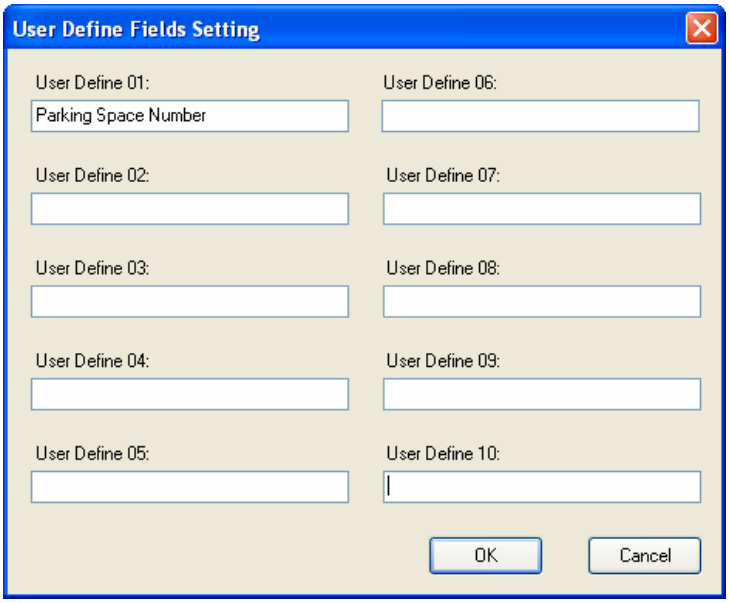


Figure 4-24

To enter personal data:

1. On the menu bar, click **Personnel** and select **User**. The User List window appears.
2. Double-click one listed user to whom personal data should be entered. The User Setup dialog box appears.
3. Click the **User Define** tab. The custom data field you have created now is displayed.
4. Click in the custom data field and enter the appropriate information. In this example, a number is entered in the created Parking Space Number field:

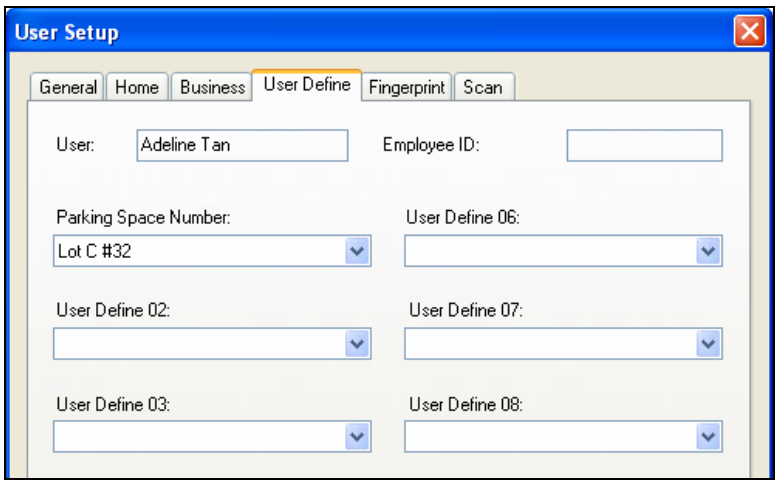


Figure 4-25

4.6.5 Importing/Exporting User Data

From the User List window, you can import and export user data in mdb or xls format. For this function, please refer to *4.3.3 Importing / Exporting Card Data.*

Chapter 5 Video Integration

GeoVision IP devices and certain third-party IP cameras can be connected to the GV-ASManager through the network. Live video can then be accessed for monitoring and surveillance purposes.

The GV-ASManager provides the following video features:

- Live view
- Video playback
- Monitor up to 16 cameras at one time

Note:

1. GeoVision IP devices include GV-System, GV-NVR, GV-Video Server, GV-Compact DVR and GV-IP Camera. For compatible third-party IP cameras, see *Appendix A*.
2. To connect third-party IP cameras to GV-ASManager V2.3 and earlier versions, a NVR Dongle is required.
3. The GV-ASManager only supports GV-System of version 8.120 or later.
4. GV-Fisheye IP Camera is currently not supported on GV-ASManager.

Hint: In the following sections the term “DVR” refers to GV-System and GV-NVR, the term “Video Server” refers to GV-Video Server, and the term “Compact DVR” refers to GV-Compact DVR.

5.1 Mapping Cameras

If you want to map a camera from the DVR to a door, the DVR must be enabled for video access ahead:

- Enable **Control Center Server** (CCS)

To map cameras to a door:

1. On the menu bar, click **Setup** and select **Device**. The Controller List dialog box appears.
2. Double-click one listed controller. The Controller Setup dialog box appears.

3. Click a **Gate** tab.
4. In the Camera Mapping section, click the first **Arrow** button.

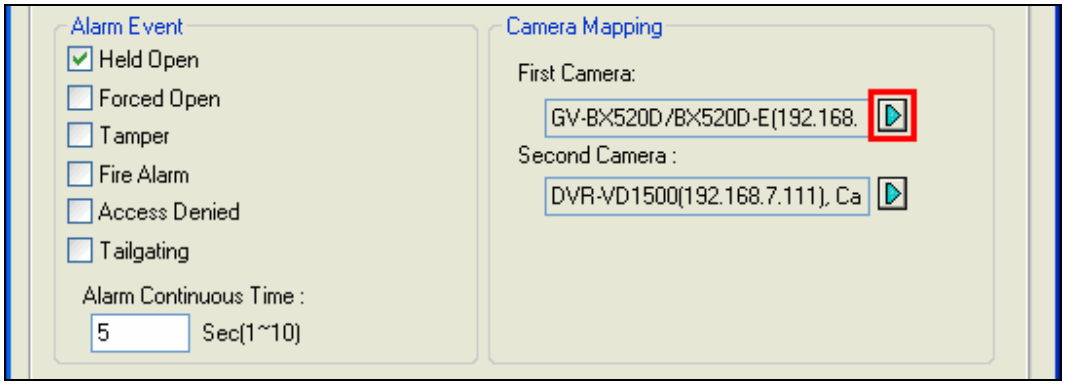


Figure 5-1

5. To connect one IP device to the GV-ASManager, use one of these ways:

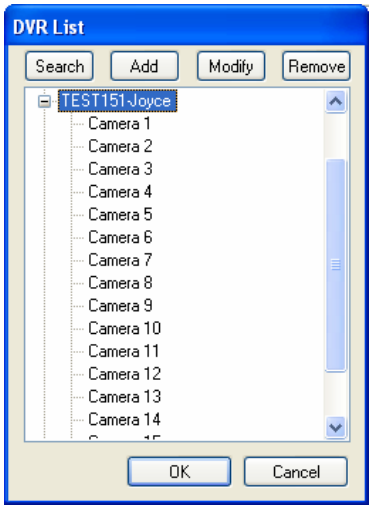


Figure 5-2

- Click **Add**, select the type of the IP device, and type its IP address and login information.
- Click **Search** to detect all GV-IP Devices or GV-Systems on the same LAN. After the found device is added, click the **Modify** button to enter its login ID and password.

6. Expand the Host folder listed in the DVR List dialog box (Figure 5-2), select one camera and click **OK**. The mapped **Host Name** and **Camera** are displayed on the Controller Setup dialog box.
7. To map the second camera to the door, click the second **Arrow** button, and follow Steps 5 and 6 to add another camera.
8. Click **OK** and return to the main screen.
9. Click the specific door on the Device View window. The associated live view is displayed on the Live Video window.

Tip:

1. You can modify the host or camera name in the DVR List dialog box (Figure 5-2) by clicking the listed name directly.
2. GV-ASManager is compatible with third-party IP devices using RTSP, ONVIF and PSIA protocols. To connect through RTSP, ONVIF and PSIA protocols, click the **Add** button, select **Add IPCam Mapping** and select **Protocol** in the **Brand** drop-down list to choose the type of protocol. For the RTSP commands, refer to the third-party IP camera's user manual.

5.2 Accessing a Live View

After mapping cameras to doors, use one of the following methods to access a live view on the Live Video window:

- On the Device View window, click the desired door. Its associated live view will appear.
- On the Camera List window, click the desired camera. Its associated live view will appear.
- On the Alarm Monitor and Access Monitor windows, click the desired event. Its associated live view will appear.

To access live views from multiple IP devices, see *5.4 The MultiView Window* below.

5.2.1 Live Video Window

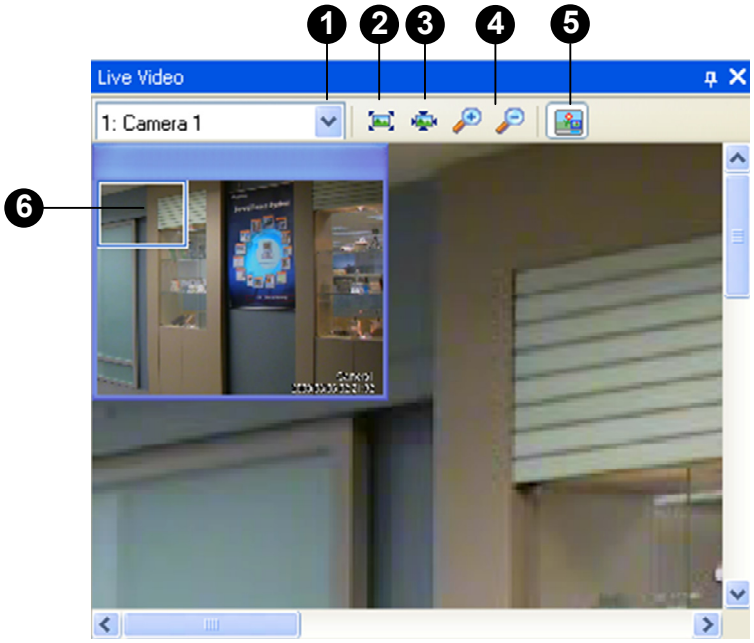


Figure 5-3

The controls on the Live Video window:

No.	Name	Function
1	Camera List	Switches between two cameras when you have mapped two cameras to the selected door.
2	Best Fit	Rescales the image to fit any resized window.
3	Actual Size	Displays the image in its original size.
4	Zoom	Zooms in or out the image.
5	Thumbnail	Displays a thumbnail view (No. 6). When the image size is larger than the Live Video window, drag the box in the thumbnail view to have a close look at the image.
6	Thumbnail View	See the description in No. 5.

5.3 Accessing a Video Image

You can access the video image captured after the access and alarm triggered event.

- On the Access Monitor or Alarm Monitor window, double-click the desired event to display the image. Or, right-click the desired event and select **Show Image** to display the image. Notice if there is no image retrievable, the option will be grayed out.

5.4 The MultiView Window

The MultiView window provides a quick view of up to sixteen preset cameras on one screen. These cameras can be a mix of cameras from several IP devices.

To open and use MultiView:

1. On the menu bar, click **View** and select **MultiView**. The MultiView window appears, similar to Figure 5-4.
2. Drag the desired camera from the Camera List window, and drop it to the required frame on MultiView.

The video generated by the camera appears in this frame. If a different camera view already exists in this frame, the new video takes its place.

Figure 5-4

The controls on the MultiView window:

No.	Name	Function
1	Frame	The frame displays live video from the assigned camera. The camera number and name, controller ID and name will be displayed in the upper left corner.
2	3D	Click this option to have a dynamic 3D live view. In the 3D live view: • Double-click one camera view to switch between 3D mode and thumbnails. Then right-click the 3D image to have different 3D effects. • Double-click one camera view in thumbnails to change different divisions (4, 9 and 16 divisions).
3	Camera List	Select the desired camera. The selected camera will be displayed with mouse focus.
4	Previous / Next Page	Go to the previous or next page of camera views.
5	Matrix View	Select an existing Matrix View (a group of views) from the drop-down list. For details, see *5.4.1 Adding a Matrix View*.
6	Add Matrix	Add a Matrix View.
7	Delete Matrix	Delete a Matrix View.
8	Resolution	Select the image resolution. Double-click one camera view to rescale the image to fit the MultiView window or restore to its set resolution.

Note: It is possible to drag the MultiView window out of the main screen and even drag the window to place at the second computer monitor.

5.4.1 Adding a Matrix View

A Matrix View, or a group of views, is a programmed arrangement of frames in the MultiView window that can present up to sixteen different camera views. Multiple Matrix Views can be added as required.

1. In the Matrix View drop-down list (No. 5, Figure 5-4), enter a name for the Matrix View.
2. Click the **Add Matrix** button. The Matrix View name is created.
3. Drag the desired camera from the Camera List window to an available frame in the window. The video associated with the camera is displayed in the frame.
4. You can repeat Steps 1-3 to add more than one Matrix View. And use the drop-down list to change to a different Matrix View.

5.5 Retrieving Recorded Video

Recorded video can be reviewed by retrieving the video from the DVR (GV-System / GV-NVR) and playing it back. Before you can review video recorded on the DVR, the following function must be enabled to allow remote access:

- DVR: Enable **Remote ViewLog Service** on Control Center Server

To play back video:

- On the Access Monitor or Alarm Monitor window, click the desired event. If recorded video exits, the Playback window will be enabled. Click the **Play** button to play the video clip.

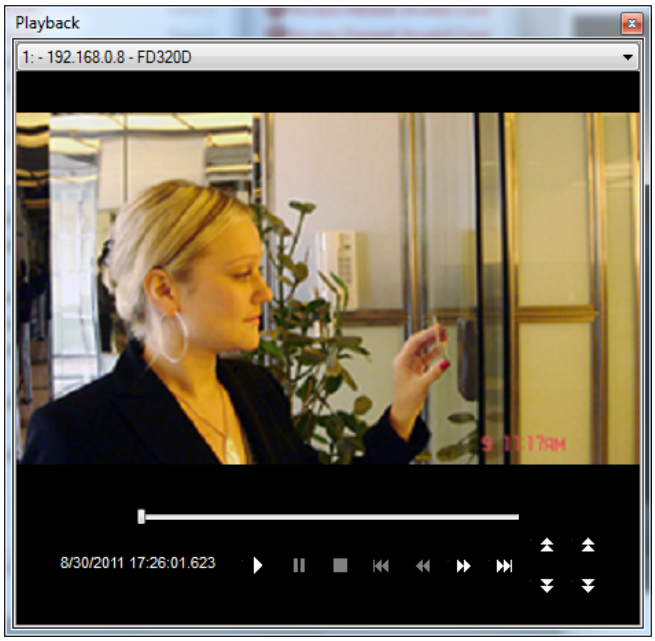


Figure 5-5

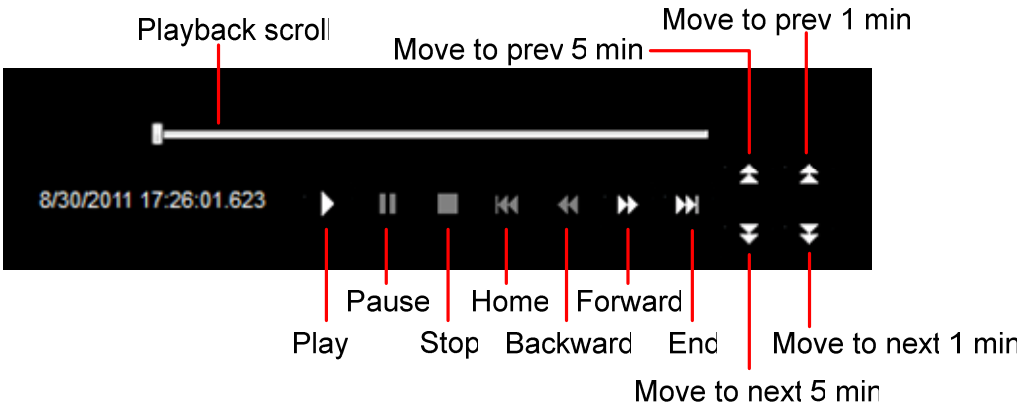


Figure 5-6

Right-click the window to have the following features:

Play Mode	Includes these options: • **Frame by Frame:** Plays back video frame by frame. • **Real Time:** Plays 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:** Plays back video up to 5 minutes. • **Audio:** Turns on or off the video sound.
Render	Includes these options: • **Deinterlace:** Converts the interlaced video into non-interlaced video. • **Scaling:** Smoothens mosaic squares when enlarging a playback video. • **Deblocking:** Removes the block-like artifacts from low-quality and highly compressed video. • **Defog:** Enhances image visibility. • **Stabilizer:** Reduces camera shake. • **Text overlay's camera name and time:** Overlays camera name and time onto the video. • **Text overlay's POS/GV-Wiegand:** Overlays POS or GV-Wiegand Capture data onto the video. • **Full Screen:** Switches to the full screen view.
Tools	• **Snapshot:** Saves a video image. • **Save as AVI:** Saves a video as avi format. • **Download:** Downloads the video clip from a GeoVision IP device to the local computer.

Chapter 6 Anti-Passback

The Anti-Passback is used to ensure one-card and one-way access into and then out of a controlled area. This function prevents users from passing their cards back to a second person to gain entry into the same controlled area. Depending on the number of controllers and communication link, there are three types of Anti-Passback operations: **Anti-Passback**, **Local Anti-Passback** and **Global Anti-Passback**.

Anti-Passback is performed only on one controller, while Local Anti-Passback and Global Anti-Passback can be performed on multiple controllers. Anti-Passback is performed through either RS-485 or TCP/IP connection, while Local Anti-Passback and Global Anti-Passback are performed only through TCP/IP connection. The following table lists the supported operations among GV-AS / GV-EV Controllers.

Model	Anti-Passback	Local Anti-Passback	Global Anti-Passback
GV-AS100	Yes	Yes (GV-ASBox or GV-ASNet required)	Yes (GV-ASBox or GV-ASNet required)
GV-AS110	Yes	Yes (GV-ASBox or GV-ASNet required)	Yes (GV-ASBox or GV-ASNet required)
GV-AS120	Yes	Yes (GV-ASBox or GV-ASNet required)	Yes (GV-ASBox or GV-ASNet required)
GV-AS210	Yes	Yes	Yes
GV-AS410	Yes	Yes	Yes
GV-AS810	Yes	Yes	Yes

6.1 Anti-Passback

Anti-Passback is used on **one controller only**. For this application, select **Local Anti-Passback** at the **Gate** tab of the Controller Setup dialog box (Figure 4-3).

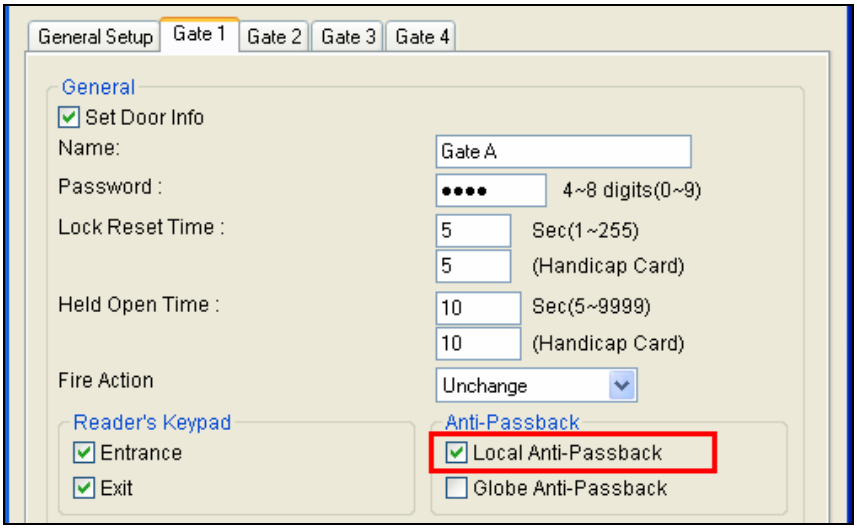


Figure 6-1

To reset Anti-Passback on GV-ASManager or GV-ASRemote, right-click the **Host** or **Controller** icon on the Device View window (Figure 3-3) and select **Reset Anti-Passback**.

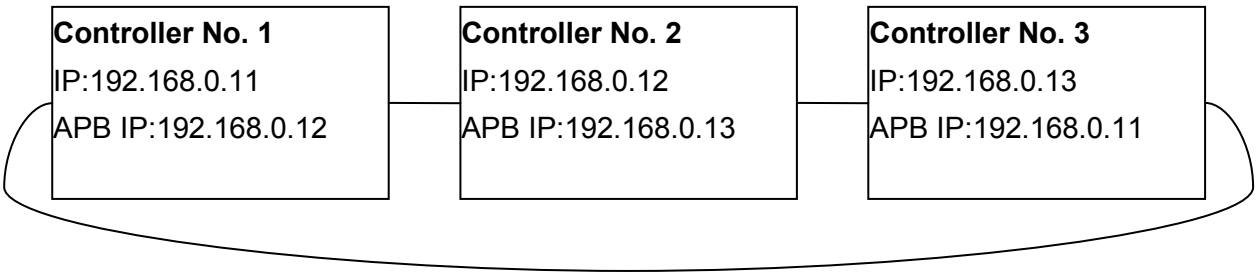
6.2 Local Anti-Passback

Local Anti-Passback is used on **multiple controllers which are associated with network connections**. Before you start, the following conditions must be true:

- The communication mode between GV-ASManager and the controller is Ethernet.
- LAN environment is applied.

Here we use three **GV-AS400 Controllers** as example to explain how to combine three controllers together to operate the Anti-Passback (APB) function. Since Anti-Passback is performed in a network connection, every controller has a unique IP address. When three controllers are connected for Anti-Passback, an APB IP address is then applied for interaction.

For example, Controller No. 1, No. 2 and No. 3 are combined in sequence, as illustrated below. APB IP is the IP address of the associated controller.
IP of Controller No. 1 is 192.168.0.11; APB IP of Controller No. 1 is IP of Controller No. 2.
IP of Controller No. 2 is 192.168.0.12; APB IP of Controller No. 2 is IP of Controller No. 3.
IP of Controller No. 3 is 192.168.0.13; APB IP of Controller No. 3 is IP of Controller No. 1.



To configure Anti-Passback for the three GV-AS400 Controllers:

1. Access the **AS400 Setting** page of the Controller No. 1 Web interface. In the Anti-Passback section, select **Enable** and enter **Info IP** that is the IP address of Controller No. 2, e.g. 192.168.0.12.

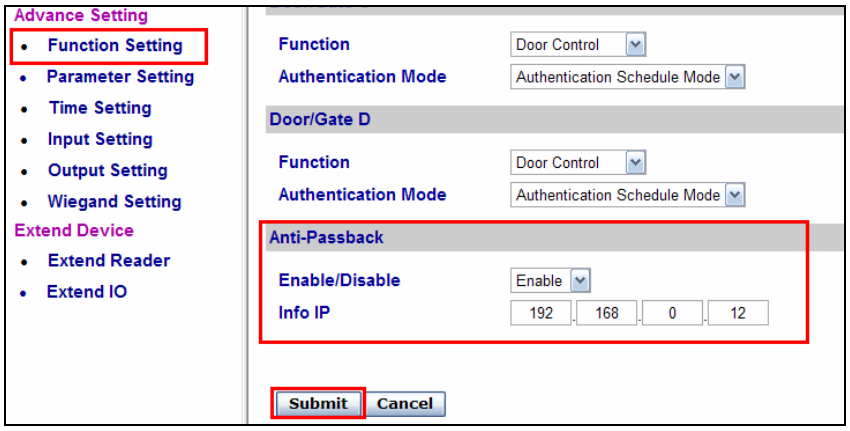


Figure 6-2

2. Access the **AS400 Setting** page of the Controller No. 2 Web interface. In the Anti-Passback section, select **Enable** and enter **Info IP** that is the IP address of Controller No. 3, e.g. 192.168.0.13.
3. Access the **AS400 Setting** page of the Controller No. 3 Web interface. In the Anti-Passback section, select **Enable** and enter **Info IP** that is the IP address of Controller No. 1, e.g. 192.168.0.11.
4. On the ASManager, select **Local Anti-Passback** (Figure 6-1) to start the function.

To reset Anti-Passback on GV-ASManager or GV-ASRemote, right-click the **Host** or **Controller** icon on the Device View window (Figure 3-3) and select **Reset Anti-Passback**.

6.3 Global Anti-Passback

Global Anti-Passback can not only prevent the use of a card to gain successive entries, but track the user around the site.

The diagram below shows a typical site controlled by access control. The following sections will guide you through the steps you would need to go through to configure this site for Global Anti-Passback.

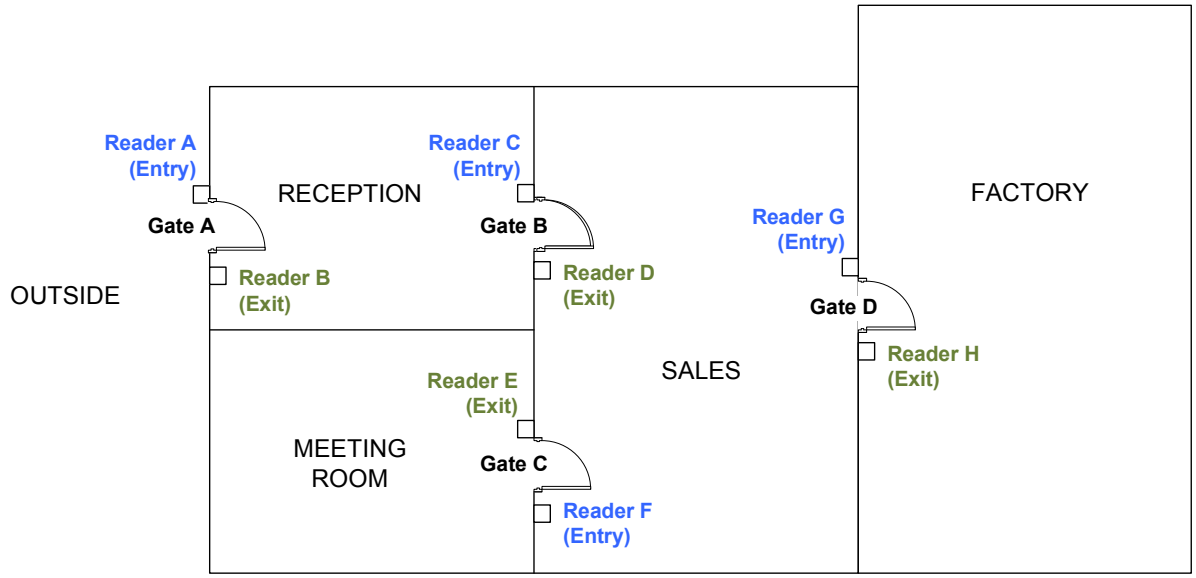


Figure 6-3

6.3.1 Step 1: Enabling Global Anti-Passback

Select **Global Anti-Passback** at each **Gate** tab of the Controller Setup dialog box (Figure 4-3).

6.3.2 Step 2: Configuring Areas

This step is to define the Entry and Exit areas for each door/gate and name the areas properly.

- On the menu bar, click **Setup** and select **Areas**. This dialog box appears.

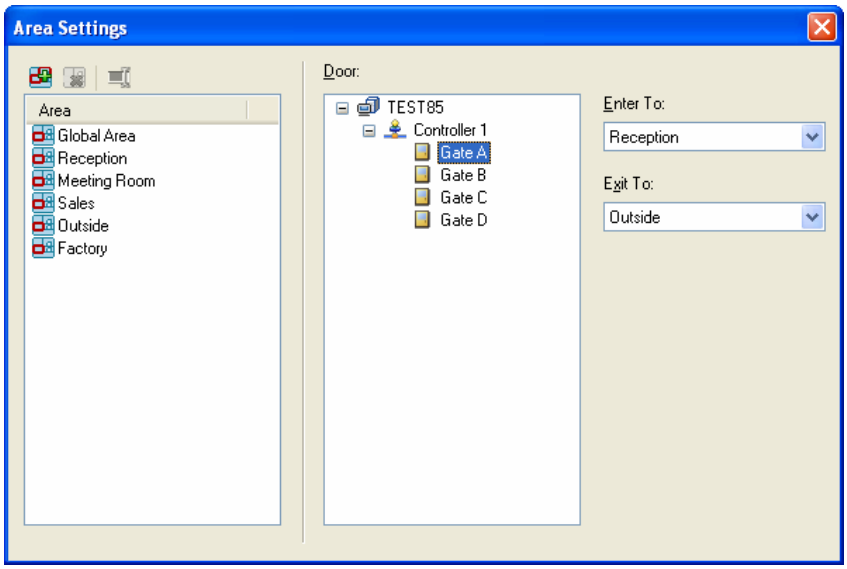


Figure 6-4

Enter to is the area where you enter by accessing the Entry reader. **Exit to** is the area where you exit to by accessing the Exit reader. In this case, we set up like this:
Gate A: **Enter to** Reception; **Exit to** Outside
Gate B: **Enter to** Sales; **Exit to** Reception
Gate C: **Enter to** Meeting Room; **Exit to** Sales
Gate D: **Enter to** Factory; **Exit to** Sales

6.3.3 Step 3: Configuring Readers

This step is to define the Entry and Exit readers for each door/gate. The reader definition tells the GV-ASManager which reader controls the access across the area boundaries.

When users access unauthorized readers, the message **Access Denied: APB (Wrong Area)** will be displayed and the door will remain locked. When users access the same reader successively, the message **Access Denied: APB (Double Entry)** will be displayed and the door will remain locked.

To define readers, you can use GV-ASKeypad or the Web interface of the GV-AS / GV-EV Controller. Here we use the GV-AS400 Web interface as example to define Wiegand readers. For this case, Wiegand reader A (Entry) goes from Outside to Reception, Wiegand reader B (Exit) goes from Reception to Outside and etc.

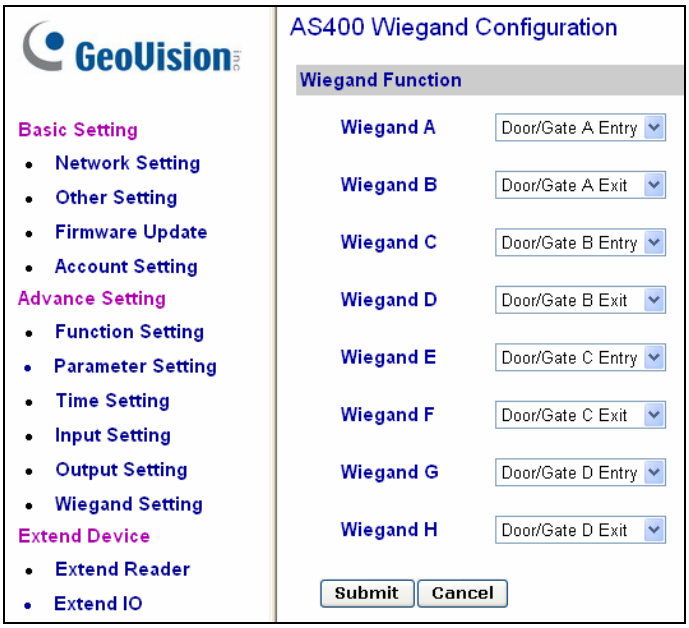


Figure 6-5

6.3.4 Step 4: Configuring Door Contacts

This step is to define the door contact sensor for each door/gate. When the door contact sensor is triggered and the door is unlocked, the GV-ASManager can tell the location of the user based on your area definition at Step 2.

To define door contact sensors, you need to use the Web interface of GV-AS / GV-EV Controller. In this example of GV-AS400 Web interface, Input 01 is used as Door Contact of Door A, Input 02 is used as Door Contact of Door B and etc.

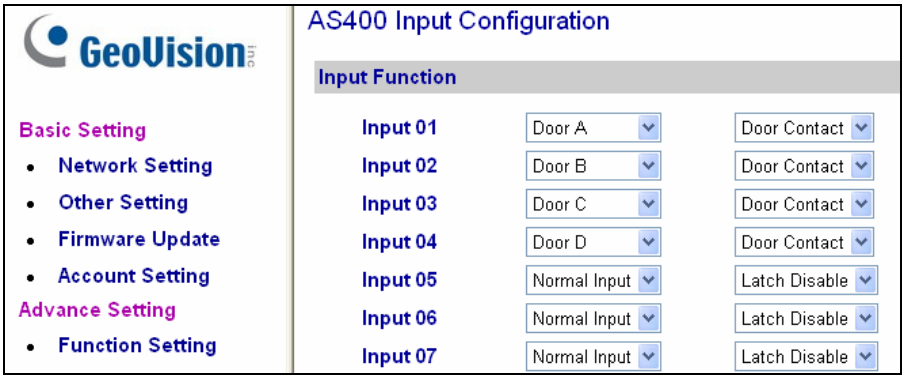


Figure 6-6

6.3.5 Step 5: Locating Users

To locate a user, select **Monitoring** on the menu bar and select **New Locate Person**. When the Exit or Entry reader is triggered, the GV-ASManager can tell if users follow Anti-Passback rules and then grand or deny access. When the door contact sensor is triggered, the GV-ASManager can tell the location of the user.

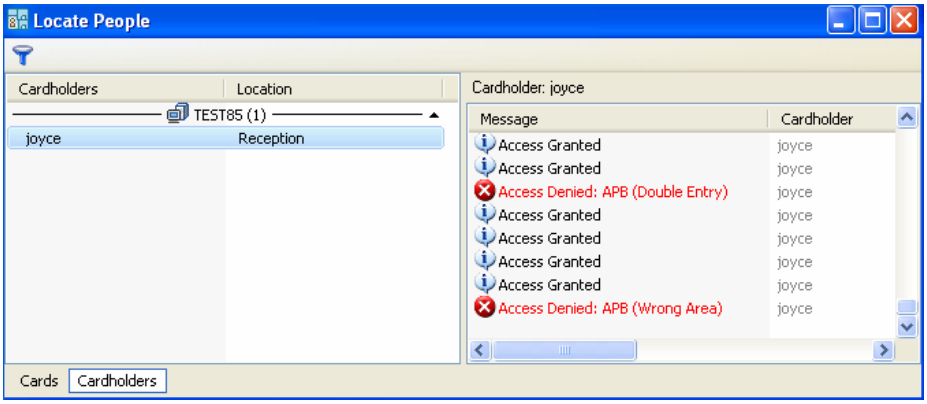


Figure 6-7

To reset Anti-Passback on GV-ASManager or GV-ASRemote, right-click the **Host** or **Controller** icon on the Device View window (Figure 3-3) and select **Reset Anti-Passback**.

Chapter 7 Patrol Tour

Patrol Tour can be created to require security staff to check in at the specified locations during a certain time period.

7.1 Creating Patrol Tour

Create weekly Patrol Tours by specifying the doors where the security staff needs to check in during the specified time period. If the security staff does not present their cards at the specified door on time, an alert notification can be sent using e-mail or SMS message.

1. On the menu bar, click **Setup** and select **Patrol Tours**. This dialog box appears.

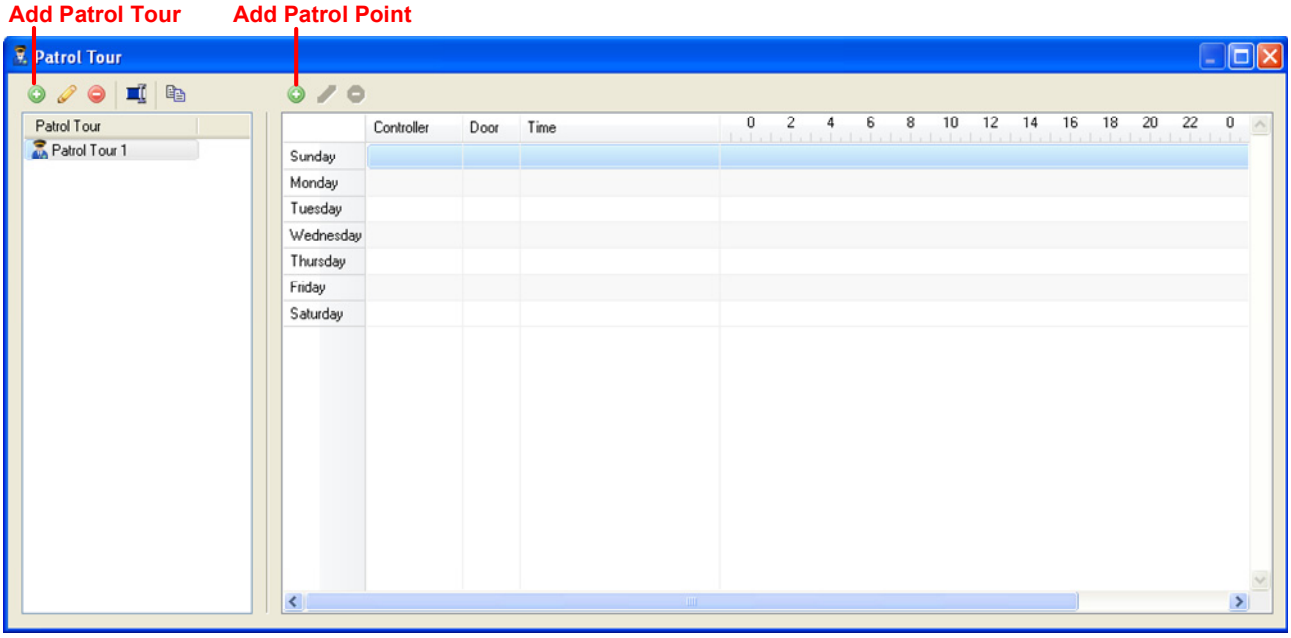


Figure 7-1

2. To create a new Patrol Tour, click the **Add Patrol Tour** button on the left.

3. Select a day in the timeline and click the **Add Patrol Point** button above the timeline. This dialog box appears.

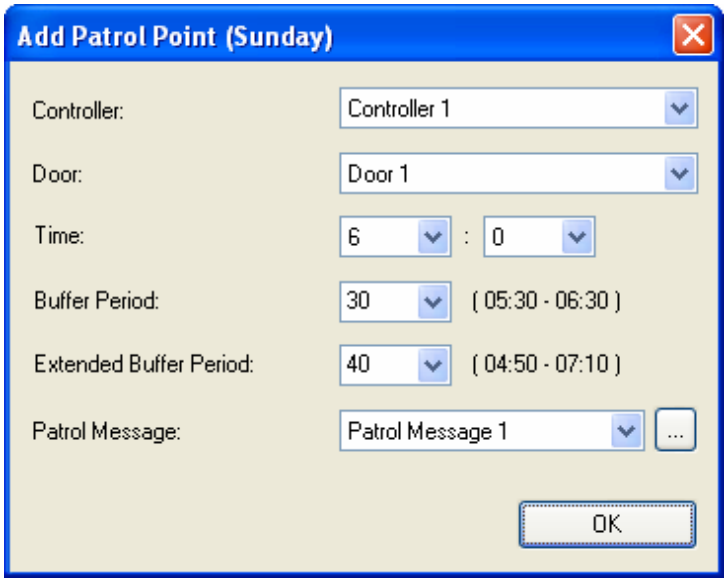


Figure 7-2

4. Select the location and check-in time of the Patrol Point:

   - **Controller:** Select the controller of the door that the security staff needs to patrol.
   - **Door:** Select the door that the security staff needs to patrol.
   - **Time:** Select the time when the security staff should check in at the selected door by presenting the card.
   - **Buffer Period:** Specify the Buffer Period in minutes, which will be added before and after the check-in time specified above. Security staff checking in during the buffer period will be considered on time. Using *Figure 6-7* as an example, the security staff needs to check in between 5:30am and 6:30am to be considered on time.
   - **Extended Buffer Period:** The Extended Buffer Period will be added before and after the Buffer Period specified above. Security staff who checks in during the Extended Buffer Time is considered late or early, and alert notification can be set off if enabled. Using *Figure 6-7* as an example, check-ins between 4:50am - 5:30am will be marked as Early, while check-ins between 6:30am – 7:10am are considered late.
   - **Patrol Message:** Click the **…** button to type an alert message that can be sent using e-mail or SMS when the security staff is on time, early, late or absent.

Note: Security staff checking in outside the Extended Buffer Period will be marked as absent.

---

5. Click **OK**.

6. To add more Patrol Points, select a day and click the **Add Patrol Point** button again to repeat the steps. You can also drag a Patrol Point to another day of week to create a copy.

Below is an example of a completed Patrol Tour, where the dark green zone is when the security staff needs to check in and the light green zone is the extended buffer period.

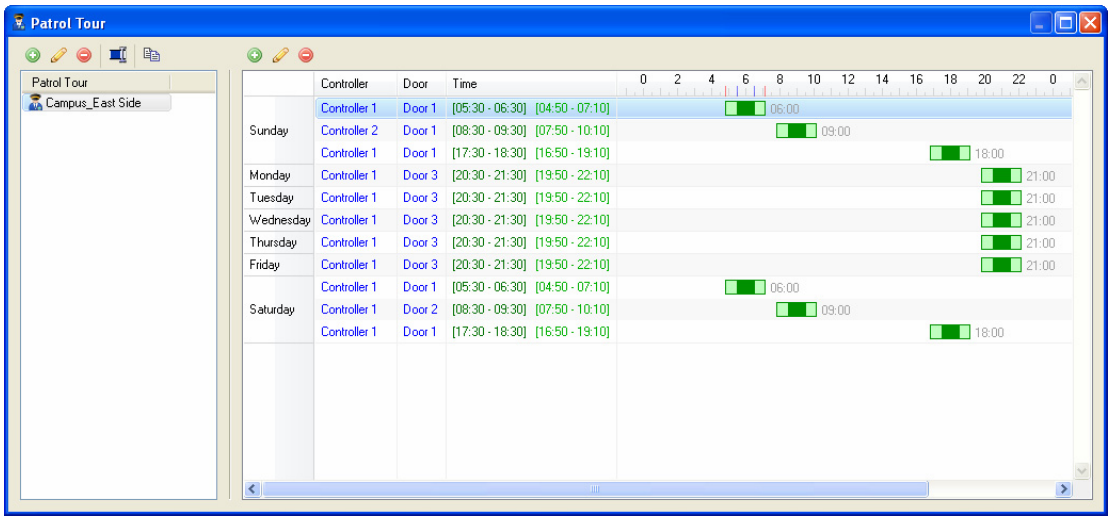


Figure 7-3

7.2 Activating the Patrol Tour

1. After you have created the Patrol Tour, double-click the Patrol Tour. This dialog box appears.

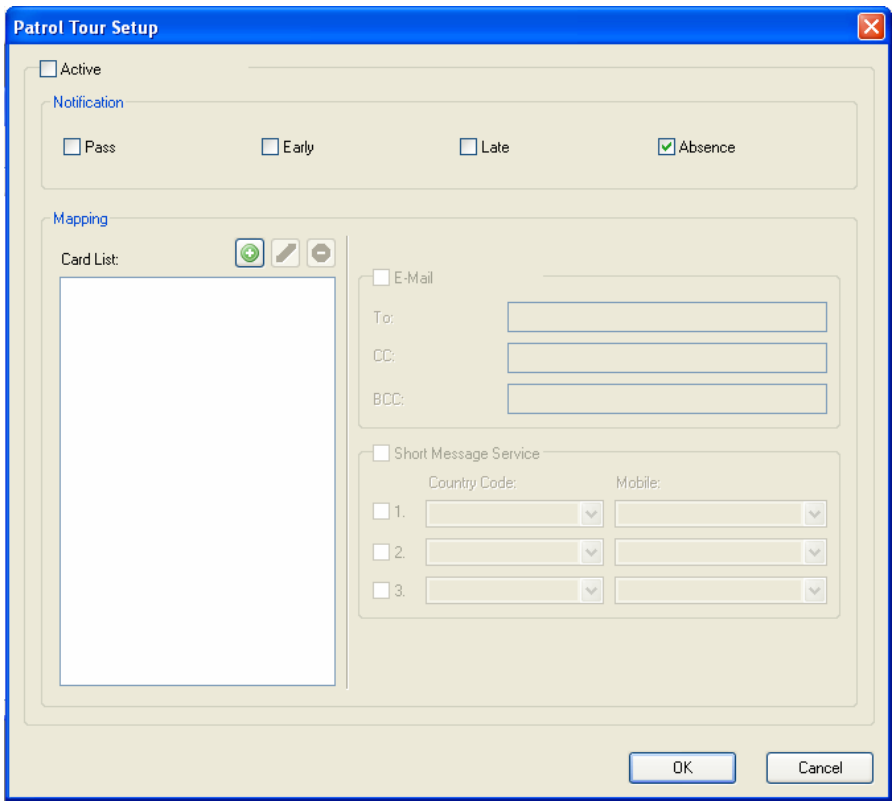


Figure 7-4

2. Click the **Add** button  and select a card. You can add multiple cards if needed and the security staff will be required to present one of the cards listed here.

Note: When the security staff presents the card, the controller may grant or deny door access according to the setting of the card. For example, if the security staff is using a Patrol Card, the door will remained locked and the security staff will check in without opening the door. Refer to *4.3 Setting Cards* to see how to set the cards.

---

3. Double-click a card and select to notify by **E-Mail** and / or **Short Message Service**.

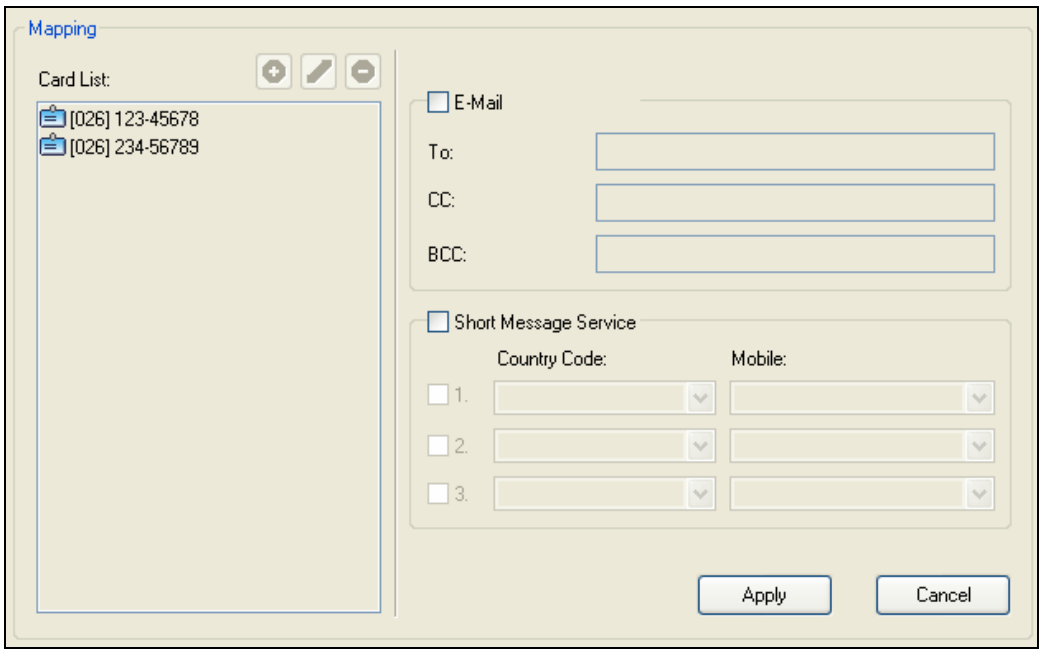


Figure 7-5

- **E-Mail:** Type the e-mail addresses that will receive the alert notifications.
- **Short Message Service:** Type up to 3 mobile numbers and their country codes.

4. To set up alert notifications, select the notification conditions to send alert.

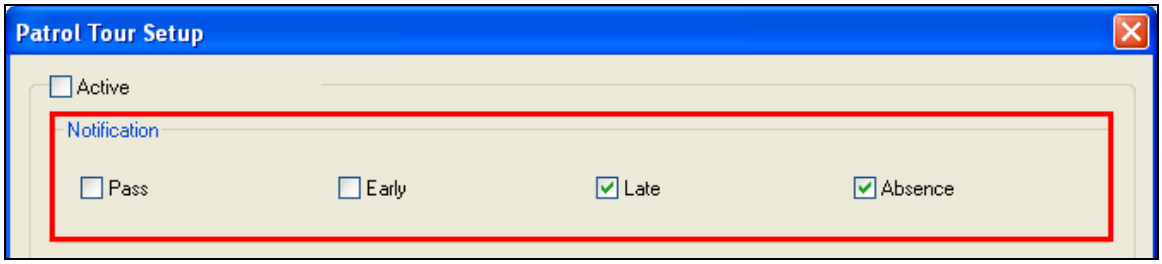


Figure 7-6

5. Click **Apply**.
6. Click **Active** to activate the Patrol Tour and click **OK**.

Note:

1. Once the Patrol Tour is activated, the Patrol Points cannot be modified again.
2. Once the Patrol Tour has been de-activated, the Patrol Tour Setup page will also become unchangeable. Instead of re-configuring a new Patrol Tour from the beginning, you can use the **Copy Patrol Tour** button to create a new patrol tour with the same settings as the de-activated Patrol Tour.

7.3 Monitoring Patrol Activities

To monitor Patrol activities, click **Monitoring** on the menu bar and select **New Patrol Tour Monitor**. This dialog box appears.

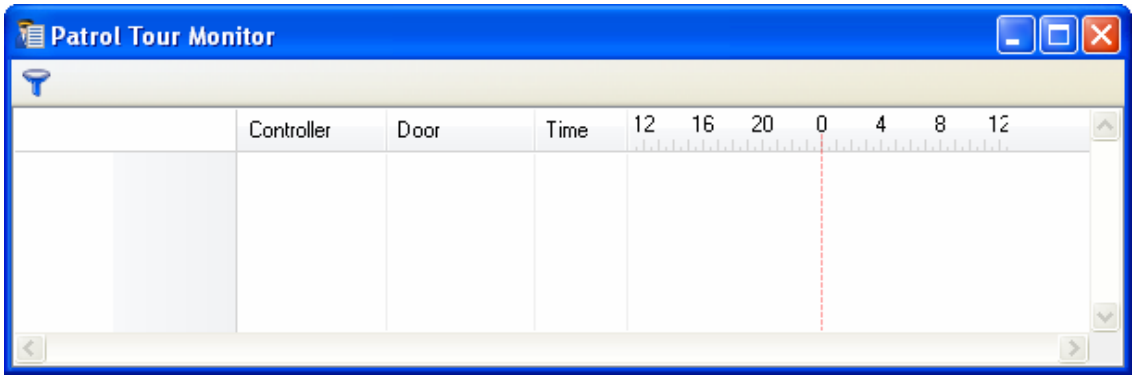


Figure 7-7

Next, click the **Filter** button and select the Patrol Tour you want to monitor. The current status of each Patrol Point will be displayed. A red zone indicates Absence, an orange zone indicates Early or Late, and a green zone indicates On Time.

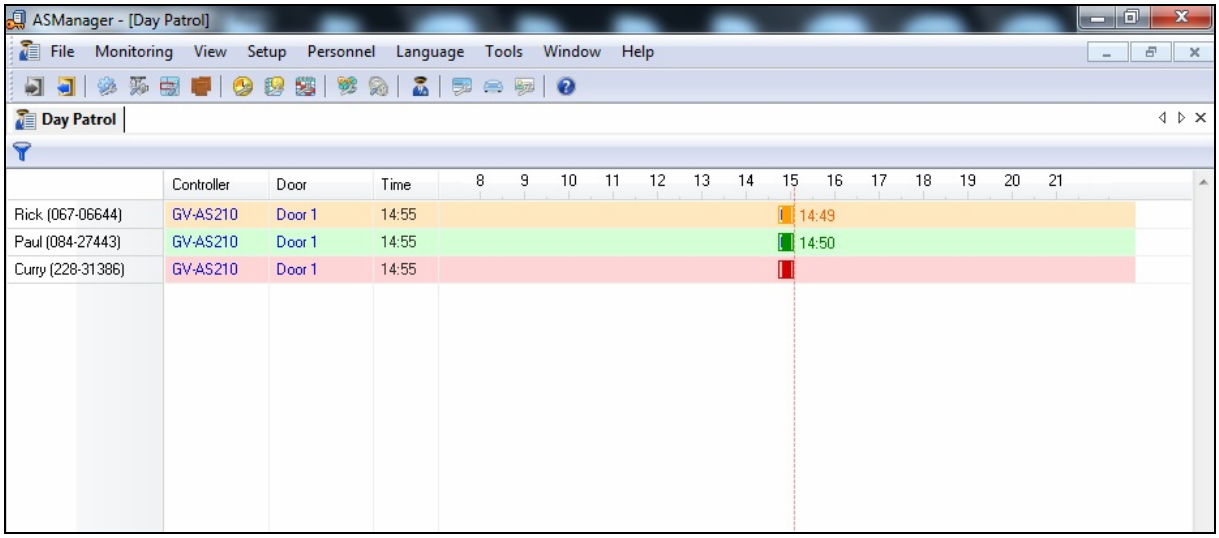


Figure 7-8

7.4 Accessing Patrol Log

Using Patrol Log, you can set search criteria to look up patrol records. Refer to *10.1 Connecting to GV-ASManager* to see how to log into GV-ASWeb.

1. On GV-ASWeb, click the **Patrol Log** icon 

. This window appears.

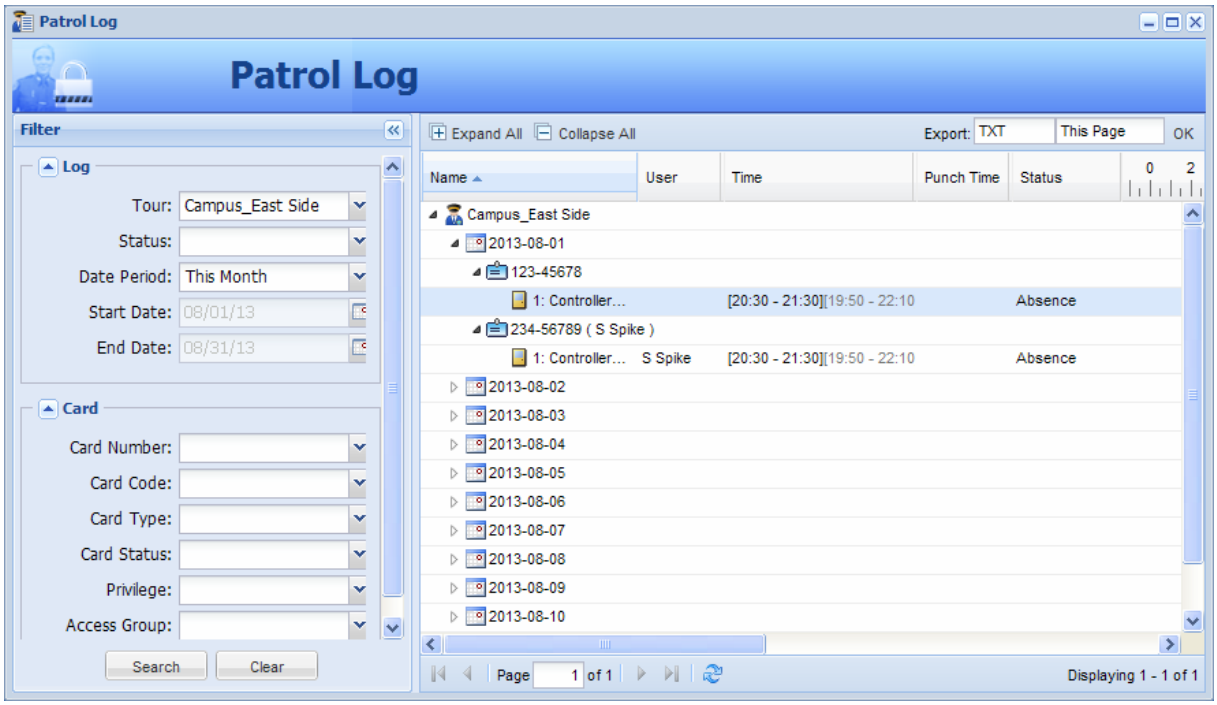


Figure 7-9

2. In the **Filter** section on the left, type or select the search criteria. For example, you can use the **Status** drop-down list to search for all patrol records listed as “Absence.”
3. Click the **Search** button to start the log search.

To see how to export logs, refer to *10.3.3 Exporting Logs* for details. To see how to customize the search results columns, refer to *10.3.4 Defining Columns* for details.

Chapter 8 Other Functions

8.1 Setting Up System User

A system user is a person using the GV-ASManager to monitor door controllers, enroll users or program the system. Using this function, the system supervisor can create new system users with different access rights. Up to 1,000 user accounts can be created.

8.1.1 Adding a New User

1. On the menu bar, click **Tools** and select **Operators**. This dialog box appears.

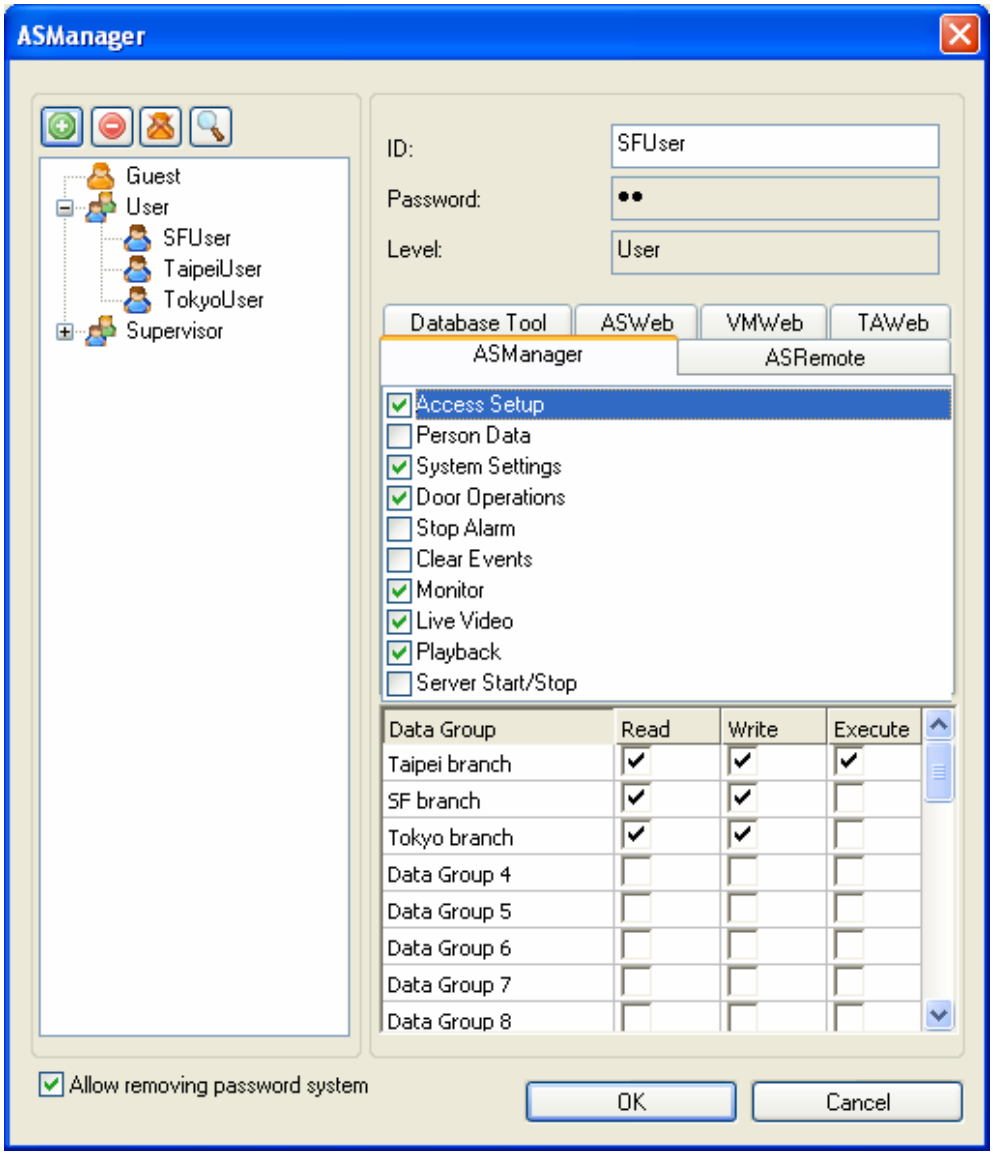


Figure 8-1

2. Click the **New** button at the top left corner. This dialog box appears.

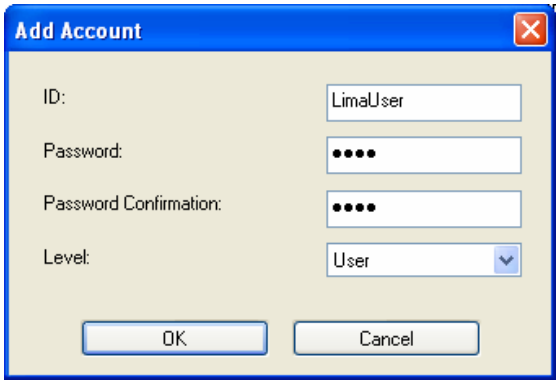


Figure 8-2

3. Type the user's **ID** and **Password**. Re-enter the same password in the Password Confirmation field.
4. Give a **Hint** (optional) that would remind you of the password.
5. Set the user's authorization level to **Supervisor** or **User**. By default, users belonging to the Supervisor level have full rights and permissions to system settings. Users belonging to the User level are restricted from all system settings, and have only limited access to certain functions.
6. Click **OK** to add the user.
7. Click the tab **ASManager**, **ASRemote**, **ASWeb**, **Database Tool**, **VMWeb** or **TAWeb** in the middle of the window. Select the functions to grant access to the system user.
8. In the **Data Group** section, you can optionally select a data group and specify whether the user account will be able to read, write and execute the functions assigned under the data group. A data group may include controllers, cards, users, access groups, time zones and weekly schedules. Up to 32 data groups can be created. You can click the name of the data group to type a different name.
   - **Read:** Privilege to view settings.
   - **Write:** Privilege to view and change settings. When Write is selected, Read will automatically be selected.
   - **Execute:** Privilege to open door, close door and turn off alarm.

   For example, if you select Data Group 4 and only select **Write**, the user will be able to view and change only the settings of the controllers, cards, users, access groups, time zones and weekly schedules assigned under Data Group 4.
9. If you select **Allow Password Removing System**, you can erase all user and supervisor accounts by running **AccessPassUninstall.exe** in the folder where the GV-ASManager program was installed.

8.1.2 Editing an Exiting User

Only supervisors are allowed to edit the information of a system user.

1. Select a user from the user list to display its properties. Or, right-click on a user level (User or Supervisor), and then select **Find Specific Account** for a quick search. A valid password is required to edit a supervisor.
2. Edit the properties as required. Check the **Account Is Disabled** option if you wish to disable this user.

8.2 Setting Up Alert Notification

When alarm conditions occur the system can automatically send SMS alerts and e-mail alerts to one or multiple recipients, as well as activating computer alarm.

8.2.1 Setting SMS Server

Before you can send out SMS alerts, you should configure the SMS server.

1. On the menu bar, click **Tools** and select **SMS Server Settings**. This dialog box appears.

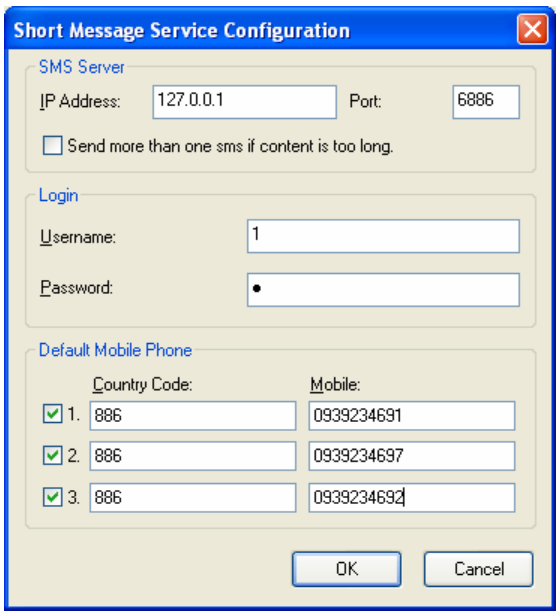


Figure 8-3

2. Type the IP address of the SMS server, its login username and password. Then assign up to three mobile numbers, including country code, which SMS alerts should be sent to. Click **OK**.
3. To enable the SMS connection, click **Tools** on the menu bar and select **Connect to SMS Server**.

Note: For ASCII encoding (English language), SMS text messages are limited to 160 characters; for Unicode encoding (other languages), SMS text messages are limited to 70 characters. If you want to send longer text messages, select **Send more than one sms if content is too long.** The long messages will be split up to 9 segments and go out as multiple SMS messages.

8.2.2 Setting E-Mail Server

Before you can send out e-mail alerts, you should configure the e-mail server.

1. On the menu bar, click **Tools** and select **Email Server Settings**. This dialog box appears.

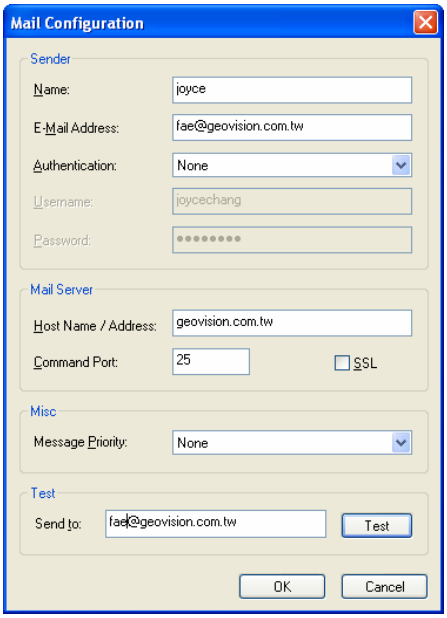


Figure 8-4

2. Set up the following options:

- **Name:** Type the sender's name.
- **E-Mail Address:** Type the sender's e-mail address.
- **Authentication:** If your mail server requires authentication for sending e-mails, select one type of authentication, and type the valid username and password.
- **Host Name/Address:** Type the name of the mail server.
- **Command Port:** Keep the default port 25, or modify it to match that of the mail server.
- **SSL:** Enable the Secure Sockets Layer (SSL) protocol to ensure the security and privacy of Internet connection. When the option is enabled, the Command Port is changed to 465.
- **Message Priority:** Assign the message a priority so the recipient knows to either look at it right away (high priority) or read it when time permits (low priority). A high priority message has an exclamation point next to it. Low priority is indicated by a down arrow.
- **Send to:** Type a valid e-mail address and click the **Test** button to check if the server setup is correctly configured.

8.2.3 Setting Notification

1. On the menu bar, click **Tools** and select **Notifications**. This dialog box appears.

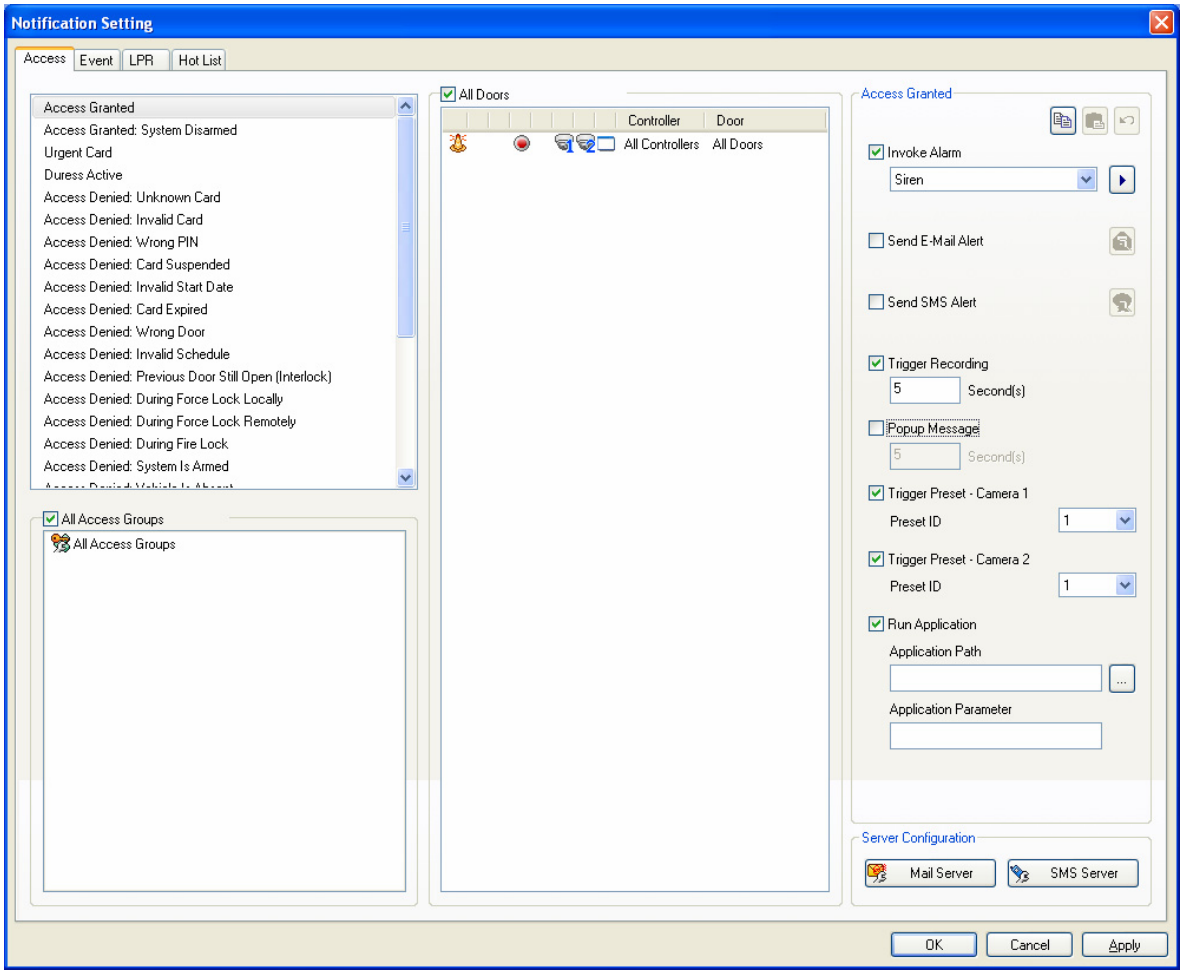


Figure 8-5

2. Click the **Access**, **Event**, **LPR** or **Hotlist** tab to set the alert methods for different events.
3. Select an event.
4. For **Access** and **LPR** tabs, you can clear the check mark for **All Access Groups** and select a specific access group. The alert will only be set off when specified event is triggered by members of that access group.

5. On the right, select the alert methods:

   - **Invoke Alarm:** Enable the computer alarm when the selected event occurs.
   - **Send E-Mail Alert:** When you select this option, an e-mail will pop up. Enter the recipient's e-mail address and alert subject. Then you can enter your own content, or use the buttons on the text window to send out the programmed information automatically.

     For example, if you click the  button, the sent SMS alert will include the controller information. For details see *C. E-Mail and SMS Alert Symbols* in *Appendix*.

   - **Send SMS Alert:** When you select this option, a dialog box will pop up. Ensure the preset mobile number(s). Select Text Code Type. Then type your messages; otherwise click the buttons on the text window to send out the programmed information automatically. See the above example in "Send E-Mail Alert".
   - **Trigger Recording:** Enable recording of DVR, Video Server or Compact DVR when the selected event occurs. You can specify the recording time between 1 and 300 seconds. For the function to work, you must activate monitoring on these IP devices ahead.
   - **Popup Message:** An associated live view will pop up for alert when the selected event occurs. You can specify the duration of the live view remains on the screen between 1 and 300 seconds.
   - **Trigger Preset:** Direct the camera(s) to a preset point when the selected event occurs.
   - **Run Application:** Specify the **Application Path** and the designated application will run when the selected event occurs. You can also type a command in the **Application Parameter** field to execute a function of that application.

6. To define more than one event with the same alert configuration, first right-click the previously defined event on the list and select **Copy** to save its settings. Then use Ctrl + left click or Shift + left click to select several events. Right-click the selected events and select **Paste** to have the same settings.

Note: For text code type, select **ASCII** for English that is limited to 160 characters and select **Unicode** for text of other languages that is limited to 70 characters.

8.3 Startup, Backup and Export Setup

To access the Auto Startup, Auto Backup and Export to File functions, click **Tools** on the menu bar and select **Option**. This dialog box appears.

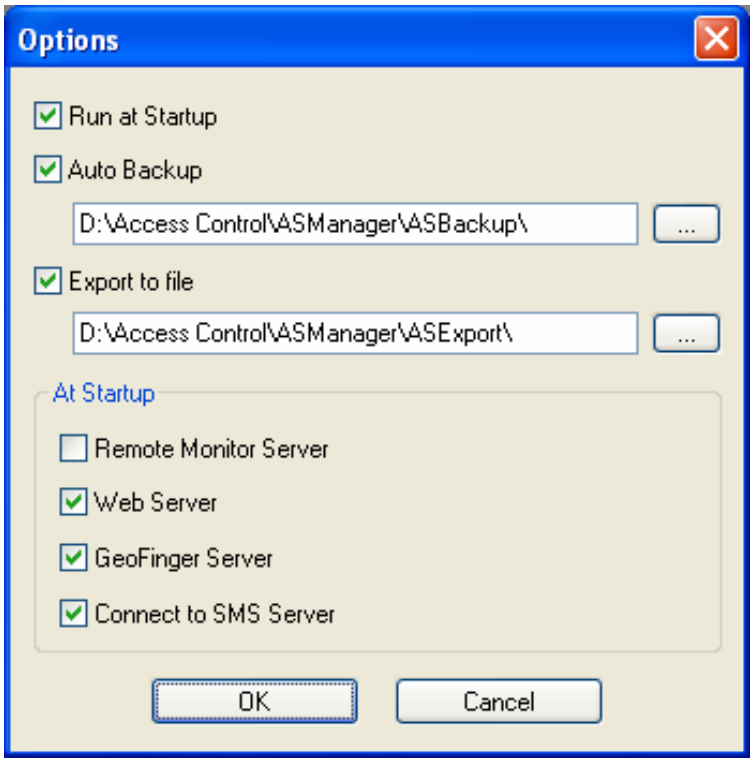


Figure 8-6

- **Run at Startup:** Run GV-ASManager at Windows startup.
- **Auto Backup:** You can also specify a path for the **Auto Backup** function to automatically save another copy of log and image files. The Auto Backup function performs backup at 24:00 A.M every day. By default, the log and image files are saved at **C:\Access Control\ASManager\ASBackup**.
- **Export to File:** Access data will be exported to text files at the specified storage path and can then be utilized by 3rd party programs. The access data will be listed in the file name of the text files. Up to 5000 files can be stored.

[At Startup]

- **Remote Monitor Server:** Enable Remote Monitor Server upon GV-ASManager startup. Remote Monitor Server needs to be enabled to utilize GV-ASRemote.
- **Web Server:** Enable Web Server upon GV-ASManager startup. Web Server needs to be enabled to access GV-ASWeb.

- **GeoFinger Server:** Enable GeoFinger Server upon GV-ASManager startup. GeoFinger Server needs to be enabled to enroll fingerprints remotely through TCP/IP.
- **Connect to SMS Server:** Enable SMS Server upon GV-ASManager startup. SMS Server needs to be enabled to receive alert notifications through SMS messages.

Note:

1. Web Server and GeoFinger Server options are selected by default.
2. To back up the Configuration files, see *14.3 Other Database Settings*.

8.4 Setting Up GV-GF Fingerprint Readers

GV-ASManager can enroll users' fingerprints using **GV-GF1911** / **GV-GF1921 / GV-GF1922** and upload the fingerprint data to the **GV-GF Fingerprint Readers** installed on the controllers. To gain access, the user's fingerprint must match the enrolled fingerprint.

Note: GV-GF1911 / 1912 / 1921 / 1922 is only supported in GV-ASManager 4.0 or later.

For details on how to enroll fingerprints and how to upload fingerprint data to GV-GF Fingerprint Reader, refer to *Chapter 3 Fingerprint Only Mode* in the *GV-GF Fingerprint Reader User's Manual*.

8.5 Scanning Driver's Licenses and Business Card

GV-ASManager can work with **SnapShell ID Scanner** to let you acquire and edit the personal data from driver's licenses and business cards.

Note: This function only supports SnapShell ID Scanner with SDK driver version.

---

1. Consult the Scanner's documentation to connect the Scanner with the GV-ASManager.
2. On the menu bar, click **Personnel** and select **Users**. The User List dialog box appears.
3. Click the **New** button. The User Setup dialog box appears.
4. Click the **Scan** tab. This dialog box appears.

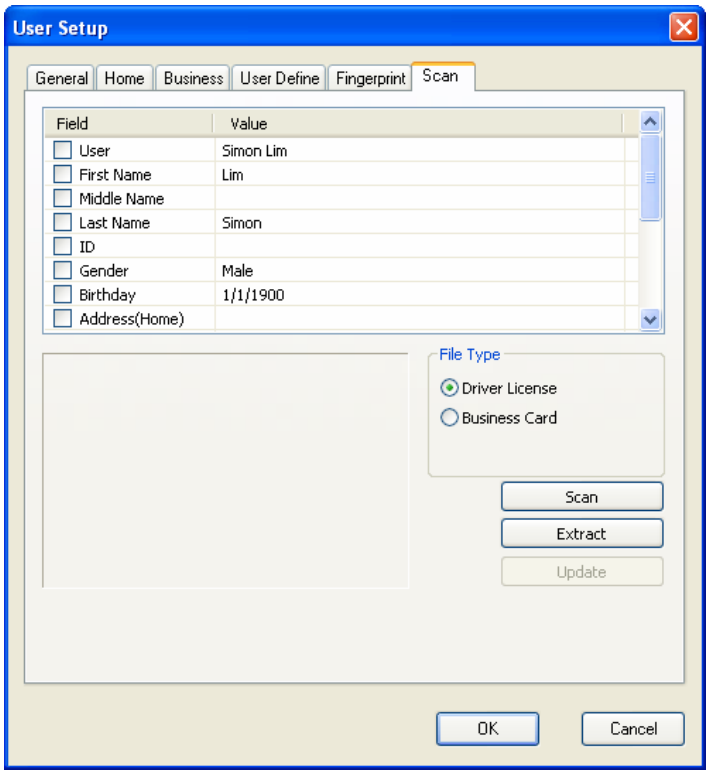


Figure 8-7

5. In the File Type field, select **Driver License** or **Business Card**. Here we use the Driver License as the example to demonstrate the following steps.

6. Place a driver's license on the Scanner and click **Scan**. The license image is displayed.

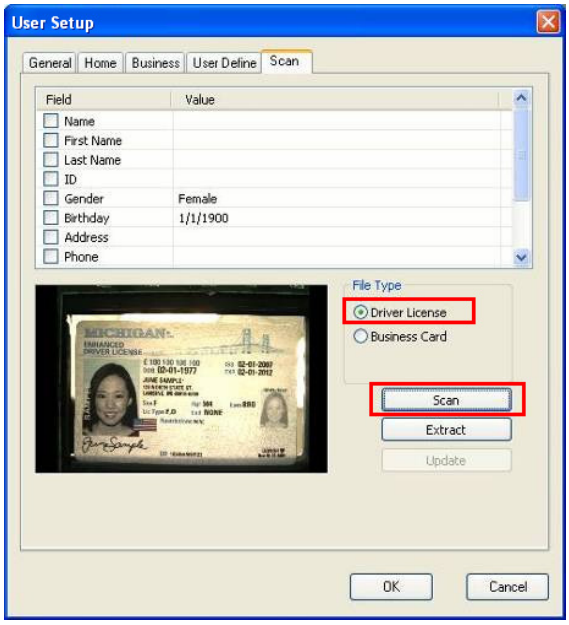


Figure 8-8

7. Click the **Extract** button to read the license data. The data is displayed in the **Value** column.
8. To modify the data, click the desired **Value** column and type the next texts. Click anywhere in the dialog box when you are finished with the modification.

Figure 8-9

9. Click the **Update** button. This driver's license is saved to the GV-ASManager's database.
10. Now you can click the **Home** tab to view the information of the driver's license, or click the **Business** tab to view the information of the business card if scanned.

8.6 Setting Hot Keys to Quickly Control Doors

You can assign hot keys to quickly control individual or multiple doors to perform one of the commands below: Unlock door, lock down, force lock, force unlock, disable door lock operation.

1. On the menu bar, click **Tools** and select **Hot Key Settings**. This dialog box appears

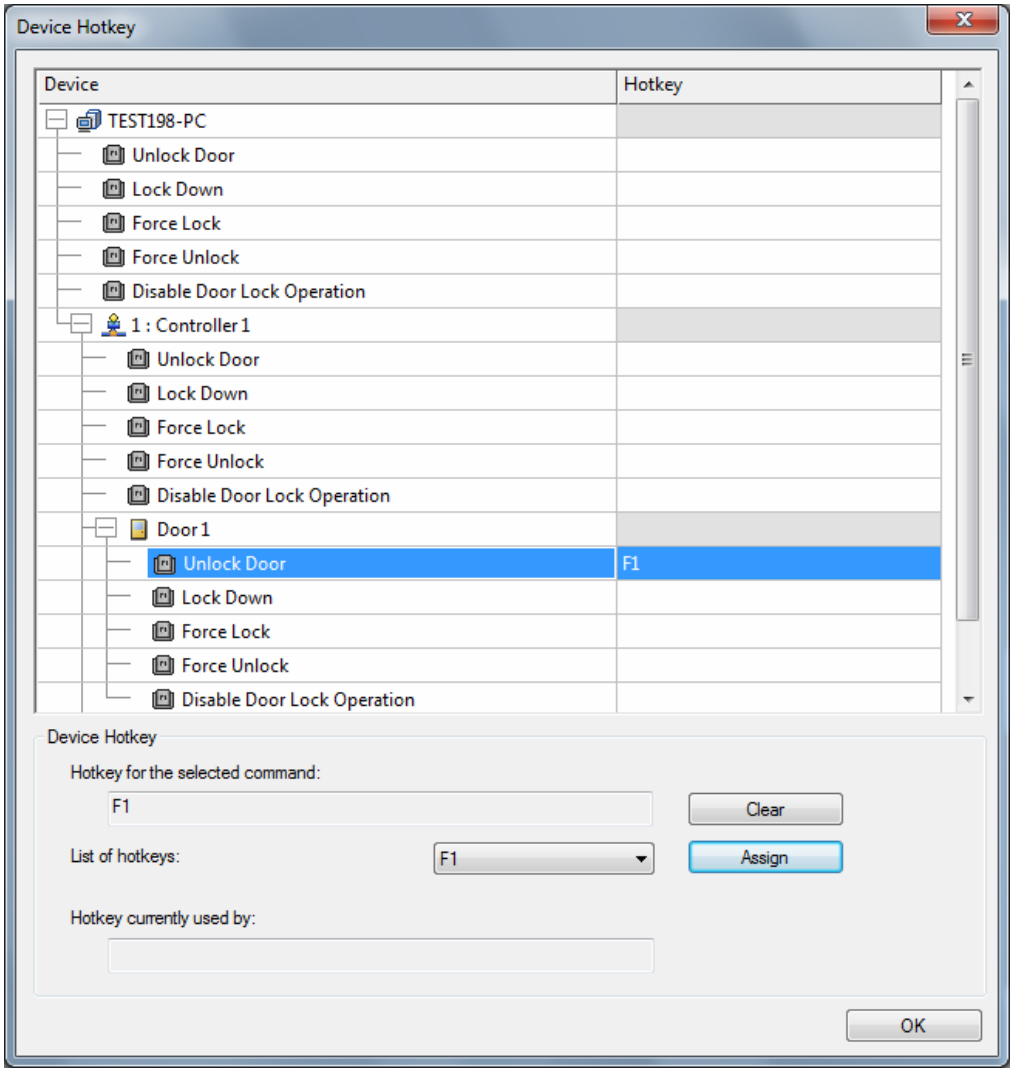


Figure 8-10

2. Under the Device list, select the GV-ASManager, a controller, or a door and select the command you want to assign a hot key.
3. Next to **List of hotkeys**, select the hot key and click **Assign**. If the hot key is already assigned, the assigned command will be listed under **Hotkey currently used by**.
4. Click **OK**.

8.7 Defining New Card Formats

By default, GV-ASManager only recognizes identification cards of certain bit formats that have been pre-defined. To use cards with other data formats, you will need to define the card format so that GV-ASManager can recognize it.

1. On the menu bar, click **Personnel** and select **Code Format Settings**. The pre-defined card formats are listed.

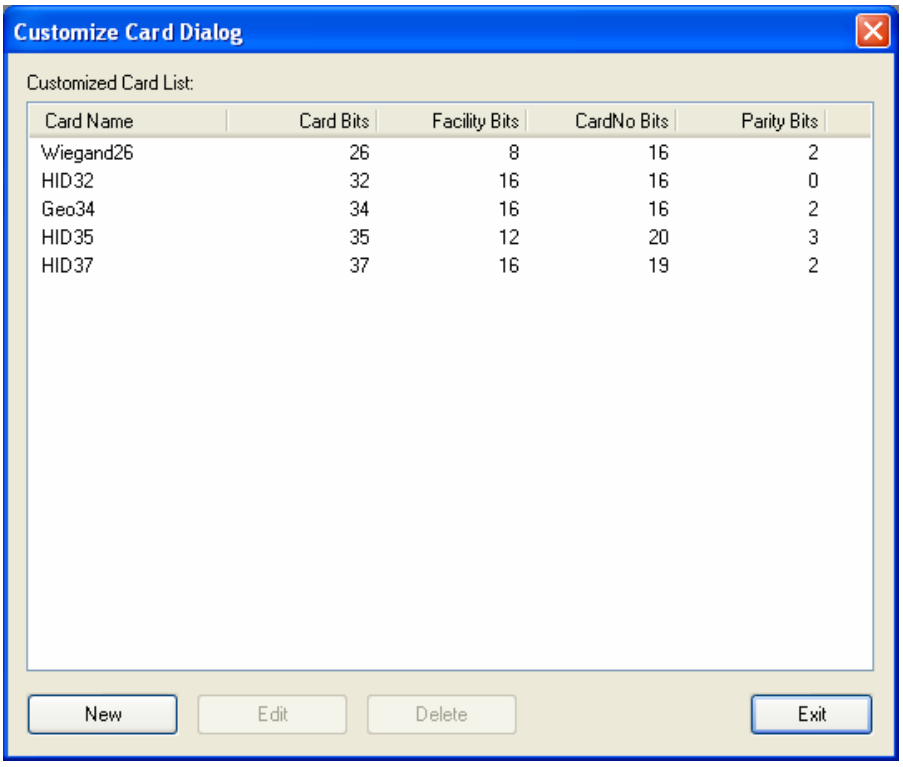


Figure 8-11

2. To define a new card format, click the **New** button. This dialog box appears.

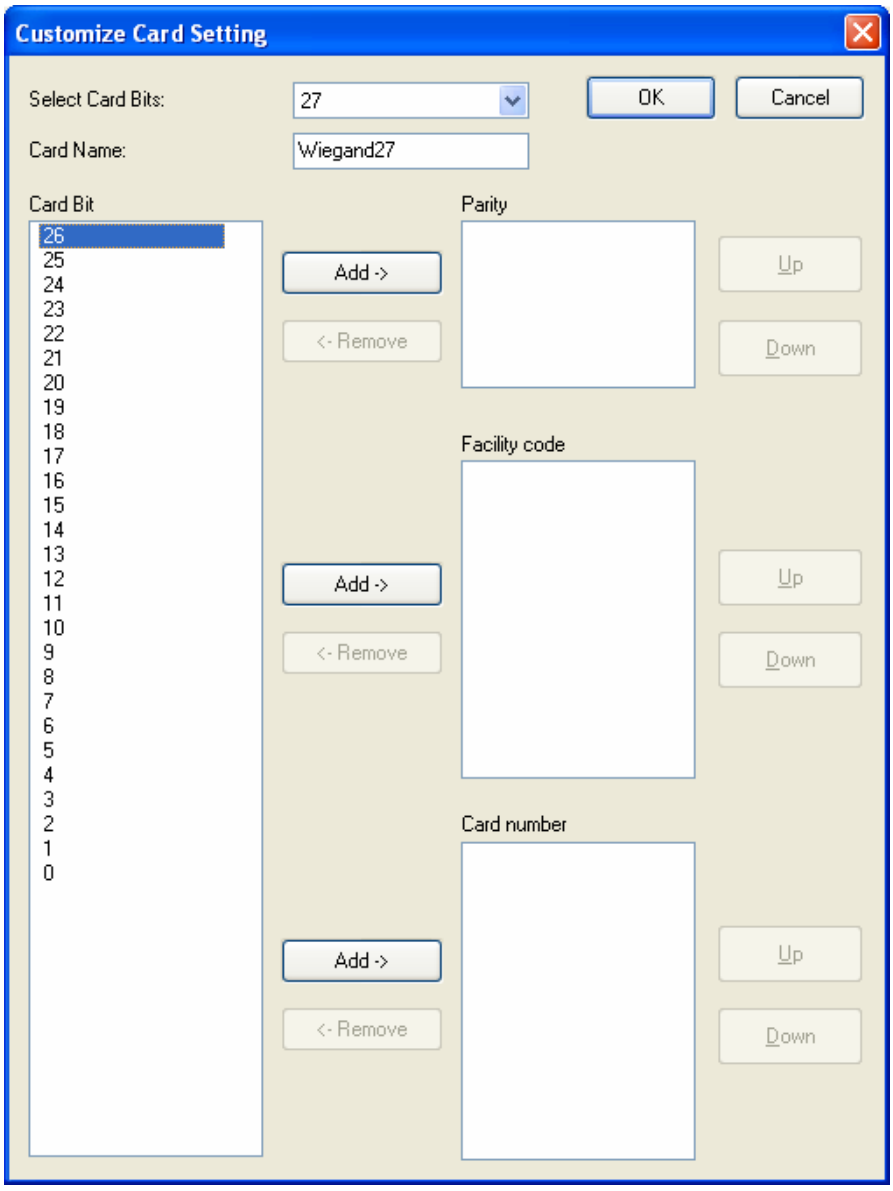


Figure 8-12

3. Next to **Select Card Bits**, select the card bit.
4. For each number under **Card Bit**, define whether it is **Parity**, **Facility Code** or **Card Number** by clicking the **Add** button. The exact steps to defining card format vary from card format to card format.
5. When you are done, click **OK**.

Chapter 9 GV-ASRemote

The client software GV-ASRemote is designed to monitor multiple GV-ASManagers over the network. The GV-ASRemote provides the following features:

- Remote monitoring
- Remote live view and playback
- Remote control: stop alarms and force the door to lock/unlock

9.1 Installing GV-ASRemote

Insert Software DVD to your computer and a window will pop up automatically. Select **Install GeoVision Access Control System**, click **GeoVision Access Control System** and follow on-screen instructions to complete the installation.

9.2 The GV-ASRemote Window

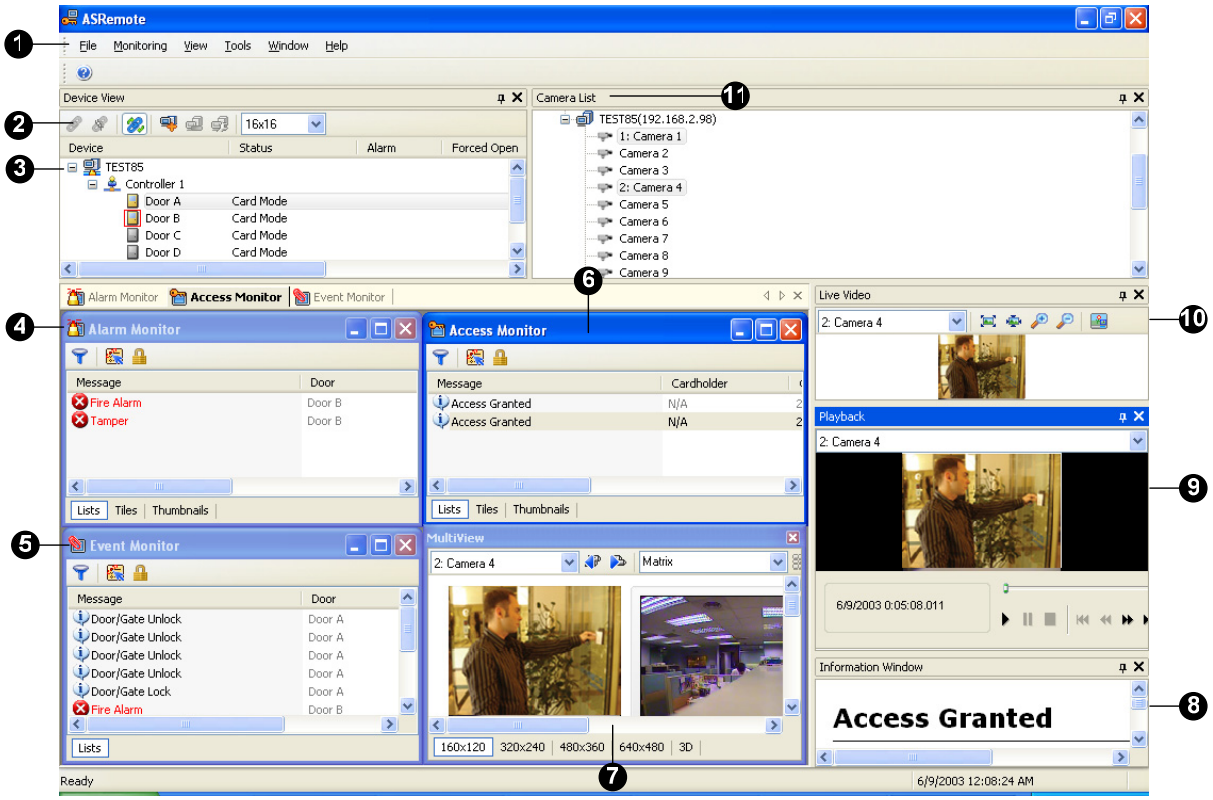


Figure 9-1

No.	Name	Function
1	Menu Bar	The Menu Bar includes the options of **File** (log in / out the GV-ASManager), **Monitoring** (display monitor windows of alarm, access and event), **View** (display the function windows) and **Window** (arrange the display of different windows).
2	Toolbar	The Toolbar includes the options of **Connect**, **Disconnect**, **Auto Connect**, **Add Host**, **Remove Host**, **Settings** and **Resolution**.
3	Device View	Displays a list of connected doors and their current status.
4	Alarm Monitor	Displays alarm events of doors.
5	Event Monitor	Displays monitored events of doors.
6	Access Monitor	Displays access activities of doors.
7	MultiView	Displays live views of connected cameras from multiple IP devices. For details, see *5.4 The MultiView Window*.
8	Information Window	Displays the information of doors, card readers and monitored events.
9	Playback	Plays back recorded events from a compatible GeoVision IP device. For details, see the same operations in *5.5 Retrieving Recorded Video*.
10	Live Video	Displays live views of one connected camera. For details, see the same operations in *5.2 Accessing Live View*.
11	Camera List	Displays a list of connected cameras.

9.2.1 Toolbar

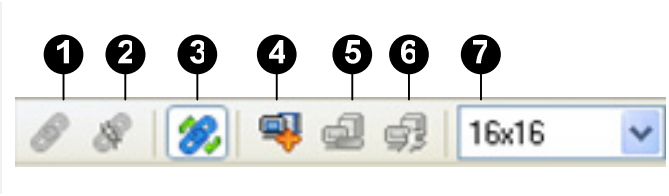


Figure 9-2

The buttons on the Toolbar of GV-ASRemote:

No.	Name	Function
1	Connect	Starts the connection with the GV-ASManager.
2	Disconnect	Ends the connection with the GV-ASManager.
3	Auto Connect	Retries to build the connection with the GV-ASManager.
4	Add Host	Adds a GV-ASManager host to the list.
5	Remove Host	Deletes a GV-ASManager host on the list.
6	Settings	Edits the settings of GV-ASManager hosts.
7	Resolution	Changes the size of icons to 16 x 16, 24 x 24 or 32 x 32.

9.3 Connecting to GV-ASManager

Before GV-ASRemote may connect to one GV-ASManager, the GV-ASManager must allow the remote access by this procedure:

- Click **Tools** on the menu bar, select **Servers** and enable **Remote Monitor Server**.

  When the server is started, the icon  appears at the bottom of the main screen.

To create a GV-ASManager host and enable connection to the GV-ASManager:

1. On the toolbar, click the **Add Host** button. This dialog box appears.

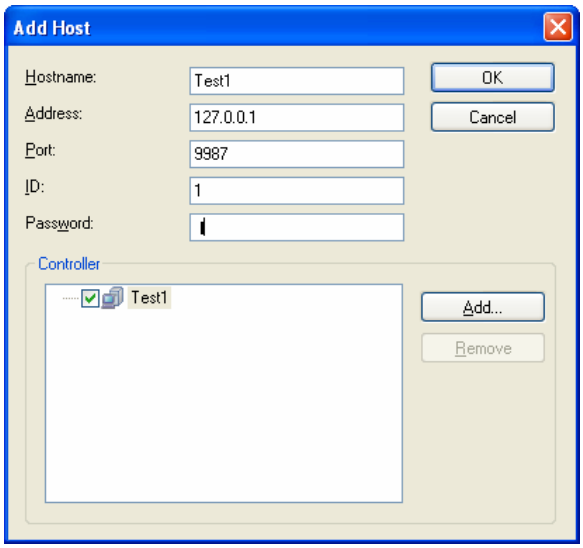


Figure 9-3

2. Give a hostname, type the GV-ASManager's IP address, modify the port number if necessary, and type the GV-ASManager's login ID and password.
3. Click **Add**. This dialog box appears.

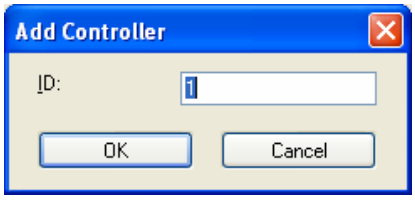


Figure 9-4

4. Type the ID of the controller associated with the GV-ASManager and click **OK.**
5. To add more controllers, repeat Steps 3-4.

6. Click **OK** and return to the main screen. A host folder will be displayed on the Device View window as example below.

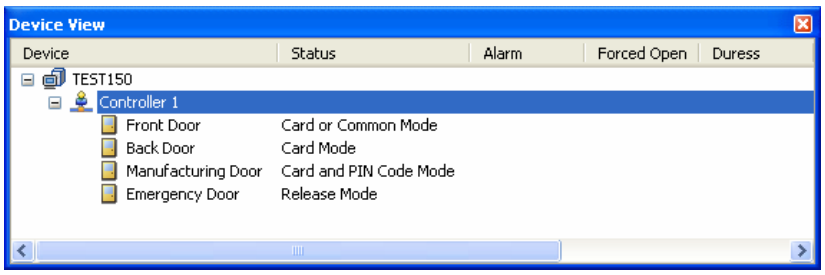


Figure 9-5

If the icon appears, it indicates the connection between GV-ASManager and GV-ASRemote has been established.

If the icon appears, it indicates the connection failed. Make sure GV-ASManager is enabled for the Remote Monitor Server function.

Note: For the disconnection messages displayed on the Status column (Figure 4-7), see *D. Controller Status* in Appendix.

Chapter 10 GV-ASWeb

The GV-ASWeb allows you to access data and settings on the GV-ASManager over the network. Connecting to one GV-ASManager at a time, users can remotely watch live video, view event data, download logs in different formats, and set up camera / cards / users / vehicles / controllers / schedule using Web interface.

To use the GV-ASWeb, the version of browser in the client PC must be **Internet Explorer 7 or later**.

10.1 Connecting to GV-ASManager

Before GV-ASWeb can connect to a GV-ASManager, the GV-ASManager must be set to allow remote access:

- On the menu bar, click **Tools**, select **Servers** and enable **Web Server**. This dialog box appears.

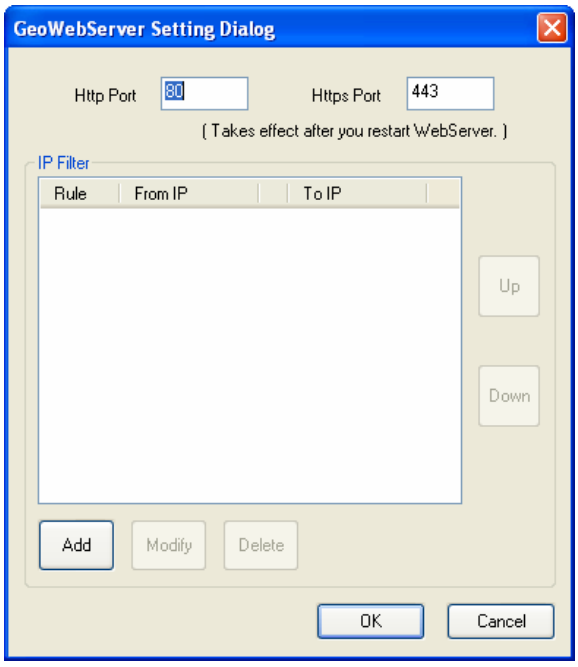


Figure 10-1

If you want to grant or deny the access from certain IP addresses, click **Add**, and type the IP addresses. Otherwise click **OK** to start the connection. When the server is started, the icon  appears at the bottom of the main screen.

To start the GV-ASWeb:

1. There are two ways to link to GV-ASWeb:

   - Under the device list, right-click the PC and click **ASWeb or ASWeb with SSL**.

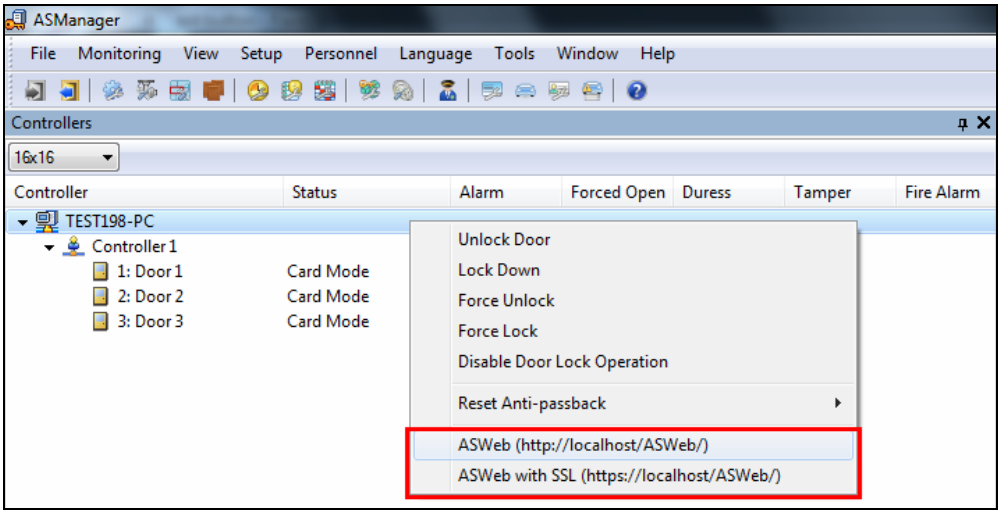


Figure 10-2a

   - Open an Internet browser, and type the IP address of the GV-ASManager to be connected. This web page appears.

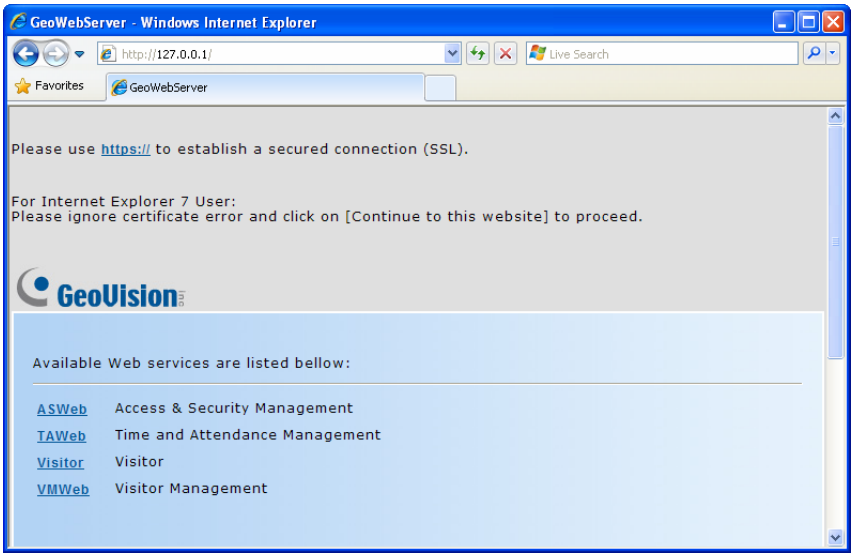


Figure 10-2b

2. Click **https://** for SSL encrypted connection, or **ASWeb** for regular connection.

3. Enter a valid username and password for login. The GV-ASWeb page appears.

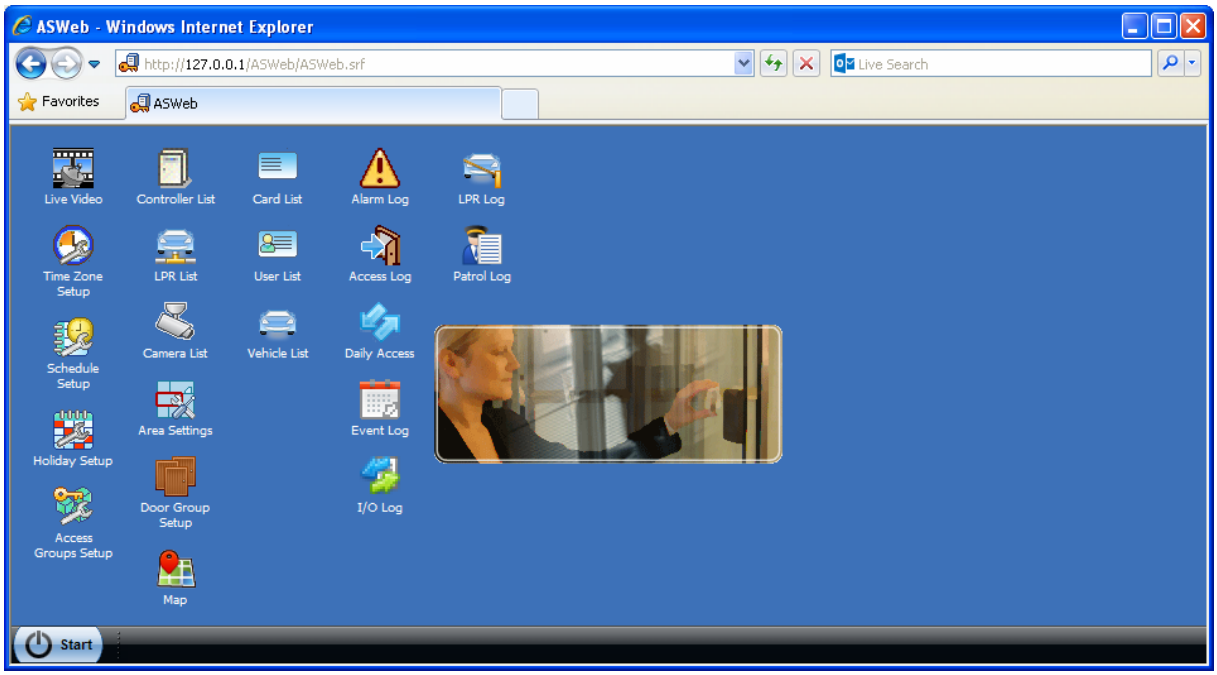


Figure 10-3

10.2 Accessing Live Video

You can use GV-ASWeb to remotely watch live video of devices connected to the GV-ASManager.

1. On GV-ASWeb, click the **Live Video** icon 

. This window appears.

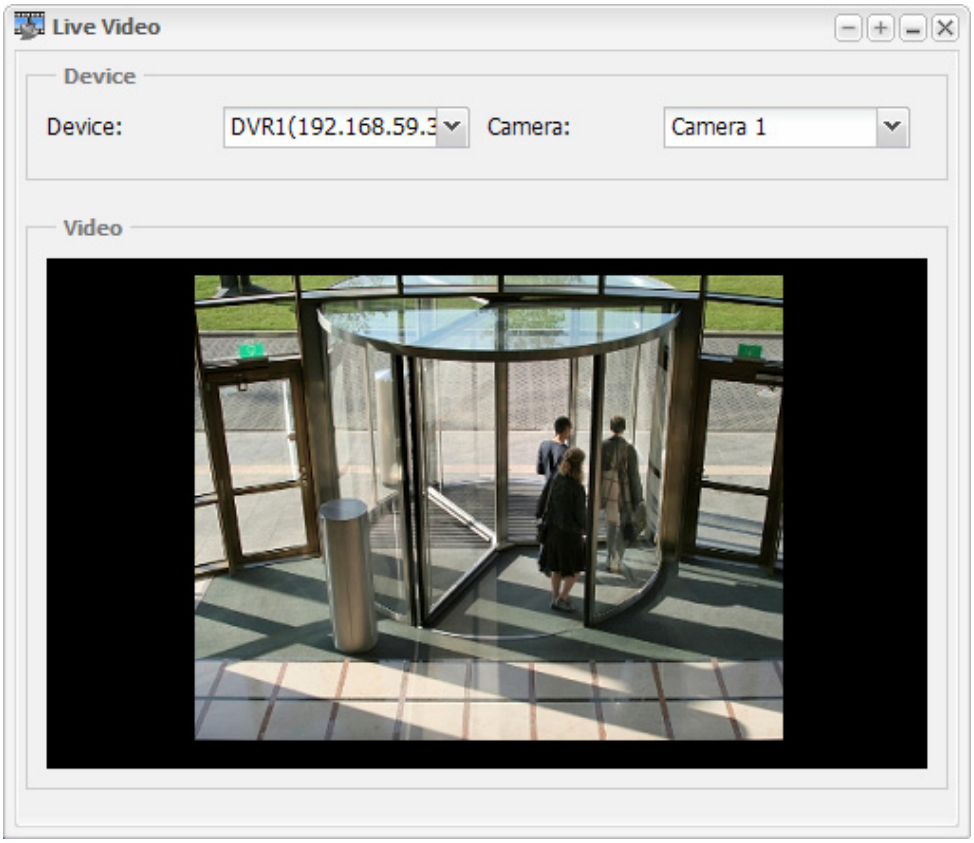


Figure 10-4

2. Click the **Device** drop-down list to select a connected GV-System or LPR.
3. Use the **Camera** drop-down list to select a camera. The live view will now be displayed.

Note: Live video will be displayed using MJPEG codec and a frame rate of 5 fps.

10.3 Accessing Logs

You can access the logs of the connected GV-ASManager, including Access Log, Daily Access, Alarm Log, Event Log and I/O Log. In addition, you can set up search criteria to view the records more efficiently.

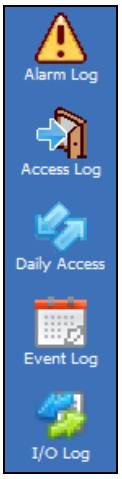


Figure 10-5

10.3.1 Setting Search Criteria

1. Select a log you want to view. Here we use Access Log as an example.
2. In the Filter section on the left, type or select the desired filtering criteria. For example, we want to search the log for the records that match the conditions of “Access Granted”, Card Number “120-38620”, Gate A entrance of AS400, and dates from November 21st to November 27th. The resulting filter window may look like this.

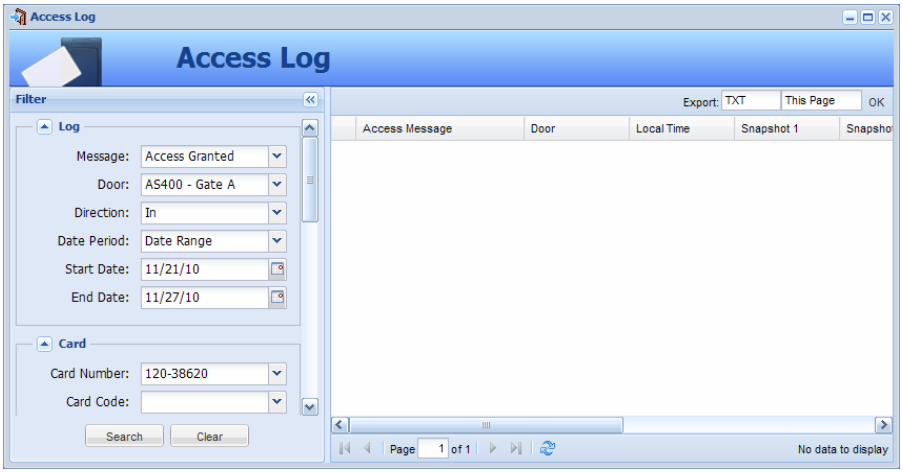


Figure 10-6

3. Click the **Search** button to start the log search.

10.3.2 Log Window Icons

The icons in the log window can display the detailed information of that category. Click the icon to view the details.

: Indicates the availability of the recorded video.

: Indicates the availability of the video image.

In Controller List, Card List, User List, Access Log and Daily Access, you can right-click each search result to access more information such as card information or user information.

Note: You can play back video only when Remote ViewLog Service included in Control Center Server is enabled on the DVR. And the Remote ViewLog function is enabled on Video Server or Compact DVR.

10.3.3 Exporting Logs

You can download the logs of the connected GV-ASManager to the current computer in four formats: **.txt**, **.html**, **.xls** and **html (zip)**.

1. Use the Export drop-down list on the top-right corner and select the file format **TXT**, **HTML**, **Excel** and **HTML (ZIP)**.
2. Use the next drop-down list to select **This Page** to save the current log page or **All** to save all logs.
3. Click **OK** to download the logs.

10.3.4 Defining Columns

You can define the displayed columns of the search results for each type of log. The field must be first enabled on GV-ASManager before the content of the field can become searchable.

1. On the menu bar of the GV-ASManager, click **Tools** and select **ASWeb Field**. This dialog box appears.

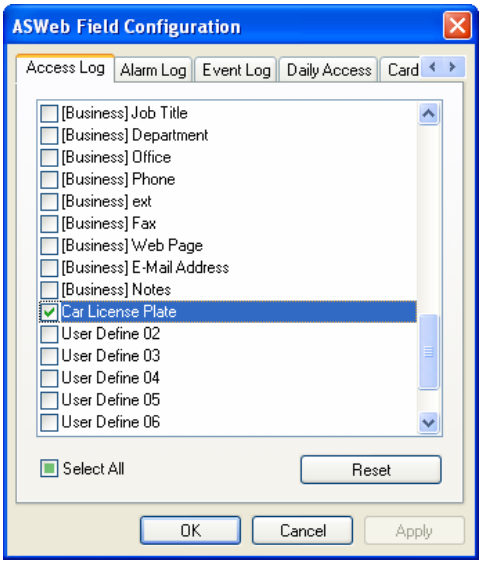


Figure 10-7

2. Select the fields you would like to enable and click **OK**.

3. On GV-ASWeb, click on the arrow next to an existing column and select **Columns**.

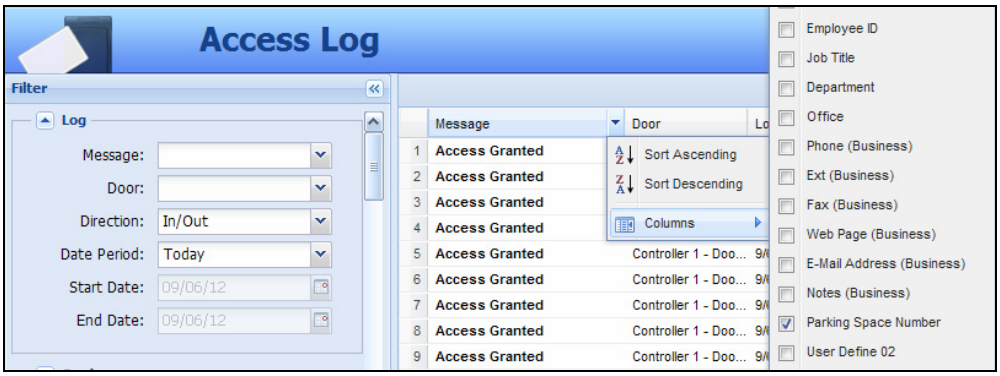


Figure 10-8

4. Select a field to display it in the search results.

   For example, we added a user-defined field “Parking Space Number” to the Access Log. The resulting window on the GV-ASWeb may look like this:

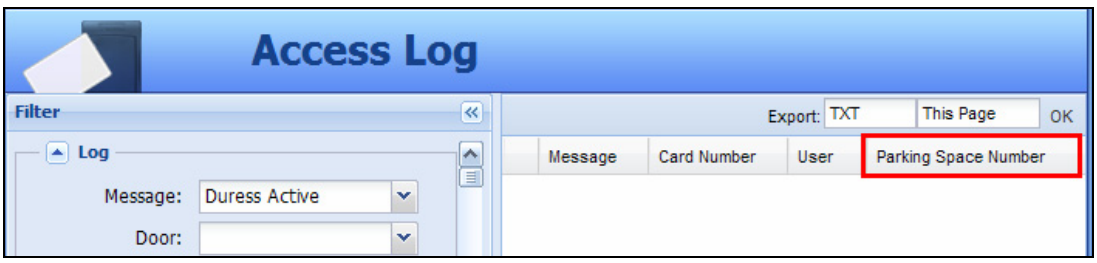
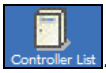


Figure 10-9

10.4 Adding and Deleting Controllers

You can use GV-ASWeb to remotely add or delete controllers to the GV-ASManager.

1. On GV-ASWeb, click the **Controller List** icon 

. This window appears.

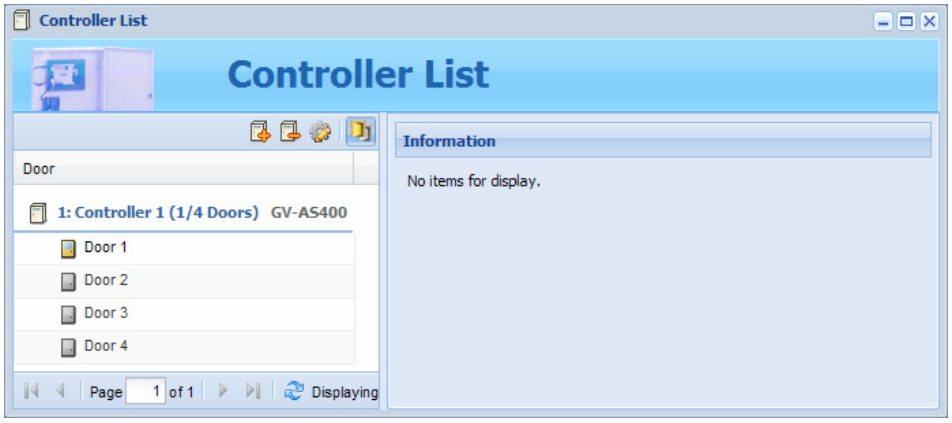


Figure 10-10

2. Click the **Add** button  to add a new controller. For details on the configurations, refer to *Step 1: Configuring a Controller* in Chapter 4.

3. To set the individual doors, click the **Edit** button  and select a door. For details, refer to *Step 2: Configuring the Doors or Elevator Floors* in Chapter 4.

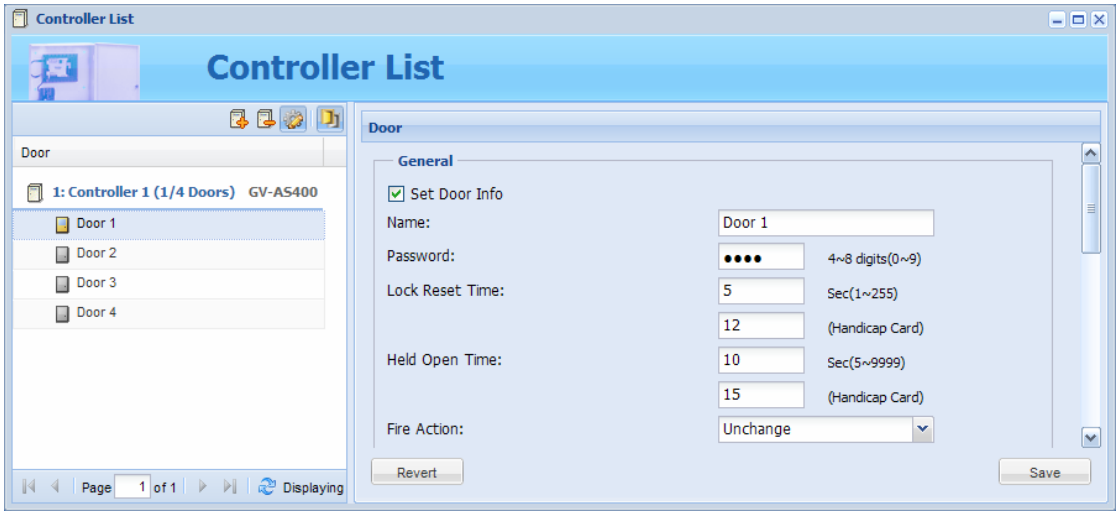


Figure 10-11

4. To delete a controller, select a controller and click the **Delete** button  .

Note: After adding or deleting a controller through GV-ASWeb, the change will be reflected in the Controller List in GV-ASManager.

10.5 Adding and Deleting Cards and Users

In addition to adding and deleting controllers, you can also use GV-ASWeb to remotely add or delete cards and users.

To add or delete cards:

1. On GV-ASWeb, click the **Card List** icon 

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

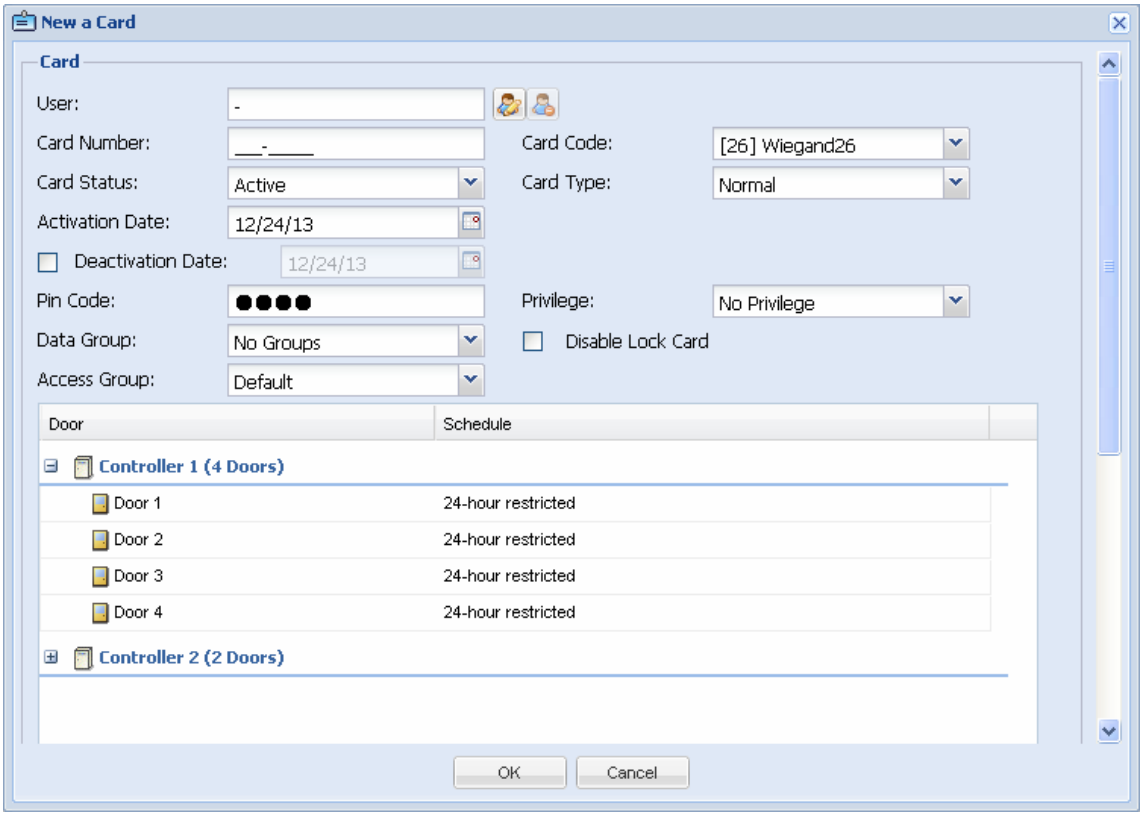


Figure 10-12

3. Fill out the required information. Refer to *4.3 Setting Cards* for more details.
4. Click **OK** to save the settings.
5. If you have a GV-PCR310 Enrollment Reader installed, you can click **Card Reader** to add a card using GV-PCR310.

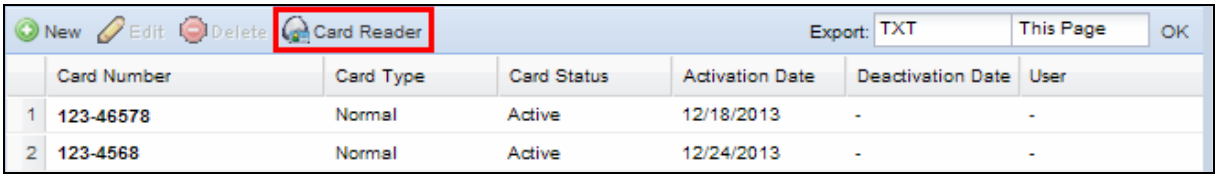


Figure 10-13

6. To delete cards, simply select the card and click the **Delete** button.

Note:

1. After adding or deleting a card through GV-ASWeb, the change will be reflected in the Card List in GV-ASManager.
2. The Batch function and the card data import/export function are not supported on GV-ASWeb.

To add or delete users:

1. On GV-ASWeb, click the **User List** icon 

. The User List window appears.
2. Click the **New** button. This dialog box appears.

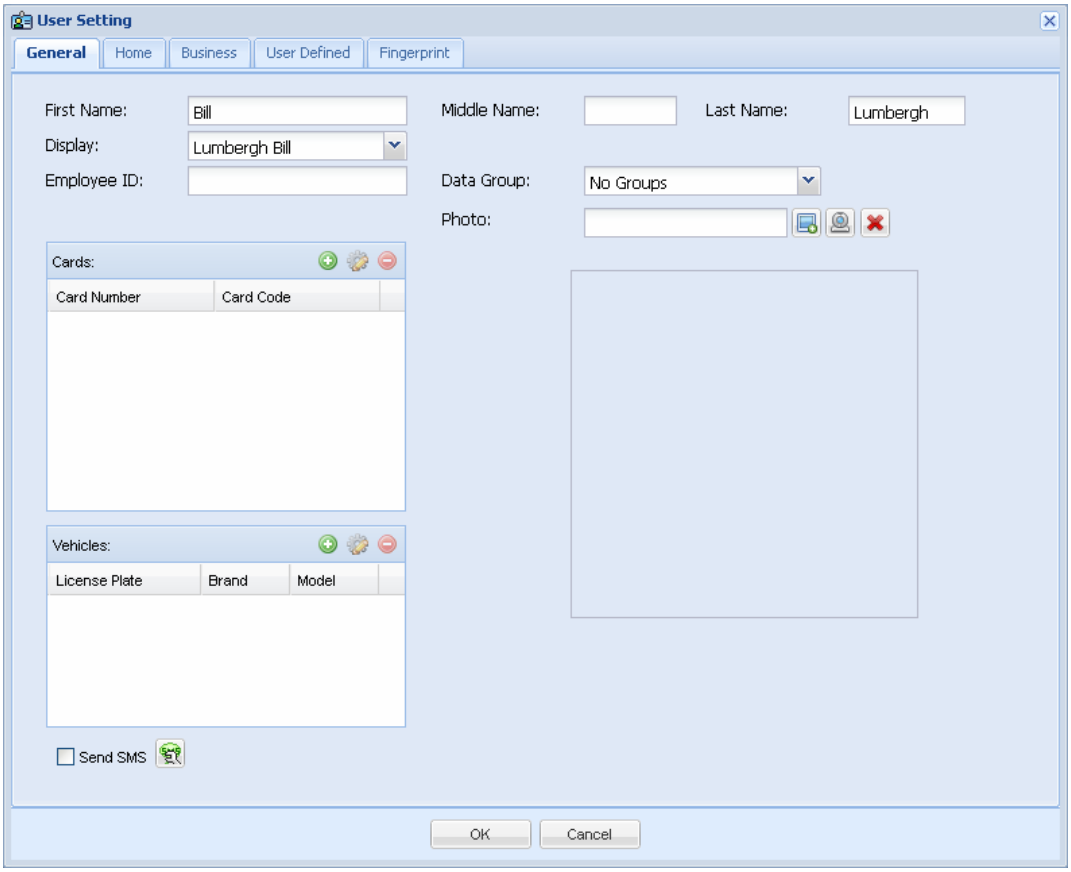


Figure 10-14

3. Type the user's name. Other user information such as Employee ID, Home information and Business information are optional.
4. You can click the **Add** button to assign a card or a vehicle to the user.
5. You can use the **Data Group** drop-down list to assign the user to a data group.
6. If you have a webcam installed, click the **Webcam** icon to take a picture from the Webcam for the user profile.
7. Click **OK** to save the settings.
8. To delete a user, simply select the user and click the **Delete** button.

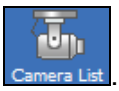
You can enroll fingerprints in the **Fingerprint** tab using GV-GF1911 / 1921 / 1922. For details, refer to *Chapter 3 Fingerprint Only Mode* in the *GV-GF Fingerprint Reader User's Manual*.

Note:

1. After adding or deleting a user through GV-ASWeb, the change will be reflected in the User List in GV-ASManager.
2. The user data import / export function is not supported on GV-ASWeb.
3. The webcam function requires Flash Player 10 or later.

10.6 Searching, Adding and Deleting IP Cameras

You can use GV-ASWeb to remotely search and set up IP cameras by connecting to GV-Systems, GV-Video Servers, GV-Compact DVR or to IP cameras directly.

1. On GV-ASWeb, click the **Camera List** icon 

. The Camera List window appears.
2. To search for available IP devices under LAN, click the **Search** button  and select **Search DVR and NVR** or **Search IP Device**. This dialog box appears.

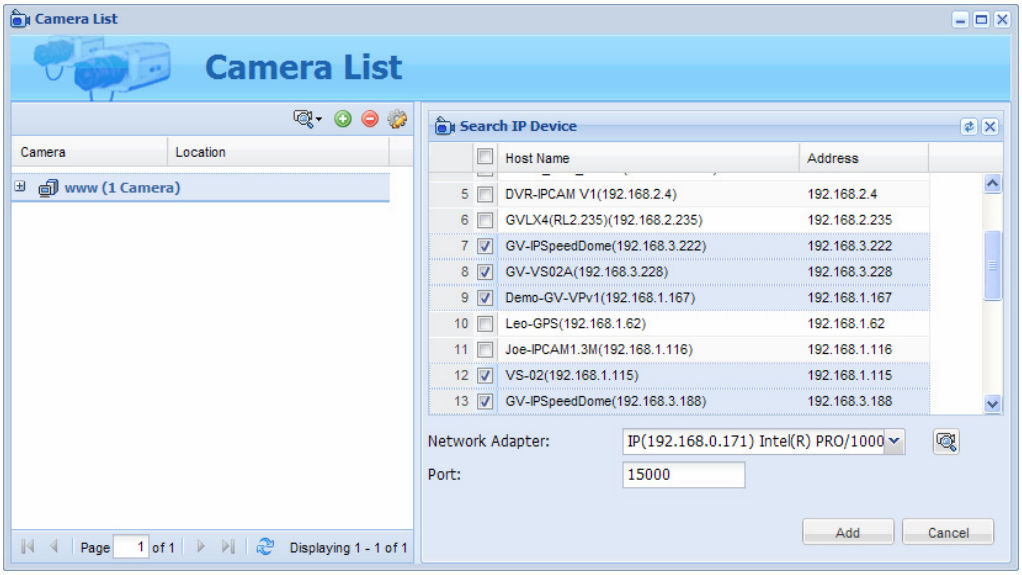


Figure 10-15

A. Select the GV-Systems or IP devices to add from the search results.

B. If necessary, you can select a different **Network Adaptor** and click the **Search** button again or modify the default port number 15000.

C. Click **Add**. The GV-System or IP device is added to the camera list on the left.

D. To login, select the GV-System or IP device, click the **Edit Mode** button  , and type the User ID and password.

3. To manually add a device, click the **Add** button . This dialog box appears.

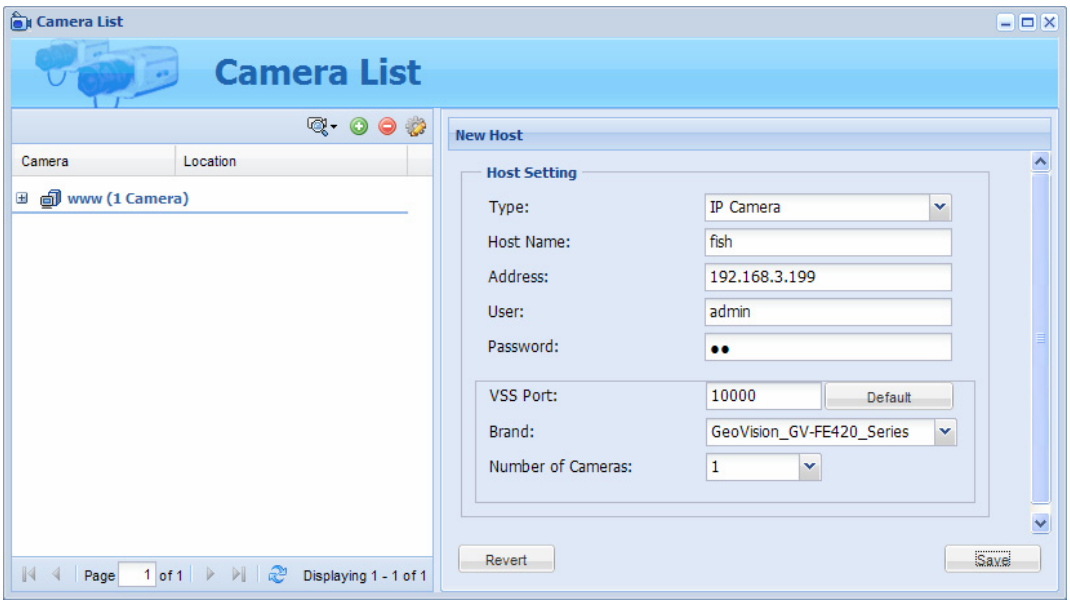


Figure 10-16

A. Select the **Type** of device to add and type a **Host Name** to name the device.

B. Type the IP **Address**, **User** name and **Password** of the device.

C. Modify the default **Data Port** 5611, default **VSS Port** 10000, and default **Log Port** 5552 if necessary.

D. For IP cameras, use the **Brand** drop-down list to select the camera model. You can connect to third-party IP cameras through ONVIF, PSIA and RTSP protocols by selecting **Protocol** in the **Brand** drop-down list.

E. For GV-Systems, GV-Compact DVR and GV-Video Server, select a number from the **Number of Cameras** drop-down list to add channels between channel 1 and the selected channel. For example, if 3 is selected, channels 1-3 will be added.

F. Click **Save**.

4. To edit a device, click the **Edit** button and select a device to begin editing.

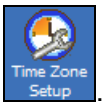
5. To delete a device, select the device and click the **Delete** button .

Note: After adding or deleting a camera through GV-ASWeb, the change will be reflected in the Camera List in GV-ASManager.

10.7 Setting Schedule

You can use GV-ASWeb to remotely create daily schedules, set up weekly schedule and specify holidays. For more details on how to set up schedule, refer to Chapter 4.

10.7.1 Setting Daily Schedule

1. On GV-ASWeb, click the **Time Zone Setup** icon 

. This dialog box appears.

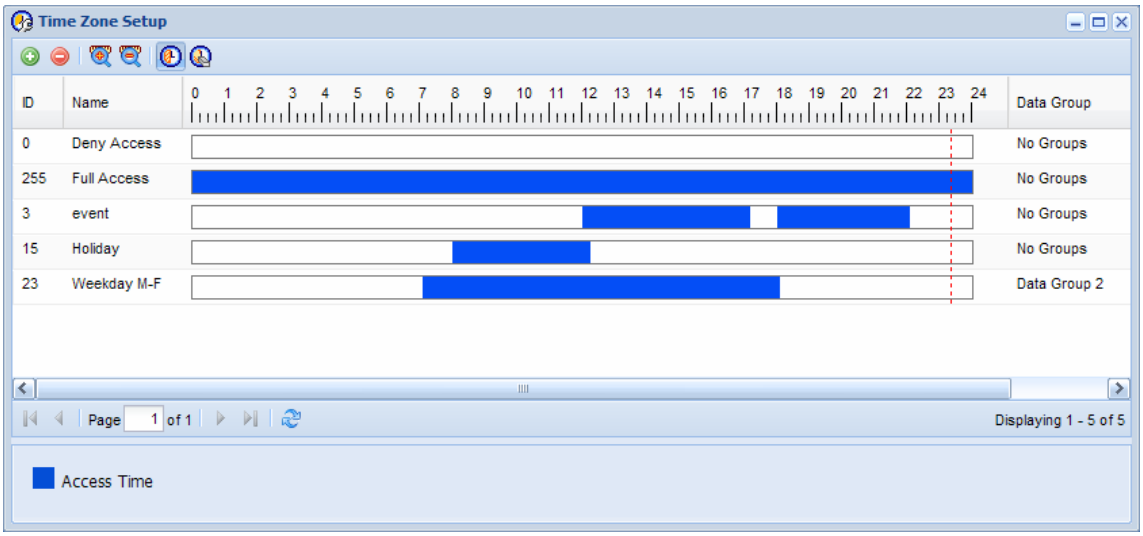


Figure 10-17

2. Click the **Add** button  . A blank schedule appears.

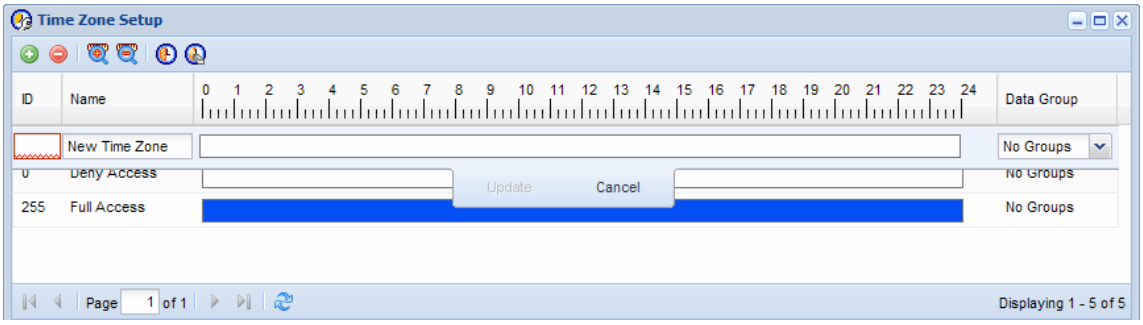
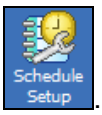


Figure 10-18

3. Type an ID and a name for the daily schedule.
4. Set the time by dragging the mouse on the timeline. To erase selected time, click the **Delete Access Time** button  and drag the mouse across the selected time.

5. You can use the **Data group** drop-down list to assign the time zone to a data group. You can then allow or forbid a user to read/write the functions listed under the data group. Refer to *Adding a New User* in Chapter 8 for more details.
6. Click **Update** to save.

10.7.2 Setting Weekly Schedule

1. On GV-ASWeb, click the **Schedule Setup** icon 

. This dialog box appears.

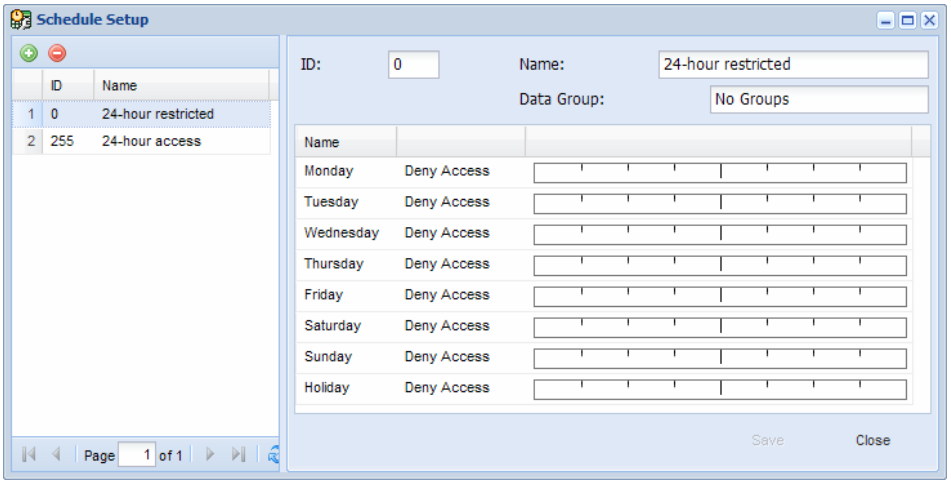
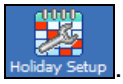


Figure 10-19

2. Click the **Add** button  . A blank schedule appears.
3. Type an ID and a name for the weekly schedule.
4. You can use the **Data Group** drop-down list to assign the weekly schedule to a data group. You can then allow or forbid a user to read/write the functions listed under the data group. Refer to *Adding a New User* in Chapter 8 for more details.
5. Click the timeline and assign the daily schedule created to the day of the week. The schedule selected for Holiday will be applied to the dates selected in the Holiday Setup page. Refer to the section below.
6. Click **Save**.

10.7.3 Specifying Holiday

On the main page of GV-ASWeb, click the **Holiday Setup** icon 

. To specify holidays, click **Add Holiday** and click the dates of the Holiday. To remove holidays, click **Remove Holiday** and click the dates.

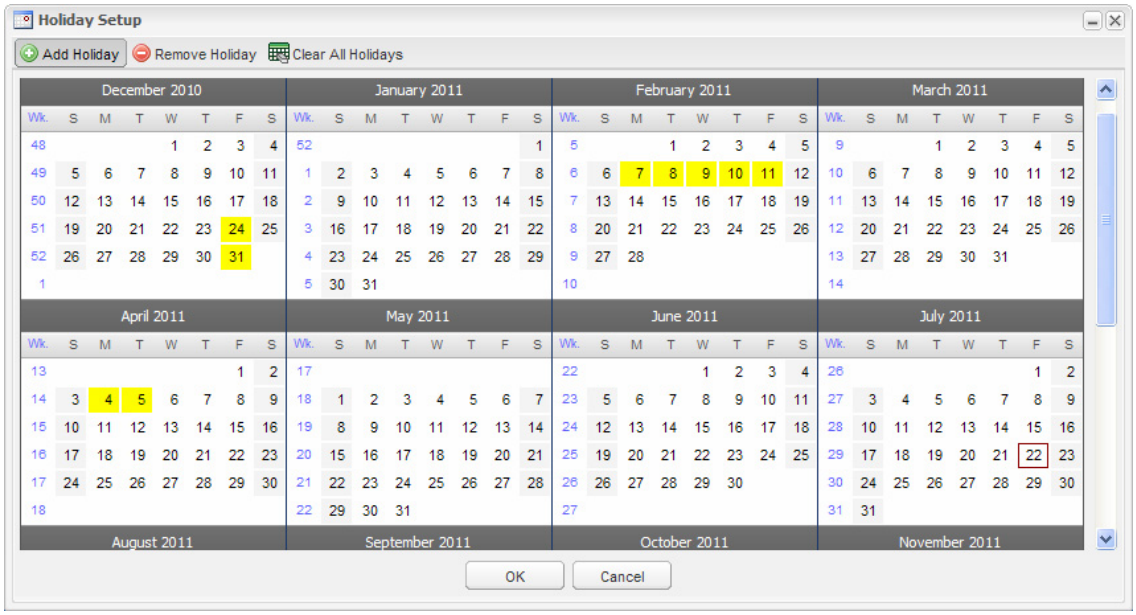
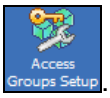


Figure 10-20

10.8 Setting Access Groups

Using GV-ASWeb, you can remotely set up access groups to restrict who can access which door at what time. On the main page of GV-ASWeb, click the **Access Groups** icon 

. For details on how to set up access groups, refer to *Setting Access Groups* in Chapter 4.

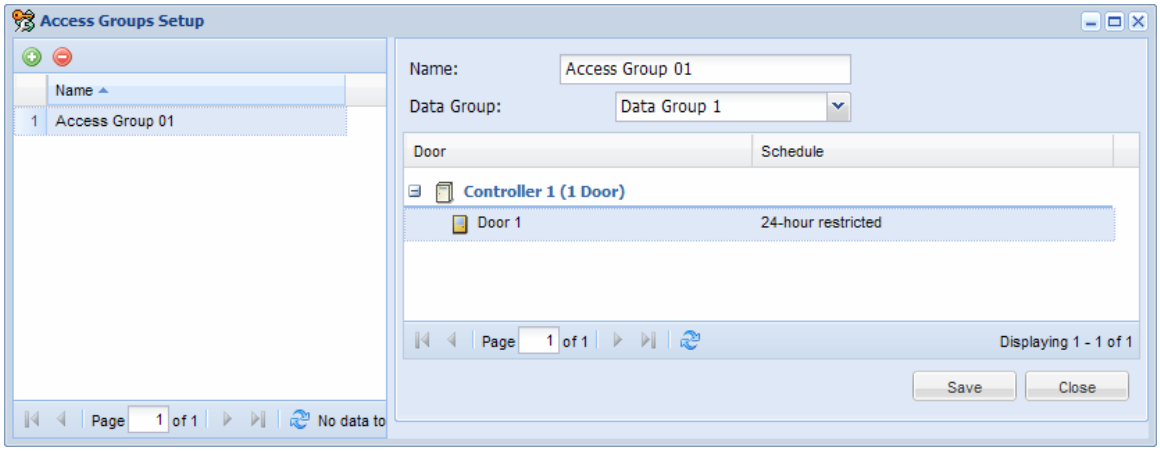


Figure 10-21

10.9 Setting Door Groups

Using GV-ASWeb, you can remotely organize controllers into different door groups, allowing you to quickly upload fingerprints to all controllers in a door group at once.

On the main page of GV-ASWeb, click the **Door Group Setup** icon 

. For details on how to set up door groups and upload fingerprints, refer to *Uploading Fingerprints to Controllers Using Door Groups* in Chapter 3 of *GV-GF Fingerprint Reader User's Manual*.

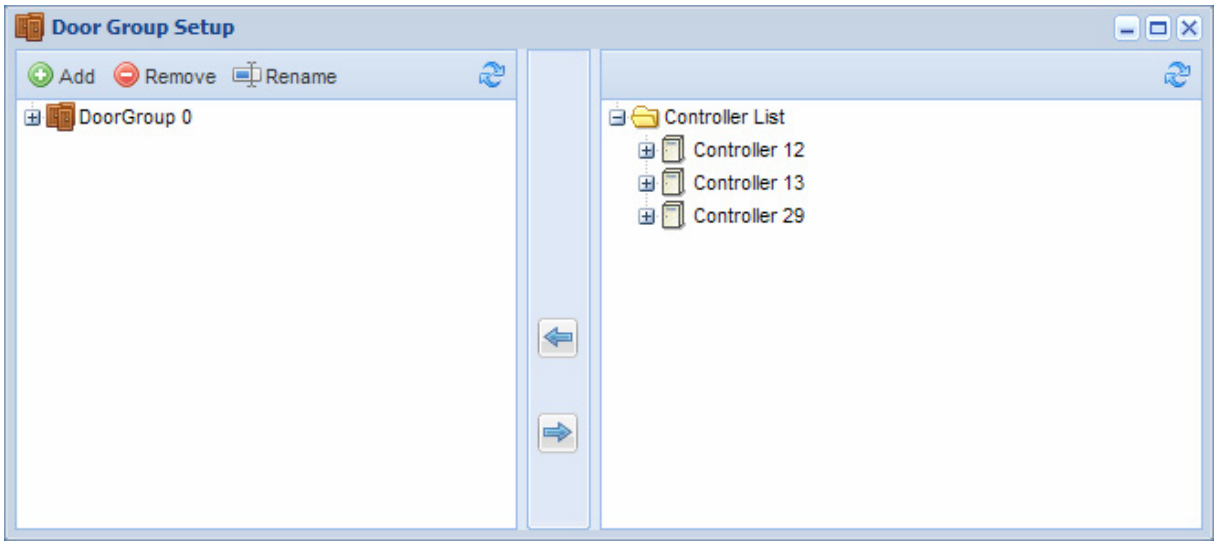
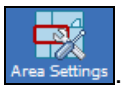


Figure 10-22

10.10 Configuring Areas for Anti-Passback

You can remotely define Entry and Exit areas for each door / gate using GV-ASWeb.

1. On GV-ASWeb, click the **Area Settings** icon 

. This dialog box appears.

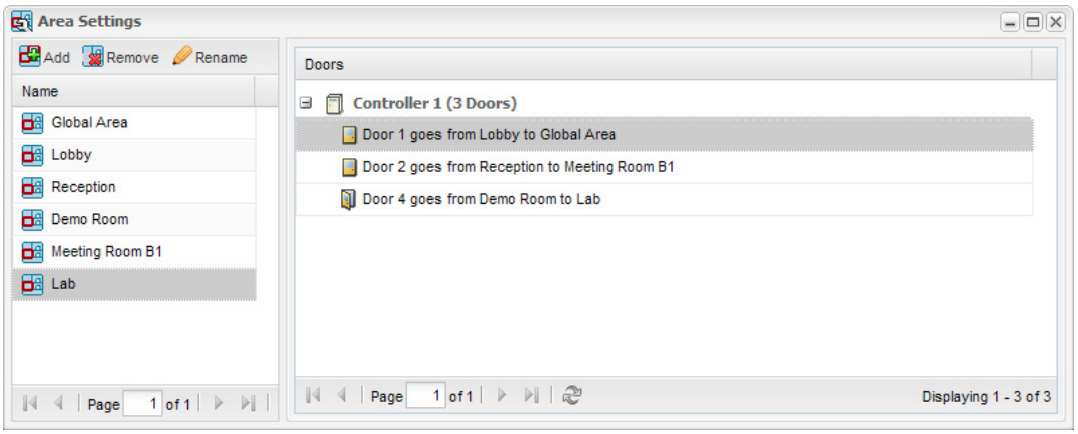


Figure 10-23

2. Click the **Add** button to add an area and double-click the name to rename the area.
3. Double-click a door and use the drop-down lists to assign the entry and exit area.

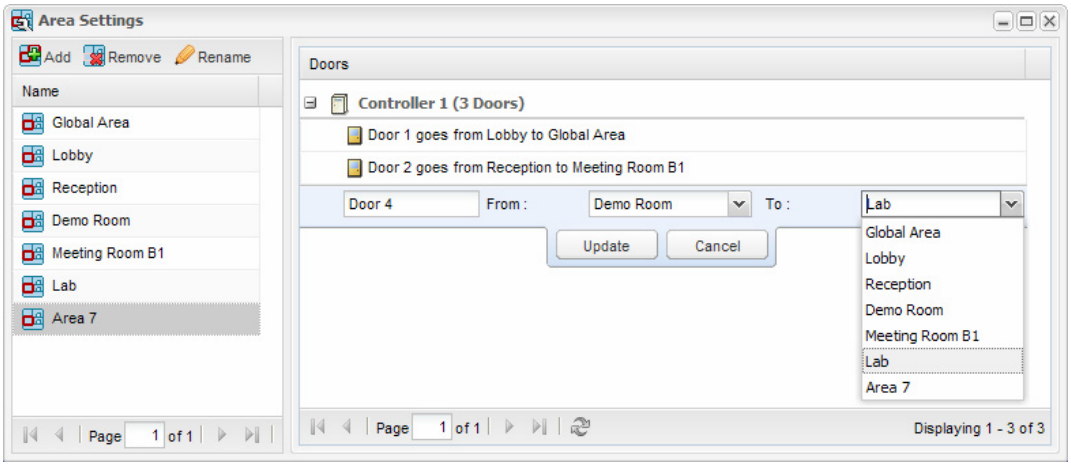


Figure 10-24

For more details on how to set up Anti-Passback, refer to Chapter 6.

Note: After defining areas for Anti-Passback through GV-ASWeb, the change will be reflected in the Area Settings page in GV-ASManager.

10.11 Creating Maps

You can place the icons of connected controller, LPR lanes, and LPR cameras on the Google Maps or on a map you uploaded to GV-ASWeb. The map will help you quickly pinpoint the location of an event or the devices you have installed.

1. On GV-ASWeb, click the **Map** icon 

. This dialog box appears.

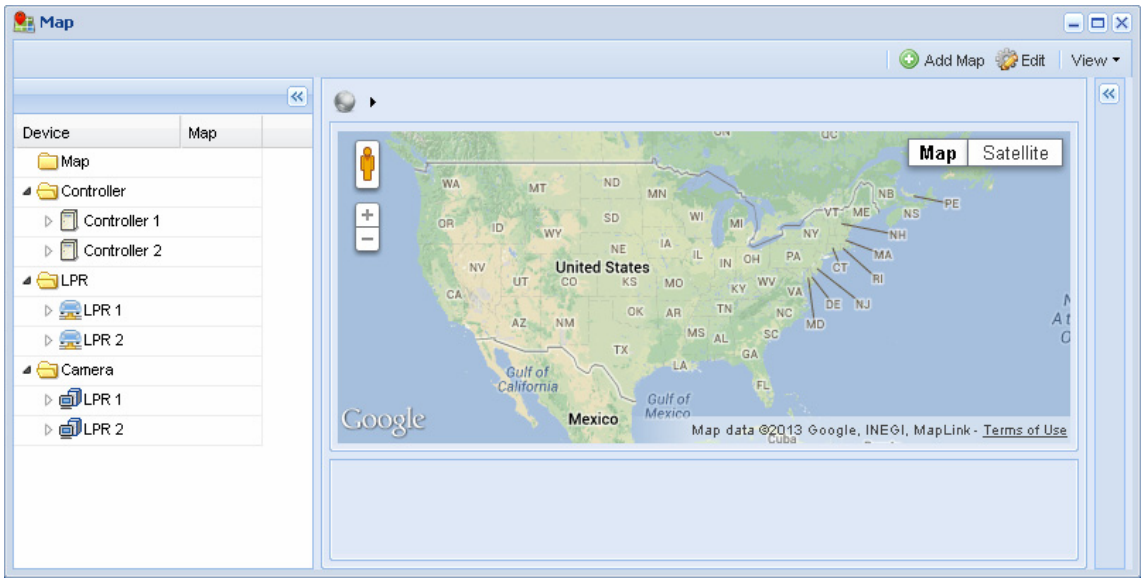


Figure 10-25

2. On the Google Maps, zoom in on location of the building or the monitored area. Skip to step 6 if you do not want to upload your own map.
3. To upload your own map, click **Add Map**. This dialog box appears.

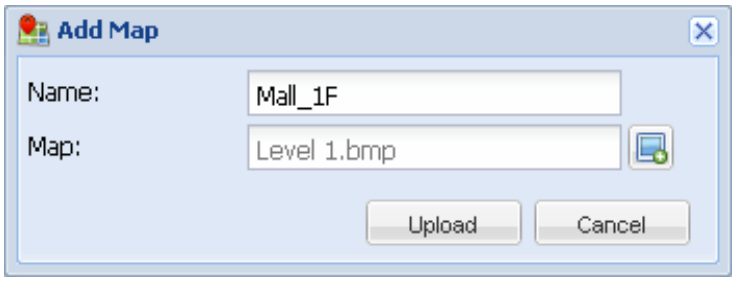


Figure 10-26

4. Type a name for the map and click the **Add** button  to locate the file of the map.
5. Click **Upload**. A pin is placed on the map.
6. Click **Edit** in the top-right corner. If you have uploaded your own map, click the pin to open the map.

7. Drag the controller, LPR lane, and LPR camera icons from the left menu onto the map according to their location.

8. Click **Edit** again when you are finished. You can click the icon of the controllers, LPR lanes or LPR cameras to access their information.

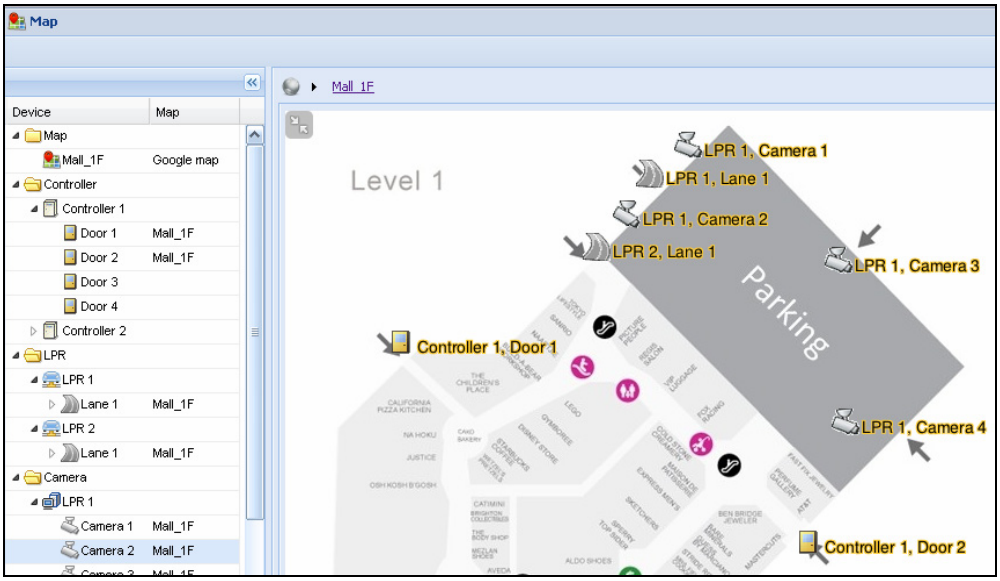


Figure 10-27

Next, you can look up activities at a door or LPR lane by clicking the arrow button in the top-right corner. Select your search criteria and click **Search**.

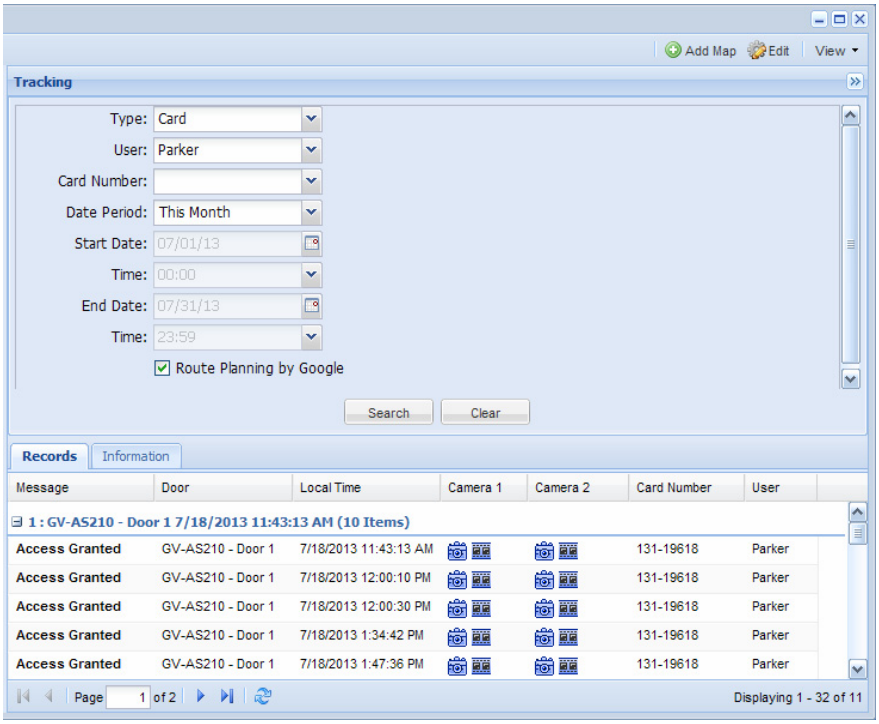


Figure 10-28

- You can double-click an event to locate the associated door or LPR lane on the map.
- You can select **Route Planning by Google** to see the suggested route between the access data of a card or a license plate in the order of access time.
- To view snapshots or play back recorded videos, click the snapshot or video button  .

On the Google maps, you can also see the directions from one controller / LPR cameras to another.

1. Right-click the icon of your starting location, and select **Begin**.
2. Add as many destinations as you wish by right-clicking the icon and selecting **Through**.
3. For your last destination, right-click the icon and select **End**.

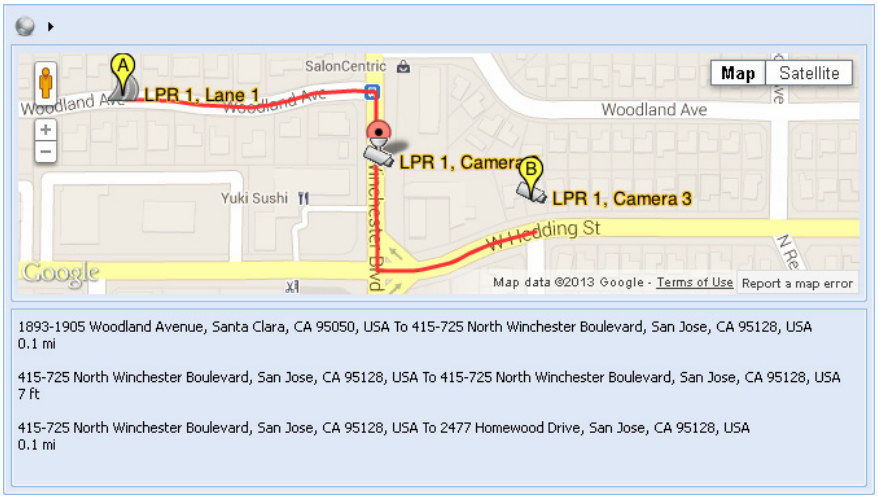


Figure 10-29

10.12 Creating Accounts to Manage GV-ASWeb

The administrator can create accounts with different privileges to manage GV-ASWeb.

1. On the menu bar, click **Tools** and select **Operators**. A dialog box appears.

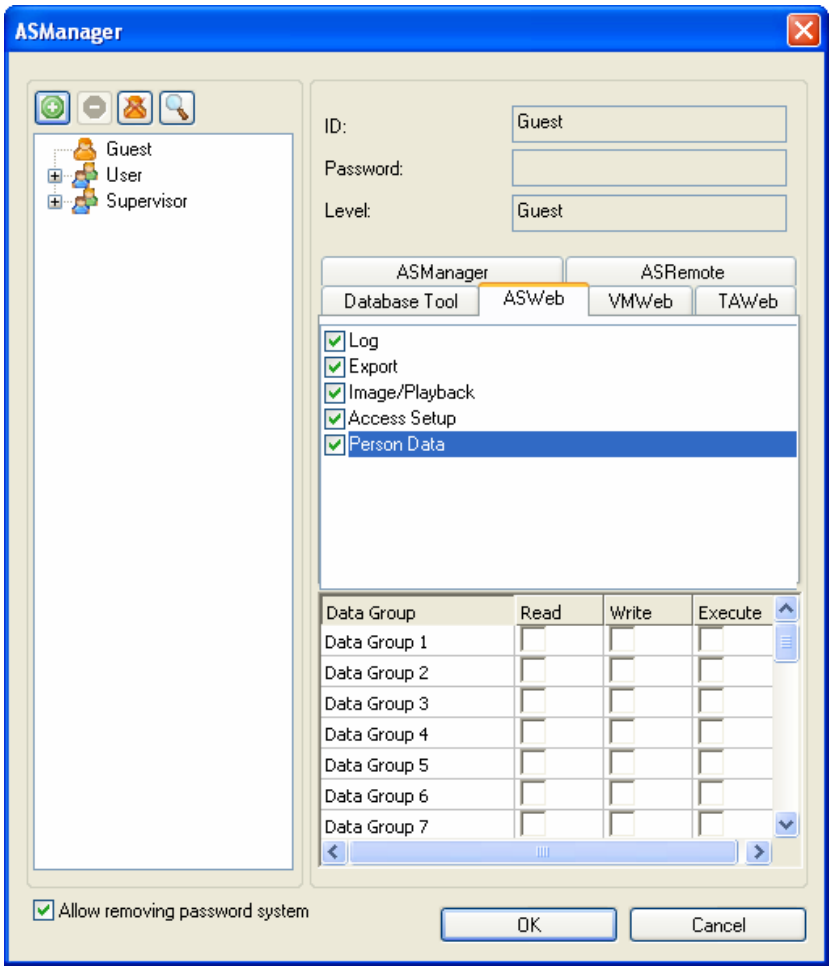


Figure 10-30

2. To create an account, click the **New** button in the top left corner.
3. Type the account's **ID** and **Password**. Re-type the password in the **Password Confirmation** field.
4. In the **Level** drop-down list, select **Supervisor** to have access to all GV-ASWeb functions. To grant limited access, select **User**. Click **OK**.
5. Click the **ASWeb** tab in the middle.
6. Select the privileges you want to grant. The following options are available.
   - **Log:** View Alarm Log, Access Log, Daily Access, Event Log and I/O Log.
   - **Export:** Export Alarm Log, Access Log, Daily Access, Event Log and I/O Log.
   - **Image/Playback:** Play back recorded videos and snapshots from GV-ASWeb logs.

- **Access Setup:** Set up controller list, camera list, area settings, time zone, schedule, holidays and user-defined access group.
- **Person Data:** Add or edit cards and users.

7. Click **OK**.

Chapter 11 GV-TAWeb for Workforce Schedule and Payroll

GV-TAWeb is a time and attendance management system that helps you assign work schedule, keep track of employee attendance and calculate salary. You must first enable GV-TAWeb function on GV-ASManager and then log in GV-TAWeb to access the following functions:

- **TA Report:** Looks up workforce schedule, attendance records, and employee payroll.
- **TA Shift:** Sets up different types of daily work schedules.
- **TA Template:** Arranges schedules of up to 45 days with daily schedules from TA Shift.
- **TA Holiday:** Designates which dates are holidays.
- **TA Schedule:** Assigns work schedule to individual or a group of employees.
- **TA User:** Specifies employee salary.

To use the GV-TAWeb, the browser in the client PC must be **Internet Explorer 7 or later**.

11.1 Connecting to GV-ASManager

To enable GV-TAWeb, the **Time Clock** option must be enabled on GV-ASManager and the **Web Server** must be enabled to allow remote access.

1. On the menu bar, click **Setup**, select **Devices** and in the dialog box, double-click the GV-AS / GV-EV Controller you want to use to keep track of attendance. Select the Gate tab and select **Time Clock**.

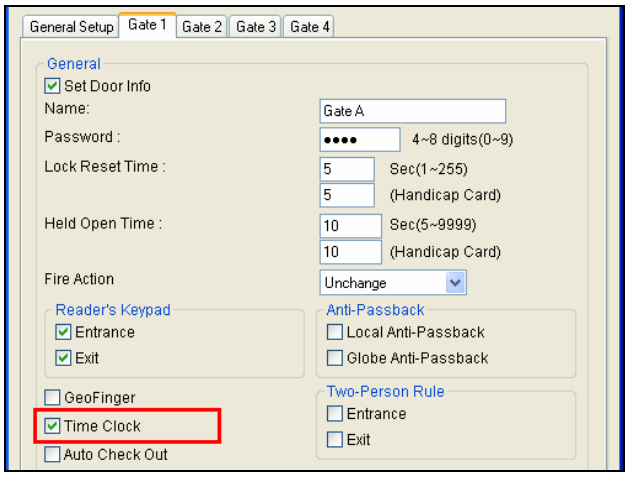


Figure 11-1

2. On the menu bar, click **Tools**, select **Servers** and enable **Web Server**. This dialog box appears.

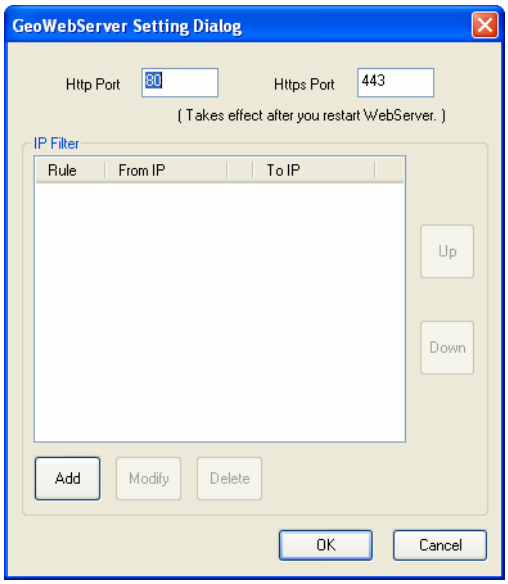


Figure 11-2

If you want to grant or deny the access from certain IP addresses, click **Add**, and type the IP addresses. Otherwise click **OK** to start the connection. When the server is started, the icon  appears at the bottom of the main screen.

To start the GV-TAWeb:

1. Open an Internet browser, and type the IP address of the GV-ASManager to be connected. This web page appears.

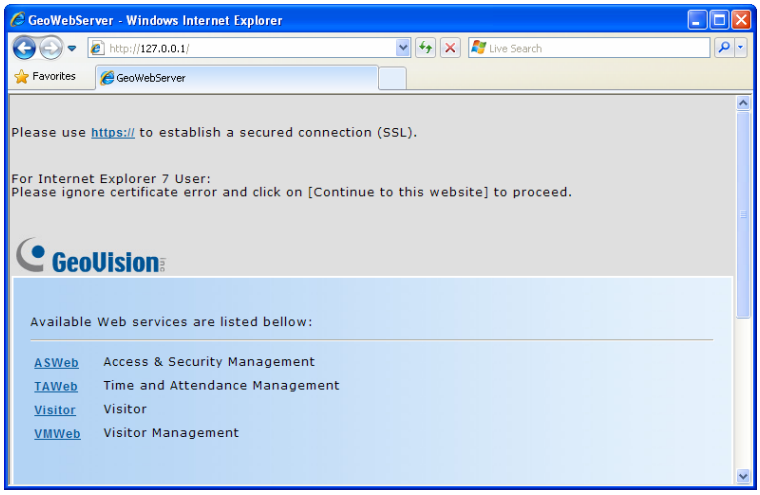


Figure 11-3

2. Click **https://** for SSL encrypted connection, or **TAWeb** for regular connection.
3. Enter a valid username and password for login. The GV-TAWeb page appears.

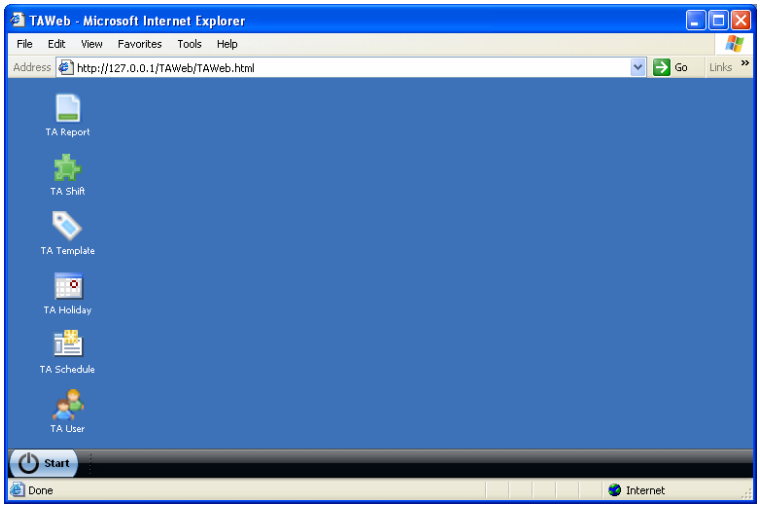


Figure 11-4

11.2 Setting Up Workforce Schedule

To set up workforce schedule, first set up different types of daily work schedules using **TA Shift**, and then you can arrange the different types of daily work schedules into a cycle using **TA Template**. Next, specify the dates for holidays in **TA Holiday**. Lastly, **TA Schedule** allows you to assign work schedule to an employee or a group of employees using daily schedule in TA Shift or using long-term schedule from TA Template.

11.2.1 TA Shift: Setting Up a Daily Schedule

1. Click the **TA Shift** icon. This dialog box appears.

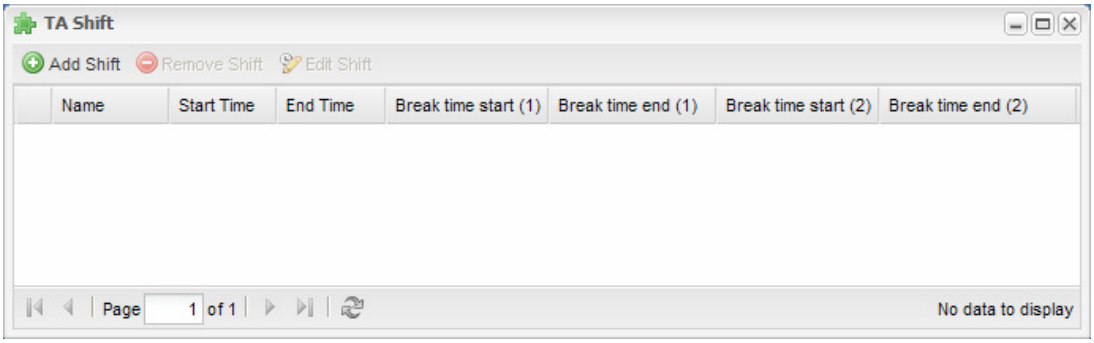


Figure 11-5

2. Click **Add Shift** to add a new daily shift schedule. This dialog box appears.

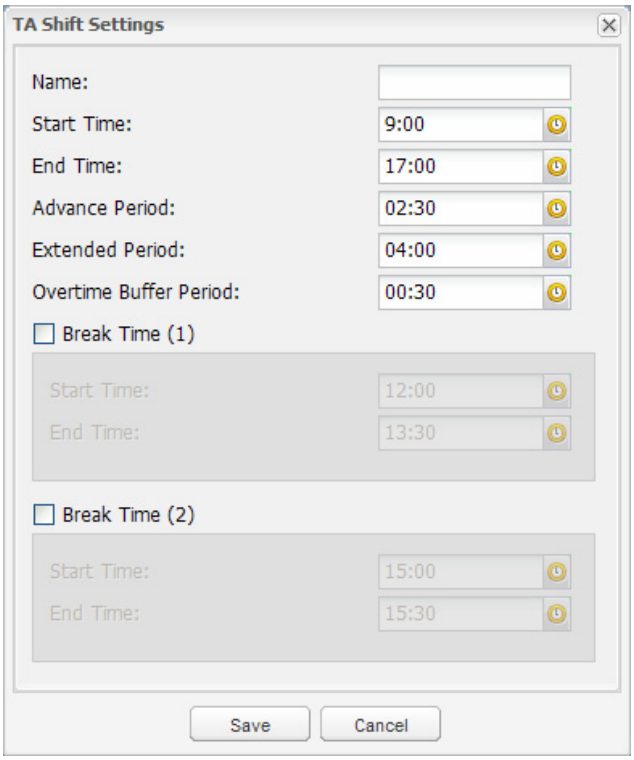


Figure 11-6

3. Type a **Name** for the daily shift to help you identify it.
4. Select a **Start Time** and **End Time** to specify when the work shift starts and ends.
5. Specify an **Advance Period** to set the amount of time prior to the regular start time an employee can work. Employees arriving before the Advance Period will be recorded as working during Not Scheduled time in TA Record.
6. Specify an **Extended Period** to set the amount of time after the regular end time an employee can work and be counted toward overtime pay.
7. Specify the **Overtime Buffer Period** and an employee has to work passed the overtime buffer period to be counted toward overtime pay.
8. To specify when break time starts and ends, select **Break Time** and select the **Start Time** and **End Time**. You can set a second break time if needed. Note that Break Time will not be counted toward Work Hours.

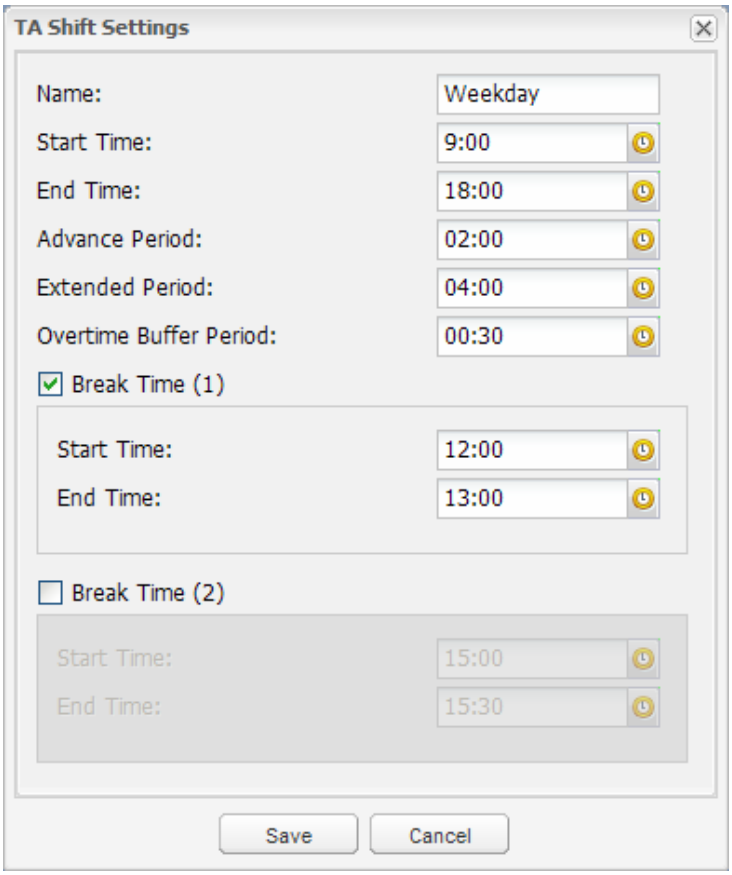


Figure 11-7

Using the above figure as an example, an employee working 4 hours passed the 18:00 pm regular end time will receive overtime pay for 4 hours (18:00 - 22:00), while an employee working 20 minutes passed 18:00 will not receive overtime pay.

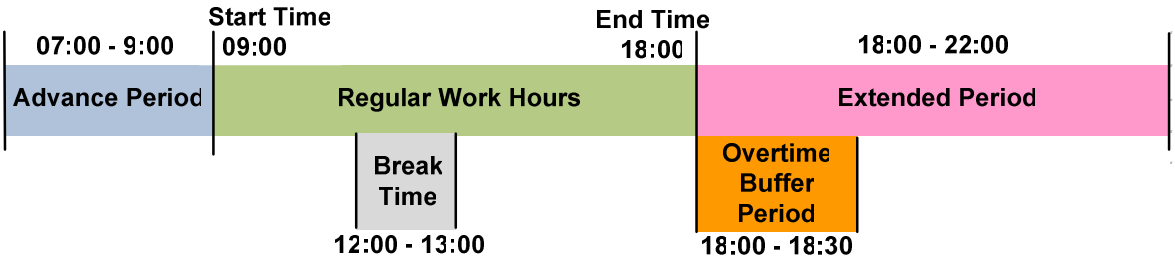


Figure 11-8

9. Click **OK** to save the shift settings.

11.2.2 TA Template: Setting Up a Schedule Template

TA Template allows you to set a 1-45 day recurring schedule template composed of the daily shift schedule created in TA Shift.

1. Click the **TA Template** icon. This dialog box appears.

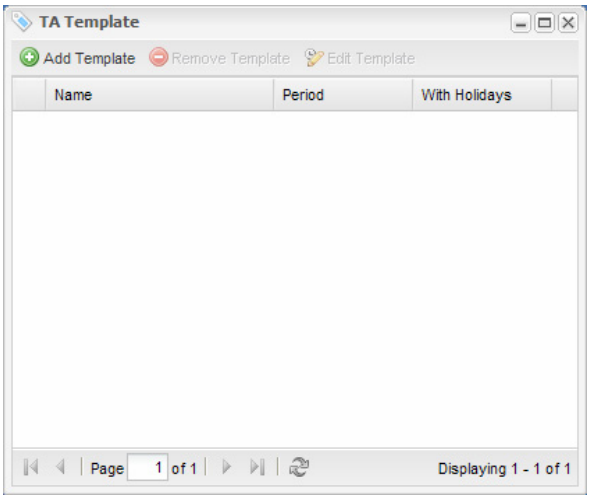


Figure 11-9

2. Click **Add Template**. This dialog box appears.

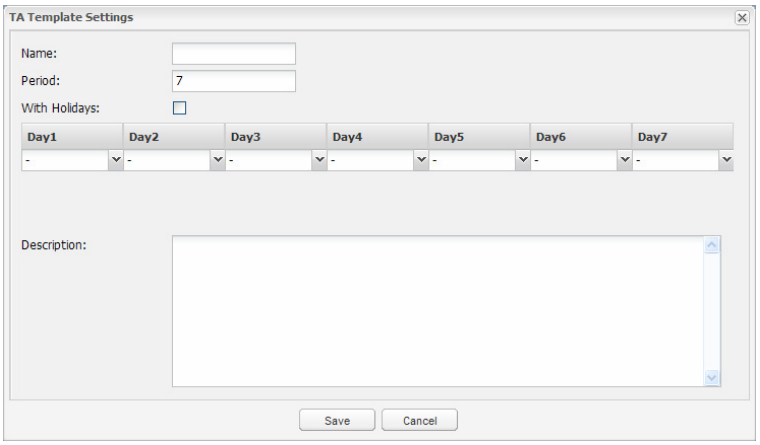


Figure 11-10

3. Type a **Name** to identify the template.
4. In the **Period** field, type a number between 1 and 45 to indicate the number of days in the schedule.
5. Select **With Holidays** to apply the holidays set up in TA Holiday.

6. In the drop-down list below each day, select a daily shift schedule created in TA Shift.

   A TA Template may look like this. In this example, the template is a 2-week work schedule, because the Period is set to 14 days. The drop-down list under each day indicates the daily work schedule selected for that day. A blank drop-down list means that no work schedule is assigned for that day.

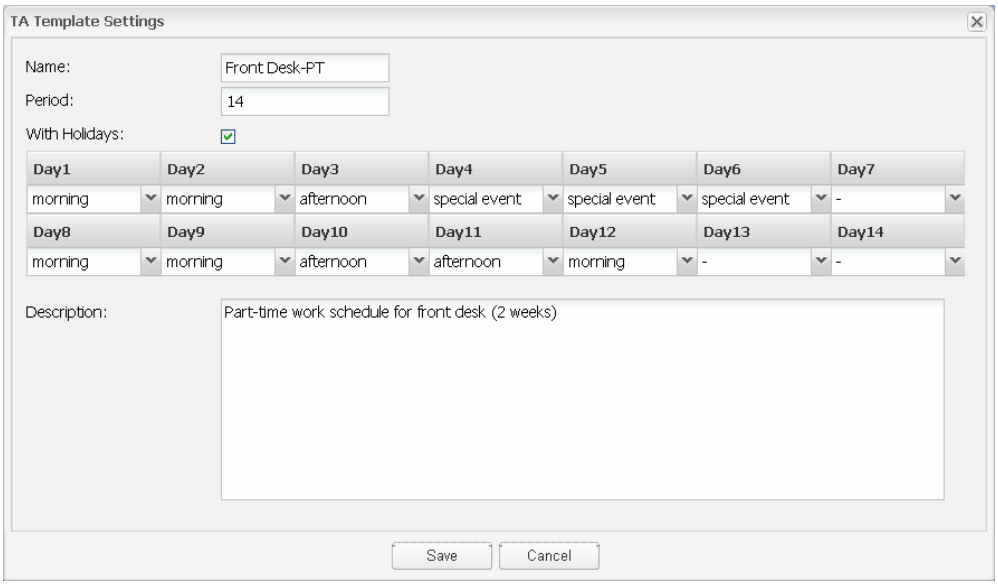


Figure 11-11

7. Click **Save**.

11.2.3 TA Holidays: Setting Certain Dates as Holidays

1. Click the **TA Holiday** icon. This dialog box appears.

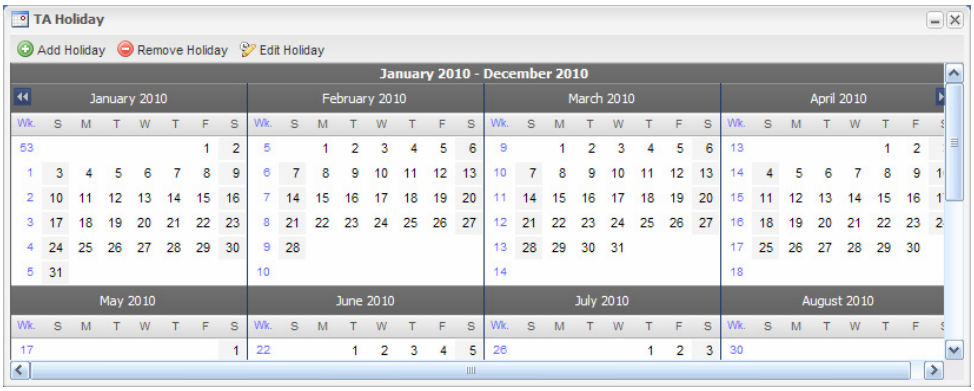


Figure 11-12

2. Select a date and click **Add Holiday**.
3. Type a name for the holiday.
4. Click **OK** and that day will be designated as a holiday if **With Holidays** is selected in TA Template

11.2.4 TA Schedule: Assigning Schedules to Employees

After creating daily shift schedules in TA Shift or arranging a schedule template in TA Template, you can now assign the schedules you set up to an employee or an entire department and select a start date.

Note: The employees listed in TA Schedule are the users in **User List** on GV-ASManager. To assign employees to a department, open the employees' user information in User List and select the **Business** tab. In the **Department** field, type the department of the employee and all employees with the same department name will be grouped into one department in GV-TAWeb.

---

1. Click the **TA Schedule** icon. This dialog box appears.

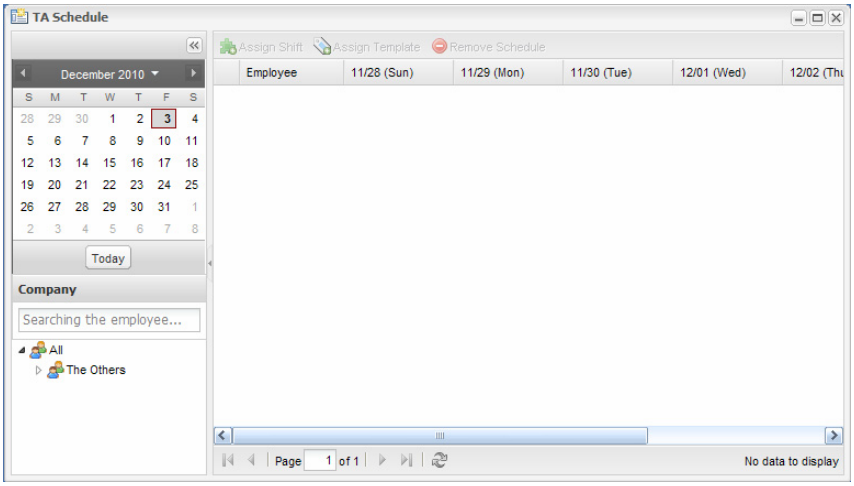


Figure 11-13

To assign daily shift schedules day by day:

2. To assign daily schedules day-by-day, select an employee or a group of employees in the Company section and click **Assign Shift**. You can also press Shift or Ctrl to select multiple employees in a department. This dialog box appears.

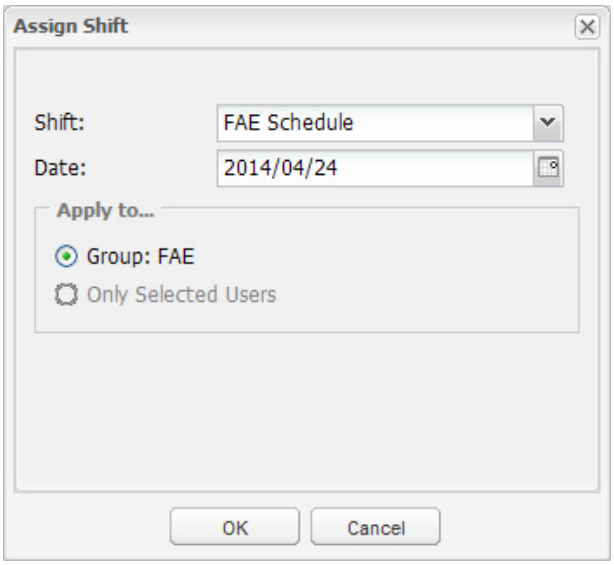


Figure 11-14

3. Select a daily schedule and assign it to a date.
4. You can choose to apply the schedule to the entire group or only the selected users.
5. Repeat the steps for all the dates you want to schedule a shift.
6. Click **OK**. A TA schedule window may look like this. In this example, different daily schedules created in TA Shift are assigned from Monday to Saturday to two employees.

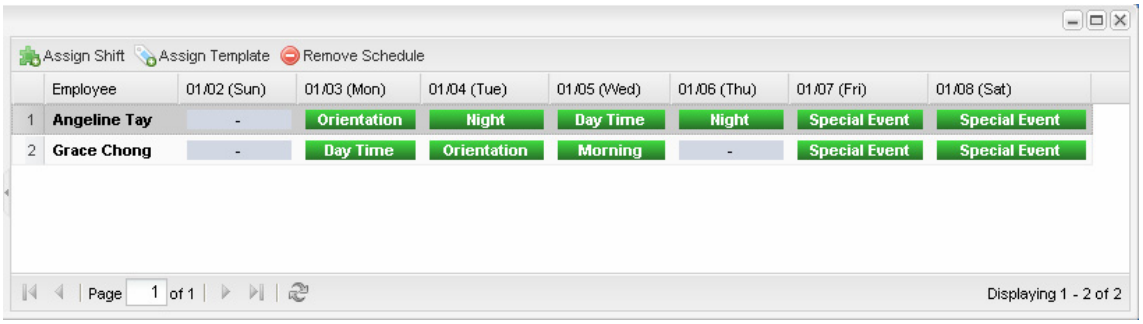


Figure 11-15

To assign a schedule template:

7. To assign a schedule template from TA Template, select an employee or a group of employees and click **Assign Template**. This dialog box appears.

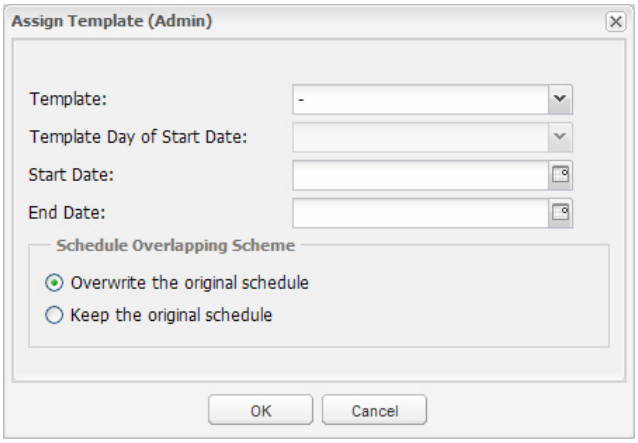


Figure 11-16

8. Using the **Template** drop-down list, select a schedule template created in TA Template.
9. Select a day from the **Template Day of Start Date** drop-down list and the template will start on that day.

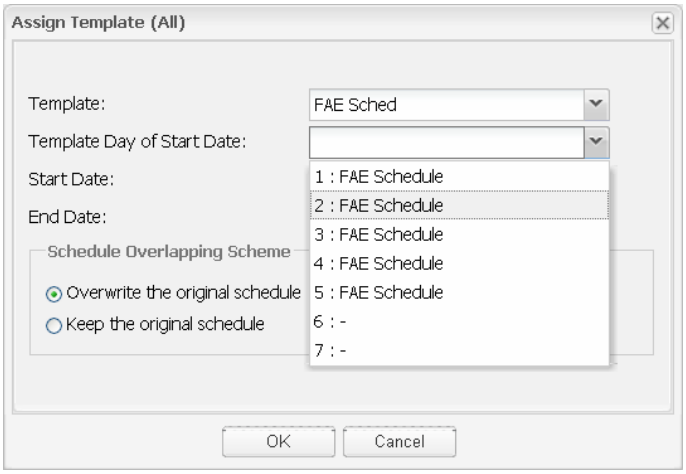


Figure 11-17

10. Select a **Start Date** to begin applying the template and the schedule will begin with the day specified in Template Day of Start Date. Select an **End Date** to discontinue the schedule.
11. In the Schedule Overlapping Scheme section, select **Overwrite the original schedule** if you want to overwrite the original schedule in the case of an overlap.
12. Select **Keep the original schedule** and the template will not be assigned if there is an existing schedule during the time period you specified.

13. Click **OK**. A TA schedule window may look like this. In this example, an FAE weekly schedule created in TA Template are assigned to two employees.

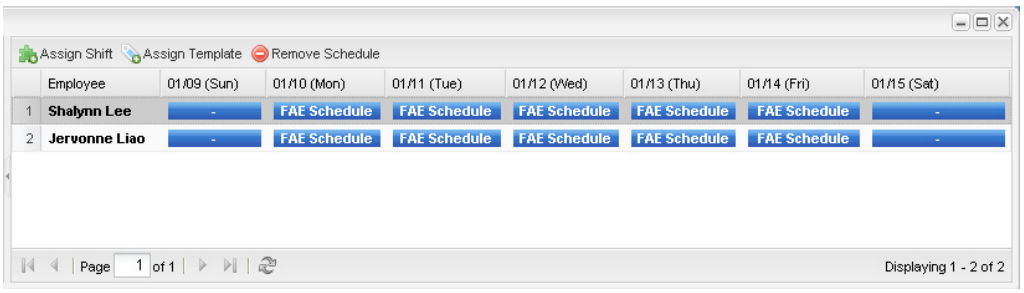


Figure 11-18

Hint: To set a weekly schedule with Saturday and Sunday as non-working days, set a 7-day Period and designate two consecutive days as non-working days by not selecting a daily shift.

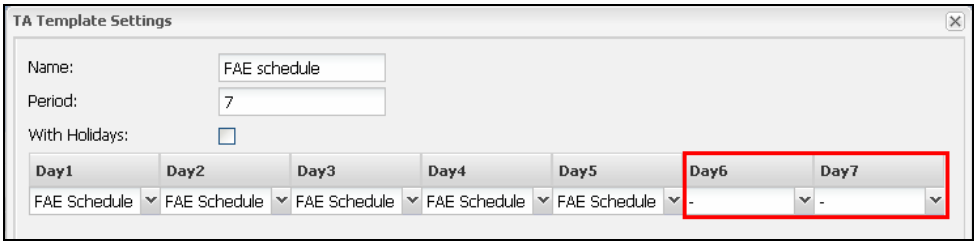
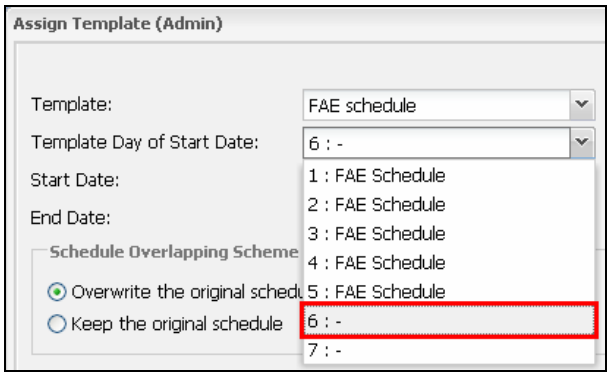
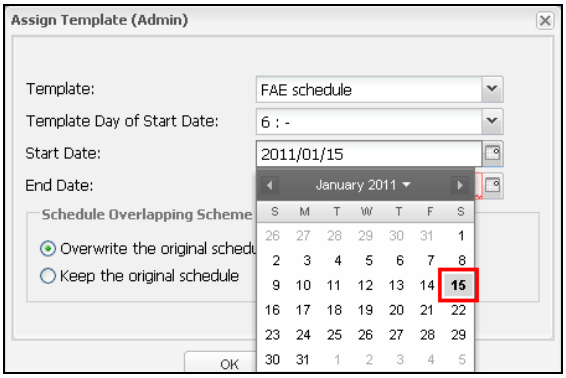


Figure 11-19

Then, in TA Schedule, match the first non-working day with a Saturday.



Select the first non-working day



Select a Saturday for Start Date

Figure 11-20

11.3 TA User: Specifying Hourly Pay

You can specify the hourly pay for regular work hours and overtime work hours using **TA User**.

1. Click the **TA User** icon. This dialog box appears.

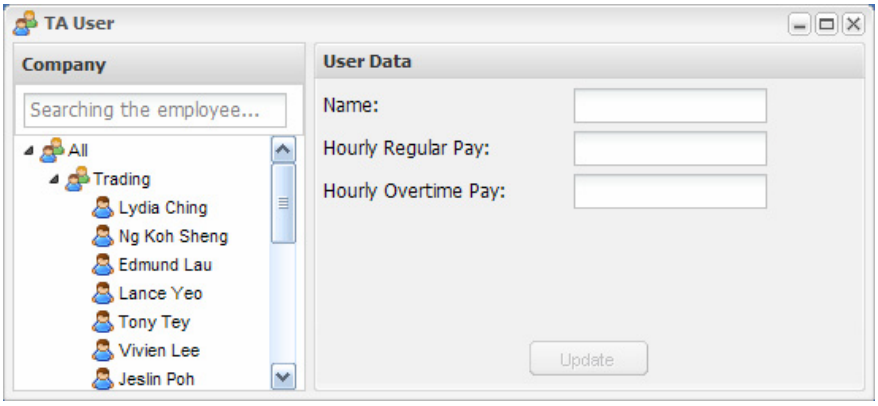


Figure 11-21

2. Select an employee from the list.
3. Type the **Hourly Regular Pay** and the **Hourly Overtime Pay**.
4. Click **Update** to save the settings.

Note: The employees listed in TA User are the users in the User List. To see how to add, edit or delete users, refer to *4.6 Setting Users*.

11.4 TA Report: Looking Up Records

TA Report allows you to look up workforce schedules, attendance record, payroll and summaries of each department's data.

1. Click the **TA Report** icon. This dialog box appears.

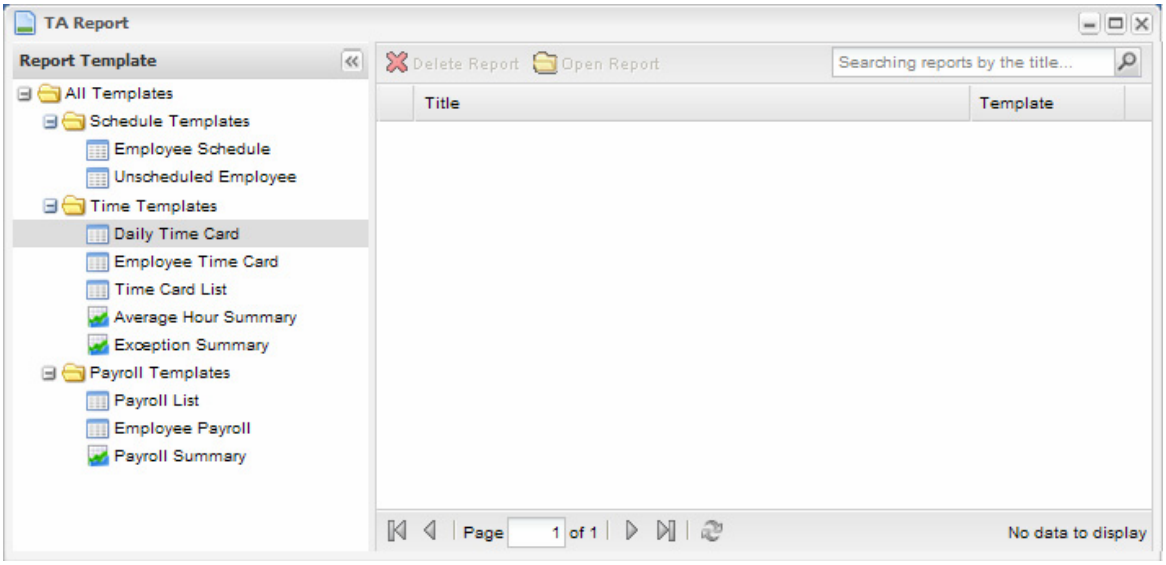


Figure 11-22

2. On the left panel, the following data and graphs are available:

Note: Accessing **Average Hour Summary**, **Exception Summary** or **Payroll Summary** requires Flash Player 10 or later.

[Schedule Templates]

- **Employee Schedule:** Shows the work schedule of an individual employee.
- **Unscheduled Employee:** Shows the days when employees are not scheduled to work.

[Time Templates]

- **Daily Time Card:** Shows the work schedule and the actual punch in/out time of employees in a department.
- **Employee Time Card:** Shows the work schedule and the actual punch in/out time of an individual employee.

- **Time Card List:** Searches for records within a department. To search for normal activities only, do not select any events. To search for abnormal activities, select one or more events under the Filter section. The following events are available.
  - **In Late:** Punching in after the assigned start time.
  - **In Early:** Punching in before the assigned start time.
  - **Out Late:** Punching out after the assigned end time.
  - **Out Early:** Punching out before the assigned end time.
  - **Over Hours:** Working after the Overtime Buffer Period but before the Extended Period.
  - **Unscheduled Absence:** Absence during scheduled work day.
  - **Missed Punch:** Punching in without punching out or punching out without punching in.
  - **Not Scheduled:** Working on days when there is no assigned shift for that day.
- **Average Hour Summary:** Shows each department's average work hours per person during the time period specified and the percentage occupied in comparison to other departments.
- **Exception Summary:** Displays a department's total counts of Exception Events within the time period specified.

[Payroll Templates]

- **Payroll List:** Shows the hourly pay, total work hours and total pay of the employees within a department during the time period specified.
- **Employee Payroll:** Shows the hourly pay, total work hours and total pay of an employee for each day of the time period specified.
- **Payroll Summary:** Shows the average total pay of each department during the time period specified and the percentage occupied within the company.

3. Using the Daily Time Card as an example, double-click **Daily Time Card** on the left menu. This dialog box appears.

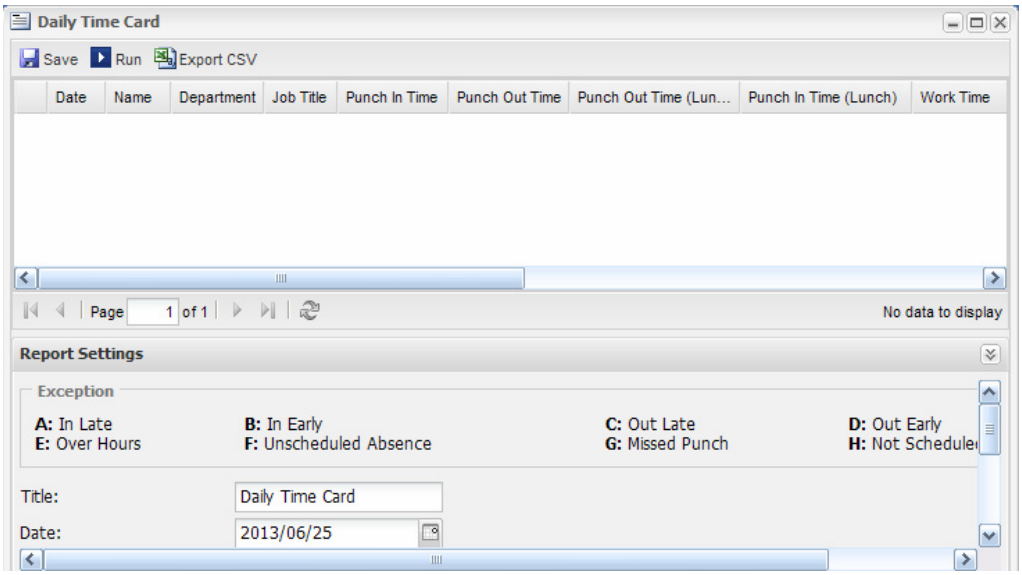


Figure 11-23

4. Select the **Date** and **Department** to look up the employees' scheduled shift and actual attendance record.

5. Click the **Run** button toward the top. A dialog box similar to the one below appears. Using the fifth person as an example, Paul punched in at 10:01 and punched out at 16:56, even though his scheduled work time is from 9:00 to 17:00. He is therefore listed as A (In Late) and D (Out Early) in the **Exception** column. The number of hours he worked is listed under the **Work Time** column.

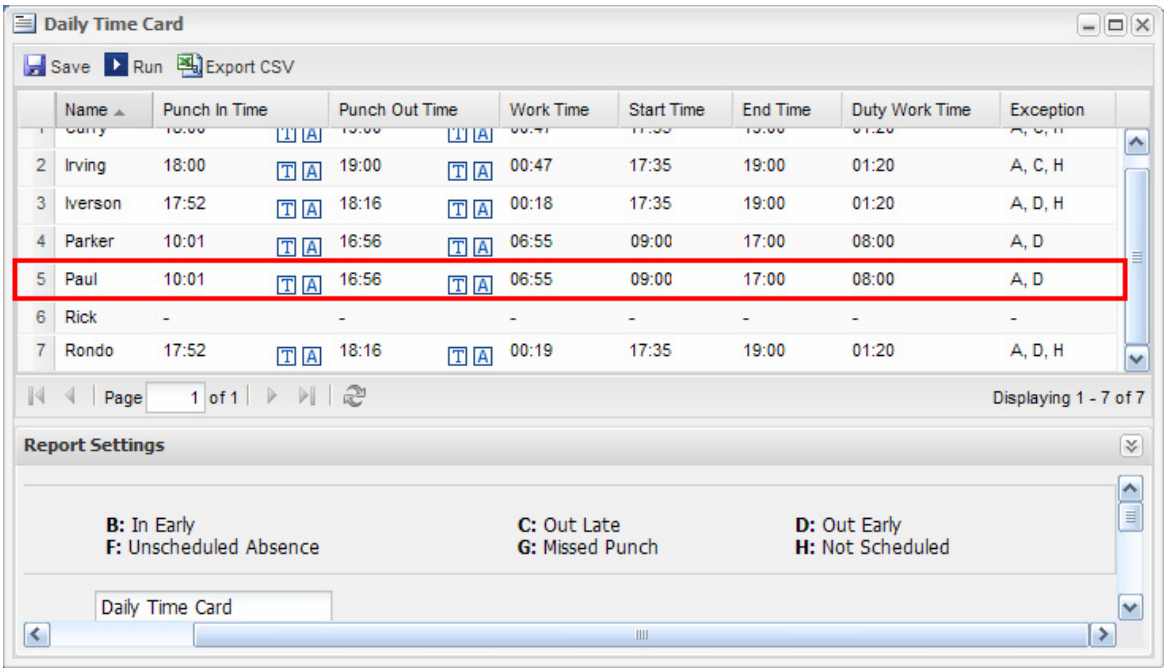


Figure 11-24

6. You can click the **Access Log** icon to see complete attendance record or click the **TA Log** icon to see attendance records excluding records that are not during the scheduled work hours.

7. Click **Save** and a shortcut of the Daily Time Card for the specified department and date will be created in the TA Report main page.

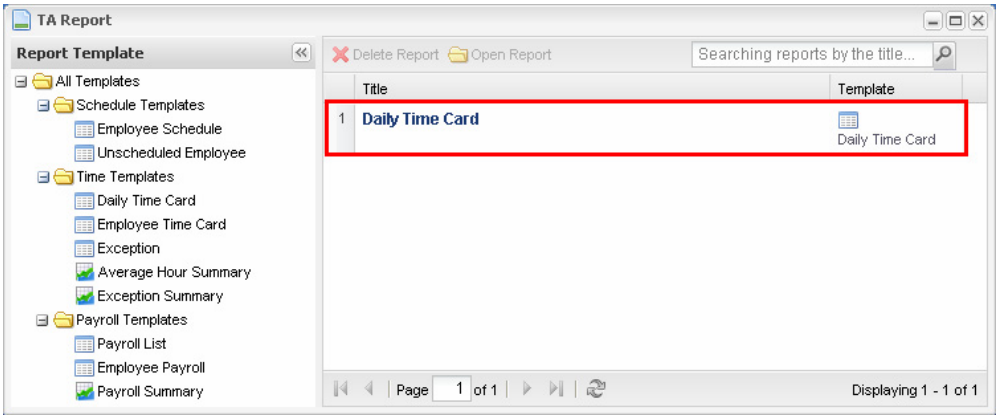


Figure 11-25

8. Click **Export CSV** to export the data in an excel file.

9. To select which data to display, click the arrow next to the column title and click **Column**.

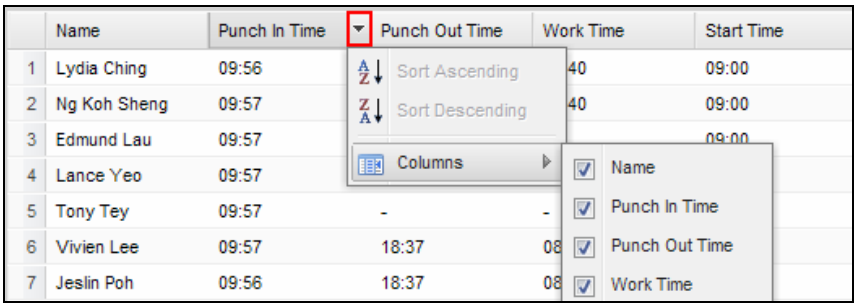


Figure 11-26

Note: The **Export CSV** function is only available after you have saved the report by clicking the **Save** button.

11.5 Creating Accounts to Manage GV-TAWeb

The administrator can create accounts with different privileges to manage GV-TAWeb.

1. On the menu bar, click **Tools** and select **Operators**. A dialog box appears.

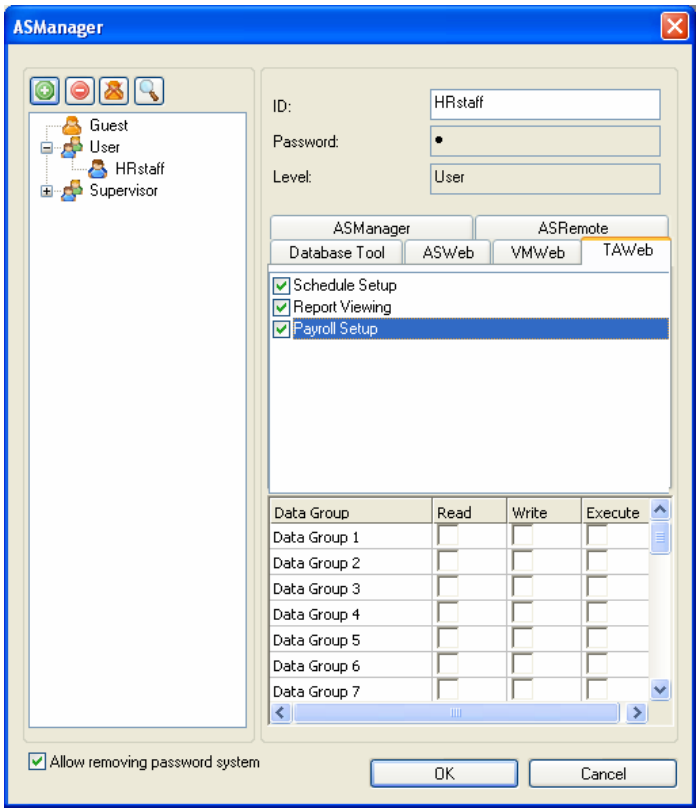


Figure 11-27

2. To create an account, click the **New** button in the bottom left corner.
3. Type the account's **ID** and **Password**. Re-type the password in the **Password Confirmation** field.
4. In the **Level** drop-down list, select **Supervisor** to have access to all GV-TAWeb functions. To grant limited access, select **User**. Click **OK**.
5. Click the **TAWeb** tab.
6. Select the privileges you want to grant. The following options are available.
   - **Schedule Setting:** Access TA Shift, TA Template and TA Schedule.
   - **Report viewing:** Access TA Report.
   - **Payroll settings:** Access TA User.
7. Click **OK**.

Chapter 12 GV-VMWeb for Visitor Management

The GV-VMWeb is a visitor management system for internal business use where the administrator can create a visitor database and grant access to visitors on a LAN environment. GV-VMWeb can also be set up to allow visitors to register their own visitor account and create visit requests over the internet using the Visitor service.

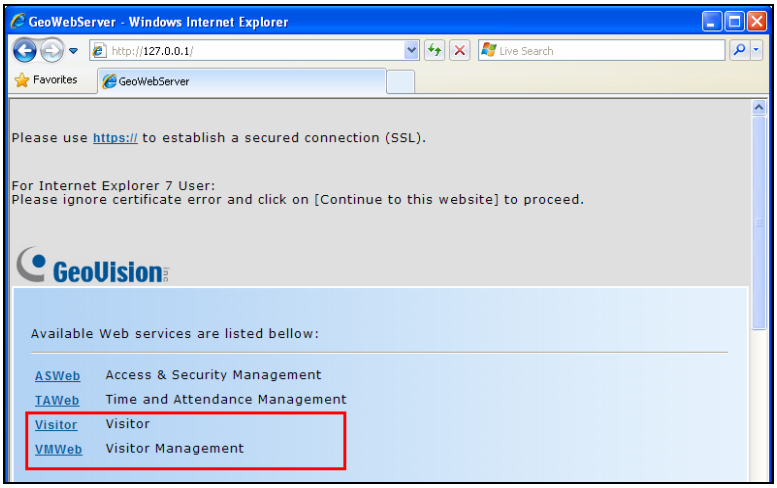


Figure 12-1

To use the GV-VMWeb, the browser in the client PC must be **Internet Explorer 7 or later**.

12.1 Connecting to GV-ASManager

Before GV-VMWeb can connect to a GV-ASManager, remote access must be enabled on the GV-ASManager as below:

- On the menu bar, click **Tools**, select **Servers** and enable **Web Server**. This dialog box appears.

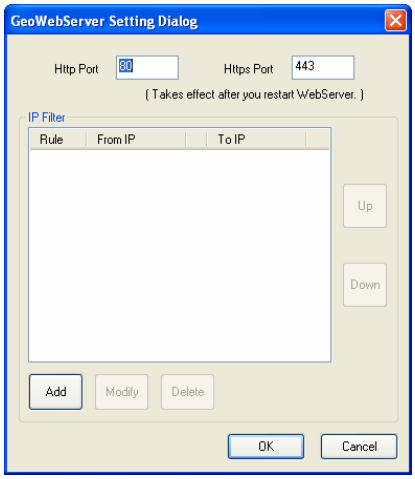


Figure 12-2

If you want to grant or deny the access from certain IP addresses, click **Add** and type the IP addresses. Otherwise click **OK** to start the connection. When the server is started, the icon  appears at the bottom of the main screen.

To start the GV-VMWeb:

1. Open an Internet browser, and type the IP address of the GV-ASManager to be connected. This web page appears.

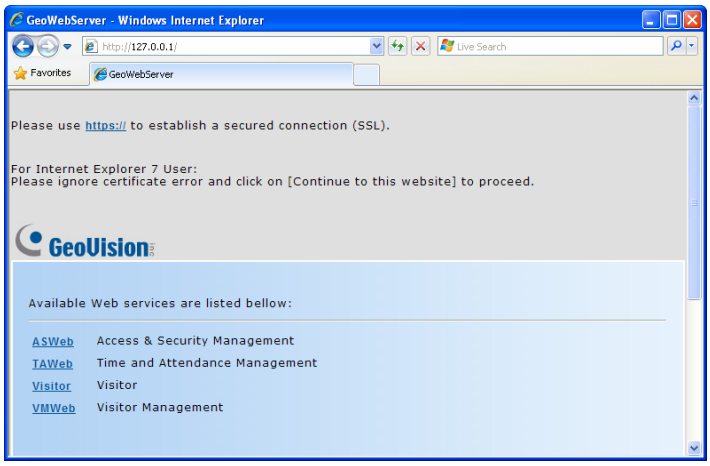


Figure 12-3

2. Click **https://** for SSL encrypted connection, or **VMWeb** for regular connection.
3. Enter a valid username and password for login. The GV-VMWeb page appears.

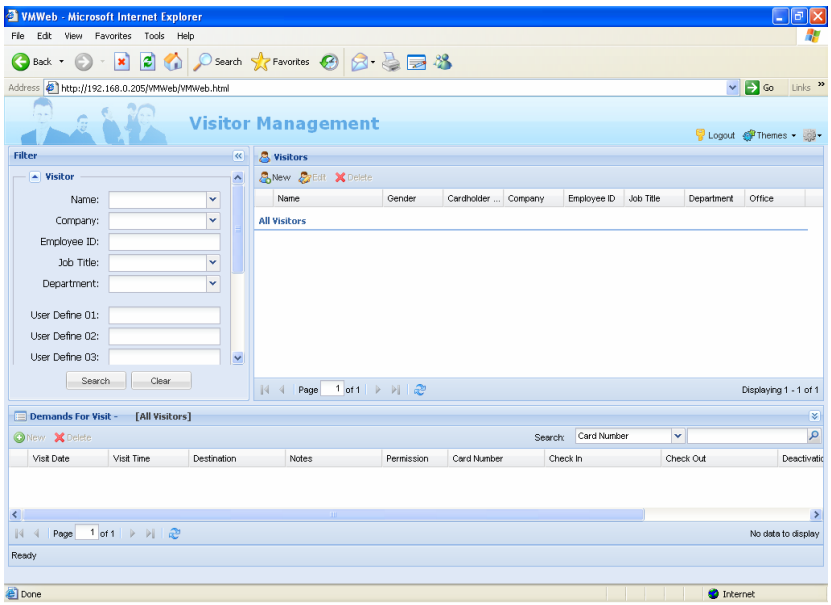
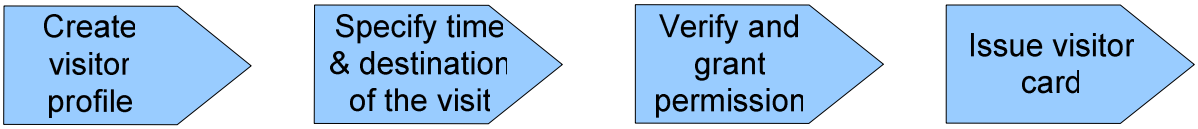


Figure 12-4

12.2 Creating Accounts to Manage GV-VMWeb

The administrator can create multiple accounts with different privileges to manage each step of granting access as shown below.



You can create a security staff account with privileges to create **Visitor Data** and **Visit Records**, while another account with privileges to **Verify** visitors and **Issue Card** can be assigned to a management staff. In this setup, the security staff can create a visitor profile and a visit request for visitors, but the management staff needs to approve the visit and issue a card to the visitor before the visitor can be granted access.

Note: You need to create a visitor card before you can issue a card to a visitor. To see how to add a visitor card, refer to *4.3 Adding Cards*.

To create accounts:

1. On the menu bar, click **Tools** and select **Operators**. This dialog box appears.

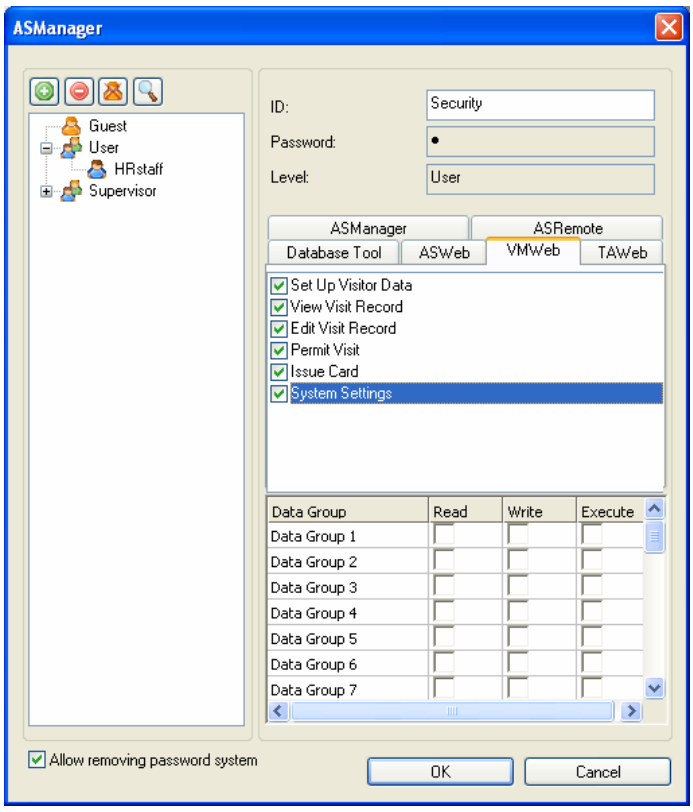


Figure 12-5

2. To create an account, click the **New** button in the bottom left corner. This dialog box appears.

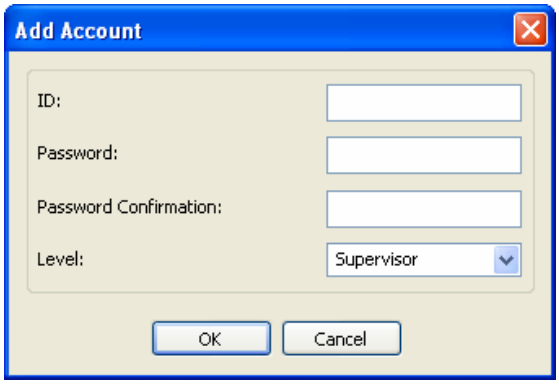


Figure 12-6

3. Type the Supervisor's **ID** and **Password**. Re-type the password in the **Password Confirmation** field.
4. In the **Level** drop-down list, select **Supervisor** to have access to all GV-VMWeb functions as shown in Figure 11-6. Click **OK**. To grant limited access, select **User** and click **OK**.
5. Click the **VMWeb** tab.
6. Select the privileges you want to grant. The following options are available.
   - **Set Up Visitor Data:** Create or edit visitor profiles.
   - **View Visit Record:** Look up visit records in the past for each visitor.
   - **Edit Visit Record:** Create or edit visits in GV-VMWeb.
   - **Approve Visit:** Record the name of the account that approved the visit request.
   - **Permit Visit:** Grant permission to allow the visit in GV-VMWeb.
   - **Issue Card:** Assign a card to the visitor in GV-VMWeb. The Verify privilege must also be allowed for the account to have access to this option.
   - **System Settings:** Enable the Auto-Verify option under **Setting** drop-down list .
7. Click **OK**.

12.3 Creating Visitor Profile

GV-VMWeb allows you to create visitors profile and grant different access to each visitor.

To create a visitor account:

1. In the Visitor section, click the **New** button. This dialog box appears.

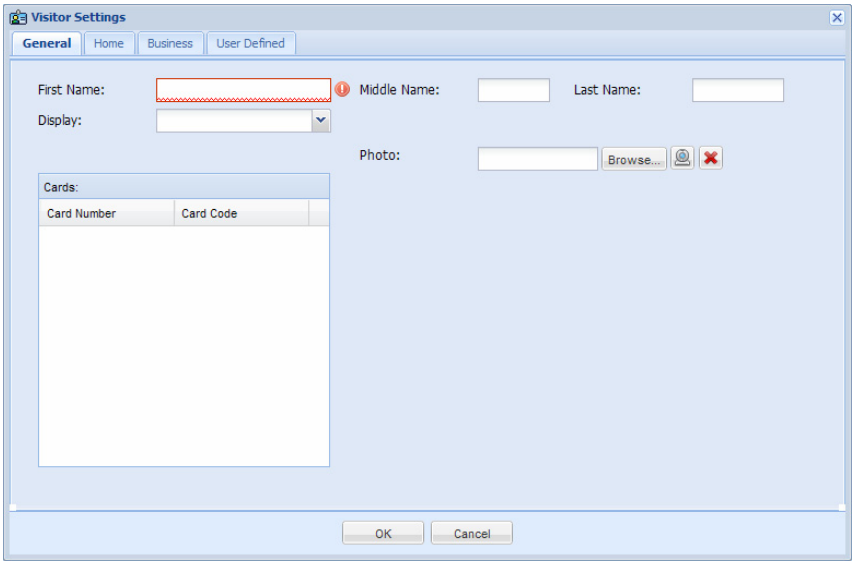


Figure 12-7

2. In the **General** tab, you can type the name of the visitor and click **Browse** to upload a photo of the visitor. If you have a webcam installed, click the **Webcam** icon to take a picture from the webcam for the visitor profile. Any valid card number and card code for the visitor will be displayed under the **Cards** section.
3. In the **Home** and **Business** tab, you can fill out other personal information about the visitor, such as phone number, address, birthday and gender.
4. In the **User Defined** tab, customized field labels will be displayed. To see how to customize the fields, see *4.6.4 Customizing a Data Field*.
5. Click **OK** to save the visitor information.

Note:

1. The visitor profile created will be updated to the User List in GV-ASManager.
2. The webcam function requires Flash Player 10 or later.

12.4 Granting Visitor Access

After the visitor's account is created, access permission can be granted to visitors using the **Demand for Visits** section. In this section, you can specify the date and time of the visit, assign an access card to the visitor and view visit record.

Note: You need to first create a visitor card before you can issue a card to a visitor. To see how to add a visitor card, refer to *4.3 Adding Cards*.

---

1. Select the visitor account in the Visitors section and click the **New** button in the Demands for Visit section.

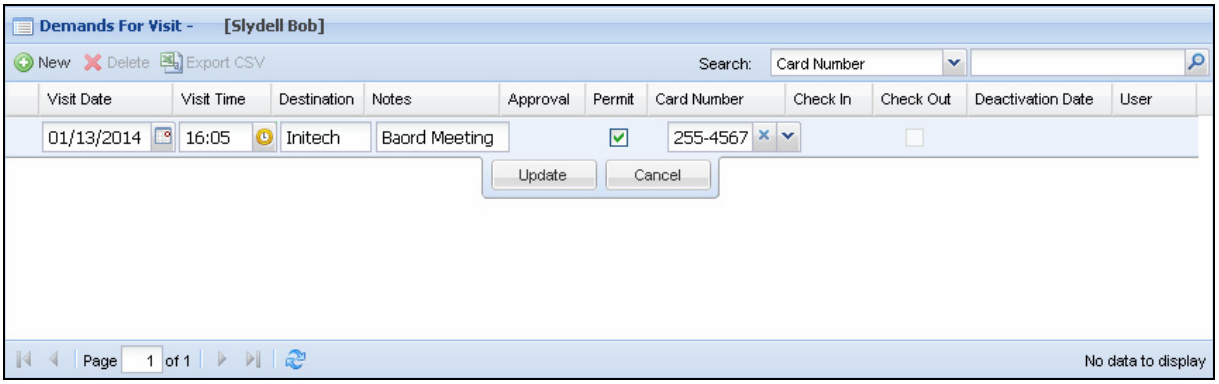


Figure 12-8

2. Select a **Visit Date** and **Visit Time** to note the time when the visitor will be visiting.
3. You can type a **Destination** and **Note** for your own reference.
4. Under **Approval**, the account that permitted the access will automatically be recorded after permission is granted.
5. Select the **Permit** checkbox to grant access permission.

6. Click the **Card Number** drop-down list. This dialog box appears.

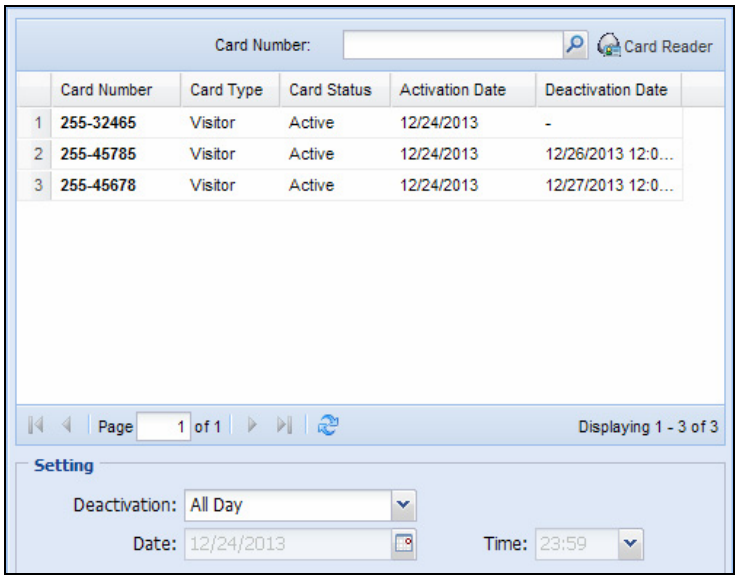


Figure 12-9

Note: If you have a GV-PCR310 Enrollment Reader installed, you can place the visitor card on the GV-PCR310 and click **Card Reader** to quickly identify the card number.

7. Select a visitor card to assign to the visitor and use the **Deactivation** drop-down list to specify when the card will be deactivated.
8. Click the **Update** button to continue editing the Demand for Visit entry.
9. The **Check-In** time is the time when the Demand for Visit entry is created. After the visitor has returned the visitor card, you can return to this visit record and select the **Check-Out** checkbox to check out the card. You can also choose to automatically check out the visitor card when the visitor presents the card at an exit door. Refer to *Step 2: Configuring the Doors or Elevator Floors* in Chapter 4 to see how to set up automatic check out.

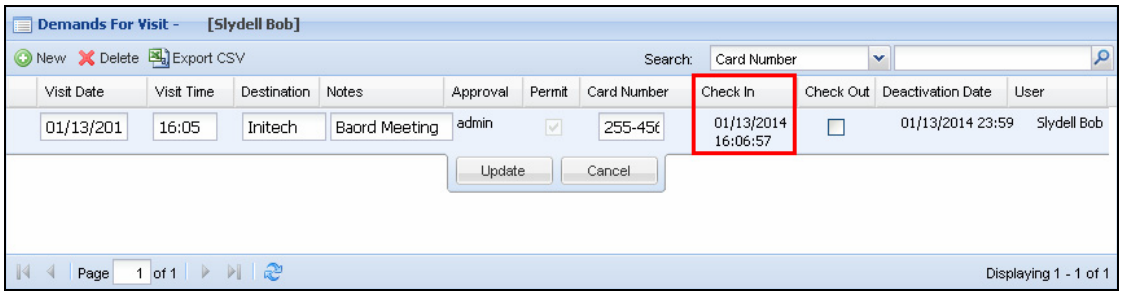


Figure 12-10

10. Click the **Update** button to save the settings and the data will be updated to GV-ASManager.

12.5 Searching GV-VMWeb Database

To search for visitors with certain criteria, type the visitor's information in the **Filter** section on the left and click the **Search** button. The search results will be listed in the **Visitors** section. You can also search visit records from the past by using the **Search** function under Demands For Visit section. Use the drop-down list to search by Card Number, Destination, Notes or User.

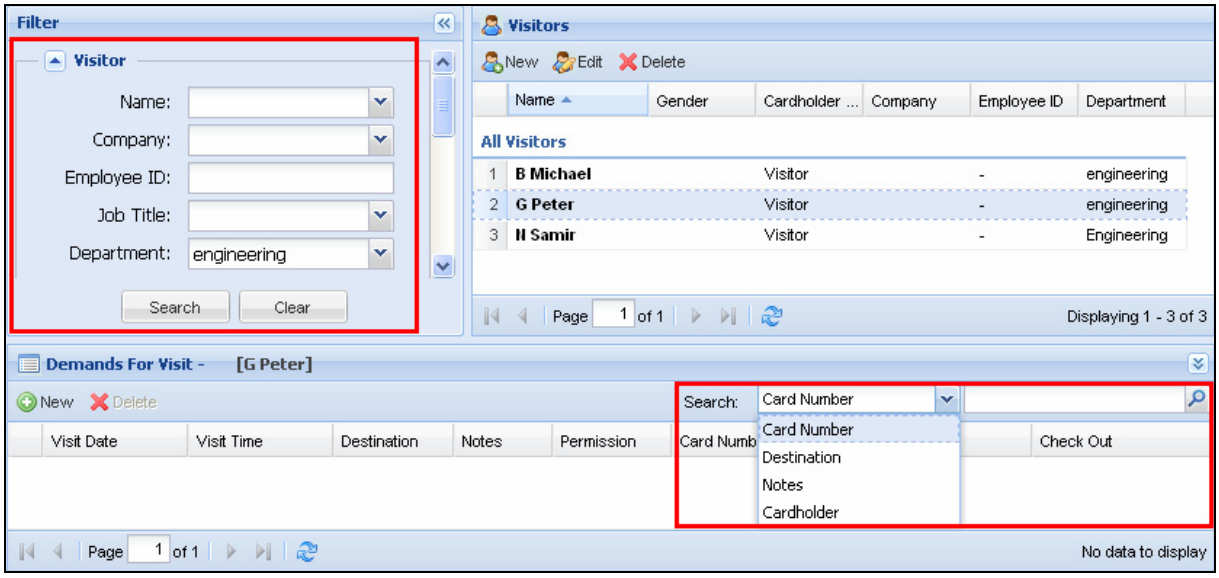
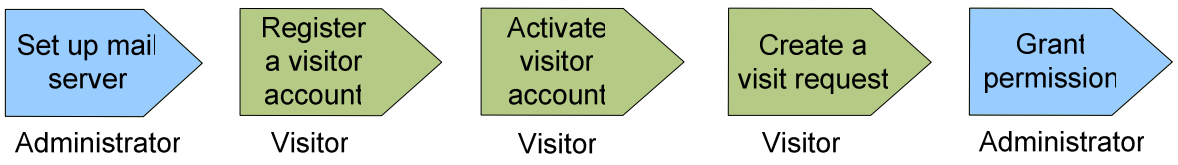


Figure 12-11

12.6 Visitor Self Registration

Visitors can create a visitor account over the Internet and request permission to access the premise.

The administrator needs to first set up the mail server on GV-VMWeb. The visitor will be able to register a visitor account, activate the account and create a visit request. The visit request will show up in GV-VMWeb for the administrator to grant or deny access.



12.6.1 Setting Up Mail Server in GV-VMWeb

The administrator must first set up the mail server in GV-VMWeb. The mail server will be used to send a confirmation e-mail to the visitor when they register an account.

1. Open an Internet browser, and type the IP address of the GV-ASManager to be connected.
2. Click **https://** and then **VMWeb** for SSL encrypted connection, or **VMWeb** for regular connection.
3. Enter a valid username and password for login. The GV-VMWeb page appears.
4. In the top-right corner, click **System Settings** and select **Visitor Web**.

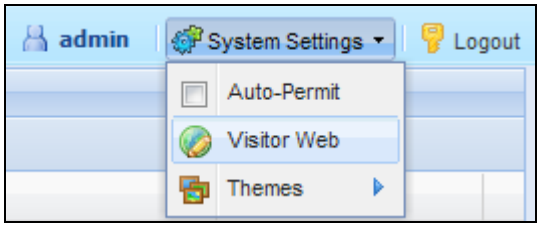


Figure 12-12

5. Under the Servers tab, set up the mail server.

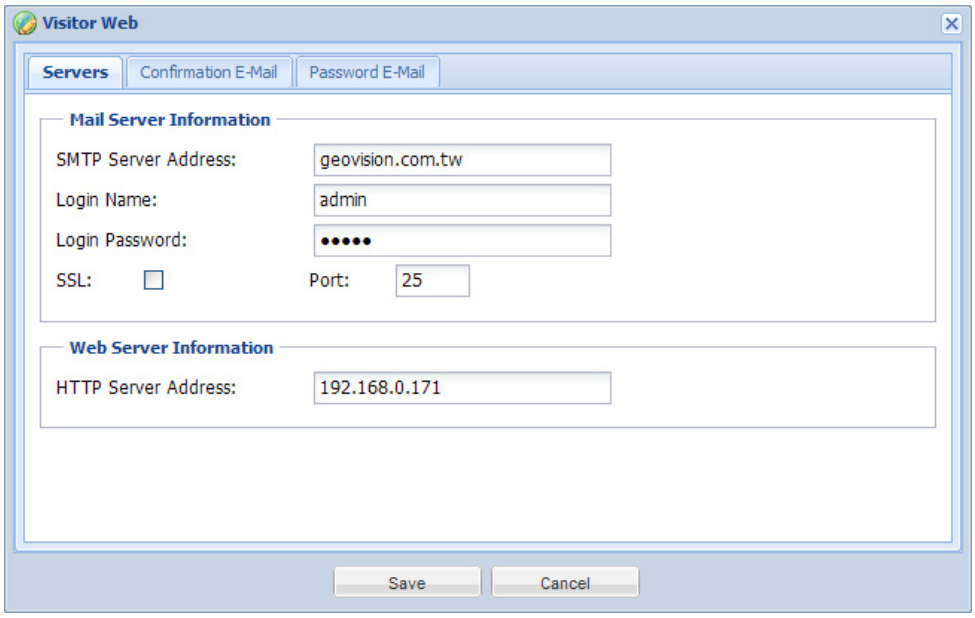


Figure 12-13

- **SMTP Server Address:** Type your mail server's URL address or IP address.
- **Login Name / Password:** Type the login name and password of the mail server.
- **SSL:** Select SSL if your e-mail server requires the SSL authentication for connection.

- **Port:** Keep the default port 25 or type a new port number for webmail providers that may use different SMTP port such as Yahoo and Hotmail.
- **HTTP Server Address:** Type the IP address or the domain name of the GV-ASManager.

6. Click the **Confirmation E-Mail** tab and type the **Sender Name**, **Sender Address**, **Mail Subject** and **Mail Message**. After registering a visitor account, a confirmation e-mail will be sent to the visitor and the visitor must click the activation link to confirm the account.

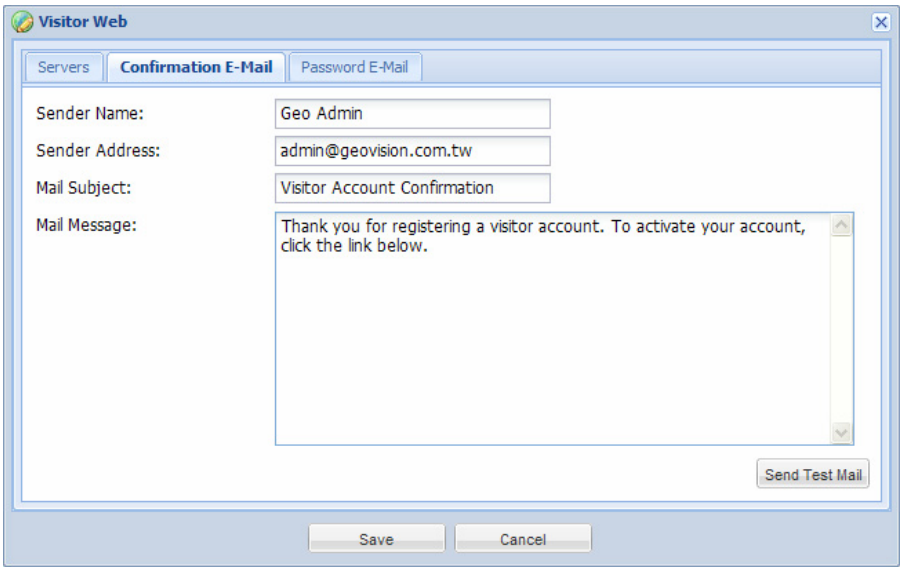


Figure 12-14

7. Click the **Password E-Mail** tab and fill out the information. The visitor will be able to retrieve a forgotten password by clicking the “Forgot your password?” link at the login page. An e-mail with the password will be sent to the visitor.

12.6.2 Creating a Visitor Account

1. Open an Internet browser, and type the IP address of the GV-ASManager to be connected. This web page appears.

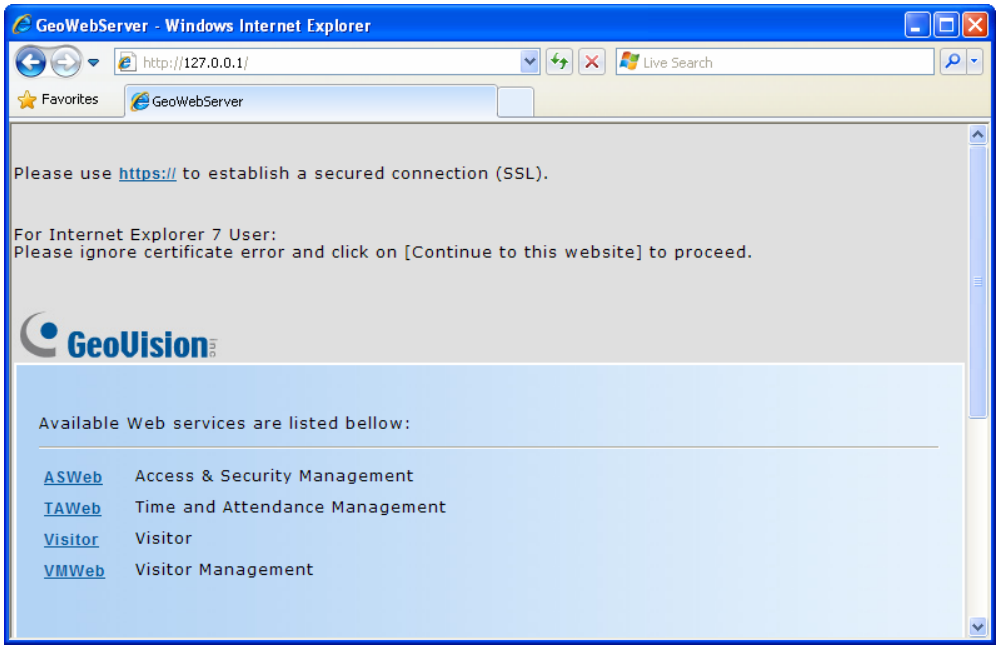


Figure 12-15

2. Click **https://** and then **Visitor** for SSL encrypted connection, or **Visitor** directly for regular connection. The Visitor Login page appears.

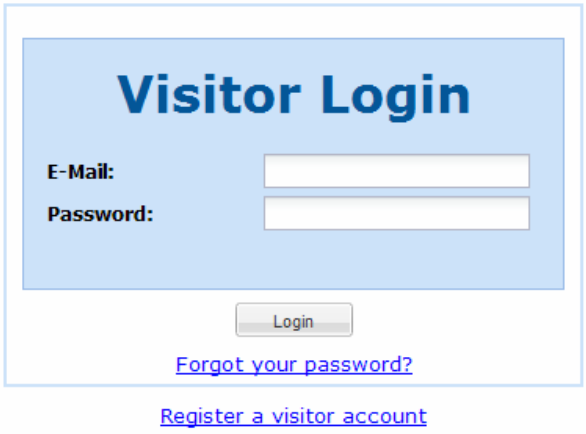


Figure 12-16

3. Click **Register a Visitor Account**. This window appears.

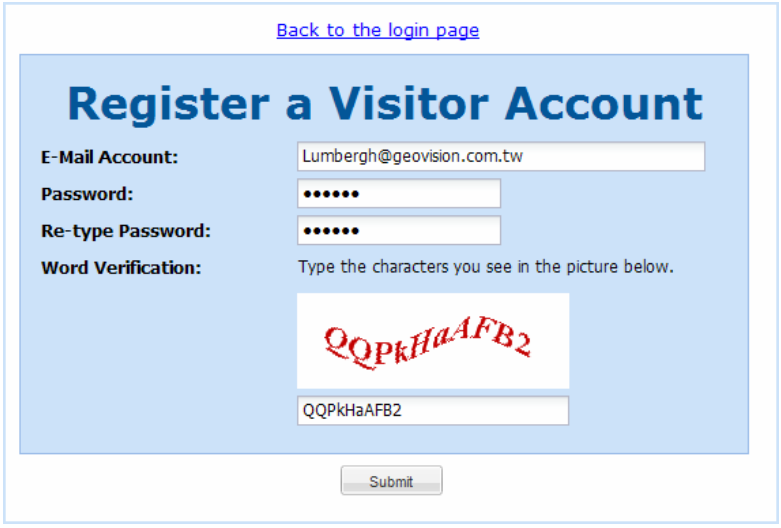


Figure 12-17

4. Type the e-mail address and type a password for the visitor account.
5. Type the characters for word verification.
6. Click **Submit**. A confirmation e-mail will be sent to the e-mail address shortly. Click the activation link in the e-mail to activate the visitor account.

12.6.3 Creating a Visit Request

After the visitor account is activated, the visitor can now log into his or her account to create a visit request.

1. Open an Internet browser, and type the IP address of the GV-ASManager to be connected. A web page appears.
2. Click **https://** and then **Visitor** for SSL encrypted connection, or **Visitor** directly for regular connection. The Visitor Login page appears.
3. Type the visitor account and password, and click **Login**. This window appears.

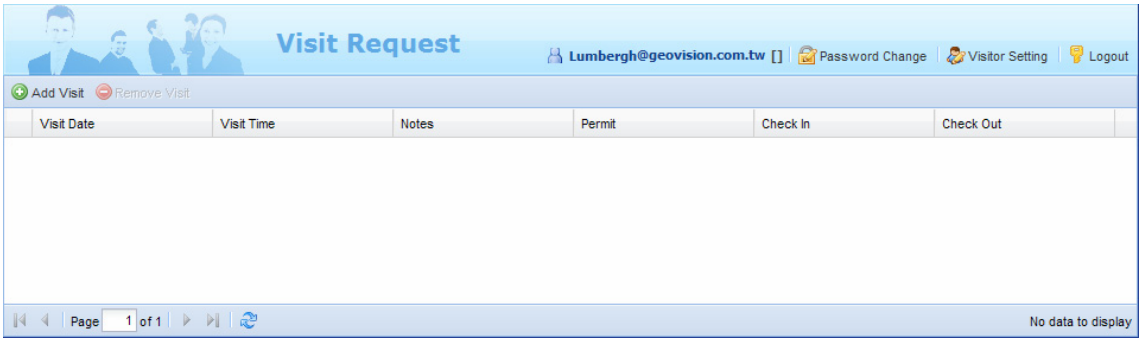


Figure 12-18

4. Click the **Visitor Setting** button to complete the visitor profile. Refer to *Creating Visitor Profile* earlier this chapter for more details.

5. Click the **Add Visit** button. This dialog box appears.

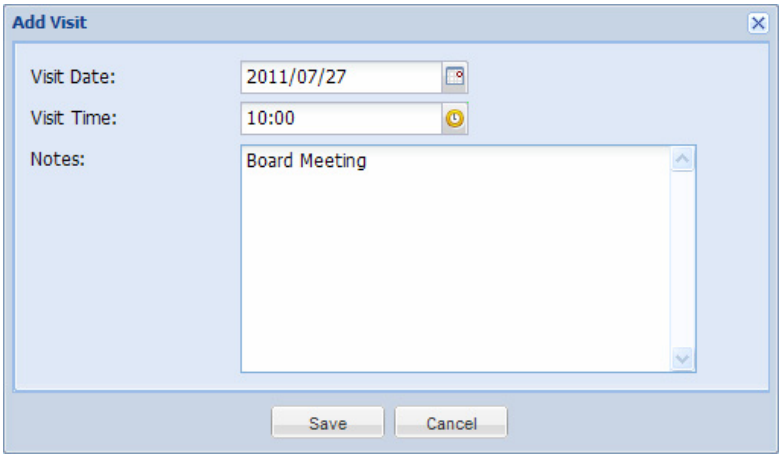


Figure 12-19

6. Specify the planned visit date and time.

7. Click **Save**.

When the administrator logs into GV-VMWeb, he or she can click the visitor's name to see the visit request submitted.

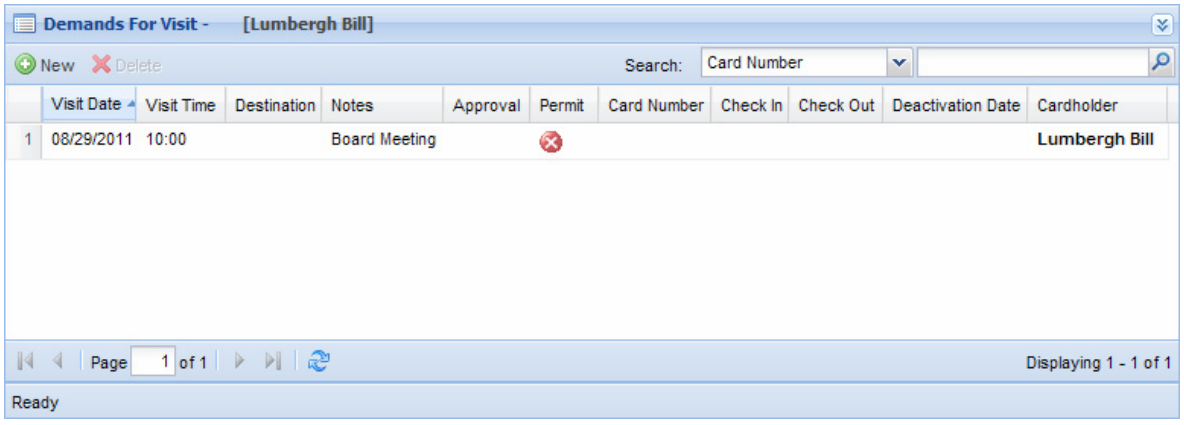


Figure 12-20

The administrator can double-click the visit request to grant access and assign visitor card to the visitor.

Chapter 13 License Plate Recognition

The License Plate Recognition functions allow GV-DSP LPR and GV-DVR LPR to grant access when the detected license plate numbers match the vehicle registered in GV-ASManager's database. GV-ASManager can connect with up to 255 GV-DSP LPR and / or GV-DVR LPR, which can recognize license plates detected in the connected cameras.

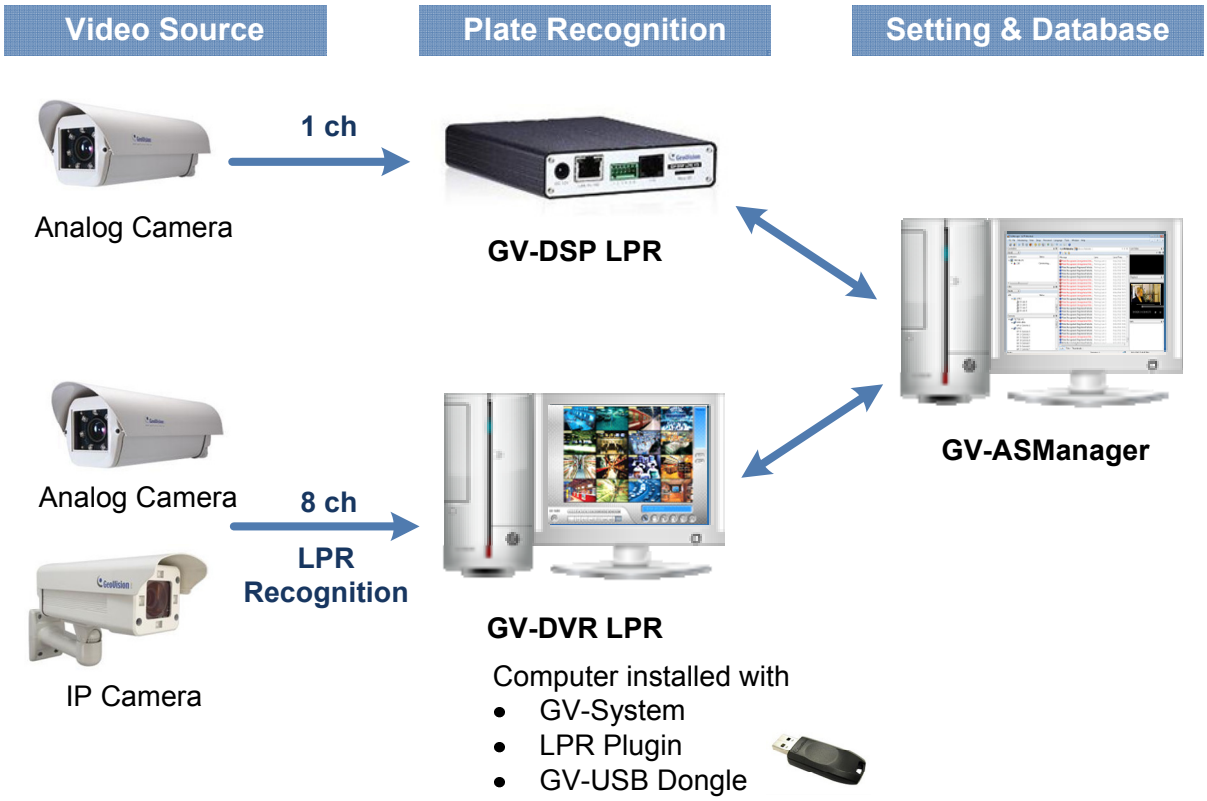


Figure 13-1

Main Screen

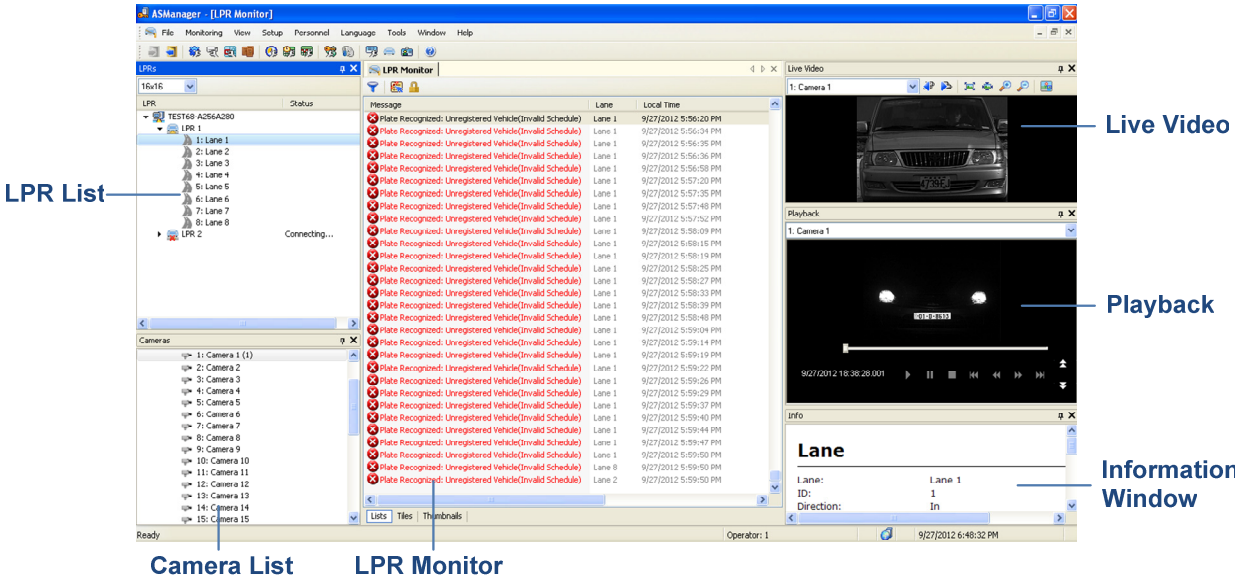


Figure 13-2

13.1 Installing GV-DVR LPR

A GV-System V8.5.5.0 or later can be turned into a GV-DVR LPR simply by installing the LPR Plugin supplied in the Software DVD and by inserting an LPR Dongle.

13.1.1 System Requirements

Before setting up GV-DVR LPR, make sure the PC meets the minimum system requirements.

Number of LPR Channels	1-4 Channels	5-8 Channels
OS	64-bit Windows 7 / 8 / Server 2008 / Server 2012	
CPU	Core i5 2400, 3.1 GHz	Core i7 2600, 3.4 GHz
Memory	2 x 2 GB Dual Channels	
Hard Disk	500 GB	
VGA	AGP or PCI-Express, 1280 x 1024 , 32-bit color and support DirectX 10c	
DirectX	End-User Runtimes (November 2008)	
Software	.NET Framework 3.5 SQL Server 2005 Express (optional)	
Browser	Internet Explorer 7.0 or later	
GV-System	GV-ASManager 4.0: V8.5.5.0 or V8.5.6.0 GV-ASManager 4.1: V8.5.7.0 GV-ASManager 4.2: V8.5.8.0 GV-ASManager 4.2.1: V8.5.9.0	

Note:

1. The software programs End-User Runtimes (November 2008) and .NET Framework 3.5 are required to run the GV-ASManager. The software programs can be found in the supplied software DVD.
2. It is recommended to use separate PCs for GV-ASManager and GV-DVR LPR.

13.1.2 Installing LPR Plugin

1. Insert the supplied Software DVD to your computer and a window pops up automatically.

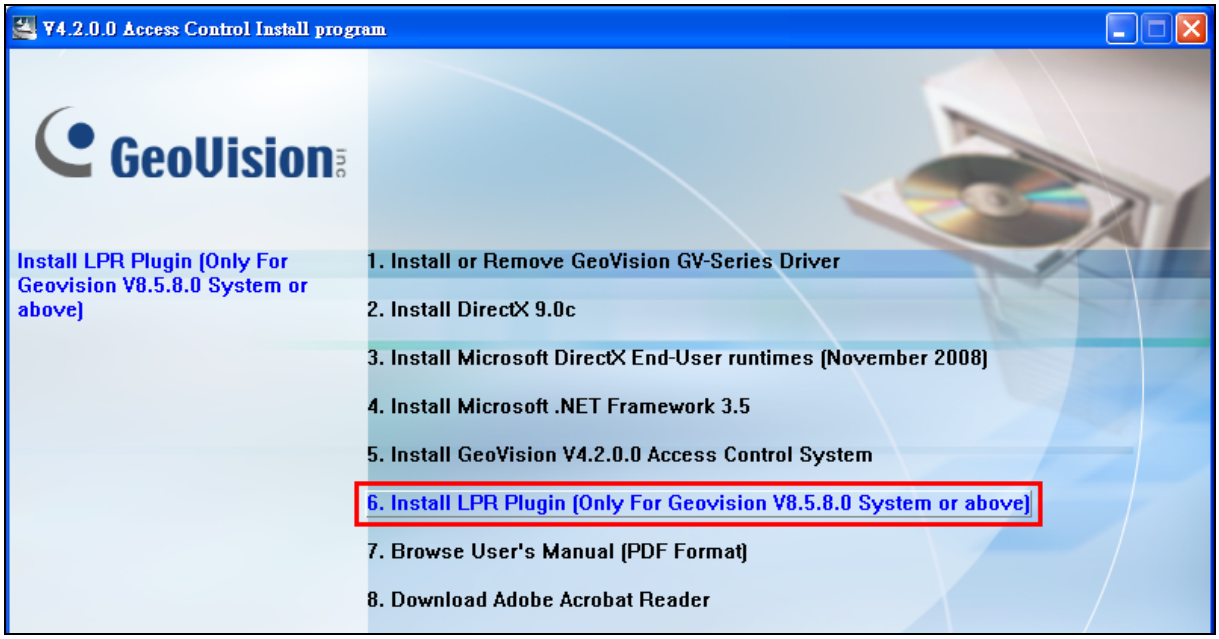


Figure 13-3

2. Select **Install LPR Plugin** and follow on-screen instructions to complete the installation.

13.1.3 Inserting LPR Dongle

To see recognition results, an LPR Dongle needs to be inserted to the computer of the GV-System. Both internal and external dongles are available. The dongle options include 1, 2, 3, 4, 5, 6, 7, 8 channels.

The following types of USB Dongle are supported:

- GV-LPR with GV-System (Black, Blue)
- GV-LPR with Video Capture Card (Black, Blue)

Note:

1. When multiple LPR dongles are inserted, the dongle that supports the most number of channels will be applied. The number of channels supported on each dongle will **not** be combined.
2. If no LPR dongle is inserted, license plates will be captured but the plate numbers will not be recognized.

13.1.4 Accessing Recognition Results on GV-DVR LPR

LPR Plugin comes with a tool that allows you to access the snapshots and recognized plate numbers of the detected license plate. When installing LPR cameras for the first time, you can use this tool to see the recognition results and make sure the cameras have been set up correctly.

1. Open the folder of the GV-System and click **TestRecogPicView.exe**. This dialog box appears.

Figure 13-4

2. Click **Show**. The upper row is the live view of channels 1 to 4 and the lower row shows the snapshots of any license plates detected. The recognized plate numbers are displayed under the snapshots.

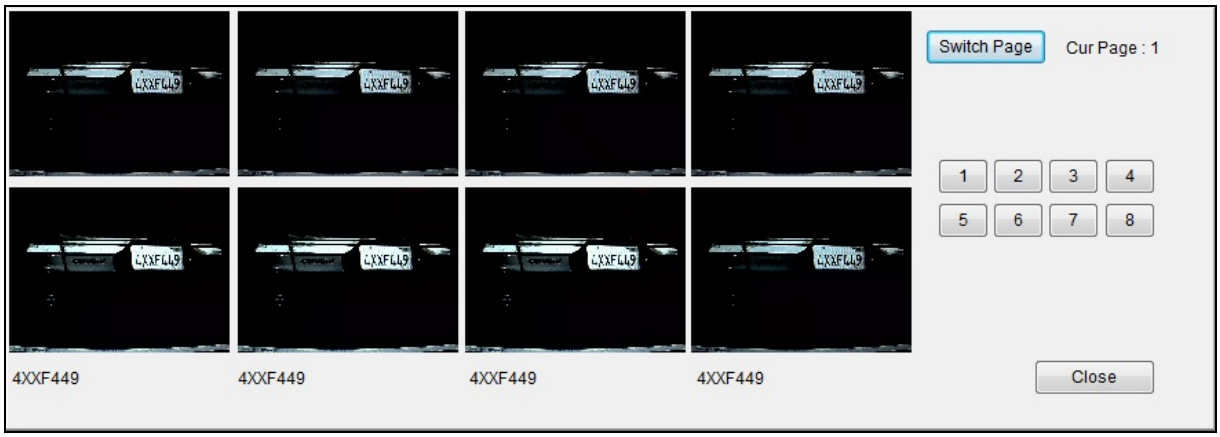


Figure 13-5

3. To see the results from channels 5 to 8, click **Switch Page** to switch to page 2.
4. To manually force the GV-DVR LPR to detect license plates, click the channel number buttons  on the right. You may need to switch to the correct page first to see the recognition results.

13.2 Setting Up GV-DVR LPR

To set up GV-DVR LPR, follow the requirements listed in *12.1 Installation* and then follow the steps below:

- **Step 1 Enabling LPR Functions on GV-DVR LPR**

  Enable the recognition cameras and/or the overview cameras on GV-DVR LPR.

- **Step 2 Adding GV-DVR LPR to GV-ASManager**

  Establish the communication between GV-ASManager and GV-DVR LPR.

- **Step 3 Configuring a Channel**

  Set up the related cameras and the recognition conditions of the channel.

Note: For optimal results, the recognition cameras should be cameras specialized for license plate recognition, such as GeoVision's GV-LPR Cam 20A, GV-LPR Cam 10A, and GV-Hybrid LPR Cam 10R. For more information, visit GeoVision's website at: http://www.geovision.com.tw/english/3_1_LPR.asp.

13.2.1 Step 1: Enabling LPR Functions on GV-DVR LPR

To enable license recognition on GV-DVR LPR, click the **Configure** button, select **Video Analysis**, select **License Plate Recognition** to access the following LPR related functions.

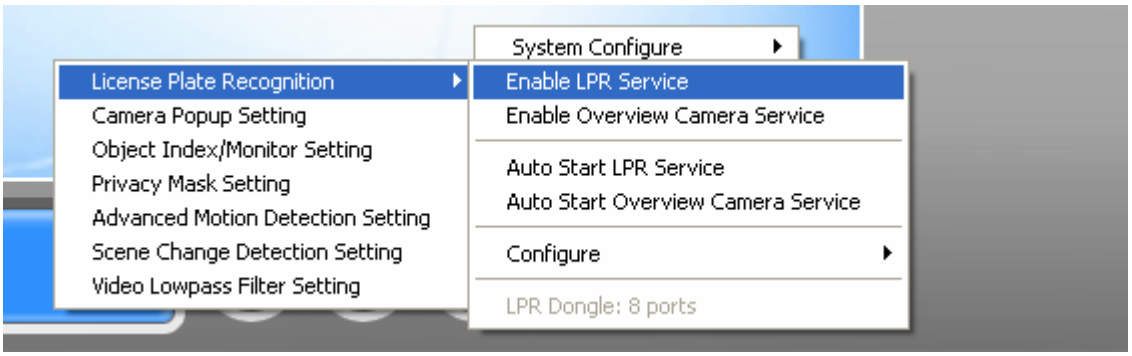


Figure 13-6

- **Enable LPR Service:** Enable recognition of license plates detected in the Recognition Camera.
- **Enable Overview Camera Service:** Allow GV-ASManager to use cameras connected to the GV-System as overview camera.
- **Auto Start LPR Service:** Automatically start LPR Service at GV-System Startup.
- **Auto Start Overview Camera Service:** Automatically start Overview Camera Service at GV-System Startup.
- **Configure:** Allows you to export LPR data. See *Exporting LPR Data* section below.

Note: Make sure the LPR dongle is inserted to the computer of the GV-System.

13.2.2 Step 2: Adding GV-DVR LPR to GV-ASManager

1. On the menu bar, click **Setup** and select **Devices**. This dialog box appears.

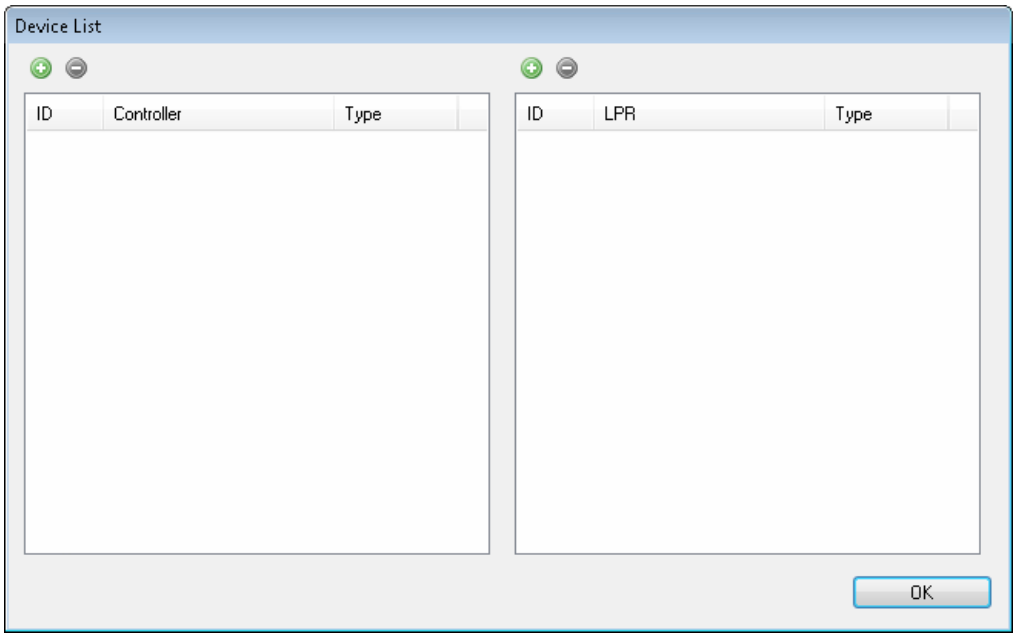


Figure 13-7

2. On the right LPR side, click the **Add** button . This dialog box appears.

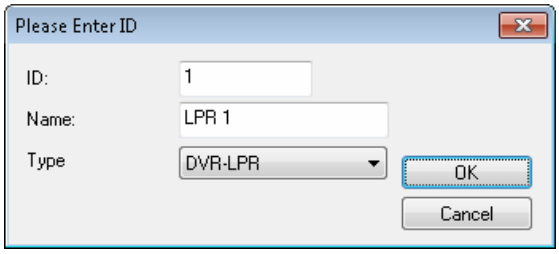


Figure 13-8

3. Type an **ID** number and **Name** for the LPR.
4. Use the drop-down list to select **DVR-LPR**.

5. Click **OK**. This dialog box appears.

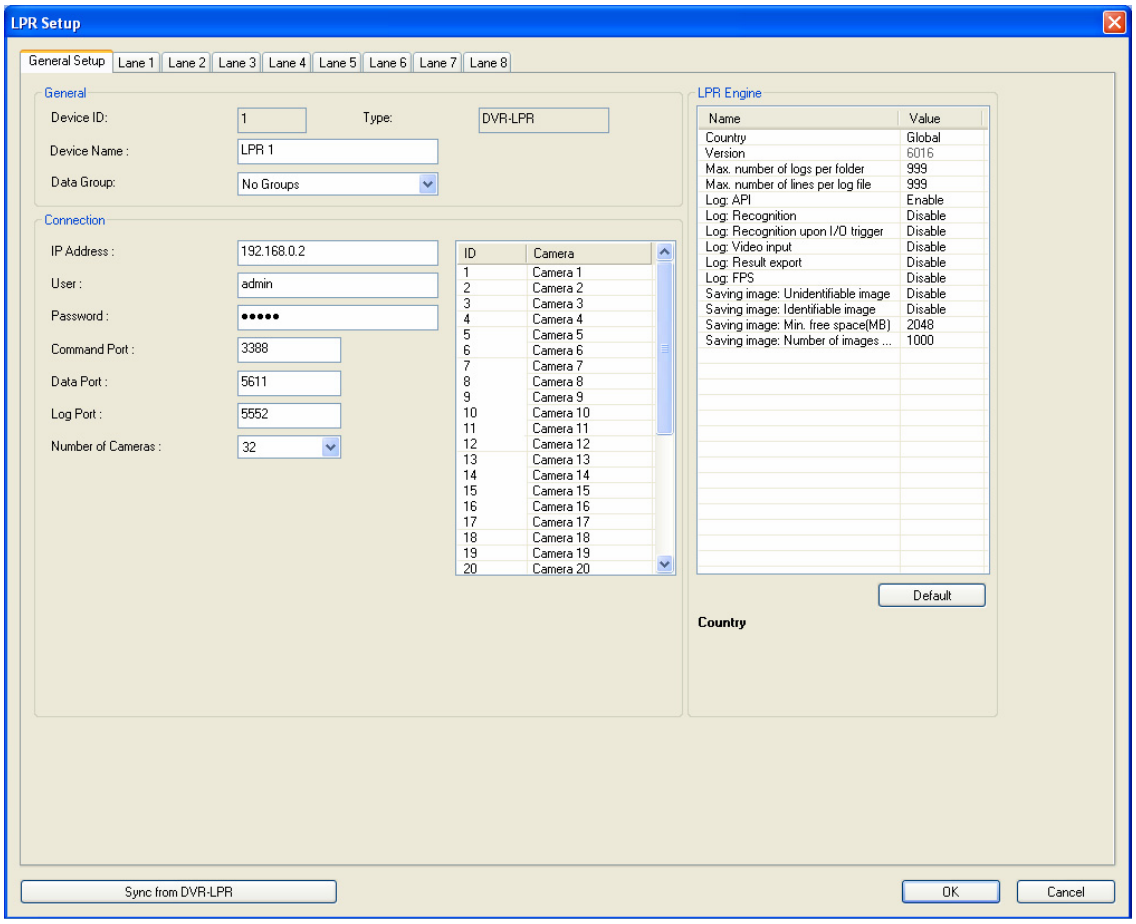


Figure 13-9

6. Assign the GV-DVR LPR to a **Data Group** if needed or select **No Groups** to disable the data group function. You can then allow or forbid a user to read / write / execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.
7. Under Connection, type the IP **Address**, **User** name and **Password** of the GV-DVR LPR.
8. You can modify the following settings if necessary.
   - **Command Port:** The default command port is 3388.
   - **Data Port:** The default data port is 5611.
   - **Log Port:** The default log port is 5552.
   - **Number of Cameras:** Select the number of cameras supported by the GV-System.
   - **Camera Name:** On the right side of the dialog box, select a camera to modify the camera name.
9. Under **LPR Engine**, select the **Country** of the recognition engine. You can also modify the log-related settings to change how and what information is stored for debug purposes.

13.2.3 Step 3: Configuring a Channel

1. To configure the channel, select a **Lane** tab. This dialog box appears.

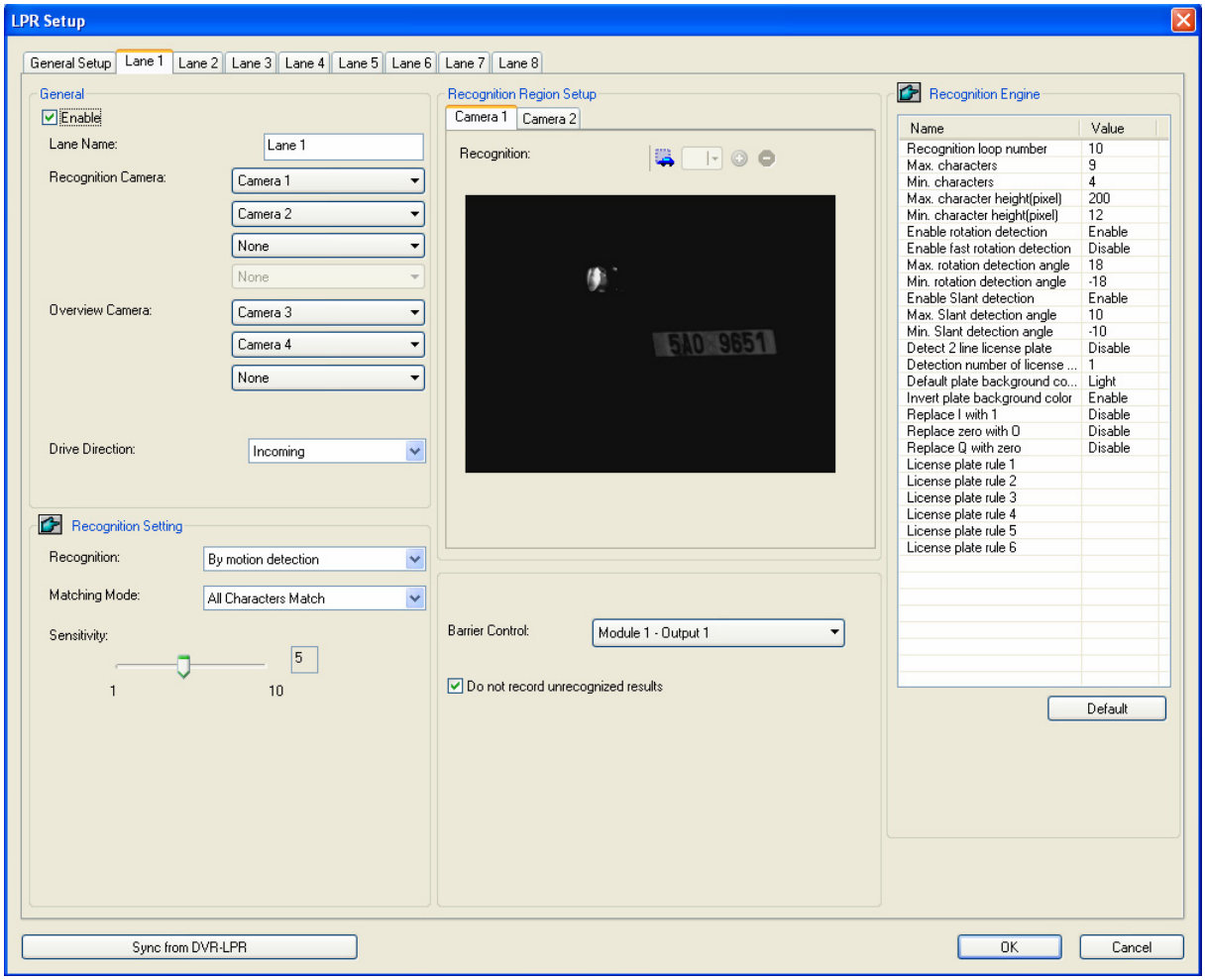


Figure 13-10

2. Select **Enable**.

Note: To apply the current settings of the connected GV-DVR LPR, click **Sync from DVR LPR** and skip to step 9.

---

3. Select up to four cameras connected to the GV-System to be the **Recognition Camera**. Having more than 1 camera is useful when the width of the lane requires multiple cameras. If multiple cameras recognize the same license plate at the same time, the data will be recorded as 1 record. Note that the resolution of the recognition camera needs to be at least D1.

4. Select up to three **Overview Cameras** to capture the overall appearance of the vehicle. The overview camera must be connected to the GV-System.
5. Configure the Recognition Settings:
   - **Recognition:** Select to start license plate recognition upon **motion detection** or **I/O** trigger.
   - **Matching Mode:** To open the output device specified in Barrier Control only when the detected license plate matches a registered license plate completely, select **All Characters Match**. When **Allow 1 mismatched character** or **Allow 2 mismatched characters** is selected, 1 or 2 mismatched characters will be tolerated and the order of the characters will be ignored. For example, license plate ABC-123 will be considered matching with ZZC-321 when Allow 2 mismatched characters is selected.
   - **Sensitivity:** Adjust the sensitivity level for motion detection.
6. Adjust the **Recognition Region Setup** for each camera if needed: Only license plates inside the area drawn will be recognized.
7. Use the **Barrier Control** drop-down list to select an output device. The output device will be triggered when the detected license plate matches a registered license plate according to the Matching Mode set in step 5.
8. Select **Do not record unrecognized results** to omit unrecognized results from LPR log.
9. Under **Recognition Engine**, adjust the settings below to improve recognition accuracy.
   - **Recognition loop number:** Repeat recognition for the number of times specified.
   - **Max. / Min. characters:** Set the maximum or minimum number of characters on the license plate to activate the recognition process. If the number of characters exceeds the maximum or is under the minimum, the system will not start the recognition.
   - **Max. / Min. height of characters:** You can set the maximum and minimum height of characters on the license plate in pixels to activate the recognition process.
   - **Enable rotation detection:** License plates tilted horizontally can be detected.
   - **Enable fast rotation detection:** This option can increase the recognition speed by 10 % but decrease the accuracy by 3%.
   - **Max. / Min. rotation detection angle:** Set the maximum and minimum tilt angle to be allowed to activate the recognition process.
   - **Enable Slant Detection:** License plates tilted vertically can be detected.
   - **Max. / Min. slant detection angle:** Set the maximum and minimum tilt angle to activate the recognition process.

- **Detect 2 line license plate:** Recognize two rows of characters on license plates. Note this option is only available on the engine version of V5000 or later.
- **Detection number of license plates:** Set the maximum number of plates to be recognized simultaneously.
- **Default plate background color:** Select **Light** to only recognize plates with white characters on dark background or select **Dark** to only recognize plates with dark characters on white background. This function is only supported when **Global** or **China** is selected for Country.
- **Invert plate background color:** Select **Enable** to invert plate color when the license plate cannot be recognized. This function is only supported when **Global** or **China** is selected for Country.
- **Replace I with 1:** Always identify the character "I" as "1" (one).
- **Replace zero with O:** Always identify the character "0" as "O" (letter O).
- **Replace Q with zero:** Always identify the character "Q" as "0" (zero). Note this option is only available on the engine version of V5000 or later.
- **License Plate Rule:** You can customize up to six license plate rules and the recognized plates will be converted similar character to follow the rule. The rule must be between 4 and 9 characters and consists of "A" (Alphabets), "D" (Numeric digits) and "X" (Any). For example, if the rule is AA-DDDD, a license plate detected as XY-123A will be converted to XY-1234 to follow the rule. The rule will be ignored if none of the detected plate numbers follow the rule.

10. Click **OK** to apply the settings and return to the main screen. An LPR folder tree will be displayed on the Device View window as example below.

    If the icon appears, it indicates the connection between the GV-DVR LPR and GV-ASManager has been established.

    If the icon appears, it indicates the connection failed. Make sure the above connection setup is correctly configured.

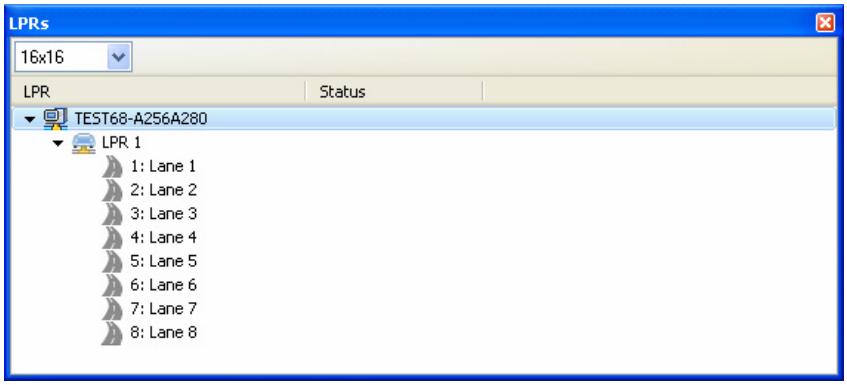


Figure 13-11

Note:

1. The Overview Cameras need to be set to round-the-clock recording on GV-System.
2. To ensure optimal performance, the total number of Overview Cameras supported in a GV-System is limited based on the resolution of the overview cameras:
   - Overview camera: D1 = maximum 16 overview cameras
   - Overview camera: 1 MP = maximum 8 overview cameras
   - Overview camera: 2 MP = maximum 4 overview cameras
   - Overview camera: 3 MP = maximum 3 overview cameras
   - Overview camera: 4 MP = maximum 2 overview cameras
   - Overview camera: 5 MP = maximum 1 overview camera
3. To open a gate when the detected license plate is recognized as a registered vehicle:
   a. Set up I/O devices on the GV-DVR LPR (**Configure** button > **Accessories** > **I/O Device** > **I/O Device Setup**). Refer to *6.1 I/O Device Setup* on the *DVR User's Manual* to see how to set the gate as the output device.
   b. Select the output device under **Barrier Control**.

13.2.4 Exporting LPR Data

You can export LPR data to other equipments, such as a parking lot ticket machine. There are two ways to export the data, through RS-232 connection or export into a file that can be imported into a third-party program. On GV-DVR LPR, click the **Configure** button, select **Video Analysis**, select **License Plate Recognition**, select **Configure** and click **Export Setting**.

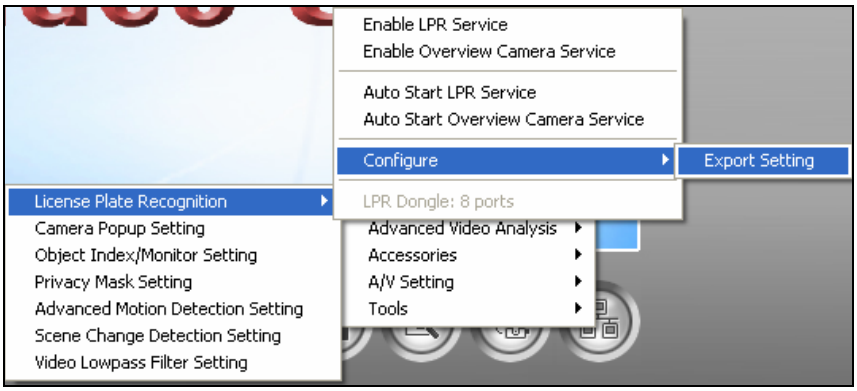


Figure 13-12

Export through RS-232

1. If you are connecting the computer to your equipment using RS-232 connection, click the **Export Through RS232** tab and select **Enable Export through RS232**.

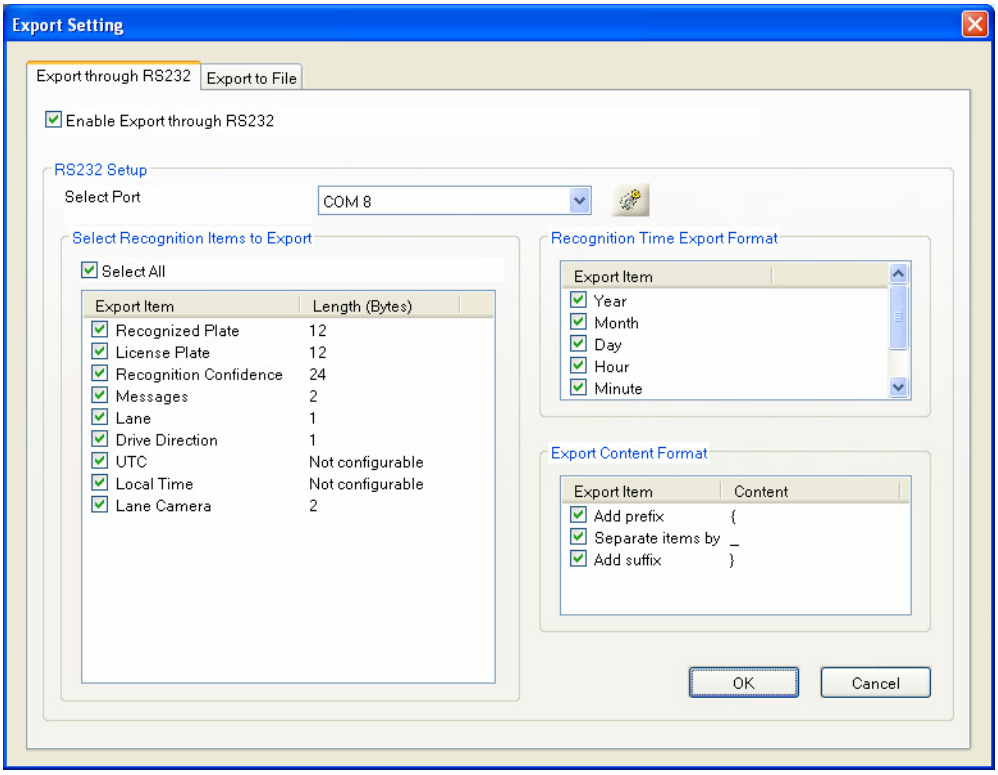


Figure 13-13

2. Next to **Select Port**, select the COM port that is used for connection.
3. Under **Select Recognition Items to Export**, select the LPR data you want to export.
4. Under **Length (Bytes)**, you can click the number to specify the length of the data you want to display.
5. Under **Recognition Time Export Format**, select how detailed you want the time information to be.
6. Under **Export Content Format**, you can add text or symbols to the beginning or the end of the LPR data. You can also separate each item with the text or symbol specified.
7. Click **OK**.

Export Into a File

1. To export a TXT file to your equipment, click the **Export to File** tab and select **Enable File Export**.

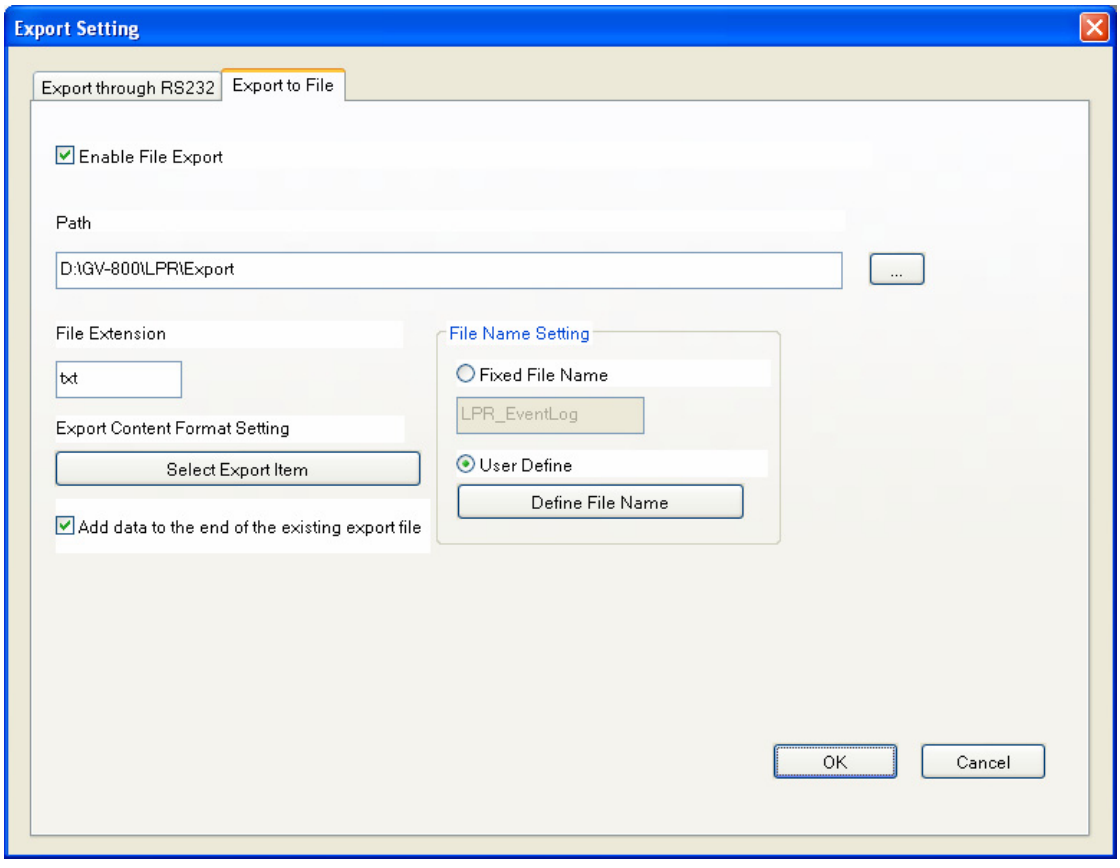


Figure 13-14

2. Select a storage **Path** to store the exported file by clicking the **…** button.
3. Under **File Extension**, you can change the default **txt** file extension if needed.

4. To select what items to export, click **Select Export Item** button.

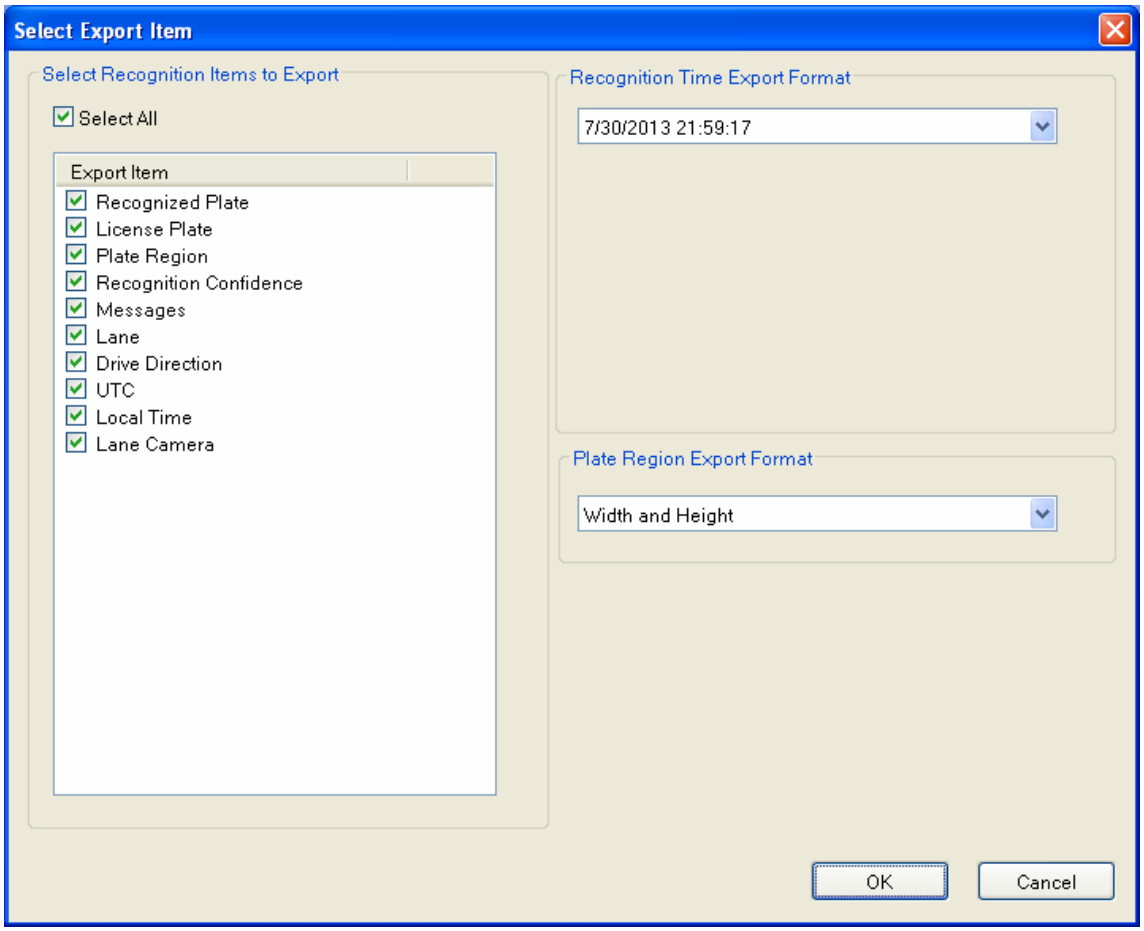


Figure 13-15

a. Select the items you want to export.

b. Use the **Recognition Time Export Format** to select how you want to display the recognition time.

c. Use the **Plate Region Export Format** drop-down list to specify how you want to display the position of the license plate detected.

d. Click **OK**.

5. Under File Name Setting,

   - You can use a **Fixed File Name**.
   - To define your own file name, select **User Define** and click the **Define File Name** button. Next, select the data you want listed in the file name.

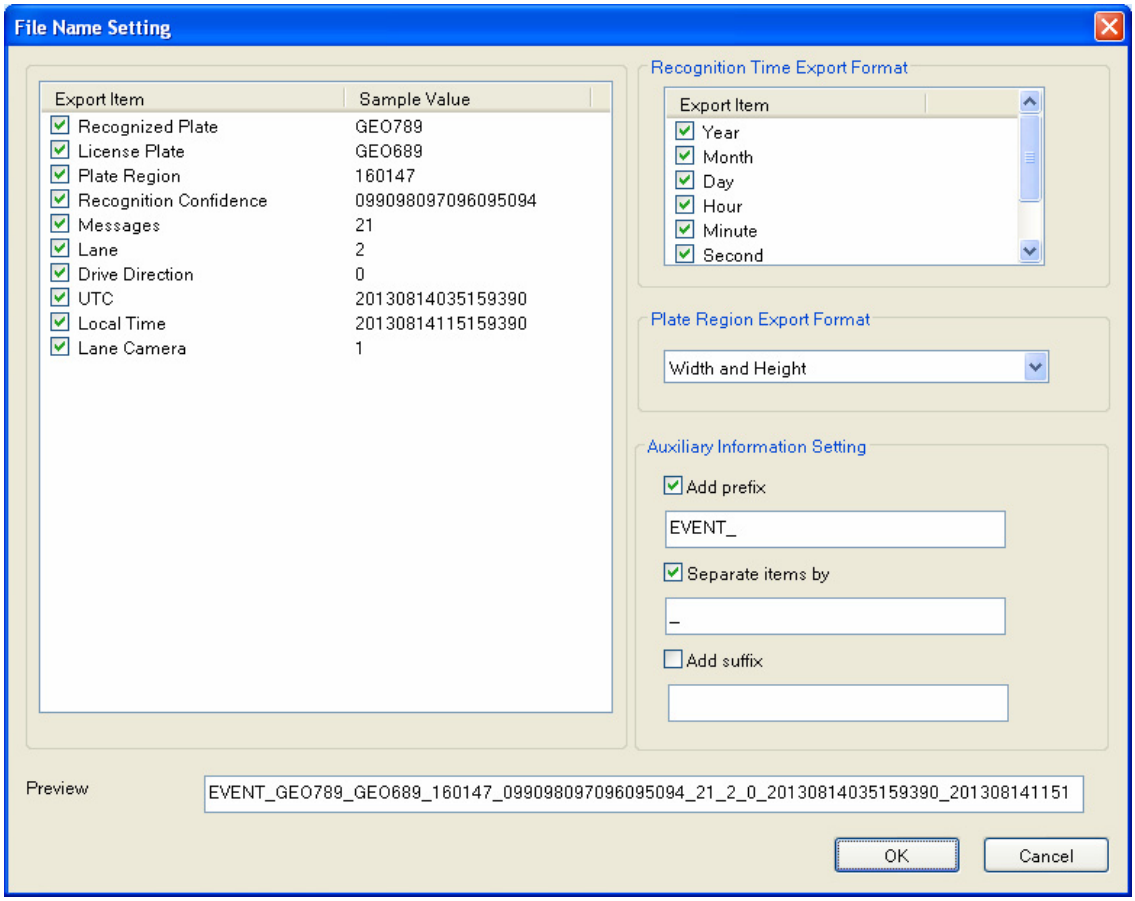


Figure 13-16

6. To add the new export data to the end of the existing export file, click **Add data to the end of the existing export file**. If this option is not selected, the old data will be overwritten.

7. Click **OK**.

13.2.5 Recognition Engine Version

GV-DVR LPR V4.2.1 only supports the following versions of recognition engines:

No.	Country	Engine Version	No.	Country	Engine Version
1	Argentina	6.0.1.6	23	Italy	6.0.0.2
2	Australia	4.2.1.1	24	Malaysia	6.0.0.3
3	Austria	6.0.1.6	25	Mexico	4.4.5.6
4	Belgium	6.0.1.6	26	New Zealand	6.0.1.6
5	Brazil	6.0.1.6	27	Norway	6.0.1.1
6	Bulgaria	6.0.1.6	28	Poland	6.0.1.6
7	Canada	4.0.4.0	29	Portugal	6.0.1.6
8	Channel Islands	4.0.3.8	30	Qatar	3.1.2.2
9	Chile	3.2.0.9	31	Russia	6.0.1.7
10	China	4.2.1.3	32	Serbia	4.0.3.8
11	Columbia	4.2.1.5	33	Slovakia	6.0.1.6
12	Croatia	4.0.3.8	34	Slovenia	4.0.3.8
13	Cyprus	4.0.3.8	35	South Africa	6.0.0.9
14	Czech	6.0.1.6	36	Spain	6.0.1.6
15	France	6.0.1.6	37	Taiwan	4.5.5.7
16	Germany	6.0.1.6	38	Thailand	2.3.0.8
17	Global	6.0.1.6	39	Turkey	4.0.3.8
18	Hong Kong	6.0.1.2	40	UAE	2.3.0.8
19	Hungary	6.0.1.5	41	UK	6.0.1.6
20	India	4.2.1.1	42	USA	4.2.1.2
21	Ireland	6.0.1.5	43	Vietnam	4.2.1.0
22	Israel	3.1.2.2			

13.3 Setting Up GV-DSP LPR

To set up GV-DSP LPR functions on the GV-ASManager, follow the steps below.

Note:

- GV-ASManager V4.1 is only compatible with GV-DSP LPR firmware V2.0 and V2.0.1.
- GV-ASManager V4.2 is only compatible with GV-DSP LPR firmware V2.0.2.
- GV-ASManager V4.2.1 is only compatible with GV-DSP LPR firmware 2.0.3

- **Step 1 Enabling Connection with GV-ASManager on GV-DSP LPR**

  Enable connection with GV-ASManager on GV-DSP LPR.

- **Step 2 Adding GV-DSP LPR to GV-ASManager**

  Establish the communication between GV-ASManager and GV-DSP LPR.

- **Step 3 Configuring a Channel**

  Set up the related cameras and the recognition conditions of the channel.

13.3.1 Step 1: Enabling Connection with GV-ASManager on GV-DSP LPR

To enable connection with GV-ASManager on GV-DSP LPR, first make sure a mini or micro SD card is inserted to the GV-DSP LPR and formatted. Next, log in the Web interface of the GV-DSP LPR and follow the steps below.

1. In the left menu under Events and Alerts, select **Registry Database**. This dialog box appears.

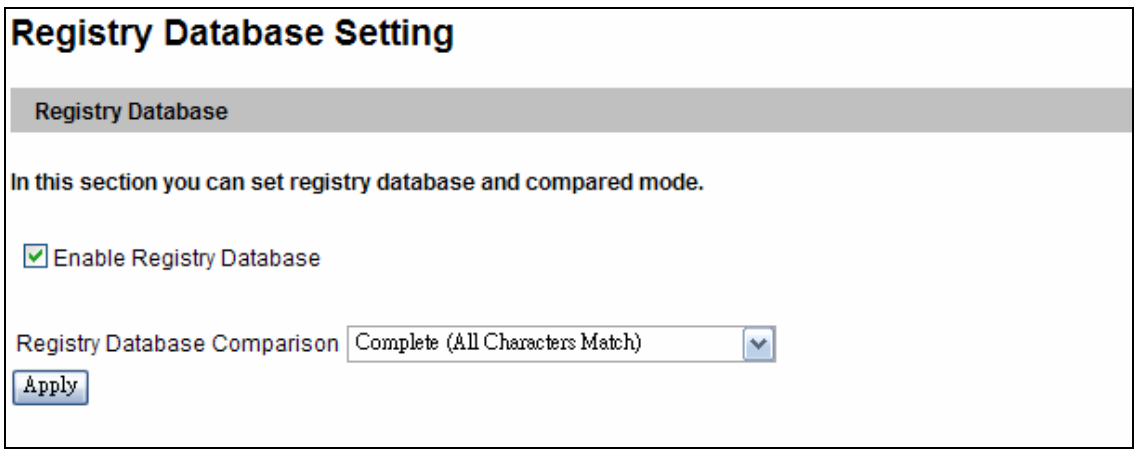


Figure 13-17

2. Select **Enable Registry Database**.
3. Use the **Registry Database Comparison** drop-down list to select one of these options:
   - **Complete (All Characters Match):** Detected license plate must match a registered license plate completely.
   - **Like (One Character Mismatch):** 1 mismatched character will be tolerated and the order of the characters will be ignored. For example, license plate ABC-123 will be considered matching with ZBC-321.
   - **Somewhat Like (Two Characters Mismatch):** 2 mismatched characters will be tolerated and the order of the characters will be ignored.
4. Click the **Apply** button.

To set the Recognition Engine and recognition conditions, recognition sensitivity for example, refer to the *Detection Mode* and *Recognition Engine Settings* in Chapter 4 of the *GV-DSP LPR User Manual*.

To open a gate when the detected license plate is recognized as a registered vehicle, refer to *4.2.2 Output Setting* on the *GV-DSP LPR User Manual* to see how to set the gate as the output device.

13.3.2 Step 2: Adding GV-DSP LPR to GV-ASManager

1. On the menu bar, click **Setup** and select **Devices**. This dialog box appears.

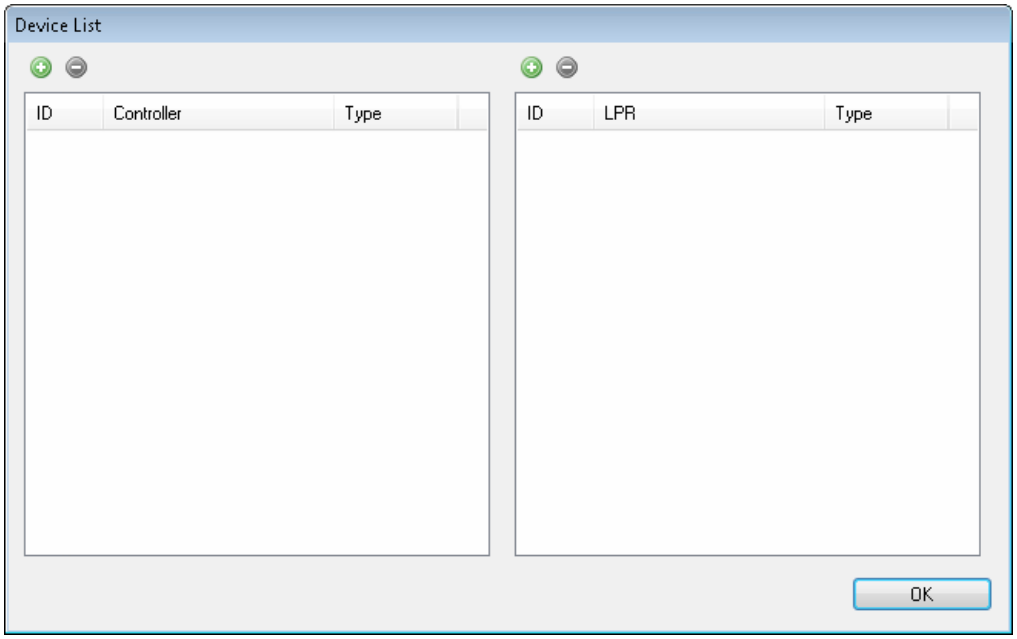


Figure 13-18

2. On the right LPR side, click the **Add** button . This dialog box appears.

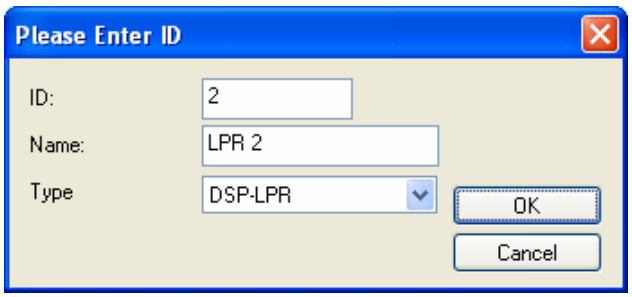


Figure 13-19

3. Type an **ID** number and **Name** for the LPR.
4. Use the drop-down list to select **DSP-LPR**.

5. Click **OK**. The LPR Setup page appears.

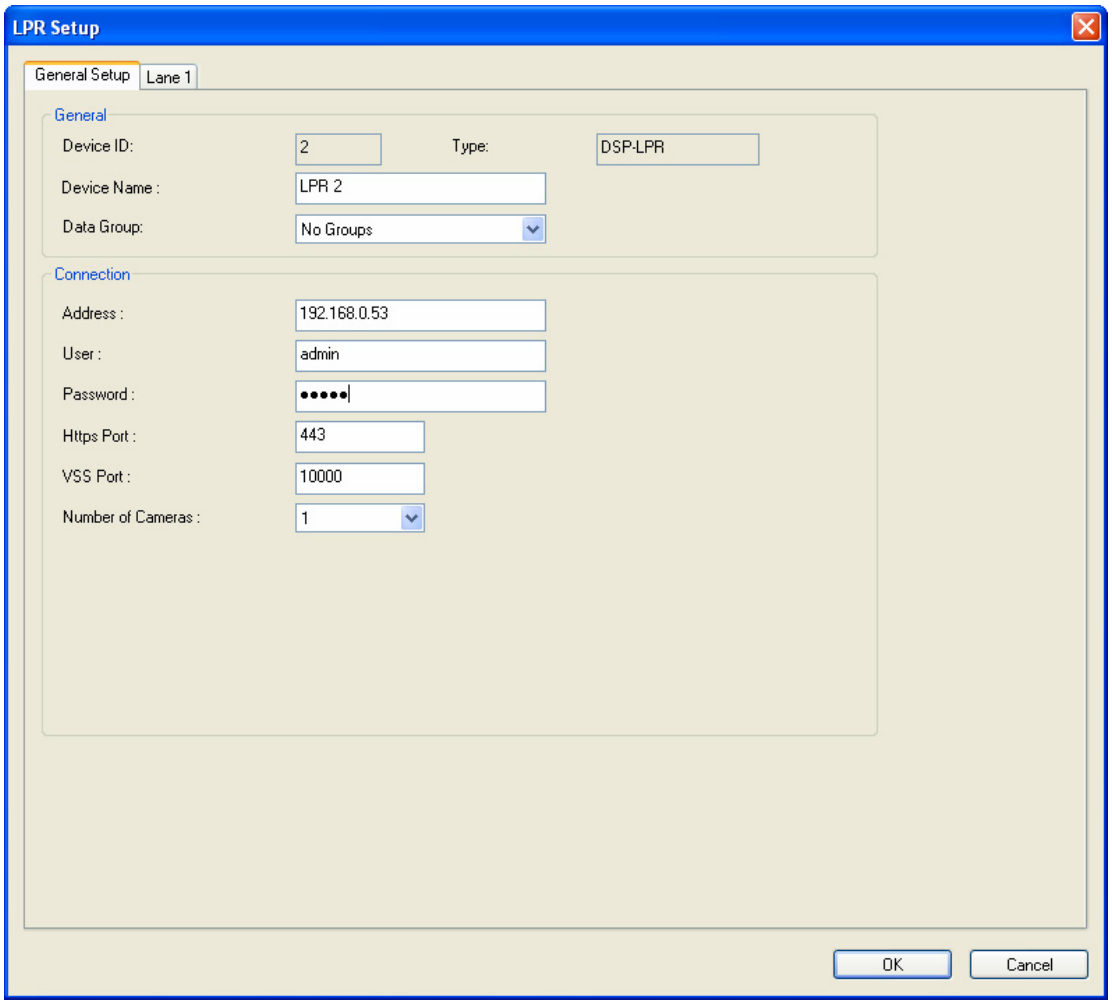


Figure 13-20

6. Assign the GV-DSP LPR to a **Data Group** if needed or select **No Groups** to disable the data group function. You can then allow or forbid a user to read / write / execute the functions assigned under the data group. Refer to *Adding a New User* in Chapter 8 for more details.
7. Under Connection, type the IP **Address**, **User** name and **Password** of the GV-DSP LPR.
8. You can modify the following settings if necessary.
   - **Https Port:** The default Https port is 443.
   - **VSS Port:** The default VSS port is 10000.

13.3.3 Step 3: Configuring a Channel

1. To configure the channel, select the **Lane 1** tab. This dialog box appears.

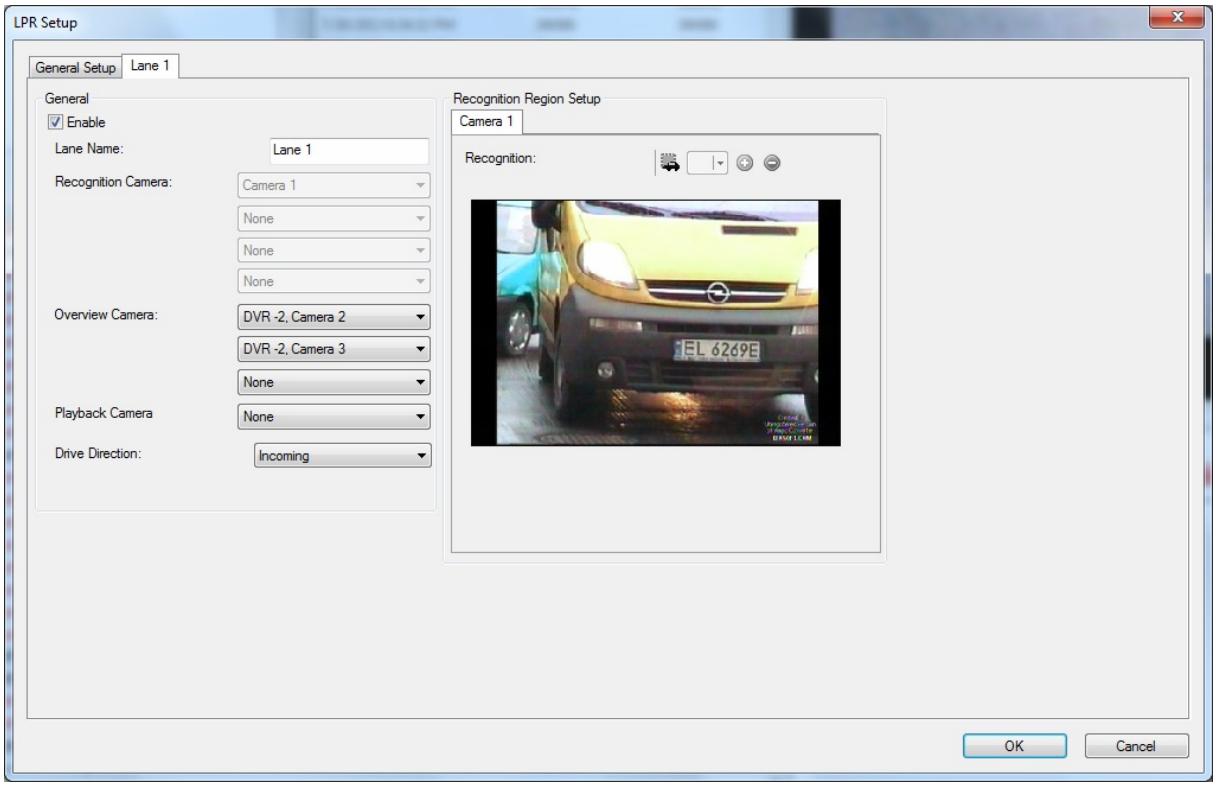


Figure 13-21

2. Select **Enable**.
3. Select up to three **Overview Cameras** to capture the overall appearance of the vehicle. The overview camera must be connected to a GV-System and the GV-System needs to be added to the camera list:
   a. Right-click the GV-System in the Camera List and select **Settings**.
   b. Click the **Add** button and select **Add DVR Mapping**.
   c. Type the connection information of the overview camera and click **OK**.
4. Select a **Playback Camera**, usually the same camera as the Recognition Camera. The playback camera also needs to be connected to a GV-System and the GV-System needs to be added to the camera list. You can select an event in the monitor window, and GV-ASManager will play back the camera view recorded at the time of the event. Refer to *Retrieving Recording Video* in Chapter 5 for details.
5. Click **OK** to apply the settings.

Recognition conditions, area, and associated output device can be set up on the Web interface of the GV-DSP LPR. Refer to the *Recognition Engine Settings* section in Chapter 4 of the *GV-DSP LPR User Manual*.

Note:

1. The Playback Cameras need to be set to recording on GV-System in either round-the-clock mode or upon motion detection.
2. The Overview Cameras need to be set to round-the-clock recording on GV-System.
3. To ensure optimal performance, the total number of Overview Cameras supported in a GV-System is limited based on the resolution of the overview cameras:
    - Overview camera: D1 = maximum 16 overview cameras
    - Overview camera: 1 MP = maximum 8 overview cameras
    - Overview camera: 2 MP = maximum 4 overview cameras
    - Overview camera: 3 MP = maximum 3 overview cameras
    - Overview camera: 4 MP = maximum 2 overview cameras
    - Overview camera: 5 MP = maximum 1 overview camera

13.4 Adding Vehicles

Once you have set up the GV-DVR LPR or GV-DSP LPR, you will need to create a vehicle database. The detected license plate number must match the license plate number of a registered vehicle before access can be granted.

1. There are two ways to add a vehicle:
   - When an unregistered vehicle is detected, the message *Plate Recognized: Unregistered Vehicle* is displayed. Right-click the message and select **New / Edit Vehicle**. The Adding a New Vehicle dialog box appears with the detected license plate number (Figure 13-23).
   - On the menu bar, click **Personnel** and select **Vehicles**. This dialog box appears.

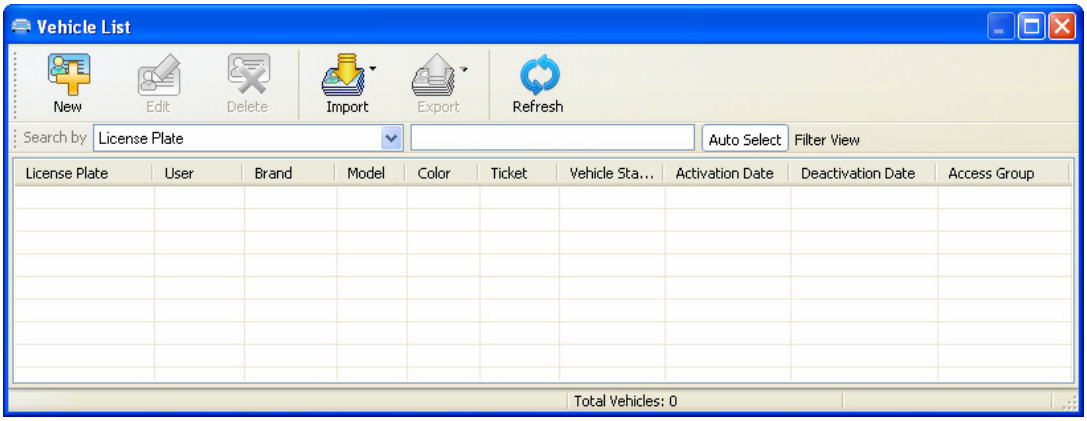


Figure 13-22

2. Click the **New** button on the toolbar. This dialog box appears.

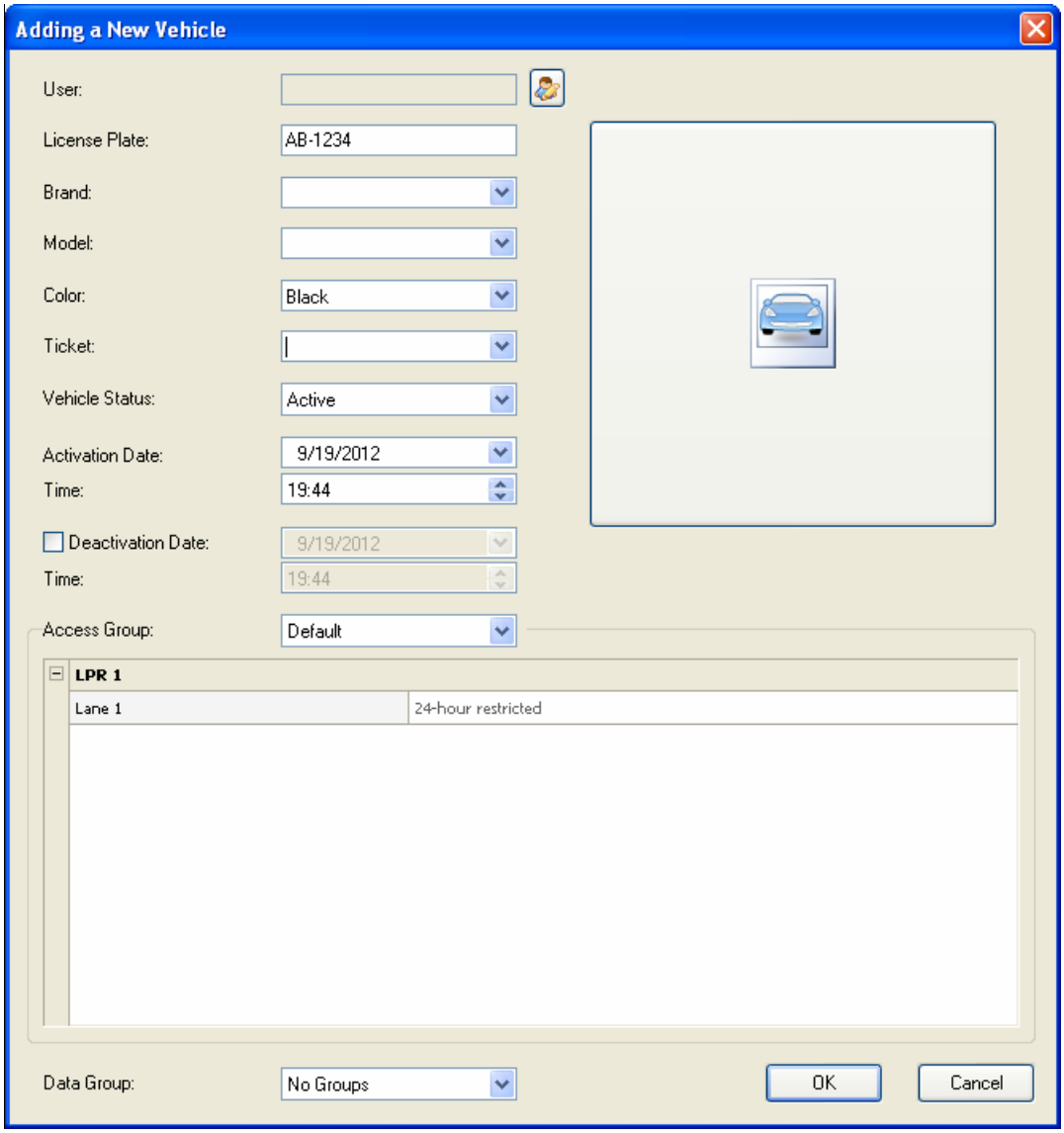


Figure 13-23

3. The settings are available for the card:

   - **User:** Assign the vehicle to a user.
   - **License Plate:** Type the license plate number of the vehicle.
   - **Brand / Model / Color:** Specify the brand, model and color of the vehicle if needed.
   - **Ticket:** You can type a note for your own reference.
   - **Vehicle Status:** Set the vehicle status to be **Active** or **Inactive**. The Deactivation Date, if enabled, will override the selection here.
   - **Activation/Deactivation Date:** Specify a time to activate and deactivate the vehicle access.

- **Access Group:** Access Groups control which vehicle can access which channel and at what time. For details, see *4.5 Setting Access Groups.*

  For first-time users of the GV-ASManager, the access group is not yet established. Select **User Define** for test run.

- **LPR:** The LPR column displays the associated channels. The selection for each channel will be automatically brought up if an access group was selected.

  When setting up LPR functions for the first time, select **24-hour access** for each channel for test run.

- **Data Group:** Assign the vehicle to a data group or select **No Groups** to disable the data group function. You can then allow or forbid a user to read/write/execute the functions listed under the data group. Refer to *Adding a New User* in Chapter 8 for more details.

To assign multiple vehicles to a user, click **Personnel** on the menu bar and select **Users**. Next to Vehicle List, click the **Add** button to assign vehicles to the user.

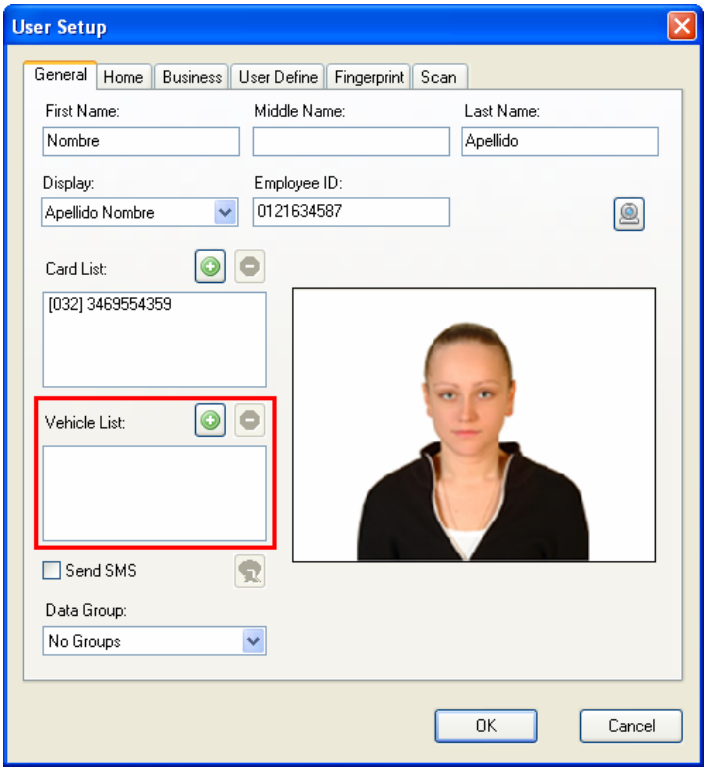


Figure 13-24

You can also import and export vehicle data in mdb or xls format. Refer to *4.3.3 Importing / Exporting Card Data* for similar settings.

13.5 Monitoring LPR Activities

13.5.1 LPR Device View

The LPR Device View displays the connection status of the connected LPRs. To open the LPR Device View, click **View** on the menu bar and select **LPRs**.

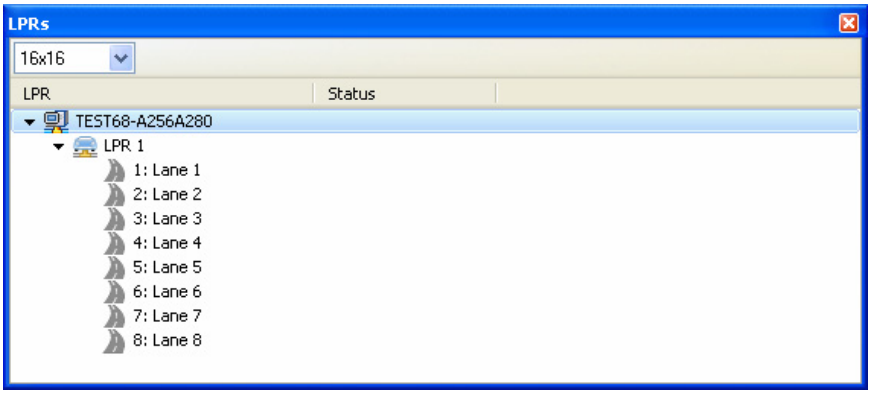


Figure 13-25

Right-click an **LPR** to access the following options:

Name	Function
Reconnect	Reconnects with the LPR.
Sync LPR	After modifying the LPR settings, clicking **Sync LPR** will renew the settings immediately.
Settings	Accesses the LPR setup dialog box.

Right-click an **LPR channel** to access the following options:

Name	Function
Unlock Door	Opens the gate barrier for the time period specified for the output device. Make sure the gate barrier has been set up as the designated output device. For GV-DVR LPR, refer to the Barrier Control option in *13.2.3 Step 3: Configuring a Channel*. For GV-DSP LPR, see the Output Setting section in Chapter 4 of the *GV-DSP LPR User Manual*.
Settings	Modifies the controller settings in the Controller Setup dialog box.

13.5.2 Monitoring Windows

To monitor LPR activities, click **Monitoring** and select **New LPR Monitor**. This dialog box appears.

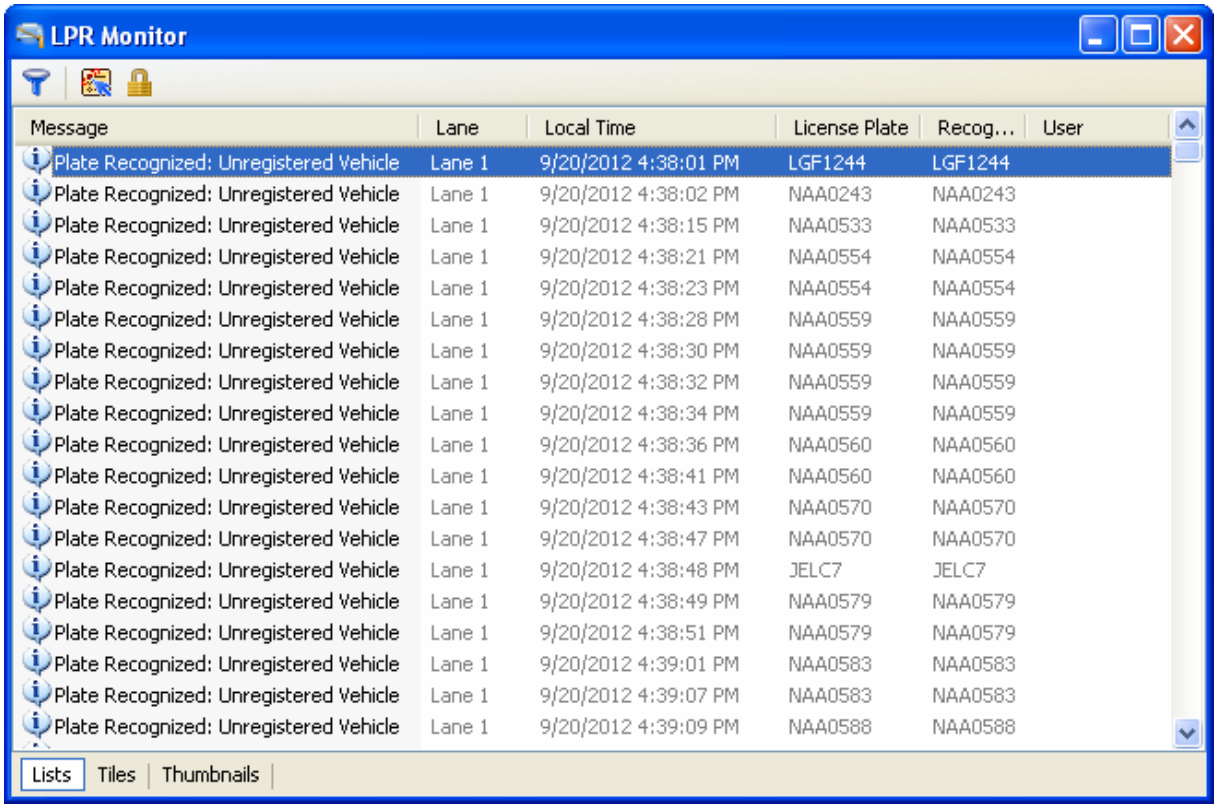


Figure 13-26

For details on the Monitoring Windows, refer to *3.3 Monitoring Windows*.

13.6 Receiving Notifications for LPR Activities

When alarm conditions occur, the system can automatically send e-mail and SMS alerts to one or multiple recipients.

To set up LPR or vehicle hotlist notifications, click **Tools**, select **Notifications**, and click the **LPR** or **Hotlist** tab. This dialog box appears. Select an event to start setting up alert methods.

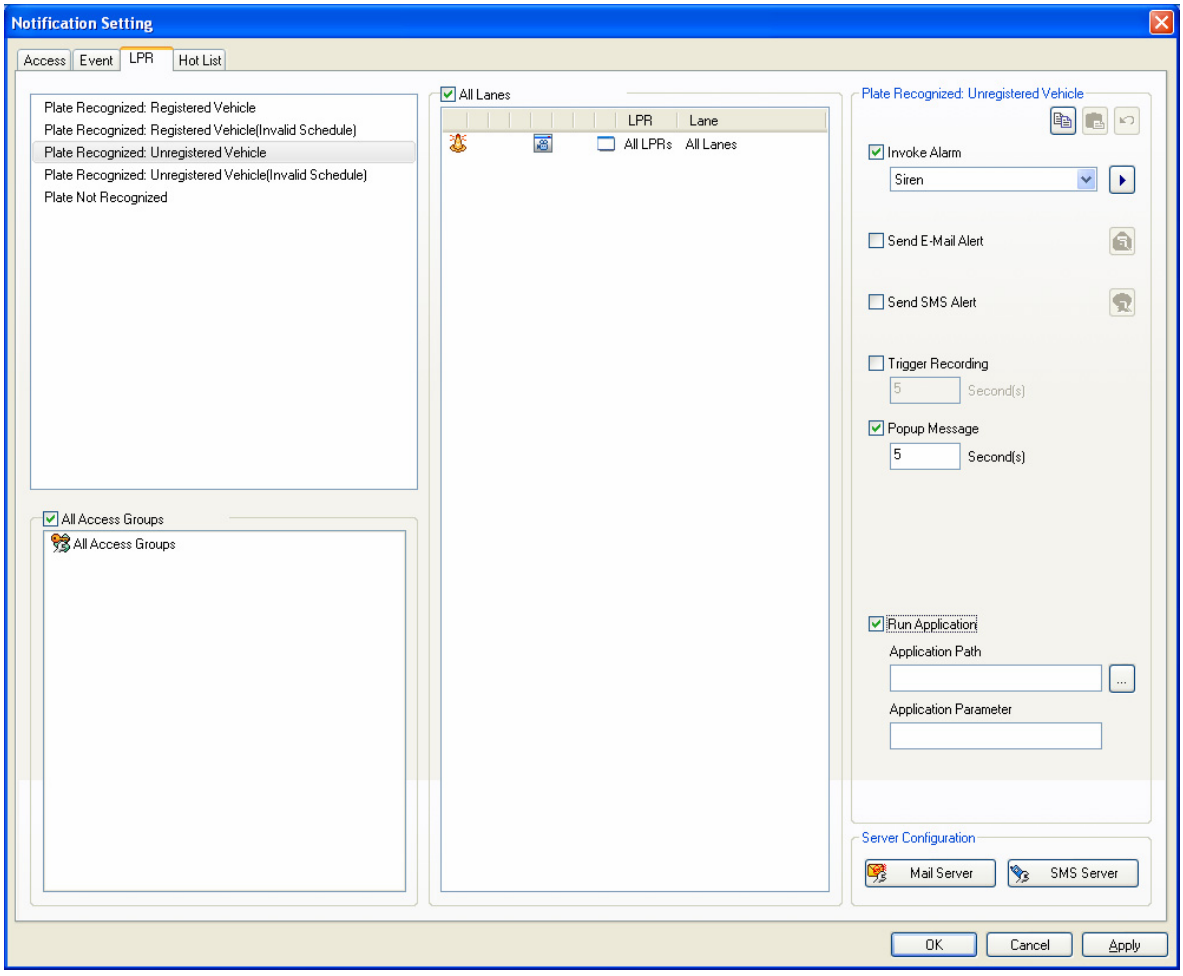


Figure 13-27

For detailed settings, refer to *8.2 Notification Setup*.

13.7 Setting Up Vehicle Hotlist

The vehicle hotlist is a list of stolen vehicles or other vehicles of interest. There are three ways to add vehicles to the hotlist: manually add vehicles, import from vehicle list or import from an external database. Up to 2-million vehicles can be added to the vehicle hotlist.

Setting Up the Hotlist Database

To import from a database, you need to complete the steps below first.

1. Run **ASDBManager.exe** from the GV-ASManager program folder at :\Access Control\ASManager\.
2. Select **Settings from Source to ASManager Database** and select **Set the mapping relations for vehicle hotlist**. This dialog box appears.

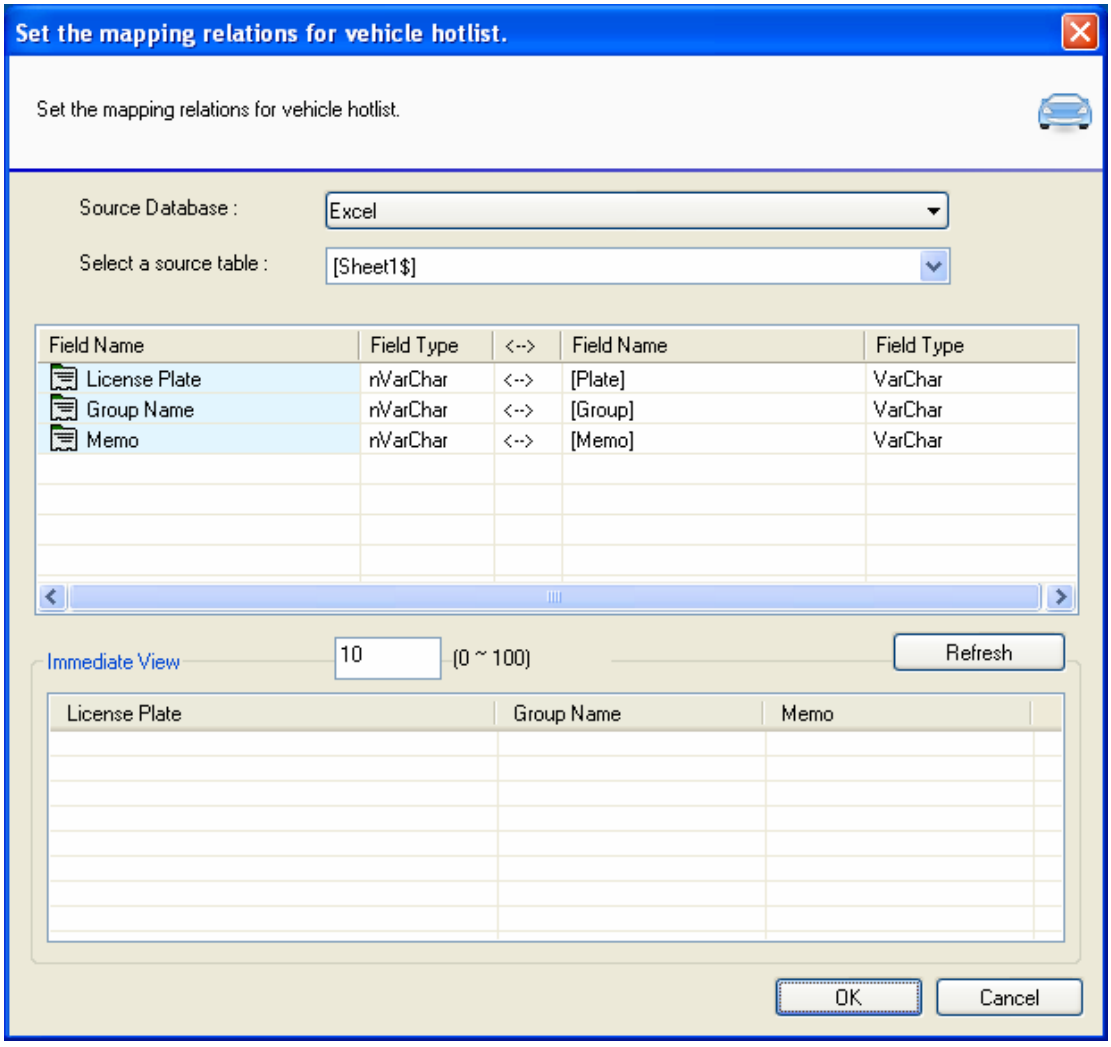


Figure 13-28

3. Use the **Source Database** drop-down list to select if you want to use the same database as other data, an excel database or other types of database.
4. Select the path of the database and click **Open**.
5. Next to **Select a source table**, select the appropriate tab in the database.
6. Match the License Plate, Group Name and Memo to the appropriate fields.
7. Click **OK** to import.

Adding Vehicles to the Hotlist

1. On the menu bar of GV-ASManager, click **Personnel** and select **Hotlist**. This dialog box appears.

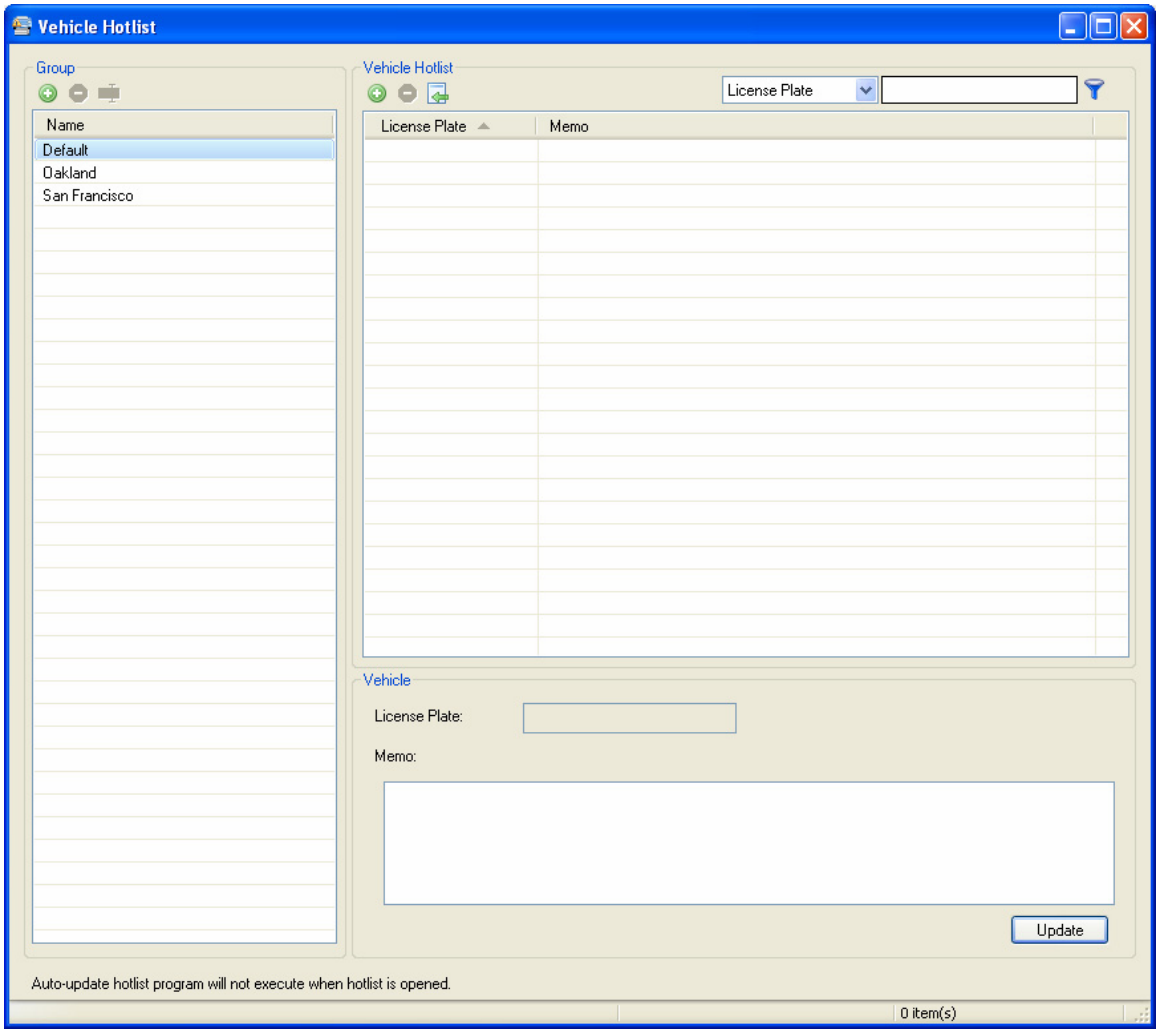


Figure 13-29

2. Under the Group section, click the **Add** button to create a hotlist group if needed. If you have imported data from an external database using ASDBManager, the vehicles will be listed under the **Default** group already.

3. To add vehicles to the hotlist manually, click the **Add** button under Vehicle Hotlist and type the **License Plate**. You can add a **Memo** to note the stolen time and location.

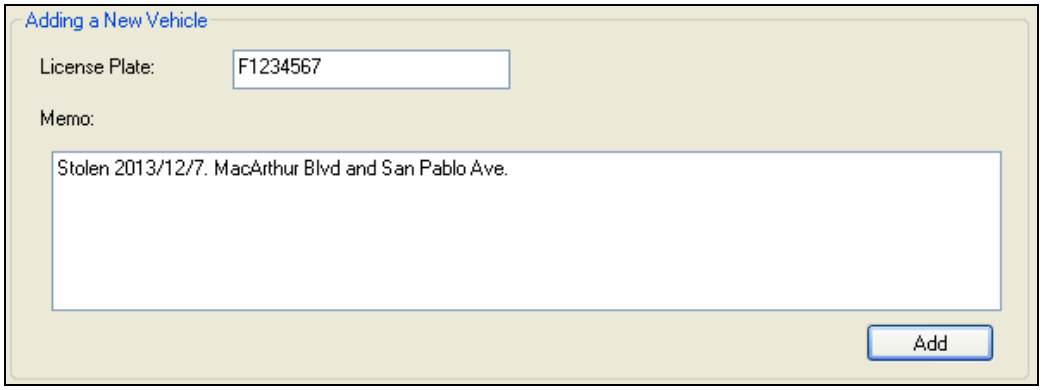


Figure 13-30

4. Click **Add**.
5. To import an existing license plate from the vehicle list, click the **Import** button .

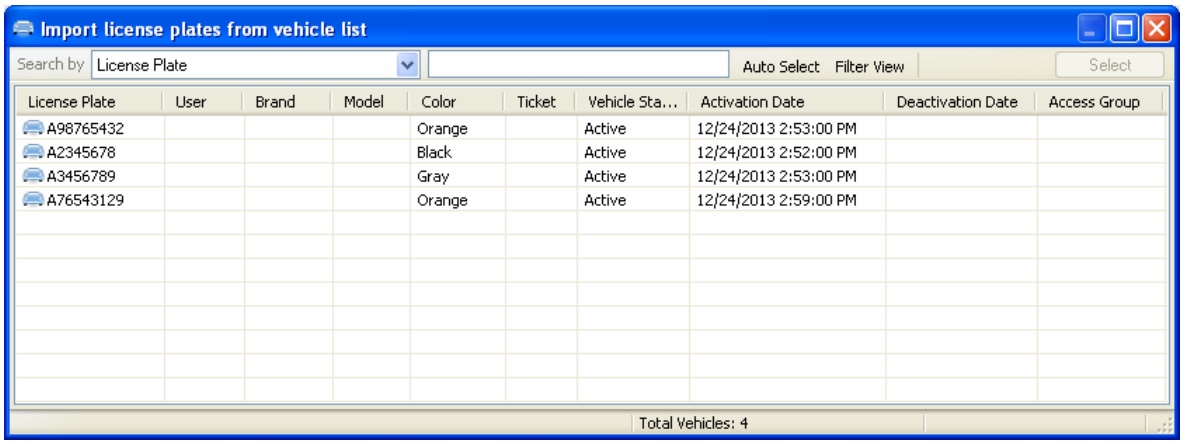


Figure 13-31

6. Select the vehicles you want to add and click **Select**.

When GV-ASManager recognizes a license plate that matches a license plate in the hotlist, the vehicle will be highlighted in red in the LPR Monitor window as shown below.

Figure 13-32

13.8 LPR Functions in GV-ASWeb

Using GV-ASWeb, you can connect to GV-ASManager over network and remotely access the following LPR functions:

- **LPR List:** Adds and deletes GV-DVR LPR or GV-DSP LPR to / from GV-ASManager.
- **Vehicle List:** Adds, deletes, edits and searches vehicles.
- **LPR Log:** Searches records of license plate detected and plays back recordings.
- **Access Group Setup:** Sets up access groups to restrict who can access which channels at what time.

Refer to *10.1 Connecting to GV-ASManager* to see how to log into GV-ASWeb.

13.8.1 LPR List

You can use LPR List to remotely add and delete a GV-DVR LPR or a GV-DSP LPR to GV-ASManager, set up channels and delete an LPR.

1. On GV-ASWeb, click the **LPR List** icon 

. This window appears.

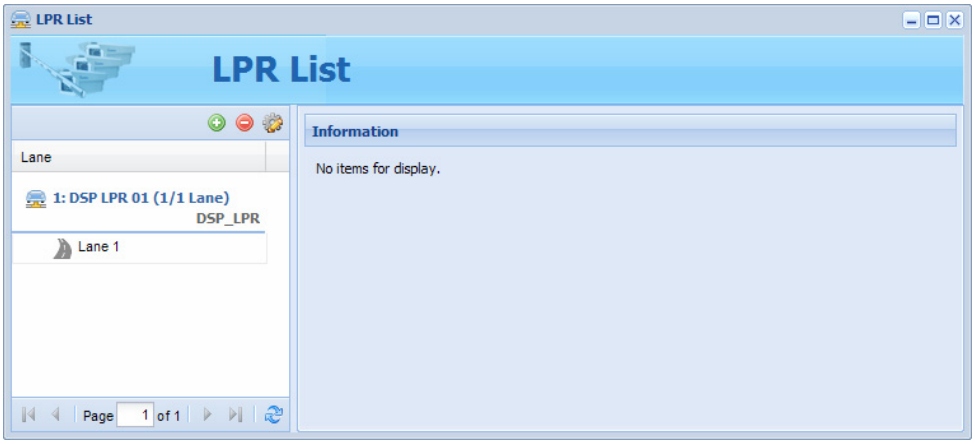


Figure 13-33

2. Click the **Add** button to add an LPR. For details on the settings, see *13.2.2 Adding GV-DVR LPR to GV-ASManager* and *13.3.2 Adding GV-DSP LPR to GV-ASManager*.
3. To set the individual channels, click the **Edit** button and select a channel. For details on the configurations, refer to *13.2.2* and *13.3.2 Configuring a Channel*.
4. To delete an LPR, select an LPR and click the **Delete** button.

Note: After adding or deleting an LPR through GV-ASWeb, the change will be reflected in the LPR List in GV-ASManager.

13.8.2 Vehicle List

Vehicle List allows you to remotely add, search, edit and delete vehicles.

1. On GV-ASWeb, click the **Vehicle List** icon 

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

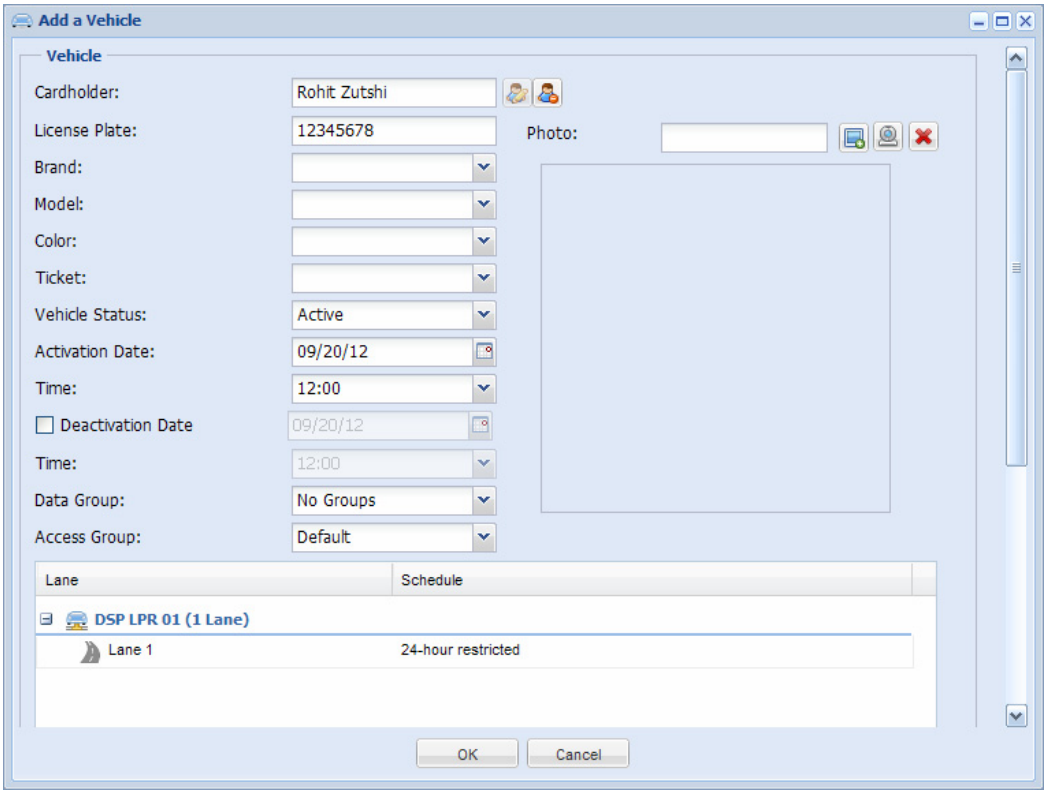


Figure 13-34

3. Fill out the required information. Refer to *13.4 Adding Vehicles* for more details.
4. Click **OK** to save the settings.
5. To delete a vehicle, simply select the vehicle and click the **Delete** button.

Note: After adding, editing or deleting a vehicle through GV-ASWeb, the change will be reflected in the Vehicle List in GV-ASManager.

13.8.3 LPR Log

Using LPR Log, you can set search criteria to look up a record, see snapshots of detected license plates and play back recorded videos.

Setting Search Criteria

In the Filter section on the left, set the search criteria and click the **Search** button.

For example, we want to search for records that match the log message of “Unregistered Vehicle”, license plate number “FM-0505”, and detected by LPR 1 this month. The resulting filter window may look like this.

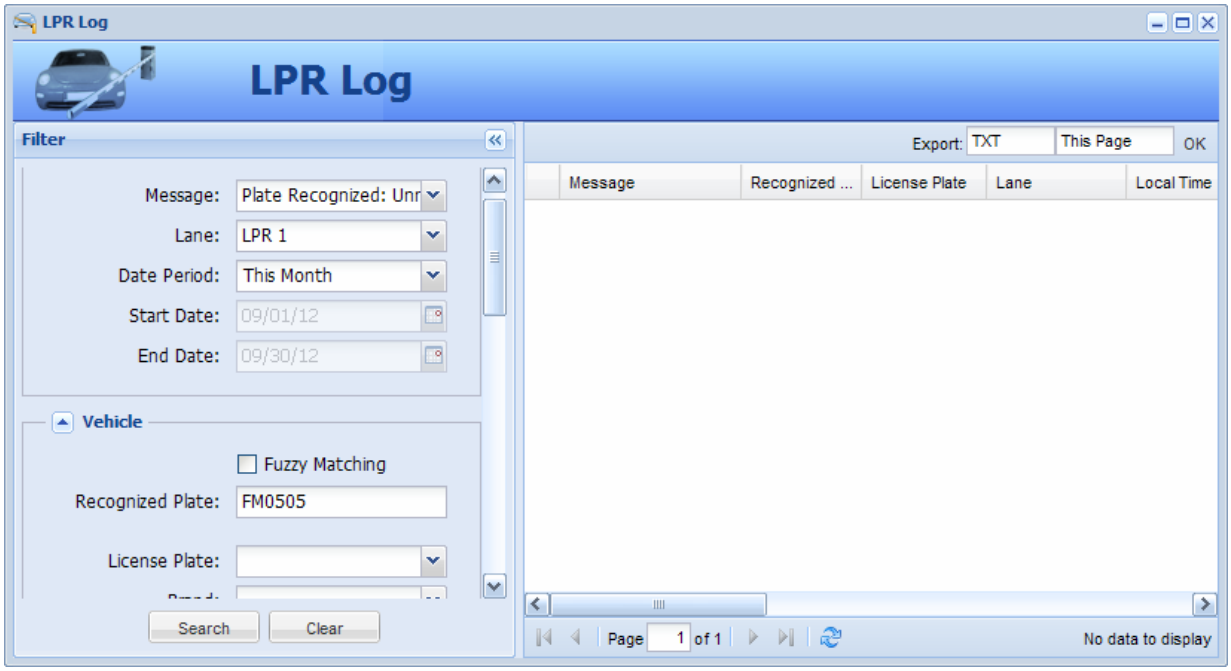


Figure 13-35

If **Fuzzy Matching** is selected, the letters below will be recognized as numbers:

- Letter B will become 8
- Letter O and D will become 0 (Zero)
- Letter S will become 5
- Letter Z will become 2
- Letter I will become 1
- Letter G will become 6

When a license plate number is typed in the **Recognized Plate** field, you can apply Fuzzy Matching and the Matching Mode you set will be applied as well (e.g. Allow 1 mismatched character). When a license plate number is typed in the **License Plate** field, only the license plate that matches completely will be displayed in the search results.

Search Results Window

Below is an example of a search results window.

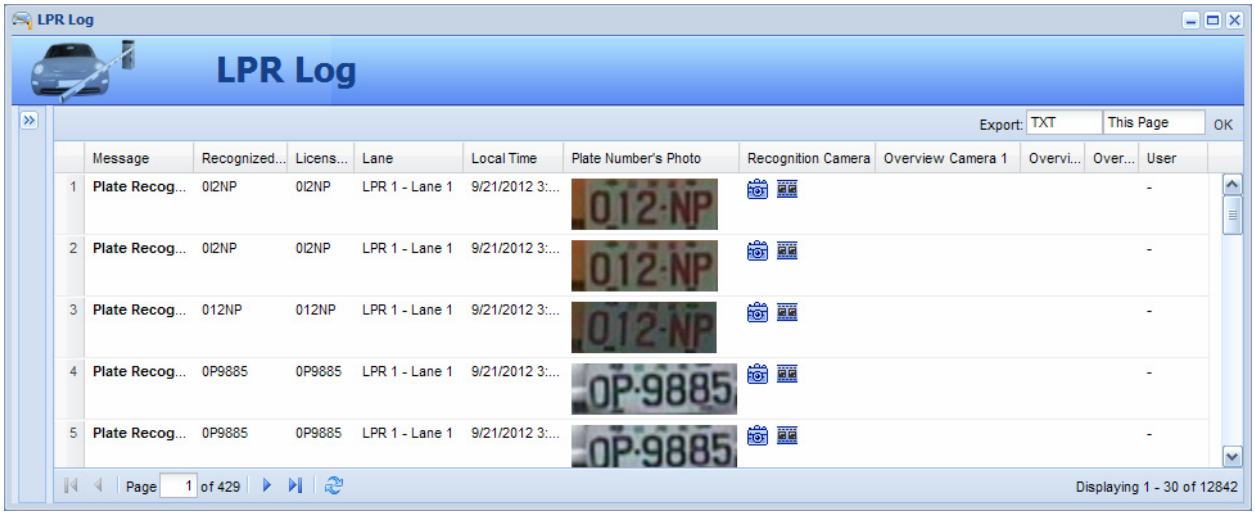


Figure 13-36

A snapshot of the detected license plate will be displayed.

: Indicates the availability of the recorded video.

: Indicates the availability of the video image.

You can right-click each search result to access more information such as vehicle information or user information .

To see how to export logs, refer to *10.3.3 Exporting Logs* for details. To see how to customize the search results columns, refer to *10.3.4 Defining Columns* for details.

Note: You can play back video only when Remote ViewLog Service included in Control Center Server is enabled on the DVR. And the Remote ViewLog function is enabled on Video Server or Compact DVR.

13.8.4 Access Group Setup

Using GV-ASWeb, you can remotely set up access groups to restrict who can access which channel at what time. On the main page of GV-ASWeb, click the **Access Groups** icon 

. For details on how to set up access groups, refer to *Setting Access Groups* in Chapter 4.

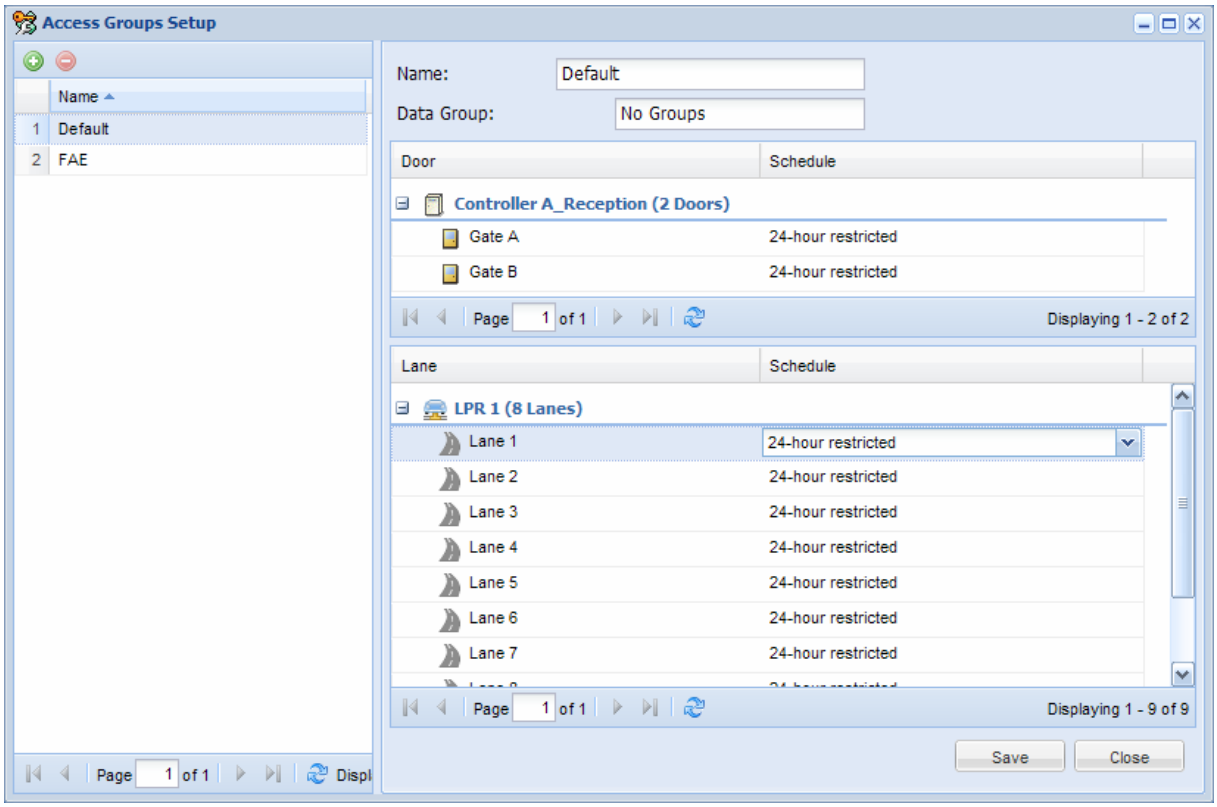


Figure 13-37

Chapter 14 GV-Access Mobile Applications

GV-Access Mobile Applications allow you to access up to 5 GV-ASManagers through an iOS or Android mobile device. The following functions are supported:

- Watch camera live view from GV-System or GV-DVR LPR mapped with a door or lane
- Lock or unlock a door
- Check door status to see if alarm events have occurred
- Open an LPR lane

Supported Operating Systems:

- Android version V4.1.2
- iOS version V6.14

14.1 Installing GV-Access

To install GV-Access on your mobile devices, search and download **GV-Access** in Android Play Store or Apple App Store. The GV-Access icon will appear on the desktop of your mobile device.

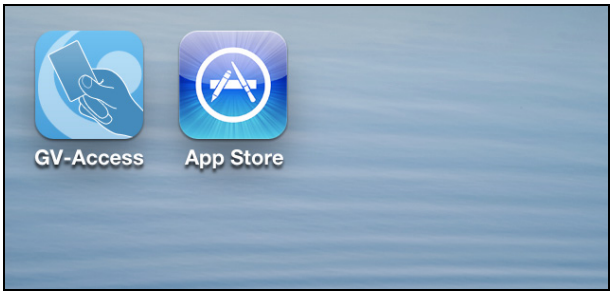


Figure 14-1

14.2 Connecting to GV-ASManager

Tap the **GV-Access** icon  on the desktop of your mobile device. There are three tabs on the bottom: **Controller**, **LPR** and **Config**.

1. Tap the **Config** tab and tap the **Add** button  .

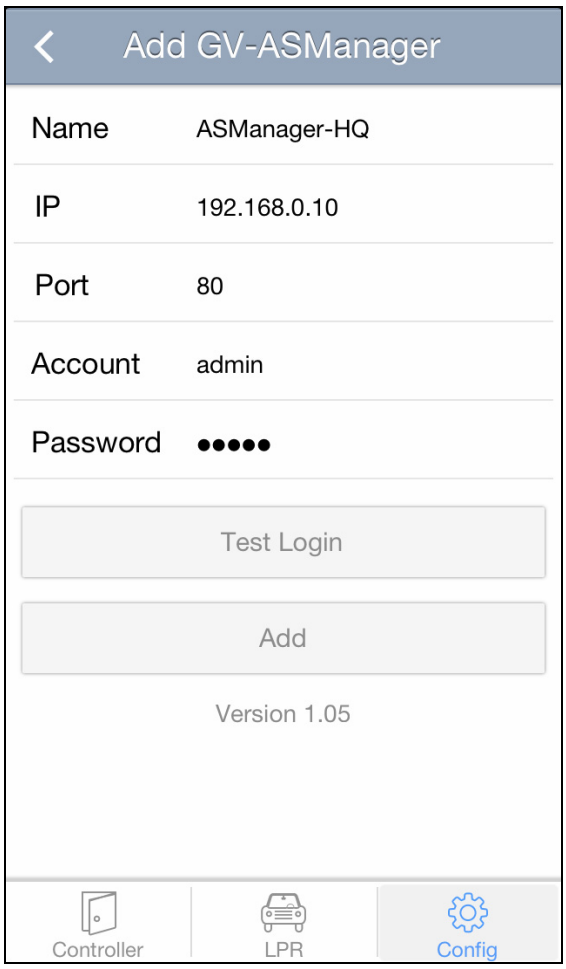


Figure 14-2

2. Type a **Name** to help you identify the GV-ASManager and type the **IP** address, **Port**, login **Account** and **Password**.
3. Tap **Test Login** to test the connection with GV-ASManager.
4. Tap **Add** to add the GV-ASManager.

14.3 Managing Controllers

After adding GV-ASManager to GV-Access, the controllers and doors associated with the GV-ASManager will be listed under the **Controller** tab.

1. Tap the **Controller** tab.

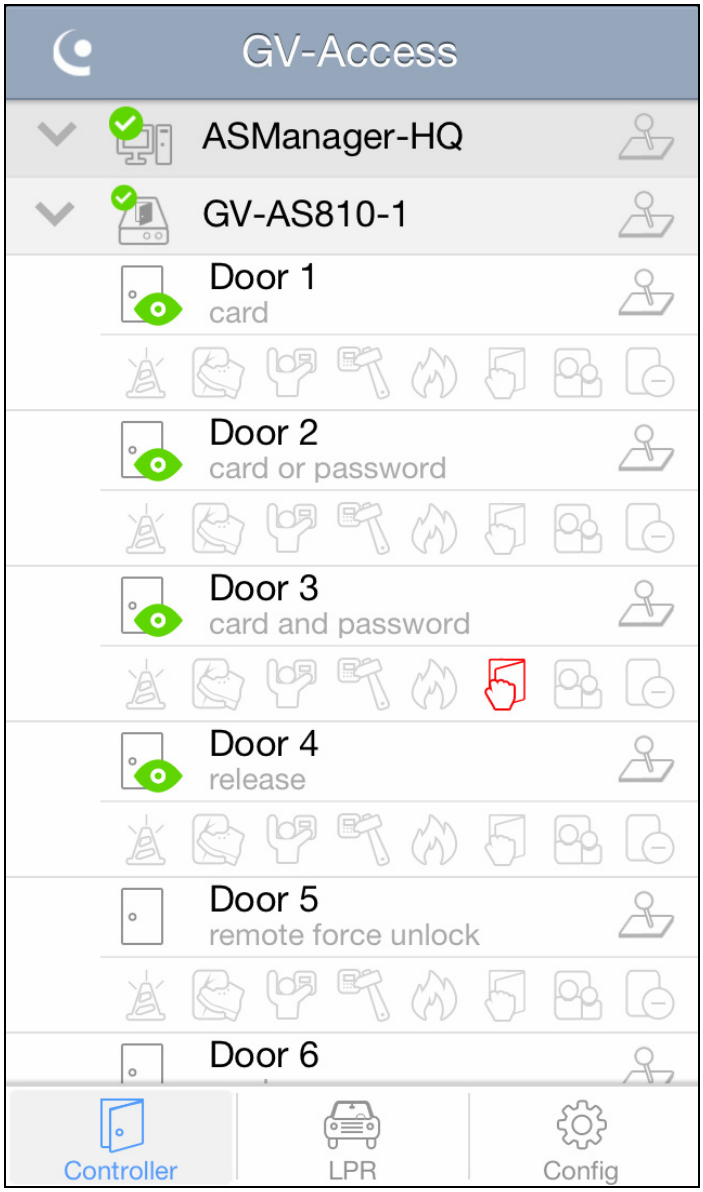


Figure 14-3

The authentication mode is listed under each door: card mode, card or password mode, card and password mode, and release mode. When you remotely control the doors using GV-Access, the action taken will be listed instead until Disable Door Operation is selected.

The following icons are available.

Icon	Description	Icon	Description
	Connected		Camera(s) available
	Disconnected		Control door(s)
Note: To access camera live view, the camera(s) associated with the door must be connected to a GV-System or GV-DVR LPR.			

The following alert icons are available. When alert conditions occur, the alert icon will light up in red. To clear the alert, tap the red icon and select **OK**.

Icon	Description	Icon	Description
	Alarm		Fire Alarm
	Force Open		Held Open
	Duress		Tailgating
	Tamper		Access Denied

Note:

1. GV-EV48 Elevator Controller only supports the Duress alert icon. The remaining alert icons are not functional for GV-EV48.
2. The Tailgating function is currently not functional.

2. To remotely control the door(s), tap the **Control** button  and select one of the following options. If you use the Control button next to a GV-ASManager, the command will apply to all connected doors.
   - **Unlock Door:** Unlock door temporarily.
   - **Force Unlock:** Unlock door until Disable Door Operation is selected.
   - **Force Lock:** Lock door until Disable Door Operation is selected.

- **Disable Door Operation:** Cancel Force Unlock, Force Lock or Lock Down command.
- **Lock Down:** Lock the door, and the door can only be opened by presenting the correct access card.

Note: The Lock Down function is not supported in GV-EV48 Elevator Controller.

---

3. Tap a door to access its live view if available. You can tap **Switch Camera** if there are multiple cameras connected to the door.

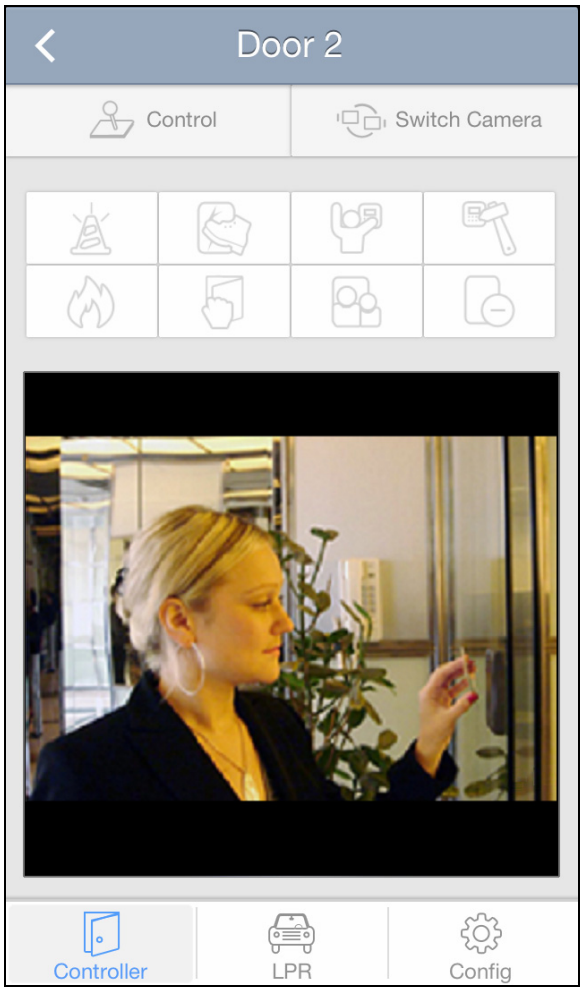


Figure 14-4

14.4 Managing LPR

After adding GV-ASManager to GV-Access, the GV-DVR LPR and GV-DSP LPR associated with the GV-ASManager will be listed under the **LPR** tab.

1. Tap the **LPR** tab. The connected LPR and lanes appear.

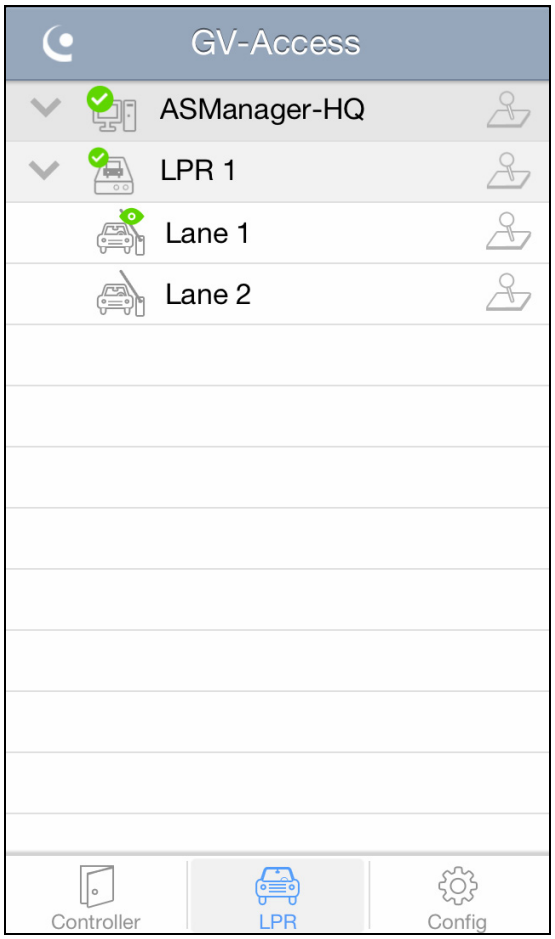


Figure 14-5

The following icons are available.

Icon	Description	Icon	Description
	Connected		Camera(s) available
	Disconnected		Control door(s)
Note: To access camera live view, the camera(s) associated with the lane must be connected to a GV-System or GV-DVR LPR.			

2. To remotely unlock the LPR lane, tap the **Control** button and select **Unlock Gate**.

3. Tap a lane to access its live view if available. You can tap **Switch Camera** if there are multiple recognition cameras connected to the lane.

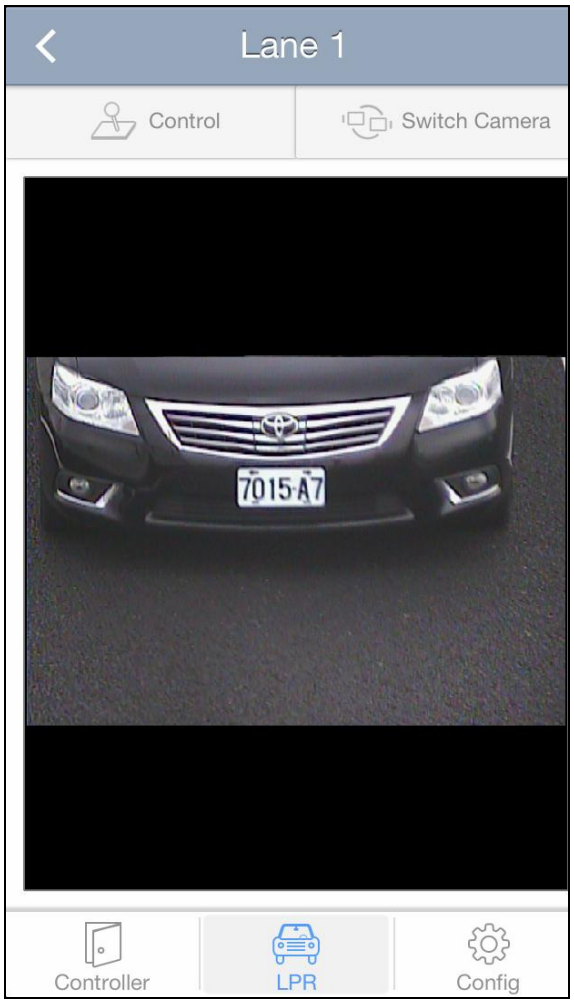


Figure 14-6

Chapter 15 Database Settings

Before you can run GV-ASManager, it is required to create a database or to upgrade your old database to fit the latest version of GV-ASManager. You can select either a **Microsoft Office Access** or **Microsoft SQL Server** to be the database of GV-ASManager.

If a database already exits, the GV-ASManager provides you the **Source Database** function to convert various database formats to be the GV-ASManager's (Access or SQL Server).

15.1 Starting the Database Tools

To start the Database Tools, you may use one of the methods:

1. If you log in the GV-ASManager for the first time, this message will pop up: "*Cannot open database. Would you like to set up database?".* Click **Yes**. The following Database Tools dialog box will appear.
2. If you have run the GV-ASManager, run **ASDBManager.exe** from the program folder to access the Database Tools.

Figure 15-1

15.2 Creating a Database

You can select either Microsoft Office Access or Microsoft SQL Server as the database of GV-ASManager.

1. Click the **ASManager Database Setting** button on the Database Tools dialog box (Figure 15-1).
2. Click the **Setup MDB/MSSQL Database for ASManager** button. This dialog box appears.

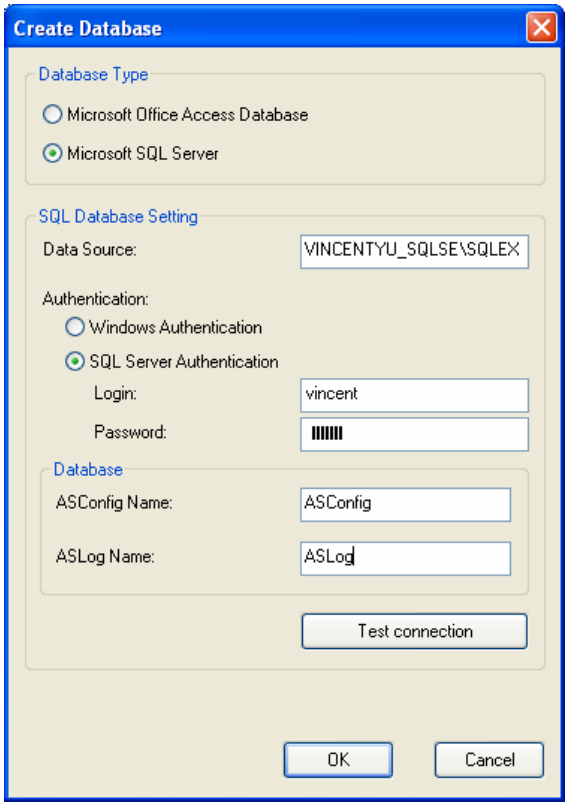


Figure 15-2

3. To use Access as the database, select **Microsoft Office Access Database** and click **OK**. The database is created in the local computer.
4. To use SQL Server as the database, select **Microsoft SQL Server**.
   a. Under the SQL Database Setting, type IP address or domain name of the SQL server in the Data Source field, and select its authentication way.
   b. Under the Database, name the databases for Configuration files and Log files that will be created on the SQL server separately.
   c. Click **Test Connection** to test the connection to the SQL server.
   d. Click **OK**. The databases are created in the SQL server.

15.3 Other Database Settings

You can upgrade, delete, back up and remove the database of GV-ASManager. Click **ASManager Database Setting** button on the Database Tools dialog box (Figure 15-1) to display the following dialog box and have further settings.

Figure 15-3

[Upgrade to latest database version] If an old database exits on the local computer, select this option to upgrade the version of the old database to the latest.

[Delete ASManager Database] Removes the database from the local computer or the SQL Server.

[Backup Database] Backs up the **Configuration** file.

[Recovery Database] Restores the backup **Configuration** file to the current computer or import it to another computer.

Note: To automatically back up Log and Image files, use the **Auto Backup** function. See *8.3 Startup, Backup and Export Setup*.

15.4 Mapping Source Database

The Source Database function can convert **OLE DB** and **Active Directory** database into GV-ASManager (Access or SQL Server) database. Click the **Setting from Source to ASManager Database** button on the Database Tools dialog box (Figure 15-1). This dialog box appears.

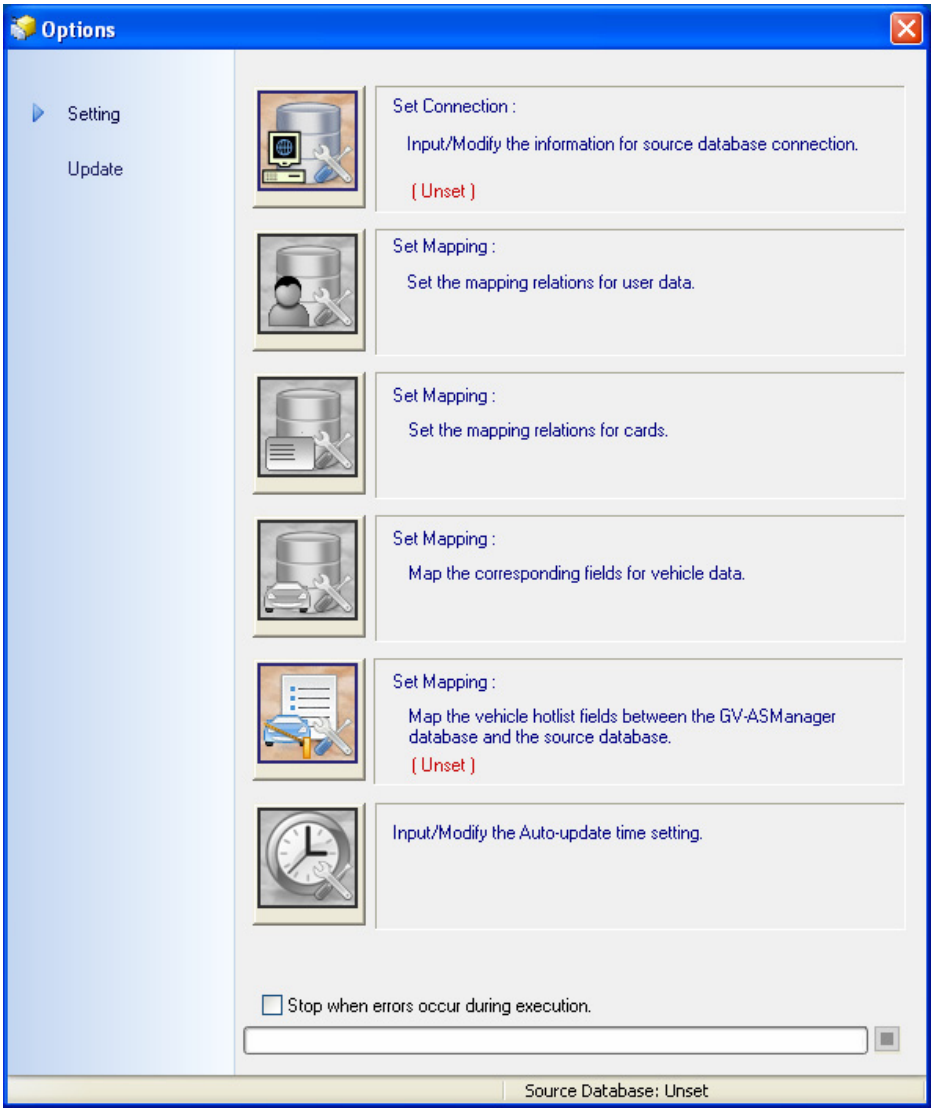


Figure 15-4

Under the **Setting** Menu:

[Set Connection] Configures the connection to an active directory or an OLEDB provider.

[Set Mapping] Maps the user, cards, vehicle or hotlist fields between the GV-ASManager database and the source database.

[Input/Modify the auto-update time setting] Specify a time to update the database automatically.

Under the **Update** Menu:

[Update User Data manually] Update the user data manually.

[Update Card Data manually] Update the card data manually.

[Update Vehicle Data Manually] Update the vehicle data manually.

[Update Vehicle Hotlist Manually] Update the vehicle hotlist manually.

15.5.1 Converting Data from the Active Directory Database

1. Click the **Set Connection** button on the Options dialog box (Figure 15-4). The Source Database dialog box appears.
2. Select **Active Directory**. This dialog box appears.

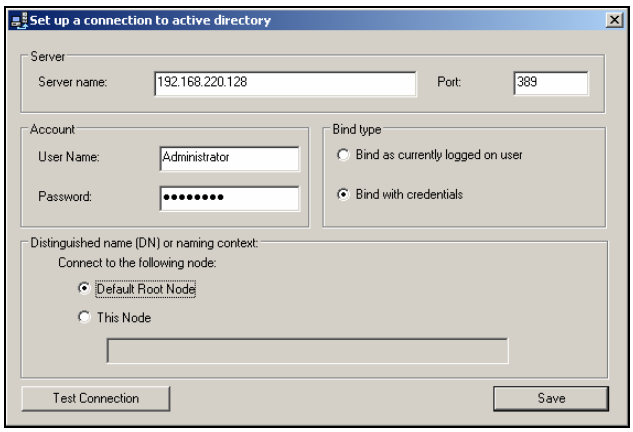


Figure 15-5

3. If you log in the local computer with the authorized username and password from the source database server, select **Bind as currently logged on user** and type the IP address or domain name of the server. If not, select **Bind with credentials**, type the IP address or domain name of the server and its login username and password.
4. Ensure the **Port** number matches that of the source database server.
5. Select **Default Root Node** to connect to the root node of the source database. Otherwise, select **This Node** and specify the node path.
6. Click **Test Connection** to connect to the source database server.
7. Click the **Update Cardholder Data manually** button in the Options dialog box (Figure 15-4) to convert the cardholder data from the source database to the GV-ASManager database immediately.
8. Click the **Update Card Data manually** button in the Options dialog box (Figure 15-4) to convert the card data from the source database to the GV-ASManager database immediately.
9. To update the database automatically later, click the **Input/Modify the Auto-update time setting** button in the Options dialog box (Figure 15-4) and specify the time in minutes.

15.5.2 Converting Data from the OLE Database

To convert data from the OLE database, you need to go through these instructions:

- **Connect an OLE database**
- **Map the cardholder data**
- **Map the card data**
- **Convert the data from the source database**

To connect an OLE database:

1. Click the **Set Connection** button on the Options dialog box (Figure 15-4). The Source Database dialog box appears.
2. Select **Other Database**. This dialog box appears.

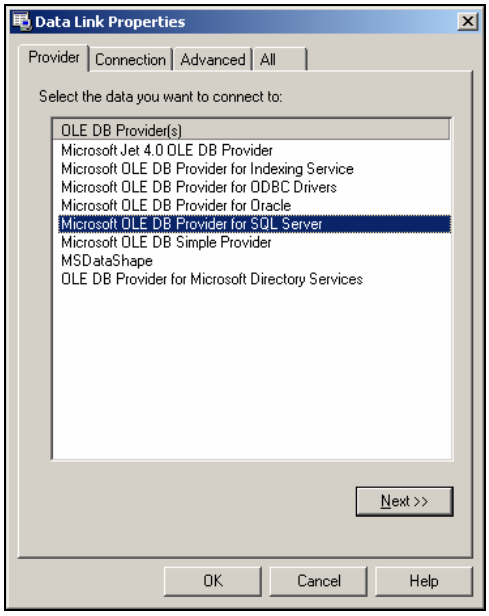


Figure 15-6

3. Select the OLE DB provider that you wish to connect to, and click **OK**. The connection dialog box appears. The dialog box varies depending on the OLE DB provider you choose. Here we select **Microsoft OLE DB Provider for SQL Server** as example.

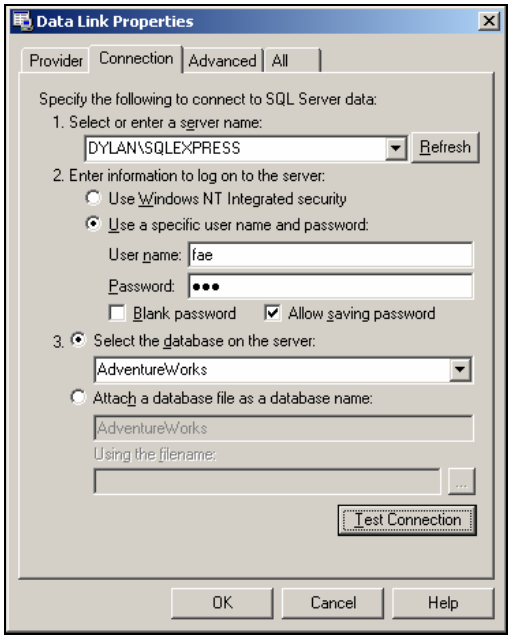


Figure 15-7

4. Type the IP address or domain name of the source database server, select its login authentication method, and select a specific database on the server. Click **Test Connection** to connect to the source database server.

To map the cardholder data:

1. Click the **Set the mapping relations for cardholders** button in the Options dialog box (Figure 15-4). This window appears.

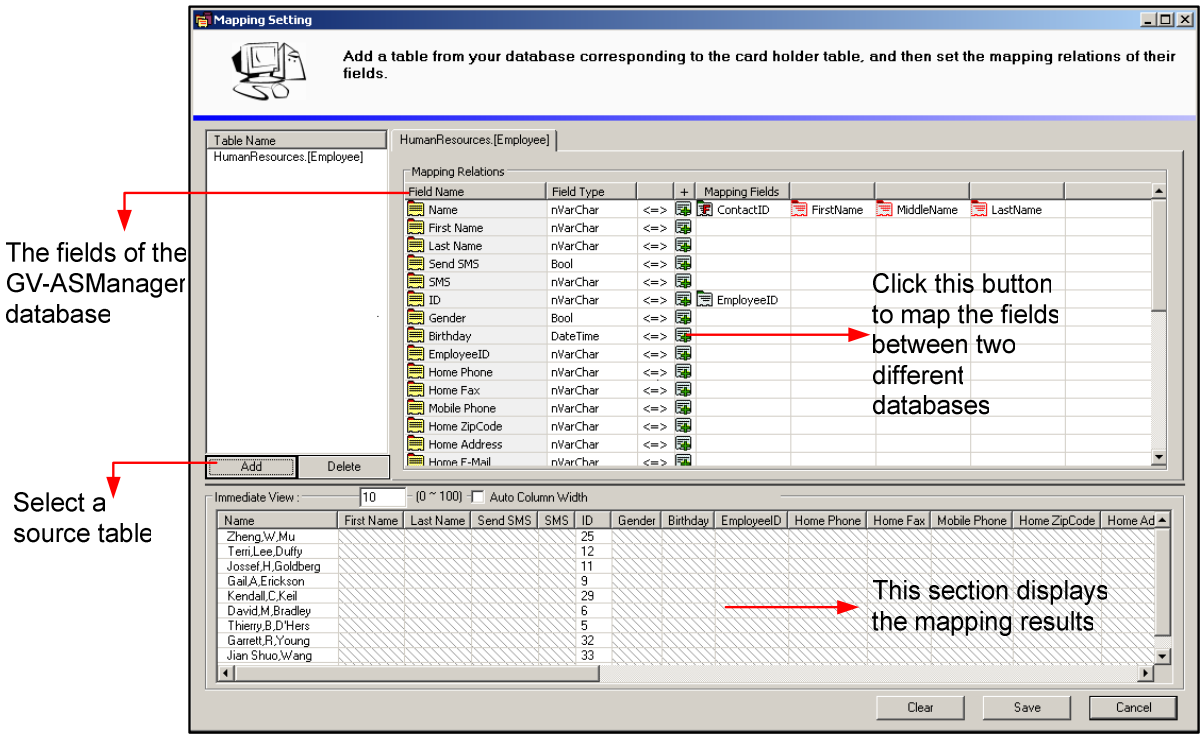


Figure 15-8

2. Click the **Add** button to select a related table on the source database.
3. Click the buttons to map each field of GV-ASManager database to a corresponding field of the source database.
4. In the following steps, we demonstrate how to map the **Name** filed as example. lick the button in the Name field. This dialog box appears.

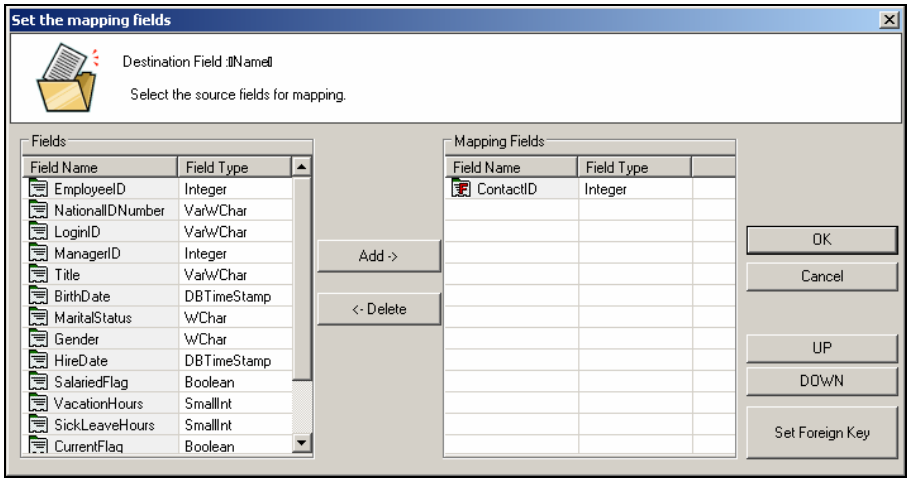


Figure 15-9

5. In the left side of the mapping field dialog box, select the field(s) of the source database corresponding to the Name field of the GV-ASManager database. Then click **Add**. In this example (Figure 15-9), the **Contact ID** field of the source database corresponds to the **Name** filed of the GV-ASManager database.

6. If the field of the source database, without having the data entered, is linked to an index or another table, click the **Set Foreign Key** button. This dialog box appears.

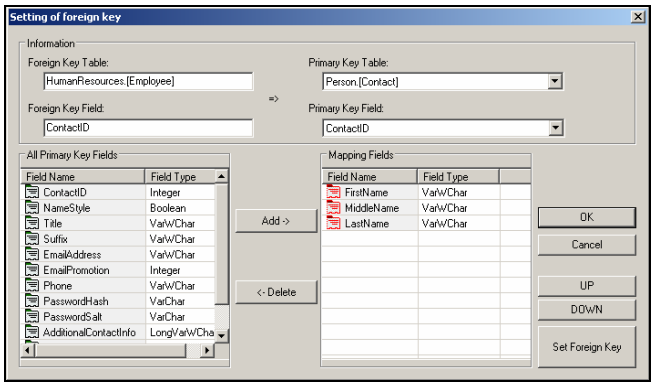


Figure 15-10

7. When the foreign key dialog box is open, the linked **Primary Key Table** and **Primary Key Field** should be displayed if the connection of the Foreign Key Table and Primary Key Table has been created. Otherwise, use the drop-down lists to select the Primary Key Table and Field.

8. In the left side of the foreign key dialog box, select the field(s) of the Primary Key Table corresponding to the field of the Foreign Key Table. In this example (Figure 15-10), the **Contact ID** field of “Human Resource (Employee)” Foreign Key Table is linked to the **First Name**, **Middle Name** and **Last Name** fields of “Person (Contact)” Primary Key Table.

9. Click **OK**. In the Mapping Setting window, you can see the mapping results. In the example (Figure 15-8), the **Name** field of the GV-ASManager database is mapped to the **Contact ID** field of the source database which includes **First Name**, **Middle Name** and **Last Name** (which are linked from the Primary Key Table).

To map the card data:

1. Click the **Set the mapping relations for cards** button in the Options dialog box (Figure 15-4). This window appears.

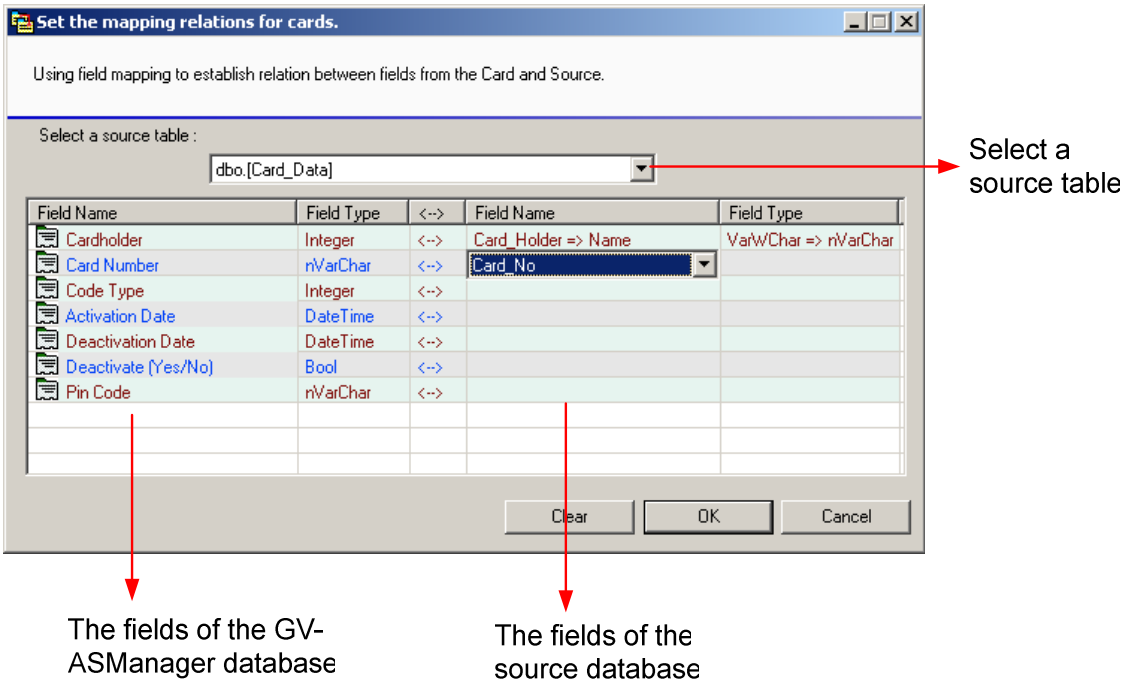


Figure 15-11

2. Select a related table on the source database.
3. Click the **Field Name** column on the right side to map each field of the GV-ASManager database and the source database.

To convert the data from the source database:

1. Click the **Update Cardholder Data manually** button in the Options dialog box (Figure 15-4) to convert the cardholder data from the source database to the GV-ASManager database immediately.
2. Click the **Update Card Data manually** button in the Options dialog box (Figure 15-4) to convert the card data from the source database to the GV-ASManager database immediately.
3. To update the database automatically later, click the **Input/Modify the Auto-update time setting** button in the Options dialog box (Figure 15-4) and specify the update time.

Chapter 16 Net Module Utility

With the **Net Module Utility** included in Software DVD, you can change settings and update the firmware of the GV-AS / GV-EV Controller.

1. Insert Software DVD, select **Install GeoVision Access Control System**, click **Net Module Utility** and follow the onscreen instructions to install the program.
2. Run **Net Module Utility**. This window appears.

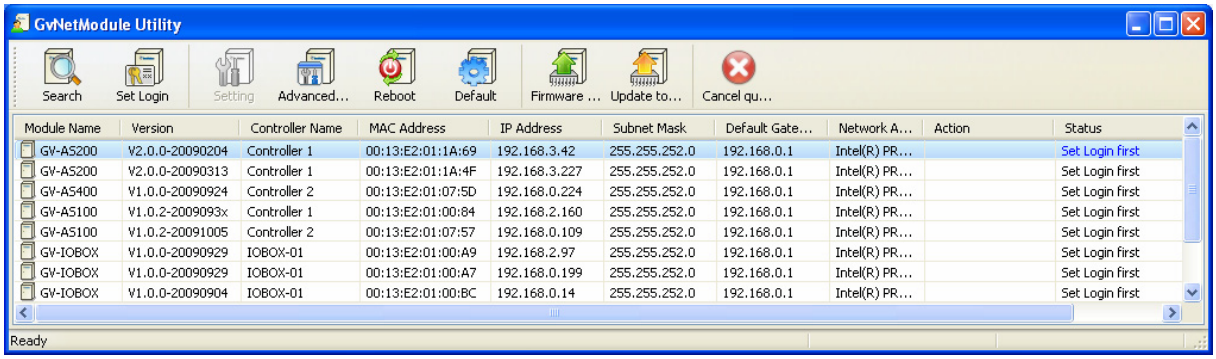


Figure 16-1

The buttons on the window:

- **Search:** Click this button to locate any GV-AS / GV-EV Controller or GV-I/O device on the same LAN.
- **Set Login:** You can select the desired modules from the list, and click this button to log on to these modules with the same ID and password together.
- **Setting:** Click this button to change the Machine Name, IP address, 3DES Code, Device Port, login ID and password.
- **Advanced Setting:** Click this button to directly link to the Web interface of the selected module.
- **Reboot:** Click this button to perform a warm boot of the selected module. This operation will keep the current configuration.
- **Default:** Click this button to reset all configuration parameters to their factory settings. This may take 5 seconds to complete.
- **Firmware Update:** Click this button and assign the firmware file for update.
- **Update to the latest firmware version:** The GV-ASManager software comes with the latest GV-AS / GV-EV Controller firmware. Clicking this button can upgrade your controller firmware.

Chapter 17 Troubleshooting

Q1: GV-ASManager cannot connect to GV-AS / GV-EV Controller over the Internet.

There are several causes for this problem such as IP address conflict, incorrect connection settings and network failure. The following solution is to assign the fixed IP to the GV-ASManager and GV-AS / GV-EV Controller respectively. This way can determine if the problem is caused by the faulty devices and incorrect network settings.

1. Disconnect the hub or switch, which connects the GV-ASManager and GV-AS / GV-EV Controller, from the network.
2. Give the GV-ASManager a fixed IP address that is NOT used by another device, e.g. 192.168.0.154.

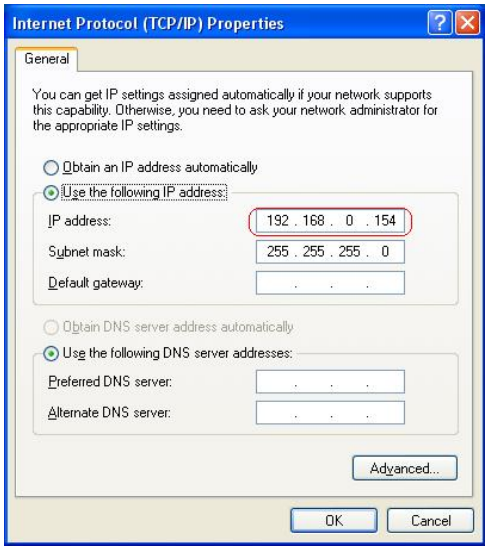


Figure 17-1

3. Reset the GV-AS / GV-EV Controller module and Ethernet module to factory defaults.
   a. Plug the GV-ASKeypad to the GV-AS / GV-EV Controller.
   b. Remove the jumper cap from the 2-pin **Default** jumper.
   c. Press the **Reset** button.
   d. Replace the jumper cap back to the 2-pin **Default** jumper.
   e. To reset the Ethernet Module, press and hold the **Default EN** button for 6 seconds.

4. Open the browser and enter the GV-AS / GV-EV Controller default address: http://192.168.0.100

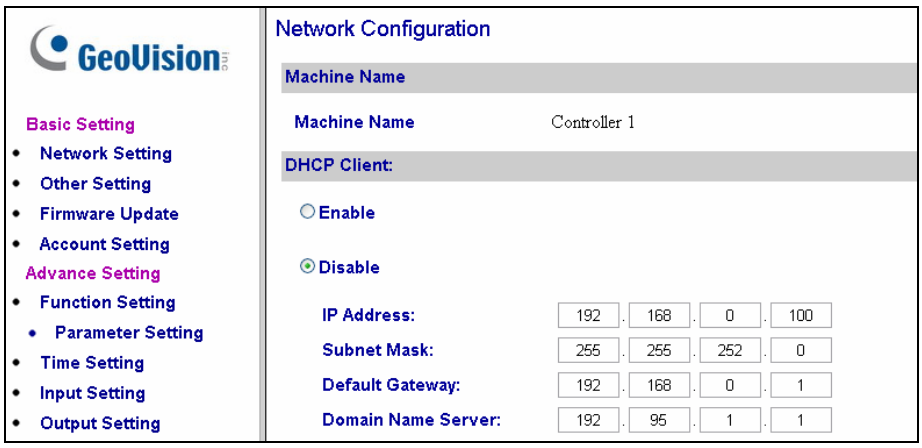


Figure 17-2

5. In the IP address field, give the controller an IP address that is NOT used by another device, e.g. 192.168.0.XXX.
6. On the GV-ASManager, enter the following settings:

   Controller ID: 1

   Network: TCP/IP

   IP: 192.168.0.XXX

   Port: 4000

   User: admin

   Password: admin

   Crypto key: 12345678

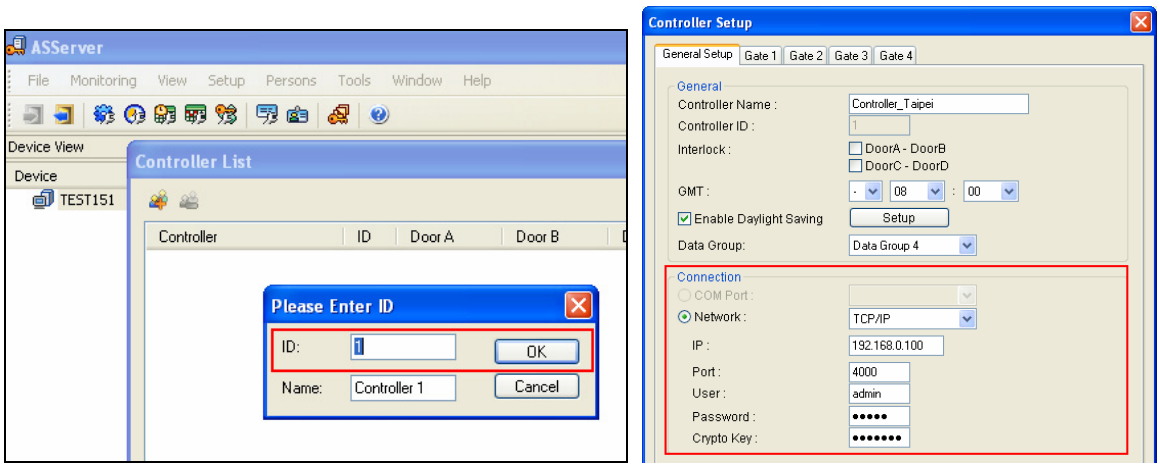


Figure 17-3

7. The connection between the GV-ASManager and the controller should be established, and the connection icon should appear. If disconnection happens after you connect the hub or switch to the network, then it should be other network problems. Please contact your network administrator.

Q2: The connection established between the GV-ASManager and GV-AS / GV-EV Controller is interrupted.

This may be due to IP address conflict. Follow these steps to troubleshoot the problem:

1. Disconnect the hub or switch, which connects to the GV-ASManager and GV-AS / GV-EV Controller, from the network.
2. Run Windows **Command Prompt**. Take Classic Windows Start Menu for example, click **Start**, select **Accessories** and click **Command Prompt**.
3. Type **arp –d** and press **Enter**.

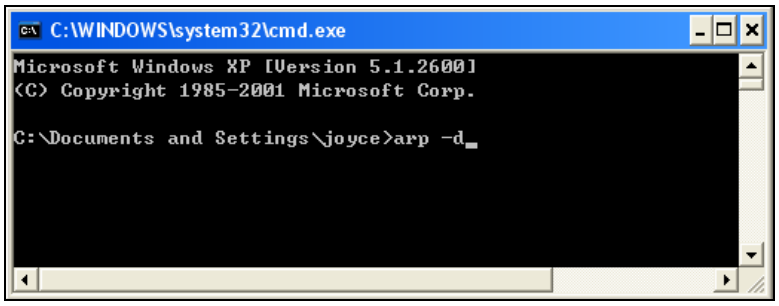


Figure 17-4

4. Give the GV-ASManager a fixed IP address that is NOT used by another device. See Figure 17-1.
5. Open the browser and enter the assigned IP address of the controller. The Network Configuration page appears. See Figure 17-2.
6. In the IP address field, give the controller an IP address that is NOT used by another device, e.g. 192.168.0.XXX.
7. On the GV-ASManager, enter the following settings. See Figure 17-3.

   Controller ID: 1

   Network: TCP/IP

   IP: 192.168.0.XXX

   Port: 4000

   User: admin

Password: admin

Crypto key: 12345678

8. The connection between the GV-ASManager and GV-AS / GV-EV Controller should be established, and the connection icon  should appear. If disconnection happens after you connect the hub or switch to the network, then it should be other network problems. Please contact your network administrator.

Q3: GV-ASManager cannot receive card messages but the reader accepts the card when the connection between the GV-ASManager and GV-AS / GV-EV Controller is well established.

It may be due to memory failure in the controller. Reset both the controller module and the Ethernet module to factory settings. Refer to Step 3 in Question 1.

Q4: The GV-ASManager cannot retrieve the video from the DVR for playback.

1. Make sure the **Remote ViewLog Service** on **Control Center Server** is enabled on the DVR.
2. Make sure the time on the GV-ASManager and the DVR is consistent.
3. Make sure the event file you want to play back has been created completely on the DVR. For example, the assigned time length of every recorded event on the DVR is 5 minutes. The desired event of 5 minutes must have been displayed on the ViewLog Event List, so you can access the event file for playback.

Q5: After I add a card by presenting to the reader, the message "*Access Denied Invalid Card*" still appears

(For details on adding a card, see Step 1 in *4.3.1 Adding a Single Card.)*

It may be the card format is not compatible with the controller. For GV-AS100, GV-AS110, GV-AS120 and GV-AS400, ensure the format is 26~64 bits. Otherwise, send us the related information of your card format so that we can customize the format for you.

Q6: The GV-ASManager cannot receive card messages from the GV-Reader connected to the GV-AS / GV-EV Controller through RS-485 interface.

1. Make sure the GV-Reader is correctly wiring to the controller and Switch 4 on the GV-Reader is set to OFF.
2. Make sure the correct GV-Reader ID is set on the controller.

Q7: I can't change the Advanced Settings on the Web interface of the GV-AS / GV-EV Controller. The "Submit" button is missing.

To modify the Advanced Settings, make sure the **Web Setting Switch** on the controllers is set to ON. For the location of the Web Setting Switch, refer to the *Web Setting Switch* section of each controller or GV-ASNet / GV-ASBox.

Q8: After installing GV-ASManager, the message "d3dx9_40.dll cannot be found" appears.

Make sure DirectX End-User Runtimes is installed and restart the computer afterwards. To install DirectX End-User Runtimes, insert the supplied Software DVD to your computer, and select **Install DirectX End-User Runtimes (November 2008)**.

Q9: How can I find more help?

Visit our website at http:///www.geovision.com.tw

Write to us at support@geovision.com.tw

Appendix

A. Compatible IP Devices

This list provides the supported IP device brands. For detailed information on the supported IP devices, refer to Supported IP Camera List on GeoVision's Website: http://www.geovision.com.tw/english/4_21.asp

GeoVision
ACTi
Arecont Vision
AVTech
AXIS
Bosch
Canon
CNB
D-Link
Etrovision
Hikvision
Hunt
IQeye
JVC
LG
MESSOA
MOBOTIX
Panasonic
Pelco
RIVA
Samsung
Sanyo
SONY
UDP
Verint
VIVOTEK

B. Event Notifications

- **"Alarm" events**

Type	Description
Force Open	Door <name> is forcibly open.
Duress	Duress function is triggered. See "Duress" in *1.2 Concepts*.
Tamper	Tamper Inputs are triggered. For hardware settings, see *Connecting Input Devices* in *GV-AS / GV-EV Controller User's Manual*. For software settings, see Step 5 in *4.2.2 Step 2: Configuring the Doors*.
Fire Alarm	Fire Inputs are triggered. For hardware settings, see *Connecting Input Devices* in *GV-AS / EV Controller User's Manual*. For software settings, see Step 5 in *4.2.2 Step 2: Configuring the Doors*.
Held Open	Door <name> is held open over the specified time. See Step 2 and 5 in *4.2.2 Step 2: Configuring the Doors*.
Access Denied	The access is rejected.

- **"Access" events**

Type	Description
Access Granted	The access from User <name> and Card <Number> is granted.
Access Denied: Invalid Card	The access is rejected because an unknown card is presented.
Access Denied: Card suspended	The access is rejected because Card <Number> is suspended.
Access Denied: Wrong PIN	The access is rejected because the PIN number entered is wrong.
Access Denied: Card Expired	The access is rejected because Card <Number> is expired.
Access Denied: Invalid schedule	The access is rejected because the user access is not on the programmed schedule.
Access Denied: Wrong Door	The access is rejected because the user has access to the wrong door.

Access Denied: APB (Duplicate Entries)	The access is rejected because the Anti-Passback rule is violated. Card <Number> is recorded as successive entries, without exit, to a secure area.
Access Denied: APB (No Entry)	The access is rejected because the Anti-Passback rule is violated. Card <Number> is recorded as exit, without entry, to a secure area.
Access Denied: APB (No Exit)	The access is rejected because the Anti-Passback rule is violated. Card <Number> is recorded as entry, without exit, to a secure area.
Access Denied: Unknown Card	The access is rejected because the card format is not compatible.
Access Denied: Invalid Start Date	The access is rejected because Card <Number> is not enabled.
Access Denied: Previous Door Still Open (Interlock)	The access is rejected because the Interlock function is violated. The entry door is left unlocked. See “Interlock” at Step 5 in *4.2.1 Step 1: Configuring a Controller*.

- **“Event” events**

Type	Description
Force Open	Door <name> is forcibly open.
Duress	Duress function is triggered. See “Duress” in *1.2 Concepts*.
Tamper	Tamper Inputs are triggered. For hardware settings, see *Connecting Input Devices* in *GV-AS / GV-EV Controller User’s Manual*. For software settings, see Step 5 in *4.2.2 Step 2: Configuring the Doors*.
Fire Alarm	Fire Inputs are triggered. For hardware settings, see *Connecting Input Devices* in *GV-AS / GV-EV Controller User’s Manual*. For software settings, see Step 5 in *4.2.2 Step 2: Configuring the Doors*.
Held Open	Door <name> is held open over the specified time. See Step 2 and 5 in *4.2.2 Step 2: Configuring the Doors*.
Access Denied	The access is rejected.
Alarm Restored	Alarm sounds are cleared.
Forced Open-Restored	Force Open alarm is cleared.

Duress Restored	Duress alarm is cleared.
Tamper Restored	Tamper alarm is cleared.
Fire Alarm Restored	Fire alarm is cleared.
Held Open Restored	Held Open alarm is cleared.
Restored Alarm Failed	Fail to clear alarm sounds.
Clear Forced Open Event Failed	Fail to clear Force Open alarm.
Clear Duress Event Failed	Fail to clear Duress alarm.
Clear Tamper Event Failed-No Event Present	Fail to clear Tamper alarm.
Clear Fire Alarm Event Failed-No Event Present	Fail to clear Fire alarm.
Clear Held Open Event Failed	Fail to clear Held Open alarm.
Clear Access Denied Failed	Fail to clear Access Denied alarm.
Clear Tamper Event Failed-I/O Still Unclear	Fail to clear Tamper alarm because Tamper Inputs remain triggering.
Clear Fire Event Failed-I/O Still Unclear	Fail to clear Fire alarm because Fire Inputs remain triggering.
Door Open	Door <name> is open.
Door Close	Door <name> is close.
Door/Gate Unlock	Door <name> is unlocked.
Door/Gate Lock	Door <name> is locked.
Two Person Rule-Active	Two-person A/B rule is active when Card <number> is presented.
Two Person Rule-Confirm	Two-person A/B rule is confirmed when Card <name> is presented after the other AB card.
Two Person Rule-Inactive	Two-person A/B rule is violated when Card <name> is presented successively or the other AB Card isn't presented within 20 seconds.
Keypad Code Confirm	On the Card or Common mode, the password entered is correct.
Wrong Keypad Code	On the Card or Common mode, the password entered is wrong.

Release Mode	Door <name> is on the Release Mode. See Step 4 in *4.2.2 Step 2: Configuring the Doors*.
Card or Common Mode	Door <name> is on the Card or Common Mode. See Step 4 in *4.2.2 Step 2: Configuring the Doors*.
Card and PIN Code Mode	Door <name> is on the Card and PIN Code mode. See Step 4 in *4.2.2 Step 2: Configuring the Doors*.
Card Mode	Door <name> is on the Card mode. See Step 4 in *4.2.2 Step 2: Configuring the Doors*.
Fire Unlock Mode	Door <name> is unlocked after Fire Inputs are triggered. See “Fire Action” at Step 2 in *4.2.2 Step 2: Configuring the Doors*.
Fire Lock Mode	Door <name> is locked after Fire Inputs are triggered. See “Fire Action” at Step 2 in *4.2.2 Step 2: Configuring the Doors*.
Force Unlock Remotely	Door <name> is unlocked remotely from the control of GV-ASManager or GV-ASRemote server.
Force Lock Remotely	Door <name> is locked remotely from the control of GV-ASManager or GV-ASRemote server.
Disable Remote Door Lock Operation	The event of “Force Unlock Remotely” or “Force Lock Remotely” is cleared.
Force Unlock Locally	Door <name> is unlocked on the site of Door Controller.
Force Lock Locally	Door <name> is locked on the site of Door Controller.
Disable Local Door Lock Operation	The event of “Force Unlock Locally” or “Force Lock Locally” is cleared.
Reset	Door Controller <name> is reset.

C. E-Mail and SMS Alert Symbols

Icon	Description
	%M (Message): include related alert message.
	%T (Controller): include door controller's name.
	%D (Door): include triggered door's name.
	%L (Local Time): include local time.
	%U (UTC): include UTC time.
	%N (Card Number): include card number.
	%H (User Name): include user name.
	%G (Gender): include user's gender.
	%E (Employee ID): include employee ID.
	%Y (Company): include company name.
	%P (Department): include department name.
	%F (Office): include office name.
	%C (Photo): include user photo.
	%S (Snapshot): include snapshot.

D. Controller Status

Status	Description
Disconnected (Login Failed)	The username, password or crypto key (3DES) entered is wrong.
Disconnected (Duplicate Connection)	Another GV-ASManager is connecting with the controller.
Disconnected (Hardware Error)	The Controller ID entered is wrong. Or controller errors occur.