Utilities

- **Backup Scheduler**

- **Watermark Inspector**

- **SettingsImportExport**

- **MutipleView**

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Backup Scheduler

Use the Backup Scheduler program to make regular backups of the recorded surveillance videos. This program allows both manual and scheduled backups. Manual backup allows you to specify the date and time range of video recordings to back up. Whereas when scheduled backup is enabled, the program automatically performs daily backups of surveillance videos that were recorded during a specific time frame in a day.
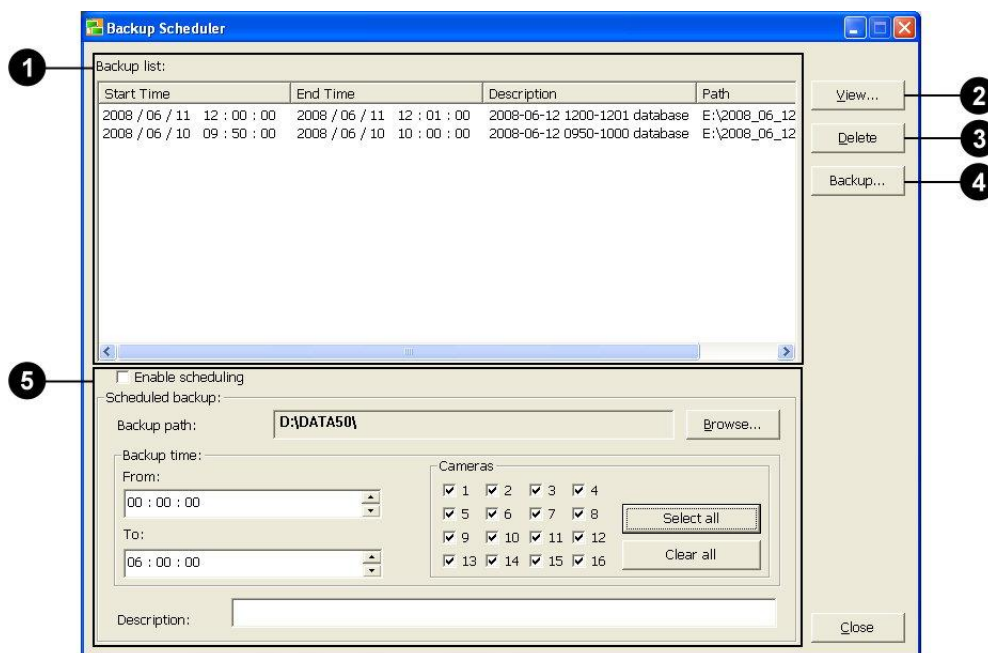
To launch Backup Scheduler, click Start - Programs - huperVision v1.6 - Backup Scheduler.

If access control is enabled in Site Server's Preferences dialog box - Users tab, users who run the Backup Scheduler program will be prompted to provide login information. To be able to use the Backup Scheduler program, the login name and password entered must belong to an existing user account that has been assigned with the "Administrator" privilege level or a privilege level that has "Backup" authority. Only users with these privilege levels are allowed to configure backup settings.

Program interface: an overview

When you launch Backup Scheduler, the main program screen opens and automatically displays the Data Size dialog box where you can perform a manual backup. In this dialog box, you can set a range of video recordings to backup by specifying your desired start and end dates. For more information on how to configure settings for a manual backup, see "Performing manual backups".

The main program screen shows a list of past backups. From the program screen, you can manage your backups, initiate a manual backup or set up automatic backups. The following describes the controls and settings on the main program screen.

Backup Scheduler dialog showing Backup list with columns Start Time, End Time, Description, Path. Entries:
2008 / 06 / 11 12 : 00 : 00 2008 / 06 / 11 12 : 01 : 00 2008-06-12 1200-1201 database E:\2008_06_12
2008 / 06 / 10 09 : 50 : 00 2008 / 06 / 10 10 : 00 : 00 2008-06-12 0950-1000 database E:\2008_06_12

Buttons: View..., Delete, Backup..., Close. Enable scheduling checkbox. Scheduled backup — Backup path: D:\DATA50\ Browse... Backup time From: 00 : 00 : 00 To: 06 : 00 : 00. Cameras 1-16 with Select all / Clear all. Description field.

1	Backup list	Keeps a record of past backups. Each backup entry in the list corresponds to a backup database folder. Each backup entry shows the date and time range of the surveillance videos that were backed up, a textual description, and the backup database folder path.
2	View	Plays back the surveillance videos that are stored in a backup database. To view the backed up surveillance videos, select the appropriate entry from the Backup list and then click View. Record Player automatically opens where you can play back the videos.
3	Delete	Deletes one or more selected entries in the Backup list. Deleting entries will also physically delete their corresponding backup database files. To select multiple entries, hold down the [Ctrl] key and click each entry you want to delete. Then, click Delete to delete them.
4	Backup	Allows you to manually initiate a backup when there are recorded surveillance videos in Site Server's Main database. (See "Performing manual backups".)

⑤ Scheduled backup   Enables the Backup Scheduler program to perform automatic backups on a daily basis. (See "Setting up automatic backups")

Performing manual backups

Manual backup allows you to selectively back up surveillance videos that were recorded by Site Server within a date and time range. To perform a manual backup, click the Backup button to open the following dialog box and configure backup settings:

① Cameras   You can select which particular video cameras you want to back up video recordings from. To select individual cameras, simply click the checkboxes of the desired camera numbers. You can also click Select All to quickly select all the cameras. If you want to start all over in choosing cameras, you can click the Clear All button first to clear all the checkboxes, and then make your selections again.

② Record database information   This displays information about the video recordings that are currently stored in Site Server's Main database. The information here shows the first surveillance video's date/time of recording and the last video's date/time of recording.

3 Backup range

The options here determine which video recordings to back up and whether to remove them from the Main database after the backup process is complete.

Adjust end time based on recording size

When selected, you can specify the data file size of the video recording you want to back up or delete. After you enter the file size in the "Data size" text box and the starting date/time of the video recording in the "First record" text box, the "Last record" text box will be filled in with the ending date/time based on your specified file size after clicking Calculate.

First / Last record

Allows you to specify the date and time range of video recordings to back up.
If you selected the "Adjust end time based on recording size" option, there is no need to specify the ending date/time range in the "Last record" text box. It will automatically be determined.

Backup only

When selected, the program backs up the video recordings that fall within the specified date and time range, and retains them in the Main database after the backup process is complete.

Backup and remove

When selected, the program deletes the video recordings that fall within the specified date and time range after backing them up.

Remove only

When selected, the program deletes video recordings without performing a back up first.

Calculate

Click this button to automatically determine the data file size of the video recording to be backed up (or removed) based on the date and time range specified in the "First record" and "Last record" text boxes.
This button works only when the "Adjust end time based on recording size" option is not selected.

④ Backup destination   Choose the location where to save the backup and enter a textual description that identifies the contents of the backup database.

There are two options for the backup destination:

Save to storage   Let you save the backup to a specified folder in the hard drive. Click Browse to choose a folder.

The available space of the selected folder must at least be the same size as the recordings to be backed up. After you selected a folder, the free space that is available on that folder will be shown to the right of the Browse button. If the chosen storage space does not have enough free space, a warning message will be displayed and the manual backup will not be performed.

Burn to CD/DVD   Let you save the backup onto a CD or DVD.

For more information about CD/DVD backup, see "Burning a CD or DVD".

Setting up automatic backups

Backups can be automatically performed by Backup Scheduler according to your preset schedule. At most, you can set up the program to back up surveillance videos that were recorded by Site Server for the last 24 hours. Configure these settings to set up a schedule for automatic backups:
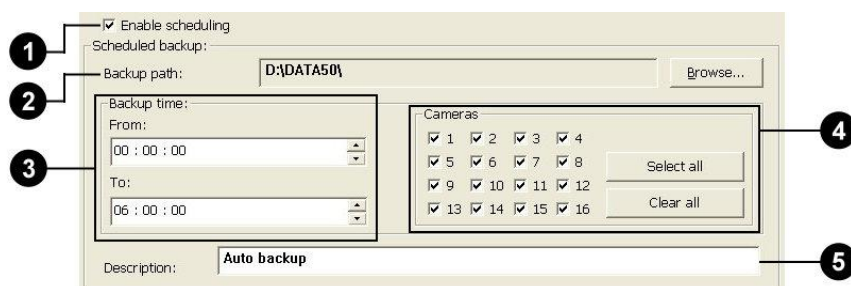
① Enable scheduling   Select this option to activate automatic backups. Choose your Backup path first before you select this checkbox.

2	Backup path	Specify the destination folder for saving the daily backups. Each day's surveillance videos recorded by Site Server will be saved as an individual backup database.
3	Backup time	Specify the time period to back up the previous day's video recordings.
4	Cameras	You can select which particular video cameras you want to back up video recordings from. Select individual cameras by clicking their checkboxes, or click Select All to select all cameras. If you want to start all over in choosing cameras, you can click the Clear All button first to clear all the checkboxes, and then make your selections again.
5	Description	Enter a textual description that identifies the contents of the backup database files.

Note: Backup processes are given lesser priority than digital video recording when both operations are performed simultaneously. When backup storage is not enough or an entire backup process cannot be completed within the specified period, a warning message will be displayed.

Burning a CD or DVD

When you choose the Burn to CD/DVD option, huperVision will use built-in burning function to burn a CD/ DVD.


How to burn the CD/DVD

After you have selected the burner to use and selected a temporary folder, click OK. The Data Size dialog box then closes and the Burn to CD/DVD dialog box will be displayed.
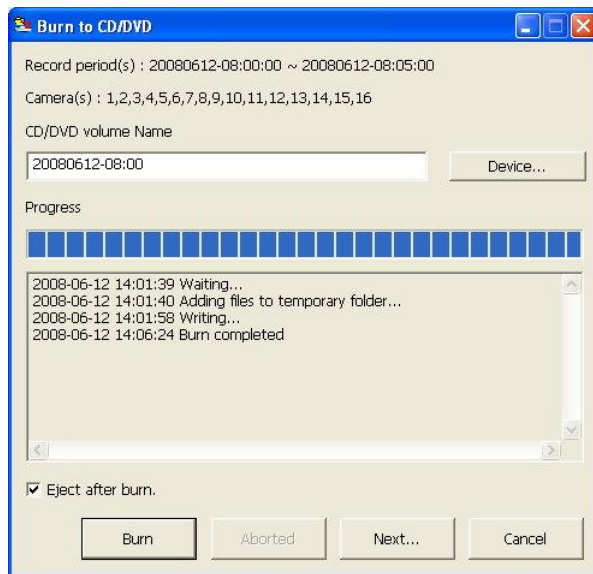
Enter the CD or DVD volume name. By default, the disc volume is named using the date and the start recording time (in hours and minutes) of the first video record.

To check the information about the burner and the path location of the temporary folder before you start burning, click the Device button.
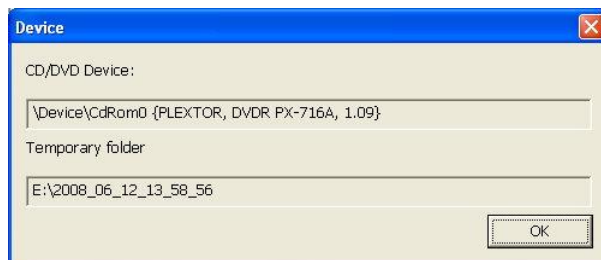
If you want the disc to be automatically ejected from the burner after disc burning has finished, select the Eject after burn checkbox. When you are ready to start burning the disc, click Burn. You can click the Abort button to cancel the burning process if this button is enabled.

After burning is completed, you can click the Burn button again if you want to burn another CD with the same set of records.

Click Next to prepare the next set of records to burn. You need to click the Burn button to start burning.

Watermark Inspector

Watermarking is a digital content protection technique that helps to identify tampered content. A watermark, which is an invisible mark, is embedded in images.

Any modification or tampering to image content can be identified by the Watermark Inspector program that is included with huperVision. If you applied watermark to the snapshots that you saved in Record Player, you can use Watermark Inspector for watermark verification.
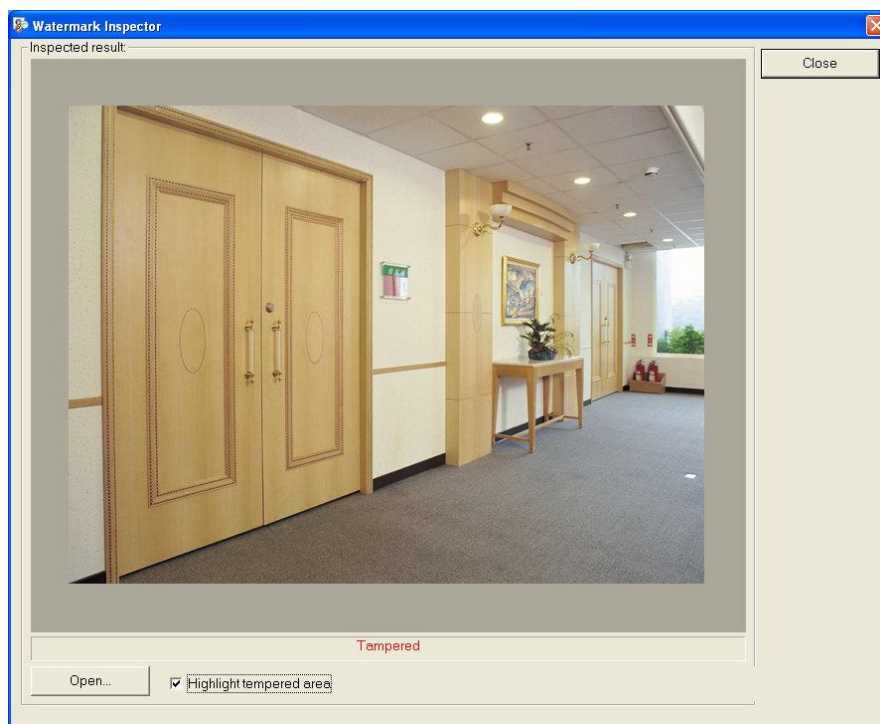
Follow the steps below to inspect an image using Watermark Inspector:

1. To launch the inspector program, click Start - Programs - huperVision v1.6 - Utilities - Watermark Inspector.
2. Click Open and select an image file to open.
3. The program then inspects the watermark of the image picture and shows one of the following status messages:
   No watermark or destroyed watermark.
   This message appears in red, and indicates that the image does not contain an embedded watermark.

Tampered.

This message appears in red, and indicates that the image content has been modified or tampered.

Image content is proved.

This message appears in blue, and indicates that the image content has not been modified or tampered.

4. If an image has been tampered and you want to find out which part of the image was tampered, you can select the Highlight tampered area check box. The tampered area will be highlighted in green.

Note that the checkbox is disabled when the image file you opened is a JPEG file. Only BMP images can be highlighted.

The examples below illustrate an image before and after it has been tampered.

Original image

Tampered image
(The two leftmost characters on the license plate)

Note: The size of the preview image area is 720x576 (PAL/D1). Images will be displayed in their original size.

SettingsImportExport

SettingsImportExport is a standalone tool to import/export environment settings of huperVision.. With this tool, you can setup DVR systems with predefined environment settings from other systems, or build up a standard DVR system settings for future usage.
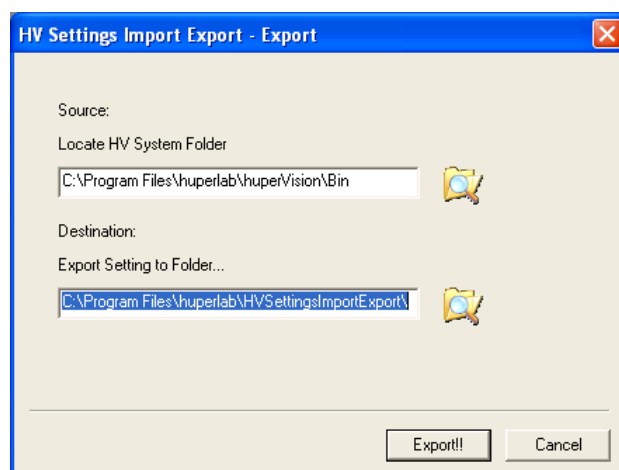
Export settings

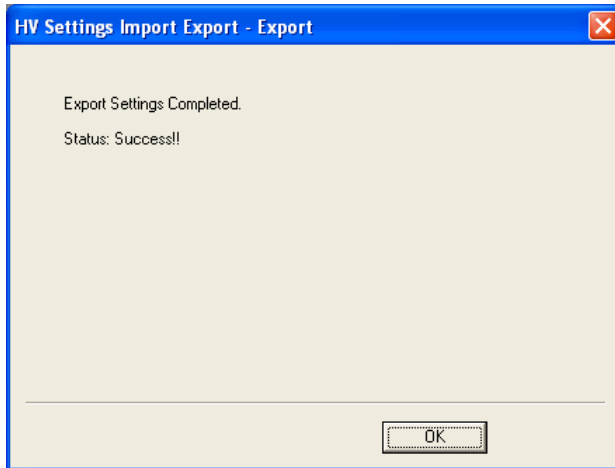Follow these steps below to export settings from huperVision:

1. Run program SettingImportExport.exe and display the main windows as below

2. Click "Export" button to start export process.
3. Select the source (bin subfolder under the local HV system installed).
4. Select the destination folder and click "Export!!" button to start.

5. Click "OK" button to end and exit program.

The export process will export all the settings of current HV system and merge as a single folder.

Import settings

Follow these steps below to import settings to huperVision:

1. Run program SettingImportExport.exe and display the main windows as below

2. Click "Import" button to start import process.

3. Select source folder (where the exported HV system settings located) and destination folder (bin subfolder under the local HV system installed) then click "Import>>" button to next step.
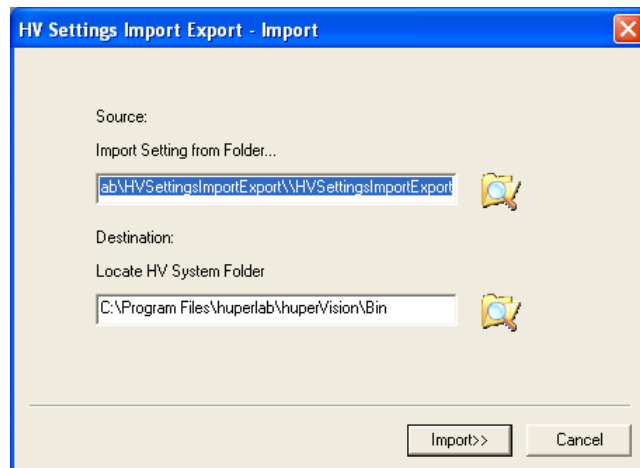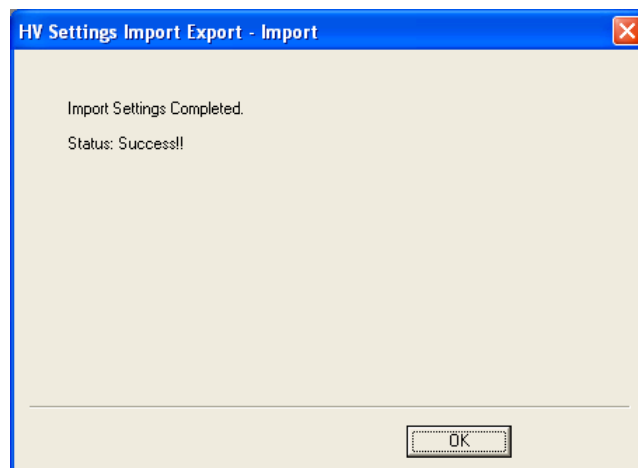

4. Select import parameters by check/uncheck options below. Click "More…" to adjust General/Camera sub options. If all the desired parameters are selected, click "Import>>" to start.
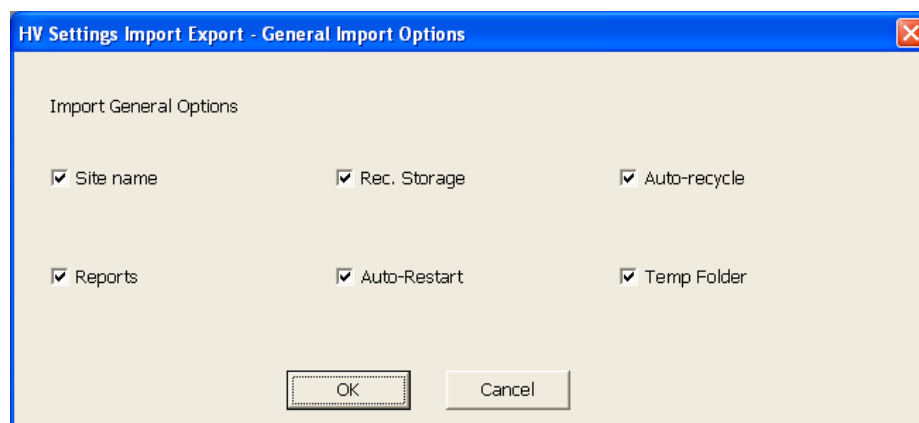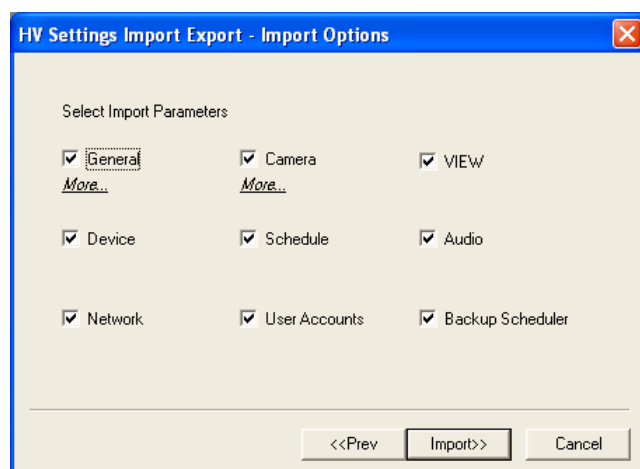
5. Click "OK" button to end and exit program.

Command Line Mode

Command line instructions for SettingsImportExport.exe:

```
SettingsImportExport Source Destination /ex /im
Source        Source folder
Destination Destination folder
/ex          Export task
/im          Import task
```

The followings are the command line instructions examples.

To export settings:

```
SettingsImportExport c:\program
files\huperlab\huperVision\bin d:\backup /ex
```

To Import setting:,

```
SettingsImportExport d:\backup c:\program
files\huperlab\huperVision\bin /im
```

Note.

1. The file HImportExportplugins.ini is the import option file which is generated by SettingsImportExport.exe under Windows mode.

2. To change import settings, you need to run the program in window mode and change import options. And then use command line mode to do the import task again.

3. Using command line instructions cannot modify the INI file.

MultipleView

MultipleView is a standalone tool to adjust Live/Player application window size and position foe single or multiple instances mode. It also supports large scale display resolution and multiple monitors. With this tool, you can set the Live or Player window size larger than 1024x768 and assigned position within the display area.

Follow the steps below to run and make settings with MultipleView:

1.   Run MultipleView tool from **Start >> Programs >> huperVision >> Utilities >> MultipleView**.

2.   Select Live1 or Player1 from Select instance pull-down menu.

   PS: For 32CH version, select Live1/Play1 for first instance; select Live2/Play2 for second instance.

3.   Setup monitor and Live/Player program window size from the Display Setup group box. You can select monitor number if using multiple monitors. Program windows size can also be changed if the selected monitor resolution is larger than 1024x768.

4.   If the current monitor resolution is larger than 1024x768 and program window is not fit to full screen, you can set Live/Player position in the Position group.

5.   To change position, select pre-defined alignment method in pull-down menu (ex. Center). The related top-left/down-right coordinates in the monitor is shown.

6.   To customize position, select Custom in pull-down menu. You can set location by typing top-left coordinates or dragging color box in the display area.

7.   Click the Apply button to apply to the chosen application.

   PS: It will popup warning message if the Live/Player is still working. To apply settings successfully, please close Live/Player and press Apply button again.

The MultipleView dialog box
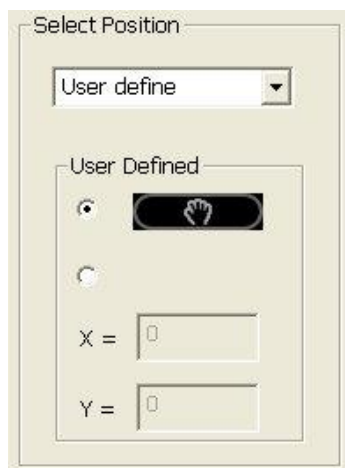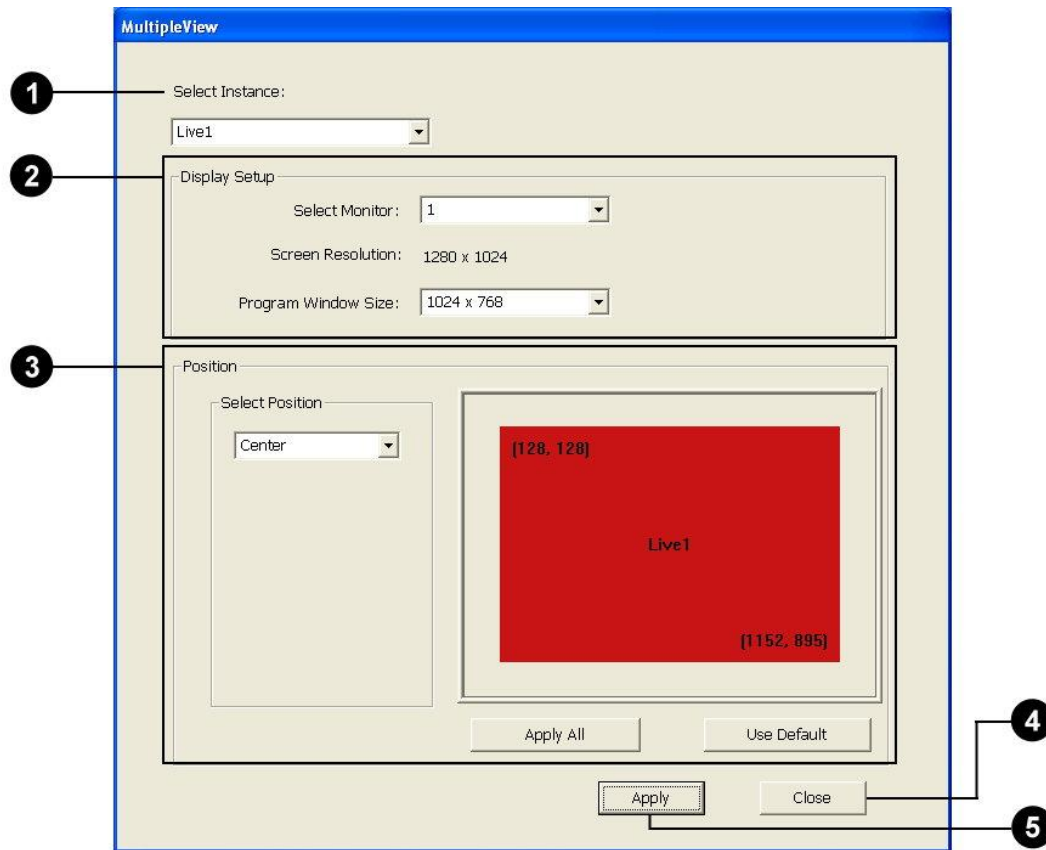
(Settings when select User Defined)

①	Select Instance	Select program from list to adjust. In 32CH version, please select Live2 or Player2 to adjust size/location for CH17~CH32.

|		
2 Display Setup		This group contains settings to adjust program window size.
Select Monitor		Select available target monitor to locate selected program..
Screen Resolution		Display screen resolution for selected monitor.
Program Window Size		Select available dimension from list to change size.
3 Position		This group contains settings to adjust program window position.
Select Position		Select one of 5 pre-defined alignment method from drop-down menu or select User define to customize position. Default is Top-Left.
Position display area		This area displays Live/Player program window coordinates (top-left and bottom-right) within selected monitor. Live uses RED rectangle block and Player uses BLUE.
(User Define)		Press this button to change position by dragging rectangle lock within position display area. The coordinates are also changed after dragging block.
(User Define) Coordinates		Change position by direct input Top-Left X, Y coordinates of program window.
4 Apply		Click this button to apply the modifed settings.
5 Close		Click this button if you change your mind and do not want to apply the modified settings. The Flame Detection dialog box then closes and reuses the previous settings.

HDD Monitor

HDD Monitor is designed for monitoring status of disk storage devices. Use SMART attribute values & other disk related data to check disk status. It will post alarm to notify user if there is an error.

Using HDD Monitor

Please select **Start→Programs→huperVision v1.6→Utilities→HDD Monitor** to start program. It will display [icon] icon on the screen. Press right mouse button on this icon will pop-up command menu as below:

Menu	Description
Open	Open HDD Monitor main window.
Close	Close HDD Monitor program.
Stop Alarm	Stop alarm from program manually, enable when there is an alarm.
About…	Display About dialog, press OK to close.

About

HDDMon Version 1.0.2008.312

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Ok
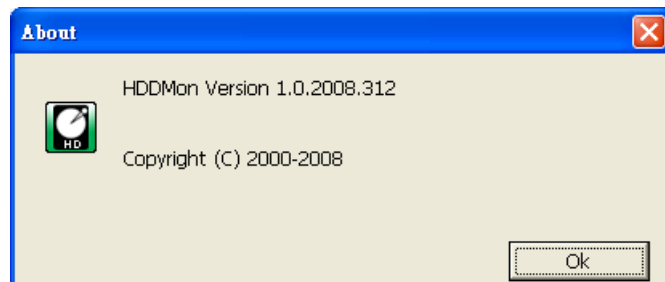
HDD Monitor Interface

Select Open command in the pop-up menu will open HDD Monitor main window. There are 3 major parts in the main window and is described as below:
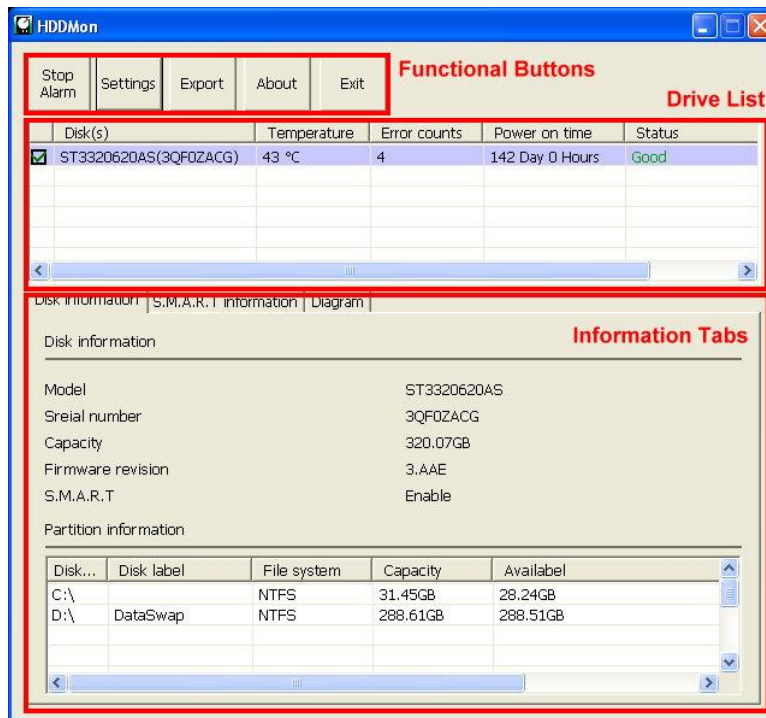
Functional Buttons	Program related functional buttons.
Drive List	List of available drive to be detected.
Information Tabs	Drive related information, 3 tabs here:
	Disk information, S.M.A.R.T information, Diagram

Functional Buttons

Stop Alarm	Stop alarm manually, enabled when there is an alarm.
Settings	Pop up Preferences dialog.
Export	Export selected drive information to text file.
About	Pop up HDD Monitor about dialog.
Exit	Close HDD Monitor main window and back to floating icon mode

Drive List

Drive list displays all available (detectable) drives (not disk partition). It can only display internal drive (external drive is not supported now). Columns of this list is shown as below:

	Disk(s)	Temperature	Error counts	Power on time	Status
☑	ST3320620AS(3QF0ZACG)	43 °C	4	142 Day 0 Hours	Good

Information Tabs

There are 3 drive related information tabs: Disk information, SMART information, Diagram.

Disk Information Tab

This tab displays basic drive information including model, serial number, capacity, firmware reversion, SMART feature and partition information.

Disk information | S.M.A.R.T information | Diagram

Disk information

Model	ST3320620AS
Sreial number	3QF0ZACG
Capacity	320.07GB
Firmware revision	3.AAE
S.M.A.R.T	Enable

Partition information

| Disk...	Disk label	File system	Capacity	Availabel
C:\		NTFS	31.45GB	28.24GB
D:\	DataSwap	NTFS	288.61GB	288.51GB

S.M.A.R.T Information Tab

This tab displays SMART related information. Colored text in the Status column are drive status reference parameters. It will display nothing in this tab if the drive doesn't support SMART feature.

Attribute name	Attribut...	Attribut...	Worst ...	Raw value	Status
01 Raw read error rate	119	6	90	00000C105DB7	Good
03 Spinup time	96	0	95	000000000000	Good
04 Start/Stop count	100	20	100	0000000000B3	Information a.
05 Reallocated sector count	100	36	100	000000000000	Good
07 Seek error rate	88	30	60	0000292AACEA	Good
09 Power-on hours count	94	0	94	00000000166F	Information a.
0A Spinup retry count	100	97	100	000000000000	Good
0C Power cycle count	100	20	100	0000000000BA	Information a.
BB vendor-specific	100	0	100	000000000000	Information a.
BD vendor-specific	100	0	100	000000000000	Information a.
BE vendor-specific	61	45	42	000027170027	Information a.
C2 HDA Temperature	39	0	58	001000000027	Information a.
C3 Hardware ECC recovered	114	0	61	00000C1AB6FB	Information a.
C5 Current pending sector c...	100	0	100	000000000000	Information a.
C6 Offline scan uncorrectabl...	100	0	100	000000000000	Information a.
C7 UDMA CRC error count	200	0	200	000000000000	Information a.
C8 Write error rate or Multi ...	100	0	253	000000000000	Information a.
CA Data Address Mark errors	100	0	253	000000000000	Information a.

Diagram Tab

Display temperature distribution diagram & several important reference parameters for reference.
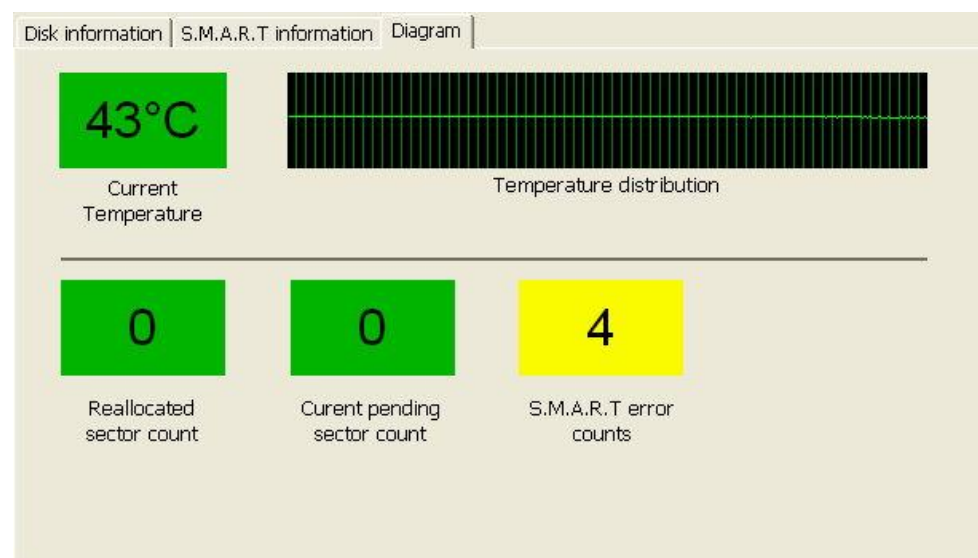
List Server

List Server is a program that keeps track of the Site Server computers that are connected on the local network and maintains the user account database. After List Server is installed, by default, it automatically runs in the background when the computer where it is installed is started up.

Running the List Server

Before you run the List Server program, first disable the Internet Connection Firewall in Windows. You can disable it through the Control Panel's Network Connections dialog box.
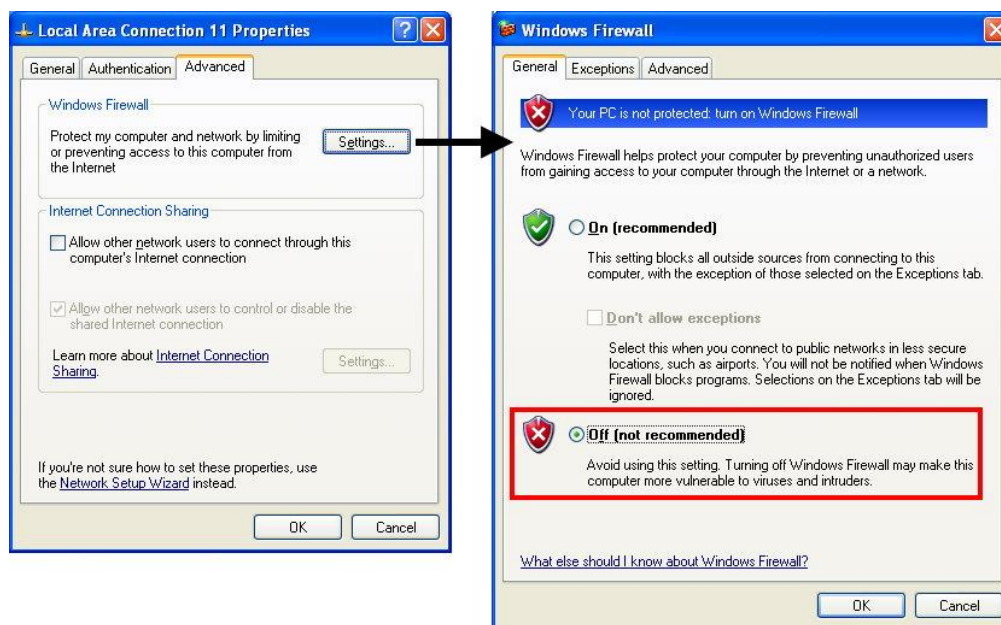
Note: The Internet Connection Firewall feature protects your computer from hackers. If you need to use this feature, refer to Microsoft Windows documentation for information on how to properly set up the firewall.

To run List Server, click Start > Programs > Huper List Server > List Server. List Server will be launched in the background, and its program icon will be added to the right side of the Windows taskbar.

This is the **List Server** program icon.

To open the List Server program window and customize its settings, you need to log into the program.

Note: Only the system administrator can log into the List Server and customize its settings.

To log into the List Server:

1. Right-click the List Server icon, then select Log in.
2. You will then be prompted to enter the system administrator name and password.

If this is your first time to open the List Server, enter "Administrator" as the name and "system" as the password.

3. Change the administrator password to avoid unauthorized access of the List Server. Click Modify, then enter a secure password.

Customizing List Server settings

The List Server program window has four tabs that provide different sets of settings.
After you have modified its settings, you need to restart the List Server program for your
new settings to take effect.

Account tab

In the Account tab, the upper part shows the existing users and information about these
users, whereas the lower part shows the number of users that are assigned to each type
of user group.
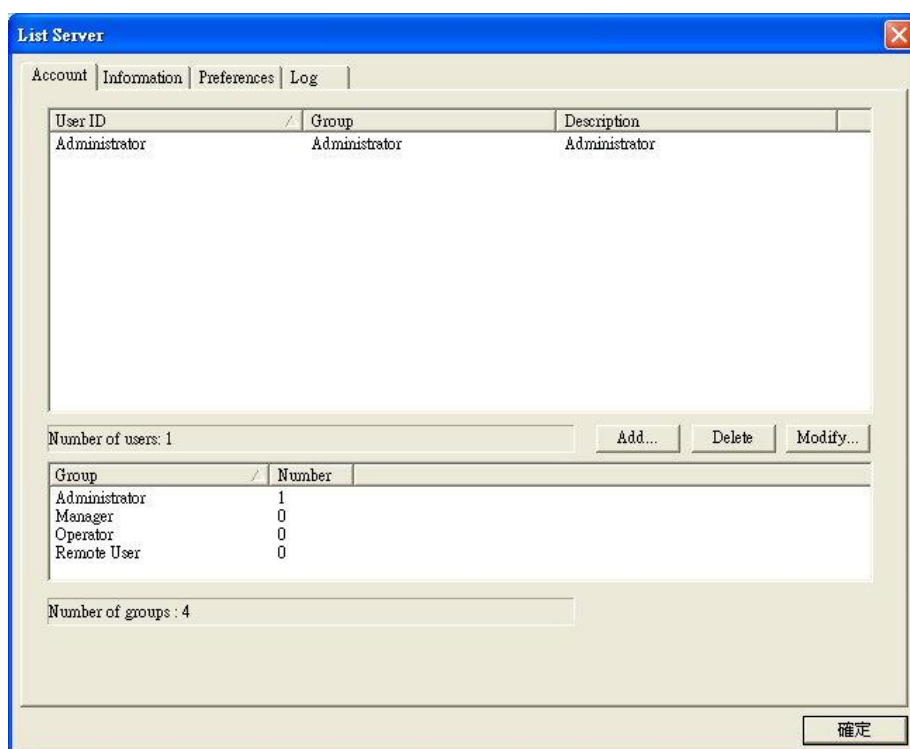
In this tab, you can add, modify or remove user accounts. For each user account, assign
it to one of these four types of user groups (i.e., privilege level): Administrator, Manager,
Operator, or Remote User.

Information tab

The Information tab keeps track of Site Server computers that are logged onto the List Server. In this tab, you can see the dynamic IP addresses or fixed IP addresses of all the Site Server computers. When you select a computer from the list, the right side of the program window will show information about the associated video cameras such as the camera name, video resolution, operation status (e.g., video recording, detection, etc.).
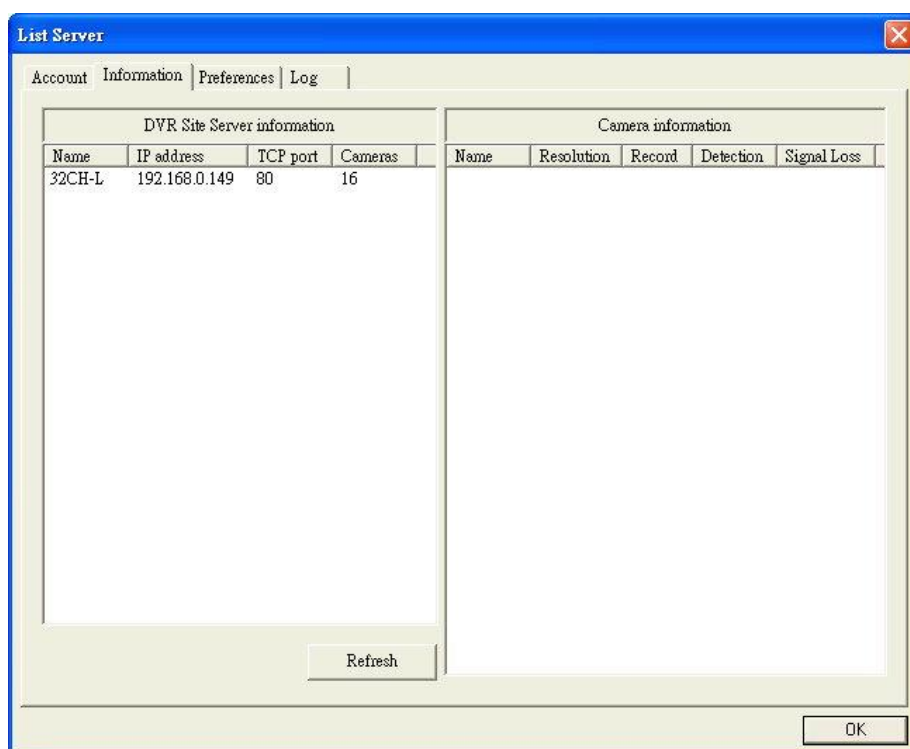
Preference tab

The Preference tab contains network settings for the List Server computer.
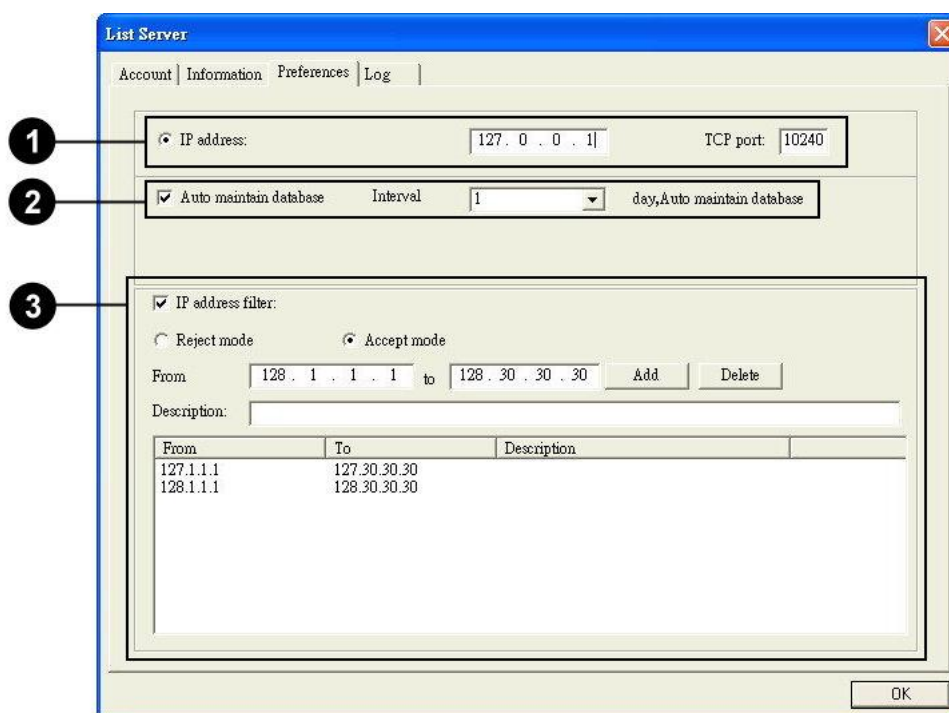
1 IP address and TCP port — Specify the IP address and TCP port number to be used by the List Server computer. (After modifying the settings, restart the List Server program for the new settings to take effect.)

> Note: If List Server is accessed via a NAT, firewall or IP-sharing device, make sure that the List Server computer's TCP port is port-forward to the device's port number.

2 Auto maintain database — Select this option to enable auto maintenance of the List Server's database. Specify the desired time interval between each maintenance.

3 IP address filter — Select this option to restrict only a specific range of dynamic IP addresses to log onto and access the List Server. To define a range, enter the start and end IP addresses, then click the Add button. Specify whether this range of address will be ignored or accepted by selecting either the Reject mode or Accept mode option.

Log tab

The Log tab displays operation logs such as List Server's startup and shutdown logs, login and logout times of Site Server computers, and user login and logout times. To control the size of the log file, either specify the maximum allowable number of operations to be logged in the Log limited by field, or specify the number of days to retain operation logs. To view operation logs of a specific date, choose the range of inquiry dates then click Search.

You can back up the operation logs by clicking Backup, or clear the logs by clicking Delete.
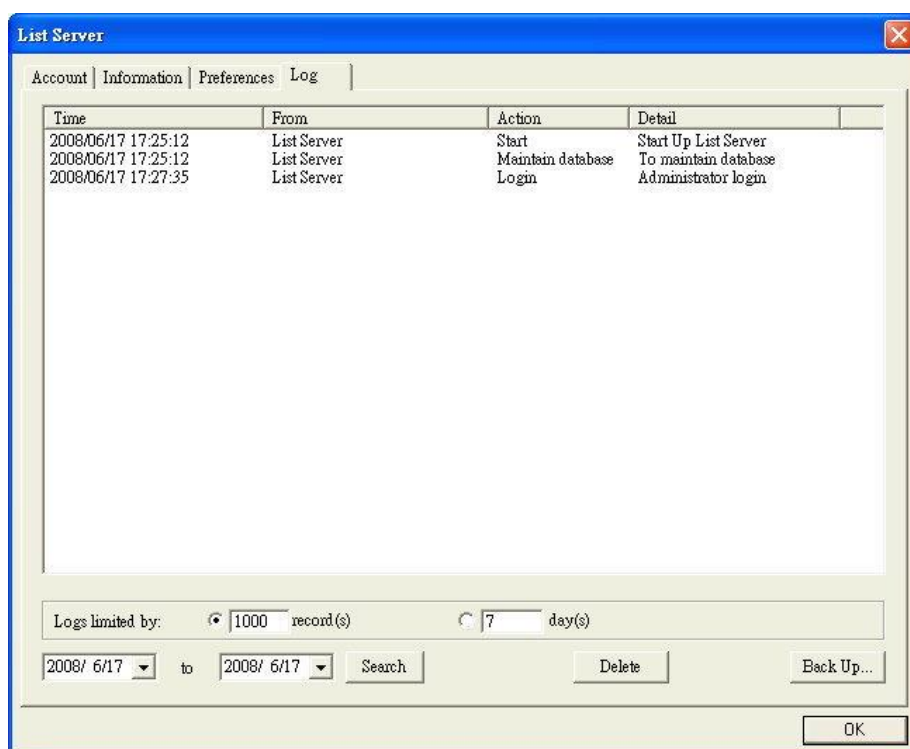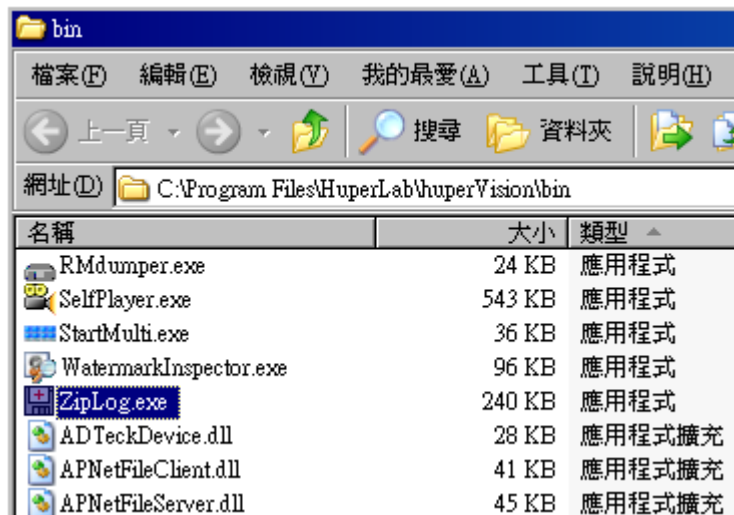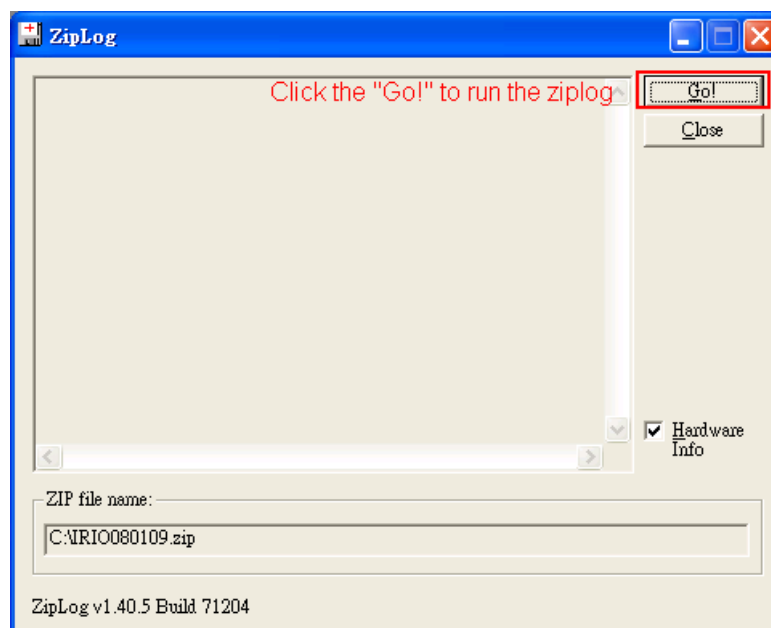
Ziplog

Ziplog is utility for huperVision to collect system information and send back to us when your surveillance system countered serious problems. We can use these collected data to analyze your system and find how to fix it.

Follow the steps below to collect your data with Ziplog:
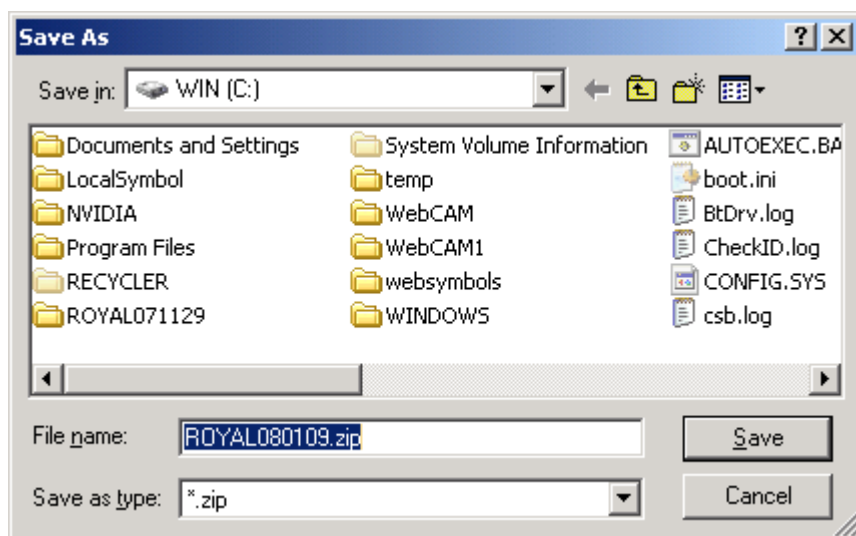
1.   Find ziplog.exe under bin subfolder in your huperVision installation folder.
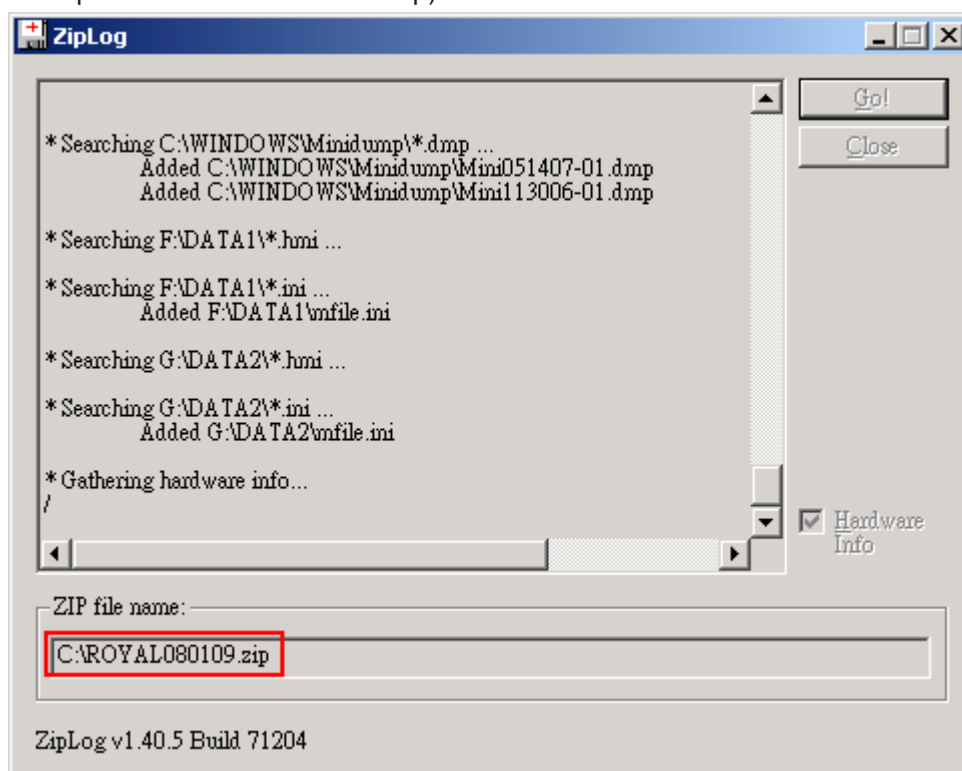

2.   Double-click the ziplog.exe to launch the program.

3.   Click GO! button to start process.

4. Select the ziplog file save path. (default path is c:\) The click Save.

5. When the process is compete. The ziplog file will be located at the save path (for example: C:\ROYAL08010109.zip).

6. Then send the ziplog file (for example: ROYAL080109.zip) to us.