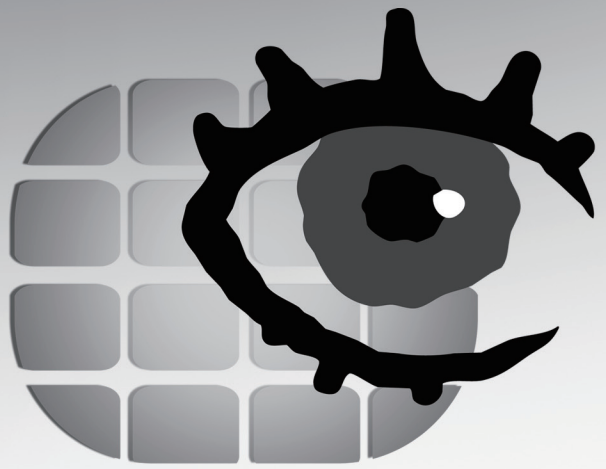
D-Link®
Building Networks for People



D-ViewCam

User Manual

Version 3.20

Business Class Networking

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System Requirements

To ensure your D-ViewCam system can maintain high video monitoring and recording performance, certain minimum system configurations are required.

	D	C	B	A
S of All Cam.	2200~1400	1400~1050	1050~550	550~0
CPU	Intel Core I7	Intel Core I5	Intel Core 2 Quad Q9400	Intel Core 2 Duo E5300
RAM	2 GB	2 GB	2GB	1GB
Motherboard	Intel P55 or H57 chip or above, MB vendor Asus, Gigabyte or Intel with Intel Chipset recommended		Intel P35 or P33 chip or above, MB vendor Asus, Gigabyte or Intel with Intel Chipset recommended	
Display card	ATI Radeon 4650 , nVIDIA GeForce GF-9600 or above (ATI recommended)			
Ethernet	100 baseT or above, Gigabit LAN recommended			
Hard Disk	250 GB or above			
OS	Microsoft Windows XP Professional SP3 / 2003 / Vista / Server 2008 R2 (64bits) /Win 7 (32bit/64bits)			

* Recording video over a long period of time will consume large amounts of disk space. Make sure that you have enough disk space available if you want to use the recording function. You can still complete the installation even if you have less than the suggested free disk space.

Note: *If a Megapixel camera is used with the D-ViewCam application, the minimum system requirement should be raised to CPU: Intel P-4 3.4GhZ or above with 1GB of memory due to the resources required to process and store large amounts of image data.*

Introduction

Thank you for purchasing a D-Link IP camera, which provides state-of-the-art camera technology combined with IP network capabilities. You can build a home or small business surveillance system by using D-Link IP cameras and the latest features offered by the D-ViewCam application software.

Features

- D-ViewCam can automatically locate and add IP cameras in the local network.
- Storage management for recording files.
- Single and multiple video stream monitoring (up to 32 video channels).
- Two-way audio communication.
- Intelligent filter and search capabilities for scheduling recording and/or event recording.

Installing Your IP Camera

Before installing D-ViewCam, please make sure you have installed your D-Link IP camera(s) that will be managed by D-ViewCam.

Step 1 - Follow the installation procedures that came with your IP camera(s) to complete the camera installation process.

Step 2 - Verify that you are able to view the video images from the IP camera(s) by accessing the camera's web-based configuration utility. It is recommended that all IP cameras be installed in the same subnet as your management PC running the D-ViewCam software.

Step 3 - Please refer to page 14 to add IP camera(s) to the D-ViewCam system.

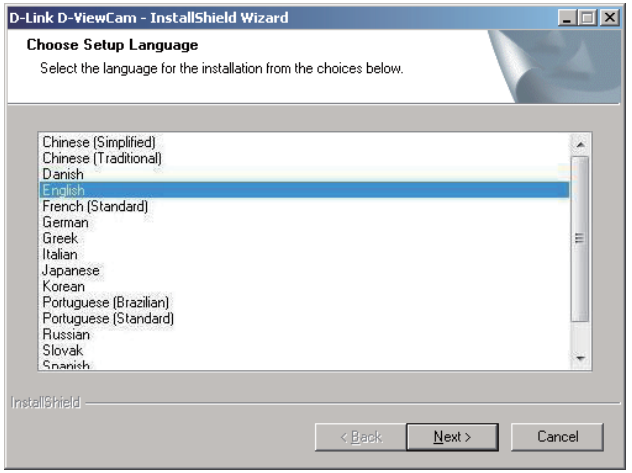
Note: *D-ViewCam is optimized for a small-scale LAN environment. To protect the system and cameras from attacks from the Internet, install the D-ViewCam software on a computer that is protected behind a firewall or an IP sharing device.*

Software Installation

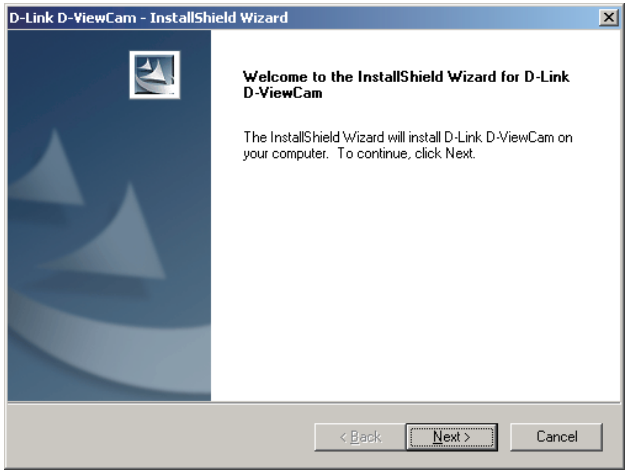
Turn on the computer and insert the D-ViewCam CD into the CD-ROM drive. Below step-by-step instructions will be shown if you are using Windows® XP. However, similar instructions and screens will also be provided for other Windows operating systems. When the autorun screen starts, click **Install D-ViewCam**.

Note: *If the Installation Wizard does not start automatically, you can manually start the wizard by double-clicking the setup.exe file from the CD.*

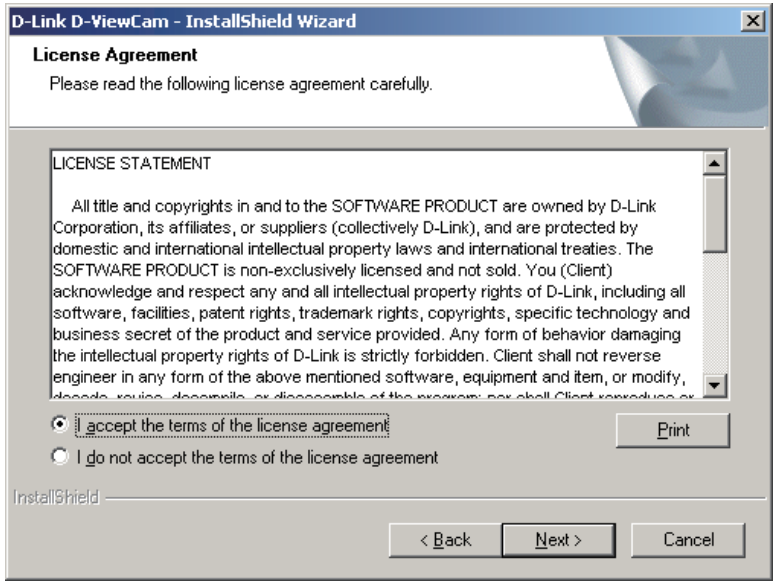
1. Select a language and click **Next** to continue.



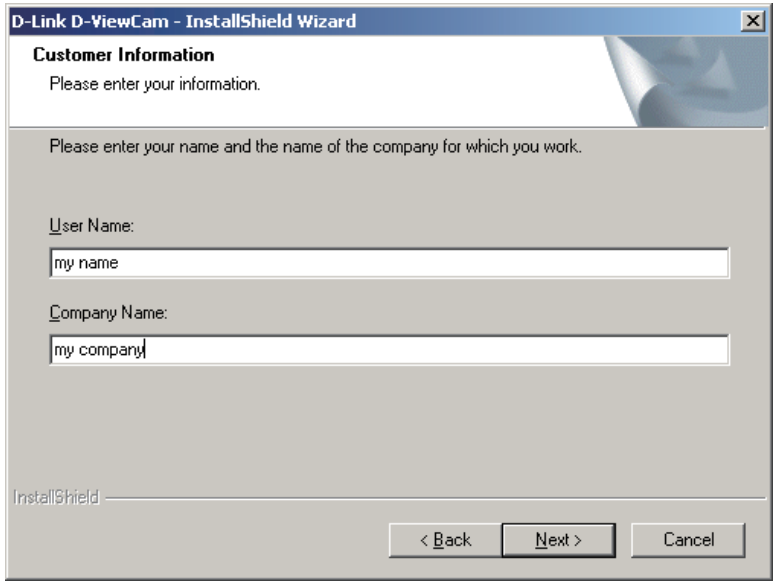
2. Click **Next** to continue.



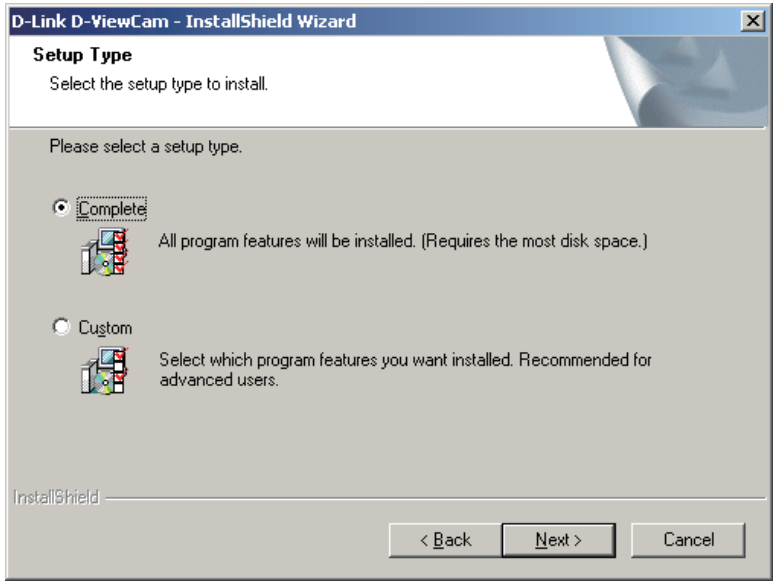
3. Click **I accept the terms of the license agreement** radio button and then click **Next** to continue.



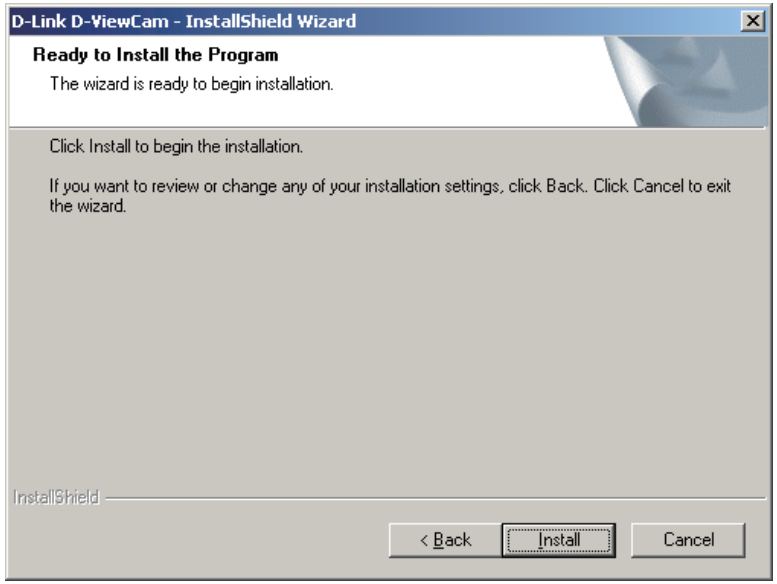
4. Enter your name and company name. Click **Next** to continue.



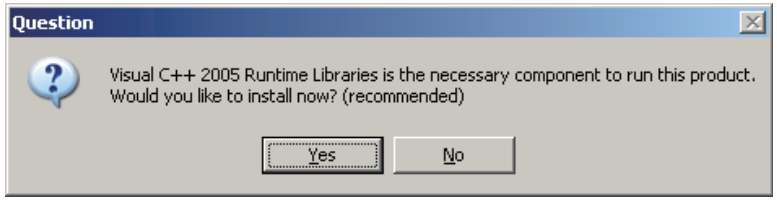
5. Select **Complete** to install the entire D-ViewCam software package or select **Custom** to choose which programs to install. Click **Next** to continue.



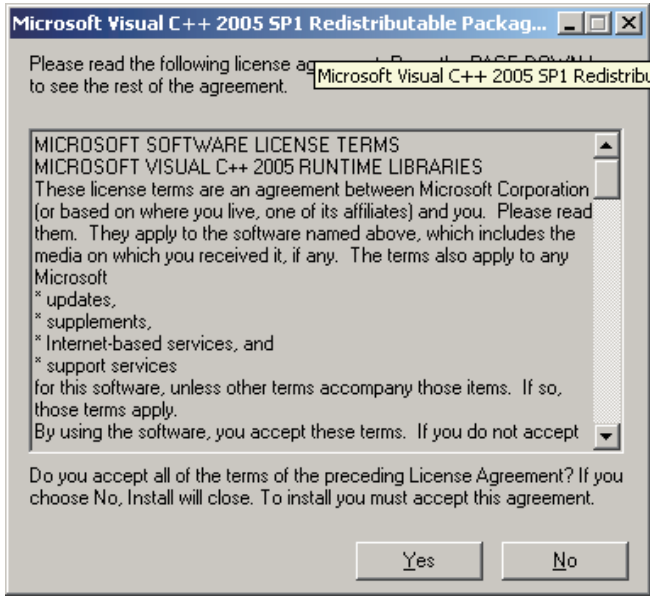
6. Click **Install** to continue. The installation process may take a few minutes.



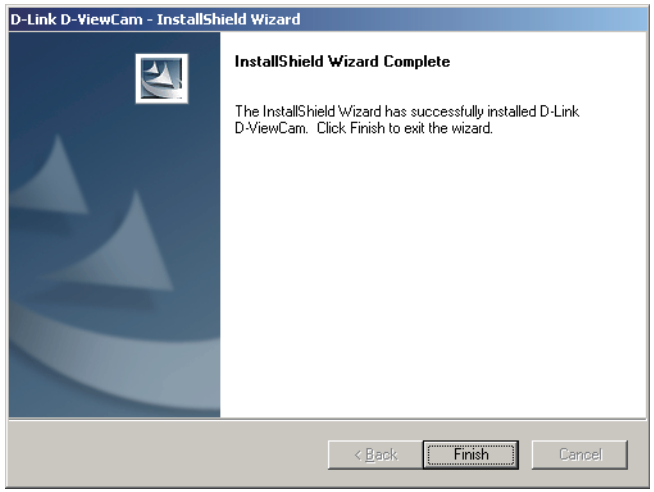
7. You may be prompted to install **Visual C++ Runtime Libraries**. Click **Yes** to install.



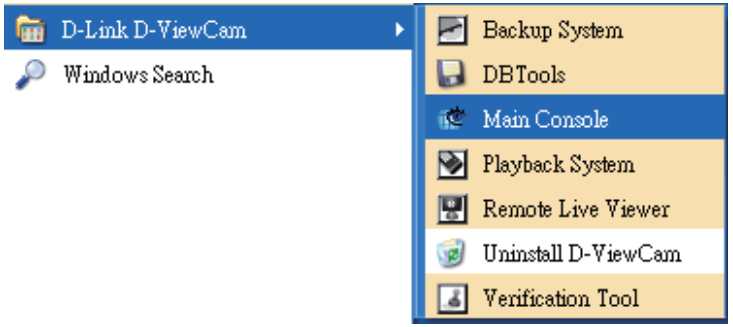
8. Click **Yes** to accept the license agreement.



9. Click **Finish** to complete the installation process.



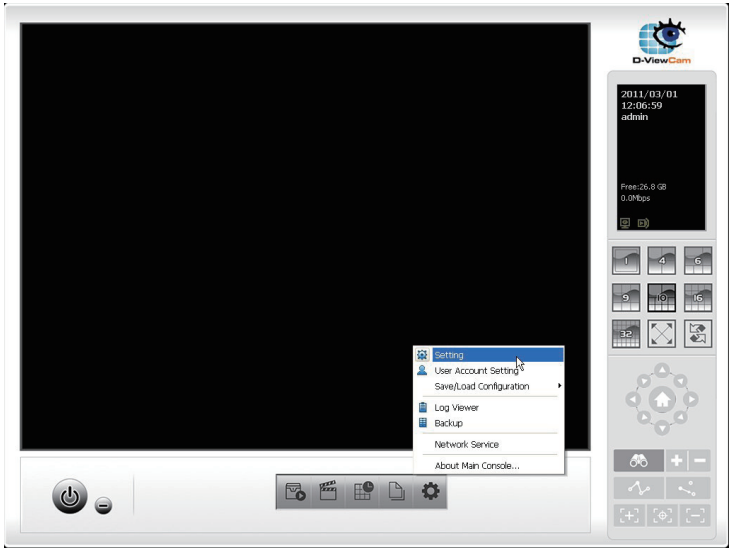
10. To start D-ViewCam, select **Start** > **All Programs** > **D-Link D-ViewCam** > **Main Console**.



11. The first time you launch the Main Console, you will need to create the admin password. Enter the password and then enter it again to confirm. Click **OK** to continue.

Add Camera(s)

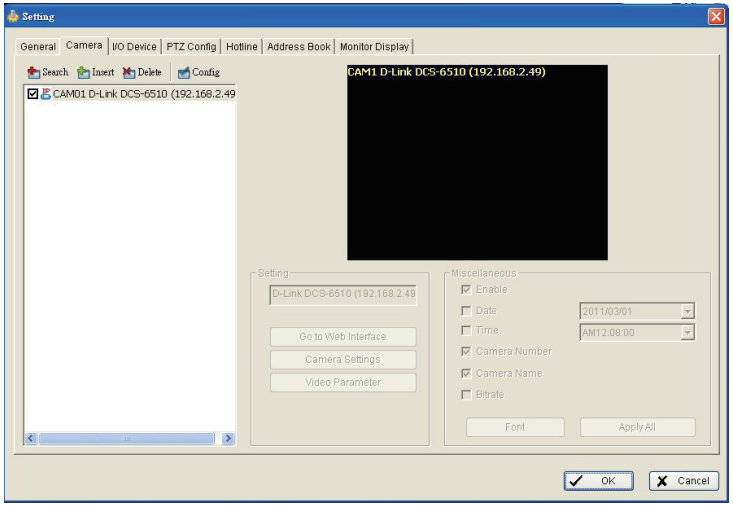
12. Once the console loads, click on the **General Settings** icon and then click **Setting**.



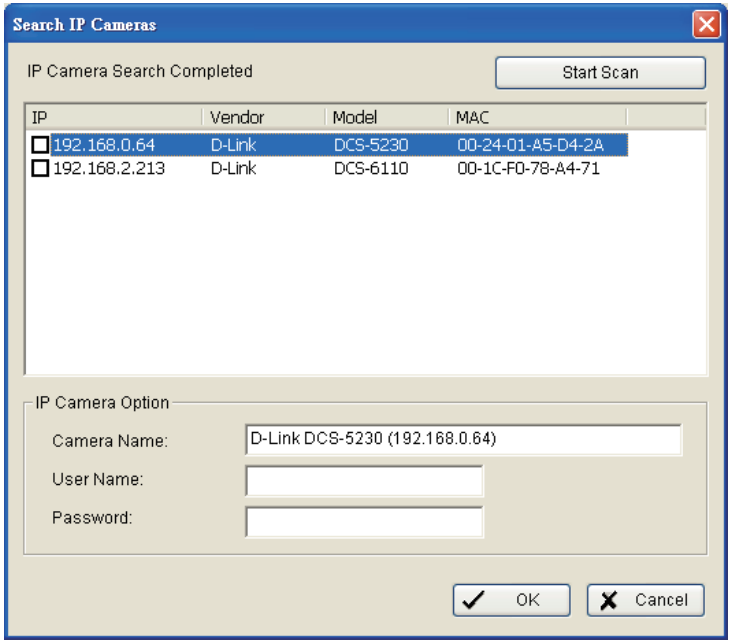
13. Click on the **Camera** tab.

    Note: If your IP cameras support UPnP, follow step 14. Otherwise, skip to step 16.

14. Click **Search** to automatically find the IP camera(s) that are on your local area network (LAN).

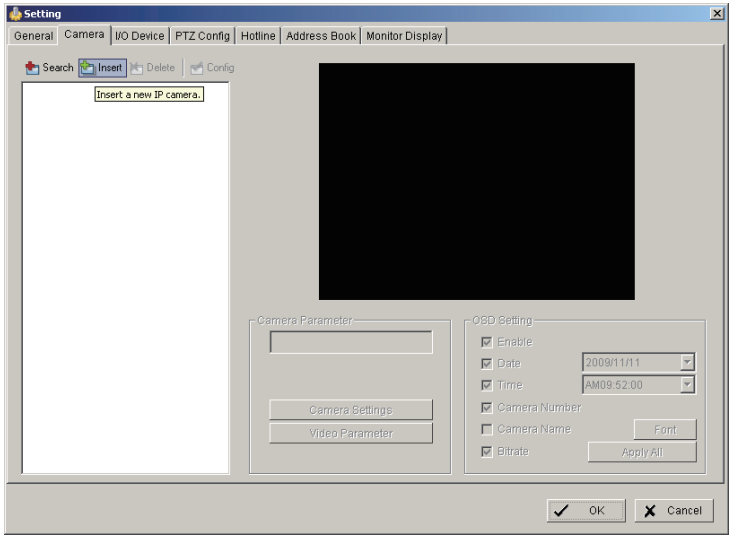


15. Select one of the IP cameras that are available. You may enter a new name for this camera and then enter the username and password assigned to this camera. Click **OK** to add the camera.



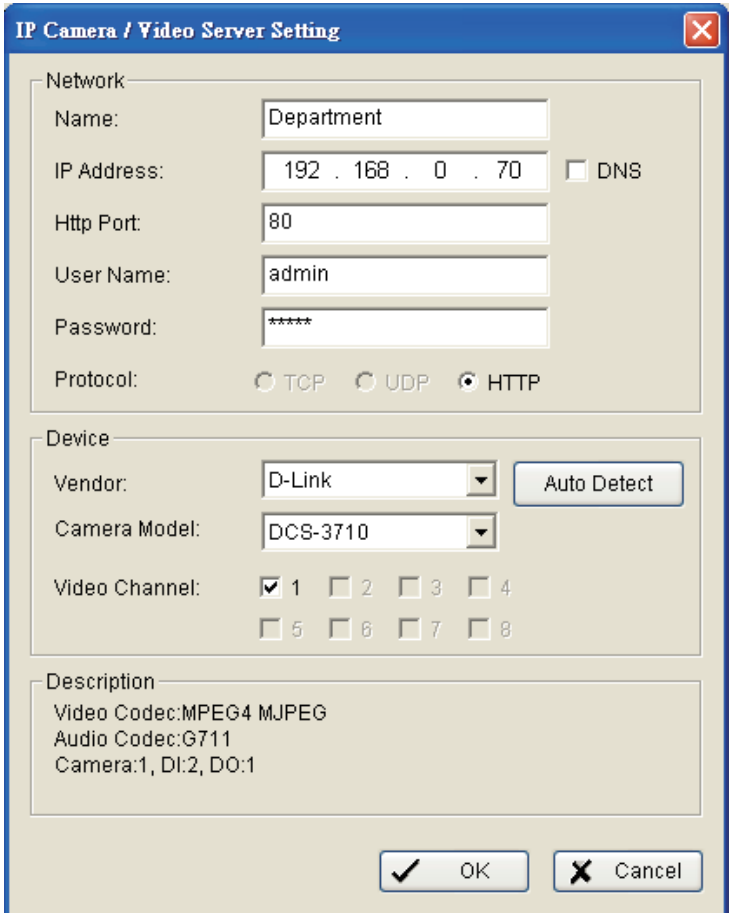
16. If your camera(s) do not support UPnP or your camera(s) were not found, you can manually add a camera.

    Click Insert to manually add IP Camera(s) that are on your local area network (LAN).



17. Enter the following Network information for your camera:
    - **Name** - Enter a name for your camera.
    - **IP Address** - Enter the IP address of the camera. If you want to use a domain name, then check the DNS box and enter the domain name of the camera.
    - **HTTP Port** - 80 is the default port.
    - **User Name** - Enter the user name for the camera.
    - **Password** - Enter the password for the camera.
    - **Protocol** - Select **TCP**, **UDP**, or **HTTP.**

    Enter the following Device information for your camera:
    - **Auto Detect** - Click the Auto Detect button to detect the vender and model information.
    - **Vendor** - Select the brand name/vendor from the drop-down menu.
    - **Camera Model** - Select the camera model from the drop-down menu.
    - **Video Channel** - Select the video channel you want to assign the camera to.

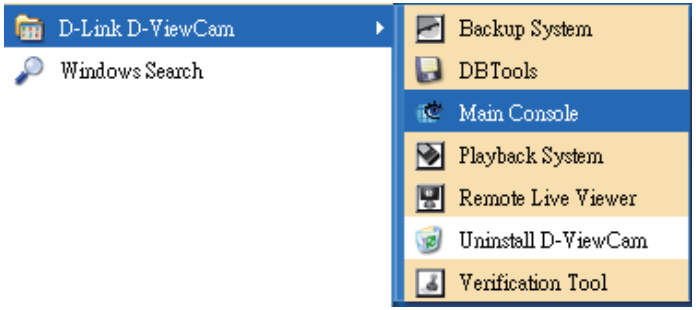


18. Click **OK** to add your camera.

D-ViewCam Interface Overview

This section will show you how to start and configure D-ViewCam.

To start D-ViewCam, select **Start** > **All Programs** > **D-Link D-ViewCam** > **Main Console**.



Enter **Admin** as the default username and enter your password. Click **OK** to log into the system.

Main Console

1	Main Display Area
2	Log out / Exit Program
3	Minimize Window
4	Start Monitor
5	Start Playback
6	Configure Schedule
7	Configure Smart Guard System
8	General Settings and Utilities
9	System Time and Date
10	Split Screen Options
11	PTZ Features

Exit/Minimize

Click to log the current user out or to close the D-ViewCam program.

Click to minimize the window.

Split Screen Options

Select a split-screen display layout by clicking on the desired layout icon. The system provides 4, 6, 9, 10, 16, and 36 split screen modes. To switch to single camera display, double-click the camera's image. To return to the previous configuration screen, press the **Esc** key or double-click on the screen again.

Displays 1 screen.

Divides into 9 screens.

Divides into 32 screens.

Divides into 4 screens.

Divides into 10 screens.

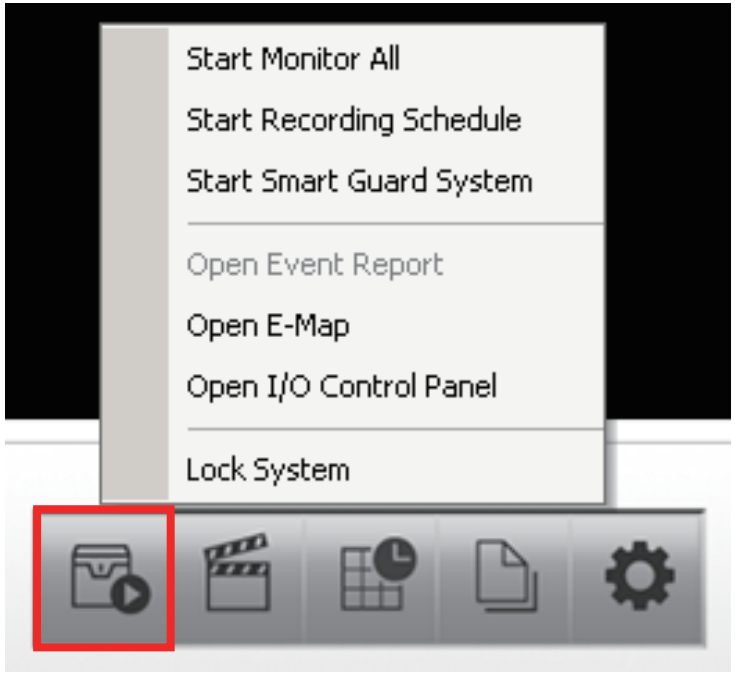
Switch to full screen.

Divides into 6 screens.

Divides into 16 screens.

Rotate all screens.

Monitor



Option	Function
Start/Stop Monitor All	Click to start or stop all monitoring functions.
Start/Stop Recording Schedule	Click to start or stop the recording schedule.
Start/Stop Smart Guard System	Click to start or stop the smart guard system.
Open Event Report	Click to open the event report which will log any events.
Open E-Map	Click to open E-Map which monitors all devices with map indicators.
Open I/O Control Panel	Click to open the I/O control panel which montors the DI/DO and manual triggering the DO devices.
Lock System	Click to lock the system.

Monitor:
Click on the **Start Monitor** icon and select from the menu to start/stop recording schedule system or the guard system features. You can also open monitor tools such as event report, E-Map, I/O control panel, and system lock.

Playback:
Click on the icon to open the Playback Console. You can watch recorded video, search recorded video, adjust the image of the stored data, save video/pictures, print images, check log information and event records, and set up recording function configuration. See PlayBack on page 61 for details.

Schedule:
Organize the recording time schedule and configure recorder settings. See Schedule on page 52 for details.

Guard:
Add/edit type(s) of events that you want to detect and setup action(s) responding to events. See Guard on page 75 for details.

General Setting an Utilities:
Select to modify general settings, user account settings, save/ load configuration settings, access log viewer and backup files, and configure network services. See Config on page 25 for details.

Information Window
Displays the date, time, free disk space, IP Camera bitrate, customized text and network utilization.

PTZ Camera Control
Control the movement of PTZ (pan/tilt/zoom) cameras. With cameras that support PTZ control, you can move, zoom, patrol, adjust the focus, and set preset points of the cameras.

Preset/Go
Adjust the camera view until you are satisfied. Click on the **Set** icon and set up the view as the preset point 01. Adjust the camera view again and set up the preset point 02. Repeat the process until all preset points are set. You can assign a custom name to each preset. Click on the **Go** icon and view the result of your setting.

Note: To adjust the speed settings of PTZ camera, go to General Setting and **Utilities > Setting > PTZ Config**.

Zoom
Click on the **+** sign to zoom in or click the **–** sign to zoom out.

Focus
You can select to have the camera focused near or far. To focus near means objects that are closer will be clearer than the objects that are further away. On contrast, to focus far means objects that are further will be clearer than the objects that are closer. Click on the **Focus** icon and select auto focus if you want the system to decide the focus point for you.

Patrol
Go to **Patrol** > **Set Patrol** to obtain the Patrol Setup dialog. From the left window, select the camera(s) that you would like to have in the patrol group. Align the cameras in order in the right window and adjust the time. Rename the group name if you want. After completing the setup, check the Active option, and then click **OK**.

You can setup up to four groups of auto patrol. To start or stop, click on the **Patrol** icon in the Main Console, and select **Start Patrol** or **Stop Patrol**.

On Screen Menu
Right-click on the camera screen and get the “On Screen” menu, from which you can quickly adjust the settings of your camera.

Enable Move
With cameras that support PT function, click **Enable Move** to adjust the current camera’s view by clicking on the display screen. To cancel this function, right-click on the screen and select **Disable Move**.

Enable Talk
With cameras that support two-way audio, select **Enable Talk** to utilize the function.

Connect/ Disconnect
Right-click on the display screen and select Connect/Disconnect to modify the connecting status of the camera.

Show Camera
Select the camera from the Show Camera menu to display video on selected screen. The list of cameras will be displayed in the right column of the monitor display panel.

Delete Camera
Click on **Delete Camera** to remove a camera from the display screen.

Enable Digital PTZ
To enable the PTZ functions of the camera, select the **Enable Digital PTZ** option. Use the mouse wheel or click on the **+** and **–** signs to zoom in and zoom out on the camera. The square flashing on the video grid indicates the correspondent view of the camera.

Fix Aspect Ratio
Enable **Fix Aspect Ratio** to view the original ratio video or disable this option to stretch 3:4 to fit window.

Snapshot
Select the snapshot function to capture a screen shot of the current video. You have the option to copy the image to clipboard or to save it. You may select the OSD option to export the image with date/time and camera number/name text. If the digital PTZ function is enabled, you can decide either Full size or Selected region as your snapshot region.

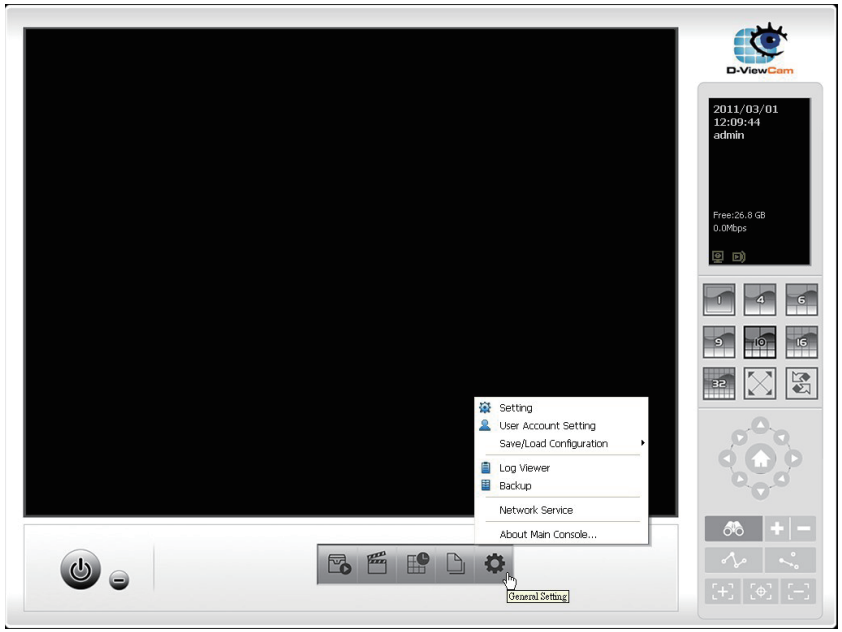
Manual Record
Select to start recording video.

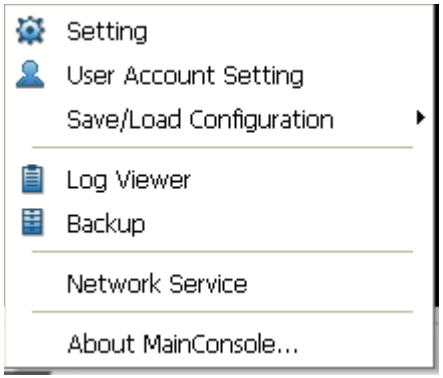
Toggle Fullscreen
Select it to view live video(s) in fullscreen. Press **ESC** to go back to original window.

Live Display
Live display is flexible to change channels and screen divisions. Each screen division will have the same display list, but have the different sequence. Such like, when using Show/ Delete Camera function to edit camera list, the operator will apply to all different screen divisions.

Configuration

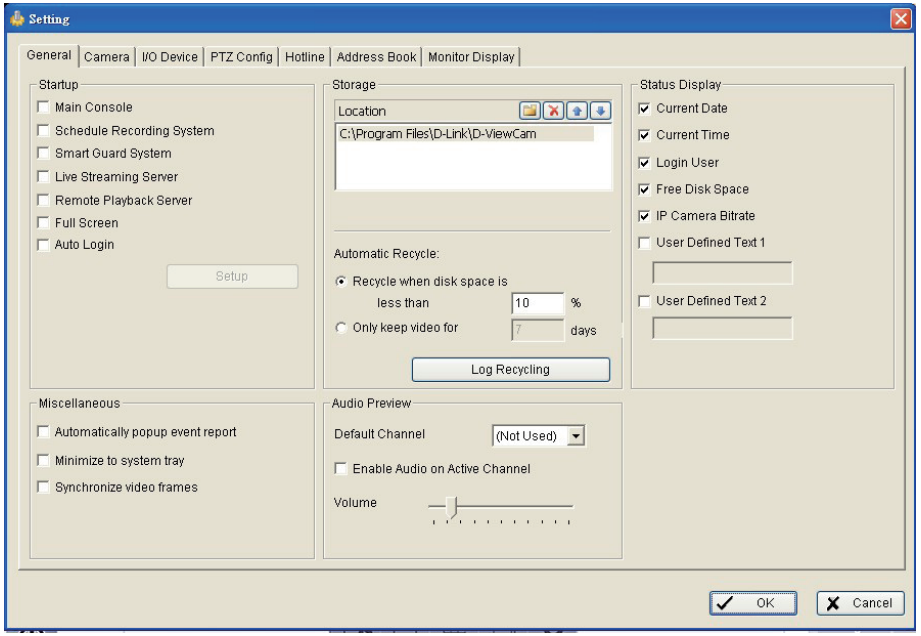
Click on the **General Setting and Utilities** icon. Click **Setting** to configure your settings.





General

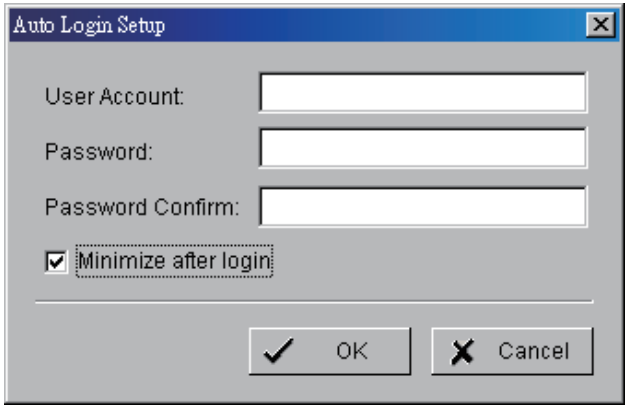
Startup



Main Console: Check to open the Main Console system when windows startup.

Check the following 3 main functions and 2 network services to auto-activate functions when the Main Console system is starting, including **Schedule Recording System**, **Smart Guard System**, **Live Streaming Server**, and **Remote Playback Server**.

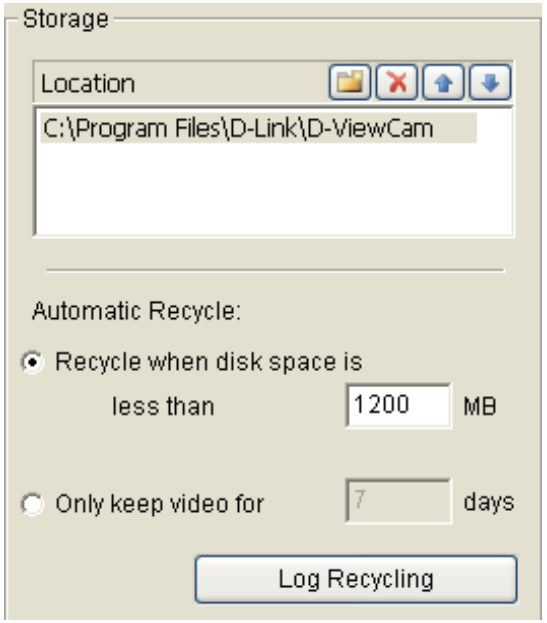
Full Screen: Check to launch video at full screen when launched.



Setup Auto login: Enable “Auto login” and click the **Setup** button to open the Auto Login Setup panel. Enter the User Account and Password to login automatically when the system starts. Enable **Minimize after login** to minimize the Main Console window after login.

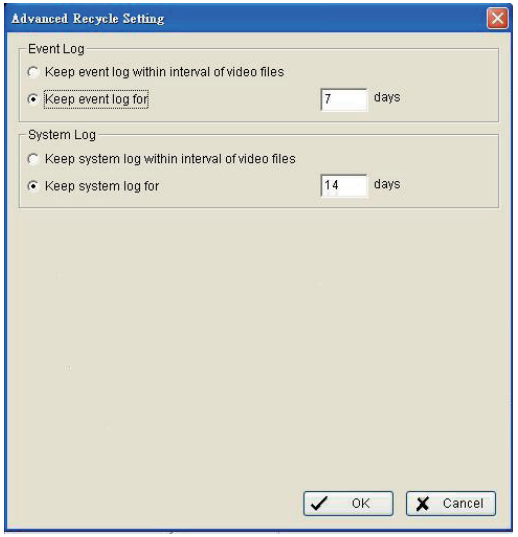
Storage

Location:
Assign the default folder for the system to store data files. It is recommend not to save in the system drive (I.E. C:\) to avoid PC efficiency drop when free storage is low.



	New	Click to add a new location. Click the **...** button to browse to a folder. Click **OK** to save the location.
	Delete	Highlight a location and then click the **Delete** button to remove it.
	Move Item Up	Highlight a location and click the **Move Item Up** button to move the location higher in the list.
	Move Item Down	Highlight a location and click the **Move Item Down** button to move the location lower in the list.

Automatic Recycle: The system will automatically delete out-of-date data to save storage space.



- **Recycle when disk space is less than:** Select and enter the available space (in MBs). When the default folder available space falls below the entered about, the system will begin to store data to the next folder in the location list. If all the status of locations exceeds the storage rule, the system will start recycling in an hour progress.

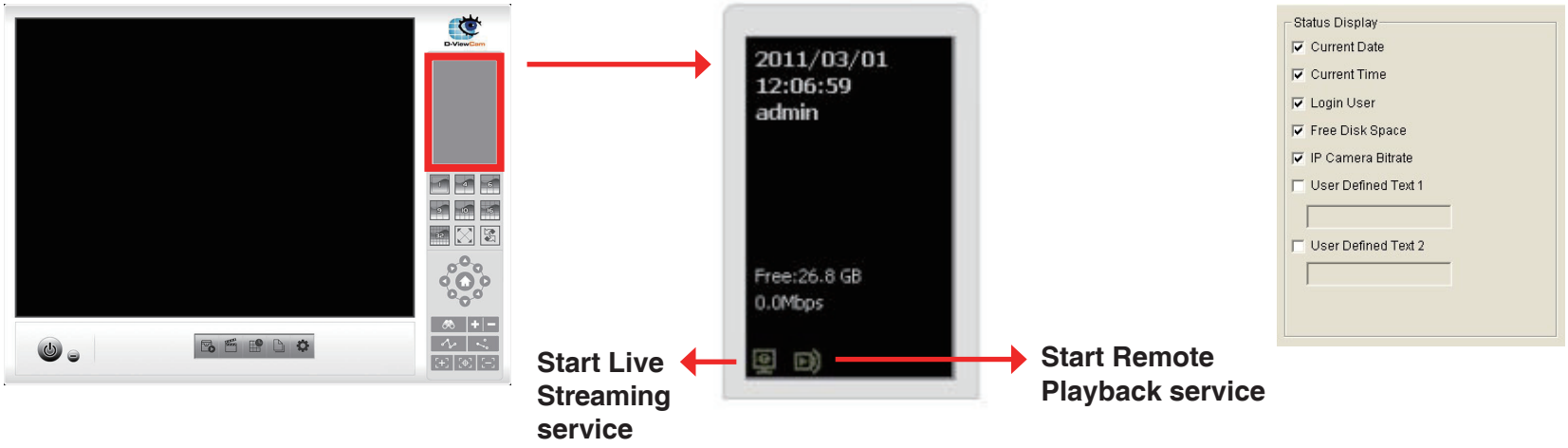
- **Only keep video for:** Delete the video records that are older than the number of days set. If the default storage spaces exhausted (disc space is less than 1200MB), the system will start to recycle by hourly period.

- **Log Recycling:** Click to set the days that you want to keep specific event logs or keep all event logs within interval of video files.

    1. **Event Log:** Delete the event log data that is older than the number of days set.
    2. **System Log:** Delete the system log data that is older than the number of days set.

Status Display

Select the information that you wish to display in the information window on the Main Console such as Current Date, Current Time, Free Disk Space, IP Camera Bitrate, and User Defined Text.



Miscellaneous

Automatically Popup Event Report: Make sure to stop Smart Guard System before you modify this setting, otherwise the modification will not take place. The Event Report dialog box will automatically popup when events have been detected.

Minimize to system tray: Enable this option to display an icon in the task bar when clicking the minimize button.

Note: Enter the username and password of Main Console again when clicking the minimized Main Console icon in notification area of windows task bar to start monitoring.

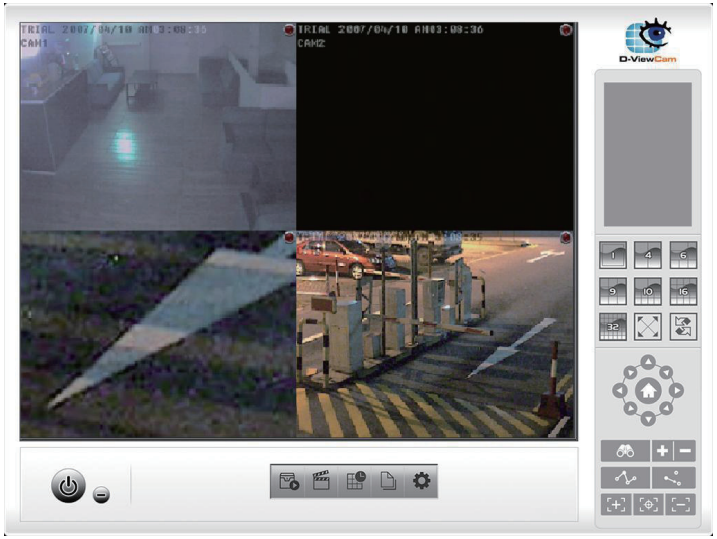
Synchronize video frames: Select to prevent tearing that may occur in the video display. However, this will increase the CPU processing load.

Audio Preview

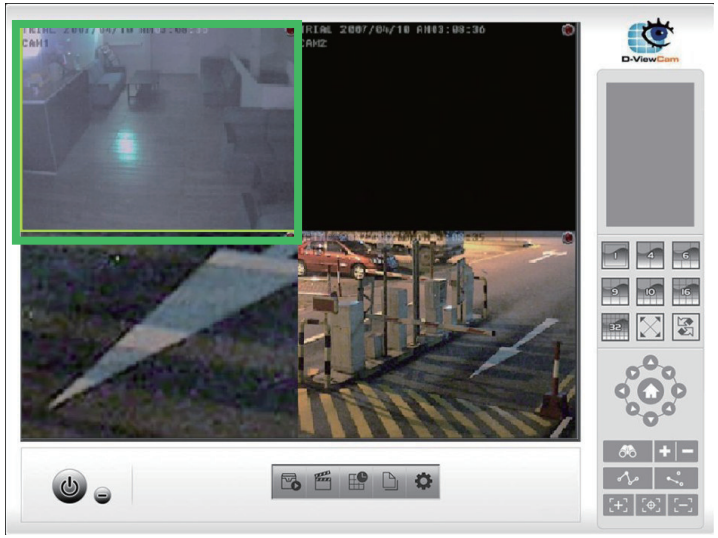
Default Channel: Select the audio channel that you wish to hear from.

Enable Audio on Active Channel: Select the **Enable Audio on Active Channel** option to hear the audio from the selected video channel on each video grid of the Main Console. The default channel plays if the video channel isn't selected.

Volume: Adjust the volume with the "volume bar."



System plays the audio of "default channel"



System plays the audio of left-top "selected channel"

Camera

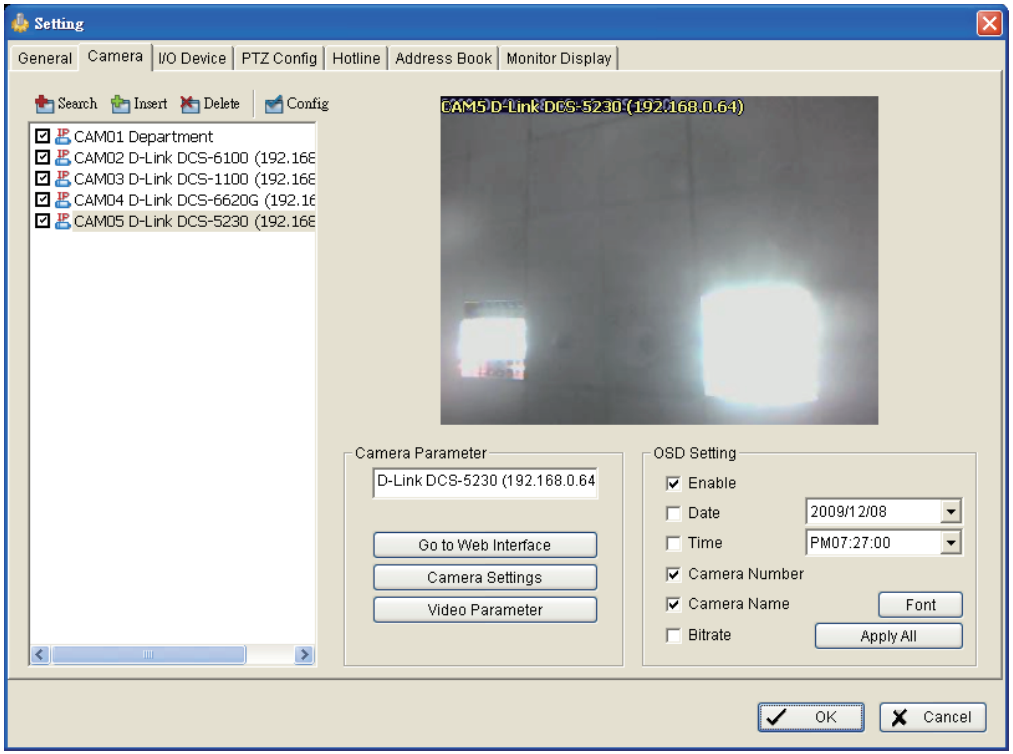
Add Camera

Four function buttons will be included in the Setting/Camera panel.

Search: Click on the **Search** icon to obtain the Search IP Camera panel. The system will start scanning automatically once the panel is opened. You may manually stop scanning by clicking on the **Stop Scan** button.

Fill in the user name and password for each IP camera found and click **OK** to add it to the camera list.

Note: Drag the mouse to multi-select the cameras and then insert the username and password. The username and password will be applied to all the selected cameras automatically.



Insert: Click to open the IP Camera/Video Server Setting panel and add IP cameras to the list.

Delete: Click to remove the selected IP camera(s) from the system. Click **OK** to finalize the modification.

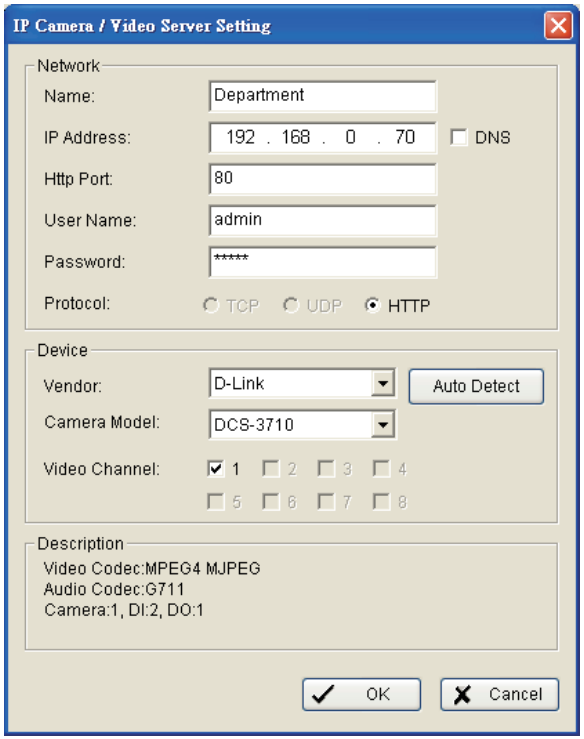
Config: Click to obtain the IP Camera/Video Server Setting panel. You can modify the IP camera settings with the Setting panel.

IP Camera / Video Server Setting Panel

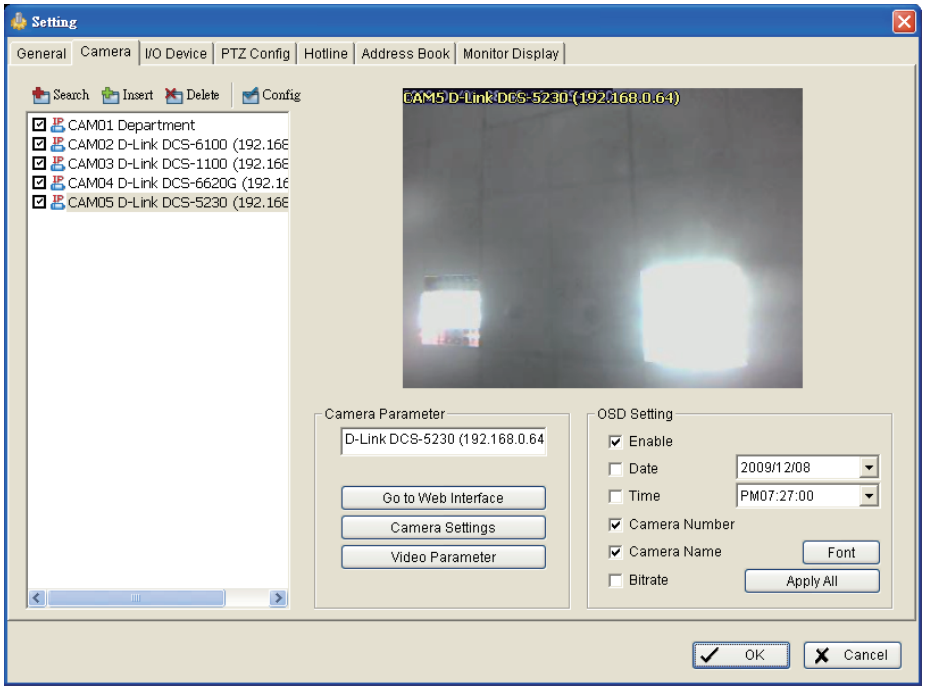
Network: Fill up the Network field (including Name, IP Address, Http Port, User Name, Password and Protocol) referring to the instruction provided by the camera manufacturer. Check “Use DNS” to use domain name instead of IP address.

Device: Choose the IP camera manufacturer from the drop-down menu. Click on **Auto Detect** and the model name will show in the box.

Description: Displays information about the device.



Camera Parameter



Camera List: Displays all the cameras that are connected to the system. Click the name of the camera to edit the settings.

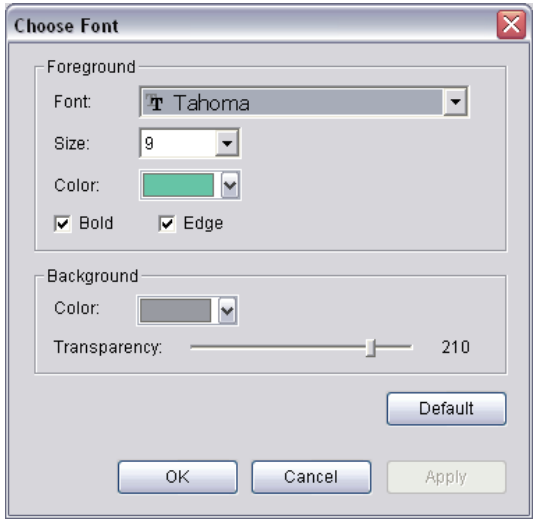
Camera Name: Name the camera for your convenience.

Go to Web Interface: Go to the web-based interface of your camera to configure the settings (optional).

Camera Settings: Edit the camera's parameters offered by camera vendor.

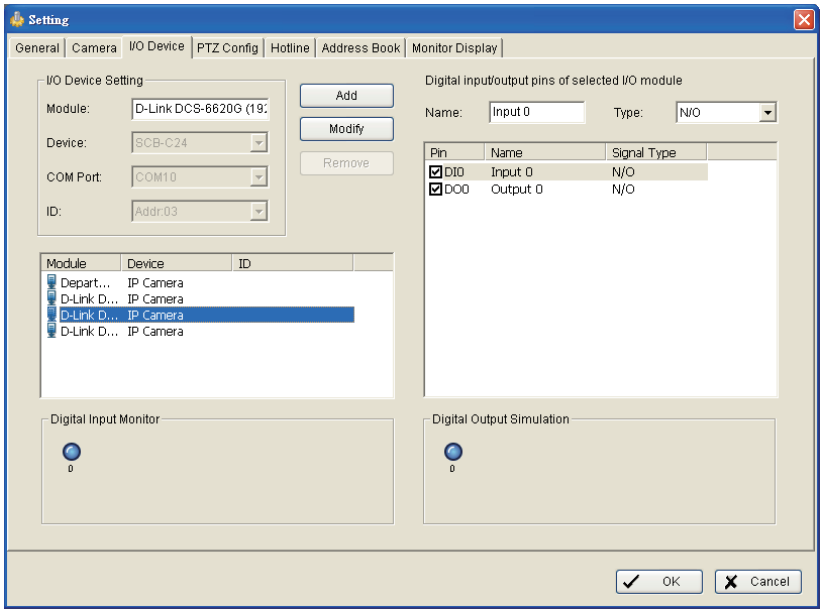
Video Parameter: Adjusts the video's brightness, contrast, saturation, and color hue values.

OSD (On-Screen Display) Settings



Select the information that you wish to see on the on-screen display. Click the **Font** button to select the font style.

I/O Device



I/O Device Setting:

- **Module:** Name of the module and ID of the digital input/output device(s) that is connected to your system.
- **Device:** This column displays the device(s) already installed to the system.
- **ID:** Select the I/O port.

Input Monitor: The device(s) is turned on if the dot is in red. By triggering the digital input device, the related icon will light up. This is used to check if the device is correctly connected or not.

Output Monitor: The device(s) is turned on if the dot is in red. By clicking on the icon, you may trigger the digital device connecting to the system. This can be used to test if the output device is correctly connected.

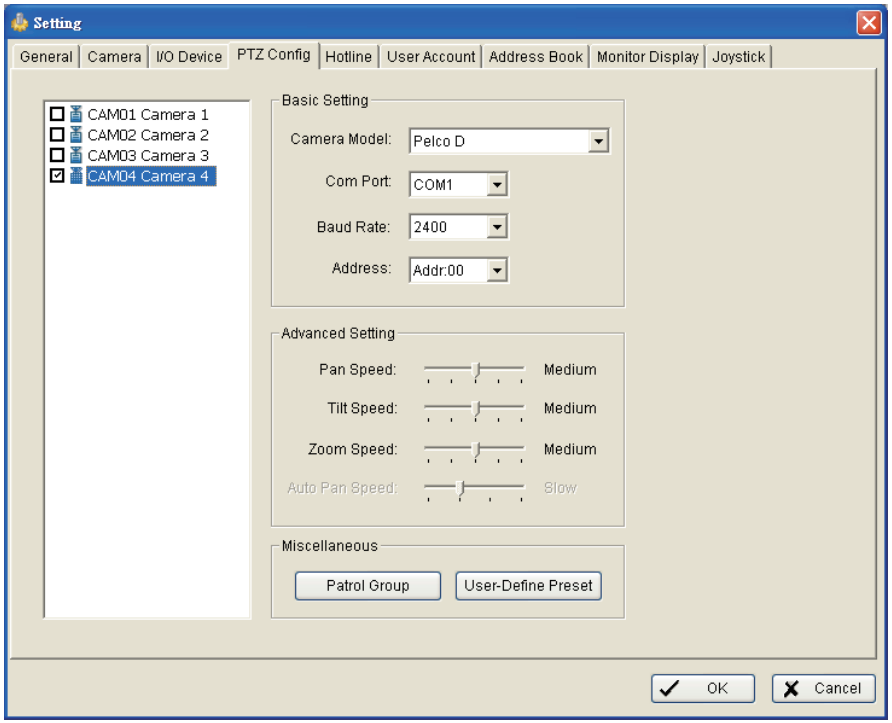
Device Setting

Name: Insert the name of the device (input and output).

Type: Select the device type from the drop-down menu.

1. N/O: Normal Open.
2. N/C: Normal Close.

PTZ Config



Check the box on the camera list to activate the PTZ control function of a PTZ camera.

Basic Setting: Select the camera model, com port, baud rate, and address of your PTZ camera.

Note: If your camera model is an IP camera, the PTZ function will work directly without the com port, baud rate, and address settings.

Advanced Setting: You may setup the pan speed, tilt speed, and zoom speed. Adjust the settings by dragging the bars.

Miscellaneous:
Patrol Group: You can setup a Patrol Group.

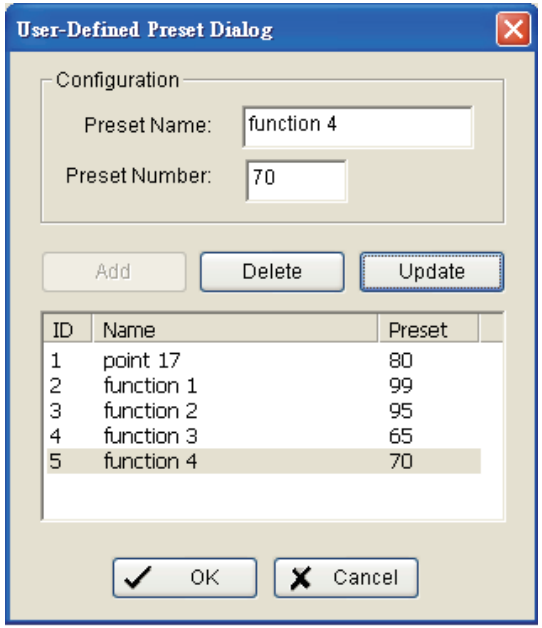
User-Define Preset: User-Define Preset can trigger the extra-function of speed dome itself such as auto-tracking, login menu of camera… etc. You can refer the detail description of each speed dome on it's user manual.

Step 1: Type a Preset Name.

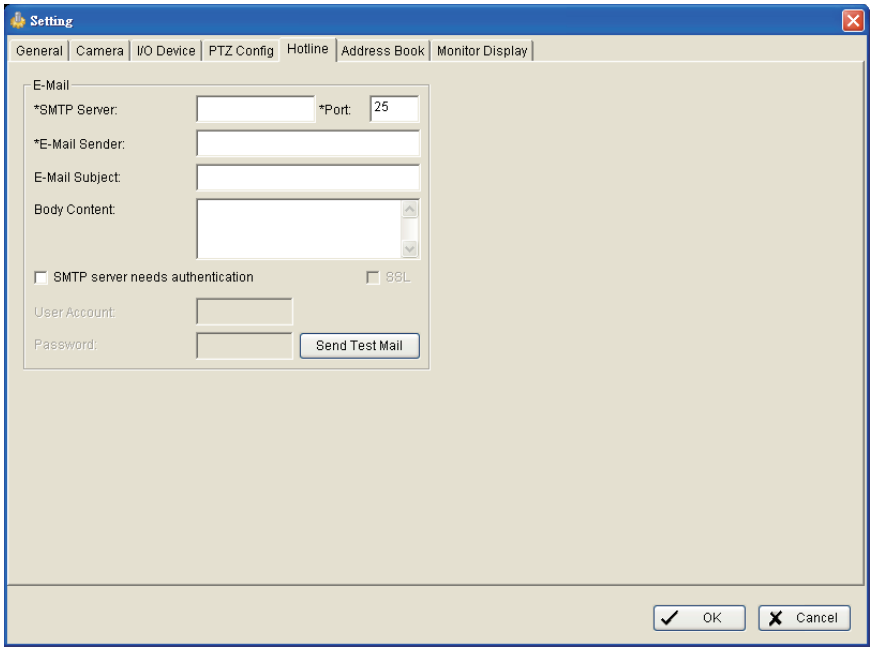
Step 2: Type the Preset Number.

Step 3: Click **OK** to save your preset.

You may click **Add** to add a new preset, highlight a preset in the list and click **Delete** to remove it, or highlight a preset and change the preset name and/or preset number and then click **Update** to save.



Hotline

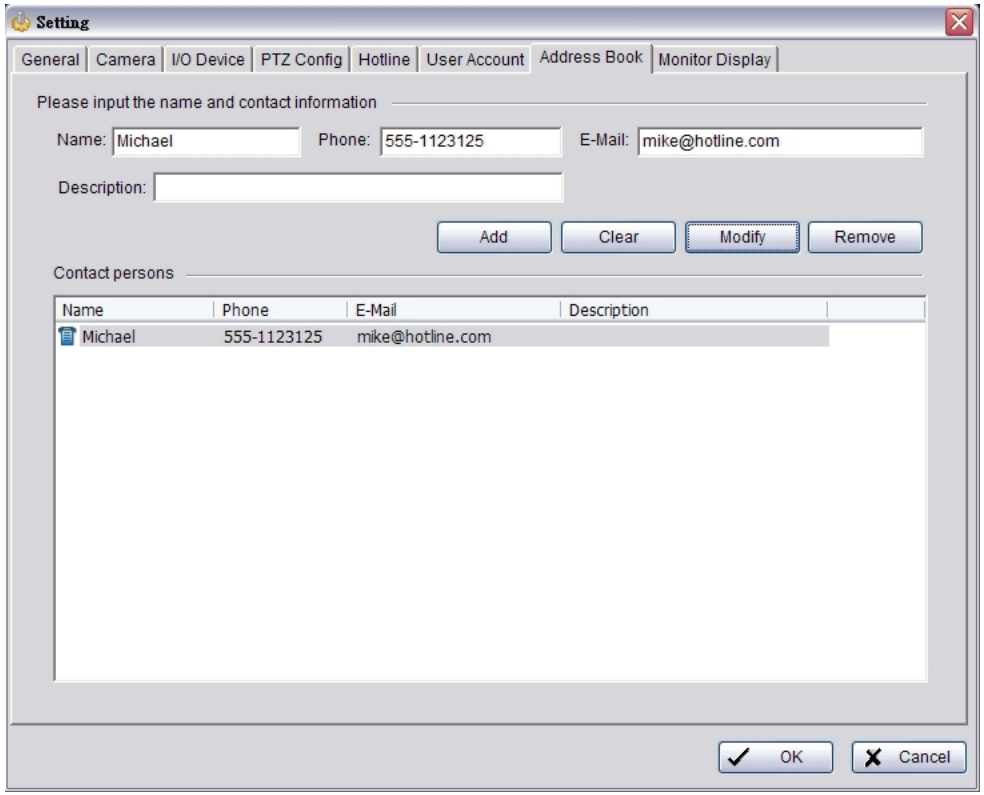


Configure the Hotline settings including E-mail, once an unusual event is detected.

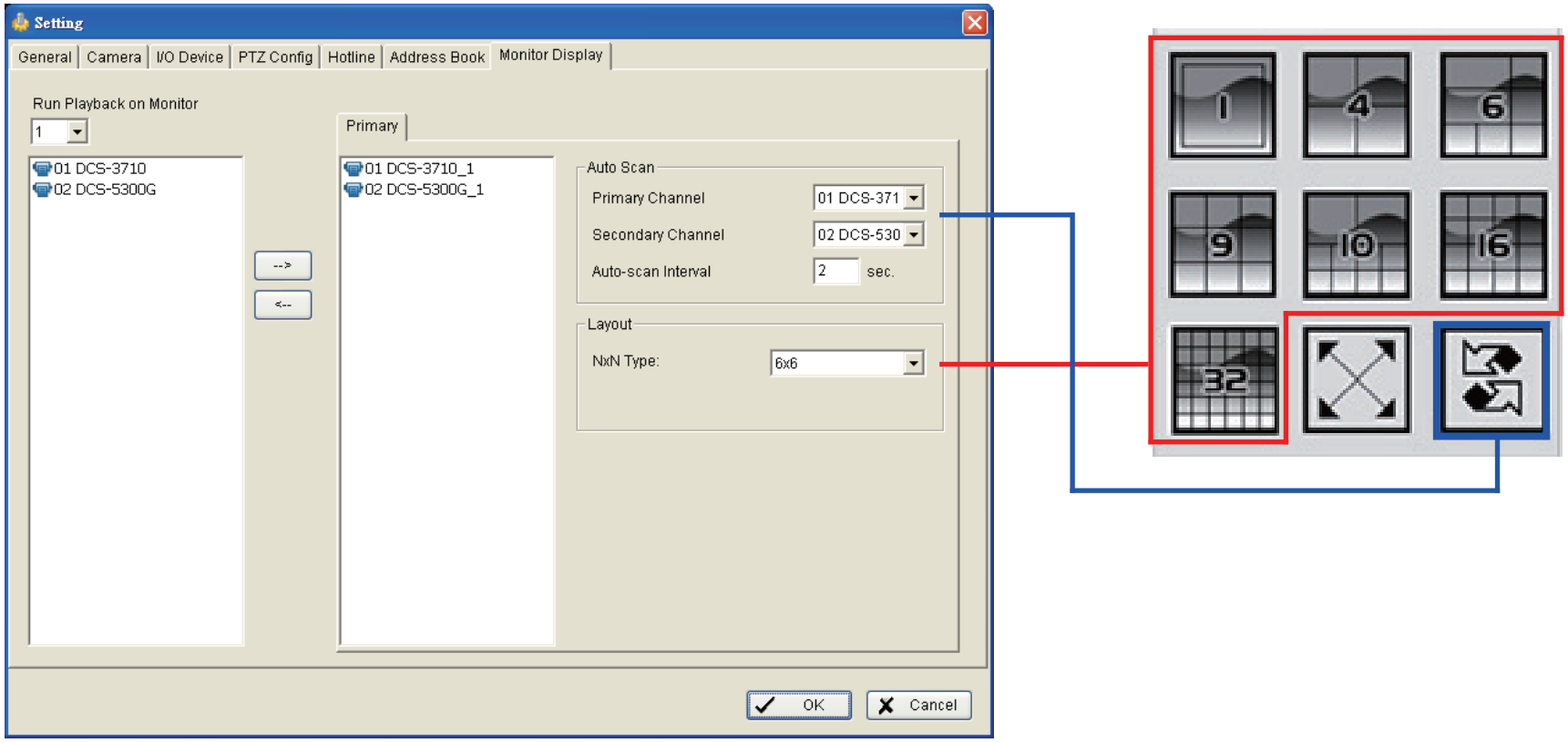
E-mail: Input the following information: Server, Port, Sender's E-mail address, E-mail's subject title, Body content and SSL option for encrypted transmission. Click on the **Send Test Mail** button to test the settings.

Address Book

Address Book: Manage the address book from which you may send out an E-mail when an unusual event is detected.



Monitor Display



Cameras List: The left column displays a list of all available cameras. Highlight the camera and click the right arrow --> to move the camera to the right column. The right column will display the primary and secondary cameras. These cameras will be available for the auto-scan function.

Auto Scan: Activate auto scan to rotate the channels / cameras on the display screen.

For instance, you may select to show only 4 sub-screens on the Main Console while having 16 channels connected to the system. With auto scan function, you will be able to see all 16 channels by turns. You can set up a primary channel that will always be on the screen and a secondary channel that has secondary priority.

User Account Setting

Only the default admin account can manage user accounts. From the list on this tab, highlight each account and modify the privilege setting.

Note: When entering into this page, the system will display one of the account group's default privilege profiles first. End users can insert Name and Password to create a new account, or click an existed account to modify his/ her privilege.

There are 3 default privilege profiles of account groups:

Admin: Have privileges to all system functions and devices, except add/delete/update privileges of other users.

Power User: Have limited privileges of system functions and complete privileges of assigned devices.

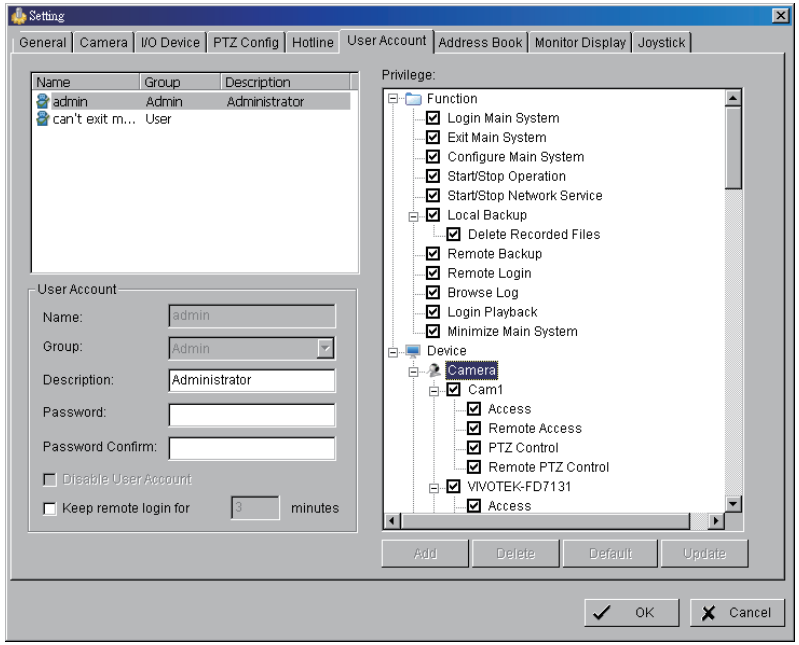
User: All the privileges of system functions are forbidden, user can only manage assigned devices.

Add: Click it to create a new account after inserting related information. The **Add** button is only enabled when filled a new account.

Delete: Click it to delete the indicated account.

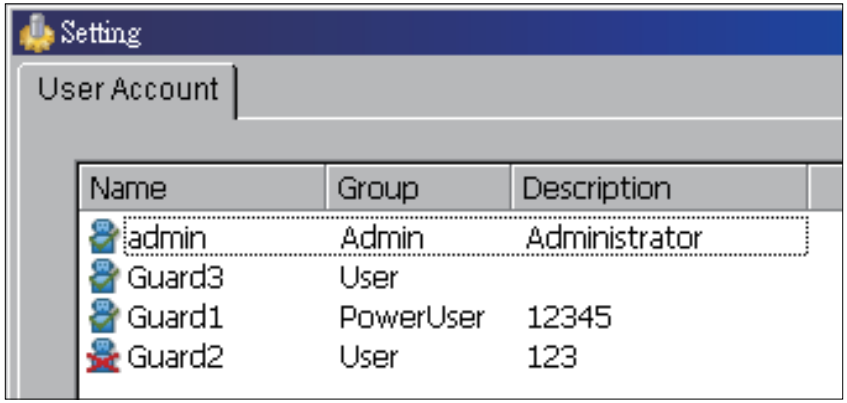
Default: Click it to go back to default privilege settings of related user group.

Upgrade: Click it to save the modifications of each account.



User Account Setting: The admin may create and modify the content of user account here.

Name: Insert an user name.
Group: Assign the group for each user.
Description: Insert a description related to each user.
Password: Insert the password assigned to each user.
Password Confirm: Insert again to confirm the password.
Disable User Account: Check “Disable User Account” to block this account.



Note: Only the default admin account cannot be disabled.

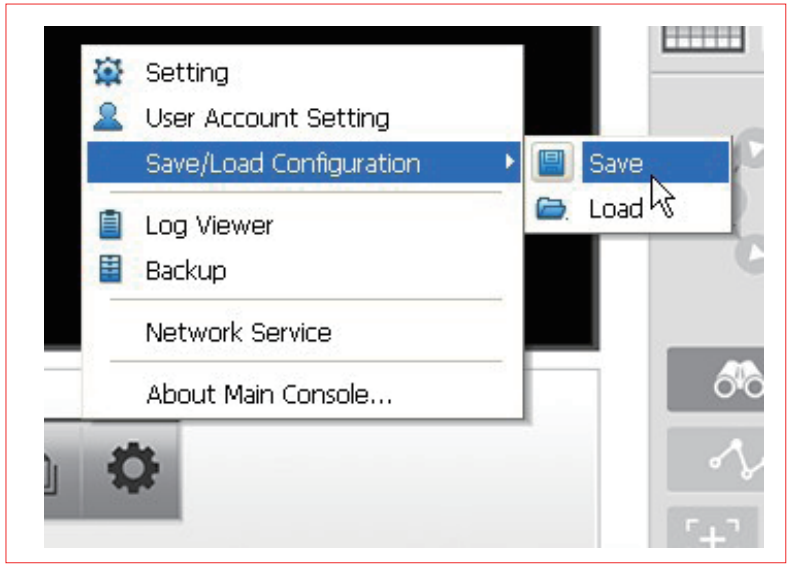
Keep remote login for___minutes: Insert the duration to autolog off an account after logging in from remote LiveViewer or Remote Playback server.
Privilege: Check each privilege of functions and devices for each user account.
Function: Check the settings and operations related system configuration, and the privilege of remote access.
Device: Check the device privileges of camera, digital output in Main Console and client applications.

The Save/Load Configuration function allows system users to save any specific setting as a .cfg (config) file. You may save up several different .cfg files at any time.

Save Configuration: To save a specific setting, go to **General Setting and Utilities** > **Save/Load Configuration** > **Save**. In the popup window, type in the file name and then save it as a .cfg file.

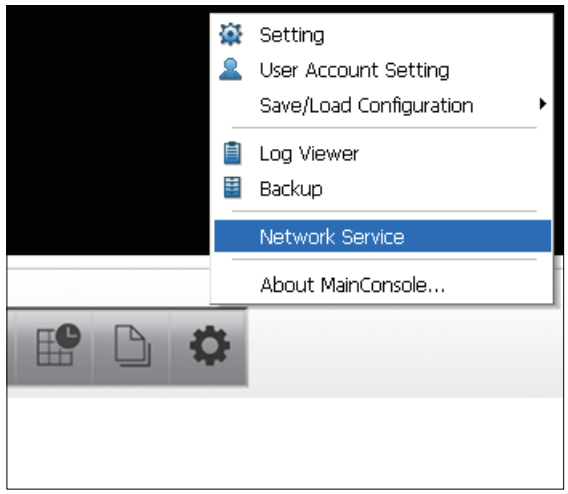
Load Configuration: To load a specific setting, go to **General Setting and Utilities** > **Save/Load Configuration** > **Load**. In the popup window, go to the directory that you saved the .cfg files at, select any one of them and then click **OK** to load the file.

Note: Main Console will be automatically shutdown after loading a new configuration. Please re-start Main Console manually.



Network Service

There are 2 types of network services:
Live streaming server and **Remote playback server**. From the Main Console, go to **General Setting and Utilities** > **Network Service** to obtain the Network Service panel.

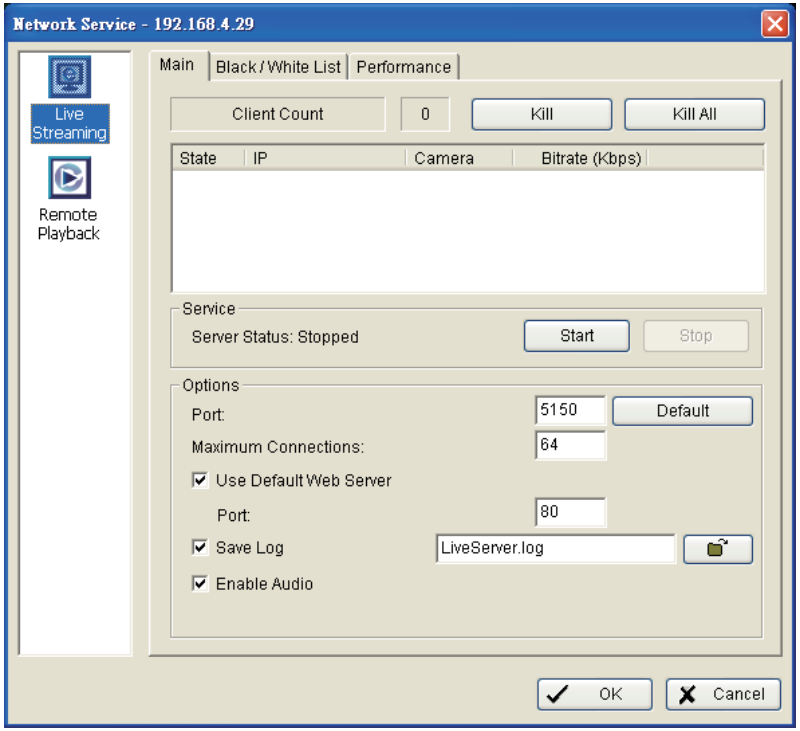


Live Streaming Server

When starting the live streaming function of computer, the system allows remote users to log in to the specific computer and view cameras that are connected to it. As system administrator, user could be able to monitor these accounts in order to maintain the system efficiency.

Main

On Live Streaming Server panel, administrator can see all the clients who are currently logging in to the computer and watching the live video from the remote side.



Client List

Client Count: Show the amount of channels that are connected.

Kill Client: Highlight an IP address and click on the **Kill Client** button to block the client from your client list.

Kill All Clients: Click on this button to block all the clients logging to your system.

Service

Server Status: Click on Start/Stop to turn on/off the server.

Options: Adjust the setting only when the server is stopped.

Port: Assign a port for the clients to connect to your system via Remote Live Viewer. Default port is 5150.

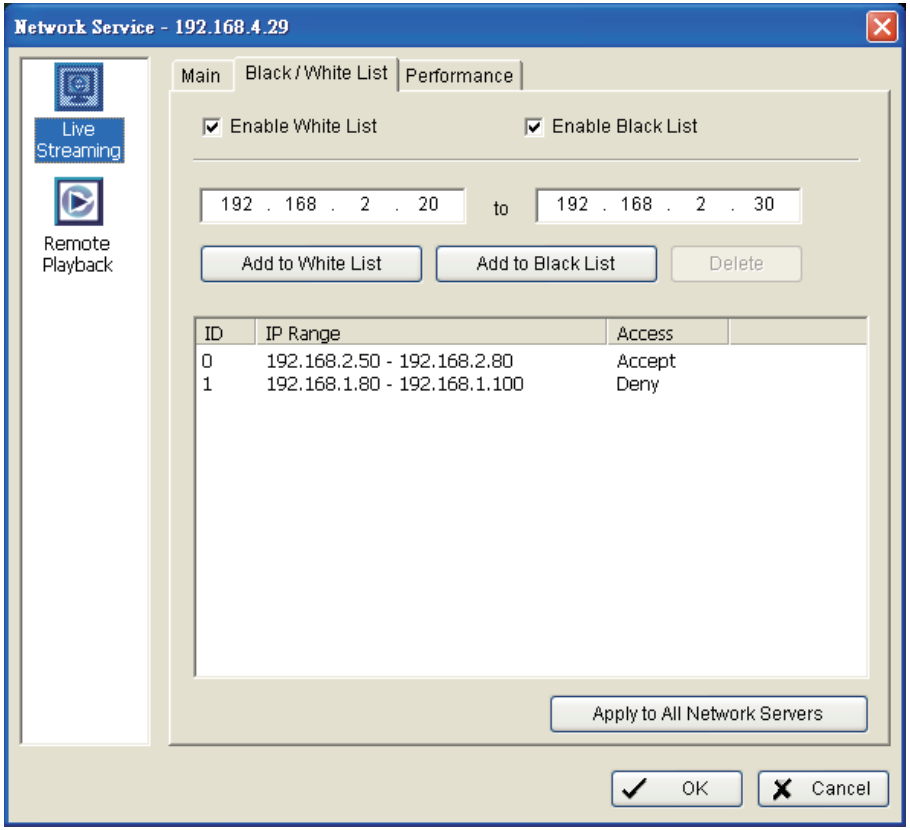
Maximum Connections: Number of connections that are allowed to connect to the system. Default is 64 channels and maximum is 64, one camera video counts as one connection.

Use Default Web Server: Activate the Web server by checking this box. Clients will be able to watch live video via Internet Explorer. The port for live streaming server is 80 by default.

Save Log: Save the current log information to your computer.

Enable Audio: Select this option to enable the audio transmission along with video stream.

Black / White List



White List: Check the “Enable White List” box to activate the white list filter. Only IPs from the white list is allowed to log in.

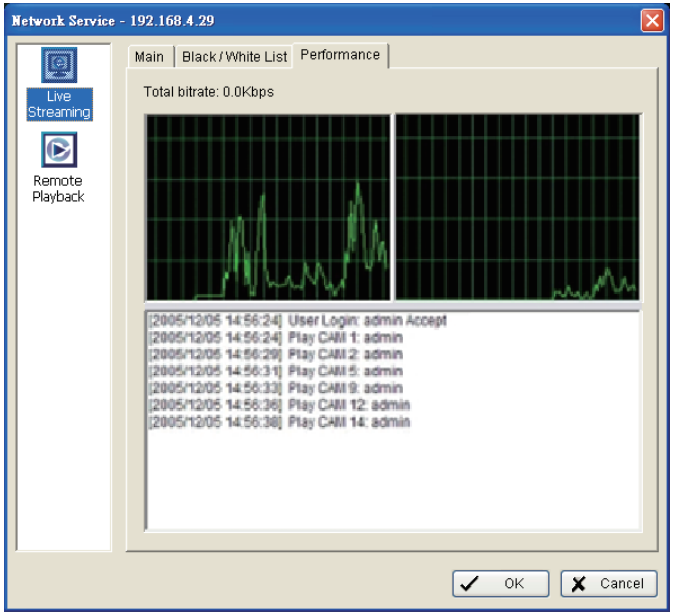
Black List: Check the “Enable Black List” box to activate the black list filter. IPs from the black list will be blocked.

IP Address: Enter an IP address into the IP address field on the left. To add an IP address range to the system, enter 2 sets of IP address to indicate a series of IP(s).

Add/Delete: Add the IP(s) onto the list or remove it from the list.

Apply to All Network Servers: Apply the settings to both live streaming server and remote playback server.

Performance

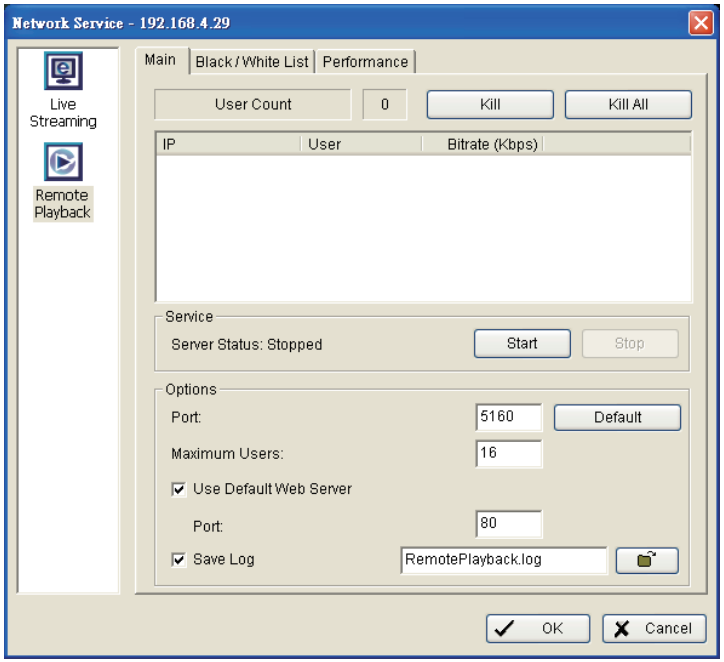


Remote Playback Server

When starting the remote playback function, the system allows remote users to log in to the specific computer and withdraw data files that are stored on it. As system administrator, user could be able to monitor the accounts logging in to maintain the system efficiency.

Main

On the Remote Playback Server panel, all the clients who are currently logged into the computer and watching the playback video from the remote side.



Client List

User Count: Show the amount of users that are connecting to system.

Kill Client: Highlight an IP address and click on the **Kill Client** button to block the client from your client list.

Kill All Clients: Click on this button to block all the clients logging in to your system.

Service

Server Status: Click on Start/Stop to turn on/off this option.

Options

Port: Assign a port for the clients to connect to your system via Remote playback server. Default port is 5160.

Maximum Users: Number of connections that are allowed to connect to the system. Default is 16 users and maximum is 16.

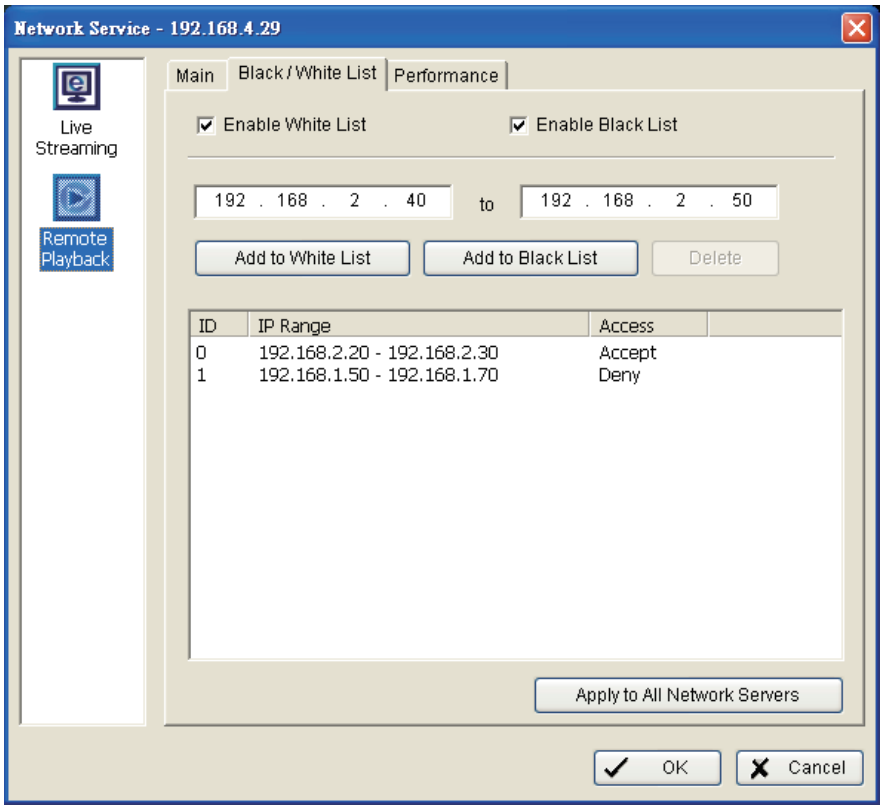
Note: One user counts as one account that is logging in to the server.

Use Default Web Server: Activate the Web server by checking this box. Clients will be able to watch live video via Internet Explorer. The port for live streaming server is set to 80 by default.

Save Log: Save the current log information.

Note: The server must be stopped before editing any settings.

Black / White List



White List: Check the “Enable White List” box to activate the white list filter. Only IPs from the white list is allowed to log in.

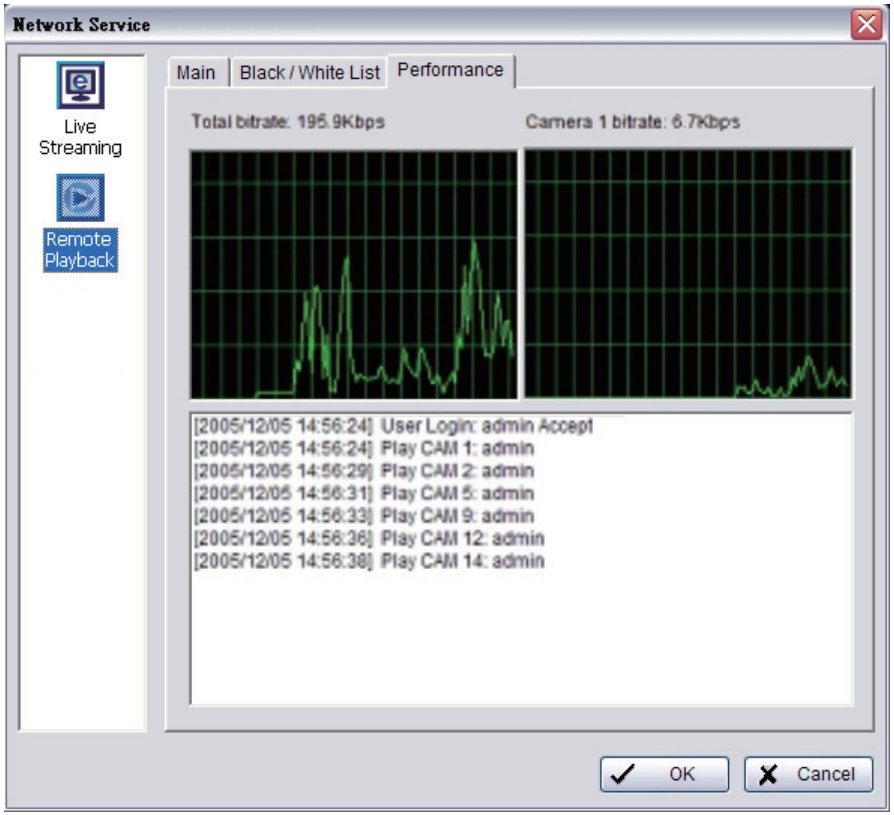
Black List: Check the “Enable Black List” box to activate the black list filter. IPs from the black list will be blocked.

IP Address: Enter an IP address into the IP address field on the left. To add an IP address range to the system, enter 2 sets of IP address to indicate a series of IP(s).

Add/Delete: Add the IP(s) onto the list or remove it from the list.

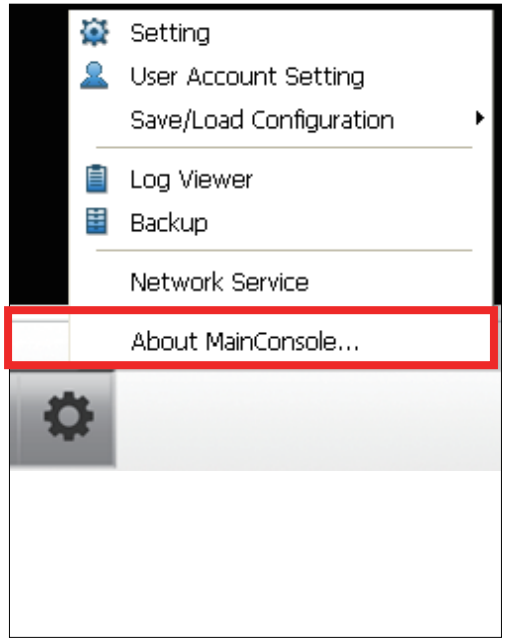
Apply to All Network Servers: Apply the settings to both live streaming server and remote playback server.

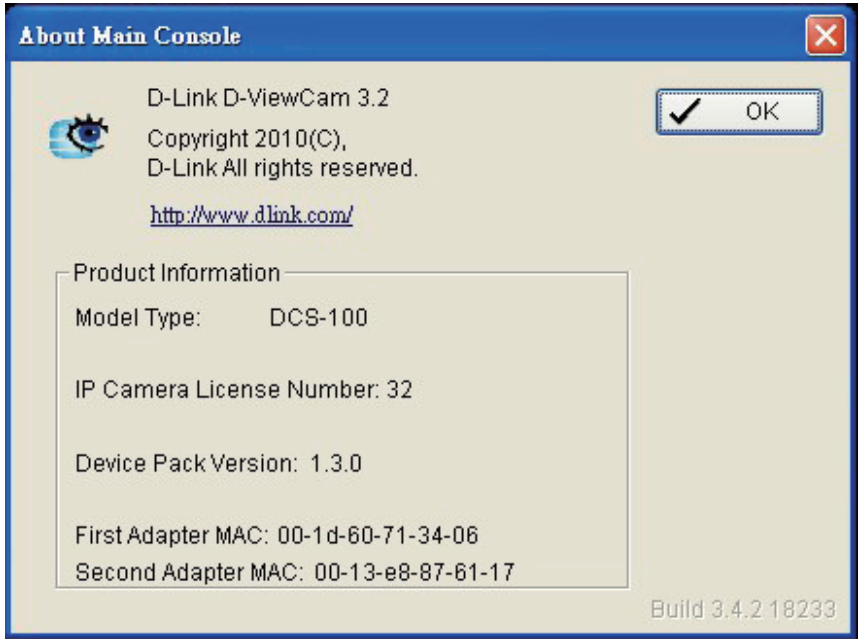
Performance



About Main Console

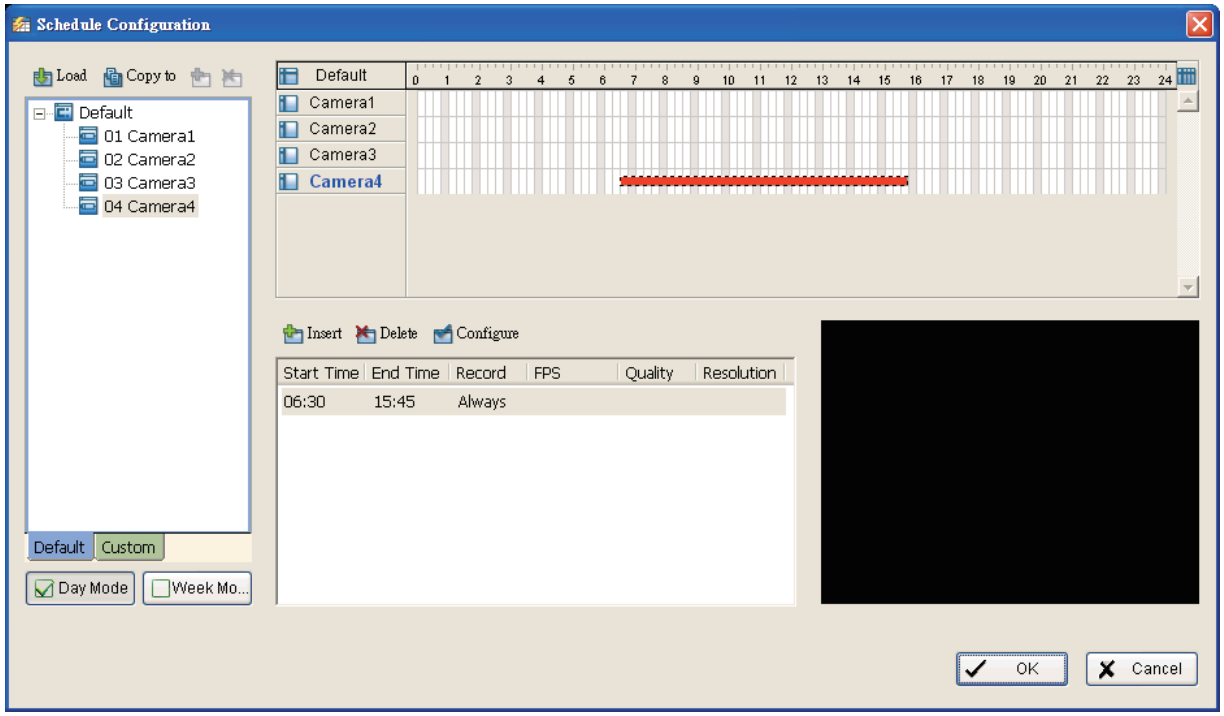
Go to About Main Console to view the version of your D-ViewCam software and model name information.





Schedule

Click on the **Schedule** icon on the Main Console to set up the time duration for video recording.

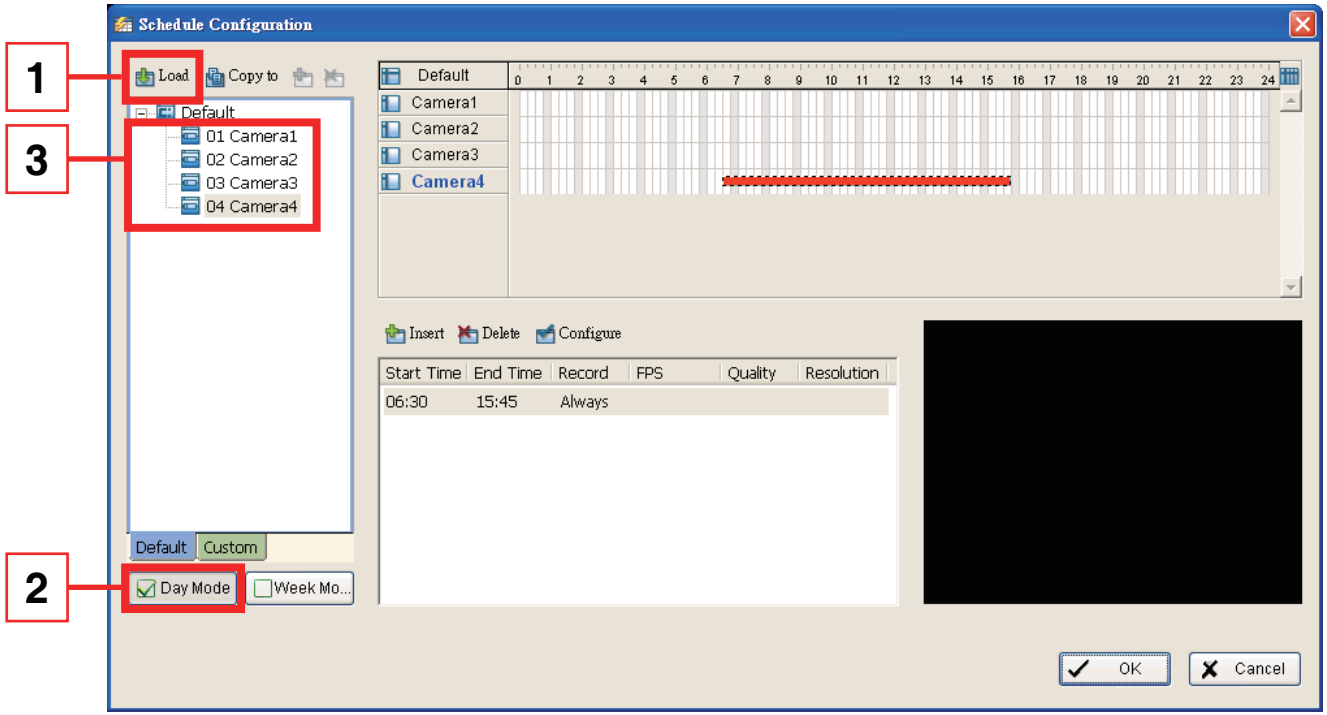


Day Mode

Schedule the camera(s) to record video at the same time every day.

There are three ways to setup the time schedule for each camera:

1. Load a preset mode or
2. Insert a new schedule manually or
3. Copy to other cameras after manually setup.



Load Preset Modes

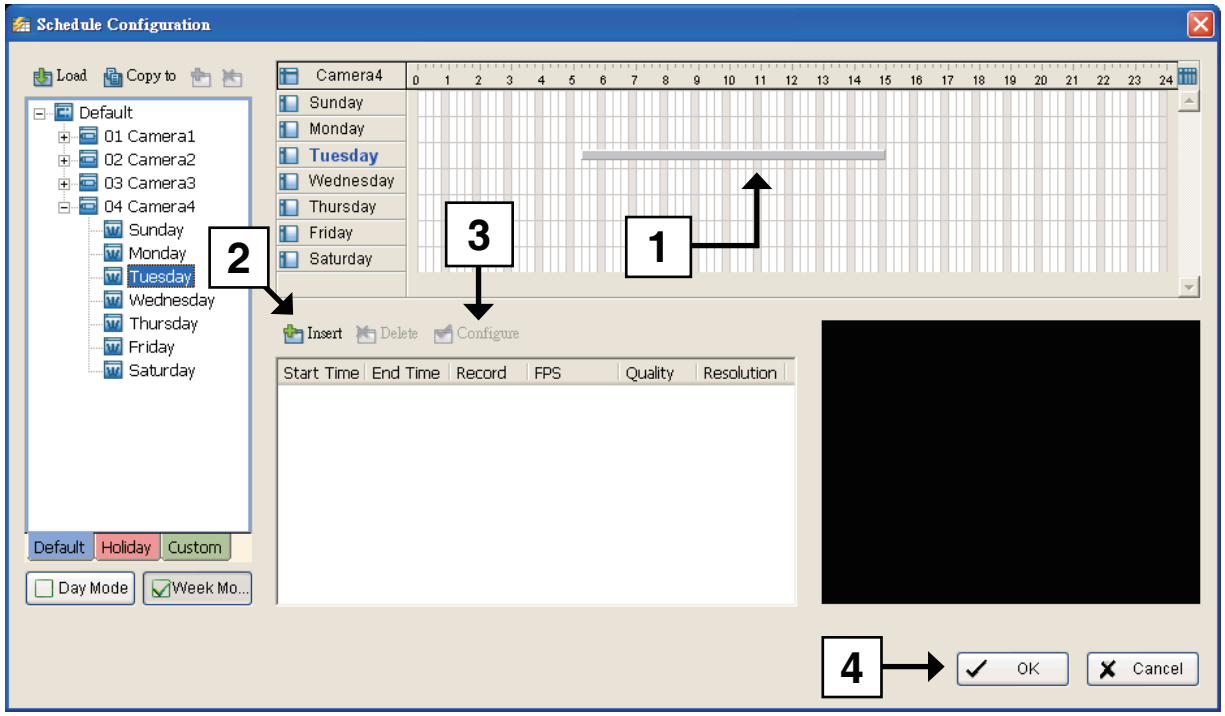
The system provides six modes to quickly setup recording schedule. Click on the

button to bring up the drop-down menu to select the preset mode. Refer below tables for the definitions of each mode in each series.

Mode	Format	Time	Record	FPS	Quality	Resolution
Regular	M-PEG	0:00 - 24:00	Always	Max	Max	Max
	MPEG-4			Max		
Office	M-PEG	8:00 - 20:00	Always	Max	Max	Max
	MPEG-4			Max		
Shop	M-PEG	10:00 - 22:00	Always	Max	Max	Max
	MPEG-4			Max		
Highly Secure	M-PEG	0:00 - 24:00	Always	Max	Max	Max
	MPEG-4			Max		
Disk Saving	M-PEG	0:00 - 24:00	Motion	10	Max	Max
	MPEG-4			i-frame		
Minor	M-PEG	0:00 - 24:00	Motion	5	Max	Max
	MPEG-4			i-frame		

Insert a New Schedule Manually

Step 1
Left-click and draw the bar you want to add to the time table. The scheduled time will show as a grey bar.



Step 2
Click the **Insert** icon and add a new schedule in the Regular Mode, i.e. to record video during the time period you set with 30 FPS, Normal video quality, and Normal resolution.

Step 3
Change the settings by clicking on the **Configure** icon or double-click the schedule information.

Step 4
Click **OK**.

Copy Schedule

You may set up the schedule for each channel/camera by repeating the process above, or simply apply the settings of a single camera to all the others by clicking the **Copy To** icon on the top of the display window.

Week Mode

Schedule the camera(s) for each day of the week. In addition, you may assign holidays under the Week Mode.

Default

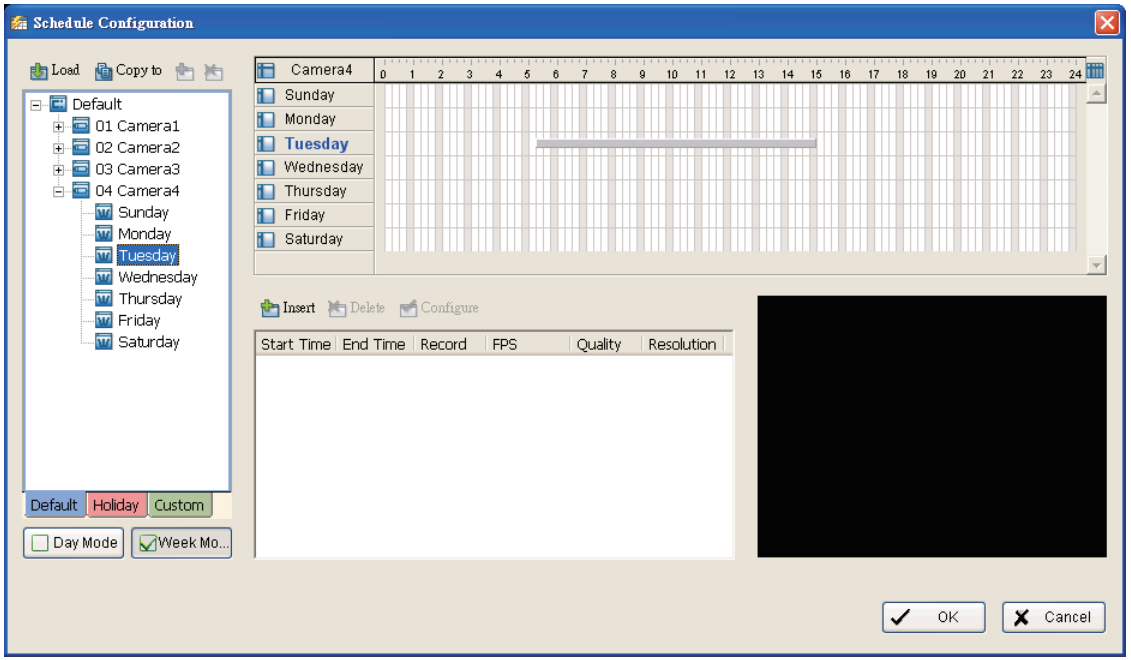
Follow the same process to setup the schedule for every day in a week.

Holiday

You may assign holidays where the system will work according to the Sunday setting.

Custom

You can assign a particular date(s) on which the system will work according to a special schedule(s) different from the others.

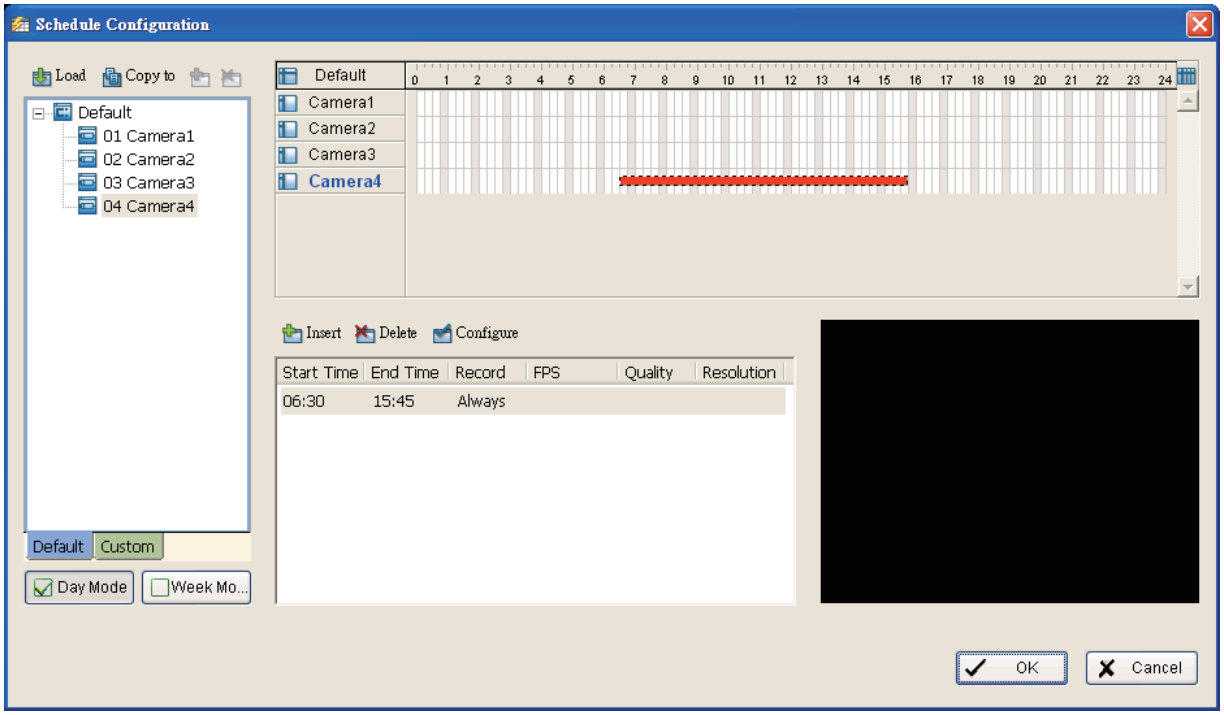


Adjust the Schedule Settings

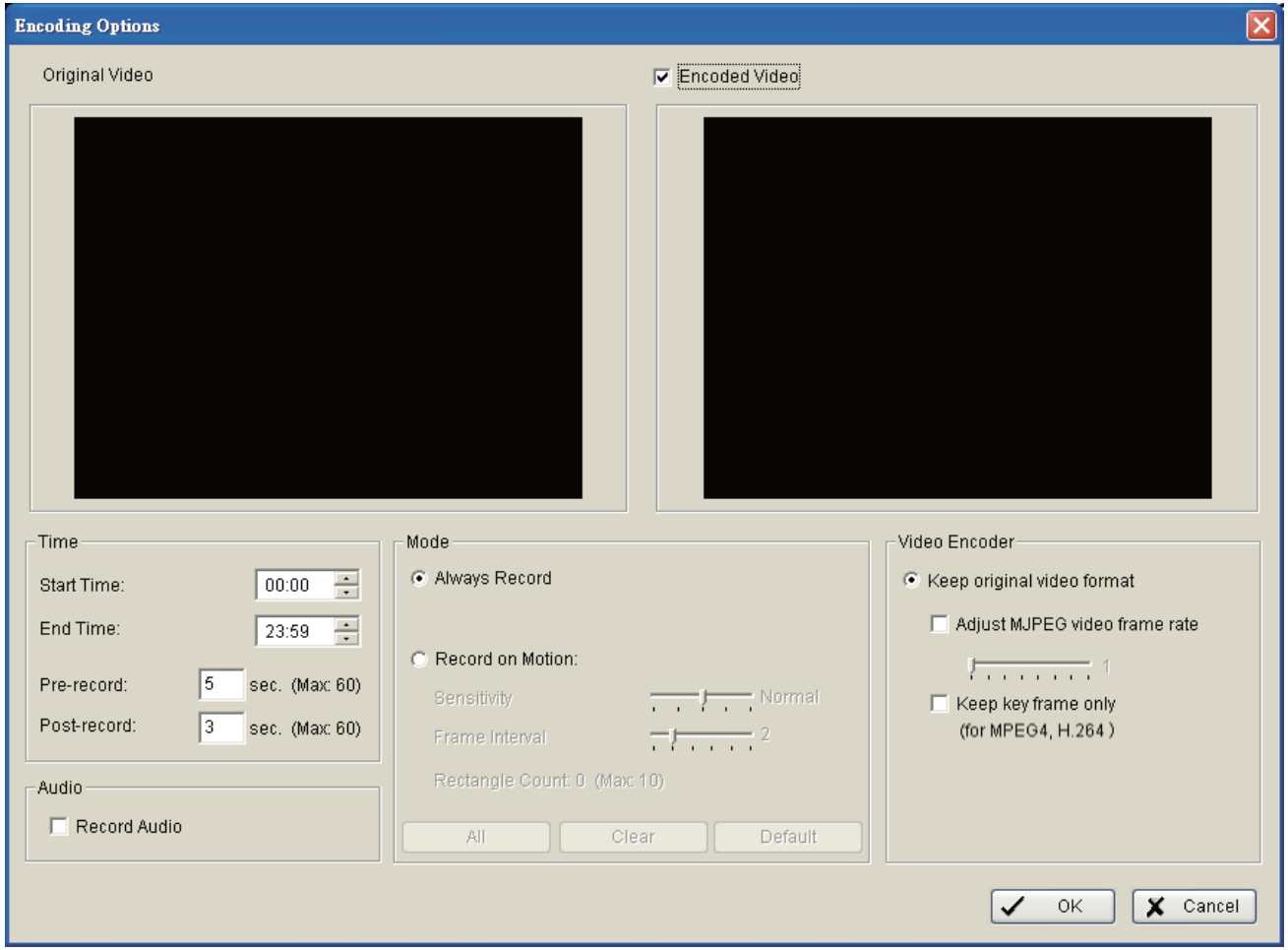
You can manually change the settings at any time after you insert or load a schedule.

Option 1: Move the cursor to the Time Bar and slide the bar to the left or right to change the start and end points.

Option 2: Click on the **Configure** icon or double-click on the schedule information on the screen (highlighted in blue) to open the Encoding Option panel (next page) and change the settings.



Encoding Option



Pre-record/Post-record Time
The pre-record/post-record function saves the recording data accordingly. For instance, to set up a 5 second pre-record time means the system will start saving the recording data 5 seconds before the event happens.
Note: The maximum record period is 60 seconds.

Record Mode

Always Record
Select this option to record video continuously.

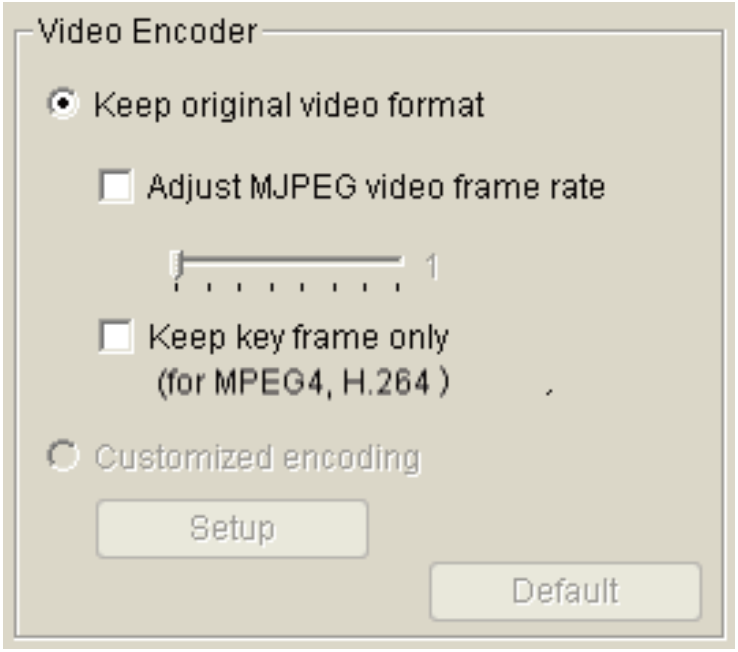
Record on Motion
Select this option to start recording when motions are detected. Please adjust sensitivity, the frame interval and setup the detection zone to detect motion. To setup a single detection zone, left-click and drag the mouse to draw a rectangle. To setup more than one detection zones, simply repeat the same process. You may create up to 10 detection zones. Click **All** to select the entire detection zone.

Encoded Options

This option is to configure the quality of video. The Original Video window is the original stream from the camera and the Encoded Video window is a preview of the recording video correspond with the encode settings (on the next page).

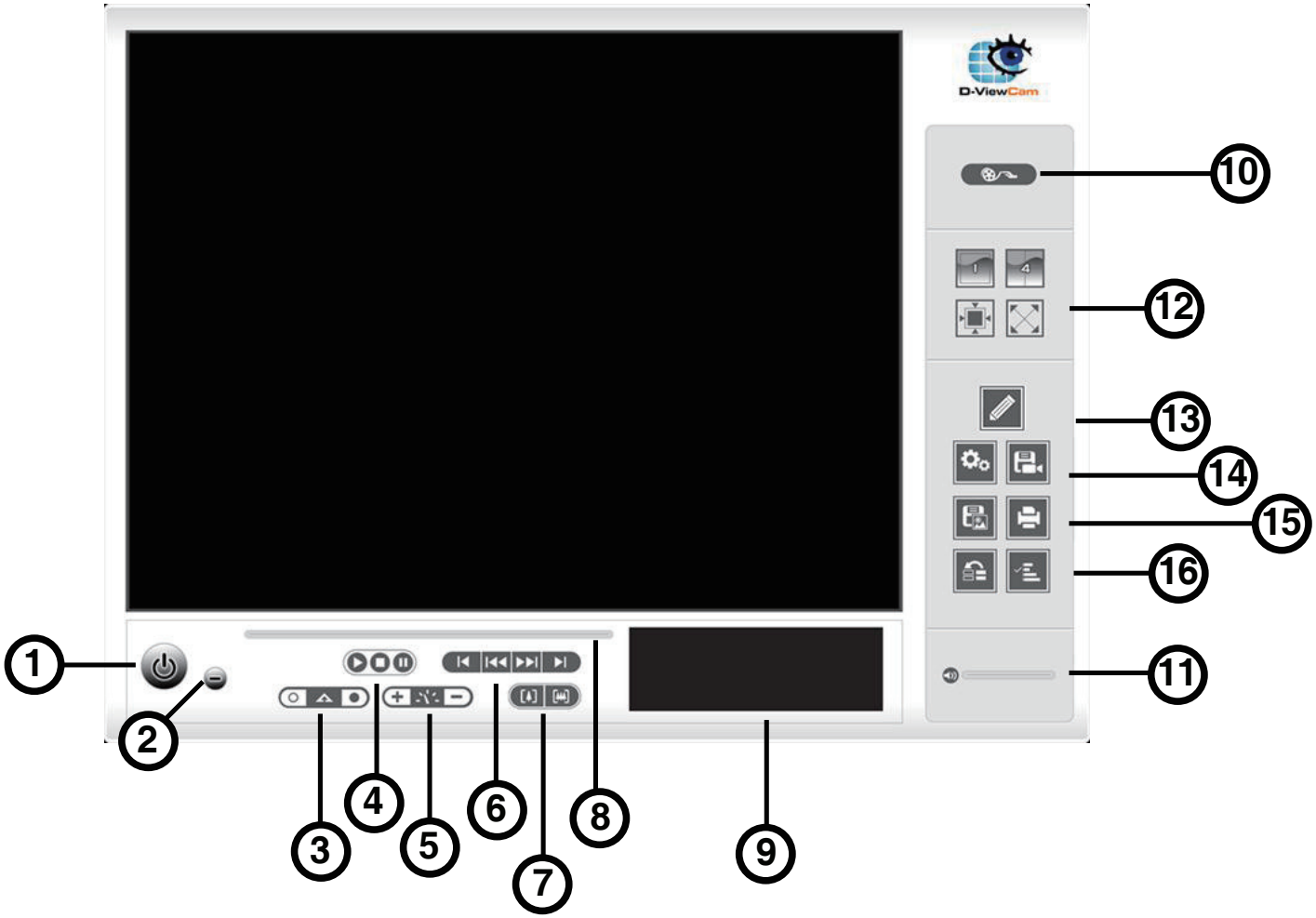
Keep Original Video format
Select this option to lower the frame rate but not re-encode the video stream.

- **Adjust MJPEG video frame rate**: Use the slider to reduce or increase the frame rate.
  Note: The maximum FPS (move the slider to the right) will be correspond with original video stream set up on camera configuration.
- **Keep key-frame only**: System will only record key frames of video streaming.
  Note: The key frame interval is controlled by each camera manufacturer and cannot be adjusted.



Playback

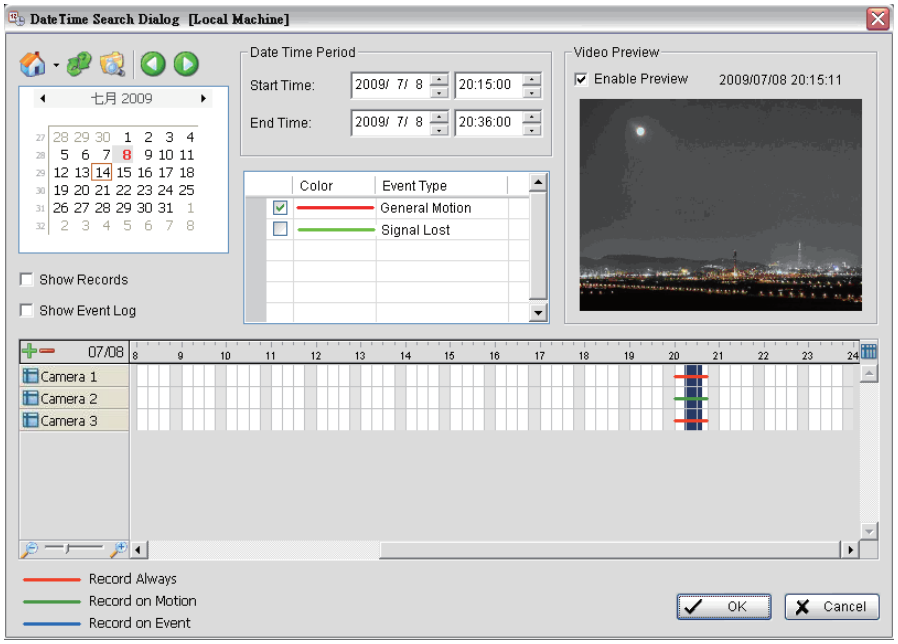
The Playback console allows you to watch the recorded video, view and/or search for unusual events, and view recorded system information.



1	Exit Playback	5	Speed	9	Information Window	13	Enhancement
2	Minimize Window	6	Play/Rewind/Fast Forward	10	Open Record	14	Setting & Save Video
3	Cue (Start/Stop Point)	7	Zoom	11	Volume Control	15	Snapshot & Print
4	Control (Play/Stop/Pause)	8	Scroll Bar	12	Screen Division	16	Backup & Log Viewer

1. **Exit**
   Close the Playback window.
2. **Minimize**
   Minimize the Playback console.
3. **Cue**
   When playing video, click on the **Cue In/Cue Out** icon to set the starting/ending point of a saved video clip. The Cue In and Cue Out time will be displayed on the Playback Information Window once they are set.
4. **Control**
   Play, pause, and stop the video.
5. **Speed**
   Control the speed of the playing video. Click **+** to speed up and **–** to slow down.
6. **Play/Rewind/Fast Forward**
   Control the video.
7. **Zoom**
   Zoom in and out of the recorded video.
8. **Scroll Bar**
   Indicates the status of the playing video; drag it to where you want to review.
9. **Information Window**
   Display video date and time, current video status, cue in/out points' time, and speed.
10. **Open Record**
    Click on the **Open Record** button to access the **Date Time** Panel.
11. **Audio Volume Control**
    Adjust the sound level.
12. **Screen Division:**
    Allocate the sub-screen display by clicking on the desired layout. To switch to a single camera display, double click on a particular sub-screen. Double click on the screen again to restore the previous screen division layout. To view in fullscreen mode, right click on the screen to enable Toggle Fullscreen.
13. **Enhancement :** Click to open the Enhancement window
14. **Setting & Save Video:** Click to open the Setting window and to open the Save Video window.
15. **Snapshot & Print:** Click to take a picture and to open the Print window.
16. **Backup & Log Viewer:** Click to open the Backup window and to open the Log Viewer window.

Date Time Panel



Record Display Window

The record display window shows the information of the available video clips. It may show in calendar or list control view.

Remote Server Site: Open Remote Playback Site Management dialog could select to access local machine or set up remote playback server. Select Folder option could directly access recorded data folder or use Recent List to access previous browser recorded folders.
Note: To use Select Folder function need password of Main Console.

Refresh: To refresh the record display window.

Log Viewer: To access the Log Viewer Tool.

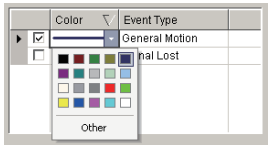
Previous Days: To show recorded video from the previous recording date.

Next Days: To show recorded video of the next recording date.

Date Time Period
Select the starting and ending time points that indicate the time period you would like to view.

Video Preview
Check the **Enable Preview** box to view the selected video.

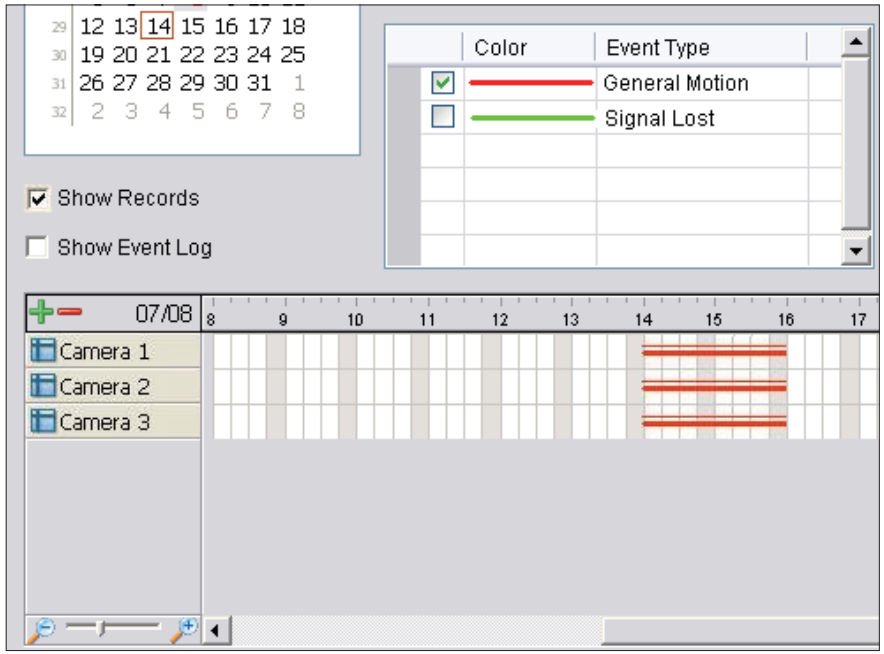
Event Type
You can change the color by clicking on the color bar and then click the down arrow.



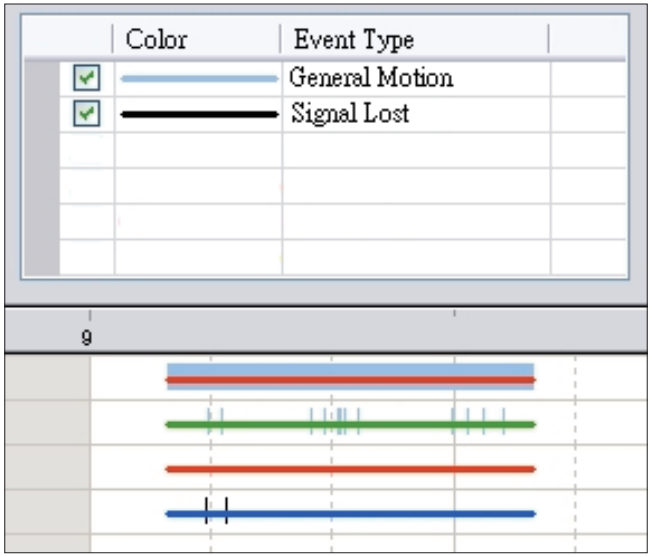
Time Table

- Click the icon to select all channels or the icon to deselect all channels. Finally, utilize the scale bar to modify the scale of the time table.

- Check the **Show Records** box to display the time period of recording data.



- Click the **Show Event Log** button to display the time of event detection:



To Withdraw the Record

Step 1: From the record display window at the top left of the Date Time Panel, select the date you want to view the recorded video from. The red/green/blue lines shown on the time table indicate available recorded video records.

Note: The record display window can be shown in (a) calendar view or (b) list control view. To modify the settings of the record display window, click on the **Settings** button at the right of the Playback Console. Refer to the next page for more details.

Step 2: Use color bars to differentiate event types from each other.

Step 3: Highlight the video clip you want to review by left-clicking and dragging the time period. You may also utilize the Start Time and End Time in the **Date Time Period** Section. In addition, modify the scale of the time table with the **+** and **–** signs on the bottom left.

Step 4: Check the **Enable Preview** option to view the video you select.

Step 5: Click **OK** when finished.

Post Processing Tool

General Setting

Select the option to either apply the filter settings to only the active channels or to all channels.

Filter Setting

Visibility: Check the box and adjust the gamma value of the image to enhance the image and make it cleaner.

Sharpen: Check the box to activate. Move the slider control to the right to sharpen the image or to the left to soften it.

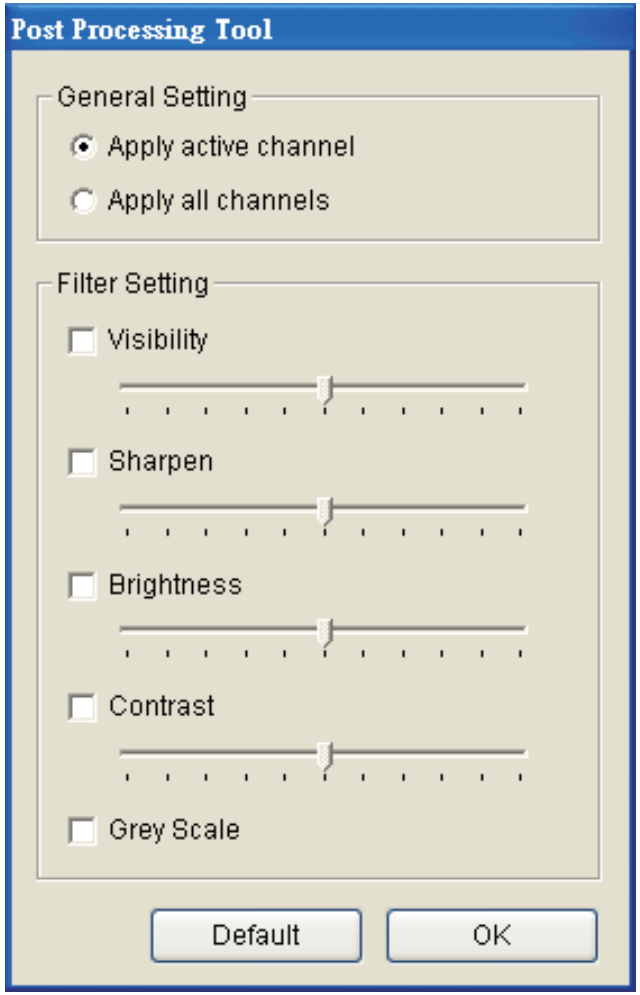
Brightness: Check the box to activate. Move the slider control to the right to make the image brighter.

Contrast: Check the box to activate the function. Move the slider control to the right to increase contrast.

Grey Scale: Check the box to show the record in grey scale mode so the image displays in black and white.

Default: Click to change the settings back to the default settings.

OK: Click to save and apply your settings.



Save Video

Step 1: Click on the display screen to select the camera display that you want to save as a video clip.

Step 2: Click the cue buttons to select the start and end points. The cue in and cue out time will show in the information window.

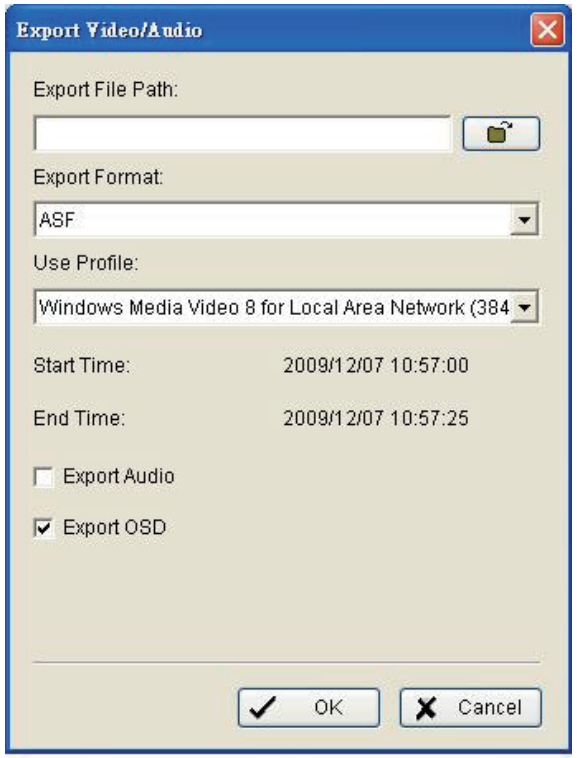
Step 3: Click the **Save Video** icon. Select the location where you want to save the file at and enter the file name. Click **Save**.

Step 4: Set the **Export Format** from the drop-down (ASF or AVI).

Step 5: Select the profile to use from the **Use Profile** drop-down.

Step 6: Select to export (i.e. save) the recorded video with Audio, OSD (On-Screen Display), or export video only.

Step 7: Click **OK** to save the video.



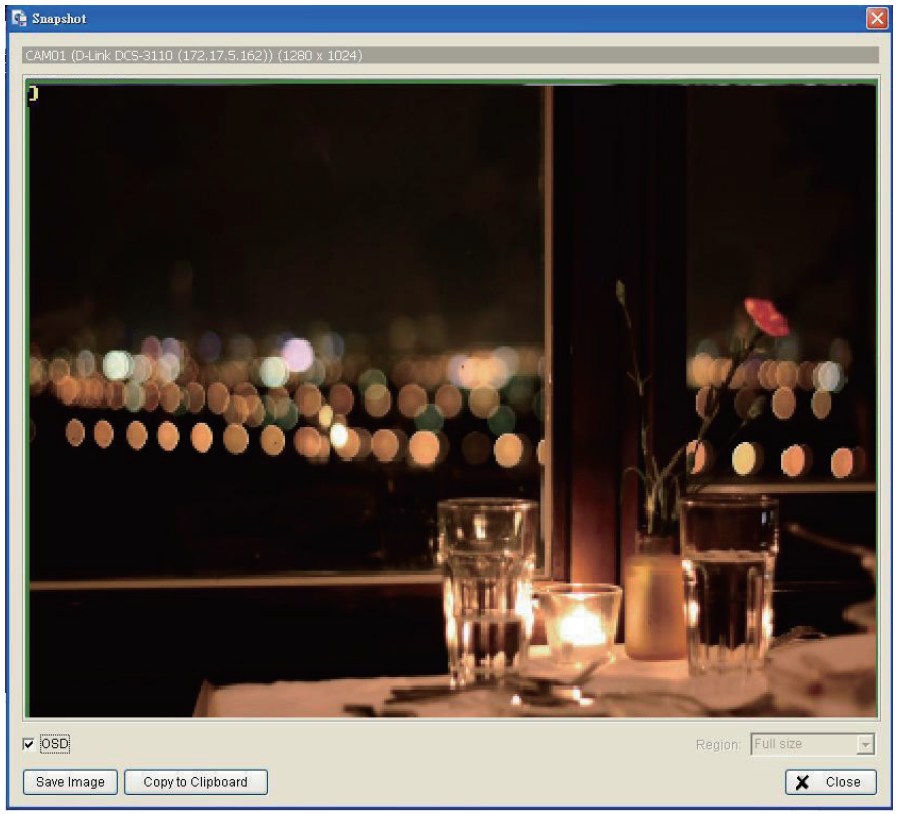
Save Image (Snapshot)

Step 1: Click on the display screen to select the camera display from which you want to save pictures.

Step 2: Click the **Save Image** button when the image you want is displayed on the screen. You may click **Pause** to freeze the video and use the Step Forward/Step Backward buttons to find the picture that you want to save.

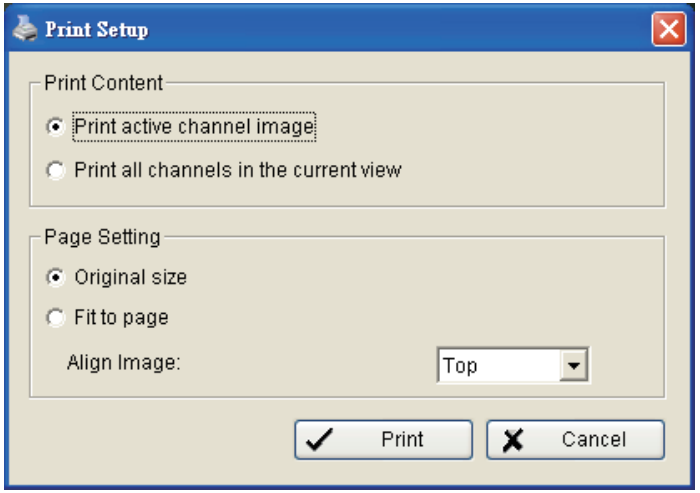
Step 3: Check the **OSD** box to export the image with the date/time and camera number/name displayed. If the digital PTZ function is enabled in the display view, you can also select either **Full size** or **Selected Region** as your image region.

Step 4: You have the option to copy the image to the clipboard or to save it to your computer. Click **Save Image** and select the folder you want to save it to. Select the image format (BMP or JPEG) and click **Save**.



Print

Print the current image of the video you have selected.



Print Content: Print the image from the selected channel or all the channels shown on the screen.

Page Setting: Set to print the image at the **Original Size** or **Fit to Page**. Set the alignment from the **Align Image** drop-down (Top, Center, or Bottom).

Print: Click to print the image.

The Backup function saves everything from the Playback panel, including log information.

You can start a full function Playback Console and load the backup files into it on any PC with Windows operating system. This means you may monitor the real time video and work on the backup files on separate computers simultaneously.

Step 1: Press the **Open Record** button and click **Backup**.

Step 2: In the *Date Time Period* section, select the Start Time and End Time you want to backup.

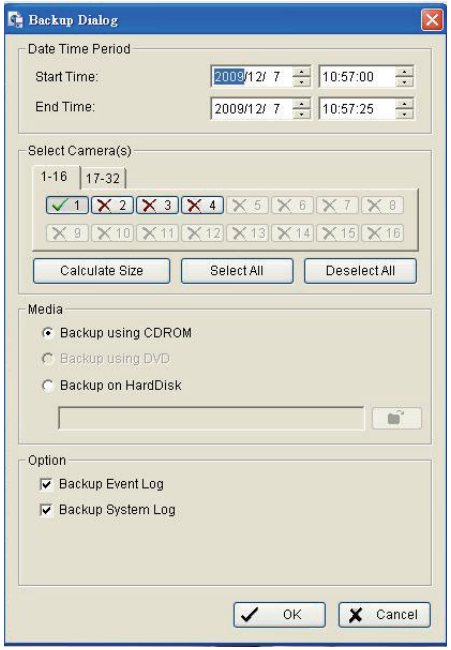
Step 3: In the *Select Camera(s)* section, select the camera(s) you want to backup.

Step 4: Click the **Calculate Size** button to calculate the size of the backup data.

Step 5: Under *Media*, select where you would like to save the backup data.

Step 6: Under *Option*, check the type of data you want to backup.

Step 7: Click the **Backup** button to start backing up.



Log Viewer

Unusual Event

View the unusual event history that had been detected by the Smart Guard System.

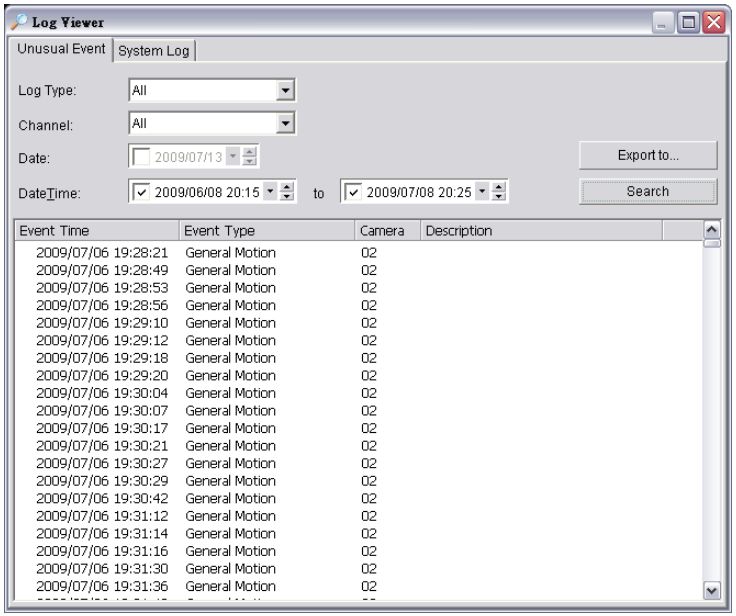
Step 1: Select the type of events you wish to view or select **All** from the drop-down menu to view all types of events. The types of Unusual Event include **General Motion**, **Signal Lost**, and **Digital Input Triggered**.

Step 2: Select the camera channel you wish to view or select **All** for all the channels available.

Step 3: View the events that happened on a particular date or during a given time period by selecting the search period.
For a particular data: check the **Date** box right and indicate the date.
For a period: check the **Date&Time** and then enter the date and time.

Step 4: Click **Search**.

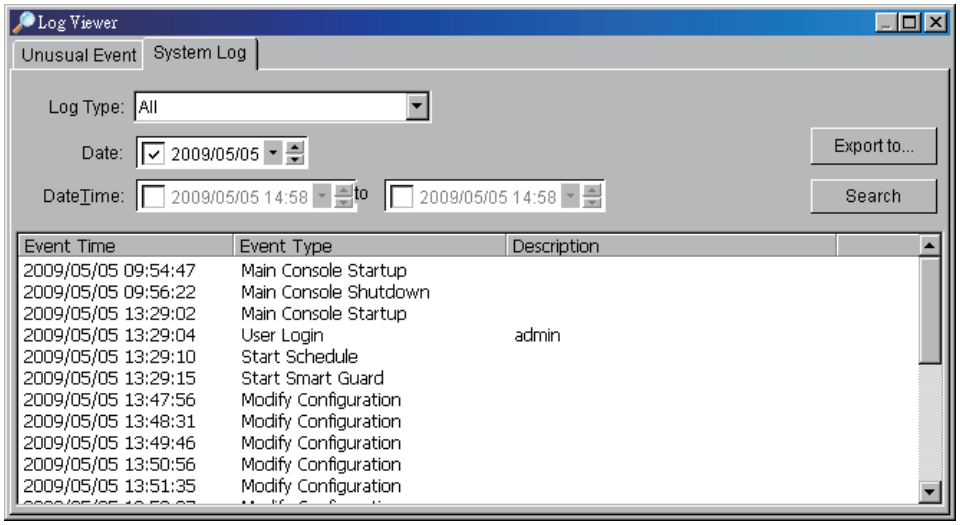
Note: When working with a video record, Log Viewer will search for Unusual Event in the video record in Date & Time mode, start from the beginning to the end of the record, which is the default setting of the system. A link will appear right next to each event time. By clicking on the link, the video will jump to the point where the unusual event takes place.



System Log

Select Log Type form the drop-down menu. There are total 23 types of log types, including:

1. Main Console Startup
2. Main Console Shutdown
3. User Login
4. User Login Failed
5. Start Schedule
6. Stop Schedule
7. Execute Recycle
8. Enable Channel
9. Disable Channel
10. Start Smart Guard
11. Stop Smart Guard
12. Modify Smart Guard
13. Modify Schedule
14. Modify Configuration
15. Start Live Streaming Server
16. Stop Live Streaming Server
17. Modify Live Streaming Server
18. Start Remote Playback Server
19. Stop Remote Playback Server
20. Modify Remote Playback Server
21. IP Camera Connection Lost
22. Auto Restart Windows
23. Modify E-Map



Step 1: Select the type of event you want to check or select **All** from the drop-down menu.

Step 2: View the events that happened on a particular date or during a given time period by selecting search period.

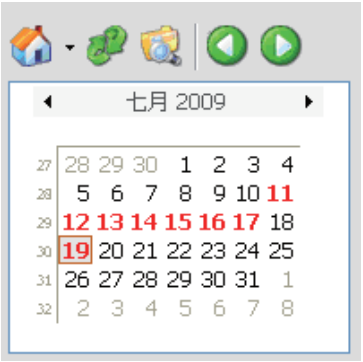
Step 3: Click the **Search** button.

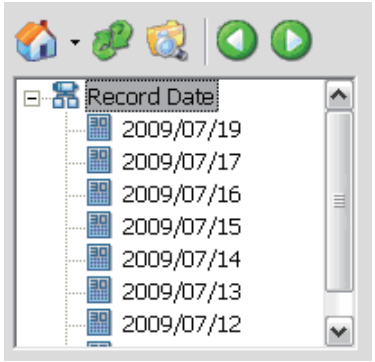
Step 4: You can export the data to a text file (.txt) or Excel file (.xls). Click the **Export to** button, enter the filename, and select the format to export to.

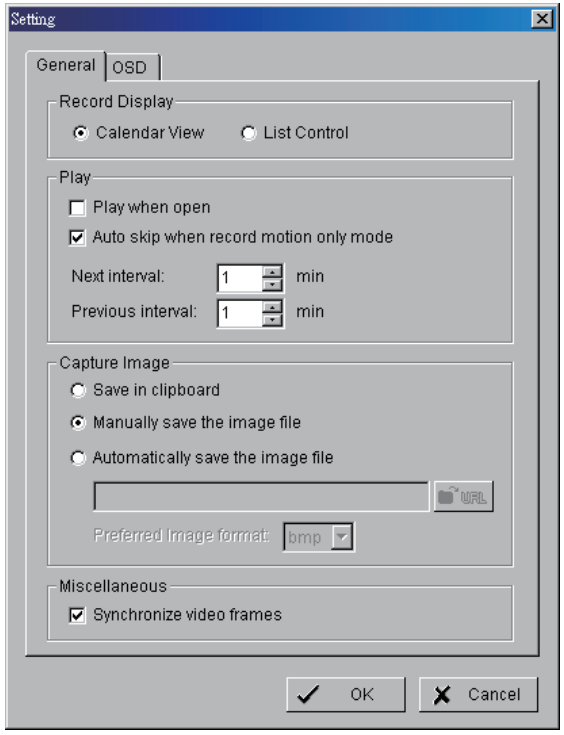
Setting - Record Display

Calendar View (left):
Display in calendar view.

List Control (right):
Display in list view.







Play

- **Play when open:** Check this option to start playing the video clip every time when a record is withdrawn.
- **Auto skip when record motion only mode:** Check this option to set up the system to automatically skip to the points where there were motions recorded.
- **Next interval:** Set the interval with which the video goes forward when you click on the **Next** icon on the control panel.
- **Previous interval:** Set the interval with which the video goes backward when you click on the **Previous** icon on the control panel.

Capture Image

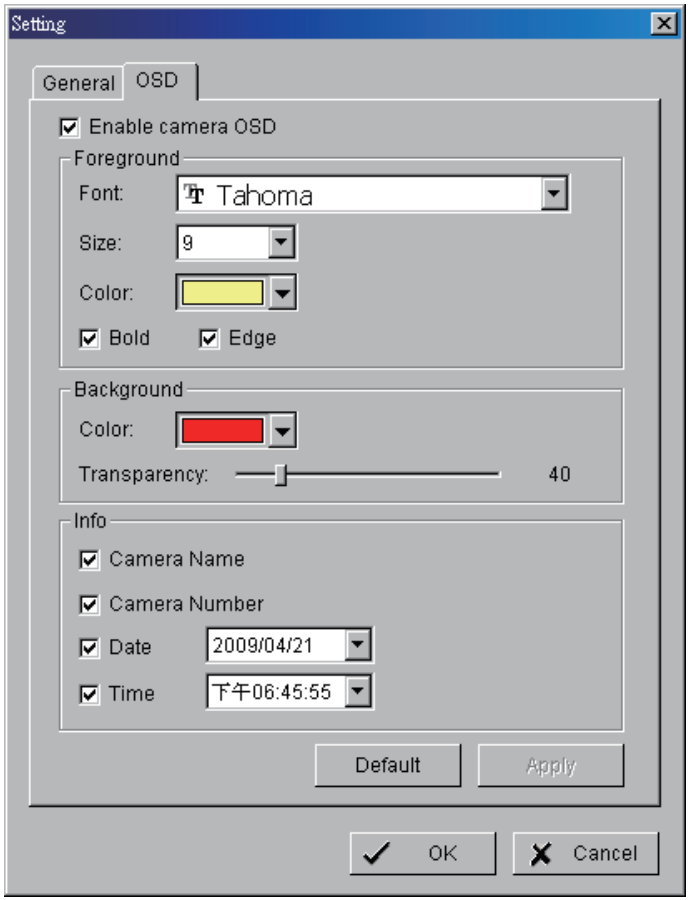
- **Save in clipboard:** The image will be saved in the clipboard and can be pasted to other applications.
- **Manually save the image file:** You can manually select where you want to save the image, name the saved file, and the format you want to save the image.
- **Automatically save the image file:** By pre-setting a path/URL and the image format, the system will automatically save the image accordingly when you click the **Save** button in the control panel.

Miscellaneous

- **Synchronize video frames:** Select to prevent tearing that may occur in the video display. However, this will increase the CPU processing load.

OSD Setting

Check the **Enable Camera OSD** box to display video information on recording video. Information includes camera name, camera number, date and time. Users also can set up the font, size, font color and any font effects desired.



Remote Server

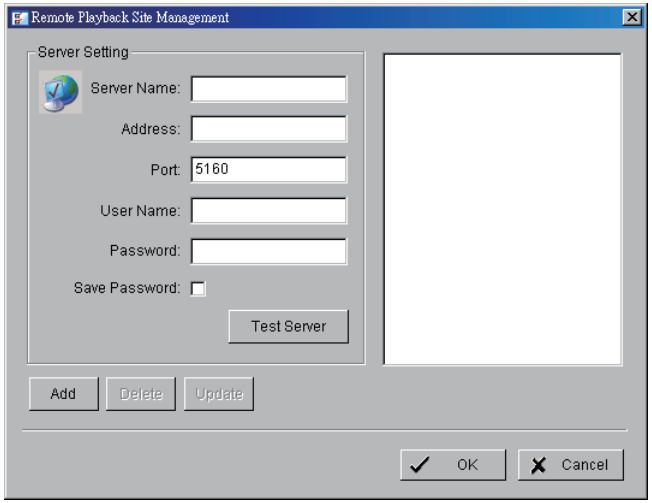
Add Remote Playback Site

Click the **Remote Server** icon to add and setup a remote playback site.

Step 1: Enter the IP address or DNS, Port, Username, and Password.

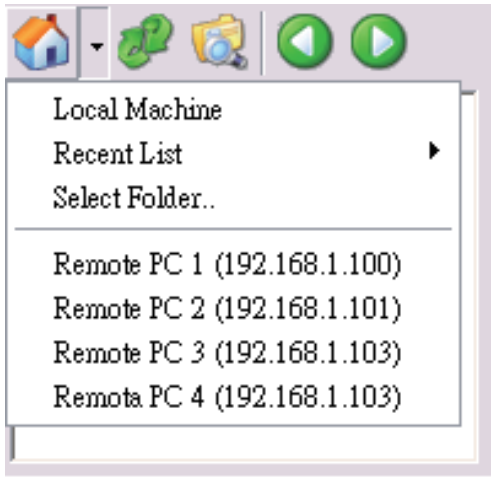
Step 2: Click **Add** to add the server.

Step 3: Click **OK** to exit.

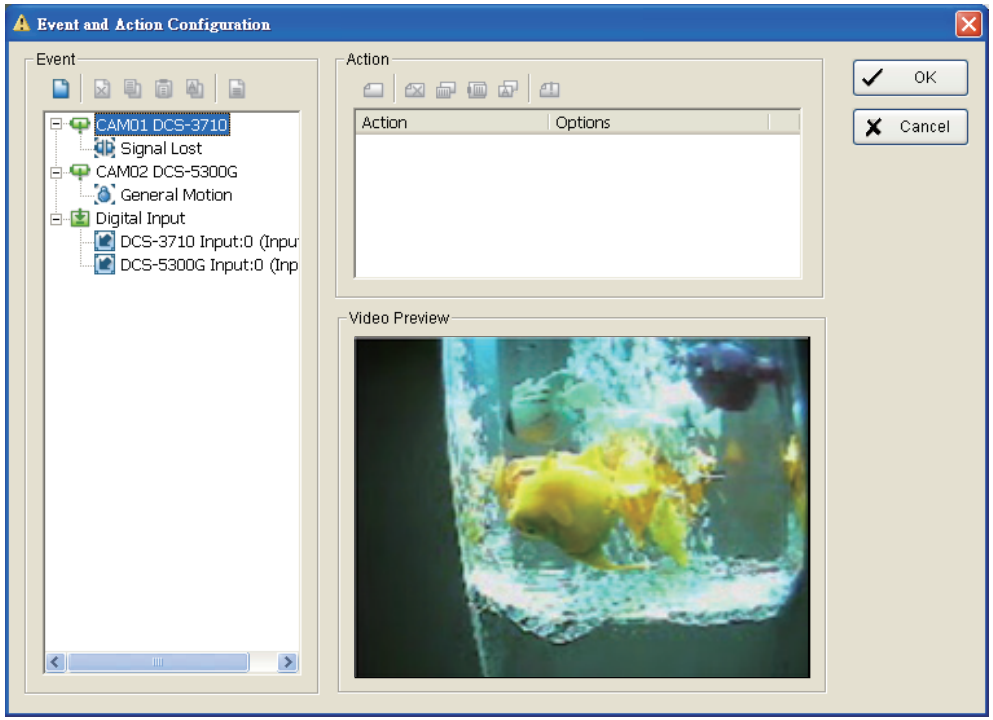


Access Remote Playback Site

Go to the Date Time Panel and click the icon on the top of the display window to access the Remote Playback Site.

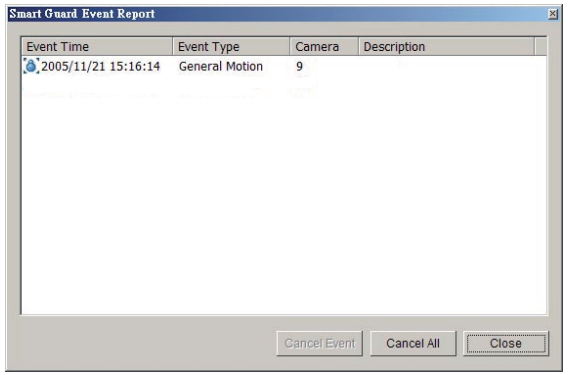


Guard



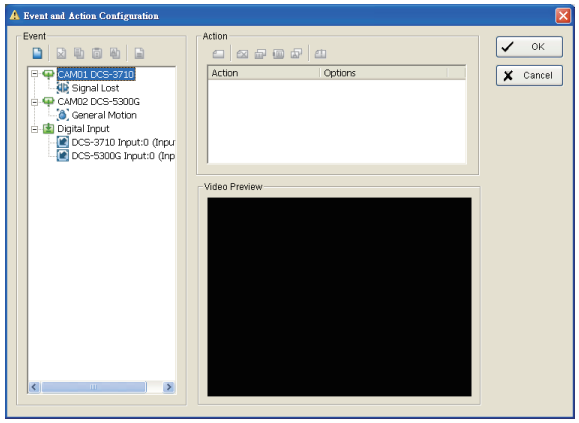
Click on the **Guard** icon on the Main Console to start the Event and Action Configuration panel. You need to specify an event to be detected and set up an action in which the system will take when the specified event is detected.

Note: To access the Event Report, click **Start** > **Open Event Report**.



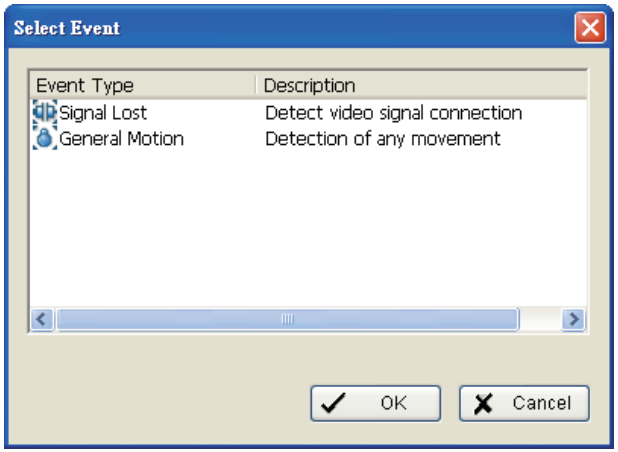
Event

There are 2 sources of events: **Camera** (video image) and **Digital Input**. You can assign multiple events by following the instructions below.



Assign a Camera Event

Step 1: Select a channel from the camera list and click the **Insert Event** icon.



Step 2: There are two types of events: **Signal Lost** and **General Motion**. Select the event you want in the Event Type list and click **OK**.

Step 3: Configure the setting of the Event Type. Refer to the next page.

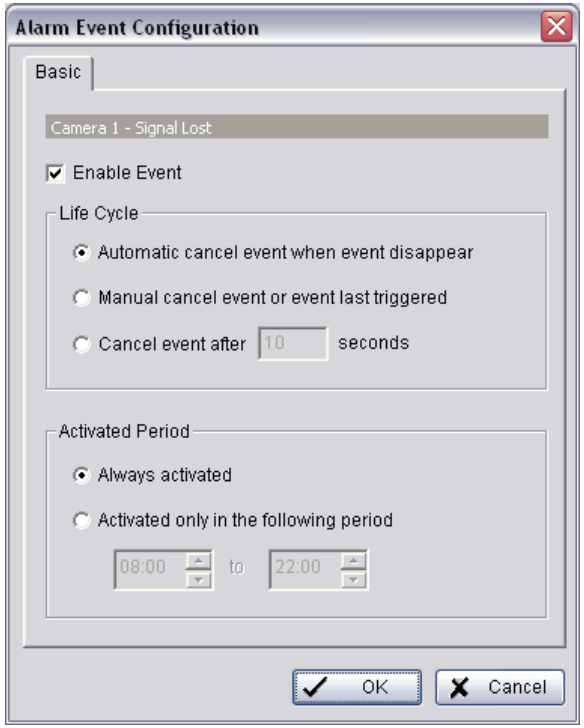
Camera Event Settings

Basic setting of video Signal Lost and General Motion.

Enable Event: Check the box to activate the event.

Life Cycle:

- **Automatically cancel event when event disappears**: The alarm/action will be cancelled once the abnormality is fixed or ends.
- **Manually cancel event or event continues triggered**: The alarm/action will continue until canceled from the Main Console. To cancel the event, click **Start** > **Open Event Report** > **Cancel All Events.**
- **Cancel event after timeout xx seconds**: Click the checkbox and enter the time (in seconds) to cancel the event after the time that you set whatever the events disappear or not.
- **Always Activated:** Select to have the event enabled 24 hours a day.
- **Activated only in the following period:** Select and choose a time period to have the event active.



General Motion

Detect any movement in the defined detection zone.

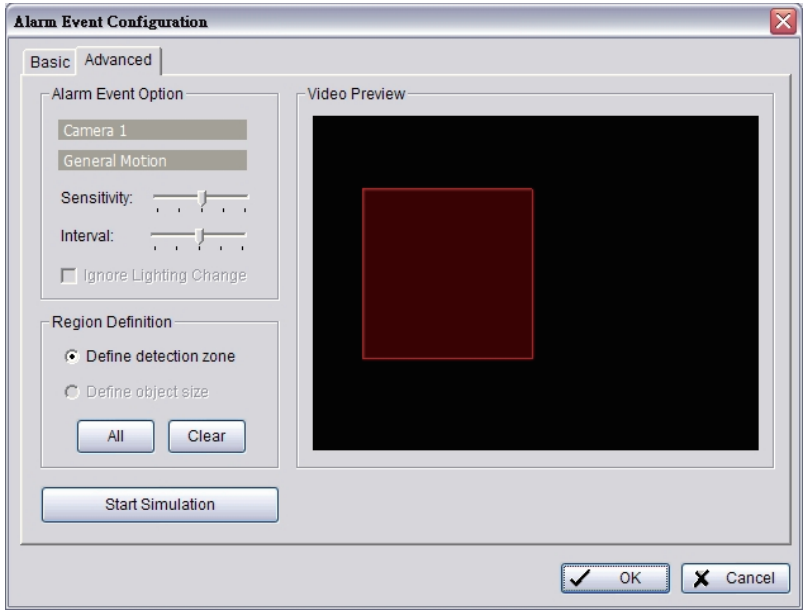
Alarm Event Option:

- **Sensitivity:** Click and move the slider control to the right to increase sensitivity so that a relatively small movement will trigger the alarm. Move the bar to the left to reduce the sensitivity of movement detection. Set up an appropriate Sensitivity value will reduce the chance of false alarm. For example, you can lower the Sensitivity to avoid the alarm being triggered by a swinging tree in the breeze.
- **Interval:** Click and move the slider control to the right to increase interval time so that the alarm will only be triggered when the movement lasts longer. Move to the left to reduce the interval time.

Region Definition:

- **Define detection zone:** To detect General Motion, you have to define a detection zone. Left-click and drag the mouse to draw a detection zone. You may define more than one zone on the screen by repeating the same process. You can also click on the **All** button to select the entire detection zone.

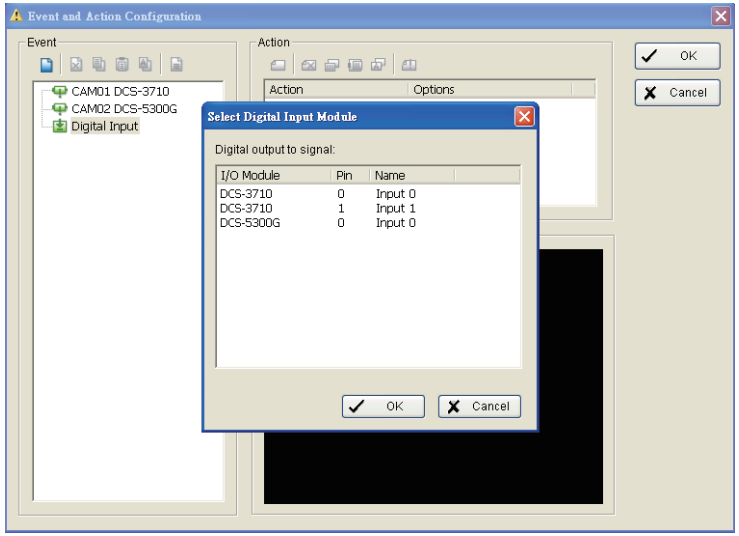
Start Simulation: Click the **Start Simulation** button and test the function on the preview screen.



Digital Input Event

Step 1: Click and highlight the **Digital Input** on the event type list and then click the **Insert Event** icon.

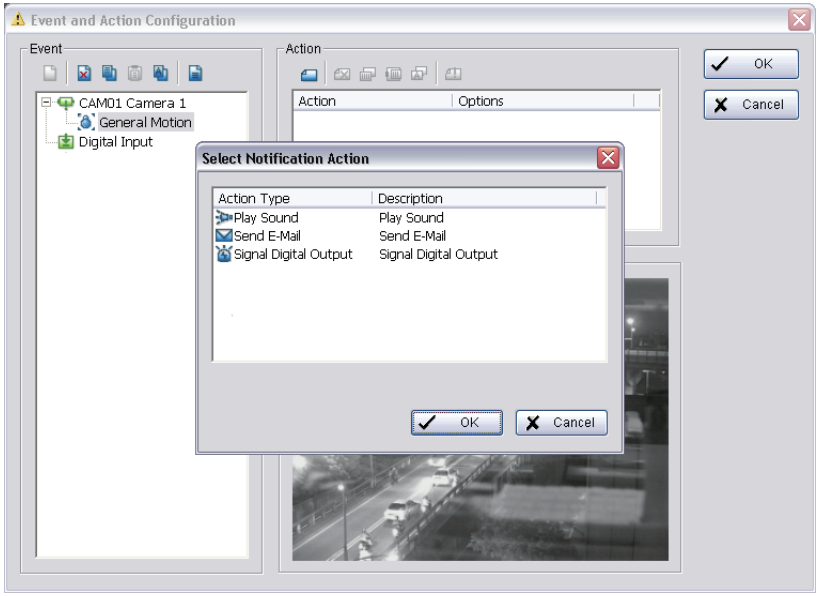
Step 2: Select the device that is connected to your camera(s).



Action

Assign an Action Type

Insert Action: To configure actions responding to an unusual event.



Step 1: Select an event and click the **Insert Action** icon.

Step 2: Select one of the three actions you want and then click **OK**.

1. Play Sound
2. Send E-mail
3. DI/DO

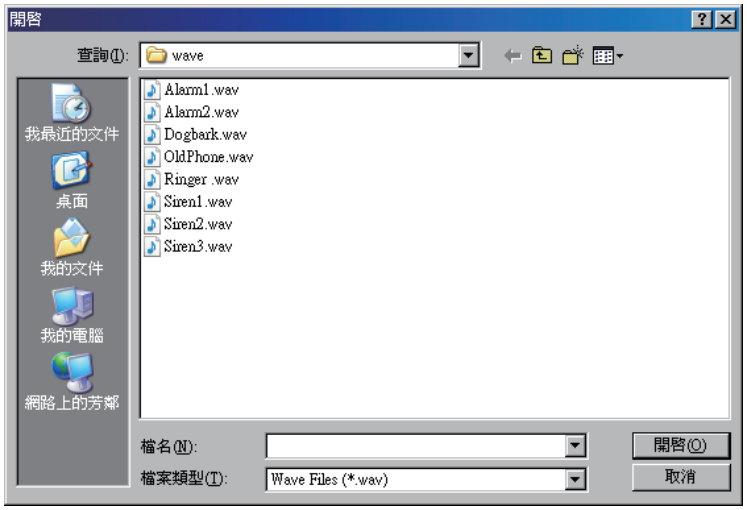
Step 3: Configure the setting of the **Action Type** if needed.

Play Sound

The system will play the sound when an unusual event is detected.

Step 1: Select the **Play Sound** action and then click **OK**.

Step 2: The window below will appear. Select a Wave file (.wav) and then click the **Play Sound** indicator to modify the setting.

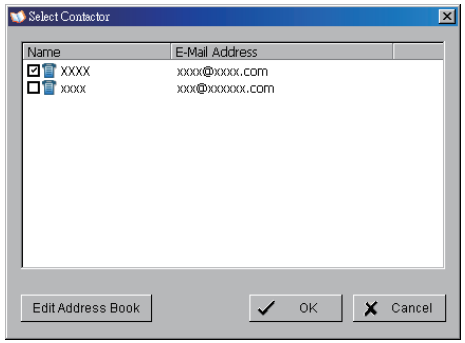


Send E-mail

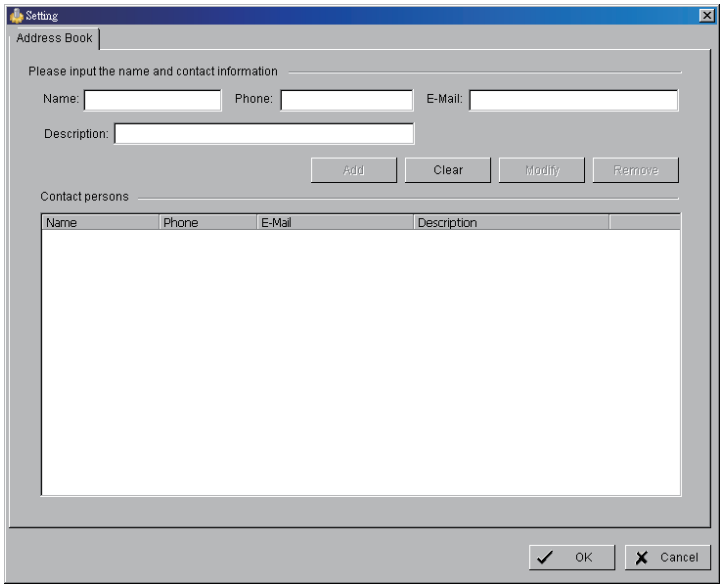
The system will send an E-mail immediately to given accounts indicating the type of event, the time, and attaching a picture taken while the event is detected.

Step 1: Select the **Send E-mail** action and then click **OK**.

Step 2: From the **Select Contactor** window select the email address(es) you want to send alerts to.

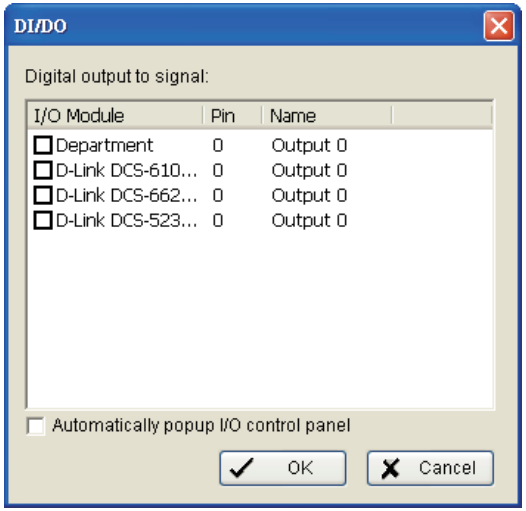


Edit Address Book: Click the **Edit Address Book** button to add, delete, or edit contacts.



DI/DO

Use to trigger Digital Input/Output devices that are connected to the camera(s), such as alarm lights and sirens.



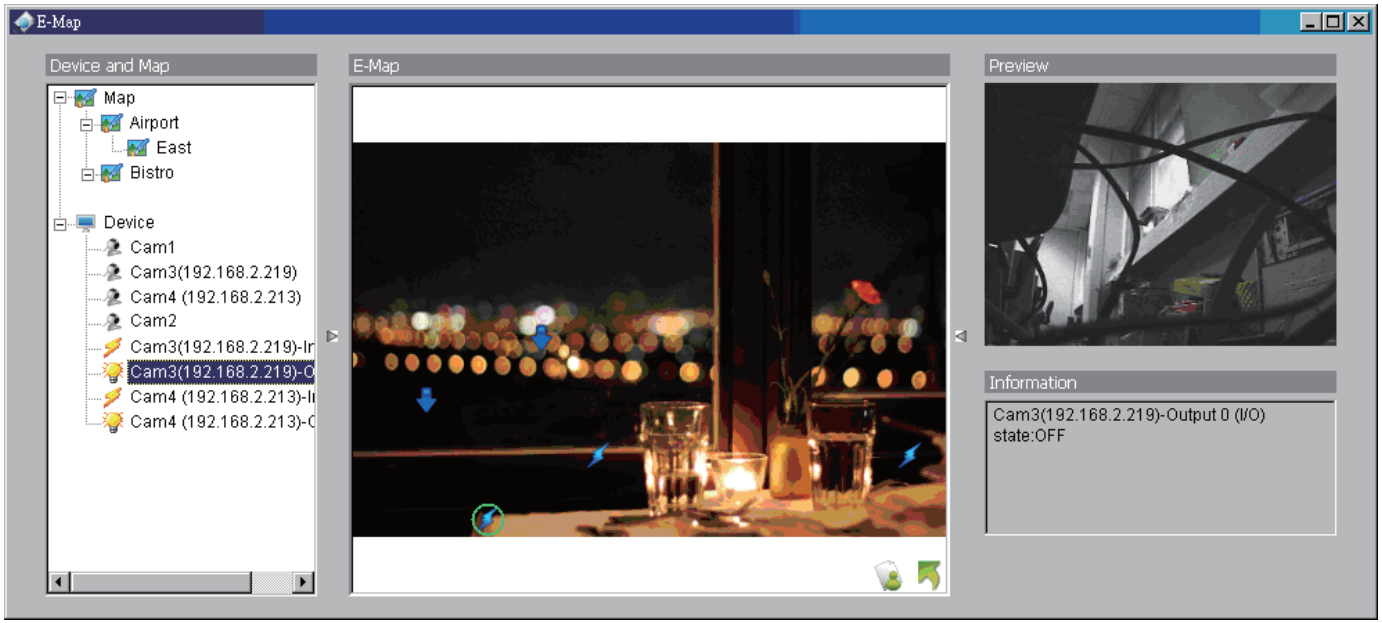
Step 1: Select the **DI/DO** action and then click **OK**.

Step 2: Select **Digital Input Module** and then click the “DI/DO” indicator to modify the setting.

Step 3: Select the device that is connected to your system, that is, the PC you are working with. You can enable the Automatically popup I/O control panel check box to obtain the correspondent panel to monitor the I/O status.

You should adjust the setting of I/O device in **General Setting and Utilities** > **Setting** > **I/O Device** first, the I/O control panel will display the device status based on it. You can also adjust the size of the panel by dragging a mouse or click the on the right top of the display window.

E-Map



With E-Map, users can track the actual location and alarm status easily for each camera and receive instant response when the event happens. The arrows and lightening icon on E-Map represent cameras and I/O devices and these icons will turn red once they are triggered by alarms.

To launch E-Map application, simply click on **Start** and select **Open E-Map** from start menu to open E-Map window.

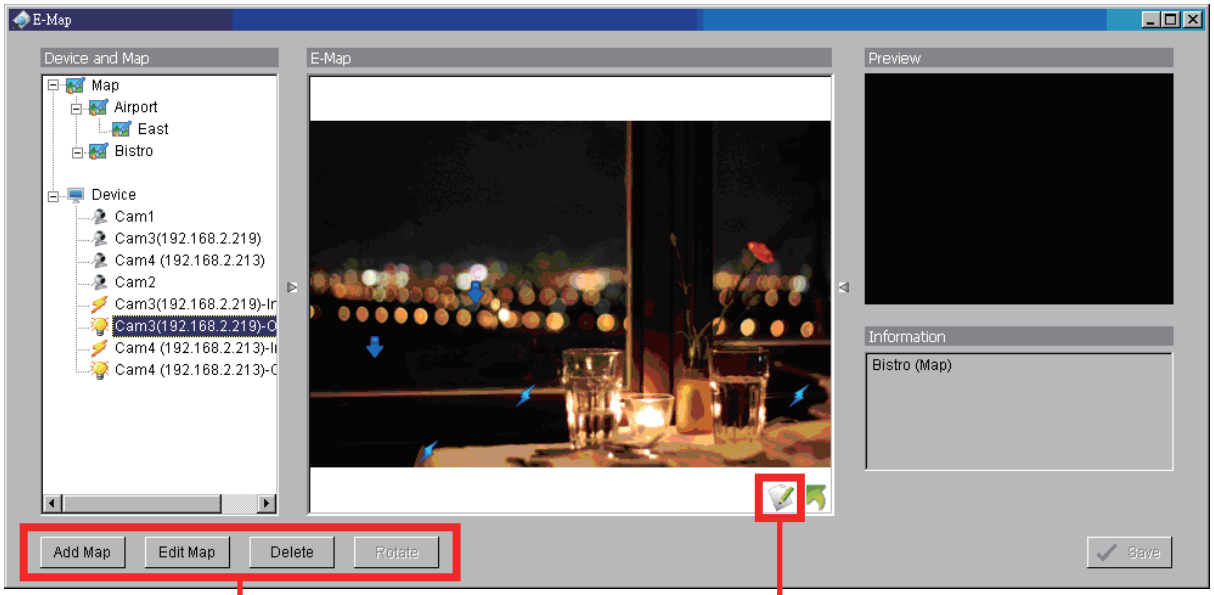
There are 2 modes in E-Map application:

Edit mode: Allow users to add/edit maps and indicators of devices. In Edit mode, the function buttons on the bottom of the window will be active, and then setup the configuration before running E-map function at the first time.

Operate mode: All settings will be activated in this mode.

Edit Mode

You will need to be in Edit Mode to activate the function buttons.



Add/Edit/Delete Map

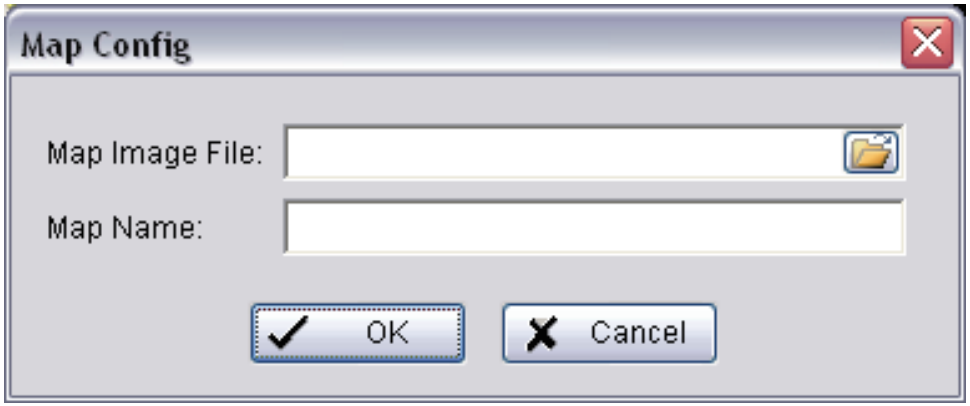
Add E-Map

Step 1: Make sure you are in Edit Mode and all devices are connected.

Step 2: Click the **Add Map** button to load a map image.

Step 3: Select the map file and insert the map name. Click **OK**, and then the map you added appears in the tree structure in the device and map list.

Step 4: The map indicator appears on the left-up corner of parent map. Drag it to the position you want on the map.



Edit E-Map

Step 1: Make sure you are in Edit Mode and all devices are connected.

Step 2: Right-click on the **Map** icon to obtain the option menu to edit map, or just click the **Edit Map** button to open the “Map Config” dialog.

Step 3: Modify the required details and then click **OK** to save configuration.

Delete E-Map

Step 1: Make sure you are in Edit Mode and all devices are connected.

Step 2: Right-click on the **Map** icon to open the option menu to delete map, or just click **Delete** to remove the map from the list.

Note: The root map cannot be deleted.

Add/Rotate/Delete Device Indicator

Add Indicator:

Step 1: Make sure you are in Edit Mode and all devices are connected.

Step 2: Select on the Map icon which you want add device indicator to.

Step 3: Before adding indicator, ensure that the map you want is displayed. Select device from list and directly drag a device to the desired location on the map.

Note: Different device is symbolized by different indicator.

- Camera indicator - digital Input indicator

Rotate Indicator

Step 1: Make sure you are in Edit Mode and all devices are connected. Select device indicator from map or form Device and Map list. The device indicator will be marked with a green .

Step 2: Click the **Rotate** button, the indicator will rotate 45 degree.

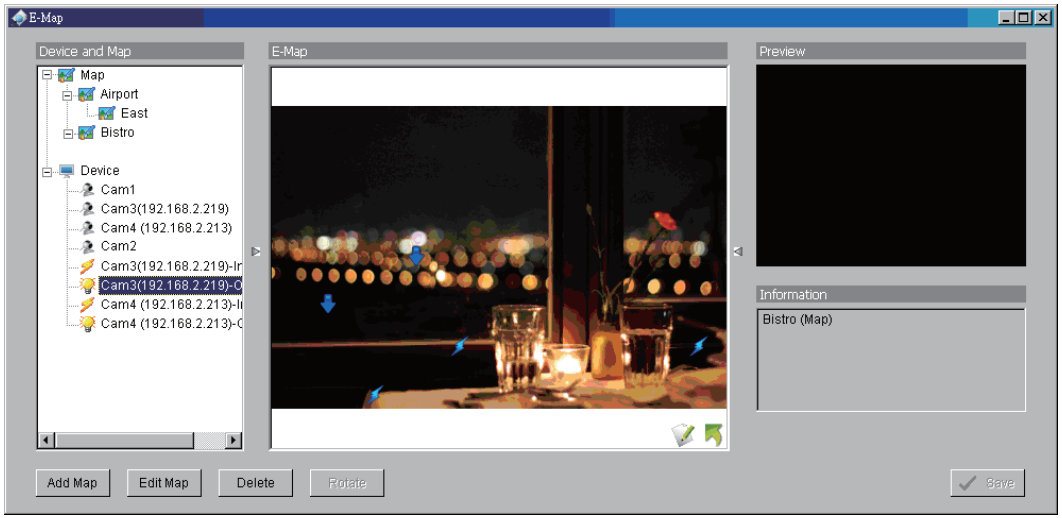
Note: Only camera indicators are allowed to be rotated.

Delete Indicator

Step 1: Make sure you are in Edit Mode and all devices are connected. Select device indicator from map or form Device and Map list. The device indicator will be marked with a green .

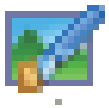
Step 2: Click the **Delete** button, the indicator will be gone.

Operate Mode

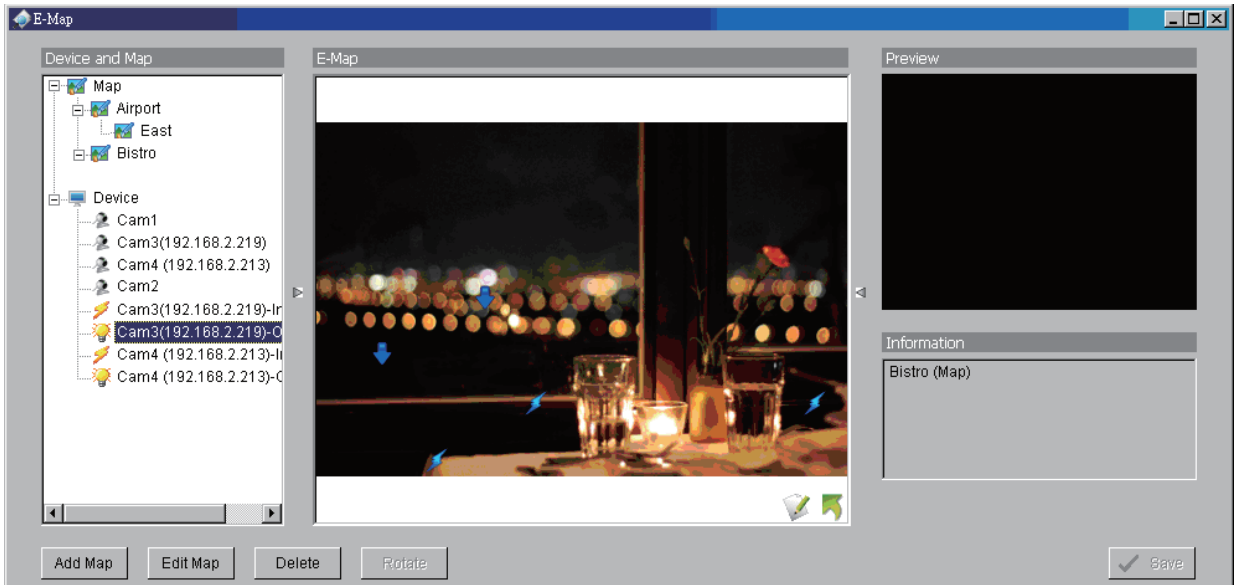


Device and Map Tree list

This window will list all devices and map hierarchies. Click the Device or Map indicator to show related information in the E-Map window.

	Map	Select the map you want to show in the E-Map Window.
	Camera	Select the camera you want to preview video from in the preview window.
	Digital Input	Select to highlight the device with a green ring on the map and show its status in the Information window. If the Digital Input is from an IP camera, the preview window will display live video from the camera.
	Digital Output	Select to highlight the device with a green ring on the map and show its status on the Information window. If the Digital Output is from an IP camera, the preview window will display live video from the camera.

Layout Adjustment



Adjust layout Window

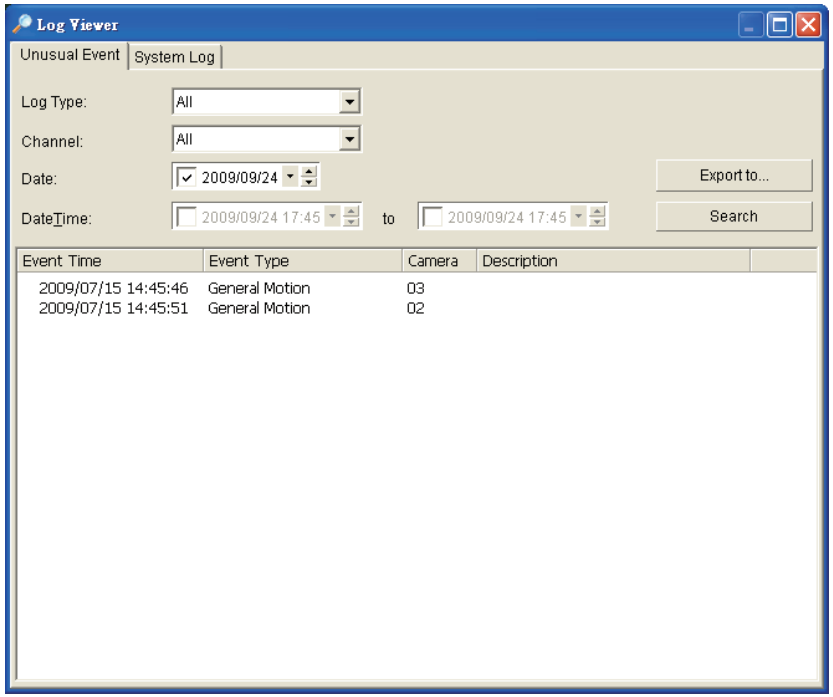
Shrink the window:
Click the triangular indicators to hide the Device and Information windows on the right and left side. Click triangular indicator again to go back to the default setting.

Full screen display:
For a computer system with dual monitors, you can view the Main Console on primary monitor and view the full-size E-Map on a secondary monitor.

Step 1: Click the triangular indicators to hide the Device and Information windows on the right and left side.

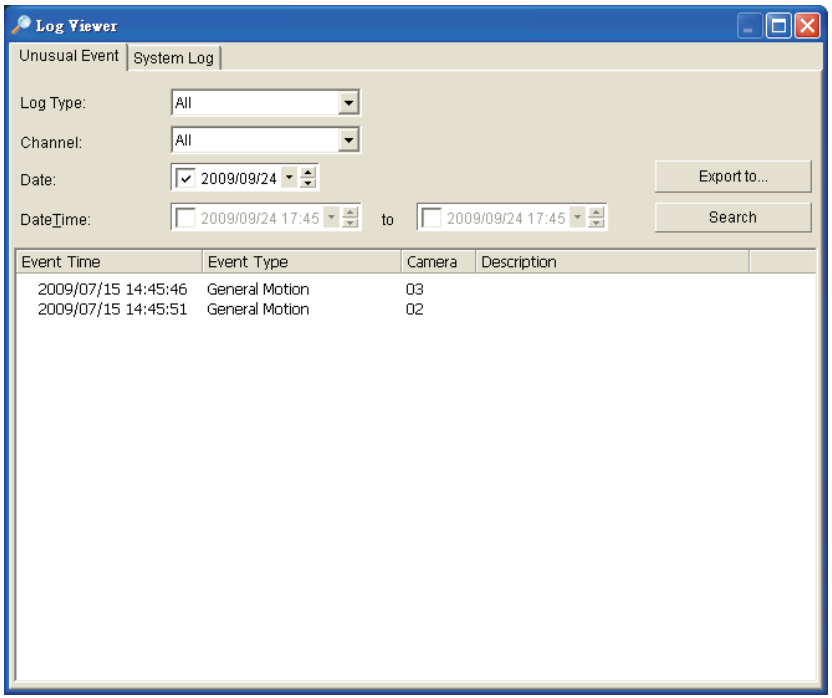
Step 2: Click on located on the upper-right of the window to switch to full screen mode.

Log Viewer



To launch Log Viewer, Click on **General Setting and Utilities** and select **Log Viewer** from the menu. View the unusual event history that had been detected by the Smart Guard System.

Unusual Event



Step 1: Select the type of event you wish to view or select **All** from the drop-down menu to view all types of events. The types include **General Motion**, **Signal Lost**, and **Digital Input Triggered**.

Step 2: Select the camera channel you wish to view or select **All** for all available channels.

Step 3: View the events that happened on a particular date or during a given time period by selecting a search period.

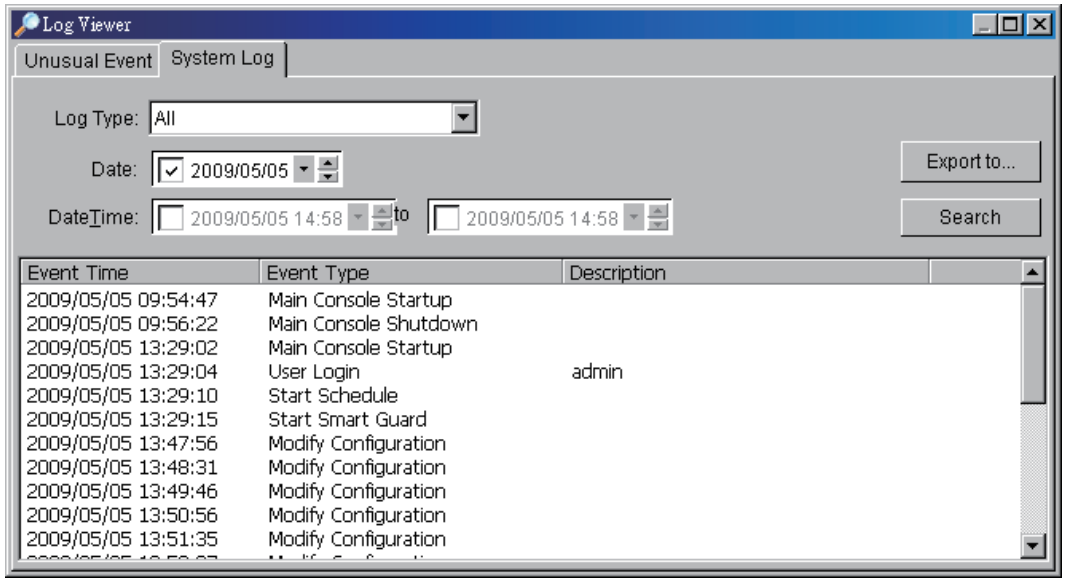
For a particular data: Check the “Date” box and select the date you want to view.
For a period: Check the “Date&Time” box and then enter the date and time.

Step 4: Click **Search**.

System Log

Select the Log Type from the drop-down menu. There are a total of 23 log types to choose from:

1. Main Console Startup
2. Main Console Shutdown
3. User Login
4. User Login Failed
5. Start Schedule
6. Stop Schedule
7. Execute Recycle
8. Enable Channel
9. Disable Channel
10. Start Smart Guard
11. Stop Smart Guard
12. Modify Smart Guard
13. Modify Schedule
14. Modify Configuration
15. Start Live Streaming Server
16. Stop Live Streaming Server
17. Modify Live Streaming Server
18. Start Remote Playback Server
19. Stop Remote Playback Server
20. Modify Remote Playback Server
21. IP Camera Connection Lost
22. Auto Restart Windows
23. Modify E-Map



Step 1: Select the type of event you want to check or select **All** from the drop-down menu for all types of events.

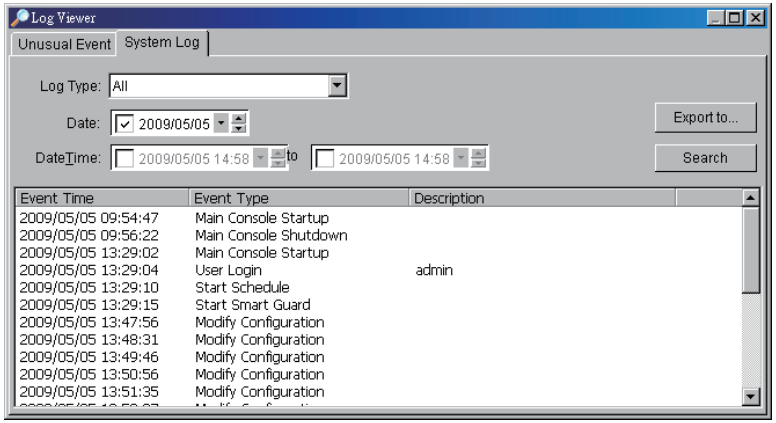
Step 2: View the events that happened on a particular date or during a given time period by selecting a search period.

For a particular data: Check the “Date” box and select the date you want to view.
For a period: Check the “Date&Time” box and then enter the date and time.

Step 3: Click **Search**.

Export

After you search the log you want, you can export it to an Excel (.xls) or a text (.txt) file.

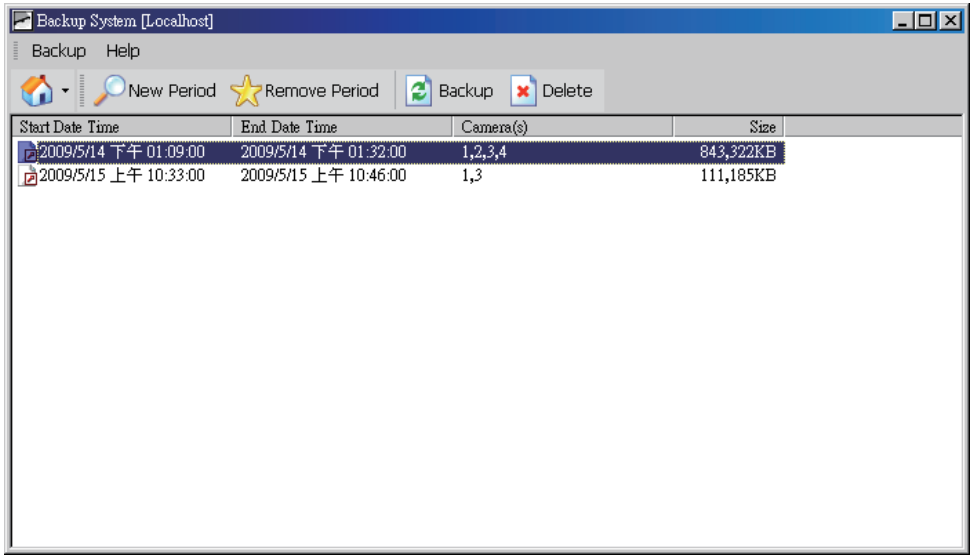


Step 1: Click the **Export To** button.

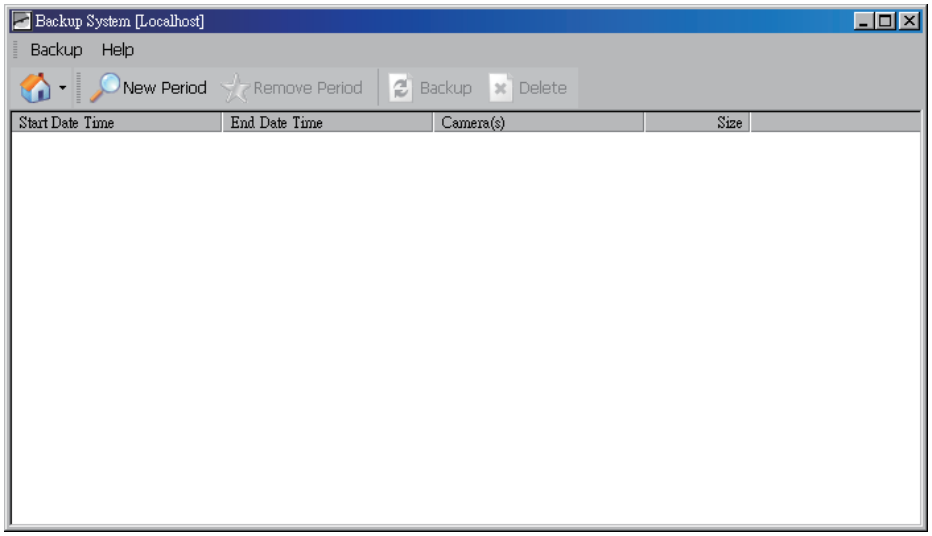
Step 2: Type the file name and select the file format (.xls or .txt).

Backup

The backup function saves video records and other log information.

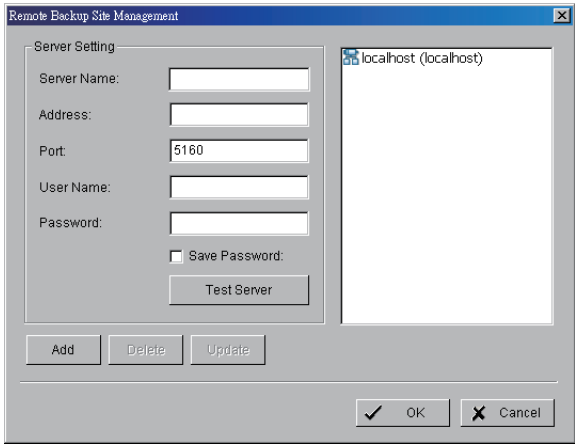


Backup Recorded File(s)



Step 1: Click the **Remote Sever** icon to add and setup the backup.

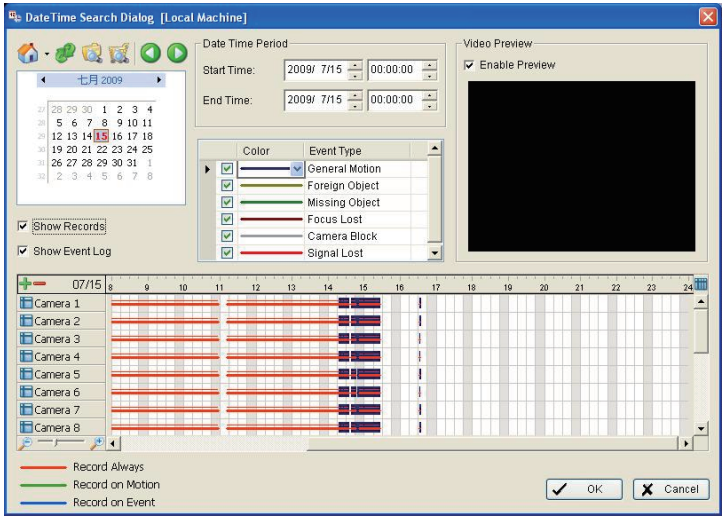
- Enter the IP address or DNS, Port, Username, and Password.
- Click **Add** to add the server.
- Click **OK** to exit the Setting panel.

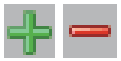


Step 2: To access the Remote Backup Site, click on the icon and enter the username/password of the remote server to access the backup site.

Step 3: Click on **New Period** to open the Select DateTime Period panel.

Step 4: Select the data you want to backup by highlighting the time period. You may also set up a start and end time in the Date Time Period section.



Step 5: Click on the camera number icon to add camera(s) or click  to add/ delete all channels.

Step 6: Check the Enable Preview box to display the preview of the video you selected.

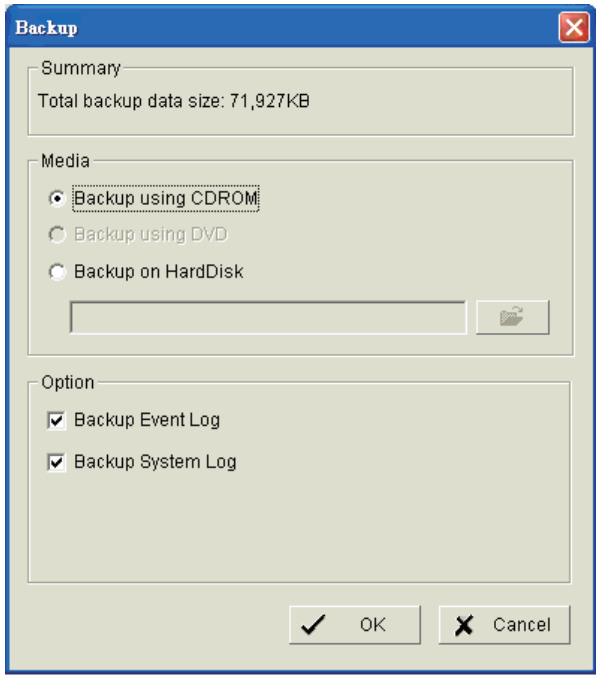
Step 7: Click **OK** when the settings are complete.

Step 8: If there is a data period you do not want, click **Remove Period** to remove the data period from the backup list.

Step 9: Click the **Backup** icon to open the Backup panel.

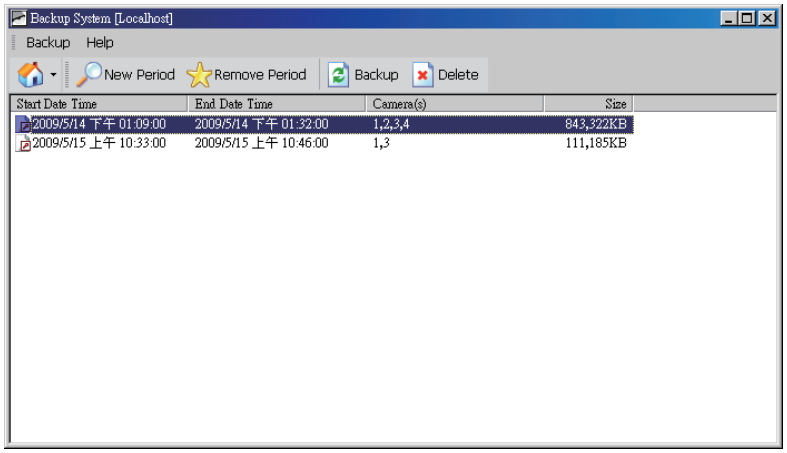
Step 10: Under **Media**, select the path you want to save the file or burn the file directly to a CD (direct CD burning for Windows® XP only), DVD or to a hard drive.

Step 11: Under **Option**, select the log information you would like to backup (Event Log or System Log,), and then click **OK**.



Delete Recorded File(s)

Step 1: Click on **New Period** to open the Select Date Time Period panel.



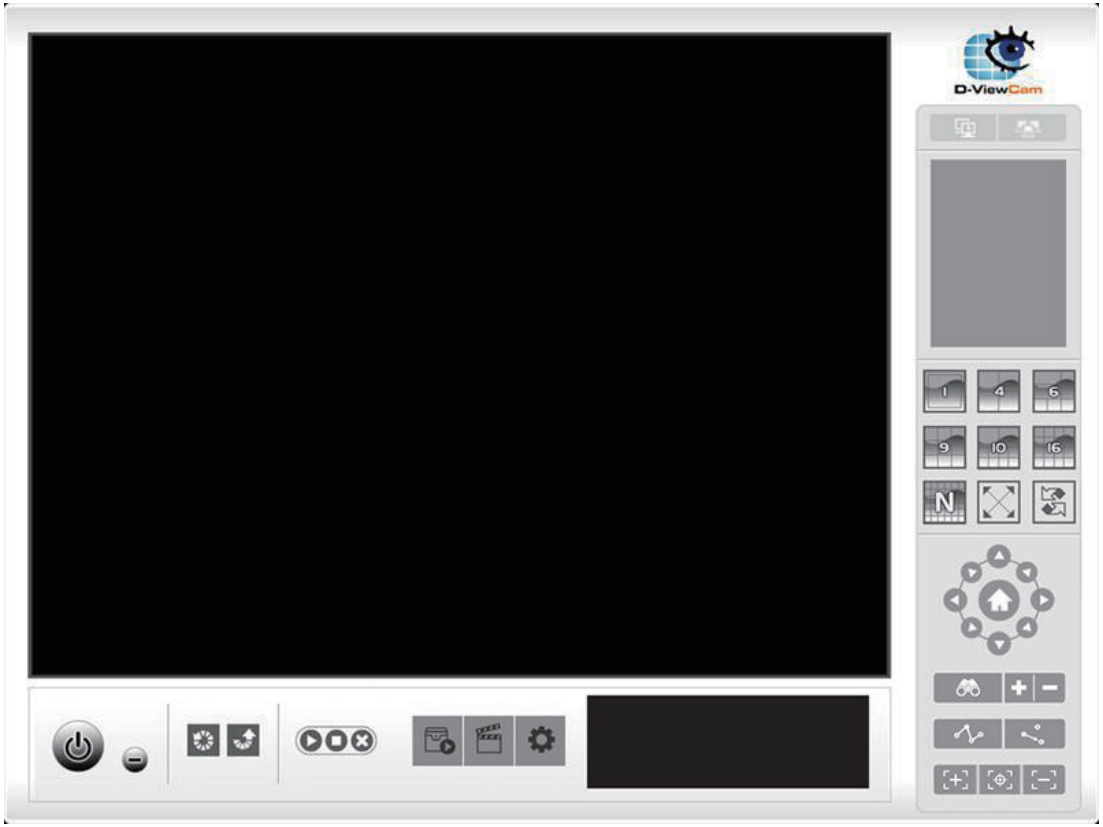
Step 2: Follow steps 3-7 from the previous two pages to select the data period which you want to delete.

Step 3: Click on the **Delete** icon to remove all the data in the backup list from the database.

Note: The deleted video cannot be recovered.

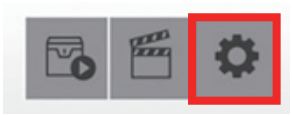
Remote Live Viewer

With the Remote Live Viewer console, remote users may watch up to 64 real-time video channels from remote live streaming servers.

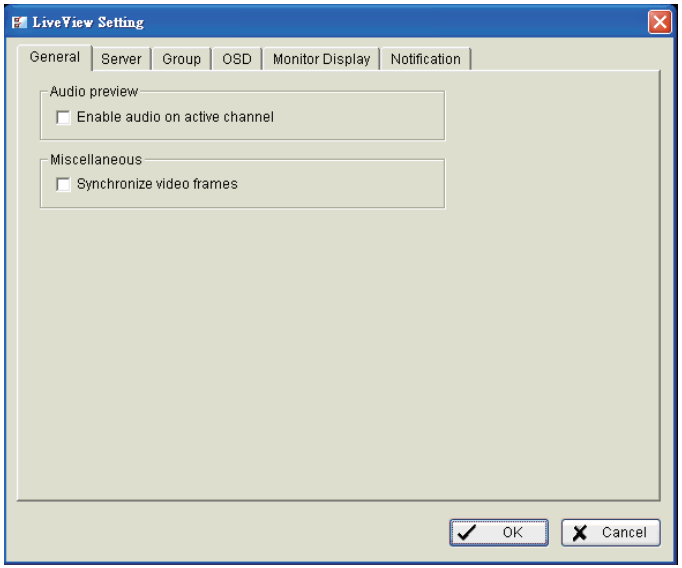


Setting

Click the **General Settings** icon to open settings dialog window.



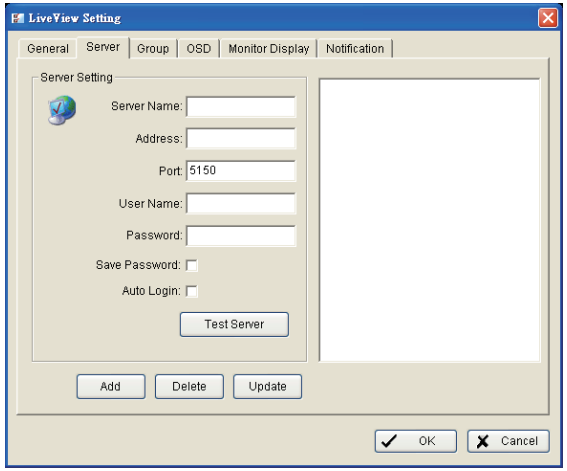
General Settings



Audio Preview
Enable audio on active channel: Select it to enable the audio streaming on active channel.

Miscellaneous
Select to prevent tearing that may occur in the video display. However, this will increase the CPU processing load.

Server Settings



Step 1: Enter the Server Name as preference.

Step 2: Enter the IP Address, Port, User Name, Password to log in the server.

Step 3: Enable the Save Password to login without entering the password again.

Step 4: Enable the Auto Login to login automatically when starting the Remote Live Viewer.

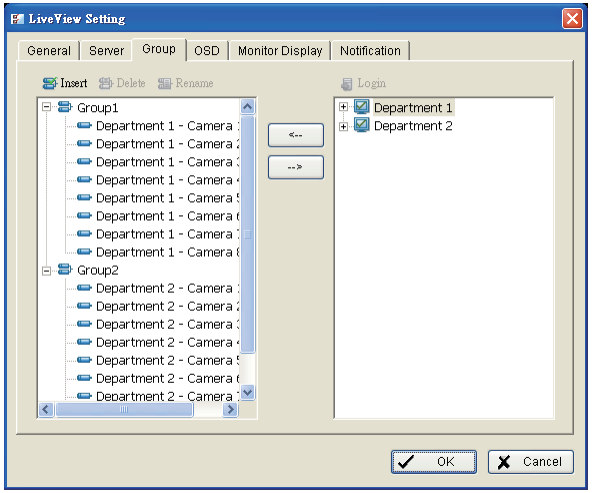
Step 5: Click **Test Server** to check if the server is available.

Step 6: Click **Add** to insert the setting to server list.

Note: To remove the server, select a server on the server list and then click **Delete**.

Group Setting

Allocate different cameras into groups.



Step 1: Log in to all the servers that contain the camera(s) you would like to put into the group(s).

Step 2: Click **Insert** to create and name a new group.

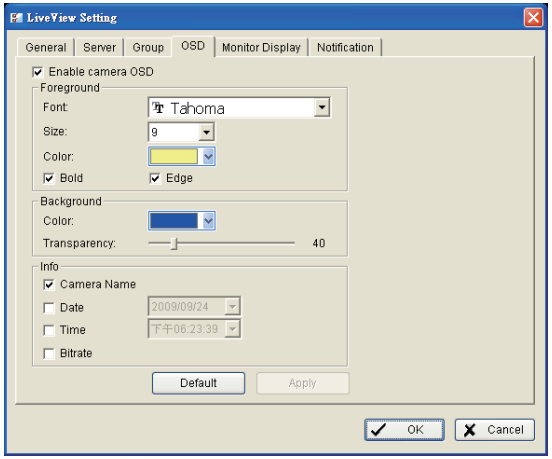
Step 3: From the window at the right, highlight the camera that you would like to add to a group and then click on the **<--** button. Repeat the process until all the cameras you want in the group are added.

Step 4: Click on the **Delete** button to remove a specific group or click the **Rename** button to change the name of a specific group.

Step 5: Click **OK** to save your group.

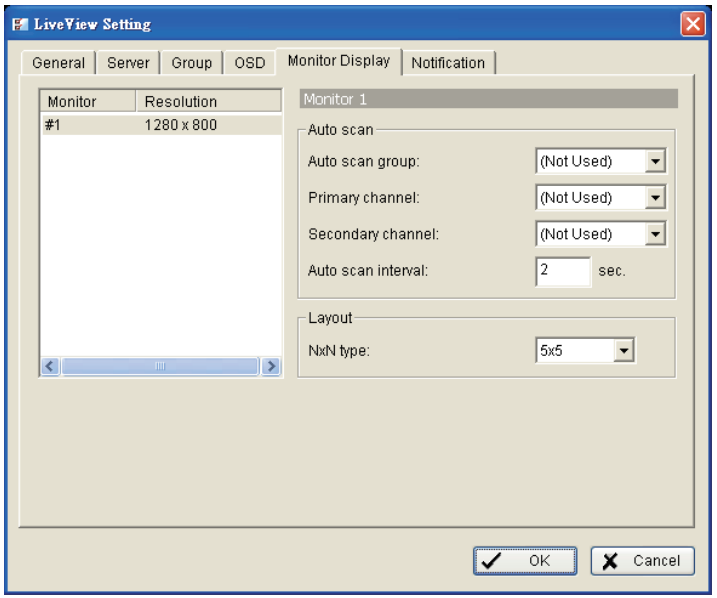
OSD Setting

Select the font style and colors of information displayed on the video.



Monitor Display Setting

Activate auto scan to rotate the channels/cameras on screen. For instance, you may select to show only 4 sub-screens on the live viewer while having 16 channels connected to the system.



Step 1: Select the Monitor connected to the system.

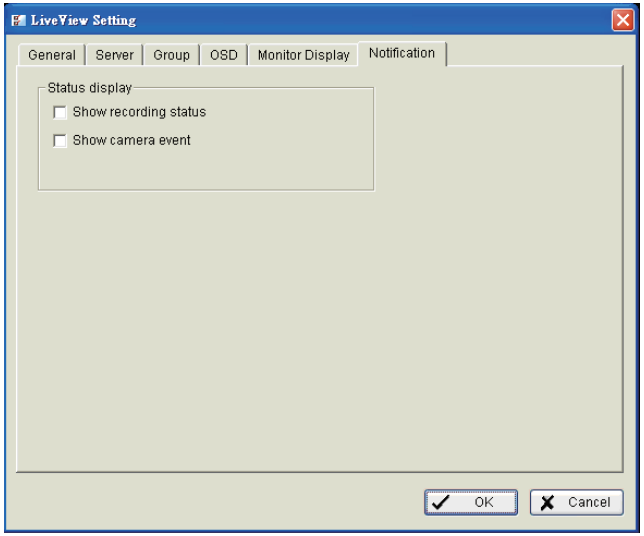
Step 2: From the **Auto scan group** drop-down, select a group.

Step 3: Select a primary channel that will always be on the screen when activating auto scan settings.

Step 4: Select a channel that has secondary priority then primary channel on the screen when activating auto scan settings.

Step 5: From the **Layout** drop-down, select the screen division you want displayed.

Notification Settings



Status display

Show recording status: Check the box to display the recording status on the monitor display.

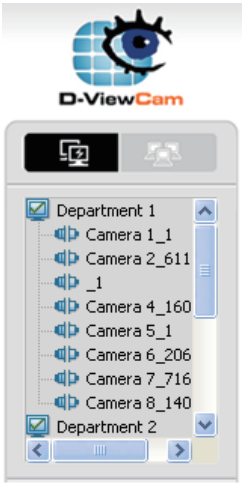
Show camera event: Check the box to display detected events on each channel.

Server/Group/Camera

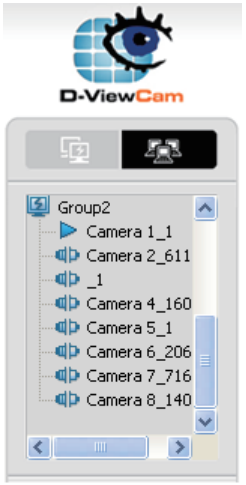
Display a complete list of the server(s), group(s), and camera(s) that are added to the system.

Server View: Display cameras sorted by servers.

Group View: Display cameras sorted by group names.



Server View

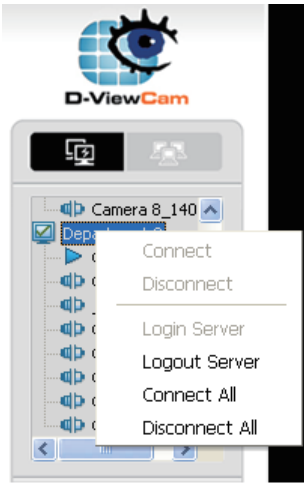


Group View

Login/Logout Server

Option 1: Select a server on the list and then click on the Log In icon to access or the Log Out icon to leave the server.

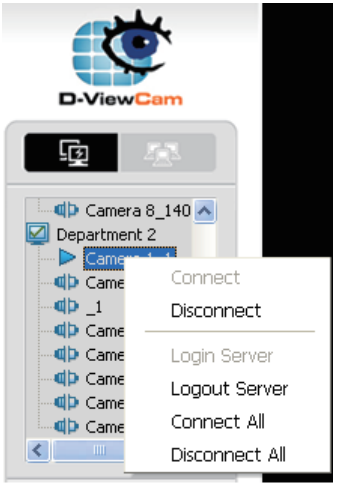
Option 2: On the server list, right-click to open the menu options.



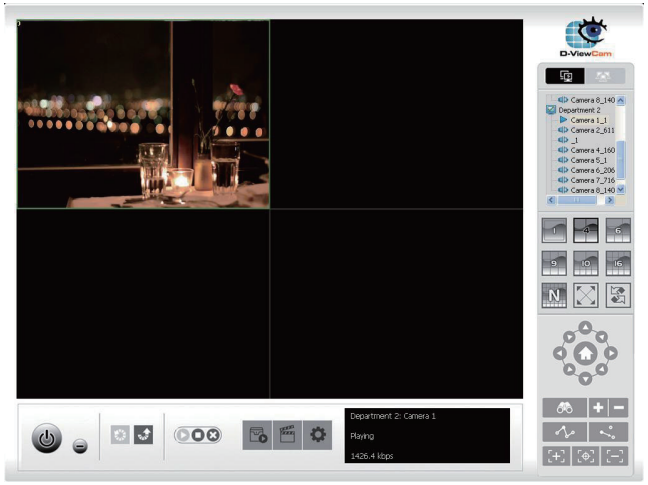
Connect/Disconnect Camera

Option 1: On the server/camera list, double-click on a camera to connect it.

Option 2: On the server/camera list, right-click on a camera to open the menu options to connect/disconnect it.



Option 3: Select a camera from the list and drag it to where you want the image to be displayed.



PTZ Control

Control the movement of PTZ cameras. With cameras that support PTZ control, you can move, zoom, patrol, adjust the focus, and set preset points of the cameras.

Preset/Go

Adjust the camera view and click on the **Set** icon and save the view as preset point 01. Adjust the camera view again and set up the preset point 02. Repeat the process until finish setting up all preset points. Enter any names you want instead of the preset point 01, preset point 02, preset point 03…, click on the **Go** icon to view the preset points.

Note: To change the speed settings of your PTZ camera, click on **Main Console** > **General Setting and Utilities** > **Setting** > **PTZ Config**.

Zoom

Click on the **+** and **–** signs to zoom in and zoom out the view.

Focus

To focus near means objects that are closer will be clearer than the objects that are further away. On contrast, to focus far means objects that are further will be clearer than the objects that are closer. Click on the **Focus** icon and select auto focus if you want the system to decide the focus point for you.

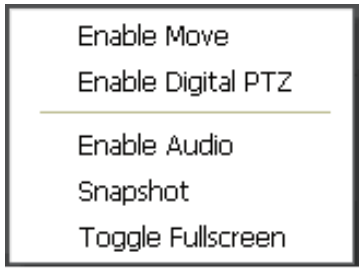
Patrol

To have your PTZ camera to patrol around pre-defined path of preset points, please click on **Patrol** button to start/stop patrol.

Note: To setup a patrol path, please setup on **Main Console** > **General Setting and Utilities** > **Setting** > **PTZ Config** > **Patrol**.

On Screen Menu

Right-click on the camera screen and get the “On Screen Menu”, from which you can quickly adjust the setting of camera.



Enable Move

With cameras that support PTZ, the function allows you to use your mouse to control the PTZ functions by clicking on the display screen. To enable, click the **Enable Move**. To disable, click **Disable Move** to cancel this function.

Enable Digital PTZ

To enable the digital PTZ functions of the video, select **Enable Digital PTZ**. Use your mouse wheel or click on the **+** and **–** signs to zoom in and zoom out on the camera. The square flashing on the video grid indicates the corresponding view of the camera.

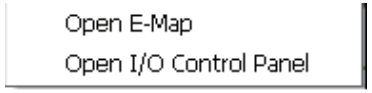
Snapshot

The snapshot function captures a specific video image to the clipboard or to a file you can save to your computer.

Toggle Fullscreen

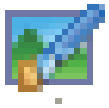
Switch to view video with full screen display. To disable the function, right-click on screen and uncheck this option or simply press **ESC** to go back to original window.

Start Monitor



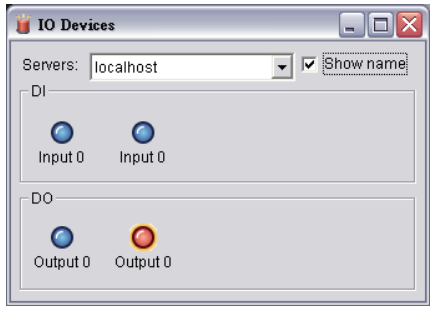
E-Map

Select **Open E-Map** to open the E-Map window.

	Map	Select the map you want to show on E-Map Window.
	Camera	Select the camera you want to preview video and mark an indicator on E-map.
	Digital Input	Select to highlight the device with a green ring on the map and show status on the Information window. If the Digital Input is from an IP camera, the preview window will display live video from the camera.
	Digital Output	Select to highlight the device with a green ring on the map and show status on the Information window. If the Digital Output is from an IP camera, the preview window will display live video from the camera.

I/O Control

Select to open the I/O control panel. The panel allows you to control DO devices remotely.



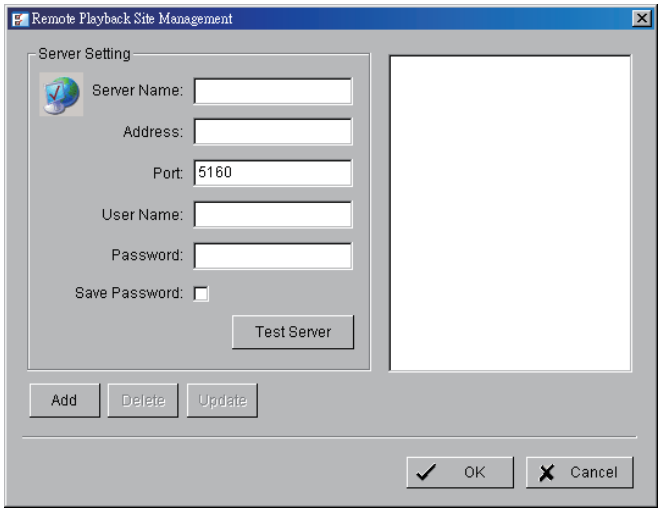
Note: Adjust the setting of I/O device in **Main Console** > **General Setting and Utilities** > **Setting** > **I/O Device** first, the I/O control panel will display the device status base on it.

Playback

Select to open the Playback panel and view video remotely.

Add Remote Playback Site

Click the **Remote Sever** icon can go to remote playback site management to add and setup the remote playback site.



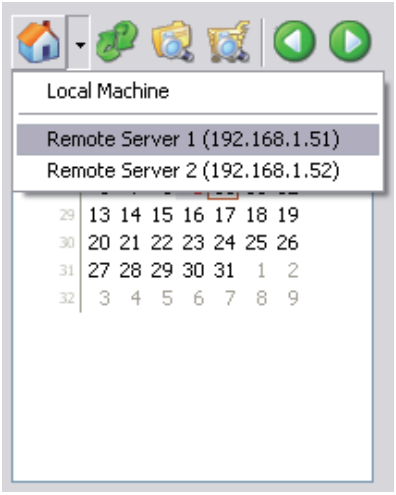
Step 1: Enter the IP address or DNS, Port, Username, and Password.

Step 2: Click **Add** to add the server.

Step 3: Click **OK** to exit the Setting panel.

Access Remote Playback Site

Go to Date/Time Panel and click on the icon on the top of the display window to access the Remote Playback Site



Web View

Note: Make sure the Live Stream Server is enabled.

Server IP

Open Internet Explorer and enter the IP address or DDNS “name” of the server followed by the connecting port.
Example: http://192.168.1.16:8080/

Note: 192.168.1.16 is the IP address of the server.
8080 is the port specified in “Use Default Web Server” in Network Service.

Remote Live Viewer

Click this icon to use **Remote Live Viewer**. Refer to page 99.

Remote Playback

Click this icon to use **Remote Playback**. Refer to page 112.

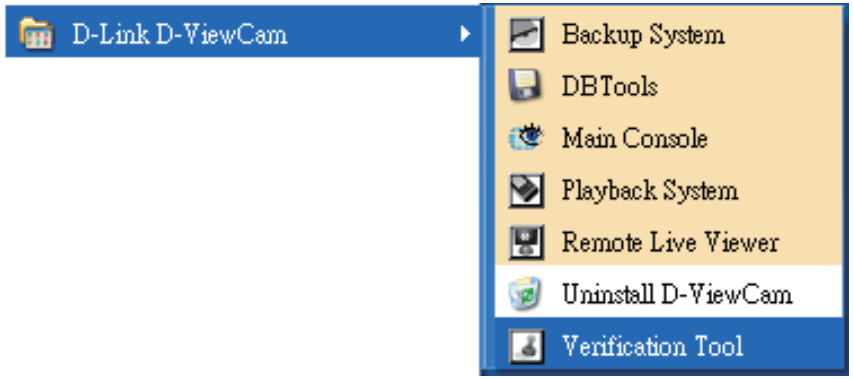
Utilities

Verification Tool

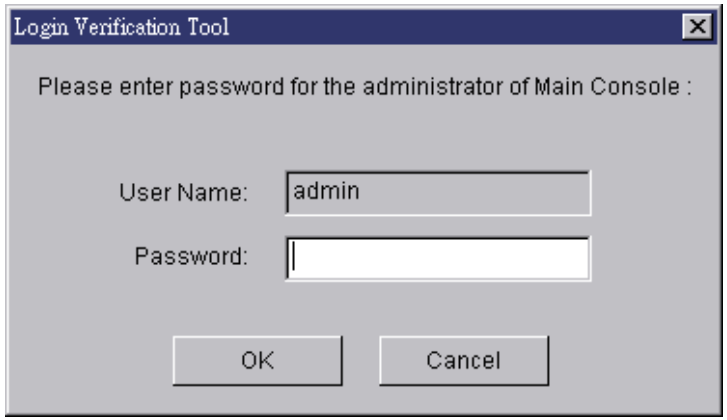
The Verification Tool verifies whether the data created by the system be tampered with or not. It is the process by which a digital watermark (a digital signature) is added to each recorded video frame to ensure its authenticity.

The 3 types of data that is verified by the Verification Tool are:
1. File in (.dat) (.264) format will be displayed as .
2. File in (.avi) (.asf) format will be displayed as .
3. File in (.bmp) (.jpg) format will be displayed as .

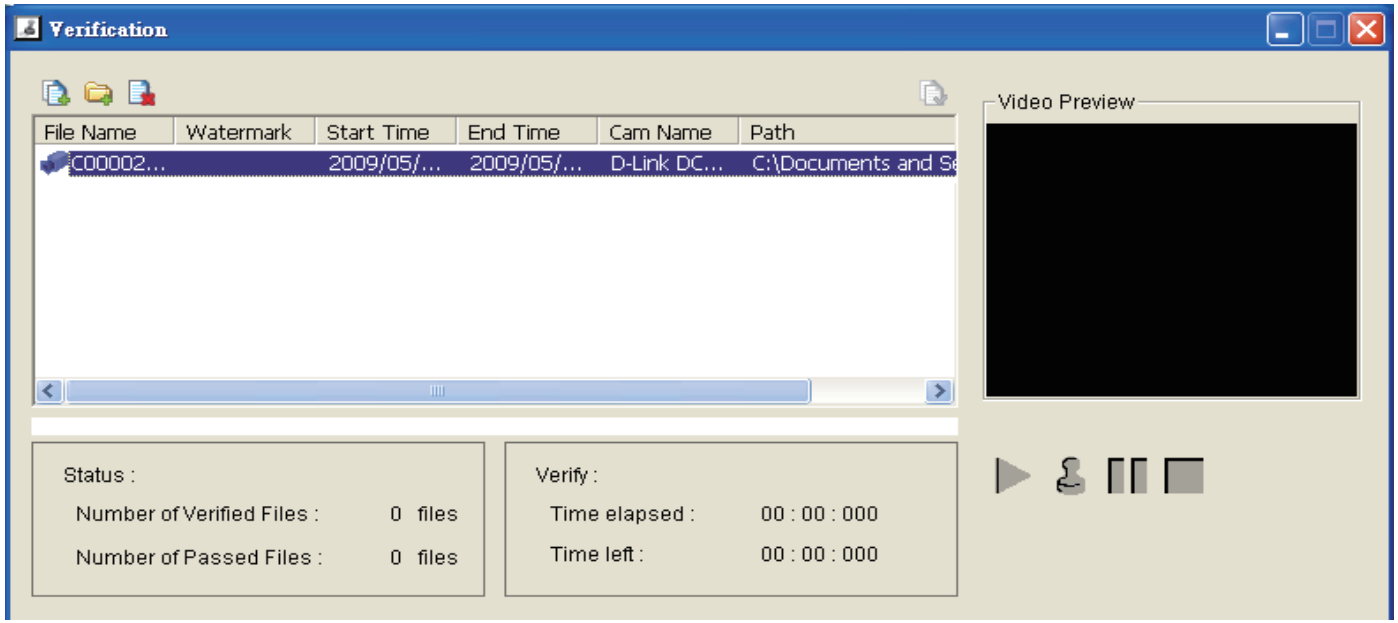
Step 1: Go to **Start > All Programs > D-Link D-ViewCam > Verification Tool**.



Step 2: Enter the Username and Password to log in.



Overview



Add File: Click to insert a file to the list for verification.

Add Folder: Click to choose a folder with multiple files and then add it to the list for verification.

Remove File: Click to remove the selected file(s) from list.

Select All: Click to select all the files in the list for verification.

Video Preview: To preview the selected file from the verification list. Use **Play**, **Verify**, **Pause** and **Stop** for preview.

Note: Preview of .bmp and .jpg formats are not allowed.

Verifying Image/Video

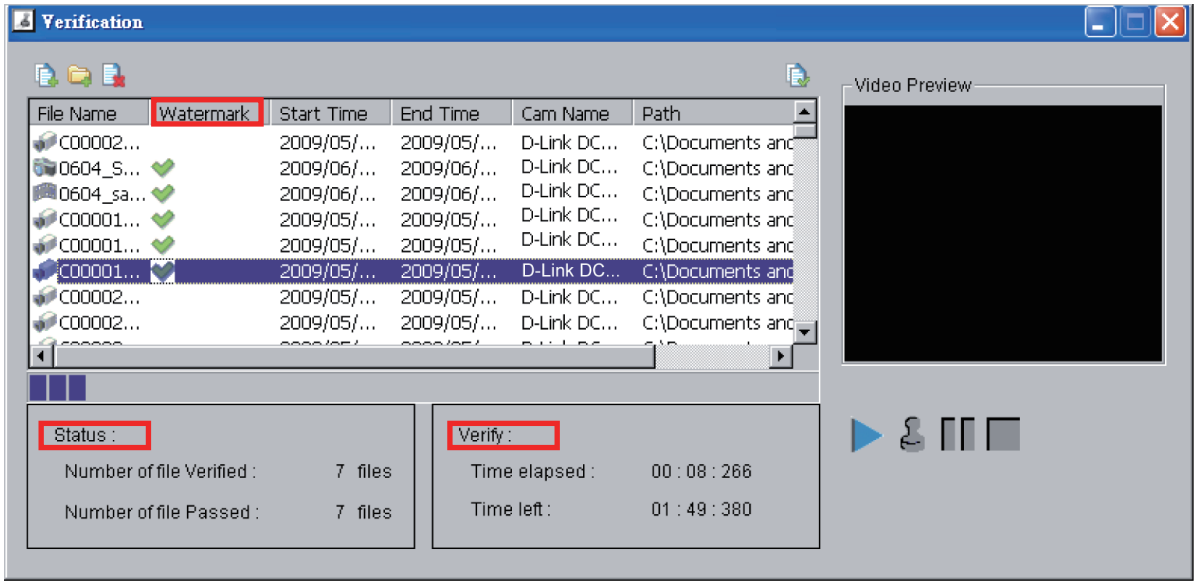
Step 1: Select a single or multiple files for verification.

Step 2: Click verify to start verification.

Step 3: The verification results will be displayed in the **Watermark** column.

Note: If the file passes the verification, it will show .

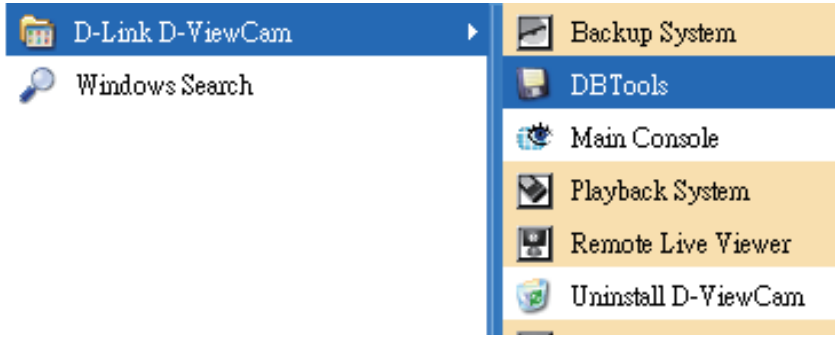
Note: If the file was tampered with, it will show .



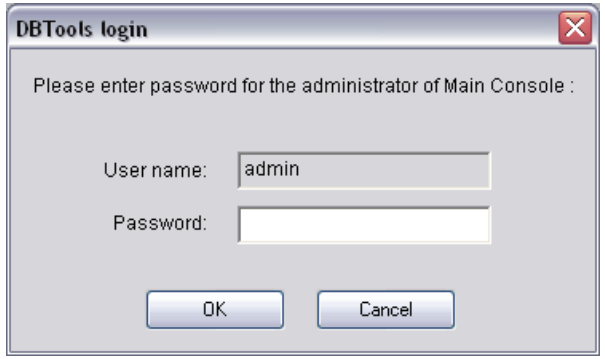
Step 4: The **Status** and **Verify** fields will display the information related to verification.

DB Tools

Step 1: Execute DB Tools from the Start menu.



Step 2: Enter the administrator password and click **OK** to log in.



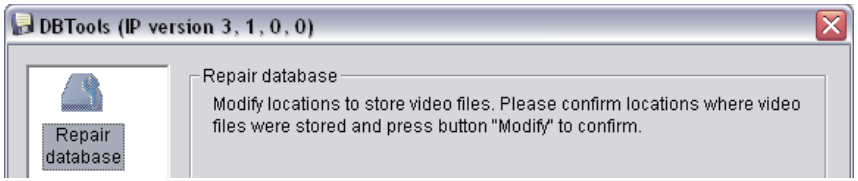
Repair Database

This page has three repair methods: **Modify Location**, **Verify Only**, and **Repair**.

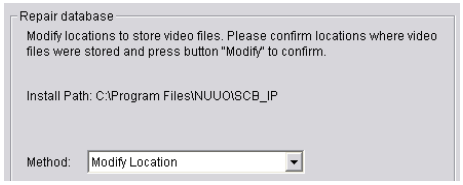
Modify Location
Playback system can recognize all recording video in the folders which list on **Main Console** > **Config** > **Setting** > **General** page. For some reason, users need to use the Playback system to open recording video beyond storage location setting.

Note: The default storage location is in your installation directory, (ex: C:\Program Files\SCB_IP).

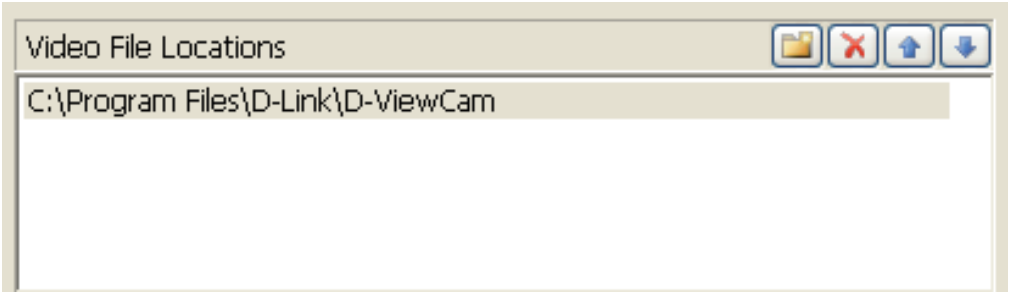
Step 1: Select **Repair Database**.



Step 2: Select **Modify Location** from the Method drop-down menu.



Step 3: Click on the button and select a new location.
To remove a database location, select it from the list and click on the button to delete location.

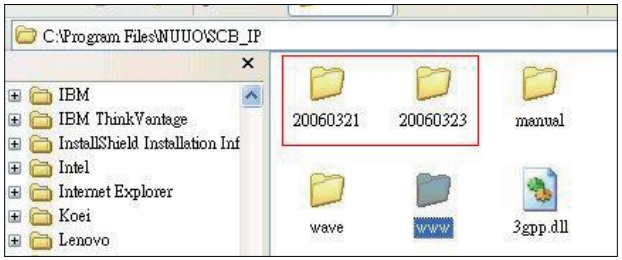


Step 4: Click on the **Modify** button to save the location.

Example of modify database

In certain cases that video data needs to be transfered from one PC to another, you will need to perform the following procedure:

1. Manually copy all recorded video data files from the default installation path or other user-defined storage path of the old PC.



2. Manually paste all recorded video files to the default installation path or other user-defined storage path of the new PC.

3. Follow previous page to add new location on new PC.

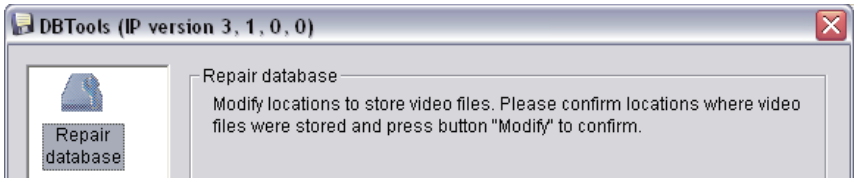
4. Old recorded video data can be viewed by playback system on the new PC.

For verify and repair proposes:

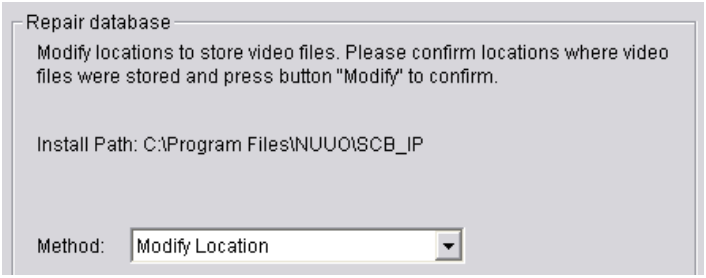
This tool is used to check and repair your database and recording video with below problems:

(1) If there are records in database, but no video file, use DB Tools to delete records.
(2) If there are video files but no record in database, use DB Tools to rearrange the database and find these records.

Step 1: Switch to **Repair Database**.



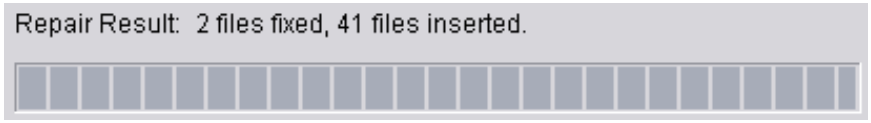
Step 2: Select **Modify Location** from the Method drop-down menu.



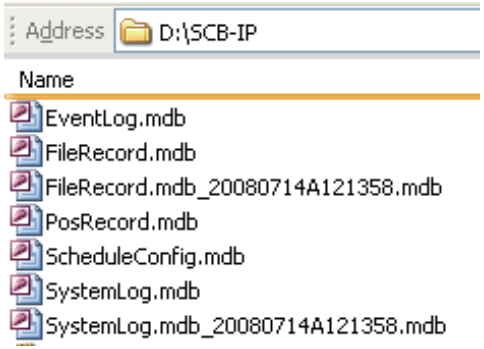
Step 3: Check the video location windows. The system will list all video locations in table, but if there are any omit, please use to insert. After inserting location, the system will show a file count table.

Step 4: Select **Verify Only** and then click **Verify**. This method will only check the files without modify. Verify result will show how many files broken or missing.

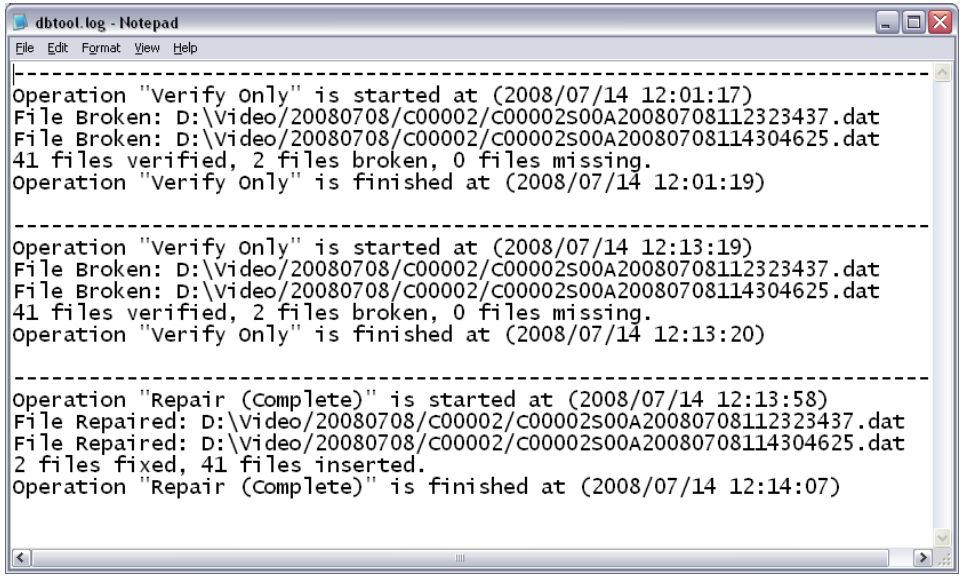
Step 5: Choose the method of “Repair (Complete)”, and click “Repair” to repair. The Repair Result will show how many files are fixed and inserted.



Step 6: The repair new database will replace old ones. And the original database will change file names with extend repair date and time as below.



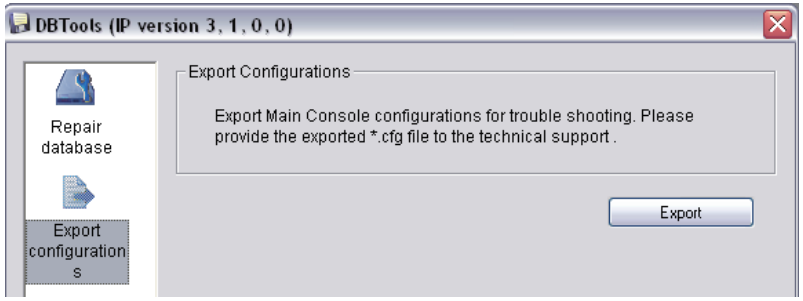
Note: Open Log is a tool to record repair database recodes. It will recode repair method, file operation, strat time and end time.



Export Configurations

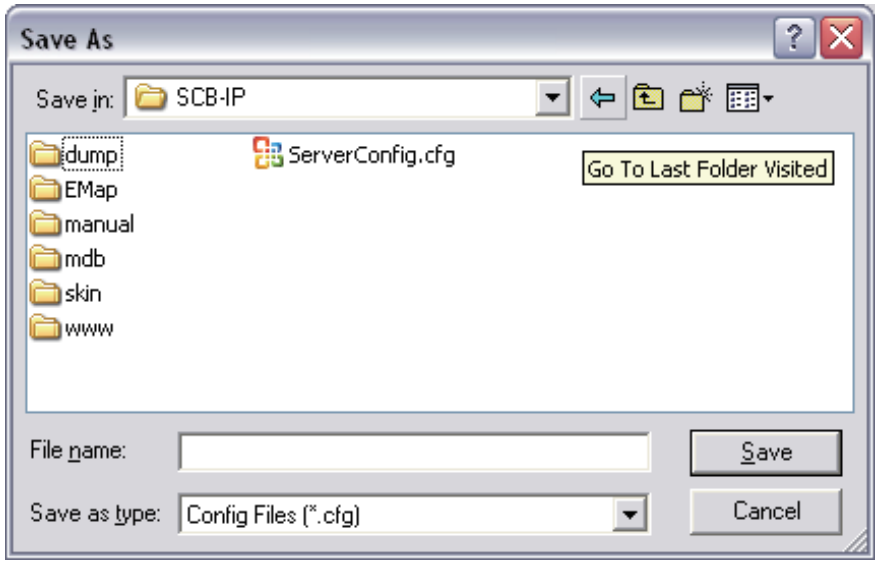
This tool is used when you want to export all configuration settings to a backup.

Step 1: Click **Export**.



Step 2: Select the location you want to export to and type the name of the config file.

Step 3: Click **Save**.



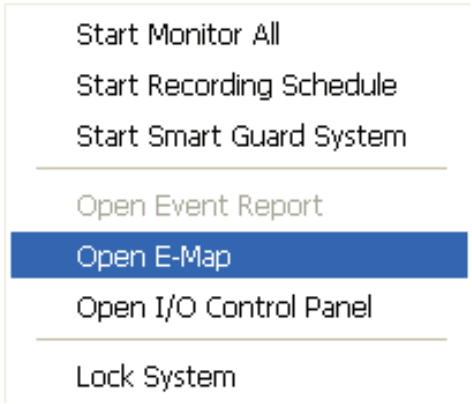
Frequently Asked Questions

1. D-ViewCam software supported languages

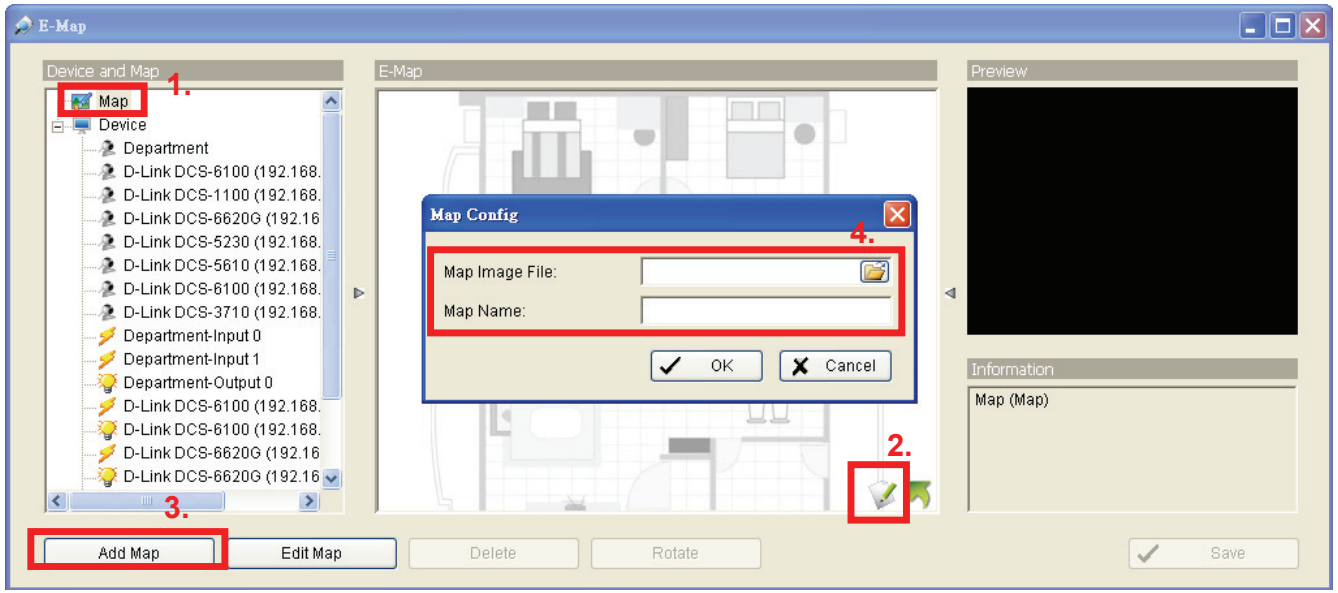
Bulgarian	Chinese (Simplified)	Chinese (Traditional)	Czech	Danish
English	Finnish	French	German	Greek
Hungarian	Italian	Japanese	Korean	Norwegian
Persian	Polish	Portuguese (Brazil)	Portuguese (Standard)	Romanian
Russian	Slovak	Slovenian	Spanish	Swedish
Thai	Turkish			

2. How do I set up E-Map?

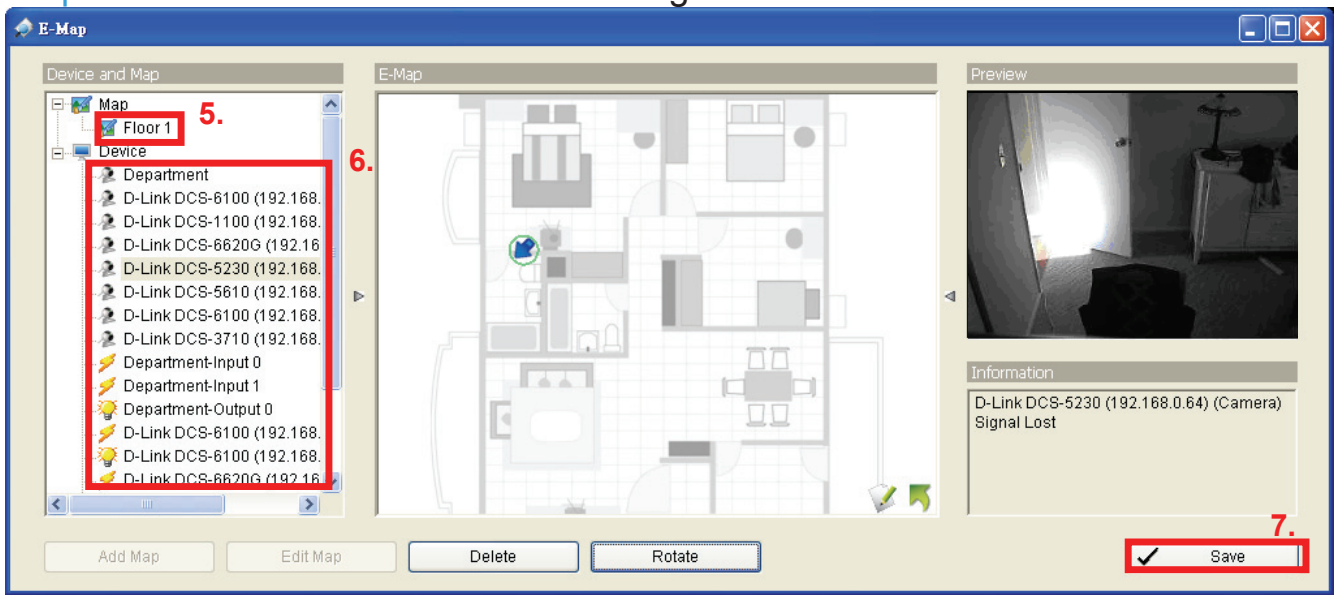
Please go to **<Main Console>**-**<Start>** and then click on **<E-map>**



Step 1: Click on **<Map>**
Step 2: Click on **<Browser/ Edit Mode>**
Step 3: Click on **<Add Map>**
Step 4: Choose a map and then fill in the map name



Step 5: Click on the map you set
Step 6: Draw the camera or IO device to the map
Step 7: Click on **<OK>** to save this setting

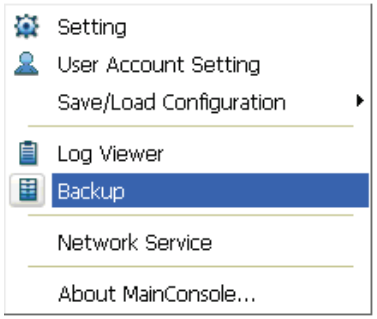


3. How do I backup video files?

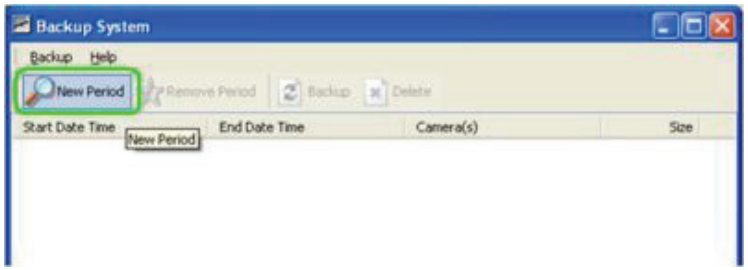
User can backup any period of video record into VCD or other drive location, and view those video via playback.exe which will also be saved in the backup folder.

Please follow those steps to backup your video record:

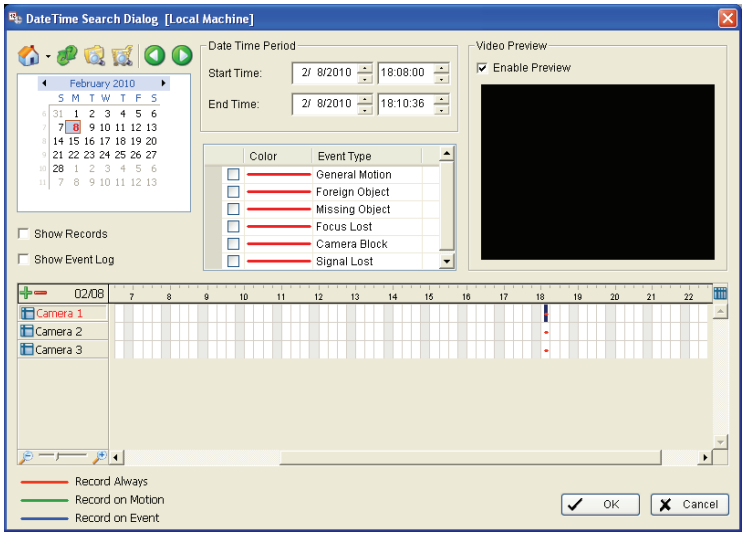
Step 1: Go to **[Main Console]**->**[Config]**->**[Backup]**



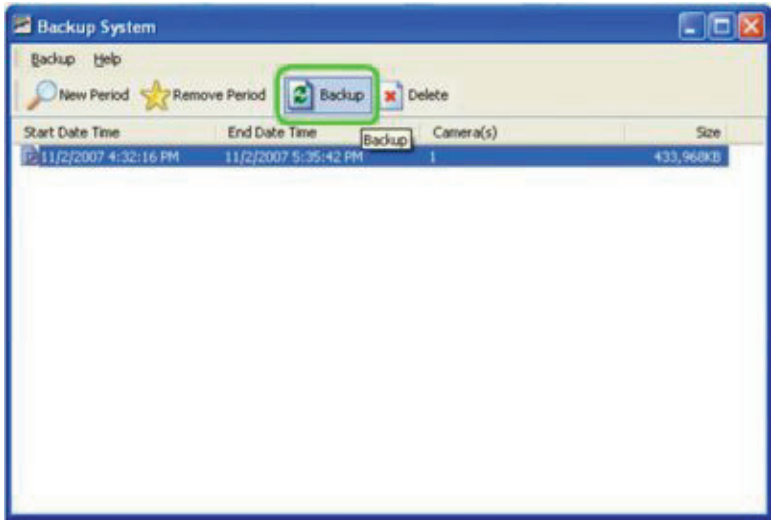
Step 2: Click on **[New Period]**



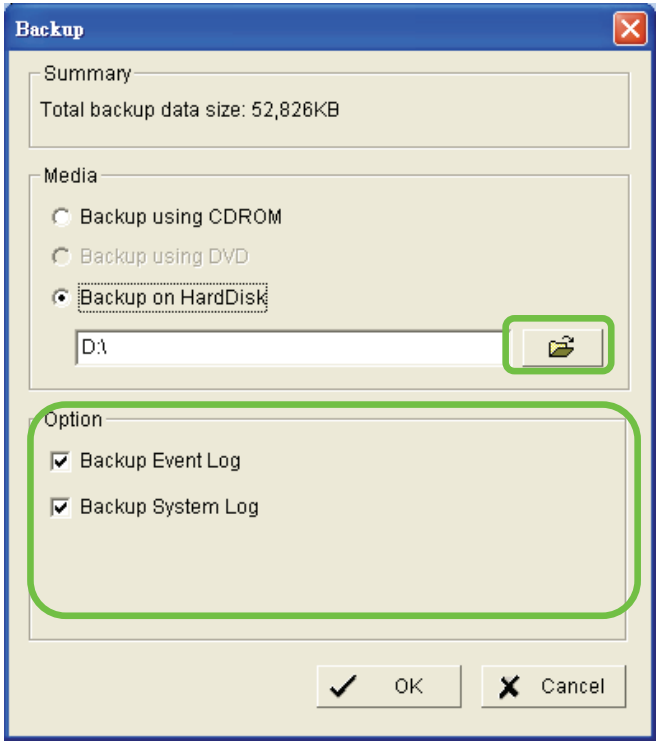
Step 3: Set start and end time for time period
Step 4: Select cameras what you want to backup
Step 5: Click **[OK]**, and period will show

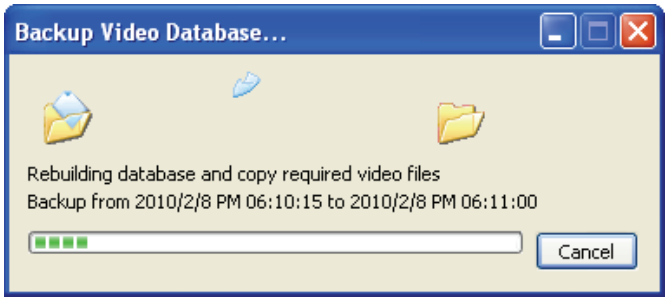


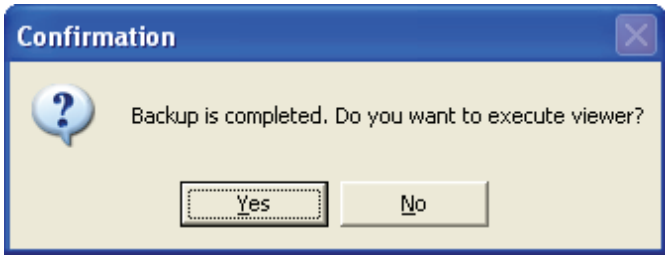
Step 6: Click **[backup]**

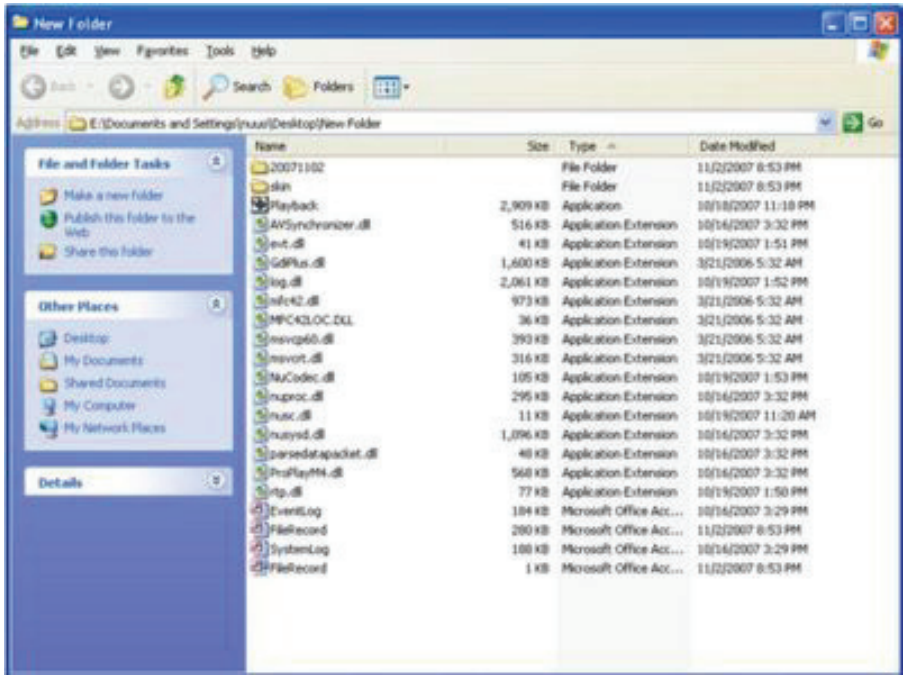


Step 7: Choose a location to backup media
Step 8: Set option to backup log files.
Step 9: Click **[OK]** to execute backup
Step 10: After backup, you can execute the playback.exe to check the backup files




Backup Video Database...
Rebuilding database and copy required video files
Backup from 2010/2/8 PM 06:10:15 to 2010/2/8 PM 06:11:00
Cancel

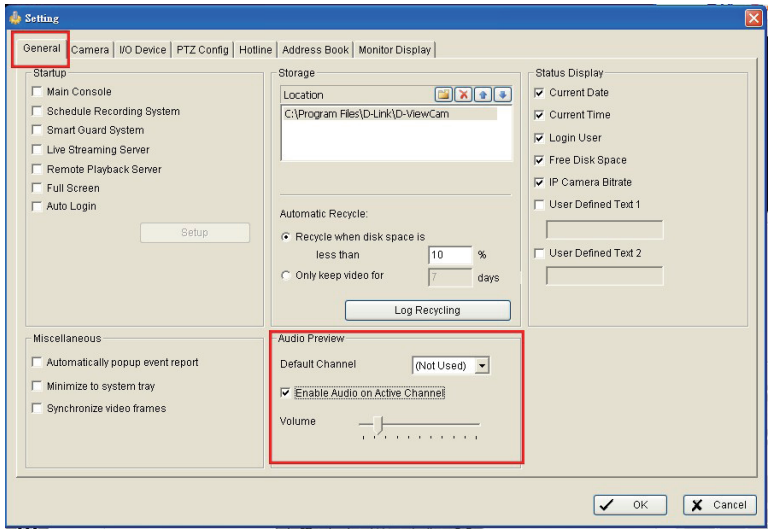

Confirmation
Backup is completed. Do you want to execute viewer?
Yes
No


New Folder
File Edit View Favorites Tools Help
Search
Folders
Address E:\Documents and Settings\nuuu\Desktop\New Folder
Go
File and Folder Tasks
Make a new folder
Publish this folder to the Web
Share this folder
Other Places
Desktop
My Documents
Shared Documents
My Computer
My Network Places
Details
Name
Size
Type
Date Modified

4. How do I enable audio in live streaming for IP cameras?

In order to save bandwidth, the default setting for audio is disabled, user needs to enable this function manually, please follow those steps.

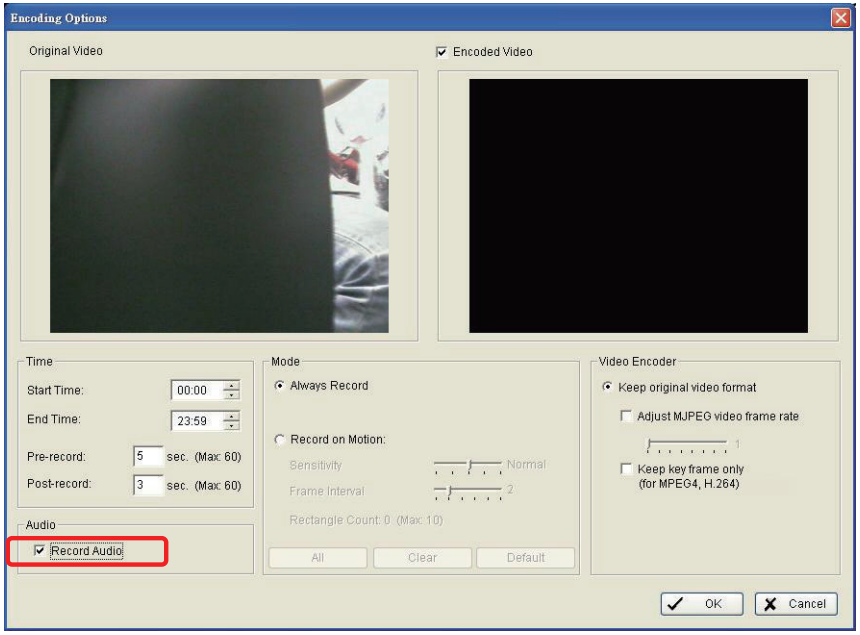
Step 1: Go to **[Config]--->[Setting]--->[General]** please enable **[Preview Active Channel]**
Step 2: Default channel means the background audio of camera channel.



Step 3: Switch audio channel
When choose sub-screen 1, you will hear audio from camera 1
When choose sub-screen 2, you will hear audio from camera 2
If you don't choose any sub-screen, you will hear audio of default channel.

5. How do I record audio for IP cameras?

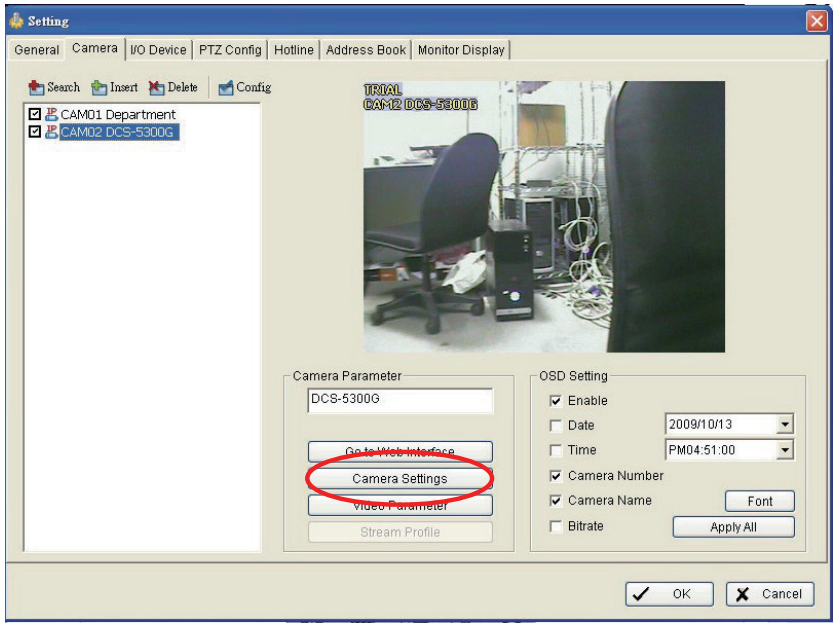
Step 1: Execute Main Console and go to **[Schedule]** -> **[Configure]** -> enable **[Record Audio]** -> **[OK]**
Step 2: Start Recording Schedule **[Start]** -> **[Start Recording Schedule]**



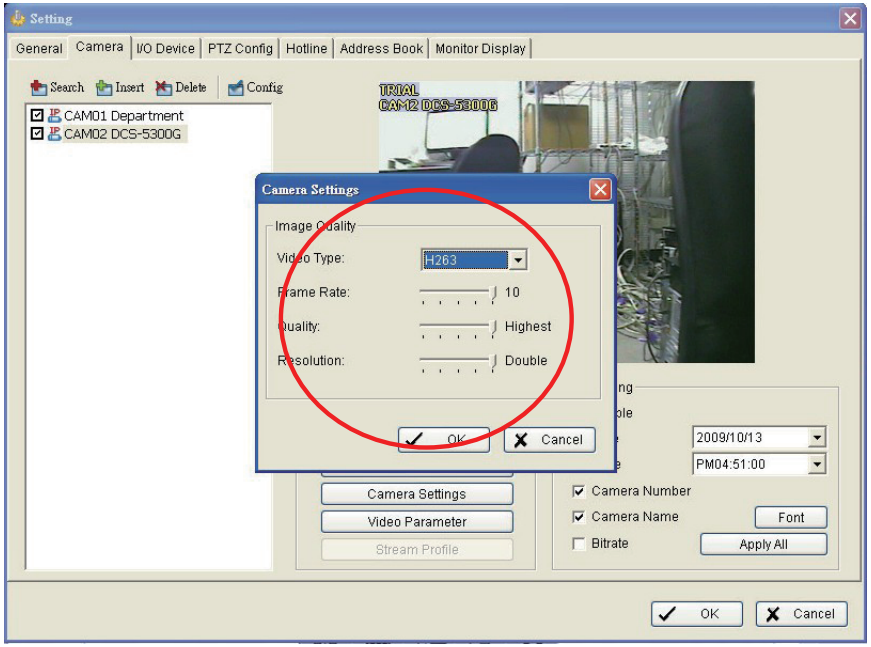
6. How do I change the recording frame rate and the resolution for IP cameras?

The recording frame rate and resolution are the same with live video, please follow those steps for adjustment.

Step 1: Open up Main Console and go to **[Config]** -> **[Setting]** -> **[Camera]**
Step 2: Select the camera of which you want to change the frame rate



Step 3: Click on **[Camera settings]**. And then you can change the frame rate, the resolution, the quality, etc.



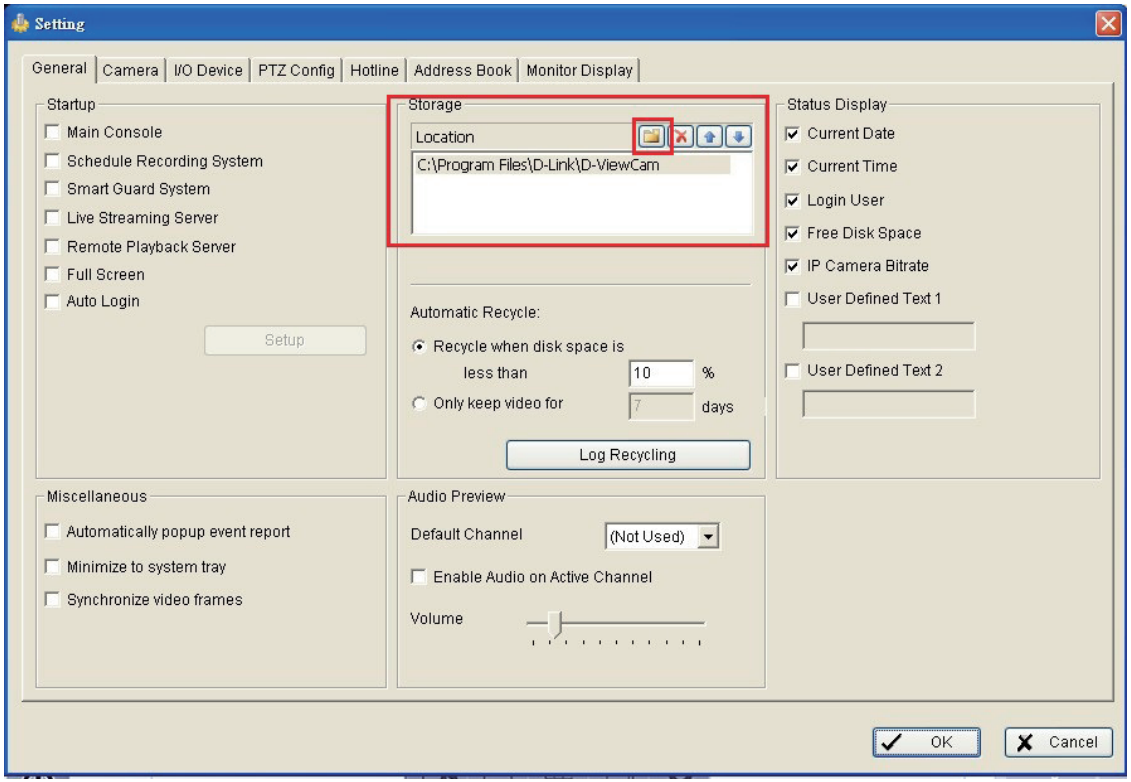
7. How do I set multiple storage paths for video recording?

Our Main Console allows you to set up several hard disk drives as the storage location. When the first hard disk is almost full (the capacity is less than 800MB on system disks or 100MB on non-system disks), Main Console will try to find a second storage with enough capacity.

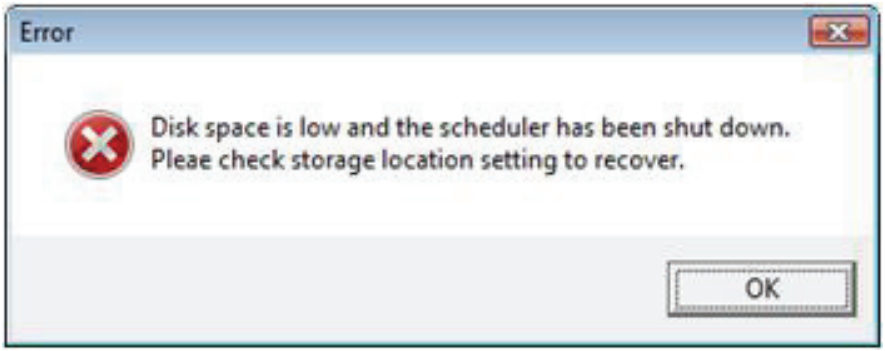
If no more capacity is available, Main Console will start recycling if auto-recycling is enabled.

If auto-recycling is not enabled, recording will stop.

Please go to **[Main Console]** -> **[Config]** -> **[General]** -> **[Storage Location]** to modify your settings.



8. Why do I get "Disk space is low and the scheduler has been shut down. Please check the storage location setting to recover"?



The error means recycling is not working, please follow the steps to diagnose this problem.

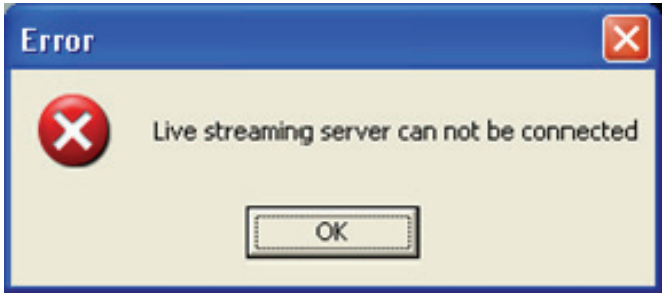
Step 1: check the setting and configuration

Make sure the auto recycle option is enabled in Mainconsole setting.
Make sure auto login, auto startup of Mainconsole and schedule are enabled in Mainconsole setting.
Remove NOD 32if NOD32 is installed since it will generate a great amount of log files (.tmp files) with tremendous size to occupy a lot of hard drive space and cause stop recording.
Do not adjust the system clock after recording is started.
Do not unplug removable disk when system is recording.
Check if any quota limit is set in your hard drive.
Check if the hard drive is set as “read only” or if a folder named “1” exists.
Check if the hard drive is damaged or there are bad sectors inside.
Make sure you do not use network hard drive.

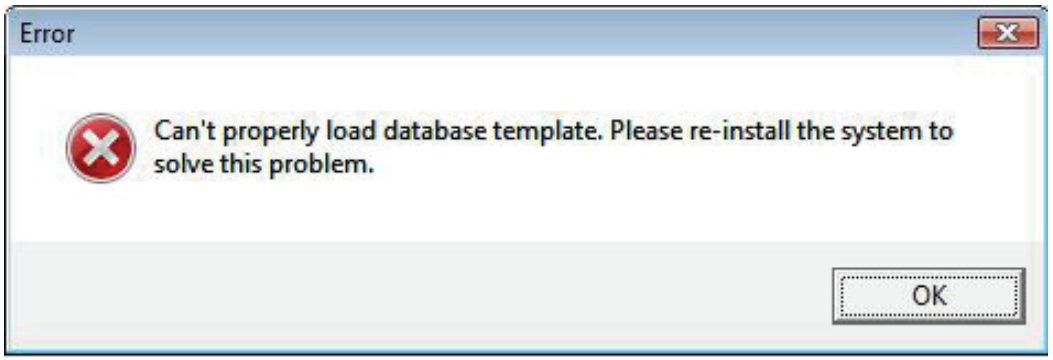
Step 2: If system stops recording which is caused by insufficient hard drive space.
Check the recording paths are the same in FileRecord.ini and Storage location.
Remove the oldest few day video folders or move them to other hard drive.
Check **dberr.log** (it can be found in D-ViewCam installation folder). If there are a lot of errors of Eventlog and Systemlog in **dberr.log**, and Eventlog.mdb and Systemlog.mdb is oversized caused by extremely frequent events or scheduler is set as record on motion while the cameras focus on a dynamic background.
The space for system hard drive must be more than 800 MB and the space of data hard drive must be more than 500 MB for Mainconsole to run recording.
If you still experience stop recording, please use DB tools to repair/rebuild database to re-associated recorded video.

9. Why do I get “Live streaming server can not be connected”?

In general, this error message is caused by network problem so always check your network connection first.
If you are connecting to a remote server or device through WAN.
Please make sure the remote server or device is not behind a router's firewall or the port is forwarded properly to bypass the router's firewall.

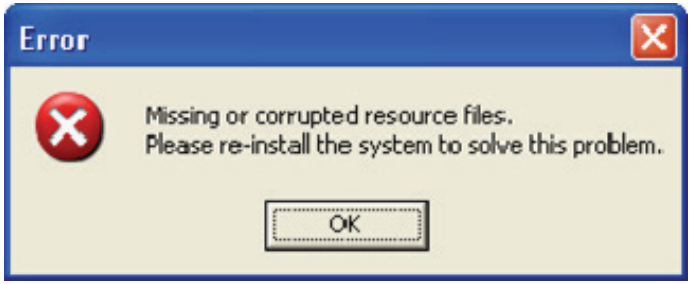


10. Why do I get "Cannot load database template. Please re-install the system to solve the problem"?



You will receive this error message when Mainconsole experienced a critical error when loading the database.
This problem is frequently observed on Windows Vista due to its tightened security system.
There are two ways to fix.
1.) Turn off UAC in control panel on Windows Vista.
2.) Enable the privilege level option in compatibility tab in Mainconsole properties.

11. Why do I get "Missing or corrupted resource files. Please re-install the system to solve the problem"?



This error message occurs when the software failed to execute the necessary file for the requested operation.

（1）Occur when loading Mainconsole

The skin files or database may be corrupted to cause this error message.
Please uninstall the software, remove D-ViewCam folder in C:\Program Files\ and install the latest version.

（2）Occur when loading ActiveX of web live viewer/ playback

Please follow below instrument for troubleshooting.

1.) Turn off UAC in control panel on Windows Vista.
2.) Enable the privilege level option in compatibility tab in Mainconsole properties.

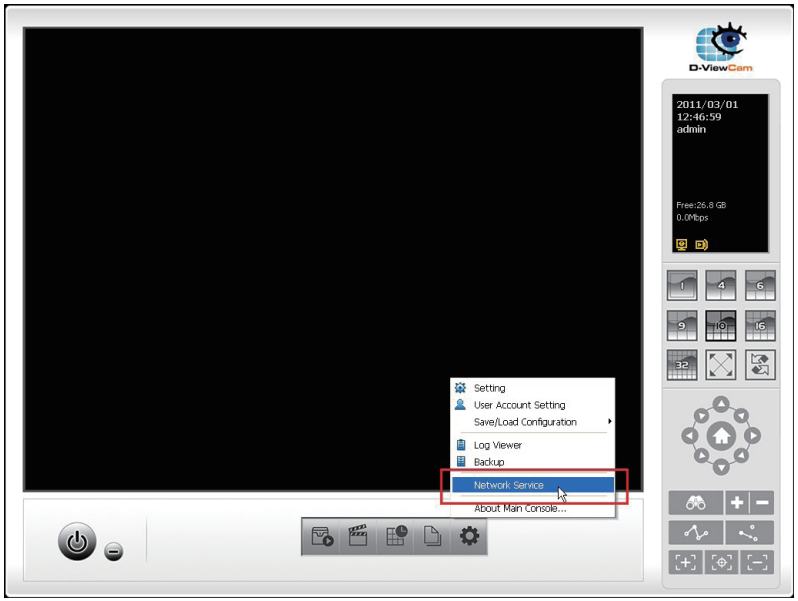
12. Why do I get "The procedure entry point WMCreateWriter could not be located in the dynamic link library WMVCore.DLL."?

If you met the error message as follows, please upgrade your windows media player and this problem will be fixed.

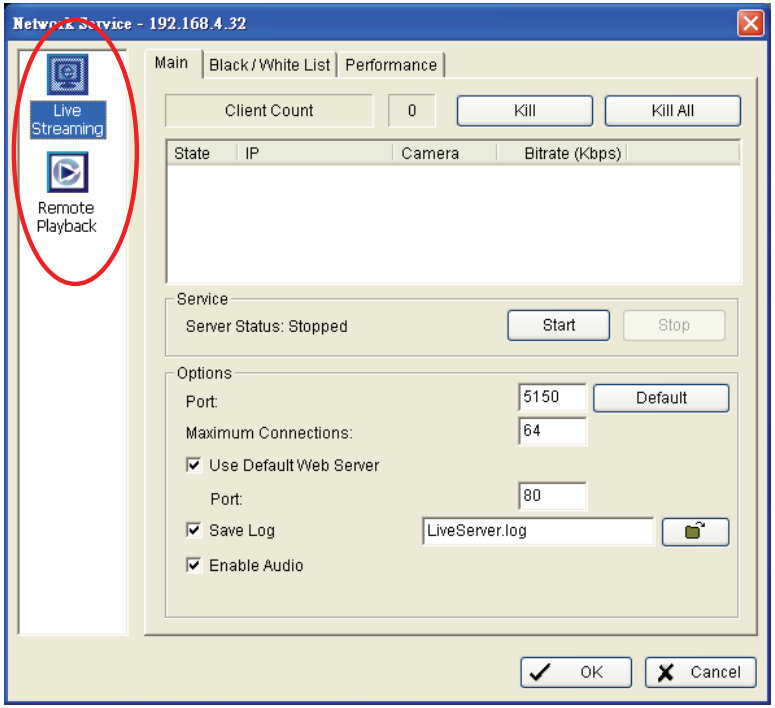
Please download the latest Windows media player here, http://www.microsoft.com/windows/windowsmedia/default.mspx

13. How do I start network services?

Step 1: Go to **[Config]** -> **[Network services]**, and you will see several services you can use.



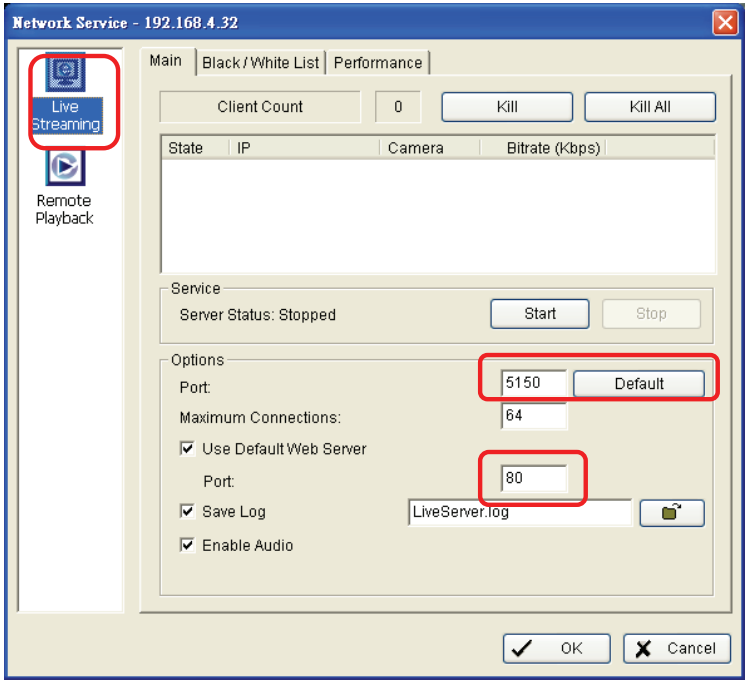
Step 2: Please remember to click on **[Start]** of the services you want to start in Main Console.

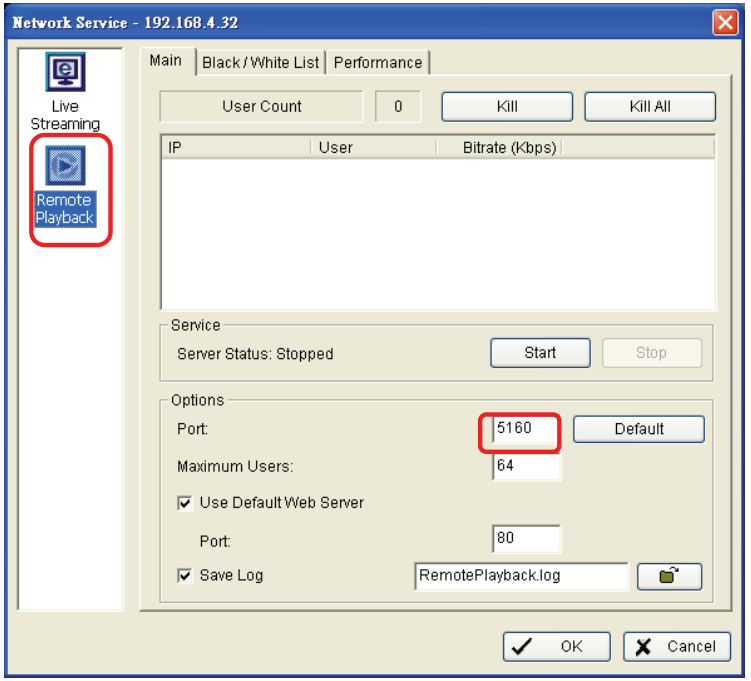


14. How to configurd my PC/Server to allow remote access for the viewer and playback?

In order to view remote live viewer and remote playback from the internet, there are two things you have to do.

Step 1: Start **<Network Service>** in Mainconsole
Please go to **<Main Console>** - **<Config>** - **<Network Service>** and then start this service.
Our default port number for live streaming is 5150.
Our default port number for remote playback is 5160.
The default port for web browser is 80.
If you need to change it to another one, please don't forget to set it to port forwarding on your router.





Please notice that if you met the following error message, it means your port 80 was occupied by the other device, therefore, you have to change it to another port number.

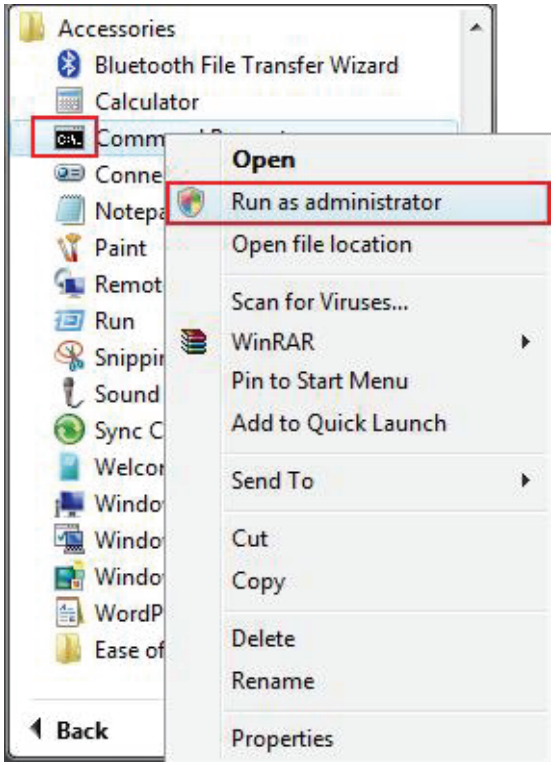
Step 2: Enable port forwarding in your router
After that, what we have to do is to find the public IP address of your router and set port forwarding on the router to NVR LAN IP.
• You can see the public IP address of your router in its configuration menu.
• You can also configure NAT (or port forwarding) port 80, 5150 and 5160 to your NVR's LAN IP (e.g. 192.168.3.30) in the router.
• Port forwarding looks something like this in your router:
You have to forward 3 ports, one for 80, one for 5150 and one for 5160.
All 3 ports should point to e.g. 192.168.3.30

After you have successfully forward the 3 ports in your router, you will be able to access remote live viewer and remote playback from the internet.

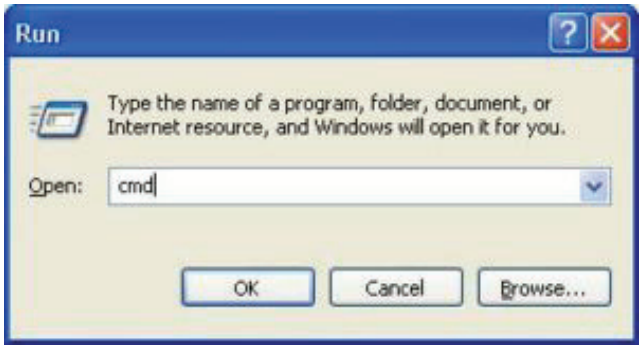
15. Why can't I see live view and video playback on Internet Explorer after up grading to the latest version?

It is often caused by the old temporary IE components in Windows. Please remove the old IE components and reinstall ActiveX to solve the problem.

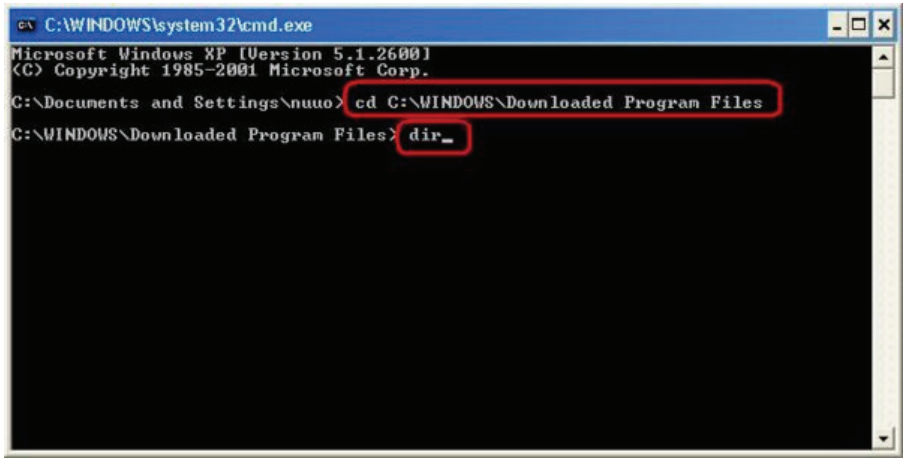
Step 1: Closed IE and all of its related applications first. Otherwise some files may be locked during removal. If your OS is Vista, please run "Command prompt" as administrator first or you will not able to remove the components.



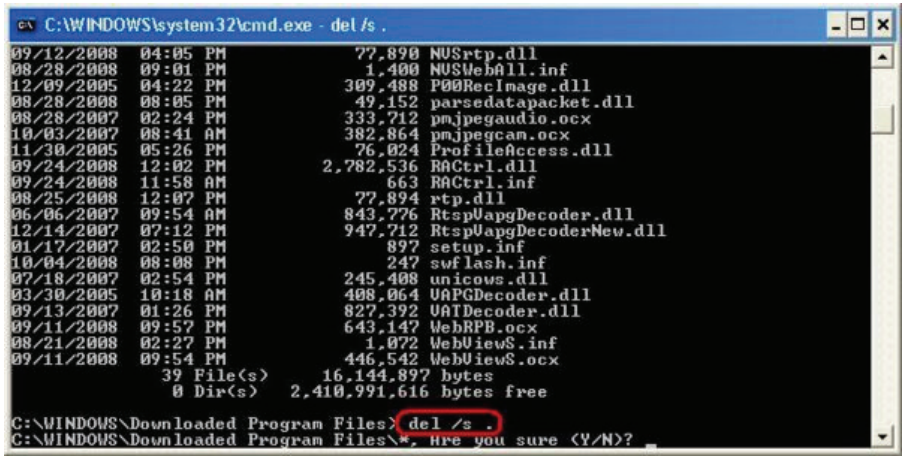
Step 2: Go to [Start]->[Run]->key in: cmd and press [OK]



Step 3: Key in: cd C:\WINDOWS\Downloaded Program Files
Step 4: Key in: dir to list all objects on this folder

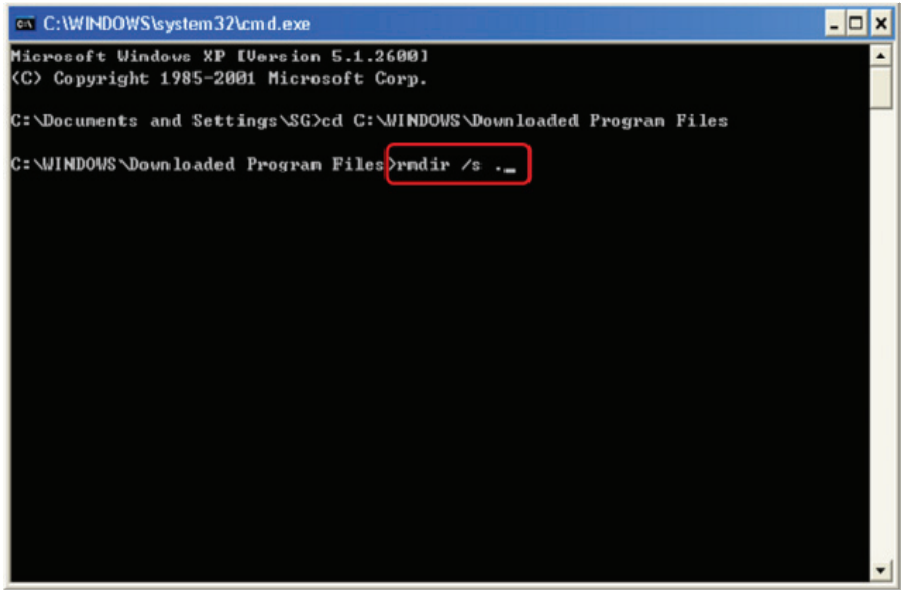


Step 5: Key in: del /s .
Don't forget the Period (.) after /s
Step 6: Keep pressing Y when prompted to delete all the files in the folder



Step 7: Key in: rmdir /s .
Don't forget the Period (.) after /s
Step 8: Keep pressing Y when prompted to clear up the remaining files in the folder

Step 9: Key in: dir and press [Enter] to check if the folder is empty.
Step 10: Complete. You can now reinstall your ActiveX with web remote client.



16. What ports for network service are used by default?

The default ports can be changed however you like, but we strongly recommend you avoid using ports below 1024 because they are often used by other system services.

Service	Port	Purpose
Live streaming	5150	Communication between desktop remote live viewer and Main Console
Default web server	80	Access protocol of web based remote client

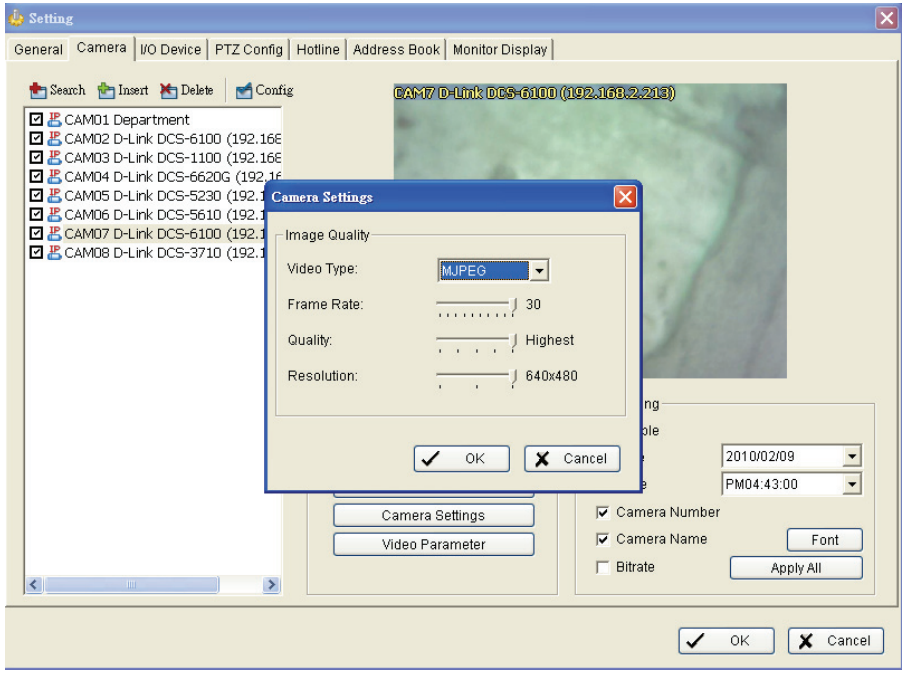
Remote playback	5160	Communication between desktop remote playback and Main Console
Remote desktop	5140	Remote access to Main Console

17. Can I hear the audio at D-ViewCam remote live viewer application and Internet Explorer browser?

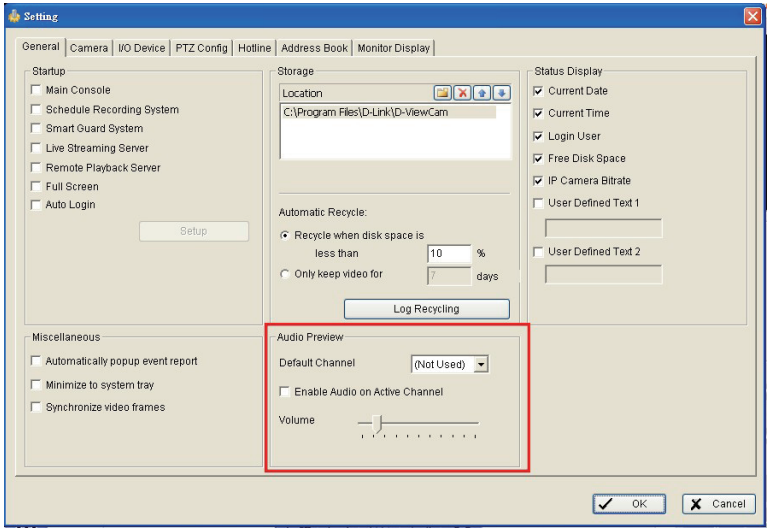
Yes, please right click on the screen and check **<Enable Audio>**.

Please do not forget to enable audio at Main Console first.

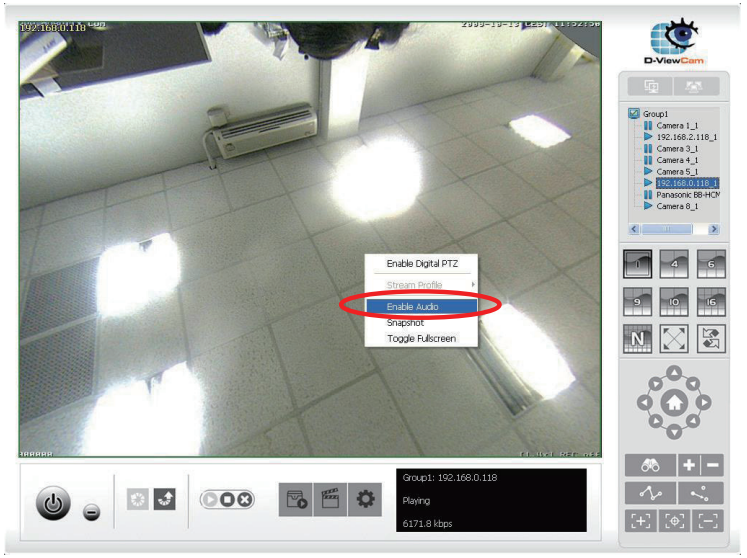
If you are using IP cameras, please go to **<Main Console> - <Config> - <Setting> - <Camera> - <Camera Settings>**

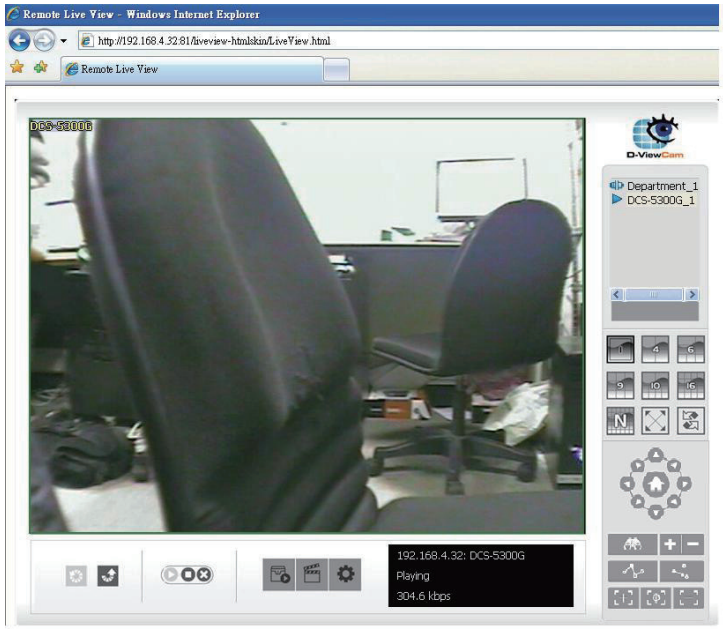


If you are using analog cameras, please go to **<Main Console>** - **<Config>** - **<Setting>** - **<Audio Preview>**



After that, please go to remote live viewer and right click on the screen to check **<Enable Audio>**

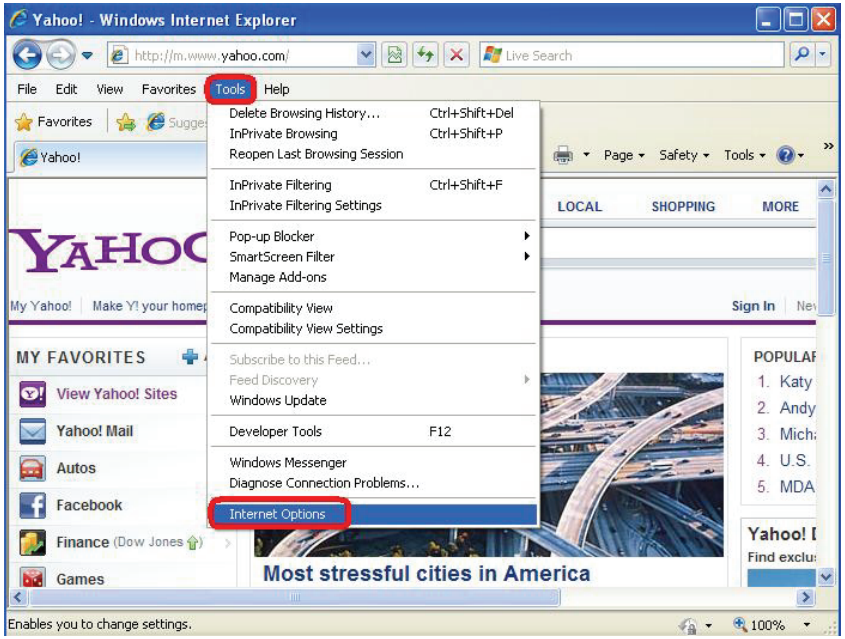


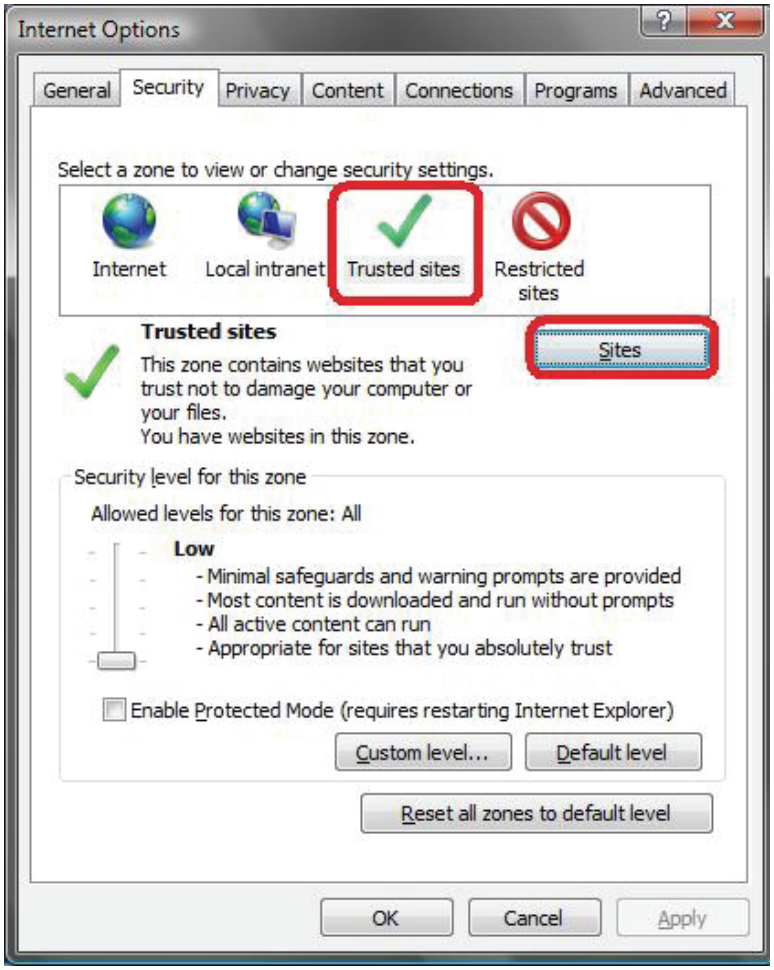


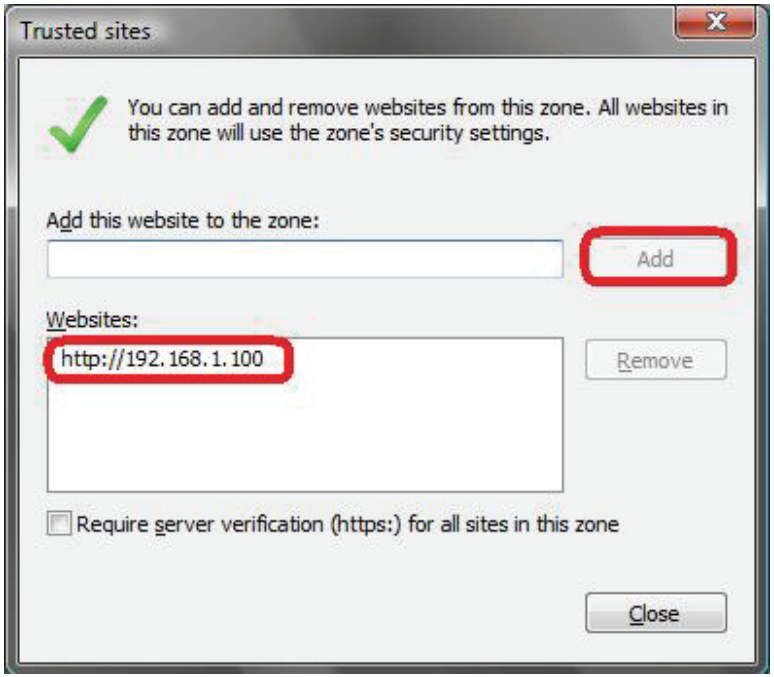
18. Why my IE8 doesn't work well with D-ViewCam software ?

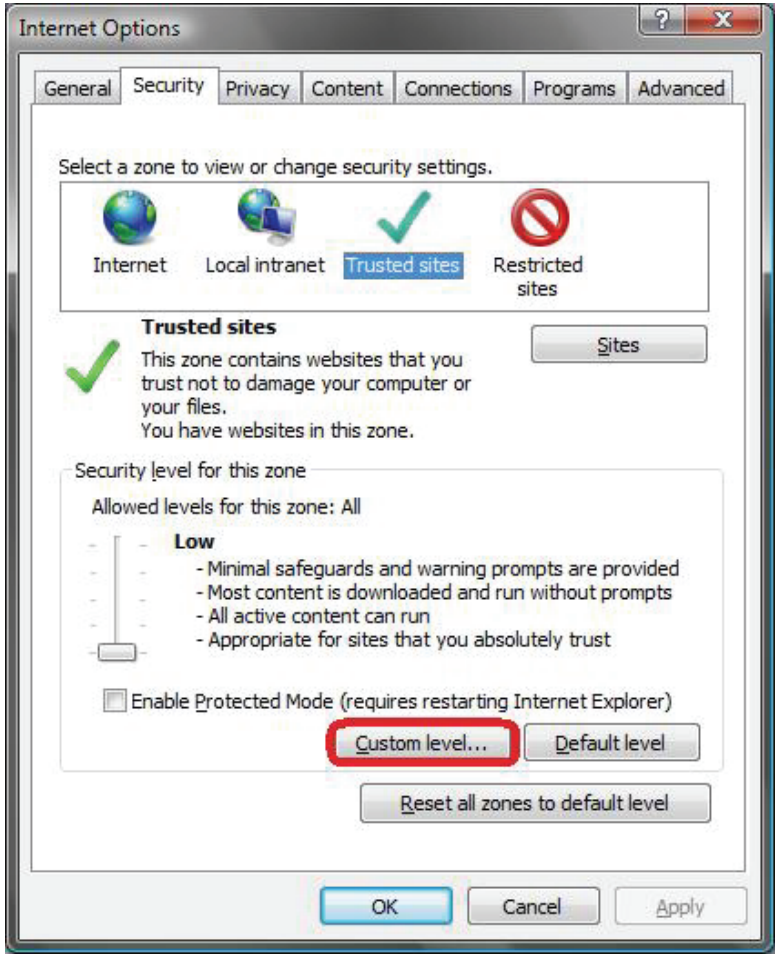
In order to install ActiveX under IE 8 environment, we need to setup following settings.
Generally, there are two settings to make it work.
First of all, please make sure 'vcredist_x86.exe' has already been installed.

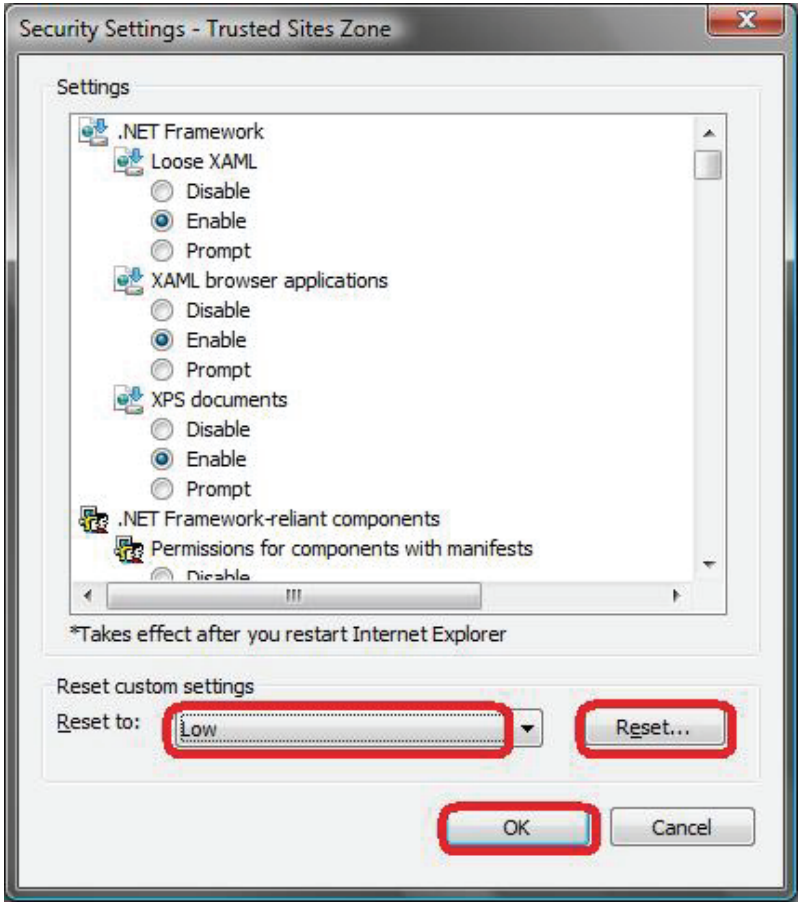
Step 1: Add the Server IP into Trusted Web Site.



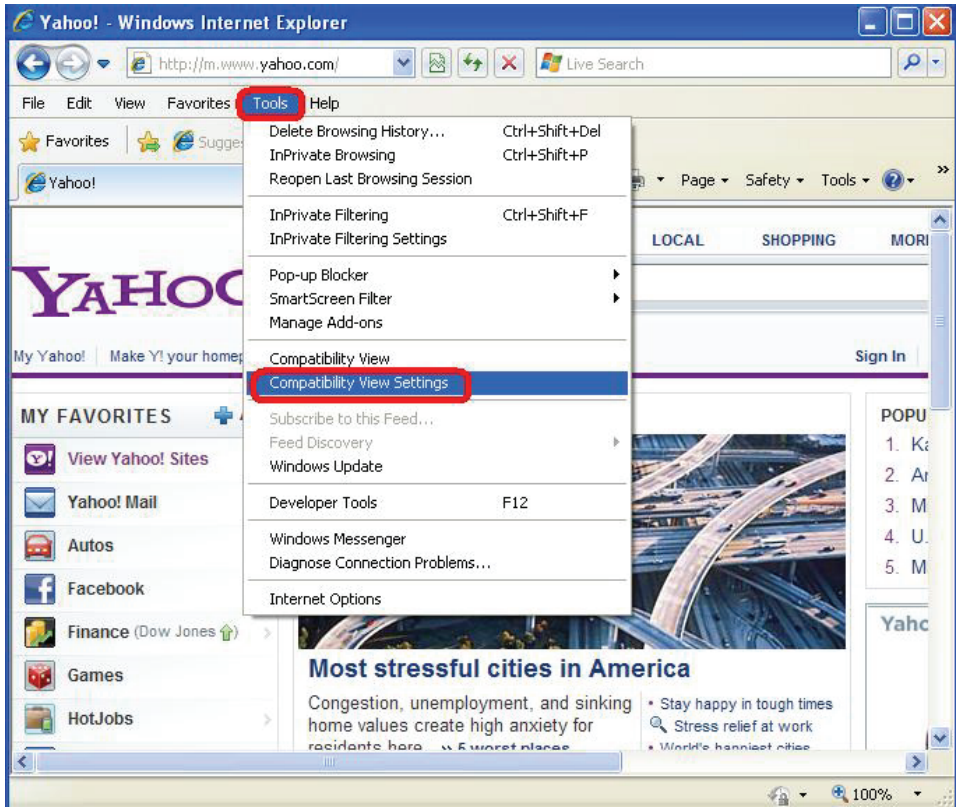

Internet Options
General
Security
Privacy
Content
Connections
Programs
Advanced
Select a zone to view or change security settings.
Internet
Local intranet
Trusted sites
Restricted sites
Trusted sites
This zone contains websites that you trust not to damage your computer or your files.
You have websites in this zone.
Sites
Security level for this zone
Allowed levels for this zone: All
Low
- Minimal safeguards and warning prompts are provided
- Most content is downloaded and run without prompts
- All active content can run
- Appropriate for sites that you absolutely trust
Enable Protected Mode (requires restarting Internet Explorer)
Custom level...
Default level
Reset all zones to default level
OK
Cancel
Apply

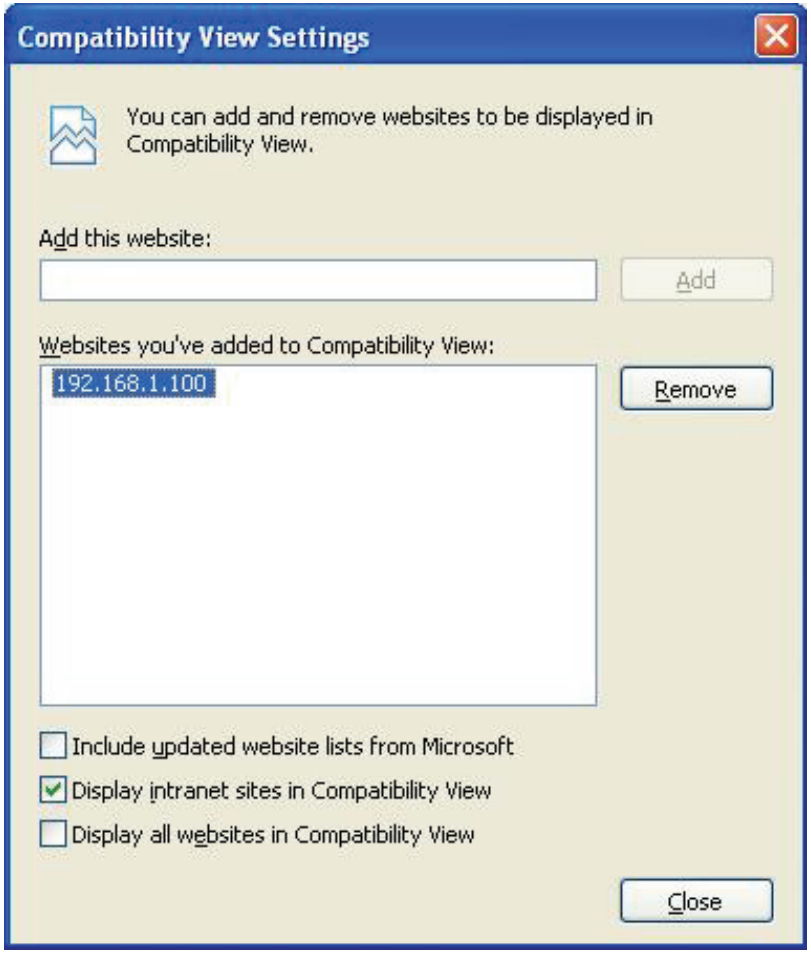

Trusted sites
You can add and remove websites from this zone. All websites in this zone will use the zone's security settings.
Add this website to the zone:
Add
Websites:
http://192.168.1.100
Remove
Require server verification (https:) for all sites in this zone
Close

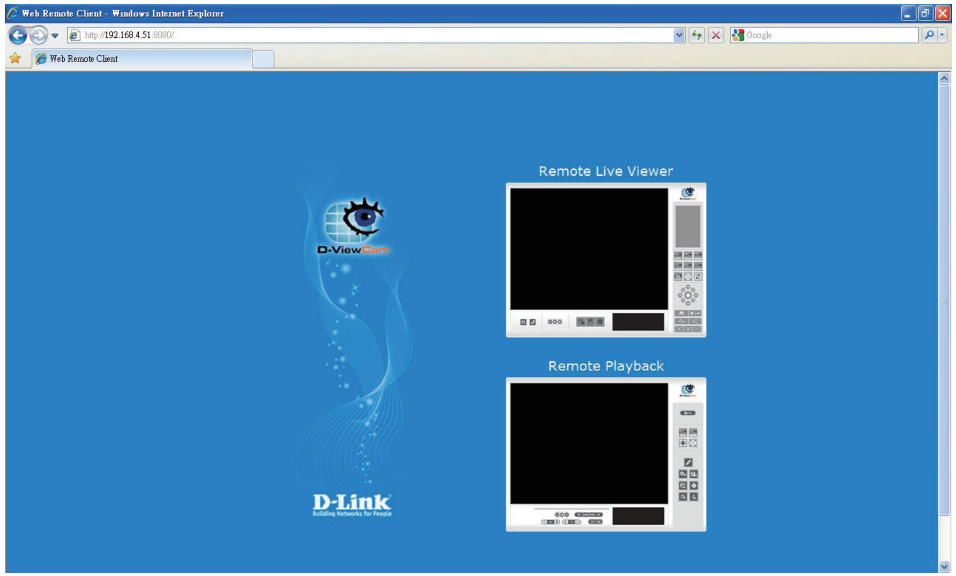

Internet Options
General
Security
Privacy
Content
Connections
Programs
Advanced
Select a zone to view or change security settings.
Internet
Local intranet
Trusted sites
Restricted sites
Trusted sites
This zone contains websites that you trust not to damage your computer or your files.
You have websites in this zone.
Sites
Security level for this zone
Allowed levels for this zone: All
Low
- Minimal safeguards and warning prompts are provided
- Most content is downloaded and run without prompts
- All active content can run
- Appropriate for sites that you absolutely trust
Enable Protected Mode (requires restarting Internet Explorer)
Custom level...
Default level
Reset all zones to default level
OK
Cancel
Apply

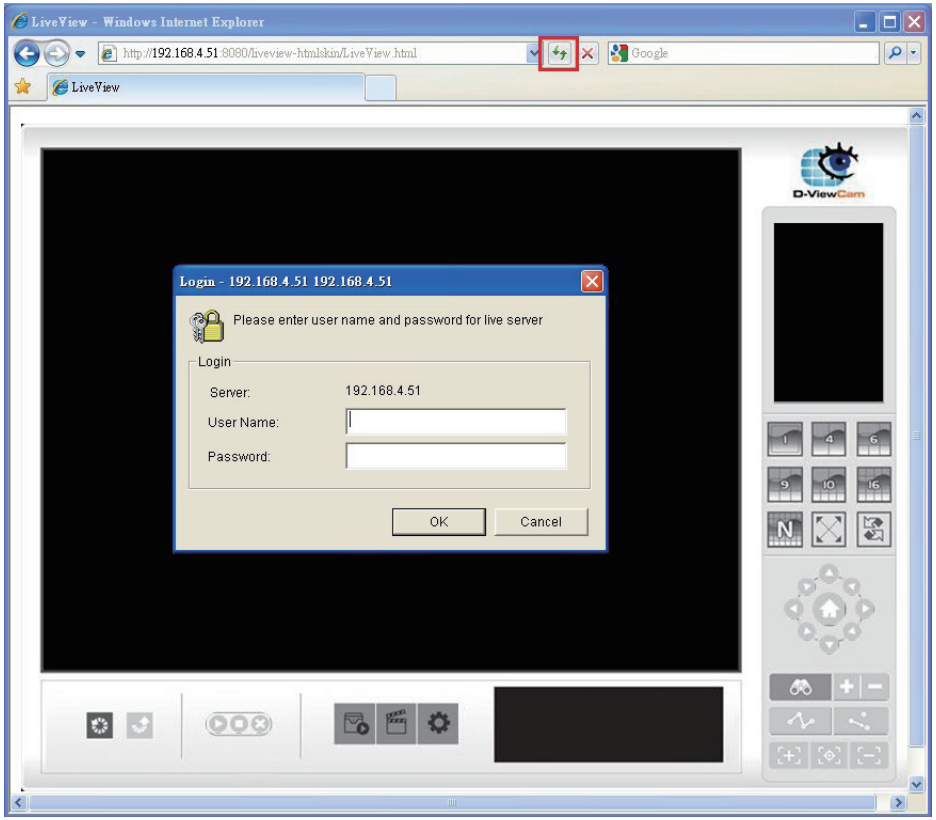

Security Settings - Trusted Sites Zone
Settings
.NET Framework
Loose XAML
Disable
Enable
Prompt
XAML browser applications
Disable
Enable
Prompt
XPS documents
Disable
Enable
Prompt
.NET Framework-reliant components
Permissions for components with manifests
*Takes effect after you restart Internet Explorer
Reset custom settings
Reset to:
Low
Reset...
OK
Cancel

Step 2: Add the Server IP Compatibility View Setting



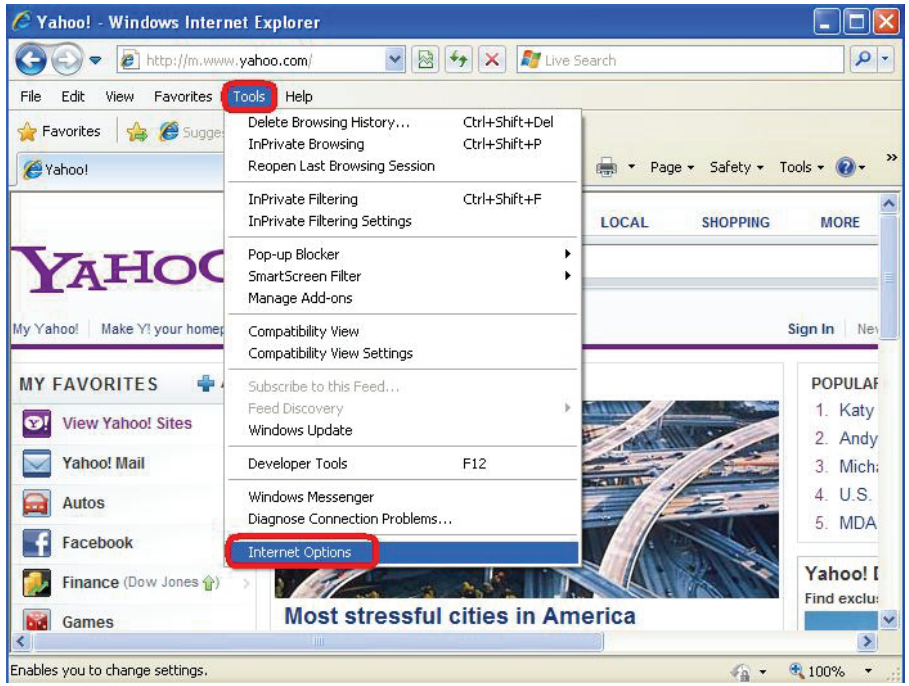


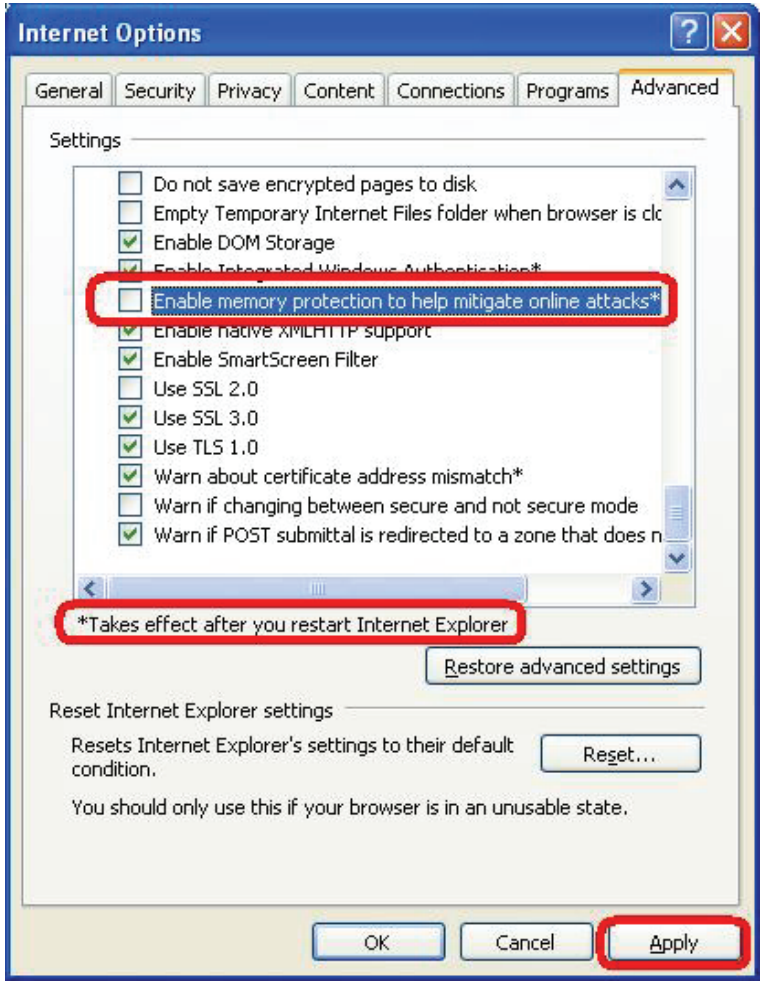

Web Remote Client - Windows Internet Explorer
Web Remote Client
Remote Live Viewer
Remote Playback
D-ViewCam
D-Link


LiveView - Windows Internet Explorer
http://192.168.4.51:8080/liveview-htmlskin/LiveView.html
LiveView
Google
D-ViewCam
Login - 192.168.4.51 192.168.4.51
Please enter user name and password for live server
Login
Server:
192.168.4.51
User Name:
Password:
OK
Cancel

Enjoy 3.2 web live viewer with Internet Explorer 8.

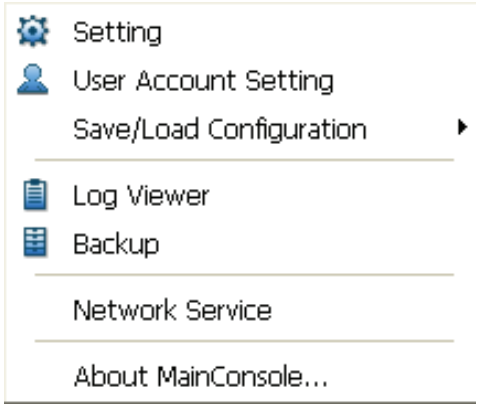
Step 3: (Optional) If the instructions above doesn't work, please try the following method.

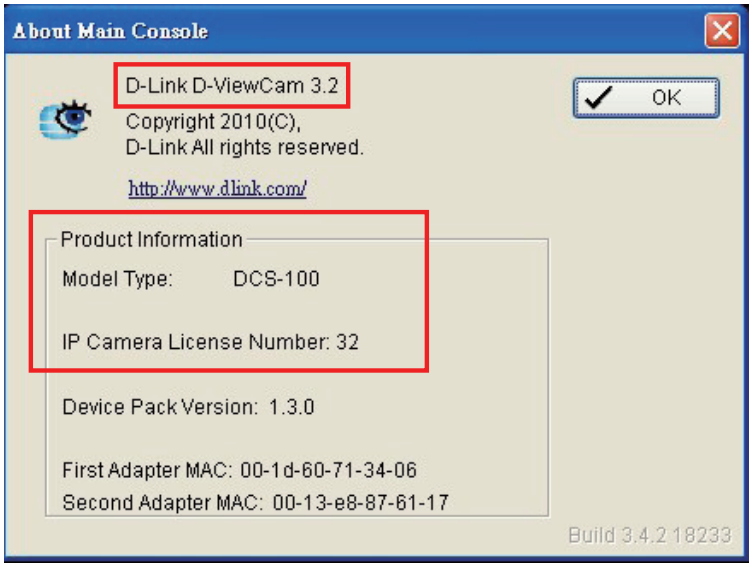




19. What is the version of my software?

In **[Main Console]** -> **[Config]** -> **[About Mainconsole...]**



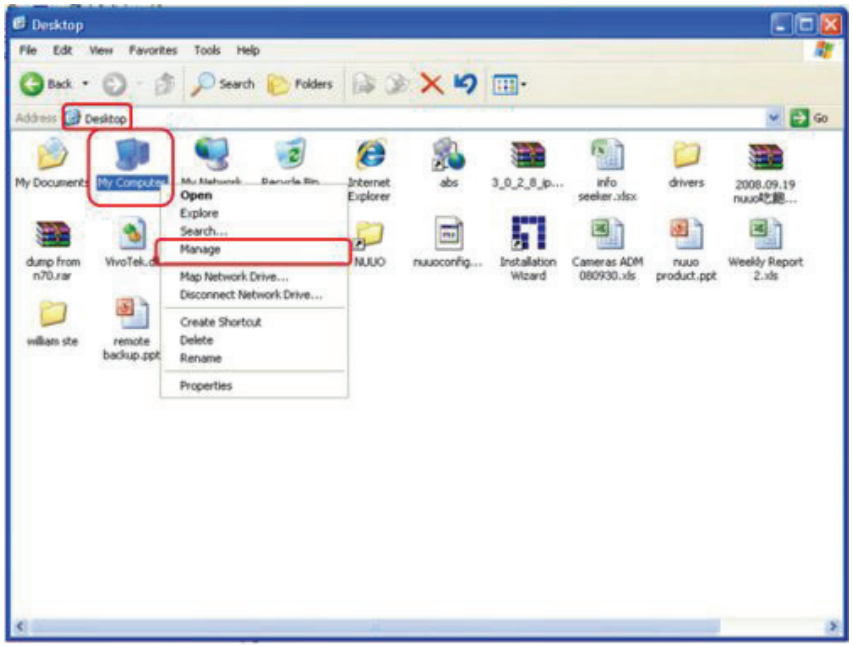


20. How do I get the Windows system log and application log?

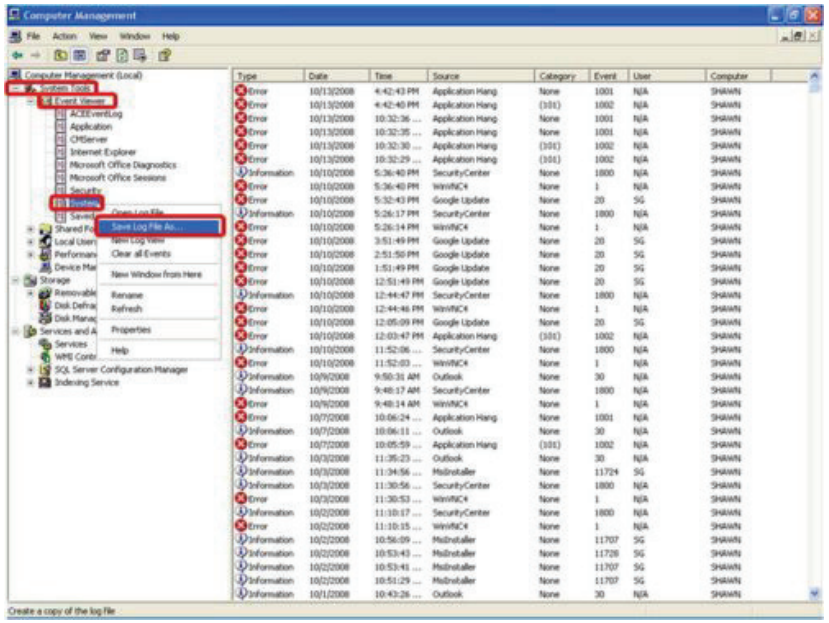
System log

Step 1: Go to **[Desktop]** -> right click on **[My Computer]** -> **[Manage]**

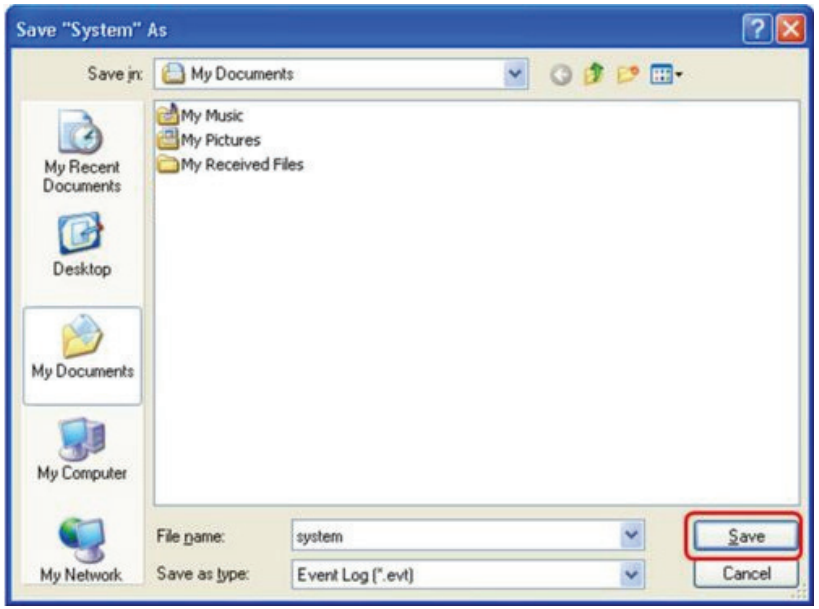
Step 2: In **[Computer Management]** -> go to **[System Tools]** -> **[Event Viewer]** -> **[System]**



Step 3: Right click on **[System]->[Save Log File As...]**



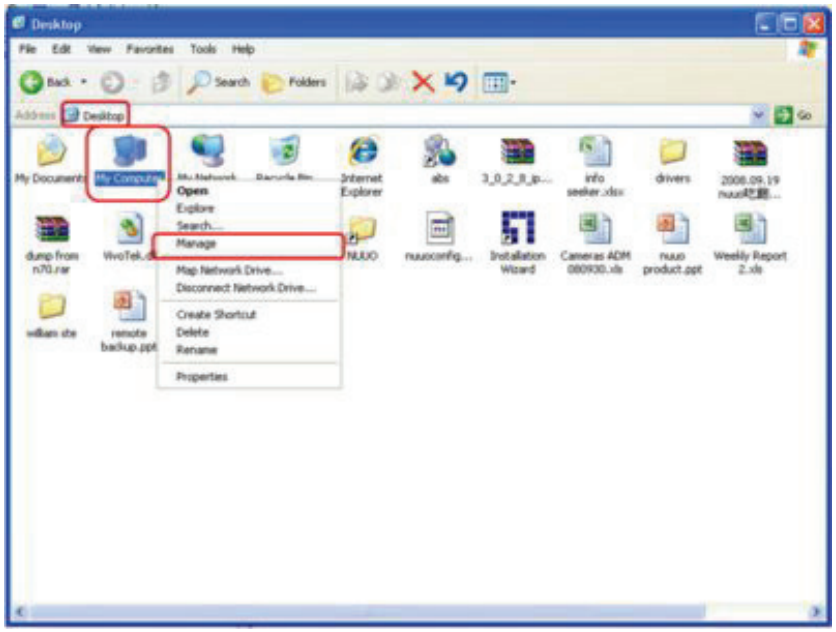
Step 4: Type "system" as file name and save as .evt format
Please name the file as "system" so we know that it is a system log file



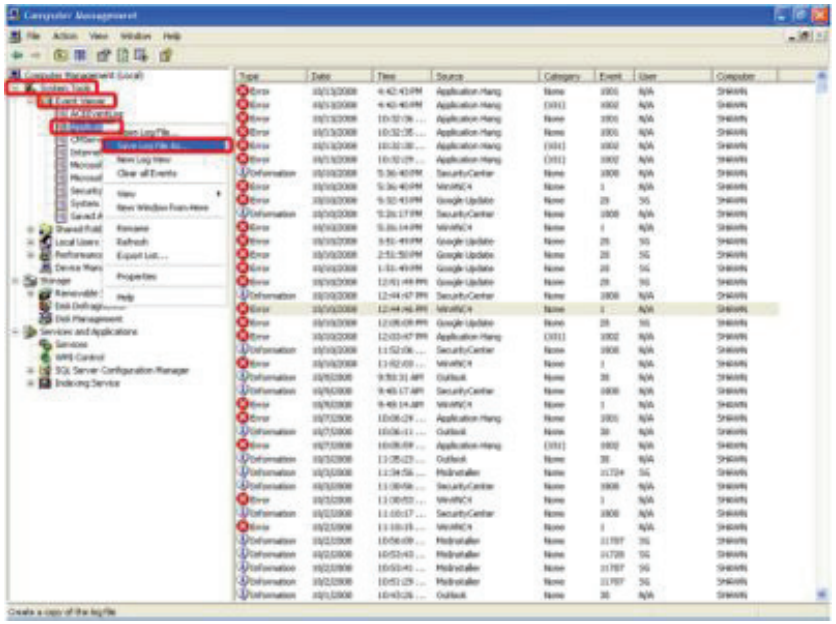
Application log

Step 1: Go to **[Desktop]**-> right click on **[My Computer]**-> **[Manage]**

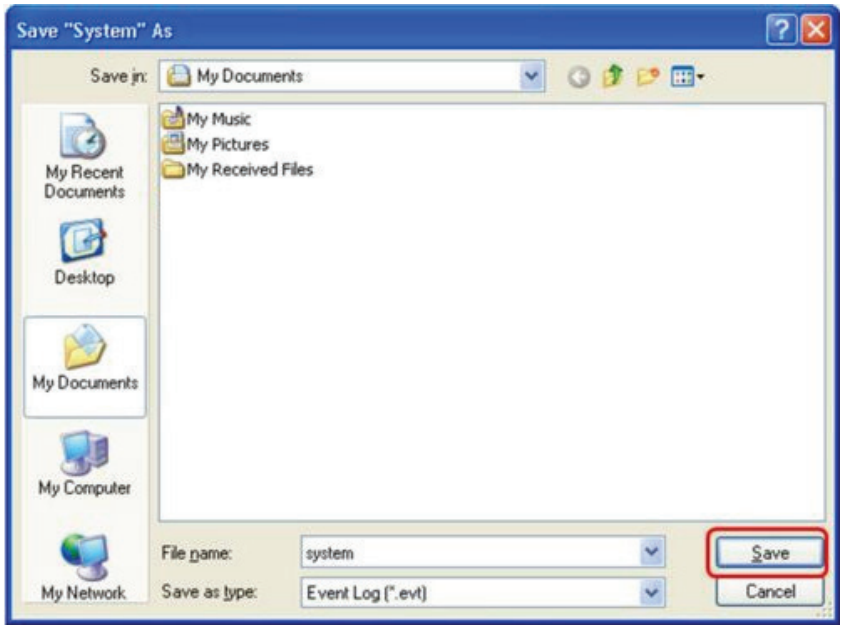
Step 2: In **[Computer Management]**-> go to **[System Tools]**->**[Event Viewer]**->**[Application]**



Step 3: Right click on **[Application]**->**[Save Log File As...]**



Step 4: Type "application" as file name and save file with .evt format
Please name the file as "application" so we know that it is a application log file



21. How many user accounts can I create?

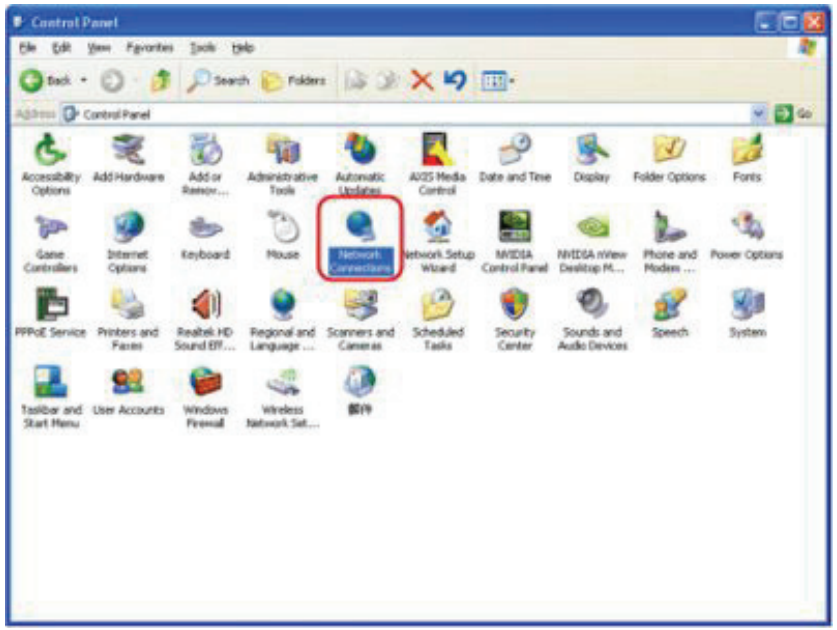
You can create an **unlimited number of user accounts.**

22. How do I setup local area network or LAN?

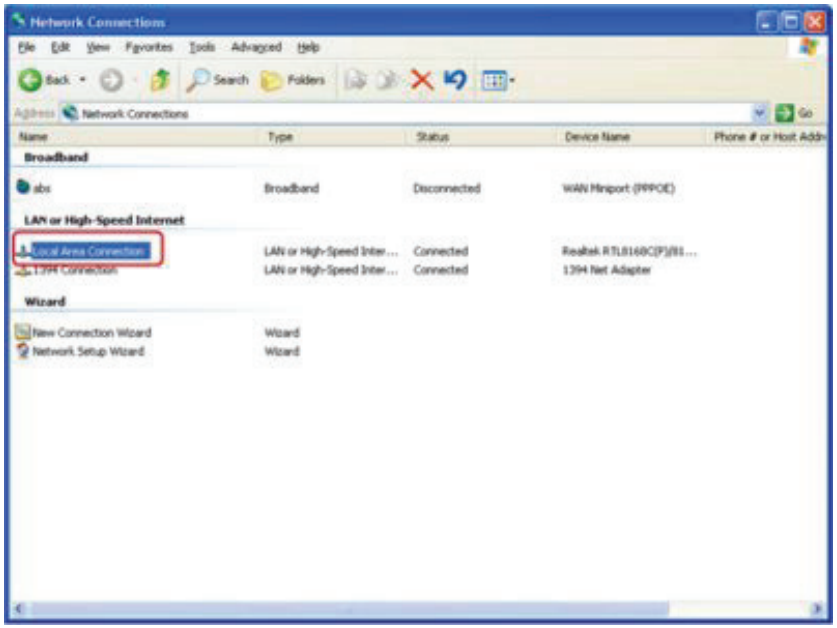
D-ViewCam supports both LAN and WAN. If your surveillance system does not need to have internet access, you can setup a private network or LAN to establish networking between Mainconsole and other network devices such as IP camera.

Setup with static IP

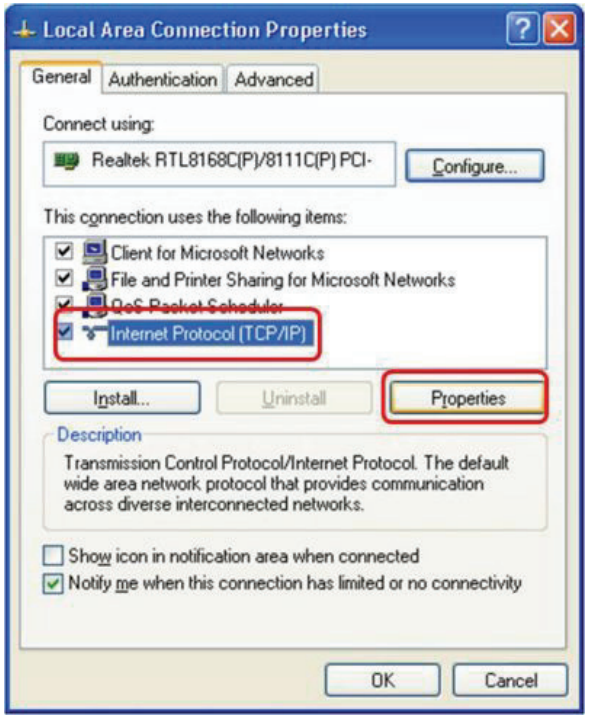
Step 1: Go to **[Control Panel]->[Network Connections]**



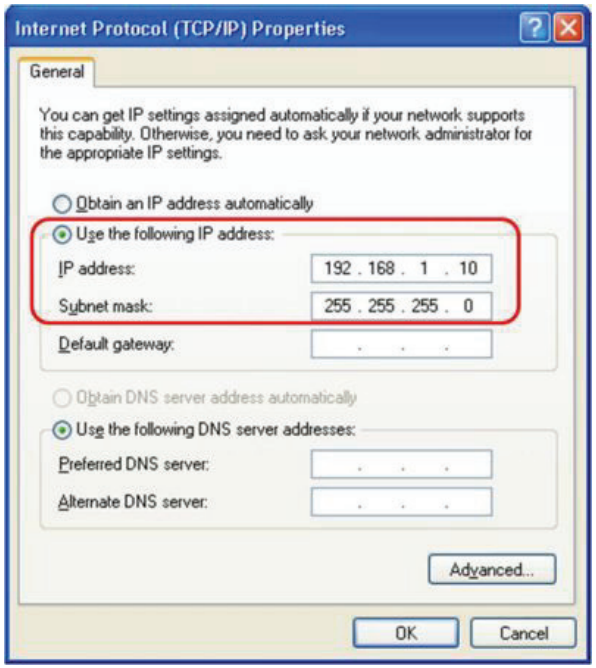
Step 2: Right click on **[Local Area Connection]->[Properties]**



Step 3: Select **[Internet Protocol(TCP/IP)]->[Properties]**



Step 4: Select **[Use the following IP address:]** and fill the fields as shown in the picture
[192.168.1.1] and [192.168.1.254] is normally occupied by the router or other network devices, so please try to avoid using these IP addresses.
Please note that you will only be able to access IP address between the same subnet address, such as [192.168.1.1 to 192.168.1.254]

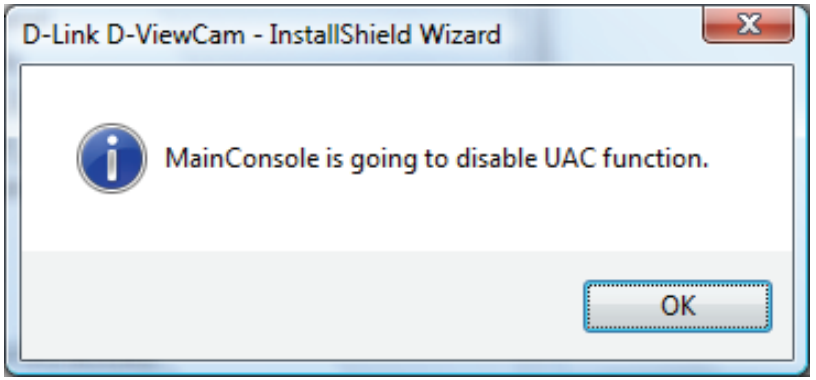


Setup with dynamic IP

We strongly discourage the assigning dynamic IP address to IP cameras which is based on DHCP. The IP address of each IP cameras is temporary so whenever the address is reassigned, the camera will lose connection permanently to your D-ViewCam server unless you manually rematch the camera's new IP address to D-ViewCam server.

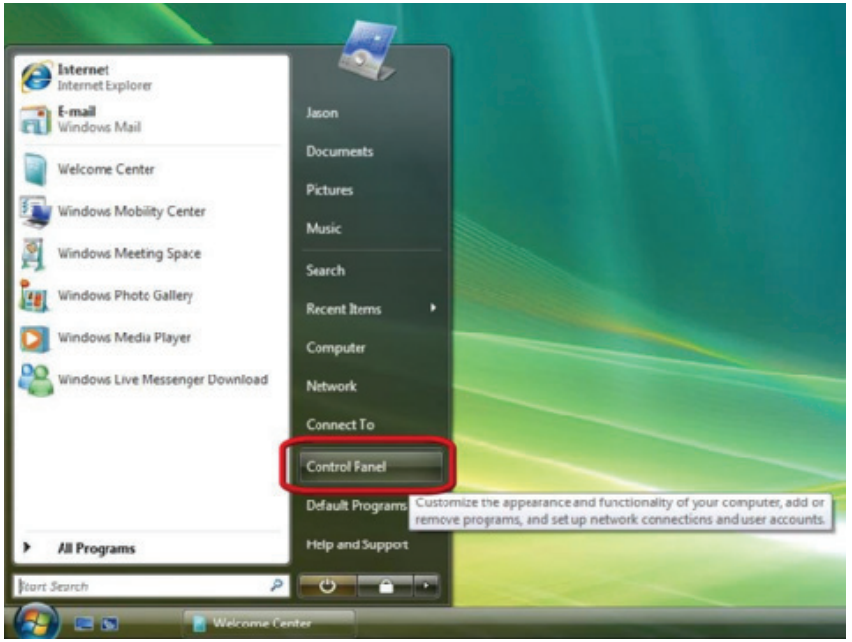
23. How should I do when popping-up UAC message?

When using Windows Vista, the system will pop-up the following message to stop your D-ViewCam.

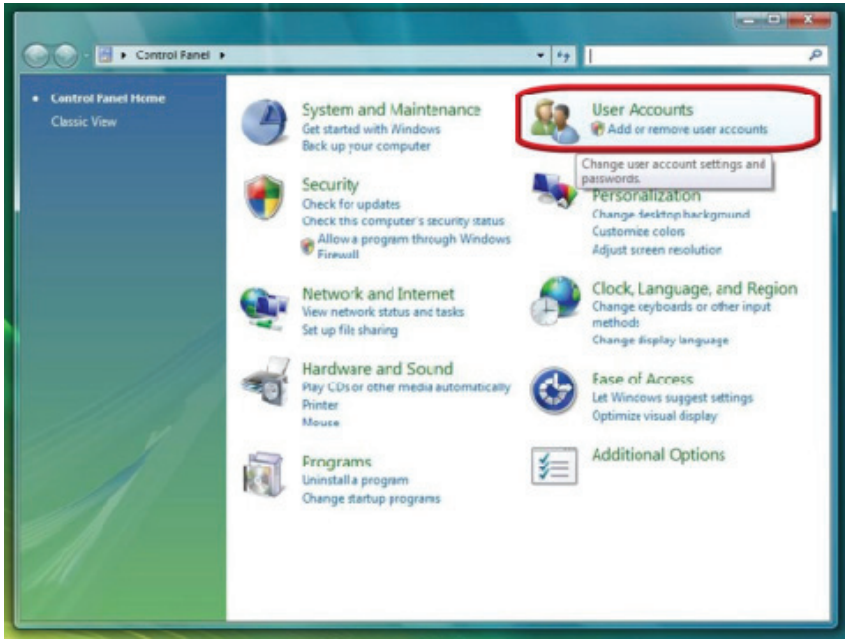


Follow the following steps to turning off UAC.

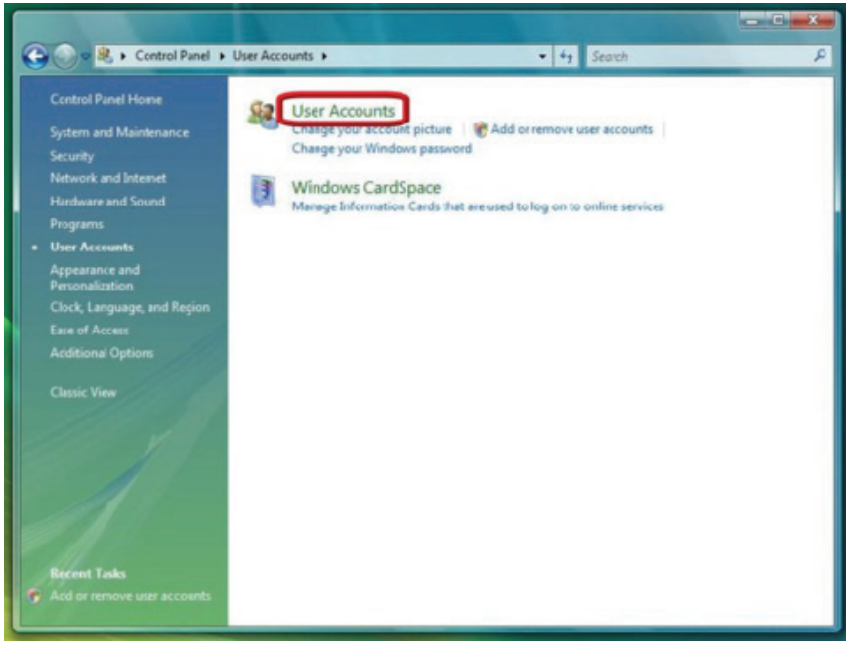
1.) Go to Vista's **[Control Panel]**



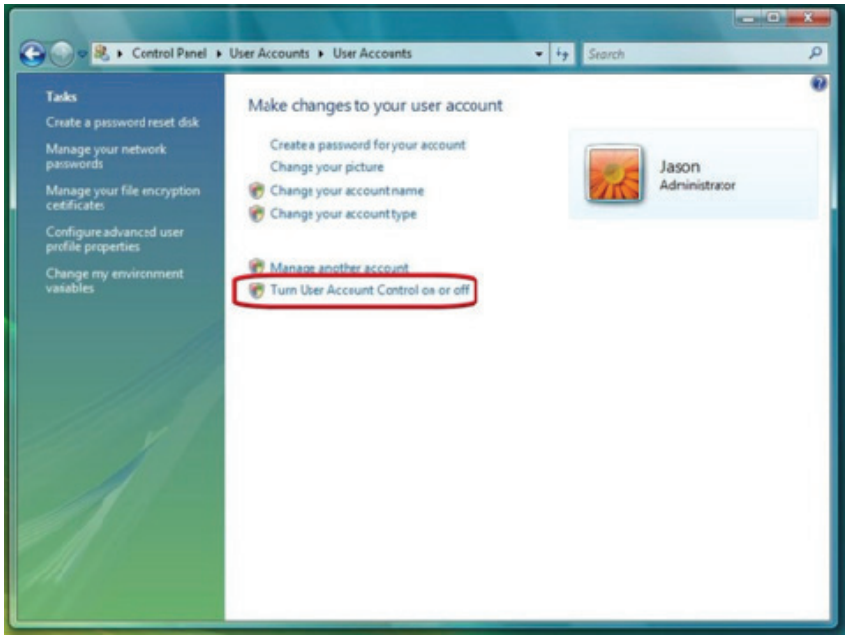
2.) Click on **[User Accounts]**



3.) Click on **[User Accounts]**

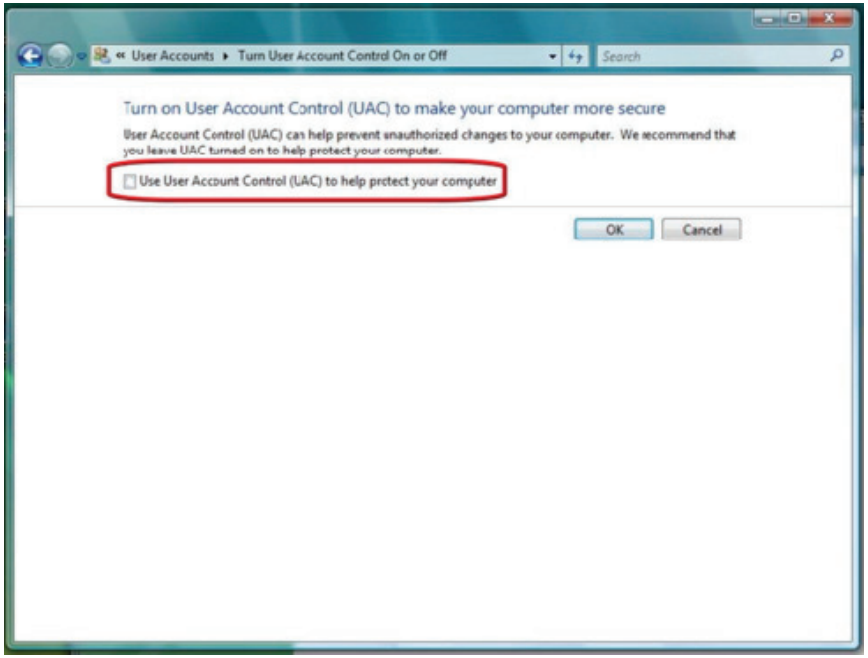


4.) Click on **[Turn User Account Control on or off]**



5.) Click to deselect the **[Turn User Account Control on or off]** box to turn off UAC

6.) Click on **[OK]** and **restart Windows** to complete the new setting



24. The camera

D-ViewCam supports both LAN and WAN. If your surveillance system does not need to have internet access, you can setup a private network or LAN to establish networking between Mainconsole and other network devices such as IP camera.

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Steve Reid - cast.cpp
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Minimum Hardware Requirement - How to calculate S value

Parameter definition:

M: parameter of resolution of camera.

Resolution	5 M	3 M	2 M	1 M	VGA / D1	CIF
Value of **M**	37	27	22	14	3	1

N: FPS of Camera
S=M*N

For example: 16 channel system
a) 8 camera at 1 Megapixel resolution with 10FPS
b) 3 cameras at D1 resolution with 15FPS
c) 5 cameras at CIF resolution with 30FPS

a) M=14; N=10, S=14*10=140
b) M=3; N=15, S=3*15=45
c) M=1; N=30, S=1*30=30
S of All Cam.=(8*140)+(3*45)+(5*30)=1405
Therefore, the minimum hardware requirement is **C level**.

Minimum Hardware Requirement

	D	C	B	A
S of All Cam.	2200~1400	1400~1050	1050~550	550~0
CPU	**Intel Core I7**	**Intel Core I5**	**Intel Core 2 Quad Q9400**	**Intel Core 2 Duo E5300**
RAM	2 GB	2 GB	2GB	1GB
Motherboard	Intel P55 or H57 chip or above, MB vendor Asus, Gigabyte or Intel with Intel Chipset recommended		Intel P35 or P33 chip or above, MB vendor Asus, Gigabyte or Intel with Intel Chipset recommended	
Display card	ATI Radeon 4650 , nVIDIA GeForce GF-9600 or above (ATI recommended)			
Ethernet	100 baseT or above, Gigabit LAN recommended			
Hard Disk	250 GB or above			
OS	Microsoft Windows XP Professional SP3 / 2003 / Vista / Server 2008 R2 (64bits) /Win 7 (32bit/64bits)			