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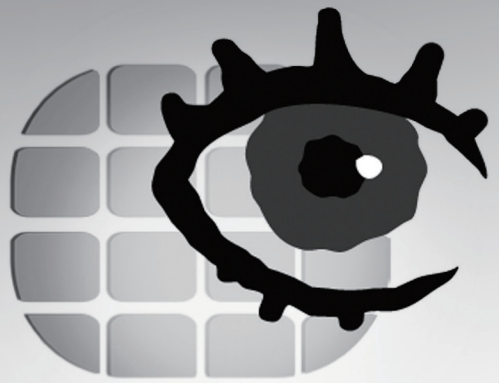
Building Networks for People



D-ViewCam

Standard/Professional/Enterprise

User Manual

Version 1.50

Business Class Networking

Manual Overview

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes. Information in this document may become obsolete as our services and websites develop and change. Please refer to the D-Link website for the most current information.

Manual Revisions

Revision	Date	Description
1.00	July 2, 2010	DCS-210 with firmware version 1.00 DCS-220, DCS-230 with firmware version 1.00
1.10	April 28, 2011	DCS-210 with firmware version 1.00 DCS-220, DCS-230 with firmware version 1.10
1.20	May 14, 2012	DCS-210 with firmware version 1.10 DCS-220, DCS-230 with firmware version 1.20
1.30	December 4, 2012	DCS-210 with firmware version 1.21 DCS-220, DCS-230 with firmware version 1.31
1.40	November 19, 2015	DCS-210/DCS-220/DCS-230 with firmware version V2.0.1
1.50	April 07, 2016	DCS-210/DCS-220/DCS-230 with firmware version V2.0.2

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Product Overview

System Requirements

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

CPU	Intel Core 2 Duo E5300
RAM	2 GB
Hard Disk	250 GB or above
Motherboard	Intel P55, H55, X58, P45, P43 chip, MB vendor ASUS Gigabyte or MSI with Intel Chipset recommended
Display card	ATI Radeon 4650 or above (ATI Driver V11-2 recommended)
Ethernet	100Base-T or above, Gigabit LAN recommended
OS	32 bits: Microsoft Windows XP pro SP3/ Vista SP1/ Win 7 SP1 / Win 8 64 bits: Win 7 SP1/ Win Server 2008 R2 / Win 8 / Win Server 2012 / Win 10
Note: Users need to disable the Metro function of Windows 8 completely when starting D-ViewCam	

Note: To determine the minimum hardware requirements for your planned surveillance system if it is not listed in the above table, please consult the SI (system integrator), the reseller, or D-Link Technical Support.

Note: 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.

Introduction

Thank you for purchasing D-ViewCam Standard/Professional/Enterprise. This state-of-the-art video management software is a comprehensive surveillance system designed to centrally manage up to 8/32/64 network cameras, while displaying real-time information on the screen. This software allows you to build a powerful surveillance system at your home or small business by using D-Link network cameras and the latest features offered by the D-ViewCam Standard/Professional/Enterprise software.

Key Features

- D-ViewCam Standard/Professional/Enterprise automatically locates and adds network cameras in the local network
- Storage management for recording files
- Single and multiple video stream monitoring (up to 8/32/64 video channels)
- Two-way audio communication
- Intelligent filter and search capabilities for scheduling recording and/or event recording

Installing Your Network Camera

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

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

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

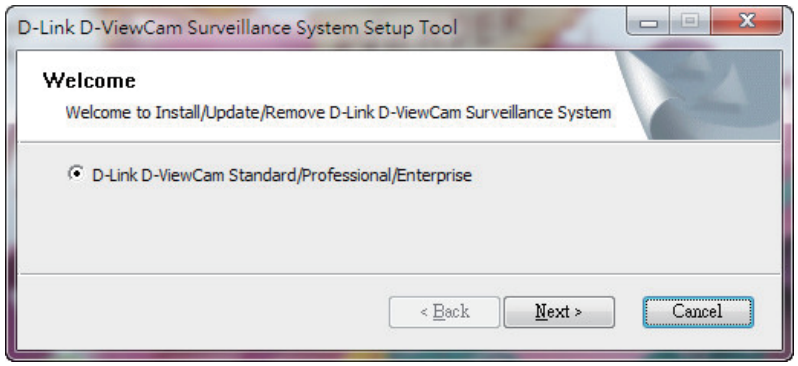
Step 3 - Please refer to the **Add camera(s)** section in the next section **Software Installation** for more information.

Software Installation

Turn on the computer and insert the CD into the CD-ROM drive. Click **Install D-ViewCam Standard_Professional_Enterprise** from the menu, and select **D-ViewCam Standard_Professional_Enterprise** to install the VMS (Video Management Software) software.

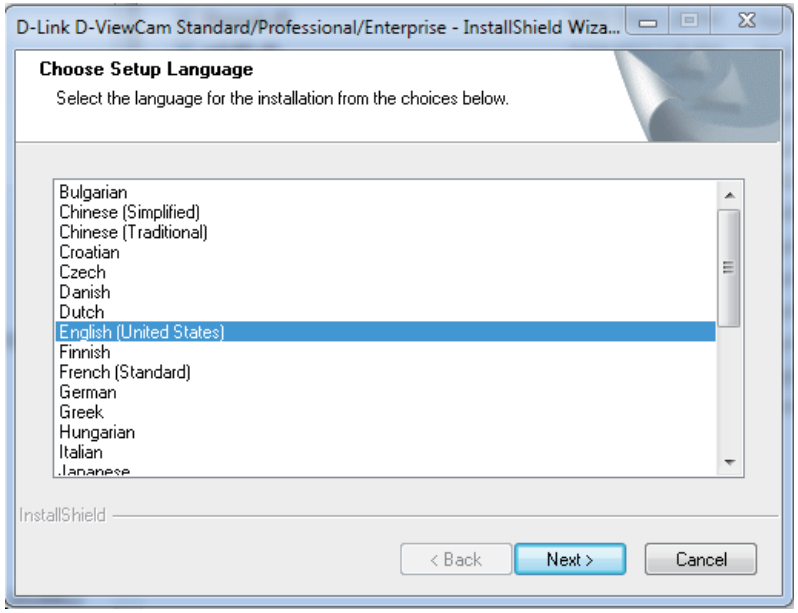
Step-by-step instructions are shown below if you are using Windows® XP. However, similar instructions and windows are displayed for other Windows operating systems.

1. Click **Next** to continue.

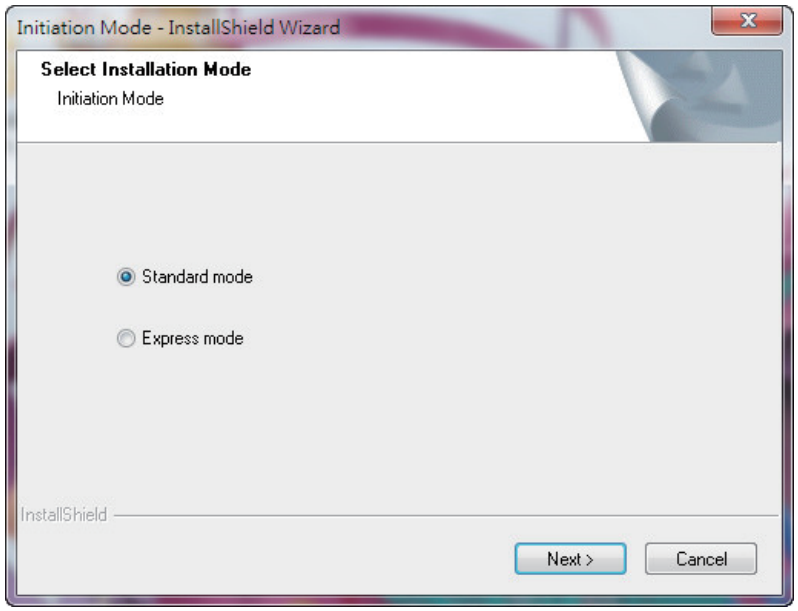


2. Select which language you want to install it, Click **Next** to continue.

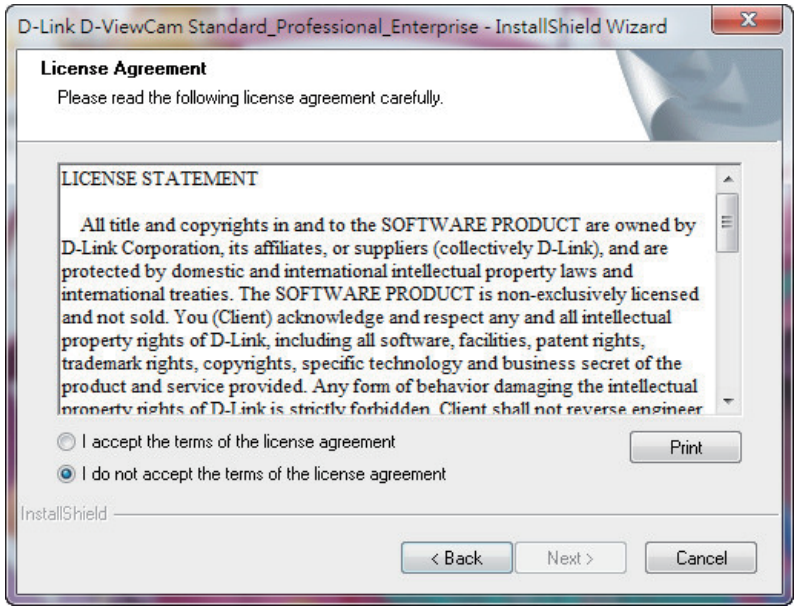
3. Select **Standard mode** or **Express mode** to install software package. Click **Next** to continue.



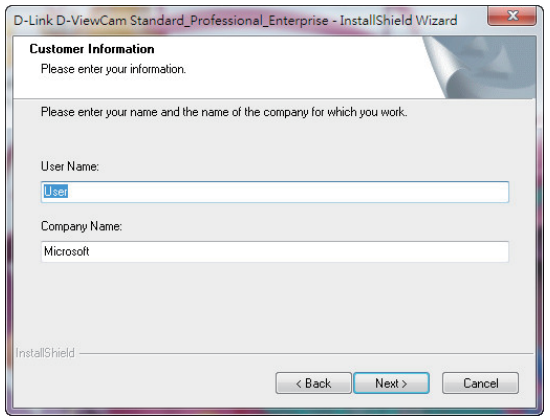
Standard mode will instruct you to step-by-step to install the software.
Express mode will directly install the software with all of default setting.



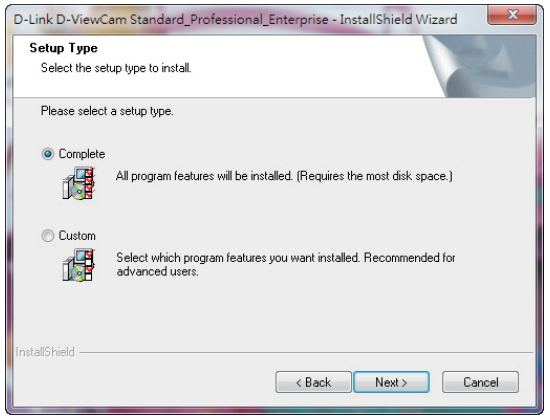
4. Select **I accept the terms of the license agreement**. Click **Next** to continue.



5. Enter the **User Name** and your **Company Name**. Click **Next** to continue

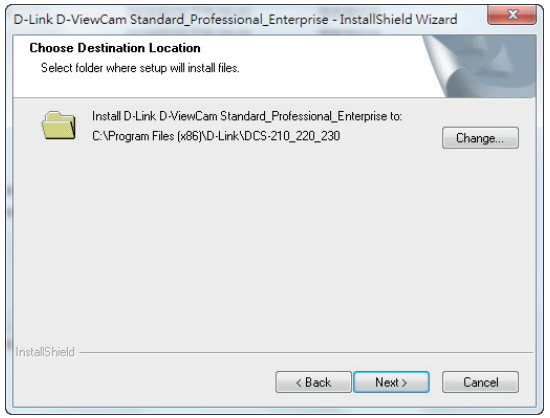


6. Select **Complete** to install the entire package or **Custom** to choose which programs to install. Click **Next** to continue.
   COMPLETE SETUP TYPE
   Select **Complete** to install all the program features into the default directory (requires the most disk space) and click **Next** to continue.
   CUSTOM SETUP TYPE
   Select **Custom** to change the installation directory and/or program features. This option is recommended only for advanced users.

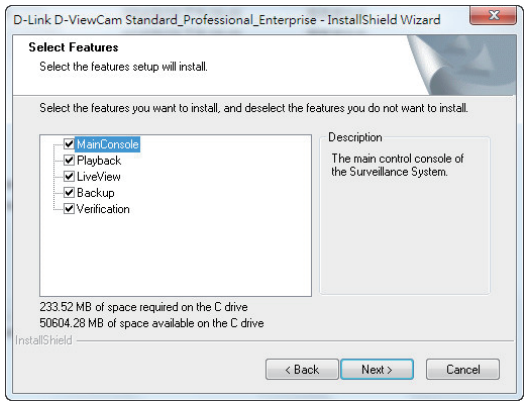


7. Select **Custom**, and then click **Next**. The Choose Destination Location window will appear.

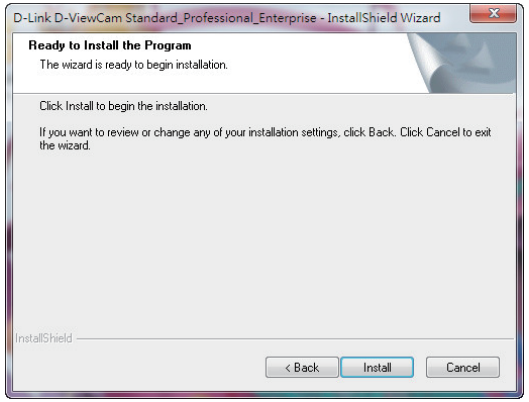
8. To install to a different folder, click **Change** and select another folder Click **Next** to choose with components are installed.



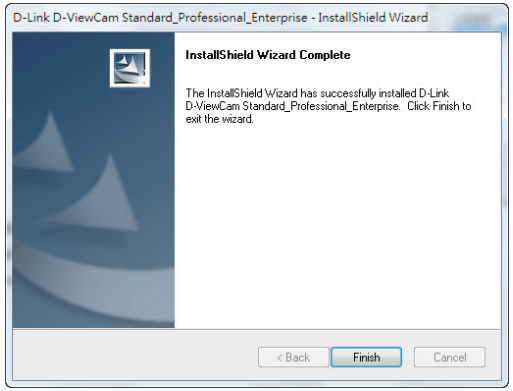
9. Select the features you want to install and click **Next** to continue. The five main features in the server setup process are:
   - Main Console
   - Playback
   - LiveView
   - Backup
   - Verification



10. To continue the installation to the specified folder with the chosen components, click **Install**.



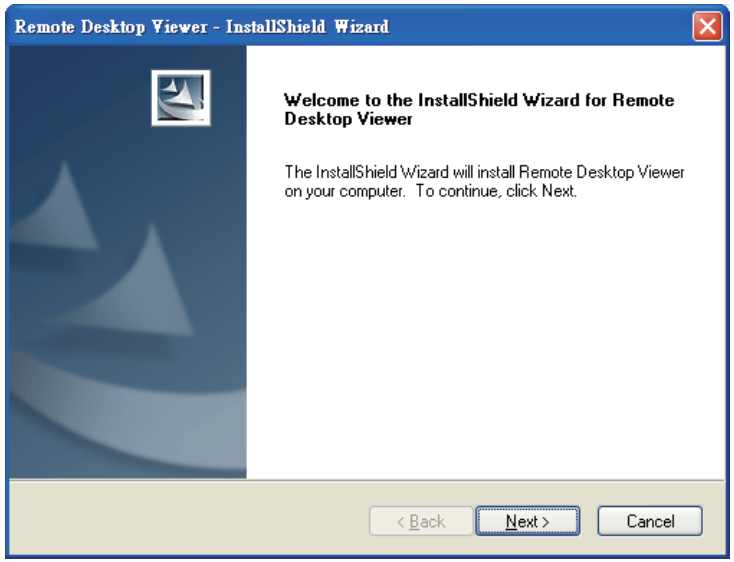
11. Click **Finish** to complete the installation.



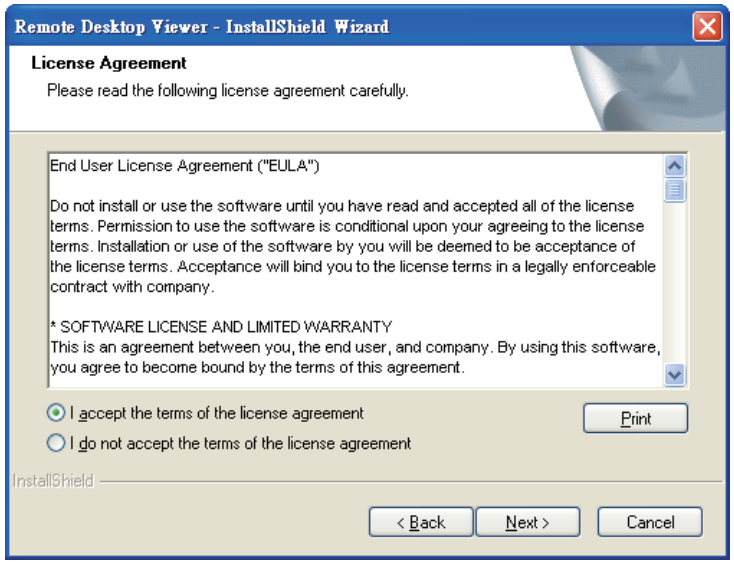
Remote Desktop Viewer Installation

Remote Desktop Viewer allows for remote access to the Main Console and Setup configuration.

1. In the InstallShield Wizard screen, click **Remote Desktop Viewer** and then click **Next** to continue.



2. Select "I accept the terms of the license agreement". Click **Next** to continue.

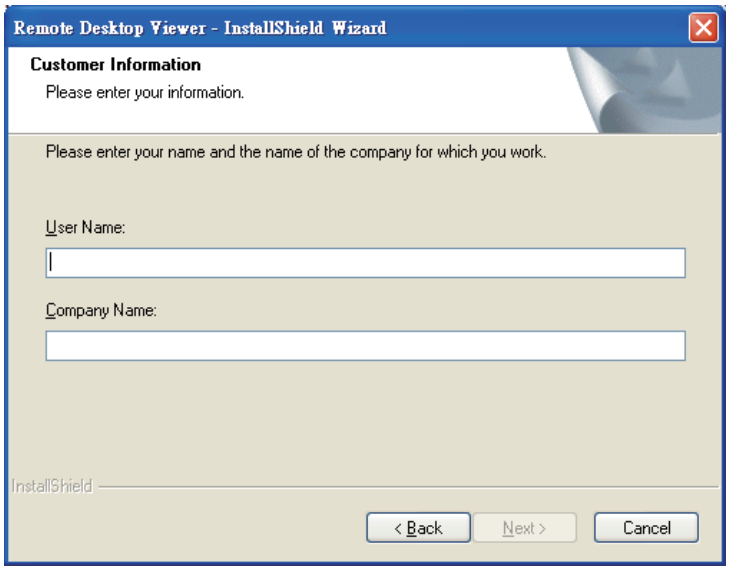


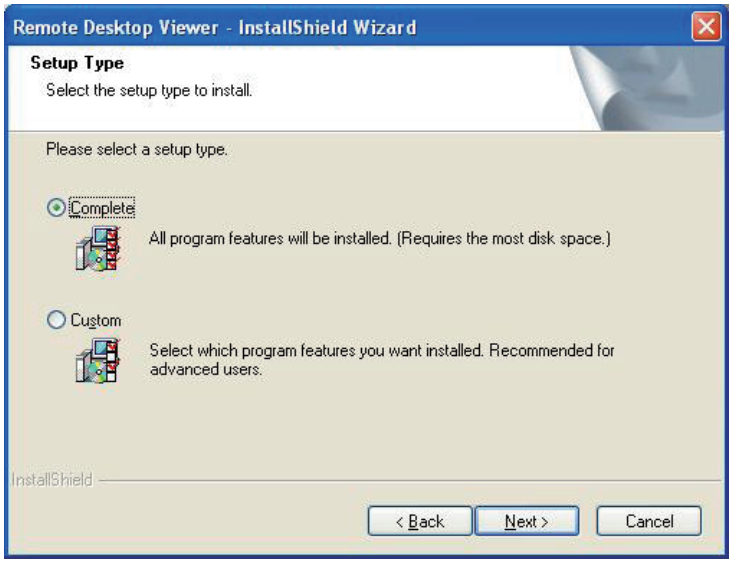
3. Enter the **User Name** and your **Company Name**. Click **Next** to continue.
4. Select **Complete** to install the entire package or **Custom** to choose which programs to install. Click **Next** to continue.

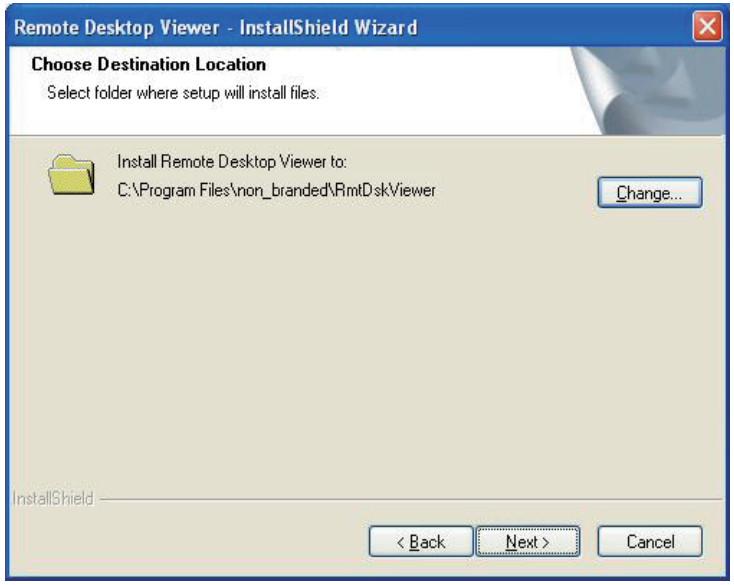
   COMPLETE SETUP TYPE
   Select **Complete** to install all the program features into the default directory (requires the most disk space) and click **Next** to continue.

   CUSTOM SETUP TYPE
   Select **Custom** to change the installation directory and/or program features. This option is recommended only for advanced users.

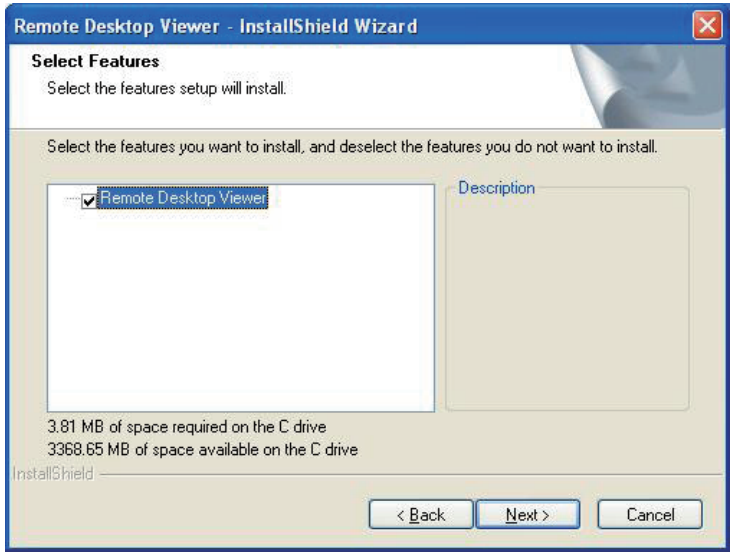
5. Select **Custom**, and then click **Next**. The **Choose Destination Location** window displays.
6. To install to this folder click **Next**. To install to a different folder, click **Change** and select another folder.



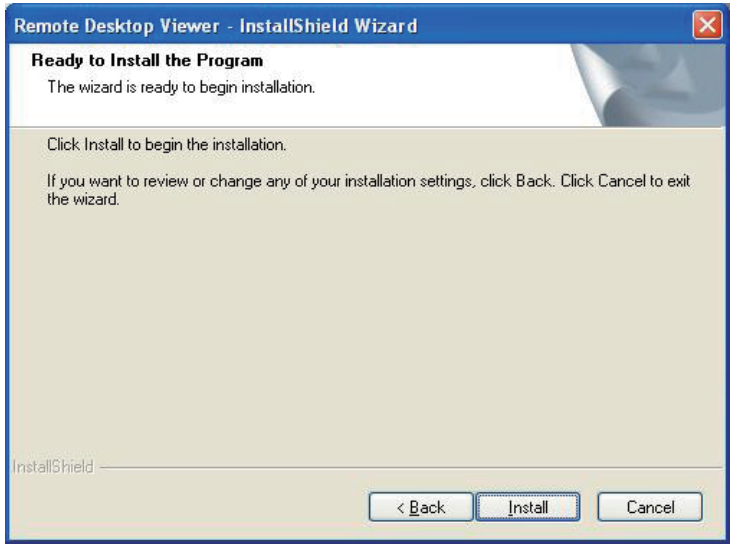


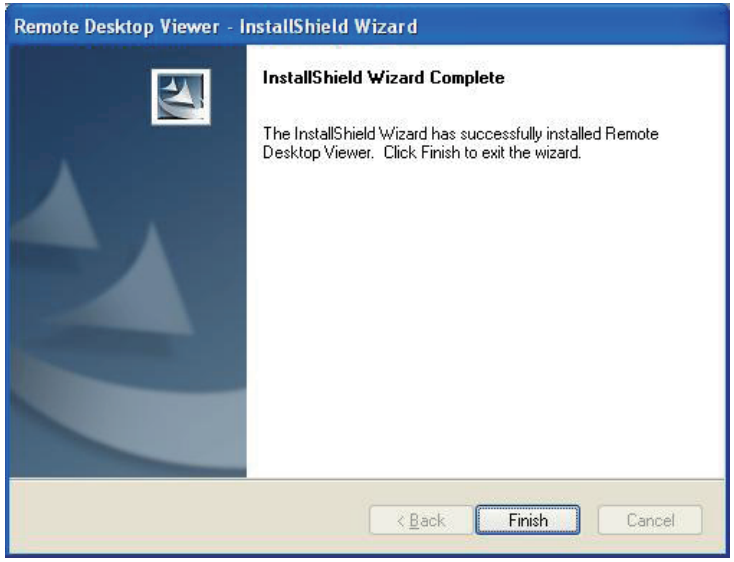


7. Select **Remote Desktop Viewer** and click **Next** to continue.
8. Click **Install** to start the installation.



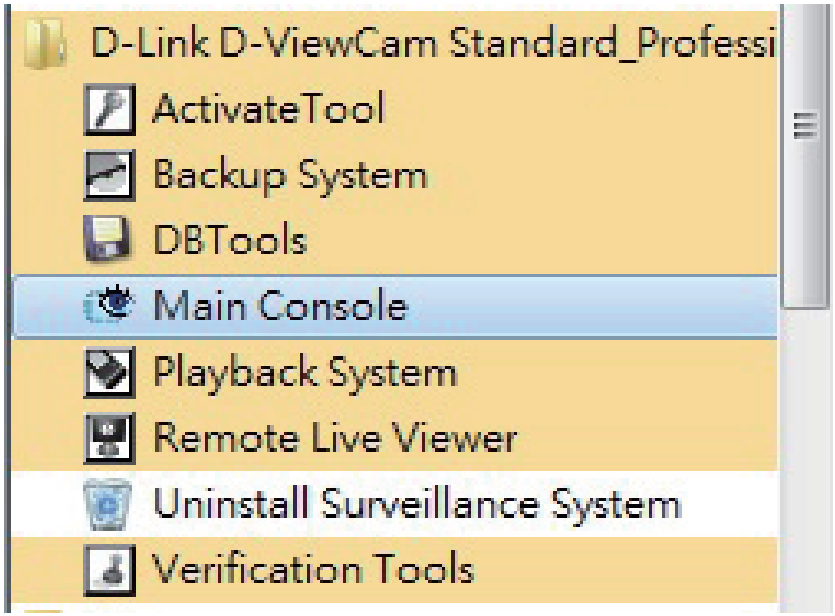
9. Click **Finish** to complete the installation.

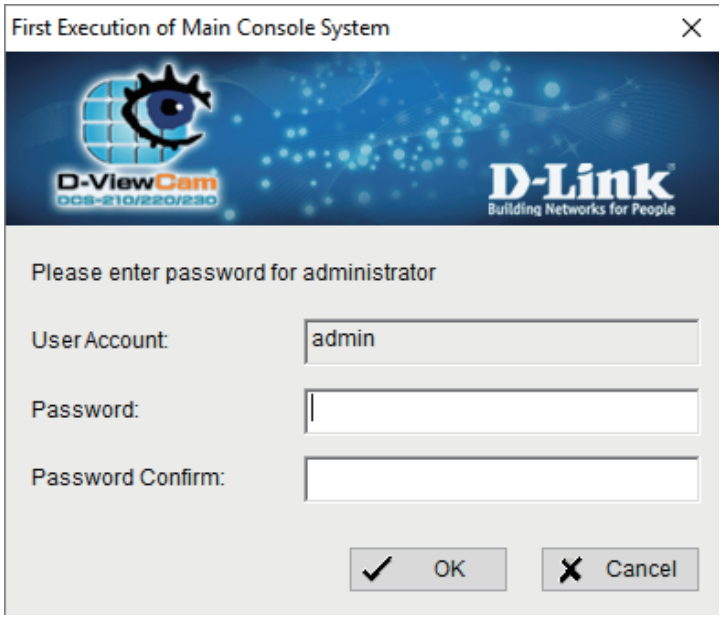




D-ViewCam Standard/Professional/Enterprise Login

When the console loads for the first time (or a password has not been set), enter the **User Name** and **Password** and confirm, then click **OK**.

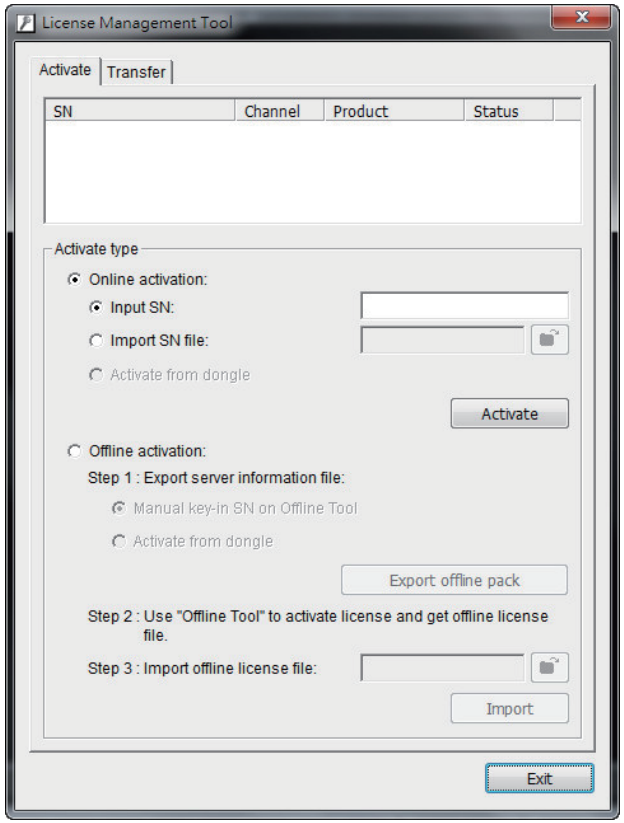




Activate Software License(s)

1. Go to **Main Console > General Setting** and open the **License Manager** tool.
2. Select Online activation.
3. Select Input SN to enter the Serial Number, Import the SN file, or Import license file to activate the license.
4. Click **Activate**. After the software license is activated successfully, please restart the Main Console.

Note: Please refer to the License Management Tool section for advanced settings.

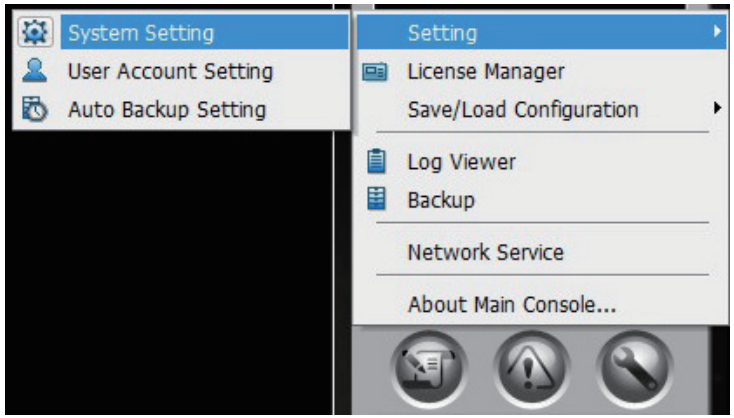


Add Camera(s)

1. Once the console loads, click **General Setting** , then click **Setting**, and select **System Setting**.

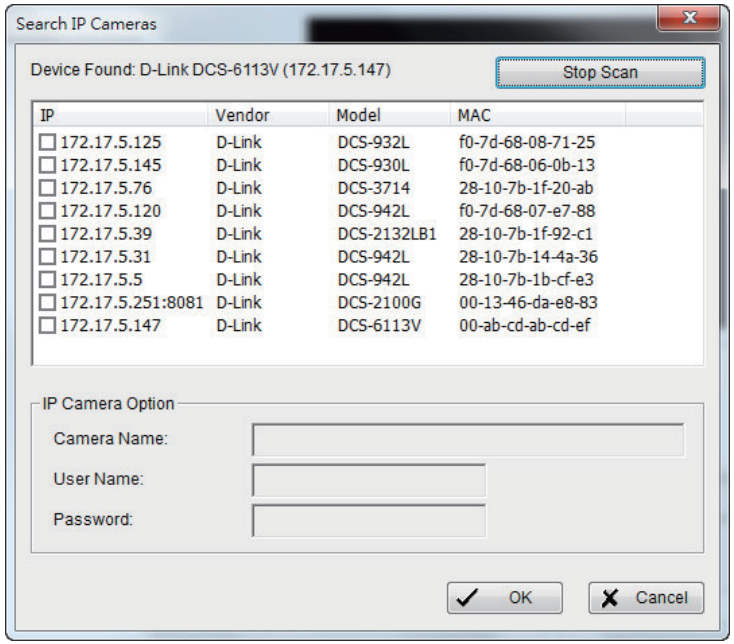
2. Select the **Camera** tab, then click **Search** to find the network camera (s) that are on your local area network (LAN).

The system automatically searches for all the network cameras that are on your local area network (LAN).

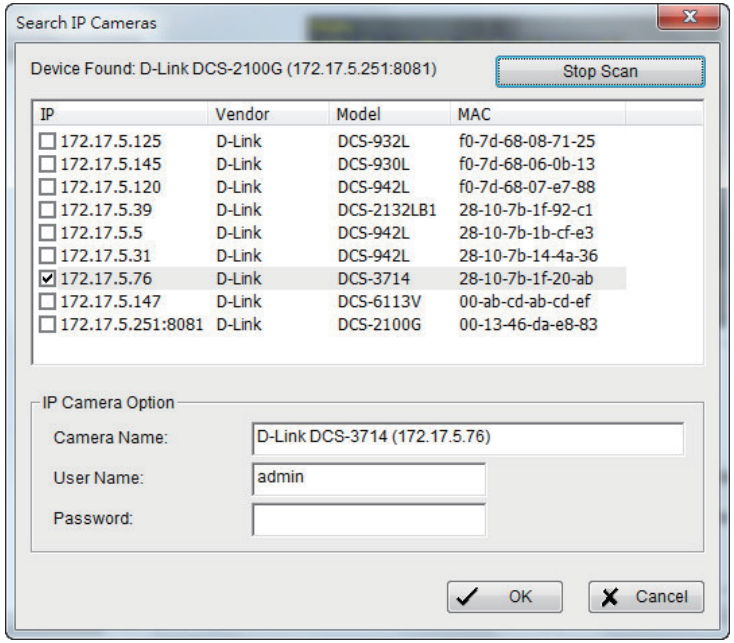


3. Select a **Camera**.

Note: If your network cameras support UPnP, follow step 4. Otherwise, skip to step 5.



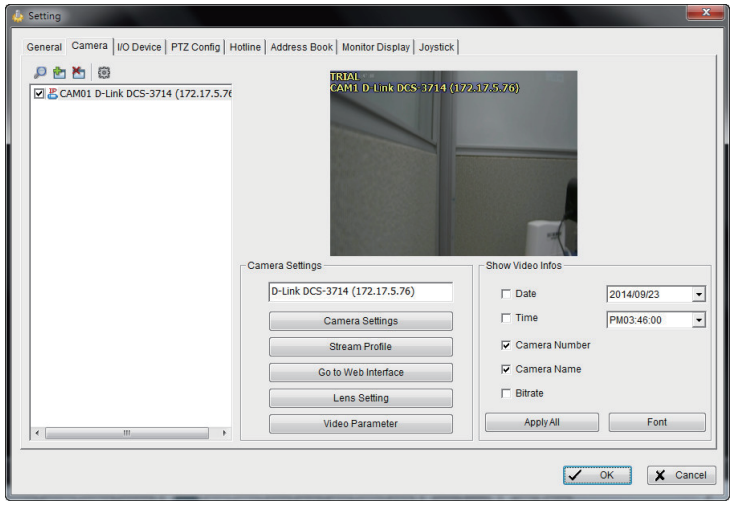
4. Select one of the network cameras that are available, enter a **Camera Name** and then enter the **User Name** and **Password**. Click **OK** to add the camera.



5. If your camera(s) does not support UPnP, you can manually add a camera. Click **Insert** to manually add network camera(s) that are on your local area network (LAN).

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

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



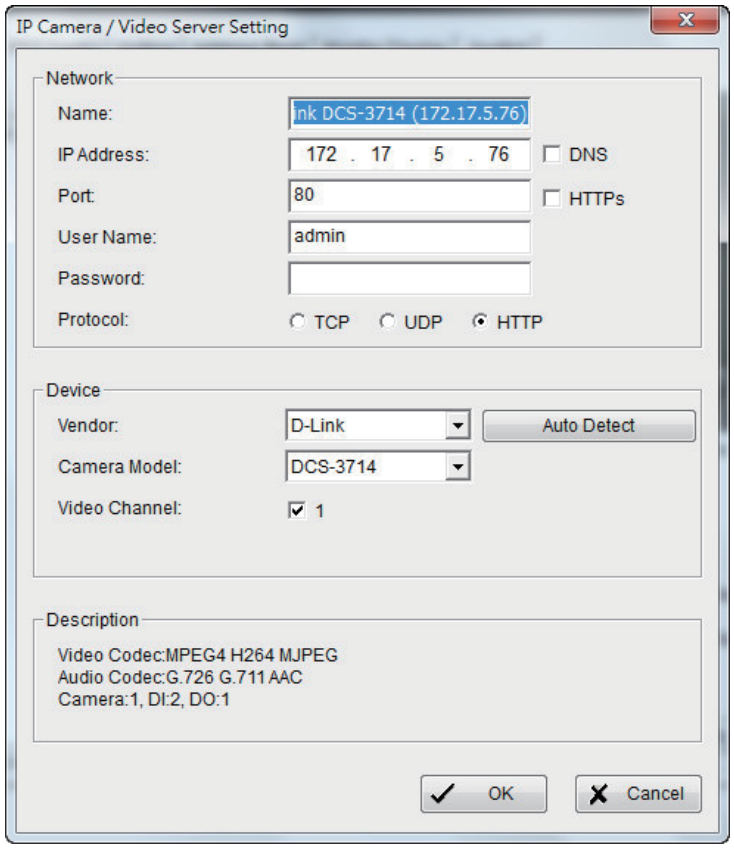
6. Enter the following Network information for your camera:

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

   Enter the following **Device** information for your camera:

   - **Auto Detect** - Click to detect the vender and model information.
   - **Vendor** - Select the vendor's name 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.

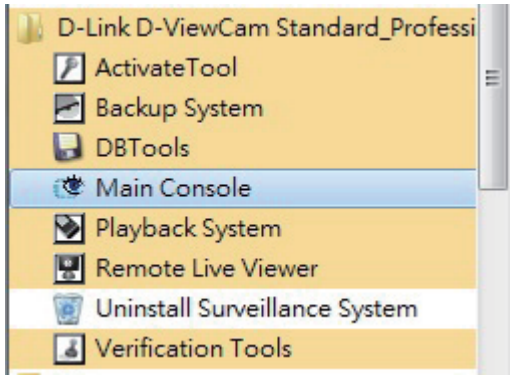
7. Click **OK** to add your camera.



D-ViewCam Standard/Professional/Enterprise Interface Overview

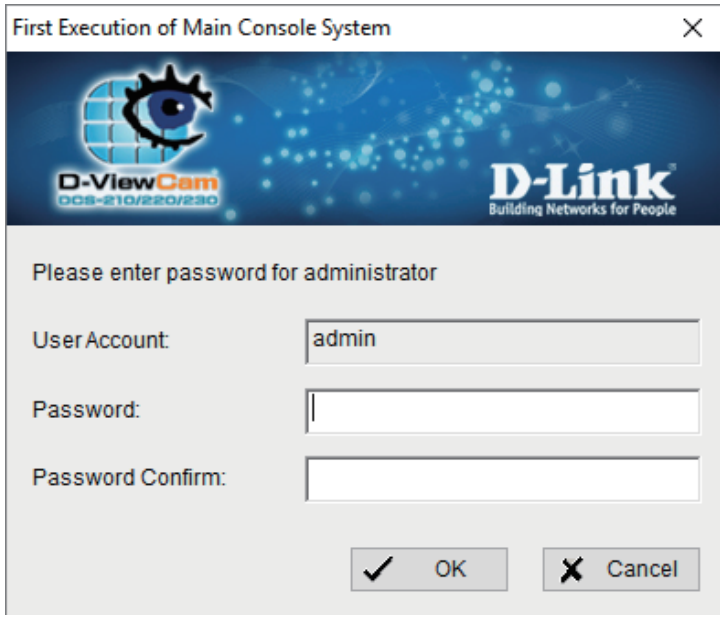
This section will show you how to start and configure D-ViewCam Standard/Professional/Enterprise.

To start D-ViewCam Standard/Professional/Enterprise, go to **Start > All Programs > D-Link D-ViewCam Standard_ Professional_ Enterprise > Main Console.**



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

Note: Refer to the **User Account Setting** section for User Account information.



Main Console

1	Main Display Area	**4**	General Controls and Settings
2	Exit/Minimize Program	**5**	PTZ Features
3	System Information	**6**	Split-Screen Options

Log Out/Exit Program/Minimize Window

Click to log the current user out or to close the D-ViewCam Standard/ Professional/Enterprise program.

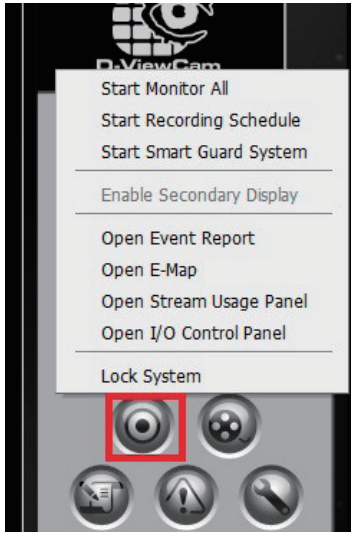
Click to minimize the window.

Split Screen Options

Select a split-screen display layout by clicking on the desired layout icon. The system provides many different split screen modes. To switch to a 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 4 screen	Divides into 1 screen	Divides into 10 screens	Divides into 13 screens
Divides into 6 screens	Divides into 4 screens	Divides into 13 screens	Divides into 17 screens
Divides into 9 screens	Divides into 6 screens	Divides into 16 screens	Switch to full screen
Divides into 12 screens	Divides into 9 screens	Divides into N 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.
Enable Secondary Display	Click to enable secondary monitor display.
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 Stream Usage Panel	Click to open Stream Usage Panel for monitoring stream usage status.
Open I/O Control	Click to open the I/O control window, monitor DI/DO, and manual triggering of DO devices.
Lock System	Click to lock the system.

Notes:
1. To automatically activate the Recording Schedule and Smart Guard when the MainConsole starts, go to **General Setting > Setting > System Setting > General > Startup** to setup the auto-startup functions.

2. The secondary monitor will still retain and display all the functions (for example Event Report, E-map, Resource Report or IO controls) that are opened in the Main console, even if you exit the Main Console.

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 the **PlayBack** section for details.

Schedule:
Organize the recording time schedule and configure recorder settings. See the **Schedule** section for details.

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

General Setting:
Select to modify general settings, user account settings, save/ load configuration settings, access log viewer and backup files, and configure network services. See the **Config** section for details.

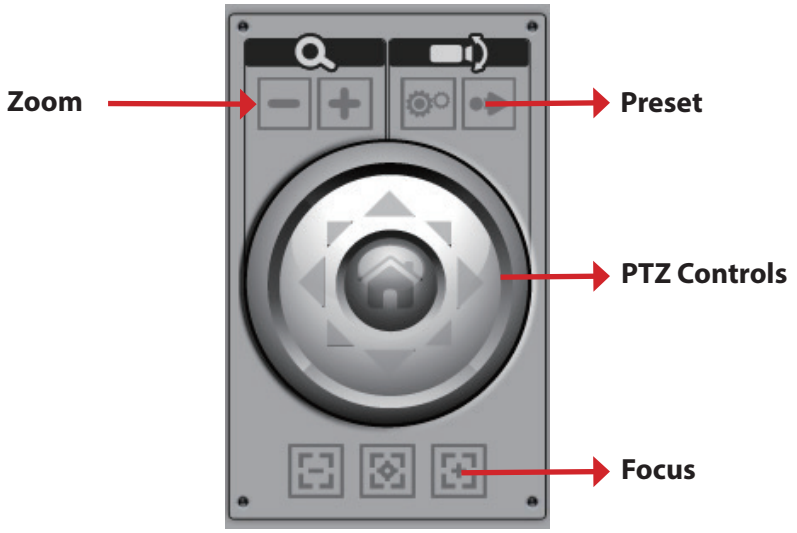
System Information Window

Displays the Current Date, Current Time, Free Disk Space, Network Camera Bitrate, and User Defined Text.

PTZ Features

PTZ Camera Control

Use this function to 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.



Zoom

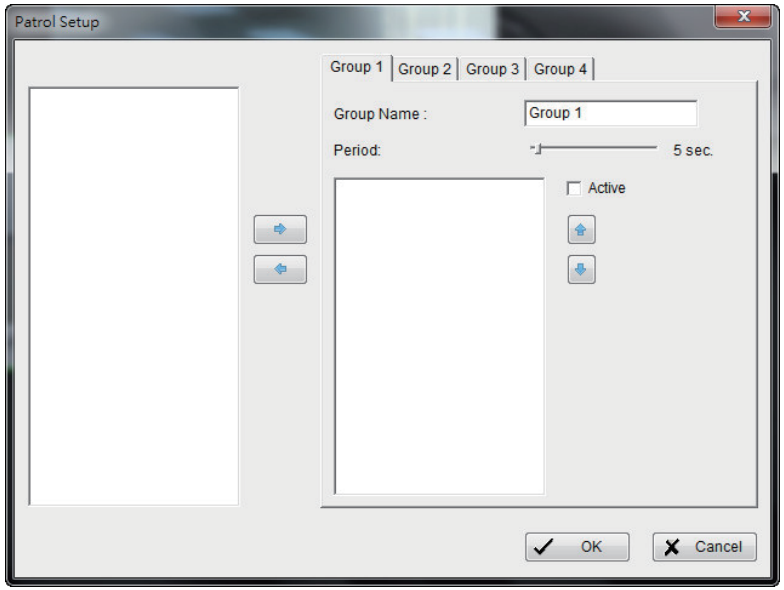
Click on the **+** sign to zoom in or click the **–** sign to zoom out.

Preset/Go

Allows you to adjust the camera view until you are satisfied. For example, click **Set** and set the preset point to 01. Adjust the camera view again and set the preset point to 02. Repeat the process until all preset points are set. You can assign a custom name to each preset. Click **Go** to view the results of your setting.
Note: To adjust the speed settings of PTZ camera, go to **General Setting** > **Setting** > **PTZ Config**.

Patrol

Go to **Add Preset Point** > **Set Patrol** to bring up 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 set up to four groups of auto patrol. To start or stop, click on the **Go to Preset Point** icon in the Main Console, and select **Start Patrol** or **Stop Patrol**.

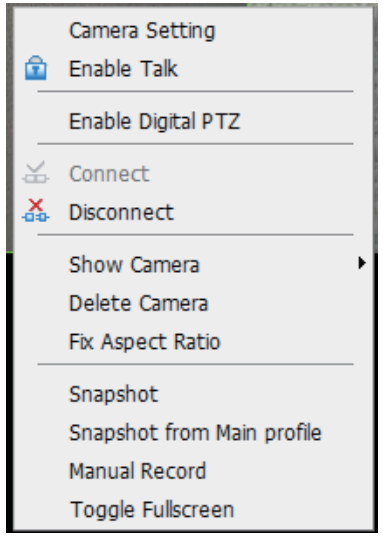
Auto Pan

Go to **Go to Preset Point** and click on **Start AutoPan** to enable auto pan. Click on **Stop AutoPan** to stop. Auto Pan enables the camera to scan an area horizontally from left to right or right to left.

Focus

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

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.



Camera Setting
Click to go to the camera setting page for General Setting

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

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.

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.

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

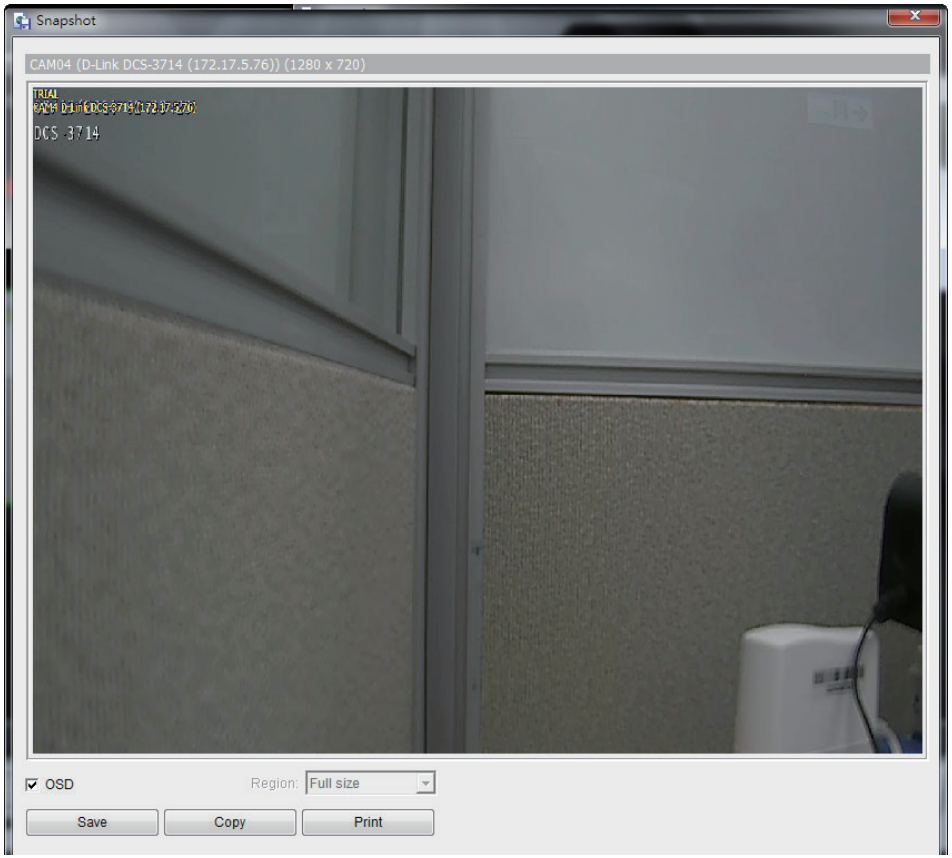
Snapshot
Select the snapshot function to capture a screen shot of the current video. You have the option to copy the image to clipboard or to save it. You may select the OSD option to export the image with date/time and camera number/ name text. If the digital PTZ function is enabled, you can decide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

Snapshot from Main profile
Select the snapshot function to capture a specific video image frame from camera main profile immediately. You have the options to copy the image to clipboard or to save it

Stream Profile
Select different level Stream Profiles to downgrade video quality for bandwidth concerns.

Manual Record
Select to start recording video.

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



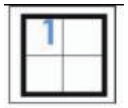
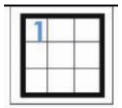
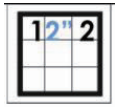
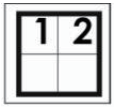
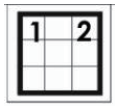
Duplicate Camera

To duplicate the feed from a camera, right-click on a blank area of the screen and select **Duplicate Camera**. Select the appropriate camera to duplicate the feed from. The duplicate view from the camera will then be displayed adjacent to the original view.

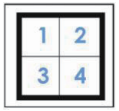
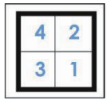
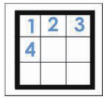
Live Display

Live display allows you to change channels and screen divisions on the Main Console and secondary monitor. Each screen division will have the same display list, but different sequence. The maximum number of screen divisions supported by the Main Console and secondary monitor is 64. For example, when using **Show/Delete Camera** to edit the camera list, the administrator can apply this function to all different screen divisions. Refer to the **On Screen Menu** section for more information on Show/Delete Camera.

Note: The camera list of all divisions is the same as the right column of monitor display on **General Setting > Setting** window. This means, two monitors could have two different lists.

Action	Current Division	Other Division
Show camera (add cam 1)		 Add to first free channel
Duplicate camera (duplicate cam 2)		 Add to first free channel
Delete camera (delete cam 2")		 Remove cam 2 and keep channel free

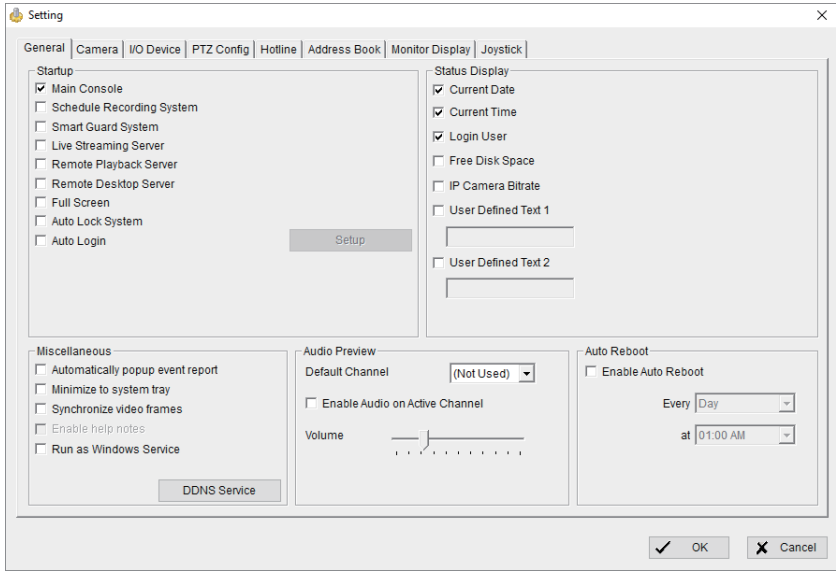
When using mouse to drag camera channel, the sequence change would only apply to original division.

Original	Action	Current Division	Other Division
	Drag cam 1 to cam 4		 No change in sequence

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

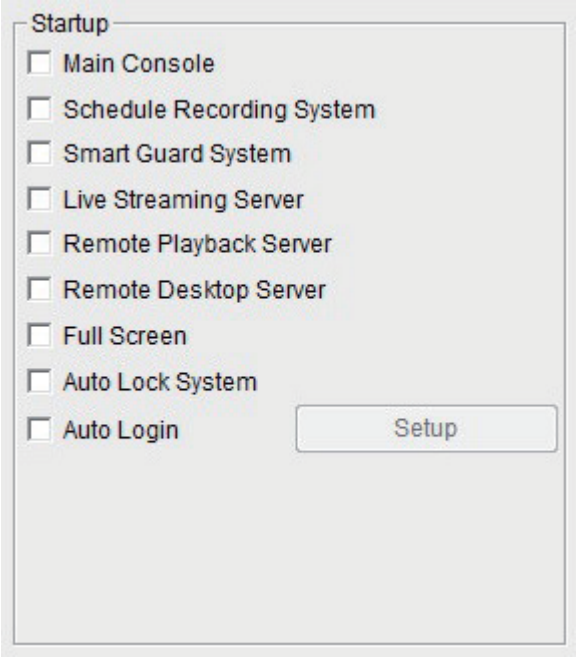
Configuration

You can access many of your surveillance settings from this page. Click to configure your settings.



General

Go to **General Setting > Setting > System Setting > General.**



Startup

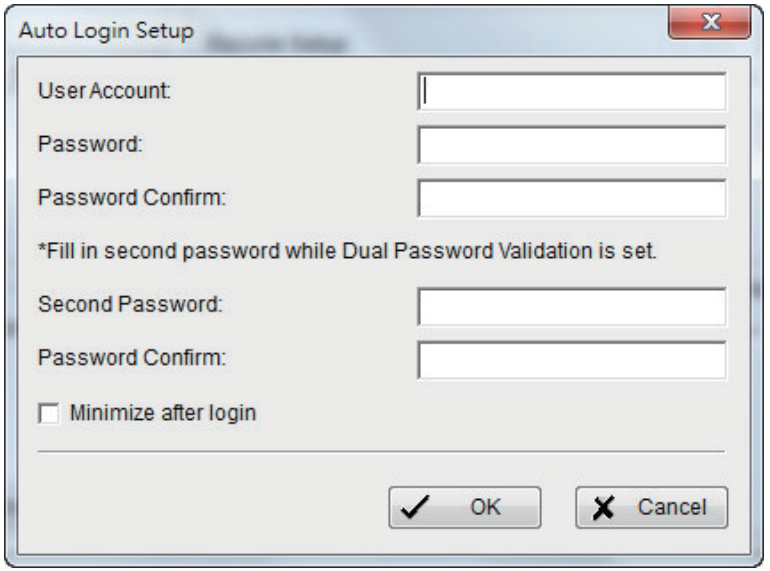
Main Console: Select to view the Main Console system at startup.

Select the functions and network services that should activate automatically.

Auto Login Setup

Auto Login: Select **Auto Login** and then click **Setup** to view the **Auto Login Setup** window.

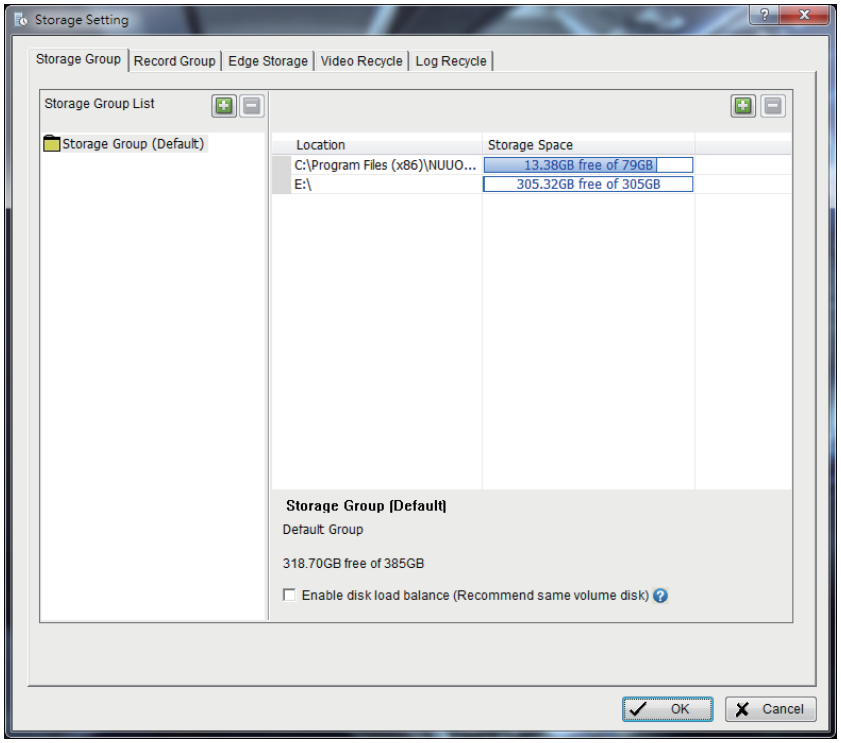
Enter the **User Account** and **Password** to login automatically when the system starts. Enable **Minimize after login** to minimize the Main Console window after login.



Storage Group

You can set up your hard disks into groups for various purposes such as archiving critical videos on high quality disks or organizing specific recorded events on select disks for better video management.

Location:
Assign the default folder for the system to store data files. It is recommend that you don't save in the system drive (C:\) to avoid a drop in your PC's performance when free storage is low.

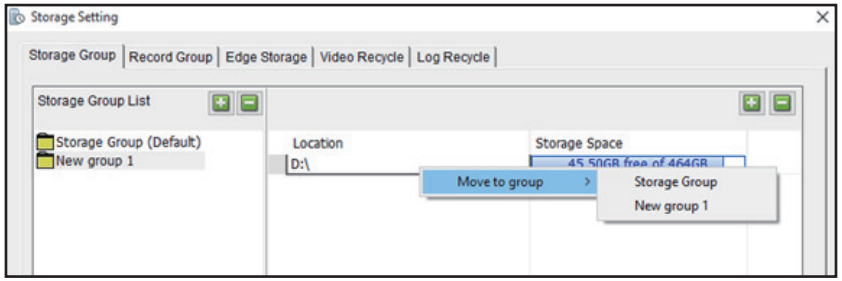


On the left column, Storage Group List lists out all the storage groups.

- Click on the + button to add a storage group.
- Click on the – button to delete a storage group.

On the right column, disks in the storage group are listed.

- Change the location by clicking the ... button.
- Right-click on a disk to move it to another group (see below), or click on the upper right + button to add a disk into the group.



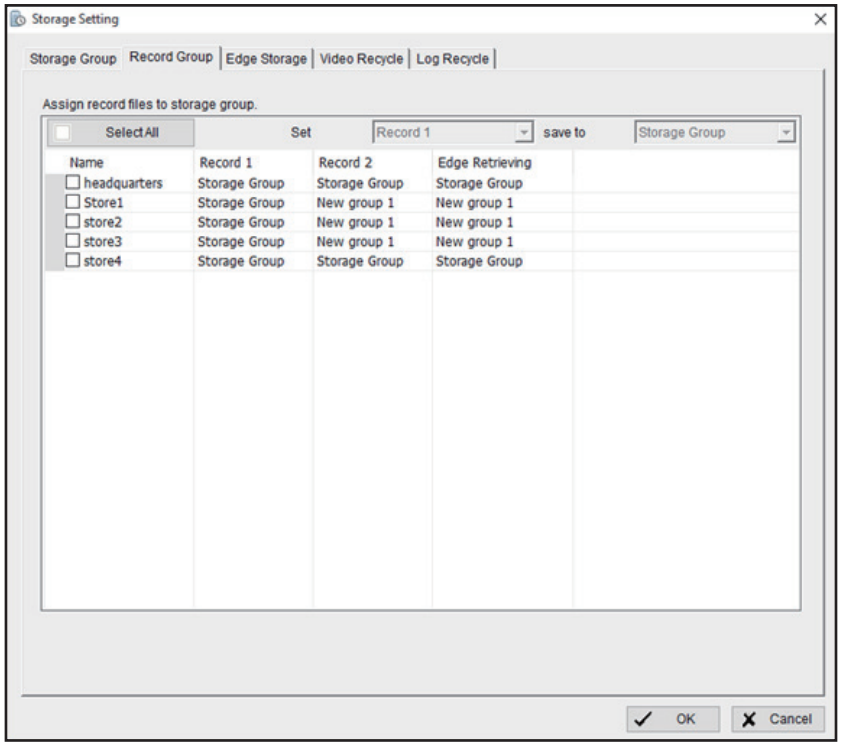
If you have more than one drive available for recording, you may check "Enable Disk Load Balance (Recommend Same Volume Disk)" to evenly distribute recording to multiple drives. This will improve the system performance.

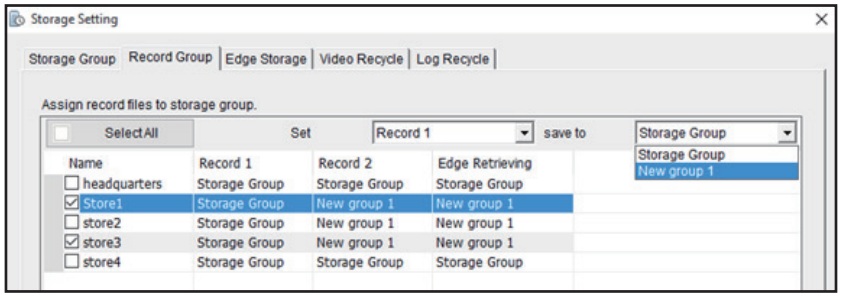
Note:
The Default group can be renamed, but not deleted.

Record Group

You can assign the destination storage group for each recorded video from a camera. Cameras that are active are listed here.

1. You can choose which video (Record 1, Record 2) is to be recorded to the intended storage group individually.
2. You can also choose to multi-select the cameras, and assign as a group.
3. Click on the checkbox on the left and select the desired cameras, and select the type of Record, and select the Storage Group to assign as a group.
4. Click on **Select All** to check all cameras on the list, and assign as a group if needed.
5. Press **OK** to confirm the change.



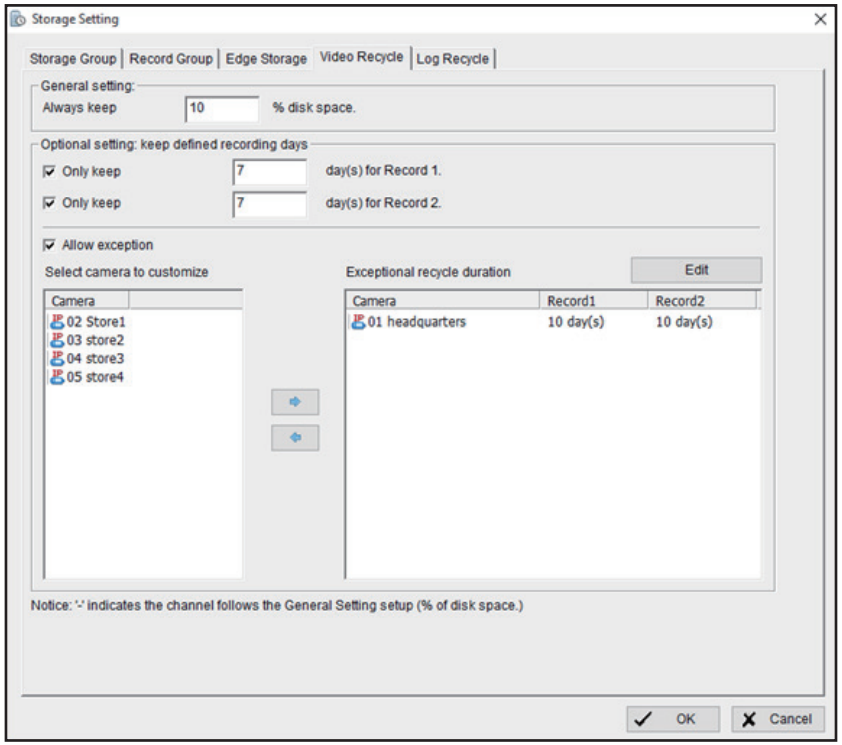


Video Recycle

This section allows you to configure criteria for recycling recorded video for each camera.

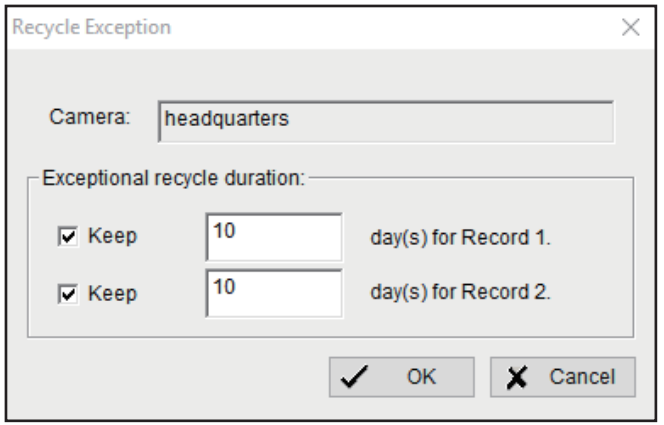
General setting: Set the standard limit to let the system recycle automatically. The system will start to recycle if the disk space is less than the indicated percentage (default is 10%, minimum is 5%).

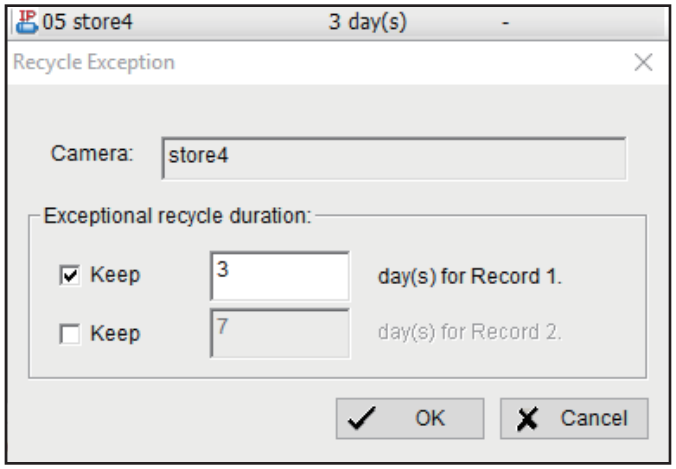
Optional setting: Set different recycle days for Record 1 / Record 2 in order to keep different lengths of recordings.



Allow exception: Drag and drop the camera(s) to the right panel and it will pop up a window allowing the input of special recycle criteria. In the example below, the 2 recordings of the first camera were configured with different recycle criteria: Record 1: 10 days; Record 2: 10 days.

If you expect a recording will utilize all available space, you can leave the keep x days option blank. By setting this, the symbol will become "-", and the length of Record 2 will depend on the remaining available space. This also means this recoding has the lowest priority, so it would be recycled first when disk space is insufficient in order to meet recording settings.





Note:

1. The system will detect the storage space of default location, if the default storage space is exhausted, the video will be stored on the next available directory.
2. If all the locations exceed the storage rule, the system will start recycling.
3. Recycle priority: keep % of disk space > keep x days > keep – days.

Recycle example:

Example 1: Set "keep 10% of disk space"; Current available space is still more than 10%, ex: 15%.

a. For the recordings set as "keep x days": Main Console will start to delete the oldest recording when it's data length reach X days.

b. For the recordings set as "keep - days": Main Console will continue recording and will start deleting the oldest recording when available disk space reaches 10%.

Example 2: Set "keep 10% of disk space"; Current available space is 10%.

c. For the recordings set as "keep - days": Main Console will start to delete the oldest recording. The new space after deletion will be used to store the recording which is set as "Keep X days".

d. For the recordings set as "keep X days": Main Console will start to delete the oldest recording when it's data length reaches X days.

e. Main Console continues to delete the oldest recordings of "keep – days" until there remains only 1 day. Then, Main Console will start to delete the oldest recordings from "keep x days" in order to follow the rule of keeping 10% of disk space.

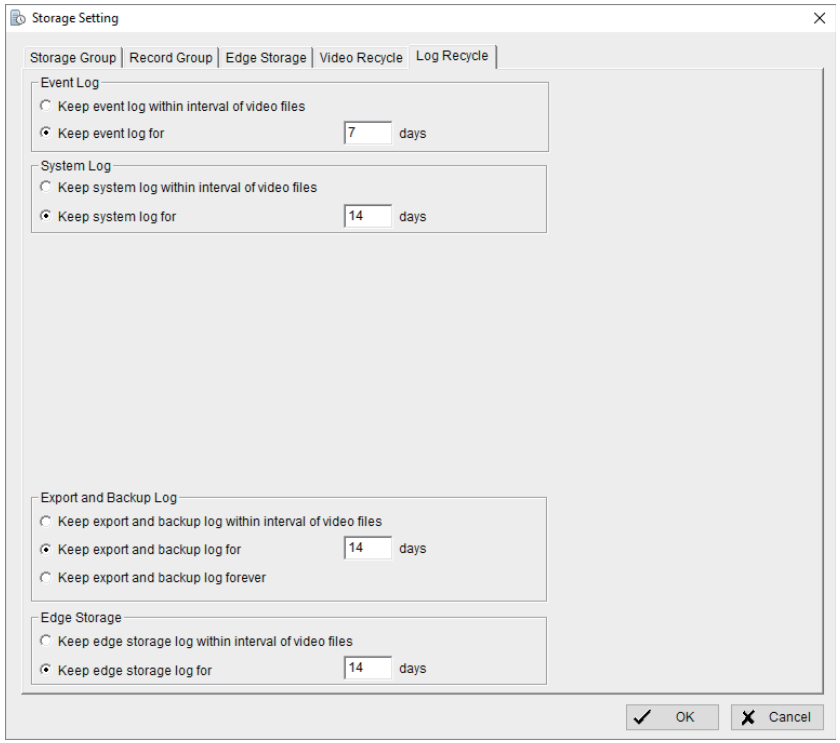
Log Recycle

Click the button to obtain the **Advanced Recycle Setting** panel. Set the days that you want to keep the event or keep all event logs within interval of video files.

Event Log: Delete the event log data that is older than the number of days set.

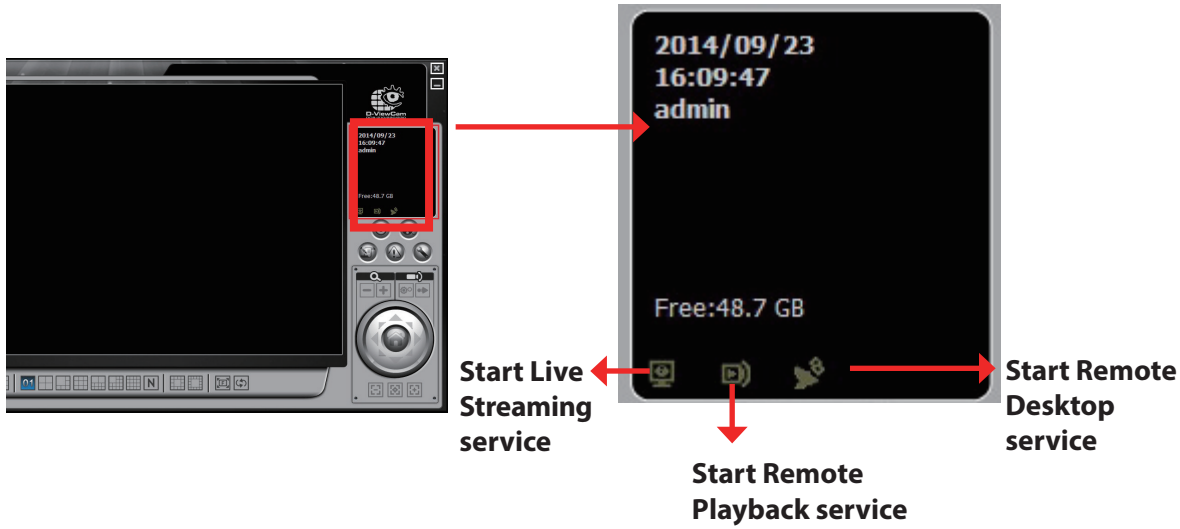
System Log: Delete the system log data that is older than the number of days set.

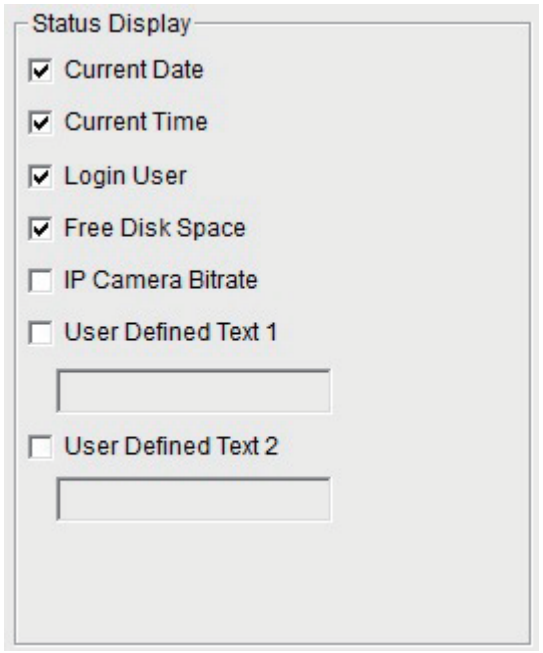
Resource Report: Delete the Resource report data that is older than the number of days set.



Status Display

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





Miscellaneous

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

Minimize to system tray: Enable this button to minimize the application to an icon in the task bar.

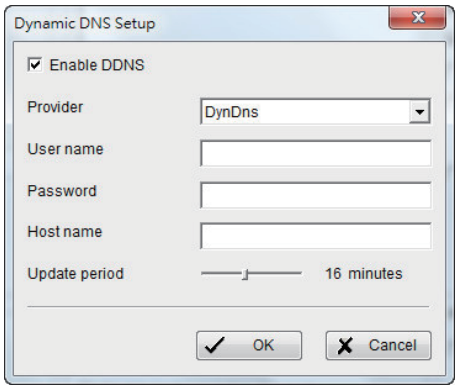
Note: *Enter the username and password of the Main Console when you click the minimized icon in the task bar to start monitoring.*

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

DDNS Service: Dynamic Domain Name Server (DDNS) allows you to use **Live View** or **Web View** to connect to the Main Console using the Internet even if you have a dynamic IP address.

Click **DDNS Service** to open the **Dynamic DNS Setup** window.

Update the following fields - **Provider**, **User name**, **Password** and **Host name**, and **Update period**.



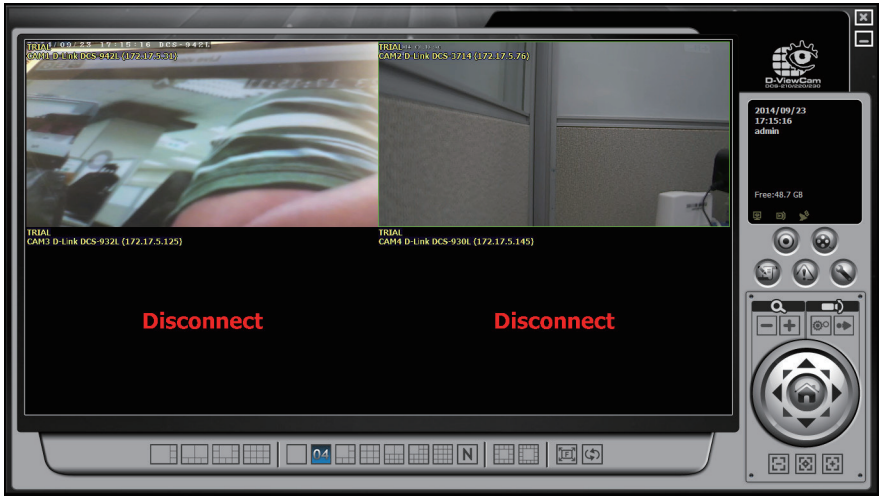
Audio Preview

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

Enable Audio on Active Channel: Select the **Enable Audio on Active Channel** 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: Use the volume bar to adjust volume.

System plays audio of the default channel

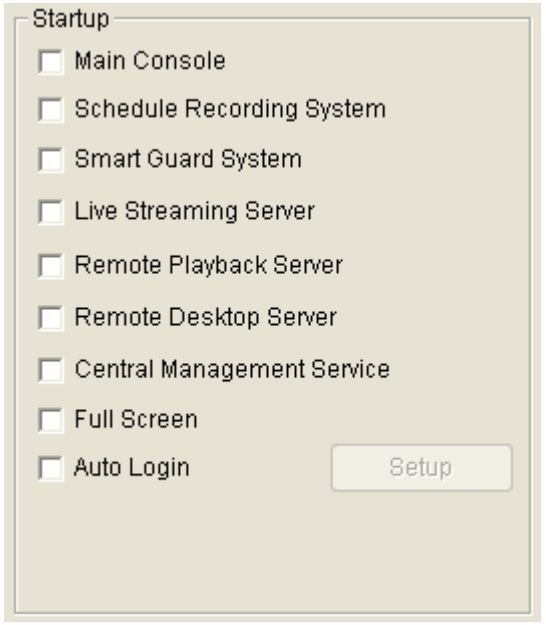


System plays audio of the selected channel

Auto Reboot

Select **Enable Auto Reboot** and set the day and time to reboot the system.

Note: Please enable **Main Console, Auto Login,** and other functions in the Startup section to ensure that the system runs normal after auto reboot.



Camera

Go to **General Setting > Setting > System Setting > Camera.**

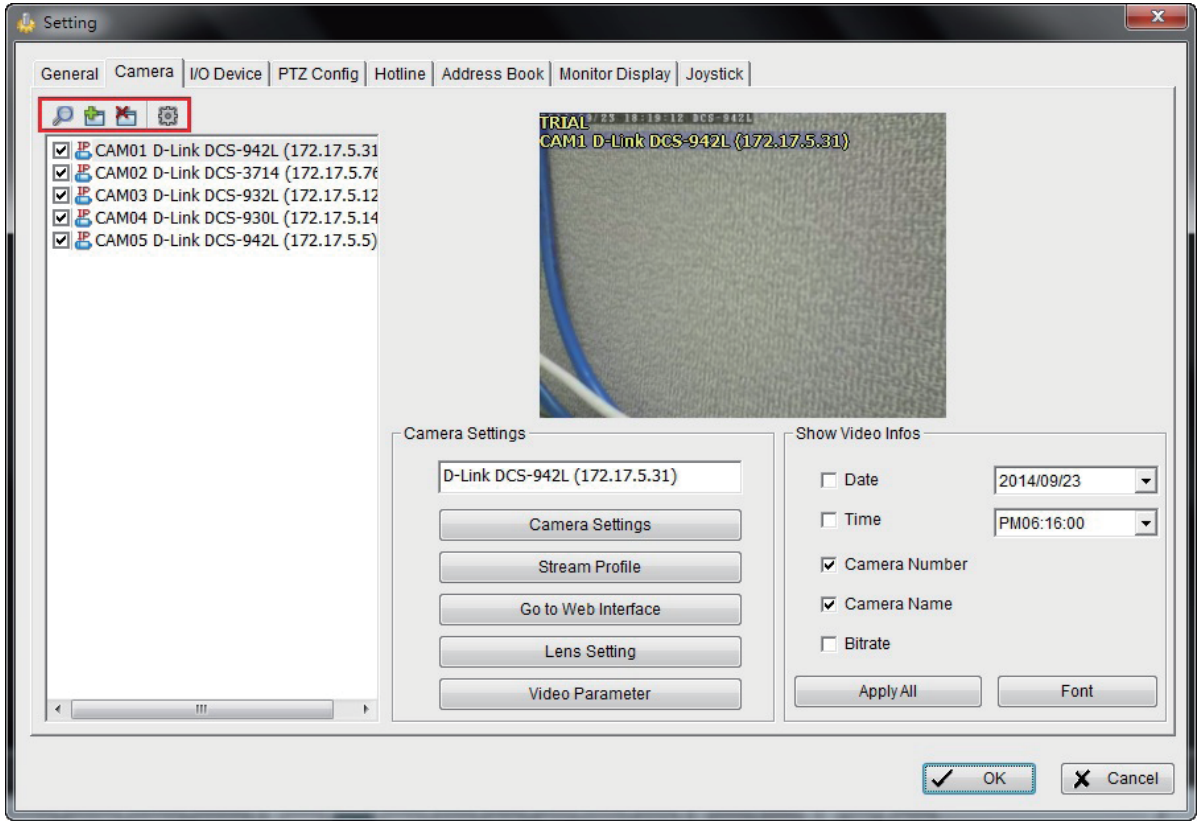
Add Camera

The **Search**, **Insert**, **Delete** and **Config** functions are included in the **Setting** window.

Search: Click **Search** to open the **Search Network Camera** window. The system will start scanning automatically once the window is opened. You may manually stop scanning by clicking **Stop Scan**.

Enter the user name and password for each Network Camera found and click **OK** to add it to the camera list.

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 **Network Camera / Video Server Setting** and add network cameras to the list.

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

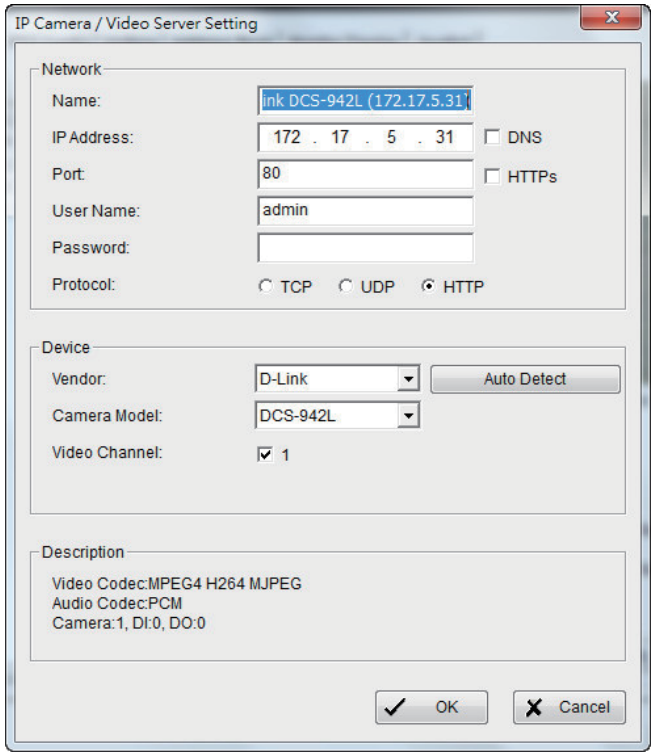
Config: Click to open **Network Camera / Video Server Setting**. Here, you can modify the network camera settings.

Network Camera / Video Server Setting

Network: Update the fields, including **Name**, **IP Address**, **Http Port**, **User Name**, **Password** and **Protocol** referring to the instructions provided by the camera manufacturer. Select **Use DNS** to use domain name instead of IP address.

Device: Choose the network camera manufacturer from the drop-down menu. Click **Auto Detect** and the model name will be displayed in the list.

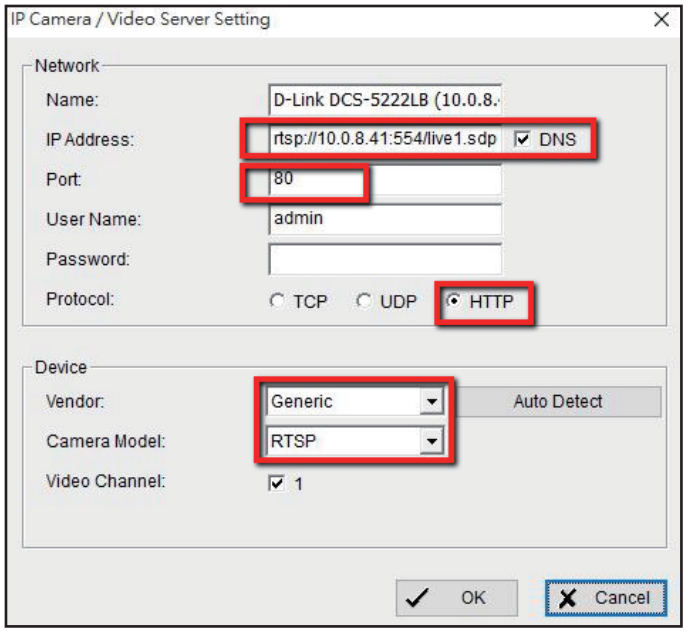
Description: Displays information about the device.



RTSP Link

You can also enter an IP camera's RTSP URL directly in the "IP Address" field to receive its video stream. Please follow the steps below:

1. Check "DNS" checkbox.
2. Enter the RTSP URL and port number for IP Address. (For example: rtsp://10.0.8.41:554/live1.sdp.)
   Note: The URL and port number are different for different cameras. Please check your IP camera's user manual for the correct RTSP URL and port number.
3. Enter "80" for Port.
4. Enter the camera's User Name and Password.
5. Select "HTTP" under Protocol.
6. Select "Generic" as the Vendor and "RTSP" as the Camera Model.
7. Click **OK** to save.



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.

Camera Settings: Set the camera parameter such as resolution and frame rate offered by camera vendor. If the camera supports Multi-stream, you can enable the function by checking "**Enable Multi-Stream**".

Note: The multi-stream function allows the main console to receive 3 different video streams. Please check device pack support list for supported features.

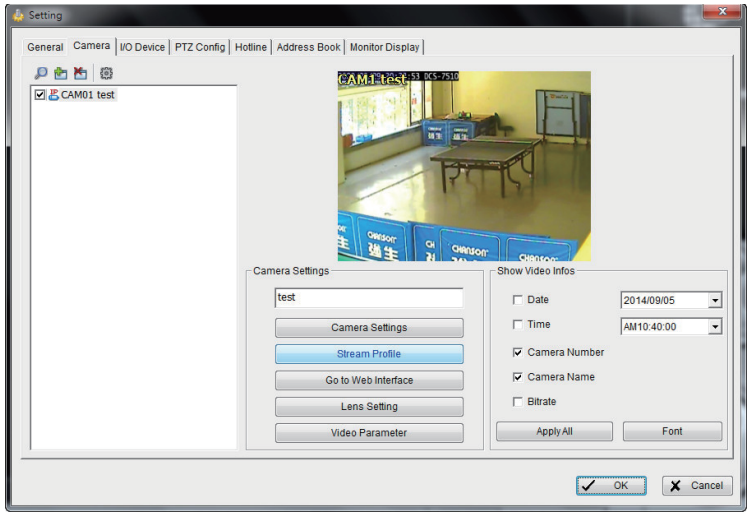
Note: Not every camera model supports multi-stream configuration, please refer to the latest camera support list to see if multi-stream is supported.

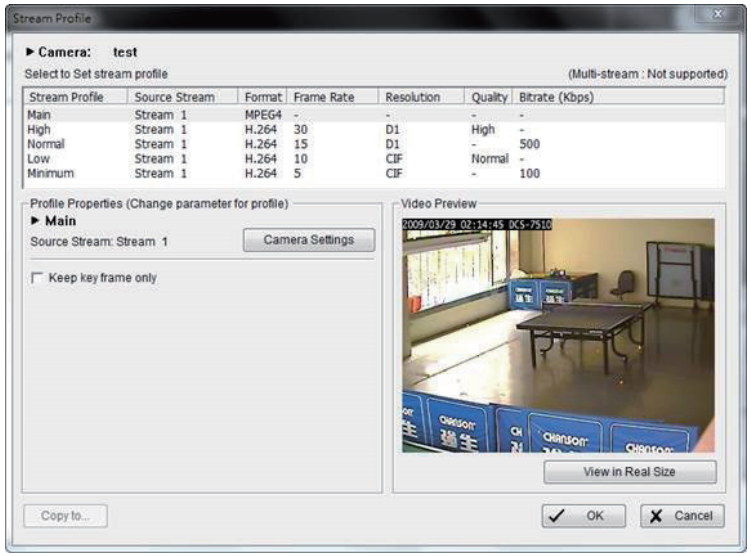
Stream Profile: Stream profiles are pre-defined to preferred settings which will respond from the query of the remote live view function. Each profile has different Format, Frame, Resolution, Quality and Bit rate (Kbps) settings.

For cameras that support the Multi-stream function, the 3 different source streams can be connected to Main console and automatically mapped to different stream profiles. Click a **stream profile** to select the source stream you would like to change.

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

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





Camera Settings

Video Format: Select the video format for the footage.

Frame Rate: Select the frame per second.

Resolution: Select the resolution.

Bitrate Type: Select the bitrate mode.

Bitrate: Select the bitrate amount.

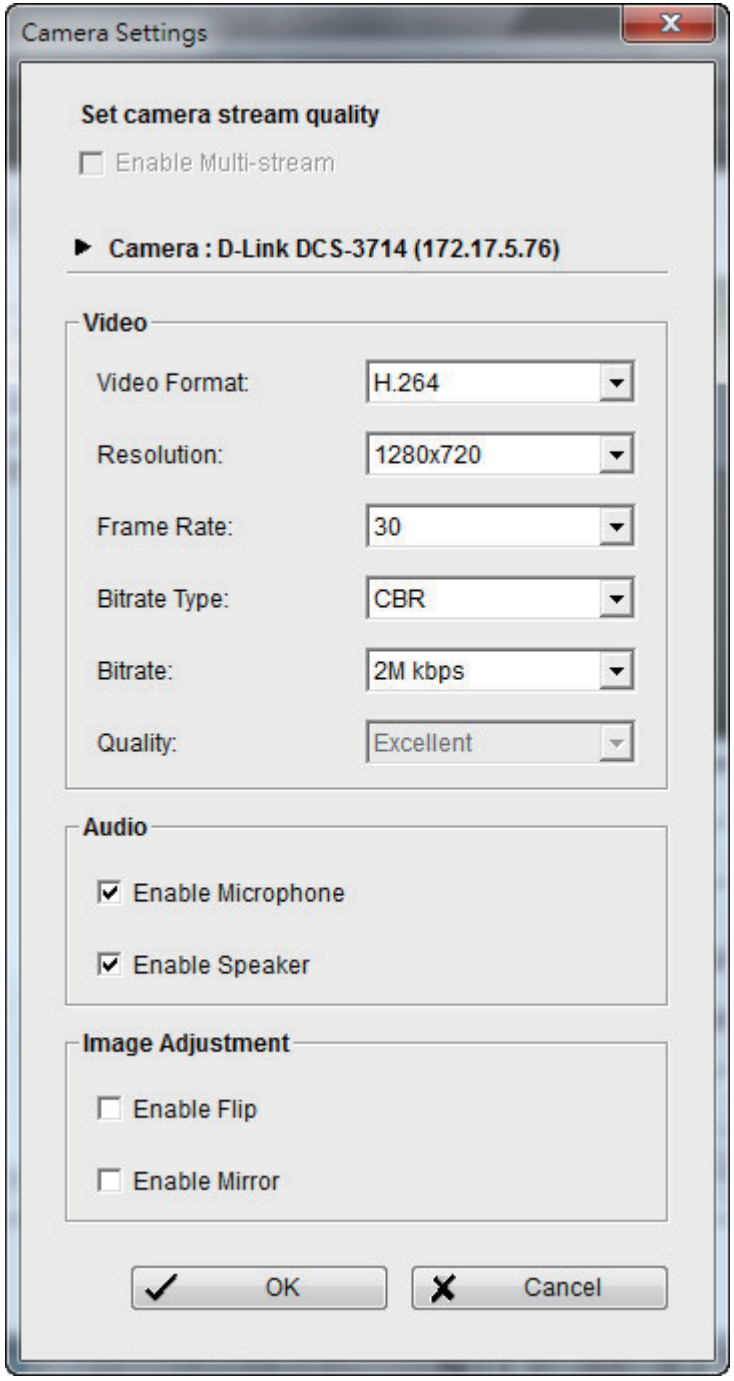


Image Adjustment: Enable image to be flipped or mirrorred.

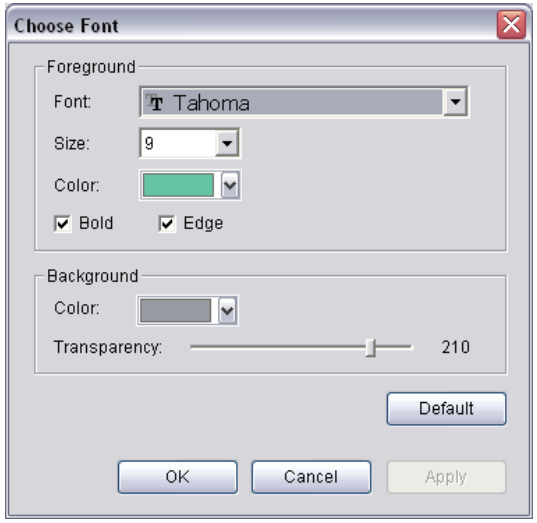
Audio: Enable microphone or speaker if your camera has these features.

Fish eye Setting (for fish eye cameras only)

Mount Type: Select whether the camera is being mounted on a wall, ceiling, or on a desktop.

Display Mode: Select the display mode from 1O (fisheye mode shows the full camera view), 1R (normal mode shows a view similar to a standard camera), 2P (panoramic mode shows a full 180-degree mode across 2 panels), 1O 3R (multi-view with Fisheye mode shows a multiple window view with fisheye in the top-left panel), and 4R (multi-view).

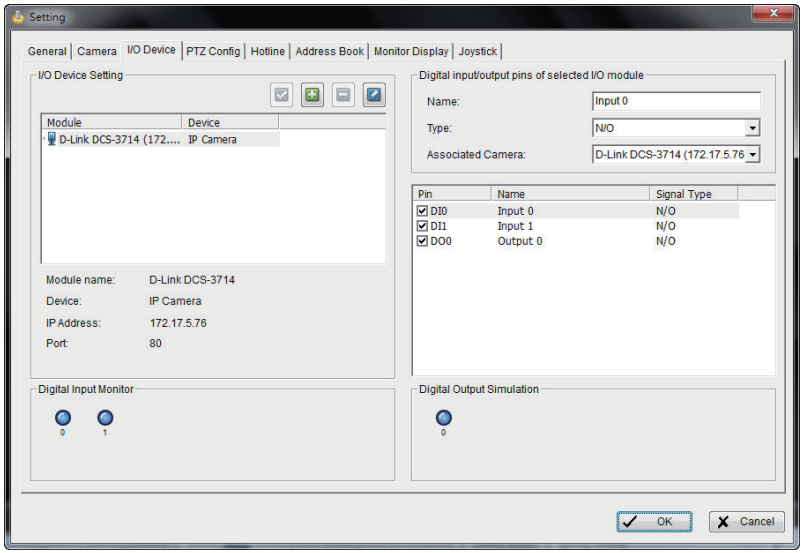
OSD (On-Screen Display) Settings



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

I/O Device

Go to **General Setting > Setting > System Setting > 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.

Digital 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.

Digital 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

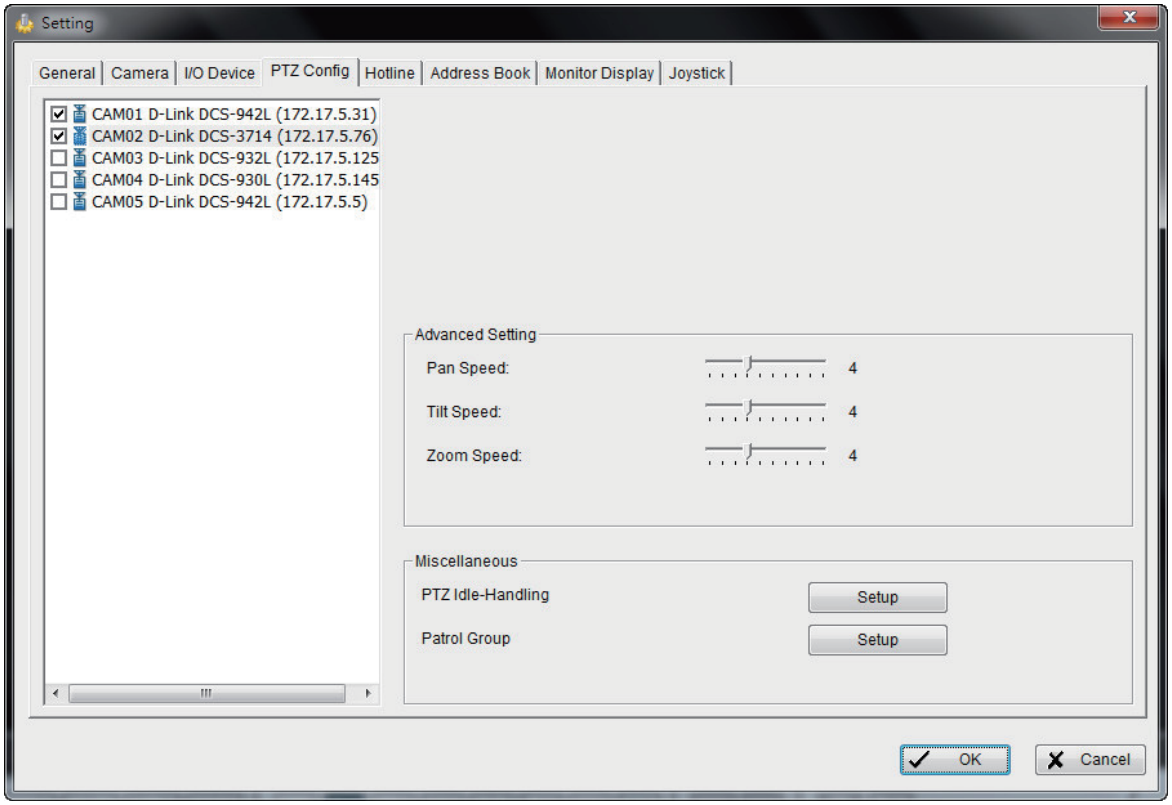
Name: Insert the name of the device (input and output).

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

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

PTZ Config

Go to **General Setting > Setting > System Setting > PTZ Config.**



Select a PTZ camera from the list to activate the PTZ control function.

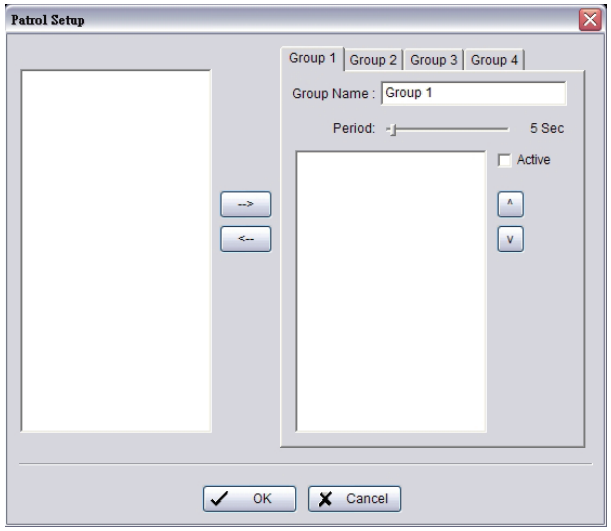
Advanced Setting

Adjust the pan speed, tilt speed, and zoom speed settings by dragging the bars.

Miscellaneous

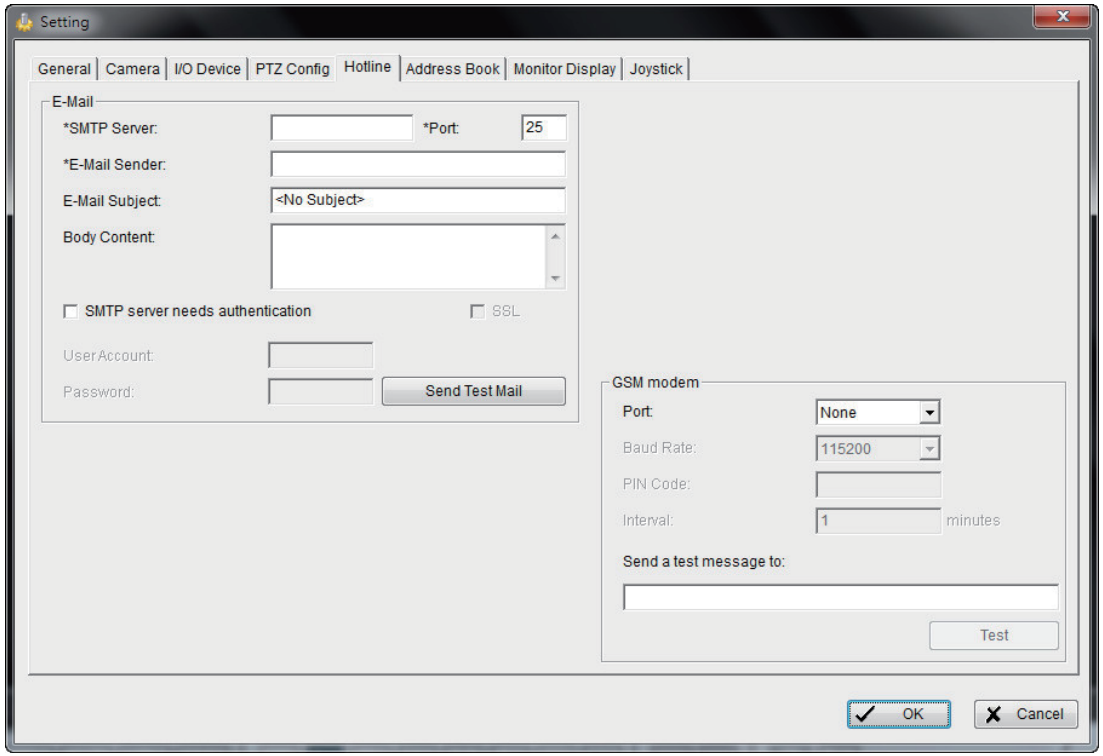
Patrol Group: Click to setup a patrol group.
From the left window, select the camera(s) that you would like to have in the patrol group. In the right window, align the cameras in order and adjust the time. Rename the group name if you want. After completing the setup, select **Active** to trigger functions such as **Auto-tracking** and **Login** of the camera, and then click **OK**.

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



Hotline

Go to **General Setting > Setting > System Setting > Hotline.**



Use this window to configure the Hotline settings when an unusual event is detected.

E-Mail: Enter the following information - SMTP server, port, sender's e-mail address, subject title, body content and SSL for encrypted transmission. Click **Send Test Mail** to test the settings.

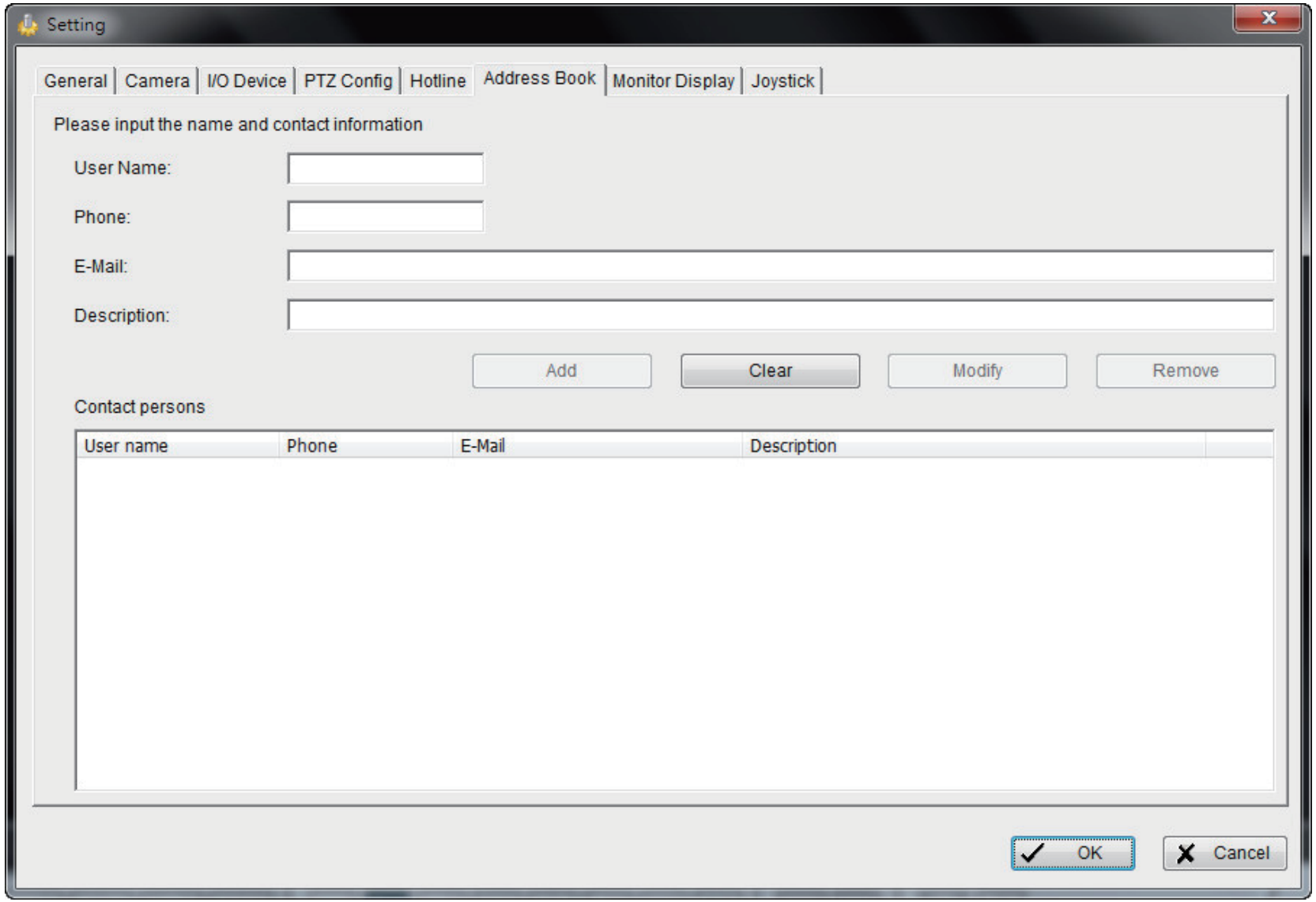
GSM modem: Set the **Port** and **Baud Rate** of the GSM modem device, and then enter **PIN** code. You can also enter the time for sending a SMS message. Click **Test** to send a test SMS message.

Note: The **Interval** is set to restrict the time period while sending two SMS messages. For example, if you set as 60 min, the SMS sent between 60 min will be deleted and not sent to the user.

Address Book

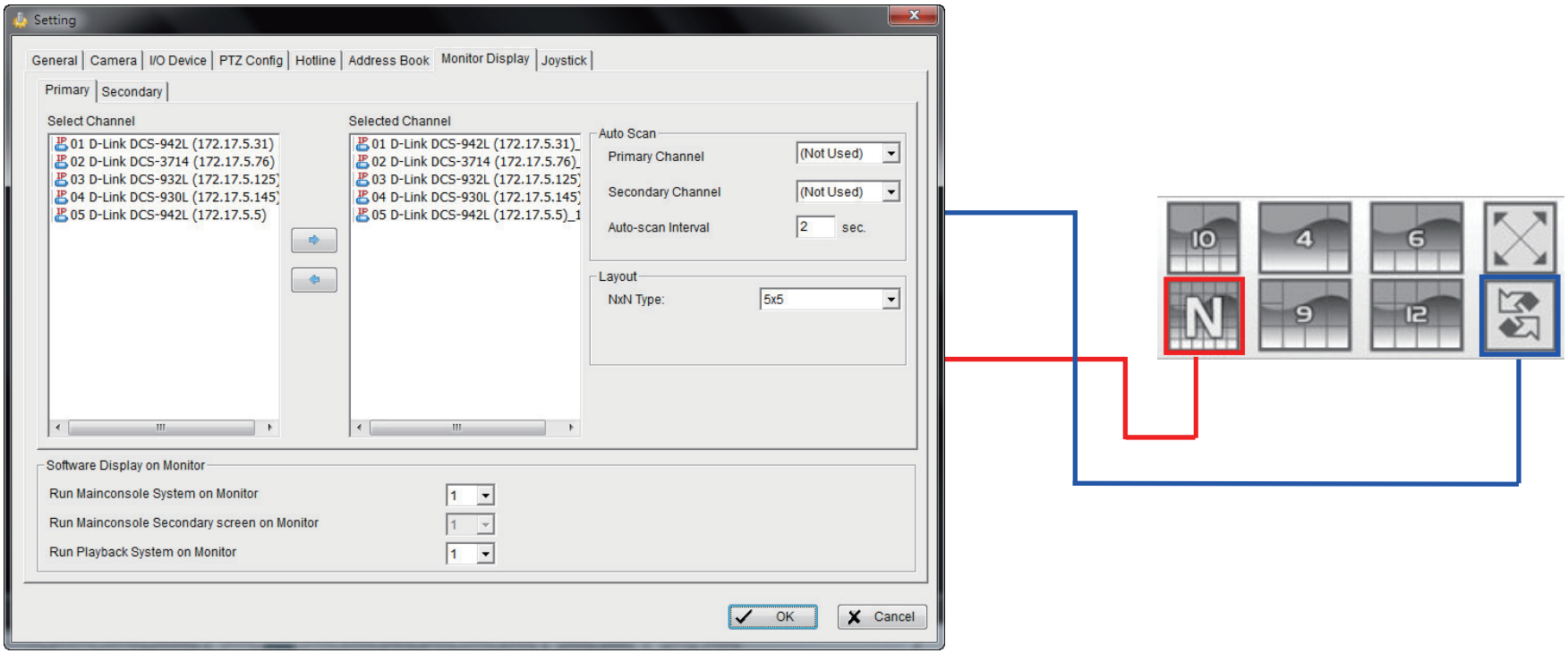
Go to **General Setting > Setting > System Setting > Address Book.**

Use this window to update name, phone number and e-mail address information. When an unusual event is recorded, an e-mail notification will be sent out by the system.



Monitor Display

Go to **General Setting > Setting > System Setting > Monitor Display.**



Playback Option: Execute Playback feature on the secondary monitor by selecting the **Secondary** tab. Make sure to adjust your computer display settings (supports 800x600, 1024x768, 1200x900, 1280x1024 and 1600x1200 monitor resolutions) in advance to avoid system error.

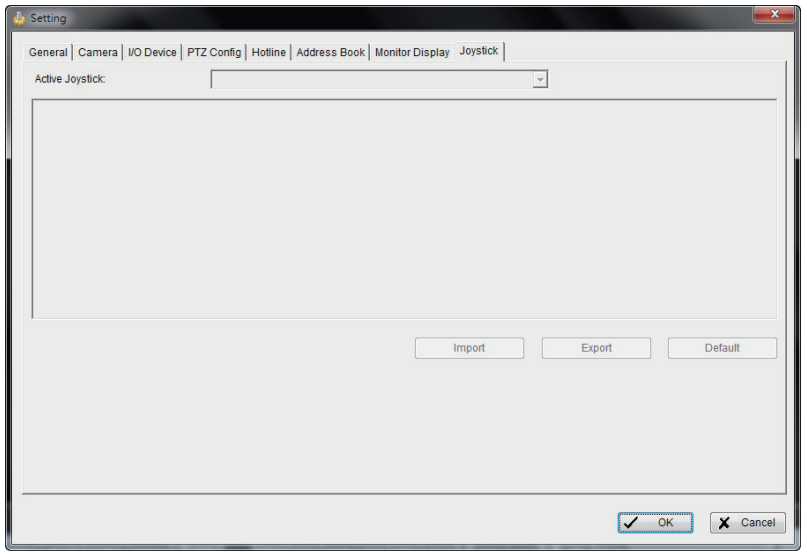
Cameras List: The left column displays a list of all available cameras. Highlight the camera and click **-->** to move the camera to the right column. The right column will display the primary and secondary cameras. These cameras will be available for the auto-scan function.

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

For example, 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 the 16 channels. You can set up a primary channel that will always be on the screen and a secondary channel that has secondary priority.

Layout: Choose the number of divisions for NxN division on the Main console screen.

Joystick Setting



Note: Following is a complete list of all functions:

1. N/A
2. Goto Preset Point (including Home)
3. Goto Camera
4. Goto Previous Camera
5. Goto Next Camera
6. Switch Screen Layout
7. Toggle Single Camera View
8. Toggle Full Screen
9. Start/Stop Auto Scan
10. PTZ Speed Up
11. PTZ Speed Down
12. Zoom Wide
13. Zoom Tele
14. Start/Stop Patrol
15. Switch Active Monitor

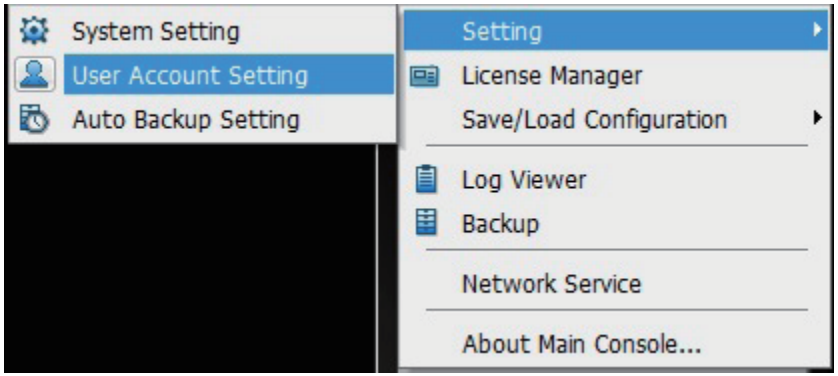
Parameter: You can choose the parameter of the function from the drop-down menu.
Default: You can set the default setting for the joystick.
Export: You can export the setting of the joystick.
Import: You can import the setting of the joystick.

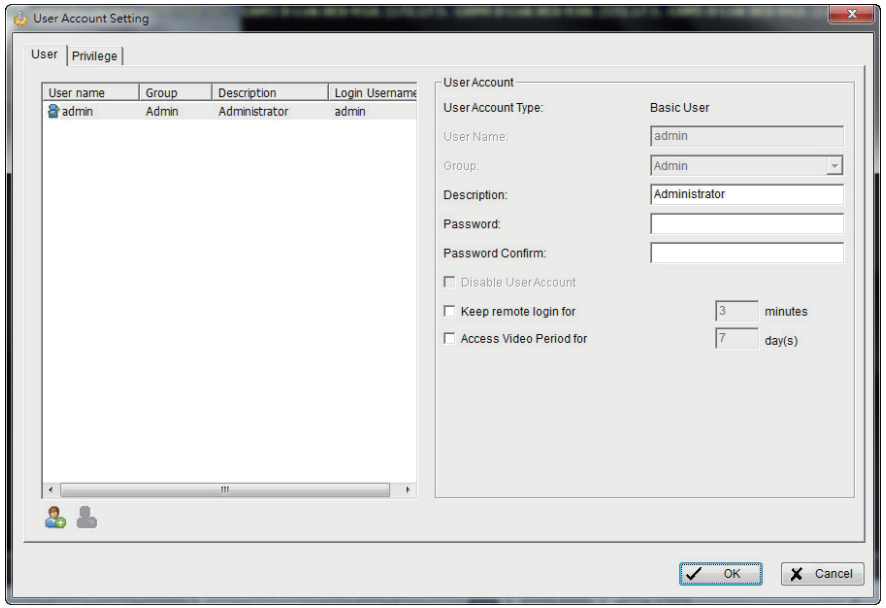
User Account Setting

Go to **General Setting > Setting > User Account.**

Only an administrator can manage user accounts. From the Privilege list, highlight each account to modify.

Note: *The system by default, will display the account group's default privilege profiles. Enter a* **Name** *and* **Password** *to create a new account, or click an existed account to modify his/ her privilege.*





There are 3 default profiles for account groups:

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

Power User: A user has limited privileges to system functions and complete privileges for assigned devices.

User: Privileges for all the system functions are forbidden, user can only manage devices.

Add: Click to create a new account after updating the information.

Delete: Click to delete the account.

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

Update: Click to save the modifications of each account.

User Account

To create and modify user accounts.

User Name: Enter a name.

Group: Assign a group for each user.

Description: Enter a description.

Password: Enter the password assigned to the user.

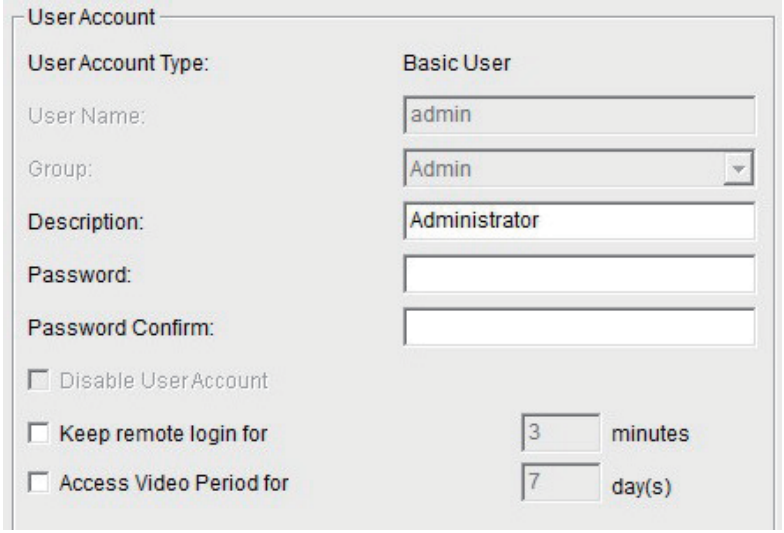
Password Confirm: Enter the password again for confirmation.

Disable User Account: Select to block this account.

Note: *Only the default admin account cannot be disabled.*

Keep remote login for___minutes: Enter the duration to auto logoff after logging in from Remote Live Viewer or Remote Playback.

Access Video Period for ___ day(s): Insert the duration for the account to access video period.

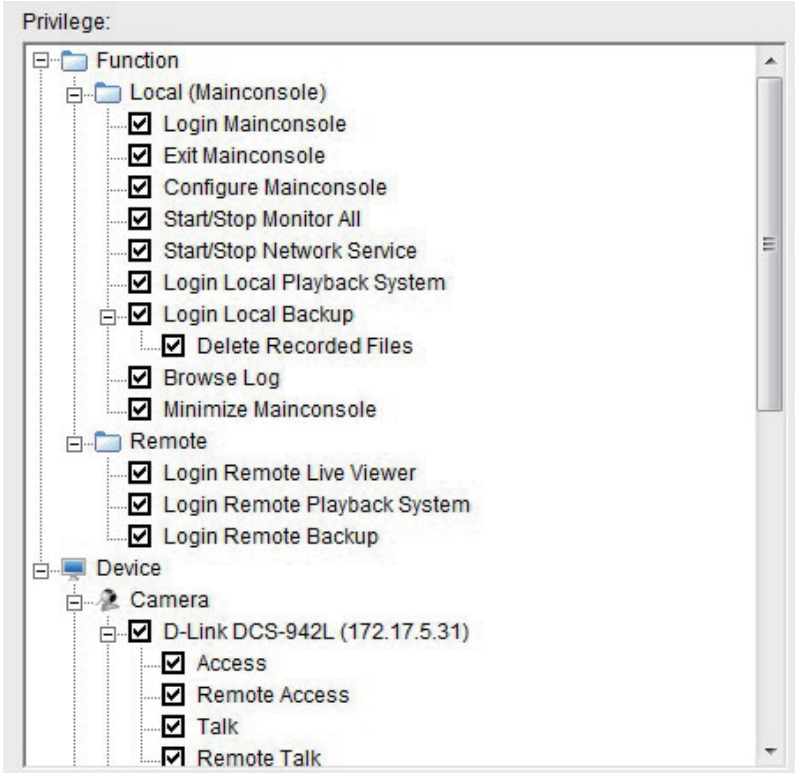


Privilege

Select to set privileges for each user account.

Function: Set the system configuration, and privileges for remote access.

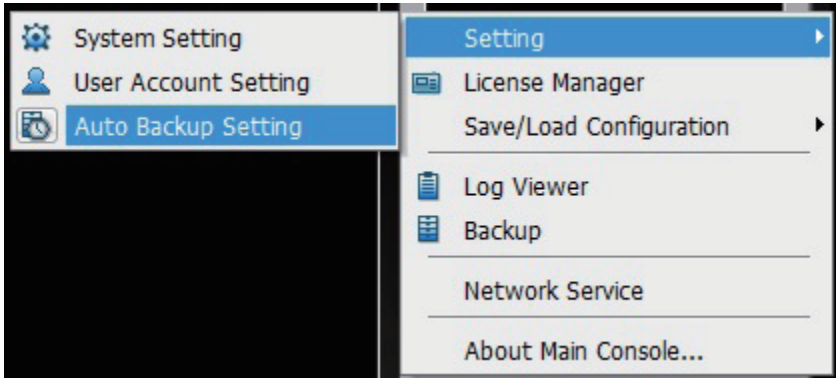
Device: Set device privileges for camera, digital output and client applications.

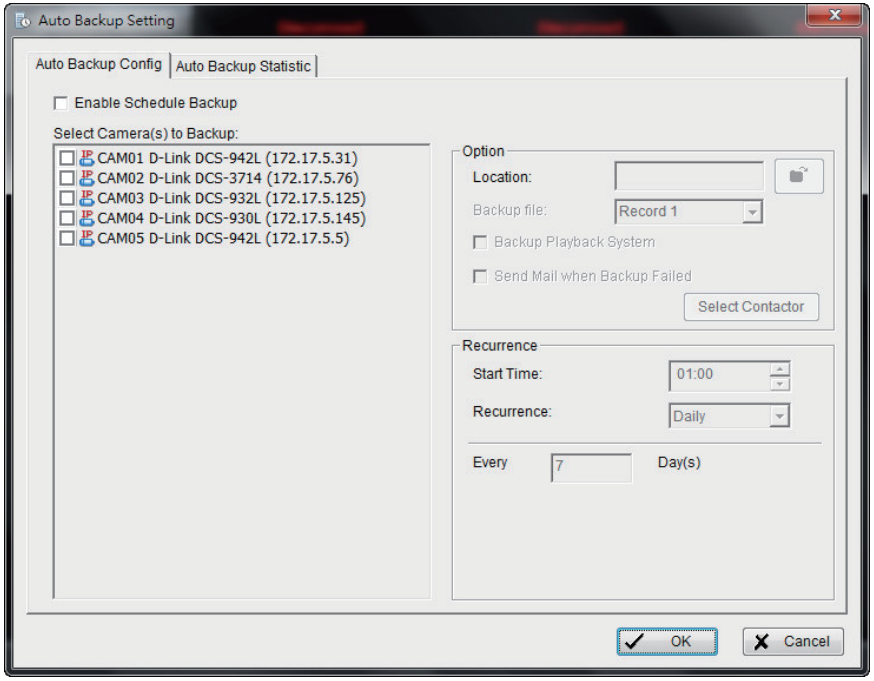


Auto Backup Setting

Go to **General Setting > Setting > Auto Backup Setting**

To configure your system to automatically back up video data.





There are 3 main options in Auto Backup config:

Enable Schedule Back Up: Check to enable the backup process.

Select Camera(s) to Back Up: Select the camera to back up.

Option: Select options for backup.

- **Location:** Define backup route.
- **Backup Playback System:** Check to backup the playback application with each process.
- **Send Mail when Backup Fails:** Check to receive an email notification when backup fails. Click Setup for email configuration. Select one or more contacts from the address book and configure customized message content.
- **Recurrence:** Choose start time and Recurrence: Daily or Weekly modes.

There are 4 main fields in Auto Backup Statistic:

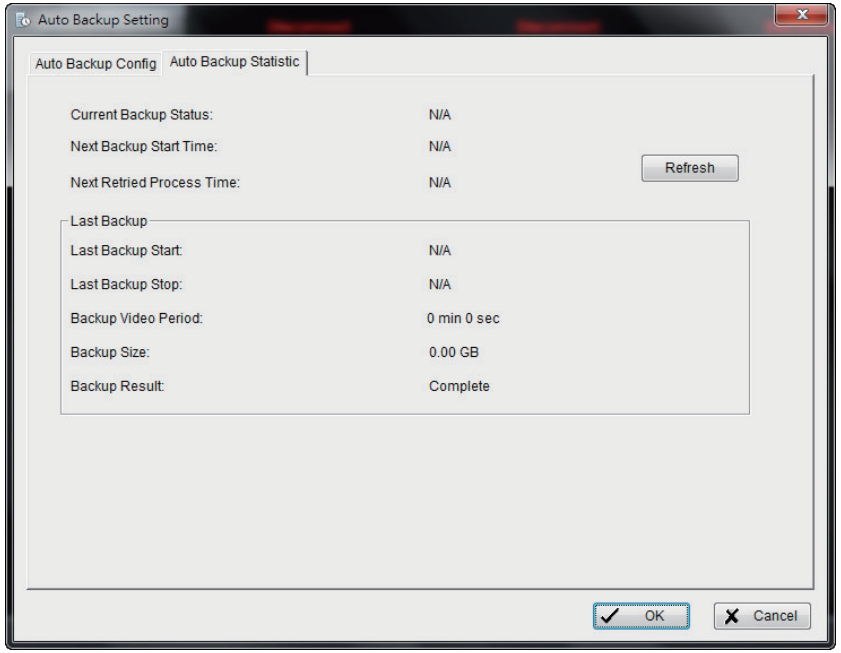
Current Backup Status: Displays whether the backup is underway, idle, or awaiting retry.

Next Backup Start Time: Displays the scheduled time for next backup process.

Next Retried Process Time: Displays the scheduled time for next backup retry process.

Last Backup: Displays information about the most recent backup.

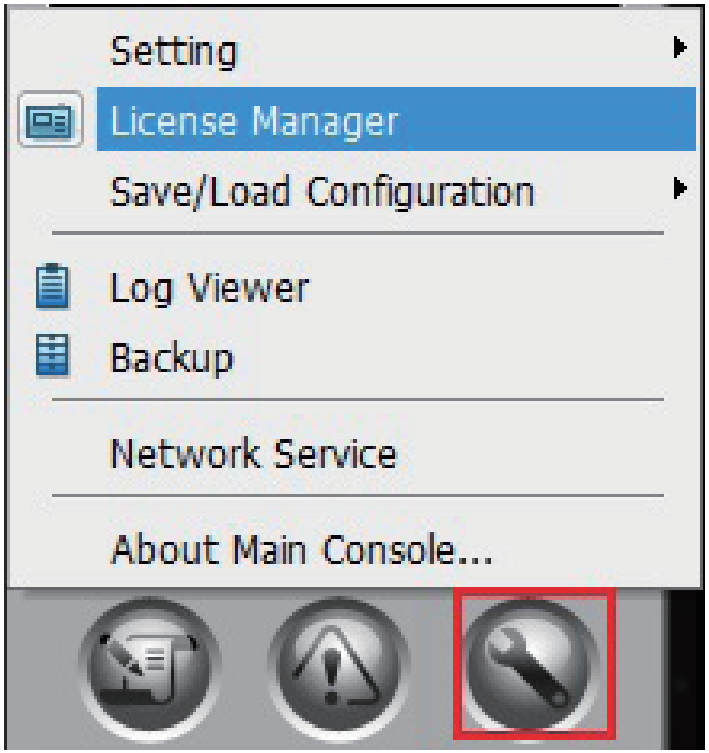
- **Last Backup Start:** Displays the time and date the last backup started.
- **Last Playback Stop:** Displays the time and date the last backup was completed.
- **Backup Video Period:** Displays the total time that the last backup took to complete.
- **Backup Size:** Displays total file size of last backup.
- **Backup Result**: Displays the result of the last backup.

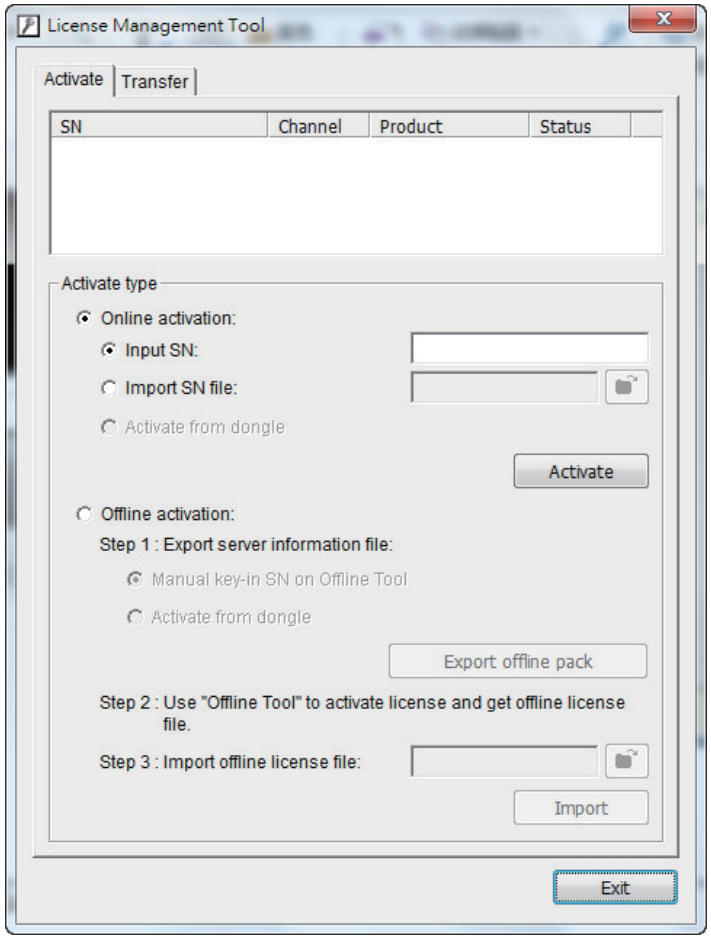


License Manager

Go to **General Setting > License Management** in the Main Console to activate the license. The serial number can be found on a sticker, located inside the CD case.

Note: *Please refer to the* **License Management Tool** *section for details.*





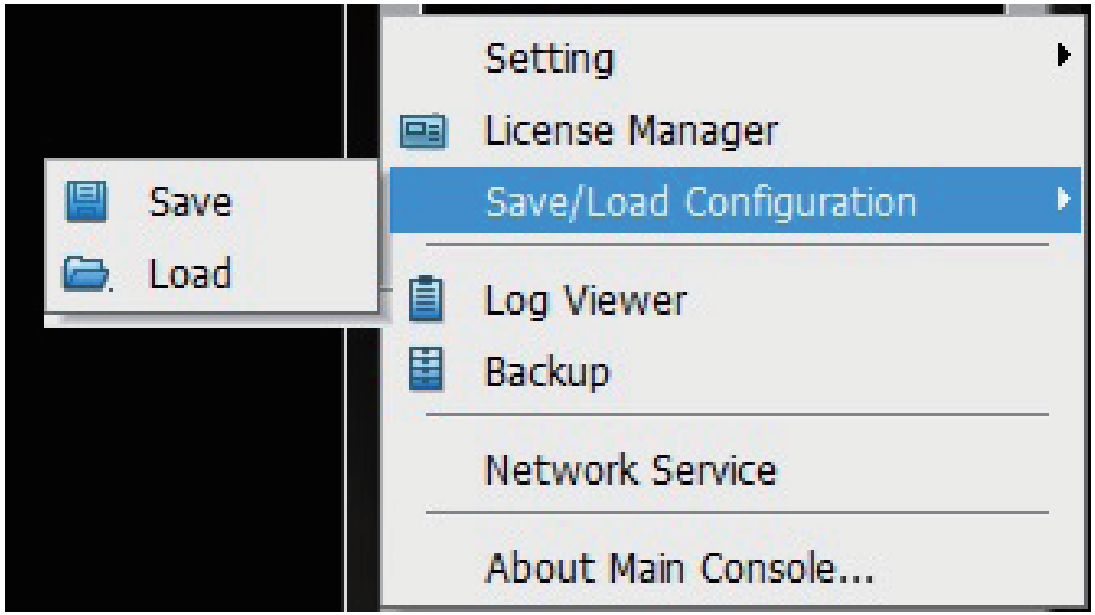
Save/Load Configuration

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

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

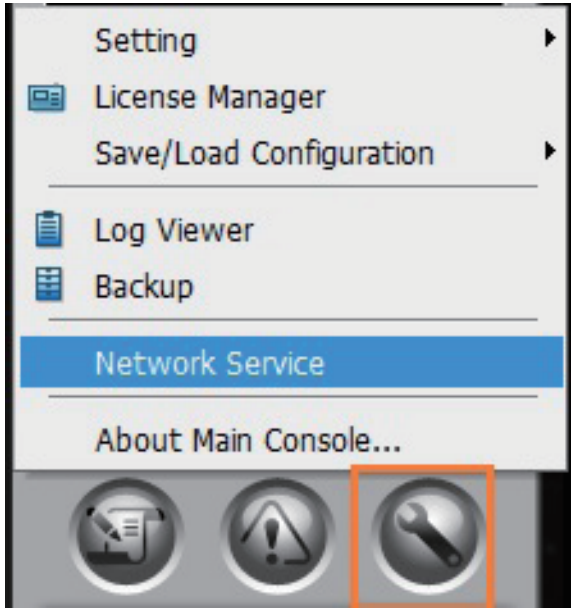
Load Configuration: To load a specific setting, go to **General Setting** > **Save/Load Configuration** > **Load**. In the popup window, go to the directory that you saved the .cfg file at, select any one of them and then click **OK** to load the file.

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



Network Service

There are 3 types of network services: **Live Streaming Server**, **Remote Playback Server**, and **Remote Desktop**. From the Main Console, go to **General Setting > Network Service** to open the **Network Service** window.

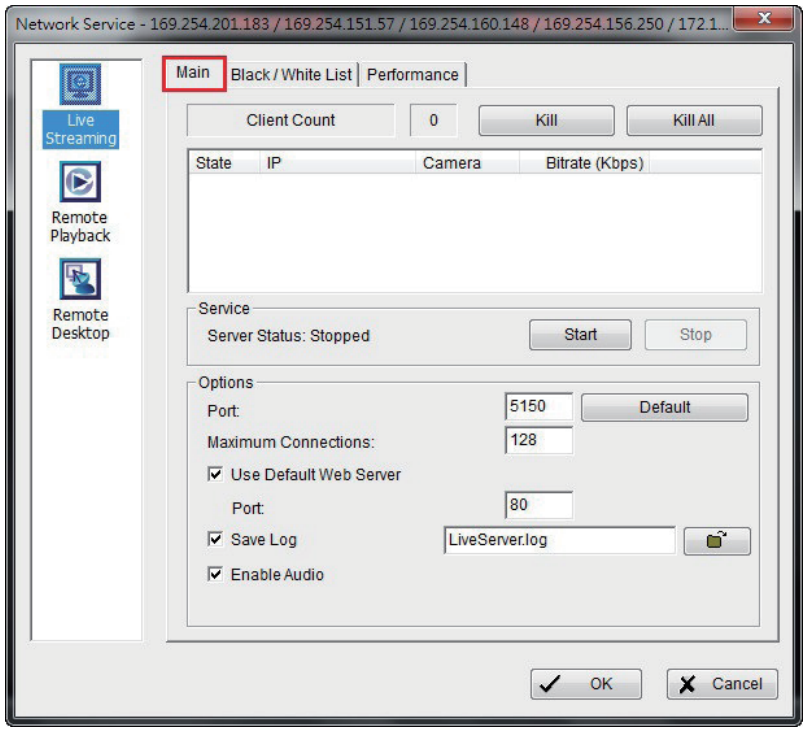


Live Streaming Server

With Live Streaming, the system allows remote users to log in to a specific computer and view cameras that are connected to it. As a System Administrator, you can monitor these accounts in order to maintain the efficiency of the system.

Main

From the Live Streaming Server window, administrators can view all the clients who have logged in. It also enables Administrators to view live video from a remote location.



Client List

Client Count: Shows the number of channels that are connected.

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

Kill All: Click to block all the clients that are currently logged in to your system.

Service

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

Options

To modify this section, click **Stop** to stop the server.

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

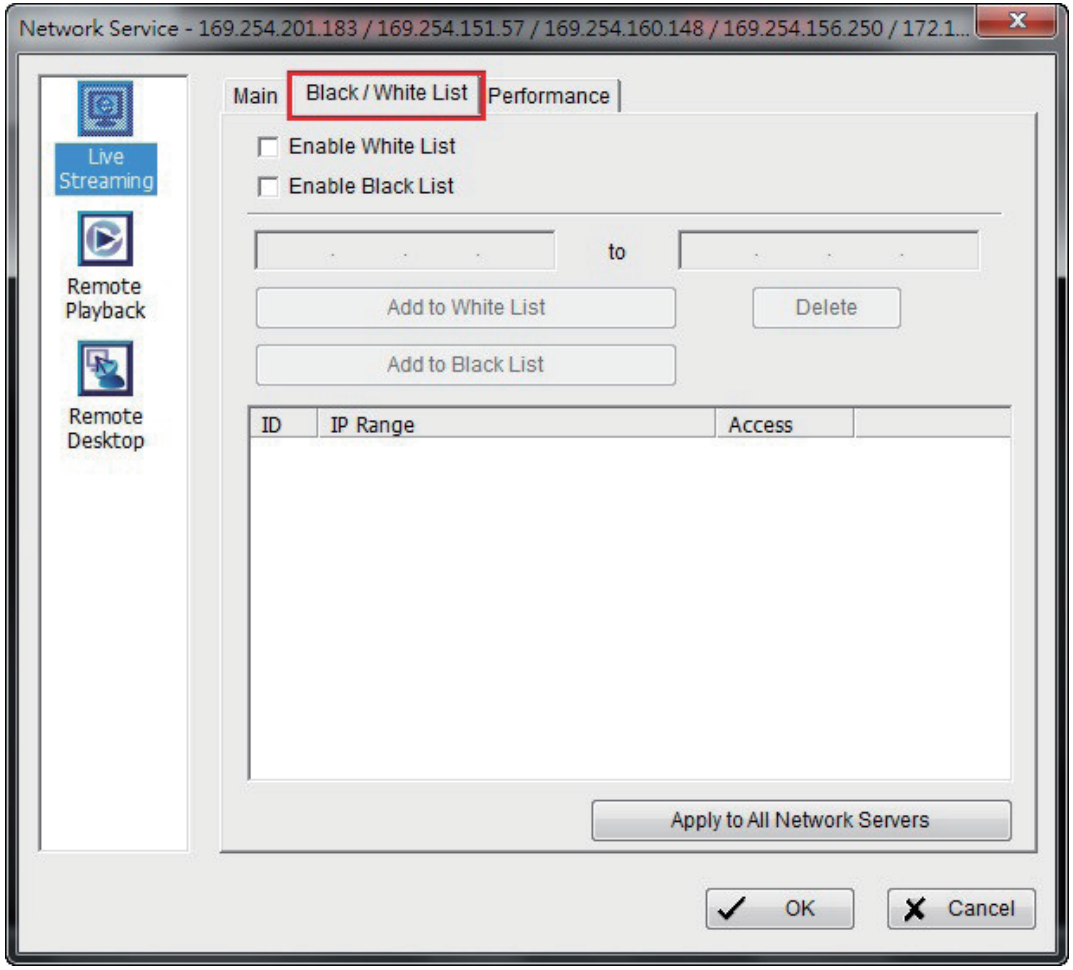
Maximum Connections: Number of connections that are allowed to connect to the system. The maximum is **128**, one camera video counts as one connection.

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

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

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

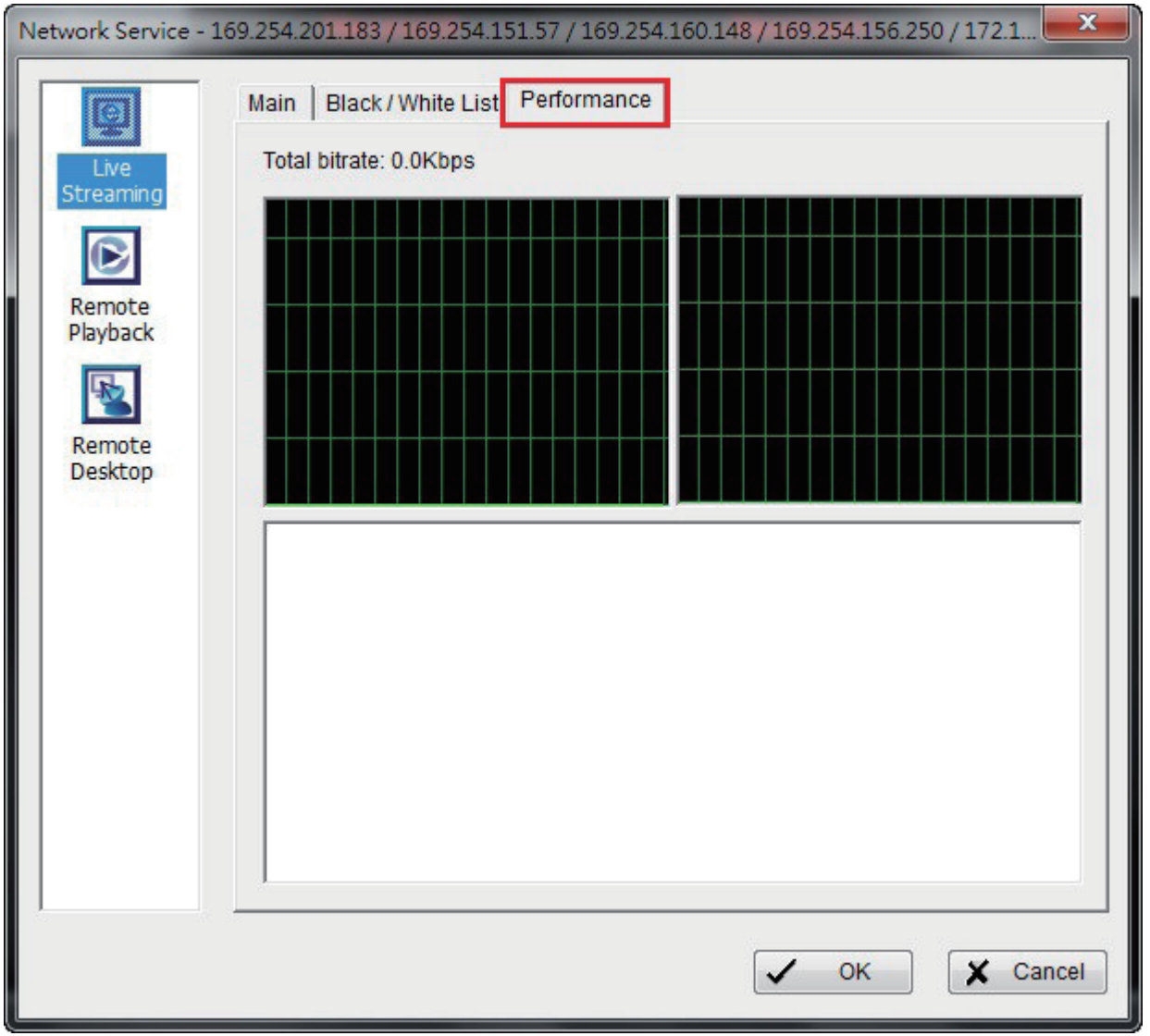
Live Streaming - Black / White List



Enable White List: Select to activate the white list filter. Only IP address from this list is allowed to log in.
Enable Black List: Select to activate the black list filter. The IP address from this list will be blocked.
IP Address: Enter an IP address or two sets of IP address to indicate a series of IP addresses.
Add/Delete: To add the IP address into the list or to remove from the list.
Apply to All Network Servers: Click to apply these settings to both Live Streaming Server and Remote Playback Server.

Live Streaming - Performance

This window displays the **Total bitrate** and individual **Camera bitrate** information.

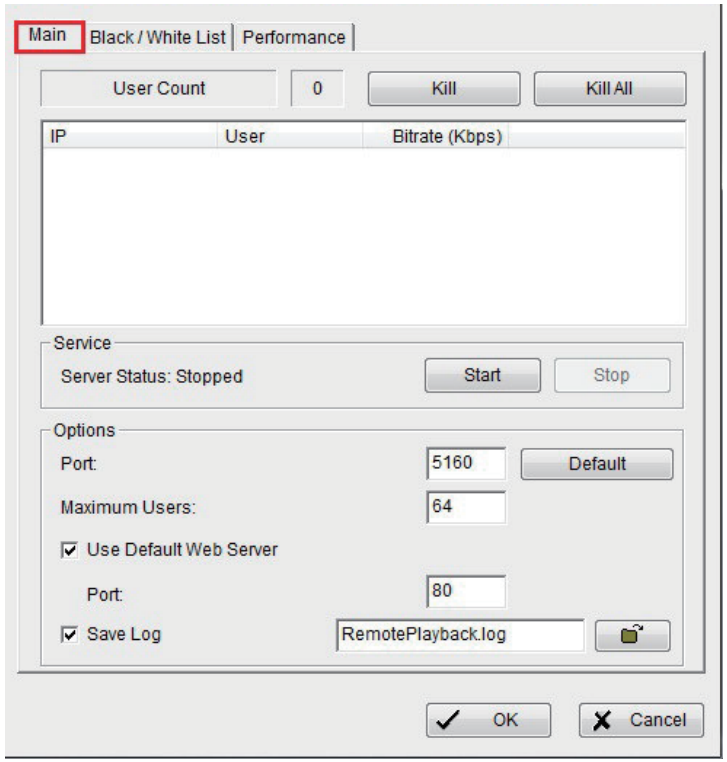


Remote Playback Server

With the Remote Playback function, the system allows remote users to log in to a specific computer and withdraw data files that are stored. As a system administrator, you can monitor the accounts logged in to maintain the system efficiency.

Main

This window displays all the clients who are currently logged in and watching a playback video from a remote location.



Client List

User Count: Displays the number of users that are connecting to the system.

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

Kill All: Click to block all the clients that are currently logged in to your system.

Service

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

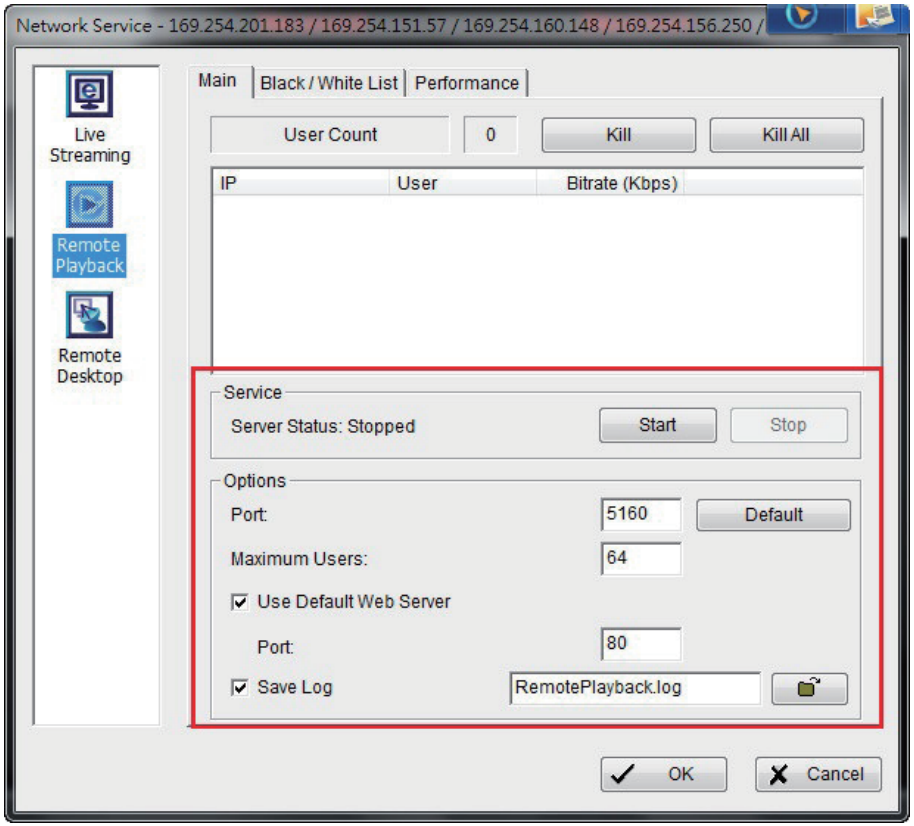
Options

Port: Assign a port for clients to connect to your system via Remote Playback. The default port is **5160**.

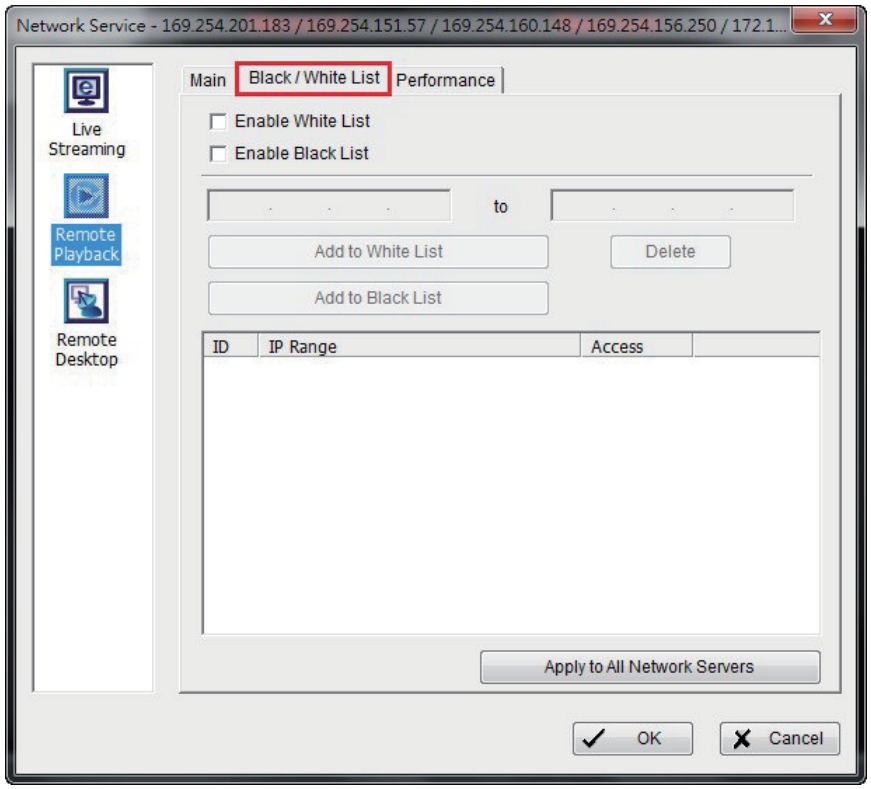
Maximum Users: Number of connections that are allowed to connect to the system. The maximum is **64**.
Note: A single user logged in to the server is considered as one account.

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

Save Log: Save the current log information.
Note: Ensure that the server is stopped before making any changes.



Remote Playback - Black / White List



Enable White List: Select to activate the white list filter. Only IP address from this list is allowed to log in.

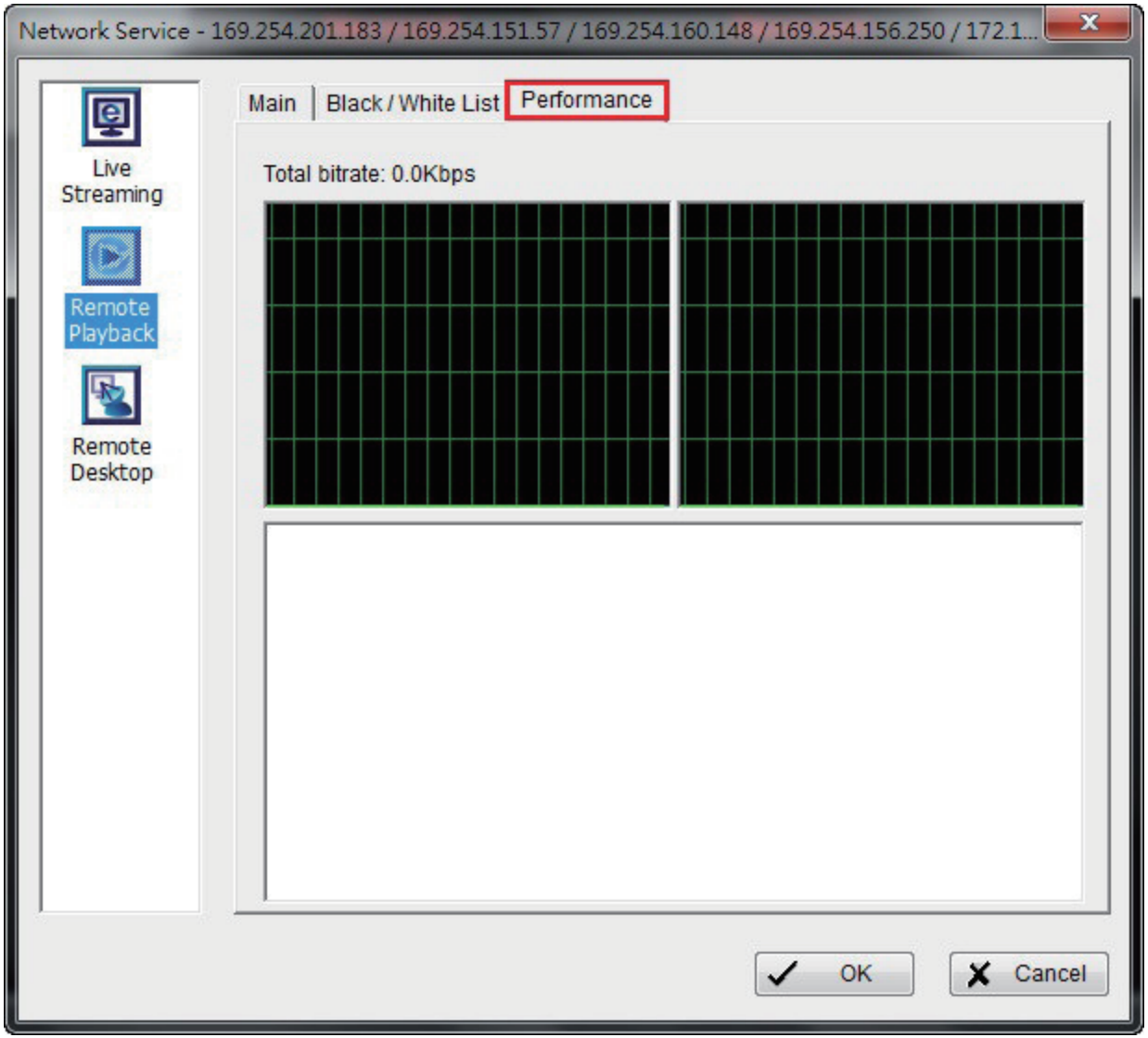
Enable Black List: Select to activate the black list filter. The IP address from this list will be blocked.

IP Address: Enter an IP address or two sets of IP address to indicate a series of IP addresses.

Add/Delete: Add the IP address into the list or remove from the list.

Apply to All Network Servers: Click to apply these settings to both Live Streaming Server and Remote Playback.

Remote Playback - Performance



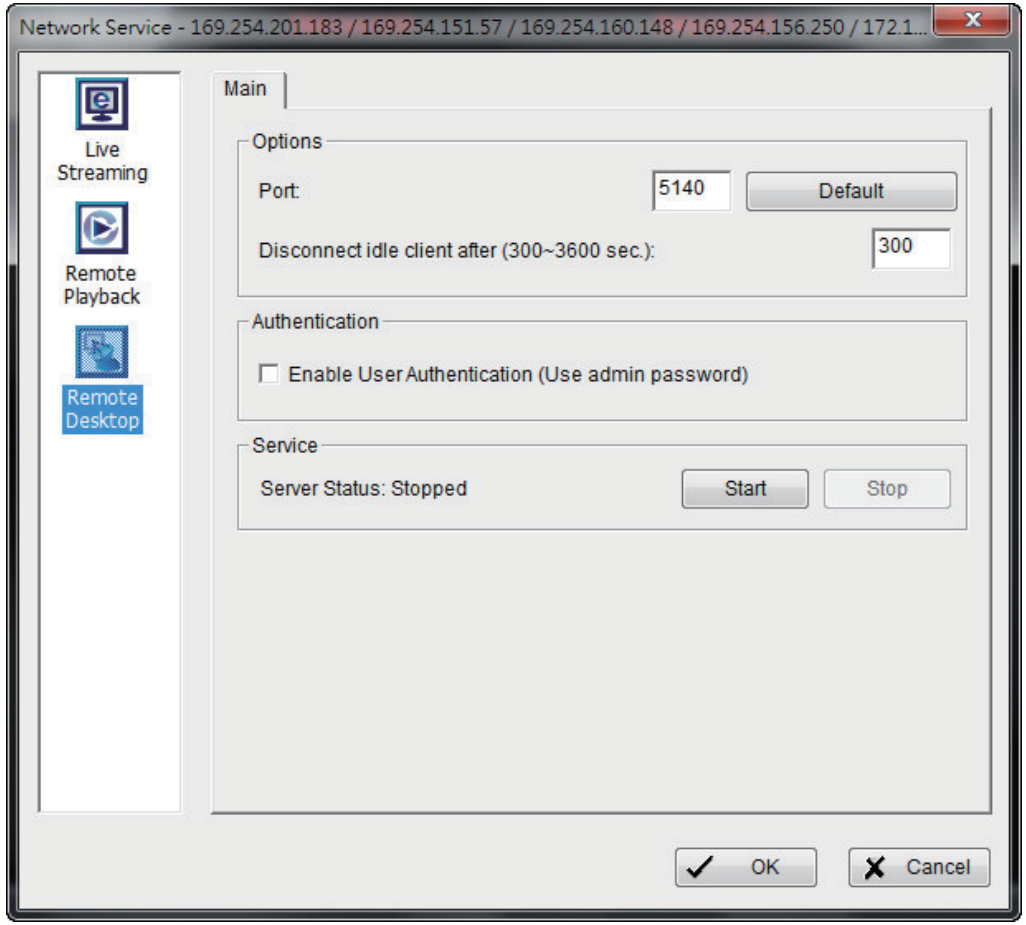
This window displays the **Total bitrate** and individual **Camera bitrate** information.

Remote Desktop

This window allows remote users to use Remote Desktop Viewer to login and configure the system. Refer to the **Remote Desktop Viewer** section to install and use this tool.

Options

Port: Assign a port for Remote Desktop Viewer, so that users can login and configure system.
Disconnect idle client after (300~3600 sec): Auto disconnects an online user who is idle for more than the specified time period.
Authentication: Enable this option to allow only an administrator to login into the system.
Server Status: Click **Start/Stop** to turn on/off this service.



Run as Windows Service:

Enable the Option to run Mainconsole as windows service. When Mainconsole run as a windows service, it will do standard operation, ex: recording and smart guard even user do not log in Windows.

Example A: If you want to keep Mainconsole operating after Windows User logout and login, please tick options:

(1) Auto Login
(2) Run as Windows Service

Example B: If you want to keep Mainconsole operating after Windows reboot, please tick options:

(1) run Mainconsole when startup
(2) Auto Login
(3) Run as Windows Service

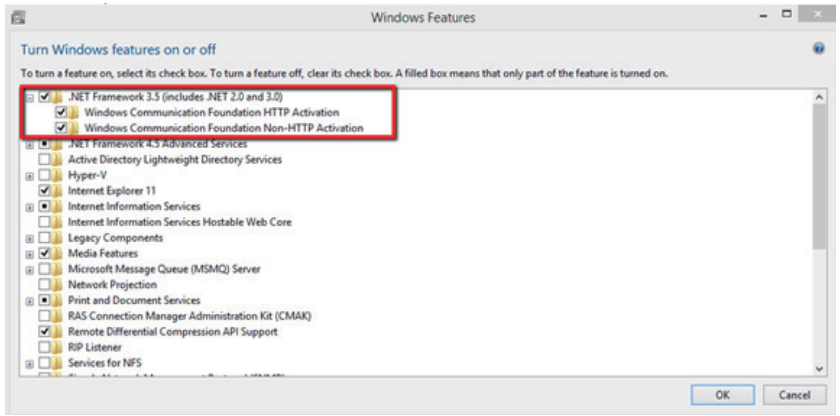
Note: If Mainconsole has been run as Windows service, user will not be able to run another Mainconsole again.

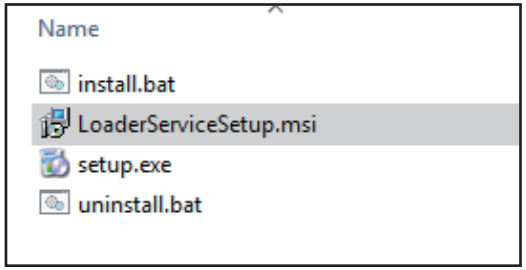
Note: If you found the run as service is gray out, please follow below 3 steps to install the necessary component:

1. Microsoft .NET Framework is required to be installed on Windows OS to make sure Run as Windows Service work properly. It can be installed via: Open Control Panel -> Turn Windows features on or off -> .NET Framework.

2. Find the file "LoaderServiceSetup.msi" in location: "C:\Program Files (x86)\D-Link\DCS-210_220_230\LoaderService". Click to install.

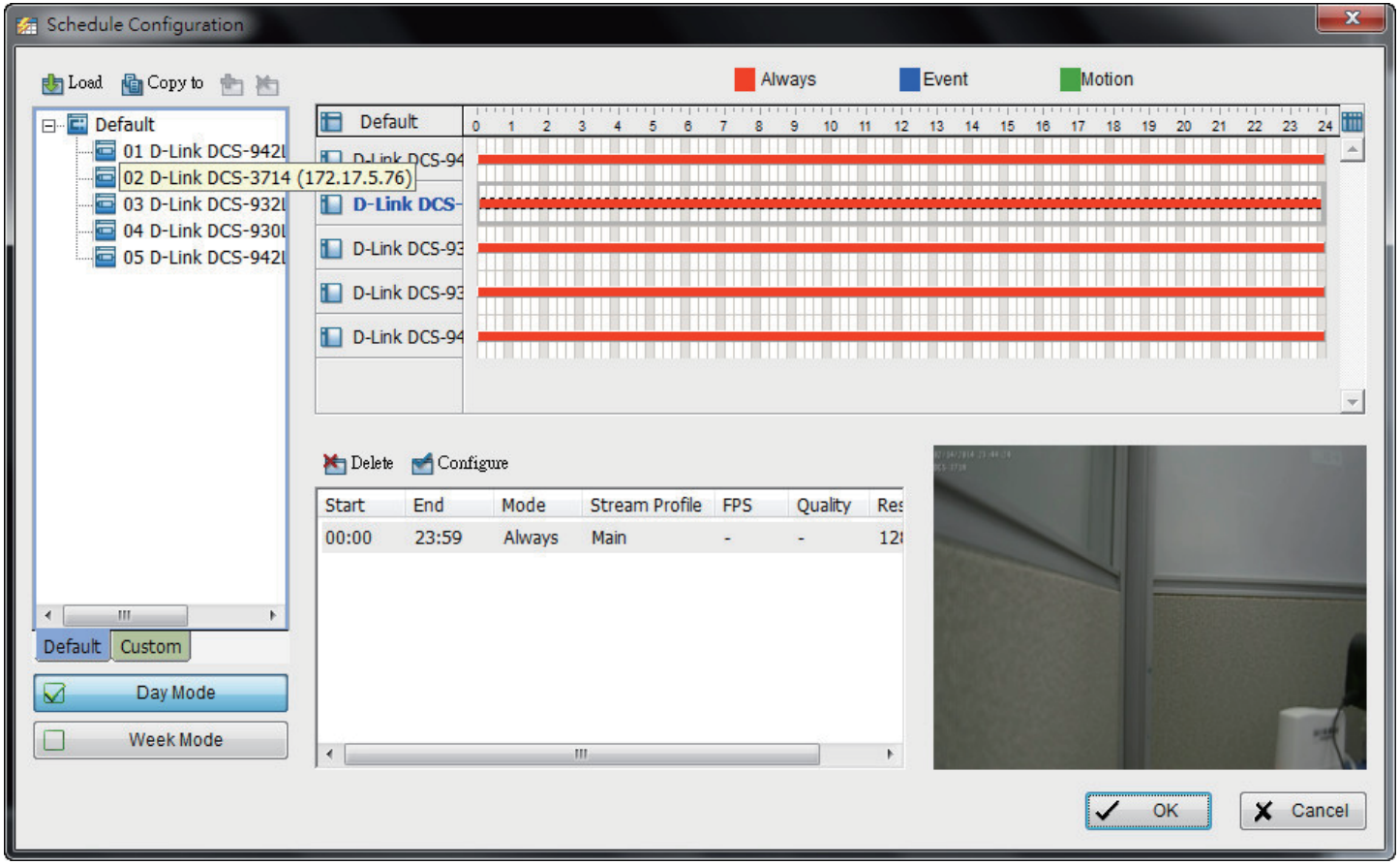
3. Reboot Windows and Mainconsole.





Schedule System

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

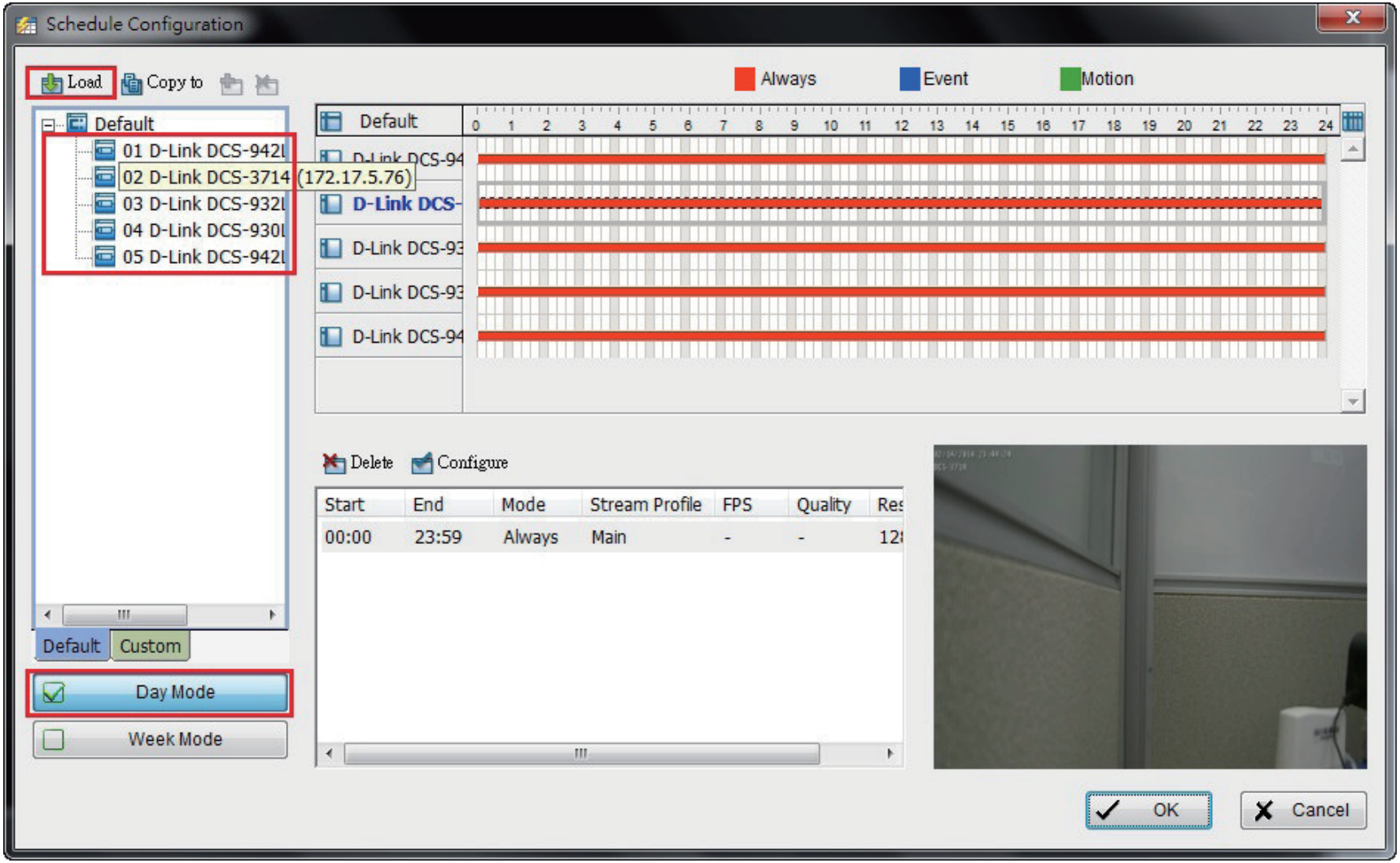


Day Mode

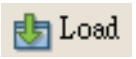
Schedule the camera(s) to record video every day at the same time.

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

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



Load Preset Modes

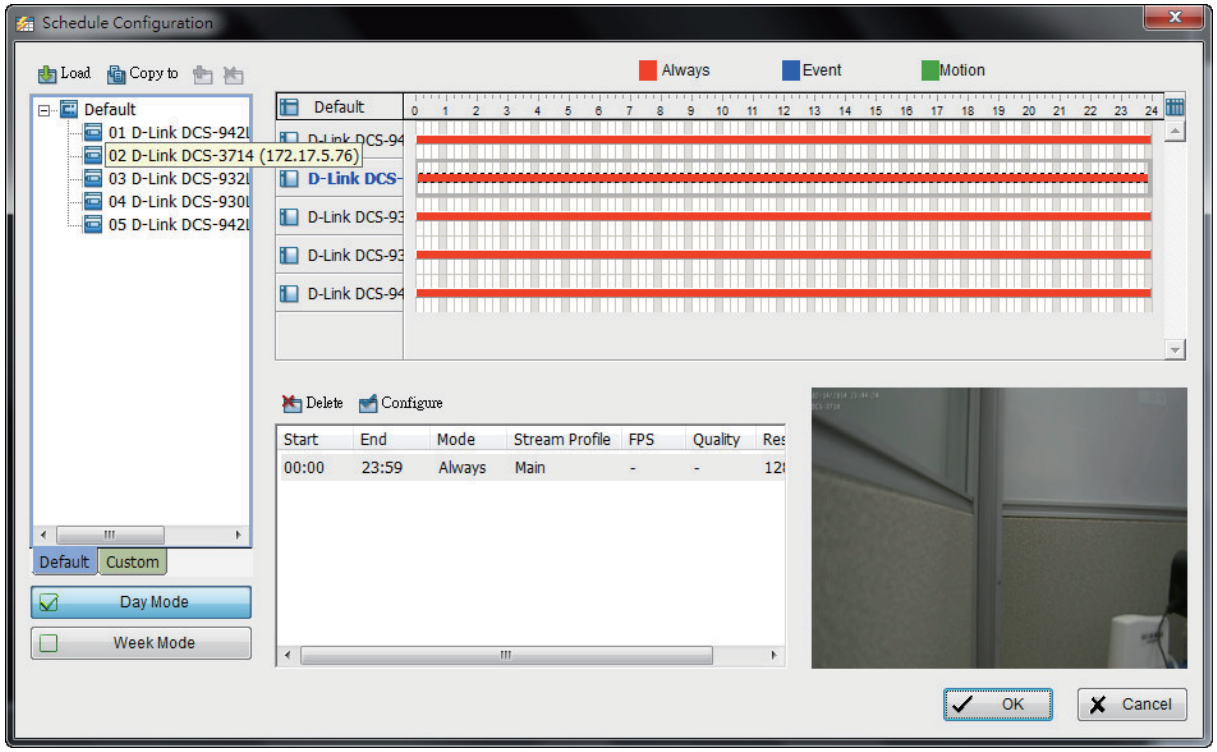
The system provides six modes to quickly setup the recording schedule. Click 

to select the preset mode. Refer to the following table for definitions of each mode in each series.

Mode	Format	Time	Record Mode	key frame only	Adjust video frame	Profile
Regular	M-JPEG	00:00-24:00	Always		uncheck	Main
	MPEG4/H.264			uncheck		
Office	M-JPEG	08:00-20:00	Always		uncheck	Main
	MPEG4/H.264			uncheck		
Shop	M-JPEG	10:00-22:00	Always		uncheck	Main
	MPEG4/H.264			uncheck		
Highly Secure	M-JPEG	00:00-24:00	Always		uncheck	Main
	MPEG4/H.264			uncheck		
Disk Saving	M-JPEG	00:00-24:00	Motion		10 fps	Main
	MPEG4/H.264			checked		
Minor	M-JPEG	00:00-24:00	Motion		5 fps	Main
	MPEG4/H.264			checked		

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 be seen as a grey bar.



Step 2
Click on the **Configure** icon or double-click the schedule information to change the settings.

Step 3
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 pre-defined Sunday schedule.

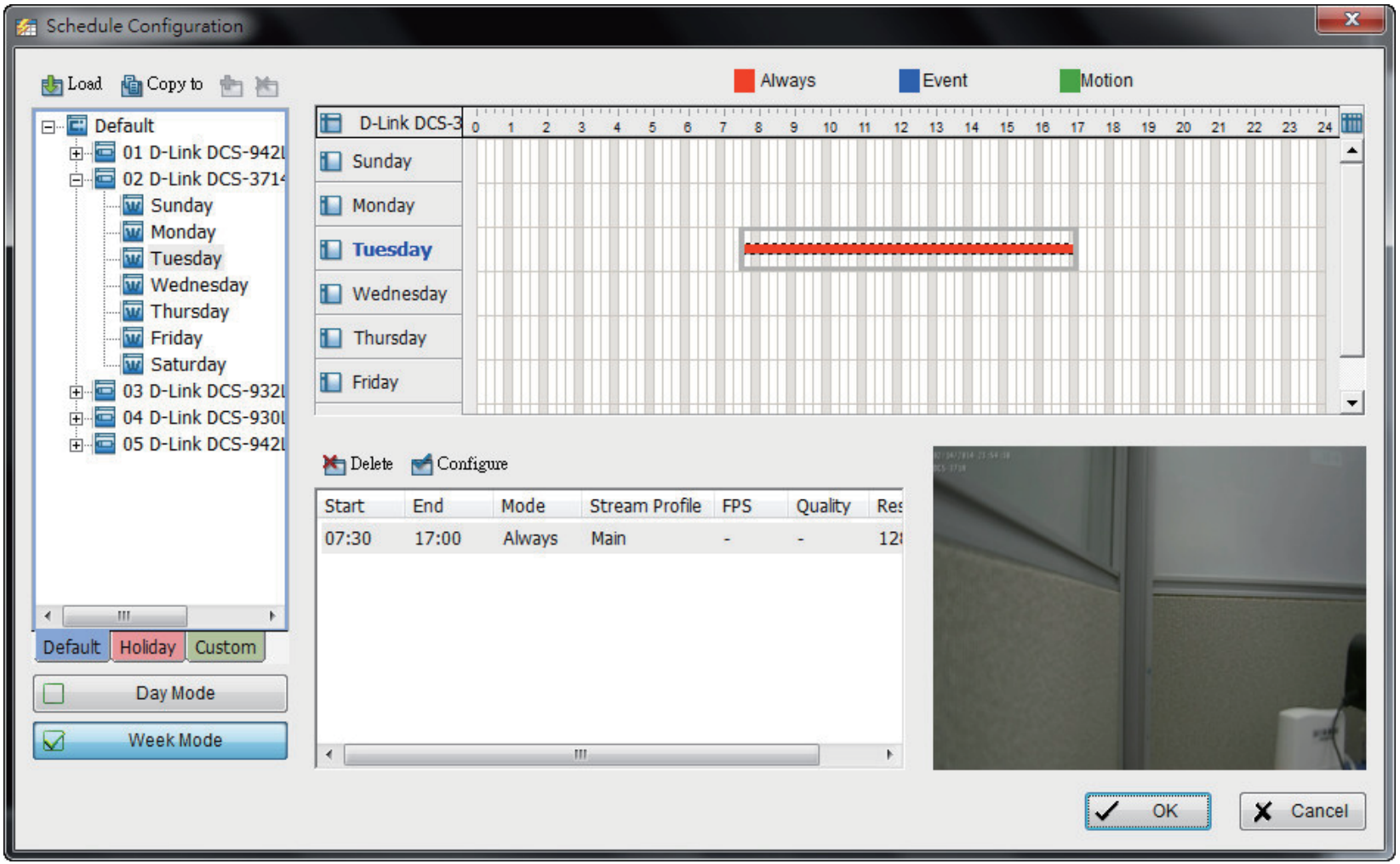
Custom
You can assign a particular date(s) for the system to work according to a special schedule(s).

Adjust the Schedule Settings

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

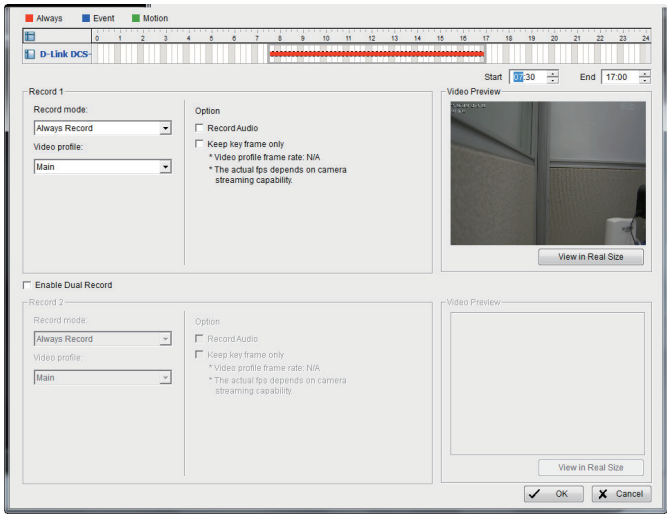
Option 1: Select the **Time Bar** and slide the bar to the left or right to change the start and end points.

Option 2: Click **Configure** or double-click on the schedule information (highlighted in blue) to open the **Encoding Options** window and modify the settings.



Record Mode

There are 2 recording modes and 5 video profiles to choose from. Please choose one that best suits your scenario.



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 set up the detection zone to detect motion. Frame interval is the interval in the number of frames between each check by D-ViewCam. To set up a single detection zone, left-click and drag the mouse to draw a rectangle. To set up more than one detection zone, simply repeat the same process or click **All** to select the entire screen.

Note: The maximum number of rectangle detection zones you may create is 10.

Record on Event
Select this option to start recording when the camera's digital input is triggered.

Enable Dual Record: recording two video streaming from IP camera at the same time.

Record Audio: Use the check box to enable or disable audio recording

Keep key-frame only: System will only record key frames of the video stream.

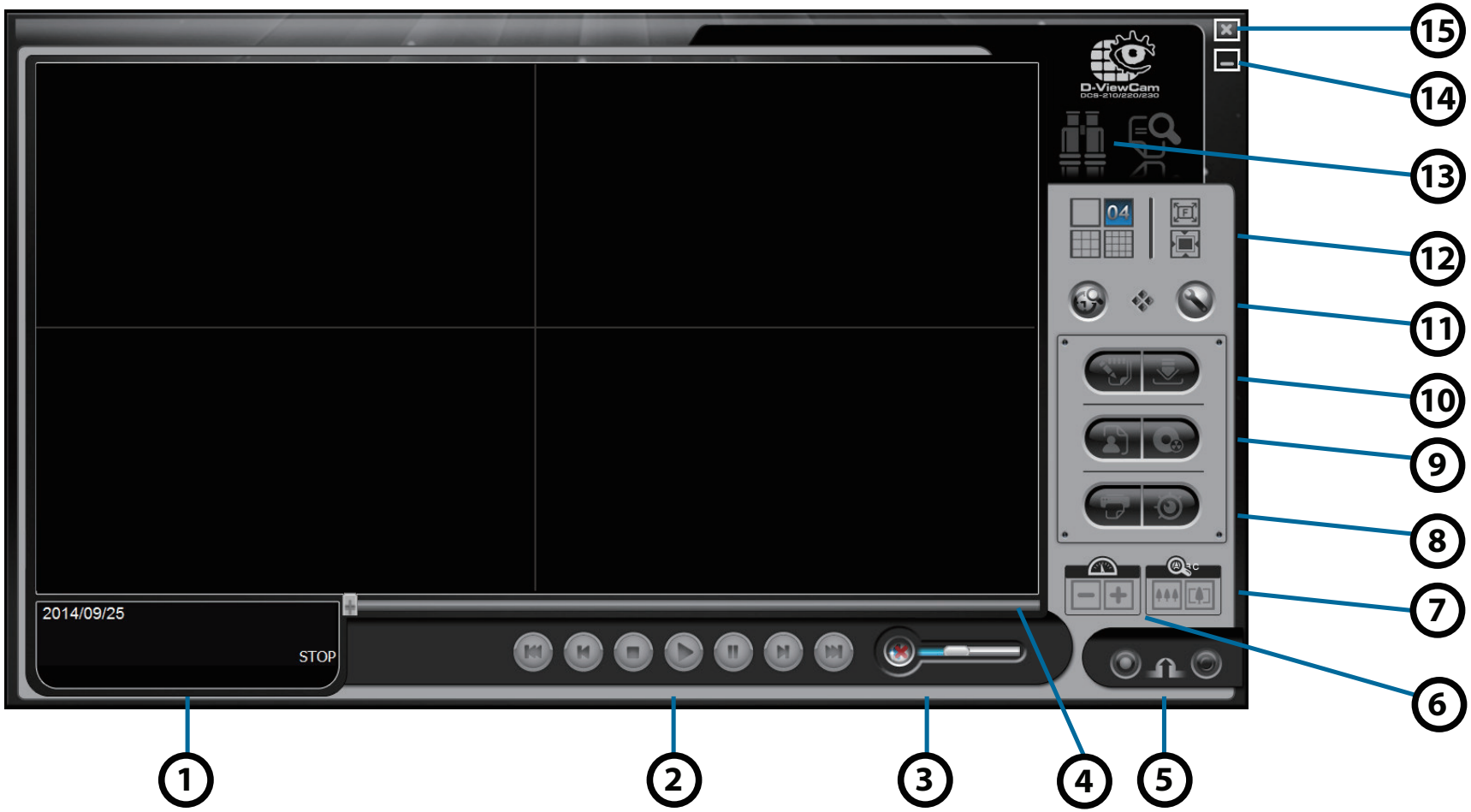
Note: The key frame interval is controlled by each camera manufacturer and cannot be adjusted.

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.

Playback

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

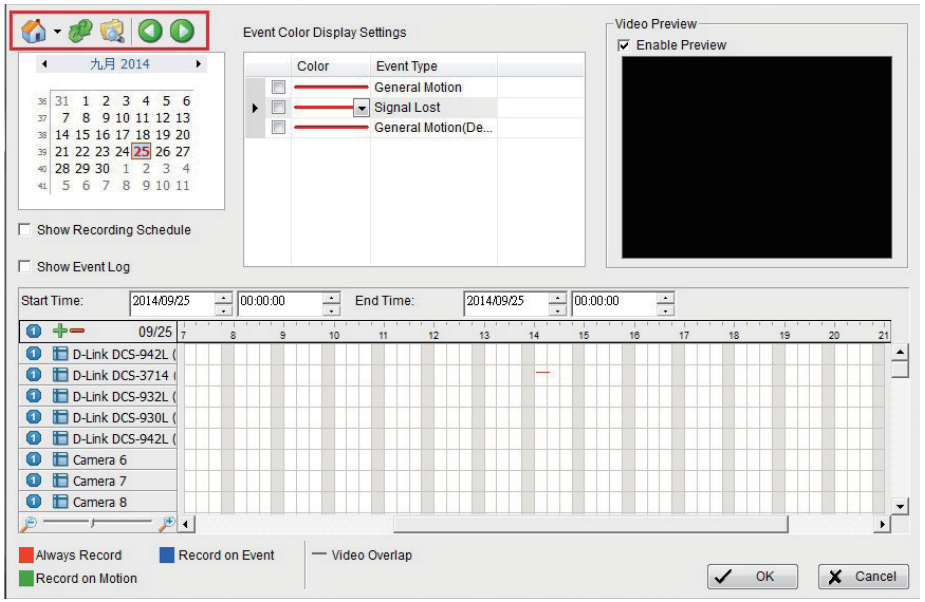


1	Information Window	5	Cue (Start/Stop Point)	9	Save image & Export Video	13	Smart Search
2	Play/Rewind/Fast Forward	6	Speed	10	Post Processing Tool & Backup	14	Minimize Window
3	Volume Control	7	Zoom	11	Date Time Search Dialog & General Setting	15	Exit Window
4	Scroll Bar	8	Print & Log Viewer	12	Screen Division		

1. **Information Window:** Display video date and time, current video status, cue in/out points' time, and speed.
2. **Play/Rewind/Fast Forward:** Control the video.
3. **Audio Volume Control:** Adjust the sound level.
4. **Scroll Bar:** Indicates the status of the playing video; drag it to where you want to review.
5. **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.
6. **Speed:** Control the speed of the playing video. Click **+** to speed up and **–** to slow down.
7. **Zoom**: Zoom in and out of the recorded video.
8. **Print & Log Viewer**: Click to open the Print window and to open the Log Viewer window.
9. **Save image & Export:** Click to take a picture and to open the Export window.
10. **Post Processing Tool & Backup:** Click to open the Post Processing Tool window and to open the Backup window.
11. **Date Time Search Dialog & General Setting:** Click to open the Date Time Search and General Setting window
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. **Smart Search:** Click on button to access the **Smart Search** feature.
14. **Minimize:** Minimize the Playback console.
15. **Exit:** Close the Playback window.

Date Time Search Dialog

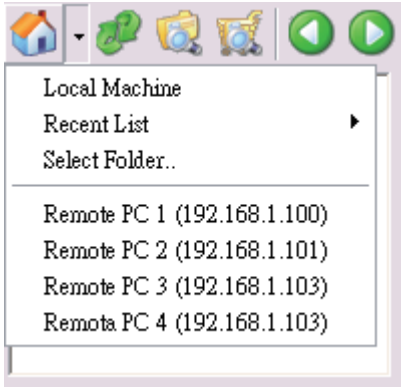
Go to **Playback** console and click **Open Record** to access the **Date Time Search Dialog**. Here, you can review video records.



Record Display

The record display window displays information about the video clips. These clips can be sorted by date (calendar view) or title (list view).

Remote Server Site: Select to open **Remote Playback Site Management**. This site allows you to access local PC or set up the remote playback server. Use **Select Folder** to directly access the recorded data folder or **Recent List** to access previously browsed recorded folders.
Note: To use **Select Folder** option you need the Main Console password.



Refresh: To refresh the Record Display window.

Log Viewer: To access the Log Viewer Tool.

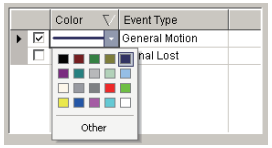
Previous Days: To show recorded videos from the previous recording date.

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

Date Time Period
Select the starting and ending time points to review a video.

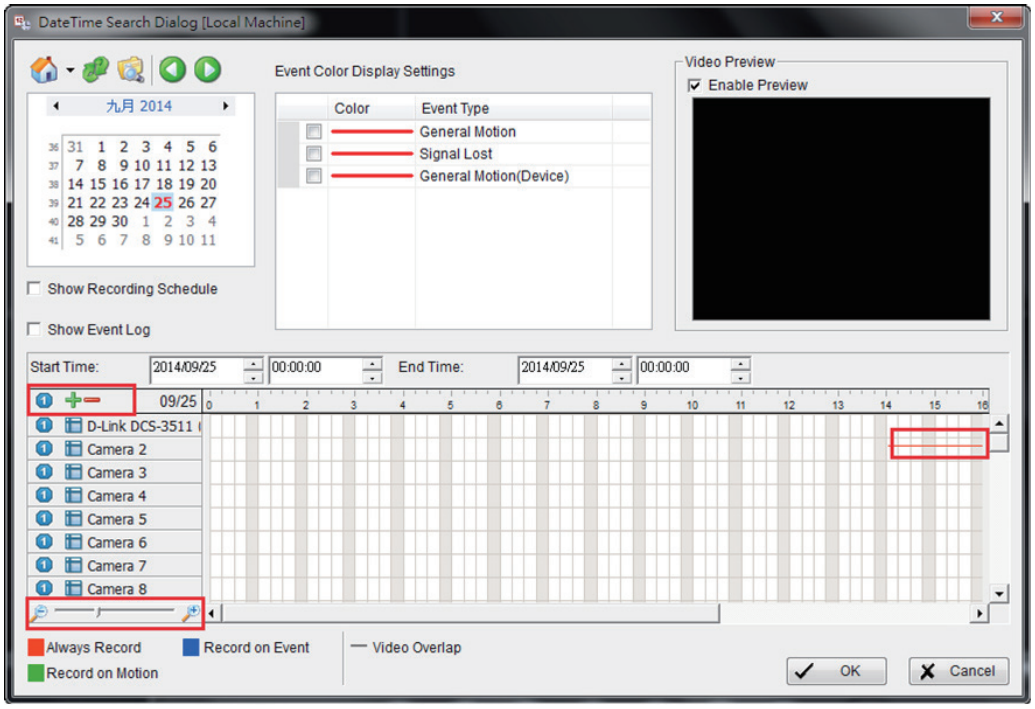
Video Preview
Select **Enable Preview** to preview the selected video.

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



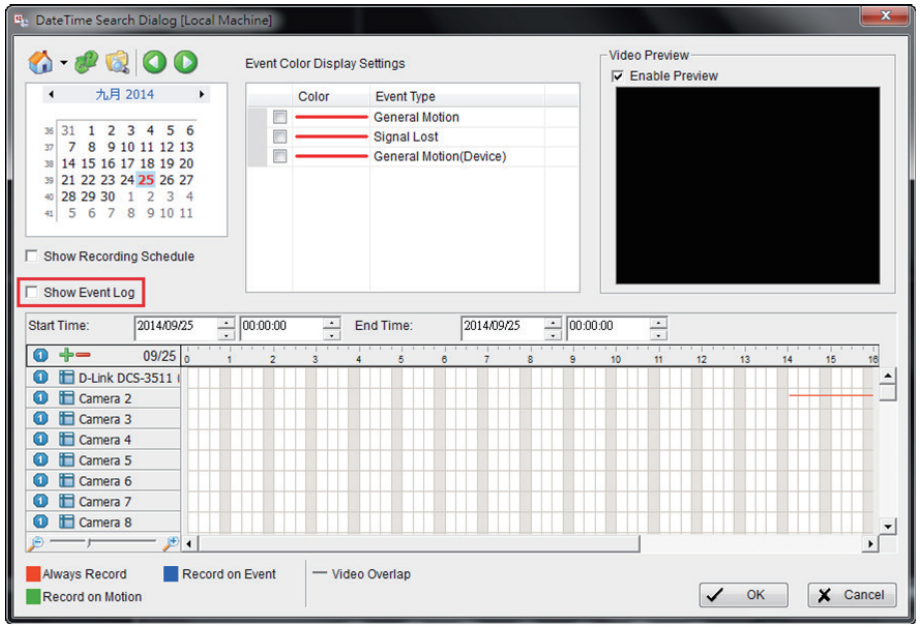
Time Table
- Click to select all channels or to deselect all channels. Finally, utilize the scale bar to modify the time table.

- Select **Show Records** to display the time period of recorded data.



* Support for dual playback: If the camera has dual recording feature, you can click the numeric button near the camera name to switch between 2 recording schedules (thick line) and available recordings (thin line).

- Select **Show Event Log** to display the time of event detected.



To Playback Video

Step 1: From the **Record Display** window, select the date of the recorded video you want to view. The red, green and blue lines in the time table indicate the available video records.

Note: The **Record Display** window can be displayed in (a) calendar view or (b) list control view. To modify these settings, click **Settings** on the Playback Console.

Step 2: Use color bars to differentiate event types.

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.

Step 4: Select **Enable Preview** in the **Video Preview** section to view your video.

Step 5: Click on the camera name to add or remove cameras that you want to playback.

Step 6: Click **OK** when finished.

Search Mode

Go to **Playback** console and click to open the **Smart Search** window.

Alarm Event Type

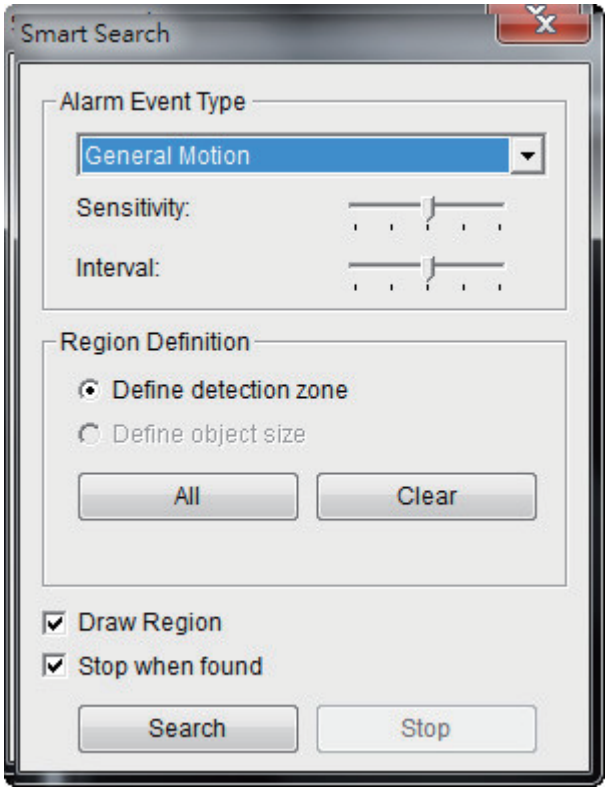
General Motion: Detects all movements in the defined area.

Sensitivity: This slider controls the sensitivity required to trigger the alarm. Slide the control to the right to increase sensitivity (relatively small movements will trigger the alarm) or to the left to reduce sensitivity.

Interval: Move the slider control to the right to increase the time interval, so the alarm will be triggered only when the movement lasts longer; moving to the left will reduce the time interval.

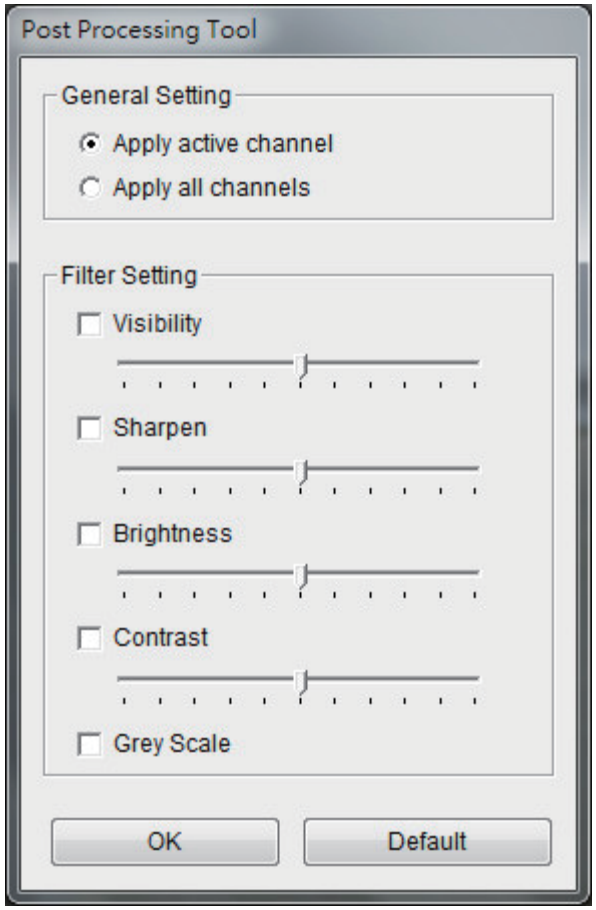
Define Detection Zone: Left click and drag, to draw a detection zone on the video screen. You may define more than one zone on the screen by repeating the process.

Stop When Found: Select this option to stop the video when detecting motion in the detection zone. Unselect this option to keep the video rolling, and to display all the detected events on the search list. Click on the listed event to jump to the specific part in the video where motion is detected.



Post Processing Tool

Go to **Playback** console and click to open this tool.



General Setting

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

Filter Setting

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

Sharpen: Select and move the slider control to the right to sharpen the image or to the left to soften the image.

Brightness: Select and move the slider control to the right to make the image brighter.

Contrast: Select to move the slider control to the right to increase contrast.

Grey Scale: Select to display the video record in grey scale mode. The image will be displayed in black and white.

Default: Click to restore the default settings.

OK: Click to save to apply your settings.

Backup

Go to **Playback** console and click to open this window.

Here, you can start a full function Playback Console and load the backup files on any Windows PC. You can monitor real time video and work on the backup files on separate computers simultaneously.

Step 1: Click **Open Record** in the **Playback** console and click **Backup**.

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

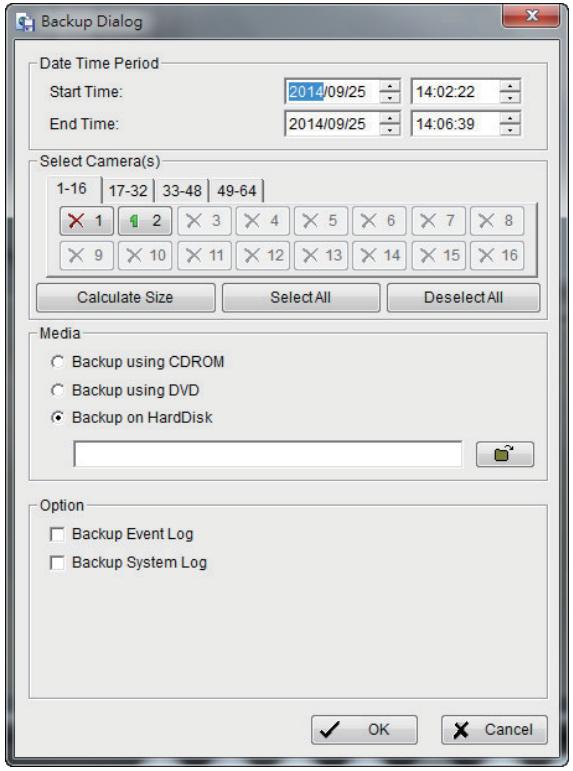
Step 3: In the **Select Camera(s)** section, select the camera(s) you want to backup.

Step 4: Click **Calculate Size** 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**, select the type of data you want to backup.

Step 7: Click **Backup** to start backup.



Snapshot

Go to **Playback** console and click .

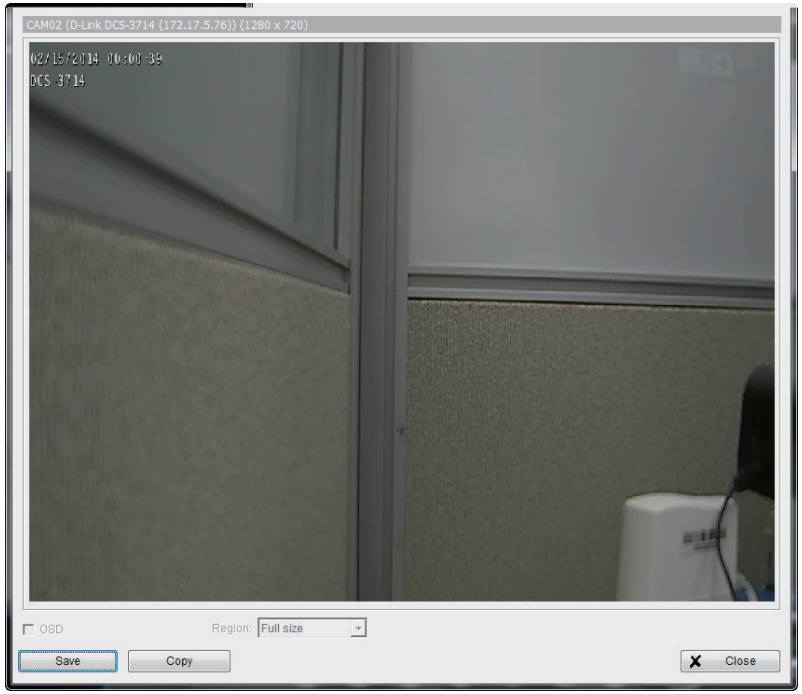
Step 1: Click on the camera display window to take a snapshot.

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

Step 3: Select **OSD** 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 **Full size** or **Selected Region** as your image region.

Step 4: You have the option to copy the image to the clipboard or 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**.

Note: You may skip step 3 by pre-setting a folder and format to save images.



Save Video

Go to **Playback** console and click to open this window.

Step 1: Click on the display screen of the Playback console to choose 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 be displayed in the information window.

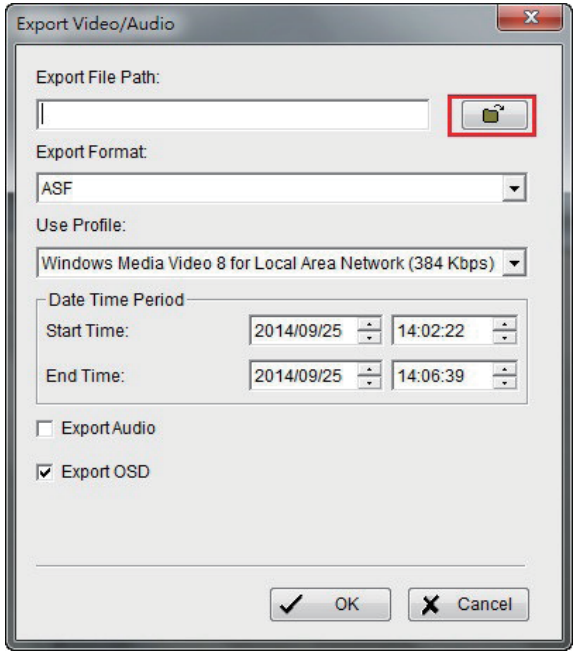
Step 3: Click the **Save Video** icon, select the location where you want to save the file to and enter the file name.

Step 4: Select **Export Format** from the drop-down list - ASF or AVI.

Step 5: Select a profile from the **Use Profile** drop-down menu.

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 video.



Log Viewer

Go to **Playback** console and click to open this window.

System Log

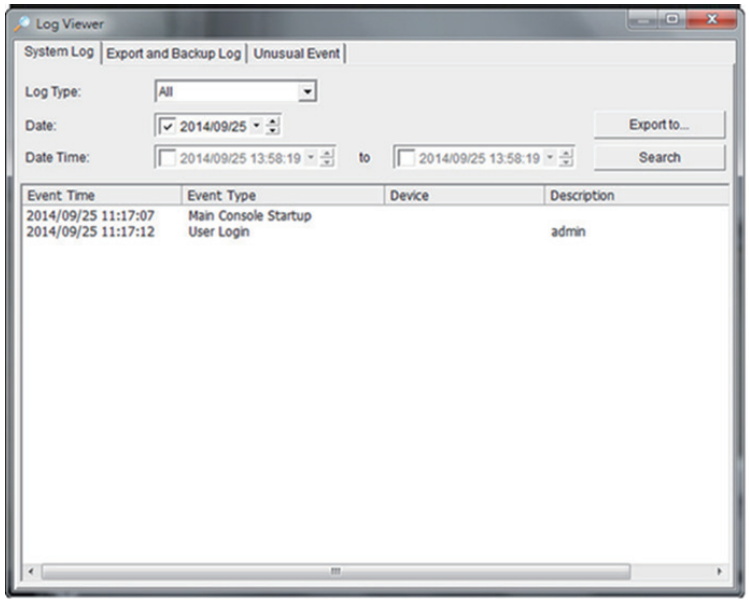
To launch Log Viewer, Click on **General Setting** and select **Log Viewer** from the menu. View the unusual event history that had been detected by the Smart Guard System.

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.

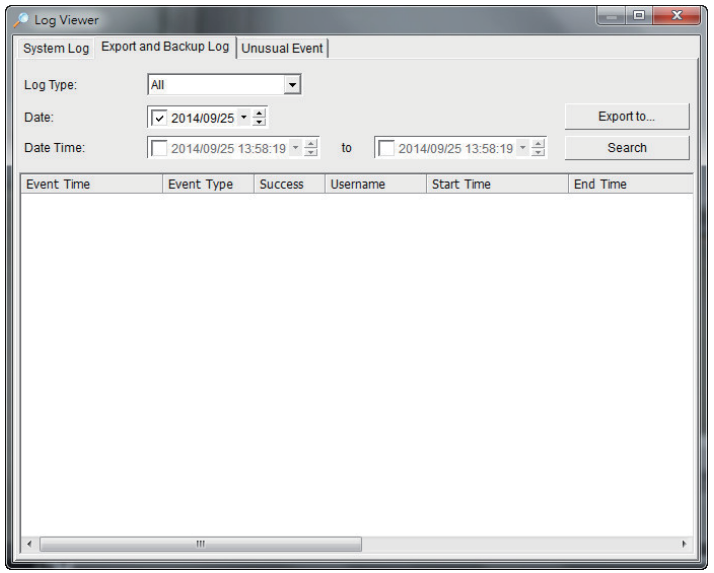
Step 3: Click **Search**.



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

Export and Backup Log



View the Export and Backup Log history that had been operated by local or remote user.

Step1: Choose 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 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 3: Click **Search.**

Unusual Event

The Smart Guard System displays the history of all the unusual events'.

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 events include **General Motion**, **Signal Lost**, and **Digital Input Triggered**.

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

Step 3: View the events that happened on a particular date or during a given time period by selecting **Search**.
Date: Select **Date** and indicate the date.
DateTime: Select the date and time.

Step 4: Click **Search**.

Note: The Log Viewer in Date & Time mode will search for all the unusual events that are recorded. The system, by default searches the record from the beginning to the end. A link will appear next to each event. By clicking this link, the video will jump to the point where an unusual event takes place.

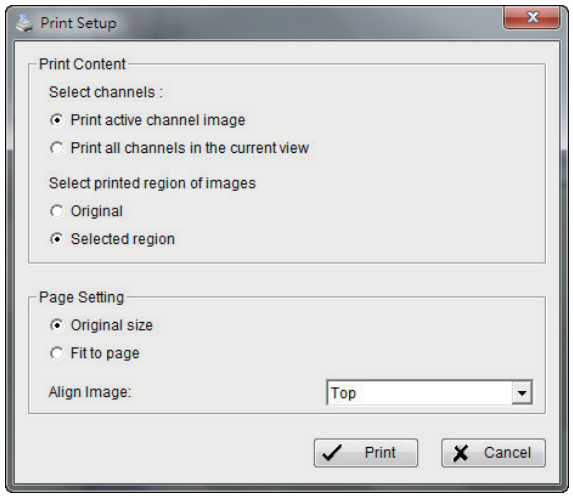
Print

Go to **Playback** console and click to open this window.

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

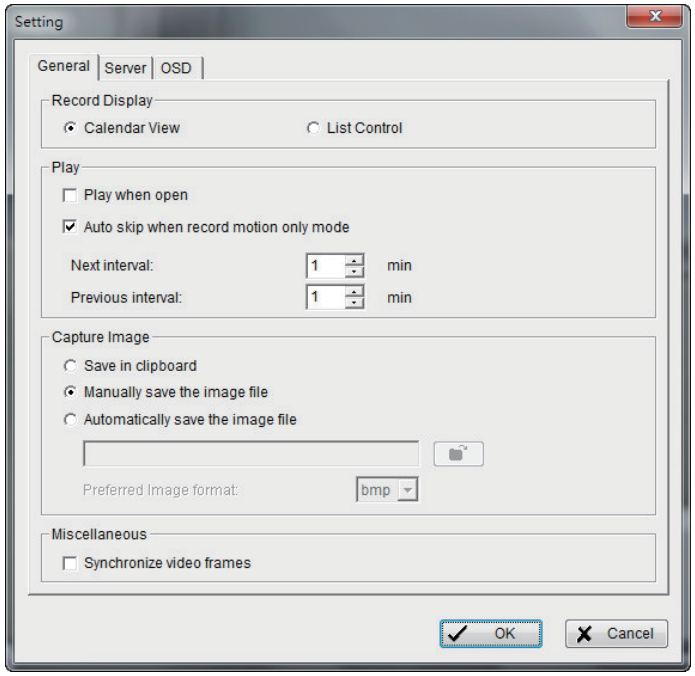
Print Content: Print the image from the selected channel or all the channels shown on the screen.

Print: Click to print the image.



Setting

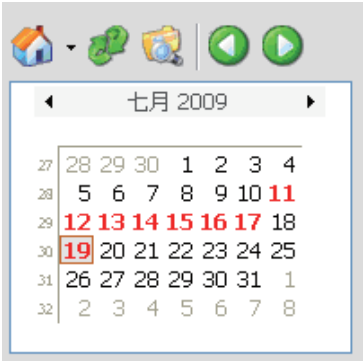
Go to **Playback** console and click to open this window.



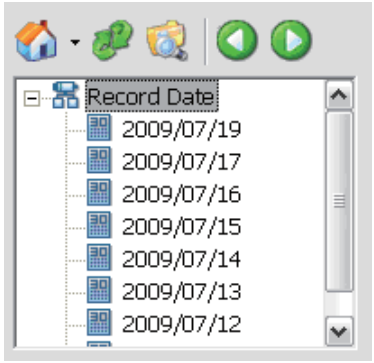
General

Record Display

Calendar View



List Control



Play

- **Play when open:** Select this option to start playing the video clip everytime a record is withdrawn.
- **Auto skip when record motion only mode:** Select to set up the system to automatically skip to the points where motions were recorded.
- **Next interval:** Set the interval and click **Next** on the playback console to fast forward the video.
- **Previous interval:** Set the interval and click **Previous** on the playback console to rewind the video.

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:** Select to manually save the image, and the format of the image.
- **Automatically save the image file:** By pre-setting the URL and the image format, the system will automatically save the image accordingly, when you click **Save** 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.

Remote Server

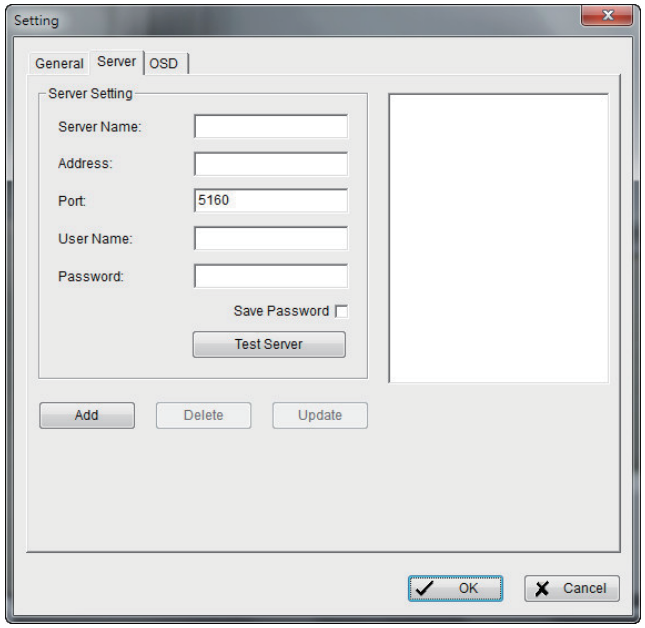
Add Remote Playback Site

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.

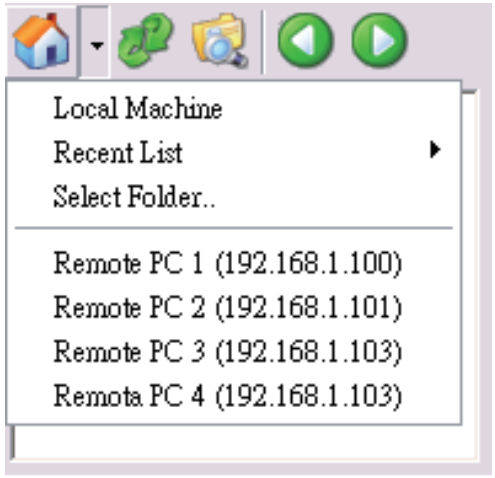
Step 2: Click **Add** to add the server.

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



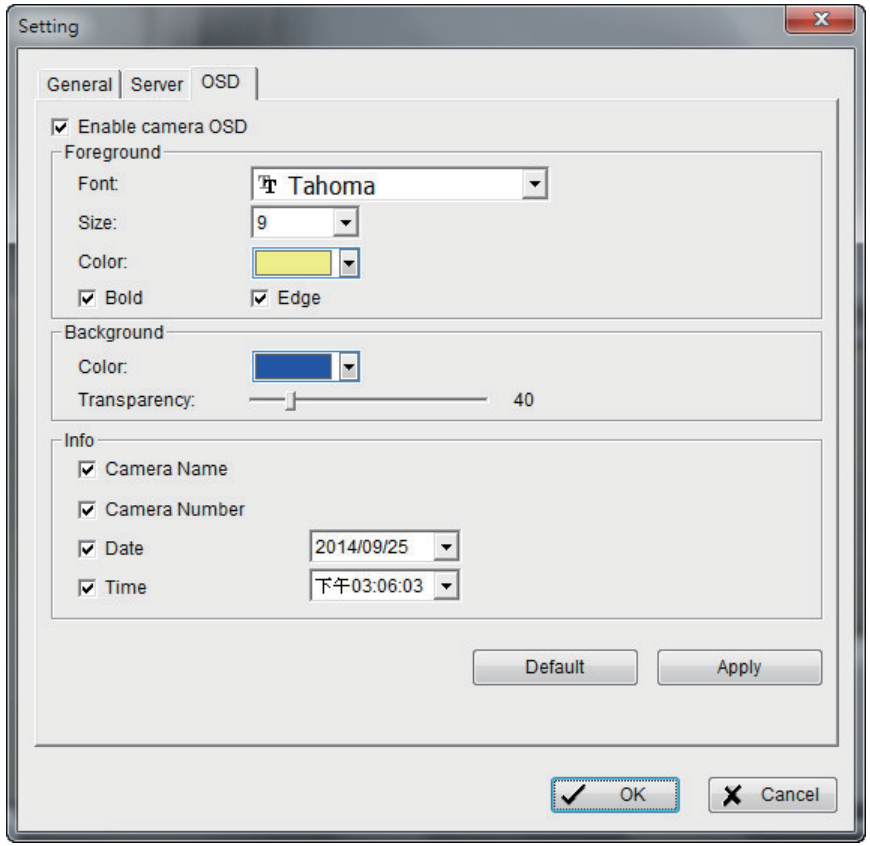
Access Remote Playback Site

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



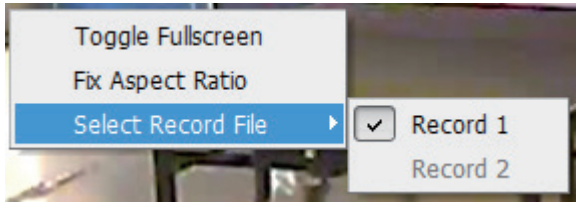
OSD

Select **Enable Camera OSD** to display video information of the recording video. Information includes camera name, camera number, date and time. Users also can set the font, size, and font color.



Switch Recordings

With dual recording support, user can switch between Record 1 and Record 2 on right-click screen menu as below.

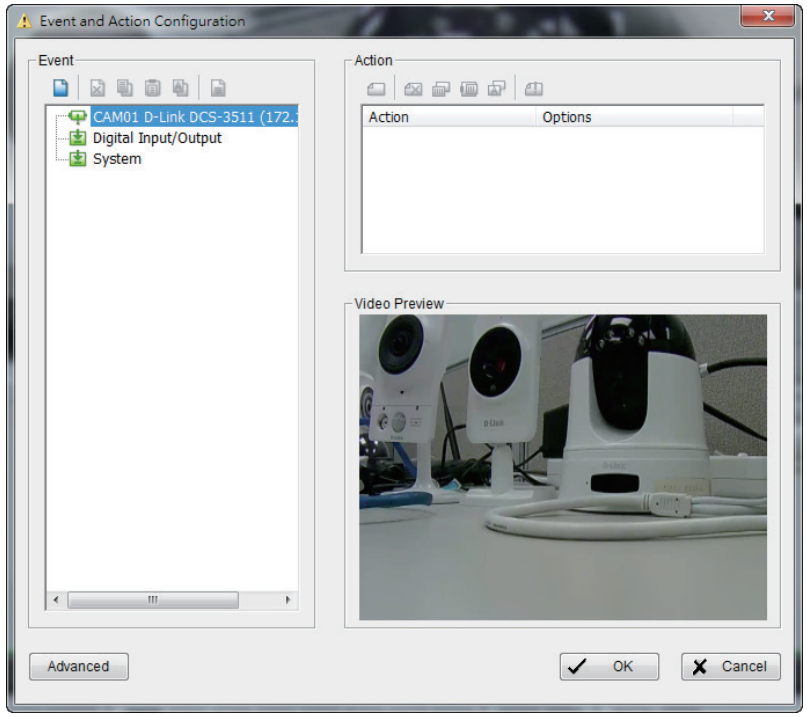


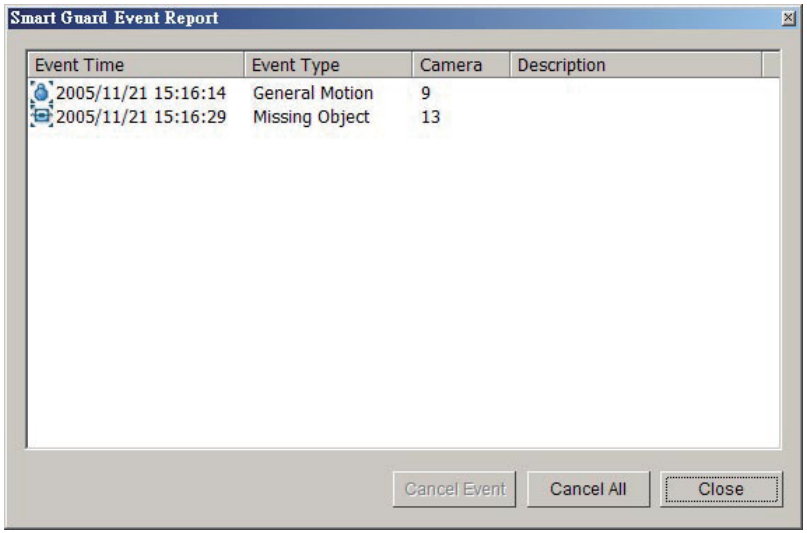
Smart Guard System

Click the **Configure Smart Guard System** icon to open the **Event and Action Configuration** window.

Select an event to be detected and set up an **Action** for the D-ViewCam Standard/Professional/Enterprise system to perform.

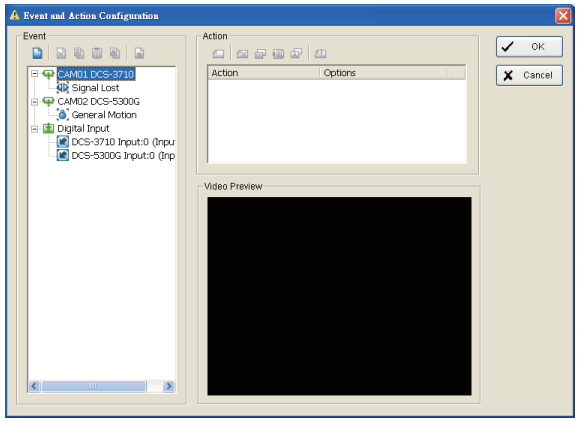
Note: To access the **Smart Guard Event Report**, click **Start Monitor > Open Event Report** in the Main Console.





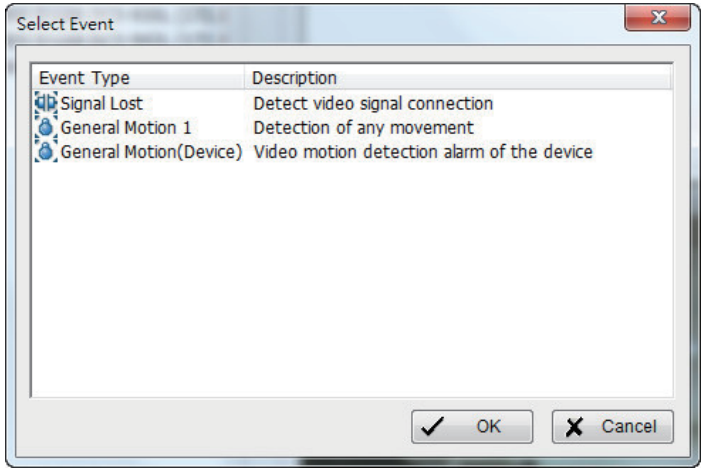
Event

There are 3 sources of events: **Camera** (video image), **Digital Input** (device connected to your camera) and **System** (condition of your hardware). 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 **Insert Event** .



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

Step 3: Configure the **Event Type** settings. Refer to the next section.

Alarm Event Configuration

This section describes the basic setting of Signal Lost and General Motion events.

Signal Lost

Enable Event: Select to activate the event.

Life Cycle

- **Automatically cancel event when event disappears**: The alarm/action will be cancelled once the event is fixed or ends.
- **Manually cancel event or event last triggered**: The alarm/action will continue to be active until canceled. To cancel the event, click **Start** > **Open Event Report** > **Cancel All Events.**
- **Cancel event after timeout xx seconds**: Select and enter the time (in seconds) to cancel an event.
- **Always activated**: Allow alarm to be activated at all times.
- **As Day Mode Schedule**: Customize a specific time range for the alarm to be activated. The alarm will be available daily according to your settings.

  Click **Day Schedule** to configure the schedule for this setting.

  Choose **Add Time Period** and drag on the selected timeframe to define an activated schedule.

  Choose **Remove Time Period** and drag on the selected timeframe to subtract from existing schedules.

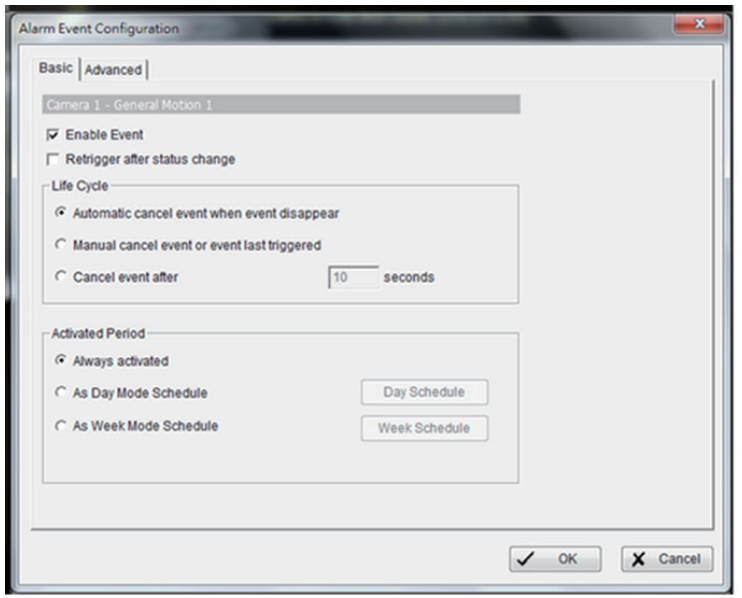
  Click **Clear All** to remove all settings.
- **As Week Mode Schedule**: Customize a weekly based time range for the alarm to be activated.

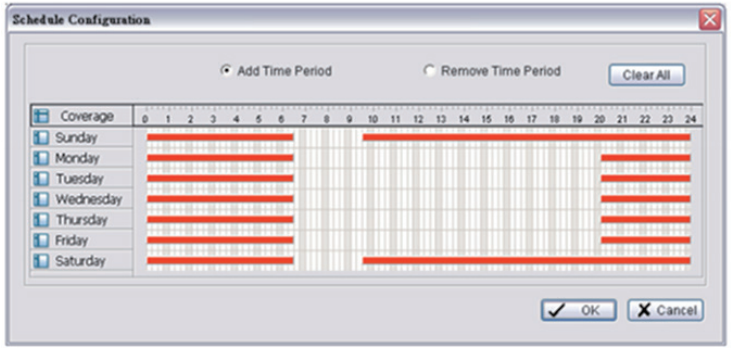
  Click **Week Schedule** to configure the schedule for this setting.

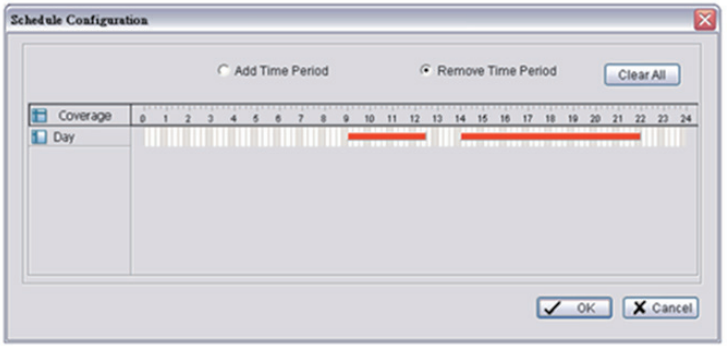
  Choose **Add Time Period** and drag on the selected timeframe to define an activated schedule.

  Choose **Remove Time Period** and drag on the selected timeframe to subtract from existing schedules.

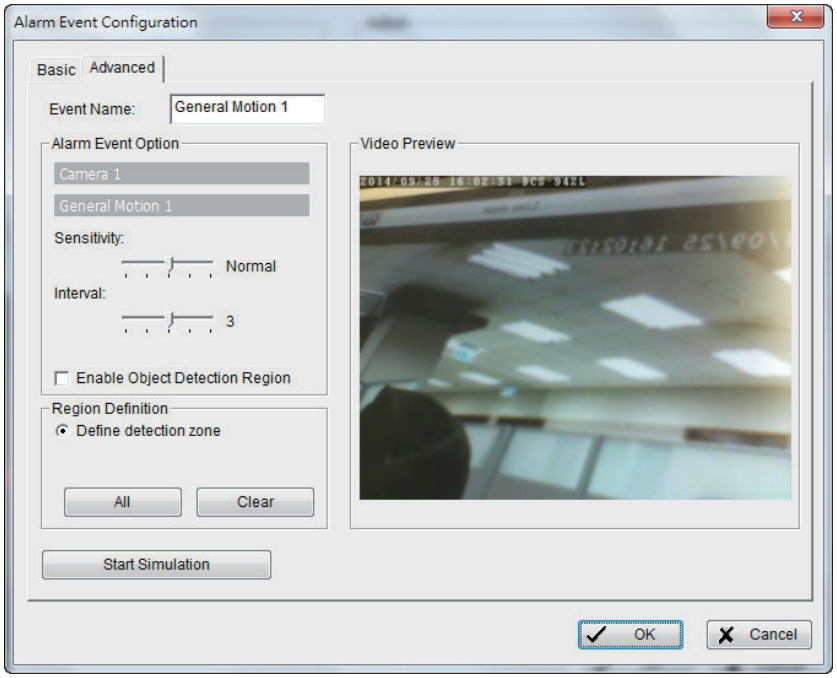
  Click **Clear All** to remove all settings.







General Motion



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 sensitivity of motion detection. Setting up an appropriate sensitivity value will reduce the chances of a false alarm. For example, you can lower the sensitivity to avoid the alarm being triggered by a tree swinging in the breeze.
- **Interval:** Click and move the slider control to the right to increase the 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

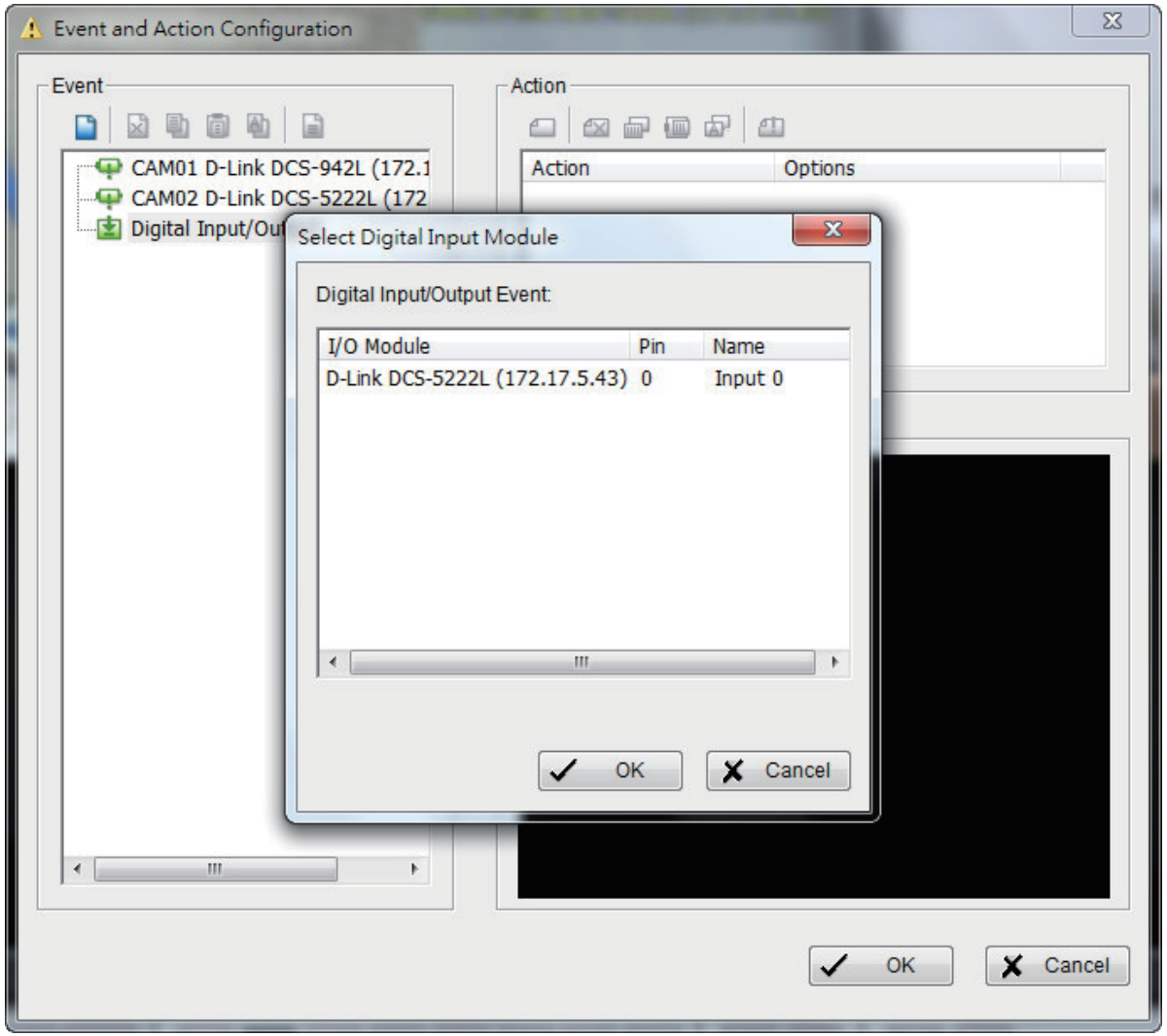
- **Define detection zone:** To detect **General Motion**, you have to define a detection zone. Left-click and drag the mouse to draw a detection zone. You may define more than one zone on the screen by repeating the same process. You can also click **All** to select the entire detection zone.

Click **Start Simulation** and test the function on the preview window.

Digital Input

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

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



Action

Assign an Action Type

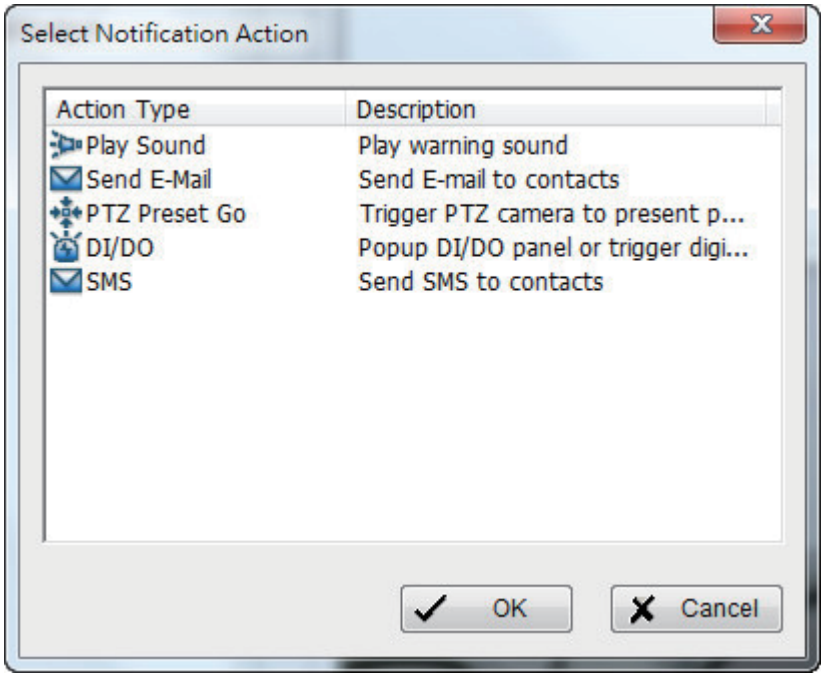
Insert Action: Select actions that responds to an unusual event.

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

Step 2: Select one of the five actions and then click **OK**.

1. Play Sound
2. Send E-mail
3. PTZ Preset Go
4. DI/DO
5. Send a SMS Message

Step 3: Configure the **Action Type** if required.

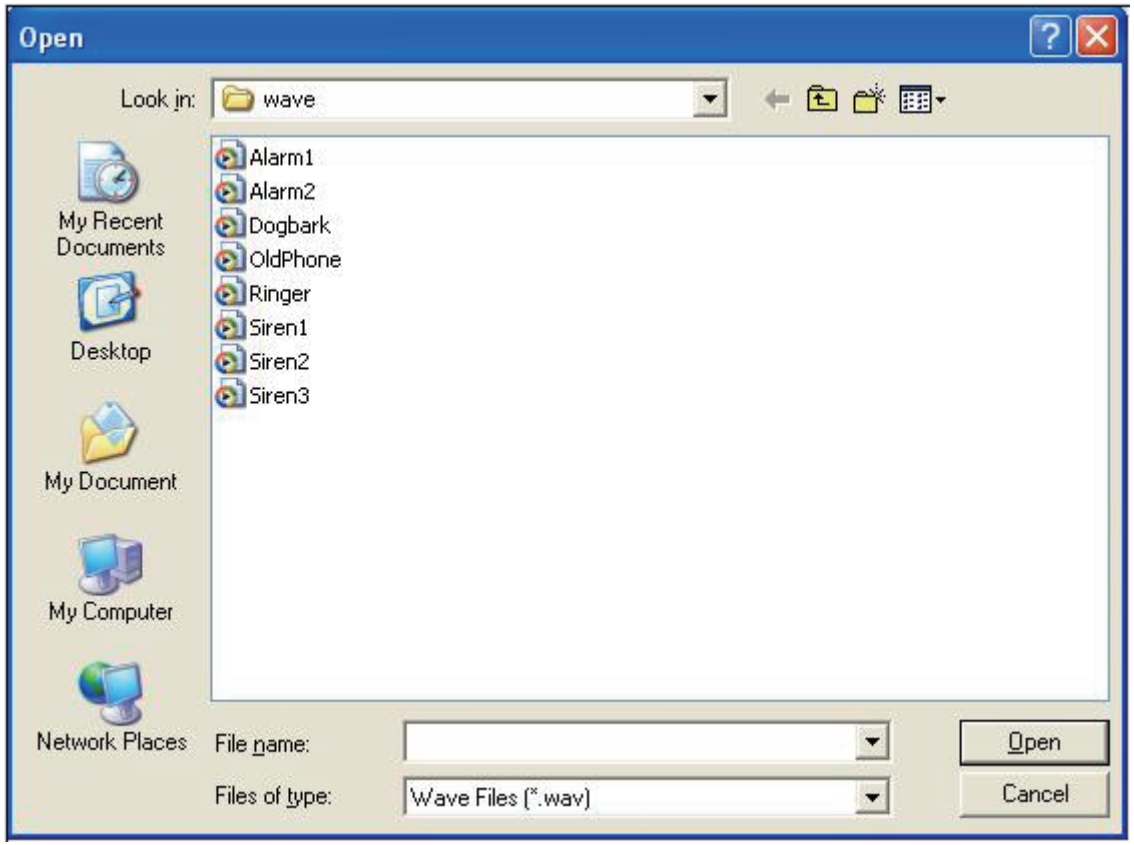


Action Type > Play Sound

The system will play an audio .wav file when an unusual event is detected.

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

Step 2: Select a wave file (.wav) and then click **Play Sound** to modify the setting.

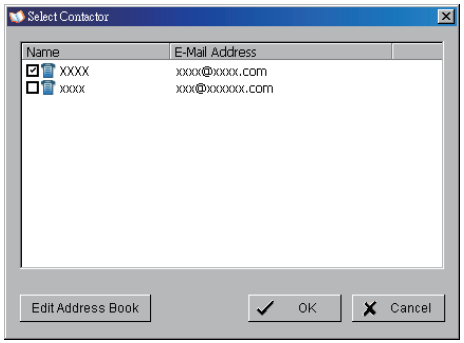


Action Type > Send E-mail

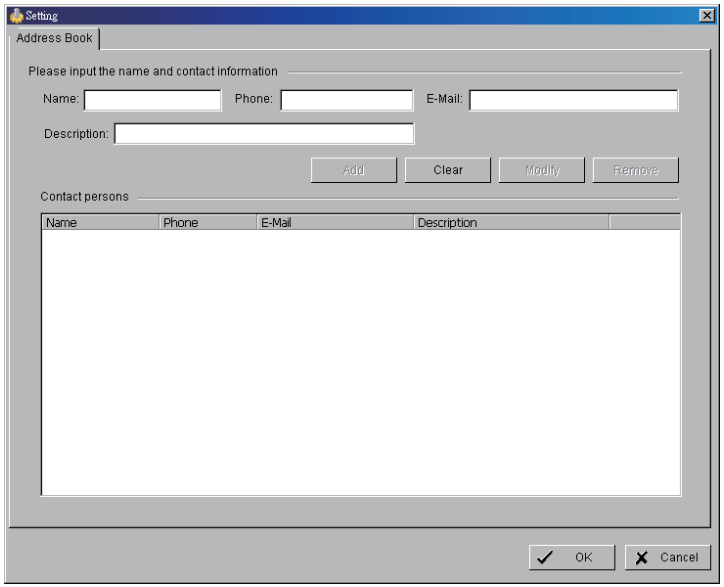
When an event is triggered, the system immediately emails the specified recipients. The email contains the type of event, the time it occurred, and a picture of the event.

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.



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



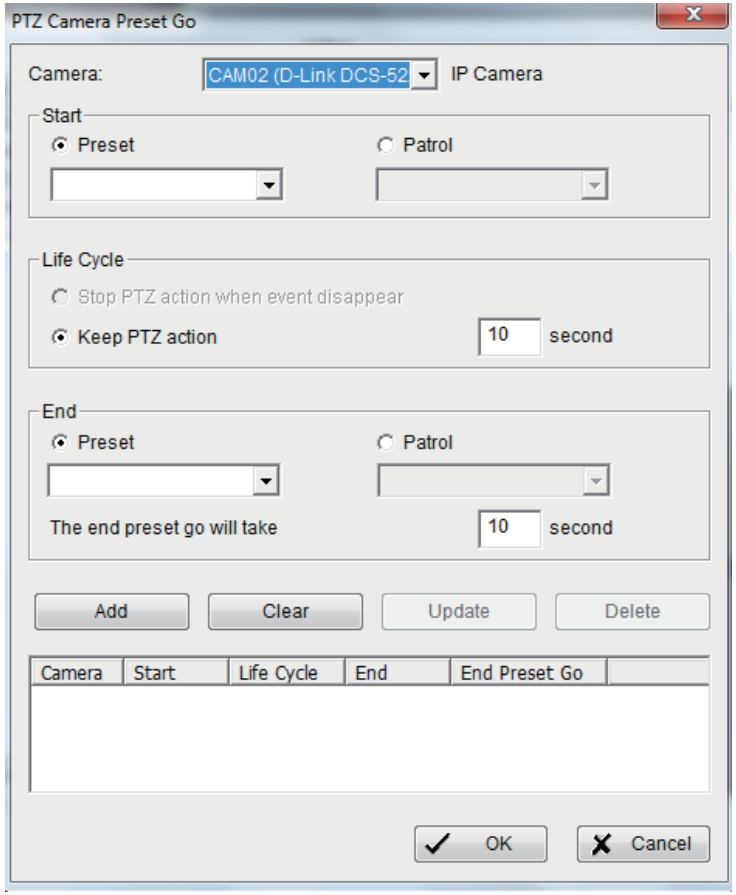
Action Type > PTZ Preset Go

Use this to trigger the PTZ (pan/tilt/zoom) camera(s)

Step 1: Select the **PTZ Preset Go** action and then click **OK**.

Step 2: In the **PTZ Preset Go** window, select the PTZ camera that is connected to your system. Then set the start and end preset points, and select the life cycle for the event. Click **Add** when you are done to add the preset to the table below. You may repeat this step to add another preset.

Step 3: When you are finished adding your presets, click **OK**.



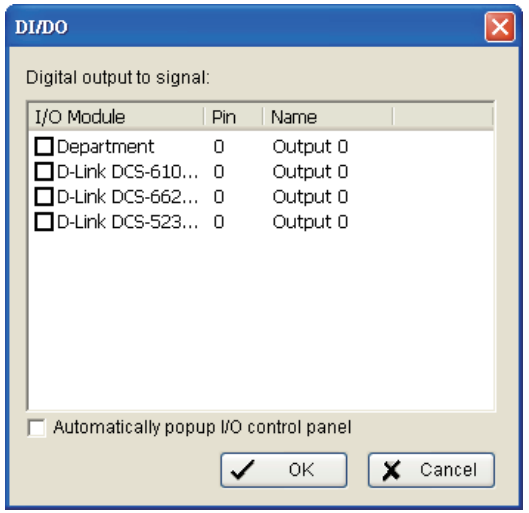
Action Type > DI/DO

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

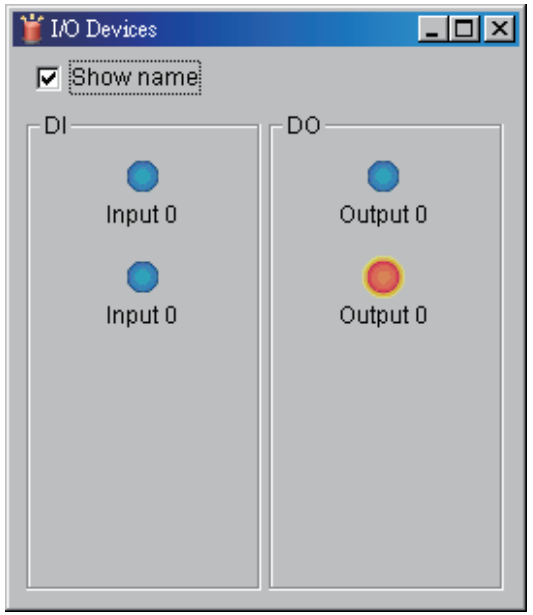
Step 1: Select the **DI/DO** action and then click **OK**.

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. Enable **Automatically popup I/O control panel** to monitor the I/O status.



You must adjust the setting of I/O device in **General Setting** > **Setting** > **I/O Device** first and the I/O control will display the device status based on this setting. You can also adjust the size of the window by clicking on the display window.



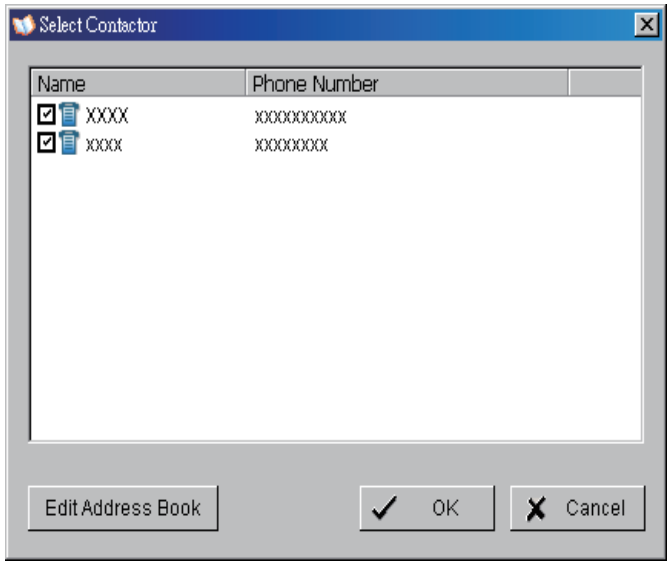
Action Type > Send a SMS

The system will immediately send an SMS to the user indicating the type of event, and the time.

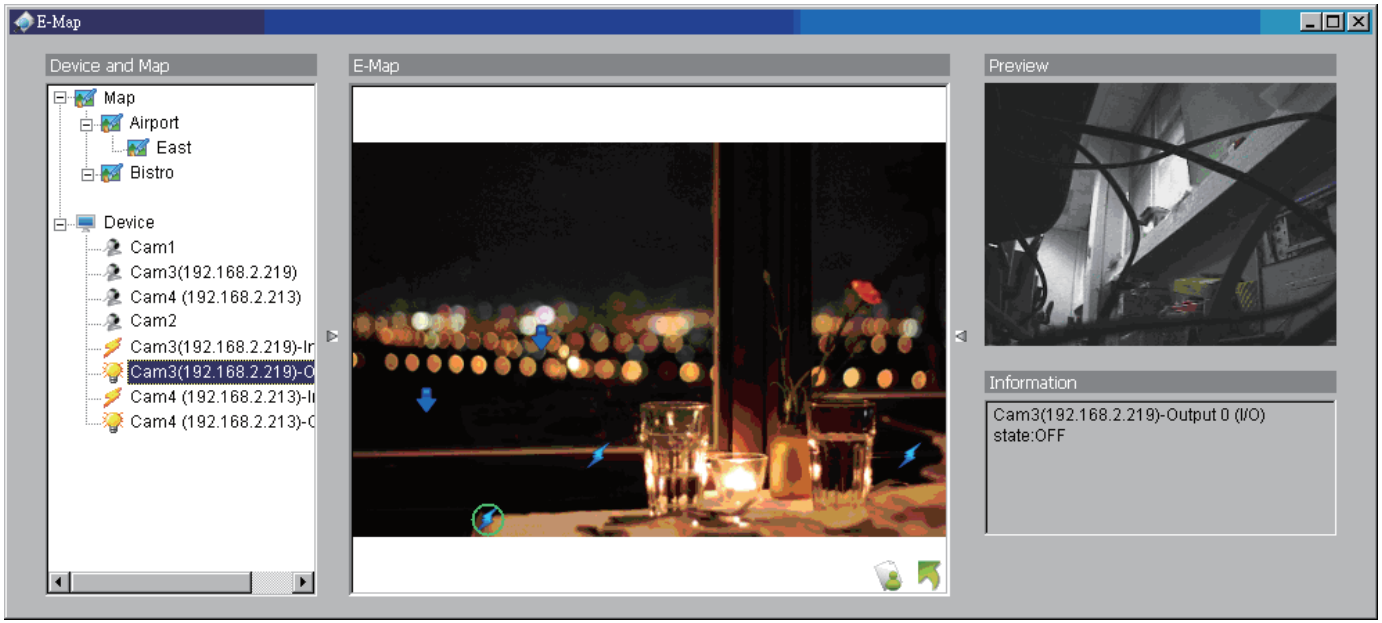
Step 1: Select the **Send a SMS message** action and then click **OK**.

Step 2: The **Select Contactor** window will display. Here you can choose one or more contacts at once.

Edit Address Book: Click to enter the contact information. This is similar to the **Send E-mail** and **Phone Call** action.



E-Map



To launch E-Map, click **Start** and select **Open E-Map** from the start menu.

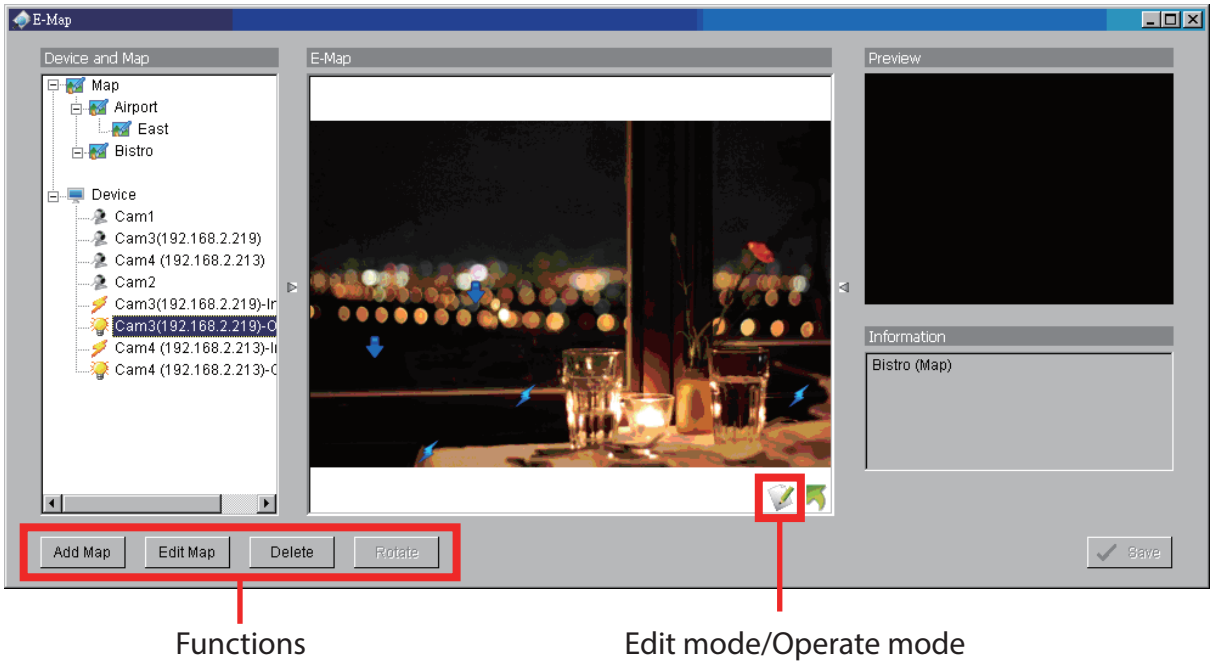
With E-Map, users can track the actual location and alarm status for each camera and receive instant response when the event happens. The arrows and lightening icon on E-Map represent cameras and I/O devices.These icons will turn red once they are triggered by alarms.

There are 2 modes in E-Map application:

Edit mode: Allows users to add/edit maps of devices.

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

Edit Mode



In **Edit** mode, the icons at the bottom of the window will be active for configuration when running the E-map function for the first time.

Add/Edit/Delete Map

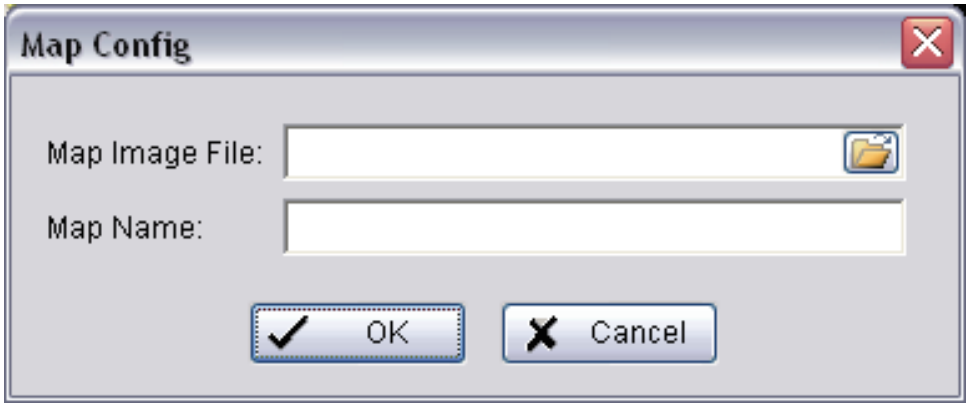
Add E-Map

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

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

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

Step 4: The map indicator appears on the left-up corner of the 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 **Map** to view the option menu to edit map, or just click **Edit Map** to open **Map Config**.

Step 3: Modify the 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 **Map** 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 the Map icon to add the device indicator.

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

Note: Different device symbolizes different indicator.

Camera indicator - digital Input indicator

Rotate Indicator

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

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

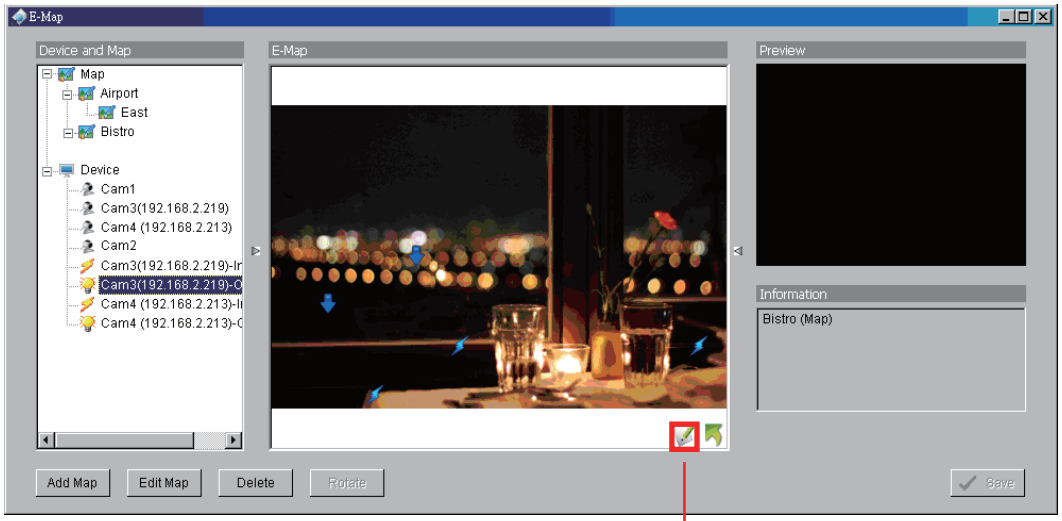
Note: Only camera indicators are allowed to be rotated.

Delete Indicator

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

Step 2: Click **Delete**.

Operate Mode



Device and Map Tree list

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

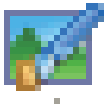
E-Map

This window displays the map layers and indicators.

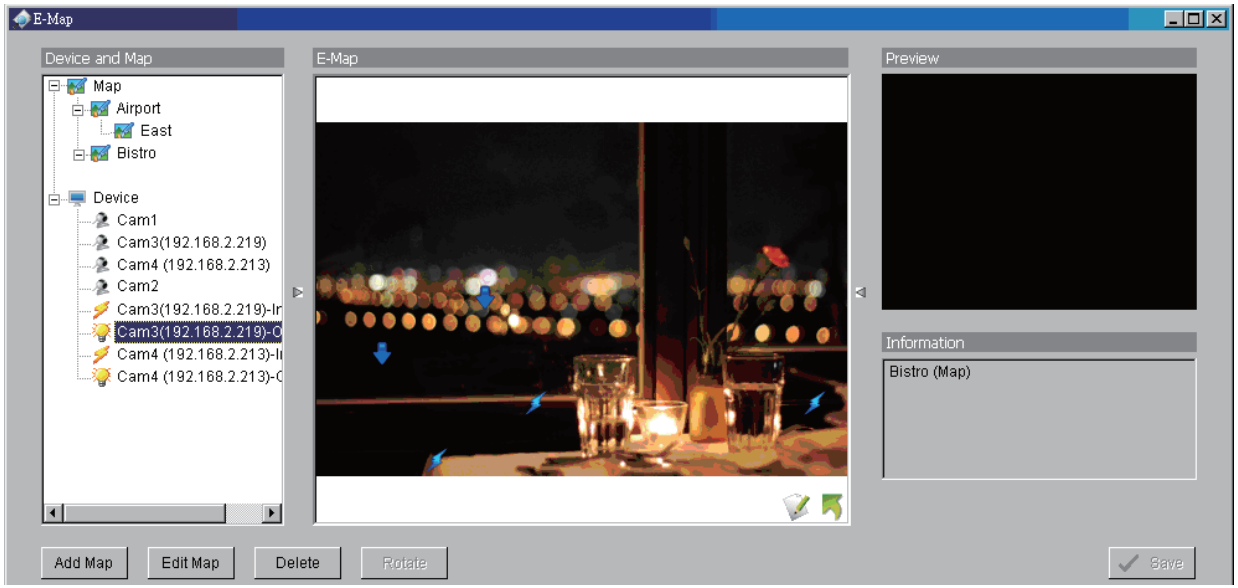
Device Indicator: Select the device indicator from **Device** and **Map Tree** list to preview video and related information.

Map Indicator: Select to enter the map layer. If you want to move to the upper layer, right-click on the map to select **Up** or click on the map.

Information and Preview window

	Map Info	Displays map name.
	Camera	Displays camera name and connection status.
	Digital Input	Displays digital input name and status (0 or 1).
	Digital Output	Displays digital output name and status (0 or 1).

Layout Adjustment



Adjust layout Window

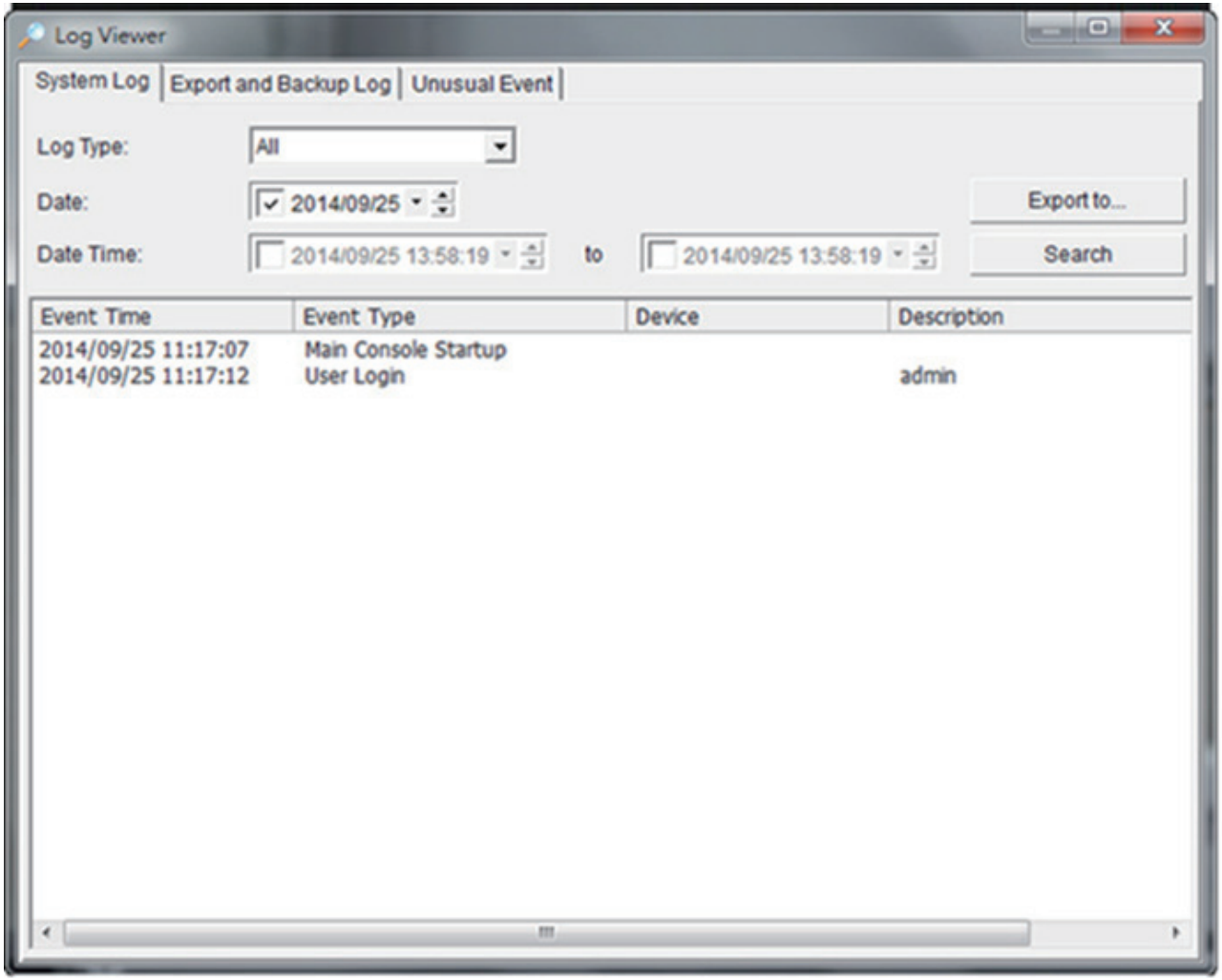
Shrink the window:
Click the triangular indicators to hide the device and information windows. Click the triangular indicator again to go back to the default setting.

Full screen display:
For a computer system with dual monitors, you can view the Main Console on primary monitor and view 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 located on the upper-right side of the window to switch to fullscreen mode.

Log Viewer



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

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 and Backup Log

View the Export and Backup Log history that had been operated by local or remote user.

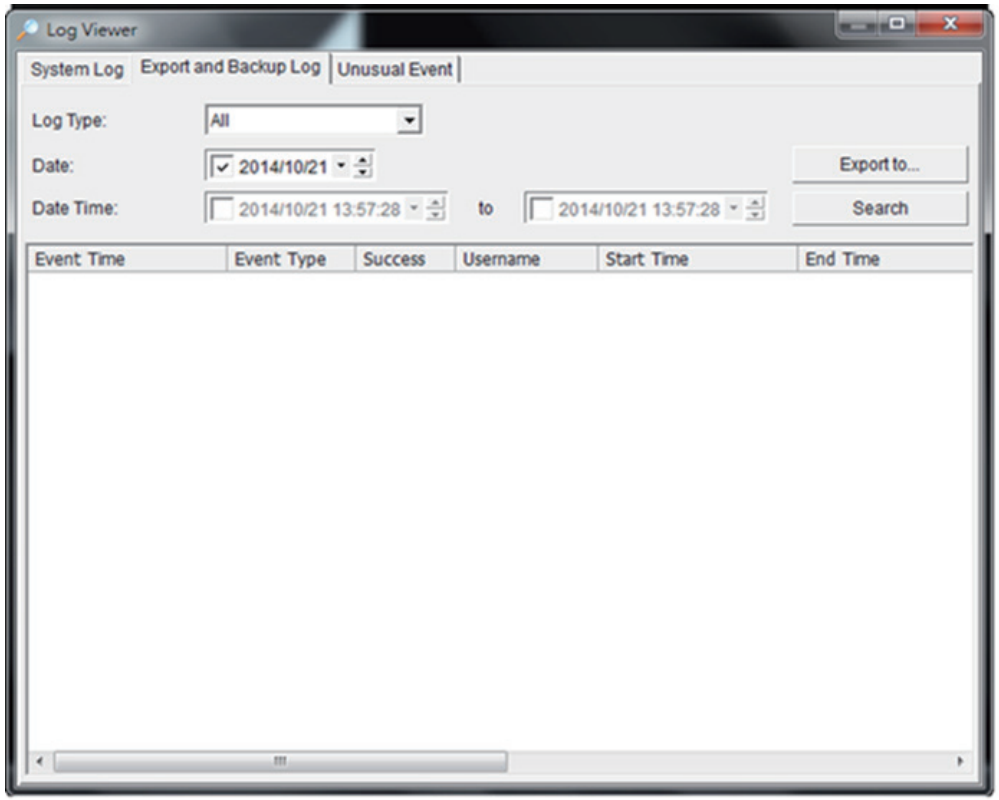
Step 1: Choose the type of event you want to check or select All from the drop-down menu for all types of events.

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

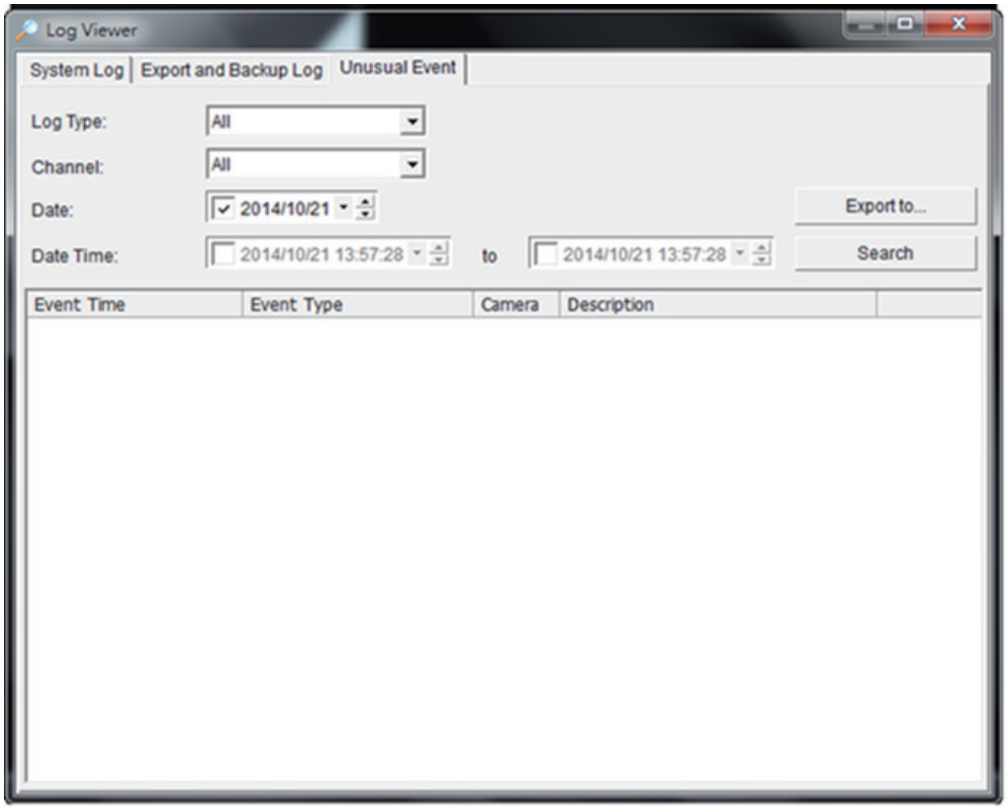
For a particular data: check the Date box right and indicate the date.

For a period: check the Date Time and then enter the date and time.

Step 3: Click **Search.**



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.

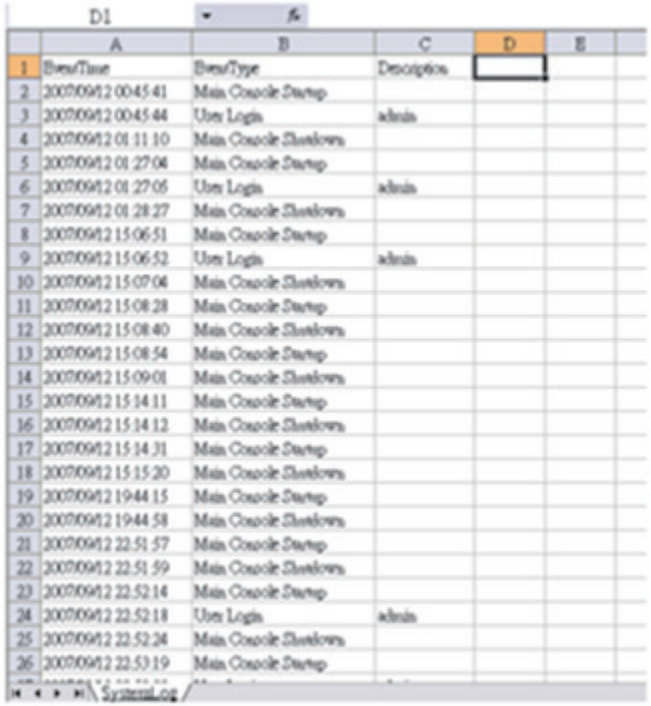
Step 3: View the events that happened on a particular date or during a given time period by selecting a search period.

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**.

Export

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



	A	B	C	D	E
1	EventTime	EventType	Description		
2	2007/09/12 00:45:41	Main Console Startup			
3	2007/09/12 00:45:44	User Login	admin		
4	2007/09/12 01:11:10	Main Console Shutdown			
5	2007/09/12 01:27:04	Main Console Startup			
6	2007/09/12 01:27:05	User Login	admin		
7	2007/09/12 01:28:27	Main Console Shutdown			
8	2007/09/12 15:06:51	Main Console Startup			
9	2007/09/12 15:06:52	User Login	admin		
10	2007/09/12 15:07:04	Main Console Shutdown			
11	2007/09/12 15:08:28	Main Console Startup			
12	2007/09/12 15:08:40	Main Console Shutdown			
13	2007/09/12 15:08:54	Main Console Startup			
14	2007/09/12 15:09:01	Main Console Shutdown			
15	2007/09/12 15:14:11	Main Console Startup			
16	2007/09/12 15:14:12	Main Console Shutdown			
17	2007/09/12 15:14:31	Main Console Startup			
18	2007/09/12 15:15:20	Main Console Shutdown			
19	2007/09/12 19:44:15	Main Console Startup			
20	2007/09/12 19:44:58	Main Console Shutdown			
21	2007/09/12 22:51:57	Main Console Startup			
22	2007/09/12 22:51:59	Main Console Shutdown			
23	2007/09/12 22:52:14	Main Console Startup			
24	2007/09/12 22:52:18	User Login	admin		
25	2007/09/12 22:52:24	Main Console Shutdown			
26	2007/09/12 22:53:19	Main Console Startup			

.xls

```
2007/09/12 00:45:41, Main Console Startup,
2007/09/12 00:45:44, User Login, admin
2007/09/12 01:11:10, Main Console Shutdown,
2007/09/12 01:27:04, Main Console Startup,
2007/09/12 01:27:05, User Login, admin
2007/09/12 01:28:27, Main Console Shutdown,
2007/09/12 15:06:51, Main Console Startup,
2007/09/12 15:06:52, User Login, admin
2007/09/12 15:07:04, Main Console Shutdown,
2007/09/12 15:08:28, Main Console Startup,
2007/09/12 15:08:40, Main Console Shutdown,
2007/09/12 15:08:54, Main Console Startup,
2007/09/12 15:09:01, Main Console Shutdown,
2007/09/12 15:14:11, Main Console Startup,
2007/09/12 15:14:12, Main Console Shutdown,
2007/09/12 15:14:31, Main Console Startup,
2007/09/12 15:15:20, Main Console Shutdown,
2007/09/12 19:44:15, Main Console Startup,
2007/09/12 19:44:58, Main Console Shutdown,
2007/09/12 22:51:57, Main Console Startup,
2007/09/12 22:51:59, Main Console Shutdown,
2007/09/12 22:52:14, Main Console Startup,
2007/09/12 22:52:18, User Login, admin
2007/09/12 22:52:24, Main Console Shutdown,
2007/09/12 22:53:19, Main Console Startup,
```

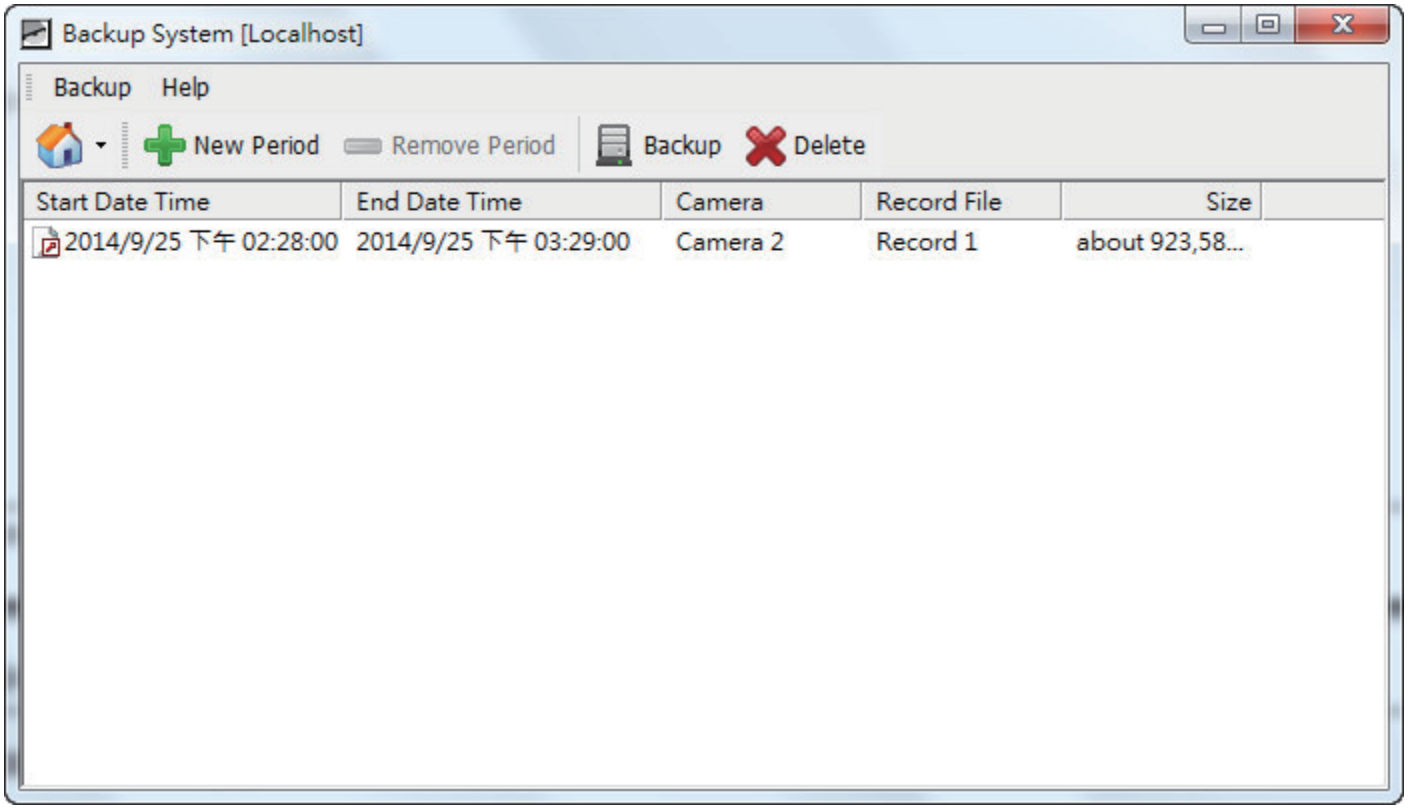
.txt

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

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

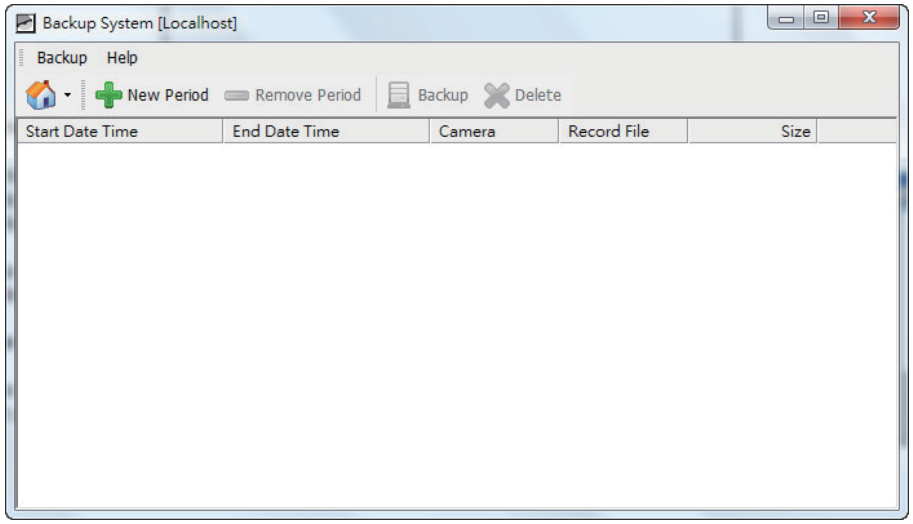
Backup

The backup function saves video records and other log information.



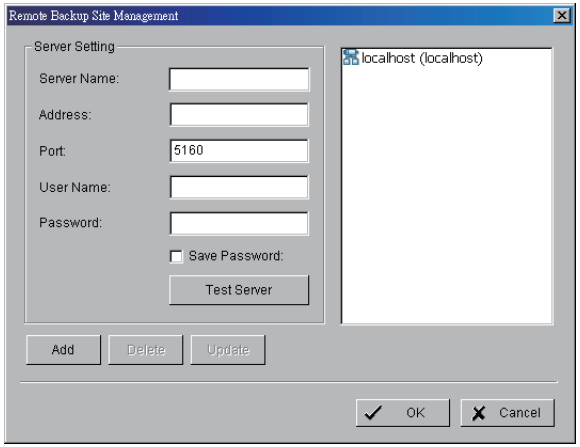
Note: The backup cannot exceed 7 days of recordings.

Back up Recorded File(s)



Step 1: Click **Remote Server** to add a backup site.

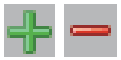
- Enter the **Server Name**, **Address**, **Port**, **Username**, and **Password**.
- Click **Add** to add the server.
- Click **OK** to exit the Setting window.



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

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

Step 4: Select the data you want to back up 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: Select **Enable Preview** to display the preview of the video you selected.

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

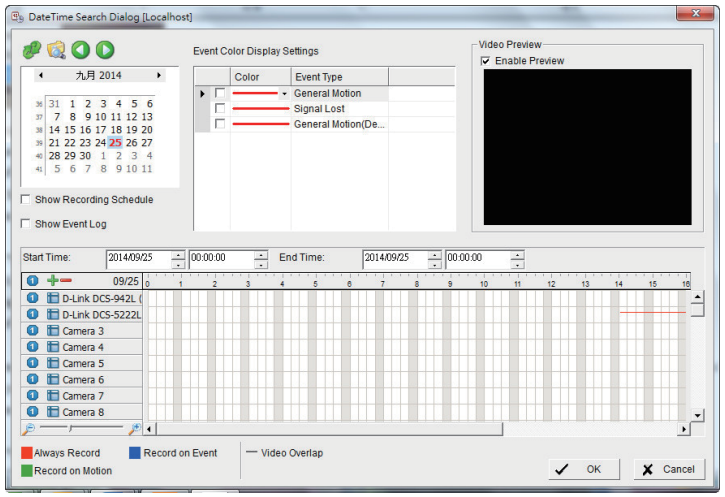
Step 8: Click **Remove Period** to remove data from the backup list.

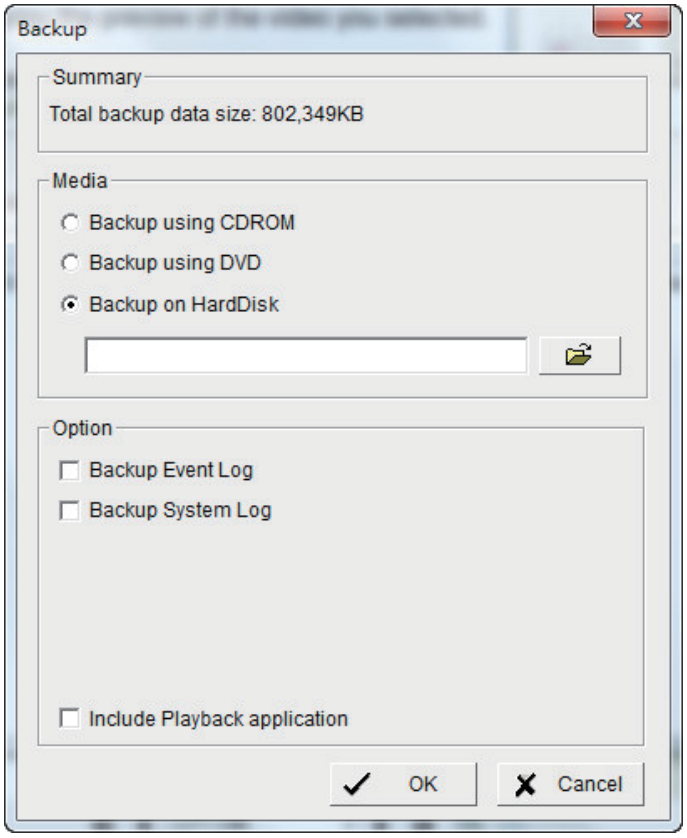
Step 9: Click the **Backup** icon to open the Backup window.

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 back up (Event Log or System Log), and then click **OK**.

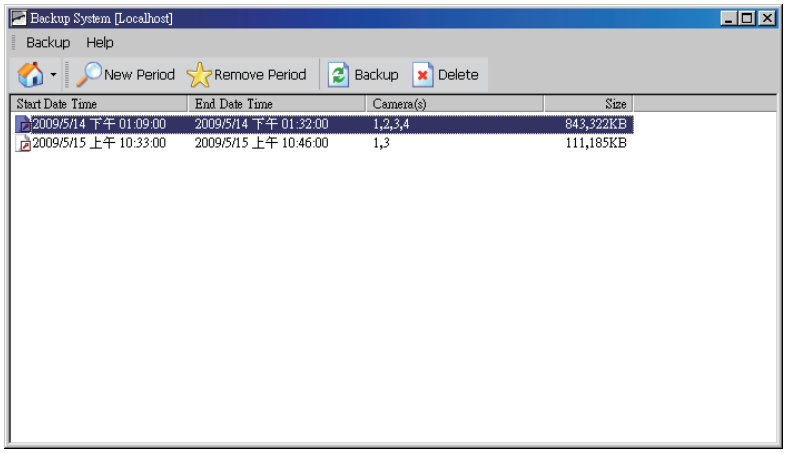
Note: The backup cannot exceed 7 days of recordings.





Delete Recorded File(s)

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



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.

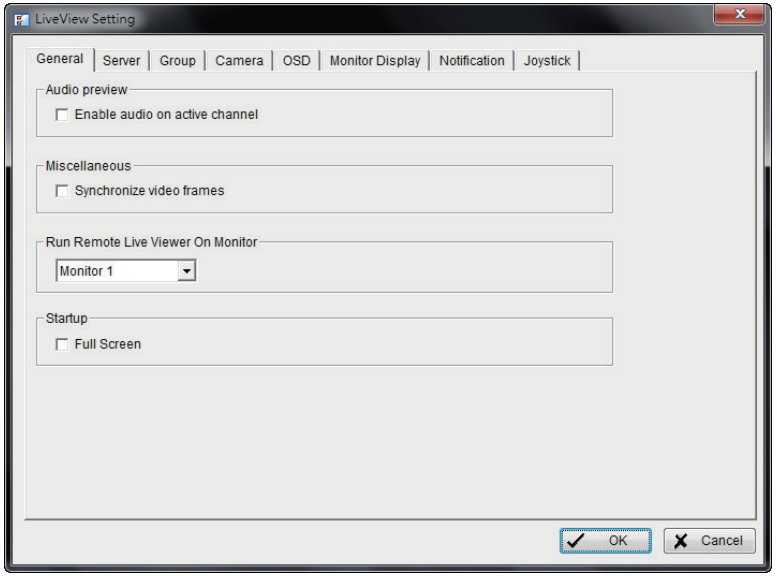
Remote Live Viewer

With the Remote Live Viewer software, remote users may watch real-time video channel per server from remote live streaming servers

Setting

Click the **General Settings** icon in the Main Console to open the Settings window.

General Setting



Audio Preview
Enable audio on active channel: Select 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.

Run Remote Live Viewer on Monitor
Select monitor to display Remote Live Viewer.

Startup
Full screen: Users can view the window as the full screen mode

Server Setting

Step 1: Enter the Server Name as preference.

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

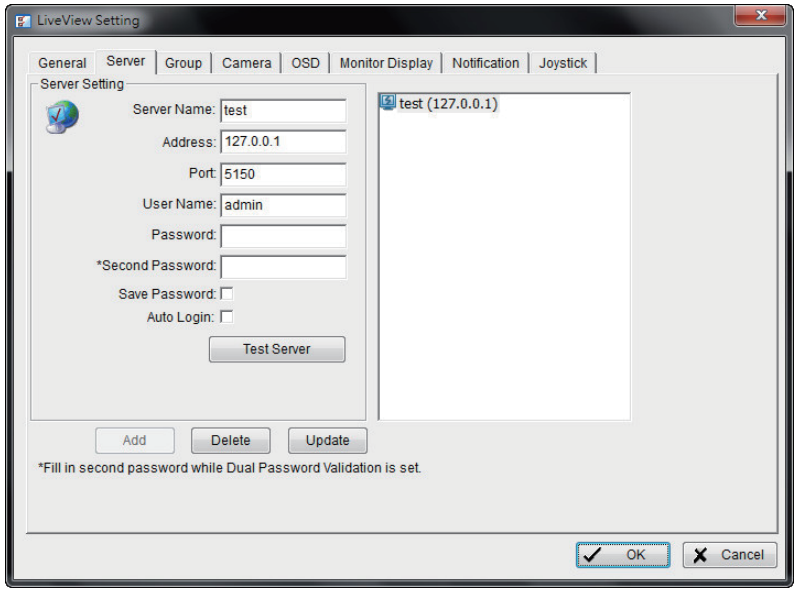
Step 3: Enable **Save Password** to login without entering the password again.

Step 4: Enable **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 in the server list and then click **Delete**.



Group Setting

Allocate different cameras into groups.

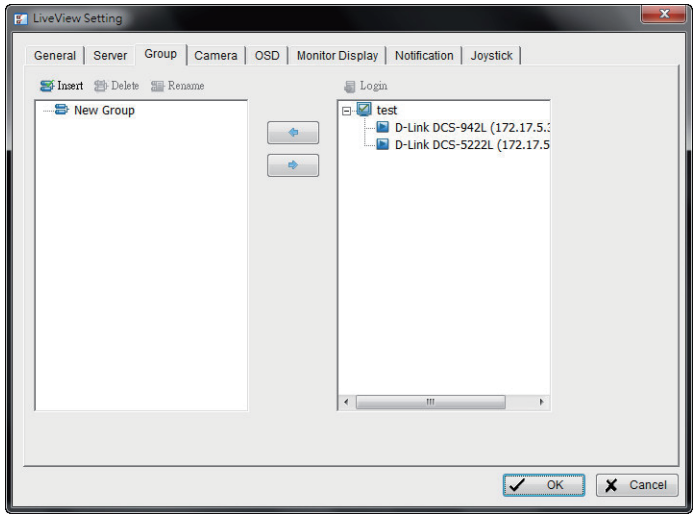
Step 1: Log in to all the servers that contain camera(s) you would like to add into the group(s).

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

Step 3: Highlight the camera that you would like to add to a group and then click on **<--** . Repeat the process until all the cameras you want in the group are added.

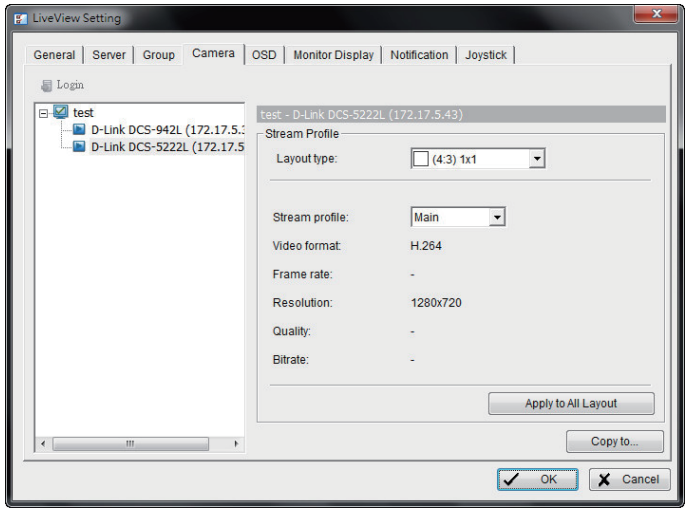
Step 4: Click **Delete** to remove a specific group or click **Rename** to change the name of a specific group.

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



Camera Setting

Select the preferred stream type of each camera as default live view profile



Stream profile: Select a layout type and choose which stream profile you would like to apply on this layout.
For some layout with large and small grid, you are able to assign different stream profile.

Record 1: The system will follow the stream profile set in **main console > Schedule > Configuration.**

Record 2: The system will follow the stream profile set in **main console > Schedule > Configuration**.

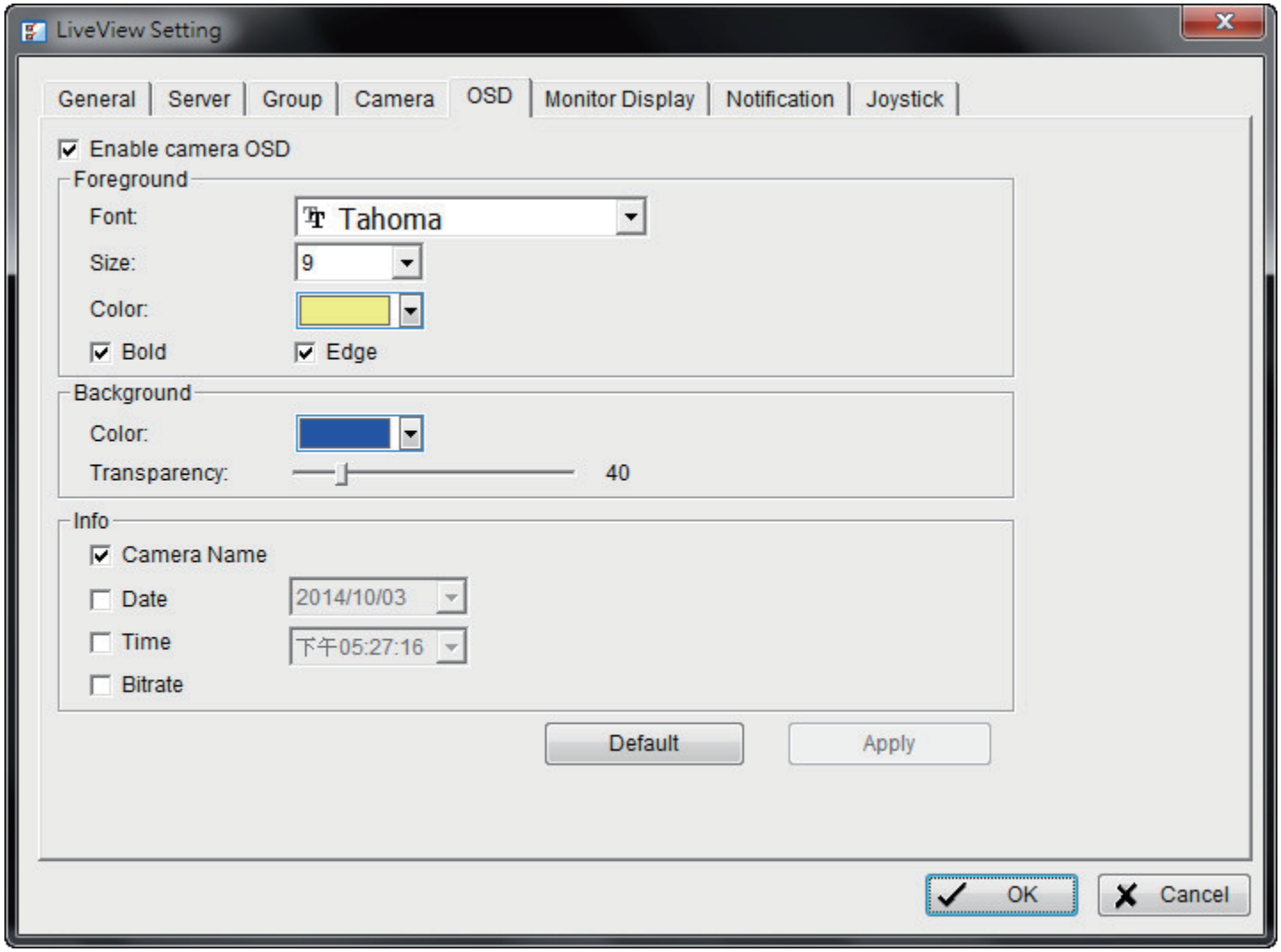
Main / High / Normal / Low/ Minimum: The system will follow the stream profile set in **main console > Schedule > Configuration**.

Apply to All Layout: Apply the stream profile setting of current layout to the other layouts.

Copy to: Select in order to copy the preferred stream profile of a channel to all of the listed channels

OSD Setting

Select the font style and color for the information displayed on the video.



Monitor Display Setting

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

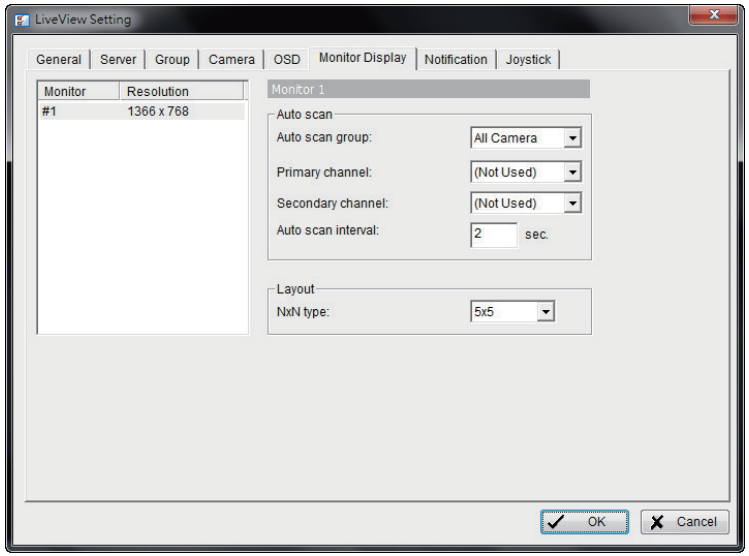
Step 1: Select the monitor connected to the system.

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.

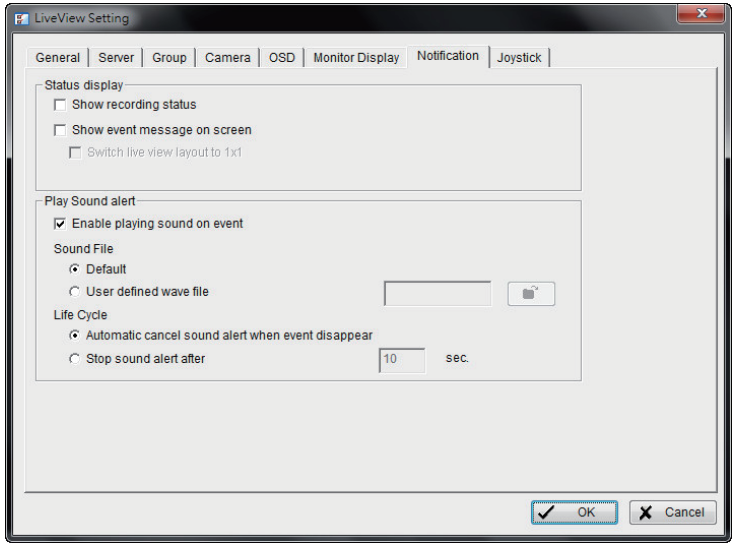
Step 4: Select a channel that has secondary priority then primary channel on the display screen when activating auto scan settings.

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



Notification Settings

Status display



Show recording status: Check to show the crystal ball with recording status on monitor display.

Show camera event: Check to show the smart guard detected event appointed in main console on each channel.

Note: To execute this function, please General Setting "on screen display" as an action of Smart Guard instant response.

Switch live view layout to 1x1: Check to switch the display layout to 1x1 when smart guard detected event appointed in Mainconsole on each channel.

Play sound alert: Enable playing sound on event: Check to enable sound alerts on events.

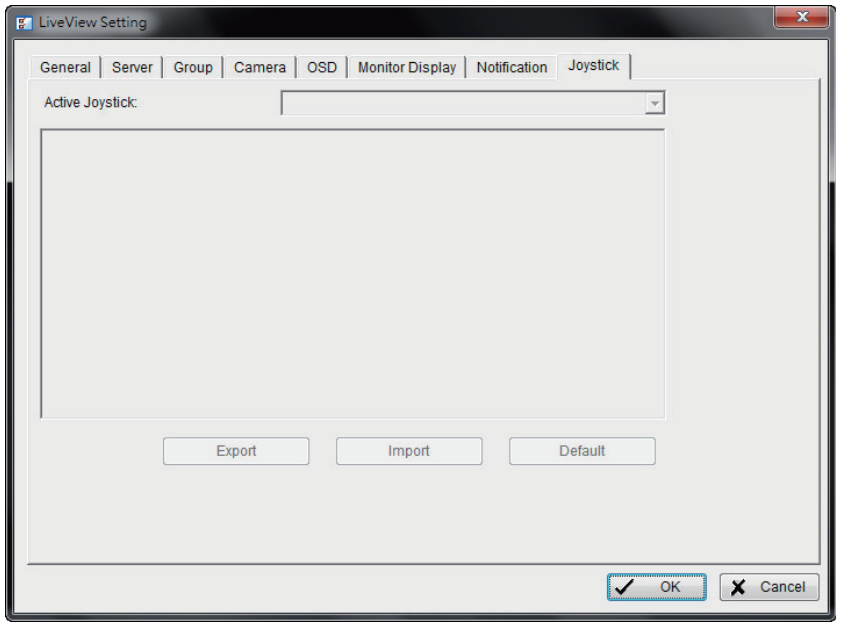
Sound File: Choose a sound file to play. You may use the default file or define another.

Life Cycle: Choose to allow the sound alert to close when events disappear, or define a timer to close the sound alert automatically after a specific period of time.

Note: To execute this function, please General Setting "play sound" as an action of Smart Guard instant response.

Joystick Settings

Settings are same to Main console joystick settings. For details please refer to page 53.

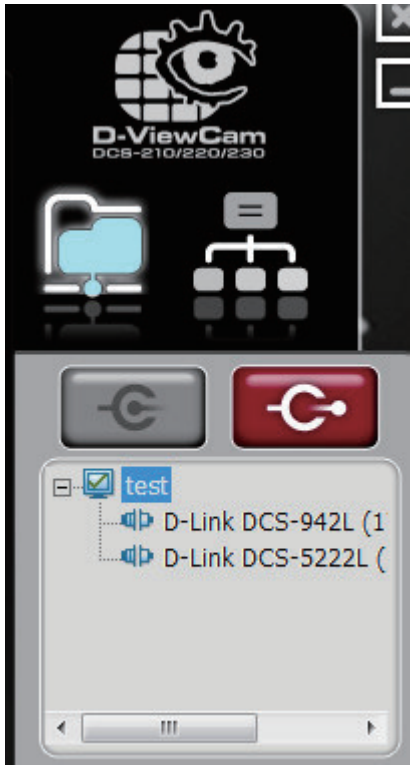


Server/Group/Camera

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

Server View: Click icon to display cameras sorted by servers.

roup View: Click icon to 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.

Log In/Log Out Server

Connect/Disconnect Camera

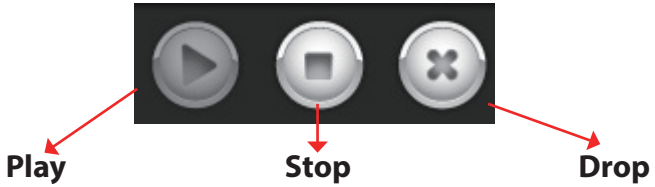
Option 1: On the server/camera list, double-click on a camera to connect it.

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

Connect/Disconnect Camera

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

Option 4: Play / Stop/ Drop: Select a camera/video and click this button to play/stop/disconnect a particular channel.



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 the preset point 02. Repeat the process until you finish setting up all the preset points. Enter a name instead of preset point 01. 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** > **Setting** > **PTZ Config**.

Zoom

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

Focus

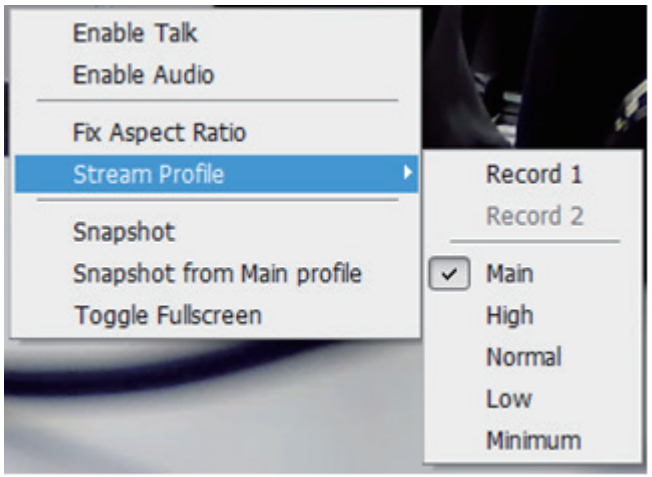
To focus near means objects that are closer will be clearer than the objects that are further away. On contrast, to focus far means objects that are further will be clearer than the objects that are closer. Click on the **Focus** icon and select auto focus if you want the system to decide the focus point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

Patrol

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

Note: To setup a patrol path, please go to **Main Console** > **General Setting** > **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 Talk
With cameras that support two-way audio, select **Enable Talk** to utilize the function

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

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.

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

Fix Aspect Ratio
For some special camera resolution, user can enable Fix Aspect Ratio to view original ratio video, or disable this option to stretch 3:4 to fit window.

Stream Profile
Select different level Stream Profiles to downgrade video quality for bandwidth concerns.

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

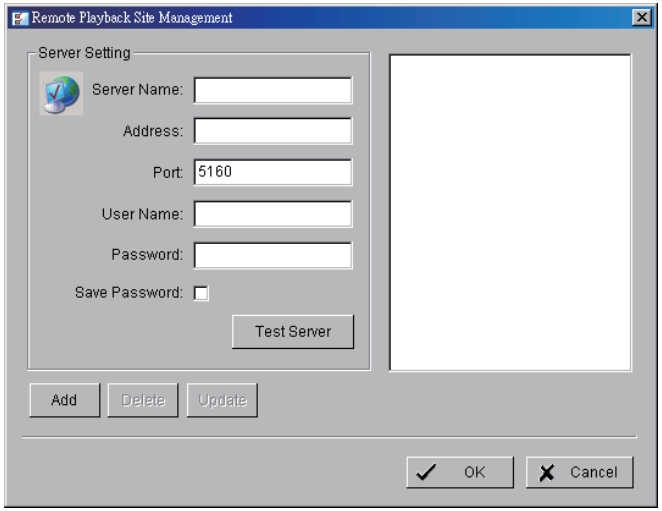
Toggle Fullscreen

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.

Playback

Select to open the Playback console and view video remotely.

Add Remote Playback Site



Click the **Remote Sever** icon to open the remote playback site management, and to add and setup the remote playback site.

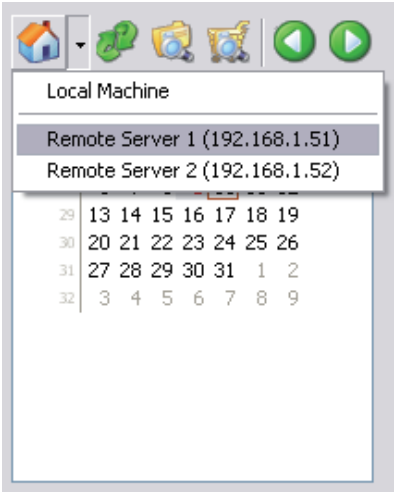
Step 1: Enter the **IP Address**, **Port**, **Username**, and **Password**.

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

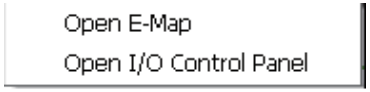
Step 3: Click **OK** to exit the **Setting** window.

Access Remote Playback Site

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

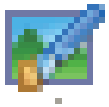


Start Monitor



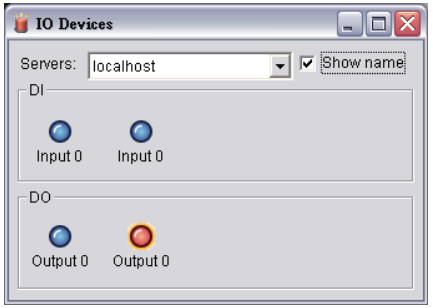
E-Map

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 circle on the map and show status on the Information window. If the Digital Input is from a network camera, the preview window will display live video from the camera.
	Digital Output	Select to highlight the device with a green circle on the map and show status on the Information window. If the Digital Output is from a network camera, the preview window will display live video from the camera.

I/O Control

Select to open the I/O control window. This window allows you to control DO devices remotely.



Note: Adjust the setting of I/O device in **Main Console** > **General Setting** > **Setting** > **I/O Device** first, and the I/O control window will display the device status based on these settings.

Web View

Note: Be sure to enable the **Live Streaming Server**. To enable, go to **General Setting > Network Service** select **Live Streaming** and click **Start Server**.

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/
192.168.1.16 is the IP address of the server. 8080 is the port specified in **Use Default Web Server** in Network Service.

Note: Make sure the Live Stream Server is enabled. Please refer to Live Streaming Server for more information.

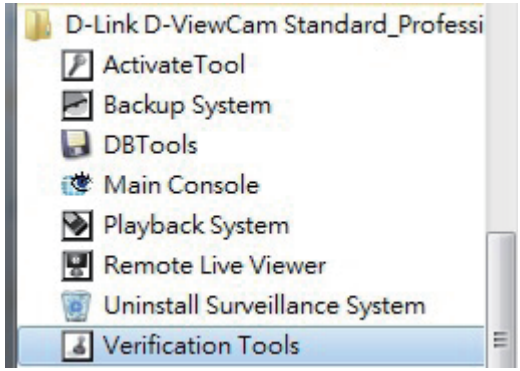
Utilities

Verification Tool

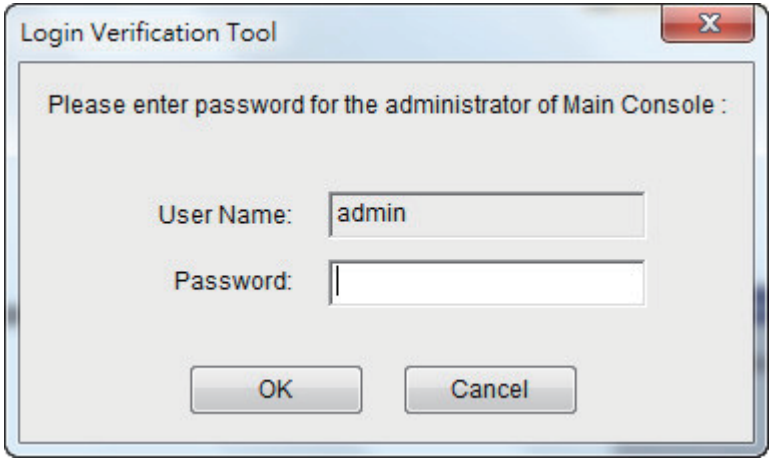
The Verification Tool verifies whether the data created by the system be tampered with or not. It is the process by which a digital watermark (a digital signature) is added to each recorded video frame to ensure its authenticity.

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 .

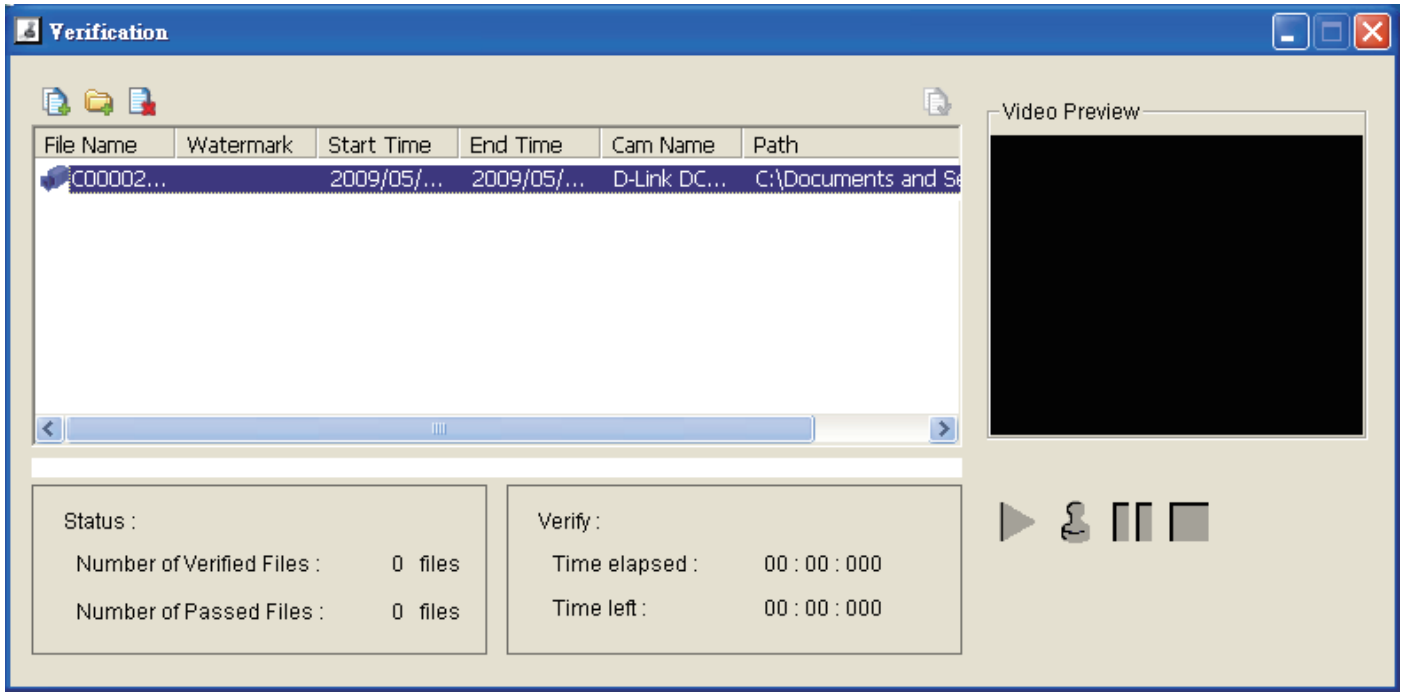
Step 1: Go to **Start > All Programs > D-Link D-ViewCam Standard_Professional_ Enterprise > Verification Tool**.



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 the list.

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

Note:
1. Choose the file type first (.dat, .264, .avi, .asf, .bmp, .jpg) before selecting the files.
2. You can also drag files to 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

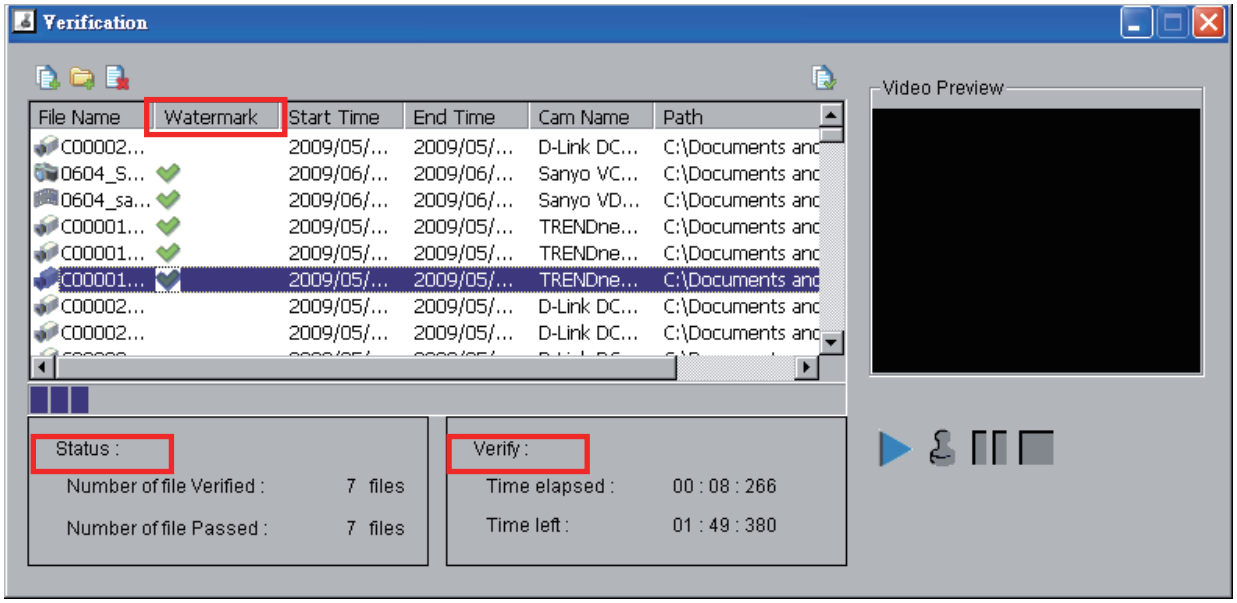
Step 1: Select a single or multiple files for verification.

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.

License Management Tool

Use the **License Management Tool** to activate the software license from a serial number allocated with the software package, or de-activate the license and activate it again in another PC.

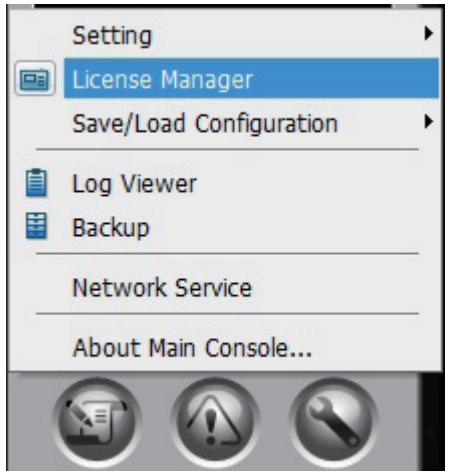
The following lists 4 types of license management process:

- To "activate" the license with PC connected to the network, follow the **Activation On line** process.
- To "activate" the license with PC not connected to the network, follow the **Activation Off line** process.
- To "de-activate/transfer" the license with PC connected to the network, follow the **Transfer On line** process.
- To "de-activate/transfer" the license with PC not connected to network, follow the **Transfer Off line** process.

Overview

Start License Management

Step 1: Click **License Manager** in **General Setting** or click Activate Tool in the installation folder or browse the installation folder and click **Activate Tool.exe**.



The **License Manager Tool** screen displays.

Activate / Transfer License

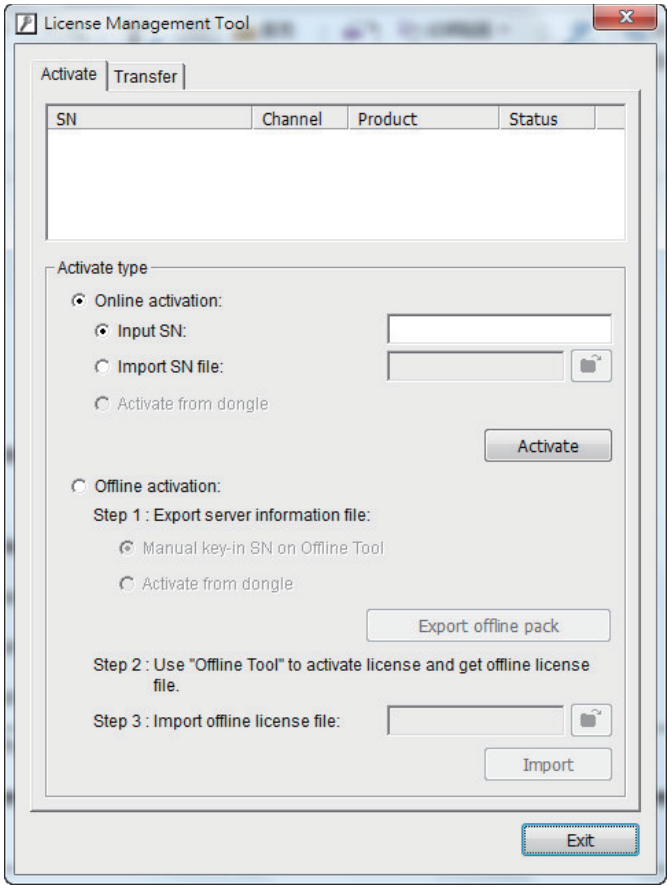
Activation On line

Step 1: Start the **License Manager Tool**.

Step 2: Select **On line** as Activate type.

Step 3: Enter the SN (Serial number) or Import SN file, and then click **Activate**.

Step 4: Restart the Main Console if activation is successful.



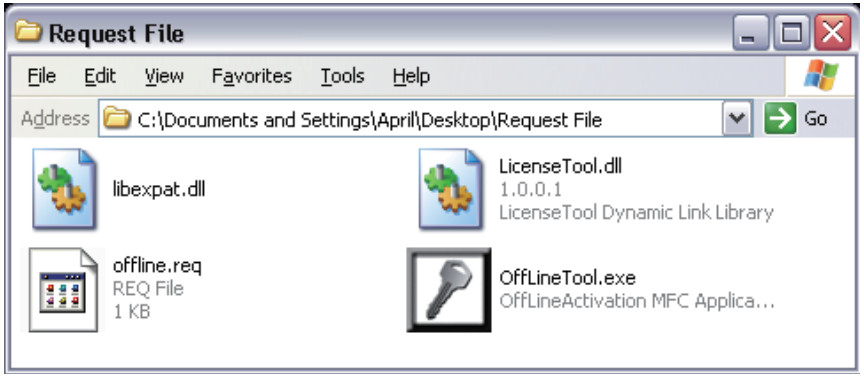
Activation Off line

Step 1: Start the **License Manager Tool**.

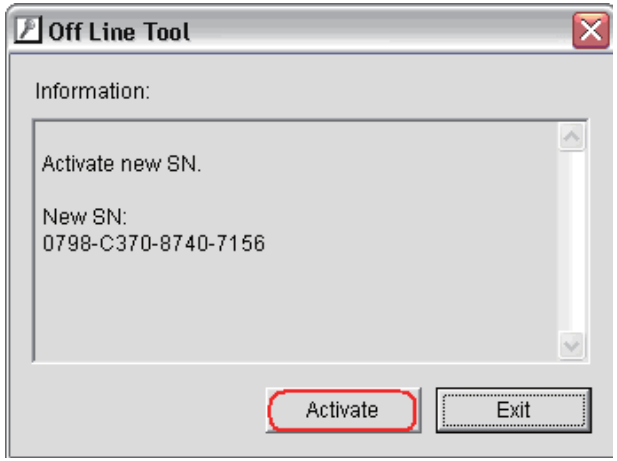
Step 2: Select **Off line** as Activate type.

Step 3: Enter the SN (Serial number) and then click **Activate**.

Step 4: Save the **Request File**, and then copy it to another PC connected to Internet.

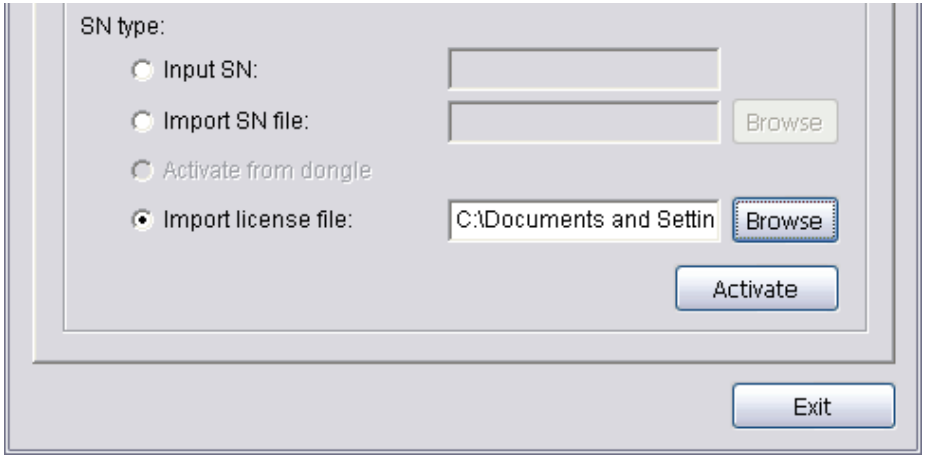


Step 5: Browse and run **Off LineTool.exe** , and then click **Activate** to send the **Request File** to the license server.

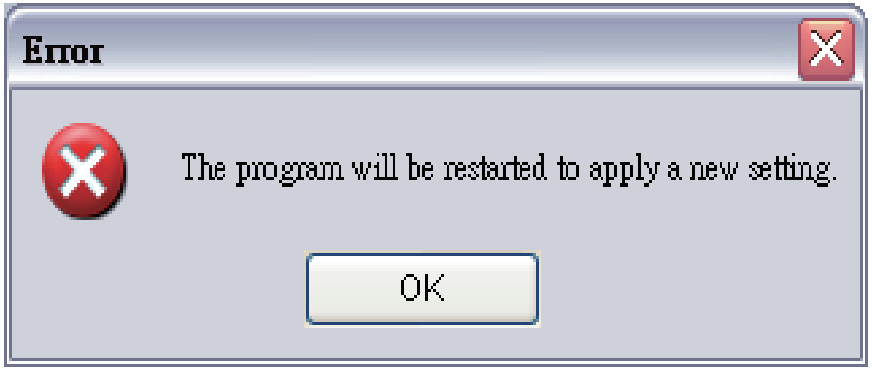


Step 6: Save this License file, and then copy it to the D-ViewCam Standard/Professional/Enterprise server.

Step 7: Open **License Manager Tool** again, select **Import license file**, and then click **Activate**.



Step 8: Restart the MainConsole if the activation was successful.



Transfer License

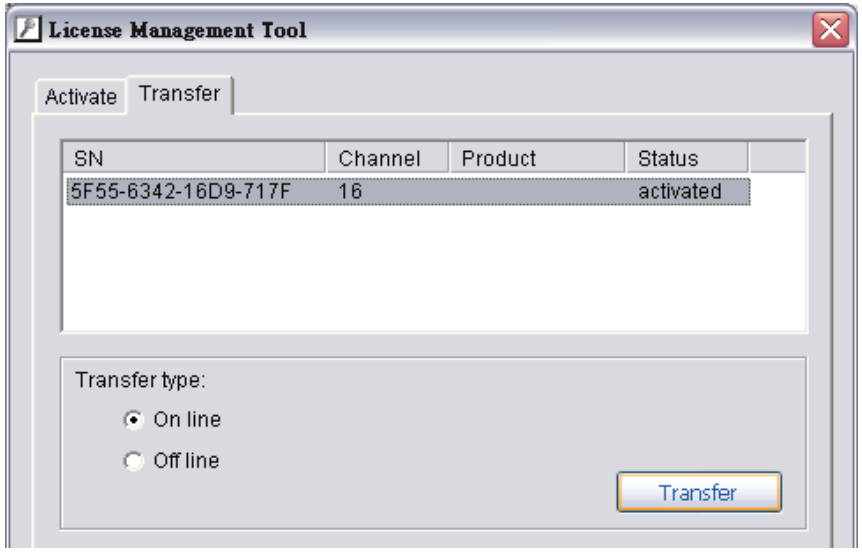
Transfer On line

Step 1: Start the **License Manager Tool**.

Step 2: Select **Transfer**, and then select **On line** as Transfer type.

Step 3: Enter the SN (Serial number) and then click **Transfer**.

Step 4: Restart the Main Console if activation is successful.

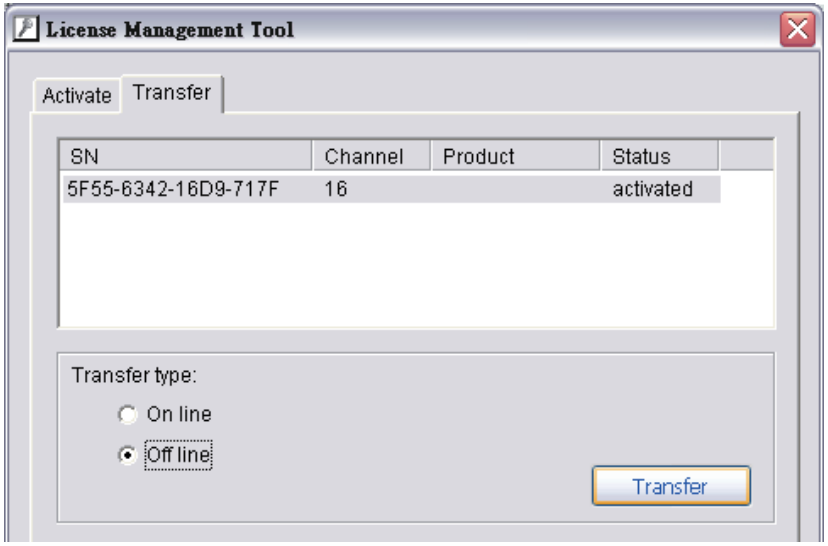


Transfer Off line

Step 1: Start the **License Manager Tool**.

Step 2: Select **Transfer**, and then select **Off line** as Transfer type.

Step 3: Enter the SN (Serial number) and then click **Transfer**.



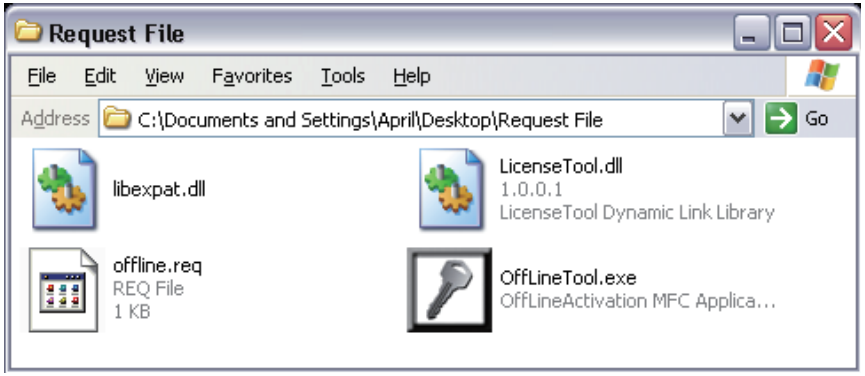
Step 4: Save the **Request File** and restart the MainConsole if activation is successful.

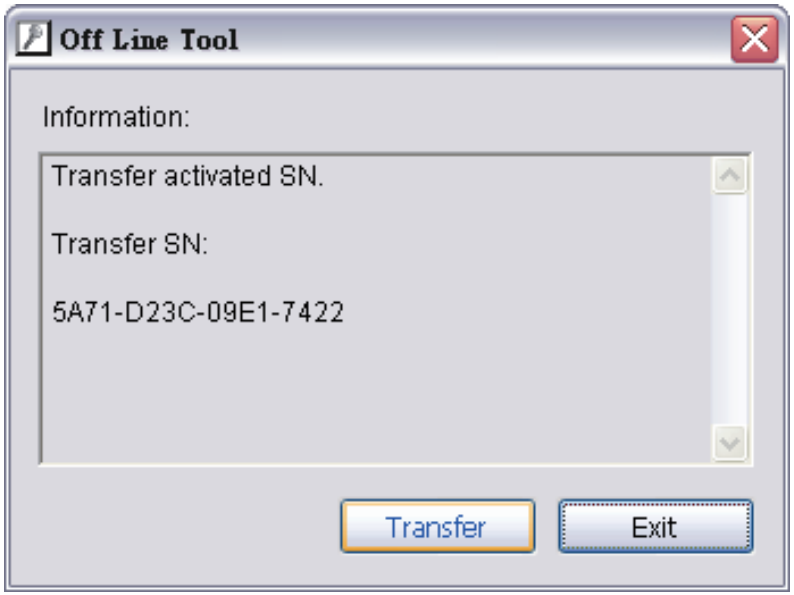
Step 5: Copy the **Request File** to another PC connected to internet.

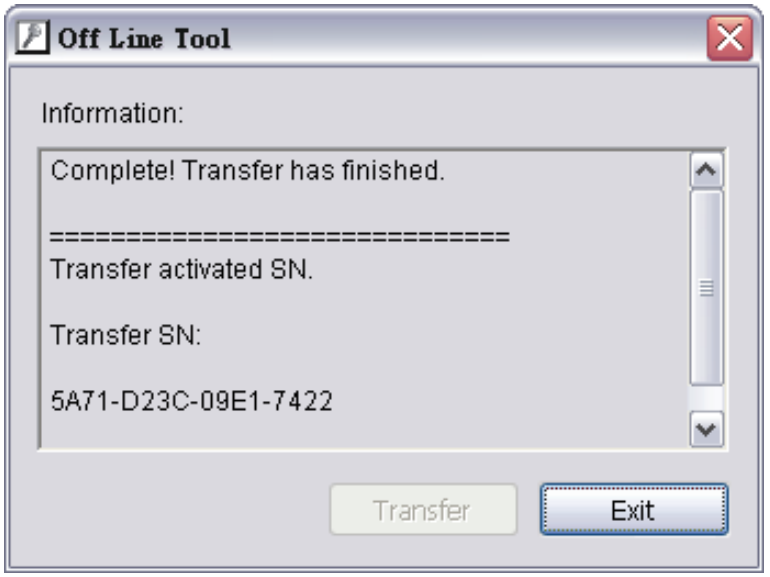
Step 6: Run **OffLineTool.exe**, select **Transfer SN** and click **Transfer** to send the **Request File** to the license server.

Note: Ensure to copy the request file to another PC and then send it to the license server, otherwise the SN cannot be re-activated again.

Step 7: Check if the transfer is complete.

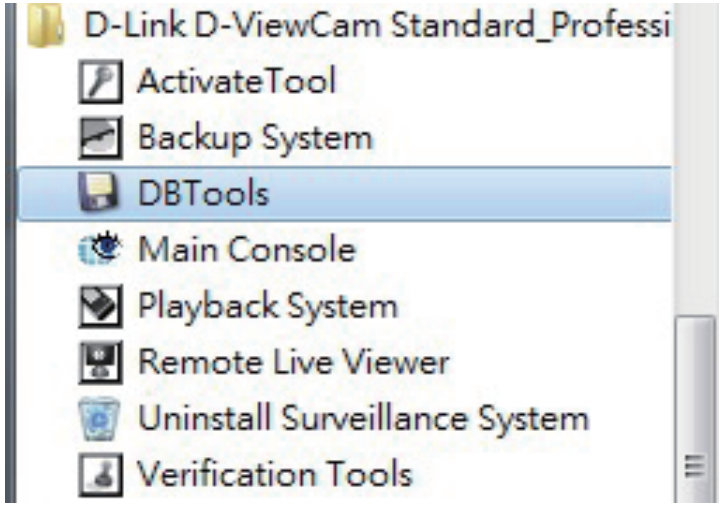




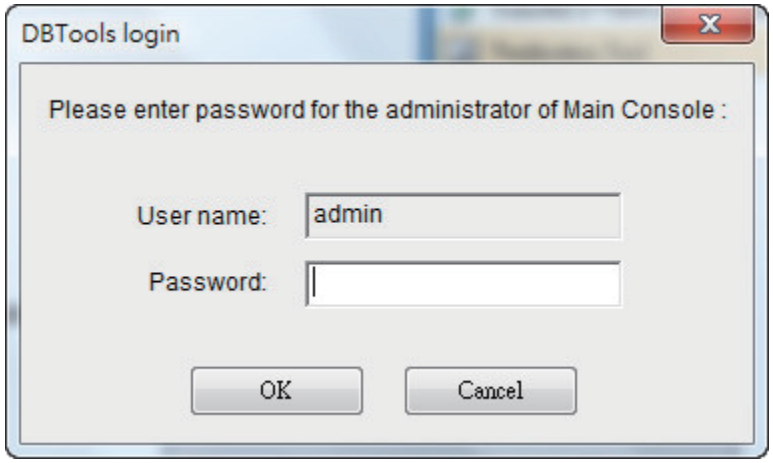


DB Tool

Step 1: Execute DB Tools from the Start menu.

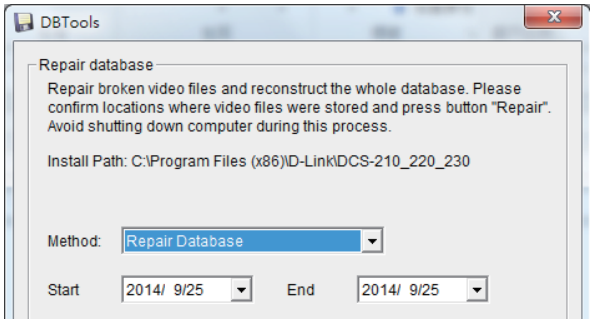


Step 2: Enter the administrator password and click **OK** to log in.



Repair Database

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



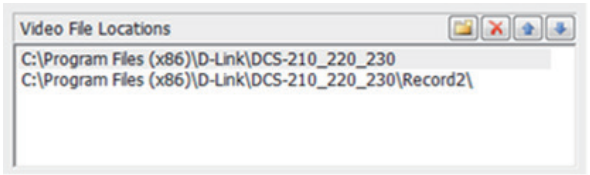
Modify Location

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.

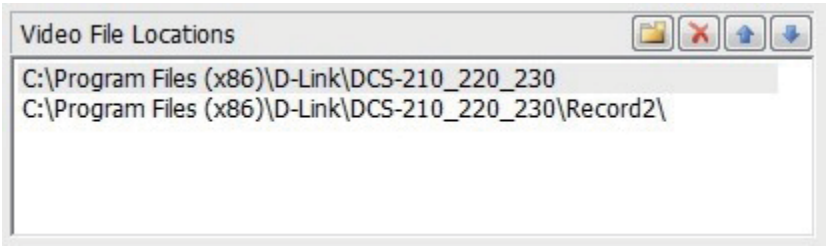
Step 1: Select **Repair Database** from the Method drop-down menu.

Step 2: 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 3: Click on the **Modify** button to save the location.

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

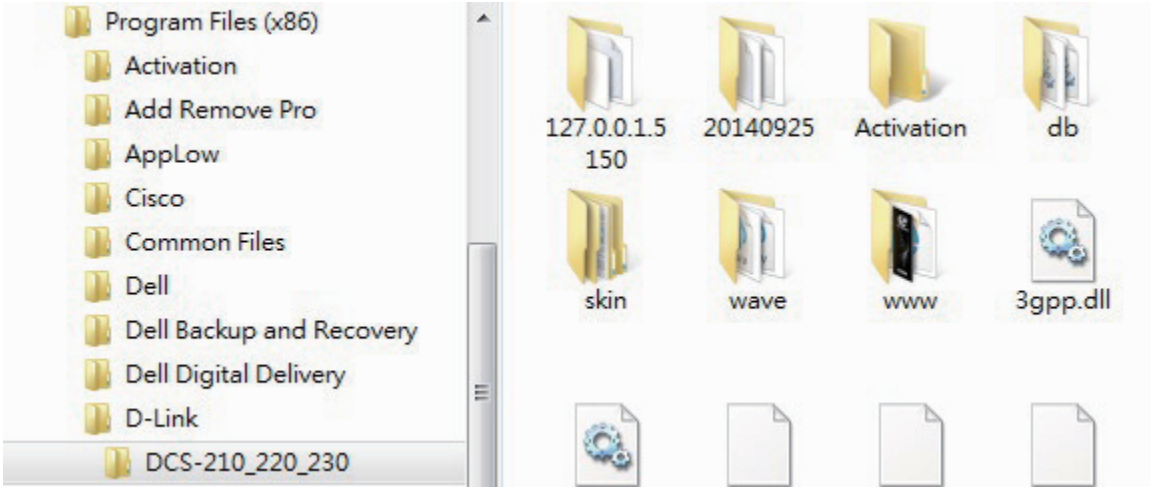


Step 4: Click **Modify** to save the location.

Example of modify database

To transfer video from one PC to another, follow this 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 the previous page to add new location on new PC.

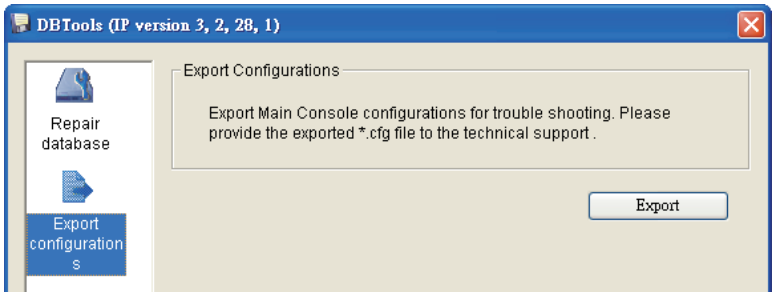
4. Old recorded video data can be viewed by the playback system on the new PC.

Verify and Repair

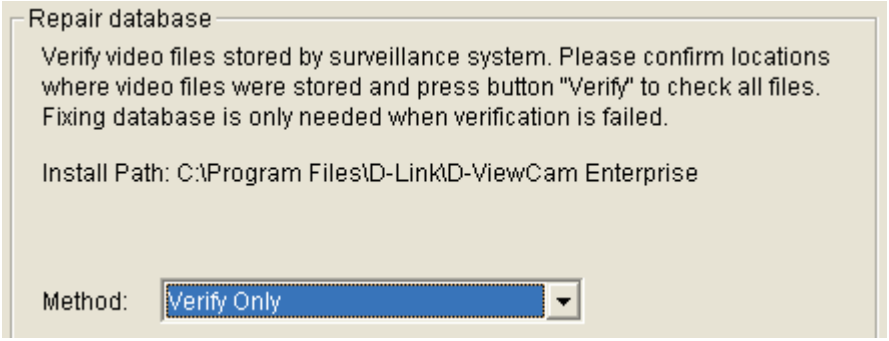
This tool is used to check and repair your database and recording video if the problems below exist:

(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**.



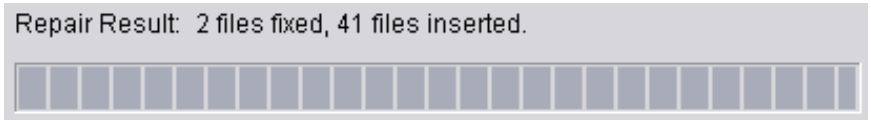
Step 2: Select **Modify Location** from the **Method** drop-down menu.



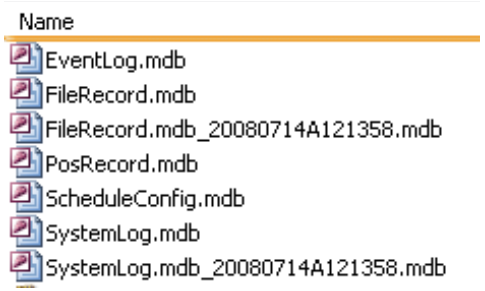
Step 3: Check the video location. The system will list all the video locations in the table, but if there are any missing locations, please use to insert a location. After inserting the location, the system will show a file count in the table.

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

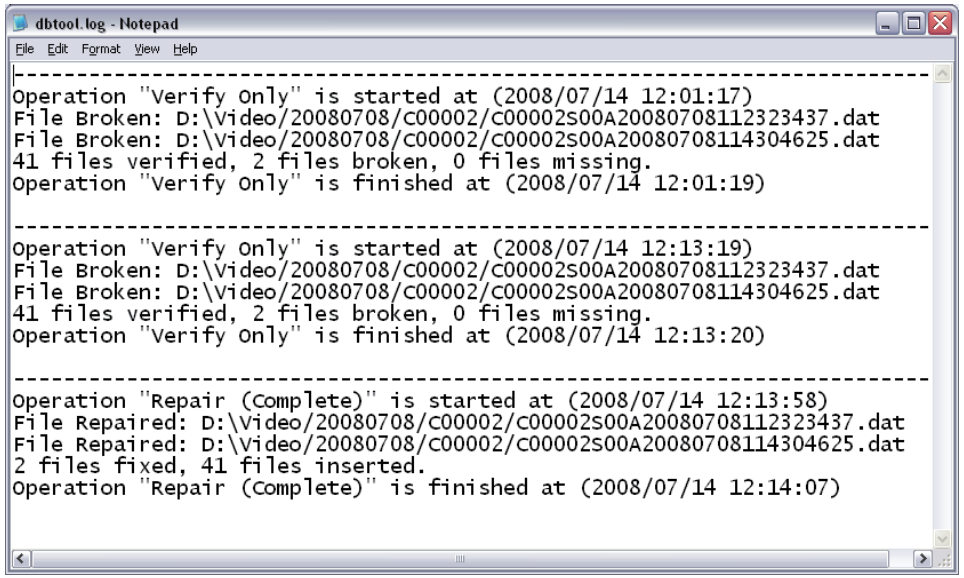
Step 5: Choose the method of Repair (Complete), and click **Repair**. The **Repair Result** will show the number of files that are fixed and inserted.



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



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



Remote Desktop Viewer

How to install Remote Desktop Viewer

Step 1: Insert the Installation CD.

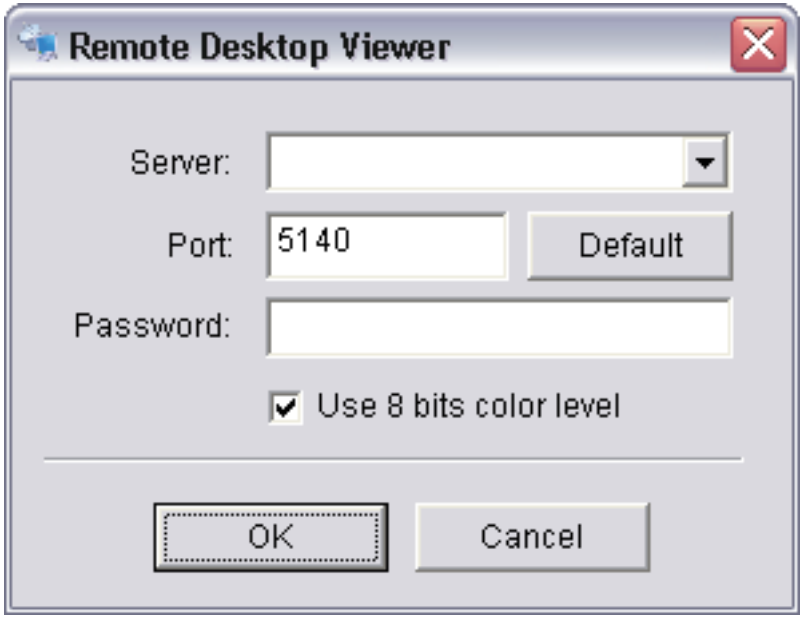
Step 2: Go to **RemoteDesktopViewer** and run the **Setup.exe** file.

How to Start Remote Desktop Viewer

Step 1: Go to **Start > All Programs > Remote Desktop Viewer > Remote Desktop Viewer**.

Step 2: Please enter the address, Port, and Password of the server and enable **Use 8 bits color level** to show steadier screen.

Step 3: Click **OK** to start Remote Desktop.



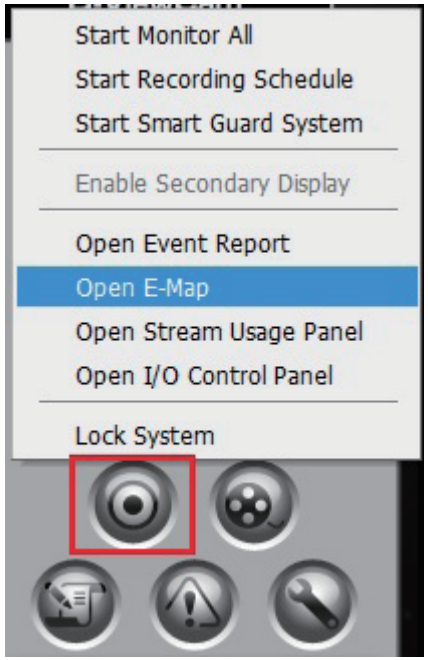
Frequently Asked Questions

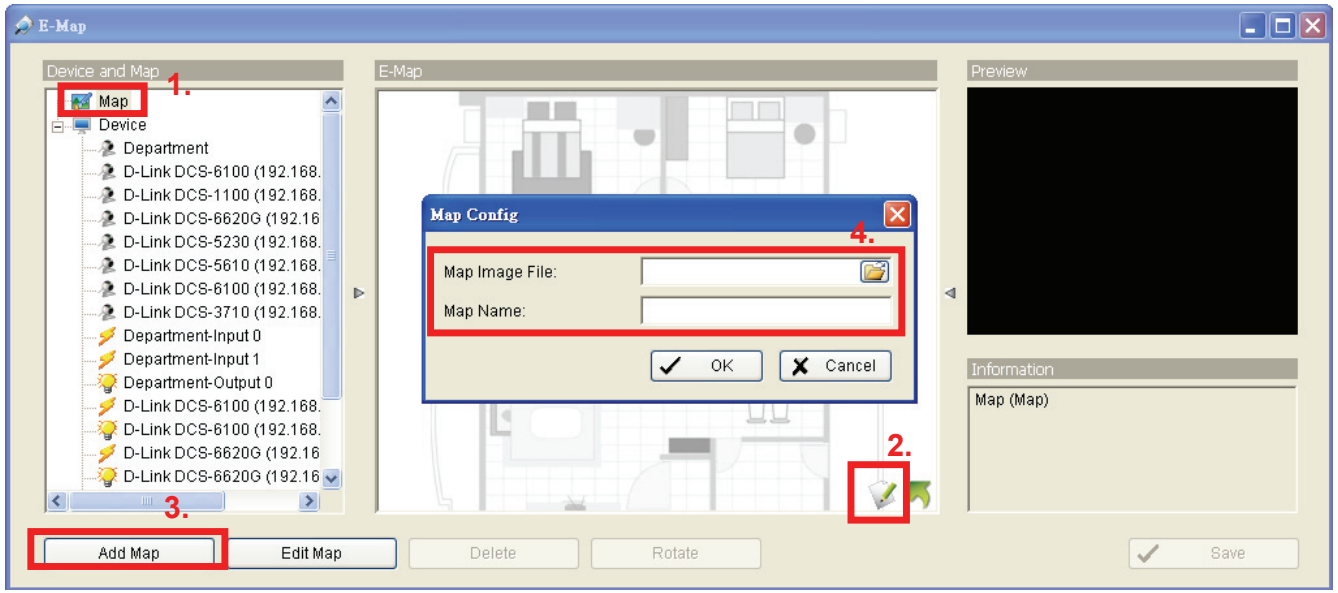
1. What languages does the D-ViewCam Standard/Professional/Enterprise software support?

Albania	Bulgarian	Chinese (Simplified)	Chinese (Traditional)	Croatian
Czech	Danish	Dutch	English	Farsi
Finnish	French	German	Hebrew	Hungarian
Italian	Japanese	Korean	Norwegian	Polish
Portuguese (Brazil)	Portuguese (Portugal)	Romanian	Russian	Serbian
Slovak	Slovenian	Spanish	Swedish	Thai
Turkish				

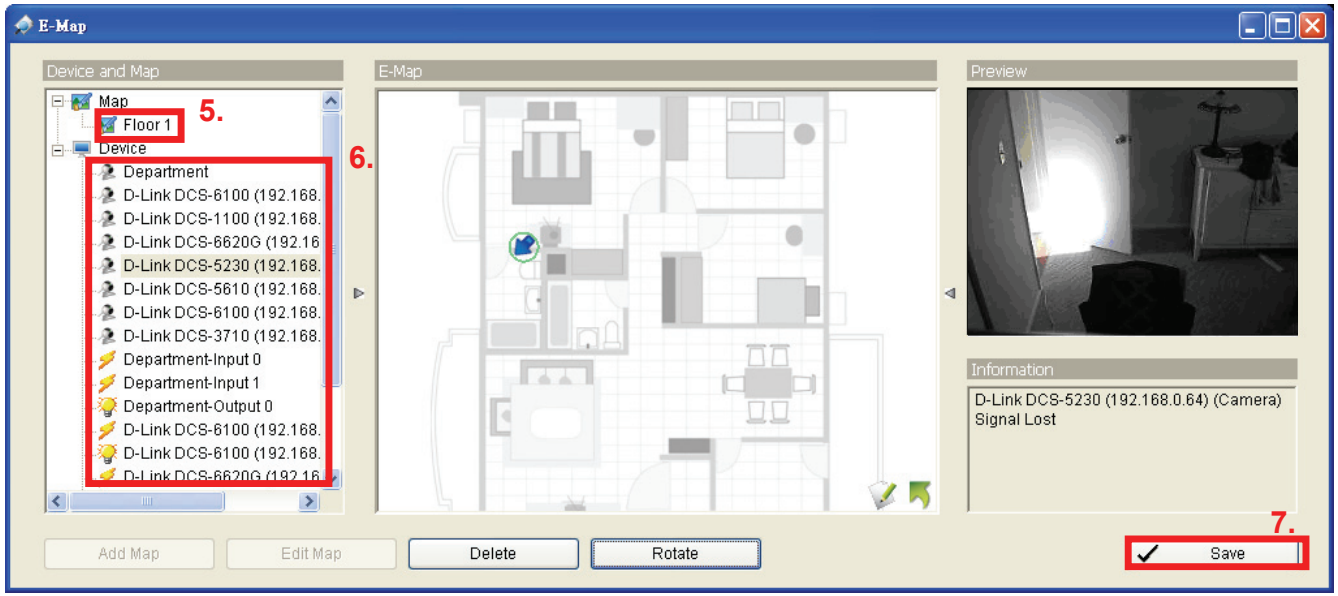
2. How do I set up E-Map?
   Go to **Main Console > Start Monitor** and then click **Open E-map**.

   Step 1: Select the map.
   Step 2: Click **Browser/Edit Mode**.
   Step 3: Click **Add Map**.
   Step 4: Choose a map and then enter the map name.





Step 5: Select the Map that you earlier set.
Step 6: Drag and drop the camera or IO device to the map.
Step 7: Click **OK** to save your settings.

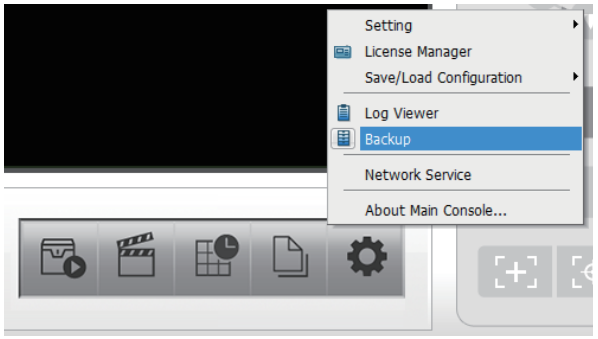


3. How do I backup video files?

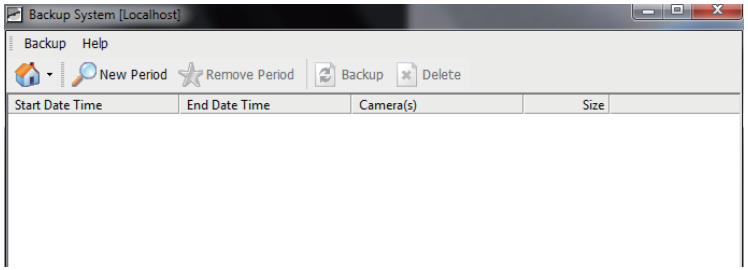
The system allows you can backup video record files into CD/DVD or other drives, and view those videos via playback.exe which will also be saved in the backup folder.

Follow these steps to backup your video:

Step 1: Go to **Main Console > General Setting > Backup.**



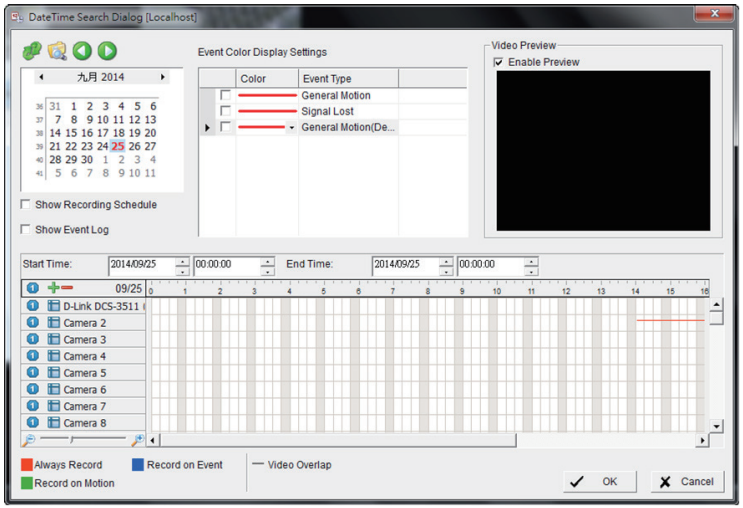
Step 2: Click **New Period**.



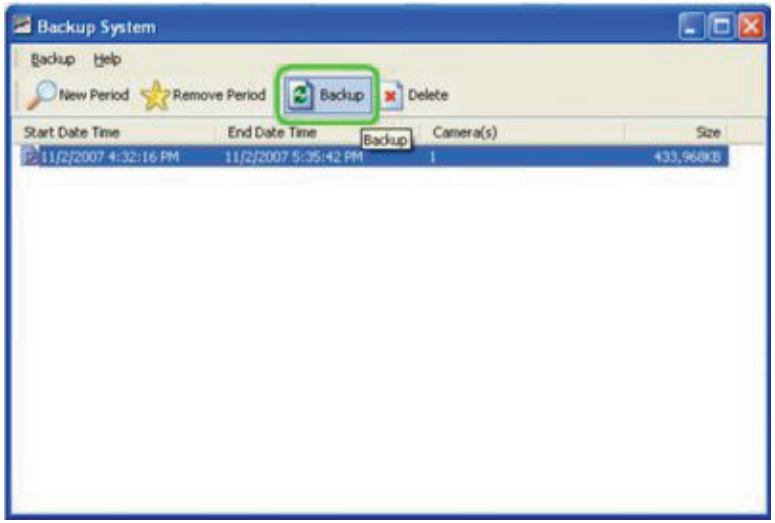
Step 3: Set the **Start** and **End Time**.

Step 4: Select the cameras that you want to backup.

Step 5: Click **OK**.



Step 6: Click **Backup.**



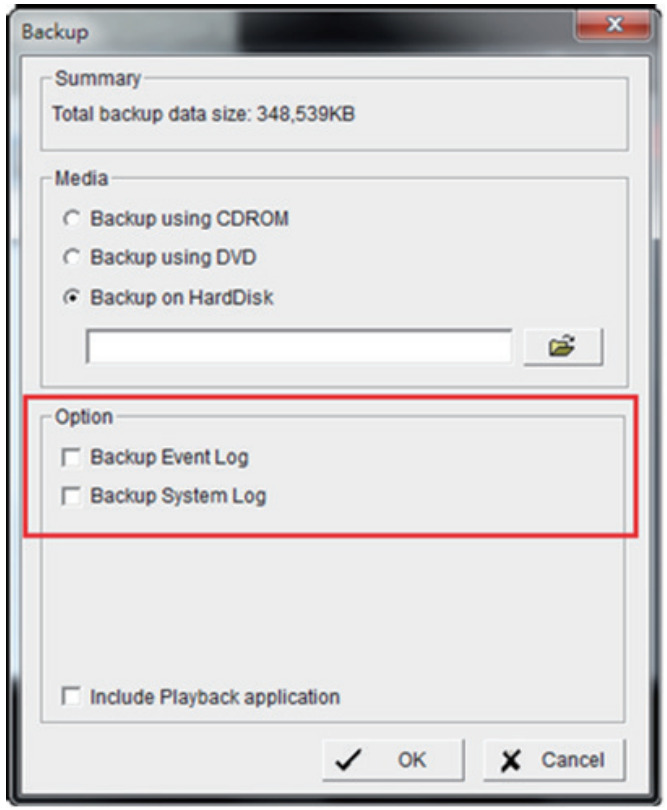
Step 7: Click **New Period**.

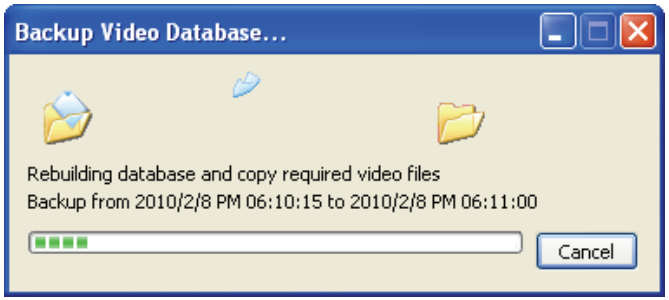
Step 8: Choose a location to backup media.

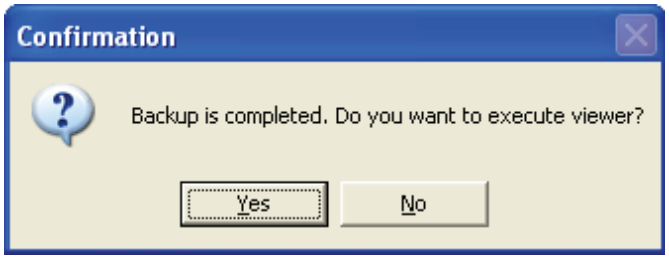
Step 9: Select **Backup Event Log** and **Backup System Log**.

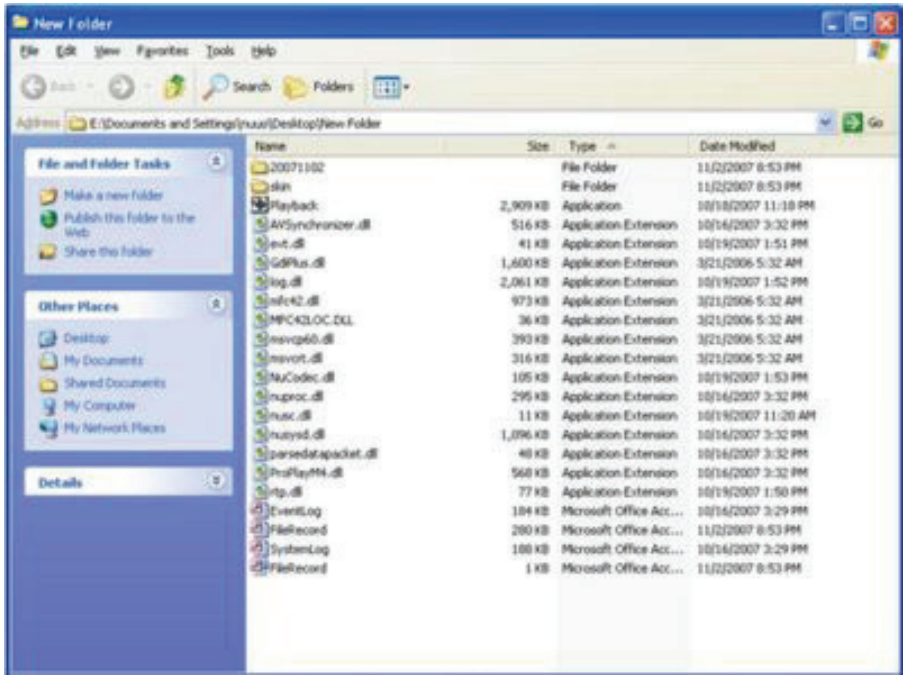
Step 10: Click **OK**.

Step 11: You can now execute the playback.exe to check your 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

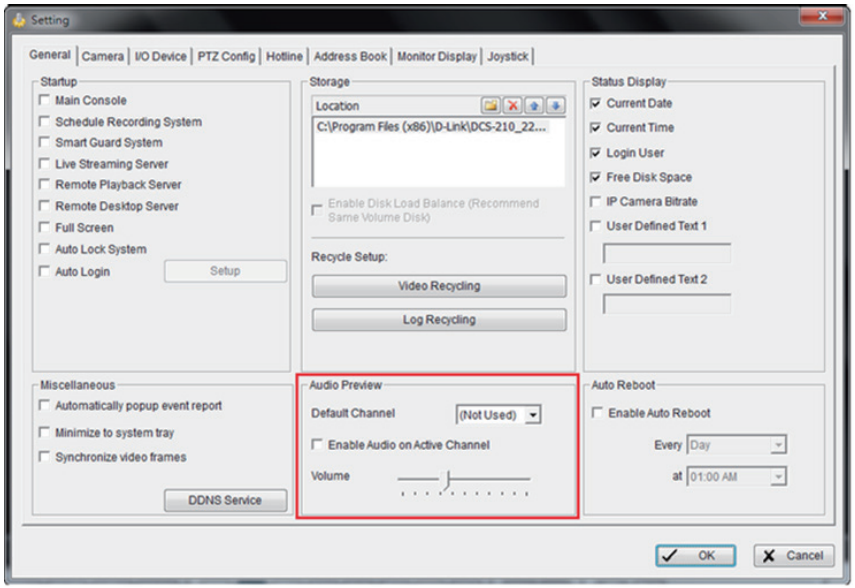

New Folder
File Edit View Favorites Tools Help
Search
Folders
Address E:\Documents and Settings\nuuu\Desktop\New Folder
Go
File and Folder Tasks
Make a new folder
Publish this folder to the Web
Share this folder
Other Places
Desktop
My Documents
Shared Documents
My Computer
My Network Places
Details
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. This function must be enabled manually. Please follow the steps given below.

Step 1: Go to **General Setting > Setting > System Setting > General** and enable **Preview Active Channel**.

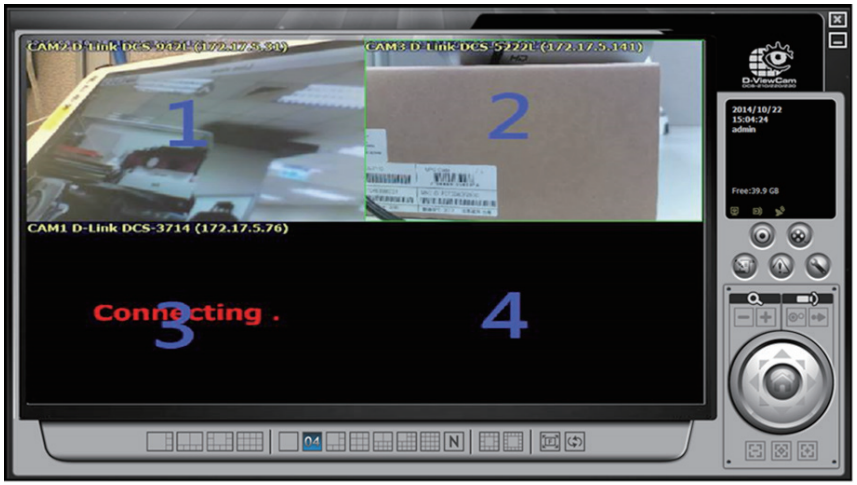
The default channel means the background audio of camera channel.



Step 2: Switch audio channels to hear audio.

If you choose sub-screen 1, you will hear audio from camera 1 or if you choose sub-screen 2, you will hear audio from camera 2.

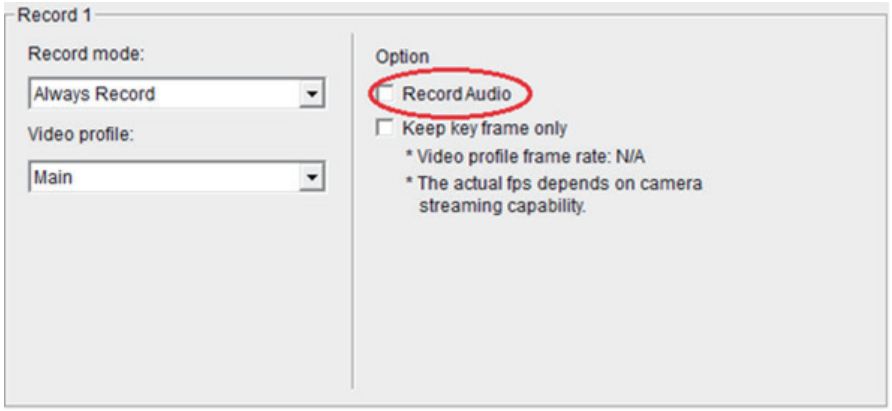
Note: If you don't choose any sub-screen, you will hear audio from the default channel.



5. How do I record audio for Network Cameras?

Step 1: Execute Main Console and go to **Schedule > Configure >** enable **Record Audio** and click **OK**.

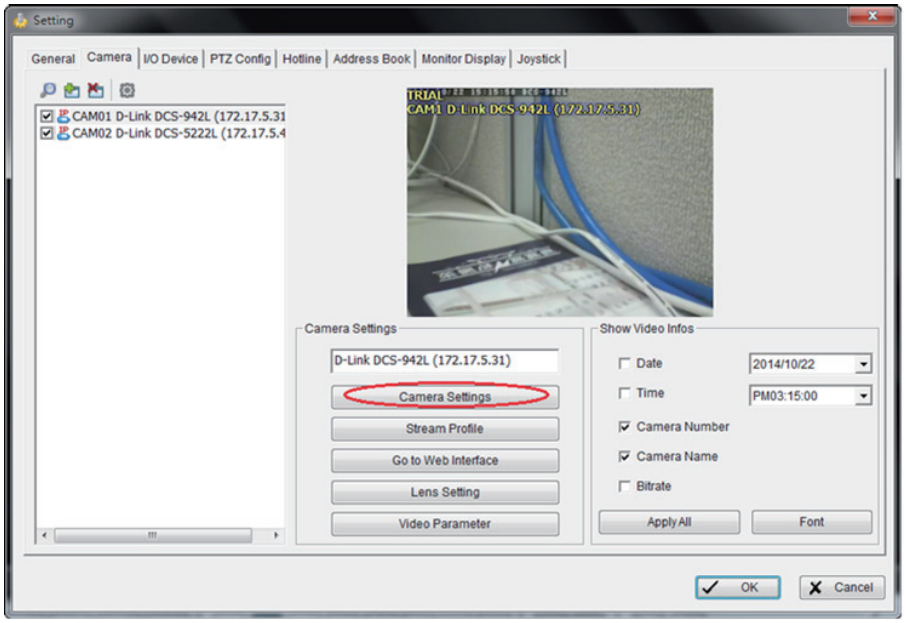
Step 2: Click on **Start > Start Recording Schedule**.



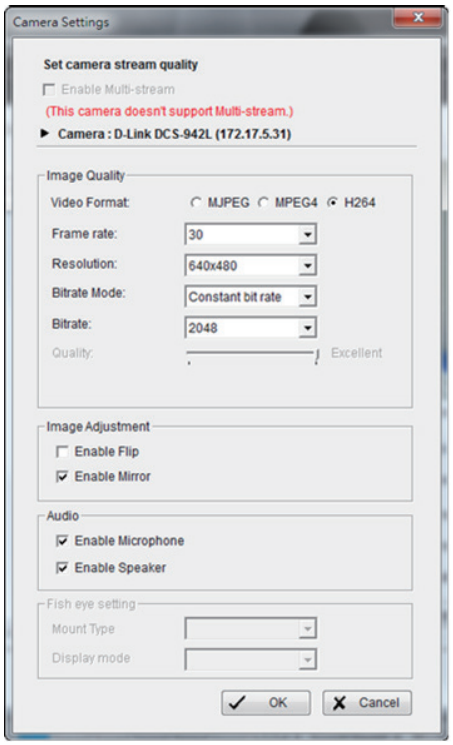
6. How do I change the recording frame rate and the resolution for network cameras?

Step 1: Open Main Console and go to **General Setting > Setting > System Setting > Camera.**

Step 2: Select the camera to change the frame rate.



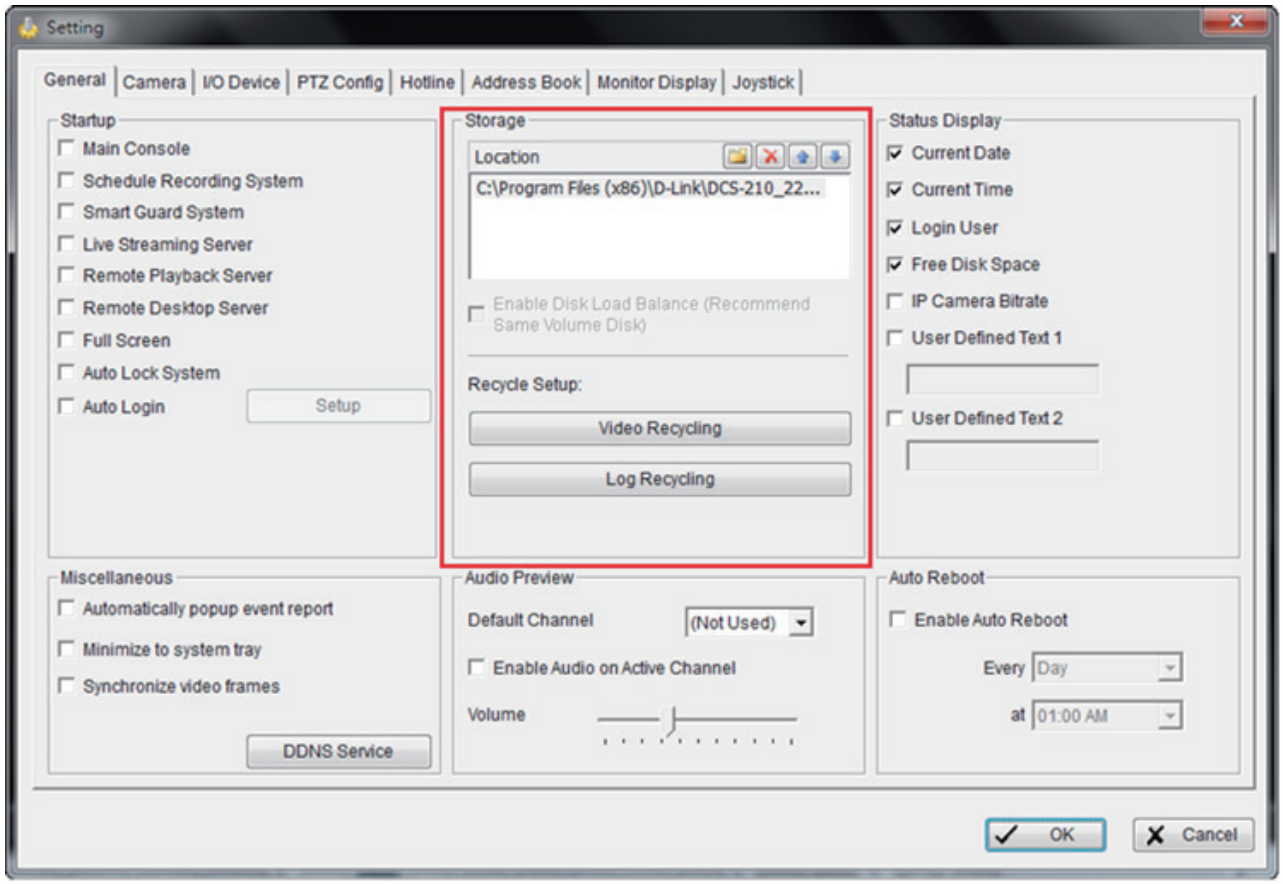
Step 3: Click **Camera Settings** to change the frame rate, resolution, and quality.



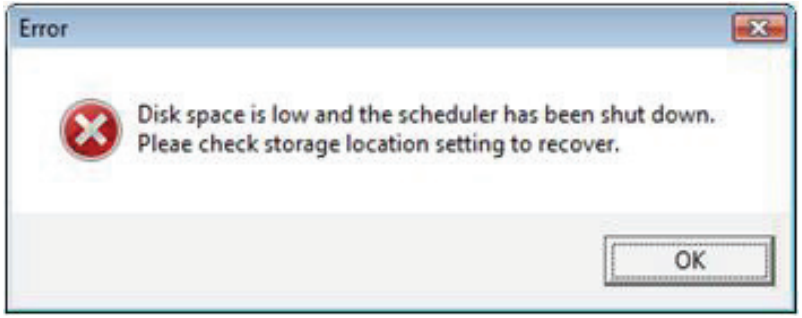
7. How do I set multiple storage paths for video recording?

The Main Console allows you to set up several hard disk drives as storage. When the first hard disk is almost full (the capacity is less than 800 MB on system disks or 100 MB on non-system disks), the Main Console will try to find a second storage with enough capaity. If it is not available, then the system will start recycling the data, if auto-recycling is enabled.

Go to **Main Console > Setting > System Setting > General > Storage Location** to modify your settings.



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



Please follow the steps below to solve this issue.

Step 1: Verify the following settings and configuration.

- Ensure the auto recycle, auto login, auto startup and schedule options are enabled in the Main Console.
- Remove NOD32 antivirus since it generates a large amount of log files (.tmp files) that occupy a lot of hard drive space and causes the recording to stop.
- Do not adjust the system clock once the recording is started.
- Do not unplug a removable disk when the 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 name "1" exists.
- Check if the hard drive has bad sectors inside or damaged.
- Make sure you are not using the network hard drive.

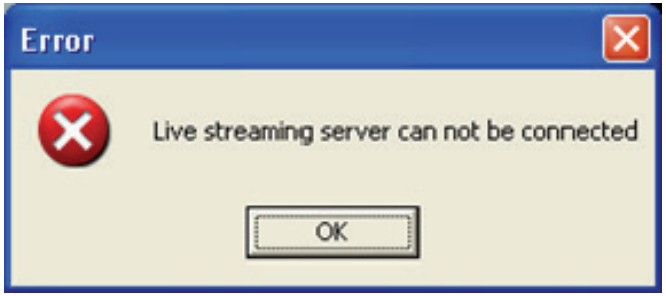
Step 2: Verify if the system stops recording which is caused by insufficient hard drive space.

- Check if the recording paths are the same in FileRecord.ini and Storage location.
- Remove the oldest video folders or move them to another hard drive.
- Check the dberr.log. This log file can be found in D-ViewCam installation folder. If there are a lot of Eventlog and Systemlog errors in dberr.log. Eventlog.mdb and Systemlog.mdb might be oversized due to frequent events or scheduler is set as record on motion while the cameras focus on a dynamic background.
- The system's hard drive space must be more than 800 MB and the data hard drive space must be more than 500 MB for recording.

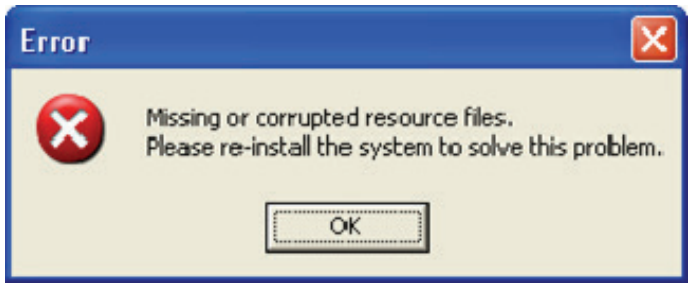
If you still experience this problem, then stop recording and use DB tools to repair/rebuild database.

9. Why do I get "Live streaming server can not be connected" message?

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 a “Missing or corrupted resource files. Please re-install the system to solve the problem” message?



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

1. When loading the Main Console:

The skin files or database may be corrupted to cause this error message. Please uninstall the software, and install the latest version.

2. When loading ActiveX of web live viewer/ playback

Please follow the instructions below for troubleshooting.

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

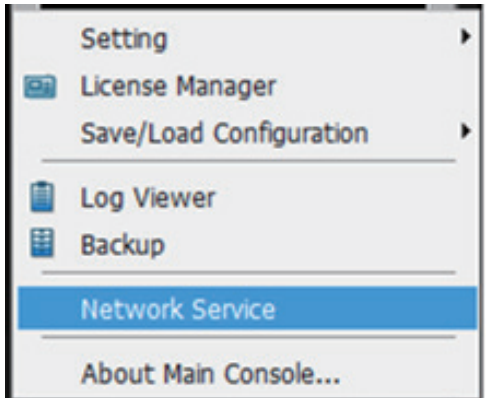
11. Why do I get a "The procedure entry point WMCreateWriter could not be located in the dynamic link library WMVCore.DLL." message?

If you see this error message, then please upgrade your windows media player and this problem will be fixed.

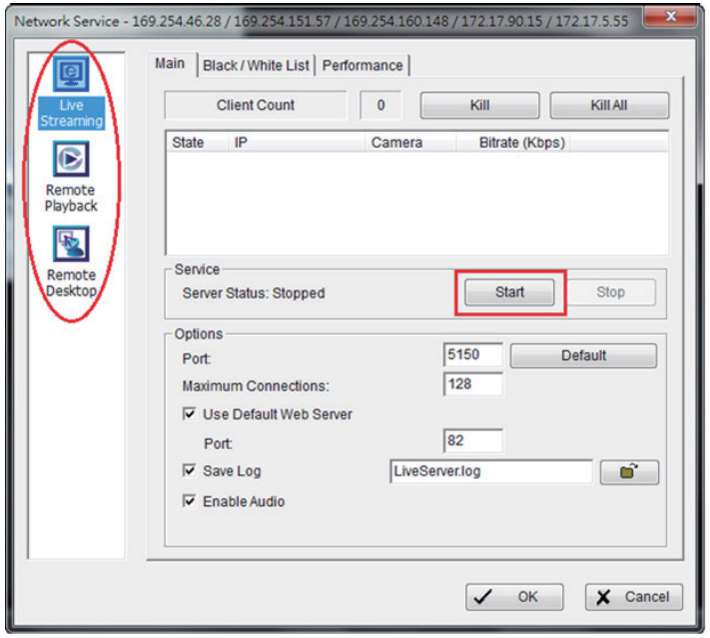
Please download the latest Windows media player here, http://www.microsoft.com/windows/windowsmedia/default.mspx.

12. How do I start network services?

Step 1: Go to **General Setting > Network services**.



Step 2: Please remember to click on the services you want to start in Main Console.



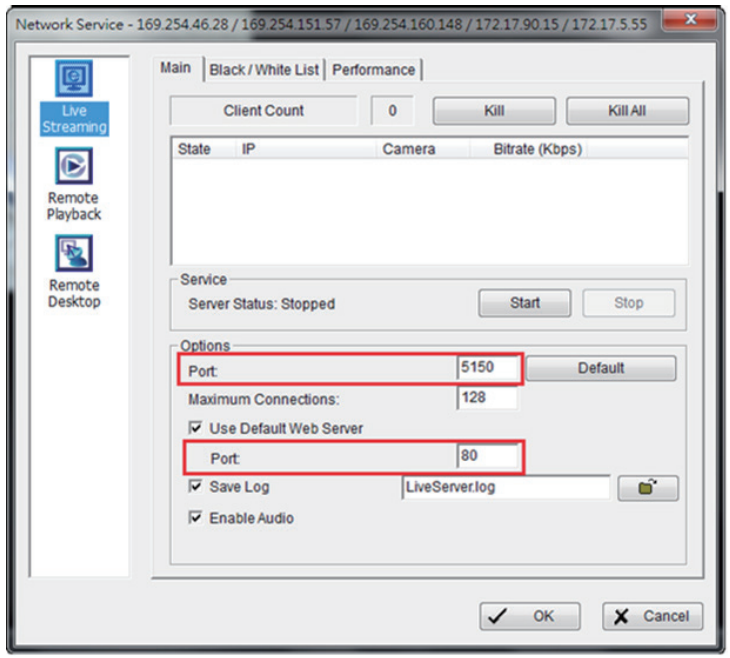
13. How to configure my PC/Server to allow remote access to Viewer and Playback?

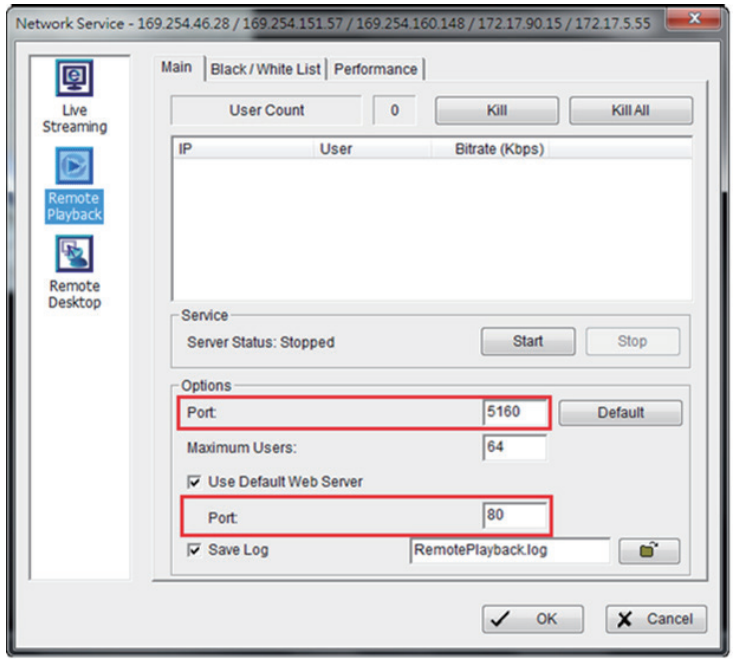
In order to view remote live viewer and remote playback from the internet, there are two things you have to do.

Step 1: Start Network Service in Main Console. To start, go to **Main Console > General Setting > Network Service** and then start this service.

- The default port number for live streaming is 5150.
- The default port number for remote playback is 5160.
- The default port for web browser is 80.

If you want to modify, please don't forget to set it to port forwarding on your router.





If you see the following error message, this means that your port 80 was occupied by the another device, therefore, you have to change the port number.

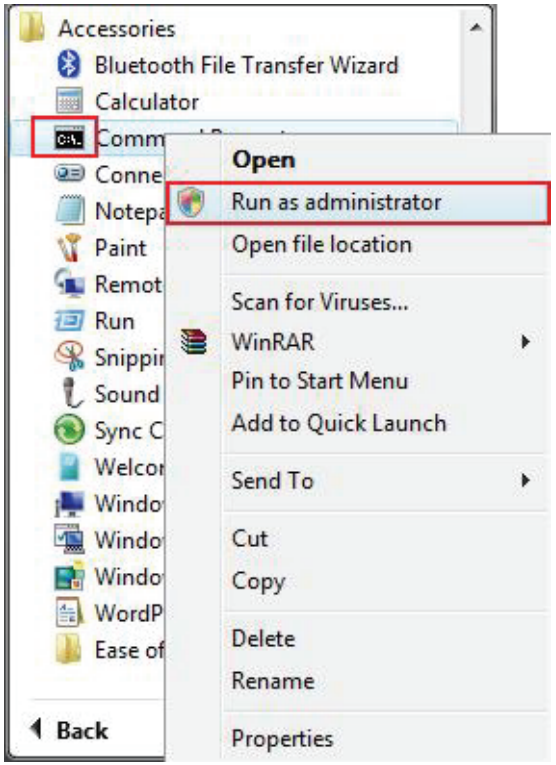
Step 2: Enable port forwarding in your router and then find the public IP address of your router and set port forwarding on the router to NVR LAN IP.
• You can see the public IP address of your router in the configuration menu.
• You can also configure NAT (or port forwarding) port 80, 5150 and 5160 to your NVR's LAN IP (e.g. 192.168.3.30) in the router.
• Port forwarding is similar to the example given below:
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 forwarded the 3 ports in your router, you will be able to access remote live viewer and remote playback from the internet.

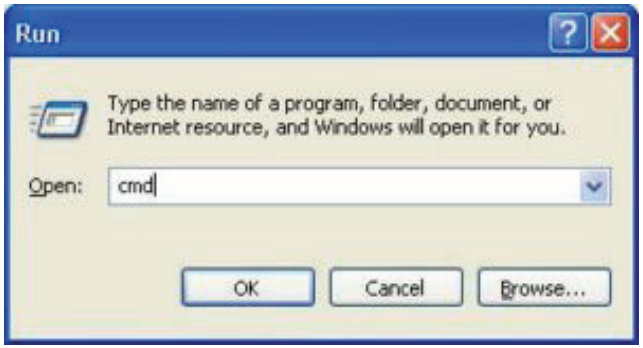
14. Why can't I see live view and video playback on Internet Explorer after upgrading to the latest version?

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

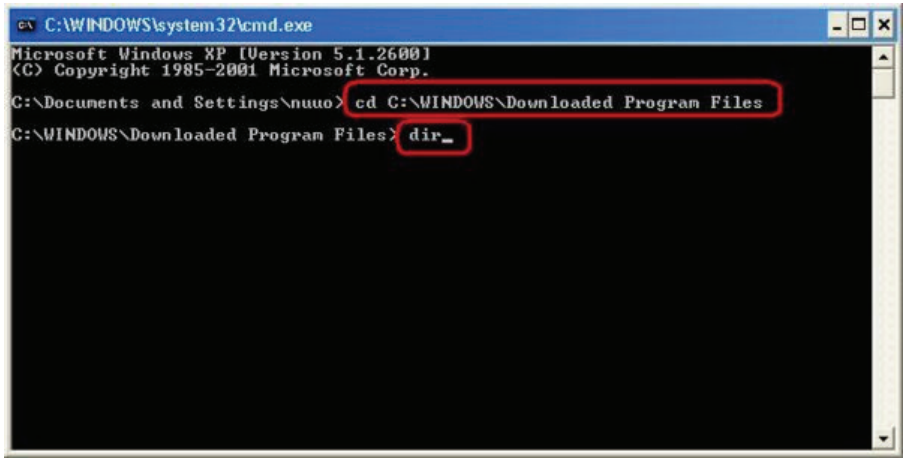
Step 1: Close IE and its related applications first. Otherwise some files may be locked during removal. If your OS is Vista, please run "Command prompt" as an administrator or you will not be able to remove these components.



Step 2: Go to **Start > Run >** enter **cmd** and press **OK**.

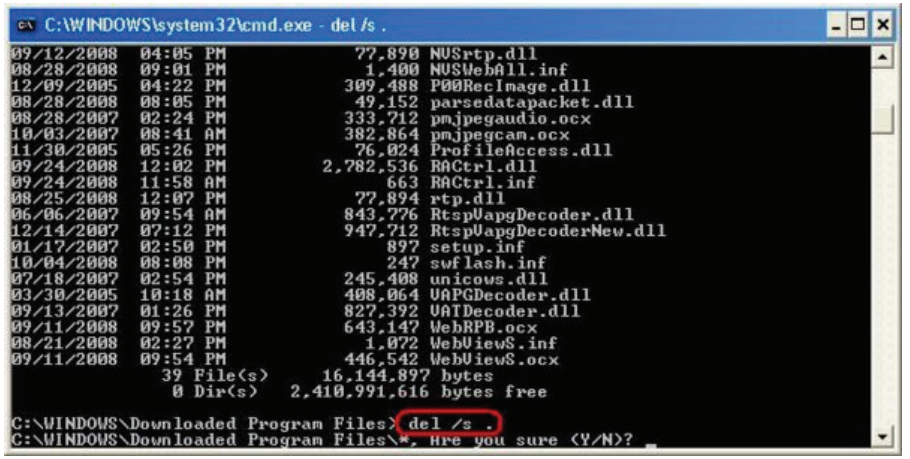


Step 3: Type **cd C:\WINDOWS\Downloaded Program Files**
Step 4: Type **dir** to list all the objects on this folder .



Step 5: Type **del /s.**
Note: Don't forget to add (.) after **/s**

Step 6: Keep pressing **Y** until you are prompted to delete all the files in the folder.

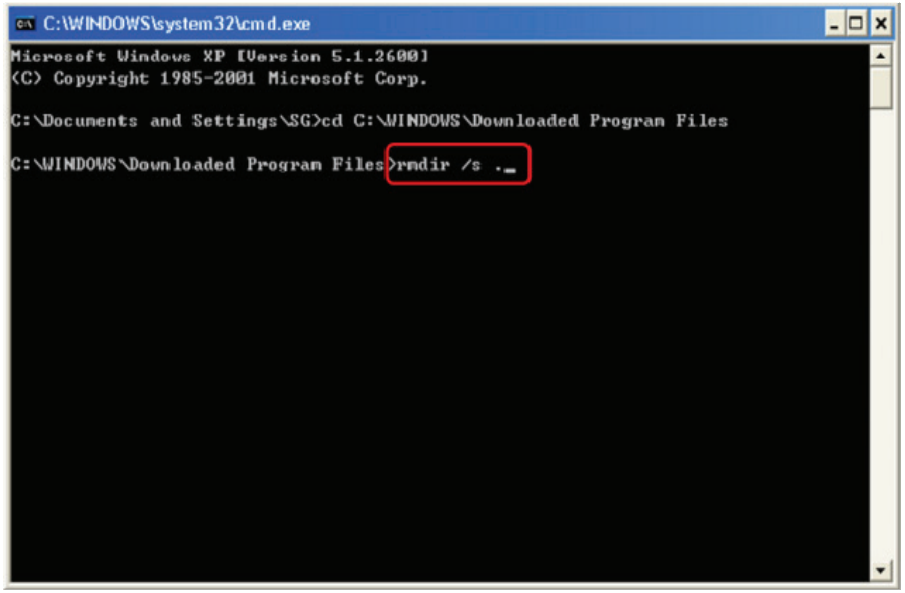


Step 7: Type **rmdir /s** .

Step 8: Continue pressing **Y** when prompted to clear up the remaining files in the folder

Step 9: Type **dir** and press **Enter** to check if the folder is empty.

Step 10: Re-install your ActiveX with web remote client.



15. What default ports are used for network service?

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

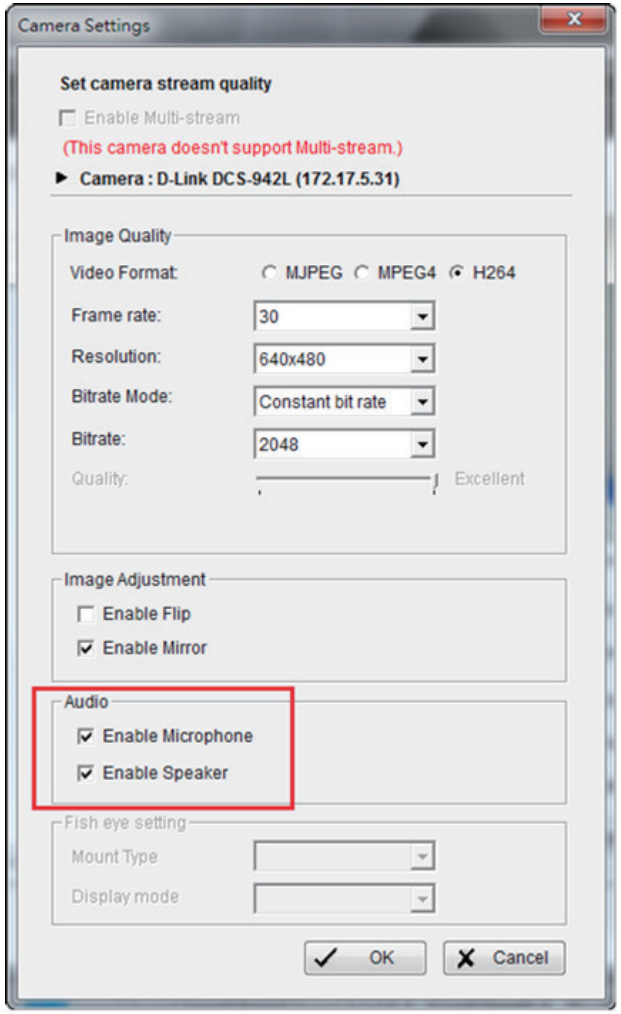
Service	Port	Purpose
Live streaming	5150	Communication between desktop remote live viewer and Main Console
Default web server	80	Access protocol of web based remote client

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

16. How to enable audio for the remote live viewer application and Internet Explorer browser?

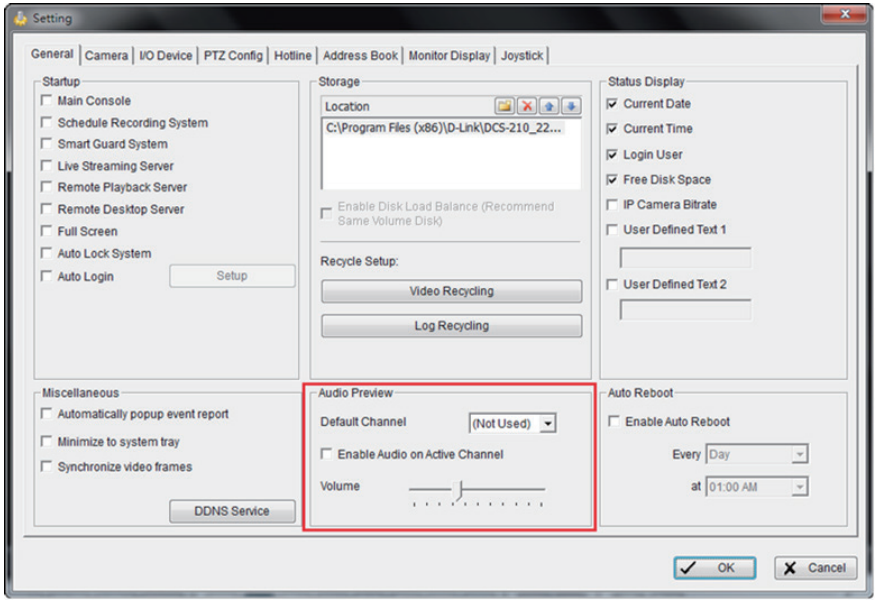
Please right-click on the screen and select **Enable Audio.**

If you are using network cameras, go to **Main Console > General Setting > Setting > Camera > Camera Settings.**

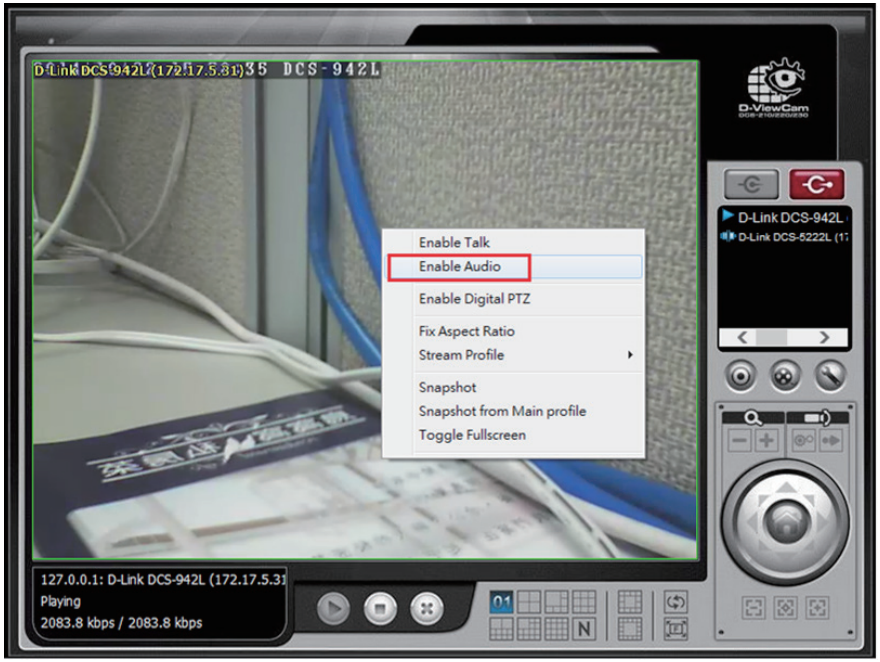


Right-click on the screen and select **Enable Audio.**

If you are using analog cameras, please go to **Main Console > General Setting > Setting > Audio Preview**.



Go to remote live viewer and right-click on the screen to check **Enable Audio**.

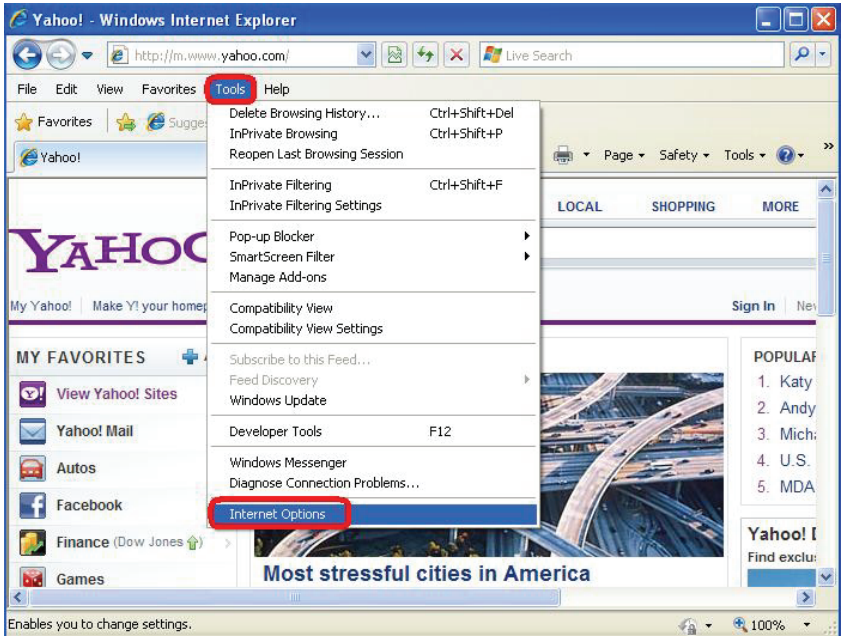


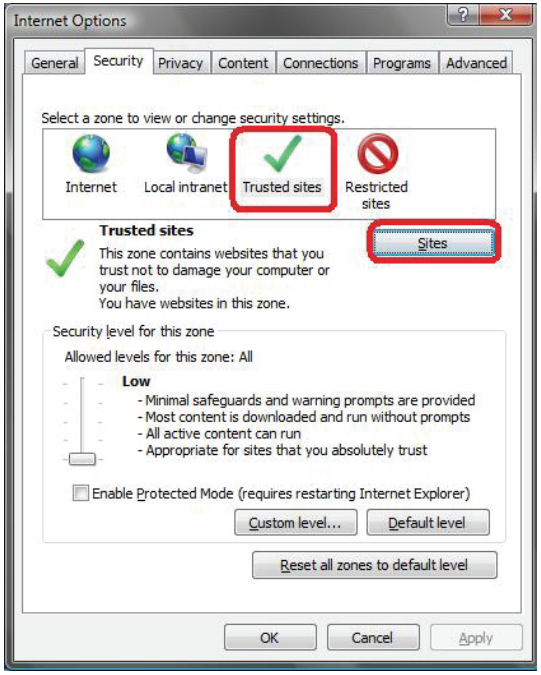
17. Why Internet Explorer 8 doesn't work well with software version 3.0?

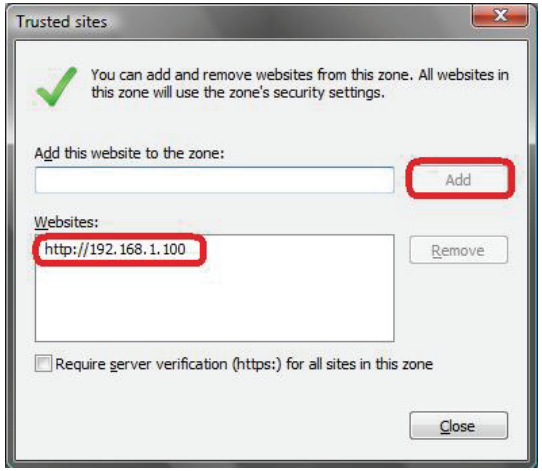
In order to install ActiveX in an IE 8 environment, we need to set up the following.

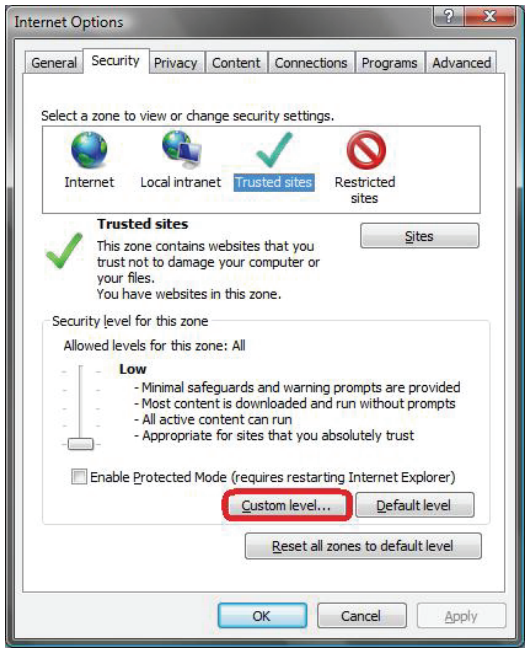
Ensure **vcredist_x86.exe** has already been installed.

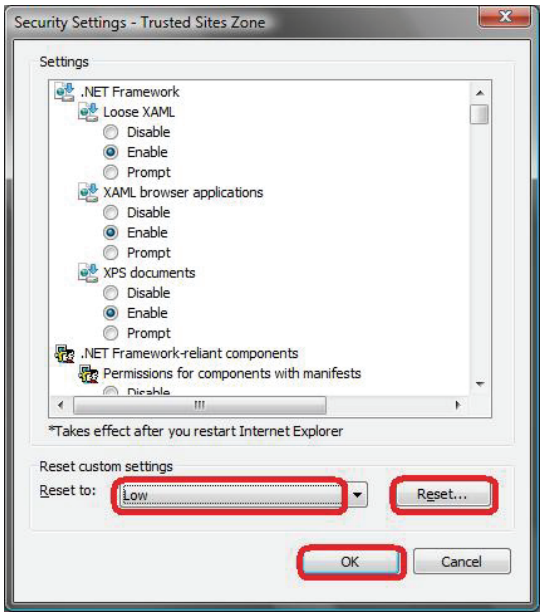
Step 1: Add the Server IP into Trusted Web Site.





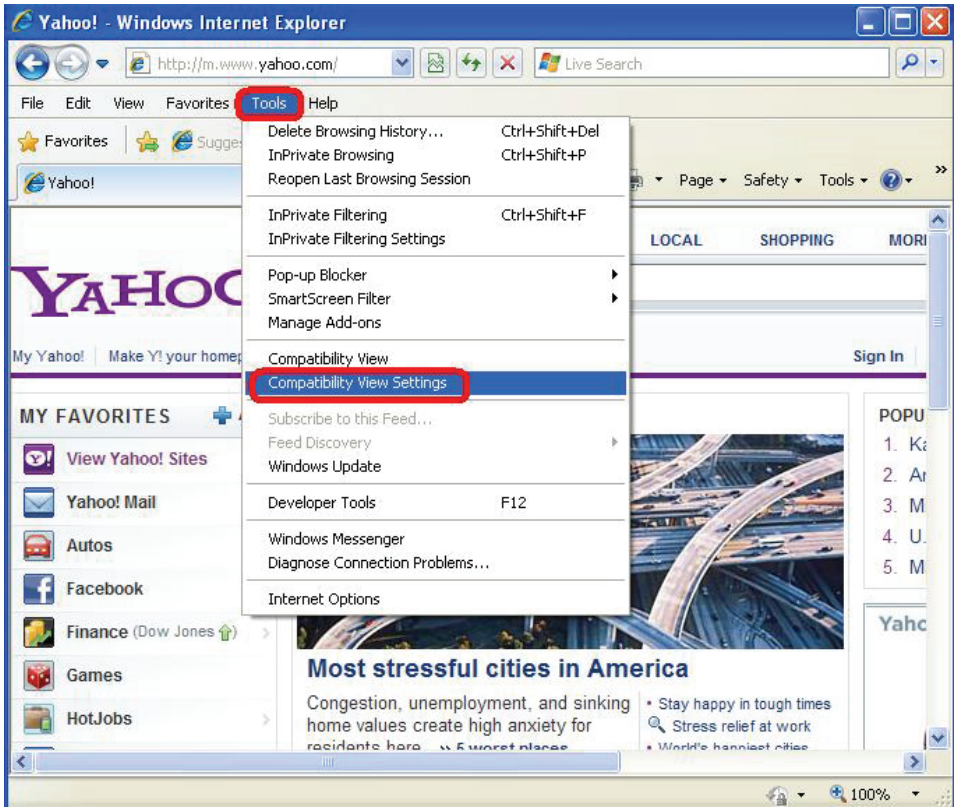


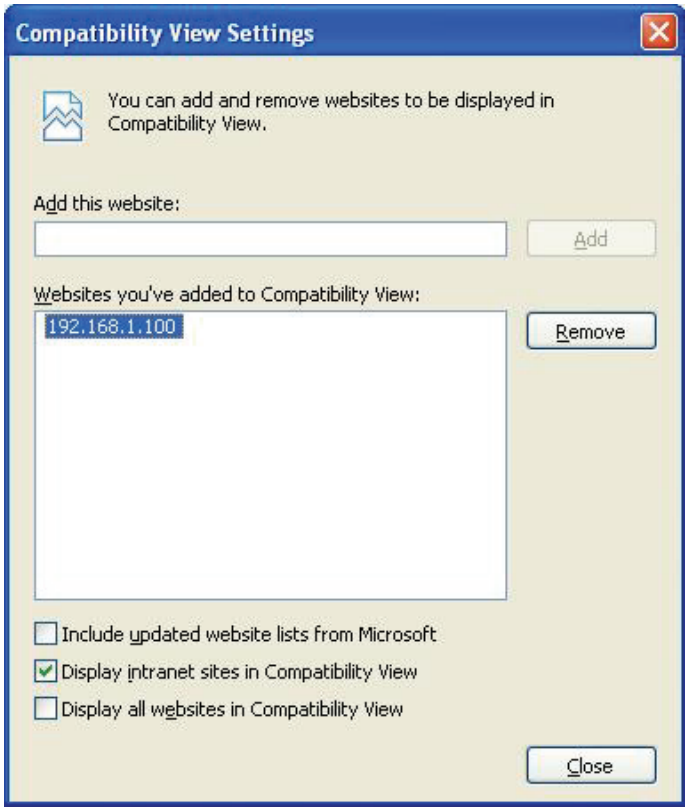




Step 2: Go to **Tools > Compatibility View Settings** and add the Server IP Compatibility View Setting.

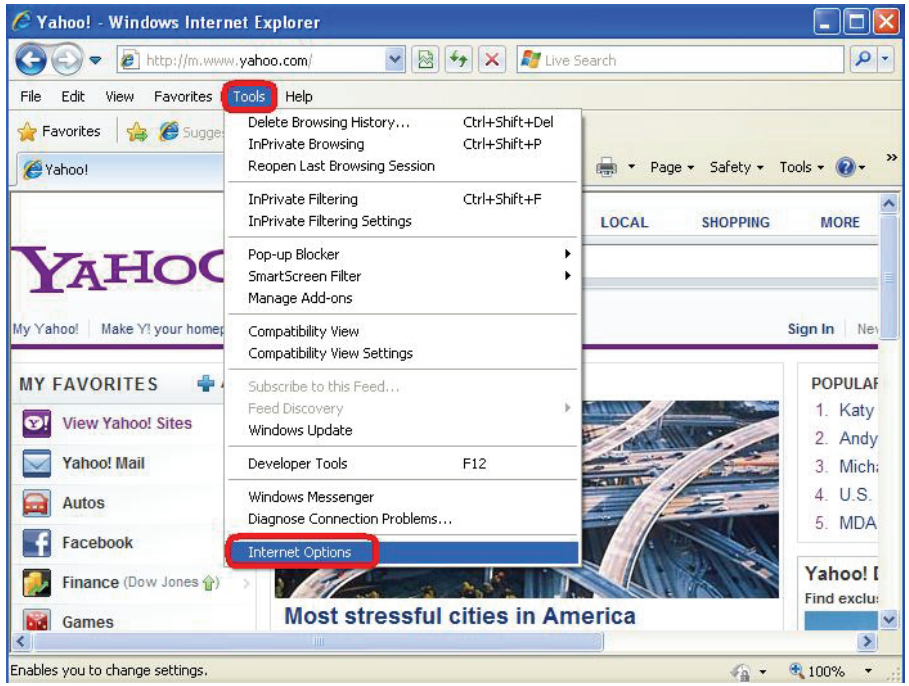
Step 2: Add the Server IP Compatibility View Setting

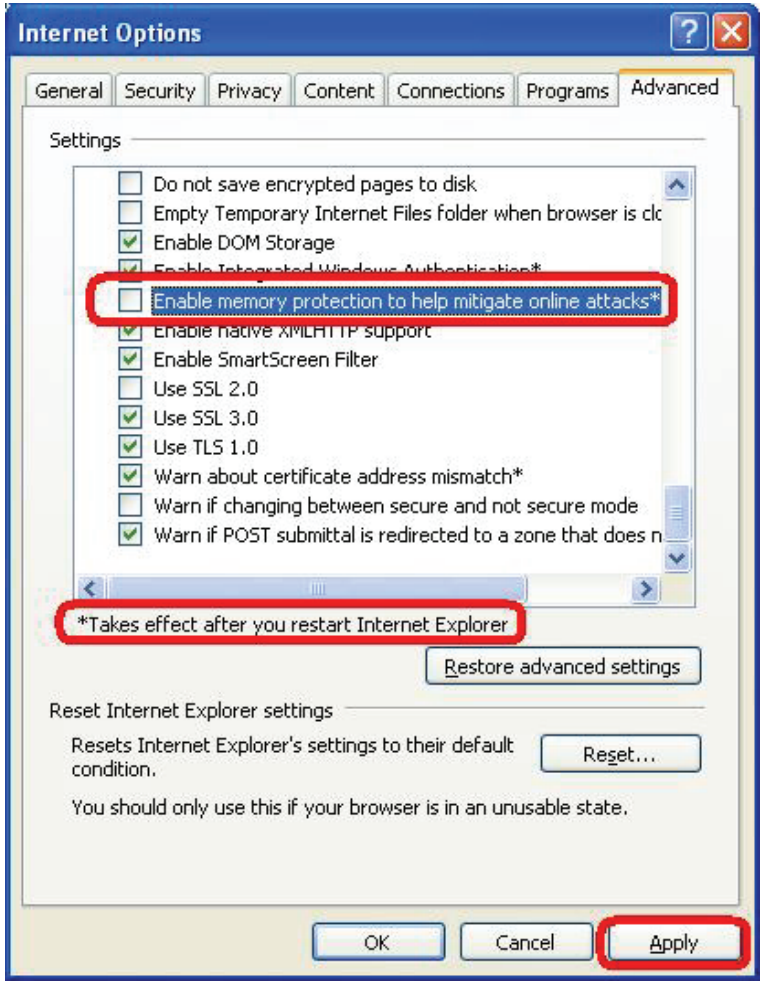




Open Internet Explorer browser and input the D-ViewCam server's IP address with port number (e.g. http://127.0.0.1:80) to connect to D-ViewCam server.

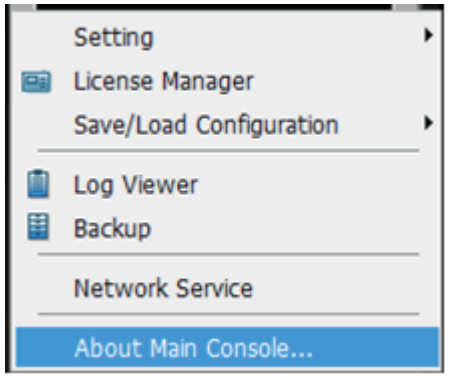
Step 3: If the instructions above do not work, please try the following method. (Optional)

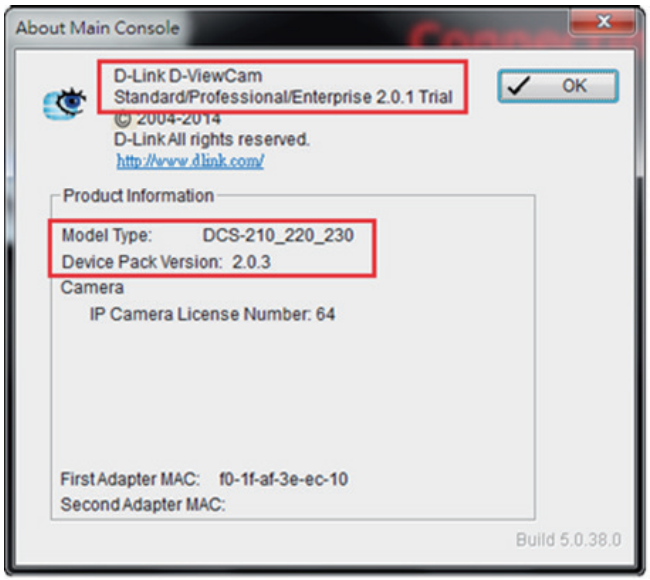




18. What is the version of my software?

Go to **Main Console > General Setting > About Mainconsole.**

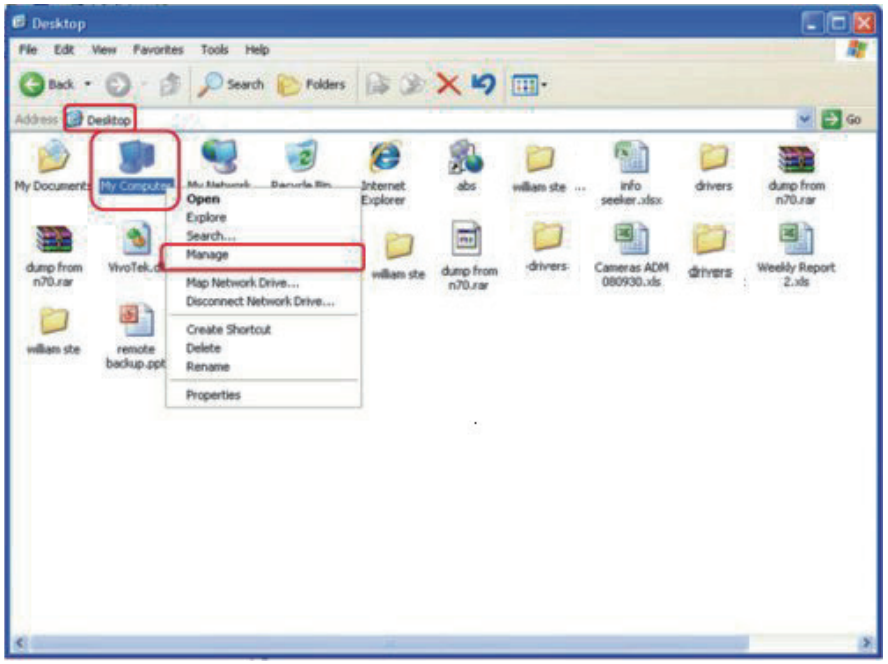




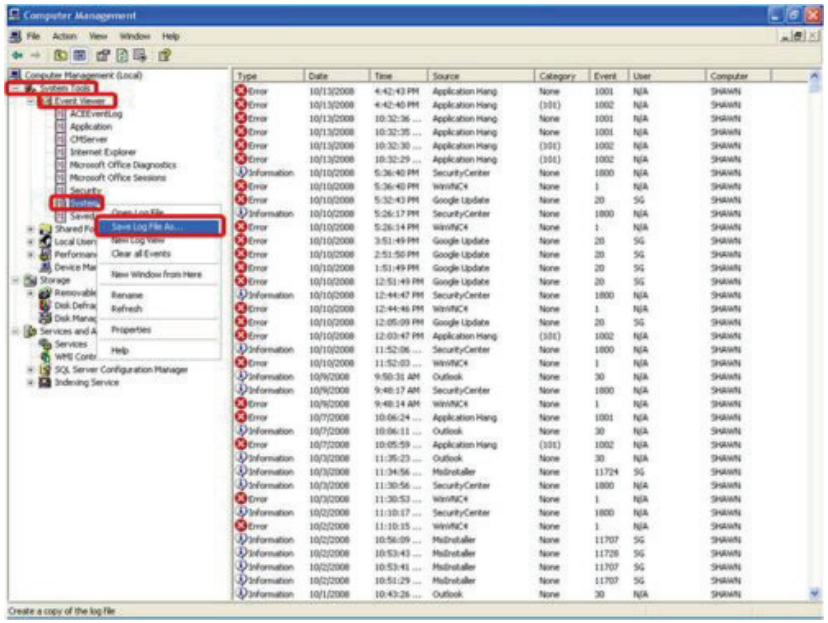
19. How do I get the Windows system log and application log?

System log
Step 1: Go to **Desktop >** right-click on **My Computer > Manage**.

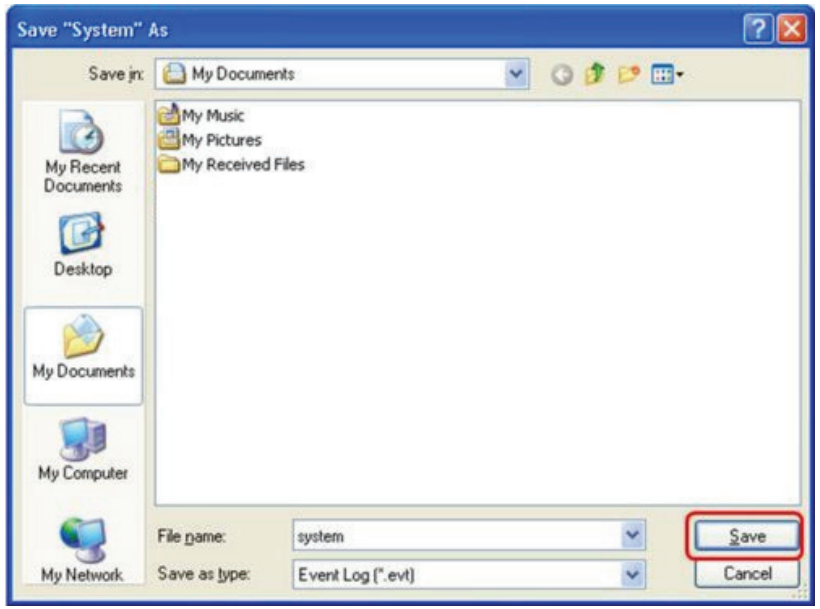
Step 2: In Computer Management, go to **System Tools > Event Viewer > System**.



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

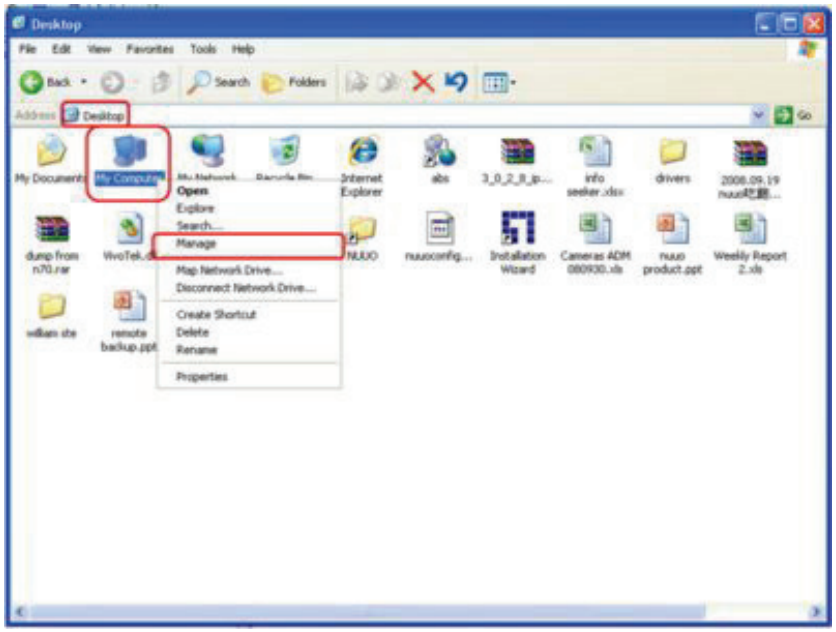


Step 4: Type **system** as file name and save file as .evt format
Please name the file as **system** so we know that it is a system log file.

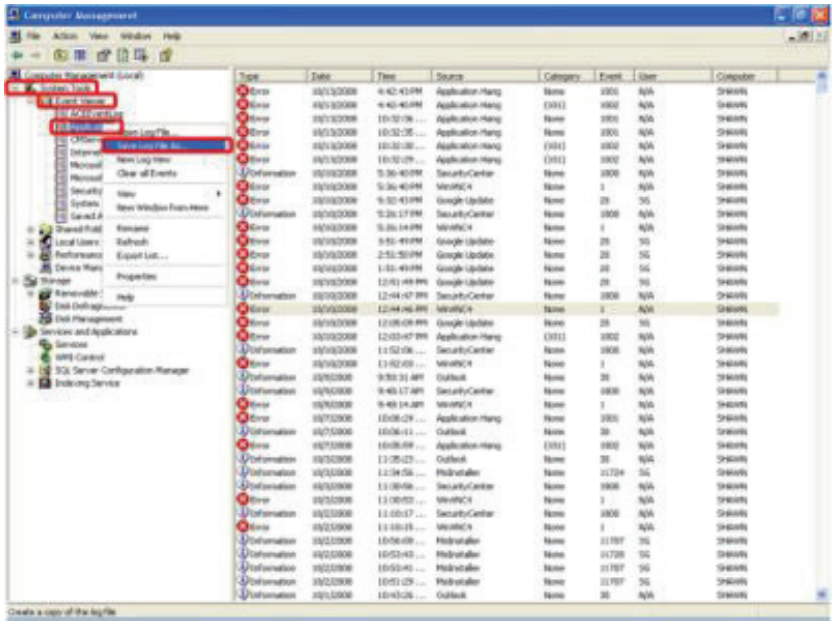


Application Log
Step 1: Go to **Desktop** > right-click on **My Computer** > **Manage**.

Step 2: In **Computer Management** > **System Tools** > **Event Viewer** > **Application**.

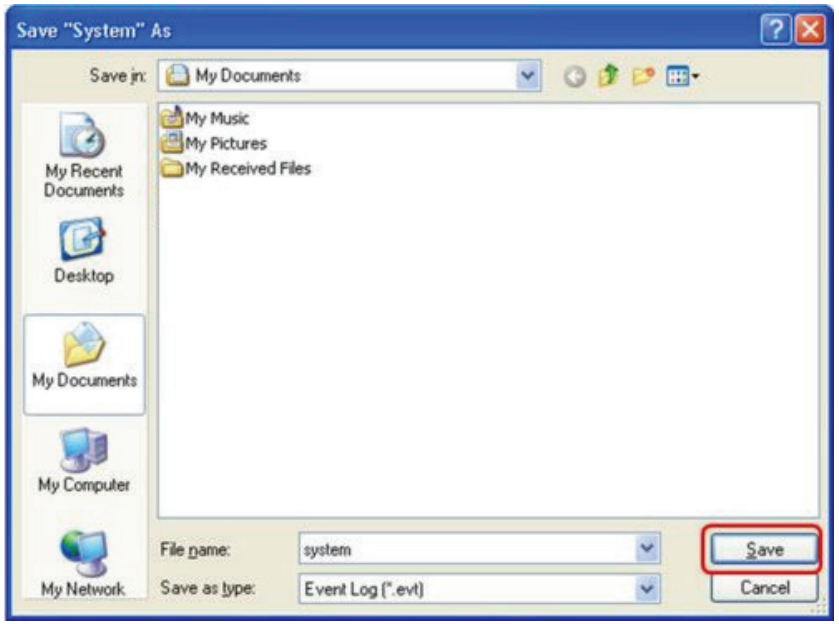


Step 3: Right-click on **Application** > **Save Log File As...**.



Step 4: Type **application** as file name and save file in .evt format.

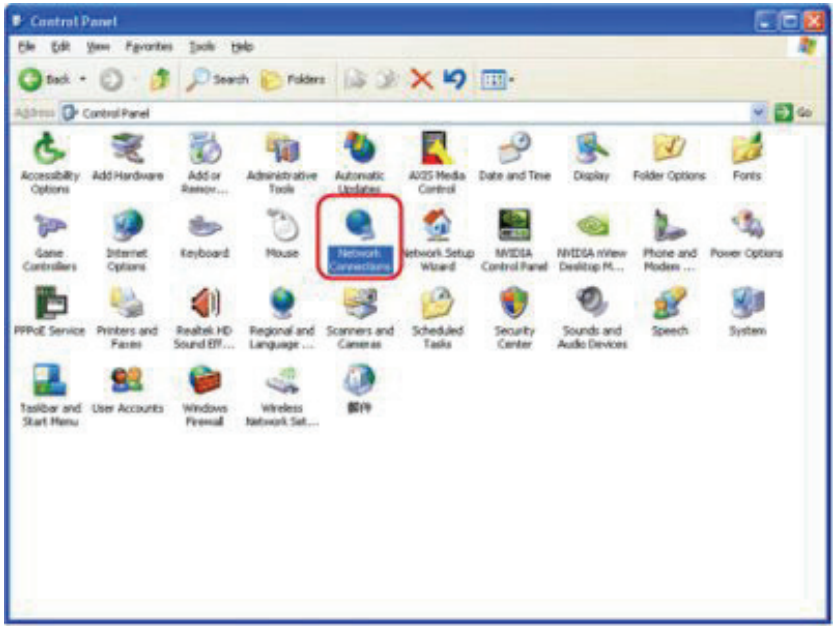
Note: Please name the file as **application** so we know that it is an application log file.



20. How many user accounts can I create?

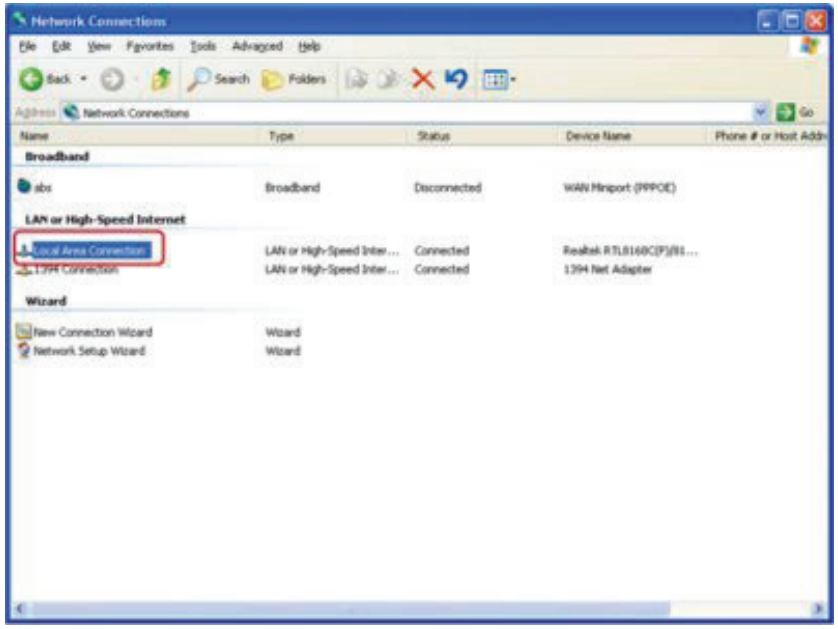
You can create an unlimited number of user accounts.

21. How do I setup local area network?
D-ViewCam Standard/Professional/Enterprise supports both LAN and WAN. If your surveillance system does not have internet access, you can setup a private network or LAN to establish networking between Mainconsole and other network devices such as an IP camera.

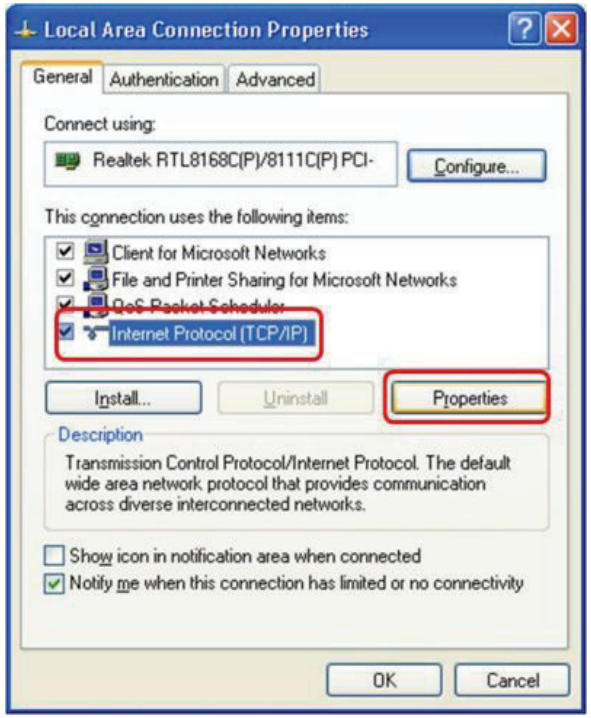


Setup with static IP
Step 1: Go to **Control Panel** > **Network Connections**.

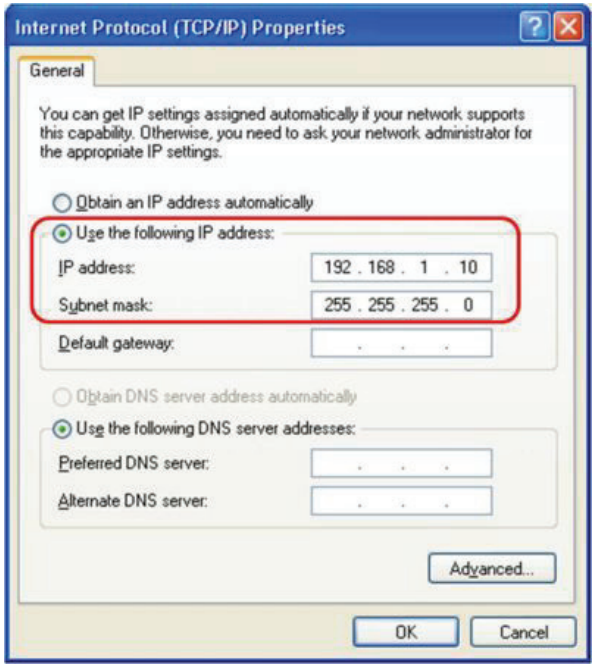
Step 2: Right-click on **Local Area Connection > Properties**.



Step 3: Select **Internet Protocol(TCP/IP) > Properties**.



Step 4: Select **Use the following IP address** and update 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 addresses between the same subnet address, such as [192.168.1.1 to 192.168.1.254].

Setup with dynamic IP

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

22. What type of network does the D-ViewCam Standard/Professional/Enterprise support?

D-ViewCam Standard/Professional/Enterprise supports both LAN and WAN. If your surveillance system does not have internet access, you can setup a private network or LAN to establish connection between the Main Console and other network devices such as network camera.

Open Source Software Notification

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