USER MANUAL
Surveillance Center Addon
VERSION 1.0

ShareCenter

IP ADDRESS:
140.11.12.88

POWER   NEXT

Four Bay Network Storage

ShareCenter

D-Link®

STORAGE

Table of Contents

Surveillance Center Overview
Introduction

The Surveillance Center Addon is a module for your D-Link ShareCenter NAS[1] which allows you to access and configure IP cameras[2] on the same network to record video footage continuously or by motion detection and back them up on the NAS. You can then use the Surveillance Center module to monitor and play back the recordings. It provides user-friendly options such as the ability to monitor and record data from 4 cameras at any given moment, retrieve playback video stored on the NAS, and upload a map of the premises where the cameras are installed and plot the location of each camera on the map. The Surveillance Center Addon is a complete home and office surveillance suite that works your NAS.

1 Check with your reseller to see if your NAS is compatible with this Surveillance Center software.

2 D-Link cannot guarantee full compatibility or proper playback with all IP cameras. Please check the IP camera compatibility list for more details.

System Requirements

For best results, the following minimum requirements are recommended on any system used to configure and use the ShareCenter:

Computer with:
- 1Ghz processor / 512MB RAM / 200MB available space / CD-ROM drive
- Windows® 7, Vista®, or XP (with latest service packs)
- Internet Explorer® 8 and above

For Storage:
- Internal 3.5" SATA Hard Drive(s)
- RAID 0/1 requires a minimum of two SATA drives

Note: *For best performance ensure that you are running the latest service packs for the appropriate Windows® operating systems. Also make sure you have sufficient disk space to accommodate all video surveillance recordings.*

Features

The ShareCenter® Surveillance Center is an easy to install surveillance data storage add-on module used for remote access cameras through a local network or from the Internet. This ShareCenter® supports a few simple features listed below:

• Auto Camera Installation
• 4-Channel JPEG, MPEG-4, or H.264 recording
• Synchronized audio and video recording
• Auto recycle recording

• 4-Channel Live Video monitoring

• 4-Channel Playback
• Manual and Schedule Recording
• E-Map integration
• Backup recorded video to NAS

Checking the Hardware Requirements

To use your Surveillance Center, you will need at least one hard drive. If you plan to use RAID, which protects your data against one hard drive failure, you will need at least two hard drives.

Note: *For the ShareCenter®, we recommend that you use at least four 1TB high performance drives. This provides more data drives, better striping performance, and helps distribute loads more effectively.*

This section will help you:
- Select the hard drives
- Determine hard disk space you will need
- Ensure your data is protected
- Understand the basic requirements for a router or switch
- Select the compatible IP Camera(s)

Selecting Hard Drives:

You can use hard drives from any manufacturer and with any capacity with your Surveillance Center. The D-Link ShareCenter supports standard 3.5" internal SATA drives. If you are unsure, ask your administrator or hard drive retailer/manufacturer to verify that your hard drives meet this standard

*Warning - Any pre-existing data on the drives will be erased during installation.

Selecting IP Cameras:

The Surveillance Center only supports D-Link IP cameras and are not compatible with third-party cameras. It supports the following cameras: DCS-930/930L, DCS-932/932L, DCS-1100/1100L, DCS-1130/1130L, DCS-5230/5230L, DCS-942L, DCS-2103/2130, DCS-2210/2230, DCS-5222L/5211L

*Warning - Confirm with your supplier on reseller that these cameras are compatible with your network and NAS.

Determining How Much Hard Drive Space you Need:

In order to protect your data from hard drive failure, your NAS requires more space than what you will use for your data, sometimes more than double the amount of space required.

Using a Router or Switch:

If you are connecting your ShareCenter/Surveillance Center to a router or switch, your router or switch needs to support Gigabit Ethernet (1000Mbit/s) for maximum performance. The ShareCenter will auto-negotiate the highest connection speed available to your router or switch. If you are using Port Bonding, use a managed switch.

Using an Uninterrupted Power Supply (UPS):

We highly recommend that you use your ShareCenter/Surveillance Center in conjunction with an uninterrupted power supply (UPS), which will protect against sudden loss in power and power surges.

Installing and Accessing the Module

Step 1 - Go to **Management**, **Application Management**, and click the **Add Ons** link on the left side panel.
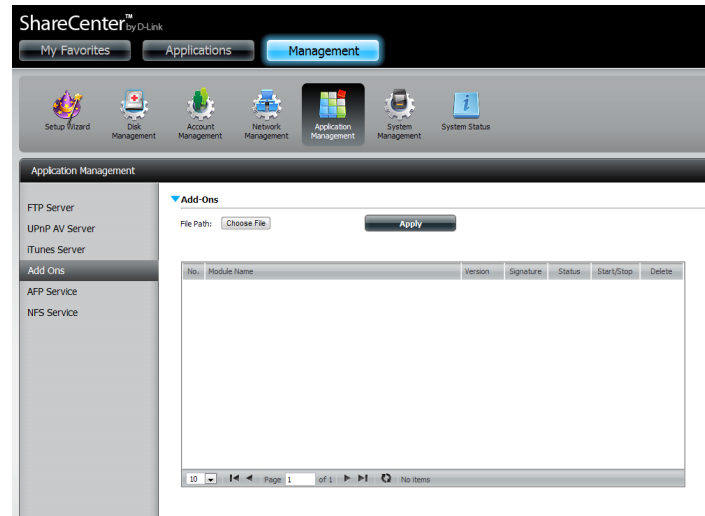
Step 2 - Click on Choose File and browse your computer to find the Surveillance Center software.
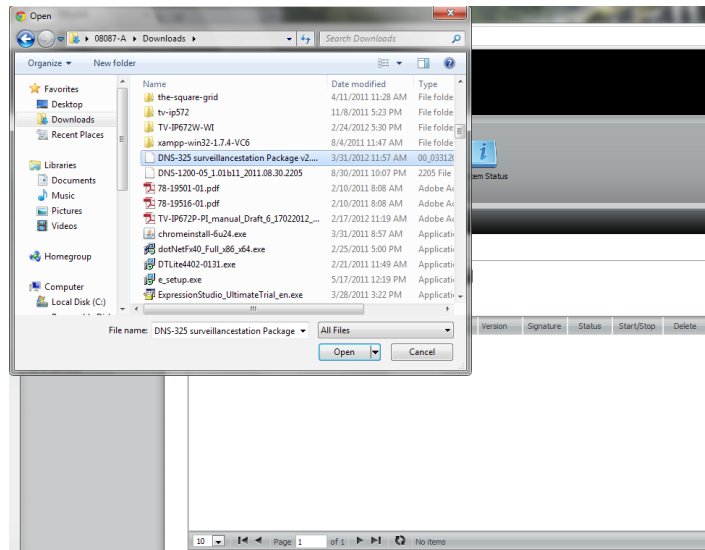
Step 3 - Once the file is located click **Apply** to install the program. Once complete your ShareCenter will inform you of a successful installation and you will see the module installed.
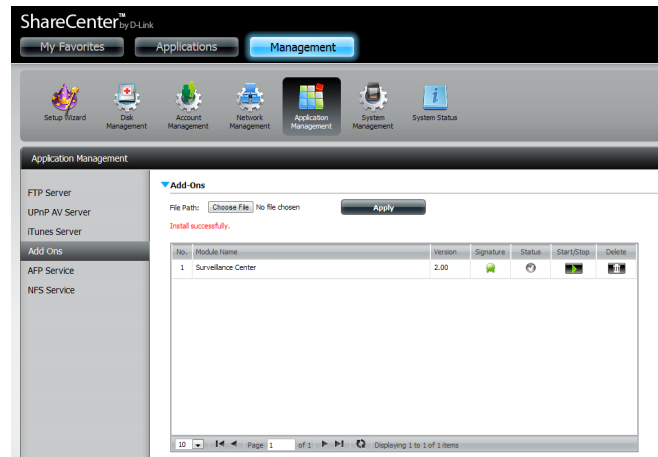
Step 4 - Under the Surveillance Center, click the green Play button to activate the Surveillance Center.

The green Surveillance Center button now turns red . You can toggle between Start and Stop

to activate or deactivate the Surveillance Center.
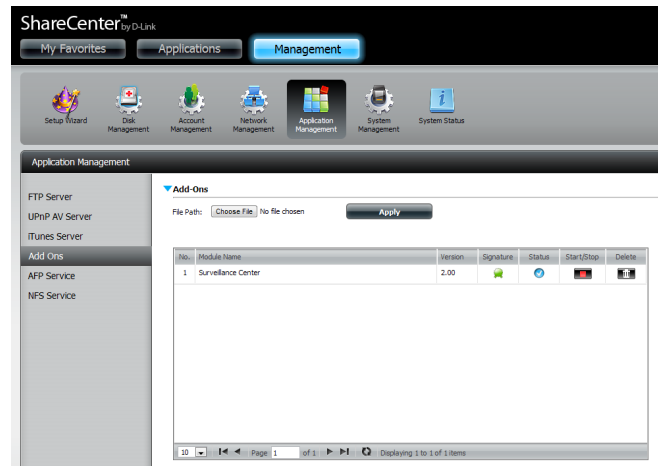
Step 5 - Next, click the Applications tab at the top of your ShareCenter. Under Enabled Add-Ons, a new icon will display a connection to the Surveillance Center.
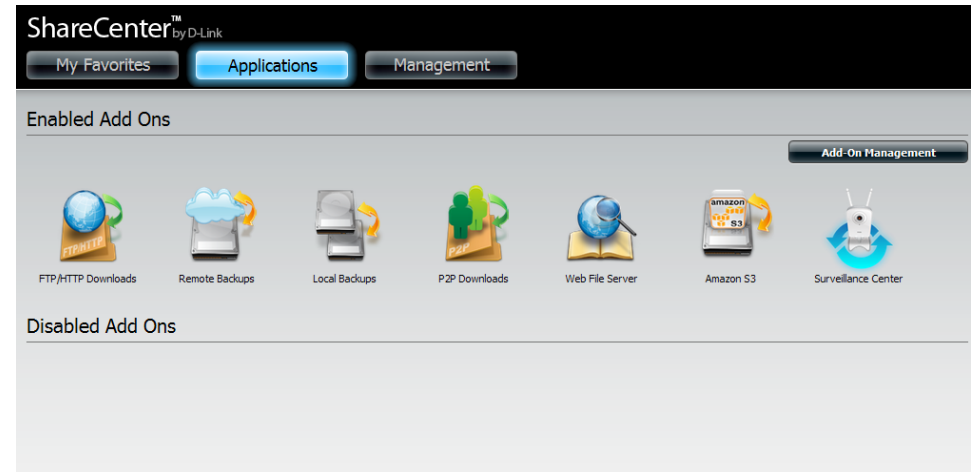
Step 6 - Double-click the Surveillance Center. This leads to the Surveillance Center details panel. Here you can view the Installation Date, the software version number, and the Installation path.

Click **Launch Interface** to access the Surveillance Center interface.
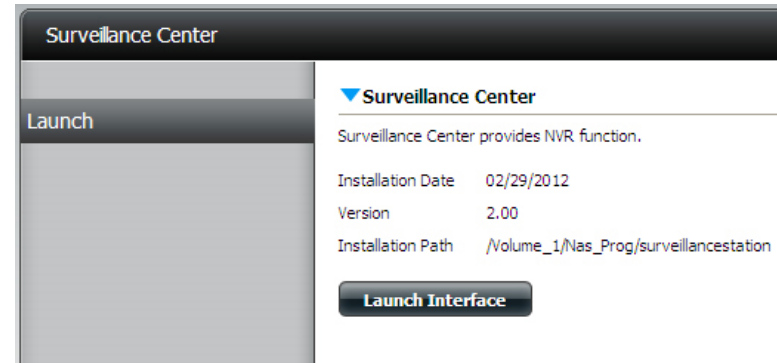
Step 7- You are prompted to install an Addon for Internet Explorer at the botom of your screen. Click **Install** to install the necessary plugin for Internet Explorer.

The Surveillance Center does not work with other browsers.
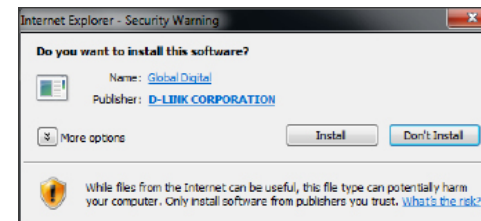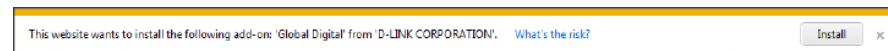
Connecting a Camera to the Network

When you connect one of the above mentioned cameras to the network, the Surveillance Center software detects the camera automatically. The software is able to recognize the IP address, model number and bit rate speed.

Click on **Setup**, **Camera Setup** to view your current cameras. Two options are available: **Run** the **Wizard** or see the **Camera List**. Under the **Camera List** you will be able to view current camera(s) connected to the NAS.
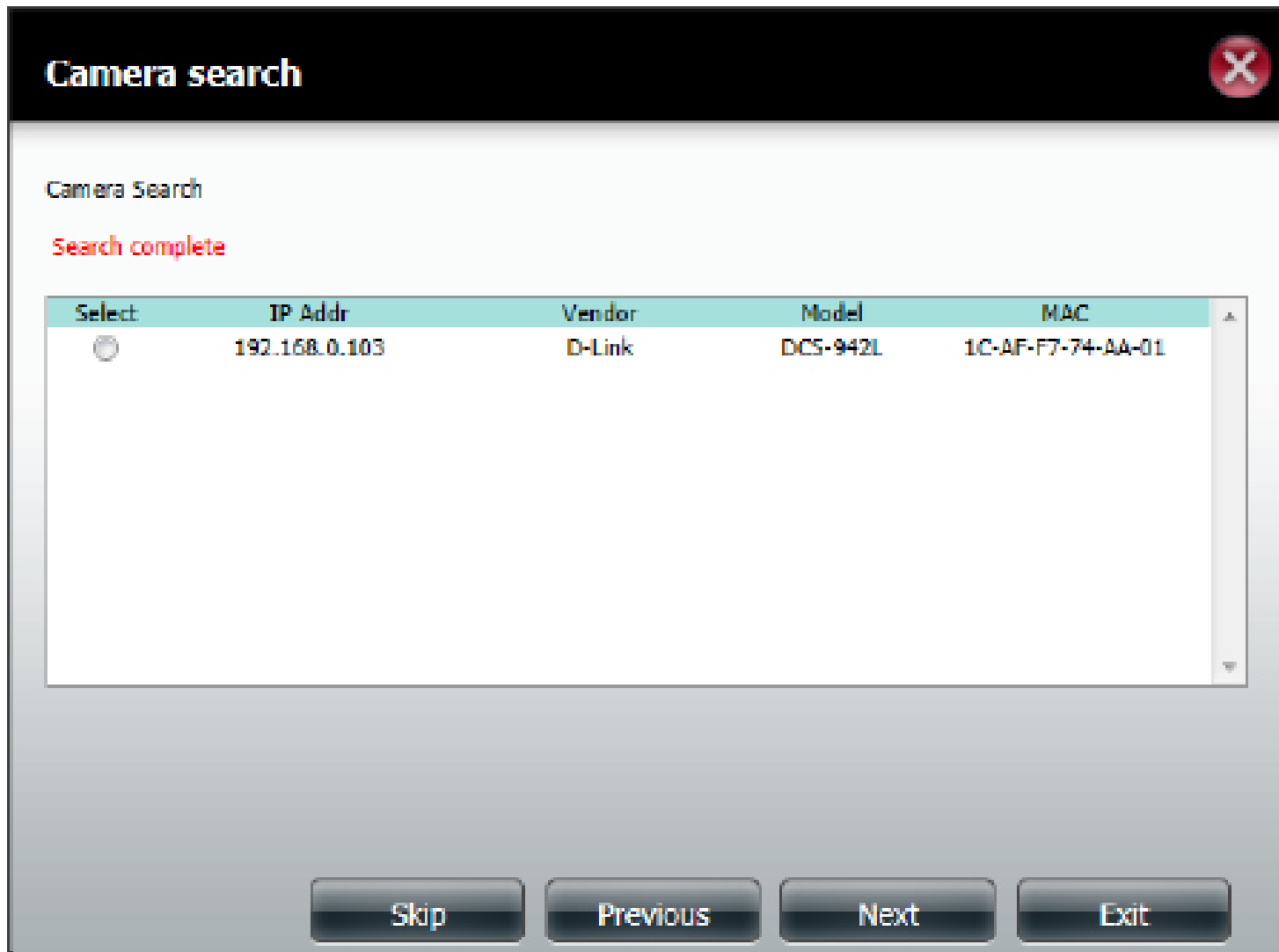
Camera Wizard

To add a camera to the surveillance Center module, click **Setup** and then **Camera Setup**. Select **Run Wizard** as shown below. The welcome screen for the wizard is shown outlining the steps involved in setting up a camera.
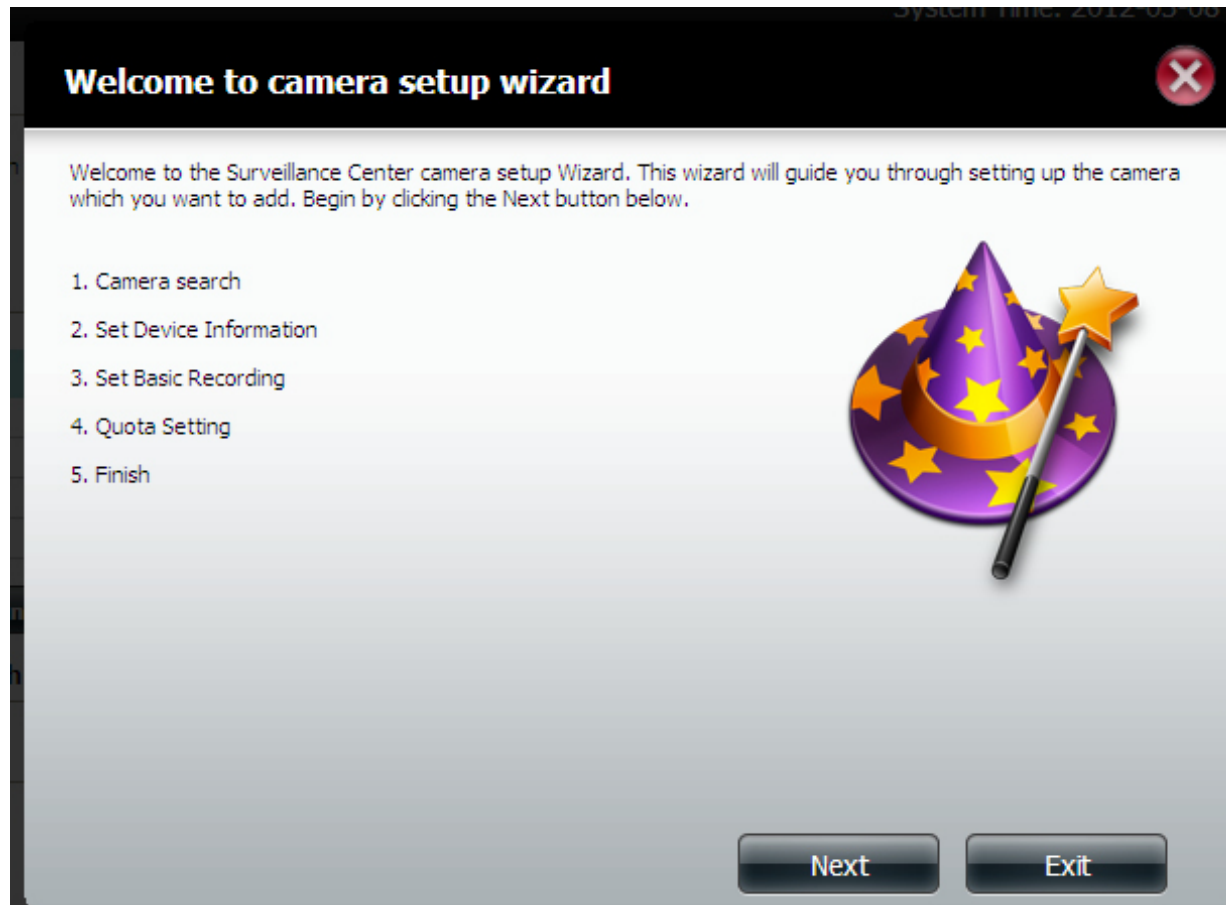
Camera Search

The wizard detects the camera(s) available on your network. Select the camera(s) you want to add by checking its corresponding radio button and click **Next.**

Adding a Camera using the Wizard

If there is a username and password required to logon to the camera, enter it in the provided fields. Enter the port number if it does not run on the default port 80. You can rename the camera by modifying the **Name** field. Additionally, you can set the video recording format. The available formats are dependent on your camera. You can use the [icon] button to have the wizard detect the video formats available for your camera as well as the port the camera is operating on.

Use the **Test Camera** button to grab an image from the camera to test the camera for image quality and deciding upon the positioning of the lens.

Click **Next** when you have entered the required details.

Recording Setup

Use the radio buttons at the top to select how you want to record. If you select to record by schedule, you will be able to set a schedule using the graph below. Click on the color of the function you want to perform and then click in the box for the day and time that you want it to perform that function. When you are done, click **Next.**

Recording Quota

Use this page to set a quota for recordings. By default, the NAS will keep the last 7 days of recordings and automatically overwrite them. Click the **Estimate Required Space** button to let the software calculate, based on your settings, how much space will be required each day. This can assist you in making a decision about how much space to allocate to the recordings. Click **Finish** when you have completed your settings.

Adding a Camera Manually

To add a new camera manually, click **Setup** and then **Camera Setup**. If you want to run the wizard to be guided through the setup of the camera, you can click **Run Wizard.**

On the Camera Setup screen, click the **Search** button under the Camera Search section. The Surveillance Center will perform a brief search of the local network to find any compatible cameras.

When the search is complete, a list of cameras is displayed. Select the camera you want to add by selecting the corresponding radio button and click **Add To.**
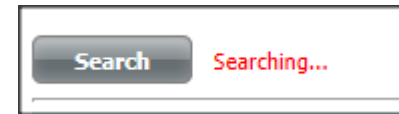
A window pops up prompting you to select which slot you want to allocate this camera to. Select which Camera number you would like this camera to be.

The camera appears in the chosen slot in the section above and you are able to adjust some settings. You can modify the Name, Address and Port if they are incorrect. You can also use the **Auto Detection** button to detect the port the camera is operating on and the supported video formats.
Enter the username and password for the camera if there is one. Select the desired Video Format (dependent on your camera).
Finally, confirm the Vendor and Model are correct for your chosen camera. If you want to delete the camera you can use the trash can button to remove it.
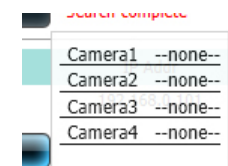Click **Save Settings** to continue.

Adding a Camera Automatically

The Auto Install function on the Camera Setup page configures the Surveillance Center to automatically install a new camera when you access the Live Video page.

Check the **Enable Auto Install** checkbox if you want new cameras to be automatically installed or uncheck it if you want to manually add them.
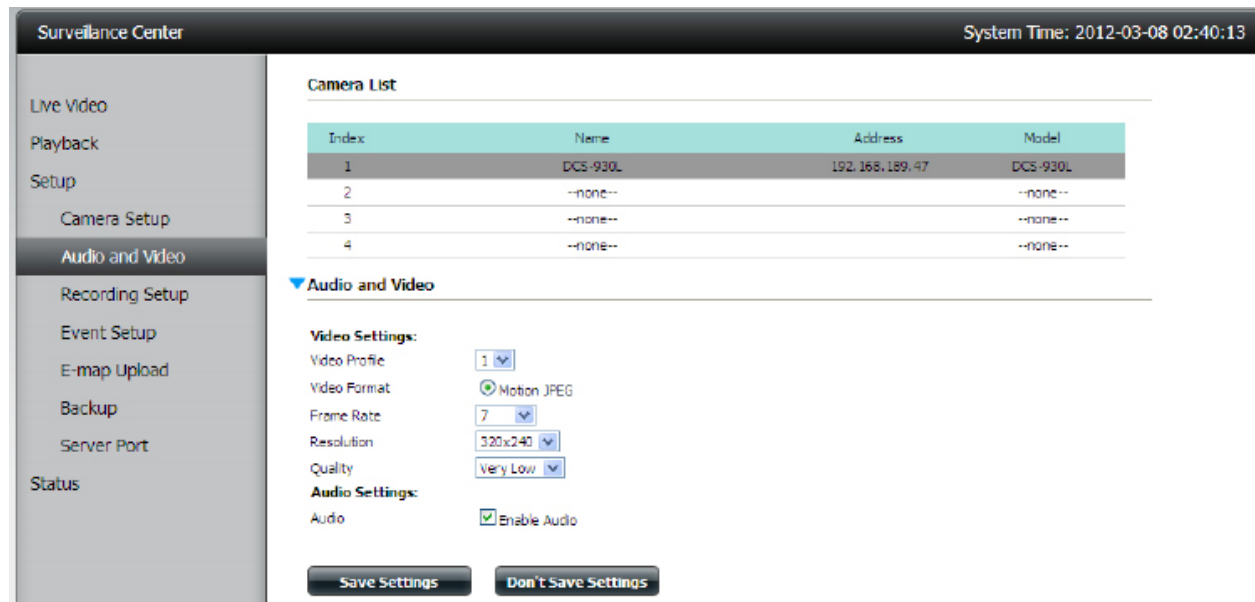
Click **Save Settings** to continue.

Audio and Video Settings

To adjust the video and audio settings of your camera, click **Setup** and then **Audio and Video** on the left side of the screen. Select your camera from the camera list at the top. Video and Audio settings are displayed below.

There are several profiles that have been pre-configured for you, but you can edit them to suit your needs.

Video Profile: Select a profile to use or edit.

Video Format: Choose the video format to use for your recordings. Each format has different size and quality characteristics.

Frame Rate: This is the number of frames per second to be recorded. A higher number of frames per second means smoother video and results in a larger file.

Resolution: The resolution is the number of pixels that the video will include. This is dependent on your camera. A higher number of pixels will result in a larger file.

Quality: Selecting Motion JPEG format will give you this setting and is a rough guide to determine the output video quality.

Bitrate: This is the number of kilobits per second the video recording will contain. A higher bitrate means a larger output file.

Audio: Use the checkbox to enable or disable audio on the recording.

Click **Save Settings** when you have finished making changes.

Recording Setup

To access the recording setup window, click **Setup** and then **Recording Setup** on the left side of the screen.

You can use this page to set a quota for recordings. By default, the NAS will keep the last 7 days of recordings and automatically overwrite them. Click the **Estimate Required Space** button to let the software calculate, based on your settings, how much space will be required each day. This can assist you in making a decision about how much space to allocate to the recordings.

Event Record allows you to specify a lead-in time in seconds to pre-record and a lead-out time to continue recording before and after a scheduled recording.

Use the **Record Mode** radio buttons to select how you want to record. If you select to record by schedule, you will be able to set a schedule using the graph below. Click on the color of the function you want to perform and then click in the box for the day and time that you want it to perform that function. **Always Record** means that the camera will always record for the specified period, **Motion Detection** will wait for motion on the camera to be detected before it begins recording and **Manual Record** requires you to manually click a record button to begin recording.

Click **Save Settings** when you have finished making changes.

Recording Setup

When using the **Record by Schedule** mode together with the **Motion Detection** function, you must first click the **Go to Web** link and log in to the camera's web interface and enable the motion detection function on that camera. Please refer to the manual of your camera for more information on enabling its motion detection function.

Camera List

Index	Name	Address	Used/Quota	Motion Detection
1	DCS-5230L	172.19.96.67	8.13 / 100 (GB)	Go to Web
2	DCS-942L	172.19.97.35	78.80 / 100 (GB)	Go to Web
3	DCS-1100L	172.19.96.102	19.07 / 100 (GB)	Go to Web
4				

To the right is an example of a camera's motion detection configuration page.
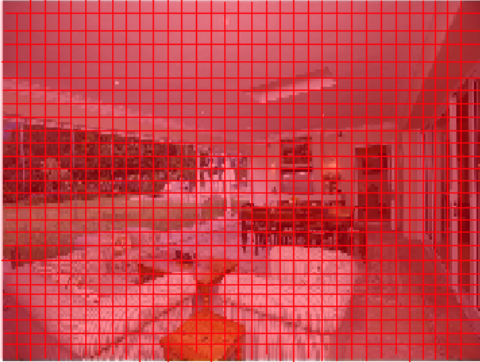
MOTION DETECTION

This section will allow you to enable or disable motion detection function, draw or erase motion area, as well as configure the sensitivity setting of your camera to detect movement. You must select the checkbox of 'Enable Video Motion' to turn on the feature.

Save Settings   Don't Save Settings

LIVE VIDEO

☑ Enable PIR
☑ Enable Video Motion
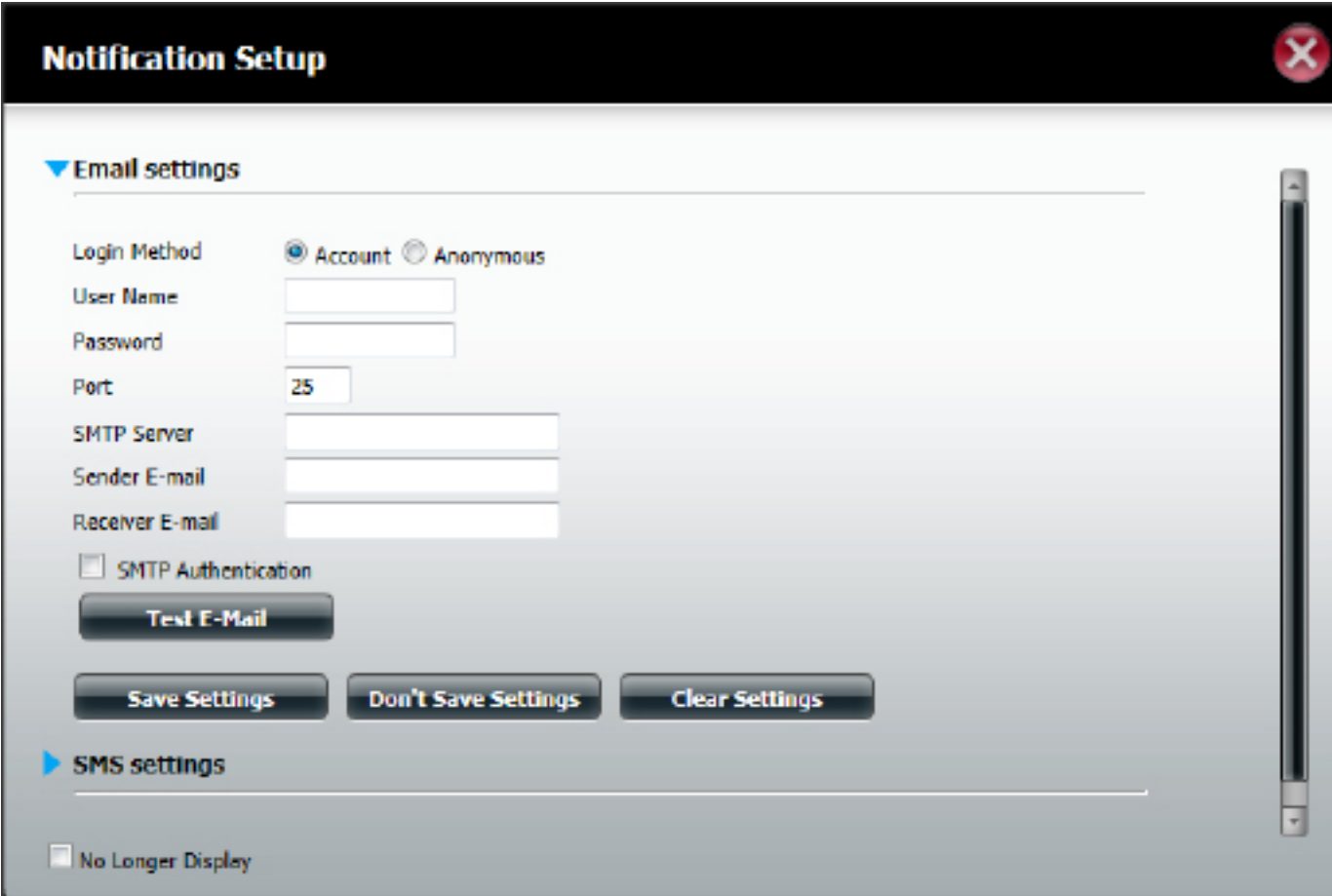
Sensitivity

90   0~100%

Drawing Mode

◉ Draw motion area

○ Erase motion area

Clear

Notification Setup

To access the **Event Setup** configuration, click **Setup** on the left side menu and then select **Event Setup.** If you have not already set up the **Email Settings**, the following window will be displayed. You can turn this off by checking **No Longer Display** at the bottom of the screen.

Enter the details of your mail server if you wish to use the mail notification service and click **Save Settings** to continue.
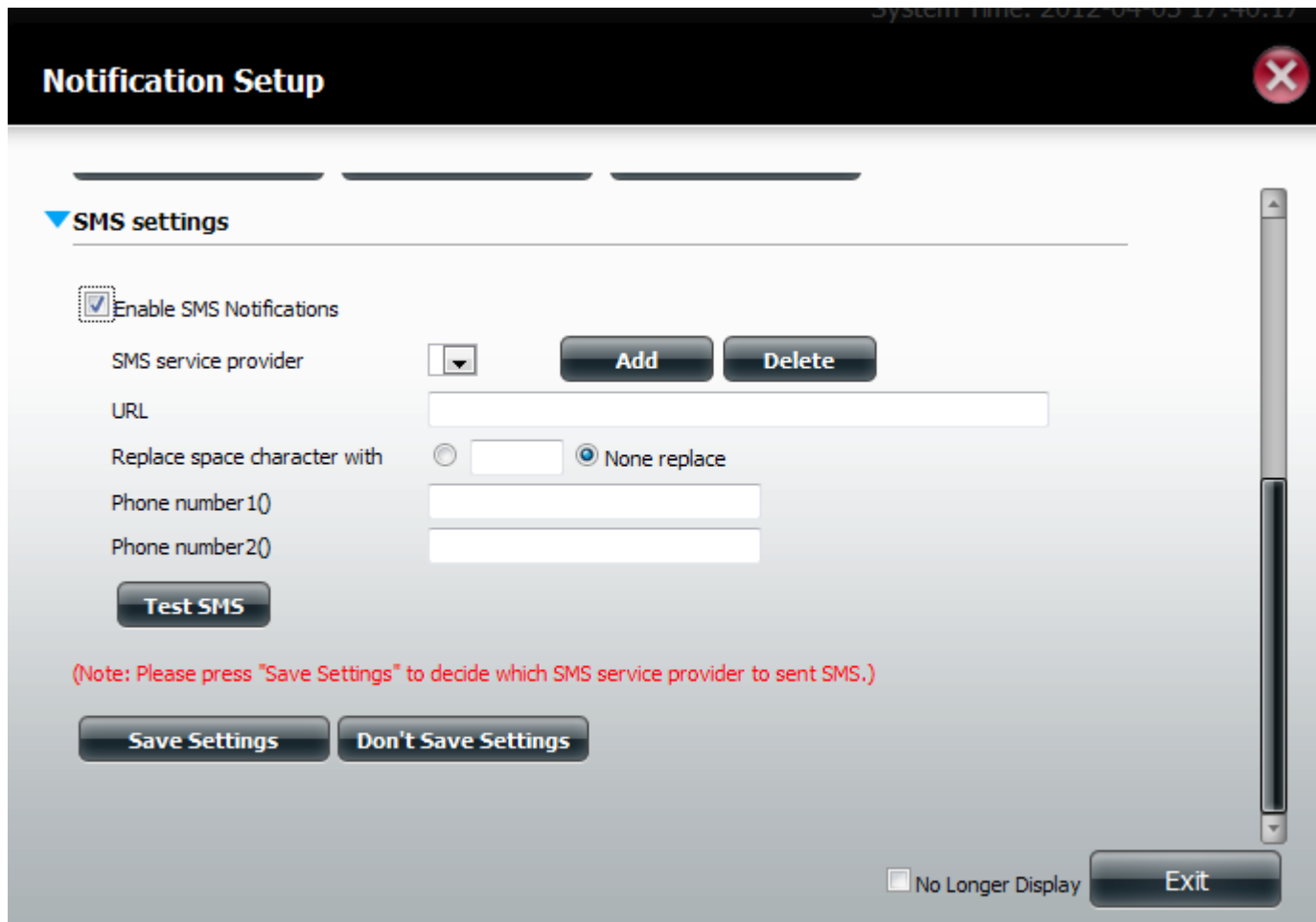
SMS Setup

Click the blue arrow to the side of the SMS settings to enlarge the configurations panel. Click the checkbox next to **Enable SMS Notifications** to enable this service. From the drop-down list select your Service Provider. If your service provider is not on the list, click **Add** to configure.

Next, enter the **SMS url** where you will have the SMS's sent. Replace or ignore the space character. Enter the phone number. Click **Test SMS** to test whether this function works and click **Save Settings** to authenticate your SMS configuration.

Event Setup

Once you have configured the Email and/or SMS settings, you have the option of selecting to be notified when certain events occur. The web page column indicates that you will be notified on the Live Video screen in the top right corner when the connection to the camera is lost and when it is resumed.
Use the **Advanced** button to access the Email and SMS settings page.

Remember to click **Save Settings** when you have finished making your changes.

▼ Event Setup

Advanced

Type of Event Notification	☐ E-Mail	☐ SMS	☑ Web Page
New Camera Add	☑	☐	☐
Camera Delete	☐	☐	☐
Connection Lost	☐	☐	☑
Connection Resumed	☐	☐	☑
Recording Failed	☐	☐	☐
Motion Detected	☐	☐	☐
Digital Input/Output	☐	☐	☐
Archive Limit Reached	☐	☐	☐

Save Settings   **Don't Save Settings**

E-map Upload

The E-map function allows you to upload an image of a map of your premises and plot the location of each camera so you know where each camera is and where it is pointing. Accepted image formats are .jpg, .bmp, .gif and .png.
Click and drag a camera from the camera list on the left to the image. When you have placed the camera in the correct location, double-click the icon to change the orientation of the camera.

Click **Save Settings** when you have finished.

Backup Setup

Create New Backup
The Backup Setup page allows you to configure the ShareCenter NAS to backup and restore the IP Camera recordings. Enter a folder name in the **Folder** field and use the **Browse** button to select a destination on the NAS for the backup or restore. Use the **Start Date/Time** and **Stop Date/Time** fields to enter the time and date range that you want to create the backup for. Next, select the cameras you want to backup or restore by clicking the checkbox for the respective camera.

Archive
When you have created a new backup, it will appear in the Archive section. From here you can check which archives to include in the playback list on the playback screen by adding or removing a check from the **Playback List** column. If you want to delete the archive, click the trash can icon for the folder you want to delete.

Server Port Setup

This page allows you to modify the ports that the Live Video Server, Playback Server and Config Server operate on. You may wish to do this if you have port restrictions on your local network. To change the port numbers, use the provided fields and click **Save Settings**.

▼ **Port Setup**

Live Video Server	Playback Server	Config Server
8070	21046	21075

Server Port Settings

Live Video Server Port: [8070]

Playback Server Port: [21046]

Config Server Port: [21075]

[Save Settings]   [Don't Save Settings]

Camera Status
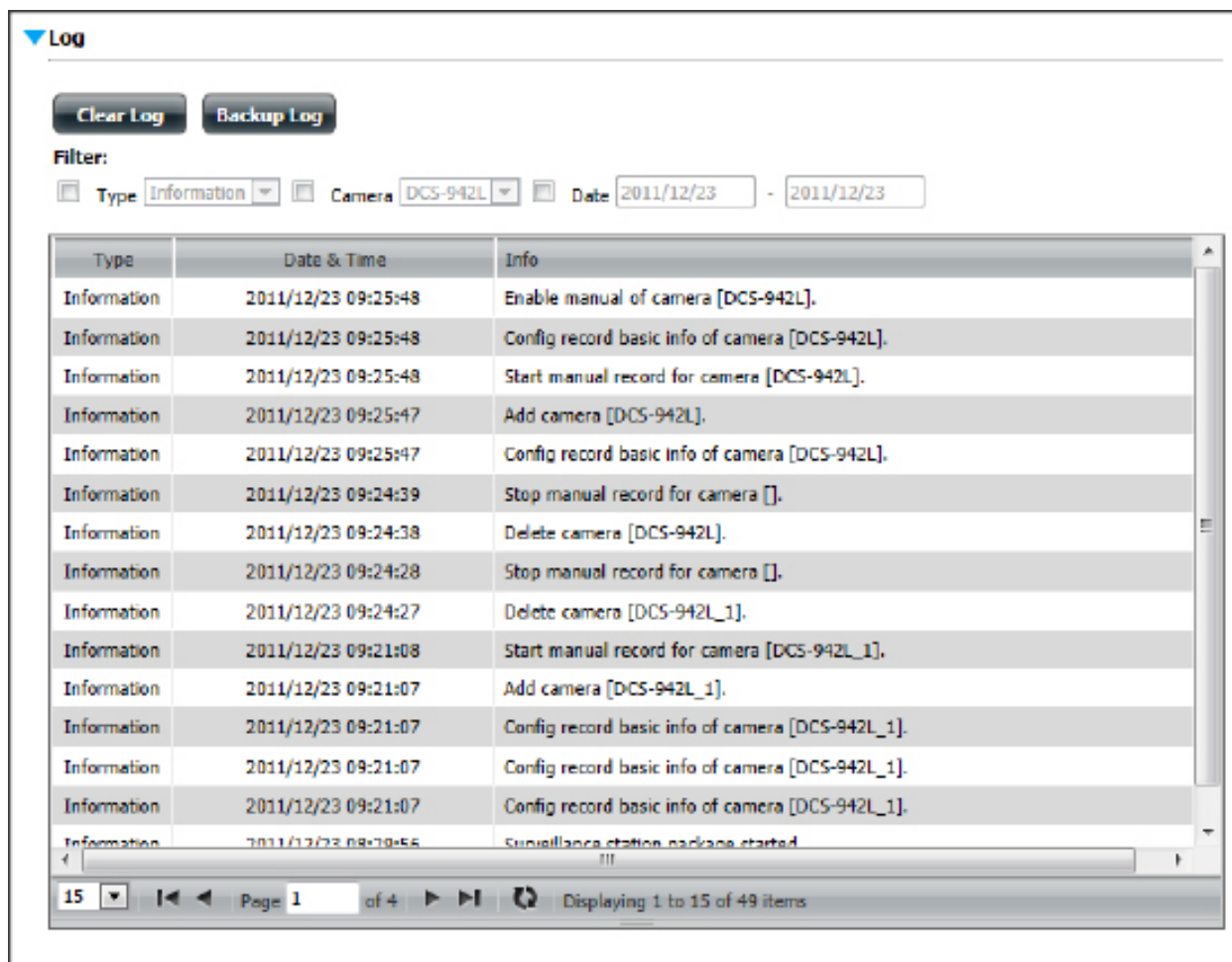
To access the camera status page, click **Status** and then **Camera Status**. This page shows you a list of your network cameras and their connection status, recording status, frame rate and bit rate.

▼ Camera Status

Index	Name	Address	Connection Status	Recording Status	Frame Rate	Bit Rate
1	DCS-2103	192.168.189.178	Connected	Motion Detection	1 fps	1149.69 Kbps
2	DCS-2210	192.168.189.67	Connected	Event	12 fps	2537.1 Kbps
3	DCS-5230L	192.168.189.152	Connected	Always	5 fps	471.8 Kbps
4	DCS-2230	192.168.189.173	Connected	Motion Detection and Event	14 fps	923.7 Kbps
					Total:	5082.3 Kbps

Log

To access the log page, click **Status** and then **Log**. The log page shows a history of all significant events of the Surveillance Center software. You can filter the events shown in the log by checking the checkbox for **Type, Camera** or **Date.** You also have the option to backup the log to a text file and clear the log.

Live Camera Panel

Live Camera Panel Explained I

- Live Video Camera 1
- Live Video Camera 2
- Camera Status
- Camera View Mode
- E-map & Snapshot Button
- Mute & Volume Slider
- Pan-Tilt-Zoom Mode
- Patrol Mode for PTZ Cameras
- Digital Zoom Mode
- Manual Recording & General Settings Tab
- Current Camera IP Address, Name, Status, & Bit Rate
- Stop & Start Camera Mode
- Live Video Camera 3
- Live Video Camera 4

Live Camera Panel Explained II

Use these buttons to stop or start the operation of the selected camera.
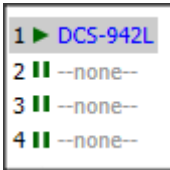
These icons show the status of each camera and allow you to double-click to toggle the status of each camera.

These icons allow you to switch the camera view to display a single camera view or up to 4 network cameras. The bottom two icons let you display the actual image size and make the image full screen on your monitor. In full screen mode, press Escape to return to the user interface.

The mute button can be used to mute the sound from the camera and the slider bar to adjust the volume.
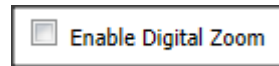
For cameras that support Pan-Tilt-Zoom control, you can use these controls to direction of the camera.

Use the E-map button to toggle between the live camera view and the E-map display. The snapshot button can be used to take a snapshot of the current frame on the selected camera.

These buttons allow you to begin a manual recording or access the camera settings.

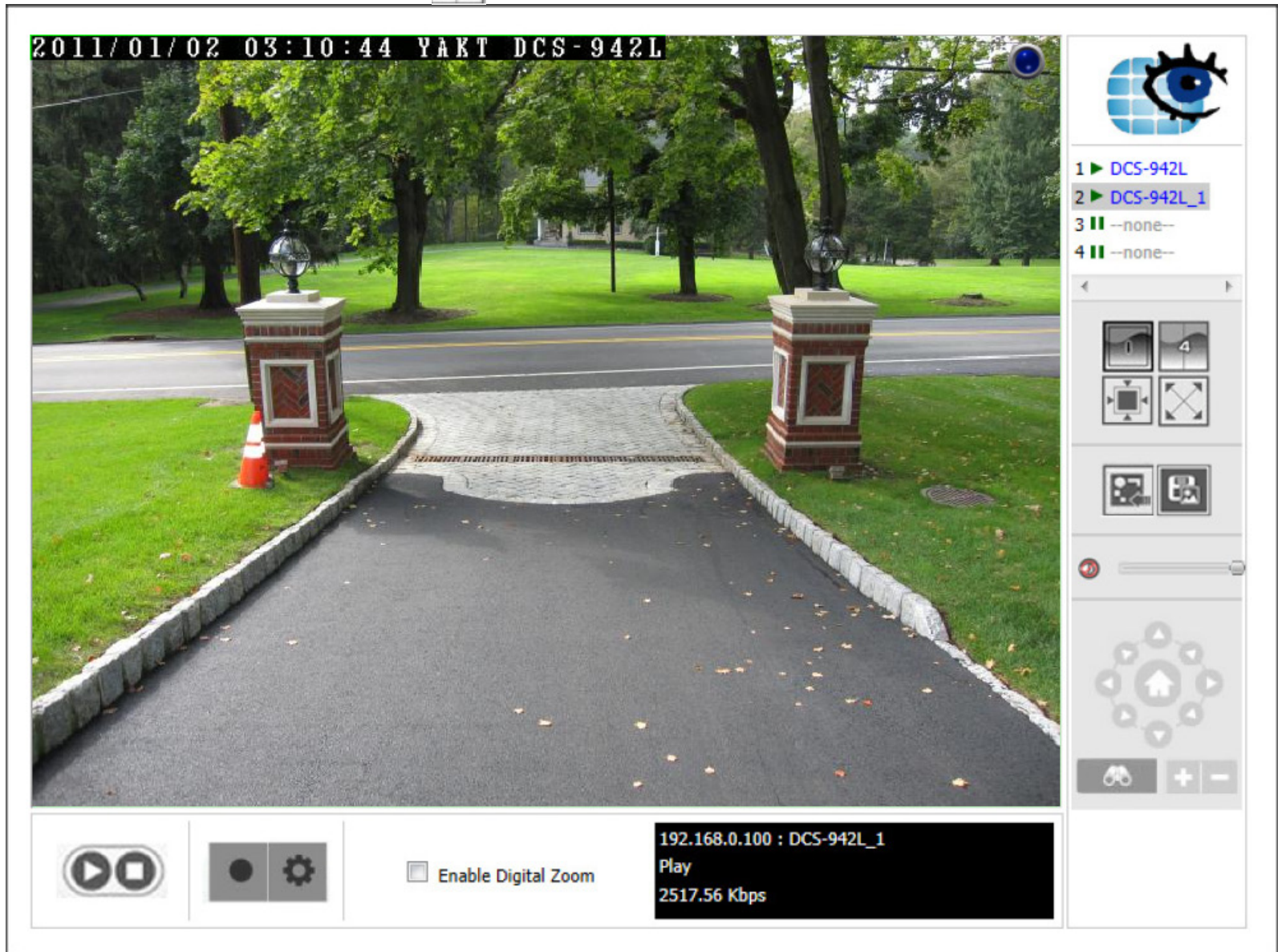Enables digital zoom on the selected camera.
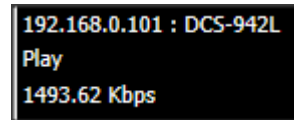
Displays the currently selected camera's IP address, name, status and bit rate.

Displays the current Patrol Radius, sets Preset Point, and directs you to the Preset Point.

Single Camera Live Video Mode

Click [ ] this button to enter **Single Camera Mode**. The viewing angle expands to cover all other camera real estate. Click this button to return to **Split Camera Mode**. [ ]

Full Screen Live Video Mode

Click ⊠ this button to enter **Full Screen Camera Mode**. The viewing angle expands to cover the entire screen. Click this button to return to **Split Camera Mode**. This can be done in **Split Level Mode** and **Single Camera Mode**.
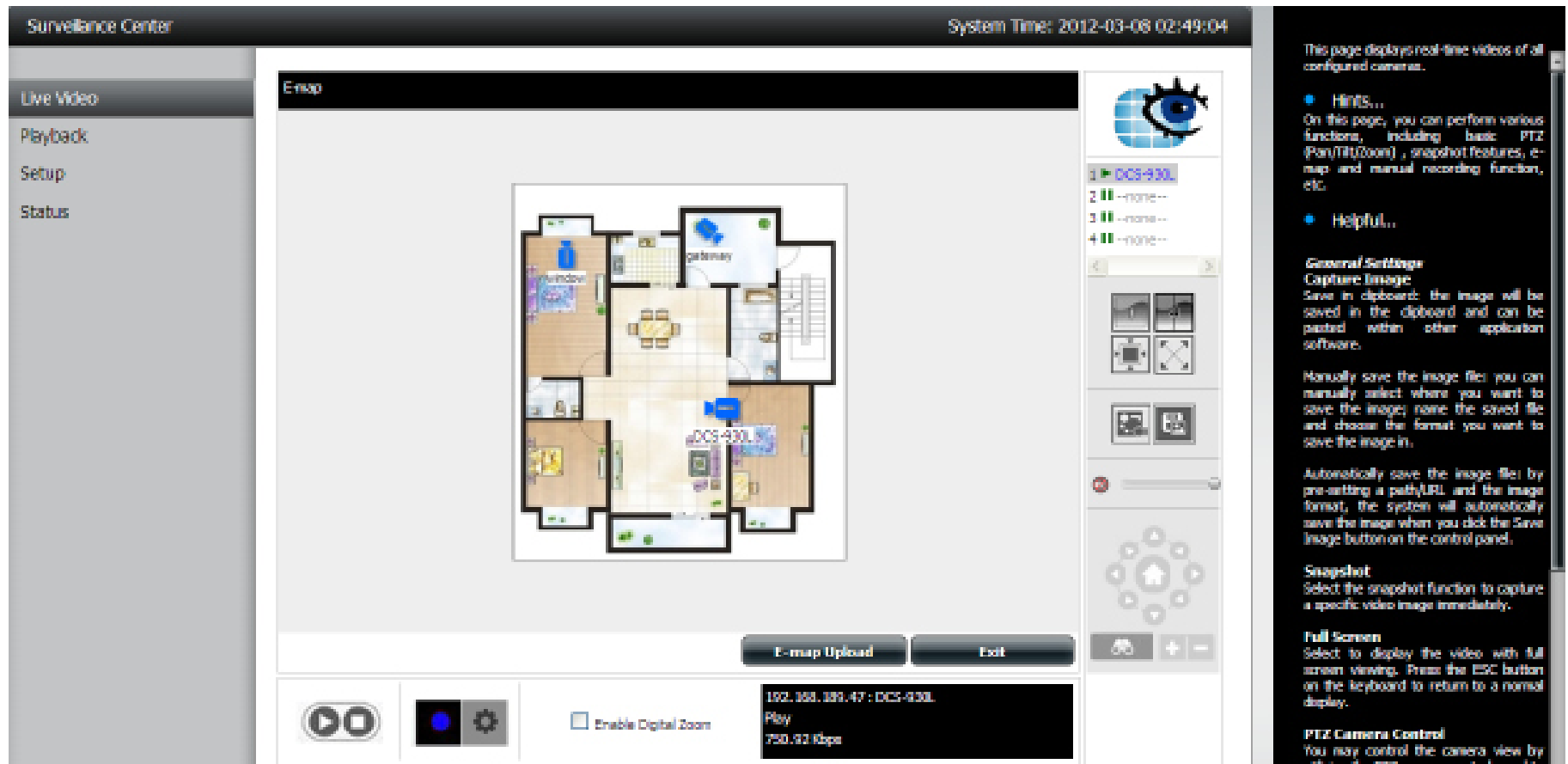
Digital Zoom Video Mode

When **Enable Digital Zoom** is checked, the software allows you to zoom in and out on an area of the image. You can place the mouse pointer in the bottom right corner of the image to click and drag the box around to view different parts of the video. You can also click directly on the part of the main image you want to focus on. Use the mouse wheel to control the level of zoom.

E-map View

You can access the E-map from the Live Video screen by clicking the ![button] button. Note: you must have installed e-map JPEG files in order to use this feature. Click the E-map Upload button to upload images into the database. When you click this button you are directed to the E-map Upload window.

Snapshot View

You can access **Snapshot** from the Live Video screen by clicking the [ ] button. This takes a snapshot of your current live screen. You can copy this image to the clipboard by clicking the **Copy to Clipboard** button [Copy to Clipboard] or you can save the image to disk by clicking the **Save Image** button. [Save Image] Click the **Close** button to exit this mode.
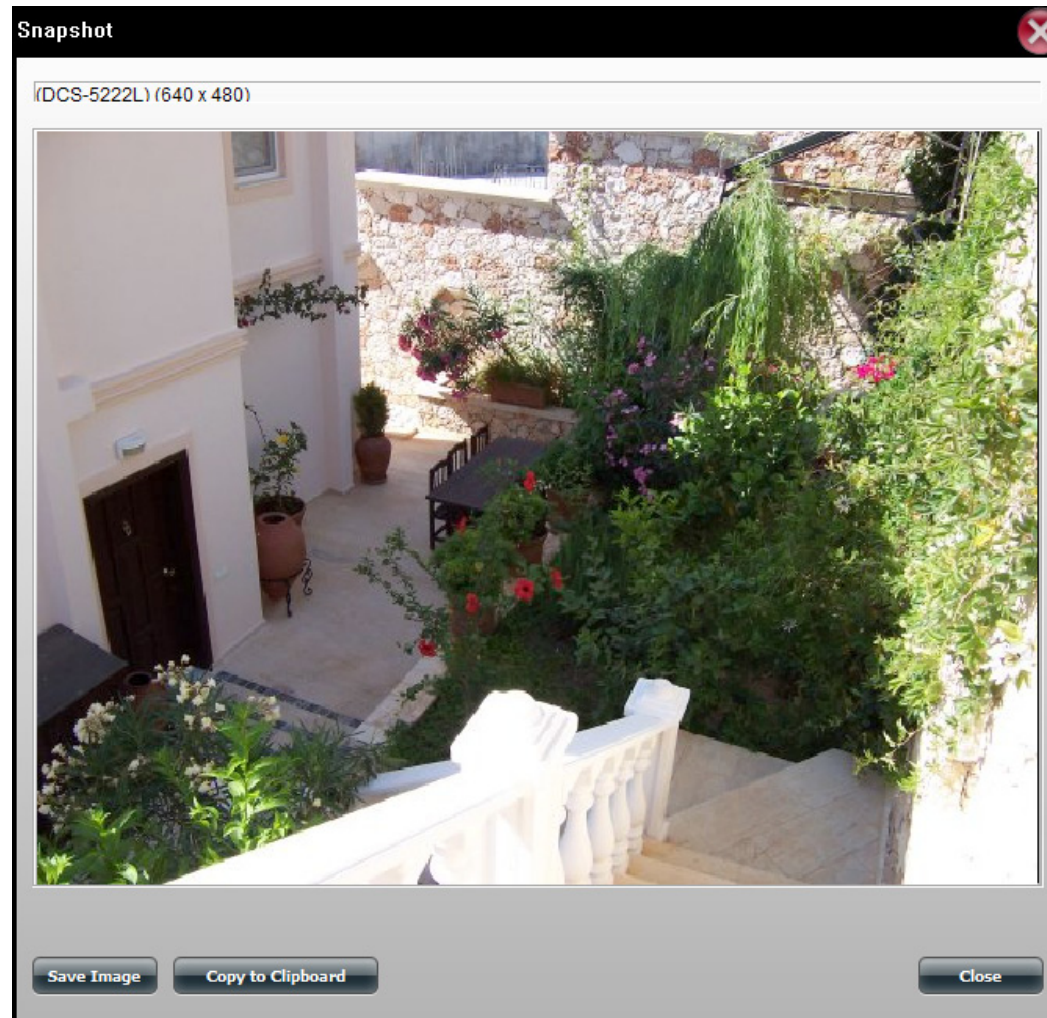
Motion Detection Camera Mode

If the camera is configured to record when motion is detected, the camera icon on the E-map will change to red when an alarm is sounded or motion is detected, as shown below. When motion is detected or an alarm is triggered, click on the red camera icon on the e-map to play the recorded event.

Configuring Patrol Settings

Patrol Settings are dependable upon the camera you are using. The Surveillance Center works with the following D-Link PTZ cameras: • DCS-5230/5230L, and DCS-5222L/5211L (Patrol Once). Click the Patrol icon ⊙ to configure the Patrol settings. Scroll down and click **Set Patrol**. The **Patrol Setup** window pops up.
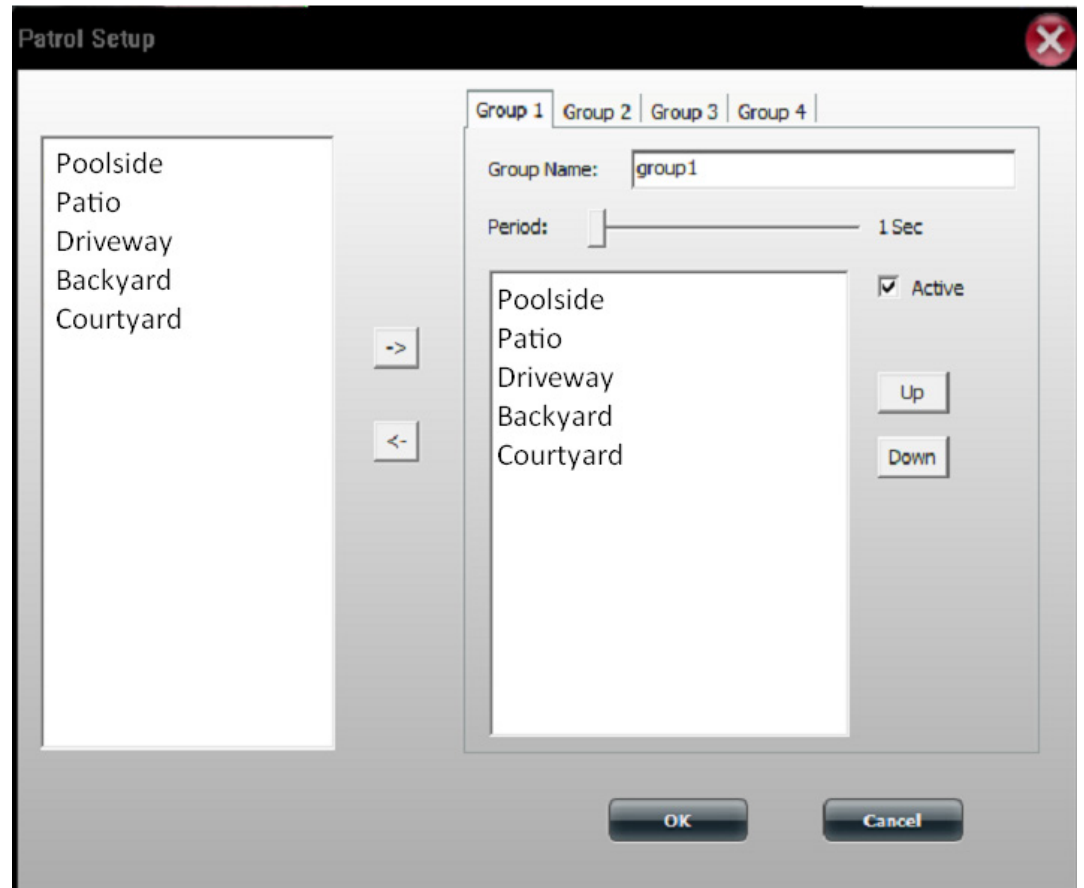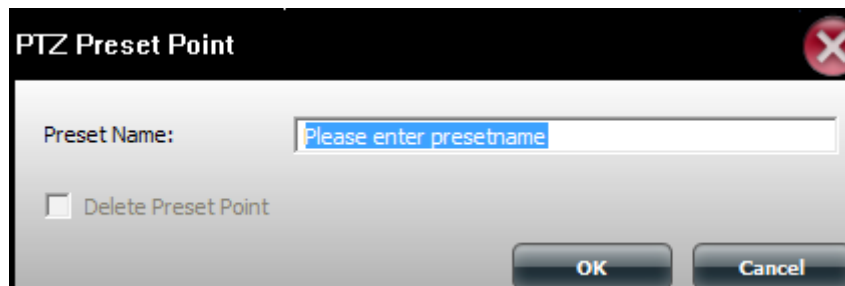
Configuring Patrol Preset Points

Click the **Preset Point** icon. create a new **Preset Point**. click **OK**.

A drop-down list appears. Select **Clear All** to clear the list or select **Add Preset Point** to This brings up the **PTZ Preset Point** box. Enter a **Preset Name** and
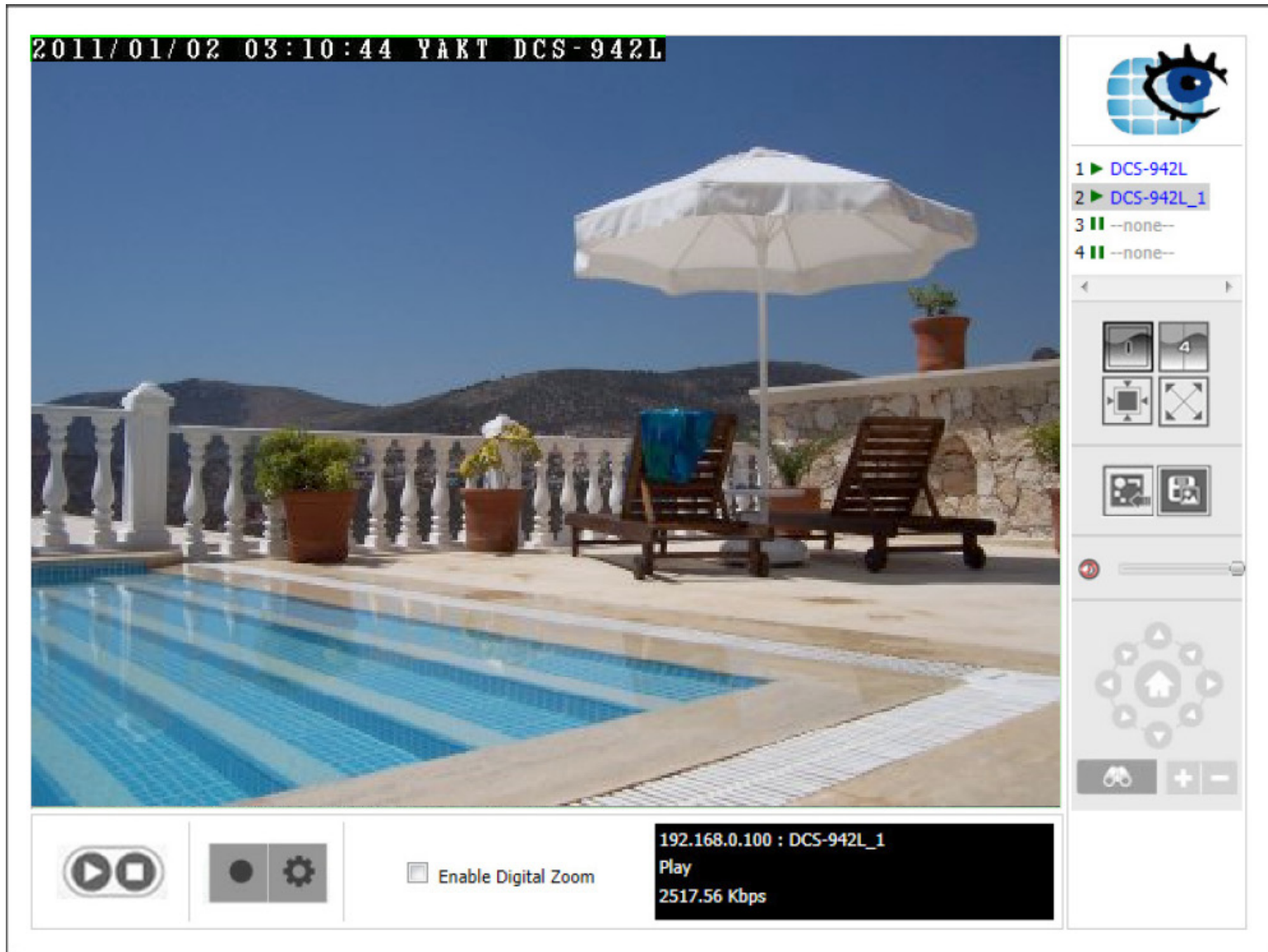
To edit the **Presets** click the **Preset Point** icon and select whichever preset you wish to delete.
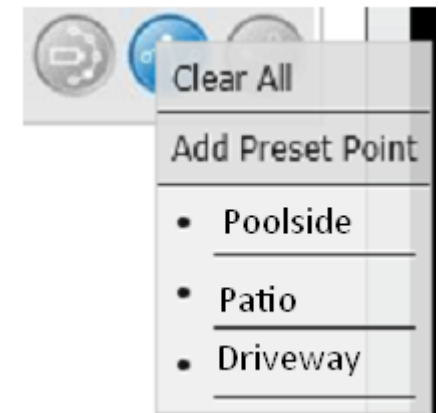
Viewing Preset Points

Click the **Go to Preset Point** icon.   This icon directs the camera to the designated points.

Live Video/Playback Settings

You can access this window from the Live Video window by clicking the Settings ⚙ button.

Record Display

The **Record Display** function is only available when accessed from the Playback screen. The Record Display options allow you to modify what is displayed when using the Open Recording button on the Playback screen, a calendar month highlighting dates with recordings or a simple list of folders with recordings.

Capture Image

This allows you to select where to save the snapshots taken using the snapshot button on the live video screen and the format they are stored in.

Click **OK** when you are done to ensure settings are saved.
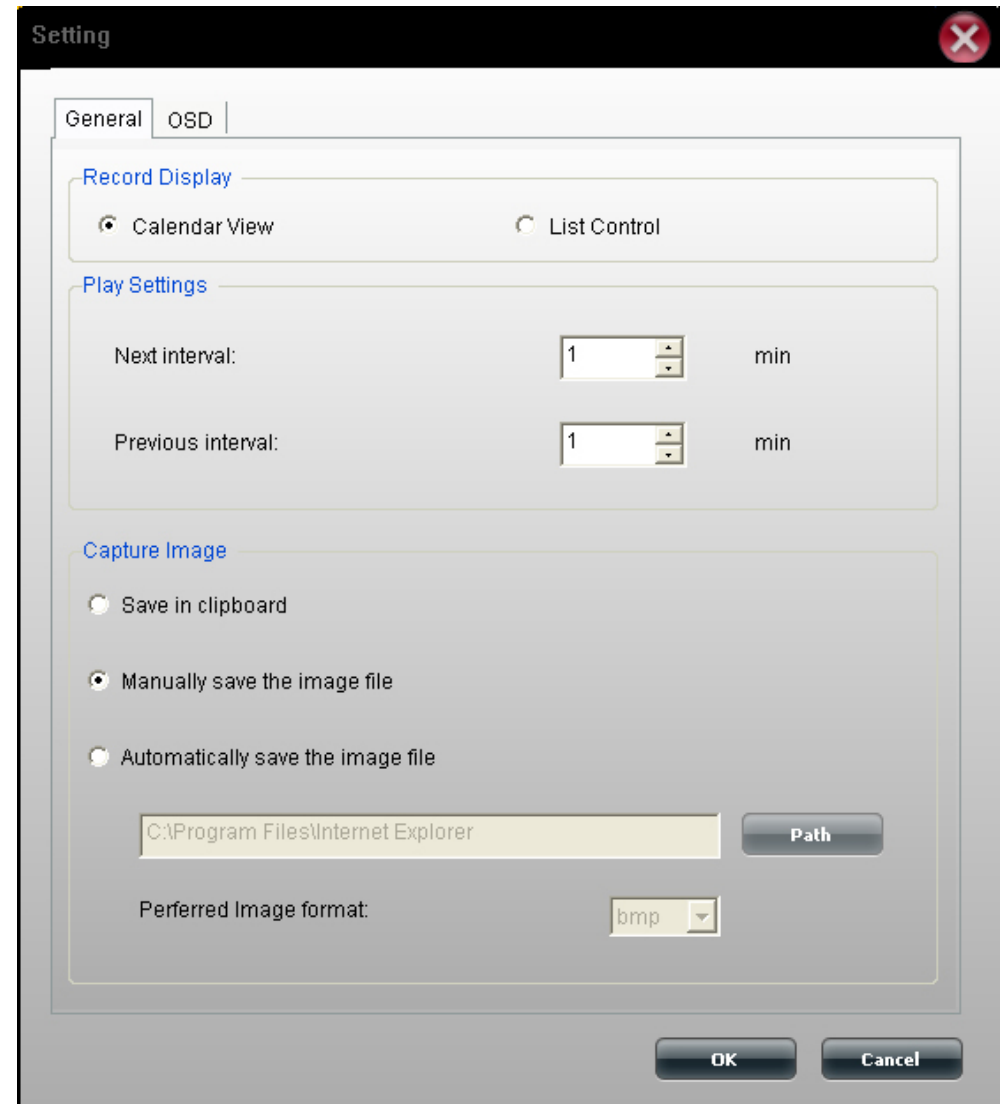
OSD Settings

You can access this window from the Live Video window by clicking the Settings ⚙ button and then selecting the OSD tab at the top. The On Screen Display Settings window allows you to adjust settings for the display of an overlay of information on the video.

If you want to enable this overlay, click **Enable camera OSD**.

You can adjust the font type, size and color in the Foreground box. There are also options to make the text bold and choosing the edge option will apply the selected color to the text.

In the background section you can select a color and the level of transparency.

The information box allows you to select the information to display. You may display the camera name, camera number, the date and time. There are several date and time formats to select on and this may be done by using the drop down menus.

If you have made changes and want to revert back to the default settings, click the **Default** button at the bottom.

Click **OK** when you are done to save your settings.
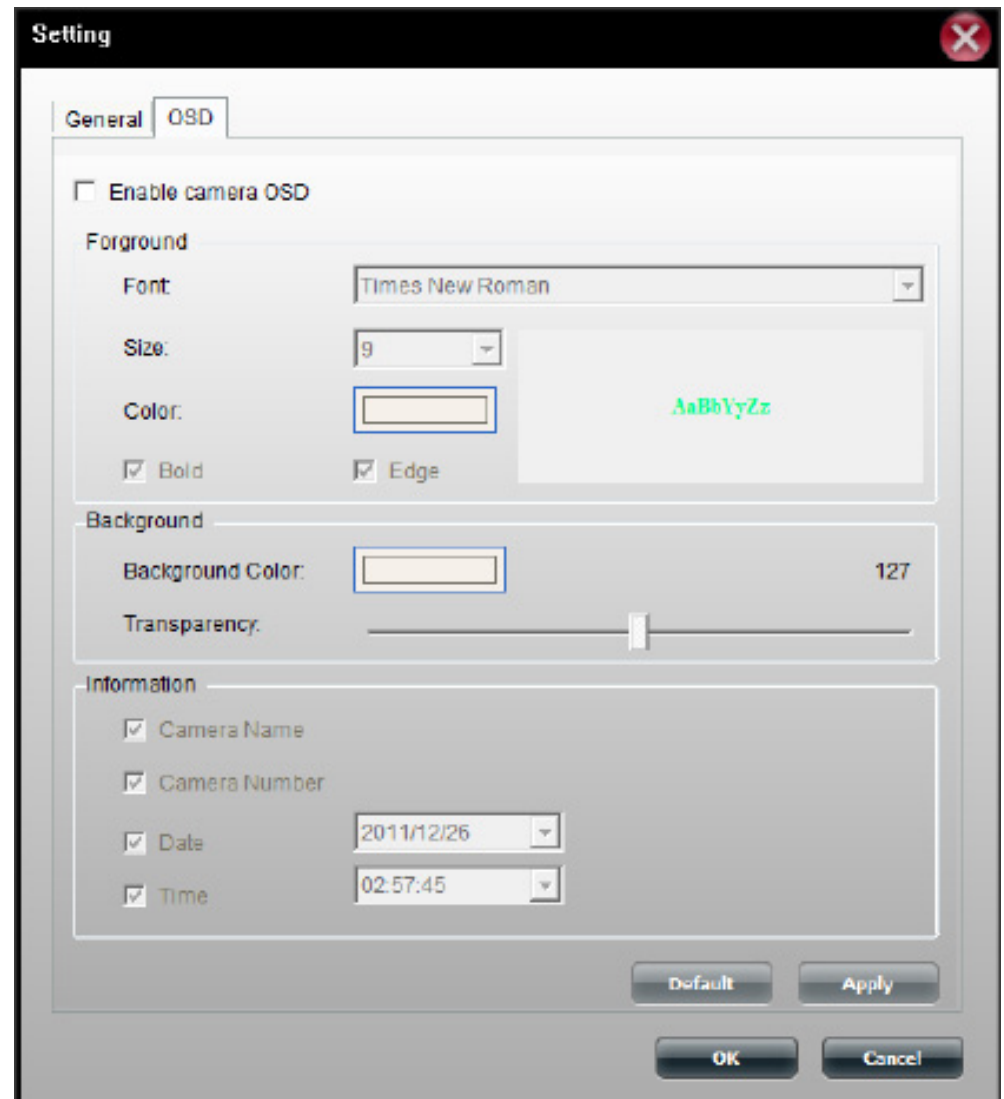
Playback

The Playback screen is where you can view recordings from the cameras.

Use this button to open a video recording. See next page for more information.

These icons allow you to switch the camera view to display a single camera view or up to 4 network cameras. The bottom two icons let you display the actual image size and make the image full screen on your monitor. In full screen mode, press Escape to return to the user interface.

The Settings button takes you to the previously described Settings screen allowing you to adjust display and image capture settings. The snapshot button can be used to take a snapshot of the current frame on the selected camera.

The mute button can be used to mute the sound from the camera and the slider bar to adjust the volume.
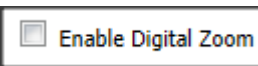
Enables digital zoom on the selected camera.

The playback controls are used to play, stop, pause or skip through video recordings. You can also adjust the playback speed and zoom levels.

This area displays the time and date of the recording, the playback speed and the current state of playback.

Record Information

When you click the Open Recording button on the Playback screen, you are presented with this screen. This screen allows you to see at a glance, the recordings that have been made with the connected cameras.

Depending on your settings, you may see a calendar month or list of recordings by date at the top left of the screen. Use this calendar or list to select a recording. In calendar view, days highlighted in green are ones which have a recording.

In calendar view, clicking the ▣ icon selects the current date, allowing you to browse through calendar months and quickly return to the current date.

The **Playback List** drop down menu provides various options:
Current Recording: This shows camera videos recorded by the Surveillance Center module.
Historic Recording: This shows camera recordings backed up by the user. The number of entries below this will depend on how many recordings you have backed up.

The Date Time Period section allows you to narrow down the time and date for which to show recordings.

The timeline at the bottom of the window plots the selected day and displays the different types of recordings and the times they were recorded. The recordings are all color-coded to differentiate between the types. You can play any of these recordings by simply clicking on the point on the timeline that you want to play. Use the two checkboxes at the bottom of the window to toggle whether to show events and motion detection on the graph.

Click the **Backup** button at the bottom of the window to go to the **Backup Setup** screen described on page 15 where you can backup the selected recording. Click the **Play** button at the bottom of the window to play the selected recording on the main playback screen.

Note: You can backup or play up to 4 selected recordings at the same time.