

# VMS

## Video Management Software Operation

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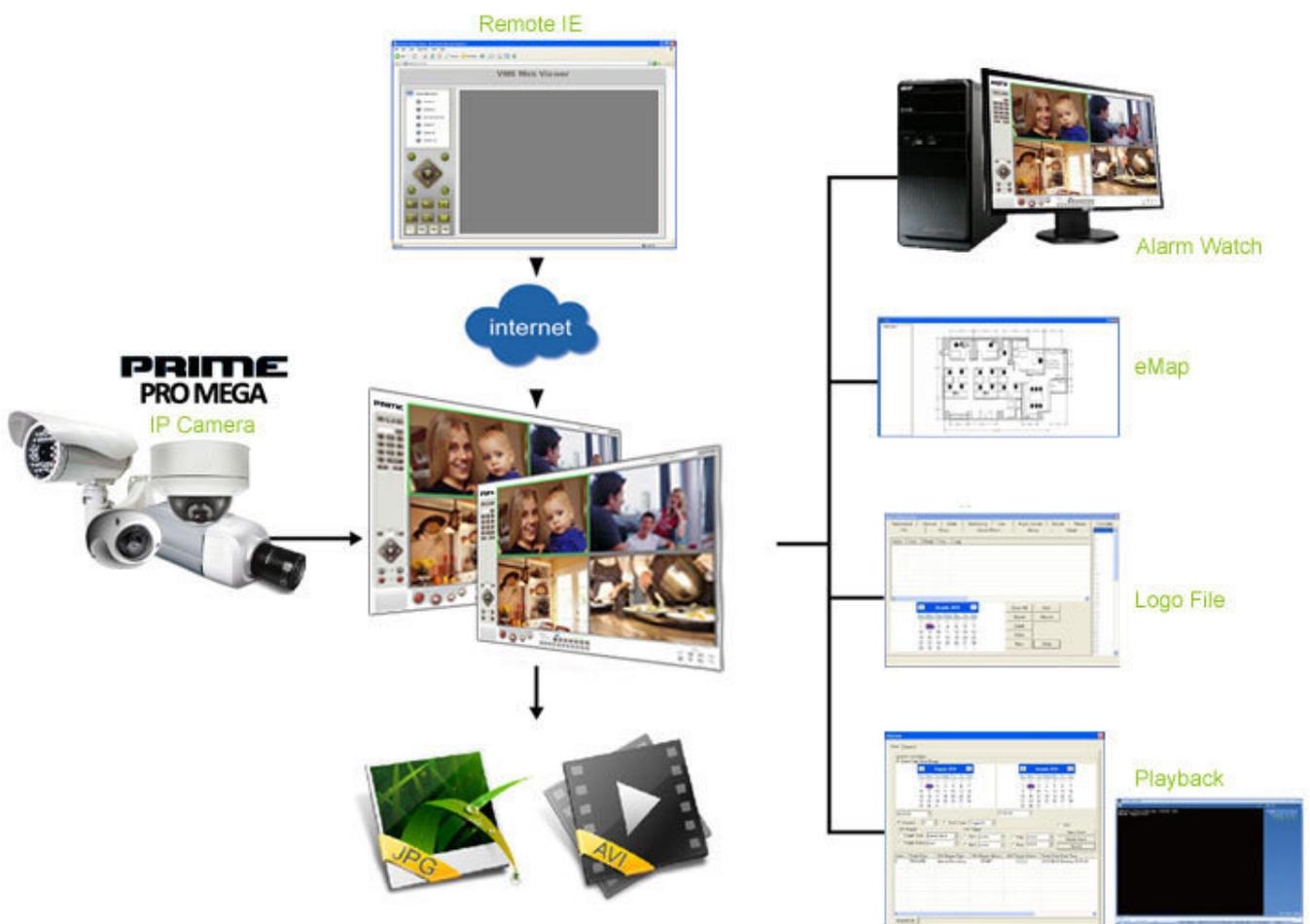
### Introduction

Video Management System (VMS) which supports 4 monitors in the same time to control all cameras, is the free IP Surveillance Software for up to 144 cameras. It provides multi-function to integrate the IP Camera/Video Server including remote monitor, control, record and playback.

VMS also provide the application of Remote Control. No matter where you are, you can remote view and control by I.E Browser. And VMS can use the forward application to become the CMS solution to control many VMS in the same time. Please refer the **Appendix: How to set the VMS Forward Application** to see the detail setting.

This chapter only provides a brief description of VMS system, tools and menu options. For a more detailed description of buttons and functions, refer to the context-sensitive Help.

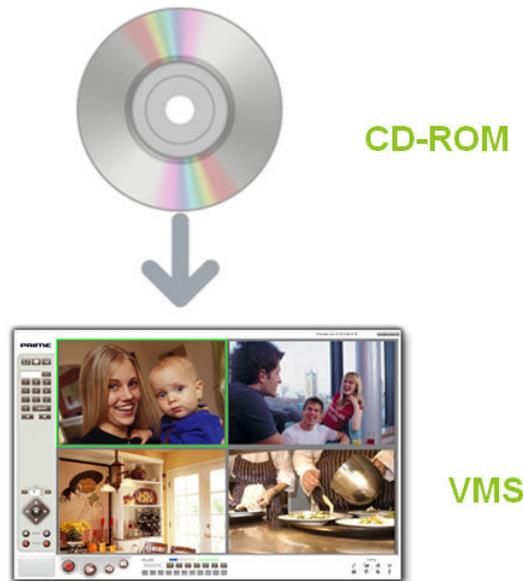
32bit and 64bit compatible, choose one for your system.



### Software Installation

You are now ready to install the VMS (Video System Management). The following pages include details on how to install the IP Surveillance Software into your computer.

Insert the Installation CD of **IP Surveillance Software** from the package what you have. Easy to set up the software by follow the following steps to complete the installation.



There are 3 kinds of program in the Installation CD as below:

- **Video Management System (VMS)**
- **Video Streaming Compression (VLC)**
- **Microsoft Visual C++ 2008 Redistributable Package**
- **K-Lite Codec Pack**



The main program of IP Surveillance Software.



A video player which decode the recording image.



Package installs runtime components of MS Visual C++ Libraries required to run applications (VMS) developed with Visual C++ on a computer



A collection of codec and related tools. It is required to encode and/or decode (play) audio and video.

#### **NOTE:**

Before installing the IP Surveillance Software, make sure your PC and network environment is in compliant with the system requirement.

Please refer to **Appendix: System Requirements** for further description.

### VMS (Video System Management)

Follow the instructions to install the VMS on your computer step by step.

#### 1. Start the VMS Installation.

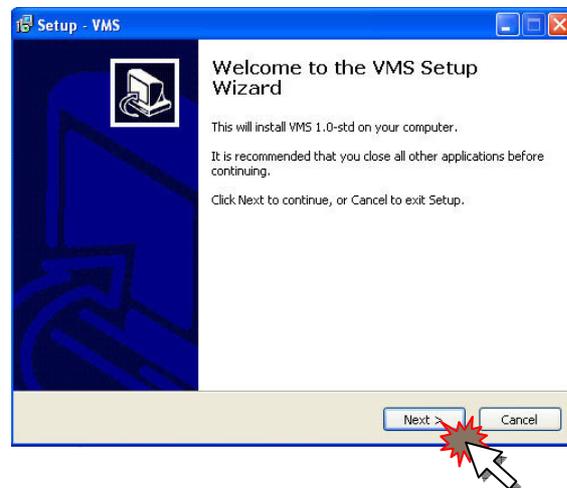
Double click the icon of the **VMS** to install the software.



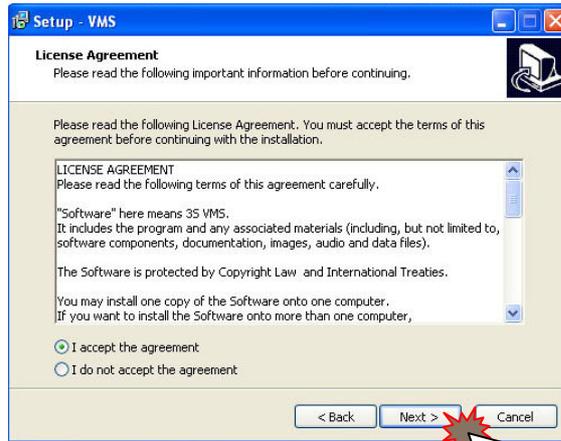
#### 2. Setup Language Selecting

Use this setting to select the language for VMS from English, SimpChinese and TradChinese.

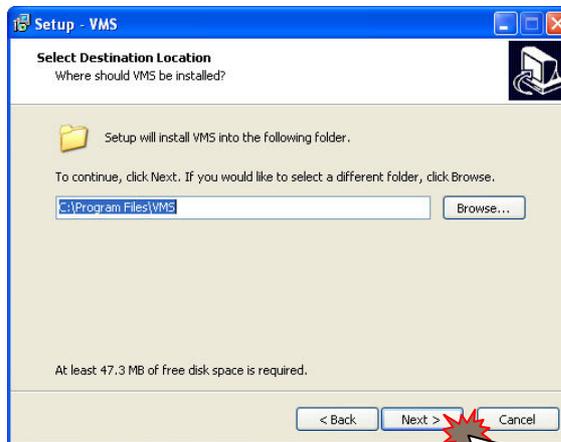
Select the language then click **OK** to enter the setup mode.



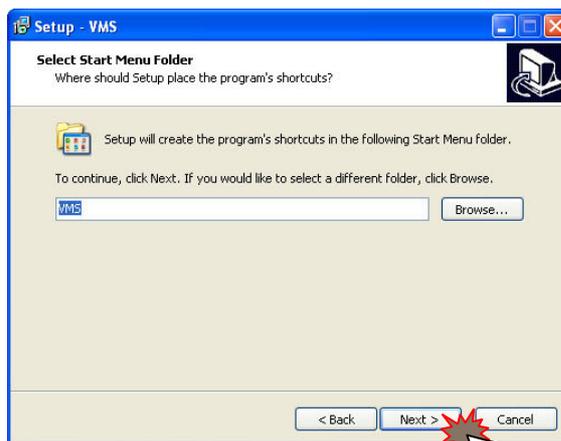
### 3. License Agreement Accepting



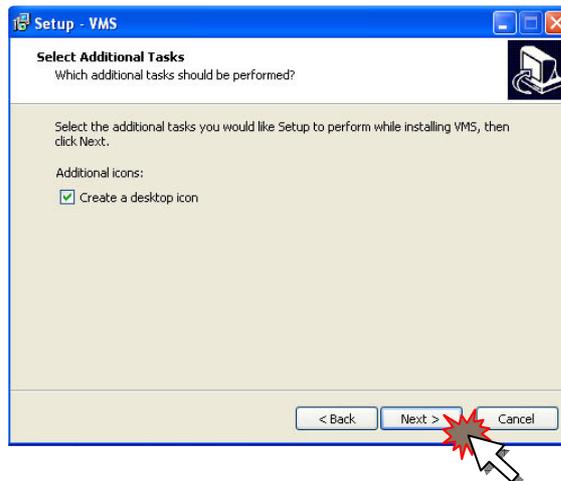
### 4. Destination Location Selecting



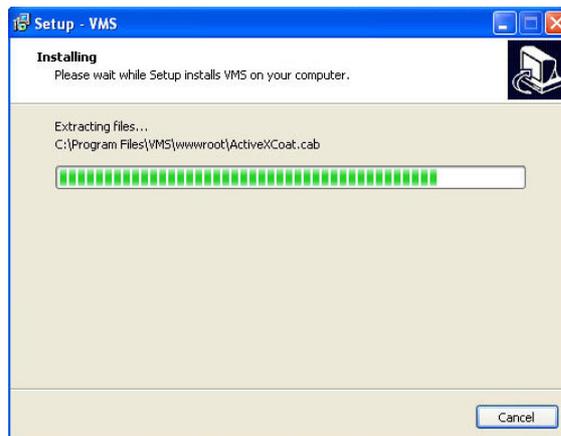
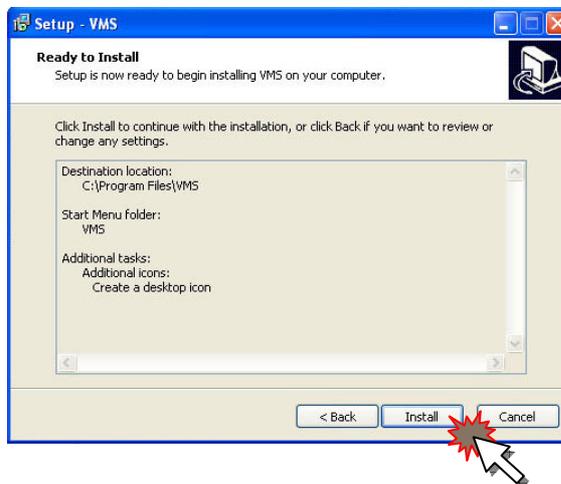
### 5. Start Menu Folder Selecting



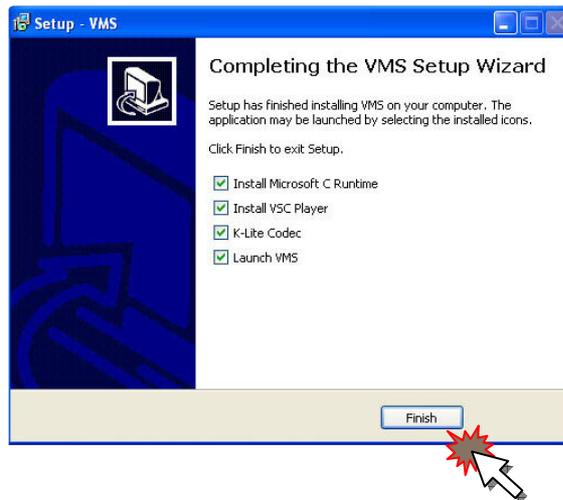
### 6. Additional Tasks Selecting



### 7. Ready to Install



### 8. VMS Setup Wizard Completed



Click **Finish** to complete the installation.

**NOTE:**

It is recommended to install Microsoft C Runtime if your OS is not Windows Vista.

### VLC (VLC Media Player)

After installed the VMS software, keep the checkbox selection to start the VLC Media Player installation.

Follow the instructions to install the VLC Media Player on your computer step by step.

#### 1. Start the VLC Media Player Installation.

Double click the icon of the **VLC** to install the software.

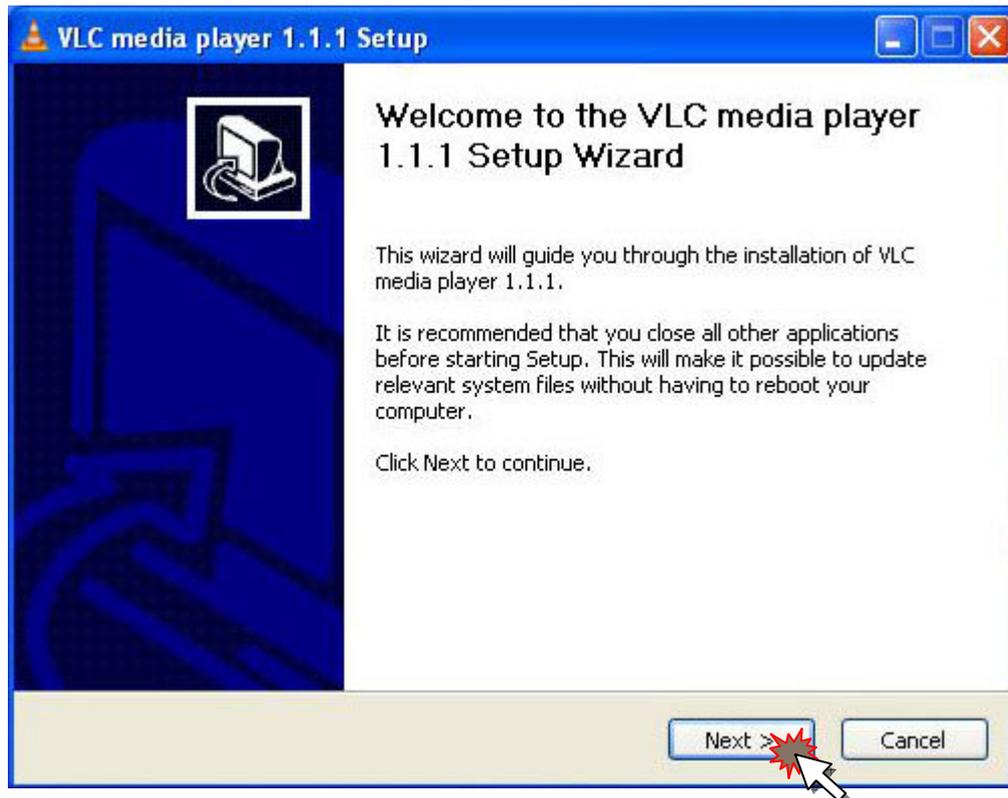


#### 2. Setup Language Selecting

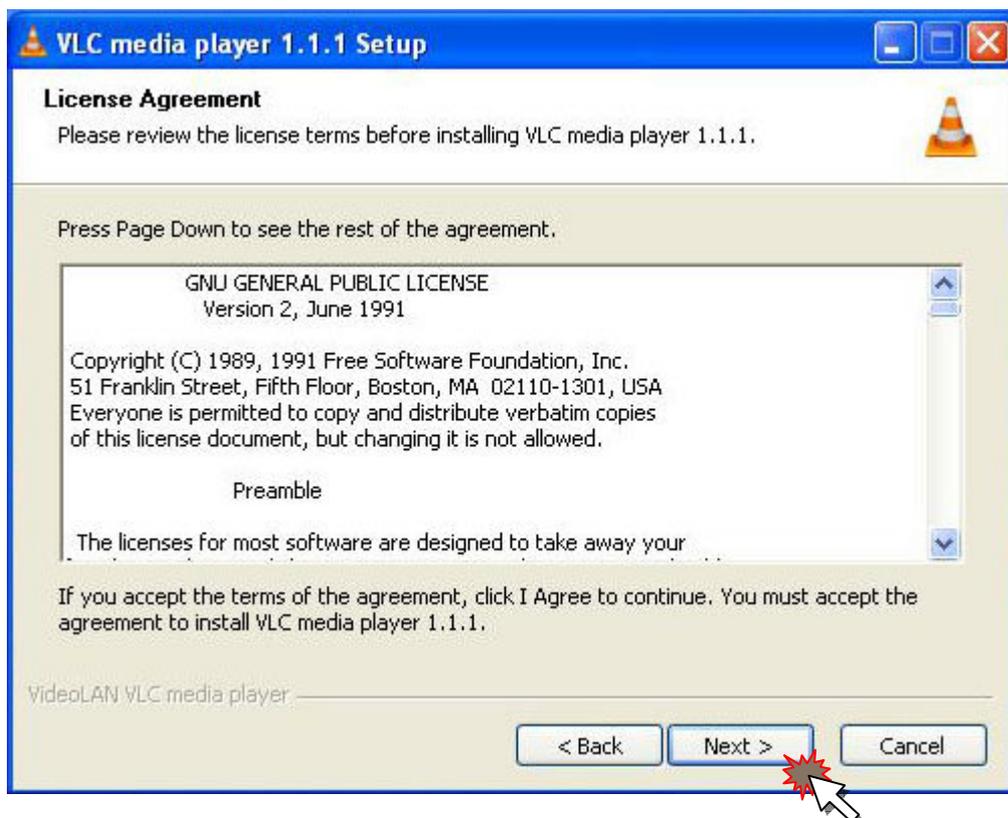
Use this setting to select the language for VLS from Català, Dansk, Deutsch, English, Español, French, Italiano, Nederlands, Norwegian, Português, Português Brasileiro, Suomi and Svenska.

Select the language then click **OK** to continue.

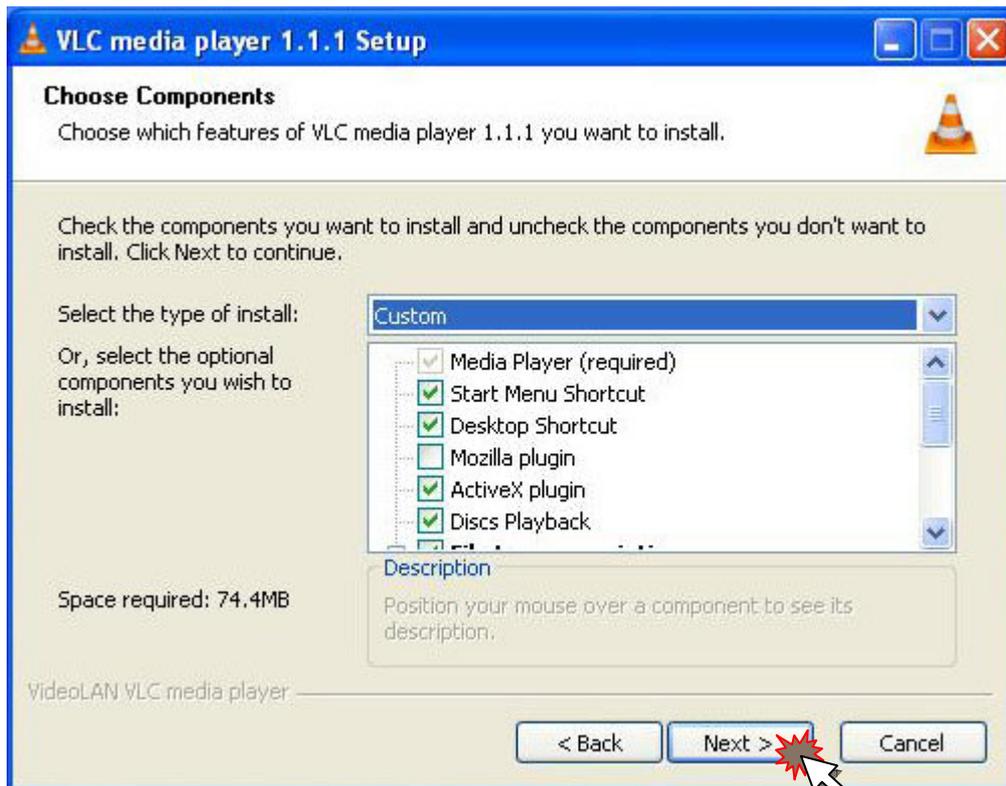




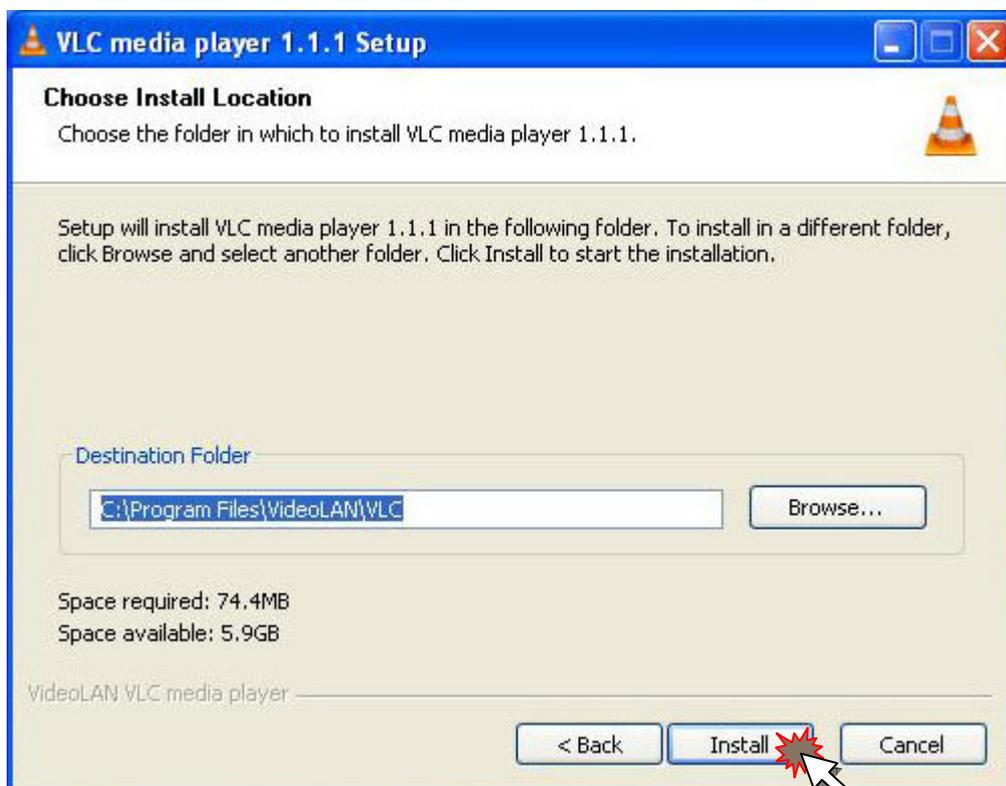
### 3. License Agreement Accepting



#### 4. Components Choosing

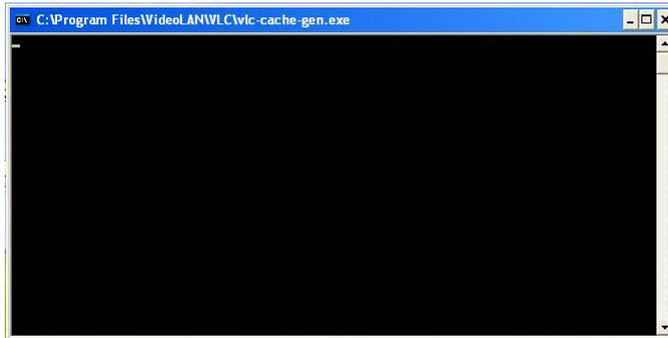


#### 5. Install Location Choosing



### 6. Ready to Install





## 7. VLC media player Completed

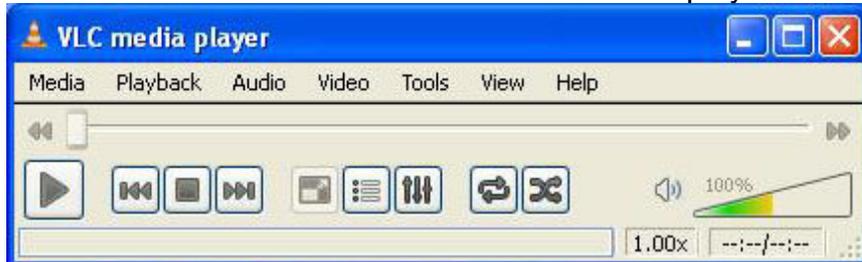


Click **Finish** to complete the installation.

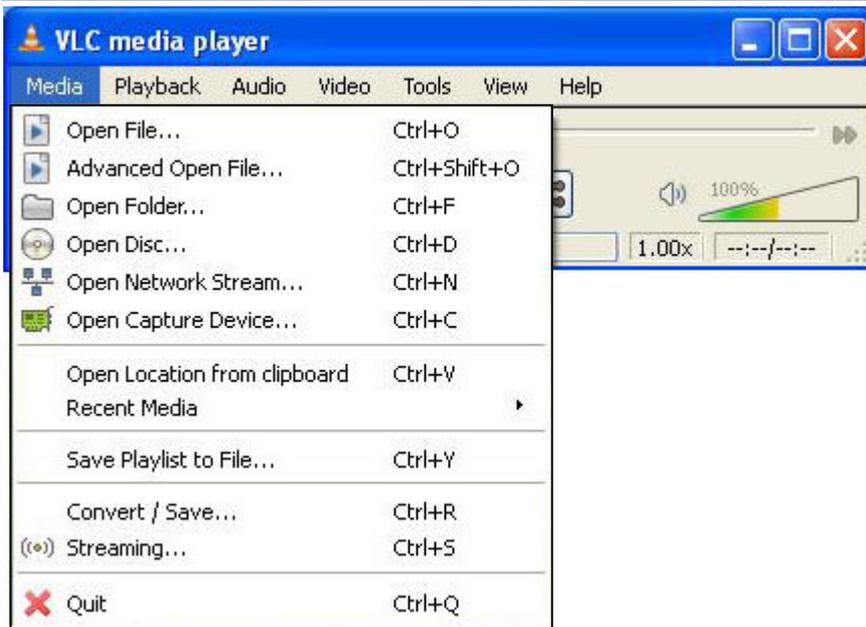
### View of VLC

The basic function of VLC (*VLC media player*) is almost same as the other media player that you have ever seen.

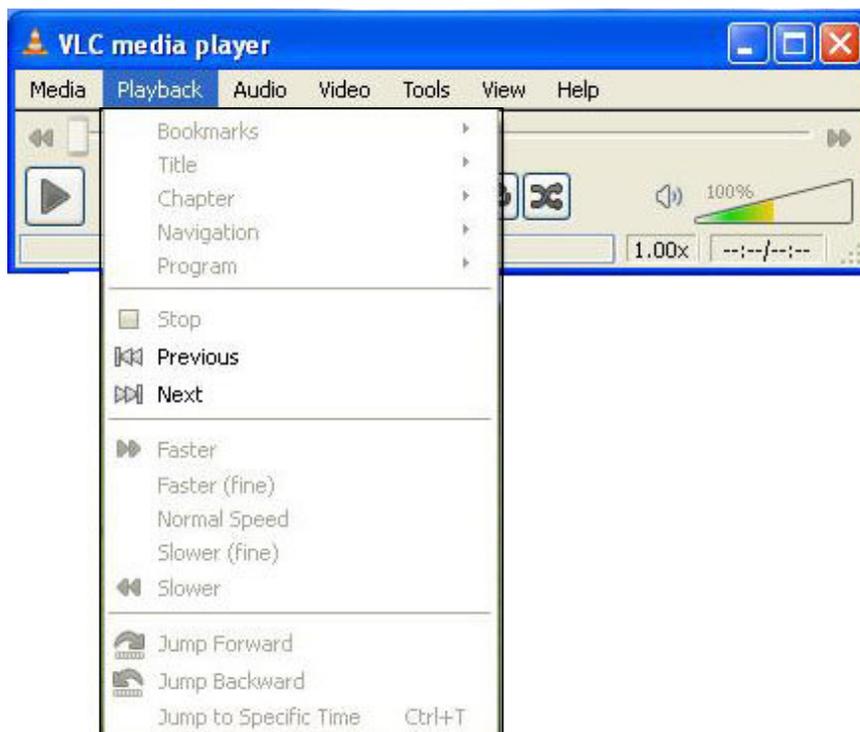
The following pictures illustrate the basic function of VLC media player.



#### 1. Media



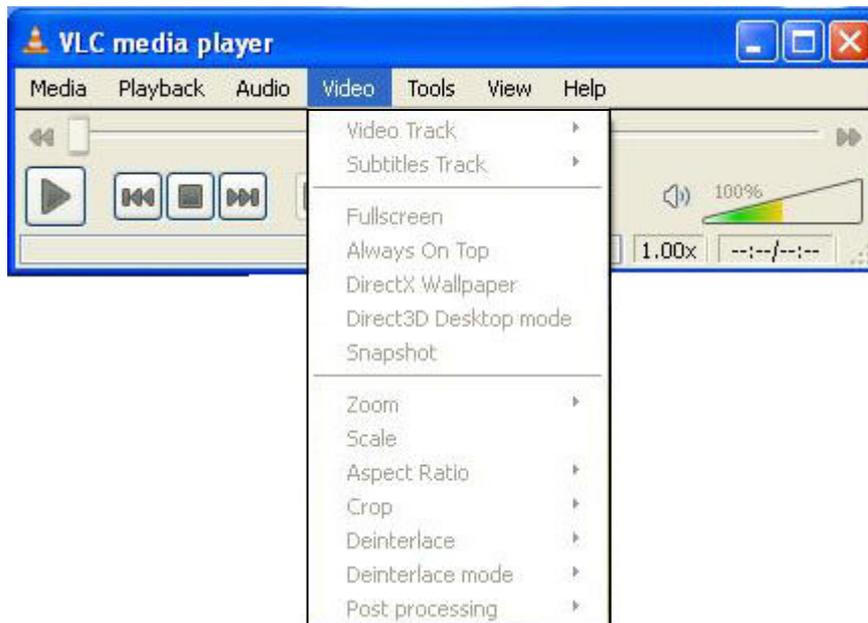
#### 2. Playback



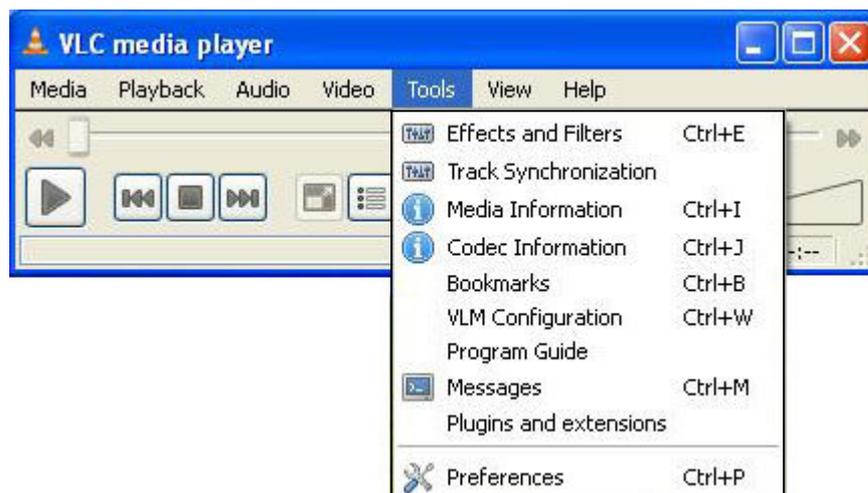
### 3. Audio



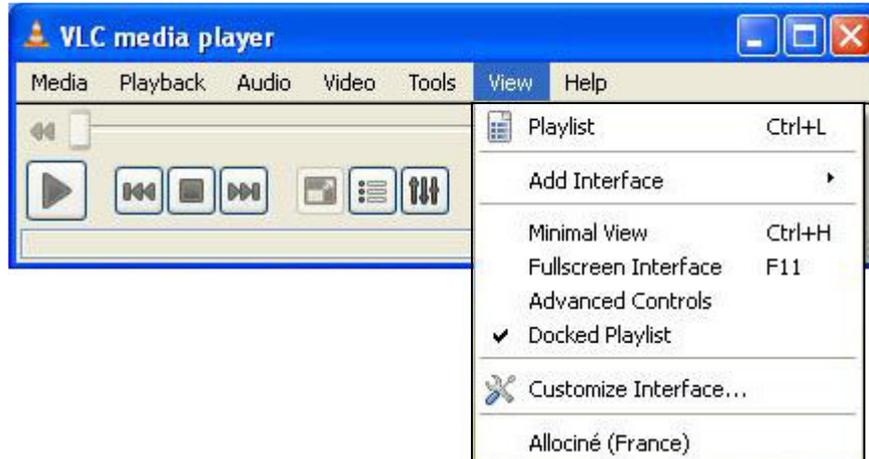
### 4. Video



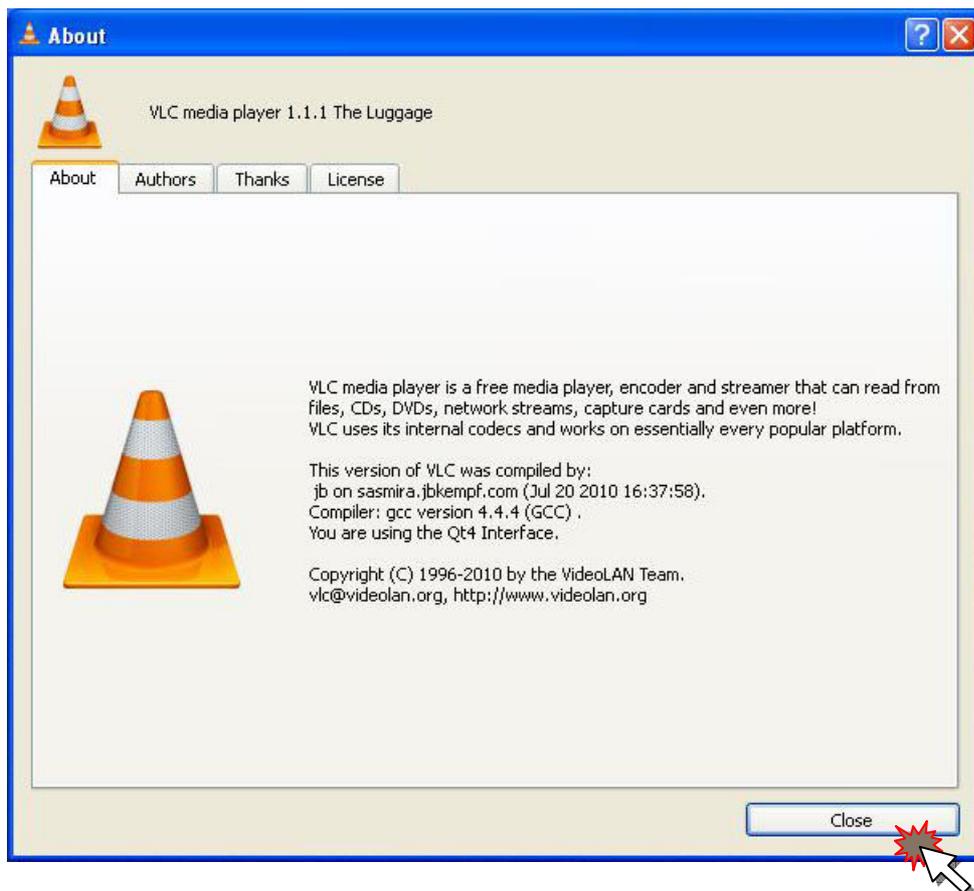
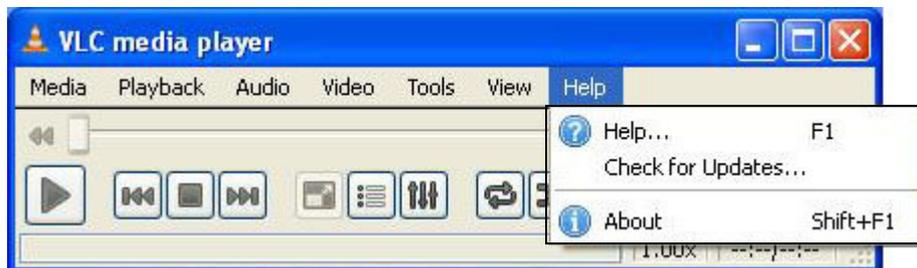
### 5. Tools



### 6. View



### 7. Help

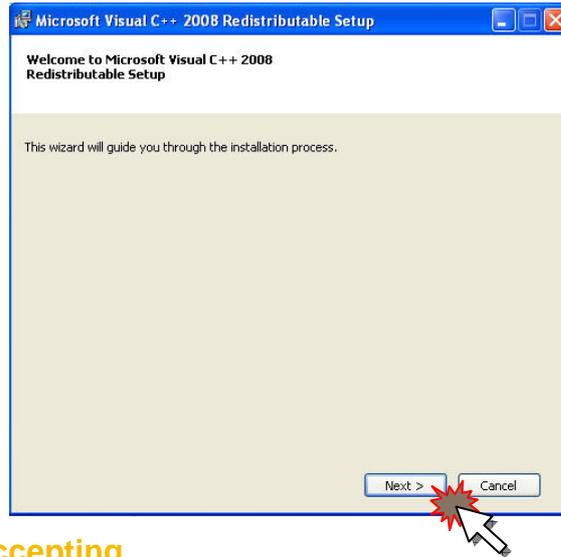


## MS Virtual C++ 2008 Redistributable

After installed the VMS software, keep the checkbox selection to start the MS Virtual C++ installation.

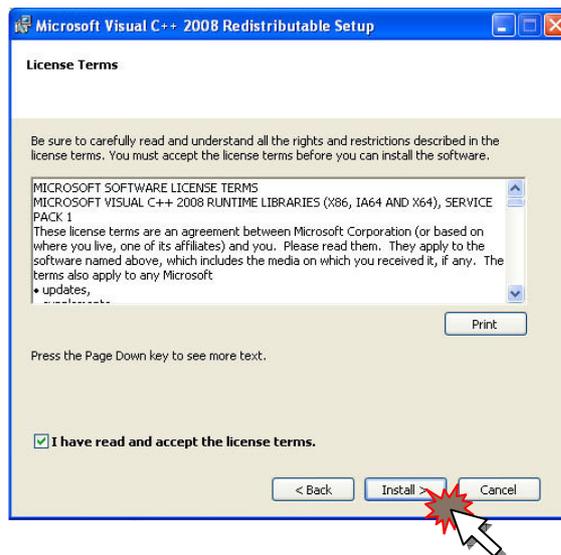
Follow the instructions to install the MS Virtual C++ on your computer step by step.

### 1. Start the MS Visual C++ 2008 Redistributable Installation.

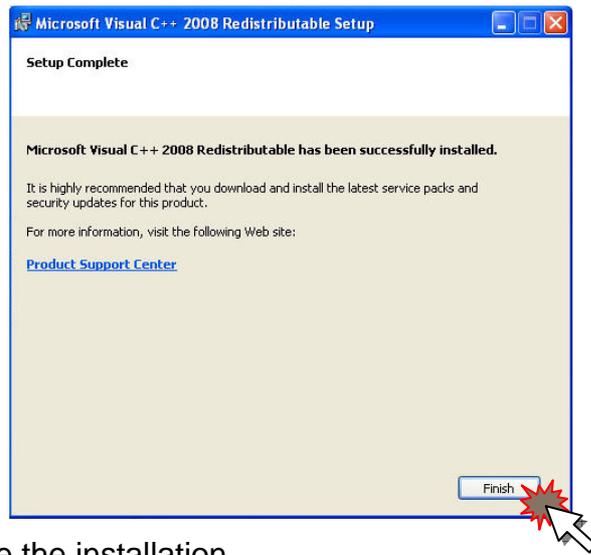


### 2. License Agreement Accepting

The MS Visual C++ is licensed under the Microsoft Software standard patent license agreement. With respect to the use of the MS Visual C++, the following licensor's patents may apply.



## 2. MS Visual C++ 2008 Redistributable Setup Completed



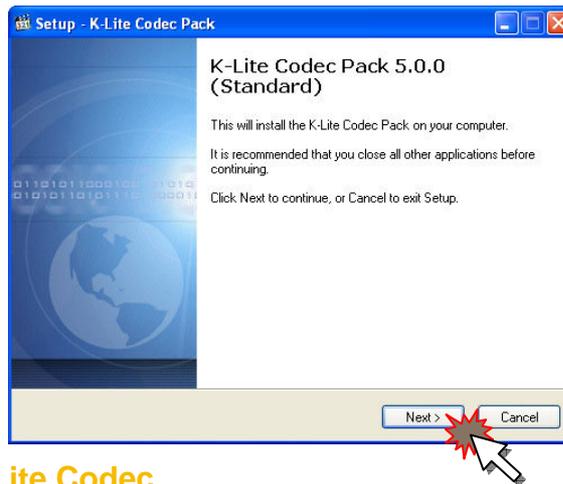
Click ***Finish*** to complete the installation.

## K-Lite Codec

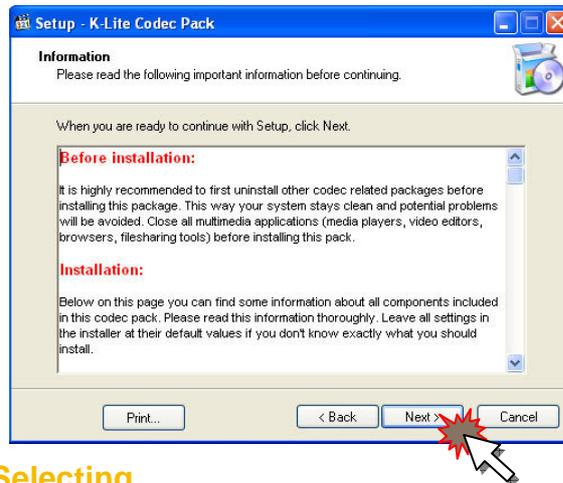
After installed the MS Visual C++, keep the checkbox selection to start the K-Lite Codec installation.

Follow the instructions to install the MS Virtual C++ on your computer step by step.

### 1. Start the K-Lite Codec Installation.



### 2. Introduction to the K-Lite Codec



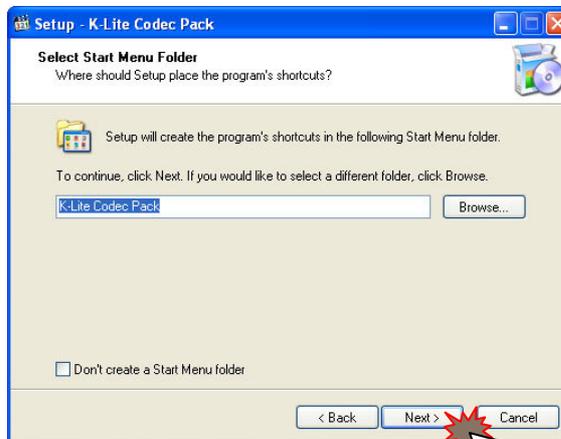
### 3. Destination Location Selecting



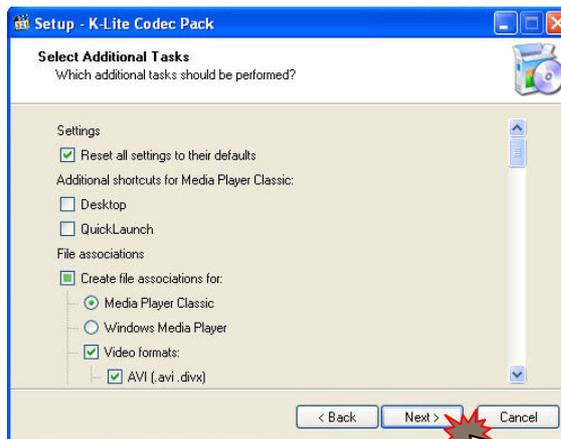
## 4. Components Selecting



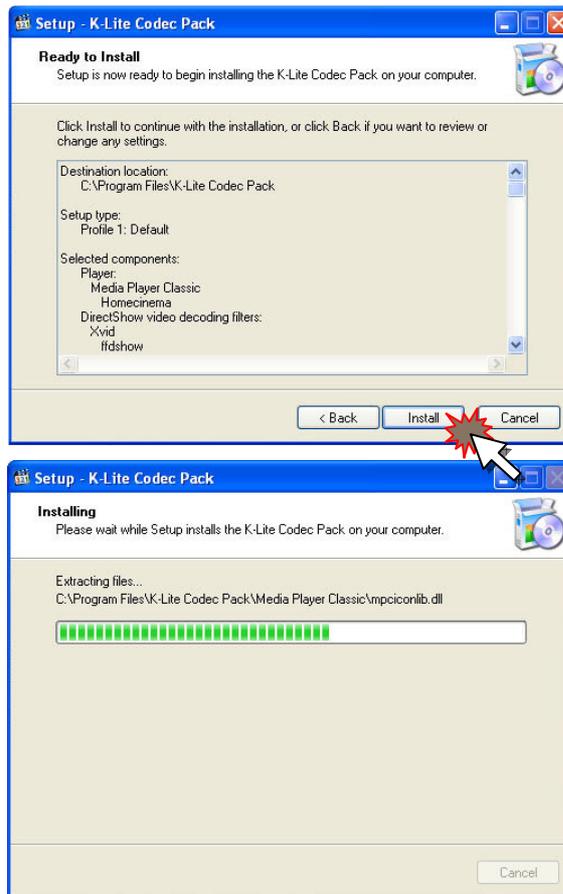
## 5. Start Menu Folder Selecting



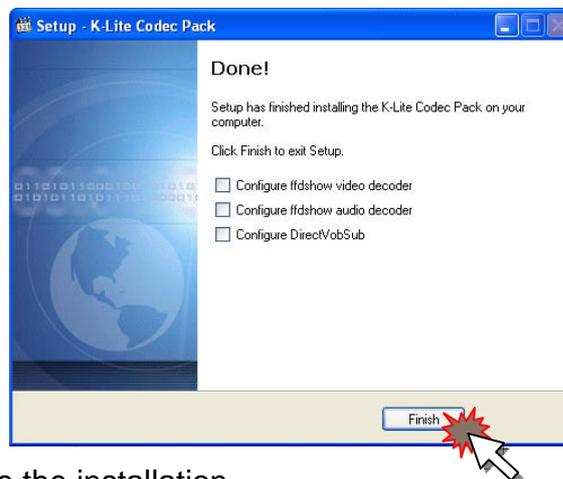
## 6. Additional Tasks Selecting



### 7. Ready to Install



### 8. K-Lite Codec Pack Setup Completed.



Click **Finish** to complete the installation.

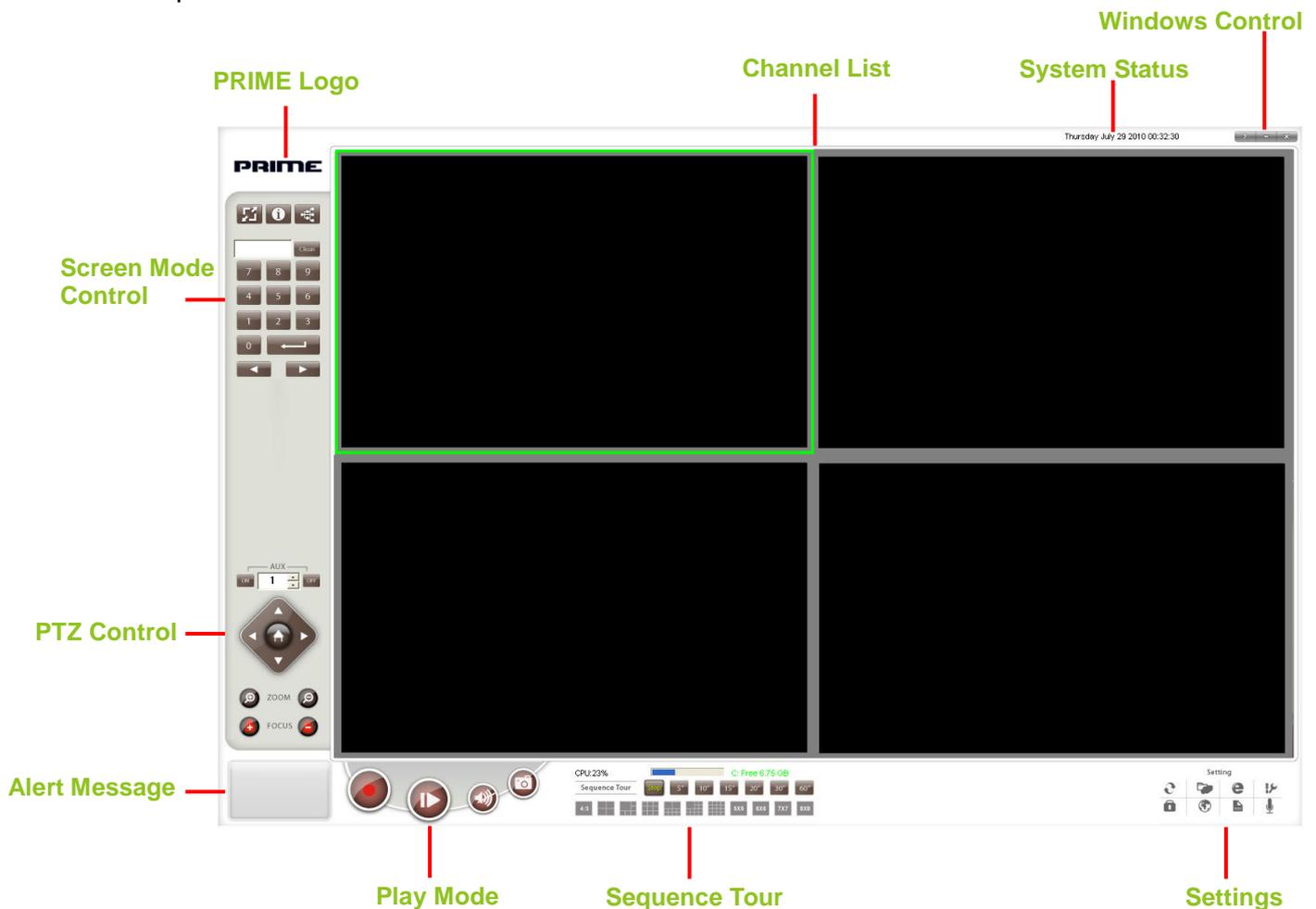
## 9. Launch the web site for Code Guide.

After the installation is finished, it will show the pop-up window of the Code Guide.



### View of VMS

The VMS (*Video System Management*) allows simultaneous with monitoring and video recording for multiple Network Cameras.



**Channel List**  
**System Status**  
**Windows Control**  
**Settings**  
**Sequence Tour**

**Play Mode**

**Alert Message**  
**PTZ Control**  
**Screen Mode Control**

Display the channel to control.

Display the status of the system.

Control the windows same as the basic MS Windows.

Setting user preferences.

According to the sequence setting, display the channel by sequence and rebroadcast.

Play the VMS with the mode of Recording, Playback, Snapshot and Audio.

It will show the messages while any alert had been triggered.

Adjust the lens and focus of IP Camera which is selected.

Control of the screen with Layout, Group and Channel.

### System Operation

Once the VMS has been executed, the pop-up window of the login will show on your screen. Follow the instructions to login VMS.

#### 1. Start the VMS.

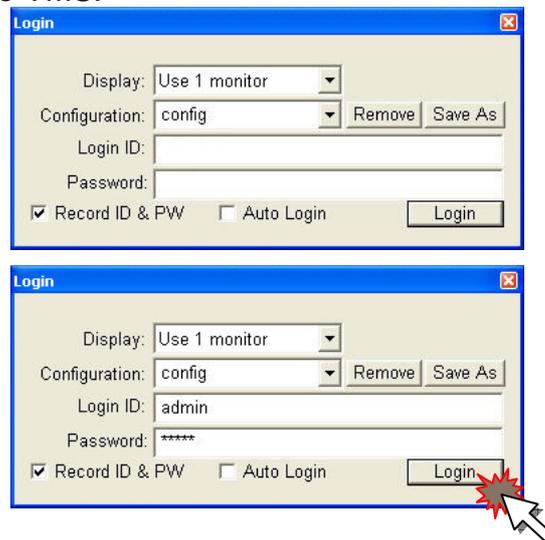
Execute VMS by double click the icon of the **VMS** on the desktop or execute it from **Start** → **Programs** → **VMS** → **VMS**.



#### 2. Login in VMS.

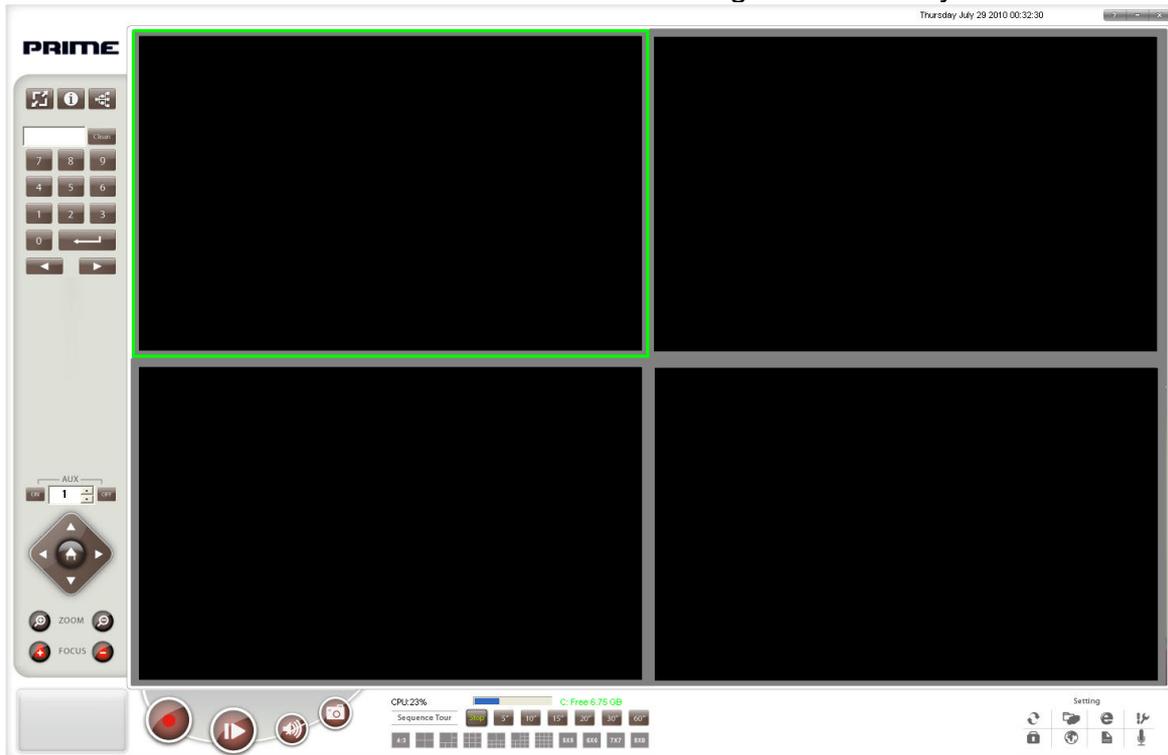
Once the VMS has been executed, the pop-up window of the login will show on your screen.

When the Login windows appear, enter the default Login ID & Password (**admin/admin**) and click **Login** to enter the VMS.



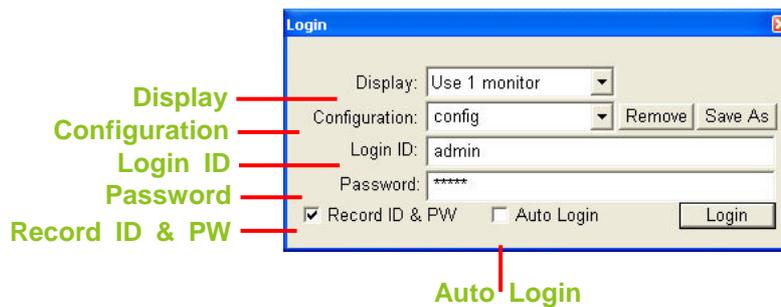
### 3. Welcome to VMS.

The VMS windows will show on the screen while login successfully.



## Login

The following description shows the settings of Login.



### Display

Select the quantity of the monitor that you will display.  
(It can support up to 4 monitors)

### Configuration

The setting parameters for the VMS.

### Login ID

Account name. (**admin** is the default ID.)

### Password

The password of account name. (**admin** is the default password.)

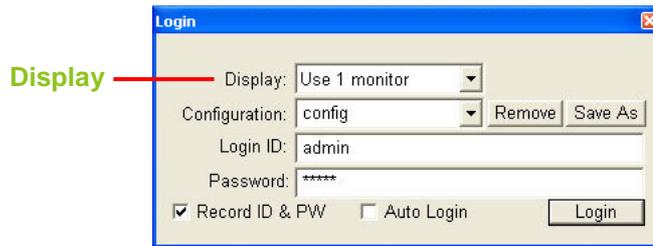
### Record ID & PW

Save the ID & Password into **.ini file** by click checkbox.

### Auto Login

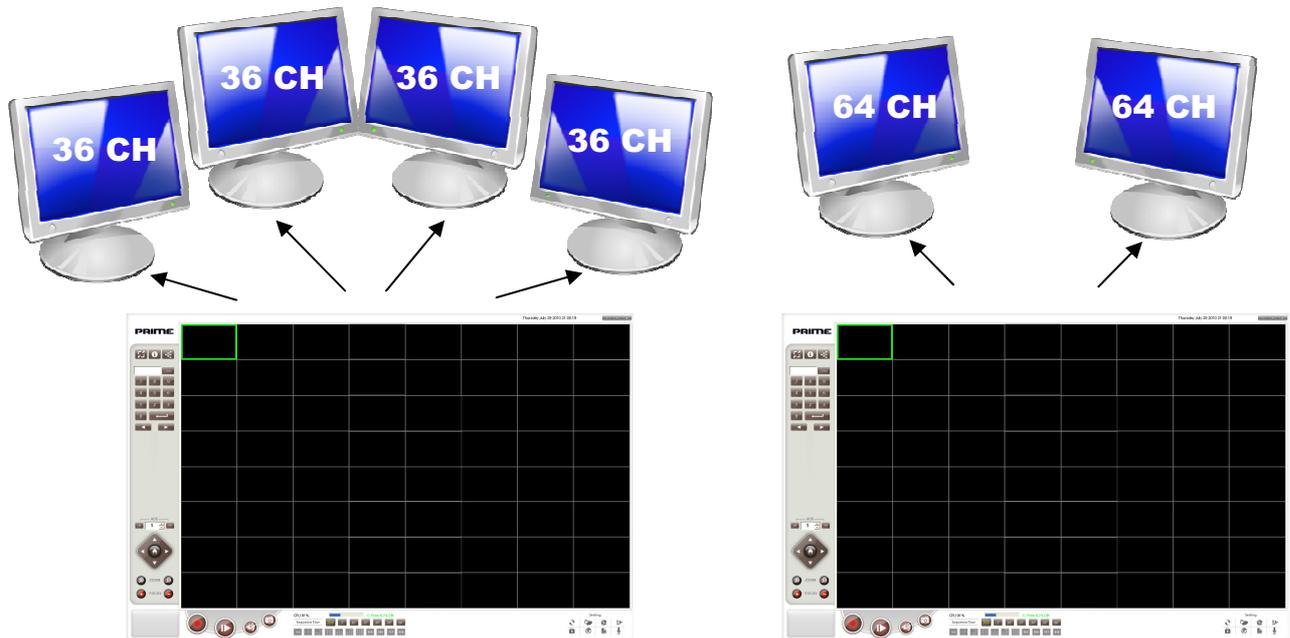
After clicked Auto Login, it will login VMS by automatically next time when you execute.

### Display



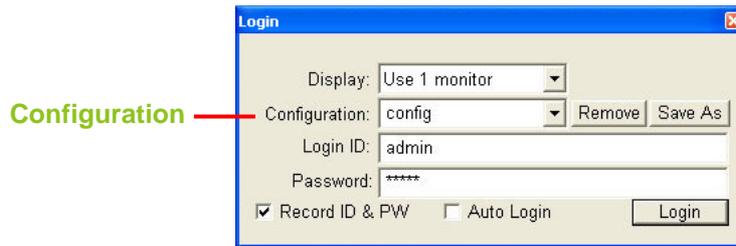
VMS can display up to 4 monitors in the same time to control and monitoring the channels. It will detect monitor from computer and then release the selection in Display column.

It will support the different of maximum layout to display from different monitor.



Quantity for Monitor	Display Column	Max. Layout of Per-monitor	Total Channels
1	Use 1 monitor	64	64
2	Use 2 monitors	64	128
3	Use 3 monitors	36	108
4	Use 4 monitors	36	144

## Configuration



The VMS will save all of the parameters into configuration file.

Save a different configuration setting with different name. Since you have created a new configuration name, the parameter will reset to the default status.

The configuration file can copy to another PC.

1. Find the file from folder path as below:  
**C:\Documents and Settings\ [User Name] \VMS\etc.**
2. Save as the file to the other PC in the same folder path.

## Login ID & Password



“**admin**” is the default ID and Password for administrator. It is available for all of the setting and modification.

“**guest**” is the default ID and Password for guest. It is restricted to setting and modify.

The following tables show the restrictions of the function on VMS between Administrator and Guest.

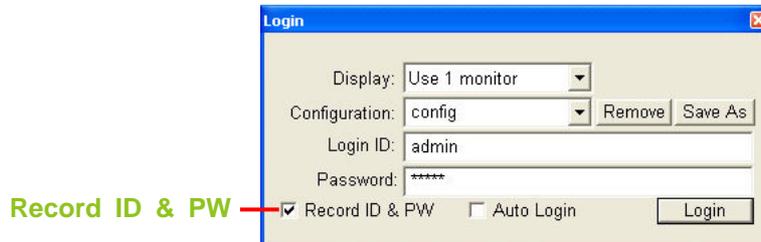
Function	Administrator	Guest
Record	•	•
Playback	•	•
Snapshot	•	•
Audio Broadcast	•	•
Sequence Tour	•	•
Rotate	•	•
Lock	•	•
IP Finder	•	
eMap	•	
Log	•	•
Web Browser	•	
Config	•	
Audio turn on/off	•	•
PTZ Control	•	•
Layout	•	•
Group	•	

AUX	•	
Virtual Keyboard & Page Switch	•	•
Window Control	•	•

**NOTE:**

Please refer to the chapter of **Application Config\Config\User** for further description.

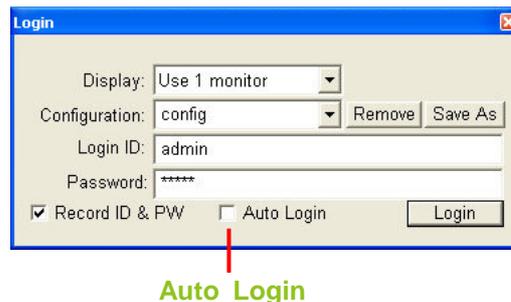
### Record ID & PW



Click the checkbox to enable the function.

After **Record ID & PW** had selected, the ID and Password will show on next time by automatically.

### Auto Login



Click the checkbox to enable the function.

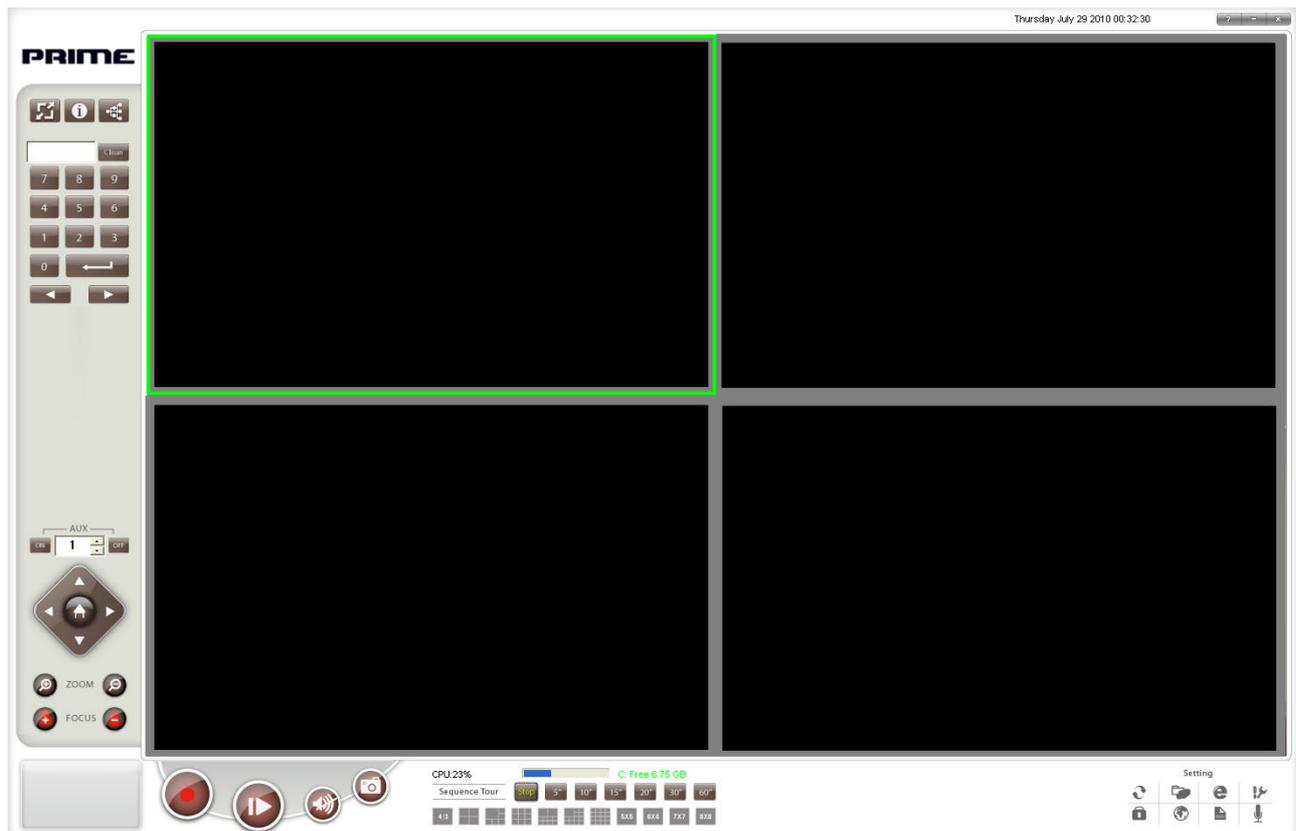
After **Auto Login** had selected, the VMS will login in five second.

**NOTE:**

**Auto Login** should be enabled with **Record ID & PW** at the same time.

## Windows Function

The windows function is serviceable only if the IP Camera is connected successfully.



The detail function illustration as below:

**Drag and Drop**            Switch the channel on display in the VMS.  
**Shortcut Function**       Provides the common selection for setting.

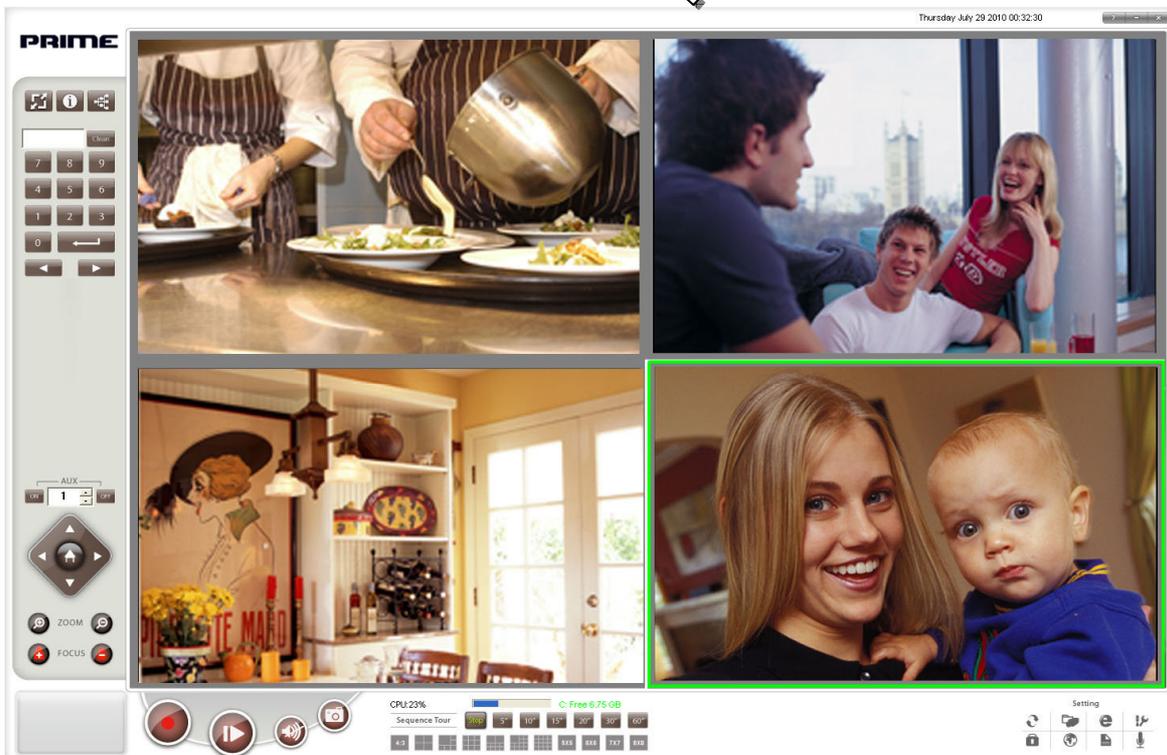
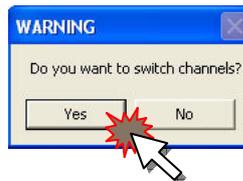
### NOTE:

The layout of 01ch is not available.

### Drag and Drop

Change the location of channel to display through the mouse.

1. Click **Ctrl** and drag a **Channel A** which you want to exchange at the same time.
2. Release the **Ctrl** and drop the **Channel A** into the **Channel B** that you want to be changed.
3. A pop-up message will show on your screen to warning you change it or not.
4. After you confirmed the message, the location of Channel A and B will exchange.



### Shortcut Function

Click the **right-button** of your mouse on the channel which you want to make change and it will display the Shortcuts List.  
Choose the option directly depend on different request.  
The detail function illustration as below:



**NOTE:**

The Shortcut function would be failed if the function of digital zoom is disabled. Please refer to **System Operation\Application Config\Config\Channel** for further description.

### +ZOOM IN

1. Click the **right button** of your mouse on the channel which you want to zoom In/Out.
2. Select **+ZOOM IN** to enlarge the image.



### NOTE:

x8/x16 Levels of zoom in/out are supported.

### +ZOOM OUT

1. Click the **right button** of your mouse on the channel which you want to zoom In/Out.
2. Select **+ZOOM OUT** to reduce the image.



### NOTE:

The range of the digital zoom in/out is follow the configure setting.  
Please refer to **System Operation\Application Config\Config\Channel** for further description.

### Original Size

1. Click the **right button** of your mouse on the channel which you want to reset the image size.
2. Select **Original Size** to reset the image size to original.



### Full Screen

Enlarge/Revert the channel size to Full/Normal screen.

1. Click the **right button** of your mouse on the channel which you want to change it.
2. Select **Full Screen** to enlarge the image size to full screen.
3. Repeat the operation or click "**ESC**" to return it to normal screen.



### Record

The image will save to default path which are you selected to record.

1. Click the **right button** of your mouse on the channel which you want to record it.
2. Select **Record** to start the recording.
3. Stop the recording by the same operation.

The VMS supported to record few channels at the same time.

Please refer to **System Operation\Application Config\Config\Record** for further description.

### Snapshot

The image will save to default path which are you selected to snapshot.

1. Click the **right button** of your mouse on the channel which you want to snapshot it.
2. Select **Snapshot** to capture the image.



### NOTE:

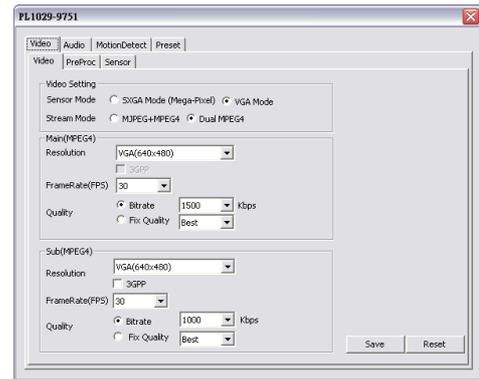
Please refer to **System Operation\Application Config\Config\Fundamental** for further description about the file path.

### Configure

You can set up the parameter for your IP Camera directly from the VMS.

The Setting Interface will different from different IP Camera.

1. Click the **right button** of your mouse on the channel which you want to view or change the configuration.
2. Select **Configure** to view or change it.



### NOTE:

Please refer to your IP Camera/Video Server User's Manual for more detail description.

### Audio On/Off

After connected the audio device to IP Camera, Audio On/Off by following steps:

1. Click the **right button** of your mouse on the channel which you want Audio On/Off.
2. Select **Audio On**.

(Switch the Audio On and Off)



## Windows Control

The Windows Control of the VMS is almost same as MS Windows.



The detail function illustration as below:

- Shut down** Close the VMS.
- Minimize** Minimize the VMS.
- Help** Open the User's Manual of the VMS.

### Shut down the VMS

Close the VMS by click **Shut Down**, and back to MS Windows.



### Minimize the VMS

The VMS will show on your screen with minimize while you click the button of **Minimize**.



### Help

The VMS provides the detail User's Manual for your information. Please click the button of **Help** to open the file via PDF Reader.



### Screen Mode

The VMS provides several different layouts for you to change the screen mode.



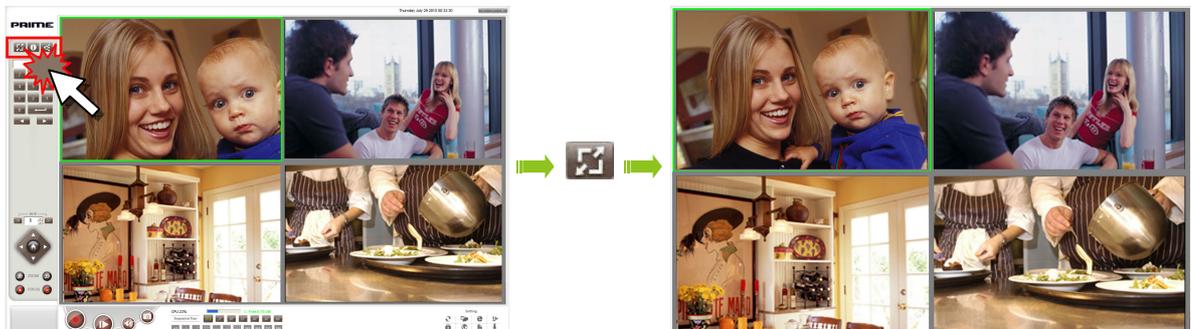
The detail function illustration as below:

<b>Enlarge Screen</b>	Change the view mode to Full Screen.
<b>Channel Information</b>	Display the IPCAM information.
<b>Tree Structure</b>	Display the file with tree structure.
<b>Virtual Numeric Keyboard</b>	Numeric buttons are for search channel.
<b>Page Switch</b>	Channel Switched.
<b>AUX</b>	Auxiliary Input for RS485.

### Enlarge Screen

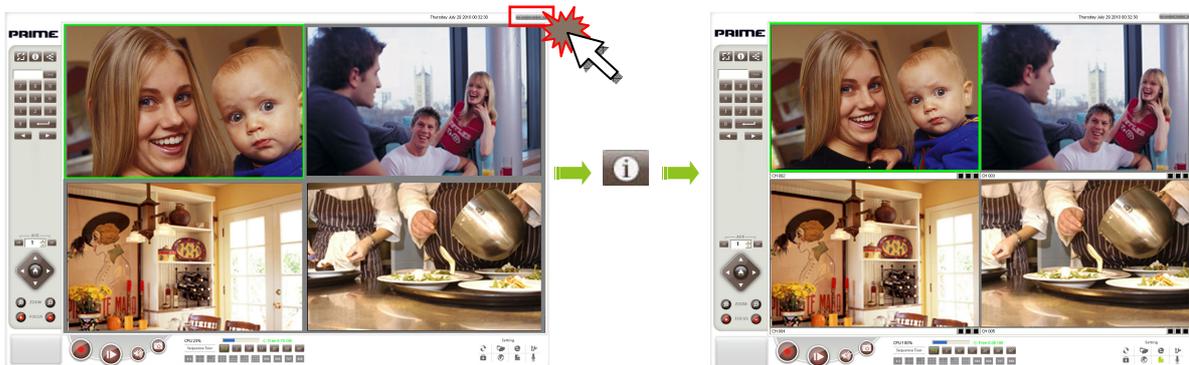
Enlarge Screen for you to change the view mode to Full Screen, and any layouts in the VMS are supported.

1. The objects and frames which are around the channels will disappear after you click the **Enlarge Screen** button.
2. Press the **ESC** to return it and back to main screen.



### Channel Information

The information will show on the screen after click the **Channel Information** button.



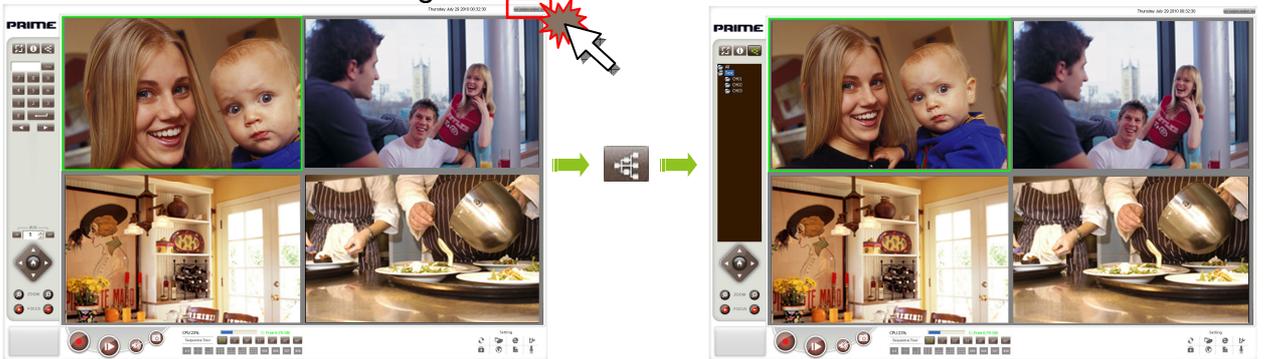
The following examples illustrate some favorable information for user:



- Channel No.** Display the channel Number.
- Record Light** Red light will display when the function of Record is enabled.
- Event Light** Yellow light will flash when any event is detected.
- Audio Light** Green light will display when the function of Audio is enabled.

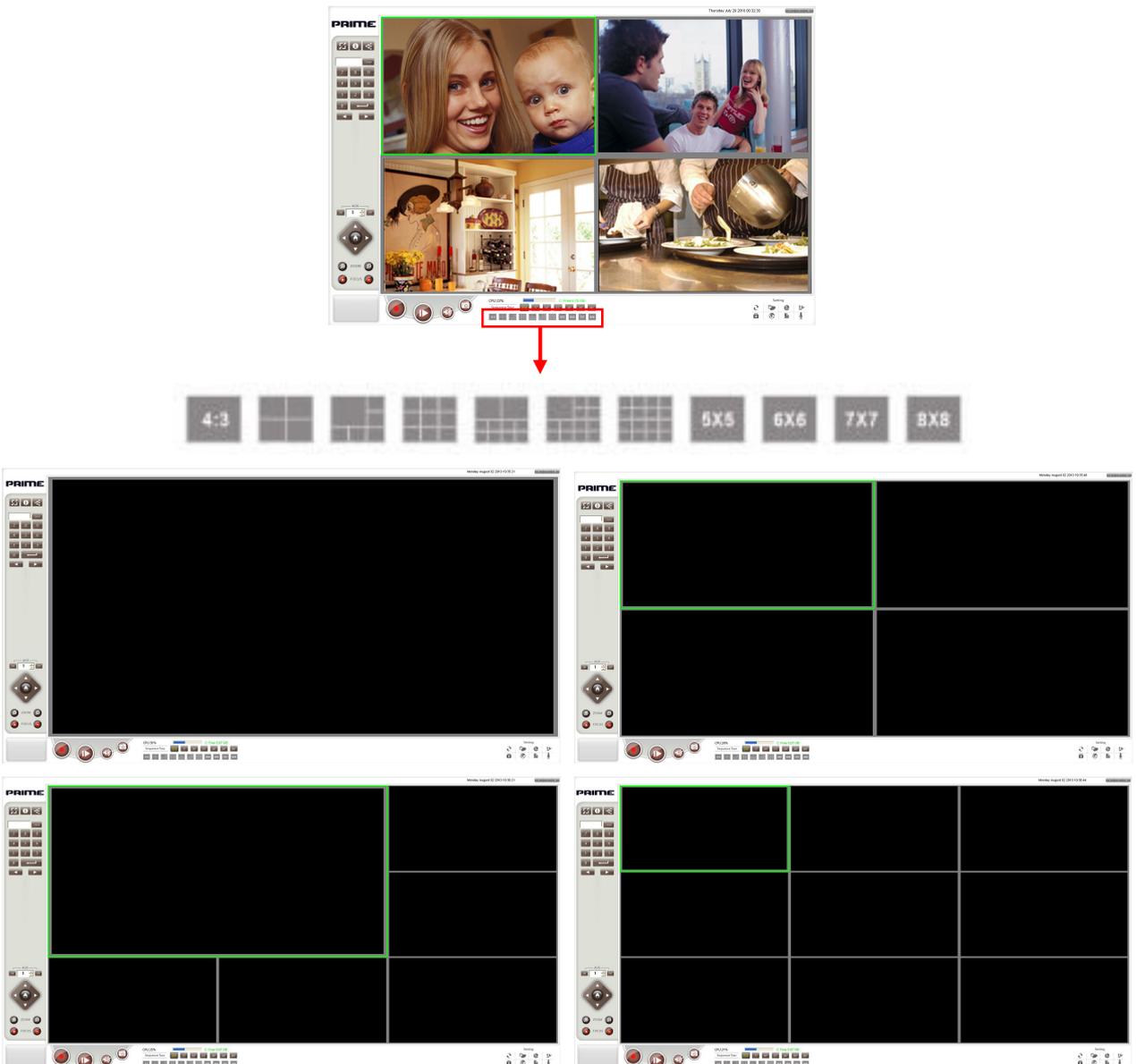
## Tree Structure

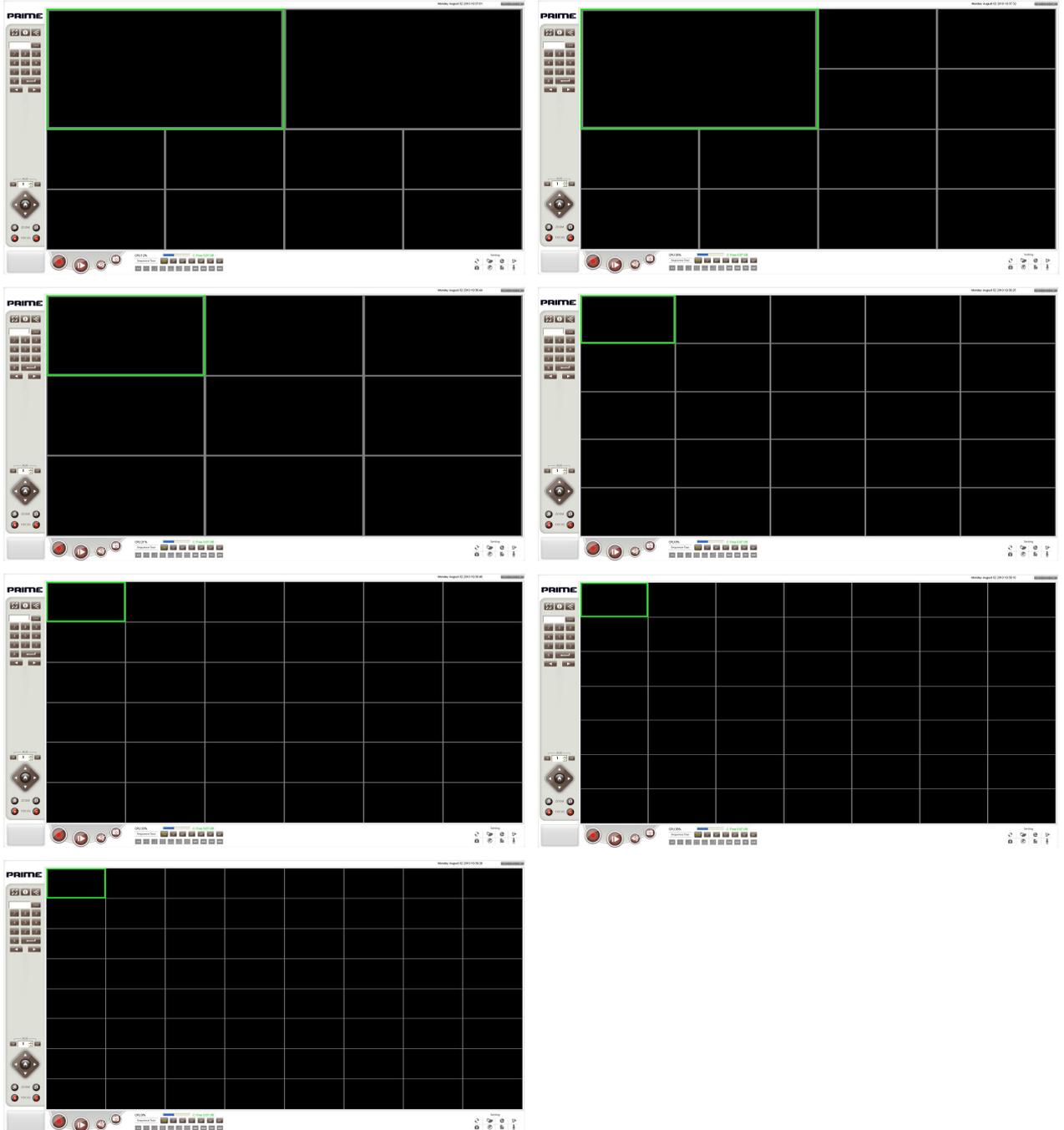
1. Channel will display with tree structure after click the **Tree Structure** button.
2. Click the **Tree Structure** again to recall.



## Layout

Use this setting to select the layout from 1, 4, 6, 9, 10, 13, 16, 5x5, 6x6, 7x7 and 8x8.





**NOTE:**

All of the layout are supported the function of **Sequence Tour**.  
Please refer to **System Operation\Sequence Tour** for further description.

### Group

Use this setting to group some IP Cameras into one. After the group is selected, it will display the IP Cameras only which are selected by group.



#### NOTE:

Add a group before active this function. Please refer to **System Operation\Application Config\Config\Group** for further description.

### AUX

Use this setting to control the external device through RS485 which is supports Pelco P/D protocol.

1. Select the device from **1~8**.
2. Click **On/Off** to enable or disable it.

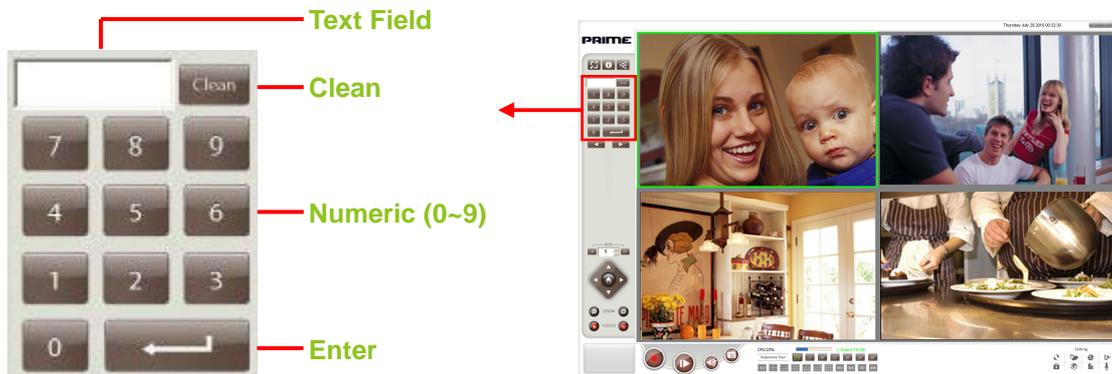


#### NOTE:

VMS never show the message about the AUX On/Off, please check the status of your device by yourself.

### Virtual Keyboard

VMS provides a virtual keyboard for entry the channel number.



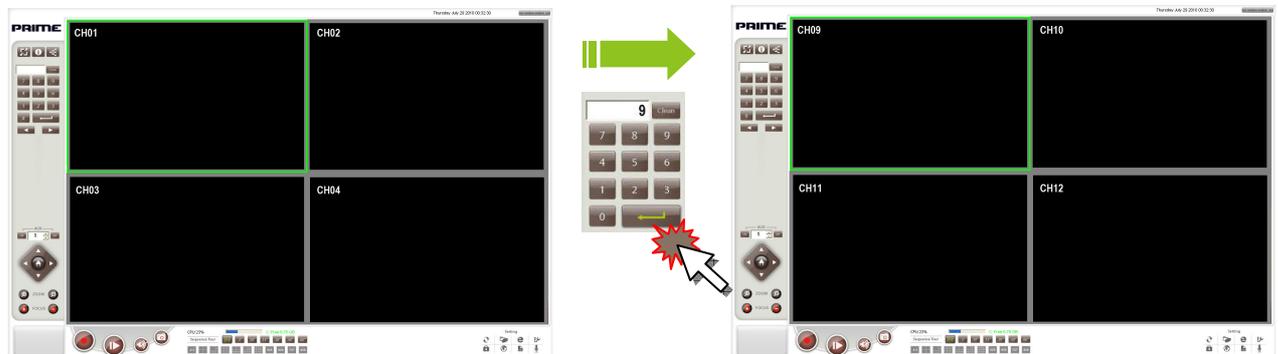
**Text Field**  
**Clean**  
**Numeric**  
**Enter**

The channel number that entry by numeric will show on.  
 Press Clean to erase the text field.  
 Numeric buttons are for entry into the various menus.  
 Press Enter to confirm selection.

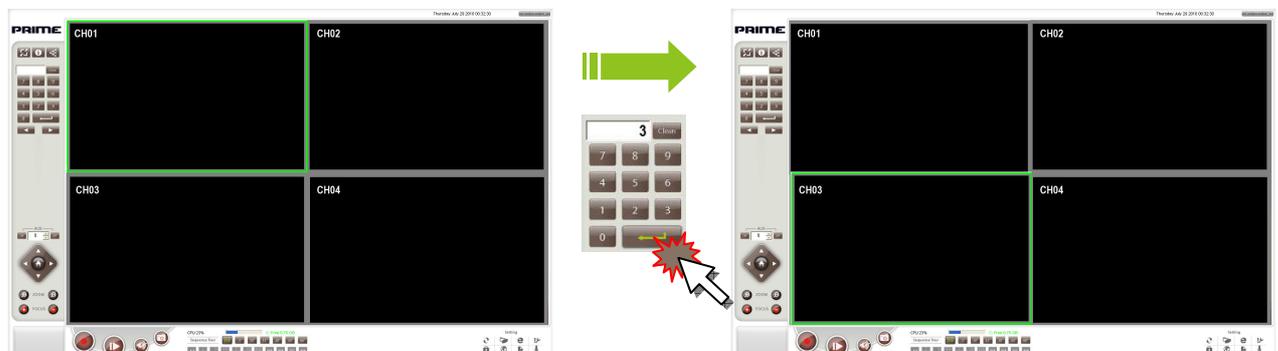
Search channel by Virtual Keyboard in any layout mode

1. Input a channel number by virtual keyboard in the text field.
2. Click **Enter** to enable this function.

- All of the channel will change the sequence and the green frame will stay on the top and left according to the channel is beyond the display channel which is searched by virtual keyboard.



- The green frame will switch to channel directly when the channel is within the display channel.



**NOTE:**

The Virtual Keyboard is corresponding with Entity Keyboard.

### Page Switch

Click the Page Up/Down to switch for the channel pages in any layout mode.

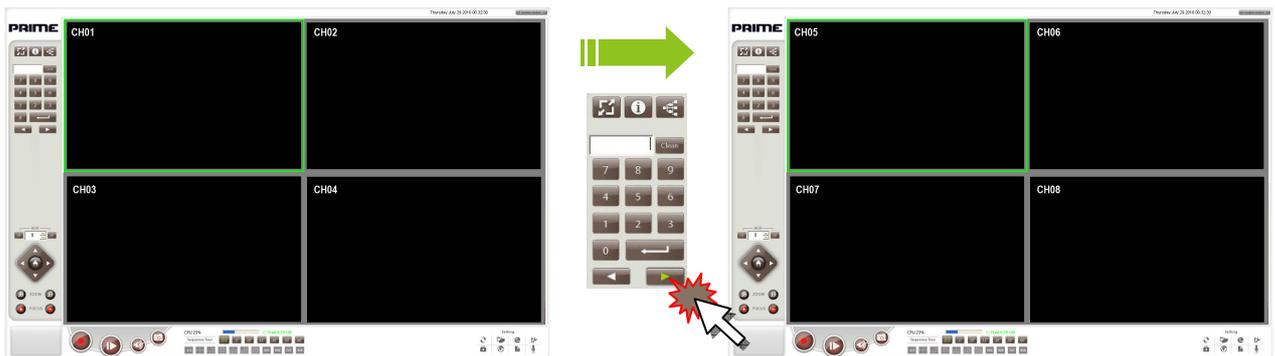


**Page Up**  
**Page Down**

Move up the pages through available channels with the channel layout.  
Move down the pages through available channels with the channel layout.

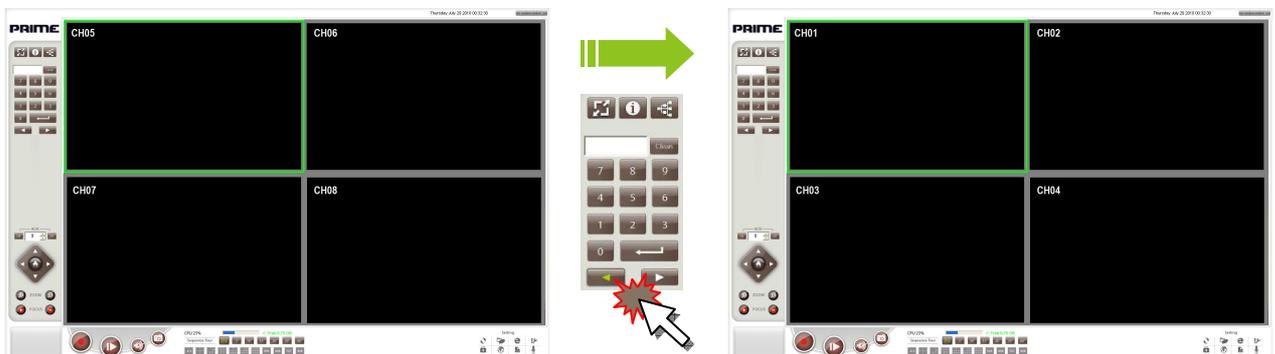
### Page Down

The following pictures illustrate how to switch the channel page using Page Down.



### Page Up

The following pictures illustrate how to switch the channel page using Page Down.



## PTZ

Control the IP Camera by VMS as control the IP Camera directly.



The detail function illustration as below:

- PT Control** Pan and Title the IP Camera.
- Zoom Control** Zoom In/Out the images.
- Focus Control** Adjust the lens focus of IP Camera

### PT Control

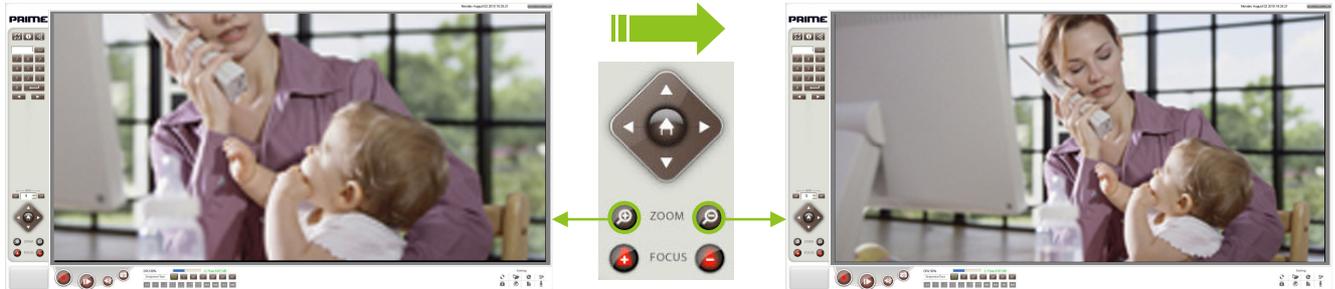
1. Operate the PT IP Camera by click the button of **PT Control** to move Up, Down, Left and Right
2. Rest the PT Control by click the center of PT Control. The PT lens will reset to the default address after the PT IP Camera has been reset.



### Zoom Control

Use this function to adjust Zoom In/Out.

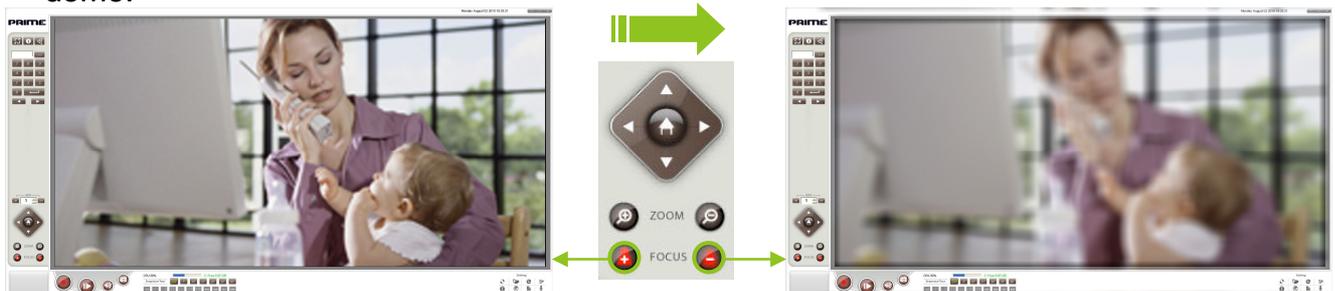
1. Click +/- to enlarge or reduce the image of speed dome.
2. The distance of the Zoom for VMS is dependent on the actual product specification of speed dome.



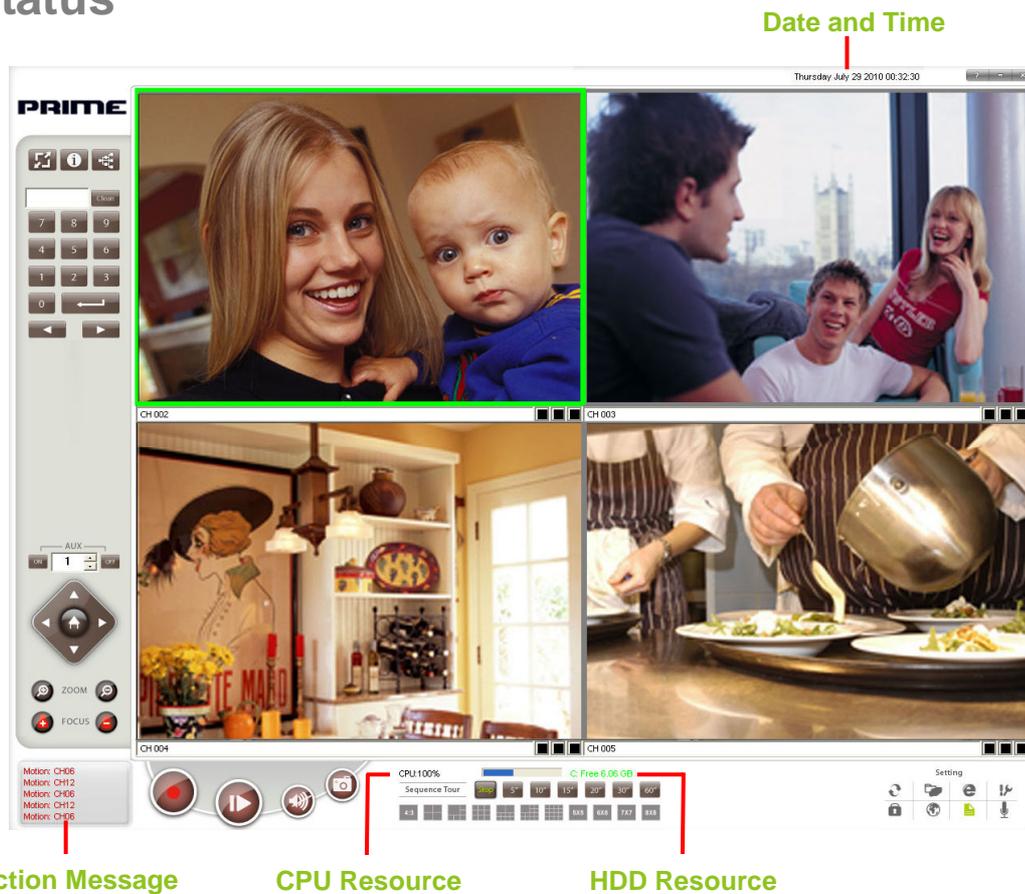
### Focus Control

Use this function to adjust the lens focus of IP Camera

1. Click +/- to enlarge or reduce the speed dome.
2. The distance of the focus for VMS is dependent on the actual product specification of speed dome.



## System Status



The detail function illustration as below:

**Date Information**  
**CPU Resource**  
**HDD Resource**  
**Action Message**

Date and Time displayed.  
 CPU Resources displayed.  
 Free for HDD Space displayed.  
 Camera action message displayed.

### Date Information

Monday August 02 2010 19:35:48

View the system date and time of MS Windows here.

**DD-MM-YYYY [HH]: [MM]: [SS]** is the format for Date and Time.

### CPU Resources

CPU:28%  C: Free 5.87 GB

To avoid the overloading for the system by monitor CPU loading.

The CPU Resource of the system should not be utilized greater than 85%.

**NOTE:**

The VMS will reduce the CPU automatically while the CPU loading is reaching or more than 90%.

Please refer to **System Operation\Application Config\Config\Fundamental** for further description.

### HDD Resources

Backup the recording image by monitor the HDD size.

The color of HDD Resource will change from green to yellow and red.

The detail function illustration as below:

**Under 70%**

Green

CPU: 28%



C: Free 5.87 GB

**70%~90%**

Yellow

CPU: 80%



C: Free 8.15 GB

**Up to 90%**

Red

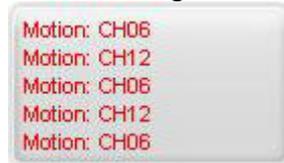
CPU: 95%



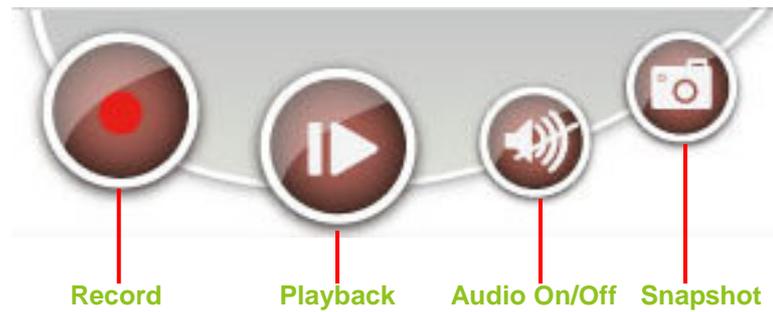
C: Free 1.00 GB

### Action Message

The message will show on the box if any IP Camera action.



## Basic Function

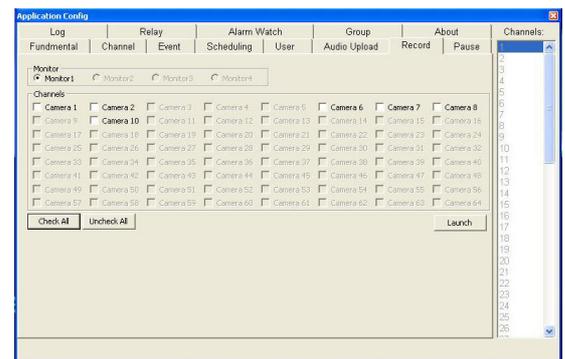


The detail function illustration as below:

- Record**                                      Start to record.
- Playback**                                    Open the Playback windows.
- Audio On/Off**                                Switch audio between On and Off.
- Snapshot**                                    Take a real time from IP Camera.

## Record

Use this shortcut function to recording.  
Click **Record** to open the windows of the Application Config for Record.



### NOTE:

Please refer to **System Operation\Application Config\Config\Record** for further description.

## Playback

Use this shortcut function to playback the video that has been recorded.

1. Click **Playback** to open the windows of the Application Config for Playback.
2. There are 2 kinds of method of playback for you to search the recording image:

Event  
Media

The detail function illustration as below:



### Playback by Event

**Event Data Time Range** - Points to the 'Event Date Time Range' checkbox and calendar selection area.

**Calendar Start** - Points to the start calendar for August 2010.

**Calendar End** - Points to the end calendar for August 2010.

**Time Start** - Points to the '00:00:00' time input field.

**Time End** - Points to the '23:59:59' time input field.

**Select Channel** - Points to the 'Channel 01' dropdown menu.

**SW Trigger** - Points to the 'SW Trigger' section with 'Device Boot' and 'start' options.

**HW Trigger** - Points to the 'HW Trigger' section with 'Pin1 active', 'Pin2 active', 'Pin3 active', and 'Pin4 active' options.

**Open Event** - Points to the 'Open Event' button.

**Delete Event** - Points to the 'Delete Event' button.

**Search** - Points to the 'Search' button.

**Recording Image List** - Points to the table listing recorded events.

**Rebuild DB** - Points to the 'Rebuild DB' button at the bottom left.

**Path Information** - Points to the 'Path Information' label at the bottom right.

Index	Event Type	SW Trigger Type	SW Trigger Status	HW Trigger Status	Event Start Date Time
0	TRIGGER	Manual Recording	START	X.X.X.X	2010-08-02 Monday 20:03:40

<b>Event Data Time Range</b>	Search the event data by the range of time.
<b>Calendar Start</b>	Search event by Start Date.
<b>Calendar End</b>	Search event by End Date.
<b>Time Start</b>	Search event by Time Start.
<b>Time End</b>	Search event by Time End.
<b>Select Channel</b>	Search event by channel.
<b>Event Type</b>	Search event by event type.
<b>SW Trigger</b>	Search event by SW trigger.
<b>HW Trigger</b>	Search event by HW trigger.
<b>Open Event</b>	Play the recording images via VSC.
<b>Delete Event</b>	Delete the recording images.
<b>Search</b>	Start to search the recording images.
<b>Search</b>	Start to search the recording images.
<b>Recording image list</b>	Display the result of the search.
<b>Rebuild DB</b>	Rebuild the recording database.
<b>Path Information</b>	Show the path of the recording image.

**NOTE:**

The SW/HW Trigger would be displayed the setting selection after you select the schedule type.

**Event Data Time Range**

Click the single box to enable the search conditions.

The VMS will refer the calendar and time setting to search the recording image.

**Calendar Start**

Select the start date of search through the calendar.

**Calendar End**

Select the end date of search through the calendar.

**Time Start**

Select the start time of search through the format of [HH]: [MM]: [SS].

**Time End**

Select the end time of search through the format of [HH]: [MM]: [SS].

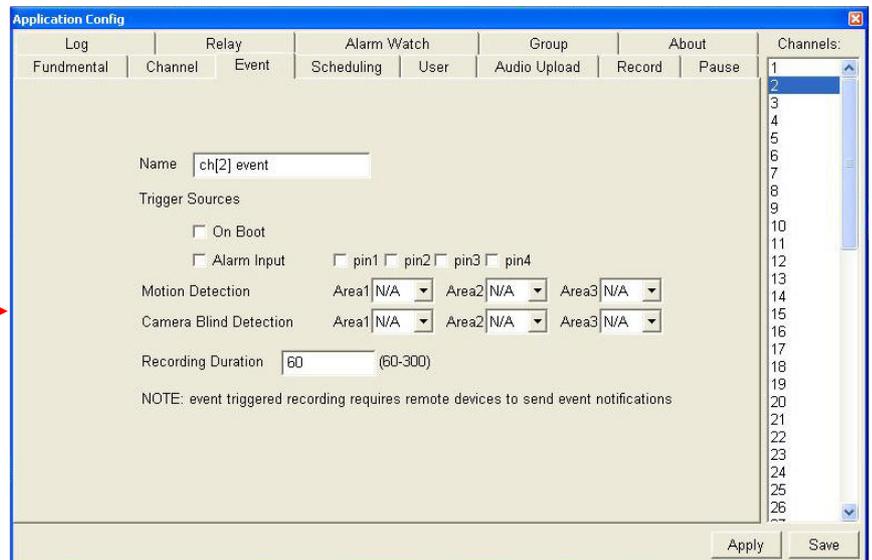
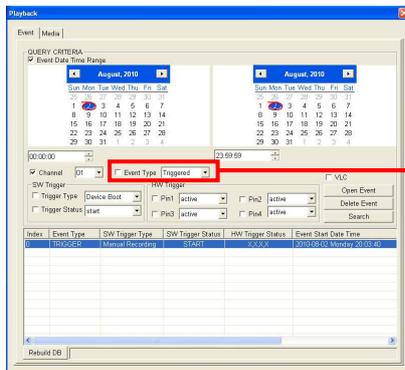
**Select Channel**

Select the channel to search the recording image.

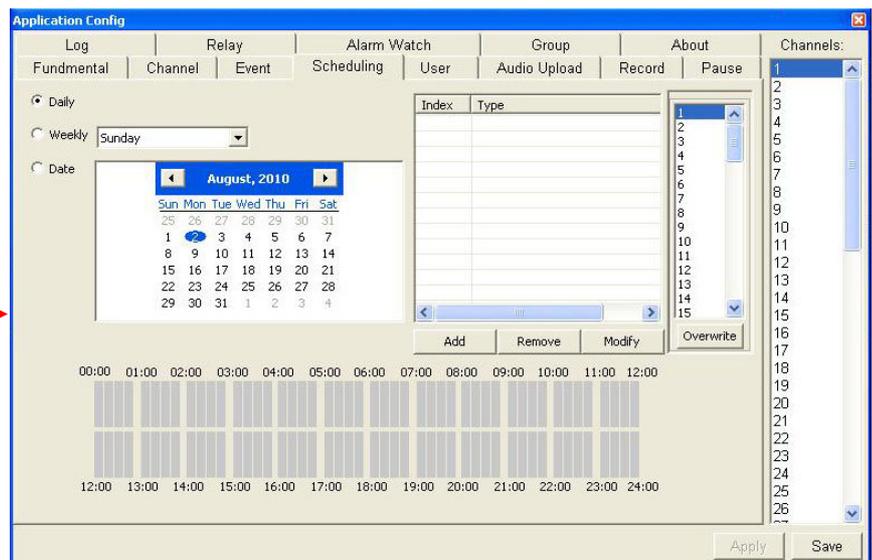
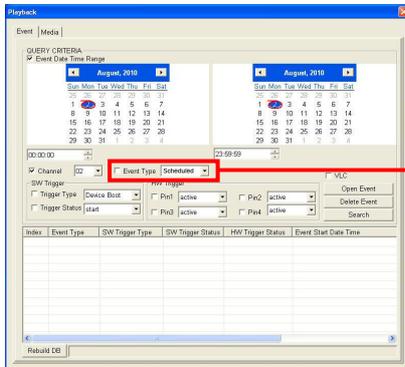
When the signal box is unclick, the VMS will search the recording image of all channels into the list.

### Event Type

There are two kinds of event type including: Triggered and Scheduled.  
The Triggered type would be following the Event setting.



The Schedule type would be following the Schedule setting.



### NOTE:

The SW/HW Trigger would be displayed the setting selection after you select the event type.

### SW Trigger

There are 5 kinds of trigger type for the application as below:

Device Boot, Video Signal, Motion Detection, Manual Recording and Camera Blind.

According to the device type and VMS setting, select the search conditions through Trigger Type and Trigger Status.

### HW Trigger

Different IP device provide the different amount of alarm input.

According to the device type and VMS setting, select the correct conditions of alarm input.

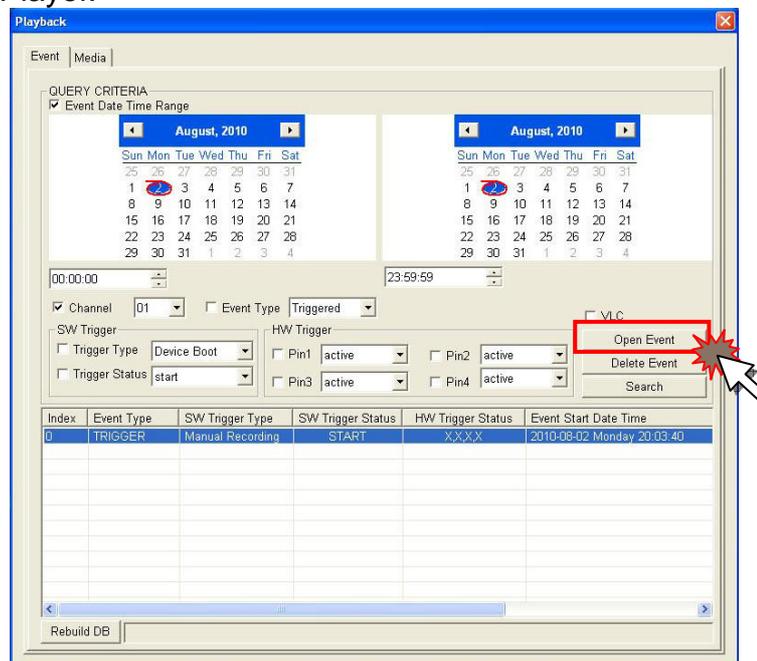
HW Trigger

Pin1 active  Pin2 active

Pin3 active  Pin4 active

### Open Event

Select the recording image from search result then click the button to play the recording image through VSC Media Player.



### NOTE:

Double click the result of the searched from the recording image list to play it.

### Delete Event

Select the recording image from search result then click the button to delete the recording image.

### Search

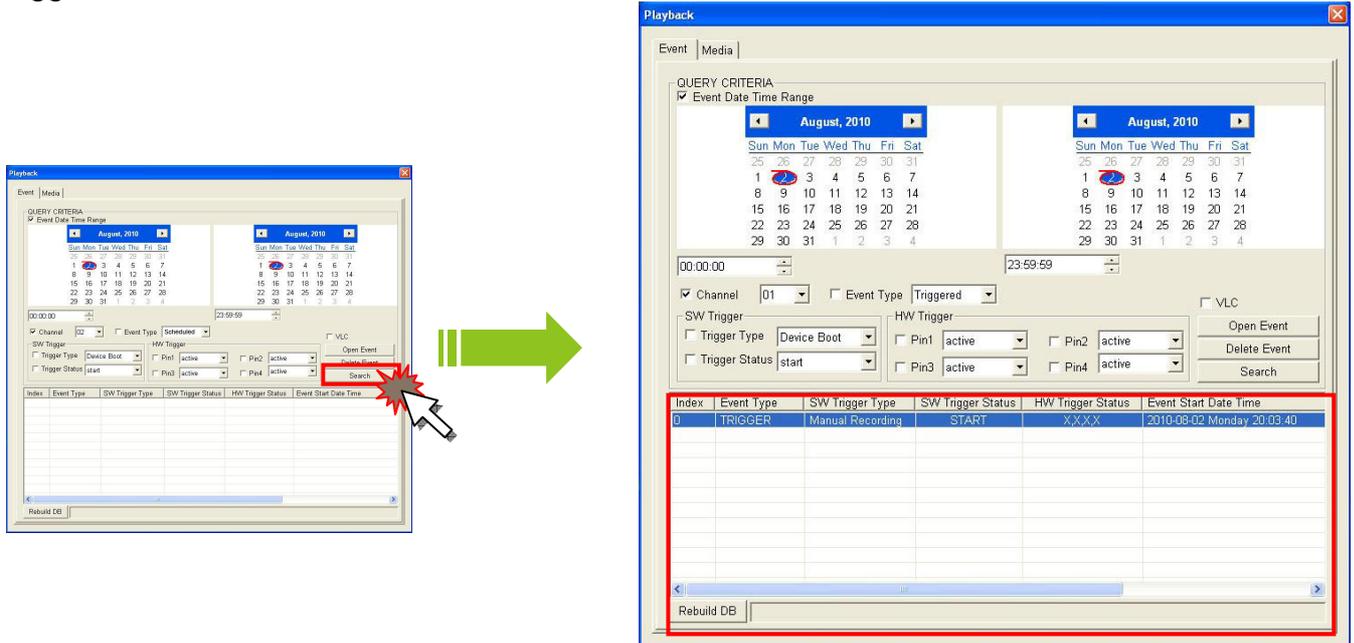
Click the button to enable the search function.

The searching results will follow all of the settings for condition.

### Recording image list

After click **Search**, the recording image list will display the search result.

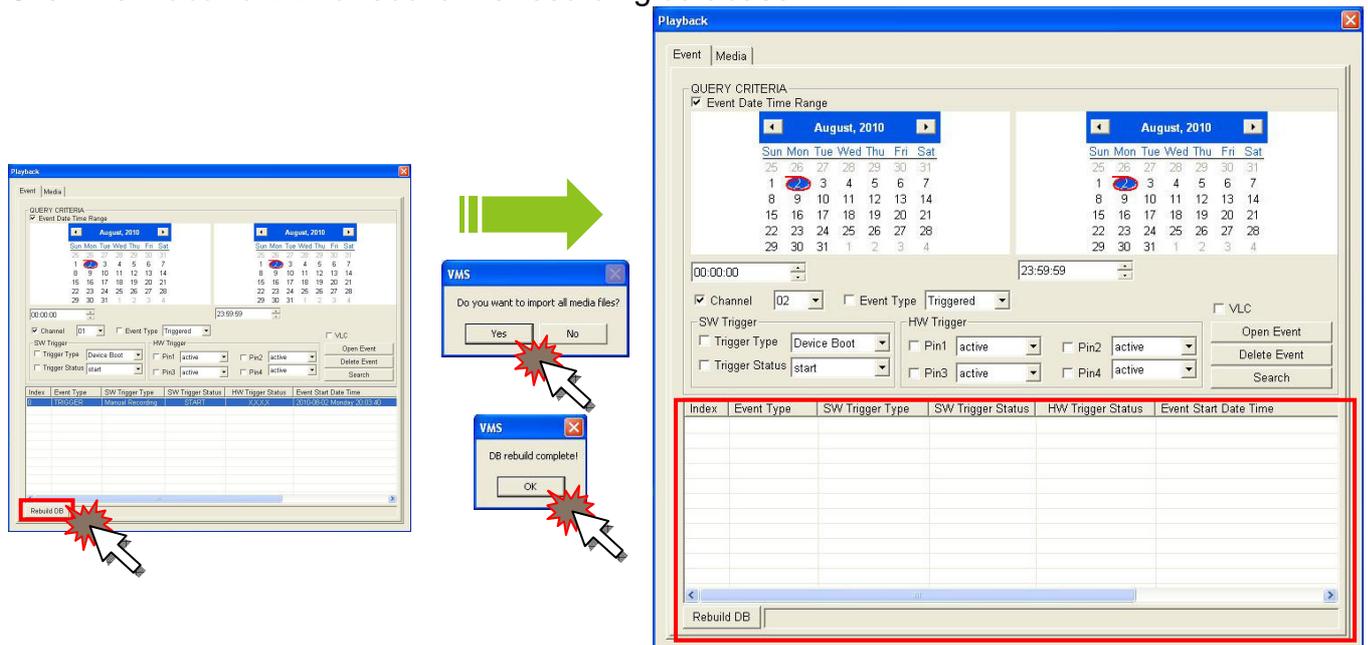
Arrange the search result by Index, Event Type, SW Trigger Type, HW Trigger Status, HW Trigger Status, Event Start Data Time, Event Duration, Channel and Event ID.



### Rebuild DB

Use this function to fix the database or import all of the recording images to database will the result of searched is not correct.

Click the **Rebuild DB** to rebuild the recording database.



### NOTE:

The recording image paths follow the Media Storage Path setting of Fundamental. Please refer to **System Operation\Application Config\Config\Fundamental** for further description.

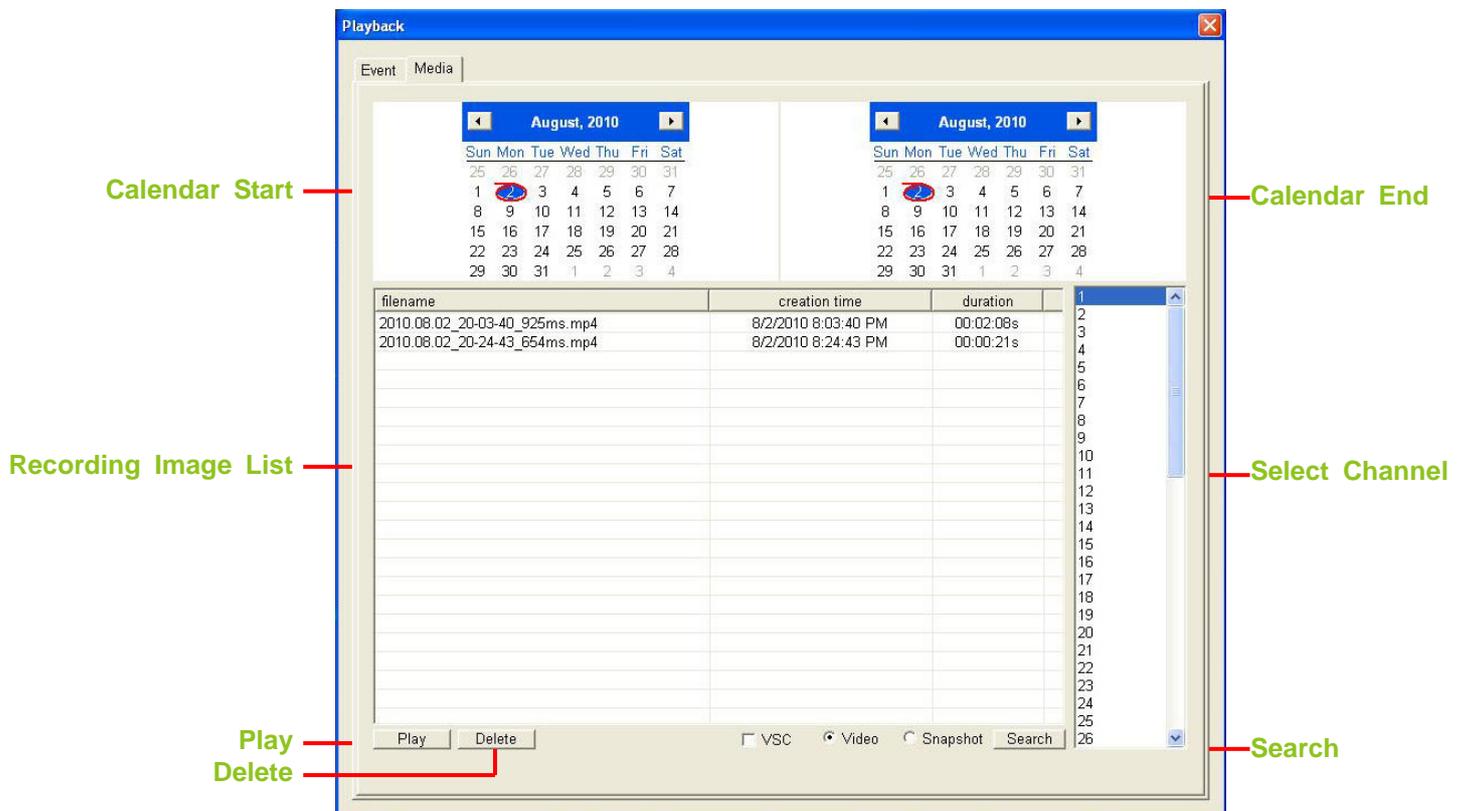
The database will save with the .ini setting when the VMS login.

### Path Information

The Path Information will display the path of recording image after click the **Rebuild DB**.



### Playback by Media



**Calendar Start**

Search event by Start Date.

**Calendar End**

Search event by End Date.

**Recording Image List**

Display the result of the search.

**Select Channel**

Search event by channel.

**Search**

Start to search the recording images.

**Play Event**

Play the recording images via VSC.

**Delete Event**

Delete the recording images.

### Calendar Start

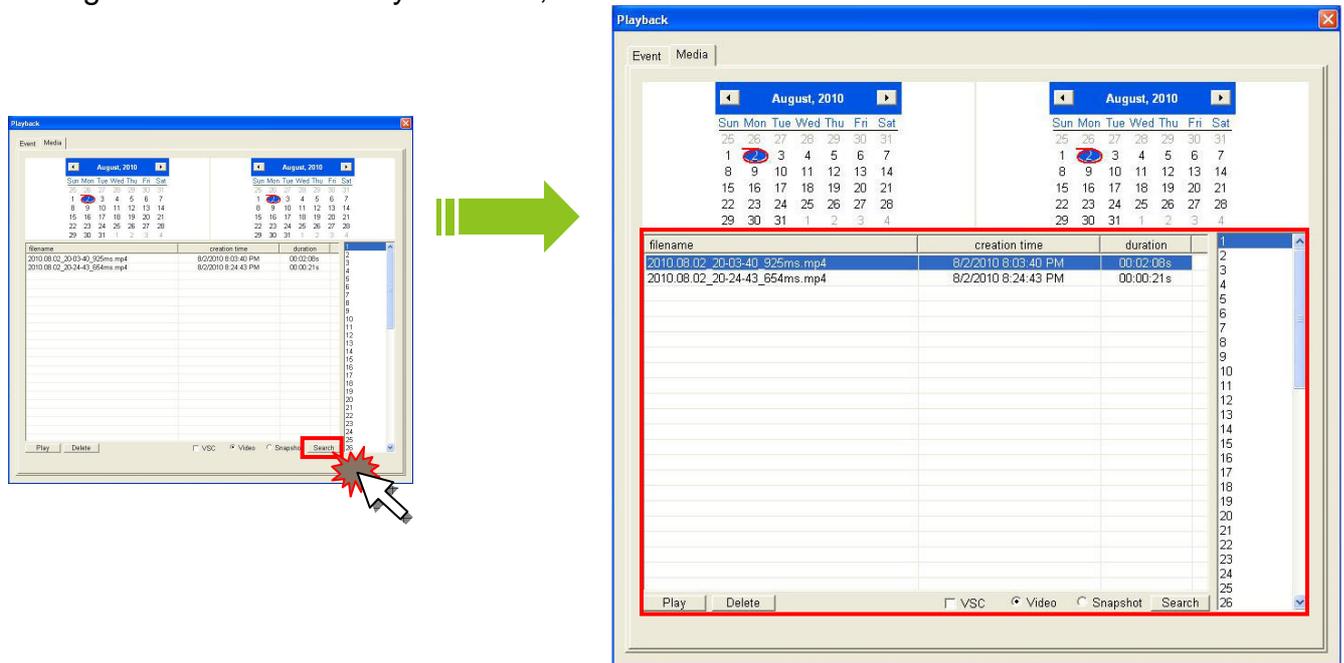
Select the start date of search through the calendar

### Calendar End

Select the end date of search through the calendar

## Recording image list

After click **Search**, the recording image list will display the search result.  
 Arrange the search result by filename, creation time and duration.

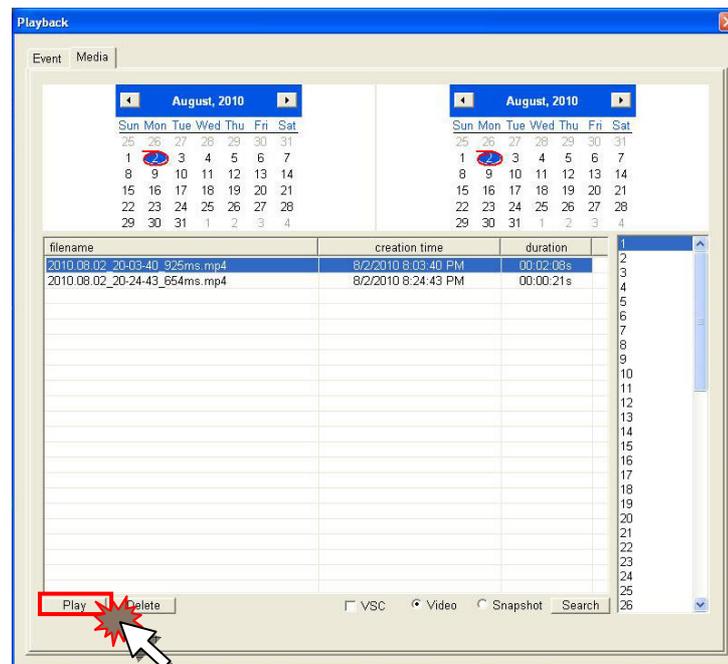


## Select Channel

Select the channel to search the recording image.  
 1 is the default channel.

## Play

Select the recording image from search result then click the button to play the recording image through VSC Media Player.





### NOTE:

Double click the result of the searched from the recording image list to play it.

### Delete

Select the recording image from search result then click the button to delete the recording image.

### Search

Click the button to enable the search function.

The searching results will follow the settings of Video / Snapshot selection to display the different one.

## Snapshot

Click **Snapshot** to capture real-time image of the IP camera and the image file will save to the default path.

This function is same as the shortcut of snapshot.

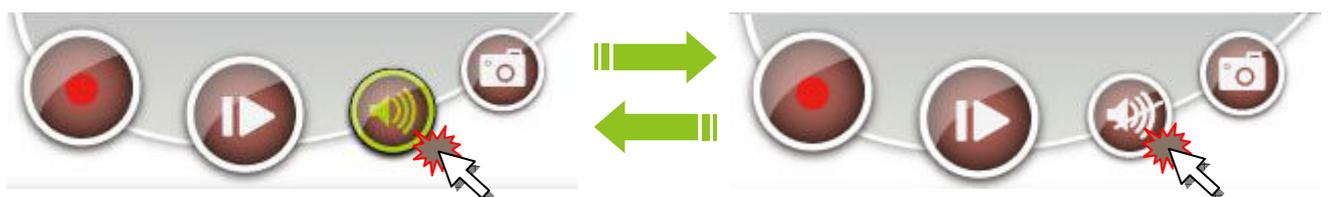


### NOTE:

Please refer to **System Operation\Windows Function\Shortcut Function\Snapshot** for further description.

## Audio On/Off

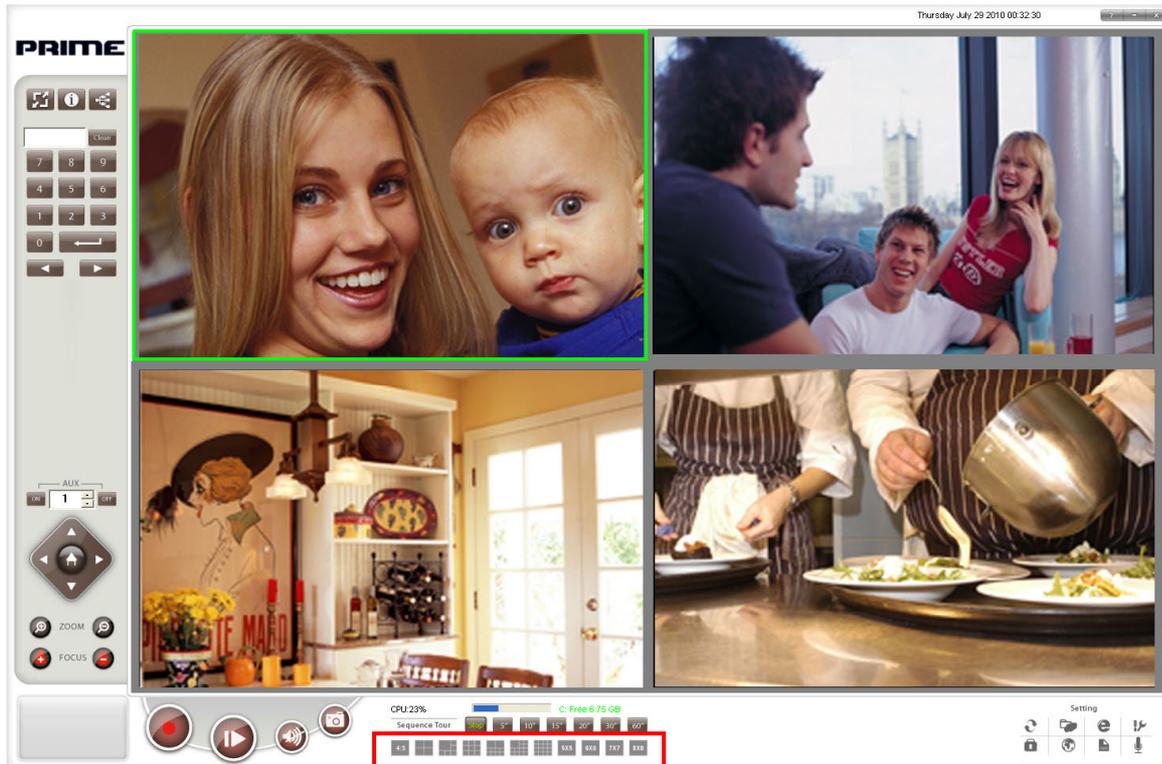
Click Audio On/Off to switch audio between On and Off.



### NOTE:

Please refer to **System Operation\Application Config\Config\Audio** for further description.

### Sequence Tour



The detail function illustration as below:

**Second Switch**  
**Stop**

The Second selection for active SEQ.  
Stop the function of SEQ.

**NOTE:**

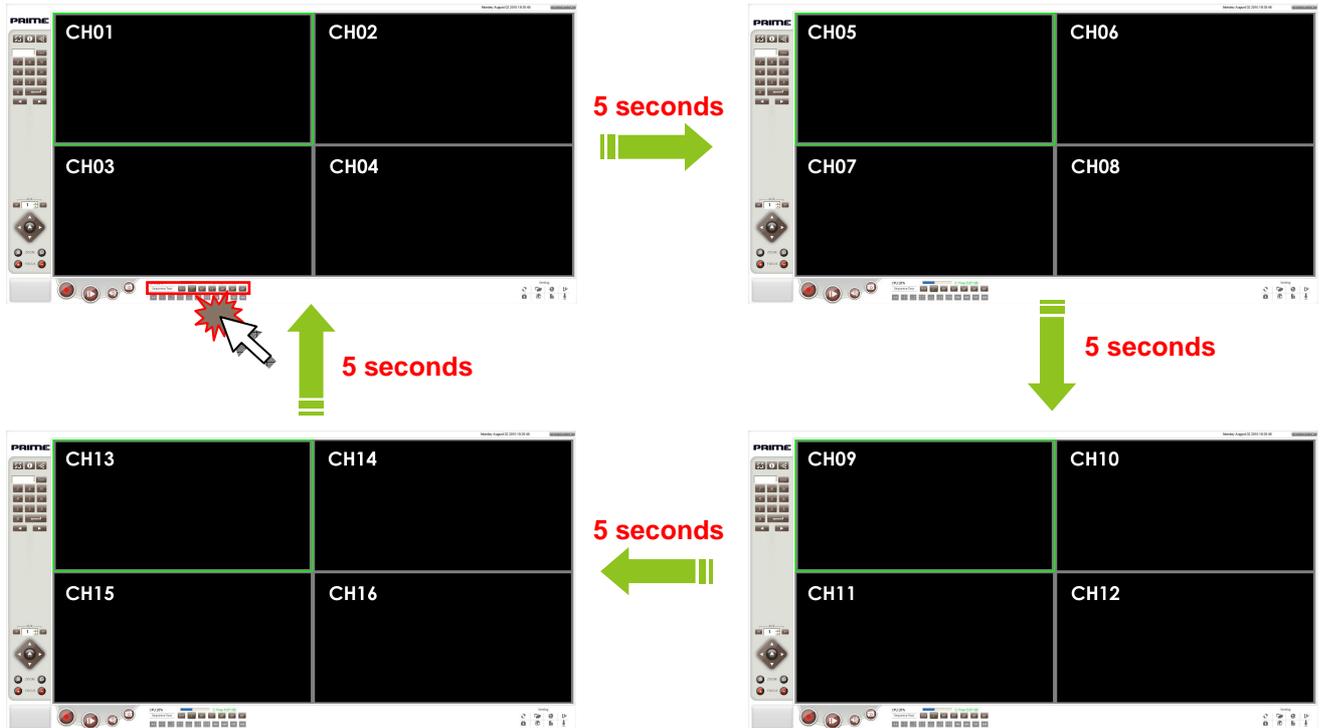
The Sequence is same as the SEQ.

### Second Switch

Use this function to automatize switch the channel pages sequentially. It is available for any layout mode.

The following pictures illustrate how to switching **16 Channels** in the **Layout Mode-04CH** by active the SEQ:

#### Active the SEQ with 5 seconds



According to the sequence setting, display the channel by sequence and rebroadcast. You can select the second to adjust the speed of page switch from 5, 10, 15 20, 30 and 60 Seconds.

#### NOTE:

The main channel would not change the IP Camera by sequentially in the PIP mode. The function of layout is useless after the SEQ is active.

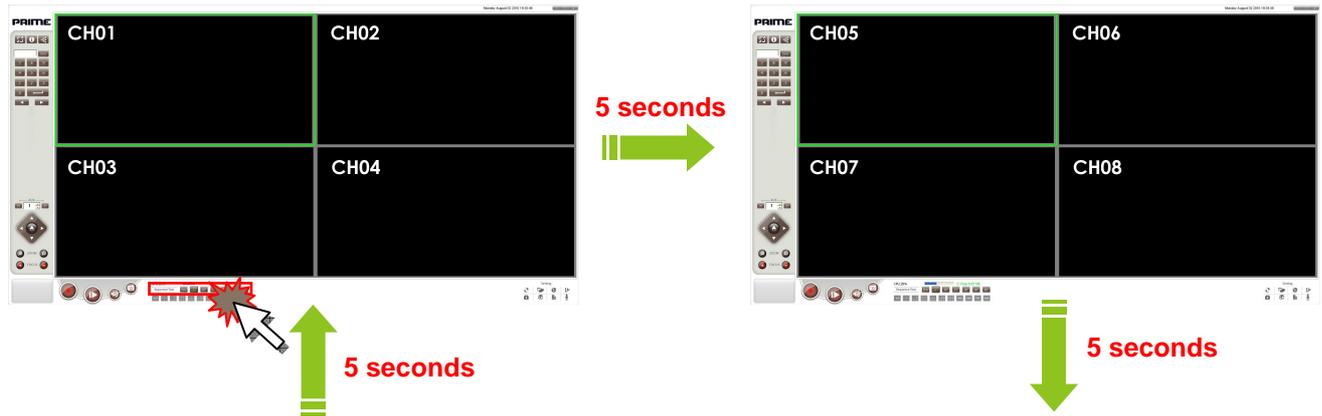
### Stop

This function can stop auto page/channel switch sequentially. Please see the example of 16CH as below:

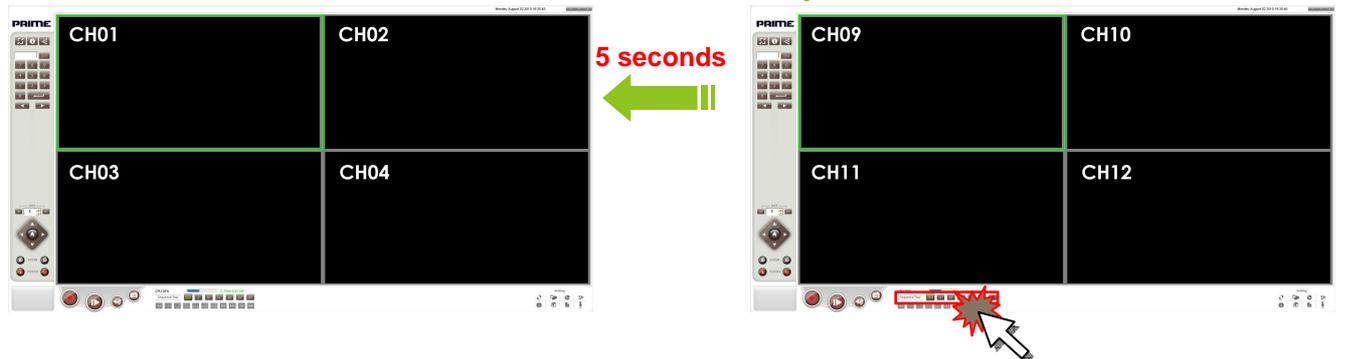
Use this function to stop switching the channel pages sequentially.

The following pictures illustrate how to stop switching **16 Channels** in the **Layout Mode-04CH** :

#### Active the SEQ with 5 seconds

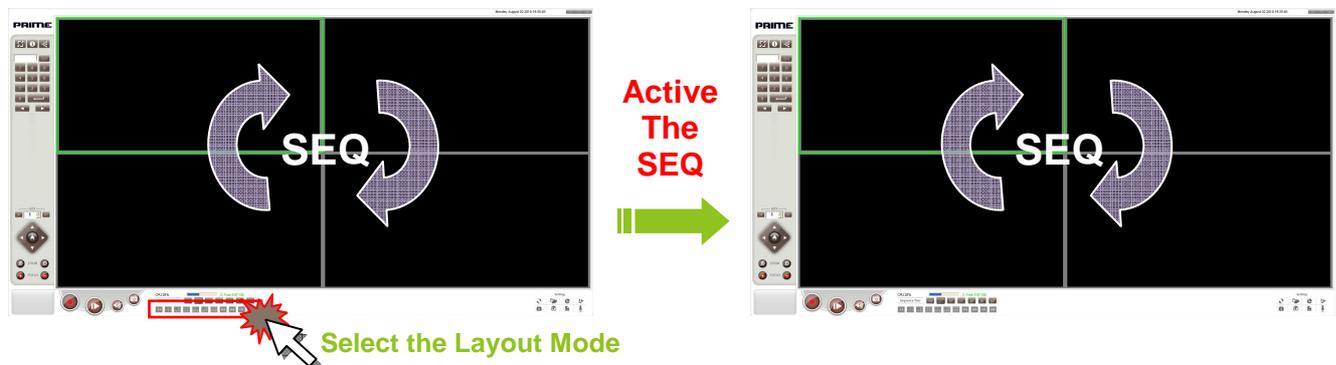


#### Back to Default Status

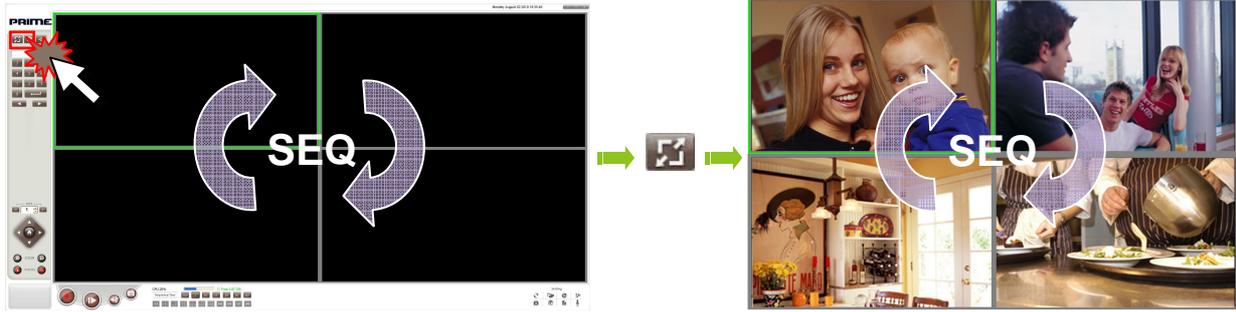


#### NOTE:

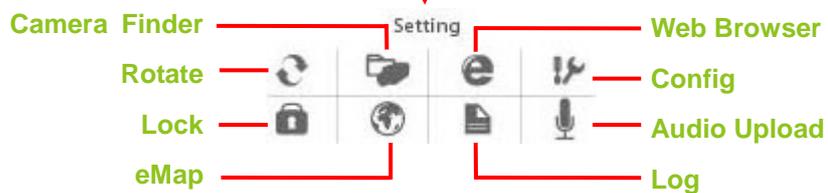
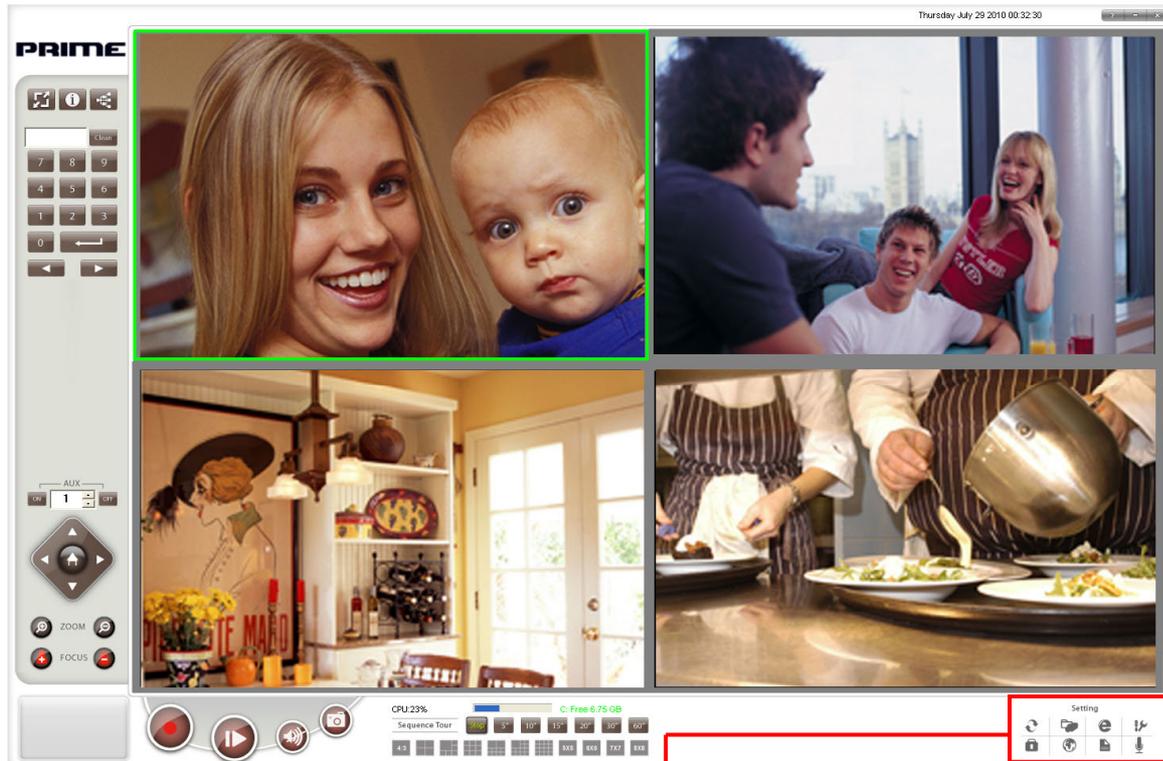
1. The layout mode is unchangeable till the SEQ function is stop.



2. The SEQ will keep in active when use the function of **Enlarge Screen** on the Screen Mode to enlarge the screen to full screen.



## Application Config



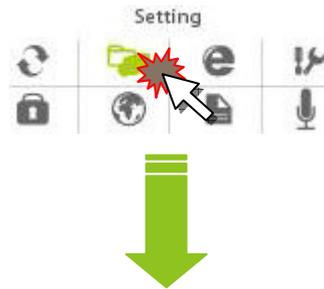
The detail function illustration as below:

**Camera Finder**  
**Rotate**  
**Lock**  
**eMap**  
**Web Browser**  
**Config**  
**Audio Broadcast**  
**Log**

Search the IP Camera.  
 To rotate images.  
 Lock the VMS Software.  
 Open the eMap function.  
 Open the Web Browser of IP Camera.  
 Enter the Software Setting.  
 Open the Audio Upload function.  
 Open the Log Information.

### Camera Finder

Use this setting to setup all of the IP Cameras quickly and easily via LAN environment. It is almost same as the Cam Finder, but there are some different between them.



Index	Name	IP	Exist
000	H264 2MegaPixel IP	192 . 168 . 20 . 218	CH01 CH07
001	H264 2MegaPixel IP	192 . 168 . 20 . 217	CH02 CH08
002	H264 2MegaPixel IP	192 . 168 . 20 . 203	CH03 CH09
003	N1071-Key	192 . 168 . 20 . 100	CH04 CH10
004	N6071	192 . 168 . 20 . 27	CH06 CH12
005	N6071	192 . 168 . 20 . 107	CH05 CH11

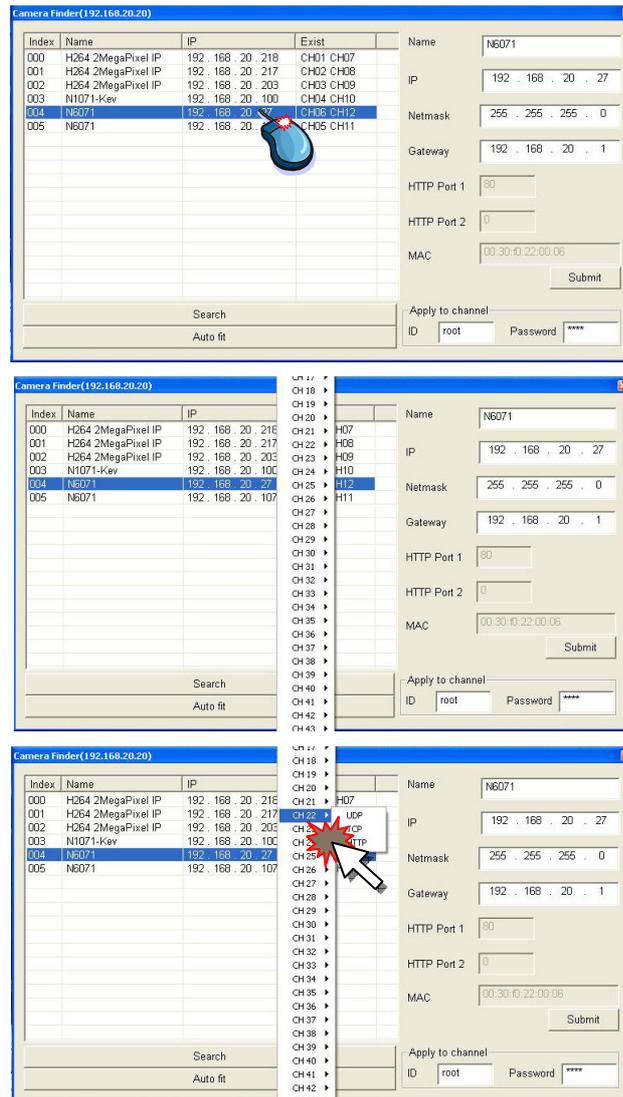
Labels in the image:

- IP Camera List**: Points to the table of camera information.
- Search**: Points to the 'Search' button.
- Auto fix**: Points to the 'Auto fit' button.
- IP Camera Information**: Points to the Name, IP, Netmask, Gateway, HTTP Port 1, HTTP Port 2, and MAC fields.
- Submit**: Points to the 'Submit' button.
- Apply to channel**: Points to the 'Apply to channel' section, including ID and Password fields.

The detail function illustration as below:

- IP Camera List**      Display all the IP Cameras from the LAN environment.
- Search**              Search all the IP Cameras from the LAN environment.
- Auto fit**             Fix the IP Cameras to the channels by automatically.
- IP Camera Info.**    Display all the parameters of the IP Camera.
- Submit**                Save the parameter of the IP Camera.
- Apply to channel**    Apply the ID and Password for the IP Camera.

Click the right-button of mouse to display the shortcut then operate the function.



The detail function illustration as below:

**Channel List**  
**Protocol Type**

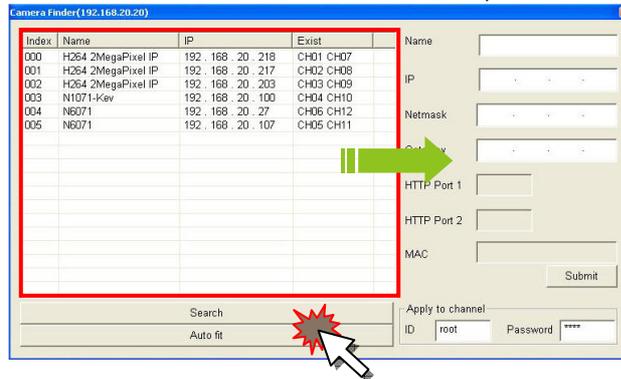
Select the channel.  
Select the transmission package protocol.

The following illustrate how to set up the IP Camera via Camera Finder:

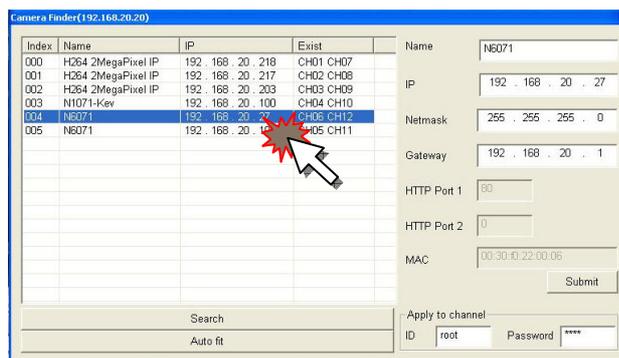
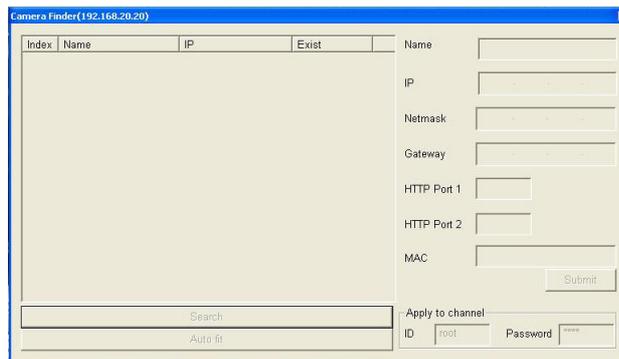
1. Click **Camera Finder** to start the program.



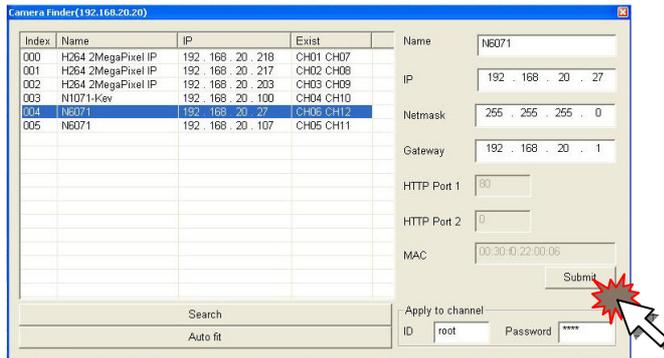
2. After the pop-up windows of the Camera Finder is shown, Click **Search**.



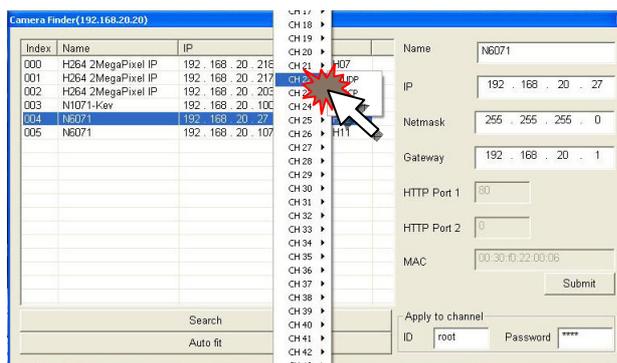
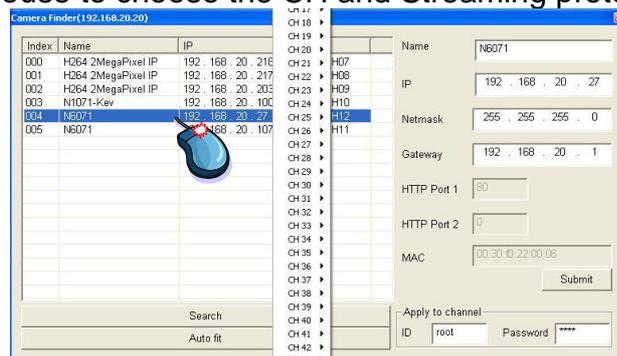
3. Click the IP camera to display the information that has been searched.



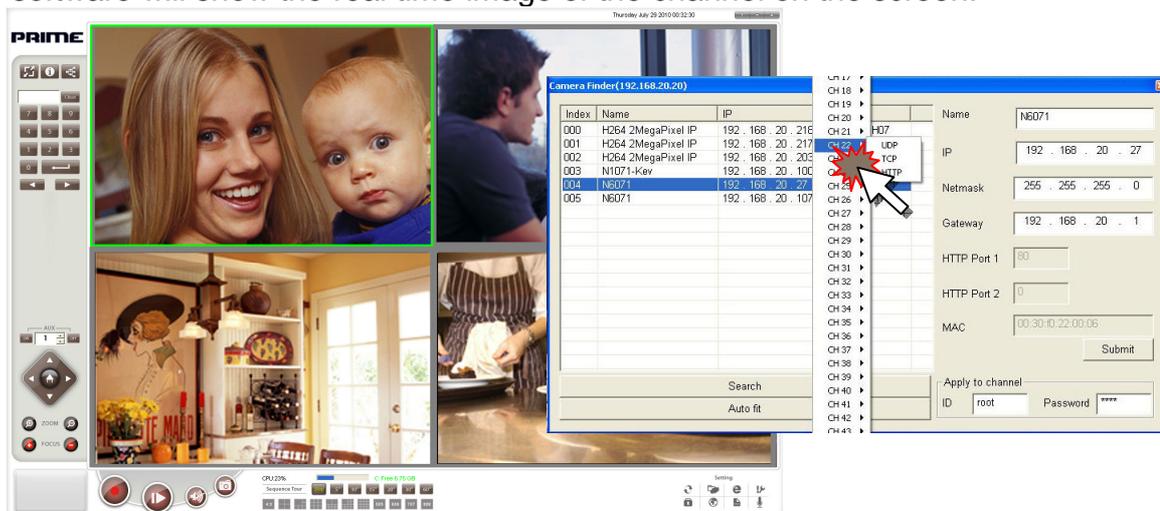
4. Click **Submit** to save the data after modified Name and IP address if necessary.



5. Click right button of mouse to choose the CH and Streaming protocol if you want to set up.



6. The software will show the real time image of the channel on the screen.



### NOTE:

The VMS can also setup the remote camera. Please refer to **System Operation\Application Config\Config\Channel** for further description.

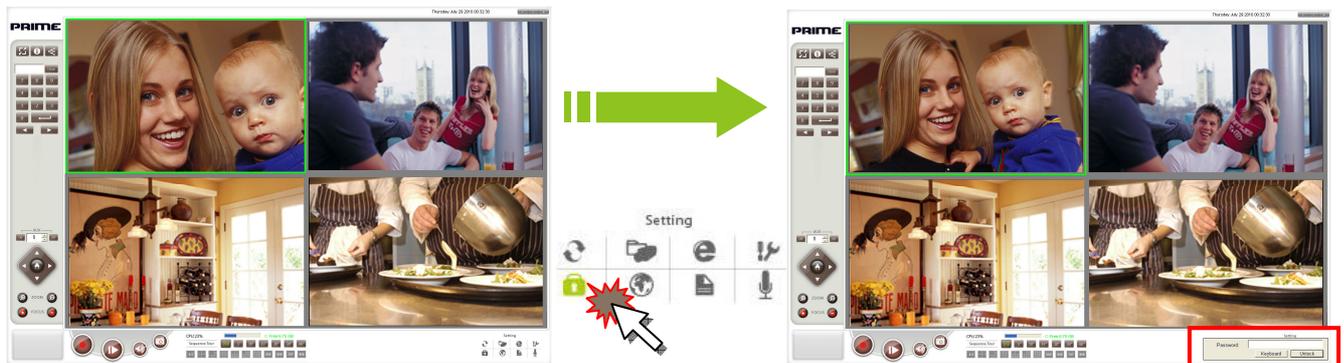
### Rotate

Use this setting to rotate the image by 180 degree.  
This function would be used according to the camera setting environment.



### Lock

Use this setting to lock the VMS in order to avoid being operated or changed by someone else. It will appear the pop-up window for you to unlock the screen after click **Lock**. The screen will remain in lock mode until released by entering the password to unlock.



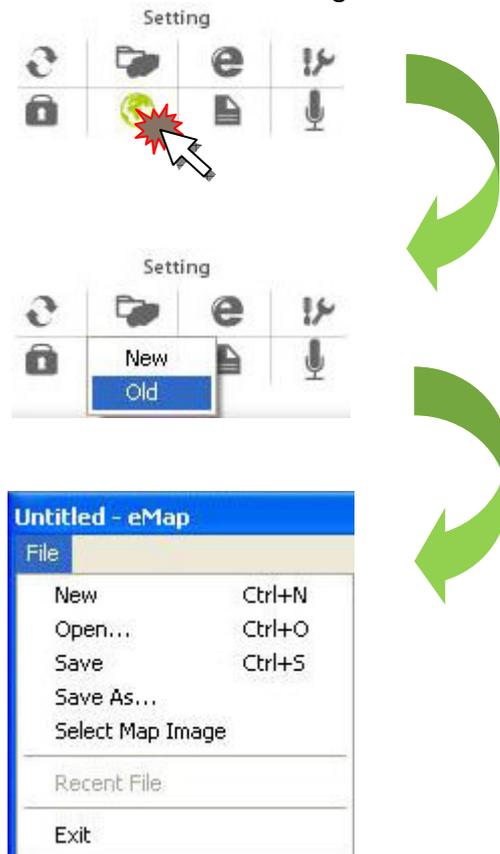
#### NOTE:

1. "**admin**" is the default password.
2. VMS provides a virtual keyboard for you to enter the password. The virtual keyboard will show on your screen after pressing the **Keyboard** in the Lock mode.



### eMap

Use this setting to integrate and edit the address setting of the IP Camera on the eMap.



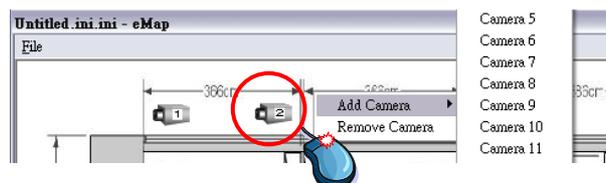
The detail function illustration as below:

<b>New</b>	Create a new map information file.
<b>Open</b>	Open a new map information file.
<b>Save</b>	Save a new map information file.
<b>Save As...</b>	Save as a map information file
<b>Select Map Image</b>	Load a JPG file.

#### NOTE:

1. Although the eMap save as the setting with \*.ini, but the VMS also supports the format of JPEG.
2. The eMap can be an interior ground plan or an actual installation picture.

After loading the map, click the right-button of mouse to display the shortcut then operate the function.



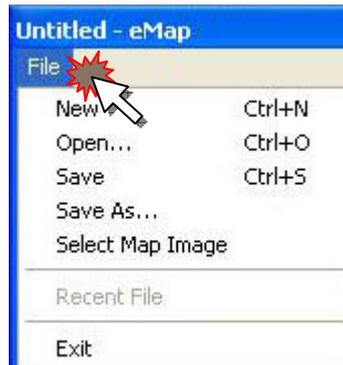
<b>Edit the IP Camera Channel List</b>	Create/Remove the IP Camera. Select the IP Camera.
--	---

The following pictures illustrate how to add the mark for the IP Camera:

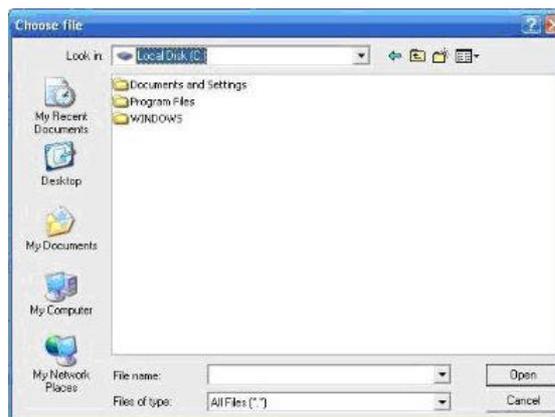
1. Click **eMap** to start the eMap program.



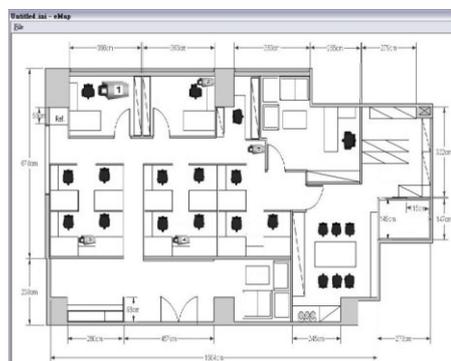
2. Click **File** to list the sub-function.



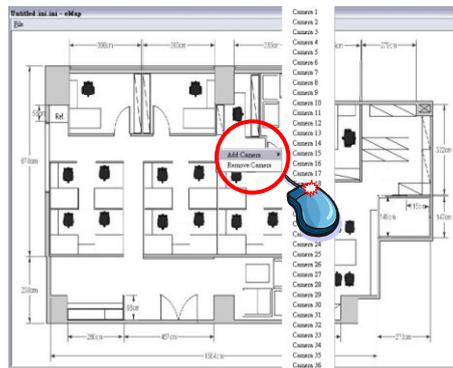
3. Select a JPEG file by click **Select Map Image**.



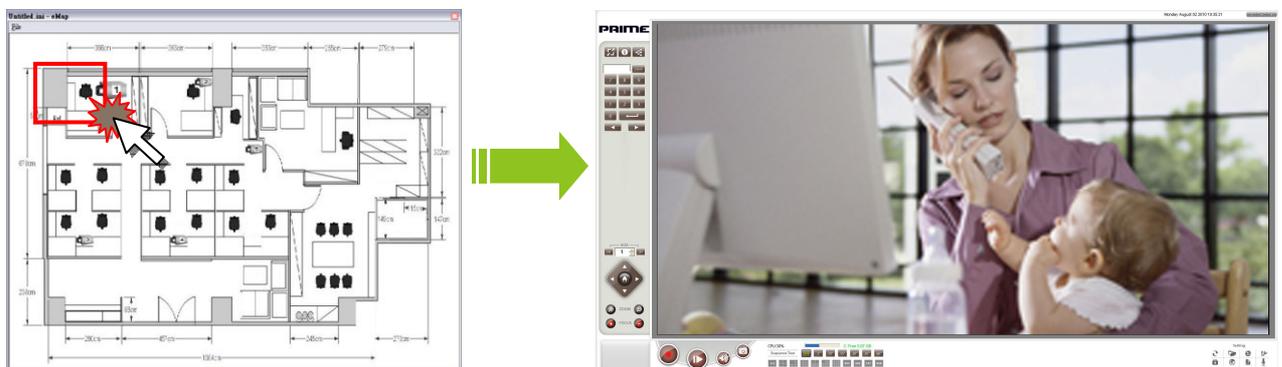
4. The JPEG of the eMap will displayed on the main windows



5. Add a new camera by click the right-button of mouse on the map.



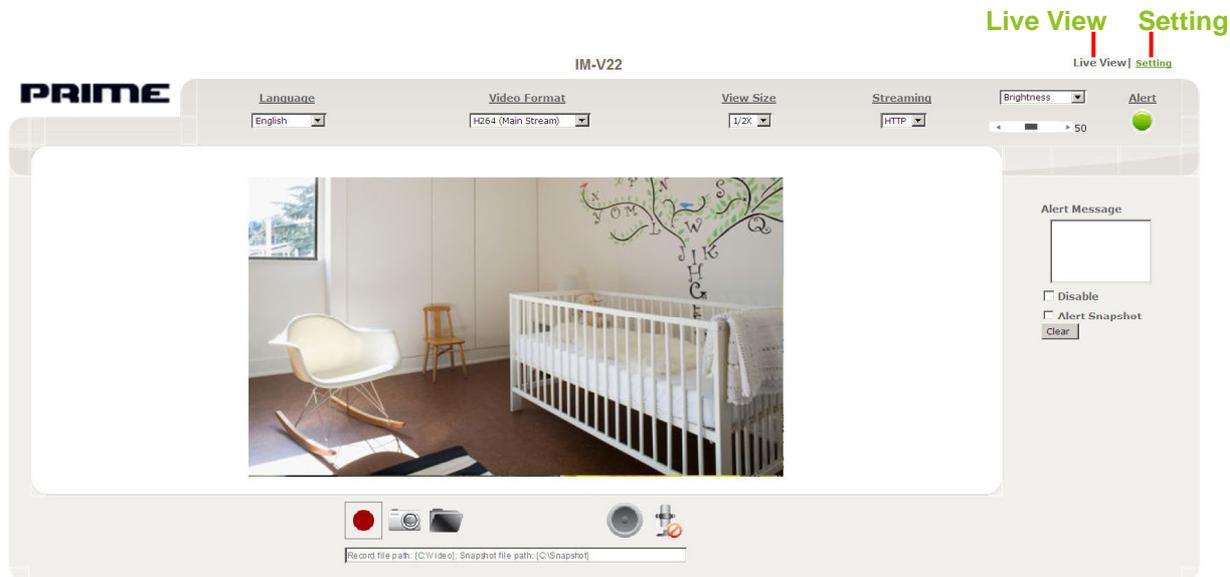
6. The image which is on the channel will show on the screen directly after double click the mouse.



7. Click **Save** to save this map file (JPG) into xxx.ini after the setting is completed.

### Web Browser

Use this setting to link the web page of the IP Camera in order to modify detail setting directly.



**Live View**  
**Setting**

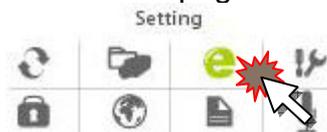
Display the streaming image.  
Set up the IP Camera.

**NOTE:**

Please refer to the User's Manual of the IP Camera for further description.

The following pictures illustrate how to login the web page of the IP Camera.

1. Click **Web Browser** to connect to the webpage of IP Camera.



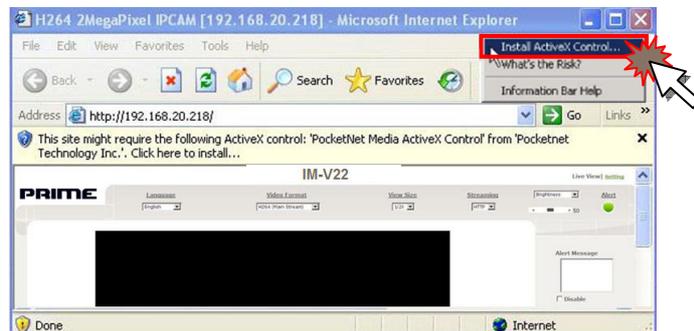
2. After fill in "root" in the User Name and Password fields, Click **OK**.



User Name: **root**  
Password: **root**

### 3. Installation of Internet Explorer ad-hoc components

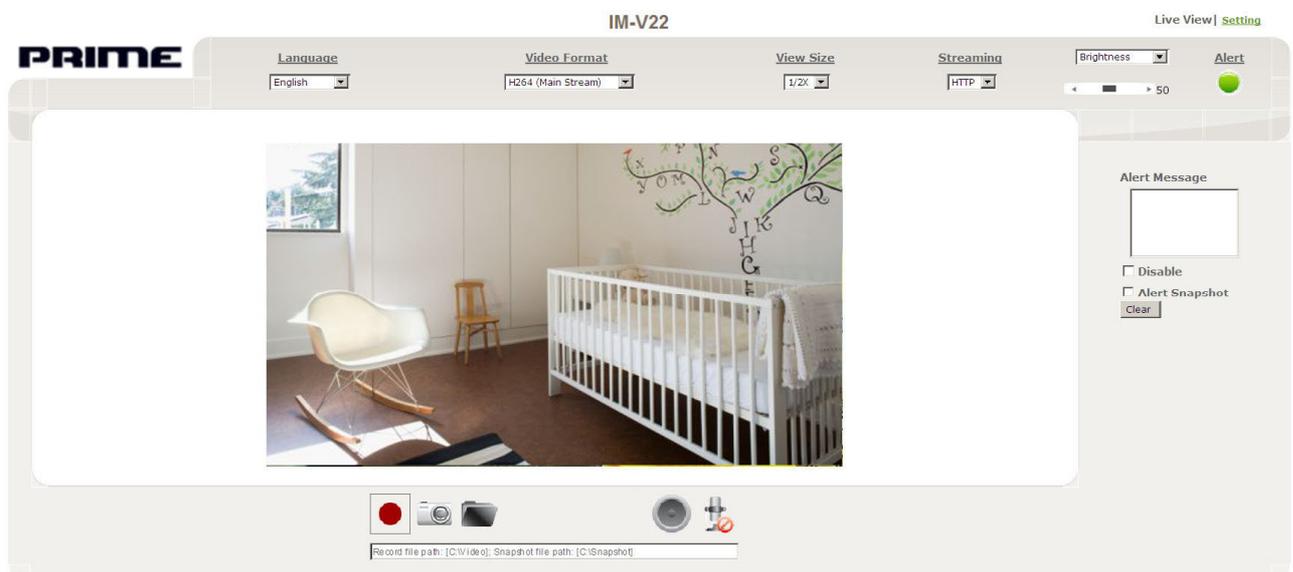
After the Username and Password are confirmed, a control setup screen pops up under the IE address bar. Click "**Install ActiveX Control**" to continue.



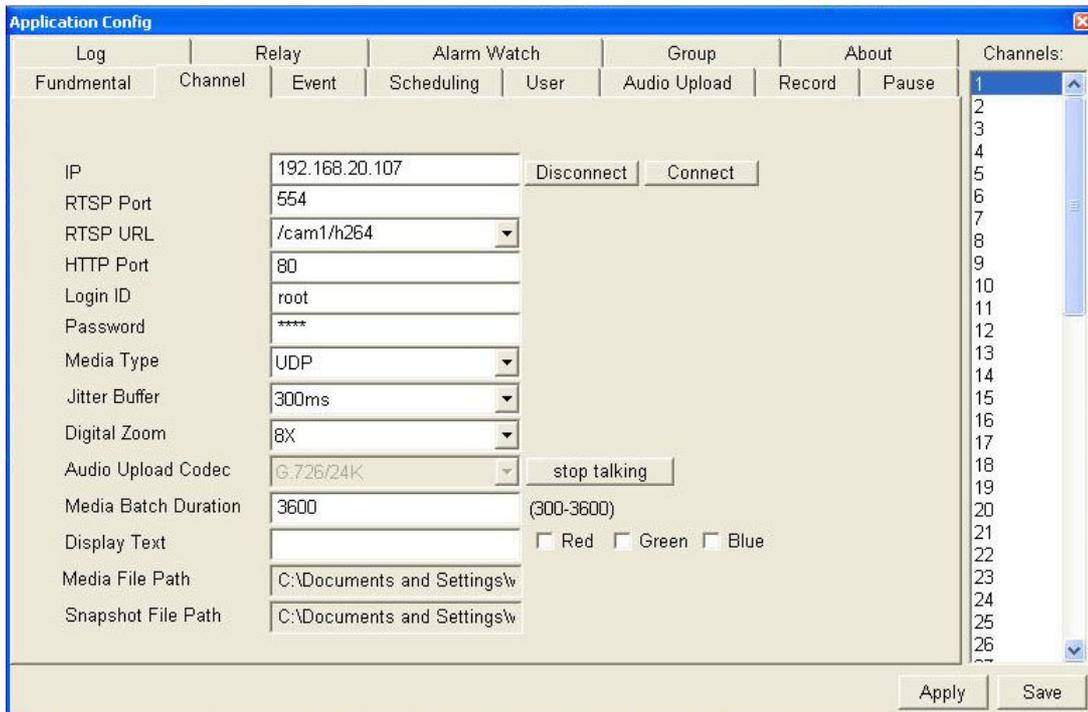
The security warning screen appears. Click "**Install**". The ActiveX Control is named "**ActiveX Control**". This software is owned by our company and well certified. You can use it without any doubts about its validity.



When ActiveX Control is installed successfully, you can see the camera image and interface on your screen.



### Config (Application Config)



The detail function illustration as below:

<b>Fundamental</b>	Set up the parameter of System.
<b>Channel</b>	Set up the parameter of IP camera.
<b>Event</b>	Set up the parameter of Event.
<b>Scheduling</b>	Set up the parameter of Schedule.
<b>User</b>	Set up the parameter of User.
<b>Audio Upload</b>	Set up the parameter of Audio.
<b>Record</b>	Set up the parameter of Record.
<b>Pause</b>	Stop the image display.
<b>Log</b>	View the Log information.
<b>Relay</b>	Set up the port management of VMS.
<b>Alarm Watch</b>	Set up alarm watch function.
<b>Group</b>	Set up the IP Camera Group.
<b>About</b>	Display the VMS information.

**NOTE:**

The Application Config will enable after the setting is completed by click **Apply** and **Save**.

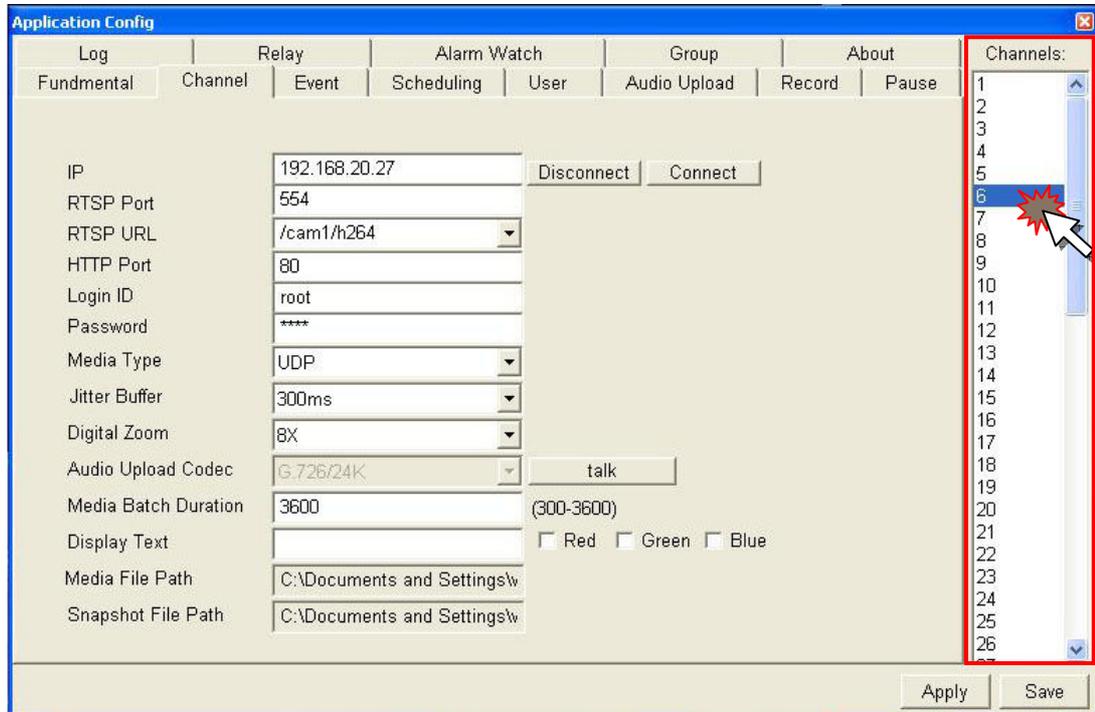
There are 2 kinds of setting methods in the Config as below:

- With Channel
- Without Channel.

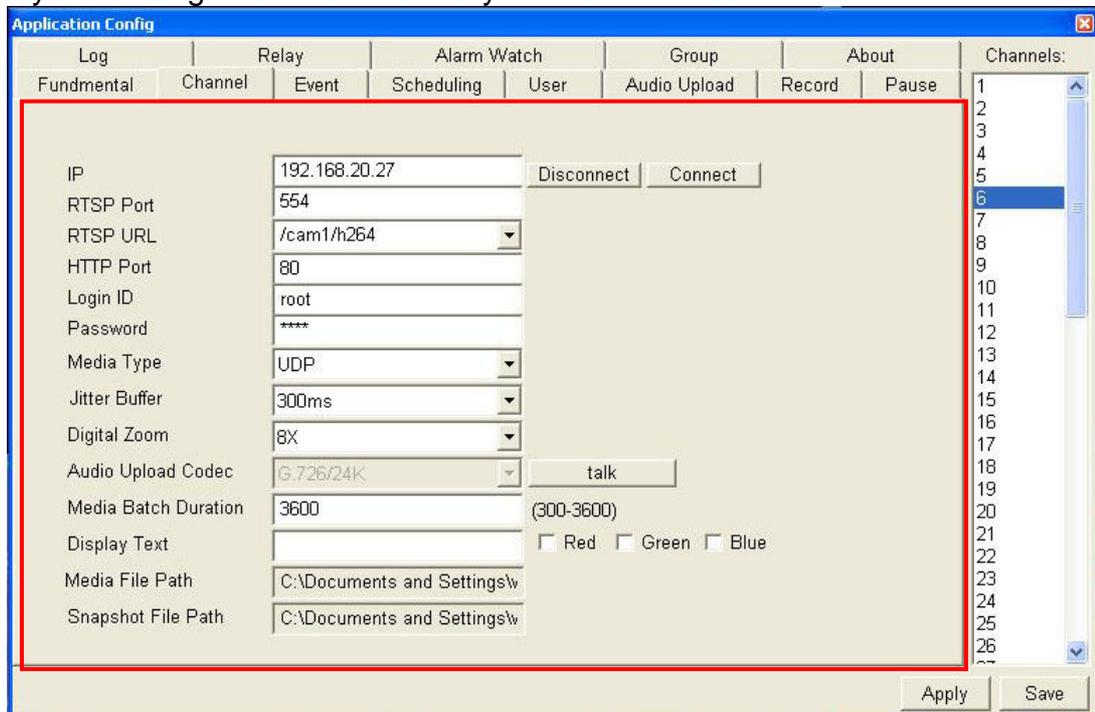
### With Channel:

Before to modify the parameter, you have to select channel at first where is on the bookmark of **Channel**, **Event** and **Schedule** at first.

1. Select a camera.



2. Modify the setting of the camera that you had selected.



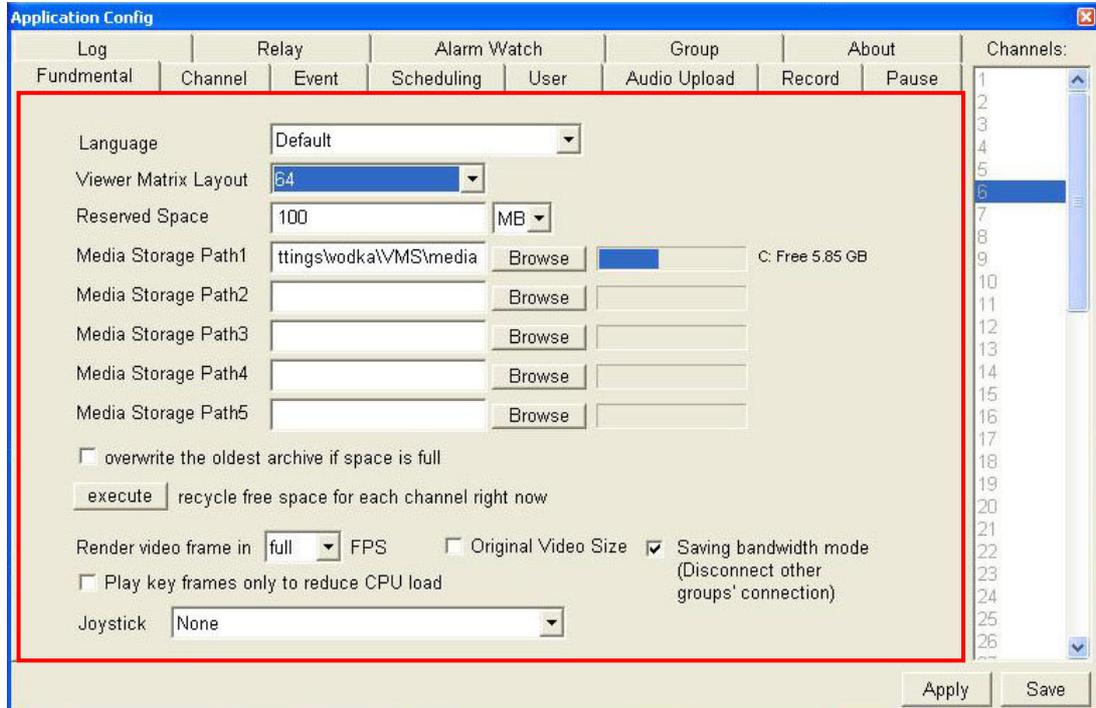
### NOTE:

Channel 1 is the default channel.

### Without Channel:

Modify the parameter on the bookmark of **Fundamental**, **User**, **Audio Upload**, **Record**, **Log**, **Relay**, **Alarm Watch**, **Group** and **About**.

1. Select a camera.

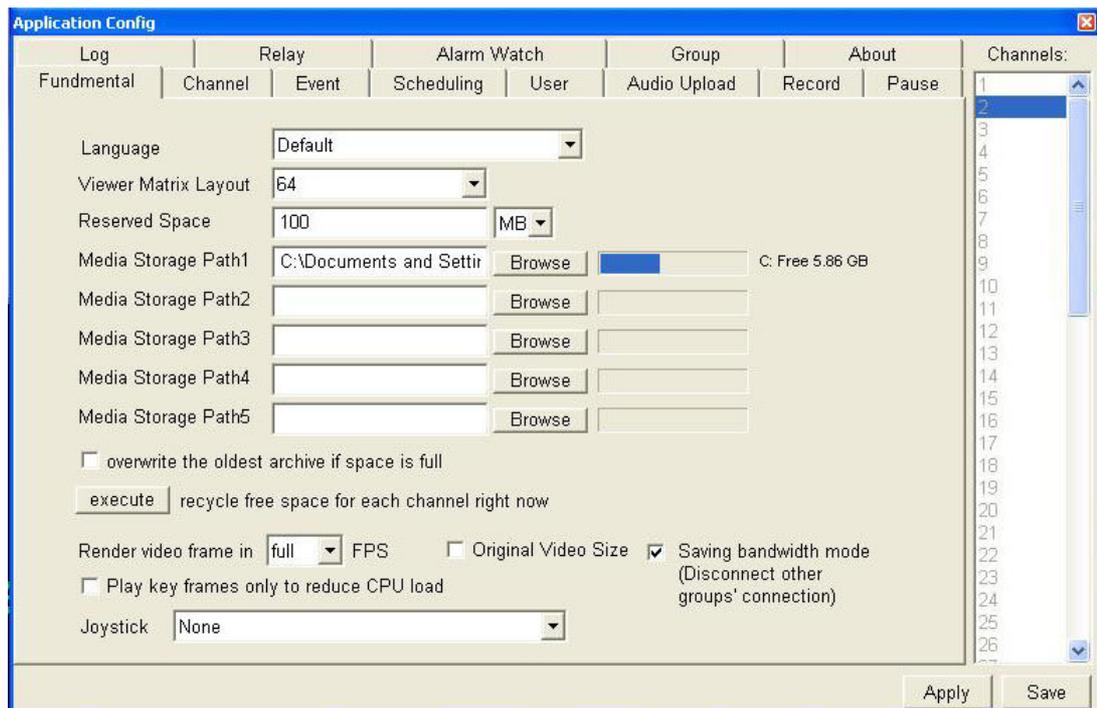


### NOTE:

The channel selection is unchangeable in these bookmarks.

### Fundamental

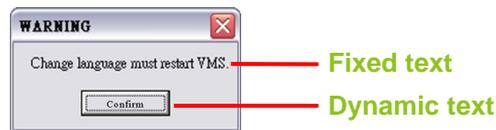
The fundamental means the basic record setting which supports pre-setting for recording the video.



### Language

It supports 4 kinds of different languages and the default language will follow the OS language.

Click the pull-down menu to select the language from Default, English, 简体中文 and Suomi.



### NOTE:

The OS language affect some dynamic text only, but the fix text follows the VMS setting.

### Viewer Matrix Layout

It supports 8 kinds of layout mode as below: 01, 04, 06, 09, 13, 16, 36 and 64.

Select one to set up the default layout

04CH is the default for layout.

### NOTE:

Please refer to **System Operation\Screen Mode\Layout** for further description.

### Reserved Space

Use this setting to avoid recording occupies space of the hard disk.

There are 2 kinds of reserved space setting for you to set up as you need: **MB** and **%**.

**The HDD Resource:** Display the HDD space of system.

**The Reserved Space:** Limited recording size, but not affect the HDD resource.

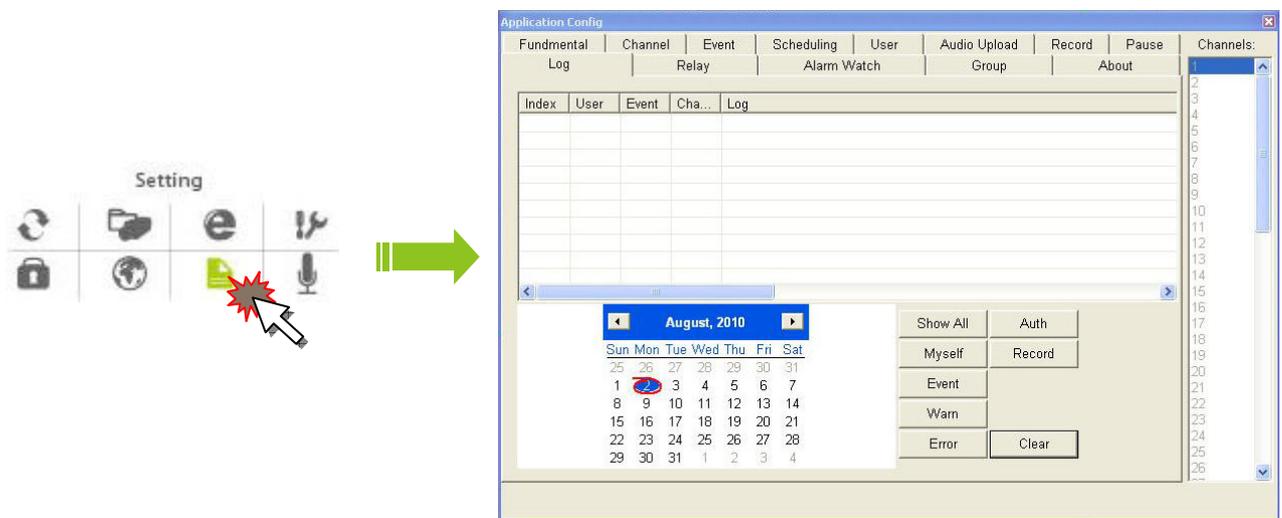
### Normal Mode:

The recording function of manual and schedule is useless while the recording image size is exceeded the storage limitation. And the recording mark will not display on the channel.



### Schedule Mode:

The VMS will record the full information of the HDD to log information when the VMS stop the recording function if the recording image size is exceeded the storage limitation.



### NOTE:

The new setting would be enabling after restart the VMS. 100MB is the default space for reserved space.

### Media Storage Path

Input the folder path directly or click **Browse** to select it easily. Five path groups can be set up in here.

Every Media Storage Path provides the HDD resource information for customers.

Media Storage Path1	C:\Documents and Settin	Browse	C: Free 33.82 GB
Media Storage Path2		Browse	
Media Storage Path3		Browse	
Media Storage Path4		Browse	
Media Storage Path5		Browse	

According to the different OS, the different path exist the default path.

OS System	Absolute Path
Windows XP	C:\Documents and Settings\ [User name] \VMS\media\
Windows Vista	C:\Users\ [User name] \VMS\media\

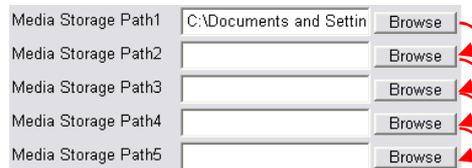
### NOTE:

The HDD resource is the same with the HDD resource of System status. Please refer to **System Operation\Screen Status\HDD Resources** for further description.

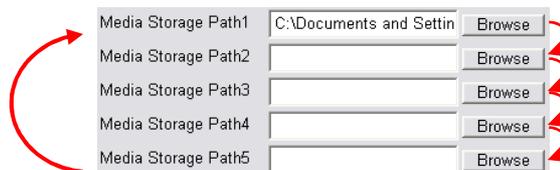
### Overwrite the oldest archive if space is full

The system will overwrite the oldest space automatically if space is full.

Disable the **Overwrite the oldest archive if space is full** function, the system will only save the recording image into the fixed path.



Enable the **Overwrite the oldest archive if space is full** function, the system will overwrite the sequence of recording image.



### Recycle free space for each channel right now

When the HDD space is full, click **execute** to recycle free space. The VMS would be removed the fixed MB / % recording image according to the Reserved Space setting.

#### NOTE:

The function will remove the recording image directly, please note to use the function carefully.

### Render video frame

When CPU resources reach 100%, use this function to avoid system crash. The default FPS is according to the video setting of IP camera.

The following tables show the FPS result:

Render video frame	FPS (NTSC)	FPS (PAL)
Full	30	25
1/2	15	12.5
1/3	10	8.3
1/4	7.5	6.25
1/5	6	5

#### NOTE:

The function will change the live image FPS only.

### Play key frames only to reduce CPU load:

The key frame is the "I Frame". Use the function to avoid the system crash, because the de-compression image is very depletion of resources. The function will be executed automatically to avoid system crash when CPU resources reach 100%.

#### NOTE:

The function will change the live image FPS only.

### Joystick

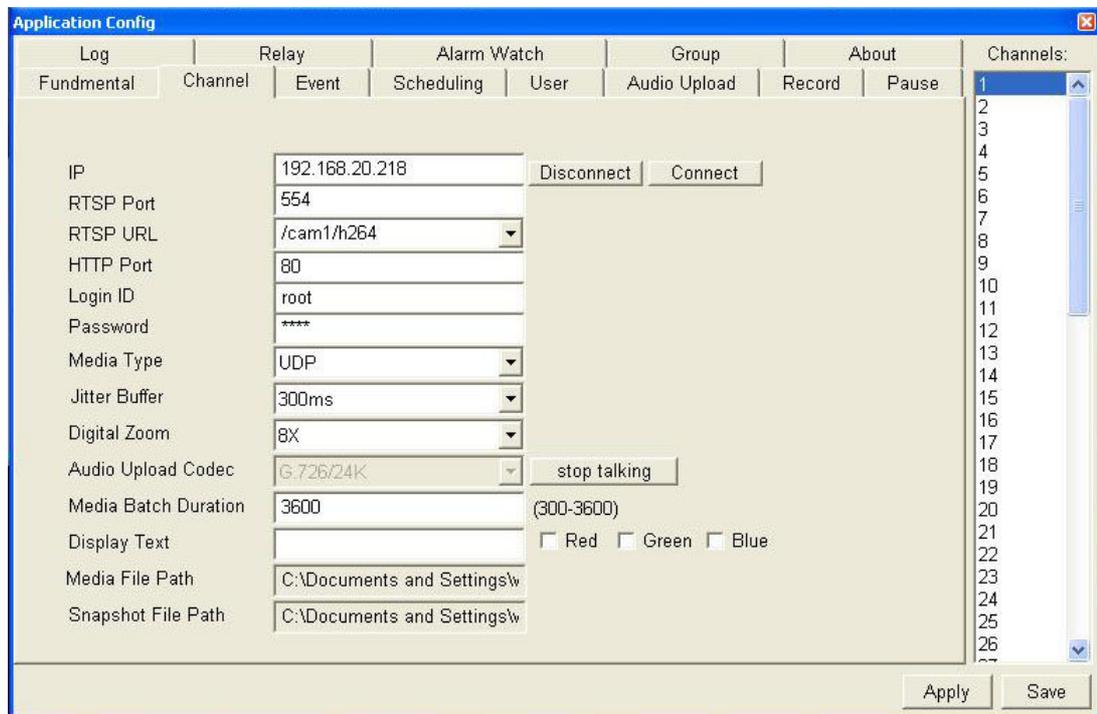
The functions can support to controls the direction including: Up, Down, Right, Left, Home and Zoom In/Out. Please see the protocol list as below:

Joystick

Series Port	Protocol	
	Pelco P	Pelco D
COM1	2400	2400
	4800	4800
	9600	9600
COM2	2400	2400
	4800	4800
	9600	9600
COM3	2400	2400
	4800	4800
	9600	9600
COM4	2400	2400
	4800	4800
	9600	9600
COM5	2400	2400
	4800	4800
	9600	9600
COM6	2400	2400
	4800	4800
	9600	9600

### Channel

The channel bookmark means the setting which to modify the parameter settings for each camera.



#### NOTE:

Set up the IP camera easily through IP Finder to avoid the too much detail setting. Please make reference to the chapter of 4-9-3 IP Finder for further detailed description. Please refer to **System Operation\Application Configs\Camera Finder** for further description.

### IP

Input the IP address follow the IPv4 setting. When all settings have been completed, click **Connect** to connect the camera.



### RTSP Port

The default RTSP (TCP) port is 554. The port setting follows the IANA standard. Change the port setting according to the requirement and environment.

### RTSP URL

There are many path selections for customer which provide different stream to the VMS. The IP camera can provide the MJPEG/MPEG4/H.264 stream. Change the RTSP URL to receive the different image type.

The detail function illustration as below:

RTSP URL	IP Camera Mode	Stream Type
/cam1/MJPEG	Main Stream M-JPEG	JPEG
/cam1/MPEG4	Main Stream Mpeg4	Mpeg4 (Main)
/cam1/MPEG4-2	Sub Stream Mpeg4	Mpeg4 (Sub)
/cam1/H.264	Main Stream H.264	H.264

The different type would show different RTSP URL in the pull-down menu.

### NOTE:

The IP camera also has the 3GPP streaming, but it is only for mobile phone solution

### HTTP Port

The default HTTP port is 80.

The port setting follows the IANA standard. Change the port setting according to the requirement and environment.

### Login ID

The default login ID is "root" from IP camera.

The login ID is the same as IP camera.

### Password

The default Password is "root" from IP camera.

The password is the same with IP camera.

### Media Type

The default setting is UDP.

Select UDP, TCP, HTTP, multicast for video streaming transmission.

Protocol	Differences		
	Tunneling	Pocket Loss	Speed
HTTP	Easy	Fair	Fair
TCP	Fair	Lower	Fast
UDP	Hard	Lowest	Fastest

### NOTE:

HTTP is recommended if your network is protected with firewalls.

### Jitter Buffer

This function can handle packet loss and packet re-ordering.

Set up the buffer time which helps the video smoother according to your bandwidth to adjust the buffer time.

There are 7 kinds of parameters for customer: N/A, 150ms, 300ms, 500ms, 1s, 3s and 5s.

The default parameter is the 300ms.

### NOTE:

The Jitter Buffer is not the same as the web page of IP camera.

Set up the range of Jitter Buffer according to the environment.

### Digital Zoom

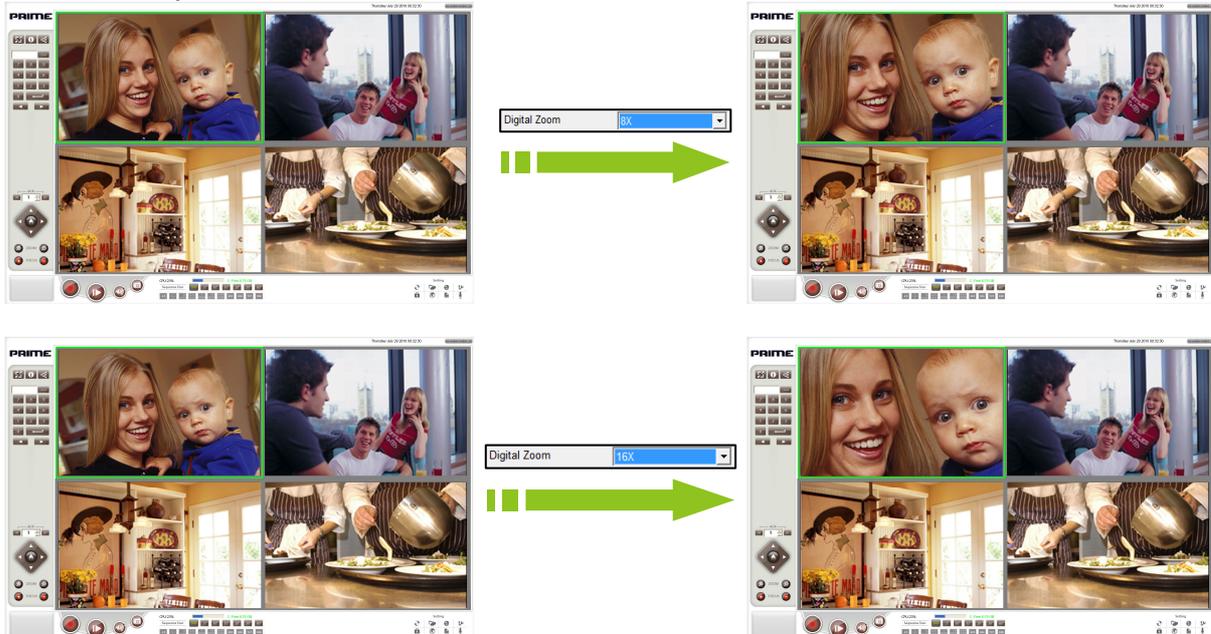
Enable the function to use the Digital Zoom IN and OUT.

When the function enable, the shortcut function will be appear through the right-button of mouse.

There are 3 kinds of setting for customers: N/A, 8X and 16X.

The different parameter will affect the ZOOM IN/OUT of shortcut function.

The default parameter is the 8X.



### NOTE:

Select the N/A parameter to disable the shortcut function.

Please refer to **System Operation\Windows Function\Shortcut Function** for further description.

### Audio Upload Codec

There are 3 kinds of audio code from IP camera including G.711, G.722 and G.724.

The audio code selections follow the IP camera type.

Click **talk** button then transmit the sound to IP camera.

### NOTE:

You need to install microphone to computer first and remote camera must be installed the speakers.

### Media Batch Duration

It means the Manual / Schedule recording duration. (Unit: sec).

And the software only provides the post-record function.

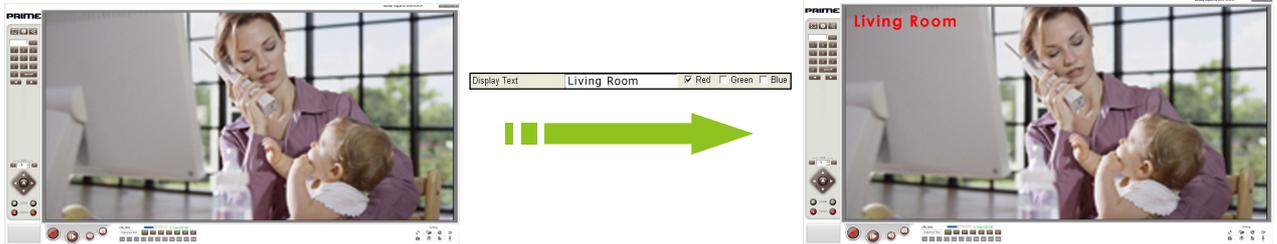
The default setting is 3600 (60 minutes).

Recommend the value is 600 (10 minutes).

### Display Text

Remark the string at the top of the channel.

The software provides the 20 byte word into this text, and clicks the RGB checkbox to change the color.



Red	Green	Blue	Result
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Black
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Red
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Green
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Blue
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yellow
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cyan
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Magenta
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	White

### Media File Path

The Media File Path is for storing the recorded video files.

The following tables show the relative path for use:

OS System	Absolute Path	Relative path
Windows XP	C:\Documents and Settings\[User name]\VMS\media\	[Channel] \video
Windows Vista	C:\Users\[User name]\VMS\media\	[Channel] \video

### Snapshot File Path

The Snapshot File Path is for saving your snapshot file.  
The following tables show the relative path for use:

OS System	Absolute Path	Relative path
Windows XP	C:\Documents and Settings\[User name] \VMS\media\	[Channel] \snapshot
Windows Vista	C:\Users\[User name] \VMS\media\	[Channel] \snapshot

### NOTE:

The absolute path can be modify then save the image.

Please refer to **System Operation\Application Configs\Config\Fundamental\** for further description.

### Attention:

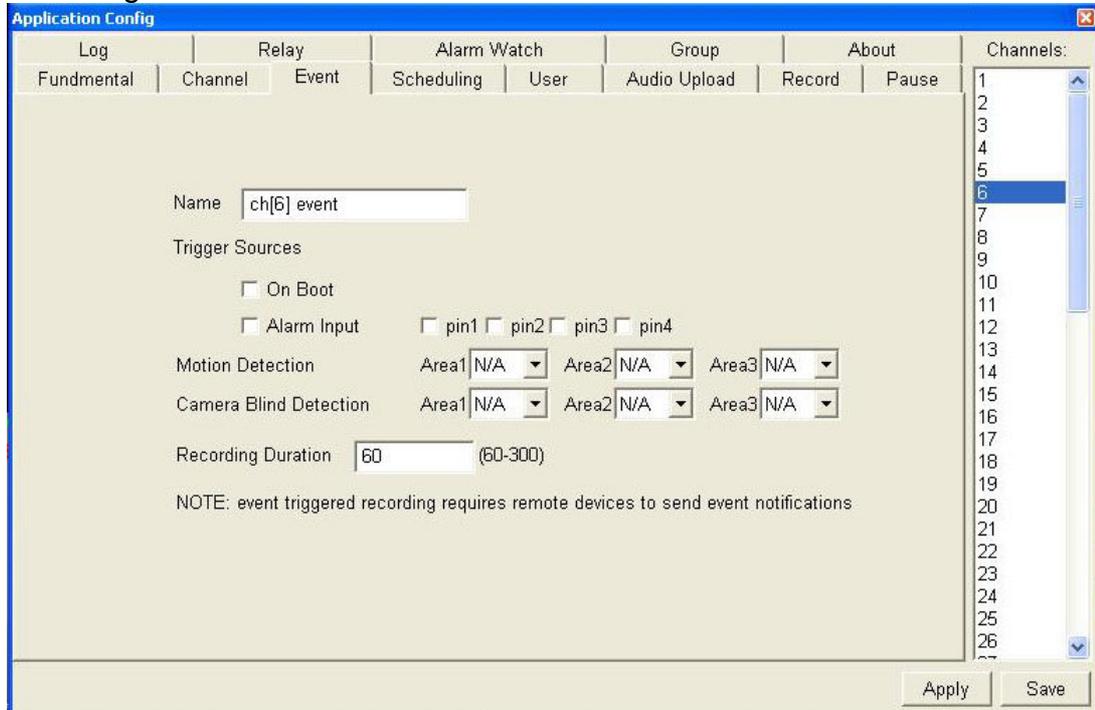
It will keep the status with **Connecting...** on the channel while the VMS is input the error parameter by user.



### Event

The Event bookmark means the setting which to record the video by event for each camera.

When the event is triggered, the camera will record the message to log information and record the image to HDD.



### Name

The default name is the **ch[Number] event**.  
The [Number] is follow up the channel number.

### Trigger Sources

There are 2 trigger sources for customer: On Boot and Alarm Input.

The detail function illustration as below:

#### On Boot:

When the system is rebooted due to power shortage, sabotage, or other reasons, the function will enable.



### Alarm Input:

When the alarm input could be detected due to the security equipment connected from the DI terminals behind the machine: such as door/window detectors or infrared sensors, the function will enable.



### Motion Detection

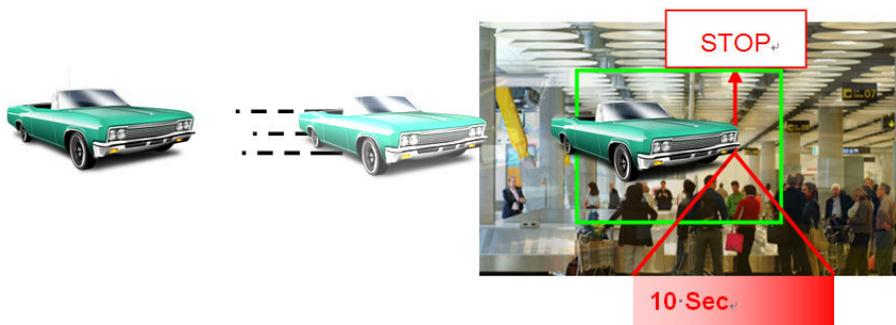
When motion is detected from any objects appeared in the set detection area, the function will be enabled.

Our IP camera always provides the three areas for customer's application and there are three kinds of setting of motion detection for every area: Start, Stop and Start/Stop.



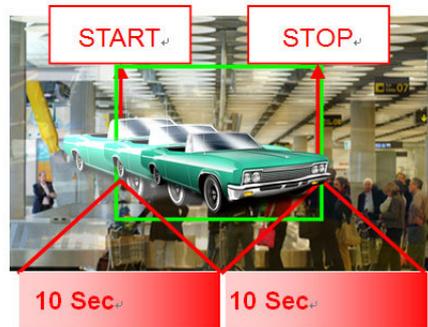
### Start:

When the objects enter or move in the motion area, the system will detect the motion to record the image according to the setting of recording duration.



### Start/Stop

The system will detect the status of Start and Stop to record the image then add the two recording duration.



### NOTE:

The next trigger will occur in the recording is completed.

### Camera Blind Detection

"Blind Detection" is typically used in high traffic area. For example, to detect whether the exhibit has been destroyed or removed from the office lobby.

Our IP camera always provides the three areas for customer's application: Start, Stop and Start/Stop.



### NOTE:

Set up the area from IP camera through Web page.

Please refer to the IP camera User's Manual for further detailed description.

### Recording Duration

It means the Event recording duration. (Unit: sec)

The VMS will record the image when enable the Trigger Sources: On Boot, Alarm Input, Motion Detection or Camera Blind Detection.



The software only provides the post-record function.

The default setting is 10 sec.

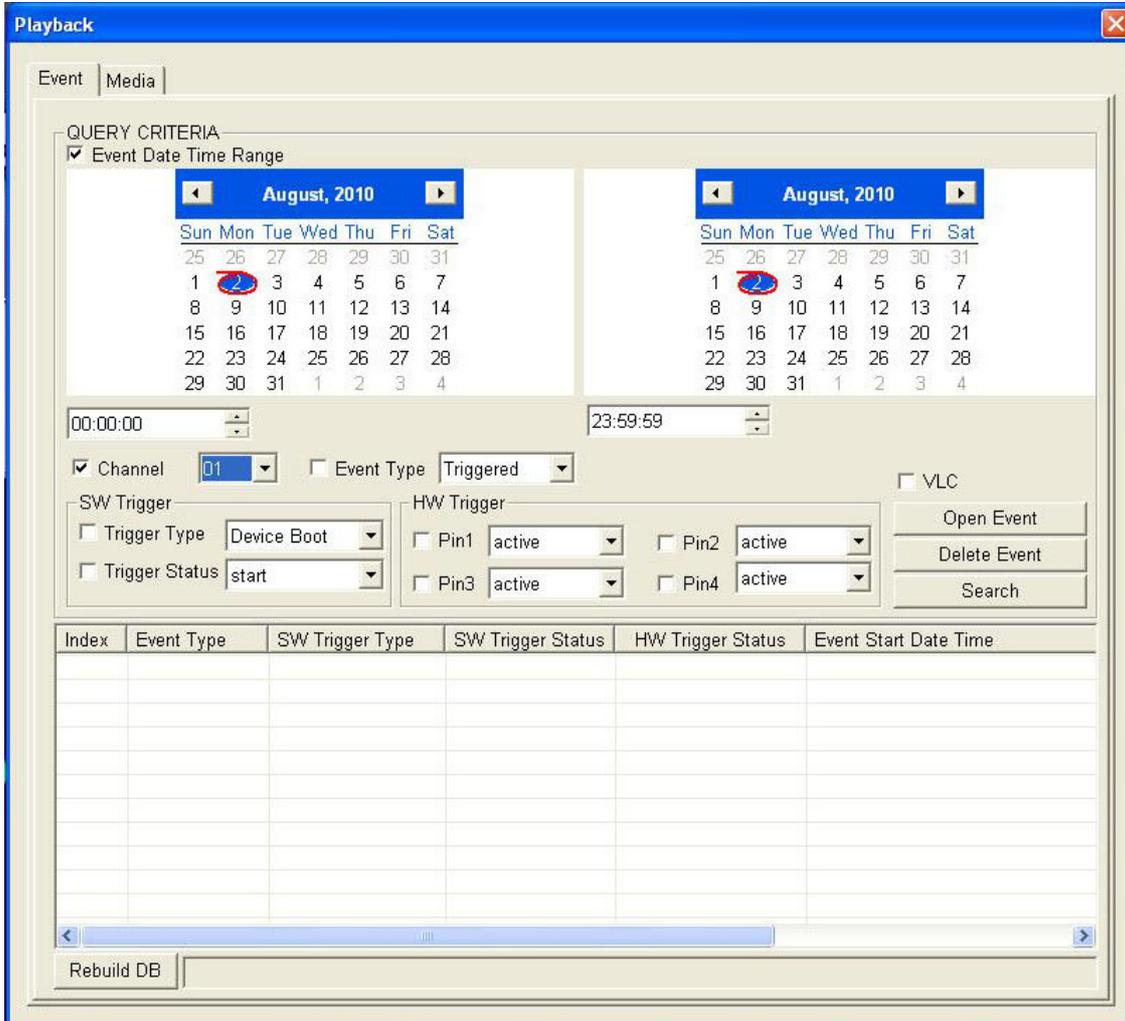
### **NOTE:**

Event triggered recording requires remote devices to send notifications.

### Scheduling

The Schedule bookmark means the setting which to Record the video by scheduling for each camera.

The detail function illustration as below:



### Schedule Data/Time Setting

Select the recording method through the type of Daily, Weekly and Data.

#### Daily

Record the image by 1~24 hour.

Set up the recording time by yourself.

### Weekly

Select the day to record the image from Weekly.

There are 7 days selections in the pull-down menu including Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday.

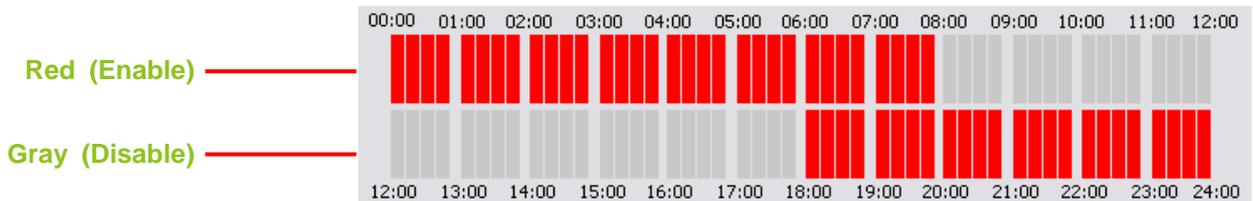
### Date

Select the date to record the image from Calendar. The Calendar is like the Windows calendar.

### Time Setting

No matter which method you choose, you need to enable the recording time first.

Click the left-button / right-button of mouse to enable / disable the recording time (Red / Gray). You can also drag the mouse to select many areas easily.



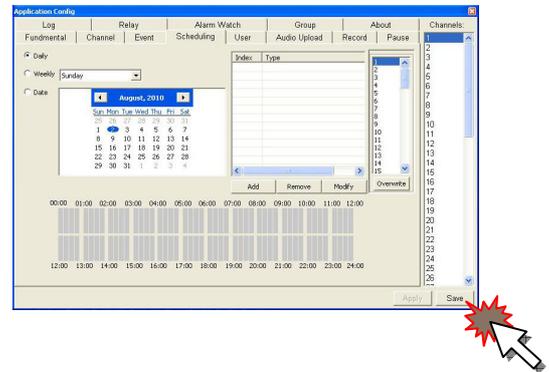
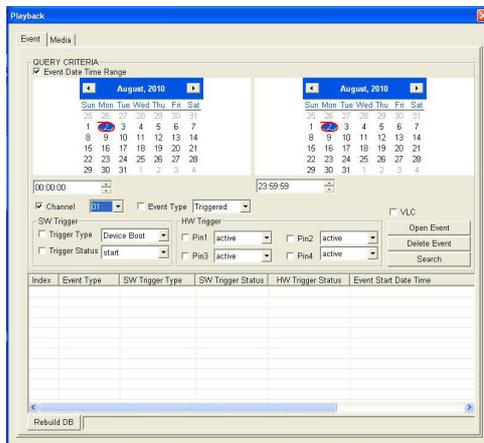
### Schedule Channel Setting

Combine with the multiple schedules setting into each channel.

Select the channel and schedule type then set up it.

### NOTE:

One data only set up one time setting into the list.



### Add:

Add the schedule into the list.

Please remember to set up the Schedule Setting first then click **Add** to add it.

### Remove:

Remove the schedule from the list. Select the schedule then click **Remove** to remove it.

### Modify:

Modify the time then click **Modify** to complete the change.

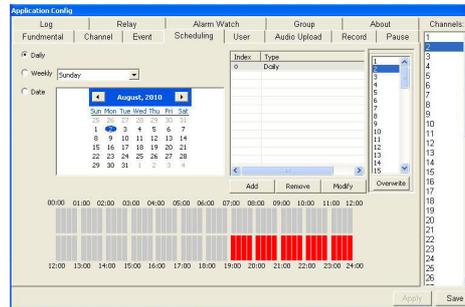
### NOTE:

The function only can modify the time setting.

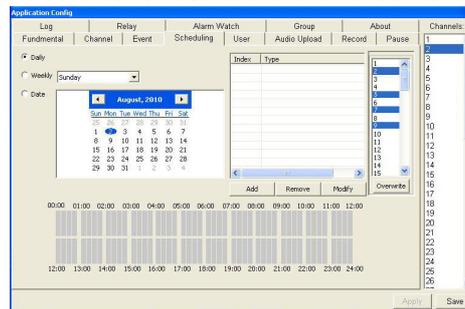
## Overwrite:

Copy the schedule setting to other channel.  
The function can save the schedule setting time.

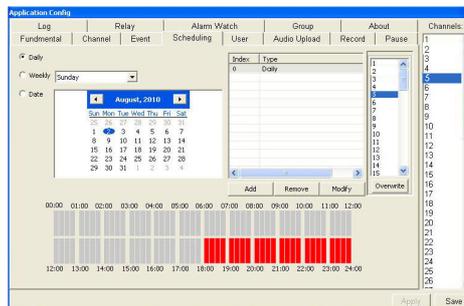
1. The default channel is the channel 1.



2. Select the overwrite channel then click **Overwrite** to save the setting.



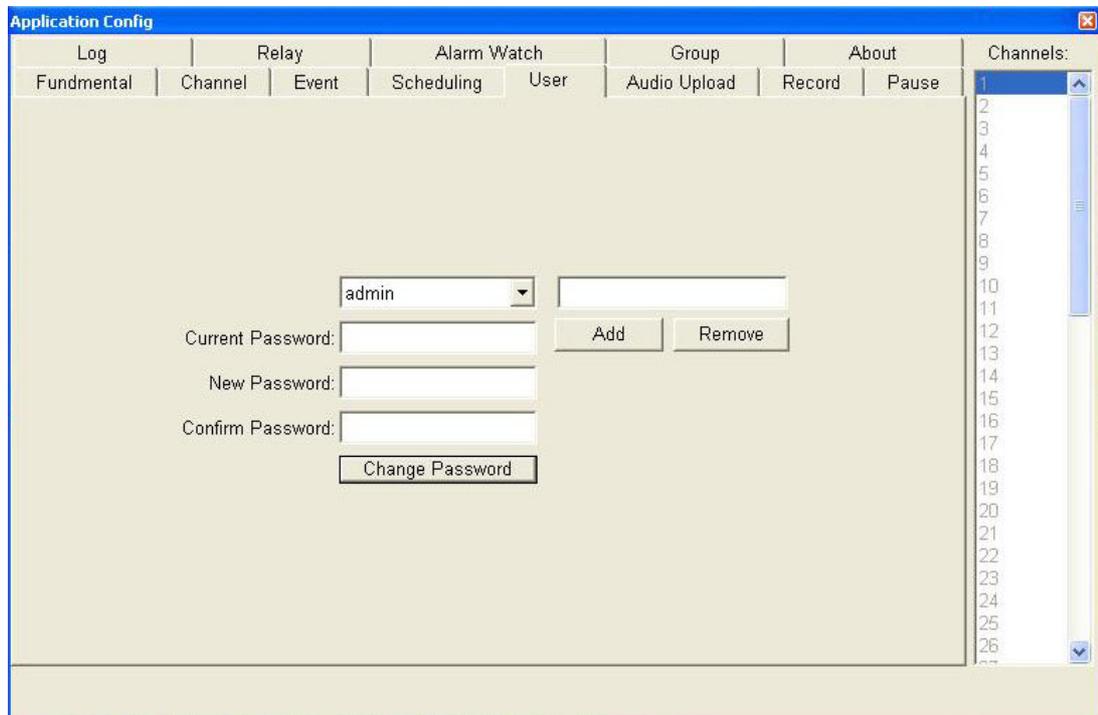
3. After finish the setting, the IP camera channel will own the same parameter with the channel 1.



### User

The User bookmark means the settings for access permission.

The detail function illustration as below:



### Account Level

There are two fixed account levels Admin and Guest.

#### NOTE:

Please refer to **System Operation\Login\Login ID & Password\** for further description.

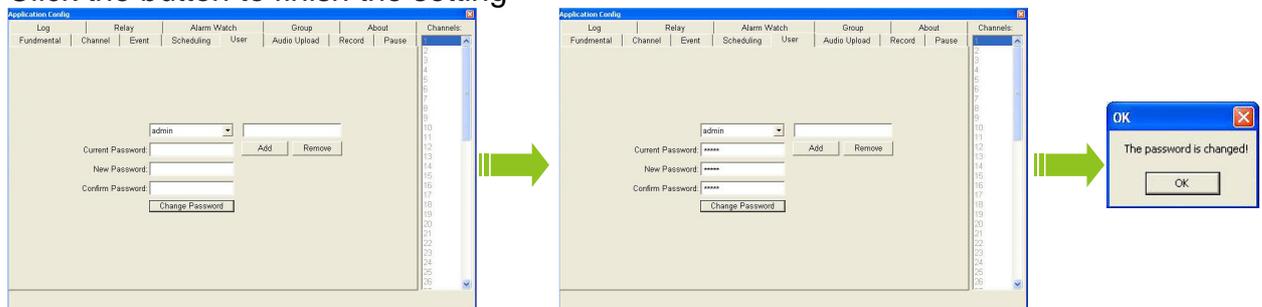
### Change the Password

The default password is the same as the User name.

Level	Content	
	User Name	Password
Administrator	admin	admin
Guest	guest	guest

Input the information to change the password.

Click the button to finish the setting

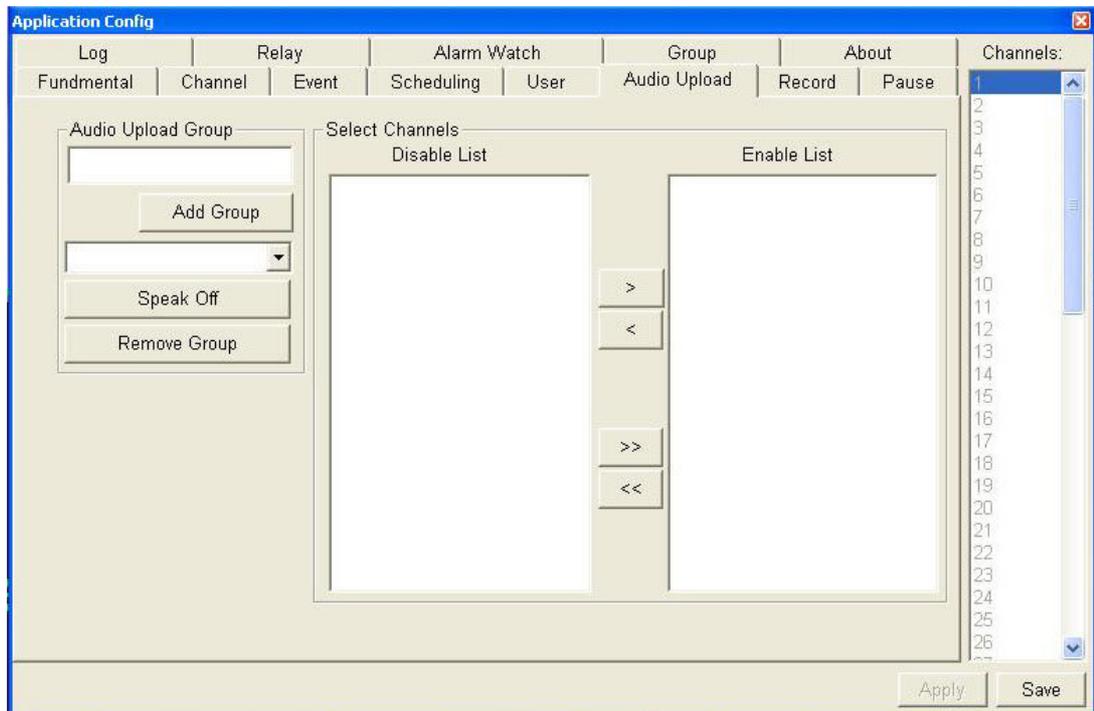


#### NOTE:

The new password would enable after next opening the software next.

## Audio Upload

The Audio Upload bookmark means the setting which to make a group audio broadcast. The detail function illustration as below:



### NOTE:

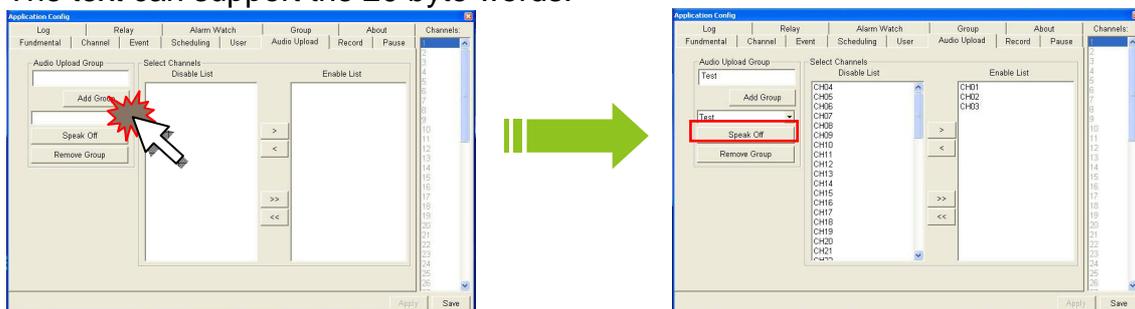
Click **Audio Broadcast** to open the setting. Please refer to **System Operation\Basic Function\Audio Broadcast** for further description.

### Audio Upload Group

This function can achieve the application of audio broadcast.

#### Add Group:

Text the group name. And click **Add Group** to add the group into the pull-down menu. Every Audio Group can select different channel to “Enable List” to use. The text can support the 20 byte words.



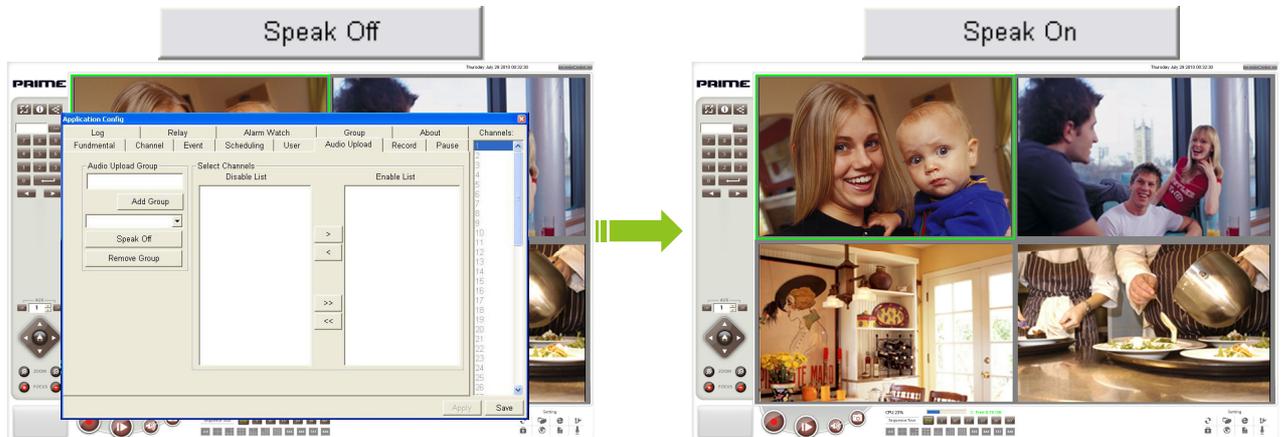
#### Group List:

When the group is added, find the new selection in the pull-down menu

### Speak Off:

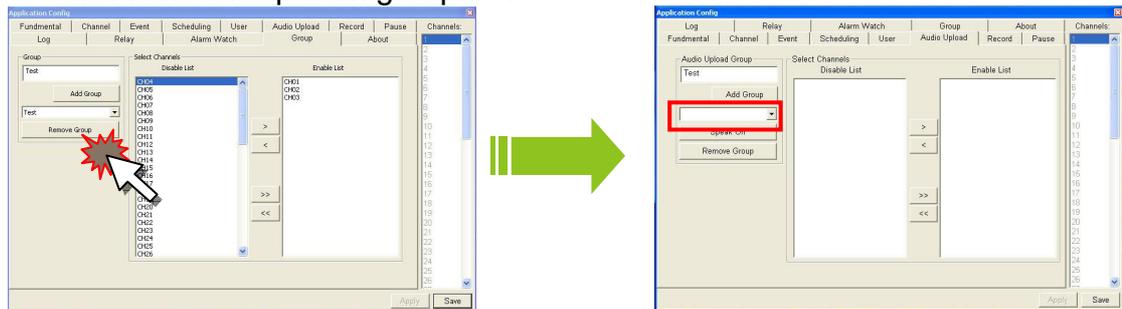
Click the button to enable the audio broadcast function which speaks through the microphone.

When the button was clicked, the button would be change the display information “Speak Off -> Speak On” and go back the live view mode.



### Remove Group:

Remove the Audio Group from group list.



### Select Channel

Select the channel to use the audio broadcast function.

### Disable List:

Create the Audio Group first then display all channel into “Disable List”. The Disable List channels mean the “Unused Channel”.

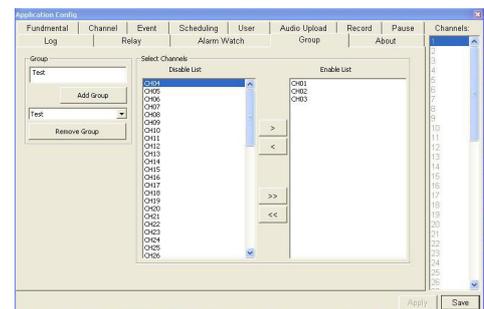
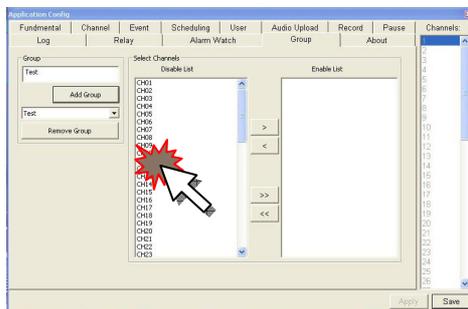
### Enable List:

The Enable List channels mean the “Used Channel”.

Select the channel then click the function button to move the channel between the Disable/Enable List.

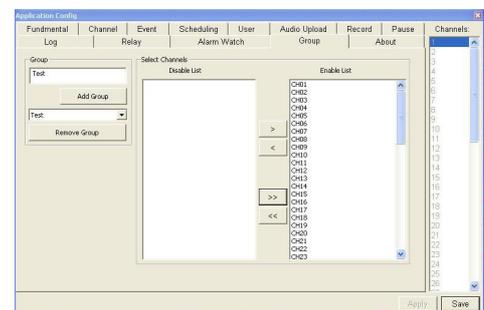
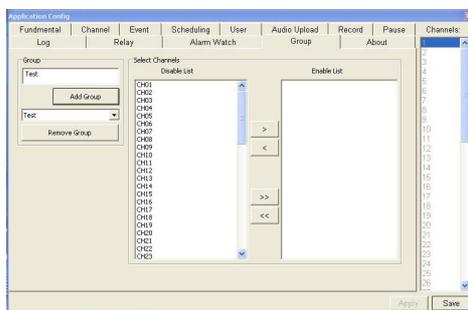
## Signal Move:

Select the channel from Display List then click the function button to move the channel between the Disable/Enable List.



## Select All:

Click the function button to move all channel between the Disable/Enable List.



Please remember to click **Apply** to write the parameter into software.  
In the finally, please click **Save** before exiting.

## NOTE:

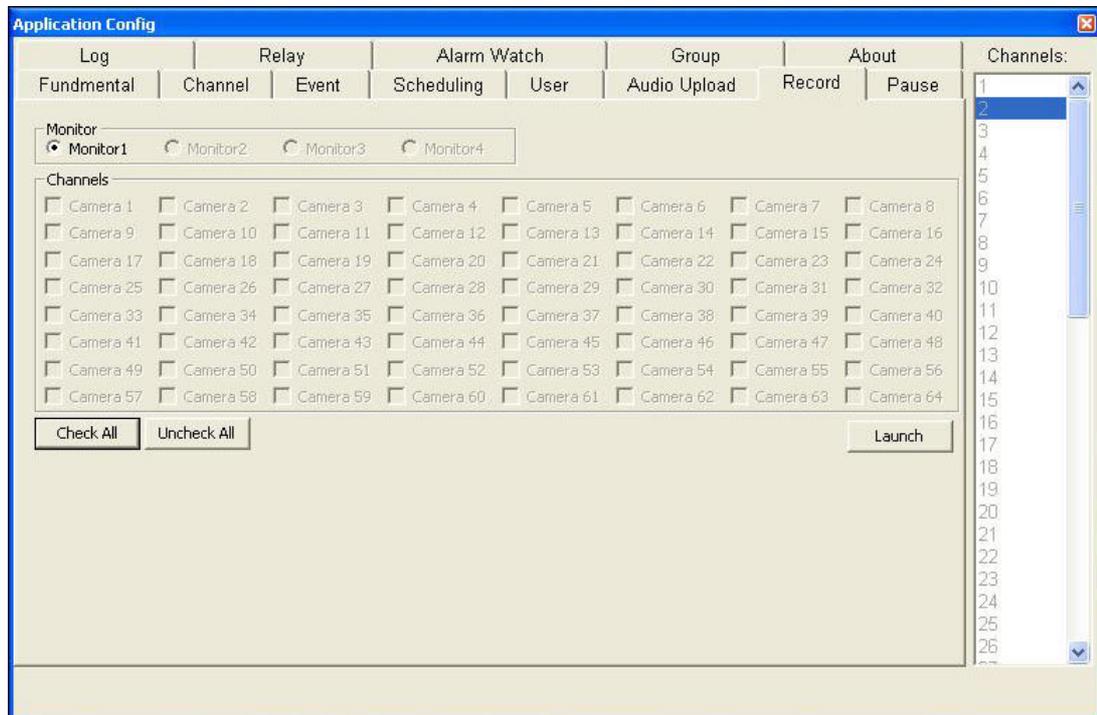
Please check the related setting.

Software: The audio setting must be active.

Hardware: Check the PC's microphone and IP camera's speak must be in good condition.

## Record

The Record bookmark means the setting has multi recording image.  
The detail function illustration as below:



### NOTE:

Click **Record** to open the setting

Please refer to **System Operation\Basic Function\Record\** for further description.

### Monitor

Switch the monitor to set up other channel recording.

When you switch the monitor selection, the channel would be point to the related channel.

### NOTE:

Enable the many display monitor when the Login window appear.

Please refer to **System Operation>Login\Display\** for further description.

### Channels

Select the channels which you want to start recording.

### Check All

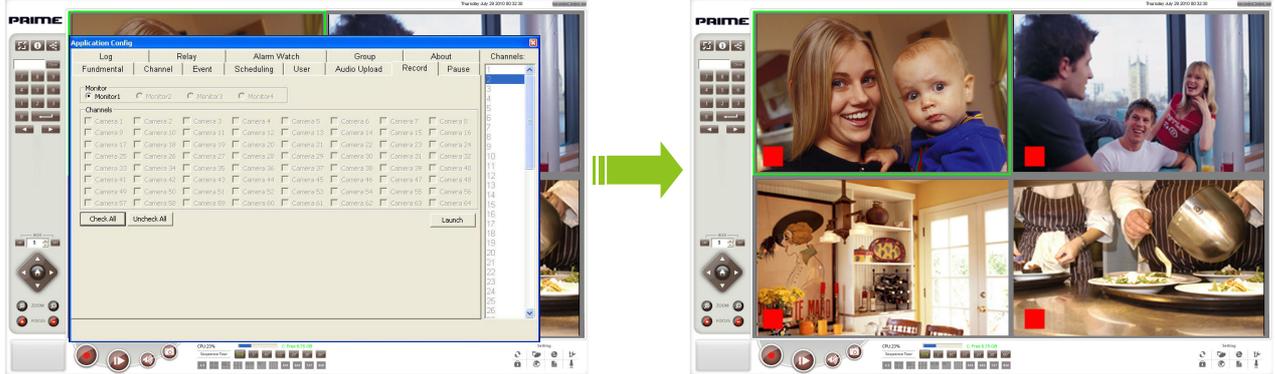
Click the button to select all channels to start recording.

### Unlock All

Click the button to cancel all channels to start recording.

## Launch

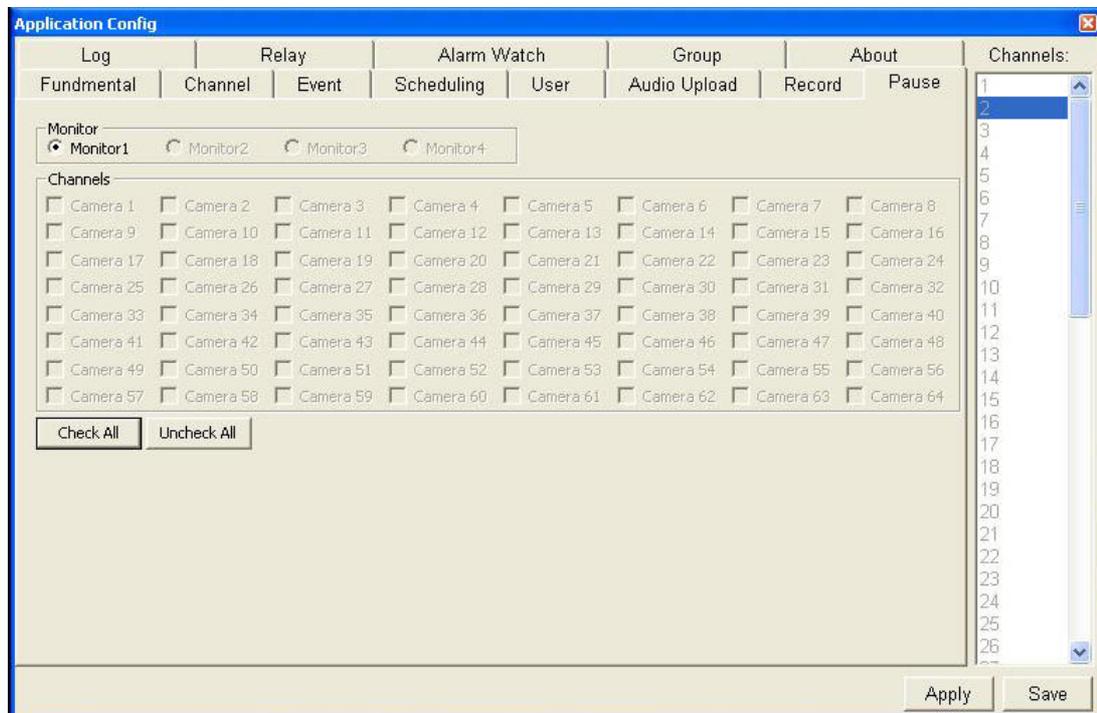
Click the button to close the enable record function and go back to live view mode.



### Pause

The function will pause the Live View image decompression to combine with the VMS forward application or reduce the CPU load.

The detail function illustration as below:



#### NOTE:

The pause channel will keep the last image of IP Camera.

#### Monitor

Switch the monitor to set up other channel recording.

When you switch the monitor selection, the channel would be point to the related channel

#### NOTE:

Enable the many display monitor when the Login window appear.

Please refer to **System Operation\Login\Display\** for further description.

#### Channels

Select the channels which start to pause the decompression.

#### Check All

Click the button to select all channels.

#### Unlock All

Click the button to cancel all channels.

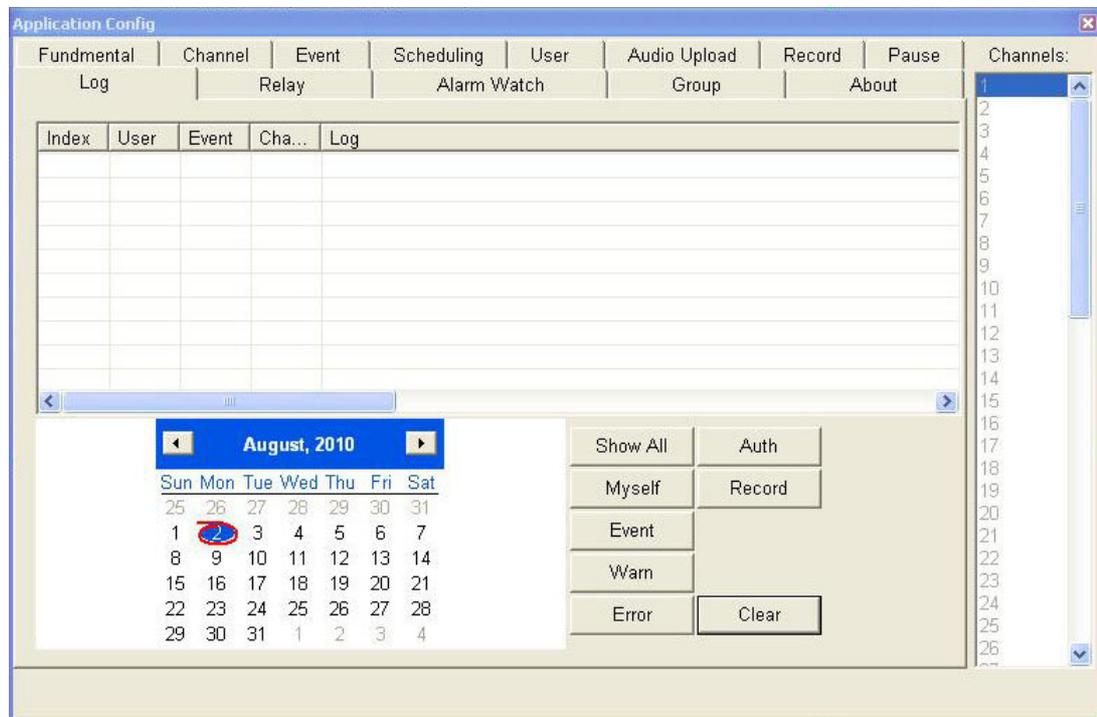
#### Launch

Click the button to enable function and go back to live view mode.

### Log

The Log bookmark means the log will display the information about program boot up, user log in and channel event...etc.

The detail function illustration as below:



The following tables show the definition of log information:

Index	User	Event	Channel	Log contents
000	admin	Info	N/A	[HH:MM:SS MM/DD/YY] The system illustration
001	guest	Auth	01	.....
002	other	Reocrd	02	
.....	.....	Event	03	
		Warm	.....	
		Error		

The log file will follow the event type to display the different color, and you can follow the color to search the log information easily.

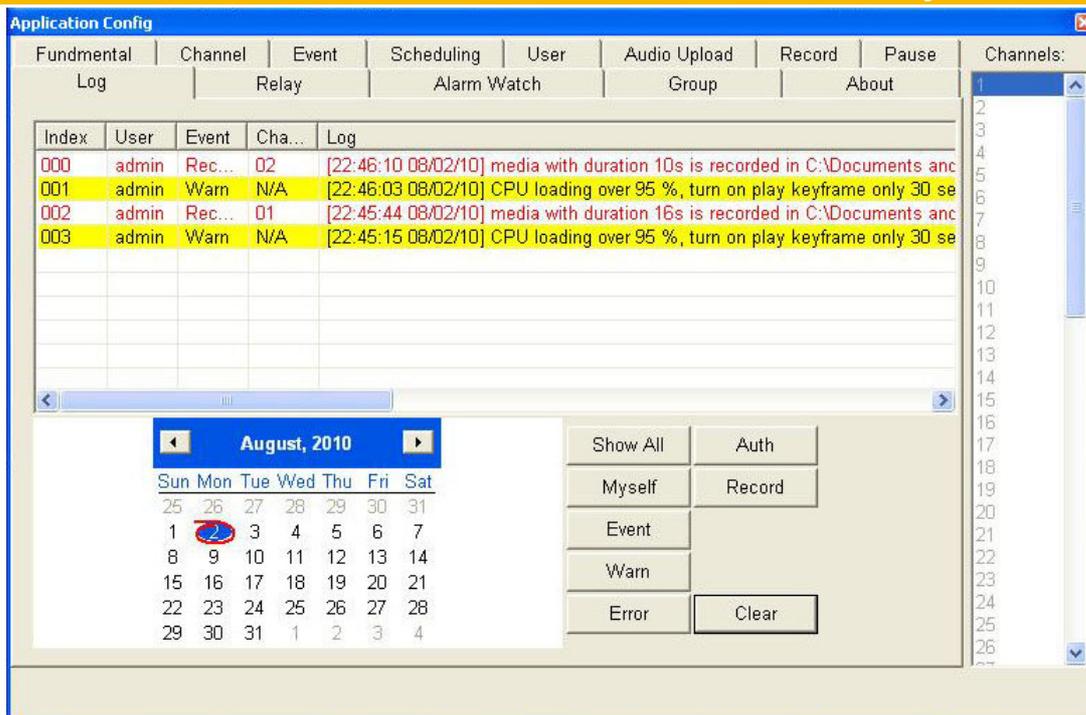
#### NOTE:

You can find the color type from the Event field.

The different OS would be provides the different default path to save the log file.

**Windows XP:** C:\Documents and Settings\ [User name] \VMS\var\ [Configuration]

**Windows Vista:** C:\Users\ [User name] \VMS\var\ [Configuration]



### Select All

Click the **Select All** to display all account log file into the list.  
The all account is from User setting of Application Config.

### Myself

Click the **Myself** to display one account log file into the list.  
One account is the login account.

### Event

Click the **Event** to display the green event information into the list.

### NOTE:

The event type will follow the Event setting of Application Config.

### Warm

Click the **Warm** to display the bottom yellow warm information into the list.

### Error

The function not release for application

### Auth

Click the **Auth** to display the blue system information into the list.

### Record

Click the **Record** to display the red record information into the list.

### Clear

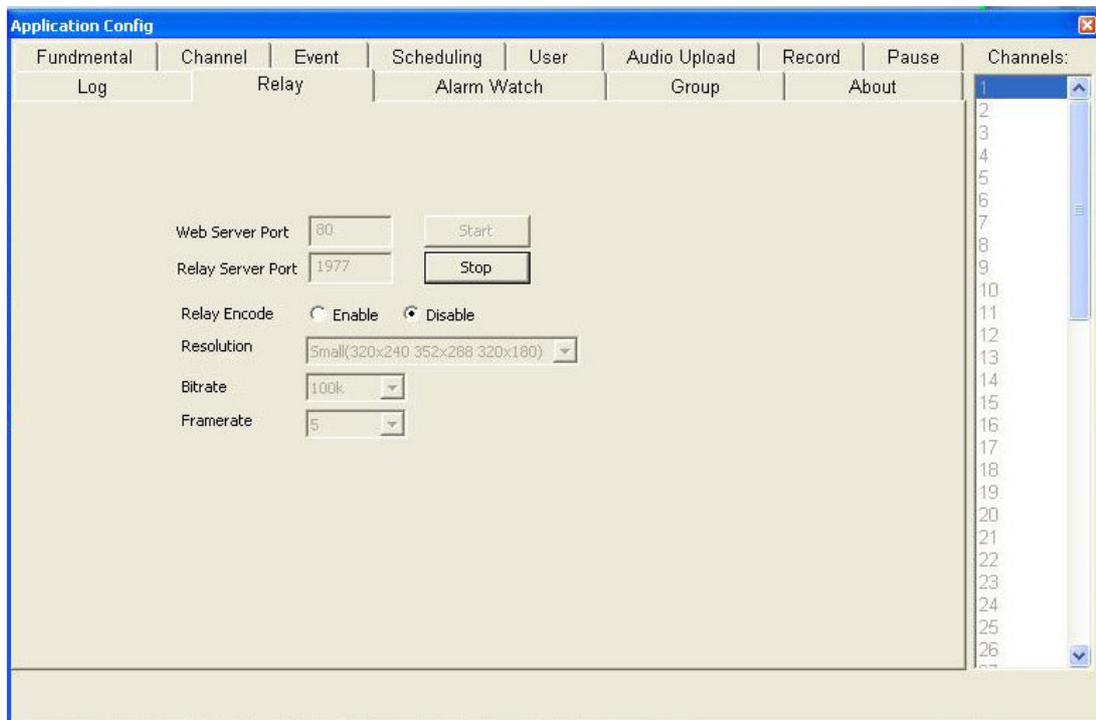
Click the **Clear** to delete the log information from database, but the function is only used from the account of admin.

### NOTE:

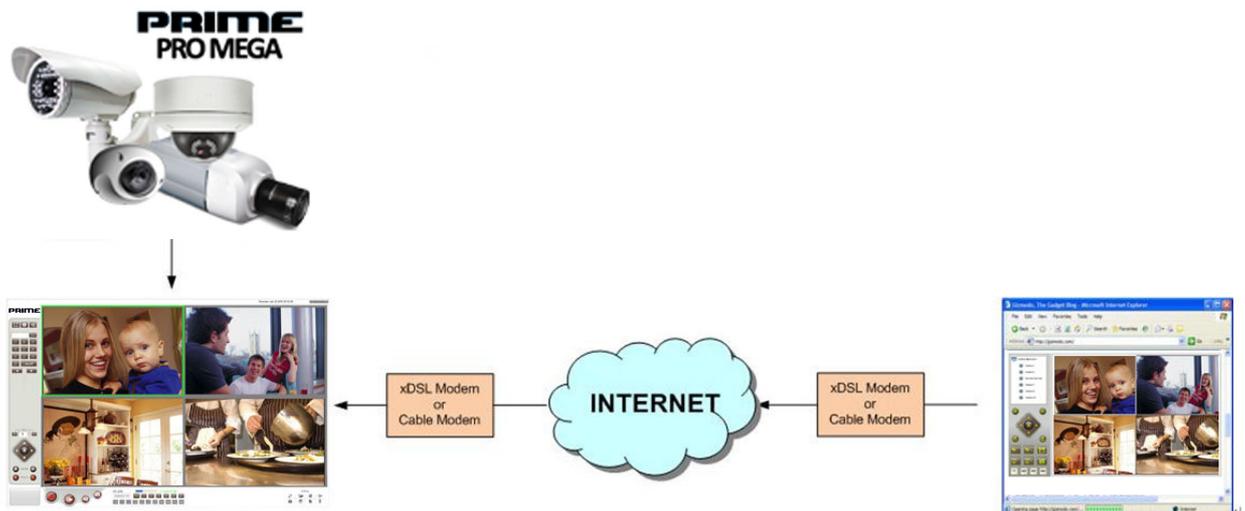
Please refer to **Appendix: Log Information** for further description.

## Relay

The Relay bookmark means the remote control function.  
The detail function illustration as below:



The VMS software is built in the ActiveX Control.  
When the function is enabled, you can remotely connect to VMS to see the image of IP camera through I.E Browser. The default function is enable status.



There are two kinds of port management from VMS: Web Server Port and Relay Server Port.

The Web Server Port is the HTTP port which the default port is 80; The Relay Server Port is the command port which the default port is 1977.

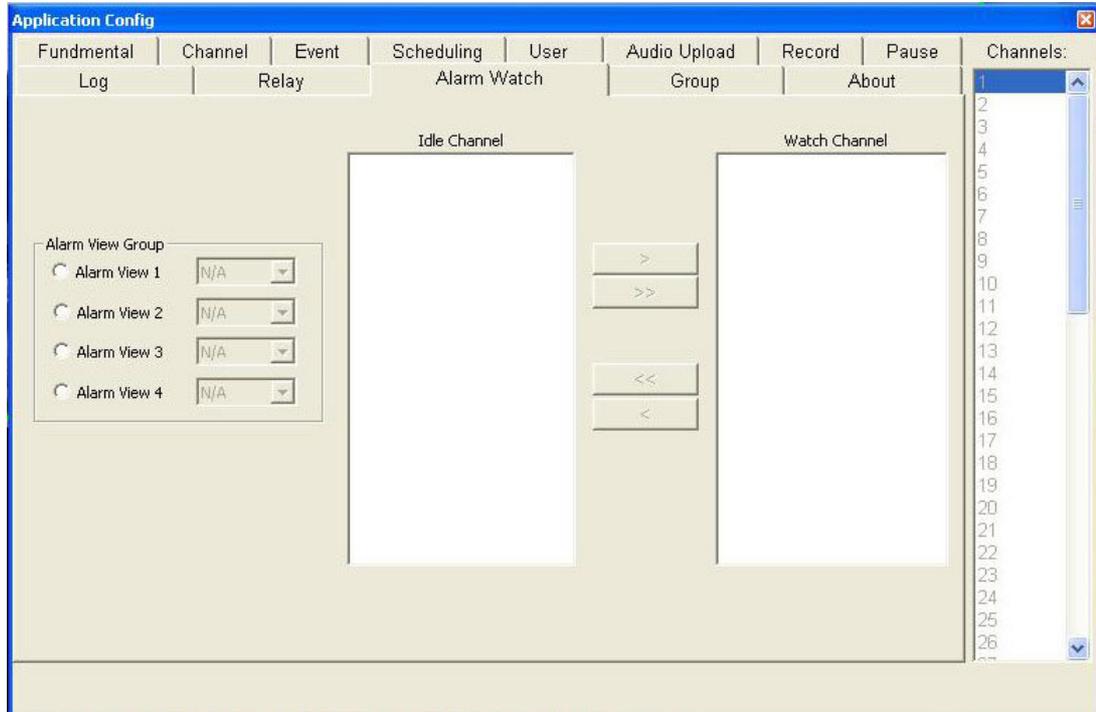
**NOTE:**

VMS also need to use the RTSP port to use for streaming, but the port setting is fixed on VMS.

## Alarm Watch

The Alarm Watch bookmark means the setting which sees an event channel displayed on another monitor.

The detail function illustration as below:



### NOTE:

The “Alarm Watch function” need to combine with the event functions.

When the software detects the events: Alarm, Motion and Camera Blind.

The “Alarm Watch” would be displayed the event channel to another channel or monitor.



### Alarm View Group

Set up the event channel.

#### Alarm View 1~4:

Every selection can assign one channel to receive the image from watch channel.

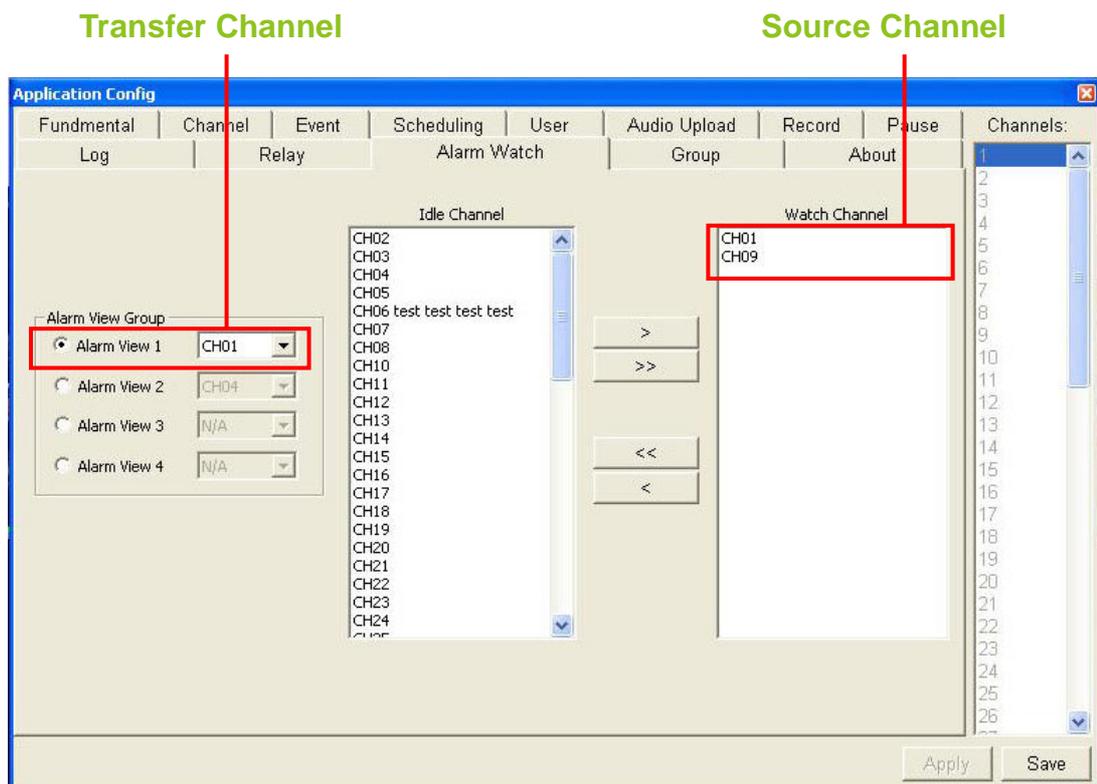
#### NOTE:

The “Alarm Watch function” need to combine with the event functions.

Enable the many display monitor when the Login window appear.

And the channel amounts follow the monitor amount.

Please refer to **System Operation\Login\Display** for further description.



### Idle Channel:

Select the Alarm Watch first then display all channel into Idle Channel.

The Idle Channel channels mean the “Unused Channel”.

### Watch Channel:

The Watch Channel channels mean the “Used Channel”.

Select the channel then click the function button to move the channel between the Disable/Enable List

### Signal Move:

Select the channel then click the function button to move one channel between the Idle/Watch Channel.

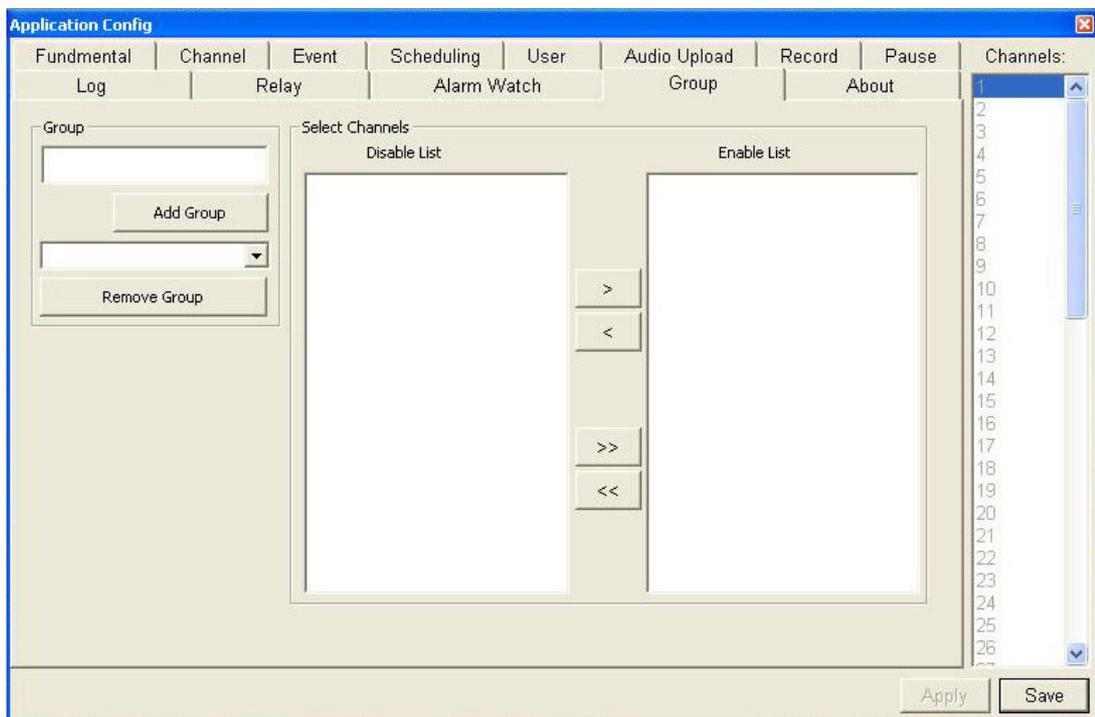
### All move:

Click the function button to move all channel between the Idle/Watch Channel.

Please remember to click **Save** to save the setting then exit the setting mode.

## Group

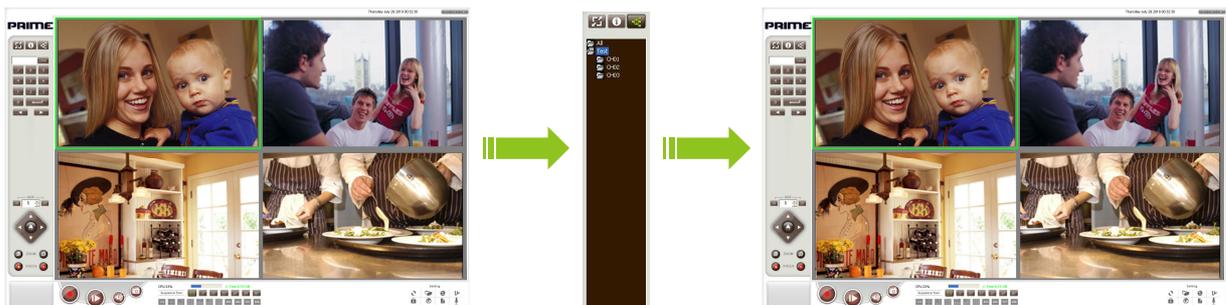
The Group bookmark means the setting which points some IP Camera into the Group. The detail function illustration as below:



### NOTE:

When the live view change to the group mode, the live view only display the group IP Cameras.

The other IP Cameras will not decompression the image, but keep the streaming connection. And this status is like the “Pause” function.



### Group

Add/Remove the Group.

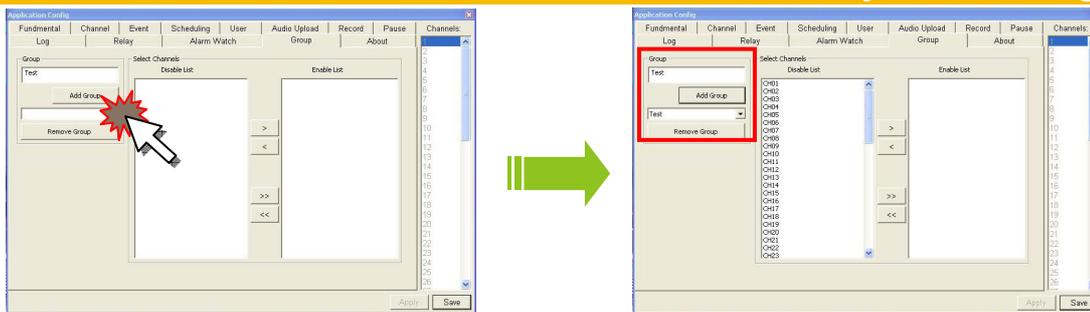
#### Add Group:

Text the group name.

Click **Add Group** to add the group into the pull-down menu.

Every Audio Group can select different channel to “Enable List” to use.

The text can support the 20 byte words.

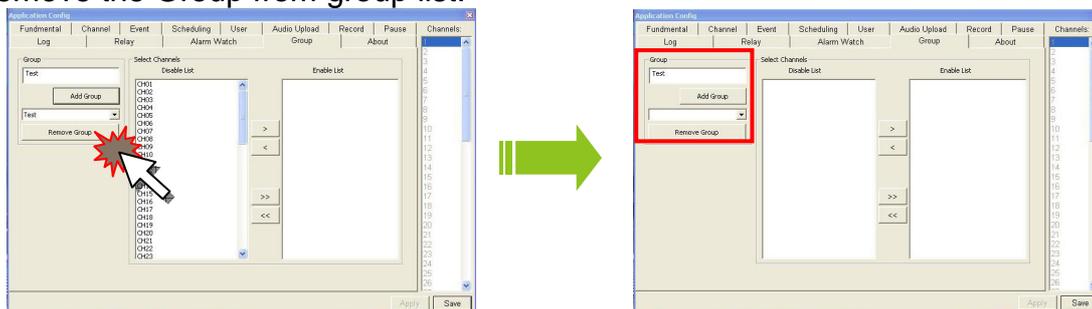


### Group List:

When the group is added, find the new selection in the pull-down menu

### Remove Group:

Remove the Group from group list.



### Select Channel:

Select the channel to add into the Group.

### Disable List:

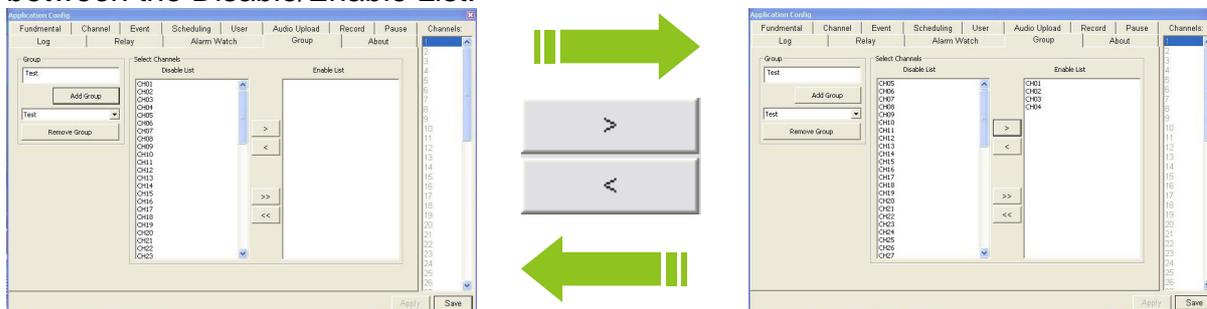
Create the Group first then display all channel into "Disable List".  
The Disable List channels mean the "Unused Channel".

### Enable List:

The Enable List channels mean the "Used Channel".  
Select the channel then click the function button to move the channel between the Disable/Enable List.

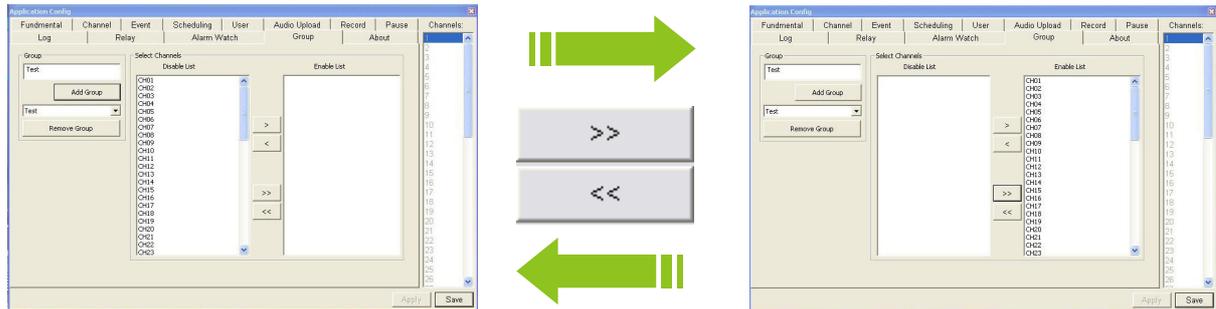
### Signal Move:

Select the channel from Display List then click the function button to move the channel between the Disable/Enable List.



### Select All:

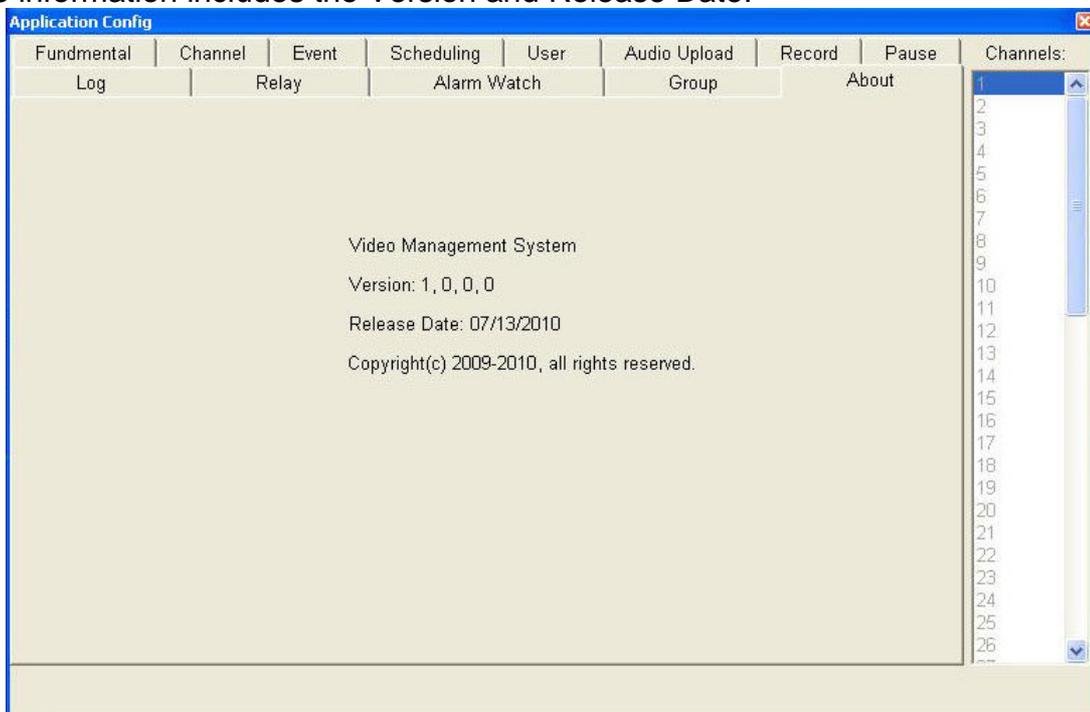
Click the function button to move all channel between the Disable/Enable List.



Please remember to click **Apply** to write the parameter into software.  
In the finally, please click **Save** before exiting.

### About

Show the information about software version and release date for customer  
The information includes the Version and Release Date.



### Audio turn on / off

Check the IP camera to connect the audio device first.  
When the Audio function is ON, the VMS will enable the two-way audio function.  
The function can be remote send and receive the audio through VMS.





**NOTE:**

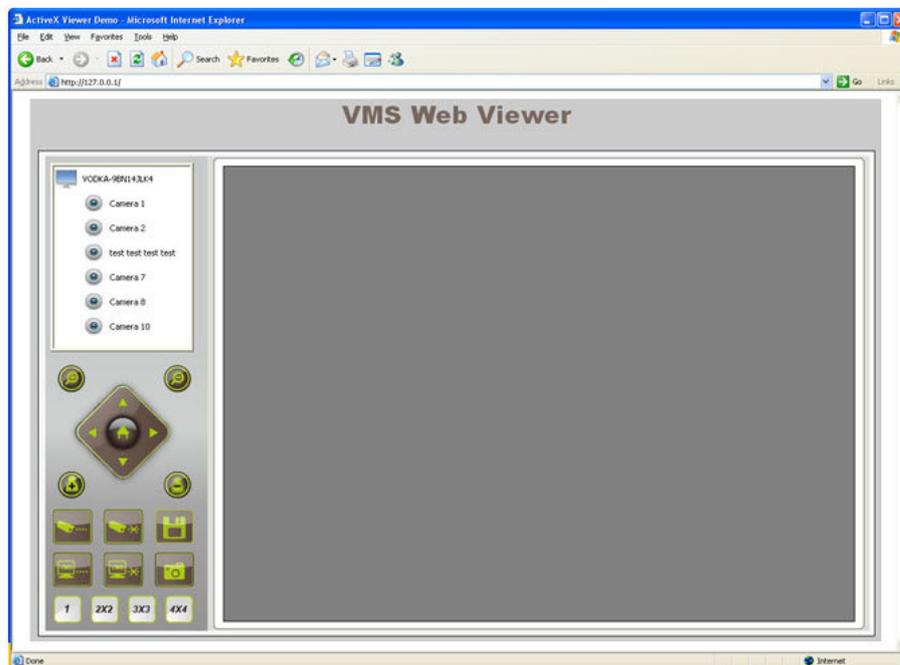
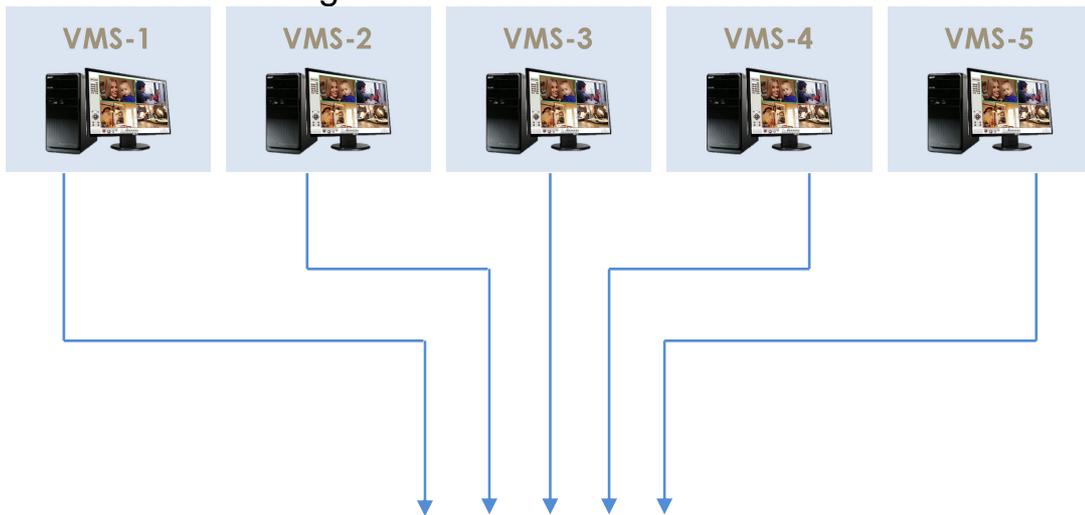
The function will affect the Audio ON/OFF of shortcut function, because the function of Audio turn on / off can control all IP cameras to enable/disable the audio function.

## VMS Relay Viewer

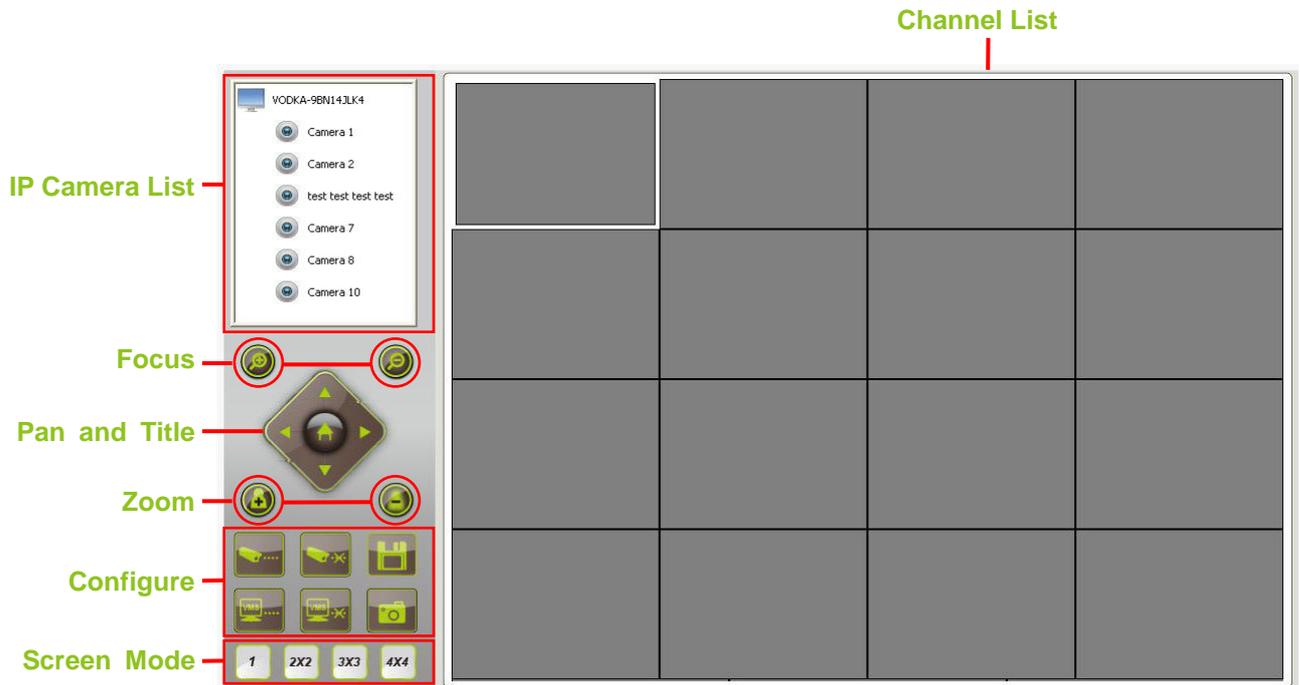
VMS Relay Viewer is the ActiveX Control of VMS which allows you to monitor the video remotely through Web Browser.

When you finish the software installation, the PC would enable the VMS Relay function automatically.

The VMS Relay Viewer can connect different VMS system to assign the channel image. The max monitoring IP cameras are 16 channels from different 5 VMS.



## VMS Relay Viewer Interface



The detail function illustration as below:

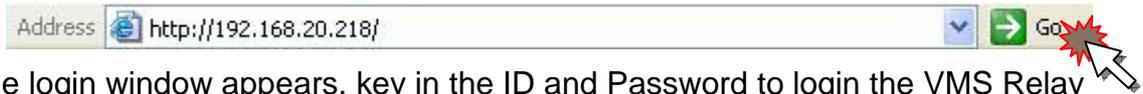
- |                       |   |
|-----------------------|---|
| <b>Channel List</b>   | Display the channel to control.                                   |
| <b>IP Camera List</b> | List all of the IP Cameras.                                       |
| <b>Focus</b>          | Adjust the focus of IP Camera.                                    |
| <b>Pan and Title</b>  | Adjust the Pan and Title.   |
| <b>Zoom</b>           | Enlarge (Zoom In)/Decrease (Zoom Out) the image of the IP Camera. |
| <b>Configure</b>      | Setting user preferences via VMS and IPCAM.                       |
| <b>Screen Mode</b>    | Change the screen mode..  |

## Appendix

### Login the VMS Relay Viewer

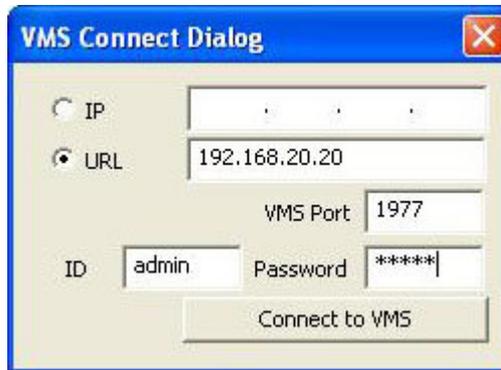
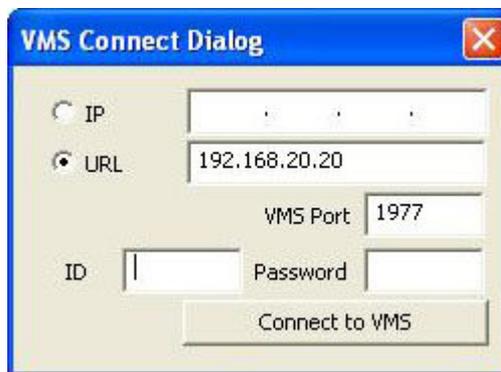
Follow the instructions to login the VMS Relay Viewer step by step.

1. Open the IE browser and key in the IP address/Domain Name of the PC installed VMS



2. When the login window appears, key in the ID and Password to login the VMS Relay Viewer.

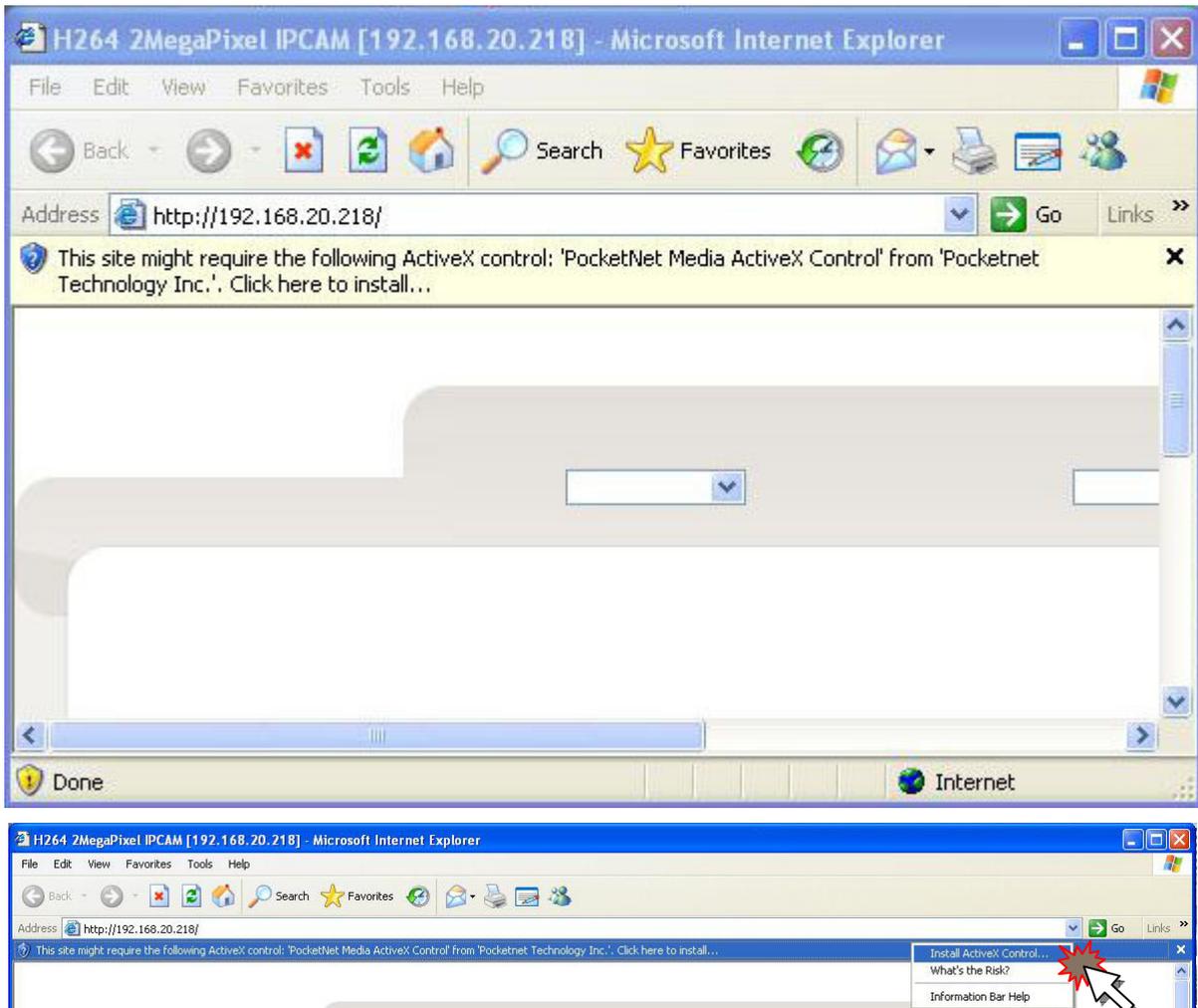
The ID and Password are the same as the Administrator of VMS.



3. After the ID and password are confirmed, the control setup screen pops-up under the IE address bar.



4. Click **Install ActiveX Control** to install the controls.

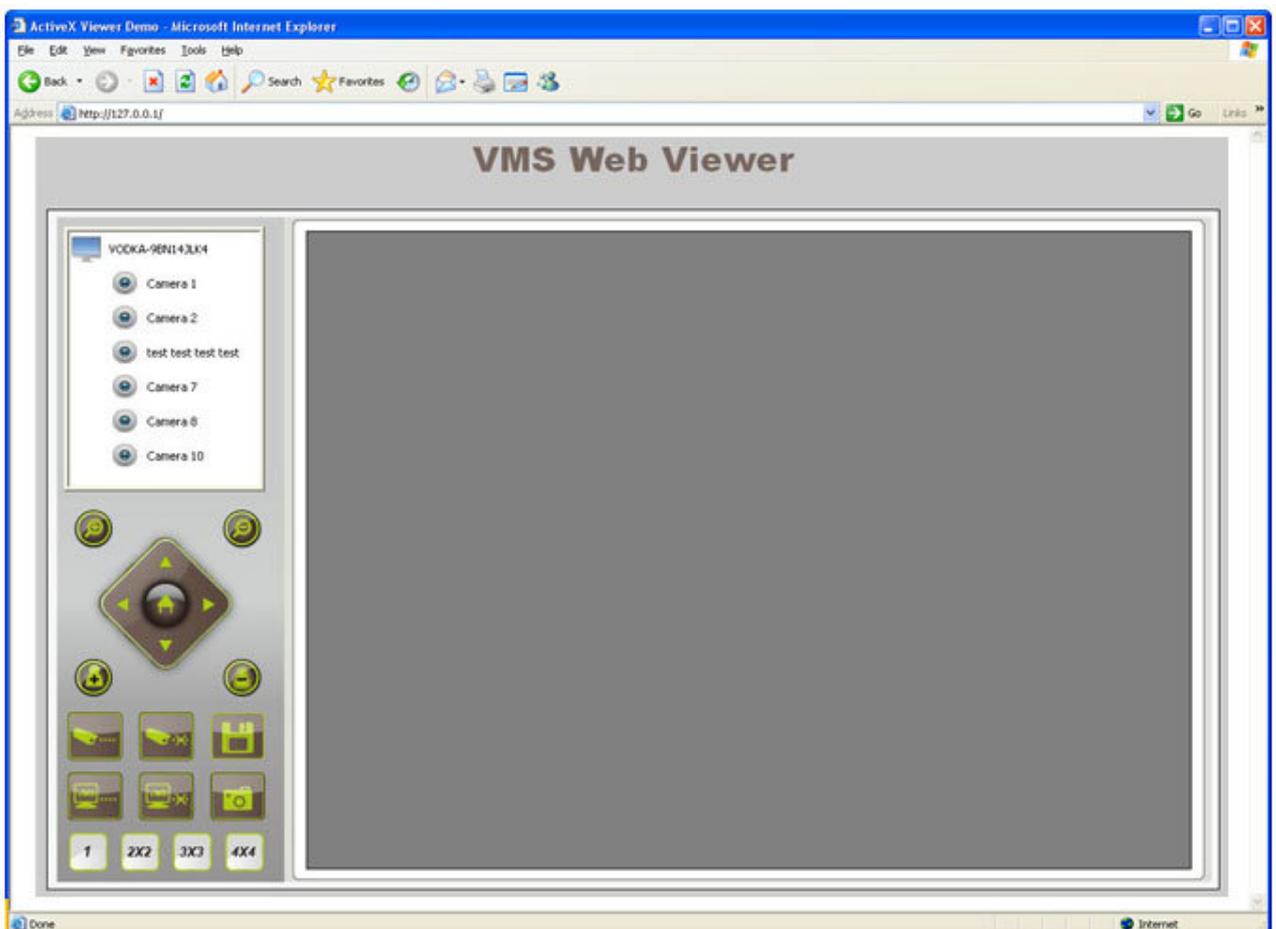


5. The security warning screen will appear; please check the ActiveX Control is named **PocketNet Media ActiveX Control**. This VMS is owned by Pocketnet Technology Inc. and well certified. You can use it without any doubts about its validity.





6. When ActiveX Control is installed successfully, you can see the interface of VMS.



7. Select the video layout at first and double click the camera channel, a video will be displayed. The same effect if you use camera connect or camera disconnect.

**NOTE:**

If you cannot download the ActiveX Control, please refer to the **Appendix: Change the Internet Explorer Settings** for further description.

### System Requirements

Before installing VMS software, make sure your system has the following recommended minimum hardware requirements.

#### Minimum System Requirements

Video Setting						
VGA / 20 FPS / 512K		1~12 Ch	12~20 Ch	20~32 Ch	32~60 Ch	60~128 Ch
VGA / 30 FPS / 1M		1~9 Ch	9~16 Ch	16~24 Ch	24~40 Ch	40~128 Ch
<b>CPU</b>	<b>Level</b>	Atom Core Duel	Intel Pentium Pro	Intel Core 2 Dual	Intel Core 2 Quad	Intel Core I7
	<b>Refer</b>	Atom 330 1.6G	E5200 2.5G	E7200 2.53G	Q9550 2.83G	I7-920 2.66G
		Cache 512K	Cache 2M	Cache 3M	Cache 12M	Cache 8M
		FSB 533 MHz	FSB 800 MHz	FSB 1066 MHz	FSB 1333 MHz	FSB 4.8 GHz
<b>DRAM</b>		1G	2G	2G	2G	3G
<b>VGA</b>		On Board Intel 945GC	128MB Video Ram	256MB Video Ram	256MB Video Ram	512MB Video Ram
<b>Network Interface Card</b>		10/100 Ethernet	10/100 Ethernet	10/100 Ethernet	10/100/1000 Ethernet	10/100/1000 Ethernet
<b>OS Support</b>		Windows XP Windows Vista Windows 7 Windows Server 2003 Windows Server 2008				

**NOTE:**

1. 32bit and 64bit Compatible.
2. The table is applicable to general computer.

### Bandwidth Requirements

Bandwidth Table		Bandwidth Statistics					
Resolution	Bit Rate	1 Ch	4 Ch	16 Ch	32 Ch	64 Ch	128 Ch
<b>D1 / VGA / CIF</b>  <b>Frame Rate</b> <b>(PAL 25 FPS / NTSC 30 FPS)</b>	2 MPS	2 M	8 M	32 M	64 M	128 M	256 M
	1.5 MPS	1.5 M	6 M	24 M	48 M	96 M	192 M
	1 MPS	1 M	4 M	16 M	32 M	64 M	128 M
	768 KPS	768 K	3 M	12 M	24 M	48 M	96 M
	512 KPS	512 K	2 M	8 M	16 M	32 M	64 M
	384 KPS	384 K	1.5 M	6 M	12 M	24 M	48 M
	256 KPS	256 K	1 M	4 M	8 M	16 M	32 M
<b>Note</b>	Through LAN: Not limit Through WAN: Suggest the bandwidth: 768K or about Recommend using Giga switch in bandwidth of red data, and the bandwidth setting is related to the Resolution, FPS and Quality.						

### Recording Size Requirements

Recording Size Table		Time Frame (1Channel)					
Resolution	Bit Rate	1 (sec/K)	1 Day	15 Days	30 Days	60 Days	120 Days
<b>D1 / VGA / CIF</b>  <b>Frame Rate</b> <b>(PAL 25 FPS / NTSC 30 FPS)</b>	2 M	256 K	22.1G	331.8 G	663.6 G	1327.1 G	2654.2 G
	1.5M	192 K	16.6 G	248.8 G	497.7 G	995.3 G	1990.6 G
	1 M	128 K	11.1 G	165.9 G	331.8 G	663.6 G	1327.1 G
	768 Kps	96 K	8.3G	124.4 G	248.9 G	497.7 G	995.4 G
	512 Kps	64 K	5.5 G	82.9 G	165.8 G	331.8 G	663.6 G
	384 Kps	48 K	4.4 G	62.2 G	124.4 G	248.8 G	497.7 G
	256 Kps	32 K	2.8 G	41.5 G	82.9 G	165.9 G	331.8 G
<b>Note</b>	The Table not include the OS space						

## Log Information

See the log file type and illustration as below:

**NOTE:**

%s = The String; VMS will display some information with the log illustration.

%d = The Digital; Most of parameter is follow the channel.

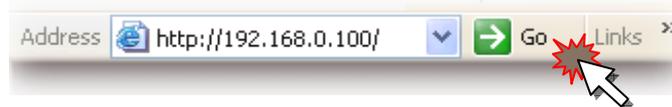
N.O.	illustration
MSG_LOG_001	"%s save fundamental settings"
MSG_LOG_002	"%s save channel settings"
MSG_LOG_003	"%s save event settings"
MSG_LOG_004	"%s save schedule settings"
MSG_LOG_005	"%s without privilege fail to change password"
MSG_LOG_006	"%s input incorrect password"
MSG_LOG_007	"%s changed password"
MSG_LOG_008	"%s login"
MSG_LOG_009	"%s login failed"
MSG_LOG_010	"channel[%d] fail to stop recording"
MSG_LOG_011	"channel[%d] fail to start recording due to space full or no connection"
MSG_LOG_012	"viewer(%d) render info %s"
MSG_LOG_013	"channel[%d] %s"
MSG_LOG_014	"channel[%d] status change due to recording stopped"
MSG_LOG_015	"channel[%d] status change due to recording started"
MSG_LOG_016	"channel[%d] fire event: %s"
MSG_LOG_017	"channel[%d] has recycled media path but is still full afterwards"
MSG_LOG_018	"fail to open %s to parse event"
MSG_LOG_019	"parse event in %s"
MSG_LOG_020	"media with duration %ds is recorded in %s"
MSG_LOG_021	"change viewer group idx to %d"
MSG_LOG_022	"%s play media file(s)"
MSG_LOG_023	"%s open %s"
MSG_LOG_024	"administrator delete %s"
MSG_LOG_025	"all system spaces are full, switch media path to %s and wait for recycling"
MSG_LOG_026	"overwrite old archives to recycle system free spaces"
MSG_LOG_027	"system free spaces are still full, require manual recycle"
MSG_LOG_028	"system free spaces are full, require manual recycle"
MSG_LOG_029	"space full in %s, switch media path to %s"
MSG_LOG_030	"fail get screen device context for the current display settings"
MSG_LOG_031	"fail to start up due to color depth less than 24 bits per pixel"
MSG_LOG_032	"fail to start up due to resolution less than 1024x768"
MSG_LOG_033	"system start up"
MSG_LOG_034	"system shutdown"
MSG_LOG_035	"fail to take a snapshot due to space full"
MSG_LOG_036	"guest delete %s"
MSG_LOG_037	"Device Boot"
MSG_LOG_038	"Video Alive"
MSG_LOG_039	"Video Loss"
MSG_LOG_040	"Motion Start"
MSG_LOG_041	"Motion Stop"
MSG_LOG_042	"Camera Blind"
MSG_LOG_043	"Manual Recording Start"

MSG_LOG_044	"Manual Recording Stop"
MSG_LOG_045	"Scheduled Recording Start"
MSG_LOG_046	"Alarm Input"
MSG_LOG_047	"CPU loading over %d %%, turn on play keyframe only %d seconds."
MSG_LOG_048	"Daily"
MSG_LOG_049	"No more user could be added."
MSG_LOG_050	"Can't remove this user."
MSG_LOG_051	"User %s was added."
MSG_LOG_052	"User %s was removed."
MSG_LOG_053	"Camera Blind Stop"

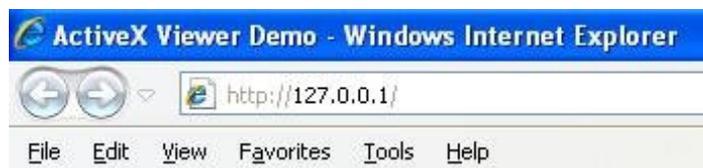
## Change the Internet Explorer Settings

Change the security setting of IE browser to allow the ActiveX Control be plug-in to the IE browser.

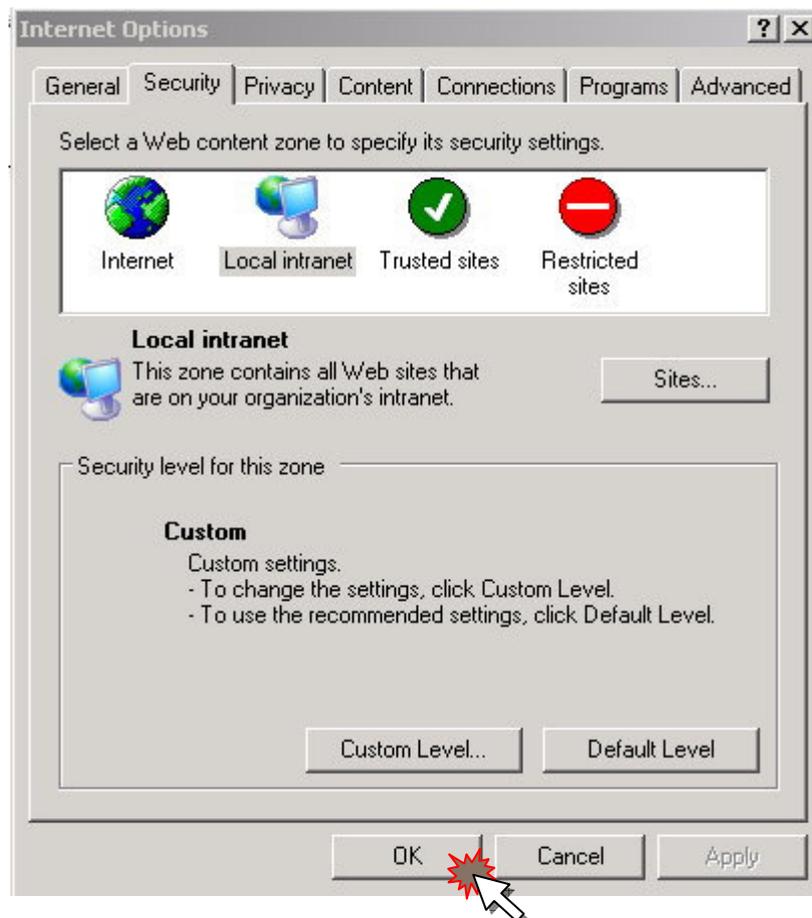
1. Open the IE browser from Desktop or State Menu.



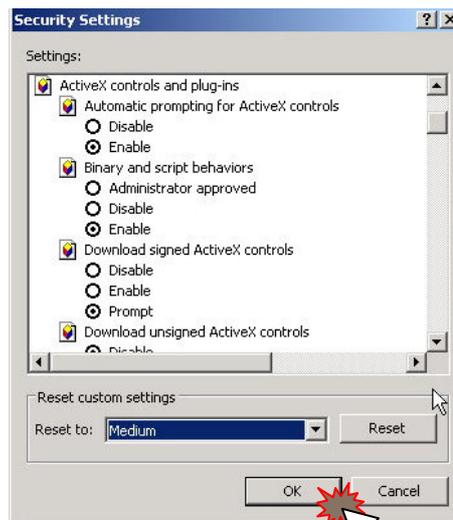
2. Select the Tools → Internet Options → Security → Custom Level



3. Select the Security bookmark then click the **Customer Level** to check the Security Level.



4. Make sure the security setting is Medium, and the commonly used default security level.

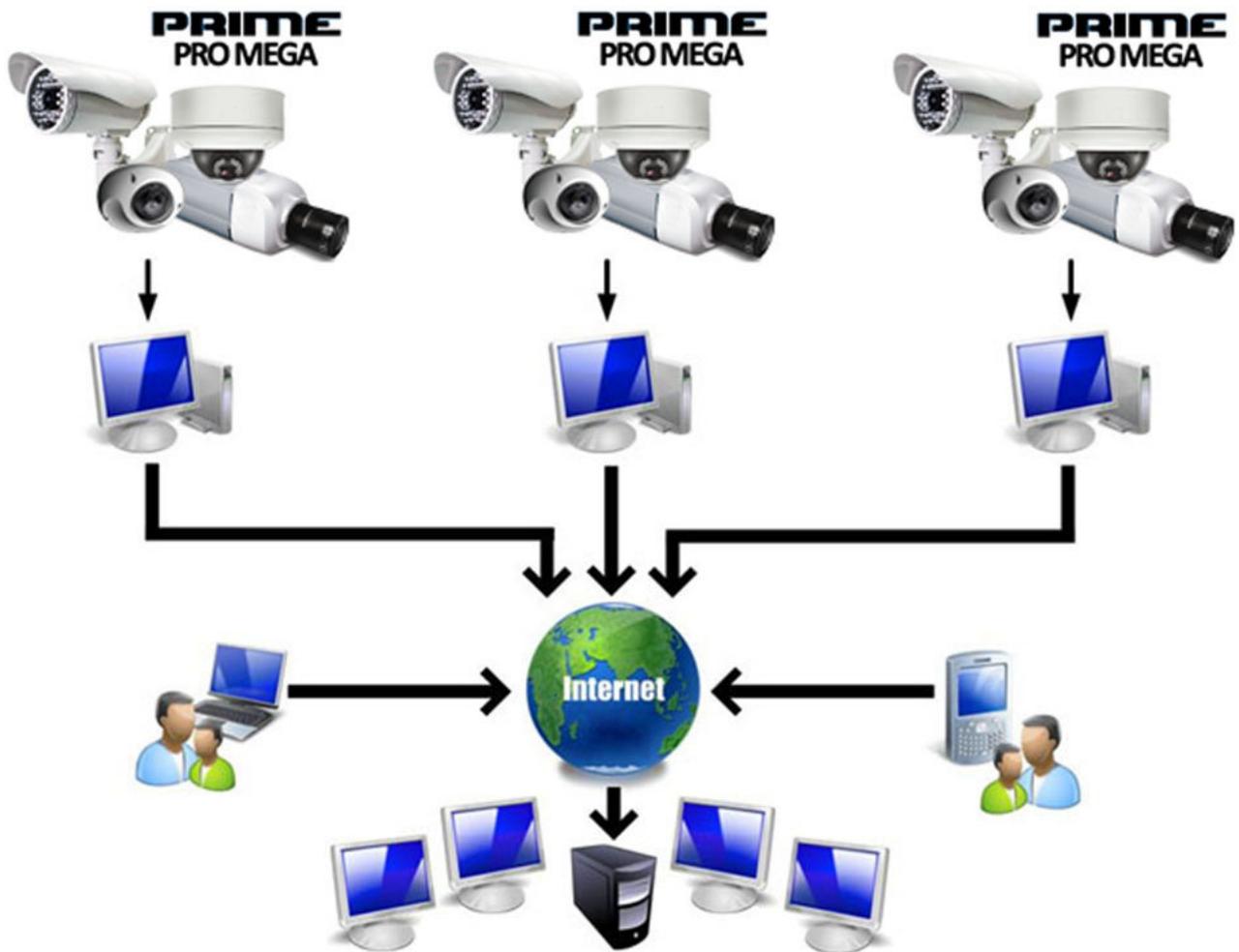


5. Click **OK** to save the parameter then quit the window.  
Please remember re-open the IE browser.

## How to set the VMS Forward Application

The VMS can receive other VMS image through LAN or WAN, so the VMS can achieve the CMS application.

The detail function illustration as below:



1. Check the original VMS can receive the IP Cameras image first.



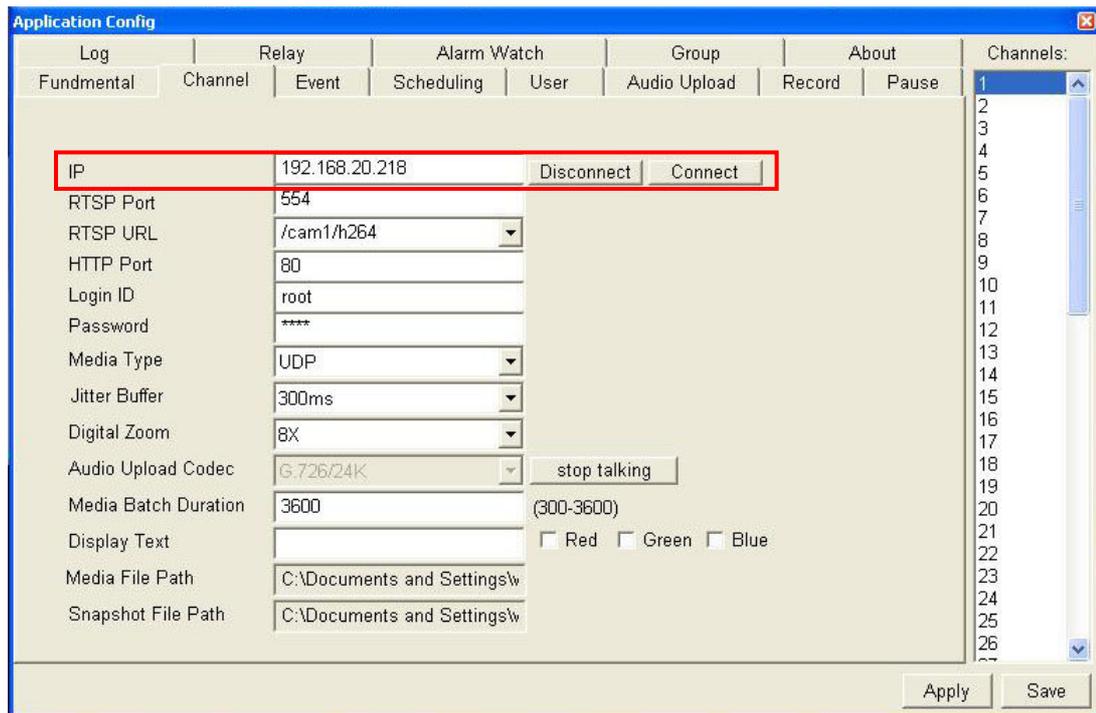
2. Open the other VMS on other PC / Laptop.



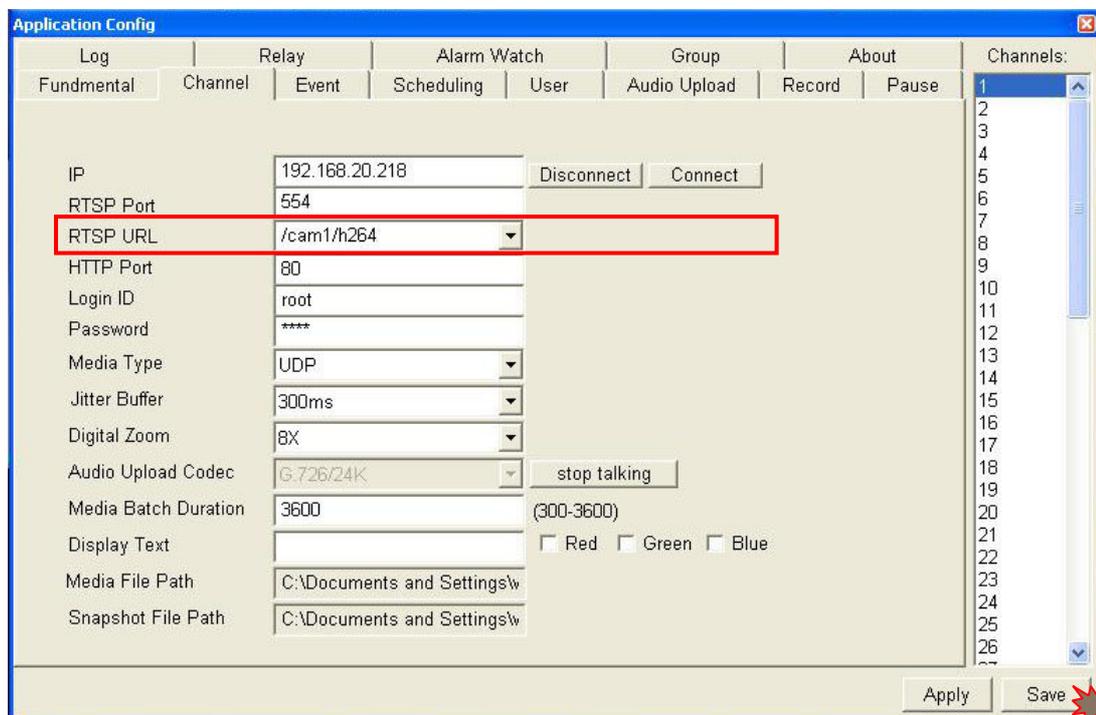
3. Click the **Config** to enter the setting.



4. Select the **Channel** bookmark to input the original VMS IP



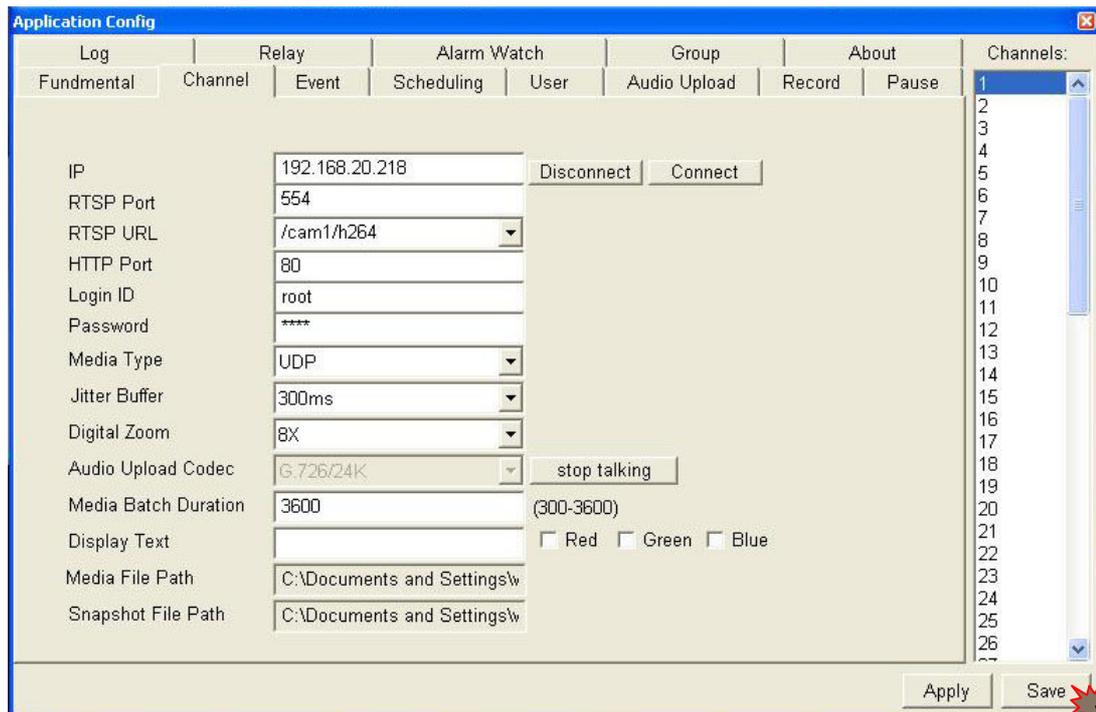
5. Modify the RTSP URL to the “/cam (Number)”, the Number is from original VMS channel. If the RTSP URL was inputted the “/cam1”, the other VMS will receive the channel 1 image from original VMS.



**NOTE:**

The RTSP URL setting can select different channel to receive the image.

6. Click **Save** to save the parameter.



**NOTE:**

If the other VMS need to set the other channel to receive the image, please click **Apply** to write the parameter first. According to your requirement, select other channel to add the setting

7. The live view will display the original VMS image in here.

**NOTE:**

Suggest combining with the Pause function to achieve the VMS Forward application. Please refer to **System Operation\Application Config\Config\Pause** for further description.