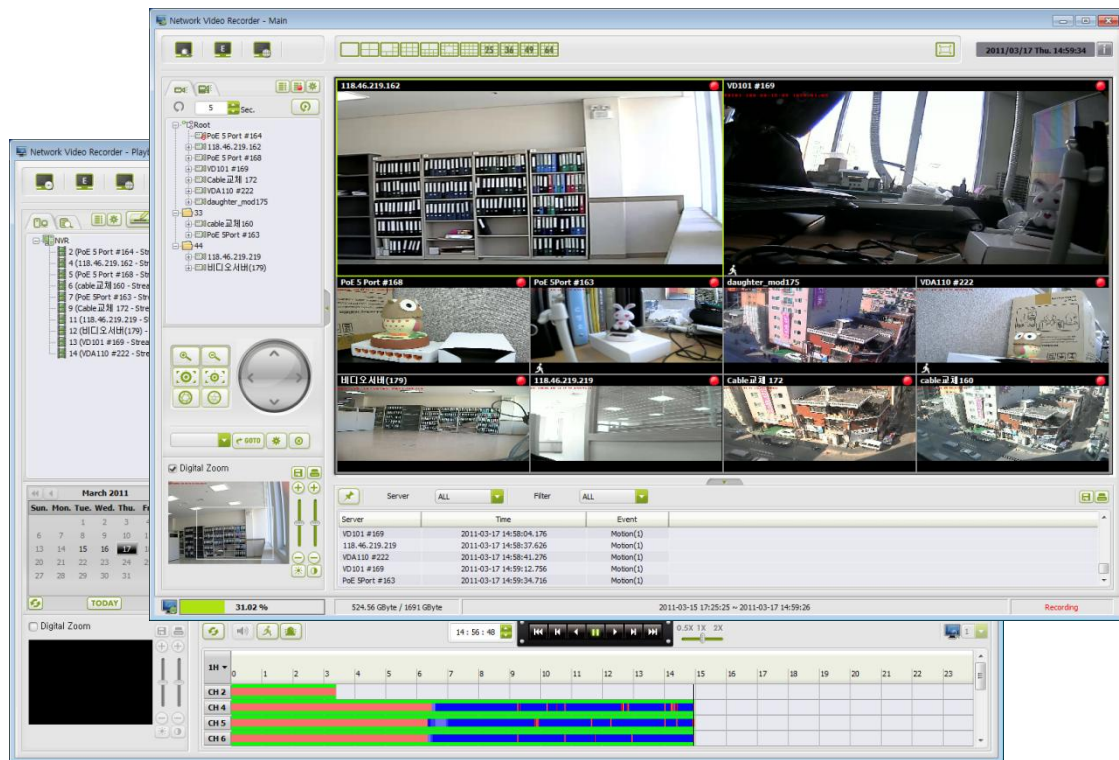


Network Video Recorder C/S

USER MANUAL



Released on 27th of Nov., 2013

INDEX

1. Feature Overview.....	6
2. Minimum System Requirements.....	6
3. Detailed Product Features	6
3.1 NVR CS Server	6
3.2 NVR Client Live.....	7
3.3 NVR Client Playback.....	7
3.4 NVR Client E-map	7
3.5 NVR Client Event View	8
4. Getting Started	8
4.1 Program installation	8
4.2 License Agreement	8
4.3 Choose Components	9
4.4 Serial number	9
4.5 Define destination folder	10
4.6 Start Program registration.....	11
4.7 Installation Completion.....	11
5. NVR Server.....	12
5.1 User Interface	12
6. NVR Server Setup.....	13
6.1 User Interface	13
6.1.1 Setup Window.....	13
6.1.2 Control buttons	18
7. NVR Client Live.....	18
7.1 User Interface	18
7.1.1 Status and Server List	19
7.1.2 Program Execution Icons.....	21
7.1.3 Display Mode.....	22
7.1.4 Display window.....	22
7.1.5 PTZ Control.....	22
7.1.6 Digital PTZ and Image Cropping.....	23
7.1.7 Event Log.....	23
7.1.8 System Time.....	23
7.1.9 Version information.....	23

7.2	Video display on NVR Client Live	24
8.	NVR Client Playback	25
8.1	User Interface	25
8.1.1	Status and server list.....	26
8.1.2	Program Icons	29
8.1.3	Display Mode.....	29
8.1.4	Display window.....	30
8.1.5	Calendar	30
8.1.6	Digital PTZ and Image Cropping.....	30
8.1.7	Time Line	31
8.1.8	System Time.....	32
8.1.9	Program version information	33
8.2	Searching record data on playback	33
9.	NVR Client E-Map	34
9.1	User Interface	34
9.1.1	Status and Server List	35
9.1.2	Program Execution Icons List	37
9.1.3	Map Manager	37
9.1.4	PTZ Control Icons	37
9.1.5	Digital PTZ.....	38
9.1.6	Event Log.....	38
9.1.7	System Time.....	38
9.1.8	Program version information	38
9.2	Running E-Map	39
9.2.1	Change E-Map mode.....	39
9.2.2	Display registered Map.....	39
9.2.3	Add Map.....	39
9.2.4	Edit Map	39
9.2.5	Delete Map.....	39
9.2.6	To add items on the map.....	40
9.2.7	To delete items from the map	40
9.2.8	To move map item	40
9.2.9	Save map.....	40
9.2.10	Open map	40
9.2.11	Pop-up Live Video on the map.....	41

9.2.12	Setup Event Link.....	41
9.2.13	Setup Event Link for Alarm-In.....	41
10.	NVR Client Event Viewer	42
10.1	User Interface	42
10.1.1	Program Execution Icons.....	43
10.1.2	Display mode.....	43
10.1.3	Event Log.....	43
10.1.4	Setup Event Log	43
10.1.5	System Time.....	44
10.1.6	Program version information	44
10.2	Running Event Viewer	45
10.2.1	Event view registration.....	45
11.	NVR Client Camera Setup.....	46
11.1	User Interface	46
11.1.1	Camera List.....	46
11.1.2	Setup Option	46
11.1.3	Setup window.....	47

About this Document

Thank you for purchasing VISION IP Camera or Network Video Server. This user manual includes instructions for using and managing the NVR C/S software on your system and network. Updated versions of this document will be posted to www.visionipvideo.com as they become available.

Legal Considerations

Video and audio surveillance can be prohibited by laws that vary from country to country. Please check the laws in your local region before using this product for surveillance purposes.

Trademark Acknowledgments

Ethernet, Internet Explorer, Linux, Microsoft, Mozilla, Netscape Navigator, OS/2, UNIX, Windows, WWW are registered trademarks of the respective holders. Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

Product Classification

Classification	Definition	Max. Resolution	Frame rate at max. resolution
i-Series	SD	D1	30 fps
MTi-Series	HD	1280 X 720	30 fps
M2Ti-Series	Full HD	1920 X 1080	30 fps
M3Ti-Series	3 Mega Pixel	2048 X 1536	20 fps

Important Notices

1. Camera surveillance laws may differ for each country. Contact the local authorities to avoid any surveillance law violations.
2. **Specifications are subject to change without prior notice to enhance the product quality and stability.**
3. **The contents of this manual may differ from actual products due to product upgrade or enhancement.**

1. Feature Overview

Key features	16	36	64	Unlimited
Number of cameras per recording server	16	36	64	64
Multi server solution	No	No	No	Yes
Number of servers	1	1	1	Unlimited
Number of cameras per NVR Client Live	16	36	64	128
Number of cameras per NVR Client Playback	16	16	16	16
Maximum numbers of users	1	5	5	32
Alarm Manager	Yes	Yes	Yes	Yes
Map function	Yes	Yes	Yes	Yes
Watchdog	Yes	Yes	Yes	Yes

2. Minimum System Requirements

System requirement	NVR CS Server	NVR CS Client
CPU	Pentium Core2 duo 2.4	Pentium i3-3220 3.3GHz (recommend higher)
Graphic Card	128MB	128MB
RAM	2GB	2GB (or higher recommend)
O/S	Windows 7	Windows 7
Network	Gigabit LAN	Gigabit LAN
HDD	Minimum 1GB Free	Minimum 1GB Free

3. Detailed Product Features

3.1 NVR CS Server

Function	Description
Recording Server	Save stream transmitted from IP camera up to 64 channels IP per server.
	Intelligent recording function(Scheduling, Event Recording)
Relay Server	Relay video stream or event IP transmitted from IP camera to assigned client.
Two way Audio Server	Transmit client's audio data to camera
User Management	User and User group management.
Watchdog	Periodic monitoring recording server for stability of recording.

3.2 NVR Client Live

Function	Description
Real time monitoring	Performs Real time monitoring up to Max. 128 channel by remote management of recording server and IP camera.
Unlimited server system	Provides unlimited server system by remote management of recording server and IP camera.
Remote setting	Provides remote setting of recording server and functions of IP camera.
P/T/Z control	Control Pan/Tilt/Zoom of IP camera.
Event Log	Print event information of IP cameras in the form of list.
Display	Shows live video in 1/4/6/9/10/13/16/25/36/49/64 channel mode
Dual monitoring	Supports up to Max. 128 channel of live video by dual monitoring feature.

3.3 NVR Client Playback

Function	Description
Remote search	Provides playback recording data in recording server up to Max. X16.
Display	Show video in 1/4/6/9/10/13/16 channel mode.
Backup	Back up as Bmp. of AVI.
Digital Zoom	Provides digital zoom in playback mode.

3.4 NVR Client E-map

Function	Description
Map management	Provides unlimited number of map pages by registration and deleting of several maps.
Event link	Supports various event notifications such as Pop-up video, Panorama, Sound Play, PTZ Preset, when event triggered.
User Interface	Supports familiar user interface such as 'Drag & Drop'
Event Log	Print event information of IP cameras in the form of list.
Backup	Back up as Bmp. of AVI.

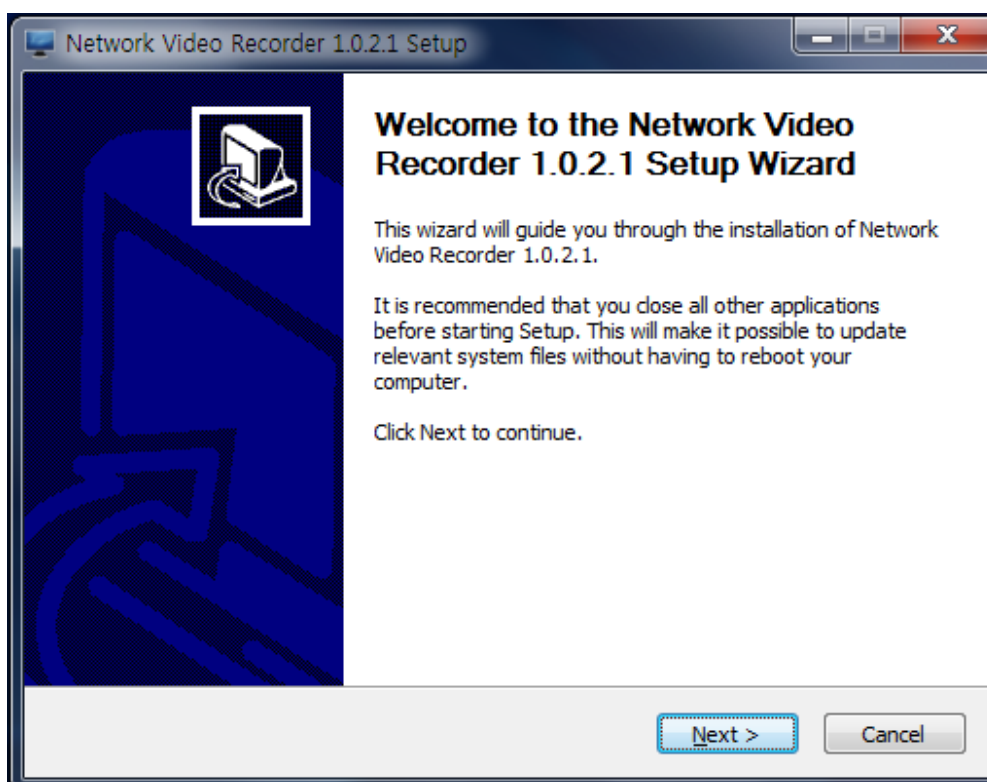
3.5 NVR Client Event View

Function	Description
Event Log	Print event information of IP cameras in the form of list.
Pop-up video	When event triggered, event video will appear on the screen.
Save or print log	Save or print registered event log
Display	Show video in 1/4/6/9/10/13/16/25/36/49/64 channel mode.

4. Getting Started

4.1 Program installation

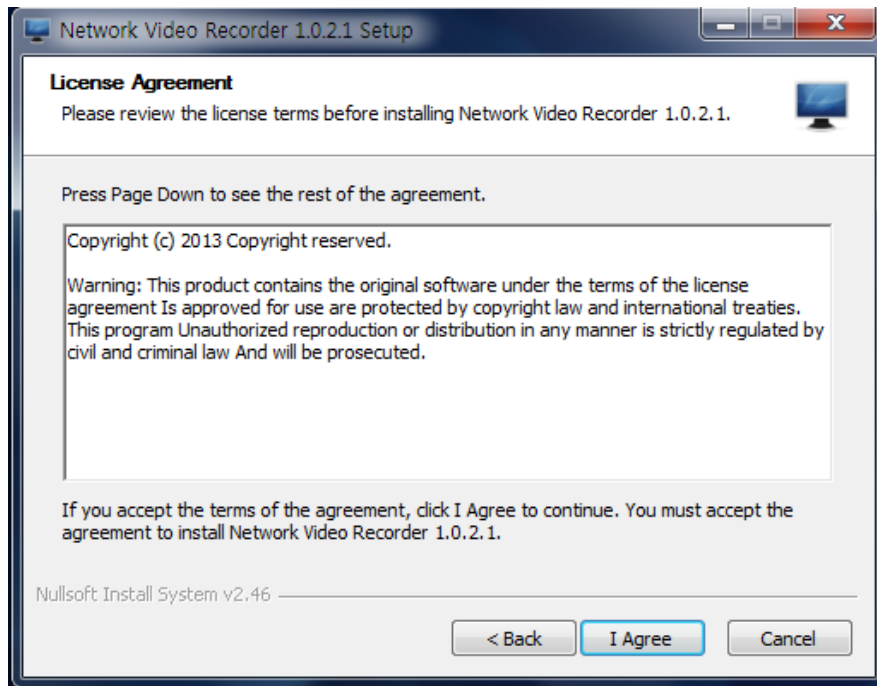
Run "NVR_CS_Install_xx.exe" to install NVR CS.



Click "Next" to continue.

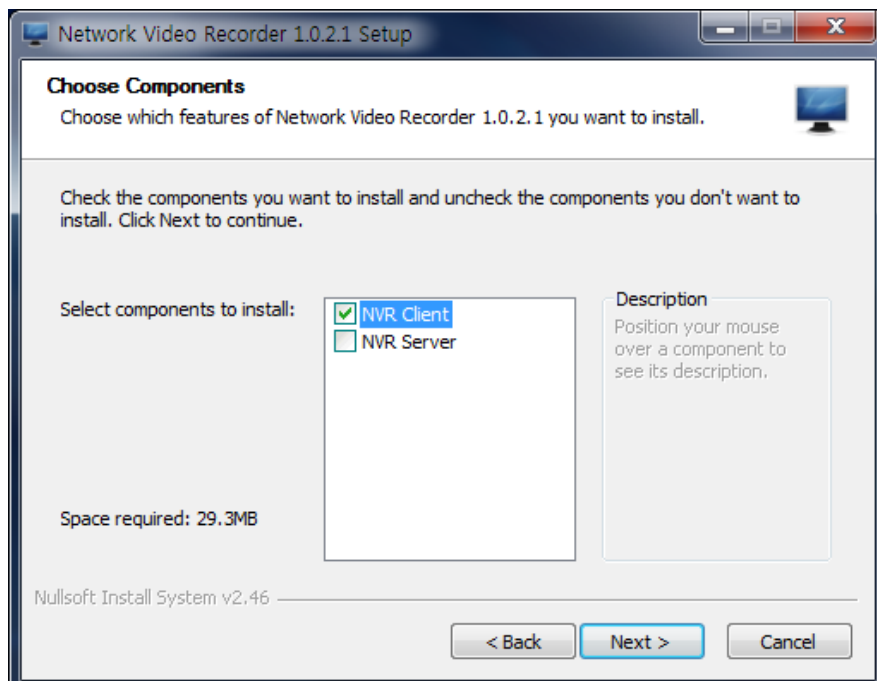
4.2 License Agreement

When 'License Agreement' dialog box appears, click "I Agree" to continue.



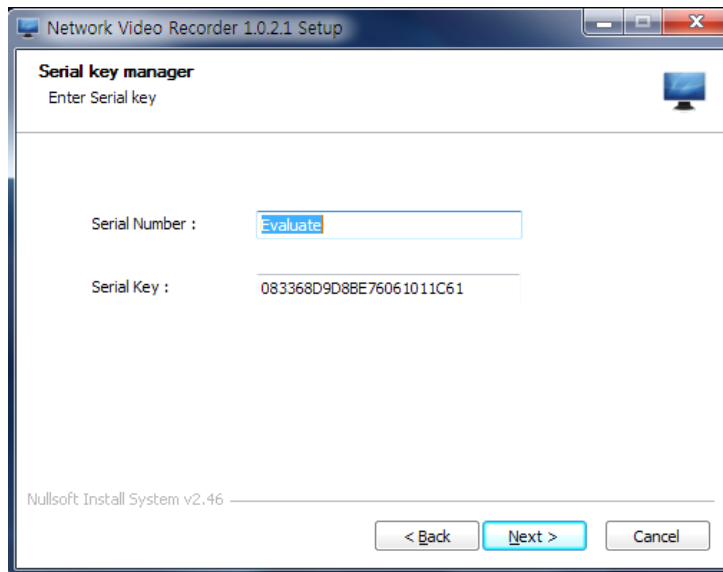
4.3 Choose Components

Check the components you want to install and click 'Next' to continue.



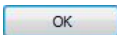
4.4 Serial number

Enter serial number & serial key. And, click "Next" to continue.



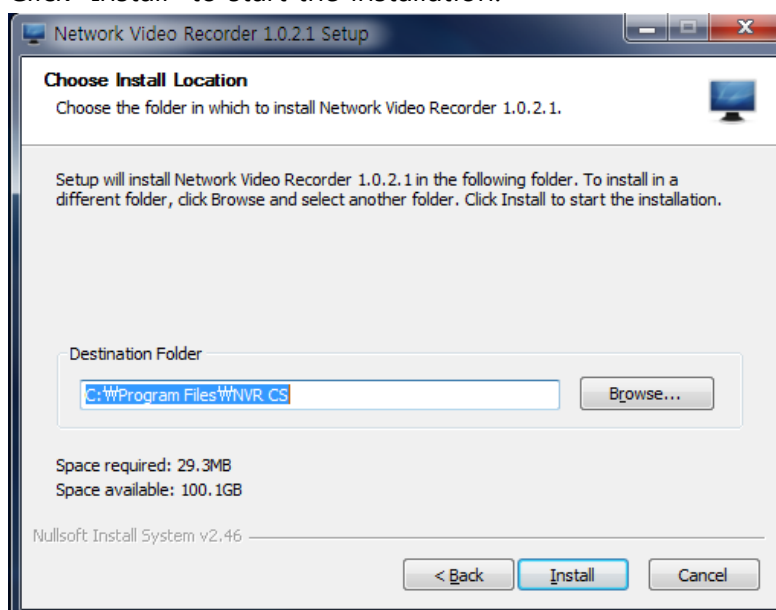
If serial number or serial key are invalid, below window will appear.



Click  and enter the valid serial number and serial key. Then, click "Next"

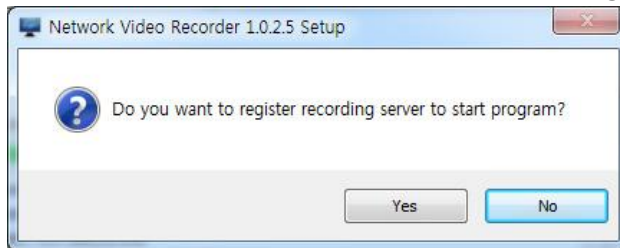
4.5 Define destination folder

Choose the folder in which to install Network Video Recorder and Click "Install" to start the installation.



4.6 Start Program registration

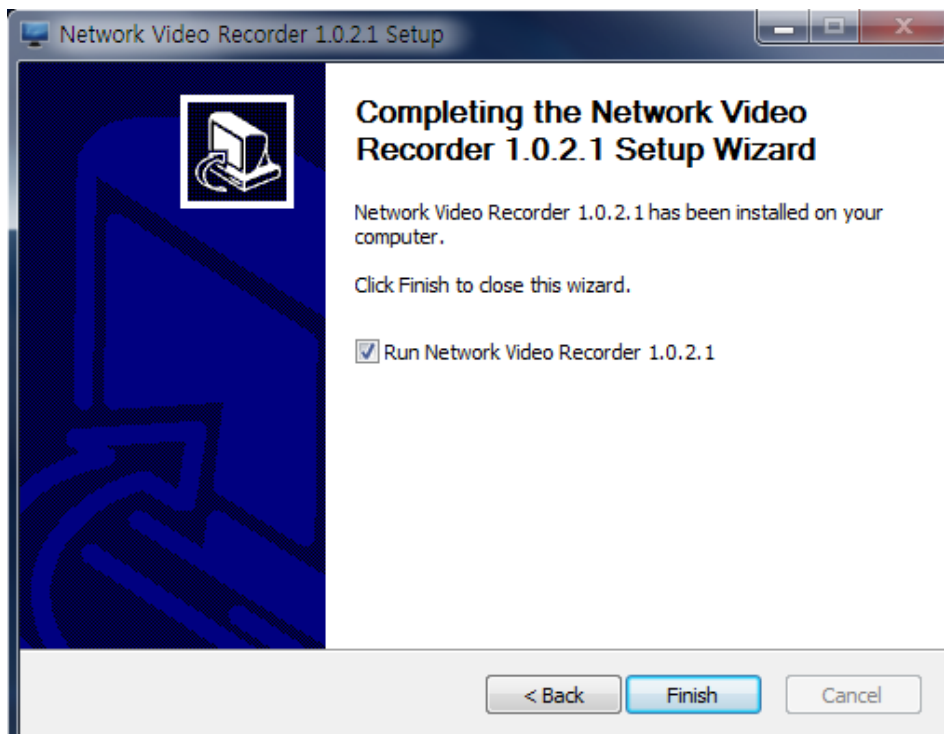
Enter user's admin account information to register for start program.



Click  to register recording server to start program.

4.7 Installation Completion

After installation is completed, NVR can be run immediately by clicking 'Finish' button with check-box checked on 'Run Network Video Recorder'.



A. After installation, 5 shortcut icons will be created on desktop as follows



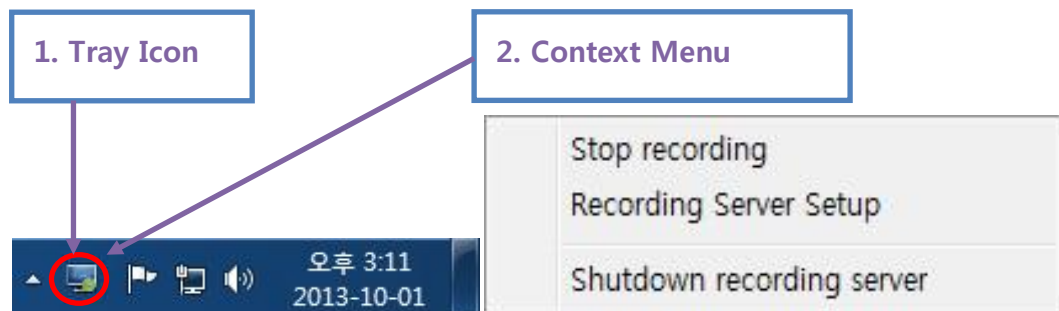
- B. When you try to delete NVR CS, you may run Uninstall.exe on below location.

Start-up Menu→All Programs→NVR CS→Uninstall.exe

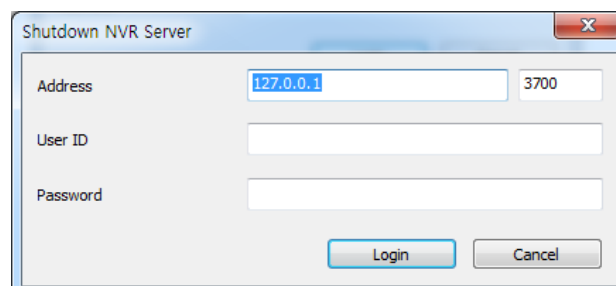
5. NVR Server

5.1 User Interface

NVR Server is the program which features video relay and recording. When the program is installed on the PC, the tray icon of NVR server will be displayed in the right tray of the task bar. NVR Server does not have a separate UI and run in the background.



- (1) Implementation of program is controlled by a context menu.
Select the icon and right-click it.
- (2) Menu : Stop/Start recording , NVR Server Setup, Shutdown NVR Server
 - A. Stop/Start Recording: Setup Stop/Start Recording.
 - B. NVR Server Setup: Configures the NVR server settings (Refer to "6. NVR Server Setup").
 - C. Shutdown NVR Server: Shut down NVR Server program.

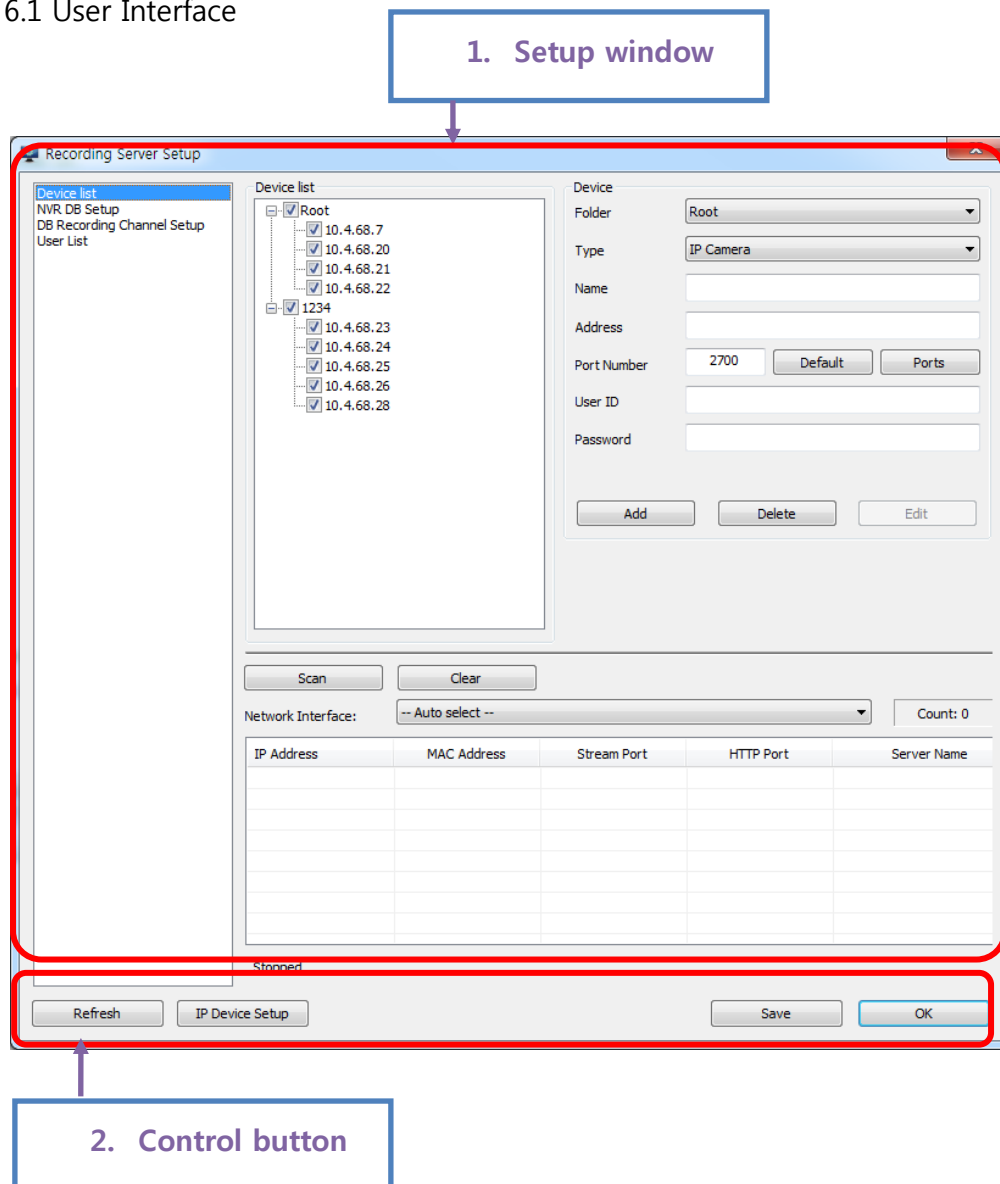


Enter user's admin account information and click 'Login' to shutdown program.

6. NVR Server Setup

This chapter provides a brief description how to setup NVR Server program.

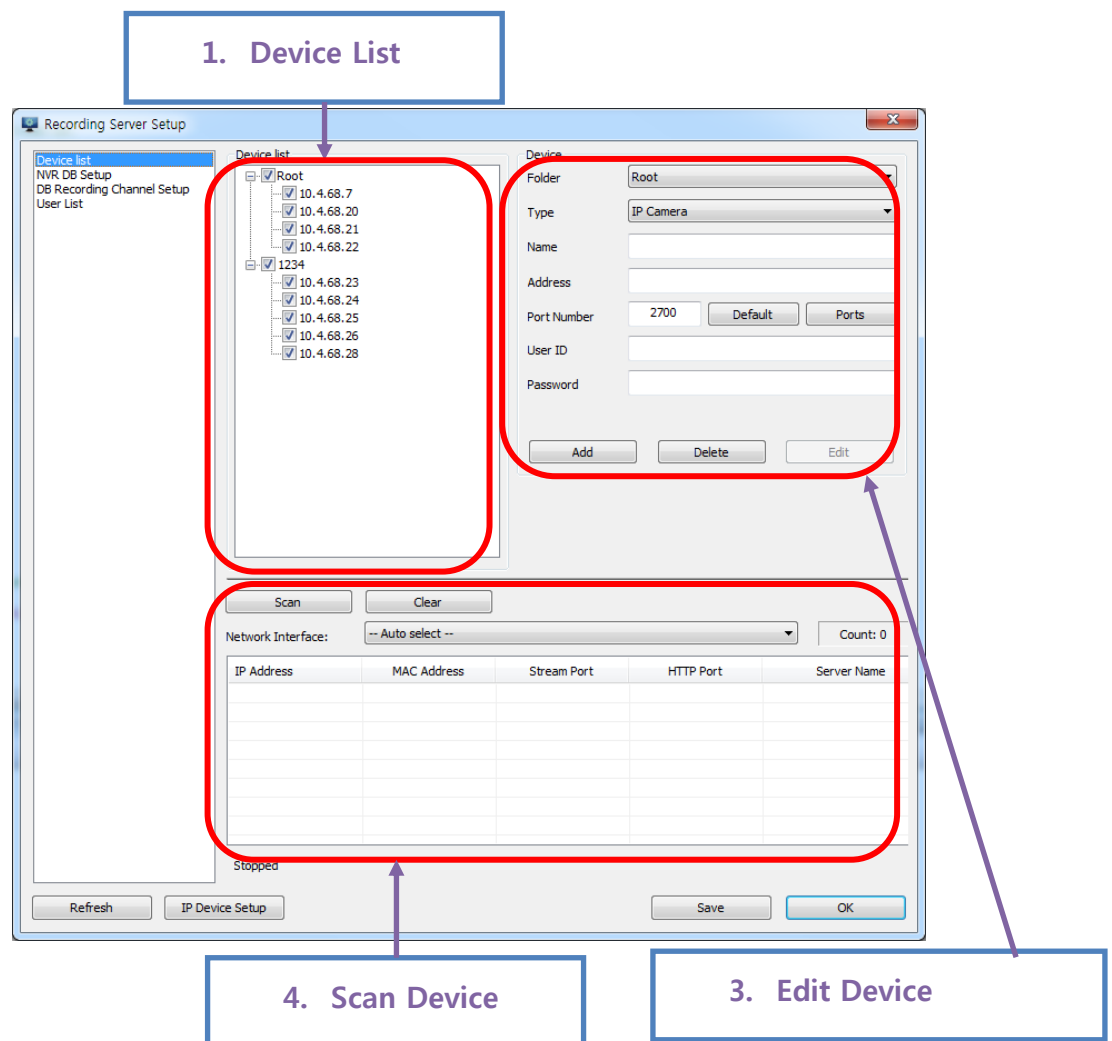
6.1 User Interface



6.1.1 Setup Window

A. Device List

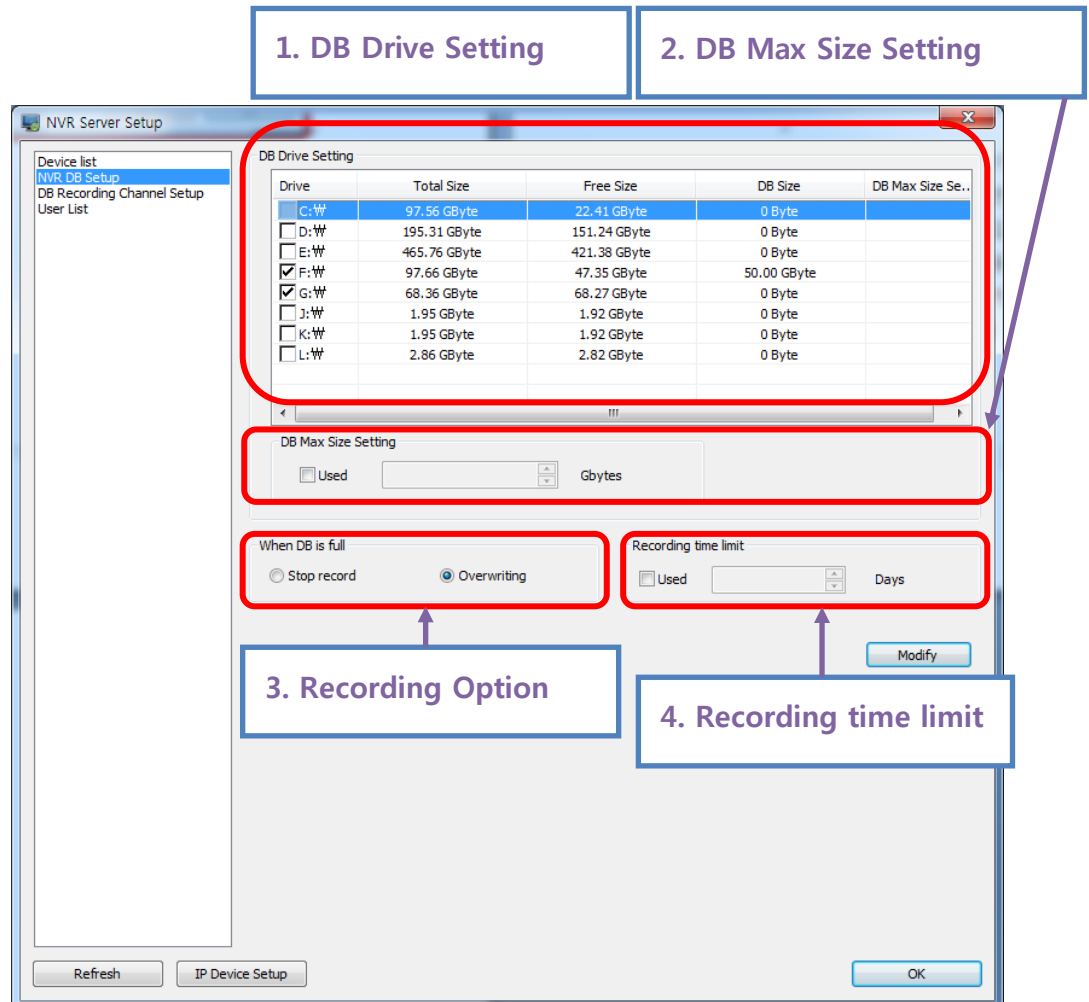
Manage and edit device list as shown below.



- (1) Device List : display the registered devices.
- (2) Edit Device : can add, delete or edit the device.
- (3) Scan Device : User can find and select all available devices in the same network environment and edit devices with easy.

B. Device List

You can start the status of DB setting, DB size and Recording time limit, etc.



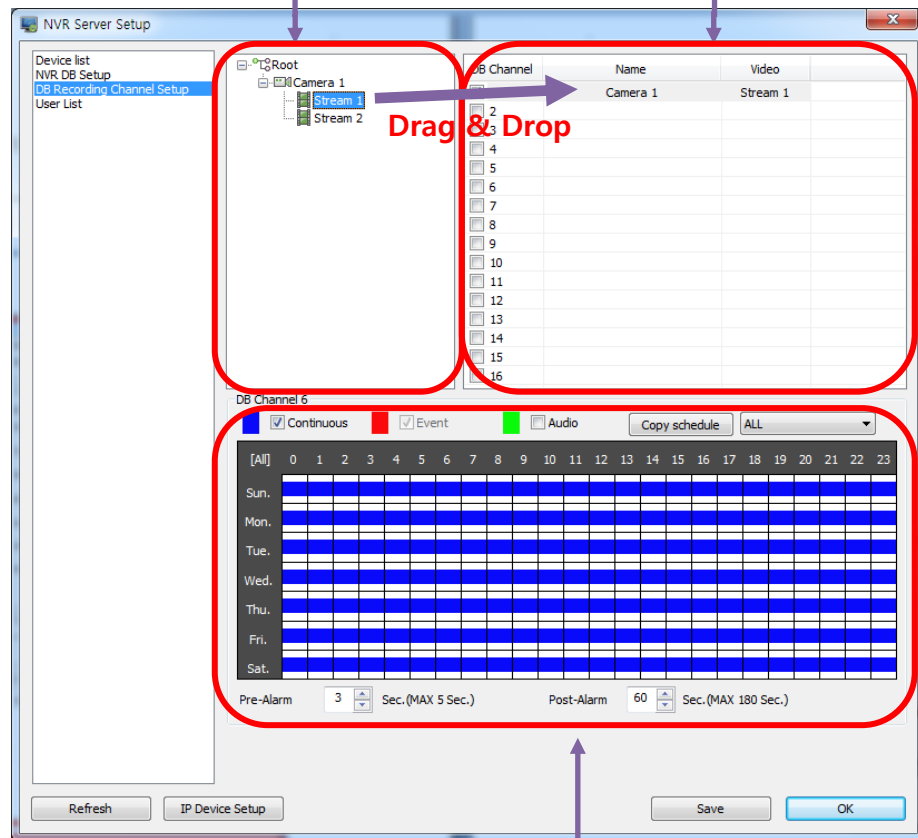
- (1) DB Drive Setting : assigns DB Drive for recording.
- (2) DB Max Size Setting : set the maximum DB size for the selected DB drive by Gbytes.
- (3) Recording Option : Select two kinds of action when DB is full.
 - Stop record : immediately stop recording when DB is full.
 - Overwriting : continues recording by overwriting the oldest data when DB is full.
- (4) Recording time limit : set the maximum recording time by day.

C. DB Recording Channel Setup

You can set up Recording Channels and make scheduled recording.

1. Registered Device List

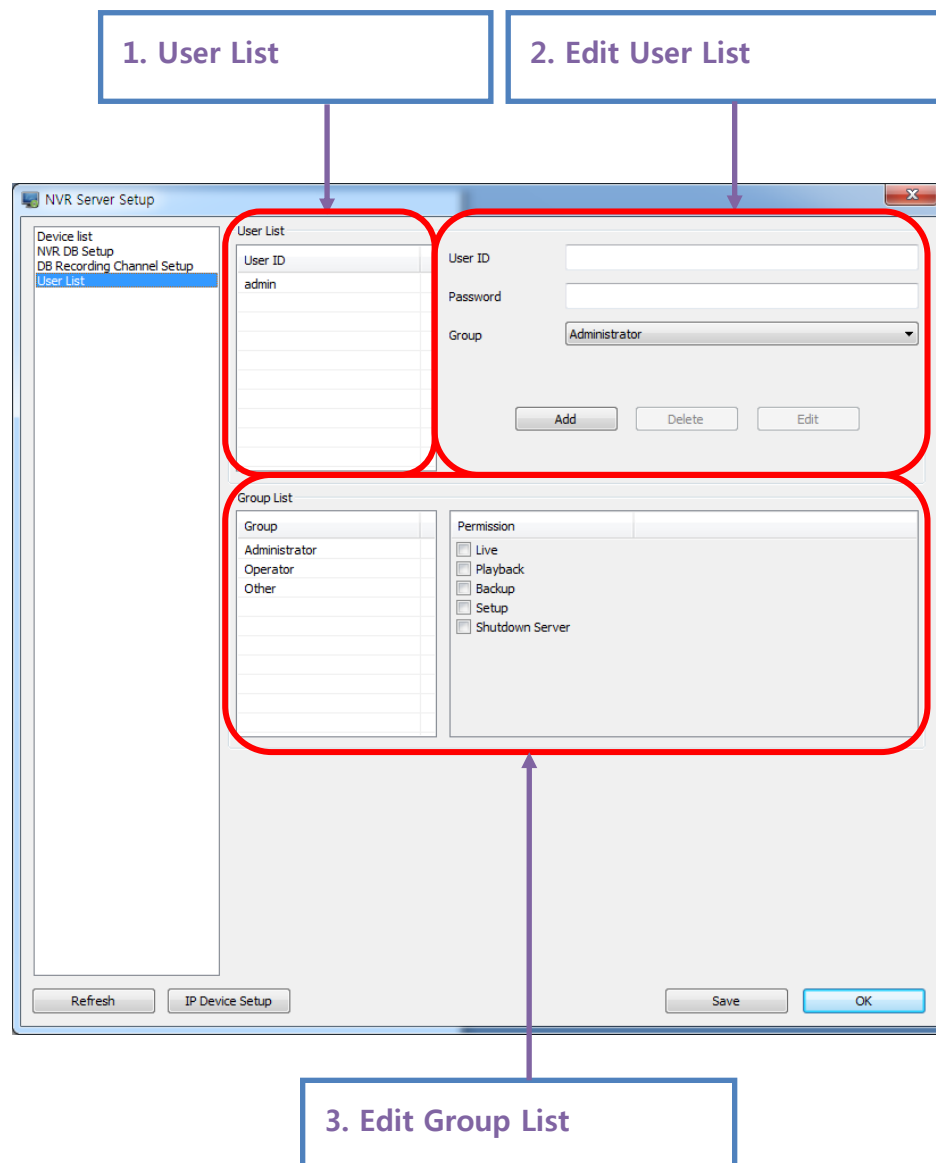
2. Stream List for Recording



3. Schedule Setup

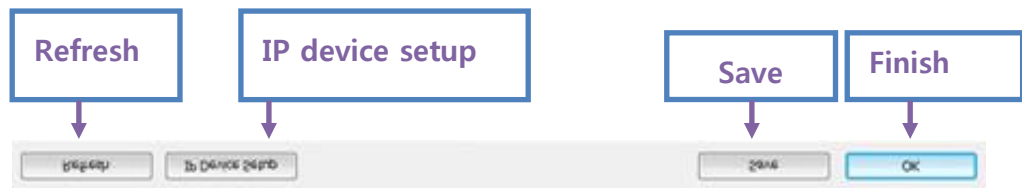
- (1) Registered Device List : displays all registered devices.
 - (2) Stream List for Recording : displays all registered stream list for recording. To add stream for recording to DB channel, select desired stream of registered devices and drag & drop it to specific DB channel.
 - (3) Schedule Setup : displays recording schedule. You can edit the recording schedule by the hour. To plot recording schedule, select desired items from Continuous, Event or Audio, and drag the cursor to specify the time range on the time table.
- On the bottom, there is Pre/Post-Alarm setting. Pre-Alarm means video before event trigger. You can set 1~5 seconds. Post-Alarm means after event trigger. 1~180 seconds can be set.

D. User List



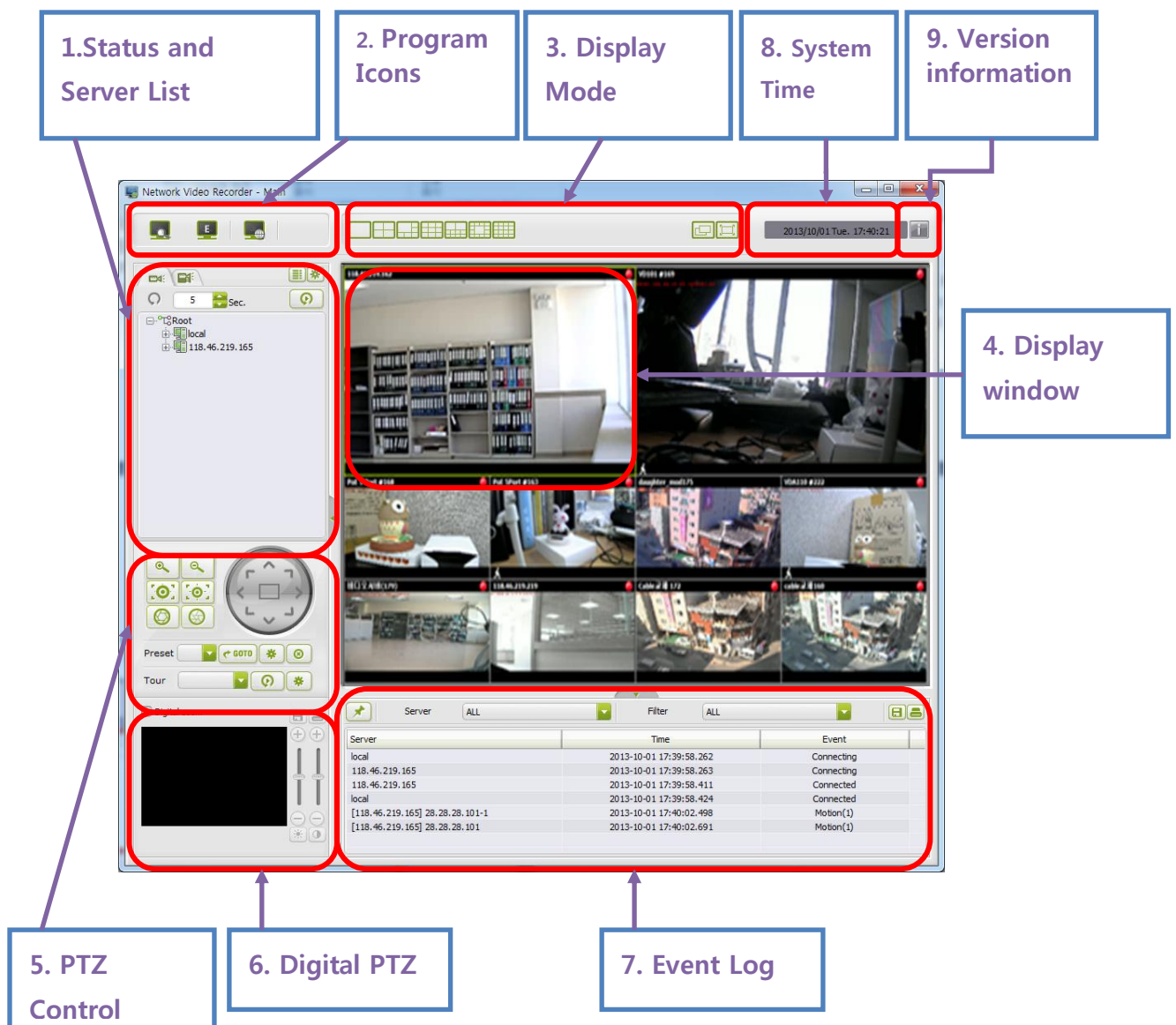
- (1) User List : displays all users.
- (2) Edit User List : can add/delete/edit a user.
- (3) Group List : User group is divided into three group(Administrator, Operator, Other) to authorize appropriately, each group can authorize 'Live, Playback, Backup, Setup, Shutdown Server' by manager's choice.

6.1.2 Control buttons

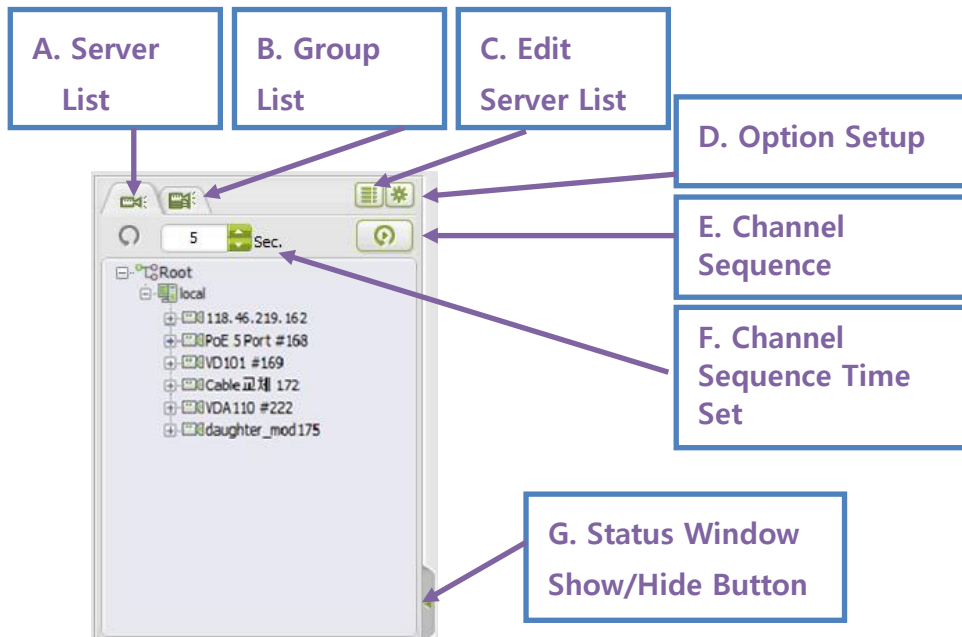


7. NVR Client Live

7.1 User Interface



7.1.1 Status and Server List



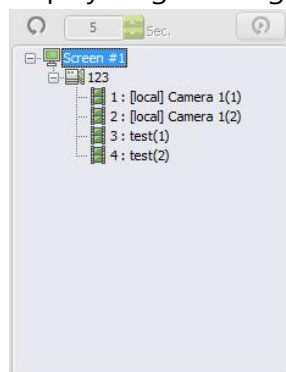
A. Server List

Displays registered server list.



B. Group List

Displays registered group list.



C. Edit server list

A. Server List

The screenshot shows the 'Server Setup' window. On the left, the 'Server list' tree shows a 'Root' folder with four checked items: 118.46.219.83, 118.46.219.85, 118.46.219.165, and 10.4.68.20. On the right, the 'Server' configuration panel is visible, with fields for Type (NVR Server), Name, Address, Port Number (3700), User ID, and Password. Below these are 'Add', 'Delete', and 'Edit' buttons. At the bottom, there are 'Import' and 'Export' buttons. The 'Scan' section at the bottom includes 'Scan', 'Clear', 'Scan type' (NVR Server), 'Count: 0', and a 'Network Interface' dropdown set to '-- Auto select --'. Below this is a table with columns: IP Address, Port, Server Name, Model, and Version. The status bar at the bottom says 'Stopped'.

IP Address	Port	Server Name	Model	Version

B. Edit Server

C. Scan Server

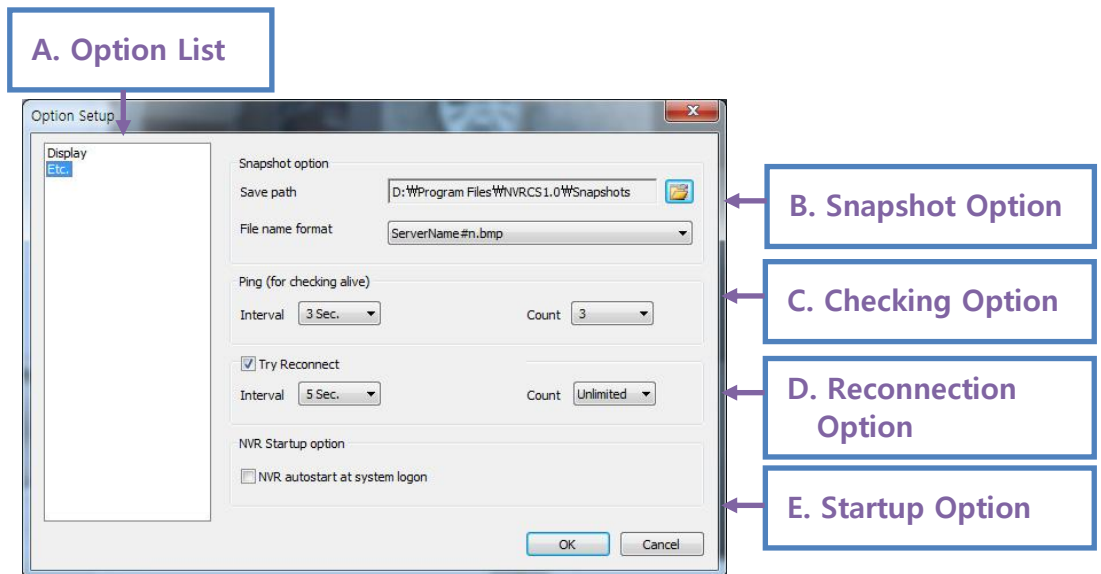
D. Option Setup

A. Option list

B. Display Caption

The screenshot shows the 'Option Setup' window. On the left, there is a list of options with 'Display' selected. On the right, the 'Display Caption' section is highlighted, showing checkboxes for Name, REC, Event, and Audio, all of which are checked. Below this is the 'Live Video Display Option' section, which has three radio buttons: 'Auto display control for delayed frame' (selected), 'Keep original frame rate', and 'I Frame Only'. The 'Auto display control for delayed frame' option has a 'Skip frame delayed over' dropdown set to '1' and a 'Sec.' label. At the bottom, there is a 'Language' dropdown set to 'English'. 'OK' and 'Cancel' buttons are at the bottom right.

C. Display Option



E. Channel Sequence



: Start Channel sequence.

F. Channel sequence Time Set

Set channel sequence time.



G. Status Window Show/Hide Button

7.1.2 Program Execution Icons



NVR Client Playback: Searches Recorded Data & Playback



NVR Client Event Viewer: Shows live video when event triggered



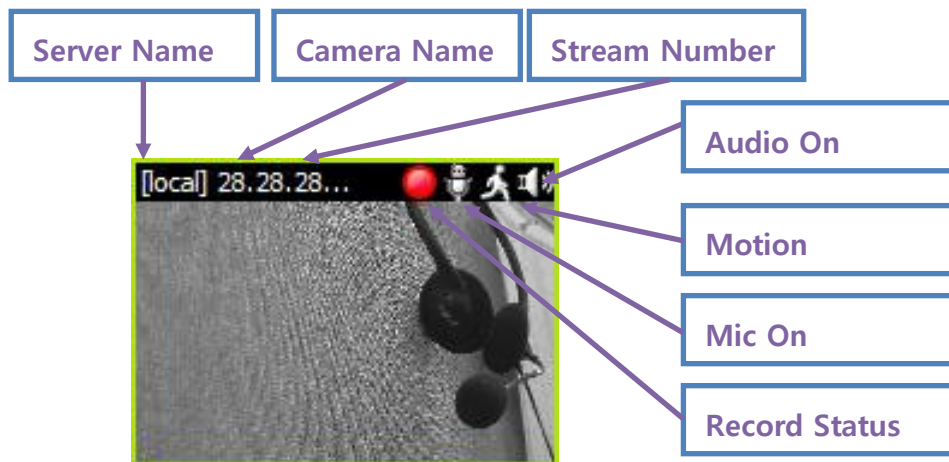
NVR Client E-Map: Displays live video and alarm on user's defined map when event triggered

7.1.3 Display Mode

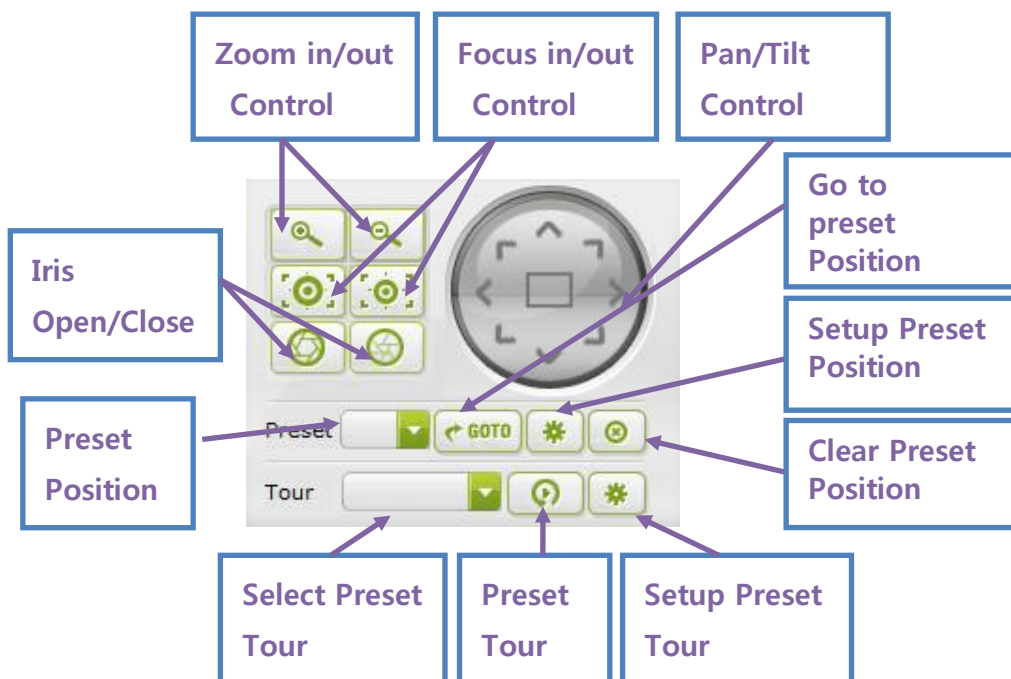


Show live video in 1/4/6/9/10/11/16/25/36/49/64 channel mode and full screen mode.

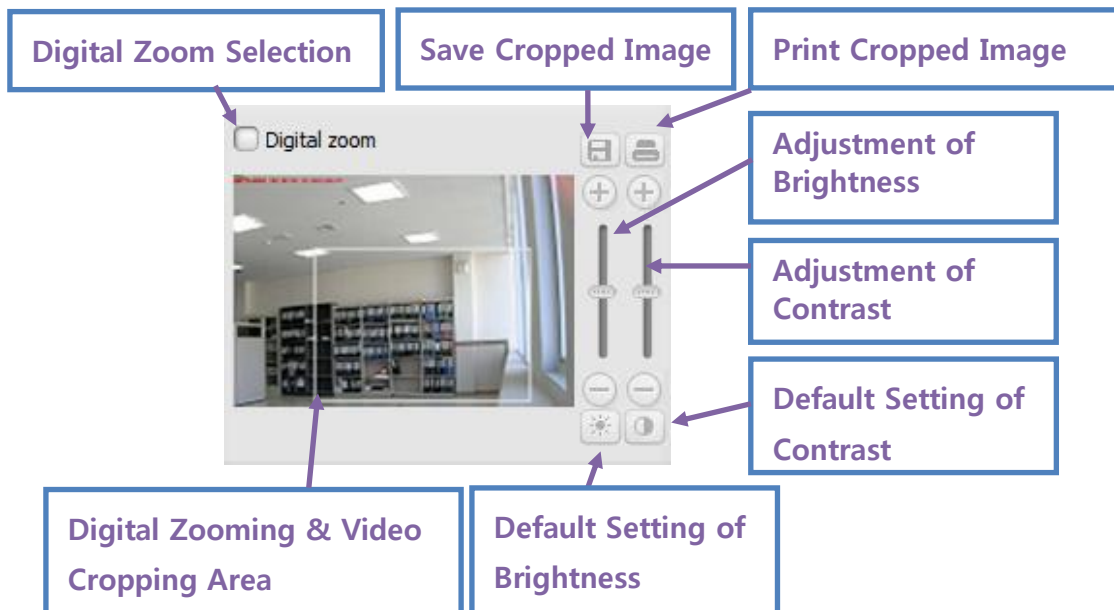
7.1.4 Display window



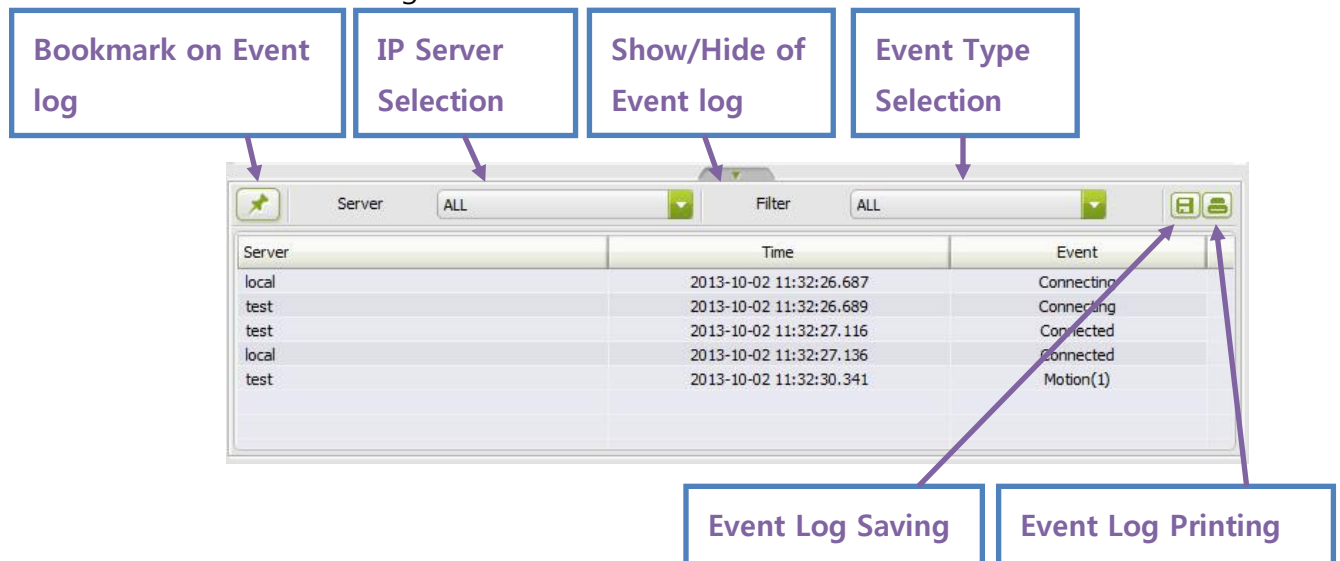
7.1.5 PTZ Control



7.1.6 Digital PTZ and Image Cropping.



7.1.7 Event Log

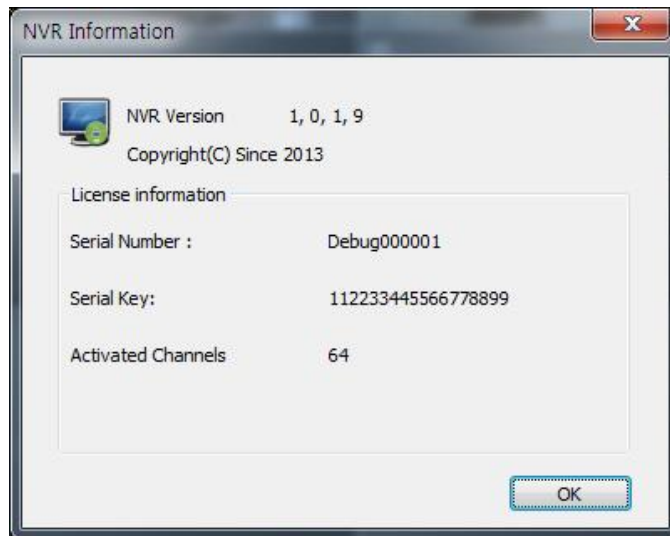


7.1.8 System Time

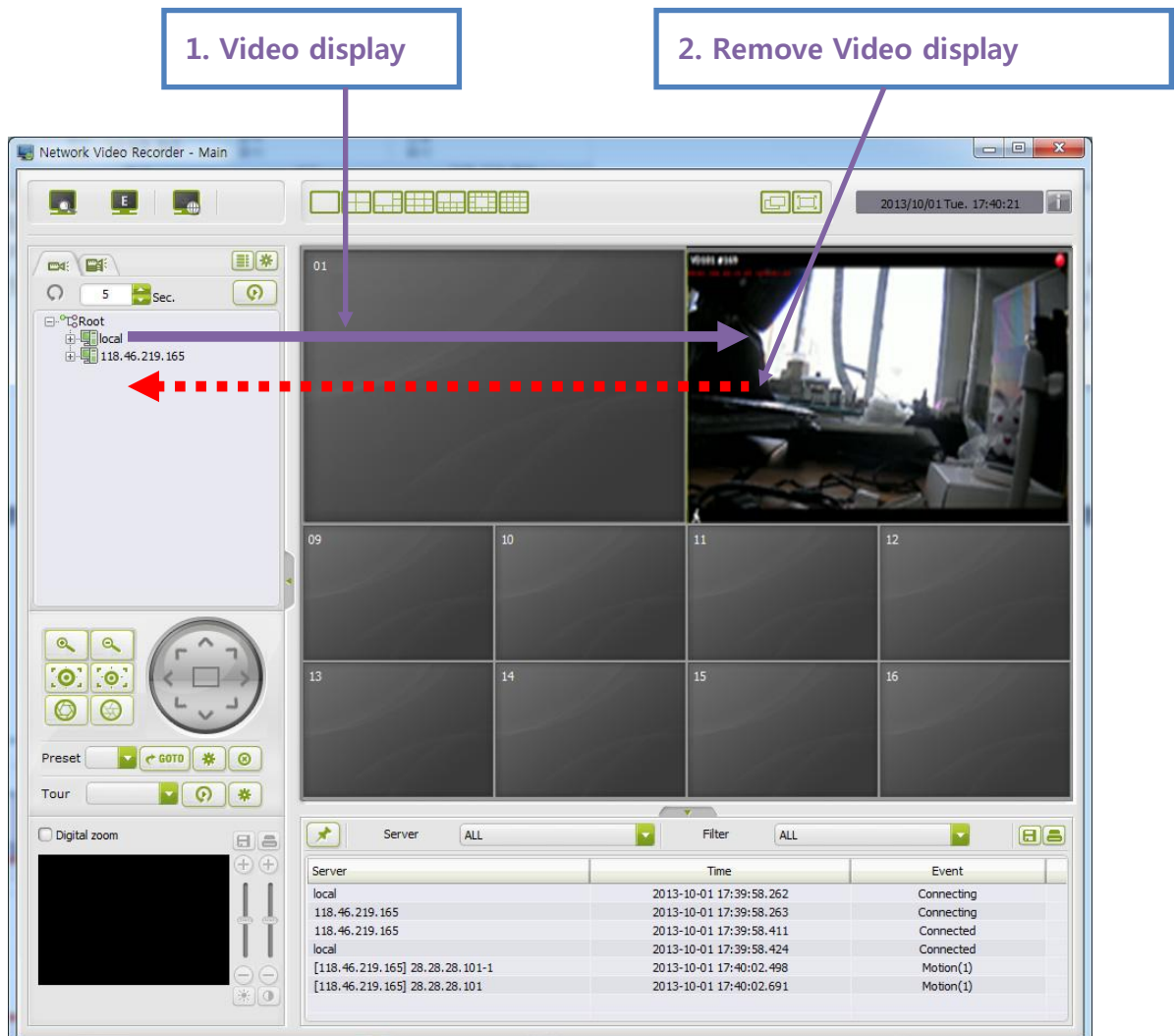


7.1.9 Version information

Click  to see Program version information as shown below.



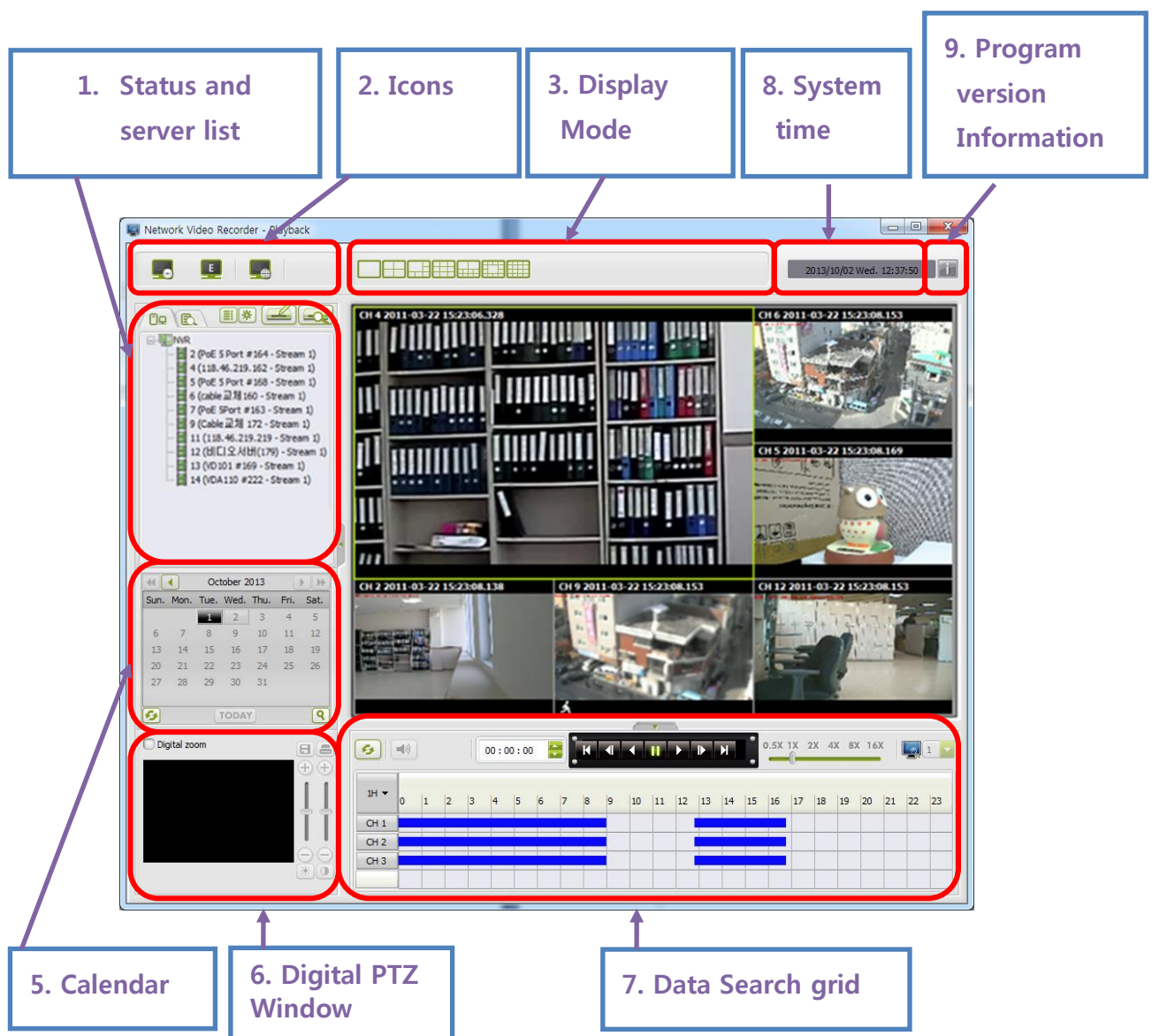
7.2 Video display on NVR Client Live



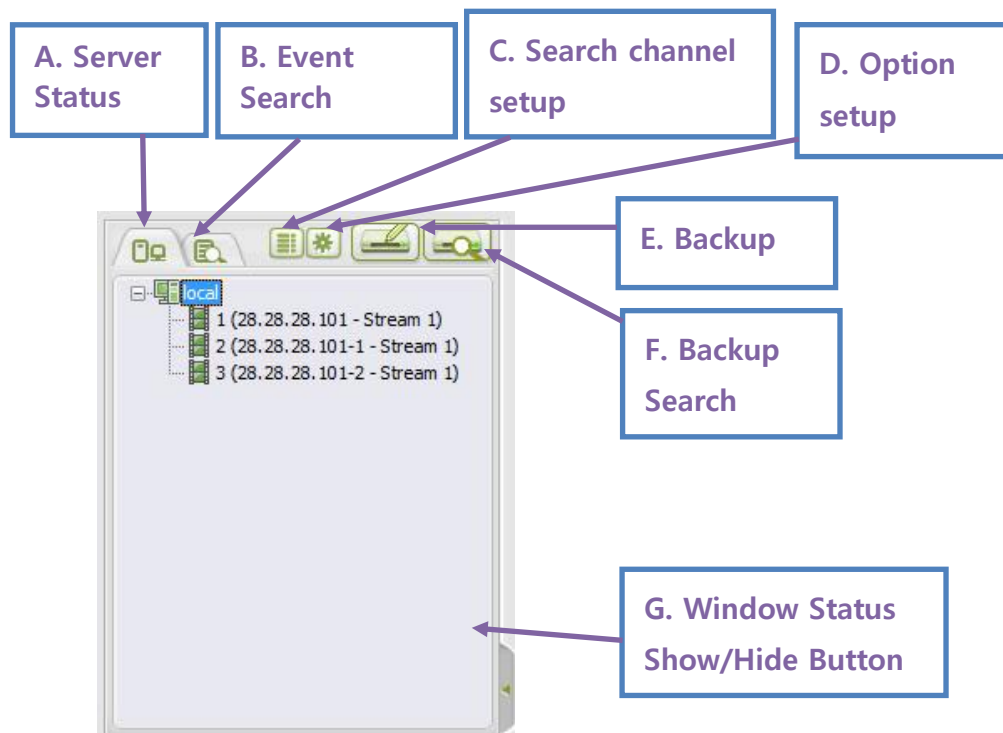
- (1) Drag and drop one selected camera on the display window to see live video from the camera.
- (2) When you want to remove specific camera from live view, click that video window. Then drag and drop it in reverse direction toward 'Status and Server list' as shown in the above picture.

8. NVR Client Playback

8.1 User Interface

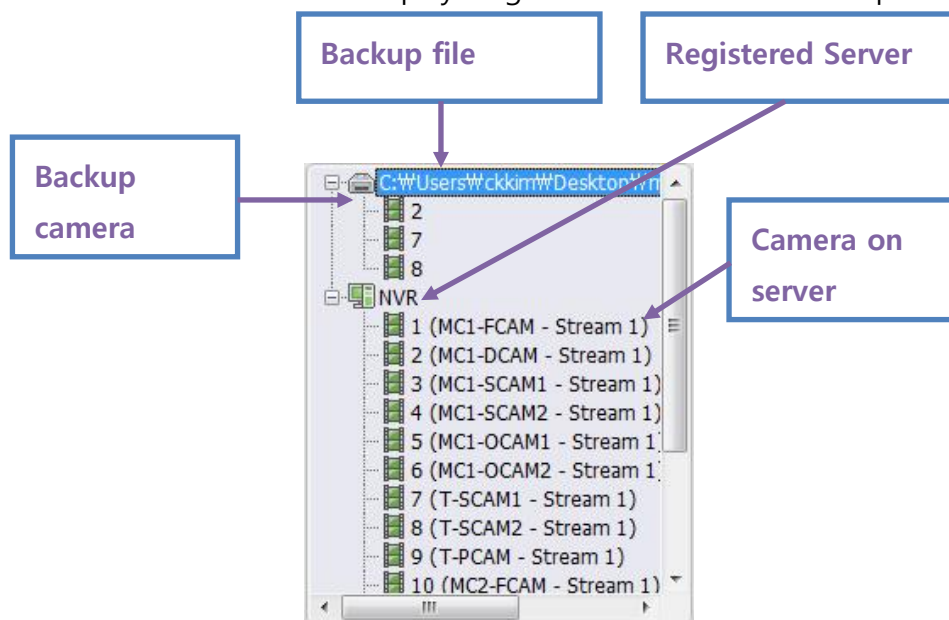


8.1.1 Status and server list



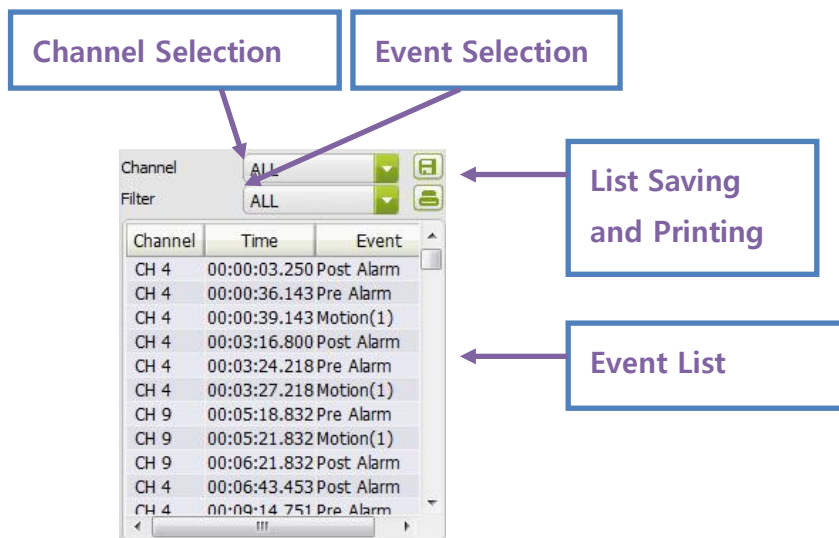
A. Server Status

Displays registered server list or backup server list.



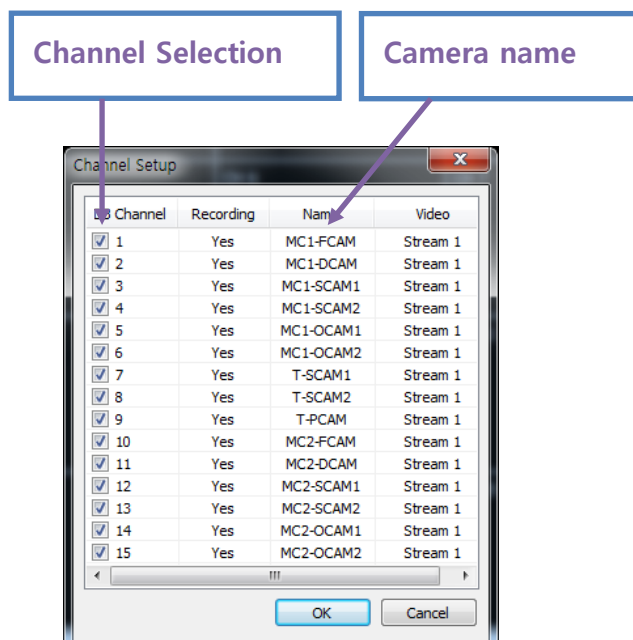
B. Event Search

Print event data list on the server.

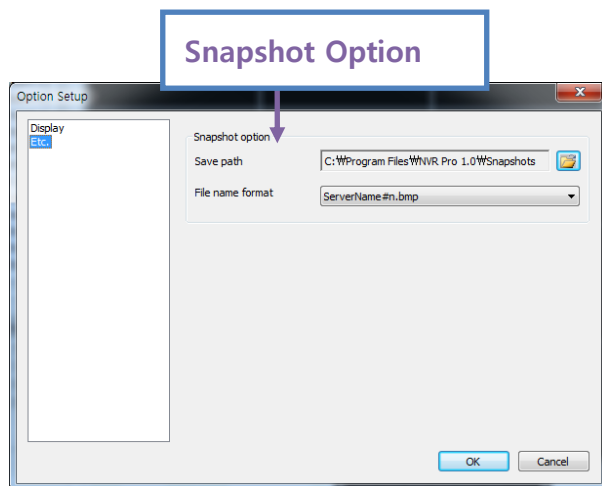
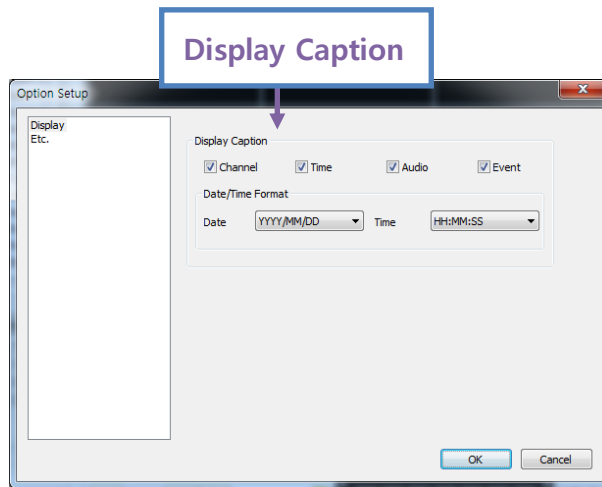


* If you double-click specific event to see, the event video will be opened.

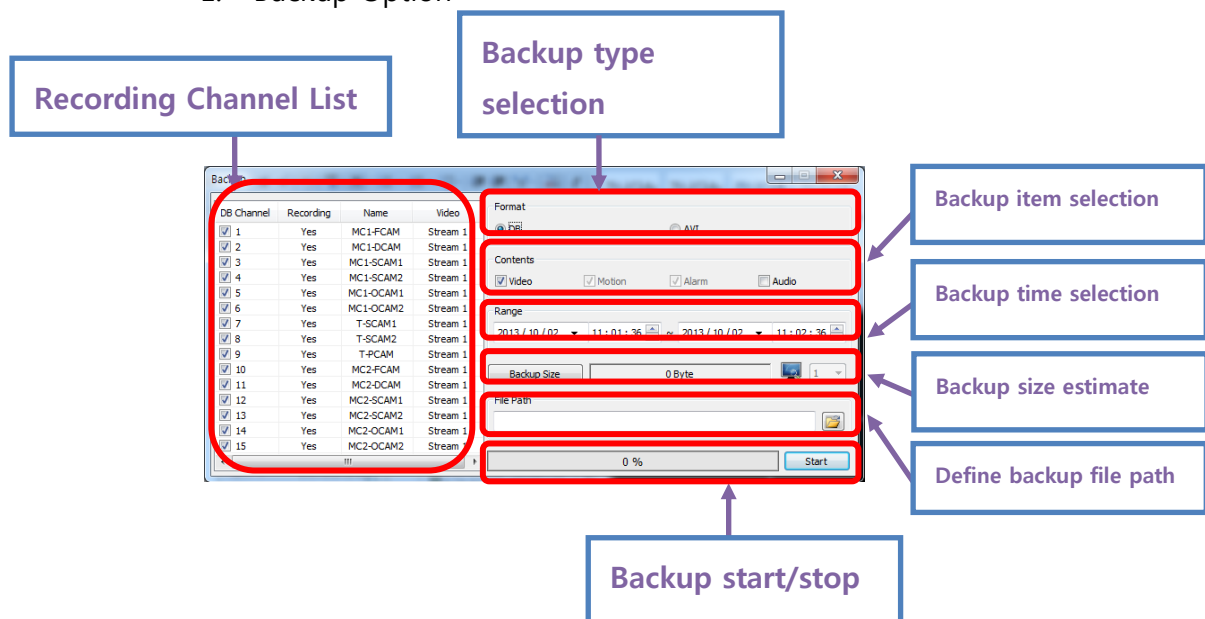
C. Search Channel setup



D. Option Setup



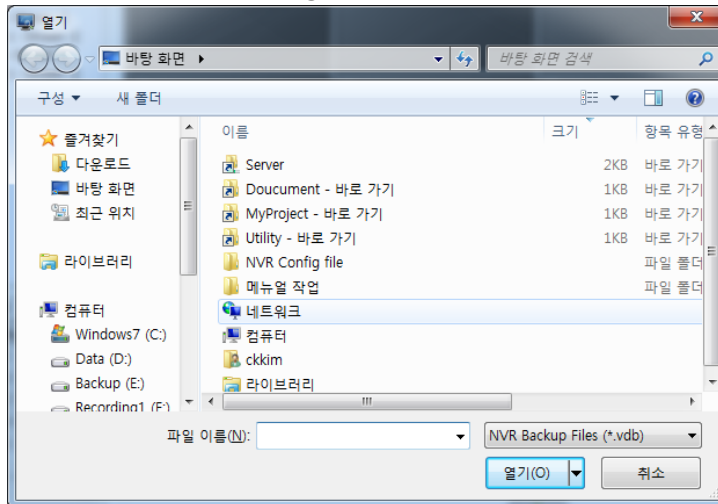
E. Backup Option



F. Search backup file

Explorer window will be opened. Find backup file and click "open" button.

File selection dialog appear to load backup files as below.



G. Status window show/hide



: Status window show/hide button

8.1.2 Program Icons



NVR Client Live



NVR Client Event Viewer



NVR Client E-Map

8.1.3 Display Mode



Show live video in 1/4/6/9/10/11/16/25/36/49/64 channel mode.

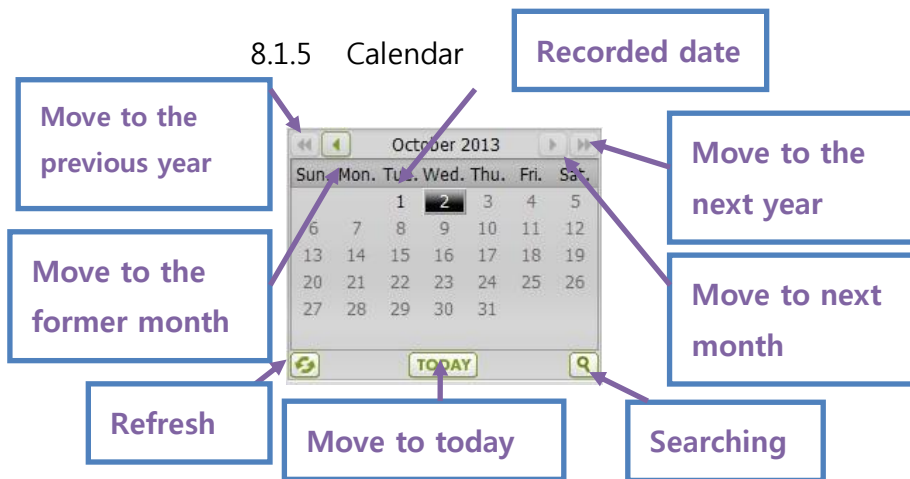


Full screen mode

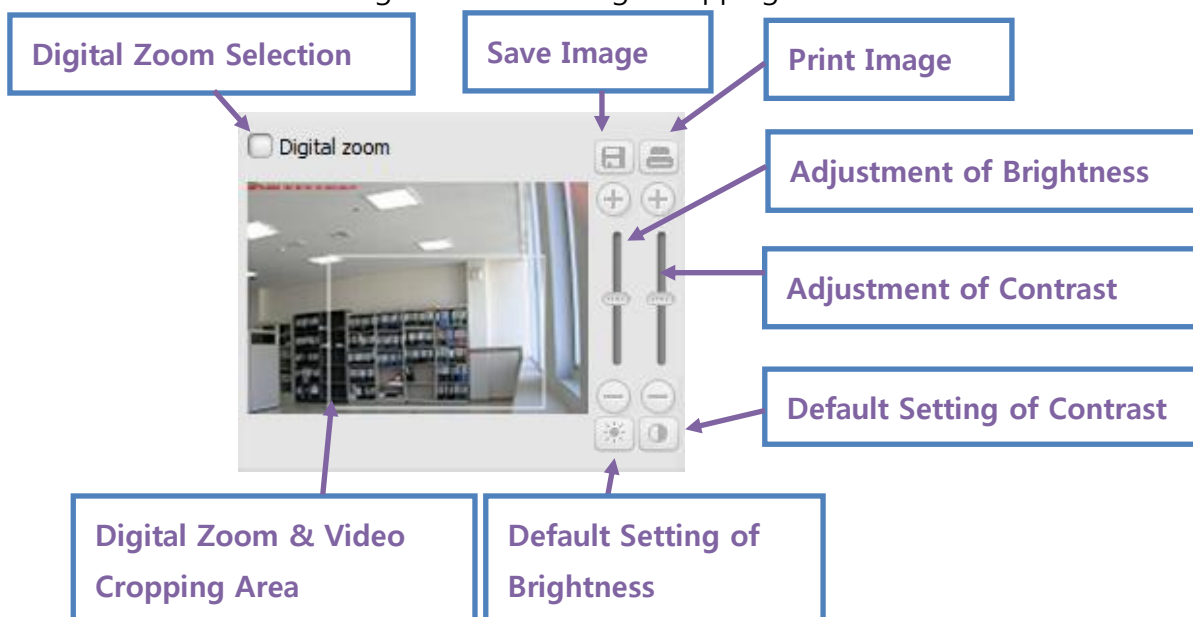
8.1.4 Display window



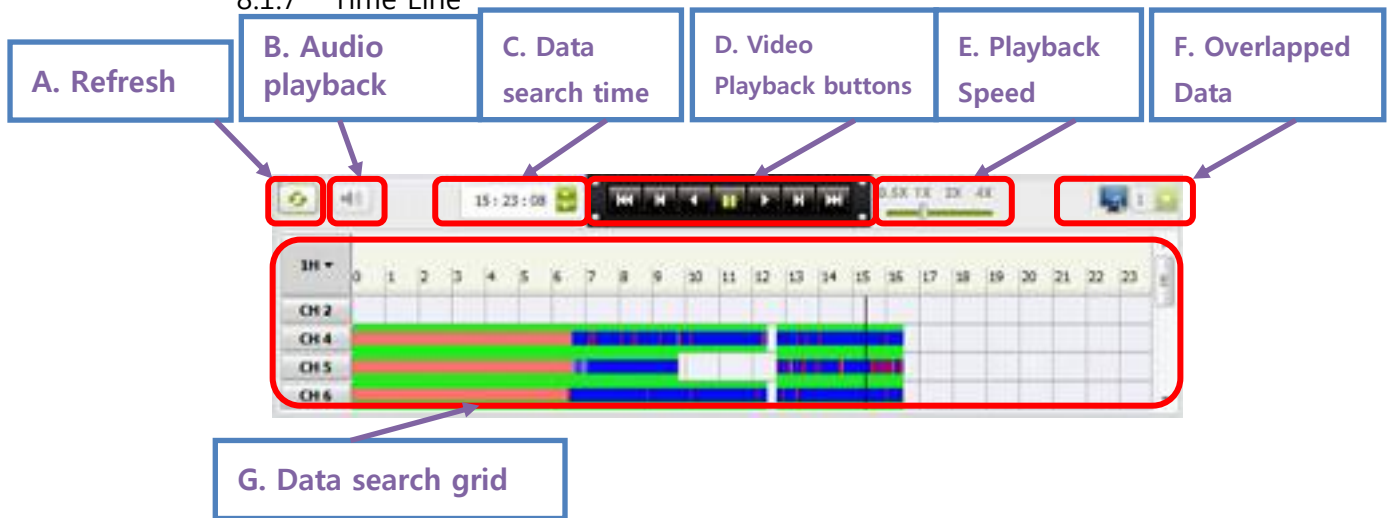
8.1.5 Calendar



8.1.6 Digital PTZ and Image Cropping



8.1.7 Time Line



A. Refresh



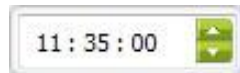
: Refresh

B. Audio Playback



: Activated only when one channel is selected and displayed. Then, audio can be played by clicking this button.

C. Data search time



: On the time window of search grid displays the data search time and this time is changeable by clicking up down key on that window .

D. Video playback buttons



: Stop



: Reverse Play / Forward Play



: One frame reverse play / One frame forward play



: Move to the first point / Move to the last point

E. Playback Speed



: This playback speed can be selected on the search grid by sliding the button (X0.5 ~X16).

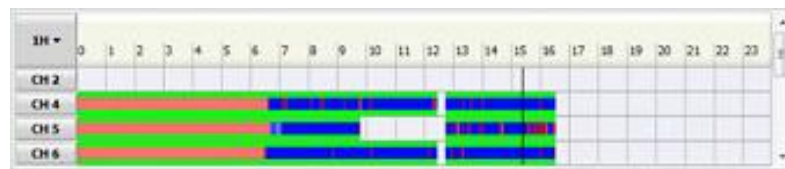
F. Overlapped Data




: When system time has been changed into earlier time, overlapped recording may happen. In this case, one another ID will be granted to distinguish and search these overlapped data.

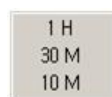
G. Data search grid

Display the recorded data in tabular form and user can search recorded data by clicking the black line with mouse button and drag it to desired search time.

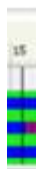


- Blank with no colored bar indicates no record data.
- Record data with more than 20 Frames per second.
- Record data with more than 10 Frames per second.
- Record data with less than 10 Frames per second.
- Audio record data.
- Event recording. The red color shows the point when event triggered and pink color shows pre or post alarm record .

When you click time button (), all these detailed types appear as shown below.

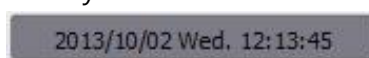


: (1Hour, 30Minute, 10Minute)



: By clicking the black line with mouse button and drag it to desired search time, users can search record data directly on the search grid.

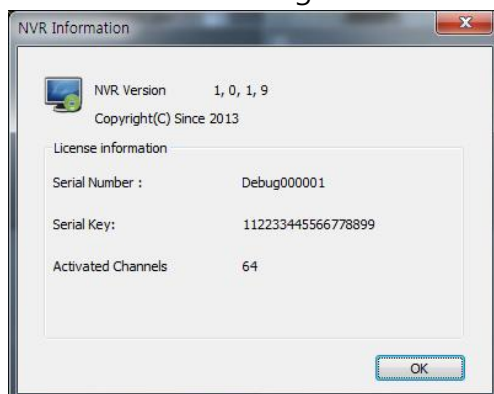
8.1.8 System Time



: Display System Time.

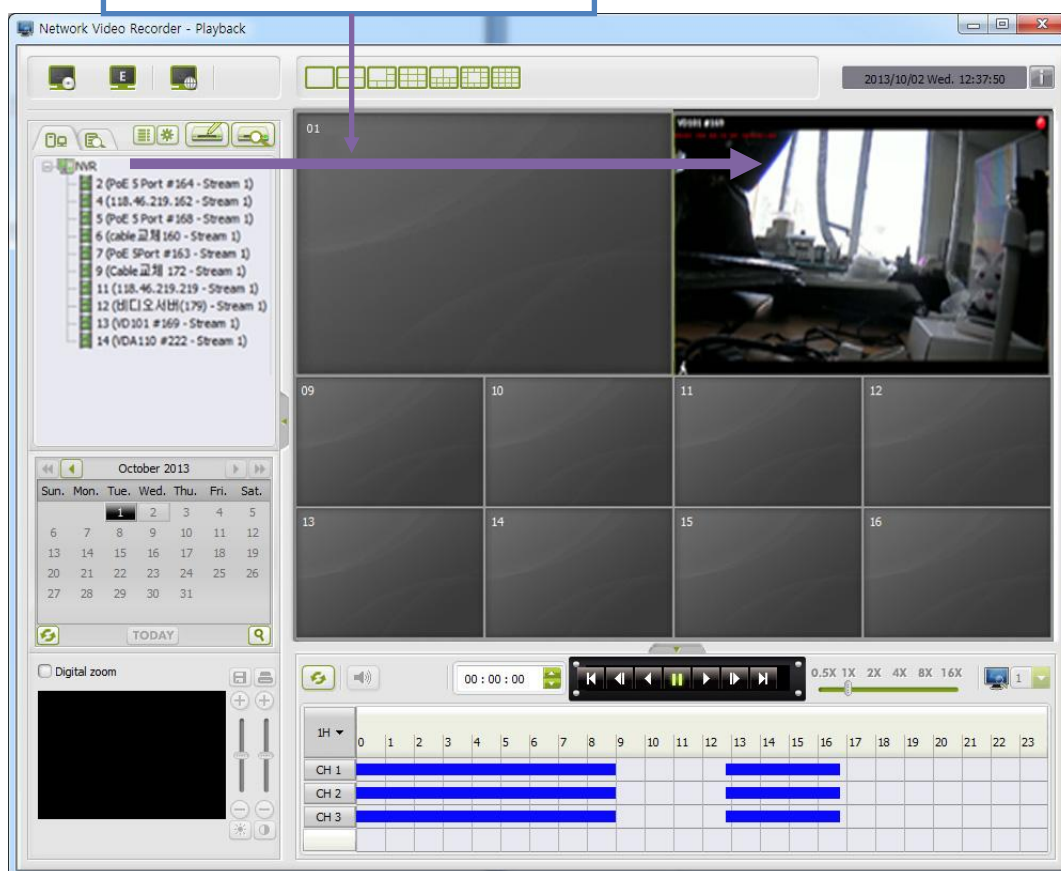
8.1.9 Program version information

Click  to see Program version information as shown below.



8.2 Searching record data on playback

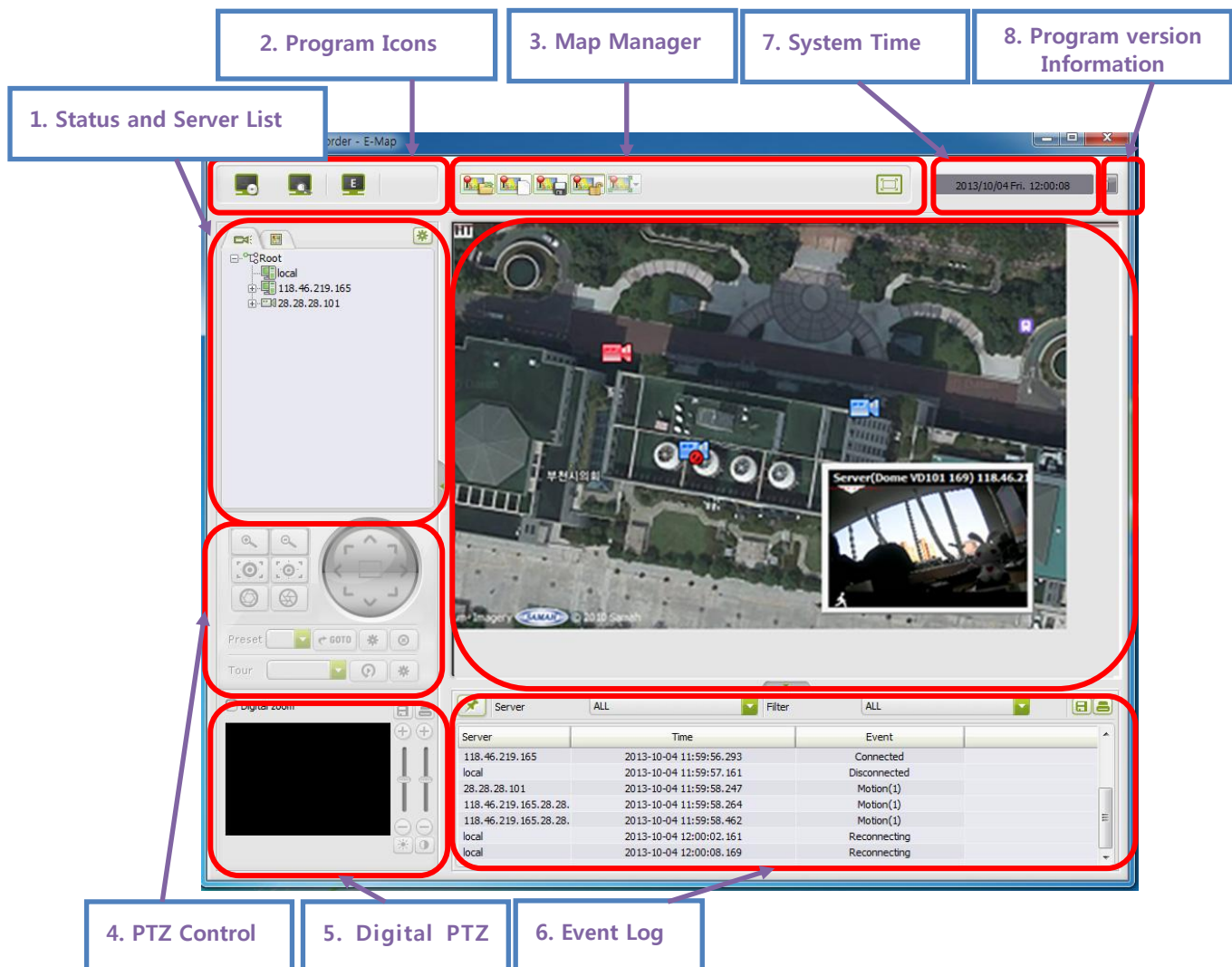
1. Start Data Searching



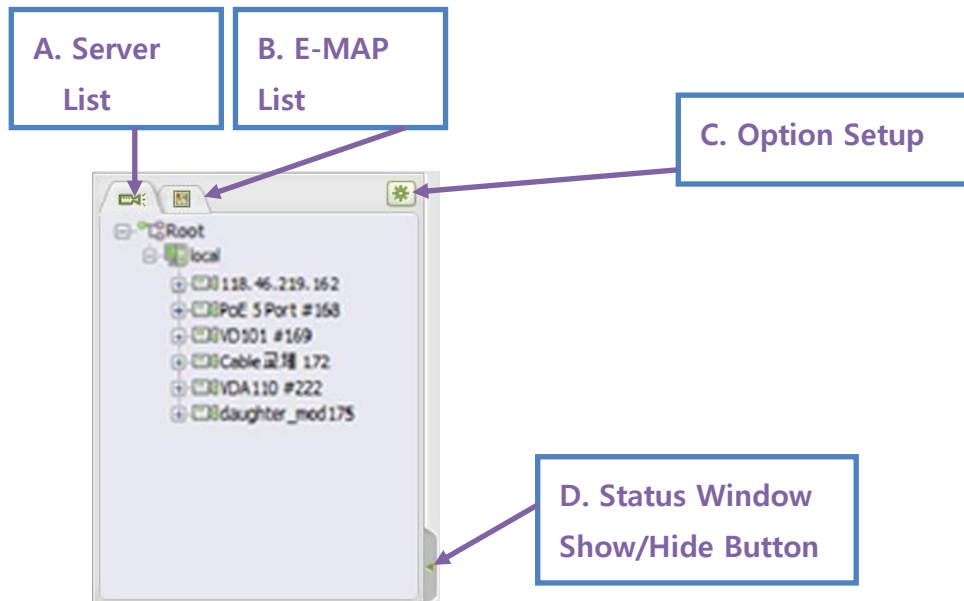
- (1) Choose and drag the registered camera from server list and drop on display screen to see playback file.
- (2) Choose the playback file on display screen and drag & drop on server list to remove.

9. NVR Client E-Map

9.1 User Interface



9.1.1 Status and Server List



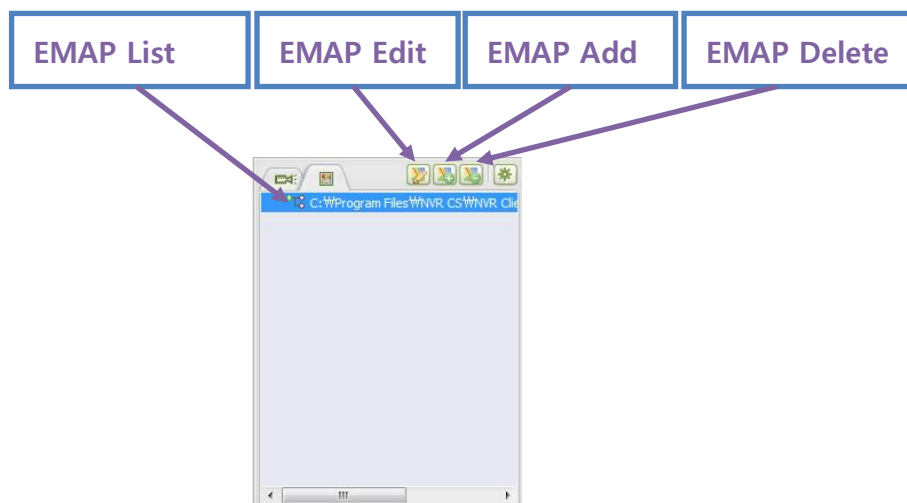
A. Server List

Click Server List to see the registered Server.

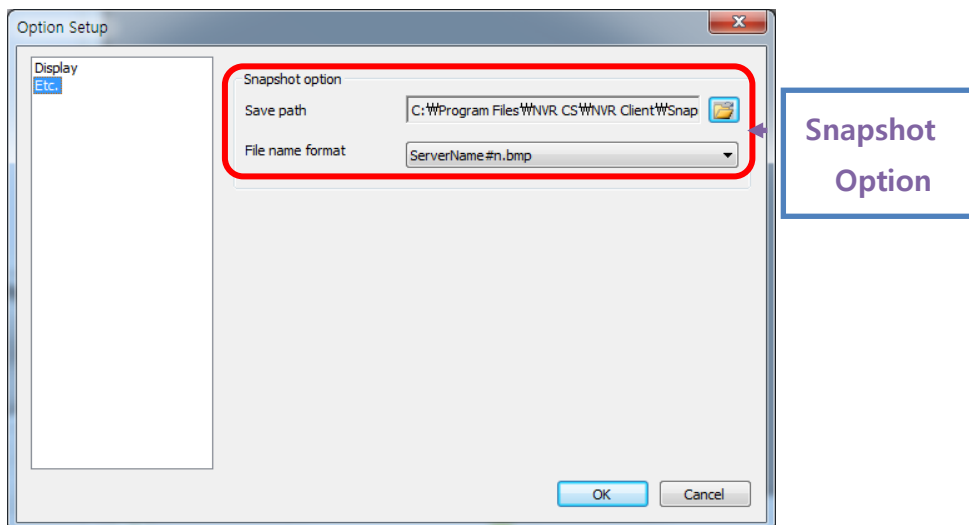
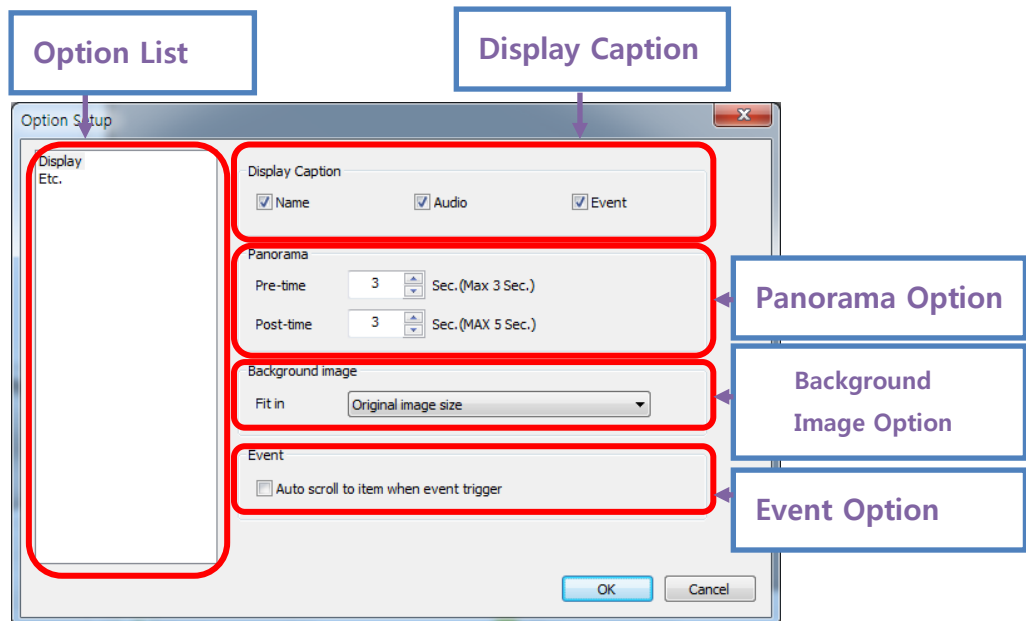


B. E-MAP List

Click E-Map List button to see the registered map.



C. Option

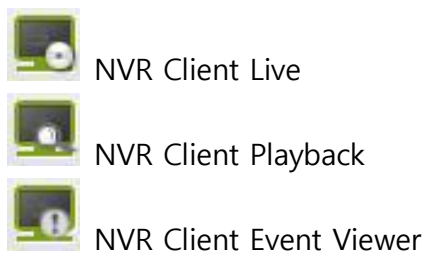


D. Status Window Show/Hide



: Status Window Show /Hide

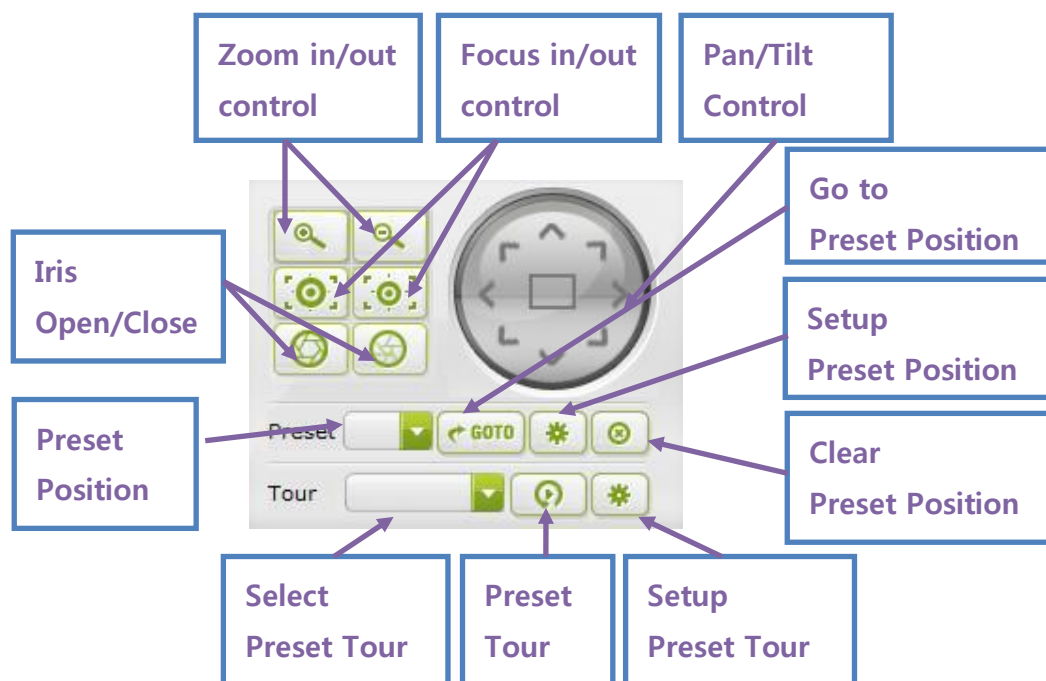
9.1.2 Program Execution Icons List



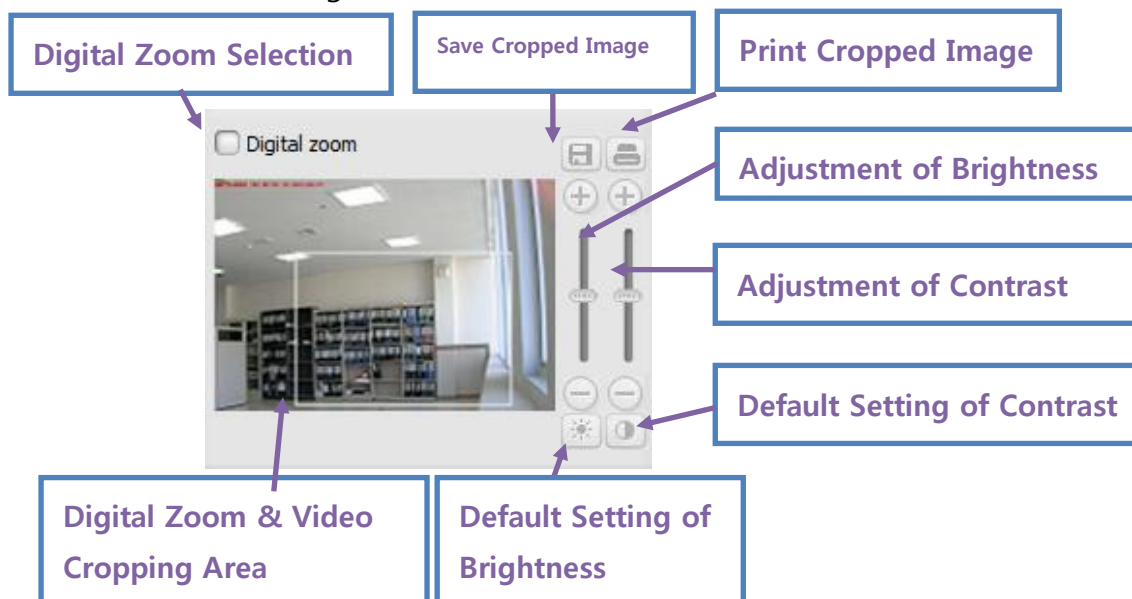
9.1.3 Map Manager



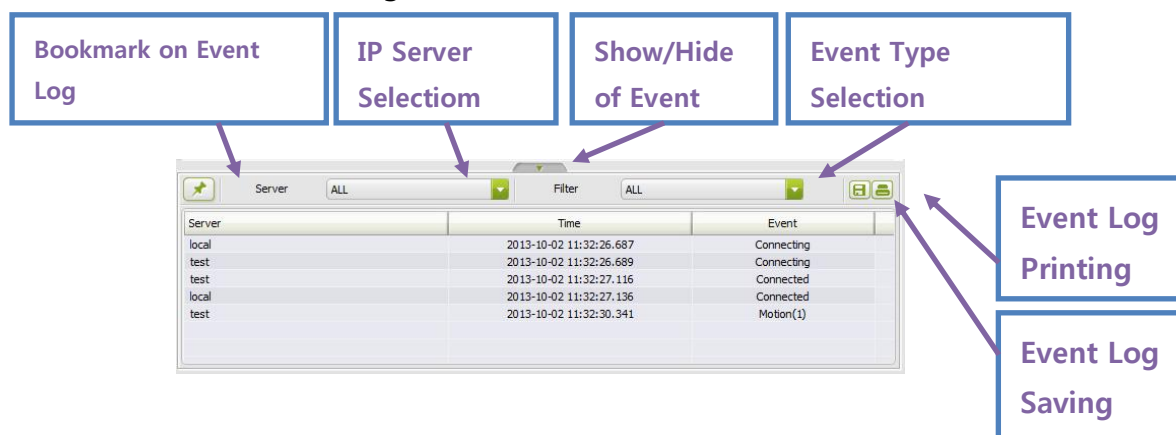
9.1.4 PTZ Control Icons



9.1.5 Digital PTZ



9.1.6 Event Log

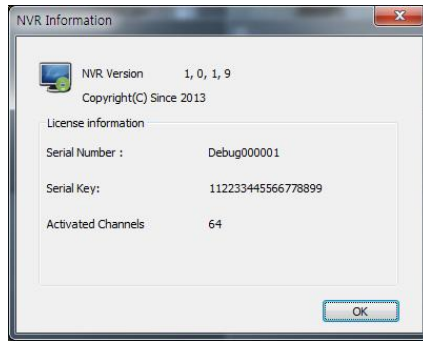


9.1.7 System Time

2013/10/02 Wed, 12:13:45 : Display System Time

9.1.8 Program version information

Click  to see Program version information as shown below.



9.2 Running E-Map

9.2.1 Change E-Map mode

Turns into E-Map edit mode by clicking E-Map monitoring mode button.



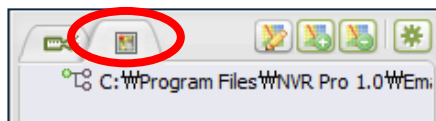
Monitoring Mode




Edit Mode

9.2.2 Display registered Map


Click E-Map list button to see registered map.

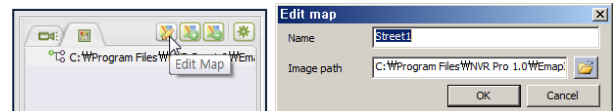


9.2.3 Add Map


- Click add Map() button or click on blank map window.
- Enter Map name and define the image path to create new Map.

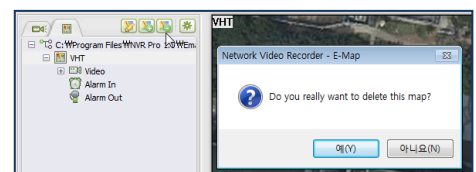
9.2.4 Edit Map

- Select map from the E-map list.
- Click Edit Map() button.
- Edit map name and change image path. Then click 'OK' button to finish.



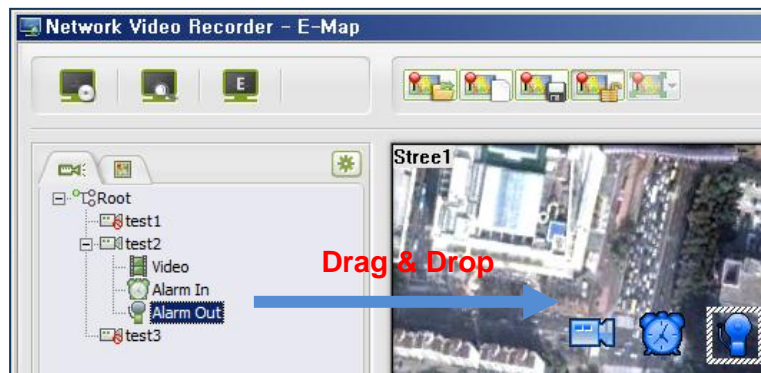
9.2.5 Delete Map

- Select map from the E-map list.
- Click Delete Map () button.



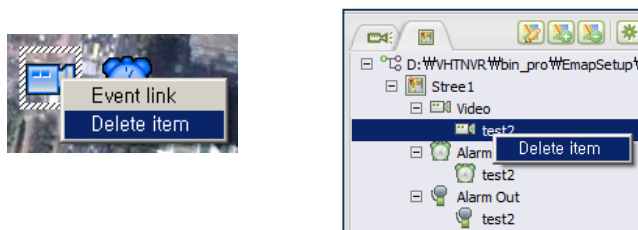
9.2.6 To add items on the map.

- A. Click server list and connect server.
- B. Then Video, Alarm In and Alarm Out will activated.
- C. Drag and Drop these items on the map as shown below.



9.2.7 To delete items from the map

- A. Select item on the map and click right button of mouse. Then select 'Delete item'.
- B. Or select item on the map list and click right button of mouse. Then select 'Delete item'.

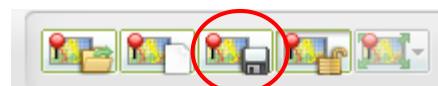


9.2.8 To move map item

Map items can be moved by drag and drop.

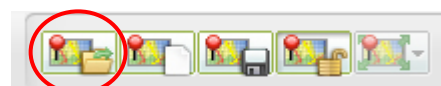
9.2.9 Save map

Save map by clicking 'Save Map' button. File name will be "*.map"




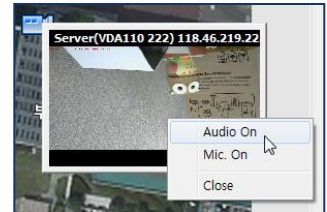
9.2.10 Open map

Open map by clicking 'Map Open' button.



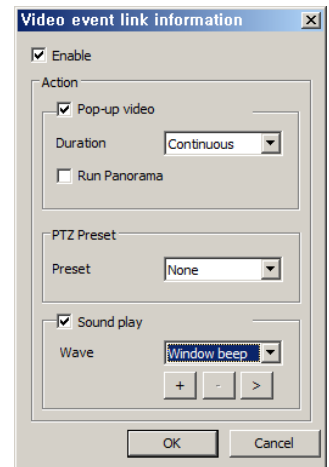
9.2.11 Pop-up Live Video on the map

- A. Connect camera and turn E-Map into monitoring mode by clicking 'Map monitoring mode' ()' button.
- B. Double click the camera icon on the map and then live video will pop up
- C. By clicking right button of mouse on the pop-up video, you may turn on audio and microphone as shown in the figure. Or you may close pop-up video as well.

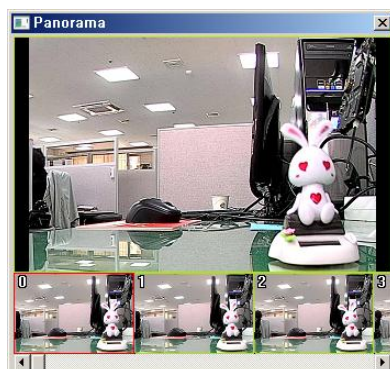


9.2.12 Setup Event Link

- A. Before setting up event link, please make sure E-Map is 'Edit mode'.
- B. Select Map icon to setup event link and click Right button of mouse.
- C. Check on 'Enable'.
- D. Check on the sub menus of 'Popup Video', 'PTZ Preset' and 'Sound Play', respectively.
- E. After setting all above items, click 'OK'.



- * Duration under 'Pop-up Video' means the lasting time of pop-up video. Duration can be set as 'Continuous' or 15~60 seconds.
- * Run Panorama shows sequence of pre/post-event video image when event triggered.



9.2.13 Setup Event Link for Alarm-In

This function enables event link for camera and 'Alarm-in' or 'Alarm-out' that is inside the set area.

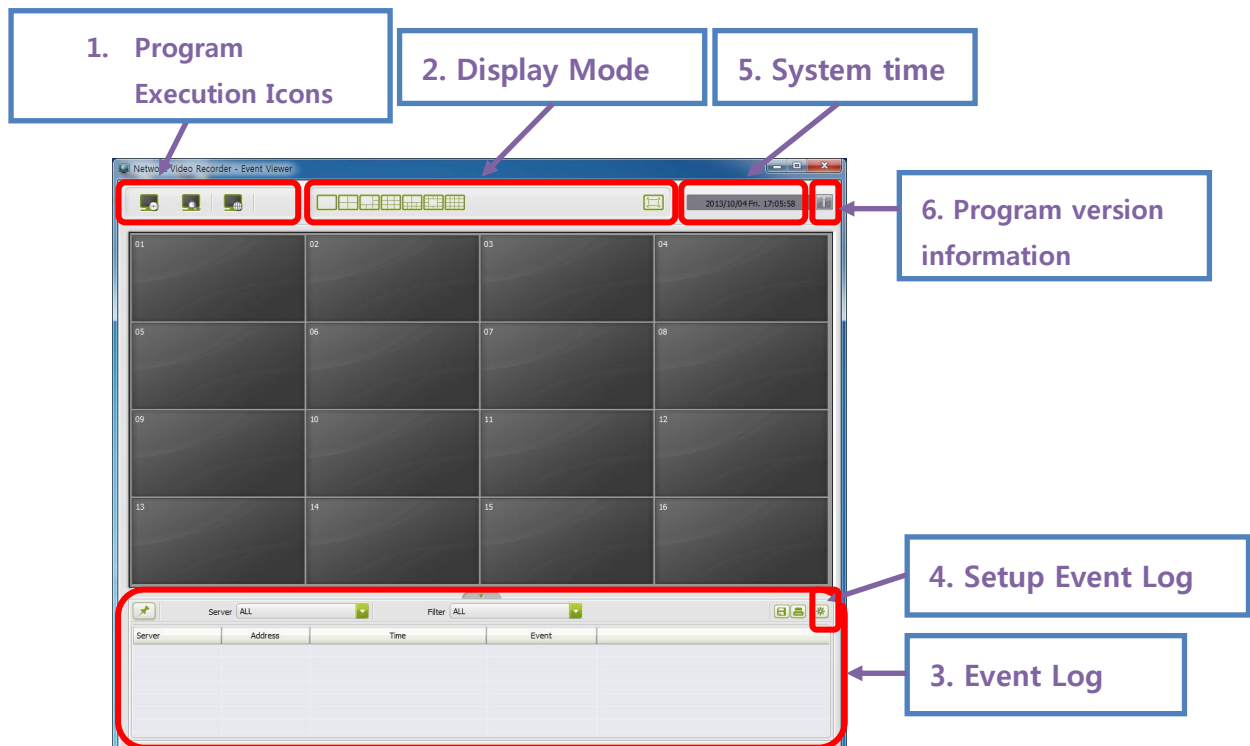
- A. Turn E-Map into 'Edit' mode.
- B. Select 'Alarm-In' area on the map.
- C. Click right button of mouse. Then context menu will pop-up.
- D. Select 'Event Link' for 'Event link item list'.



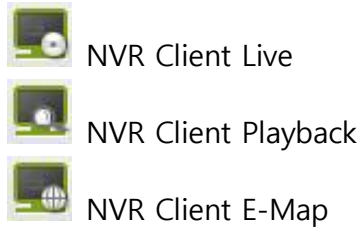
- E. Select video and click 'Action' button, 'OK' button respectively.

10.NVR Client Event Viewer

10.1 User Interface




10.1.1 Program Execution Icons

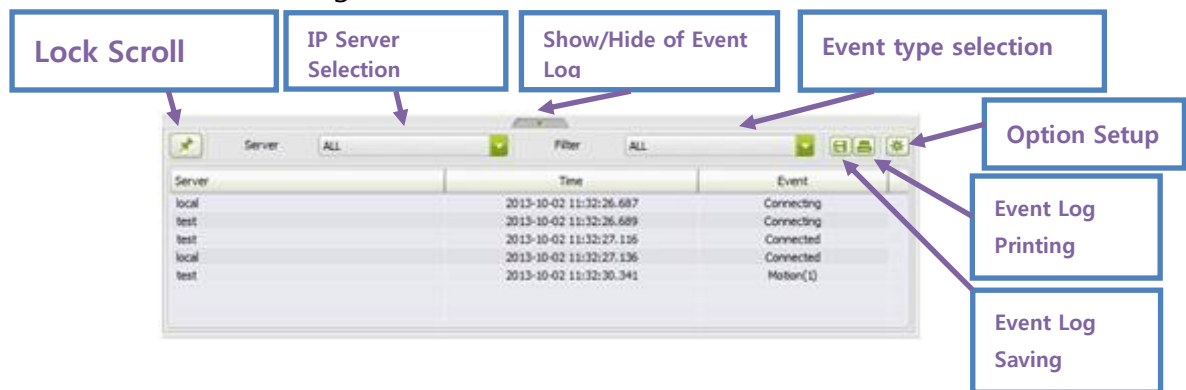


10.1.2 Display mode



Full screen mode  are available.

10.1.3 Event Log

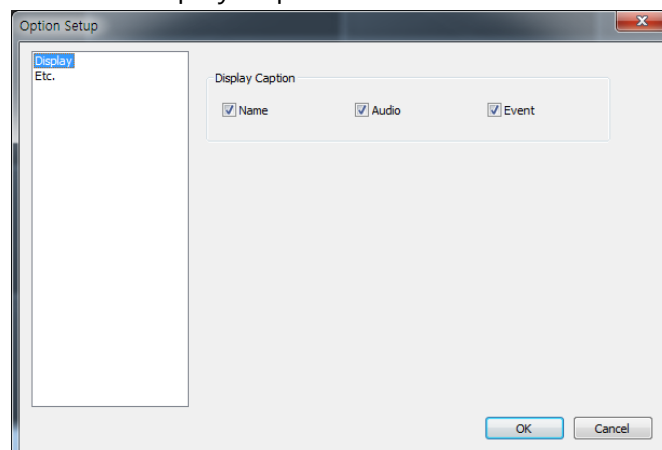


10.1.4 Setup Event Log

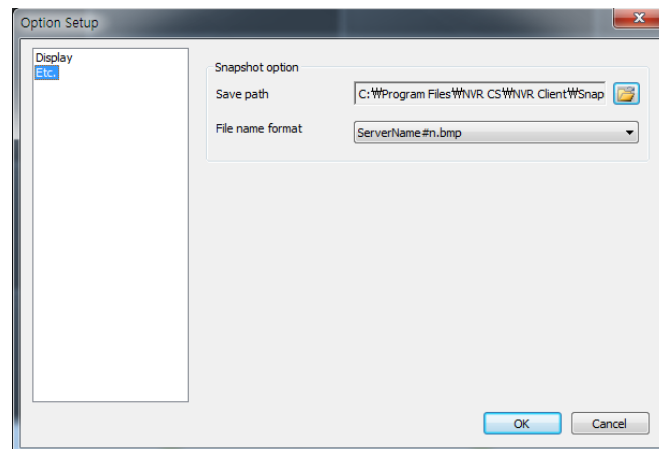
Click 'Option Setup' button on the top right of event info window and setup window will be opened.

A. Display Option

Check on Display Caption.



- B. ETC Option
Define snapshot option.

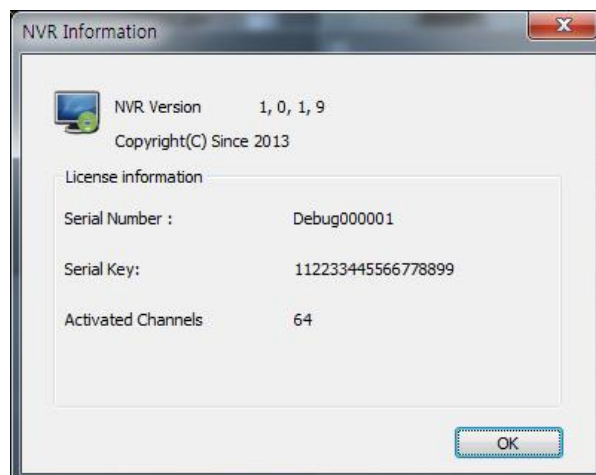


10.1.5 System Time

: Display System Time.

10.1.6 Program version information

Click  to see Program version information as shown below.

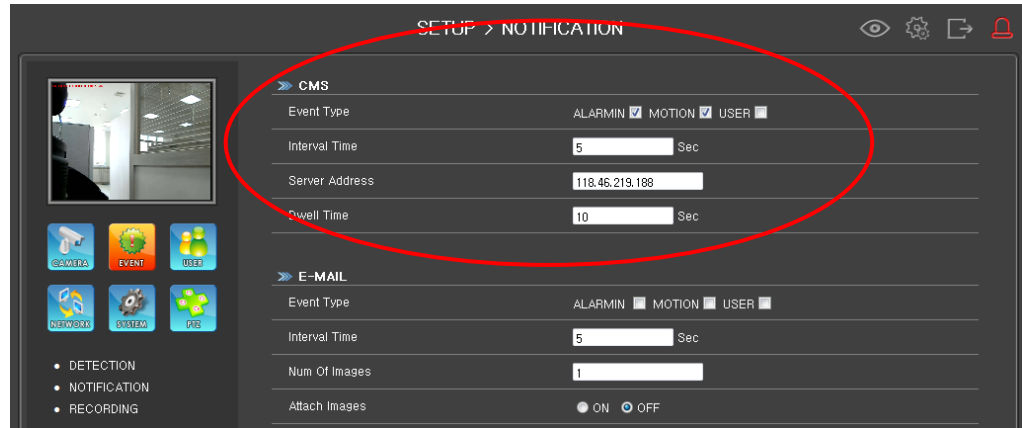


10.2 Running Event Viewer

10.2.1 Event view registration

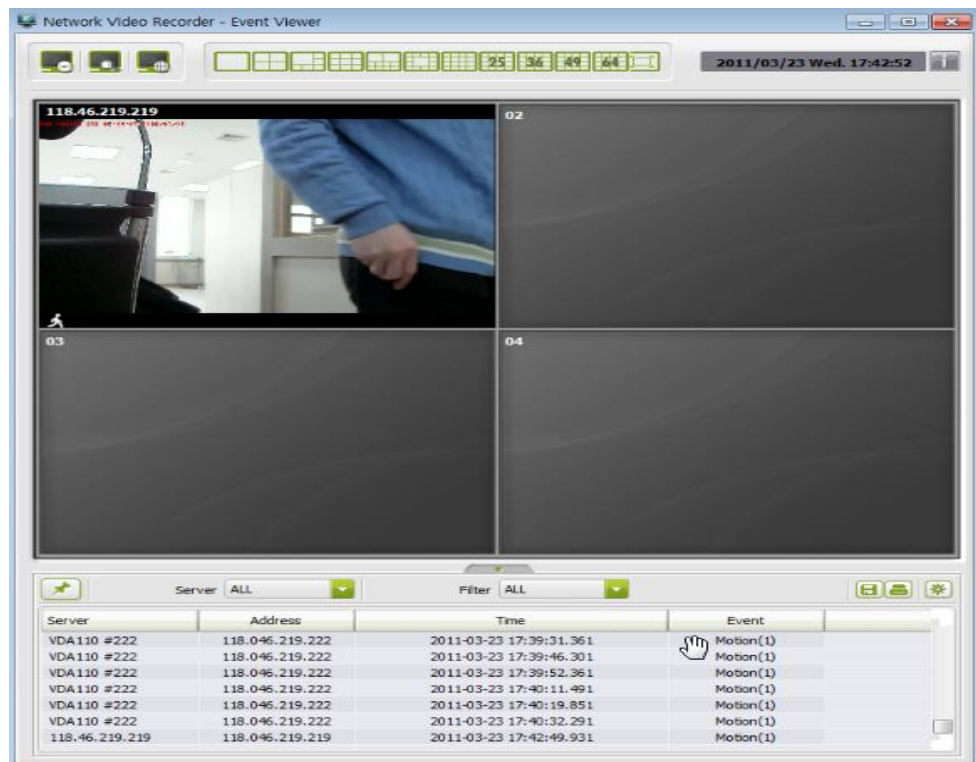
A. Connect to IP camera and set emergency as below.

Configuration → Event → Notification → Check and enter related info on CMS



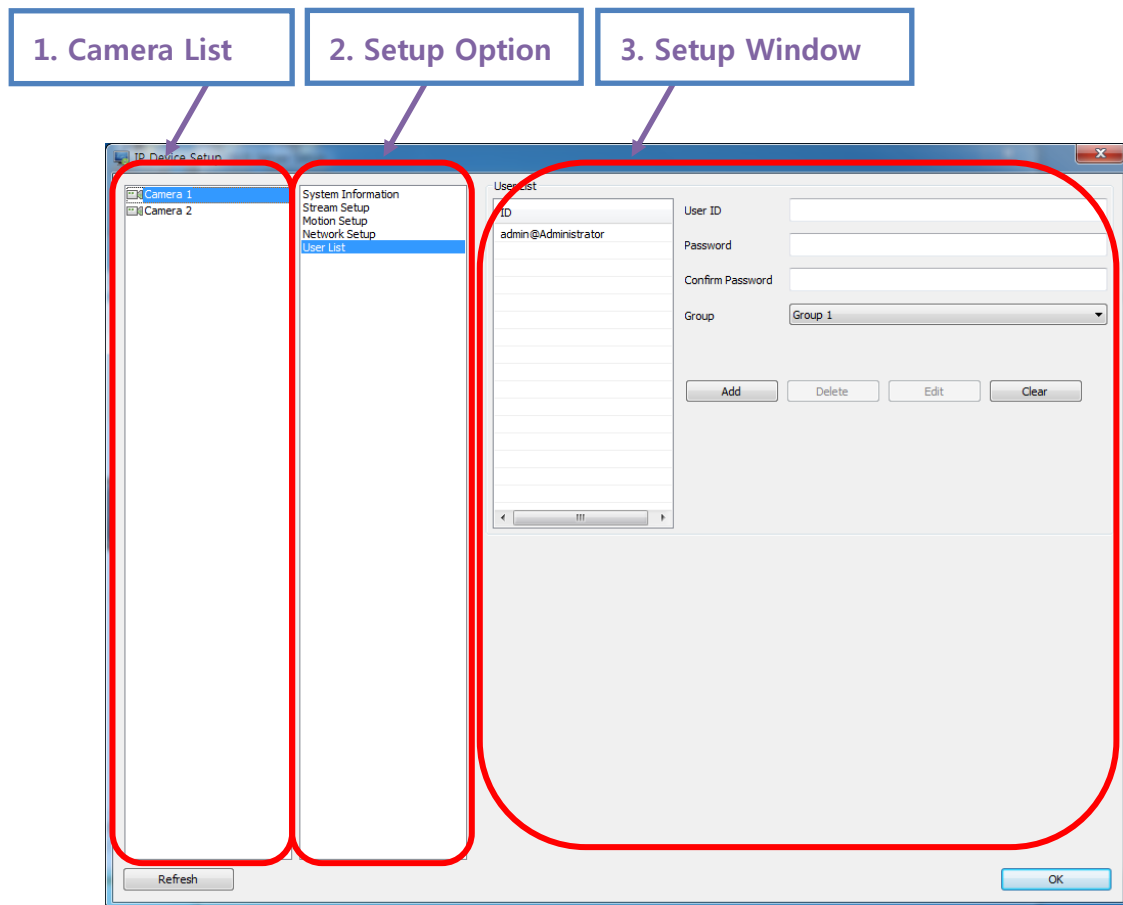
B. When emergency happens, event log will appear on event log window and event video will appear on the screen during the defined 'Dwell Time'.

Video will show on the first blank screen.



11. NVR Client Camera Setup

11.1 User Interface

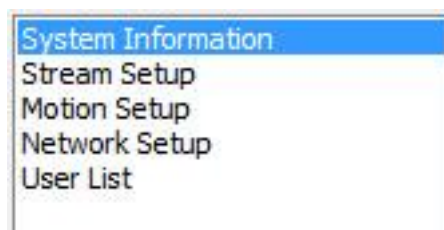


11.1.1 Camera List

Registered cameras appear on the list.

11.1.2 Setup Option

Setup Options are listed as shown below.



11.1.3 Setup window

Check on one of setup option and setup window will be opened.

A. System Information

System Information	
Firmware Version	VISION 1.1.3.4 20130628
Model Type	VISION AM3TI
Video format	NTSC

Network Information	
Connection Type(IPv4)	Static
IPv4 Address	118.46.219.211
IPv4 Subnet Mask	255.255.255.0
IPv4 Gateway	118.46.219.254
MAC Address	00:26:e6:00:18:48

B. Stream Setup

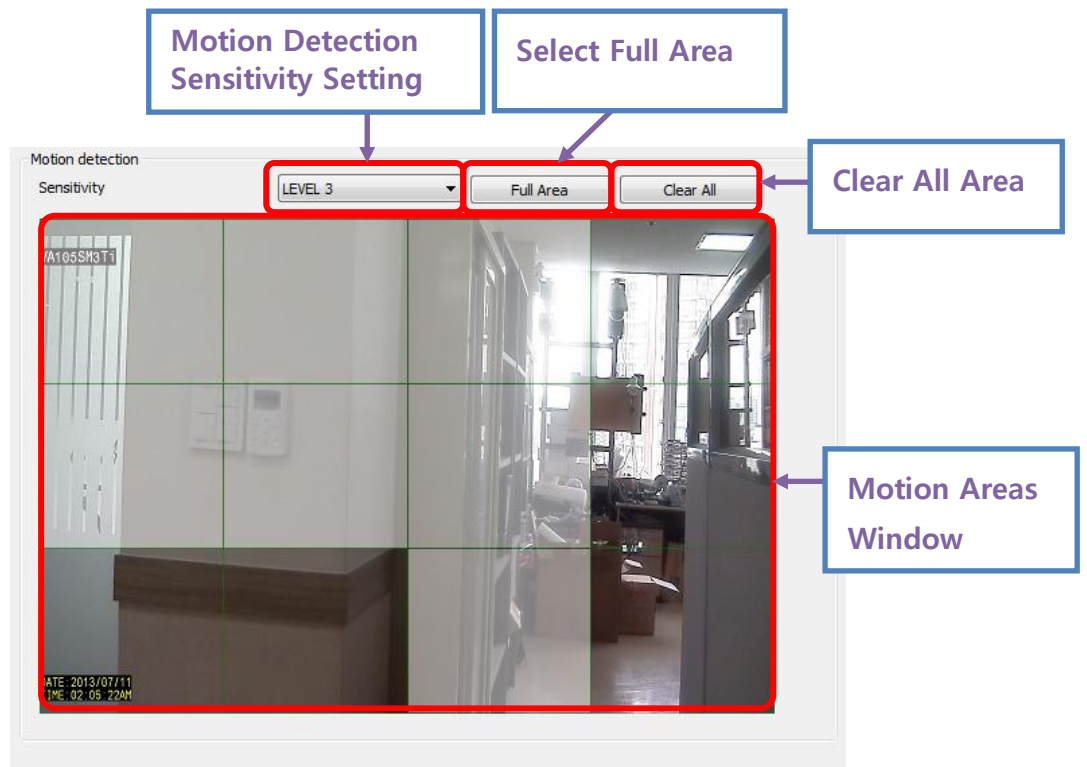
Video Display

Stream Setup	
Stream Type	Dual
Codec Combo	H.264+MJPEG
Resolution Combo	H.264:1920x1080+MJPEG:640x480
Rate Control	CVBR

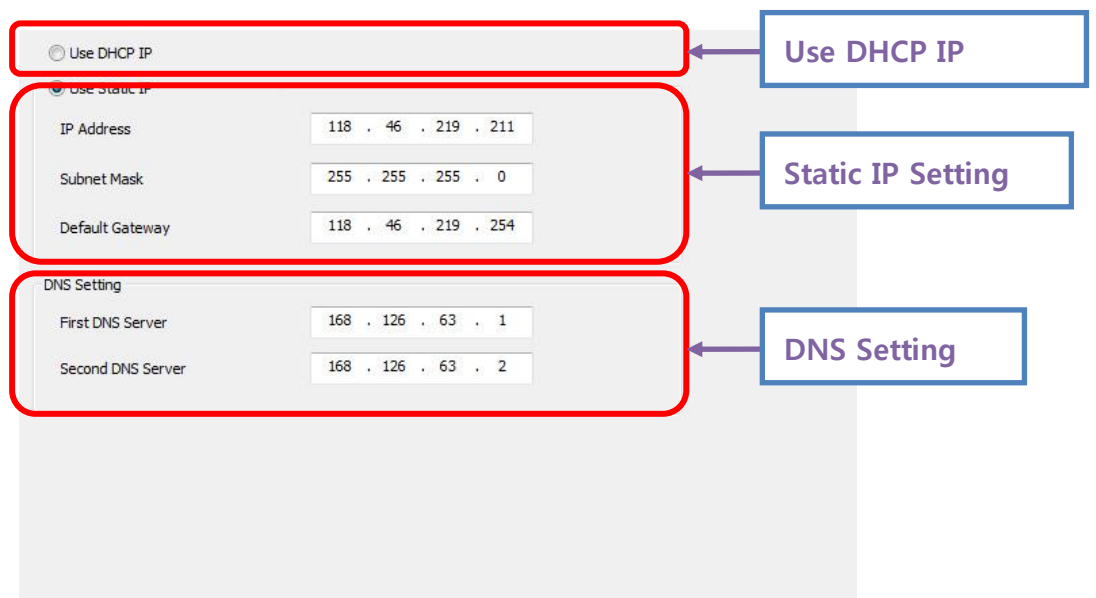
First H.264 Stream	
Bitrate	4000000 bits/s(100000 ~ 8000000)
Frame Rate	30 FPS
G.O.P	30

MJPEG Setting	
Frame Rate	30 FPS

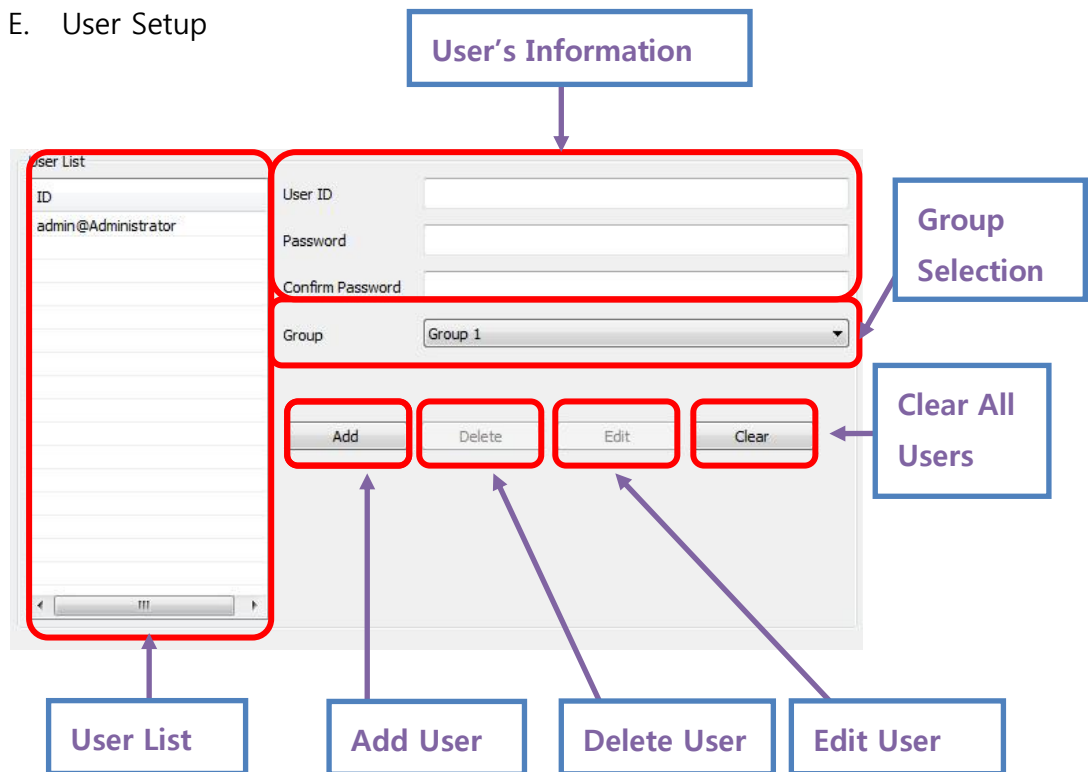
C. Motion Setup



D. Network Setup



E. User Setup



VISION IP Video offers a complete line-up of network video products and solution.

Ask your local dealer for more information or visit www.visionipvideo.com

Copyright © VISIONHITECH Co., Ltd.

All products mentioned are trademarks or registered trademarks of their respective owners.