

iDVR-E & iDVR-RT Series Video Surveillance Recorders



iDVR-E Series



iDVR-RT Series

Enterprise Management Suite Software Manual

- Thank you for purchasing this Digital Video Recorder.
- Before using the Digital Video Recorder, please ensure that you read and understand the User Guide.
- Please store the User Guide at an easily accessible location.
- Before connecting and installing any third party cameras, monitors, alarms and computers, please refer to the appropriate instruction manual for proper operation.

Enterprise Management Suite

Light Version 02.01V

Tale of Contents

II. INSTALLING	4
III.EXECUTING EMS.....	6
IV. FEATURES	7
1. EMS Overview.....	7
1. Online/Offline button	7
2. Device Manager	8
3. Tree	10
4. EMS Log.....	10
5. New VDVR.....	11
6. Tree Window	11
7. Main Window	12
8. E-map.....	12
9. Live	12
10. Health.....	12
2. EMS Setup.....	16
1. OSD Setup	16
2. Password	16
3. Etc.....	17
4. Video Standard	17
5. Video Render	17
6. Video Channel.....	17
7. Download Folder.....	17
8. Version.....	17
3. EMS account.....	18
V. DVR CONTROL	20
1. Live Monitoring.....	20
1. Individual DVR	20
1) Sequence.....	20
2) Tab unlock.....	21
3) Close.....	21
5) PAN / TILT / ZOOM CONTROL	22
6) Capture	23
7) REC	23

8) Main Display.....	24
2. Virtual DVR.....	25
1) What is Virtual DVR.	25
2) Virtual DVR Monitoring.....	25
3) Editing	25
4) Delete Camera.....	26
2. Playback Mode	27
1. Remote Search	27
1) Remote Search	27
2) Remote Download	29
3) Remote Download for Computer User Account on Vista.....	30
2. Local Search	30
3. DVR Menu Setup	31
4. Context Menu.....	31
1. Virtual DVR Context menu	31
2. DVR Context menu	32
3. Camera Context menu	33
5. Channel Context menu	33
VI. POST-EVENT ACTION	34
1. DVR Post-Event Action	34
2. Camera Post-Event Action.....	37
3. Digital In/Out Post-Event Action.....	38
VII. E-MAP	39
1. Edit.....	39
2. E-Map Link	42

I. SYSTEM REQUIREMENT

The EMS utilizes much resource from the computer as it draws data from multiple DVRs. The PC must sufficiently and efficiently manage the incoming data stream and real-time alerts from each DVR connected. Therefore, the PC must be equipped with a higher minimum requirement for its components and operating system.

The following chart displays the minimum and the recommended system specification to operate the EMS properly.

	Minimum	Recommended
OS	Window XP SP1	Window XP SP1
CPU	Pentium4 2.4G (Free Resources 90% Over)	Pentium4 D3.0G (Free Resources 95% Over)
RAM	512MB (Free Physical Memory 300M)	1G (Free Physical Memory 700M)
Video Card	AGP 64M Memory	PCI-E 256M Memory
Resolution	1024*768	1600*1200(1920*1080) 2 Monitor
DirectX	DX 7.0 Support	DX 9.0 Support
Network	100M Ethernet LAN	100M Ethernet LAN (Free Resource 99%)
HDD	Remain Size 10G	Remain Size 40G

EMS may not run if DirectX7.0 or earlier version is installed.

Please download the latest **Direct X** form Microsoft.

<NOTE> For VISTA user.

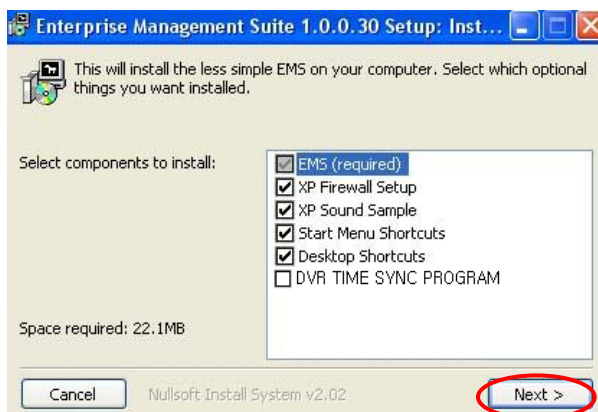
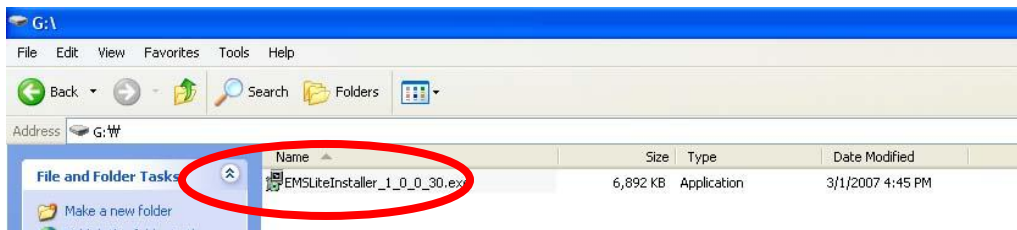
When multiple people share a computer, user account has limited function for Downloading.

Please use the proper version depends on computer account.

Program	Download	Default path	Admin	User
EMSLiteInstaller_x_x_x_x.exe	Service	C:\Program Files\EMS	OK	limited
EMSLiteUserACInstaller_x_x_x_x.exe	Popup	C:\Users\User\Documents\EMSW	OK	support

II. INSTALLING

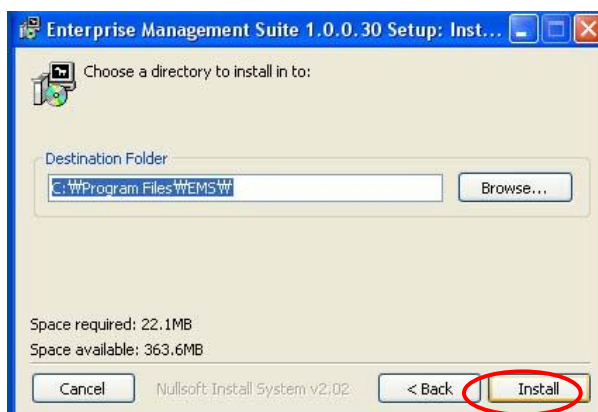
Insert the program CD into the CD-ROM drive of PC and locate the EMSLiteInstaller_x_x_x_xx.exe. The Xs represent version number of the program. Double-Click on the file, which opens the setup dialog.



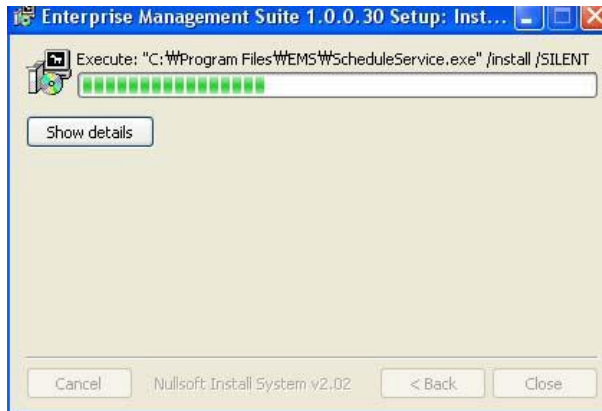
The setup dialog displays the installation options: the EMS, XP Firewall Setup, XP Sound Sample, Start Menu Shortcuts, Desktop Shortcut and DVR TIME SYNC PROGRAM.

The Start Menu Shortcuts and Desktop Shortcuts may be unchecked if desired.

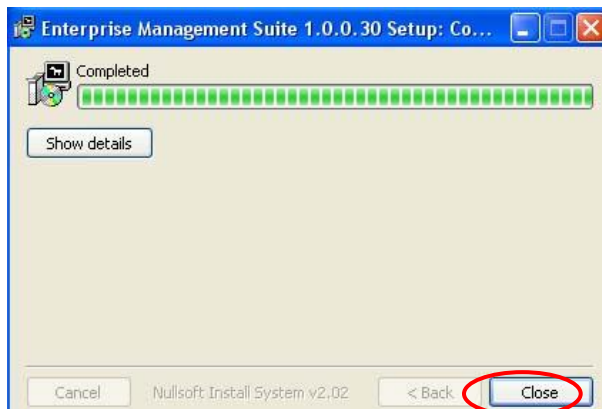
Click on **Next** to continue.



Select the folder in which the program will be installed. By default, it is installed in "C:\Program Files\EMS."




Click on **Install** and the installation will begin.



Click on **Close** to finish the installation.

III.EXECUTING EMS

1. Double click  icon and you will see the Login window as below.



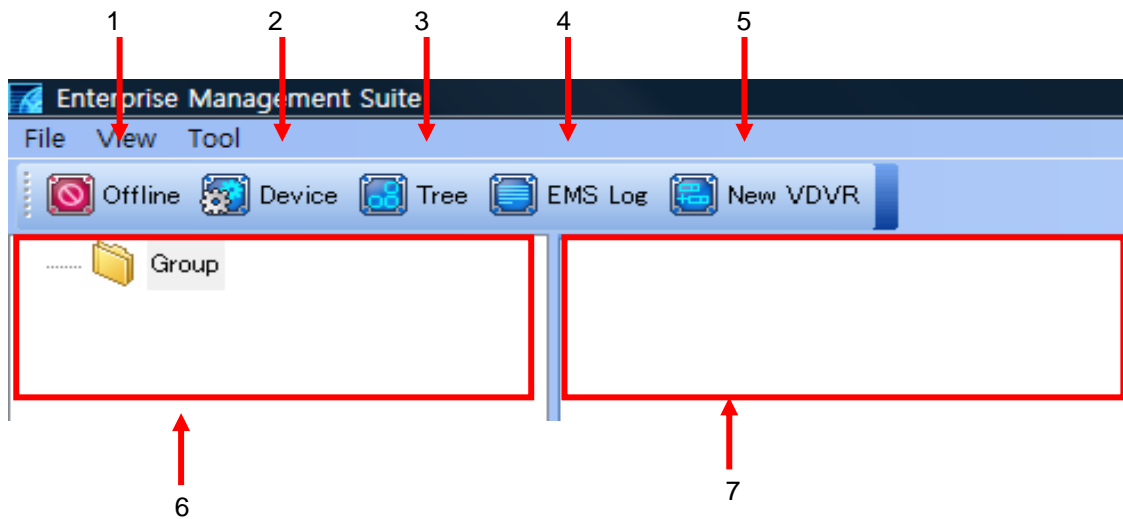
The default user ID and password is “admin” and “0”

Refer to EMS Setup to change the password. To get rid of Screen, press **X**.

Refer to EMS account to add user.

IV. FEATURES

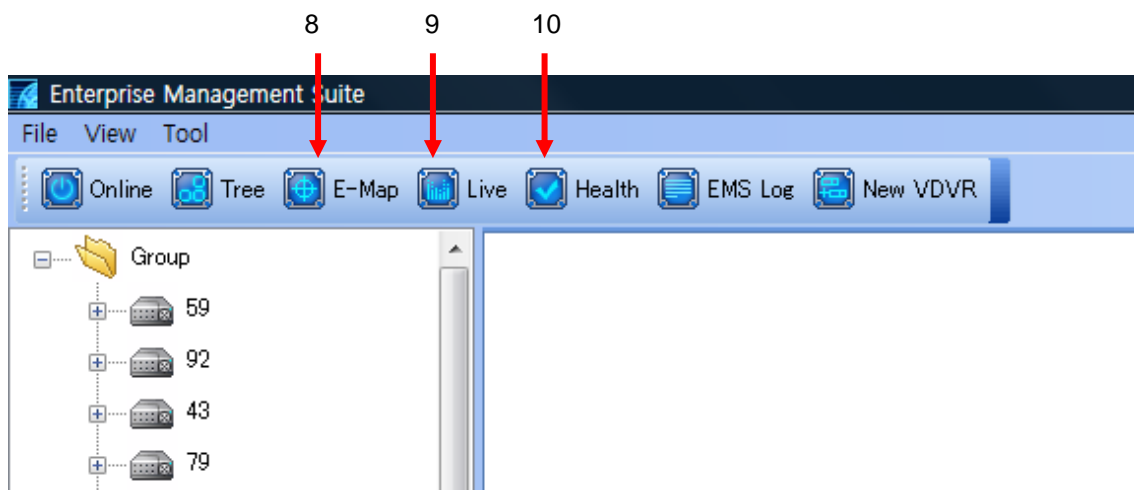
1. EMS Overview



1. Online/Offline button

Connect/Disconnect all events for each device.

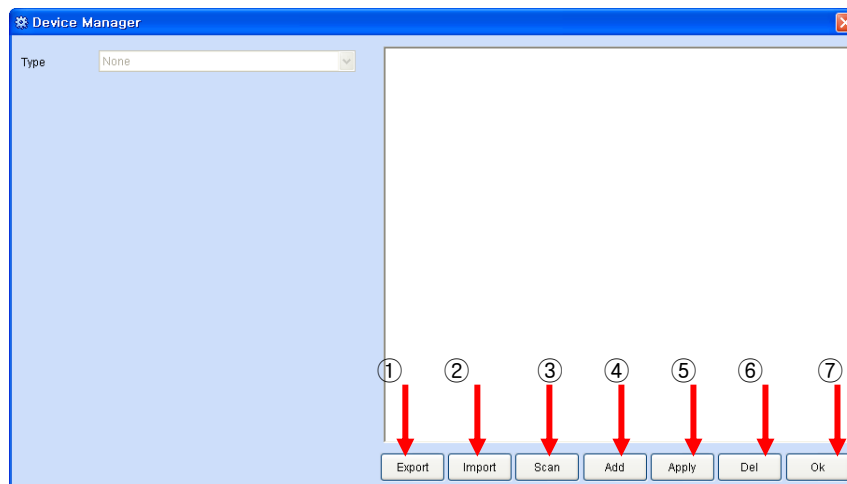
- When it's connected ,it will be changed like below



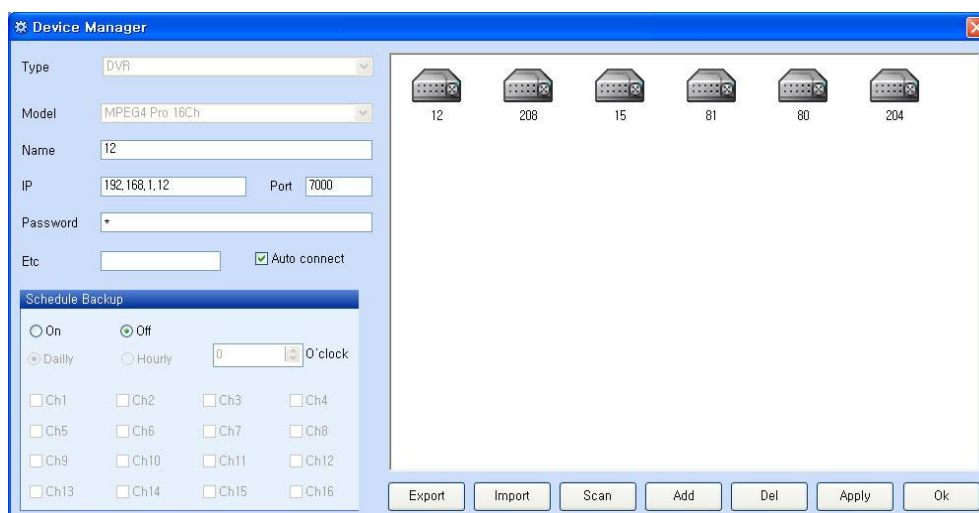
2. Device Manager

Device Manager will be executed only in Offline status and after log in by 'Admin'.

It is for registration for all devices which will be used in EMS program.



- ① **Export:** Abstract the information of registered devices.
 - A. Password window will pops up.
 - B. Enter the EMS Executing Password.
 - C. Designate a directory for save the file.
 - D. Putting the file name, "*.exp" file will be abstracted.
- ② **Import:** import the "*.exp" file and register it.
- ③ **Scan:** It automatically tracks down DVRs connected local network but skips over already on the list. "The last 3 digit of IP" is entered automatically to the title and default Password is 000000(USER).
- ④ **Add:** Add device.



-
- A. If you choose Type<DVR>, Model will be activated.
- B. Select your DVR type then “IP, Port, Etc and Password” will be activated. (Last 3 digit of IP number are set by default if you do “Auto Scan”.)
- a. Name: Type on DVR title to display on Tree, Health window and DVR Window.
- b. IP: Enter the IP address<ex: 192.168.0.52> or DNS name. <ex: demo.dvrhost.com>
- c. Port: 7000<Default>
- d. Etc: Edit if you have need special description.
- C. Password: Select from the following options:
- User Password: Depends on the privilege
 - Admin Password: All functions.
- D. Auto connects – It’s set by default as <ON>.
- If you do not check, the device will be disconnected when online.
- E. Click **Apply** button or **Ok** button to complete adds the DVR onto EMS list.
- F. Setup for **Schedule backup**, backup time, and backup channels if you necessary.
- 1) ON/OFF: Select “On” to activate schedule backup function
- 2) Time Setup for Backup
- * Daily: If you setup with 5O’clock, EMS starts back-up at 5O’clock every day.
- One day (24hours) of recording data in DVR will be back up to PC.
- Ex) 05:00 (One day before) ~ 04:59:59 (Today)

- * Hourly: If you setup with 10minute, EMS starts backup at 10minutes every hour.
- One hour of recording data in DVR will be back up to PC.
- Ex) 00:10 (One hour before) ~ 01:09:59
- 3) Channels: Select the channels you want to back up.

<Note> Please be aware that Schedule Backup is independently working while EMS is closed. <C:\Program Files\EMS\Download> is set by default for downloading for XP O/S. Please change the download Folder when you set the Schedule Backup. Otherwise, your PC will be full with the image of DVR Backup. Backup function will not be activated when the remained HDD space is less than 3GB. This function is not supported for USER account on VISTA OS.

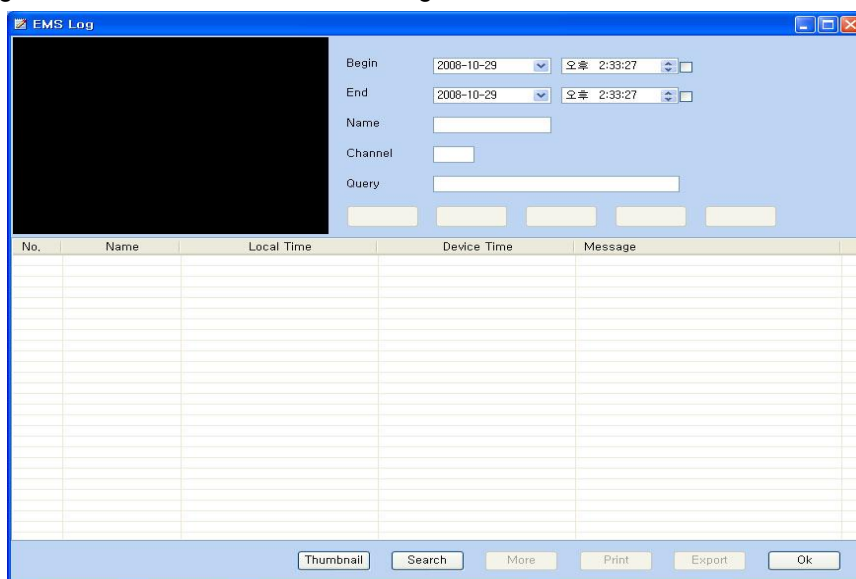
-
- ⑤ **Apply:** Apply the changes.
 - ⑥ **Del:** Delete the selected device. (Device on the tree and E-map will be deleted.)
 - ⑦ **Ok:** Close the Device Manager window.

3. Tree

- Shows or Hide the Tree window.

4. EMS Log

Displays logs of all events while EMS is running.



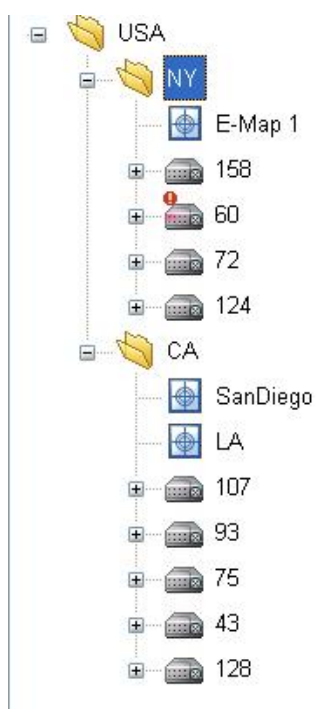
- ① **Begin:** Set the beginning time of Search.
 - ② **End:** Set the ending time of Search.
 - ③ **Name:** Search only log by registered device's name in the tree window.
 - ④ **Channel:** Search only log by selected channel.
 - ⑤ **Query:** Search the specific words which are in the Message item.
 - ⑥ **Trick Play**
 - I. If you click a log which is related with Video, Trick Bar will be activated.
-
- II. If Trick Bar is activated, Still image of selected log will be showed if there are record images.
 - III. It will be playback in -8x, -4x, -2x, -1x, 1x, 2x, 4x, 8x speed.
- ⑦ **Thumbnail or Report:** Toggles between Thumbnail and Report type.
Thumbnail log will be providing when you setup for snapshot at Post Event Action.

- ⑧ Search button: Search for log from the beginning. If it's Report type, it searches by 1000 log. And if it's thumbnail type, it will search by 100 logs.
- ⑨ More button: Add log which is searched previously. If it's Report type, it searches by 1000 log. And if it's thumbnail type, it will search by 100 logs. The maximum search log is 20,000 for Report and 1,000 for Thumbnail type.
- ⑩ Print button: Print the searched log.
- ⑪ Export: Log list can be downloaded to any folder of PC in text file format.
- ⑫ Ok button: Close the log window.

5. New VDVR

- Add the Virtual DVR.

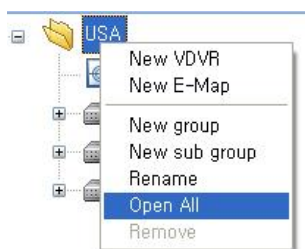
6. Tree Window



.Any DVR that has been added into the EMS will be listed under the Tree window with its own DVR icon and name. Moreover, individual DVR icons also act as a supplementary icon to display individual DVR's status

Create Group and subgroup by right click on the mouse and renaming it as you wish.

And all icons can be opened at a time by clicking "Open ALL".



	Connecting		Network had been disconnected
			Network disconnected

"ADMIN" can Drag & Drop to change the position of ICONS such as DVR, E-map in Tree Window.

7. Main Window

- Main Window is distinguished by TAP and it's possible for docking/undocking.



1. Live or playback video is displayed up to 64 cameras in the main window. When the actual video is displayed, it will display the channel number and title as well as the field rate.
2. E-Map will be displayed.
3. Health Report will be displayed.

8. E-map

- Start the E-map window. It will be discussed on Chapter 7.E-Map.

9. Live


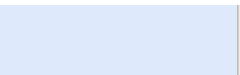




- Start the previous Live View.

10. Health

Displays the name of DVRs with an event or a problem. The color will be changed appropriately according to the event or problems reported from the DVRs.

10.1 Warning Colors

- Background color will be different based on the connection status of Device.

Definition	Block Color		
Connect	Blue		
Disconnected before	Dark Blue		
Disconnect	Pink		

10.2 Health Report

Any DVR name or number, or any of the lit or unlit blocks may be double-clicked to access the DVR log list.

Health Report												
① NO.	② Name	③ HDD	④ Rec	⑤ Schedule	⑥ Backup	⑦ Fan		⑧ Temperature		⑨ Event		
						System	CPU	System	CPU	Alarm	Motion	Video loss
1	158											
2	45											
3	86											
4	85											
5	102											
6	47											
7	155											

① Number

- The order the DVR was entered.

② Name

- DVR name, either the host name or something created by the user.

③ HDD

- Notifies Hard Drive Disk failure during the operation.

	Normal
	Error occurred but it is okay now.
	Error occurs




④ Rec.

- Displays the status of the recording LED from the DVR.

	Recording
	Recording had been stopped but now it's recording properly.
	Recording has been stopped.




⑤ Schedule

- Displays the status of the schedule LED from the DVR

	Schedule recording.
	Schedule recording had been stopped but now it is recording.
	Stop Schedule Recording.







⑥ Backup

- Displays the status of the Backup LED from the DVR.

	Backup now
	Backup had been stopped but now backup properly.
	Stop backup.







⑦ FAN

- System Fan Lock: Notifies System Fan abnormality.
- CPU Fan Lock : MPEG4 Pro Model Only.

		Normal
		Error had occurred but now it's Normal.
		Currently error has occurred.









⑧ Temperature

- System: Notifies DVR over Temperature.
- CPU: Notifies CPU on DVR over Temperature. MPEG4 Pro Model Only.

		Normal
		Error had occurred but now it's Normal.
		Currently error has occurred.

⑨ Event

- A. ALARM TRIGGER - Notifies the alarm trigger.
- B. MOTION TRIGGER- Notifies motion detection.
- C. VIDEO LOSS- Notifies loss of video signals.

Alarm		No alarm signal.
		Alarm signal occurred.
		Alarming now
Motion		No motion
		Motion has been detected but now motion now.
		Motion detected.
Video Loss		Live
		Recovered video signal

2. EMS Setup

- Located in Log in Page or located the **File--Setup**

The screenshot shows the 'Setup' window with the following sections and callouts:

- ① OSD Setup:** Contains checkboxes for Time, Camera No., Frame Rate, Set Name, Camera Title, and Status. The 'Time' checkbox is checked.
- ② Password:** Contains fields for ID (admin), Old Password, New Password, and Confirm Password.
- ③ ETC:** Contains checkboxes for Check watermark and Keep opened window, and a Sequence Time field set to 3 Sec.
- ④ Video Standard:** Contains radio buttons for NTSC (selected) and PAL.
- ⑤ Video Render:** Contains radio buttons for VMR7 (selected) and VMR9.
- ⑥ Video Channel:** Contains radio buttons for Max 16 and Max 64 (selected).
- ⑦ Download Folder:** Contains a text field with the path C:\Program Files\EMS\Download\.
- ⑧ Version:** Contains a list of version numbers: App Version: 1,2,0,0; Service Version: 1,2,0,0; Codec Version: 1,0,5,4; Download dll Version: 1,0,1,8.

At the bottom right are 'Ok' and 'Cancel' buttons.

1. OSD Setup

Select On-Screen-Display information such as the Time, DVR name, Camera Number, Camera Name, Frame Rates, Status for each camera.

2. Password

- The setting to change the password for initial log-in of the software.

- Old Password: Enter your current password. By the factory default, it is "0"
- New Password: Enter the NEW password.
- Confirm Password: Enter the New password to confirm.

<Note> This password is for protection screen when you launched EMS. This is different from your DVR password.

3. Etc

- 1) Check Watermark - Setting to check for watermark.
- 2) Keep opened window – When users rerun EMS program, EMS automatically reopen all windows which were opened right before closing it.
- 3) Sequence Time - Setup interval for sequential display of all windows.

4. Video Standard

- Select NTSC or PAL. NTSC is set by default.

5. Video Render

- Overlay is used by default. The video overlay utilizes Microsoft DirectX and video card hardware acceleration for the optimal video transmission speed.
- Select VMR 7 for Direct X 7.0 or VMR9 for Direct X 9.0

6. Video Channel

- Designate maximum channel number on Live display

<Note> Limitation

- 1) Max 8 for Virtual DVR, Live, PB display windows
- 2) Max 12 for Virtual DVR, Live, PB, e-map, e-map live video windows.
- 3) Max 16 for Virtual DVR, Live, PB, Popup image, e-map, e-map live video windows

7. Download Folder.

- Designate a directory for Schedule Backup, emote recording and to store downloaded files.

8. Version.

- Displays the version of the EMS Software.

3. EMS account

- File – EMS account Menu

You can customize the way EMS and the display for each user.

Windows	Function	Uses
Main	Virtual DVR editing	<input type="checkbox"/>
Main	Device control	<input type="checkbox"/>
Main	Device setup	<input type="checkbox"/>
Main	Download	<input type="checkbox"/>
Main	Playback	<input type="checkbox"/>
E-Map	View	<input type="checkbox"/>
E-Map	Editing	<input type="checkbox"/>
Device Manager	View	<input type="checkbox"/>
Live	Local recording	<input type="checkbox"/>
Live	PTZ control	<input type="checkbox"/>
Post event action	View	<input type="checkbox"/>
Post event action	Editing	<input type="checkbox"/>
Health Report	View	<input type="checkbox"/>
Visitor Log	View	<input type="checkbox"/>
EMS Log	View	<input type="checkbox"/>
Log	View	<input type="checkbox"/>
POS data search	View	<input type="checkbox"/>

1. User list

- Displays registered User list. Detailed user information will be displayed by Clicking USER.

<Note> 'Admin' accounts allow the user to change the limited function.

2. User info

– Modify ID and Password for each User.

3. Uses DVR List

-. Allow DVRs for each user. Each user will have only selected DVRs on Tree window.

4. Detail Windows

-. Allow functions for each window.

5. Add

- . You can register maximum 20 users.

6. Del

- . Delete the selected User.

7. Apply

- . Apply to save setting.

8. OK

- . Save and close this window.

9. Cancel


- . Do not store User's authorities and close window.

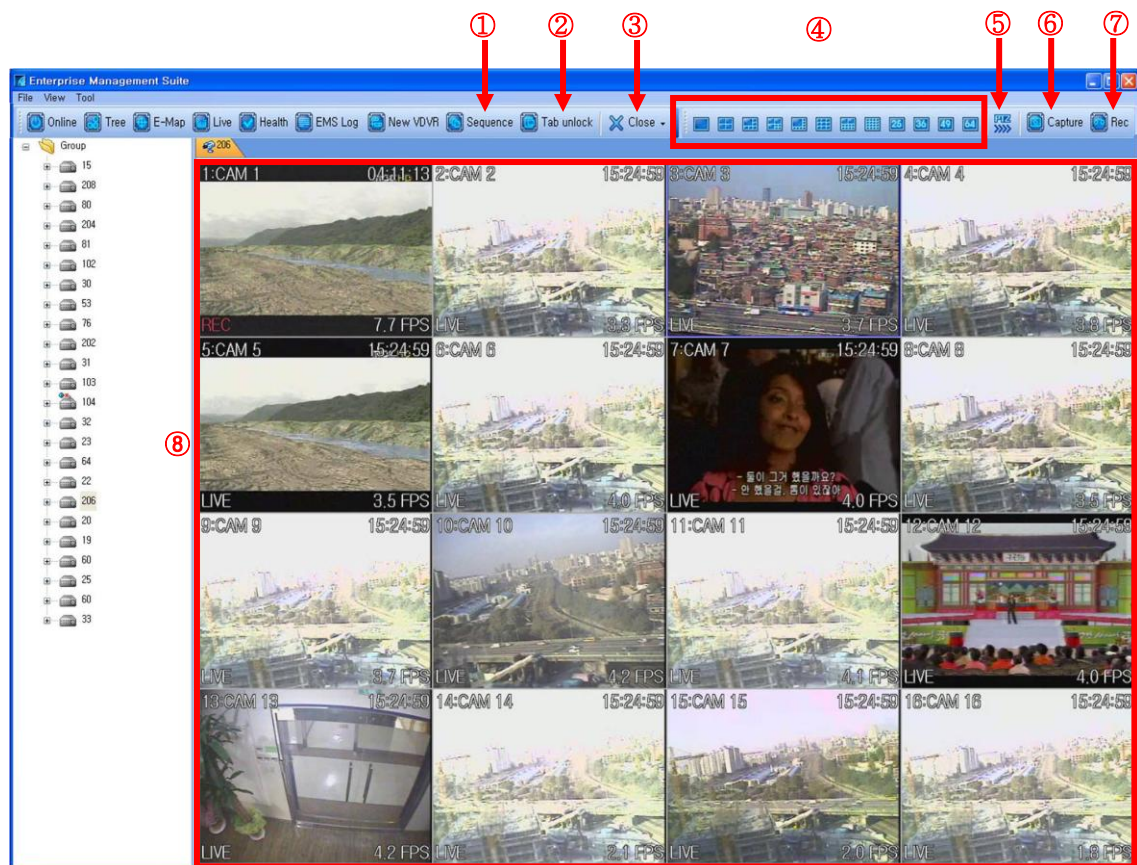
V. DVR CONTROL

1. Live Monitoring

- Live Mode, individual DVRs and Virtual DVRs can be displayed and sorted in any order.

1. Individual DVR

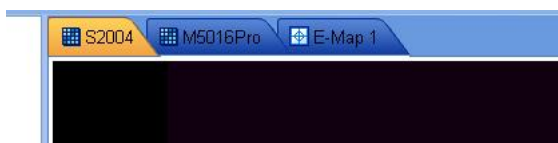
- Double-click on a DVR icon  or “Live” button to begin live monitoring.



1) Sequence

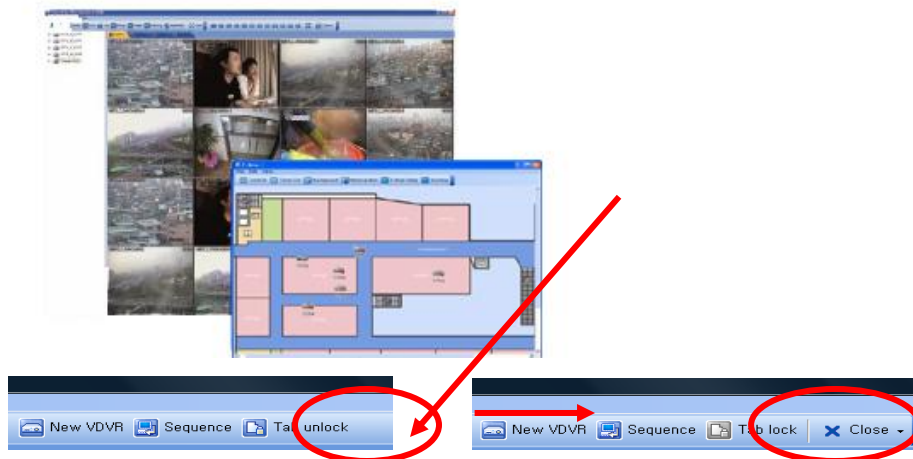
- Activate sequential display of all windows one by one.

Ex) S2004 → M5016pro → E-Map-1



2) Tab unlock

-EMS provides multi monitors so the simultaneously monitoring several Live Screens, E-map, Health Report, etc.















Click “Tab unlock” button to sustain Undocking mode.

3) Close

- Close: Close window one by one
- Close all: Close all windows at a time

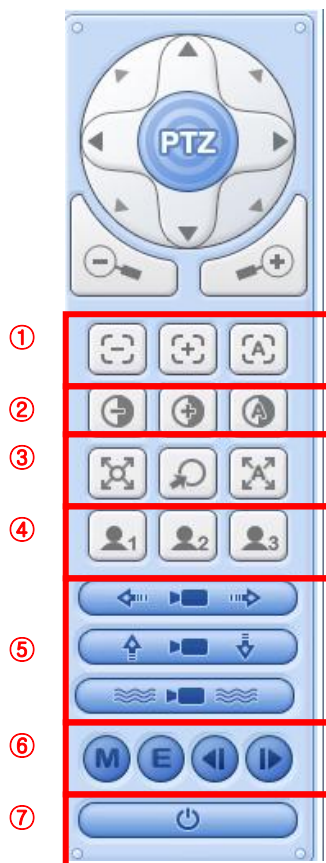
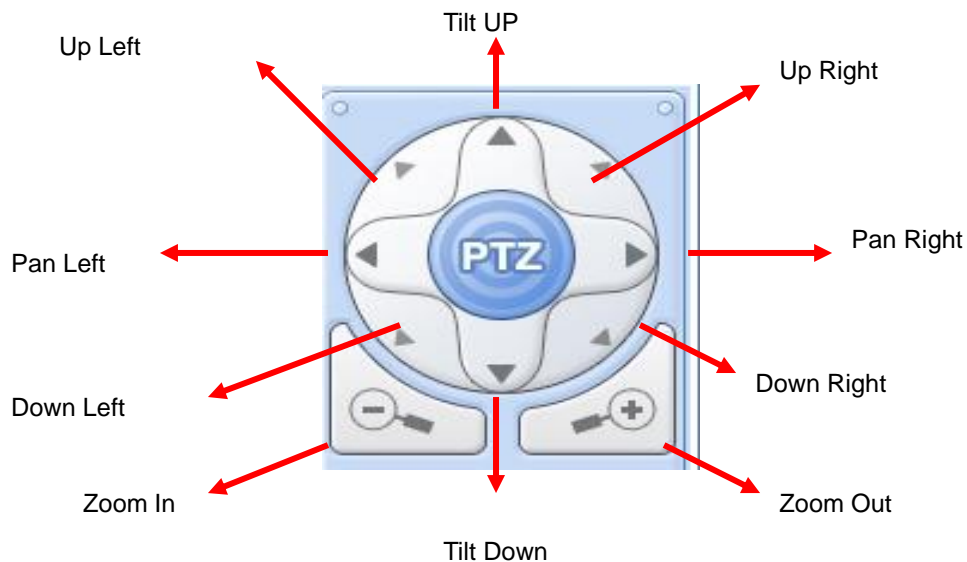
4) Display option/Multi-screen Displays

From the left: single, 4 channel, 6 channel, 7 channel, 8 channel, 9 channel, 10 channel, 16 channel, 25 channel, 36 channel, 49 channel and 64 channel view modes. All display modes are accessible no matter how many DVRs are connected or how many cameras are being displayed.

- | | | | |
|--|------------------------|--|-------------------------|
| a.  | Full Screen Display. | g.  | 10- Way Screen Display. |
| b.  | Quad Screen Display. | h.  | 16- Way Screen Display. |
| c.  | 6- Way Screen Display. | i.  | 25- Way Screen Display. |
| d.  | 7- Way Screen Display. | j.  | 36- Way Screen Display. |
| e.  | 8- Way Screen Display. | k.  | 49- Way Screen Display. |
| f.  | 9- Way Screen Display. | l.  | 64- Way Screen Display. |

5) PAN / TILT / ZOOM CONTROL

- If one or more Pan / Tilt / Zoom cameras are installed on the DVR, they can be individually selected and controlled using the PTZ control box. To control a channel-specific PTZ camera, simply click on the channel where the PTZ camera is connected.
- This Icon toggles between Shows or Hide the PTZ menu.






① Focus

Indicator	Resulting Action
	Focus near
	Focus far.
	Focus automatically.

② Iris

Indicator	Resulting Action
	Iris close
	Iris open
	Iris auto.

③ Tour




Indicator	Resulting Action
	Set tour by clicking. Total address depends on connected Pan/Tilt camera.
	Move into designated area automatically.
	Run tour

④ Special function key



It has various function depends on PTZ camera.

⑤ Auto PTZ

Indicator	Resulting Action
	Run auto pan function.
	Run auto tilt function
	Run Pattern

⑥ Menu, ESC, SPEED Control - Refer to DVR Manual for more information.

⑦ Pan/Tilt Power.



Standby Pan/Tilt or Turn on/off the lights of P/T/Z camera.

6) Capture

- Save a snap image or print current monitoring images.

7) REC

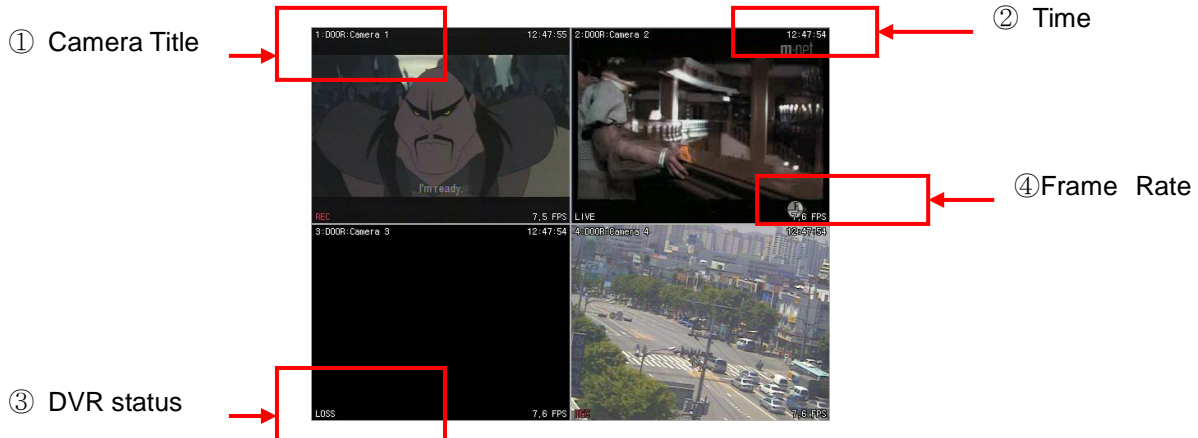
- Save the current live images. When the remote recording is in progress, the record button will change its color to Blue cyan.

(Default Location: C:\Program Files\EMS\Download)

8) Main Display

(1) On-Screen Indicators

There are four types of on screen indicators. OSD Display can be chosen in the EMS Set UP.



- ① Camera Title: Displays the following orders: Camera Number- DVR Name or Host Name -Camera title

* Tip : Camera title can be updated as described in DVR by clicking "Update camera title"



- ② Time: Displays the **Local** time of the DVR's location.
- ③ DVR Status: Displays REC, Network connection, Video Loss, Event, and Current Status.

Indicator	Condition
REC	Normal Recording
Wait	At the initial connecting
Loss	Video Loss
Close	Disconnected from DVR
Alarm	Alarm Recording
Motion	Motion Recording
PB	Playback for selected channel.
Live	Live viewing

- ④ Field per Second: Network transmission speed. The transmitted field rate is Different from the actual recording field rate of the DVR.

(2) Change the camera position.

Click on each camera to directly switch the desired camera.

2. Virtual DVR

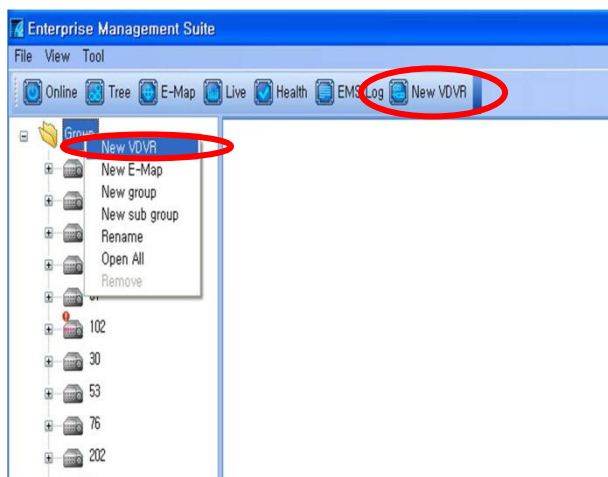
1) What is Virtual DVR?

Virtual DVR is not an actual DVR, but a combination, or group of several DVRs already listed under the Device. Under one Virtual DVR set, up to 64 DVRs can be added, pulling one camera from each DVR to be displayed. The Virtual DVR behaves in the same way a DVR would, except for the warning notifications.

2) Virtual DVR Monitoring

- The basic of monitoring a Virtual DVR is just as the individual DVR. The only difference is that a Virtual DVR consists of multiple cameras selected from multiple individual DVRs.

3) Editing

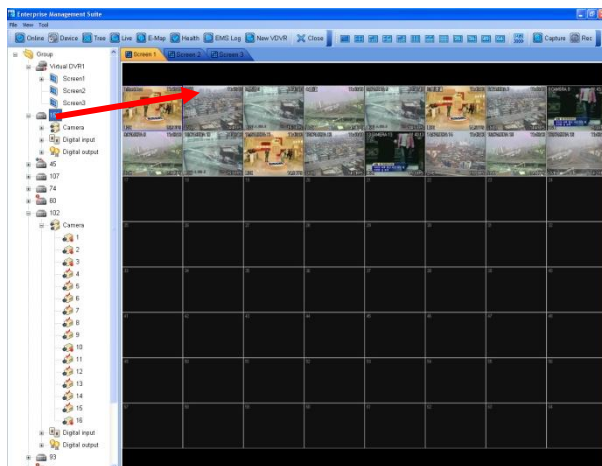


① Right-Click on next Group, and context menu will appear on the screen. Or Click NewVDR on the Tool bar



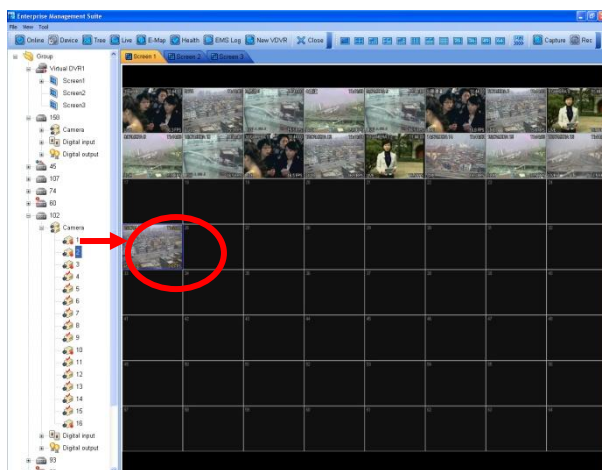
② Select any Screen to Display. The selected Screen of Virtual DVR will be activated and it is indicated with “ ▷ ”

The number of screen depends on the number of monitors which are registered in Setup Screen. (MAX 16)



③ Click-and-drag the DVR to any channel number to display all available cameras under Virtual DVR. The camera will be added in numeric order from selected channel to end, depends on connoted number of cameras on DVR.

Please note that the number of channels to be displayed may be changed at any time if necessary.



④ Individual cameras can be added onto the Virtual DVR by click-and-dragging individual cameras.

4) Delete Camera

- Select any camera for delete during live monitoring. Context menu will appear on screen by Right Clicking. Select **<REMOVE>**

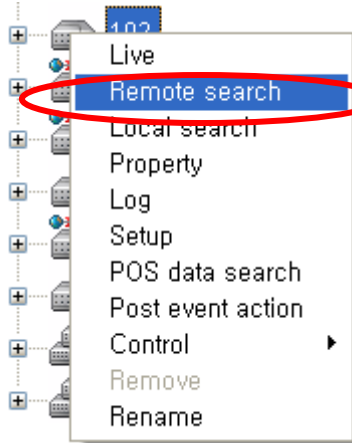
2. Playback Mode

DVRs that have been added onto EMS can be accessed in Playback Mode for Remote Playback or to download the files onto the remote PC. Unlike the live mode, only one DVR can be accessed at a time.

1. Remote Search

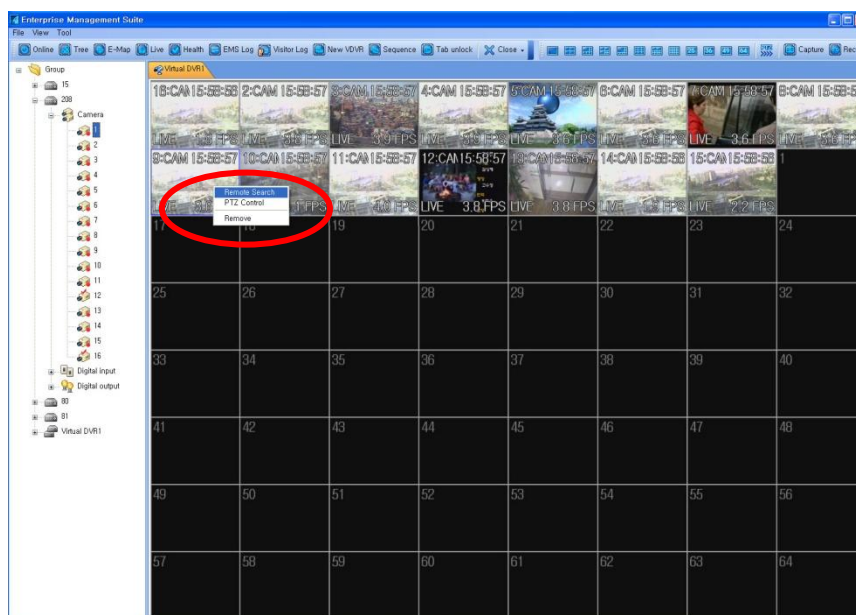
Remote Playback is provide so that users directly playback the stored video on the internal HDD through EMS.

1) Remote Search

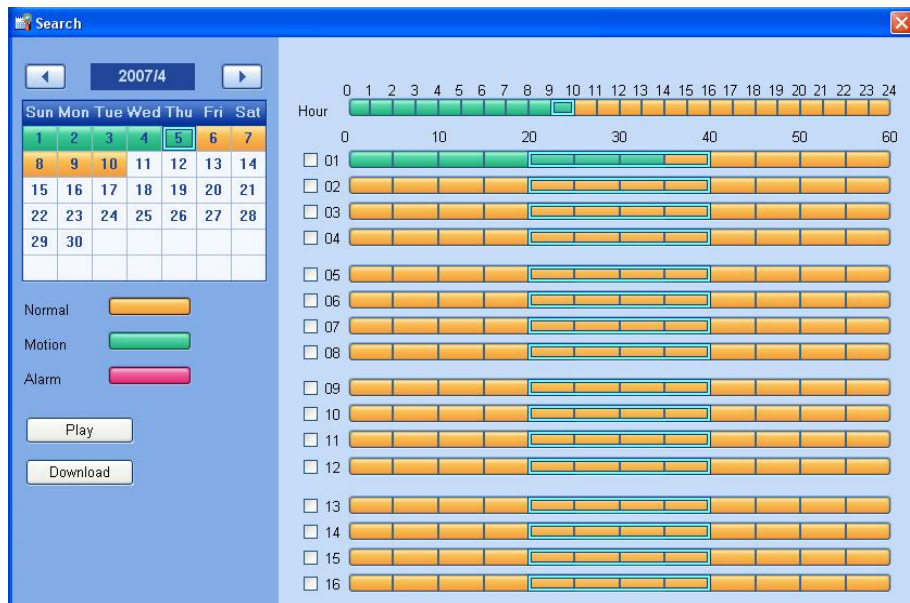


Right-Click on DVR and context menu will appear on the screen.

Otherwise, Right Click on Live Window and context menu will appear on the screen



Remote **Search** shows a graphical representation of the recorded video stored on the DVR. The data are color-coded by category: Alarm (RED)>Motion (Green)> Normal (Yellow)



Select desired Date and Time. By Click and drag, it is possible to select longer minutes.

Click  button to start Playback.



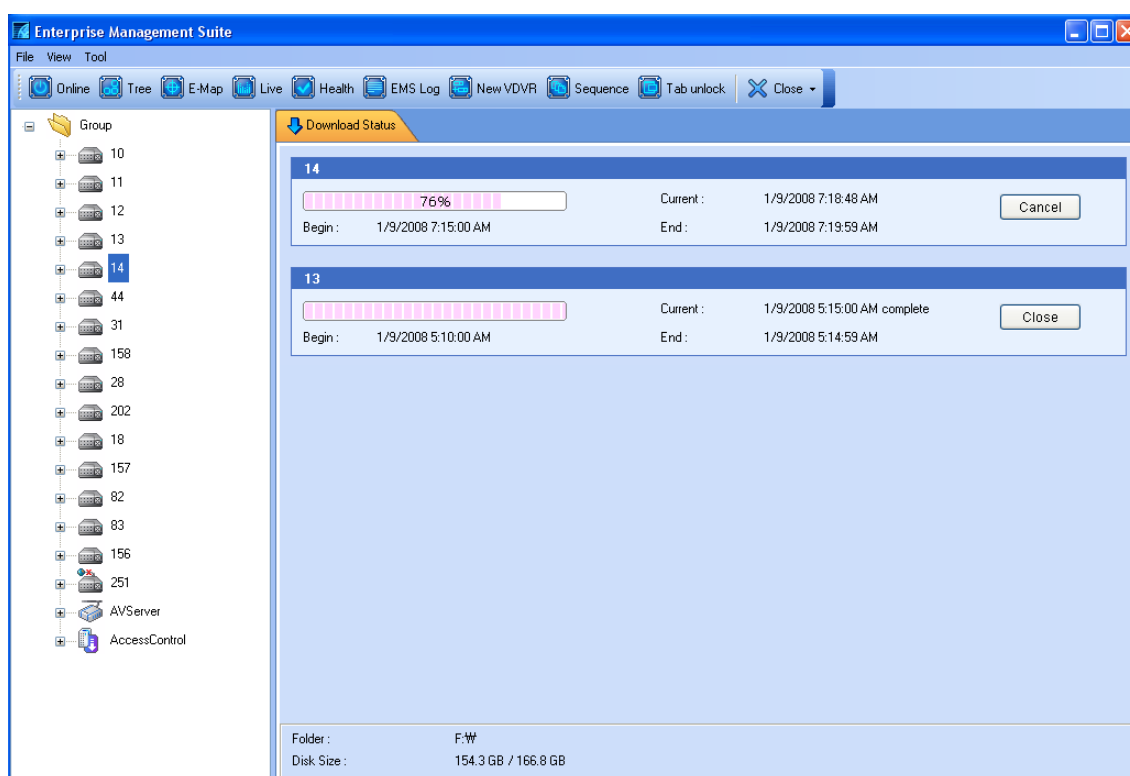
The Hour, Minute and the Clip can be clicked at any time to move backward or forward in time.

2) Remote Download

Remote Download is providing so that users save on remotely connected computer through EMS. By default, the files are saved in “C:\program Files\EMS\Download”

- The file selection process is just same as remote playback. Additionally, the user can check any channel that they wish to download. To download the file, click **[Download]** instead of **[Play]**

The download Tap will appear displaying the Start time, End time and current downloading section.



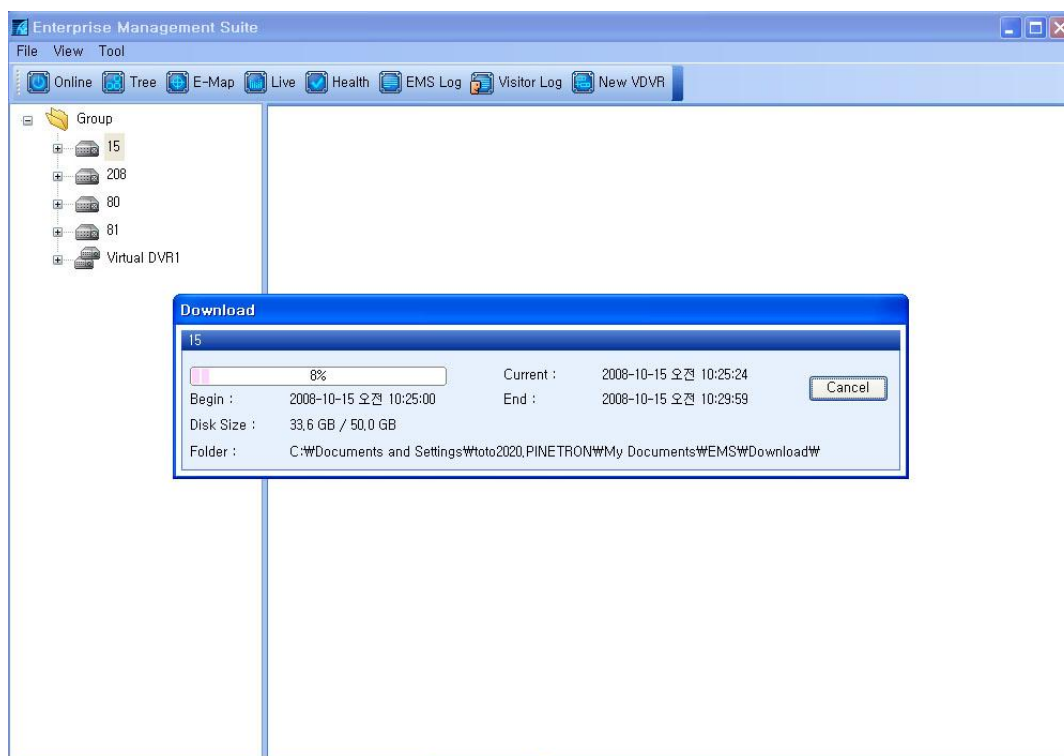
Download statuses displayed max 500 statuses. Once the download is completed “Download Complete” will be displayed. Click on <Close> to delete the status.

3) Remote Download for Computer User Account on Vista

By default, the files are saved in “C:\Users\ log in USER\Documents\EMS\Download”

-Refer to EMS set up to change directory.

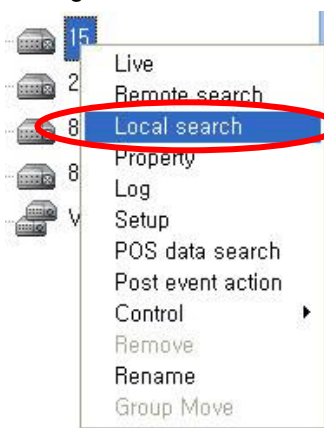
The download window will be pop up as below and shows [start time, current time, finish time]




Maximum Download is for 5 windows.

2. Local Search

Local Search is mainly used to review the data downloaded from a DVR or backup CD through EMS.



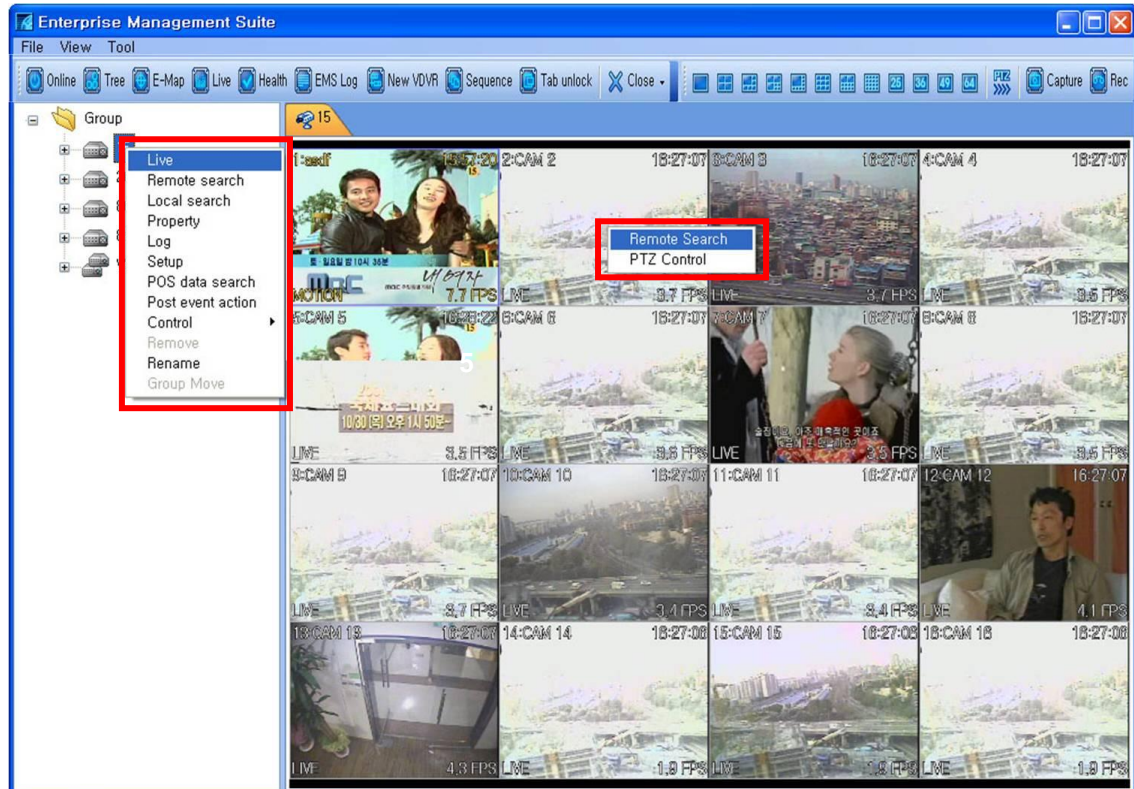
Located on Tools  File Playback , and then select the DVR file which the file was downloaded from. Or Right-Click on DVR and context menu will appear on the screen.

3. DVR Menu Setup

- The DVR Setup allows modification of all system setting through EMS as it would be done accessing the DVR menu screen.

-DVR set up can be accessed through the context menu from any DVRs

4. Context Menu



- The context menu allows access to the submenus for the channel, DVR and the Virtual DVR. The submenus allow access to various features for each individual submenu type.

1. Virtual DVR Context menu

- 1) Live
 - Start live monitoring for pre-configured Virtual DVR.
- 2) Rename
 - Enter Virtual DVR title to display on EMS Tree.
- 3) Remove
 - Removes the Virtual DVR from the EMS Tree.
- 4) Group Move
 - Move the Virtual DVR to the other Groups.

2. DVR Context menu

1) Live

- Start live monitoring for the selected DVR.

2) Remote Search

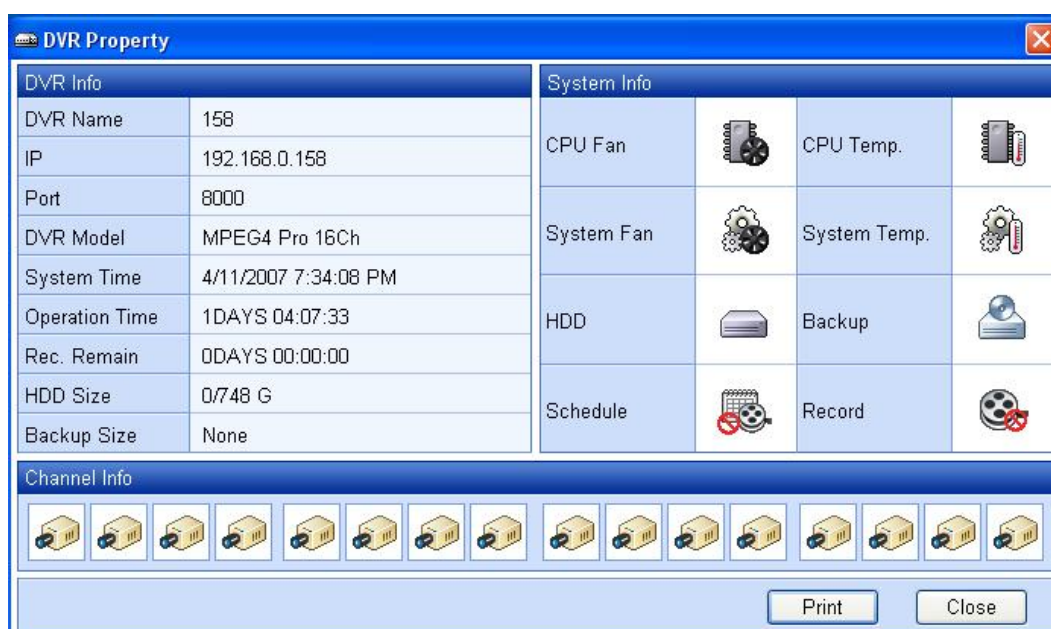
- Enters Remote Search window.

3) Local Search

- Enters Local Search window.

4) Property

- Displays general information of the DVR.



5) Log

- Displays logs of all events from the DVR from the first power on. User can click on DATE/TIME or MESSAGE to sort the list accordingly.

6) Setup

- Enters the setup dialog for the DVR.

7) P.O.S data Search

- Enters P.O.S Data Search window.

8) Post Event Action

- Enters the Post Event Action dialog.

9) Control

- ① Control – Record Start/ Stop, Schedule Record Start/Stop.
- ② Rename

10) Remove

- Remove the DVR from the DVR Window.

11) Rename

- Enter individual DVR title to display on EMS Tree. E-Map is not affected.

12) Group Move

3. Camera Context menu

1) Live

- Start live monitoring for the selected camera.

2) Post Event Action

- Enters the Post Event Action dialog.

3) Control - Control of GoTo, Tour, Auto Pan/Tilt of PTZ menu

4) Rename

4. Digital Input/output Context menu

- **Digital** input is sensor in and digital output is alarm out.

1) Digital Input

- ① Post Event Action
- ② Rename

2) Digital Out put

- ① Control - Digital Output high/low
- ② Rename

5. Channel Context menu

1) Remote Search

- Enters Local Search window for single camera.

2) PTZ control

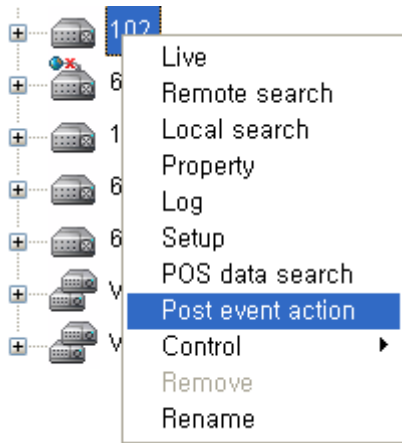
3) Remove (Virtual DVR only)

- Remove the single channel from the virtual DVR.

VI. POST-EVENT ACTION

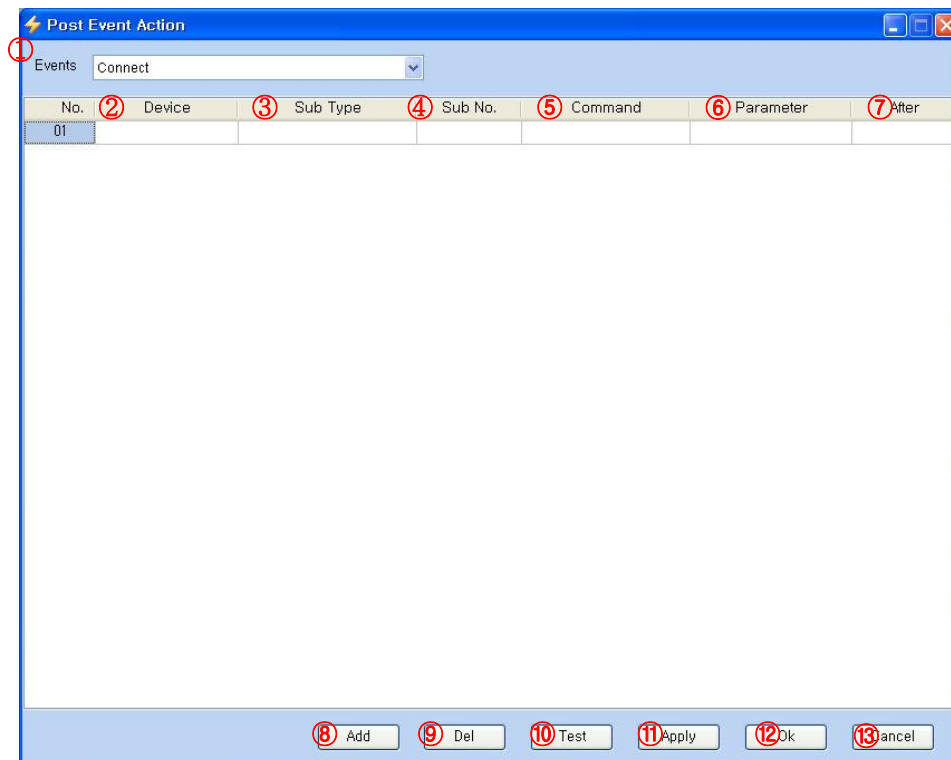
EMS allows customization of Alert notification. It includes audio alert, image pop up after events related with DVR, Cameras and Sensor.

1. DVR Post-Event Action



Right-Click on DVR and context menu will appear on the screen

Post-Event windows pops up as below



1) Event

- The EMS will send notifications related to the system abnormalities such as **[Connect, Disconnect, HDD fail, Fan Fail, Temperature Fail]**

2) Device

- Select from registered DVR or system. **System** means PC which EMS is installed.

3) Sub Type

- Select the Device which is connected with above no 2. For example, DVR with [Camera, Alarm] or system with [Window or Sound]

4) Sub No

- Select the camera / alarm number to control

5) Command

① DVR>Camera

- Select the camera PTZ options, snapshot, Live video window. Thumbnail log will be provided when you select snapshot.

② DVR> Digital output

- Select Digital output high/ low

③ System> Sound

- Select Play sound. EMS will emit a sound when a DVR Connect, disconnect, HDD Fail, Fan Fail, Over Temperature (Depends on which you select the event on above No 1)

Some wav file samples are provided and located in **[C:\Program Files\EMS\Sound]**, you can use your own sound file.

④ System>Window

- Select <Alert Window>. Message windows come up for 10 seconds and down.

No.	Event	Sub No	Command	Parameter	After
01	Connect	1	Play Sound	chimes.wav	0
02	Disconnect	1	Alert Window		0
03	HDD fail	1	Alert Window		0
04	Fan fail	2	Auto Tour	3	0
05	Temperature fail	3	Auto Pan	On	0
06		4	Auto Tilt	On	0
07		5	Snapshot		0
08		6	Live Video		0
09		1	Digital Output High		0
10		1	Play Sound	ding.wav	0
11		1	Alert Window		0

Buttons: Add, Del, Test, Apply, Ok, Cancel

6) Parameter

① DVR>Camera >Parameter

- Type the desired number for the camera PTZ options such as preset no.

② System> Sound

- Select wav file for alert.

7) After

- Set the delay time after the event. (Unit 1ms: 1000 = 1second)

8) Add

- One Action will be added on event. (You can enter 25 at maximum.)

9) Del

- Delete the selected action.

10) Test

- Test action for events.

11) Apply

- Apply changed value.

12) OK

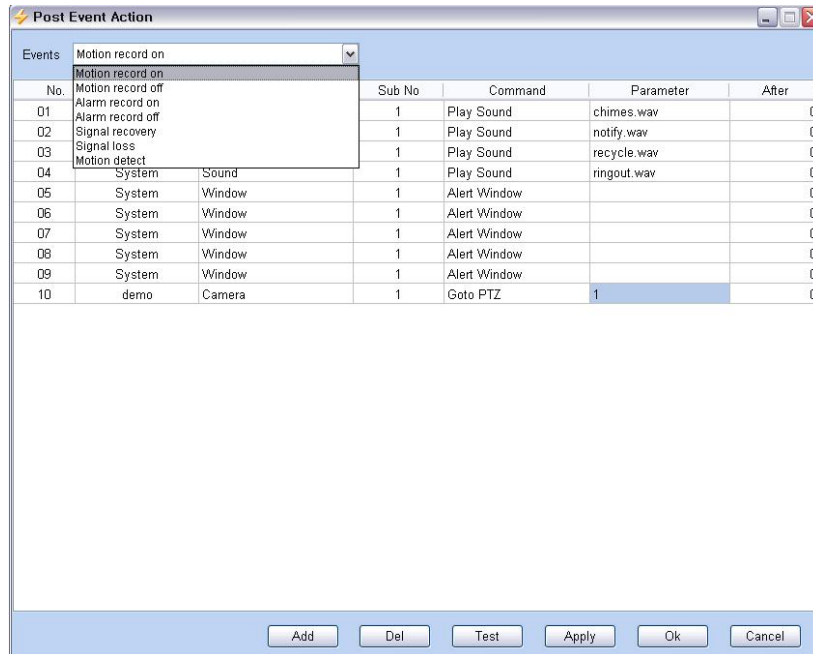
- Save the applied value and exit the window.

13) Cancel

- Does not save the valued and exit the window.

2. Camera Post-Event Action

- Right-Click on Camera and context menu will appear on the screen



1) Event

- The EMS will send notifications related to the camera such as [**Motion, Alarm, Video Loss, Motion detect**]. Only <Mpeg4 Pro> model supports Motion detect function.

2) Device

- Select from registered DVR or system. **System** means PC which EMS is installed.

3) Sub Type

- Select the Device which is connected with above no 2. For example, DVR with [Camera, Alarm] or system with [Window or Sound]

4) Sub No

- Select the camera / alarm number to control

① DVR>Camera

- Select the camera PTZ options, snapshot, Live video window. . Thumbnail log will be provided when you select snapshot.

② DVR> Digital output

- Select Digital output high/ low

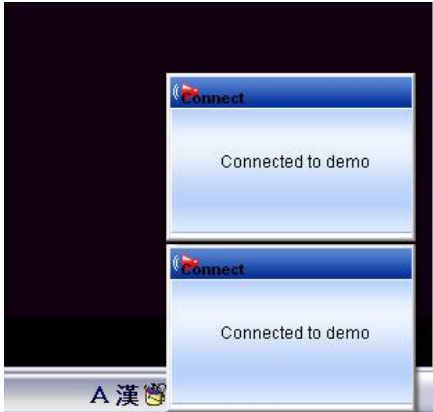
③ System> Sound

- Select Play sound. EMS will emit a sound when [**Motion, Alarm, Video Loss, Motion detect**] happens (Depends on which you select the event on above No 1)

Some wav files are provided and located in [**C:\Program Files\EMS\Sound**].

④ System>Window

- Select <Alert Window>. Message windows come up for 10 sec and down. It is linked to Live image.



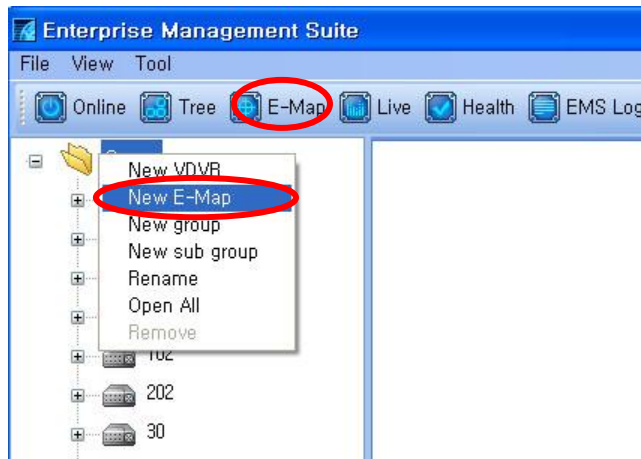
3. Digital In/Out Post-Event Action


- Right-Click on Digital Input and context menu will appear on the screen
- The EMS will send notifications related to Sensor [input high, low]

-

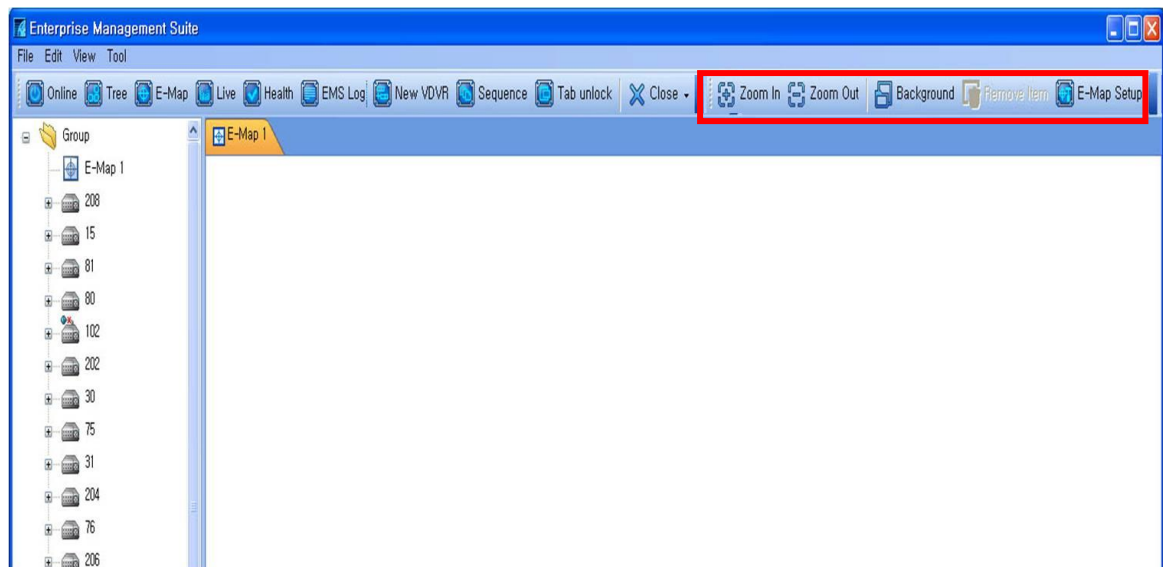
VII. E-MAP

1. Edit



1. Right-Click on next Group and context menu will appear on the screen. Or Click  on the Tool bar

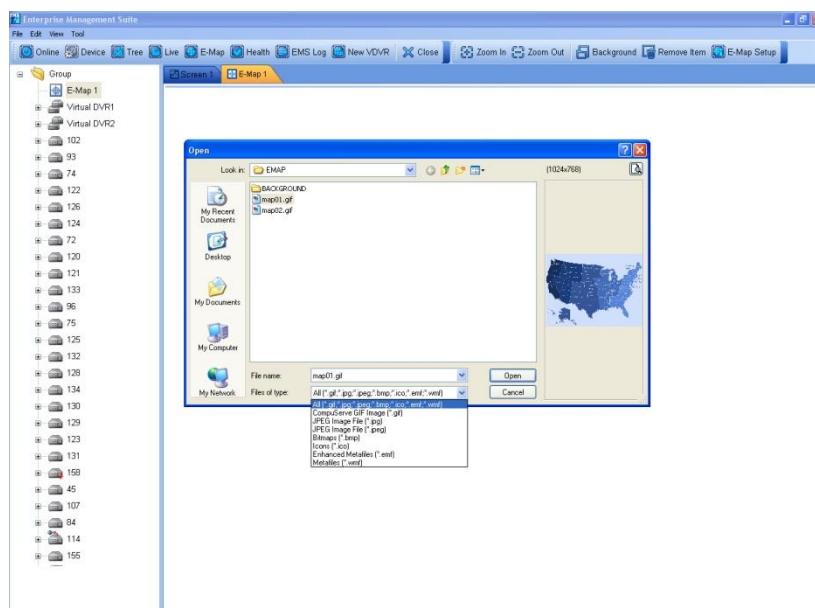
2. E-map control Buttons will be displayed.



- ① Zoom In: Enlarge the image twice which is registered on the EMAP and also change the coordinates of items. The maximum magnification rate is 400%.
- ② Zoom Out: Shrink the image twice down which is registered on the EMAP and change the coordinates of items. The maximum reduction rate is 25%.
- ③ Remove: Remove the selected E-map.

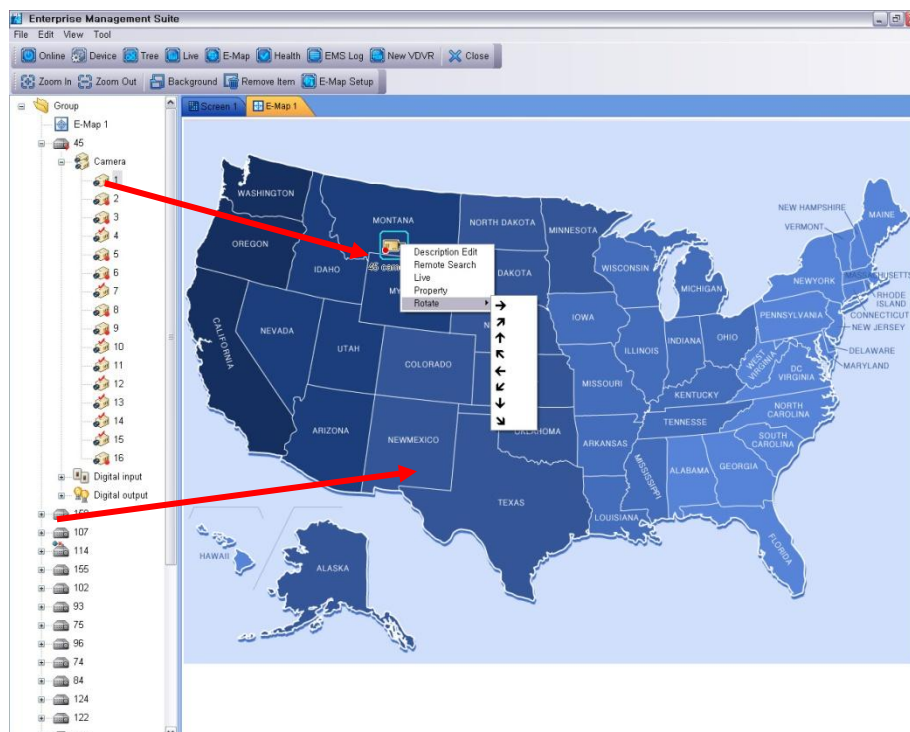
3. Select Background.

- Select image file for the Map

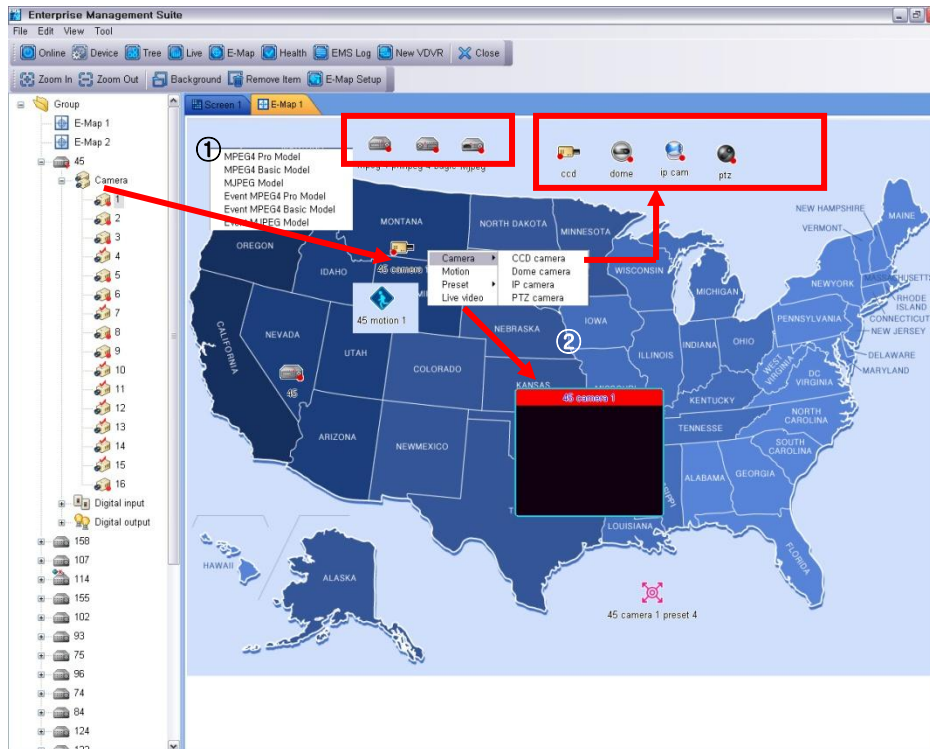


You can store the image file at [C:\Program Files\EMS\EMAP\BACKGROUND].

4. Drag and drop your desired items onto e-map.

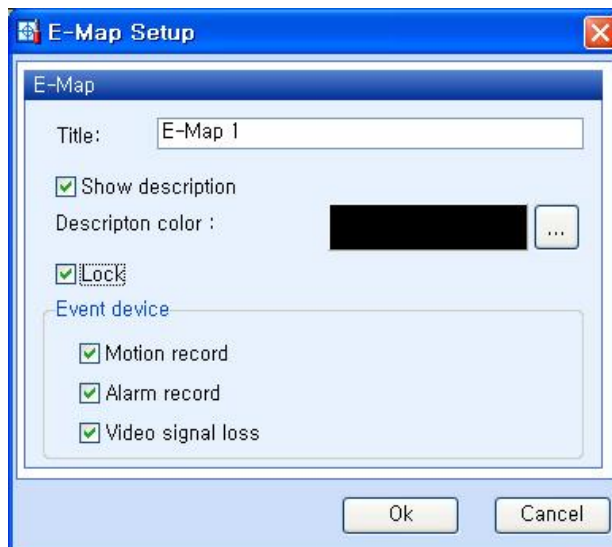


5. When you click by Right Mouse on the tree and drop to e-map. You can select the image of the icons.



1) DVRs

- MPEG 4 Pro DVR / MPEG 4 Basic DVR / MJPEG DVR
- Lock: Select this to keep the position of all icons as arranged in map.
- Event MPEG 4 Pro DVR / Event MPEG 4 Basic DVR / Event MJPEG DVR
- * Event DVR displays the Event status of DVR by blinking Red Color. Setup the motion, Alarm, Video Loss at E-map setup.

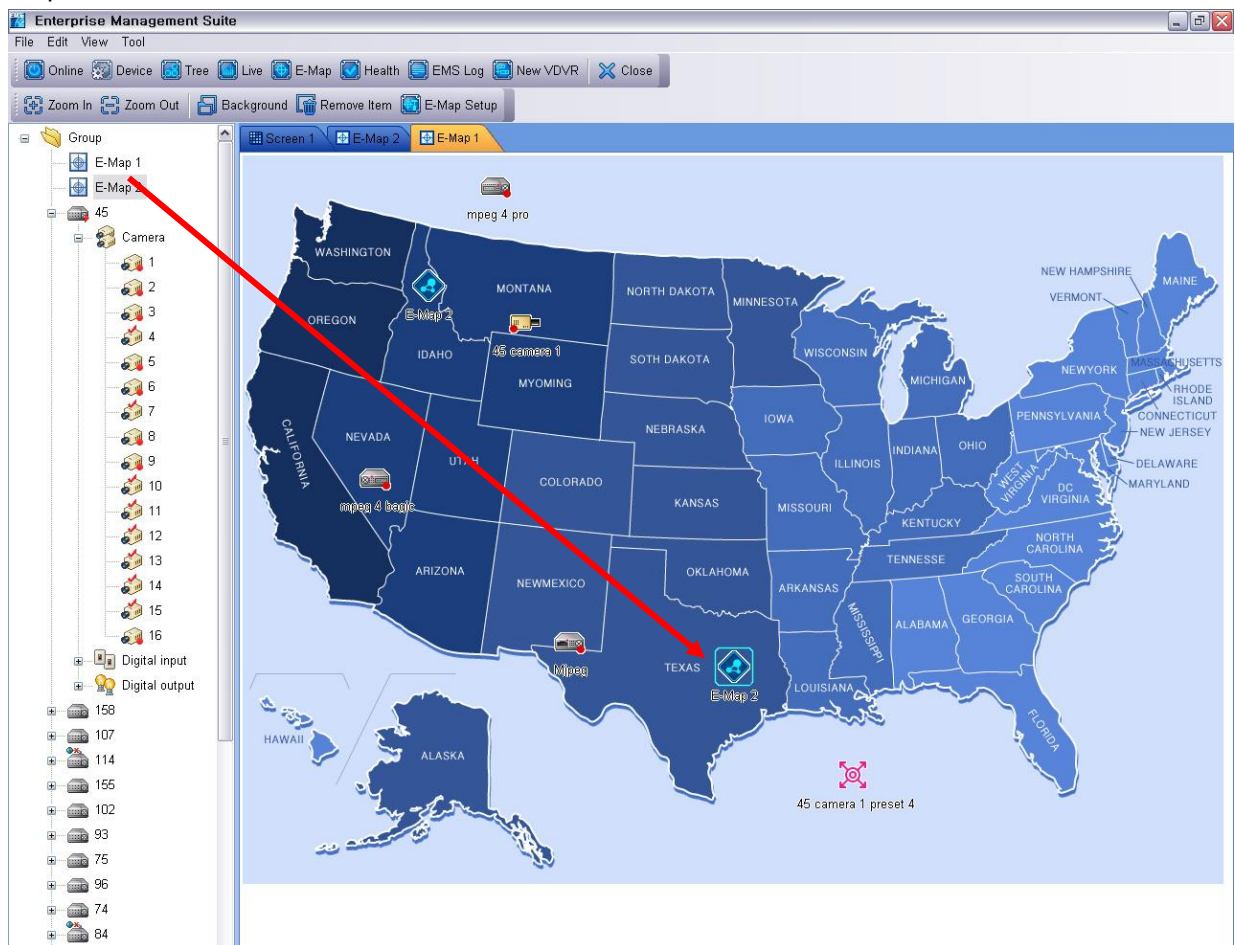


2) Camera

- Select the camera image distinguished as CCD Camera, Dome, IP Cam, PTZ camera.
- Select <Motion> to display of the status of motion record.
- Select <Preset> to move directly the settled position.
- Select < Live Video> to live monitoring.

2. E-Map Link

All items and e-maps are linked together. If you wish to make a link between e-maps, drag and drop.



- When you click the e-map it will automatically move to linked e-map.
- When you select items on e-map such as the DVR, Camera and etc, the items will be indicated as grey color on the Tree.

<Memo>

Revised at Jan. 2009