

communication

Total Security Solution Provider based on Internet Technology

***Central
Monitoring
System***

CMS

• USER MANUAL •

I. Introduction	4
II. CMS Server	
1. HARDWARE SPECIFICATION FOR CMS	5
2. REMARKS	5
III. HOW TO USE	6
1. LOG IN & OUT	6
2. HOW TO REGISTER DVR IN DVR MANAGER	7
3. HOW TO USE OPTION	10
4. HOW TO USE LIVE PANE	14
[1] STRUCTURE OF LIVE SCREEN	14
[2] HOW TO DISPLAY IMAGES IN LIVE SCREEN	15
[3] HOW TO USE FUNCTION BUTTONS IN LIVE SCREEN	17
[4] HOW TO USE SCREEN DIVISION BUTTON	21
[5] POP-UP	23
[6] CHANGE TRANSFER RATE	24
5. HOW TO USE SEARCH MODE	26

6. HOW TO USE E-MAP PANE.....	30
[1] ENTERING E-MAP PANE.....	30
[2] HOW TO USE TOOL BAR.....	32
[3] HOW TO CONSTRUCT EMAP TREE.....	37
[4] HOW TO USE EDIT TOOLBAR.....	41
[5] HOW TO USE USER-MAPPING.....	49
7. HOW TO USE EVENT PANE.....	51
[1] SERVER SETUP.....	51
[2] ALARM SOUND.....	55
[3] ENTERING EVENT PANE.....	56
[4] RECEIVING EVENT DATA.....	57
[5] SEARCHING EVENT DATA.....	58
[6] FILTERING TEXT DATA.....	59
8. HOW TO USE STATUS PANE.....	61
9. HOW TO CONTROL PTZ CAMERA.....	64
10. HOW TO BACK UP.....	65
11. HOW TO USE ACCOUNT MANAGER.....	68
12. HOW TO USE AUTHORITY MANAGER.....	70

I. INTRODUCTION

Most of countries still have a weak internet infra, and so users have to pay a big cost for high speed of internet network. Compared with text or sound, image has such a big size that it is difficult to receive images transmitted from one unit of DVR with 16 channels under 128 Kbps, 256 Kbps or 512 Kbps. If a user wants to control or monitor decades of hundreds of DVR servers installed in remote sites from a Central Monitoring Station, what should he does? DVR providers and NVR providers focus on how many camera channels users can monitor in the live screen at the same time, in result, they show off division screen with 32 channels, 64 channels and 128 channels. But if real limitation of transmission bandwidth is considered, it is impossible or makes no difference to display how many channels users monitor on the live screen. For example, in case that a user has 100 units of DVR servers and over 1000 units of cameras, how can he receive and monitor over 1000 pieces of images at the same time ?

The key point of Central Monitoring System is not to receive more images or data indifferently but to receive emergency images or data prior to other ordinary ones and to take proper actions depending on those images or data efficiently. And the other key point is to control and manage efficiently DVR servers installed in remote sites from a Central Monitoring Station.

CMS has the following functions for construction of efficient Central Monitoring.

1. Event Screen for Alarm Management
2. Monitoring up to 144 channels of live images on one screen.
3. Supporting Dual or Triple Monitors for live screen, e-map screen and Event Screen.
4. Advanced E-Map Monitoring System
5. Remote Setup
6. Remote Search
7. Remote Backup
8. Remote PTZ control
9. Supporting dynamic IP
10. Tow-way Audio System
11. Etc

II. CMS Server

1. HARDWARE SPECIFICATION FOR CMS

- **MINIMUM SPECIFICATION**

- (1) O/S : Windows 2000, Windows XP, Windows Vista
- (2) RAM : 512 MB and over
- (3) CPU : Pentium IV 3.0 GHz and over

- **RECOMMENDED SPECIFICATION**

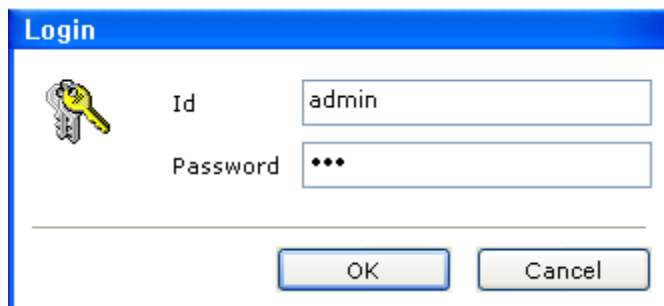
- (1) O/S : Windows XP or later
- (2) RAM : 1G
- (3) CPU : Core 2 Duo CPU

2. REMARKS

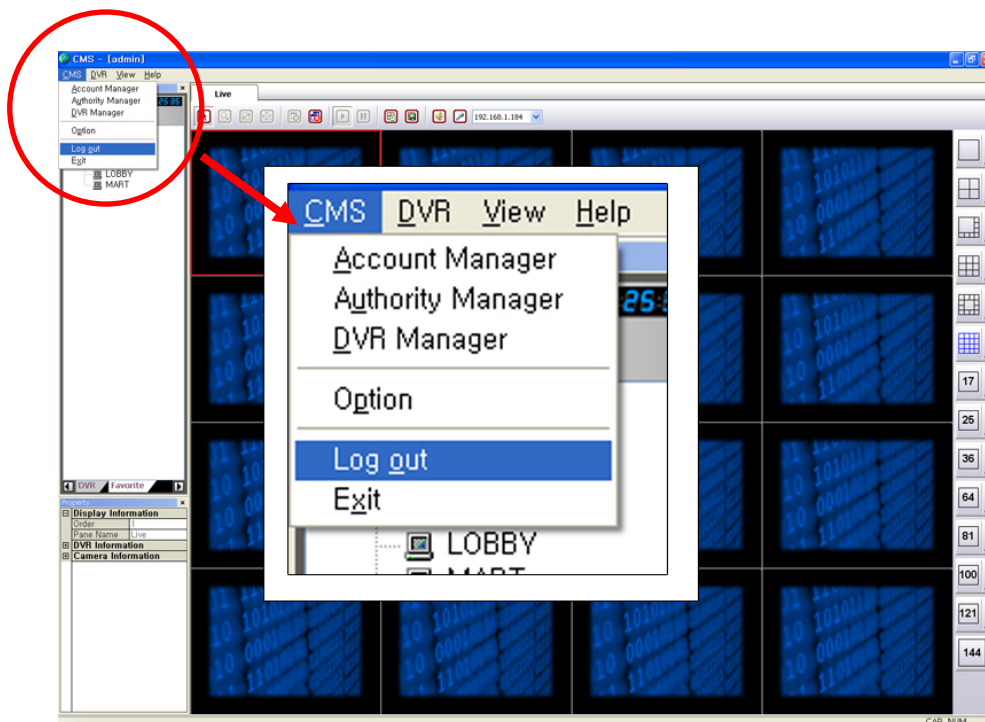
CMS server should be used for only Central Monitoring. Unauthorized software or utilities are probable to make CMS malfunctioned. Please note that unauthorized software or utilities should not be installed without the provider's confirmation.

III. HOW TO USE CMS

1. LOG IN & LOG OUT



- (1) The initial ID is [admin]
- (2) The initial password is [333]
- (3) Click OK, and the below Live Screen appears.

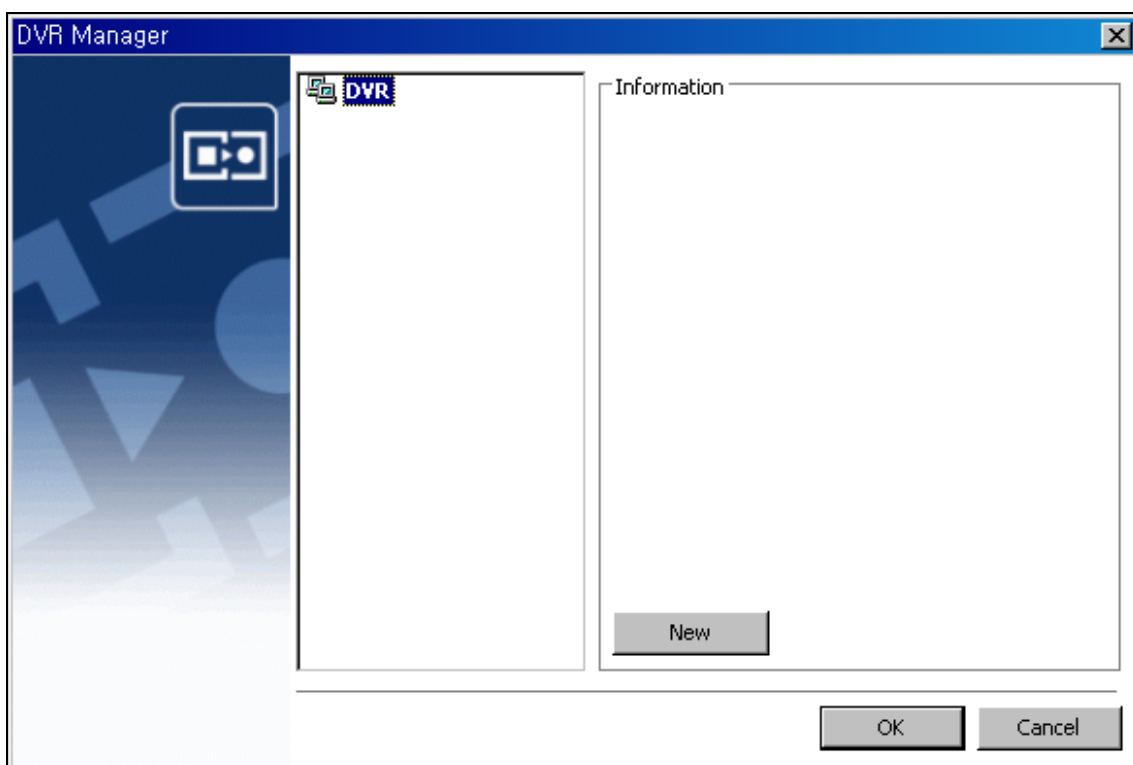


- (4) Choose 'Log out' or 'Exit' in CMS menu as above for Logout or Exit.

2. HOW TO REGISTER DVR IN DVR MANAGER



(1) Select 'DVR Manager' in CMS menu, and the below window appears.



DVR Information

DVR Information

Name

Address

Port

Product

Login id

Password

Additional Information

Name	Value
Fire Dept	
Police	
Fax	
Phone	

New

Delete

OK Cancel

- (2) Click 'New' in 'Information' to register a new DVR, and the below window appears.
- (3) Type Name, IP Address and Password of the DVR which you want to manage in CMS.
- (4) And then, select the product type of DVR. Then select 'OK', and the DVR are registered as below. You can register other DVRs by the same procedure.

DVR Information	
Type	Unknown DVR
Name	LOBBY
Connected	No
No. of cameras	0
Address	192.168.1.111
Port	7100
Login Account	admin

Additional Information	
Fax	
Fire Dept	
Manager	
Phone	
Police	

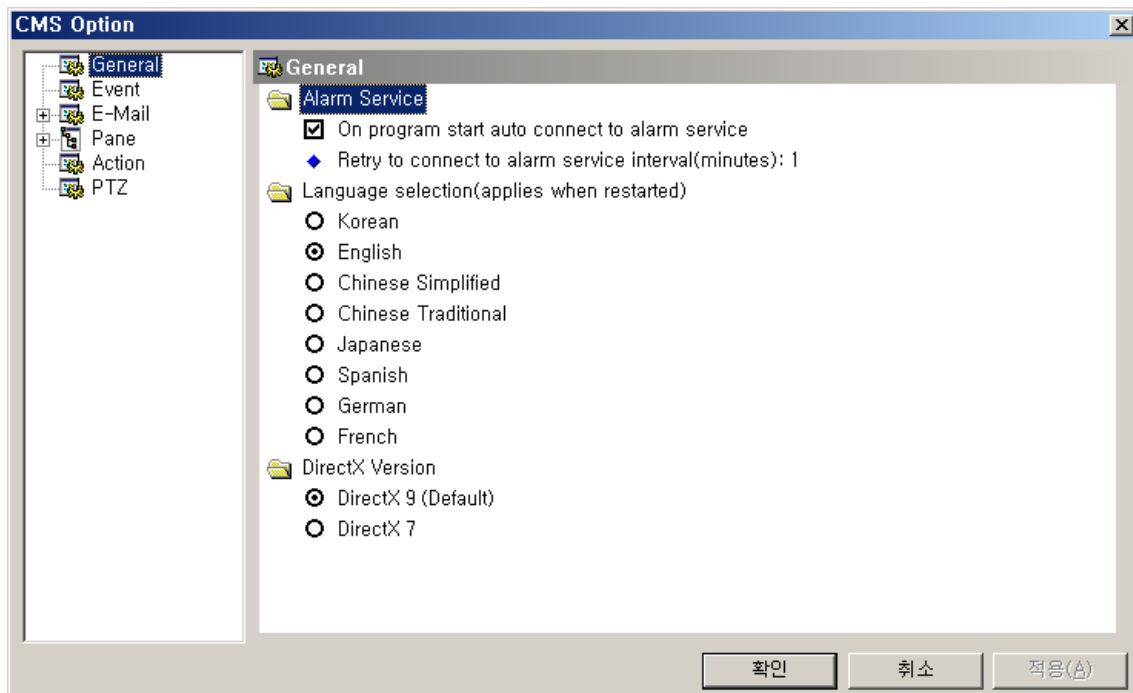
(5) If you need to modify the information of the registered DVR, select 'Modify' and then select 'OK'.

(6) If you need to delete a certain registered DVR, select 'Delete' and then select 'OK'.

3. HOW TO USE OPTION



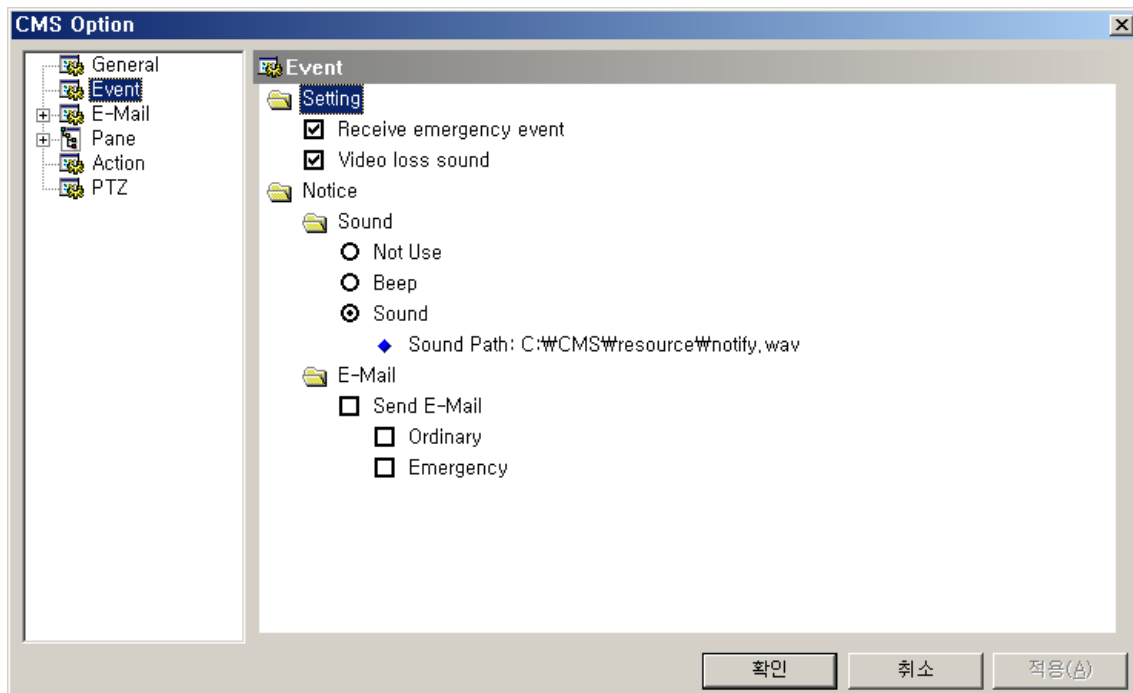
(1) Select 'Option' in CMS menu, and the below window appears.



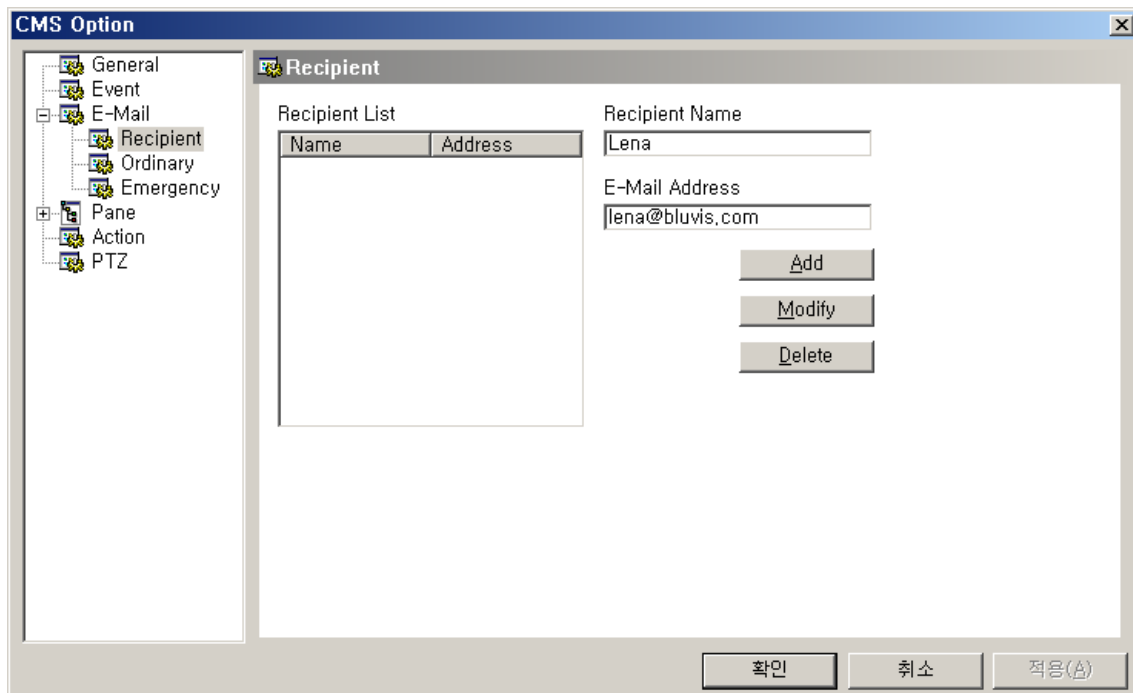
(2) Select 'General', and its relevant menu comes out in the right part.

(3) Check the check box in 'Alarm Service', and you can receive alarm data from the remote DVR without any additional setup, only if you start CMS program.

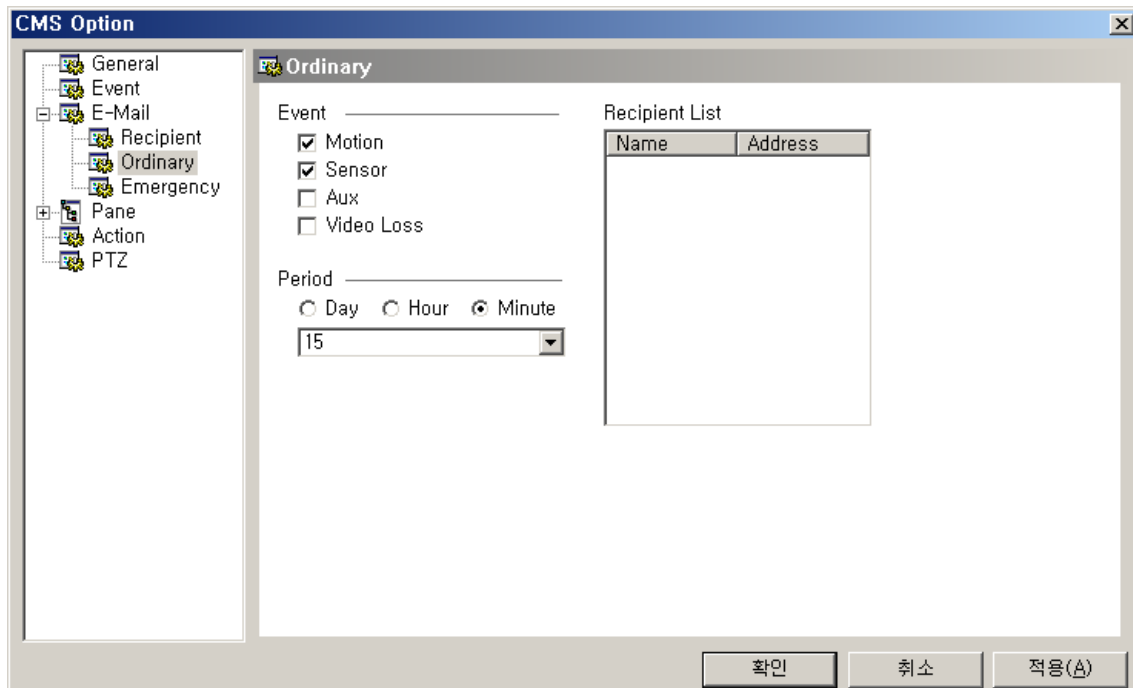
(4) Select language and click 'APPLY' and then click 'OK'



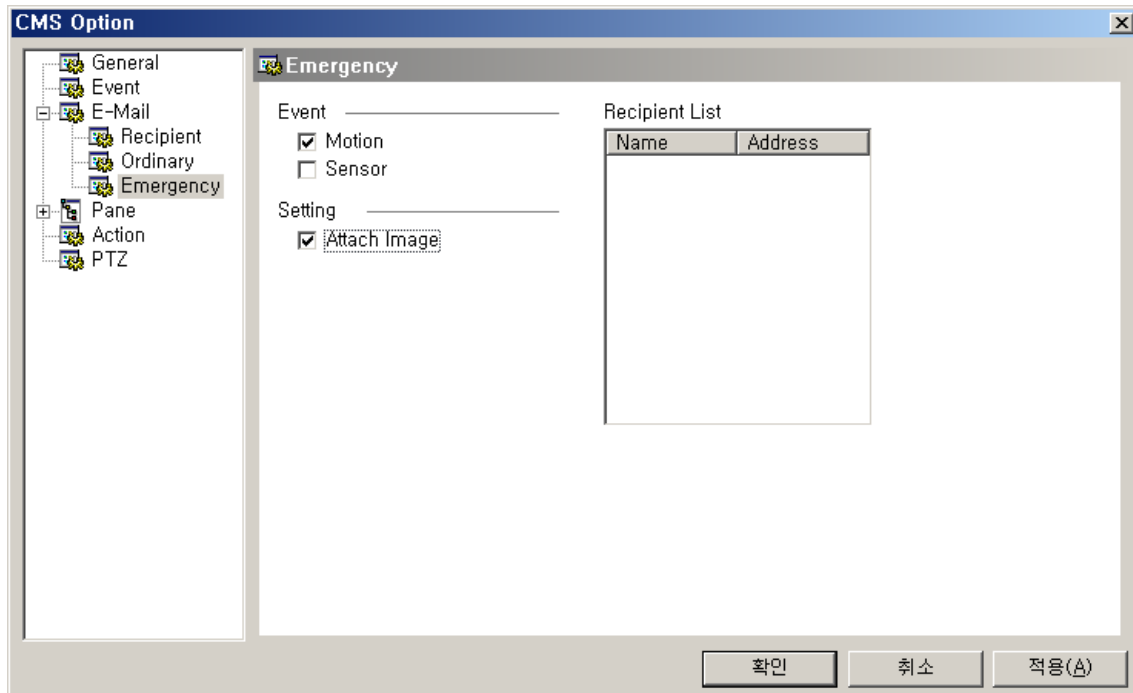
- (5) Select 'Event', and its relevant information comes out in the right part.
- (6) If you want to receive data on emergency event, check the check box of 'Receive emergency event' in 'Setting'
- (7) If you want to receive data on video loss sound, check the check box of 'Video loss sound' in 'Setting'
- (8) If you want to recognize by sound signal whether any event including motion detection, sensor and alarm occurs or not, select 'Beep' or 'Sound'.
- (9) If you want to receive event data by email when they occur, check the check box of 'Send E-mail'.
- (10) If you want to receive all events by email, select 'Ordinary'. While, if you want to receive only emergency event by email, select 'Emergency'.
- (11) When setup ends, click 'APPLY' and then click 'OK'



- (12) Select 'Recipient' in E-Mail menu, and its relevant information comes out in the right part.
- (13) Fill out Recipient Name and E-Mail Address and then click 'Add', and a new recipient is registered in 'Recipient List'
- (14) Select 'Apply' and then click 'OK'



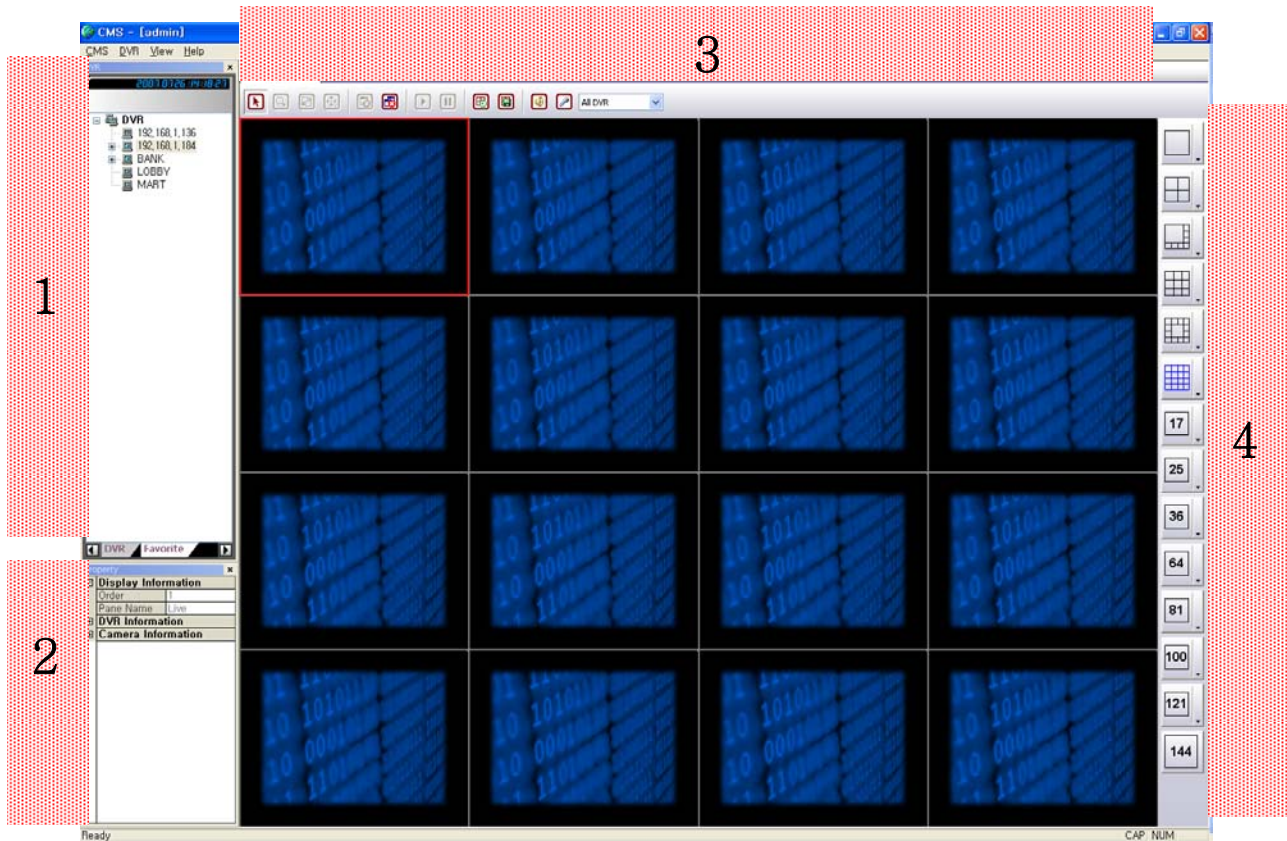
- (15) Select 'Ordinary' in E-Mail menu, and its relevant information comes out.
- (16) Select event type in Event menu which you receive by email.
- (17) Set period when you want to receive event data by the day, hour or minute.
- (18) Select recipients in Recipient List to whom event data will be transmitted by email.



- (19) Select 'Emergency' in E-Mail menu, and its relevant information comes out.
- (20) If you want to receive image of event by email, check the check box of 'Attach Image'

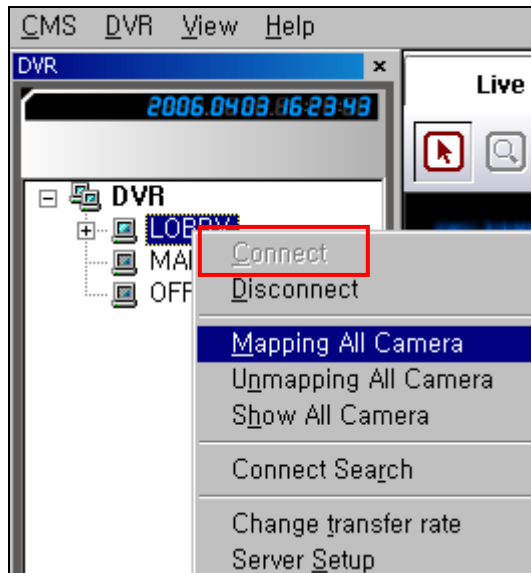
4. HOW TO USE LIVE PANE

[1] STRUCTURE OF LIVE SCREEN

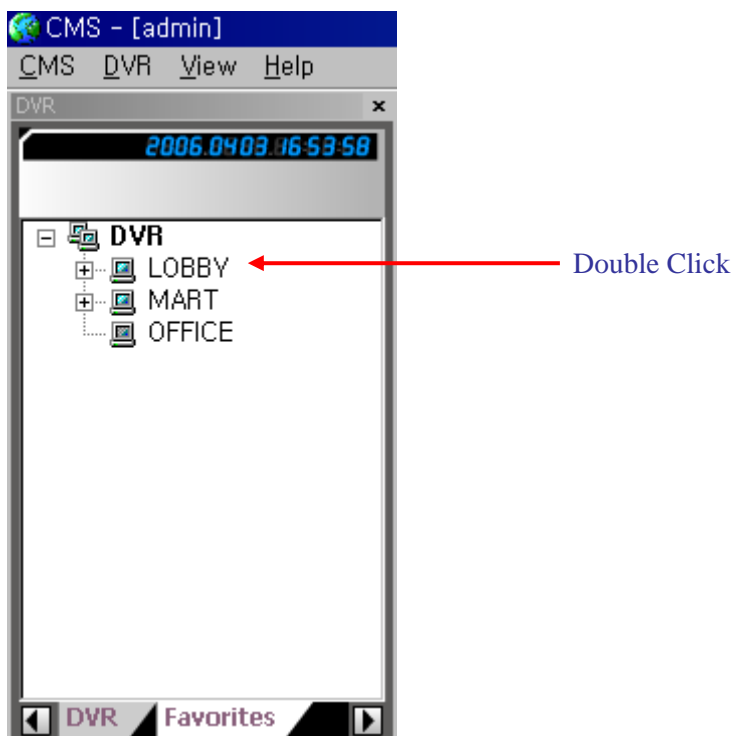


- 1** : This part shows DVR List _ the registered DVRs and their cameras.
- 2** : This part shows Property List _ information on CMS version, DVR and cameras.
- 3** : This part shows Live Screen and function buttons for it.
- 4** : This part shows Division screen button.

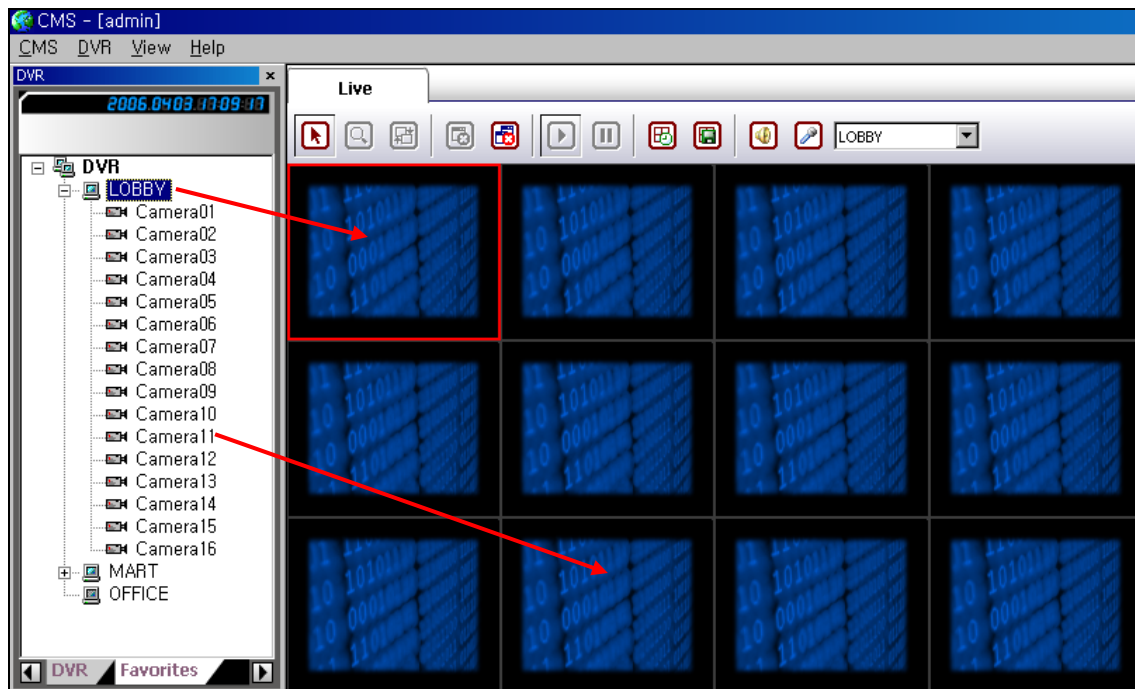
[2] HOW TO DISPLAY IMAGES IN LIVE SCREEN



- (1) Click the right button of mouse and select 'Connect' in the menu.
- (2) And then select 'Mapping All Camera', and all camera images are displayed.



- (3) If you feel that this procedure is not convenient, you have only to double-click the name of the DVR in the list to display in the Live Screen.



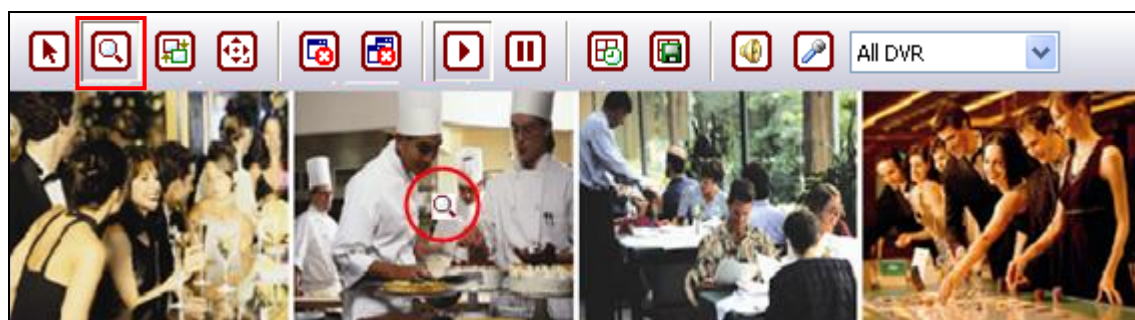
- (4) You can display camera images by drag & drop. If you select a certain DVR and then drag & drop it into the live screen, all images belonging to the DVR are displayed. Besides, if you want to display only one camera, select the camera and then drag & drop it into the live screen.

[3] HOW TO USE FUNCTION BUTTONS IN LIVE SCREEN



 : Mouse Pointer

 : Zoom



- (1) Select this button and then click a certain channel, and zoom icon appears.
- (2) Put the icon on where you want to zoom in and roll a scroll button of mouse.

 : Exchange between camera channels



- (1) Select this button and then select a certain channel.
- (2) Drag the channel and then drop where you want, and the two channels are exchanged.

 : Control the Pan/Tilt/Zoom



- (1) Select this button and then click a channel connected with Pan/tilt camera, and PTZ icon appears.
- (2) Click the left button of mouse, and you can Pan or tilt camera by moving up/down/left/right in the directing of Mouse and zoom in/out it by rolling a scroll of mouse.

 : Turn-off of one channel



Select a certain channel and then click this button, and the image of the channel is turned off.

 : Turn-off of all channels in the Live Screen

If you click this button, the images of all channels in the Live Screen are turned off.

 : Play



: Stop

Select a certain channel and then click this button, and play of the channel is stopped.

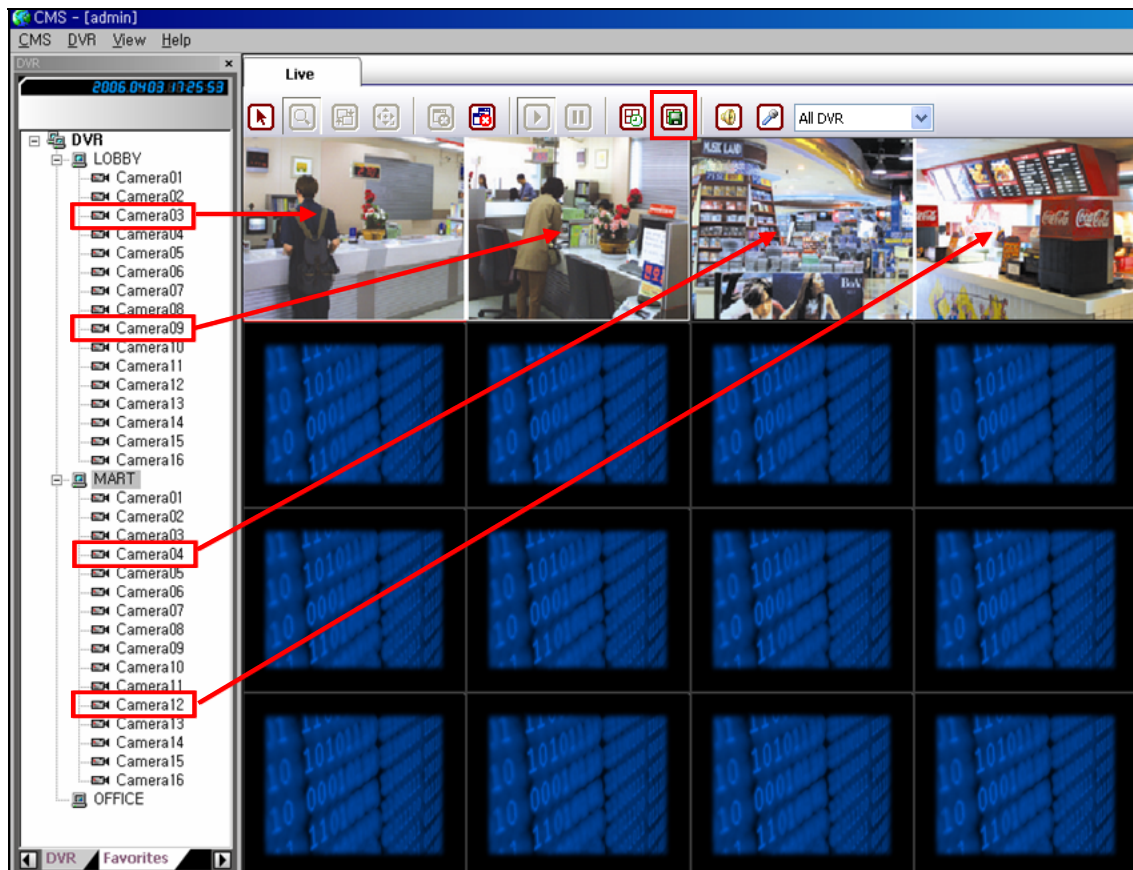


: Switch

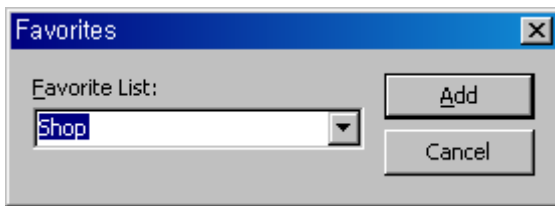
For example, in case that you select '4 division screen button' and you select this button, CH.1 to CH.4, CH.5 to CH.8, CH.9 to CH.12 and the next 4 pieces of channels are displayed in turn.



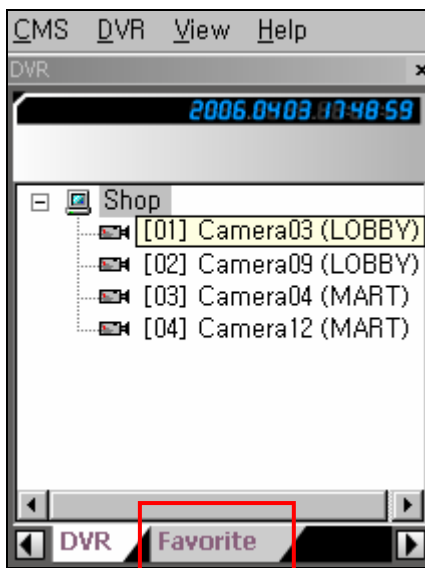
: Favorites



(1) Make combination of cameras which are necessary or effective to monitor together as a group with some common things by drag & drop and then click this button, and the below window appears.



(2) Type a certain name for the group under Favorite List and click 'Add'.



(3) Select 'Favorites', and DVR List is changed into Favorites List. If you double-click one in Favorites List, the image group is displayed.



: Speaker

Select a certain channel and then click this button, and you can hear audio coming from the speaker connected with the CMS Server.



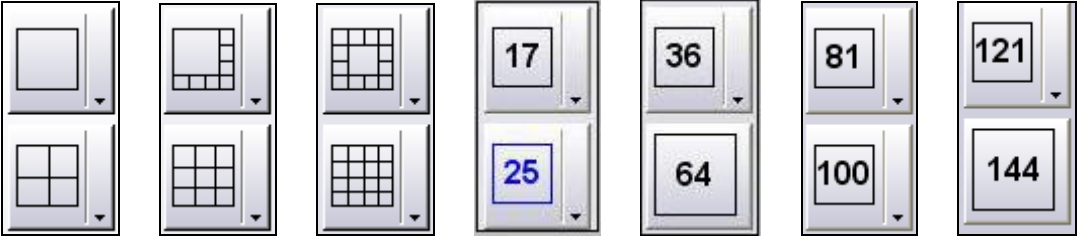
: Microphone

(1) Select a certain channel and click this button and then speak something through the microphone connected with the CMS Server, and your voice is transferred to the speaker connected with the DVR which the selected camera belongs to.

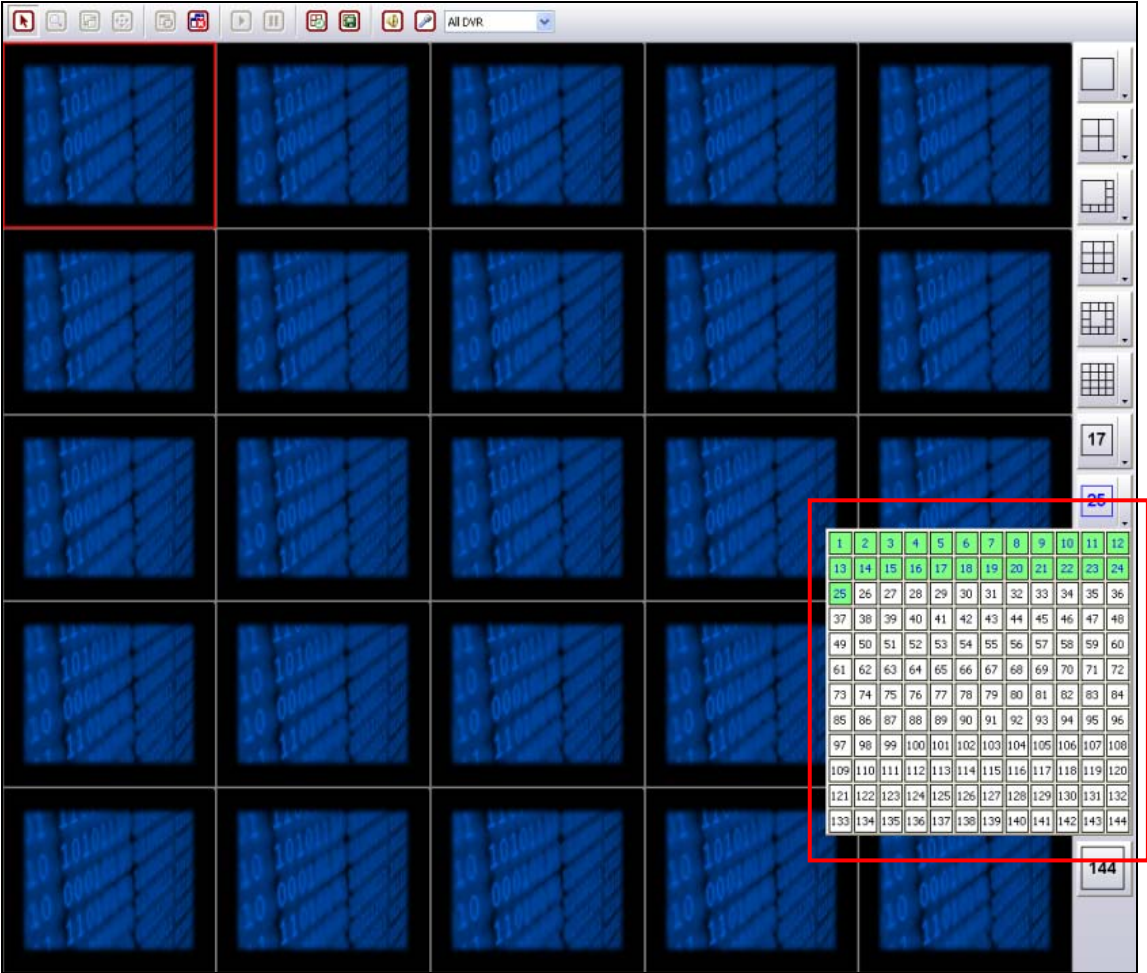
(2) If you want to transfer your voice to all speakers connected with each DVR at the same time,

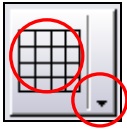
select 'All DVR'.  

[4] HOW TO USE SCREEN DIVISION BUTTON

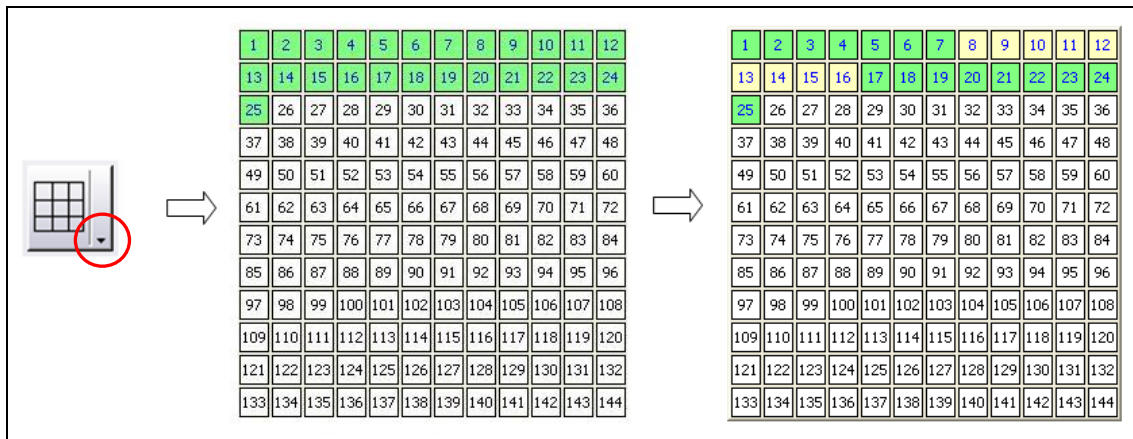


(1) Screen Division Button consists of D1 / D4 / D8 / D9 / D13 / D16 / D17 / D25 / D36 / D64 / D81 / D100 / D121 / D144.



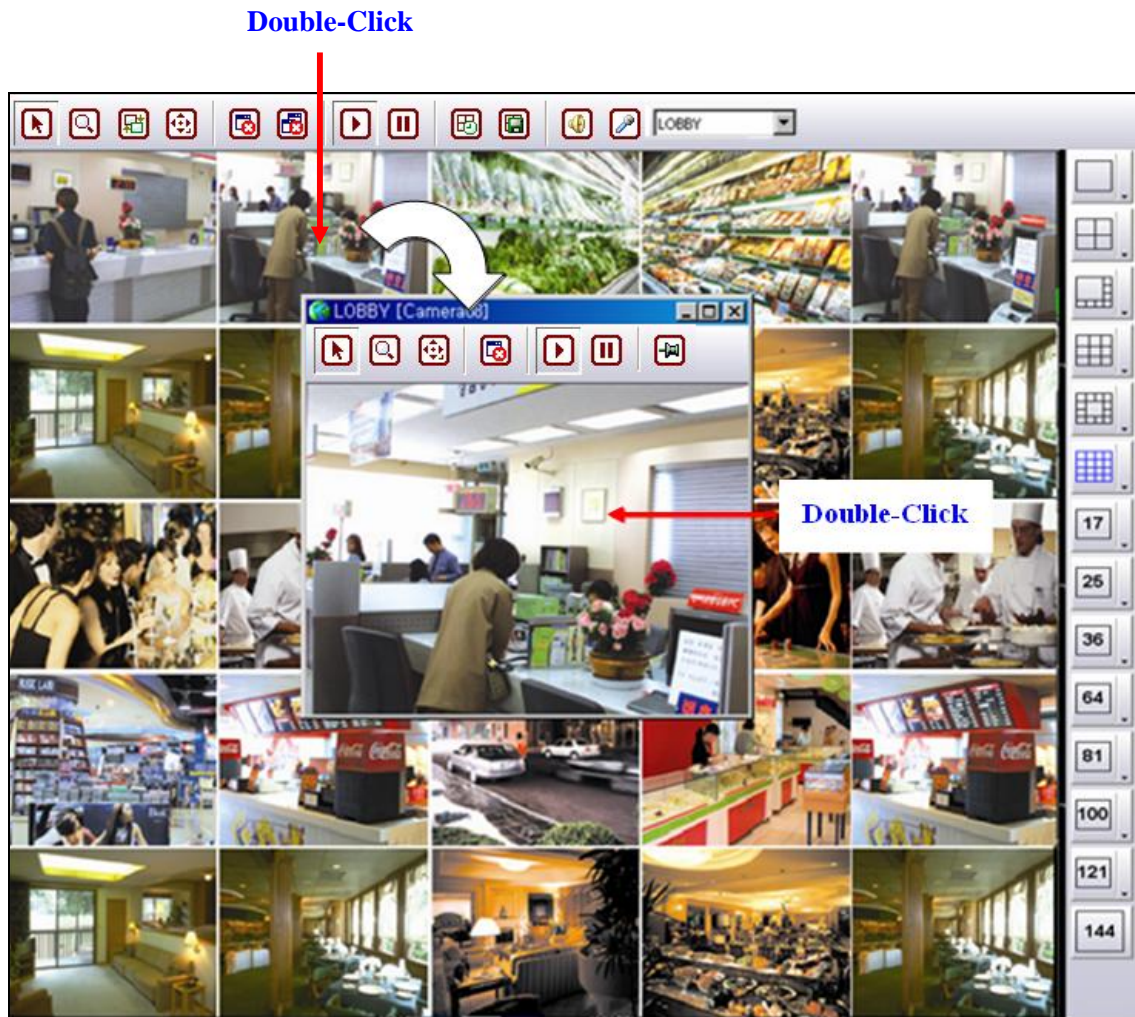


(2) Screen Division Button consists of two buttons. The left button is related to how many channels Live Screen is divided into and the right button is related to the numbers of the channels to be displayed in the Live Screen.



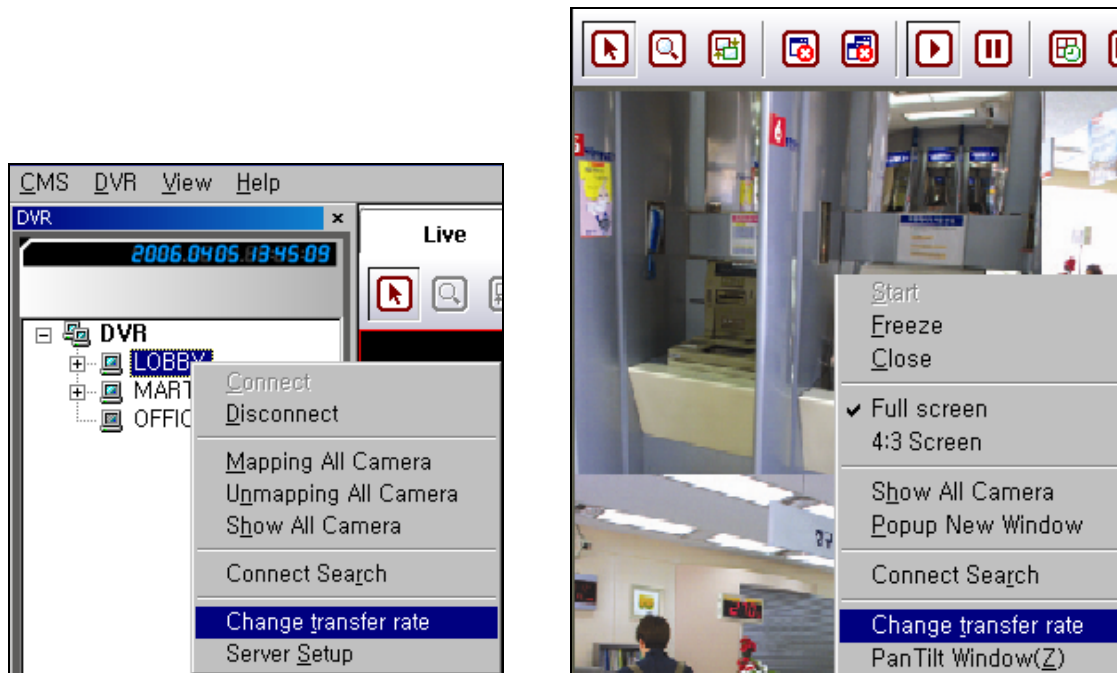
(3) For example, in case that D25 is displayed in the Live Screen, CH.1 to CH.25 in Camera Number Table are highlighted in green. In this case, if you click the right button of D9 and put mouse pointer on CH.8, CH.8 to CH.16 are highlighted in yellow. And then, if you click mouse, Live Screen is changed into D9 and CH.8 to CH.16 are displayed in the Live Screen.

[5] POP-UP



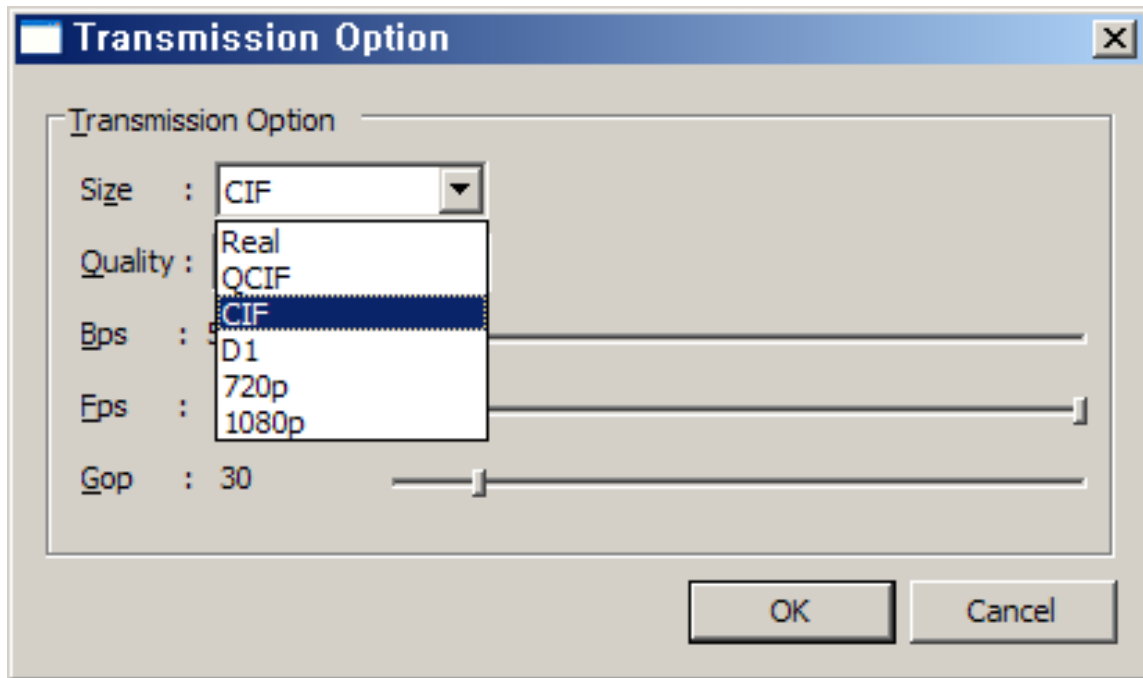
- (1) Select a certain channel and double-click it, and the channel pops up as above.
- (2) If you double-click the pop-up image, all the camera images of the DVR which the pop-up image belong to are displayed separately from Live Screen.

[6] CHANGE TRANSFER RATE



(1) Select one DVR or select one image and then click the right button of mouse, and the menu comes out.

(2) Select 'Change transfer rate' in the menu, and the below window appears.



(3) You can optimize operation of CMS under the real network conditions by adjusting Bandwidth and Image Size.

(4) You can adjust bandwidth of network connected with the DVR installed in remote site by adjusting 'Bandwidth Limit' in the above window.

(5) There are three kinds of image resolution, that is, 1080i, 720p, D1, CIF, QCIF, Real Which resolution should be used depends on how big bandwidth is. The file size is like below.

1080P : 1920x1080

720P : 1280x720

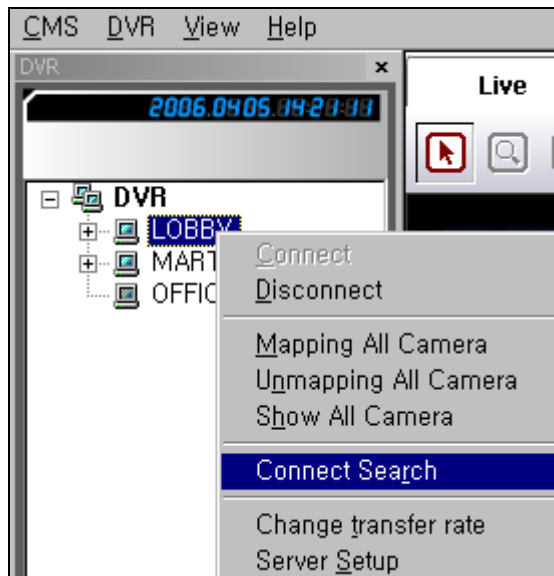
D1 : 704x480 (NTSC), 704x576 (PAL)

CIF : 352x240 (NTSC), 352x288 (PAL)

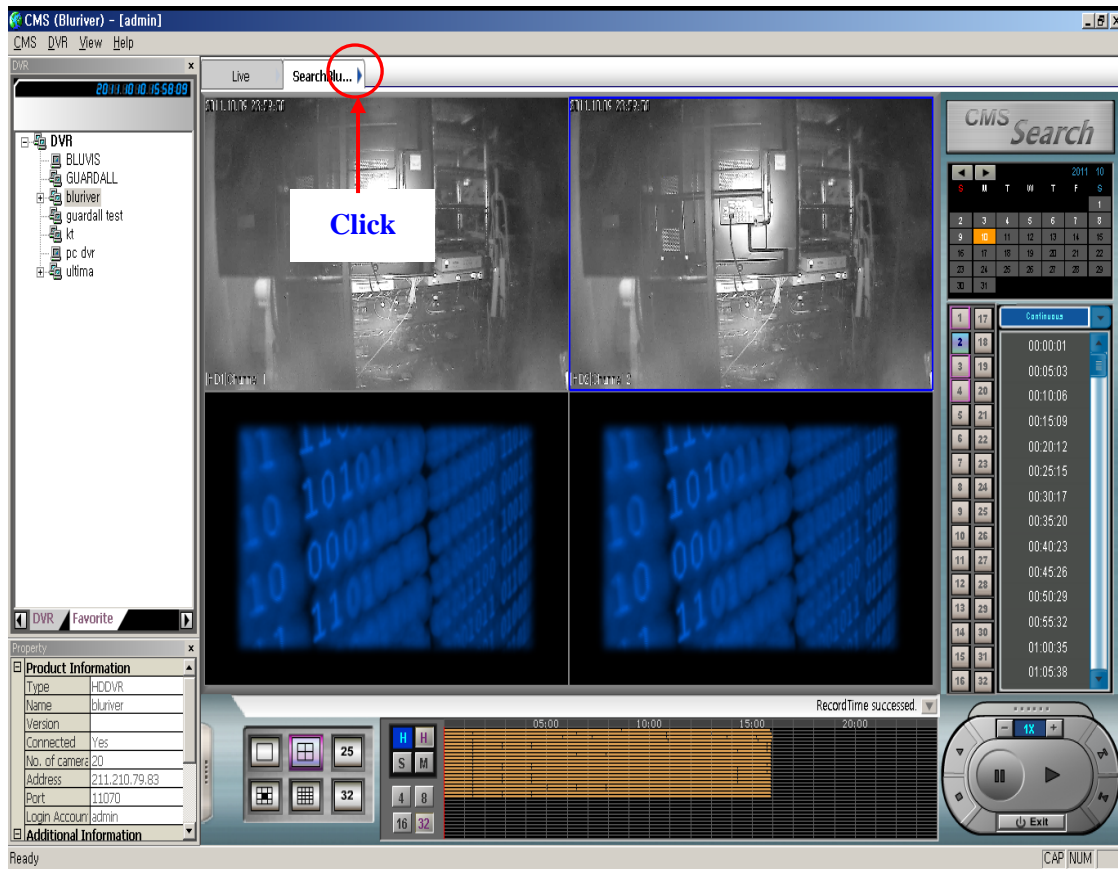
QCIF : 176x120 (NTSC), 176x144 (PAL)

(6) Image quality can be adjusted by 'Quality' bar.

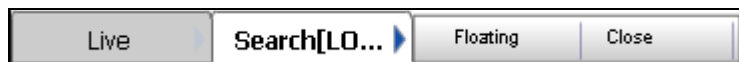
5. HOW TO USE SEARCH MODE



- (1) Select one DVR and click the right button of mouse, and the above menu comes out.
- (2) Select 'Connect Search', and Live Screen is changed into Search Screen as below.



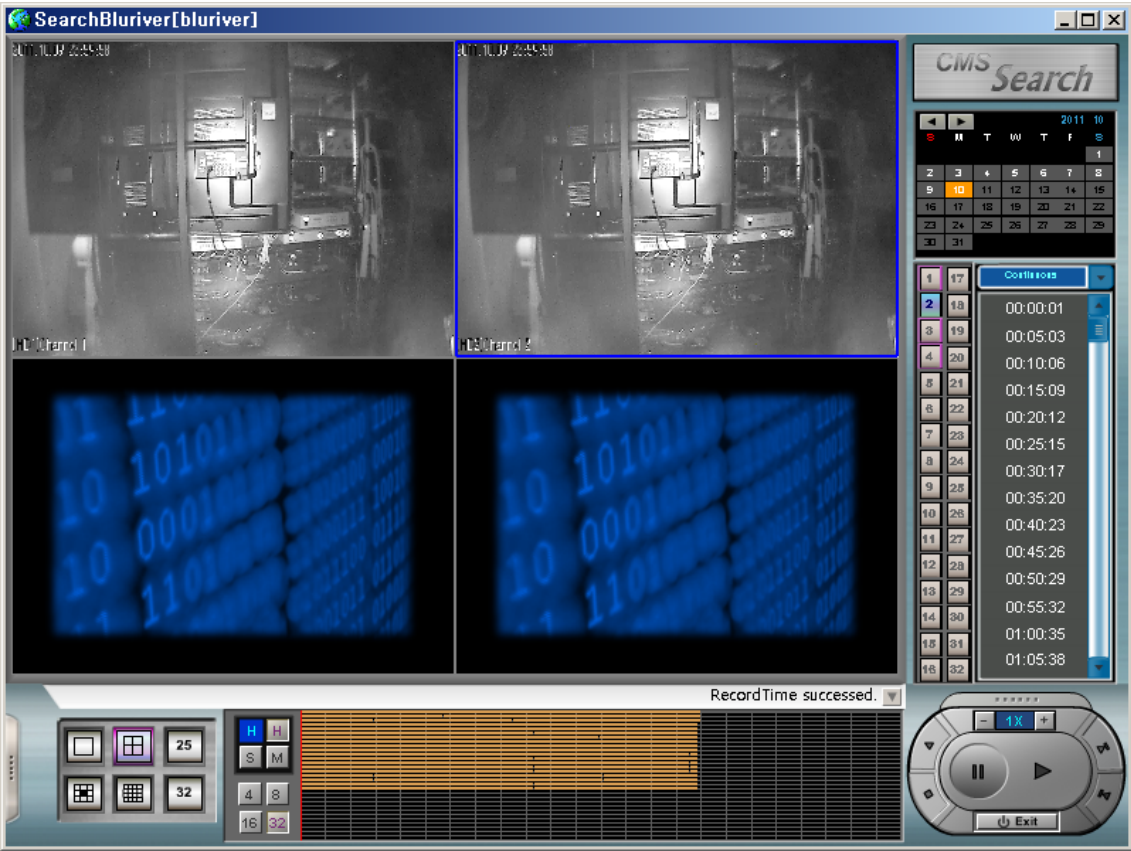
(3) How to use search mode in CMS is the same as how to use search mode in DVR.



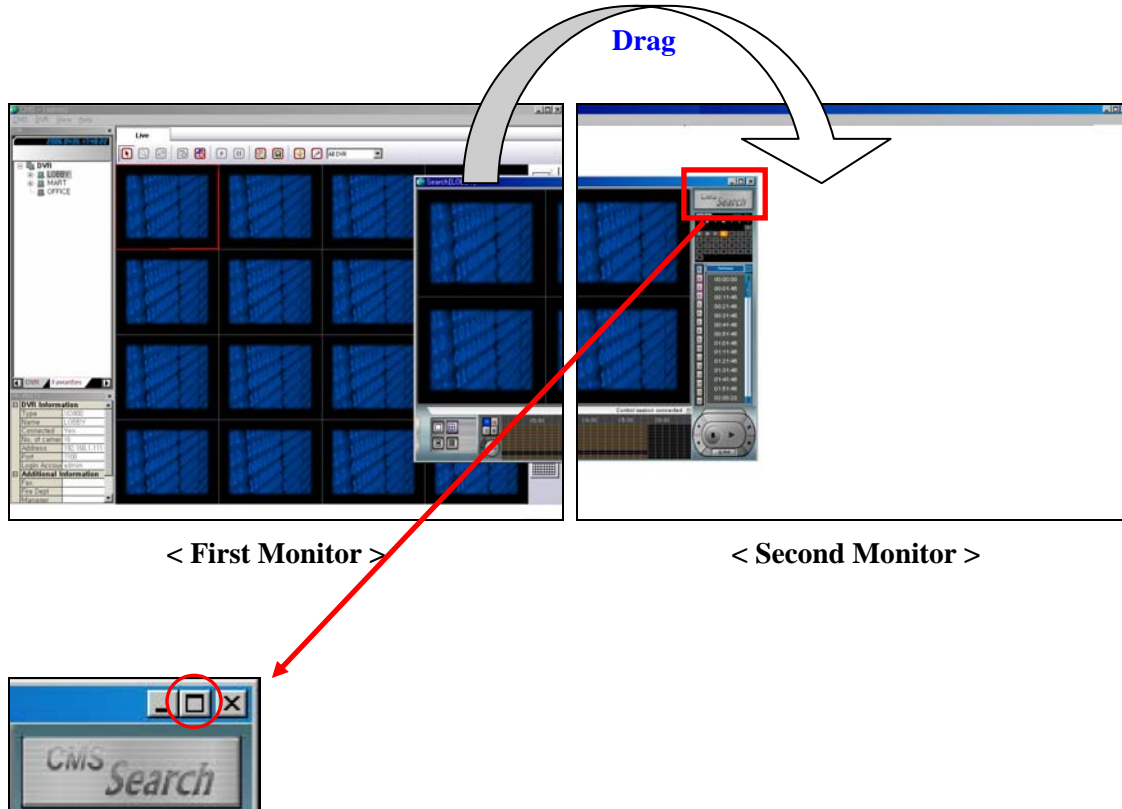
(4) Click 'Search', and two buttons (Floating & Close) come out.


(5) If you select 'Close', Search Screen is closed.

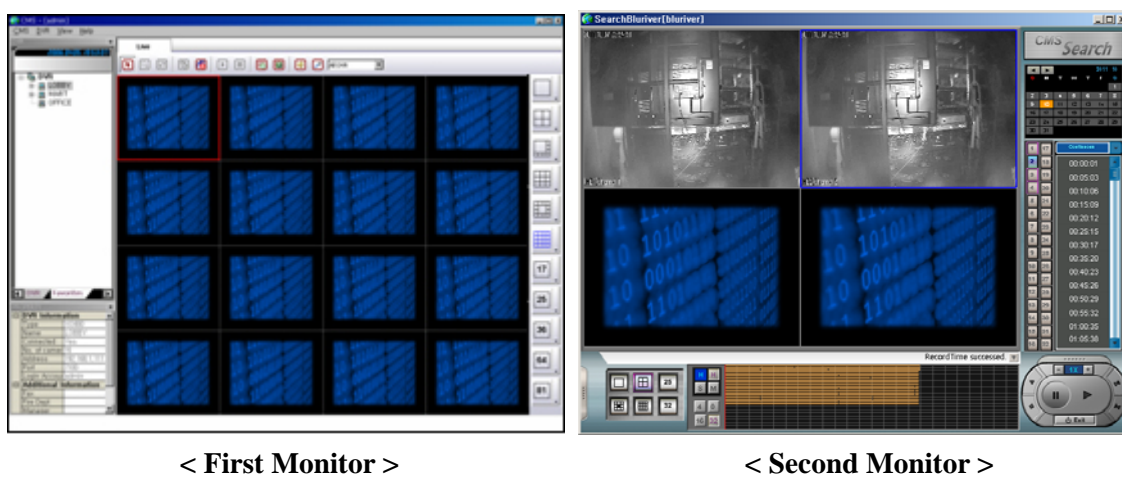
(6) If you select 'Floating', Search Screen is detached from the Main Screen as below.



(7) If you set dual monitor, you can move the search screen to the other monitor by dragging as below.

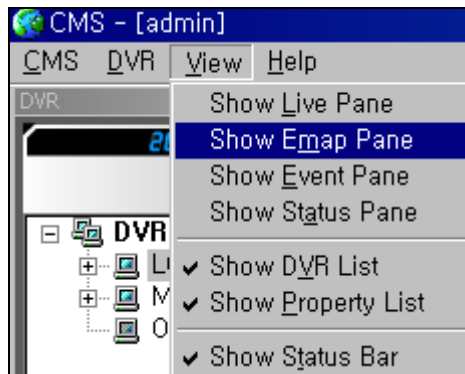


(8) If you click  button, the size of the search screen becomes as big as the full screen as below.

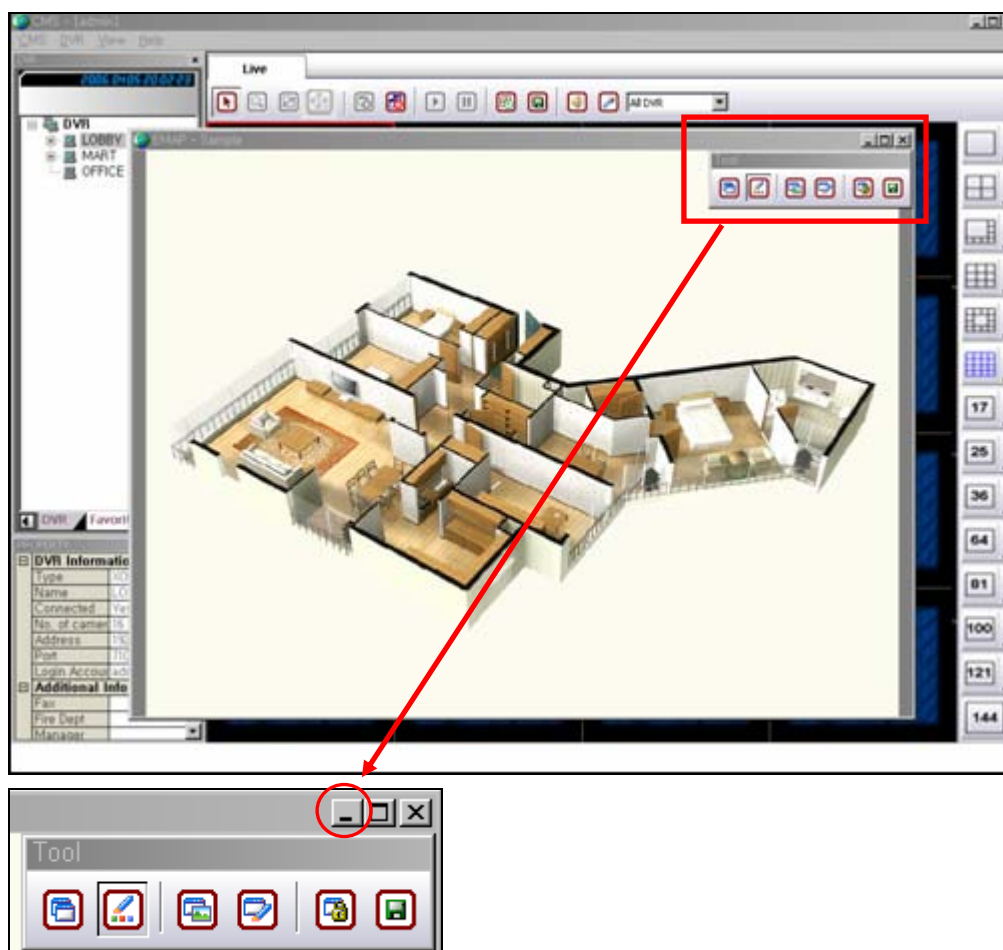


6. HOW TO USE E-MAP PANE

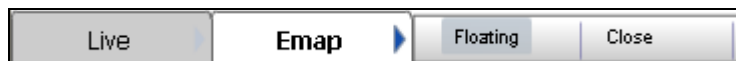
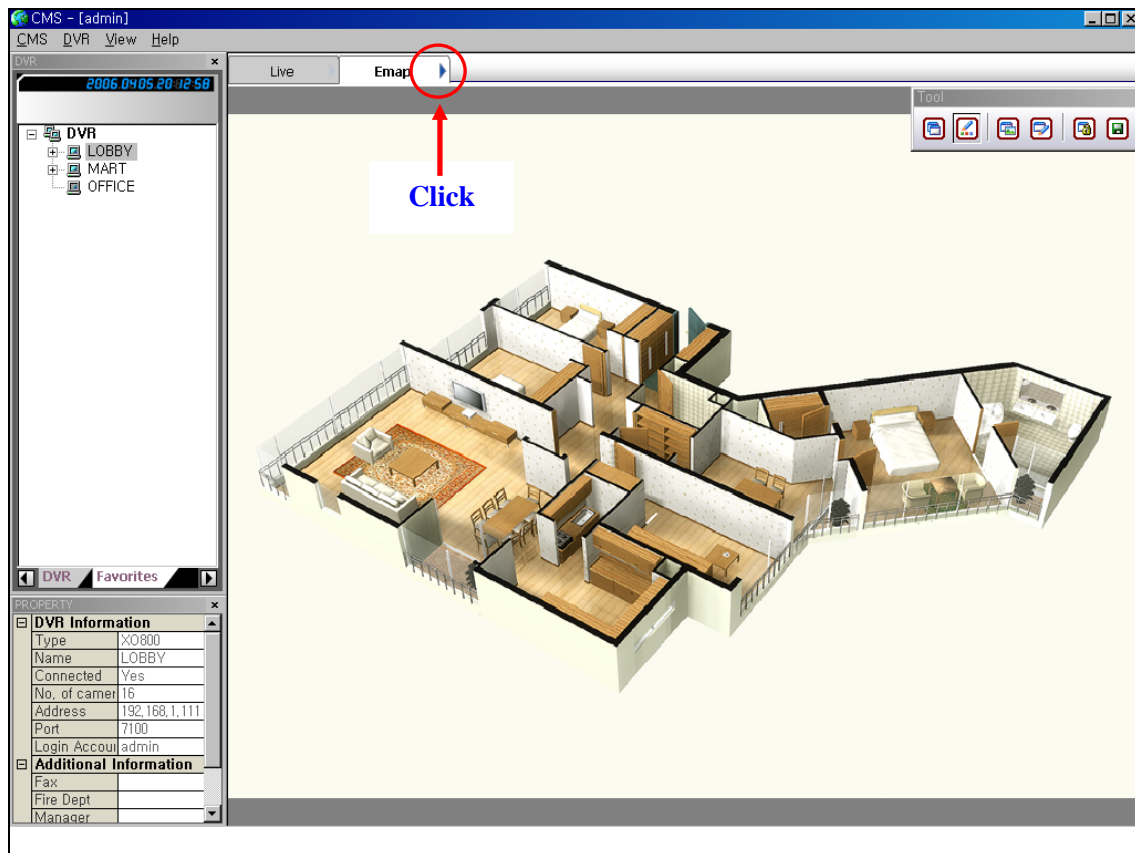
[1] ENTERING E-MAP PANE



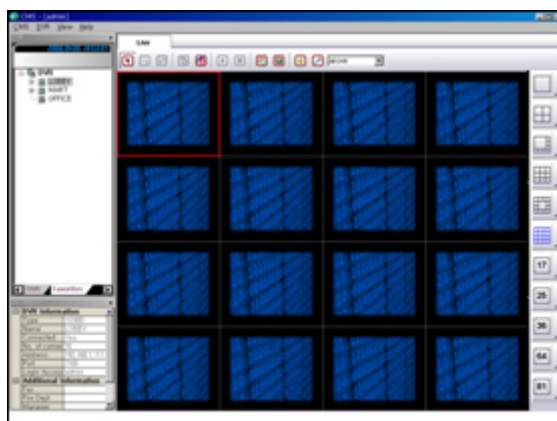
(1) Select 'Show Emap Pane' in View menu, and E-map screen appears as below.



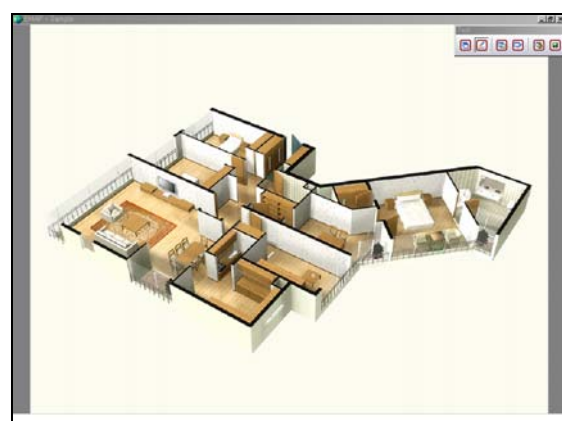
(2) If you click  button, the floating screen are relocated as below.



- (3) If you click 'Floating', the Emap screen is detached from the main screen.
- (4) If you click 'Close', the Emap screen disappears.
- (5) If you use dual monitors, you can move Emap screen into the second monitor by dragging.



< First Monitor >



< Second Monitor >

[2] HOW TO USE TOOL BAR



: Auto Toolbar Layout



: View Mode for Edit

You can edit Emap after selecting this button.



: Show Map Toolbar



: Show Edit Toolbar



: Lock / Unlock

(1) If you activate this button by clicking, location of icons are fixed.

(2) If you deactivate this button by clicking the activated button, you can move icons.

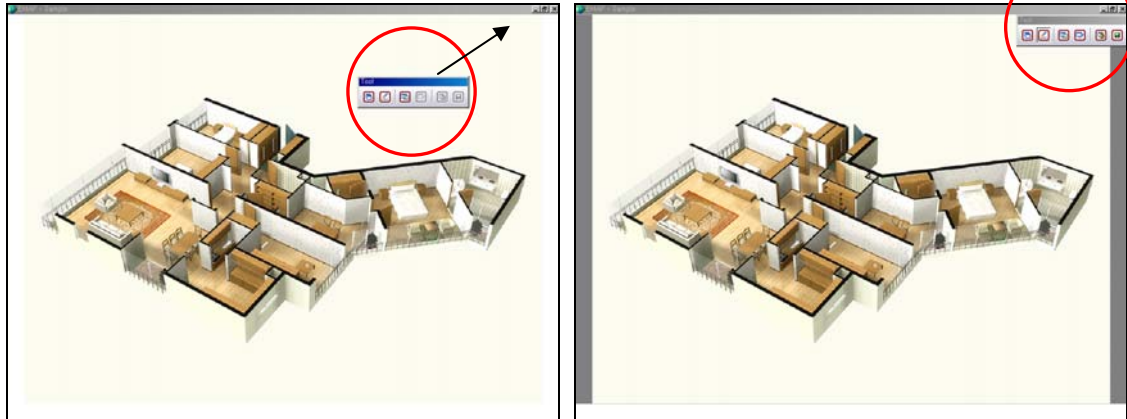


: Save Emap

You should click this button to save when you finish editing Emap.



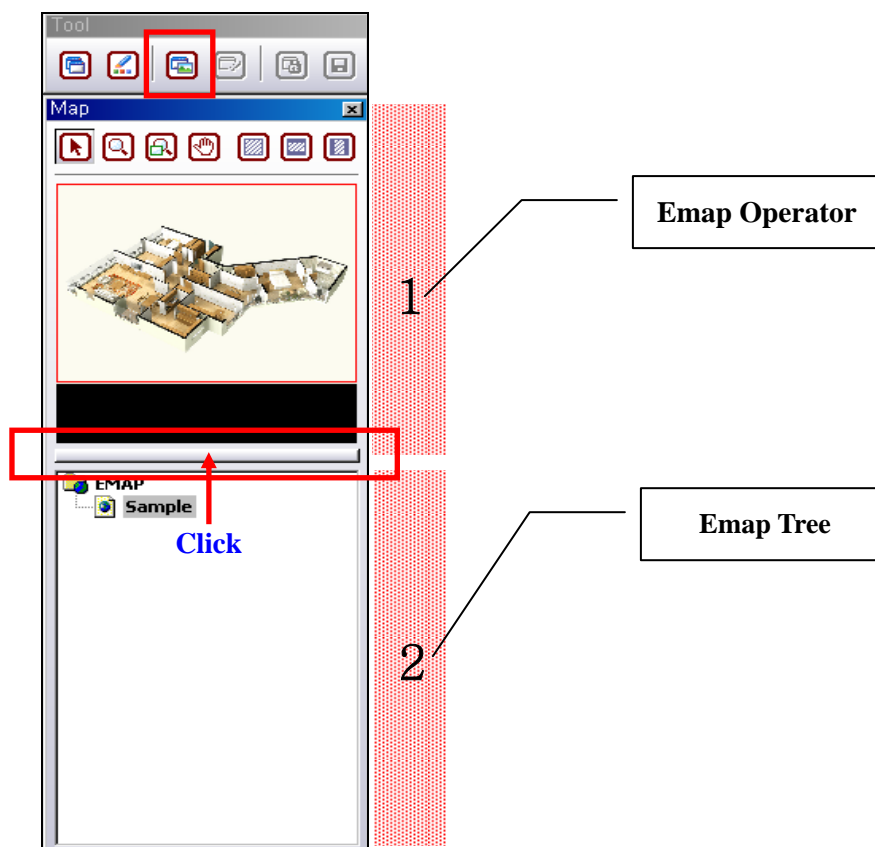
: Auto Toolbar Layout



- (1) Toolbar is available to move anywhere.
- (2) If you click this button, Toolbar returns to the initial location.



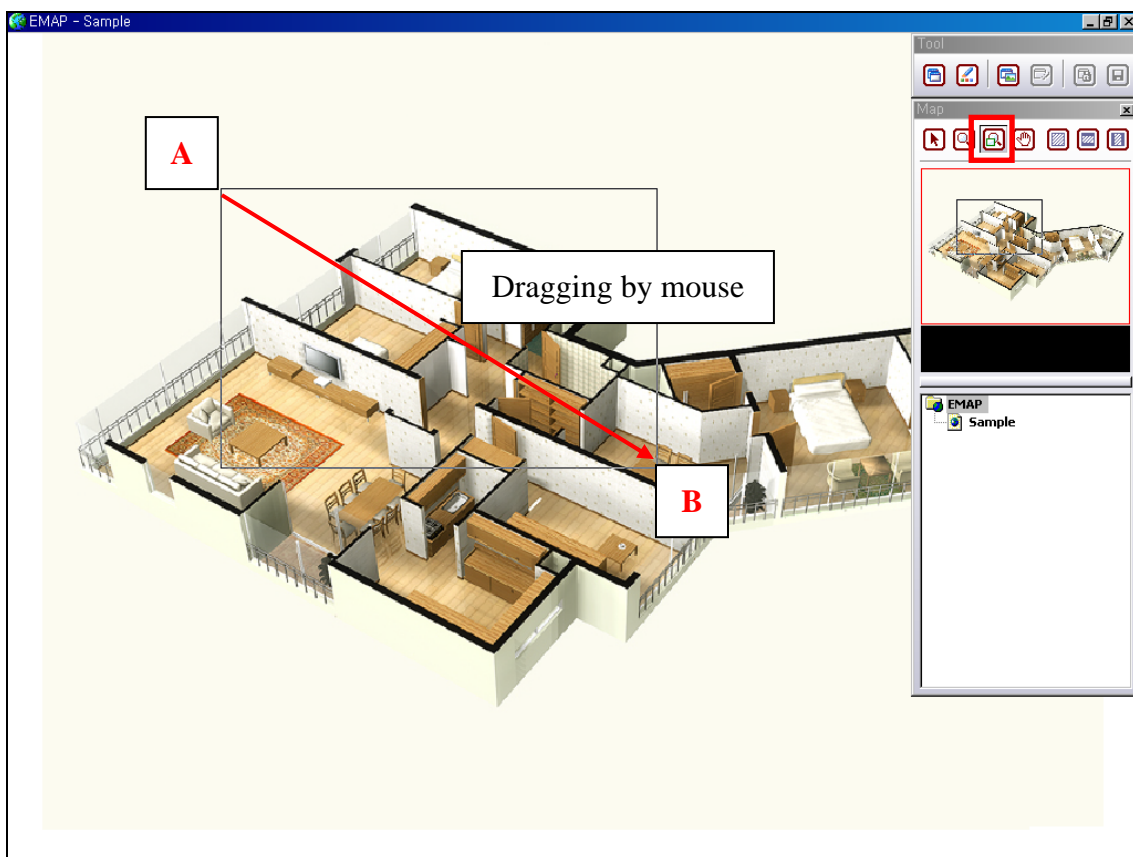
: Show Map Toolbar



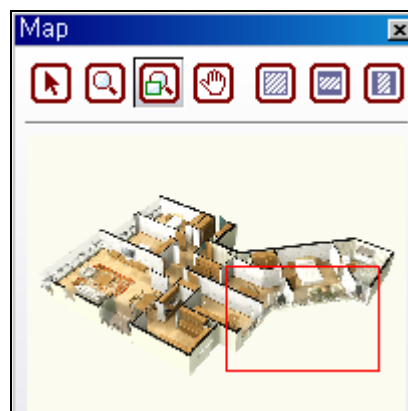
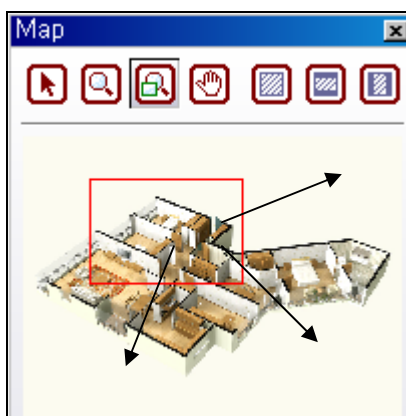
- (1) If you click the red box, Emap Tree disappears.



(2) If you select the second button in red box, you can magnify the map. Whenever you click the left button of mouse, the map becomes bigger. On the other hand, whenever you click the right button of mouse, the map becomes smaller until it returns to the original size.



(3) Select the third button in red box and then drag mouse from Point A to Point B in the main map, and the selected area becomes magnified as below.



(4) When you set a grid for magnifying some area in the main map, the same grid is set in Emap Operator as above. You can move this grid by dragging mouse.



(5) Select the fourth button in red box, and the palm icon appears in the main map. You can move the magnified area by dragging mouse.



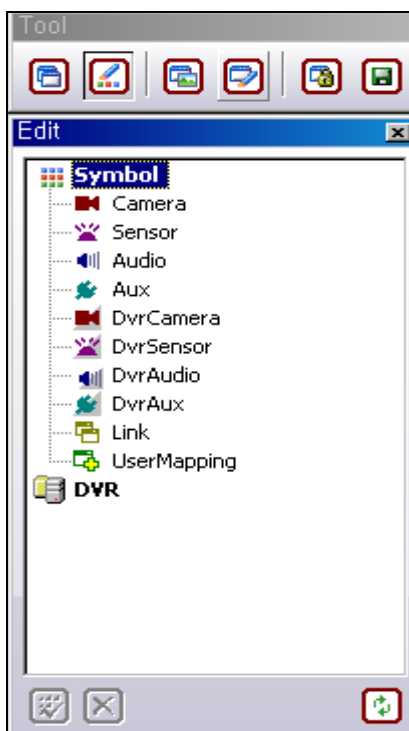
(6) You can fit map image to the size of the monitor screen by using these buttons.



: Show Edit Toolbar

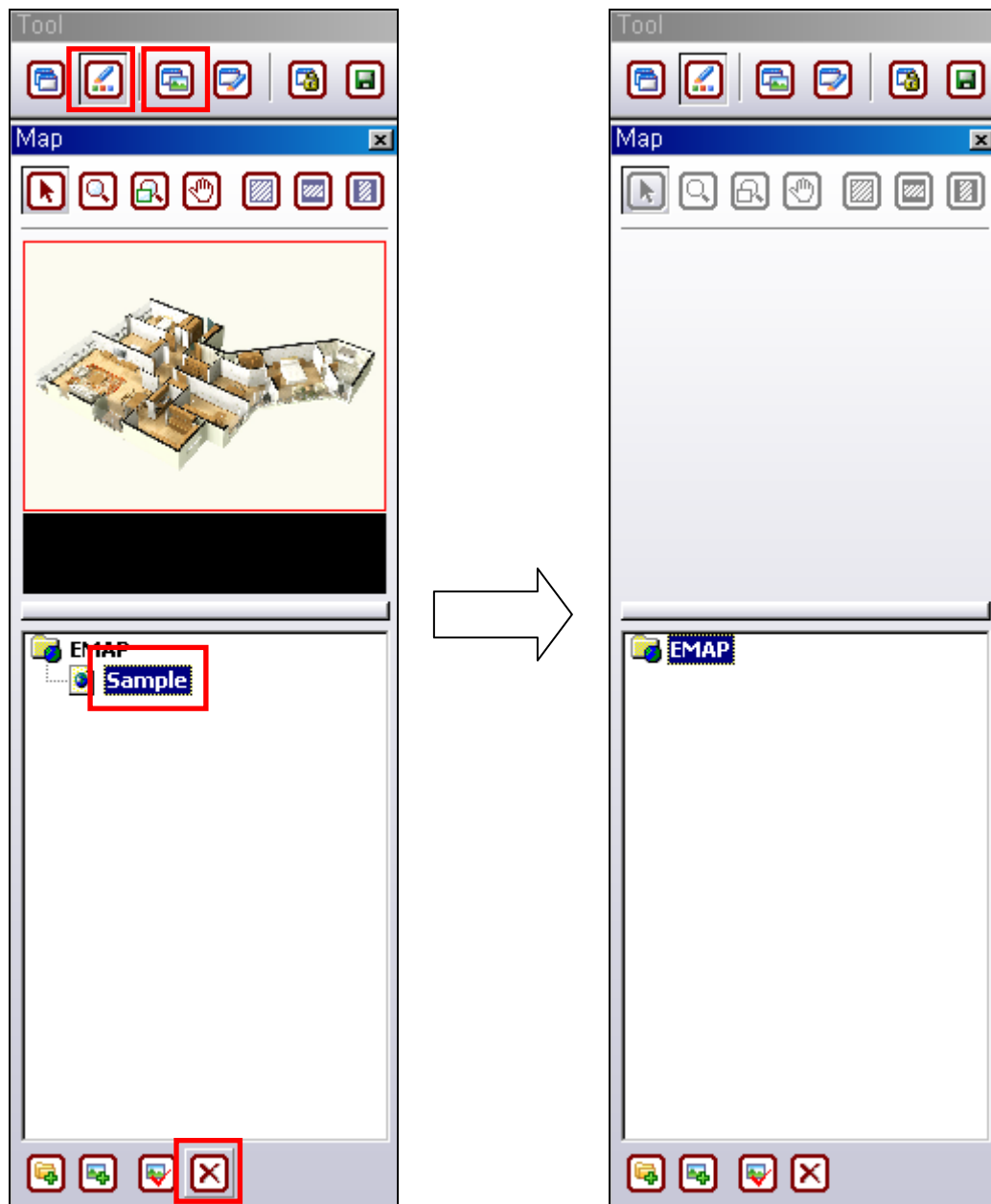


(7) Select the second button and then select the fourth button, and the Edit Toolbar appears as below.




(8) How to use Edit Toolbar is explained in the next [4] HOW TO USE EDIT TOOLBAR.

[3] HOW TO CONSTRUCT EMAP TREE



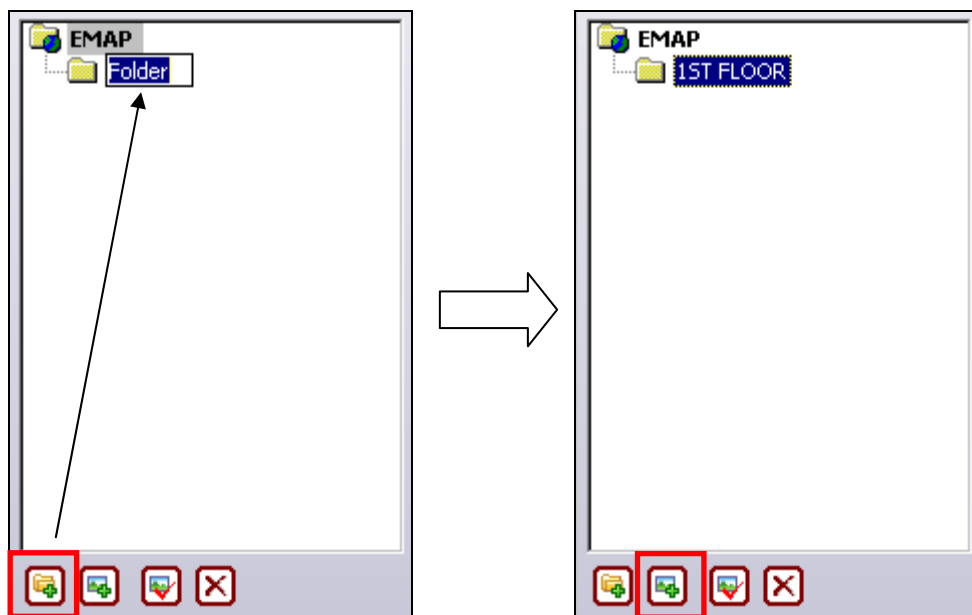
(1) Select the second button among Toolbar buttons and then select the third button, and Emap Operator and Emap Tree appears.


(2) Select 'Sample' in Emap Tree and then select 'Delete button'  in the below part.



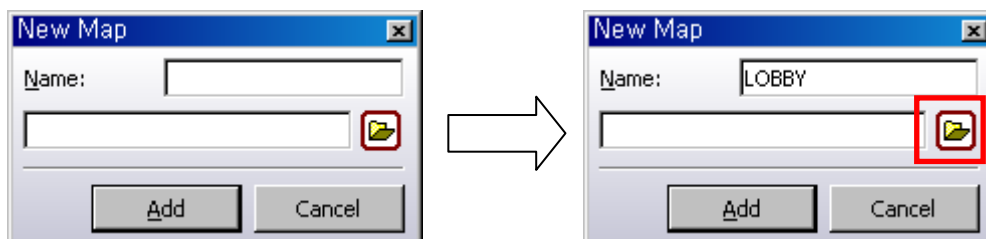
(3) The first button is for adding a new folder, and the second button is for adding a new map, and the third button is for modifying a folder or a map, and the fourth button is for deleting a folder or a map.

(4) For example, 3 units of DVRs are installed in each floor of a building and the first floor consists of Lobby, Mart and Office. In this case, you can make a new folder named as '1ST FLOOR' and add three map images for Lobby, Mart and Office.

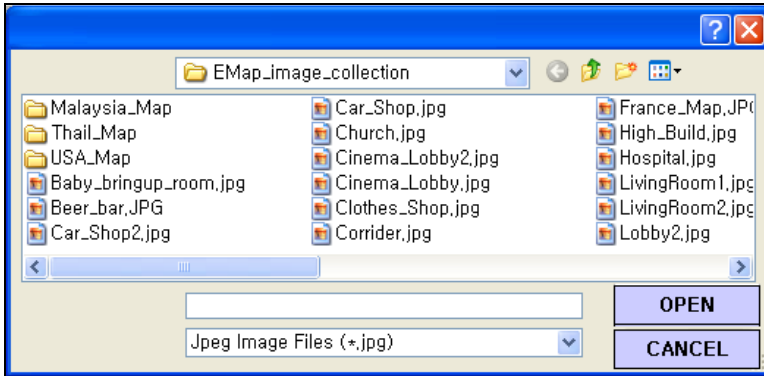


(5) Select the first button, and  appears. Change its name into 1ST FLOOR.

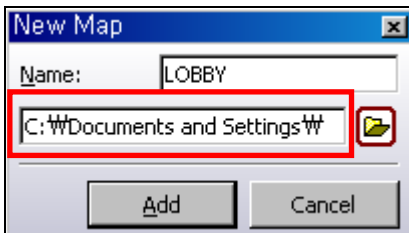
(6) Select the second button, and the below window appears.



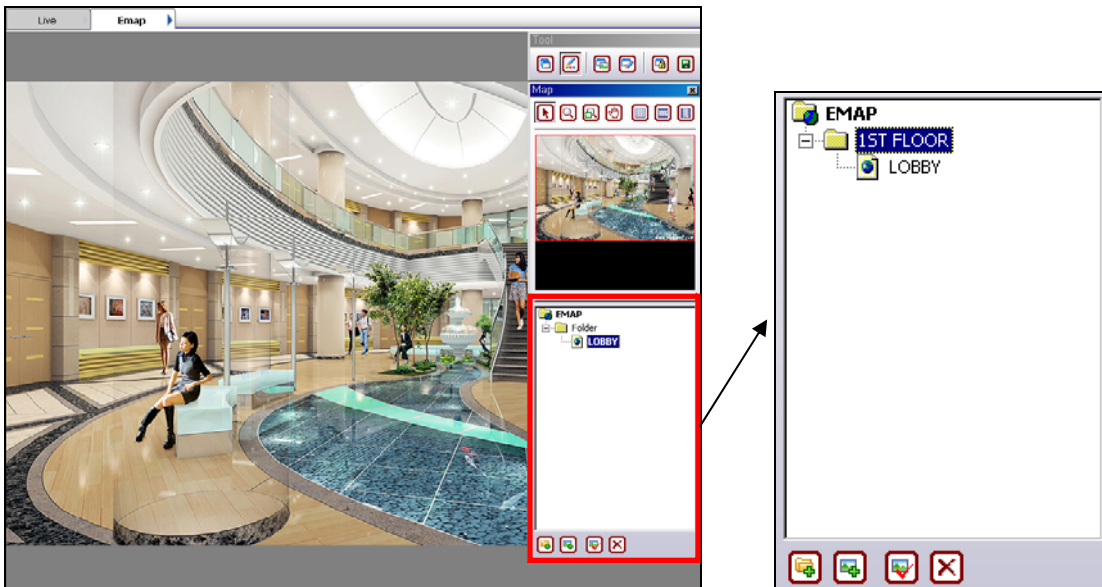
(7) Type the name of emap in 'Name' and then click the red box, and the below window appears.

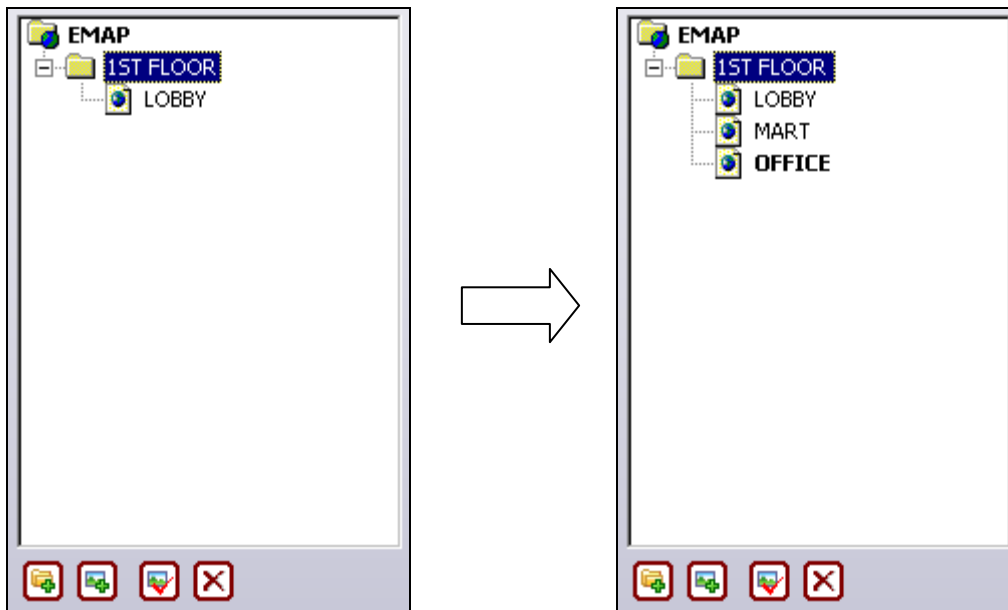


(8) If you have jpg or bmp type of images in your CMS server, select one of them and click 'OPEN', and the image is selected as below.

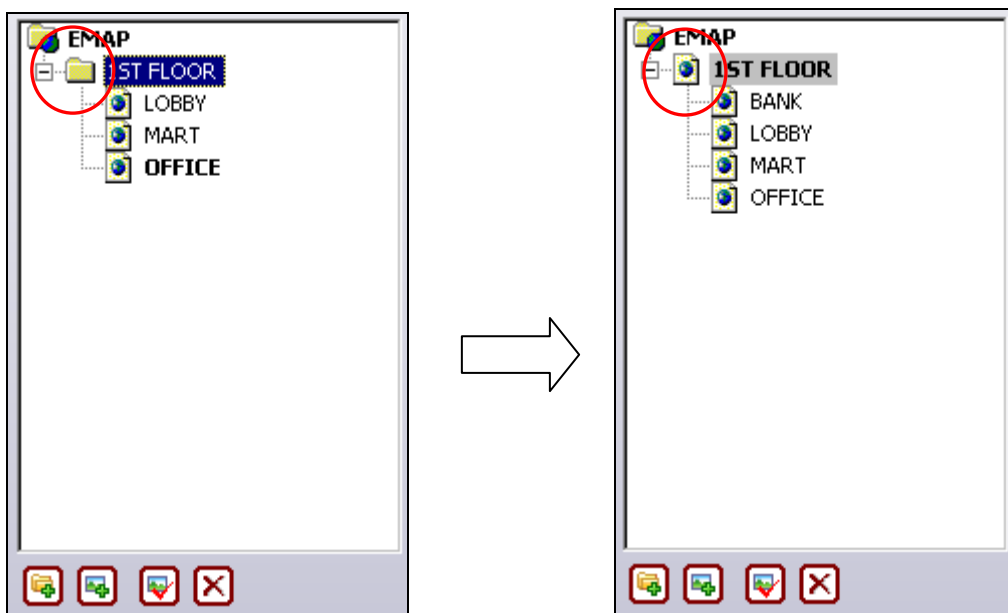


(9) Click 'Add', and 'LOBBY' is listed under '1ST FLOOR' and its image is displayed in the main screen as below.





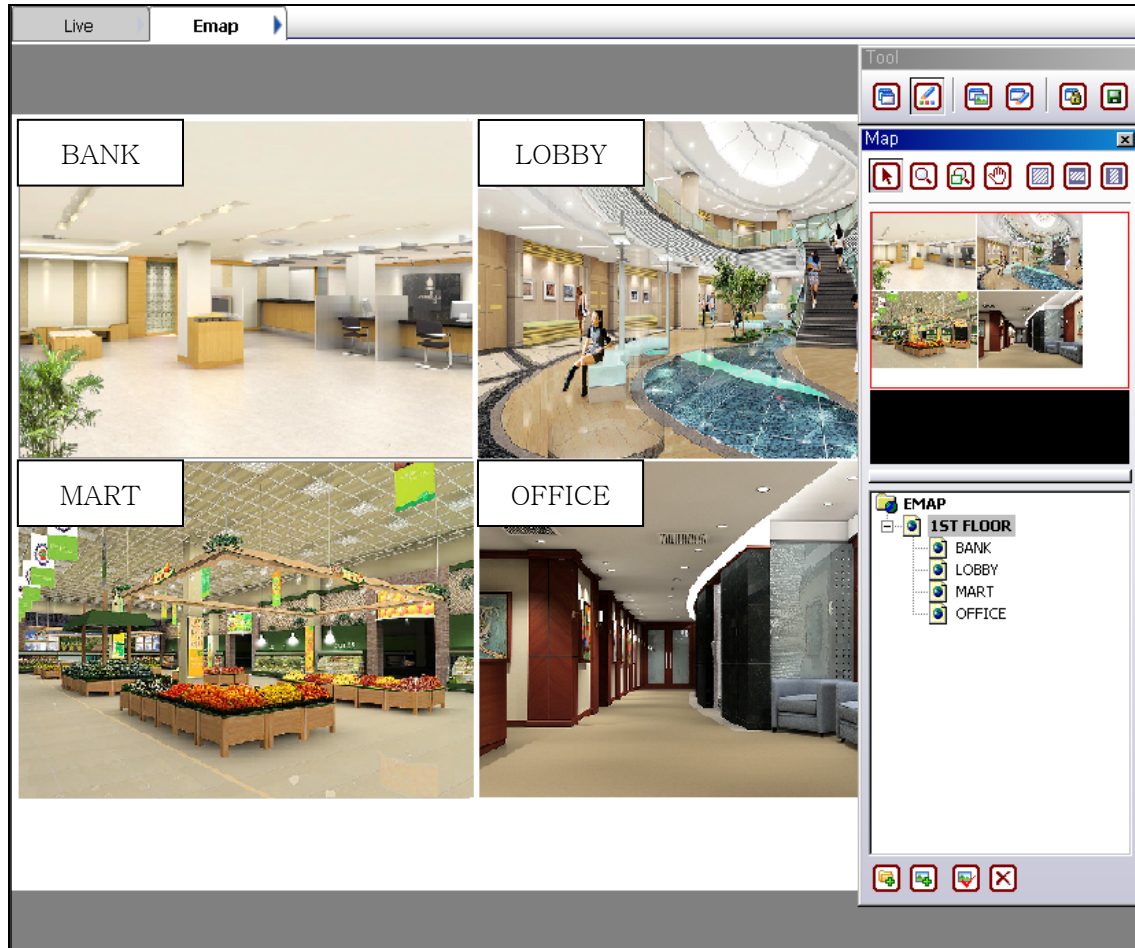
(10) You can add another two emap by the same procedure as above.



(11) If you have a map image of the first floor, you can use it instead of a folder.

(12) Delete folder type of '1ST FLOOR' and then add image type of '1ST FLOOR'.

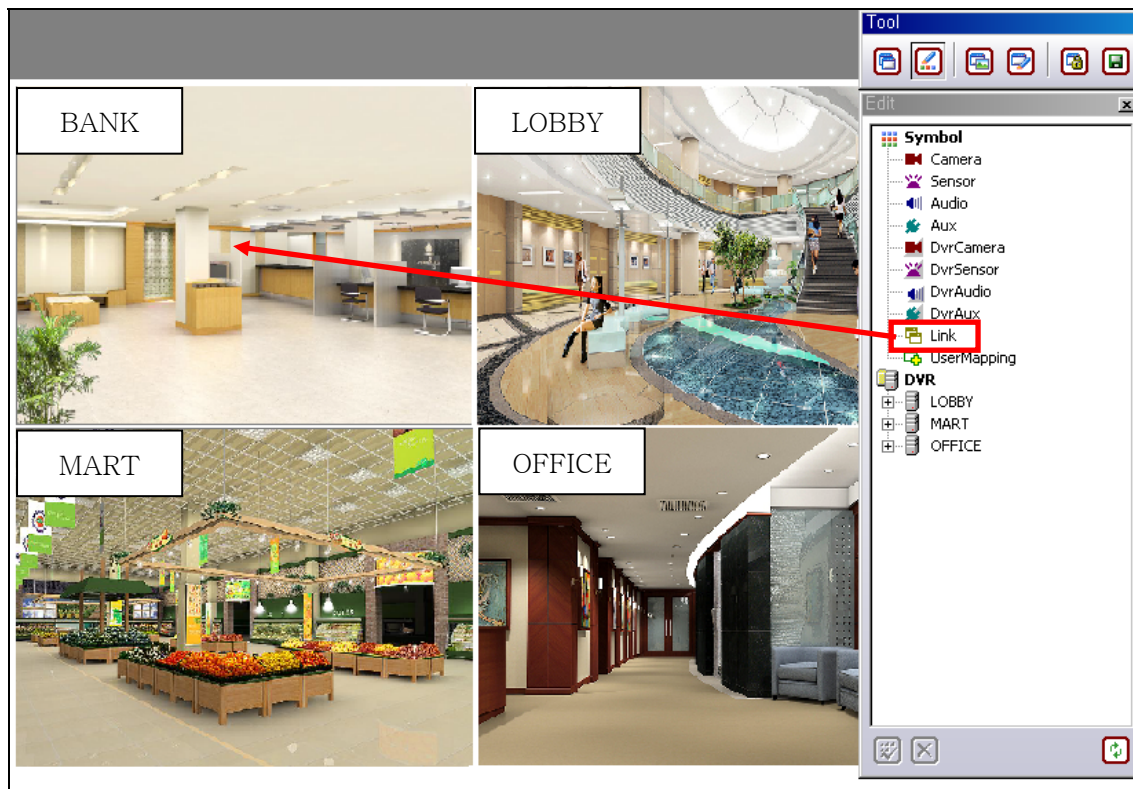
[4] HOW TO USE EDIT TOOLBAR



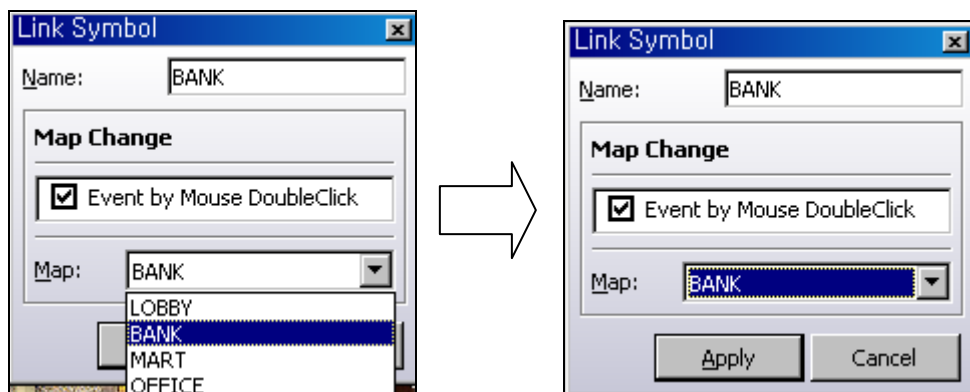
(1) The first floor consists of Bank, Lobby, Mart and Office.



(2) Select the fourth button, and the below Edit Toolbar appears.



(3) Select 'Link' and then drag & drop it on image of 'Bank', and the below window appears.



(4) Type 'BANK' in Name.

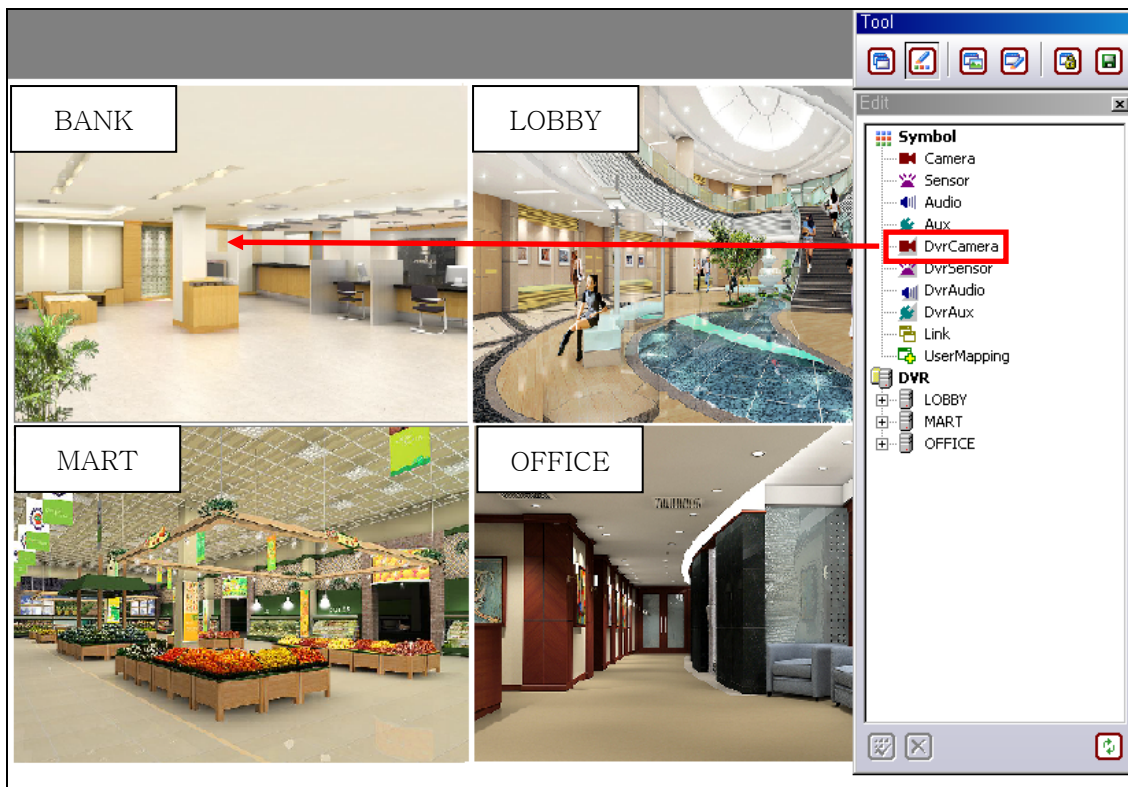
(5) Check in the check box of Map Change.

(6) Select 'BANK' in the map list.

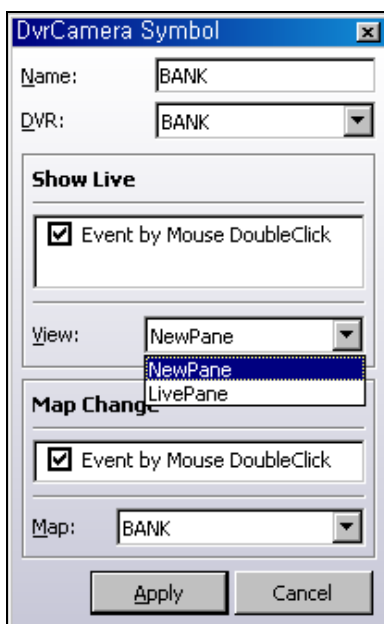
(7) Click 'Apply', and the Link Icon  appears on the map.

(8) If you click Link Icon, you can move from '1ST FLOOR' map to 'BANK' map.

(9) You can install this icon for the other maps by the same procedure.



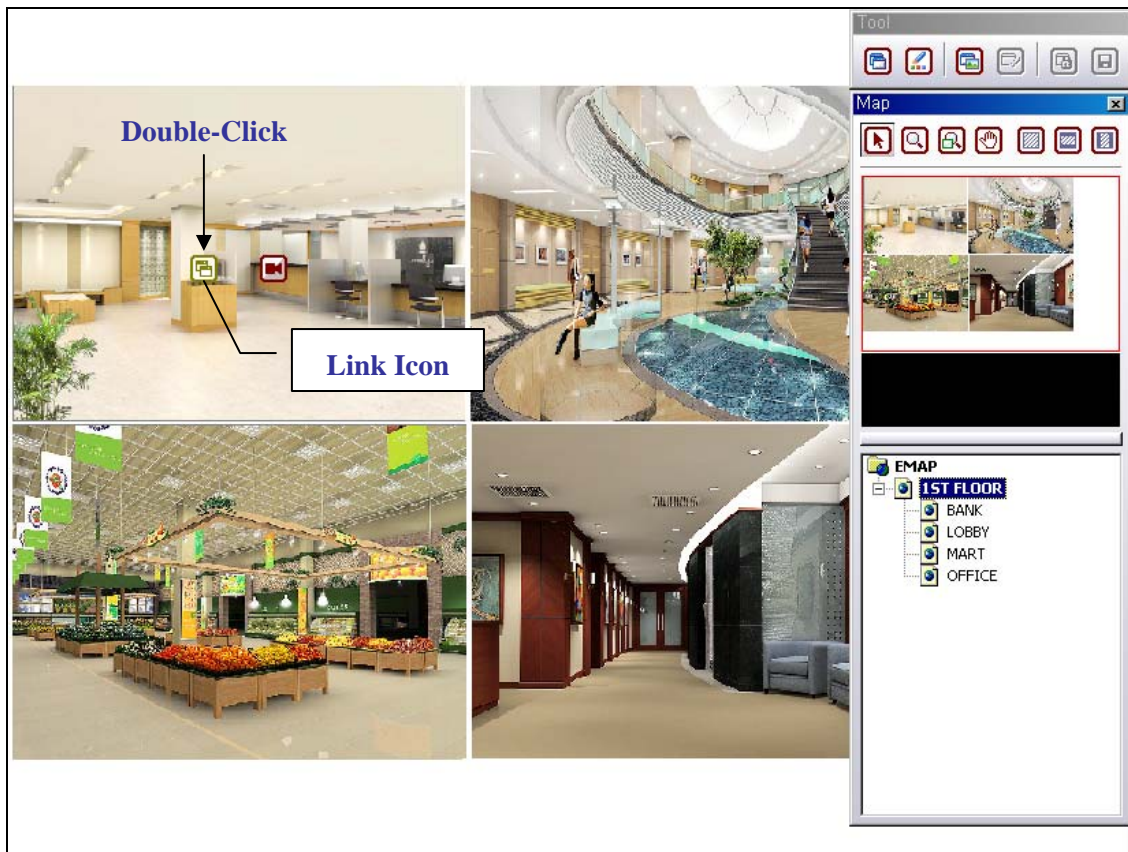
(10) You can use another icon to move from the main map to the sub-map. Select 'DvrCamera' icon and then drag & drop it on the map, and the below window appears.



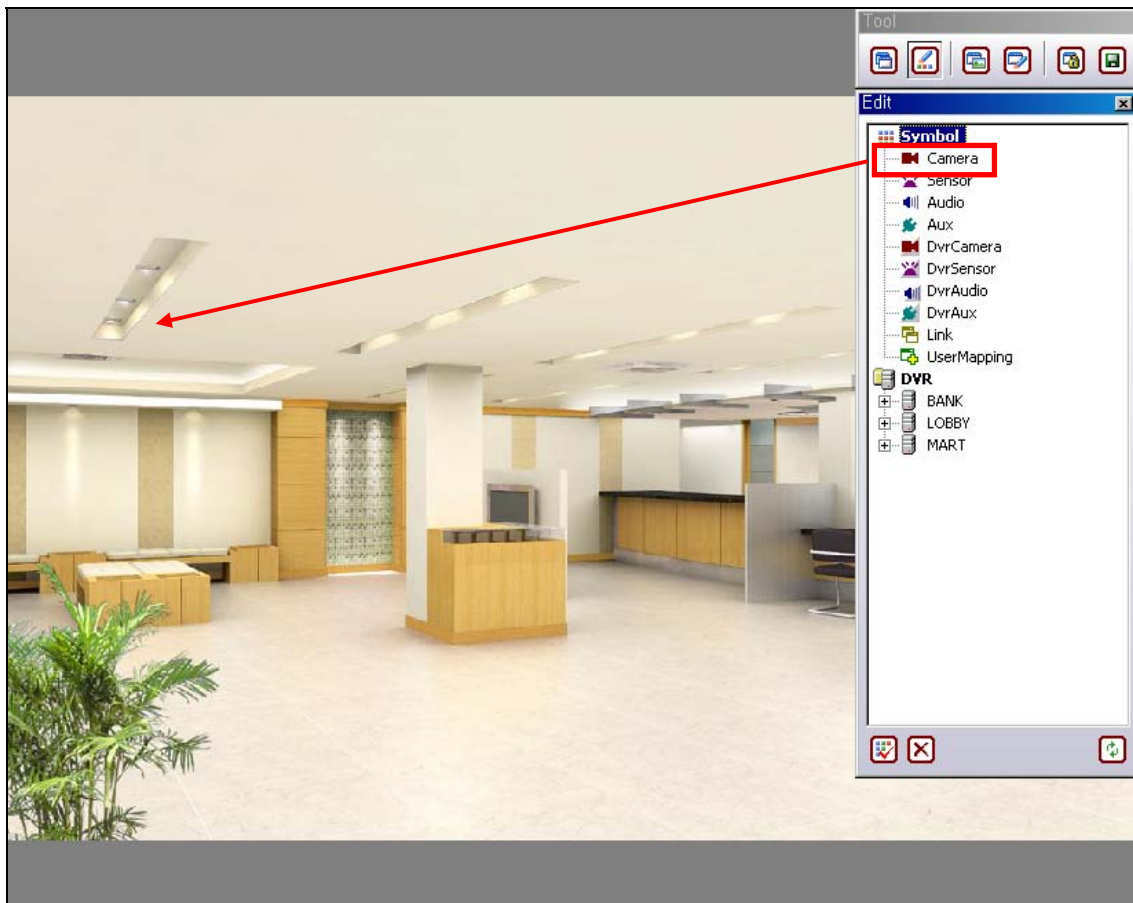
(11) Click 'Apply', and the DvrCamera Icon  appears on the map.

(12) If you click the icon, you can move from the main map to sub-map, in addition, all the cameras images of the DVR are displayed in the Live Screen.

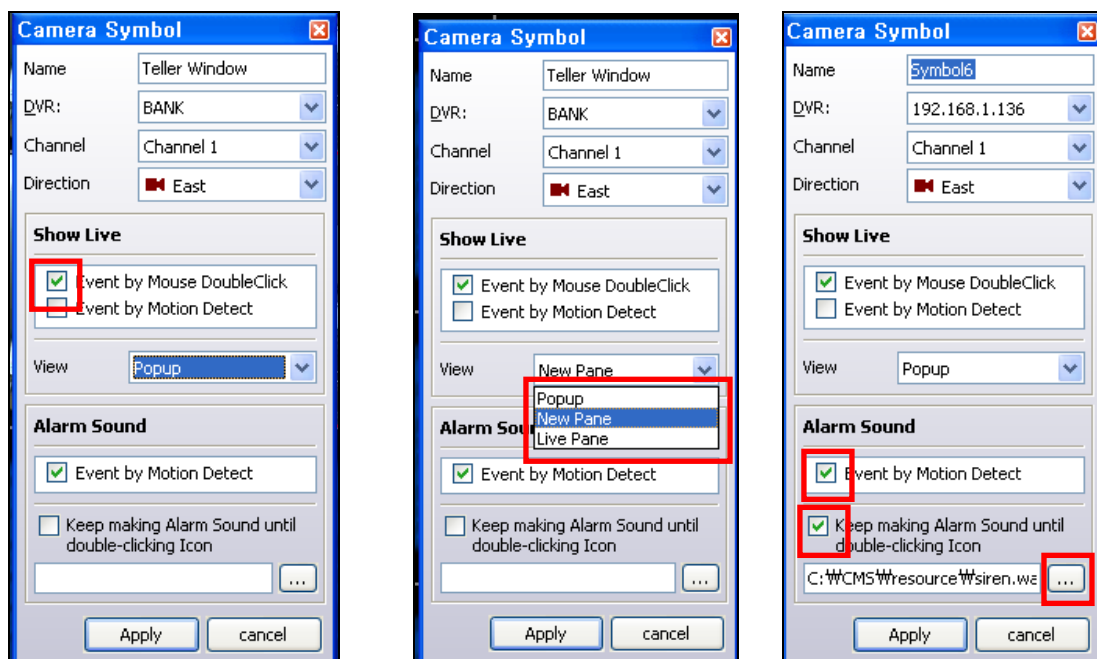
(13) When motion or alarm is detected in some cameras or sensors, this icon starts to flicker at the same time.



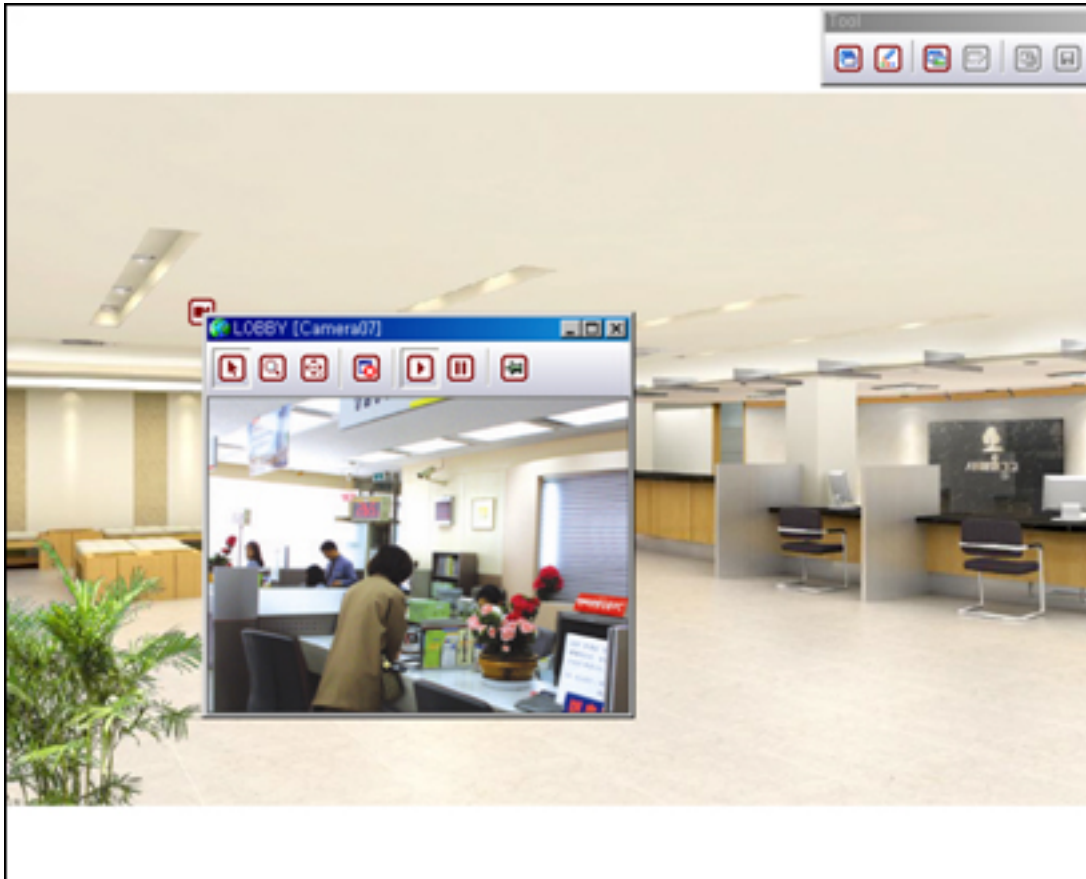
(14) Double-click 'Link' icon, and you can move from '1ST FLOOR' map to 'BANK' map.




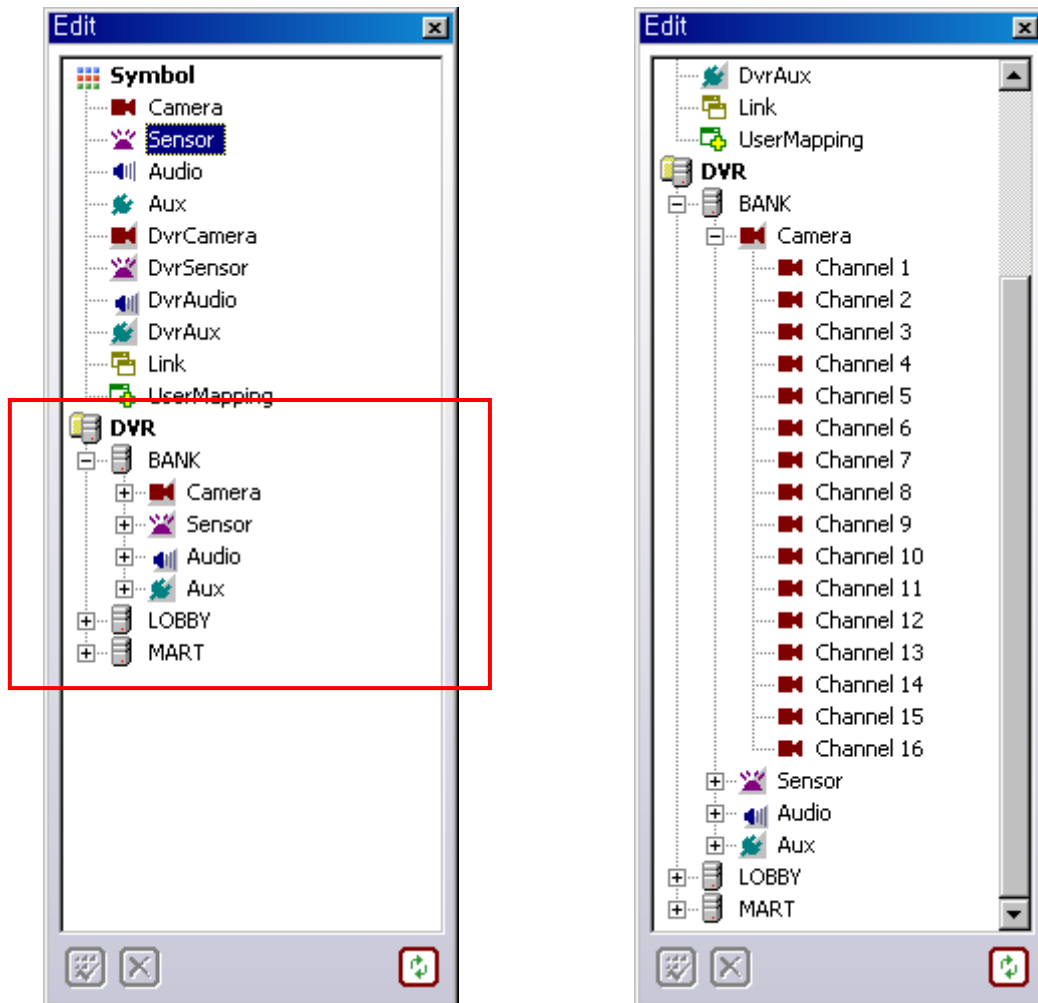
(15) Select 'Camera' icon and then drag & drop it on the map, and the below window appears.



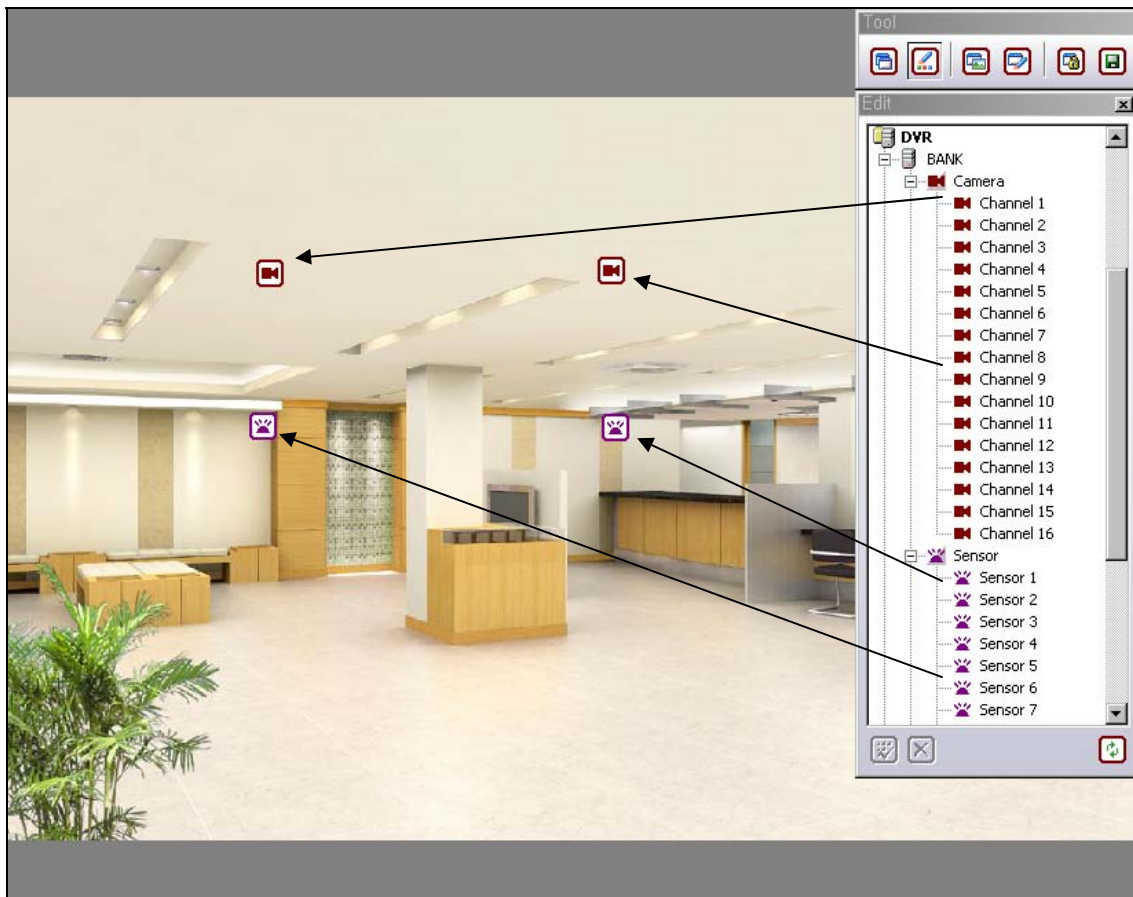
- (16) Type the Camera name, and then select DVR , Channel and Direction.
- (17) Check 'Event by Mouse DoubleClick' in Show Live.
- (18) There are three kinds of options [Popup, New Pane, Live Pane] in 'View'. For example, in case that you select 'Popup', when you double-click camera icon, the camera image pops up as below.



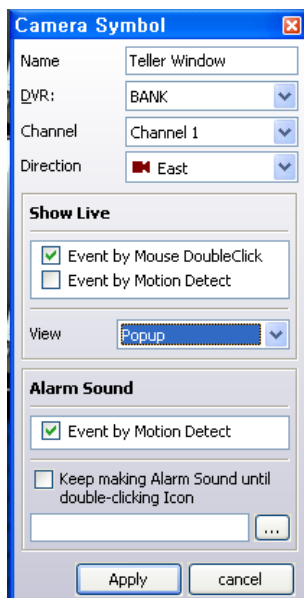
- (19) In case of 'NewPane', when you double-click the camera icon, all cameras images of the DVR which the camera belongs to are displayed beside the Live Pane in the first monitor.
- (20) In case of 'LivePane', when you double-click the camera icon, all cameras images of the DVR which the camera belongs to are displayed in the Live Pane.
- (21) Check 'Event by Motion Detect' in Alarm Sound. In this case, Alarm ring only one time.
- (22) Check 'Keep making Alarm Sound until double-clicking Icon'. In this case, Alarm keep ringing until double-clicking Camera Icon.
- (23) Click this button , You can select a kind of Alarm Sound.
- (24) You can install camera icons, sensor icons, audio icons and other auxiliary equipments icons by the same procedure.



(25) There is the other way to install icons. DVR section shows which DVRs are connected with CMS. You can install icons of DVR by drag & drop as below.

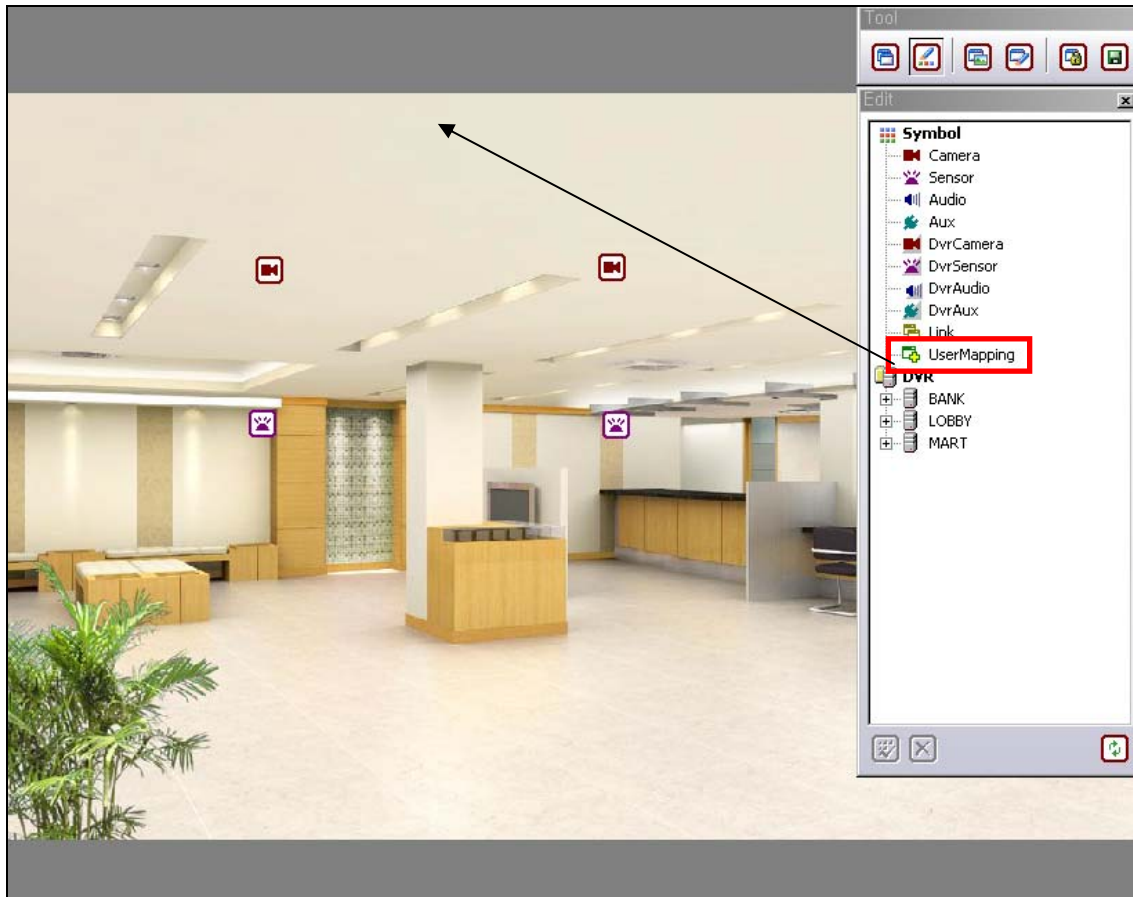


(26) If you drag & drop a certain icon, the below window appears.

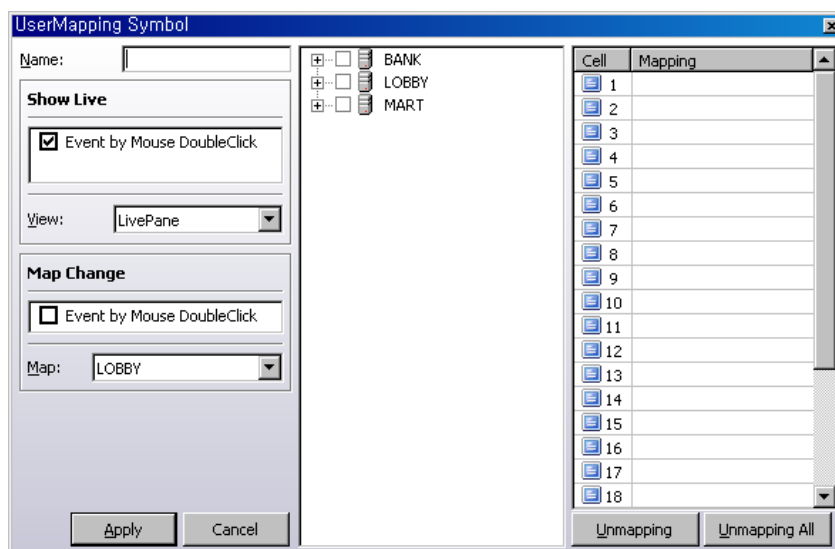


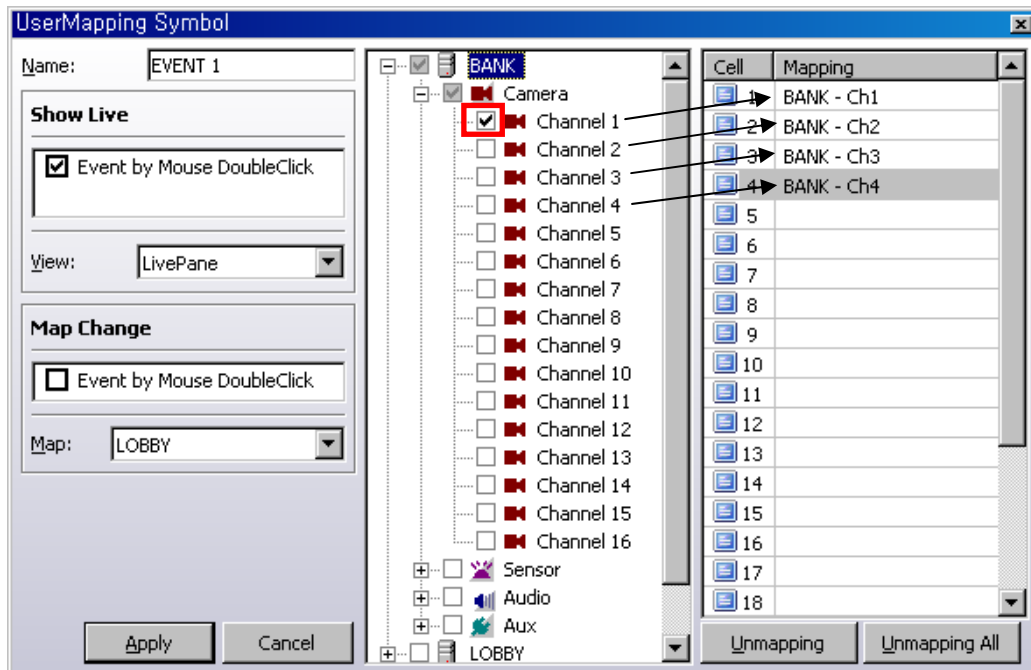
(27) How to fill out is the same as the procedure mentioned from (16) to (23).

[5] HOW TO USE USER-MAPPING

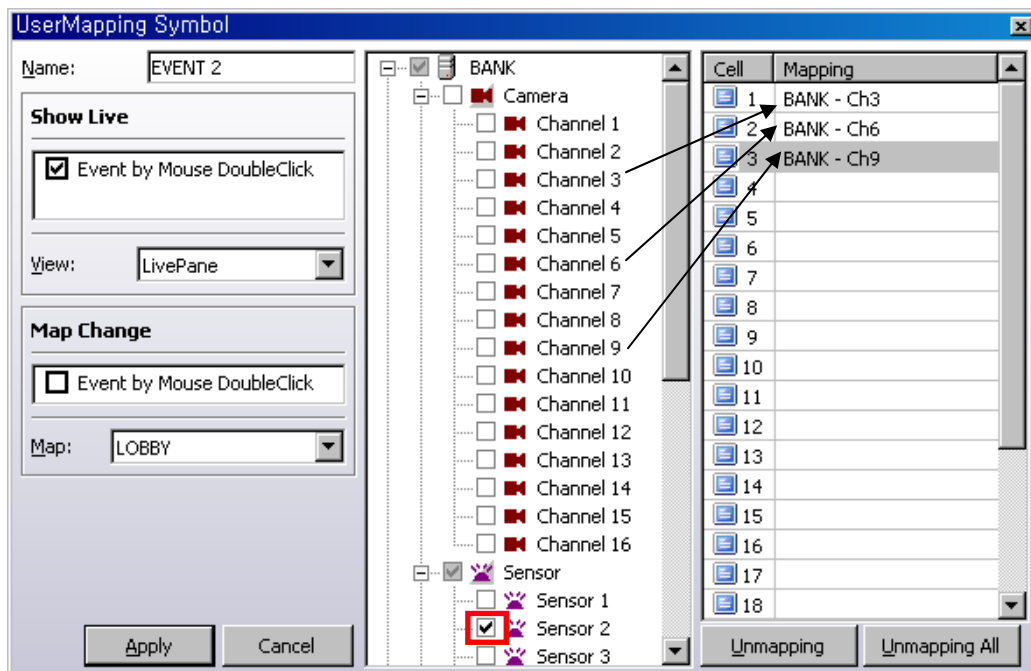


(1) Select 'UserMapping' icon and then drag & drop it on the map, and the below window appears.





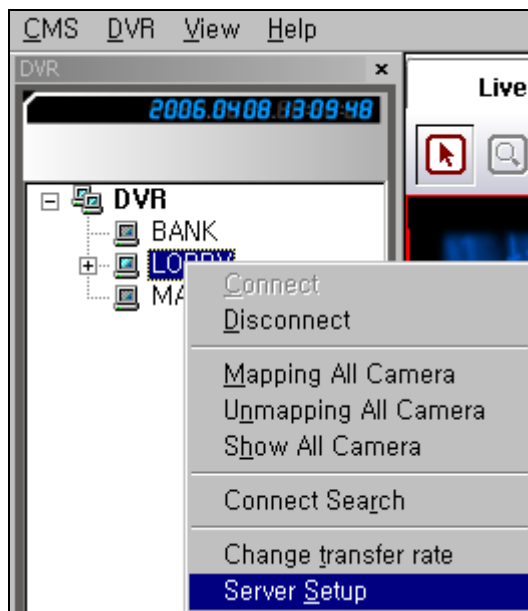
(2) If you want to see a group of specific cameras when a certain event occurs, you can use UserMapping. For example, if you want to see from CH.1 to CH.4 together in Live Pane when motion is detected in CH.1, select 'Channel 1' and drag & drop from Channel 1 to Channel 4 in Mapping List. And then, click 'Apply'



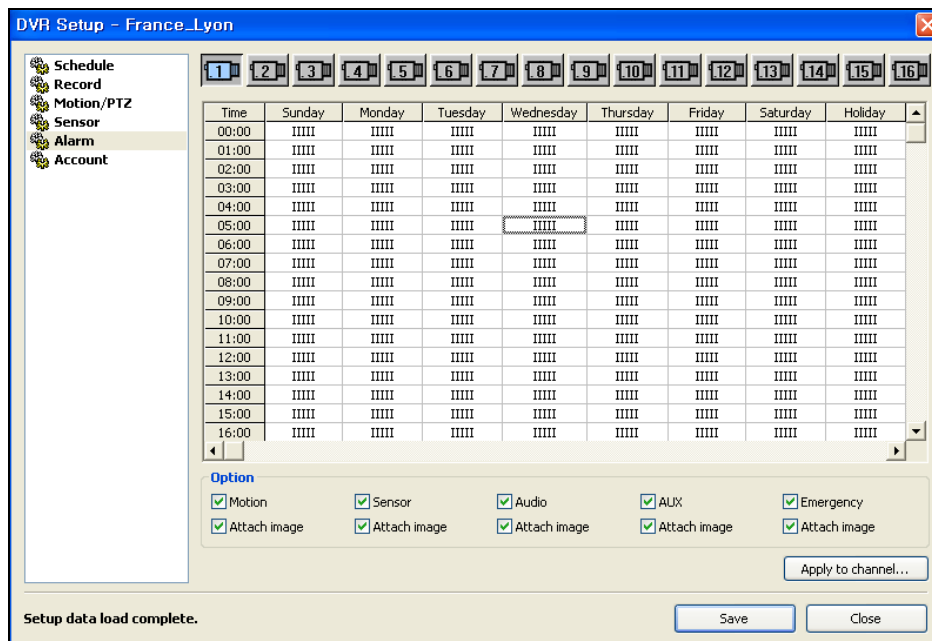
(3) If you want to see CH.3, CH.6 and CH.9 together when sensor 2 are detected, you can set UserMapping as above.

7. HOW TO USE EVENT PANE

[1] SERVER SETUP



(1) Connect one DVR server and then select 'Server Setup', and the below window appears.



(2) Select 'Alarm' in the left part

(3) Select time and day. How to select time and day is as follows.

[a] As clicking 'Time', all time slots and day slots get selected as below.

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Holiday	
00:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
01:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
02:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
03:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
04:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
05:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
06:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
07:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
08:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
09:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
10:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
11:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
12:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
13:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
14:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
15:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
16:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	

[b] As clicking one time slot(02:00), the time slots of the same time get selected as below.

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Holiday	
00:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
01:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
02:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
03:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	
04:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII	

[c] As clicking one day (Monday), all time slots of the day get selected as below.

Time	Sunday	Monday	Tuesday
00:00	IIII	IIII	IIII
01:00	IIII	IIII	IIII
02:00	IIII	IIII	IIII
03:00	IIII	IIII	IIII
04:00	IIII	IIII	IIII
05:00	IIII	IIII	IIII
06:00	IIII	IIII	IIII
07:00	IIII	IIII	IIII
08:00	IIII	IIII	IIII
09:00	IIII	IIII	IIII
10:00	IIII	IIII	IIII
11:00	IIII	IIII	IIII
12:00	IIII	IIII	IIII
13:00	IIII	IIII	IIII
14:00	IIII	IIII	IIII
15:00	IIII	IIII	IIII
16:00	IIII	IIII	IIII

[d] You can select time and day as below by dragging mouse.

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Holiday
00:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
01:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
02:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
03:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
04:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
05:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
06:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
07:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
08:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
09:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
10:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
11:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
12:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
13:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
14:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
15:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII
16:00	IIII	IIII	IIII	IIII	IIII	IIII	IIII	IIII

Option				
<input checked="" type="checkbox"/> Motion	<input checked="" type="checkbox"/> Sensor	<input checked="" type="checkbox"/> Audio	<input checked="" type="checkbox"/> AUX	<input checked="" type="checkbox"/> Emergency
<input checked="" type="checkbox"/> Attach image	<input checked="" type="checkbox"/> Attach image	<input checked="" type="checkbox"/> Attach image	<input checked="" type="checkbox"/> Attach image	<input checked="" type="checkbox"/> Attach image
<input type="button" value="Apply to channel..."/>				

- (4) If you want to receive alarm signal, select types of alarms as you want in the above Option.
- (5) In case that you select Motion & Attach Image, when some motion is detected, the text data and image data of motion event are transmitted into 'Event Pane'
- (6) If you want to apply this setting value to other camera channels, click 'Apply to channel', and the below window appears.

Select Channel	
<input checked="" type="checkbox"/> Channel 1	<input checked="" type="checkbox"/> Channel 9
<input type="checkbox"/> Channel 2	<input checked="" type="checkbox"/> Channel 10
<input checked="" type="checkbox"/> Channel 3	<input checked="" type="checkbox"/> Channel 11
<input checked="" type="checkbox"/> Channel 4	<input type="checkbox"/> Channel 12
<input type="checkbox"/> Channel 5	<input checked="" type="checkbox"/> Channel 13
<input type="checkbox"/> Channel 6	<input type="checkbox"/> Channel 14
<input type="checkbox"/> Channel 7	<input checked="" type="checkbox"/> Channel 15
<input type="checkbox"/> Channel 8	<input type="checkbox"/> Channel 16
<input type="button" value="All setting"/> <input type="button" value="All clear"/> <input type="button" value="OK"/> <input type="button" value="Cancel"/>	

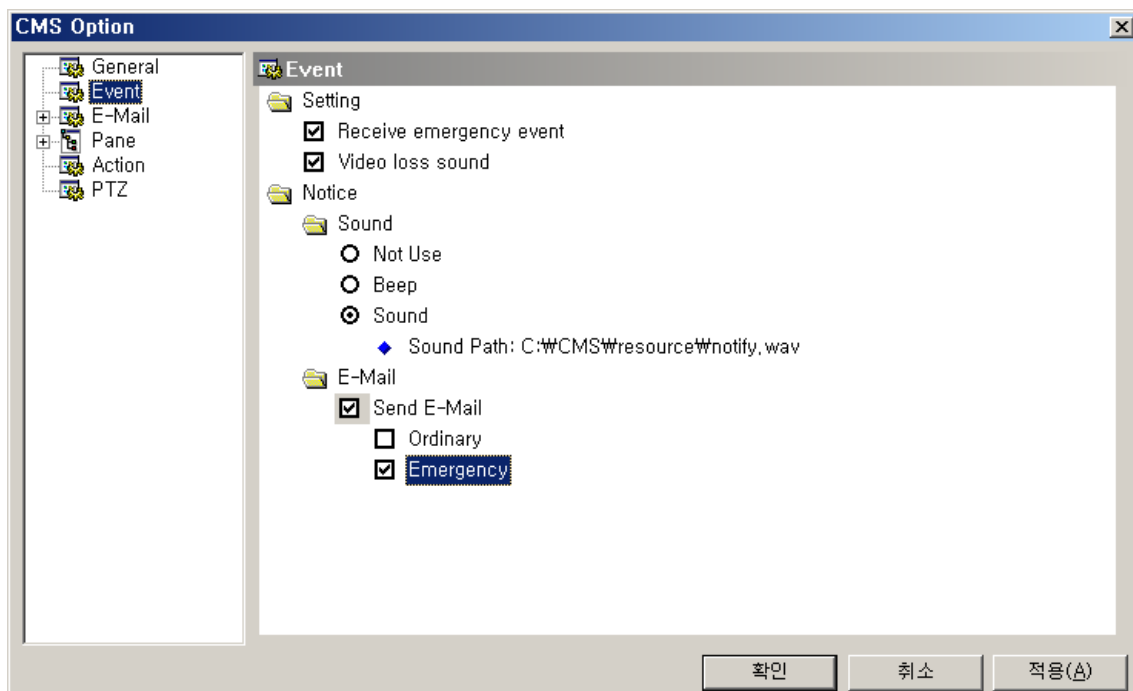
(7) Select channels as you want and click 'OK'

(8) If you want to select all channels, click 'All setting'. While, if you want to remove all selections of channels, click 'All clear'

[2] ALARM SOUND



(1) Select 'Option' in CMS menu, and the below window appears.



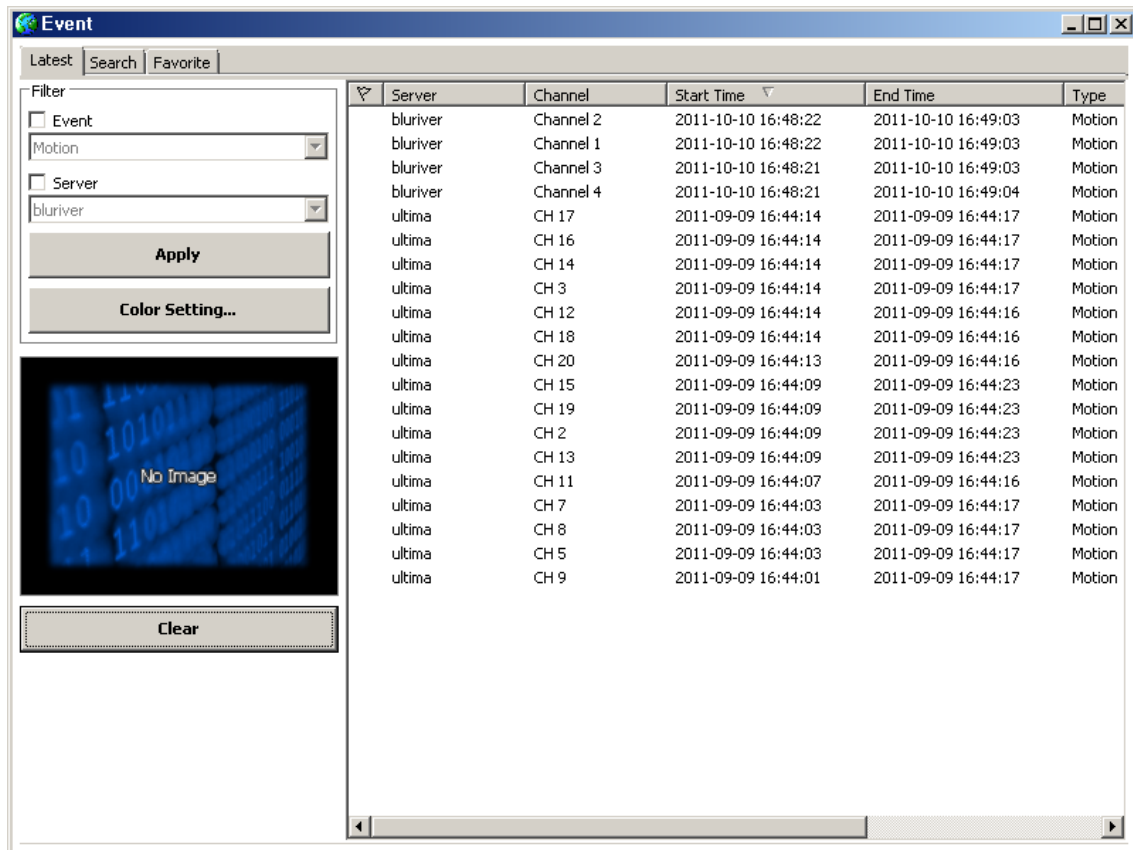
(2) Select 'Sound' in 'Notice' and click 'Apply' and then click 'OK'

(3) Whenever some event occurs, default alarm sound is supposed to come out.

[3] ENTERING EVENT PANE



(1) Select 'Show Event Pane' in View menu, and Event Screen appears as below.





(2) Click 'Event', and two hidden buttons appears.

(3) To detach Event Screen from the main screen and relocate it to the other monitor, select 'Floating'.

[4] RECEIVING EVENT DATA

Event Image Count: 10 Size: 160x120

channel 18 France_Lyon, 12

Event List

Filter

Event: [All Events] ▼

DVR: [All DVRs] ▼

Flag: [All Flags] ▼

Memo:

Reset Apply

No.	DVR	Camera	Start Time	End Time
1	France_Lyon	Camera11	2005-05-10 AM 10:14:34	2005-05-10 AM 10:14:43
2	France_Lyon	Camera14	2005-05-10 AM 10:14:45	2005-05-10 AM 10:15:34
3	France_Lyon	Camera11	2005-05-10 AM 10:14:46	2005-05-10 AM 10:15:34
4	France_Lyon	Camera04	2005-05-10 AM 10:14:52	2005-05-10 AM 10:15:35
5	France_Lyon	Camera07	2005-05-10 AM 10:14:52	2005-05-10 AM 10:15:35
6	France_Lyon	Camera14	2005-05-10 AM 10:15:40	2005-05-10 AM 10:15:53
7	France_Lyon	Camera07	2005-05-10 AM 10:15:40	2005-05-10 AM 10:15:54
8	France_Lyon	Camera04	2005-05-10 AM 10:15:42	2005-05-10 AM 10:15:56
9	France_Lyon	Camera11	2005-05-10 AM 10:15:42	2005-05-10 AM 10:15:55
10	France_Lyon	Camera07	2005-05-10 AM 10:16:09	2005-05-10 AM 10:17:41
11	France_Lyon	Camera14	2005-05-10 AM 10:16:09	2005-05-10 AM 10:16:18
12	France_Lyon	Camera04	2005-05-10 AM 10:16:09	2005-05-10 AM 10:17:42
13	France_Lyon	Camera11	2005-05-10 AM 10:16:10	2005-05-10 AM 10:17:42
14	France_Lyon	Camera14	2005-05-10 AM 10:16:21	2005-05-10 AM 10:18:38
15	France_Lyon	Camera12	2005-05-10 AM 10:16:59	2005-05-10 AM 10:17:08
16	France_Lyon	Camera16	2005-05-10 AM 10:16:59	2005-05-10 AM 10:17:08
17	France_Lyon	Camera09	2005-05-10 AM 10:16:59	2005-05-10 AM 10:17:08

(1) In case that Event occurs in remote DVR servers, its image data appears in channel ①.

(2) In case that another event occurs, the first image data is transferred into channel ② and the latest second image data appears in channel ①.

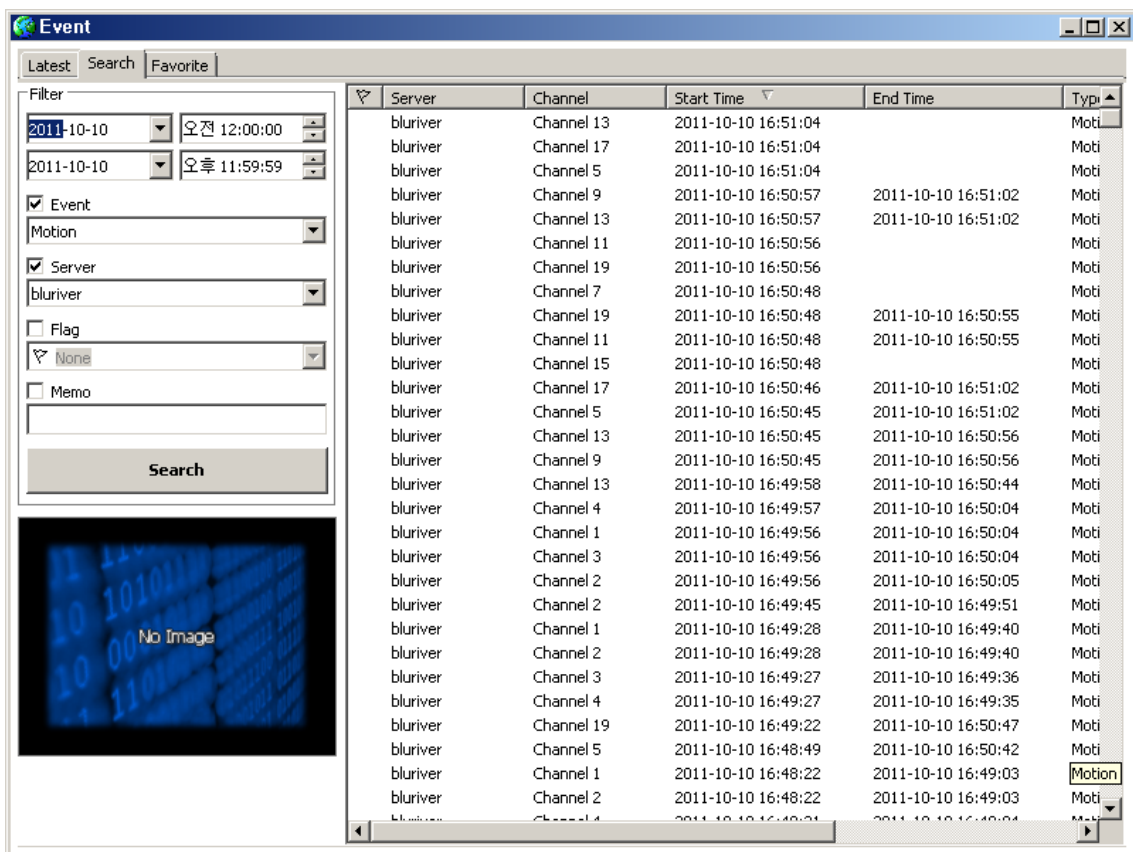
(3) According to order of time, event image data is transferred like ① → ② → ③

(4) Event text data is described in the Excel Sheet.



(5) Double-click the transmitted event image, and all the images of the DVR which the event image belongs to are displayed in Live Screen.

[5] SEARCHING EVENT DATA



(1) To search & playback images of the time when an event occurred, double-click a text data in the event list, and Search screen appears and the motion images relating to the event are playback as below.



[6] FILTERING TEXT DATA



(1) Select date in the Calendar and then click 'search', and text data made in the selected date are sorted out in the event list.

Filter

2011-10-10 오전 12:00:00

2011-10-10 오후 11:59:59

☒ Event

Motion

Motion
VideoLoss
Sensor
Auxiliary
Audio
Emergency
Connection

☐ Memo

Search

(2) You can sort out text data by event type. Select event type and click 'search'.

Filter

2011-10-10 오전 12:00:00

2011-10-10 오후 11:59:59

☒ Event

Motion

☒ Server

bluriver

☒ Flag

None

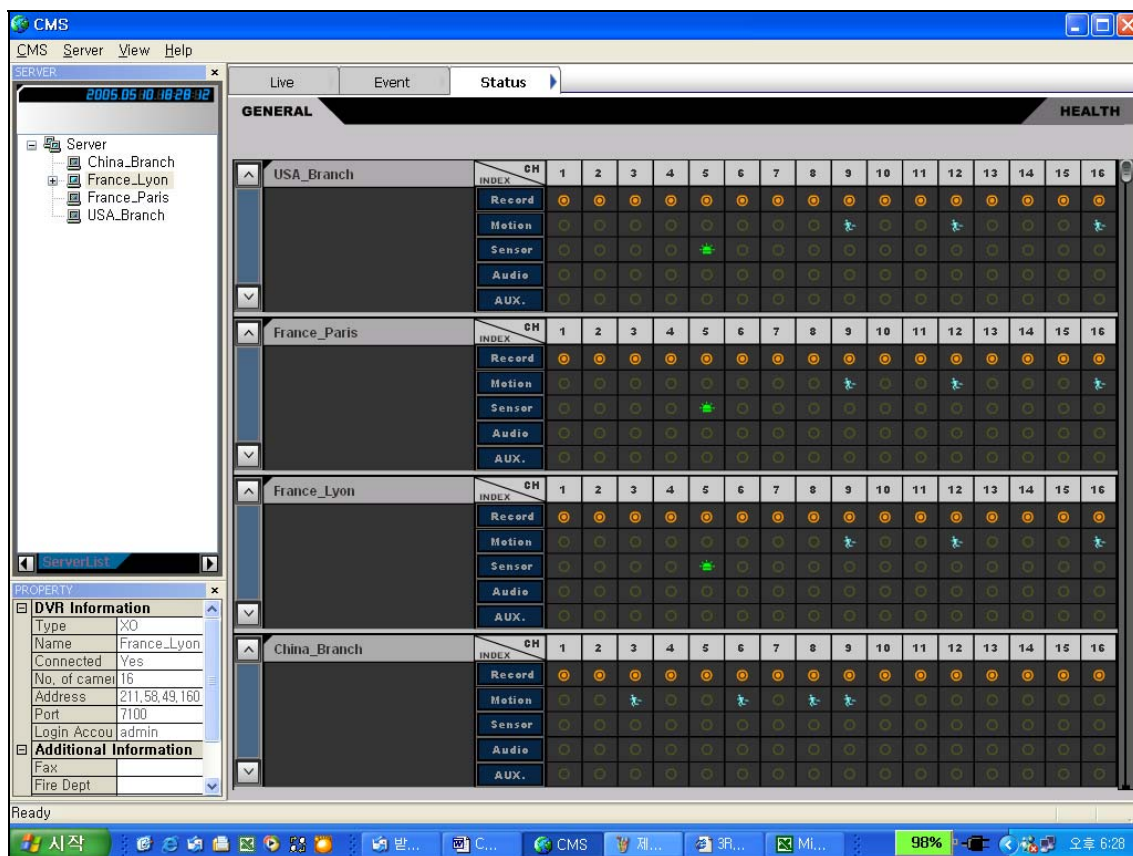
None
Red
Blue
Yellow
Green
Violet
All

(3) You can sort out text data by importance or priority. Select Flag type and click 'search'.

8. HOW TO USE STATUS PANE



(1) Select 'Status Pane' in View menu, and the below window appears.



CH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
INDEX																
Record																
Motion																
Sensor																
Audio																
AUX.																

(2) While image is recorded or Motion is detected or Sensor works or Audio is recorded or Auxiliary equipment linked with DVR works, their icons get highlighted.

Status

GENERAL

HEALTH

LEVEL	DVR_NAME	TRANS	HDD	LAST UPDATE
	BANK		92 %	2007-07-13 11:00:08
	LOBBY		84 %	2007-07-13 11:00:08
	MART		86 %	2007-07-13 11:00:11

(3) If you want to check health status of DVR servers installed in remote sites, click 'Health'

GENERAL				HEALTH
LEVEL	DVR_NAME	TRANS	HDD	LAST UPDATE
	BANK		92 %	2007-07-13 11:00:08
	LOBBY		84 %	2007-07-13 11:00:08
	MART		86 %	2007-07-13 11:00:11

(4) This Table shows information on Transmission status, HDD usage and Local time of remote DVR servers.

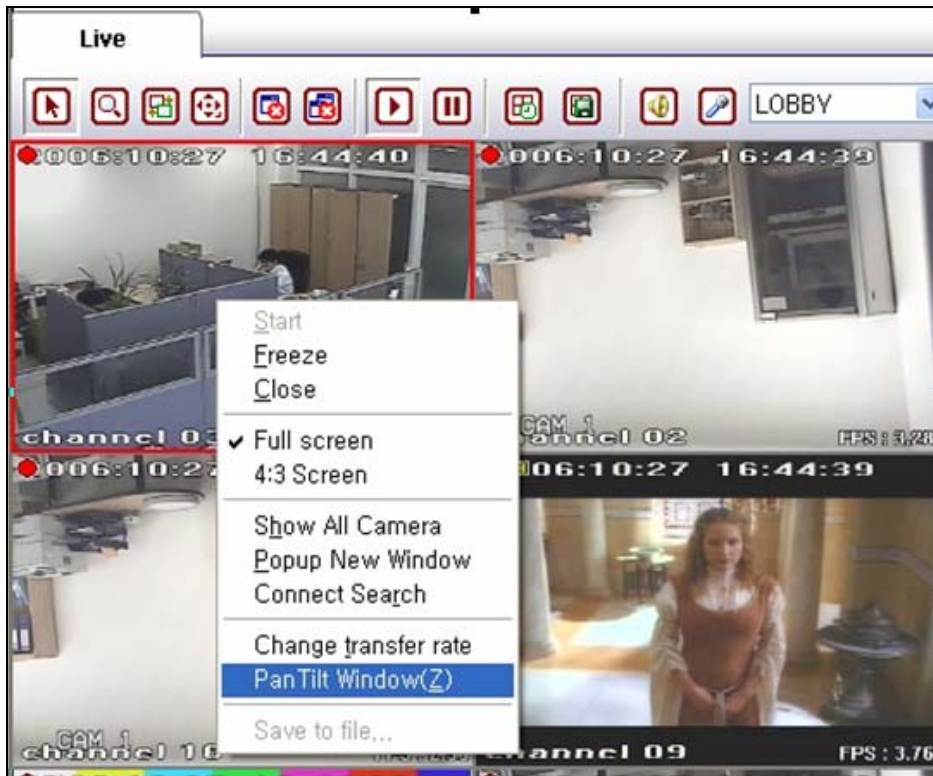
TRANS		
●	●	●
●	●	●
●	●	●
●	●	●

(5) 'TRANS' shows how many users link with DVR through CMS. CMS allows up to 3 persons to access DVR at the same time.

HDD	
	90 %
	90 %
	90 %
	91 %

(6) 'HDD' shows how many percentage of HDD capacity recording data occupy.

9. HOW TO CONTROL PTZ CAMERA

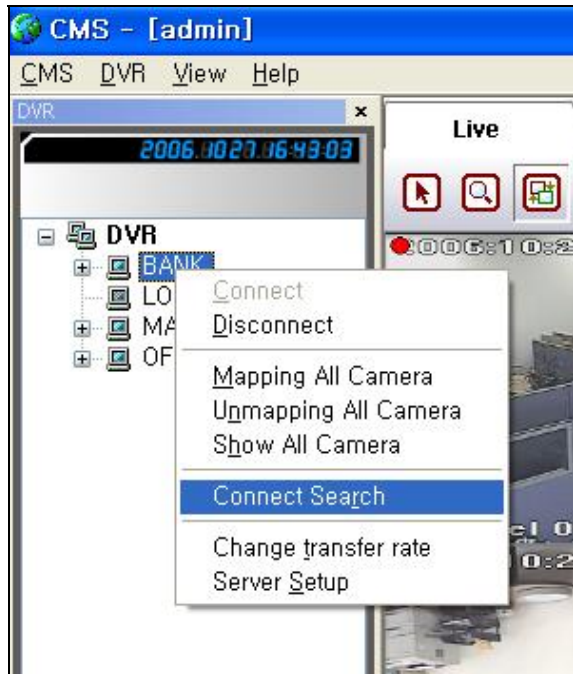


- (1) Select the channel connected with PTZ camera in the Live Screen and then click the right button of mouse.
- (2) Select 'Pan Tilt Window(Z)' in the menu, and PTZ controller appears as below.



- (3) How to use this controller in CMS is the same as how to use it in DVR. You can find how to use it in DVR user manual.

10. HOW TO BACK UP

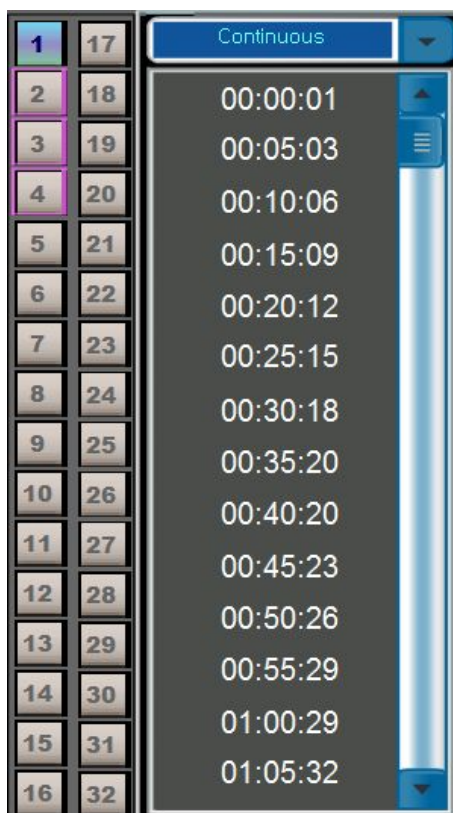


- (1) Select the DVR you want to back up in the Live Screen and then click the right button of mouse.
- (2) Select 'Connect Search' in the menu, and the Search Pane appears as below.

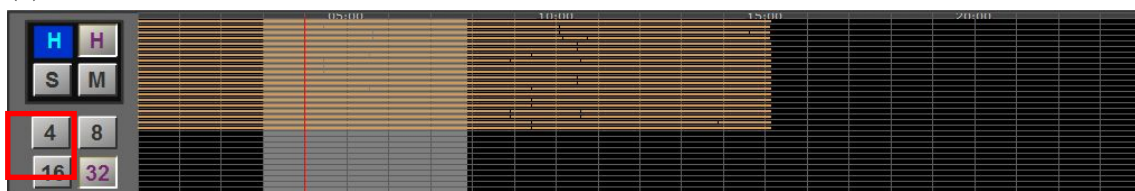




(3) Select the Date you want to back up.

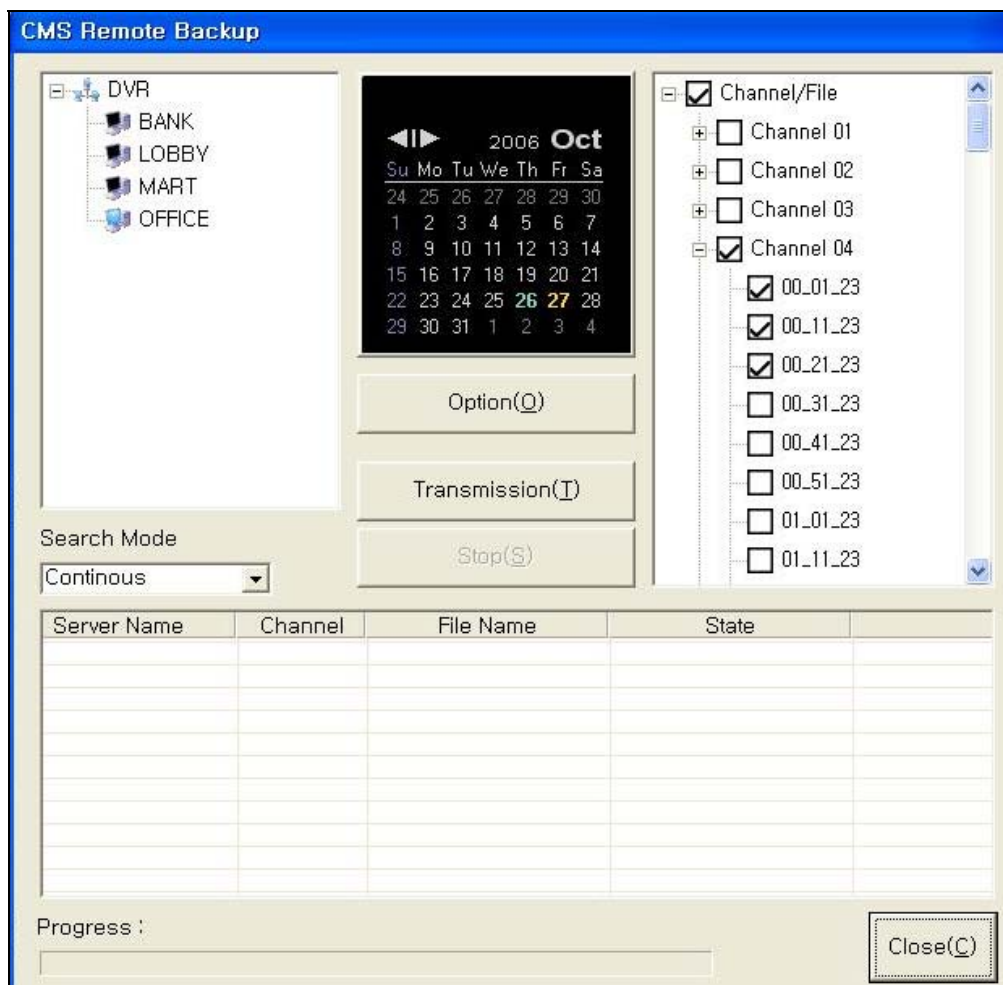


(4) Select the channel Number.



(5) Make the Range for backup by dragging mouse with pressing the right button of mouse.

(6) Select 'Remote Backup', and the below window appears.



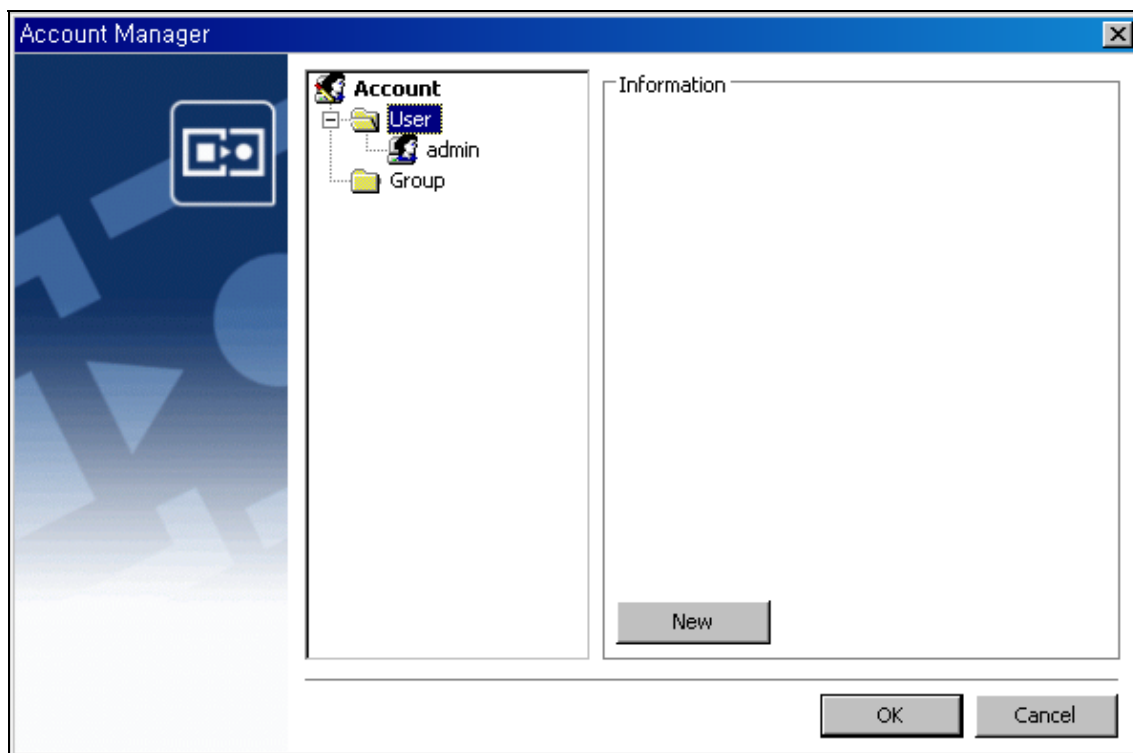
(7) Select ‘Transmission(T)’, and backup for the selected image files starts.

(8) When Progress is over, click 'Close(C)'.

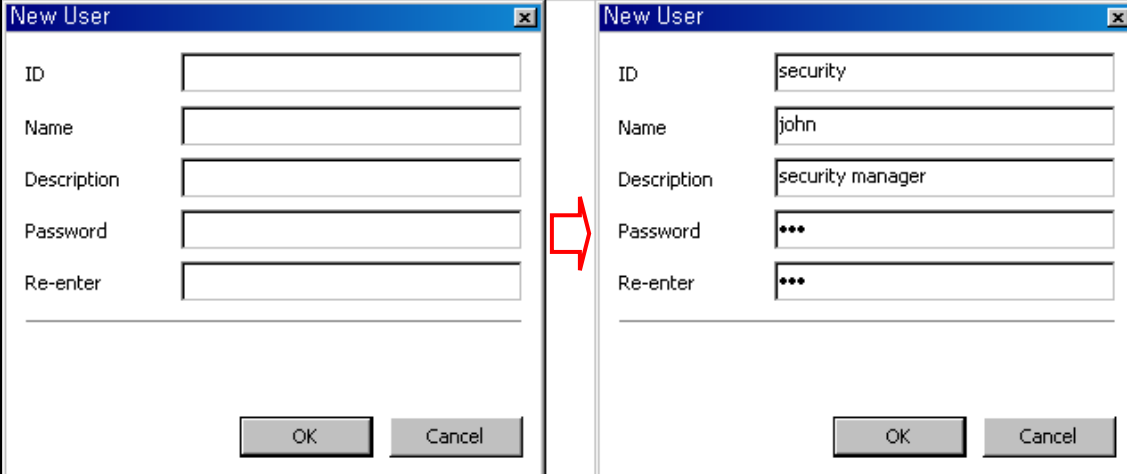
11. HOW TO USE ACCOUNT MANAGER.



(1) Select 'Account Manager' in CMS menu, and the below window appears.



(2) If you want to add a new user, select 'New' and the below window appears as below.

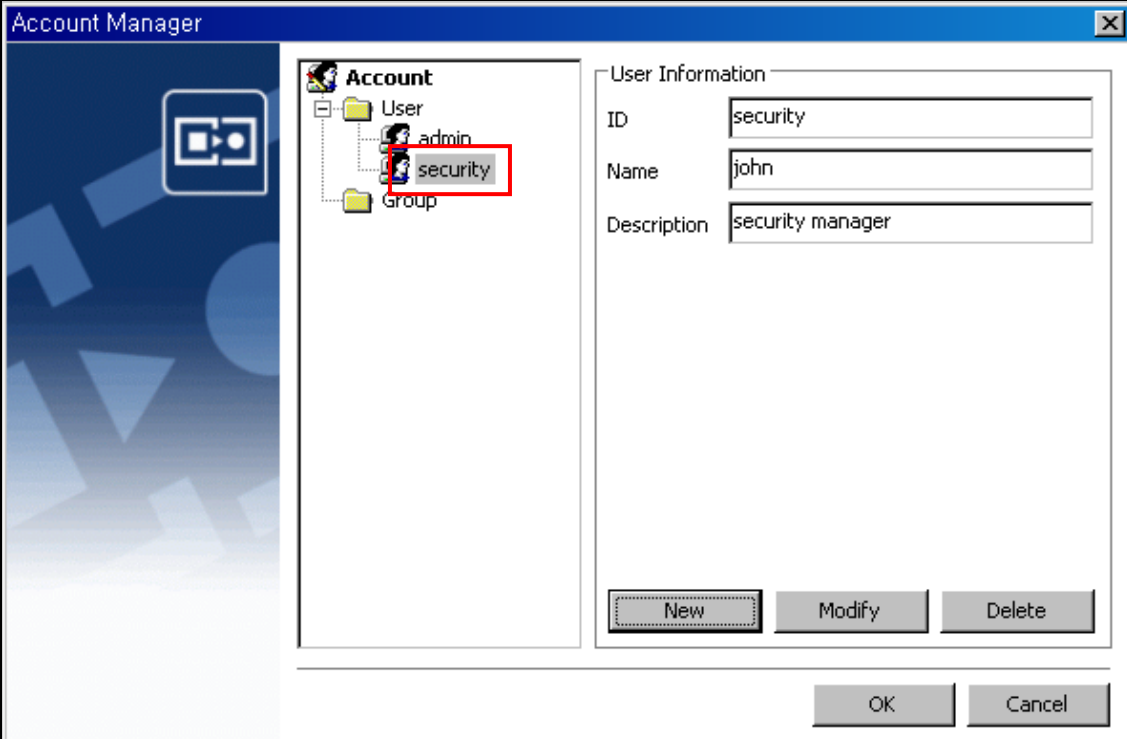


The image shows two 'New User' dialog boxes. The left box is empty, while the right box contains the following information:

Field	Value
ID	security
Name	john
Description	security manager
Password	***
Re-enter	***

Both boxes have 'OK' and 'Cancel' buttons at the bottom. A red arrow points from the left box to the right box.

- (3) Fill out ID, Name, Description, Password and Re-enter.
- (4) Select 'OK', and the new user, 'security' is registered as below.



The 'Account Manager' dialog box displays a tree view on the left with 'User' and 'Group' folders. The 'security' user is selected and highlighted with a red box. The 'User Information' section on the right shows the following details:

Field	Value
ID	security
Name	john
Description	security manager

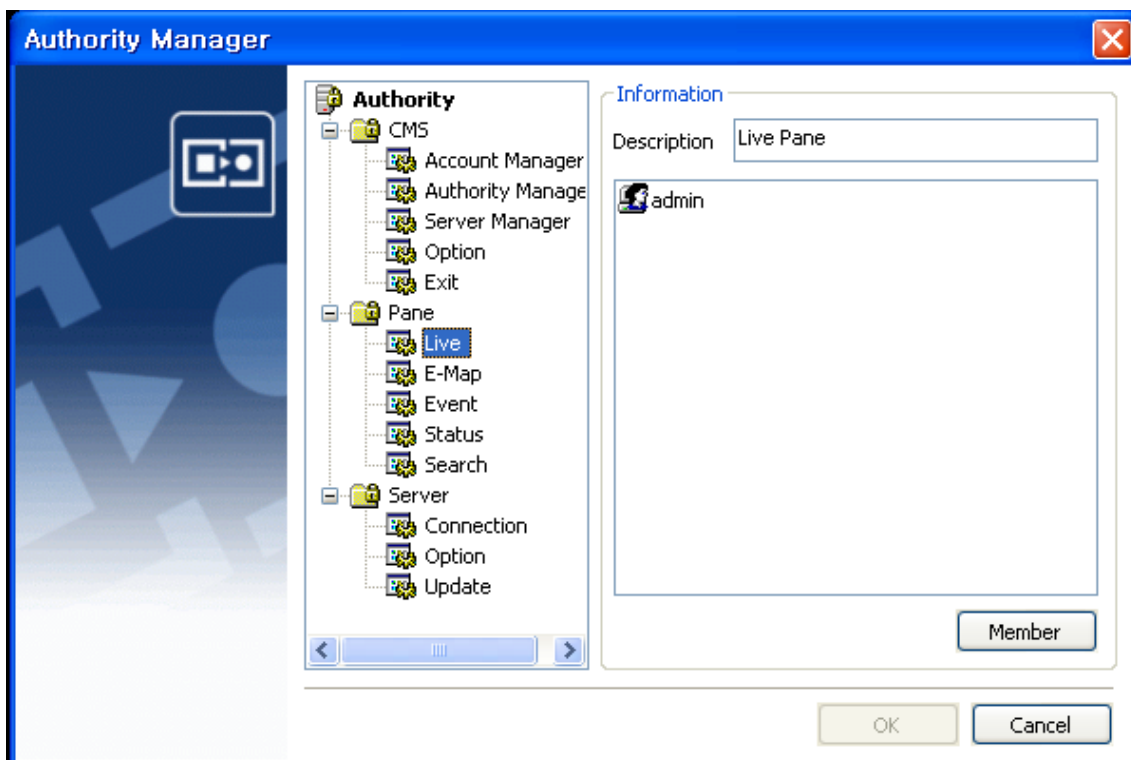
Buttons for 'New', 'Modify', 'Delete', 'OK', and 'Cancel' are located at the bottom of the dialog.

- (5) You can add other new users or groups by the same procedure as above.
- (6) Select 'OK' when registration procedure is over.

12. HOW TO USE AUTHORITY MANAGER



(1) Select 'Authority Manager' in CMS menu, and the below window appears.

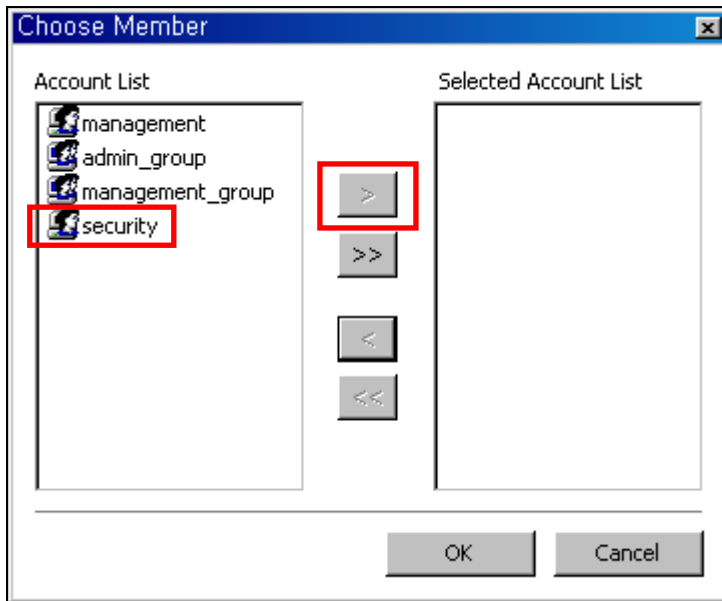



(2) CMS program consists of the three big categories _ CMS, Pane and Server. And Each category consists of a few functions. For example, 'Pane' consists of Live pane, E-Map pane, Event pane, Status pane and Search pane.

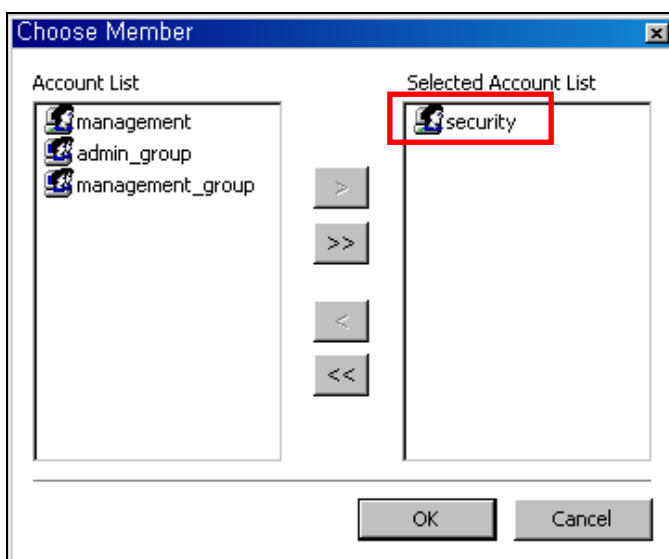
(3) If you need to give each user or group a separate authority different from each other, follow the below procedure.

(4) For example, select 'Live' in the Pane, and its relevant information appears in 'Information'

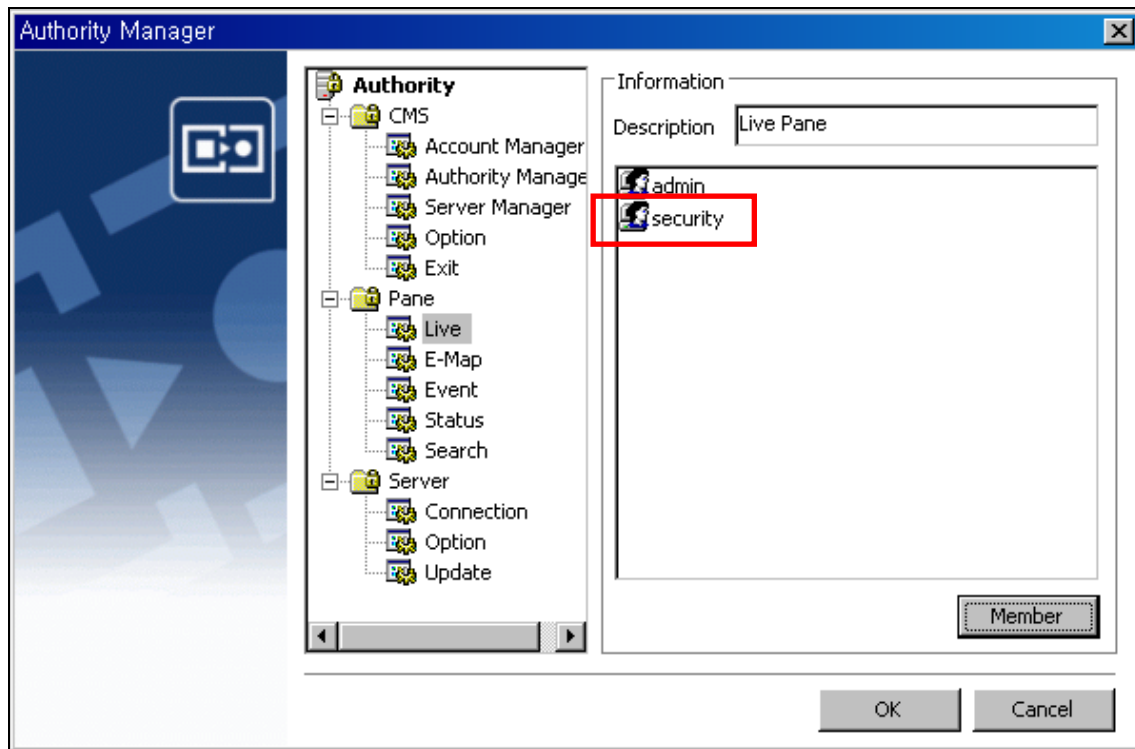
of the right part. Now, only one user with ID 'admin' is registered as a member who is authorized to use or approach functions in the 'Live Screen'. If you want to authorize another users or groups to use or approach functions in the 'Live Screen', click 'Member' button, and the below window appears.



(5) If you allow a user 'security' to approach 'Live Pane', select 'security' in Account List and then click , and 'security' moves to Selected Account List as below.



(6) Select 'OK', and a user 'security' is registered in Live Pane as below.



- (7) Click 'OK' after allocation of authority is over.
- (8) You can allocate usage authority for other categories by the same procedure