



# CMS User's Manual

Version 1.9



## Introduction

### [ Principal function ]

- This CMS Interlocked with megapixel camera.
- This CMS supports easy connection and registration of the site(Camera)
- This CMS supports maximum 256 channel multi screen with 64 site of E-map preview.
- User can manage the site by group and it supports 64 site a group.
- Supports Drag&Drop for site selection.
- This CMS provides E-map for finding a site easily.
- User can check the site easily by the event display OSD.
- This CMS supports many kind of record function like a motion record, sensor record, continuous record
- It can record, search, register 1000site with 100group and view the 64site on one monitor.
- This CMS supports easy back up function.
- User can prevent unauthorized users handling the data while using CMS due to login on CMS according to authority ID.
- User can control the site's function directly through CMS.

### [ Features ]

#### ● **Multi monitor supported**

User can monitor the live, search and E-Map at the same time by 4 monitors.

#### ● **Effective Central Monitoring System**

User can easily control the site recording, search through multi channel and group management.

#### ● **Various record function**

It provides motion record, sensor record, continuous record.

#### ● **Powerful search function and Backup function.**

The CMS provides powerful search function and backup as like a DVR.

#### ● **CMS Server / Client**

This CMS provides remote surveillance by different CMS and search function.

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# Chapter 1. Program Installation

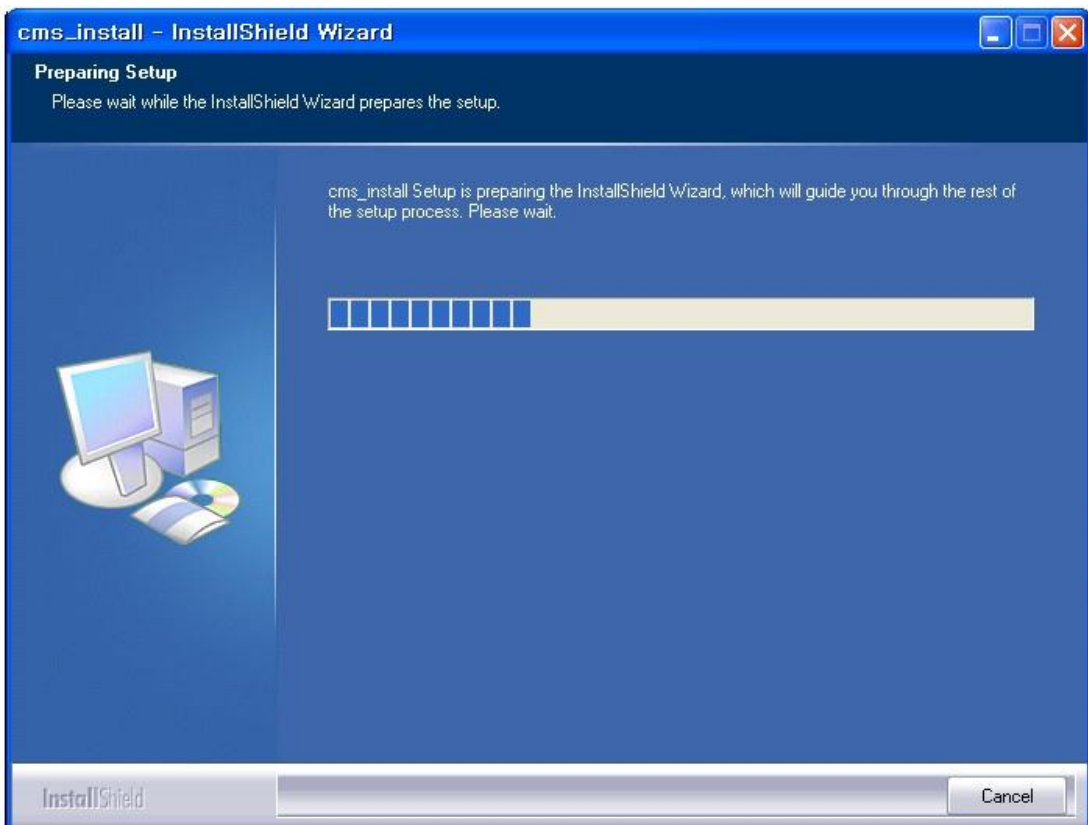
The CMS means "Central Monitoring System".

## 1.1 PC specifications

	Minimum Specifications	Recommended Specifications
CPU	Single core CPU 3GHz	Dualcore 2GHz or better
Main Memory	512MB	4GB
O/S	Windows XP ,Vista x86/x64, Windows7 x86/x64	
Web Browser	I.E 6.0	I.E 8.0 or More
Monitor Resolution	1280 x 1024	1920 x 1080
Video Memory	256MB(8CH)	1GB(64CH)
Network	100 Base-T Ethernet	1000 Base-T Ethernet

## 1.2 Program Installation

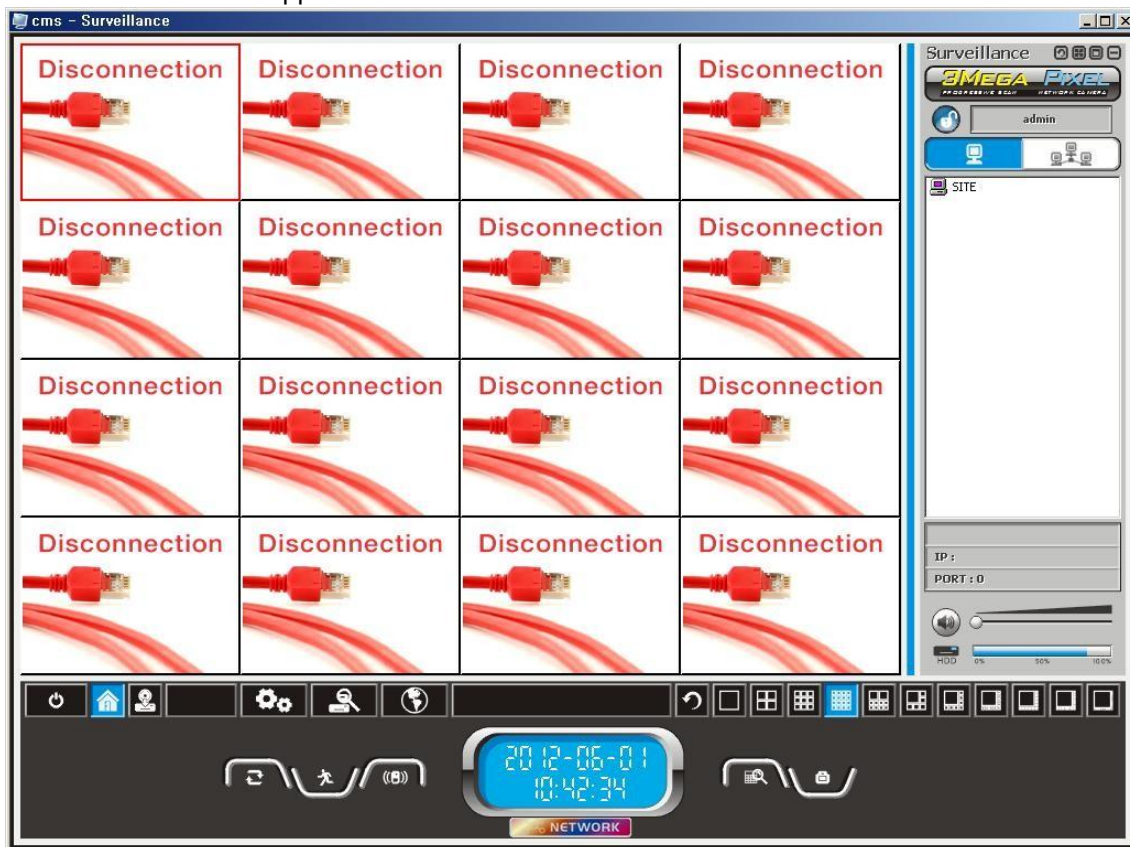
Double click "setup\_cms.exe" file in the CD and start the installation.



## Chapter 2. For the start of CMS

### 2.1 Run program

The below window appears afterwards.

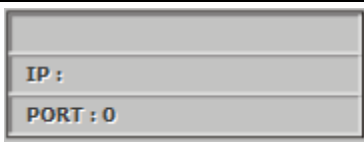











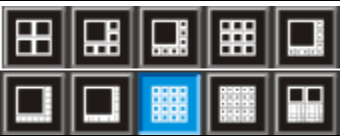




[Pic 2-1] Monitoring Screen

#### [ Button description ]

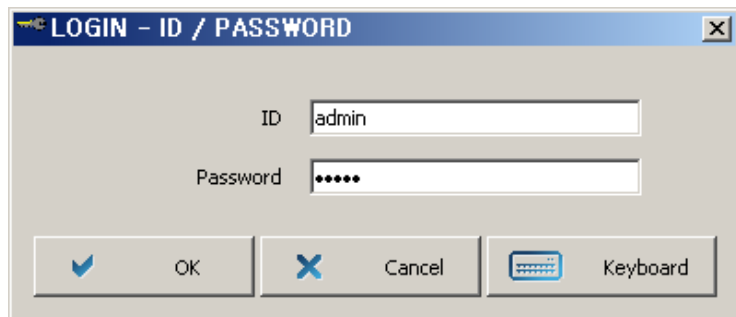
		Return to normal size
		Max. view
		Maximize, minimize
		Login button
		Login ID
	(  SITE )	Site registration selection
	(  GROUP )	Group registration selection
		Site registration (Network camera registration)
		Group registration

## Chapter 2. For the start of CMS

		Display the information of Site(IP, Port)
		PC speaker volume control No sound
		PC HDD Info
		CMS termination
		Information
		Storage function setting
		Setup
		Recorded file search
		E-Map
		Refresh back to initial screen
		screen division (4 to 64 channel)
		Date and time synchronized with PC
		Network Hologram In network connected, the hologram will shine.

## Chapter 2. For the start of CMS

### 2.2.Login



#### <Login>

All functions can be performed only after login. In the setup menu, the operators can be created or added. The function may be limited by authorized ID and Password.

Ref : Factory default ID and password are admin / admin. Mind the letter in capital or minuscule when typing in the ID and Password.

[Pic 2-2] Login window

#### [ Button description ]

	OK	Login to CMS
	Cancel	Cancel login
	Keyboard	Virtual keyboard

#### [Virtual Keyboard]



[Pic 2-3] Virtual keyboard

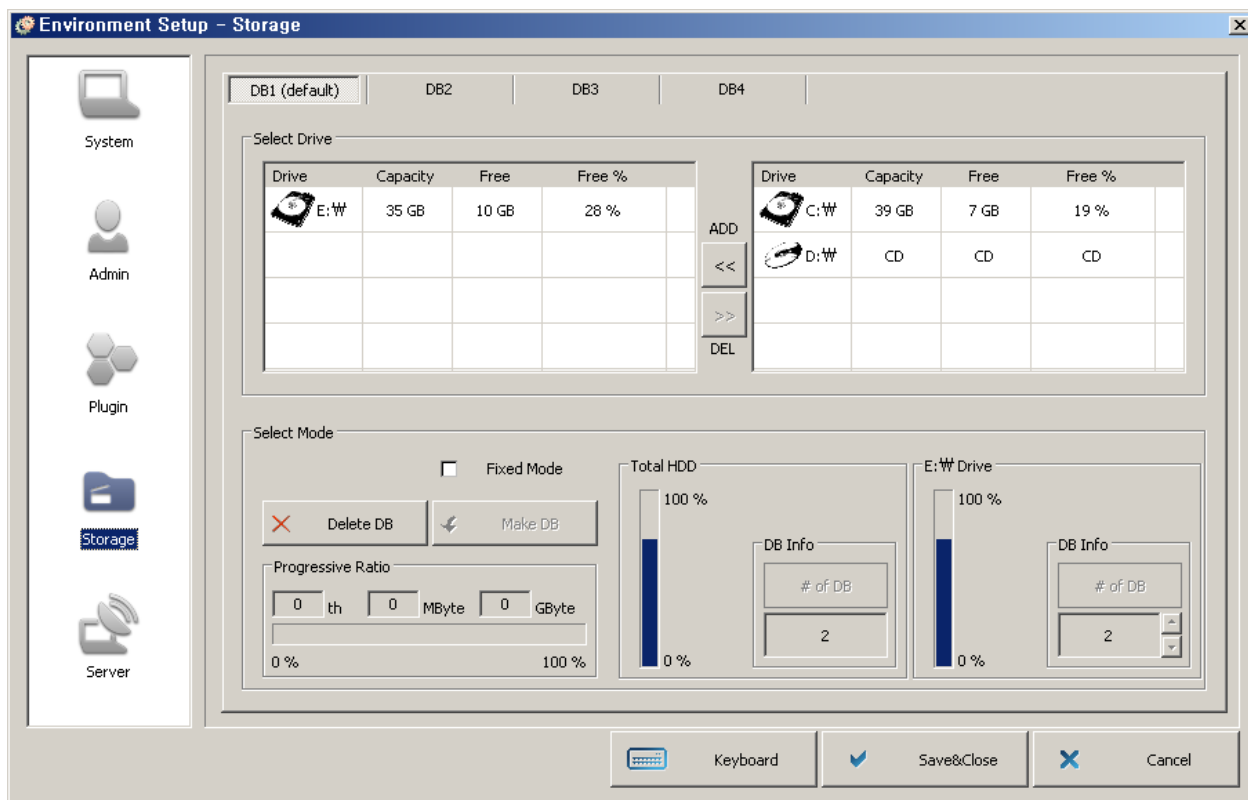


## Chapter 2. For the start of CMS

### 2.3 Video DB setting

#### <Environment setup>

Before using this CMS, User must setting the video DB setting in the environment setup.  
More information, Please refer to “**Chapter 7. Environment Setup**” page.

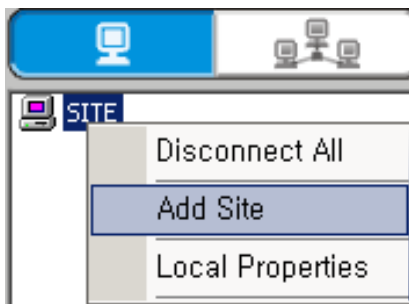


[Picture 2-4] Video DB setting

- Please add the drive to left side.

## Chapter 3. Site Setup

### 3.1 Site Registration Setup (Network Camera Registration)

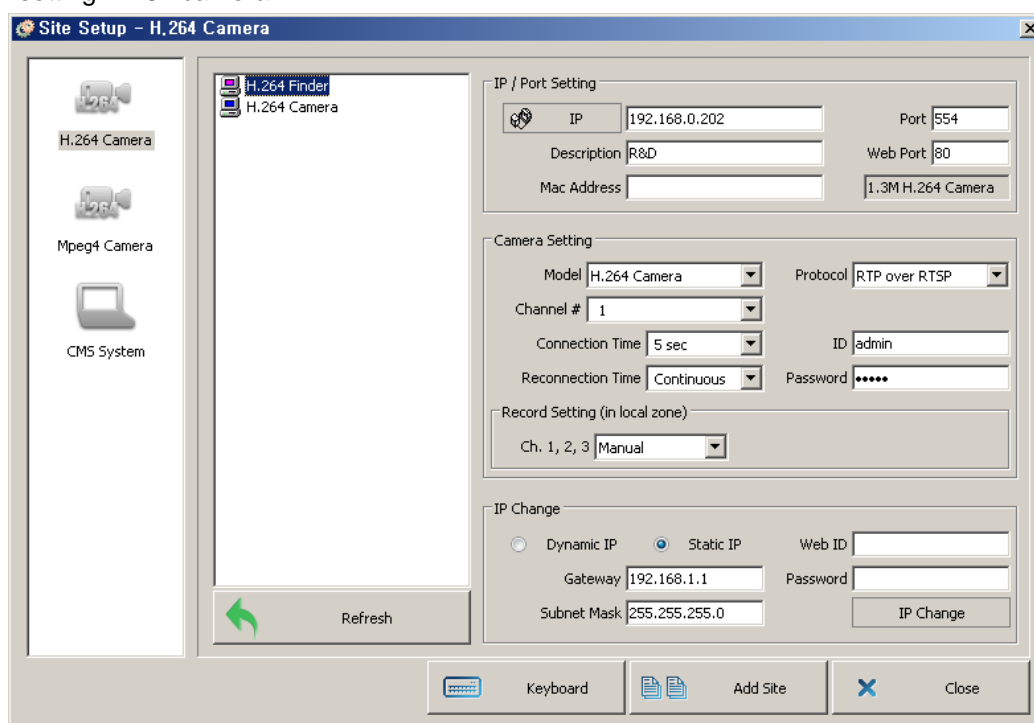


By right-click, pop-up menu appears. Choose “Add Site” menu. Then site Information window appears.

[Pic 3-1] Pop-up menu site addition



### 3.2 H.264 Camera setup

For setting H.264 camera





[Pic 3-2] H.264 camera setting

[ Button description ]

 H.264 Finder	Display the installed camera in the local network.
 H.264 Camera	Site address

## Chapter 3. Site Setup

### [ Button description ]

 IP <input type="text" value="192.168.0.202"/>	IP Address ( Click the IP button to run ping test)
Description <input type="text" value="R&amp;D"/>	Site name (If you leave it blank, IP address will be shown.)
Mac Address <input type="text"/>	Mac Address
Port <input type="text" value="554"/>	Stream port number
Web Port <input type="text" value="80"/>	Web port number
<input type="checkbox"/> 1.3M H.264 Camera	Show H.264 IP Camera Type (1.3M or 3M)
Model <input type="text" value="H.264 Camera"/>	Select Model "H.264 Camera"
Channel # <input type="text" value="1"/>	Select Channel
Protocol <input type="text" value="RTP over RTSP"/>	Select Network Protocol
Connection Time <input type="text" value="5 sec"/>	Connection time setting
Reconnection Time <input type="text" value="Continuous"/>	Reconnection time setting
ID <input type="text" value="root"/>	Type in ID
Password <input type="password" value="****"/>	Type in Password
Ch. 1, 2, 3 <input type="text" value="Manual"/>	Record Setting
<input type="radio"/> Dynamic IP <input checked="" type="radio"/> Static IP	IP type Selecting
Gateway <input type="text"/>	Gateway setup
Subnet Mask <input type="text"/>	Subnet Mask setup
Web ID <input type="text"/>	Display the web ID
Password <input type="password"/>	Password setting
 IP Change	Click to change the IP

## Chapter 3. Site Setup

### 3.2.1 Add site

Register a site of the H.264 device

#### Site auto register

1. H.264 finder will find all devices that are connected to the local network.
2. Select a site to register from the found devices.
3. Provide the user ID and password, then click "Add Site"
4. The registered camera will be displayed in the site address book.

#### Site manual register

1. Provide IP address, the user ID and password, then click "Add Site"
2. The registered camera will be displayed in the site address book.

### 3.2.2 IP Change

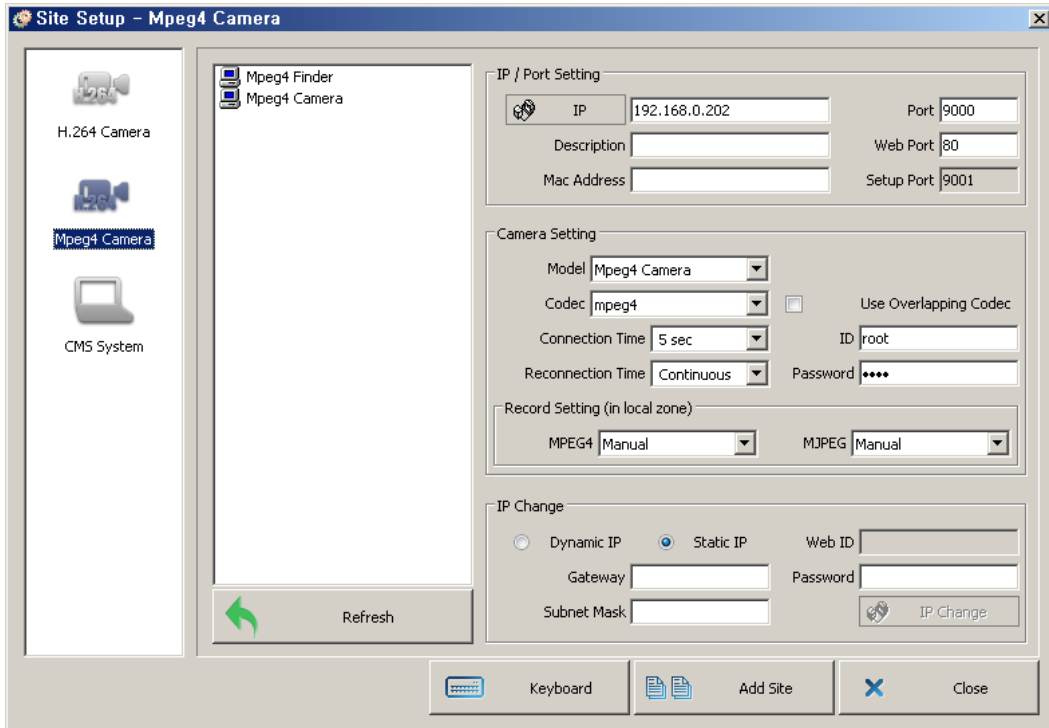
User can change the IP of registered camera.

1. H.264 finder will find all devices that are connected to the local network.
2. Click a device to change IP from the found devices.
3. Input the IP address.
4. Input Web ID, password, Gateway and Subnet Mask and click 'IP change'.
5. After a while, IP change will be completed. And you can find the changed information.

## Chapter 3. Site Setup




### 3.3 Mpeg4 Camera setup

For setting MPEG4 camera






[Pic 3-3] IP camera setting

#### [ Button description ]

	Keyboard	Virtual keyboard
	Add Site	Add Site
	Close	Close


## Chapter 3. Site Setup

### [ Button description ]

 IP Finder	Display the installed camera in the local network.
 IP Camera	Site address
 IP <input type="text" value="192.168.0.202"/>	IP Address ( Click the IP button to run ping test)
Description <input type="text" value="R&amp;D"/>	Site name (If you leave it blank, IP address will be shown.)
Mac Address <input type="text"/>	Mac Address
Port <input type="text" value="9000"/>	Stream port number
Web Port <input type="text" value="80"/>	Web port number
Setup Port <input type="text" value="9001"/>	Remote control port (Stream port + 1)
Model <input type="text" value="IP Camera"/>	Select Model "IP Camera"
Codec <input type="text" value="BOTH"/>	Codec setting (MPEG4 and MJPEG selectable. If you chosen both, two codecs will be registered at the same time.)
<input type="checkbox"/> Use Overlapping Codec	Overlapping Codec
Connection Time <input type="text" value="5 sec"/>	Connection time setting
Reconnection Time <input type="text" value="Continuous"/>	Reconnection time setting
ID <input type="text" value="root"/>	Type in ID
Password <input type="password" value="****"/>	Type in Password
MPEG4 <input type="text" value="Motion"/>	Choose recording type when MPEG4 is using
MJPEG <input type="text" value="Manual"/>	Choose recording type when MJPEG is using

## Chapter 3. Site Setup

### [ Button description ]

<input type="radio"/> Dynamic IP <input checked="" type="radio"/> Static IP	IP type Selecting
Gateway <input type="text" value="192.168.1.1"/>	Gateway setup
Subnet Mask <input type="text" value="255.255.255.0"/>	Subnet Mask setup
Web ID <input type="text"/>	Display the web ID
Password <input type="text"/>	Password setting
 IP Change	Click to change the IP

### 3.3.1 Add site

Register a site of the Mpeg4 device

#### Site auto register

1. Mpeg4 finder will find all devices that are connected to the local network.
2. Select a site to register from the found devices.
3. Provide the user ID and password, then click "Add Site"
4. The registered camera will be displayed in the site address book

#### Site manual register

1. Provide IP address, the user ID and password, then click "Add Site"
2. The registered camera will be displayed in the site address book.

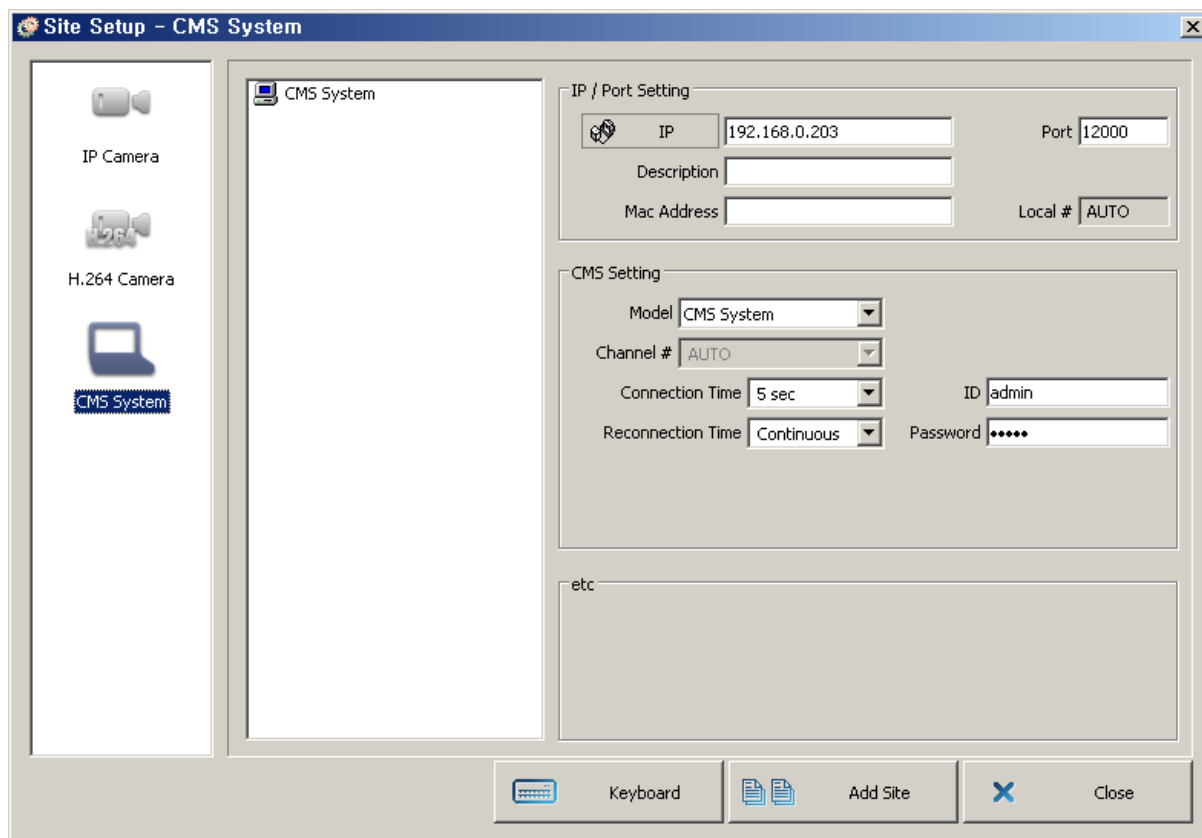
### 3.3.2 IP Change

User can change the IP of registered camera.

1. Mpeg4 finder will find all devices that are connected to the local network.
2. Click a device to change IP from the found devices.
3. Input the IP address.
4. Input Web ID, password, Gateway and Subnet Mask and click 'IP change'.
5. After a while, IP change will be completed. And you can find the changed information.

## Chapter 3. Site Setup

### 3.4 CMS system setting



[Picture 3-4] CMS system setup window

#### [Function description]

CMS System	Display the registered site
Local # AUTO	Local number of CMS
Channel # AUTO	Channel number of CMS

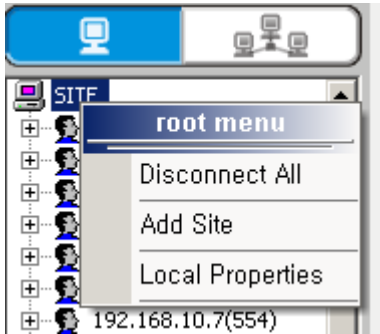
- User can do as like monitoring, remote record and remote search to the CMS server through the CMS System function.
- Register the IP address, port, ID and password for the CMS server.  
Registration method is the same as network camera registration.  
(Refer to the chapter 3.3.1. Add site.)
- To activate CMS system function, you should check usage setting in server tap of environment setting.(Refer to the chapter 10.1 CMS server setting)



## Chapter 3. Site Setup

### 3.5 Site address book popup menu

1.

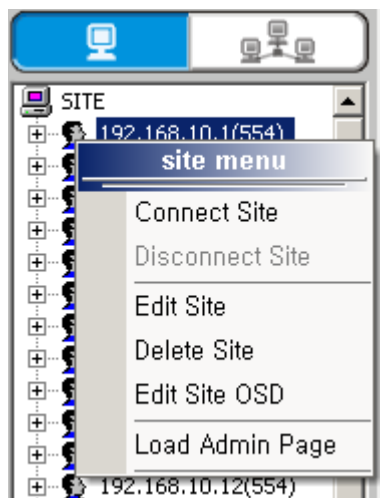


#### <1. ROOT>

By right-click onto "SITE", menu appears

Disconnect All	Disconnect all sites
Add Site	Site adding
Local Properties	Display status of connection and setting the record of local.

2.

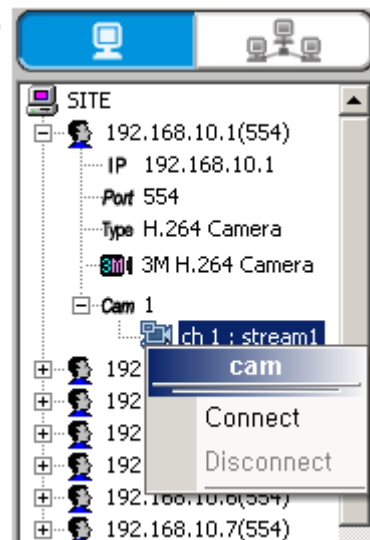


#### <2. SITE>

By right-click onto the registered site, the menu appears

Connect Site	Connect site
Disconnect Site	Disconnect site
Edit Site	Site editing Can not change IP address and port number
Delete Site	Site deletion
Local Admin Page	Link to administrators page of remote site
Remote Setup	Set the camera configuration of the site.

3.



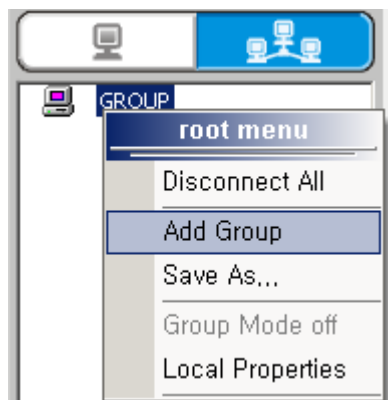
#### <3. Camera>

By right-click onto the registered site channel, menu appears

Connect	Site camera connection
Disconnect	Disconnection

## Chapter 4. Group Setup

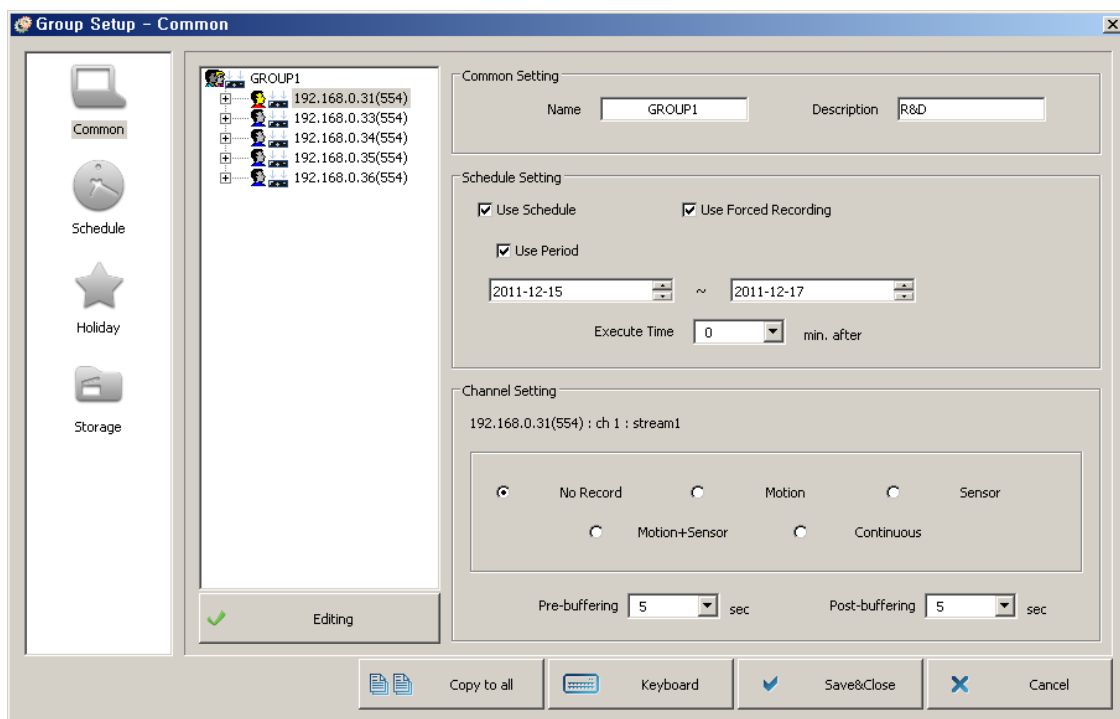
### 4.1 Group Registration Setup



Click <GROUP>. Right-click onto the <Group>, you may select <Add Group> . Then <Group information> window appears.




[Pic 4-1] Pop-up menu group addition

### 4.2 Group setup



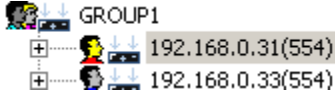
[Picture 4-2] Group setup window

#### [Function description]

	Copy to all	Apply the setting to all channel
	Save&Close	Save & Close
	Cancel	Cancel

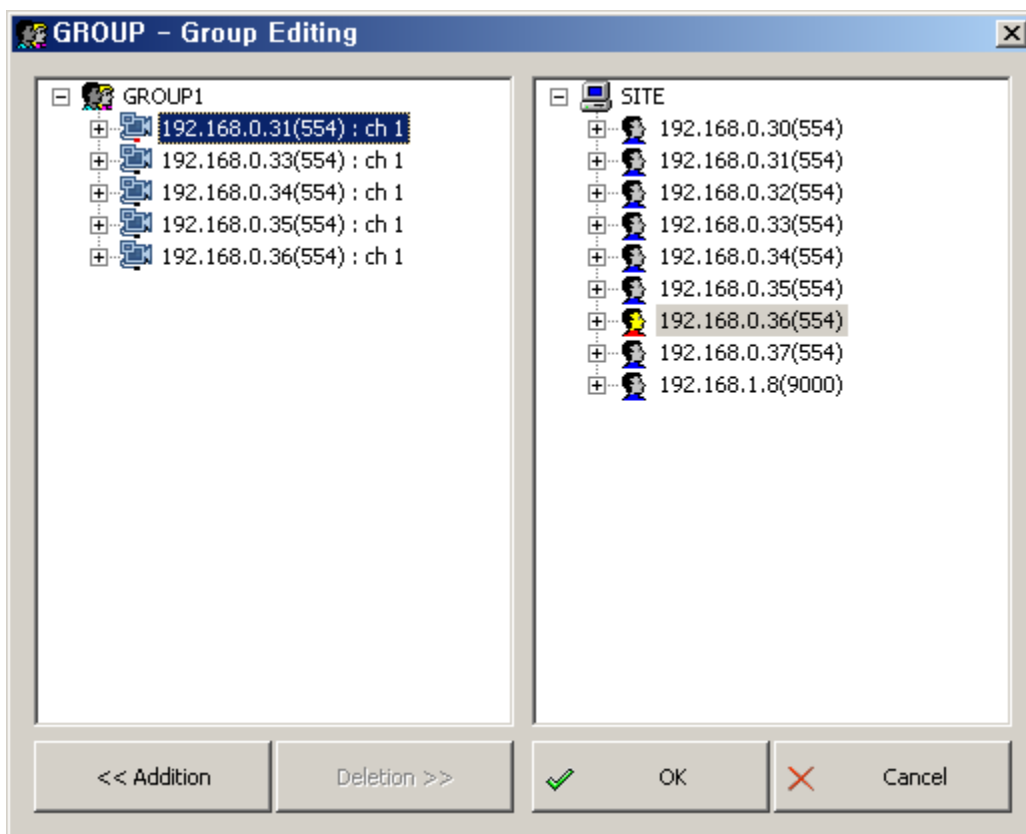
## Chapter 4. Group Setup

### [Function description]

	Display the registered site onto the group.
<p>Name <input type="text" value="GROUP1"/></p>	Group name
<p>Description <input type="text" value="R&amp;D"/></p>	Description of Group
<p><input checked="" type="checkbox"/> Use Schedule</p>	Use schedule function
<p><input type="checkbox"/> Use Forced Recording</p>	Use forced recording function (Setting by each channel)
<p><input checked="" type="checkbox"/> Use Period</p>	Period setting for using 'schedule'
<p>2009-09-02 ~ 2009-09-04</p>	Period setting for using 'schedule'
<p>Execute Time <input type="text" value="10"/> min. after</p>	Apply the schedule after the set minute from the schedule. (It will prevent that several schedule execute simultaneously.)
<p>192.168.0.203(9000) : cam 1-mpeg4</p>	Selected channel information
<p> <input checked="" type="radio"/> No Record   <input type="radio"/> Motion   <input type="radio"/> Sensor  <input type="radio"/> Motion+Sensor   <input type="radio"/> Continuous </p>	Setting the recording mode in case of forced recording
<p>Pre-buffering <input type="text" value="5"/> sec</p>	Pre-buffering time selection
<p>Post-buffering <input type="text" value="5"/> sec</p>	Post-buffering time selection
<p><input checked="" type="checkbox"/> Editing</p>	Run group editor

## Chapter 4. Group Setup

### 4.3 Group Editor

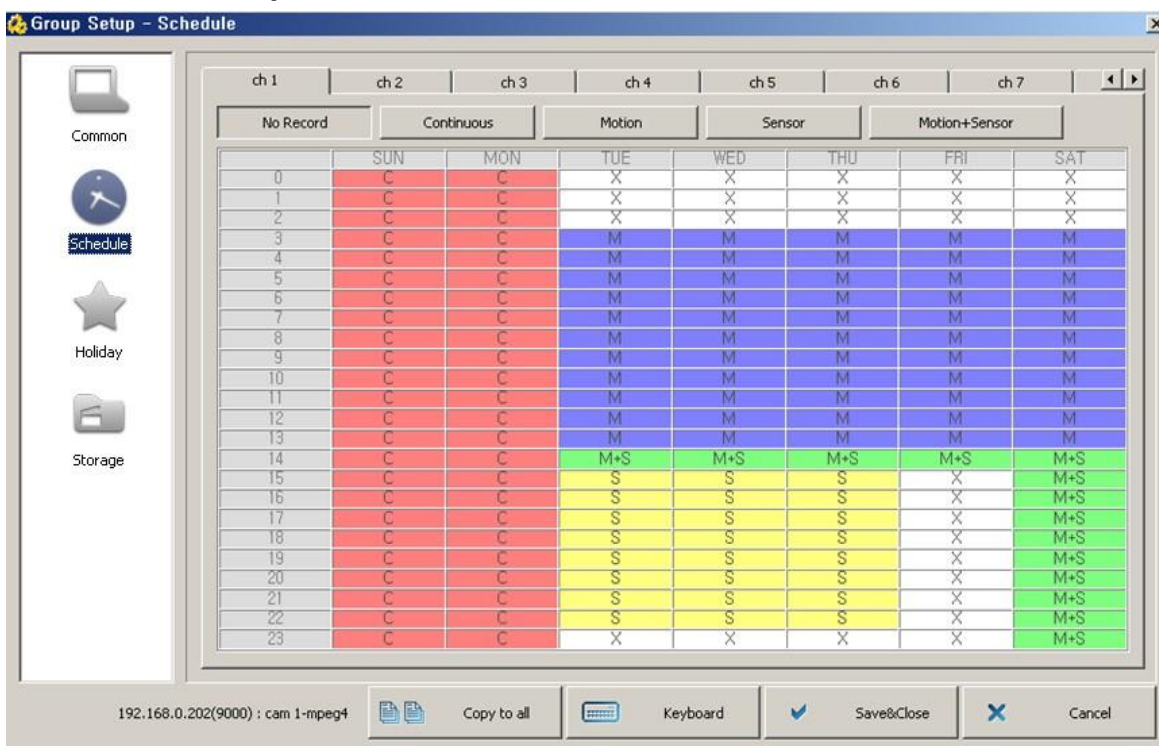


[Picture 4-3] Group Editor

	Display the registered site onto group
	Display the unregistered site onto group
	Add the site to group
	Delete the site in the group
	Save & Close
	Cancel

## Chapter 4. Group Setup

### 4.4 Schedule setup



[Picture 4-4] Schedule setup

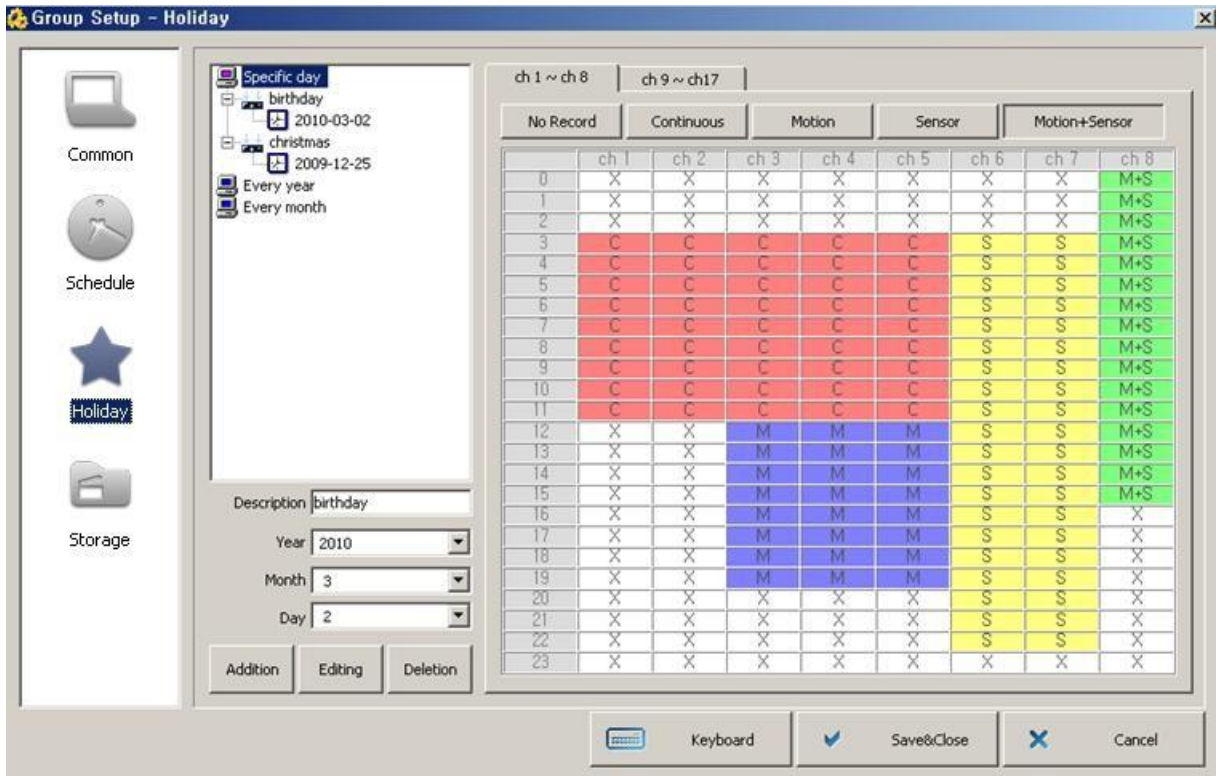
### [Function setup]

<div style="display: flex; justify-content: space-around;"> <span>ch 1</span> <span>ch 2</span> </div>		Channel Selection																																																																																																																																																																																																					
192.168.0.203(9000) : cam 1-mpeg4		Selected channel information																																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th>No Record</th> <th>Continuous</th> <th>Motion</th> <th>Sensor</th> <th>Motion+Sensor</th> </tr> </thead> <tbody> <tr><td>0</td><td>SUN</td><td>MON</td><td>TUE</td><td>WED</td><td>THU</td><td>FRI</td><td>SAT</td></tr> <tr><td>1</td><td>C</td><td>C</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>2</td><td>C</td><td>C</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>3</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>4</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>5</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>6</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>7</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>8</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>9</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>10</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>11</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>12</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>13</td><td>C</td><td>C</td><td>M</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> <tr><td>14</td><td>C</td><td>C</td><td>M+S</td><td>M+S</td><td>M+S</td><td>M+S</td><td>M+S</td></tr> <tr><td>15</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>16</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>17</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>18</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>19</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>20</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>21</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>22</td><td>C</td><td>C</td><td>S</td><td>S</td><td>S</td><td>X</td><td>M+S</td></tr> <tr><td>23</td><td>C</td><td>C</td><td>X</td><td>X</td><td>X</td><td>X</td><td>M+S</td></tr> </tbody> </table>			No Record	Continuous	Motion	Sensor	Motion+Sensor	0	SUN	MON	TUE	WED	THU	FRI	SAT	1	C	C	X	X	X	X	X	2	C	C	X	X	X	X	X	3	C	C	M	M	M	M	M	4	C	C	M	M	M	M	M	5	C	C	M	M	M	M	M	6	C	C	M	M	M	M	M	7	C	C	M	M	M	M	M	8	C	C	M	M	M	M	M	9	C	C	M	M	M	M	M	10	C	C	M	M	M	M	M	11	C	C	M	M	M	M	M	12	C	C	M	M	M	M	M	13	C	C	M	M	M	M	M	14	C	C	M+S	M+S	M+S	M+S	M+S	15	C	C	S	S	S	X	M+S	16	C	C	S	S	S	X	M+S	17	C	C	S	S	S	X	M+S	18	C	C	S	S	S	X	M+S	19	C	C	S	S	S	X	M+S	20	C	C	S	S	S	X	M+S	21	C	C	S	S	S	X	M+S	22	C	C	S	S	S	X	M+S	23	C	C	X	X	X	X	M+S
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7	C	C	M	M	M	M	M																																																																																																																																																																																																
8	C	C	M	M	M	M	M																																																																																																																																																																																																
9	C	C	M	M	M	M	M																																																																																																																																																																																																
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15	C	C	S	S	S	X	M+S																																																																																																																																																																																																
16	C	C	S	S	S	X	M+S																																																																																																																																																																																																
17	C	C	S	S	S	X	M+S																																																																																																																																																																																																
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20	C	C	S	S	S	X	M+S																																																																																																																																																																																																
21	C	C	S	S	S	X	M+S																																																																																																																																																																																																
22	C	C	S	S	S	X	M+S																																																																																																																																																																																																
23	C	C	X	X	X	X	M+S																																																																																																																																																																																																

After choosing save mode then make table by mouse drag. When you click the day and time, save mode of the day and time will be changed to selected save mode

## Chapter 4. Group Setup

### 4.5 Specific day setup



[Picture 4-5] Specific day setup window

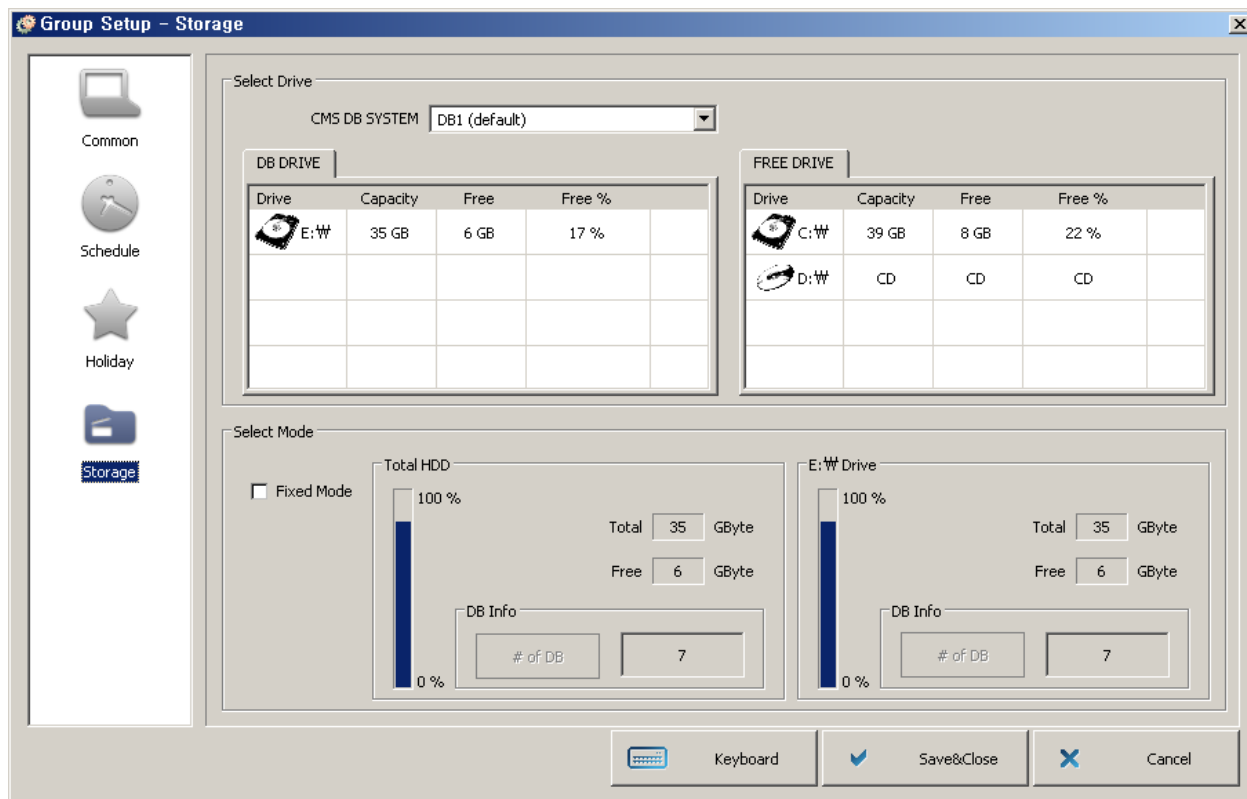
#### [Function description]

	Description <input type="text" value="christmas"/> Year <input type="text" value="2009"/> Month <input type="text" value="12"/> Day <input type="text" value="25"/>	Selected specific day information Priority 1 <sup>st</sup> : Forced recording 2 <sup>nd</sup> : specific day 3 <sup>rd</sup> : Every month 4 <sup>th</sup> : Every year 5 <sup>th</sup> : a weekday																																																																																																																																				
<input type="button" value="Addition"/> <input type="button" value="Editing"/> <input type="button" value="Deletion"/>		Addition, Editing, Deletion																																																																																																																																				
<input type="button" value="ch 1 ~ ch 8"/> <input type="button" value="ch 9 ~ ch 17"/>		Channel group selection																																																																																																																																				
<table border="1"> <thead> <tr> <th></th> <th>No Record</th> <th>Continuous</th> <th>Motion</th> <th>Sensor</th> <th>Motion+Sensor</th> </tr> </thead> <tbody> <tr> <td></td> <td>ch 1</td> <td>ch 2</td> <td>ch 3</td> <td>ch 4</td> <td>ch 5</td> <td>ch 6</td> <td>ch 7</td> <td>ch 8</td> </tr> <tr> <td>0</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>M+S</td> </tr> <tr> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>M+S</td> </tr> <tr> <td>2</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>M+S</td> </tr> <tr> <td>3</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>4</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>5</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>6</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>7</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>8</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>9</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>10</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>11</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>C</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> <tr> <td>12</td> <td>X</td> <td>X</td> <td>M</td> <td>M</td> <td>M</td> <td>S</td> <td>S</td> <td>M+S</td> </tr> </tbody> </table>				No Record	Continuous	Motion	Sensor	Motion+Sensor		ch 1	ch 2	ch 3	ch 4	ch 5	ch 6	ch 7	ch 8	0	X	X	X	X	X	X	X	M+S	1	X	X	X	X	X	X	X	M+S	2	X	X	X	X	X	X	X	M+S	3	C	C	C	C	C	S	S	M+S	4	C	C	C	C	C	S	S	M+S	5	C	C	C	C	C	S	S	M+S	6	C	C	C	C	C	S	S	M+S	7	C	C	C	C	C	S	S	M+S	8	C	C	C	C	C	S	S	M+S	9	C	C	C	C	C	S	S	M+S	10	C	C	C	C	C	S	S	M+S	11	C	C	C	C	C	S	S	M+S	12	X	X	M	M	M	S	S	M+S
	No Record	Continuous	Motion	Sensor	Motion+Sensor																																																																																																																																	
	ch 1	ch 2	ch 3	ch 4	ch 5	ch 6	ch 7	ch 8																																																																																																																														
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7	C	C	C	C	C	S	S	M+S																																																																																																																														
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9	C	C	C	C	C	S	S	M+S																																																																																																																														
10	C	C	C	C	C	S	S	M+S																																																																																																																														
11	C	C	C	C	C	S	S	M+S																																																																																																																														
12	X	X	M	M	M	S	S	M+S																																																																																																																														

Schedule table by channel

## Chapter 4. Group Setup

### 4.6 Video DB setting



[Picture 4-6] Video DB setup window

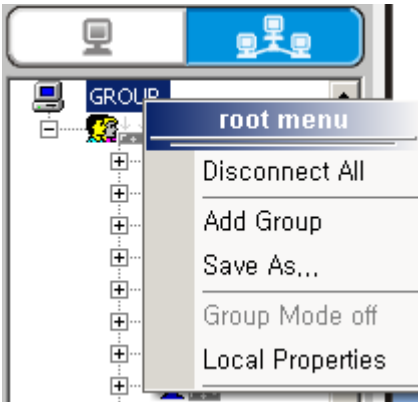
#### [Function description]

<p>CMS DB SYSTEM DB1 (default) ▼</p>	<p>DB selection Please refer to “7.4 Storage Setting”</p>
--------------------------------------	---

## Chapter 4. Group Setup

### 4.7 Group address book popup menu

1.

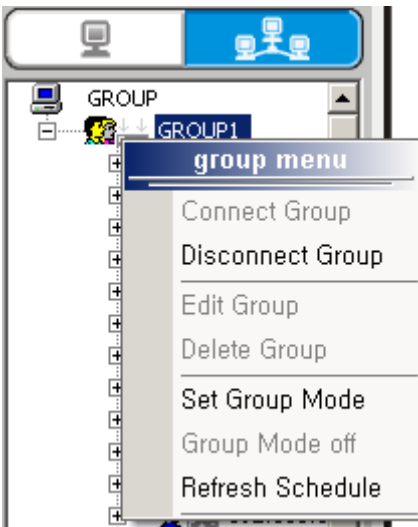


#### <1. ROOT>

By right-click onto "GROUP", menu appears

Disconnect ALL	Disconnect all group
Add Group	Group adding
Save As...	Save the connected display as different group name
Group Mode off	Group mode off
Local Properties	Display status of connection and setting the record of local.

2.

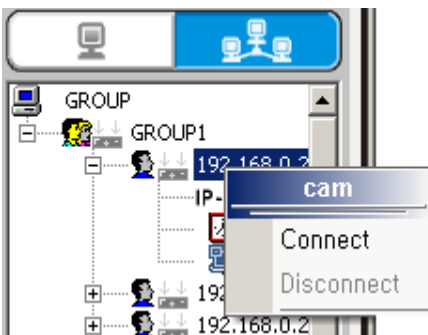


#### <2. Group>

Right-click on to registered group like <Group1>, the menu appears

Connect Group	Group connection
Disconnect Group	Group disconnection
Edit Group	Group edition
Delete Group	Group deletion
Set Group Mode Group Mode off	When use "Set Group Mode", It will work by schedule.
Refresh Schedule	Refresh Schedule

3.



#### <3. Site>

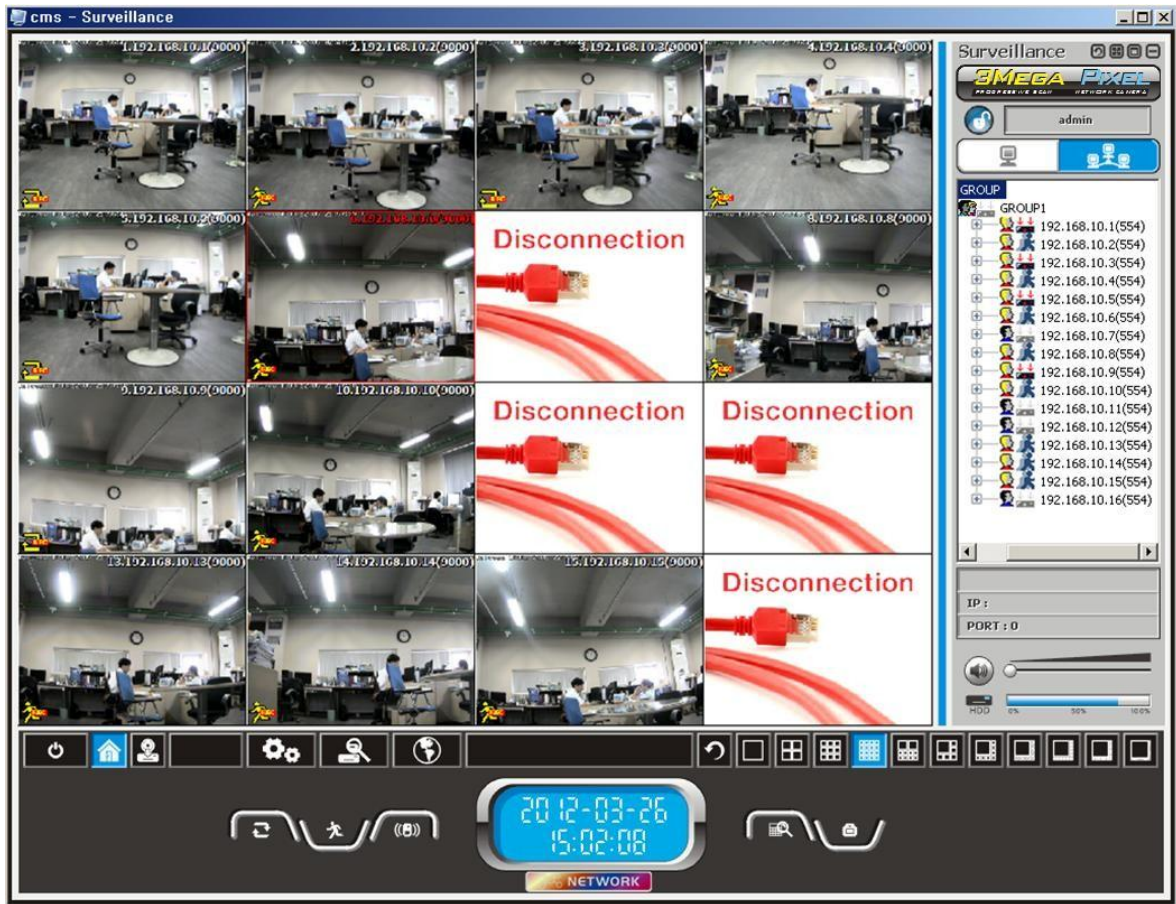
Right-click onto the registered site and channel, menu appears

Connect	Site camera connection
Disconnect	Disconnection



## Chapter 4. Group Setup

### 4.8 Group mode & Schedule



[Picture 4-7] Group mode setup



[Picture 4-8] Display the record status by schedule

[Picture 4-7] Group mode setup

When setup the group mode, the group connect to screen by schedule of group. User can not choose the site randomly. Only the schedule will be applied to recording mode. E-map will apply the group's e-map only.

[Picture 4-8] Display the record status by schedule

If use schedule in group mode, display the record status on group address book.

Left icon means status of connection and right icon means status of record.

## Chapter 5. Monitoring



[Picture 5-1] Picture of Monitoring screen

### 5.1 Connecting camera

1. Register the site.(Refer to Chapter 3. Site Setup.)

2. By Drag & Drop

Using mouse, drag the site, group or camera from the site section and drop them to screen.



3. By double click

Double clicking to connect site, group or the camera.

4. Using Pop-up menu

Clicking mouse right on site, group or camera in the site section, using connecting menu among pop-up menu.

- Connecting site showing as yellow icon and connecting camera showing as red icon.

“   SITE ” is showing basic information of site, network hologram

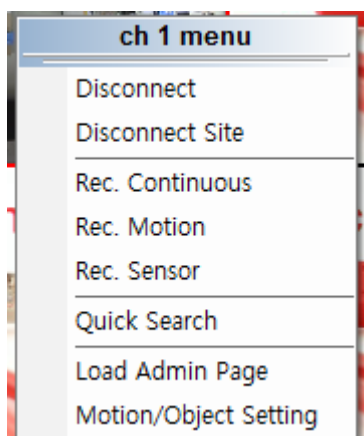
 is starting.

- Below picture showing that connecting the site.



## Chapter 5. Monitoring

### [Pop-up menu on the monitoring screen]









#### <Group>

Showing the menu when clicking right button of mouse

Disconnect	Disconnecting the channel
Disconnect Site	Disconnecting the site
Rec. Continuous	Continuous recording
Rec. Motion	Motion recording
Rec. Sensor	Sensor recording
Quick Search	Searching the local data
Load Admin Page	Link to administrators page of remote site
Motion/Object Setting	Motion or Object Area Setting

#### <Display Icon>

If the site is connected below event icons are showing.  
Each event icon means below.

	Continuous recording
	Motion setting and motion event
	Motion event
	Sensor setting and sensor event
	Sensor event
	Alarm event

# Chapter 5. Monitoring

## 5.2 Information Tap



[Picture 5-2] Information Tap

		Continuous recording setting
		Motion recording setting
		Sensor recording setting
		Snapshot function Print or save current screen to BMP/JPG file. ( see chapter “ <b>SNAPSHOT</b> ” )
		Search event Log.

● You have to setting the save folder for saving. See chapter “**Setting**”

## 5.3 Recording Tap



[Picture 5-3] Recording tap

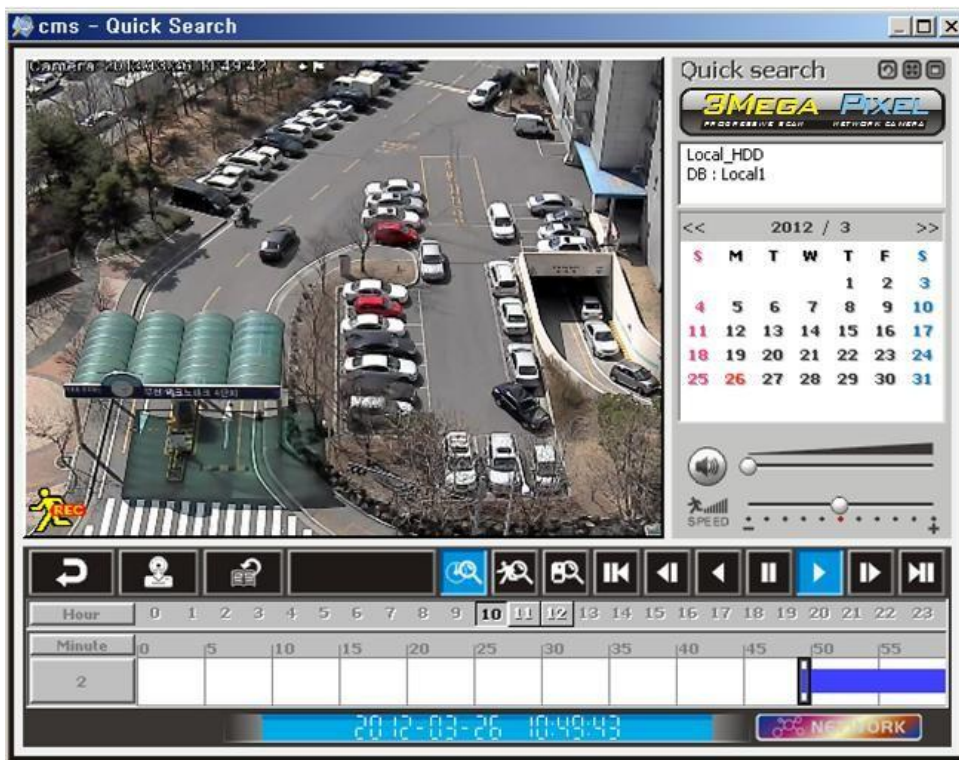
		Select channel to save
		Showing previous 16 channels
		<b>Continuous Recording</b>
		<b>Motion Recording</b>
		<b>Sensor Recording</b>
		Showing next 16 channels



## Chapter 5. Monitoring

### 5.4 Quick Search Tap

Without changing to search mode, user can search for a particular channel quickly and keep the live monitoring.



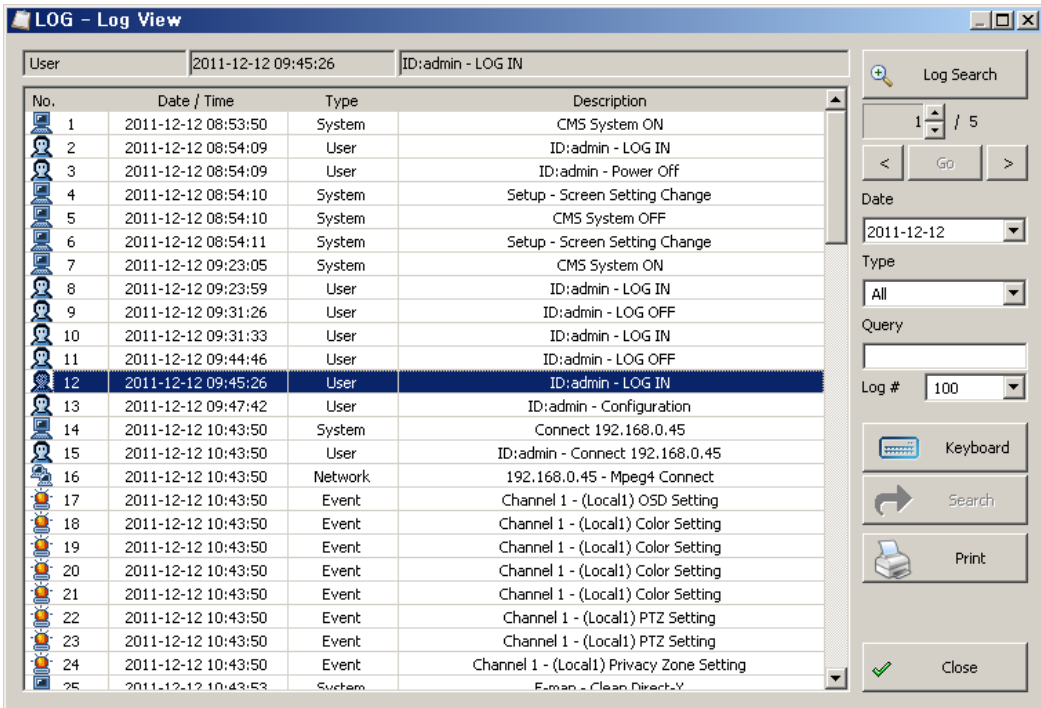
[Picture 5-4] Quick search (Please refer to “Chapter 8. Search Mode”)

# Chapter 5. Monitoring





## 5.5 Log View

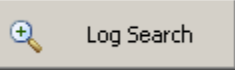
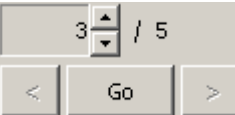
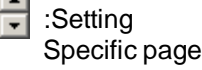
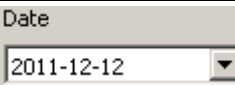
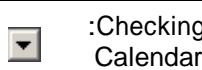

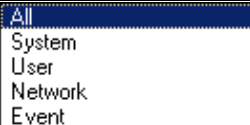


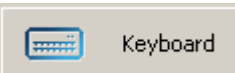
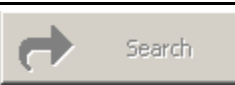
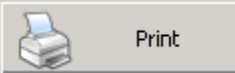
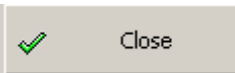


Click event log button then open log view dialog.



[Picture 5-5] Log View (Search event and History)

Event		Log message type
2010-07-21 17:47:43		Log time configuration & selected log time
Channel 3 - (Local4) Motion Off		Contents of selected log
Date/Time		Date/time list
Type		System type log
		User type log
		Network type log
		Event type log

		Log contents list
		Log search using configured log type/log time/log query
		< : Previous page Go : Specific page > : Next page
		Date setting for log search
		Type setting for log search
		Log query configuration This function can search specific character of log contents.
		The Log number per 1page view.
		Virtual keyboard
		Search selected time of log
		Print log list
		Close


### Log type

1. System type
  - A. ON/OFF CMS
  - B. system operation for recovering data
  - C. save new & close
  - D. configuration change
  - E. backup
  - F. open backup data
2. user type : user's data
3. network type : network connection status
4. event type : motion, sensor, alarm event record

## Chapter 5. Monitoring

### 5.6 Snapshot



Below picture is **Snapshot** button(  )of **Information Tap**



[Picture 5-6] Snapshot screen













[Picture 5-7] Print screen of snapshot



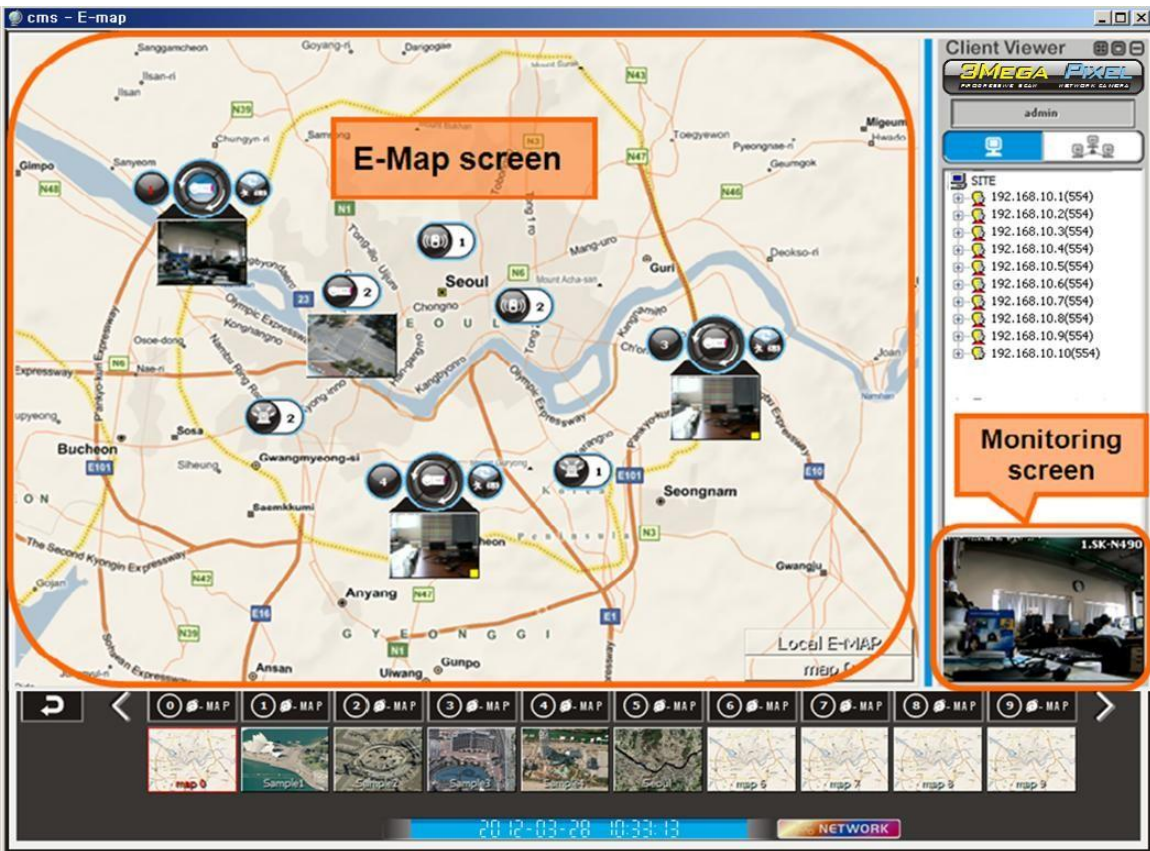
## Chapter 5. Monitoring

[Snapshot button]

 Preview	Preview
 Save	Saving
 Print	Print
 Refresh	Refresh
 Flip	Mirroring
 Mirror	Flip
 Negative	Negative image
Brightness 	Brightness control bar
Contrast 	Contrast control bar
 Exit	Exit

## Chapter 6. E-Map Mode

By E-map, user can take in the situation of installed cameras with a glance.









[Picture 6-1] E-Map mode screen

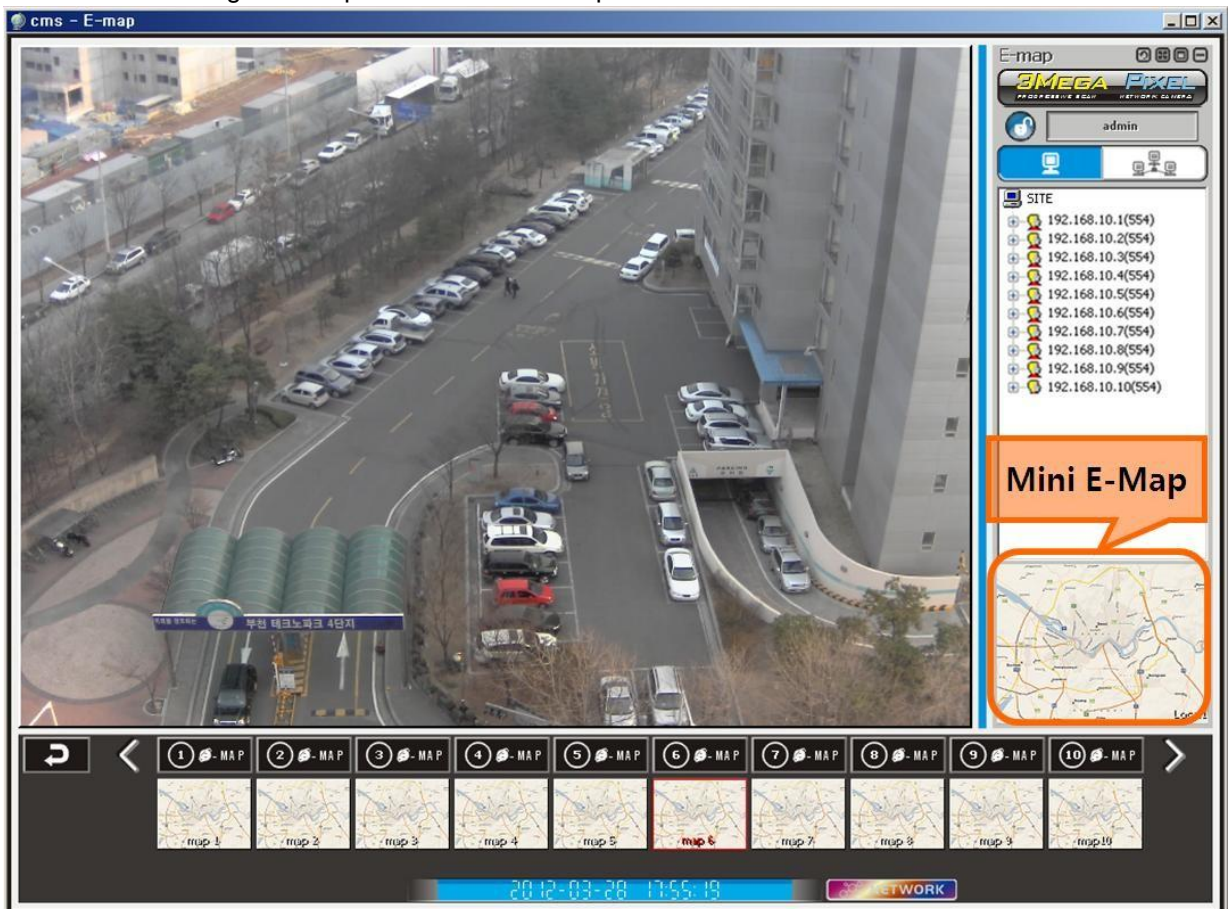
### [ Button description ]

		Return to normal screen size
		E-Map full screen view
		Maximize or minimize the E-map
<input type="text" value="admin"/>		Log-in ID
		Select SITE add
		Select GROUP add
		SITE add (Network camera add)
		GROUP add
		TIME display
		Network Hologram (Working once a SITE connected)
		EXIT E-MAP
		Previous, Next Map view

## Chapter 6. E-Map Mode

		Open E-Map folder (Can add other E-Map file)
		Registered E-Map Select E-Map by mouse click (Max. 16 E-Map can be added)
		Alarm ON/OFF
		Sensor display
		Standard camera icon
		Spread camera icon

Like below picture, E-Map screen and monitoring screen can be cross change by double clicking. In mini E-Map screen, red dot is camera, yellow is sensor and green is alarm. Location change is also possible in mini E-Map.



[Picture 6-2] Screen change between E-Map and Monitoring screen

## Chapter 6. E-Map Mode

### 6.1 Camera Icon



[Picture 6-3] Camera Icon

There are 4 types camera icon as like standard, spread, preview-standard and preview-spread. Click the right button in mouse. Then there is a Spread Mode which changes camera icon from standard camera icon into spread camera icon. There are 2 ways to use preview screen. One is choosing preview in pop-up menu and the other is double-clicking. All preview screen would be appear or disappear once clicking the E-Map one more time which already displaying in E-Map screen.

1. Counterclockwise rotation : Rotate the camera counterclockwise (Total 12 directions) .
2. Channel No. : Channel number of camera.
3. Camera selection : Show the channel in E-Map mode monitoring screen.
4. LED : Connection status / Motion / Sensor.
5. Clockwise rotation : Rotate the camera clockwise (Total 12 directions)
6. Preview screen : Show the camera picture.

### 6.2 Sensor / Alarm Icon



[Pic 6-4] Sensor icon

Display the sensor signal generated from network camera of the channel.  
 [Reference] Real sensor number is displayed in SITE E-Map mode.



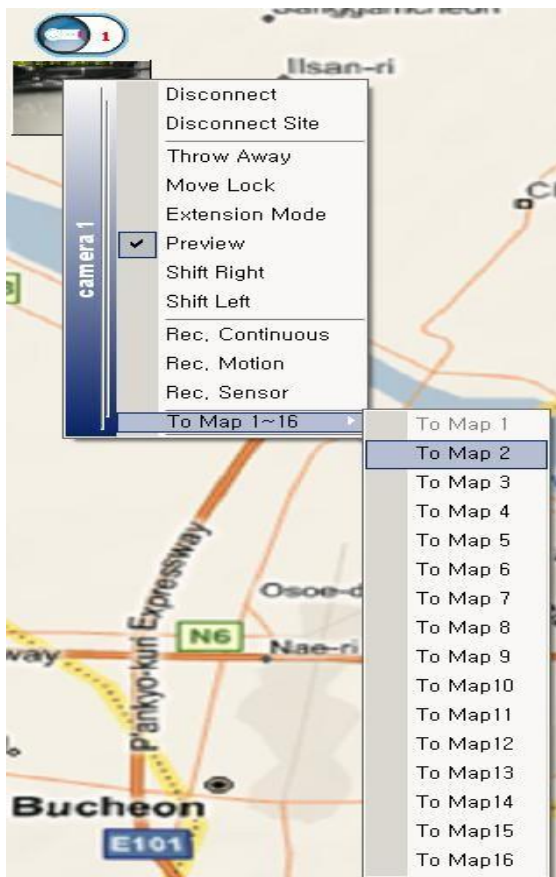
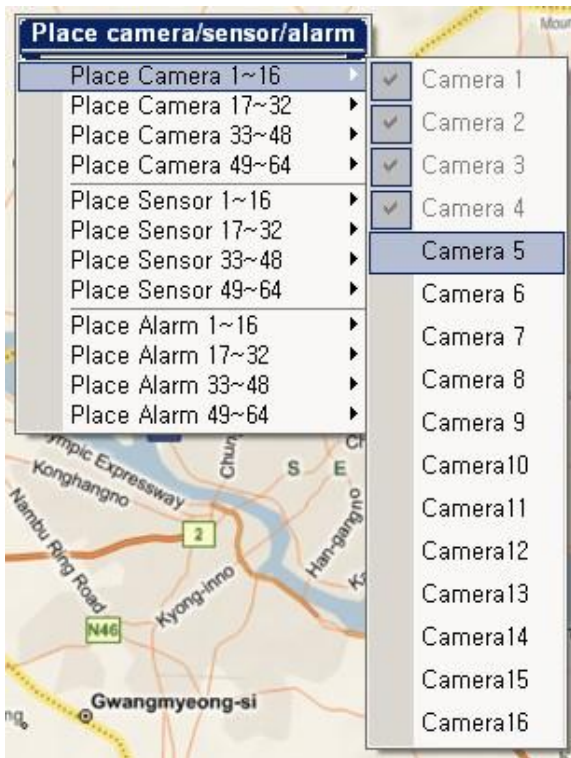
[Pic 6-5] Alarm icon

Display the alarm signal generated from network camera of the channel.  
 [Reference] Real alarm number is displayed in SITE E-Map mode.



## Chapter 6. E-Map Mode

### 6.3 E-Map Pop-up Menu



Listed menu when mouse right button is clicked in E-Map screen (supported in E-Map mode)

Place Camera XX	Place XX channel camera
Place Sensor XX	Place XX channel sensor
Place Alarm XX	Place XX channel alarm

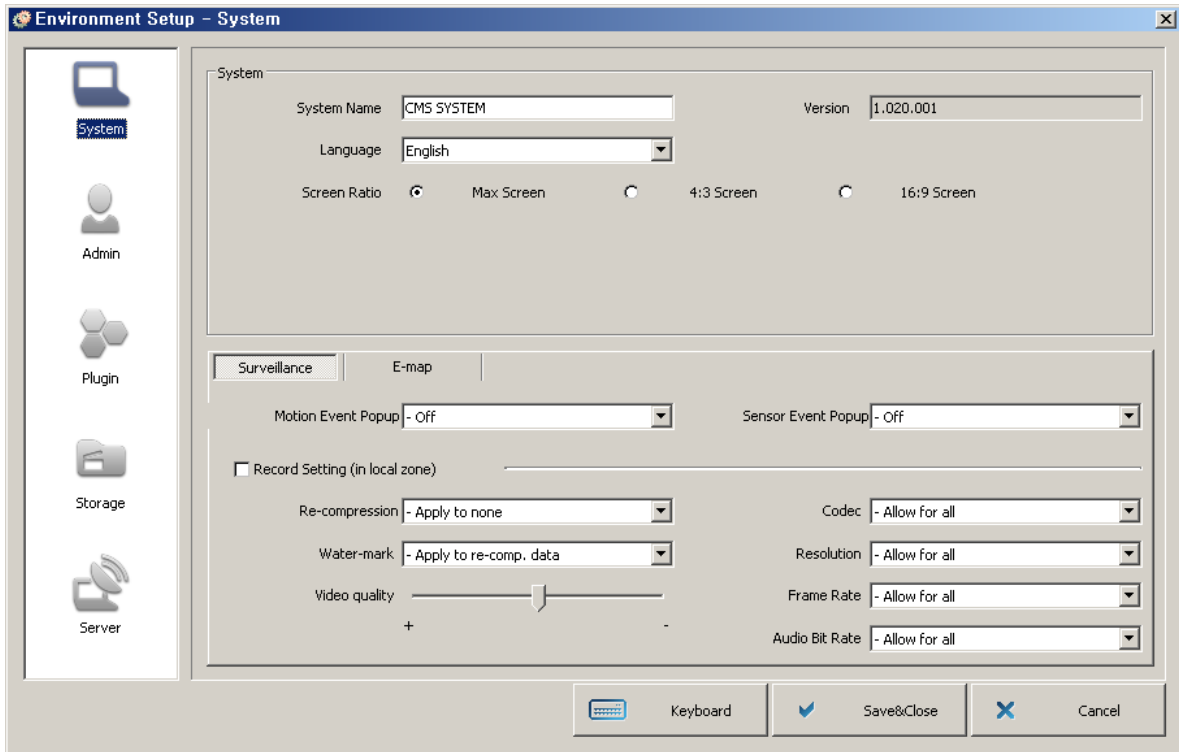
\* Designated channel / sensor / alarm icon is placed in mouse position.

Disconnect	Disconnect the channel
Disconnect Site	Disconnect every channel which registered in same site.
Throw Away	Throw away
Move Lock	Lock the location of icon
Extension Mode	Change into extension mode icon. Only camera icon. Refer "CAMERA ICON"
Preview	Preview function. Only camera icon. Refer "CAMERA ICON"
Shift Right	Rotate camera clockwise. Only camera icon.
Shift Left	Rotate camera counterclockwise. Only camera icon.
Rec. Continuous	Continuous record setting for designated channel
Rec. Motion	Motion record setting for designated channel
Rec. Sensor	Sensor record setting for designated channel
To Map 1~16	Move to other channel in 16 channel

## Chapter 7. Environment Setup

### 7.1 System Setting

Click setup icon at the monitoring screen



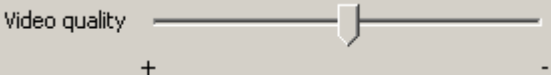
[Picture 7-1] System setting window

#### [Button & Functions]

System Name <input type="text" value="CMS SYSTEM"/>	System name setting
Language <input type="text" value="English"/>	Select language
Screen Ratio <input checked="" type="radio"/> Max Screen <input type="radio"/> 4:3 Screen <input type="radio"/> 16:9 Screen	Select screen ratio Max screen / 4:3 / 16:9
Version <input type="text" value="1.020.001"/>	System version
<input type="button" value="Surveillance"/> <input type="button" value="E-map"/>	Selection of application
Motion Event Popup <input type="text" value="- Off"/>	Select on/off for event popup dialog
Sensor Event Popup <input type="text" value="- Off"/>	Select on/off for sensor popup dialog

## Chapter 7. Environment Setup

### [Button & Functions]

<input type="checkbox"/> Record Setting (in local zone)	Set Record Setting
Re-compression - Apply to none	Re-compression setup
Water-mark - Apply to re-comp. data	Water mark setup
Codec - Allow for all	Allowable codec type selection
Resolution - Allow for all	Allowable resolution selection
Frame Rate - Allow for all	Allowable frame-rate selection
Video quality 	Video quality setup in recompression
Audio Bit Rate - Allow for all	Audio bit rate setting

## Chapter 7. Environment Setup

### 7.2 User Setting

[Picture 7-2] User Setting window

#### [Button & Functions]

User Name	<input type="text" value="James"/>	User name setting					
User ID	<input type="text" value="JAMES"/> <input type="button" value="Check ID"/>	User ID Setting Check ID : ID Duplicate Check					
Password	<input type="password" value="    "/>	Password setting					
Password confirm	<input type="password" value="    "/>	Password confirmation					
Authority	<input type="radio"/> Admin <input checked="" type="radio"/> Operator <input type="radio"/> User <input type="radio"/> Guest	User authority setting					
<input type="button" value="Add ID"/> <input type="button" value="Edit ID"/> <input type="button" value="Delete ID"/>		Add ID/Edit ID/Delete ID					
User Name	User ID	Level	Configura...	Search	E-map	Network	Backup
admin	admin	admin	0	0	0	0	0
Users List : Registered Users and authorities							

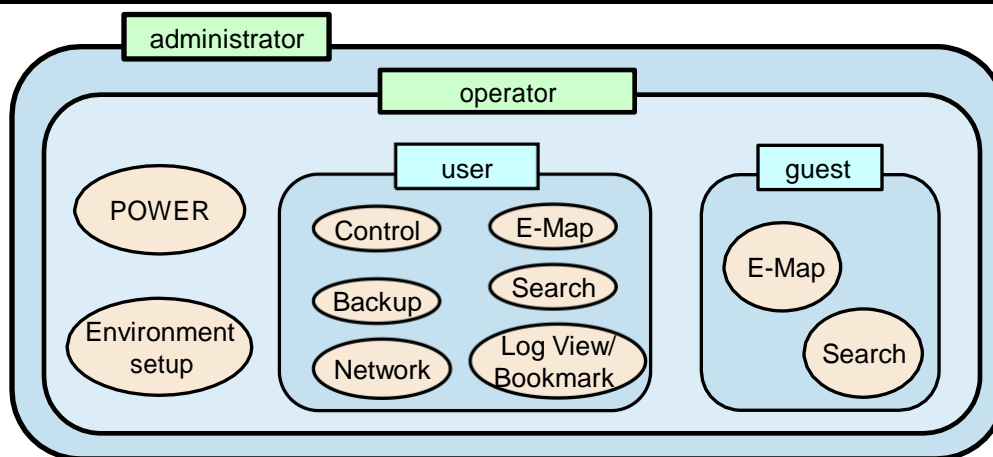
**[Remark]** The setting add/edit/cancel are available only by superior user.  
Administrator can setup all the settings except adding the administrator.



## Chapter 7. Environment Setup

### [User Authority ]

administrator	Top and sole authority. The factory default ID/Password is admin/admin and has the authority of administrator.
Operator	Subordinate of administrator. Administrator enable to add/edit/cancel and allow the authority.
User	Subordinate of operator. User can be add/edit/canceled by administrator and operator. User is allowed authorities except environment setup and close CMS.
Guest	Lowest authority. Guest can be add/edit/canceled by superior users. Search & E-map are allowed.

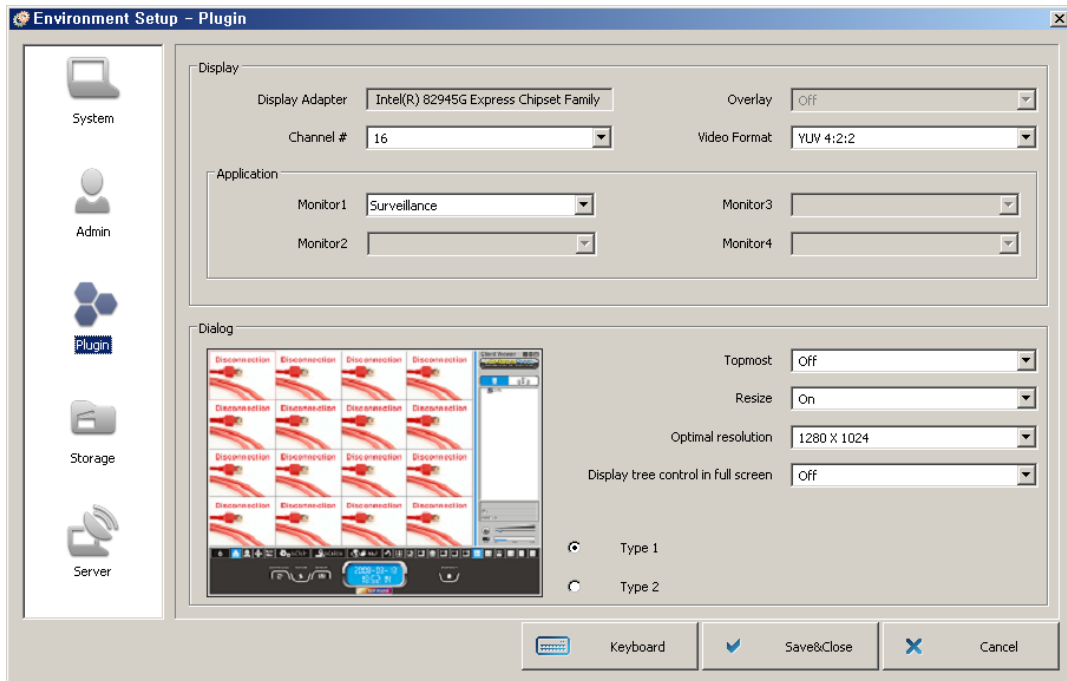


### [Authority Description]

Environment Setting	-Environment setting window setup -Save -Site and group address add/edit/cancel
Search	-Search mode setting and control -Backup data search
E-Map	-E-map mode setting and control -Local/Site/Group E-Map Open
Network	-Network Connection -Network Disconnection
Backup	-INF Backup -AVI Backup
Control	-Alarm On/Off
Log view/Bookmark	-Log view -Bookmark
Power	-Close CMS

## Chapter 7. Environment Setup

### 7.3 Plug-In setting



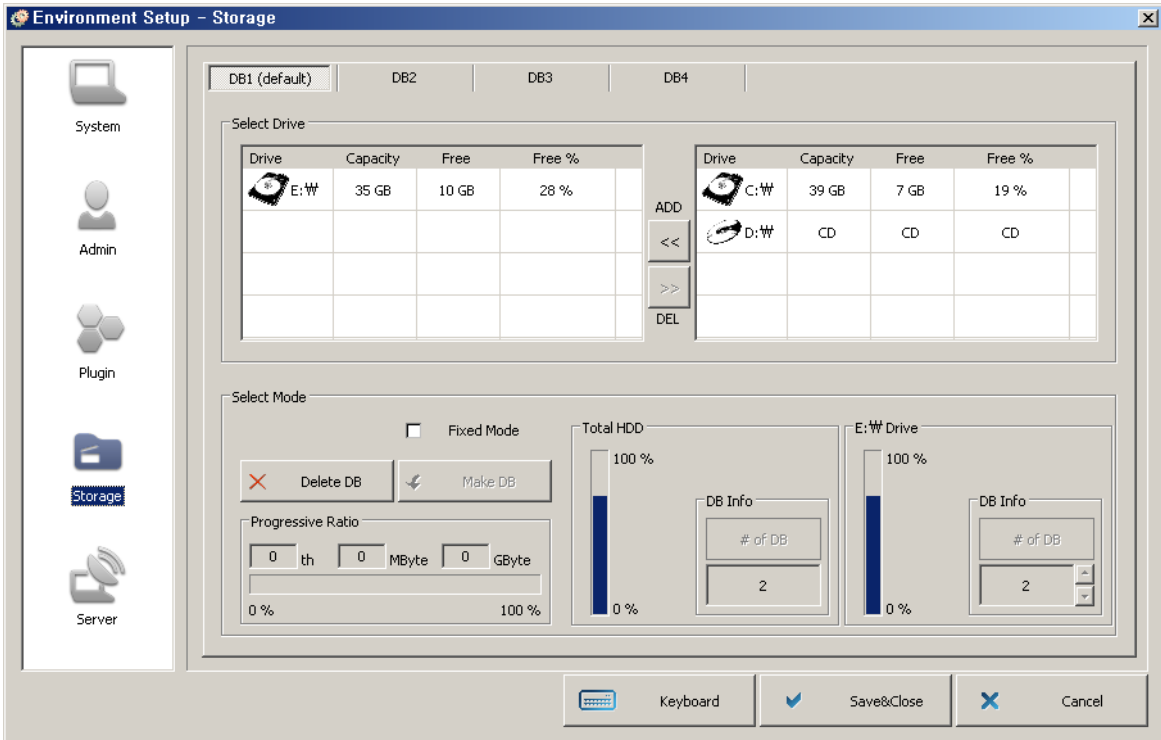
[Picture 7-3] Plug-in setting window

#### [Button & Functions]

Display Adapter	Intel(R) 82945G Express Chipset	Graphic Card Adapter
Channel #	64	Number of Channels (4 / 16 / 36 / 64)
Overlay	Off	Overlay On/Off
Video Format	YUV 4:2:2	Video Format (YUV4:2:2 / RGB32)
Monitor1	Surveillance	1'st Monitor Setting (Surveillance)
Monitor2 ~ Monitor4		2'nd ~ 4'th Monitor Setting (Extension1~Extension3, Search, E-map mode)
<input checked="" type="radio"/> Type 1 <input type="radio"/> Type 2		Dialog type Setting
Topmost	On	Dialog Topmost On/Off
Resize	Off	Dialog Resize On/Off
Optimal resolution	1280 X 960	Optimal resolution Setting
Display tree control in full screen		Display tree control in full screen On/Off

## Chapter 7. Environment Setup

### 7.4 Storage setting

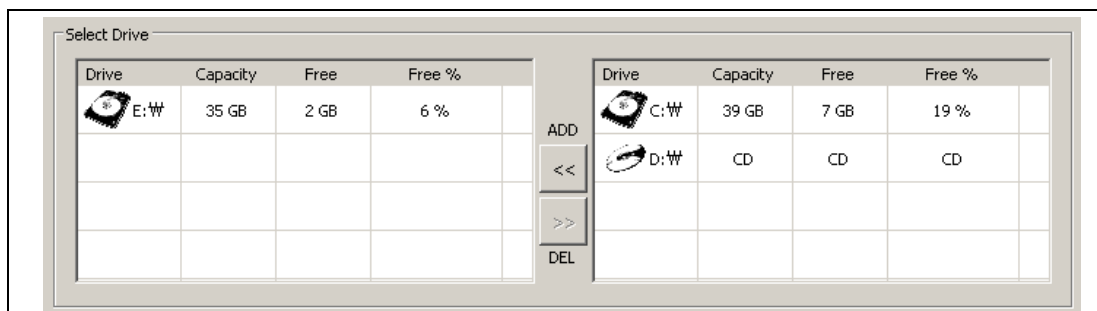


[Picture 7-4] Storage setting window

#### [Button & Functions]

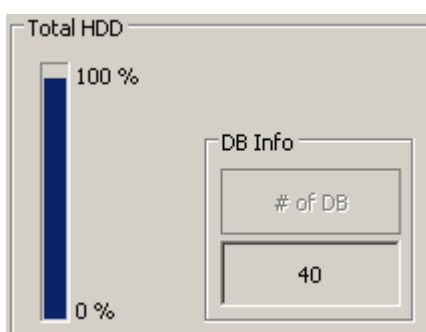
	<p>Max available DB number is 4. This function is using in case setting each save path to each different folder. Default is DB1. To choose other DB, select a quick menu to change the setting.</p>
	<p>Make a DB file in advance then recording on that file.</p>
	<p>Erase all file. This function can be performed only after login by administrator ID. 'Make DB' is make a DB file in advance in case of fixed mode.</p>
	<p>Display the status of progress, when making a DB.</p>

## Chapter 7. Environment Setup

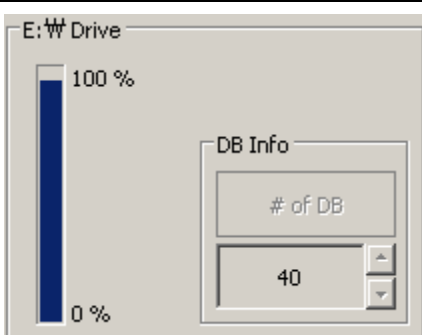


Drive add list : List of DB drive setting list


Left drive list is the list of assigned drive to the DB and the available drive list displayed on the right side. Add the drive and delete through add/delete button or use drag-and-drop. Deleting the drive is allowed in case of that drive don't have the DB file.



Display the file number of the DB and empty space rate of whole hard disk. One DB file volume is about 260Mbyte.

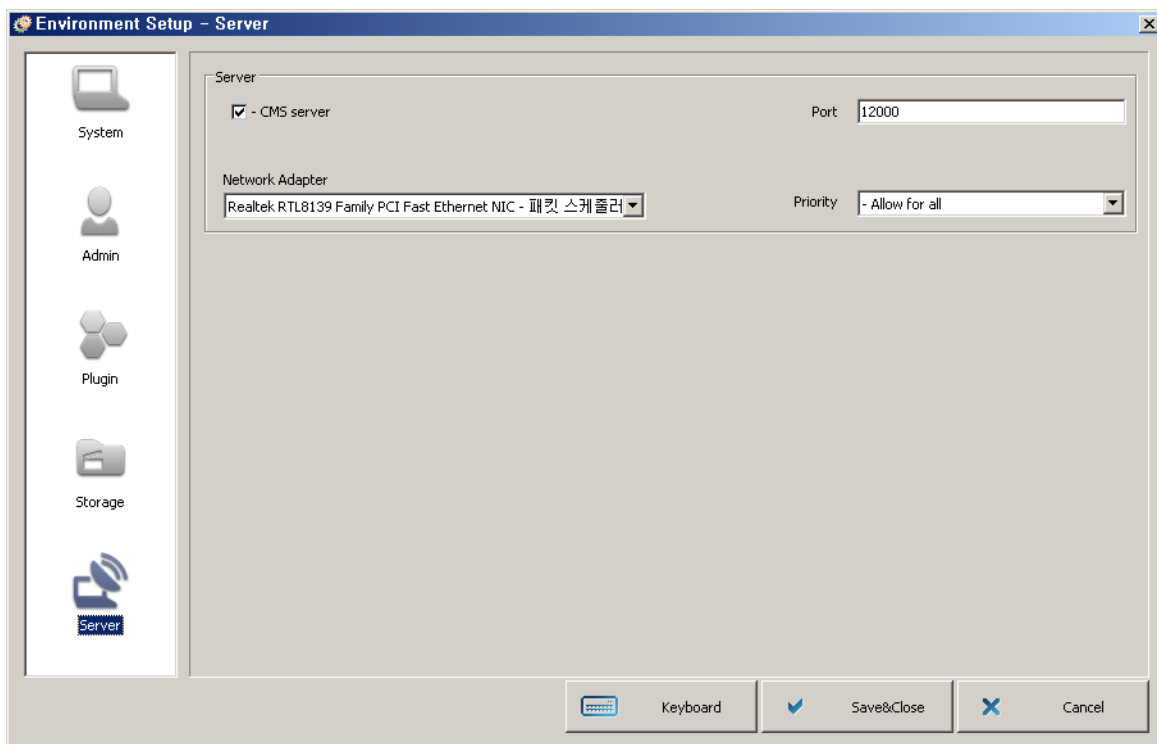


Display the file number of the DB of DB and empty space rate of selected hard disk at the left side of drive add.

In case fix mode,  the button is activated and you can set the number of the DB file in the drive.

## Chapter 7. Environment Setup

### 7.5 Server setup



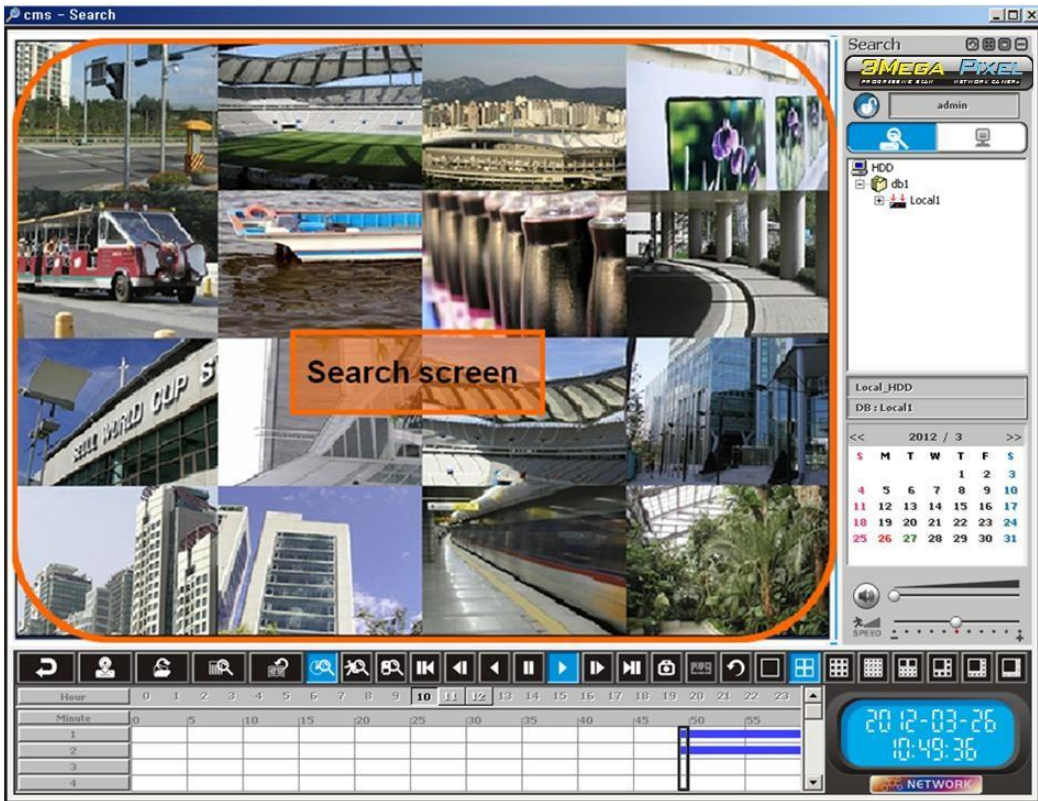
[Picture 7-5] Server setup

#### [Function description]

<input checked="" type="checkbox"/> - CMS server	Server system On/Off
Port 12000	Server system port
Priority - Allow for all	Priority setup(Refer "User Setting")

# Chapter 8. Search Mode

## 8.1 Search




















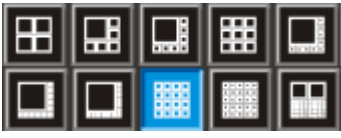


[Picture 8-1] Search mode screen








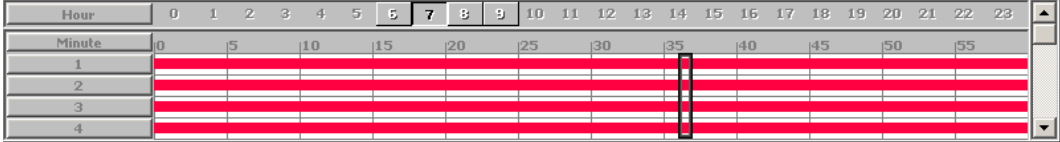
### [ Button description ]

		Return to normal screen size
		Search screen full view
		Maximize, Minimize
		Log-in ID
		search registration
		Remote search registration
		searching time
		network hologram (activated while searching)
		Exit search mode

## Chapter 8. Search Mode

		Backup button
		Open INF file (backup data)
		Log view - Event list search
		Bookmark
		Search continuous recording
		Search motion recording
		Search sensor recording
		Move 1minute to reverse
		1frame play to reverse
		Reverse play
		Pause
		Play
		Play 1 frame
		Skip 1 minute
		<b>Snapshot</b> BMP/JPG file capture & print With reference to "snapshot" tap of the manual
		<b>Panorama view</b> (when 1channel is activated) Panorama is shown by 16 divided pictures.
		<b>Refresh</b> back to initial screen
		screen division (4 to 64 channel)

## Chapter 8. Search Mode

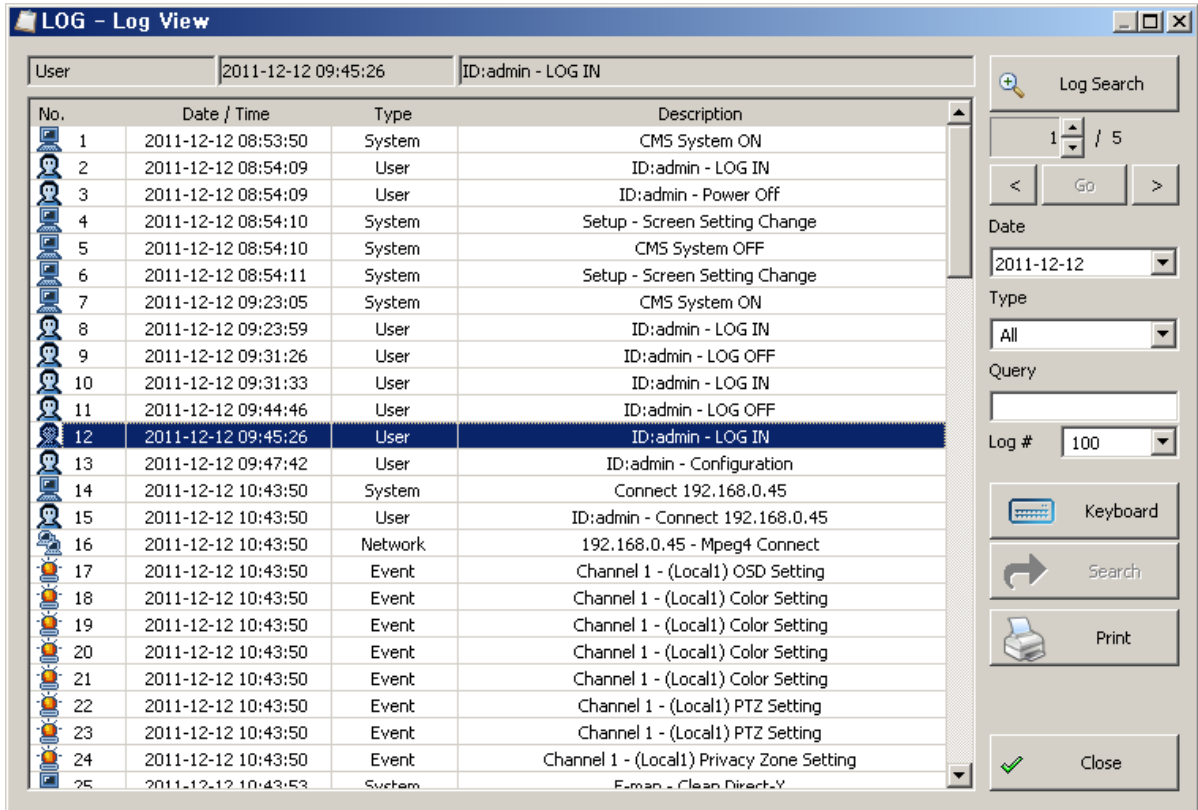
		PC speaker volume control No sound
		Adjustment of searching speed
		Calendar – Year / Month selection
		Calendar – Day selection Green : There is a data Red : Now searching
 <p style="text-align: center;">Time selection</p>		
<p>1. Hour If there is a data, button is activated.</p> <p>2. Minute If there is a data, it indicates by different color of graph according to continuous / motion / sensor recording.</p>		







## Chapter 8. Search Mode

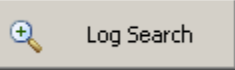
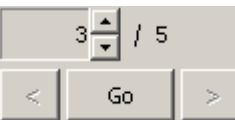

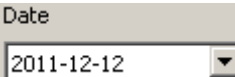





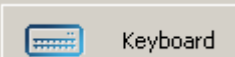
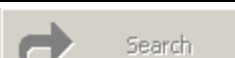
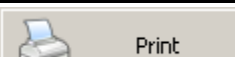
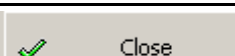
### 8.2 Log view

Click the log view button then window will be open. If log view is activated while searching, log search will be initialized. If search is not activated, log search will execute the present date. Search will execute while log view is on. Searching time can be changed using log view search button.



[Picture 8-2] Log view

Event		Log message type
2010-07-21 17:47:43		Log time configuration & selected log time
Channel 3 - (Local4) Motion Off		Contents of selected log
Date/Time		Date/time list
Type		System type log
		User type log
		Network type log
		Event type log

Description		Log contents list
		Log search using configured log type/log time/log query
	 :Setting Specific page	< : Previous page Go : Specific page > : Next page
Date 	 :Checking Calendar	Date setting for log search
Type 		Type setting for log search
Query 		Log query configuration This function can search specific character of log contents.
Log # 		The Log number per 1page view.
		Virtual keyboard
		Search selected time of log
		Print log list
		Close

### Log type

1. System type
  - A. ON/OFF CMS
  - B. system operation for recovering data
  - C. save new & close
  - D. configuration change
  - E. backup
  - F. open backup data
2. user type : user's data
3. network type : network connection status
4. event type : motion, sensor, alarm event record

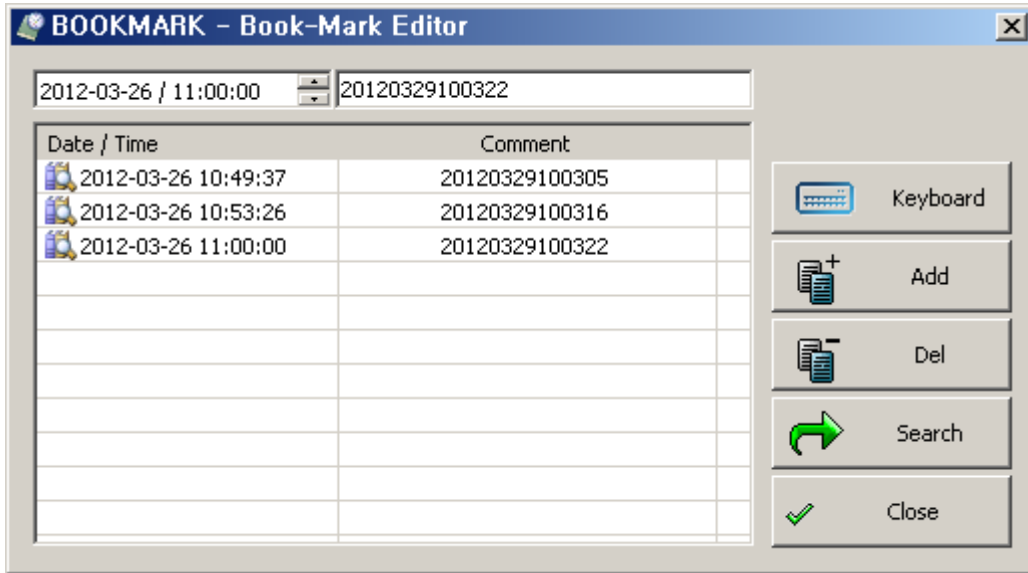
## Chapter 8. Search Mode

### 8.3 Bookmark

Window will open when the bookmark button is clicked at search menu.

Bookmark can be performed only while searching. Searching will not be stopped while bookmarking. Searching time can be changed using search button.

Contents can be listed which log-in user bookmarked.

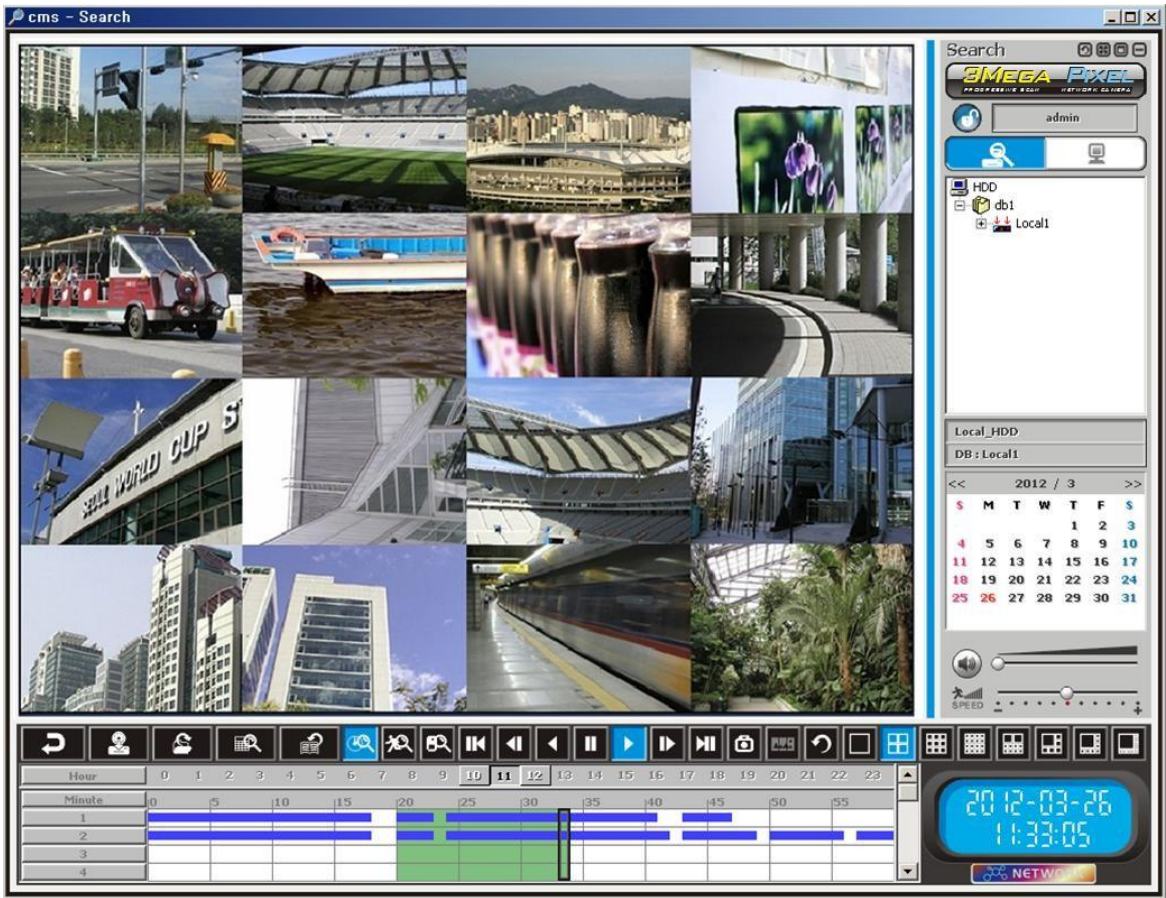


[Picture 8-3] Bookmark

2012-03-26 / 11:00:00		Time to bookmark
20120329100322		bookmark name Name is needed to distinguish configuration.
Keyboard		Virtual keyboard
Add		Add bookmark
Del		Delete bookmark
Search		Move to time of selected bookmark
Close		Close

# Chapter 9. Backup mode

## 9.1 Selection of backup scope

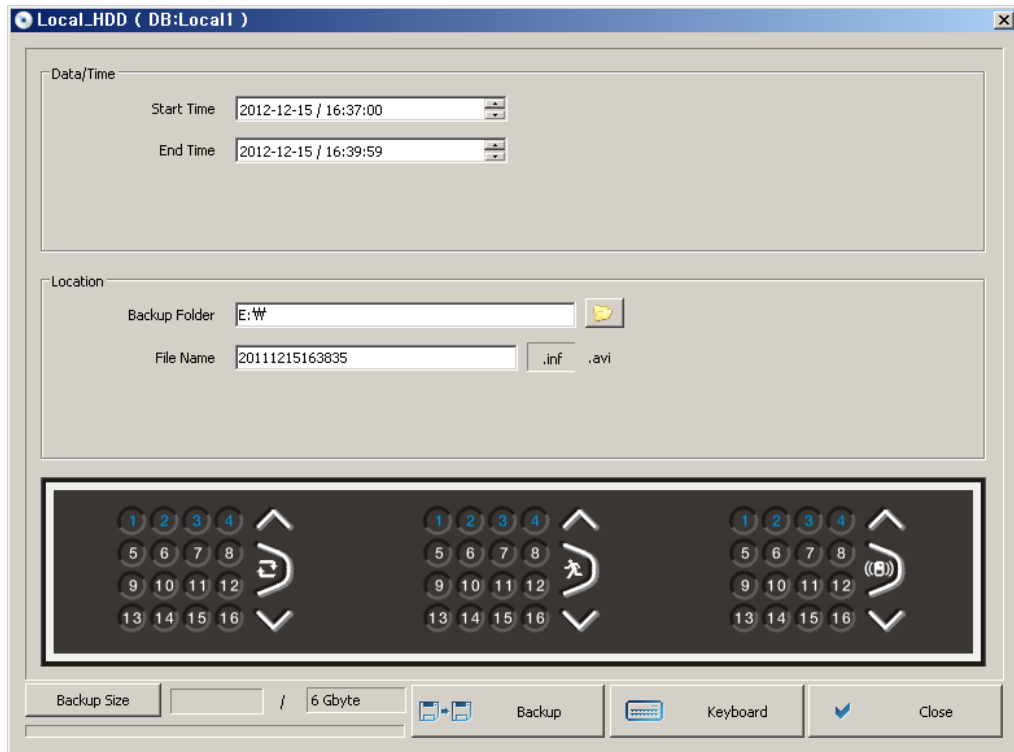


[Picture 9-1] Selection of backup scope

	<p><b>Drag</b></p> <p>To archive video clip recorded for certain period, drag the time to backup. Dragged period appear green.</p>
	<p><b>Backup button</b></p> <p>Click the backup button. The backup dialog window appears.</p>


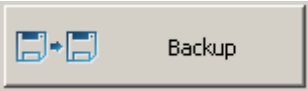
## Chapter 9. Backup mode

### 9.2 Backup



[Picture 9-2] Common backup

#### [Function description]

Start Time End Time	Start Time <input type="text" value="2012-12-15 / 16:37:00"/> End Time <input type="text" value="2012-12-15 / 16:39:59"/>	User can easily archive video while he/she watches video playback. In playback mode, user can set 'start time' and 'end time' by dragging the time bar
Backup Folder	Backup Folder <input type="text" value="E:\"/>	Location selection - Specify the backup folder in the PC to backup recording files. In case of CD writer installed, CD drive can be selected.
		Open folder selection window
File Name	File Name <input type="text" value="20111215163835"/>	Backup file name
	<input type="radio"/> .inf	Select INF backup
	<input type="radio"/> .avi	Select AVI backup
Backup Size	<input type="button" value="Backup Size"/>	Click "Size" button to check the backup file size and storage capacity before starting backup.
Backup		Backup button - After setting all about backup, click backup button to start backup



## Chapter 9. Backup mode

1. INF backup  
Click this option to archive several channels simultaneously.
2. AVI backup  
Make the AVI backup file separately for each channel.
3. Camera setting





### 9.3 How to view INF backup file

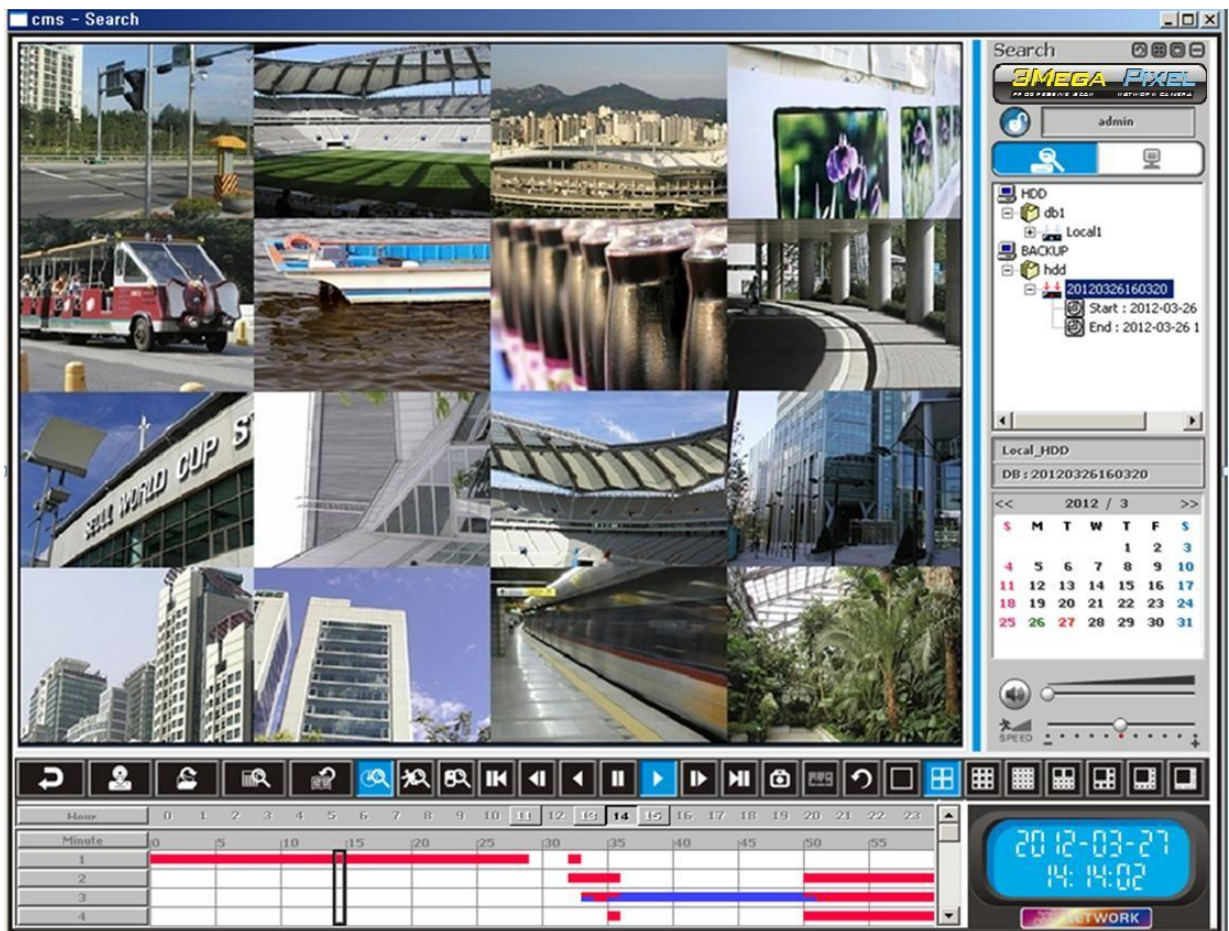
There is two ways to view INF backup file.

#### 9.3.1 Using 'Inf file open' button in 'Search' mode on the CMS

In 'search mode' on the CMS,

Click 'Inf file open' button, and then select the backup file.

User can view details on the search list. By double-clicking   icon, user can select search list.





[Picture 9-3] Play the backup file in CMS search mode

## Chapter 9. Backup mode

### 9.3.2 Using 'Player.exe'

Player will be added when user select INF backup.

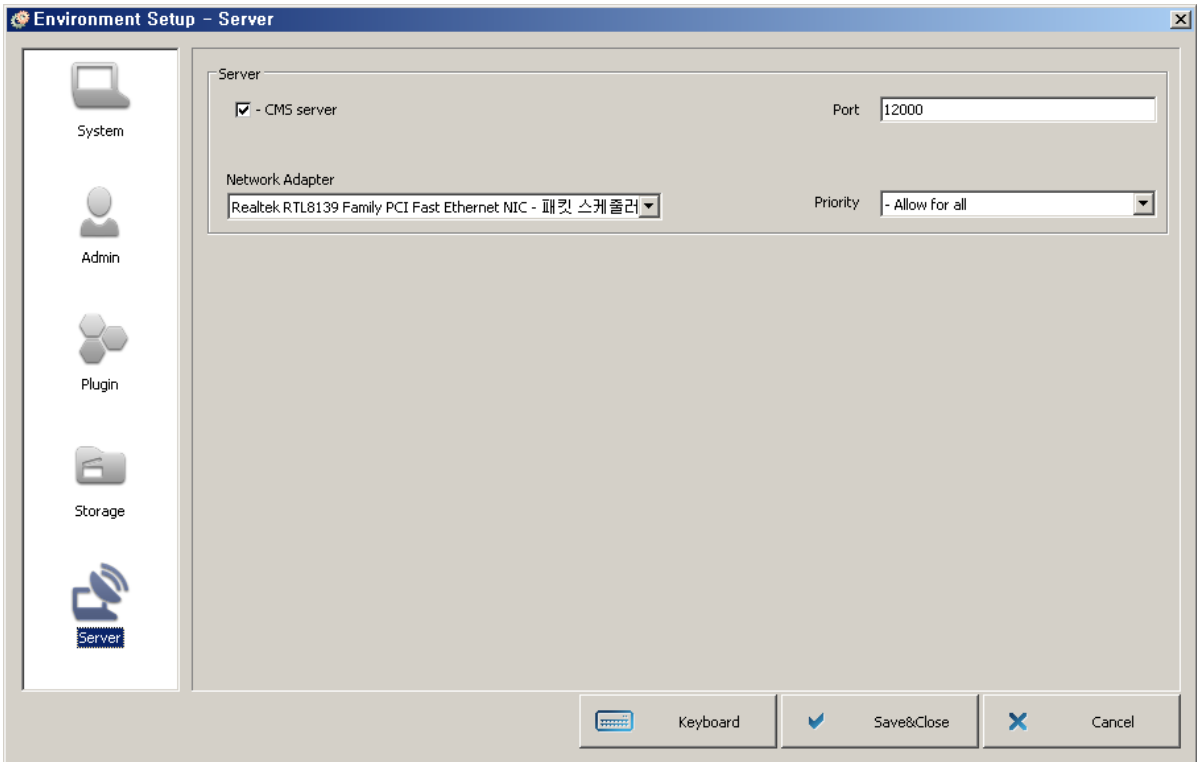
User can double click 'player.exe' file and add all INF file in the folder at search list.

By double-clicking  , user can select search list.



[Picture 9-4] Player window

## 10.1 CMS server setting



[Picture 10-1] Server setting

Before using CMS server function, You should check usage setting in server tap of environment setting.

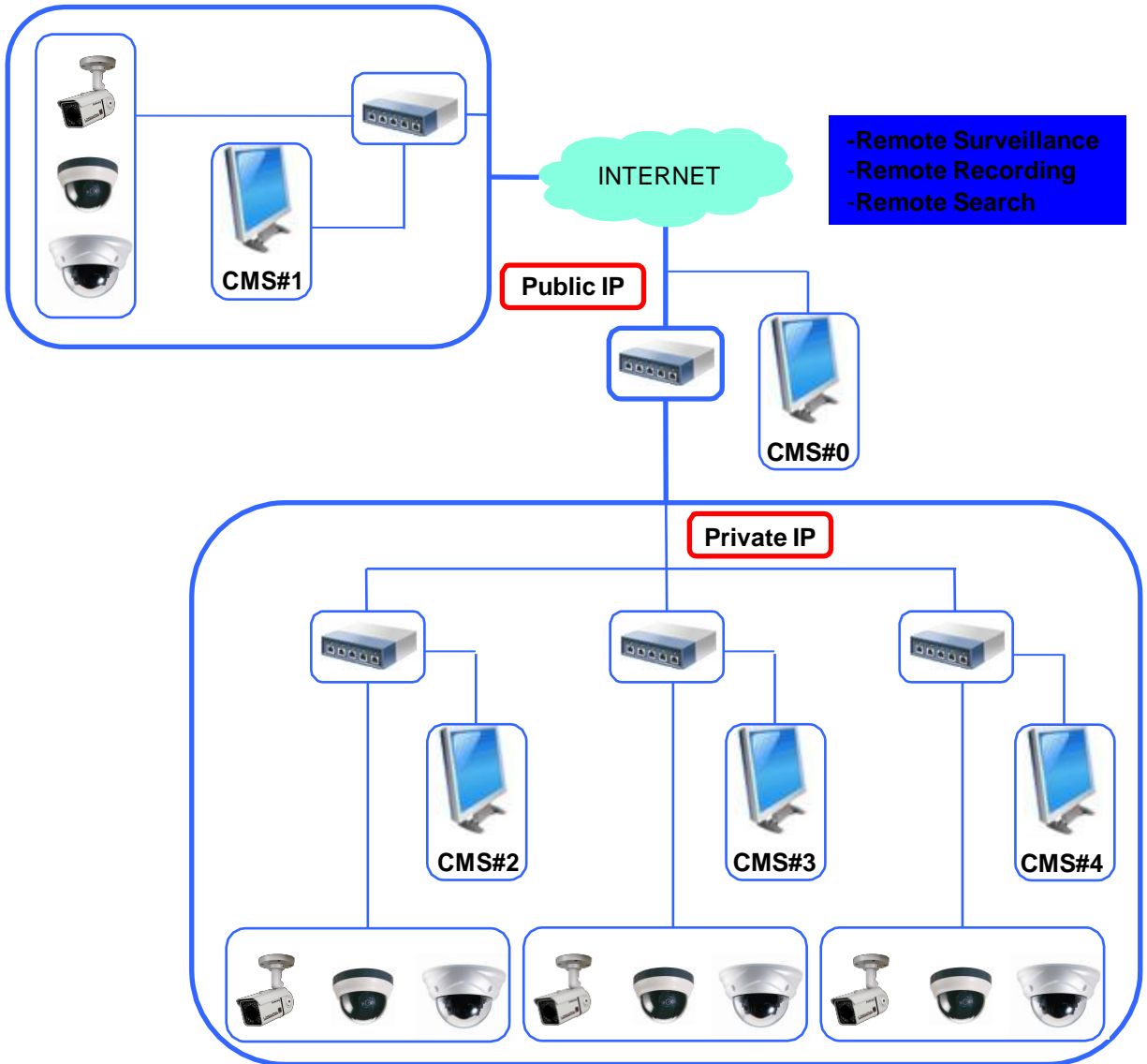
To connect CMS server, you may add new ID & password on the administrator's tab of set up menu.

To connect CMS client, you should use ID & password that was registered in the server.

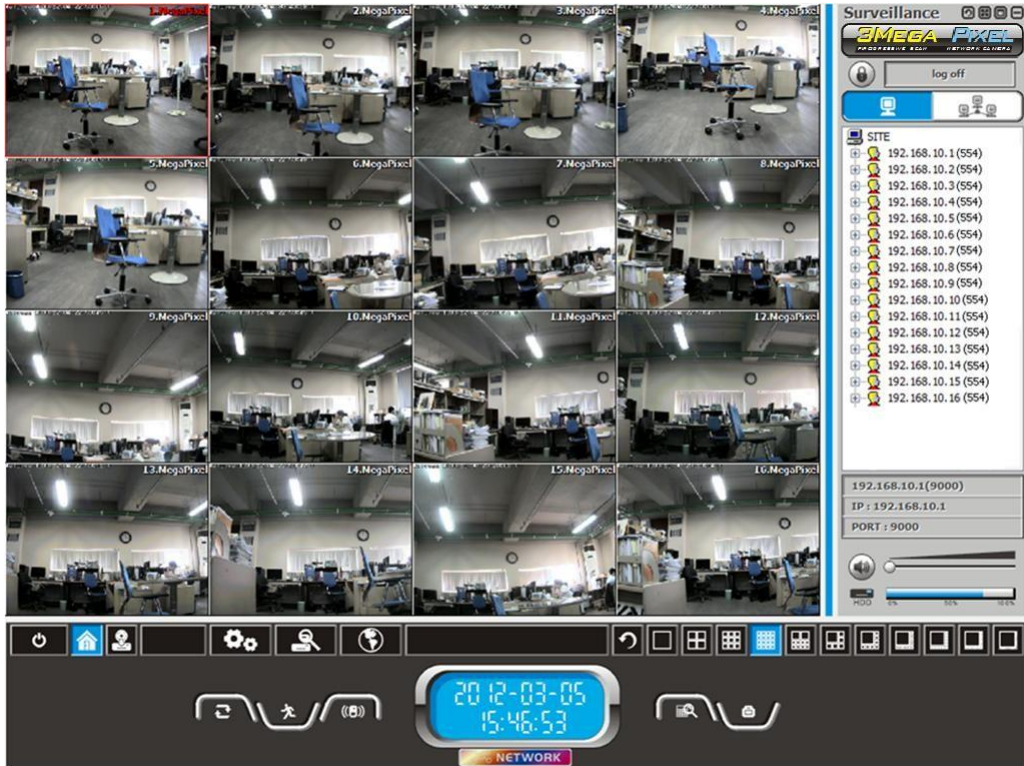


# Chapter 10. CMS server / Client

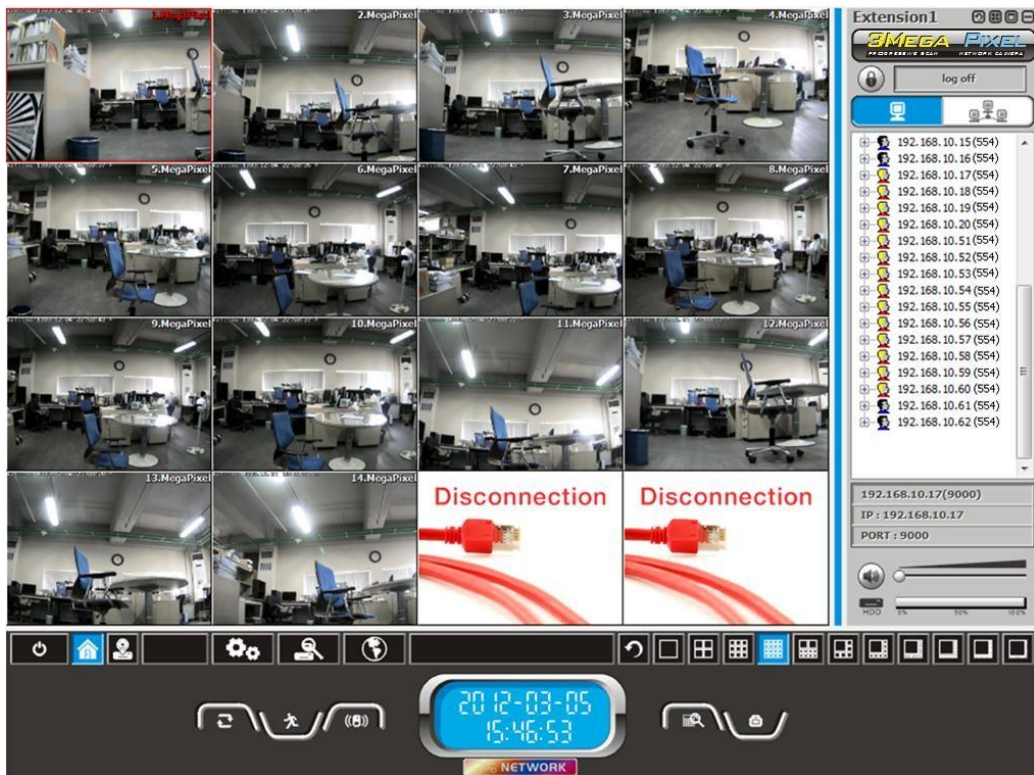
## 10.1.1 CMS server / client connection diagram



[Picture 10-2] CMS server / client connection diagram



[Picture 10-3] CMS server monitoring(Surveillance)



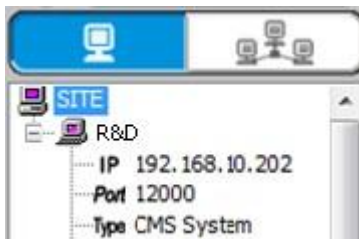
[Picture 10-4] CMS server monitoring(Extension 1)

# Chapter 10. CMS server / Client

## 12.2 CMS sever surveillance

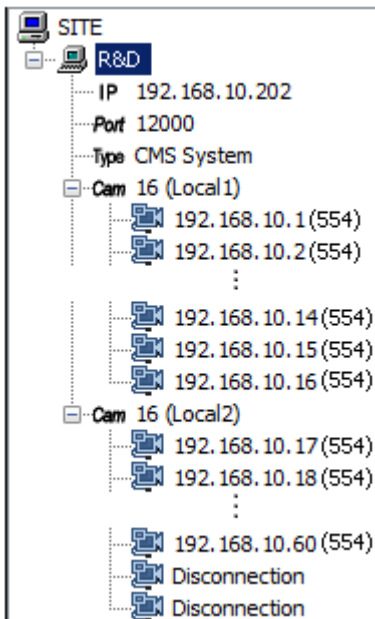


[Picture 10-5] CMS server monitoring screen with 32 channel view



[Picture 10-6] CMS server registration

- First refer to “3.3 CMS system setting” then register the CMS server to client.
- Display the CMS server on address book, double click or drag & drop to connect to CMS server.

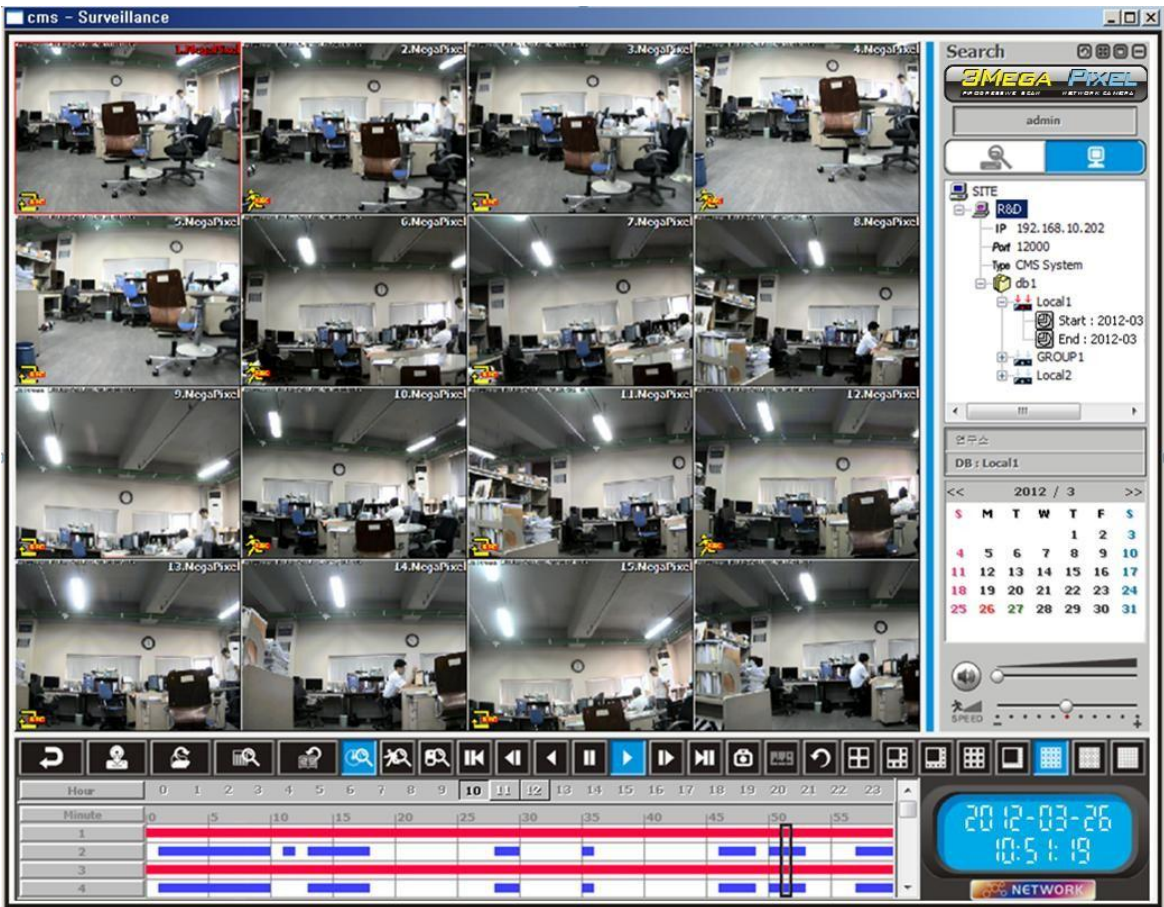


[Picture 10-7] CMS server connection

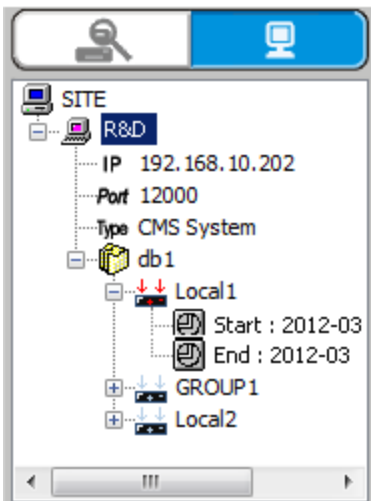
- “[Picture 10-2] Display information of the CMS server as the “picture 12-2”
- “Cam16 (Local1)” is display the information of “cms – surveillance”  
“Cam16 (Local2)” is display the information of “cms – expansion1”
- Mouse drag & drop or double clicking to connect to screen step by step.
- The connected channels show all the event and information of the related camera. In the case of setting the record, it is saved with camera equally.



## 10.3 CMS server remote search



[Picture 10-8] CMS server search monitoring




[Picture 10-9] CMS server search DB

- Double clicking to connect DB of CMS server.
- If connection is completed, display the DB list of CMS server, double click what you want DB for play .
- Search mode : Please refer to “chapter 8 Search mode”.

## 11.1 Partial Enlargement / Reduction



[Picture 11-1] Partial enlargement setup window

1. Partial enlargement or reduction image by dragging
  - Image enlarged or reduced when user drag on the screen.
  - When image is enlarged, the mouse cursor will be change as  , at this moment user can move the screen position by mouse drag
  - Clicking mouse right button or press ESC key to return to origin image.
2. Partial enlarge or reduce image by Key board
  - Press +/- key of keyboard to enlarge or reduce image.
  - When image is enlarged, press direction key to move where you wanted position.
  - Press Esc key to move back to origin image.