

MultiWindow  
Operation Document\_V3.00.04

REVISION HISTORY

Version	Author	Description	Date
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## 1、System Requirements

### a. IP CAM Requirements

Imagia Module Firmware Version : Module 2.0.5

Stardot

LEX-8200-8/16

HA-8160/4125

### b. System Requirement

1 : Terminal Server :

OS : Windows system : Windows 2000 and Windows XP above

Memory : DDR 2048 MB above

Hard disk : Refer to the chart below ( by parameters of number of channel and recording time )

ID	Number of channel	Hard Disk Capacity (GB)
1	1	$1*2 = 2$
2	4	$4*2 = 8$
3	9	$9*2 = 18$
4	16	$16*2 = 32$
5	64	$64*2 = 128$

Calculation

Hard Disk Capacity : number of channel \* 2(GB)

Hard Disk overwrite : When destination Hard disk is full capacity, the first five recording data will be deleted and to overwrite recording into Hard disk

2 : client terminal :

OS : Windows system : Windows 2000 and Windows XP、Windows VISTA、Windows 7

Memory : DDR 2048 MB above

Hard disk :

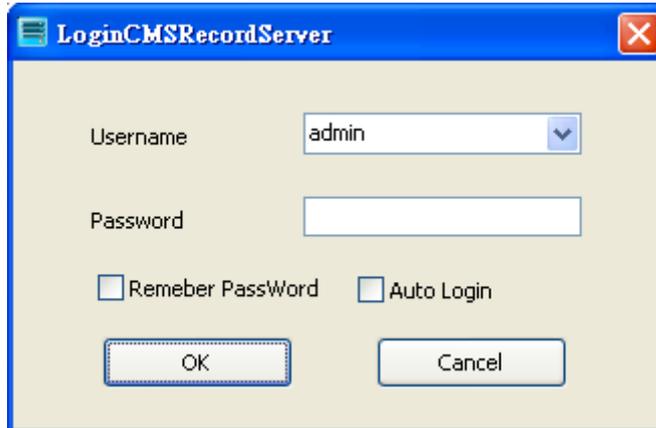
Display resolution : 1024 x 768 above

## 2、 PC Server

### a. Interface instruction

#### 1、 Login Interface

Double click the CMS-Server Program to execute it and then get into Login interface shown as below:



User Name : self-assigned name to login

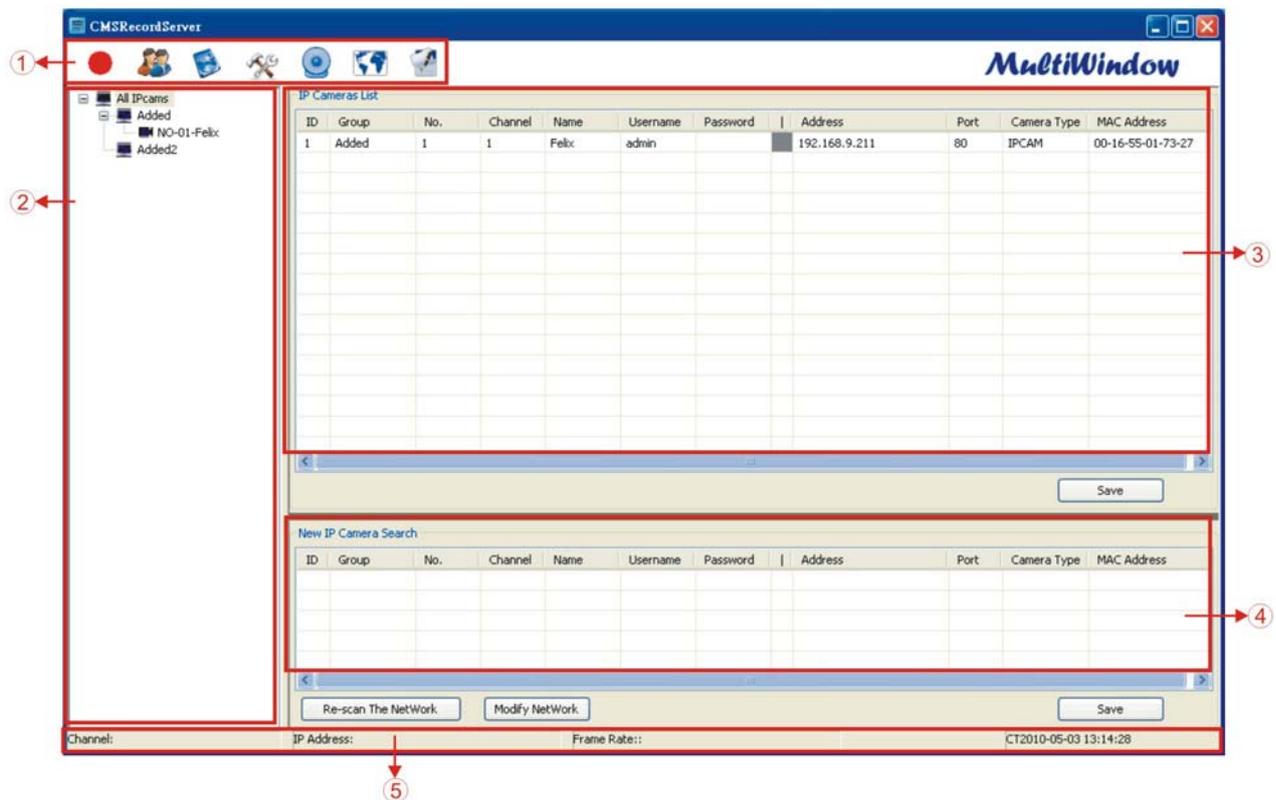
Password : self-assigned password to login

Remember Password : Recording User' s last Login-information

Auto Login : Directly auto login to Main Window with correct Username and password for next execution of the CMS-Server Program when this item is selected .

Note : As first time execution, the default value for User Name : admin / Password : None

## 2、 Main Window



To login to Main Window with correct Username and password as shown above

(1) Tool Bar

There are seven control option in Tool Bar :

1 : Start/ Stop Record 2 : User Set 3 : Recording path 4 : System set 5 : Camera List  
6 : EMap 7 : Log system

(2) Group list

ALL IPCAM connected to PC Server will be listed by group in Tree, and setting, adding and modifying group, could be made in this list.

(3) Camera List

ALL IPCAM added to PC Server' s Multi Window database (MultiWindow.mdb) will be listed b, and setting of every details of each camera could be made in this list.

(4) Search Camera

ALL IPCAM available in LAN will be listed , and setting, adding and modifying group, could be made in this list, furthermore, be added into data base with correct user name and password.

(5) Status Information

Display transmitting status of IPCAM, as well as its information: channel number, IP Address, frame

rate , Streaming and present time

## b. Tool Bar

### 1、System Set

select  in Tool Bar to get into interface shown as below



1 : Add new camera when connect successful :

Auto connecting to new searched IPCAM with default username and password when enable this function, and its IP address would be added into database, that simplifying the operation.

4 : Max Window : Select the maximum amount of IPCAM ( 1,4,9,16,25,36,49,64,81,100 )

5 : Language : Select the language

6 : Port : Set the port of the server terminal for internet connection , default value : 10001 .

7 : Auto record all : All the IPCAM in data base will auto-recording when enable this function.

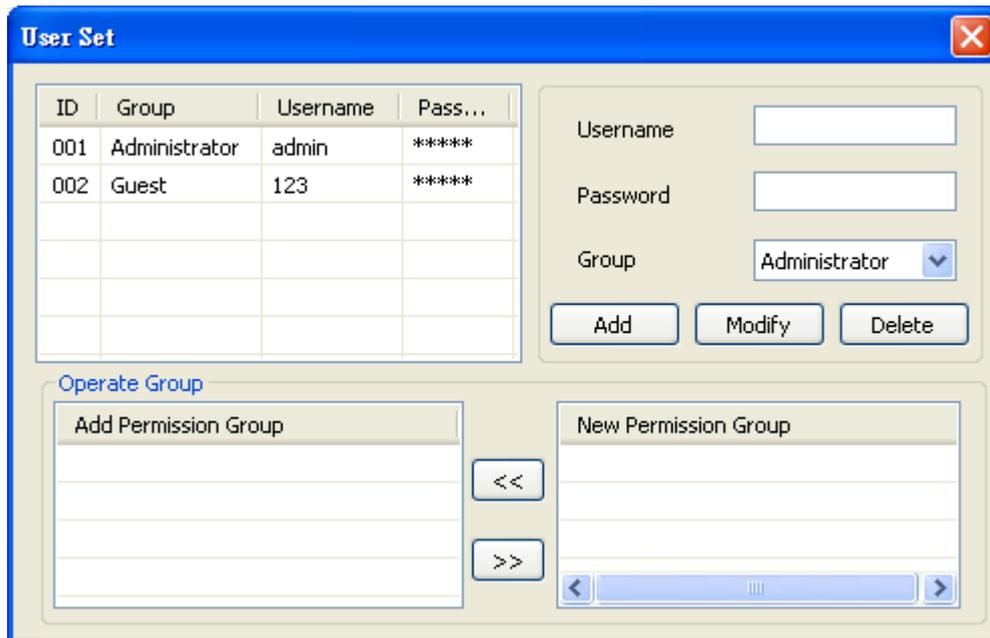
8 : Auto Login : Auto-login when enable this function with correct user name and password

9 : Auto to run when the windows OS starting :

auto execute after windows OS starting when enable this function

## 2、User Set

select  in Tool Bar to get into interface shown as below



- 1、Add：type new username and password and then “add” to create a new account
- 2、Modify：Select one account and then “modify” to fix all parameters under its permission
- 3、Operate Group：permission of users could be modified in this column by group.

## 3、IP Cameras List

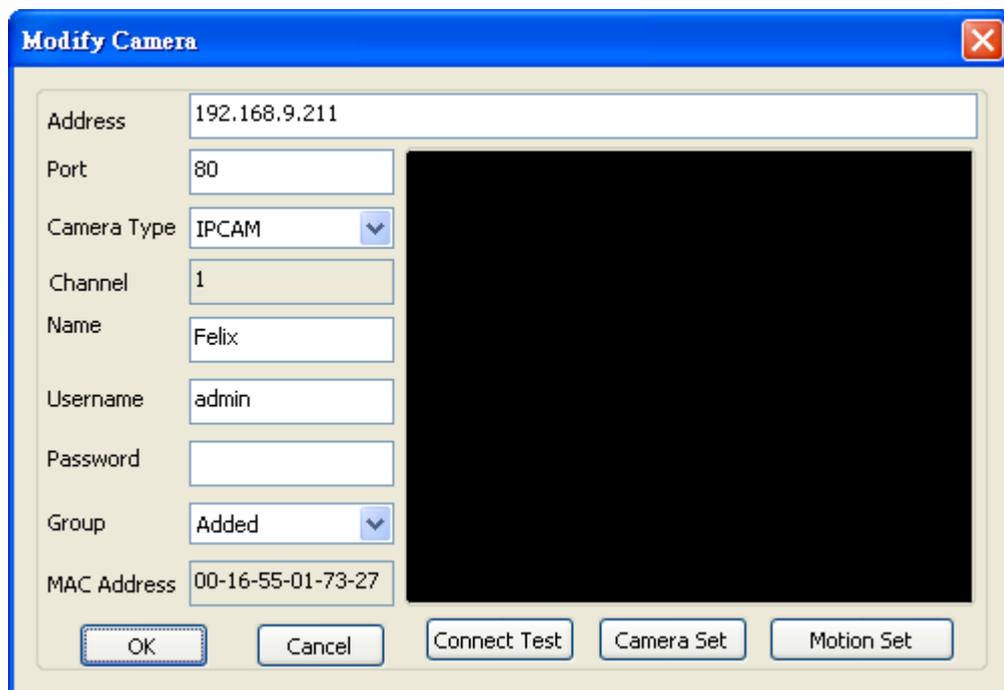
In this list, double click upon selected IPCAM to get into its setting interface.

ID	Group	No.	Channel	Name	Username	Password	Address	Port	Camera Type	MAC Address
1	Added	1	1	Felix	admin		102.168.9.211	80	IPCAM	00-16-55-01-73-27

Add Camera  
 Modify Camera  
 Delete Camera  
 Camera Set

### 3.1 Add Camera & Modify Camera

Click Add Camera & Modify Camera both are led to one interface as shown below

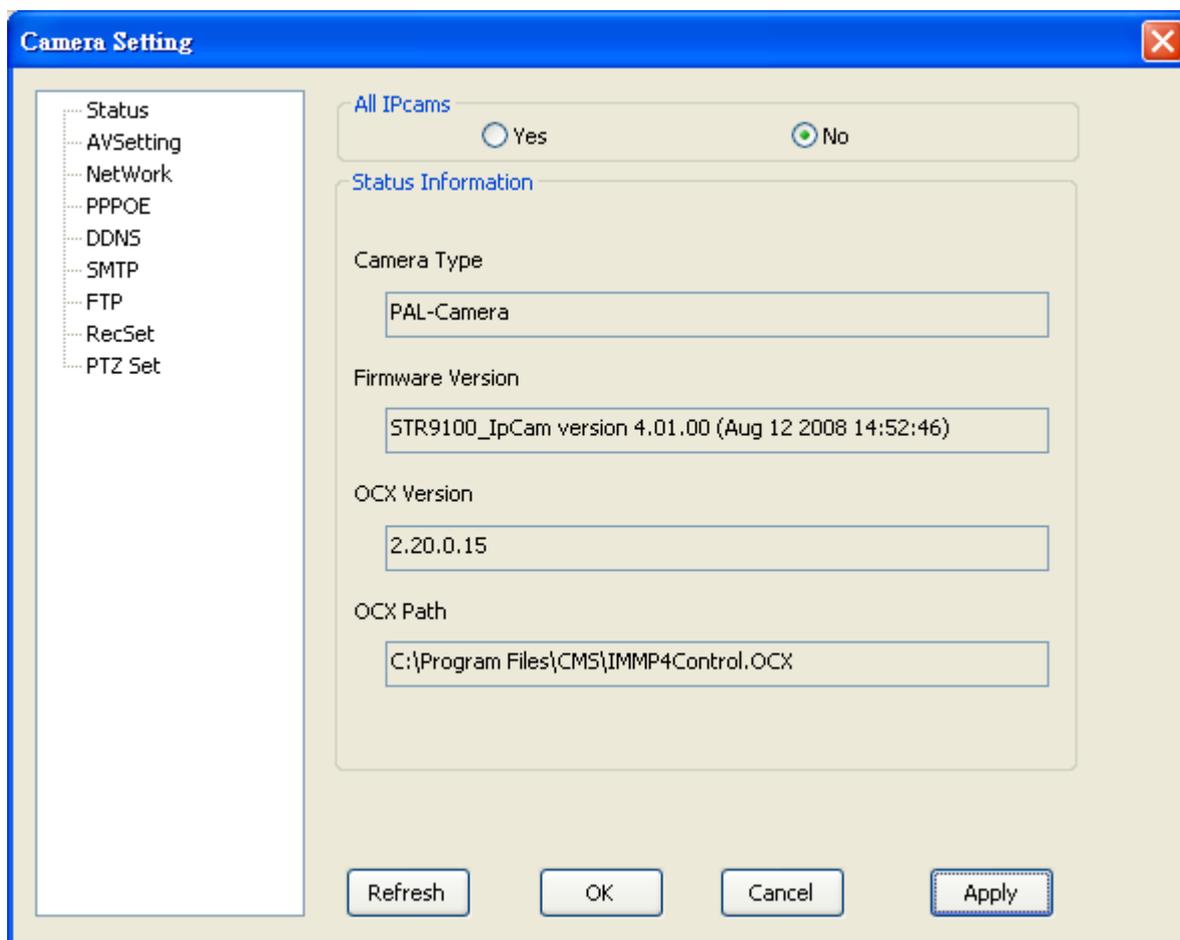


- 1 : Address : Type IP Address of new IPCAM to add it to list
- 2 : Port : IP CAM' s port
- 3 : Camera Type : Select the Camera' s type accordingly, such as HA-64X 、 StarDotand etc..
- 4 : Channel : Self-assign the name of each IP CAM
- 5 : User name : Set User name of IPCAM
- 6 : Password : Set Password of IPCAM
- 7 : Group : Self-assign the group for each IP CAM
- 8 : MAC Address : MAC Address
- 9 : Connect Test : With correct username and password, Live display will show on the right after click “connect test “ , and then “ OK “ to add it into database when the connection succeeded.
- 10 : Camera Set : Set IPCAM, refer to next index for details
- 11 : Motion Set : Set motion detect

## 3.2 Camera Setting

### 3.2.1 Status

You can see the camera, OCX and other basic information from the camera setting as shown below:



#### 1、All IPcams

When “ Yes ”, all set will be to all camera in database, instead of setting individually, to save time from setting.

#### 2、Camera Type

Television system of cameras shown as PAL-Camera or NTSC-Camera

#### 3、Firmware version

The current firmware version. Please check this information to make sure whether the system should be updated or not. In general, update to latest firmware can fix the system bug and provide more functions if available.

#### 4、OCX version

The current ActiveX version : OCX goes along with the Multi Window installation, so up-date is unnecessary as usual.

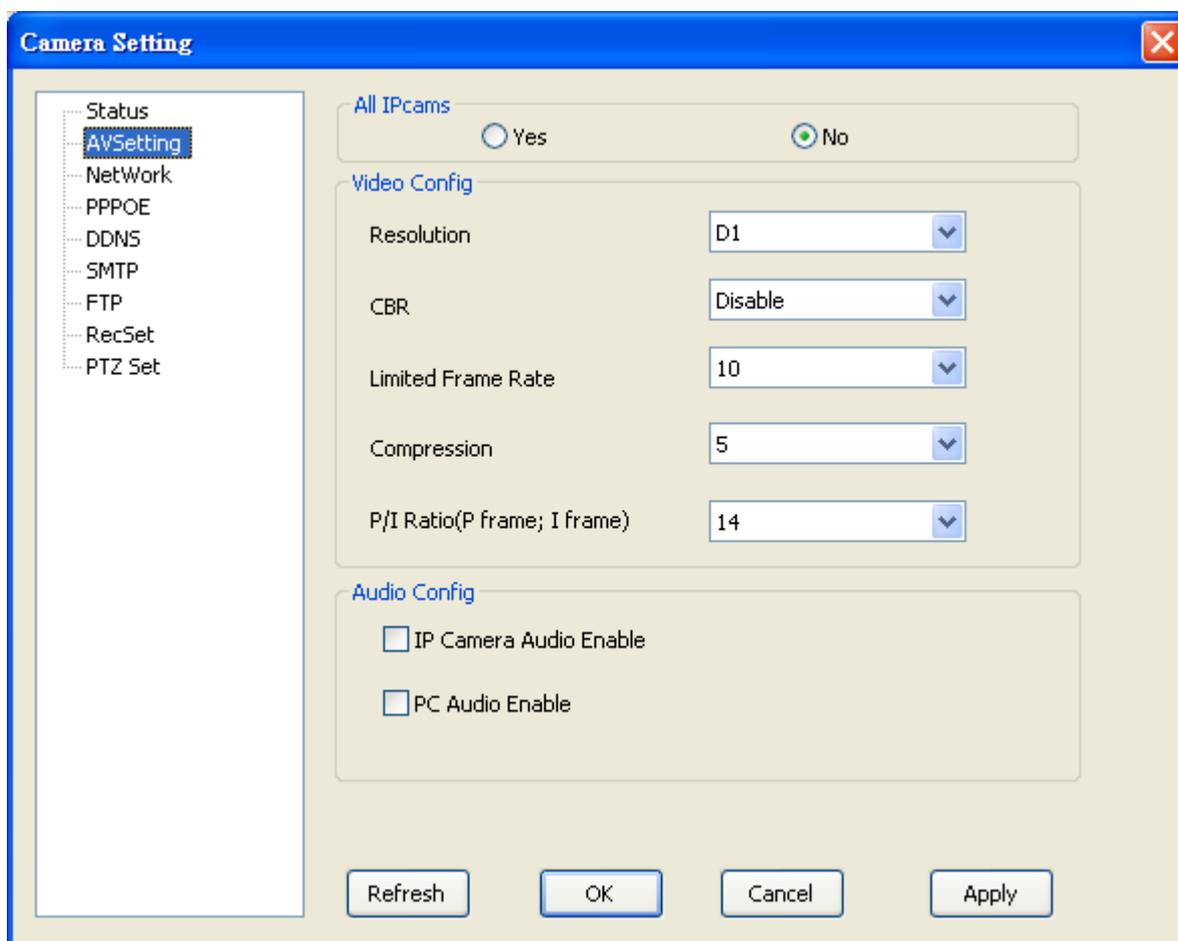
#### 5、OCX path

The installation path of the ActiveX.

### 3.2.2 AV Setting

In this interface, you may set the Audio / Video of each IPCAM, such as Resolution, CBR, Limited frame

rate and etc..., as shown below:



## 2、Video Config:

### 2.1 Resolution

Options as D1、CIF、VGA、QVGA.

### 2.2 CBR

CBR file fixed the amount of output data per time segment, to keep away from internet jammed with limited band; transmitting image quality go down as CBR value is set lower

### 2.3 Limited Frame Rate (fps)

Frame rate transmitting per second is defined by the internet connection speed. Higher value brings smoother picture performance..

### 2.4 Compression

Image compression rate-the less value brings the higher image quality and the larger data transmission.

### 2.5 P/I Ratio (P frame : I frame)

As P/I value gets less, that image quality be higher, yet transmitting load rising.

## 3、Audio Config

Enable IP Camera Audio to record its audio; enable PC Audio to play audio from IP Camera.

### 3.2.3 NetWork Setting

In this interface, you may set the network condition of each IPCAM, such as IP Address and etc., as shown below:

The screenshot shows a 'Camera Setting' dialog box with a sidebar on the left containing a tree view with the following items: Status, AVSetting, Network (highlighted), PPPOE, DDNS, SMTP, FTP, RecSet, and PTZ Set. The main area is titled 'All IPcams' and contains two radio buttons: 'Yes' (unselected) and 'No' (selected). Below this is the 'Network Config' section, which has two radio buttons: 'Obtain IP Address via DHCP' (unselected) and 'Use the following IP Address' (selected). Under the selected option, there are three input fields: 'IP address' with the value '192 . 168 . 9 . 211', 'Netmask' with '255 . 255 . 240 . 0', and 'Gateway' with '192 . 168 . 9 . 4'. Below these are two more radio buttons: 'Obtain DNS Server Address via DHCP' (unselected) and 'Use the following DNS Server Address' (selected). Under the selected option, there are two input fields: 'Primary DNS Server' with '168 . 95 . 1 . 1' and 'Secondary DNS Server' with '0 . 0 . 0 . 0'. At the bottom of the dialog, there is an 'HTTP Port' input field with the value '80'. At the very bottom, there are four buttons: 'Refresh', 'OK', 'Cancel', and 'Apply'.

Obtain IP Address via DHCP : Obtain IP Address via DHCP

Use the following IP Address : Self-assign the IP Address of each device and related setting

HTTP Port : HTTP Port of selected IPCAM, default value : 80

### 3.2.4 PPPoE Setting

In this interface, you may set the PPPoE of each IPCAM , as shown below:

The screenshot shows two sections of a configuration interface. The top section, titled "PPPoE Config", contains the following elements: "Enable PPPoE" with radio buttons for "Yes" and "No" (where "No" is selected); "User Name" and "Password" text input fields; and "Email Notification when IP is changed" with radio buttons for "Yes" and "No" (where "No" is selected). The bottom section, titled "Status", contains five text input fields: "IP Address", "Default Route", "Primary DNS Server", "Secondary DNS Server", and "Connection State". The "Connection State" field contains the text "Disabled".

#### 1 : PPPoE Config

Enable PPPoE : it needs user-name and password from ISP ( Internet Service Provider ) when enable PPPoE, and dynamic IP is provided and changed accordingly by the “ Email Notification when IP is Changed” .

#### 2 : Status

Every information of IP Address, DNS, Connection State and etc. from ISP is listed after internet connection succeeded.

#### 3.2.5 DDNS ( Dynamic Domain Name Service )

Set DDN Service in this option . Please kindly register to complimentary DDNS Server in the list we offered for DDNS Service ; DDNS Server not in our list is not available . Please refer to related website for more details. For example, as Dyn dns, as shown as below :

The screenshot shows the "DDNS Config" section of a configuration interface. It includes a "Choose Server" dropdown menu with "Dyn dns" selected. Below it is a "DDNS Account" text input field containing "test.dyndns.org". There are also "Username" and "Password" text input fields, with "test" entered in the username field and "\*\*\*\*" in the password field. At the bottom, there is a "Status" text input field and a "Manual Update" button.

### DDNS Config

Choose ( DDNS ) server :      Choose DDNS Server , offered as : DynDNS 、 PeanutHull and Perfecteyes

DDNS Account :      Self-assign the domain name , such as : test.dyndns.org

Username :            Self-assign the Username

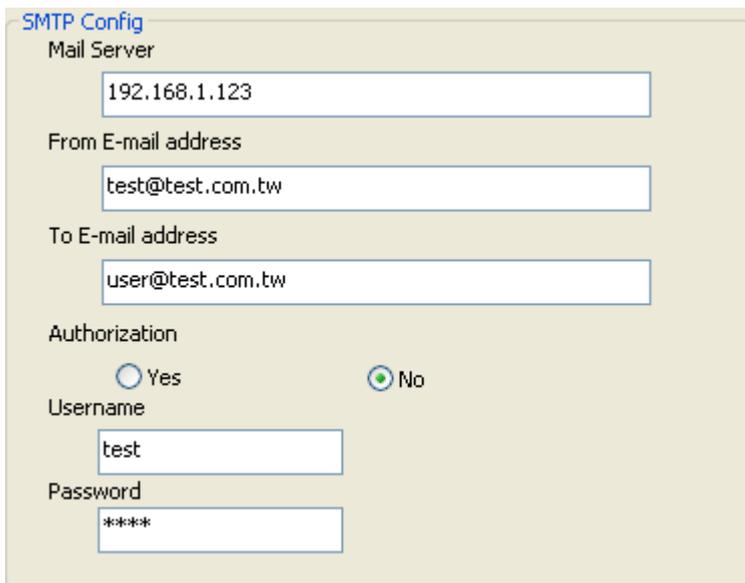
Password :            Self-assign the Password

Status :              Display connecting status to DDNS server

Manual Update        : When connecting failed, click “Manual Update ” to announce the IP Address of your IPCAM to DDNS Server.

### 3.2.6 SMTP Config

Set SMTP of selected IPCAM in the interface as shown below :



The screenshot shows the SMTP Config interface with the following fields and values:

- Mail Server: 192.168.1.123
- From E-mail address: test@test.com.tw
- To E-mail address: user@test.com.tw
- Authorization:  Yes,  No
- Username: test
- Password: \*\*\*\*

### SMTP Config

In PPPoE mode, please renew the IP when it is changed and noticed by E-mail; and please refer to the fig. above to set SMTP server for picture sending when alarm triggered, entering your E-Mail information accordingly.

### 3.2.7 FTP Config

Set FTP of selected IPCAM in the interface as shown below :

**FTP Config**

FTP Server  
192.168.1.123

Username  
test

Password  
\*\*\*\*\*

Port  
21

Path  
./Record/

#### FTP Path

Please ensure the correction of FTP Config for the function of recording to FTP when alarm triggered.

#### 3.2.8 Record By Schedule

Set Scheduled Recording of selected IPCAM in the interface as shown below :

Record Type **Record By Schedule** ▼

**Schedule**



No Record       60 Min  
 Motion Record     GPIO Record  
 Motion or GPIO Record

**Duration**

Motion or GPIO Record Times  Second

#### Record By Schedule :

- Record Type : set as No Record 、 manual Record 、 record by Schedules
- Schedule : Scheduled by self-assignment in this option
- Duration : Set recording time when alarm triggered

Note : Default value of IPCAM,StarDot is manual record , and that of HA-640X No record , please set record path for HA-64X to record in locale terminal.

### 3.2.9 PTZ Config

Set PTZ of selected IPCAM in the interface as shown below :

#### 1、PTZ Config

Protocol : Set the Protocol of the PTZ ; supports PELCO-P, PELCO-D

Baud Rate : Set the Baud Rate of the PTZ.

Address : Set the PTZ address from 0 to 255.

Type : Set the Model Number of the PTZ

PTZ Direction: : Please set the PTZ direction while the PTZ camera is in the opposite direction.

### 3.2.10 Motion Set

Set Motion Detect for selected IPCAM ,in “Add Camera & Modify Camera “ , select  to get into interface shown as below :

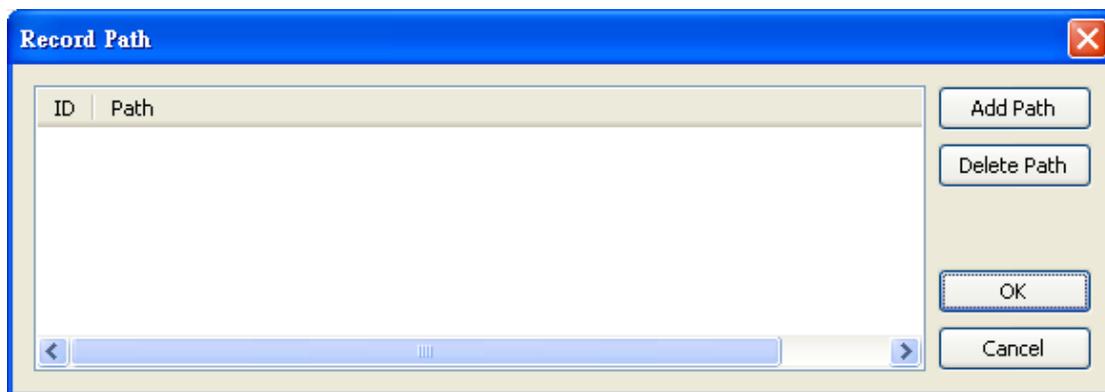
Motion Detection Enable :

Please select detect area for when Motion Detect enabled; there are options of alarm mail sending and recording in FTP server, as well as “ motion record ” scheduled in Multi Window when Motion Detect triggered.

### c. Record Path

#### 1、Record Path

Click  in tool bar and get into interface as shown below; multi-recording path is available as second path would be executed when full capacity by first path



#### 2、Record Set

Default value is “ No Record ” as first execute program, click  in tool bar to record all IPCAM in data base of PC server , and fig. changes to  ; also select “ auto record all ” in “ System Set ” to record automatically .

Fig.  means IPCAM in recording ; and fig.  IPCAM “ No Record ”

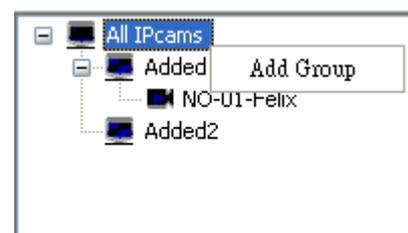
### d. All IPCAMS

#### 1、Add Group

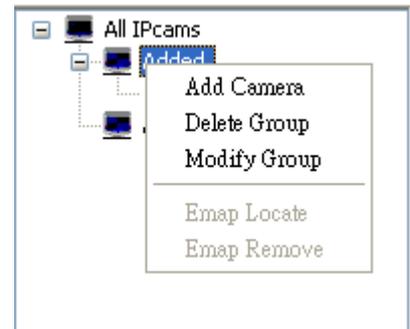
Self-classify all IPCAM into groups and set user' s permission to self-assign groups visible for certain user .

To add new group shows in Fig. right

And then get into interface as below to enter new group name :



Right click upon certain group name to add, delete, and modify selected group as shown below



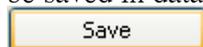
Groups will be automatically added in the list of data base when finish of adding; and could be self-classified.

ID	Group	No.	Channel	Name	Username	Password	Address	Port	Camera Type	MAC Address
1	Added	1	1	Felix	admin		192.168.9.211	80	IPCAM	00-16-55-01-73-27
	NEW									
	Added									
	Added2									

P.S. : group named “New” is default value and means failed in connection; group named “Added” also default value yet means succeeded in connection

## 2、IP Camera List

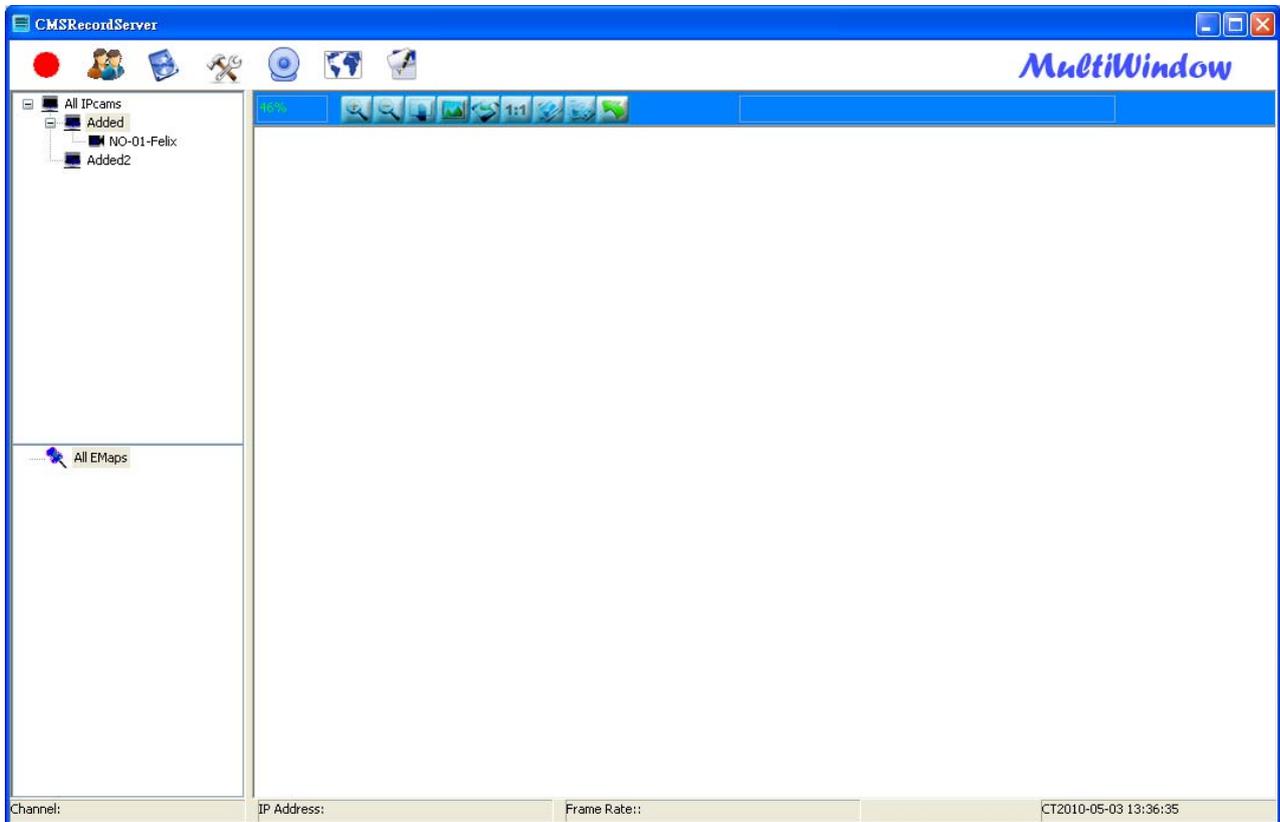
To set and manage each IPcam in data base, but the set of each IPcam itself will be remained; all set-up be saved in data base of Multi Window only . Whenever every modification of each IPCAM finished, click



to make it valid



select in  Tool Bar to get into interface shown as below



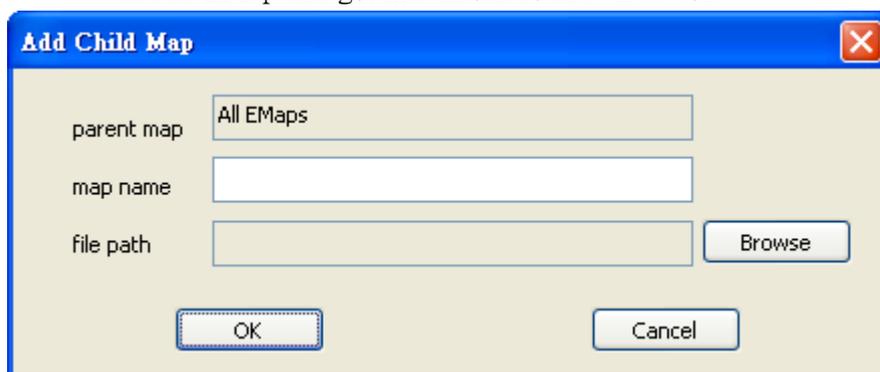
For this function, map file needs to be added as JPEG file , up to three layers from main-layer to sub-layer

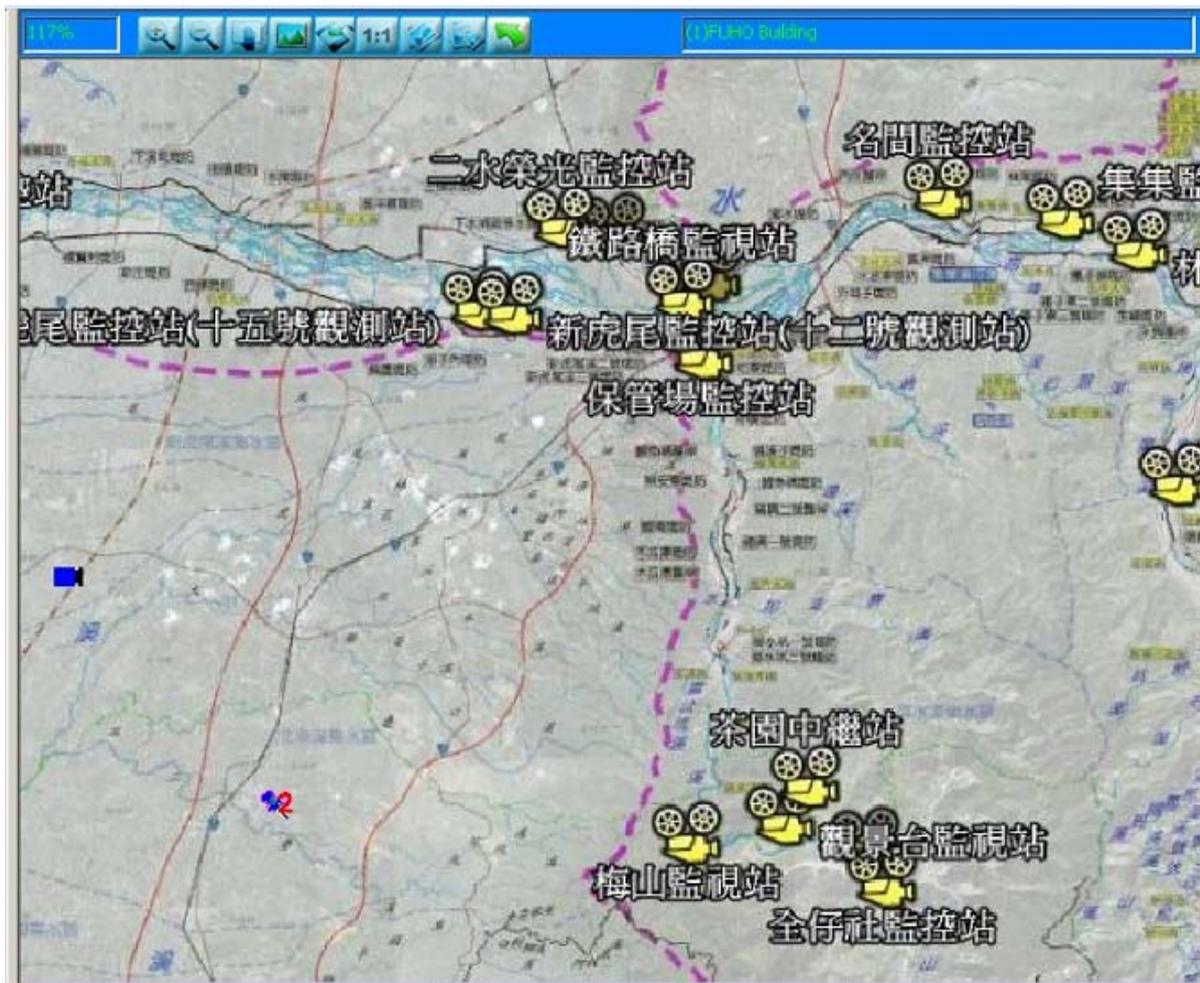
### 1、Add and modify E-map

The tool bar as shown below



select  to add EMap and get into interface shown as below :





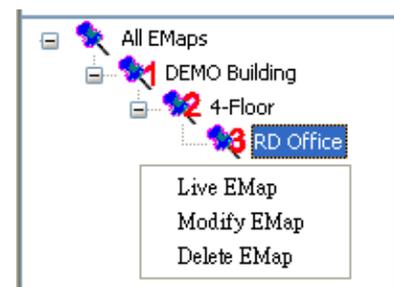
Right click upon the Selected map in Tree to modify and delete the map

Live EMap, Modify EMap : modify the resource and file name of map;

Delete EMap: delete map file, and the camera in this map as well

## 2、EMap Set

The tool bar as shown below



Icon instruction ( from left to right ) :

 E-Map Ratio



( from left to right ) Zoom out 、 zoom in 、 move 、 Cursor 、 Original Size 、 Fit Screen 、 Modify 、 Add 、 Back to last layer

(1)FUHO Building->(2)4-Floor->(3)RD Office

Names of E-Maps by layer

Note : the ratio is the selected area by cursor to the main frame

### 3、Monitor Spot Set

Put IPCAM upon Maps to matched position when maps-adding finished

Select IPCAM in Tree and draw it to the certain area of selected map;

also you may draw Group as well to selected map, yet the changement needs to be made in groupas shown below:

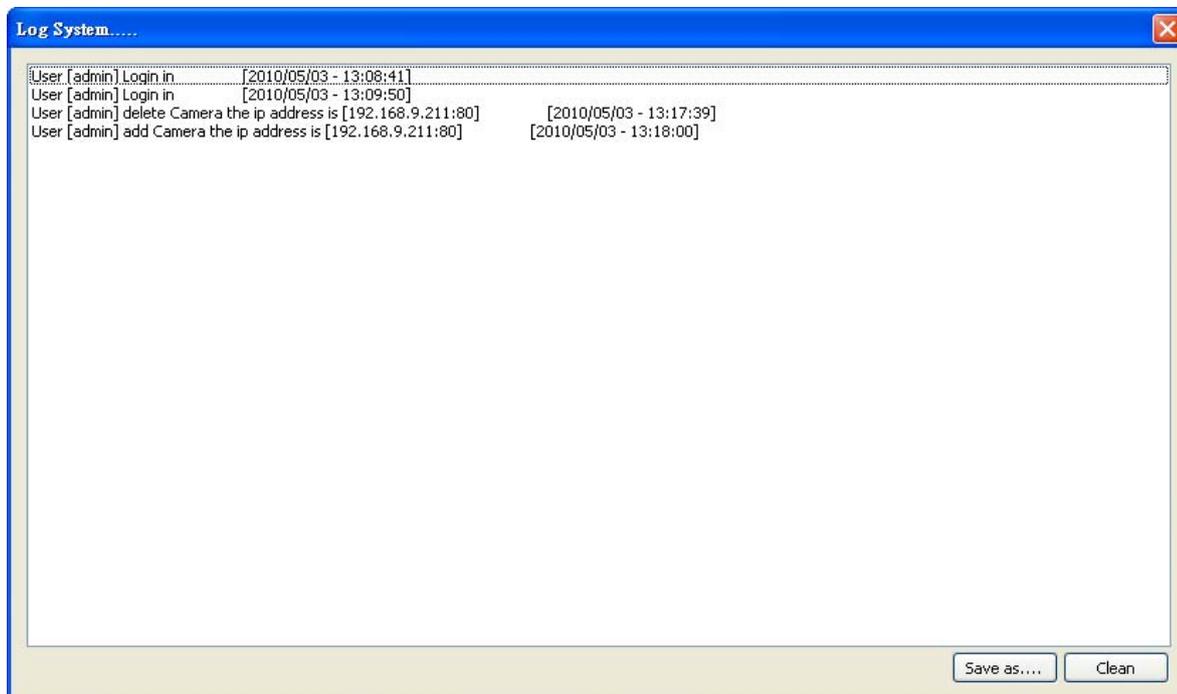


Left : " added" means Group; and its sub-tree means IPCAM

Right : numbers show the layer of maps

#### f. Log system

record every operation information: user name , operated camera , motion detect triggered and etc. as shown below



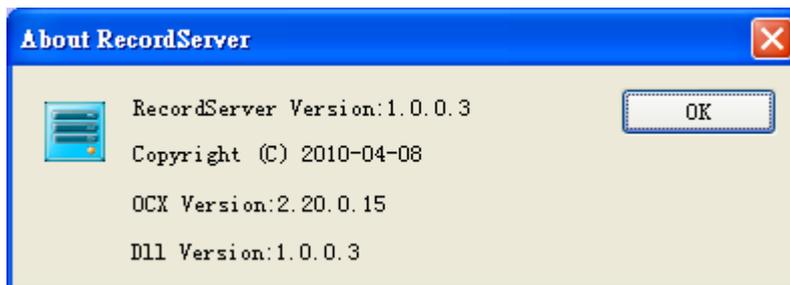
Save as. : to back up log

clean : clear all in log away

## g. About Multi Window 3.0

Related information of program Multi Window

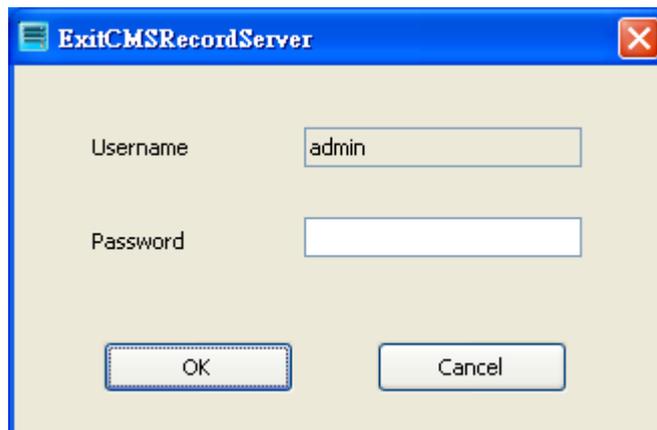
Click  in the top on right in Main Window



Exit : Right Click  and “Exit” shown as



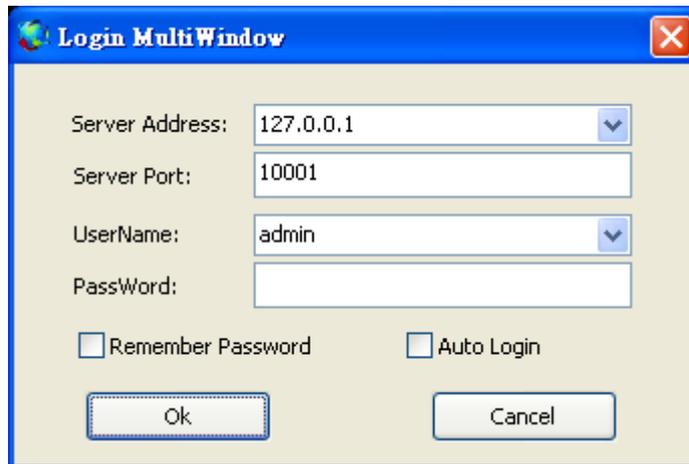
And the click “Exit” to close after confirmation of username and password as shown below



### 3、 Client Server

#### a. Login MultiWindow

Execute Client Server Program “CMS-Client.exe” to get into interface as shown below :



Server Address : IP Address of PC server ( Default value : 127.0.0.1)

Server Port : Server Port of PC server , Default value 10001 °

User Name : enter valid User Name; its addition and modification be set in PC Server

Pass Word : enter correct Pass Word

Remember Password : no need of Pass Word entering for next login

Auto Login : Auto Login

OK : OK

Cancel : Cancel

Note : Instruction of Multi-Server Connection will be later

## b. Live monitor

After succeeded in connection, then comes the interface shown as below :



(1) Exit program	(6)Information of IP Address , Frame rate and etc.
(2) Live monitor	(7) PTZ Control
(3) Disply Mode	(8) IPCam list
(4) Tool Bar	(9) Log 、 Move log
(5) Information of Time , channel number	

## 1. Exit program, minimize, full screen and exit ( window )



Exit program

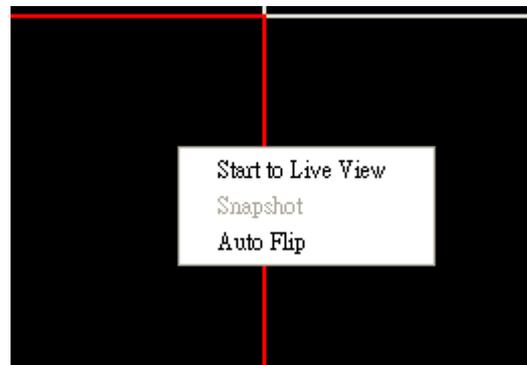


Full Screen ( of selected channel )



Minimize window

## 2. Live monitor, drawing Cursor to change the position of each channel; with right click, it will be shown as below:



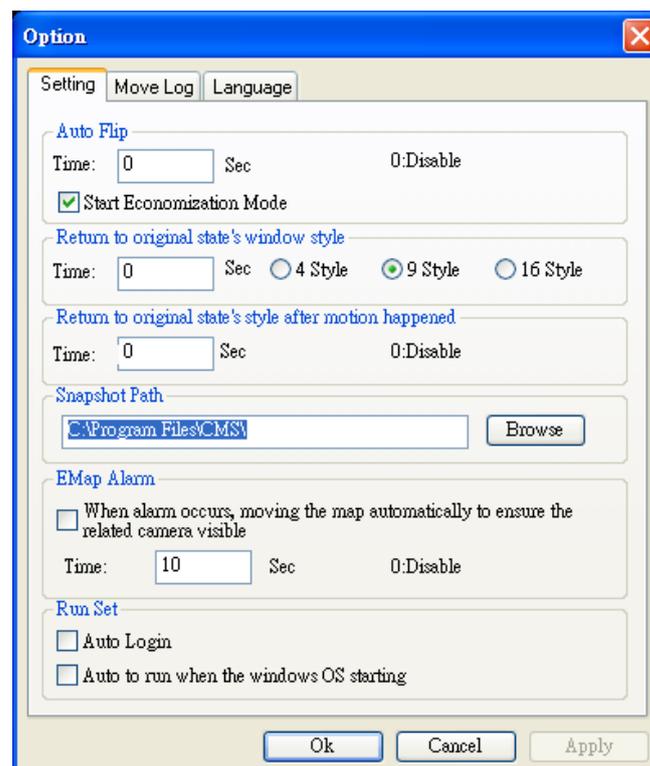
- Start to Live View : Start / stop Live view  
 Snapshot : make picture of certain channel  
 Auto Flip : Enable auto switch of channel , to adjust the interval in “ System Set ”

3. Disply Mode : there are options of 1 ch, 4 ch, 9 ch, 16 ch, 25 ch , 36 ch , 49 ch , 64 ch ( It depends on the ability of PC to select the options for the smoothness of display )

4. Tool Bar

#### System Set

Click  to get into “System Set “, there are options of ” Setting “, “ Move log “ and “ Language “ as shown below :



## 1、Option

### (1)Auto Flip

Its interval is adjust-able , and function be disable when interval set to “ 0”

Start economization mode :

When displayed in Auto Flip Mode, decoding will be made only for present channel to save system resource.

### (2) Return to original state' s window style :

When Stay idle too long, system will be back to default display to save its resource from decoding; and function be disable when interval set to “ 0”

### (3) Return to original state' s window style after motion happened

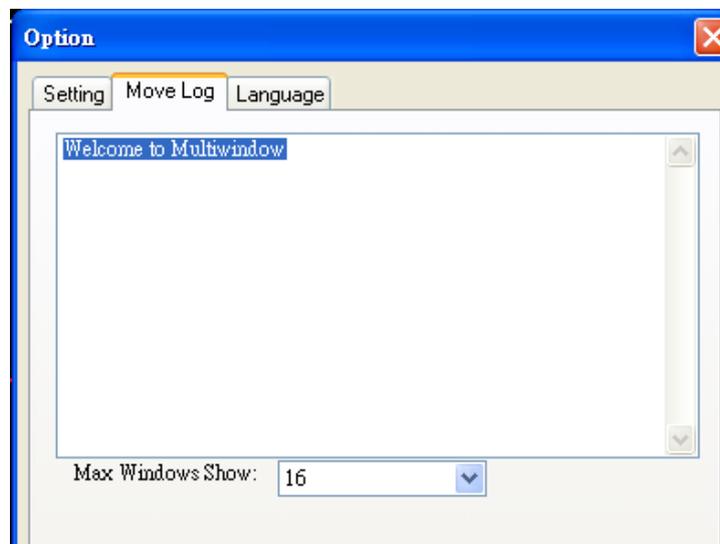
after motion happened, it will Return to original state' s window style as reminder; and its duration is adjust-able, and function be disable when duration set to “ 0”

### (4) Snapshot Path : path to save pictures

### (5) EMap Alarm

after motion happened, Icon of triggered IPCAM will remain flash; and its duration is adjust-able, and function be disable when duration set to “ 0”

## 2、Move Log

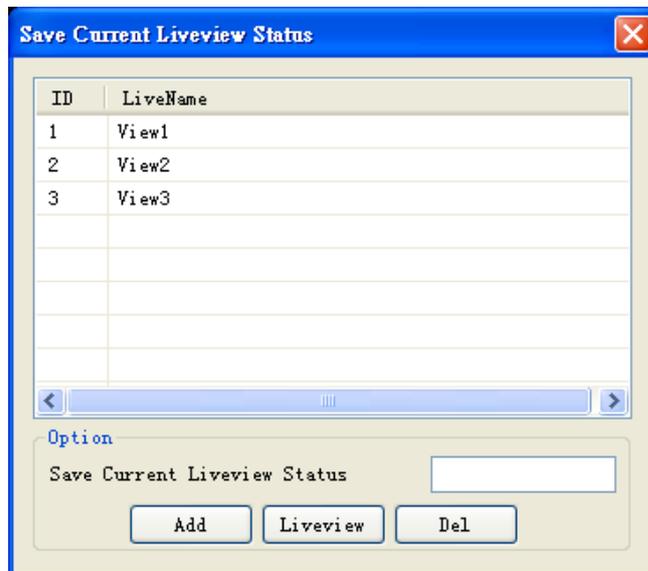


Move-log that self-assigned will be shown on the right top

Max Windows Show : number of channel to display

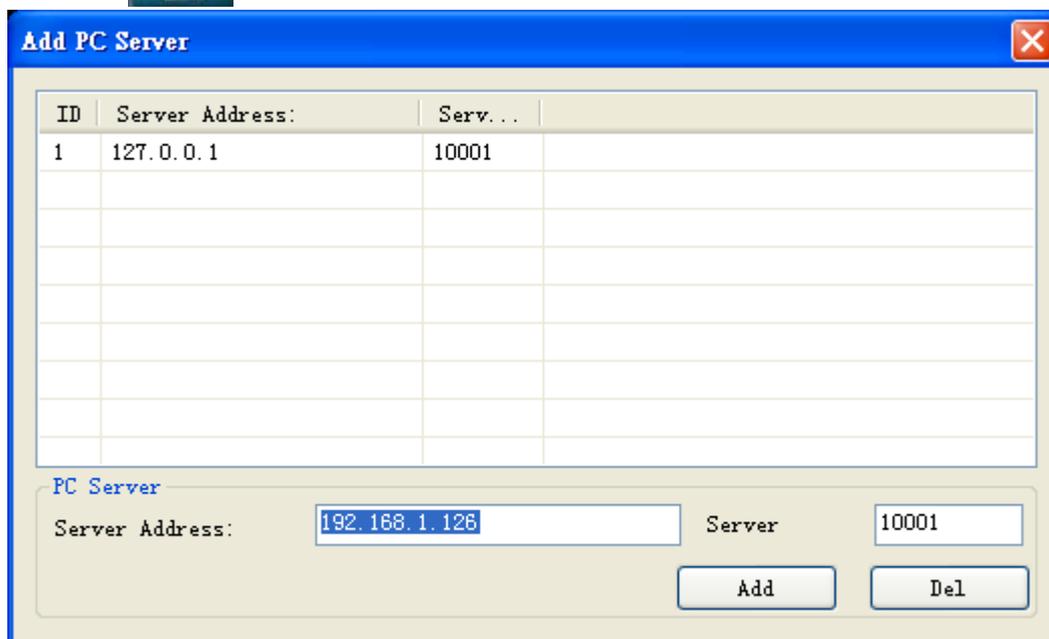
**Save current liveview status**

Click  to save current live view status and the split of connecting IPCAM self-assigned and it as shown as below:  
enter a file name and save, then options of live view be added



### Multi-server connection

click to get into  list of Server



Enter Server ( IP ) Address and server ( port ) and then “ Add ” to Connect to Several Server simultaneously, and see all of belonging IPCAM

## Playback

Please press this button  to enter the playback system as shown below. ' refer to its operation later

## Emap

Click  to get into Emap from PC Server

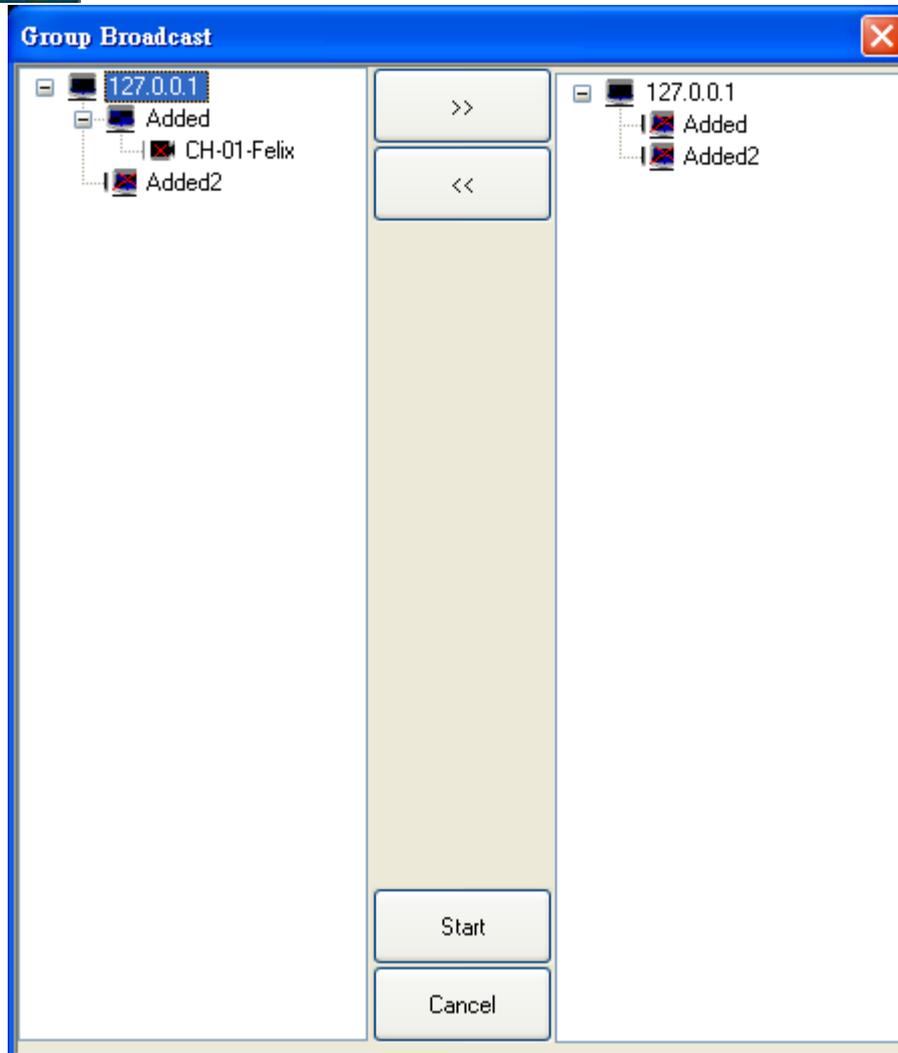


Note :

Except “Add and modify E-map” , all operation is the same as that of PC Server, such as Zoom in / out and etc..

## Group Broadcast

Click  to get into Group Broadcast as shown below :



- >> Add IPCAM from present list
- << Delete IPCAM from present list

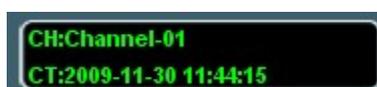
Start : Broadcasting to selected IPCAM

Cancel : Cancel Broadcasting and back to main window

**Note :** it supports only when audio function of IPCAM / Video Server be available

## 5. Information of Time , channel number

Information, such as Time and channel number of selected channel

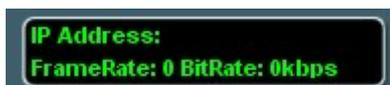


CH Number of selected channel

CT Present time

6. Information of IP Address , Frame rate and etc.

Information, such as IP Address , Frame rate and etc. of selected channel



IP Address : IP Address of selected channel

FrameRate 、 BitRate : Current FrameRate 、 BitRate of selected channel

7. PTZ control



Icon Instruction :



— : Zoom OUT

+ : Zoom IN



— : Focus -

+ : Focus +



↑ : Tilt

- ↓ : Down
- ← : Left
- : Right
- : Stop PTZ Control



Save present camera position



Clean present saved position



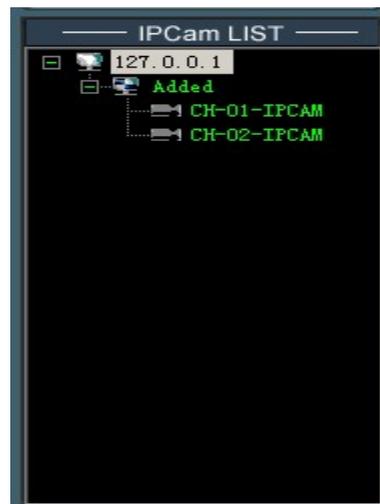
Enable / disable tour function



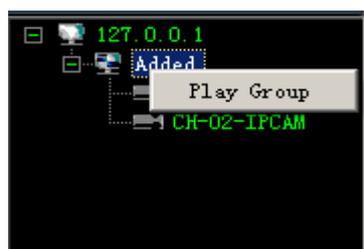
Select from saved position

## 8. IP Cam List

After succeeded in connecting to server, all IPCAM will be listed



Surveillance could be displayed by IPCAM in list , as well as by group with right click upon group name and then “ Play Group “



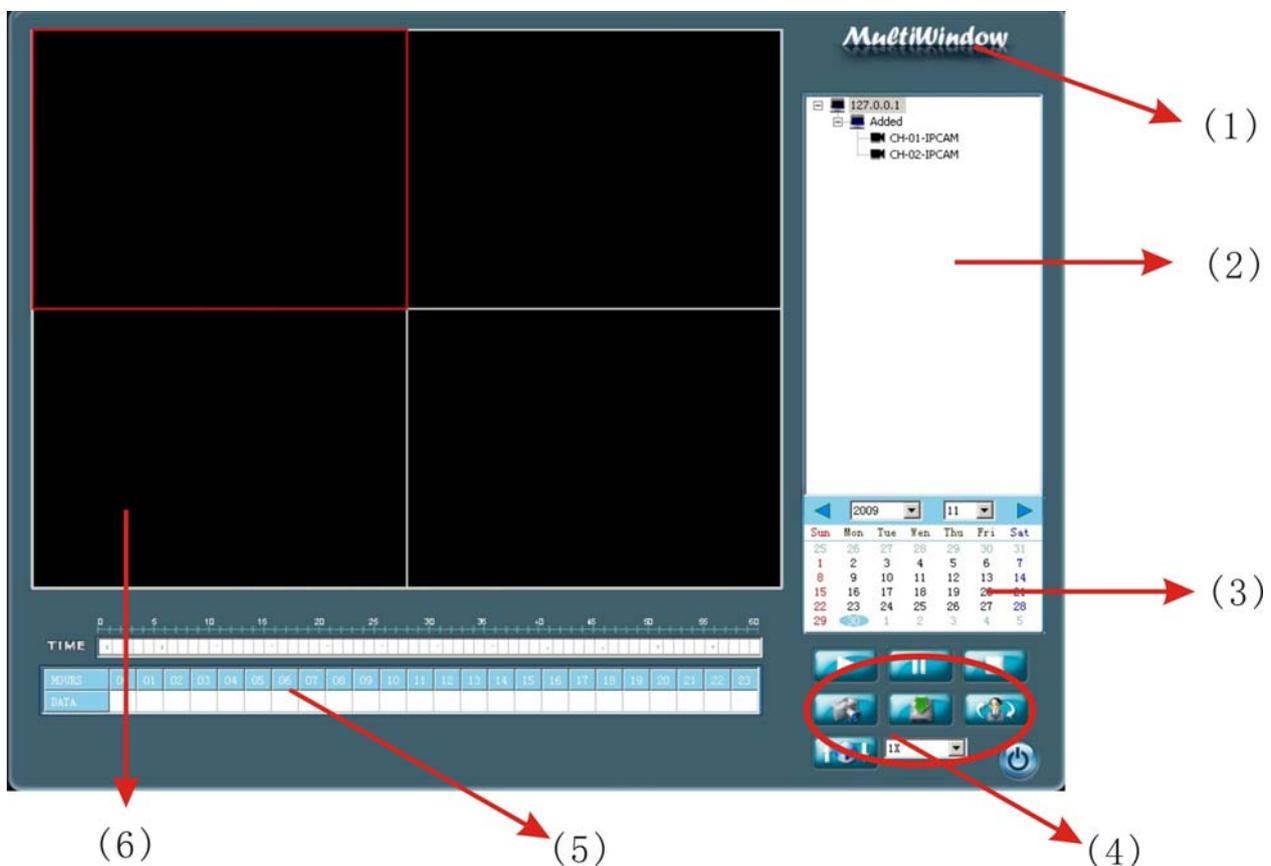
## 9. Logo、Move Log

Move Log set in “System Set” will be shown as below:



## c. PlayBack

in the tool bar of Main Window, click  to playback interface as shown below:

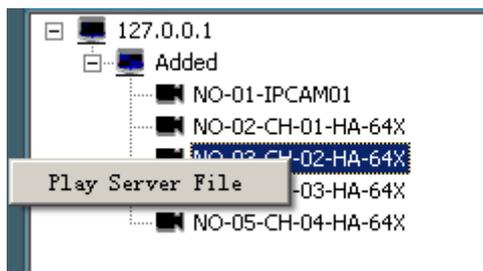


(1) Logo Info.	(4) Tool Bar
(2) IP CAM List	(5) time to playback
(3)date of recording data	(6) Playback Display

1. Logo Info.
2. IP CAM List

all IPCAM of PC server is listed , selecting IPCAM or drawing selected IPCAM to play window on left to playback directly

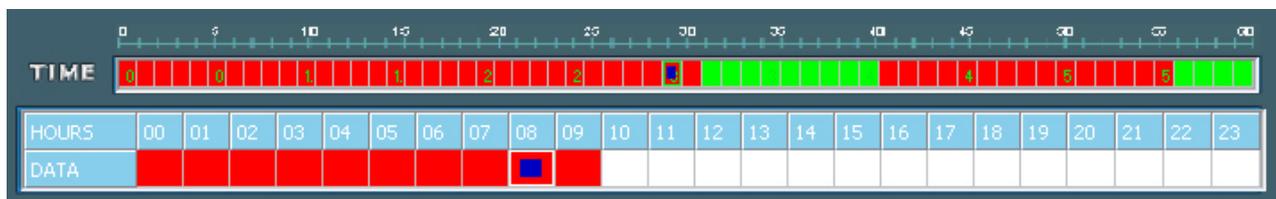
※ For HA-64X Series , it plays back data from DVR , by selecting data list with right click and “ Play Server File” to playback data from Server



3、5 date of recording data & time to playback

date of recording data of selected IPCAM is shown in red as below,

Different data type will be shown by colors in time table



Above is 24 hrs Table and TIME list is by minutes, playback by select certain hour and then minute

Instruction :

Red : recording time

Green : interval between recordings

White : no recording data

4. Tool Bar



Items in first raw from left : 1、replay 2、Pause 3、Stop

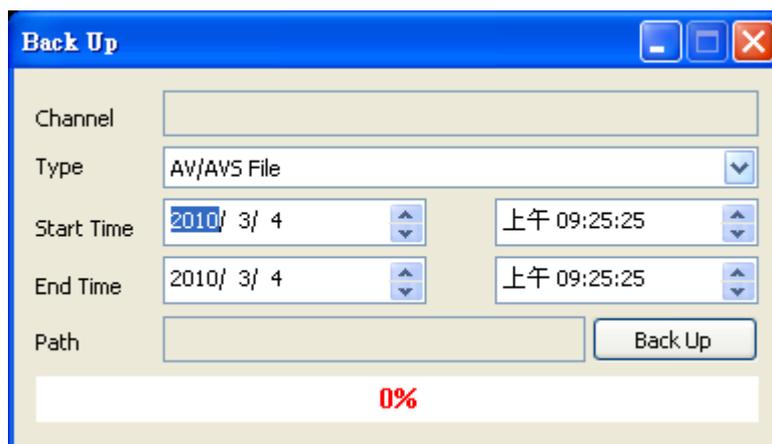
Items in second row from left :

1、Snapshot 2、Back Up 3、Synchronous /Not Synchronous Play back

Items in third row from left :

1、Renew loading to server 2、Play Speed 3、Exit Play Back Window

#### 4.1 Back u p



Channel : Channel to Back-up

Type : File type to Back-up :

1、 AV/AVS File

( Normally be AV file , and AVS file is reserved file for StarDot )

2、 avi File

Start Time : Start Timeo Back-up

End Time : End Timeo Back-up

Path : Path o Back-up

#### 4.2 Synchronous /Not Synchronous Play back

Synchronous Play back : After playback for a while, difference between 4 ch will be shown, and then system will slow down the faster channel Synchronous Play back

Not Synchronous Play back : Each 4 ch be self-playback

#### 4.3 Renew loading to server

Renew loading to server

#### 6. Playback Display

UP TO 4 Channel playback simultaneous.