Brickcom

PC Based Network Video Recorder

BRC-64

User Manual

Quality Service Group

Brickcom

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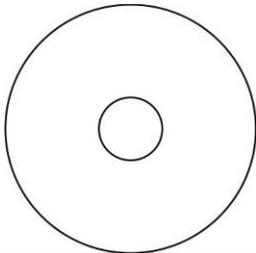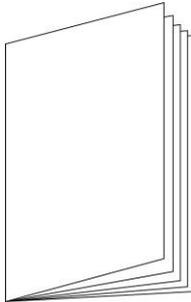
Overview

Brickcom BRC64 is an advanced PC-based NVR that allows users to manage up to 64 Brickcom IP cameras for live viewing and video recording. With the support of Mega-pixel resolution and H.264 compression, it uses less bandwidth while offering optimal image viewing and recording quality.

Designed for flexibility and user-friendliness, BRC64 has many features which enable easy setup and management of the entire IP surveillance system. E-MAP gives users a full view of the monitored areas and the 'Smart Camera Search' feature makes it possible to gain instant access to any Brickcom IP camera on the specific site. 'Smart Motion Detection' and extensive event configuration work together to make an effective IP system. Support for viewing and recording at different frame rates is available for efficient use of disk space. Flexible recording options include manual, event-triggered, scheduled and continuous.

With Brickcom IP cameras and BRC64, users can quickly build a secure IP surveillance system.
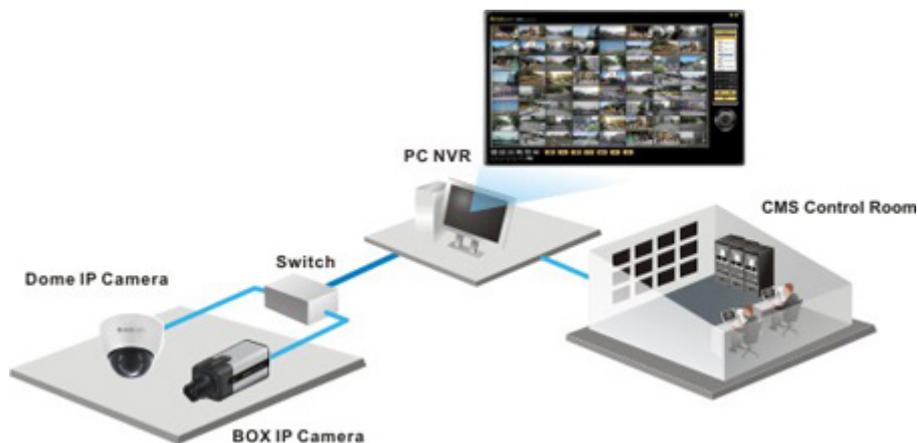
System Requirements

Operating System:

Microsoft Windows XP

Microsoft Windows Vista

Microsoft Windows 7

Computer:

IBM PC/AT compatible.

CPU:

Pentium 3GHz or faster.

Memory:

1024 MB or more.

Monitor:

1024 x 768 pixels or more, 24-bit true color or better.

HDD

2048 MB or more.

Network Interface:

10/100Mbps network interface card must be installed.

Web Browser:

Microsoft Internet Explorer 6.0 SP2 or higher.

Adobe Reader:

Adobe Reader 8.0 or higher.

Audio:

- The audio function will not work if a sound card is not installed in the PC. Audio may be interrupted depending on network traffic.

Software Installation

BRC64 Installation

1. Insert the Installation CD into the CD-ROM driver. Run Auto-Run Tool directly from the CD-ROM to start the installation. While installing the Brickcom Software Kit for the first time, select a desired language for the interface. The available languages are listed in the scroll box. Select Standard/Professional edition and click <Install PC-NVR> and follow the steps to install on the desired computer.
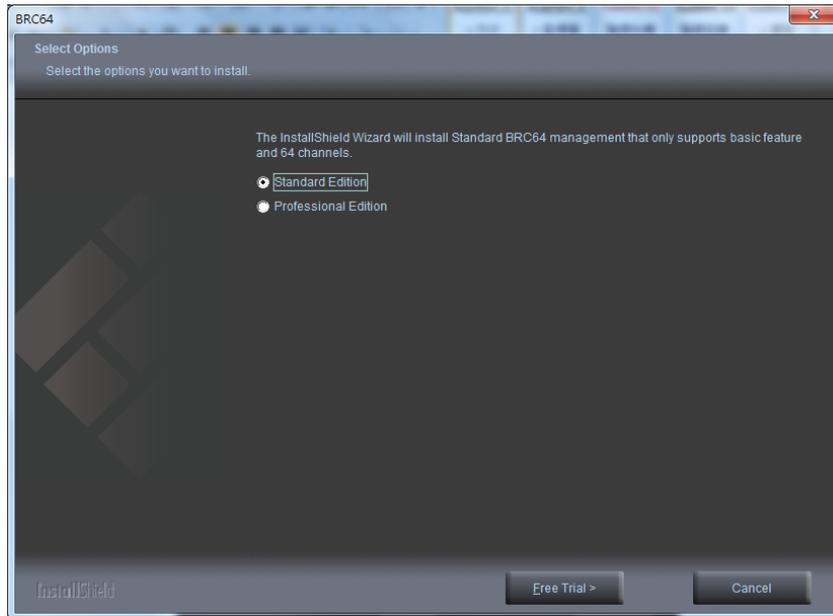
2. In the Install Shield Wizard dialog box, click **<Next>** to continue.
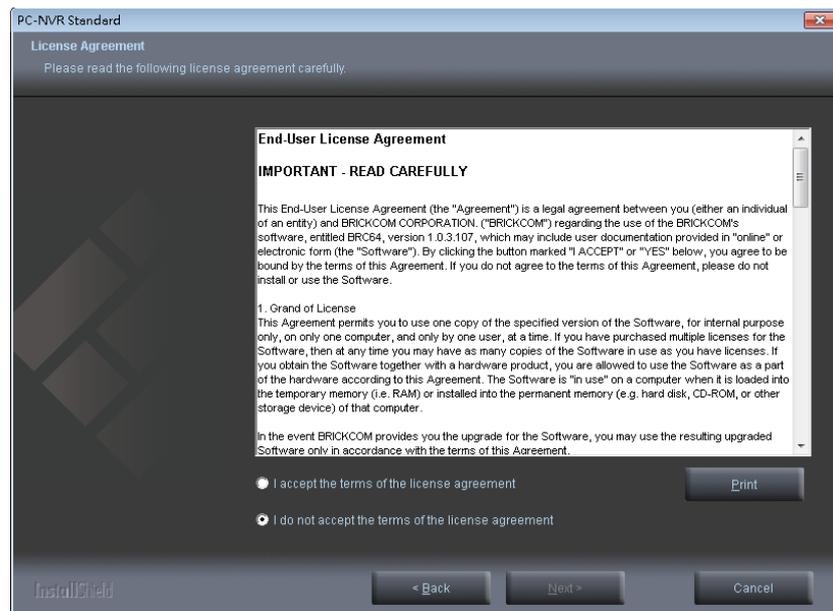
3. Read the End-User License Agreement and check the option **<I accept the terms of the license agreement>**. Click **<Next>** to continue.
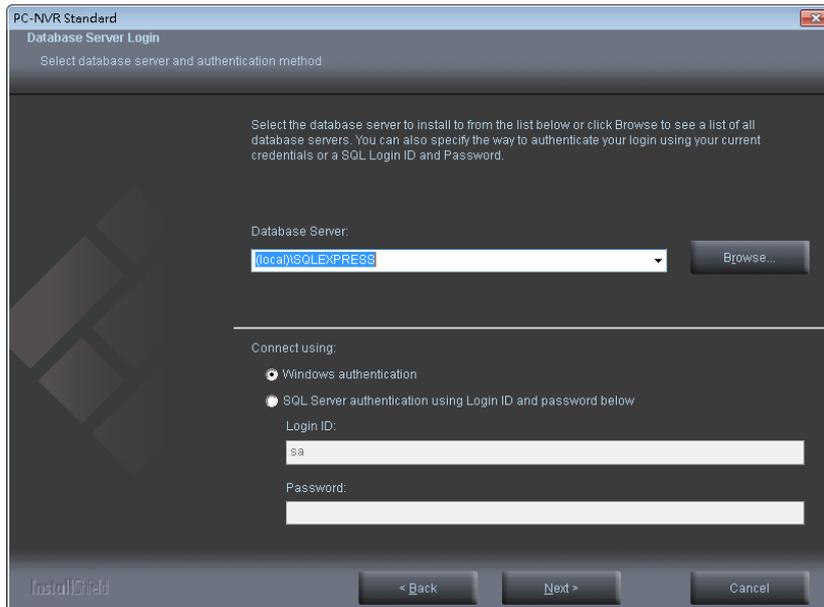
4. Click **<Next>** to continue installation. If another SQL server already exists on your device, you can click **<Browse>** to search.
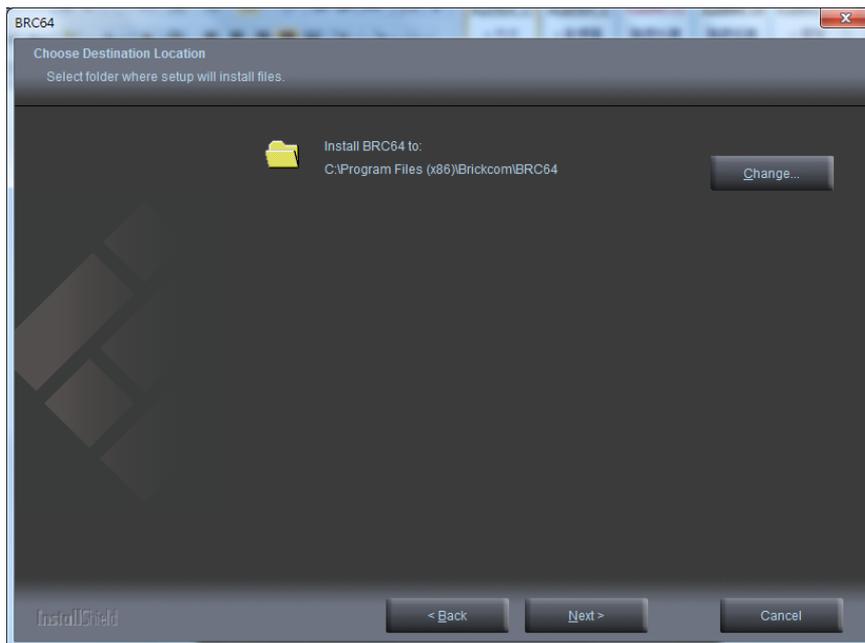
5. Click **<Change>** to change the appointed folder where installation and program files will be stored. Click **<Next>** to continue.
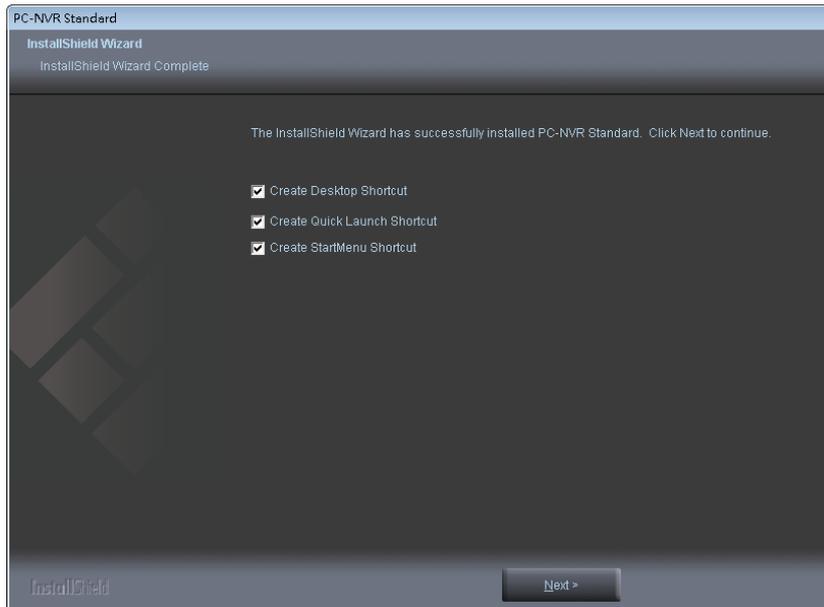
6. Select to create shortcuts. Click **<Next>** to continue.
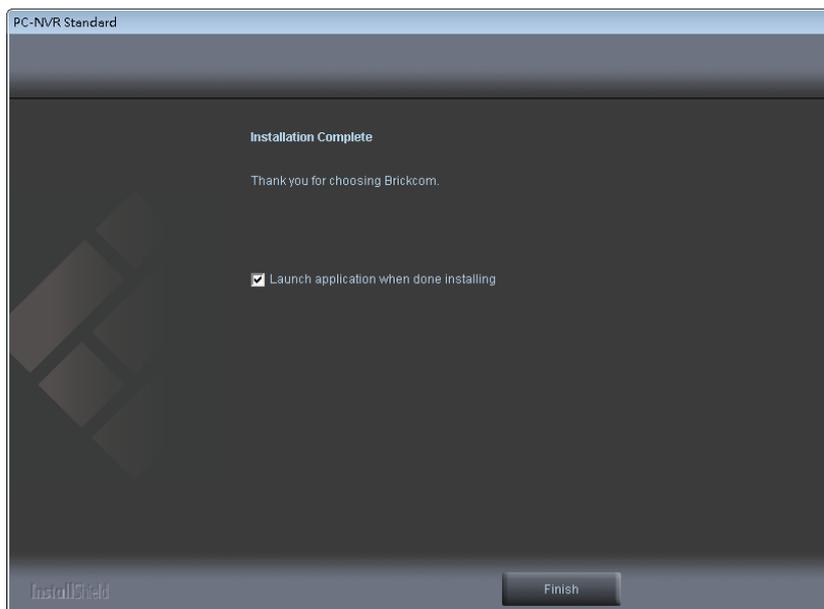
7. Click to launch the application, and click **<Finish>** to complete the installation and return to Shield Wizard dialog box.

EasyConfig Installation

1. Click **<Install EasyConfig>**.
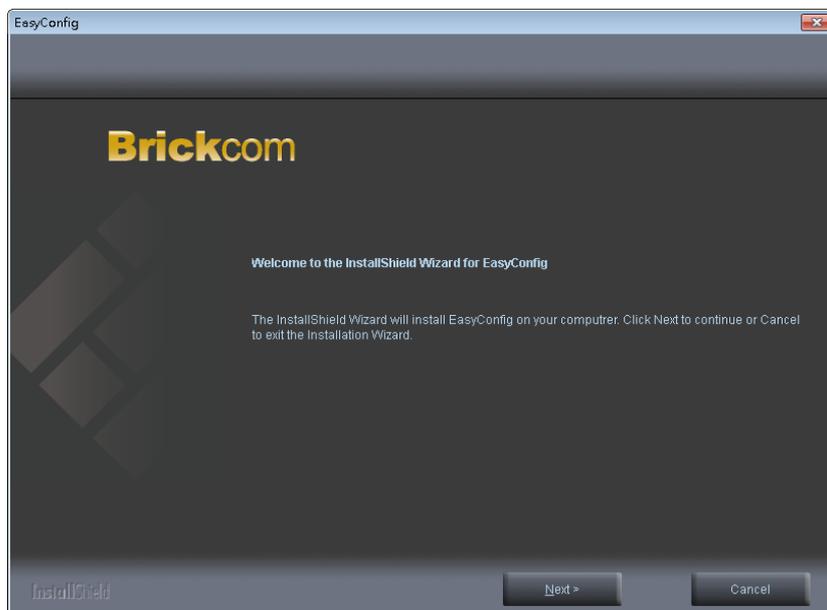
2. In the Install Shield Wizard dialog box, click **<Next>** to continue.
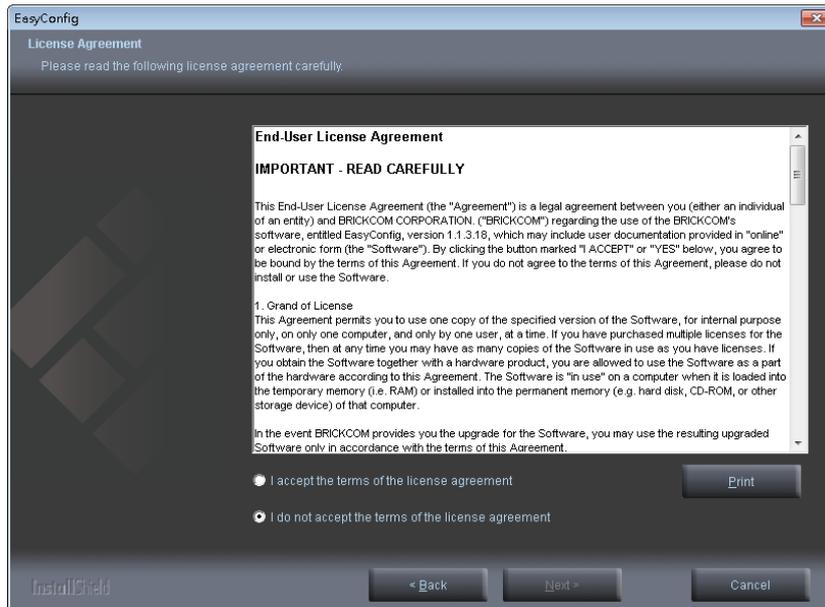
3. Read the End-User License Agreement and check the option **<I accept the terms of the license agreement>**. Click **<Next>** to continue.
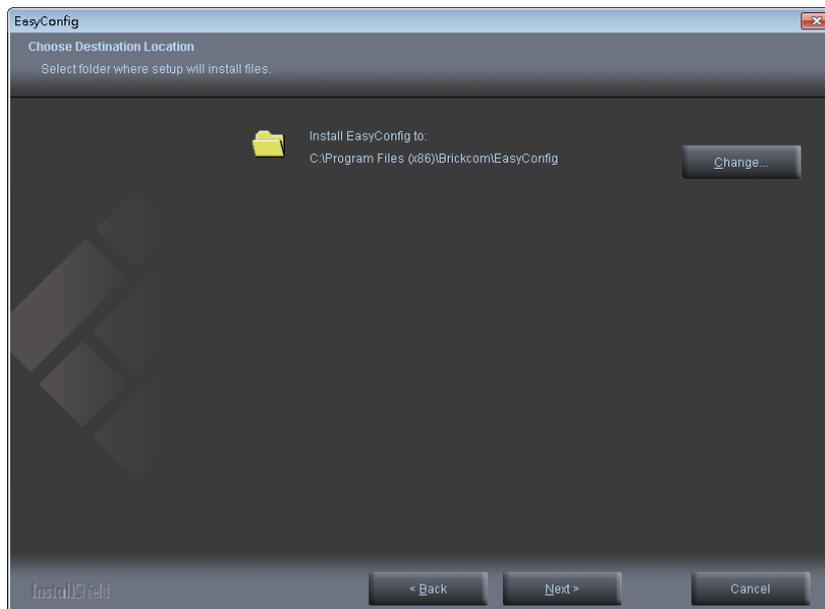
4. Click **<Change>** to change the appointed folder where installation and program files will be stored. Click **<Next>** to continue.
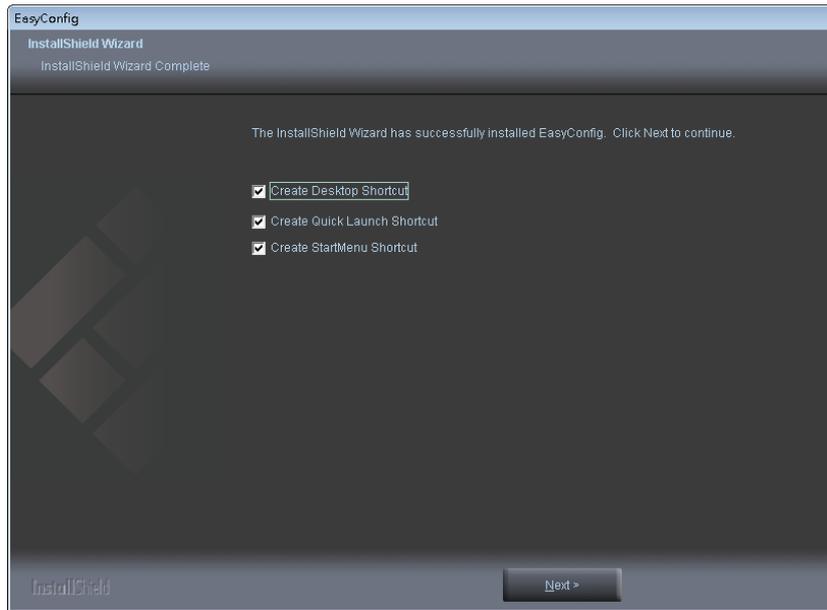
5. Select to create shortcuts. Click **<Next>** to continue.
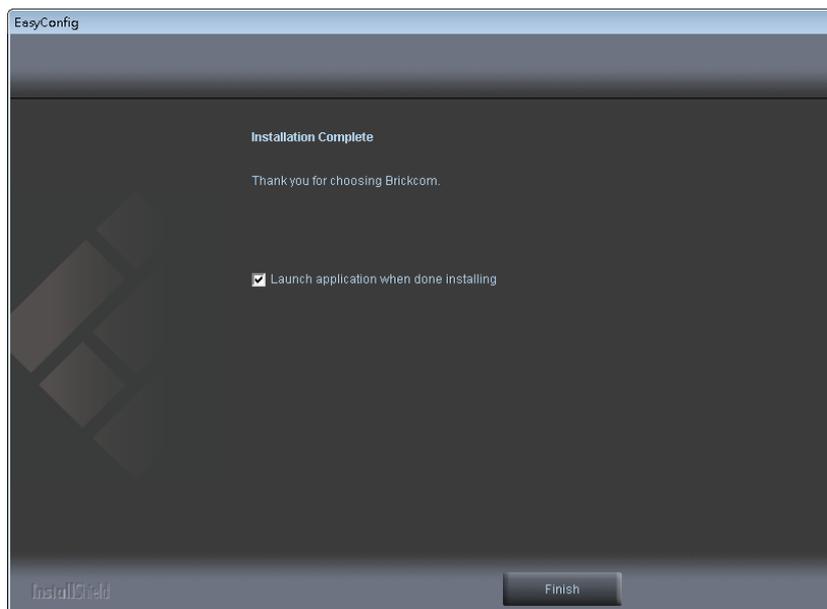
6. Click to launch the application, and click **<Finish>** to complete the installation and return to Shield Wizard dialog box.

Launch EasyConfig

User can search cameras by EasyConfig and configure the settings below:

- IP address configuration.
- Easylink configuration.
- Live view & Individual Camera Modification.
- BRC64.

To launch EasyConfig, select EasyConfig from the start menu. If Complete Setup type was selected in the software installation, an EasyConfig icon would have appeared on the desktop. Double click to open the icon.
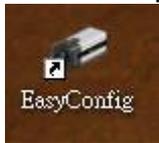
If Custom Setup type was selected in the software installation and an EasyConfig icon does not appear on the desktop, the program would have been installed under '**C:\Program Files\Brickcom\EasyConfig**' unless the program was saved to a preferred directory.

> ⚠ **NOTE** - Check **<Skip the hardware installation guide>** to skip checking the hardware connection. To check the hardware installation settings, do not check the box.
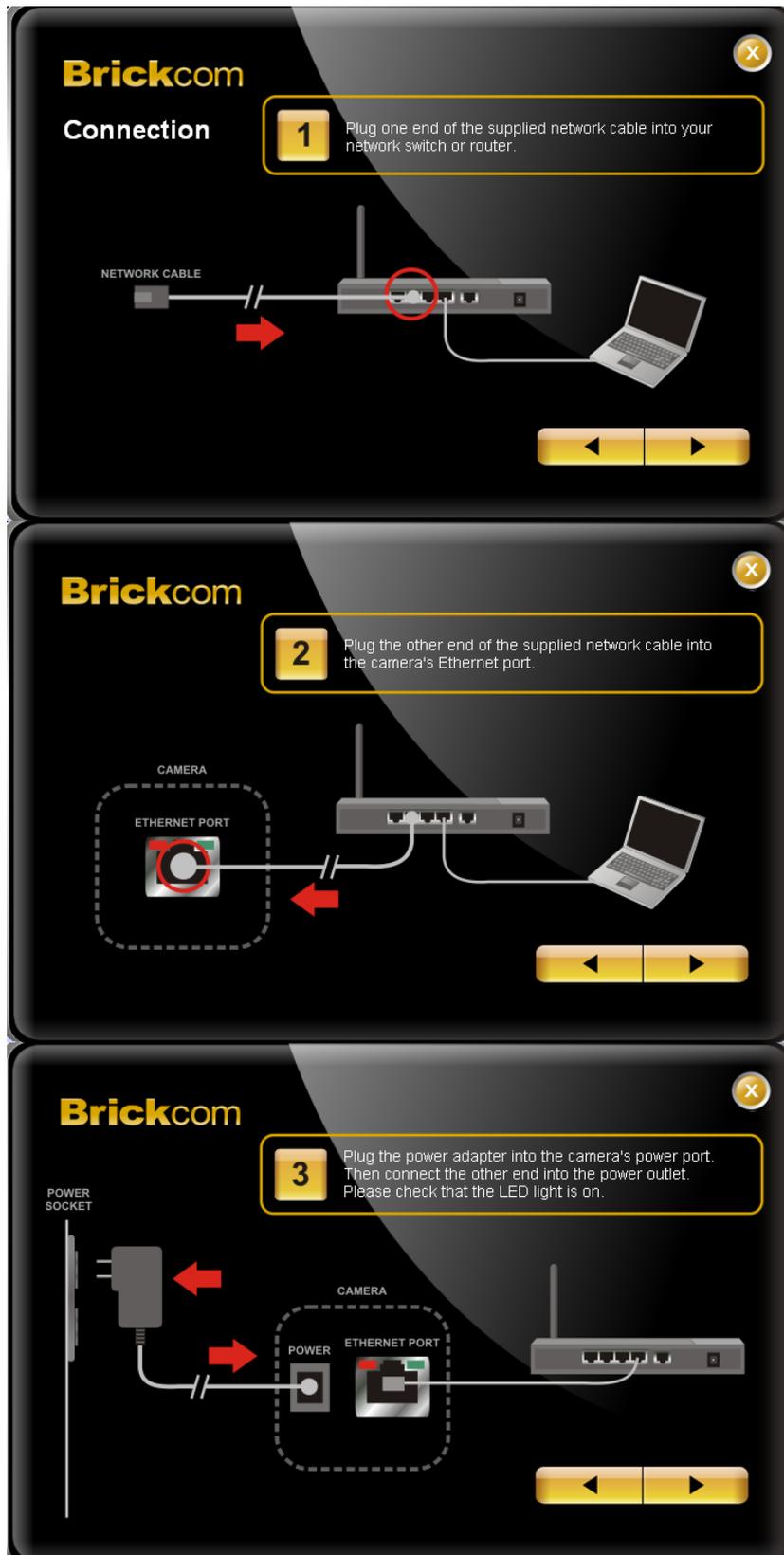
1. Click **<Start>** to continue. The program will automatically search for the camera in the intranet.
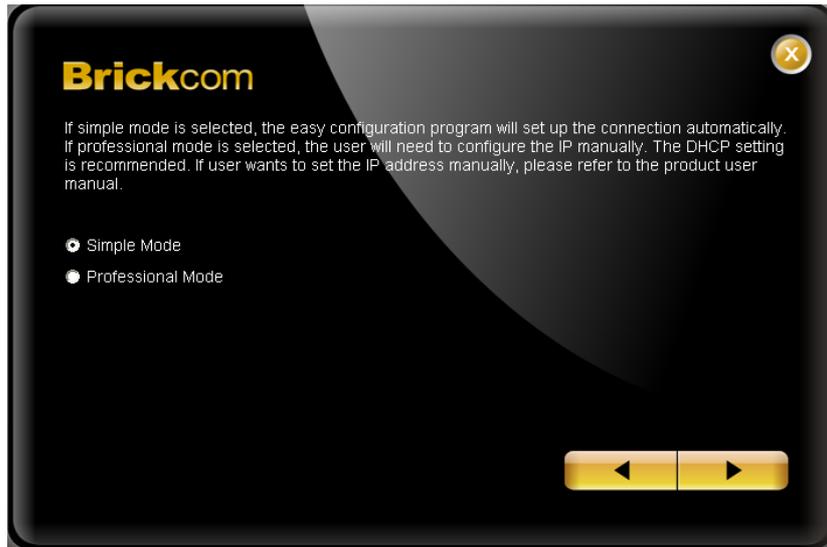
2. Select either **<Simple Mode>** or **<Professional Mode>** to obtain the camera's IP settings. If **<Simple Mode>** is selected, EasyConfig will set up the connection automatically. If **<Professional Mode>** is selected, the user will need to configure the IP settings manually.
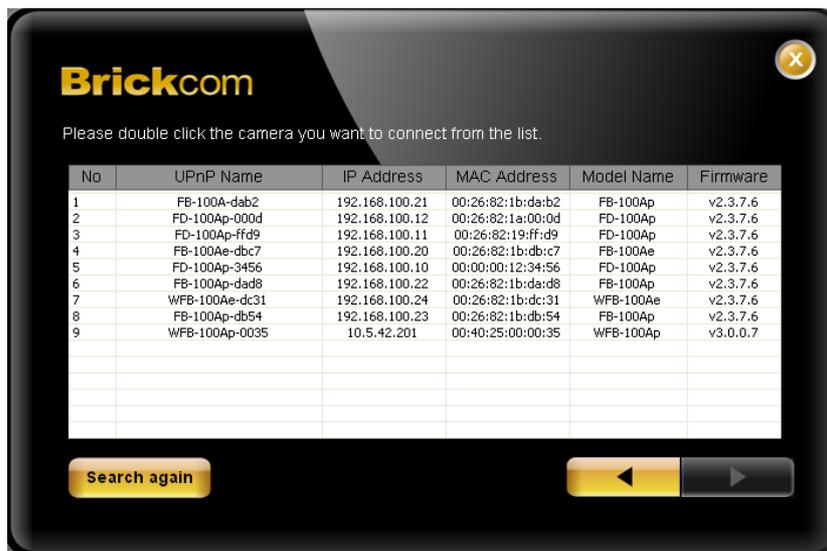
3. There may be many cameras in the local network. Differentiate the cameras using their UPnP name. Double click on the camera from the survey list to connect.

4. Enter the username and password of the camera. For first time

use, the default username and password are **'admin/admin.'**

5. For configuring the IP address settings, select either **<Settings remain the same>**, **<Automatically obtain an IP Address (DHCP)>** or **<Set IP Address configuration manually>**. The DHCP setting is recommended.
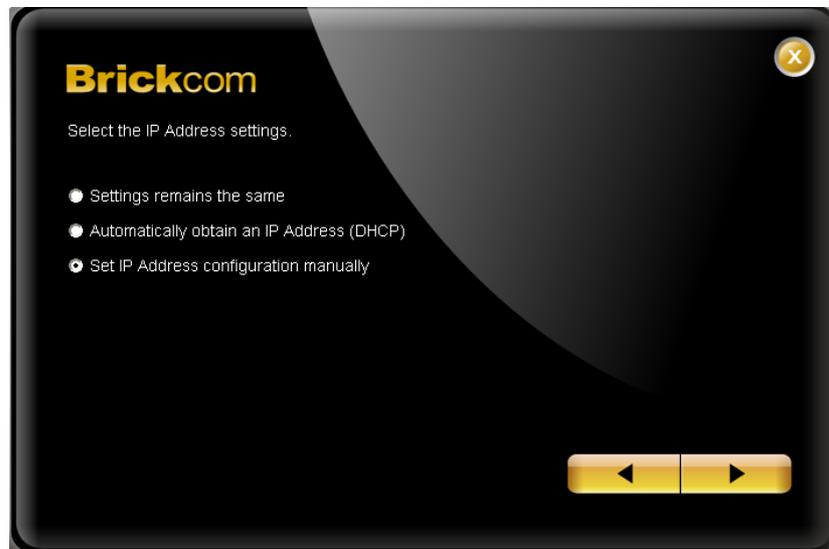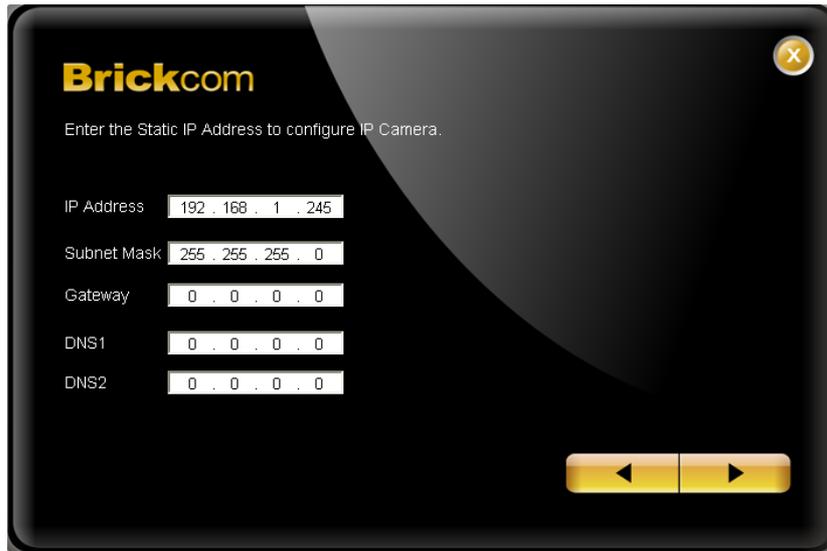
5.1 If **<Set IP Address configuration manually>** is selected, the above pages will be displayed.

6. **If the camera supports the EasyLink**™ **function**, the above page **will be** displayed. Otherwise, this page **will not** be shown. *If desired, click **<Skip>** to skip this setting. EasyLink™ is a unique Brickcom function which allows users to assign a unique EasyLink name to their network camera's IP address. There is no need to configure the router to open up ports or remember hard-to-memorize IP addresses. Users can log onto [uniqueEasyLinkname].mybrickcom.com to view the camera's web GUI and live view.

   $^{35}_{17}$ Enter a unique EasyLink name whose length must be between 5-32 characters.

When finished, click the arrow button to continue.

7. When the IP address settings have been configured, the screen will either display a successful or failed connection message. If the connection failed, either try again or quit the installation.

7.1 If '**DHCP IP address settings'** was selected, the failure page will be displayed as below:
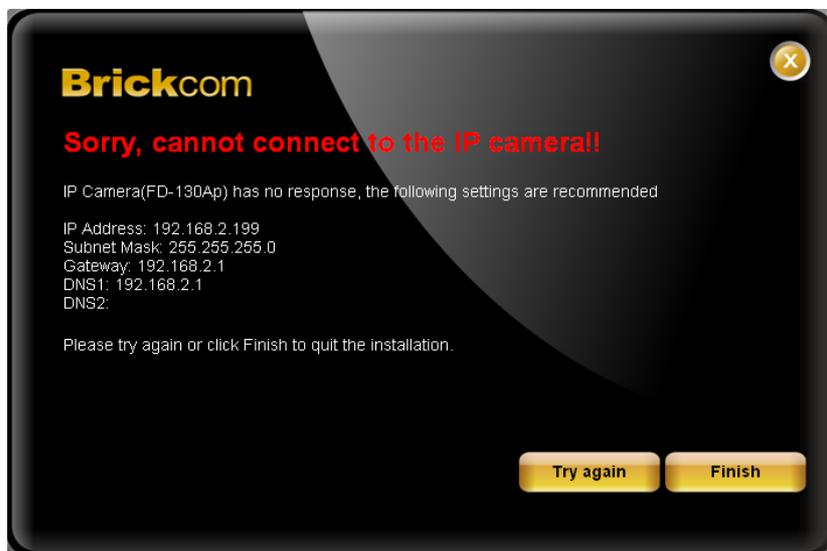
7.2 If **<Static IP address settings>** was selected, the failure page will be displayed as above:

7.3 If the connection was successful, the user will see the message: **<Congratulations. The installation of the camera is complete.>**

8. When this window is displayed, click **<BRC64>** to start the BRC64 program, **<Live View>** to view the live video from the connected IP camera, or **<X>** in the top right corner of the screen to close the installation window. If the user starts the BRC64 program, see page 18.

Start with BRC64

To launch BRC64, select BRC64 from the start menu. If **<Complete Setup>** type was used in software installation, a BRC64 icon would have appeared on the desktop. Double click to open the icon.

If **<Custom Setup>** type was selected in the software installation and a BRC64 icon does not installed on the desktop, the program would have been installed under **'C:\Program Files\Brickcom\BRC64\EXE'** unless the program was saved to a another preferred directory.

1. For first time use, the user name and password are assigned as '**admin/admin**'. Click **<OK>** to login.

⚠️**NOTE1**

Check **<Save user name and password>** to automatically login when the BRC64 starts.

⚠️**NOTE2**

Windows only allow administrator account to edit the system folders. As the result, BRC64 fails to start the service if certain condition is satisfied:

1. User is unable to edit the system folder.
2. BRC64 is installed in default path.

For the purpose to implement BRC64 normally, please request administrator to carry out the following steps:

WINXP
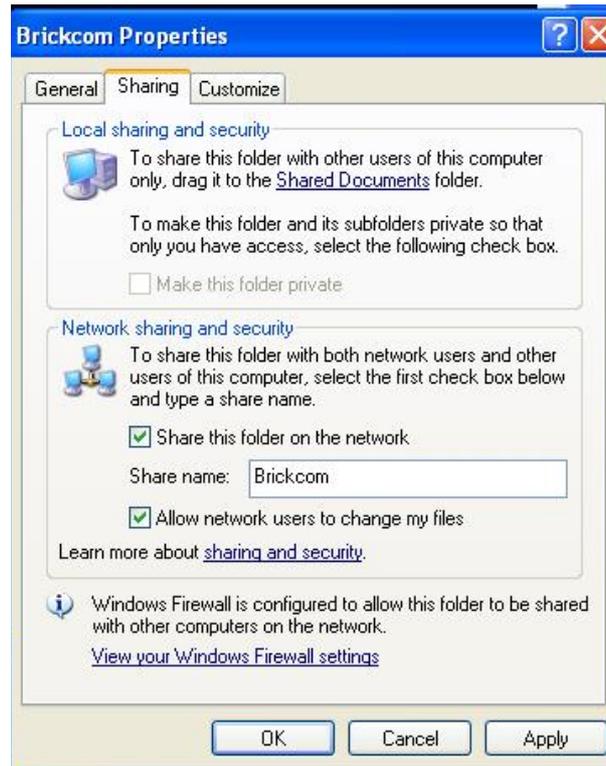
1. Start Windows Explorer to the path via '**Computer->Local Disk(C:)->Program Files\Brickcom**'.
2. Press right mouse click via the path '**Properties->Sharing**' to select **<Share the folder on the network>** & **<Allow network users to change my files>**.

3. If operation system is disable to remote access service, the description in the Properties will show as the description '**As a security measure, Windows has disabled remote...** '

Please refer to below steps for triggering the service.

4. Press **<Network Setup Wizard>** to enable remote access service.
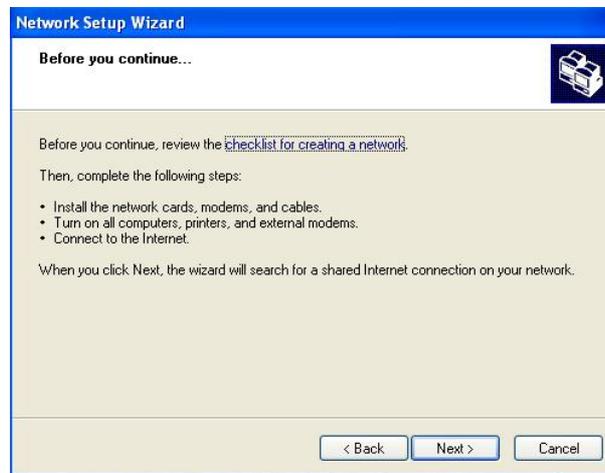
5. Press **<Next>** to continue the wizard.

6. Select the connection to apply the service.
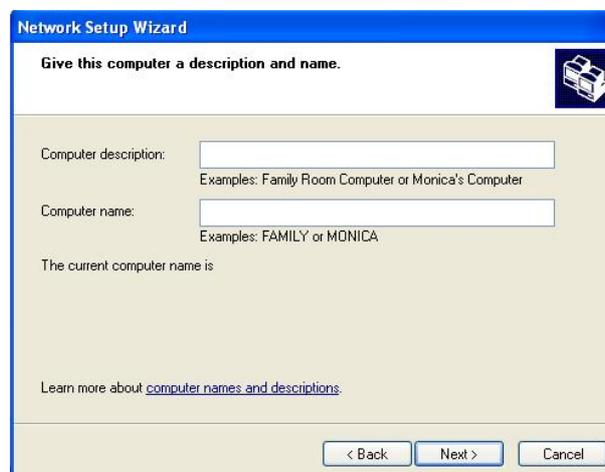
7. Give this computer a description and name.

8. Select **<Turn on file and printer sharing>**. Then press **<Next>**.
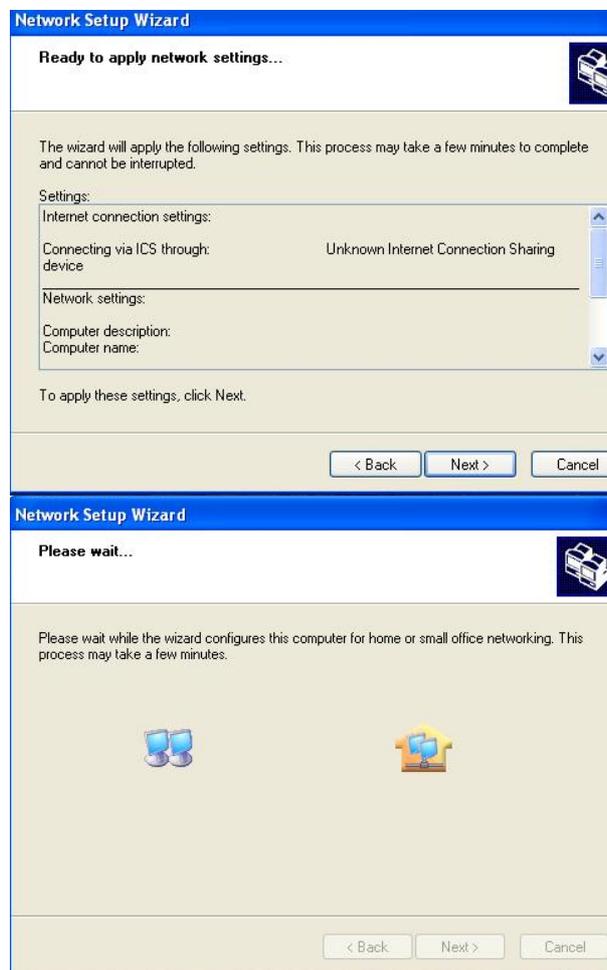
9. Press **<Next>** to continue the wizard.
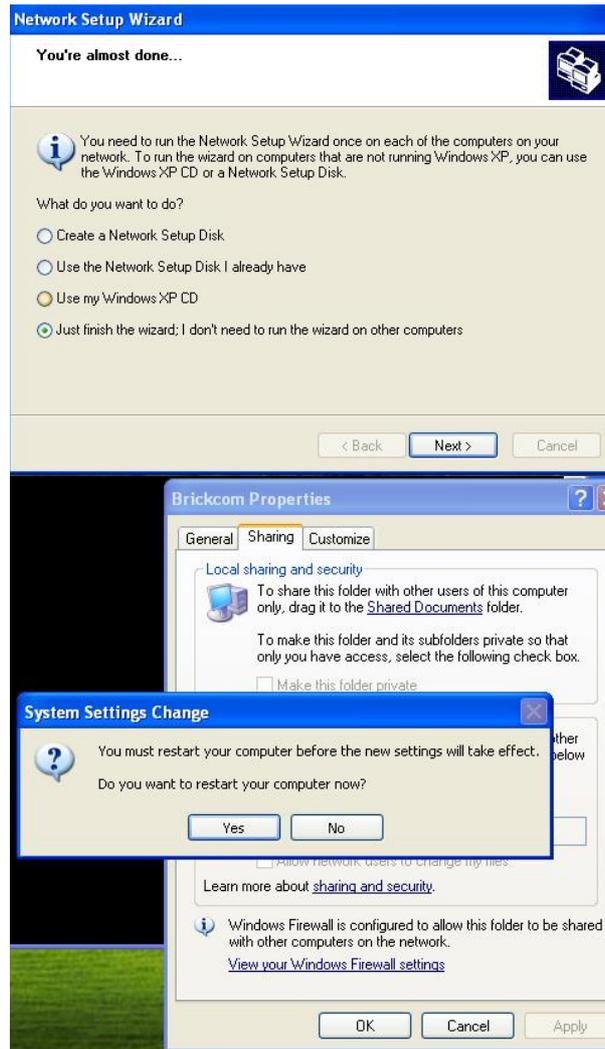
10. Select the description '**Just finish the wizard**…'.

11. Press **<Finish>** to complete the wizard.
12. Repeat step 1.

WIN7
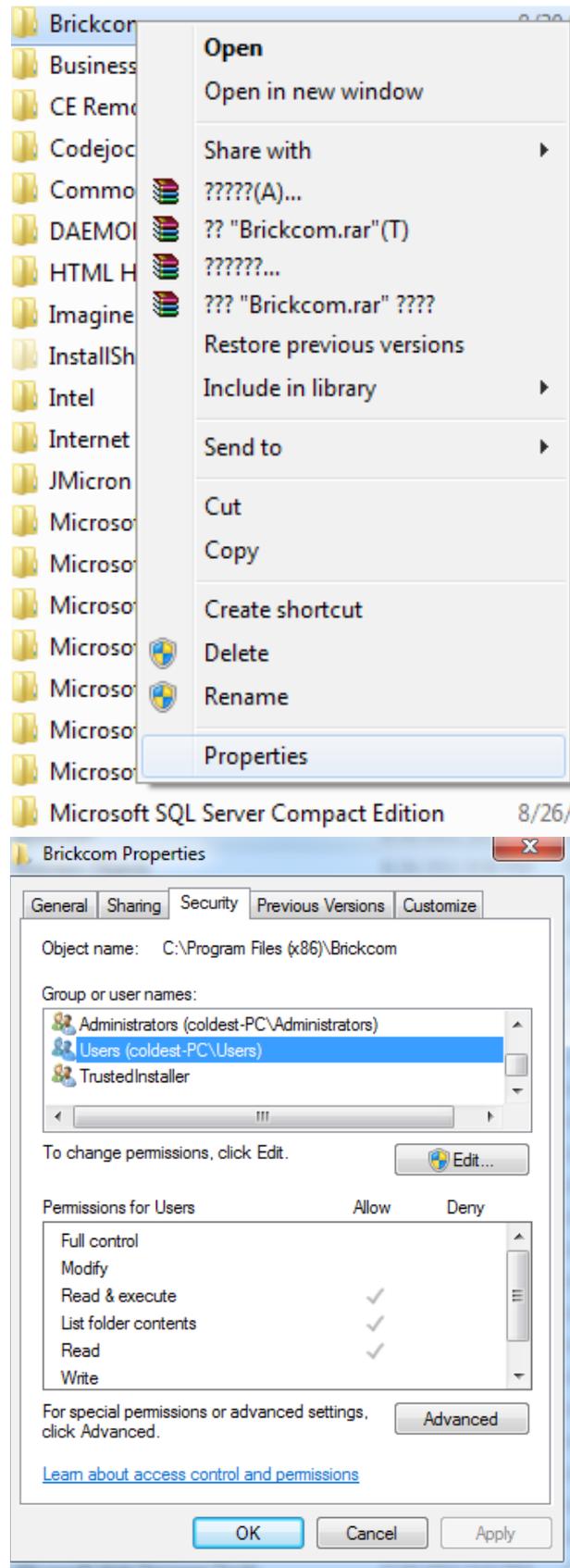
1. Start Windows Explorer to the path via '**Computer->Local Disk(C:)->Program Files\Brickcom**'. If your computer is 64bit, the default path will be'**Computer->Local Disk(C:)->Program Files (x86)\Brickcom**'.

2. Press right mouse click via the path '**Properties->Sharing**' to select **<Share the folder on the network> & <Allow network users to change my files>**.
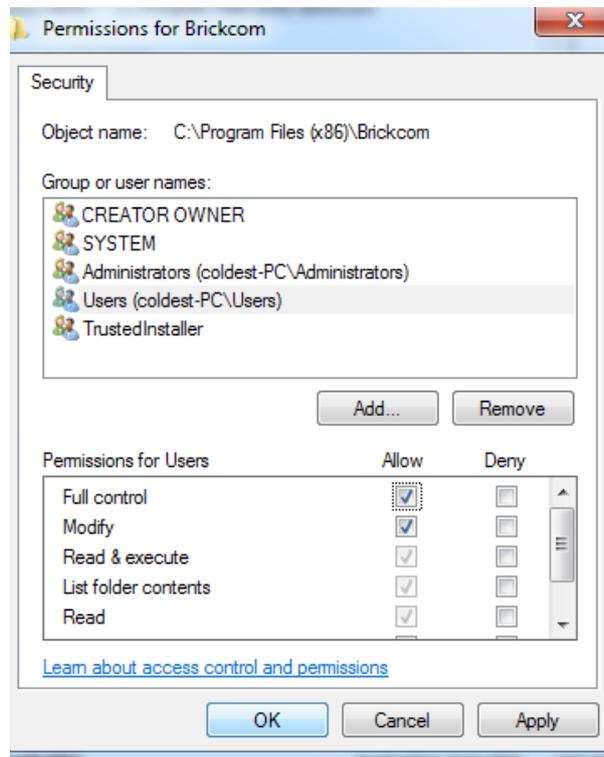
3. Assign Users the full ability to control the folder.

Supported Sites

BRC64 for sale has its own individual product key. The supported max sites are 4 as default. Please input the corresponding product key to increase the max sites(up to 64).
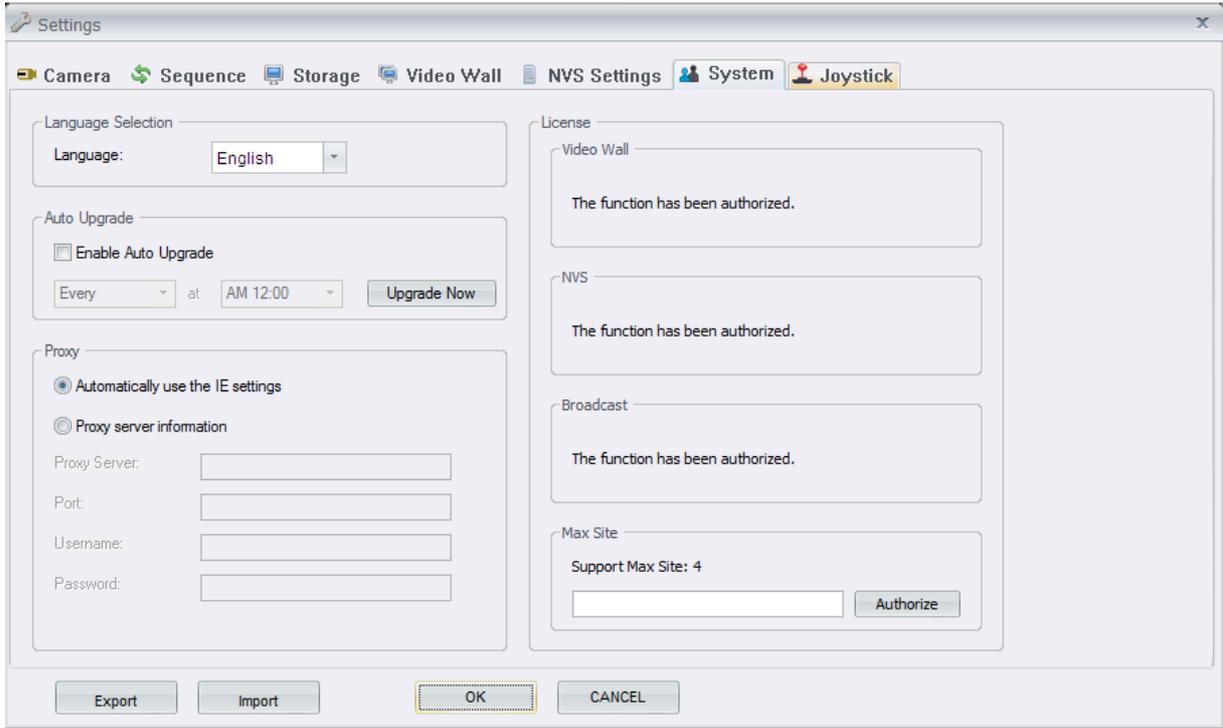
Main Window
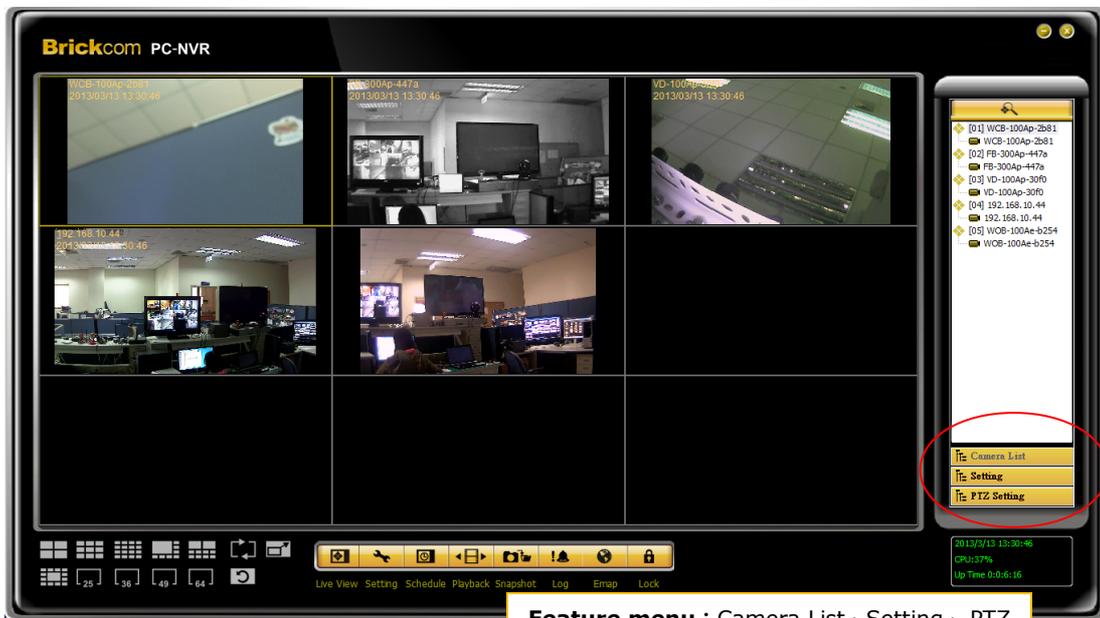
Feature menu：Camera List、Setting、 PTZ Setting

Main Window – Camera List

Main Window – Setting

The usage and function of each button will be briefly described below:

Speaker Volume	Modify Volume by drag-and-pull the mouse
Brightness	Modify brightness drag-and-pull the mouse. Double-click the left mouse bottom to reset to default.

Zoom out / Zoom in - Click to manually adjust the zoom on the desired grid.	
Focus – Click to manually adjust the focus on the desired grid.	

Main Window – PTZ Setting
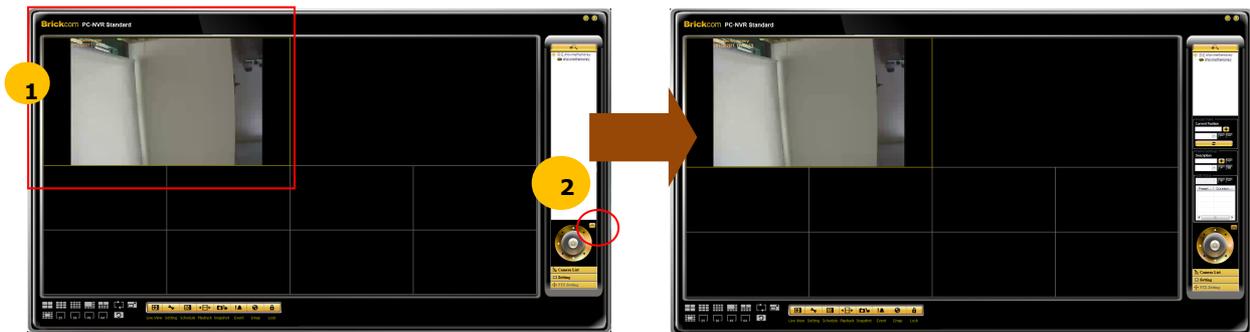
(1) Select camera

(2) Click and popup preset panel and patrol panel.

Preset Point Current Position	Input preset name on edit panel, click to add it.
	Select preset point you want to move by selecting drop down menu.
	Click to go to preset point. Click to delete perset point.
	Click to synchronize setting with camera.
	Zoom out /in - Click to manually adjust the zoom on the desired grid.
	Focus – Click to manually adjust the focus on the desired grid.
Description test test	TEST Insert preset name on edit panel, Click to add, Click to delete.
	TEST Drop down menu to add preset points into patrol set. Click to play current patrol set. Click to stop patrol.
Preset... | Duration...	Displays added preset points.
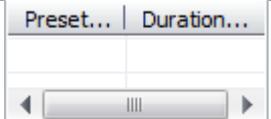
	PTZ Panel- Click on the arrows to pan and/or tilt the desired camera

Main Window – other buttons

	Click this button to search for Network Camera devices within the LAN. The button is moving round and round.
	Live View - Click on the <Live View> icon to view live video feed. After viewing recorded video, click this button to return to the live mode. ⚠NOTE: The menu will jump if you use your mouse to click on this icon. The content of this menu is: ● Enable all live view. ● Enable all live view and record. ● Enable all live view and MD record. ● Enable record only mode and hide BRC64 main console. ● Disable all record.

⚠NOTE 1

Please use right mouse click in the right bottom side of Windows desktop to show/hide BRC64 main console.

🔧	Setting - Click on the **<Setting>** icon to adjust the following configuration: ● **System information** Monitor CPU&Memory Usage, Disk Usage and Network Usage. ● **Settings** Modify the setting of camera, Sequence, Storage, Video Wall, NVS, and System. ● **Account Management** Enable / Disable the authority for accounts to configure the cameras and functions. ● **Alarm & Event Setting Dialog** Modify the immediate actions while events are happening.
🕐	Schedule record - Click on the <Schedule Record> icon to schedule recording times for cameras on the network.
◀🎞▶	Playback - Click on the <Playback> icon to view recorded video stored in the HDD of the connected IP camera.
📷	Snapshot - Click on the **<Snapshot>** icon to save snapshots including: ● Snapshot Single - Snapshot single image. ● Snapshot Matrix - Snapshot all window grids image. ● Snapshot All - Snapshot all video images individually.
🔔	Event - List of system and camera event logs.
🌐	E-map - Click on the <E-map> icon to open the E-map program. The E-map is a program that allows the user to illustrate the positions of the cameras on a self selected

	image.
🔒	Lock - Click on the <Lock> icon to lock the BRC64 without closing the program. To re-access the BRC64, the user will be prompted to enter the username and password.

Display Modes

■	1-window mode
⊞	4-window mode
⊞	9-window mode
⊞	16-window mode
⊞	10-window mode
⊞	8-window mode
⊞	13-window mode
25	25-window mode
36	36-window mode
49	49-window mode
64	64-window mode
↱↲	**Sequence**: This function is used to set the display sequence.
◰	**Full Screen**: Enlarge the viewing window to fit full screen. Hit <Esc> to exit.
↺	**Resort Camera**: Resort Display Window Grids; to rearrange camera images of connected sites in order.

Configure the BRC64

Live View

With the live view function, the user can view live video feed from any IP camera connected to the network. To operate this feature:

1. Click on the [⬥] <Live View> button to see the live view. Right click on a desired grid and select < Disable Live View > from the pull down menu to disable live view.

2. Click [⚲] <UPnP Search> button on the control panel to start searching for UPnP devices within the LAN.

3. Use the Display Modes to determine the amount of sites to view.

4. The BRC64 allows the user to assign any camera in the site tree to any grid in the main window.

   Step 1: Selects the camera to be viewed from the site tree.

   Step 2: Drag and drop the selected camera into the window to view.

Re-sort Camera

If the camera sites are rearranged during live view, return to the original camera order by right pressing on any grid square and selecting <Re-sort camera>.

Zoom In – Double click on the desired grid, and use the scroll wheel on the mouse to zoom in and out of the live view window.

If the camera has pan, tilt, and zoom capabilities, the following control panel will be displayed.
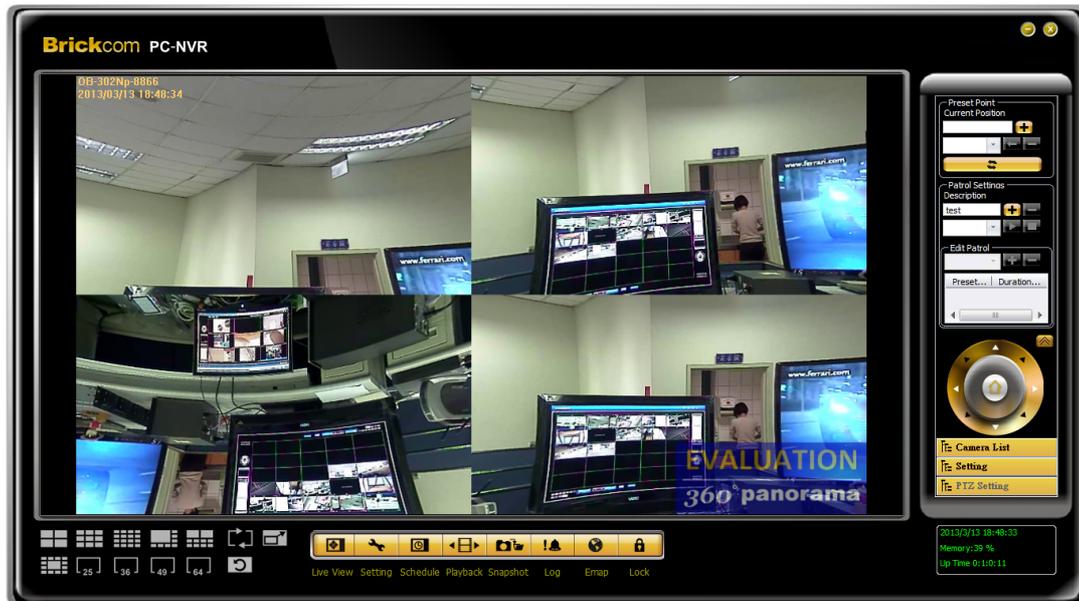
	Zoom out / Zoom in - Click to manually adjust the zoom on the desired grid.
	Focus – Click to manually adjust the focus on the desired grid.
	PTZ Panel- Click on the arrows to pan and/or tilt the desired camera.

Setting

With the Setting tool, the user can manage up to 64 camera sites on the BRC64. Use this tool to add, remove, or configure cameras.

Add/Remove a Site

There are two ways to add a site.

1. **Setup the Site via UPnP Device Search.**

2. Click ![UPnP Search button] **<UPnP Search>** button on the control panel to start searching for UPnP devices within the LAN.

Click and select the Network Camera from the survey list. Enter the user name, password and select the stream type from the drop-down menu. For first time use of an IP camera, the user name and password are '**admin/admin**'.

Setup the Site Manually

Camera
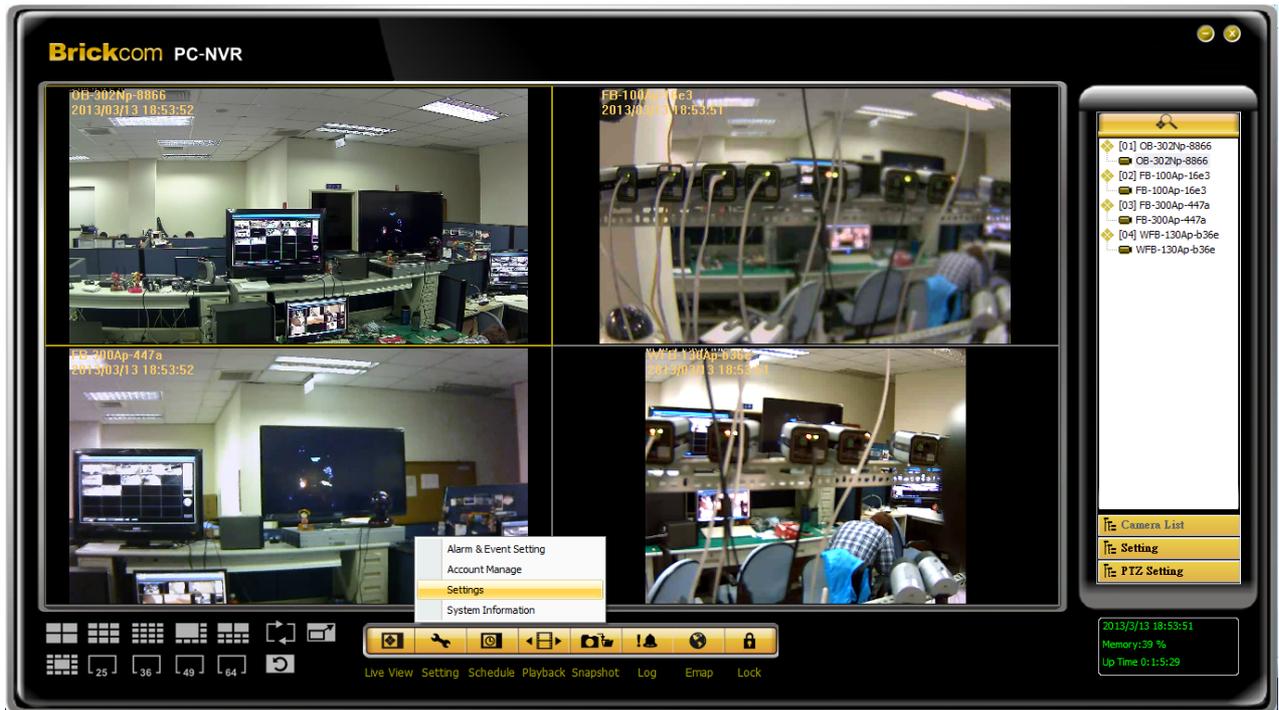
1. Click on the <Settings> icon and select <Settings>.
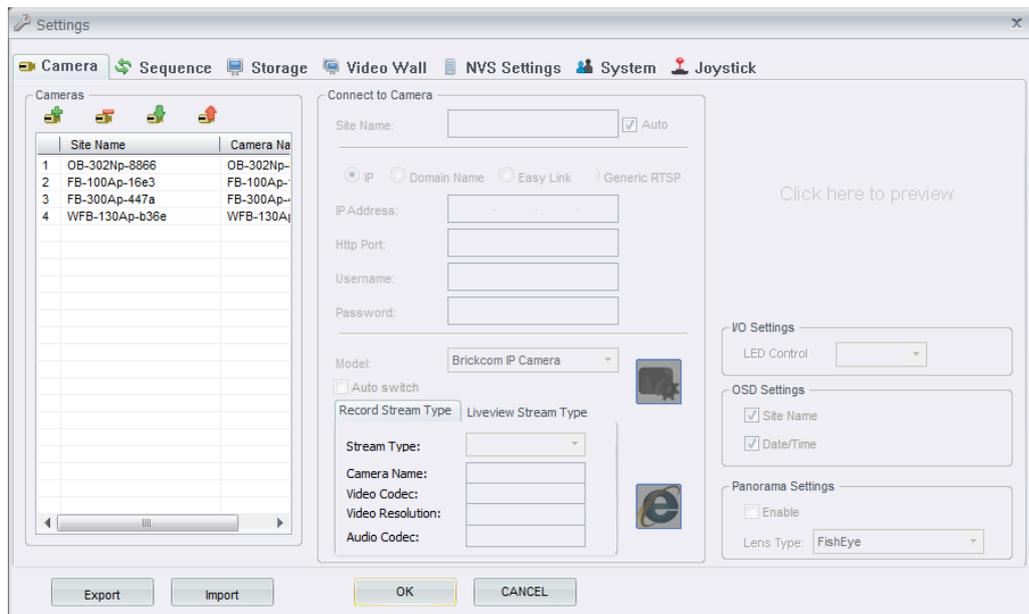
2. The figure below will be displayed.
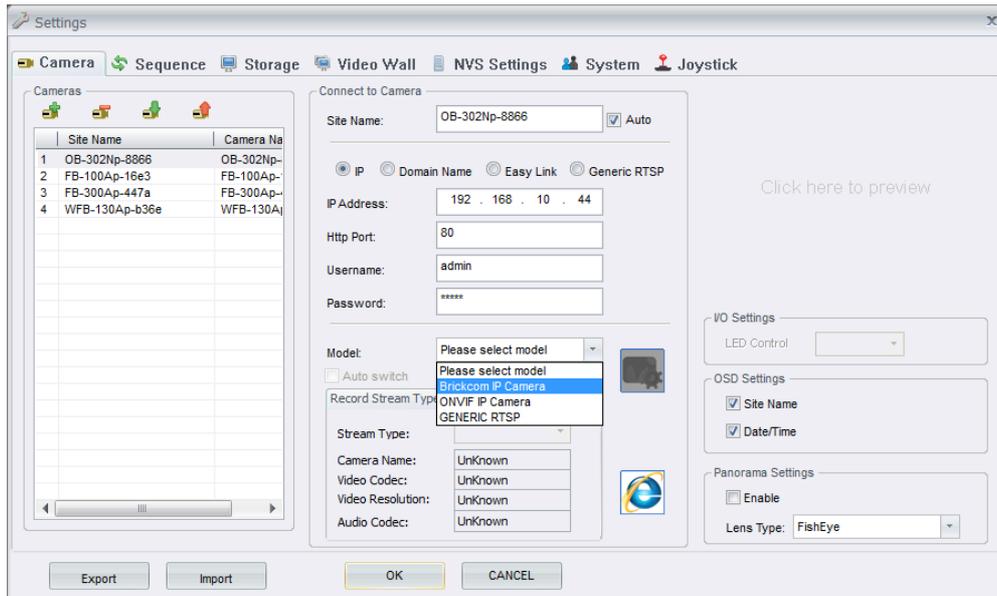
2.1 Click ![add] button to add a site. Click ![remove] to remove it.

How to add a site

2.1.1   Enter the required information, including IP, Http port, Username, and Password of the Network Camera.

2.1.2   Select the **<Model>** of the IP Camera from the drop-down menu to automatically retrieve the Site name from the UPnP name of the camera being added add to the BRC64.

2.1.3   Click **<OK>** to complete the setting. Otherwise, rename the 'Site name' is available with 25 character limit.

2.1.4   Dual Stream supported and you can select different stream for recording or liveview by selecting Record Stream Type and Liveview Stream Type. Auto switch will automatically change liveview stream and record stream in a different display mode.

2.1.5   For a 360-degree camera, you can enable fisheye de-warp feature by checking '**Enable**' box on the Panorama setting.
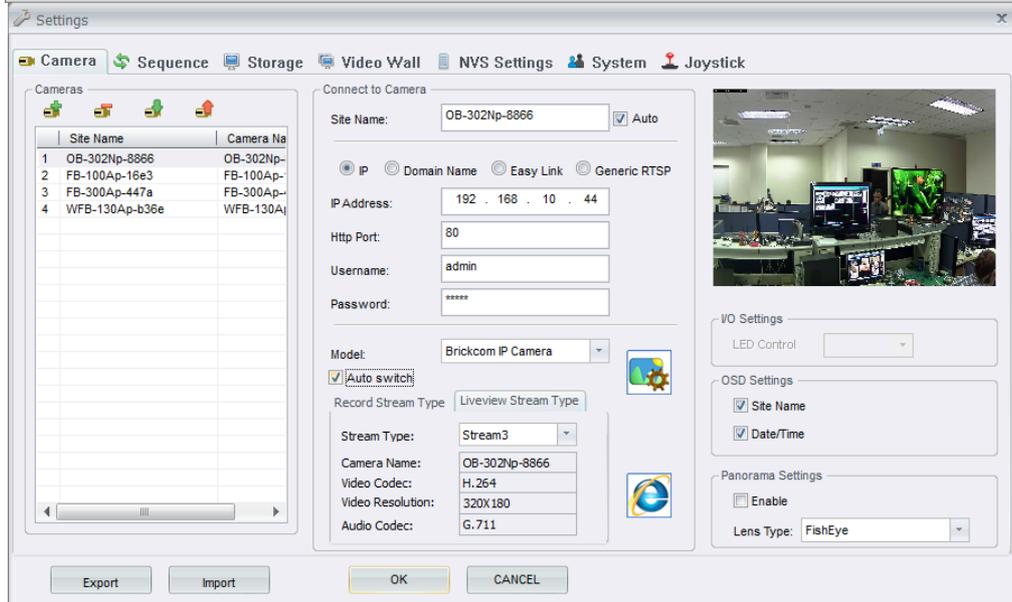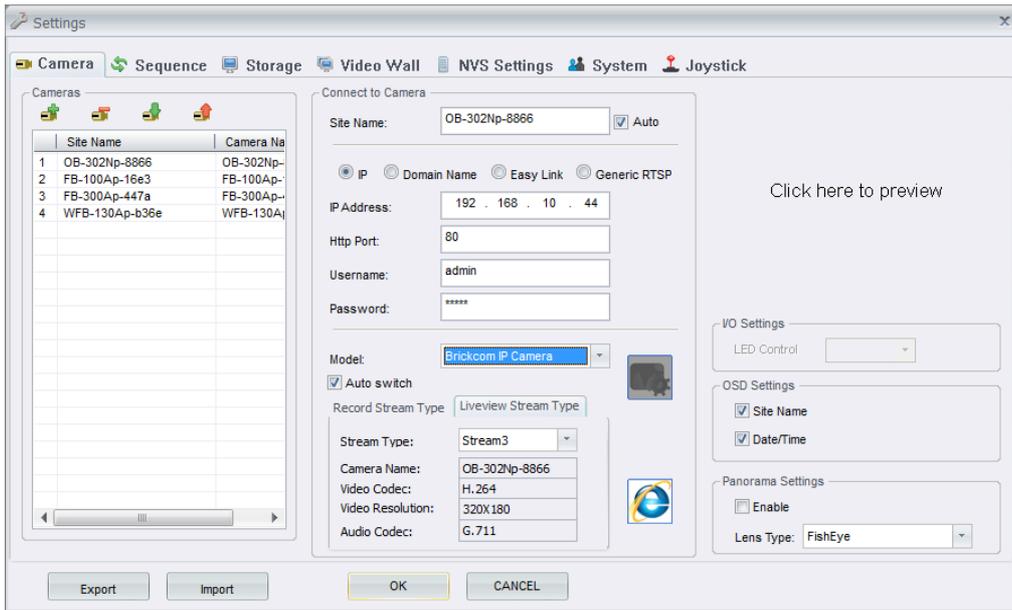
⚠️ NOTE

If the camera already has a configured domain name or Easy Link, user can enter **Domain Name** or **EasyLink name or Generic RTSP** instead of IP address by selecting ◉IP ○Domain Name ○Easy Link ○Generic RTSP connection type. If your camera's link for EasyLink is '**123.mybrickcom.com**,' please enter '**123**' in the row space of **EasyLink name**.

	Add a site.
	Delete a site.

	Click to modify the Brightness, Contrast, Sharpness, and Saturation.
	Click to modify the Video & Audio setting including Codec, Resolution, Fps, and Bitrate.
	Click to automatically open the Web GUI of the selected camera.

Talk

If there are cameras connected to BRC64, 2-Way audio can be carried out.

Single: Implement 2-Way audio with single camera. Select '**Single(On/Off)**'. Please see the below photo.

Broadcast: 2-Way audio with several cameras.

1. Please select **Broadcast** to start broadcast setting.

2. Please select ▣ to create group.
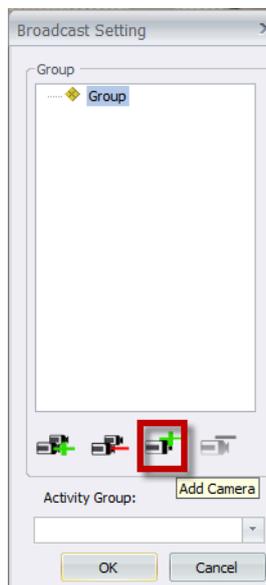
3. Please select ◻️ to add camera.
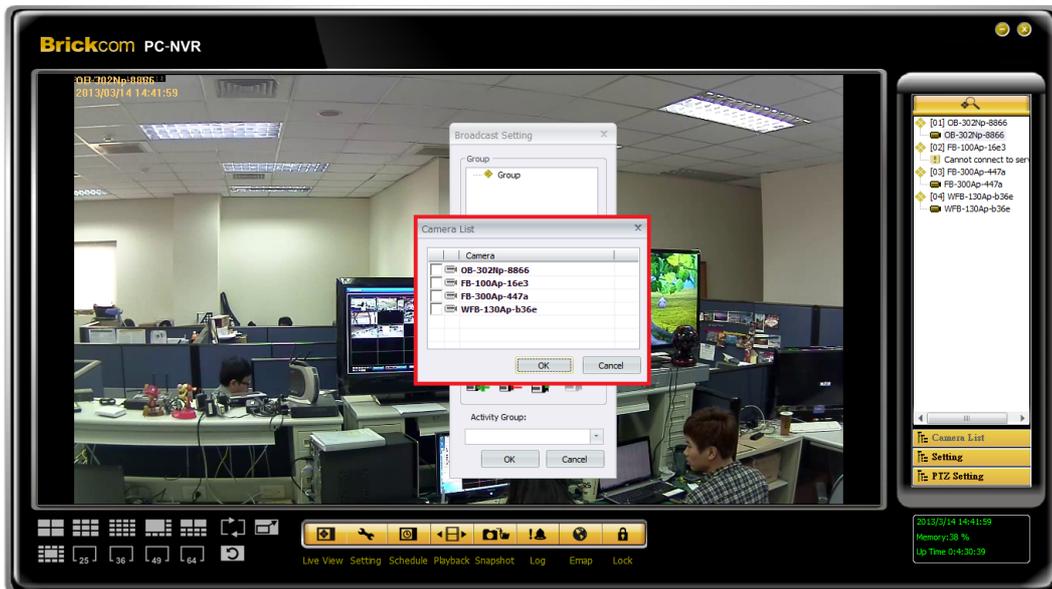
4. Add camera to the broadcast list, then press '**OK**'.

5. Select group to start broadcast service, then press '**OK**'.

OSD Settings

'**On-screen display**' displays the camera data, which includes site-name, UPnP name and Date/Time, of a connected Network Camera on the live view screen. Click to select the options on the camera setting page or right click on a desired grid and select **< OSD setting >** from the drop-down menu.
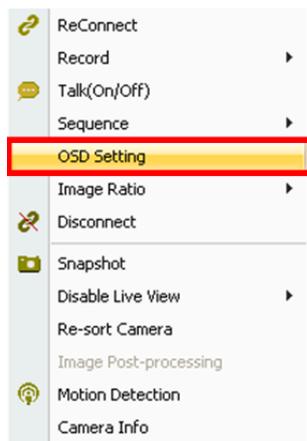
Sequence

This function is used to set the display sequence for live view of the cameras. There are two ways to add cameras to the sequence.
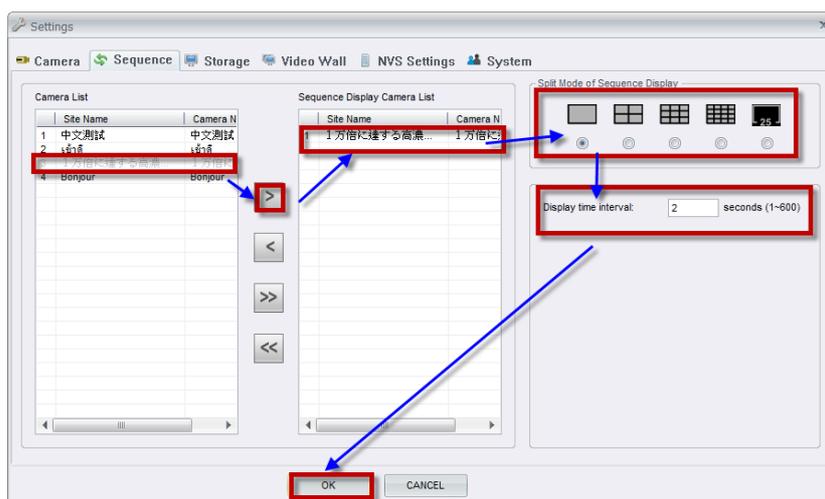
1. Click on the [icon] **<Setting>** icon and choose **<Sequence>** to setup the sequence. Select a camera and move from the '**Camera List**' to the '**Sequence Display Camera List**' in the preferred sequence order. The user can setup the display time interval (from 1 to 600 seconds) and split mode of sequence display (1*1, 2*2, 3*3, 4*4, and 5*5). Click **<OK>** to save the settings.

2. Right click on a desired grid and select **<Sequence>** → **<Add to Sequence>** to add, or **<Remove from Sequence>** to remove.

> ⚠️NOTE
> When the sequence is added, a capital '**S**' will be shown on the icon.

Storage

Record Path	The file path menu defines the storage located of recorded videos and snapshot. It is **NOT** recommended to use the default folders. 35/17 '**C:\Program Files\Brickcom\BRC64\Record**' is the default path for recorded videos. The recorded videos can be stored in more than one folder. 35/17 Check the '**Enable**' box and click **<Browse>** to set more destination folders.
Circular Recording	The **Circular** is used to adjust the HDD space usage of the BRC64. If **Circular** is enabled, then once the free space remaining in the destination folder falls below the threshold, the **Circular** will overwrite the oldest video and snapshot files in the storage folder with new videos and snapshots files. The user can adjust the threshold by megabytes or percentage of the file size.
Remaining days	Decide the period to store the video clips.
Event Recording Duration	When motion detection is enabled, the **<Event Recording Duration>** can be used to define the amount of time for post-event recording. The duration must between 10 seconds to 600 seconds.
Snapshot Settings	'**C:\Program Files\Brickcom\BRC64\Snapshot**' is the default path for snapshots.

	Click **<Browse>** to set desired destination folder as shown below. If the boxes are checked to save snapshots as Bmp and Jpg, the snapshots will be saved to two folders: one for Bmp and one for Jpg.

Video Wall
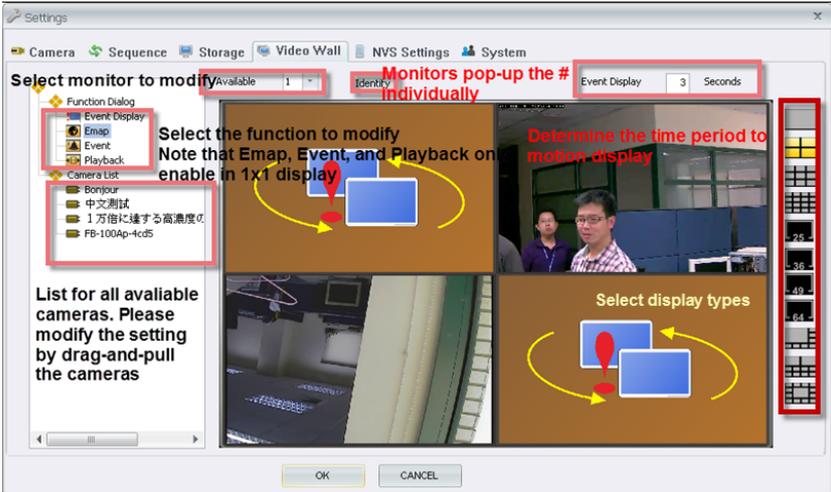
BRC64 allows users to use multiple computer monitors to perform different program.

Display configuration is accessible by selecting button list on the right side.

⚠ NOTE1
Please restart BRC64 after changing your device's resolution.
⚠ NOTE2
The setting of Emap, Event, and Playback can only be enabled in 1x1 display.

Available Monitor	Select the monitor to modify the setting.
Camera List	A list for available cameras, that users can assign these into schedule by dragging and dropping the mouse.
Identify	Pop-up monitor's number representation.
Event Display Period	Determine the time period to motion display.
Function Dialog	According to user demand, Video Wall supports several functions to satisfy.
Event	Set up events from motion detection to sequence display.

Display	
Emap	User can arrange monitors to start Emap service to get a clear picture of the whole environment.
Event	User can assign monitors to show & update the latest message for BRC64
Playback	User also can assign monitor for playback service.
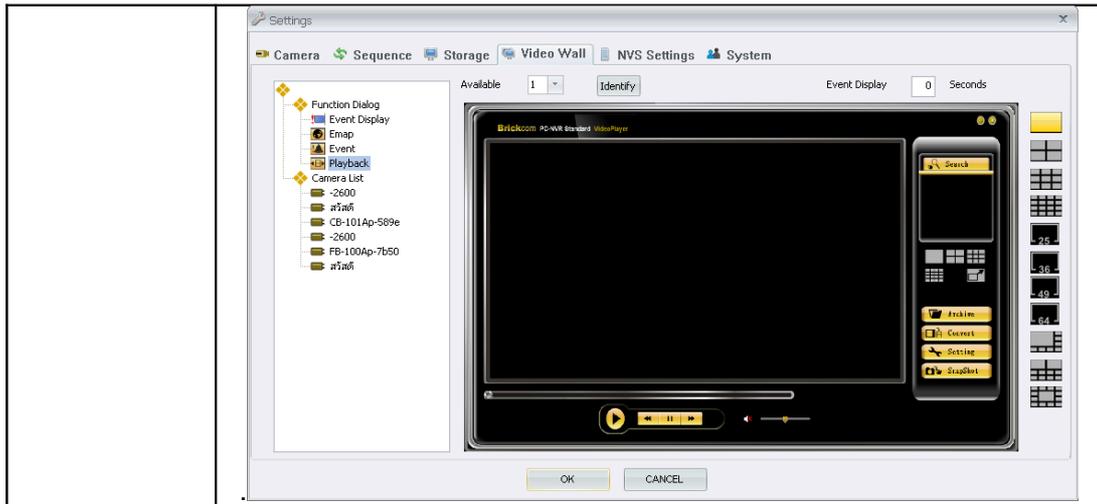
NVS Setting

Allows another user to monitor immediately by IE browser
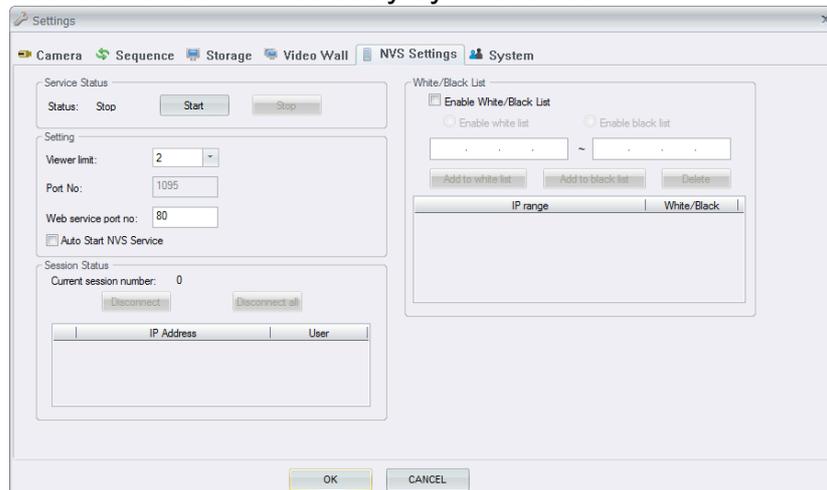
Service Status	Enable the NVS settings, press **\<Start\>** to begin the service or **\<Stop\>** to disable the service.
Setting	● Modify the maximum connections that can be accessed. ● Modify the port connections that can be accessed. ● Enable to start NVS service automatically.
Session Status	Display connection information.
White/Black List	Allow/Block specific IP addresses in the service.

Steps to start Remote Liveview & Playback

1. Open the IE browser.

2. Input the IP address for BRC64.

3. Agree the ActiveX authorization.
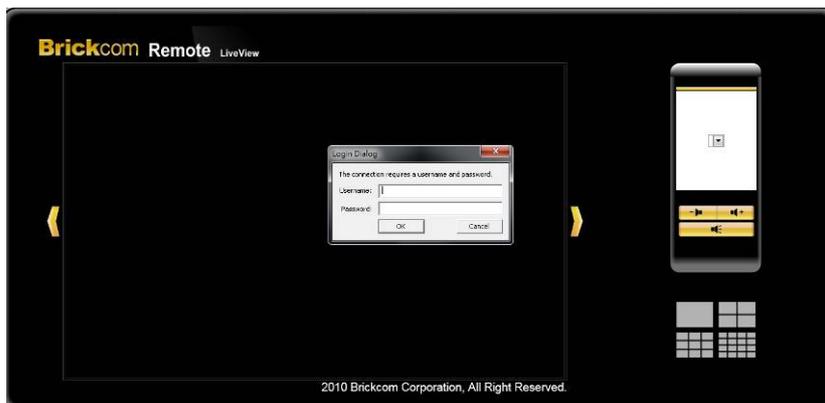
4. Enter the username and password of BRC64.
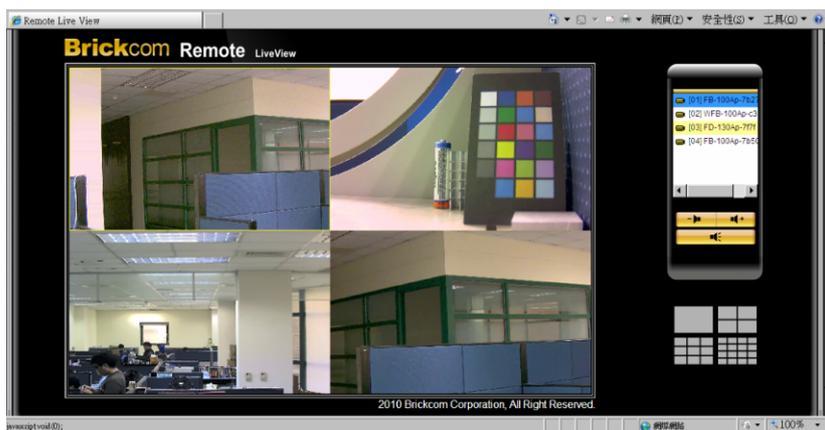
5. Remote Live View.

Remote Liveview
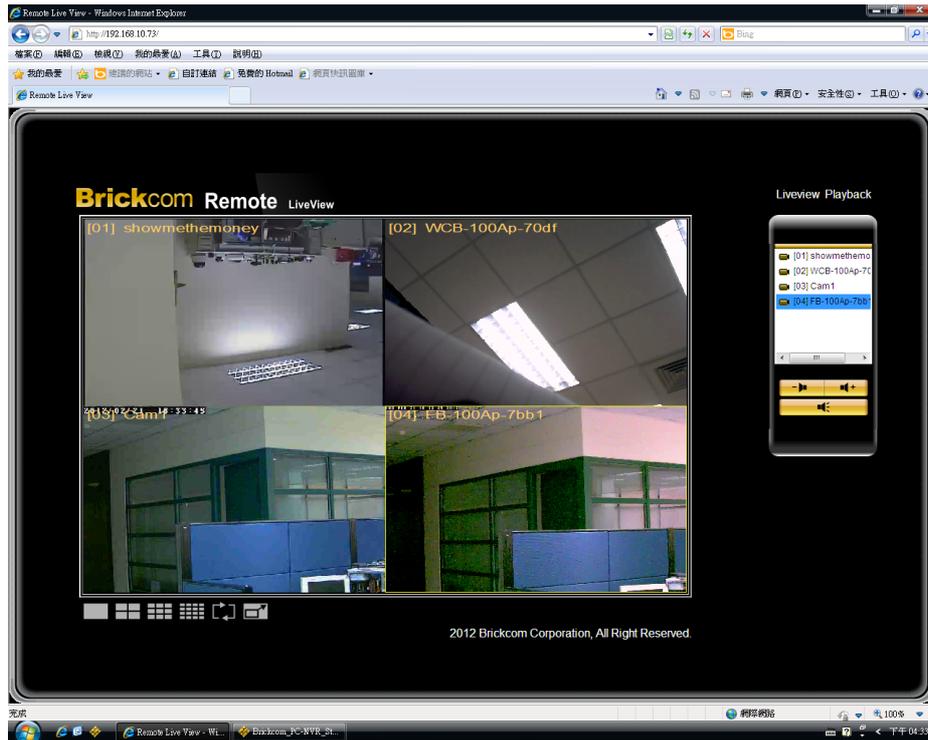
◀+	Increase volume
-▶	Decrease volume
◀⊘	Turn off audio

Display mode

⊞	4-window mode
▦	9-window mode
▦	16-window mode
↻	**Sequence**: This function is used to set the display sequence.
↗	**Full Screen**: Enlarge the viewing window to fit full screen. Hit <Esc> to exit

Remote Playback

On LiveView windows，click Playback to enter remote playback webpage
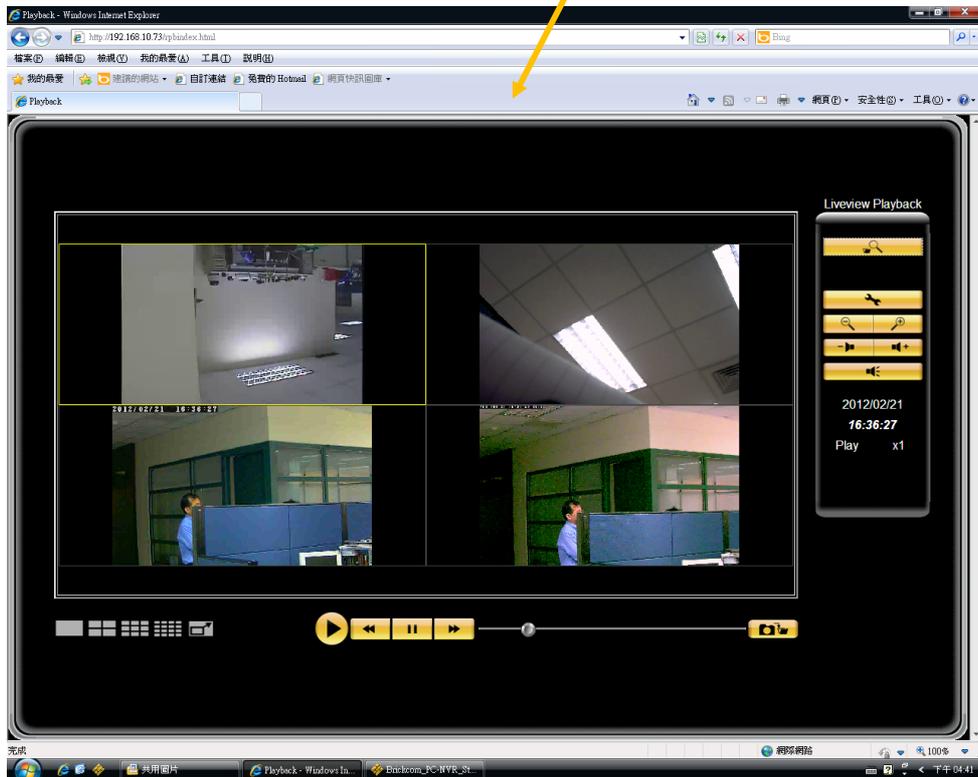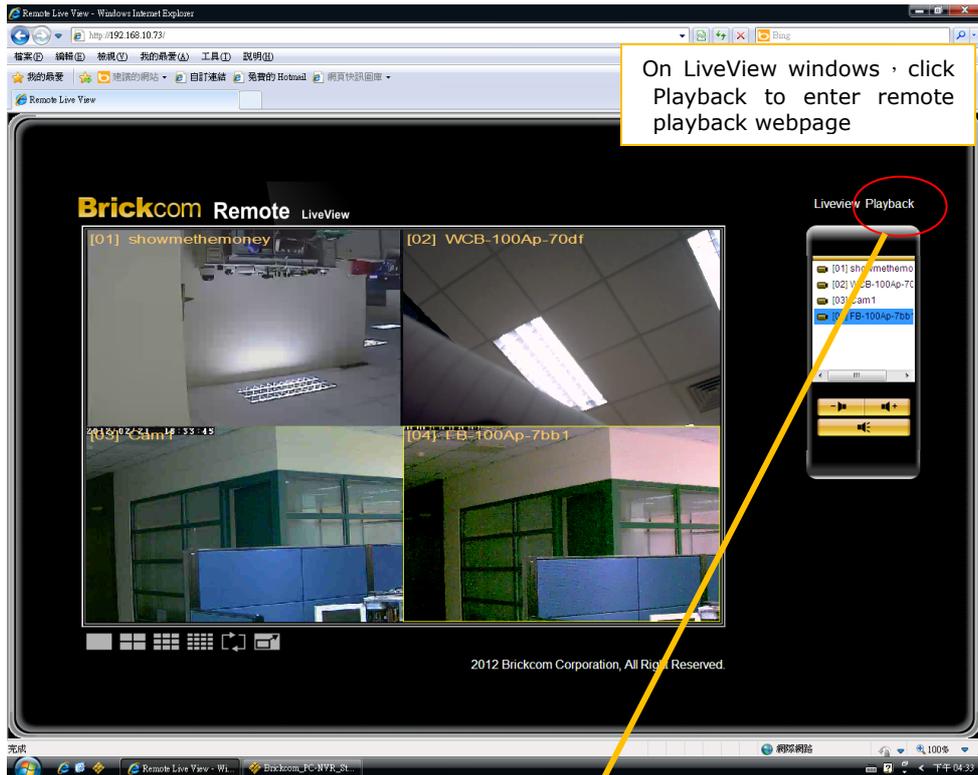
	Click **<Search Image Files>** button to search video clips by event types or date-time.
	<Setting>button
	Zoom out/in button
	Increase volume
	Decrease volume
	Turn On / Off the audio output.
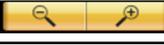
- **Search**

Click button , this will pop up a search dialog. There is a preview image window while the mouse hovers on time footage. Please follow the steps below:
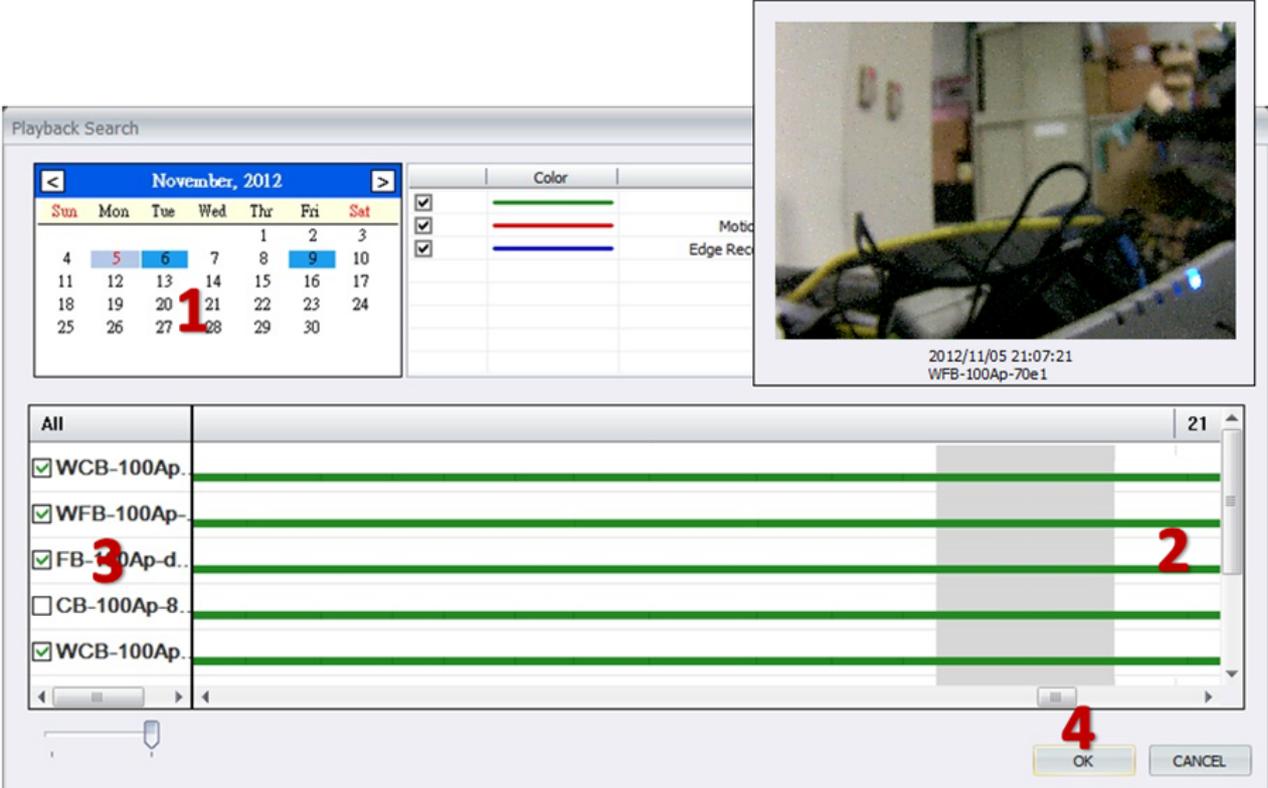
1. Select a specific date on the calendar to playback. Different color are to tell if there are recording files inside.
2. Select time period. Mouse drag and drop to select a time period. Also, you can use the mouse to hover on time-line to preview the image

3. Check cameras to insert into the display list.

4. Select mode: Click OK button to display

- **Preference**

Click ![wrench icon] button, Click**<Browse>**to select snapshot path. In addition, there are 2 formats for performing snapshots.
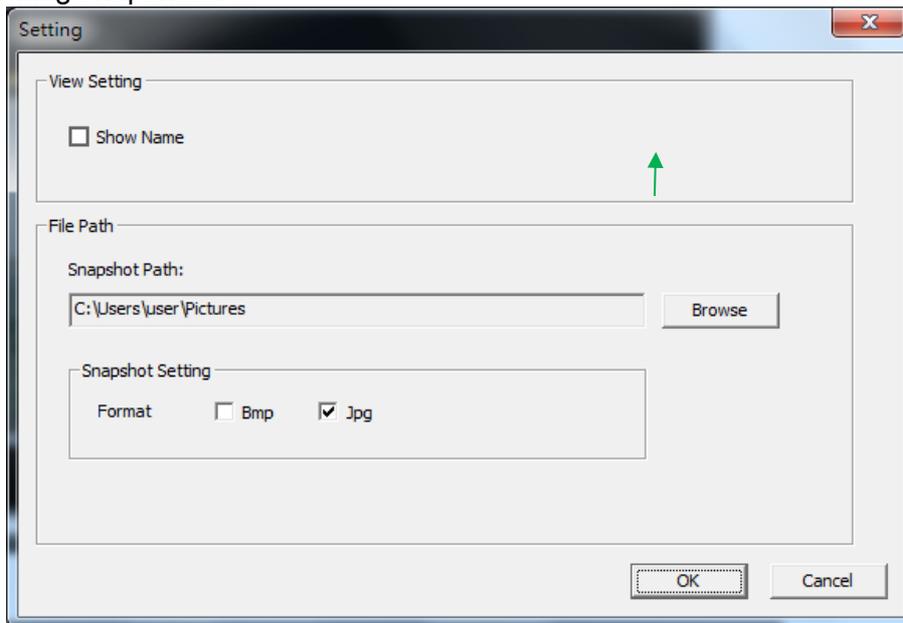
The root cause to fail the NVS service:

- Reject the installing request for ActiveX authorization.
- Forget to close other IE browser pages during installing process.
- Windows needs to be updated. Please follow the below paths to download the file vcredist_x86.exe.

http://www.microsoft.com/download/en/details.aspx?id=29

http://www.microsoft.com/download/en/details.aspx?id=5582

Please select DOWNLOAD to start & finish the software installing process.
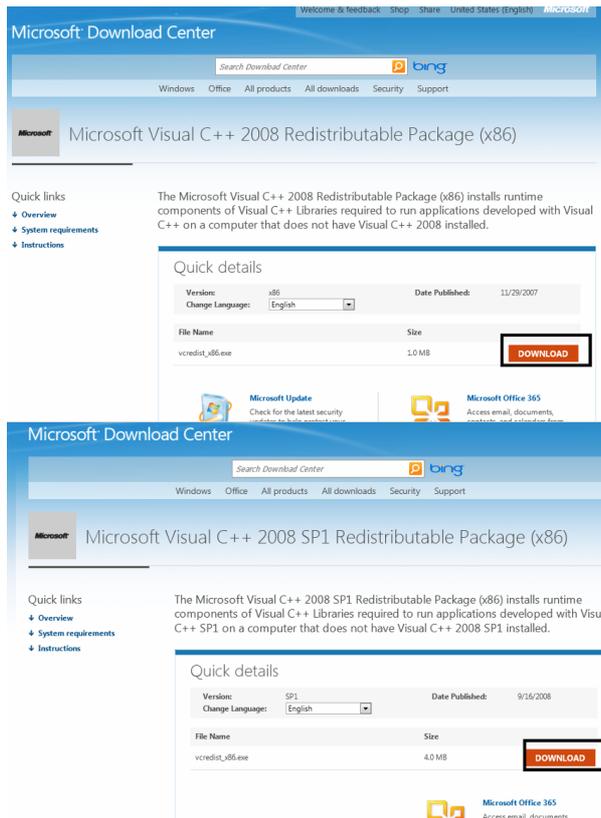
System
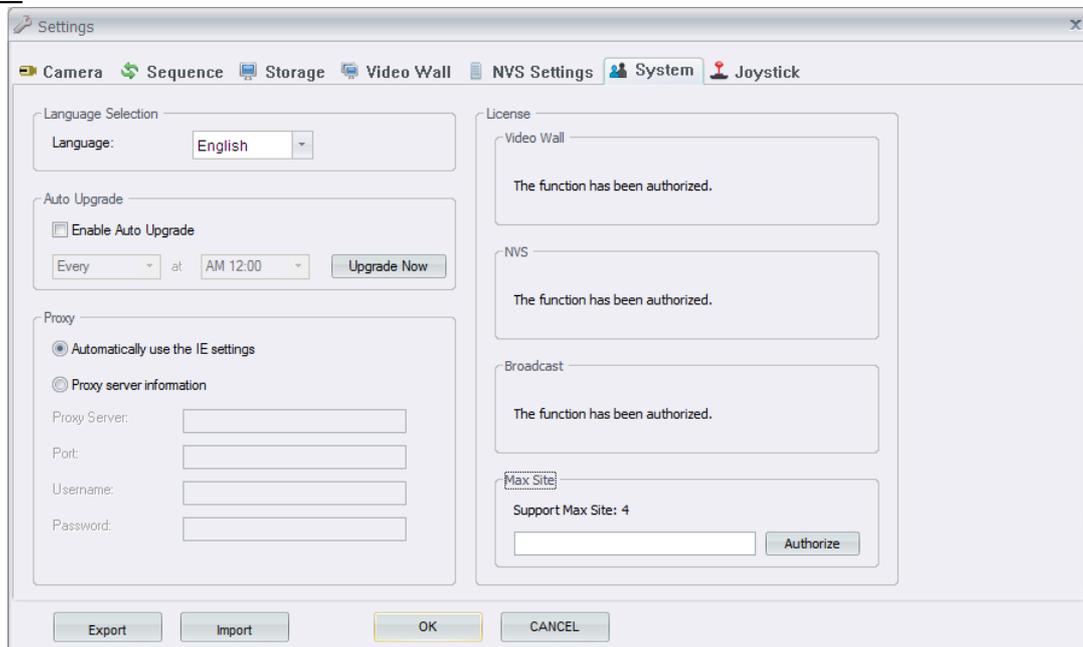
Language Selection	Select the desired language from the drop-down menu.
Auto Update	Modify the regular schedule to update BRC64. Updating process starts and downloads files automatically at regular

	time points. Please see below photo:
	  After finishing downloading, user will get prompt if new software update for BRC64 is available. If no update is available, you will prompt "There are no updates available for this program. This is the latest version."
Proxy	Modify proxy setting.
License	Display the days remaining to use the specific functions.
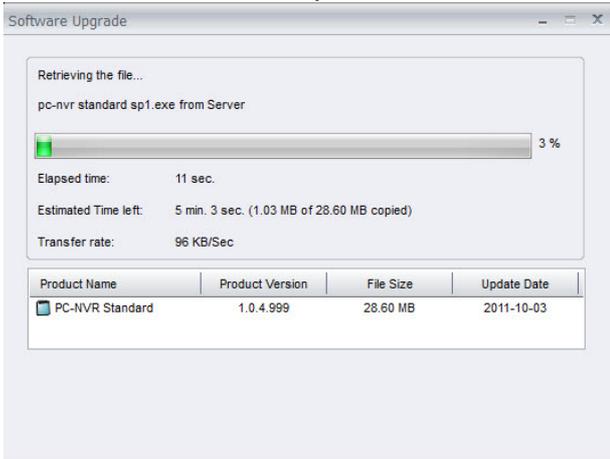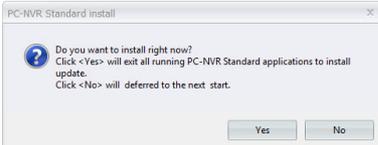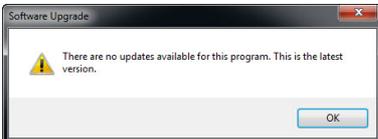
Alarm

If there is something wrong with liveview, BRC64 will send first hand information to default receivers including:

- Sounds.
- Liveview-Blinking.
- E-mail.
- Ftp.

How to configure & trigger alarm notification

Please refer to the below steps to modify & trigger alarm notification:

1. Please start the alarm setting via '**Setting->Alarm & Event Setting Dialog**'.
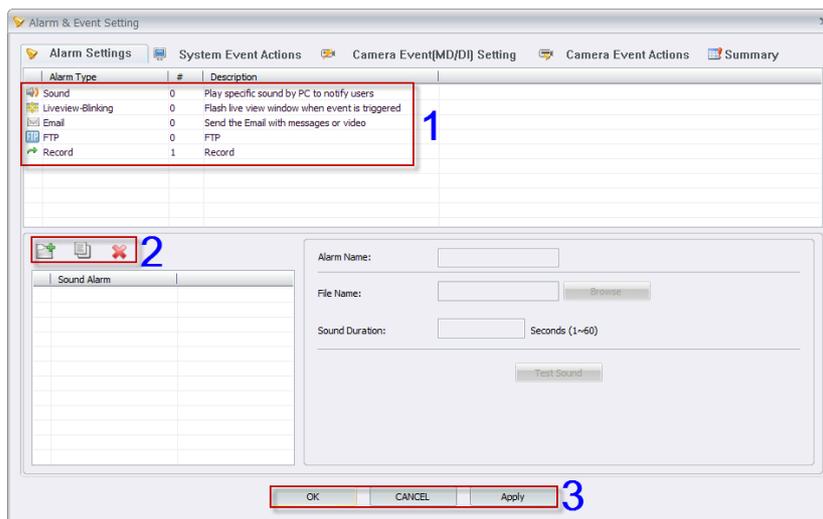
2. Please modify notification types in '**Alarm Settings**' including '**Sound**', '**Liveview-blinking**', '**Email**' and '**FTP**'. After selecting alarm types, click **<Add>** /<Copy> /Delete to create/duplicate/remove alarm settings.
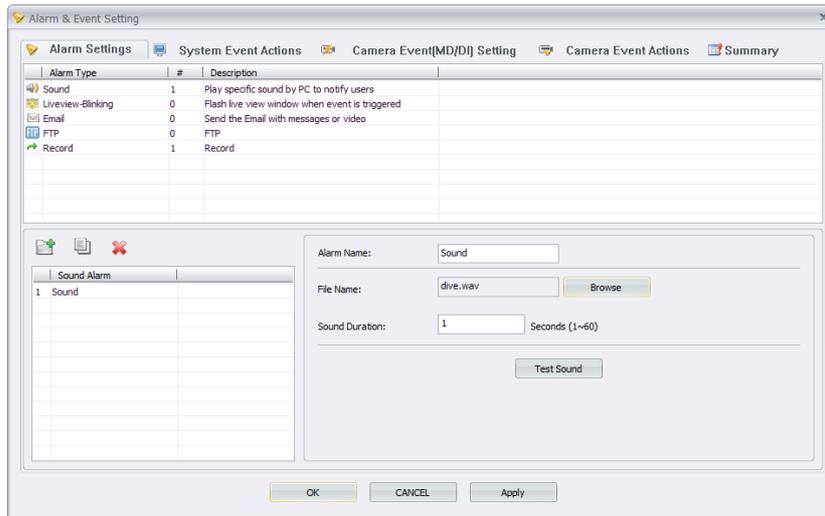
2.1 Detail setting for alarm notifications

2.1.1 Sound

BRC64 will notify users by setting off an audio clip if there is something wrong with liveview.

Alarm Name	Rename the new alarm file.
File Name	Click**<Browser>** to select the default audio clip.
Sound Duration	Decide time period to play the audio clip.
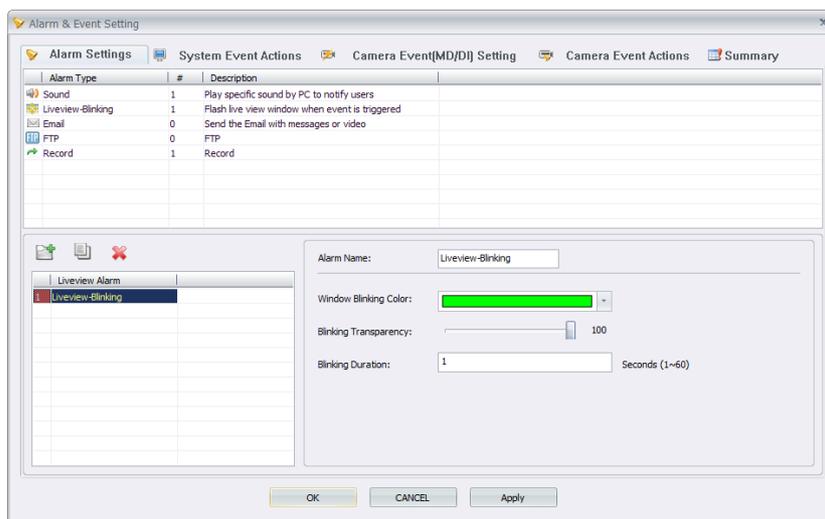
2.1.2 Liveview-Blinking

BRC64 will blink the liveview window if there is something wrong with liveview.

Alarm Name	Rename the new alarm file.

Window Blinking Color	Select the color for blinking.
Blinking Transparency	Transparency modification.
Blinking Duration	Decide time period for blinking

Non-Blinking	Blinking
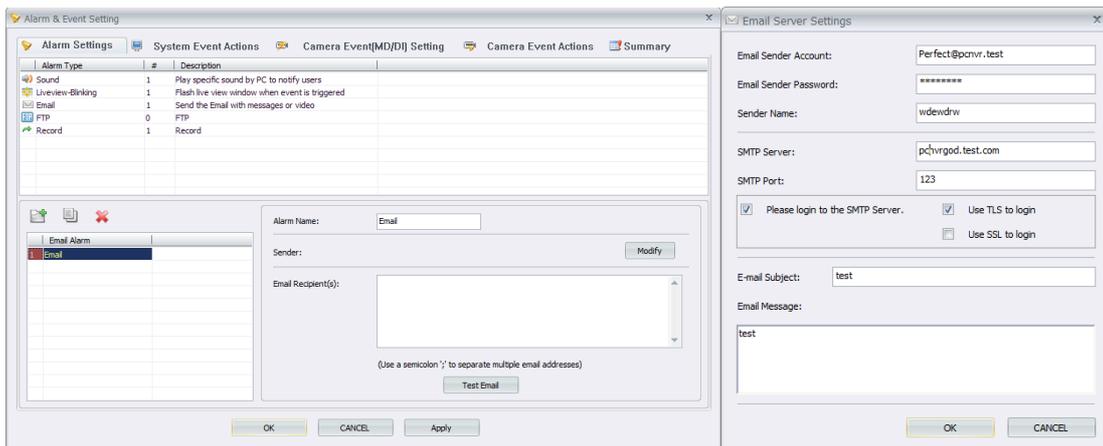
2.1.3 Email

BRC64 will send messages to default mail address if there is something wrong with liveview.

- **Alarm Name** - Rename the new alarm file.
- **Email Recipient** - Modify the mail address to send.
- **Test Email** - Pre-Test the prior setting.

Alarm Name	Rename the new alarm file.
Email Recipient	Modify the mail address to send.
Test Email	Pre-Test the prior setting.
Modify Sending	According to different Email address, configure the server setting for delivering.

connection	
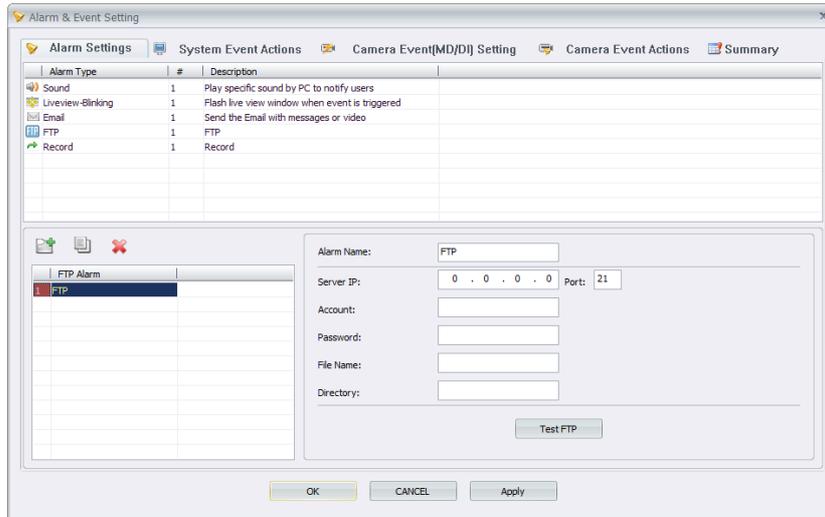
2.1.4 FTP

BRC64 will send snapshots to the default FTP address if there is something wrong with liveview.

FTP Alarm Name	Rename the new alarm file
Server IP & Port	Modify the IP address and accessible port to connect the Ftp server.
Account & Password	Modify Account & Password to login.
File Name	Rename the storage file to save & upload. For example, the file name will be Snapshot_Test_Time if input 'Test' in **File Name** column.
Directory	Modify the default subfolders position to upload. For example, the default subfolder position to upload will be 'Test' if input '//Test' in **Directory** column.

⚠ **NOTE –** It is necessary to input **'//'** in the **Directory** column.
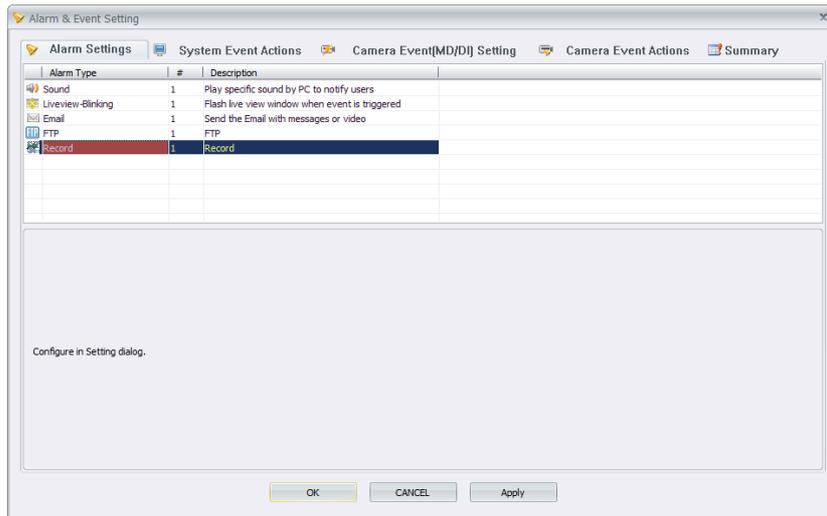
2.1.5 Record

BRC64 will start the recording process if there is something wrong with live view.
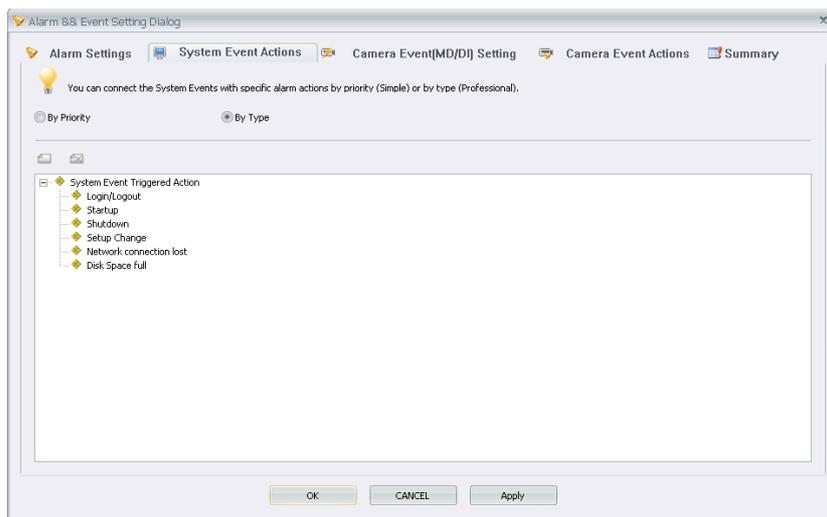
2.2 According to the actual needs, assign cameras to implement alarm notifications in 'Camera Event Setting' or choose the system event notification service in 'System Event Actions'.

2.3 Detail setting for System Event Actions.

BRC64 will notify users if specific events happen during BRC64 operation. Specific events include login, logout, shutdown, etc.
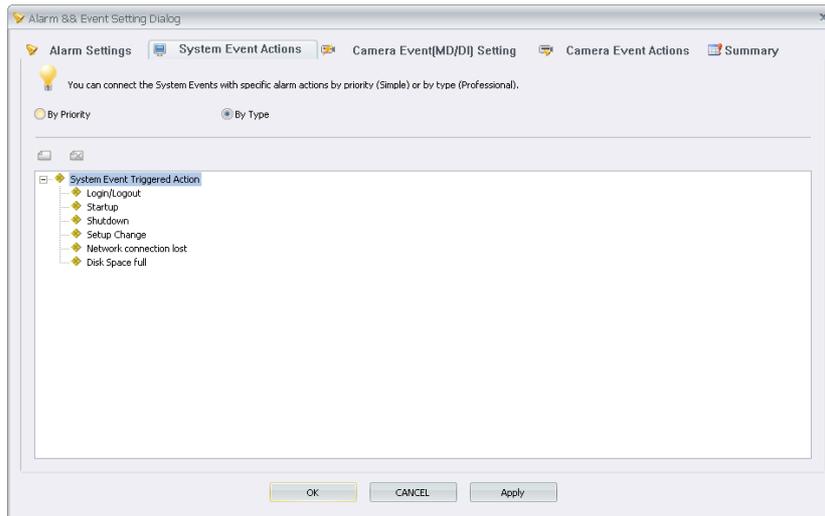
3.1.1 Please choose to connect by '**Priority**' or by '**Type**' for alarm notification. Priority mode is available if BRC64 has been configured with priority to system events. Default modification is to connect by type.
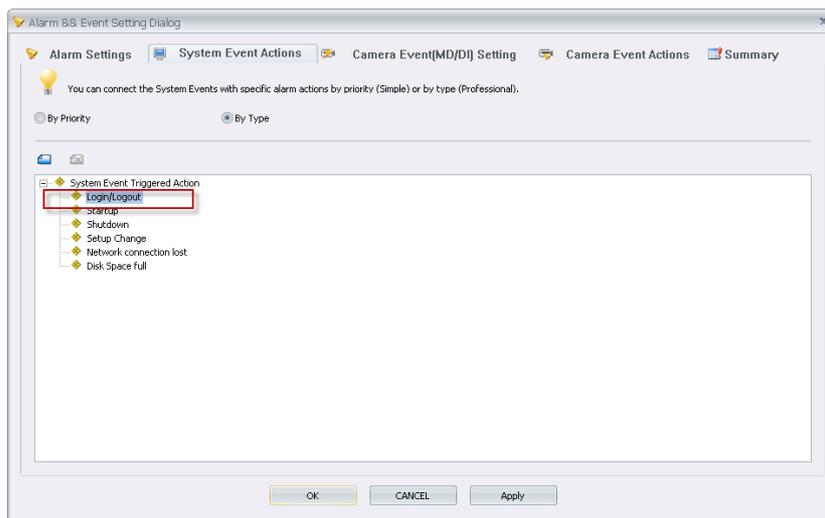
3.1.2 Please select system event to trigger alarm notification.
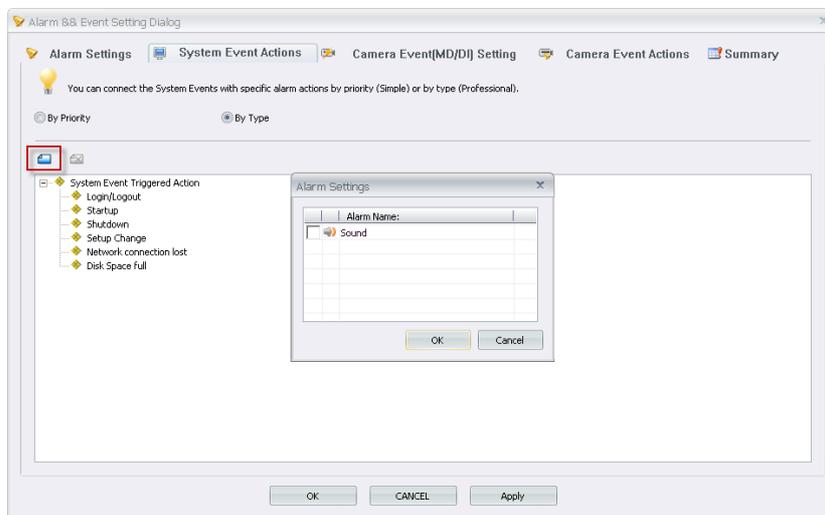
3.1.3 Please assign alarm notification by pressing **\<add\>** button, then select **\<OK\> to finish the setting**.
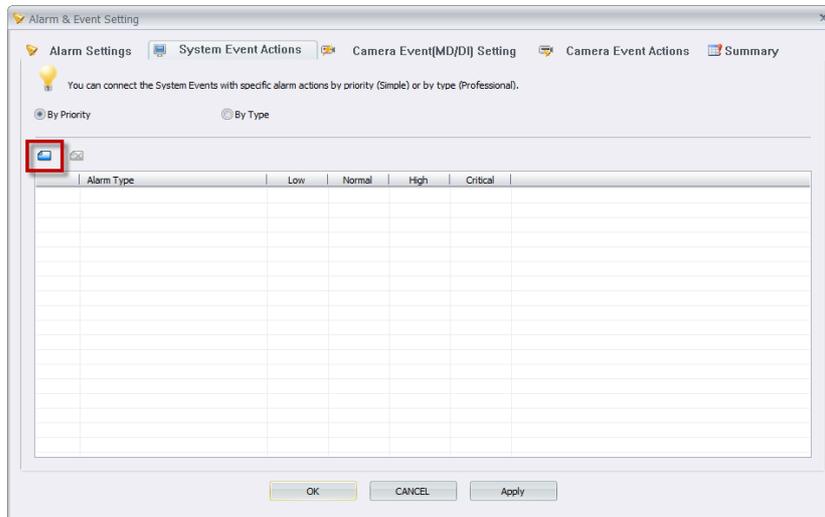
3.1.4 Please click \<Add\> button to create new alarm type.
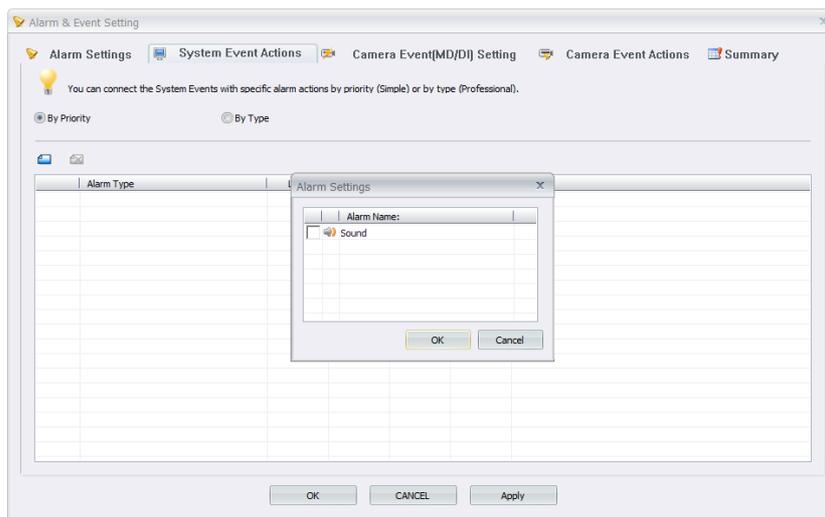
3.1.5 Select alarm name to carry out notification, then press \<OK\>.
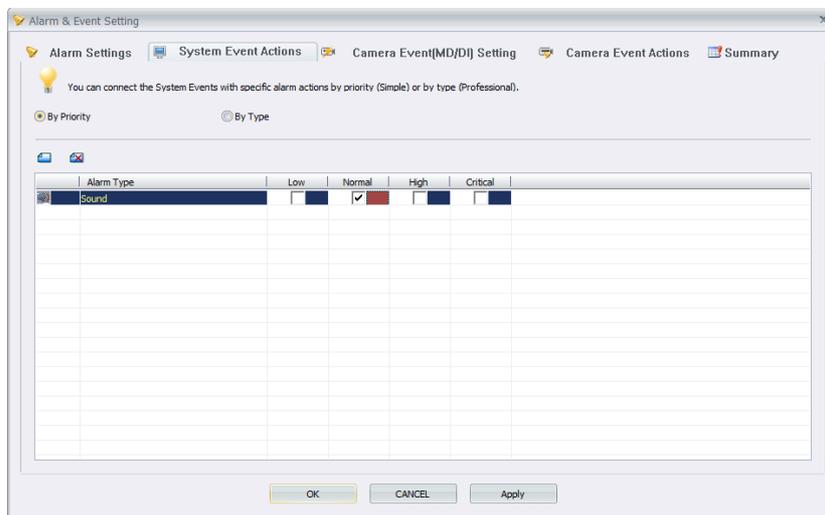
3.1.6 According to different system events, set up default priority to alarm types individually.

Please see below the chart for default priority rank for event type:

Login/Logout:	**Low**
Startup:	**Low**
Shutdown:	**Low**
Setup Change:	**Normal**
Disk Space Exhausted:	**Normal**
Network Loss:	**High**
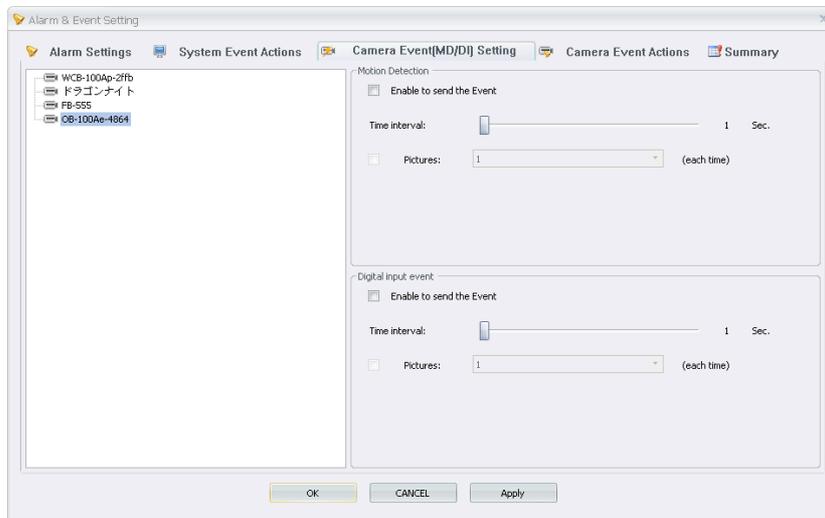
4.1 Camera Event[MD/DI] Setting.
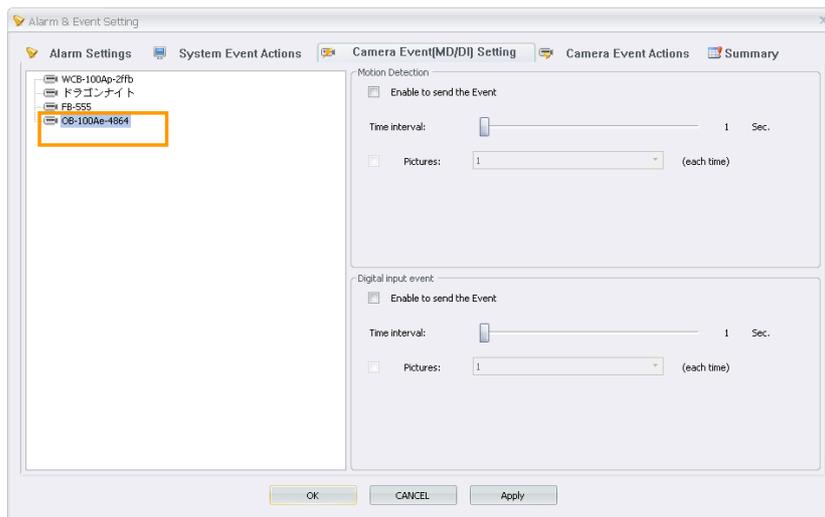
4.2 Please select a camera to start individual alarm event report.

4.2.1 Please select event types to trigger alarm notification service including motion detection and digital input event. Furthermore, it is accessible to advanced setting including modifying the time interval to report MD/DI event and selecting

the snapshot frequency per notification.

4.2.1.1 Users can modify Digital Input Event service and Camera status by hot-key such as F5，F6，F7，F8，Ctrl+F5，Ctrl+F6，Ctrl+F7，and Ctrl+F8. Alarm for Digital Input Event Service will trigger if the status between external device attached to the camera and that of the camera is the same. The following steps are how to get the digital input status of camera.

Hotkey	Description
F2	Enable all Record
F3	Enable all MD Record
F4	Disable all Record
F5	Set selected camera DI Status to Low
F6	Set selected camera DI Status to High
F7	Set all cameras DI Status to Low
F8	Set all cameras DI Status to High
Ctrl+F5	Set selected camera DI detection disable
Ctrl+F6	Set selected camera DI detection enable
Ctrl+F7	Set all cameras DI detection disable
Ctrl+F8	Set all cameras DI detection enable
F9	Show DI Status in Video Frame(10 Sec)

4.2.1.2 Click the **<Live View>** button to connect the setting dialog page for camera via the path "**Setting→Settings→Cameras.**"

65
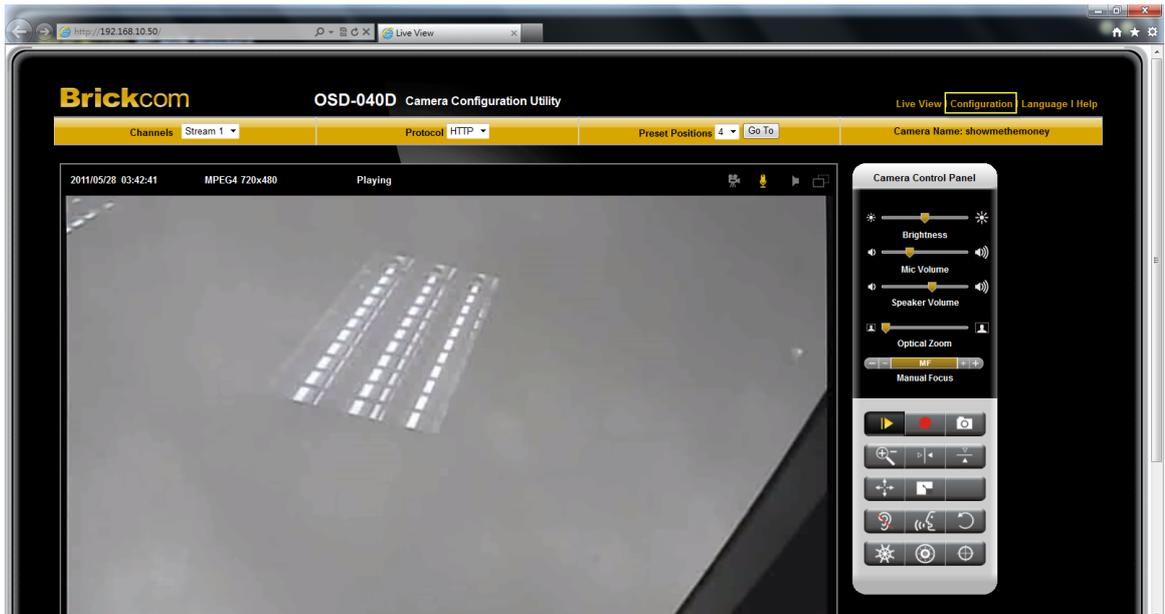
4.2.1.3 Please select **<Configuration>**.
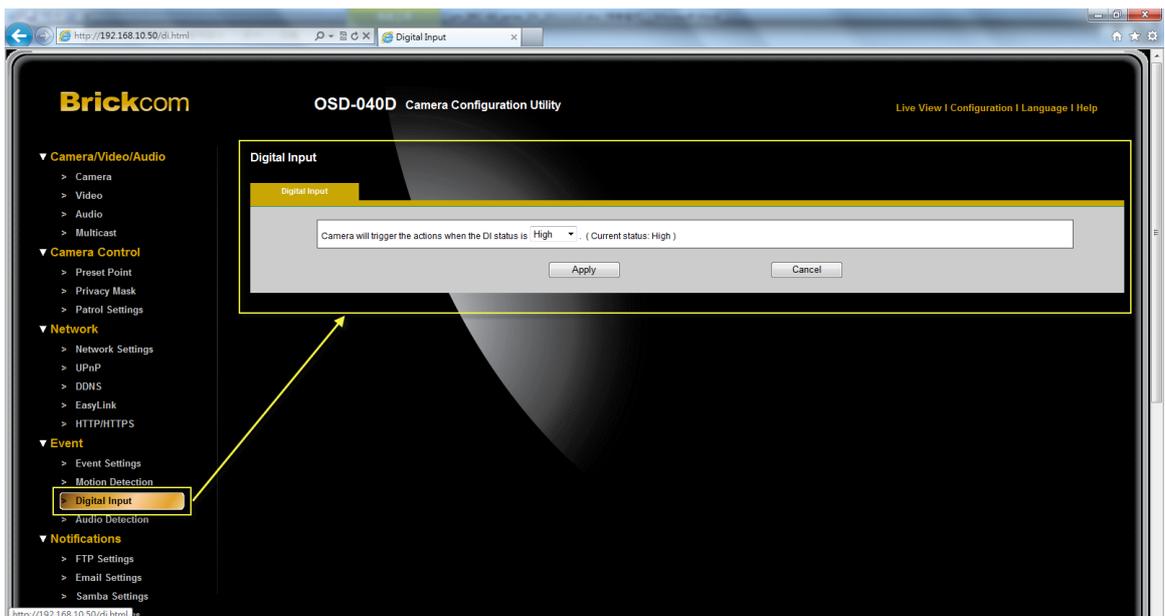
4.3 Please check the "**Current status**" for external device attached to the camera via the path "**Event→Digital Input→DI/DO**".
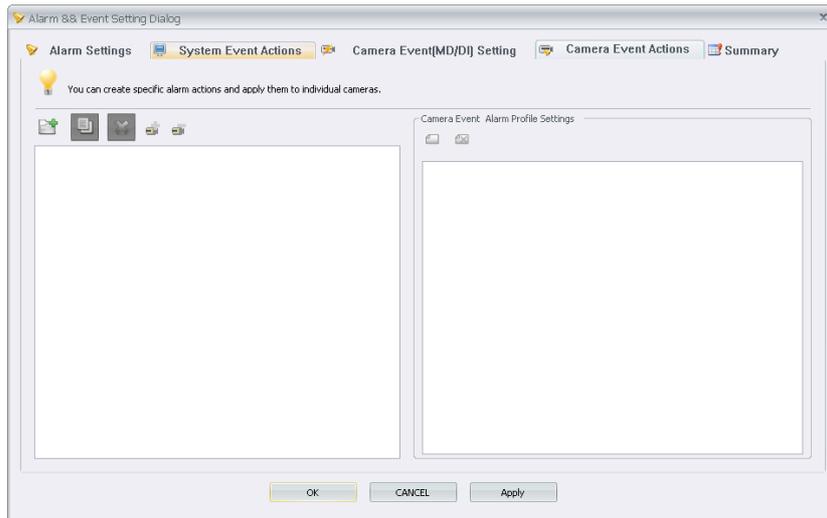
5.1 Please trigger alarm notifications in **Camera Event Actions**.
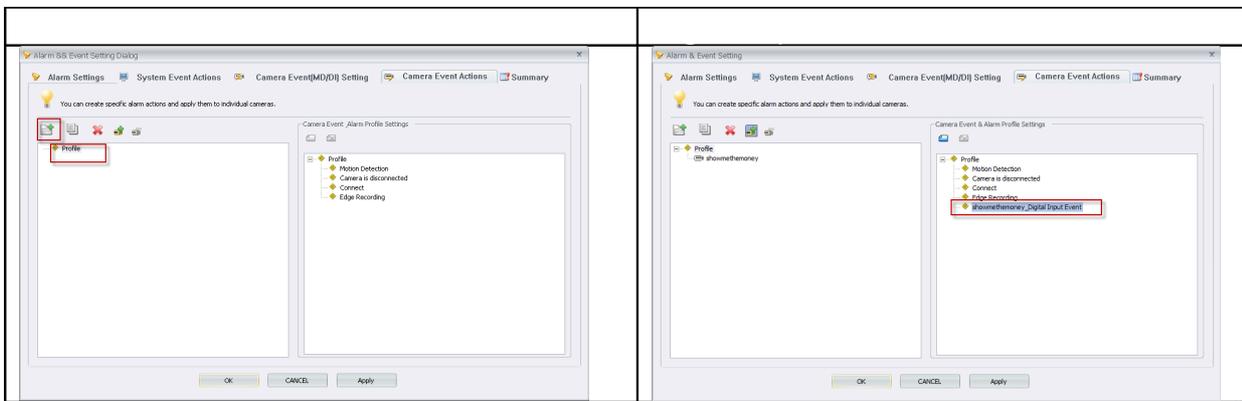
5.2 Please create new profile by pressing <New> button. If you have already triggered Digital Input Event service for some cameras in **Camera Event[MD/DI] Setting**(4.1), the Digital Input Event will appear in **Camera Event & Alarm Profile Settings** for advanced configuration named as "CameraName_Digital Input Event".
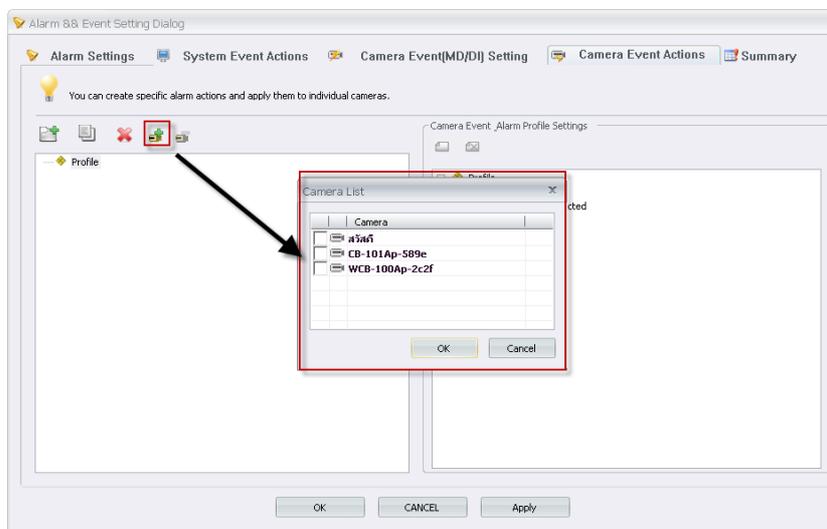
5.3 Please add camera by pressing <Add> button.
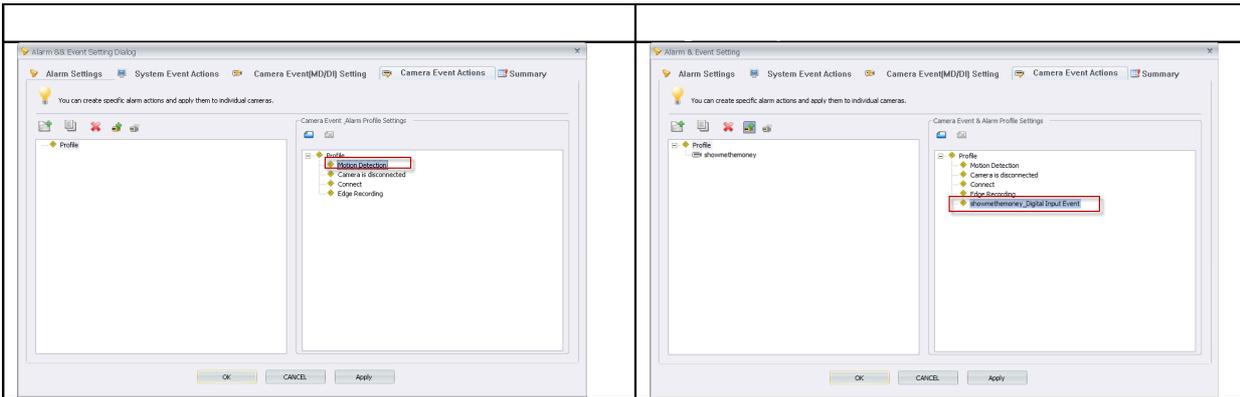
5.4 Select profile's system event in **Camera Event Alarm Profile Settings**. Digital Input Event for individual camera is available in **Camera Event & Alarm Profile Settings** named as 'CameraName_Digital Input Event'.
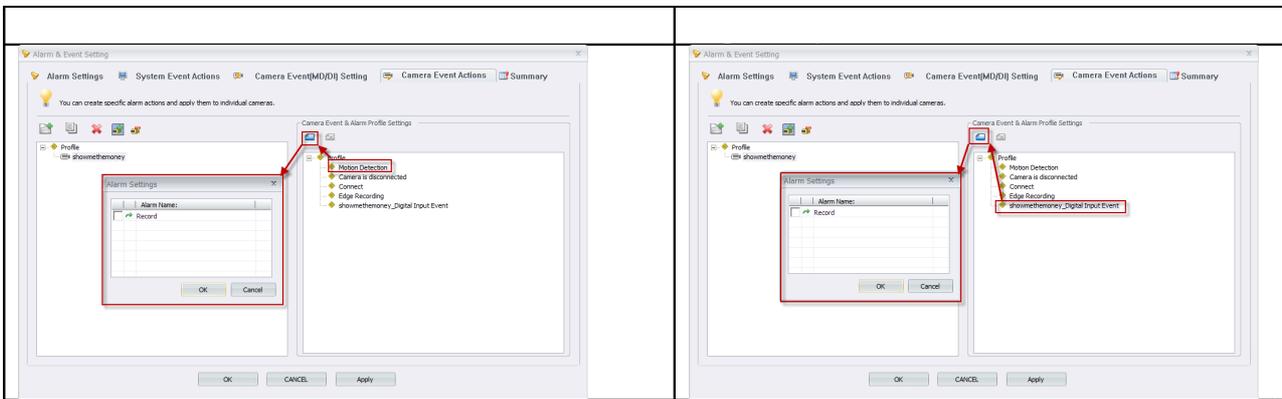
5.5 Assign actions to alarm notification by pressing <Add> button. Please press Apply & OK to finish alarm notification settings. Prior setting will carry out immediately if related detections start the service.

Summary

Detailed event information to BRC64.

System Information

1.1 CPU & Memory usage

[Event Setting] : There are 2 system event trigger sources which are CPU event and memory event respectively.

[Set action triggered by event] :
[Alarm&Event   Setting]→[System   Event
Actions]，select system action and click   ，it will
popup alarm settings dialog.

1.2 Disk Usage

[Set action triggered by event] :
[Alarm&Event   Setting]→[System   Event
Actions]，select system action and click   ，it will
popup alarm settings dialog.

1.3 Network Usage

[upload Event] &
[download Event]

[Set action triggered by event] :
[Alarm&Event   Setting]→[System   Event
Actions]，select system action and click [icon]，it will
popup alarm settings dialog.
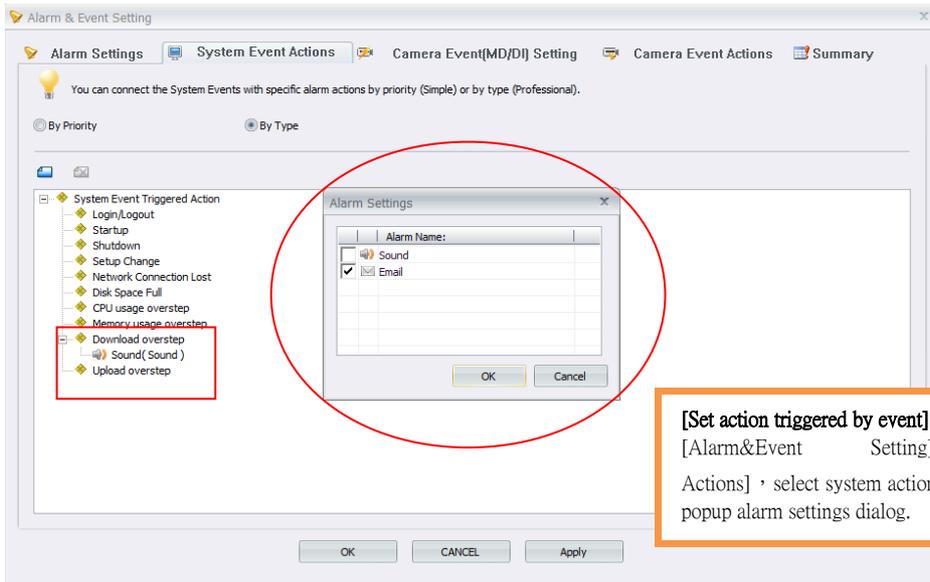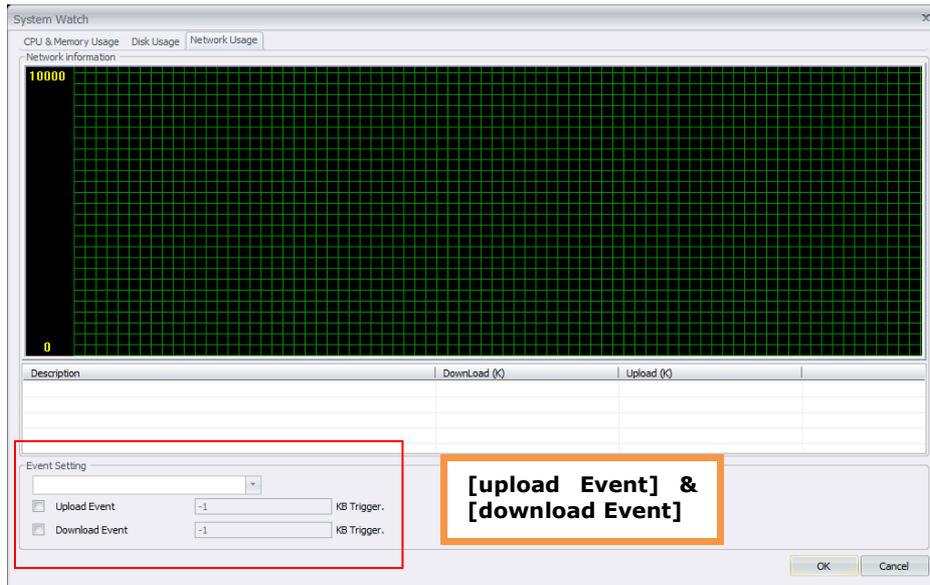
Schedule Record

Click on the [icon] **<Schedule record>** icon and the figure below will be displayed.

The user can schedule specific times for the camera to record videos.
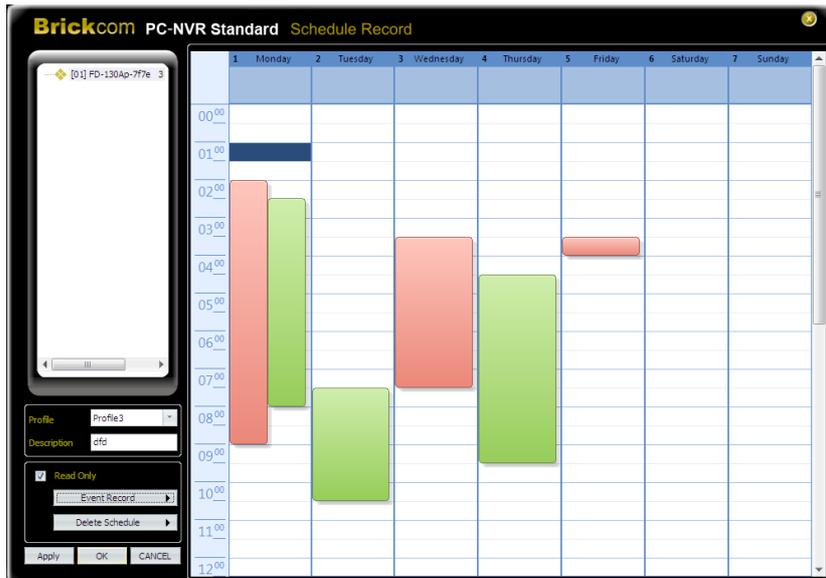
Create a recording schedule for a camera:
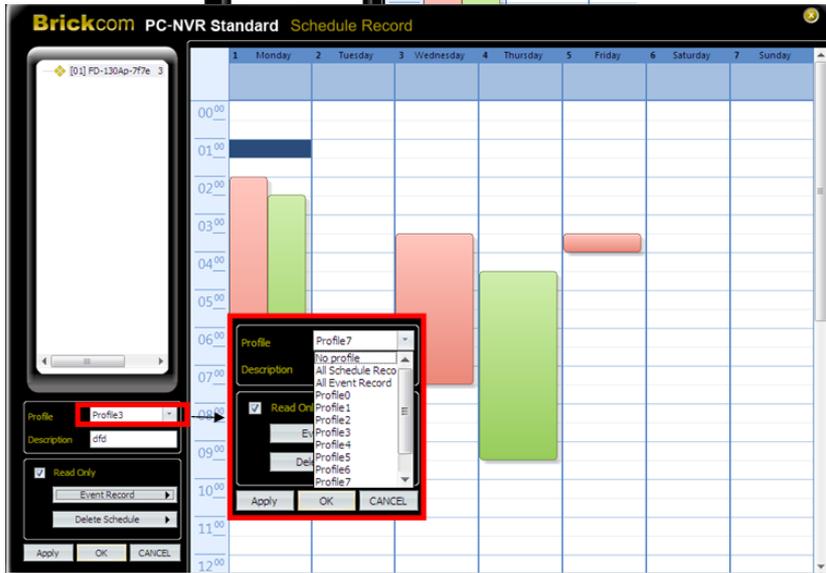
1. Select the desired camera.

2. Select a profile from the 'Profile' drop-down menu. Enter a description for the profile.

3. Click and drag the mouse on the time frame table to schedule specific times for the camera to record video.

4. After finishing creating a recording schedule for the desired camera, click **<Apply>** to save and keep editing the schedule record setting for other cameras or click **<OK>** to save and exit the Schedule Record.

5. Recorded files will be saved to the default folder '**\BRC64\Record**'.

⚠️**NOTE1**

When a profile is created, it can be used by other cameras by repeating step one and choosing the desired profile.

⚠️**NOTE2**

When the sites are being recorded, a 🔴 will be displayed on the live view main window of the site.

Read Only	Allows the user to read the schedule only.
Select All Period	Schedule will be set to record normal and event videos at all times.
Schedule Record	Schedule to record only the normal videos within the selected time frame.
All Event Record	Schedule to record only the event videos all the times.
Event Record	Schedule to record only the event videos within the selected time frame.
Delete One	Select to manually clear the schedule setting.

Period	
Delete All Period	Select to clear all the schedule settings.

Instant Record

While the videos are scheduled to record, the user can choose to instantly record live video clips. Right click on a desired grid and select **<Start Recording>** to start recording and **<Stop Recording>** to stop recording.
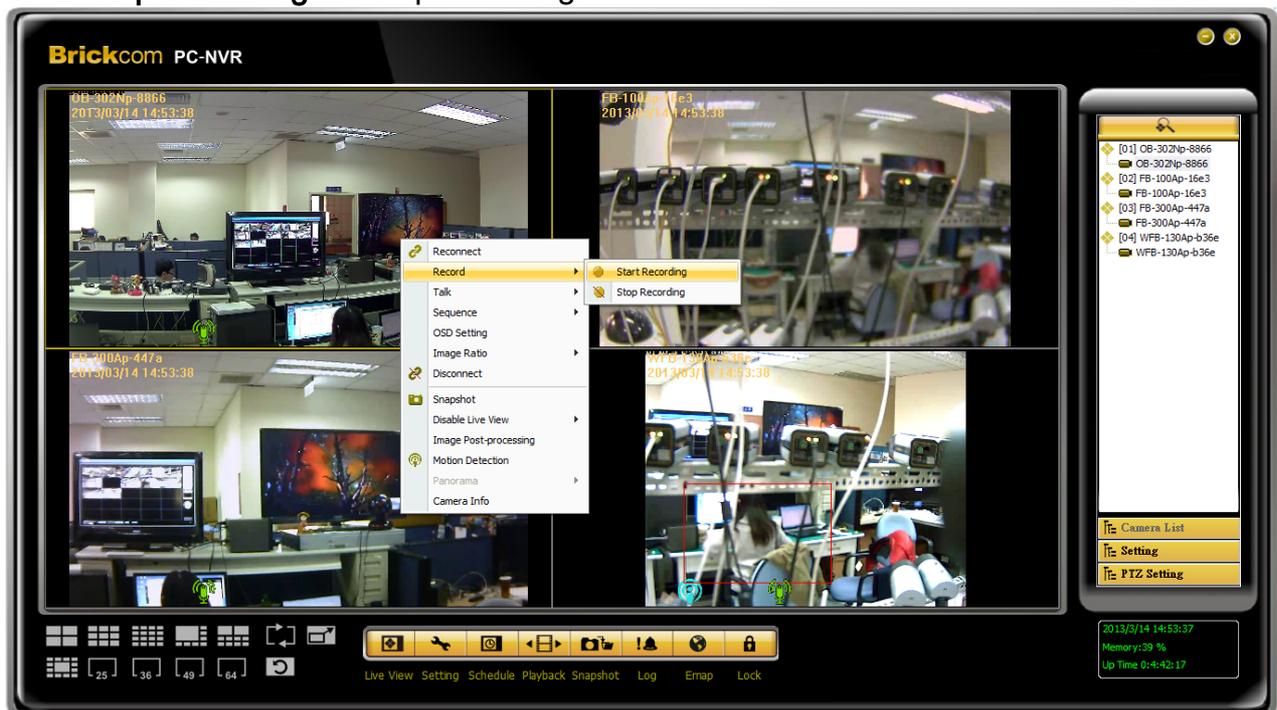
Adjust the display size

The user can adjust the display size of the Live View window by right pressing on the window to display the camera control menu. Select **<Image Ratio>** to adjust the size. The image ratio includes: Original, Fit, Original all, and Fit all.
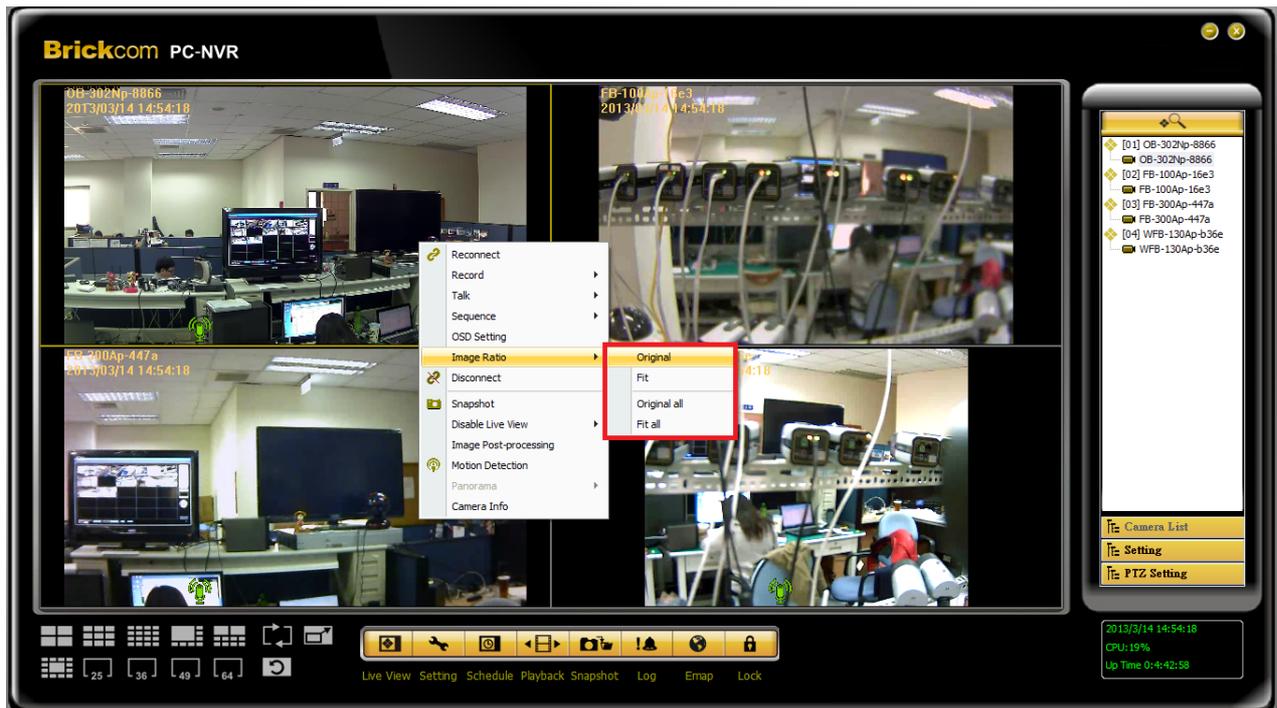
Motion Detection

Users can setup a camera to record motion detection at any site. Right click on a desired grid and select <Motion Detection> from the pull down menu.

Please see below pictures for the motion detection settings window. Under 'Detection Region', users can click <ALL> to monitor the entire screen or click <Regional> to monitor up to eight individual regions. A blue grid will appear on the screen and the user

can adjust the size.　To delete, select desired grids and click on the **<Clear>** button to delete all selected areas. Alternatively, right click on any selected area to delete it individually.
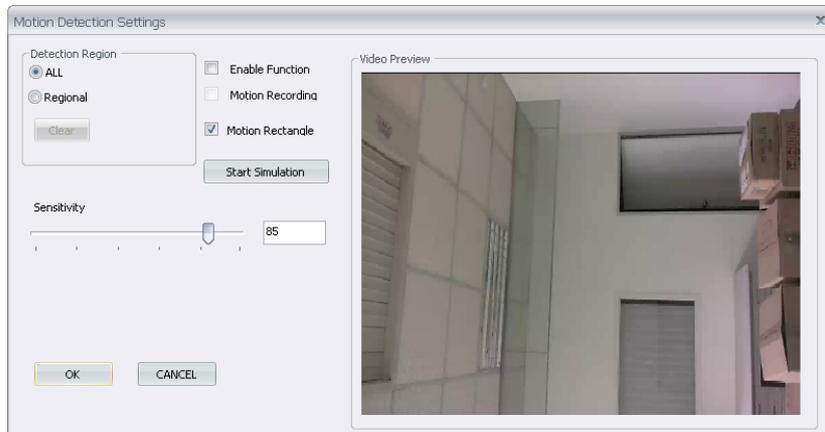
Enable Function	Check to begin monitoring motion detection.
Motion Recording	Check to record an event video when motion is detected. The length of event video can be set by going to <Event Recording Duration> which is under System Setting
Motion Rectangle	Show the detection area while event is happening.
Start Simulation	Click to simulate motion detection. As shown above, red boxes will mark when motion is detected in an area.
Stop Simulation	Click to stop the simulation.
Sensitivity	Setup a desired sensitivity level from 0 to 100.

Click on **<OK>** to apply the settings, or click on **<Cancel>** to disregard and return to Live mode. The live monitoring screen will not show the colored motion detection boxes.

Camera Info

The Camera Info can be viewed in BRC64. Right click on any desired grid and select **<Camera Info.>** from the pull down menu to view the information. Refer to the following for example:

Camera Info.
Site Name: FB-100Ap-Poca
Camera Name: FB-100Ap-Poca
IP :   10.5.42.48

Video Size :   1280 x 800
Format :   H264
Device :   IP Camera
Model :   BRICKCOM IP Camera
Stream Type :   Stream1

Close

Playback

Click on the **<Playback>** icon, the figure below will be displayed.
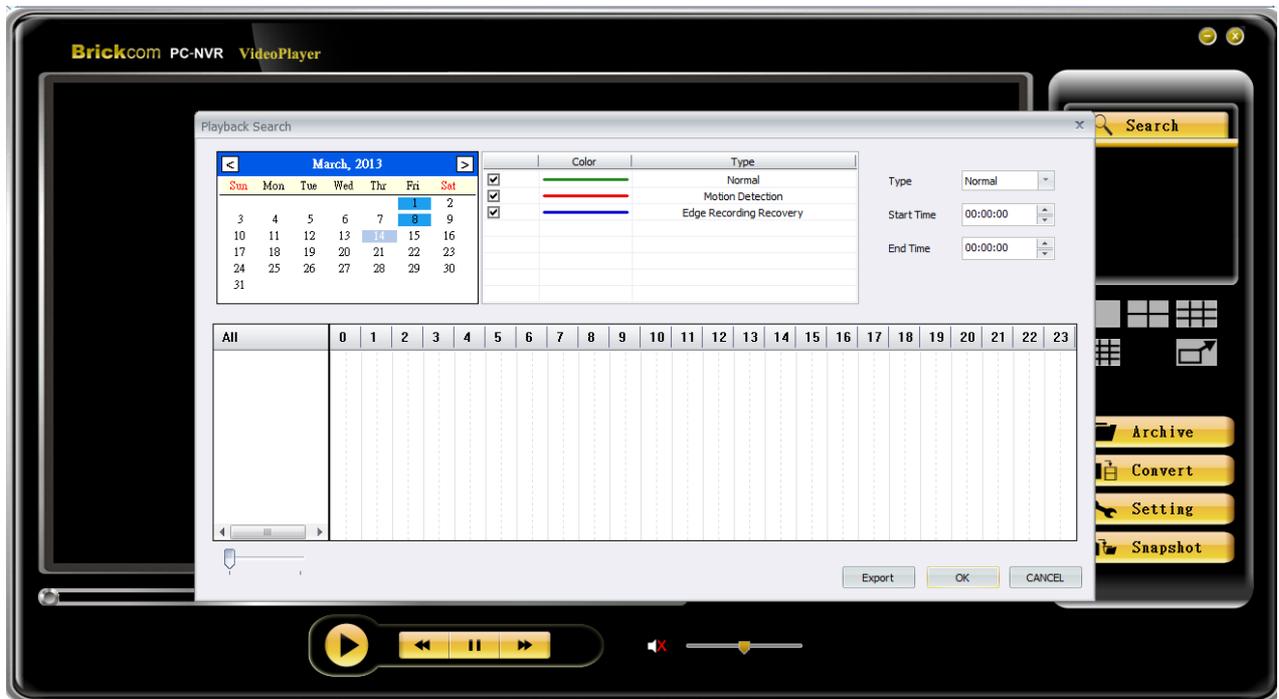
This function allows the user to retrieve and play multi-channel videos stored on the HDD.

	Click **<Rewind>** to play backward. In pause mode, time point returns to 1 second ago per click.
	Pause.
	Click **<Fast Forward>** to change playback speed. In pause mode, time point returns to 1 fps ago per click.

		Play.
		Turn On / Off the audio output.
		Click **<Search Image Files>** button to search video clips by event types or date-time.
		Drag-and-drop the tool bar to adjust audio volume.
		Drag-and-drop the tool bar to change the start time.

● **Search Image Files**

Click **<Search Image Files>** button to search video clip by event types or date-time.

Please refer to the below steps:

1. Please select the record type to playback. Event types consist of normal records, Motion detection, and offline records.
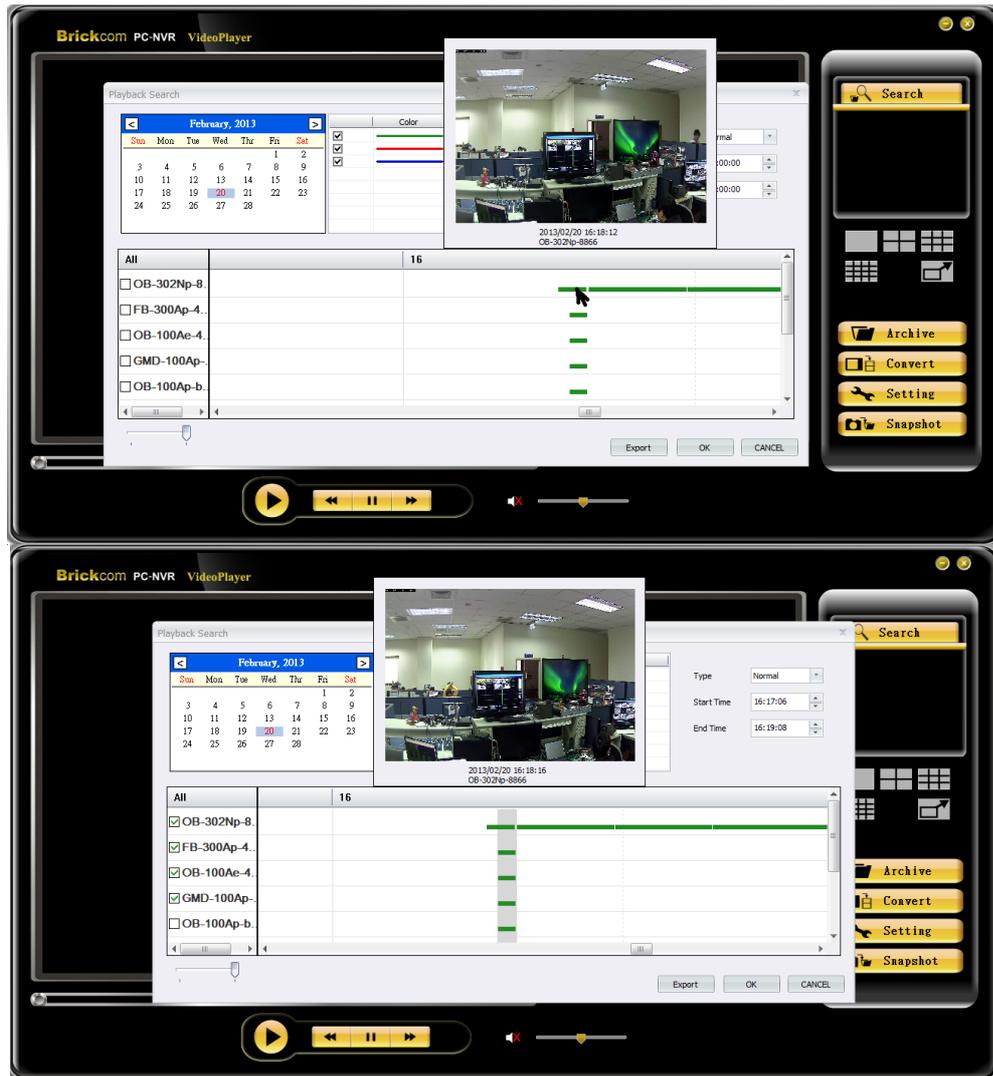
2. Please set time period to playback by circling horizontal bar or inputting time period manually in the top right of the window. If necessary, modify the range of timeline on the bottom left of the window.

3. Tick off the cameras in left side window. Click 'OK' to start playback service.

⚠️**NOTE 1**

Please make sure to select the record types before starting playback service. The offline record & motion record will not play if selecting record type to be normal.

⚠️**NOTE 2**

In order to decrease system loading, it is recommended to configure BRC64 with record only mode while operating 16 channel playback simultaneously.

⚠️**NOTE 3**

The preview snapshot will pop-up if the mouse gets close to timeline with available video clips.
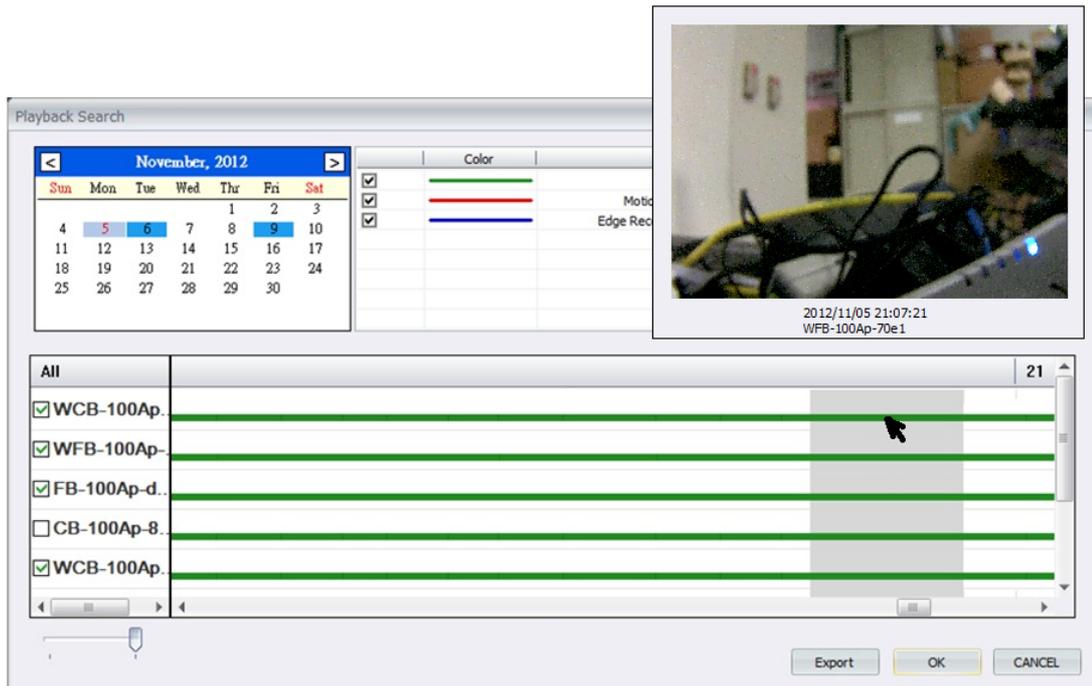
The user can also change the color of each category.
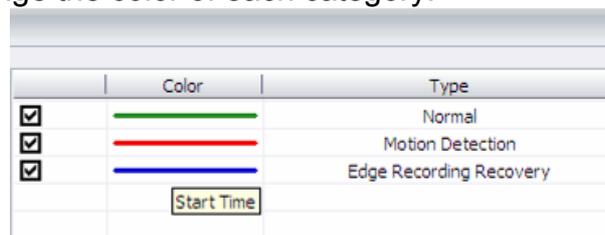
1. Move the mouse to **<Color>** bar on right below side of the window.
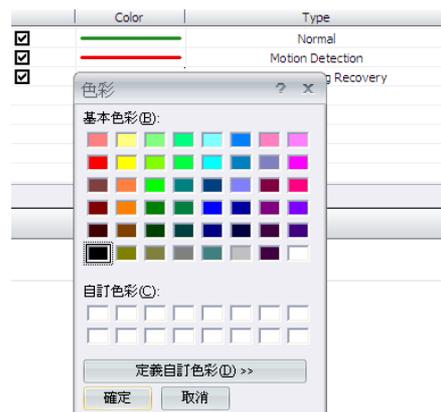
2. Double click to adjust the color setting.

Archive UI is available when selecting <Archive> button. The preview snapshot pops up after choosing the recorded video. Double click the left mouse button to start playback.
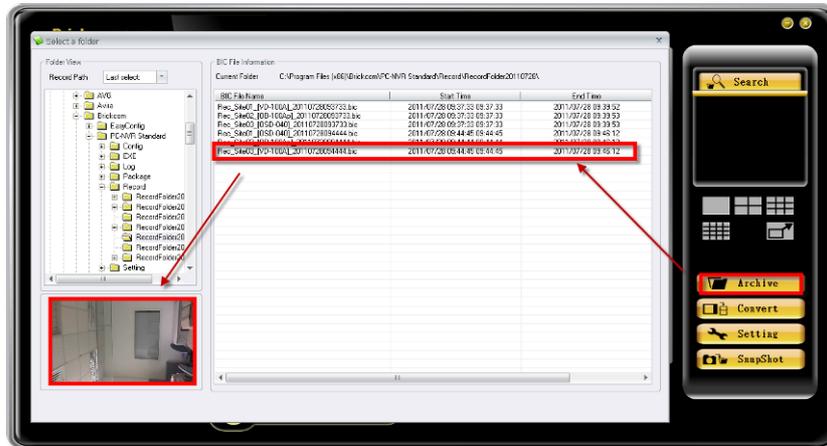
Click the right mouse button in the playback window to modify the following functions:

- Full/Normal Screen.
- Image Post-processing.
- Image Ratio.
- Camera Info.
- Convert.
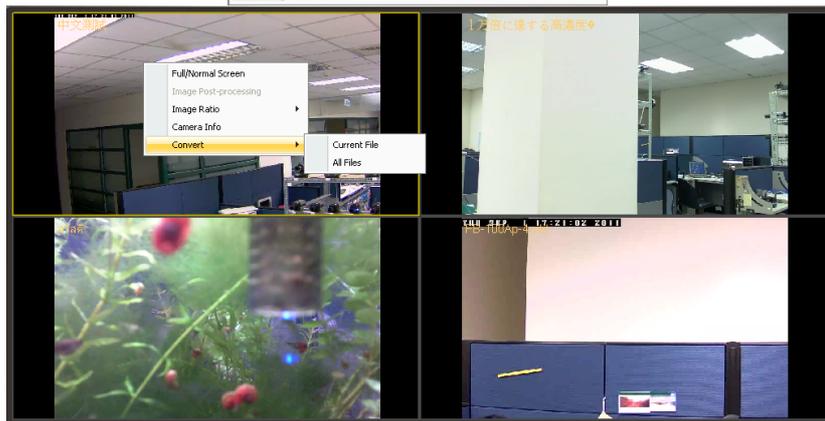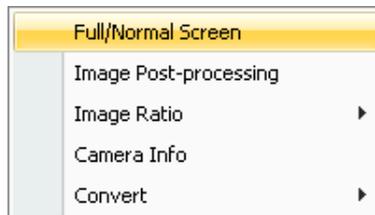
- **Full/Normal Screen**

Full screen is shown below:

● Image Post-processing

Click Image **Post-processing** to modify the image setting.
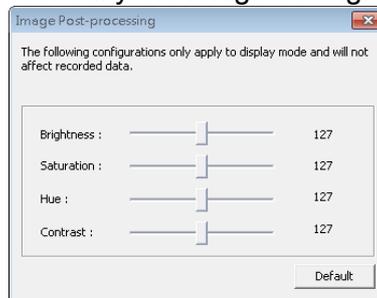
● Image Ratio

Click **Image Ratio** to change the width-and-length ratio. There are two displays to select.
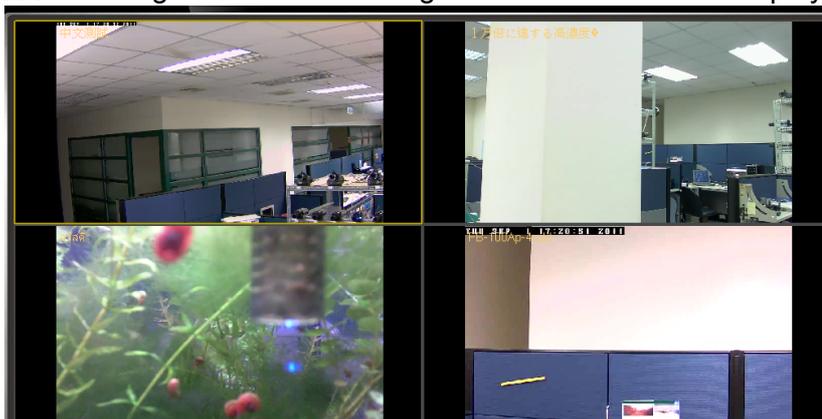
- **Camera Info**

Check the information of the camera.

- **Convert**

Convert the present / all video clips to be AVI format.
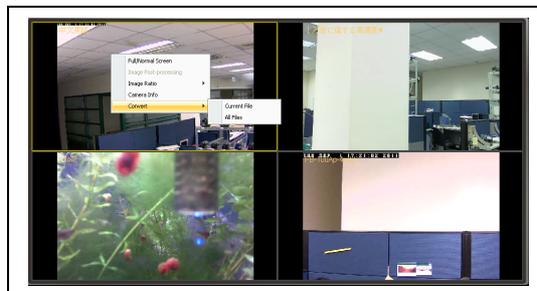
- **Modify Window Grid**

The types of window grid are 1x1, 2x2, 3x3, 4x4, and full screen.

Convert Image File

The **<Convert Image File>** icon is used to convert recorded video files to WMV

video format. Click the icon to open the video files and select the files to be converted. Click **<Convert>** to start conversion of selected files.
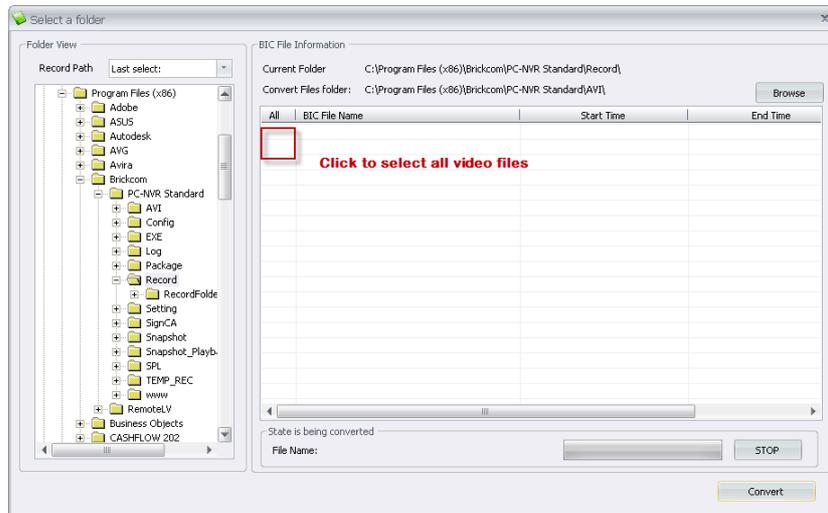
There is a service to select all video clips by pressing '**All**'. If the user wishes to stop the conversion, click **<STOP>** to abort. The converted files will be stored under folder '**C:\Program Files\Brickcom\BRC64\AVI**'. To choose an alternate destination folder, click **<Browse>** and chose a desired folder.
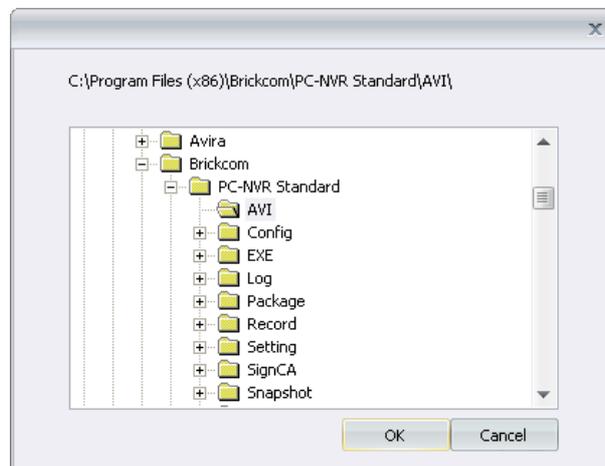
View Setting

Click on the **<View Setting>** to choose to show or hide the time on the playback video. Check **<Show Time>**, and the time will be shown on the screen. Uncheck to hide the information.

File Path determines where AVI conversion and snapshot files are saved on the computer HDD. Click on **<Browse>** to select desired folders. In addition, snapshot pictures can be saved using Bmp and/or Jpg formats. After the settings are selected,

click **<OK>** to save.
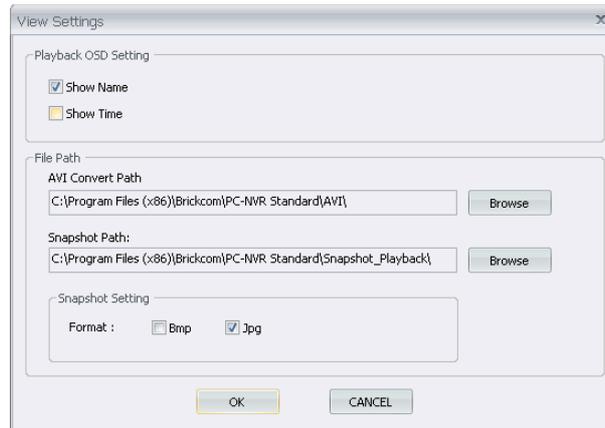
Snapshot

Click <Snapshot> button to select. The files will be stored under folder
'**C:\Program Files\Brickcom\BRC64\Snapshot_Playback**'.
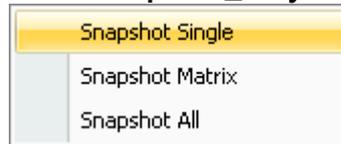
- **Snapshot Single -** Snapshot single image.

- **Snapshot Matrix** - Snapshot all window grids image.

- **Snapshot All -** Snapshot all video images individually.

Event

Click on the **<Event>** icon to list all log and event activities of the camera.

Camera Event

Click **<Refresh>** to refresh the list of events. The user can filter events two ways. The first is to use the three settings: priority, state, and type. The second is to filter using the 'Advanced' settings. Click **<Advanced>** and the following menu will appear. The user can then select the filters for viewing the event list and click **<OK>** when done.
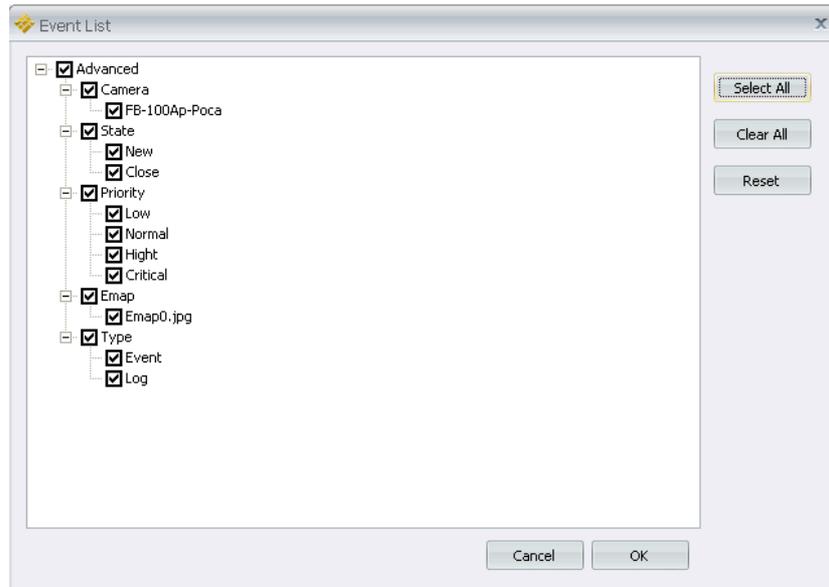
Under 'Time Period,' users can choose to view events from the most recently recorded or a specific time period. The user can change the status of an event log by moving the mouse pointer over the <State> column. When 🖑 appears, click to change the status of the log.

Snapshot

The Snapshot function is a simple screen capture tool. The screenshots are saved to the default path 'C:\Program Files\Brickcom\BRC64\Snapshot' or an alternative file path chosen by the user.

There are two ways to take a snapshot. The first is to click on the <Snapshot> icon. Click <OK> to save the file. The second way is to right click on the window, and select <Snapshot> to snapshot single. The file will be saved without displaying the image.

Click <Snapshot> button to select.
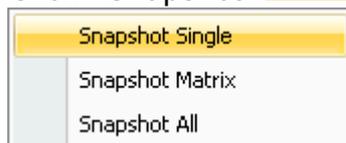
● **Snapshot Single -** Snapshot single image

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- **Snapshot Matrix** - Snapshot all window grids image.

- **Snapshot All -** Snapshot all video images individually.

E-Map

Click on the **<E-map>** icon to open the E-Map program. The E-Map is a program that allows the user to illustrate the positions of the cameras on a self selected image. If the BRC64 is being used to monitor multiple locations, the user can have multiple images to display the location of the cameras.

Add an image to the E-Map by selecting the <Load Image> button. The figure below is the Load Image window to add or delete images. Click on <Add> to add an image.
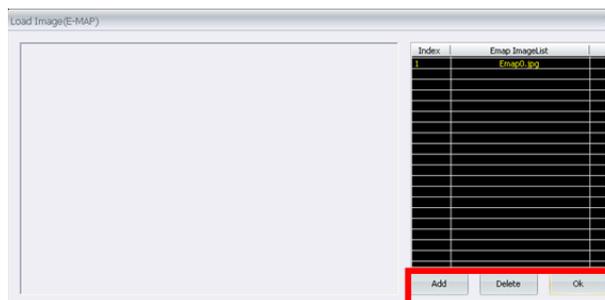
After the image is loaded, the filename of the image will be displayed on the list. 'Index' indicates the order (starting from '1') of the files. Click <OK> to save the settings.
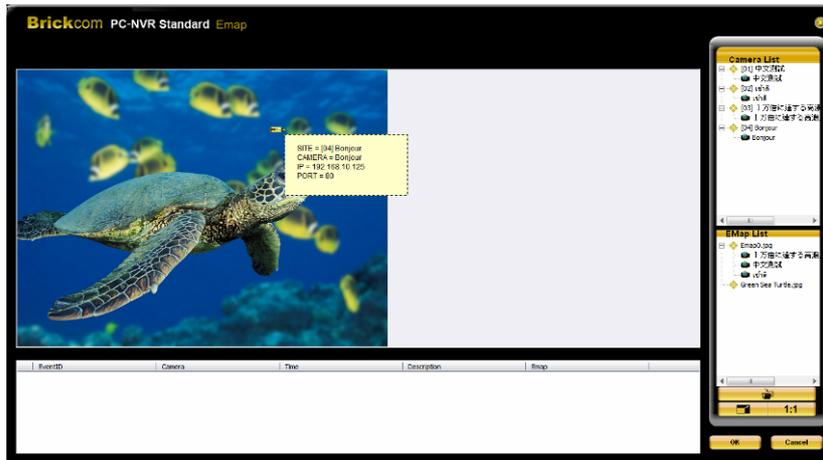
Add cameras to the E-Map by selecting **<E-Map List>** menu to list the map images. The user can select an image and it will be displayed in the E-Map main window. Click **<Camera>** on the control panel to list the site tree. Drag and drop a camera from the site tree to any desired position on the main image. If camera is implementing motion detection, the camera's icon will be , please refer to the below photo

The users can drag-and-drop cameras to access Live View, to remove the camera, or to rotate its recording direction. The rotating directions include: Top, Top-Right, Right, Bottom-Right, Bottom, Top-Left, Left, and Bottom-Left.
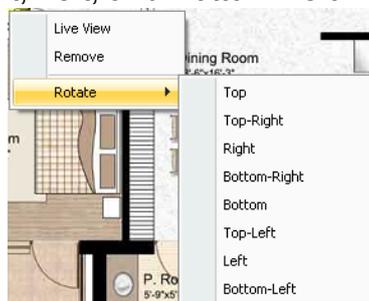
When the mouse pointer scrolls over a camera icon in the image, an information dialog box will be displayed as below.
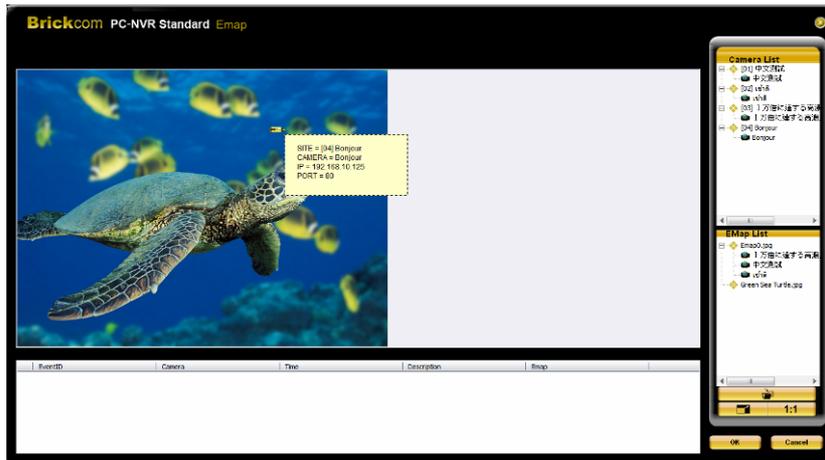
Double click on any camera icon in the image to display the live preview image of the camera. Right click on the camera preview window to display the camera control menu. The menu items includes: Snapshot, and Camera Info.
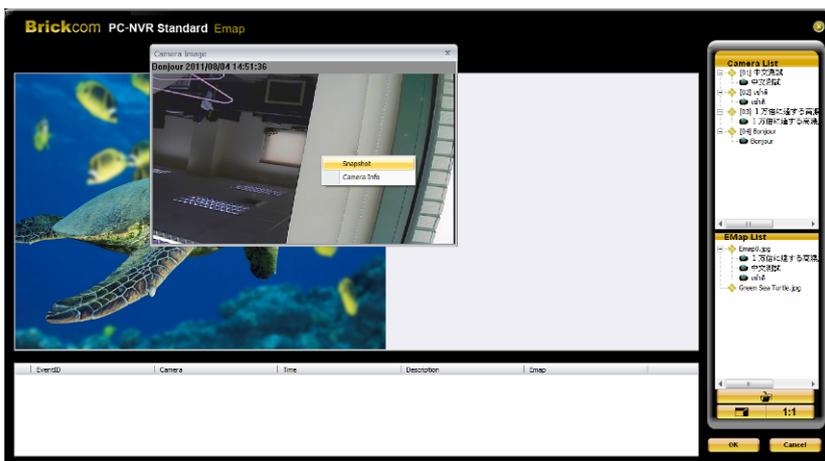
If the camera is implementing motion detection, the camera's icon will be . Please refer to the below photo.
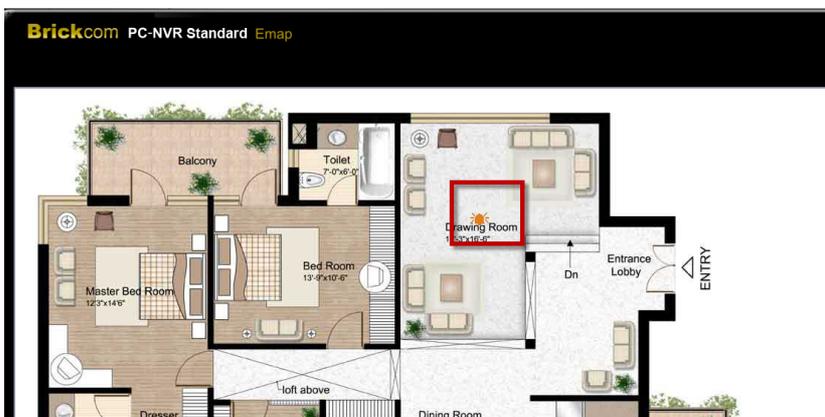
ACCOUNT MANAGE

This function is able to manage user's authority, including lower levels status and individual account. Only administrators have the right to modify all accounts. There are five levels of status in default setting: Administrator, Power User, User, Operator, and Guest.
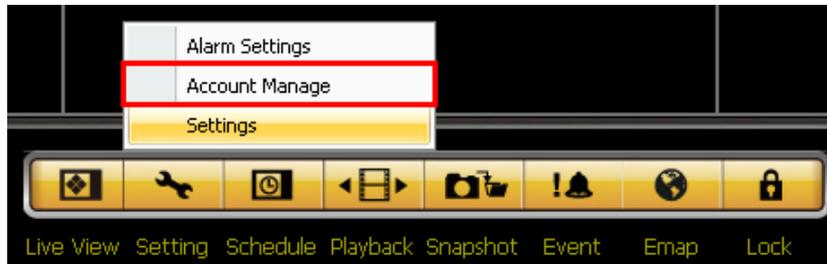
1. Click <Setting> Button and select <Account Manage>.
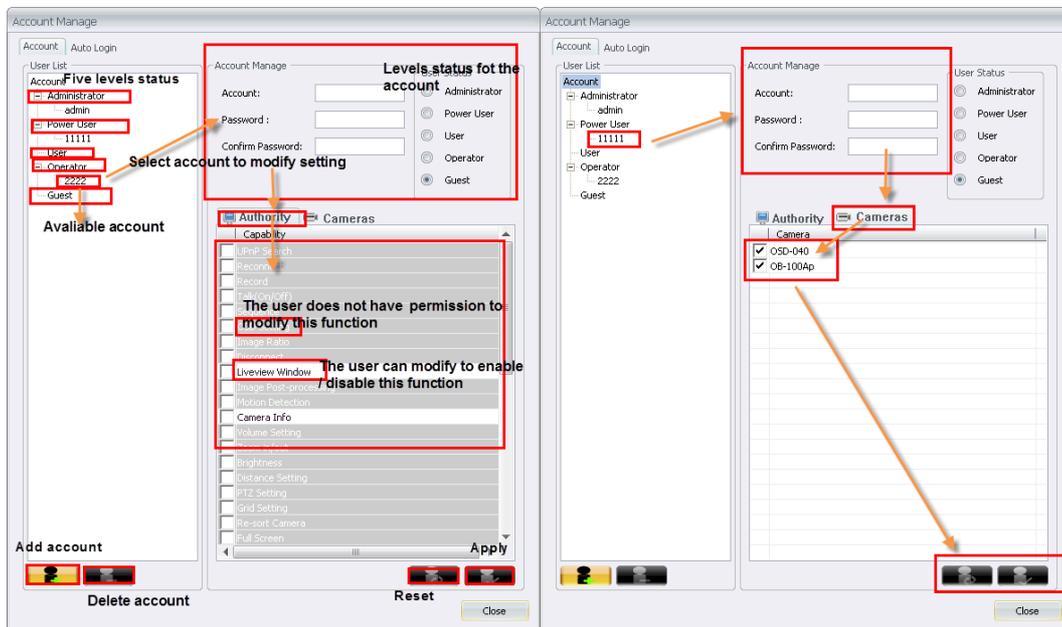
2. The following photo is the UI for account management. Each levels status consist of different accounts. Users are able to add account /delete account /manage lower levels status accounts. User can modify username & password in <Account manage>. <User Status> shows the levels status of the account. Each function is able to open/close by ticking off the mouse. Functions with gray are to indicate unable-to-modify. Select <Cameras> to decide if the camera is able to be operated or not.

3. There are two ways to add accounts:

3.1 Select user status of new account, then set up username & password. Finally modify permission for each function. Click button to finish the setting.

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3.2 Select the **<User List>** to decide the level status of new account. Then set up username & password. Finally modify permission for each function. Click ![button] button to finish the setting.

4. Click ![button] button to apply the setting or return to default setting by selecting ![button] button.

> ⚠️ **NOTE**
>
> If the user is unable to use NVS service, please contact higher levels status account to enable this function.

Auto Login

For the easy-to-use, BRC64 supports the following functions:

- Start BRC64 automatically when Windows begins.
- Start live-view when BRC64 opens.
- Auto Login.
- Set the Auto Reboot into Schedule.
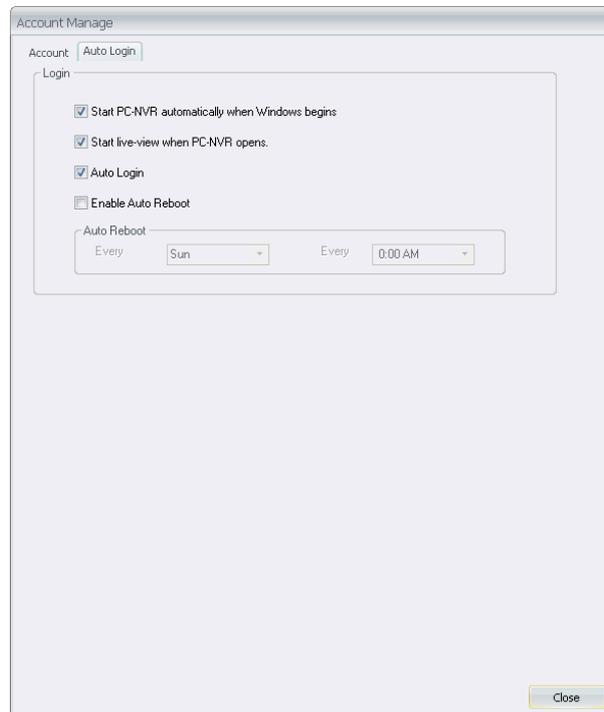
> ³⁵₁₇ **Note**
>
> If your system device is Windows Vista or Windows 7, please close the UAC function to avoid unnecessary errors. Please refer to the below steps:

Vista

1. Please refer to the path as **Start->Control Panel**.

2. Please select **User Accounts and Family Safety.**

3. Please select **User Account.**

4. Please select **Turn User Account Control in or off.**

5. Please cancel **Use User Account Control (UAC) to help protect your computer.**
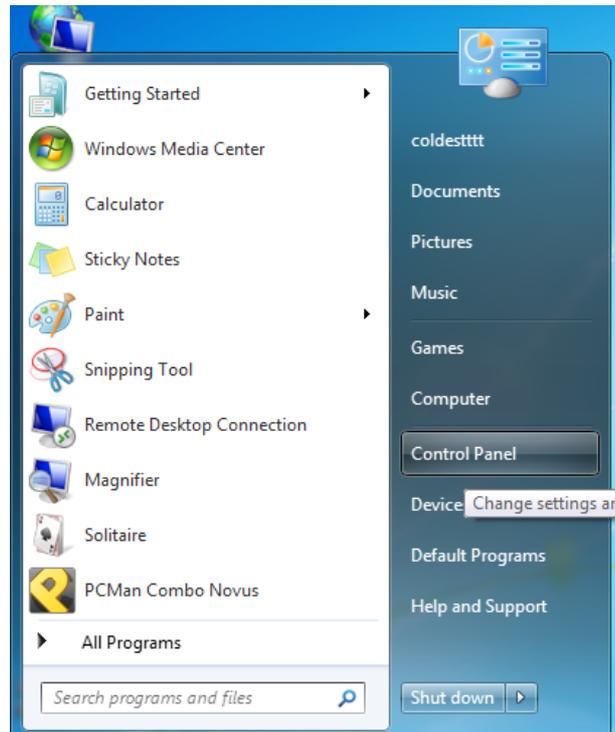
1. Please refer to the path as **Start->Control Panel.**

2. Please select **User Accounts and Family Safety.**

3. Please select **User Account.**

4. Please select **Change User Account Control settings.**
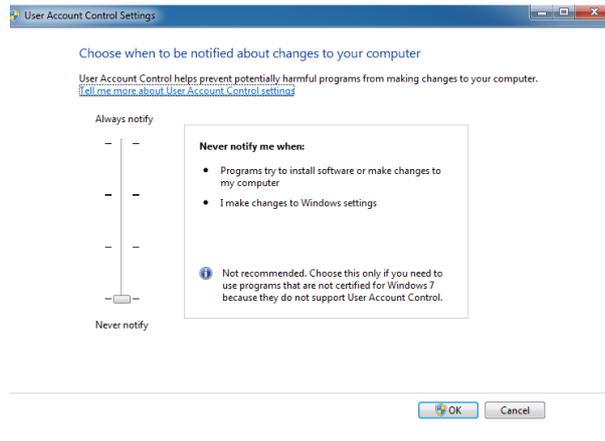
5. Select **Never notify** to finish the setting.

Lock

The Lock function can be used to lock the BRC64 and prevent unauthorized access when the user needs to be away from the computer for any length of time.

Click on the ⬜🔒⬜ **<Lock>** icon and a confirmation message will be displayed as below. Click 'Yes' to confirm.
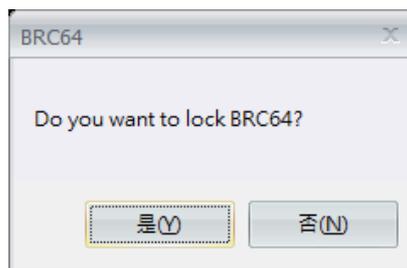
To unlock, click on the ⬜🔒⬜ icon again. The user will need to enter the password to unlock the BRC64 by the following window.

Hot-Key

In order to give more support and service for customers, BRC64 provides hot-keys to start function immediately. Here is the list for hot-keys:

Hotkey	Description
F2	Enable all Record
F3	Enable all MD Record
F4	Disable all Record
F5	Set selected camera DI Status to Low
F6	Set selected camera DI Status to High
F7	Set all cameras DI Status to Low
F8	Set all cameras DI Status to High
Ctrl+F5	Set selected camera DI detection disable
Ctrl+F6	Set selected camera DI detection enable
Ctrl+F7	Set all cameras DI detection disable
Ctrl+F8	Set all cameras DI detection enable
F9	Show DI Status in Video Frame(10 Sec)

How to start DI service:

1. Start search->'regedit'.
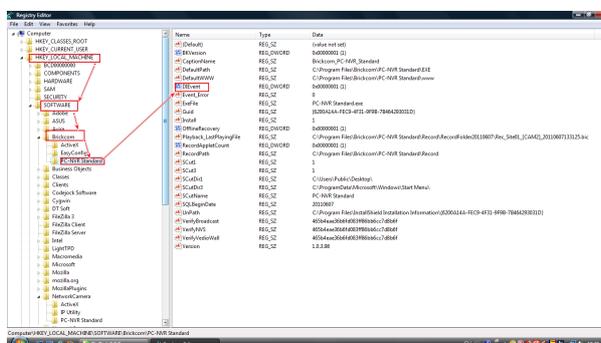
2. Please enter to configure DI service via

HKEY_LOCAL_MACHINE\SOFTWARE\BRICKCOM\BRC64.
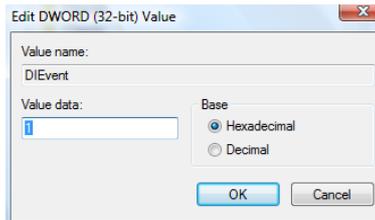
3. Please select **DIEvent** to change **Value data** from 0 to **1.**

Watch dog

The icon of watch dog always appears in right below side of screen for the sake of monitoring the BRC64's. Users are able to stop the monitor by selecting **<Exit>** or get the information by **<About>**. Please see the below photo.