



CMS & 96CH NVR

User Manual

Release: v0.1b.JN10

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Overview

Welcome to HYDRA

HYDRA, THE Hybrid-Devices Rs Application for AVTECH NVR SYSTEM, is an IP-based Surveillance System, providing users with a broad selection of integrations. **Rs** represents all functions of **HYDRA – Real-time, Record, Remote, Replay, and Reliability**. Flexible and stackable architecture design is expected to support and meet customer needs, to quickly enter IP Surveillance field. In **HYDRA** contains 3 main controls -- **NVR management application** for Live monitoring, Event monitoring, Recorder, **CMS Wizard**, and **CMS Web-service**. Through our highly-intuitive GUI, it is quick and easy to access local monitor, remote control, and central management. Management for powerful search, prompt alarm notification, remote monitoring, and E-map control, is available to operate through multi-platform – web browser, console, and mobile devices.

Features and Capabilities

The following list is a short overview of some of the features and capabilities which ANS offers you:

- ✓ Intuitive Web-based Interface
- ✓ Stackable video matrices can support up to 96CH Live View/NVR per server/console
- ✓ Manage up to 96 Network Cameras per server/console
- ✓ Event Driven Monitoring and Management, with instant alarm notification to mobile devices.
- ✓ Advanced E-Map Monitoring
- ✓ User friendly Configuration Wizard , easily and efficiently.
- ✓ Powerful Search and Control Management
- ✓ Support MegaPixel Resolution
- ✓ Support H.264
- ✓ Remote Client Backup and Playback
- ✓ Support up to 4 Monitors per server/console
- ✓ Compatible with AVTECH DVR NVR Solutions

Minimum System Requirements

Hardware Requirement

CPU	Intel Core i7 920 or above
RAM	Minimum 6 GB or above is recommended
Network	Ethernet 1 Gigabit recommended.
Graphics Card	Independent graphic card with DirectX9.0c or higher AGP or PCI-Express, minimum 1024×768, 16 bit colors
Hard Disk Type	E-IDE, PATA, SATA, SCSI, SAS (7200 RPM or faster)
Hard Disk	1.5 TB or above *2 disk free space is recommended -- 1 for System running, and 1 for video storage. (the actual disk space needed depends on different scenarios, excluding space needed for database, system configuration, logging data, and video storage.)

Software Requirement

Operating System (OS)	Microsoft Windows 7 Pro 32-bits
Web Service	Microsoft Internet Information Services (IIS) IIS is an administrative feature of Windows program but not installed by default with Windows 7. IIS will be added automatically when you install the applied software of AVTECH NVR System.
Software Framework	Microsoft .NET 3.5 Framework SP1 or above. Generally Microsoft .NET Framework is installed in Windows 7 Professional. Or Microsoft .NET 3.5 Framework SP1 and above will be added automatically when you run either <u>Windows Update</u> or the installation of <u>AVTECH NVR System software</u>.

Management Server Installation

Use the applied software to install NVR system on your computer as the Management Server. Please follow the instructions of Setup Wizard to complete the installation.

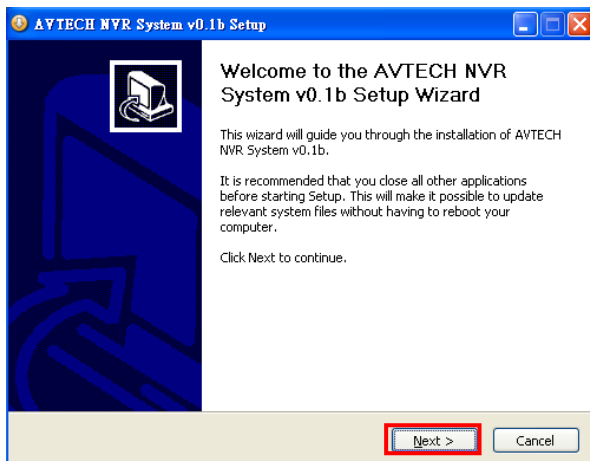
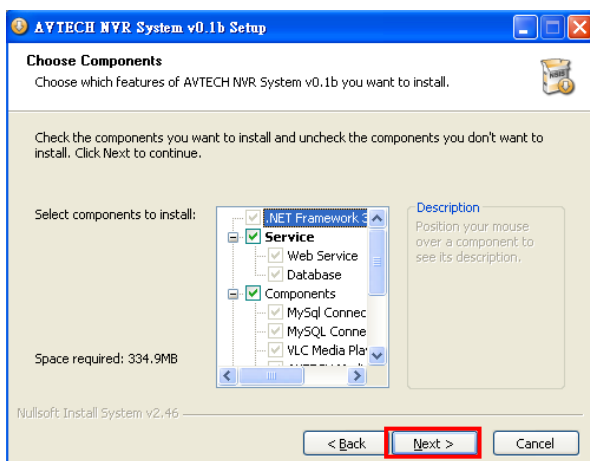
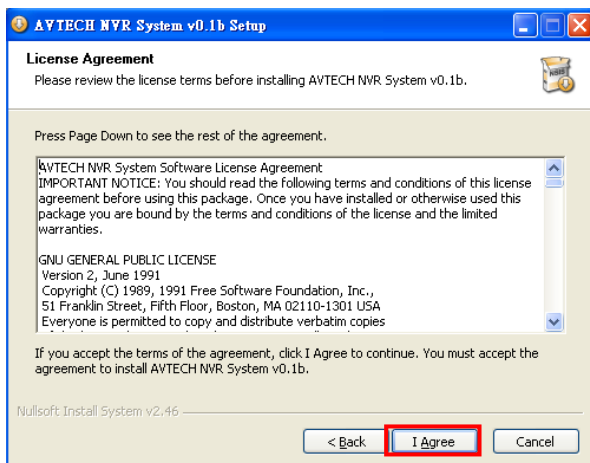


Figure 1 : AVTECH NVR System Setup Wizard



Step 1:

Place the applied Installation CD-Rom and start the Setup Wizard.

The Setup Wizard opens and will guide you through the process of installing AVTECH NVR System Management Server.

Click “Next>” button.

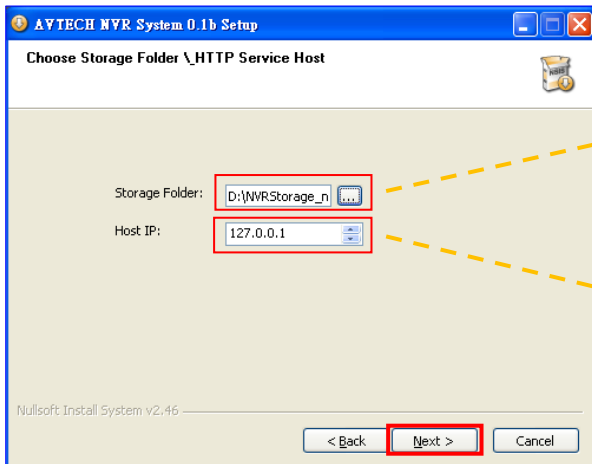
Step 2:

Scroll to read all the License terms. Then Click “I Agree” button.

Please be aware that you must accept the License terms to use AVTECH NVR system,.

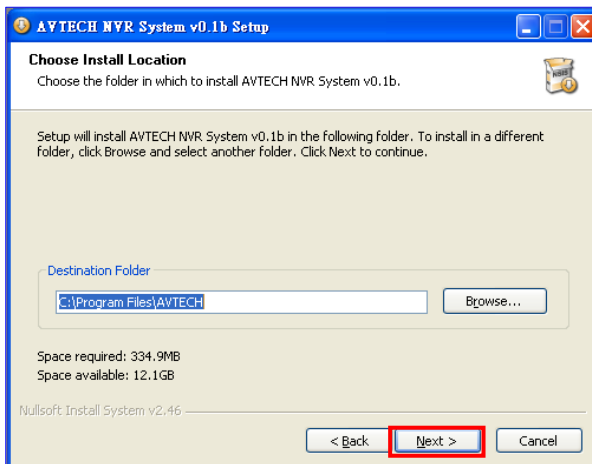
Step 3:

Click “Next>” button.



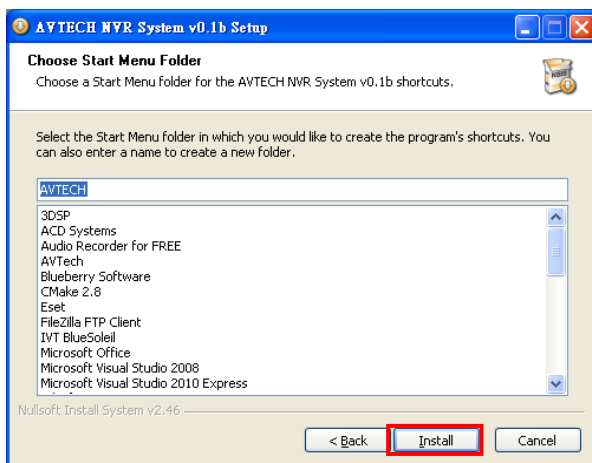
Step 4:

1. Please create a folder or specify a Disk for record files storage at this step. It is required to be setup as a physical path for video data storage of **“Storage Folder”**
2. Please select a Host IP from the combo list. **“127.0.0.1”** is recommended for single console.
3. Click **“Next>”** button.



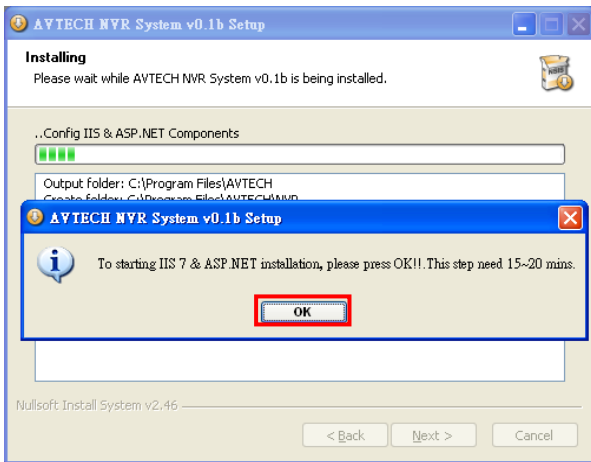
Step 5:

Click **“Next>”** button.



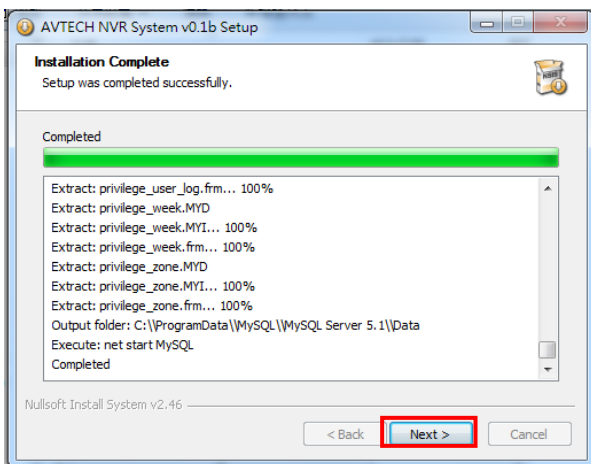
Step 6:

Click **“Install”** button.

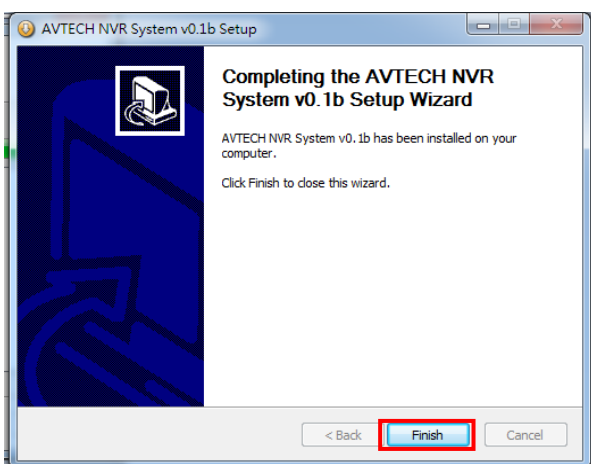
**Step 7:**

It may take 15~20 minutes for installation and configuration depends on system of your computer.

Click “**OK**” button at the Setup message.

**Step 8:**

Click “**Next>**” button.

**Step 9:**

Click “**Finish**” button.

Installation now is completed.

A shortcut of NVR management application will be created at your Desktop now.

Getting Started

Management User Interface

In NVR Management Application, combines commands including Setup, Search and Play (the “CMS Wizard”), CMS (the “CMS Web Service”), and other operation for Live monitoring, Event monitoring, Recording and information. We will separate NVR Management Application into 3 subjects describing in the chapters:

- 1) [CMS Wizard](#) – The ONLY and most important user interface for configuration. It is the very first step of all to use the NVR management application.
- 2) [NVR Management Application](#) – The main control for whole central management system.
- 3) [CMS Web Service](#) – The GUI for E-map Monitoring and Event Monitoring, also support direct devices controls.

Menu Tree

NVR Management Application v0.3b				
Live Player	Play	Setting1 (96Channels)		
		Setting2 (96Channels)		
		Setting3 (96Channels)		
		Setting4 (96Channels)		
		All Channels		
	Stop			
	Close			
Event Player	Start Monitor	Select(Camera) / Enable (Motion ; Alarm) / Start in which Monitor / Cancel / Apply / Start Monitor		
	Stop Monitor			
Recorder	Timer Recorder	Start / Stop		
	Manual Recorder	Start / Stop		
	Event Recorder	Start / Stop		
Setup	IP Camera	Add Quantity / Device Name / Device Suffix Num / Start IP(Ex. 192.168.1.1) /Port/Add Device/Get Model/Save		
	Device Location Mapping	Building	Add / Delete	
		Floor	Add Floor / Delete Floor	
		Area	Add Area / Delete Area	
		Devices in Area		
		Save		
		Map Layout	Floor	UPLOAD MAP
	Layout		Area / Devices(On/Off)	
	NVR Setting	Schedule Template	Create New Schedule	
		Record Setting	On-Line Schedule/Record On/ Apply	
		Archive Setting		
		User Account	Create Account	Username/Password/Confirm Password/ User Level / ADD / RESET / Delete / Save
	Edit Level		Level Name/ Select / Delete/ Save	
	Live Monitor	Monitor Name / Channel Type		
		Edit Layout		

Menu Tree

NVR Management Application v0.3b		
Search and Play	Event Log Query	Status
		Event
	Search and Play	
CMS	E-map Monitor	Trigger List/Live Monitoring/Tracking
	Event Monitor	Live Monitor/Replay
Auto Scan	Configure	Server IP / MAC Address / NetMask / GateWay / DNS / Web Port / User Name / Password
	Upgrade	User Name / Password / Add / Remove / Start / Cancel
	Scan	
Close	(Close NVR management application menu and all running commands)	
About	(Display current version information of NVR management application.)	

Managing CMS Setup Wizard

CMS Wizard is for you to preset all elements for NVR management and CMS Web-service, including devices management, devices mapping, NVR scheduling, Log query, and Live view setup. We are going to describe how to operate CMS Wizard for each setting in this chapter. Please follow instructions below.

Overview

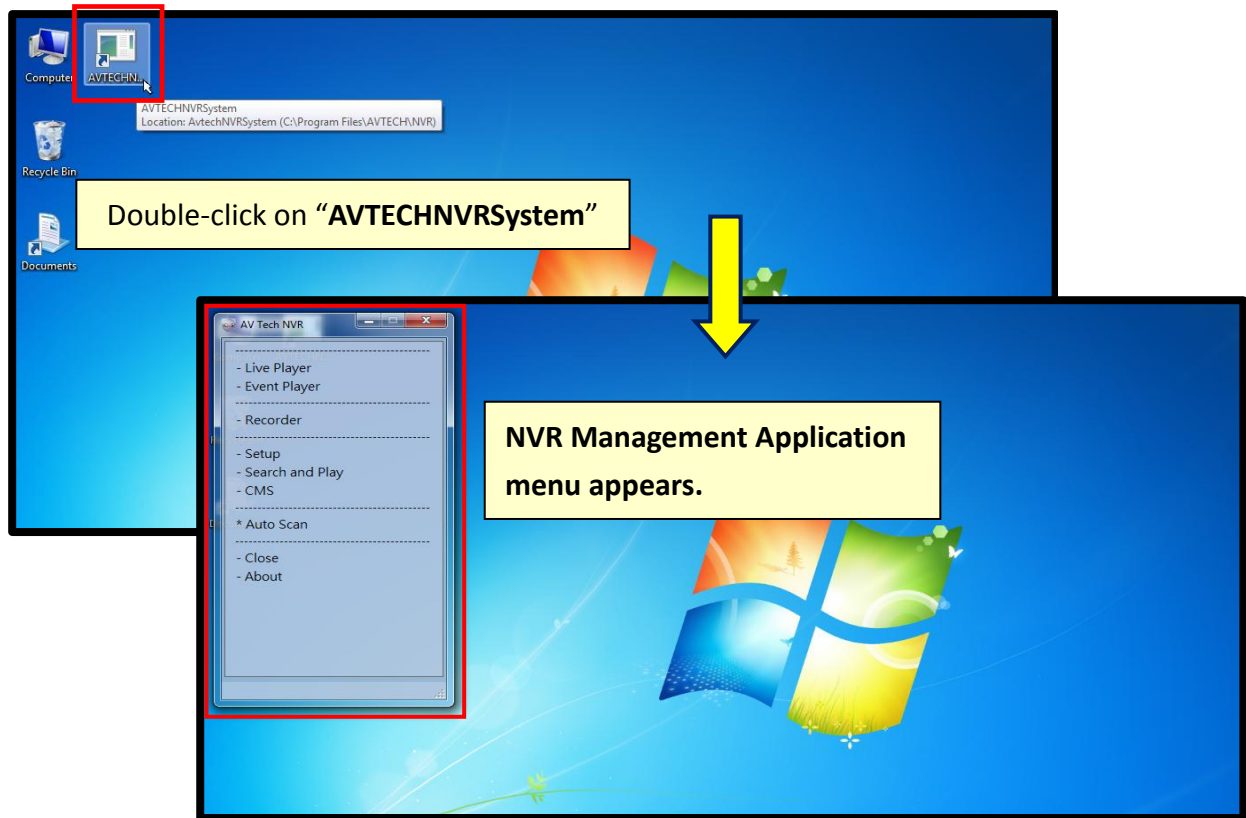
CMS Wizard contains control menu of the 8 pages, please see the table below:

Page	Intention
<u>IP Camera</u>	To create and manage devices which will be used for NVR management and CMS web-service control.
<u>Device Location Mapping</u>	To create areas (including Buildings, Floors, and Areas) and set devices into the areas.
<u>Map Layout</u>	To upload image files of map; draw polygons of area on maps; and allocate device indicators on maps.
<u>NVR Setting</u>	Schedule Template: To create and manage schedule template. Record Setting: To arrange schedule for devices.
<u>Event Log Query</u>	To query status (motion triggers) and events (alarm triggers) for online playback and download.
<u>Search and Play</u>	To search recording videos of devices for online playback and download.
<u>User Account</u>	To create new users or manage the permissions of options for NVR management, CMS Wizard, and CMS web-service.
<u>Live Monitor</u>	To choose display monitors layout and pre-arrange the device locations of each video window for NVR Live Viewer display.

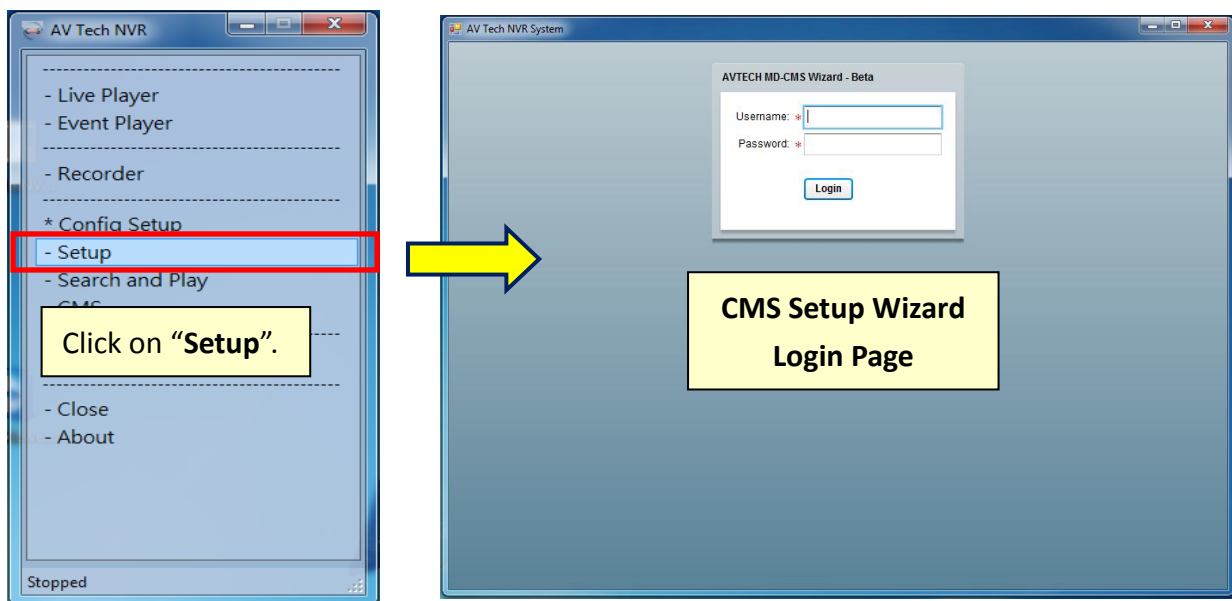
Figure 2 :CMS Wizard – IP Camera Features Overview

Launch CMS Setup Wizard

1. Double-click the shortcut icon **NVR management application** on your Desktop. The NVR management application menu appears.

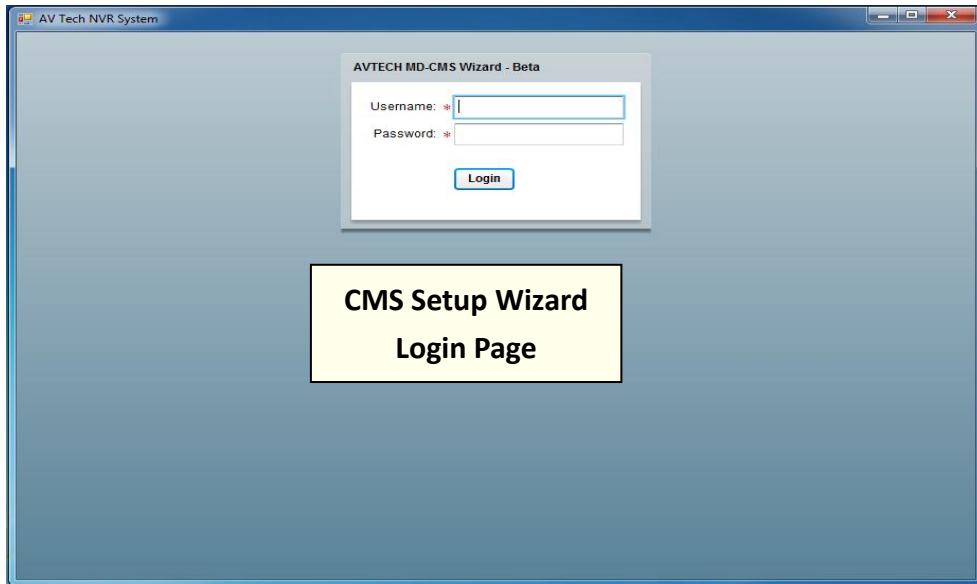


2. Click on "**Setup**" from the menu and the **CMS Setup Wizard** will be launched.



Log in CMS Setup Wizard

1. CMS Setup Wizard webpage is launched to open.



2. Type Username and Password.
3. Click "**Login**" button to log in.

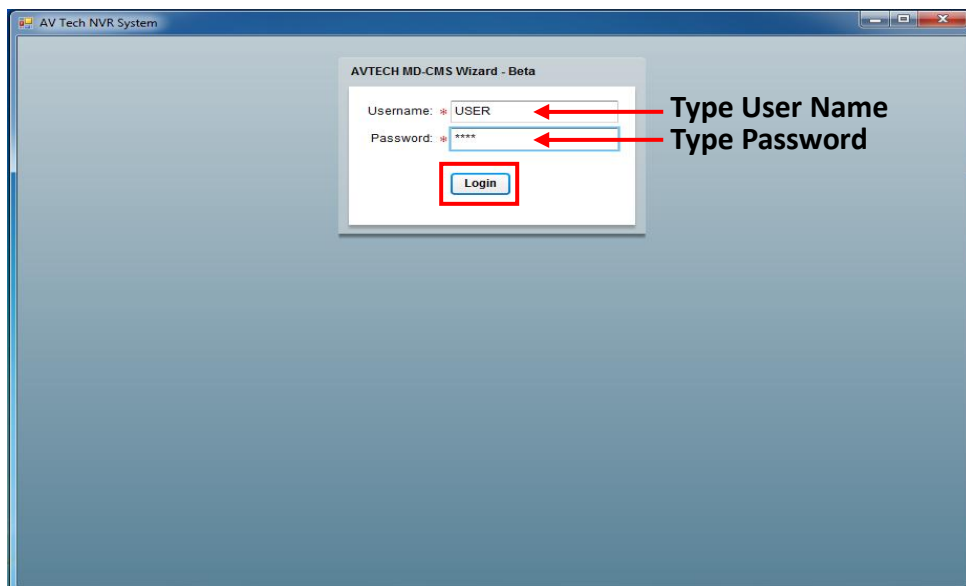


Figure 3: CMS Setup Wizard Login Webpage

Managing IP Cameras

management.

- “IP Camera”.**

The IP Camera page consists 2 parts:

- (1) **Template** pane is for you to add new IP cameras into system.
- (2) **Devices table** lists all IP cameras command of CMS and NVR.

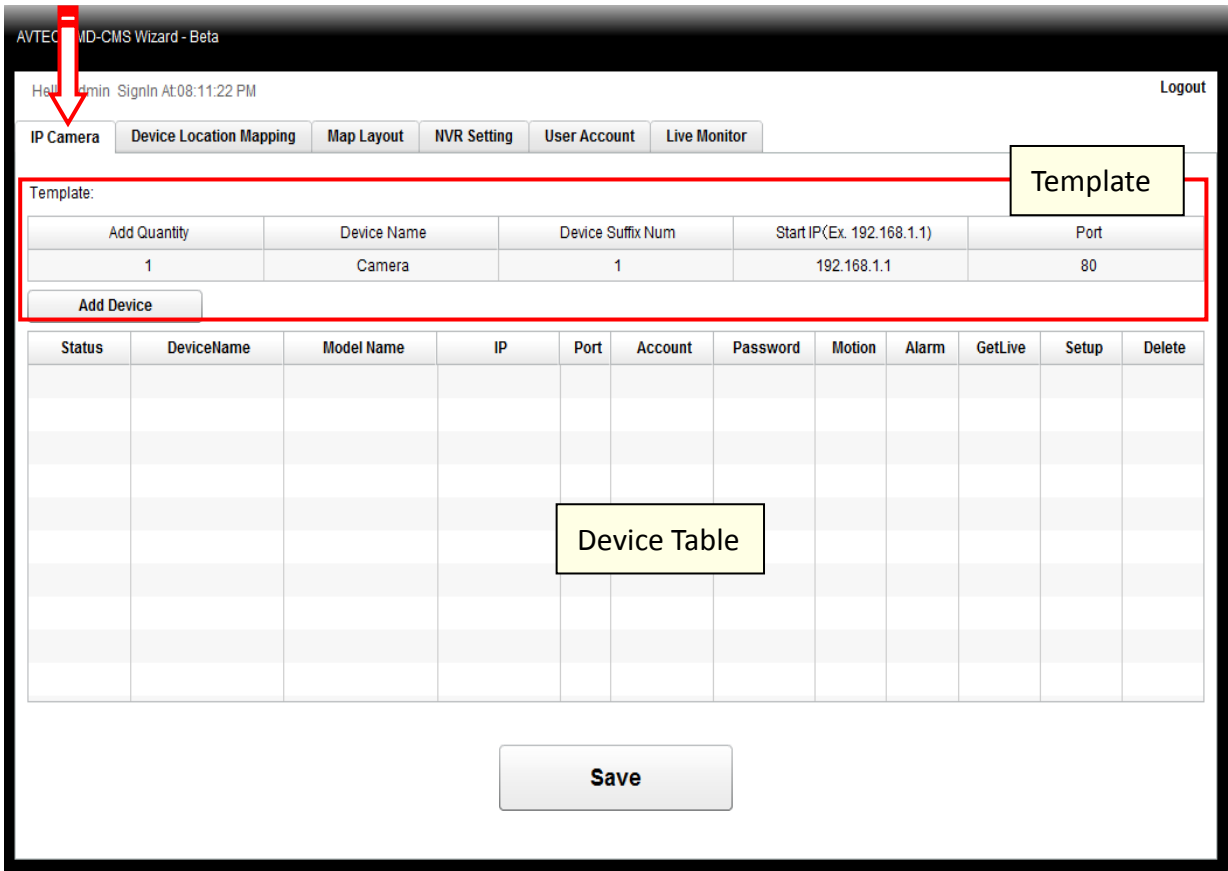


Figure 4 : CMS Setup Wizard - IP Camera

Template of Creating IP Cameras

Create Devices

1	2	3	4	5
Add Quantity	Device Name	Device Suffix Num	Start IP(Ex. 192.168.1.1)	Port
1	Camera	1	192.168.1.1	80

Add Device

Figure 5: CMS Setup Wizard - IP Camera Template

1. Click on **Add Quantity** pane and Type the quantity of devices you want to create at the highlight cursor. The default quantity is 1.
2. Click on **Device Name** pane and Type an initial device name at the highlight cursor. The default device name is "Camera".
3. Click on **Device Suffix Num** pane and type a numeral here. Depends on the quantities you set, the numerals started from the specified suffix number will be auto-added right after the **Device Name**. If you don't want to specify a suffix number, you can delete it and it will be shown as "-".

Template:

Add Quantity	Device Name	Device Suffix Num	Start IP(Ex. 192.168.1.1)	Port
5	Camera	1	10.1.1.11	80

Add Device

Status	DeviceName	Model Name	IP	Port	Account	Password	Motion	Alarm	GetLive	Setup	Delete
✓	Camera1	AVN212	10.1.1.11	80	admin						
✓	Camera2	AVN212	10.1.1.12	80	admin						
✓	Camera3	AVN212	10.1.1.13	80	admin						
✓	Camera4	AVN212	10.1.1.14	80	admin						
✓	Camera5	AVN212	10.1.1.15	80	admin						

Example: Specify a suffix number "1"

The suffix number will be automatically based added-up on the quantities you created.

Template:

Add Quantity	Device Name	Device Suffix Num	Start IP(Ex. 192.168.1.1)	Port
5	Camera	-	10.1.1.11	80

Add Device

Status	DeviceName	Model Name	IP	Port	Account
?	Camera	Get Model	10.1.1.11	80	admin
?	Camera	Get Model	10.1.1.12	80	admin
?	Camera	Get Model	10.1.1.13	80	admin
?	Camera	Get Model	10.1.1.14	80	admin
?	Camera	Get Model	10.1.1.15	80	admin

Without specifying a suffix number

Please be aware that if you don't specify a suffix number, the **Device Name** you created will be all the same.

4. Click on **Start IP (Ex. 192.168.1.1)** pane and Type a start IP address at the highlight cursor. The default device name is "192.168.1.1". The IP address of devices will be automatically added up based on the start IP.
5. Click on **Port** pane and Type a Port number of devices. The default Port number is "80".
6. Click **"Add Device"** button, the devices will be created at the below Device Table.

Meanwhile you will see a button **"Get Model"** at the **Model Type** pane next to each device.

AVTECH MD-CMS Wizard - Beta

Hello:admin SignIn At:08:11:22 PM Logout

IP Camera **Device Location Mapping** Map Layout NVR Setting User Account Live Monitor

Template:

Add Quantity	Device Name	Device Suffix Num	Start IP(Ex. 192.168.1.1)	Port
5	Camera	6	10.1.1.11	80

Add Device

Status	DeviceName	Model Name	IP	Port	Account	Password	Motion	Alarm	GetLive	Setup	Delete
?	Camera1	Get Model	10.1.1.11	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera2	Get Model	10.1.1.12	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera3	Get Model	10.1.1.13	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera4	Get Model	10.1.1.14	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera5	Get Model	10.1.1.15	80	admin	*****	☐	☐	Live	Setup	Delete

Save

Setup is not yet complete; please continue the following steps – Setup of Device Table.

● Setup of Device Table

In the **Device Table**, you can see all devices basic information – Status, Device Name, Model Name, IP address, Port number, Account and password for devices login, trigger activation (Motion / Alarm detection).

You can also manage devices by using the “**Live**”, “**Setup**”, and “**Delete**” buttons.

Status	DeviceName	Model Name	IP	Port	Account	Password	Motion	Alarm	GetLive	Setup	Delete
?	Camera1	Get Model	10.1.1.11	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera2	Get Model	10.1.1.12	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera3	Get Model	10.1.1.13	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera4	Get Model	10.1.1.14	80	admin	*****	☐	☐	Live	Setup	Delete
?	Camera5	Get Model	10.1.1.15	80	admin	*****	☐	☐	Live	Setup	Delete

Click on each “**Get Model**” button.

Save

Figure 6 : CMS Wizard – Device Table of IP Camera Settings

- There is an icon **Question mark (?)** in front of each device Before your server (computer) getting connected to a selected device successfully. Once when your server is connected to the device successfully, the question mark will turn to a **Check mark (✓)** and a model type will be displayed in place of the “**Get Model**” button. To get connection with the device, Click on each “**Get Model**” button.
- Click “**Save**” button to complete your settings and any changes.



Please be aware that only when **Get Model successfully**, you can operate all functions of devices, such as Live view, Recording, PTZ control...etc. **Get Model** CANNOT keep checking the connection status automatically or detect an occurred disconnection (also known as “Healthy Check”); it only checks a valid connection with the device when you click the button. If you want to know current connection status of a device, please use the “**Live**” button.

Other Operation

9. Click **“Live”** button, a display window will pop up. You can see the live view of the selected device.
10. Click **“Setup”** button, the setup wizard webpage of the device will be launched. Use the authorized account and password to log in and configure your device.
11. Click **“Delete”** button, the selected device will be deleted.
12. Click on any block at the device table -- Device Name, Model Name, IP address, Port number, Account and password -- you can modify directly at the highlight cursor.
13. Tick the checkbox at **Motion** pane and **Alarm** pane for devices you want to activate Motion or Alarm detection. Or undo the tick to disable Motion or Alarm detection.

Status	DeviceName	Model Name	IP	Port	Account	Password	Motion	Alarm	GetLive	Setup	Delete
✓	IPcam1	AVN212	10.1.1.10	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam2	AVN212	10.1.1.11	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam3	AVN212	10.1.1.12	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam4	AVN212	10.1.1.13	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam5	AVN212	10.1.1.14	80	admin	*****	☐	☐	Live	Setup	Delete
?	IPcam6	Get Model	10.1.1.15	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam7	AVN212	10.1.1.16	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam8	AVN212	10.1.1.17	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam9	AVN212	10.1.1.18	80	admin	*****	☐	☐	Live	Setup	Delete
✓	IPcam10	AVN212	10.1.1.19	80	admin	*****	☐	☐	Live	Setup	Delete

Failed to connect.

Connect Successfully
Displays the model name.

Live

Delete

Figure 7 : CMS Wizard – IP Camera Operation Buttons

● Example – Create IP Cameras

I am going to create an example for your reference:

Quantity: 5

Device Name: Camera

Device Suffix Num: 1

Start IP: 10.1.1.11

Port: 80

Steps:

Click on “Add Quantities” pane and Type “5” >> Click on “Device Name” pane and Type “Camera” >> Click on “Device Suffix Num” pane and Type “1” >> Click on “Start IP” and Type “10.1.1.11” >> Click on “Port” and Type “80” >> Click “Add Device” button >> Click each “Get Model” button >> Click “Save” button

AVTECH MD-CMS Wizard - Beta

Hello: admin SignIn At: 08:11:22 PM Logout

IP Camera Device Location Mapping Map Layout NVR Setting User Account Live Monitor

Template:

Add Quantity	Device Name	Device Suffix Num	Start IP(Ex. 192.168.1.1)	Port
1	Camera5	6	10.1.1.15	80

Add Device

Status	DeviceName	Model Name	IP	Port	Account	Password	Motion	Alarm	GetLive	Setup	Delete
✓	Camera1	AVN212	10.1.1.11	80	admin	*****	☐	☐	Live	Setup	Delete
✓	Camera2	AVN212	10.1.1.12	80	admin	*****	☐	☐	Live	Setup	Delete
✓	Camera3	AVN212	10.1.1.13	80	admin	*****	☐	☐	Live	Setup	Delete
✓	Camera4	AVN212	10.1.1.14	80	admin	*****	☐	☐	Live	Setup	Delete
✓	Camera5	AVN212	10.1.1.15	80	admin	*****	☐	☐	Live	Setup	Delete

Device name:

Camera1

Camera2

Camera3

Camera4

Camera5

IP Address:

10.1.1.11

10.1.1.12

10.1.1.13

10.1.1.14

10.1.1.15

Save

Displays when setup successfully:

Figure 8: Example for CMS Wizard – IP Camera Creation

Managing Device Location Mapping

Device Location Mapping is for you to create Buildings/Floors/Areas and set your devices into these locations. With it you can easily monitor by group view in CMS monitoring. Please follow the instructions below.



You can only choose existed IP cameras (which you can view at page "**IP camera**") for device location mapping of areas. Make sure you have created devices at **IP Camera** page already.

1. Log in CMS Setup Wizard.
2. Click on tab "**Device Location Mapping**" at the top of MD-CMS Wizard window.

The **Device Location Mapping** page consists 2 parts :

- (1) **Setting table** – Building, Floor, Area, and Devices.
- (2) **Devices table** with Device name, Model name, IP address and Location information.

AVTECH MD-CMS Wizard - B

Hello:admin SignIn At:10:59 PM Logout

IP Camera **Device Location Mapping** Map Layout NVR Setting User Account Live Monitor

Building: Floor: Area: Devices in Area:

Building Name	FC	Floor	Floor Name	AC	Area Name	DC	Device Name	Modify

Add Delete Add Floor Delete Floor Add Area Delete Area (Please drag and drop below devices onto this Area)

Browse Device:

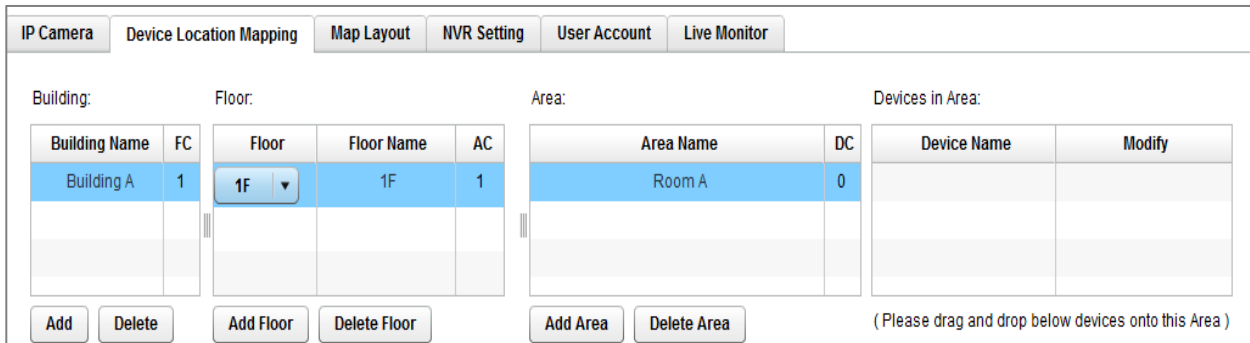
Index	Device Name	IP	Model Name	Building	Floor	Area
1	Camera1	10.1.1.11	AVN212	-	-	-
2	Camera2	10.1.1.12	AVN212	-	-	-
3	Camera3	10.1.1.13		-	-	-
4	Camera4	10.1.1.14		-	-	-
5	Camera5	10.1.1.15		-	-	-

Search devices by name of

Save

Figure 9: CMS Setup Wizard - Device Location Mapping

Create Buildings/Floors/Areas



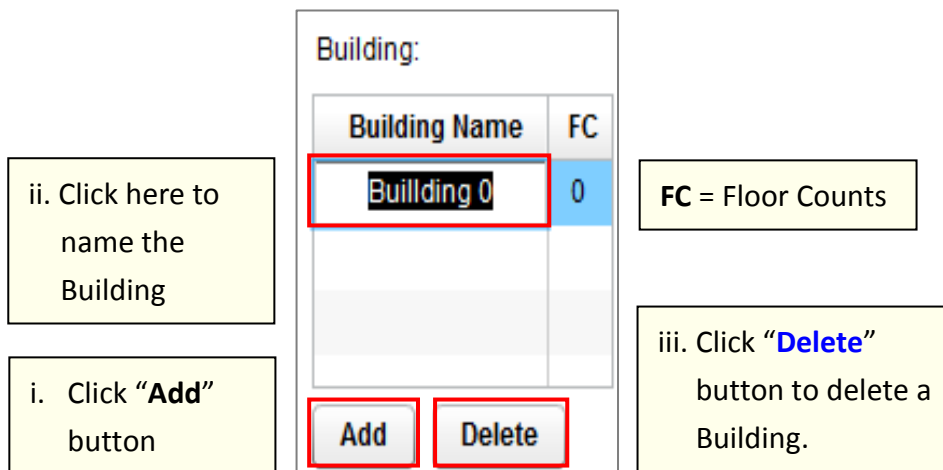
The interface shows four main sections: Building, Floor, Area, and Devices in Area. Each section has a table and associated buttons.

Building:		Floor:			Area:		Devices in Area:	
Building Name	FC	Floor	Floor Name	AC	Area Name	DC	Device Name	Modify
Building A	1	1F	1F	1	Room A	0		

Buttons: Add, Delete (for Building); Add Floor, Delete Floor (for Floor); Add Area, Delete Area (for Area). A note at the bottom right says: (Please drag and drop below devices onto this Area)

Figure 10: Setting Table of Device Location Mapping

1. Click **"Add"** button at the **Building:** pane, a new building will be created at the first of the list. By clicking on the building, Type a name at the highlight cursor or leave it as default **"Building"**.



ii. Click here to name the Building

i. Click **"Add"** button

iii. Click **"Delete"** button to delete a Building.

FC = Floor Counts



- (1) Only when you select a building, you can continue following settings – Floor/Area/Devices.
- (2) **"FC"** pane shows floor count of a selected building. It is aggregated by the following Floor settings automatically.

- Click “**Add Floor**” button at the **Floor:** pane, a new floor will be created at the first of the list. Click tab to select a floor from the drop-down list. If you would like to name the floor, click at the block of **Floor Name** and then enter the name at the highlight cursor. Or leave it as default.

Floor:

Floor	Floor Name	AC
▼	Floor 0	0

AC = Area Counts

Add Floor **Delete Floor**

i. Click “**Add Floor**” button

Click “**Delete Floor**” button to delete a Floor.

Floor:

Floor	Floor Name	AC
▼	Floor 0	0

ii. You can modify the Floor name or leave it as default.

Delete Floor

iii. Click on the tab to select a floor



- Only when you select a floor, you can continue following settings – Areas / Devices.
- “**AC**” pane shows area count of a selected floor. It is aggregated by the following Area settings automatically.

- Click “**Add Area**” button at the **Area:** pane, a new area will be created at the first of the list. By clicking on the area, you can name it at the highlight or leave it as default “**Zone**”.

Area:

Area Name	DC
Zone 0	0

DC = Device Counts

Add Area **Delete Area**

ii. Click to name the Area

i. Click “**Add Area**” button

iii. Click “**Delete Area**” button to delete an Area



- Only when you select an area, you can continue following settings – locate devices.
- “**DC**” pane shows device count of a selected area. It is aggregated by the following Device settings automatically.

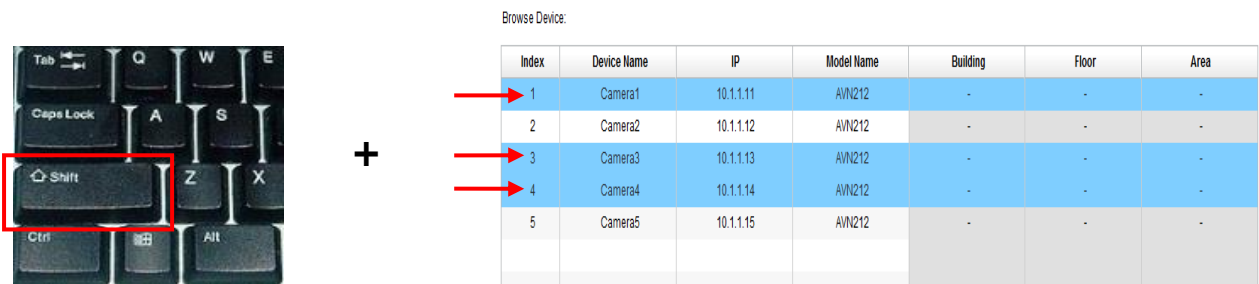
Locate Devices

4. After you create or click on an area, you are able to set devices onto this selected area.
The **Device in Area:** table has a **Drag-Handle area**. You can add devices by drag-and-drop devices onto the area.

Below describes either way to setup devices onto areas:

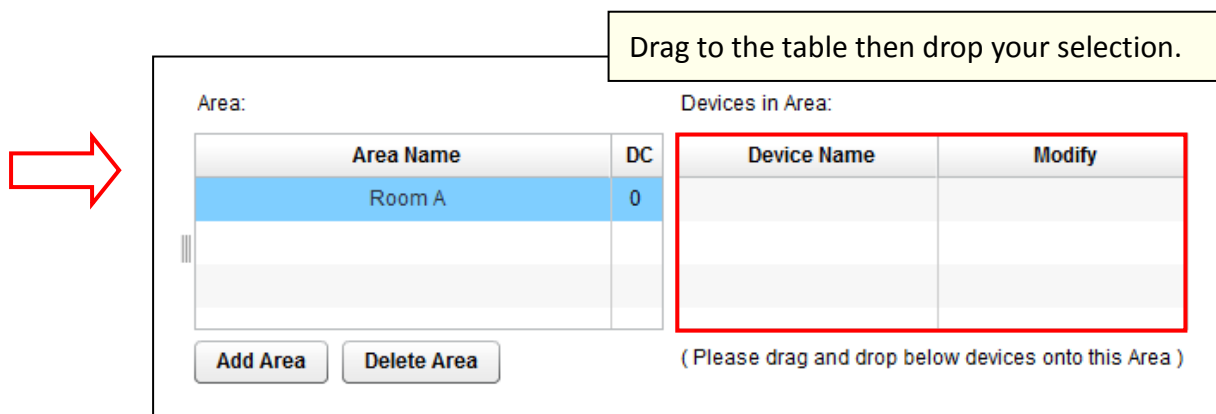
- (1) Double-click on a target device directly.
- (2) Click on a target device and hold your click on mouse, dragging it to the **Devices in Area:** table then drop it.
- (3) You can drag more than one device onto the same area at one time. Click on a target device
 >> Press **Shift key** of your keyboard and hold it >> Keep click on other devices you wish to add in until you have selected all you need, at the time you can release **Shift Key** >> Drag your selection to the drag handle area then drop it.

Browse Device:



Index	Device Name	IP	Model Name	Building	Floor	Area
1	Camera1	10.1.1.11	AVN212	-	-	-
2	Camera2	10.1.1.12	AVN212	-	-	-
3	Camera3	10.1.1.13	AVN212	-	-	-
4	Camera4	10.1.1.14	AVN212	-	-	-
5	Camera5	10.1.1.15	AVN212	-	-	-

Drag to the table then drop your selection.



Area:

Area Name	DC
Room A	0

Devices in Area:

Device Name	Modify

Add Area Delete Area

(Please drag and drop below devices onto this Area)



How to know when to Drop your selection – The Drag Handle Area:

1. **Inside the Drag Handle Area** – There will be a symbol coming with your cursor; meanwhile you can drop your selection.
2. **Outside Drag-Handle-Area Range** – There will be a symbol coming with your cursor; Do Not drop your selection.

Outside of Range

Buttons: Add Floor, Delete Floor, Add Area, Delete Area

IP	Model Name	Building
10.1.1.10	AVN212	-
10.1.1.11	AVN212	-
10.1.1.12	AVN212	-
10.1.1.13	AVN212	-

Drag Handle Area

Buttons: Add Area, Delete Area

(Please drag and drop below devices onto this Area)

5. Click **“Save”** button to complete your settings before leaving the page. The location information of devices will appear at the **Browse Device:** table. It is helpful when you want to

Browse Device:

Device Name	IP	Model Name	Building	Floor	Area
IPcam1	10.1.1.10	AVN212	Building A	1F	Room A
IPcam2	10.1.1.11	AVN212	Building A	1F	Room B
IPcam3	10.1.1.12	AVN212	Building A	1F	Room B
IPcam4	10.1.1.13	AVN212	TPE	1F	Z1
IPcam5	10.1.1.14	AVN212	TPE	1F	Z2
IPcam7	10.1.1.16	AVN212	TPE	2F	Z3
IPcam8	10.1.1.17	AVN212	TPE	5F	Z4
IPcam9	10.1.1.18	AVN212	TPE	5F	Z4
IPcam10	10.1.1.19	AVN212	TPE	5F	Z4
IPcam6	10.1.1.15	AVN212	TCC	8F	Area 1

Location Information

Search devices by name of

Save



Use keyword at the **Search devices by name of** pane for quick browse your IP cameras

● Example – Create New Area Set IP Cameras into Areas

Add **a Building** >> Add **a Floor** >> Add **2 Areas** – Room A and Room B >> Drag **2 IP Cameras** onto area Room B – Click and drag **IP cam2** and **IP cam 3** to the **drag handle area then drop**>> **Save**

The screenshot displays the 'Device Location Mapping' tab in the AVTECH CMS interface. It shows a hierarchical structure for adding buildings, floors, and areas, and a table for mapping IP cameras to specific areas.

Building:

Building Name	FC
Building A	1

Floor:

Floor	Floor Name	AC
1F	1F	2

Area:

Area Name	DC
Room B	0
Room A	1

Devices in Area:

Device Name	Modify
AVN212	-
AVN212	-

Browse Device:

Device Name	IP	Model Name	Building	Floor	Area
IPcam1	10.1.1.10	AVN212	-	-	-
IPcam2	10.1.1.11	AVN212	-	-	-
IPcam3	10.1.1.12	AVN212	-	-	-
IPcam4	10.1.1.13	AVN212	-	-	-
IPcam5	10.1.1.14	AVN212	-	-	-
IPcam7	10.1.1.16	AVN212	-	-	-
IPcam8	10.1.1.17	AVN212	-	-	-
IPcam9	10.1.1.18	AVN212	-	-	-
IPcam10	10.1.1.19	AVN212	-	-	-
IPcam6	10.1.1.15	AVN212	-	-	-

Search devices by name of

Save

Dragging these 2 IP cameras onto Devices in Area: table

Figure 11 : Example for CMS Wizard - Device Location Mapping

Managing Map Layout

Map Layout is for you to upload site maps, allocating areas and devices on map; to easily view and control devices on E-map at CMS web service. It is necessary if you are going to use E-map monitoring. Please read the following instructions.



You can only choose existed IP cameras (which you can view at page "*IP camera*") for device mapping. Make sure you have created devices at *IP Camera* page already.

1. Log in CMS Setup Wizard.
2. Click "**Map Layout**" tab at the top of MD-CMS Wizard window.
3. The **Map Layout** page consists 2 parts –
 - (1) **Floor** – To upload image file of maps.
 - (2) **Layout** – To allocate areas and devices by drawing on a map.

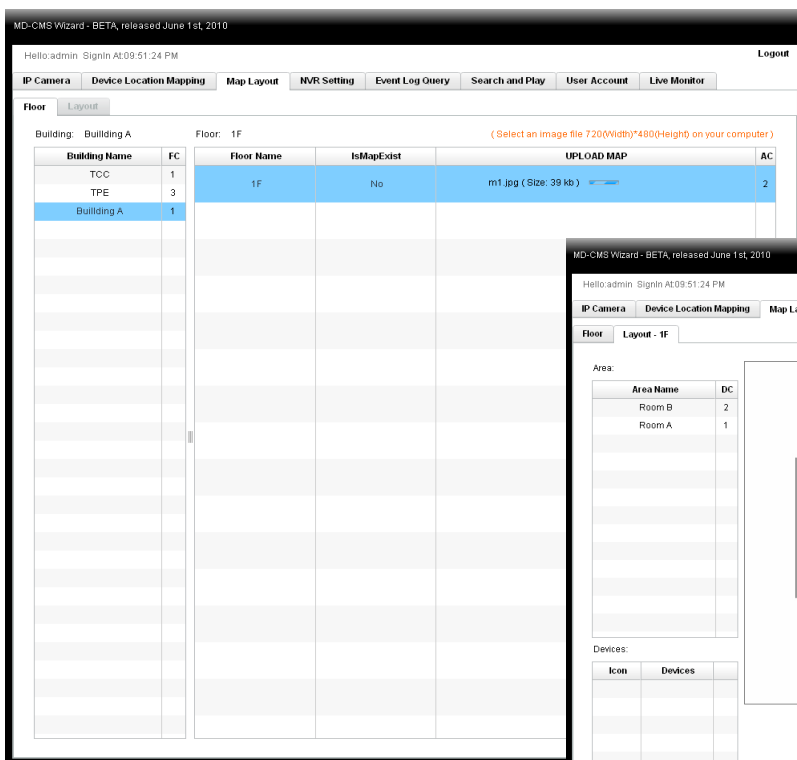


Figure 12 : CMS Wizard – Upload Map

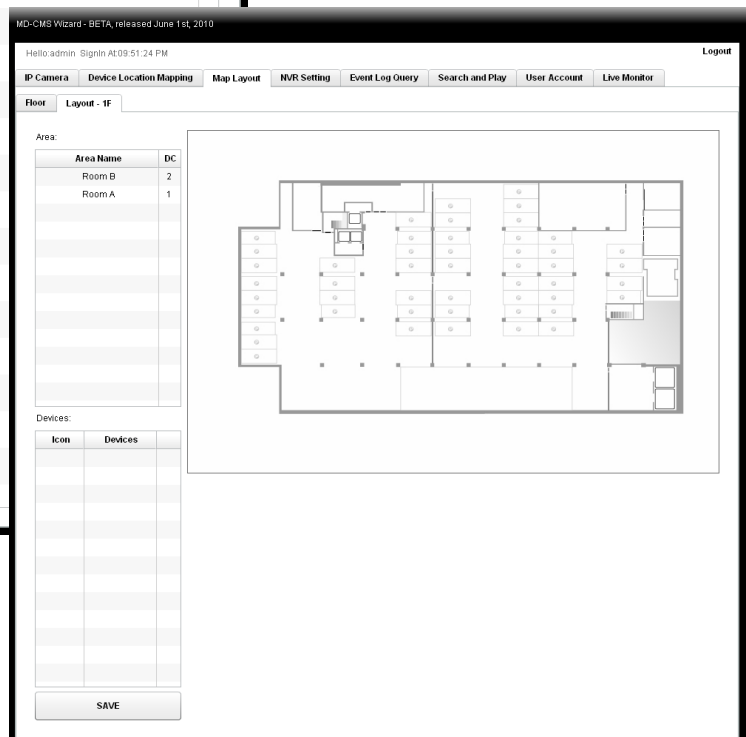


Figure 13: CMS-Wizard – Layout of Zones and devices mapping

Upload Maps

IP Camera Device Location Mapping Map Layout NVR Setting Event Log Query Search and Play User Account Live Monitor

1 Floor Layout

Building: Building A Floor: 1F (Select an image file 720(Width)*480(Height) on your computer)

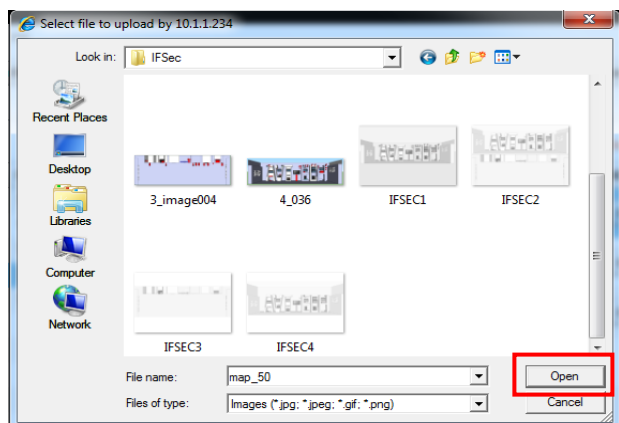
Building Name	FC	Floor Name	IsMapExist	UPLOAD MAP	AC
Building 4	1	1F	No	m1.jpg (Size: 39 kb)	2
Building 3	1				
TCC	1	2F	4 Yes	3 Upload file	1
TPE	3				
Building A	1	5F	No	Upload file	1

- Click on “Floor” tab to open Floor settings at Map Layout page.
- Click on a building at the Building: list, the floors which were set in the building will be displayed at the left Floor: table

- Click "Upload file" button of a selected floor, a window pops up for you to browse your file.
Select an image file then click “Open” button to start uploading your map.



The supported formats of image file are **JPG/JPEG/BMP/PNG** and in **720(Width) x 480(Height)** resolution.



- When uploading file successfully, the map will be saved automatically. You can see the status display at **isMapExist** field from "No" to "Yes". The map upload is completed.
- To change a map, please upload another target file again to replace the existed one directly. Now we can move to next step – drawing areas and locating devices.

- 

[illegible]

- IP Camera

Device Location Mapping

Map Layout

NVR Setting

Event Log Query

Search and Play

User Account

Live Monitor

Floor

Layout - 1F

Area: Room A

Area Name	DC
Room B	2
Room A	1

2

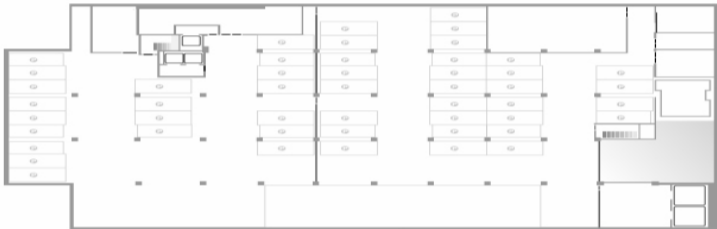
Click on an area

Devices:

Icon	Devices
	IPcam1 Off

Devices appear at the table

SAVE



Click on the stage to start drawing the polygon

Drawing polygons and Mapping devices here.

3. To **START** drawing, move your mouse to the map stage, and Click directly on the map to add points. You can see that at your click there will be black dots ● appeared as anchor points. Between each black dots there are light red dots ● appeared for you as insertable anchor points. The area surrounded by the anchor points will be indicated in light red. Please refer to the figure below.



At any time you can move any anchor (black dots ●) – even when you are creating a polygon -- to edit your polygon, or move any inserted anchor point (light red dots ●) to insert additional anchor points.

Click on the stage to start drawing the polygon

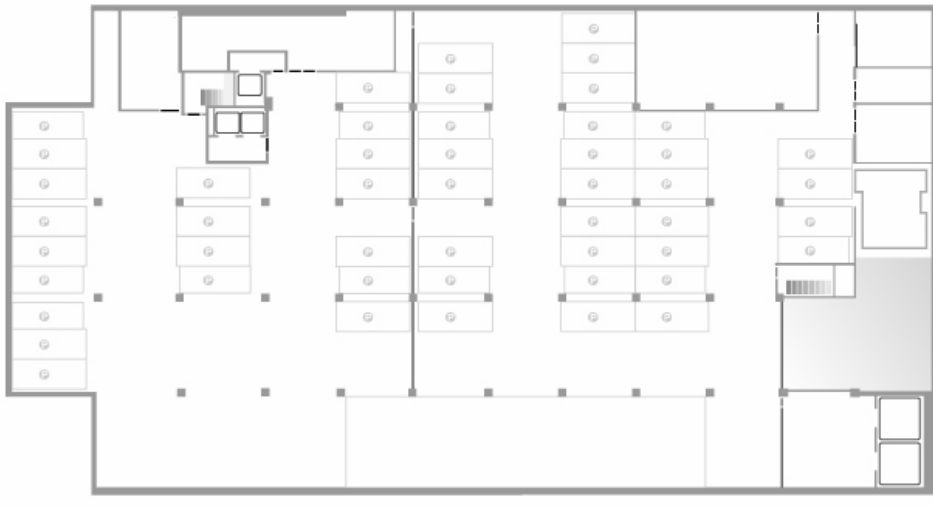
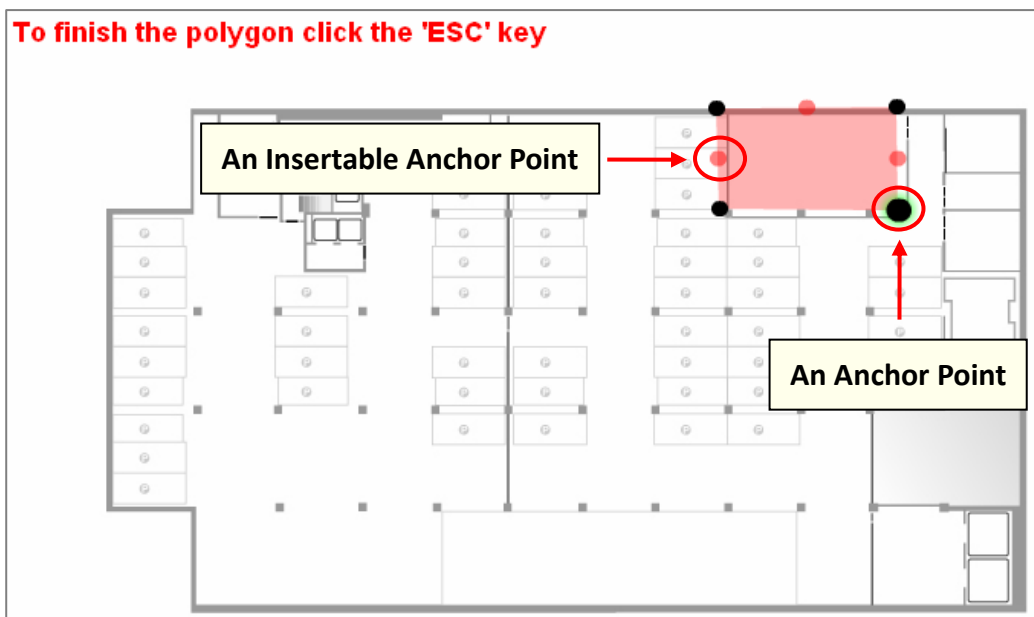


Figure 14 : CMS Wizard – Drawing Areas on Map

To finish the polygon click the 'ESC' key



Please be aware that you need to draw by clicking clockwise or counterclockwise on map.

4. To **END** drawing: Press **Esc key**  of your keyboard to finish. Once a polygon is created in, it can be fully edited. Anchor points can be moved, inserted, and deleted anytime.
5. To **DELETE** an anchor point: Click on the dot directly and then press **Delete key** of your keyboard.

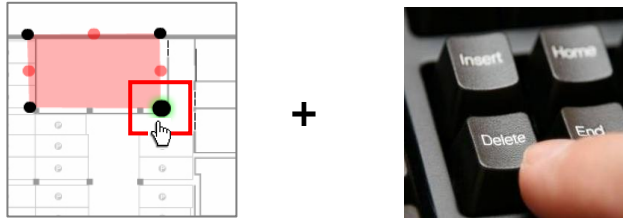


Figure 15 : CMS Wizard Map Layout– Delete An Anchor

6. To **ADJUST** a Polygon : Click and hold on an anchor point, dragging it to where you want to locate then drop it.

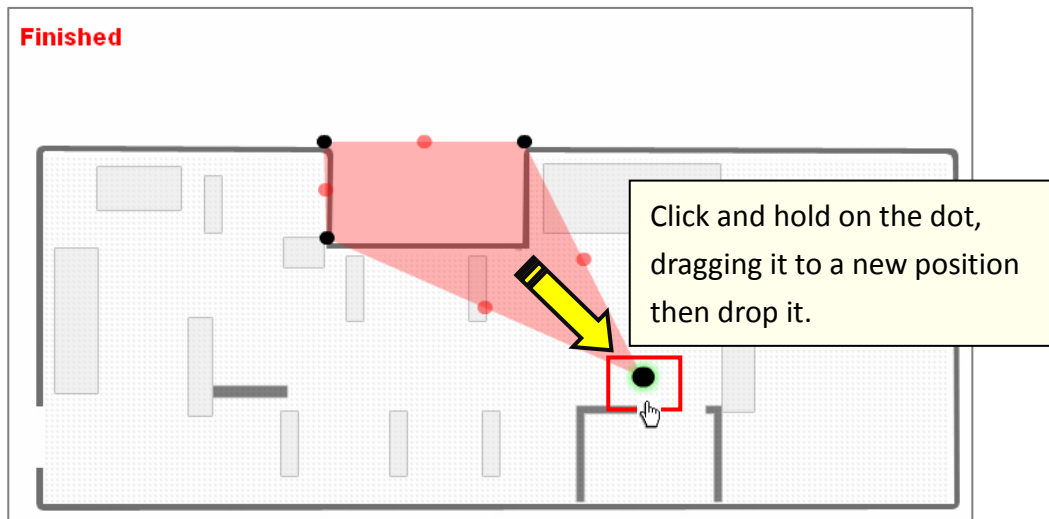


Figure 16: CMS Wizard Map Layout – Adjust a Polygon

7. **ADJUST LOCATION** to match an area: Click and hold the polygon you drawn, dragging it to meet your wanted area then drop it.

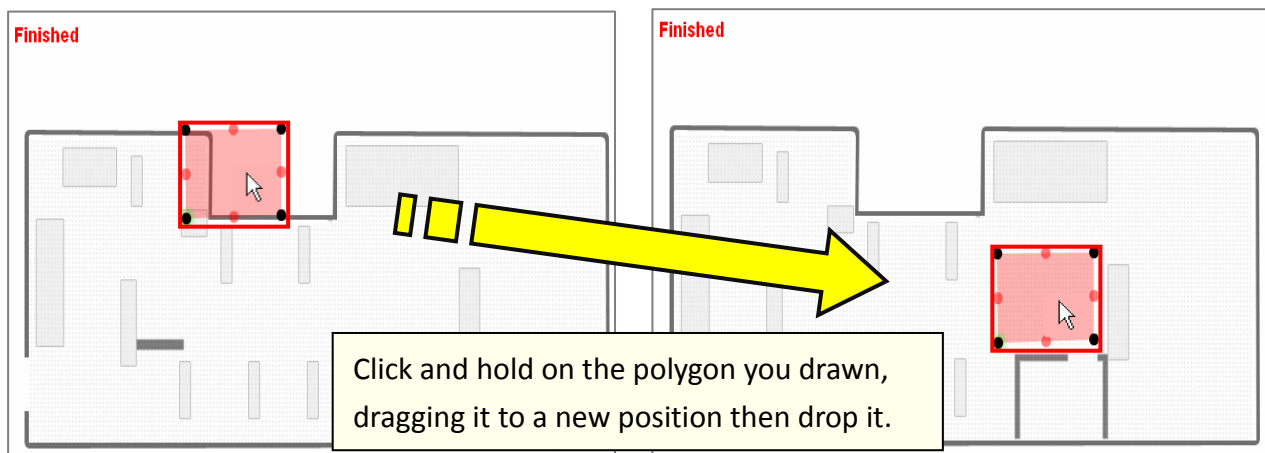


Figure 17 : CMS Wizard Map Layout – Adjust Location of an Area

8. To Add Additional Anchor Points: **I)** Click and hold on an insertable anchor point (light red dots ●), **II)** dragging it to a new position then **III)** drop it, the insertable anchor point (light red dot ●) will turn to an anchor point (black dot ●). Meanwhile there will be 2 more insertable anchor points (light red dots ●) appeared between anchor points (black dots ●). Please see figure below.

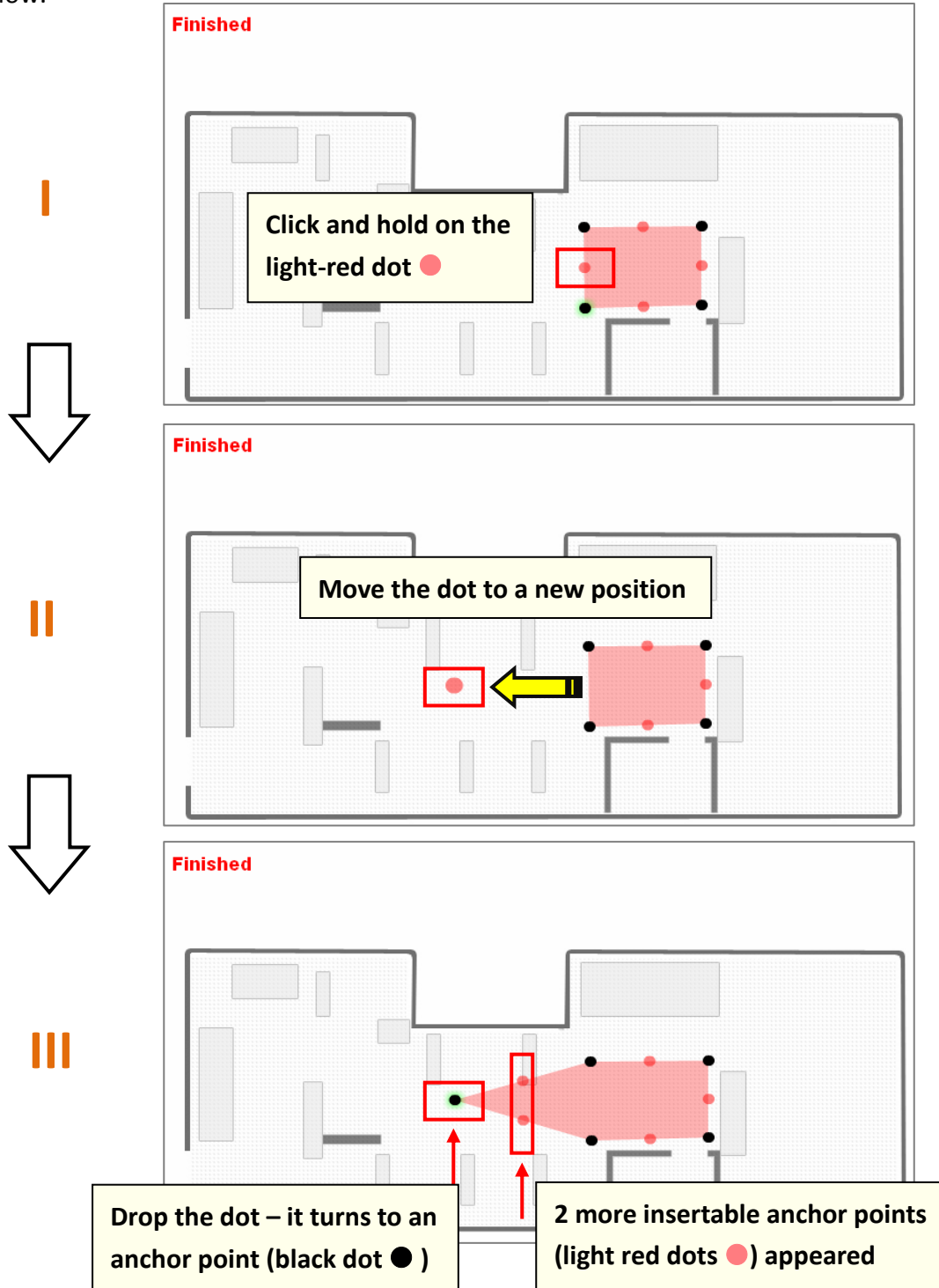


Figure 18 : CMS Wizard Map Layout – Add Additional Anchor Points

● Mapping Devices

Let's Move to the last stage – Locate Devices on Map. The map area is also a **Drag-handle area** like *Device in Area:* of **Device Location Mapping** page. Which means you can click and drag a device to the **drag-handle area** of map directly. Please read the following description.

Add Devices to Sitemap

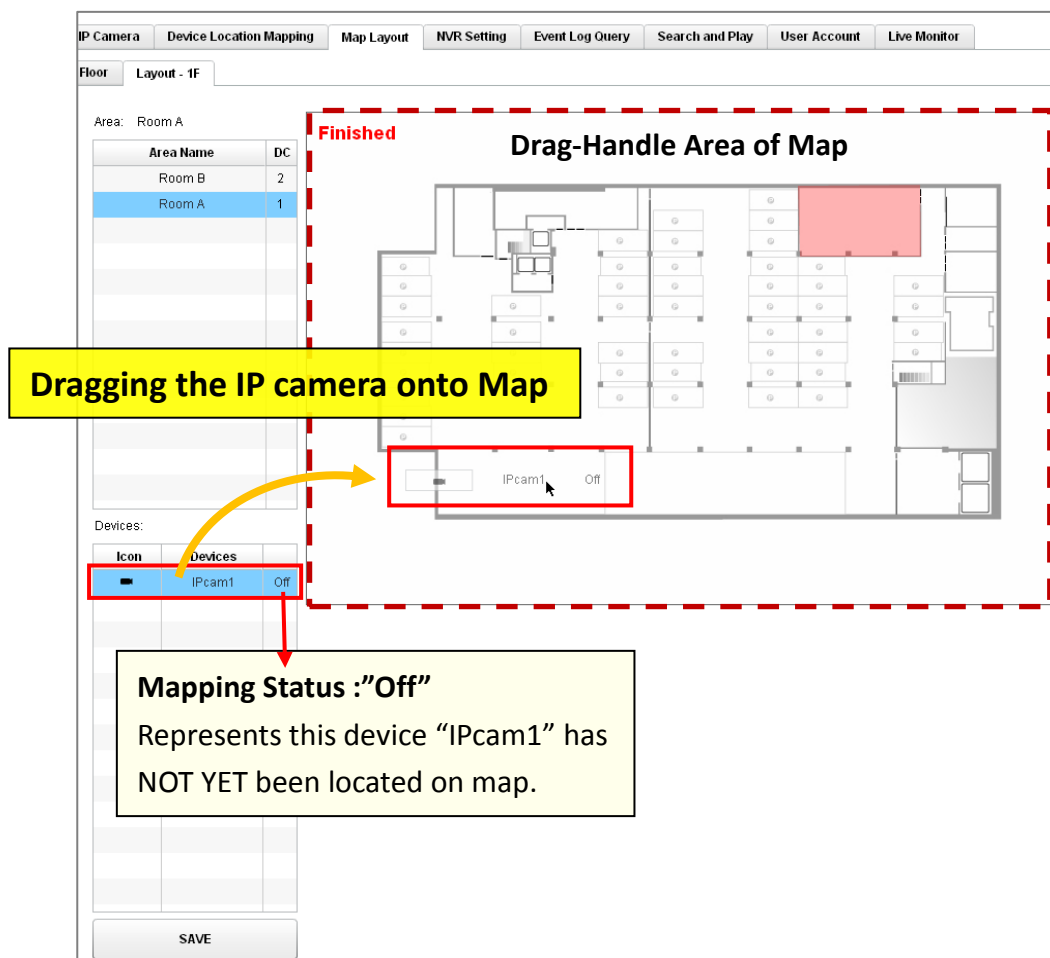
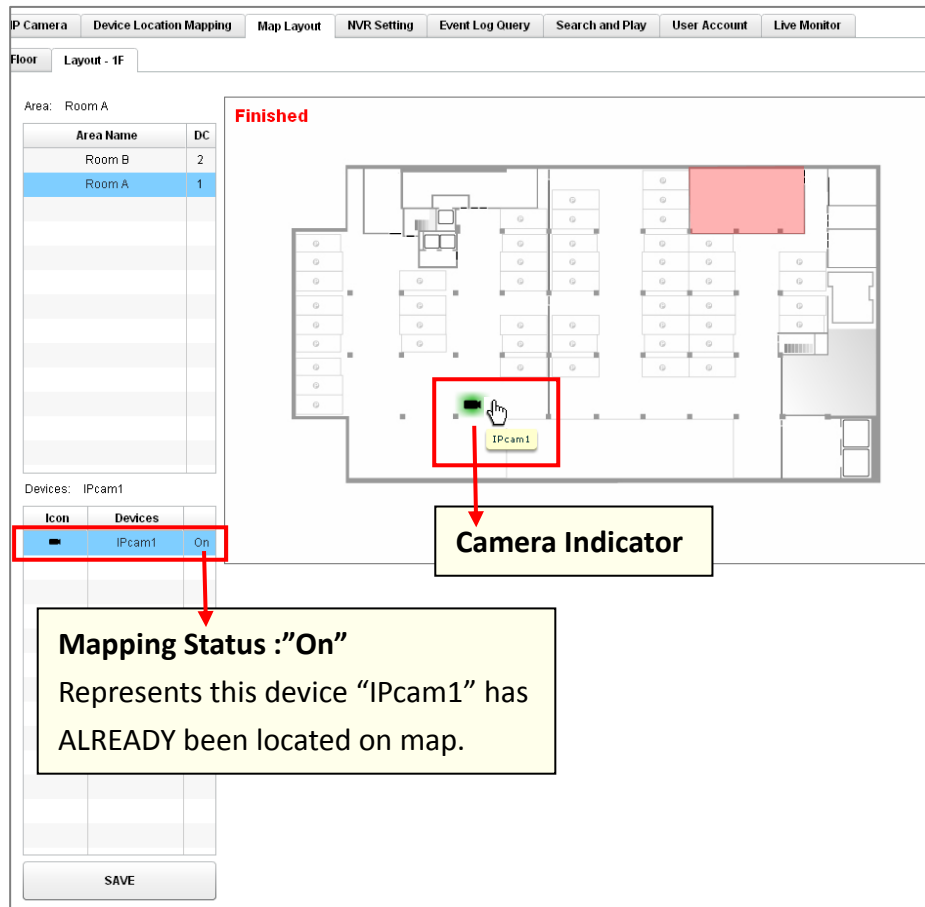


Figure 19 : CMS Wizard Map Layout – Add Devices to Map

- Click on an area from **Area:** table, devices belonged to the area will be listed at below **Devices:** table. You can see the mapping status of each IP camera.
- Click and hold on a wanted device, dragging it from **Devices:** table to the **drag-handle area** of map, then drop it.

11. A camera indicator  will be shown on map. If there are several camera icons, the one you select will be displayed with light green .



12. Click and hold on the camera indicator, you can move it and locate it anywhere on the map.
13. To delete a device from map, you can use either way – I) Click on the camera indicator on map directly and Press Delete key of your keyboard; II) Click on a device from **Devices:** table and Press Delete key of your keyboard

Adjust Device's Direction on Sitemap

14. Click on a camera indicator, and then press **L** key of your keyboard to rotate in counterclockwise direction, or press R key of your keyboard to rotate in clockwise direction.
15. Click on a camera indicator, and then use keyboard direction keys to fine tune the location.
16. Click "**Save**" button to save your settings before leaving this page.

Managing NVR Setting

NVR Setting is for you to do NVR scheduling control of devices. NVR scheduling of devices will be activated as default if you do not do any setting at this stage. Please read the following instructions.

1. Log in CMS Setup Wizard.
2. Click “**NVR Setting**” tab at the top of MD-CMS Wizard window.
3. The **NVR Setting** page consists 3 parts –
 - (1) **Schedule Template** – To create a new template or modify an existed one for live view and record scheduling.
 - (2) **Record Setting** – To set online view and record schedule for specified devices.
 - (3) **Archive Setting** – Archive Setting shows playback files

Figure 20: CMS Wizard NVR Setting - Schedule Template

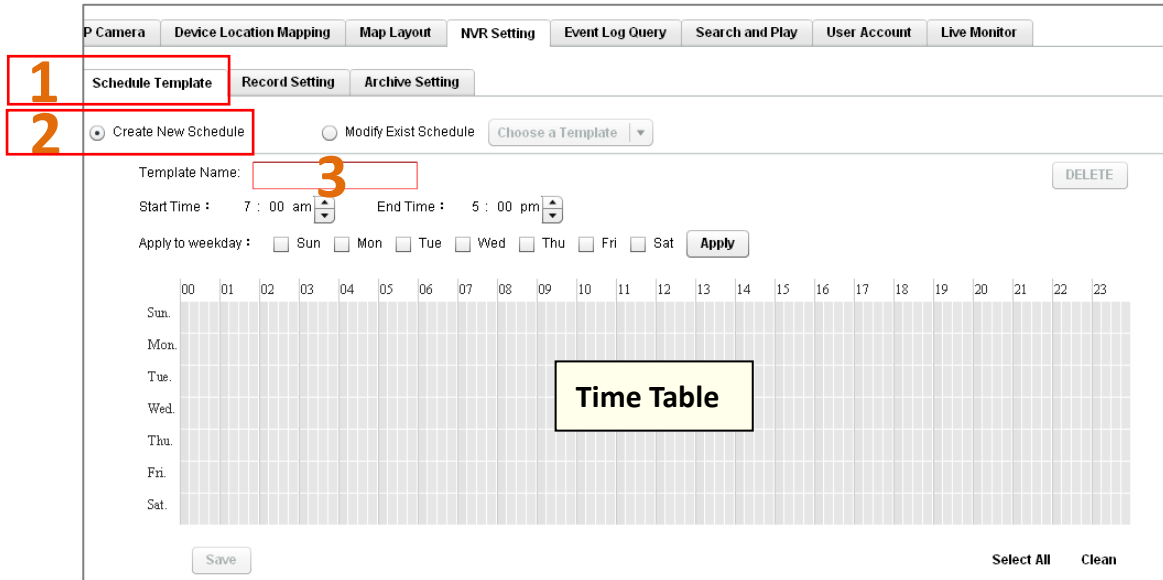
Figure 21 : CMS Wizard NVR Setting – Record Setting

Figure 22 : CMS Wizard NVR Setting –Archive Setting

Schedule Template

In **Schedule Template**, you can **create** new schedules or **modify** existed schedules.

Create A Schedule

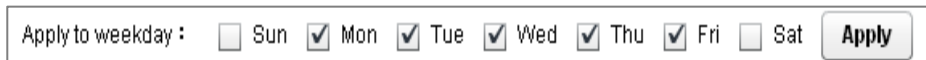


1. Click on "**Schedule Template**" to the setting table at **NVR Setting** page.
2. Click on the radio button of "**Create New Schedule**".
3. Type a name for the schedule at the block of **Template Name:**.
4. Select Time Period. You can use either way as below:
 - (1) **Select by applied items** – Time (**Start Time** / **End Time**) and Weekday (**Apply to weekday buttons**)

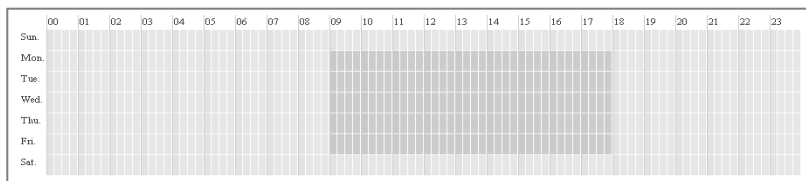
- a. **To set Time:** Click at the time block you want to setup – **Hour/Minute/am and pm** – and it will be highlighted. Use the Up/Down arrow to adjust time.



- b. **To set Weekday:** Tick at the checkbox of weekday at the **Apply to weekday** options.



- c. Click "**Apply**" button. The time period you set will appear on the time table above.



(2) **Select manually** – Click and drag at the time table directly.

The screenshot shows the 'Schedule Template' interface. At the top, there are tabs for 'Schedule Template', 'Record Setting', and 'Archive Setting'. Below these, there are radio buttons for 'Create New Schedule' (selected) and 'Modify Exist Schedule', along with a 'Choose a Schedule' dropdown. The 'Template Name' is set to 'MEETING'. The 'Start Time' is 9:00 am and the 'End Time' is 6:00 pm. There are checkboxes for 'Apply to weekday' for Sun, Mon, Tue, Wed, Thu, Fri, and Sat, with an 'Apply' button. The main area is a time table grid with days of the week (Sun. to Sat.) on the y-axis and time slots (00 to 23) on the x-axis. A yellow box labeled 'Click and Drag' points to a selected area on the grid. The 'Save' button is highlighted with a red box. There are also 'Select All' and 'Clean' buttons at the bottom right.

(3) **Select All and Clean** – Click on “Select All” for selecting all time period or click on “Clean” to clean the time table.

This screenshot shows the same time table grid as the previous one. A yellow box labeled 'Select All' points to the 'Select All' button at the bottom right. The 'Save' button is also visible at the bottom left.

This screenshot shows the same time table grid as the previous one. A yellow box labeled 'Clean All' points to the 'Clean' button at the bottom right. The 'Save' button is also visible at the bottom left.

5. Click **“Save”** button to save your settings.

Modify A Schedule

6. Click on the radio button of “**Modify Exist Schedule**” >> Select a schedule from the “**Choose a Schedule**” tab.

The screenshot shows the 'Modify Exist Schedule' configuration page. The 'Choose a Schedule' dropdown menu is open, displaying three options: 'Always On', 'WORKING HOUR', and 'MEETING'. The 'MEETING' option is currently selected. Below the dropdown, the 'Template Name' field is empty. The 'Start Time' is set to 7:00 am and the 'End Time' is set to 5:00 pm. The 'Apply to weekday' section has checkboxes for Sun, Mon, Tue, Wed, Thu, Fri, and Sat, all of which are currently unchecked. A large grid below these settings represents the weekly schedule, with columns for each hour of the day (00-23) and rows for each day of the week (Sun-Sat). At the bottom, there are buttons for 'Save', 'Delete', 'Select All', and 'Clean'.

7. The schedule you select will appear on the time table. Use the same way as creating a new template to modify time period for the selected schedule.
8. When you select a schedule from the drop-down list, you can click the “**Delete**” button to delete a schedule.

This screenshot shows the same interface after the 'MEETING' schedule has been selected. The dropdown menu now displays 'MEETING'. The 'Template Name' field has been populated with 'MEETING'. The 'Delete' button is now highlighted in blue. The schedule grid shows a shaded area from 7:00 am to 5:00 pm on Monday, Tuesday, Wednesday, Thursday, and Friday, indicating the active schedule. The 'Save' button is at the bottom left, and 'Select All' and 'Clean' buttons are at the bottom right.

9. Click “**Save**” button to save the changes.

Record Setting



You can view all schedule settings of IP-Cameras at the table. **Record Setting** is not a necessary configuration for NVR. The default value is **Always On** for live view and recording. If you are not going to do any changes at this page, you can still play live view and record for all devices.

1. Click on “**Record Setting**” to the setting table at **NVR Setting** page.

The screenshot shows the NVR Setting page with the 'Record Setting' tab selected. The 'On-Line Schedule' dropdown is open, showing 'Always On' as the selected option. The table below lists 10 IP cameras, all with 'Always On' for both 'On-Line Schedule' and 'Record On'.

Select	Device Name	IP	On-Line Schedule	Record On
☐	IP CAM1	10.1.1.2	Always On	Always On
☐	IP CAM2	10.1.1.3	Always On	Always On
☐	IP CAM3	10.1.1.4	Always On	Always On
☐	IP CAM4	10.1.1.5	Always On	Always On
☐	IP CAM5	10.1.1.6	Always On	Always On
☐	IP CAM6	10.1.1.7	Always On	Always On
☐	IP CAM7	10.1.1.8	Always On	Always On
☐	IP CAM8	10.1.1.9	Always On	Always On
☐	IP CAM9	10.1.1.10	Always On	Always On
☐	IP CAM10	10.1.1.11	Always On	Always On

2. Click on the **onLineSchedule** pane, the selection tab appears >> Click on the tab to select a schedule (which is created at from the drop-down list. Default value is “**Always On**”.

The screenshot shows the NVR Setting page with the 'Record Setting' tab selected. The 'On-Line Schedule' dropdown is open, showing 'Always On' as the selected option. The table below lists 10 IP cameras, all with 'Always On' for both 'On-Line Schedule' and 'Record On'.

Select	Device Name	IP	On-Line Schedule	Record On
☐	IP CAM1	10.1.1.2	Always On	Always On
☐	IP CAM2	10.1.1.3	Always On	Always On
☐	IP CAM3	10.1.1.4	Always On	Always On
☐	IP CAM4	10.1.1.5	Always On	Always On
☐	IP CAM5	10.1.1.6	Always On	Always On
☐	IP CAM6	10.1.1.7	Always On	Always On
☐	IP CAM7	10.1.1.8	Always On	Always On
☐	IP CAM8	10.1.1.9	Always On	Always On
☐	IP CAM9	10.1.1.10	Always On	Always On
☐	IP CAM10	10.1.1.11	Always On	Always On

3. Click on the **Record On** pane, the selection tab appears >> Click on the tab to select a schedule template from the drop-down list. Default value is “**Always On**”.

IP Camera | Device Location Mapping | Map Layout | NVR Setting | User Account | Live Monitor

Schedule Template | Record Setting | Archive Setting

Template:

On-Line Schedule | Record On

Always On | Always On

Apply

Browse Device: | Get All Device

Select	Device Name	IP	On-Line Schedule	Record On
☐	IP CAM1	10.1.1.2	Always On	Always On
☐	IP CAM2	10.1.1.3	Always On	Always On
☐	IP CAM3	10.1.1.4	Always On	Always On
☐	IP CAM4	10.1.1.5	Always On	Always On
☐	IP CAM5	10.1.1.6	Always On	Always On
☐	IP CAM6	10.1.1.7	Always On	Always On
☐	IP CAM7	10.1.1.8	Always On	Always On
☐	IP CAM8	10.1.1.9	Always On	Always On
☐	IP CAM9	10.1.1.10	Always On	Always On
☐	IP CAM10	10.1.1.11	Always On	Always On

Select All | Clean All | Apply

Search devices by name of

4. Tick at the checkbox at the **Select** pane for target devices of **Browse Devices** table.

IP Camera | Device Location Mapping | Map Layout | NVR Setting | User Account | Live Monitor

Schedule Template | Record Setting | Archive Setting

Template:

On-Line Schedule | Record On

Always On | WORKING DAY

Apply

Browse Device: | Get All Device | Choose Building | Choose Floor | Choose Area

Select	Device Name	IP	On-Line Schedule	Record On
☐	IP CAM1	10.1.1.2	Always On	Always On
☒	IP CAM2	10.1.1.3	Always On	Always On
☐	IP CAM3	10.1.1.4	Always On	Always On
☒	IP CAM4	10.1.1.5	Always On	Always On
☐	IP CAM5	10.1.1.6	Always On	Always On
☐	IP CAM6	10.1.1.7	Always On	Always On
☒	IP CAM7	10.1.1.8	Always On	Always On
☐	IP CAM8	10.1.1.9	Always On	Always On
☒	IP CAM9	10.1.1.10	Always On	Always On
☐	IP CAM10	10.1.1.11	Always On	Always On

Select All | Clean All | Apply

Search devices by name of

5. Click “**Apply**” button at below to complete the settings.

When you **start Timer Recorder of NVR Management Application** it will follow the Record schedule you setup here.

Quick Search Devices

To quick search devices, you can use browse buttons:

- (1) “**Get All Device**”: Click to list all devices at one time.
- (2) Browse by a target Building from the drop-down list of button “**Choose Building**” tab.
- (3) Browse by a target Floor from the drop-down list of button “**Choose Floor**” tab.
- (4) Browse by a target Area from the drop-down list of button “**Choose Area**” tab.
- (5) Use keyword at the *Search devices by name of* pane.

The image displays three overlapping screenshots of the 'IP-CAM Online Schedule' web interface, demonstrating different search filters. Each screenshot shows a 'Browse Device' table with columns for 'Select', 'Device Name', 'IP', 'OnLineSchedule', and 'Record On'. The interface also includes tabs for 'IP-CAM Online Schedule', 'Record Setting', and 'Archive Setting', and an 'Apply' button.

Screenshot 1 (Top): The 'Choose Building' dropdown is selected, showing a list with 'TCC', 'TPE', and 'Building A'. The table below lists devices IPcam1, IPcam2, and IPcam3.

Screenshot 2 (Middle): The 'Choose Floor' dropdown is selected, showing a list with '1F', '2F', and '5F'. The table below lists devices IPcam8, IPcam9, and IPcam10.

Screenshot 3 (Bottom): The 'Choose Area' dropdown is selected, showing a list with 'Z4'. The table below lists devices IPcam1 and IPcam10.

Screenshot 4 (Bottom Right): A search bar at the bottom right is highlighted with the text 'Search devices by name of' and the input 't'.

Managing Live Monitor

Live Monitor is for you to pre-set devices/IP Cameras for Live Monitor Layout. It is required to complete the settings before using NVR application for Live monitoring. Please follow the instructions below.

1. Log in CMS Wizard.
2. Click “**Live Monitor**” at the top of MD-CMS Wizard window.
3. The **Live Monitor** page consists 3 parts –
 - (1) **Live View Mode** Selection – To choose a live view mode you want to setup for.
 - (2) **Device** List – To find a device for setup.
 - (1) **Channel** setup – To set devices into channel display.

Select A Live View Mode

At the left you can see the diagram of live view mode. The diagram shows the actual location on NVR Live Monitoring. It separates all selected channels into 6 tables equally as shown in layout at the right window and fit the screen display.

For example:

96CH: There are 4x4 displays for each table of 96CH.

54CH : There are 3x3 displays for each table of 54CH.

24CH: There are 2x2 displays for each table of 24CH.

6CH : There are only 1 display for each table of 6CH.

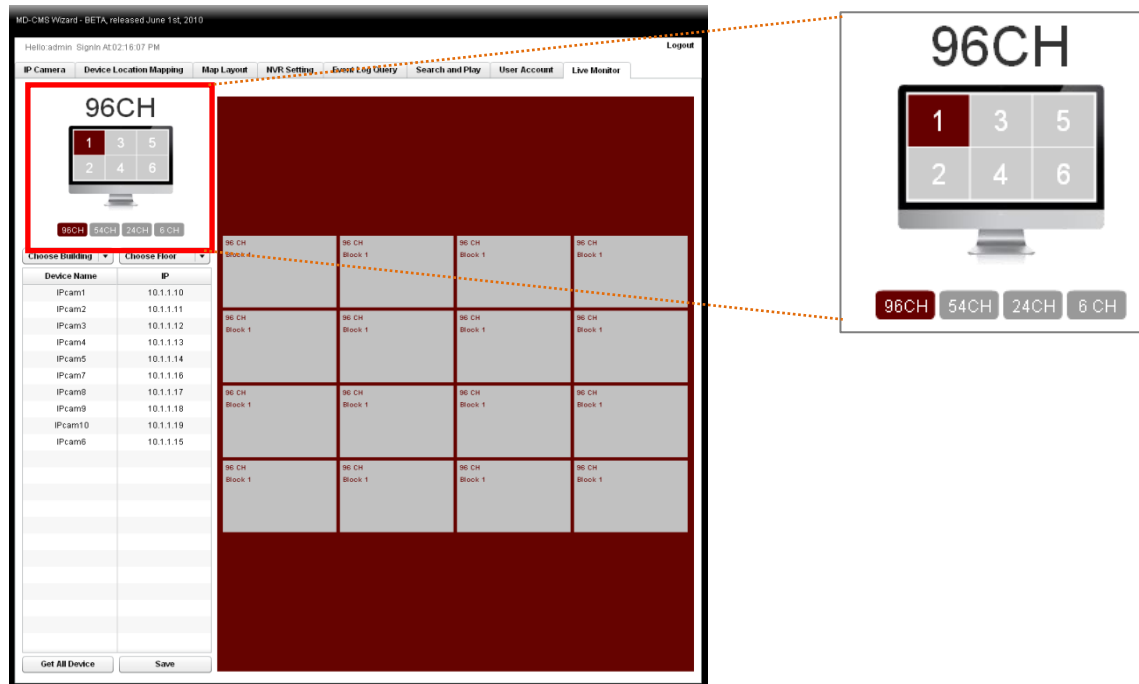


Figure 23 : CMS Wizard – Live Monitor Layout

4. Select a live view mode by clicking on a **CH** button **96CH/54CH/24CH/6CH**.
5. Click on a block at the Diagram above **CH** button. The setup layout will appear at the right schematic diagram.

● Add A Device Into Position

6. Click and hold an IP camera from the device list below to a target location at the layout then drop it. You can see the device information (device name and IP address) you locate in displayed at the block.

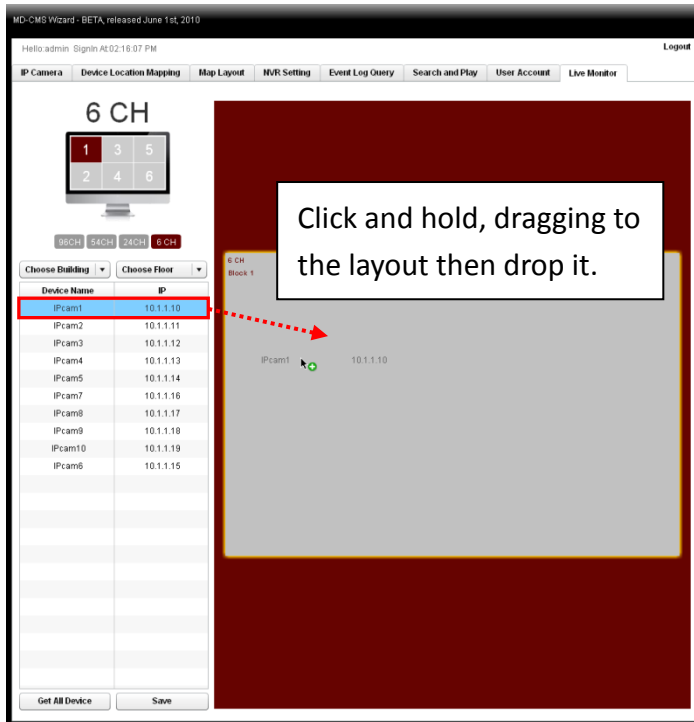


Figure 24 : CMS Wizard – Add Devices into Live Monitor Layout

7. Repeat the steps to setup all devices into Live monitor location if needed.
8. To remove a device from the table, click on the icon at the selected block.

TIP

To quick search devices, you can use browse buttons:

- (1) **“Get All Device”**: Click to list all devices at one time.
- (2) Browse by a target Building from the drop-down list of button **“Choose Building” tab**.
- (3) Browse by a target Floor from the drop-down list of button **“Choose Floor” tab**.

1. Click **“Save”** button to save the settings.

Managing User Account

User Account is for administrator to manage user accounts for CMS and CMS-Wizard log-in control and also the authorization for CMS-Wizard operations. Administrator can create new user account and edit the user level for CMS-Wizard management. Please follow the instructions below.

1. Log in CMS Wizard.
2. Click “**User Account**” at the top of MD-CMS Wizard window.

Create A New User Account

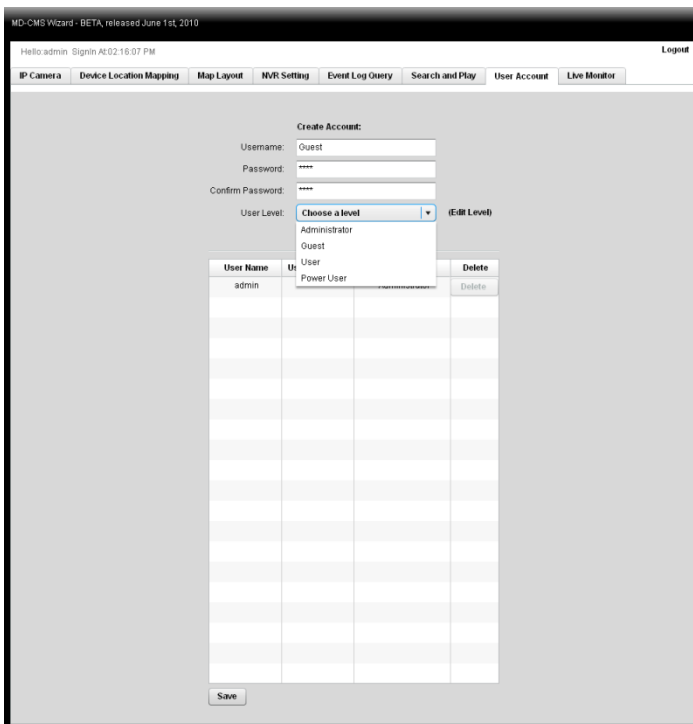


Figure 25 : CMS Wizard – Manage User Account

1. Specify a user name at the **Username:** pane.
2. Enter a password for log-in in CMS and CMS-Wizard at the **Password:** pane.
3. Enter the password again to confirm it at the **Confirm Password:** pane.
4. Clicking on “**Choose a level**” tab of **User Level** for the user.
5. Click “**ADD**” button. The new user now is created successfully. You can see the user name and user level at the table below.
6. To remove a user, click “**Delete**” button at **Delete** pane.
7. Click “**Save**” button to save the setting and any change.

TIP

To reset the user account, click “**RESET**” button.

Edit User Level

1. Click **Edit Level** button next to the **Choose a level** tab. The edit page appears.
2. Click on the radio button of **Modify Exist UserLevel** >> Select a user level from the drop-down list by clicking **Choose a User Level** tab. The default authorization for CMS-Wizard operation will be shown at the table below – the ticked items are authorized to be viewed and operated by the selected user level.
3. To modify, tick the checkbox at **Select** pane of those CMS-Wizard pages – addDevice, deviceMapping, mapLayout, nvrSetting, log, searchAndPlay, addMember, and liveMonitorLayout.
4. Click **Save** button to save the setting and any change.

TIP

To exit Edit Level page, click **Back To** Button.

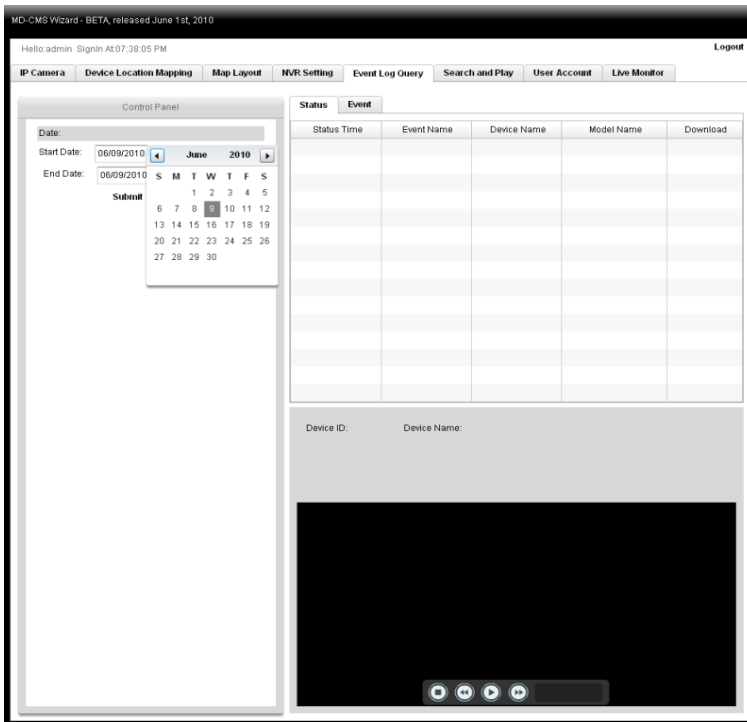
Managing Event Log Query

Event Log Query provides you **Status** (Motion detection) and **Event** (Alarm detection) searching, downloading, and playback. Please read the following instructions.

1. Log in CMS Setup Wizard.
2. Click “**Event Log Query**” at the top of MD-CMS Wizard window.
3. The **Event Log Query** page consists 2 parts –
 - (1) **Status** log page – For status log query by time search.
 - (2) **Event** log page – For event log query by time search.

The screenshot displays the 'Event Log Query' interface. At the top, there is a navigation bar with tabs: IP Camera, Device Location Mapping, Map Layout, NVR Setting, Event Log Query (selected), Search and Play, User Account, and Live Monitor. Below this, the 'Control Panel' section on the left contains a 'Date:' label, 'Start Date' (06/09/2010 5:21 pm), 'End Date' (06/09/2010 5:21 pm), and 'Submit' and 'Reset' buttons. The main area is divided into two tabs: 'Status' (selected) and 'Event'. The 'Status' tab contains a table with the following columns: Status Time, Event Name, Device Name, Model Name, and Download. The table is currently empty. Below the table, there are input fields for 'Device ID:' and 'Device Name:'. At the bottom, there is a large black rectangular area, likely for video playback, with a control bar at the bottom center containing play, stop, and other media controls.

Status Log Query



4. Click on "**Status**" to the table at **Event Log Query** page. The table appears.
5. At the **Date:** block in **Control Panel**, there are a start time and an end time for you to set a time period.
 - (1) Click on the tab (a calendar icon ) next to the **Start Date:** pane and **End Date:** pane. A calendar appears. Choose a date for a start and an end.
 - (2) Click on the time (Hour/Minute/am and pm) and the time you select will be highlighted. Adjust time by clicking on up and down arrow  if needed.
6. Click on **Submit** to start search. The status log will be listed at the right window if there is any. You can see information of all status occurred during the time period you setup.
7. Use the scroll bar to find the playback you want and one Click on it to start playing at below the media player window.
8. At the **Location:** block in **Control Panel**, you can see the **Building:**, **Floor:** and **Area:** with selection tabs. Click on the tabs to select a **Building** >> **Floor** >> **Area** from the drop-down list to narrow your search from the log list.

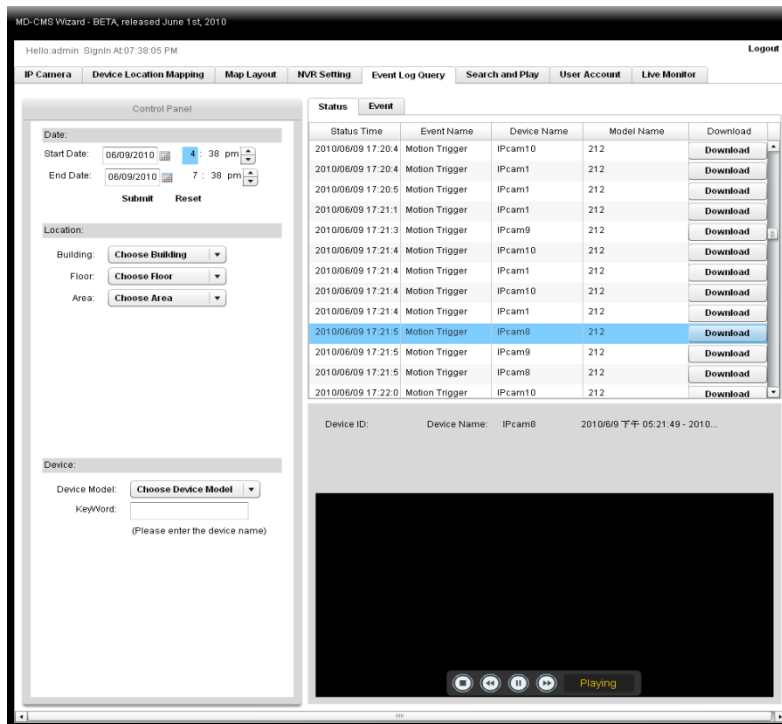


Figure 26 : CMS Wizard – Event Log Query

9. For advance search, please use **Device:** block in **Control Panel**. Select a device model by clicking on the tab **Choose Device Model** and device name at the **Keyword** pane.
10. To keep a specific playback file, please clicking “**Download**” button at **Download** pane of **Status** window to save on your computer.

Event Log Query

11. Click on “**Event**” to the table at **Event Log Query** page. The table appears.
12. At the **Date:** block in **Control Panel**, there are a start time and an end time for you to set a time period.
 - (1) Click on the tab (a calendar icon) next to the **Start Date:** pane and **End Date:** pane. A calendar appears. Choose a date for a start and an end.
 - (2) Click on the time (Hour/Minute/am and pm) and the time you select will be highlighted. Adjust time by clicking on up and down arrow if needed.
13. Click on **Submit** to start search. The status log will be listed at the right window if there is any. You can see information of all status occurred during the time period you setup.
14. Use the scroll bar to find the playback you want and one Click on it to start playing at below the media player window.

15. At the **Location:** block in **Control Panel**, you can see the **Building:**, **Floor:** and **Area:** with selection tabs. Click on the tabs to select a **Building** >> **Floor** >> **Area** from the drop-down list to narrow your search from the log list.
16. For advance search, please use **Device:** block in **Control Panel**. Select a device model by clicking on the tab **Choose Device Model** and device name at the **Keyword** pane.
17. To keep a specific playback file, please clicking "**Download**" button at **Download** pane of **Event** window to save on your computer.

Managing Search and Play

Search and Play allows you to search playback records by devices. Please follow steps below.

2. Log in CMS Wizard.
3. Click “**Search and Play**” at the top of MD-CMS Wizard window.
4. The **Search and Play** page consists 2 parts –
 - (2) **Browse Device** table – For you to select a target device.
 - (3) **Date and Time period** setup – To set a period for playback search.

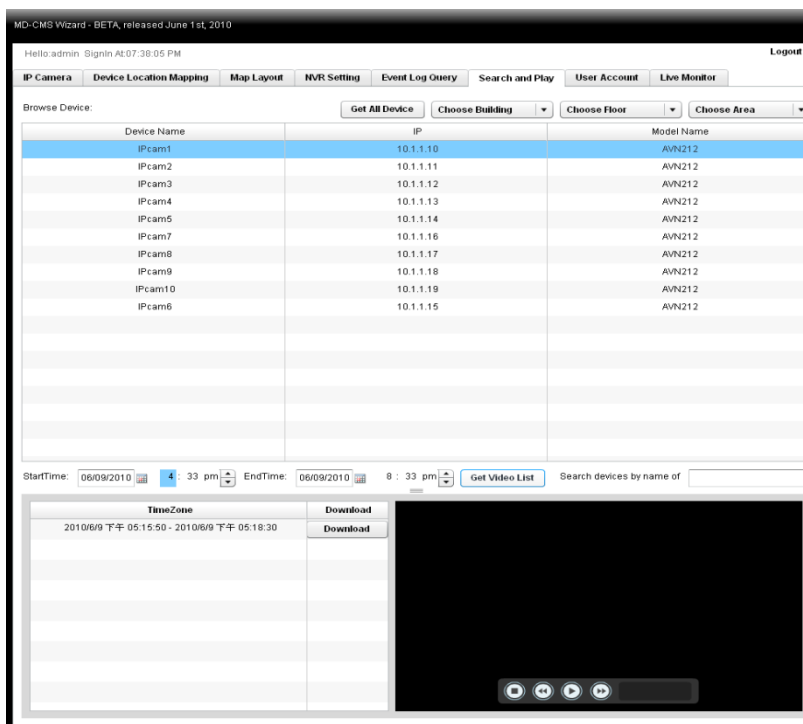


Figure 27 : CMS Wizard – Search and Play

5. Use the scroll bar or browse item to find your target device and then click on it.
 - (1) “**Get All Device**”: Click to list all devices at one time.
 - (2) Browse by a target Building from the drop-down list of button “**Choose Building**” tab.
 - (3) Browse by a target Floor from the drop-down list of button “**Choose Floor**” tab.
 - (4) Browse by a target Area from the drop-down list of button “**Choose Area**” tab.
 - (5) Use keyword at the **Search devices by name of** pane.
6. Click on the tab (a calendar icon) next to the **Start Date:** pane and **End Date:** pane. A calendar appears. Choose a date for a start and an end.
7. Click on the time (Hour/Minute/am and pm) and the time you select will be highlighted. Adjust time by clicking on up and down arrow if needed.

8. Click on “**Get Video List**” button to start search. The playback will be listed at below if there is any occurred during the time period you setup.
9. Clicking on a playback from the list of search result, it will start playing at the right window. Meanwhile, you can download it on your computer by clicking “**Download**” button.

NVR Management Application

NVR Management Application is installed on the main console as the central management server for monitoring, including Live monitoring, Event monitoring, Recorder, Configurations, and basic information. Following instructions will guide you how to operate NVR application.

Live Player

In Live Player, you can select a live view mode to start monitoring as your setup in CMS- Wizard. Please follow the steps below.

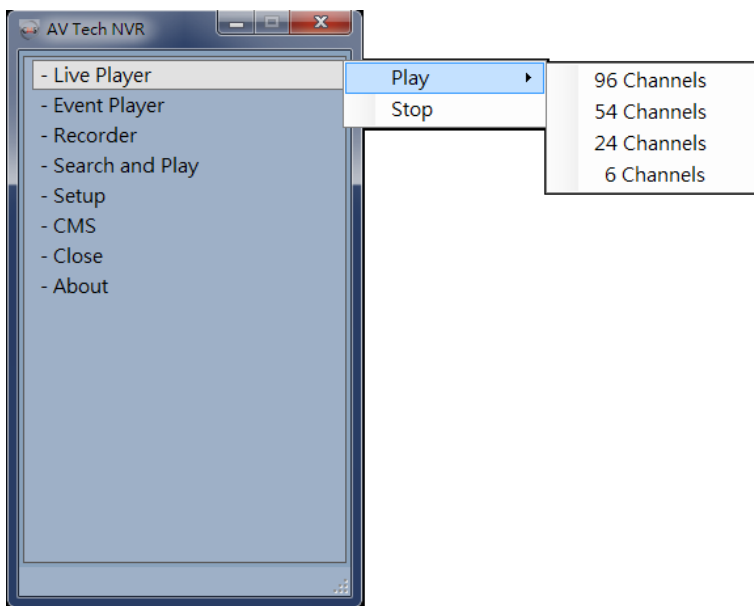
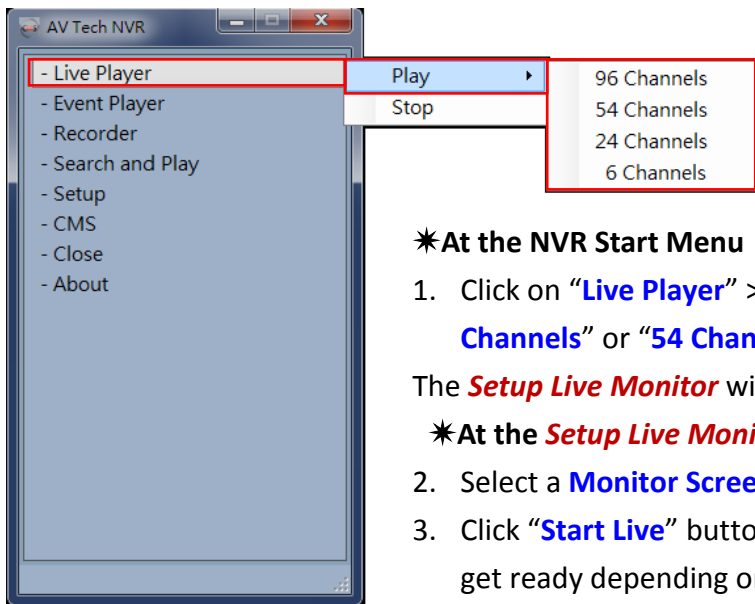


Figure 28 : NVR Application Menu

To Start Live Monitoring



*At the NVR Start Menu

1. Click on “**Live Player**” >> Click on “**Play**” >> Click on “**96 Channels**” or “**54 Channels**” or “**24 Channels**” or “**6 Channels**”

The **Setup Live Monitor** window will pop up as the figure below.

*At the **Setup Live Monitor** window

2. Select a **Monitor Screen** by clicking at the tab below
3. Click “**Start Live**” button to start. It may take few minutes to get ready depending on the channel counts.

Figure 29 : NVR Application – Live Player

TIP

In the **Setup Live Monitor** window, you can see the devices layout at the left table. Click on any of the devices, its live view will be displayed at the right window.

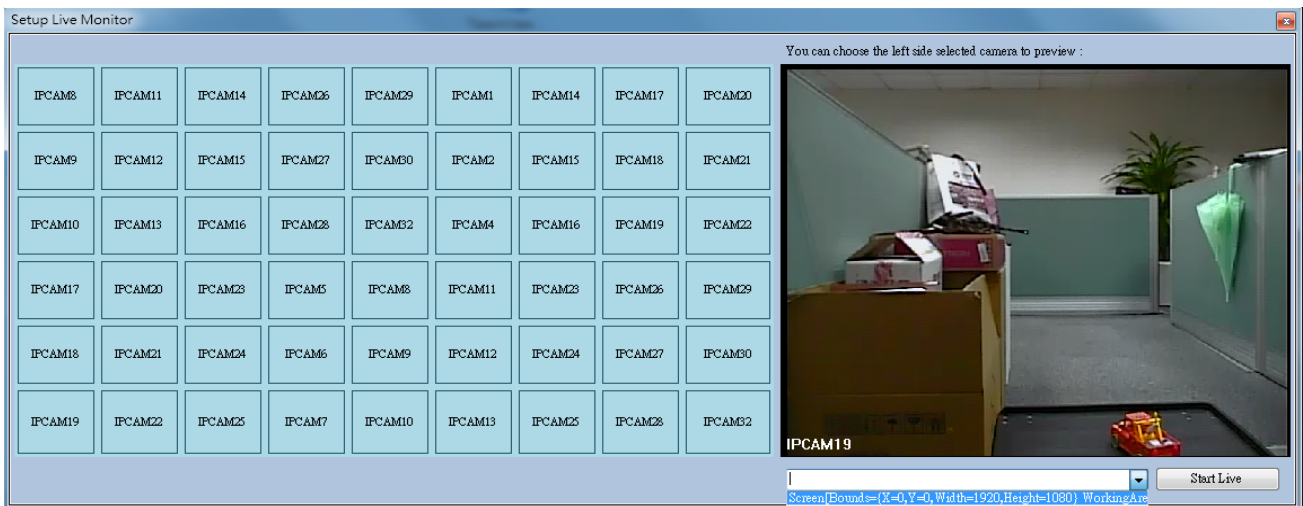


Figure 30 : NVR Live Player – Setup Live Monitor

5. The Live monitoring screen will be displayed (see figure below – it is 96CH live monitoring).



Figure 31 : 96CH Live Monitor

To Stop Live Monitoring

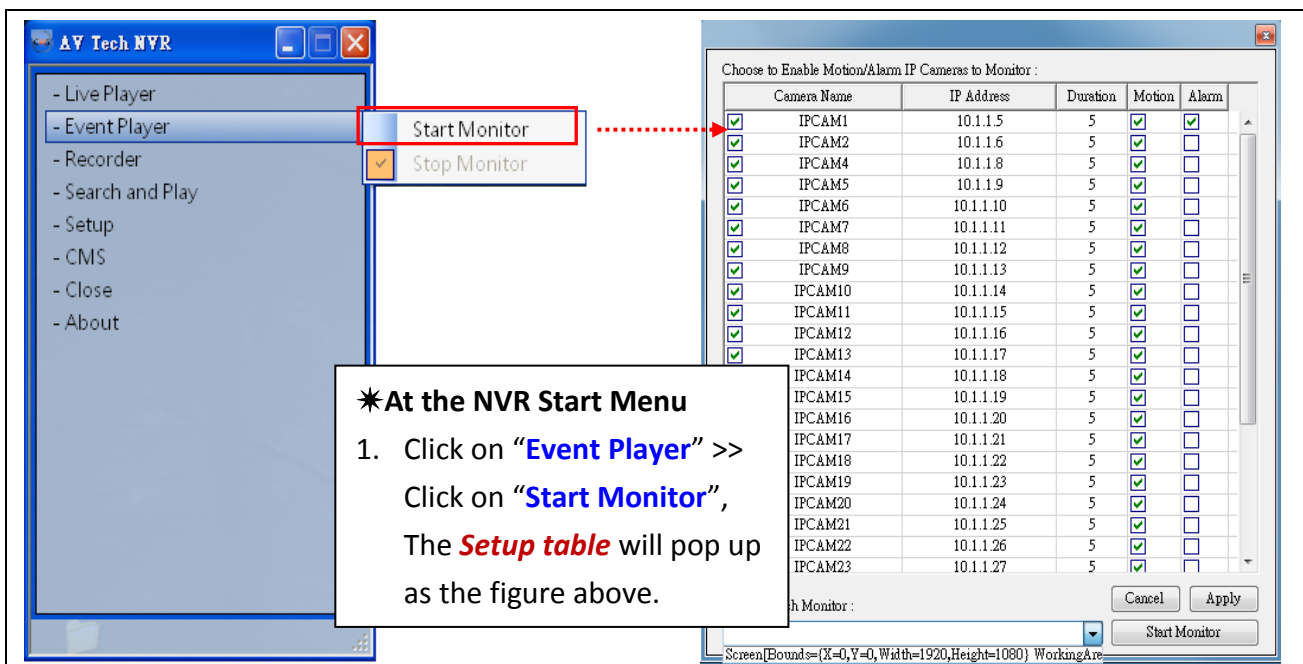
***At the NVR Start Menu**

1. Click on “**Live Player**” >> Click on “**Play**” >> Click on “**Stop**”. The Live monitoring screen will be closed.

Event Player

Event Player is for you to activate motion trigger and alarm trigger for monitoring. Please follow the instructions below.

To Start Event Monitoring



*At the Setup Table

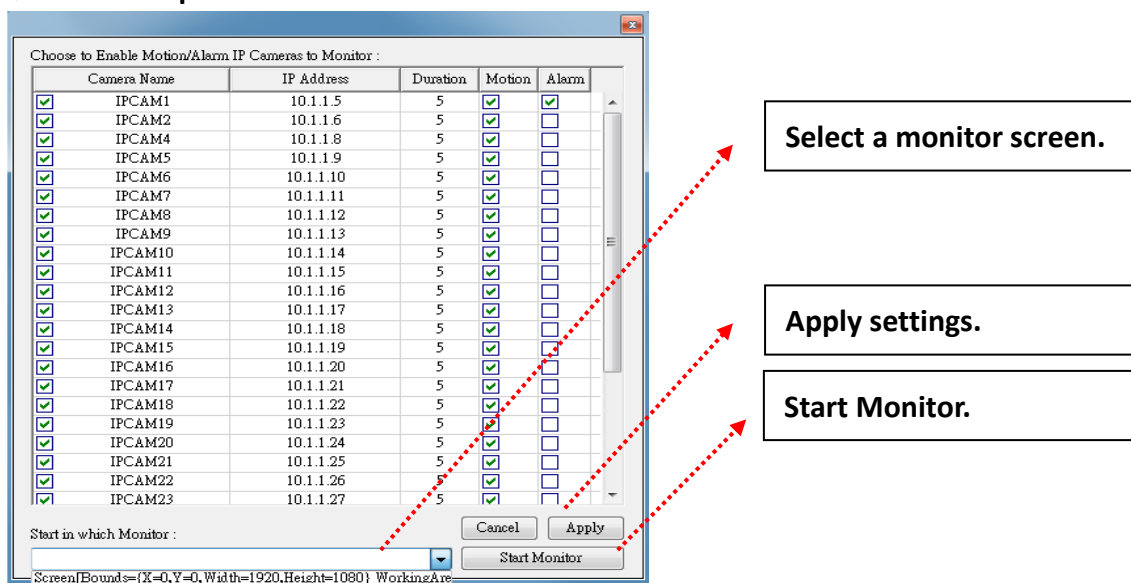


Figure 32 : NVR Event Player Setup

1. Select IP Cameras from the table by ticking at the checkbox of target devices you want to monitor.
2. Select **Actions** (motion and alarm trigger) by ticking at the checkbox of the chosen devices >>
3. Click “**Apply**” button to enable the settings >>
4. Select a **Monitor Screen** from the drop-down list by clicking at the tab of **Start in which Monitor:**.
5. Click “**Start Monitor**” button to get **Event monitoring** started. It may take few minutes....

TIP

You can also use **CMS-Wizard >> IP Camera** settings to activate Motion and Alarm trigger. Please refer to **Managing CMS Wizard >> Managing IP Cameras**.

6. The Event monitoring screen will appear and display live event when there is any trigger occurred (see figure below)

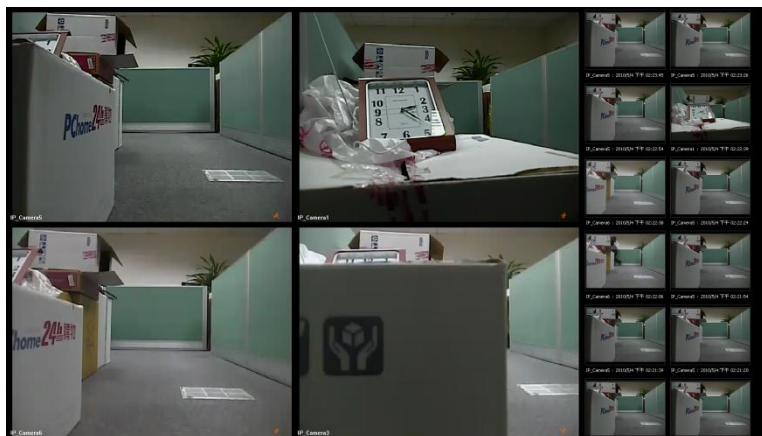


Figure 33 : NVR Event Live Monitoring

NOTE

1. Current Event monitoring supports maximum 4-split screen at one time.
2. When a motion or an alarm occurred, it will be auto-detected and display at the left screen. The device name of the detected action will be shown with the monitoring screen.
3. There will be a snapshot of the trigger when you start **Event Recorder** at the same time. The snapshots will be shown as thumbnails with device name and time at the right screen.
4. You can also search and play the trigger list in **CMS** and **CMS-Wizard >> Event Log Query**.

To Stop Event Monitoring

***At the NVR Start Menu**

7. Click “**Event Player**” >> Click “**Stop Monitoring**”. The Event monitoring screen will be closed.

Recorder

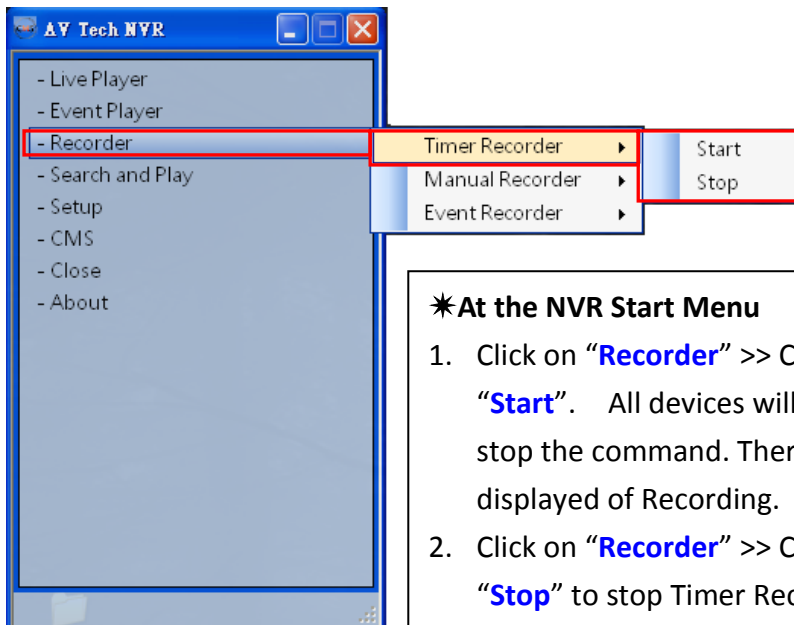
In Recorder command, you can choose to start recording by **Timer Recorder**, **Manual Recorder**, or **Event Recorder**. Please read the instructions below.

NOTE

Please be aware that you can start ONLY one Recorder at one time.

Timer Recorder

Timer Recorder is for you to record of all devices by schedule – which you setup in **CMS-Wizard >> NVR Setting >> Record Setting**.



***At the NVR Start Menu**

1. Click on "**Recorder**" >> Click on "**Timer Recorder**" >> Click on "**Start**". All devices will start recording by schedule until you stop the command. There will be no window or monitor screen displayed of Recording.
2. Click on "**Recorder**" >> Click on "**Timer Recorder**" >> Click on "**Stop**" to stop Timer Recorder.

Figure 34 : NVR Timer Recorder

Manual Recorder

Manual Recorder is for you to record of all devices continuously.

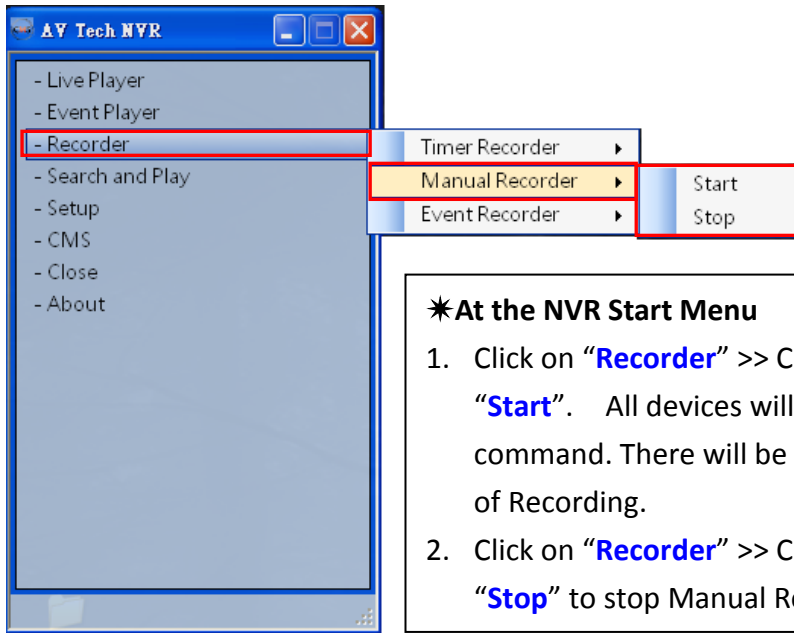


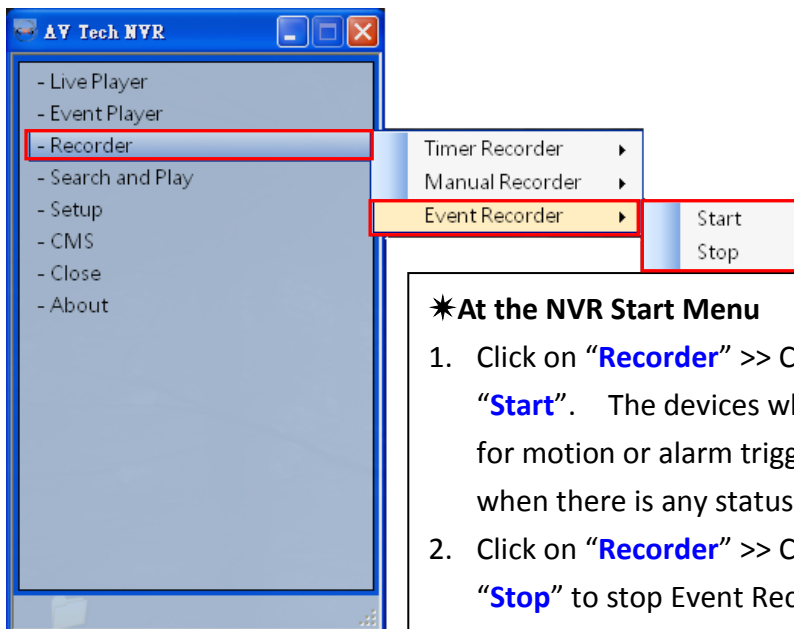
Figure 35 : NVR Manual Recorder

*At the NVR Start Menu

1. Click on “**Recorder**” >> Click on “**Manual Recorder**” >> Click on “**Start**”. All devices will start recording until you stop the command. There will be no window or monitor screen displayed of Recording.
2. Click on “**Recorder**” >> Click on “**Manual Recorder**” >> Click on “**Stop**” to stop Manual Recorder command.

Event Recorder

Event Recorder is for you to record of selected devices when there is any status or event occurred.



*At the NVR Start Menu

1. Click on “**Recorder**” >> Click on “**Event Recorder**” >> Click on “**Start**”. The devices which are activated actions and selected for motion or alarm trigger will start recording automatically when there is any status or event occurred.
2. Click on “**Recorder**” >> Click on “**Event Recorder**” >> Click on “**Stop**” to stop Event Recorder command.

Figure 36 : NVR Event Recorder

Search and Play

Search and Play is for you to find playback files – if there is any – and play the record or download the file. Please read the instructions below.

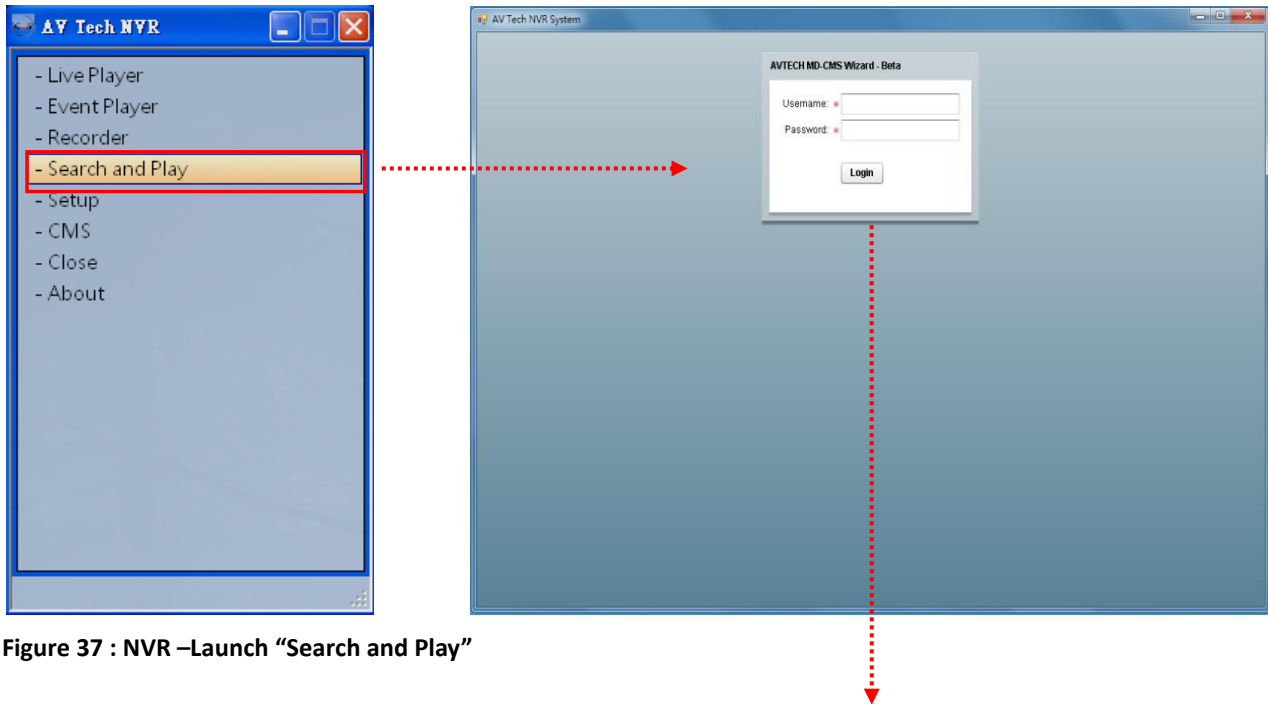


Figure 37 : NVR –Launch “Search and Play”

*At the NVR Start Menu

1. Click on “**Search and Play**”, the web page of **Search and Play** will be launched. Use the same login account and password of CMS-Wizard to log in.
2. For **Search and Play** operation, please refer to **Managing CMS Wizard >> Managing Search and Play**.

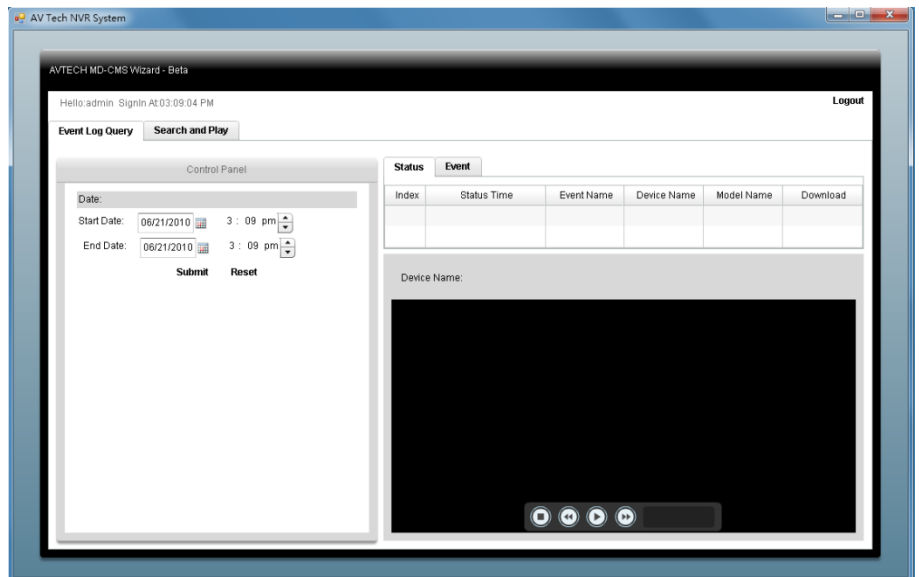


Figure 38 : NVR – Search and Play

Setup

Setup is a quick launch to CMS-Wizard.

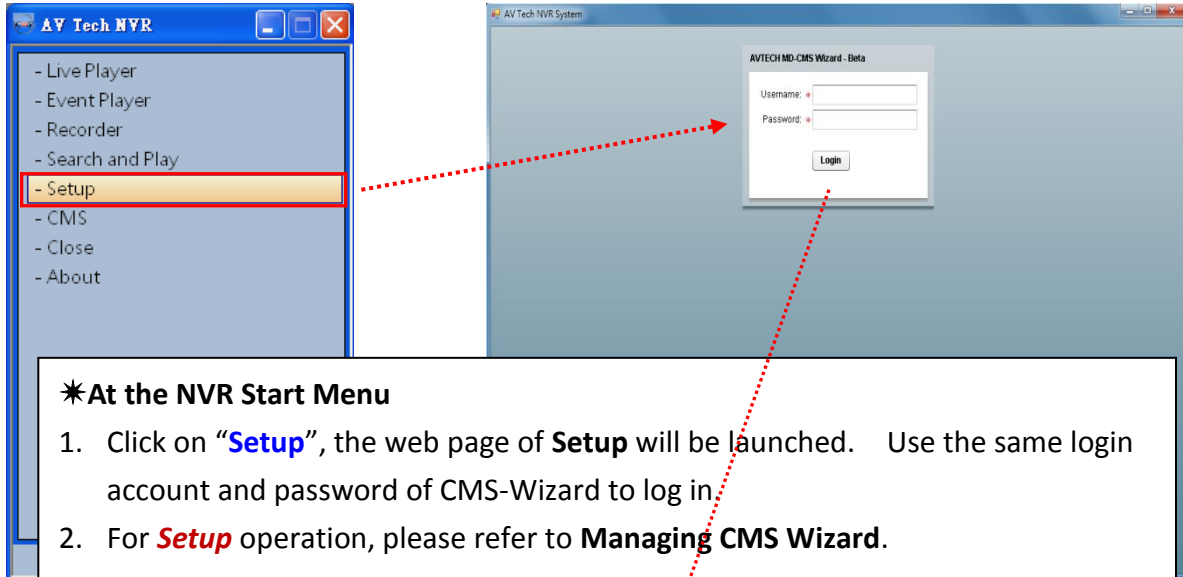


Figure 39 : NVR - Launch "Setup"

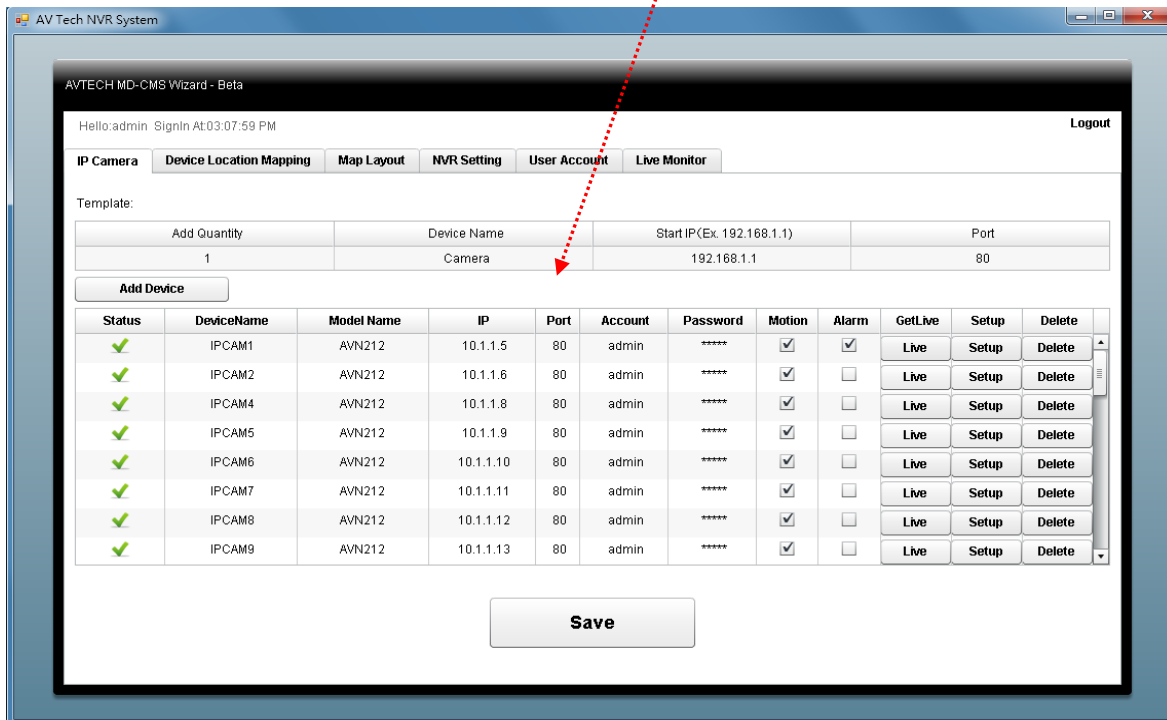


Figure 40 : NVR - Setup

CMS

CMS is a quick launch to CMS web service. We will describe CMS web service in the next section.

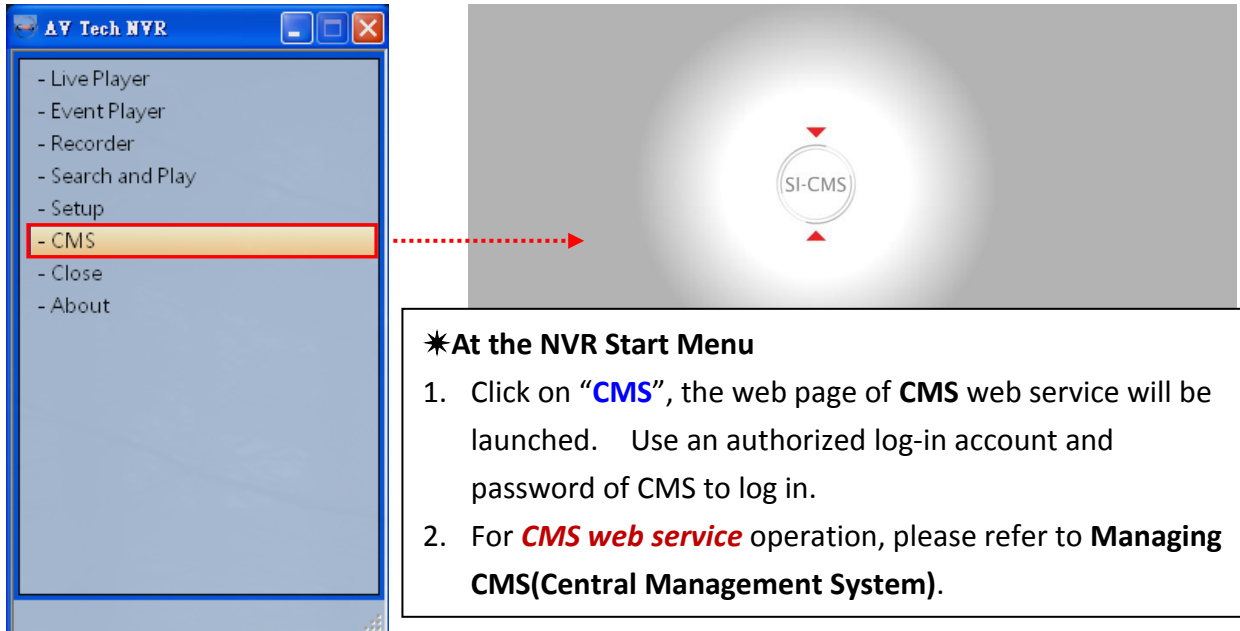
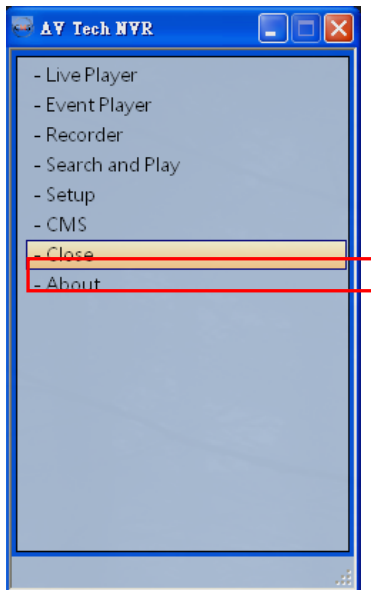


Figure 41 : NVR – Launch “CMS web service”

Close



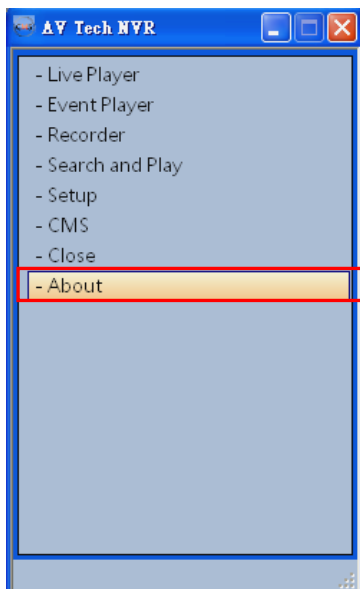
*At the NVR Start Menu

Click on “**Close**”, the NVR application and all running command (including Live Player, Event Player, Recorder) will be closed.

Figure 42 : Exit NVR Application

About

In About you can find current version information of NVR system.



*At the NVR Start Menu

1. Click on “**About**”, the version information appears.
2. Click “**OK**” and the message window will be closed.

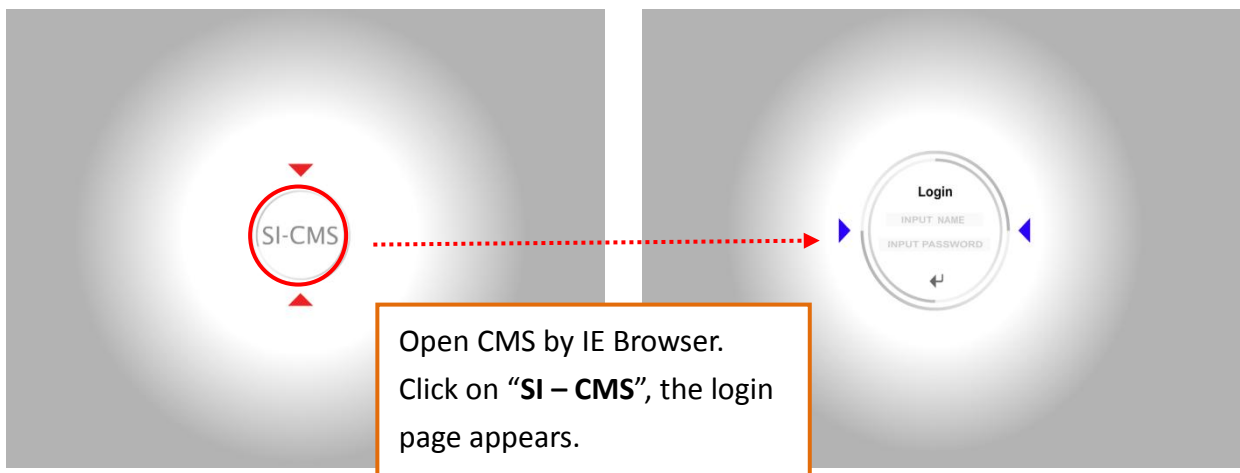
Figure 43 : NVR Version Information

CMS Web Service

AVTECH Central Management System (CMS) is a web-based GUI for all authorized users to do E-map monitor, Event monitor, and devices control.

Logging in CMS Web Service

1. Open CMS by IE Browser. Click on “SI – CMS”, the login-page appears.



2. Type a login **user account** at **INPUT NAME** pane and the **password** at **INPUT PASSWORD** pane. Then Click on “” at the page or press “**Enter**” key by your keyboard. The access page appears.
3. Click on “**Click Me**” to log in CMS web service or it will also redirect to the CMS main page in 10 seconds.

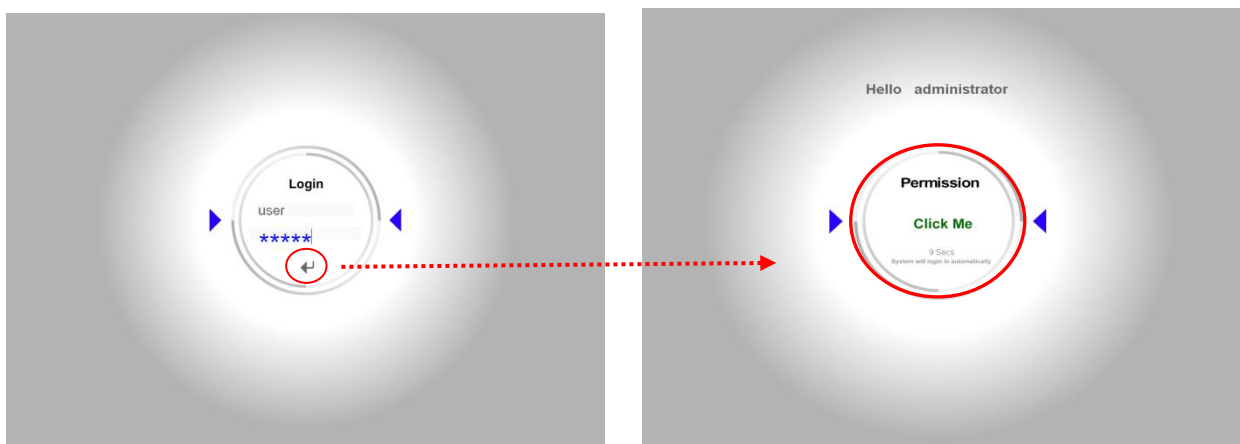


Figure 44 : CMS Web Service Login Page

4. The CMS web service main menu appears (see the figure below).

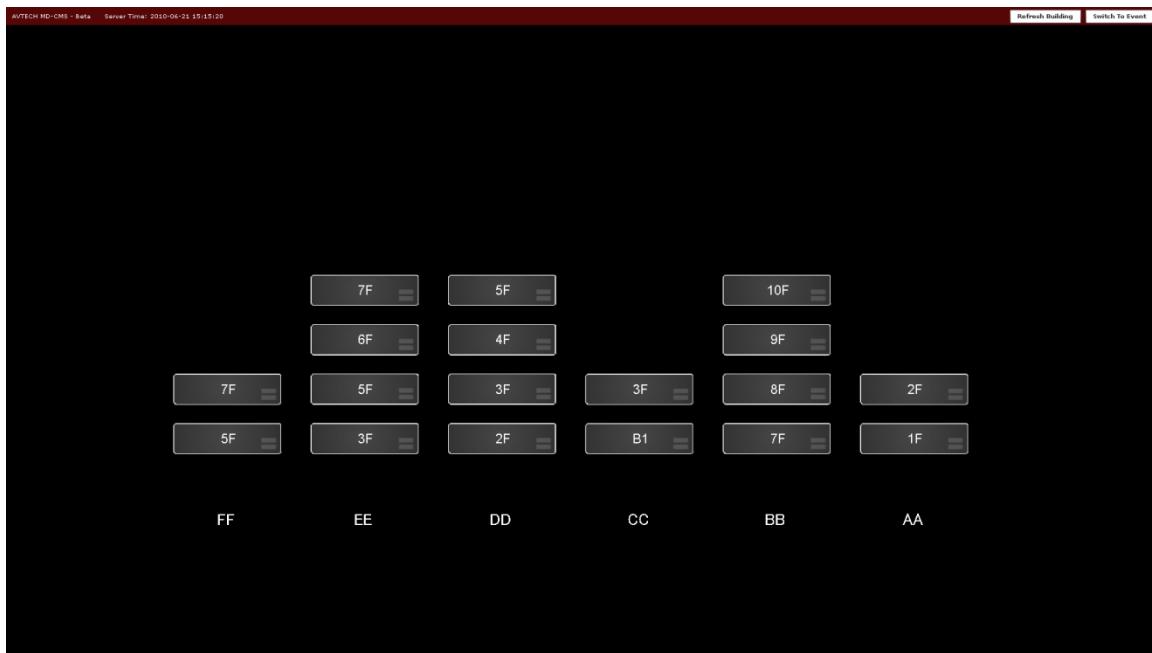


Figure 45 : CMS Web Service Main Page

CMS Main Menu

At CMS main menu, you can run the E-map monitoring and review playbacks by the status/event trigger list. Moreover, if you are using devices with special functions like PTZ or Smart Zoom ...etc, it is also allowed to control devices by the control panel. Please read the following descriptions.

Information Bar



Figure 46 : CMS Web Service Information Bar

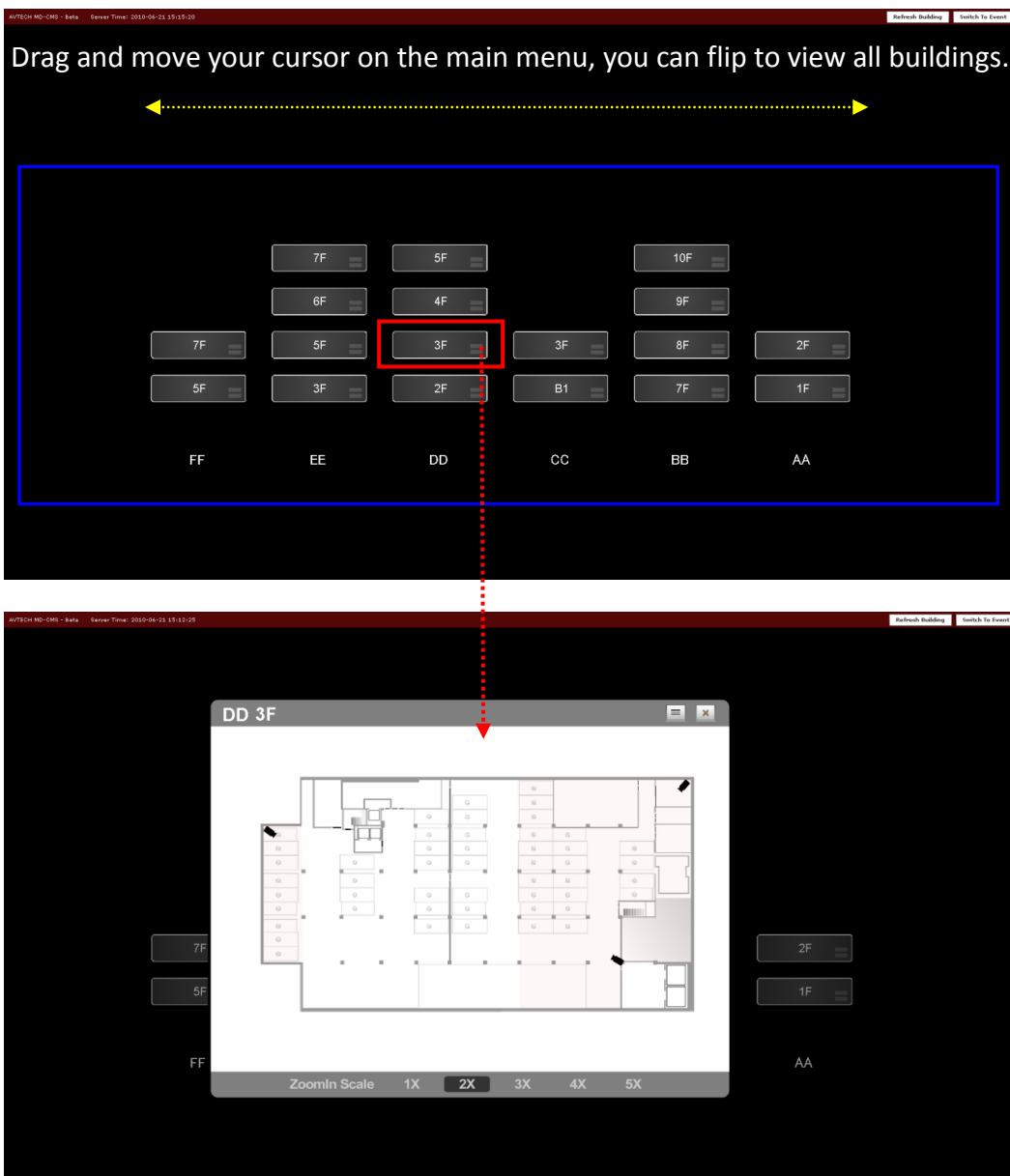
1. Display current system date and time.
2. Click **“Refresh Building”** button after you creating or modifying Buildings/Floors/Areas and meanwhile keeping CMS web service connected.
3. Click **“Switch To Event”** button at the main menu to switch to Event monitoring.
4. If you are at Event monitoring, the button at step 3 will be **“Switch To Status”**. Click **“Switch To Status”** for switching back to main menu.

E-map Monitoring

In CMS web service main menu, there are buildings and floors shown as blocks for you to monitor all devices easily by E-map management.

Live View

1. Here list all buildings and floors you created in CMS-Wizard. Double-Click on a floor and the map of this selected floor will pop up. I click on **Building DD >> 3F** as example.



- In this map, there are areas indicated as light-red polygons and devices location shown as camera icons. Click on a camera icon and then its live view will start playing at the left “Live” window and a thumbnail displaying at below. Double-clicking on “Live” window or the thumbnail, it will turn to full screen display.

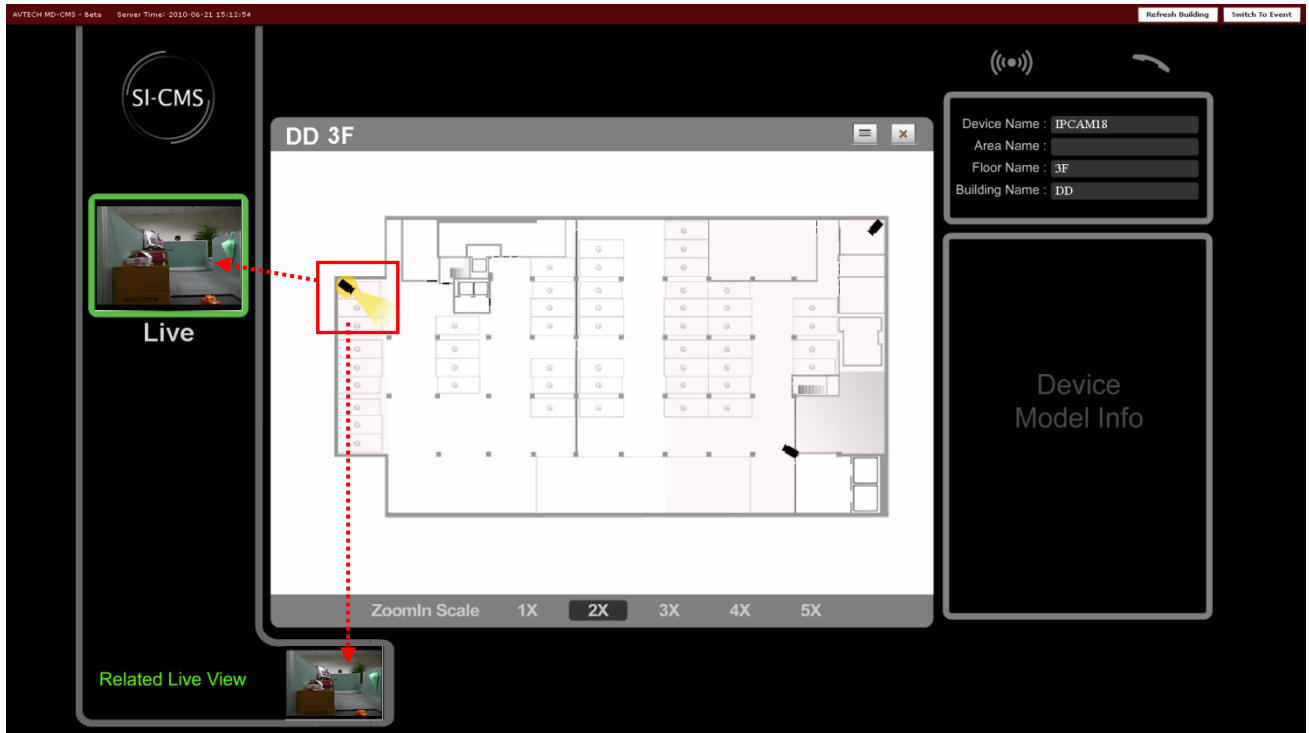


Figure 47 : CMS Web Service E-map Monitoring

Group View

- If you double-click on an area at the map, the selected area will be indicated and all devices belonged to the area will be also selected too. All live view of the selected devices will be displayed at below as thumbnails, and at the left “Live” window displaying one of them. The one which is displayed live view will be indicated as a camera icon with yellow light  Click on a camera icon directly to switch the live view of device.

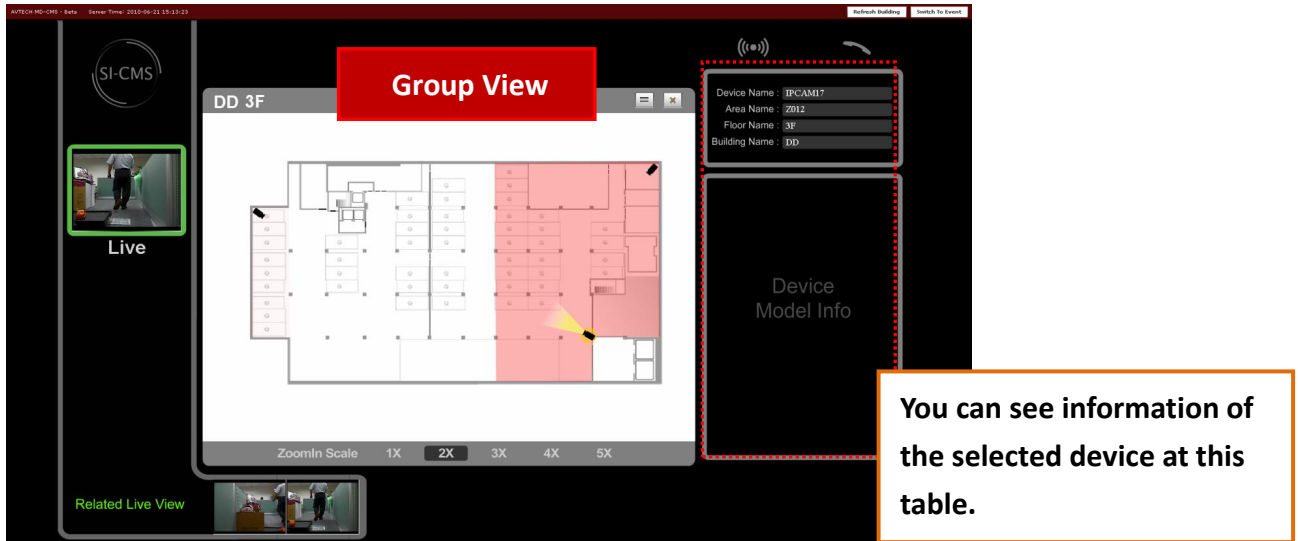


Figure 48 : CMS Web Service – E-map Group Live View

Switch Tab

4. Click on the button  at the popup window to switch monitor mode – by E-map or by List.

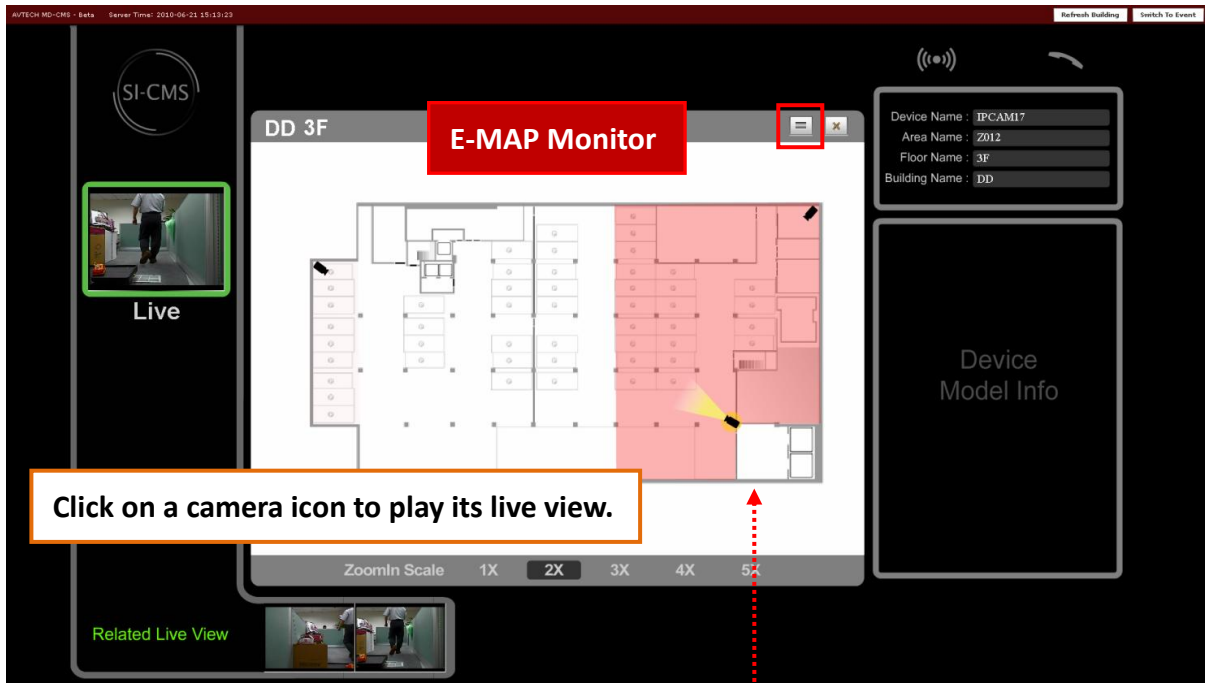


Figure 49 : CMS E-map Monitoring

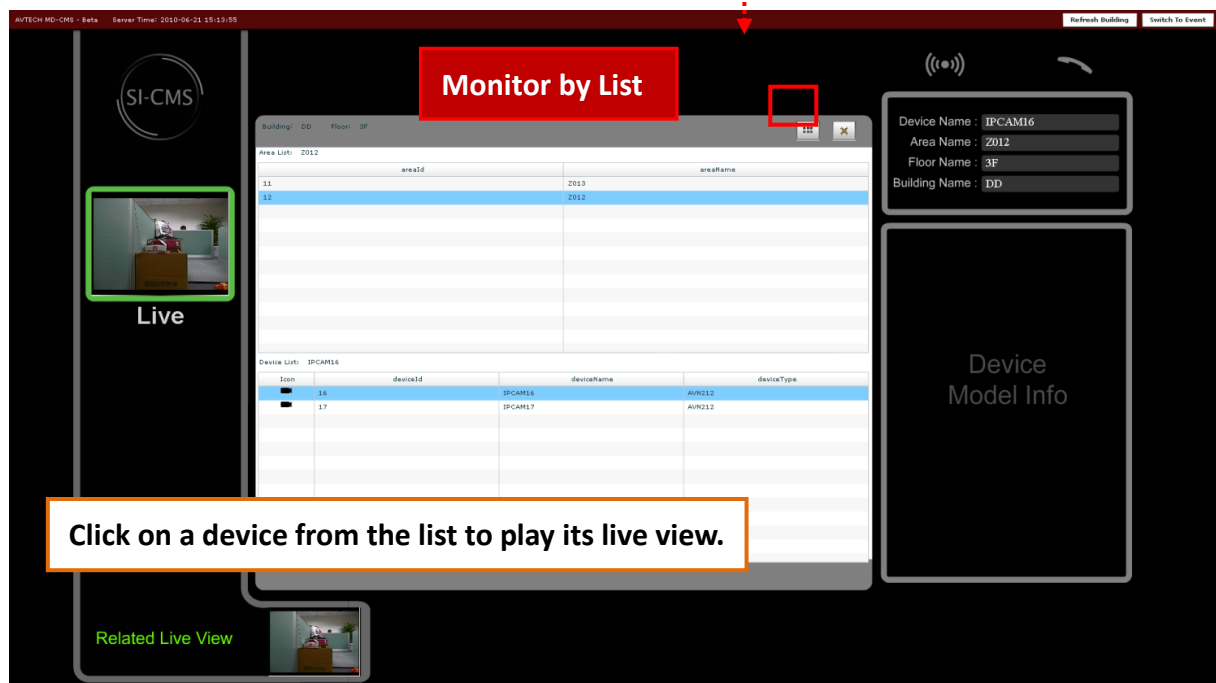


Figure 50 : CMS Live Monitor by List Selection

5. To close the popup window, click the button  at the popup window of E-map.

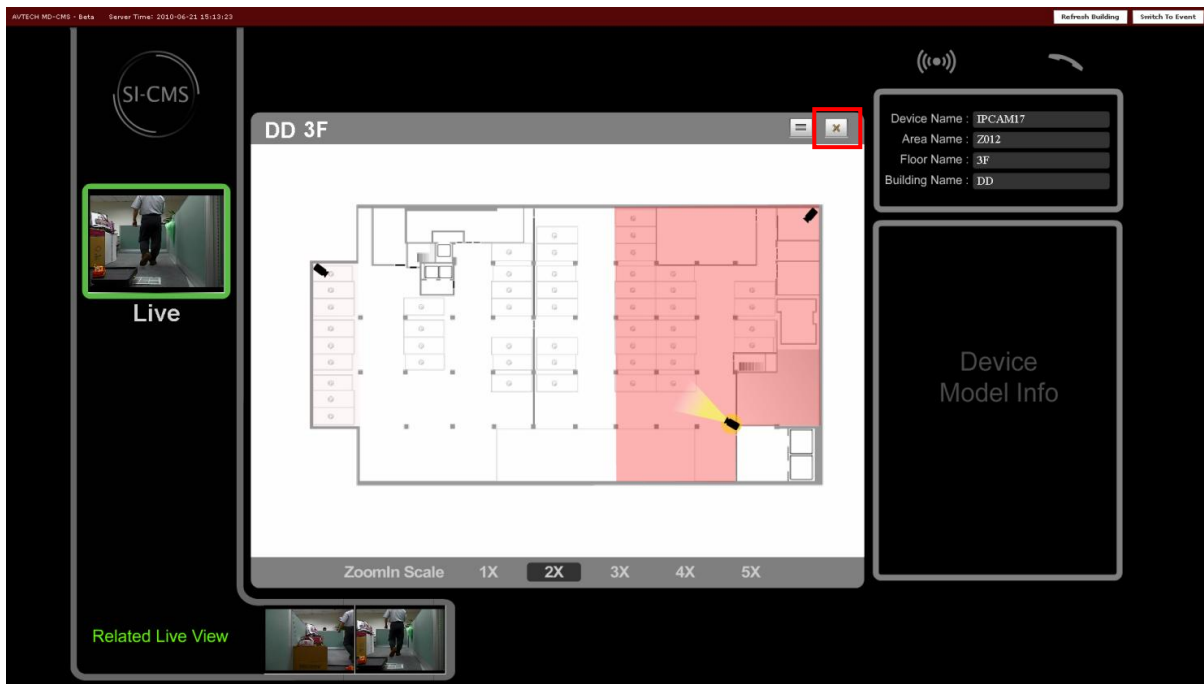


Figure 51 : Close CMS E-map popup window

Devices Control Here I am going to show you how to do the devices control.
The function keys of Control Panel will be different of devices.

A PTZ(Pan-Tilt-Zoom) Device

1. When you select a PTZ device, there will be a Control Panel contained with special functions of PTZ controls.

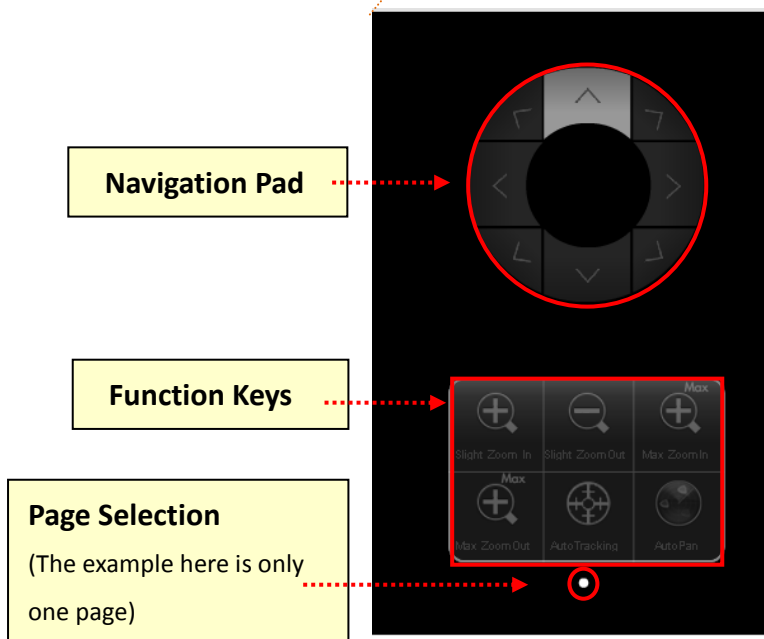
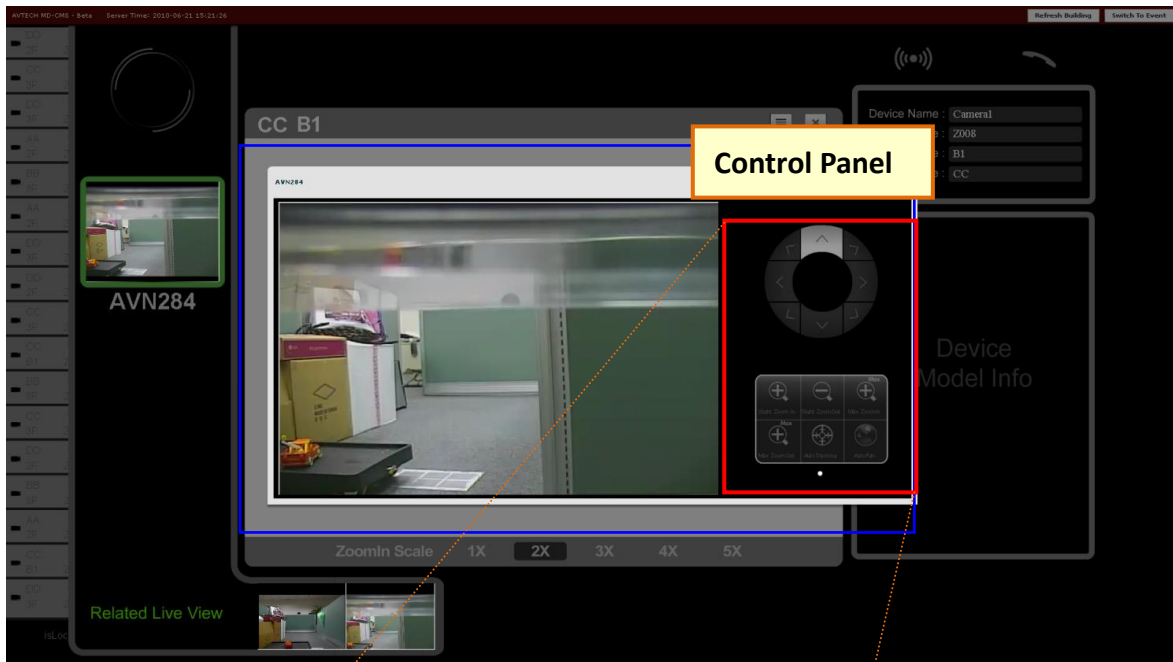


Figure 52 : CMS Device Control Panel

Hot-Point Control

2. At a Live view popup window, you can click and drag as Hot-Point Control for quick Zoom in or Zoom out. Please see the figures below.

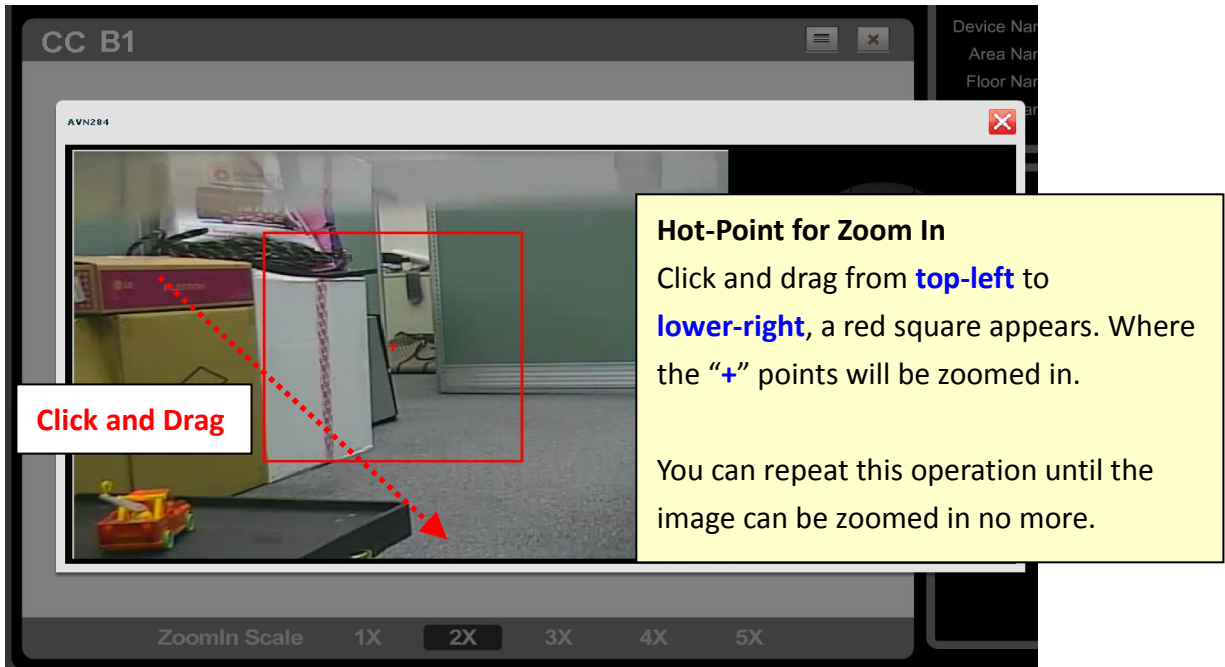


Figure 53 : Hot-Point for Device Control – Zoom In

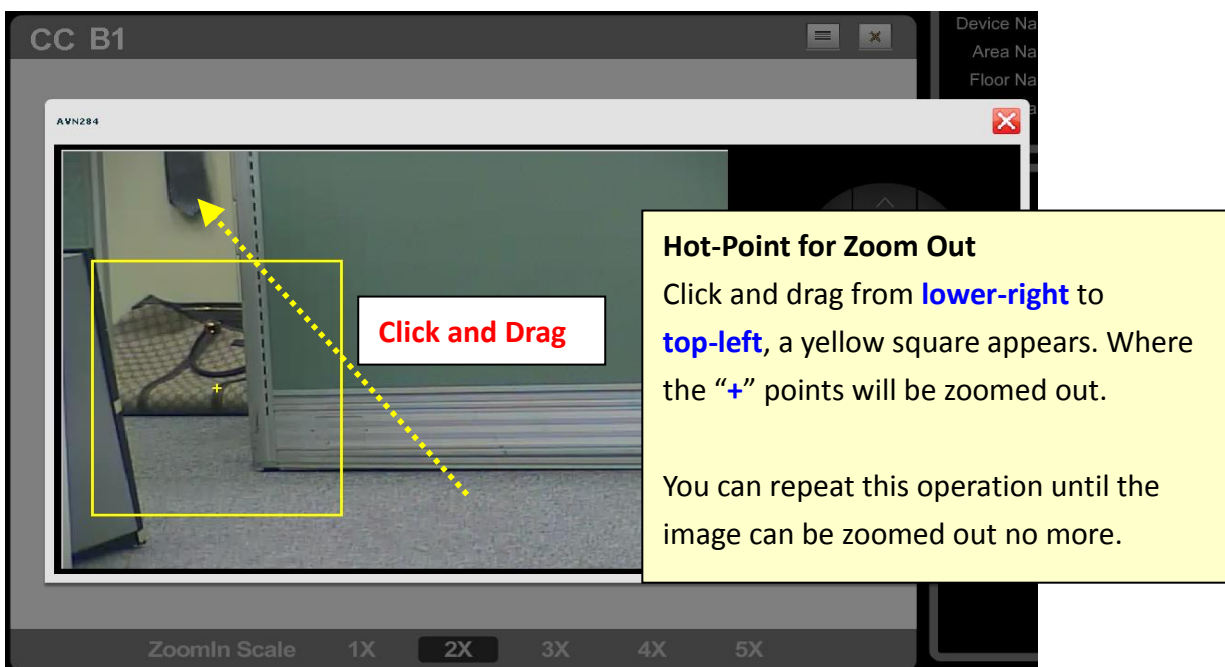


Figure 54 : Hot-Point for Device Control – Zoom Out

Trigger List

Trigger List at CMS main menu displays only daily motion detection status which are recorded by NVR Event Monitor.

1. When you **start Event Player by NVR application**, and, If there is **any motion trigger occurred in the day**, the status will be also listed at the main menu as figure below.

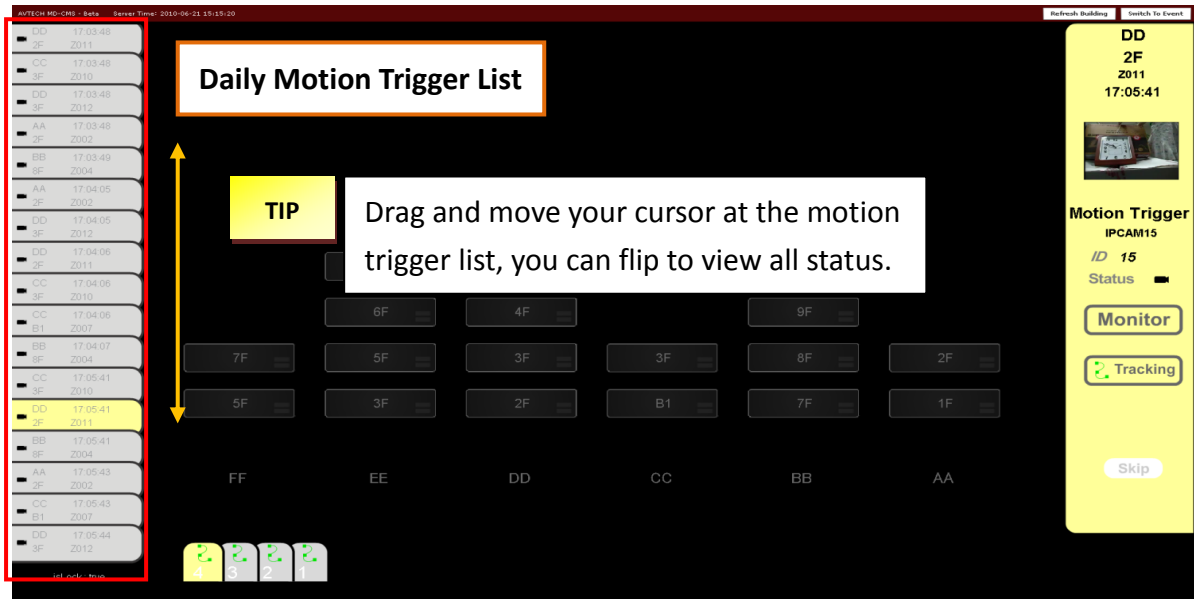


Figure 55 : CMS Main Menu – Status Trigger List

2. Click on a status from motion trigger list, information of the selected detected motion will be shown at the right of CMS main menu.

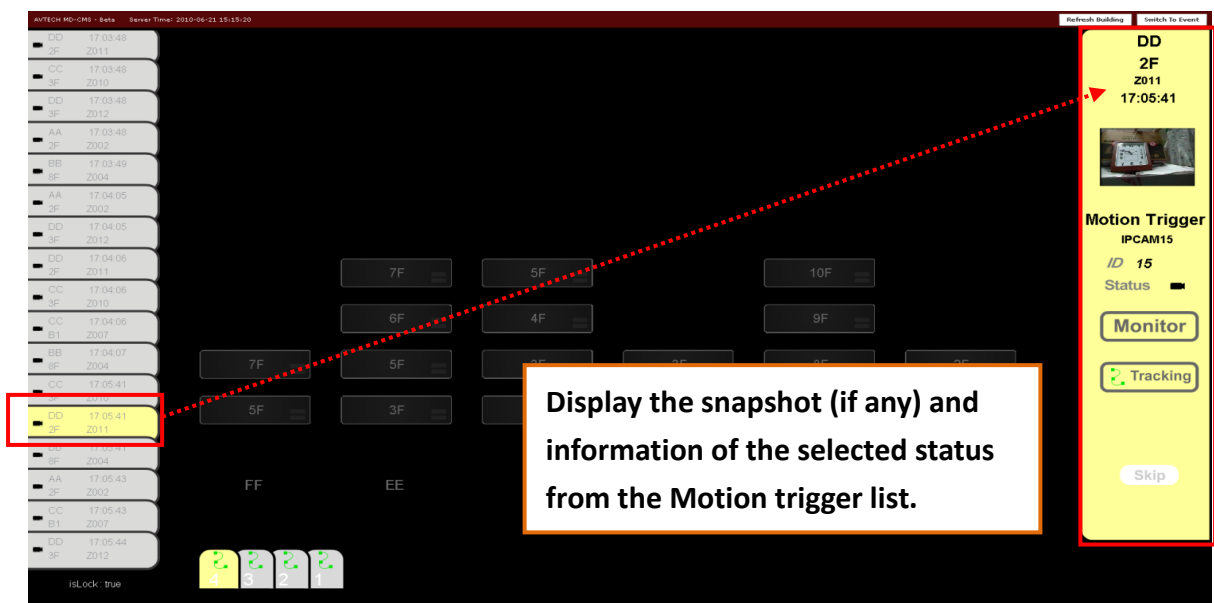
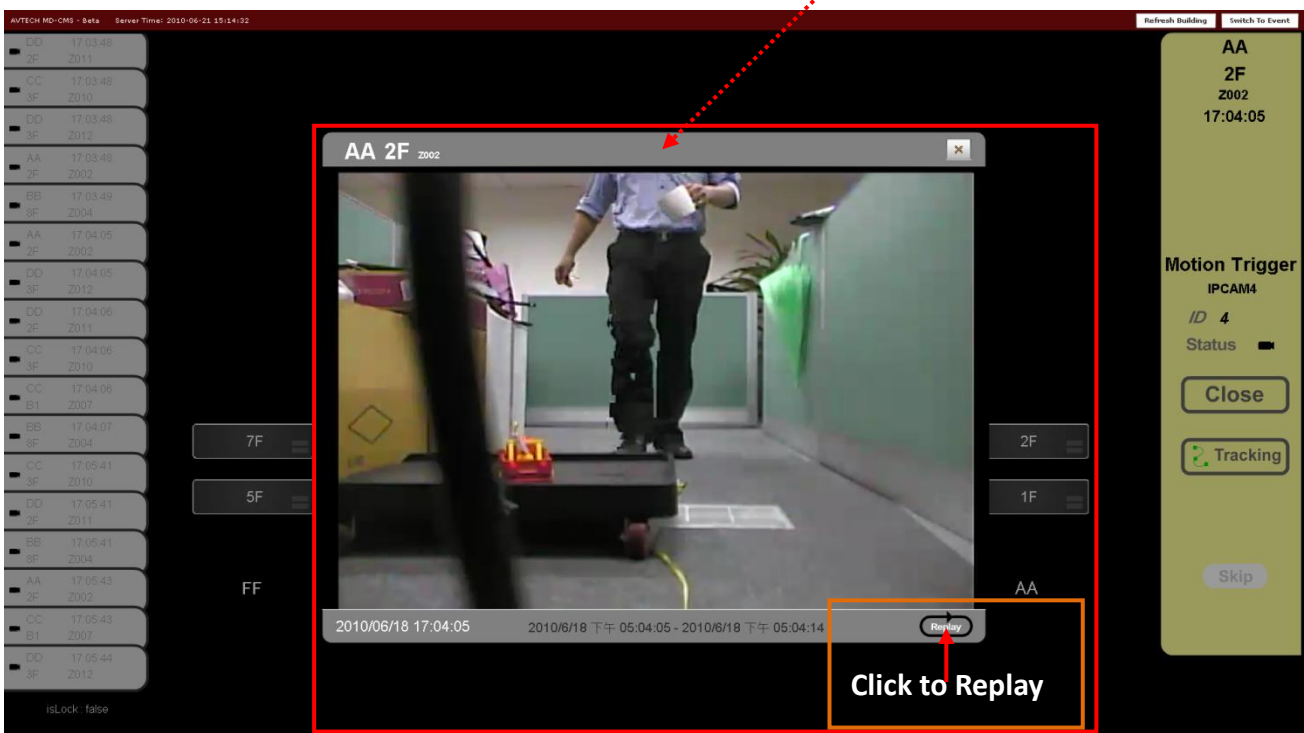
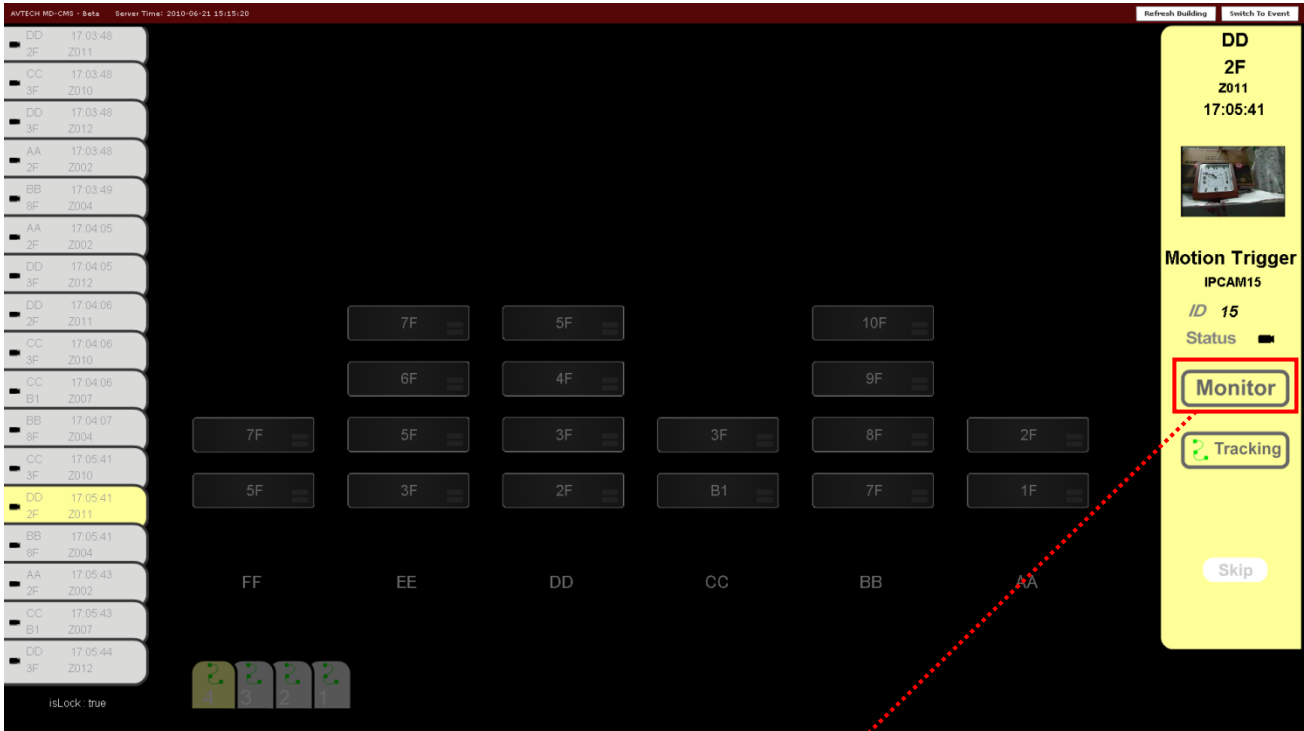


Figure 56 : CMS Status information and Snapshot

NOTE

Please be aware that only when you start Event Recorder (**NVR Application >> Recorder >> Event Recorder >> Start**) there will be snapshots of motion triggers. To search old trigger playbacks, please use **CMS-Wizard >> Search and Play** or **CMS-Wizard >> Event Log Query**.

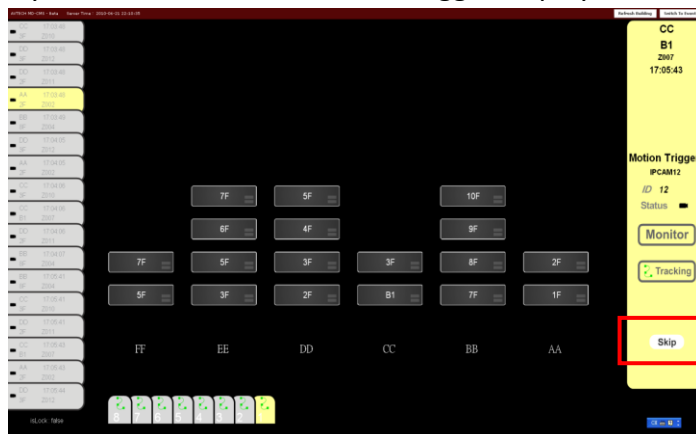
- Click on **"Monitor"**, the playback will start displaying at a popup window.



- Click on **Tracking** to mark selected devices as quick search. The tracking data will be listed at below and marked in numbers. Click on a tracking number, and the tracked status will be prompt selected.



- If you want to hide the motion trigger display table, click on **Skip**.



Hide Motion Trigger Information Display



Event Monitoring

Event Monitoring is a prompt alarm notification for you when there is any alarm (for example, break-in or smoke detection) occurred. Where an alarm occurred will be displayed automatically on map.



Figure 57 : CMS Event Monitoring