NUVICO EasyNet - VMS Lite

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I. Installation

Before installing NUVICO EasyNet - VMS Lite to a PC, please make sure that the PC meets below requirements. If the PC does not meet the requirements, NUVICO EasyNet VMS Lite may not run properly.

1. PC Requirements

	Minimum
CPU	Intel Core ™2 Duo 2.4GHz
Memory	2GB
Video Card	512MB
Resolution	1280 x 1024
HDD storage space	10GB or higher
OS	Windows XP SP2
Others	DirectX 8.1 or Higher

2. Installing NUVICO EasyNet - VMS Lite

Please note that in order to install and utilize the software, the PC must be logged in as an administrator account. Run x.x.x.x Setup.exe file in the NUVICO EasyNet – VMS Lite Setup CD.

Click "I Agree" to proceed.
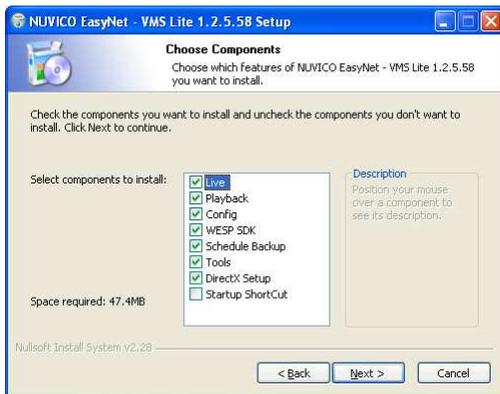
Choose the components and press "Next". Note that WESP SDK must be selected.
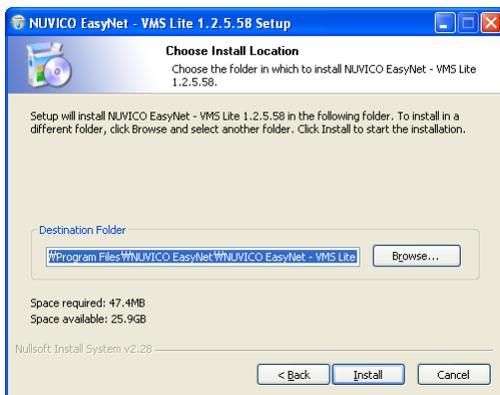
Select folder and press "Install".

II. Basic Operation

1. Login

Run NUVICO EasyNet – VMS Lite Live to begin. The default User Name of NUVICO EasyNet – VMS Lite is "Administrator" and the password is "admin". Click OK to run the software.

The default User ID and Password for APEX DVR is "*admin*" and "*admin*".

2. Live
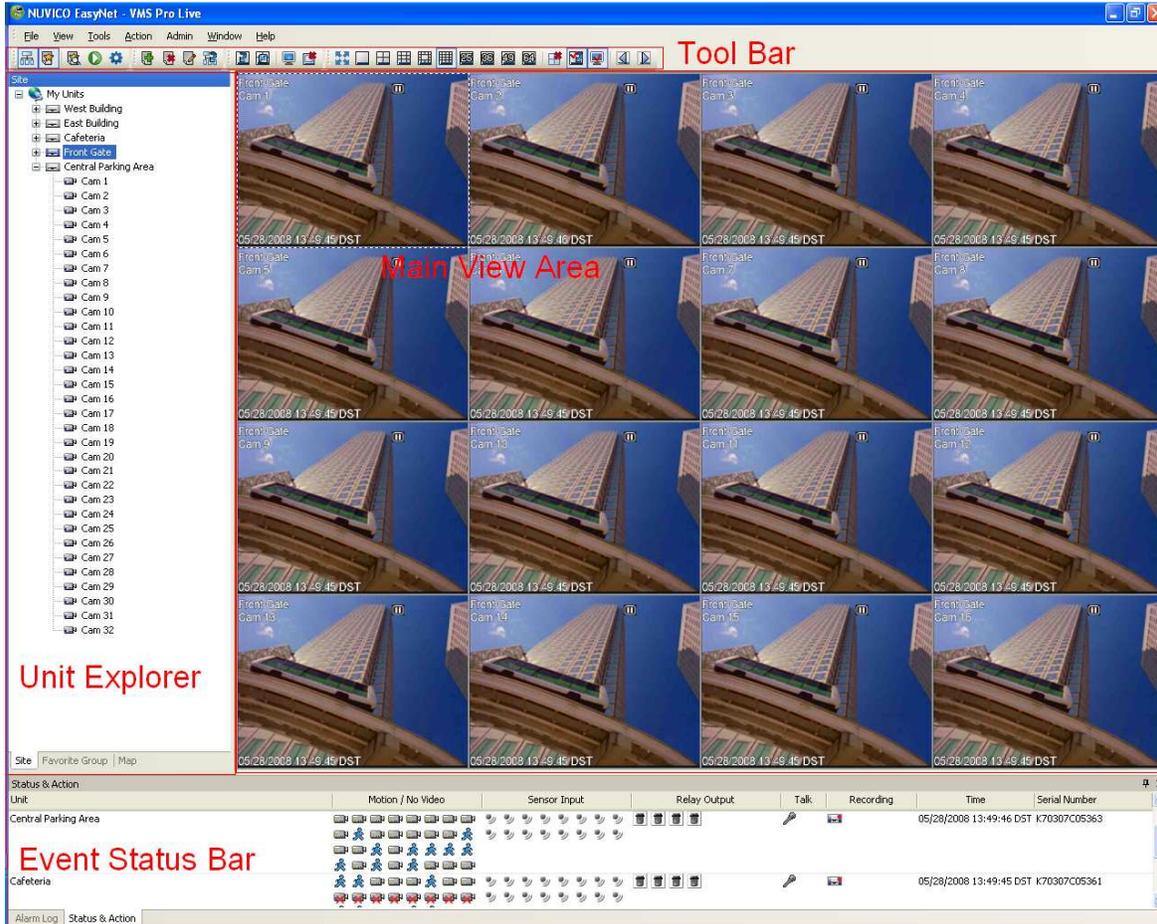
A. Main View Area

Live video is displayed up to 64 cameras in the Main View Area.

B. Unit Explorer

Site : To make connection to DVRs
Favorite Group: To view different cameras from different DVRs for more efficient monitoring.
Map: To monitor with e-map for special applications

C. Event Status Bar

Status & Action : Provides activities and information such as motion, video loss, date & time of the DVRs in real time. Also it allows controlling relay output as well as to activating /deactivating two-way audio.
Alarm Log: Provides events on DVRs in real time.

Icons in Unit Explorer and Event Status Bar

ICON	DESCRIPTION
	My Units
	Folders

	Connection fail
	Login fail
	Connected
	Event occurred
	Currently being viewed
	Camera off/on
	Relay out off/on
	Sensor on/off
	Microphone on/off
	Motion
	Video detected/video loss
	Authentication fail
	Configuration changed

D. Tool Bar

Icons in the tool bar are to activate and deactivate numerous function s that NUVICO EasyNet – VMS Lite offers. Please refer to below chart for each icons and its function.

ICON	FUNCTION
	Show/hide Unit Explorer
	Show/hide Event Status Bar
	Expand to full screen
	Open Playback
	Open Configuration tools
	Event search
	To add DVRs and favorite groups
	To edit connection information or favorite groups
	To delete DVRs and favorite groups.
	Save creent display as favorite group
	Refresh Unit Explorer
	Auto sequence on/off
	Alarm pop-up on/off
	Stop video streaming for all monitors
	Stop video streaming for current monitor
	Split screen selection 1/4/9/13/16/25/36/49/64
	Use current monitor as sequential monitor
	Use current monitor as alarm popup monitor

3. Connecting to APEX DVRs

To connect to an APEX series DVR, in the site mode, click ![icon] icon in the tool bar or right mouse click in Unit Explorer Area then click Add Unit. Add Unit window will appear as shown below.

For local area connection
If a DVR is connected in local area network, simply click Auto Detect. DVRs information will appear in the box on right hand side. Thereafter, select the DVR from the list, type User ID and Password, followed by clicking OK.

For remote connection
Type the public IP address or hostname.connectip.net in the Address box. If the port number has been changed from the default, 7000, click Advanced to input the appropriate port number. Otherwise, click Find. When connection is ready, Unit Information will appear as illustrated above if not, please check the network setting. Input the User ID and Password then click OK to connect. Please note that the default user ID and the password is "admin".
Once the connection is made, click on ![icon] icon in the Unit Explorer to view the cameras.

4. Playback

To access recorded data of DVRs, click on ⏵ icon in the tool bar or click NUVICO EasyNet VMS – Lite Playback icon on the desktop.
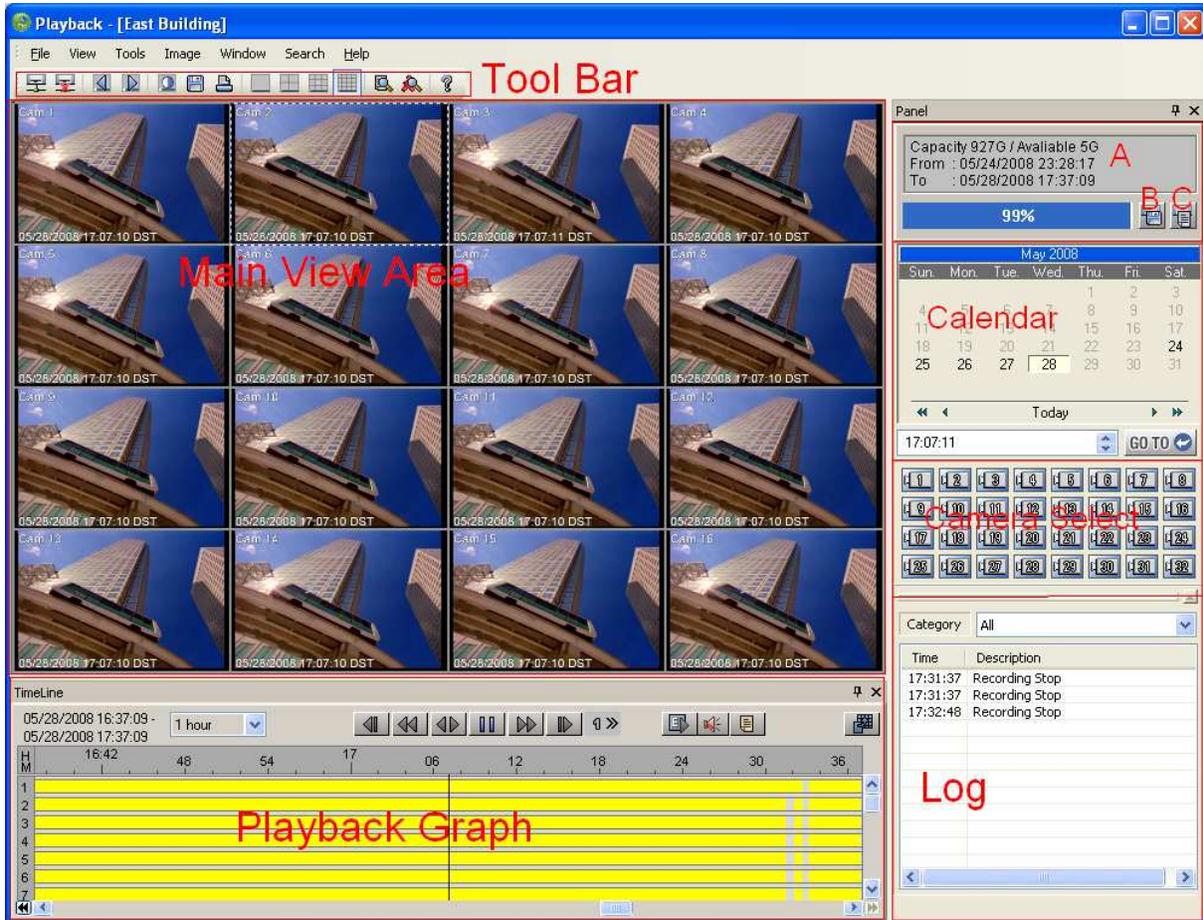
A. Main View Area

Up to 16 cameras are displayed during playback

B. Playback Graph

Yellow : Continuous
Green: Motion / Pre&Post Event
Red: Alarm

C. Log

Displays event log for selected duration

D. Camera Select

To select or deselect cameras from remote playback streaming

E. Calendar

When connected to a DVR, recorded dates will turn black. Click desired date to playback afterwards; input the hour, minutes, and seconds then click GO TO icon to begin to play.

F. (A) HDD Status
Displays total & available HDD status of the DVR as well as the earliest and the latest recorded data.

G. (B) Backup Utility
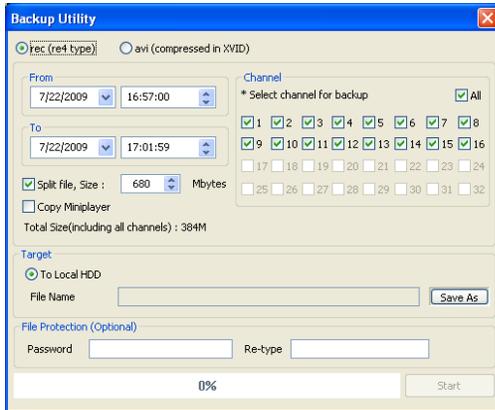
Select Backup Utility to download recorded data to PC. NUVICO EasyNet – VMS Lite also supports downloading recorded data as proprietary format as well as avi. Select the date, time, and cameras and then input the file name. For avi download, please note that only one camera can be downloaded at a time. Additionally, it may require installing a codec to play the file on Windows Media Player. Downloaded file may be password protected. If desired, input the password and verify for security purpose.

H. (C) Backup Log
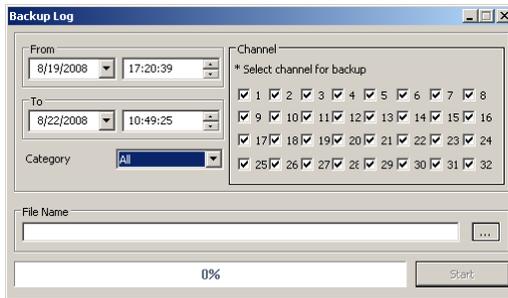
Backup Log is to download DVR's log to PC.

I.   Tool Bar Icons

ICON	FUNCTION
	To connect to a DVR
	To disconnect
	To view previous group
	To view next group
	To control brightness and contrast
	To capture a snapshot
	To print an image
~	Split screen selection 1/4/9/13/16
	Not Supported
	Smart search
	To check the version of NUVICO EasyNet – VMS Lite Playback

J. Playback Control Icons

ICON	FUNCTION / DESCRIPTION
◁‖ / ‖▷	Step reverse/forward
◀ / ▶	To change playback direction as well as speed
‖‖	Pause
▣▶ / ▣▶	To advance to the next event
◁»	Playback speed and direction
▦	To view the graph of selected cameras only
◀×	Audio control, if available
▤	Not supported

5. Configuration Tools
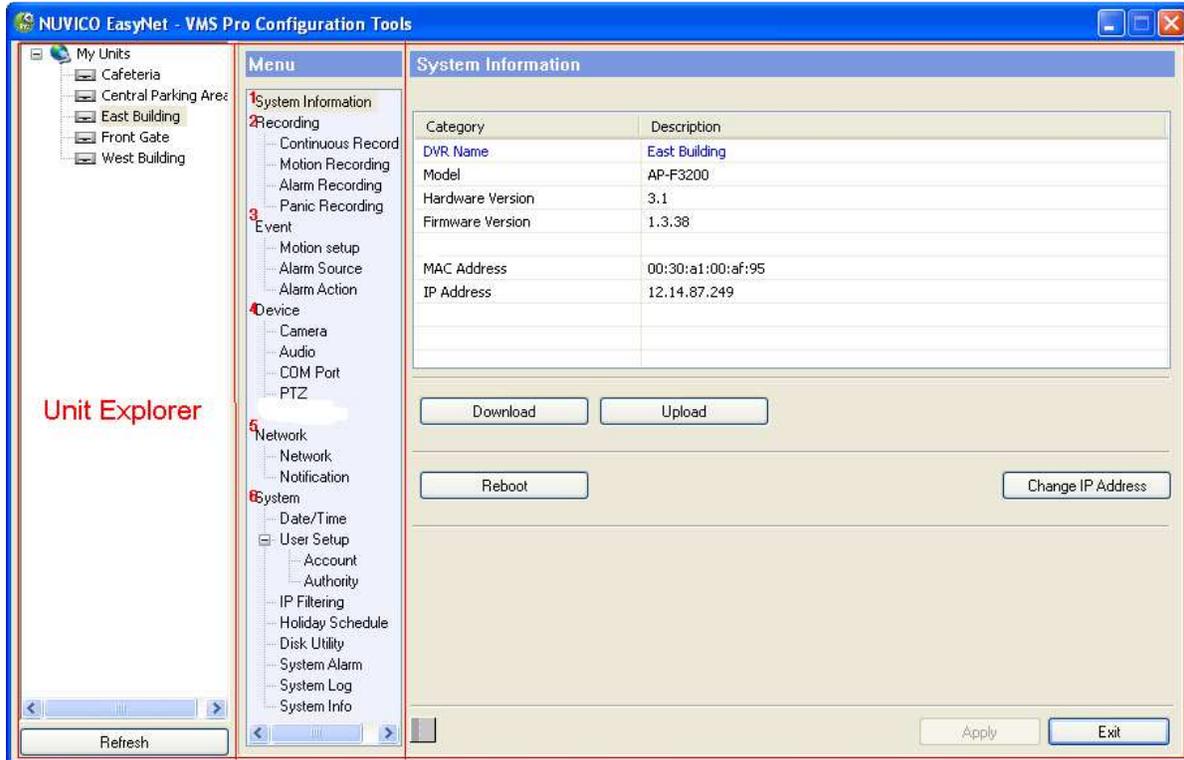
Configuration Tools is to change settings on the DVRs. Click ⚙ icon or run NUVICO EasyNet – VMS Lite Configuration Tool on the desktop.

A. Unit Explorer

Unit Explorer displays all the DVRs that are currently connected. Select the DVRs icon to change settings.

B. Menu

1. System Information: Information such as DVR name, model, H/W version, F/W version, MAC address, and IP address are displayed. Additionally, features such as download/upload settings, rebooting DVR, and changing IP address are supported.
2. Recording: To configure record setting of the DVR
3. Event: To configure event related functions such as motion setup, alarm source, and alarm action
4. Device: To configure settings related to camera, audio, COM Port, and PTZ
5. Network: To configure network settings of DVR such as port, bandwidth limits, and e-mail notification
6. System: To configure System related settings. Date/Time must be changed from the DVR.

III. Advanced Operation

This section will cover advanced features that NUVICO Easy – VMS Lite offers. This instruction manual will assume that the section on basic operation has been read and understood thoroughly.

1. Live

A. Favorite Group

Favorite Group may be utilized when there are multiple DVRs connected. By creating favorite groups, monitoring different cameras from numerous DVRs may become more efficient. To begin, select Favorite Group tab in the Unit Explorer. There after click Add icon. Add Favorite Group window will appear as illustrated below.
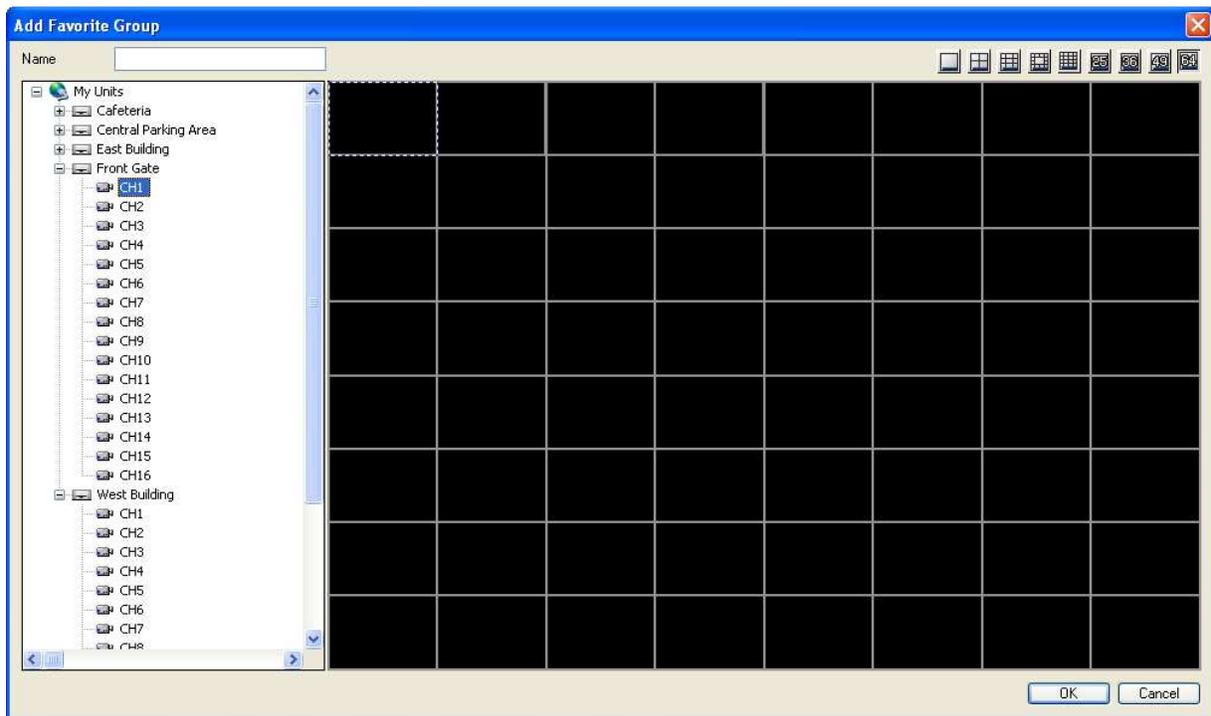
First, input the name of the group. Depending on the number of cameras will be added, select the appropriate split screen mode, then drag and drop the camera icons from the Unit Explorer. When finished, click OK to complete. Multiple favorite groups may be created; simply, repeat the procedure.

B. Monitoring Control

 Monitoring Control consists of Caption, Stream, REC Start, Save As, Listen, PTZ, and Close. During live monitoring, right mouse click on a picture, these control options will appear on the screen as illustrated. Please refer to below table for detail information for each feature.

FUNCTION	CONTROL
Caption	OSD such as camera number, DVR name, date/time, refresh rate, number of users, etc.
Stream	If a DVR's encoding priority is set to Recording, NUVICO EasyNet – VMS Lite offers dual- codec ,MPEG-4 or MJPEG, to optimize live monitoring.
REC Start	To begin record live streaming video to PC's HDD. The maximum duration is 10 minutes.
Listen	To begin hear audio if available
PTZ	Activate/deactivate PTZ control if available
Close	Close connection of selected camera

C. PTZ Control
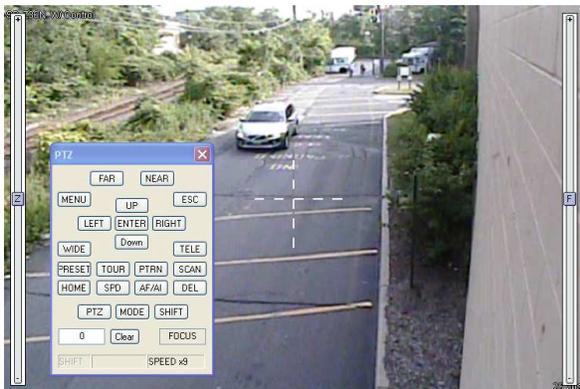
 A cross hair appears in the middle of the screen, click on the picture to Pan and Tilt. Farther the click point from the center of the crosshair, the speed of Pan/Tilt is faster. To zoom In/Out, use mouse scroll or move the mouse to the left or right edge of the picture for zoom and focus control.

The PTZ GUI for VMS share the same button layout as the DVR. A PC mouse can be used to control a PTZ if a mouse is not present. **Some buttons and functions only works with NUVICO PTZ models in NUVICO protocol.**

	DIRECTION: Also used as a directional, enter and esc button in the PTZ menu.

	MOUSE MOVEMENT TRACK: For NUVICO PTZs, a PTZ camera can be moved with the mouse clicks on the picture. The camera will track the mouse movement and change its speed based on the distance of the mouse point from the center of the picture.
MENU	MENU: Access menu of the PTZ camera.
ESC	ESC
TELE WIDE	TELE, WIDE: Zoom in and out. Also used as a enter button on the PRESET, TOUR, PATTERN and SCAN function setup menu.
FAR NEAR OPEN CLOSE ON OFF	FUNCTIONS: Used as an Iris Open/Close during IRIS mode. Used as a focus Far/Near in FOCUS mode. Used as a focus On//Off in AUX mode. In FOCUS mode it can be used as a 'save & exit' button in PRESET, TOUR, PATTERN and SCAN function setup menu.
PRESET	PRESET: Press desired preset number + PRESET button to run a preset. Press this button to open a preset programming menu.
TOUR	TOUR: Press desired tour number + TOUR button to run a tour. Press this button to open a tour programming menu.
PTRN	PATTERN: Press desired pattern number + PATTERN button to run a pattern. Press this button to open a pattern programming menu.
SCAN	SCAN: Press desired scan number + SCAN button to run a scan. Press this button to open a scan programming menu.
HOME	Home: Press 1 + HOME button to run a home function.
SPD	SPEED CONTROL: Press desire number + SPD button to change control speed.
AF/AI	AUTO FOCUS/ AUTO IRIS
DEL	DELETE: Used to delete a preset.
PTZ	PTZ: Enter or Exit from PTZ control mode.
MODE	MODE: Toggles between FOCUS / IRIS / AUX mode.
SHIFT	SHIFT: Press desired number and press this button to program a preset
0 Clear	NUMERIC INPUT BOX: Input numbers to run relative PTZ functions
FOCUS SHIFT SPEED x9	FUNCTION / BUTTON STATUS: Displays the status of the PTZ control and function mode status
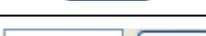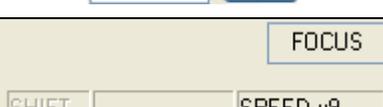
D. Event Search Utility
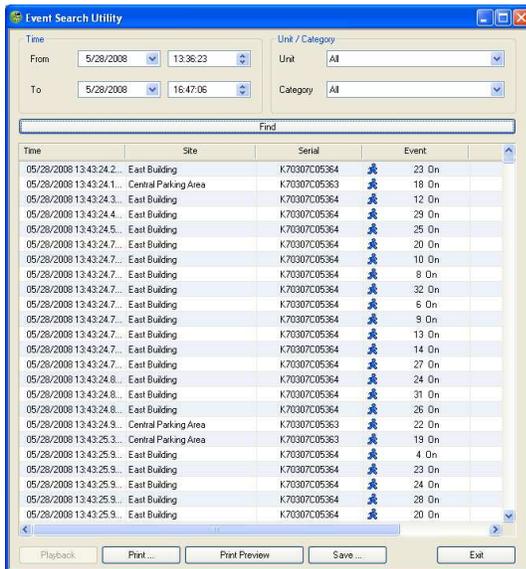
Go to Tools then select Event Search Utility. This is to search events by the event log kept on NUVICO EasyNet – VMS Lite. Select Time, Unit, and Category then click on Find. List of log will be generated as illustrated. Select an event to playback, print, or save. When finished, click Exit to close.

E. Options

Go to Tools -> Options to change configuration of NUVICO EasyNet – VMS Lite.

a. Caption
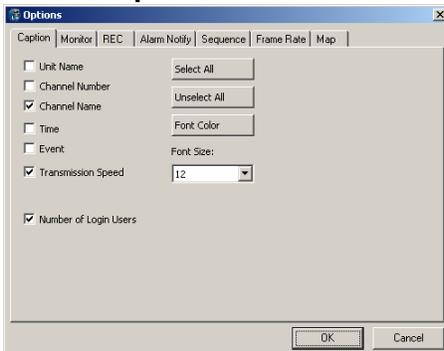
Caption tab is to change settings pertain to OSD settings.

b. Monitor
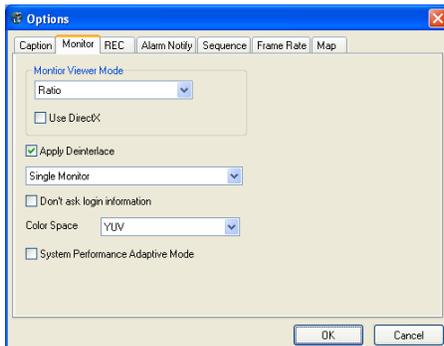
Monitor tab is to adjust monitor related settings. If there are two monitors attached a PC, Dual Monitor mode may be selected to have two Main View Areas.

FUNCTION	DESCRIPTION
Monitor Viewer Mode	Full: Resize the video accordingly to the display size Ratio: Keep original aspect radio Caption Area: Display caption bar
Use DirecX	Use DirecX control. Not suggest for the older PC model
Apply Deinterlace	Use de-interlace for D1 video
Monitor Mode	Use either Single monitor or dual monitor
Don't ask login	Bypass initial login screen for VMS Lite
Color Space	RGB/ YUV color display option. Please see Video card spec for the best performance
System Performance Adaptive Mode	Use SPA mode to prevent system overload. VMS software will operate in minimum display mode(1pps) when CPU or memory of the PC is over loaded.

c. REC

REC tab is to designate HDD for live recording if there is two or more HDDs installed on a PC. Additionally, for live image capture, file format can be selected, BMP, JPG, or eye.

d. Alarm Notify
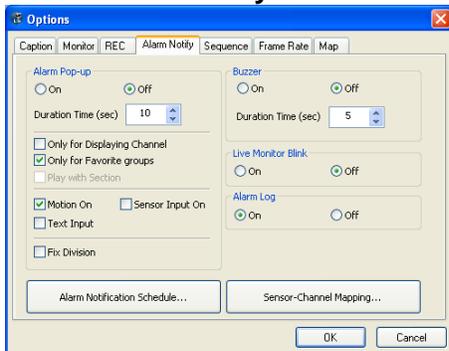
NUVICO EasyNet – VMS Lite alerts users when events such as motion and alarm occur to DVRs by displaying only those cameras on the Main View Area as well as making sound. Related settings can be adjusted on Alarm Notify tab.

FUNCTION	DESCRIPTION
Alarm Pop-up	Activate event pop-up function to display a channel(s) with event based on the duration time
Only for Displaying CH	Apply alarm pop-up only for the channels that are currently displayed
Only for Favorite Groups	Apply alarm pop-up only for the channels that are part of the Favorite Group
Motion / Sensor / Text	Type of event to be used for alarm pop-up
Buzzer	Activate PC buzzer based on the duration time
Live Monitor Blink	Channel with an event blinks during live display
Alarm Log	Log event information
Alarm Notification Schedule	Schedule alarm notification
Sensor-Channel Mapping	Map input sensors with the channels for alarm pop-up

Alarm Notification Schedule
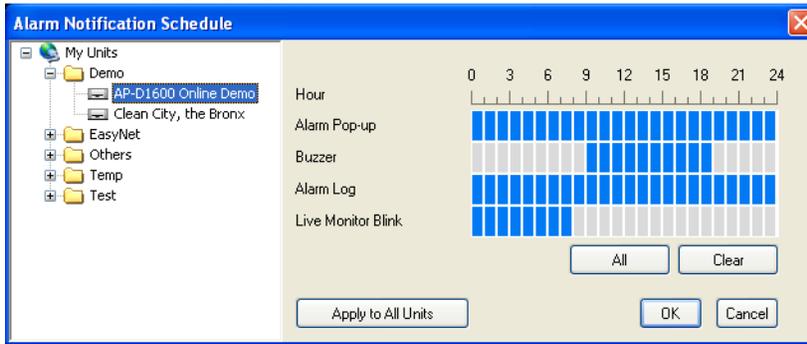
Sensor-Channel Mapping
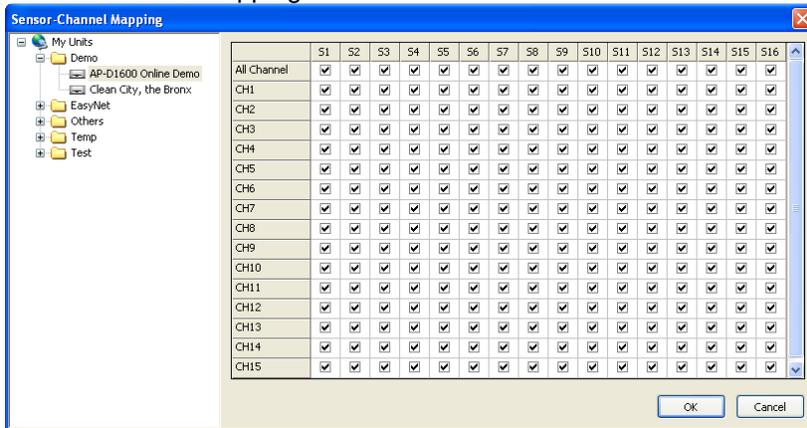
e. Sequence
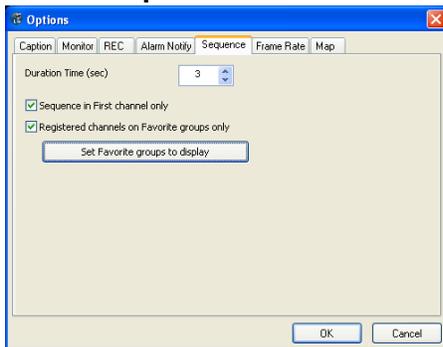
Configure automatic sequence duration. When Monitor 1 Only is checked, NUVICO EasyNet – VMS Lite will sequence cameras only in the first grid in the Main View Area.

FUNCTION	DESCRIPTION
Duration Time	Duration time for channel sequence
Sequence in First channel only	Activate a sequence on the first channel of the live display only
Register channels on Favorite group only	Add / Remove a Favorite group which can be a part of the sequence

f. Frame Rate
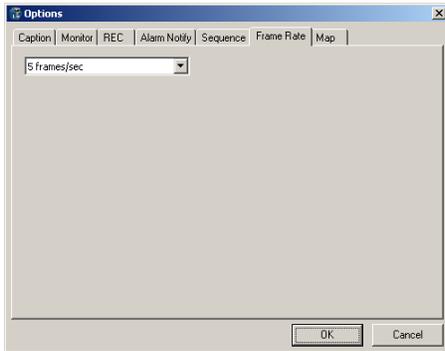
Not supported. Please note that this setting is irrelevant to actual recording rate and the network refresh rate.

g. Map
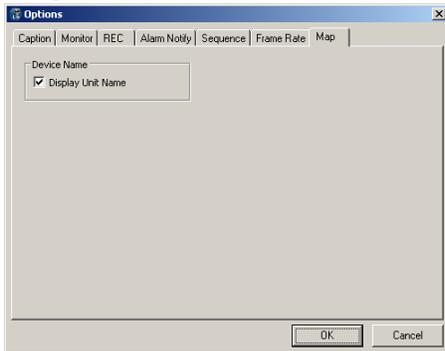
Map tab is to select whether or not display DVRs' names when utilizing Map feature.

F. Users and Passwords

Go to Admin -> Users and Passwords to create, modify, or delete accounts for NUVICO EasyNet – VMS Lite.

G. Map

If a map such as floor plant is available in jpg or bmp file, users can create a map and allocate peripheral devices, cameras, alarm inputs, relay outs, and microphones, on the map. To create a map, click Map tab in the Unit Explorer then click add icon. MapEditor window will appear on the screen; thereafter, open the map file. After the map is displayed, drag and drop the icons from the Unit Tree. When finished, click Save icon to exit.   For efficient monitoring and usage, having dual monitor is highly recommended.

2. Playback

A. Smart Search

Smart Search is to search by change in specific area within the field of view of a camera. To begin, click on Smart Search icon, if the icon is in grey scale, please stop or pause playback. Select the camera and the area, input the range, and click Search. As illustrated below, list of thumbnails will be generated.
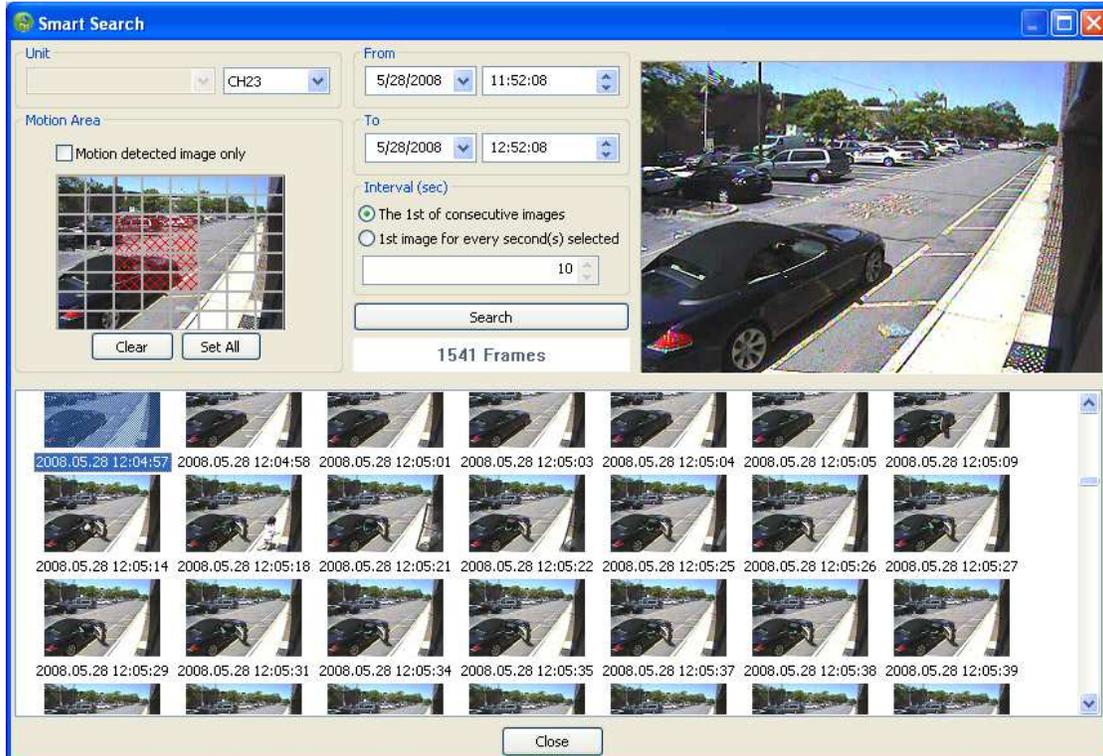
After searching is done, double click on the desired picture to begin playback from particular moment. Otherwise, click Close to exit.

3. Configuration Tools

A. User Authority
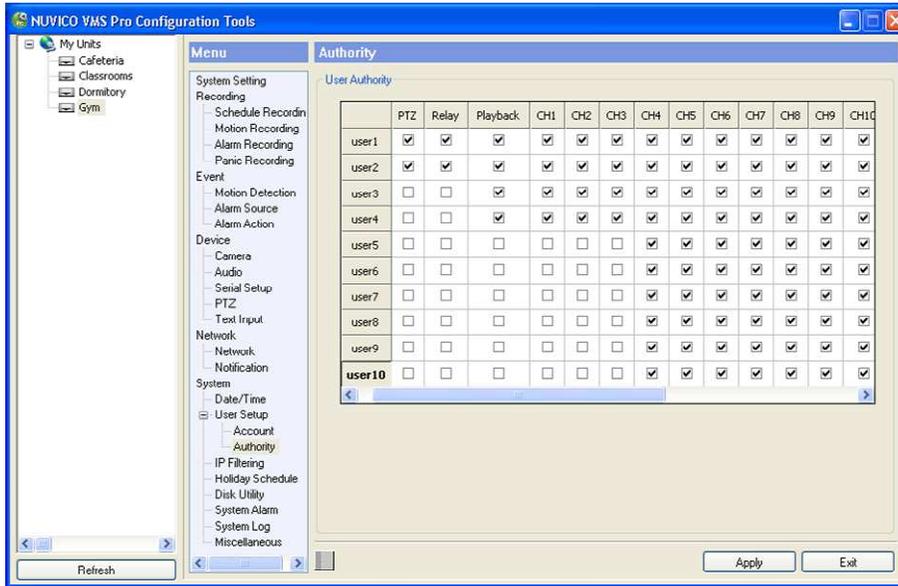
NUVICO EasyNet –VMS Lite offers User Authority, in which up to 10 remote user accounts can be generated. Each user account may be assigned with different privileges including PTZ can relay out control, playback access, as well as specific cameras view only. First, activate user accounts in Account under User Setup. Create User ID and Password; afterwards, click on Authority to assign privileges to created user accounts. Please note that, in order to configure User Authority, the current connection has to be made as Admin.

4. Schedule Backup

NUVICO EasyNet – VMS Lite offers Schedule Backup that allows users to save recorded data to PC's HDD during programmed hours. To open Schedule Backup go to Start - > Programs - > NUVICO EasyNet -> NUVICO EasyNet - VMS Lite -> Tools -> Schedule Backup.
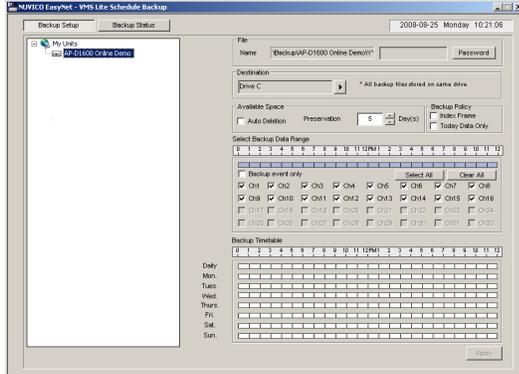
Select an APEX DVR from My Units. Designate the drive for file download. Mainly, due to bandwidth issue, defining Backup Policy as well as selecting particular cameras may make the process more practical. On the Backup Timetable, select desired process interval. Please note during programmed hour, only one DVR can be connected for download. When finished, click Apply to begin the process.
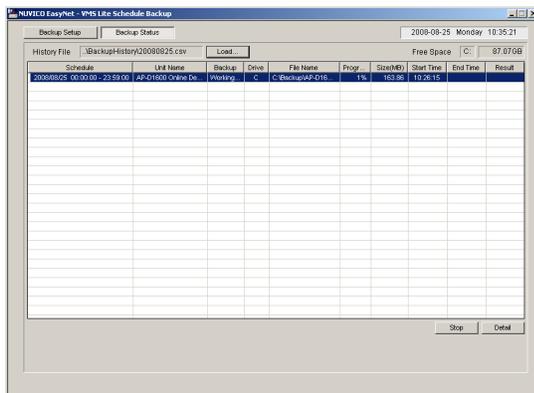
Click Backup Status to view the status of Schedule Backup. If available, old history schedule backup log may be loaded.