PIVOT PRO

USER MANUAL

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Pivot Pro

1 START PROGRAM

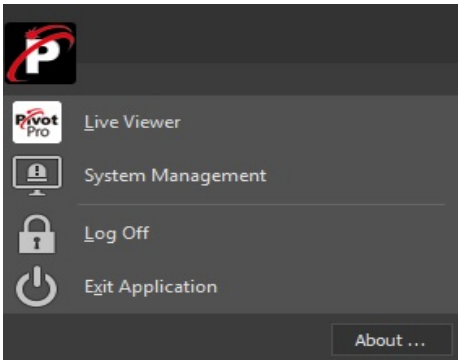
1.1 START PROGRAM

1. 'Window Start Menu' -> 'All Programs' -> 'PIVOT PRO'-> Click the icon 'Pivot Pro'.

   .

2. At log-in window, enter user ID and Password and click 'log-in' button.

In 'Program Menu' of running program, click the menu 'Live Viewer' to start, and there is no need for authentication.



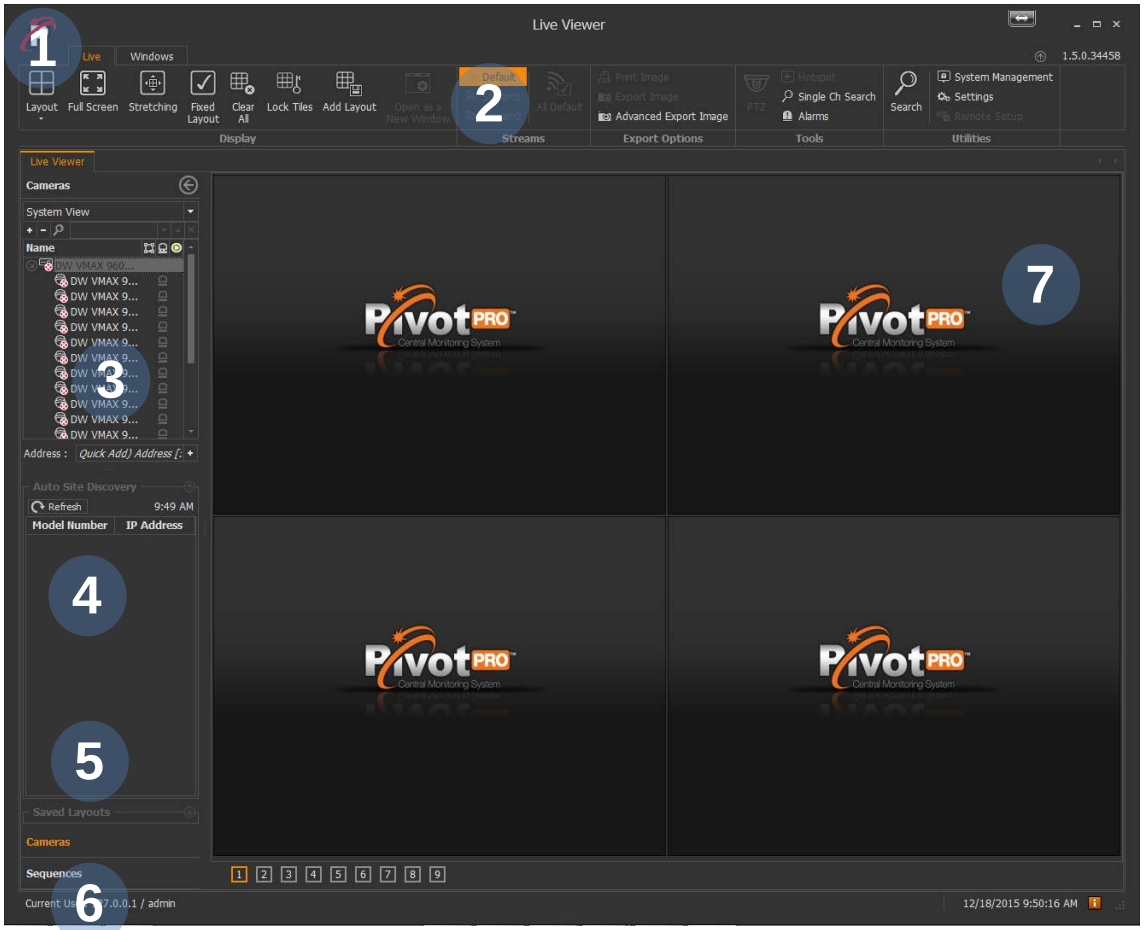
1.2 MINIMUM HARDWARE REQUIREMENTS

Main B/D	Super Micro X10SLQ
CPU	Intel Core i5-4570 3.2GHz
Memory	Samsung Memory PC3-12800 DDR3 4GB
VGA	Intel® HD Graphics 4600
Network Interface	100/1000 Base

2 LIVE VIEWER

LIVE VIEWER is the basic function to run when Remote Client starts. It can monitor live video, PTZ control, real-time surveillance, and real-time alarm search function etc by using live viewer.

2.1 PROGRAM LAYOUT



1. Program Menu
   it can finish, log-off, or start other programs or functions.

2. Tool box
   there are tools to use in live viewer.

3. Device list
   Devices appears on the list on the config manager.

4. Discovered device
   All discovered devices within the same network will be displayed.

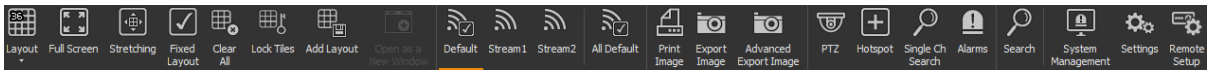
5. Saved Layouts
   Layout that user saved appears.

6. Group menu
   Cameras: It can receive live view from the device.
   Sequences: Live view can be seen as a registered order.

7. Video section
   It is the section to show the video data received from connected device.

2.1.1 Tool box

The menu and description of tool box on live viewer are as follows.



[Button]	[Description]
Layout	Change the layout of video section.
Full Screen	Zoom live video to full screen.
Stretching	Stretches the size of live video to fit to the size of screen.
Fixed Layout	Fix the layout of video section.
Clear all	Clear all live video is currently viewed.
Lock Tiles	Locks tiles and layout of video section.
Add Layout	Save the layout the user is viewing.
Open as a New windows	Unlock the current tab to separate window.
Default	Automatically change Stream1 to Stream2 when 9 Videos are detected at once
Stream1	Regardless of the number of channel allocated in Tile, Set for watching Stream1
Stream2	Regardless of the number of channel allocated in Tile, Set for watching Stream2
All Default	Set all default setting in channel allocated in Tile
Print Image	Print the stop image of selected video.
Export Image	Save the stop image of selected video as an image file.
Advanced Export Image	Save video selection the user is viewing as an image file.
PTZ	Control the camera direction using PTZ controller.
Hotspot	Zoom the section user want to expand.
Single Ch Search	Helps to search the saved video while watching live view.
Alarms	Helps to see alarm information while watching live view.
Search	Helps to open the search window to search a saved video in device.
System Management	Execute System Event Monitor.
Setting	Execute Config Manager.
Remote Setup	Displays device setting on screen.

2.2 CONNECTING AND DISCONNECTING DEVICE

2.2.1 Connecting a device

All the devices registered on the config manager are appeared on the list of Remote Client. Connect to the device to use it.

Select a device to connect and click ‘Connect’ on Popup menu’ to connect.

Device list → Select a device → Popup menu -> Connect

If it is connected successfully, the icons in front of the device name are changed as below.

If the icon is still connecting, please double check whether the information set on the config manager is right or not.

2.2.2 Disconnecting a device

Select a device and press 'Disconnect' on popup menu to disconnect a device.

Device list → Select a device → Popup menu → Disconnect

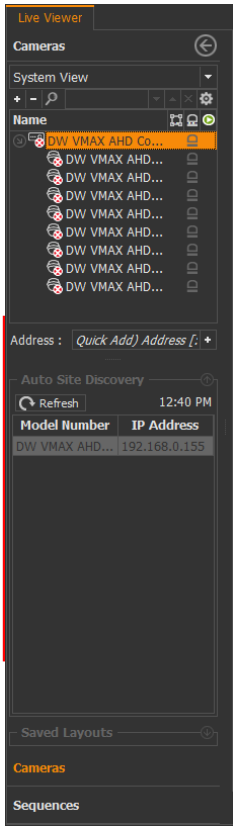
2.2.3 Registering a device

2.2.3.1 Semi-Automatic

A device can be registered without through the config manager and the way to do so is as follows.

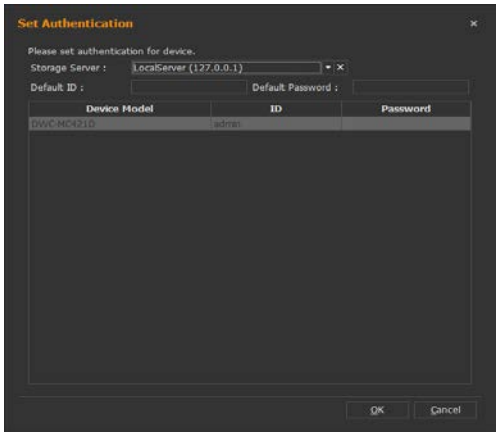
1. Select a device from 'searched device' section at the bottom of the device, and drag and drop the device to the list.

- The device to support OpenEye protocol or ONVIF Conformance protocol from 'searched device' section automatically appears after searched.
- Drag and drop a device to lower storage server to save a video received from the device to the storage server.

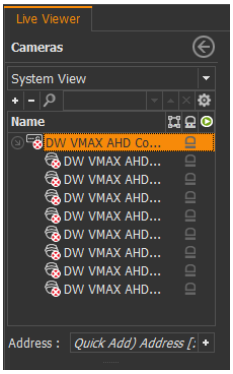


2. Enter the required value on additional popup window. .

[Fields]	
Storage Server	Storage server that the video received from a device to be added
Default ID	Default ID commonly applied in the device to be added
Default Password	Default Password commonly applied in the device to be added
ID	Device ID
Password	Password of the device



2.2.3.2 Quick Register (Quick Add)



Device is registered if the IP to register a device enters in “Address” following below device list.

To use Quick Register function, sysinfo.xml file has to be existed in the device. It is checked whether the file is existed or not by entering http://ip.address/sysinfo.xml in address bar of browser.

2.2.4 Setup

Open device setting window to change the setting of a device.

After selecting successfully connected device, if select “Setup” in pop-up menu or “Remote Setup” in tool, the setting window is displayed on screen.

- Only video storage device such as DVR, NVR offers device setting feature.

Device list → Select a device → Popup menu → Setup

2.3 START LIVE VIDEO

Remote Client can monitor the live video received from registered device on the config manger.

The way to see live video is as follows.

1. Select a device to see the video from the device list.
2. Drag and drop the selected device over the video section.

- If the device is connected successfully, ‘start live video’ appears on popup menu only when the device is connected successfully.

Device list → Select a Device → Popup menu → Start Live Video

- OSD (On Screen Display) on video tile is displayed and time of the video on the left upper side, device name on left lower side, and resolution of the video are shown.
- If the monitoring camera is recording, there will be displayed on top right side of live video, and during event recording, and when there is no recording.

- The below image appears on video tiles when there is no video signal from the device. Then, please double check the connection status to the camera.

2.4 STOP LIVE VIDEO

The way to stop live video is as follows.

1. Select a live video to stop from video section.
2. Drag and drop the selected video to the outside of video section or press ‘stop live video’ on popup menu.

Video Section → Select a video → Popup Menu → Stop Live Video

2.5 LAYOUT

Select the icon from tool bar to change the layout. Change to the larger layout to monitor multiple camera at the same time and change to smaller layout to see a few video of the camera on the big screen.

2.6 FULL SCREEN

Select the icon on tool bar to display live video currently playing to full screen. Press ESC to go back to the previous status.

2.7 STRETCHING

Select the icon on the tool bar to stretch video tiles in video section to full screen. Press to go back to the previous status.

2.8 FIXED LAYOUT

Select the icon on the tool bar to fix the layout of video section as n x n and the layout will be fixed even if the size of the window is changed. Press again to go back to the previous status.

- Fixed layout button do not activate on 6,7,8,10,13 division that cannot display as the n x n layout format.

2.9 CLEAR ALL

Select the icon on the tool bar to clear all the video being monitored from video section and the connection to the device will be exited.

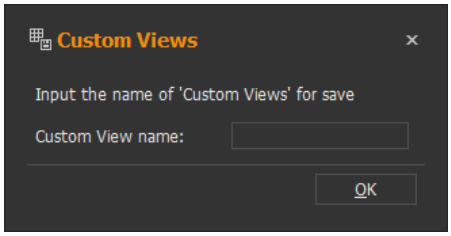
2.10 LOCK TILES

Select the icon on the tool bar to limit the layout change. Warning message will appear if try to change the layout on lock tiles status. Press again to unselect the lock tiles.

2.11 ADD LAYOUT

Select the icon on the tool bar to save layout addition and video disposition, and share with other users.

Click the icon to display customer view window of the video as follows.

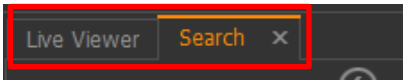


Input the name of customer views and press OK button to save current layout and video disposition, and saved layout will appear on custom view layout section on lower left side of Remote Client.

2.12 OPEN AS A TO NEW WINDOW

Select the icon on the tool bar when the icon is being activated to undock current tab to new window.

- The icon ‘Undock to new window’ activates only when there are more than two tabs.



2.13 DEFAULT

Automatically change Stream1 to Stream2 when 9 Videos are detected at once

2.14 STREAM1

Regardless of the number of channel allocated in Tile, Set for watching Stream1. Click video for changing resolution in Tile.

2.15 STREAM2

Regardless of the number of channel allocated in Tile, Set for watching Stream1. Click video for changing resolution in Tile.

2.16 ALL DEFAULT

Set all default setting in channel allocated in Tile

2.17 PRINT IMAGE

The stop view of selected camera can be printed out.

The way to print a stop view is as follows.

1. Select a video to print from video section.
2. Select on tool bar or 'print' on popup menu.

   Video section → Select a video → Popup menu → Export Options → Print

3. Enter the required value on additional popup window.
   The label in bold are mandatory.

[Fields]	
Logo	Logo to be printed with stop view
Title	Name of stop view
Notes	Description on stop view

.

2.18 EXPORT AND ADVANCED EXPORT IMAGE

Selected camera or stop view of all live videos currently viewing can be saved.

The way to change the stop view to image file is as follows.

1. Select the view to print from video section.

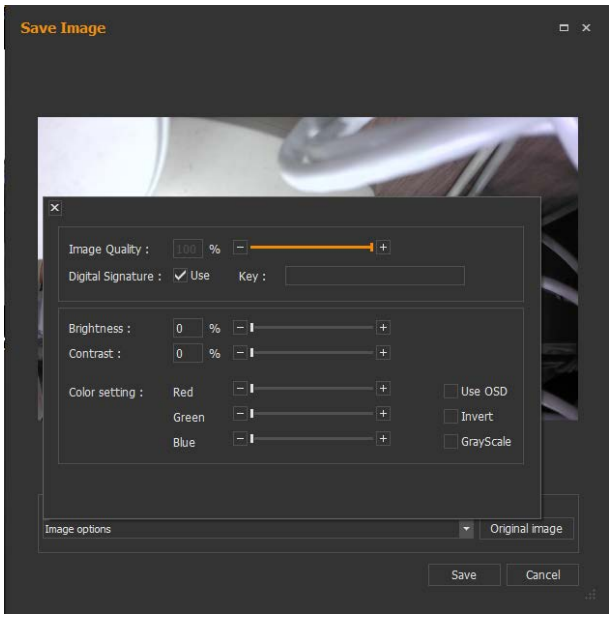
2. Select on the tool bar or ‘save’ on popup menu.

- The stop view of selected tile can be saved as an image, view image saves total video selection as image file.

Video section → Select a video → Popup menu → Export Options → Save

3. Enter the required value on additional popup window.

[Fields]	
Image Quality	Quality of the image
Digital Signature	Digital signature to be added with image
Brightness	Brightness setting of the image
Contrast	Contrast setting of the mage
Color setting	RGB Value setting of the image
Use OSD	Add OSD on the image
Invert	Invert color of the image
Gray-Scale	Change the image to grayscale



2.19 PTZ

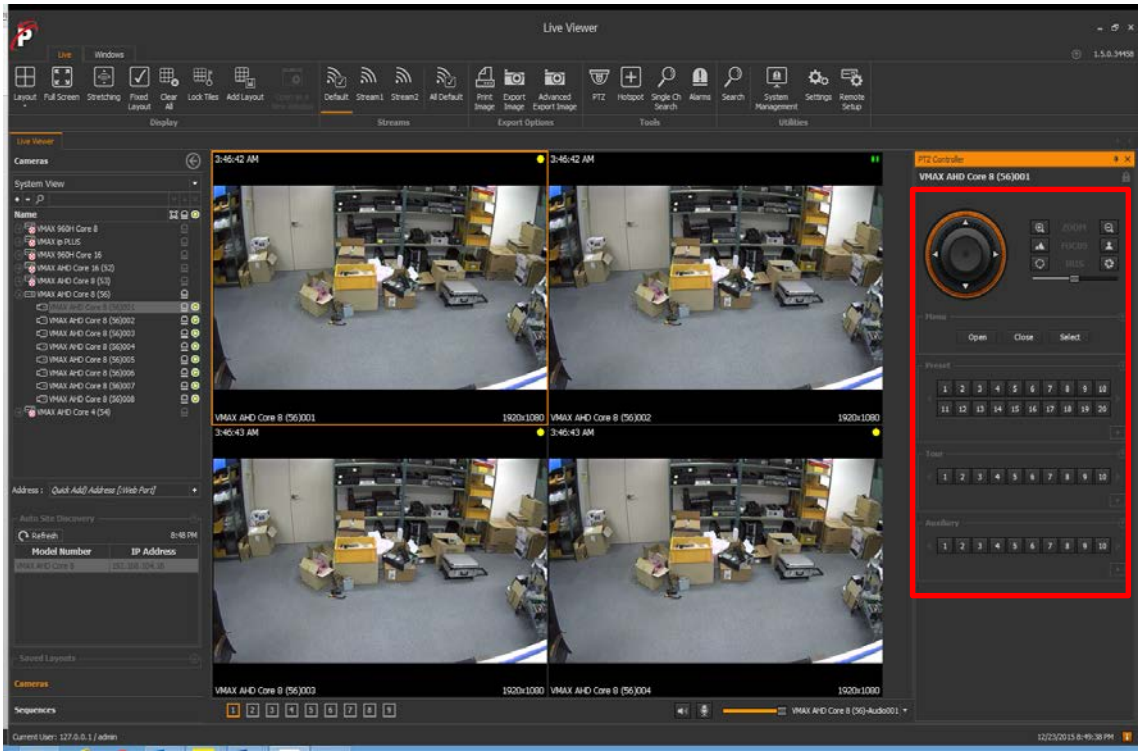
Camera direction can be changed by using PTZ controller.

The way to change the camera direction is as below.

1. Select the camera video to change the direction on video section.
2. Select on tool bar or 'PTZ controller' on popup menu.

   Video Section → Select a video → Popup menu → PTZ

3. Change the direction of camera using PTZ controller.



2.20 HOT SPOT

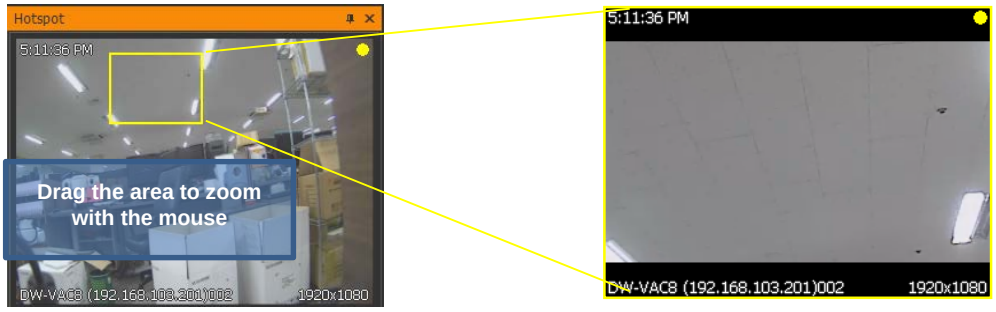
HOTSPOT can enlarge and monitor the area to zoom even as there is no zoom function on the device.

The way to use Hotspot function is as follow.

1. Select the camera video to change the direction from video section.
2. Select on tool bar or select ‘Hotspot’ on popup menu.

   Video section → Select a video → Popup menu → Hotspot

3. Drag the area to zoom on the ‘Hotspot’ with the mouse.



2.21 SINGLE CH SEARCH

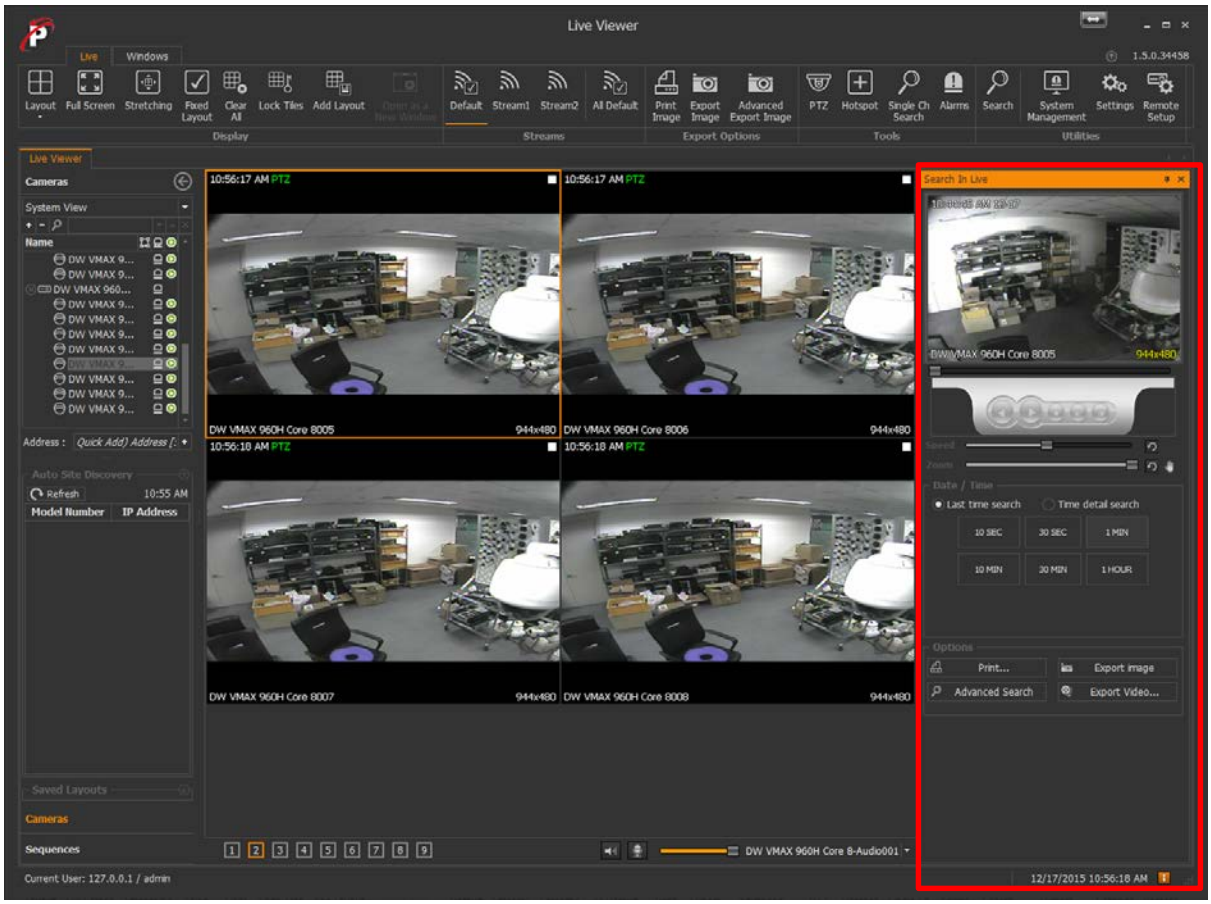
Single CH search can monitor the live video and the view saved in the device at the same time.

The way to use Search In Live is as follows.

1. Select the camera video to change the direction from video section.
2. Select on tool bar, or press 'Single Ch Search' on popup menu.

   Video Section → Select a video → Popup menu → Single Ch search

3. Recorded video can be searched by using Single Ch search function.



Last time search

The video of 1 hour ago, 30 minutes, 10 minutes, 30 seconds, and 10 seconds from the present time can be viewed.

Time detail search

The video of the selected time zone can be searched.

Print

The stop view of the video is printed out.

Export image

Save the stop view of searched file as image file.

Export video

Export searched view as video file.

Advanced Search

Activate search function for more detailed search.

2.22 PROXIMITY CAMERAS

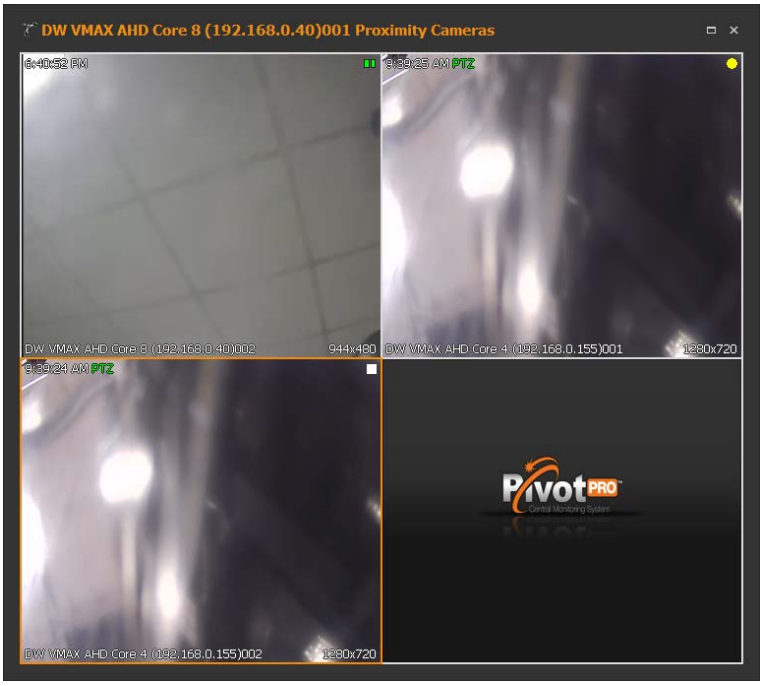
The camera and a video adjacent to the camera can be checked at once by using proximity cameras.

- Set the device and cameras adjacent to the device as proximity camera to use proximity cameras function. The icon is shown next to the device that the proximity cameras is installed.

The way to see proximity cameras are as follows.

1. Select a video to see from video section.
2. Select 'Proximity Cameras' on popup menu.

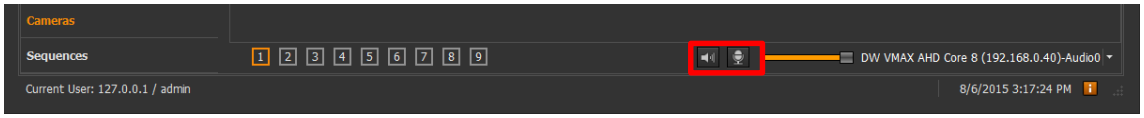
Video section → Select a video → Popup menu → Proximity Cameras



2.23 AUDIO

Sound can be heard from the microphone attached on the device, and the sound can be sent through the speaker of the device.

Select a camera on video section and press the icon on the bottom of Remote Client to hear the sound, and press the icon to export the sound.



2.24 RELAY

The relay attached on the device can be ON/OFF by using relay control function.

- Add relay as child device of a device in the config manager to use relay function. The device relay added To use relay function, relay should be added as child device of the device on the config manager. The icon is shown next to the device that the relay is installed

The way to control relay is as follows.

1. Select a camera to control relay from device list.
2. Select a relay to operate on popup menu.

Device List → Select a camera → Popup menu → Relay → Select a relay

- The icon is changed from to next to the device when the relay changes from OFF -> ON, the icon is changed from to next to the device when the relay changes from ON -> OFF.

2.25 RESOLUTION SETUP (RESOLUTION)

Using the function of resolution setting, video resolution is changeable by transforming streaming of current live video.

- When over 9 of video are monitored spontaneously, the stream of all channel automatically switches from stream1 to stream2.

Order to change resolution of live video.

1. Select a live video to change resolution in video tile.
2. Select the number of the stream in pop-up menu

Video field→ Video field → Pop-up Menu → Resolution → Select a stream

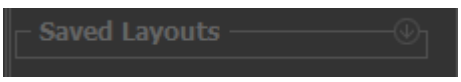
2.26 SAVED LAYOUT

Reopen user views after saving the layout and view disposition to monitor or share with other users.

2.26.1 Add a user views

The way to add a user views is as follows.

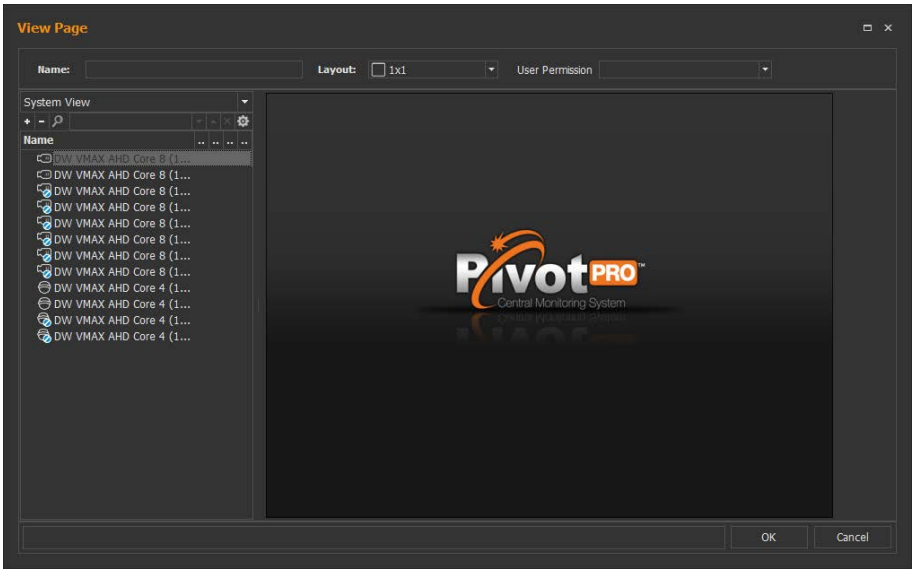
1. Press ↑ next to user views and activate the Saved Layout section.



2. Select ‘new view’ on popup menu.

Activating User views → Popup menu → New view

3. Input the required value on additional popup window and position cameras on video tiles by drag & drop.



The label in bold are mandatory.

[Fields]	
Name	Name of user view
Layout	Layout of user view
User Permission	Permission of user view (set all users as permission to share with other users)

2.26.2 Modify a user views

Select a user view in user view section and click the icon or select a user view to modify a view on popup menu.

Activating User views → Select a user view → Popup menu → Edit view

2.26.3 Delete a user view

Click or select 'Delete a user view' after choosing a user view in user view section to delete a user view.

Activating User views → Select a user view → Popup menu → Delete view

2.27 SEQUENCES

Sequences function displays live view or user view as the order of registered sequentially.

Sequences function can monitor multiple areas efficiently with one monitor.

Select Sequences on left bottom side to display all registered sequences and select a sequence and press 'Start' button to start sequences.

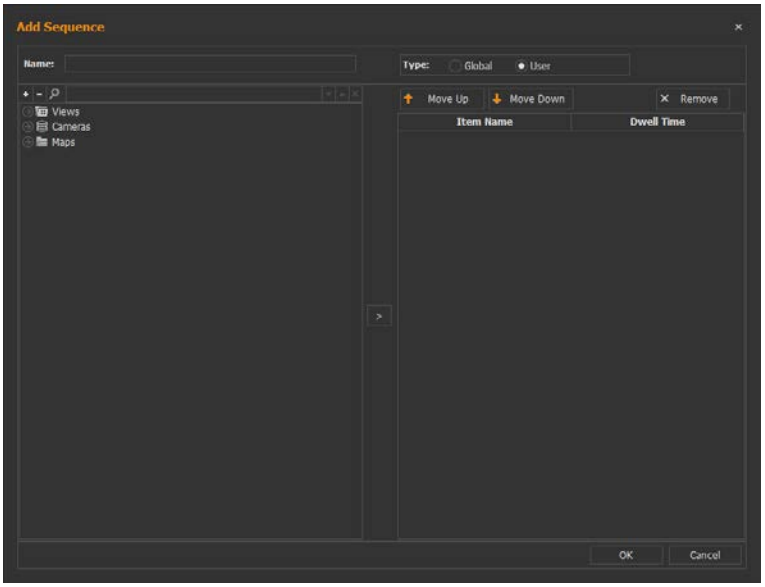
2.27.1 Add a sequence

After selecting Type (Private/Public), Click or Click New Sequence in Popup menu

Sequences → Popup menu → New Sequence

A registered device or custom view on the sequence section can be added.

Select a camera to change and click buttons ‘Move Up’ ‘Move Down’ to change the order to be shown when sequences function starts.



2.27.2 Modify a sequence

Select a user view to modify on the sequence and click or select ‘Edit sequence’ on popup menu to modify a sequence.

Sequences → Select a sequence → Popup menu -> Edit sequence

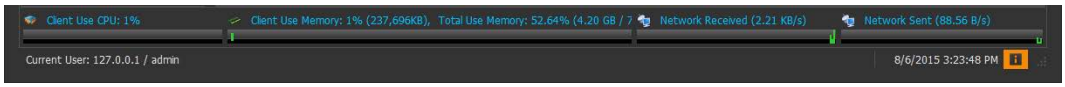
2.27.3 Delete a sequence

Select the user view to delete on the sequence, click or, select ‘Delete Sequence’ to delete user view on popup menu or after selecting sequence for deleting, click

Sequence → Select a sequence → Popup menu -> Delete sequence

2.28 RESOURCE VIEW

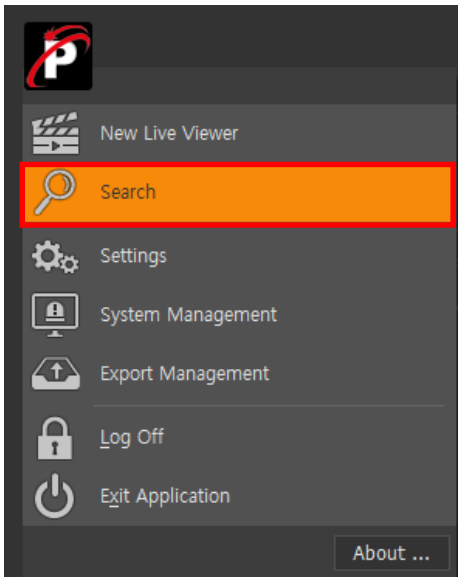
Press on left bottom of Remote Client to check the current current usage of the system.



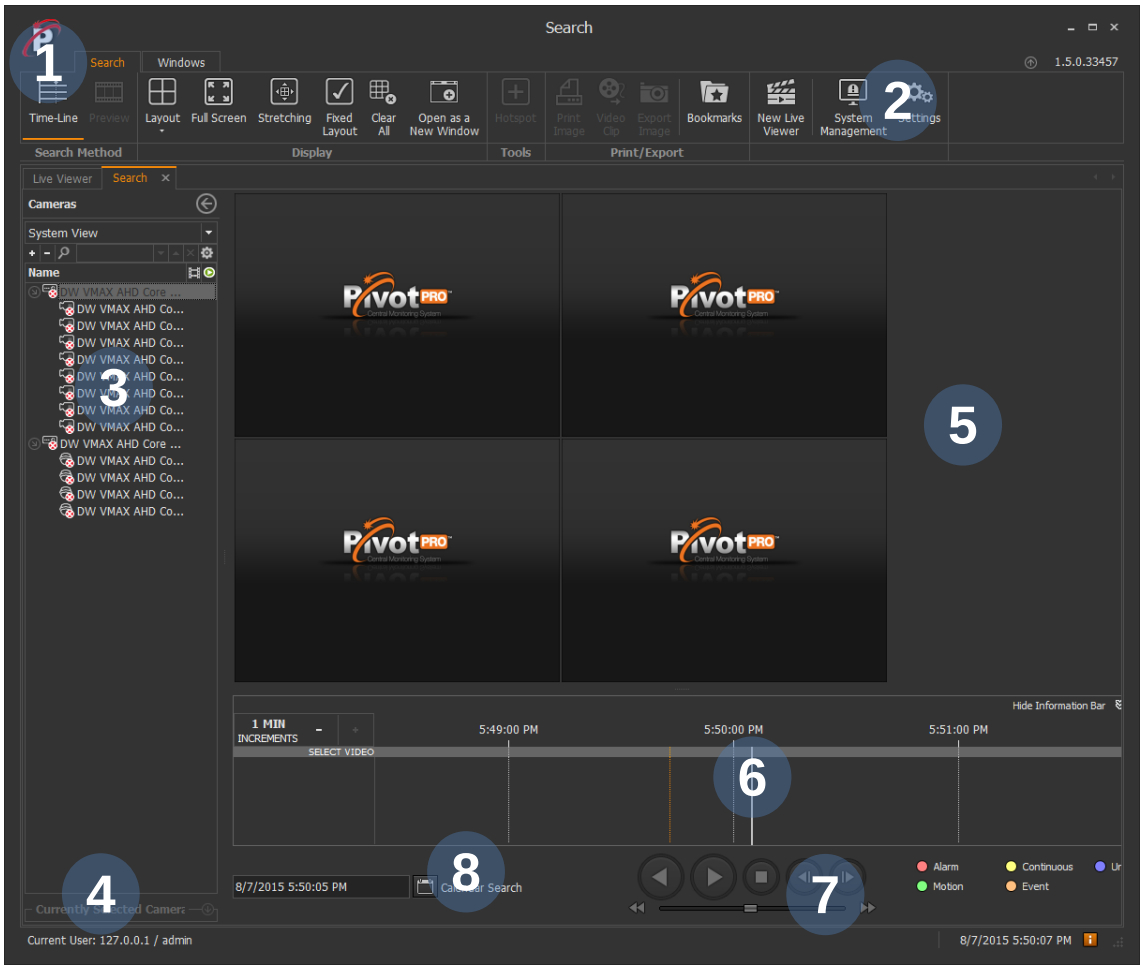
3 SEARCH ON STORED VIDEO

It can search or export the stored video with using search function.
Select ‘Search’ on program menu or Tool box to start video search on stored video.

Program menu → New Search



3.1 PROGRAM LAYOUT



1. Program Menu
   It can finish or log-off, or start other programs or functions.
2. Tool box

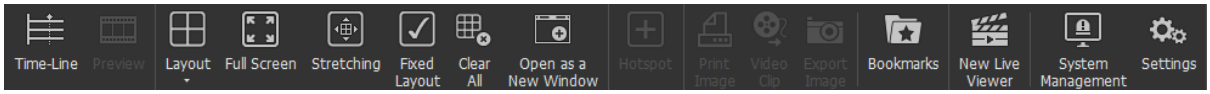
   There are all tools to use for search on stored video.
3. Device list
   Registered device list is appeared on the config manager.
4. Currently Selected Cameras
   The list of camera being searching is displayed.
5. Video Section
   It is the section to show the video searched from a device.
6. Time graph
   It shows hourly recording status.
7. Search Tools

   There are all tools to change search mode and operate searched video.
8. Appoint Time

   You can specify the time zone of the video you wish to search..

3.2 TOOL BOX

The names and function on the tool bar of recording search are as follows.



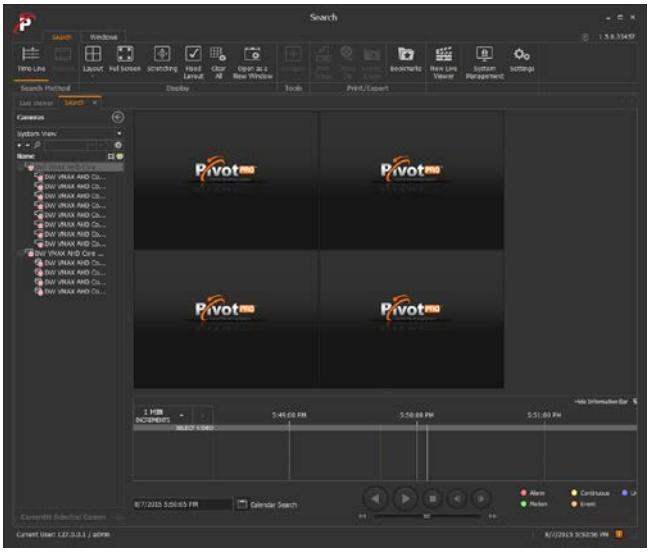
[Button]	[Description]
Time Line	Run time search you can search by the hour.
Preview	Run Preview Search can search looking Preview.
Layout	Change the layout of the video.
Full Screen	Zoom the search video is currently viewed as full screen
Stretching	Stretch the size of a live view to fit the size of the screen.
Fixed Layout	Fixes the layout of the video section.
Clear All	Clear all the searched videos currently viewed from video section.
Open as a New Windows	Undock current tab to a new window.
Hotspot	Zooms the section the user enlarge.
Print Image	Print out the stop view of selected video.
Video Clip	Saves the selected view as video file.
Export Image	Saves the stop view of selected video as image file.
Bookmarks	Shows the list of saved bookmarks.
New Live Viewer	Opens live viewer to show live video.
System Management	Executive System Event Monitor
Settings	Executive Configuration Manager

3.3 TIME LINE SEARCH

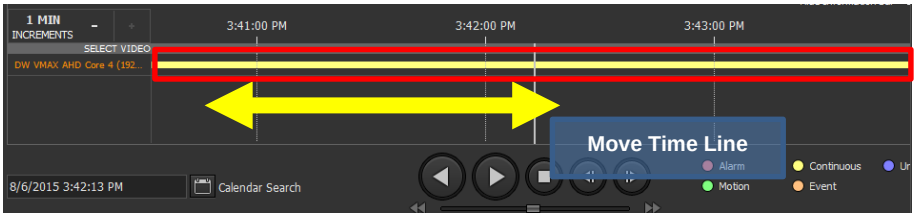
Start recording search function to display the screen shown below.

Select a device to search and press ‘Start Search’ on popup menu, drag and drop a device on video tiles, or double click a device to start to search.

- Initial screen layout is 4 division, and the layout can be changed depending on the number of channel of video recording device (DVR or NVR) or the number of camera.



Once search starts, stored video data will appear on the tile, and the recording status will be shown as graph, and can drag and move time graph to any time line.



: It appears when the video is being loaded.

: It appears when the video is continuously recorded.

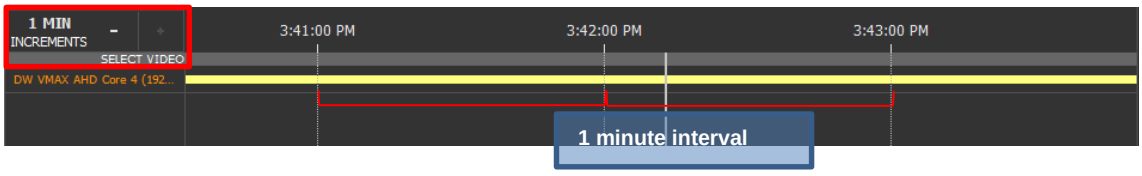
: It appears when the recording type is not checked.

: If the recorded video is displayed after an alarm has occurred

: It appears when the video is recorded by the event.

: The image is recorded after a motion was detected appears.

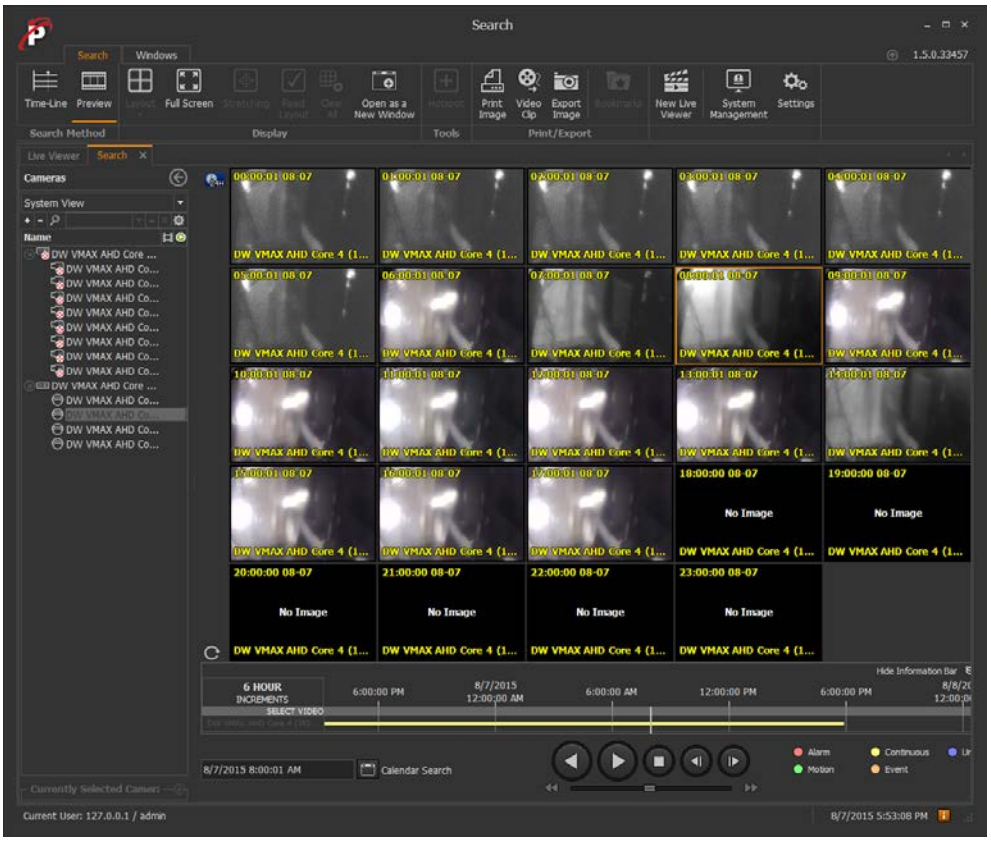
- It can change the increments of graph for 1 minute, 10 minutes, 1 hour, 6 hour, 1 day, 1 week by pressing ‘+’, ‘-‘ button on the upper end of time graph or using the mouse.



Move to another time line and press ▶ to play forward a recorded video and, press ◀ to play backward.

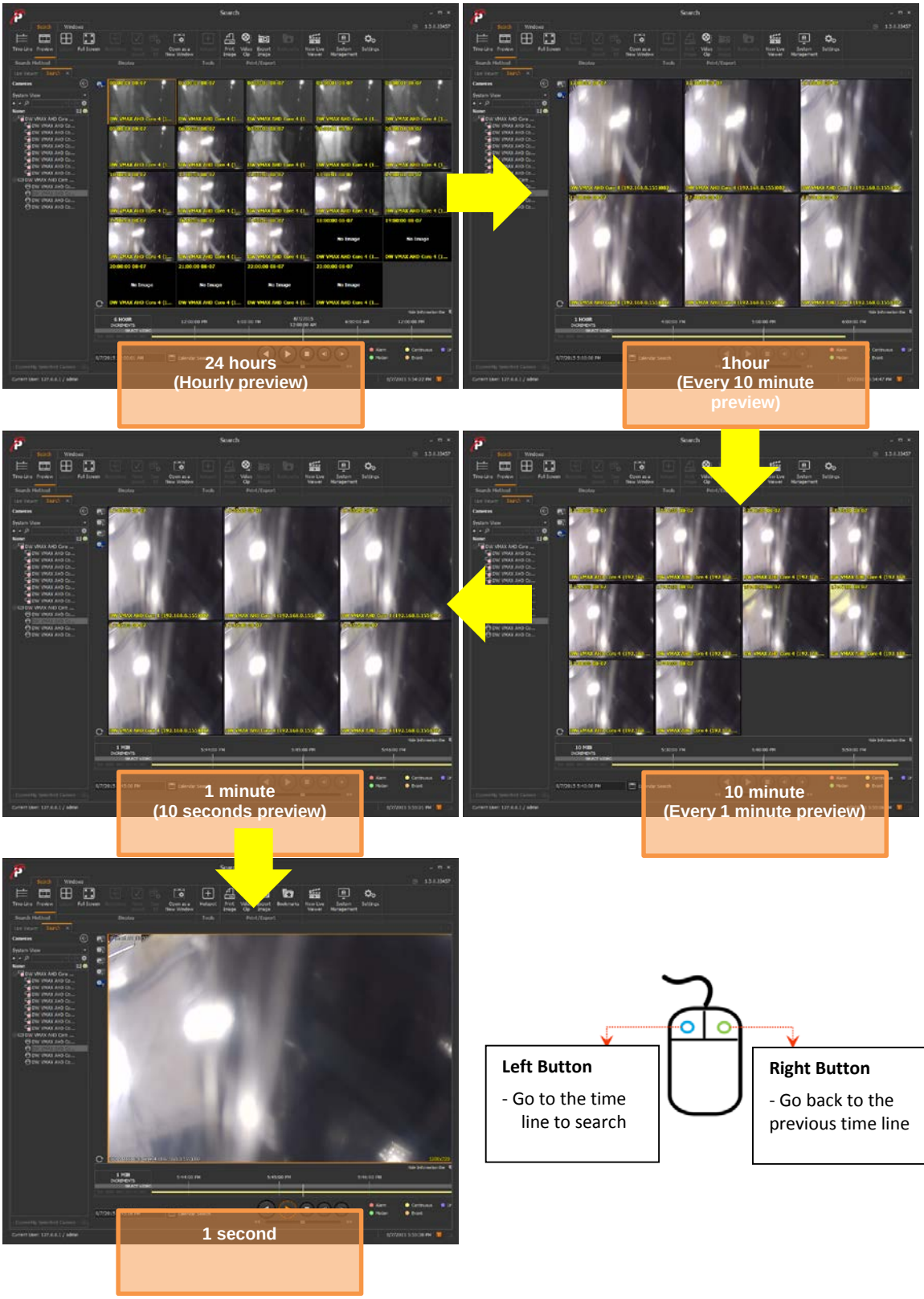
3.4 PREVIEW SEARCH

Preview search is to check a selected one channel in detail over time, and select a video and press 'Preview Search' on tool bar to start Preview Search.



Use the Preview search to keep track of time line of 24 hours ↔ 1 hour ↔ 10 minutes ↔ 1 minute basis to search and playback.

It can search the screen when looking to playback up to 1 second and play the video.



- It can change the unit of time using a mouse button.

3.5 EXPORT VIDEO

It can export and save the video from a device with searching a video at the same time.

The way to export a stored video is as follows.

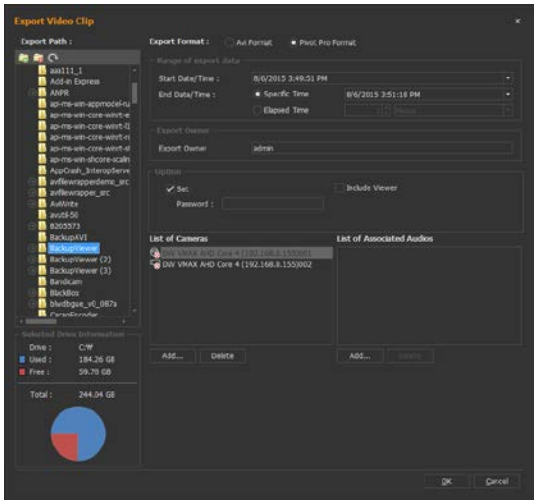
1. Drag and drop the upper side of time table with a mouse and select the desired time line to export a video.

2. Select 'Video Clip' on popup menu to run by dragging the mouse.

3. Enter export format and the required value on additional popup window.

[Export Format]	
Avi Format	Save the exported video as Avi format
Exe Backup	Multi Channel Backup

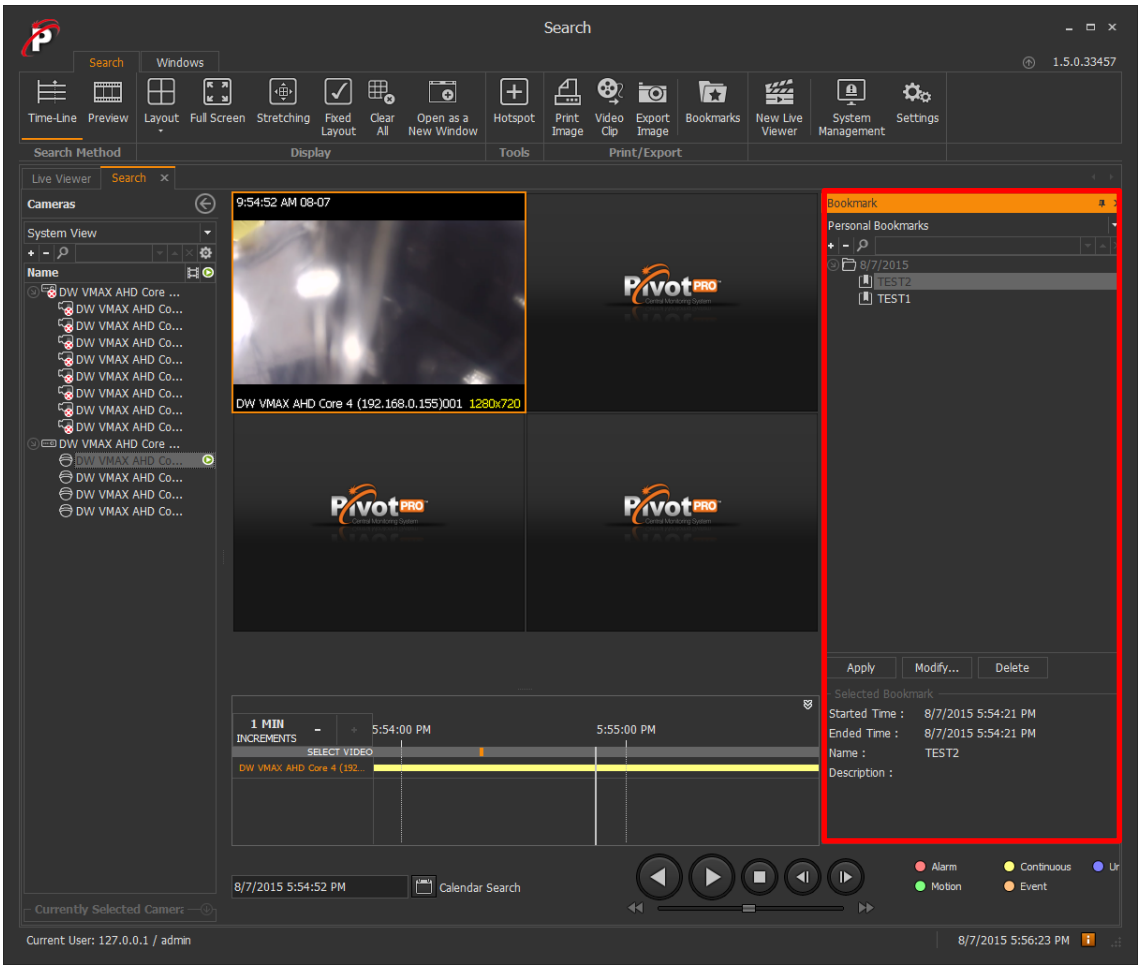
[Fields]	
Export Path	Path to store a video
Start Data/Time	Start time to export a video
End Data/Time	End time to export a video
Export Owner	The owner of a video to export
Use Digital Signature	Add digital signature on a video to export
Public key	Key to use on digital signature
Related Audio(Avi Format)	Audio connected to the device exported a video
File Name(Avi Format)	File name of the video to store
List of Cameras(Exe Backup)	Device list to export a video



3.6 BOOKMARKS

Bookmarks function save the time information for the search and video data being retrieved and can quickly navigate to the time zone by using the information stored at a later date.

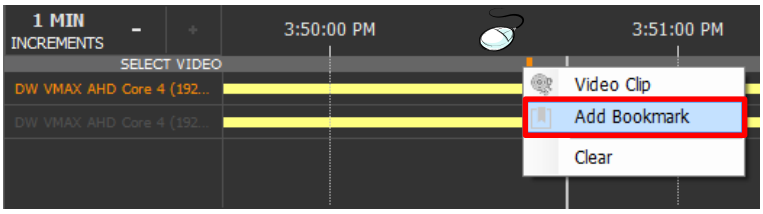
Select on tool bar to see the saved bookmarks.



3.6.1 Add a Bookmark

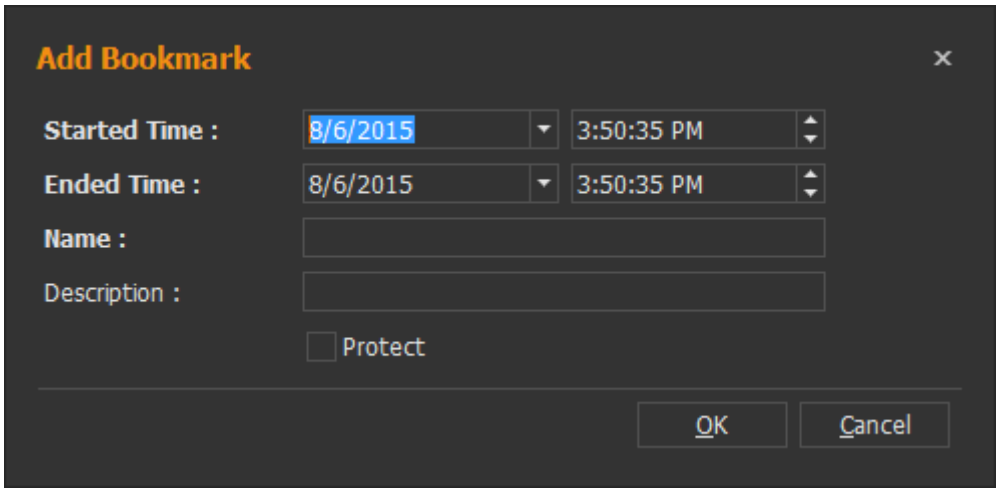
The way to add a bookmark is as follows.

1. Select ‘Add Bookmark’ on popup menu shown on the upper part of the time table.



2. Enter the required value on additional popup window.

   The label in bold is mandatory.

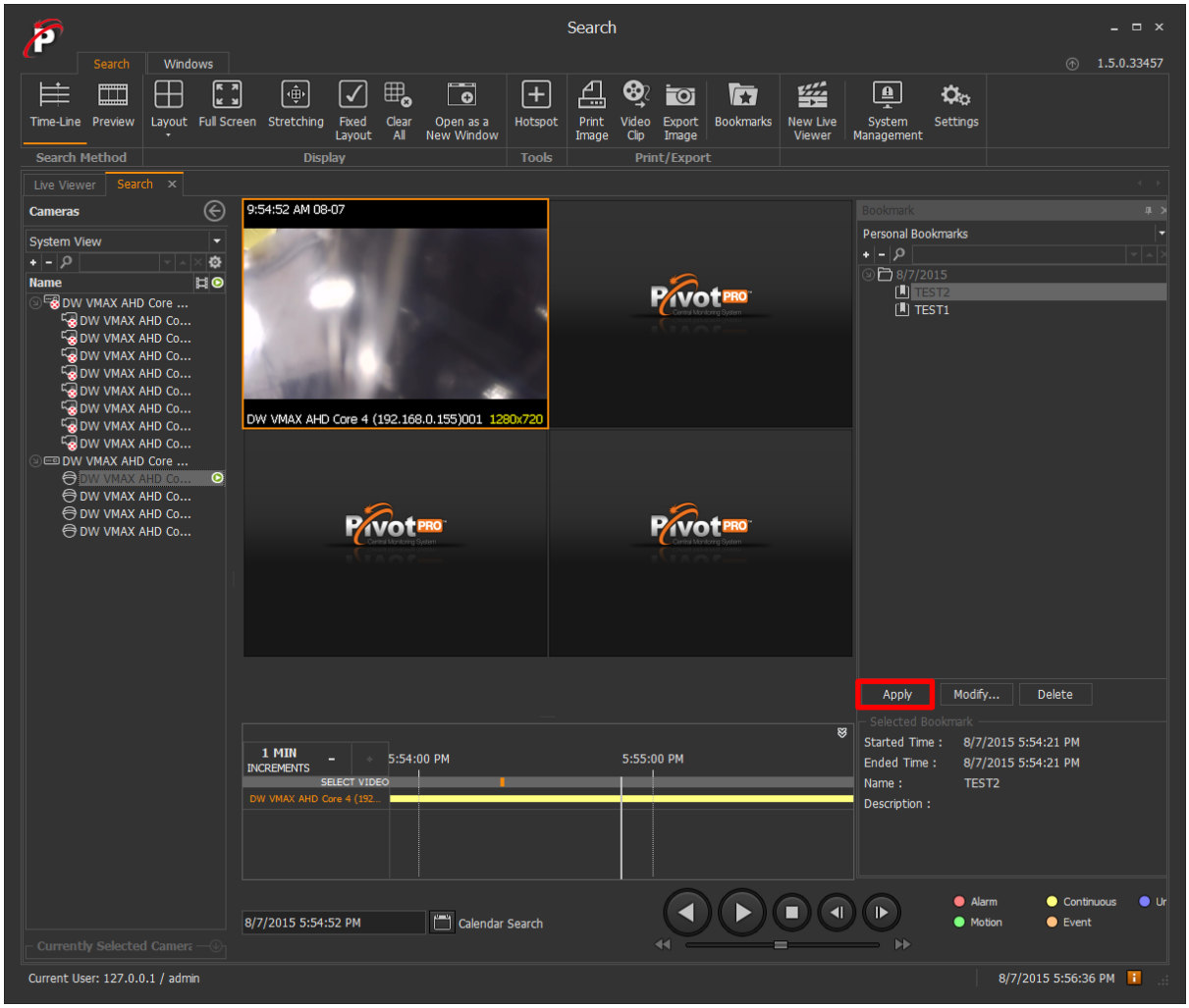


[Fields]	
Started Time	Started time to add a video on bookmarks
Ended Time	Ended time to add a video on bookmarks
Name	Name of bookmark
Description	Description of the bookmark
Protect	Protection status of the bookmark If check Protection status, added user or user with the administrator permission can modify or delete the bookmark.
Public	Set Bookmark open or not to other user

.

3.6.2 Apply a Bookmark

Select a bookmark to add and press ‘Apply’ button to display the view of set time line on search window.



3.6.3 Modify a bookmark

Select a bookmark to modify and press ‘Modify’ button to modify the bookmark.

Bookmark list → Select a bookmark → Modify

3.6.4 Remove a bookmark

Select a bookmark to remove and press ‘Delete’ button to delete the bookmark from the list.

Bookmark list → Select a bookmark → Delete

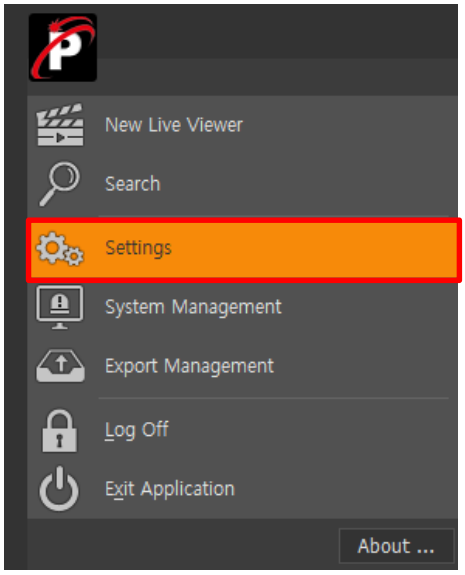
2

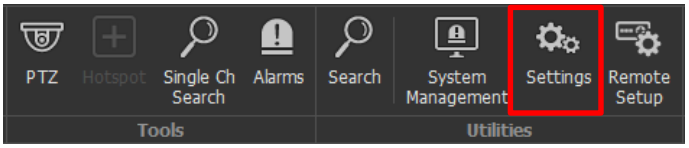
Config Manager

1 START PROGRAM

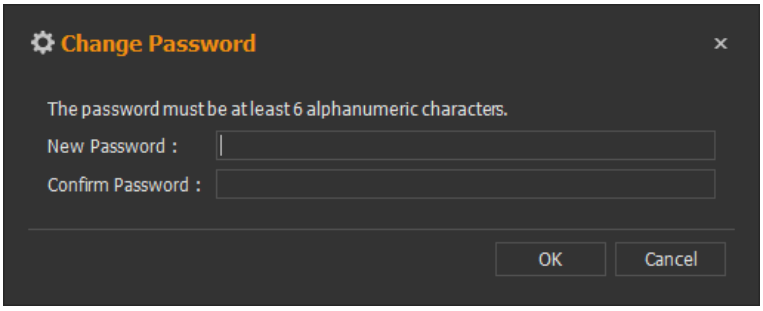
1.1 START PROGRAM

Pivot Pro's Program Menu or Toolbox → click the icon 'Settings' than you can execute a Config Manager



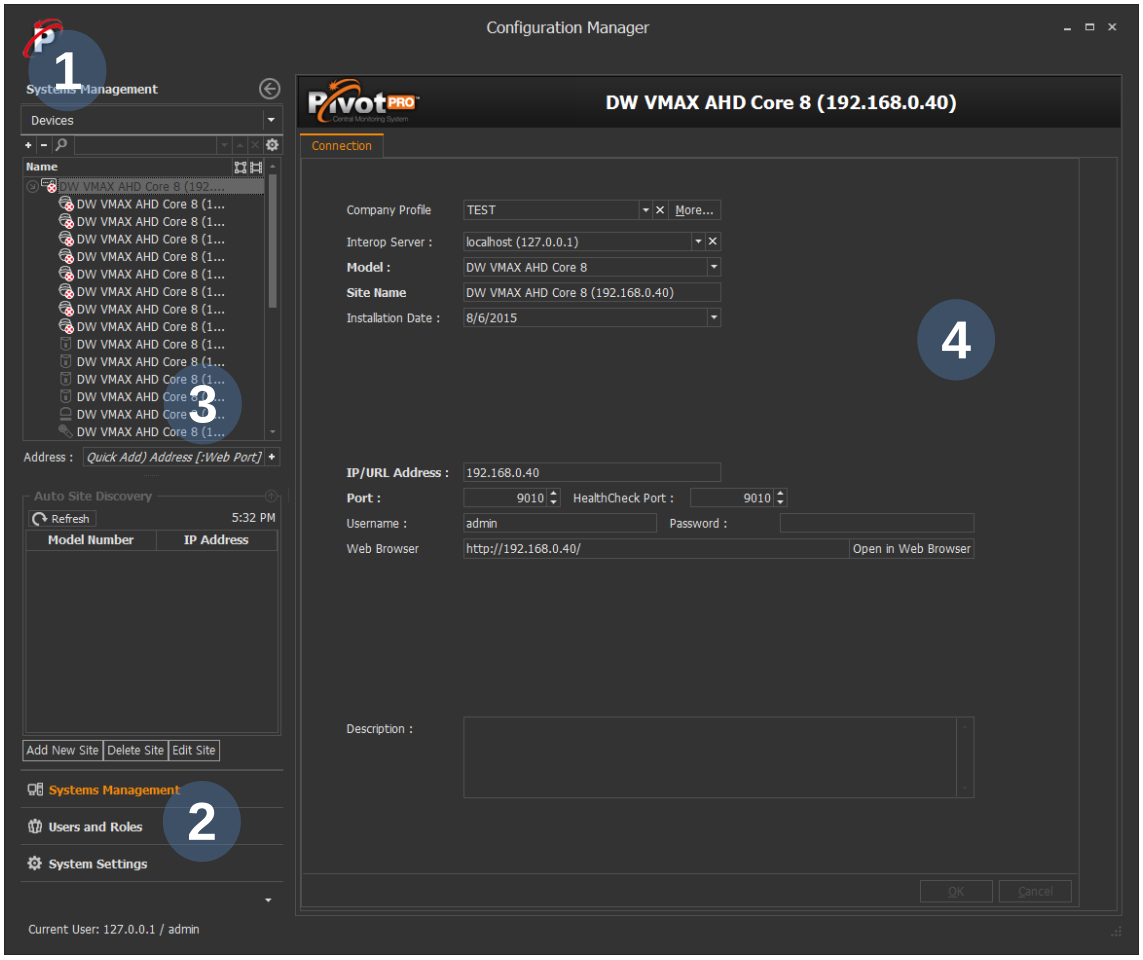


1.2 CHANGE ADMIN DEFAULT PASSWORD



The admin password is default when the program is loading, window for change password will display as above. New password will be applied from next login.

2 PROGRAM LAYOUT



1. Program Menu

   It can finish, log-off, and start other programs and functions.

2. Group Menu

   System Organization

   System organization for Device/ Camera group/ location info can be set.

   Users and Roles

   User/ User Group/ Permissions setting can be made.

   System Settings

   System setting on additional functions including SMTP / OSD can be made.

   Group Menu can be changed depending on the function.

3. Object List

   Added object (Device/ user/ group etc) list can be checked.

   Fast setting can be made using search/ filter if there are many listed objects.

4. Setup Page

   It shows setup page of selected object.

3 GENERAL FEATURES

3.1 SYSTEM ORGANIZATION

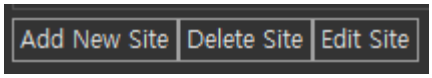
It set device/ camera group/ location info.

3.1.1 Add Site

It add and manage devices for network connection manually.

System Organization → Object List (Devices)

1. Click ‘Add New Site’ button on ‘Object List’ to add

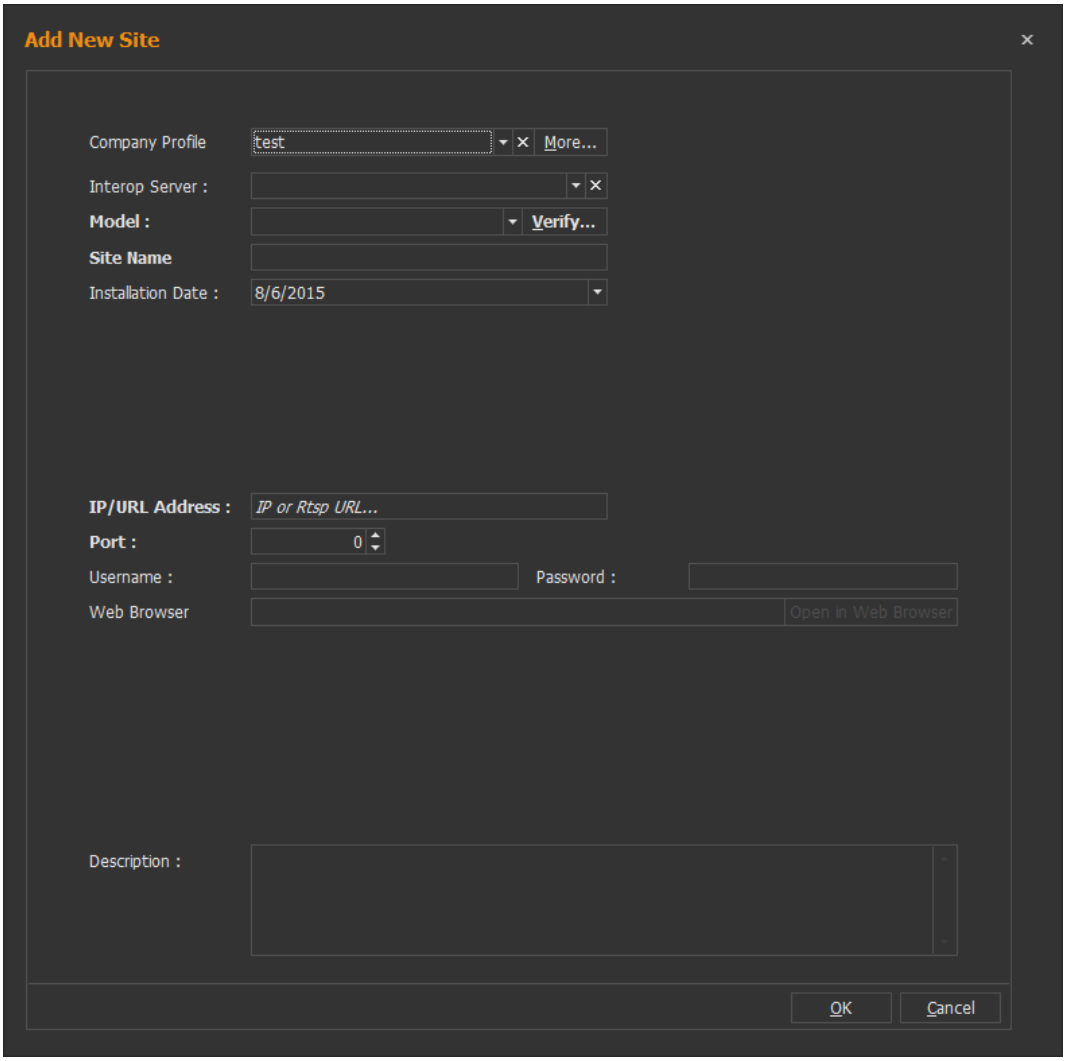


[Popup Menu]	
Add Site	
DVR / NVR	Add DVR / NVR

2. Enter the required value on additional popup window.

   The label in bold is mandatory.

[Fields]	
Company Profile	Setting Site to manage the change history of device change (Refer to ‘Add location information’)
Interop Server (Option)	Service to check the device status and collect log
Model	Model no. of the device
Site Name	Site name
Installation Date	Installation date of device for device change history management
IP/URL Address	Address for Network Connection (IP)
Port	Live or main port
Web Port	Web Port
Username	User for network connection
Password	Password for network connection
Web Browser	Website address of the device
Description	Description of the device



3.1.2 Delete Site

System Organization → Object List (Devices)

Select a device on 'Object List' and click 'Delete Site' button on object list to delete.

3.1.3 Add Custom Group

Add custom group for the camera management.

Management of Group Creation management is available in a hierarchical way.

System Organization → Object List (Custom Groups)

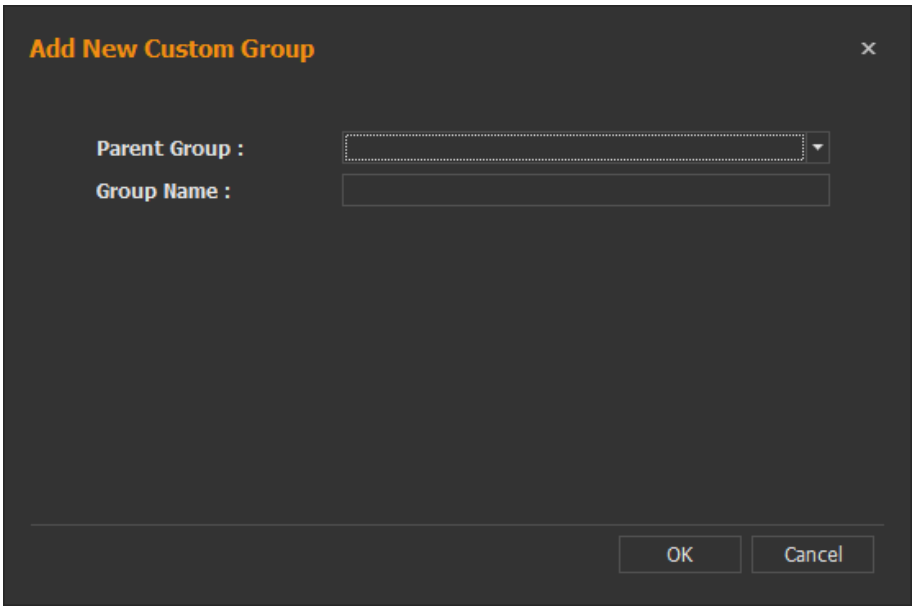
1. Click 'Add New Group' button to add

2. Enter the required value on additional popup window.

   The label in bold are mandatory.

[Field]	
Parent Group	Parent group of the group
Group Name	Group Name

3. Change group setting of the device by drag and drop a device on ‘Object List’.



3.1.4 Delete Custom Group

System Organization → Object List (Custom Groups)

Select custom group to delete from ‘Object List’ and click ‘Delete Group’ button on ‘Object List’ to delete.

3.1.5 Add Company Profile

Add the company profile on installation site of a device.

A batch permission can be applied to the devices in the site using additional company profile

Group setting on company profile can be made and the way to add is same as camera group.

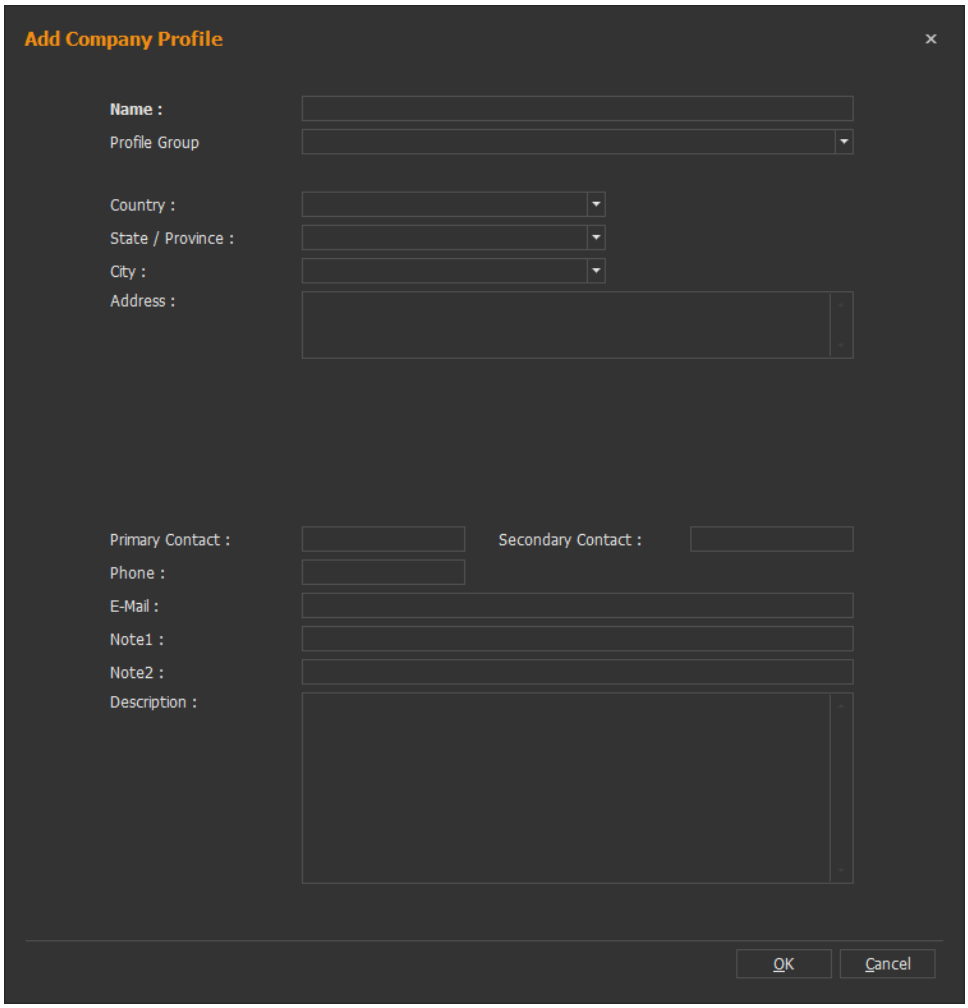
System Organization → Object List (Company Profiles)

1. Click Add New Profile on ‘Object List’ to select ‘Add Company Profiles’.
2. Enter the required value on additional popup window.

The labels in bold are mandatory.

[Fields]	
Name	Name of the Company Profile
Profile Group	Group of the Company Profile
Country / State / City / Address	Address Information 'Country / State / City' information can be entered by the user and the information inputted can be referred when adding site information next time.
Primary Contact	1st Contact information in case that issue occurs like a failure
Secondary Contact	2nd Contact information in case that issue occurs like a failure
Phone	Phone number
E-Mail	E-Mail Address
Note1 / Note2	Notice
Description	Description of the company profile

3. Drag and drop company profile of a device on 'Object List' to change the site setting of a device.



3.1.6 Delete Site

System Organization → Object List (Sites)

Select site information to delete from the 'Object List' and click 'Delete Profile' button to delete.

3.1.7 Asset History

It monitors asset history of device installation/ removal of specific company profile

'System Event Monitor' can check Asset History.

Asset History is added automatically on the program on the situation listed below.

1. In case that the 'Company profile' is set on the device

   Add Installation history
2. In case that the ''Company profile' is deleted from the device

   Add removal history
3. In case that the device is deleted

   Add Destroy history

User can modify asset history directly.

System Organization → Object List → Select Company profiles → Asset History

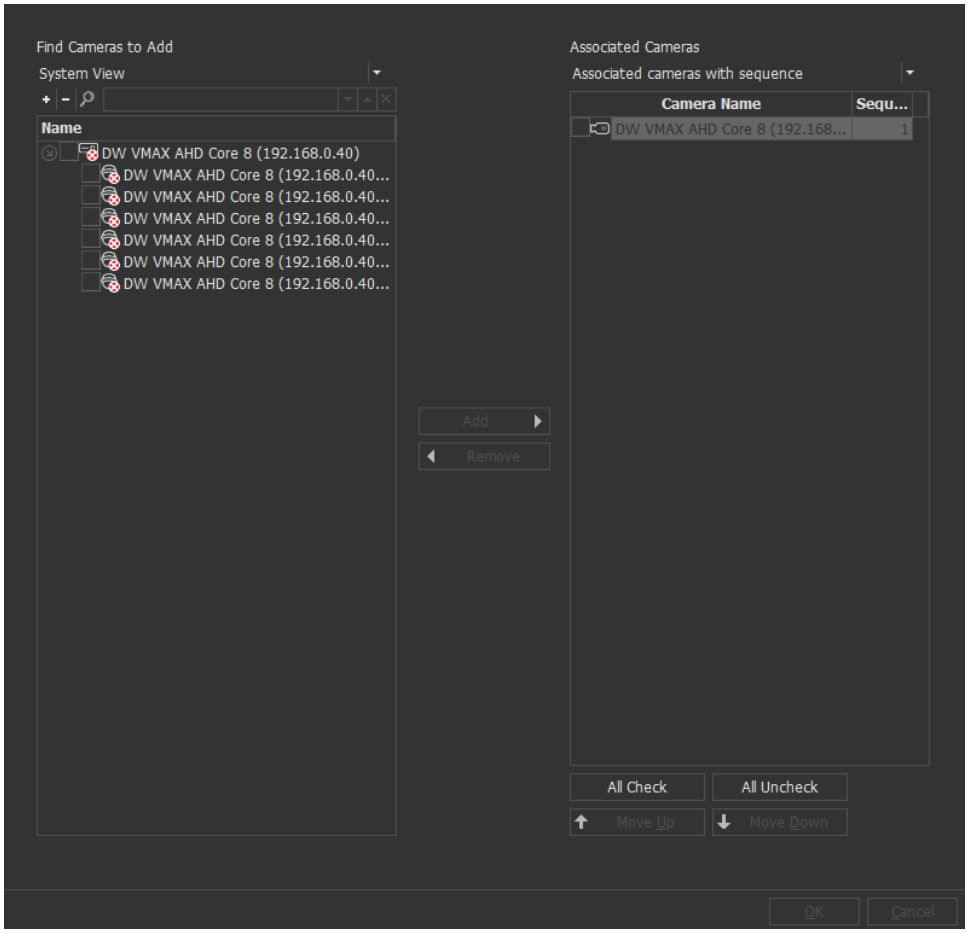
3.1.8 Proximity Cameras

It is the function to identify the video of camera associated with other camera views when a specific situation occurs during the monitoring of live video.

System Organization → Object List → Select Camera → Proximity Cameras

Select associated cameras from 'unconnected camera list' and click 'connect' button for proximity camera setting.

Select a camera to change from 'Connected camera list' and clock 'Move Up' 'Move Down' button to change the priority of set proximity camera.



3.1.9 Associated Audios

User can manage audios associated with the video.

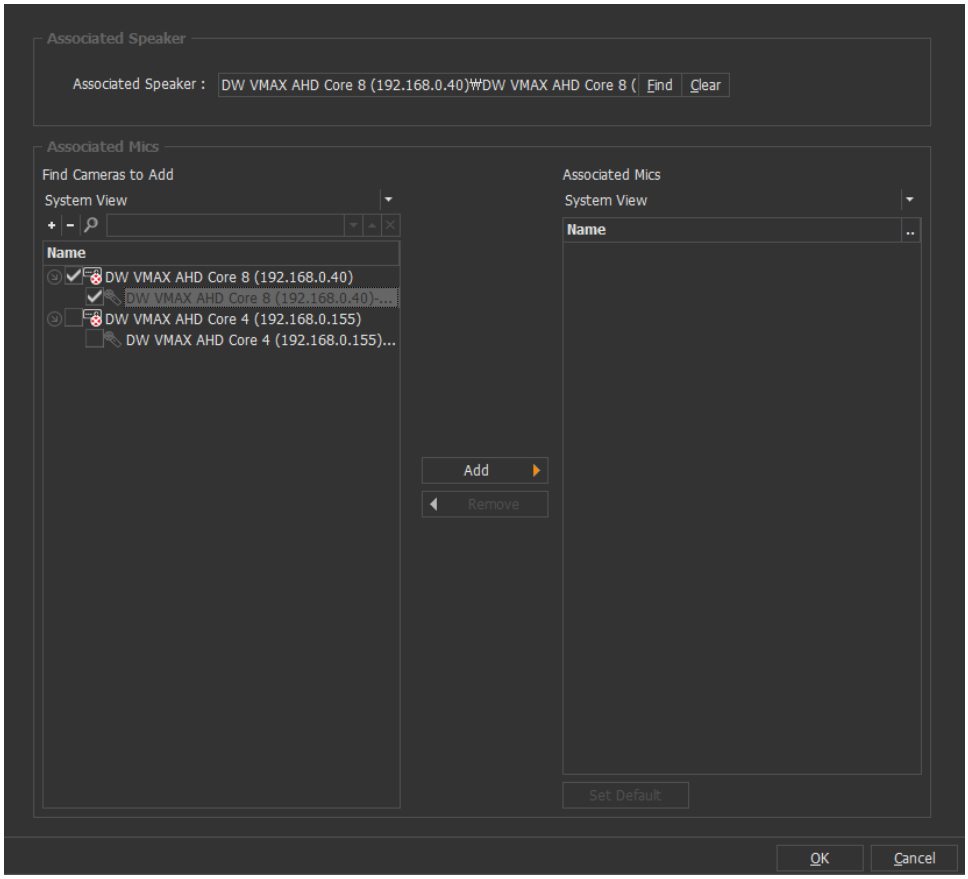
System Organization → Object List → Select Camera → Associated Audios

ASSOCIATED SPEAKER

Associated speaker for audio output on selected camera can be set by clicking ‘Find’ button on ‘Associated speakers’ to select.

ASSOCIATED MICS

Associated mics for audio input on selected camera can be set by clicking ‘Connect’ button to select from ‘Unconnected Mics list’.


Associated Speaker
Associated Speaker :
DW VMAX AHD Core 8 (192.168.0.40)₩DW VMAX AHD Core 8 (
Find
Clear
Associated Mics
Find Cameras to Add
System View
Name
DW VMAX AHD Core 8 (192.168.0.40)
DW VMAX AHD Core 8 (192.168.0.40)-...
DW VMAX AHD Core 4 (192.168.0.155)
DW VMAX AHD Core 4 (192.168.0.155)...
Add
Remove
Associated Mics
System View
Name
Set Default
OK
Cancel

3.2 USERS AND ROLES

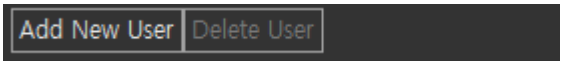
Users and groups, permissions can be set.

3.2.1 Add User

Add user to use program as below.

Users and Roles → Object List

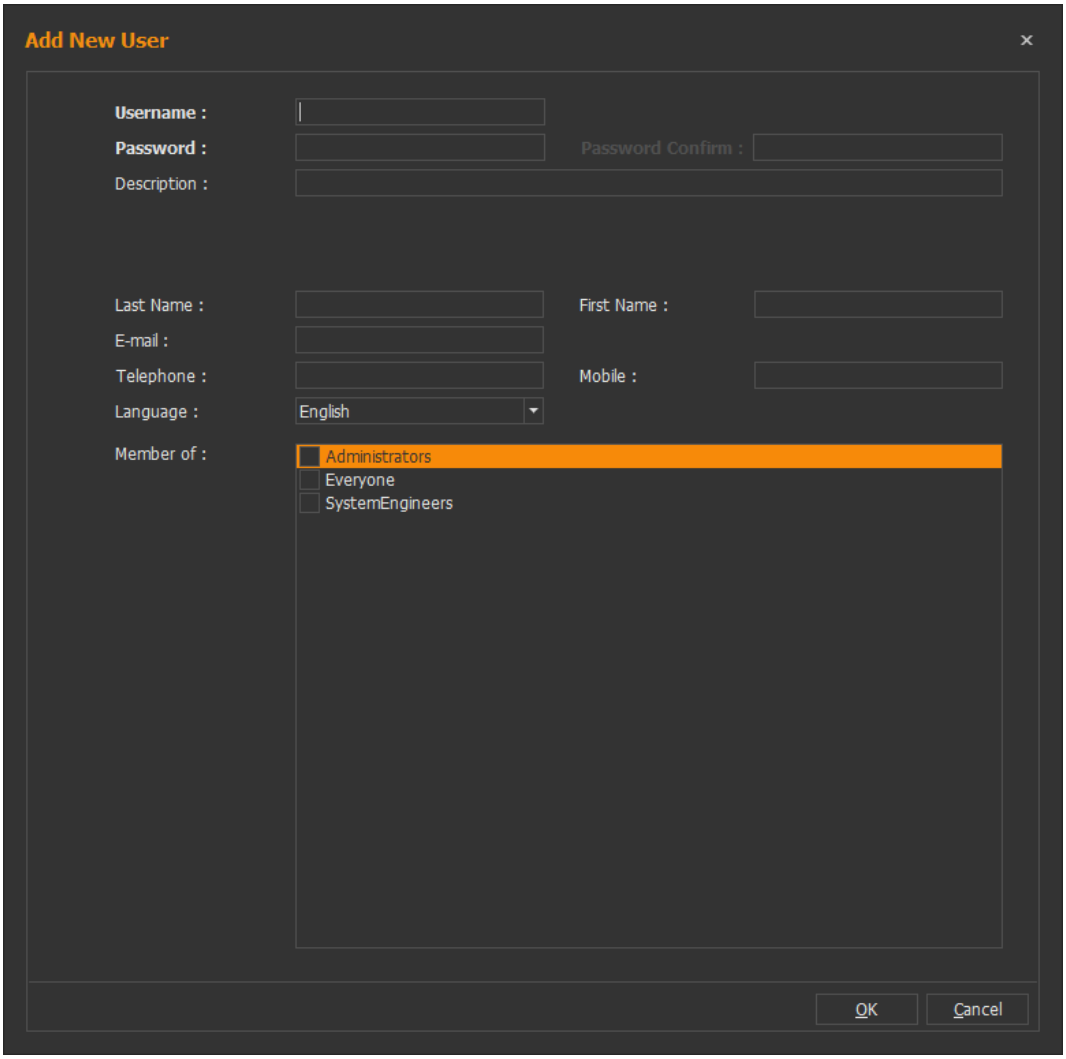
1. Click ‘Add New User’ Button on object list to press ‘Add user’ on popup menu.



2. Enter the required value on additional popup window.

   The labels in bold are mandatory.

[Fields]	
Username	User ID
Password	User Password
Description	Description
Last Name	Last Name
First Name	First Name
E-mail	E-mail
Telephone	Telephone
Mobile	Mobile
Language	Language
Member of	Group



3.2.2 Delete User

Users and Roles → Object List

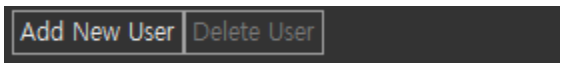
Select a user to delete from 'Object List' and clicking 'Delete User' button on object list to delete.

3.2.3 Add Role

The group of users is added as follows.

Users and Roles → Object List

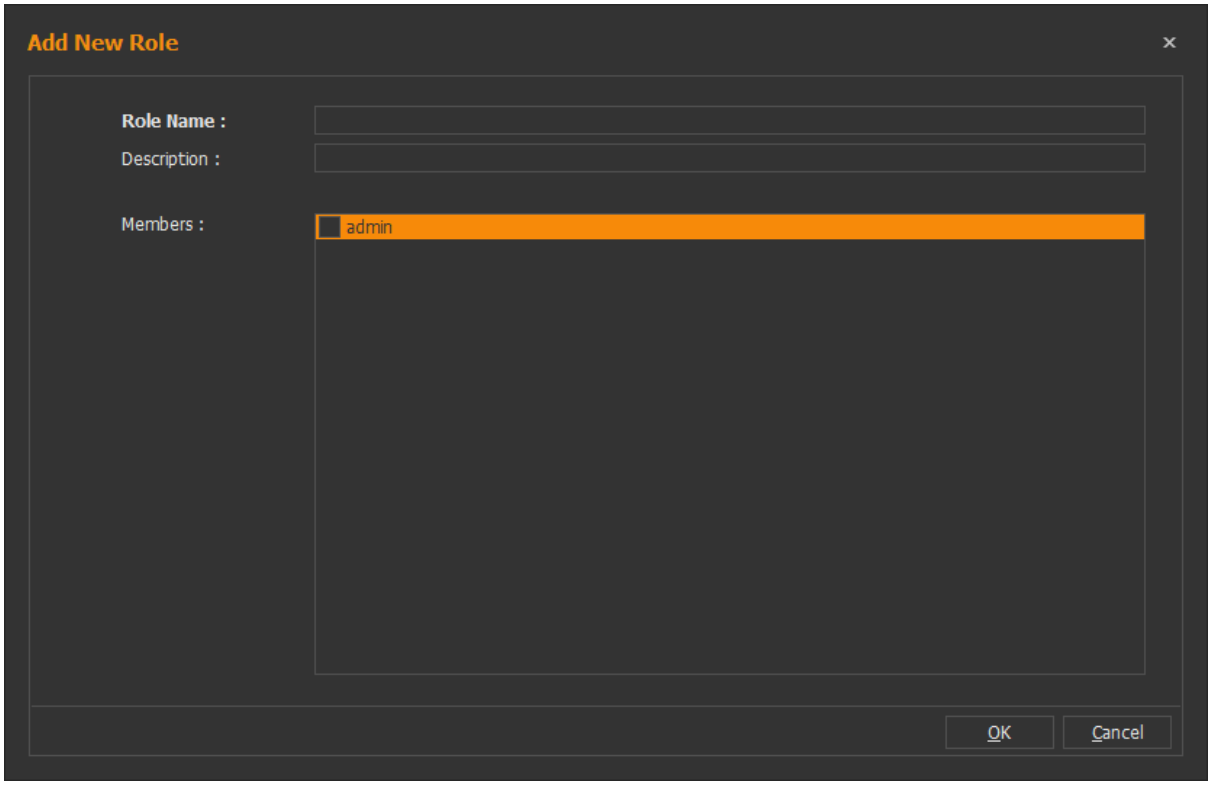
1. Click 'Add New User' button on 'Object List' and click 'Add Role' on popup menu.



2. Enter the required value on additional popup window.

   The labels in bold are mandatory.

[Fields]	
Role Name	User Group Name
Description	Description
Members	Members of Group



3.2.4 Delete Role

Users and Roles → Object List

Select a role from ‘Object List and click ‘Delete User’ button on ‘object list’ to delete.

3.2.5 Permission

Permission can be classified as ‘Default permission’ ‘Group permission’ ‘user permission’ depending on the user.

PERMISSION PRIORITY

Permission priority is as follows.

User Permission > Role Permission > Default Permission

Therefore, if there is no permissions setting for user and group permissions applied at the time, 'default permission' is applied.

ROLE PERMISSIONS

User can be registered as a member of several groups and role permissions assigned for each group will be integrated and applied.

e.g.) in case that the user ‘Hong Gil Dong’ is the member of ‘Role 1’, ‘Role 2’.

Role 1: No permission to search

Role 2: Search permission exists

‘Hong Gil Dong’ can use the search function.

There are ‘System permissions’ ‘Site permissions’ ‘Device Permissions’.

SYSTEM PERMISSIONS

It is the permission for available program functions.

SITE PERMISSIONS

The permission to access the device to use or not in a specific site.

If logged-in user does not have site permission, user cannot check or control the devices included in the site with the list.

DEVICE PERMISSIONS

The permission on the option for individual use of the device and associated function.

3.2.6 System Permissions

The way to set system permissions is as follows.

DEFAULT PERMISSION

User and Group setting → Object List → select Default permission

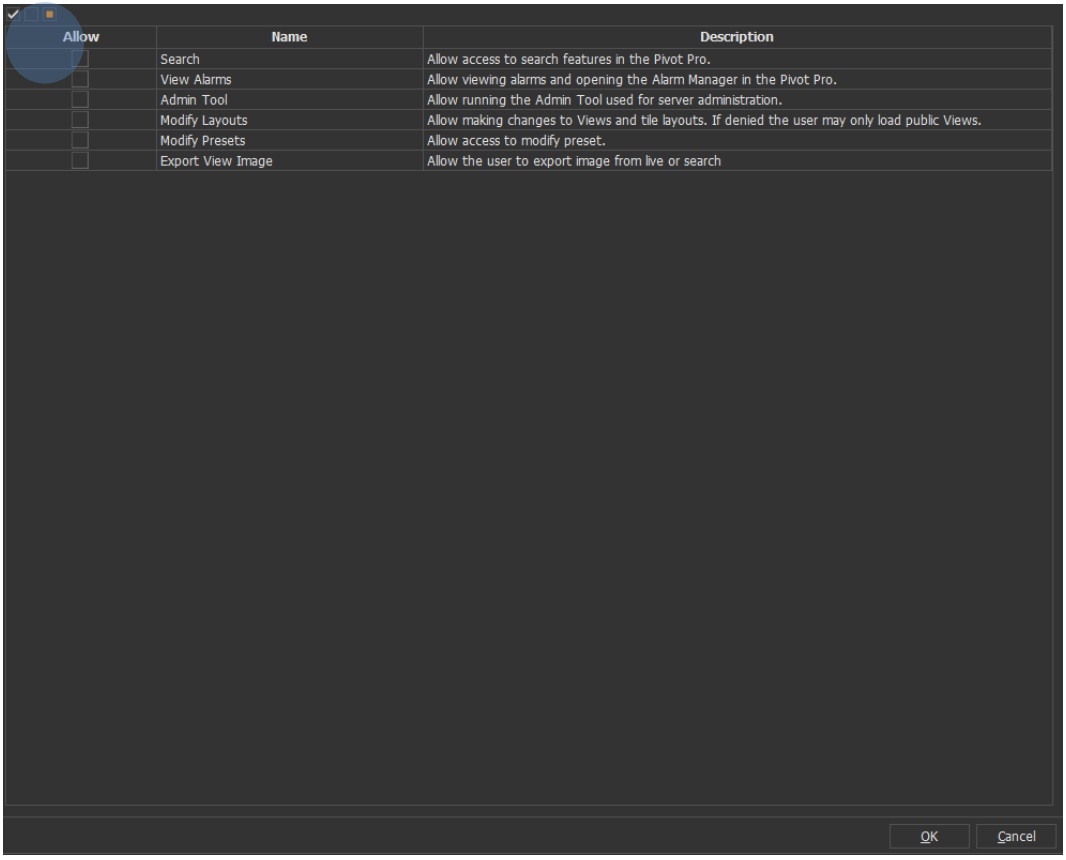
ROLE PERMISSION

User and Roles → Object List → select a role → Role permission

USER PERMISSION

User and Roles → Object List → select a user → User permission

Click ‘Allow’ section on the permission to change on system permission list.



Button images have the following meanings.

	Allow
	Inherited (Allow) –When setting user and role permissions
	Inherited (Deny) – When setting user and role permissions
	Deny

3.2.7 Site Permissions

Site permissions are set as follows.

ROLE PERMISSION

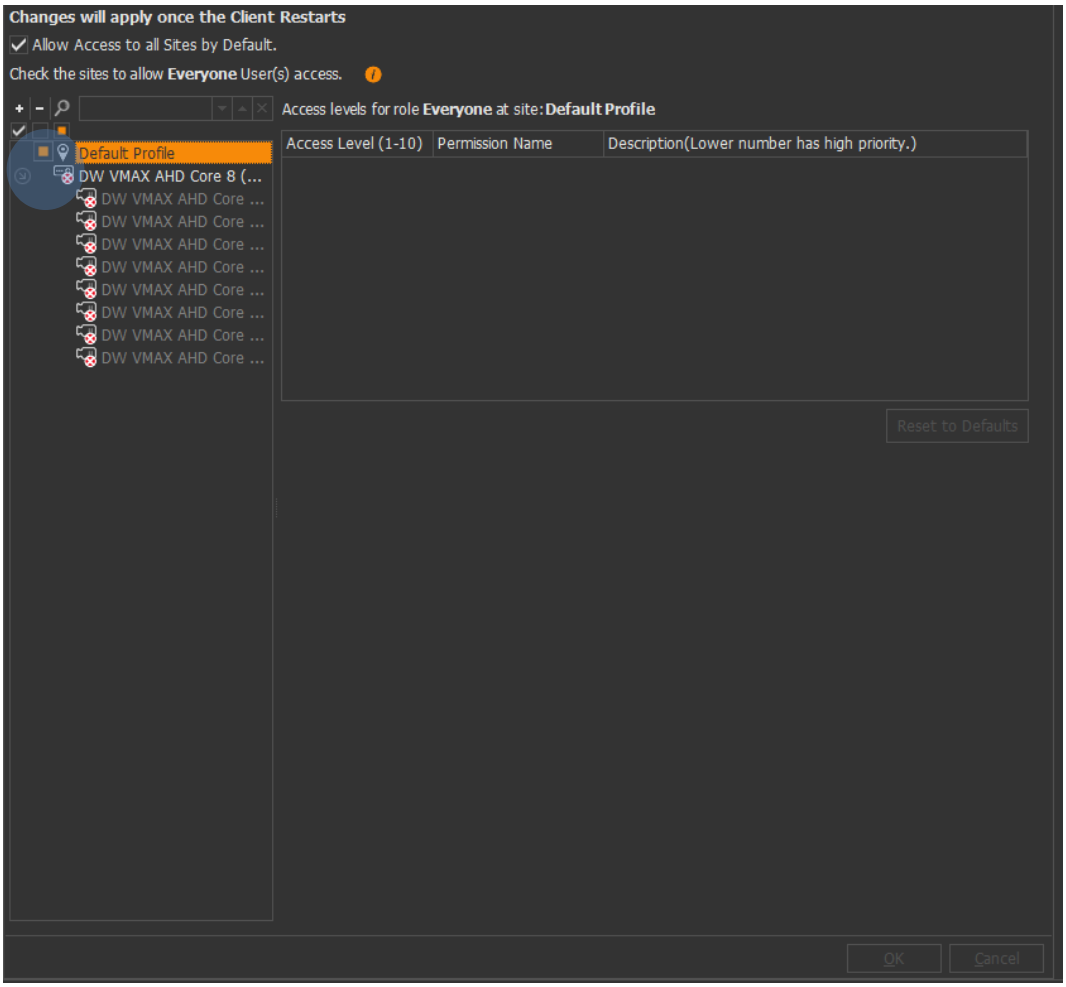
User and Roles → Object List → Select Role → Site Permissions

USER PERMISSION

User and Roles → Object List → Select User → Site Permissions

All the site information should be set before setting site permissions. (Refer to the 'Add Site Information')

Click 'Check' button to allow to access the site permission to change on 'Object list' of site permission.



Button image is the same as 'system permissions setting'.

3.2.8 Device Permissions

Device permissions are set as follows.

DEFAULT PERMISSION

User and Roles → Object List → Default Permissions → Device

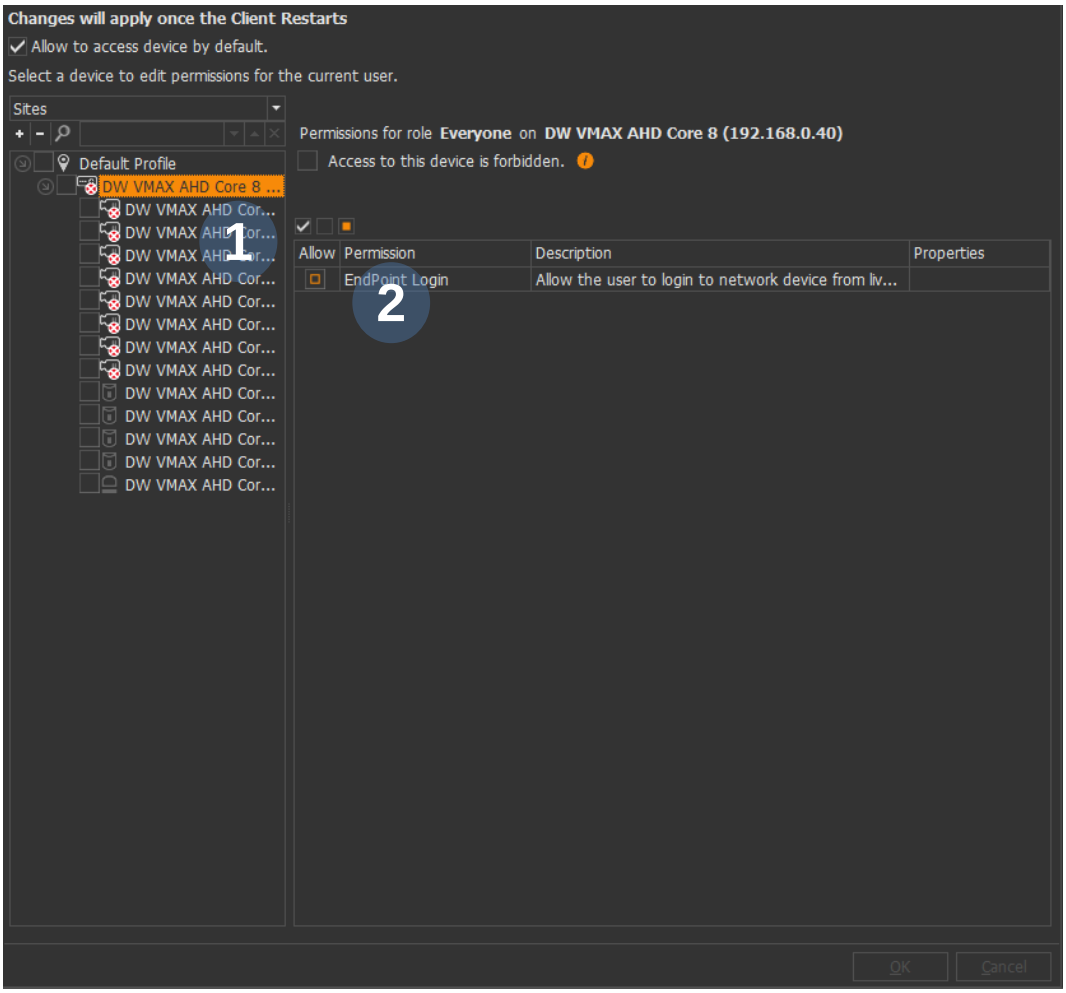
ROLE PERMISSION

User and Roles → Object List → Select Role → Device Permissions

USER PERMISSION

User and Roles → Object List → Select User → Device Permissions

The device without site permissions has no device permission setting.



1. Select a device to change setting on ‘Object list’ of device permissions.

   ‘Check’ button on object list of device permissions means the option to select a device to set and apply permission setting.

2. Click ‘Allow to access device’ button about the permissions to change on the permission list.

3.3 System Settings

User can set the necessary options for program operations.

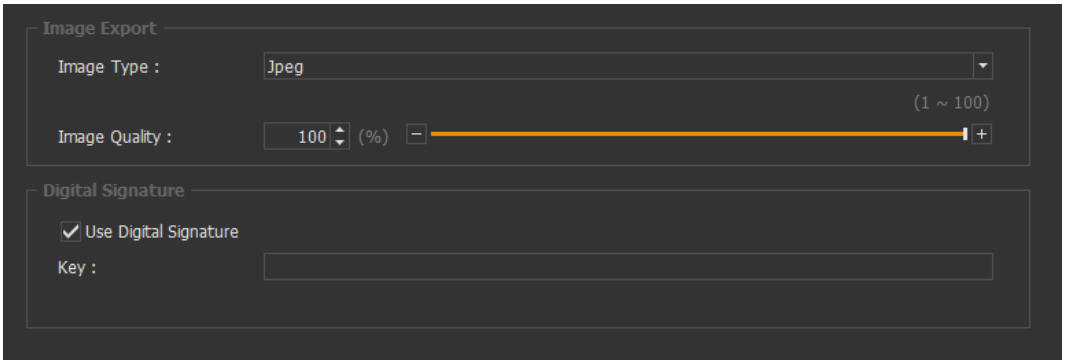
3.3.1 Export

Set default codec, quality or electronic signature required for export or picture storage.

System Settings → Export

Save formats of export are ‘Avi’/ ‘Archive File’ / ‘Exe’ and so on, the save formats may vary depending on available program.

[Fields]	
Image Export	Option for saving image
Image Type	
Image Quality	
Digital Signature	Digital signature when export or save image
Use Digital Signature	
Key	



3.3.2 On Screen Display Options

It performs configuration associated with OSD when showing a live/search video.

System Settings → On Screen Display Options

The information can be shown by OSD in Live/ Search are as follows.

1. Show Camera Name

   It displays specified name when setting a device.

2. Show Device Code

   It shows device code or camera serial number.

3. Show Date/Time

   It shows the time of the video.

4. Show Recording Mode

   It shows recording status.

☐	Stop recording
●	Continuous recording
▮▮	Even recording

5. Show Resolution

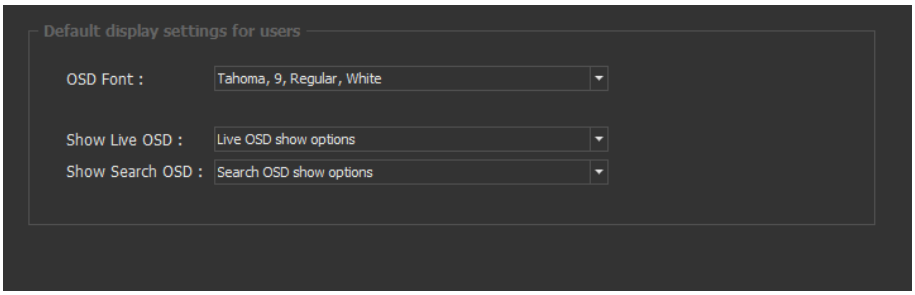
   It shows the resolution of the video.

6. Show BPS

   It shows BPS.

7. Show FPS

It shows FPS.



3.3.3 Event Settings

Events happened in the program can be managed and recorded as log. Event type may vary depending on the program.

Events are classified as follows.

DEVICE LOG

Events occurred during the program use.

e.g.) user log-in

ALARM LOG

Event can be managed as alarm.

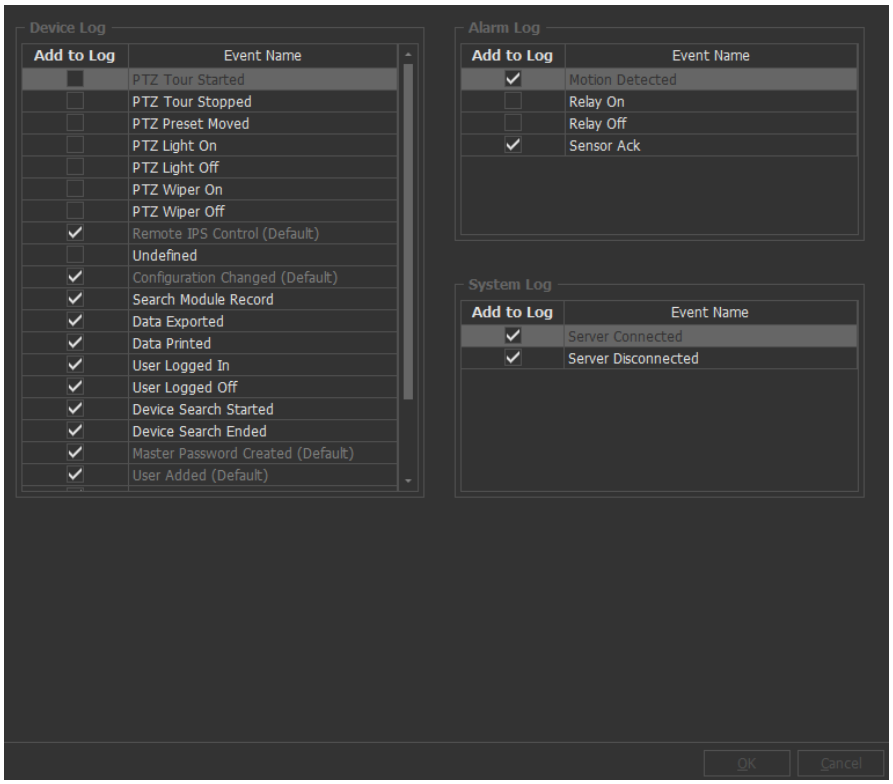
e.g.) motion detection

SYSTEM LOG

It means alarm event while the event is a system event.

e.g.) Server disconnected

Check the 'Add to Log' button on the events to be logged and managed.



4 FAULT MANAGEMENT

Fault status of network devices can be monitored by using ‘System Event Monitor’ and Sundance Interop Server will work for status collection.

4.1 SETUP

DEVICE SETUP

User can set up ‘Sundance Interop Server’ and ‘Health Check Port’ to monitor fault status of a device. Devices that do not support fault status monitoring functions will not be visible on ‘Health Check port’.

PERIOD FOR COLLECT STATUS INFORMATION

The period for collecting status information such as recording period information can be set as follows.

System Organization → Object List (Interop Servers)

1. Select Sundance Interop Server to set from ‘Object List’.
2. Change the ‘Health Check Period’.

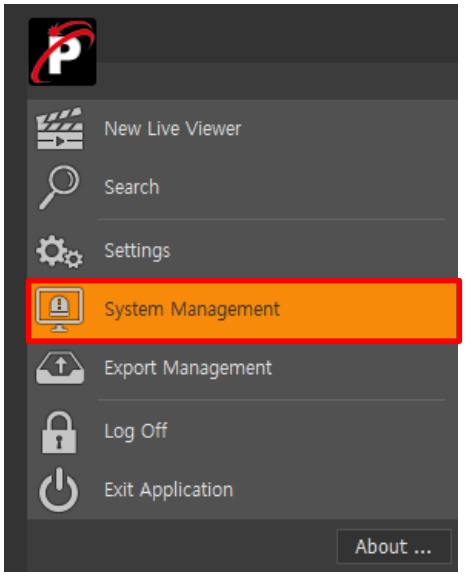
3

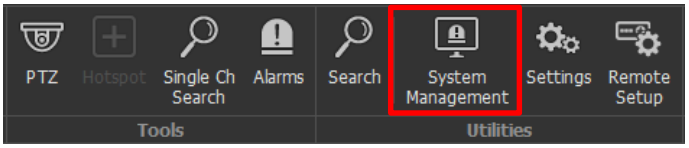
System Event Monitor

1 STARTING PROGRAM

1.1 START PROGRAM

Pivot Pro's Program Menu or Toolbox → click the icon 'System Management' than you can execute a System Event Monitor.

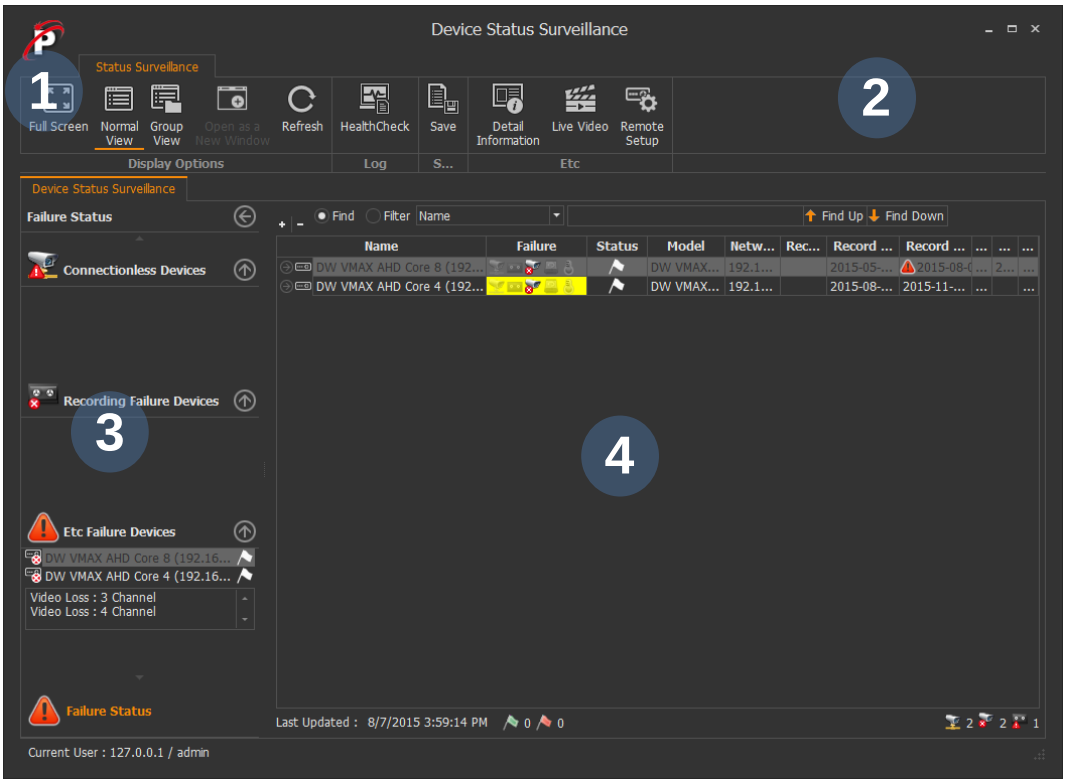




2 DEVICE STATUS SURVEILLANCE

It can monitor the status of registered devices using device status surveillance function.

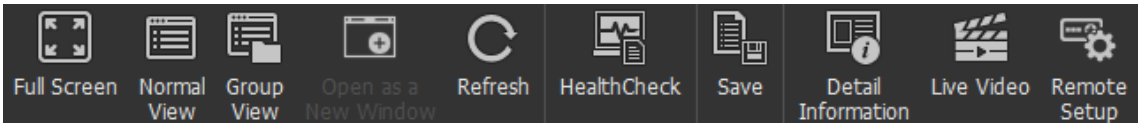
2.1 PROGRAM LAYOUT



1. Program Menu
   it can finish or log-off, and start other programs and functions.
2. Tool box
   there are all tools used for device status surveillance.
3. Failure Status
   it shows the failure by failure status.
4. Device Status Page
   It shows the information of registered devices and current device status.

2.1.1 Tool box

The button and description on tool bar are follows.

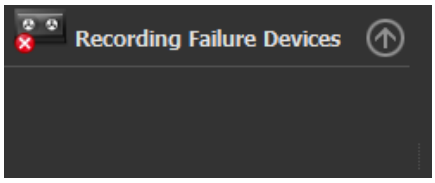


[Button]	[Description]
Full Screen	Zoom device status surveillance window as full screen.
Normal View	Show the list of all registered devices as the order of registered.

Group View	Show the list of all registered devices by the group.
Open as a New Window	Undocks current tab to new window.
Refresh	Refresh the information on device status page with the latest updates.
HealthCheck	Check HealthCheck of selected device.
Save	Save the information on device status as excel file format.
Detail Information	Show detailed information of selected device on screen.
Remote Setup	Displays device setting on screen.

2.1.2 Failure Status

It shows by failure type and the field and description of the failure status are as follows.

[Fields]	[Description]
	It shows the list of connectionless devices.
	It shows the list of recording failure devices.
	It shows the list of miscellaneous failure devices.

2.1.3 Device Status Page

The information on device status page are as follows.

[Attribute]	[Description]
Name	Device name
Failure	Failure Status of a device Connection failure Recording failure Video loss failure Hard Disk failure Temperature warning of hard disk

Status	Current device status Normal Installing Recovering
Model	Model name of device
Network Address	IP address for network connection (IP)
Record Method	Record method set
Record Start	Start time of the device recording
Record End	End time of the device recording
Installed	Latest Installed date of a device
Site Opened	Initial installed time of a device
Version	Firmware version installed on a device

2.2 FULL SCREEN

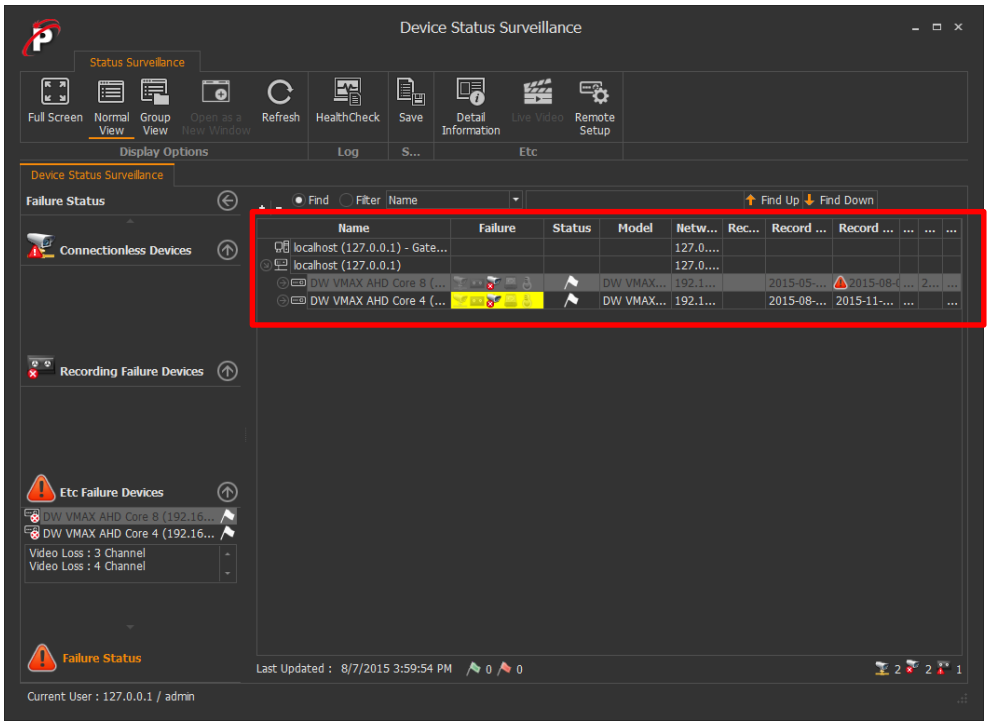
Select on tool bar to view device status surveillance page as full screen. Press 'ESC' to go back to previous status.

2.3 NORMAL VIEW

Select on tool bar to display the devices as the order of registered.

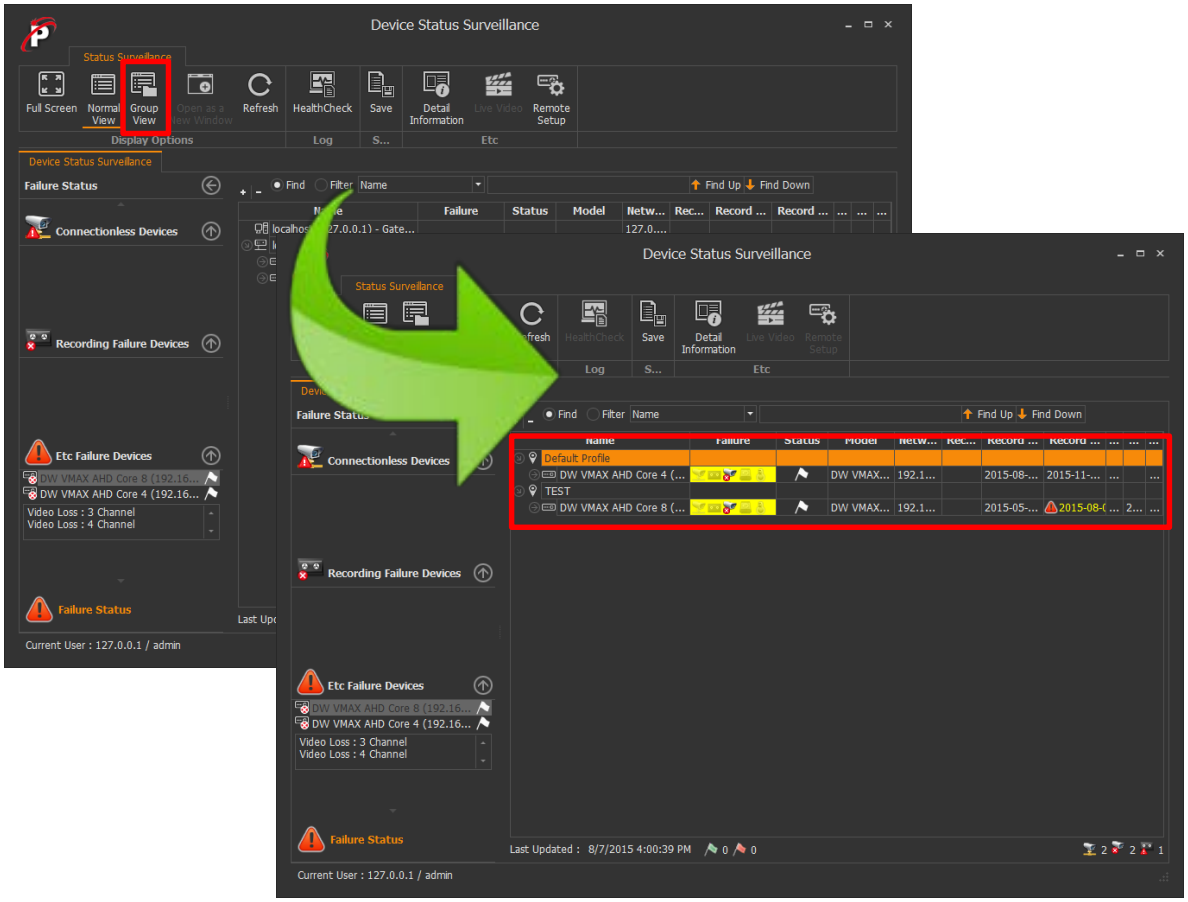
- Select 'View Server list' on popup menu to display servers registered.

Device Status Page → Popup Menu → View Server List



2.4 GROUP VIEW

Select on tool bar to display devices sorted as the group set on ‘the config manager’.



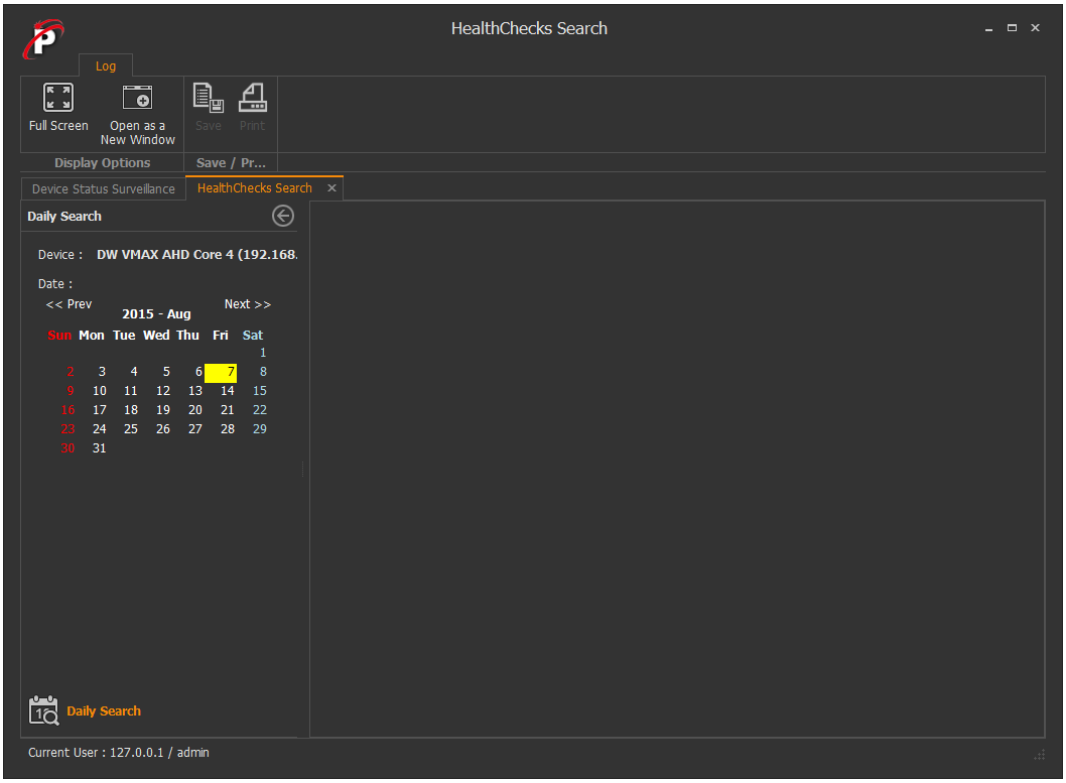
2.5 REFRESH

Select on tool bar or press ‘Update Status’ on popup menu to update device status with latest information.

Device Status Page → Popup Menu → Update Status

2.6 HEALTH CHECK

Select a device and press on tool bar to search Healthcheck of the device.

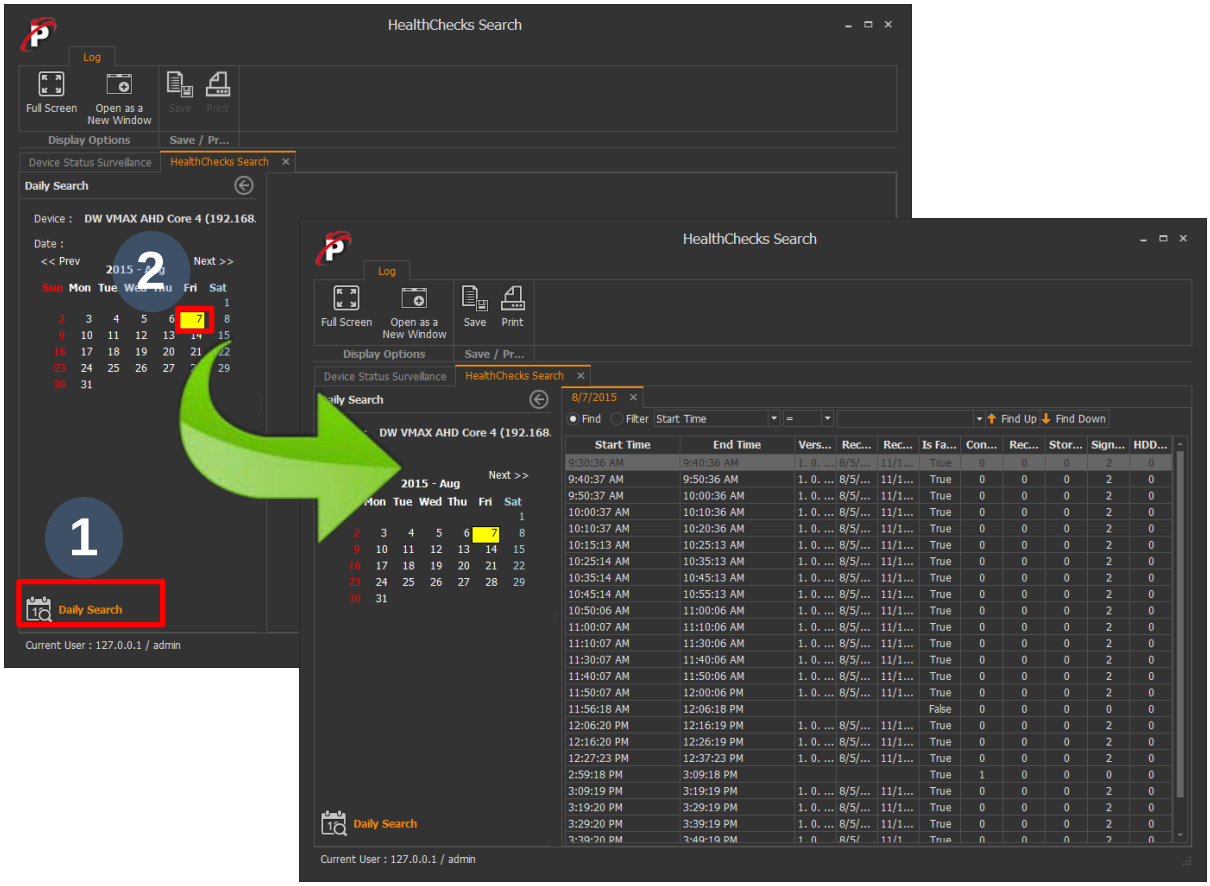


2.6.1 Daily Search

Health check on specific date can be searched using daily search function.

The way to search log using daily search function are as follows.

1. Select ‘Daily Search’ on left bottom corner.
2. Double click the date to search on the calendar on right side of the screen to see the log on the specific date.
3. The log date is highlighted in yellow color.



2.6.2 Save

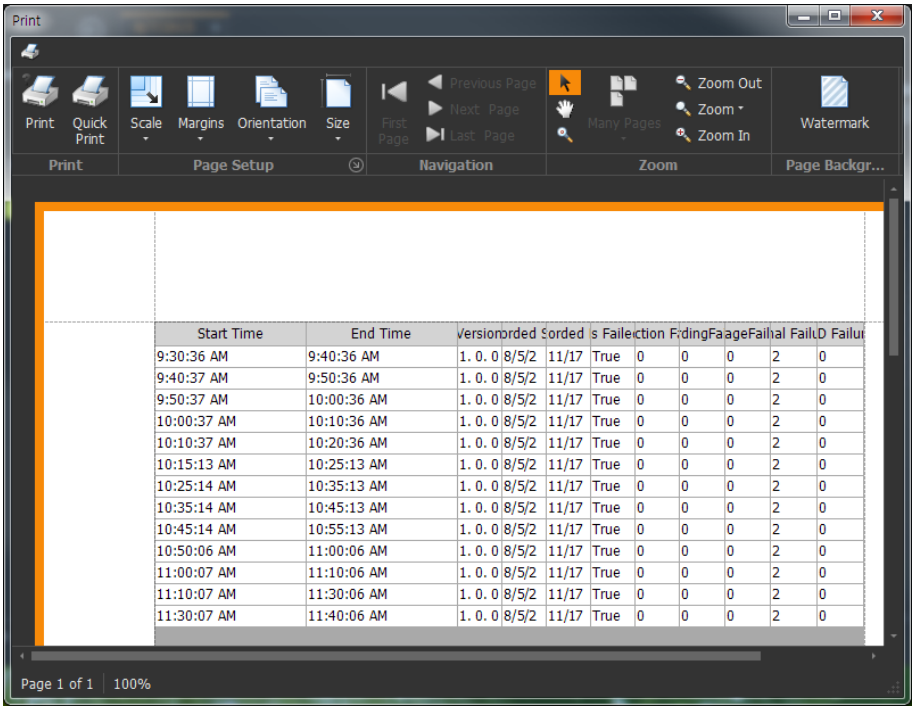
Select on tool bar to save status history searched as excel file.

2.6.3 Print

Select on tool bar to print status history searched.

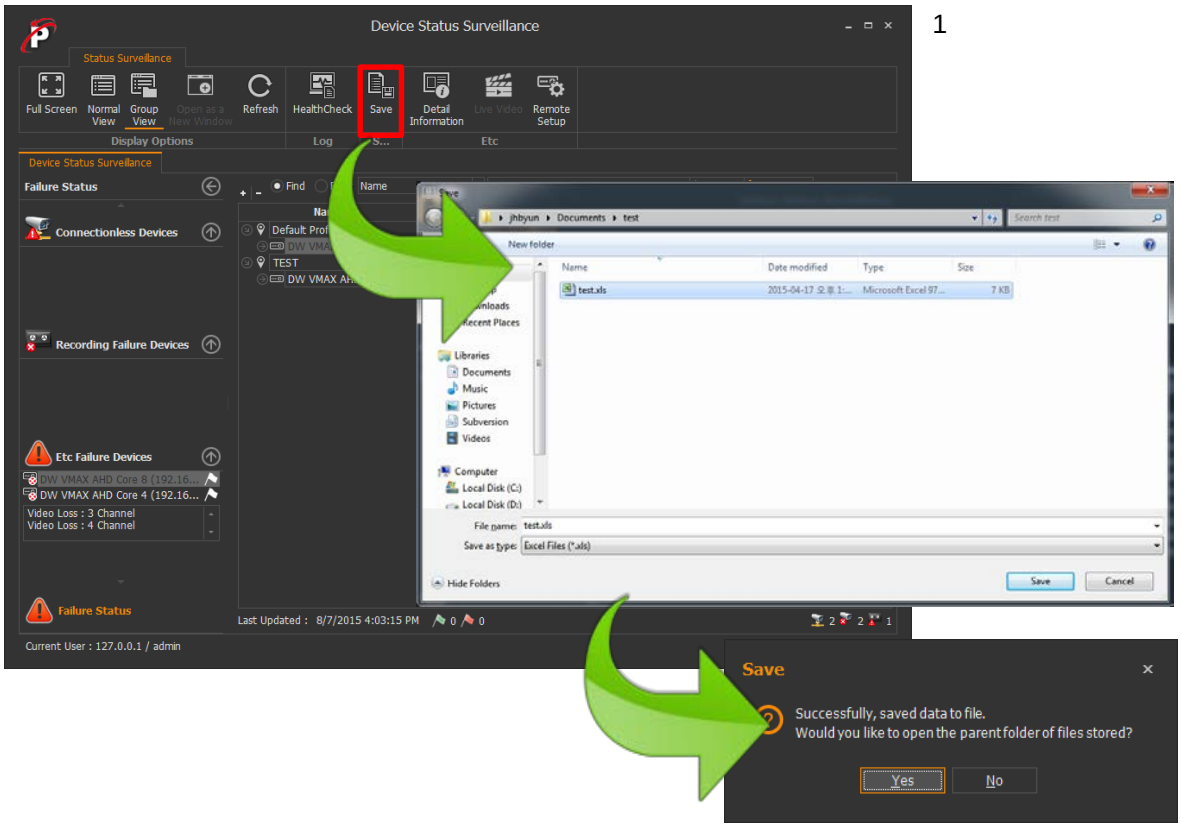
The way to print searched status history is as follows.

1. Select on tool bar.
2. Press or on additional popup window to print out.



2.7 SAVE

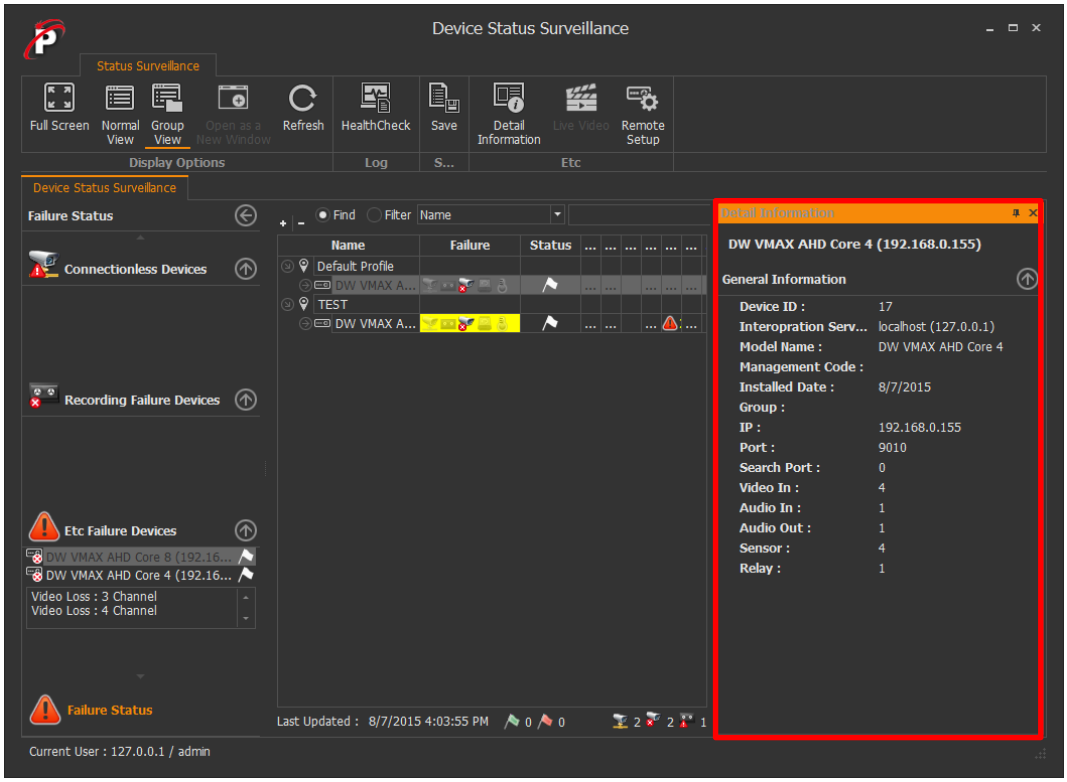
Select on tool bar to save the information shown on current device status page as excel file format.



2.8 DETAIL INFORMATION

It shows detail information of device extracted from database on the screen.

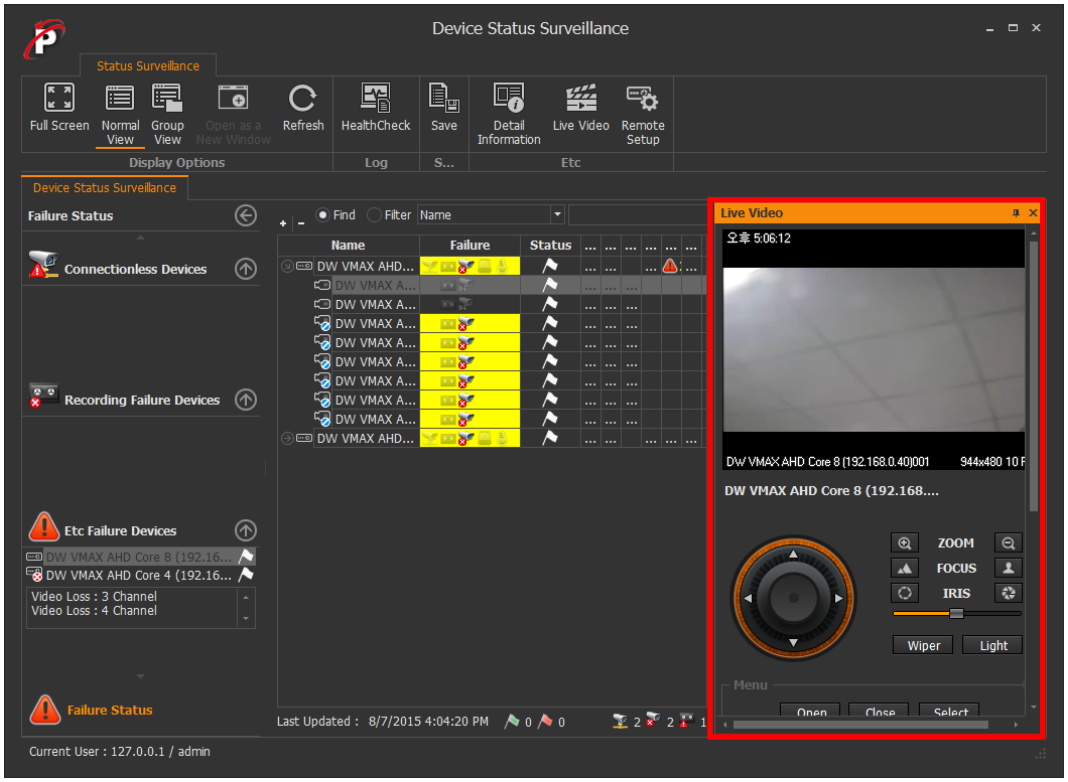
Press on tool bar after selecting a device to display detail information of the device on right side of the screen.



2.9 LIVE VIDEO

It can check live video and provide a task like PTZ control using live video function.

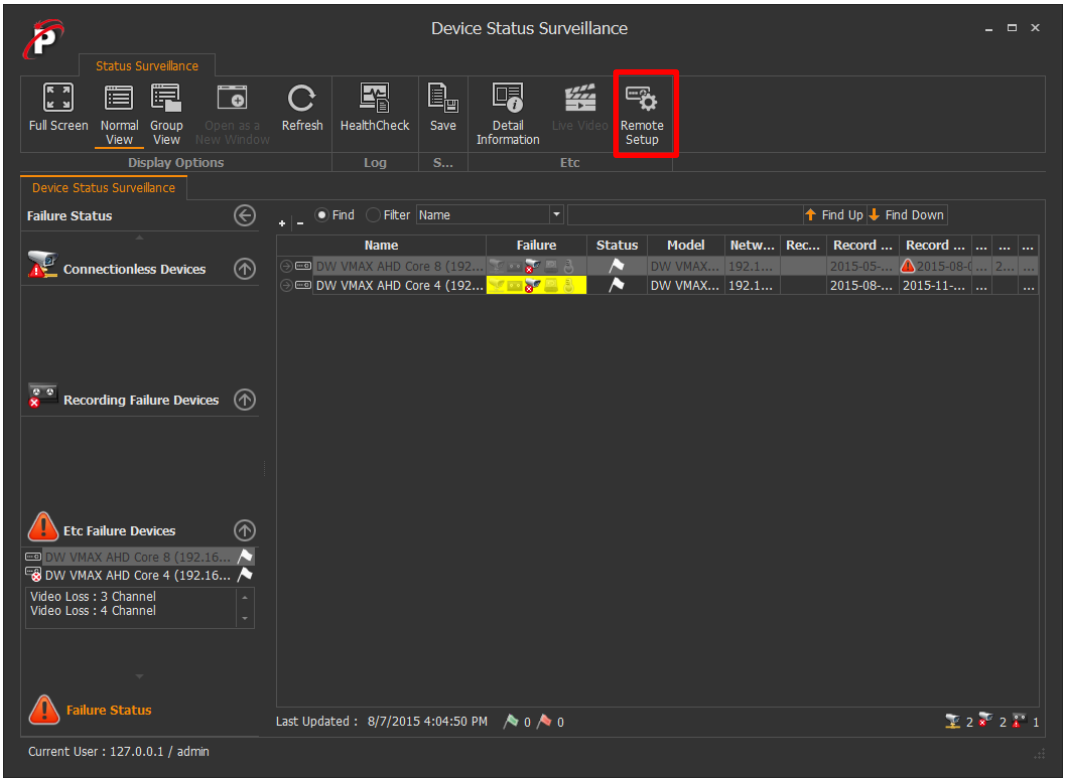
Select a device and press on tool bar to display live video controller on the right side of the screen.



2.10 REMOTE SETUP

It can change device setting using setting function.

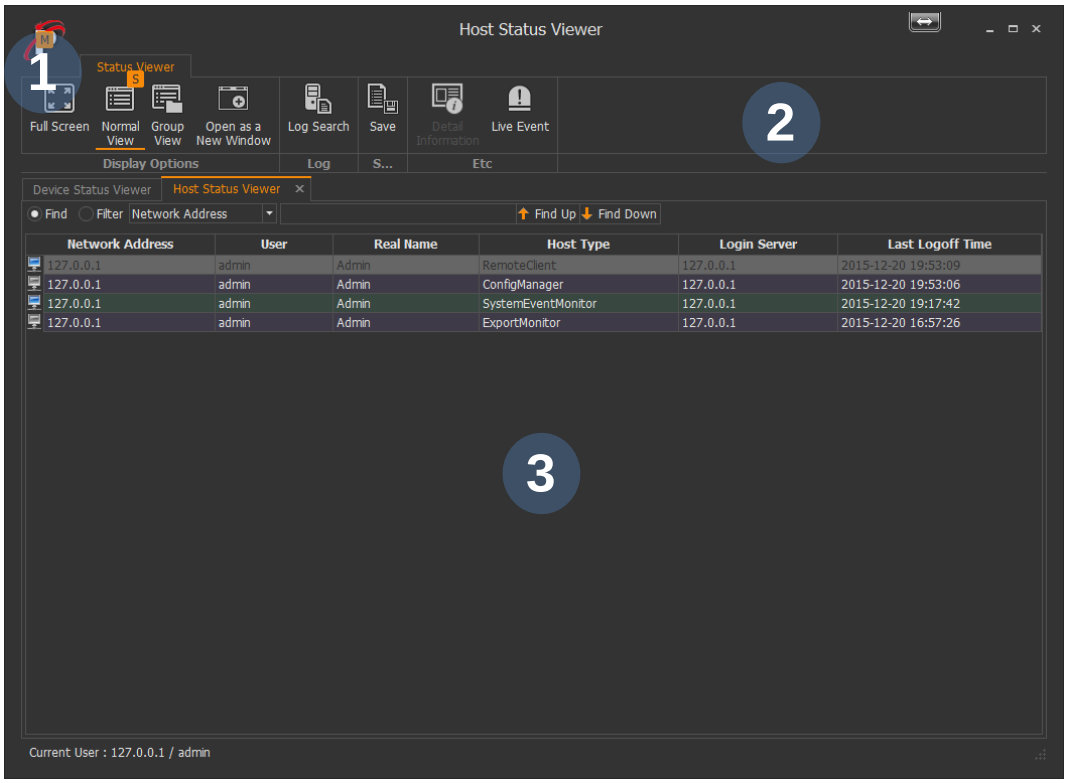
Select a device and press on tool bar to display setting window of the device provided by the device manufacturer on screen.



3 HOST STATUS VIEWER

It can monitor hosts that try connect to media control server using host status viewer function.

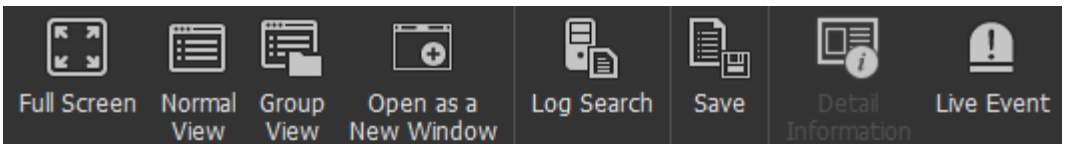
3.1 PROGRAM LAYOUT



1. Program Menu
   it can finish or log-off, and start other programs and functions.
2. Tool box
   there are tools used for host status viewer.
3. Host Status Page
   Host status page shows host information that try connect to media control server.

3.1.1 Tool box

Name and description of tool bar are as follows.

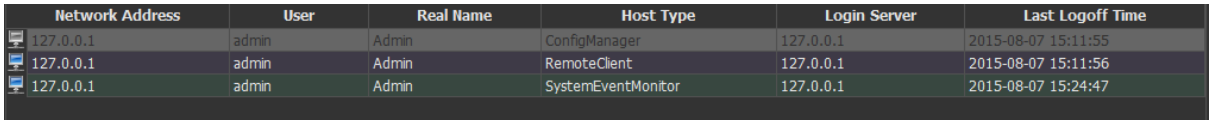


[Button]	[Description]
Full Screen	Zoom host status viewer window as full screen.
Normal View	Shows host program list as the order that try connected to.
Group View	Shows host program list sorted by the group.
Open as a New Window	Undocks current tab to new window.

Log Search	Search log of selected host program.
Save	Saves the information on host status page as excel file format.
Detail Information	N/A
Live Event	Shows live event happened from selected host program.

3.1.2 Host Status Page

The information on host status page are as follows.



[Attribute]	[Description]
Network Address	Host address tried to connect (IP) Connecting Host Connected Host
User	User ID to connect to the host
Real Name	User name connected to the host.
Host Type	Running program on the host tried to connect
Login Server	Login server that host tried connection.
Last Logoff Time	Last logoff time of the host

3.2 FULL SCREEN

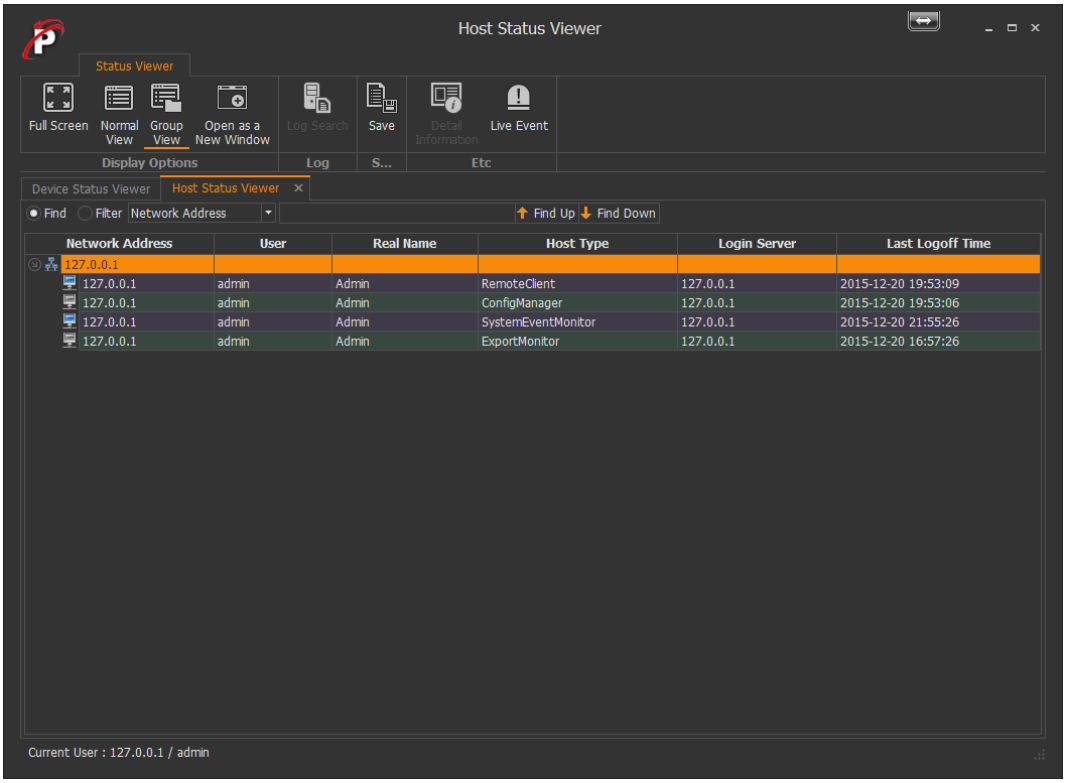
Select on tool bar to display host status page as full screen. Press ESC to go back to previous status.

3.3 NORMAL VIEW

Select on tool bar to display hosts as normal view sorted as the order of being tried connection.

3.4 GROUP VIEW

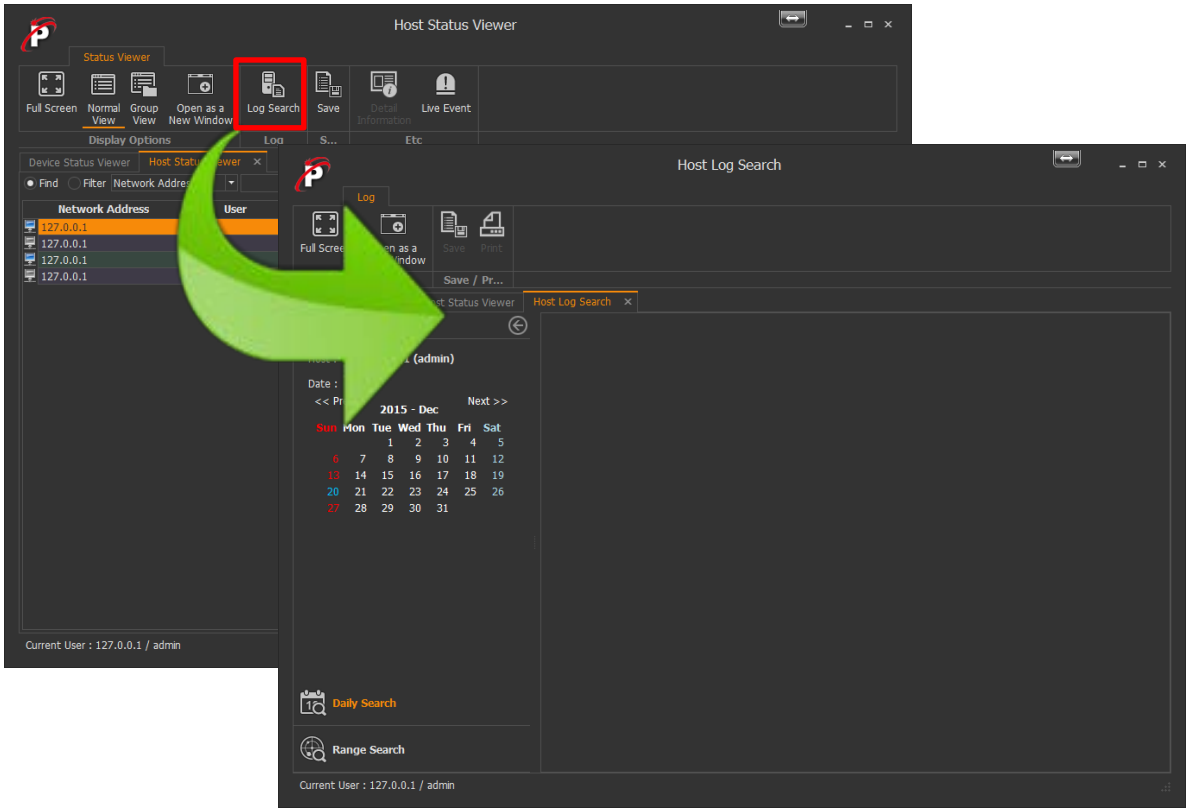
Select on tool bar to display hosts sorted by group view of network address.



3.5 LOG SEARCH

Select a host to search log and press or double click the mouse to activate host log search function.

It can search host log using host log search function. (For details, see Chapter. 5)



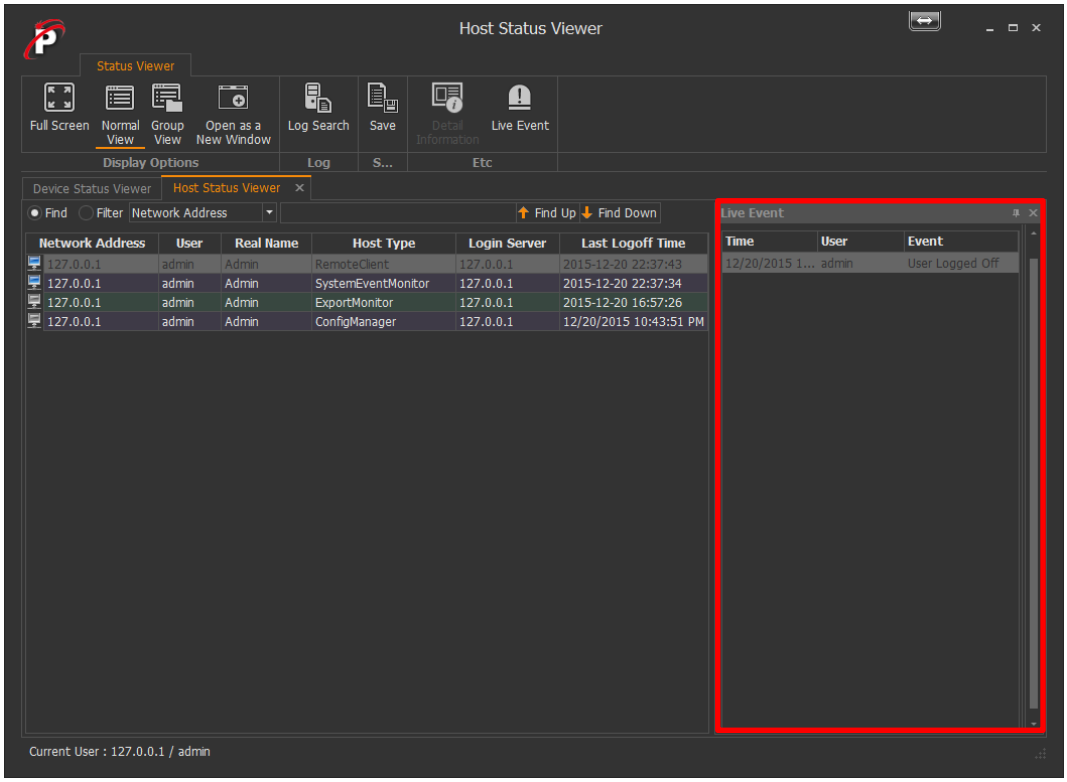
3.6 SAVE

Select on tool bar to save host status page as excel file format.

3.7 LIVE EVENT

It can check live event of the host using live event function.

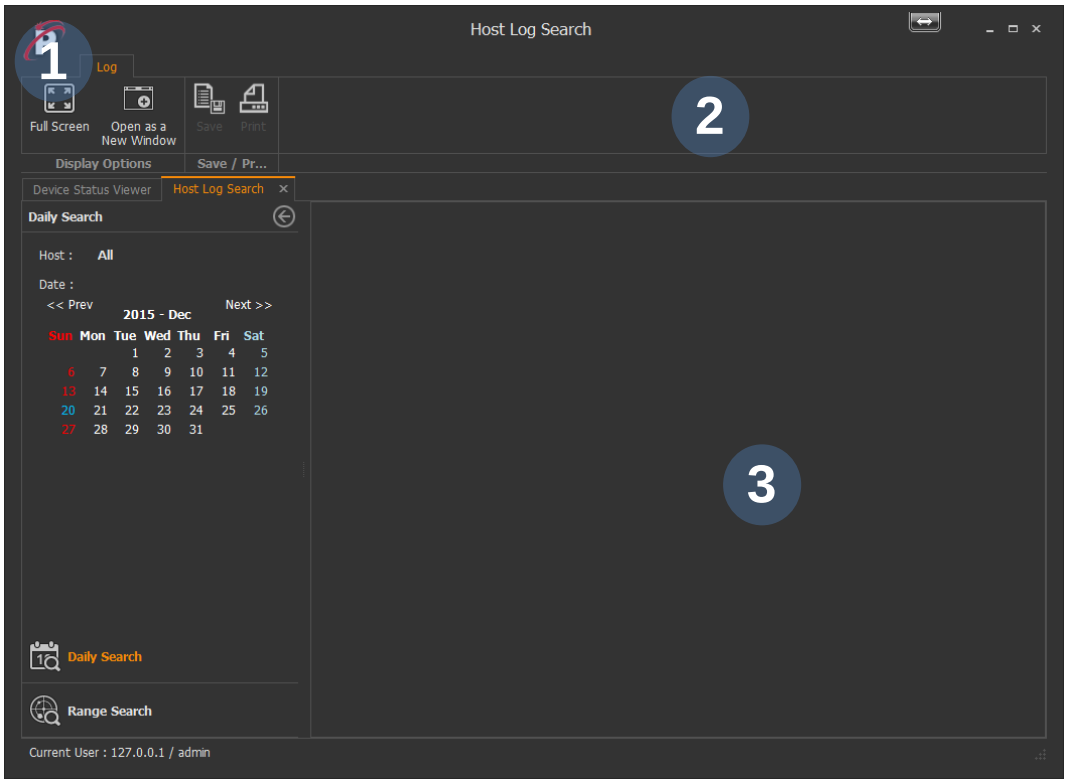
Select a host and press on tool bar to display live event list of the host on right side of screen.



4 HOST LOG SEARCH

It can search logs occurred by the host using host log search function.

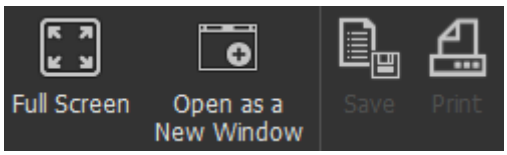
4.1 PROGRAM LAYOUT



1. Program Menu
   It can finish or log-off, and start other programs and functions.
2. Tool box
   there are tools used for system log search.
3. Log Search Page
   it searches log and views log search page.

4.1.1 Tool box

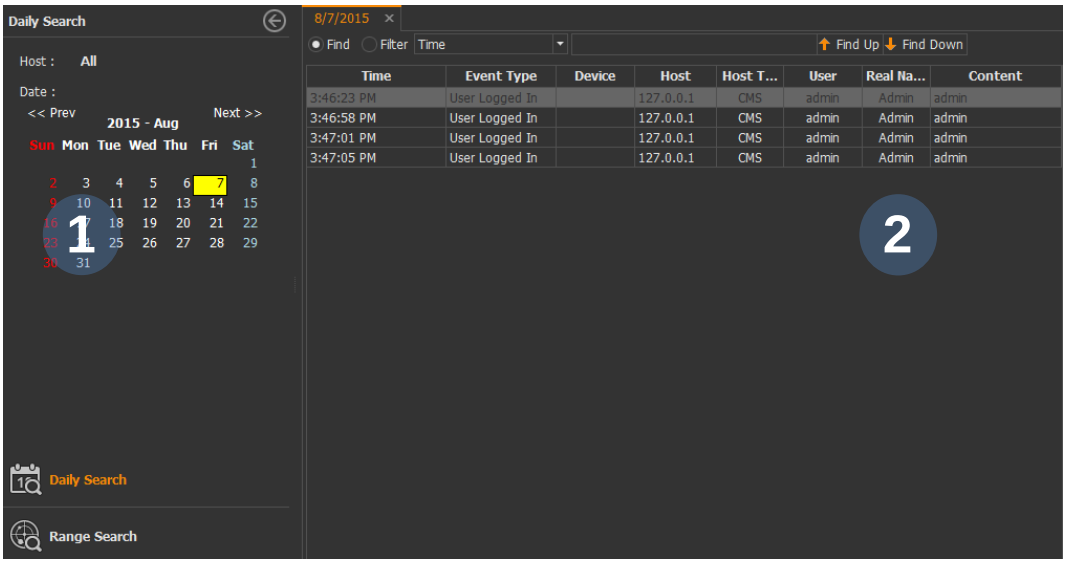
The name and description of tool box are as follows.



[Button]	[Description]
Full Screen	Zooms device status viewer to full screen.
Open as a New Window	Undocks current tab to new window.
Save	Save searched log as excel file format.
Print	Prints searched log.

4.1.2 Log Search Page

Log search page can be divided into two sections as follows.



1. Search Section
   It can search saved by setting either as daily search or range search.

2. Searched Log Section
   It shows searched log and the information on the section are as follows.

[Attribute]	[Description]
Time	Log recorded time
Event Type	Type of the event
Device	Device associated with the event occurred
Host	Event Host
Host Type	Host type of Event
User	User ID connect to Event Host
User Name	User Name connect to Event Host
Content	Event Contents

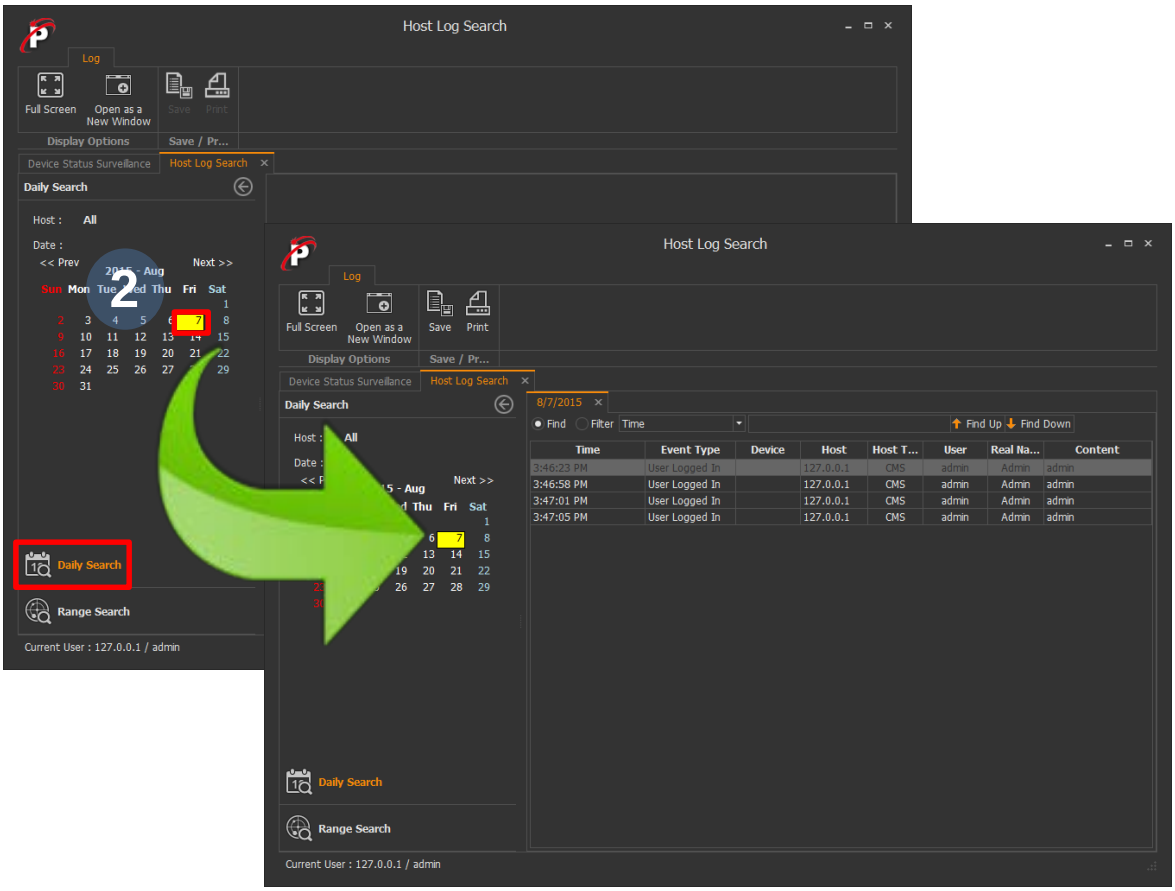
4.2 LOG SEARCH

4.2.1 Daily Search

Daily search function can search log on specific date.

The way to search log using daily search is as follows.

1. Select ‘Daily Search’ on left bottom end.
2. Double click the date to search on the calendar of left upper side to display saved log on the right side of the screen.
3. Log recorded date is highlighted in yellow.



4.2.2 Range Search

It can set the range of log to search using range search function.

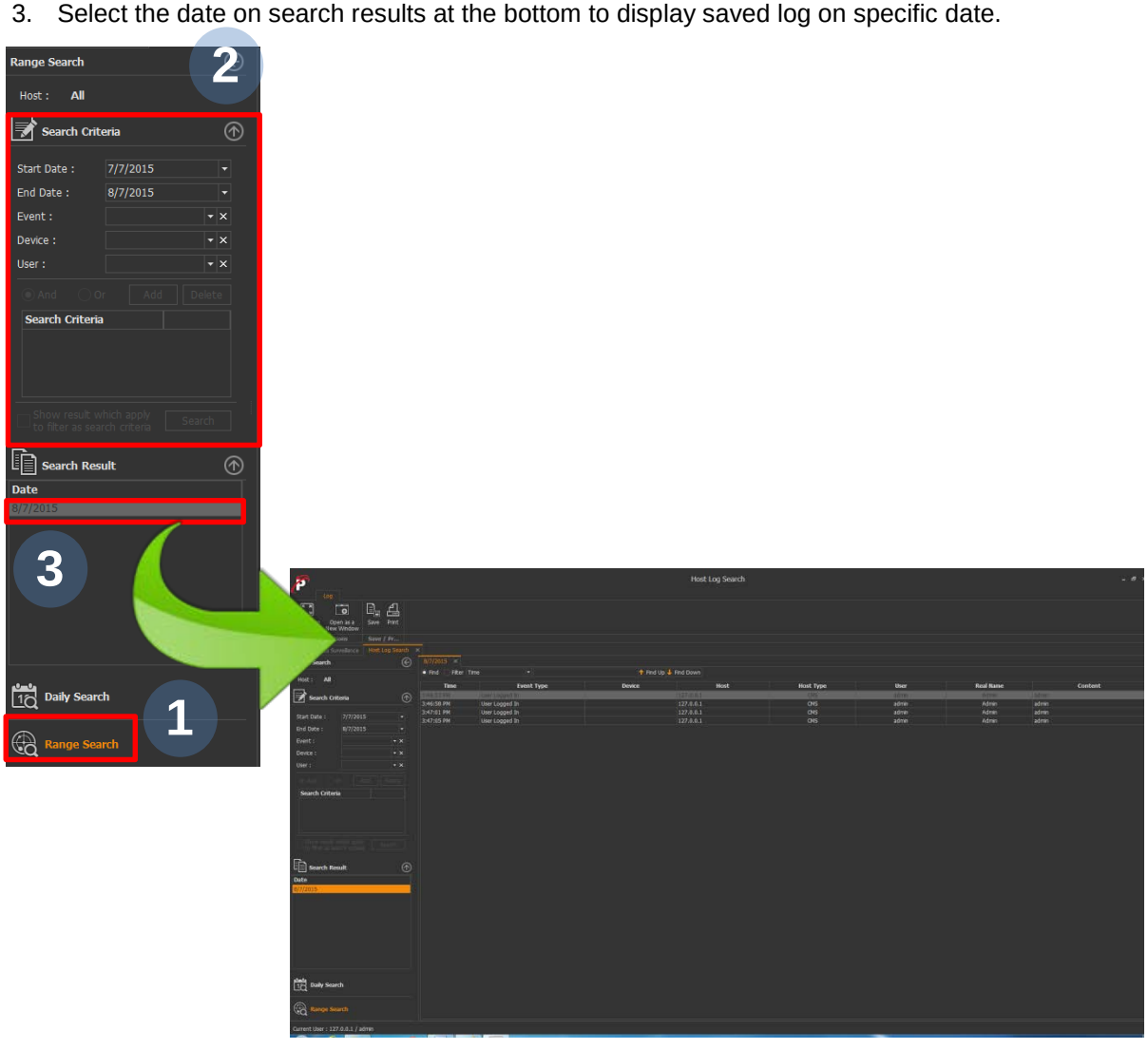
The way to search log by daily search is as follows.

1. Select ‘Range Search’ on left bottom end.
2. Set search criteria on left upper side and press ‘Add’ and click ‘Search’ button.

- Search criteria are as follows.

[Search Criteria]	[Description]
Start Date	Start Date of search
End Date	End Date of search
Event	Event to search
Device	Event device
User	Event user
Show result which apply to filter as Search criteria	Show the searched results only on the screen if check search criteria

3. Select the date on search results at the bottom to display saved log on specific date.



4.3 Full Screen

Select on tool bar to display log search as full screen. Press ESC to go back to the previous status.

4.4 Save

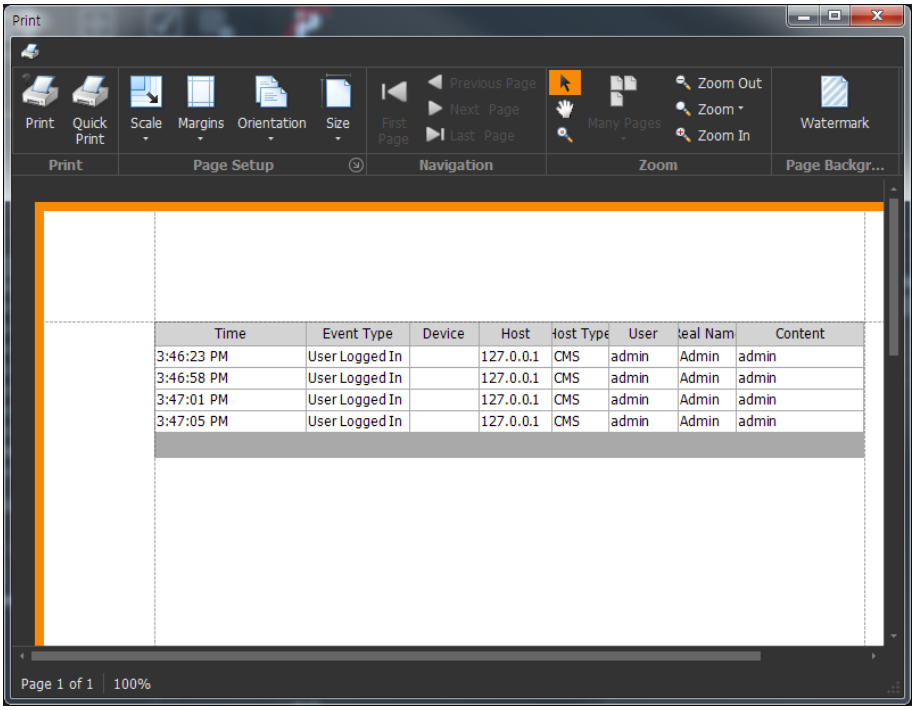
Press on tool bar to save log search as excel file.

4.5 Print

Select on tool bar to print log search.

The way to print searched log is as follows.

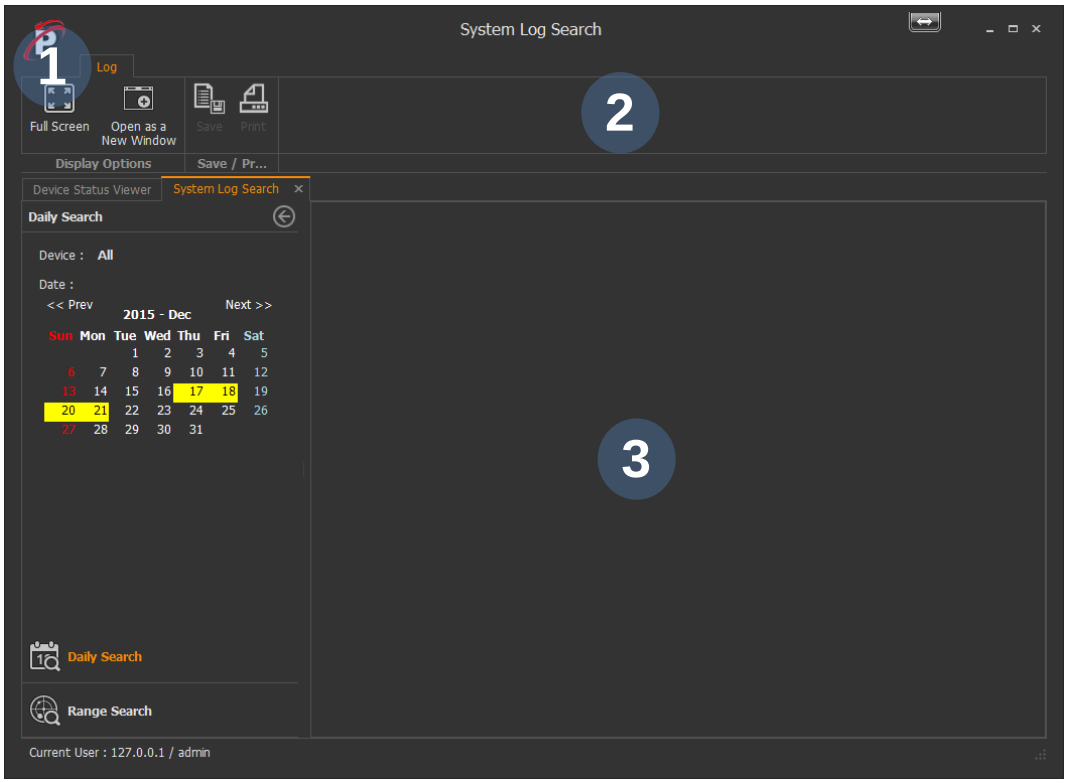
1. Select on tool bar.
2. Press or on additional popup window to print out.



5 SYSTEM LOG SEARCH

It can check the saved log on the system using system log search.

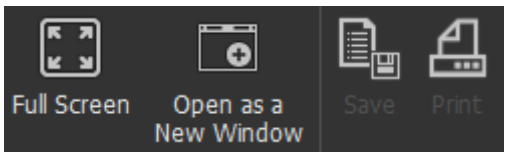
5.1 PROGRAM LAYOUT



1. Program Menu
   It can finish or log-off, start other programs and functions.
2. Tool box
   there are tools used for system log search.
3. Log Search Page
   it searches log and displays log search results.

5.1.1 Tool box

The name and description of tool box are as follows.

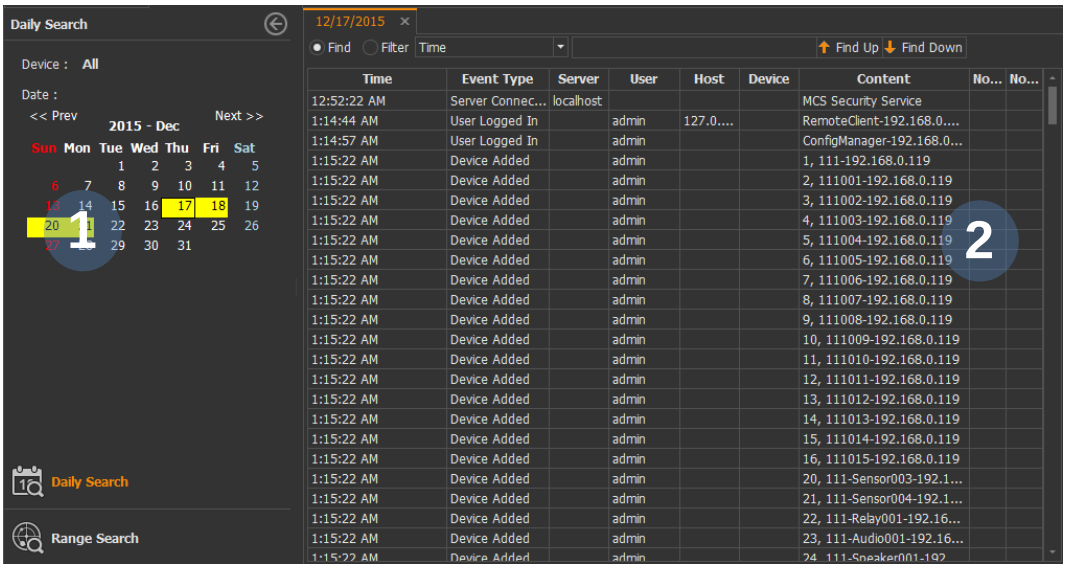


[Button]	[Description]
Full Screen	Zooms device status viewer window as full screen.
Open as a New Window	Undocks current tab to new window.
Save	Save searched log as excel file.
Print	Prints searched log.

.

5.1.2 Log Search Page

Log search page can be divided into two pages as follows.



1. Search Section
   It can search saved log by daily search or range search.

2. Searched Log Section
   It shows searched log and the information on the section as follows.

[Attribute]	[Description]
Time	Log recorded time
Event Type	Type of Event
Server	Server occurred evnet
User	User ID connect to Event Host
Device	Device associated with the event occurred
Content	Event details
Note 1	Note 1
Note 2	Note 2

5.2 LOG SEARCH

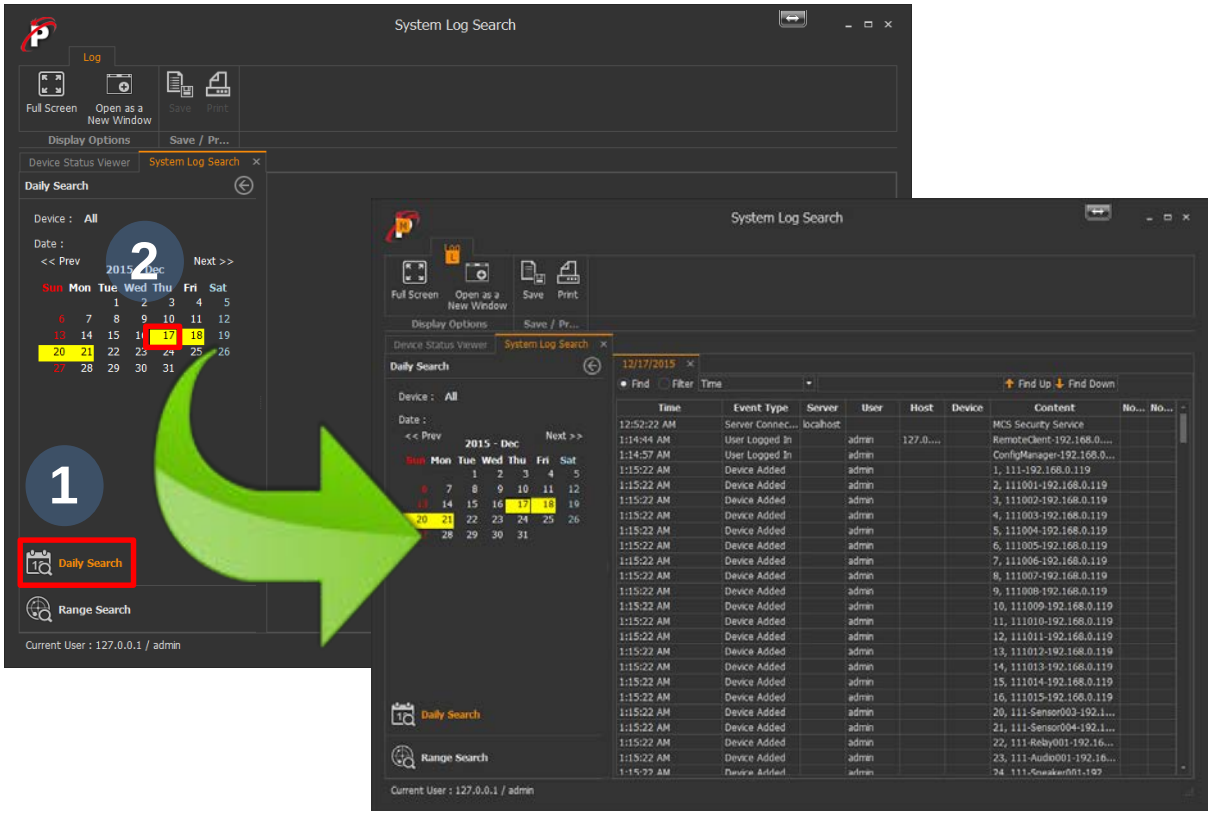
5.2.1 Daily Search

It can search log on specific date using daily search function.

The way to search log by using daily search is as follows.

1. Select ‘DAILY SEARCH’ on left bottom corner.
2. Double click the date to search on the calendar of left upper side to display saved log search on the right side of screen.

- Log date is highlighted in yellow.



5.2.2 Range Search

It can set the range of log and search log using range search function.

The way to search log by using range search is as follows.

1. Select ‘Range Search’ on left bottom end.
2. Set search criteria on left upper side and press ‘Add’ and click ‘Search’ button.

- Search criteria to be set are as follows.

[Search Criteria]	[Description]
Start Date	Start Date of Search
End Date	End Date of Search
Event	Event to Search
Device	Device that the event occurs
User	Event User
Keyword	Keyword to search
Show result which apply to filter as Search criteria	Show the searched results only on the screen if check search criteria

3. Select the date on search result on the bottom side of search criteria to show saved log of the date.

5.3 FULL SCREEN

Select on tool bar to display log search page as full screen. Press ESC to go back to previous status.

5.4 SAVE

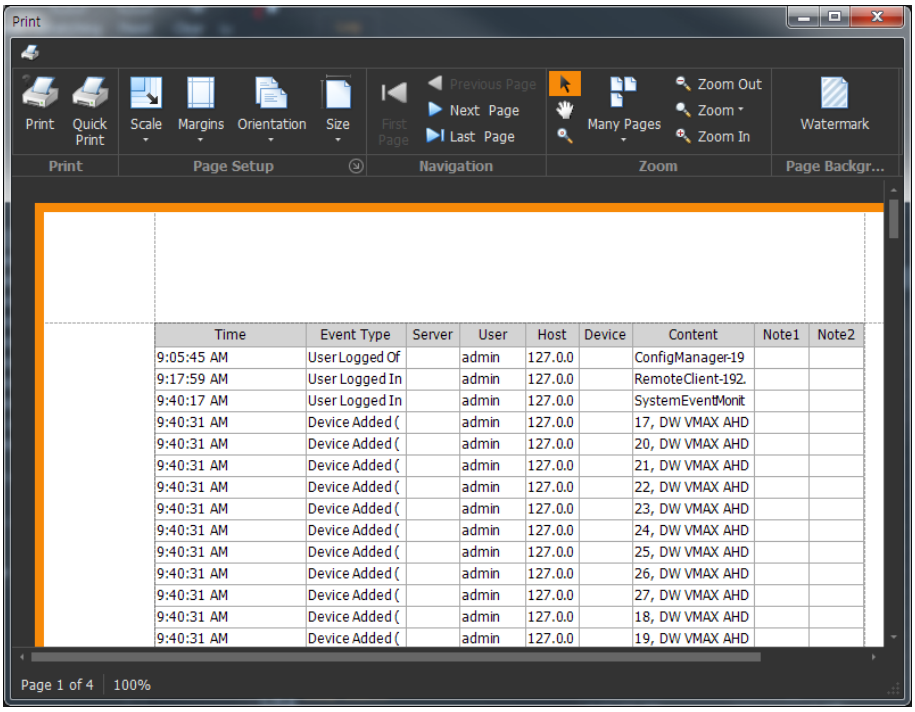
Press on tool box to save searched log as excel file.

5.5 PRINT

Select on tool box to print searched log.

The way to print searched log is as follow.

1. Select on tool box.
2. Click or on additional popup window to print out.



4

Export Monitor

1 EXPORT MONITOR

EXPORT MONITOR is to export, store, and manage the archived on video recording device (DVR or NVR).

EXPORT MONITOR will automatically start by Remote Client and the icon will appear on Window System Tray once started.

EXPORT MONITOR will end when Remote Client finish, and if there is a video to export, it will complete a exporting task and exit even as remote client ends.

Select 'Export Monitor' on Remote Client program menu or double-click on system tray, or click 'Start Export Monitor' to display Export Monitor on the screen.

Window System Tray → Export Monitor → Right Click of the mouse → Popup Menu → Start Export Monitor

1.1 PROGRAM LAYOUT

1. Tool box
   there are all tools for Export Monitor.

2. Task Lists
   it shows the list of progressing status or completed tasks of export.

The information on task list section are as follows.

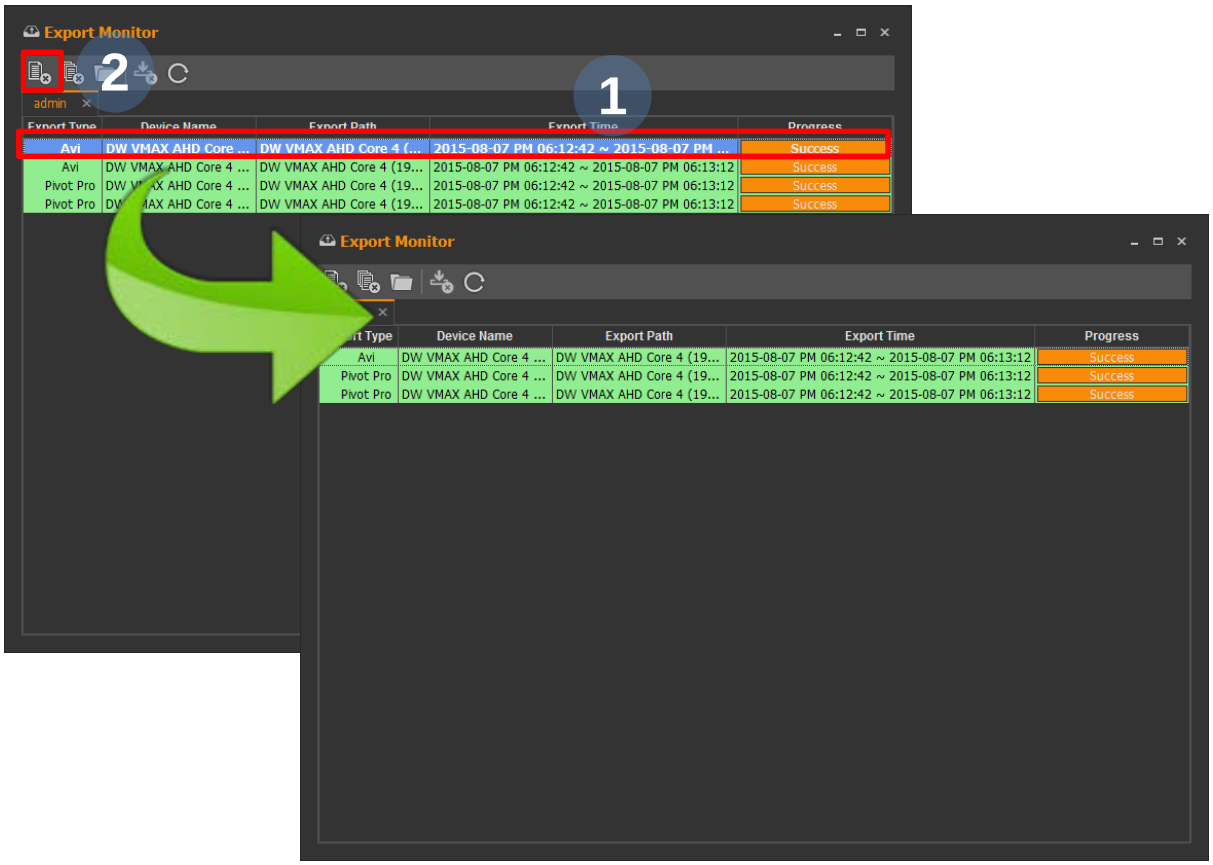
Export Type	Device Name	Export Path	Export Time	Progress
Avi	DW VMAX AHD Core ...	DW VMAX AHD Core 4 (...	2015-08-07 PM 06:12:42 ~ 2015-08-07 PM ...	Success
Avi	DW VMAX AHD Core 4 ...	DW VMAX AHD Core 4 (19...	2015-08-07 PM 06:12:42 ~ 2015-08-07 PM 06:13:12	Success
Pivot Pro	DW VMAX AHD Core 4 ...	DW VMAX AHD Core 4 (19...	2015-08-07 PM 06:12:42 ~ 2015-08-07 PM 06:13:12	Success
Pivot Pro	DW VMAX AHD Core 4 ...	DW VMAX AHD Core 4 (19...	2015-08-07 PM 06:12:42 ~ 2015-08-07 PM 06:13:12	Success

[Attribute]	[Description]
Export Type	Show the export type of video from the device
Device Name	Show device name of the saved video
Export Path	Path to store export video
Export Time	Show started time and ended time of exporting video
Progress	Show the progress status of exporting as status bar

1.2 DELETE A TASK

Export completed task can be deleted from the task list.

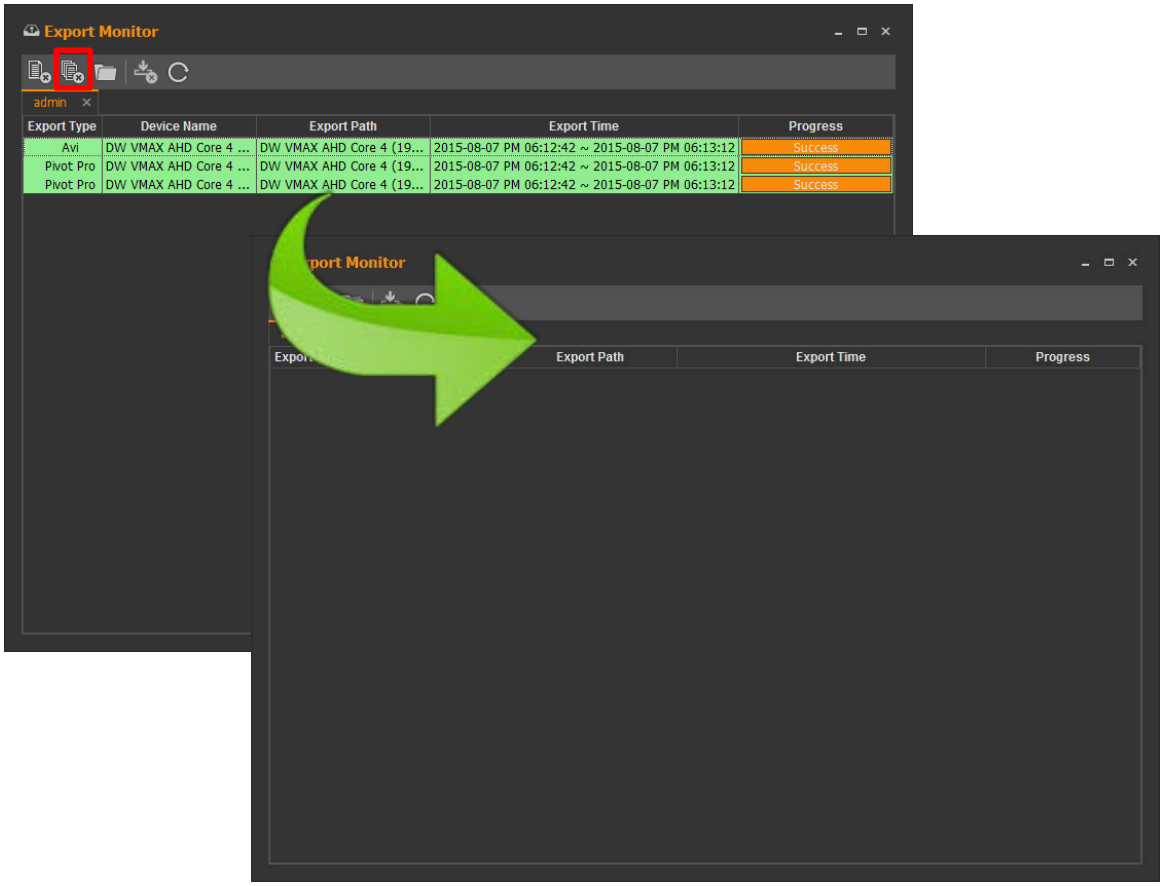
1 Select a task to delete and click on tool bar to delete selected tasks from the list.



1.3 DELETE TASKS

The list of export completed tasks can be deleted at once.

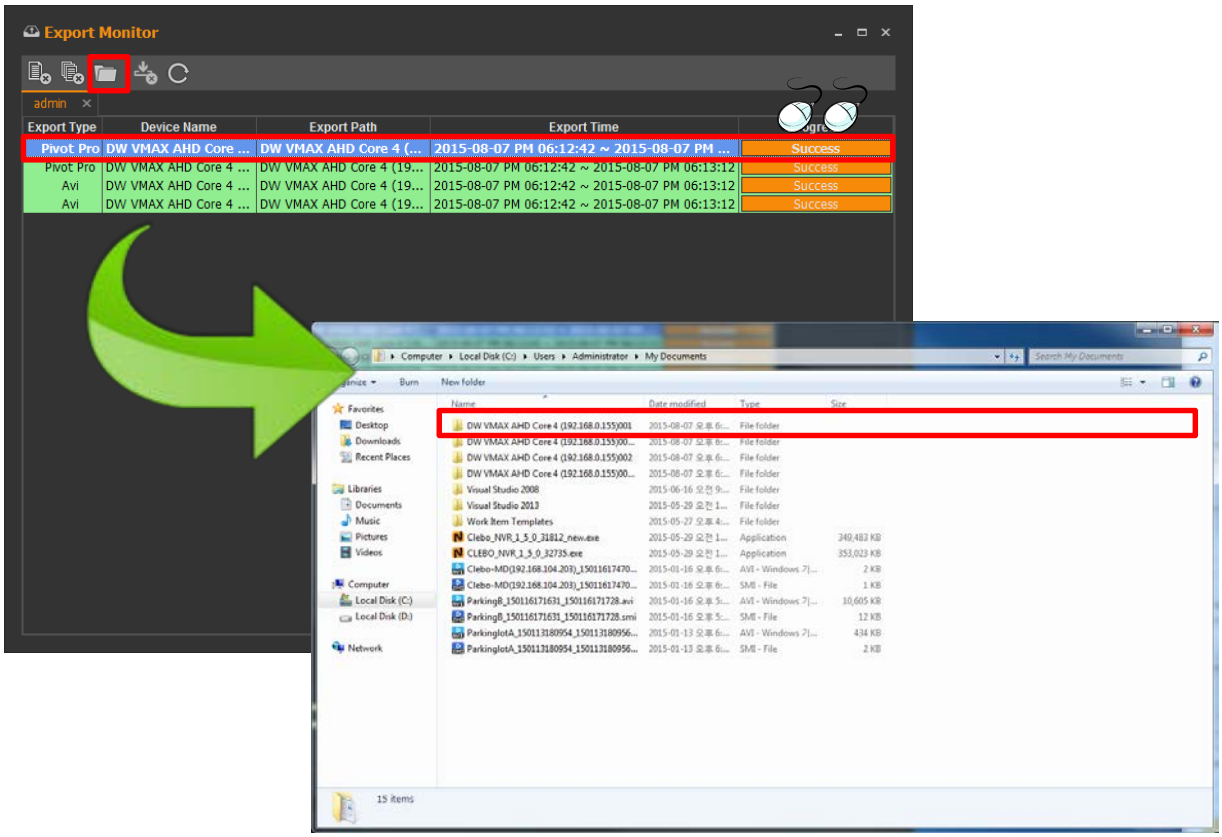
Select on tool bar to delete all completed tasks on task list.



1.4 Open a Folder

Export Monitor can open a folder that the exported video is saved.

Press on tool bar or double click a task from the list to open a saved folder.

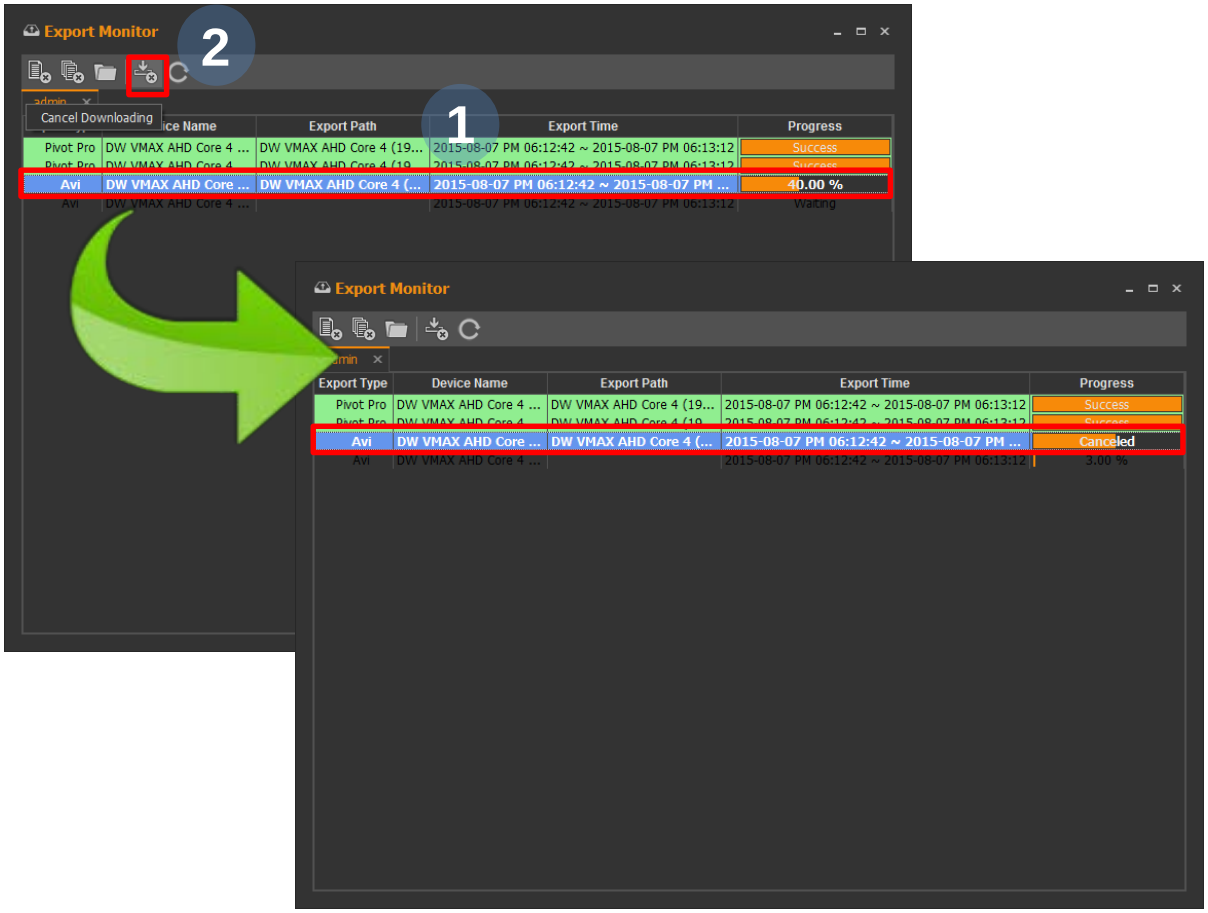


1.5 CANCEL A EXPORTING TASK

It can cancel an exporting task.

Select a task to cancel on export list and press on tool bar to cancel an exporting task.

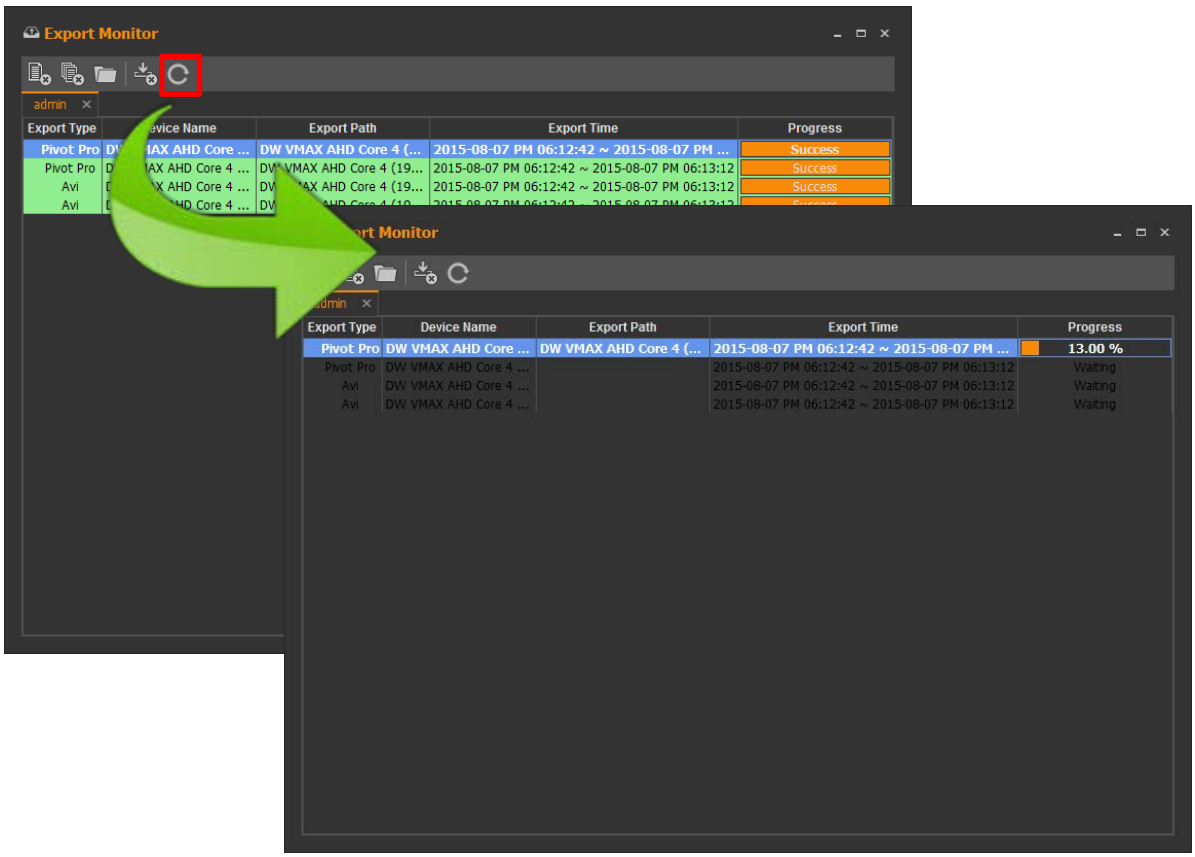
- The icon ‘Cancel an exporting task’ activates when video export is progressing.



1.6 RETRY DOWNLOAD

It can retry downloading a task on task list.

Press on tool bar to retry downloading a task on task list.

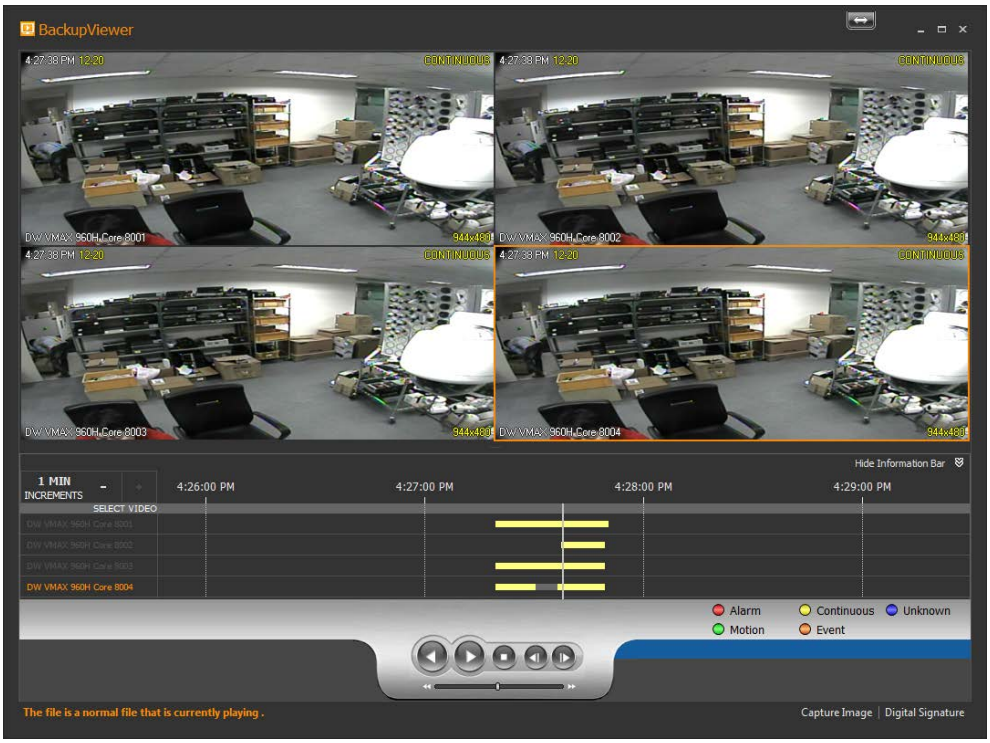


Backup Viewer

1 BACKUP VIEWER

You can play back up file which is created by exe backup format in Video Export. For playing, Double click exe back up file. It can be playing video as same as playing back up file in Time Line Search.

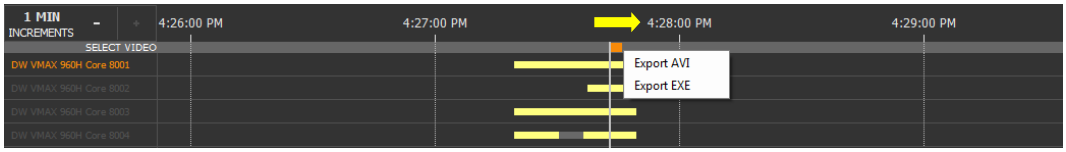
(Read 3. Search on stored video - 3.3 Time line Search for reference.)



1.1 EXPORT VIDEO

You can export video to avi / exe Format

1. Drag and drop the upper side of time table with a mouse and select the desired time line to export a video.
2. Select 'Export AVI or Export EXE' on popup menu to run by dragging the mouse.

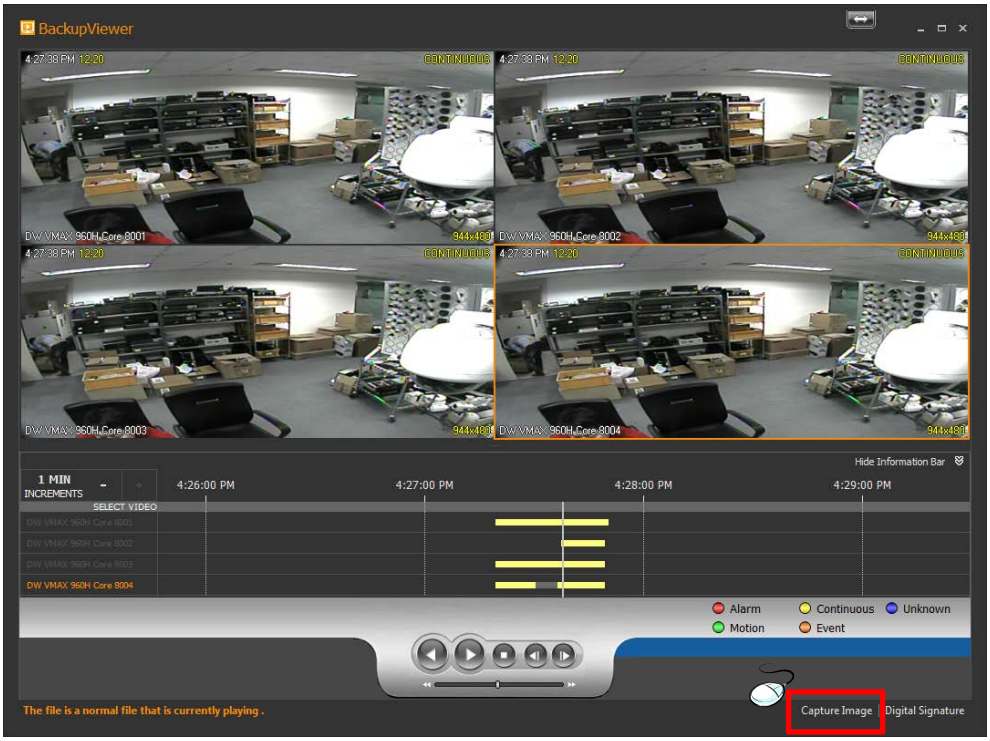


1.2 CAPTURE IMAGE

Selected channel or stop view of video currently can be saved.

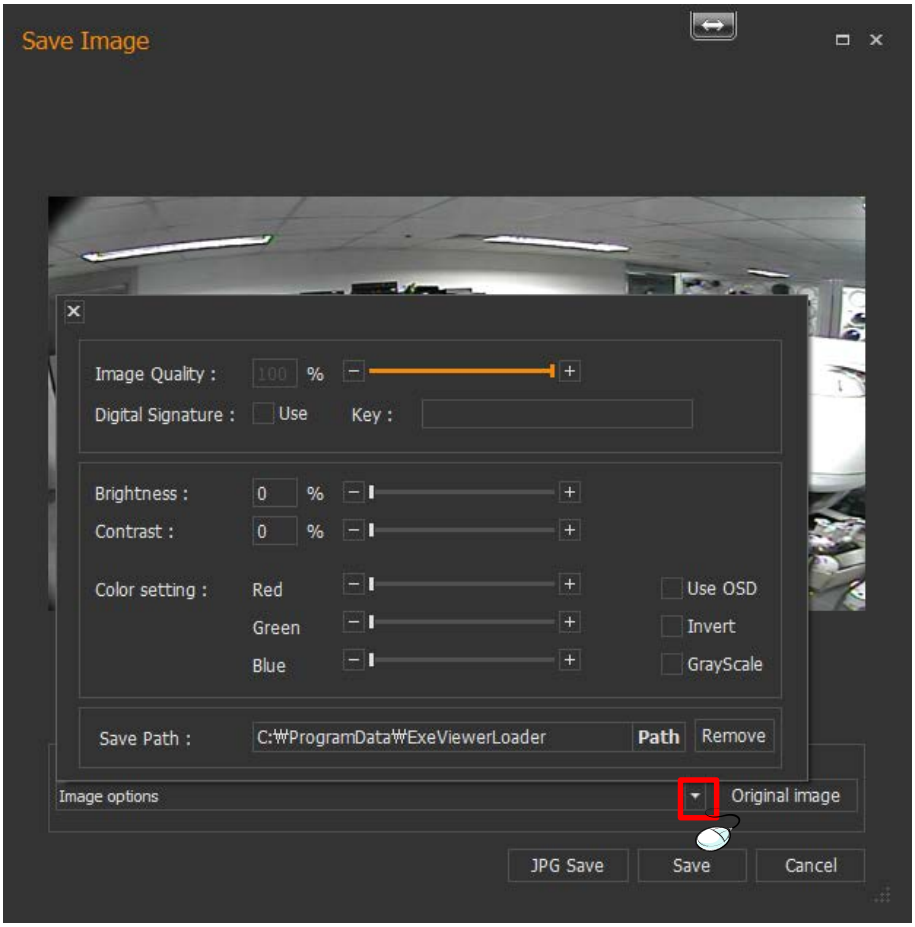
The way to capture the image is as follows.

1. Select a video to capture from video section.



2. Enter the required value on additional popup window.

[Fields]	
Image Quality	Quality of the image
Use Digital Signature	Digital signature to be added with image
Brightness	Brightness setting of the image
Contrast	Contrast setting of the image
Color setting	RGB Value setting of the image
Use OSD	Add OSD on the image
Invert	Invert color of the image
Gray-Scale	Change the image to grayscale
Save Path	Path to store the image


Save Image
Image Quality :
100
%
Digital Signature :
Use
Key :
Brightness :
0
%
Contrast :
0
%
Color setting :
Red
Green
Blue
Use OSD
Invert
GrayScale
Save Path :
C:₩ProgramData₩ExeViewerLoader
Path
Remove
Image options
Original image
JPG Save
Save
Cancel

PIVOT PRO

USER MANUAL

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