# TABLE OF CONTENTS

## Pivot Pro

1. **START PROGRAM** .............................................................. 6  
   1.1 Start Program ............................................................... 6
2. **Live Viewer** ................................................................. 7  
   2.1 Program layout ............................................................ 7  
   2.2 Connecting and Disconnecting device ................................. 8  
   2.3 Start live video ............................................................ 10  
   2.4 stop live video ............................................................. 11  
   2.5 Layout .......................................................................... 11  
   2.6 full Screen ................................................................. 11  
   2.7 stretching ...................................................................... 11  
   2.8 fixed layout ................................................................. 11  
   2.9 clear all ........................................................................ 11  
   2.10 lock tiles ...................................................................... 12  
   2.11 add layout .................................................................... 12  
   2.12 open as a to new window ................................................. 12  
   2.13 print image .................................................................... 12  
   2.14 export and advanced export image .................................... 13  
   2.15 PTZ ............................................................................. 15  
   2.16 hotspot .......................................................................... 16  
   2.17 single ch search ............................................................. 17  
   2.18 Proximity cameras ......................................................... 18  
   2.19 audios .......................................................................... 18  
   2.20 relays ........................................................................... 19  
   2.21 Resolution set up (resolution) .......................................... 19  
   2.22 saved layout ............................................................... 19  
   2.23 Sequences .................................................................... 20  
   2.24 Resource view ............................................................. 21
3. **Search on stored video** ..................................................... 22  
   3.1 Program layout ............................................................. 23  
   3.2 Tool box ....................................................................... 24  
   3.3 Time line Search ........................................................... 25  
   3.4 Preview Search ............................................................. 26  
   3.5 Export Video ................................................................. 28  
   3.6 Bookmarks .................................................................... 29

## Config Manager

1. **Start Program** ............................................................... 33  
   1.1 Start Program ............................................................... 33
1.2 Change admin default password ................................................................. 34

2 Program Layout ....................................................................................... 35

3 General Features ...................................................................................... 36
   3.1 System Organization ..................................................................... 36
   3.2 Users and Roles .......................................................................... 43
   3.3 System Settings .......................................................................... 50

4 Fault Management ..................................................................................... 53
   4.1 Setup ............................................................................................ 53

System Event Monitor

1 Starting Program ...................................................................................... 55
   1.1 Start Program .............................................................................. 55

2 Device Status Surveillance ........................................................................ 56
   2.1 Program Layout .......................................................................... 56
   2.2 Full Screen .................................................................................. 58
   2.3 Normal View ............................................................................... 58
   2.4 Group View .................................................................................. 59
   2.5 Refresh ........................................................................................ 60
   2.6 Health Check .............................................................................. 60
   2.7 Save ............................................................................................ 63
   2.8 Detail Information ....................................................................... 64
   2.9 Live Video ................................................................................... 65
   2.10 remote setup .............................................................................. 66

3 Asset History ............................................................................................. 67
   3.1 Program Layout .......................................................................... 67
   3.2 Full Screen .................................................................................. 68
   3.3 Save ............................................................................................ 68
   3.4 Print ............................................................................................ 68
   3.5 Detail Information ....................................................................... 70

4 Host Status Surveillance ............................................................................ 72
   4.1 Program Layout .......................................................................... 72
   4.2 Full Screen .................................................................................. 73
   4.3 Normal View ............................................................................... 73
   4.4 Group View .................................................................................. 73
   4.5 Log Search ................................................................................... 75
   4.6 Save ............................................................................................ 76
   4.7 Live Event .................................................................................... 76

5 Host Log Search ....................................................................................... 77
   5.1 Program Layout .......................................................................... 77
   5.2 Log Search ................................................................................... 79
5.3 Full Screen ............................................................................................................. 81
5.4 Save ......................................................................................................................... 81
5.5 Print ......................................................................................................................... 81

6 System Log Search .................................................................................................... 82
  6.1 Program Layout ....................................................................................................... 82
  6.2 Log Search ............................................................................................................... 84
  6.3 Full Screen ............................................................................................................. 86
  6.4 Save ......................................................................................................................... 86
  6.5 Print ......................................................................................................................... 86

Export Monitor

1 Export Monitor .......................................................................................................... 88
  1.1 Program Layout ..................................................................................................... 88
  1.2 Delete a task .......................................................................................................... 89
  1.3 Delete tasks ............................................................................................................ 90
  1.4 Open a Folder ....................................................................................................... 91
  1.5 Cancel a exporting task ......................................................................................... 92
  1.6 Retry Download .................................................................................................... 93
1

Pivot Pro
1 START PROGRAM

1.1 START PROGRAM

1. Go to ‘Window Start Menu’ -> ‘All Programs’ -> ‘PIVOT PRO’ -> Click the icon ‘Pivot Pro’.

2. At the log-in screen, enter the user ID and Password and click ‘log-in’ button.
   The default username and password are: admin | no password

Click on the ‘P’ button at the top left side of the window. Click the ‘Live Viewer’ option to start monitoring saved devices.
2  **LIVE VIEWER**

LIVE VIEWER is the Pivot Pro’s basic monitoring client. Through it, you can monitor live video, control PTZ devices, real-time surveillance, real-time alarm search etc.

2.1  **PROGRAM LAYOUT**

1. Program Menu: close the window, 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 configuration manager.
4. Discovered device: All discovered devices within the same network will be displayed.
5. Saved Layouts: Display a list of saved layouts.
6. Group menu:
   A. Cameras: Receive live view from the device.
   B. Sequences: Start or stop a sequence mode.
7. Video section: View 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 (from left to right).

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>Change the layout of video section.</td>
</tr>
<tr>
<td>Full Screen</td>
<td>Zoom live video to full screen.</td>
</tr>
<tr>
<td>Stretching</td>
<td>Stretches the size of live video to fit the size of screen.</td>
</tr>
<tr>
<td>Fixed Layout</td>
<td>Fix the layout of video section.</td>
</tr>
<tr>
<td>Clear all</td>
<td>Clear all live video is currently viewed.</td>
</tr>
<tr>
<td>Lock Tiles</td>
<td>Locks tiles and layout of video section.</td>
</tr>
<tr>
<td>Add Layout</td>
<td>Save the layout the user is viewing.</td>
</tr>
<tr>
<td>Open as a New windows</td>
<td>Unlock the current tab to separate window.</td>
</tr>
<tr>
<td>Print Image</td>
<td>Print the stop image of selected video.</td>
</tr>
<tr>
<td>Export Image</td>
<td>Save the stop image of selected video as an image file.</td>
</tr>
<tr>
<td>Advanced Export Image</td>
<td>Save video selection the user is viewing as an image file.</td>
</tr>
<tr>
<td>PTZ</td>
<td>Control the camera direction using PTZ controller.</td>
</tr>
<tr>
<td>Hotspot</td>
<td>Zoom the section user want to expand.</td>
</tr>
<tr>
<td>Single Ch Search</td>
<td>Helps to search the saved video while watching live view.</td>
</tr>
<tr>
<td>Alarms</td>
<td>Helps to see alarm information while watching live view.</td>
</tr>
<tr>
<td>Search</td>
<td>Helps to open the search window to search a saved video in device.</td>
</tr>
<tr>
<td>System Management</td>
<td>Execute System Event Monitor.</td>
</tr>
<tr>
<td>Setting</td>
<td>Execute Config Manager.</td>
</tr>
<tr>
<td>Remote Setup</td>
<td>Displays device setting on screen.</td>
</tr>
</tbody>
</table>

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.

Connecting → Successfully connected

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.

<table>
<thead>
<tr>
<th>[Fields]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Server</td>
<td>Storage server that the video received from a device to be added</td>
</tr>
<tr>
<td>Default ID</td>
<td>Default ID commonly applied in the device to be added</td>
</tr>
<tr>
<td>Default Password</td>
<td>Default Password commonly applied in the device to be added</td>
</tr>
<tr>
<td>ID</td>
<td>Device ID</td>
</tr>
<tr>
<td>Password</td>
<td>Password of the device</td>
</tr>
</tbody>
</table>

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 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.

Enter the required value on additional popup window.

The label in bold are mandatory.

<table>
<thead>
<tr>
<th>Fields</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Logo</td>
<td>Logo to be printed with stop view</td>
</tr>
<tr>
<td>Title</td>
<td>Name of stop view</td>
</tr>
<tr>
<td>Notes</td>
<td>Description on stop view</td>
</tr>
</tbody>
</table>
2.14 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.

<table>
<thead>
<tr>
<th>[Fields]</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Quality</td>
<td>Quality of the image</td>
</tr>
<tr>
<td>Digital Signature</td>
<td>Digital signature to be added with image</td>
</tr>
<tr>
<td>Brightness</td>
<td>Brightness setting of the image</td>
</tr>
<tr>
<td>Contrast</td>
<td>Contrast setting of the mage</td>
</tr>
<tr>
<td>Color setting</td>
<td>RGB Value setting of the image</td>
</tr>
<tr>
<td>Use OSD</td>
<td>Add OSD on the image</td>
</tr>
<tr>
<td>Invert</td>
<td>Invert color of the image</td>
</tr>
<tr>
<td>GrayScale</td>
<td>Change the image to grayscale</td>
</tr>
</tbody>
</table>
2.15 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.
2.16 HOTSPOT
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 the 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.
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.

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.

2.17 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.

2.18 AUDIOS
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.
2.19 RELAYS
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.

2.20 RESOLUTION SET UP (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]

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

2.21.1 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.

<table>
<thead>
<tr>
<th>[Fields]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Layout</td>
</tr>
<tr>
<td>User Permission</td>
</tr>
</tbody>
</table>

2.21.2 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

2.21.3 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

2.22 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.

2.22.1 Add a sequence

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.

2.22.2 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

2.22.3 Delete a sequence
Select the user view to delete on the sequence, click or, select ‘Delete Sequence’ to delete user view on popup menu.

Sequence → Select a sequence → Popup menu → Delete sequence

2.23 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.

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

Left Button
- Go to the time line to search

Right Button
- Go back to the previous time line
### 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.

<table>
<thead>
<tr>
<th>[Export Format]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Avi Format</td>
<td>Save the exported video as Avi format</td>
</tr>
<tr>
<td>Pivot Pro Format</td>
<td>Store the exported video as VF1 (PIVOT PRO recording file)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Fields]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Path</td>
<td>Path to store a video</td>
</tr>
<tr>
<td>Start Data/Time</td>
<td>Start time to export a video</td>
</tr>
<tr>
<td>End Data/Time</td>
<td>End time to export a video</td>
</tr>
<tr>
<td>Export Owner</td>
<td>The owner of a video to export</td>
</tr>
<tr>
<td>Use Digital Signature</td>
<td>Add digital signature on a video to export</td>
</tr>
<tr>
<td>Public key</td>
<td>Key to use on digital signature</td>
</tr>
<tr>
<td>Related Audio(Avi Format)</td>
<td>Audio connected to the device exported a video</td>
</tr>
<tr>
<td>File Name(Avi Format)</td>
<td>File name of the video to store</td>
</tr>
<tr>
<td>Include Viewer(Pivot Pro format)</td>
<td>Save the video play including viewer</td>
</tr>
<tr>
<td>List of Cameras(Pivot Pro format)</td>
<td>Device list to export a video</td>
</tr>
<tr>
<td>List of Associated Audios(Pivot Pro format)</td>
<td>Audio list connected to the device to export a video</td>
</tr>
</tbody>
</table>
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.

   ![Add Bookmark popup window](image)

   **[Fields]**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Started Time</td>
<td>Started time to add a video on bookmarks</td>
</tr>
<tr>
<td>Ended Time</td>
<td>Ended time to add a video on bookmarks</td>
</tr>
<tr>
<td>Name</td>
<td>Name of bookmark</td>
</tr>
<tr>
<td>Description</td>
<td>Description of the bookmark</td>
</tr>
<tr>
<td>Protect</td>
<td>Protection status of the bookmark</td>
</tr>
<tr>
<td></td>
<td>If check Protection status, added user or user with</td>
</tr>
<tr>
<td></td>
<td>the administrator permission can modify or delete the</td>
</tr>
<tr>
<td></td>
<td>bookmark.</td>
</tr>
</tbody>
</table>

   .
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.

Bookmarks 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.

Bookmarks 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 ADMINI 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:
   A. System Organization: System organization for Device/ Camera group/ location info can be set.
   B. Users and Roles: User/ User Group/ Permissions setting can be made.
   C. System Settings: System setting on additional functions including SMTP / OSD can be made.
   D. 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.

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

<table>
<thead>
<tr>
<th>[Popup Menu]</th>
<th>Add Site</th>
<th>DVR / NVR</th>
<th>Add DVR / NVR</th>
</tr>
</thead>
</table>

2. Enter the required value on additional popup window.

The label in bold is mandatory.

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

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Group</td>
<td>Parent group of the group</td>
</tr>
</tbody>
</table>
3. Change group setting of the device by drag and drop a device on 'Object List'.

3.1.4 Delete Custom Group

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.

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.

<table>
<thead>
<tr>
<th>[Fields]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name of the Company Profile</td>
</tr>
<tr>
<td>Profile Group</td>
<td>Group of the Company Profile</td>
</tr>
<tr>
<td>Country / State / City / Address</td>
<td>Address Information</td>
</tr>
</tbody>
</table>

'Country / State / City' information can be entered by the user.
and the information inputted can be referred when adding site information next time.

<table>
<thead>
<tr>
<th>Primary Contact</th>
<th>1st Contact information in case that issue occurs like a failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Contact</td>
<td>2nd Contact information in case that issue occurs like a failure</td>
</tr>
<tr>
<td>Phone</td>
<td>Phone number</td>
</tr>
<tr>
<td>E-Mail</td>
<td>E-Mail Address</td>
</tr>
<tr>
<td>Note1 / Note2</td>
<td>Notice</td>
</tr>
<tr>
<td>Description</td>
<td>Description of the company profile</td>
</tr>
</tbody>
</table>

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

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.

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.

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 click ‘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 6 (192.168.6.49) | DW VMAX AHD Core 6

### Associated Mics

Find Cameras to Add

<table>
<thead>
<tr>
<th>System View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>DW VMAX AHD Core 3 (192.168.0.48)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Add</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove</td>
</tr>
</tbody>
</table>

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.

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.

<table>
<thead>
<tr>
<th>Fields</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Username</td>
<td>User ID</td>
</tr>
<tr>
<td>Password</td>
<td>User Password</td>
</tr>
<tr>
<td>Description</td>
<td>Description</td>
</tr>
<tr>
<td>Last Name</td>
<td>Last Name</td>
</tr>
<tr>
<td>First Name</td>
<td>First Name</td>
</tr>
<tr>
<td>E-mail</td>
<td>E-mail</td>
</tr>
<tr>
<td>Telephone</td>
<td>Telephone</td>
</tr>
<tr>
<td>Mobile</td>
<td>Mobile</td>
</tr>
<tr>
<td>Language</td>
<td>Language</td>
</tr>
<tr>
<td>Member of Group</td>
<td></td>
</tr>
</tbody>
</table>
3.2.2 Delete User

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.

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.

<table>
<thead>
<tr>
<th>[Fields]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Name</td>
<td>User Group Name</td>
</tr>
<tr>
<td>Description</td>
<td>Description</td>
</tr>
<tr>
<td>Members</td>
<td>Members of Group</td>
</tr>
</tbody>
</table>

### 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.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>Allow</td>
</tr>
<tr>
<td><img src="image" alt="Inherited (Allow)" /></td>
<td>Inherited (Allow) – When setting user and role permissions</td>
</tr>
<tr>
<td><img src="image" alt="Inherited (Deny)" /></td>
<td>Inherited (Deny) – When setting user and role permissions</td>
</tr>
<tr>
<td><img src="image" alt="Deny" /></td>
<td>Deny</td>
</tr>
</tbody>
</table>

### 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’)

Contact: 866.446.3595  sales@dwcc.tv  www.digital-watchdog.com
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.

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

<table>
<thead>
<tr>
<th>[Fields]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Export</td>
<td>Option for saving image</td>
</tr>
<tr>
<td>Image Type</td>
<td></td>
</tr>
<tr>
<td>Image Quality</td>
<td></td>
</tr>
<tr>
<td>Digital Signature</td>
<td>Digital signature when export or save image</td>
</tr>
<tr>
<td>Use Digital Signature</td>
<td></td>
</tr>
<tr>
<td>Key</td>
<td></td>
</tr>
</tbody>
</table>
3.3.2 On Screen Display Options
It performs configuration associated with OSD when showing a live/search video.

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.

<table>
<thead>
<tr>
<th></th>
<th>Stop recording</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Continuous recording</td>
</tr>
<tr>
<td>2</td>
<td>Even recording</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Device Log</th>
<th>Alarm Log</th>
<th>System Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTZ Tour Started</td>
<td>Motion Detected</td>
<td>Server Connected</td>
</tr>
<tr>
<td>PTZ Tour Stopped</td>
<td>Relay On</td>
<td>Server Disconnected</td>
</tr>
<tr>
<td>PTZ Reset Moved</td>
<td>Relay Off</td>
<td></td>
</tr>
<tr>
<td>PTZ Light On</td>
<td>Sensor Ack</td>
<td></td>
</tr>
<tr>
<td>PTZ Light Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTZ Wiper On</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTZ Wiper Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote IP or Control (Default)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Configuration Changed (Default)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search Module Record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Exported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Deleted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Logged In</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Logged Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device Search Started</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device Search Ended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Added (Default)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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.

<table>
<thead>
<tr>
<th>[Button]</th>
<th>[Description]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Screen</td>
<td>Zoom device status surveillance window as full screen.</td>
</tr>
<tr>
<td>Normal View</td>
<td>Show the list of all registered devices as the order of registered.</td>
</tr>
<tr>
<td>Group View</td>
<td>Show the list of all registered devices by the group.</td>
</tr>
<tr>
<td>Open as a New Window</td>
<td>Undocks current tab to new window.</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Refresh</td>
<td>Refresh the information on device status page with the latest updates.</td>
</tr>
<tr>
<td>HealthCheck</td>
<td>Check HealthCheck of selected device.</td>
</tr>
<tr>
<td>Save</td>
<td>Save the information on device status as excel file format.</td>
</tr>
<tr>
<td>Detail Information</td>
<td>Show detailed information of selected device on screen.</td>
</tr>
<tr>
<td>Remote Setup</td>
<td>Displays device setting on screen.</td>
</tr>
</tbody>
</table>

### 2.1.2 Failure Status
It shows by failure type and the field and description of the failure status are as follows.

<table>
<thead>
<tr>
<th>Fields</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectionless Devices</td>
<td>It shows the list of connectionless devices.</td>
</tr>
<tr>
<td>Recording Failure Devices</td>
<td>It shows the list of recording failure devices.</td>
</tr>
<tr>
<td>Etc Failure Devices</td>
<td>It shows the list of miscellaneous failure devices.</td>
</tr>
</tbody>
</table>

### 2.1.3 Device Status Page
The information on device status page are as follows.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Device name</td>
</tr>
<tr>
<td>Failure</td>
<td>Failure Status of a device</td>
</tr>
<tr>
<td></td>
<td>Connection failure</td>
</tr>
<tr>
<td></td>
<td>Recording failure</td>
</tr>
<tr>
<td></td>
<td>Video loss failure</td>
</tr>
<tr>
<td></td>
<td>Hard Disk failure</td>
</tr>
<tr>
<td></td>
<td>Temperature warning of hard disk</td>
</tr>
<tr>
<td>Status</td>
<td>Current device status</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Installing</td>
</tr>
<tr>
<td></td>
<td>Recovering</td>
</tr>
<tr>
<td>Model</td>
<td>Model name of device</td>
</tr>
<tr>
<td>Network</td>
<td>IP address for network connection (IP)</td>
</tr>
</tbody>
</table>
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.
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.

![Healthcheck Search](image)
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.
   - 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 toolbar 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 ![button](image) 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 the [ ] tool bar to display setting window of the device provided by the device manufacturer on screen.
3 ASSET HISTORY

Change history of a device installed on specific site can be searched using asset history 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 asset history.

3. Asset Page
   It shows the information of device registered and current status.

3.1.1 Tool box

The name and description of functions on tool bar are as follows.

<table>
<thead>
<tr>
<th>[Name]</th>
<th>[Description]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Screen</td>
<td>Zoom asset history window as full screen.</td>
</tr>
<tr>
<td>Open as a New Window</td>
<td>Undock current tab to new window.</td>
</tr>
<tr>
<td>Save</td>
<td>Saves asset history as excel file format.</td>
</tr>
<tr>
<td>Print</td>
<td>Prints information on asset page.</td>
</tr>
</tbody>
</table>
### 3.1.2 Asset Page

The information on asset page are as follows.

<table>
<thead>
<tr>
<th>[Attribute]</th>
<th>[Description]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>Installation site to manage device change history</td>
</tr>
<tr>
<td>Model</td>
<td>Model Name of a device</td>
</tr>
<tr>
<td>Device Name</td>
<td>Device Name</td>
</tr>
<tr>
<td>Network Address</td>
<td>IP Address for network connection (IP)</td>
</tr>
<tr>
<td>Open Date</td>
<td>Initial installation date of a device</td>
</tr>
<tr>
<td>Change Date</td>
<td>Recent change date of a device</td>
</tr>
<tr>
<td>Reserved 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Reserved 2</td>
<td>Note 2</td>
</tr>
<tr>
<td>Description</td>
<td>Description on installation site</td>
</tr>
</tbody>
</table>

### 3.2 Full Screen

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

### 3.3 Save

Press ☰ on tool bar to save current asset page as excel file format.

### 3.4 Print

Press ☰ on tool bar to print the information on current asset page. The way to print asset page are as follows.

1. Select ☰ on tool bar.
2. Press ☰ or ☰ on additional popup window to print out.
3.5 **Detail Information**

It shows asset change history like device change extracted from database on screen.

Select a device and press **on tool bar, or double click a device to display detail information of asset device history.**
3.5.1 Asset History Save
Asset change history like device change can be saved as excel file format.
The way to save asset history details is as follows.
   1. Select a device to save asset history on the asset page.
   2. Press 📑 on tool bar.
   3. Create save path and file name on popup window and press ‘SAVE’ button to save.

3.5.2 Asset History Print
Asset change history like device change can be printed out.
The way to print asset change history is as follows.
   1. Select a device to print asset history details on asset page.
   2. Select 📐 on tool bar.
   3. Press 📐 or 📐 on additional popup window to print out.
4 HOST STATUS SURVEILLANCE

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

3. Host Status Page: Host status page shows host information that try connect to media control server.

4.1.1 Tool box

Name and description of tool bar are as follows.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Screen</td>
<td>Zoom host status surveillance window as full screen.</td>
</tr>
<tr>
<td>Normal View</td>
<td>Shows host program list as the order that try connected to.</td>
</tr>
<tr>
<td>Group View</td>
<td>Shows host program list sorted by the group.</td>
</tr>
<tr>
<td>Open as a New Window</td>
<td>Undocks current tab to new window.</td>
</tr>
<tr>
<td>Log Search</td>
<td>Search log of selected host program.</td>
</tr>
<tr>
<td>Save</td>
<td>Saves the information on host status page as excel file format.</td>
</tr>
<tr>
<td>Detail Information</td>
<td>N/A</td>
</tr>
<tr>
<td>Live Event</td>
<td>Shows live event happened from selected host program.</td>
</tr>
</tbody>
</table>
### 4.1.2 Host Status Page

The information on host status page are as follows.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Address</td>
<td>Host address tried to connect (IP)</td>
</tr>
<tr>
<td>User</td>
<td>User ID to connect to the host</td>
</tr>
<tr>
<td>Real Name</td>
<td>User name connected to the host.</td>
</tr>
<tr>
<td>Host Type</td>
<td>Running program on the host tried to connect</td>
</tr>
<tr>
<td>Login Server</td>
<td>Login server that host tried connection.</td>
</tr>
<tr>
<td>Last Logoff Time</td>
<td>Last logoff time of the host</td>
</tr>
</tbody>
</table>

#### Full Screen

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

#### Normal View

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

#### Group View

Select [ ] on tool bar to display hosts sorted by group view of network address.
Host Status Surveillance

<table>
<thead>
<tr>
<th>Network Address</th>
<th>User</th>
<th>Real Name</th>
<th>Host Type</th>
<th>Login Server</th>
<th>Last Logoff Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>127.0.0.1</td>
<td>admin</td>
<td>Admin</td>
<td>ConfigManager</td>
<td>127.0.0.1</td>
<td>2015-06-01 13:46:40</td>
</tr>
<tr>
<td>127.0.0.1</td>
<td>admin</td>
<td>Admin</td>
<td>NamedClient</td>
<td>127.0.0.1</td>
<td>2015-06-01 15:11:56</td>
</tr>
<tr>
<td>127.0.0.1</td>
<td>admin</td>
<td>Admin</td>
<td>SystemMonitor</td>
<td>127.0.0.1</td>
<td>2015-06-01 15:55:39</td>
</tr>
<tr>
<td>127.0.0.1</td>
<td>admin</td>
<td>Admin</td>
<td>CMS</td>
<td>127.0.0.1</td>
<td></td>
</tr>
</tbody>
</table>

Current User: 127.0.0.1 / admin
4.5 **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)
4.6 **SAVE**
Select ✒️ on tool bar to save host status page as excel file format.

4.7 **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.
5 HOST LOG SEARCH

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

5.1 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.

5.1.1 Tool box
The name and description of tool box are as follows.

<table>
<thead>
<tr>
<th>[Button]</th>
<th>[Description]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Screen</td>
<td>Zooms device status surveillance to full screen.</td>
</tr>
<tr>
<td>Open as a New Window</td>
<td>Undocks current tab to new window.</td>
</tr>
<tr>
<td>Save</td>
<td>Save searched log as excel file format.</td>
</tr>
<tr>
<td>Print</td>
<td>Prints searched log.</td>
</tr>
</tbody>
</table>
5.1.2 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.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Log recorded time</td>
</tr>
<tr>
<td>Event Type</td>
<td>Type of the event</td>
</tr>
<tr>
<td>Device</td>
<td>Device associated with the event occurred</td>
</tr>
<tr>
<td>Host</td>
<td>Event Host</td>
</tr>
<tr>
<td>Host Type</td>
<td>Host type of Event</td>
</tr>
<tr>
<td>User</td>
<td>User ID connect to Event Host</td>
</tr>
<tr>
<td>User Name</td>
<td>User Name connect to Event Host</td>
</tr>
<tr>
<td>Content</td>
<td>Event Contents</td>
</tr>
</tbody>
</table>
5.2 LOG SEARCH

5.2.1 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.

5.2.2 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.

<table>
<thead>
<tr>
<th>Search Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date</td>
<td>Start Date of search</td>
</tr>
<tr>
<td>End Date</td>
<td>End Date of search</td>
</tr>
<tr>
<td>Event</td>
<td>Event to search</td>
</tr>
</tbody>
</table>
3. Select the date on search results at the bottom to display saved log on specific date.
5.3 **FULL SCREEN**
Select on tool bar to display log search as full screen. Press ESC to go back to the previous status.

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

5.5 **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.
6 SYSTEM LOG SEARCH

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

6.1 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.

6.1.1 Tool box

The name and description of tool box are as follows.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Screen</td>
<td>Zooms device status surveillance window as full screen.</td>
</tr>
<tr>
<td>Open as a New Window</td>
<td>Undocks current tab to new window.</td>
</tr>
<tr>
<td>Save</td>
<td>Save searched log as excel file.</td>
</tr>
<tr>
<td>Print</td>
<td>Prints searched log.</td>
</tr>
</tbody>
</table>
6.1.2 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.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Log recorded time</td>
</tr>
<tr>
<td>Event Type</td>
<td>Type of Event</td>
</tr>
<tr>
<td>Server</td>
<td>Server that event takes place</td>
</tr>
<tr>
<td>User</td>
<td>User that causes event</td>
</tr>
<tr>
<td>Device</td>
<td>Device that event occurs</td>
</tr>
<tr>
<td>Content</td>
<td>Event details</td>
</tr>
<tr>
<td>Note 1</td>
<td>Note 1</td>
</tr>
<tr>
<td>Note 2</td>
<td>Note 2</td>
</tr>
</tbody>
</table>
6.2 LOG SEARCH

6.2.1 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.
6.2.2 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.

<table>
<thead>
<tr>
<th>[Search Criteria]</th>
<th>[Description]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date</td>
<td>Start Date of Search</td>
</tr>
<tr>
<td>End Date</td>
<td>End Date of Search</td>
</tr>
<tr>
<td>Event</td>
<td>Event to search</td>
</tr>
<tr>
<td>Device</td>
<td>Device that the event occurs</td>
</tr>
<tr>
<td>User</td>
<td>Event User</td>
</tr>
<tr>
<td>Keyword</td>
<td>Keyword to search</td>
</tr>
<tr>
<td>Show result which apply to filter as</td>
<td>Show the searched results only on the</td>
</tr>
<tr>
<td>Search criteria</td>
<td>screen if check search criteria</td>
</tr>
</tbody>
</table>
3. Select the date on search result on the bottom side of search criteria to show saved log of the date.
6.3 FULL SCREEN
Select ☰ on tool bar to display log search page as full screen. Press ESC to go back to previous status.

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

6.5 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.
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.
### [Attribute] [Description]

<table>
<thead>
<tr>
<th>Export Type</th>
<th>Show the export type of video from the device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Name</td>
<td>Show device name of the saved video</td>
</tr>
<tr>
<td>Export Path</td>
<td>Path to store export video</td>
</tr>
<tr>
<td>Export Time</td>
<td>Show started time and ended time of exporting video</td>
</tr>
<tr>
<td>Progress</td>
<td>Show the progress status of exporting as status bar</td>
</tr>
</tbody>
</table>

### 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.