# **UVMS**

## **User Manual**

- \* Contents of this user manual are protected under copyrights and computer program laws.
- \* Functions or configurations are subject to be changed or modified without prior notice.

1<sup>st</sup> Edition : 2020. 01

#### Thank You!

Before operating the system, please read this User Manual and retain it for future reference.

## **Contents**

1.	UVMS	2
1.1	1 Login	2
1.2	2 SPLASH	2
1.3	3 Main Layout	3
1.4	4 TOP PANEL	4
1.5	5 LEFT PANEL	4
1.6	8 RIGHT PANEL	5
1.7	7 BOTTOM PANEL	5
2.	REGISTRATION	6
2.1	1 SITE LIST	6
2.2	2 FAVORITE	7
3.	LIVE	9
3.1	1 Live	9
3.2	2 DISPLAY	9
3.3	3 PLAYBACK	12
3.4	4 PANORAMA	14
3.5	5 PTZ	15
3.6	6 Multi-Window	16
3.7	7 RIGHT PANEL	17
4.	BACKUP	20
4.1	1 BACKUP DIALOG	20
4.2	2 FILE BACKUP	21
4.3	3 SCHEDULE BACKUP	22
4.4	4 SCHEDULE BACKUP LIST	23
4.5	5 FILE PASSWORD	23
4.6	STREAMING BACKUP	24
4.7	7 BACKUP PLAYER	25
5.	CONFIGURATION	26
5.1	1 Application	26
5.2	2 General	27
5.3	3 NETWORK	27
5.4	4 DISPLAY	28
5.5	5 Status	29
5.6	6 EVENT	29
5.7	7 USER ACCOUNT	30

## [Recommended Specification]

Recommended PC Specification(More than 64ch)		Windows	MacOS	Linux (Ubuntu)
	OS	win10 64bit	10.12 (Sierra)	ubuntu 14.04 LTS ~
CPU		8 Intel Core i7-8700(3.2G)	"4 Intel Core i5 2.5G ~ (MacBook Pro 15"")"	8 Intel Core i7-8700(3.2G)
64ch ~ 128ch Video		32GB	32GB	32GB
		"NVIDIA gtx 1060 ~ (Memory 3GB ~)"	"Radeon R9 M370X ~ (Standard of MacBook external Video )"	"NVIDIA gtx 1060 ~ (Memory 3GB ~)"
	HDD	500GB~ 1TB	500GB~	500GB~ 1TB
Resolution		(4k) 3840x2160 ~	2880x1800 ~	(4k) 3840x2160 ~

## 1. UVMS

## 1.1 Login



- 1) Login
  - Connect to UVMS with user ID and password
- 2) User Name
  - Input UVMS user ID
- 3) Password
  - Input UVMS user password
- 4) Auto Login
  - Check to use Auto Login
- 5) Save User Name
  - Check to save user ID

## 1.2 Splash



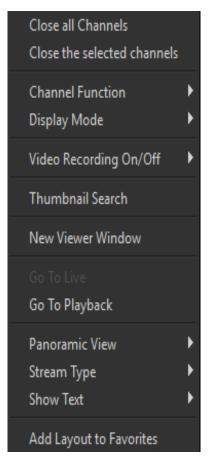
- If Auto Login is set, you would see only splash screen when UVMS is started again.

## 1.3 Main Layout



Main layout is composed of top panel, left panel, right panel and bottom panel.

#### 1.3.1. Main layout menu



- 1) Close all channels
- Close all channels on UVMS
- 2) Close the selected channels
- Close the selected channels on UVMS
- 3) Channel Function
- Go to D-Zoom/PTZ/Capture/Print/Original image recording (MP4)/ Image recording (AVI)
- 4) Display Mode
- Go to View All/1, 4, 9, 16 screen mode
- 5) Video Recording on/off
- If there is the channel to record, focus the channel and click 'Video Recording' then it will be saved as MP4 file
- 6) Thumbnail search
- Search a specific channel with multiple thumbnail images in 1 hour, 2 minutes and 4 seconds unit.
- 7) New viewer window
- Open new window for multi-window
- 8) Go to live / playback
- Go to live or playback mode
- 9) Panoramic view
- Select channels and make a panoramic view
- 10) Stream type
- Choose stream type to display Auto stream, 1st stream and 2nd stream
- 11) Show text
- Choose the text to display
- Site name, channel title, mode, date/time, resolution and bottom background
- 12) Add layout to favorites
- -Make current layout to favorite layout

## 1.4 Top Panel



Icon	Name	Description
=	Top menu bar	Backup, Configuration, etc.
UVMS	UVMS Logo	
Layout 1	Layout tab	
×	Close layout	
#	Add layout	
2	Tab sequence	Tab Sequence Movement
	Volume control	Control UVMS audio volume
(I)×	Turn ON/OFF Volume	
0	Two-way audio	Two-way audio ON/OFF
•	Configuration	
?	Help	Version Information / UVMS Update and Reinstall
_	Minimize	
2	Full Screen	
×	Exit	

## 1.5 Left Panel



Icon	Name	Description
<b>O</b> UVMS	UVMS Logo	
Search Sites and Favorites	Device search	Search device or cameras by entering its name
Site	Device list	Registered site list
<b>€</b> Favorite	Favorite	Save the current layout into favorite
«	Hide/Show	Hide and show left panel
Site Refresh Add / Edit Site Import / Export Live Playback Open Remote Satup Site Backup	Popup Menu	For details, refer to '1.5.1 popup menu'

#### 1.5.1. Popup Menu

1) Site refresh: Refresh site list

2) Add/Edit site: Show the 'Site Add /Edit' popup window

3) Import/Export: Import and export site list

4) Live

- Choose a site list and click 'Live' to see the live view of all cameras in the site

- Choose a camera of site list and click "Live" to see the live view of that camera

#### 5) Playback Open

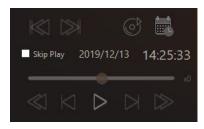
- Choose a site list and click 'Playback Open' to see the playback of all cameras in the site
- Choose a camera of site list and click 'Playback Open' to see the playback of that camera
- 6) Remote Setup
  - Connect to the Setup Page of Web
  - Access after entering ID and PW
- 7) Site Backup: Show schedule backup window

## 1.6 Right Panel

>>	STATUS
	Noe Noe
	9
	16
	ALL
	< >
	( )

Icon	Name	Description	
STATUS	STATUS	Check the health status per device	
- LOG	LOG	System log, device log, LPR log	
	1 Mode	1 screen split mode	
4	4 Mode	4 screen split mode	
9	9 Mode	9 screen split mode	
16	16 Mode	16 screen split mode	
<b>     </b>	All	View All Screen	
< >	Channel shift	Move to previous and next channel	
	Full Screen	Monitoring with full screen	
$\rightleftharpoons$	Sequence	Sequence by split-screen	
O	Back	Back to the previous mode	

#### 1.7 Bottom Panel



Icon	Name	
	Go to first play / last play	
©	Backup Player	
	Calendar	
✓ Skip Play	Skipping playback	
2019/12/13 14:39:32	Date and time	
	Speed Control	
$\ll$ $\bowtie$ $\triangleright$ $\bowtie$	Playback Control	



Name	Description	
Zoom	In/out	
Focus	+/-	
Iris	+/-	
Speed	Normal, Low, Fast	
Preset	preset setup and move (1~199)	
Guard Tour	Move to set presets in sequence	
LIVE	Move the timeline to the current time	
Site sync	Synchronize all channels of same site	
	based on focused channel	
Snapshot	Snapshot ON / OFF	
PTZ	PTZ Panel ON / OFF	

## 2. Registration

#### 2.1 Site List

#### 2.1.1. Site Add/Edit



- 1) Site search function
  - Search all devices connected to network automatically
  - Refresh for new device
- 2) Site add function
  - Choose connected device
  - Click 'Add' to registration
  - Device information is shown in the below part
- 3) Site edit function
  - Click information column to modify.
  - If user edits the number of channel, it is displayed as the number of channel which user sets
  - Click 'OK' button to complete edition.
- 4) The order of sit add function
  - Choose the device → Click 'Add' button and then the window is popup → Click 'OK' button in popup window to register the site

#### 2.1.2. Site Add/Edit



- 1) New group
  - Add new group in the list

- 2) New Site
  - Add new site manually
- 3) Verify
  - If IP, Port, Web Port, ID, PW information are correct, the Site information will be shown when 'Verify' is clicked
- 4) Rename
  - Edit group or site name
- 5) Delete
  - Delete the group or site
- 6) Change Group
  - Move group or site into other group
- 7) Move up
  - Site name goes up in the list
- 8) Move down
  - Site name goes down in the list

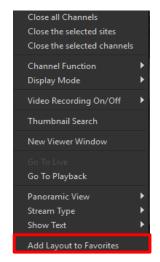
#### 2.1.3. Site List



- 1) Site list
- Once Add/Edit site process is done, site list will be shown.
- 2) Layout open (site)
- If you drag sites on layout, all cameras included in the site will be displayed
- 3) Layout open (camera)
- If you press Ctrl + left mouse button click or Shift + left mouse button click on desired cameras and drag on the layout, those selected cameras will be displayed

#### 2.2 Favorite

#### 2.2.1. Favorite



- 1) Add the current screen to 'Favorites' menu
- 2) After making your own layout and clicking right mouse button, choose 'Add Layout to Favorite' to create your own favorite layout

#### 2.2.2. Add Favorite



- 1) When you choose 'Add Layout to Favorites', favorite name edit window will popup
- 2) Enter the name and then the favorite name will be shown up at left panel

#### 2.2.3. Open Favorite



- 1) In case of dragging created Favorite on the layout window, a new layout tab with the same layout name will be shown up
- 2) While a Favorite Window is open, you can add more cameras and rearrange the layout

#### 2.2.4. Delete Favorite



- After right mouse button click on the title of favorite list, you can remove it by clicking 'Edit favorite list' → 'Remove Favorite'
- \* If user wants to rename the favorite, click 'Rename Favorite'

## 3. Live

## 3.1 Live



Icon	Name	Description
<b>①</b>	Information	Information of channel
<b>•</b>	PTZ	8-direction Zoom in/out
<b>@</b>	D-Zoom	Digital Zoom in/out by using wheel of mouse
G	Print	Print current channel
	Snapshot	Capture current channel
×	Close	Close the channel
	Select	Selected channel is changed into yellow color Multi Channels could be selected by mouse dragging
10/11/ <mark>2018</mark> 16:17:21 640 x 480 LIVE	Channel status	Status of current channel, PTZ, D-zoom, Date/Time and Resolution
<ul> <li>◆ PTZ</li> <li>◆ D-Zoom</li> <li>← Capture</li> <li>➡ Print</li> <li>◆ Information</li> </ul>	Dropdown	When the screen is small, the top menu is shown in 'Dropdown' type

## 3.2 Display

## 3.2.1. Zoom





- 1) Zoom in/out can be controlled by mouse wheel operation
  - Wheel up and down for zoom in and out of the screen
  - If you Zoom in the screen, the stream will be changed from sub into main
  - In the Zoom-in screen, screen is moving as zoomed-in status.
  - If you double click at the background, the layout will be rearranged

#### 3.2.2. Free



#### 1) Channel Swap

- Two channels are interchangeable
- Changing with dragged and dropped channel



#### 2) Adjust channel size

- If the mouse curser is located at the corner, the curser will be changed and the screen size can be adjusted.



#### 3) Free Screen layout

- User can change the size of the screen and position as user wants
- Default is standard split mode

#### 4) Display

- Choose multiple channels by mouse drag
- Ctrl + left mouse button to choose multiple channels
- Enlarge or shrink display size by using wheel of mouse
- Double click to make the channel in full screen mode

## 3.2.3. Split Screen Mode

1) 1 screen split mode



2) 4 screen split mode



3) 9 screen split mode

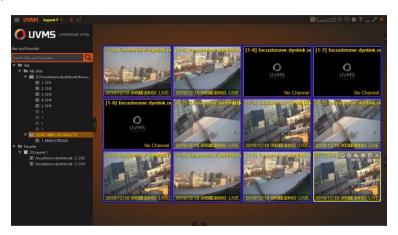


4) 16 screen split mode



All screen : Rearrange all channels on current layout

## 3.2.4. Group



1) While the multiple sites are displayed, user can classify which channels are in the site by clicking left mouse button for about 2~3 seconds. Border line color will be changed into blue

#### 3.3 Playback

#### 3.3.1. Playback Extra Features



- 1) Date / Time
  - Display the date and time on focused video
  - If there is no data in Playback mode, the time and date of live will show
- 2) Playback Controller
  - x(-64) backward ~ x64 forward playback
  - Playback by skipping frame is available (Skip play)
  - Control the playback speed by slide bar
  - Go to first data and Go to last data
- 3) Indicator
  - Default: Show date and time of the currently focused channel
  - X Tip
    - 1. Same time playback of whole channel
      - : Choose the channel → Playback → Site sync
    - 2. All channel Live
      - : Choose the channel → Live → Site sync
- 4) Live (Button)
  - Move to current time line(as a live view)
- 5) SYNC (Button)
  - On: Sync all channels (Control at the same time)
  - Off: Control only focused channel
- 6) PTZ (Button)
  - PTZ panel on/off

#### 3.3.2. Playback



- 1) Calendar
- Date which has recorded data is showed in yellow
- Choose date and time, and click search icon
- Click calendar icon : on/off
- 2) Go to
- Playback from wanted time
- Choose the date in the Calendar and enter time to go, and click search icon



#### 3) Time table



It will be shown if there is recorded data

Orange : ContinuousGreen : Alarm, Event

Red : Panic

When you choose a specific time, recorded data of that time is played

4) Extension and contraction

- By controlling the mouse wheel on the timeline, you can see the recorded data from day unit to second unit
- When you drag mouse, you can move scroll bar
- 5) Snapshot
  - Press snapshot button to on/off snapshot

#### 3.3.3. Playback Icon



Icon	Name	Description
« »	Rewind / Fast forward	
	Back frame / Forward frame	
<ul><li> &gt;</li></ul>	Pause / Play	
10 10	Skip 10 seconds	Skip the frame by 10 seconds
<b>(</b>	Zoom	Click the icon and zoom in/out with mouse dragging
		Original screen is displayed on bottom right
÷();	Capture	Create UVMS Agent window
99	Recording	If click the recording icon, 'Recording' word is displayed
Па		on right bottom. If double click the icon, recording data is saved as MP4 file

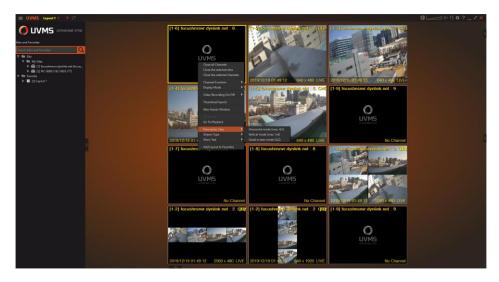
#### 3.4 Panorama

#### 3.4.1. Panorama



- 1) Time is displayed based on the first selected camera
- 2) Resolution is displayed by combining all cameras
- 3) Horizontal, vertical and quad-screen mode are available
- 4) Panorama add
  - Ctrl+ left mouse button click to choose 4 channels
  - After selecting channels, click the right mouse button and then click 'Panorama View' on the popup menu.

#### 3.4.2. Panorama Type



- 1) There are 3 types of Panorama: Horizontal/ Vertical/ Quad mode.
- 2) Max. 4 Channel could be selected

Horizontal mode	Vertical mode	Quad-Screen mode
Max. 4x1	Max. 1x4	Max. 4x4

#### 3.5 PTZ 3.5.1. PTZ



- 1) Go to PTZ mode
  - When you click PTZ icon, the color of icon is changed into orange (Activation)
- 2) PTZ move
  - If you click your mouse to the direction which you want, the arrow will be highlighted
- 3) PTZ speed
  - If you position the mouse for the direction which you want to move and drag the mouse, moving speed is faster and the shape of the arrow will be changed

#### 3.5.2. PTZ Panel



- 1) PTZ
- PTZ on/off by clicking 'PTZ' on bottom panel
- 2) Zoom
- PTZ zoom in/out
- 3) Focus
- PTZ focus control
- 4) Iris
- Adjust the quantity of light
- 5) Speed



- Set PTZ speed (Low, Normal, Fast)
  - 6) Preset
- Choose PTZ preset (Available from 1 to 199)
  - 7) Preset Go
- Go to chosen PTZ preset
  - 8) Preset Set
- After positioning preset, choose preset number and set
  - 9) Guard Tour
- Tour as preset

#### 3.6 Multi-Window

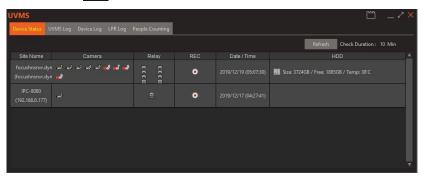


- 1) UVMS supports multi-window monitoring
- 2) It is on right mouse button menu 'New Viewer Window'
- 3) Can make only 1 multi window and support up to 64ch

## 3.7 Right Panel

## 3.7.1. Device Status





- 1) Status
  - Show the current status of connected device on UVMS
- 2) Site name
  - Site name or device name
- 3) Camera
  - Check connection status of camera

Icon	Description
444	Video in
Kaj Kaj Kaj	No video or loss
4 4	Motion in

#### 4) Relay

- Relay Status connection site

Icon	Description
▣	Connected relay
Θ	Operating relay

- 5) REC
- 6) Date/Time
  - Date and time of each device
- 7) HDD
  - Total storage, available storage, HDD temperature

#### 3.7.2. UVMS Log





- 1) UVMS log
  - Display UVMS log record
  - Can be searched by user, date and time
- 2) Date/Time
  - Choose date and time to search
- 3) Search
- 4) Display log of chosen date
- 5) Export CSV & hmac
  - Export currently displayed log record as CSV and hmac
- 6) hmac certification



- Certificate hmac file is original
- If hmac file is original without modification, certification window is showed up

#### 3.7.3. Device Log



- 1) Device log
  - Device log search function
  - Snapshot is displayed by double clicking the list, and play record video is available
- 2) Site name
  - Choose the site to search
- Device log
  - Choose the event to search
- 4) Date/Time
  - Choose the date and time to search
- 5) Search
  - Click to search

#### 3.7.4. LPR Log



- 1) In case of the device that has LPR registration, LPR log search is available
- 2) Searching log record by selecting device and setting time Log search is also available by inputting specific car number plate
- 3) Playing video is available by clicking play icon on the right bottom of still image
- 4) The registered car number is remained as a log

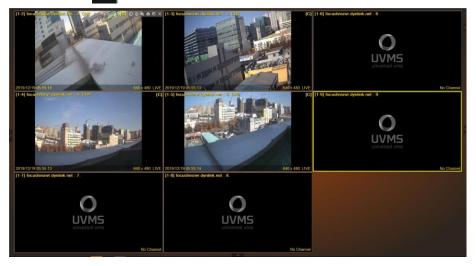
### 3.7.5. People Counting



- 1) If people counting camera is connected, people counting log search is available
- 2) Search people counting log as daily, weekly, monthly and year
- 3) Export people counting log as PNG or CSV file

#### 3.7.6. Full Screen





- 1) Change UVMS into full screen
- 2) In case of full screen mode, channel screen is displayed on screen without panel

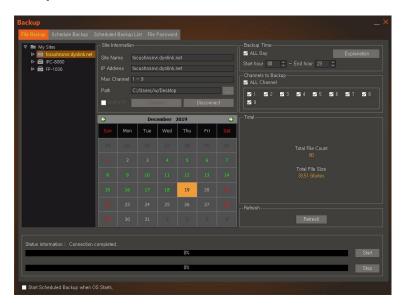
## 4. Backup

- 4.1 Backup Dialog
- 4.1.1. Go to Backup Mode



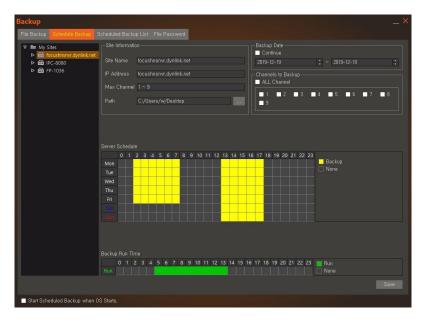
- 1) Go to backup mode
  - In UVMS top menu( ) or mouse-right on site list and click 'site backup' then backup window will open.

## 4.2 File Backup



- 1) File Backup
- 2) Backup Time
  - Choose the time to backup
  - When 'ALL DAY' is selected, it include whole day (24hours)
- 3) Calendar
  - The data which has recorded data, it shows in green
  - Choose the date to backup
- 4) Total
  - Total file information of File Count and File Size for the currently selected file
- 5) Refresh
  - Refresh all status of file backup
- 6) Status information
  - Once backup starts, it shows status of file download

## 4.3 Schedule Backup



- 1) Site List
  - Site list registered on UVMS
- 2) Device Information
  - Display information of current site
  - Path can be changed
- 3) Backup Channel
  - ALL Channel : Select all channels
  - Choose the channel to backup
- 4) Backup Date
  - Choose the date to backup
  - If you check 'Continue', backup is continuously proceeded based on set date
- 5) Server Schedule Setting
  - Set date and time to backup
  - Backup section is set by dragging or clicking, and then it is displayed in yellow
- 6) Backup Runtime
  - Set backup progressing time
  - Backup runtime is set by dragging or clicking, and then it is displayed in green
  - In schedule backup mode, set a backup time of PC
     (\*Backup program has to be run during backup runtime)
- 7) 'Save' Button
  - After set up backup setting and click 'Save' button, data is saved on 'Schedule Backup List' tab
  - Backup starts as soon as click 'Save'
- 8) Start Schedule Backup with OS
  - Auto start on/off when OS start

## 4.4 Schedule Backup List



- 1) Schedule Backup List
  - It shows schedule backup list which is saved on device
  - When schedule backup is set up, user can check status of device backup list
  - When the list is double clicked, saving path is opened
- 2) Backup Stop/Run
  - Set operation state during backup
  - Displayed in icon and text
- 3) Delete schedule
  - Delete saved list

#### 4.5 File Password



- 1) Backup File List
  - Display a list of backed up files
- 2) Select File List
  - If you select a file to encrypt, it appears in the list
  - 'Password Status' shows the status of the current files
- 3) File Encryption
  - Set up the password in backup file saved in PC (\*Multi-files are available)
- 4) Password Change
  - Delete or change the password

#### 4.6 Streaming Backup

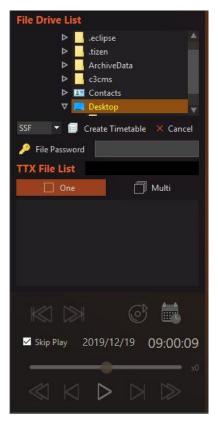




- Streaming Backup
  - If both start and end time is set, streaming backup menu is showed up automatically
- 2) Backup Set
  - Set 'Start indicator' and 'End Indicator' where the mouse is currently located
  - Date and time is automatically input on backup dialog
  - Or designate range with dragging right mouse button (\*Recommend for short time backup)
- 3) Backup Clear
  - Initialize backup setting
- 4) Device Information
  - Display information of current device
  - Set the save path
- 5) Backup setting
  - User can choose channel to backup and setup date and time, manually
  - When date and time is changed, start and end indicator is moved accordingly
- 6) Backup Status
  - Display backup start and backup status in progress bar

## 4.7 Backup Player

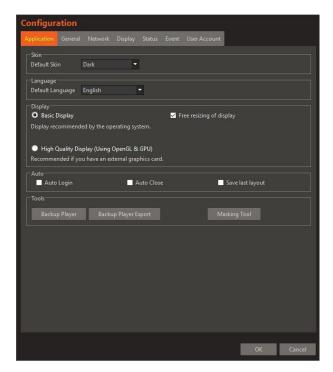




- 1) Backup Player
- Backup Player window is popup when clicking backup play icon on bottom panel (On/Off)
- 2) TTX File List
- Choose the file to play
- If you choose the file, TTX file is created. And then you can play the file through UVMS by double clicking the file
   Create Timetable
- Change SSF file into TTX file to use on UVMS

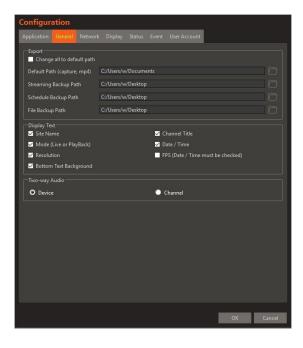
## 5. Configuration

## 5.1 Application



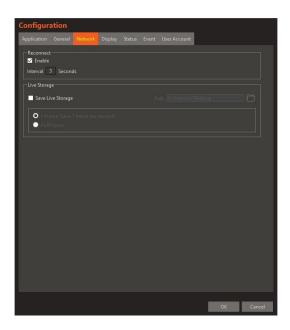
- 1) Skin
  - Setup UVMS skin type: Dark, Light and Black
- 2) Language
  - Setup UVMS language (There are 3 types of language : English, Korean, Traditional Chinese)
- 3) Display
  - Setup display specification
  - There are 2 types of Basic Display and High Quality Display
- 4) Auto
  - Auto Login: When UVMS restarts, only the splash screen is displayed (On/Off)
  - Auto Close: Not pop up when you close UVMS (On/Off)
  - Save last layout: Save last layout (On/Off) (\*layout before close UVMS)
- 5) Tools
  - Open 'Backup Player'
  - Backup Player Export
  - Open 'Masking Tool'

#### 5.2 General



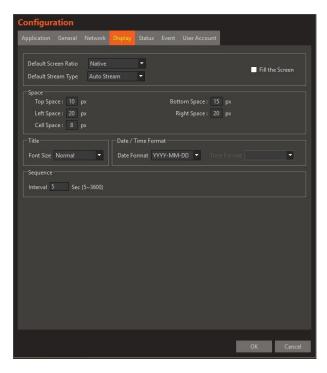
- 1) Export
- Designate default path and backup path
- 2) Display text
- Check text to display on channel(Site Name, Channel Title, Mode, Date/Time, Resolution, FPS, Bottom Text Background)
- 3) Two-way Audio
- Setup two-way audio type: Device or Channel.

#### 5.3 Network



- 1) Reconnect
  - Setup the time for retrying connection
- 2) Live Storage
  - Setup live storage for saving live image as I-frame or full frame.

## 5.4 Display



- 1) Default Screen Ratio
  - Setup basic ration of the channel
  - There are 3 types of ratio → Native, 4:3, 16:9
  - Fill the Screen: Fill the Screen (On/Off)
- 2) Default Stream Type
  - Setup basic stream
  - There are 2 types of stream type → 1st Stream, 2nd Stream
- 3) Space
  - Adjust channel space to fit channel
- 4) Title
  - Adjust title font size of channel
- 5) Date/Time Format
  - There are 2 types of date/time format: YYYY-MM-DD, MM-DD-YYYY
  - Time format: (\*Currently disabled)
- 6) Sequence
  - Set sequence time interval(5~3600[sec])

#### 5.5 Status



- 1) Status Setting
  - Set check duration time for status setting
- 2) Video loss display
  - If there is a video loss, the screen can be set to display "video loss" (On/Off)

#### 5.6 Event



- 1) Event port number received from the Event Server
  - Set port number of event server
- 2) Event alarm
  - Set the color when event alarm occurs
     (If there is an event, color effect is showing on the screen)

#### 5.7 User Account



- 1) User account management
  - Only 'admin' account can access to user account management
- 2) User list
  - Current user list and description
- 3) User add/edit
  - Add or edit user account
- 4) User delete
  - Delete user account
- 5) Permission
  - Setup the permission of each user account

## Thank you!