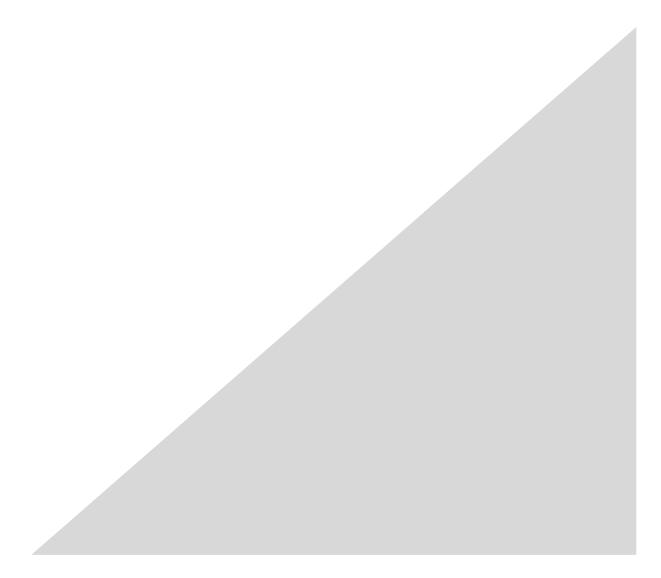


# Setup Instructions i-PRO Active Guard for Video Insight



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# 1. Preface

# 1.1. Limitation of liability

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- Other names of companies and products contained in these operating instructions may be trademarks or registered trademarks of their respective owners.

# 1.4. Abbreviations

These are descriptions of the basic terms used in these operating instructions. Microsoft<sup>®</sup> Windows<sup>®</sup> are described as Windows.

# 1.5. Disclaimer of warranty

This product is designed to search/verify a specified face from database that stores face information and thumbnail images created based on faces captured by network cameras and display statistical information by operation using a client terminal or system compatible with this product. This product by itself is not designed for crime prevention. Our company accepts no responsibility for the following under any circumstances.

- (1) ANY DAMAGE AND LOSS, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THE PRODUCT.
- (2) ANY INCONVENIENCE, LOSS, OR DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER.
- (3) UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE PRODUCT BY THE USER.
- (4) ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY.
- (5) ANY CLAIM OR ACTION FOR DAMAGES BROUGHT BY ANY PERSON OR ORGANIZATION AS A PHOTOGRAPHED SUBJECT DUE TO VIOLATION OF PRIVACY CONCERNING A SURVEILLANCE CAMERA'S PICTURE OR SAVED DATA, FOR SOME REASON (INCLUDING USE WHEN USER AUTHENTICATION ON THE AUTHENTICATION SETTING SCREEN IS SET TO OFF), BECOMING PUBLIC OR BEING USED FOR ANY PURPOSE.
- (6) LOSS OF REGISTERED DATA CAUSED BY ANY FAILURE (INCLUDING INITIALIZATION OF THE PRODUCT DUE TO FORGOTTEN AUTHENTICATION INFORMATION SUCH AS A USERNAME AND PASSWORD).
- (7) ANY PROBLEM, DAMAGE OR COMPLAINT CAUSED BY THE OPERATION BY A MALICIOUS THIRD PARTY.

# 1.6. Collection of Usage Data

This software may collect data about utilization of this software and send it to i-PRO Co., Ltd. In particular, we use this data to improve our products and services. You can stop this data collection by unchecking "Send anonymous data to improve software and user experience," checkbox.

The following is an example of the data collected by this software. We do not collect data about your personal information.

- · Company name, Country and Purpose of use entered by user.
- The number of camera and camera's extension software.

# 1.7. Network security

As you will use this product connected to a network, your attention is called to the following security risks.

- 1. Leakage or theft of information through this product
- 2. Use of this product for illegal operations by persons with malicious intent
- 3. Interference with or stoppage of this product by persons with malicious intent

It is your responsibility to take precautions such as those described below to protect yourself against the above network security risks.

- Use this product in a network secured by a firewall, etc.
- If this product is connected to a network that includes PCs, make sure that the system is not infected by computer viruses or other malicious entities (using a regularly updated anti-virus program, anti-spyware program, etc.).
- Protect your network against unauthorized access by restricting users to those who log in with an authorized username and password set by using user authentication.
- After the product is accessed by the administrator, make sure to close the web browser.
- Change the administrator password periodically. Keep the authentication information (your username and password) in a safe place free from public view.
- Apply measures such as user authentication to protect your network against leakage or theft of information, including image data, authentication information (user names and passwords), alarm mail information and FTP server information.
- Use a password that has never been used to protect your network from information leakage or theft.

# 1.8. Precaution for use

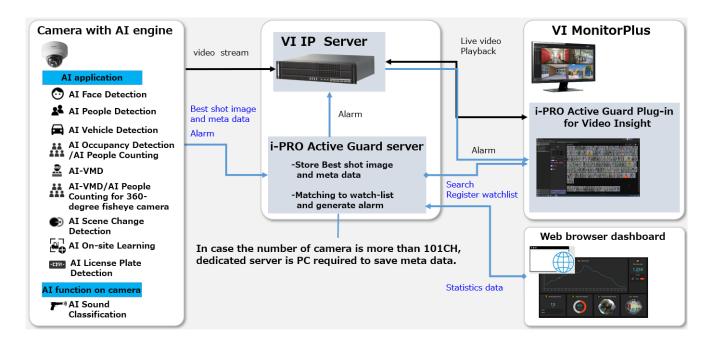
- The administrator should properly manage authentication information such as cameras, recorders, client software, Windows, databases, etc. so as not to leak to third parties.
- Always change passwords for cameras, recorders, client software, etc. from the default values, and perform appropriate management.
- Apply authentication information for each user, and do not share.
- Set the access privileges of the user appropriately.
- Make sure to manage login properly using auto logout function etc. so that third parties do not operate unintentionally by leaving it logged in.
- When downloading the application, please download from the official site.
- The administrator should properly manage exported data using export function so that there is no leakage to third parties.
- When repairing, disposing of, or transferring PC, there is a possibility that information may be left on the HDD etc. Therefore, please manage by an appropriate method such as physically destroying the HDD. Also, if using external media, remove them in advance and manage them so that they do not leak to third parties.
- If the authentication information is lost, system needs to be initialized. Store the authentication information properly in a place where only authorized persons can view it.
- It is recommended to back up and manage system configuration data regularly.
- Set the time for devices in the system, such as cameras, recorders, and PCs, using an NTP server, etc.
- Please properly manage the expiration date of the server certificate prepared by the customer.
- For Windows, apply the latest security patch. Also, please set up Windows properly according to your environment.
- Databases can be corrupted by forced shutdowns / power outages or system outages / system crashes due to power interruptions.

In that case, following phenomenon may occur. i-PRO Active Guard server software will not start, functions such as search, alarm notification, or watch registration will not work.

Damaged data cannot be recovered, so it is highly recommended to install a UPS in case of power failure.

# 2. Introduction to i-PRO Active Guard

# 2.1. System overview



Al application or Al function on cameras transmit video stream to VI IP server and transmit Best shot images and meta data to i-PRO Active Guard server.

i-PRO Active Guard server stores those data and also generate alarm when face, people or vehicle is matched to watchlist.

i-PRO Active Guard Plug-in for Video Insight (hereinafter referred to as "Plug-in") which is the plug-in software for VI MonitorPlus can search Best shot images, register watchlist, show live video, recorded video, and alarm.

By visualizing statistics data from AI application on the web browser, it can also be used for business intelligence.

# 2.2. Software components and supported version

#### Camera's Al function

- Al Face Detection: Camera's extension software. V1.11 or later is supported.
- Al People Detection: Camera's extension software. V1.11 or later is supported.
  - V1.40 or later is required for to use the automatic detection of people attributes from images.
- Al Vehicle Detection: Camera's extension software. V1.11 or later is supported.
  - V1.40 or later is required for to use the automatic detection of vehicle attributes from images.
- Al Occupancy Detection/Al People Counting: Camera's extension software. V1.60 or later is supported.
- AI-VMD: Camera's extension software. V2.00 or later is supported.
  - V3.00 or later is required for people or vehicle counting dashboard.
  - V3.20 or later is required for to show the line names set in the camera.
- Al Sound Classification: Camera's firmware function.
- AI-VMD/AI People Counting for 360-degree fisheye camera: Camera's extension software. V1.21 or later is supported.
  - V1.50 or later is required for to show the area/line names set in the camera.
- Al Scene Change Detection: Camera's extension software. V1.00 or later is supported.
- Al On-site Learning: Camera's extension software. V1.00 or later is supported.
- Al Processing Relay: Camera's extension software. V1.00 or later is supported.
- VaxALPR Camera's extension software. V1.3.16 or later is supported.
  - For Multi-Sensor Cameras, only 1ch is supported.
  - VaxALPR does not work just by installing it on the camera.

Set "Reports - ONVIF - Destination" to "i-PRO Active Guard" in VaxALPR app settings.

Fanaschic ALPR MML - Protée I - Microsoft bdge					
🛦 Not secure   122.168.0.74/cgi-bin/adam.cgi?Language=18methodName=sendDataToAdamApplicationRinstallid=06CrAD918s,appDataType=08s,appData=e3tM?WSndWFnZTodX0%3D					
<b>WAXTOR</b>					
=	Reports				
Plates	Helix				
Settings					
Davion of Interact	Vaxtor Protocol				
Reports	JSON				
Blacklist					
Whitelist	Overlay				
Database					
Log fle	XML				
Uplead config	ONVIF				
Download config					
Load license	Active				
	Desired image				
	Both				
	Destination				
	I-PRO Active Guard V				
	Genetec				
	TEST P				

For VaxALPR settings and installation detail, please see <u>https://www.vaxtor.com/products/vaxalpr/</u> Please see <u>https://i-pro.com/products\_and\_solutions/en/surveillance/learning-and-support/knowledge-</u> base/product-tips/active-guard-links for more information.

For integration with 3rd party extension software, refer to 7.3.

#### Camera's firmware

Camera with AI engine (hereinafter referred to as "camera") are supported.

Please also check supported camera models on VMS.

camera model	Version		
WV-S1136, WV-S2136, WV-S2136L, WV-S2236L	1.11 or later		
WV-S1536L, WV-S1536LN, WV-S1536LTN, WV-S2536L, WV-S2536LN, WV-S2536LTN	1.11 or later		
WV-X1571L, WV-X2571L, WV-X2271L, WV-X1551L, WV-X2551L	1.50 or later		
WV-S4576L, WV-S4176, WV-S4576LM, WV-S4156, WV-S4556L, WV-S4556LM	1.01 or later		
WV-S8543, WV-S8543G, WV-S8543L, WV-S8543LG,			
WV-S8544, WV-S8544G, WV-S8544L, WV-S8544LG,	1.01 or later		
V-S8563L, WV-S8563LG, WV-S8564L, WV-S8564LG,			
WV-S8573L, WV-S8573LG, WV-S8574L, WV-S8574LG			
WV-S15500-V3L, WV-S15500-V3LN, WV-S15500-V3LN1,			
WV-S15500-V3LK, WV-S15600-V2L, WV-S15600-V2LN, WV-S15700-V2L,			
WV-S15700-V2LN, WV-S15700-V2LK, WV-S22500-V3L, WV-S22500-V3LG,			
WV-S22500-V3L1, WV-S22600-V2L, WV-S22600-V2LG, WV-S22700-V2L,	1.00 or later		
WV-S22700-V2LG, WV-S22700-V2L1, WV-S25500-V3L, WV-S25500-V3LN,	1.00 or later		
WV-S25500-V3LG, WV-S25500-V3LN1, WV-S25600-V2L,			
WV-S25600-V2LN, WV-S25600-V2LG, WV-S25700-V2L, WV-S25700-V2LN,			
WV-S25700-V2LG, WV-S25700-V2LN1			
WV-S71300-F3	1.10 or later		

Please see <u>https://i-pro.com/global/en/surveillance/training-support/support/technical-information</u><Control No:C0103> for more information.

#### VMS and i-PRO Active Guard server / Plug-in

Software	Version
VI IP server (Recording server) VI MonitorPlus (Client software) *VI Enterprise is supported; VI Express is not supported.	V7.8.3 or later
i-PRO Active Guard server / i-PRO Active Guard Plug-in for Video Insight	V1.0.0 or later

# 3. System design

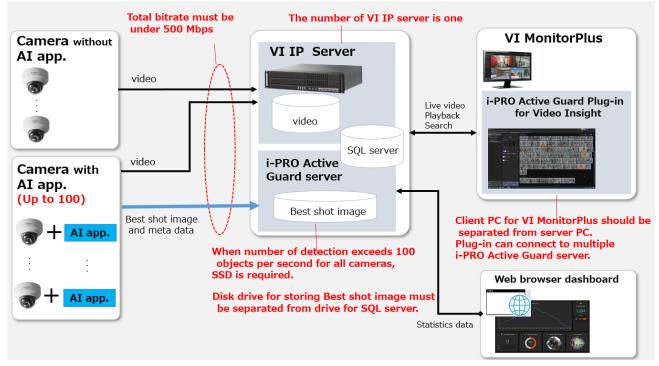
# 3.1. System architecture

Two system architecture is selectable depending on the number of cameras, the number of VI IP server, the frequency that camera detects objects or storage size and so on.

	i-PRO Active Guard server installedi-PRO Active Guard server iwith VI IP serverIn dedicated server	
The number of	100	300
cameras	(AI Face Detection is up to 20)	(AI Face Detection is up to 60)
The number of VI IP	1	12
server		12
Tatal bitrata	500Mbps for video and best shot	FOOMbac for best shot images
Total bitrate	images	500Mbps for best shot images

## 3.1.A i-PRO Active Guard server installed to PC with VI

### **IP** server

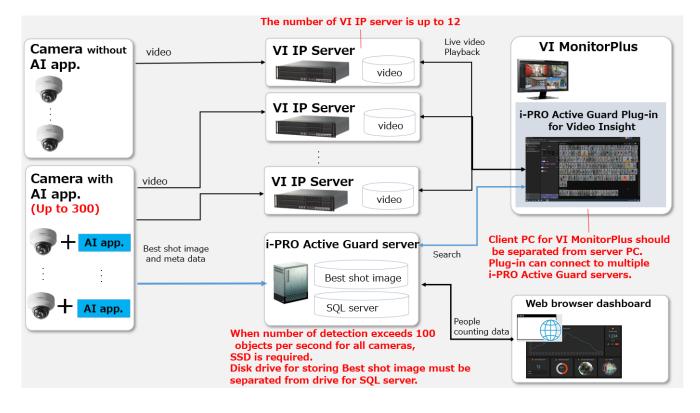


There are some conditions for installing i-PRO Active Guard server to the server PC with VI IP server.

- The number of cameras with AI engine is up to 100.
   Camera with AI Face Detection is up to 20.
- (2) Total bitrate that server PC receives must be under 500Mbps. Both bitrate of video data and best shot images should be calculated. For video, the Storage and Bandwidth calculator is available on <u>https://i-pro.com/us/en/surveillance/storage-and-bandwidth-calculator/</u> Bitrate of best shot images can be calculated in 3.3.
- (3) The number of VI IP server is one. When multiple VI IP servers exist in system, dedicated server PC is required for i-PRO Active Guard server. Dedicated server PC is also required when using failover server for VI IP server.
- (4) Disk drive for storing Best shot image must be separate from drive for storing video and SQL server.For the file path to store "SQL server", see 4.3.1.For the file path to store "Best shot image", see 4.3.1. or 4.3.5.4.If you require reliable data management, please consider using RAID5/6.
- (5) Client PC should be separated from server PC. Plug-in can connect to one i-PRO Active Guard server.

# 3.1.B i-PRO Active Guard server installed to dedicated

### server PC



When i-PRO Active Guard server is installed in dedicated server,

- The number of cameras with AI engine is up to 300.
   Camera with AI Face Detection is up to 60.
- (2) Up to 12 VI IP server can be registered to i-PRO Active Guard server. Each camera should be registered to one VI IP Server.
- (3) Disk drive for storing Best shot image must be separate from drive for SQL server.
  For the file path to store "SQL server", see 4.3.1.
  For the file path to store "Best shot image", see 4.3.1. or 4.3.5.4.
  If you require reliable data management, please consider using RAID5/6.
- (4) Client PC should be separated from server PC. Plug-in can connect to multiple i-PRO Active Guard server.

# 3.2. System requirement

# 3.2.1 System requirement for i-PRO Active Guard server

#### Hardware requirement

	Requirement
	Intel® Xeon® Silver 4208 (2.1 GHz, 8 core 16 thread) or better
Up to 100 cameras	32 GB of RAM or more
	64 bit operating system
i-PRO Active Guard server installed with VI IP server * Bandwidth limitations apply.	Microsoft® Windows Server 2016 Standard Microsoft® Windows Server 2019 Standard Microsoft® Windows Server 2022 Standard Microsoft® Windows Server 2016 Datacenter Microsoft® Windows Server 2019 Datacenter Microsoft® Windows Server 2022 Datacenter Microsoft® Windows Server 2022 Datacenter
Up to 100 cameras i-PRO Active Guard server installed in dedicated server	<ul> <li>Intel® Core<sup>™</sup> i7-9700 (4.9 GHz, 8 core 8 thread) or better</li> <li>32 GB of RAM or more</li> <li>64 bit operating system Microsoft® Windows 10 Pro Microsoft® Windows 10 Enterprise Microsoft® Windows 10 Education Microsoft® Windows 10 Pro Education Microsoft® Windows 10 IoT Enterprise * Version 2004 or later Microsoft® Windows 11 Pro Microsoft® Windows 11 Enterprise Microsoft® Windows 11 Pro Education Microsoft® Windows 11 Enterprise Microsoft® Windows 11 Interprise Microsoft® Windows 11 IoT Enterprise Microsoft® Windows 11 IoT Enterprise Microsoft® Windows 11 IoT Enterprise Microsoft® Windows Server 2016 Standard Microsoft® Windows Server 2022 Standard Microsoft® Windows Server 2019 Datacenter Microsoft® Windows Server 2022 Datacenter GbE network interface card</li> </ul>

	Requirement				
	<ul> <li>Intel® Xeon® Silver 4208 (2.1 GHz, 8 core 16 thread) or better</li> <li>32 GB of RAM or more</li> </ul>				
Up to 300 cameras i-PRO Active Guard server installed in dedicated server	<ul> <li>64 bit operating system Microsoft® Windows Server 2016 Standard Microsoft® Windows Server 2019 Standard Microsoft® Windows Server 2022 Standard</li> <li>Microsoft® Windows Server 2016 Datacenter Microsoft® Windows Server 2019 Datacenter Microsoft® Windows Server 2022 Datacenter</li> <li>GbE network interface card</li> </ul>				

#### Common software requirement

Category	Supported software			
	<ul> <li>SQL server 2014/2016/2019/2022 Express/Standard Edition</li> <li>The following SQL server is installed when new installing         <ul> <li>i-PRO Active Guard server version 1.0.0 to 1.6.2</li> <li>SQL server 2016 Express Edition.</li> </ul> </li> </ul>			
Database Engines	<ul> <li>i-PRO Active Guard server version 1.7.0 or later SQL server 2019 Express Edition.</li> <li>For update i-PRO Active Guard server, SQL Server carries over the existing version.</li> <li>SQL server Upgrade to Standard Edition procedure is shown in 5.10.</li> </ul>			
Web browser for Configuration Tool	<ul> <li>Microsoft Edge 85 or later</li> <li>Chrome 83 or later</li> <li>Firefox 95 or later</li> </ul>			

#### Disk drive considerations

When the maximum number of detections exceed 100 objects per second for all cameras, SSD is required for storing data. See 3.3 in detail. If using HDD, data will not be stored, and system become unstable.

Disk drive for storing Best shot image must be separate from drive for SQL server.

#### Database considerations

The SQL server Express Edition has limitation that the maximum size for database is 10GB, so estimated used disk size for database of face, people, vehicle, and LPR should be under 8GB." Check 3.3 to see if the Express edition is sufficient.

# 3.2.2 System requirement for Plug-in

Component	Requirement
Processor	6th Generation or better Intel Core processor (3.1 GHz quad- core+)
Memory	8 GB or more
Video	1GB
Network	1 Gb/s+
OS	Microsoft® Windows 10 Pro (64 bit) Microsoft® Windows 11 Pro (64 bit)

# **3.3. How to determine the system architecture**

#### STEP1: The number of cameras

When the numbers of cameras with AI People detection, AI Vehicle detection, AI Occupancy detection/AI People Counting, AI-VMD, Sound, AI-VMD/AI People Counting for 360-degree fisheye camera or AI Scene Change detection, License plate detection is no more than 100(AI Face detection is no more than 20), it may be possible that AI server is installed to PC with VI IP server. Please continue to check STEP2.

When over 100 (or over 20 for AI Face detection), i-PRO Active Guard server should be installed in dedicated server PC. Please see 3.1.B i-PRO Active Guard server installed to dedicated server PC".

In case of multi-sensor camera, extension software can be installed for each camera and each camera needs to be registered to i-PRO Active Guard server.

#### STEP2: The number of extension software

To calculate the bitrate of best shot, the number of extension software (Face, People, Vehicle, License plate and People Counting for 360-degree fisheye camera) should be considered. Since the amount of counting data by AI-VMD, AI Occupancy detection/AI People Counting, AI Scene Change detection is small, it is not necessary to consider it. Multiple extension software can be installed to each camera. (Ex, When People and Vehicle are installed to a camera, add 1 for People and Vehicle, respectively.)

		Face	People	Vehicle	License	People counting for 360-
					plate	degree fisheye camera
The number of extension	n software					
# of people/vehicle	Max.					
[per camera, per hour]	Average.					

	Maximum number of detections in total [per sec]	
--	---	--

When "Maximum number of detections in total" is less than 100, HDD or SSD is available for disk drive. When "Maximum number of detections in total" is over 100, SSD is required.

#### STEP3 : Total bitrate server receives

Maximum bitrate of best shot image [Mbps]	
Maximum bitrate of People counting data [Mbps]	
Total bitrate of video recording for all cameras (*) [Mbps]	
Total bitrate that server PC receives [Mbps]	

If the "Total bitrate that server PC receives" exceeds 500Mbps, i-PRO Active Guard server should be installed in dedicated server PC.

\* Storage and Bandwidth calculator for video is available on <u>https://i-pro.com/us/en/surveillance/storage-and-bandwidth-calculator/</u>

#### STEP4: Retention period and storage

	Face	People	Vehicle	License	People counting for 360-
				plate	degree fisheye camera
Retention period (day)					
*Face, People, Vehicle,					
License Plate Images (1-					
31),					
count, heatmap,					
statistics(1-92)					
* Up to 366 days when using					
SQL Server Standard Edition					
Operating time (hours per					
day)					

Estimated used disk size for best shot images [GB]	
Estimated used disk size for count [GB]	
Estimated used disk size for database [GB]	

When "Estimated used disk size for database" is under 8 GB, SQL Server Express Edition or Standard Edition can be used. When more than 8GB, SQL Server Express Edition cannot to be used due to the limitation of Express Edition. Standard Edition is must. (Refer to 5.10)

# 3.4. Ports used in i-PRO Active Guard server

The following table lists the default network ports used by i-PRO Active Guard server. These ports need to be allowed from firewall configurations.

Port number	Protocol	Port usage
1435	TCP	Connection to SQL server
8090	HTTP	Client plugin connection
8091	HTTPS	Client plugin connection
8092	HTTPS	Web configuration tool connection
8888	TCP	Internal process communication
50000	TCP	Internal process communication
50002	TCP	Internal process communication

# 4. Installation and setup

## **Procedure overview**



# 4.1. Install extension software to camera and setup using iCT

Extension software is installed and configured using i-PRO Configuration Tool (iCT). Please refer to below URL for downloading extension software and i-PRO Configuration Tool (iCT).

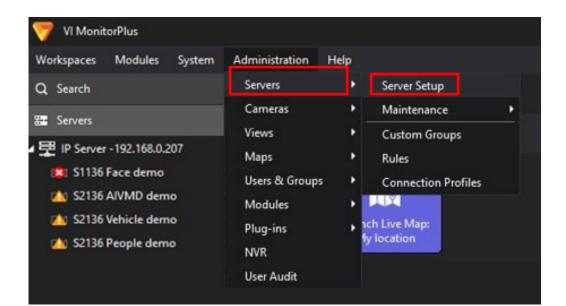
<u>https://i-pro.com/products\_and\_solutions/en/surveillance/learning-and-support/knowledge-base/product-tips/active-guard-links</u>

# 4.2. Install and setup VI IP server

Install the VMS server software and register the AI camera with the VMS client. Install Plug-in to VI IP server and configure alarm port. Register the camera in MAP as an Option setting.

### 4.2.1. Install and register cameras to VI

Detail procedure about VI installation and basic setup are shown on VI's manual. After installation, register AI cameras to VI IP server using VI MonitorPlus. ([Administration] – [Servers] – [Server Setup] – [Cameras])



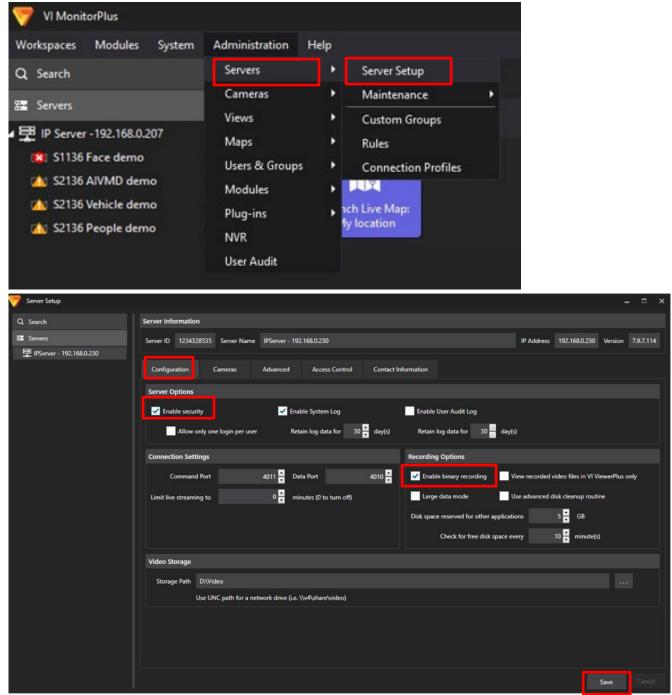
Search	Server Information						
Servers	Server ID 1234328535 Server Name IPServer - 192.168.0.23			IP Address	192.168.0.230	Version	
B IPServer - 192.168.0.230	Configuration Cameras Advanced Acce	ss Control	Contact Information				
	Camera Licensing						
	Licensed 100 Assigned 23	Bundled	23 Server Limitation Unlimited	I	Remaining 10	ю	
	Unassigned Cameras	Assi	gned Cameras				
	Camera Name IP Address Manufacturer Mo		Camera Name		IP Address	Manul	t,
							t
			192.168.0.75 - Panasonic - Model: S4156		192.168.0.75	Panasc	
			192.168.0.60 - Panasonic - Model: S1136		192.168.0.60	Panasc	
			192.168.0.69 - Panasonic - Model: S2136L		192.168.0.69	Panasc	
		←	192.168.0.52 - Panasonic - Model: S2136L		192.168.0.52	Panasc	7
		→	192.168.0.77 - Panasonic - Model: S4176		192.168.0.77	Panasc	
			192.168.0.58 - Panasonic - Model: S1135V		192.168.0.58	Panasc	~
			192.168.0.67 - Panasonic - Model: S2136L		192.168.0.67	Panasc	2
			192.168.0.93 - Model: Panasonic / i-PRO S85702-F3	L - Sensor 1	192.168.0.93	Panasc	
			192.168.0.93 - Model: Panasonic / i-PRO S85702-F3	L - Sensor 2	192.168.0.93	Panasc	
			192.168.0.100 - Model: Panasonic / i-PRO S71300-F	3	192.168.0.100	Panasc 🚽	
				Add Came	era Discove	er Cameras	

# 4.2.2. Setup VI IP server

### 4.2.2.1. Configure general settings

([Administration] - [Servers] - [Server Setup] - [Configuration] tab)

Check [Enable Security] and [Enable Binary Recording] and [Save].



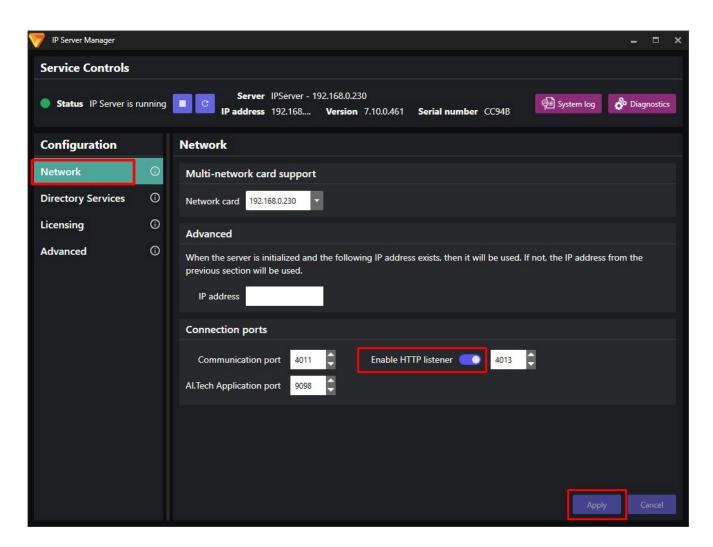
### 4.2.2.2. Configure the port to receive alarm

Click [Run as administrator] in the right click menu of the [Server Manager] icon on the desktop.

#### [Network]

Turn on [Enable HTTP Listener] and [Apply].

[Restart] from Service Controls.



### 4.2.2.3. Register cameras to Map (optional)

Using maps, operator can easily find the location of each best shot image on plugin screen. See operation manual of VI in details.

#### Note)

In case of using "Live Map Setup," the map you have set may not be displayed on some screens. (ex. Camera filter screen)

### 4.2.3. Install Plug-in to VI IP server

Install "i-PRO Active Guard Plug-in for Video Insight" software to VI IP server's PC.

#### STEP1

Click [Run as administrator] in the right click menu of the [Server Manager] icon on the desktop.

#### STEP2

Click [Stop] button.

🦻 IP Server Manager		_ = ×
Service Controls		
<b>Status</b> IP Server is n	unning	Server IPServer - 192.168.0.230 IP address 192.168 Version 7.10.0.461 Serial number CC948
Configuration		Network
Network	0	Multi-network card support
Directory Services	Ō	Network card 192.168.0.230 👻
Licensing	()	Advanced
Advanced	0	When the server is initialized and the following IP address exists, then it will be used. If not, the IP address from the previous section will be used. IP address Connection ports Communication port 4011 Enable HTTP listener 4013 4013
		Al.Tech Application port 9098
		Apply Cancel

### STEP3

Launch the "Active Guard Plugin.exe" as Administrator.

Click the [Next] button, then check mark [I accept the terms in the License Agreement], and then click the [Install]

When the installation complete window is displayed, click the [Finish] button.

### STEP4

Restart the IP Server by click [Start] button.

# 4.3. Install and setup i-PRO Active Guard server

#### Download the installer from

https://i-pro.com/products\_and\_solutions/en/surveillance/learning-and-support/knowledge-base/producttips/active-guard-links

Install i-PRO Active Guard server software. Configuration after installation can be done from web browser.

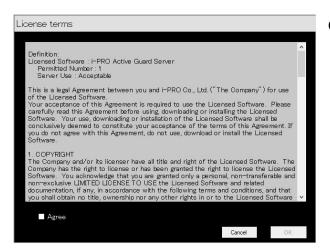
### 4.3.1. Install

[Important]

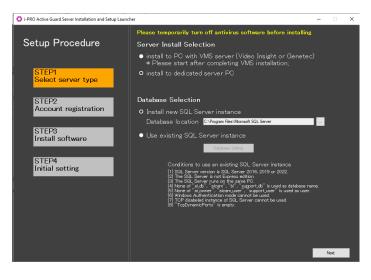
Please temporarily turn off antivirus software before installing.

Execute "*MultiAlStartup.exe*" as administrator (file path length must be less than 120).

When .NET Framework 4.8 and Microsoft Visual C++ Redistributable are not installed on the PC, it will automatically be installed, and the main screen of the setup tool will be displayed after the installation. Also, when you use Windows 10 version 20H2, Windows Update message. Execute "Windows Update" according to the message.



Check for [Agree] for License terms and [OK].



 Server Install Selection
 Select [install to PC with VMS server] or [install to dedicated server PC].

#### Note)

When you install i-PRO Active Guard server to PC with VMS server, you need to install VMS server software in advance.

#### Database Selection

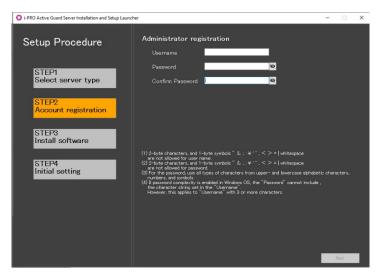
Select [Install new SQL Server instance] or [Use existing SQL Server instance].

For [Install new SQL Server instance], you need to set Database location.

For [Use existing SQL Server instance], you need to click [Database Setting] to set the existing SQL Server instance. Select existing SQL Server instance and set administrator credentials.

Click [Next].

Existing Datab	ase Setting
Instance	~
SQL Server A	uthentication (*Administrator account)
User name	
Password	
	Connect
	OK



Register credentials and click [Next].

#### Note)

Make a note of the password you entered and keep it in a safe place.

When you forget the Administrator account, you can reset (Refer to 5.9).

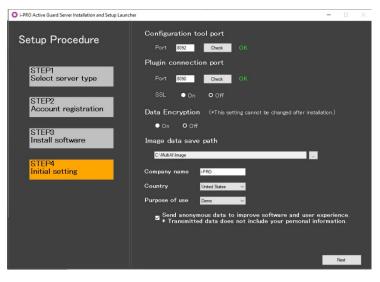
O i-PRO Active Guard Server Installation and Setup Launcher

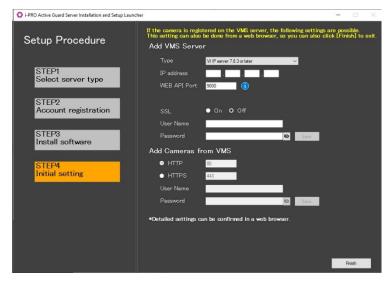
Setup 📷 SQL Server 2019 Setup	i-DRO Active Guard Server Installation and Setup
Installation Progress STEP Selec	
Installation Progress STEP Accoo STEP Instal STEP Initial	InstalLsqLdmf_loc_Cpu64_1033_Action : Do_LoginstaliStart_64. Record Install Start in Windows Event Log
	Next > Concel

Installation starts.

[Next] button will be appeared when finished. Click [Next].

i-PRO Active Guard Server Installation and Setup Launcher		×
Setup Procedure	i-PRO Active Guard Server Installation and Set	qı
STEP1 Select server type STEP2 Account registration	[SQL Server 2016] Installation Start [SQL Server 2016] Installation Complete [SQL Server 2016] Initialize Start [SQL Server 2016] Initialize Complete [Environment] Encryption key Registration Start [Environment] Encryption key Registration Complete	^
STEP3 Install software STEP4 Initial setting	[Environment] Environment Variable Registration —— Start [Environment] Environment Variable Registration —— Complete [Camera Root Certificate] Import —— Start [Camera Root Certificate] Import —— Complete [ImPRO Active Guard Server] Installation —— Start [ImPRO Active Guard Server] Installation —— Start [Environment] Create self-signed certification —— Complete [Environment] Create self-signed certification —— Complete	
	Next	V





Configure port number, SSL and Data Encryption, Image data save path, Company name, Country and Purpose of use.

#### Click [Next].

#### Important)

When "On" is selected for Data Encryption, Image data will be encrypted. This setting cannot be changed after installation. Re-installation is required when you want to change after completing installation.

Register VMS Server and cameras. To finish the settings, click [Finish]. [Finish] can be clicked at any time without registering the VMS Server and Cameras.

#### Add VMS Server

Set Type to "VI IP server", and set IP address, WEB API Port, SSL, User Name, Password. Click [Save] to check the connection to VMS Server and save settings if the connection is successful.

- Add Cameras from VMS Set HTTP or HTTPS, HTTP port, HTTPS port, User Name, Password of the cameras registered on VMS Server. Click [Save] to check the connection to the cameras and save settings if one or more connections are successful.
- \* Camera with AI Processing Relay will not be registered. register from web browser.

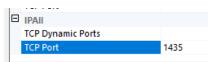
Note)

If you select [Use existing SQL Server instance] and install SQL, make sure TCP Port is configured. If the setting is blank, please set "1435".

1. Run "SQL Server Configuration Manager"



2. SQL Server Network Configuration - Protocols for (instance name) - TCP/IP - IP Addresses tab – IPAII - TCP Port=1435.



If 1435 is already used, set other empty port and uninstall i-PRO Active Guard server and install again.

# 4.3.2. Setup i-PRO Active Guard server

### 4.3.2.1. Login

Access https://<ip>:8092 using Google chrome, Microsoft Edge, or Firefox. Input credentials.

Sign in https://127.0	.0.1:8092			
Username				
Password				
			Sign in	Cancel

Note)

Credentials and port number configured by install tool 4.3.1 are used.

i-PRO Active Guard server uses self-signed certificate for web access.

When the security alert window is displayed, click [advanced] and [Proceed to <ip> (unsafe)].

It is possible to prevent the warning display by performing the following procedure for each client PC to be accessed.

- 1) Copy "C:¥MultiAl¥apache24¥conf¥server.crt" in i-PRO Active Guard server PC to client PC.
- 2) Double click the file and click "Install Certificate."
- 3) Select "Local Machine" for Store Location

4) Select "Place all certificates in the following store and "Trusted Root Certification Authorities."

÷	F Certificate Import Wizard	×
	Certificate Store Certificate stores are system areas where certificates are kept.	
	Windows can automatically select a certificate store, or you can specify a location for the certificate.	
	<ul> <li>Automatically select the certificate store based on the type of certificate</li> <li>Place all certificates in the following store</li> </ul>	
2	Certificate store:	
ĺ	Trusted Root Certification Authorities Browse	
	Next Canc	el

5) Confirm "Subject Alternative Name" from "Details." DNS Name=xxxx is shown.

	>
General Details Certification Pa	th
Show: <all></all>	$\sim$
Field	Value ^
Valid from	Tuesday, April 26, 2022 11:03
🛄 Valid to	Friday, April 23, 2032 11:03:3
Subject	i-PRO Co., Ltd., Not Applicabl
Public key	RSA (2048 Bits)
Public key parameters Subject Alternative Name	05 00 DNS Name=PC-PA 1909C 1044R
Thumbprint	594b 1a 1ca 28 39 c 4e 106 21 d 42 f
inditiophine .	SS+D 1a1ca2SSSC+C100210+21 ∨
DNS Name=PC-PA1909C1044R	Edit Properties

6) Open "C:¥Windows¥System32¥drivers¥etc¥hosts" and add IP address of i-PRO Active Guard server and xxxx(DNS Name).

ex. 192.168.0.125 PC-PA1909C1044R

7) Access https://xxxx:8092 using web browser.

### 4.3.2.2. Register VMS



	Camera Cor	nnection	0	Server Status	C	Dia	gnosis
♠		0 🔻 0		Database		Total Alarm	shot Images: 319 History: 207
₽¢				Disk Free:49.3/98GB		(2023/12/0	4 17:00)
11+	IP address	Model	Camera name	Function	Last	received time	Last auto diagnosis time

### Click [Add]

\_

≡	VMS Server				Add	Delete	Save
		IP address	Server name	Version	Notification		Notification port
11+							
¢							

### Input VI IP server's information and click [Test]

		×
Туре	VI IP server v7.8.3 or later	~
IP address	192.168.0.207	
WEB API Port	9000	
SSL	🔵 On 💽 Off	
User Name	Administrator	
Password		Test
		Save

#### When "Succeeded" is shown, click [Save]

		×
Туре	VI IP server v7.8.3 or later	~
IP address	192.168.0.207	
WEB API Port	9000	
SSL	On Off	
User Name	Administrator	
Password		Test
		Succeeded
		Save

#### Confirm VMS server is registered.

≡	Restart process is	required to finish	o configuration.	Restart		
	VMS Server					
<b>f</b>					Add Delete	Save
		IP address	Server name	Version	Notification	Notification port
₽÷ †	1	192.168.0.206	IP Server -192.168.0.206	7.9.5.248	Alarm Notify all detected license plates System error Exceed the receiving data limit (data loss)	9000
1919					<ul> <li>Reach the max usage of image storage drive (delete old images)</li> </ul>	
20						

Note) Restart button will be appeared on the top of screen, but you do not need click now. You need to click Restart after completing all other configuration.

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## 4.3.2.3. Register Cameras

Click (Register Cameras)

Select [Add devices] - [Camera(s) from VMS]

≡	Registered VMS	Enabled camera				Add devices Camera(s) from VMS	Delete	Save
—	IP Server -192.168.0.206					Al Processing Relay Dashboard function only		
₽¢	Others	IP address	Model	Camera name	Function (		SSL	
11+ 11		Disabled camera		$\land$				
19 <b>4</b>								

Note)

 When camera is selected from [AI Processing Relay], only cameras to which have added AI Processing Relay App can be registered. Set up the cameras you want to relay in the Camera setting browser and register it to VMS in advance. Enter IP address of the camera, credentials, [Check] and [Register].
 After registration is complete, the model in the camera list will be displayed as below.

"Non-AI camera model (relay AI camera model)"

ex) WV-U2542LA(WV-S71300) ↑ ↑ Non-Al model Relay Al model

- When camera is registered from [Dashboard function only], only dashboard function can be used. Plug-in cannot use the camera. Enter IP address of the camera, credentials, [Check] and [Register].

## All i-PRO cameras (including not supported cameras) are shown.

Input camera's credentials and click [	Check].
--	---------

]	IP address	Camera model	Camera name	Check result	A	Camera conne	ction
1	192.168.0.25	WV-X2251L	192.168.0.25 - Panasonic - M	odel			
	192.168.0.54	WV-S2136L	192.168.0.54 - Panasonic - M	odel			
	192.168.0.63	WV-X2251L	192.168.0.63 - Panasonic - M	odel		HTTPS 443	
	192.168.0.71	WV-S1136	192.168.0.71 - Panasonic - M	odel		sword	
	192.168.0.106	WV-S4176	192.168.0.106 - Panasonic - I	Mod			

Note)

Camera can be sorted by [IP address], [Camera Type] or [Camera Name].

Unregistered cameras can be filtered by checking [Show only unregistered cameras].

Icon related to AI function is shown for supported AI cameras. Click [Save].

	IP address	Camera model	Camera name	Check result	Ĉ	amera connection	
	192.168.0.54	WV-S2136L	192.168.0.54 - Panasonic - N	1odel 💽 🕼 刘			
	192.168.0.63	WV-X2251L	192.168.0.63 - Panasonic - N	10del <b>- 1231- ((( ))</b>	<ul> <li>НТТР</li> <li>НТТР</li> </ul>	80	
	192.168.0.71	WV-S1136		1odel 🚘 🚨 👬 🔁 🗰 🖉	User Name	admin	
	192.168.0.78	WV-S4176	192.168.0.78 - Panasonic - N	1odel 🕂 👬 🅼 🕅	Password		
					Ch	eck Save	
•	Al Face det	ection					
Ł	Al People d	Al People detection					
	Al Vehicle o	letection					
<u>.</u>	Al Video mo	otion detection					
(( ))	AI Sound de	etection					
Ð	Al Scene C	Al Scene Change detection					
	People Cou	People Counting/Occupancy (*)					
	Vehicle Cou	unting					
	On-site Lea	rning Object Co	unting				
C251 ·	License pla	te detection					

#### \* The available functions differ depending on the installed application.

	Line Count	Area count	Heat map	Occupancy detection
WV-XAE200W	yes	-	-	-
WV-XAE207W	-	Yes	-	Yes
WV-XAE300W	yes	yes	yes	Yes

#### Confirm cameras are registered.

:	Restart process is requ	ired to f	inish conf	figuration.	Restart				
	Registered VMS	Ena	abled ca	amera			Add o	levices D	elete Save
_	IP Server -192.168.0.206								
\$	Others			IP address	Model	Camera name	Function 🖒 🚺	HTTP(S) port	SSL
*	otileis		1	192.168.0.50	WV-S2136L	192.168.0.50 - Model: Panasonic WV-S	<b>**</b> 🛋 ((* ))	80	Off
•			2	192.168.0.71	WV-S1136	192.168.0.71 - Model: Panasonic WV-S	a() <u>2#</u> 5	80	Off
			3	192.168.0.78	WV-S4176	192.168.0.78 - Model: Panasonic WV-S	(( )) <u> 2 #</u>	80	Off
			4	192.168.0.104	WV-S71300-F3	192.168.0.104 - Model: Panasonic WV	⊙(())#	80	Off
		Dis	abled ca	amera		$\land \square$			
				IP address	Model	Camera name	Function	HTTP(S) port	SSL

#### Note)

If multiple VMS are registered, it is necessary to register cameras by selecting each VMS from [Registered VMS] and [Add devices] - [Camera(s) from VMS].

If you registered the camera from [Dashboard function only], select [Others] in [Registered VMS] and check the registration status.

## 4.3.3. Restart process to apply changes

\*To apply any configuration changes, restart process is required. When you finish all configurations, click "Restart" from display bar above or Home screen.

Restart process is required to finish configuration.

Restart

## 4.3.4. Check

Click 希 (Home)

#### Check camera connection

Check all registered cameras are connected.

-	Camera	Connection 4 0	C Server Status Process Database Disk Free:49.3/	Ũ	Total Best Total Alar	iagnosis t shot Images: 319 m History: 207 /04 17:00)
	IP address	Model	Camera name	Function	Last received time	Last auto diagnosis time
	92.168.0.54	WV-S2136L	192.168.0.54 - Panasonic - Model: S2136L	œ(v))	-	-
	92.168.0.63	WV-X2251L	192.168.0.63 - Panasonic - Model: X2251L	((( ))) =C251-	-	-
	92.168.0.71	WV-S1136	192.168.0.71 - Panasonic - Model: S1136	<b>=()<u>2</u>#5</b>	-	2023/12/04 17:09
	-		192.168.0.78 - Panasonic - Model: S4176	(* )) <u>2 #</u>		

A means the number of cameras connected. (Meta data session between camera and i-PRO Active

Guard server).

means the number of cameras disconnected. When disconnection detected, confirm network connection to camera.

### Check Server status

Check Process and Database shows status green.

## 4.3.5. System configuration (optional)

Click <sup>C</sup> (Configure system) and change settings if needed.

### 4.3.5.1. General

Select [Auto], [English] or [Japanese] for [Language]. (Default: Auto). Check or uncheck for [Send anonymous data to improve software and user experience].

Note) When the language configuration for web browser is other than English or Japanese, English is shown.

#### 4.3.5.2. Client plugin connection

Select [HTTP] or [HTTPS] and port number (Default: Set by install tool at 4.3.1)

Client plugin co	nnection	
• НТТР	8090 (1-65535)	
	8091 (1-65535)	Save

Note) For secure communication, HTTPS is recommended.

### 4.3.5.3. Configuration page access

Set port number for configuration tool (Default: Set by install tool at 4.3.1)

Configuration	tool access port	
HTTPS	8092 (1-65535)	Save

Note) When you change and restart software at 4.3.2, you need to access https://<ip>:<port>using new port number. Make a note not to forget.

## 4.3.5.4. Database

Configuration item	Comment
Storing images in database	All data(default): Store all data including images.
	Only alarm and statistics data: Store only alarm and statistics data
	Only statistics data: Store only statistics data
License plate number	Enable/Disable can be configured. (Default: Enable)
	Sets whether to store the license plate number in SQL Server.
Retention period	[For face image, people image, vehicle image, license plate image and
	alarm history]
	Using SQL Server Express Edition:1 – 31 days (Default: 31) can be set.
	Using SQL Server Standard Edition:1 – 366 days (Default: 366) can be set.
	[For Count, heat map, statistics]
	Using SQL Server Express Edition:1 – 92 days (Default: 92) can be set.
	Using SQL Server Standard Edition:1 – 366 days (Default: 366) can be set.
	Note)
	Data after retention period will be deleted at night (0:00am $\sim$ 3:30 am). If the
	server is shut down, data cannot be deleted, so new data may not be stored
	due to lack of storage space.
CSV backup	Enable/Disable can be configured. (Default: Disable)
	When enable and the retention period for counting data expires, the data
	will be deleted from SQL server but automatically backed up as CSV file.
	Note)
	When enable, [Max usage of image storage drive] will be also enabled
	automatically.
	Important:
	Statistics data in CSV backup files cannot be used on dashboard
	by itself. This data can be used only in comparison view and 1 day duration.
	* When [Comparison] is checked and the [Display Duration] is
	selected for 1 day in Search Mode.
Max usage of image storage	Enable/Disable and data size 10- 2000 (GB) can be configured.
drive(*)	(Default: Disable)
.,	Note)
	When enabled, the used disk space of drive for storing best shot images
	exceed the setting value, old image will be deleted automatically. This
	works every hour.
	You can manage data size using this configuration that i-PRO Active Guard
	server stores. Used disk space equals total volume minus free space.

Configuration item	Comment
Image data save path	Save path for images (Default: C:¥MultiAl¥Image)
	Note)
	When you change save path, all existing image data cannot be used from
	Plug-in.
SQL Server data save path	SQL Server data save path is shown set by install tool at 4.3.1. You cannot
	change this after installation.
Max frequency of receiving	50 -300 ( Default: 100)
object data (per sec)	Note:
	If the number of object data from all cameras exceed the value, those object
	data will be discarded to reduce disk access so that system is stable.
	SSD is required in case of 100 or more. When you set over 100 using HDD,
	system will be unstable.
Data Encryption	On/Off is shown set by install tool at 4.3.1. You cannot change this after
	installation.

\* Simple calculator can be used by clicking 🤨

Input parameters of your system and click Calc. Estimate used disk space is shown.

Number of cameras X
Face   0   People   0   Vehicle   0   People counting   0
Average number of object per camera, per hour
Face   1000   People   1000   Vehicle   1000
Retention period(day)
Face         31         People         31         Vehicle         31         People counting         92
System operating time(hours per day)
Face   12   People   12   Vehicle   12   People counting   12
Calc
Estimated used disk space
image:-GB
database:-GB
*If you need calculations that include extension software other than the above, please access the following URL and confirm. https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/tools/calculators#tbl_ai_vi

#### Note)

Estimated used disk space is just a reference. Actual data size highly depends on actual environment.

## 4.3.5.5. Initialization

Image: delete all best shot images.

Alarm history: delete all alarm history

Statistics data: delete statistics data.

Watchlist: delete all face watchlist, people watchlist, vehicle watchlist and lpr watchlist (also lpr group and registered license plate). See operation manual about watchlist.

Configuration: delete all registration data (VMS, Camera, and logs) except for port and user account.

Note)

It may take time to delete image depending on the number of images. When deleting, button will be as follows. Please update page to confirm the latest status.

Image Alarm history Statisti	cs data
Watchlist Configuration (Except for port and user acc	count)
	Delete
	Now deleting

## 4.3.6. Notification to VMS Server (optional)

Some alarms and notification related to i-PRO Active Guard server's system failure can be enabled. Actions on VMS side also can be configured (4.7.1.8 System alarm of i-PRO Active Guard server)

Click	₽¢	(Re	gister VMS)				
≡	VMS Se	rver				Add Delete	Save
∎.÷			IP address	Server name	Version	Notification	Notification port
11 m	1	<b>~</b>	192.168.0.206	IP Server -192.168.0.206	7.9.5.248	<ul> <li>Alarm</li> <li>Notify all detected license plates</li> <li>System error</li> <li>Exceed the receiving data limit (data loss)</li> <li>Reach the max usage of image storage drive (delete old images)</li> </ul>	9000
₽ ₽							

Check following items that you want and [Save].

#### Notify all detected license plates

Notifies all detected license plates received by the i-PRO Active Guard server.

#### System error

Error that i-PRO Active Guard server detects. (ex. camera connection error between camera and i-PRO Active Guard server.)

#### Exceed the receiving data limit (data loss)

When the data exceeds the setting value for "Max frequency of receiving object data (per sec)" configured at 4.3.5.4.

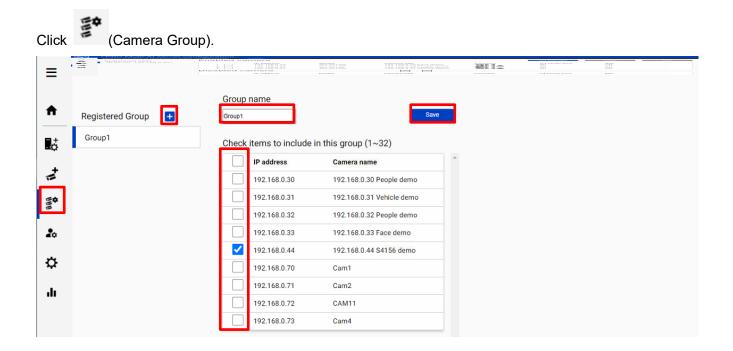
#### Reach the max usage of image storage drive (delete old images)

When the usage of image storage drive exceeds the setting value for "Max usage of image storage drive (GB)" configured at 4.3.5.4.

# 4.3.7. Dashboard configuration (optional)

## 4.3.7.1. Camera group configuration

When displaying the chart on the dashboard, it is possible to display it as statistical information for each group consisting of multiple cameras instead of statistical information for each camera.



Click [+] button, input Group name, check for cameras and [Save].

Note) Up to 16 groups can be configured.

To delete camera group, right click the group and select [Delete Camera Group].

## 4.3.7.2. User Management

By registering multiple users, it is possible to customize the dashboard display for each user.

# Click (User Management) and [Add].

					10 00 10 10 00 10 10 00 10
User Managemer *User information is u		ccess	Add	Dele	te
	User name				
1	user				
2	user2				

Enter [User name], [Password] and [Retype password] and then [Save]

User name (1 to 32 characters)	
Password (8 to 32 characters)	
Retype password	
Save	
(1) 2-byte characters, and 1-byte symbols " & ; : \ ' ^ = , < > $\mid$	are not allowed for user name
(2) 2-byte characters, and 1-byte symbols " & ; : \ ' ^ = , < > $\mid$	are not allowed for password
(3) For the password, use all types of characters from	

upper- and lowercase alphabetic characters, numbers, and symbols.

Note) User information can also be used for plugin connection.

[User name] set by install tool at 4.3.1 is shown as default. [Password] is not shown.

If you forget password, delete the user, and register again.

## 4.3.8. More information about status (optional)

### 4.3.8.1. Camera Connection

	Camer	a Connection	C Server Status	C		Diagnosis
		4 🗸 0	Process     Database     Disk Frog(4) 2/		Total Al	est shot Images: 319 arm History: 207
L			Disk Free:49.3/	98GB	G (2023/1	12/04 17:00)
	IP address	Model	Camera name	Function	Last received time	Last auto diagnosis time
			192.168.0.54 - Panasonic - Model: S2136L	⊙(())	2021/06/16 19:54	2021/06/16 19:42
C	192.168.0.54	WV-S2136L	192.100.0.04 - Fallasonic - Model. 52150E			
000	192.168.0.54 192.168.0.63	WV-S2136L WV-X2251L	192.168.0.63 - Panasonic - Model: X2251L	((L ))) = C235-	2021/06/16 19:54	2021/06/16 19:47
000	· · · · · · · · · · · · · · · · · · ·				2021/06/16 19:54 2021/06/16 19:54	2021/06/16 19:47 2021/06/16 19:52

: Camera is connected.

😢 : Camera is not connected.

L : Camera is connected, but last auto diagnosis result error.

Metadata session is connected, but AI application on camera side may not work well. Check AI application on camera side is installed, schedule setting is on and also check whether "Last received time."

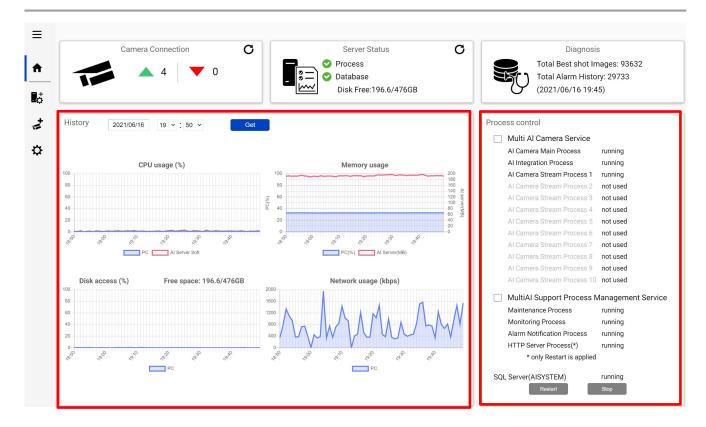
"Last received time" shows the last detection time that the camera detected face, people, vehicle, license plate or alarm. If this time is older than when camera captured actually objects, AI application on camera side may not work well.

"Last auto diagnosis time" is the latest time when i-PRO Active Guard server tested connection to camera and database. The test executes every 5 minutes for a camera in order. When error occurs, the time is shown in red color. In that case, check Log and confirm the status of camera or database.

#### Note)

When schedule setting for the AI application is off, last auto diagnosis will be failed. If it is intended, please ignore this indicator.

## 4.3.8.2. Server Status



#### **History**

History shows CPU usage, Memory usage, Disk access and Network usage of the i-PRO Active Guard server. CPU usage and Memory usage show the total value in the PC and i-PRO Active Guard server. Data for one hour from specified date is shown. Select date and [Get] for previous date (within 31 days can be shown).

These data can be used to check whether PC performance is stable after installation or investigation of the system trouble.

Note) Data may not be shown correctly when PC is power off or i-PRO Active Guard server software is stopped for some duration.

#### Process Control

Processes related to i-PRO Active Guard server can be restarted or stopped. When the system is running, please check all processes show "running" or "not used."

(The number of used "AI Camera Stream Process x" depends on the number of registered cameras.) When it is required to restart PC, check [Multi AI Camera Service] and [MultiAI Support Process Management Service] are stopped (also see 5.6.1).

When investigation to system trouble is required, please check status, and try to [Restart].

## 4.3.8.3. Diagnosis

Record summ	nary	All Best s	shot image:	5	~ Da	te 202	1/06/16		Get									
IP address	16th Jun	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
192.168.0.30	1046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
192.168.0.31	395	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
192.168.0.32	2156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
192.168.0.33	308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4																		

#### **Record summary**

Record summary shows the number of received data from each camera on the specified date.

Selectable items depend on the registered camera and AI application.

\*Selectable items

- All Best shot images
- Face Best shot images
- People Best shot images
- Vehicle Best shot images
- License plate images
- All alarm
- Registered face detection
- Registered people detection
- AI-VMD
- Sound detection
- AI Occupancy detection
- Registered vehicle detection
- AI Scene Change detection
- Registered License plate detection

(Also Includes LPR watchlists with "Detect by vehicle appearance only" set to on)

- Unregistered License plate detection

#### Note)

About notification of LPR Detection.

- License plate detection

You will be notified when you set "Notify all detected license plates" on the screen of Register VMS. See 4.3.6.

- Registered License plate detection

You will be notified when you set watchlist to below settings on i-PRO Active Guard plug-in.

(1) set "Detect by vehicle appearance only" to off,

and set "Trigger" to "When license plates in the selected group was detected."

(2) set "Detect by vehicle appearance only" to on.

- Unregistered License plate detection

You will be notified when you set watchlist to below settings on i-PRO Active Guard plug-in.

(1) set "Detect by vehicle appearance only" to off,

and set "Trigger" to "When other license plate which is not in the selected group was detected."

#### Information

Software version, OS, windows configuration is shown.

## 4.3.8.4. Display log

Comer	a Connection	C	Server Status	C		
Carrier	a connection	° _		C	_	Diagnosis
	▲ 4 🛛 🕶 0		🛇 Process		Total B	est shot Images: 680
	▲ 4 <b>▼</b> 0		🖃 📀 Database		Total A	larm History: 225
			Disk Free:49.2/	'98GB	(2023/	12/04 17:00)
IP address	Model	Camera name		Function	Last received time	Last auto diagnosis t
192.168.0.54	WV-S2136L	192.168.0.54 - Pa	nasonic - Model: S2136L	⊙(())	-	2023/12/04 18:04
	WV-S2136L WV-X2251L		nasonic - Model: S2136L nasonic - Model: X2251L	⊙((* 3)) ((* 3))=€2355	- 2023/12/04 18:09	-
92.168.0.54		192.168.0.63 - Pa			- 2023/12/04 18:09 2023/12/04 18:12	

Click to show logs.

Overview of system error can be displayed. Select date and error level ([error], [warning] and [information]) and click [Get].

Detail for each message and troubleshoot for Code is shown on 6 Troubleshooting.

_og202	21/05/09	22h ~ to	2021/05/10 22h v varning information Get	
Date	Level	Category	Message	Code
2021/05/10 21:02	Warning	Server process	Cannot receive test data from camera (1724635326)	010205
2021/05/10 21:02	Warning	Server process	Failed to send test data request to camera (1724635326) (The remote server returned an error: (400) Bad Request.)	010204
2021/05/10 20:57	Warning	Server process	Cannot receive test data from camera (118488675)	010205
2021/05/10 20:57	Warning	Server process	Failed to send test data request to camera (118488675) (The remote server returned an error: (400) Bad Request.)	010204
2021/05/10 20:52	Warning	Server process	Cannot receive test data from camera (730645128)	010205

Note) Maximum 1000 logs can be shown at the same time.

## 4.3.8.5. Download log

<ul> <li>192.168.0.54</li> <li>WV-S2136L</li> <li>192.168.0.54</li> <li>Panasonic - Model: S2136L</li> <li>(*)</li> <li>2023/12/04 18:09</li> <li>2023/12/04 18:09</li> <li>2023/12/04 18:09</li> <li>2023/12/04 18:12</li> <li>2023/12/04 18:12</li></ul>		Camera Connection	C Server Status	<b>O</b>		Diagnosis
Image: Provide and Provided and Provid			Process		Total Be	est shot Images: 680
IP adress       Model       Camera name       Function       Last received time       Last auto diagon <ul> <li>192.168.0.54</li> <li>WV-S2136L</li> <li>192.168.0.63</li> <li>WV-S213L</li> <li>192.168.0.63 - Panasonic - Model: S2136L</li> <li>(1) 192.168.0.63</li> <li>192.168.0.71</li> <li>WV-S1136</li> <li>192.168.0.71 - Panasonic - Model: S1136</li> <li>(1) 192.168.0.71</li> <li>WV-S1136</li> <li>192.168.0.78 - Panasonic - Model: S1136</li> <li>(1) 192.168.0.78</li> <li>192.168.0.78 - Panasonic - Model: S4176</li> <li>(1) 192.168.0.78</li> <li>192.168.0.78 - Panasonic - Model: S4176</li> <li>(1) 192.168.0.78</li> <li>192.168.0.78 - Panasonic - Model: S4176</li> <li>(1) 192.168.0.79</li> <li>2023/12/04 18:12</li> <li>2023/12/04 18:12</li></ul>		4 0				
• 192.168.0.54         • WV-S2136L         192.168.0.63         WV-X2251L         192.168.0.63 - Panasonic - Model: S2136L         (i))         • 2023/12/04 18:0         2023/12/04 18:0         2023/12/04 18:0         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12             • 192.168.0.71         WV-S1136         192.168.0.71 - Panasonic - Model: S1136           • (iii)          2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         -         • *         • to download log.             • w          • to download log.             • camera connection, Server status, Diagnosis,Log         *file name shows the time of log included			Disk Free:49.2	/98GB	G (2023/1	2/04 17:00)
<sup>●</sup> 192.168.0.54          WV-S2136L         192.168.0.63 - Panasonic - Model: S2136L <sup>●</sup> (M) <sup>●</sup> 2023/12/04 18:09         -         2023/12/04 18:09         -         2023/12/04 18:09         -         2023/12/04 18:02         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         -             • 192.168.0.71         WV-S1136         192.168.0.71 - Panasonic - Model: S1136           • (M)           2023/12/04 18:12         2023/12/04 18:0         2023/12/04 18:12         2023/12/04 18:12         2023/12/04 18:12         -             • 192.168.0.78         WV-S4176         192.168.0.78 - Panasonic - Model: S4176         (M)           2023/12/04 18:12         -             • k         • to download log.           • (M)           2023/12/04 18:12         -             • wnload system information         *Camera connection, Server status, Diagnosis,Log         *file name shows the time of log included         *file name shows the time of log included	IP address	Model	Camera name	Function	Last received time	Last auto diagnosis t
Image: Second System information       *Camera connection, Server status, Diagnosis,Log         *file name shows the time of log included		WV-S2136L	192.168.0.54 - Panasonic - Model: S2136L		-	2023/12/04 18:04
№ 192.168.0.78 WV-S4176 192.168.0.78 - Panasonic - Model: S4176 (M) M M M M M M M M M M M M M M M M M M	92.168.0.63	WV-X2251L	192.168.0.63 - Panasonic - Model: X2251L	((t ))) =C256-	2023/12/04 18:09	-
k ⊥ to download log. ★ wnload system information *Camera connection, Server status, Diagnosis,Log wnload technical internal log tfile name shows the time of log included	92.168.0.71	WV-S1136	192.168.0.71 - Panasonic - Model: S1136	<b>=()<u>2</u>#5</b>	2023/12/04 18:12	2023/12/04 18:09
wnload system information       *Camera connection, Server status, Diagnosis,Log       wnload technical internal log       *file name shows the time of log included	92.168.0.78	WV-S4176	192.168.0.78 - Panasonic - Model: S4176	(* )) <u>2 #</u>	2023/12/04 18:12	
ownload technical internal log *file name shows the time of log included	k ⊥ to dov	wnload log.				
*file name shows the time of log included	ownload syst	em information				
atest	ownload syst	em information				
	ownload syst *Camera connectio ownload tech	em information n, Server status, Diagnosis				
021-05-10_180749290	ownload syst *Camera connectio ownload tech *file name shows th	em information n, Server status, Diagnosis				
2021-05-09_180725321	ownload syst *Camera connectio ownload tech *file name shows th .atest	tem information In, Server status, Diagnosis Innical internal log Ine time of log included				

#### **Download system information**

Download Camera Connection, Server Status, Diagnosis and Log loaded on screen as json format.

#### Download technical internal log

Download detail log. File name "yyyy-mm-dd\_hhmmssfff" shows the time of log included. Log files are zipped automatically depending on the duration or size and the filename shows the time zipped.

Ex. "2021-05-10\_180749290" includes logs from 2021-05-09 18:07:25.321 to 2021-05-10 18:07:49.290 on this example.

## 4.3.9. Windows setting

Following Windows configuration is required for i-PRO Active Guard server's work to be stable. Location of configuration may differ depending on OS.

### 4.3.9.1. Disable Real-time protection and Tamper protection

This is required for i-PRO Active Guard server to keep the basic performance.

In case of Windows 10,

(Start – Settings – System – Update & Security – Windows Security – Virus & threat protection – Virus & threat protection settings – Manage settings) Off the "Real-time protection" and "Tamper protection." Windows server OS does not have Tamper protection feature.

### 4.3.9.2. Disable Windows Update service

Windows updates are important to keep the system up to date, but auto update may require an unplanned restart and some a Windows feature may influence the i-PRO Active Guard server. To avoid unplanned restarts or influences, disable Windows update service.

In case of Windows 10,

Start – Windows Administrative Tools – Services – right click "Windows Update" – Properties – select "Disabled" for "Startup type" and click OK.

### 4.3.9.3. Virtual memory setting

If the virtual memory is insufficient, the database may stop.

Follow the procedures below to check the virtual memory setting.

System Propertie	25				$\times$
Computer Name	Hardware	Advanced	System Protection	Remote	
You must be lo	gged on as a	an Administrat	tor to make most of t	these changes.	
Performance					
Visual effects	processor s	cheduling, m	emory usage, and vi	itual memory	
				Settings	
User Profiles					
Desktop settir	ngs related to	o your sign-in			
				Settings	
Startup and R	ecovery				
System startu	p, system fai	lure, and deb	ugging information		
			_		
				Settings	
			Environme	ent Variables	
		OK	Cancel	Apply	

In case of Windows 10, Start – Windows System – Control Panel – System and Security – System – Advanced system setting

Select Settings

erformance (	Options			>
Visual Effects	Advanced	Data Execution Preven	ntion	
Processor	scheduling	í		
Choose h	low to alloc	ate processor resourc	es.	
Adjust fo	r best perfo	rmance of:		
Progra	ams	OBackground	d services	
Virtual me	mory			
A paging were RAM		ea on the hard disk th	at Windows uses a	as if it
Total pag	ing file size	for all drives:	8152 MB	_
			Chang	e
		ОК	Cancel	Apply

Select "Advanced" tab on "Performance Options" screen and click "Change..." button of Virtual memory.

Confirm that "Automatically manage paging file size for all drives" is checked on "Virtual Memory" screen. Check it and click "OK" button.

# 4.4. Install and setup Plug-in for VI MonitorPlus

Section 4.2.3 should be completed in advance to install Plug-in to VI MonitorPlus.

## 4.4.1. Install Plug-in to VI MonitorPlus

#### STEP1

Click the [Modules] tab, then select [Plugins] - [Manage Plugins]. The [Plugin Manager] window will be displayed.

### STEP2

Click the [i-PRO Active Guard Plug-in] in the [Plugin Manager] window. Then click the [Install] button.

### STEP3

Follow the instructions on the screen to proceed with the installation.

## STEP4

When the installation complete window is displayed, click the [Finish] button. Click the [Yes] button to restart VI MonitorPlus.

### STEP5

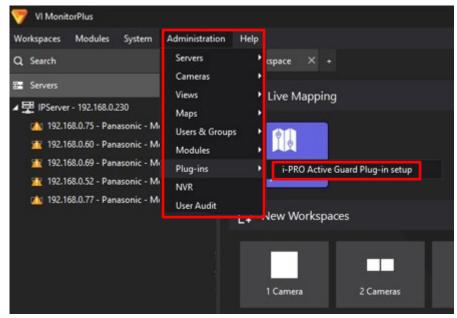
Log in again and confirm that [i-PRO Active Guard Search] and [i-PRO Active Guard Event] is normally displayed in the [Application Plug-ins] area.

## 4.4.2. Connection to i-PRO Active Guard server



Login to VI MonitorPlus as a user who has admin credential.

Then select [Administration] - [Plug-ins] - [Active Guard Plug-in setup]



i-PRO Active Guard Plug-in setup		×
Connections		User Management
🎛 i-PRO Active Guard 🕂		
<b>型</b> 192.168.0.15	Server Name	192.168.0.15
🚟 VI Mobile Server	IP address	192.168.0.15
	Port	• нттр 8090
		О нттру 8091
	User name	admin
	Password	•••••
	Status	Connected Test
	Web access	https://192.168.0.15:8092
	Version	1.3.1
		Save Cancel

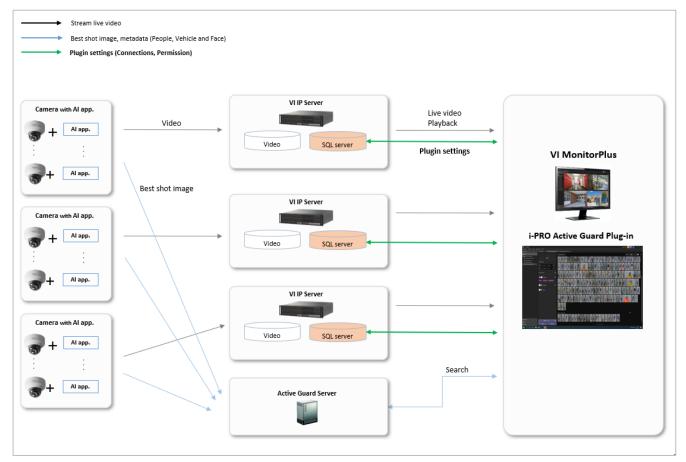
Input i-PRO Active Guard server information and Click [Test] and then click [Save].

#### Note)

If Test failed, please check if credential is correct.

Note)

Connections and User Management settings in Plug-in setup is saved to all SQL databases of VI IP Servers which are connected to VI MonitorPlus.



## 4.4.3. User Management (Optional)

## 4.4.3.1. Privileges for plug-in specific function

Configure [User Management] for [Face Watch list] and [People Watchlist] and [Vehicle Watchlist] and [LPR Watchlist] access and [Export Results] for each user or group registered in VI IP server.

🤝 i-PRO Active Guard	Plug-in setup				×
Col	nnections		Pe	rmission	
-	User		Group		
User name	Face Watchlist	People Watc	Vehicle Watc	LPR Watchlist	Export Results
Administrator			$\checkmark$		
F&P&V					
Face					
None					
People			$\checkmark$		
Vehicle					
			Save		Cancel

## 4.4.3.2. Required privileges to use plugin for non-administrator

If non-administrator uses this software, VI IP server may be required. ([Administration] – [Users & Groups] – [Setup and Configuration])

- [Servers] tab
- [Cameras] tab
- [Maps] tab
- [Rules] tab

User Informatio	n	Permissions					
User Name	Face	Servers	Cameras	Maps	Rules	Views	Access Control
User Id	1048316520038972544	Map Name 🔺	Server Name	<b>T</b>	Has Permission		
Full Name		New Map 1	IPServer - 192.	168.0.230			
Email							
Phone Number							
Password	Verify						
	Is Administrator						
Off	Timeout after 1 minutes of inact						

In addition to these, you may need to allow more privileges depending on the features of VI IP server you use.

See manual of VI for details.

# 4.4.4. Check

Start [i-PRO Active Guard Search] from New Workspace

🤝 VI MonitorPlus			Administrator 🖴 🤜 🚍 📒 🗆 🗙
Workspaces Modules System	Idministration Help		
Q Search	New Workspace × +		
	[↓ New Workspaces		
		9 Cameras 13 Cameras 13 Cameras	16 Cameras 19 Cameras 25 Cameras
	36 Cameras 18 Cameras (Wide) 24 Cameras (Wide)		
	Saved Workspaces		
	💉 Application Plug-ins		
	C C C C C C C C C C C C C C		
🐨 Cameras			
: Views			
🕅 Maps			

When the number is shown for "Cameras (x)," Connection succeeded.

\* x means the number of camera that Face, People, Vehicle or LPR extension software is installed.

VI MonitorPlus			Administrator 🚨 🗧 📮	σ×
Workspaces Modules System Adr	ministration Help			
Q Search	New Workspace X Multi-Al Re	cording Search $\square  imes +$		
servers	↔  ⊕:			\$
▲ 🕎 IP Server -192.168.0.207test □1 S1136 Face demo	Filter			
(a. S136 People demo(PS3) (a. S136 Venicle demo (a. S135 AUV/0 demo	August 2023       >         Su       Mo       Tu       We       Th       FF       Su         20       21       1       1       2       3       4       5         6       7       8       7       10       11       14       15       16       17       18       19         20       21       22       23       24       25       26       27       28       29       30       31       1       2         3       4       5       6       7       8       9       9       5       5       7       8       9       9         Search only within       Past 24 hours         People       Fast 4       9	San time 6:55:40 PM End time 6:55:40 PM	Please select your filters and click Search to view results.	
🐨 Cameras	♥ Save filters	-		
# Views				
🐧 Maps	Clear	Search		

# 4.5. Upgrade i-PRO Active Guard server

#### [Important]

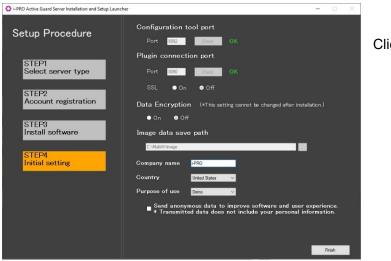
When upgrading the version of i-PRO Active Guard server, do not uninstall the already installed version. If you uninstall it, you will not be able to use the past data.

Execute "MultiAlStartup.exe" as administrator (file path length must be less than 120).

Check for [Agree] for License terms and [OK].

O i-PRO Active Guard Server Installation and Setup Launcher	=	$\Box$ $\times$
Setup Procedure	i-PRO Active Guard Server Installation and S	etup
STEP1 Select server type Account registration STEP3 Install software STEP4 Initial setting	[SQL Server 2019] Installation Start [SQL Server 2019] Installation Skip [SQL Server 2019] Initialize Skip Environment] Encryption key Registration Start Environment] Encryption key Registration Skip [Environment] Window Search Disabled Skip [Camera Root Certificate] Import Skip [Camera Root Certificate] Installation Start [-FRO Active Guard Server] Installation Skip [Environment] Create self-signed certification Skip	
		Next

Installation starts and [Next] button will be appeared when finished. Click [Next].



Click [Finish].

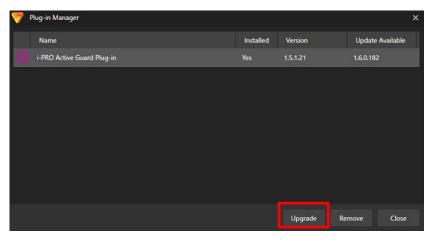
# 4.6. Upgrade Plug-in

## STEP1

Click the [Modules] tab, then select [Plugins] - [Manage Plugins]. The [Plugin Manager] window will be displayed.

## STEP2

Click the [i-PRO Active Guard Plug-in] in the [Plugin Manager] window. Then click the [Upgrade] button.

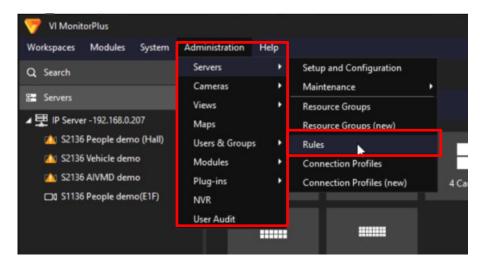


## STEP3

Follow the instructions on the screen to proceed with the installation.

# 4.7. Rules setup for alarm notification (optional)

Basic alarm function can be used on Plug-in without Rules setup. Rules setup enables more advanced operation. ([Administration] – [Servers] – [Rules])



## 4.7.1. Add event

Create new Rules and click [Add event]

💎 Rule Setup		×
Rule Setup		Cancel Save Now
Rules	New Rule Properties	
	Enable Rule Name New Rule Server IP Server -192.168.0.207 •	
	Schedule	
	Rule will run all the time Add Schedule	
	Trigger Events	
	Event Name Event Type Add Event	
	UNLICENSED TRIAL   To Purchase Visit	
	OAND (All Events) ●OR (Any Event) Trigger Wait Time 30 3 seconds	
	Actions	
	Actions - What happens when the Rule executes	
	Action Name Action Type Add Action Remove Remove	
	UNLICENSED TRIAL   To Purchase Vait. http://inflegatio.com	D TRIAL   To Purchase Visit http://infragistics.com.m

#### Select [Enhanced System Input]

Add Event		1	
ossible Events that will Trig	ger the Rule		
Event Type	Event Description	Enhanced	System Input
Access Control Event	Trigger off of an Access Control Entry or Alarm	Limanceut	System input
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)
Analytics	Trigger off of a supported Camera's Analytics		S2136 Vehicle demo (192.168.0.31)     S2136 Vehicle demo (192.168.0.31)
Camera Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>
Enhanced System Input	Receive Alert with Metadata		
Digital Input	External input device (i.e Alarm)		
License Plates	Trigger when a License Plate is found		
SDK Input	Receive data from a TCP Port		
User Login	Rule triggers when a user logs in.		
Video Motion	Motion is detected on a specific camera		
			Select All Clear Selections
		Category	
		Area	
		Area	
	UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		UNLICENSED TRIAL   To Purchase Visit http://infragistics.c
			OK Cance

## 4.7.1.1. Registered face detection

To use Registered face detection as Rules, check cameras with AI Face detection, and input category exactly strings registered as face watch list (ex. VIP, Student, Employee and so on.) for Category. Actions can be set for specific category.

1	Add Event				,
P	ossible Events that will Trig	ger the Rule			
	Event Type	Event Description	Enhanced S	System Input	
	Access Control Event	Trigger off of an Access Control Entry or Alarm			
	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)	
	Analytics	Trigger off of a supported Camera's Analytics		<ul> <li>S2136 Vehicle demo (192.168.0.31)</li> <li>S2136 AIVMD demo (192.168.0.33)</li> </ul>	
	Camera Down	Trigger when a specific or all cameras stop responding.		S2136 AIVIND demo (192, 168.0.33)	
Þ	Enhanced System Input	Receive Alert with Metadata			
	Digital Input	External input device (i.e Alarm)			
	License Plates	Trigger when a License Plate is found			
	SDK Input	Receive data from a TCP Port			
	User Login	Rule triggers when a user logs in.			
	Video Motion	Motion is detected on a specific camera			
				Select All Clear Selections	
			Category	VIP	
			Area		
		To Develope the second state of the Developer Main		To Bushese	A - In
		UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		UNLICENSED TRIAL   To Purchase   http://infragio	tics.com
				ок с	ancel

Category can be set from Face Watchlist registration window. See "i-PRO Active Guard Plugin Operating Instructions for VI" in detail.

Area setting is invalid.

Information	
Representative face image	
Take Intrage	+
First Name	
Last Name	
Age	
Gender	🔵 Male 🔵 Female 💿 Arbitrary
Remarks	
Matching	On Off
Category	
Alarm threshold	50 🗘 Low — High
Validity period	2021/04/17 8:52:57 🛇 🛱
	Disable matching Delete registration
	Cancel Save

## 4.7.1.2. Registered people detection

To use Registered people detection as Rules, check cameras with AI People detection and input "Registered people detection" for Category.

🐬 Add Event				×
Possible Events that will Trig	ger the Rule			
Event Type Access Control Event	Event Description Trigger off of an Access Control Entry or Alarm	Enhanced S	System Input	
Alert Button Analytics Camera Down Finhanced System Input Digital Input License Plates SDK Input User Login Video Motion	An alert button appears in the "Alert Buttons" menu Trigger off of a supported Camera's Analytics Trigger when a specific or all cameras stop responding. Receive Alert with Metadata External input device (i.e Alarm) Trigger when a License Plate is found Receive data from a TCP Port Rule triggers when a user logs in. Motion is detected on a specific camera	Cameras	✓ S2136 People demo (Hall) (192.168.0.30) S2136 Vehicle demo (192.168.0.31) S2136 AIVMD demo (192.168.0.33) ✓ S1136 People demo(E1E) (192.168.0.32)	
	UNLICENSED TRIAL   To Purchase Visit	✓ Category Area	Select All Clear Selections Regisered people detecti UNLICENSED TRIAL To Purchase Visi Thttp://nfregistic	it s.com
			OK Can	icel

Area setting is invalid.

## 4.7.1.3. Registered vehicle detection

To use Registered vehicle detection as Rules, check cameras with AI Vehicle detection and input "Registered vehicle detection" for Category.

Event Type       Event Description         Access Control Event       Trigger off of an Access Control Entry or Alarm         Alett Button       An alert button appears in the "Alett Buttons" menu         Analytics       Trigger off of a supported Camera's Analytics         Camera Down       Trigger off of a supported Camera's Analytics         Enhanced System Input       Receive Alert with Metadata         Digital Input       External input device (i.e Alarm)         License Plates       Trigger when a License Plate is found         SDK Input       Receive data from a TCP Port         User Login       Rule triggers when a user logs in.         Video Motion       Motion is detected on a specific camera	sible Events that will Trig	ger the Rule		
Access Control Event       Trigger off of an Access Control Entry or Alarm         Alet Button       An alert button appears in the "Alett Buttons" menu         Analytics       Trigger off of a supported Camera's Analytics         Camera Down       Trigger off of a supported Camera's Analytics         Camera Down       Trigger off of a camera's Analytics         Enhanced System Input       Receive Alert with Metadata         Digital Input       External input device (i.e Alarm)         License Plates       Trigger when a License Plate is found         SDK Input       Receive data from a TCP Port         User Login       Rule triggers when a user logs in.         Video Motion       Motion is detected on a specific camera	Event Type	Event Description	Enhanced	System Input
Variation       Private Outcomposition of the Dation mend         Variation       Private Outcomposition of the Participation mend         Analytics       Trigger off of a supported Camera's Analytics         Camera Down       Trigger off of a supported Camera's Analytics         Enhanced System Input       Receive Alert with Metadata         Digital Input       External input device (i.e Alarm)         License Plates       Trigger when a License Plate is found         SDK Input       Receive data from a TCP Port         Jser Login       Rule triggers when a user logs in.         Video Motion       Motion is detected on a specific camera         Select All       Clear Selections	Access Control Event	Trigger off of an Access Control Entry or Alarm		
Analytics       Ingger off of a supported califiers a Marytics         Camera Down       Trigger when a specific or all cameras stop responding.         Enhanced System Input       Receive Alert with Metadata         Digital Input       External input device (i.e Alarm)         License Plates       Trigger when a License Plate is found         SDK Input       Receive data from a TCP Port         User Login       Rule triggers when a user logs in.         Video Motion       Motion is detected on a specific camera         Select All       Clear Selections         Select All       Clear Selections	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	
Camera Down       Ingger when a specific or all cameras stop responding.         Enhanced System Input       Receive Alert with Metadata         Digital Input       External input device (i.e Alam)         License Plates       Trigger when a License Plate is found         SDK Input       Receive data from a TCP Port         User Login       Rule triggers when a specific camera         Video Motion       Motion is detected on a specific camera         Select All       Clear Selections         If Category       Registered vehicle detect	Analytics	Trigger off of a supported Camera's Analytics		
Enhanced System Input       Receive Alert with Metadata       192.168.0.58 - Panasonic WV-S1135V (192.168.0.58)         Digital Input       External input device (i.e Alarm)       192.168.0.69 - Panasonic WV-S1135V (192.168.0.60)         License Plates       Trigger when a License Plate is found       192.168.0.69 - Panasonic WV-S2136L (192.168.0.62)         SDK Input       Receive data from a TCP Port       192.168.0.65 - Panasonic WV-S2136L (192.168.0.62)         Juser Login       Rule triggers when a user logs in.       192.168.0.69 - Panasonic WV-S2136L (192.168.0.66)         Video Motion       Motion is detected on a specific camera       192.168.0.68 - Panasonic WV-S2136L (192.168.0.66) ×         Select All       Clear Selections       Select All	Camera Down	Trigger when a specific or all cameras stop responding.		
License Plates Trigger when a License Plate is found DSK Input Receive data from a TCP Port User Login Rule triggers when a user logs in. Video Motion Motion is detected on a specific camera Video Kotion Motion Kotion	Enhanced System Input	Receive Alert with Metadata		192.168.0.58 - Panasonic WV-S1135V (192.168.0.58
License Plates Ingger when a License Plate is tound SDK Input Receive data from a TCP Port User Login Rule triggers when a user logs in. Video Motion Motion is detected on a specific camera Select All Clear Selections Clear Select Clear Selections Clear Select Clear Selections Clear Select Clear Selections	Digital Input	External input device (i.e Alarm)		
SDK Input       Receive data from a TCP Port         User Login       Rule triggers when a user logs in.         Video Motion       Motion is detected on a specific camera         Select All       Clear Selections         Claegory       Registered vehicle detect	License Plates	Trigger when a License Plate is found		
Video Motion Motion is detected on a specific camera  Video Motion Motion is detected on a specific camera  Select All Clear Selections  Category Registered vehicle detect	SDK Input	Receive data from a TCP Port		192.168.0.65 - Panasonic WV-S2136L (192.168.0.65
Select All Clear Selections	User Login	Rule triggers when a user logs in.	1	
Category Registered vehicle detect	Video Motion	Motion is detected on a specific camera		192.168.0.68 - Panasonic WV-S2136L (192.168.0.68)
Area Area			✓ Category	
			Area	

Area setting is invalid.

## 4.7.1.4. AI-VMD

To use AI-VMD to trigger the Rule, check cameras with AI-VMD input Category and area as follows. Area means area number 1 to 8 configured by camera side.

#### Intruder for all areas

💎 Add	Event				×
Possible	e Events that will Trigg	ger the Rule			
	Event Type	Event Description	Enhanced S	System Innut	
Acce	ess Control Event	Trigger off of an Access Control Entry or Alarm	Linnanced 5		
Alert	Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)	
Anal	ytics	Trigger off of a supported Camera's Analytics		S2136 Vehicle demo (192.168.0.31)	
Cam	era Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>	
► Enha	anced System Input	Receive Alert with Metadata			
Digit	tal Input	External input device (i.e Alarm)			
Licer	nse Plates	Trigger when a License Plate is found			
SDK	Input	Receive data from a TCP Port			
User	Login	Rule triggers when a user logs in.			
Vide	o Motion	Motion is detected on a specific camera			
				Select All Clear Selections	
			Category	Intruder	
			Area		
		UNLICENSED TRIAL   To Purchase Visit		UNLICENSED TRIAL   To Purchase http://infragi	
				ок с	Cancel

#### Loitering for all areas

17 A	dd Event						×
Poss	ible Events that will Trigg	ger the Rule					
A	Event Type ccess Control Event	Event Description Trigger off of an Access Control Entry or Alarm	Enhanced Sy	ystem Input			
	lert Button nalytics	An alert button appears in the "Alert Buttons" menu Trigger off of a supported Camera's Analytics	Cameras	S2136 People demo S2136 Vehicle demo		0.30)	
	amera Down	Trigger when a specific or all cameras stop responding.		S2136 AIVMD demo		0.32)	
	nhanced System Input ligital Input	Receive Alert with Metadata External input device (i.e Alarm)					
	icense Plates	Trigger when a License Plate is found					
	DK Input	Receive data from a TCP Port					
	Iser Login ideo Motion	Rule triggers when a user logs in. Motion is detected on a specific camera					
					Select All	Clear Selections	
			Category	Loitering			
			Area				
		UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		Z	UNLICENSED	TRIAL   To Purchase \ http://infragis	lisit tics.com
						ок с	ancel

#### Direction for all areas

Event Type	Event Description	Enhanced S	System Input
Access Control Event	Trigger off of an Access Control Entry or Alarm	Ennanced S	ystem input
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)
Analytics	Trigger off of a supported Camera's Analytics		S2136 Vehicle demo (192.168.0.31)
Camera Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>
Enhanced System Input	Receive Alert with Metadata		31130 People demo(E II ) (132.100.0.32)
Digital Input	External input device (i.e Alarm)		
License Plates	Trigger when a License Plate is found		
SDK Input	Receive data from a TCP Port		
User Login	Rule triggers when a user logs in.		
Video Motion	Motion is detected on a specific camera		
		Select All Clear Selections	
		Category	Direction
		Area	
	To Purchase Visit		To Purchase Visi

#### Cross Line for all areas

7	Add Event				×
Po	ssible Events that will Trig	iger the Rule			
	Event Type	Event Description	Enhanced S	System Input	
	Access Control Event	Trigger off of an Access Control Entry or Alarm	Linnanced 5	bysient input	
	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)	
	Analytics	Trigger off of a supported Camera's Analytics		S2136 Vehicle demo (192.168.0.31)	
	Camera Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>	
Þ	Enhanced System Input	Receive Alert with Metadata			
	Digital Input	External input device (i.e Alarm)			
	License Plates	Trigger when a License Plate is found			
	SDK Input	Receive data from a TCP Port			
	User Login	Rule triggers when a user logs in.			
	Video Motion	Motion is detected on a specific camera			
				Select All Clear Selections	
			Category	Cross Line	
			Area		
		UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		UNLICENSED TRIAL   To Purchase Visit http://infragistics.c	om
				OK Cance	

Area field enables that other actions for each area can be set.

Example of use case using Area field.

Area 1 is an exclusion zone and area 2 is around the area 1.

Popup live window and start recording when someone intrudes into area 2, and e-mail notification when the person intrudes into area 1. These can be set by Rules setup using Area field.



Intruder for area 1 (example of using Area field)

Check Area and input area number.

7	Add Event				×
P	ossible Events that will Trig	ger the Rule			
	Event Type	Event Description	Enhanced S	ivstem Innut	
	Access Control Event	Trigger off of an Access Control Entry or Alarm	Ennanceare	Joten input	
	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)	
	Analytics	Trigger off of a supported Camera's Analytics		<ul> <li>S2136 Vehicle demo (192.168.0.31)</li> <li>S2136 AIVMD demo (192.168.0.33)</li> </ul>	
	Camera Down	Trigger when a specific or all cameras stop responding.		S2136 AlVMD demo (192, 166, 0.35)	
	Enhanced System Input	Receive Alert with Metadata			
	Digital Input	External input device (i.e Alarm)			
	License Plates	Trigger when a License Plate is found			
	SDK Input	Receive data from a TCP Port			
	User Login	Rule triggers when a user logs in.			
	Video Motion	Motion is detected on a specific camera			
				Select All Clear Selections	
			Category	Intruder	
			🗹 Area	1	
		UNLICENSED TRIAL   To Purchase Visit		UNLICENSED TRIAL To Purchase Visit	
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				OK Can	el

### 4.7.1.5. AI Sound classification

Category for AI Sound classification (Gunshot, Yell, Glass break, Vehicle horn and Audio detection) can be distinguished and Actions can be set for specific category.

Check cameras with AI Sound classification, Category, and input category strings. Area setting has no relation.

#### Gunshot

7	Add Event				×
Po	ssible Events that will Trigg	ger the Rule			
	Event Type	Event Description	Enhanced S	System Input	
	Access Control Event	Trigger off of an Access Control Entry or Alarm	Ennanceare		
	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)	
	Analytics	Trigger off of a supported Camera's Analytics		S2136 Vehicle demo (192.168.0.31) ✓ S2136 AIVMD demo (192.168.0.33)	
	Camera Down	Trigger when a specific or all cameras stop responding.		S2136 AvviiD demo (192,166,0,33)	
•	Enhanced System Input	Receive Alert with Metadata			
	Digital Input	External input device (i.e Alarm)			
	License Plates	Trigger when a License Plate is found			
	SDK Input	Receive data from a TCP Port			
	User Login	Rule triggers when a user logs in.			
	Video Motion	Motion is detected on a specific camera			
				Select All Clear Selections	
			Category	Gunshot	
			Area		
		UNLICENSED TRIAL   To Purchase Visit   http://infragistics.com		UNLICENSED TRIAL   To Purchase Visi http://infragistic	it s.com
				OK Can	icel

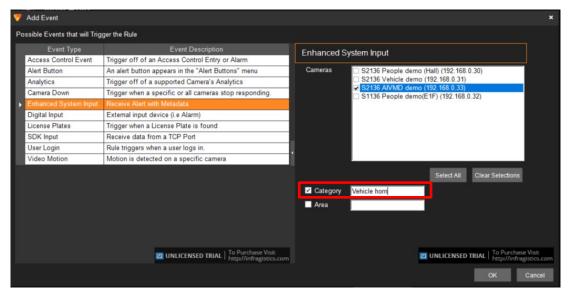
#### Yell

Event Type	Event Description	Enhanced S	System Input
Access Control Event	Trigger off of an Access Control Entry or Alarm		
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)
Analytics	Trigger off of a supported Camera's Analytics		□ S2136 Vehicle demo (192.168.0.31)
Camera Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>
Enhanced System Input	Receive Alert with Metadata		
Digital Input	External input device (i.e Alarm)		
icense Plates	Trigger when a License Plate is found		
SDK Input	Receive data from a TCP Port		
Jser Login	Rule triggers when a user logs in.		
/ideo Motion	Motion is detected on a specific camera		
		Select All Clear Selections	
		Category	Yell
		Area	
	UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		UNLICENSED TRIAL   To Purchase Vis

#### Glass break

Event Type	Event Description	Enhanced S	System Input
Access Control Event	Trigger off of an Access Control Entry or Alarm	Limanecale	y stell might
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)
Analytics	Trigger off of a supported Camera's Analytics		□ S2136 Vehicle demo (192.168.0.31)
Camera Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>
Enhanced System Input	Receive Alert with Metadata		
Digital Input	External input device (i.e Alarm)		
License Plates	Trigger when a License Plate is found		
SDK Input	Receive data from a TCP Port		
User Login	Rule triggers when a user logs in.		
Video Motion	Motion is detected on a specific camera		
			Select All Clear Selections
		Category	Glass break
		Area	
	L To Durchara Visit		To Durchase Vi
	UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		UNLICENSED TRIAL   To Purch
			OK C

#### Vehicle horn



#### Audio detection

	ger the Rule		
Event Type	Event Description	Enhanced System Input	
Access Control Event	Trigger off of an Access Control Entry or Alarm	ne de la company de la comp	
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras S2136 People demo (Hall) (192.168.0	.30)
Analytics	Trigger off of a supported Camera's Analytics	□ S2136 Vehicle demo (192.168.0.31) ✓ S2136 AIVMD demo (192.168.0.33)	
Camera Down	Trigger when a specific or all cameras stop responding.	S2136 AIVMD demo (192, 166,0.33)	32)
Enhanced System Input	Receive Alert with Metadata		
Digital Input	External input device (i.e Alarm)		
icense Plates	Trigger when a License Plate is found		
SDK Input	Receive data from a TCP Port		
Jser Login	Rule triggers when a user logs in.		
/ideo Motion	Motion is detected on a specific camera		
		Select All	Clear Selections
			Glear Selections
		Category Audio detection	
		Area	
			-
	UNLICENSED TRIAL   To Purchase Visit http://infragistics.com	UNLICENSED 1	RIAL   To Purchase Visit

#### 4.7.1.6. AI Scene Change Detection

To use AI Scene Change Detection as Rules, check cameras with AI Scene Change Detection and input "AI Scene Change Detection" for Category.

Event Type	Event Description	Enhanced	System Input
Access Control Event	Trigger off of an Access Control Entry or Alarm		
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	192.168.0.52 - Panasonic WV-S2136L (192.168.0.52) 192.168.0.53 - Panasonic WV-S2136L (192.168.0.53)
Analytics	Trigger off of a supported Camera's Analytics		192.168.0.55 - Panasonic WV-S2136L (192.168.0.55)
Camera Down	Trigger when a specific or all cameras stop responding.	1.00	192.168.0.57 - Panasonic WV-S1536L (192.168.0.57)
Enhanced System Input	Receive Alert with Metadata		192.168.0.58 - Panasonic WV-S1135V (192.168.0.58
Digital Input	External input device (i.e Alarm)		<ul> <li>192.168.0.60 - Panasonic WV-S1136 (192.168.0.60)</li> <li>192.168.0.61 - Panasonic WV-S2136L (192.168.0.61)</li> </ul>
License Plates	Trigger when a License Plate is found		192.168.0.61 - Panasonic WV-S2136L (192.168.0.61)
SDK Input	Receive data from a TCP Port		192.168.0.65 - Panasonic WV-S2136L (192.168.0.65)
User Login	Rule triggers when a user logs in.		□ 192.168.0.67 - Panasonic WV-S2136L (192.168.0.67)
Video Motion	Motion is detected on a specific camera	192.168.0.6	□ 192.168.0.68 - Panasonic WV-S2136L (192.168.0.68) ∨
			Select All Clear Selections
		Category	Al Scene Change Detec
		Area	

Area setting is invalid.

#### 4.7.1.7. License plate detection

To use Registered or Unregistered license plate detection as Rules, check cameras with Al license plate detection, and input group strings registered as LPR watch list (ex. VIP, Student, Employee and so on.) for Category.

Actions can be set for specific category.

Event Type	Event Description	Enhanced S	System Input
Access Control Event	Trigger off of an Access Control Entry or Alarm	Limaneed e	system input
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	S2136 People demo (Hall) (192.168.0.30)
Analytics	Trigger off of a supported Camera's Analytics		S2136 Vehicle demo (192.168.0.31)
Camera Down	Trigger when a specific or all cameras stop responding.		<ul> <li>S2136 AIVMD demo (192.168.0.33)</li> <li>S1136 People demo(E1F) (192.168.0.32)</li> </ul>
Enhanced System Input	Receive Alert with Metadata		
Digital Input	External input device (i.e Alarm)		
License Plates	Trigger when a License Plate is found		
SDK Input	Receive data from a TCP Port		
User Login	Rule triggers when a user logs in.		
Video Motion	Motion is detected on a specific camera		
			Select All Clear Selections
		Category	VIP
		Area	
	UNLICENSED TRIAL   To Purchase Visit		UNLICENSED TRIAL   To Purchase Vi

Area setting is invalid.

To use all licence plate detection and registered advanced vehicle detection as Rules, check cameras with Al license plate detection and input "License plate detection" or "Registered advanced vehicle detection" for Category.

Actions can be set for specific category.

7	Add Event				×
P	ossible Events that will Trig	ger the Rule			
	Event Type	Event Description	Enhanced	System Input	
	Access Control Event	Trigger off of an Access Control Entry or Alarm	Ennanceus		
	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	192.168.0.52 - Panasonic WV-S2136L (192.168.0.52)	
	Analytics	Trigger off of a supported Camera's Analytics		<ul> <li>192.168.0.53 - Panasonic WV-S2136L (192.168.0.53)</li> <li>192.168.0.55 - Panasonic WV-S2136L (192.168.0.55)</li> </ul>	
	Camera Down	Trigger when a specific or all cameras stop responding.		192.168.0.55 - Panasonic WV-S2136L (192.168.0.55)	
Þ	Enhanced System Input	Receive Alert with Metadata		192.168.0.58 - Panasonic WV-S1135V (192.168.0.58	
	Digital Input	External input device (i.e Alarm)		□ 192.168.0.60 - Panasonic WV-S1136 (192.168.0.60)	
	License Plates	Trigger when a License Plate is found		<ul> <li>192.168.0.61 - Panasonic WV-S2136L (192.168.0.61)</li> <li>192.168.0.62 - Panasonic WV-S2136L (192.168.0.62)</li> </ul>	
	SDK Input	Receive data from a TCP Port		✓ 192.168.0.65 - Panasonic WV-S2136L (192.168.0.65)	
	User Login	Rule triggers when a user logs in.		192.168.0.67 - Panasonic WV-S2136L (192.168.0.67)	
	Video Motion	Motion is detected on a specific camera		192.168.0.68 - Panasonic WV-S2136L (192.168.0.68; *	
				Select All Clear Selections	
			-		
			Category	License plate detection	
			Area		
				ок с	ancel

Area setting is invalid.

#### Note)

About notification of LPR Detection.

- License plate detection

You will be notified when you set "Notify all detected license plates" on the screen of Register VMS. See 4.3.6.

- Registered license plate detection

You will be notified when you set watchlist to below settings on i-PRO Active Guard plug-in.

(1) set "Detect by vehicle appearance only" to off,

and set "Trigger" to "When license plates in the selected group was detected."

- Unregistered license plate detection

You will be notified when you set watchlist to below settings on i-PRO Active Guard plug-in.

(1) set "Detect by vehicle appearance only" to off,

and set "Trigger" to "When other license plate which is not in the selected group was detected."

- Registered Advanced Vehicle Detection

(1) set "Detect by vehicle appearance only" to on.

#### 4.7.1.8. System alarm of i-PRO Active Guard server

Some alarms related to i-PRO Active Guard server failure can be enabled.

Configuration on i-PRO Active Guard server side is required in advance (Refer to 4.3.6)

Check for all cameras and input "Al server error" for Category.

7	Add Event			×
Р	ossible Events that will Trig	ger the Rule		
	Event Type	Event Description	Enhanced System Input	
	Access Control Event	Trigger off of an Access Control Entry or Alarm		
	Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras S2136 People demo (Hall) (192.168.0.30)	
	Analytics	Trigger off of a supported Camera's Analytics	<ul> <li>S2136 Vehicle demo (192.168.0.31)</li> <li>S2136 AIVMD demo (192.168.0.33)</li> </ul>	
	Camera Down	Trigger when a specific or all cameras stop responding.	S S2 I36 AIVMD demo (192. 166.0.33) S S1136 People demo(E1F) (192.168.0.32)	
D	Enhanced System Input	Receive Alert with Metadata		
	Digital Input	External input device (i.e Alarm)		
	License Plates	Trigger when a License Plate is found		
	SDK Input	Receive data from a TCP Port		
	User Login	Rule triggers when a user logs in.		
	Video Motion	Motion is detected on a specific camera		
			Select All Clear Selections	
			Category Al server error	
			Area	
		UNLICENSED TRIAL   To Purchase Visit http://infragistics.com	UNLICENSED TRIAL   To Purchase Vie http://infragisti	sit cs.com
			ОК Са	ncel

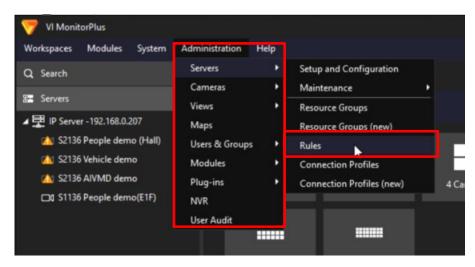
## 4.7.2. Add Actions

💎 Rule Setup			- • ×
Rule Setup		Cancel	Save Now
Rules +	New Rule Properties		-
	Enable Rule     Name     Registered face detection     Server     IP Server -192.168.0.207		
	Schedule		
	Rule will run all the time Add Schedule		
	Trigger Events		
	Event Name Event Type Add Event		
	Enhanced System Input Receive Alert with Metadata Remove		
	UNLICENSED TRIAL   To Purchase Visit http://infragistics.com		- 1
	OAND (All Events) OCR (Any Event) Trigger Wait Time 30 Seconds		
	Actions		
	Actions - What happens when the Rule executes Action Name Action Type Add Action		
	Remove		
	UNLICENSED TRUAL   To Porchase Visit http://infragstics.com	ISED TRIAL   To Pu http://	rchase Visit finfragistics.com m

Click [Add Action] and select any actions, and then [Save Now]

# 4.8. Setup for VCA monitoring function (optional)

Video Control Analytics (VCA) is available in Plug-in if a camera is equipped with Analytic functionality. This feature must be enabled in the individual camera's properties (See *Video Insight Administrative Guide*). Navigate to ([Administration] – [Servers] – [Rules])



## 4.8.1. Add event

Create new Rules and click [Add event]

Rule Setup				×
Rule Setup		Cancel	Save Now	
Rules 🔹	New Rule			
New Rule	Properties			•
	Enable Rule     Name New Rule     Server IP Server -192 168.0 207			
	Schedule			
	Rule will run all the time Add Schedule			
	Trigger Events			
	Event Name Event Type Add Event			
	Remove			
	UNLICENSED TRIAL   To Purchase Visit http://infragistic.com			
	OAND (All Events) OCR (Any Event) Trigger Wait Time 30 seconds			
	Actions			
	Actions - What happens when the Rule executes			
	Action Name Action Type Add Action			
	Remove			
	UNILCENSED TRUL   To Purchase Visit.     Integrational Properties	ISED TRIAL   To P	urchase Visit //infragistics.com	om

#### Select [Analytics]

7	Add Event					×
P	ossible Events that will Trig	ger the Rule				
	Event Type	Event Description	Video Analytic I	Event		
	Access Control Event	Trigger off of an Access Control Entry or Alarm	Thuser analysis i			
	Alert Button	An alert button appears in the "Alert Buttons" menu	This event will occu	ur whenever the selected Video Anal	ytic event occurs.	
E	Analytics	Trigger off of a supported Camera's Analytics				
	Camera Down	Trigger when a specific or al cameras stop responding.	Reference Name	Analytics		
	Enhanced System Input	Receive Alert with Metadata	interence marine			
	Digital Input	External input device (i.e Alarm)	Camera	Corridoor3	-	
	License Plates	Trigger when a License Plate is found	Analytic Rule	Scene Changed Detection	*	
	SDK Input	Receive data from a TCP Port		Control on angeo Detterion	_	
	User Login	Rule triggers when a user logs in.				
	Video Motion	Motion is detected on a specific camera				
					ок	Cancel

Enter a [Reference Name], then select a [Camera] (camera must be enabled with analytics).

Event Type	Event Description	Video Analytic Event	
Access Control Event	Trigger off of an Access Control Entry or Alarm	Theo Analytic Event	
Alert Button	An alert button appears in the "Alert Buttons" menu	This event will occur when	ever the selected Video Analytic event occ
Analytics	Trigger off of a supported Camera's Analytics	-	10 Mar
Camera Down	Trigger when a specific or a cameras stop responding.	Reference Name Analyt	line
Inhanced System Input	Receive Alert with Metadata		
igital Input	External input device (i.e Alarm)	Camera Corride	oor3 💌
icense Plates	Trigger when a License Plate is found	Analytic Rule Scene	Changed Detection
DK Input	Receive data from a TCP Port	Printing in the occure	
Iser Login	Rule triggers when a user logs in.		
/ideo Motion	Motion is detected on a specific camera	1	
			ок

Select an [Analytic Rule] (available rules vary according to the functionality of each individual camera) and click OK.

Event Type Event Description		Video Analytic Event		
ccess Control Event	Trigger off of an Access Control Entry or Alarm			
lert Button	An alert button appears in the "Alert Buttons" menu	This event will occ	ur whenever the selected Video Analytic event occurs.	
nalytics	Trigger off of a supported Camera's Analytics			
amera Down	Trigger when a specific or all cameras stop responding.	Reference Name	Analytics	
nhanced System Input	Receive Alert with Metadata			
igital Input	External input device (i.e Alarm)	Camera	Corridoor3 -	
cense Plates	Trigger when a License Plate is found	Analytic Rule	Scene Changed Detection	
DK Input	Receive data from a TCP Port		Scene Changed Detection	
ser Login	Rule triggers when a user logs in.		Intrusion Detection	
ideo Motion	Motion is detected on a specific camera		Loitering Detection	
			Cross Line Detection Detection program 1 - Area 1 Detection program 1 - Area 2 Detection program 1 - Area 3	

## 4.8.2. Add Actions

🕎 Rule Setup			- 0 ×
Rule Setup		Carcel	Save Now
Rules 🕂	VCA(LiveMapAlarm)		
Alarm1(LiveMapAlarm) Alarm2(LiveMapAlarm)	Properties		
https LiveWindow New Rule New Rule (2)	Z Enable Rule Name VCA(LiveMapAlarm) Server Dev Meeting - Delete Rule		
New Rule (2) New Rule (3) VAXTOR(LiveMapAlarm)	Schedule		
VCA(LiveMapAlam)	Rule will run all the time Add Schedule		
	Trigger Events		
	Event Name Event Type Add Event Analytics Analytics		
	Remove		
	Properties		
	OAND (All Events) OR (Any Event) Trigger Wait Time 5 seconds		
	Actions		
	Actions - What happens when the Rule executes		
	Action Name Action Type Add Action Eve Map Alarm Displays Alarm to Eve map alarm panel		
	Сате индереманит сларных сате типри налити ронных		
	Properties		
		SED REAL   To PA	chave Weit minigro-cucoment

Click [Add Action] and select [Live Map Alarm], and then [Save Now]

# 4.9. Setup for Access Control monitoring function (optional)

Access Control monitoring is available in Plug-in if IP Server is integrated with an Access Control server. Access Control must be configured in VI MonitorPlus (See *Video Insight Administrative Guide, section 4.8.A*). It is required to assign cameras to specific doors.

# 5. When changing system component

## 5.1. Add system device

## 5.1.1. Add camera

#### STEP1

Register AI cameras to VI IP server using VI MonitorPlus (Refer to 4.2.1).

#### STEP2

Register AI cameras to i-PRO Active Guard server (Refer to 4.3.2.3)

#### STEP3

Restart process (Refer to 4.3.3)

## 5.1.2. Add IP server

#### STEP1

Register AI cameras to new VI IP server using VI MonitorPlus. (Refer to 4.2.1).

#### STEP2

Register new VI IP server to i-PRO Active Guard server (Refer to 4.3.2.2)

#### STEP3

Register AI cameras associated with new VI IP server to i-PRO Active Guard server. Select new VI IP server and click [Add devices] - [Camera(s) from VMS]. Following procedure is the same as 4.3.2.3

≡								
•	Registered VMS	Enabled camera				Add devices Camera(s) from VMS	Delete	Save
	IP Server -192.168.0.206					Al Processing Relay Deshboard function only		
∎¢	IP Server -192.168.0.207	IP address	Model	Camera name	Function (		SSL	
11	Others	Disabled camera						
-								

#### STEP4

Restart process (Refer to 4.3.3)

# 5.2. Delete system device

## 5.2.1. Delete camera

#### STEP1

Check camera and [Delete] from Register Cameras screen.

Existing data of the selected camera will be unavailable.

Registered VMS	Enabled c	amera			Add de	De	elete
IP Server -192.168.0.206							
Others		IP address	Model	Camera name	Function 🖸 🚺	HTTP(S) port	SSL
Others	1	192.168.0.50	WV-S2136L	192.168.0.50 - Model: Panasonic WV-S	<b>**</b> 🛋 ((* ))	80	Off
	2	192.168.0.71	WV-S1136	192.168.0.71 - Model: Panasonic WV-S		80	Off
	3 🔽	192.168.0.78	WV-S4176	192.168.0.78 - Model: Panasonic WV-S	(( )) <u> 2</u>	80	Off
	4	192,168.0,104	WV-S71300-F3	192.168.0.104 - Model: Panasonic WV	$\odot$ (()) $\vdots$	80	Off

#### STEP2

Restart process (Refer to 4.3.3)

## 5.2.2. Disable camera

When you want to disable specific cameras temporarily, which means there is a possibility you want to search existing data of the camera later, configure the camera as Disabled camera.

#### STEP1

Check camera and move to Disabled camera from Register Cameras screen.

Existing data of the selected camera will be unavailable as long as the camera is disabled camera.

=		Enabled ca	mera			Add	devices De	Hete Save
<b>↑</b>	Registered VMS							
	IP Server -192.168.0.206							
t,	Others		IP address	Model	Camera name	Function 🔿 🕕	HTTP(S) port	SSL
	ourcio	1	192.168.0.50	WV-S2136L	192.168.0.50 - Model: Panasonic WV-S	<b></b> (())	80	Off
1		2	192.168.0.71	WV-S1136	192.168.0.71 - Model: Panasonic WV-S		80	Off
>☆		3 🗹	192.168.0.78	WV-S4176	192.168.0.78 - Model: Panasonic WV-S	.() <u>2</u> #	80	Off
<b>*</b>		4	192.168.0.104	WV-S71300-F3	192.168.0.104 - Model: Panasonic WV	. 👁 (())	80	Off
΢.		Disabled ca	amera					
≎								
di 🛛			IP address	Model	Camera name	Function	HTTP(S) port	SSL

#### STEP2

#### [Save]

		Eng	abled ca	mora					
•	Registered VMS	LIIC		amera			Add	devices D	elete Save
	IP Server -192.168.0.206								
¢.	Others			IP address	Model	Camera name	Function 🗇 🚺	HTTP(S) port	SSL
¥.	ouldis		1	192.168.0.50	WV-S2136L	192.168.0.50 - Model: Panasonic WV-S	<b>24</b> 🛋 ((* ))	80	Off
ţ			2	192.168.0.71	WV-S1136	192.168.0.71 - Model: Panasonic WV-S	<b>=()<u>2</u>#5</b>	80	Off
¢			3	192.168.0.104	WV-S71300-F3	192.168.0.104 - Model: Panasonic WV	• • • • • • • • • • • • • • • • • • •	80	Off
I		Dis	abled c	amera					
			✓	IP address	Model	Camera name	Function	HTTP(S) port	SSL
			1 🗸	192.168.0.78	WV-S4176	192.168.0.78 - Model: Panasonic WV-S	()) 🔍 👬	80	Off

#### STEP3

Restart process (Refer to 4.3.3)

When you want to use the camera and existing data of the camera again, move to Enabled camera and [Save].

Existing data of the camera will be available as long as retention period is not exceeded from plugin.

## 5.2.3. Delete IP server

#### STEP1

Check server and [Delete] from Register VMS screen.

Cameras belonged to the selected server are also deleted and exiting data will not be searched from plugin.

When the same VMS server is registered again, existing data becomes available.

Best shot images and related database will be deleted when retention period exceed.

MS Server				Add Delete	Save
	IP address	Server name	Version	Notification	Notification port
1	192.168.0.206	IP Server -192.168.0.206	7.8.1.52	Alarm System error Exceed the receiving data limit (data loss) Reach the max disk space of image (delete old images)	9000
2	192.168.0.207	IP Server -192.168.0.207	7.8.1.52	Alarm System erro Exceed the receiving data limit (data loss) Reach the max disk space of image (delete old images)	9000

#### STEP2

Restart process (Refer to 4.3.3)

## 5.3. Update registered camera's information

#### [Important]

After changing the settings (\*) of a camera registered on i-PRO Active Guard server, follow the steps in this chapter to update server's camera information.

If you want to change the "IP address", please refer to 5.5.

- \* The settings are below.
  - Camera's settings. (ex. IP address, Camera name)
  - Camera's extension software settings.

(ex. Installing and uninstalling camera's extension software, Line name of AI-VMD)

## 5.3.1. Update camera and extension software settings

#### STEP1

Change settings using iCT. (Refer to 4.1)

#### STEP2

Click [Add devices] - [Camera(s) from VMS] on Register Cameras screen.

1	Registered VMS	Enabled c	amera				Add dev Camera(s) fro		Delete S	Save
_	IP Server -192.168.0.206					•	Dashboard fu	inction only		
ŀ	Others		IP address	Model	Camera name	Function C	U	HTTP(S) port	SSL	
	Guiero	1	192.168.0.50	WV-S2136L	192.168.0.50 - Model: Panasonic WV-	s 💒 🛋 ((* ))		80	Off	
-		2	192.168.0.71	WV-S1136	192.168.0.71 - Model: Panasonic WV-	s 🛋 🌘 🔍 🧟		80	Off	
,		3	192.168.0.78	WV-S4176	192.168.0.78 - Model: Panasonic WV-	s ((* )) 🚨 👬		80	Off	
¢		4	192.168.0.104	WV-S71300-F3	192.168.0.104 - Model: Panasonic WV	🔿 (0) 👬		80	Off	

#### STEP3

Select the camera and input credentials and [Check].

#### × Camera Registration Show only unregistered cameras IP address Camera model Camera name Check result Camera connection 192.168.0.54 - Panasonic - Model... 💽 🅼 🌒 192.168.0.54 WV-S2136L HTTP 80 192.168.0.63 WV-X2251L ○ HTTPS 443 192.168.0.71 - Panasonic - Model... 🚘 🕼 🕽 🚨 👬 🚘 192.168.0.71 WV-S1136 User Name admin 192.168.0.78 - Panasonic - Model...(())) 🚉 👬 192.168.0.78 WV-S4176 Password

#### STEP4

Confirm the icons for Check result is changed and [Save]. (See 4.3.2.3 about the meaning of icons).

IP address	Camera model	Camera name	Check result		Ca	mera connectior
192.168.0.54	WV-S2136L	192.168.0.54 - Panasonic -	Model			
192.168.0.63	WV-X2251L	192.168.0.63 - Panasonic -	Model(( )) •6254•		• нттр	80
192.168.0.71	WV-S1136	192.168.0.71 - Panasonic -	Model. 💽 🕼 ))		O HTTPS	443
192.168.0.78	WV-S4176	192.168.0.78 - Panasonic -	Model(( )) 🚉 👬	- 1	User Name Password	admin
				_	1 00011010	

#### STEP5

Restart process (Refer to 4.3.3)

## 5.3.2. Update extension software settings

#### STEP1

Change extension software settings using iCT. (Refer to 4.1)

#### STEP2

Check the target camera and click  ${f C}$  on Register Cameras screen.

Registered VMS	Enabled c	amera			Add d	evices D	alote Sav
IP Server -192.168.0.206							
Others		IP address	Model	Camera name	Function 🔿 🌗	HTTP(S) port	SSL
ouncio	1	192.168.0.50	WV-S2136L	192.168.0.50 - Model: Panasonic WV-S		80	Off
	2	192.168.0.71	WV-S1136	192.168.0.71 - Model: Panasonic WV-S	<b>a()2#5</b>	80	Off
	3 🗹	192.168.0.78	WV-S4176	192.168.0.78 - Model: Panasonic WV-S	(()) <u>R H</u>	80	Off
	4	192.168.0.104	WV-S71300-F3	192.168.0.104 - Model: Panasonic WV	⊙(())	80	Off

Note)

This function cannot update camera's settings. (ex. IP address, Camera Name ) If there is an abnormal value, please try update using method 5.3.1.

#### STEP3

Confirm the icons for Check result is changed.

(See 4.3.2.3 about the meaning of icons).

## 5.4. Uninstall the system

## 5.4.1. Uninstall Plug-in from client PC

#### STEP1

Open the Programs and Features window (from the Control Panel).

#### STEP2

Find [Multi AI Plugins] and [Uninstall].

#### Note)

Do not use the [Remove] button on Plugin Manager window.

## 5.4.2. Uninstall i-PRO Active Guard server

#### STEP1

Open the Programs and Features window (from the Control Panel).

#### STEP2

Find [i-PRO Active Guard Server] and [Uninstall].

Delete "C:¥MultiAI" folder if exist.

#### 5.4.2.1. Uninstall SQL Server instance of i-PRO Active Guard server

·If you select "Install a new SQL Server instance" in database selection for installation.

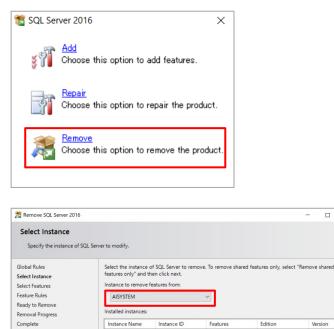
#### STEP1

Find [Microsoft SQL Server 2016 (64 bit)] or [Microsoft SQL Server 2019 (64 bit)] and [Uninstall]. Select [Remove] and delete "AISYSTEM" instance.

> ×

13.2.5026.0

13.2.5026.0



AISYSTEM

Next >

< Back

Features

MSSQL13.AISYSTEM SQLEngine, SQLEng... Express

MSSQL13.MSSQLS... SQLEngine, SQLEng... Express

Cancel

name. Slobal Rules Select Instance Select Features Feature Rules Ready to Remove	this computer are shown below. To remove a feature, sel Features:	ect the checkbox next	Description:	
Global Rules Select Instance Select Features eature Rules Ready to Remove	AISYSTEM Database Engine Services	]		
Feature Rules Ready to Remove			The configuration	n and operatio
lemoval Progress icomplete	SQL Server Replication Redistributable Features		of each instance is Server instance is other SQL Server Server instances of side-by-side on t compute.	isolated from instances. SQI can operate
	Select All Unselect All	< Back	Next >	Cancel
Remove SQL Server 2016				x
Ready to Remove	features to be removed.			
ilobal Rules	Ready to remove SQL Server 2016:			
ielect Instance ielect Features ieature Rules Ready to Remove Jemoval Progress Complete	Summary  Gittion: Express  Action: Uninstall  General Configuration  Features  Database Engine Services  SQL Server Replication			
	Configuration file path:			

#### Note)

- SQL server instance that VMS uses is not deleted. Only instance for i-PRO Active Guard server is deleted.

- The instance name "AISYSTEM" is the default name. If you have specified an instance name as described in section 4.3.1, replace "AISYSTEM" with the specified instance name in the following sections.

#### STEP2

Delete "C:¥Program Files¥Microsoft SQL Server¥MSSQL13.AYSYSTEM" folder or "C:¥Program Files¥Microsoft SQL Server¥MSSQL15.AYSYSTEM" folder.

#### Note)

If any of the following services remain after uninstallation, please remove them manually.

- SQL Full-text Filter Daemon Launcher (AISYSTEM)
- SQL Server (AISYSTEM)
- SQL Server Agent (AISYSTEM)
- SQL Server CEIP service (AISYSTEM)

#### (1) How to display services

Please start the service application in the following folder

 $C: \label{eq:constraint} C: \ensuremath{\texttt{P}} rogram \ensuremath{\texttt{D}} ta \ensuremath{\texttt{A}} dministrative \ensuremath{\texttt{Tools}} ta \ensuremath{\texttt{C}} ta \ensuremath{\texttt{A}} ta \e$ 

Services (Local)	Services (Local)					
	SNMP Trap	Name	Description	Status	Startup Type	Log On As
	Start the service	Special Administration Console Helper Spot Verifier	Allows adm Verifies pote		Manual Manual (Trig	Local Syste. Local Syste.
	Description: Receives trap messages generated by	SQL Full-text Filter Daemon Launcher (AISYS     SQL Server (AISYSTEM)     SQL Server Agent (AISYSTEM)	Service to la Provides sto Executes jo	,	Manual Automatic Disabled	NT Service NT Service Network S
	local or remote Simple Network Management Protocol (SNMP) agents and forwards the messages to	SQL Server Browser     SQL Server CEIP service (AISYSTEM)     SQL Server CEIP service (AISYSTEM)	Provides SQ CEIP service Provides th		Automatic Automatic Automatic	Local Servic NT Service Local Syste.
	running on this computer. If this service is stopped, SNMP-based	SCD Server VSS Willer	Discovers n Provides re	Running	Disabled	Local Servic Local Syste.
	programs on this computer will not receive SNMP trap messages. If this service is disabled, any services that	Still Image Acquisition Events	Launches a	-	Manual	Local Syste.
	explicitly depend on it will fail to start.	Storage Service Storage Tiers Management	Provides en Optimizes t	Running	Automatic ( Manual	Local Syste.

#### (2) How to delete a service

Start a command prompt as an administrator user and execute the following command.

#### sc delete "xxx"

"xxx" is the Service name that appears when the target is double-clicked.

General Log Or	n Recovery Dependencies	e.g.) SQL Server (AISYSTEM)
Service name:	MSSQL\$AISYSTEM	sc delete MSSQL\$AISYSTEN
Display name:	SQL Server (AISYSTEM)	
Description:	Provides storage, processing and controlled access of data, and rapid transaction processing.	
Path to executa "C:\Program File	ible: es\Microsoft SQL Server\MSSQL15.AISYSTEM\MSSQL\Bi	
Startup type:	Automatic ~	
Service status:	(Unknown)	
Start	Stop Pause Resume	
You can specify from here.	y the start parameters that apply when you start the service	

# 5.4.2.2. Delete i-PRO Active Guard server databases and users in existing SQL Server instance

·If you select "Use existing SQL Server instance" in database selection for installation.

#### [Important]

Other applications using SQL Server may be affected.

Please operate with caution and only when necessary.

#### STEP1

Please use "SQL Server Management Studio (SSMS)" to delete the following data from the instance where i-PRO Active Guard server is installed.

- Databases
  - ∙ai\_db
  - •aicam
  - ۰bi
  - ∙support\_db

- Security - Logins

- •ai\_owner
- •aicam\_user
- ∙support\_user

# 5.5. Change IP address

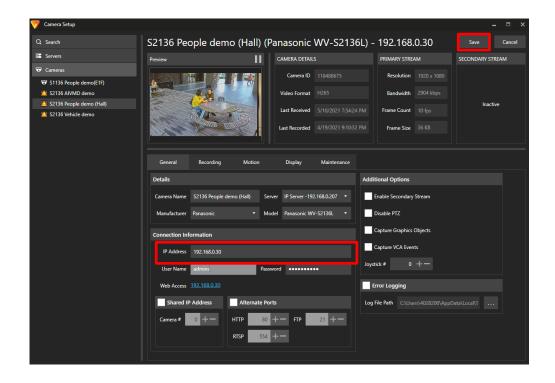
## 5.5.1. Change camera's IP address

#### STEP1

Change camera's IP address.

#### STEP2

When you want to maintain existing recorded data and best shot images of the camera, update [IP Address] and [Save] from VI MonitorPlus ([Administration] – [Cameras] – [Configure Properties])



Once deleting cameras from VI Monitor Plus and re-register the camera using new IP address, existing data will be unavailable.

#### STEP3

Delete the camera from i-PRO Active Guard server (Refer to 5.2.1)

#### STEP4

Register the camera again (Refer to 4.3.2.3).

#### STEP5

Restart process (Refer to 4.3.3).

## 5.5.2. Change IP server's IP address

Existing recorded data and best shot images are available after changing IP address.

STEP1

Change IP server's IP address.

STEP2 Delete the IP server from i-PRO Active Guard server (Refer to 5.2.3)

STEP3 Register the IP server again (Refer to 4.3.2.2).

STEP4 Restart process (Refer to 4.3.3).

## 5.5.3. Change i-PRO Active Guard server's IP address

Existing recorded data and Best shot images are available after changing IP address.

#### STEP1

Change i-PRO Active Guard server's IP address.

#### STEP2

Update configuration for Connection to i-PRO Active Guard server from Plug-in (4.4.2).

# 5.6. Data backup and restore

Image data and related database can be backed-up manually. It is important to note that the reinstallation of i-PRO Active Guard server requires the same version of software for reinstallation from backup due to differences in each database version.

#### [Important]

In the restore environment, the following settings must be the same as the backup environment.

- SQL Server instance
- Administrator username and password

If the settings are different, please reinstall the i-PRO Active Guard server in the restore environment.

## 5.6.1. Backup process

#### STEP1

Start – Windows Administrative Tools – Task Scheduler. Right click and disable "AliveMonitoringProcess"

#### STEP2

Start - Windows Administrative Tools - Services.

Right click and stop for "MultiAlCameraService," "MultiAlSupportProcessManagementService" and "SQL Server(AlSYSTEM)," respectively.

#### STEP3

Browse to SQL Server data save path (set by install tool at 4.3.1.).

Copy "ai\_db.mdf," "aicam.mdf," "support\_db.mdf," ai\_db\_log.ldf," "aicam\_log.ldf," "support\_db\_log.ldf," "bi.mdf" and "bi\_log.ldf" to safe location (i.e.: a USB drive, a NAS device, another server, etc.).

Default SQL Server data save path is below:

SQL server 2016

"C:¥Program Files¥Microsoft SQL Server¥MSSQL13.AISYSTEM¥MSSQL¥DATA"

SQL server 2019

"C:¥Program Files¥Microsoft SQL Server¥MSSQL15.AISYSTEM¥MSSQL¥DATA"

#### STEP4

Copy "C:¥MultiAl¥Image" folder to safe location. If you changed image data save path, copy the folder. Copy "C:¥MultiAl¥Backup" folder to safe location.

#### STEP5

Type "regedit" to Start menu and run. Right click two folder and export to safe location, respectively. "¥HKEY\_LOCAL\_MACHINE¥SOFTWARE¥Panasonic¥AiSystem" or "¥HKEY\_LOCAL\_MACHINE¥SOFTWARE¥i-PRO¥AiSystem."

"¥HKEY\_LOCAL\_MACHINE¥SOFTWARE¥WOW6432Node¥Panasonic¥AiSystem" or "¥HKEY\_LOCAL\_MACHINE¥SOFTWARE¥WOW6432Node¥i-PRO¥AiSystem."

#### STEP6

Start – Windows Administrative Tools – Services.

Right click and run for "MultiAICameraService," "MultiAISupportProcessManagementService" and "SQL Server(AISYSTEM)," respectively.

#### STEP7

Start – Windows Administrative Tools – Task Scheduler. Right click and enable "AliveMonitoringProcess".

## 5.6.2. Restore process

#### STEP1

Install i-PRO Active Guard Server in the restore environment with the same SQL instance, administrator username, and password settings as in the backup environment.

#### STEP2

Start – Windows Administrative Tools – Task Scheduler. Right click and disable "AliveMonitoringProcess"

#### STEP3

Start – Windows Administrative Tools – Services. Right click and stop for "MultiAlCameraService," "MultiAlSupportProcessManagementService" and "SQL Server(AlSYSTEM)," respectively.

#### STEP4

Copy saved files "ai\_db.mdf," "aicam.mdf," "support\_db.mdf," ai\_db\_log.ldf," "aicam\_log.ldf," "support\_db\_log.ldf," "bi.mdf" and "bi\_log.ldf" to SQL Server data save path and replace existing files.

Default SQL Server data save path is below:

SQL server 2016

"C:¥Program Files¥Microsoft SQL Server¥MSSQL13.AISYSTEM¥MSSQL¥DATA"

SQL server 2019

"C:¥Program Files¥Microsoft SQL Server¥MSSQL15.AISYSTEM¥MSSQL¥DATA"

#### STEP5

Copy saved folder "Image" to "C:¥MultiAI" and replace existing files. Copy saved folder "Backup" to "C:¥MultiAI" and replace existing files.

#### STEP6

Double-click the saved registry export file. This will re-install the registry keys.

#### STEP7

Start – Windows Administrative Tools – Services. Right click and run for "SQL Server(AISYSTEM)."

#### STEP8

Execute "C:¥MultiAl¥tools¥restore\_user¥restore\_user.bat" as administrator.

#### Note)

If you set the SQL server instance name to something other than "AISYSTEM", change the instance name in the bat file from "AISYSTEM" to the instance name you set and execute the file.

#### STEP9

Right click and run for "MultiAlCameraService," "MultiAlSupportProcessManagementService," respectively.

#### STEP10

Start – Windows Administrative Tools – Task Scheduler. Right click and enable "AliveMonitoringProcess."

# 5.7. Procedure to move i-PRO Active Guard server location from IP Server's PC to dedicated server's PC

i-PRO Active Guard server location can be moved from VI IP server's PC to dedicated server's PC, for example, when the number of cameras are increased or when distributing processing load is required.

## 5.7.1. Preparation of data and account information

#### STEP1

Prepare administrator account information of existing i-PRO Active Guard server when install. If you forget administrator account, reset it (Refer to 5.9).

#### STEP2

Backup data (Refer to 5.6.1)

# 5.7.2. Install i-PRO Active Guard server to new PC and restore data

#### STEP1

Install i-PRO Active Guard server to new PC as dedicated server PC (Refer to 4.3.1).

Note) Account information you set when installing will be overwritten in restore process (Refer to step 2).

STEP2 Restore data (Refer to 5.6.2)

#### STEP3

Execute "C:¥MultiAl¥tools¥init\_dedicated\_server.bat" as administrator.

#### STEP4

Start – Windows Administrative Tools – Services. Right click and Restart for "MultiAlCameraService," "MultiAlSupportProcessManagementService."

# 5.8. Procedure to restart/shut down i-PRO Active

## **Guard server PC**

As a safety precaution, it is recommended to stop the services before rebooting the computer.

STEP1 Stop i-PRO Active Guard server's process (4.3.7.2).

STEP2 Restart or shutdown.

## 5.9. Reset administrator account

When you forget credential of administrator to access configuration, you need to reset on PC that i-PRO Active Guard server is installed.

Execute "C:¥MultiAl¥tools¥ChangeAdminPassword¥ChangeAdminPassword.exe" as administrator and set credentials.

# 5.10. Upgrade SQL server to Standard Edition

You can determine if you need Standard Edition from 3.3.

If you need it, please follow the steps below to upgrade after purchasing the license.

i-PRO Active Guard server software need to be installed in advance.

#### STEP1

Start [setup.exe] from install media of SQL server Standard Edition.

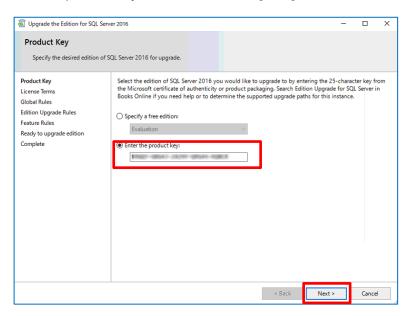
#### STEP2

Select [Edition Upgrade] from Maintenance.

🐮 SQL Server Installation Center	– 🗆 X
Planning Installation Maintenance	Edition Upgrade Launch a wizard to change your edition of SQL Server 2016, like changing from Developer to Enterprise.
loois Resources Advanced Options	Repair           Launch a wizard to repair a corrupt SQL Server 2016 installation.           Remove node from a SQL Server failover cluster           Launch a wizard to remove a node from an existing SQL Server 2016 failover cluster.           Launch Windows Update to search for product updates           Launch the Windows Update to search for product updates that are available for your existing SQL Server insure you Windows Updates settings are set to received updates for Microsoft products.
Microsoft' SQL Server' 2016	

#### STEP3

Confirm product key is shown and click [Next].



### STEP4

Check for license term and click [Next].

Upgrade the Edition for SQL S	erver 2016 — 🗆 🗙
License Terms	
To install SQL Server 2016, ;	you must accept the Microsoft Software License Terms.
Product Key License Terms Global Rules Edition Upgrade Rules Feature Rules Ready to upgrade edition Complete	MICROSOFT SQL SERVER 2016 STANDARD         These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft         • updates,         • supplements,         • Internet-based services, and         • support services         • copp         • copp
	< Back Next > Cancel

#### STEP5

Select [AISYSTEM] for instance and click [Next].

Upgrade the Edition for SQL S	Server 2016				- 0	×
Select Instance						
Specify the instance of SQL	Server to modify.					
Product Key License Terms Global Rules Edition Upgrade Rules Select Instance Feature Rules	Select the SQL Server the edition of an insta Specify the instance of AISYSTEM Installed instances:	ince.	ke to upgrade edition o	or you can choose to	skip upgradin	g
Ready to upgrade edition	Instance Name	Instance ID	Features	Edition	Version	
Complete	AISYSTEM	MSSQL13.AISYSTEM	SQLEngine, SQLEng	Express	13.2.5026.0	
	<shared compone<="" td=""><td></td><td>Conn, BC, SDK</td><td></td><td>13.0.14500.1</td><td>10</td></shared>		Conn, BC, SDK		13.0.14500.1	10
	·		< Ba	ck Next >	Canc	el:

## STEP6

#### Click [Upgrade]

Upgrade the Edition for SQL Sei	
Ready to upgrade edi Verify the SQL Server 2016 fer Product Key	
License Terms Global Rules Edition Upgrade Rules Select Instance Feature Rules <b>Ready to upgrade edition</b> Complete	Summary         Edition: Standard         Action: Edition/Dgrade         General Configuration         Features         SQL Server Replication         Client Tools Connectivity         Client Tools SDK         Documentation Components         SQL Client Connectivity         SQL Writer         Instance Configuration         Instance ID: undefined         Configuration file path:         C:\Program Files\Microsoft SQL Server\130\Setup Bootstrap\Log\20220125_140806\ConfigurationFile.ini
	< Back Upgrade Cancel

## STEP7

Global Rules     Client Tools Connectivity     Succeeded       Edition Upgrade Rules     Client Tools SDK     Succeeded       Select Instance     Client Tools Backwards Compatibility     Succeeded       Feature Rules     SQL Server Replication     Succeeded       Ready to upgrade edition     Database Engine Services     Succeeded       Complete     SQL Browser     Succeeded       Sol Utrace     Succeeded     Succeeded	Upgrade the Edition for SQL	Server 2016		-		×
License Terms Global Rules Edition Upgrade Rules Select Instance Feature Client Tools Connectivity Client Tools Backwards Compatibility Succeeded Client Tools Backwards Compatibility Succeeded Complete SQL Server Replication SQL Browser Succeeded SQL Browser SQL		on upgrade is complete.				
Global Rules       Feature       Status         Edition Upgrade Rules       Client Tools Connectivity       Succeeded         Select Instance       Client Tools Backwards Compatibility       Succeeded         Feature Rules       SQL Server Replication       Succeeded         Ready to upgrade edition       Database Engine Services       Succeeded         Complete       SQL Browser       Succeeded         Solt. Muiter       Succeeded       Succeeded         Solt. Muiter       Succeeded       Succeeded         Summary log file has been saved to the following location:       C/Program Files/Microsoft SQL Server\130\Setup Bootstrap\Log\20220125 140806\Summary DESKTOP-		Information about the Setup operation or possi	ble next steps:			
Client Tools Connectivity       Succeeded         Select Instance       Client Tools DK       Succeeded         Feature Rules       SQL Server Replication       Succeeded         Ready to upgrade edition       Database Engine Services       Succeeded         Complete       SQL Browser       Succeeded         SOL Miriter       Succeeded       Succeeded         Source SQL Browser       Succeeded       Succeeded         Source SQL Browser       Succeeded       Succeeded         Source SQL Browser       Succeeded       Succeeded         Summary log file has been saved to the following location:       Summary log file has been saved to the following location:         Ci-Program Files/Microsoft SQL Server/130/Setup Bootstrap/Log/20220125_140806/Summary_DESKTOP-       Summary Log Strop-Log/20220125_140806/Summary_DESKTOP-		Feature	Status			1
Select Instance Feature Rules Ready to upgrade edition Complete		Client Tools Connectivity	Succeeded			
Feature Rules Ready to upgrade edition Complete		Client Tools SDK	Succeeded			
Ready to upgrade edition Ready to upgrade edition Subtabase Engine Services SQL Browser Succeeded SQL Writer Succeaded SQL Writer Succeaded Succeaded Complete Succeaded SQL Writer	Select Instance	Client Tools Backwards Compatibility	Succeeded			
Complete SQL Browser Succeeded SUcceaseded	Feature Rules	SQL Server Replication	Succeeded			
Summary log file has been saved to the following location: C\Program Files\Microsoft SQL Server\130\Setup Bootstrap\Log\20220125 140806\Summary DESKTOP-	Ready to upgrade edition		Succeeded			
Summary log file has been saved to the following location: <u>C\Program Files\Microsoft SQL Server\130\Setup Bootstrap\Log\20220125_140806\Summary_DESKTOP-</u>	Complete					
			-	\ <u>Summar</u>	<u>y DESKT</u>	OP-

# 6. Troubleshooting

# 6.1. Trouble shooting for Installation and Setup

Symptom	Cause and solution	Refer
"New version or same version is already installed." message is displayed but [i-PRO Active Guard Server] does not exist.	Please check if [Multi AI Server] exists in the Programs and Features window. If it exists, please uninstall it.	5.4.2
Failed to install SQL server	There may be some data that was used in the past. If possible, uninstall programs related to SQL Server and i-PRO Active Guard Server and delete related folders. Check if the file path length of file path of install package is less than 120 and launch installer as administrator.	5.4.2 5.4.2.1 5.4.2.2 4.3.1
	When you use Window 10, version 20H2 and the Microsoft Edge browser of any version from 84.0.522.52 through 86.0.622.55, execute "Windows update". Ref. <u>https://docs.microsoft.com/en-</u> us/troubleshoot/sql/install/error-set-up-update-instances	
	If the installation fails even after restarting the PC, please execute "¥03_SQL¥SQLEXPRADV_x64_ENU ¥1033_ENU_LP¥x64¥Setup¥SQLSUPPORT.MSI". And then, execute "MultiAIStartup.exe" again.	-
Cannot install VMS server software after i- PRO Active Guard server installation	When you install i-PRO Active Guard server to PC with VMS server, you need to install VMS server software in advance. If i-PRO Active Guard server is installed before that, uninstall i-PRO Active Guard server and SQL server and then, install VMS server.	4.3.1 5.4.2

Symptom	Cause and solution	Refer
Cannot access i-PRO Active Guard configuration.	Did you access "http:// <ip>:8092" ? "https://<ip>:8092" is correct. When you set another port number when installation or you changed after installation, enter the port number.</ip></ip>	4.3.2.1
	Supported browser is Microsoft Edge 85(or later), Chrome 83(or later) and Firefox 95(or later.)	3.2
	Please confirm related service is existing on PC that	5.4.2 5.4.2.1
	2. PRO Active Guard server is	5.4.2.2 4.3.1
	installed.	
	<ul> <li>Start – Windows Administrative Tools – Services.</li> <li>MultiAlCameraService</li> <li>MultiAlSupportProcessManagementService</li> <li>If these services do not exist, please perform the following steps.</li> </ul>	
	<ol> <li>Uninstall i-PRO Active Guard server.</li> <li>Delete SQL instances or database related to i-PRO Active Guard server.</li> </ol>	
	3. Confirm related services does	
	not exist.	
	If related services remain, start command prompt with administrator privileges and delete services with following command.	
	sc delete MultiAlCameraService	
	sc delete SupportProcessManagementService	
	4. Reinstall i-PRO Active Guard server.	

Symptom	Cause and solution	Refer
	Please confirm related service is running on PC that i- PRO Active Guard server is installed. Start – Windows Administrative Tools – Services. - MultiAlCameraService - MultiAlSupportProcessManagementService - SQL Server (instance name) If stopped, right click and run.	5.6.1
Cannot log in to i-PRO Active Guard configuration	If you forget administrator account, reset account from PC that i-PRO Active Guard server is installed.	5.9
	If you select [Use existing SQL Server instance] and install SQL, make sure TCP Port is configured. If the setting is blank, please set "1435". 1.Run "SQL Server Configuration Manager" 2.SQL Server Network Configuration – Protocols for (instance name) - TCP/IP – IP Addresses tab – IPAII – TCP Port=1435. If 1435 is already used, set other empty port and uninstall i-PRO Active Guard server and install again.	4.3.1 5.4.2
Cannot register VMS.	Check if IP address, port, protocol, and credentials are correct. Supported version of VI IP server is 7.8.3 or later.	4.3.2.2 4.2.3 2.2
	If you use VI IP server is 7.8.3 or later and "Not supported version" or "Invalid response" is shown, please restart Insight API from Insight API config tool.	
Cannot register cameras	Check if IP address, port, protocol, and credentials are correct.	-
	Check if extension software is installed to camera in advance.	4.1
	Check if cameras are registered to VI IP server in advance.	4.2.1

Symptom	Cause and solution	Refer
	Check if PC time of i-PRO Active Guard server is	-
	synchronized to that of VMS server. When the difference	
	is larger than about 1hour, camera list cannot be retrieved	
	from [Camera(s) from VMS]	
	Check if "Digest" is used for authentication on camera	-
	side. ([Settings] – [User mng.] - [User auth.])	
	Please try updating the camera's firmware and Al application firmware	-
	When the camera is registered to VI IP server as	
	"Multicast RTP" for camera model, the camera will not be	
	shown on i-PRO Active Guard server's web. If multicast	
	streaming is required, following procedure is required.	
	1.Register camera to VI IP server as unicast	
	2.Register camera to i-PRO Active Guard server	
	3.Change to "Multicast RTP" on VI.	
Cannot connect from	Check if IP address, port, protocol, and credentials are	4.3.5.2
Plug-in to i-PRO Active	correct. Port and credentials can be changed from i-PRO	4.4.2
Guard server.	Active Guard configuration.	
	Please confirm related service is existing on PC that	5.4.2
	i-PRO Active Guard server is installed.	5.4.2.1
	Start – Windows Administrative Tools – Services.	5.4.2.2
	- MultiAlCameraService	4.3.1
	- MultiAlSupportProcessManagementService	
	If these services do not exist, please perform the following	
	steps.	
	1. Uninstall i-PRO Active Guard server.	
	2. Delete SQL instances or database related to i-PRO Active Guard server.	
	3. Confirm related services does not exist.	
	If related services remain, start command prompt with	
	administrator privileges and delete services with	
	following command.	
	sc delete MultiAlCameraService	
	sc delete SupportProcessManagementService	
	4. Reinstall i-PRO Active Guard server.	

Symptom	Cause and solution	Refer
Face, People, Vehicle,	Camera registration to i-PRO Active Guard server should	5.2.1
or license plate images	be done after registering camera to VI IP server.	5.1.1
cannot be searched	When you re-register the camera to VI IP server after	
from Plug-in (camera is	registration to i-PRO Active Guard server, you need to	
not shown for camera	also re-register the camera to i-PRO Active Guard server	
list).	(delete and then register again.)	
Face, People, Vehicle	Receiving status from each camera can be confirmed	4.3.8.1
or license plate images	from i-PRO Active Guard configuration.	
cannot be searched	Check network connection between camera and i-PRO	
from Plug-in (the	Active Guard server, last received time, last diagnosis	
number of search	time.	
result is 0).	If the result is not expected, check if schedule setting on	
	camera side for extension software is on.	
	note)	
	License plate detection is not support "last diagnosis	
	time".	
	Check process status of i-PRO Active Guard server.	4.3.8.2
	If some process is stopped, restart the process.	
	Check if schedule setting on camera side for extension	-
	software is on.	
	Configuration issues in a multiple network environment	-
	Check if the camera is connected to a network that is not	
	local to the server.	
	Firewall configuration issues.	-
	Check if i-PRO Active Guard server's program are listed	
	on "Allowed apps and features" for firewall settings.	
Camera name, app	Check if camera or app settings have been changed.	5.3
name, etc. Cannot	If there are any changes, please update i-PRO Active	
displayed correctly in	Guard server	
Plug-in		
Playback time is	Check if PC time of i-PRO Active Guard server and VMS	-
incorrect.	server are synchronized when i-PRO Active Guard server	
	is installed to dedicated server. Also check if time zone	
	setting of VMS server and VMS client are the same.	

Symptom	Cause and solution	Refer		
Notifications such as	Check if i-PRO Active Guard server detect alarm from	4.3.8.3		
registered face	diagnosis on i-PRO Active Guard configuration.			
detection or registered	f alarm exists, check the process status of i-PRO Active			
people detection	Guard server.			
cannot be shown	Check the configuration VMS to receive alarm from IP	4.2.2.2		
	server manager.			
	Check the insight API status from Insight API config tool.	-		
System alarm cannot	Check the configuration for alarm notification.	4.3.6		
be shown				
Restore failed	Check the SQL Server instance.	5.6		
	If the SQL Server instance is different from the backup,			
	please install i-PRO Active Guard server again with the			
	same SQL Server instance as the backup.			

# 6.2. Trouble shooting after staring operation

When trouble occurs after starting operation, you can confirm error code on i-PRO Active Guard configuration (Refer to 4.3.7.4)

Symptom	Error code	Cause and solution
Server process is	514 - 517	Services related to i-PRO Active Guard server does not
stopped on i-PRO		exist. Please install i-PRO Active Guard server again
Active Guard	1025 – 1028	Process related to i-PRO Active Guard server failed to start.
configuration	4097 – 4100	Restart i-PRO Active Guard server manually (Refer to
	4354,4357,	4.3.8.2).
	4610,4611	
		When process stops again, download logs (Refer to 4.3.8.5)
		and contact the system administrator.
Camera	4355,4356,4358	Check network connection between camera and i-PRO
disconnect		Active Guard server.
		Check if video recording to VMS and live monitoring works
		well or not. If recording or live monitoring also has problem,
		check camera's status.
		If problem continues after restarting camera and i-PRO
		Active Guard server manually (Refer to 4.3.8.2), download
		logs (Refer to 4.3.8.5) and contact the system administrator.
Face, People,	66052,66053	Receiving status from each camera can be confirmed from i-
Vehicle or license		PRO Active Guard configuration.
plate Images		Check network connection between camera and i-PRO
cannot be		Active Guard server, last received time and last diagnosis
searched from		time.
Plug-in (the		If the result is not expected, check if schedule setting on
number of search		camera side for extension software is on.
result is 0).		
False detection	-	To avoid false detection, configure mask area using iCT
(Not face, people		(Refer to 4.1).
or vehicle is		
searched)		

Symptom	Error code	Cause and solution
High CPU usage, memory usage or disk access	65793,65794 65796,65797	Check CPU or memory status (Refer to 4.3.8.2) and confirm whether the usage by i-PRO Active Guard server software is high.
		If the usage of i-PRO Active Guard server is high, to reduce load, configure mask area on camera side using iCT (Refer to 4.1) or "Max frequency of receiving object data (per sec)" (Refer to 4.3.5.4)
		If the usage of i-PRO Active Guard server is low and those of whole PC is high, check the influence of other software. When i-PRO Active Guard server is installed with VMS software, check the VMS software status.
Reach the max disk space of image (delete old	65795	Old images have been deleted by exceeding the settings for "Max usage of image storage drive".
images)		If you need to store data for "Retention period", configure mask area on camera side using iCT (Refer to 4.1) to reduce the number of detections.
The display of Web setting page is misaligned.	-	Please try clearing the cache in your web browser, and close the web browser, access it again.

# 7. Appendices

# 7.1. Secure system guideline

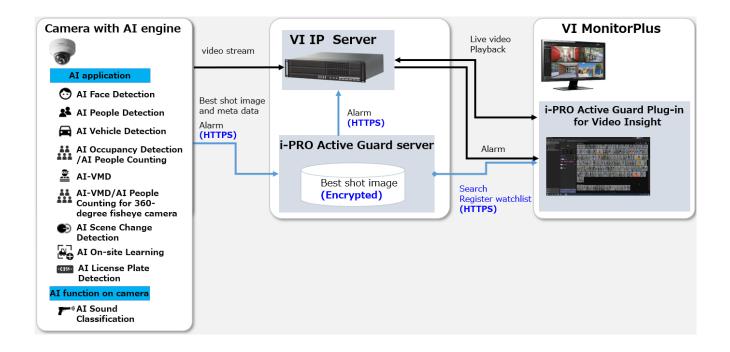
To ensure encrypted communications within critical environments, the secure system has been created as an additional security layer for the application. This document describes how to enable and configure secure system.

The communication between the cameras and i-PRO Active Guard server can be encrypted over HTTPS protocol.

The communication between the VI IP Server and i-PRO Active Guard server can be encrypted over HTTPS protocol.

The communication between i-PRO Active Guard server and Plug-in can be encrypted over HTTPS protocol.

Recorded Best shot images on i-PRO Active Guard server can be encrypted. Data Encryption can be configured only when you install i-PRO Active Guard server.



## 7.1.1. HTTPS between camera and i-PRO Active Guard

#### server

#### STEP1

Open the camera's web browser (*see instructions for each made and model*). [Setup] – [Network] – [Advanced] – [HTTPS], select [HTTPS] from the Connections list box.

#### STEP2

When you register camera to i-PRO Active Guard server, select HTTPS (Refer to 4.3.2.3).

## 7.1.2. HTTPS between i-PRO Active Guard server and

## Plug-in

### STEP1

Configure HTTPS for [Client plugin connection] on i-PRO Active Guard server's setting (Refer to 4.3.5.2) and Restart process.

### STEP2

Configure HTTPS connection on Plug-in's setting (Refer to 4.4.2)

## 7.1.3. HTTPS between VMS and i-PRO Active Guard

### server

#### STEP1

Run Insight API Configuration Tool on VI IP server (Start – VI Enterprise – Insight API Config). Click [SSL Config] and check [Enable SSL] and select Certificate. [Stop] and [Start] Insight API Service.

### STEP2

When you register VMS to i-PRO Active Guard server, select HTTPS (Refer to 4.3.2.2).

## 7.1.4. Encryption of Best shot images

Encryption on/off can be configured only when installing i-PRO Active Guard server (Refer to 4.3.1). When data is encrypted, image can be seen from Plug-in software. Other software cannot open the file.

# 7.2. Open-source software

This product uses open-source software.

For details concerning licensing, read license.txt included in install package.

## 7.3. How to use 3<sup>rd</sup> party extension software

3rd party camera extension software developed for i-PRO camera can be used in the i-PRO Active Guard system. Not all 3<sup>rd</sup> party extension software cannot be used, software that implements specific integration can be used. You can check the extension software that can be connected to i-PRO Active Guard from <u>application list</u> when released.

This document does not include install or configuration for 3<sup>rd</sup> party extension software itself and includes other procedure after them.

### 7.3.1. Required software version

i-PRO Active Guard server: v1.6.1 or later. i-PRO Active Guard plug-in for Video Insight: v1.6.0 or later.

### 7.3.2. i-PRO Active Guard server configuration

This section describes the steps required to register camera with 3rd party extension software to i-PRO Active Guard server and receive event data.

#### STEP1

Edit configuration file to register the extension software.

Open the file "C:¥MultiAl¥Backup¥3rdpartyApp.config" in the PC that i-PRO Active Guard server software is installed.

Input the extension software name and event name, and also enable the line by removing ";" at the beginning of the line.

```
Ex.
application_name_1 = "SampleApplication"
event_name_1 = "SampleDetection"
```

Save and close the file after editing.

Note)

Up to 10 extension software and 10 events can be registered in a system.

The extension software name and event name of the extension software will be shown on <u>application list</u> when released. It will not work if any other name is configured.

#### Note)

For i-PRO Active Guard server v1.8.0 or later, you can register 3rd party LPR app. If you would like to register as an LPR app, please add the below text to "3rdpartyApp.config."

#### Ex.

lpr\_application\_name = " SampleApplication "

\* For LPR app, "event\_name" not required.

For new installations of i-PRO Active Guard server v1.8.0 or later, the above LPR app sample text already included in "3rdpartyApp.config".

#### STEP2

Register camera to i-PRO Active Guard server (Refer to 4.3.2.3).

IP address	Camera model	Camera name	Check result	Ca	mera connection
192.168.0.30	i-PRO/Panasonic WV-S2136L	Panasonic WV-S2136L			
192.168.0.33	i-PR0/Panasonic WV-S2136L	Panasonic WV-S2136L	<b>(</b> ())	• нттр	80
				O HTTPS	443
				User Name	admin
				Password	

When the 3<sup>rd</sup> party extension software is installed in the selected camera, icon will be shown in the [Check result]. If not shown, please check if configuration file is edited correctly.

Note)

For LPR app is checked, icon will be shown.

#### STEP3

Check if an event has occurred (Optional).

[Extension app. event] can be selected to confirm the number of detections. (Refer to 4.3.8.3)

		Ca	mera	Connection	C	_	0		Status			o		т		iagnosis	ages: 73	2050
	1			3 🔻 0			=) 📀	Process Databas Disk Fre		/2795GB			) H	()	otal Alar	m Histor 23 18:45	y: 700	3959
R	ecord su	mmary		Extension app. event  All Best shot images	Date	2023/0	1/23	G	et									
1	4:00	5:00	6:00	People Best shot images Vehicle Best shot images All alarm	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
	0	0	0	Registered people detection Registered vehicle detection	0	0	0	0	0	0	0	0	24	0	0	0	0	0
				Sound detection Extension app. event														

\* It takes about 15 min for an event to appear on the screen after it has occurred.

## 7.3.3. Rules setup for alarm notification (Optional)

Similar to the procedure described in 4.5, 3<sup>rd</sup> party extension software event can be used as [Event] By enabling [Category] with the event name.

🐬 Add Event						×
Possible Events that will Trig	ger the Rule					
Event Type	Event Description	Enhanced S	system Innut			
Access Control Event	Trigger off of an Access Control Entry or Alarm	Ennancede	ysterninput			
Alert Button	An alert button appears in the "Alert Buttons" menu	Cameras	✓ 192.168.0.30 People d			
Analytics	Trigger off of a supported Camera's Analytics		192.168.0.33 Face de 192.168.0.32 Vehicle of			
Camera Down	Trigger when a specific or all cameras stop responding.		№ 192.106.0.52 Venicle 0	iemo (192.100	.0.32)	
Enhanced System Input	Receive Alert with Metadata					
Digital Input	External input device (i.e Alarm)					
License Plates	Trigger when a License Plate is found					
SDK Input	Receive data from a TCP Port					
User Login	Rule triggers when a user logs in.					
Video Motion	Motion is detected on a specific camera					
a a 1213 a 1312				Select All	Clear Selections	1
		Category	GuninHandDetection			
		🔲 Area				
					ок	Cancel

## 7.3.4. Check

[i-PRO Active Guard Event] plug-in screen on VI MonitorPlus show the event, the filter [Extension app. event] can filter by event name of the extension software.

When event occurs, event will be shown on [Live events] and alarm history can be searched on [Past events].

Live events	Past events			Current I	Date/Time: 202	3/01/23 19:12:01			C 🍫
↔	+ Setup watchlists	Date / Time	Camera	Event	Detected	Registered	Details	Status 🔻 Comments	Live
Fili Cameras (3)		2023/01/23 19:08:00	192.168.0.33 Face demo	GuninHandDetection			Other info: Detection size:60x120 Detected score: 80%	• New	۵a
Registered Peop Registered Peop		2023/01/23 19:07:50	192.168.0.33 Face demo	GuninHandDetection			Other info: Detection size:60x120 Detected score: 80%	• New	04
Registered vehi Sound	cle detection	Refine filters	Face demo	GuninHandDetection			Other info: Detection size60x120 Detected score: 80%	• New	•
C Extension app. 6	event	GuninHandDetection	} Face demo	GuninHandDetection			Other info: Detection size60x120 Detected score: 80%	• New	•
			Face demo	GuninHandDetection			Other info: Detection size60x120 Detected score: 80%	• New	٥

# 7.4. Specifications

The details of the specifications are as follows.

Scale	Supported camera					
Scale		i-PRO network camera with AI engine				
	Number of cameras	1 to 100 CH when installed with VMS server (AI Face				
		Detection is up to 20)				
		1 to 300CH when installed in dedicated server (AI Face				
		Detection is up to 60)				
	Number of clients	No limitation (depending on limitation of VMS)				
	Number of Recording	12 VI IP servers				
	server					
	Number of	No limitation				
	i-PRO Active Guard	(Depending on capability of whole system)				
	server per a client					
Supported	For plugin	AI-VMD / AI Sound Classification /AI Face Detection /				
AI		Al People Detection / Al Vehicle Detection /Al Scene change				
applications		detection / LPR				
	For dashboard	AI Face Detection, AI People Detection, AI Vehicle Detection,				
		AI-VMD/AI People Counting for 360-degree fisheye camera,				
		AI-VMD, On-site Learning, AI Occupancy detection, LPR				
		Counting				
Store	Retention period	Max. 31 days limitation for face, people or vehicle or license				
		plate data / Max. 92 days limitation for count/heatmap/				
		statistics data				
		* Max. 366 days by upgrading SQL Server Standard edition or				
		higher				
Post Search	Filter	People, Vehicle, LPR (attribute, date & time, camera, moving				
		direction)				
		Face (similar face, date & time, and camera)				
	Similar search	Yes (by same attribute information)				
		*People and Vehicle (by same attribute information) and Face				
	Sort	Descending date, Ascending date, Similarity (Face), Only high				
		Relevance (People and Vehicle)				
		1				

		[]				
Alarm	Watch list alarm	Up to 1,000 faces, up to 12 people attributes, up to 12 vehicle attributes.				
		There is no limitation to the number of license plate and				
		license plate group (*depending on the system design). Up to				
		12 LPR attributes or license plates group.				
	Detection alarm	AI Sound Classification				
		(Gunshot / Yell / Vehicle horn / Glass break)				
		AI-VMD				
		(Intruder / Loitering / Direction / Line cross)				
		LPR, VCA, Access Control / AI Scene change detection				
	Related function	Show alarm on real-time, Alarm search,				
		VMS's Rules configuration, Map overlay,				
		Notification to mobile app,				
		Manage alarm status				
Playback/	Playback	Playback video around the time of the bestshot on full.				
Export		and multi-view				
	Export video	Save best shot image, Export video from Recording server				
	Export Search result	HTML and CSV				
Dashboard	Supported browser	Microsoft Edge, Google Chrome, and Firefox				
	Chart	People counting, occupancy statistics and heatmap when				
		using AI-VMD/AI People Counting for 360-degree fisheye camera.				
		People counting and vehicle counting when using AI-VMD.				
		People counting and occupancy statistics when using AI				
		Occupancy Detection.				
		On-site learning object counting when using AI-VMD with On-				
		site Learning application. Data update interval is minimum 5 seconds for people/				
		vehicle/ On-site learning object counting and 1 min for heat				
		map/ LPR Counting.				
		Age and gender statistics when using AI Face Detection. Data				
		update interval is minimum 1 min.				
		People attribute statistics when using AI People Detection.				
		Data update interval is minimum 1 min.				
		Vehicle attribute statistics when using AI Vehicle Detection.				
		Data update interval is minimum 1 min.				

Customize	Contents, display size, location for each chart.
	3 Layouts per user can be saved and 24 users can be
	registered.
	(Up to 4 users can be log-in at the same time)
	Basic display color theme (dark or light)
	Line chart type (Straight line / Smoothed line), line/area name
	for counting