Fire Smoke Detection Application for i-PRO

LiveView



Preferences

Application preferences can be set on "Configuration" and "Detection areas" page of application WebUI

Configuration



Save

Settings	Unit	Min	Default	Max	Description
Capture quality	Enum	0	0	max<=255	List of capture modes (resolution and FPS) provided by camera. Used for thumbnail generation. Frames will be resized for AI model inference. Actual FPS can be lower.
LiveView framerate	FPS	1	3	15	LiveView page MJPEG stream FPS, does not affect inference speed.
Object detection on firmware	bool	False	True	True	Object detection using CV engine is always operating inside of the camera. By setting False (disabling function), more resources from CV engine will be available to be used by the extension software. <i>Notice:</i> When object detection is disabled, functions that use the object detection installed in the camera (such as some image quality automatic control functions and APIrivacy Guard) will be also disabled.

Detection areas

	Zone color	Enabled	Zone name	Fire ala thresho	arm Id, %	Smoke thresho	alarm old, %	Fire alarm warm up timer, ms ()	Sn war	moke alarm rrm up timer, ms ()	Fire alarm cooldown timer, ms ()	Smoke alarm cooldown timer, ms ()	Fire alarm ID 🚺	Send fire test alarm	Smoke alarm ID ()	Send smoke test alarm ()
				100.00	\$	20.00	÷	3600000	50	000	30000	30000	172 ~	Test	173 ~	Test
Clear All clear			Zone1	0.50	\$	0.50	\$	5000 0	50	000	30000 0	30000	171 ~	Test	172 ~	Test
			Zone2	0.50	\$	0.50	\$	50000	50	000	30000 0	30000	171 ~	Test	174 ~	Test
			Zone3	0.50	\$	0.50	\$	5000	50	00 0	30000 0	30000	171 ~	Test	172 ~	Test
			Zone44	50.00	\$	0.50	\$	50000 0	50	000	20000	30000 0	174 ~	Test	174 ~	Test
			Zone5	0.50	\$	0.50	\$	5000	50	00 0	30000	30000 0	171 ~	Test	172 ~	Test
			Zone6	0.50	\$	0.50	\$	5000 0	50	000	30000	30000 0	171 ~	Test	172 ~	Test
			Zone7	0.50	0	0.50	\$	5000	50	00 0	30000	30000 0	171 ~	Test	172 ~	Test
			ZoneLast	70.00	\$	20.00	\$	5000	50	000	30000 0	30000 0	174 ~	Test	173 ~	Test

Manipulating zone contours:

Button	Description
\bigcirc	Add new contour by clicking and adding vertexes to the configuration frame, to complete the contour click on the first point. Zones to be added consecutively. 8 zones total, not more then 16 vertexes.
ß	Select an existing contour by clicking on it, the line style becomes a dash.
Clear	Delete selected contour.
All clear	Delete all contours.

Settings per zone:

Settings	Unit	Min	Default	Max	Description
Zone color	color				Zone colors are constant
Enabled	bool	False	Full:True ZoneN:False	True	Only enabled zones will be processed
Zone name	text	1 char	Full Zone N	20 chars	Used in alarms data and live view cards. Must contain only latin letters, digits, underscores, and spaces.
Fire alarm threshold	%	0.01	0.5	100.0	Threshold for fire detection, expressed as a percentage of a zone size.
Smoke alarm threshold	%	0.01	0.5	100.0	Threshold for smoke detection, expressed as a percentage of a zone size.

Settings	Unit	Min	Default	Max	Description
Fire alarm warm- up timer	ms	0	5000	3600000	Time interval before a fire alarm event is triggered after the first detection.
Smoke alarm warm-up timer	ms	0	5000	3600000	Time interval before a smoke alarm event is triggered after the first detection.
Fire alarm cooldown timer	ms	0	30000	3600000	Time to wait before initiating a new fire alarm.
Smoke alarm cooldown timer	ms	0	30000	3600000	Time to wait before initiating a new smoke alarm.
Fire alarm ID	Enum	171	171	174	Camera internal Alarm ID assigned for fire detection events.
Send fire test alarm					Used for alarm checks and demonstration purposes.
Smoke alarm ID	Enum	171	172	174	Camera internal Alarm ID assigned for smoke detection events.
Send smoke test alarm					Used for alarm checks and demonstration purposes.

Additional notes

- Please note that in the event of simultaneous fire and smoke detection, the application will prioritize fire event, and send both event, but due to the camera's cooldown limitation only fire alarm will be triggered.
- The application will be reloaded if the rotation setting is set in the camera configuration. Therefore, the LiveView page should also be reloaded.
- Enabled zones without contours to be considered full-frame zones.
- The default zone serves as a fallback option when no zones have been enabled in the internal configuration.

License

License can be set on "License" WebUI page

	Live	Configuration	Detection areas	License
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Device blob	/54fhdcg4nGOsHdaz5HaVCz9YD31bQS8CHitQcCy6xU=
Status	Valid Expiry date: 31.10.2024
License	New license key Apply

System linkage for VMS

Genetec Security Center with i-PRO Active Guard

i-PRO Active Guard server configuration

1. Edit "C:\MultiAI\Backup\3rdpartyApp.config" in the PC that Active Guard server is installed.



application_name_1 = "Noema Fire and Smoke Detection iPRO App" event_name_1 = "Fire detection" event_name_2 = "Smoke detection"

If Genetec system, genetec_custom_event_id_1 = 12000 genetec_custom_event_id_2 = 12001 for example. Remove the ";" at the beginning of the line, respectively

```
#-----
# Application name (mandatory)
#-----
# It is neccessary to match "EXTAPP1"or"EXTAPP2"or ... in the response of "/cgi-bin/getinfo?FILE=1" from c
# Up to 256 characters using alpha-numeral, hyphen, under score and period as camera's SDK specification.
application_name_1 = "Noema Fire and Smoke Detection iPRO App"
application_nume_2
;application_name_3 =
;application_name_4 =
;application_name_5 =
;application_name_6 =
;application_name_7 =
;application_name_8 =
;application_name_9 =
;application_name_10 =
# If you would like to register as an LPR app, please enter below.
# When registering as an LPR app, "Event name" and "Custom event ID" are not required.
lpr_application_name = "Vaxtor CONTAINER"
#-----
# Event name (mandatory)
#-----
# It is neccessary to match the event name included in the notification from camera.
event_name_1 = "Fire detection"
event_name_2 = "Smoke detection"
;event_name_3 =
;event_name_4 =
;event_name_5 =
;event_name_6 =
;event_name_7 =
;event_name_8 =
;event_name_9 =
;event_name_10 =
# Custom event ID. (Mandatory for Genetec system)
# This will be used for the notification from i-PRO Active Guard server to Genetec.
genetec_custom_event_id_1 = 12000
genetec_custom_event_id_2 = 12001
;genetec_custom_event_id_>
```

2. Register Camera on i-PRO Active Guard configuration web Register camera to i-PRO Active Guard server (Refer to 4.3.2.3).

IP address	Camera model	Camera name	Check result	1	Ca	mera connection
192.168.0.30	i-PRC/Panasonic WV-S2136L	Panasonic WV-S2136L	2 = (0)			
192.168.0.33	i-PRC/Panasonic WV-S2136L	Panasonic WV-S2136L			HTTP	80
				_	O HTHS	443
					User Name	edmin
					Password	

When the 3rd 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.

3. Restart i-PRO Active Guard Service

Restart process is required to finish configuration.	Restart
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Genetec configuration

1. Create "Custom Event" on Genetec config tool. Value should be matched with Active Guard server side configuration.

Config Tool System	🗙 🔯 Hardware in 📝 🎟 Video	🛛 🔆 🆄 Plugins	🗸 🧟 Alarms 🛛 🖂		
🦉 General settings 🥌 Roles 🕮 Sch	edules 🛛 Scheduled tasks 🚿 Macros 🛱 C	$tutput behaviors$ \langle $>$	84		
Custom fields				Custom events Event colors	
Events	Custom event	Value	Role		
	test		Local system		
Actions	Wrong-way vehicle		Local system		
	Stopped vehicle		Local system		
Id Logical ID	Auto track alarm		Local system		
	Clearance export progress		Local system		
Ilcor paceword sottings	Fire detection	12000	Local system		
Coser password settings	Smoke detection	12001	Local system		
Activity trails					
🎵 Audio					
📒 Threat levels					
Incident categories					
Features					
😃 Updates					
Aaintenance mode reasons					
Advanced settings					
	+×/				
🕂 Add an entity					🗢 Cancel 🛛 🖌 Apply

2. (Optional) Create "Alarm" and configure "Event-to-action"

Event-to-action	
When:	Fire detection
From:	Any entity
Action:	👰 Trigger alarm 👻
Alarm:	Sire detection
Effective:	Always
Enabled:	
	Cancel Save

Milestone XProtect with i-PRO Active Guard

With i-PRO Active Guard server, alarm name, snapshot, and event detail information are shown on XProtect Alarm manager.

i-PRO Active Guard server configuration

i-PRO Active Guard server configuration

XProtect configuration

1. Create "Analytics Event" on XProtect Management client Name must be matched with configured event name.

Site Navigation	→ ₽ X	Analytics Events 👻 👎	Analytics Events Information	– 9
 Failover Servers ♥ Failover Servers ♥ Devices ♥ Cameras ♥ Microphones ♥ Speakers ♥ Metadata ✓ o Input ♥ Output ♥ Cirent ♥ Cirent ♥ Cirent ♥ Management Client Profiles ♥ Rules and Events ♥ Rules ♥ Time Profiles ♥ Notification Profiles ♥ User-defined Events ♥ Liner Votiles ♥ User-defined Events ♥ User-defined Events ♥ User-defined Events ♥ User-defined Events ♥ Webbooks 		Analytics Events Analytics Events Bicycle_Abandoned Fallen geople Fire detection GunnHandDetecton FirRO Active Guard system notification Evense plate detection Registered advanced vehicle detection Registered face detection Registered face detection Registered face detection Registered face detection Registered face detection Registered face back of the face of	Name: Fre detection Test Event Description:	

2. Create "Alarm definition" on XProtect Management client

Site Navigation	- 4 ×	Alarm Definitions 🚽 🧸	Alarm Definition Information		•
► Teilover Servers Mobile Servers Devices	^	Alarm Definitions Al Scene Change Detection Bicycle Abandoned Eallen people	Alam definition Enable:		
- ⊸® Cameras - ♪ Microphones - ♥ Speakers - ♥ Metadata - ♥ Output		Fire detection GuninHandDetection GuninHandDetection Icicense plate detection Registered advanced vehicle detection Registered advanced vehicle detection	Name: Instructions: Trigger	Hire detection	^ v
Client Smart Wall		Registered face detection Registered license plate Detection Registered people detection	Triggering event:	Analytics Events Fire detection	~ ~
		The second s			
Management Client Profiles		Hegistered Venicle Detection Smoke detection Unregistered license plate Detection Wheel chair detection	Sources: Activation period	All Cameras	Select
Smart Client Profiles Management Client Profiles Matrix Rules and Events		Consideration and the second s	Sources: Activation period Time profile:	All Cameras Atways	Select
Smart Client Profiles Management Client Profiles Marix Rules and Events Brules Watrix Watrix		Pregistered vehicle deextual Single detection Unregistered filenese plate Detection White care detection White care detection	Sources: Activation period Time profile: Event based:	Al Cameras Always Start: Stop:	Select V
Construction C		Projistered vehicle deextual Single deextual Unregistered license plate Detection White cane detection	Sources: Activation period Time profile: Event based: Map Alam manager view:	All Cameras Always Start: Stop: Start Stop:	Select

Milestone XProtect without i-PRO Active Guard (with i-PRO Maximizer plug-in)

With i-PRO Maximizer plug-in, simple integration can be used without additional PC for Active Guard server. In this case, only alarm name will be shown on XProtect Alarm manager.

Miestone XProtect Management Client 2021	1.42					- 0 ×
File View Action Maintenance Tools Help	P					
a 🤊 🕡 🗢 🖬						
Site Navigation 🔹 🕸	X Configuration					
- Smart Hall - 22 View Groups - 25 Smart Clext Publies - 26 Management Clext Publies	A IPPO sameres Test Test	Select a carran or a gro Auto Focus (Fired)	g of cameras to anable or double	ta conmanda		
Matrix Rules and Events Pules Time Profiles Netform Profiles	- The LFPC-Parameters WV-57100-F3 (132.163.9.2 - The LFPC-Parameters WV-57400-F3 (132.163.9.2 - The LFPC-Parameters WV-55544 (132.163.0.2) - C - The LFPC-Parameters WV-55544 (132.163.0.2) - C - The LFPC-Parameters WV-55544 (132.163.0.2) - C	Auto facus for fixed carveria) Brable	O Deable	C Endled on some cameras
User-defined Events Analytics Events Generic Events Internols		Auto Focus PTZ Auto Isour		C truble	O Deable	C Ended in some canenas
Security Security Security Security Besic Users System Clashboard Current Table System Monitor		Focus For (Field) Focus far for find careeras		C Bradie	O Duable	C Endled on some cameras
System Nonitor Thresholds Sender Cardy and Angele Configuration Reports Sender Logs Weakters Dive Meadure Servit Access Control		Focus Fer PTZ Fecus fer		O Brable	O Duble	C Ended on some carversa
20 Toders 20 Inder provides 20 Inder provides 20 Inder provides 20 Inder provides 20 Transaction definitions 20 Inder provide the provides 20 Inder provides		Focus Near (Finid) Focus near forbed camera		C Brable	O Duble	C Bubled on some cameras
Sta Nacional Set Neurophy	×	Carligue constands	Update alam sending an all cameras	Cutton Event Mapping		

1. Run "Update alarm sending on all cameras" on [Rules and Events] – [i-PRO Extended Actions]

Check if HTTP alarm notification was configured on camera side. [Alarm] – [Notification] – [Notification] – [HTTP alarm notification] - [Address 1]

Live	Setup	Alarm	VMD area	SCD ar	ea	Audio detection	Notification	
-Ext. software	e		TCP at	arm notifica	tion	HTTP alarm notifica	tion	
Software r	nng.	HTTP alarm not	fication	Alarm	Diag	p.		
Operation Control log Mimamori	sched. Al Dur	Address 1 User name Password Notification da	ta		0	http://192.168.0.102.8095	D=%almsrc2	Delete
+Easy Setup		Address 2 User name Password Notification da	ta	0		http://	D=01	Delete
+Basic -Image/Audio Image Image qua	ality	Address 3 User name Password Notification da	ta	0		http://	D=01	Delete
+Multi-screen -Alarm Alarm VMD area	n	Address 4 User name Password Notification da	ta			http://	D=01	Delete
SCD area Audio dete Notificatio +User mng.	n	Address 5 User name Password Notification da	ta	0		http://	D=01	Delete

2. Create "Custom Event Mapping" Set Hexadecimal number of alarm ID and tag name.

Cus	tom Event Mappin	gs		×
Use this Events This cor	s section to map cu with these custom nfiguration is globa	ustom event codes to ev mappings will be trigger I for all cameras.	ents that can be received from the cameras. ed on "i-PRO Custom Event".	
	Alarm ID	Tag		
	AB	Fire detection		
1	AC	Smoke detection		
•				

3. Create "Alarm definitions" Select i-PRO Maximizer Events and i-PRO Custom Event for Triggering event.

Site Navigation 👻	Alarm Definitions 🗸 🕫	Alarm Definition Information		
Speakers	🔨 🖃 🧏 Alarm Definitions	Alarm definition		
- 🤓 Metadata	AI Scene Change Detection	Enabler		
of input	- Je Fire detection	Lindbo		
🚫 Output	- g Gun in hand detection	Name:	Fire detection	
Glient	License plate detection	hetructione		
- III Smart Wall	Registered advanced vehicle detection			
- Canal View Groups	Registered license plate Detection			~
- 👰 Smart Client Profiles	- Registered people detection	Trigger		
Management Client Profiles	- Registered vehicle detection			
- 😳 Matrix	- Stopped_Vehicle	Inggering event:	IPPRO Maximizer Events	~
Rules and Events	Unregistered license plate Detection		i-PR0 Custom Event	~
- 📋 Rules	Visual PB On Common Funct	a		
- 🛞 Time Profiles	VaxAEPR OI Canera Event	aources:	All Cameras	Select
- Motification Profiles		Activation period		
		Time profile:	Ahave	
			randya	-
- 🍖 Generic Events		 Event based: 	Start	Select
- 🖧 Webhooks			Stor	Select
- Axis actions		L	- 19 J	
i-PRO Extended Actions		Мар		
e 🛱 Security		Alarm manager view	O Smart map	
- Rasic Users			(e) Map	
AXIS Optimizer Security		Related map		~
System Dashboard		Occurrence of the second second		
Gurrent Tasks		Operator action required		
System Monitor		l me limit:	1 minute	~
System Monitor Thresholds		Events triggered		Select
Evidence Lock				
Server Leze		Other		
Matadata Llas		Related cameras:		Select
Matadata Saush		Initial alarm owner:		~
Manager Control		In this I also an an include		
- 92 Incidents		anna alarm pronty.	i: High	~
53 Incident properties		Alarm category:		~
Transact		Events triggered by alarm:		Select.
Transaction sources		Automations alarma		
Transaction definitions		Hoto-close alarm		
AXIS Optimizer		Alarm assignable to Administrators:		
Sh Device assistant				
Operator controls				
(123) License plate lists				
System overview				
Speaker manager				
i-PRO Plugins				
i-PRO Active Guard				
🖻 🔵 Alarms				
🛃 Alarm Definitions	v .			
c	>			

Video Insight with i-PRO Active Guard

i-PRO Active Guard server configuration

i-PRO Active Guard server configuration

No configuration is required for Active Guard plug-in. Configured event name will be shown in "Extension app. event filter.

Sound	Refine filters X
Extension app. event	Fire Detection
● VCA ►	Smoke Detection

(Optional) Rule configuration on Video Insight:

By configuring the event name as "Category" in "Enhanced System Input", any Actions can be used.

7	Add Event						×
Po	ossible 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	An alert button appears in the "Alert Buttons" menu	Cameras	□ 192.168.0.21 - Panason	ic - Model: S	713Z (192.168.0.21	
	Analytics	Trigger off of a supported Camera's Analytics		□ 192.168.0.22 - Panason	iic - Model: S iic - Model: S	4156 (192.168.0.22 8544 - Sensor 3 (1	
	Camera Down	Trigger when a specific or all cameras stop responding.		192.168.0.20 - Panason	ic - Model: S	8544 - Sensor 4 (1	
►	Enhanced System Input	Receive Alert with Metadata		S7130 (192.168.0.40)			
	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	Fire Detection			
			Area				
						ок	Cancel

NVR/WV-ASM300

camera configuration

[Alarm] – [Notification] – [Notification] – [TCP alarm notification] - [Destination of notifications] Configure NVR's IP address for destination.

Live	Setup	Alarm	VMD area	SCD ar	ea	Audio dete	ction	Notification	
-Ext. softwar	re		TCP al	arm notifica	tion	HTTP alarm r	notificat	ion	
Software	mng.	TCP alarm notifie	cation	O	n	00	Off		
Operation Control Io	n sched.	Additional alarm	data	O	n	00	Off		
Mimamor	i Al Dur	Destination port		1818		(1-65535)			
		Retry times		2 🗸]				
+Easy Setup	.	Destination of no	tification	Alarm	Diag	. Destination se	rver addr	ess	
+Basic		Address 1				192.168.0.102			Delete
+Image/Aud	io	Notification pe	r VMD area			○ On	Off	Alarm area N	o. 1 v
+Multi-scree	n	Address 2				·			Delete
Alarm		Notification pe	r VMD area		_	On	Off	Alarm area N	o. 1 🗸
SCD area	1	Address 3							Delete
Audio det	ection	Notification pe	r VMD area			On	Off	Alarm area N	o. 1 V
-User mng.		Address 4		0					Delete

NVR configuration

Extension software alarm should be configured on NVR.

Control	Cam. select	Setup	Recording setup	Event setup	Advanced setup						
	Setup		Recording mode	On 🗸	•	Extension	software ala	rm - Google Chrome		- 0	x x
	Date/Language		· Select "Off"	for "Recording mode" t	o stop all the recording	▲ 保護されて	ていない通信	192.168.0.120/cgi-bin/event_exta	larm.cgi		Z
	Camera		Alarm disarm du	ration 2 s	~		Extension	software alarm			
	REC & event		TCP alarm port r	number 1818			No.	Name	Mes (DE	sage ID C/HEX)	
			Extension softwa	are alarm Setu	e >			侵入検知 運殺論知	50	/ 32	
	Monitor							方向検知	52	/ 34	
			Emergency reco	rding setup				ラインクロス	56	/ 38	
	Network		Recording tim	ne 30 s	~		5	Fallen people	171	/ AB	
	liser management		Emergency a	udio recording Off	~			Fire detection	176	/ B0	
	oser management		This setting	is to record audio only	for emergency recordi		7	Smoke detection	180	/ B4	
	Maintenance		"Audio" of "Re	ecording Setup" under '	"REC & event" is being		8	ユーザー定義4	diam law and and	/	
			· Other manu	facturers' cameras are	not supported.		 ir setting window. 	g the message ID, the name is	displayed on t	ne event type	
	HDD management		SD backup rec.	Setu	< q						
	Extra function		Smart coding (G	OP control) Setu	p >			Set			

To notify WV-ASM300, configure WV-ASM300's IP address from [Network] – [TCP alarm notifiacton].

Control	Cam. select	Setup	Basic	e-Mail		TCP alarm notification	NTP/SNMP	
	Setup							
			TCP alarm notifie	cation				
	Date/Language		Port number(to PC)	1818			
			Retry		2 🗸			
	Camera		Destination a	ddress				
	REC & event		Address1		192.1	68.0.99		
			Address2					
	Monitor		Address3					
			Address4		_			
			Address5					
	User management		Address6					
			Address7		-			
	Maintenance		Address8		-			
	HDD management		Addresso					
	noo management					Set		
	Extra function							

WV-ASM300 configuration

[Setting] – [AI camera] – [Alarm name setting]

Set Name and Message ID. Message ID must be matched with the number configured.