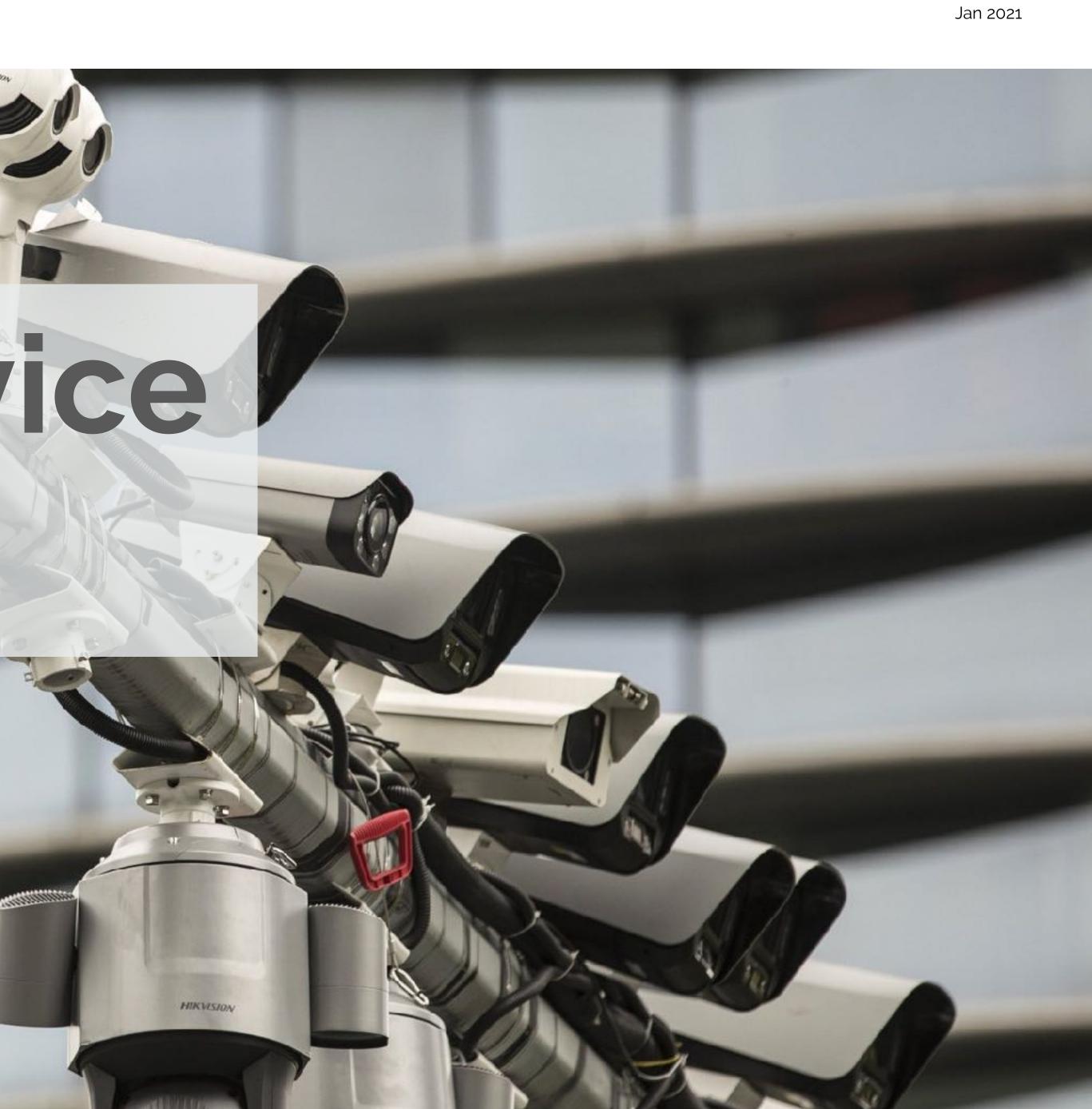
Edge on-device Al

To make all cameras smart (finally)!



Edge on-device AI & Deep Learning







4Gb RAM 128Gb encrypted SSD PoE In PoE Out





Every module has its own OLED display with IP, etc. The self setup is accessible via http (<u>http://IP</u>) Every module has an auto-discover mode about the network settings and cameras (with users and passwords dictionary) Every module is IEEE 802.1x compliant.

	Welcome to the Sm_All configuration	
	welcome to the Shi_An configuration	
	M	
	Sm_All	
Parallel Contai License starting date : C64014	2021 11 20 09	
Lisense enting date : 05 07 2	121 12-20 CP	
Module issue	Device1	
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EndP	 Manual Automatic 	
LAN	Choose network interface	۲
IPs .	192-161-1-1	
Routing charact	 Manual Actionatic 	
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Camera IDs.	usus -	
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Pi Configuration ×		
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	Welcome to the Sm_All configurat	ion
Parallal Seria	Sm_All	
Configuratio	n successfully	
Current scenario : Smart cross	ing	
License starting date : 08-01-3 License ending date : 05-07-2		
Module name	Infrabel-2	
Camera IP	10.135.16.235	
RTSP port number	554	
Log file link	http://10.24.27.0:2000/logs	
RTEP ink	risp. 910-54.27.85oste- media/media.amp	
Beck		



Al detection models

Every module has automatic detection features like:

- vehicles (12 different types)
- Persons
- object stop or movement (persons and vehicles)
- Direction of movement (persons and vehicles)
- Traffic lights phases, barriers phases (closed or open)
- Danger zone detection on top of the crossing path (needs 2-3 min from startup)

That list could be complemented. 4 simultaneous detections are possible.

All those features were developed thanks to several deep learning training based upon customer's videos.



eeds 2-3 min from startup)



Example of complex detection scenarios



Green lines : automatic danger zone detection In the green box at right bottom : counting and crossing phases

All those operations are fully automatic, without human interactions





Integration with Nice (Cognify) on existing cameras

Ongoing danger zone calculation



Every module is inserted into Nice as a regular camera

Sm_All

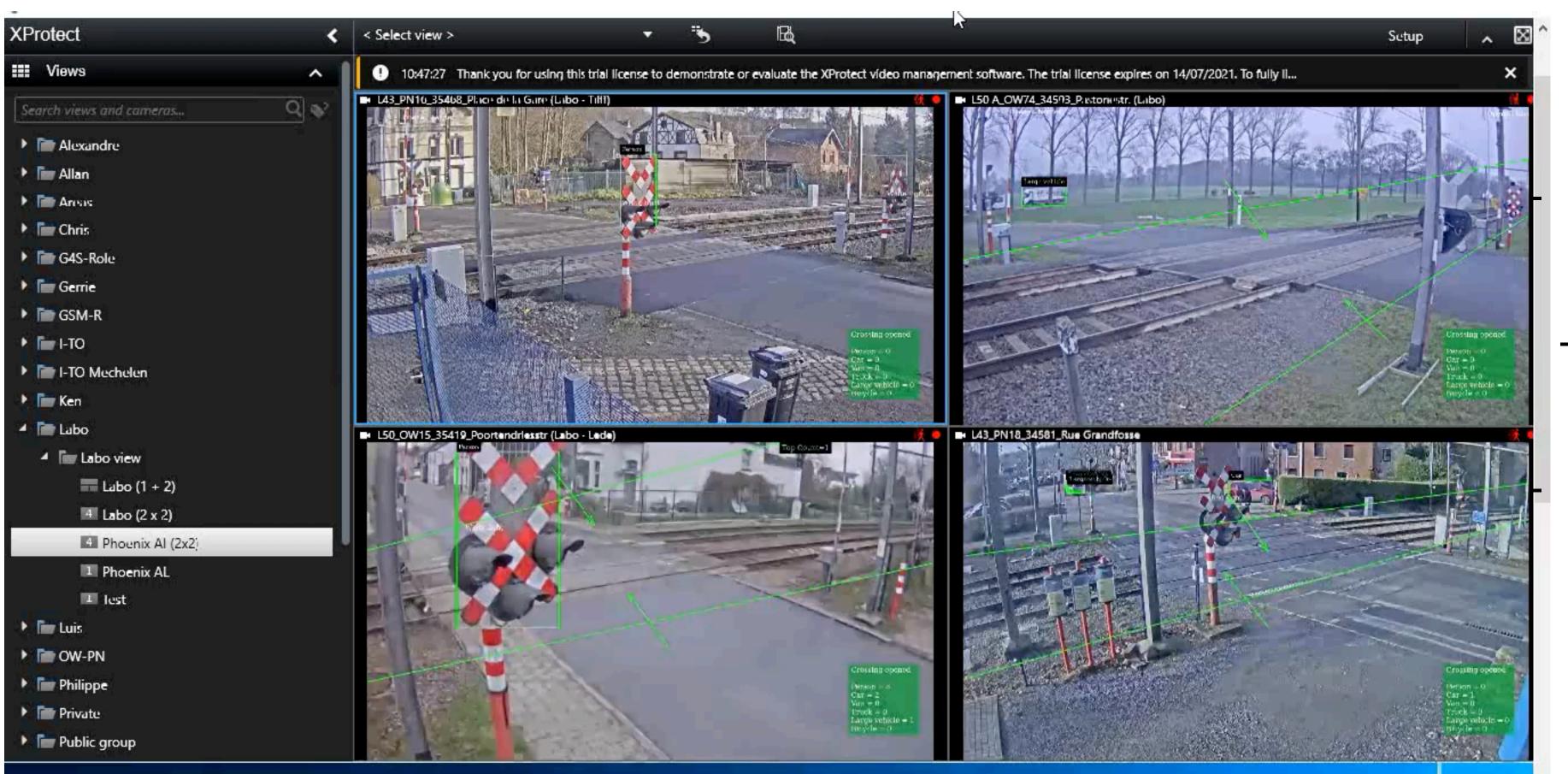
Ongoing danger zone calculation (because of snow)



- AI detection - Counting - AI classification - Danger zone detection - Traffic lights phases detection and crossing phases - Detection of passing through if red lights



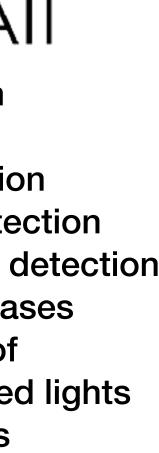
Milestone (XProtect) integration on existing cameras



Every module runs Milestone Plugin on ARM with Deepstream 5. No extra server needed.

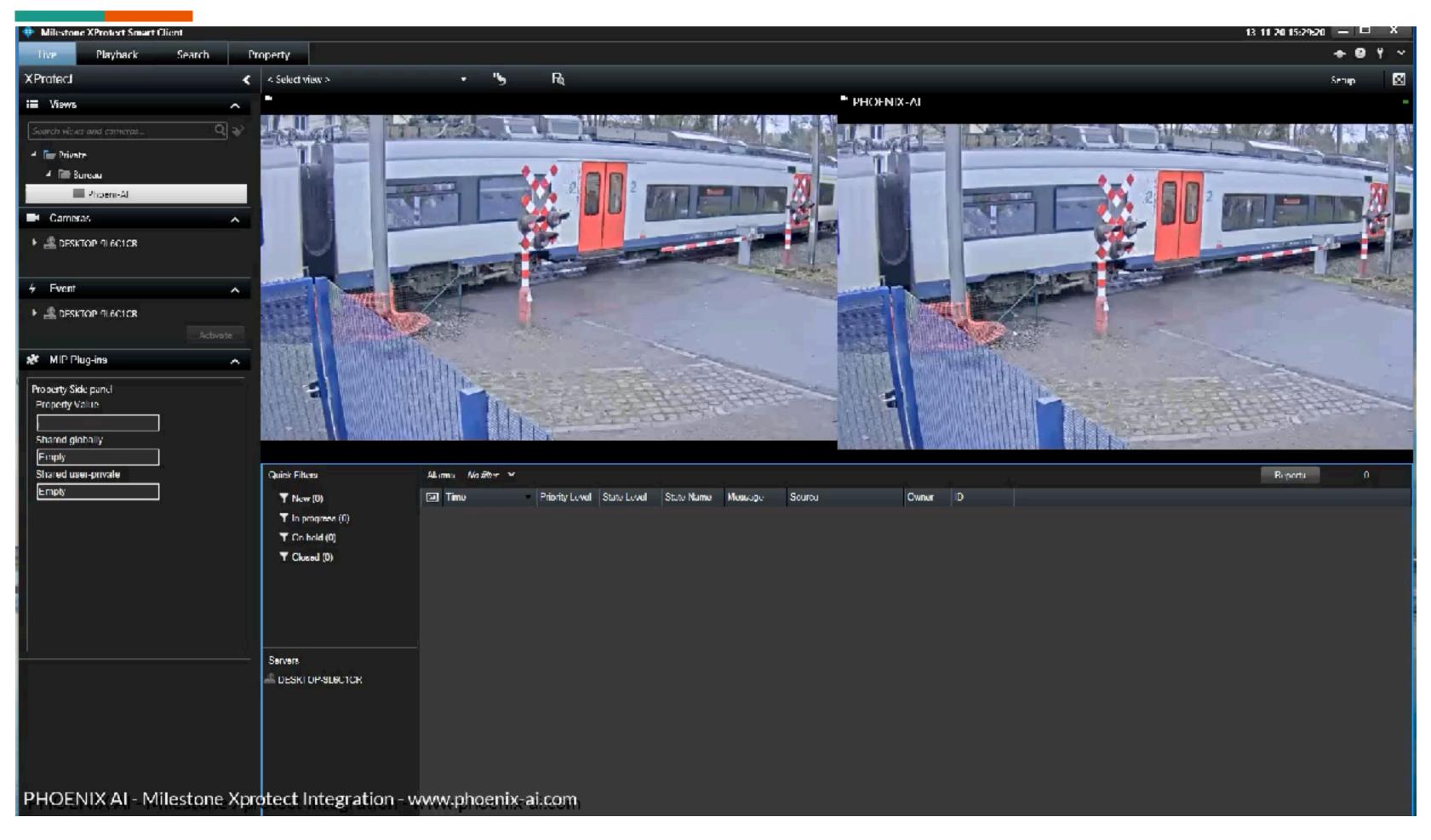
Sm_All

Al detection - Counting - AI classification - Danger zone detection - Traffic lights phases detection and crossing phases - Detection of passing through if red lights - Send alerts





Milestone (XProtect) integration on existing cameras



Reception of configurable alerts in Milestone



- Identification of passing through
- Alerts management



Presented by **PHOENIX AI S.A. -** <u>www.phoenix-ai.com</u>





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