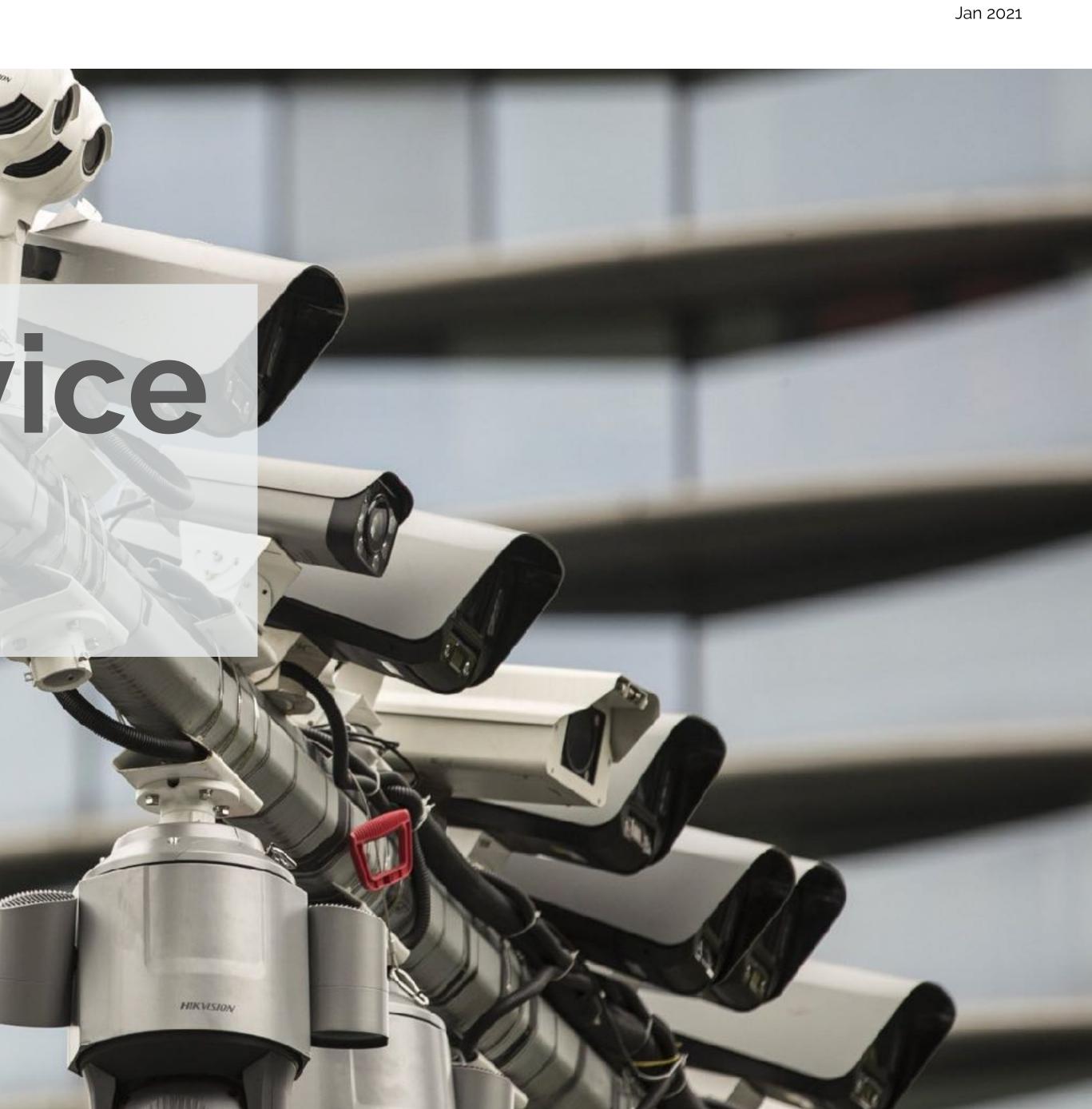
# Edge on-device Al

#### 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.

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	Sm_All	
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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)

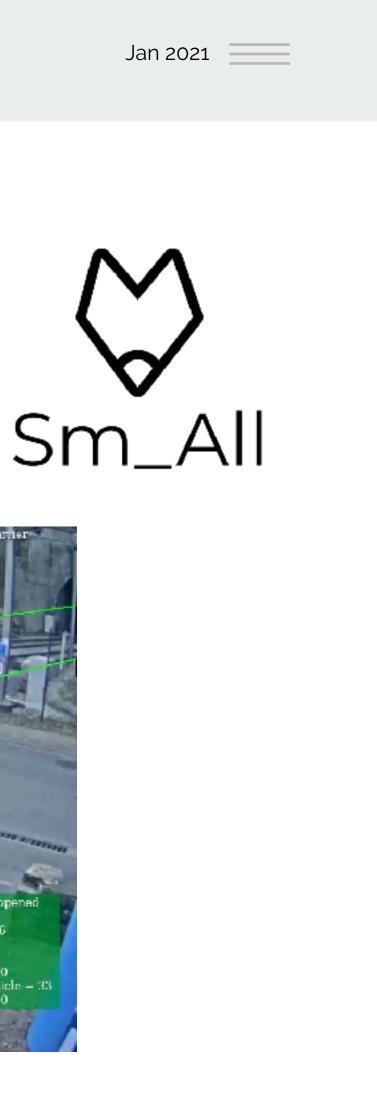


## **Example of complex detection scenarios**



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

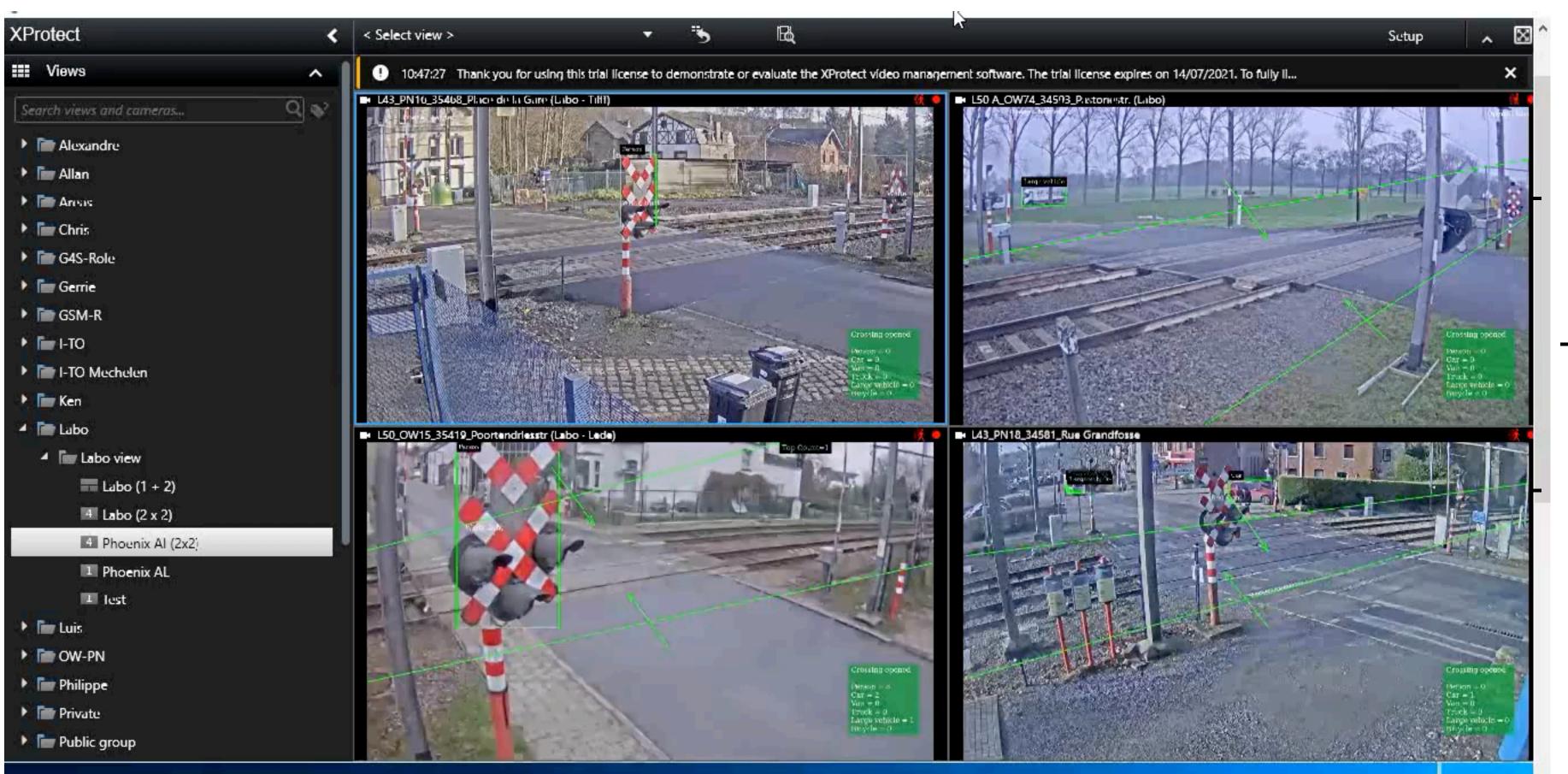
Ongoing danger zone calculation (because of snow)



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



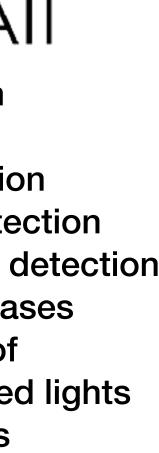
### Milestone (XProtect) integration on existing cameras



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

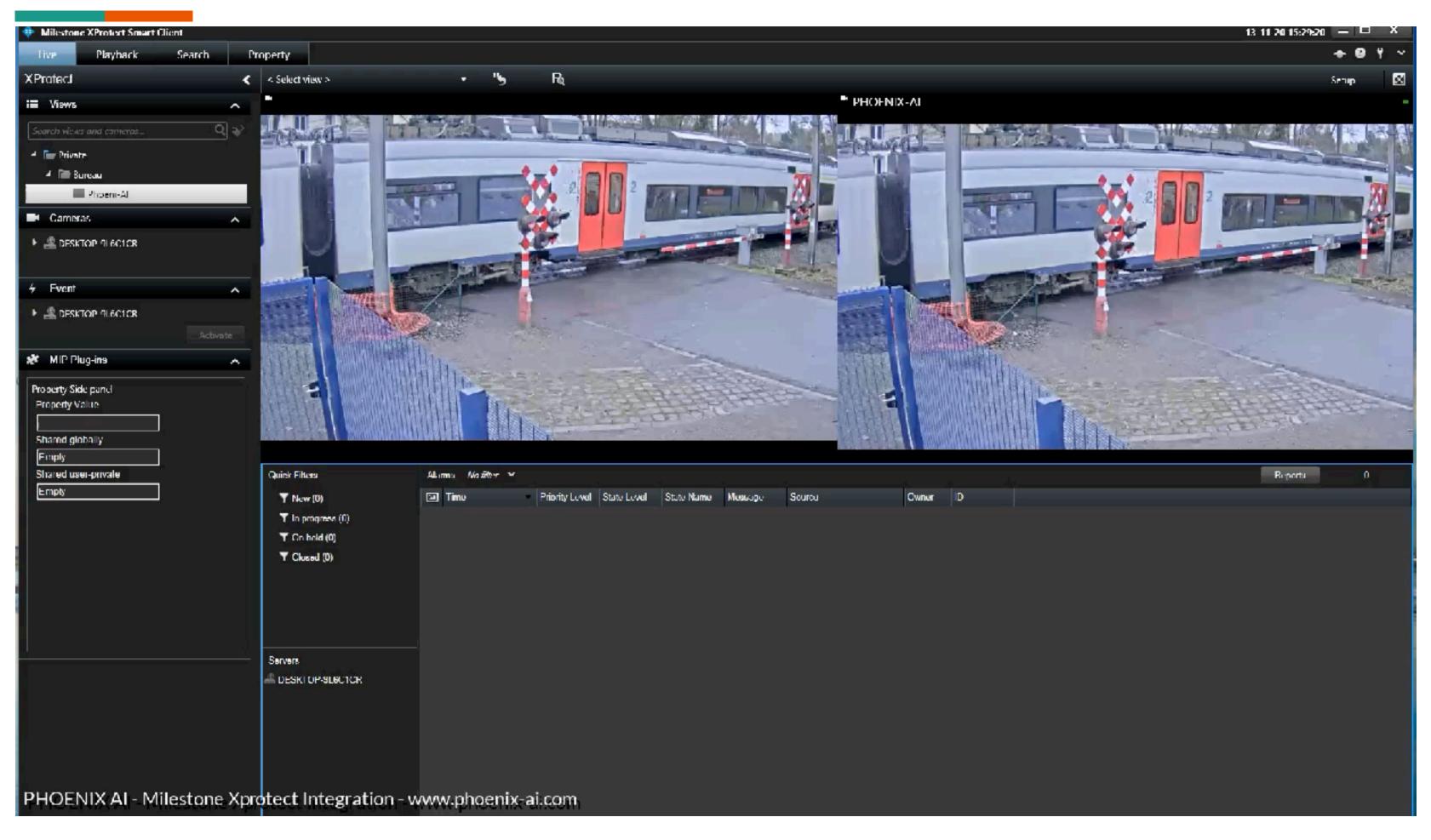
Sm\_All

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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