



# Edge on-device AI

To make all cameras smart (finally)!



# Edge on-device AI & Deep Learning



4Gb RAM  
128Gb encrypted SSD  
PoE In  
PoE Out



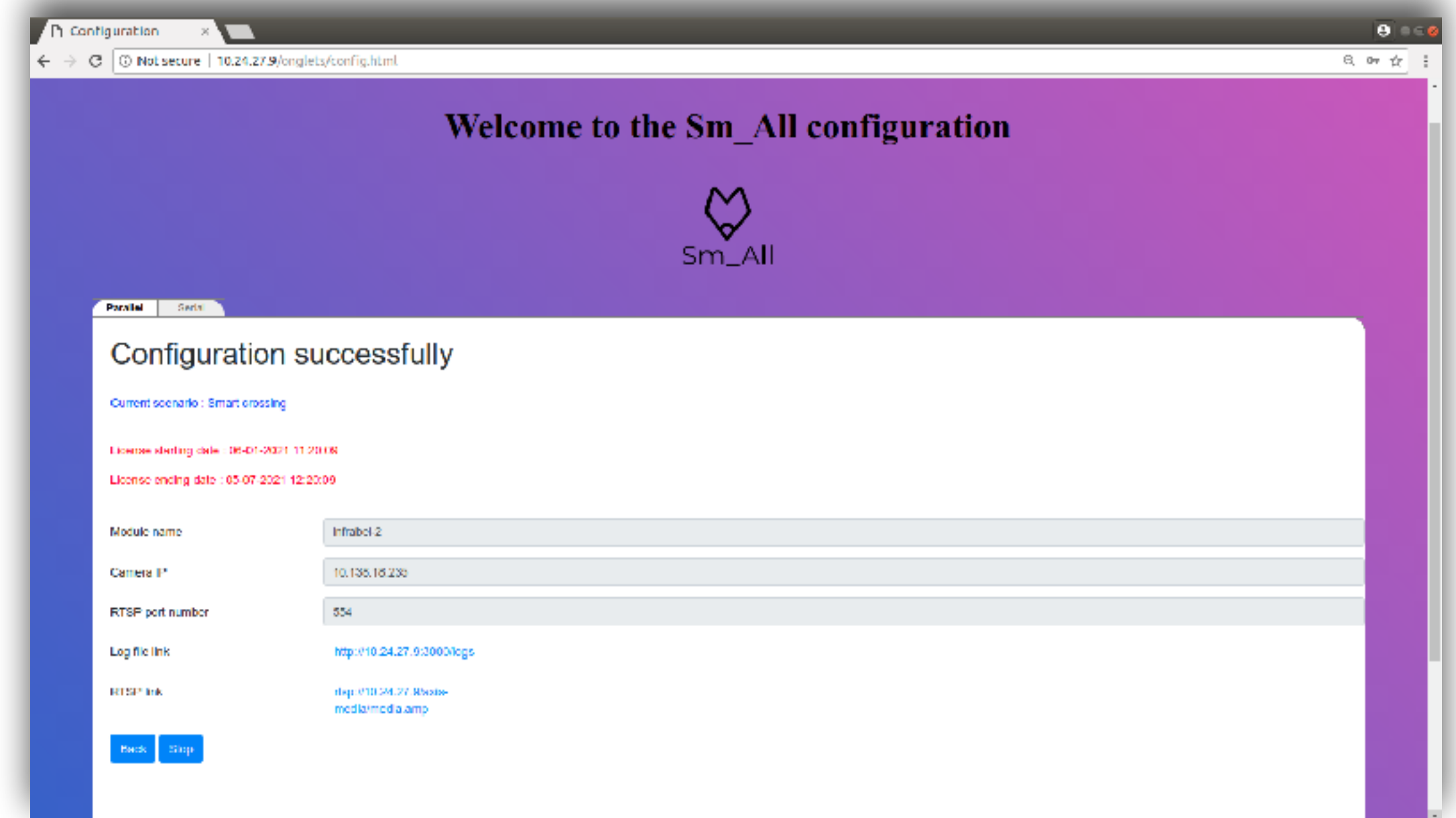
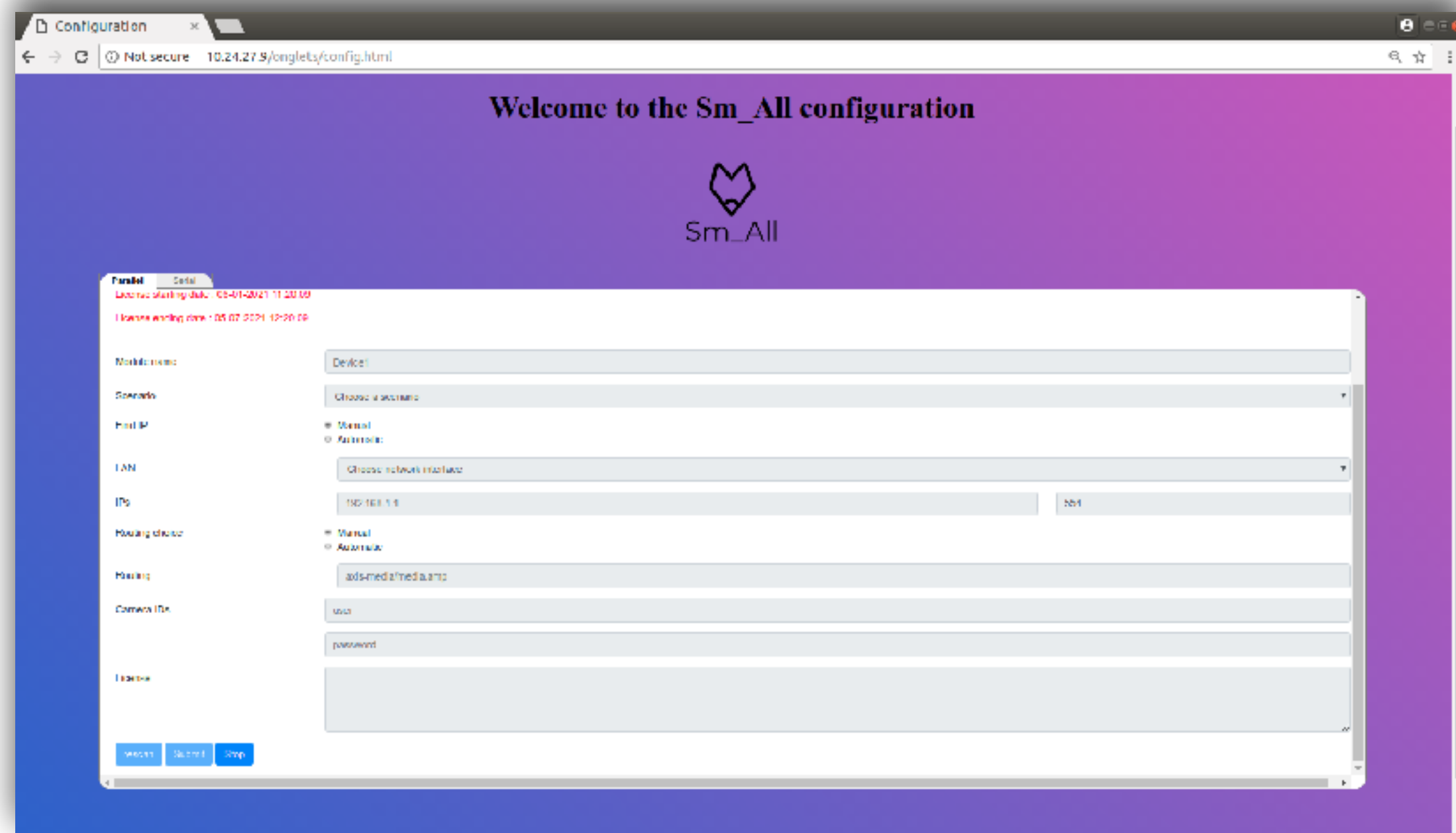
# Easy http setup

Every module has its own OLED display with IP, etc.

The self setup is accessible via http ( <http://IP> )

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.**



# AI detection models



Every module has automatic detection features like:

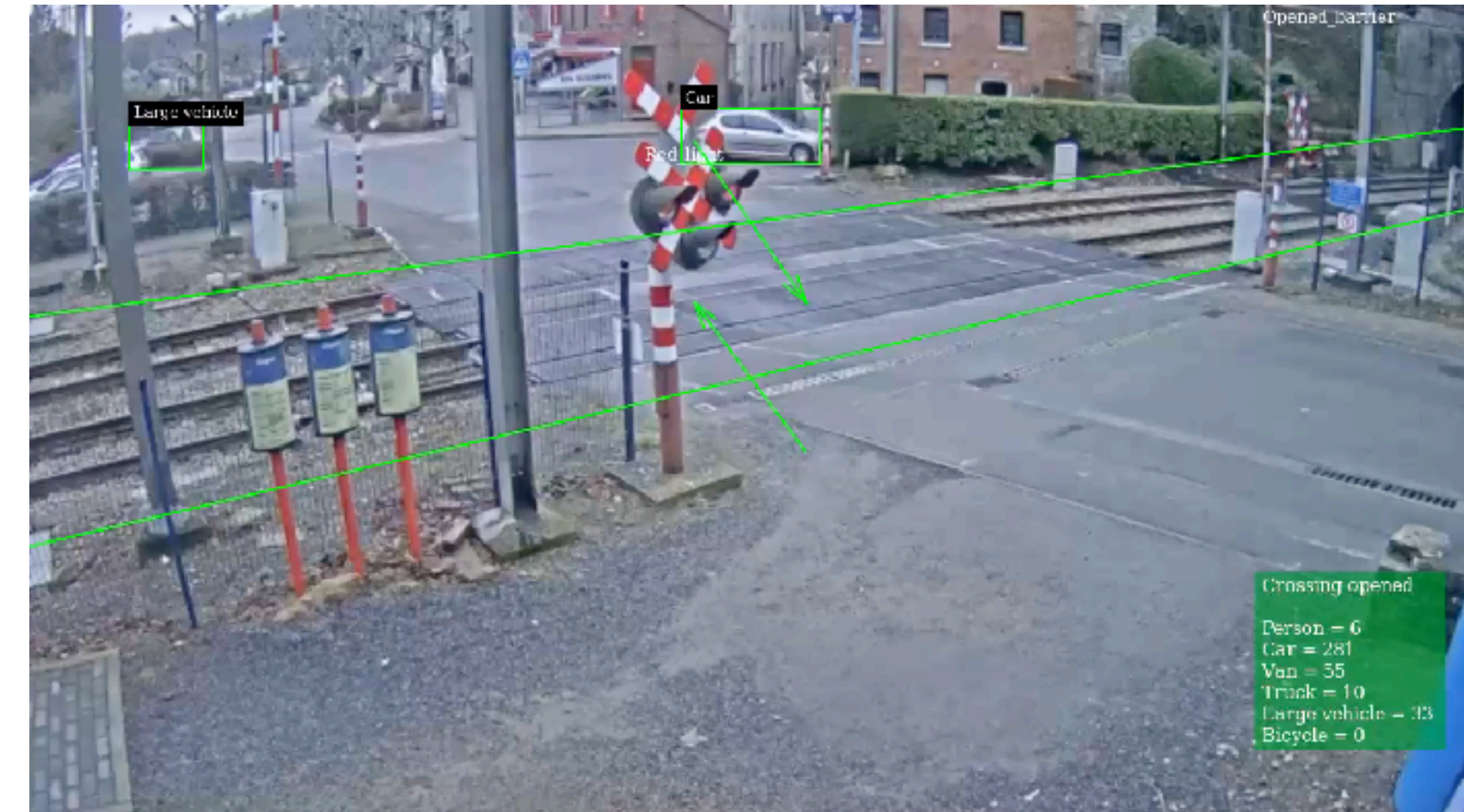
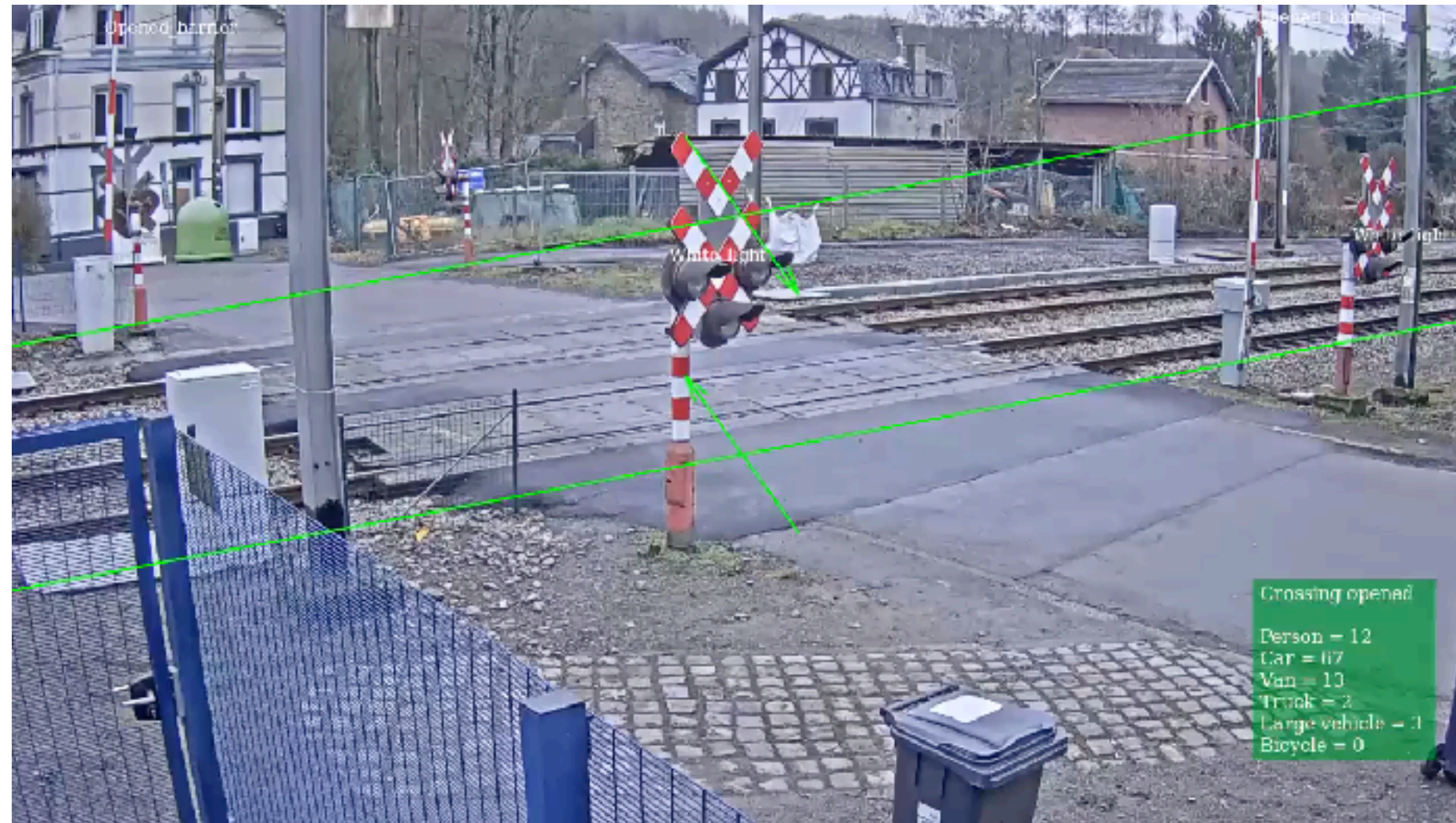
- vehicles (12 different types)
- Persons
- object stop or movement (persons and vehicles)
- Direction of movement (persons and vehicles)
- Traffic lights phases, barriers phases (closed or open)
- Danger zone detection on top of the crossing path (needs 2-3 min from startup)

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.



# 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



Sm\_AI

Ongoing danger zone calculation

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

Every module is inserted into Nice as a regular camera

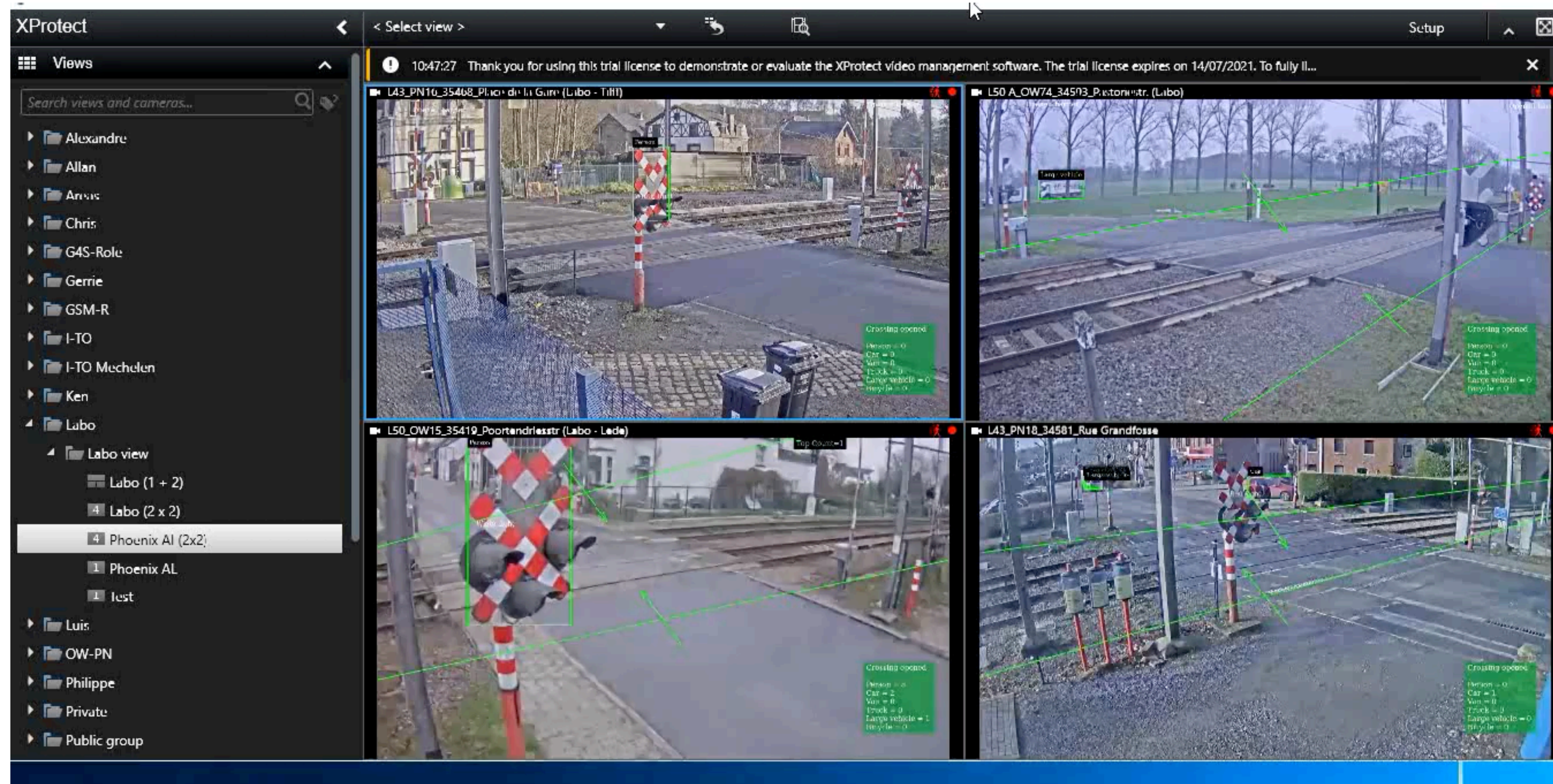


# Milestone (XProtect) integration on existing cameras



Sm\_AI

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



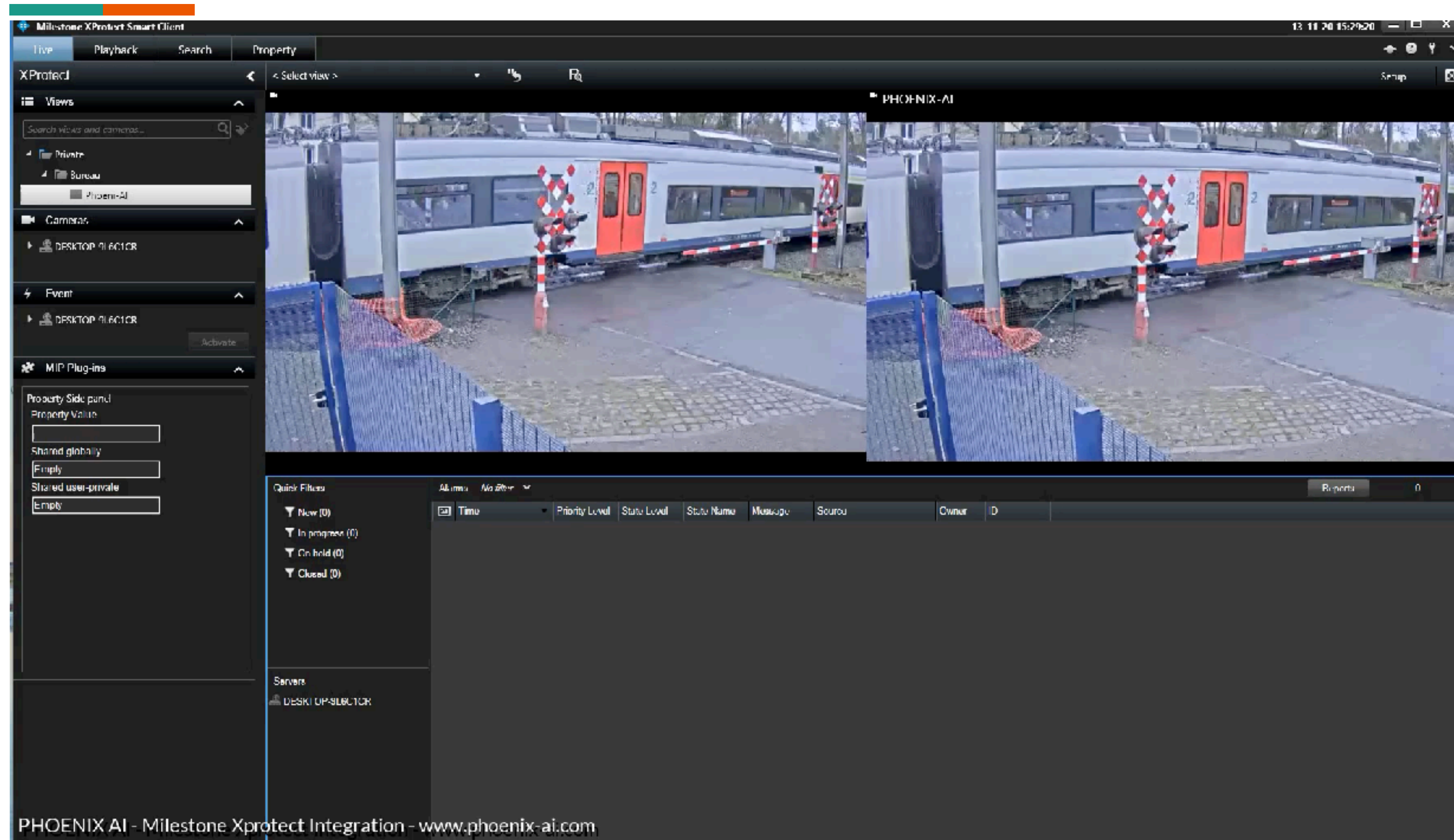
Every module runs Milestone Plugin on ARM with Deepstream 5. No extra server needed.



# Milestone (XProtect) integration on existing cameras



- Identification of passing through
- Alerts management



Reception of configurable alerts in Milestone





# Thanks



**Laurent RENARD**  
**CEO & Founder**  
[laurent@phoenix-ai.com](mailto:laurent@phoenix-ai.com)