



Person recognition & tracking

Every camera. One identity. A full timeline.

Face recognition · new-person detection · cross-camera movement history — on your own LAN

8-16

cameras per server

100 %

local data

40+

images analysed / s

< 1 s

to recognise a face

Your existing cameras become an identity-aware security system

ZoneX-Vision reads the video streams of ordinary surveillance cameras — IP or analog behind an encoder — recognises the people in them against your own database of faces and identities, flags anyone it has never seen before, and follows each person from camera to camera. Ask for anyone's day and you get a timeline: which cameras, which zones, from when to when.

Who is it?

Each face is compared with the enrolled identities — employees, visitors, a watchlist — and labelled on the live image in under a second. Look-alikes are kept apart by design.

Is this someone new?

A clear, unknown face seen for a few seconds becomes a new, auto-detected identity and raises an alert. You name it, classify it or merge it later in two clicks.

Where did they go?

All cameras on the site share identities. The movement timeline shows a person's path across cameras and zones, with the time spent in each, for any day you choose.

Even from behind

When a face is hidden — back turned, head down — the person is still followed by body tracking and, optionally, by a same-day clothing signature learned from their own face.

No cloud, no subscription, no images leaving the building: the server runs on a PC in your LAN.

What you get

1 Live view

All cameras in a grid or one at a time, with colour-coded labels: green = known by face, yellow = probable by clothing, orange = new / unknown, red = watchlist, grey = still analysing. An activity badge shows that the AI really is working on each camera.

2 People directory

Every identity with its photos, category (employee, visitor, watchlist, banned, unknown), first and last seen, number of visits, and reference faces that improve automatically with each clear sighting.

3 Movement timeline

By camera or by zone, zoomable, with the time spent in each place and a day-by-day history. Wrong attributions are corrected with 'Not him' and reassigned.

4 Alerts

New person, watchlist or banned person seen, possible duplicate identity, camera offline, AI engine problem — in the application and in the health monitor.

5 Zones

Group cameras into zones (Reception, Workshop, Exterior...) and read the timeline per zone.

6 Camera management

RTSP / ONVIF streams, connection test, per-camera recognition settings (crowd mode, minimum face size, match threshold, analysed frame rate, new-identity policy).

7 Monitor

CPU, memory, GPU load / temperature / clock, per-camera frame rate and AI state, stream health, live log with filters — everything a technician needs.

8 Roles & privacy

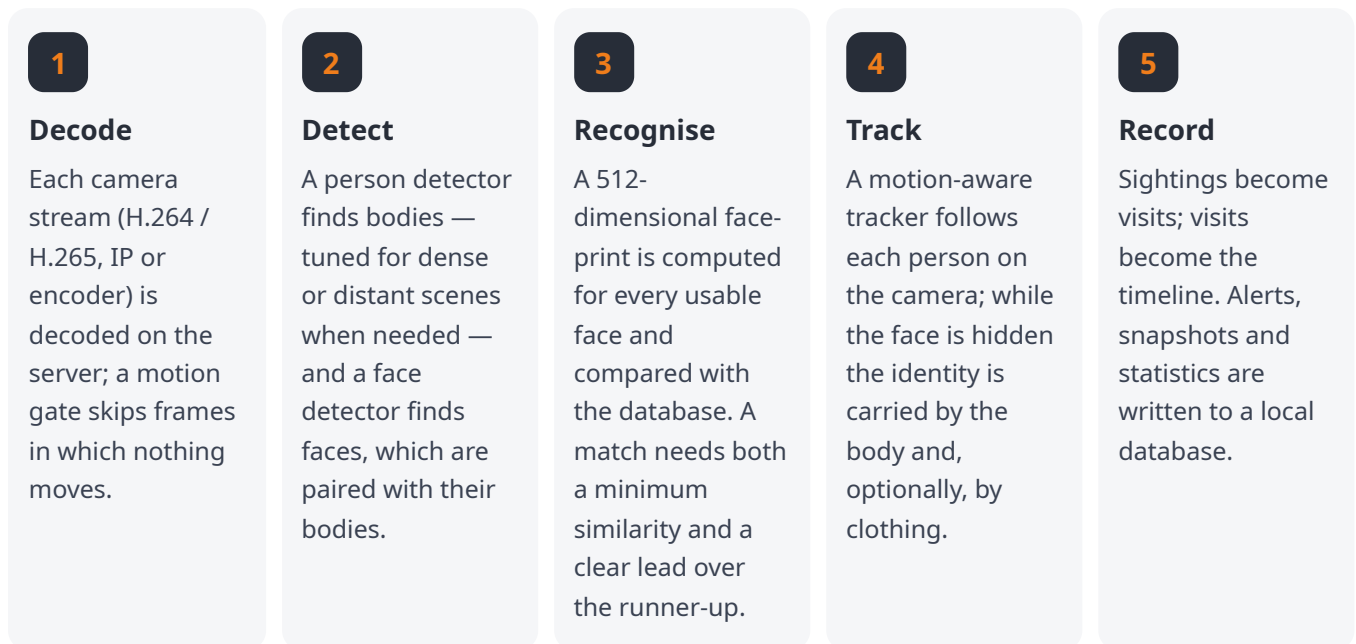
Admin, operator and technician roles; technicians see positions only, never names. Configurable retention; one-click deletion of a person and all their data.

9 Robust in real rooms

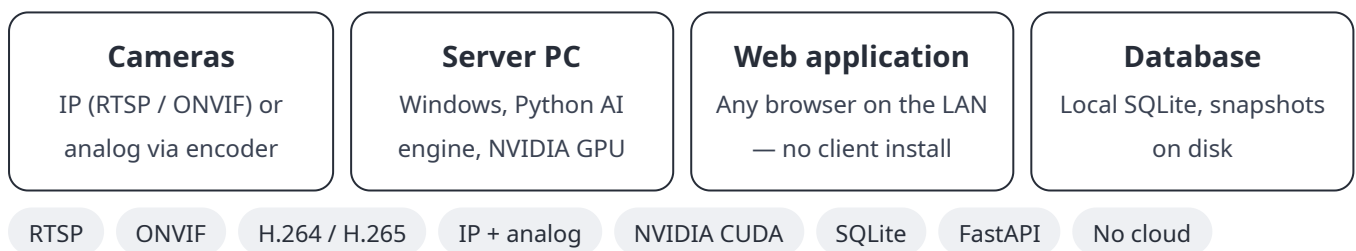
Static objects (chairs, speakers, parked scooters) are filtered out; motion-gated analysis keeps an idle camera nearly free of cost; stalls and reconnections are handled automatically.

HOW IT WORKS

From video stream to identity in five steps



Architecture



AI models: InsightFace face detection and ArcFace face-prints · YOLOX person detector · clothing re-identification model. All run locally with onnxruntime on the GPU (or CPU for small sites).

Built for real sites

Workshops & factories

Know who entered each area and when; spot strangers on the floor; reconstruct a shift.

Offices & reception

Recognise staff and regular visitors, detect newcomers, measure time on site.

Retail & showrooms

Identify returning customers and flagged individuals; understand paths through the store.

Sites with mixed cameras

Works with the cameras you already own — IP and analog — with per-camera tuning for soft or distant images.

Requirements

Server	Windows 10/11 64-bit, 16 GB RAM, SSD
GPU	NVIDIA (GeForce RTX / Quadro, 6 GB+) recommended; CPU-only for 1–2 cameras
Cameras	RTSP / ONVIF, 1080p recommended, main stream ≥ 4 Mbit/s
Network	Wired LAN; the web app is reached at http://server:8080
Clients	Any modern browser — PC, tablet or phone on the LAN

Delivery & services

Installation on your server, camera onboarding and tuning, enrolment of your staff, operator training, and a maintenance plan with updates. Deployment typically takes one day for up to 16 cameras.

Let's see it on your cameras

Book a demonstration on your own site: we connect two of your cameras and show recognition, new-person detection and the movement timeline live.

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