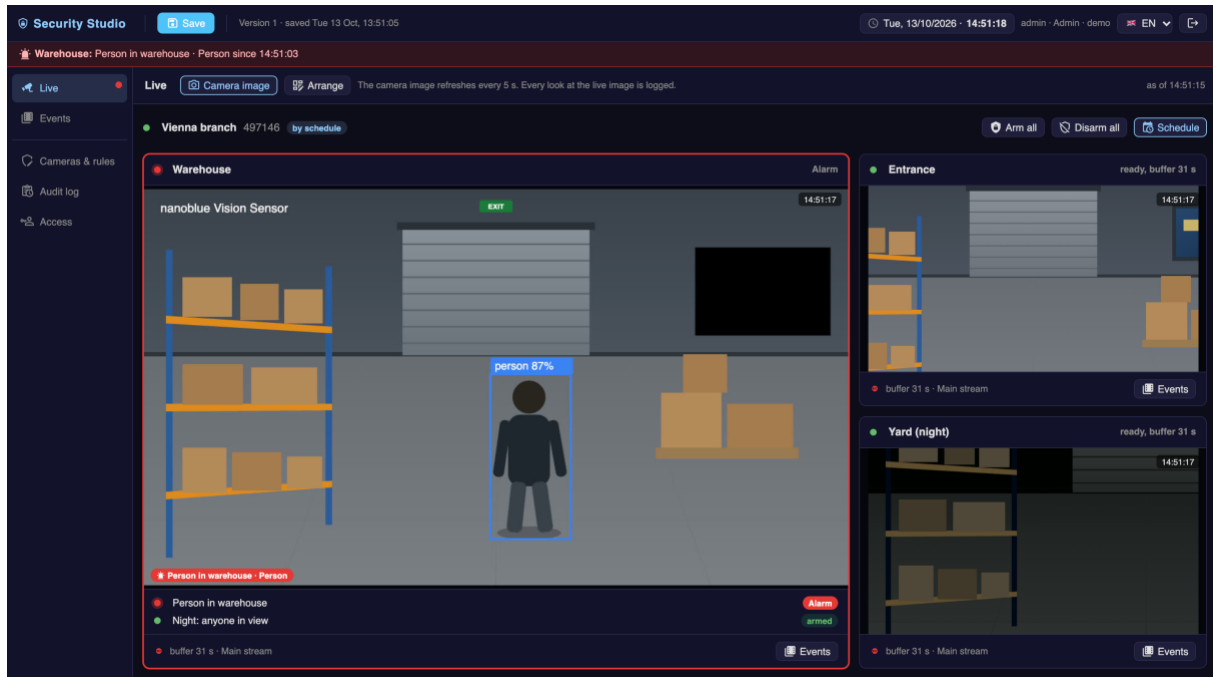


//nanoblu

nanoblu® Security Studio

Event-driven video recording with the nanoblu Vision Sensor – with alarms, retention periods and access log



Live view, freely arranged: the warehouse with an alarm shown large, entrance and yard next to it; privacy zone blacked out, arm/disarm per site.

What it is about

Security Studio turns the nanoblu Vision Sensor into a lean video surveillance system. The camera itself detects people, vehicles or objects. When a rule applies – such as “person in the warehouse after closing” – a clip with pre-roll and post-roll is created and the people in charge are notified immediately via Telegram with a photo.

Only what triggers an event is recorded – no continuous recording. Retention periods, privacy zones, user permissions and a complete access log are built in from the start. Set-up and evaluation are done centrally in the browser via the nanoblu portal.

How it works

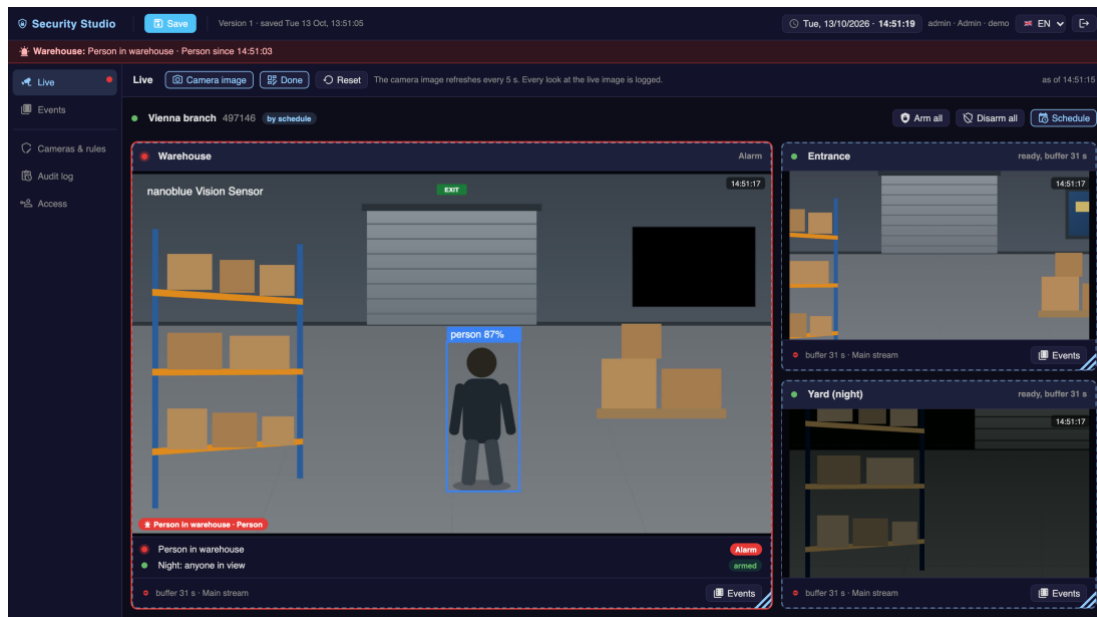
Where	What happens
Camera (Vision Sensor)	detects people and objects with built-in AI and provides the video image
nanoblu media player on site	checks the rules, keeps the last seconds in memory and cuts the clip when an event occurs – without re-encoding, even without internet
nanoblu Core (cloud)	collects the clips encrypted, prepares them for the browser, blacks out privacy zones, raises alarms, deletes after the retention period and logs every access

The evidence is therefore not only kept in the monitored room: if the player is stolen or destroyed, the clips are already in the cloud.

Key features

Live view

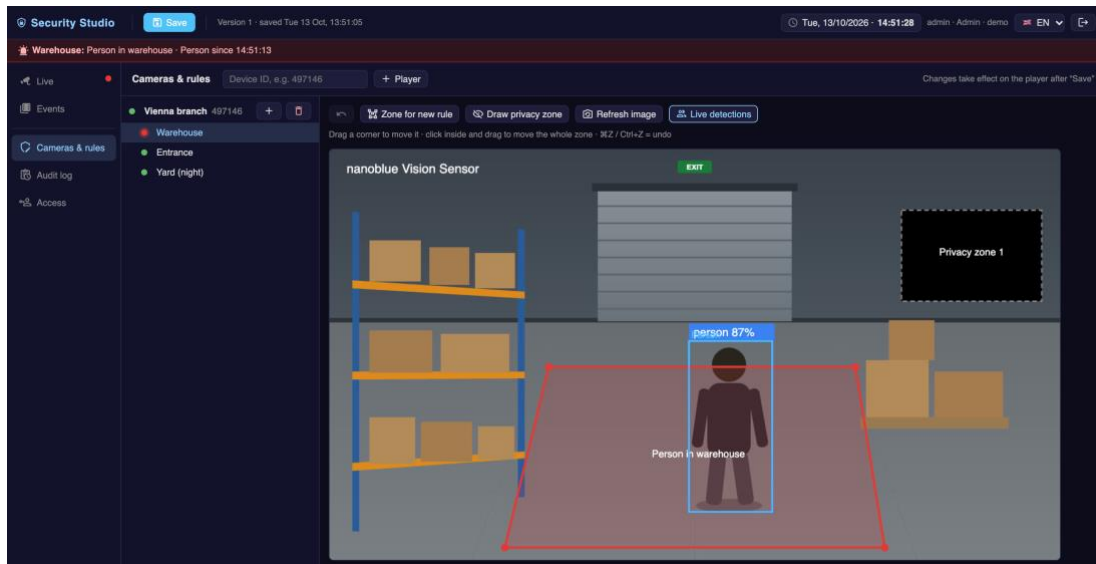
- **All cameras at a glance:** current camera image, active alarms, status of every rule (armed, disarmed, alarm) and whether recording is running.
- **Free arrangement:** move tiles by drag & drop and resize them by dragging the corner – important cameras large, others small. Tiles snap to a grid and never overlap.
- **Saved per user:** everyone sees their own arrangement, on any computer; larger tiles automatically get a sharper image.
- **Date and time of the player** are always shown in the header – with a warning if a player's clock deviates.



Arranging: drag a tile by its header to move it, drag the bottom-right corner to resize it.

Rules

- **Object in zone or anywhere in view:** zones are drawn directly on the camera image; each rule can have its own zone.
- **Objects:** person, car, truck, bicycle, motorcycle, bus, dog, cat, backpack, handbag, suitcase – selectable individually.
- **Minimum duration and “left behind”:** e.g. only after 2 seconds in the zone; an object that does not move for 5 minutes triggers “left behind”.
- **Armed by schedule:** always, by time windows per weekday (also overnight, e.g. 20:00–06:00) or manually only.
- **Arm all / disarm all** per site with one click – or from the Interactive UI and the Show Controller. The setting remains until switched back to “Schedule”.



Rule editor: zone of the “Person in warehouse” rule, privacy zone over the window to the neighbouring building, detected person live (example image).

☒
Person in warehouse

Zone
Alarm
Redraw zone

Objects
Person
Car
Truck
Bicycle
Motorcycle
Bus
Dog
Cat
Backpack
Handbag
Suitcase

At least this long in the zone
2
s
☐ motionless (left behind)

Armed
always

Notification
☒ notify (Telegram with photo, browser push)
as alarm

Title
Warehouse: {regel}

Text
{objekt} at {zeit} ({sicherheit}) - {player}
Placeholders: {kamera} {regel} {objekt} {sicherheit} {zeit} {player} - empty = default text
Warehouse: Person in warehouse
Person at 14:51 (87 %) - Vienna branch

☒
Night: anyone in view
anywhere in view
armed

Objects
Person
Car
Truck
Bicycle
Motorcycle
Bus
Dog
Cat
Backpack
Handbag
Suitcase

At least this long in view
0
s
☐ motionless (left behind)

Armed
by schedule
Mo Tu We Th Fr Sa Su 20:00 06:00 X
Mo Tu We Th Fr Sa Su 18:00 08:00 X
+ Time window
End before start = overnight (e.g. 20:00 – 06:00)

Notification
☒ notify (Telegram with photo, browser push)
as alarm

Title
{kamera}: {regel}

Text
{objekt} ({sicherheit})
Placeholders: {kamera} {regel} {objekt} {sicherheit} {zeit} {player} - empty = default text
Warehouse: Night: anyone in view
Person (87 %)

Rules with objects, minimum duration, schedule and their own alarm notification including preview.

Recording

- **Pre-roll and post-roll:** the clip starts e.g. 10 seconds before the detection and ends 15 seconds after the last one.
- **Long events** are continued seamlessly in a follow-up clip after the maximum clip length.
- **Original quality:** the camera stream is recorded without re-encoding (1080p or 4K HEVC); the Core creates a playable version for the browser.
- **Fail-safe:** if the camera’s main stream fails, the recorder automatically switches to the sub stream.
- **No audio:** audio recordings are legally sensitive in video surveillance and are deliberately not stored.

CAMERA AND RECORDING

Player name:

Camera name:

ID:

Camera IP:

The camera's RTSP stream is recorded without re-encoding. If it fails, the recorder falls back to the other stream.

MQTT-Topic:

Recently seen on the player: visionsensor/results/data

Record: ☒ Save clip with pre- and post-roll (otherwise event + alarm only)

Pre-roll / post-roll: s · s · max. clip length s

Retention: hours

Default 72 h (data protection). After that clips are deleted automatically unless protected.

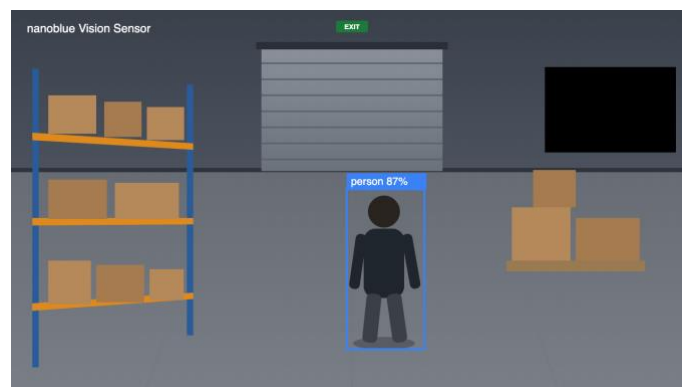
Detection: Min. confidence · Reference point

Report recording failure: ☒ via Telegram and browser push if the camera stops recording for more than 1 minute. Alarm notifications are set per rule.

Camera and recording: stream, pre-/post-roll, maximum clip length, retention and notification on recording failure.

Alarms

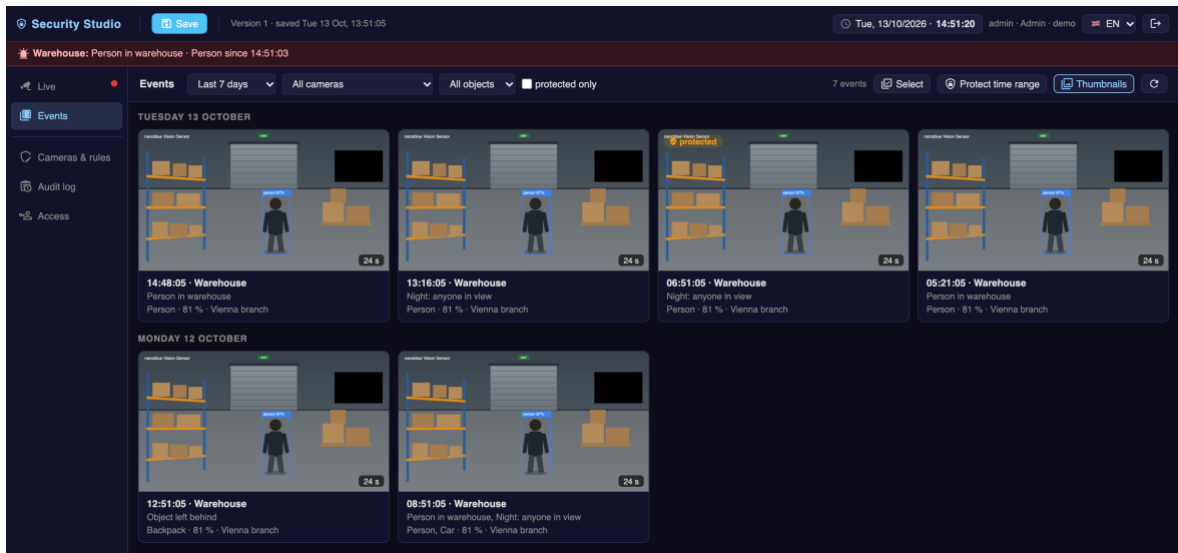
- **Telegram with photo:** the photo shows the moment of triggering – with the detected person or object.
- **Browser push** on PC and smartphone via nanoblu Notify; recipients and filters are managed centrally.
- **Own texts per rule** with placeholders for camera, rule, object, confidence, time and site – optionally as an alarm or as a warning.
- **Calm under continuous activity:** the same rule reports at most every 2 minutes.
- **Technical notifications:** notice when a camera is not recording, and “recording again”.



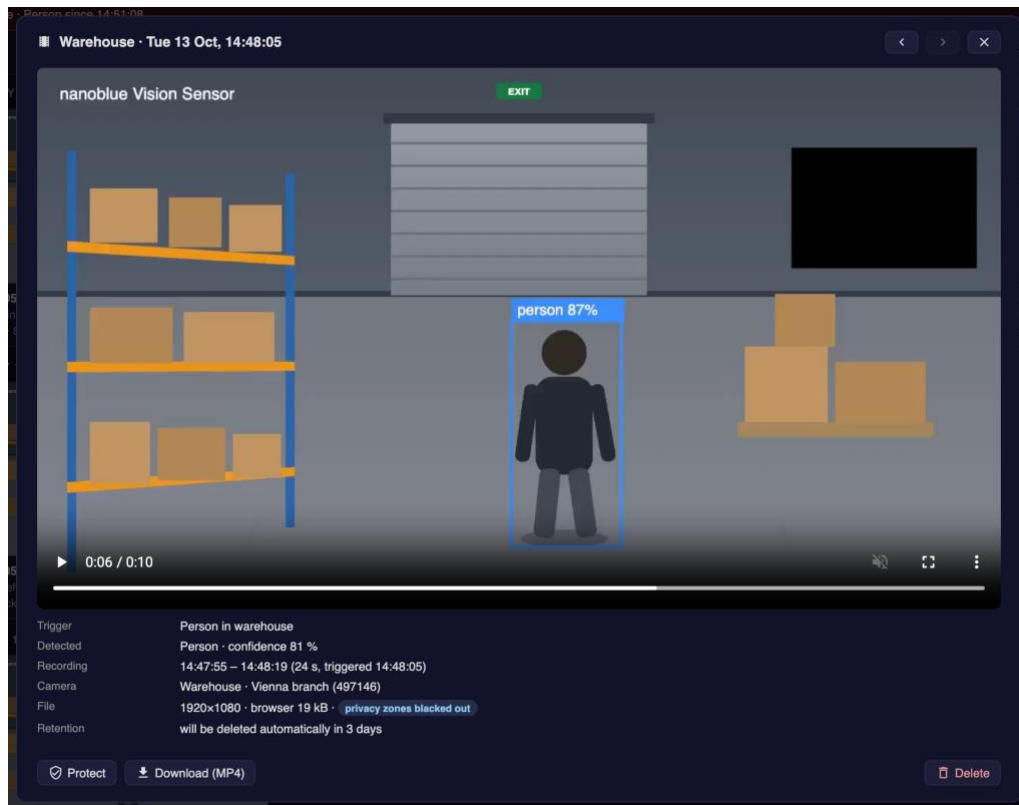
Alarm photo as received via Telegram (example image).

Events and clips

- **Overview** as tiles with thumbnail or as a compact list, grouped by day; filter by camera, object and “protected only”.
- **Search by date and time:** from–to, accurate to the minute.
- **Play and scrub** directly in the browser; download as MP4 as well as the unaltered camera original for evidence.
- **Protect:** protected clips are not deleted automatically – individually, for an entire time range or for a selection, always with a reason.
- **Select several** and protect or delete them together.



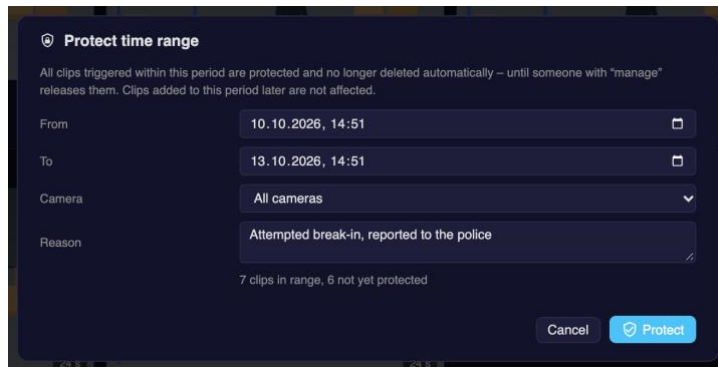
Events as tiles with thumbnail, trigger, object and duration.



Clip with trigger, recording period, retention and the actions protect, download and delete.

DATE	TIME	CAMERA	TRIGGER	DETECTED	DURATION
Tue, 13/10/2026	14:48:05	Warehouse Vienna branch	Person in warehouse	Person 81 %	24 s
Tue, 13/10/2026	13:16:05	Warehouse Vienna branch	Night: anyone in view	Person 81 %	24 s
Tue, 13/10/2026	06:51:05	Warehouse Vienna branch	Night: anyone in view	Person 81 %	24 s
Tue, 13/10/2026	05:21:05	Warehouse Vienna branch	Person in warehouse	Person 81 %	24 s
Mon, 12/10/2026	12:51:05	Warehouse Vienna branch	Object left behind	Backpack 81 %	24 s
Mon, 12/10/2026	08:51:05	Warehouse Vienna branch	Person in warehouse, Night: anyone in view	Person, Car 81 %	24 s
Sun, 11/10/2026	12:51:05	Warehouse Vienna branch	Person in warehouse	Person 81 %	24 s

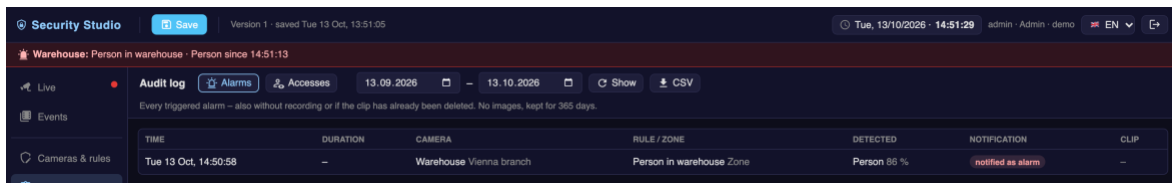
List without thumbnails with search by date and time.



Protect time range: keep all clips of an incident from deletion with one click.

Data protection

- **Events only:** no continuous recording, no audio.
- **Retention:** 72 hours by default, then deleted automatically. Longer periods only with a reason per camera; protected clips are kept until released.
- **Privacy zones:** neighbouring property, sidewalk or PIN pad are not analysed and are blacked out in clips, thumbnails, alarm photos and the live image. With privacy zones no unblacked original is kept.
- **Access log:** every view, download, live image, protection, deletion, arming/disarming and every change – with user, time and IP; entries cannot be deleted, export as CSV.
- **Secure transfer:** player and Core are connected via the nanoblue VPN; videos are loaded in the browser only via short-lived signed addresses.



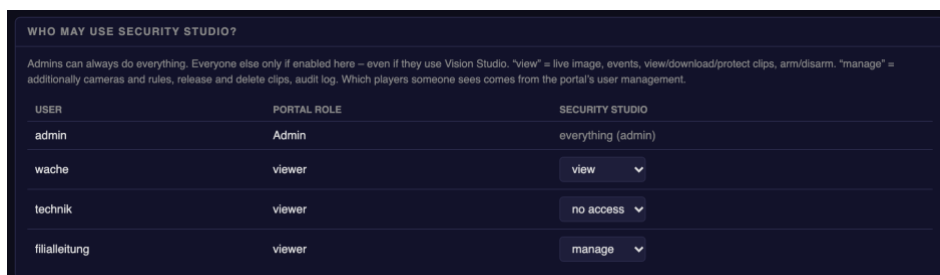
Access log: who viewed, protected or switched what and when.

Note: Signage of the video surveillance on site and the legal approval of the specific installation are the operator's responsibility (in Austria DSGVO §§ 12–13); we recommend consulting the data protection advisor.

Access and permissions

Security Studio has its own access: only admins and explicitly enabled users get in – even users of Vision Studio see no recordings without approval.

Level	May
view	live image, events, view, download and protect clips, arm/disarm
manage	additionally cameras and rules, release and delete clips, access log
admin	everything, including the permissions themselves



Permissions per user.

Reliable in operation

- **Autonomous:** rules, buffer and clips run on the player – even without internet. Clips stay there until the Core has collected them.
- **No alarm gets lost,** even short events of a few seconds are reported.
- **Time in view:** the studio shows the player's time and warns if it deviates – so that the timestamps of the recordings are correct.
- **Restart-proof:** rules and arming state are kept through power failures and restarts; a running clip is still completed.

Technology in brief

- nanoblue Vision Sensor: edge AI camera with its own AI processor (3 TOPS NPU), 8 MP, Gigabit Ethernet with PoE; object detection on the device, video stream via RTSP.
- Security Engine and recorder on the nanoblue media player; ring buffer in memory, clips on the NVMe, hardly any processor load (< 1 % of one core).
- Security Studio on the nanoblue Core; connection to the players encrypted via the nanoblue VPN.
- Web-based, integrated into the nanoblue portal, own access, multi-tenant with permissions per device; user interface in German, English and Spanish.

Typical applications

- Warehouses, workshops and technical rooms: alarm for people outside working hours.
- Shops and showrooms after closing, driveways and parking areas.
- Museums and exhibitions: areas in front of exhibits, objects left behind.
- Event venues and reception areas: trace incidents without continuous recording.