

Railway Stations Solution

eocortex



Berlin Hauptbahnhof

25 Aryan
ANIVERSARIO

VALUE ADDED IT SOLUTIONS

Railway Stations Tasks



Would you like to receive immediate notification of the CCTV system to the monitor, video wall, phone or e-mail:

- ✓ on smoke or fire?
- ✓ on crossing check line or perimeter?
- ✓ on objects left intentionally or accidentally in your building?
- ✓ on absence of an employee at his/her workplace (is he awake)?
- ✓ on shot fired, explosion, unusual loud noise?
- ✓ on accumulation of too many people?
- ✓ on exceeding the allowed length of the queue of passengers?
- ✓ on detection of malfunctions of CCTV cameras?

Railway Stations Tasks



Would you like:

- ✓ know the number of visitors to the railway station?
- ✓ find a person by the face?
- ✓ listen to the process of serving your passengers?
- ✓ quickly find children who are lost in the area of railway station?
- ✓ track the movement of suspicious individuals in the area of railway station?
- ✓ organize fully controlled and automated access of people and cars to the area?
- ✓ control the time spent by cars in your parking lot?
- ✓ provide streaming and video stream recording regardless of force majeure factors?
- ✓ cover a larger area of observation with fewer cameras?

Railway Stations Tasks




















If you answered "Yes"
to all or several questions,
then we have what you need.

Products for Your Tasks

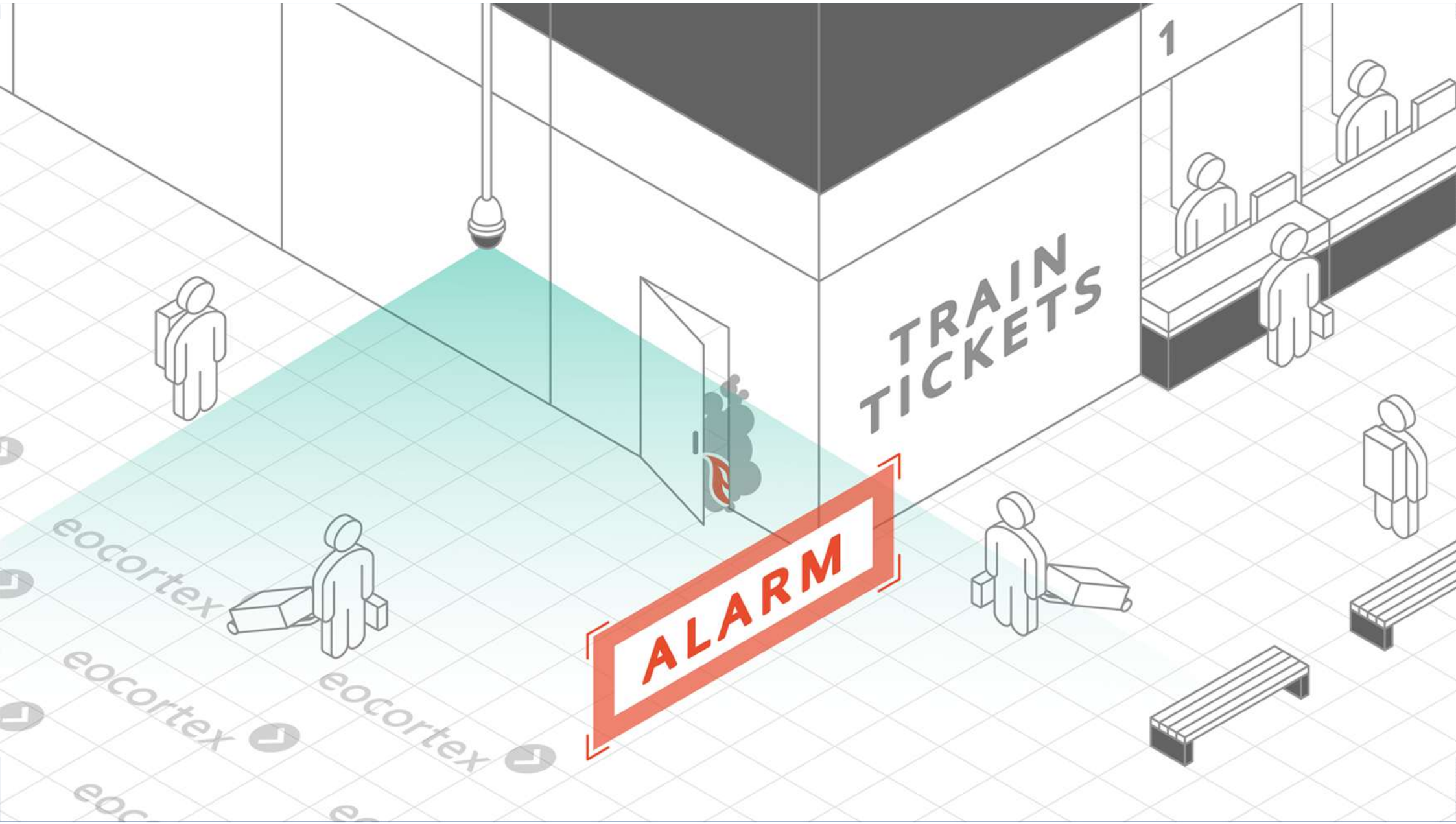


We have created a package of intelligent modules that solve your problems:

-  Smoke and Fire Detection
-  Tracking
-  Abandoned Object Detection
-  Face Detection
-  Suspect Search
-  Loud Sound Detection
-  Crowd Monitoring
-  Face Recognition
-  License Plate Recognition
-  People Counting
-  Audio Stream Processing
-  Personnel Monitoring
-  People Counting in Queue
-  Failover
-  PTZ camera control
-  Sabotage detection
-  Fisheye dewarping



Smoke and Fire Detection



TRAIN
TICKETS

ALARM

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Smoke and Fire Detection



Purpose

To avoid victims, loss of property and disasters caused by fires.

How it works

- ✓ In case of detection of "Smoke" or "Fire" events, you receive an immediate notification to your monitor, phone or e-mail.
- ✓ All module events are recorded in the Event Log for quick search in the archive.
- ✓ You can integrate the module with fire alarm or fire extinguishing system.

Your benefits

You do not need to look at video surveillance monitors 24 hours a day. Thanks to the Smoke and Fire Detection module, you can:

- ✓ prevent fire or smoke from spreading
- ✓ promptly inform passengers and staff in the danger zone for their subsequent evacuation and rescue
- ✓ investigate causes of fire or smoke



Tracking



Tracking



Purpose

To prevent terrorist acts, to minimize loss of property caused by the actions of third parties.

How it works

You receive an immediate notification to the monitor, phone or e-mail:

- ✓ when an object crosses the control line (intrusion into the territory, throwing of an object over a fence, etc.)
- ✓ when an object moves in the area
- ✓ when an object has remained in the area for a long time

You can search in the archive for fragments of a video on which an object entered the control zone.

Your benefits

You do not need to look at video surveillance monitors 24 hours a day. Thanks to the Tracking module, you can dispatch security forces to neutralize the intruder and thus:

- ✓ prevent a possible terrorist attack
- ✓ ensure the safety of passengers and staff
- ✓ safeguard your property

In addition, you can save server capacity by configuring video recording to start only when control events occur.



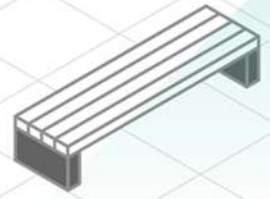
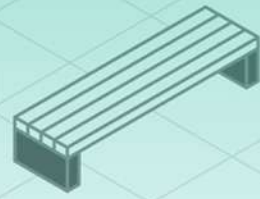
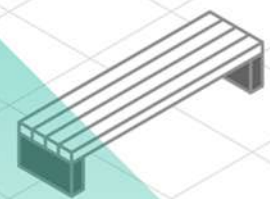
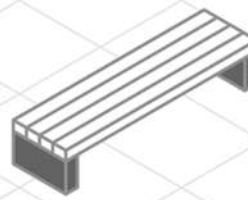
Abandoned Object Detection

TRAIN
TICKETS

1

2

ALARM
ABANDONED
OBJECT



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Abandoned Object Detection



Purpose

To prevent terrorist attacks, to eliminate the threat to life and health of passengers and staff.

How it works

You can:

- ✓ specify the area to search for the abandoned object on the camera image
- ✓ specify the duration of object location in the zone

When the control event is detected, you receive an immediate notification to the monitor, phone or e-mail.

Your benefits

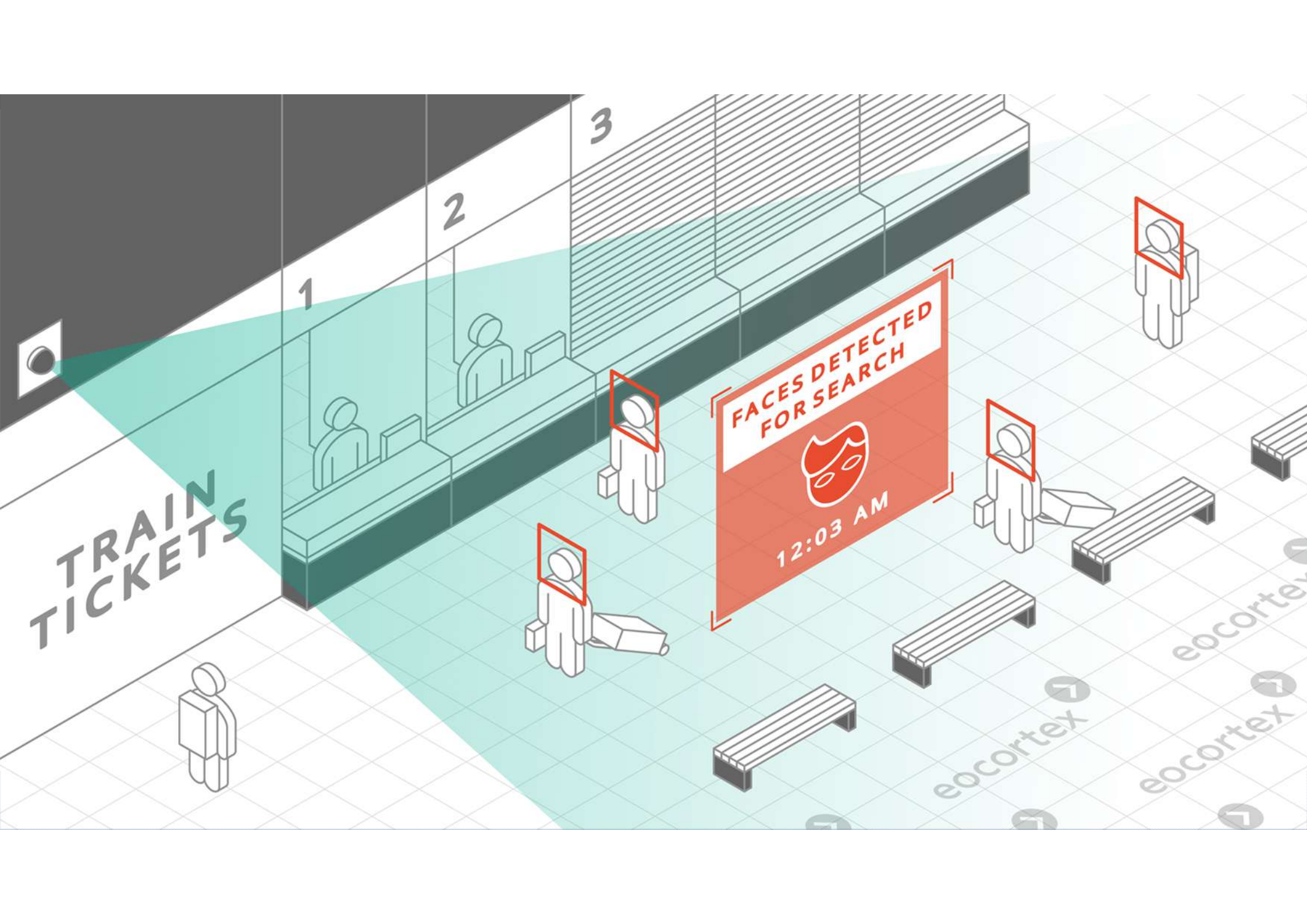
You do not need to look at video surveillance monitors 24 hours a day. Through the use of the Abandoned Object Detection module, you can:

- ✓ prevent possible terrorist attack
- ✓ promptly inform passengers and staff in the danger zone for their subsequent evacuation and rescue
- ✓ identify the person who left the object

Thus, you can save the lives and health of many people, avoid grave property loss. You can also help to neutralize a perpetrator.



Face Detection



TRAIN
TICKETS

FACES DETECTED
FOR SEARCH



12:03 AM

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1

2

3

Face Detection



Target

To minimize property loss, to avoid threats to life and health of passengers and staff.

How it works

You can:

- ✓ see all the faces which got into the field of vision of the camera
- ✓ receive automatic notifications upon detection of faces to the monitor, phone or e-mail
- ✓ generate reports about the persons whose presence was detected, indicating the detection time
- ✓ save detected faces in JPG format

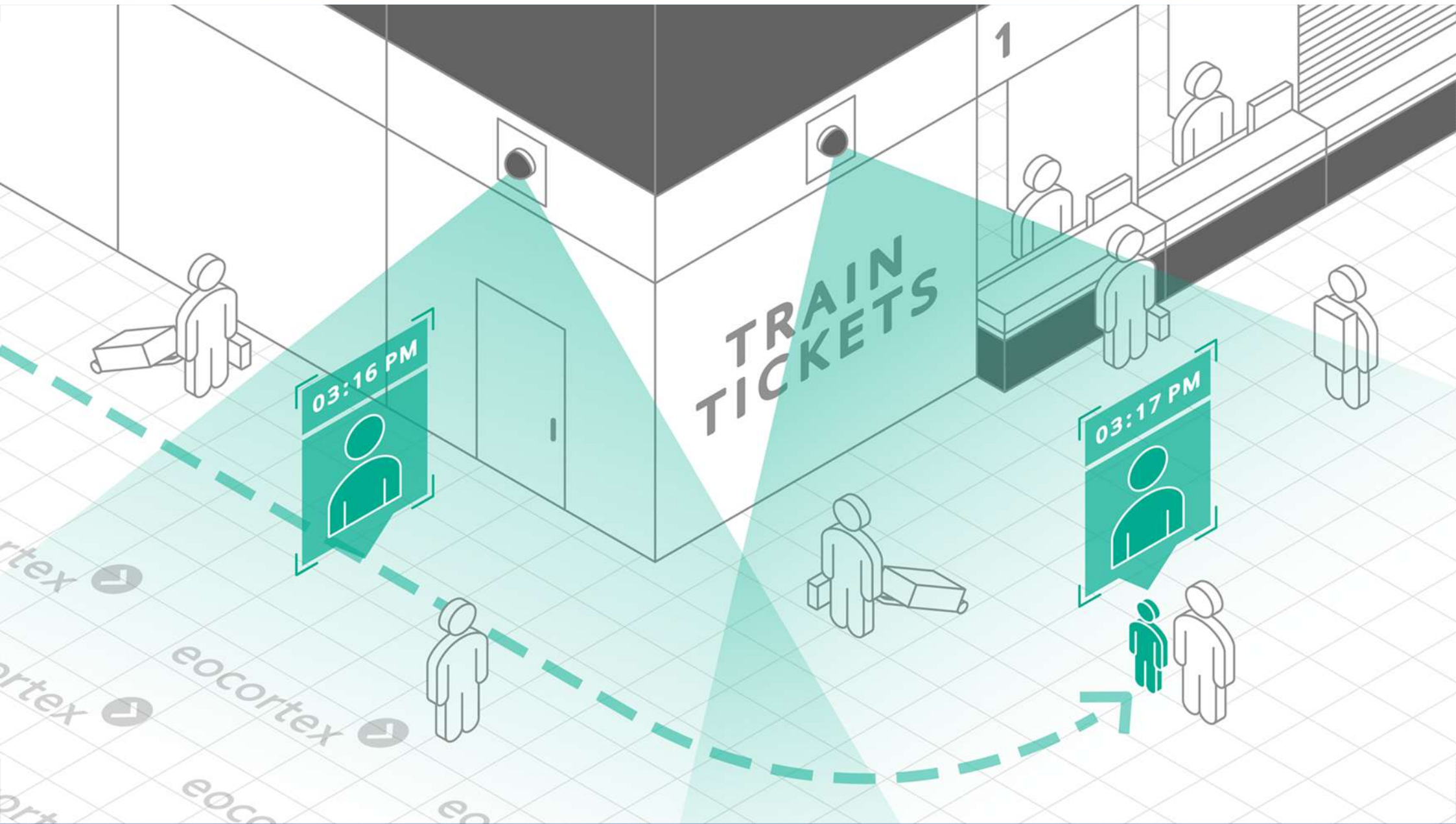
Your benefits

You do not need to look at video surveillance monitors 24 hours a day. Through the use of Face Detection module, you can find a suspect person by the face which got into the field of vision of the camera.

Thus, you can prevent the occurrence of grave dangers in the work of staff and in the operation of the infrastructure attributed to human factor.



Suspect Search



Suspect Search



Purpose

To prevent and investigate offenses, to find lost children in the railway station.

How it works

- ✓ You can choose a person on the recording from the camera.
- ✓ The program offers freeze-frames and video sequences with the images of lookalike people from different cameras in chronological order.
- ✓ The program draws the object movement trajectory on the pre-loaded plan of the premises.
- ✓ You can search for objects by their form, color, size, position in the frame in the video archive using downloaded photo.

Your benefits

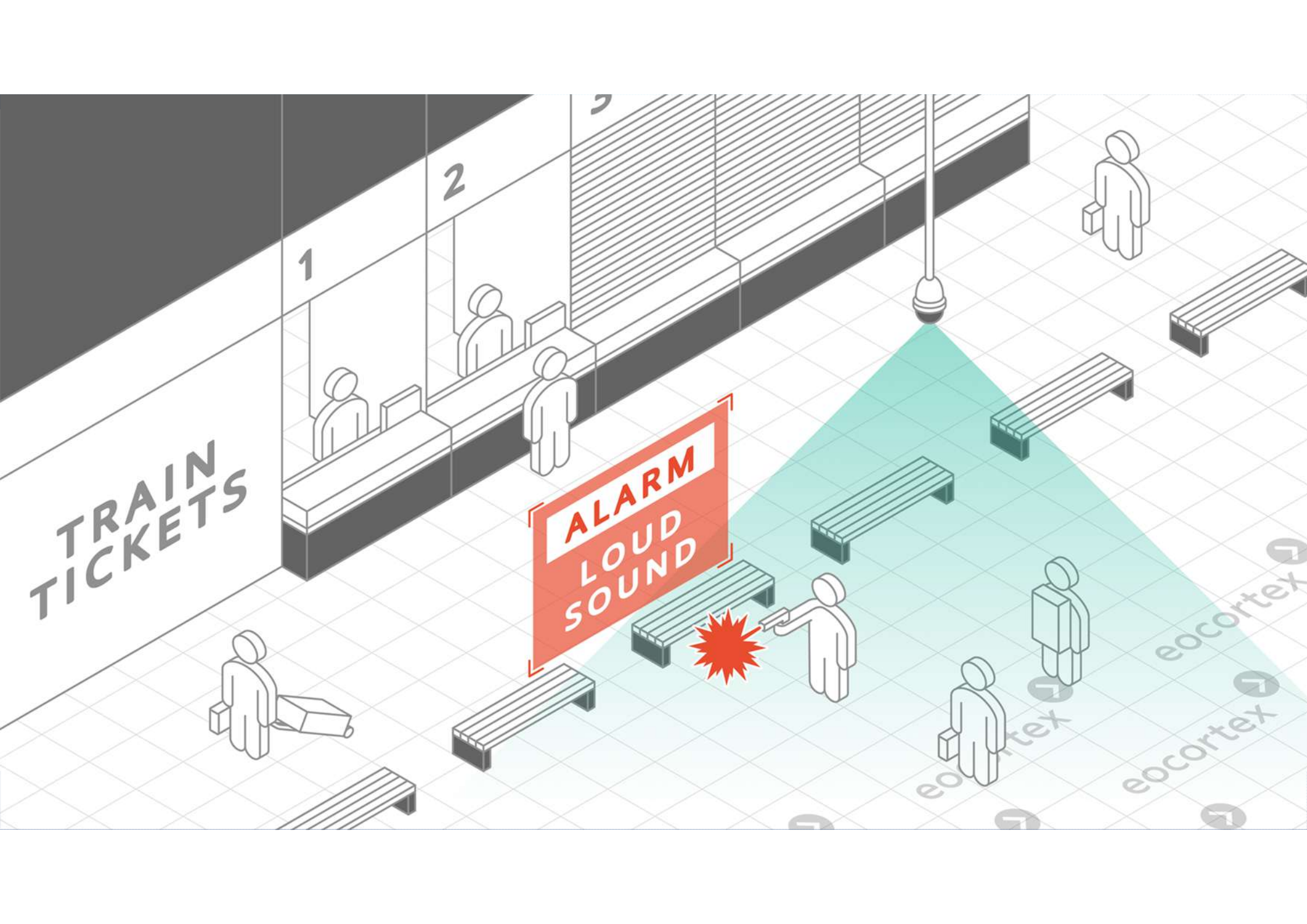
You don't have to spend time searching for frames with the right person in the video archive. With the Suspect Search module, you can reconstruct the route of this person in minutes in order to establish his/her location.

This will allow you to:

- ✓ quickly find a child lost in the railway station and return him/her to the parents
- ✓ quickly find a suspected offender and dispatch security forces to neutralize him/her



Loud Sound Detection



TRAIN
TICKETS

1

2

3

ALARM
LOUD
SOUND

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Loud Sound Detection



Purpose

To respond promptly to force majeure events, accompanied by a loud sound.

How it works

- ✓ When the sound pressure level detected by the camera microphone exceeds the preset value, you receive an immediate notification to the monitor, phone or e-mail
- ✓ If the exceeding of the preset sound pressure level is detected, the video recording to the archive starts automatically

Your benefits

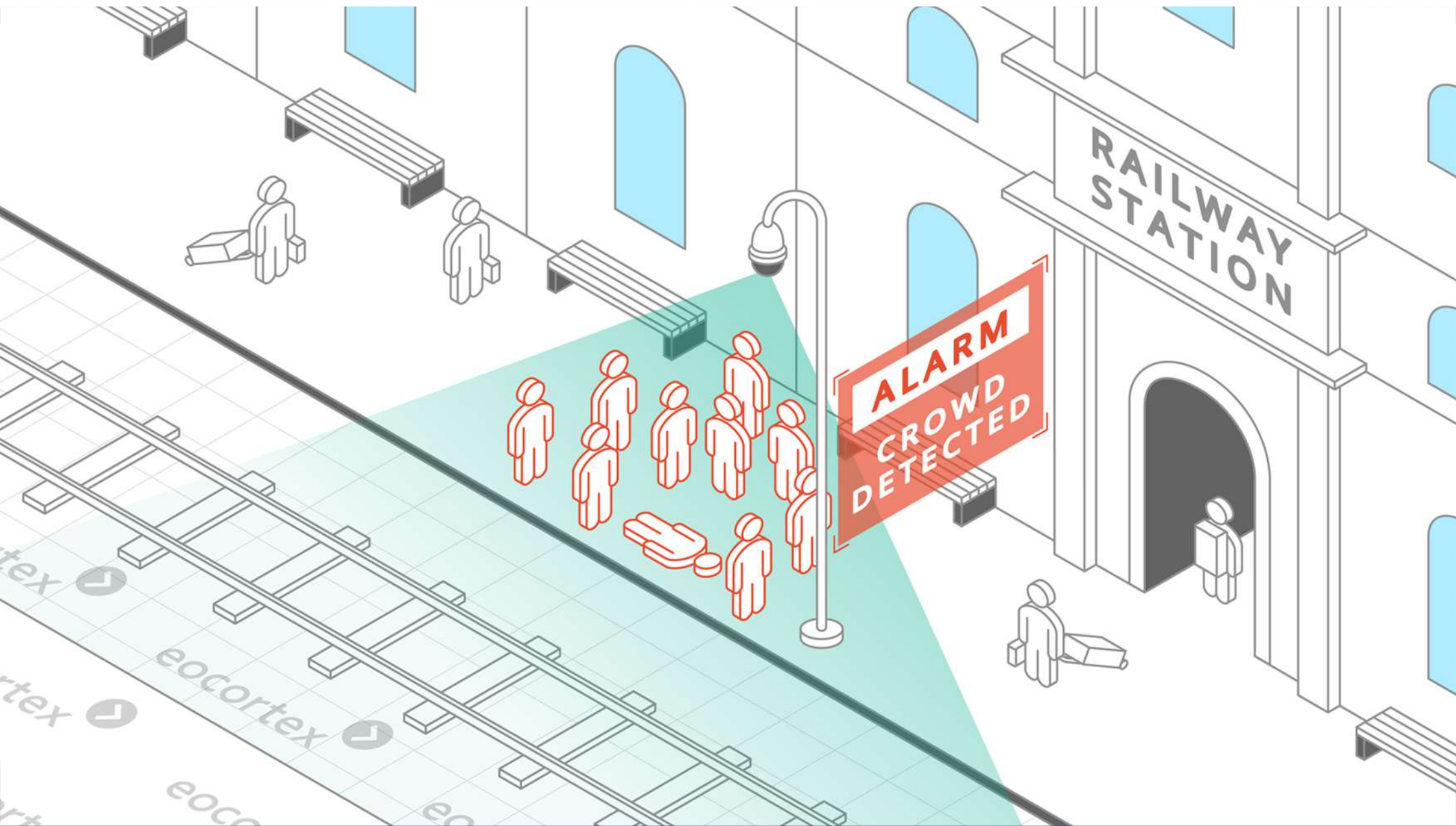
You do not need to look at video surveillance monitors 24 hours a day. Thanks to the Loud Sound Detection module, you can:

- ✓ identify the source of danger
- ✓ stop the service process if necessary

Thus, you can ensure the safety of your passengers and staff, and minimize damage to property.



Crowd Monitoring



Crowd Monitoring



Purpose

To prevent mass unrest and public disturbance.

How it works

You can:

- ✓ specify areas of the frame in which monitoring will be performed
- ✓ set two quantitative levels: "Attention" and "Alarm"

If one of the levels is exceeded, you receive an immediate notification to the monitor, phone or email.

You can plot graphs showing the number of people in a given area on the timeline.

Your benefits

You do not need to look at video surveillance monitors 24 hours a day. Thanks to the Crowd Monitoring module, you can:

- ✓ dispatch security forces to prevent mass unrest on the territory under your control
- ✓ make adjustments to the work of staff that serves passengers

Thus, you ensure the safety of passengers, staff and reduce your reputational risks.



Face Recognition



Face Recognition



Purpose

To organize 100% controlled access of people to the territory.

How it works

You can:

- ✓ integrate the module with the access control system
- ✓ create a database of photos of “trusted” and “blacklisted” people
- ✓ receive automatic notifications to the monitor, phone or e-mail about infiltration attempts perpetrated by people who do not have access rights
- ✓ search for fragments with the detected face in the video archive, search for people in the video archive using their photos

Your benefits

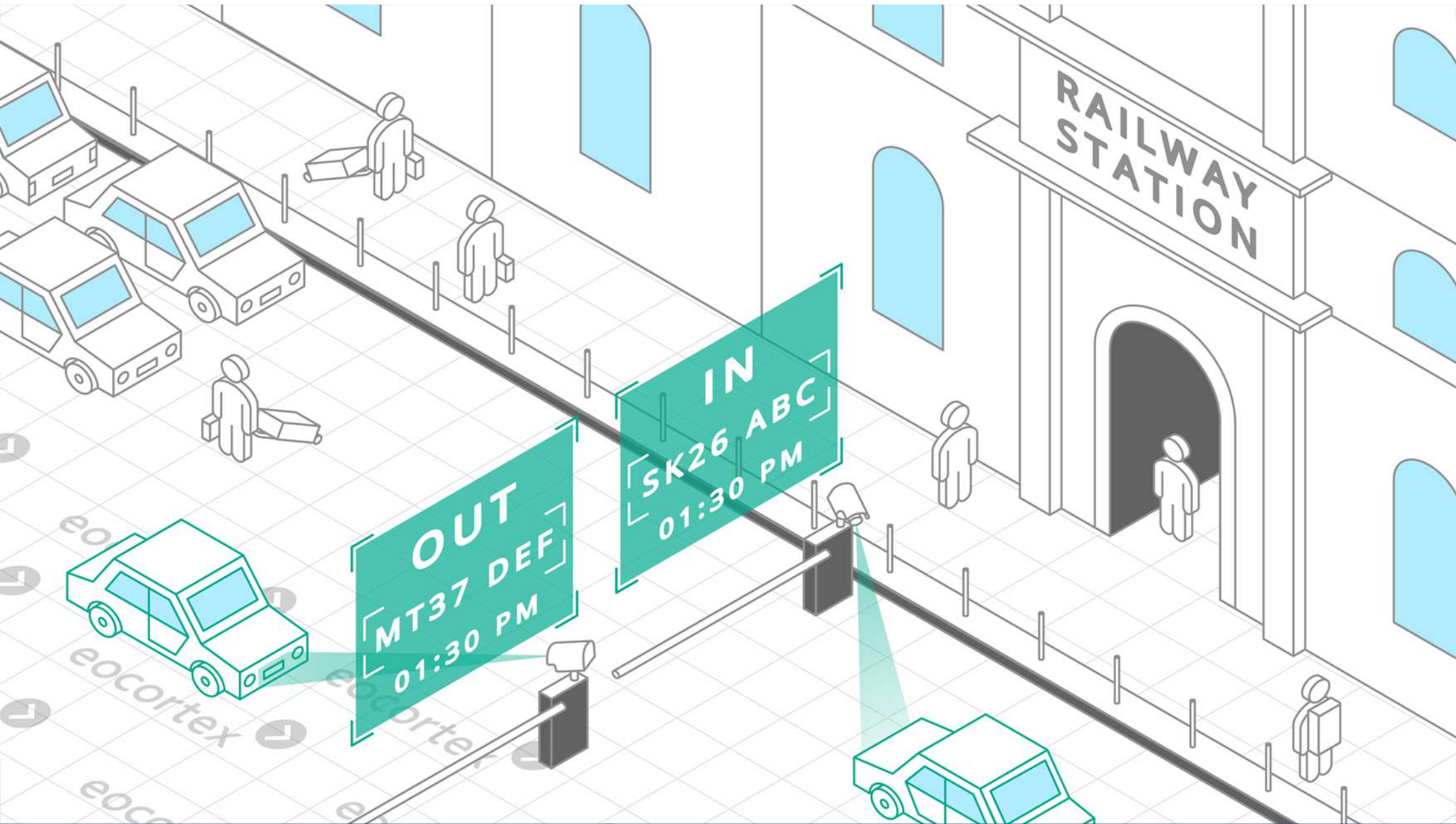
You do not need to use your staff to control the admission to all premises. Thanks to the Face Recognition module you can:

- ✓ provide automatic admission to the premises of those employees who have appropriate permission, and control the time they spend there
- ✓ prevent the unauthorized persons from entering the premises

Thus, you will be able to ensure a high level of security for passengers, staff, infrastructure.



License Plate Recognition



License Plate Recognition



Purpose

To organize fully controlled car access.

How it works

You can:

- ✓ add license plates to the database, create their "black" and "white" lists
- ✓ control the opening of a rising arm barrier
- ✓ save time and date of recognition, license plate, links to the corresponding video frame in the archive
- ✓ search for the license plates in the archive based on time and date
- ✓ upload data in XLS or CSV formats

Your benefits

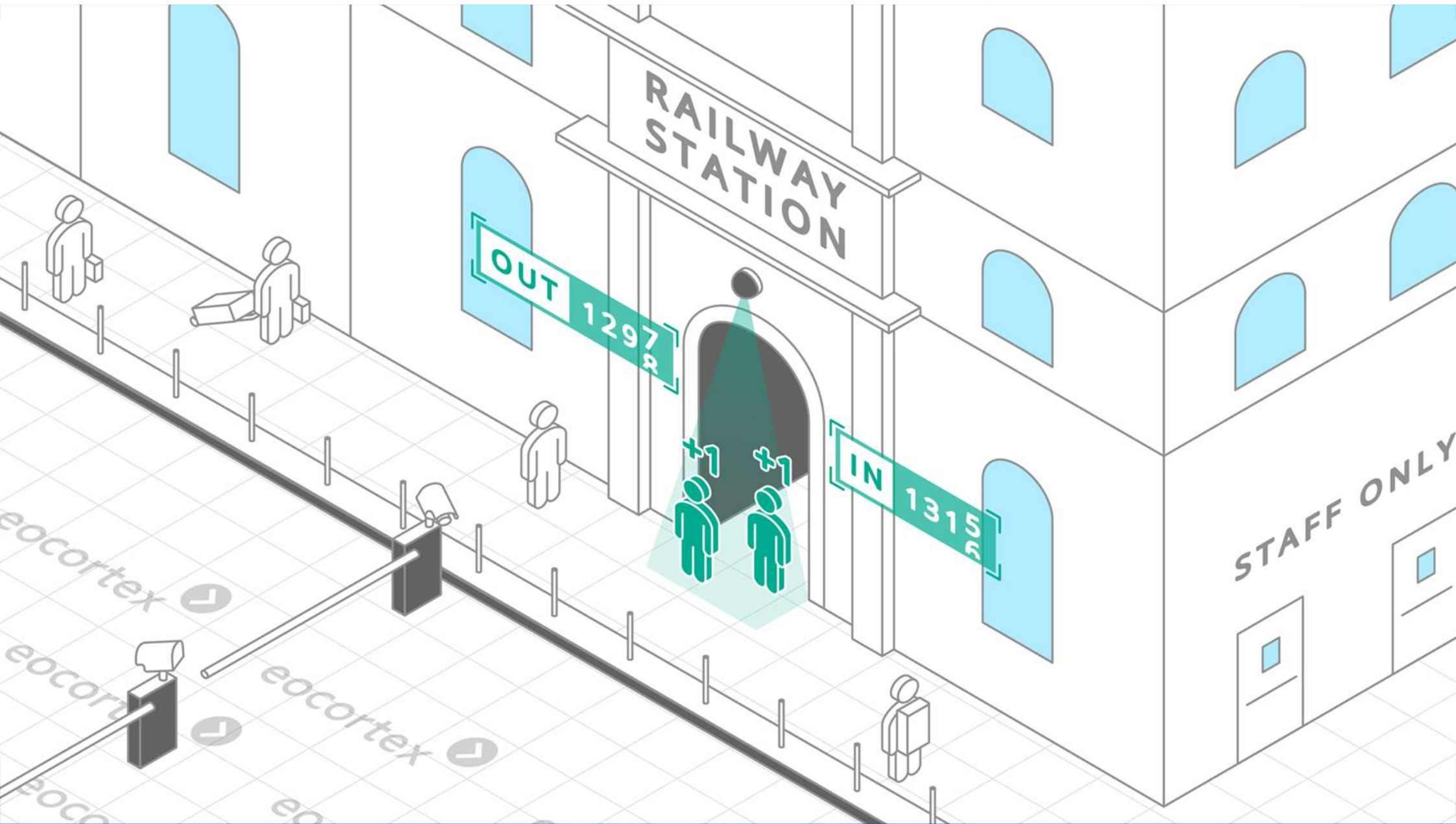
You do not need to use additional staff to control the license plates of entering vehicles. Thanks to the License Plate Recognition module, you can:

- ✓ ensure automatic admission of vehicles that have a permission to enter, and control the time they stay in the territory
- ✓ prevent the entrance of unauthorized vehicles

Thus, you can ensure the safety of passengers, staff and reduce staff costs.



People Counting



People Counting



Purpose

To increase the effectiveness of service process.

How it works

You can specify the minimum height of the objects to be counted in order to exclude, for example, shopping carts and baby carriages. The system counts all entering and exiting visitors.

You can:

- ✓ create reports and graphs broken down by hours, days, months, years based on the data from various cameras
- ✓ export data to CSV format

Your benefits

Thanks to the People Counting module, you estimate the number of your visitors with 99% precision. It allows you to regulate working schedules of service personnel.

Thus, you increase the cost effectiveness of your expenses and personnel efficiency.



Audio Stream Processing

TRAIN
TICKETS

1

2

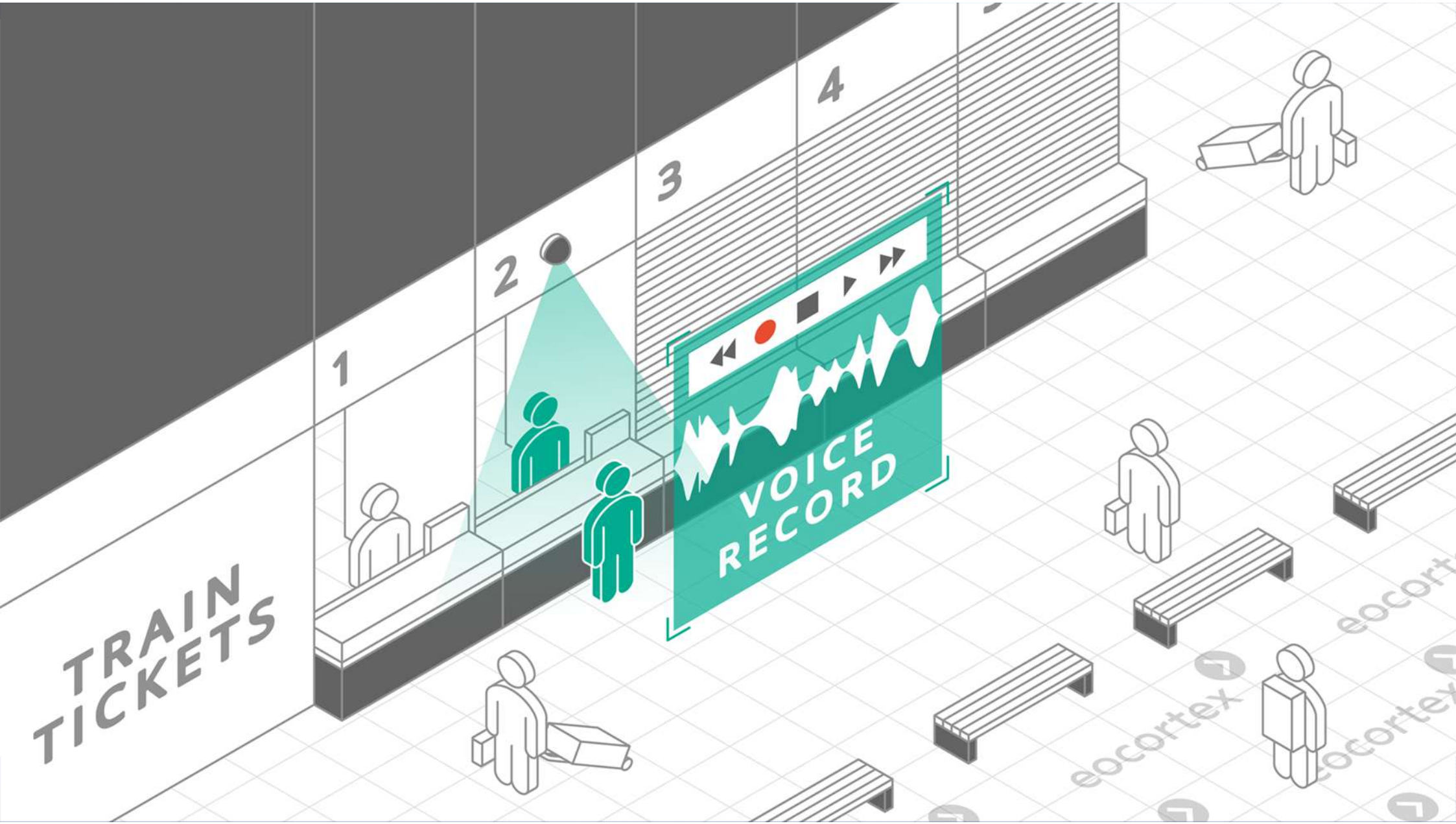
3

4

VOICE
RECORD

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Audio Stream Processing



Purpose

To prevent offences and improve staff performance.

How it works

- ✓ The program transmits and records audio from a camera with built-in microphone.
- ✓ You can also transmit the sound to the object of surveillance through the camera.
- ✓ You can equip the camera with a sound amplifying device if required

Your benefits

Thanks to the Audio Stream Processing module you can:

- ✓ prevent the development of conflict situations
- ✓ monitor the progress of service personnel performance
- ✓ prevent possible harmful actions of the subject being monitored, warning him that he is under surveillance

Thus, you prevent offences, ensure the safety of your business, and increase the efficiency of your staff.



Personnel Monitoring



TRAIN
TICKETS

1

2

3

4

ALARM
STAFF
MEMBER
ABSENT

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Personnel Monitoring



Purpose

To increase work performance of your staff, to reduce risks attributable to human factor.

How it works

- ✓ You can configure up to six staff activity monitoring zones for each camera
- ✓ The system captures the movement or its absence in the activity zone in real time
- ✓ When the controlled events are detected, you receive an immediate notification to your monitor, phone or e-mail
- ✓ You can create reports for each configured zone for a specified period of time

Your benefits

You do not need to look at video surveillance monitors 24 hours a day. Thanks to the Personnel Monitoring module, you can make effective management decisions related to:

- ✓ evaluation of time and quality of work of your employees
- ✓ optimization of your incentive program and work processes

Thus, you can improve your staff's work performance and reduce the risks of occurrence of dangerous situations related to the absence of personnel in the workplace.



People Counting in Queue



TRAIN
TICKETS

ALARM
7 people
Max - 5

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People Counting in Queue



Purpose

To increase sales proceeds and passenger loyalty.

How it works

You can:

- ✓ configure up to two queue detection zones for each camera
- ✓ set the threshold value of the number of people and duration of their stay in the queue

When the threshold value is exceeded, you receive an immediate notification to the monitor, phone or email.

You can create reports about the number of people in queues for any period of time, zone and facility as a whole.

Your benefits

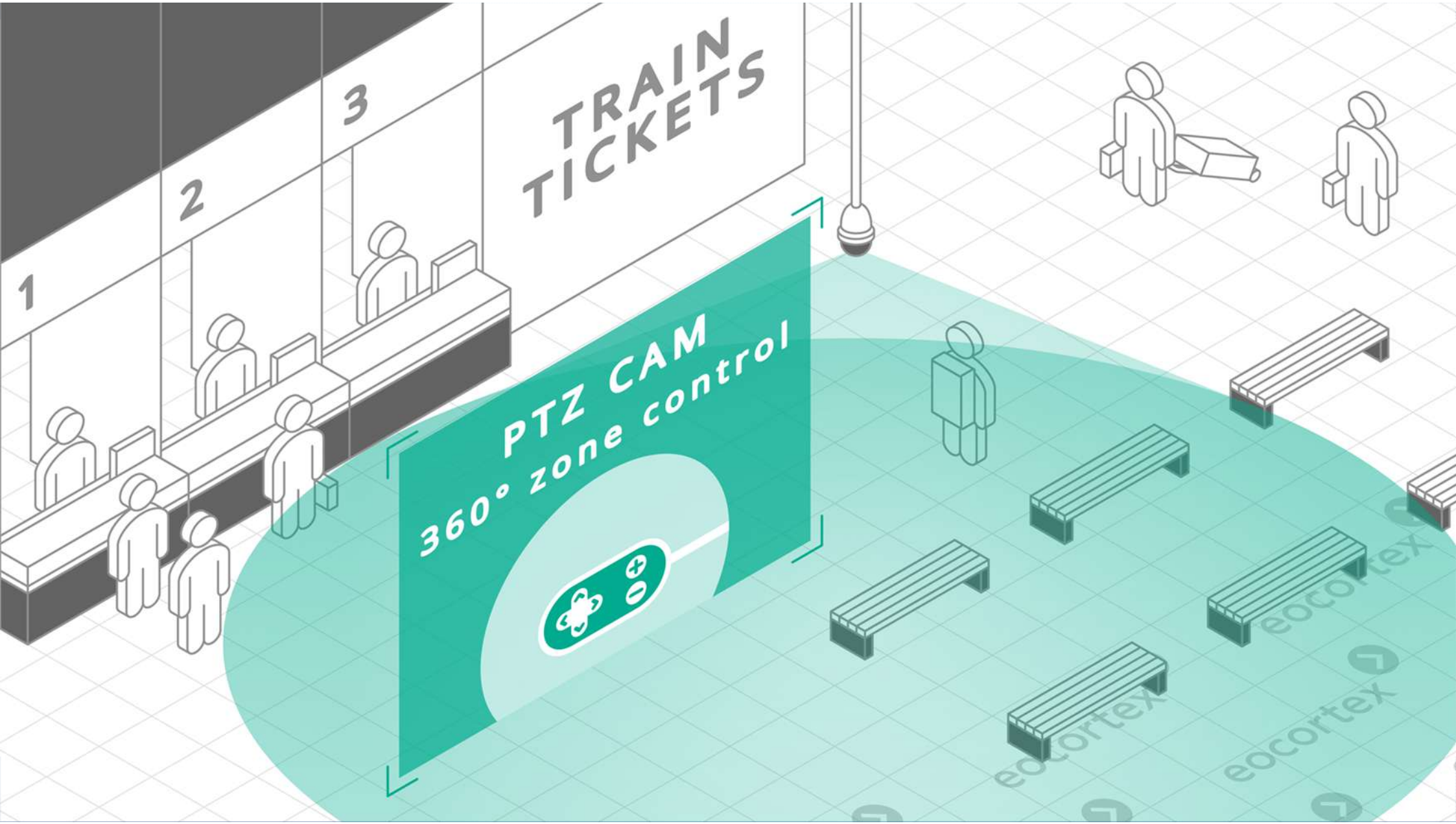
Thanks to the People Counting in Queue module, you can:

- ✓ quickly engage additional staff and eliminate the queue
- ✓ adjust opening hours of your store and the work schedule of your staff

Thus, you retain passenger loyalty and optimize your expenses.



PTZ Camera Control



TRAIN
TICKETS

1

2

3

PTZ CAM
360° zone control



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PTZ Camera Control



Purpose

To provide greater flexibility of the video surveillance system.

How it works

You can:

- ✓ control the camera rotation in the desired direction by using a joystick or keyboard
- ✓ zoom camera image in and out by using the optical zoom
- ✓ control the camera focus in automatic or manual mode
- ✓ set up camera scenarios

Your benefits

Thanks to the PTZ Camera Control module you can:

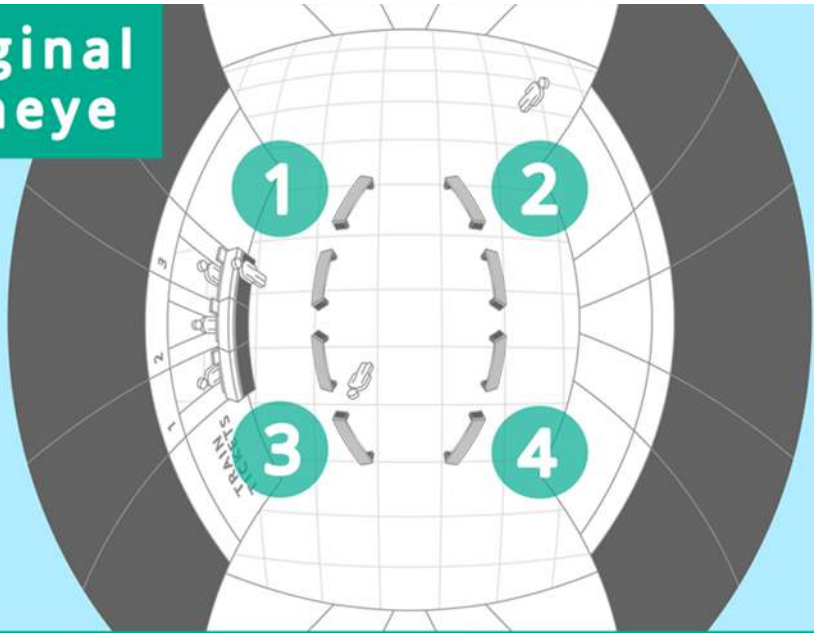
- ✓ replace several conventional cameras indoors or outdoors with a single PTZ camera
- ✓ see the smallest details of the image from the camera
- ✓ focus the camera on the desired object and track it

Thus, you increase the flexibility of your CCTV system and solve complex tasks, which is impossible when you use conventional cameras.

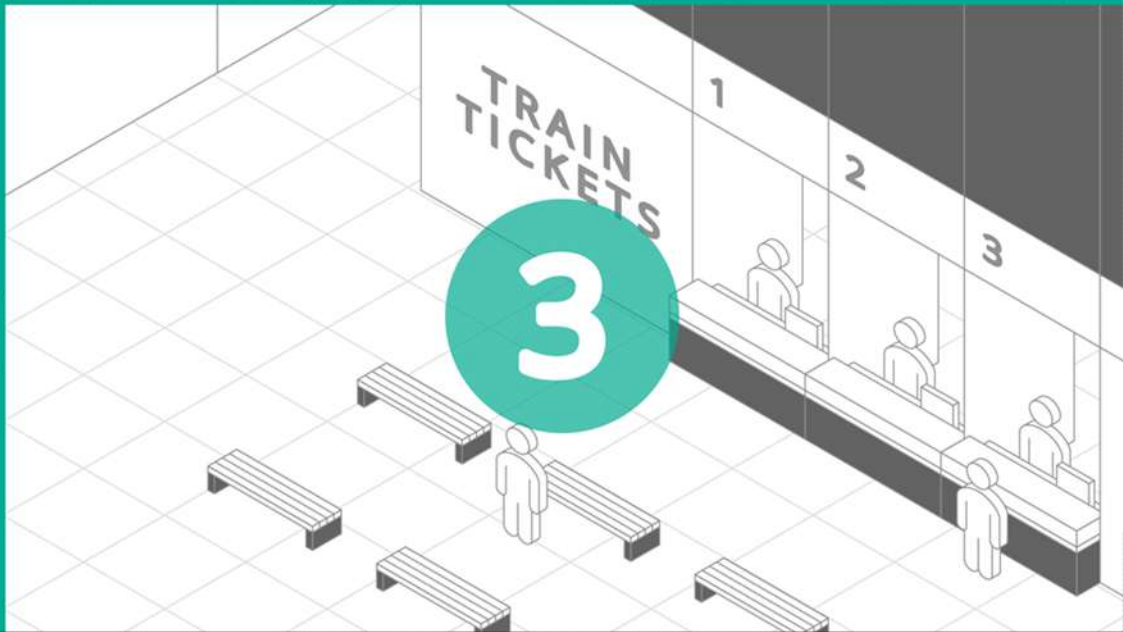
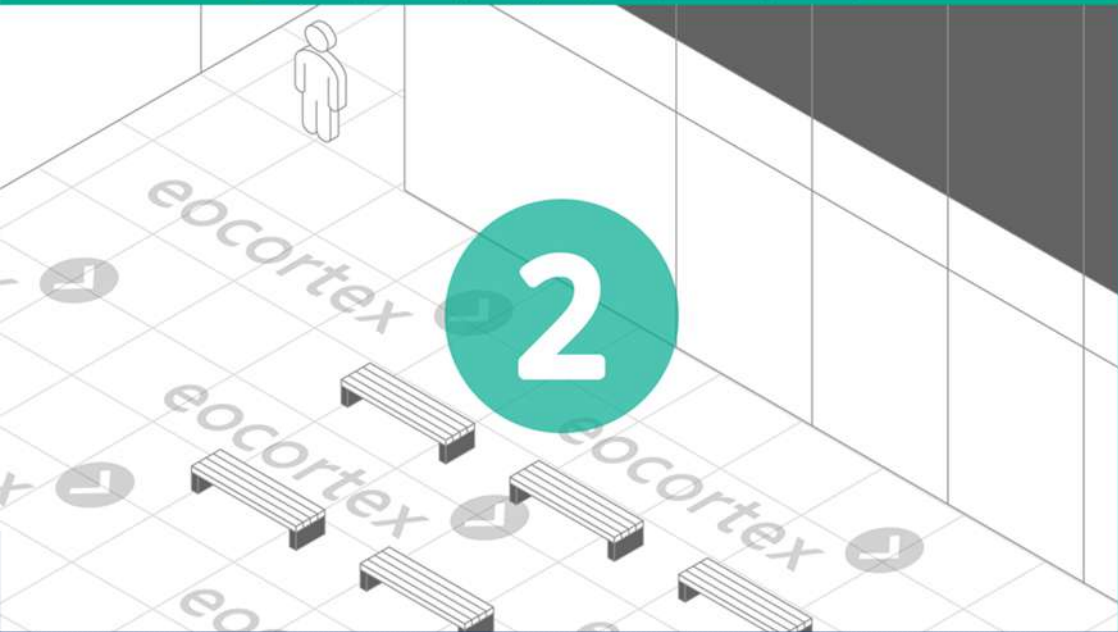
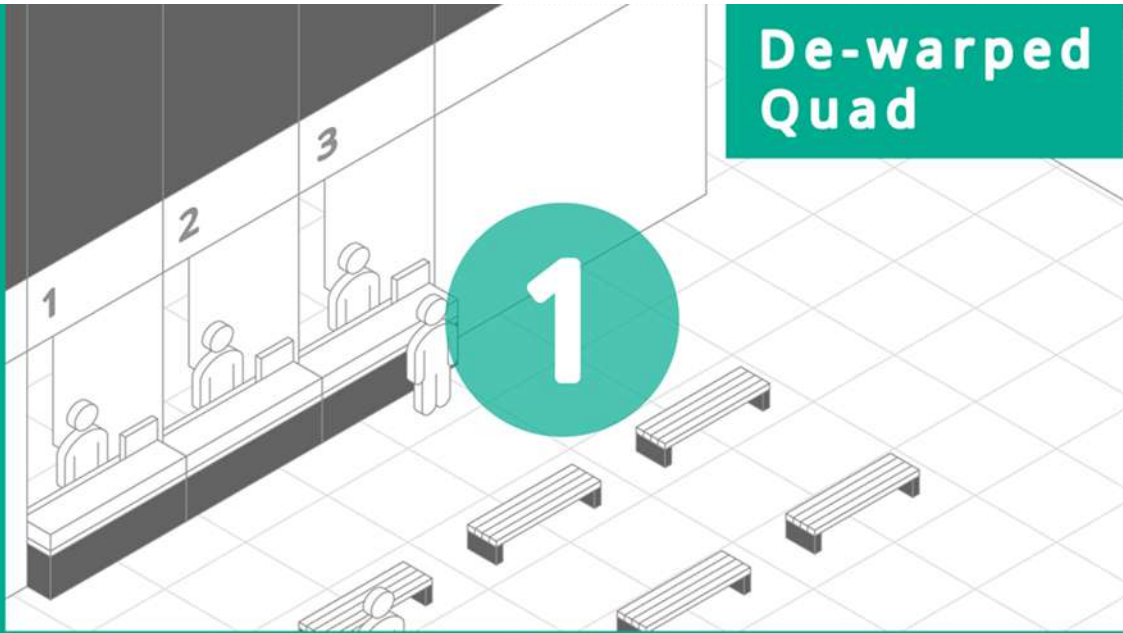


Fisheye Dewarping

Original Fisheye



De-warped Quad



Fisheye Dewarping



Purpose

To reduce the cost of the video surveillance system.

How it works

You can obtain an expanded image and control it by using joystick and keyboard:

- ✓ in the double panorama mode - the panorama is divided in two parts, 180° each
- ✓ in the 4x90 mode - the image is divided in four cells, 90° each
- ✓ in the virtual PTZ mode, which simulates PTZ camera operation

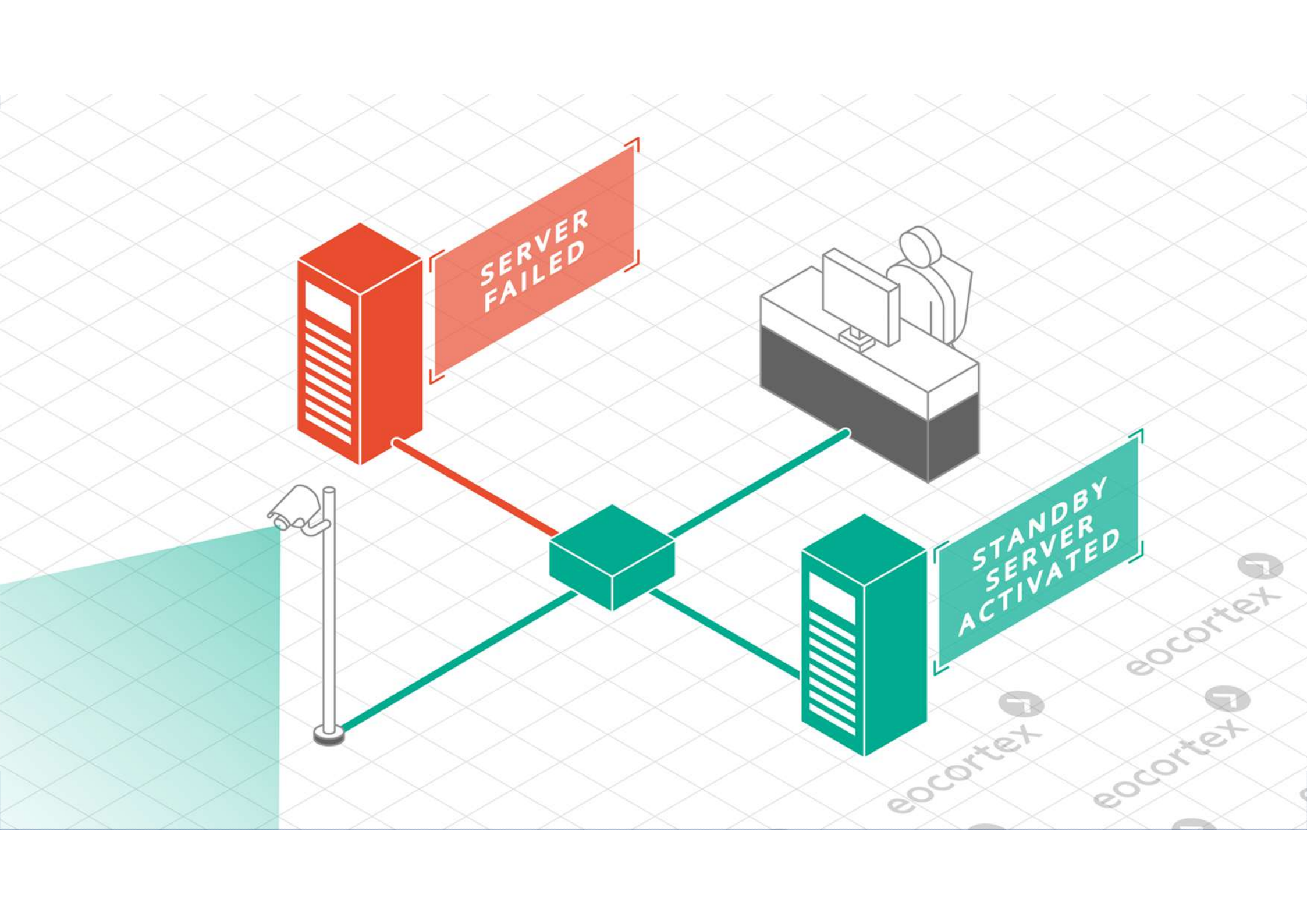
Your benefits

Thanks to the Fisheye Dewarping module, you can:

- ✓ replace several conventional cameras indoors with a single Fisheye-camera with wide functionality
- ✓ view several controlled areas simultaneously using a single camera



Failover



Failover



Purpose

To provide a video stream and to record a video archive regardless of force majeure factors.

How it works

- ✓ The module is installed on each camera, archive and transmission of which you want to protect.
- ✓ If the server with the cameras on which the module is installed fails, these cameras will be transferred to the backup server.
- ✓ It will provide consistent transmission of video and prevent loss of archive while the server is disconnected.

Your benefits

- ✓ Thanks to the Failover module, you will not lose a minute of video transmission or recording made by your video surveillance system.
- ✓ You continue to receive all notifications of control events from your video analytics to your phone or email, despite the potential problems with the server.
- ✓ Thus, you continuously ensure the safety of passengers and staff.



Sabotage Detection



Sabotage Detection



Purpose

To minimize the time of video surveillance cameras inoperability.

How it works

You can configure control events:

- ✓ camera defocusing
- ✓ panning away from pre-defined view
- ✓ flaring
- ✓ overlapping of the camera view

When any control event occurs, you receive an immediate notification to the monitor, phone or e-mail.

Your benefits

Thanks to the Sabotage Detection module, you can quickly restore video surveillance system operability.

Thus, you will ensure uninterrupted monitoring and receiving notifications of video surveillance system about the control events:

- ✓ related to ensuring the safety of passengers, staff and infrastructure
- ✓ related to ensuring the effectiveness of your business processes



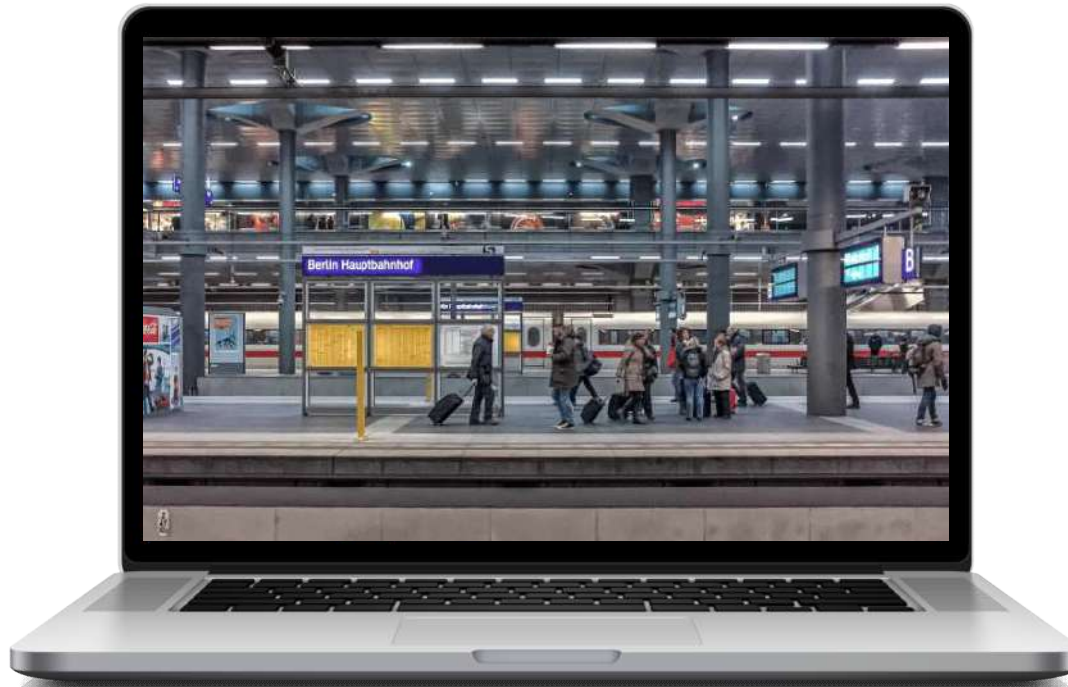
Remote Access to Your CCTV System

Remote Access



To get mobile access to your video surveillance system, you can use mobile applications on iOS, Android and through web client via the browser.

Video stream formats supported by mobile clients: MJPEG, MPEG-4, H.264, H.265 and any versions of operating systems.



Remote Access



Features and functions	Android	iOS	Web-client
Watch online			
View images from cameras online	+	+	+
Configure the frame rate for viewing	+	+	+
Adjust the number of IP cameras in a multipicture	up to 15	up to 15	up to 5
Scale the image	+	+	+
Drag a channel in a multipicture grid	+	+	+
Take screenshots	+	+	+
Listen to the sound from cameras	+	+	+
Manage online			
Control PTZ cameras	+	+	+
Receive notifications online			
Receive push-notifications about events that are configured in video analytics	+	+	+
Work with the video archive			
Play the archive, search for frames by date and time	+	+	+
Speed up archive viewing 20-fold and slow down 10-fold	+	+	+



About us



Eocortex is a global provider of an Open-Platform Video Management Software (VMS) with the added strong intelligence of video analytics and network video recorders (NVR)

2008

company founded

40+

countries

\$0

cost of personnel training and certification

19

Video Analytics modules

5 000+

partners in the world

\$0

pre-sale service cost for your projects

5 000+

camera models +ONVIF, + PSIA compatible

23 000+

projects implemented

\$0

cost of technical support

10 min

time required for installation and configuration

300 000+

cameras operating on Eocortex VMS

\$0

cost of all Eocortex VMS updates



VALUE ADDED IT SOLUTIONS

Eocortex in the World



Czech Republic



Germany



Italy



Denmark



UAE



Saudi Arabia



South Africa



India



Belgium



Spain



Luxembourg



UK



Qatar



Oman



Turkey



Vietnam



France



Poland



Portugal



USA



Kuwait



Egypt



Bahrain



Malaysia



Slovakia



Hungary



Netherlands



Canada



Iran



Tunisia



Pakistan



Australia

Eocortex Compatibility

100%

AVIGILON

AXIS
COMMUNICATIONS

 **BOSCH**

Brickcom


CISCO

alhua
TECHNOLOGY


Dallmeier

D-Link

 **GeoVision**

 **Hanwha**

HIKVISION

Honeywell

 **IDIS**

 **LG**


MOBOTIX

LILIN

Panasonic

PELCO

SONY

uniview

 **VIVOTEK**

ONVIF

 **PSIA**
PHYSICAL SECURITY INTEROPERABILITY ALLIANCE

And other 100+ manufacturers

Big Projects



The video surveillance system at ER-Telecom branches in 56 Russian cities consists of **5 000 IP cameras** and Eocortex software.

ER-Telecom is the leading telecom services provider in the Russian regions. «ER-Telecom» is one of the TOP-2 biggest Russian internet providers and one of the TOP-3 largest cable TV operators.

[More details](#)



The video surveillance systems are installed at more than 100 retail premises in Bryansk and Bryansk region and consist of more than **1 600 IP cameras** and Eocortex software.

Retail chains involved in the project include "Cranes", "Svenskaya Fair", "Kalita", "Canella". IP cameras were mounted at the variety of premises: stores of different formats and areas, catering and food production buildings, warehouses and construction sites, housing estates and private properties.

[More details](#)



Thanks to the Eocortex software, **1 062 IP cameras** have been integrated into the VMS, which successfully operates at six prison sites in Izmir, Turkey.

Each system uses 26 to 304 cameras that are managed centrally. Each object includes security and fire alarm integrated with Eocortex. Systems integration allows receiving information and setting up different responses to specific events within a single environment.

[More details](#)



¿Quieres una demo online?
Solicítala a marketing@aryan.es

<https://www.aryan.es>

Síguenos en redes:

