TRASSIR ACCESS CONTROL SYSTEM

Access Control portion of the TRASSIR ecosystem

CONTENT

Key features
Branded product line of access control hardware
Supports equipment from other vendors
Licensing
Types of IDs supported
Software features

KEY FEATURES

TRASSIR CCTV Ecosystem

NEURAL NETWORKS

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

Ability to integrate with other solutions and third-party vendor equipment

KEY DIFFERENCES FROM OTHER ACCESS CONTROL SYSTEMS

- **Multivendor ACS**
  (Trassir, HikVision, HiWatch, ZkTeco, TrueIP)
- **Integrated security system**
  (CCTV, video and event analytics, fire alarm system, ACS, intercom, cloud technologies)
- **Client customization available**
  (Rules, Scripts, Open API)
- **Economy and simplicity**
  (No need for an additional server or additional licenses for integration; one license for all features and a user-friendly interface)

TRASSIR ACCESS CONTROL HARDWARE

TRASSIR TR-C241 CONTROLLER

THREE VERSIONS:

1. TR-C241 – Controller board
2. TR-C241B – Board in case with space for UPS and battery installation
3. TR-C241F – Plug&Play version (Board, Case, UPS and battery)

- Network interface ..... TCP/IP
- Storage capacity ..... Cards: 10,000; Events: 50,000
- Number of doors 2
- Door reader interface ..... Wiegand (W26/W34)
- Readers per door 2
- Operating temperature ..... from -20 to +65 °C
- Operating voltage ..... DC 12 V

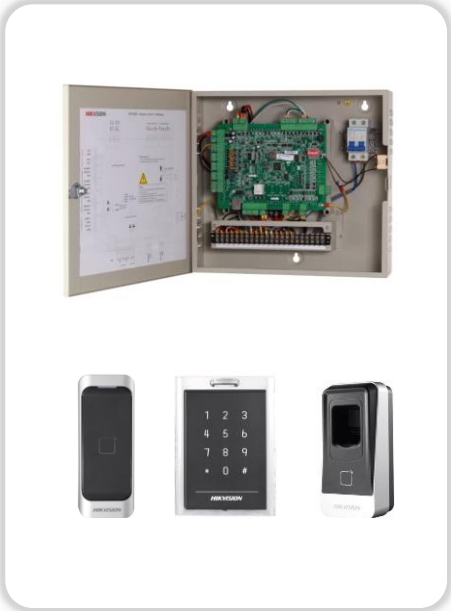
TRASSIR TR-R1M MIFARE CARD READER

- Operating voltage..... DC 12 V
- Waterproof level..... Ip64
- Operating temperature ..... From -40 to +70 °C
- Connection interface ..... Wiegand / RS-485
- Indication method ..... Beeper and LED-indicator
- Size ..... 129x76x14.7 mm

SUPPORT FOR EQUIPMENT FROM OTHER VENDORS

HARDWARE.
ALL HIKVISION ACCESS CONTROL PRODUCTS

HIKVISION



Controllers

Access terminals with fingerprint recognition

Access terminals with facial recognition

Access terminals with temperature measurement

HARDWARE. ZKTECO

SpeedFace-V4L

SpeedFace-V5L

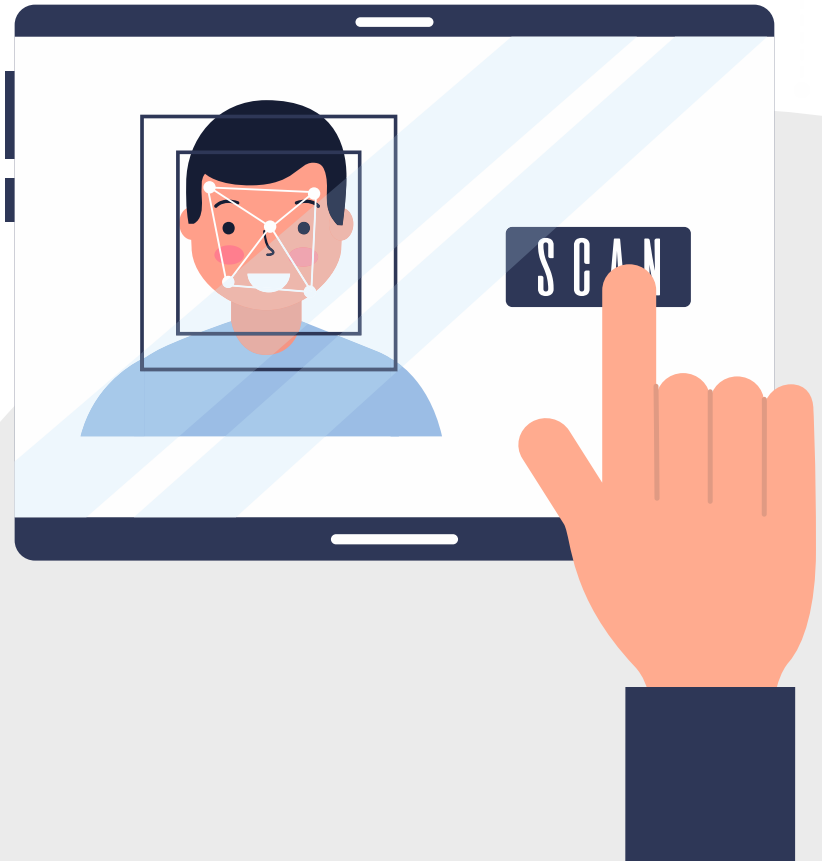
ProFaceX

HARDWARE.
HIWATCH

HiWatch

ACT-T1331 / w

ACT-T1341M / MF



INTERCOM. TRUEIP

True IP

The following features will soon be available:

- Access management on intercom panels
- Event, call and alarm notifications
- Performance status monitoring
- Manual door opener control

They allow:

- Get a unified security system at the site
- No need to install additional equipment to organize site access

Panels supported in the first release:

TI-2600C • TI-2220WD • TI-2400CM • TI-2308M • TI-4300

LICENSING

LICENSING

Basic license

“TRASSIR ACS” Module

The license includes the connection of ANY single device

Extension licenses

“TRASSIR ACS+1 TRASSIR” Extension

Connection of one additional TRASSIR controller (without face detection)

Extension “TRASSIR ACS +1 HikVision

Allows connection of one additional device (without facial recognition) from Hikvision

“TRASSIR ACS +1 HikVision Face” Extension

Connection of one additional device (with facial recognition) from Hikvision

“TRASSIR ACS +1 ZkTeco Face” Extension

Connection of one additional device (with facial recognition) from ZKTeco

“TRASSIR ACS +1 HiWatch Face” Extension

Connection of one additional device (with facial recognition) from HiWatch

“TRASSIR ACS +1 TrueIP” Extension

Connection of one additional TrueIP device

Ability to connect additional solutions

ADDITIONAL MODULES FOR CONTROLLING CHECKPOINTS

AutoTRASSIR (30)

Neuroanalytic licence plate recognition module

Facial Recognition 2.0

Neuroanalytic module with facial recognition

Neuro Detector

Neuroanalytic module with detection of people, cars and animals

Crowd Detector

Neuroanalytic module with crowd detection

Hard Hat Detector

Neuroanalytic module for detecting the presence or absence of a protective helmet on an individual's head

Wear Detector

Neuroanalytic module for detecting the presence or absence of protective clothing or uniforms (by color)

Face Mask Detector

Neuroanalytic module for determining the presence or absence of a protective mask on an individual's face

LICENSING EXAMPLE

“TRASSIR ACS” Module

Included in the price of the basic TRASSIR ACS license

"TRASSIR ACS+1 HikVision Face" Extension

"TRASSIR ACS+1 HikVision" Extension

TYPES OF CREDENTIALS

TYPES OF IDS

Cards

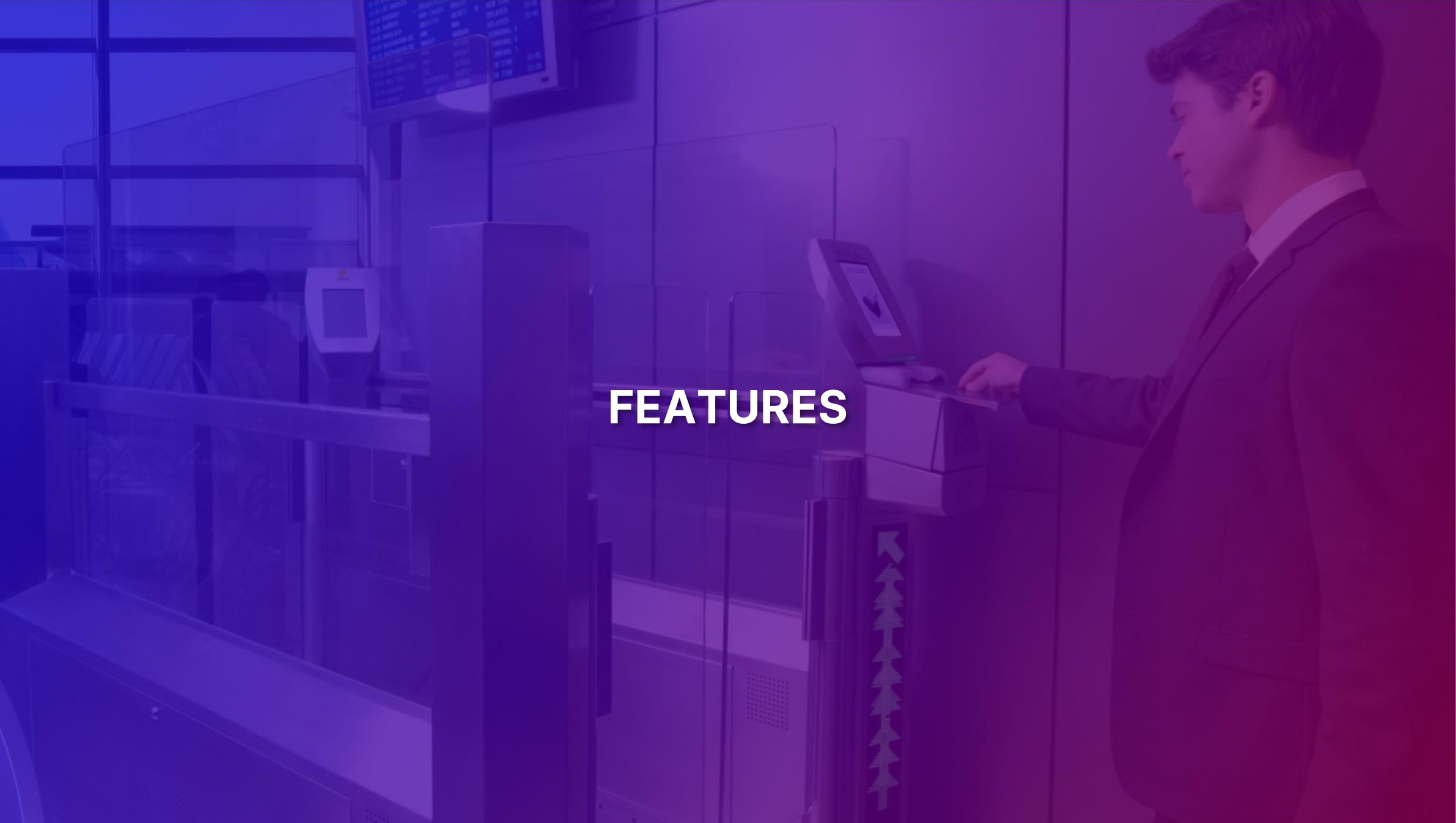
Fingerprints

PIN-codes

Faces

Temperature

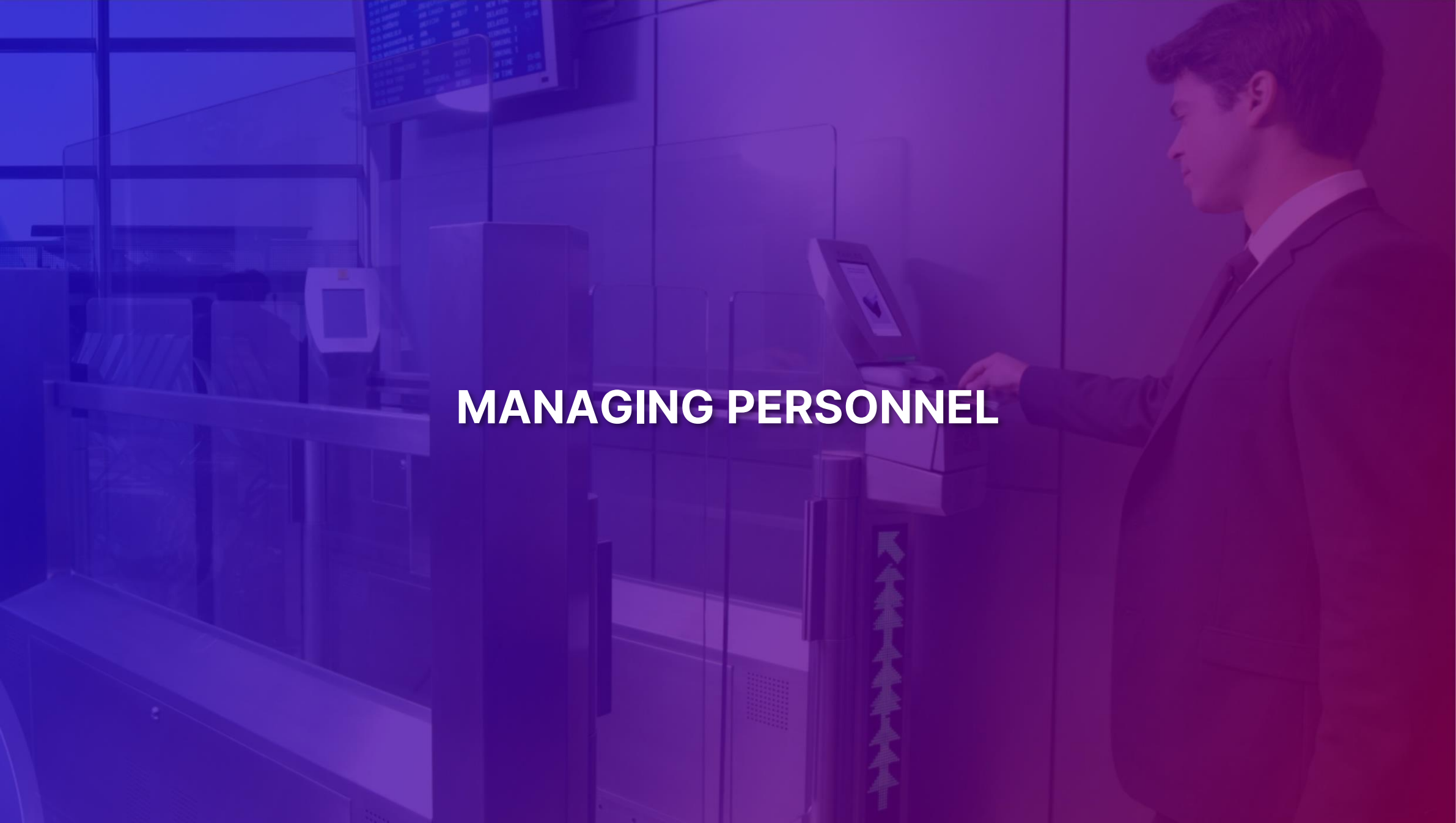
License plate numbers



FEATURES

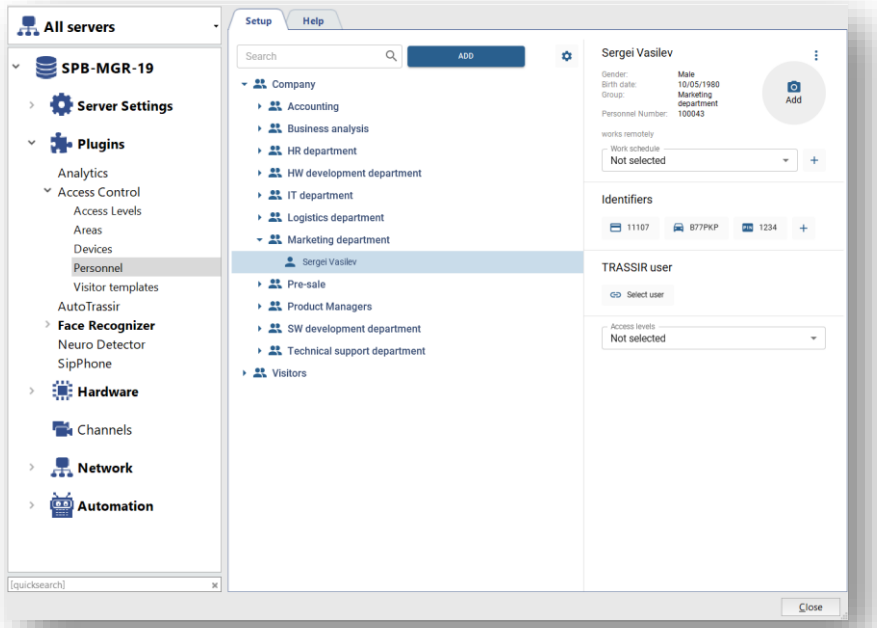
FEATURES

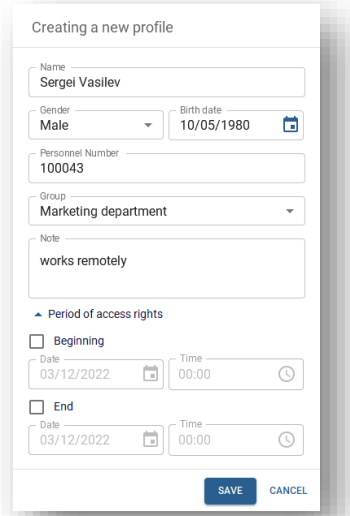
- Managing personnel
- Access management
- Setting up and managing equipment
- Accounting for working periods
- Managing guest credentials
- Configuring flexible reactions to events in the system
- Working from browser and mobile app
- Open API

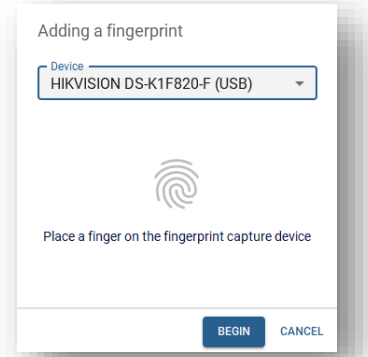


MANAGING PERSONNEL

CREATING AND EDITING PROFILES

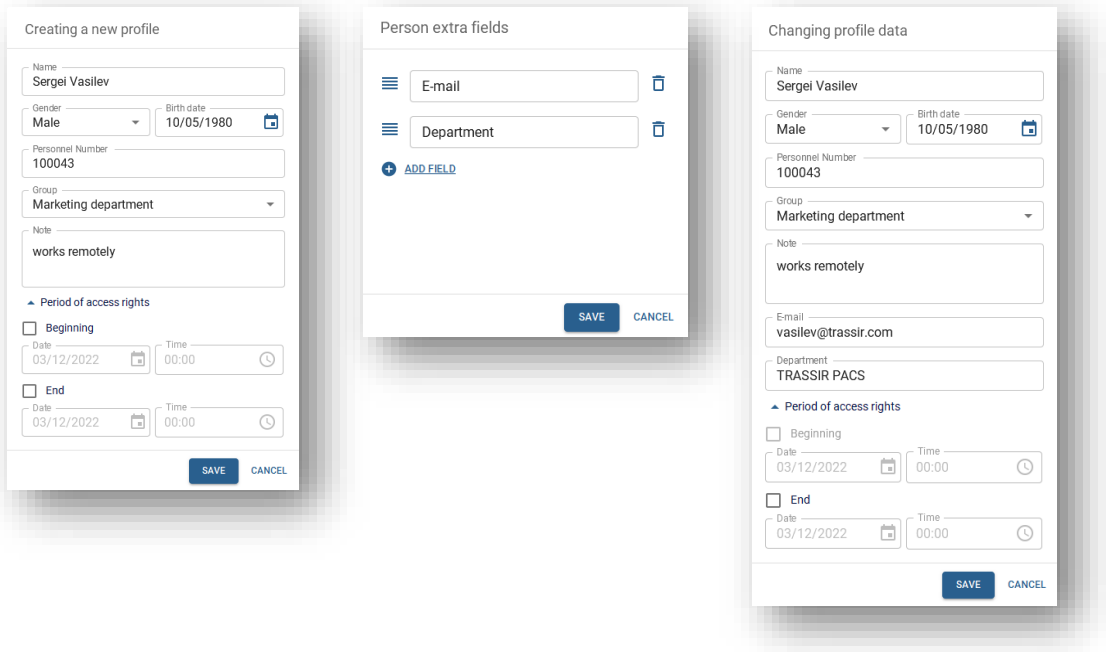






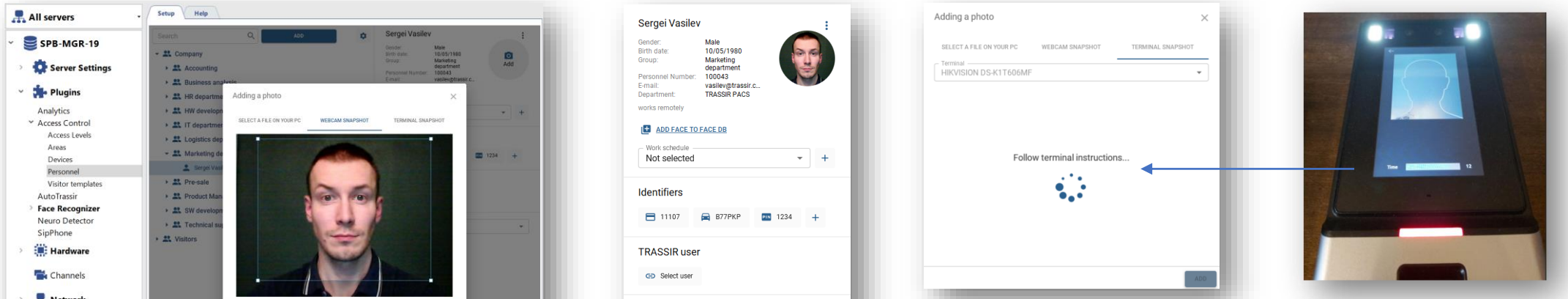
You can create new employee profiles, or import them into the system from a preexisting file if you already have a list with identifiers, positions, etc. Employee profiles can be arranged by group, folder, or department. It is also possible to set access levels for which areas certain employees may enter at specific times, and add employee identifiers: fingerprints, license plates, faces, etc. Additionally, there is a function to assign shift schedules and add additional data (name, date of birth, etc.) for employees. Biometric data can be loaded from the terminal.

ADDING OPTIONAL FIELDS FOR INDIVIDUALS



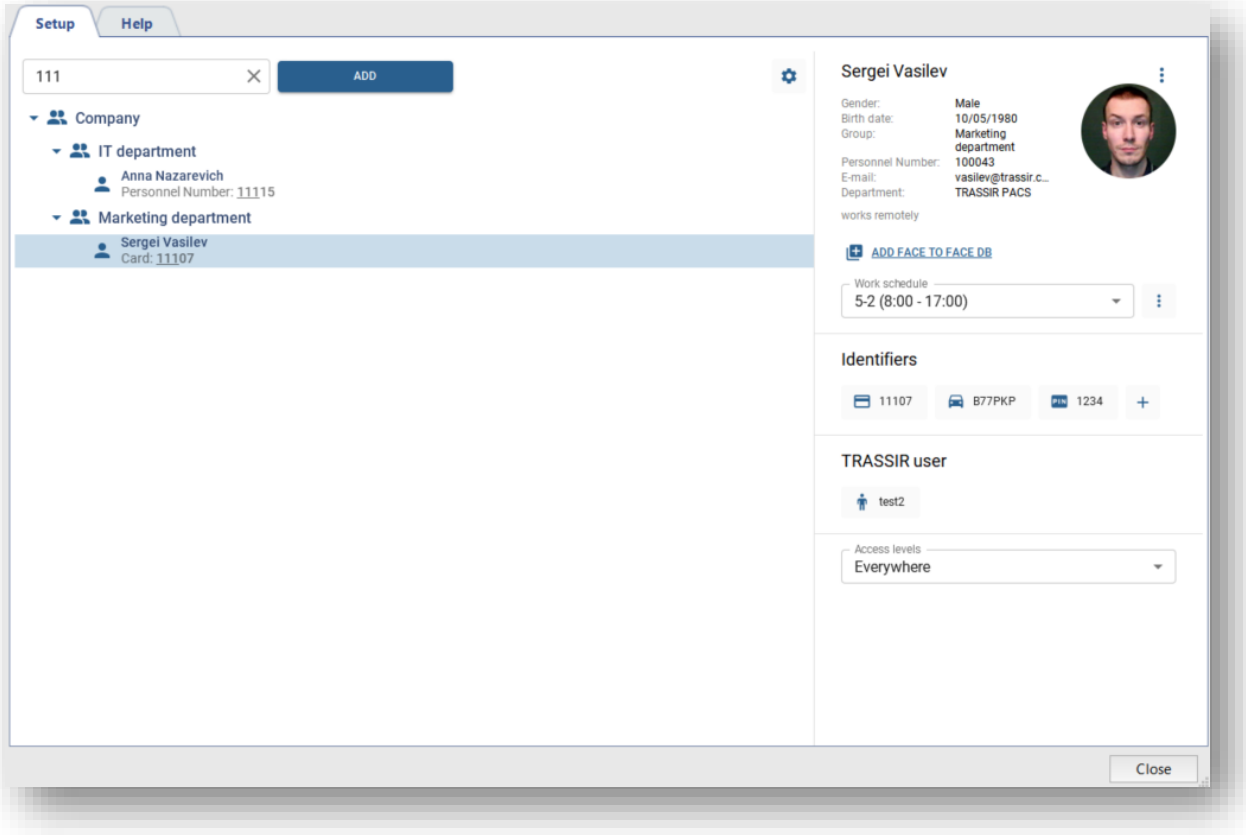
The system allows creation of custom fields. To add additional information to an individual's profile, create field, label it (organization, position, contacts for communication, etc.), and this field will be applied to all persons.

ADDING PHOTOS TO A PROFILE



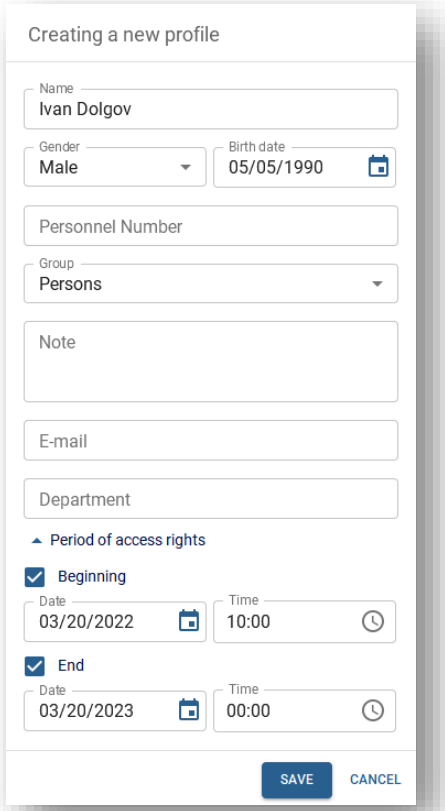
A profile picture may be added for each person. It can be imported from an existing file or from an access terminal with facial recognition function.

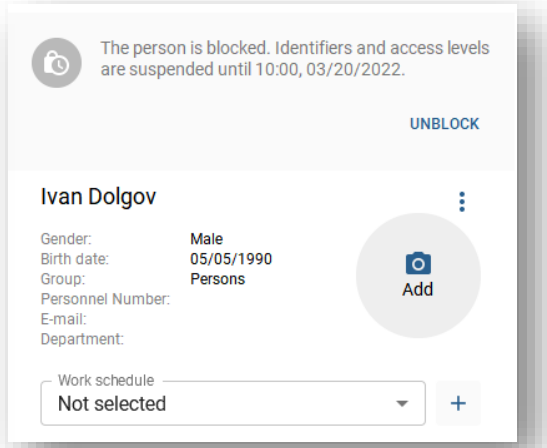
CONVENIENT SEARCHING

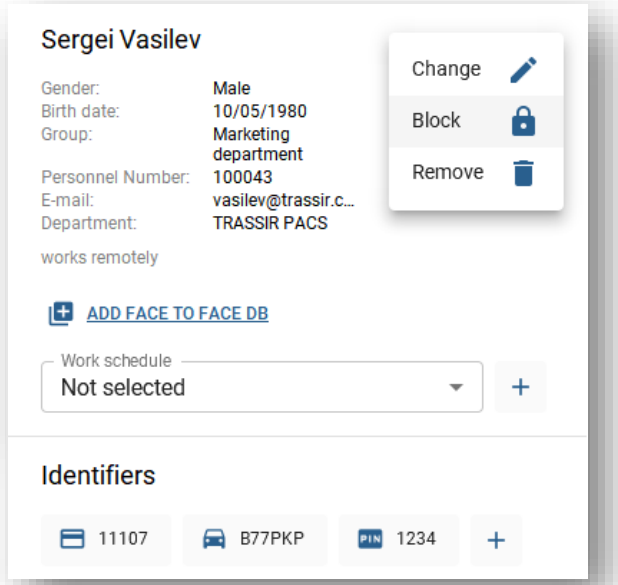


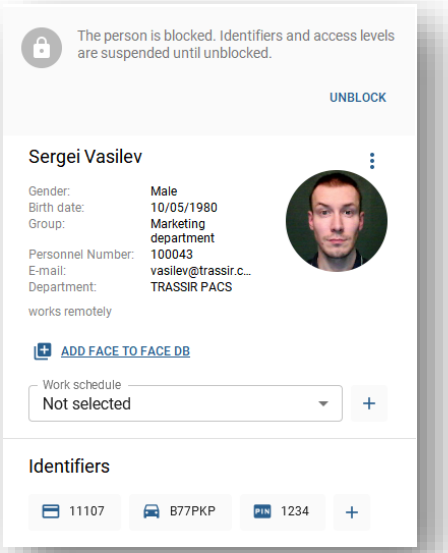
Individuals can be found using a quick and easy contextual search of people using any details.

TEMPORARY PERSONS







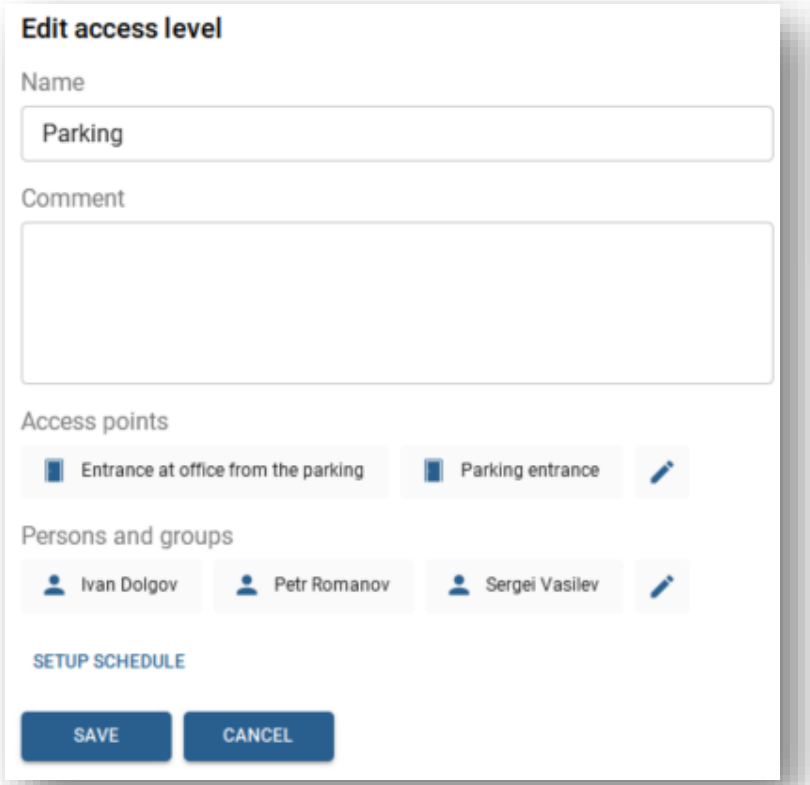


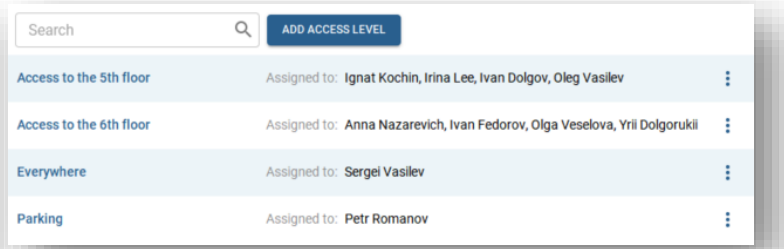
In TRASSIR ACS, you can integrate temporary persons, i.e. those employees who need to be given access for a limited period. In addition to granting temporary access, temporary blocking is also available.

ACCESS MANAGEMENT

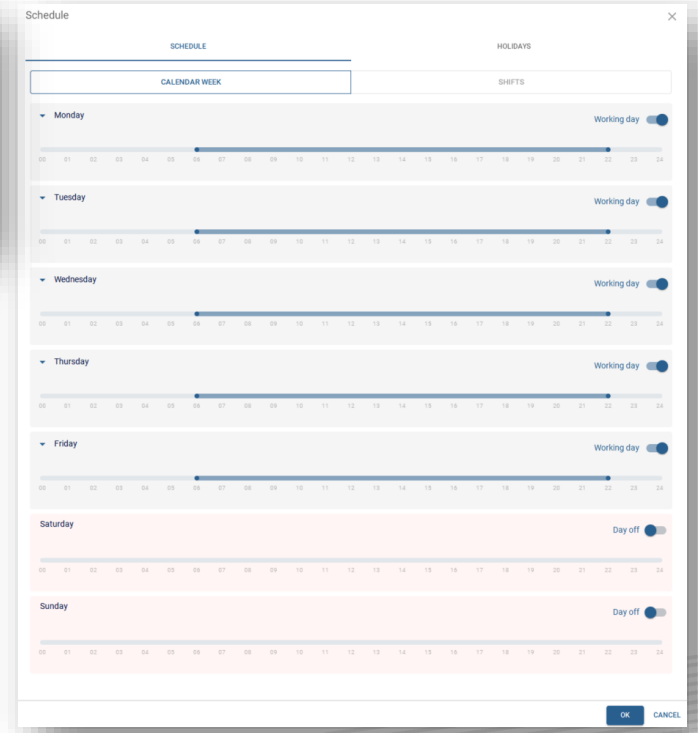
Who? Where? When?

ACCESS LEVELS

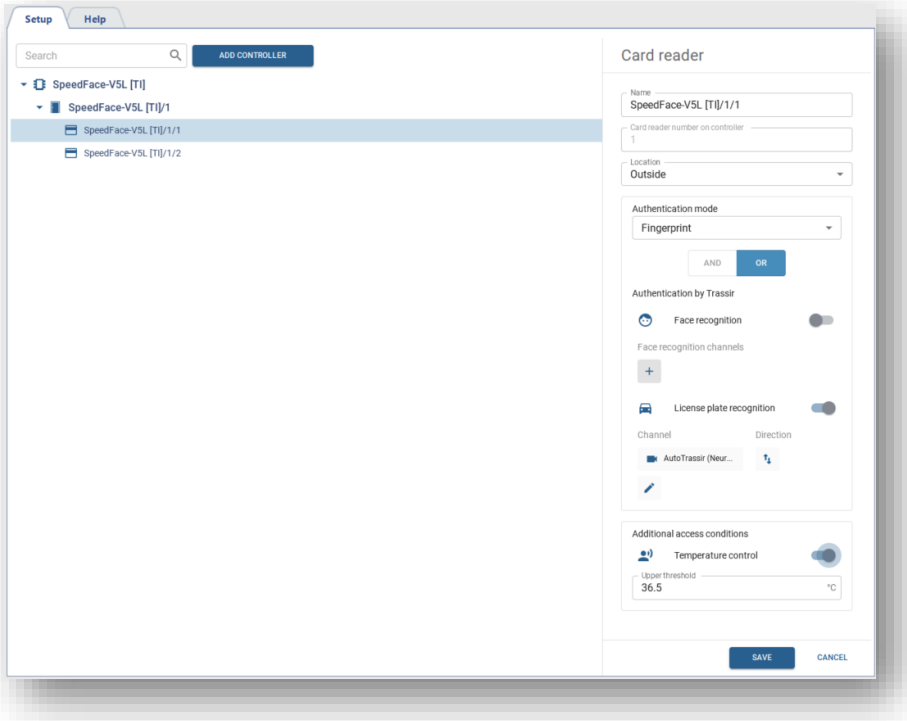


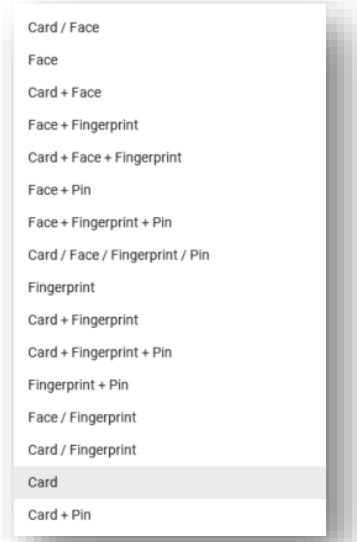


Access levels or access patterns allow you to assign the times when an employee has permission to enter and access specific points. Access levels can be assigned to a specific user or group of users.



MULTI-FACTOR IDENTIFICATION

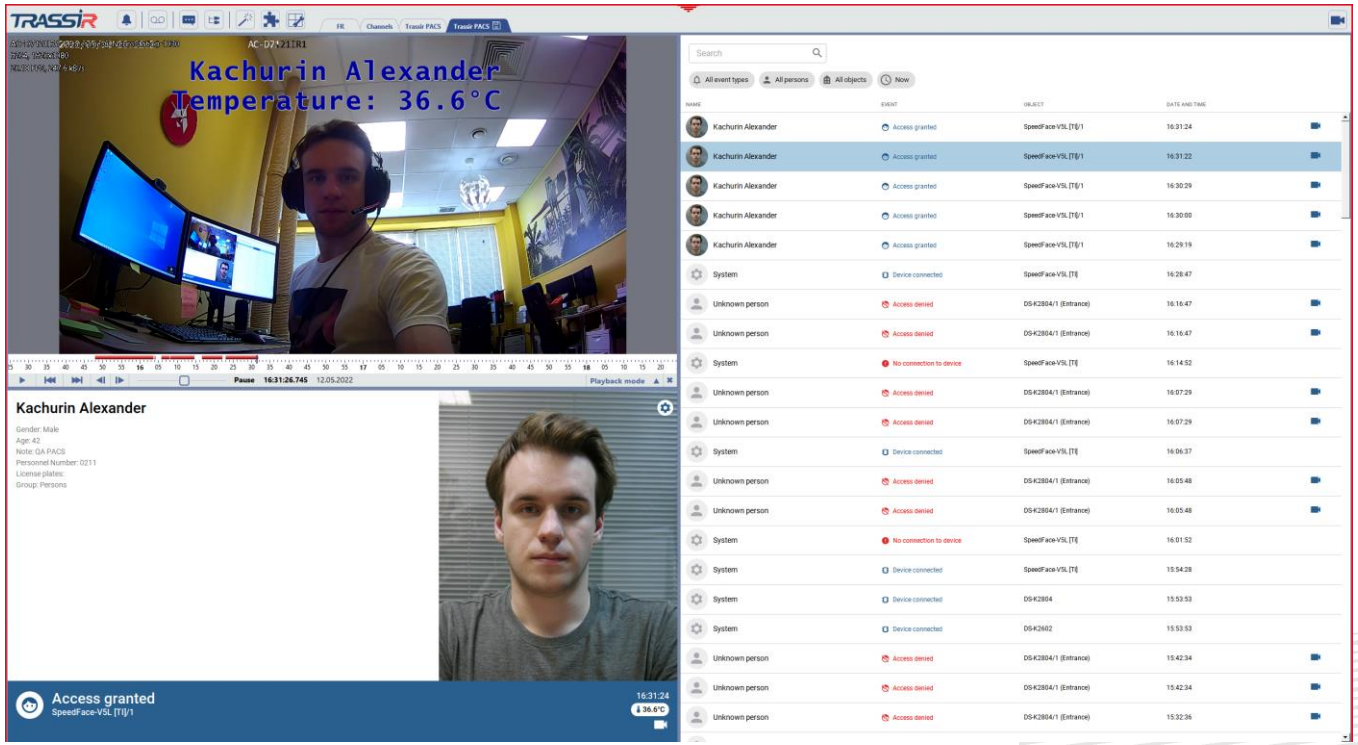




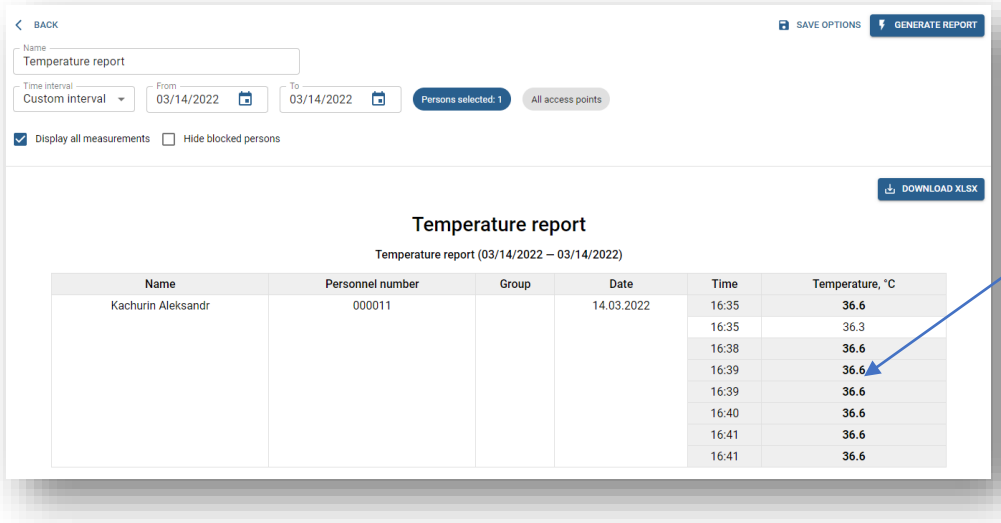
TRASSIR ACS allows for any combination of multi-factor identification

BODY TEMPERATURE ACCESS

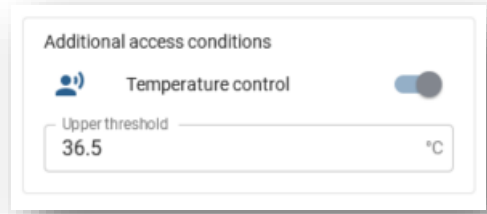
The system operator has access to the employee's card, which indicates whether the employee has a heightened temperature when entering. This function makes it possible to track employees who arrived to work with a high body temperature.



TEMPERATURE MEASUREMENT REPORT

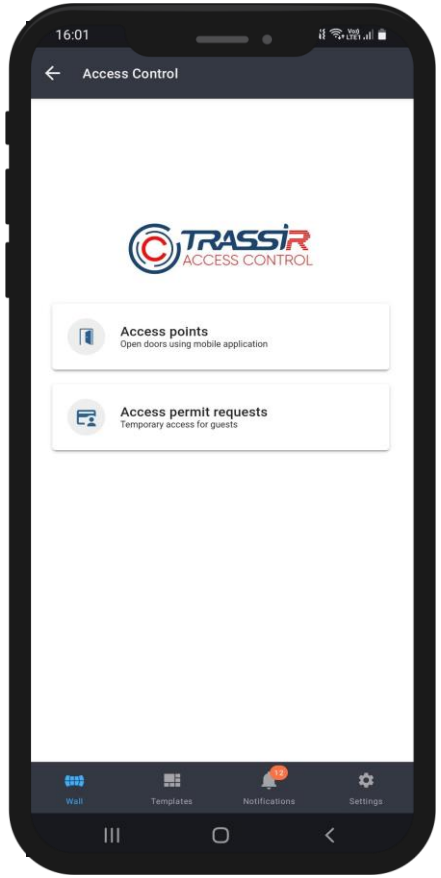


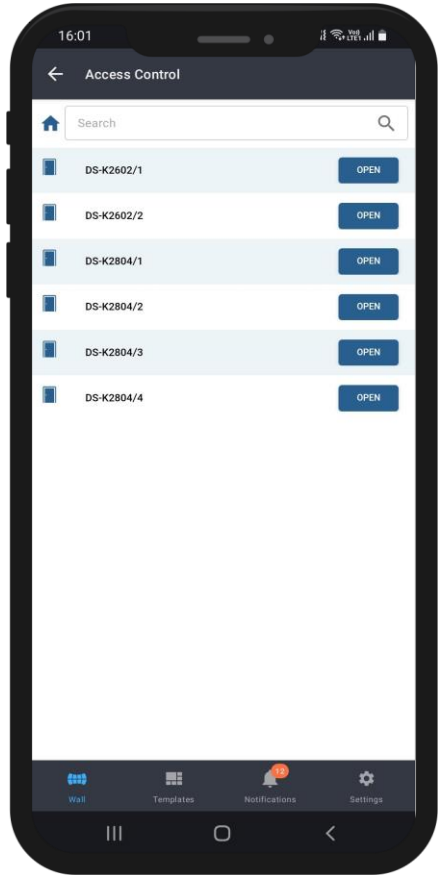
Exceeding the threshold value



You can compile a temperature report showing all measurements or only the highest recorded on a given day for a particular employee. TRASSIR ACS highlights temperature measurements that exceed a fixed value

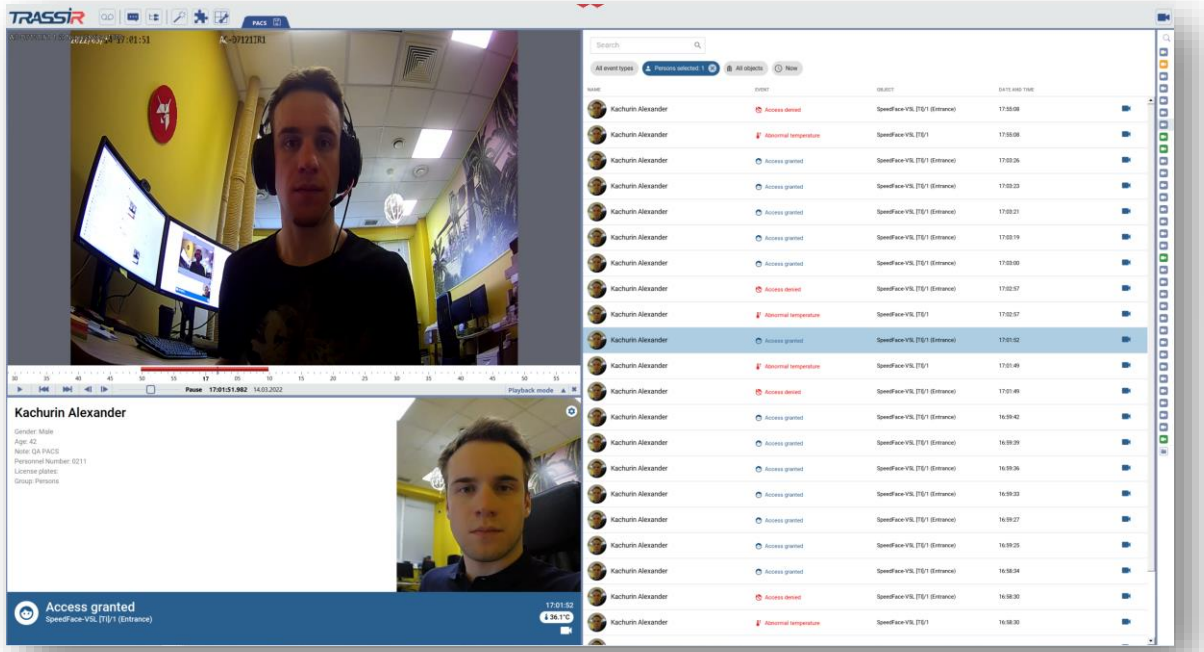
OPENING DOORS FROM THE MOBILE APP

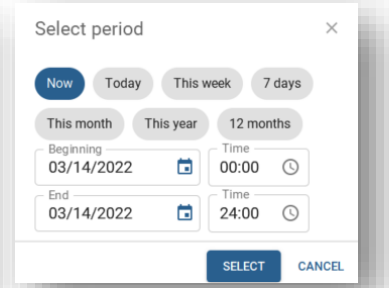


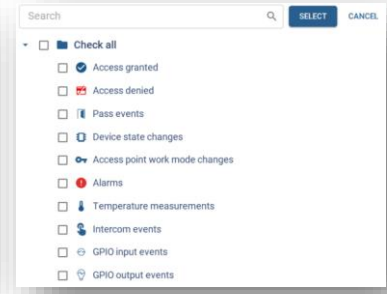


Access points such as doors or barriers can be filtered in the mobile app and opened with the click of a button. TRASSIR ACS identifies who opened the access point by connecting the user with the person. You can also restrict certain employees from opening specific access points.

EVENTS LOG

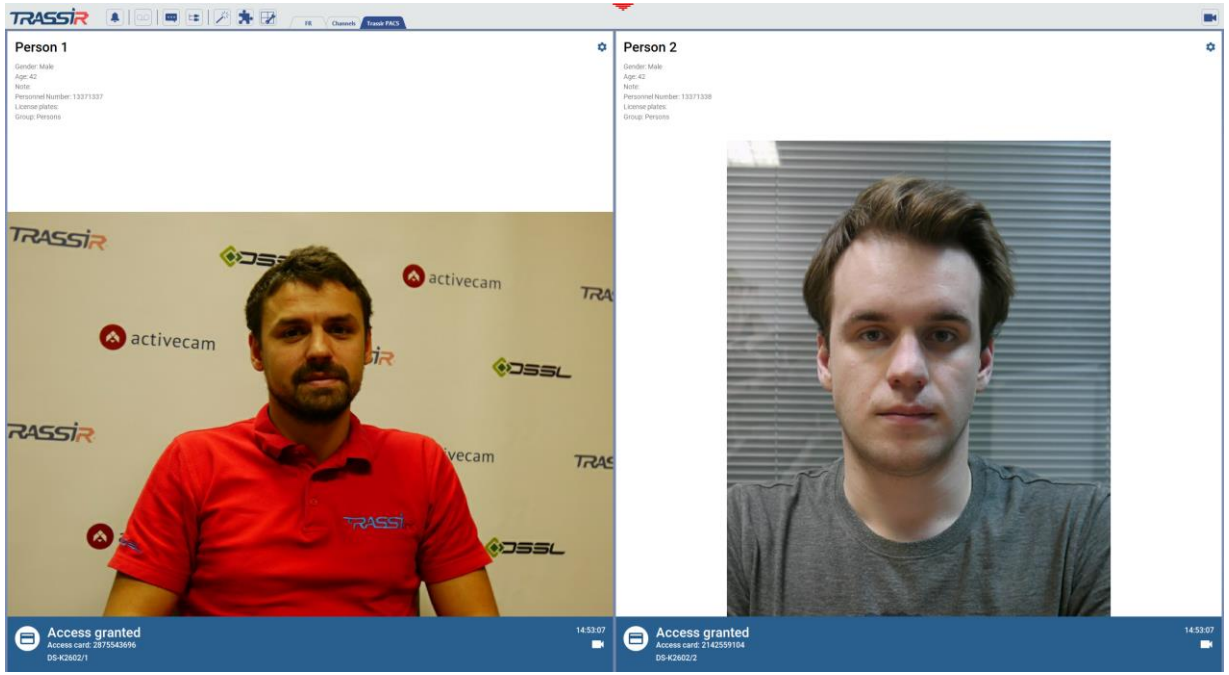


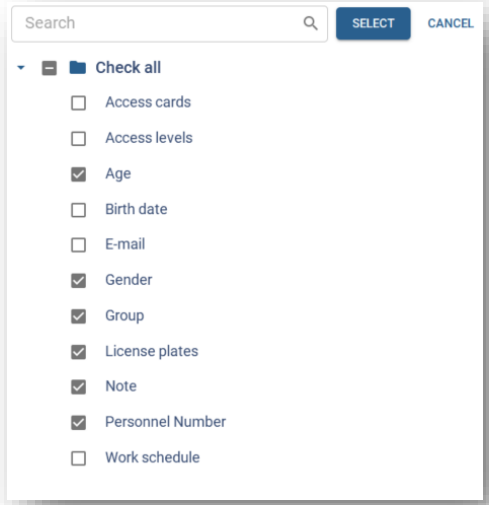




The TRASSIR ACS event log can be filtered by event type and period. Click on these events to get camera footage associated with a particular access point.

REALTIME CHECK OF ENTRANCE BY PHOTO

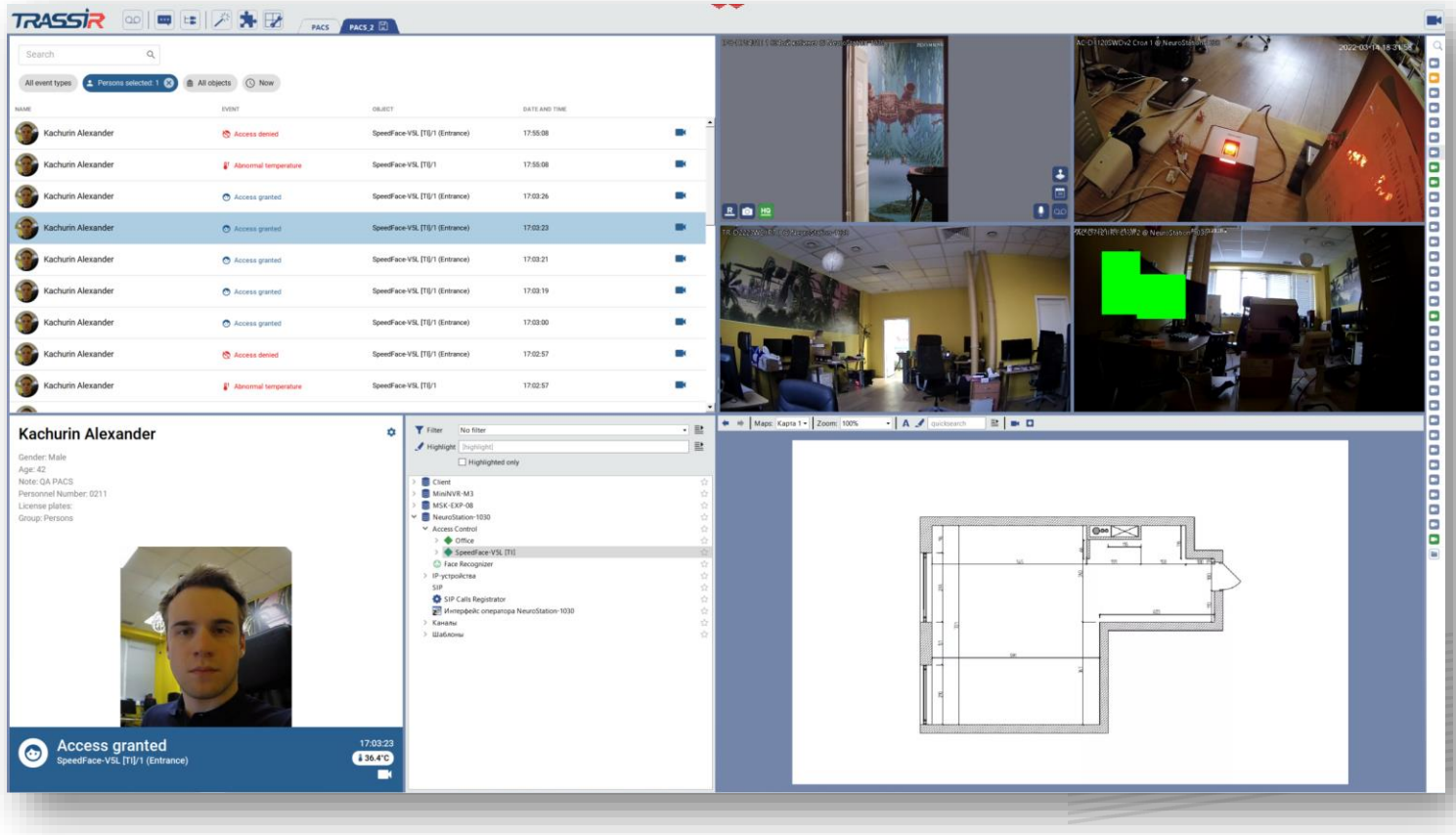




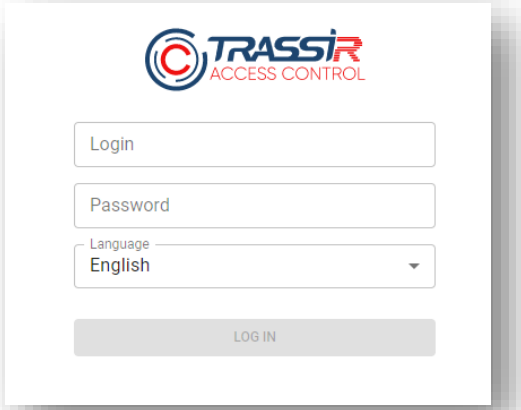
Why use a photo ID widget? One use is to put a monitor between turnstiles so that guards can see the data of card holders as well as photos for verification. The TRASSIR ACS Photo ID widget is flexible and customizable: it can hide or display name, gender, temperature, and other parameters. The widget can also be connected to the events log to show photos of persons who entered, where, and when.

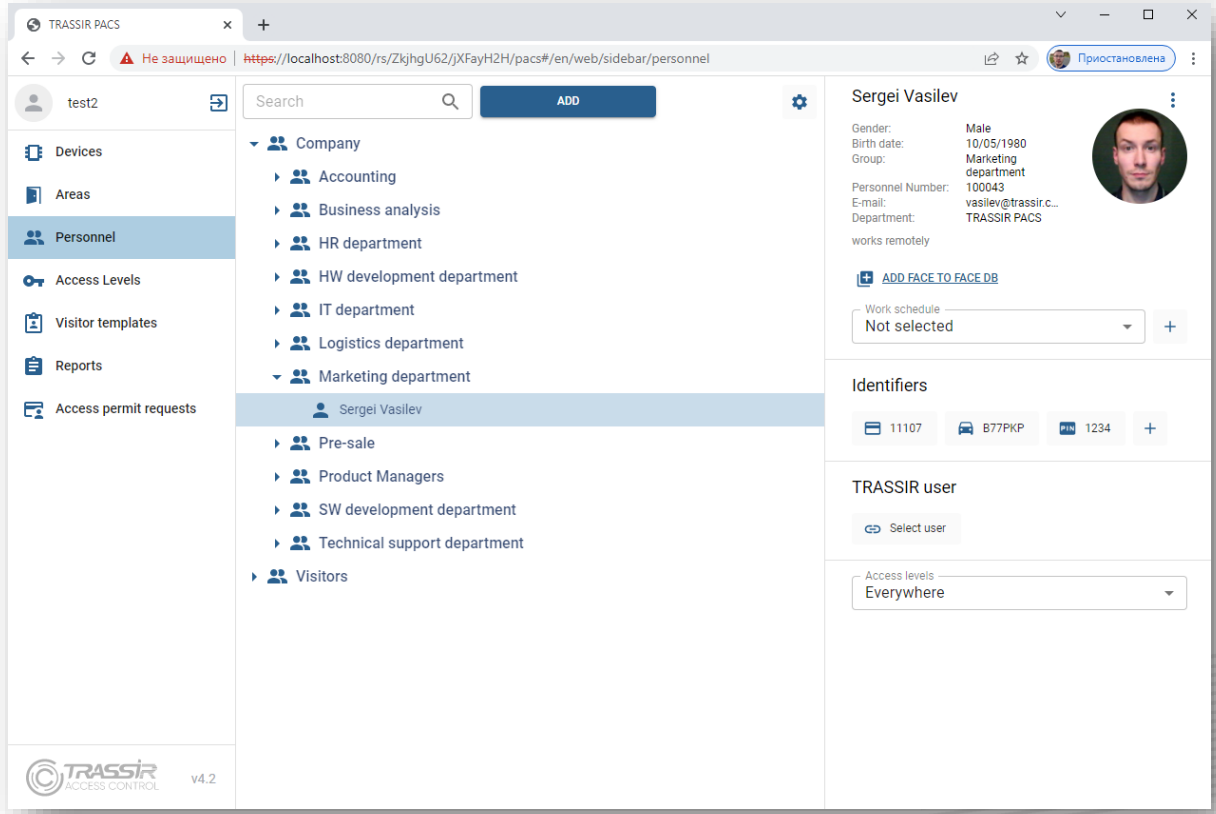
OPERATOR INTERFACE

In TRASSIR and ACS in particular, any widget can be conveniently configured for the operator



ACCESS FROM WEB BROWSER

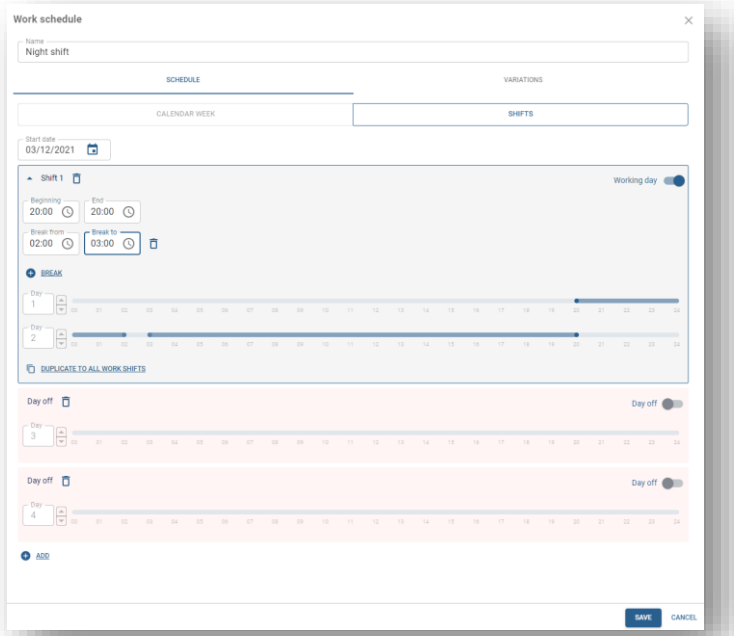


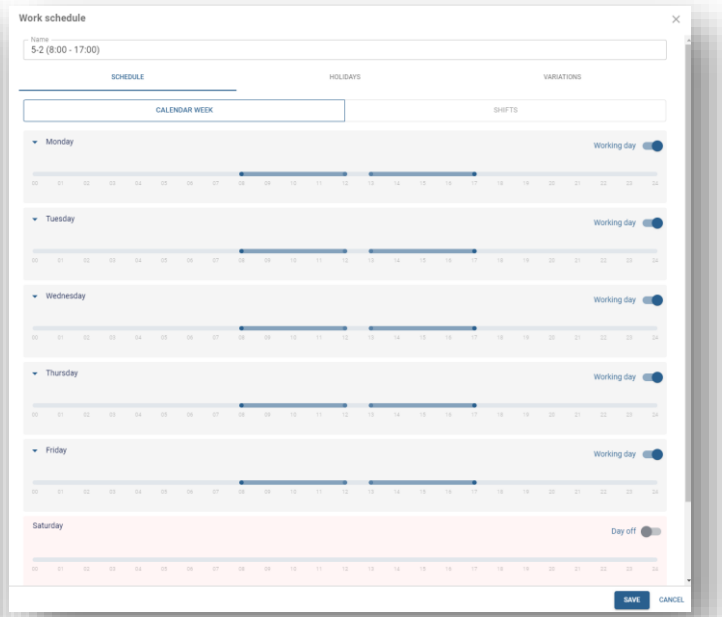


All the standard ACS functionality - adding devices, combining devices into zones, managing employees, assigning identifiers, access level schedules, working with guest passes, reporting, and much more - is available in the web browser.

ACCOUNTING FOR WORKING PERIODS

WORK SCHEDULES



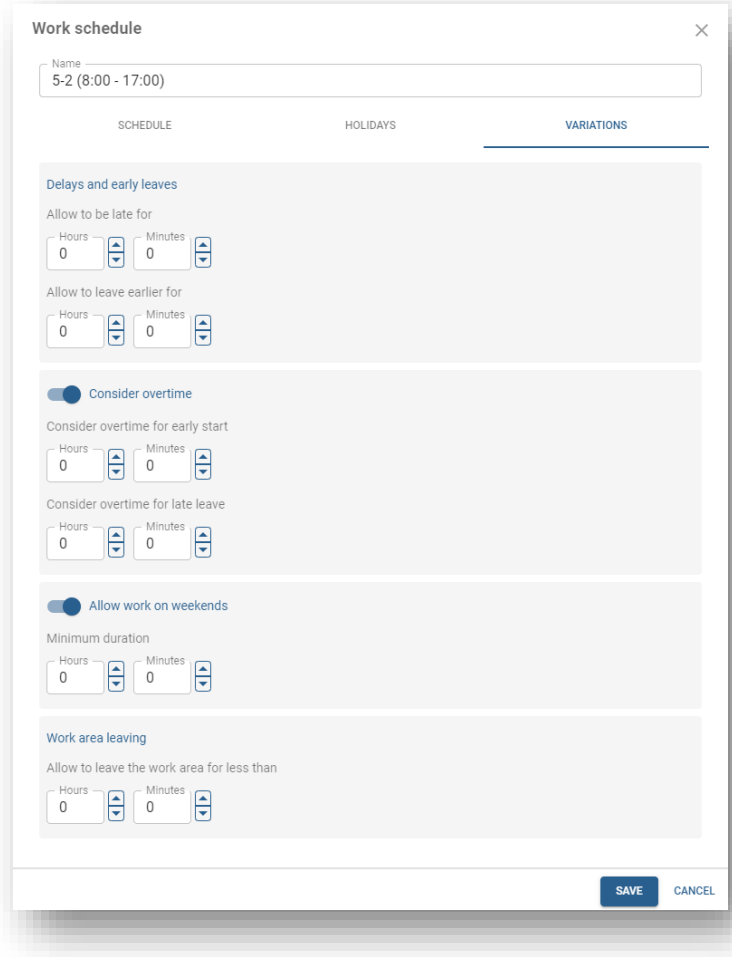


TRASSIR ACS provides the ability to create flexible work schedules, including the transition of overnight shifts.

PERMISSIBLE DEVIATIONS

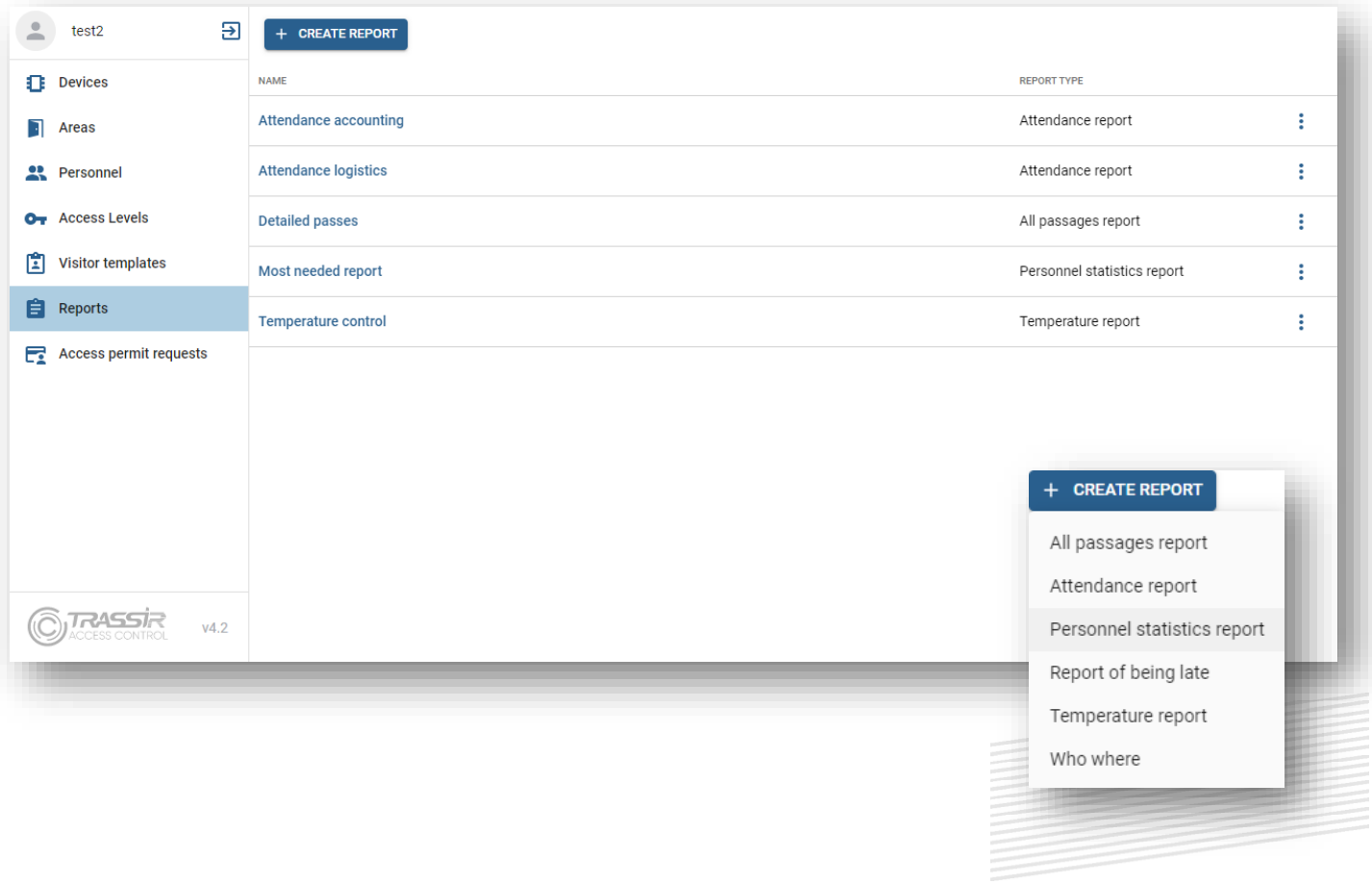
- Late arrivals and early departures
- Overtime
- Weekend work
- Leaving a work area

The deviation accounting system module allows you to set permissible parameters for tardiness, overtime, weekend work, and control over leaving the work area.



REPORT TEMPLATES

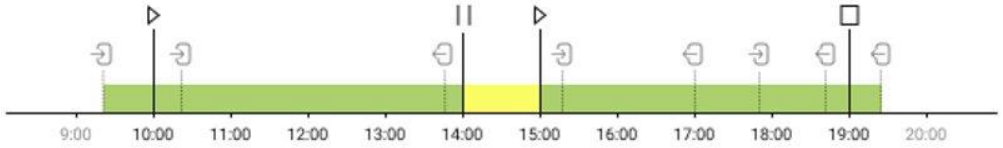
Report templates can be saved using preset settings (by group of employees, period, etc.). The report also stores data about which access points are responsible for calculating working time. This significantly increases the speed of generating necessary reports.



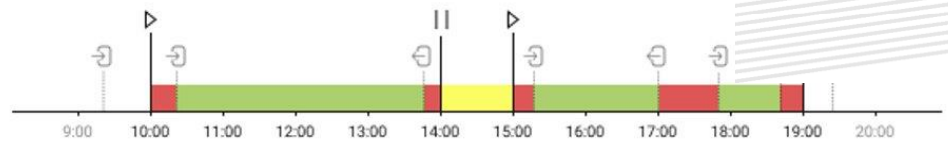
DIFFERENT WAYS OF WORKTIME ACCOUNTING

TRASSIR ACS allows for selection of event type according to which working time should be calculated, such as when an employee touched their card to the reader or when a door was opened. Another available option is strict time accounting, which counts all of employees entrances so that only the time spent inside the work area is counted.

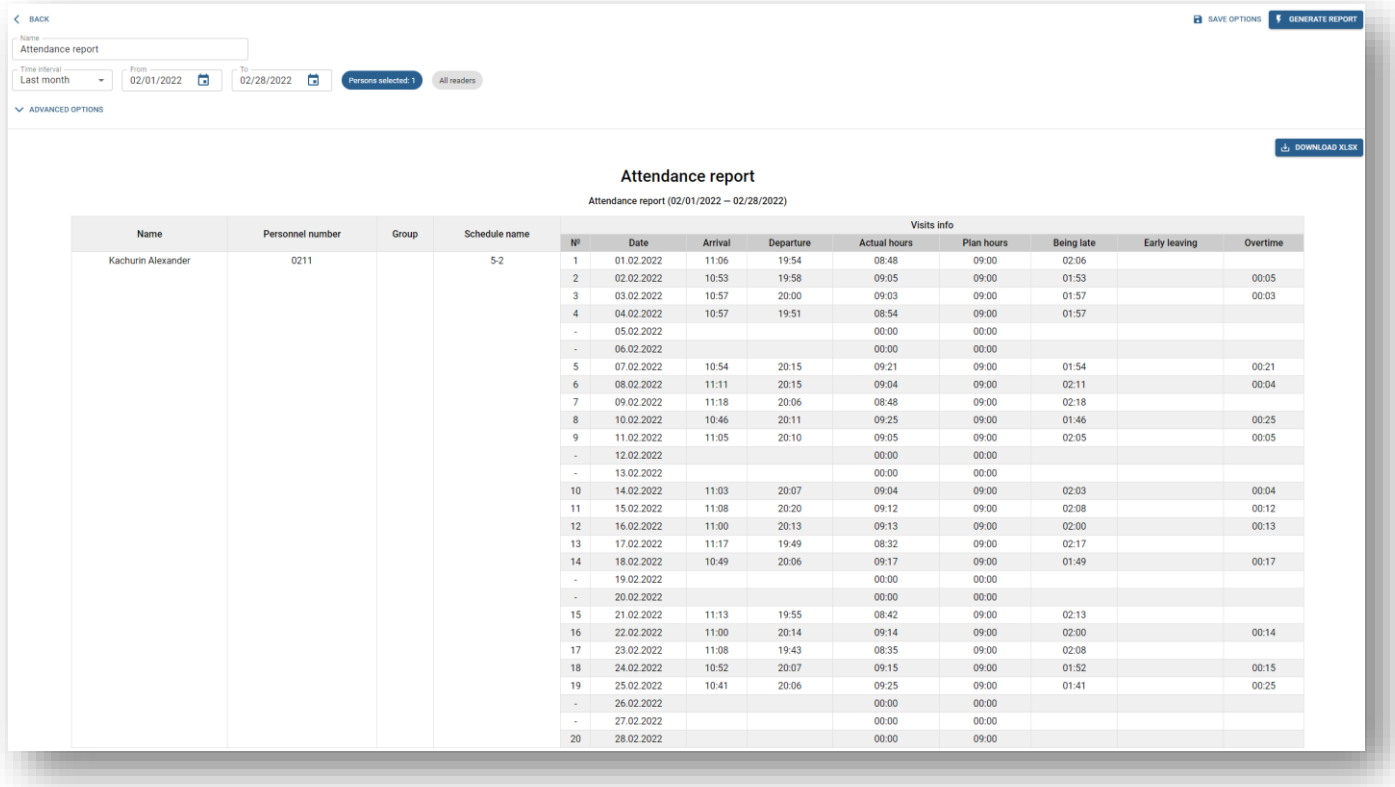
First and last entrance



All entrances



WORKTIME CALCULATION BY DAYS



Attendance report

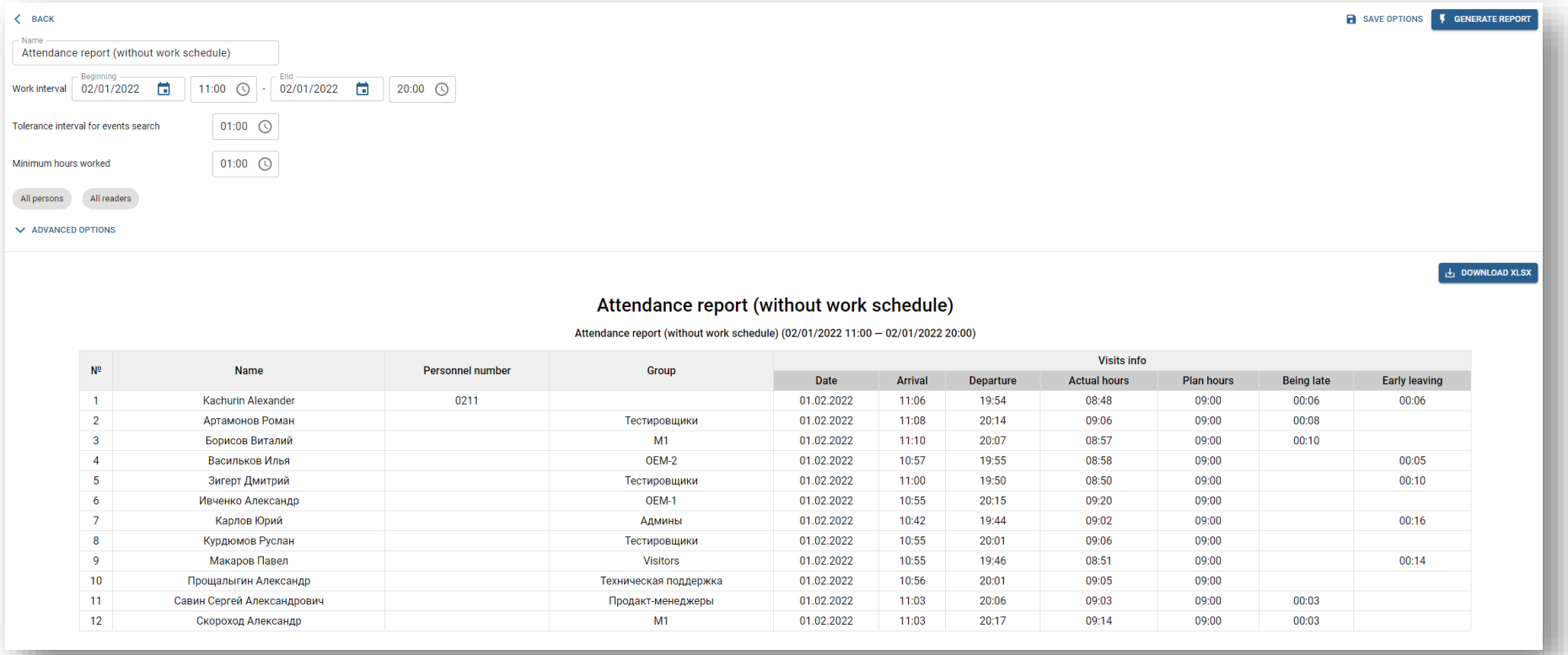
Attendance report (02/01/2022 – 02/28/2022)

Name	Personnel number	Group	Schedule name	Visits info								
				№	Date	Arrival	Departure	Actual hours	Plan hours	Being late	Early leaving	Overtime
Kachurin Alexander	0211		5-2	1	01.02.2022	11:06	19:54	08:48	09:00	02:06		
				2	02.02.2022	10:53	19:58	09:05	09:00	01:53		00:05
				3	03.02.2022	10:57	20:00	09:03	09:00	01:57		00:03
				4	04.02.2022	10:57	19:51	08:54	09:00	01:57		
				-	05.02.2022			00:00	00:00			
				-	06.02.2022			00:00	00:00			
				5	07.02.2022	10:54	20:15	09:21	09:00	01:54		00:21
				6	08.02.2022	11:11	20:15	09:04	09:00	02:11		00:04
				7	09.02.2022	11:18	20:06	08:48	09:00	02:18		
				8	10.02.2022	10:46	20:11	09:25	09:00	01:46		00:25
				9	11.02.2022	11:05	20:10	09:05	09:00	02:05		00:05
				-	12.02.2022			00:00	00:00			
				-	13.02.2022			00:00	00:00			
				10	14.02.2022	11:03	20:07	09:04	09:00	02:03		00:04
				11	15.02.2022	11:08	20:20	09:12	09:00	02:08		00:12
				12	16.02.2022	11:00	20:13	09:13	09:00	02:00		00:13
				13	17.02.2022	11:17	19:49	08:32	09:00	02:17		
				14	18.02.2022	10:49	20:06	09:17	09:00	01:49		00:17
				-	19.02.2022			00:00	00:00			
				-	20.02.2022			00:00	00:00			
				15	21.02.2022	11:13	19:55	08:42	09:00	02:13		
				16	22.02.2022	11:00	20:14	09:14	09:00	02:00		00:14
				17	23.02.2022	11:08	19:43	08:35	09:00	02:08		
				18	24.02.2022	10:52	20:07	09:15	09:00	01:52		00:15
				19	25.02.2022	10:41	20:06	09:25	09:00	01:41		00:25
				-	26.02.2022			00:00	00:00			
				-	27.02.2022			00:00	00:00			
				20	28.02.2022			00:00	09:00			

The system has reports that record working time by day. Choose a date and employee to display the time worked, tardiness, etc. for a given working day. These reports can also be downloaded in XLSX format.

WORKTIME CALCULATION WITHOUT WORK SCHEDULES

TRASSIR ACS also has a generalized report that summarizes the time worked over a certain period. Not by days, but by period of time. This option is useful when employees cannot be connected with a work schedule.



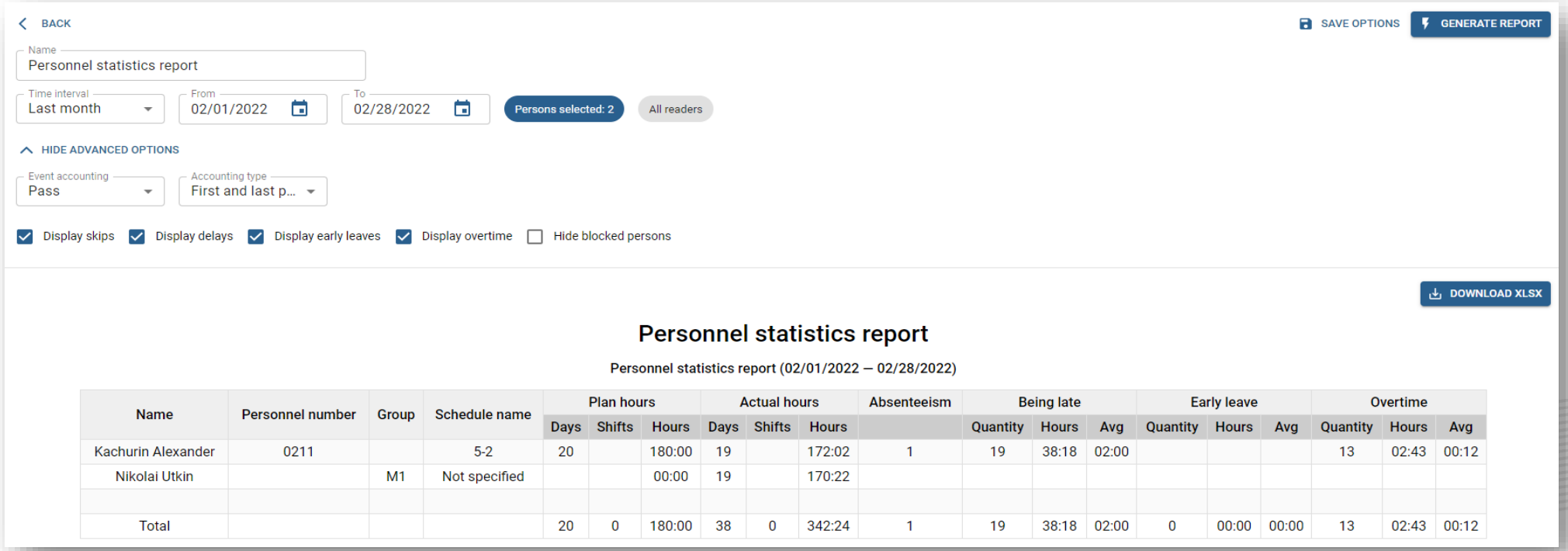
Attendance report (without work schedule)

Attendance report (without work schedule) (02/01/2022 11:00 — 02/01/2022 20:00)

№	Name	Personnel number	Group	Visits info						
				Date	Arrival	Departure	Actual hours	Plan hours	Being late	Early leaving
1	Kachurin Alexander	0211		01.02.2022	11:06	19:54	08:48	09:00	00:06	00:06
2	Артамонов Роман		Тестировщики	01.02.2022	11:08	20:14	09:06	09:00	00:08	
3	Борисов Виталий		M1	01.02.2022	11:10	20:07	08:57	09:00	00:10	
4	Васильков Илья		OEM-2	01.02.2022	10:57	19:55	08:58	09:00		00:05
5	Зигерт Дмитрий		Тестировщики	01.02.2022	11:00	19:50	08:50	09:00		00:10
6	Ивченко Александр		OEM-1	01.02.2022	10:55	20:15	09:20	09:00		
7	Карлов Юрий		Админы	01.02.2022	10:42	19:44	09:02	09:00		00:16
8	Курдюмов Руслан		Тестировщики	01.02.2022	10:55	20:01	09:06	09:00		
9	Макаров Павел		Visitors	01.02.2022	10:55	19:46	08:51	09:00		00:14
10	Прощалыгин Александр		Техническая поддержка	01.02.2022	10:56	20:01	09:05	09:00		
11	Савин Сергей Александрович		Продакт-менеджеры	01.02.2022	11:03	20:06	09:03	09:00	00:03	
12	Скороход Александр		M1	01.02.2022	11:03	20:17	09:14	09:00	00:03	

PERSONNEL STATISTICS

Statistics for each employee can be displayed, such as: number of days employee was at work, number of days required, amount actually worked, and number of late arrivals. This report can be downloaded in Excel format.



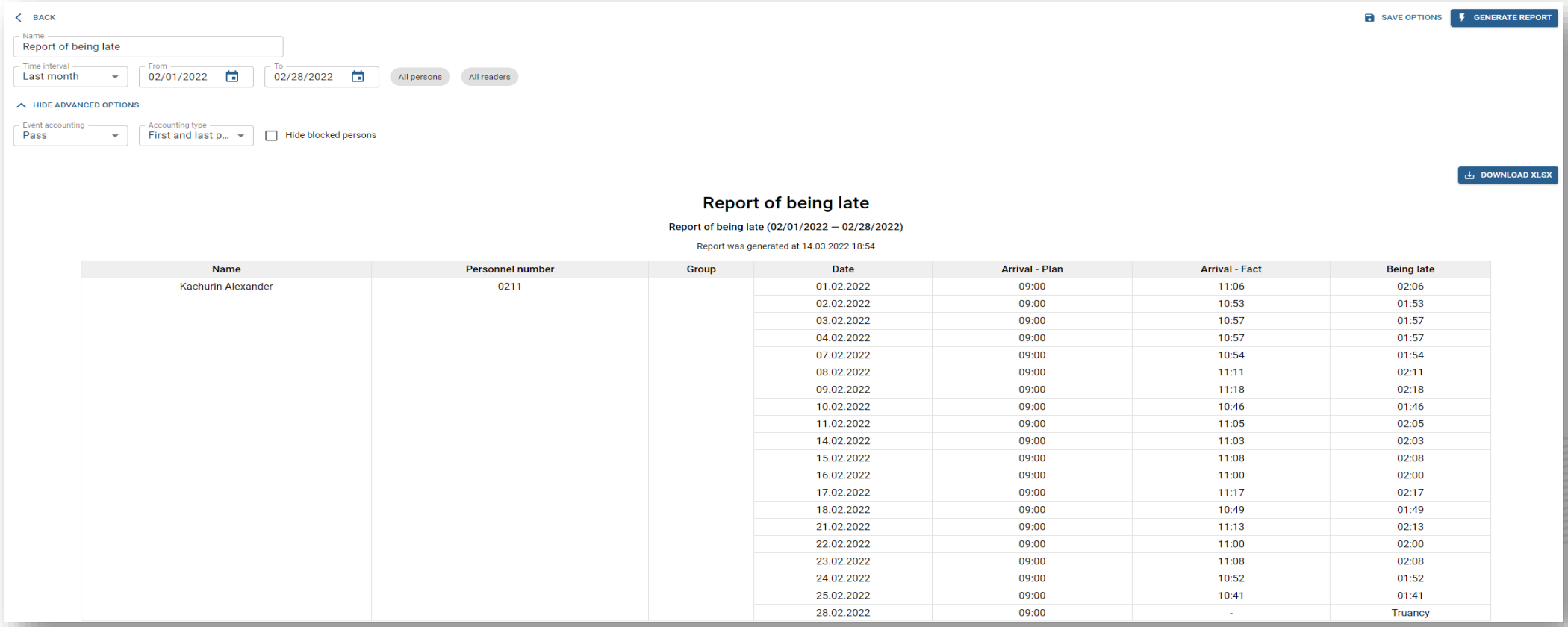
Personnel statistics report

Personnel statistics report (02/01/2022 — 02/28/2022)

Name	Personnel number	Group	Schedule name	Plan hours			Actual hours			Absenteeism	Being late			Early leave			Overtime		
				Days	Shifts	Hours	Days	Shifts	Hours		Quantity	Hours	Avg	Quantity	Hours	Avg	Quantity	Hours	Avg
Kachurin Alexander	0211		5-2	20		180:00	19		172:02	1	19	38:18	02:00				13	02:43	00:12
Nikolai Utkin		M1	Not specified			00:00	19		170:22										
Total				20	0	180:00	38	0	342:24	1	19	38:18	02:00	0	00:00	00:00	13	02:43	00:12

REPORT OF LATE ARRIVALS

A separate report on employee tardiness can be generated.



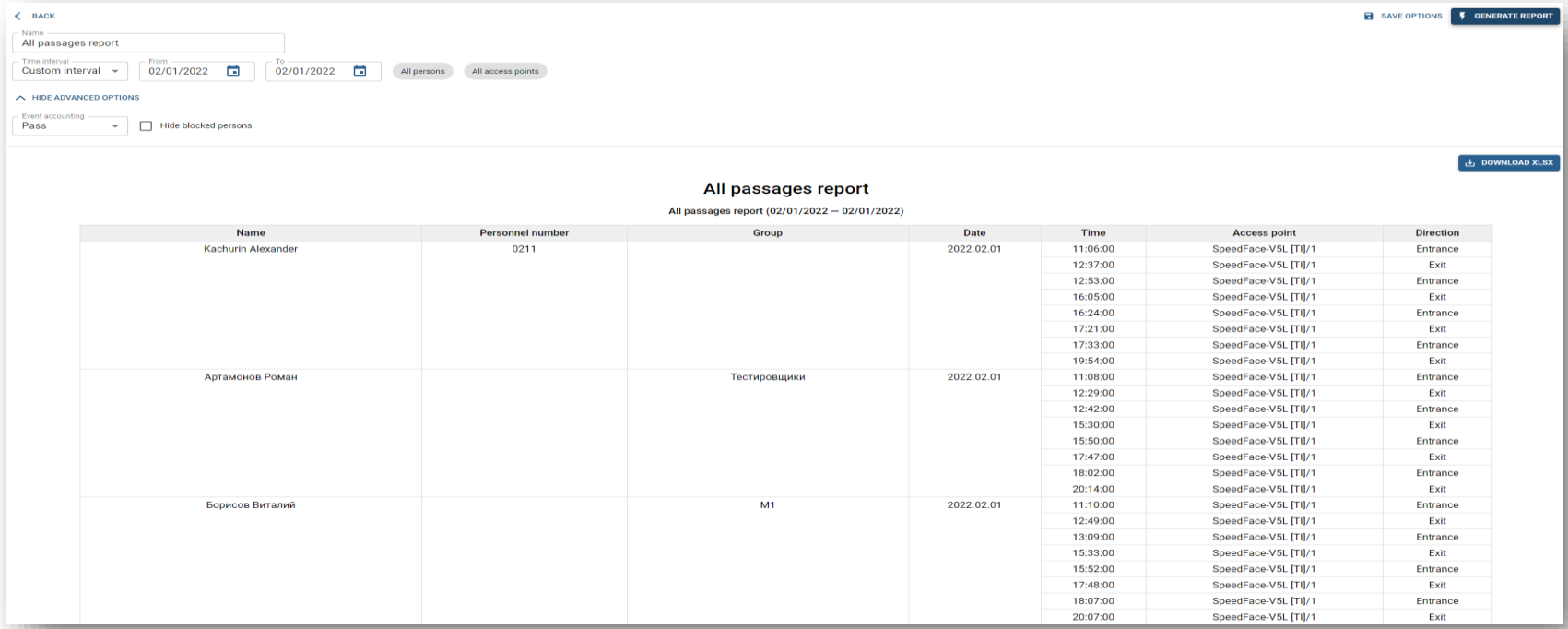
Report of being late

Report of being late (02/01/2022 — 02/28/2022)

Report was generated at 14.03.2022 18:54

Name	Personnel number	Group	Date	Arrival - Plan	Arrival - Fact	Being late
Kachurin Alexander	0211		01.02.2022	09:00	11:06	02:06
			02.02.2022	09:00	10:53	01:53
			03.02.2022	09:00	10:57	01:57
			04.02.2022	09:00	10:57	01:57
			07.02.2022	09:00	10:54	01:54
			08.02.2022	09:00	11:11	02:11
			09.02.2022	09:00	11:18	02:18
			10.02.2022	09:00	10:46	01:46
			11.02.2022	09:00	11:05	02:05
			14.02.2022	09:00	11:03	02:03
			15.02.2022	09:00	11:08	02:08
			16.02.2022	09:00	11:00	02:00
			17.02.2022	09:00	11:17	02:17
			18.02.2022	09:00	10:49	01:49
			21.02.2022	09:00	11:13	02:13
			22.02.2022	09:00	11:00	02:00
			23.02.2022	09:00	11:08	02:08
			24.02.2022	09:00	10:52	01:52
			25.02.2022	09:00	10:41	01:41
			28.02.2022	09:00	-	Truancy

ALL STAFF MOVEMENTS

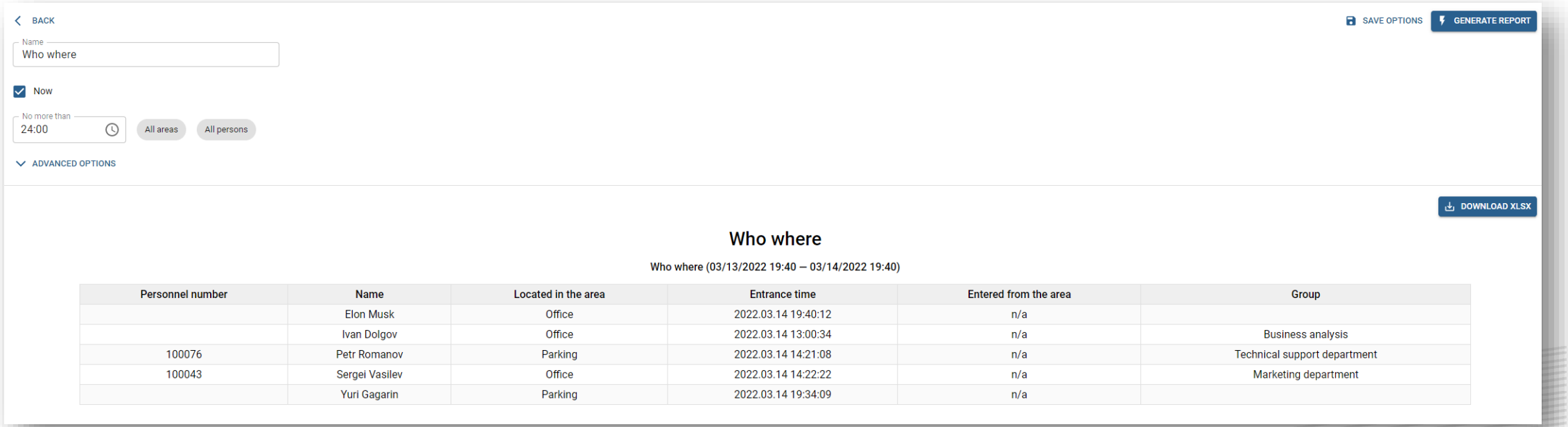


Name	Personnel number	Group	Date	Time	Access point	Direction
Kachurin Alexander	0211		2022.02.01	11:06:00	SpeedFace-V5L [TI]/1	Entrance
				12:37:00	SpeedFace-V5L [TI]/1	Exit
				12:53:00	SpeedFace-V5L [TI]/1	Entrance
				16:05:00	SpeedFace-V5L [TI]/1	Exit
				16:24:00	SpeedFace-V5L [TI]/1	Entrance
				17:21:00	SpeedFace-V5L [TI]/1	Exit
				17:33:00	SpeedFace-V5L [TI]/1	Entrance
				19:54:00	SpeedFace-V5L [TI]/1	Exit
Артамонов Роман		Тестировщики	2022.02.01	11:08:00	SpeedFace-V5L [TI]/1	Entrance
				12:29:00	SpeedFace-V5L [TI]/1	Exit
				12:42:00	SpeedFace-V5L [TI]/1	Entrance
				15:30:00	SpeedFace-V5L [TI]/1	Exit
				15:50:00	SpeedFace-V5L [TI]/1	Entrance
				17:47:00	SpeedFace-V5L [TI]/1	Exit
				18:02:00	SpeedFace-V5L [TI]/1	Entrance
				20:14:00	SpeedFace-V5L [TI]/1	Exit
Борисов Виталий		M1	2022.02.01	11:10:00	SpeedFace-V5L [TI]/1	Entrance
				12:49:00	SpeedFace-V5L [TI]/1	Exit
				13:09:00	SpeedFace-V5L [TI]/1	Entrance
				15:33:00	SpeedFace-V5L [TI]/1	Exit
				15:52:00	SpeedFace-V5L [TI]/1	Entrance
				17:48:00	SpeedFace-V5L [TI]/1	Exit
				18:07:00	SpeedFace-V5L [TI]/1	Entrance
				20:07:00	SpeedFace-V5L [TI]/1	Exit

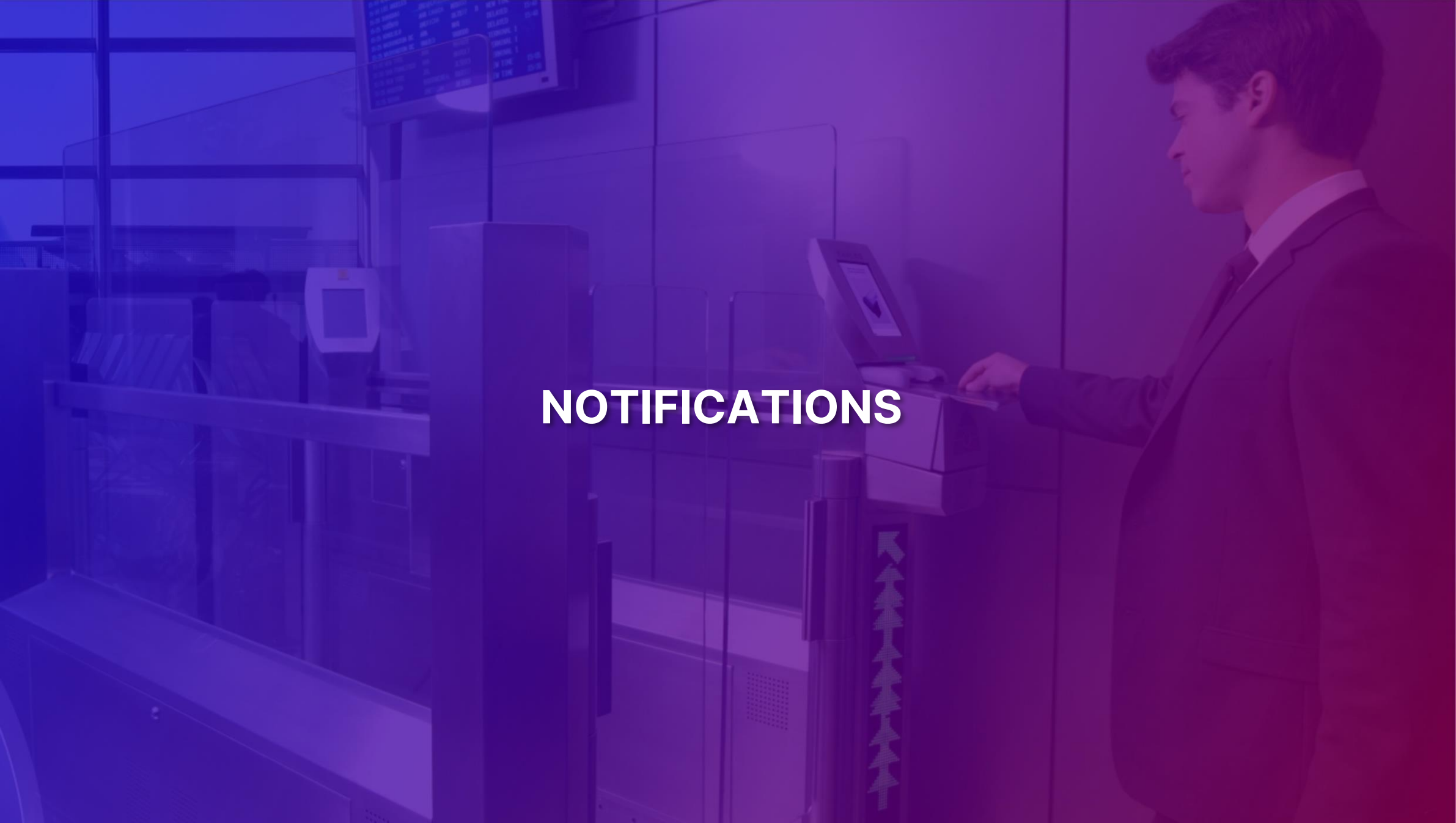
All movements through access points can be both viewed in the event widget as well as generated into a report. It can be conveniently downloaded in XSLX format for delivery to HR, accounting, and other departments.

REPORT ON EMPLOYEE PRESENCE IN SPECIFIC ZONES

TRASSIR ACS lets you select a person or zone and see whether the employee was present during working hours.



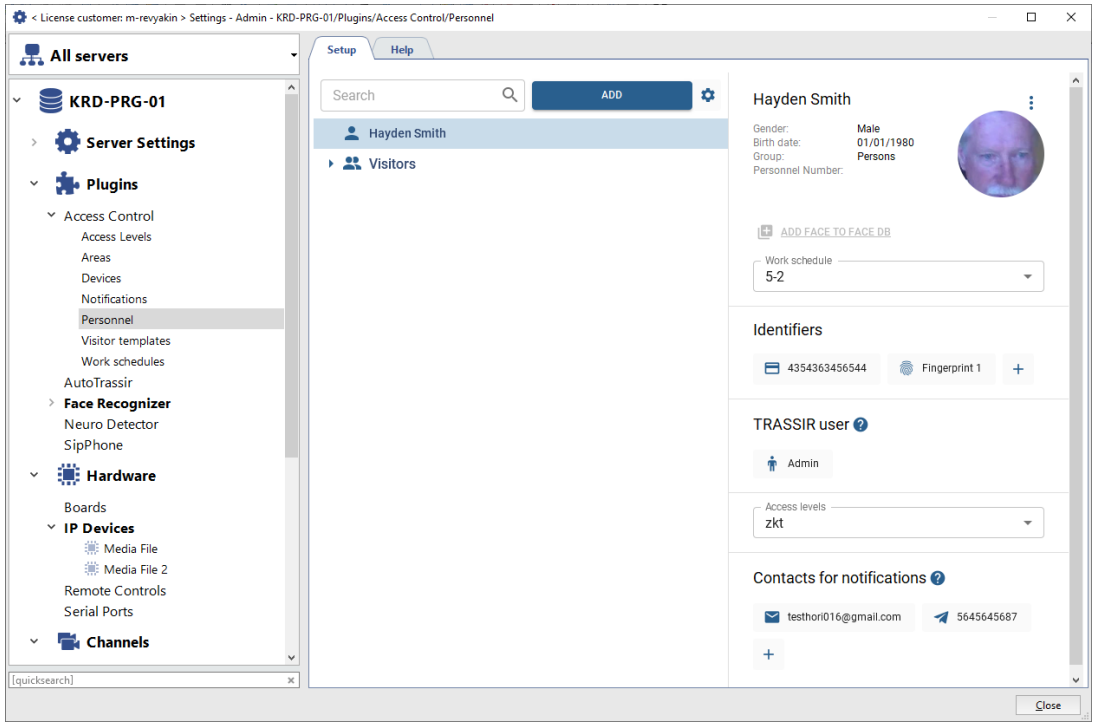
Personnel number	Name	Located in the area	Entrance time	Entered from the area	Group
	Elon Musk	Office	2022.03.14 19:40:12	n/a	
	Ivan Dolgov	Office	2022.03.14 13:00:34	n/a	Business analysis
100076	Petr Romanov	Parking	2022.03.14 14:21:08	n/a	Technical support department
100043	Sergei Vasilev	Office	2022.03.14 14:22:22	n/a	Marketing department
	Yuri Gagarin	Parking	2022.03.14 19:34:09	n/a	

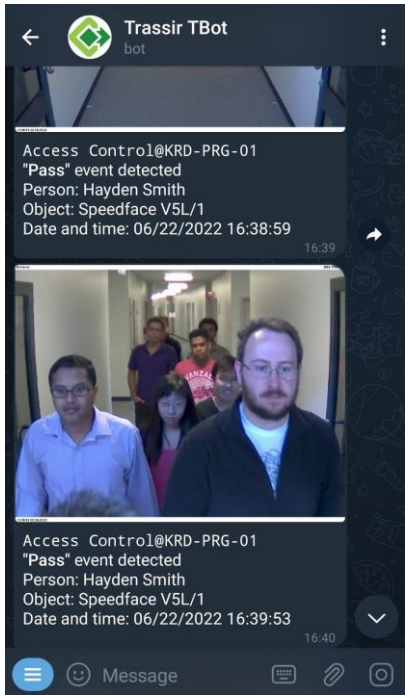

NOTIFICATIONS

NOTIFICATIONS

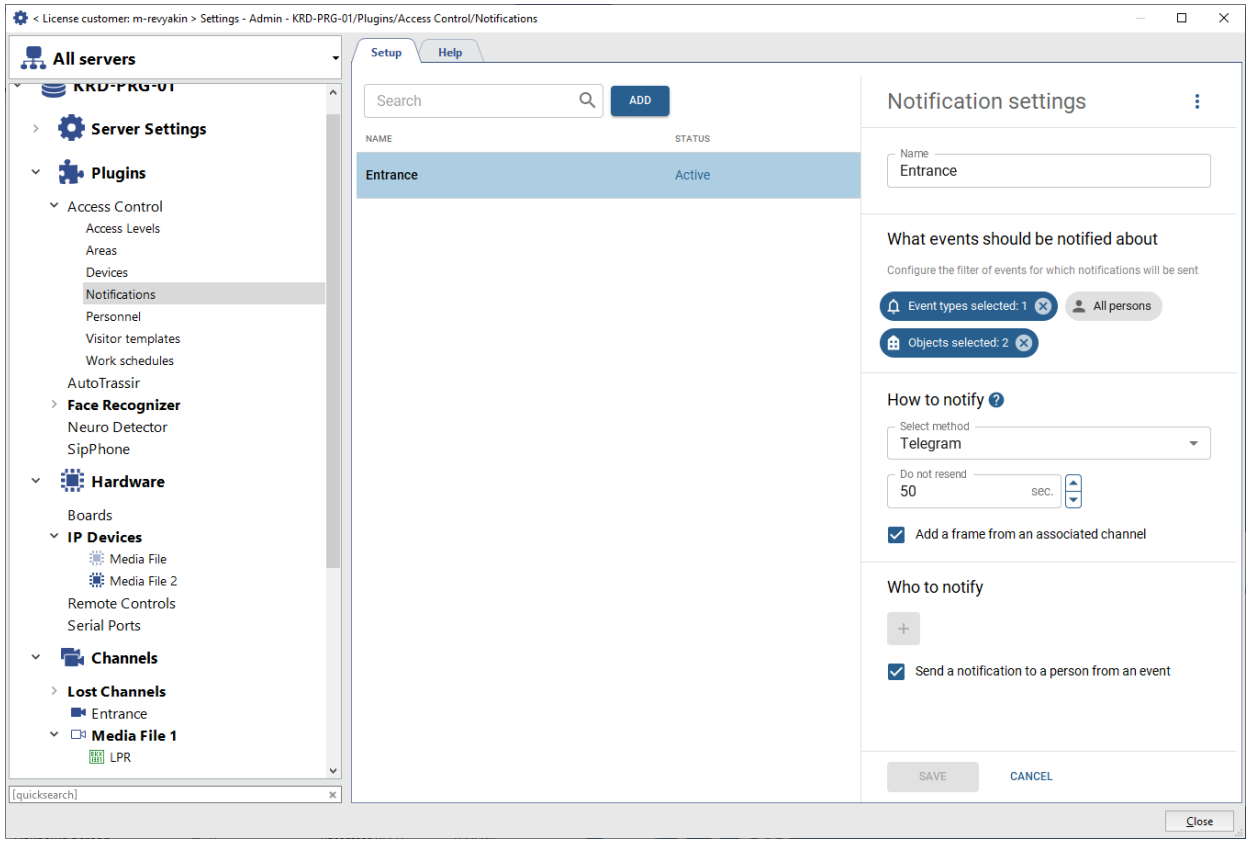
For operational access control you can set up notifications about any events.

Sending these notifications can be configured both to e-mail and Telegram bot.





NOTIFICATIONS

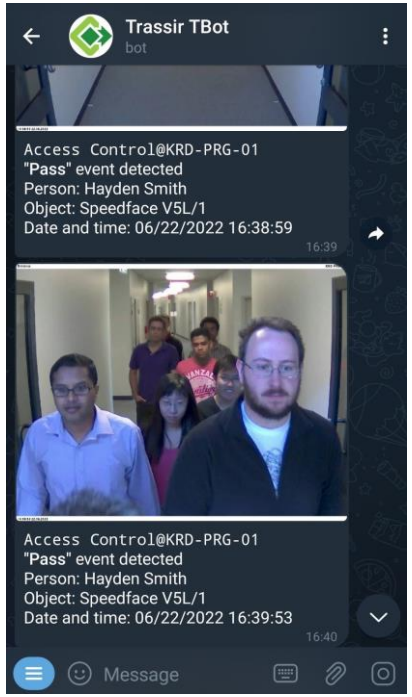


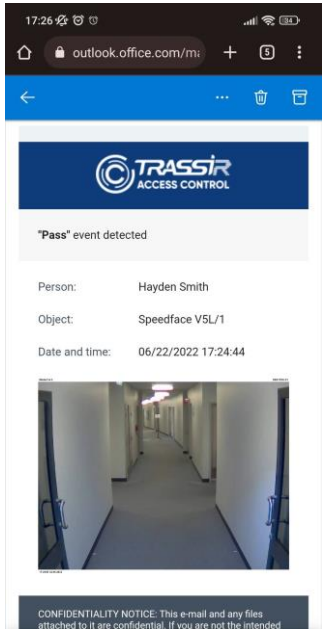
Notifications can be sent to any events that occur in the access control system: a person passes, holding the door open and many others.

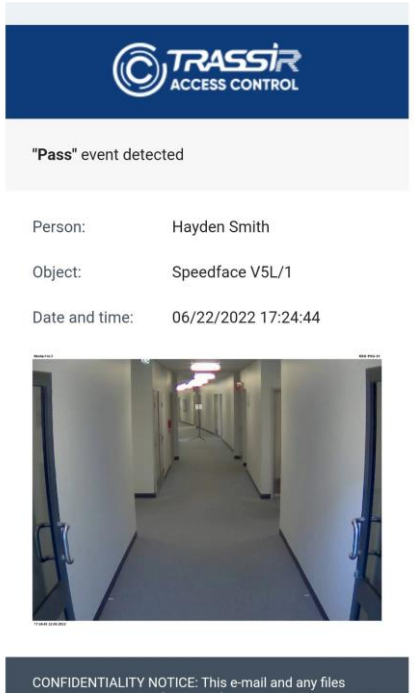
You can also configure to whom and what specific events should be sent, as well as use the automatic sending function for a person who appeared in any events, for example, sending events to parents about arrivals and departure of their child from school.

NOTIFICATIONS

TRASSIR ACS can attach a frame to the notification associated with the event, which helps to further inform operators, administrators and other stakeholders about what happened at the facility, where and when



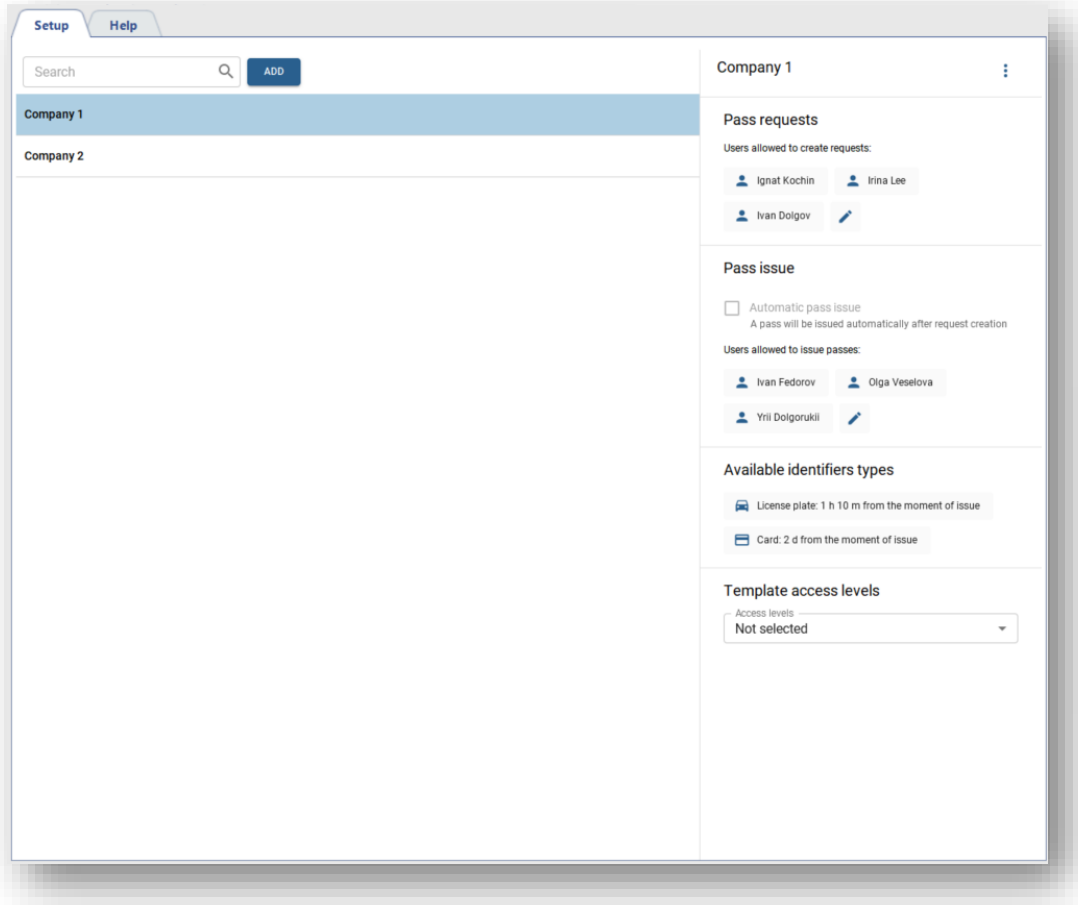


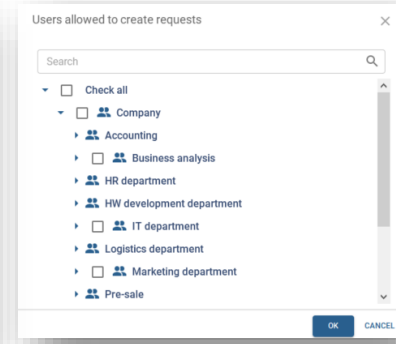


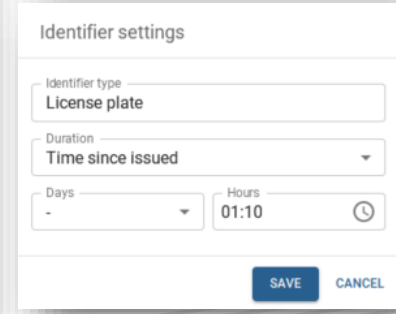
EQUIPMENT SETUP AND MANAGEMENT

GUEST CREDENTIAL TEMPLATE SETTING

If separate rights and access levels need to be created for each individual tenant, you can specify who has the ability to create requests or issue passes, and which types of identifier are available. You can set up auto-issue* - order a pass, enter a number, and the access point (barrier) opens immediately. Pass validity may also be limited.



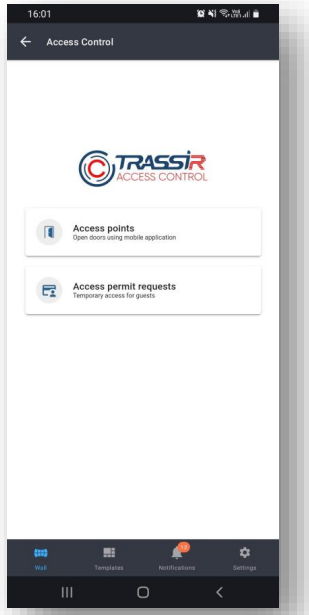


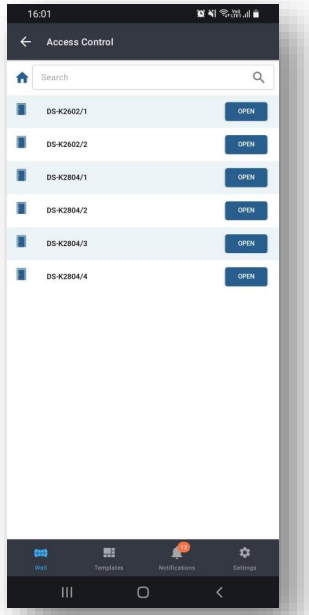


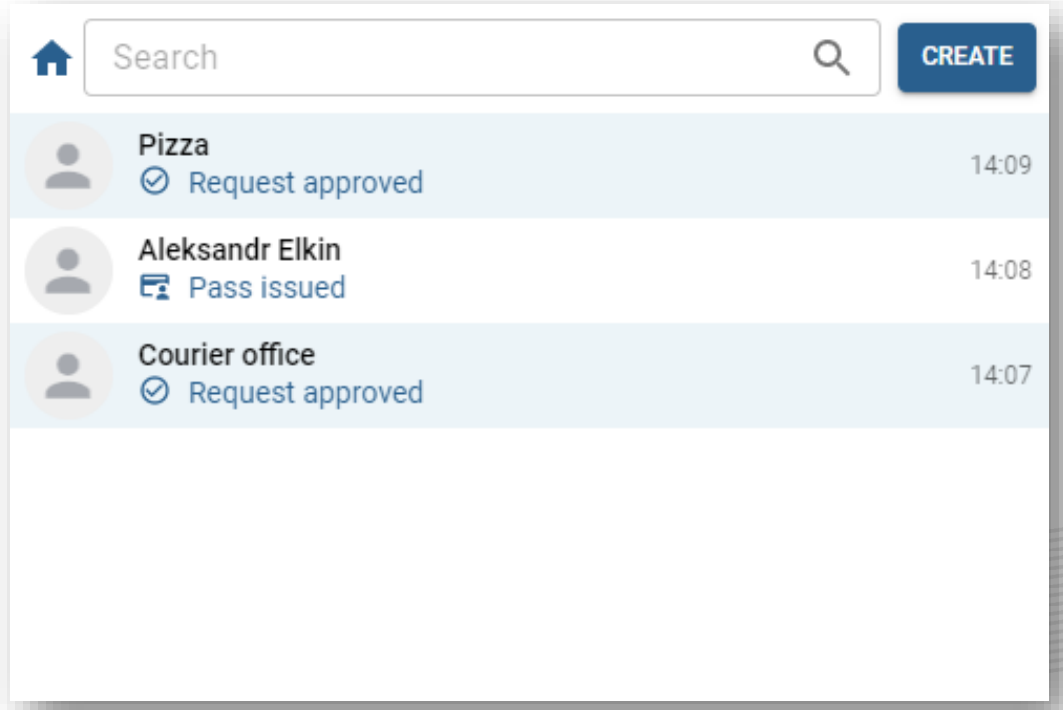
* currently available for license plates only

GUEST PASS ORDERING

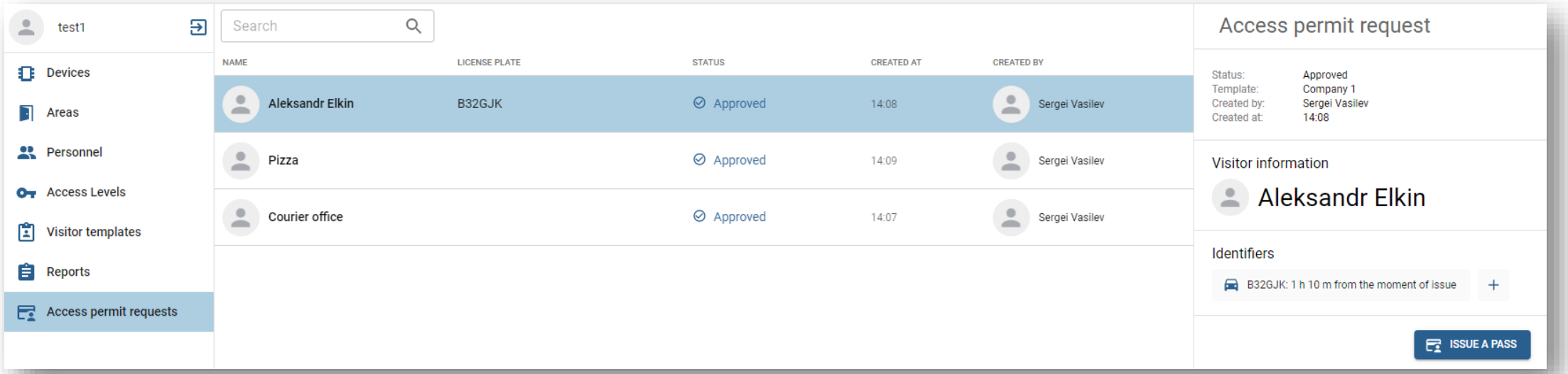
Order credentials while using TRASSIR ACS from the mobile app by entering the guest's name, selecting an available group of people, and specifying a note.





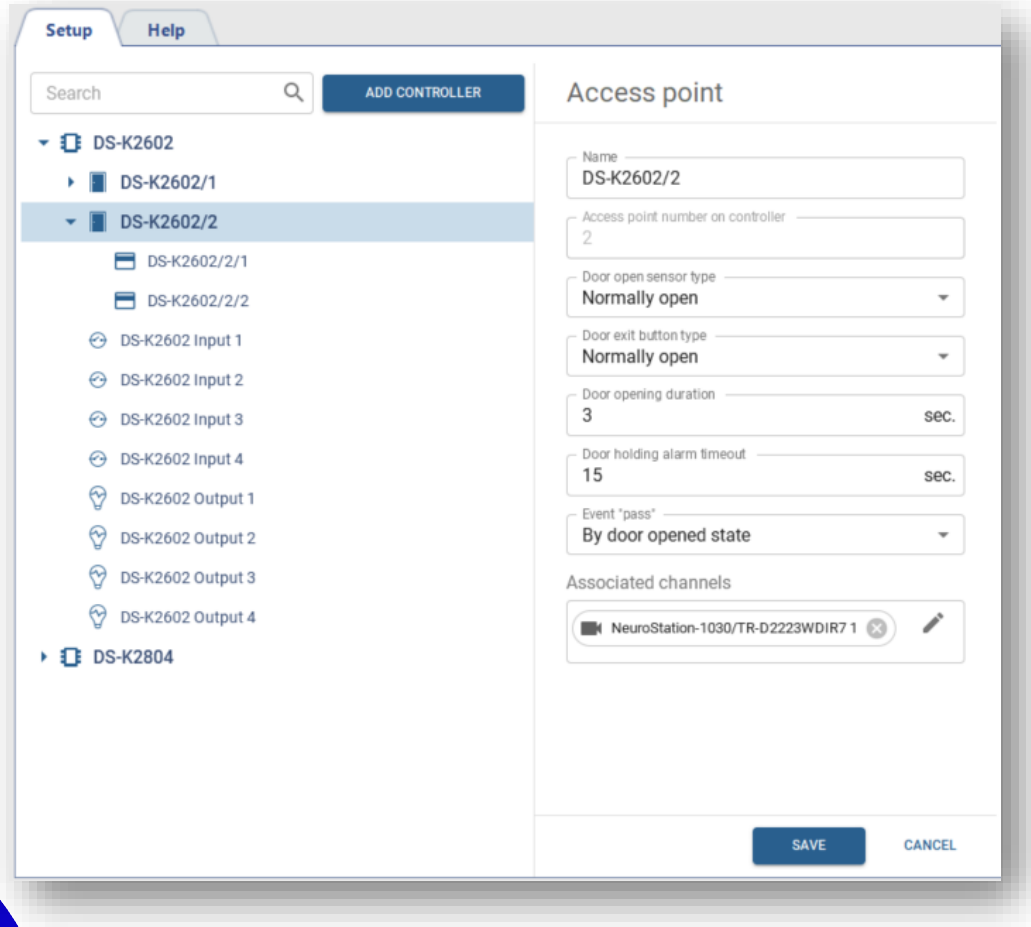


VIEW ALL APPLICATIONS AND PASSES ISSUED



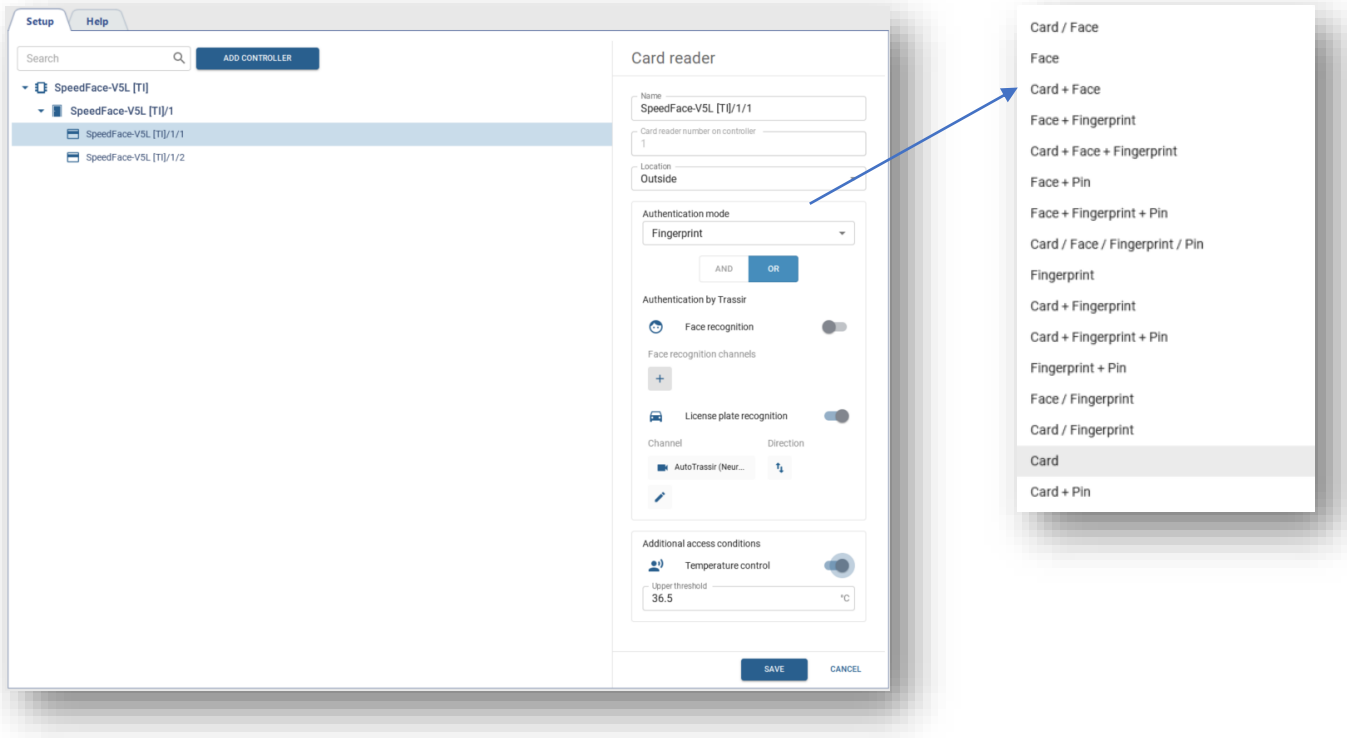
TRASSIR ACS currently contains two roles - one for ordering passes, and another for issuing them.

EQUIPMENT SETUP AND MANAGEMENT



You can configure equipment using basic parameters. Some examples are: which types of contact connect buttons, assigning times to open or hold doors, the ability to associate a specific access point with a video camera for subsequent viewing of footage from events.

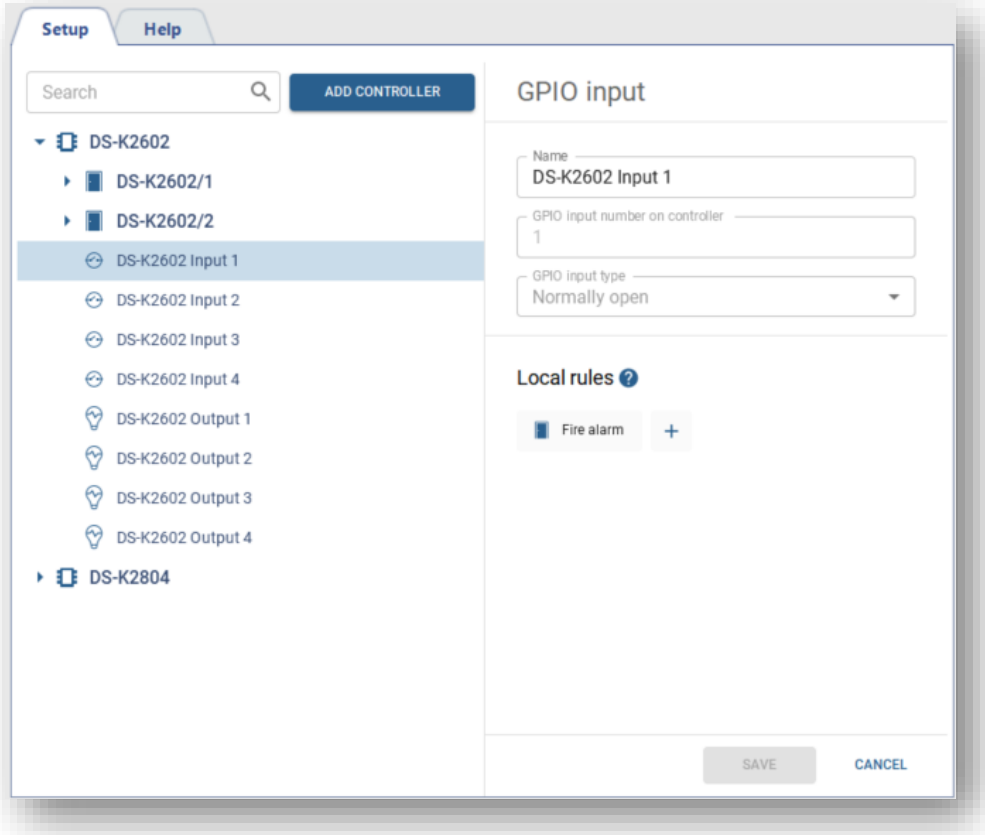
EQUIPMENT SETUP AND MANAGEMENT

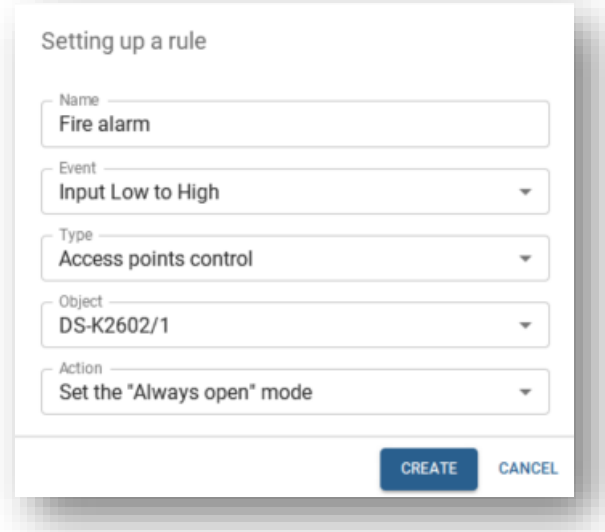


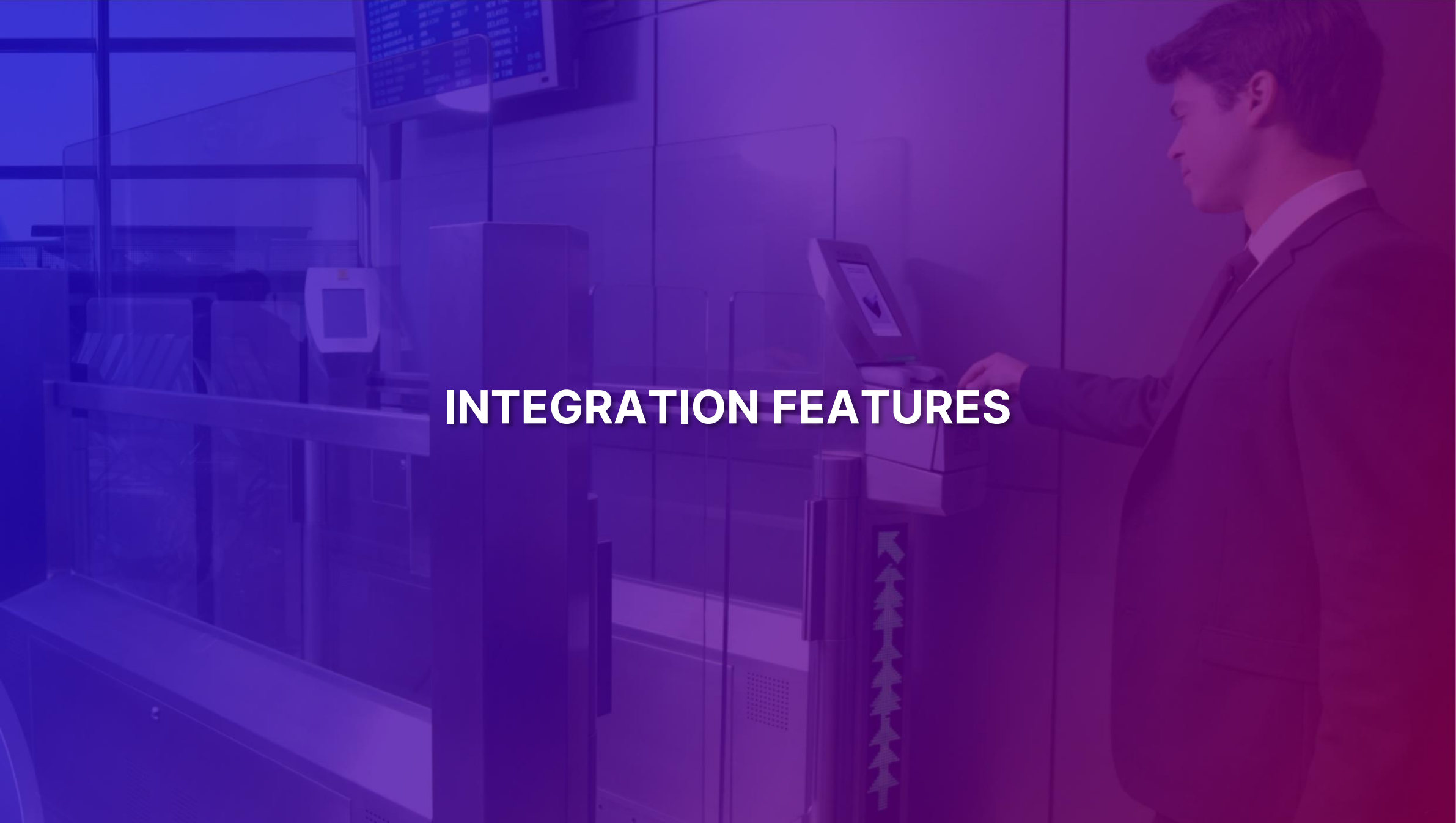
TRASSIR functions make it possible to set up a reader or include additional identification such as license plates or facial recognition.

EQUIPMENT SETUP AND MANAGEMENT (GPIO)

The operation of TRASSIR ACS can also be configured for specific responses to signals from other systems, such as fire alarms.



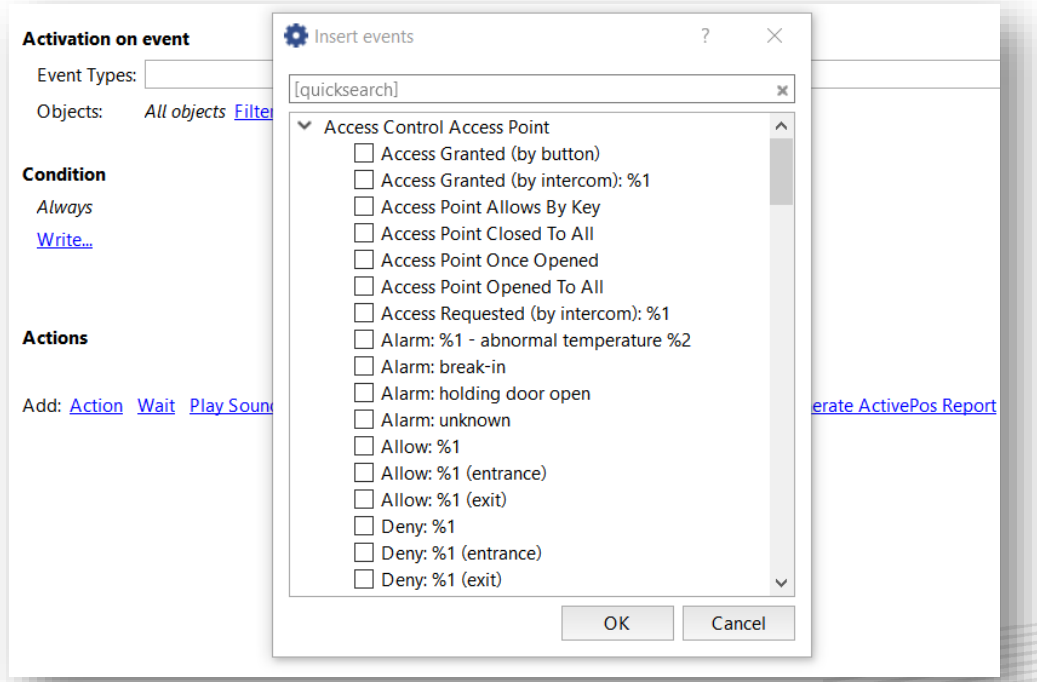




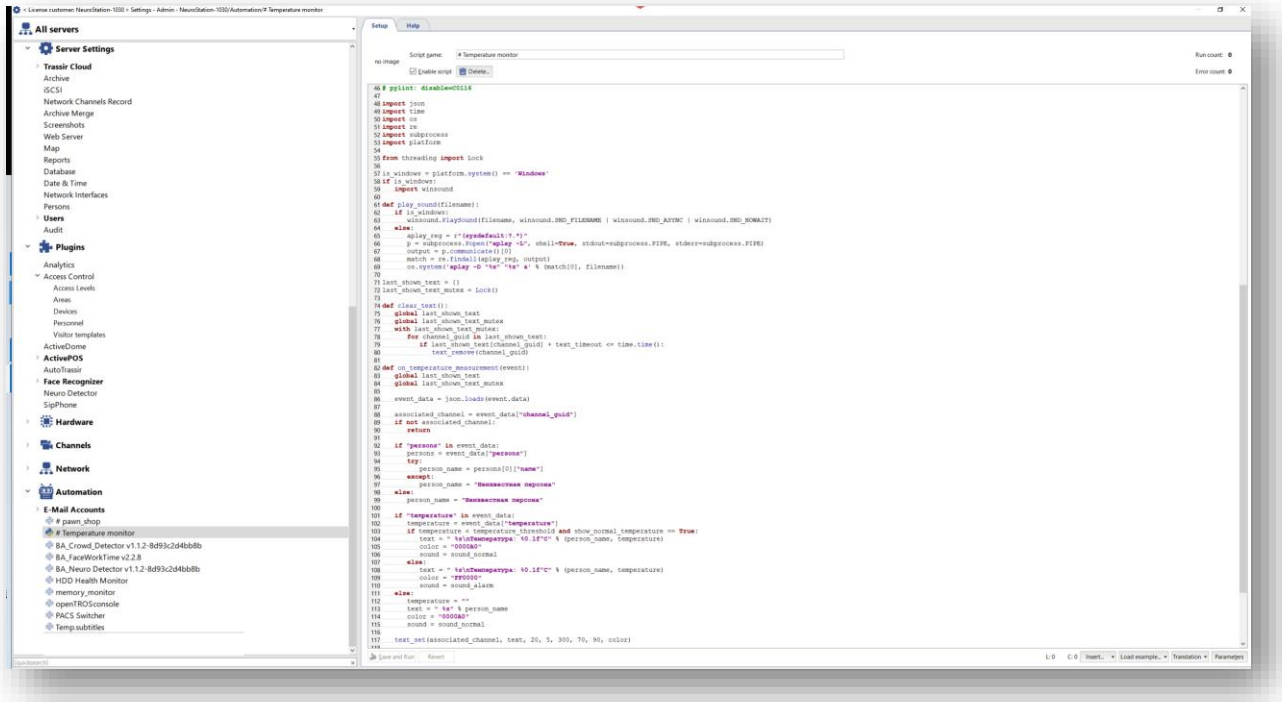
INTEGRATION FEATURES

SETTING UP RULES, FLEXIBLE REACTIONS TO EVENTS

A variety of rules can be created in the system for how it reacts to certain events. This can be done by selecting the desired action from a list of events and reactions (e.g., sending an email, playing a sound when a device fails, etc.)



EMBEDDED PROGRAMMING LANGUAGE



In the case that your requirements are absent from the list of available rules, you can use Python to create more complex scripts for TRASSIR ACS behaviors.

OPEN API

TRASSIR ACS has complete documentation with corresponding examples. It can be integrated with any information system you need. All of the TRASSIR system interface's functions can also be accessed through the open API.

Request


```
{
    "info": {
        "family": "emulator",
        "ip_address": "192.168.1.201",
        "login": "admin",
        "name": "New device",
        "password": "12345",
        "port": 8000
    },
    "language": "en"
}
```


Response


```
{
    "info": {
        "errors": [],
        "family": "emulator",
        "id": 9,
        "ip_address": "192.168.1.201",
        "licensed": true,
        "login": "admin",
        "name": "New device",
        "parent_device_id": 0,
        "password": "",
        "port": 8000,
        "status": "CONNECTING"
    }
}
```

trassir.com

welcome@tglobal.ae