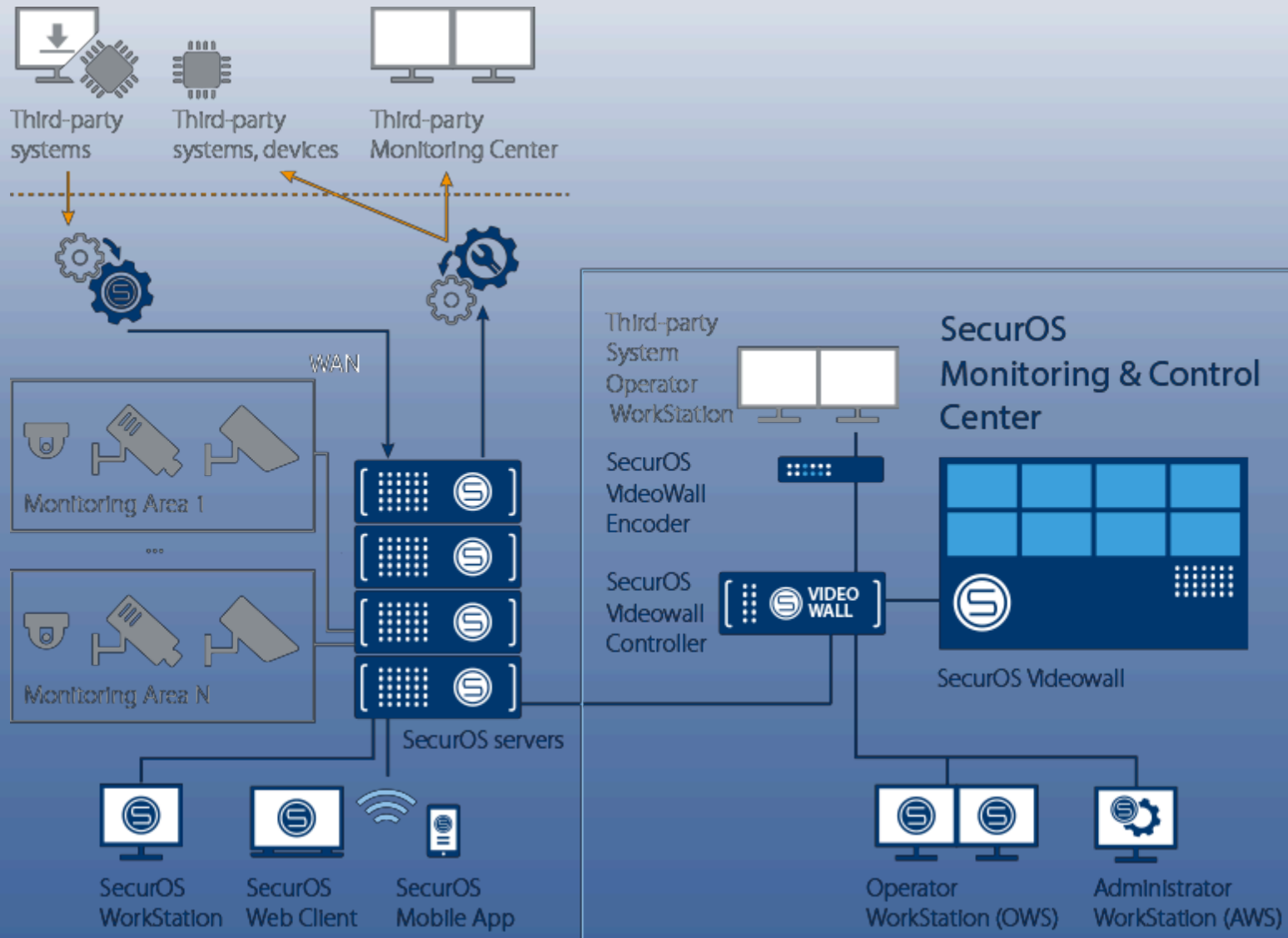


SECUROS **UNIDIED** **SECURITY &** **EXTENSIBILITY**

By operating of both video management system and intelligent analytics modules and detectors, SecurOS™ is the most powerful framework in the world.

ISS advanced software and hardware based products and solutions portfolio

SECUROS - UNIFIED SECURITY & EXTENSIBILITY



SecurOS integrates a multitude of IS and third party systems into one integrated network and creates a unified command and control capability.

SECUROS - A COMPLETE SECURITY ECO-SYSTEM



FEDERATION

Support of local or distributed security systems into a unified network with unlimited numbers of video servers, cameras, sensors, etc. Centralized monitoring and control of local sites.



INTEROPERABILITY

Integrate third party systems and devices into one network



ADDITIVE / MODULAR ARCHITECTURE

Scalable system topology generates ready ROI on the system - new functionalities and capabilities can generally be added with minimal software management



EVENT / SCENARIO MANAGEMENT

Program complex reactions to complex events to intelligently and dynamically react to real world events



EXTENSIBILITY / CUSTOMIZATION

From multi-layer maps, custom user-based screens and permissions, to custom forms and GUI, SecurOS allows for complete customization based on user need



BUSINESS INTELLIGENCE

Advanced native analytics and integration of surveillance platform with business process systems allows for proactive action

SECUROS - TECHNOLOGICAL DOMINANCE



All devices, objects, cameras, systems, and even users, macros, and scripts can be individually managed and have multilevel permissions based on login.



Each object can be controlled manually or automated using scripts and macros



Security system efficiency active monitoring



Security system resources optimization



Continuity and redundancy capability with failover



Operating under insufficient capacity of data channels



Resilient data storage



High level of cyber-security



Full compliance with standards and requirements

INTERGRATIONS & COMPATIBILITY

Video Cameras, incl. PTZ, fish-eye, ImmerVision, Computer Vision

ACS, Security & Fire Alarms, Perimeter / Intrusion, Building Automation, Weight Stations, etc.

Actuated equipment (sensors, beams, barriers, etc.)

Video Walls

Remote Storage / Data Centers (Virtualizations and NAS)

GIS, Interactive 2D/3D Maps

Emergency Service (911)

PSIM, other 3rd-party software

NATIVE PRODUCTS

License Plate Recognition

Traffic Violations Detection Systems

Face Capture & Recognition

Train Character Recognition

Sea Container Character Recognition

Visual Inspection and Automation of Terminal Gates System

Under Vehicle Surveillance System

POS & ATM Transaction Monitoring

Situational Awareness Video Analytics and Service Analytics

Access Control & Fire Alarm

Command & Control, Video Walls

MONITORING, FORENSICS AND MANAGEMENT

Remote Monitoring and Admin

Mobile App and WEB-browser

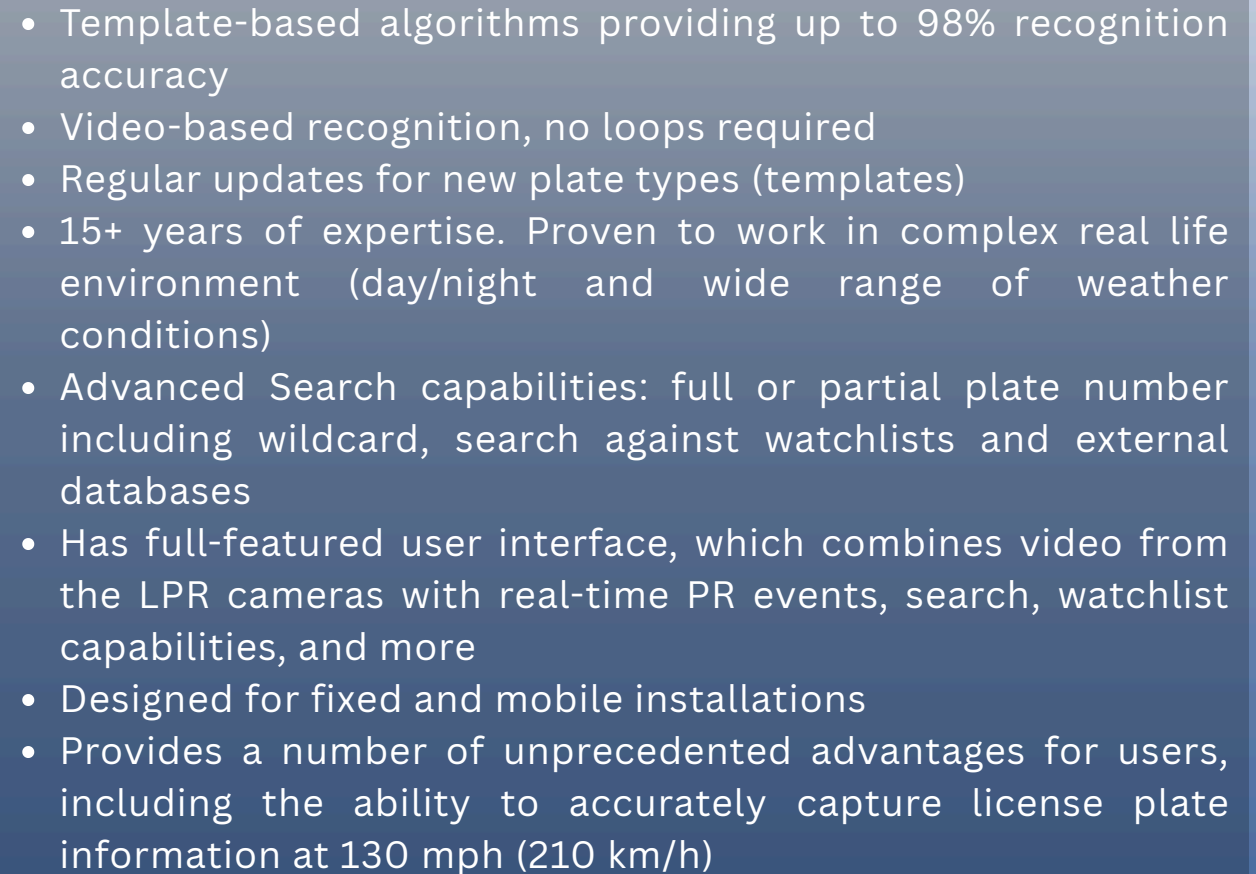
Monitoring & Control Center

Data Processing and Event Management

SOL DB / XML

ONVIF, RTP/RTSP, video formats: H.263, H.264, H.265, MPEG-4, MUPEG, MXPEG

RestAPI / SDK/ IIDK / Active Media Kit (Video API)



LICENSE PLATE RECOGNITION - RELATED SOFTWARE PRODUCTS

SecurOS EdgeAuto

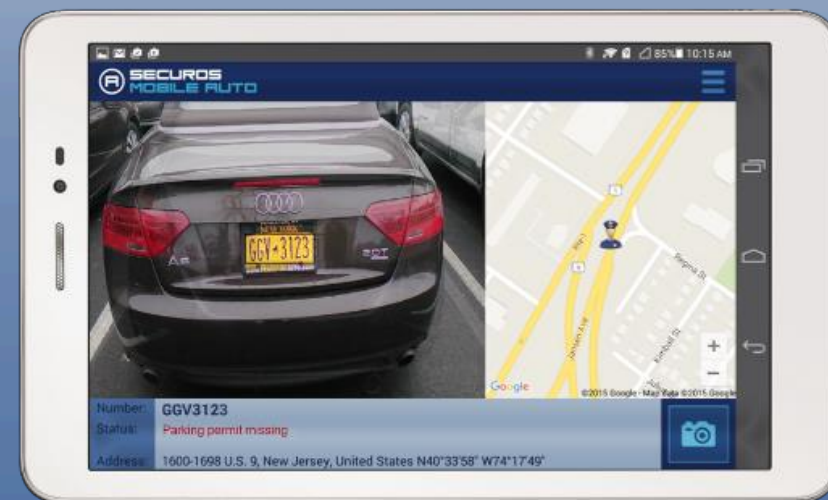
A special integrated solution for LP/ANPR embedded on supported IP-cameras.

It is targeted for applications where the camera has a limited connection with the server, and it is necessary to perform real-time license plate recognition as well as have the corresponding video archive on the server for long-term storage.



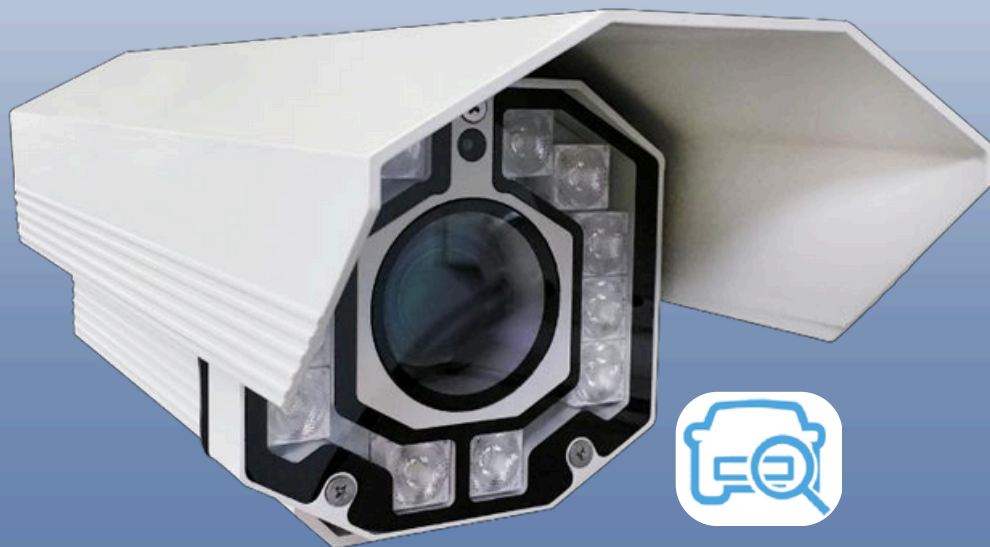
SecurOS MobileAuto

PR/ANPR mobile application designed for working in field conditions. The solution is intended for municipal and police authorities and the security services of commercial enterprises.



LICENSE PLATE RECOGNITION - SPECIALIZED TURNKEY SOLUTION

SecurOS Motus



SecurOS Motus 452 is an IP-based automatic license plate recognition camera designed for SecurOS Auto - High-speed. It provides unbeatable ANPR precision for commercial facilities and law enforcement applications.

- Ready-to-use all-in-one unit
- Specially designed for severe weather conditions
- Easy remote calibration and camera's configuration adjustments
- Built-in remotely configurable white-light or IR illuminator
- Superior image quality and NPR precision
- Recognize plates from two lanes of traffic
- IP67
- Adjustable wall-mount bracket is included
- Low power consumption
- FCC and CE certified
- 2 years warranty

ADVANCED SPEED LIMIT VIOLATIONS DETECTION

SecurOS Velox

SecurOS Velox is a ready-to-use all-in-one device designed for real-time traffic violations detection and automatic license plate recognition (ANPR) of all passing vehicles - 24 hours a day under any weather conditions. SecurOS Velox provides automatic detection of traffic violations:



DETECTION OF COMPLEX TRAFFIC VIOLATIONS

SecurOS Crossroad

SecurOS Crossroad is an edge-to-edge solution for traffic violations detection. It combines specialized ruggedized hardware components and software for high precision detection and automatic license plate recognition (ANPR).

SecurOS Crossroad automatically detects a wide range of Traffic Violations at a crossroads including a violation failure to give way to pedestrians at zebra crosswalks.



SecurOS Cargo provides the ability to recognize characters on cargo containers from above, below, and from the side. It has an automated ISO code recognition system, so that the country of origin can be known right away. The advanced algorithms mean that such information can be read in any kind of weather, and can also read container characters on trucks as well as cranes.

The screenshot shows the RECOGNITION ENTERPRISE software interface. The main window displays a video feed of a train car with the text "TCLU 291103" overlaid. The interface includes a top menu bar, a left sidebar with camera selection, a right sidebar with search filters (Time Interval, Type, etc.), and a bottom section with a large text overlay "TCLU 291103" and a search results table.

Search Results Table:

Image Name	Image	Container Top Number Recognizer ID
0000000004	0000	Container top number recognizer ID
0000000005	0001	Container top number recognizer ID
0000000006	0002	Container top number recognizer ID
0000000007	0003	Container top number recognizer ID
0000000008	0004	Container top number recognizer ID
0000000009	0005	Container top number recognizer ID
0000000010	0006	Container top number recognizer ID
0000000011	0007	Container top number recognizer ID
0000000012	0008	Container top number recognizer ID
0000000013	0009	Container top number recognizer ID
0000000014	0010	Container top number recognizer ID
0000000015	0011	Container top number recognizer ID
0000000016	0012	Container top number recognizer ID
0000000017	0013	Container top number recognizer ID
0000000018	0014	Container top number recognizer ID
0000000019	0015	Container top number recognizer ID
0000000020	0016	Container top number recognizer ID
0000000021	0017	Container top number recognizer ID
0000000022	0018	Container top number recognizer ID
0000000023	0019	Container top number recognizer ID
0000000024	0020	Container top number recognizer ID
0000000025	0021	Container top number recognizer ID
0000000026	0022	Container top number recognizer ID
0000000027	0023	Container top number recognizer ID
0000000028	0024	Container top number recognizer ID
0000000029	0025	Container top number recognizer ID
0000000030	0026	Container top number recognizer ID
0000000031	0027	Container top number recognizer ID
0000000032	0028	Container top number recognizer ID
0000000033	0029	Container top number recognizer ID
0000000034	0030	Container top number recognizer ID
0000000035	0031	Container top number recognizer ID
0000000036	0032	Container top number recognizer ID
0000000037	0033	Container top number recognizer ID
0000000038	0034	Container top number recognizer ID
0000000039	0035	Container top number recognizer ID
0000000040	0036	Container top number recognizer ID
0000000041	0037	Container top number recognizer ID
0000000042	0038	Container top number recognizer ID
0000000043	0039	Container top number recognizer ID
0000000044	0040	Container top number recognizer ID
0000000045	0041	Container top number recognizer ID
0000000046	0042	Container top number recognizer ID
0000000047	0043	Container top number recognizer ID
0000000048	0044	Container top number recognizer ID
0000000049	0045	Container top number recognizer ID
0000000050	0046	Container top number recognizer ID
0000000051	0047	Container top number recognizer ID
0000000052	0048	Container top number recognizer ID
0000000053	0049	Container top number recognizer ID
0000000054	0050	Container top number recognizer ID
0000000055	0051	Container top number recognizer ID
0000000056	0052	Container top number recognizer ID
0000000057	0053	Container top number recognizer ID
0000000058	0054	Container top number recognizer ID
0000000059	0055	Container top number recognizer ID
0000000060	0056	Container top number recognizer ID
0000000061	0057	Container top number recognizer ID
0000000062	0058	Container top number recognizer ID
0000000063	0059	Container top number recognizer ID
0000000064	0060	Container top number recognizer ID
0000000065	0061	Container top number recognizer ID
0000000066	0062	Container top number recognizer ID
0000000067	0063	Container top number recognizer ID
0000000068	0064	Container top number recognizer ID
0000000069	0065	Container top number recognizer ID
0000000070	0066	Container top number recognizer ID
0000000071	0067	Container top number recognizer ID
0000000072	0068	Container top number recognizer ID
0000000073	0069	Container top number recognizer ID
0000000074	0070	Container top number recognizer ID
0000000075	0071	Container top number recognizer ID
0000000076	0072	Container top number recognizer ID
0000000077	0073	Container top number recognizer ID
0000000078	0074	Container top number recognizer ID
0000000079	0075	Container top number recognizer ID
0000000080	0076	Container top number recognizer ID
0000000081	0077	Container top number recognizer ID
0000000082	0078	Container top number recognizer ID
0000000083	0079	Container top number recognizer ID
0000000084	0080	Container top number recognizer ID
0000000085	0081	Container top number recognizer ID
0000000086	0082	Container top number recognizer ID
0000000087	0083	Container top number recognizer ID
0000000088	0084	Container top number recognizer ID
0000000089	0085	Container top number recognizer ID
0000000090	0086	Container top number recognizer ID

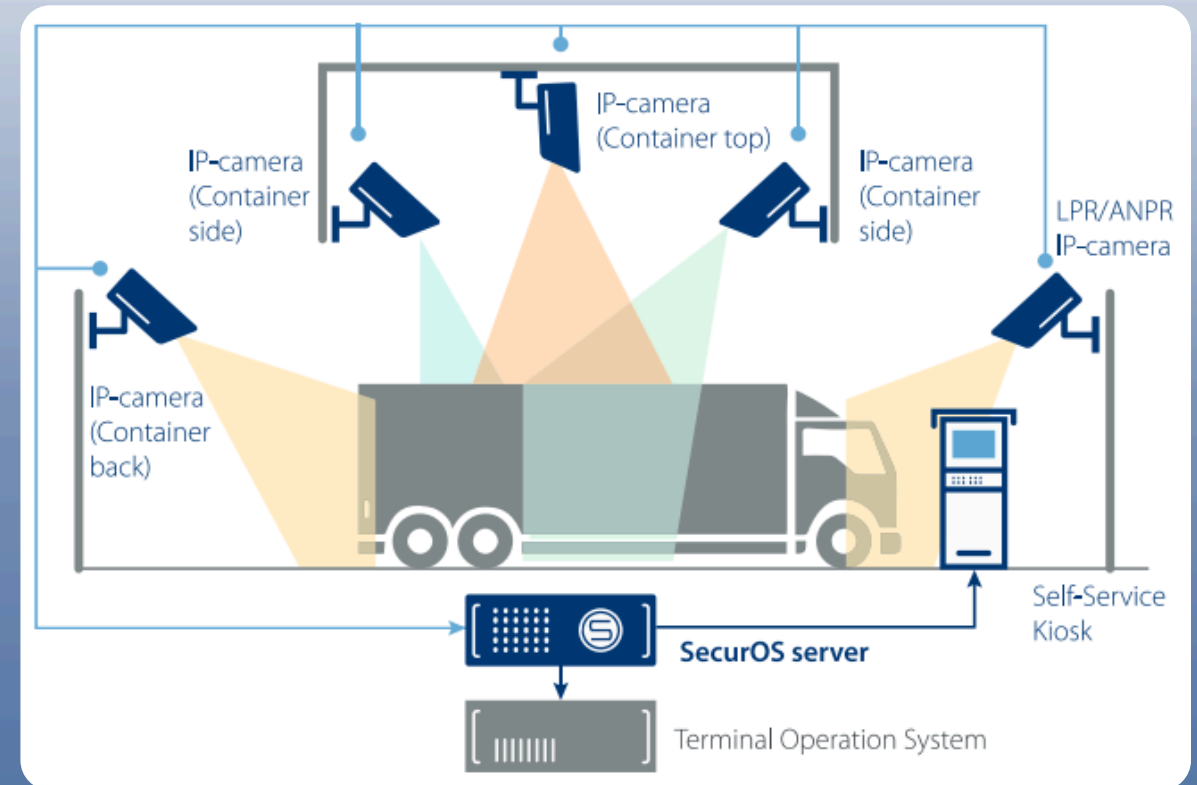
VISUAL INSPECTION AND AUTOMATION OF TERMINAK GATES SYSTEM

SecurOS Cargo Terminal

SecurOS Cargo Terminal facilitates data flow processing and seamless integration with Terminal Operation System.

This software-hardware based solution automatically collects and provides to TOS full set of Gate metadata:

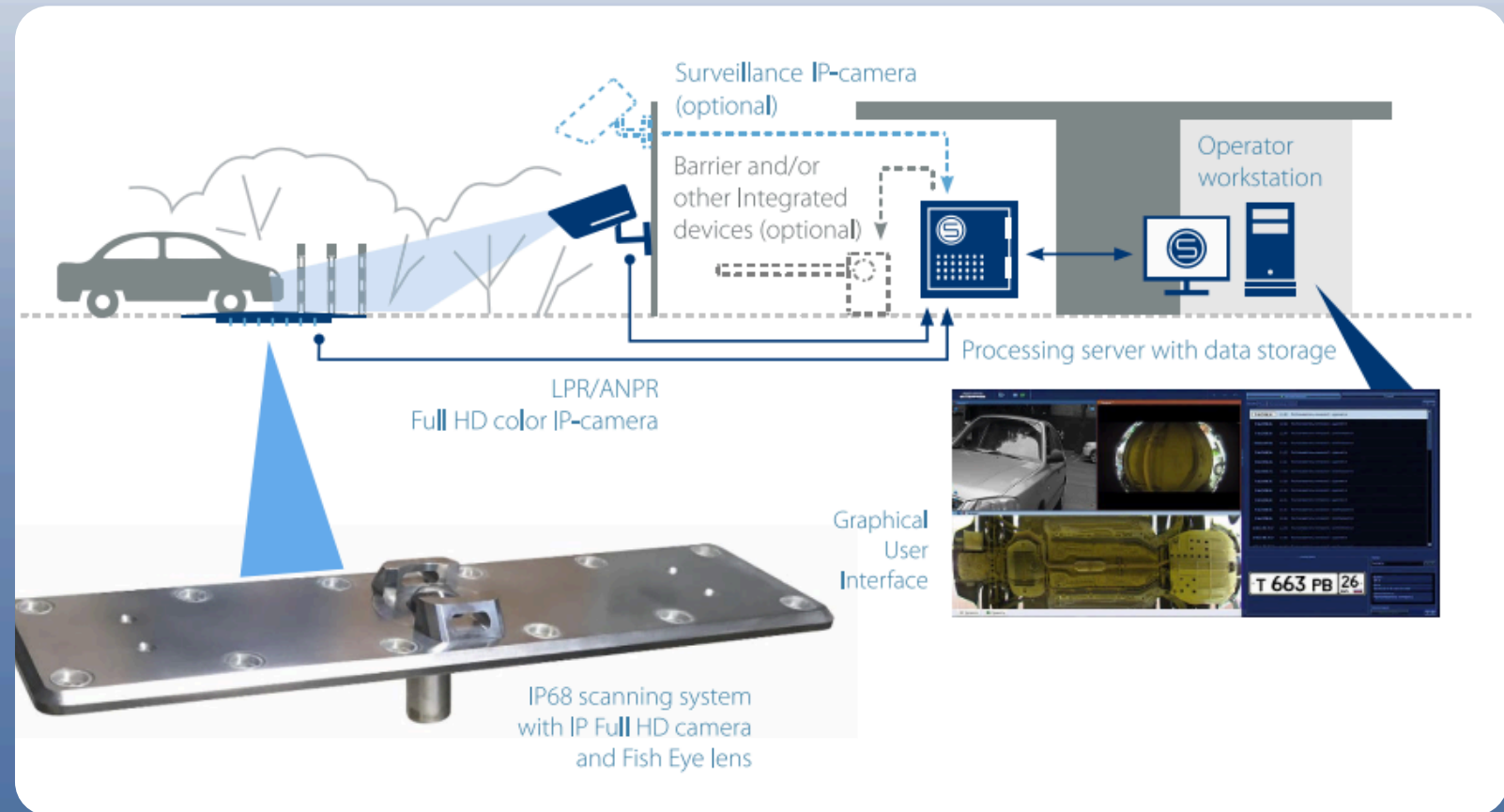
- ISO Container images for visual inspection
- ISO container number, Size and type code, Kemler, IMDG, ILU
- License plate of a truck
- RTSP video stream and ASF/AVI video clips



UNDER VEHICLE SURVEILLANCE SYSTEM

SecurOS Flatimus

SecurOS Flatimus is a hardware-software based system of remote under-vehicle surveillance. The system creates a database of high-resolution undercarriage images and recognizes vehicle license plates.



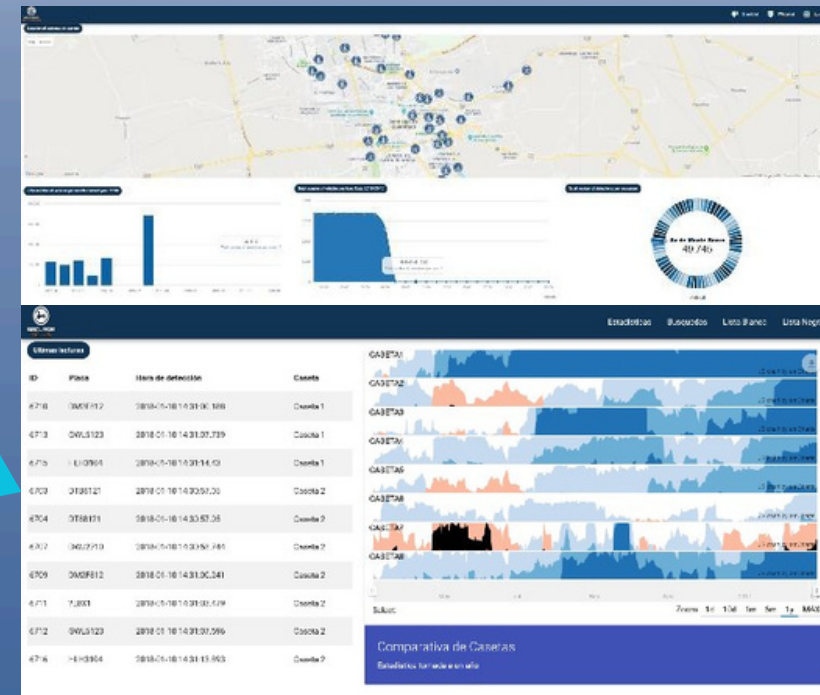
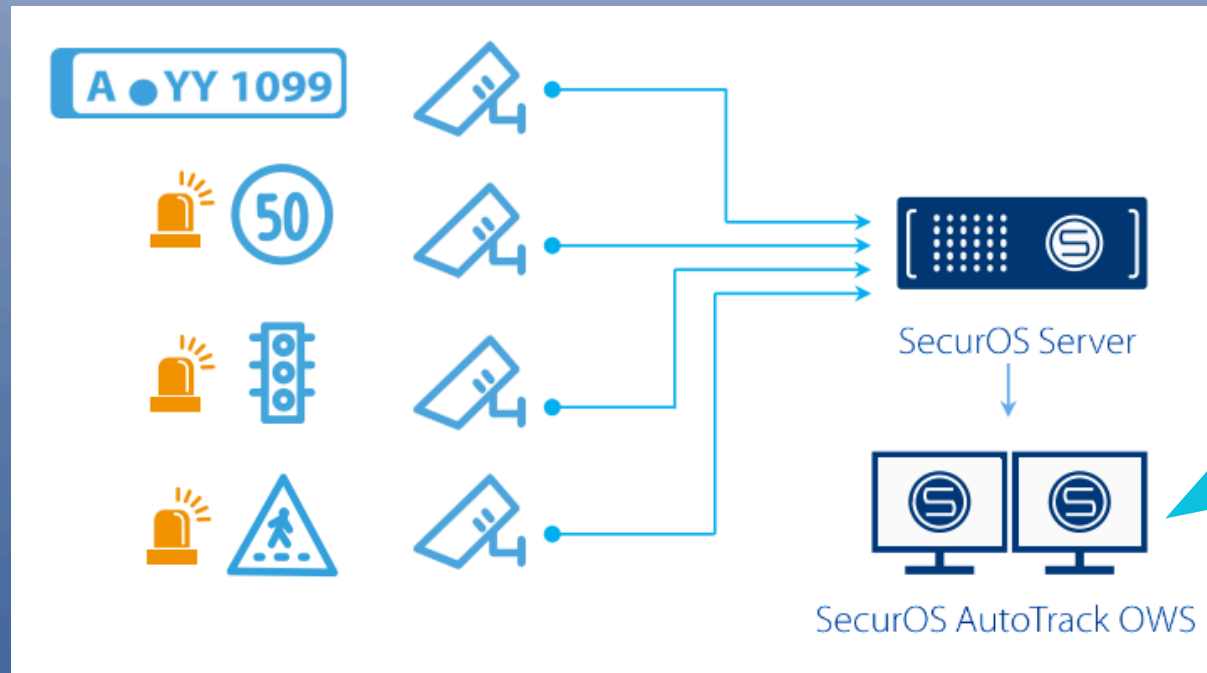
SecurOS Transit is an effective software solution for registration of train cars, tankers, and platforms at the shunting-yards, customs terminals, railroad hubs, industrial enterprises, warehouses, etc.



BUSINESS INTELLIGENCE FOR ITS AND LAW ENFORCEMENT

SecurOS AutoTrack

SecurOS AutoTrack is a software enables data aggregating, processing, and display of processed data in a convenient for operator form about vehicles moving on roads. SecurOS AutoTrack supports large distributed systems focused on flexibility and scalability, and provides transformation of raw data about road traffic into a suitable for business analysis form, as well as tools for shared work with such data.

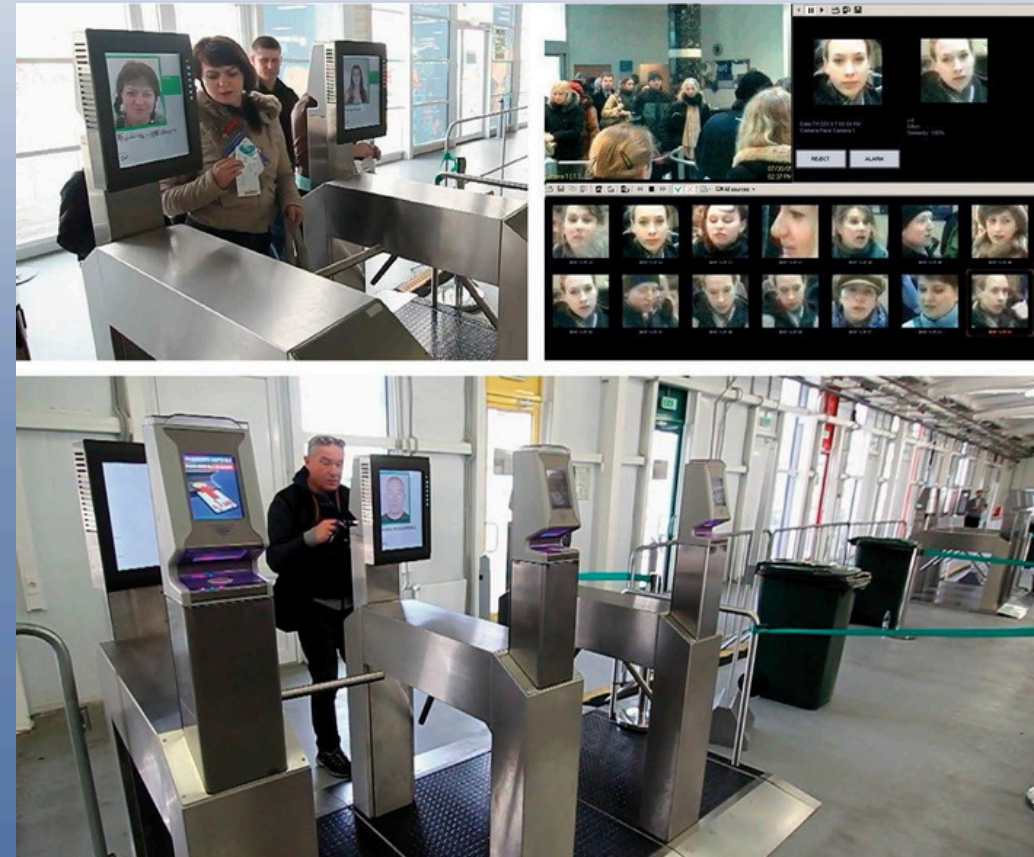


FACE CAPTURE & RECOGNITION

SecurOS Face

SecurOS FACE provides Face Capture & Recognition with a high accuracy level in a wide variety of challenging conditions and as such, is ranked among the most accurate of all Face Recognition systems in the marketplace.

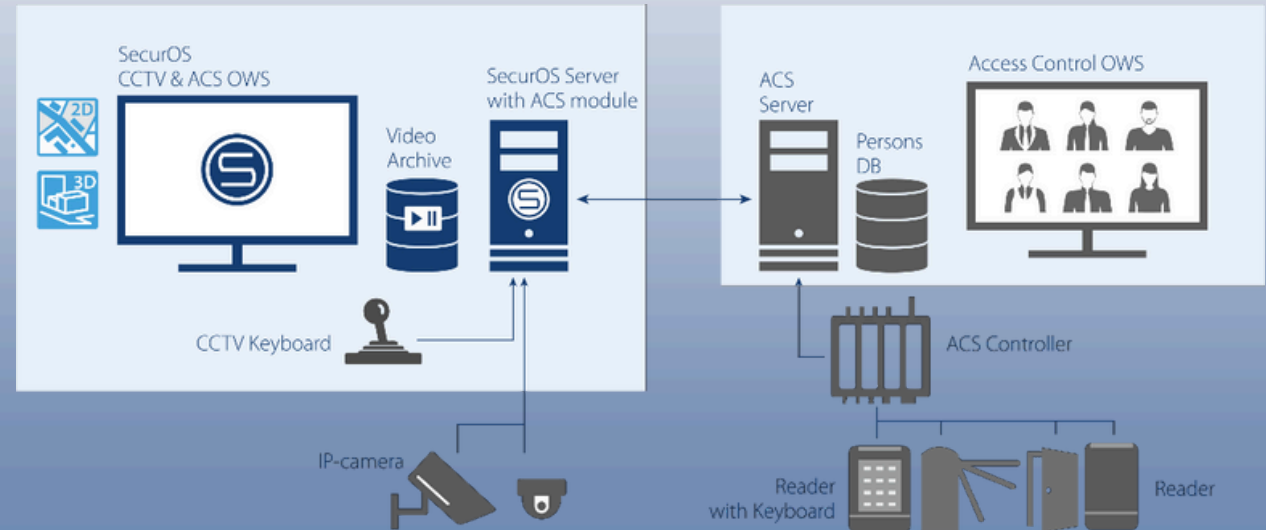
The reason of a high level of accuracy has to do with the experience of IS specialists in image analytics technology, and the related expertise with advanced algorithms, which then identifies and matches an individual's specific features with relentless attention to every detail.



ACCESS CONTROL SYSTEM

SecurOS ACS module

ISs introduces a comprehensive solution to enhance access control in high-security installations. By combining SecurOS VMS with an integrated access control system, you can create a modern, flexible and scalable system to effectively monitor staff and visitors.



SecurOS GUI Operator Workstation (OWS) is expanded with the ACS / Fire alarms operator's functionality

ACS / Fire alarms operator's functionality can be expanded with automated multi-factor authentication with video analytics: LPR/ANPR (SecurOS Auto) and face capture and recognition (SecurOS Face)

Scripting (operating scenarios) in accordance with the objectives of a particular site and ACS/Fire alarms system

POS & ATM TRANSACTION MONITORING SYSTEM

SecurOS POS

SecurOS POS is an intelligent software module of SecurOS VMS, which links live video with transaction data from a POS or ATM system. It allows search of specific transactions and review of the exact video archive of that transaction.

It provides full video documentation on selected transaction IDs, item numbers, terminal numbers, employees, customers, payment details, or stores in any combination you wish.

Effectively combat fraud and loss occurring in transactions. Integrate with other analytics to provide a complete retail solution, including recognition of known shoplifters, inventory management, after-hours surveillance, license plate recognition for gas stations, etc.



The interface displays four video feeds of a retail counter. Below the feeds, the following information is shown:

- Терминал: 3
- Кассир:
- Чек: 11
- Продажа:
- Товар: Салат Фаворит...
- Артикул: 318231
- Количество: 0.122
- Скидка: 0.0
- Сумма: 58,56

On the right, a table shows transaction details:

Чек	Время	Артикул	Название про...	Кол...	Сумма
2	16 май 2008 18:55:25	315738	Мороженое М...	1,00	17,70
8	16 май 2008 18:55:28	383089	Соль Аджаро...	1,00	4,50
10	16 май 2008 18:55:29	209327	Пиво Бранд...	1,00	32,50
8	16 май 2008 18:55:30	319792	Горчица зерн...	1,00	33,20
10	16 май 2008 18:55:31	315284	Натали К-10	1,00	17,60
8	16 май 2008 18:55:31	327061	Сливки сухие	1,00	29,20
10	16 май 2008 18:55:33	315284	Натали К-10	1,00	-17,60
10	16 май 2008 18:55:33	315284	Натали К-10	2,00	35,20
10	16 май 2008 18:55:36	30620	Шпроты в мас...	1,00	23,00
10	16 май 2008 18:55:38	30620	Шпроты в мас...	1,00	-23,00
10	16 май 2008 18:55:38	30620	Шпроты в мас...	2,00	46,00
11	16 май 2008 18:56:17	314705	Мин вода Пил...	1,00	15,80
11	16 май 2008 18:56:19	321784	Мука Степная	1,00	46,20
11	16 май 2008 18:56:26	386330	Рожок Руссок...	1,00	19,00
11	16 май 2008 18:56:31	317464	Фарш свиной	0,67	150,83
12	16 май 2008 18:56:33	323865	Вода Черная	1,00	385,30
11	16 май 2008 18:56:36	321699	Груша Бер Бо...	0,31	25,23
12	16 май 2008 18:56:37	370275	Конверт почт...	1,00	12,80
12	16 май 2008 18:56:38	319479	Открытка, шт	1,00	15,40
11	16 май 2008 18:56:41	318231	Салат Фаворит...	0,12	58,56

Below the table, a summary table is shown:

Терминал	Чек	Время начала	Время окончания	Сумма
3	1	16 май 2008 ...	16 май 2008 ...	25,90
3	2	16 май 2008 ...	16 май 2008 ...	133,66
2	3	16 май 2008 ...	16 май 2008 ...	0,00
1	4	16 май 2008 ...	16 май 2008 ...	23,80
4	5	16 май 2008 ...	16 май 2008 ...	27,60
1	6	16 май 2008 ...	16 май 2008 ...	90,49
4	7	16 май 2008 ...	16 май 2008 ...	80,50
1	8	16 май 2008 ...	16 май 2008 ...	195,35
4	9	16 май 2008 ...	16 май 2008 ...	95,30
3	10	16 май 2008 ...	16 май 2008 ...	113,70
3	11	16 май 2008 ...	In progress...	
1	12	16 май 2008 ...	In progress...	

SITUATIONAL AWARENESS VIDEO ANALYTICS

SecurOS Tracking Kit III (ecurOS Computer Vision subsystem)

SecurOs Tracking Kit III detectors provide significant reduction of operator's load: no need for constant monitoring of all control areas and exclusion of human factor influence



Crowd
Detector



Loitering
Detector



Object Left
Behind
Detector



Running
Detector



Dwell Time
Detector



Intrusion
Detector



Object
Counter



Line Crossing
Detector



Wrong
Direction
Detector



Smoke
Detector

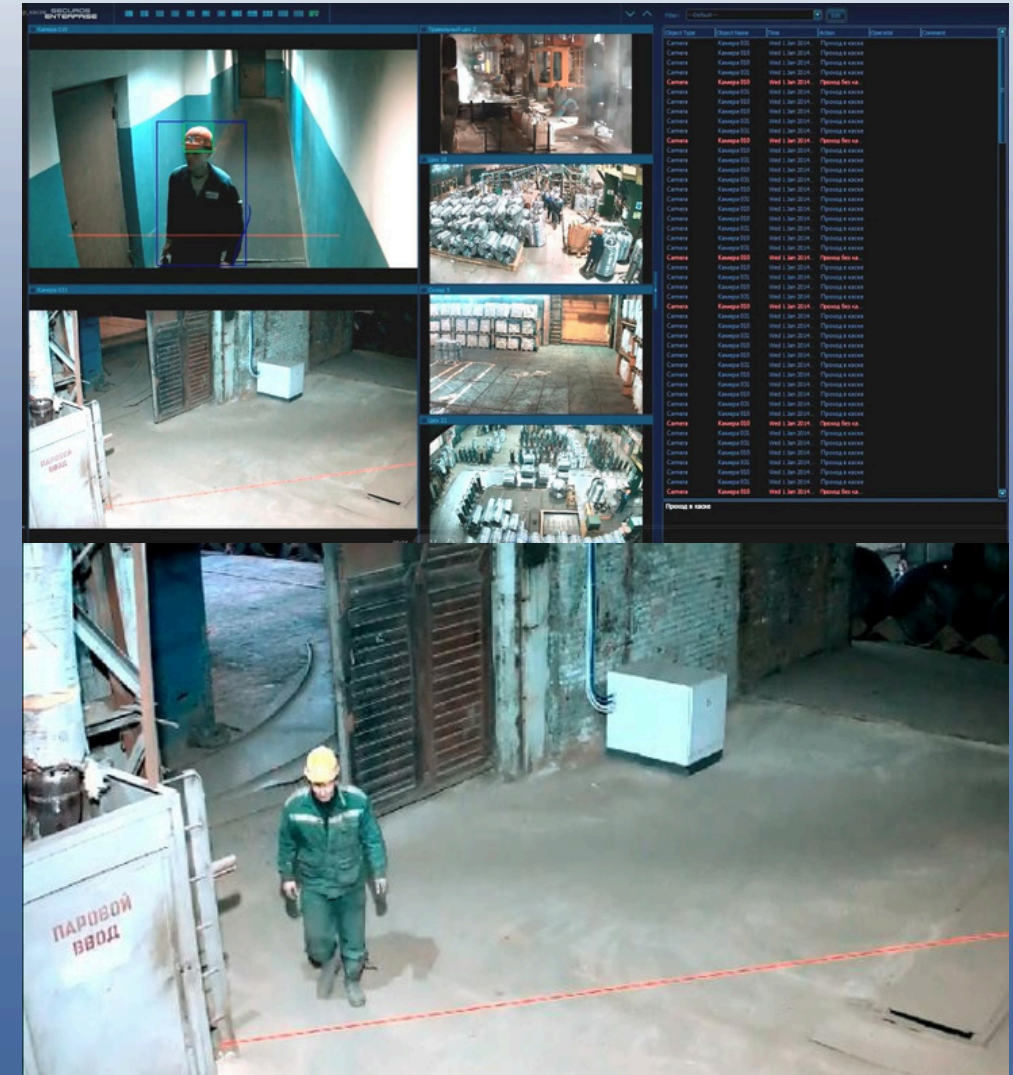


NON-HELMET DETECTOR (VIDEO ANALYTICS)

Construction site, foundry, coal mine - work in such areas requires strict compliance staff safety rules, including using of protective equipment. One of the most frequently used tools is a helmet.

ISS video analysis, in conjunction with strategically placed video surveillance cameras, allows the detection of production staff who are not wearing protective head gear in areas where it is required

The accurate reads the video analytic systems provides, even in poor lighting or steamy conditions. The highly intelligent nature of the algorithms makes this possible, and results in very few false alerts.

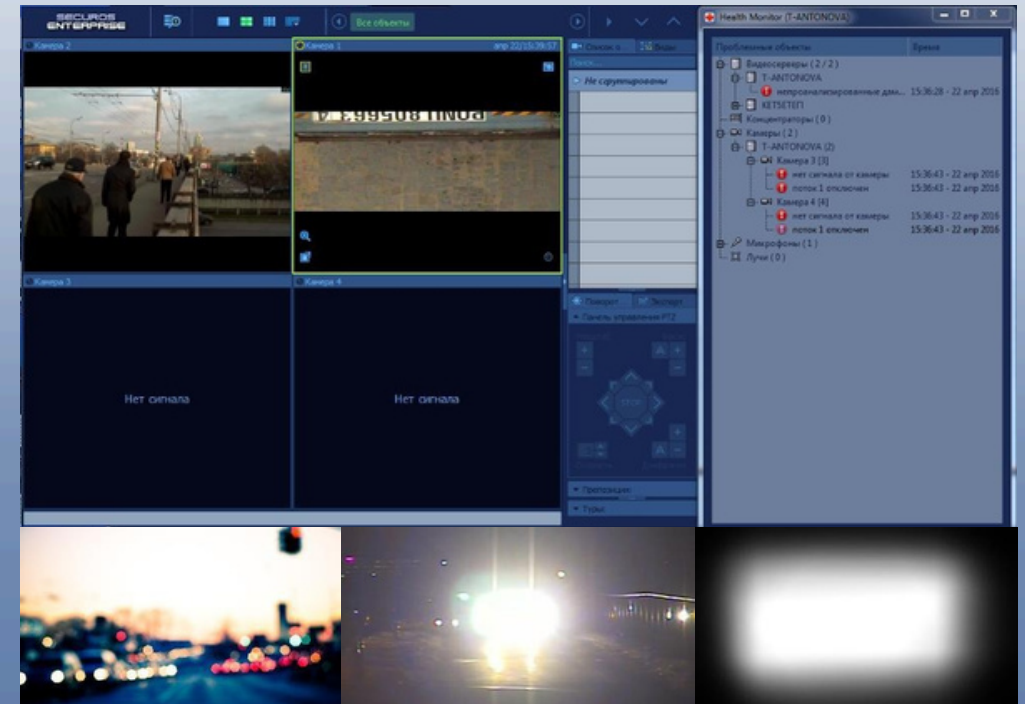


SERVICE VIDEO ANALYTICS

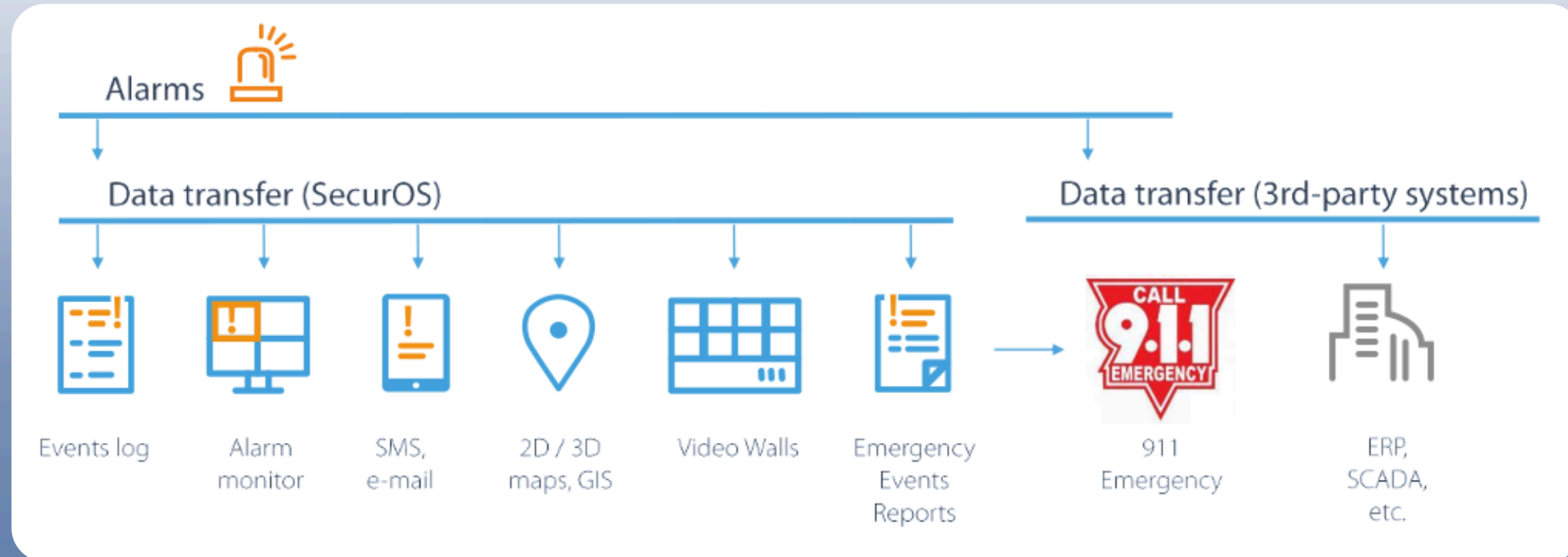
SecurOS Camera Health

Used to verify operation of the CCTV cameras and the video stream according to the technical requirements of the system and is implemented on the basis of the service detectors

- **Loss of signal** from the camera logs communication blackout between server and camera
- **Defocusing** responses in case of the image sharpness loss
- **Blinding** registers light beam directed at the lens.
- **Camera shielding** reacts to the darkening of the image in cases of closure of lens, failure of the lighting device
- **Changes the field of view** registers unauthorized rotates of the camera



EVENT MANAGEMENT



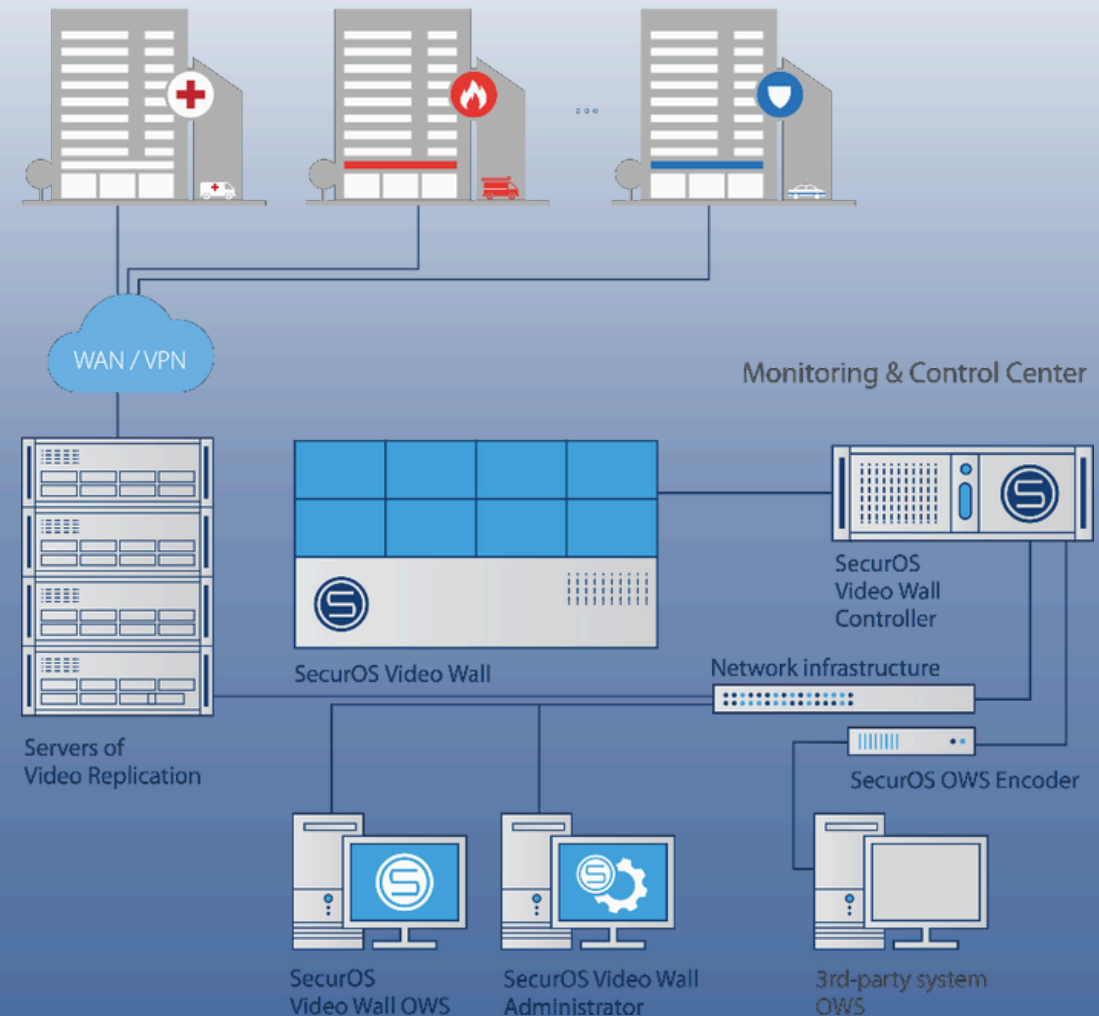
ISS advanced integration capabilities allow to develop integrated solutions based on video management platform, including a number of additional subsystems (video analytics, event processing, GIS, "91 1", etc.) and hardware (terminals "Citizen-Police", acoustic, chemical and radiation sensors, systems, Fire Alarm, etc.).

MONITORING & CONTROL CENTER

SecurOS MCC

SecurOS MCC provides the global monitoring and management of a complete remoted security infrastructure of all your local sites (as if they were part of a single virtual system) from a single command center. It is an excellent solution for customers with multiple geographical disparate sites or business facilities located at vast area.

SecurOS MCC allows for a much more streamlined workflow and globalizes security operations to make security personnel more productive and better informed.

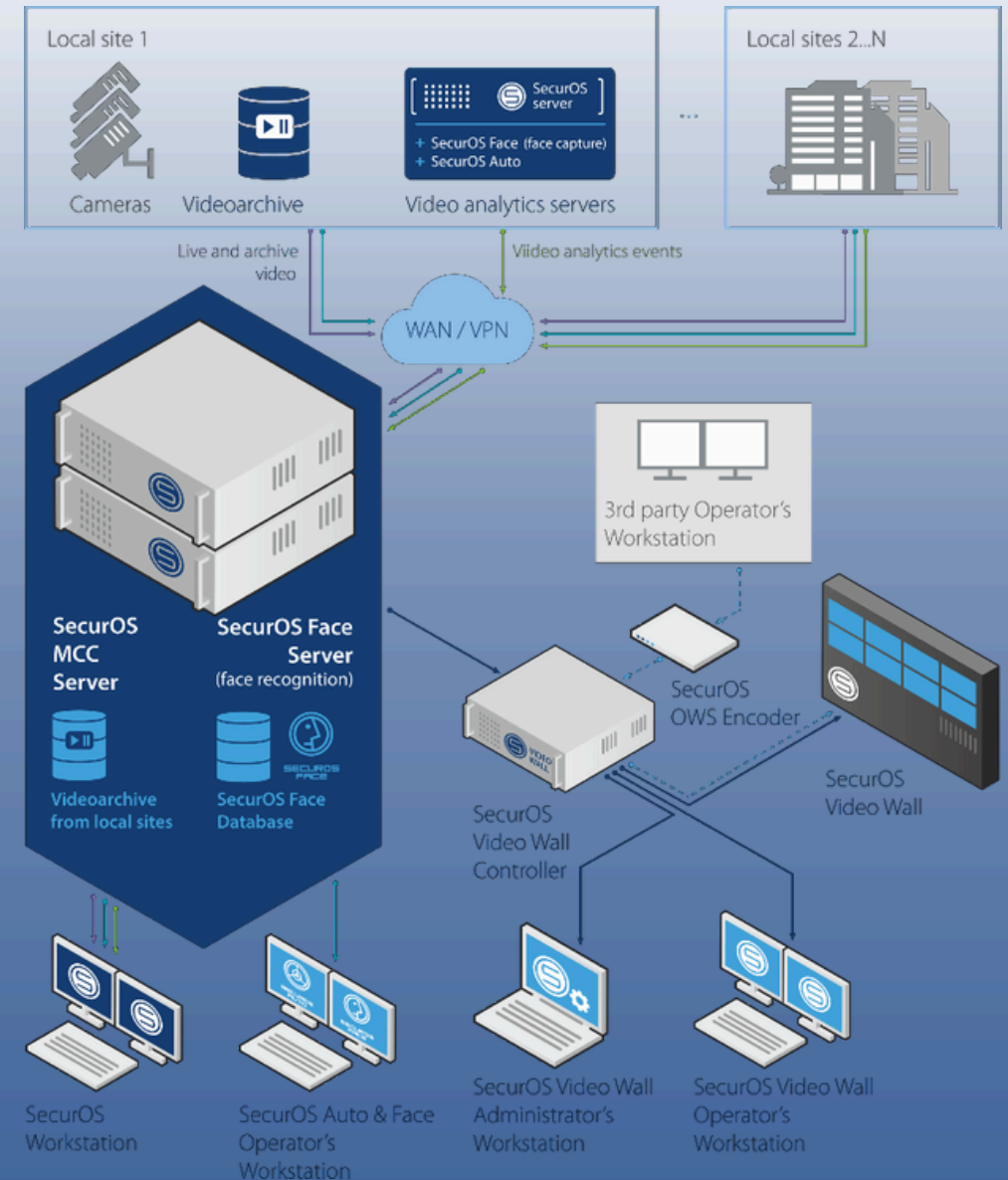


MONITORING & CONTROL CENTER

SecurOS MCC

The SecurOS MCC federation capability scales as needed to tie together a few sites to hundreds and thousands of globally disparate sites, and provides management of all SecurOS servers within the virtual network and visualization of all cameras and other devices which are connected to each individual SecurOS deployment.

The flexible SecurOS architecture allows to create a hierarchical structure from several Monitoring & Control Centers. One MCC can be top-level to others MCC-s or the responsibilities can be divided among a number of MCC-s in accordance with customer's needs.



VIDEO WALL

SecurOS IVS VideoWall

The SecurOS MCC federation capability scales as needed to tie together a few sites to hundreds and thousands of globally disparate sites, and provides management of all SecurOS servers within the virtual network and visualization of all cameras and other devices which are connected to each individual SecurOs deployment.

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MOBILE APPLICATION FOR IOS AND ANDROID DEVICES

SecurOS Mobile

SecurOS Mobile is a mobile client for Securos MS which gives security personnel capabilities to monitor video and control cameras on their mobile phones and tablets (iOS and Android). Operators can easily access live video streams, playback video archive, monitor video analytics events and other types of alarms over Wi-Fi or 3G/4G networks.

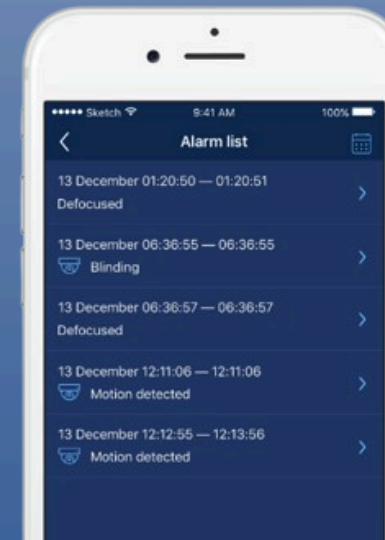
Set up access and save credentials for multiple SecurOS systems

SecurOS Mobile can be download on the App Store and the Google Play

Set Up access and save credentials for multiple SecurOS systems



Review alarms



Playback up to 4 cameras simultaneously in various speed

