Intelligent Video Surveillance Solutions

softrust

Overview 04
Benefits 06
Applicability 08
System and services 10

› Video surveillance systems: stand alone environment, multi building or campus environment and geographically distributed environment 11

› IP system 11
› Analog system 11
› Hybrid system 11

› Video surveillance management platform 12
› Video surveillance analytics platform 14
› Services 18

Intelligent Video Surveillance for any business sectors and industries

› Building surveillance solution (offices or residential): hospitality, banking, education, healthcare, enterprise or other industry sector 20
› City and traffic (town centers, public spaces) 21
› Mass Transportation 22
› Retail 23
› HS - Critical infrastructures 24
› Government & military facilities 25

References 26

Intelligent video surveillance solutions

Enhance security with Video
Management and Video Analytics solutions

- Reliable security coverage 24/7/365
- Easy integration
- Flexible extension
- High autonomy

Video surveillance has already surpassed the stage of simple recordings due to digital technology that improves and adds more value to the video content captured and stored.

The Softrust Intelligent Video Surveillance solution works with both existing analog and IP based cameras from multiple manufacturers. Video is captured and transported over IP-based networks for event management, data analysis, indexing or archiving.

With a comprehensive line of IP, analog and hybrid products available, the surveillance solutions deliver superior performance and cost-efficiency for any application and the clients' specific needs.

Based on an open architecture, our proprietary software transforms standard surveillance networks into an intelligent and effective solution that allows detection, alarm management and image analysis.

The software can manage multiple video sources in parallel without compromising safety, enabling alerts and responses to events as they happen.

Softrust brings together production capabilities, system integration, consulting services and maintenance services to provide Intelligent Video Solutions that solve critical problems for its clients. **Our solutions are focused on helping clients, secure their business and operations, and increase their efficiency.**

› Improve safety and security
› Efficiency in turnkey solutions perfectly adapted to clients
› Flexibility in developing customized solutions
› Reduced capital and operational costs through integration of multiple services on a single system
› Low maintenance cost
› Flexibility to choose components, from multiple vendors
› Easy integration and adaptability with 3rd parties (other existing security systems)
› Easy installation, integration and maintenance
› Better results and efficiency in running out management and analytics tasks

› Increase security with real time alerts through an integrated alarm management system
› Proven quality, expertise and demonstrated skills - references from local and international clients
› Better insight of multi - buildings and campuses locations due to centralized deployment
› Rapidity in integration process due to quick setup, design and execution
› Versatile configuration and modular architecture: expand the surveillance system according to your needs and budget

Applicability

Softrust Intelligent Video Surveillance solutions are designed to allow the integration of many different services and interoperable systems that can be addressed to numerous video-related vertical market applications.

› **Building surveillance solution**
hospitality, banking, gaming, education, healthcare, enterprise or other industry sector
› **City and traffic** (town centers, public spaces)
› **Mass transportation** (train, metro, bus stations / ports / airports)
› **Retail**
› **Homeland security / critical infrastructures**
› **Government & military facilities**

Systems and services

Video surveillance systems for any business

Even if you have a small business with moderate application needs or if you have a business that needs an enterprise-level video security with a comprehensive line of hardware and software, the Softrust surveillance solutions get the foremost performance.

Our customized Intelligent Video Surveillance solutions allow you to monitor your vital areas in real time.

Standalone Environment

Analog Video System Solutions – DVR

KVision DVR is a modern technological solution for digital video supervision and recording. It can be connected to analog cameras and is capable of monitoring 16 video cameras on a station and up to 256 cameras in a network.

Multi building or campuses environment

IP Video System Solutions – NVR

KVision NVR is dedicated for CCTV systems tooled with digital surveillance cameras, allowing visualization and management for the images they send. A single NVR system can manage up to 32 cameras, each delivering 25 frames per second, including the transmission of audio data.

Geographically Distributed environment

Hybrid video system solutions – HVR

KVision HVR is a professional hybrid recorder capable of managing digital and analogical recordings. It is capable to monitor up to 16 analogical video cameras and up to 16 IP video cameras on a single workstation.

Systems and services

Video surveillance management platform

The Softrust surveillance system comes with a video management platform developed by our specialists in order to satisfy the highest of the clients' needs. Our proprietary technology provides an easy-to-use interface and incorporates IT friendly features to make administration simple.

The platform can integrate and manage video recordings, video storage and management function eliminating the needs for separate servers or third-party interfaces for security systems that include access control, intruder alert and fire alarm.

This is the best solution for forensic search, case and alarm management and business intelligence.

Features

› Live visualization and playback recordings
› Event-driven, interactive timeline
› Electronic map for the supervised objective and camera location on this map
› Alarm triggering – video images and sound - for a special event (move detection on a video camera, signal from a sensor, hand event for one set camera
› Alarm notification and response log
› Archiving and special functions for database management
› Event control and alarm management in real-time or post event applications
› Recording captures by demand, event, alarm or time schedule
› Reporting for investigation (people/vehicle counts, object density/ occupancy traffic flow, alarm counts/time/rule, loitering/dwell time)
› Video analysis, forensic search and multiple algorithm support
› Video compression: H264, MPEG4, MJPEG for IP cameras
› Watch-dog function
› User-friendly, multi-lingual and fully customizable graphical user interface
› Remote command and control
› Customizable display
› Multiple PTZ control options
› Digital zoom (live): 4x/ (playback): 20 x
› "Day" and "night" concept for each video channel
› Auto lighting adjust (VQA)
› Camera blocking and tampering detection

Systems and services

Video surveillance analytics

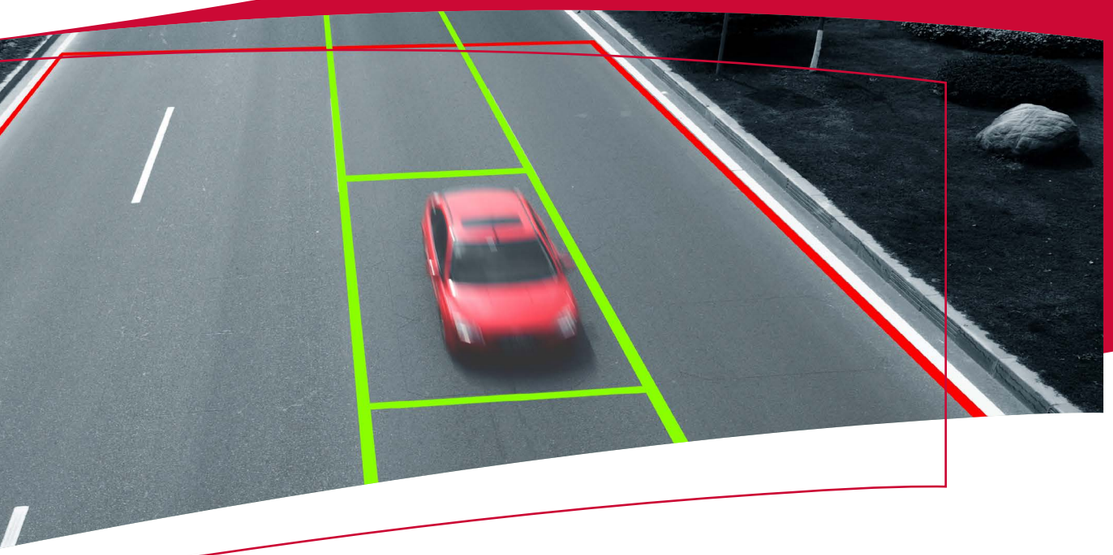
› Augmented surveillance
› Triggering automatic processes & fast decision tool / support
› Alarm / alert operators

We developed and improved continuously our video image analysis solutions that imply complex computational methods for processing and automatically extract (without operator) the synthetic information from the video data.

Softrust video analytics is capable of automatically analyzing video content in order to detect and determine behaviors that can indicate a security breach, including perimeter or zone violation, illegal parking, loitering and suspicious idle object or left baggage.

The system works with the common fixed and pan/tilt/zoom (PTZ) cameras and the information captured by these can be used in both real time application and post event analysis applications.

Systems and services



Video analytics

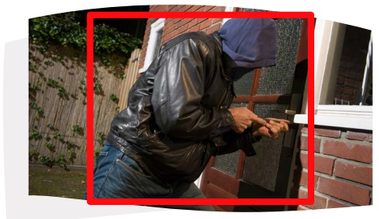
› **Perimeter protection/intrusion detection:** the system improves security, being capable of supervising large areas and helping organization to reduce costs with classical patrols.

› **Line crossing:** the system can detect whether a car or a person breached a perimeter

› **Car stationary, idle object or left baggage:** whether it's a car parked illegally or an object left behind for too long, the system can alert the operator immediately for protocol violations, avoiding threatening situations

› **Wrong direction**: the function alerts immediately the operator when a vehicle or a person is moving against the specific flow of movement and prevents accidents on roads

› **Object/Equipment removal:** automatically detects when an object has been removed from its usual position in a surveillance area

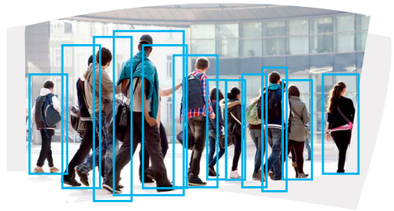


› **Loitering:** the system automatically detects if someone (people or vehicle) has remained in an area for too long, detecting suspicious activity

› **Visitor/Shopper counting:** information about number of visitors and shopper (density map) can be analyzed by the system, increasing operational efficiency of the personnel

› **Face recognition:** automatically identifying or verifying a person from a video frame by comparing facial features from the video frame with a facial database

› **Crowd detection:** automatically detect and alert when a crowd of people enter in a specific area or when several persons move rapidly through a camera scene



› **License Plate Recognition – LPR:** automatically identifying the vehicle license plate in real time. The system can be integrated with access control and weight devices

› **Point Of Sale - (POS) Analysis:** The system supervises payments and financial transactions in order to rapidly detect theft, errors and frauds

Systems and services

Services

In every implementation, a strong technical support and maintenance service plays a vital role in ensuring that all technical and functional systems capabilities run at its maximum capacity to satisfy your specific business needs.

Softrust has developed internal competencies and expertise to cover the entire needs of a client who chooses an intelligent video surveillance system from requirements analysis, design, implementation, development, and maintenance.

Support and maintenance:

We offer trained technicians and warranty and post warranty flexible service and maintenance options, remote diagnostics through our call center and rapid intervention.

System design and consulting:

Our professional team of experts with demonstrated skills will work with you to plan and design an effective surveillance system for your facility.

Installation, configuration and training:

We can configure advanced surveillance systems, install equipment, provide training and also we are capable of integration with 3rd party systems containing: access control, intruder alert, fire alarm.

Intelligent video surveillance for any business sector and industries

Softrust intelligent video surveillance solutions are capable of extracting information and performing analysis in real time and post-event. It can be integrated into any security management system, containing access control, intruder alert, fire alarm, facial recognition analytics, and license plate recognition.

Softrust solutions are present in all sectors, answering to the specific request of safety and security for large corporations with networks of many remote sites, helping in planning business requirements, improving operations and increasing ROI.

Whether your intelligent video surveillance networks consist of indoor or outdoor analog or digital cameras, Softrust enables you to understand suspicious or abnormal behavior for all types of events occurred in busy urban areas, in unmanned facilities in remote location and on highways or parking lots.

Intelligent video surveillance for any business sector and industries

Building surveillance

- hospitality
- banking
- education
- healthcare
- entreprise
- other industry sector

Surveillance systems that integrate all function to prevent accidents or to supervise indoor and outdoor perimeters in order to prevent events with critical impact among the personnel.

Advantages

- Video surveillance
- Alarm management
- Remote monitoring
- Trespassing
- Loitering
- Face capture
- Idle object or left baggage
- Missing object detection
- Crowd detection
- Parking control
- Breaches of security areas
- Stationary
- Captures the highest level of detail
- Improve security
- Monitoring building access
- Enhance safety, protect assets and verify alarms
- Centralized video monitoring of multiple cameras and campus buildings from one location
- Long-term savings in infrastructure and operational costs
- Asset protection
- Post-event analysis

City and traffic (town centers, public spaces)

Large metropolitan areas require a supervision system that reports incidents and violations in order to ensure safety and security.

Advantages

- Video surveillance
- Alarm management
- Remote monitoring
- Real-time detection of crowding, accidents, loitering and exceeding speed
- Wrong direction of the vehicle (one way streets)
- Illegal parking
- Traffic-flow analysis and reporting
- Travel time
- Breaches of security zones
- Crowd management with alarms for overcrowding
- Graffiti / vandalism detection
- License plate recognition
- Maximizes public security
- Increase passenger safety
- Deter crime, reduces vandalism
(and associated repair costs)
- Analyze events

Intelligent video surveillance for any business sector and industries

Mass transportation

Even if we are speaking about airports, seaports, train and metro stations or bus terminals, video surveillance and video analysis solutions are the easiest way to supervise and monitor crowded areas.

- Video surveillance
- Alarm management
- Remote monitoring
- Detection of emerging threats
- Idle object or left baggage
- Crowd detection
- Loitering or obstructions to the traffic paths
- Breaches of security zones
- Motion tracking
- Crowd management with alarms for overcrowding
- Maximizes public security
- Increase passenger safety
- Deter crime, reduces vandalism (and associated repair costs)
- Analyze events

Retail

Classical stores, supermarkets or shopping centers are looking to improve customer's safety and to supervise the personnel.

- Video surveillance
- Alarm management
- Remote monitoring
- Point of Sale - (POS) analysis (detection of fraud, inventory monitoring, stock delivery tracking)
- People counting
- Density map
- Face Capture
- Entry and exit monitoring
- Optimize customer service
- Optimize workforce management
- Optimize retail operations
- Enhance security
- Increase sales
- Reduce loss
- Maximize customer and mall employee security
- Reduce vandalism, theft, and other criminal activity during and outside operating hours
- Video monitor in real-time from any location over the network
- Alert when specific expensive merchandise is removed

Intelligent video surveillance for any business sector and industries

Homeland Security / Critical Infrastructures

Power chemical and nuclear plants, power grid companies, telecommunications infrastructure require a real-time detection of security and safety breaches in order to prevent accidents and deliberate attacks with crucial impact among population.

- Video surveillance
- Alarm management
- Remote monitoring
- Real-time detection of perimeter intrusion
- Zone entry detector
- Human or vehicle line crossing
- Idle object or left baggage
- Loitering
- Face Capture
- Illegal parking
- Motion tracking
- Maximize security at well-sites
- Make sure only authorized persons get in
- Control all systems via one single platform
- Guard against terrorism attacks
- Keep intruders out

Government & Military Facilities

Security for government and military sites buildings or installations is crucial. Softrust video surveillance system is capable of high-level decision-making, enabling real time alerts for fast decision support.

- Video surveillance
- Alarm management
- Detection of perimeter intrusion
- Human or vehicle line crossing
- Illegal stationary in restricted areas
- Idle object or left baggage
- Loitering
- Motion tracking
- Zone entry detector
- Maximize security at well-sites
- Increase employee and public safety
- Guard against unauthorized access
- Reduce vandalism, theft and other criminal activity
- Help prevent terrorism providing better control
- Reduce staffing costs

References

Building surveillance solution:

(hospitality, banking, education, healthcare, enterprise or other industry sector)

› Dacia-Renault Factory
› Coca Cola Romania
› Pepsi Beverages Romania
› Vodafone
› Michelin
› Raiffeisen Bank
› Total Soft
› Arcelor Mittal

City and traffic
(Town centers, public spaces)

Romania

› Bucharest Traffic Surveillance
› Craiova Traffic Surveillance
› Brasov Traffic Surveillance

Poland

› Szczecin Traffic Surveillance
› Kalisz Traffic Surveillance

Mass transportation

› Henry Coanda International Airport in Bucharest
› Aurel Vlaicu International Airoport in Bucharest
› Traian Vuia International Airoport in Timisoara
› Sibiu International Airport
› Targu - Mures International Airport
› Metrorex (Bucharest Underground Public Transportation Network)
› Constanta Port

Retail

› Metro Cash And Carry
› Carrefour
› Real
› Cora
› Selgros
› Praktiker
› Baumax

Homeland security / Critical infrastructures

› Cernavoda (Romanian Nuclear Power Plant)
› Transelectrica (Romanian National Power Grid Company)
› OMV - Petrom
› MOL Romania

softrust

www.softrust.ro
UTI Research & Development Center
107-111 A Oltenitei Avenue, 041303, Bucharest 4, Romania
Phone: + 40 31 413 80 01
Fax: +40 21 316 75 84