VIGILATE

v-ENGINE Security Products

Vigilate's intelligent NVR dedicated to the management of field products and systems: CCTV, video analysis, anti-intrusion, fire prevention, access control, IoT.

Versatility and scalability

v-ENGINE is Vigilate's product for the management and video recording of analog and IP cameras.
Its strength is the numerous video analysis functions based on artificial intelligence (I worked that, in time real, can trigger alarm events and provide other metrics) and its ability to integrate existing systems of access control, fire and intrusion prevention.

Hybrid (analog)

Digital (Full IP)

v-ENGINE can manage and supervise small systems such as villas and shops up to large integrated systems such as sensitive structures, Smart Cities, Airports, Ports, large retail chains, military headquarters.
Based on the size of the system, Vigilate offers a specific product:

v-ENGINE

Vigilate's technological HUB for systems with up to 24 cameras

v-ENGINE is the compact Vigilate device to the management of security systems with a limited number of connected devices.
v-ENGINE is marketed in different models and offers the right ratio between computing power and software processing for correct management of plants small and medium size.

v-ENGINE CORE

The Software to manage large Systems

The v-ENGINE CORE software is an optimal solution for the management of large and very large systems that can be installed on physical or virtualized server architectures; it can support systems with tens of thousands of devices, including cameras, systems and field sensors.

Each v-ENGINE or v-ENGINE CORE model allows predefined working modes according to your needs. The use of a preset (a working mode), allows you to maximize the computing power by using all the available resources offered.
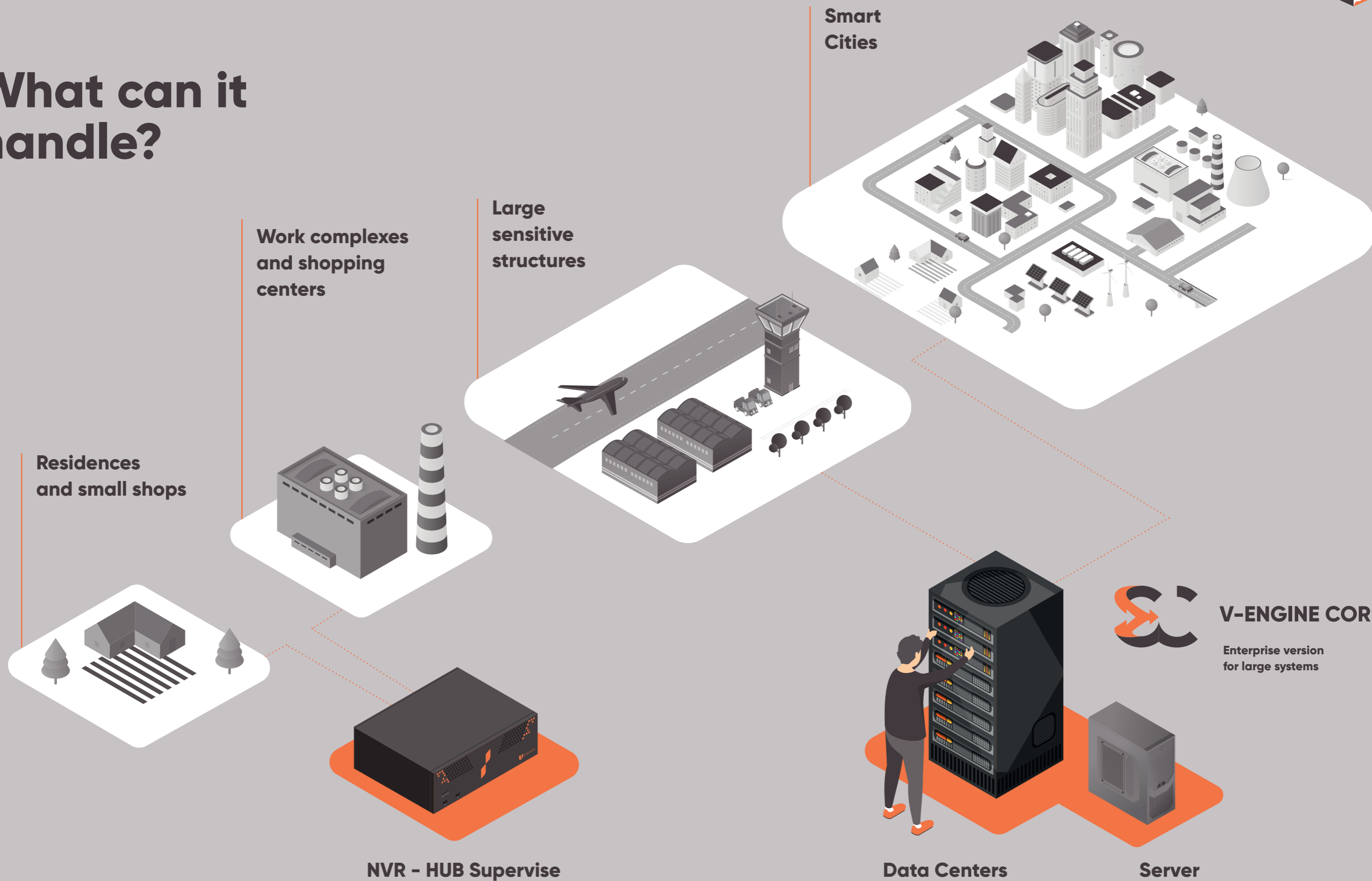
What can it handle?

Smart Cities

Large sensitive structures

Work complexes and shopping centers

Residences and small shops

NVR - HUB Supervise

V-ENGINE CORE

Enterprise version for large systems

Data Centers

Server

Main features

Record and export

Record and manage digital and analog video streams.
Intelligent and balanced video management via remuxing, encoding, decoding, transcoding, rendering.
Multiple video streams, both at full resolution camera and with reduced streaming depending on the need. The video clips related to the events detected both on the local v-ENGINE device and on the v-SUITE platform for redundancy.
For particular needs for very long archives, granted by the Privacy Guarantor, it is possible record on external NAS in order to increase the recording capacity depending on the period of desired time.

Integrate subsystems

Anti-intrusion, access control, smoke detection, perimeter systems, distributed I/O

Integrate systems building automation

Lighting, air conditioning systems, systems solar panels, thermal power plants, water systems etc..

Diagnostics

Shows the status of connected systems and diagnoses internal, supervises events coming from the systems integrated and connected intelligent cameras, shows synoptic diagrams of the connected devices.

Traditional video analysis and AI

Combine traditional video analytics and deep learning Neural, technological synergy for video analysis is effective and reliable.

Intrusion detection with cameras

Generate alarms, manage areas, activate and deactivate parts of the plant, manages and notifies with systems messaging, implements operational actions following events.
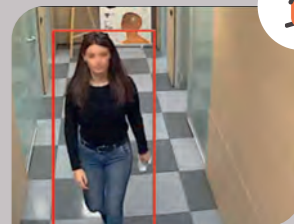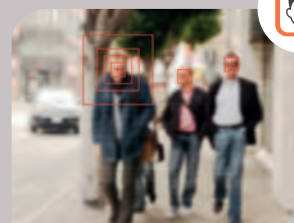
Integrate IoT devices

Integrate third-party devices and subsystems

Video wall monitoring

Features video stream monitoring dashboards for video walls and video checks

A full range of video analytics algorithms

Analyzed flow

Video streams to analyze

Alarms

Blind
(blinding)

Intrusion
(anti-intrusion)

Cross line
(line crossing)

Motion detection
(motion detection)

Smoke and fire detection
(fire/smoke detection)

Man down
(man down detection)

Animal detection
(animal detection)

Vehicle detection
(vehicle detection)

Vehicle counter
(vehicle counting)

People counter
(people counting)

Crowd detection
(crowd detection)

Face detection
(face detection)

Pointer
(target tracking)

Object
(object classification)

Bike detection
(bicycle detection)

Integrations

Integrable with external platforms and software

Integrate third-party systems

CCTV & Video Management

DVR

Direct connection of Onvif, non-Onvif and analogue cameras

Fire prevention stations

Access control

Alarm centres

Traffic systems
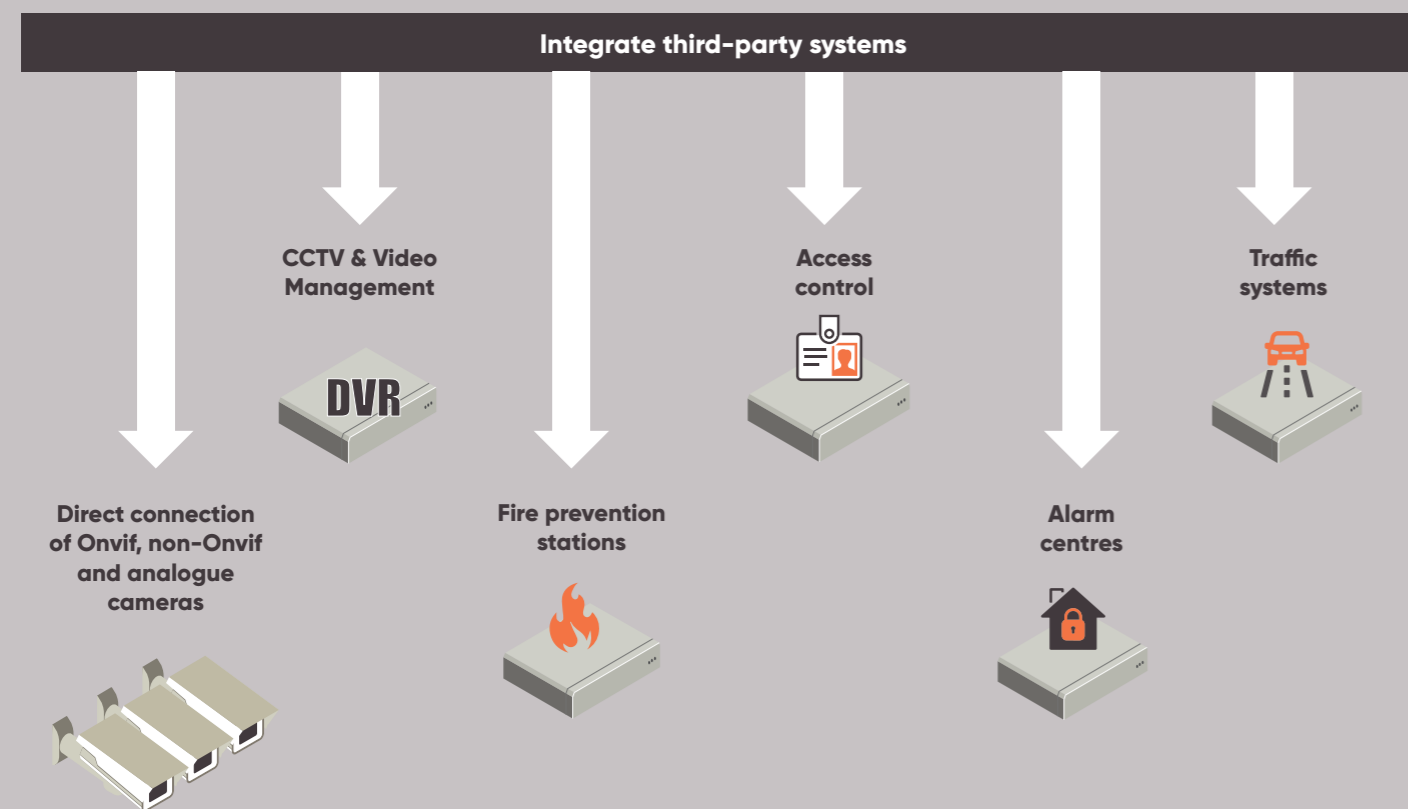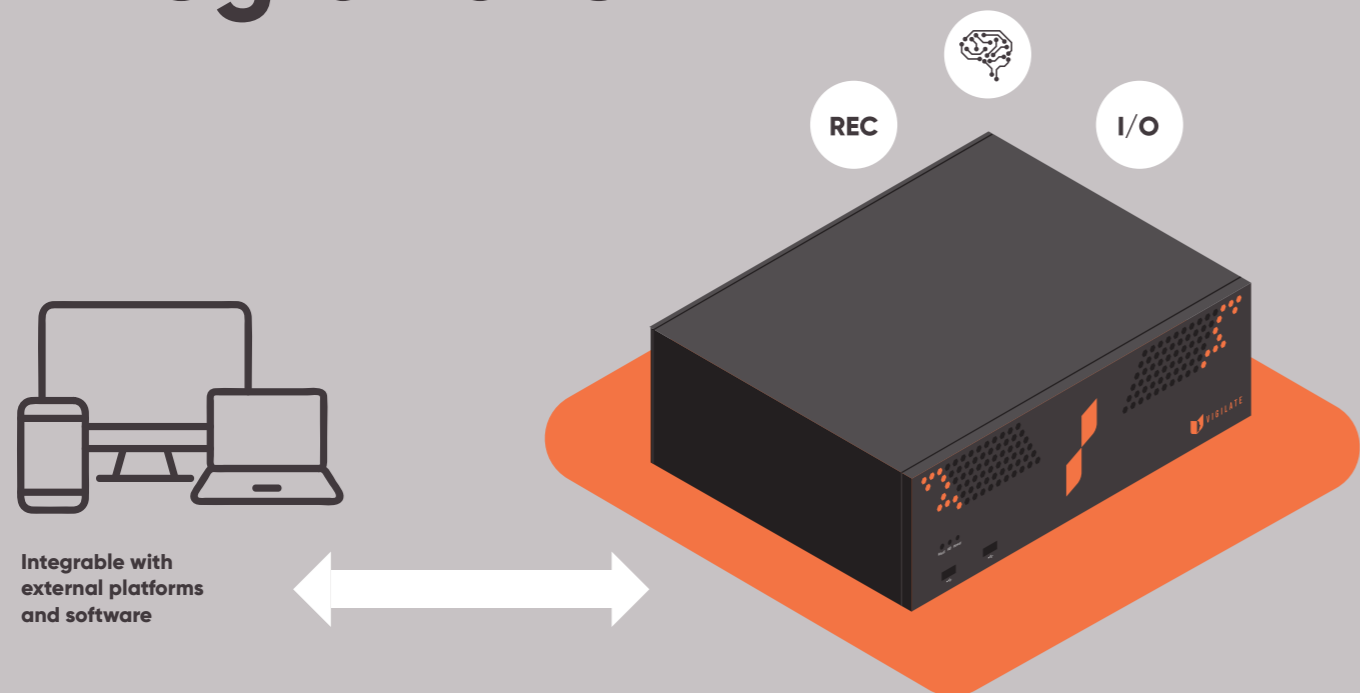
TVCC & Video Management

DVR NVR VMS	SPEED DOME	CAMERE TERMICHE	ENCODER VIDEO	CAMERE TVCC
Dahua Avigilon Samsung Hikvision Syac UTC - Truevision Bettini Epos RTM Milestone Axis camera station	All ONVIF Pelco D – Pelco P Axis Dynacolor Dahua Samsung Hikvision Icantek Pelco VKD	Flir Axis Hikvision Hanwha	Avigilon Axis Hikvision Dahua Bettini UNV	All ONVIF Analog Cameras High Res Analog Cameras Axis Bosch Dynacolor Dahua Mobotix Truevision Samsung Hikvision Avigilon Siqura Sentry 360 Sony Bettini UNV Vicon Vivotek

Sistemi traffico

SISTEMI AID
Citilog (Axis) Sprinx (Hanwha)

Sistemi integrati

CONTROLLO ACCESSI	FUOCO FUMO	DIGITAL I/O	SISTEMI PERIMETRALI	ANTINTRUSIONE
Codarini Solver Pro-series UTC True Portal Kantech EntraPass Kronotech Selesta 2N Suprema XPass	UTC 1X, 2X Series Notifier AM2000 TecnoFire Tecnoalarm	Advantech Adam series Moxa Lantronix Ajax AJ Series	CIAS DEA Security GPS Standard TSEC Macs	Standard CEI-ABI UTC ATS Guardall Windsor Delta Erre Safe Tecnoalarm Honeywell Axel Elmo Ksenia Risco Inim

Tecnologie d'interfacciamento

COMUNICAZIONE	VIDEO	AUDIO
JSON XML TCP-IP HTTP HTTPS FTP MQTT MODBUS KNX QNX CAN	JPEG MJPEG H264 H265 RTP RTSP MP4 HLS	SIP VOIP FLAC AAC

API FIRST v-ENGINE provides an application programming interface (API or web API) that conforms to the constraints of the REST architectural style, allowing interaction with RESTful web services. The API therefore acts as an intermediary element between users or customers and the web resources or services linked to the functions of the v-ENGINE. v-ENGINE can share resources and information while ensuring security, control and authentication, as it establishes access policies.

SUITE

Interfacing architectures with the v-SUITE platform

The most complex systems require the presence of numerous field devices (cameras, sensors, NVRs and encoders) and require a strong centralization of data, signals and alarm events. For these needs, v-ENGINE is the perfect interconnection HUB between the field and the centralized management platform.
v-ENGINE can be natively connected to the platform v-SUITE management but can also be connected to third-party platforms including: Milestone, Axxon, Centrax, Openware, RMT ....

TRAFFIC SAFETY SMART BUILDING IoT

SUITE
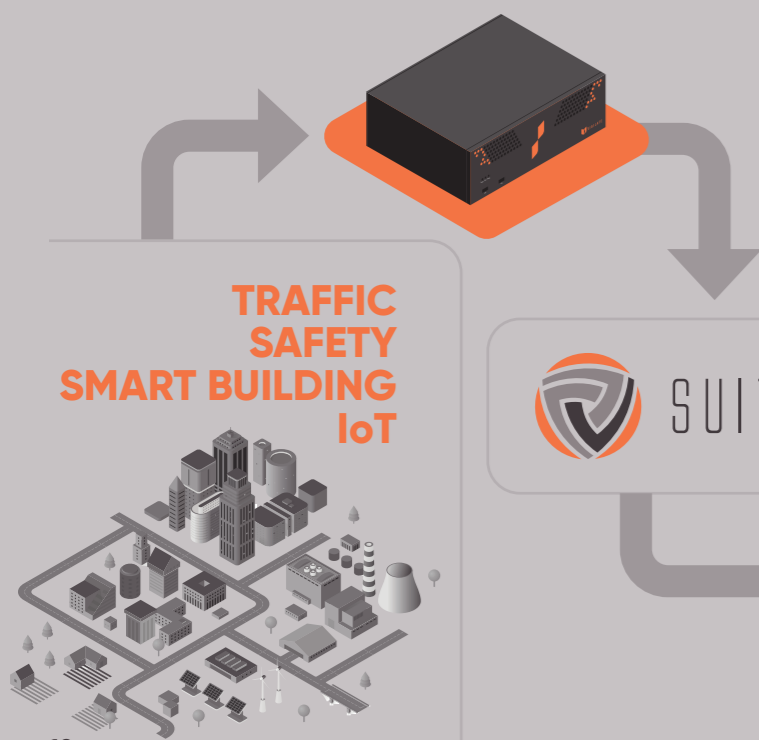
DATA NOTIFICATIONS EVENTS ALARMS

- Private surveillance control room
- Critical infrastructure control room
- Police control room
- Maintenance control room

Method of interfacing with the platform

The infrastructure architectures offered by v-ENGINE are the following:

Centralized management

RETAIL
FRANCHISE
COMPLEXES
REAL ESTATE
COMPANY OFFICES
BANK BRANCHES

MULTI DEVICE SYSTEMS

Direct sending of data to the platform from the Engines located on the various sites

Centralized management

PORTS
AIRPORTS
STATIONS
SMART CITY

BIG SYSTEMS

V-ENGINE CORE

Centralized data in a single high-performance v-ENGINE CORE Server.
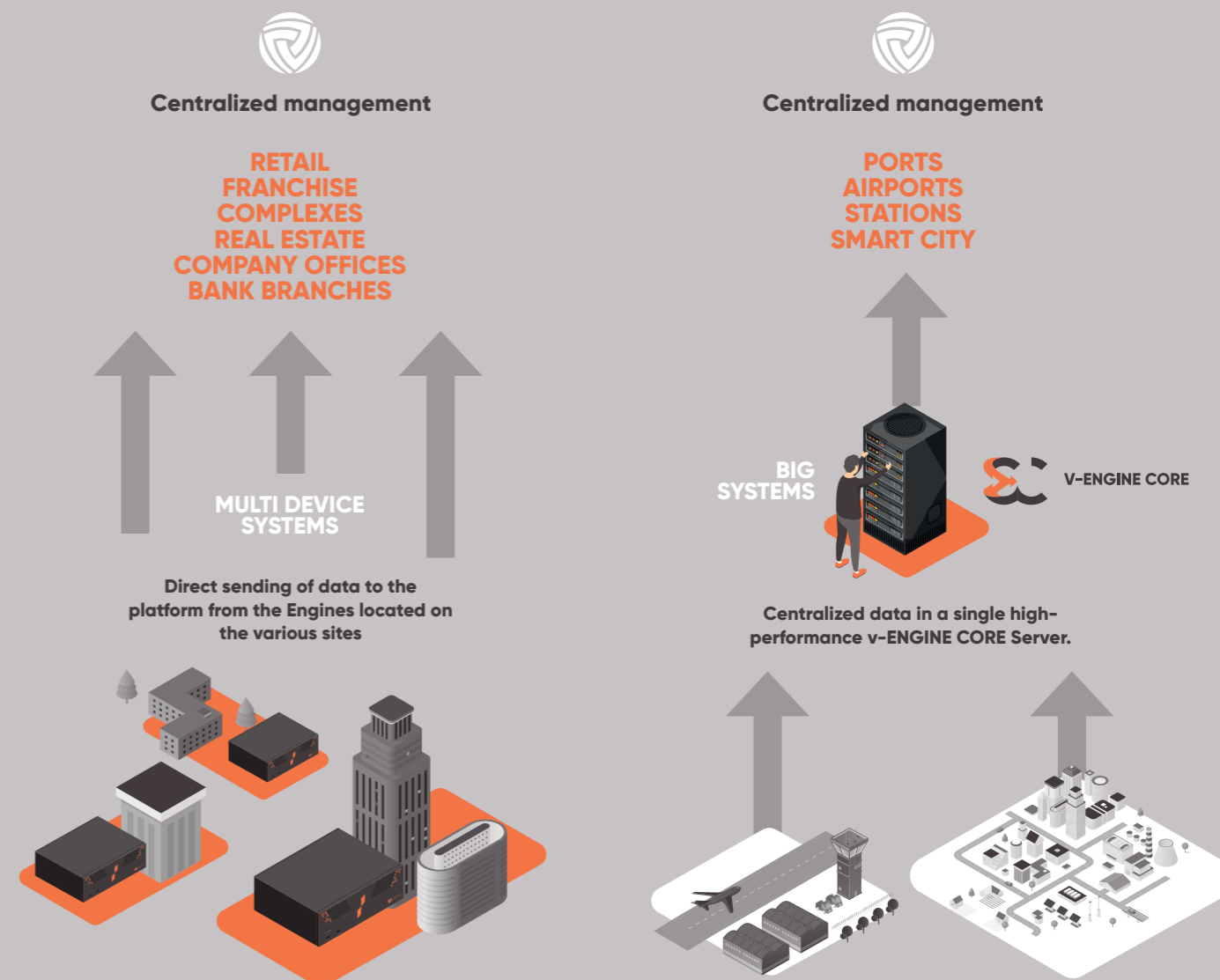
Integrable via SDK and API-REST

Integrable via SDK and API-REST
If you wish to connect your own devices or third-party devices not available in the Vigilate/Engine library to v-SUITE, you can interface the platform using the numerous API functions offered by the v-SUITE framework.
v-SUITE provides a wide range of calls for the management and representation of data within thematic software, available at Front End.
Vigilate in order to increasingly expand compatibility with third-party devices, offers a protocol development service supported by a dedicated internal team.

Applications and markets

Homeland Security & Smart City

Modern public administrations increasingly require technological and automatic control of the territory in order to govern Smart City and Smart Land infrastructures.
v-ENGINE products are characterized by the quality and reliability of video analysis, the possibility of integration with third-party systems and the large quantity of functions and data produced.
Vigilate offers turnkey solutions with field products and a platform where it is possible to easily organize and manage all aspects of modern security systems, from alarms to data, from visualizations to event management, all accessible via the web anywhere and simultaneously by multiple operators at the station and in the field.

Some examples

MUNICIPAL CCTV PARKS PUBLIC BUILDINGS ECOLOGICAL ISLANDS

Private, Commercial, Industrial

From the central offices of banks, franchising, multinationals to individual points of sale or suburban offices, we offer professional, innovative and highly automatic solutions, capable of functioning without the supervision of human operators who constantly monitor the state of the system and the areas managed by it . Vigilate's security is effective, automatic, easy and always active, an efficient offer and scalable, ready to adapt to the needs of an advanced private sector in need of an excellent price-performance ratio for the multilevel control of their organizations.

Some examples

COMPANIES SHOPPING CENTERS SHOPS BUILDINGS RESIDENTIAL AREAS BANKS

Critical infrastructures

The evolution of the world geo-political situation, cultural change, globalization, today exposes everyone to the threat of retaliation from groups or individuals who disagree with these evolutionary dynamics and who disagree with the way of feeling and living of our times. From this perspective there is the absolute need to protect sensitive places where people need to go for work or for the development of the social life of the community. It is necessary to set up high-performance security systems and strategies. Vigilate proposes itself as part of the solution to these new problems, which require a decisive evolution compared to everything that traditional security has proposed to date.

Some examples

HOSPITALS STADIUMS AIRPORTS MUSEUMS STATIONS AND PORTS PARKS FUN

Public and private professional security

Security is a strategy and not a technology, it is easy to understand that technological systems are only the first layer of an event management process which necessarily leads to a field intervention and professional management service, operated by structures created for this purpose. Security as a service is the basis of the creation of all Vigilate products, which allow the creation of technological systems originally conceived as "As A Service " infrastructures.

Some examples

PRIVATE SURVEILLANCE MILITARY FORCES POLICE FIRE FIGHTERS CIVIL PROTECTION

Technical features

v-ENGINE

An "intelligent NVR", capable of centralizing and autonomously monitoring cameras and sensors. On board the machine is the latest generation software accessible directly from the device like a normal PC or remotely via browser. A series of fast and intuitive features allow for rapid installation and configuration and offer graphic dashboards for the management and supervision of the installed system.

v-ENGINE CORE

The complete solution for managing video surveillance and multiple devices in complex systems, such as large companies, municipalities, cities. The numerous devices can be centralized in a local server (Local Architecture) located in a LAN. In this case the products are managed and monitored via a single administration platform v-ENGINE Core, a real supervision and general control panel of your system.

- Mono or multi-server architecture scalable without limitations for connected cameras for recording, streaming, anti-blinding and video analysis of both anti-intrusion and presence/ counting types
- Defined on the customer's operational specifications and validated on the basis of computing and storage capabilities.
- Also available in cold redundant or hot-swap configuration to ensure business continuity and disaster recovery.
- Available on both physical server architecture and VMware virtualized architecture

D1   Presets available

- **24 cameras** with recording and streaming only (without video analysis)
- **16 cameras** with recording, streaming and anti-blinding
- **14+2 cameras** 14 cameras with recording, streaming and anti-masking 2 Cam. with video analytics for anti-intrusion (4 fps)
- **8 cameras** with video analytics for counting (2 fps)
- **8+8 cameras** 8 cameras with recording, streaming and anti-blinding 8 Cam. with video analytics for anti-intrusion (4 fps)
- **4+4 cameras** 4 cameras with video analytics for counting (4 ftps) 4 Cam. with video analytics for anti-intrusion (4 fps)
- **4+4 cameras** 4 cameras with recording and streaming only (without video analysis) 4 Cam. with video analytics for anti-intrusion (8 fps)
- **2+6 cameras** 2 cameras with video analytics for counting (8 fps) 6 Cam. with video analytics for anti-intrusion (4 fps)

D2   Presets available

- **24 cameras** with recording and streaming only (without video analysis)
- **16 cameras** with recording, streaming and anti-blinding
- **8+8 cameras** 8 cameras with recording, streaming and anti-blinding 8 Cam. with video analytics for anti-intrusion (8 fps)
- **8 cameras** with video analytics for counting (4 fps)
- **4+4 cameras** 4 cameras with video analytics for counting (4 fps) 4 Cameras with video analytics for anti-intrusion   (8 fps)
- **2+6 cameras** 2 cameras with video analytics for counting (8 fps) 6 Cam. with video analytics for anti-intrusion (8 fps)

D3   Presets available

- **24 cameras** with recording and streaming only (without video analysis)
- **24 cameras** with recording, streaming and anti-acceleration
- **24+16 cameras** 24 cameras with recording and streaming only (without video analysis) 16 cameras with video analytics for anti-intrusion (4 fps)
- **24 cameras** with video analytics per count (4 fps)
- **22 cameras** with video analytics for anti-intrusion (4 fps)
- **16+8 cameras** 16 cameras with recording, streaming and anti-acceleration 8 cameras with video analytics for anti-intrusion (8 fps)
- **16 cameras** with video analytics for anti-intrusion (8 fps)
- **16 cameras** with video analytics per count (8 fps)
- **16 cameras** with recording, streaming and anti-acceleration
- **16+8 cameras** 16 cameras with video analytics for counting (2 fps) 8 cameras with video analytics for anti-intrusion   (8 fps)
- **16+12 cameras** 16 cameras with recording, streaming and anti-acceleration 12 cameras with video analytics for anti-intrusion (4 fps)
- **15+1 cameras** 15 cameras with recording, streaming and anti-acceleration 1 camera with video analytics for counting (12 fps)
- **14+2 cameras** 14 cameras with recording, streaming and anti-acceleration 2 cameras with video analytics for counting (8 fps)
- **8 cameras** with video analytics per count (15 fps)
- **8+8 cameras** 8 cameras with video analytics for counting (8 fps) 8 cameras with video analytics for anti-intrusion (8 fps)

Configuration and management interface for your system

Each Vigilate product in the v-ENGINE line is equipped with configuration and management software for your system; practical, fast, modern, which makes using the product extremely easy.

General features

- Camera management
- Configuration of Video Analytics with real-time feedback
- Management, activation and deactivation of system areas
- Management of entrances and exits
- Creations of actions following events
- Interfacing and configuration of third party systems for the supervision of systems: anti-intrusion, access control and fire prevention systems
- System administration and user profiling tools
- Creation and supervision via video wall dashboards
- Recording and supervision of live videos and historical videos
- Comprehensive search for videos and events
- Export of data and videos
- Tools for managing your own anti-intrusion system
- Security, privacy by design and privacy by default.
- Multiple integration tools with external systems
- System diagnostic tools
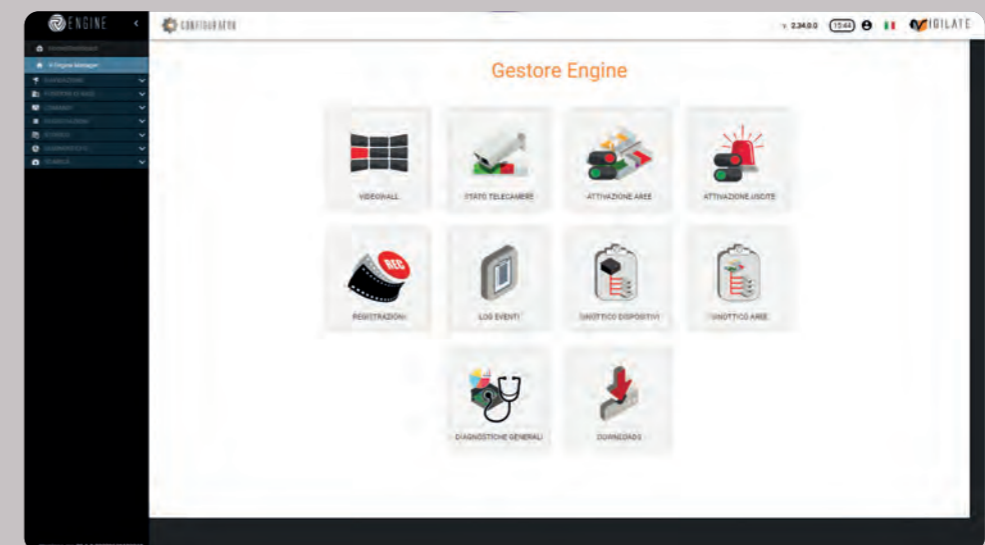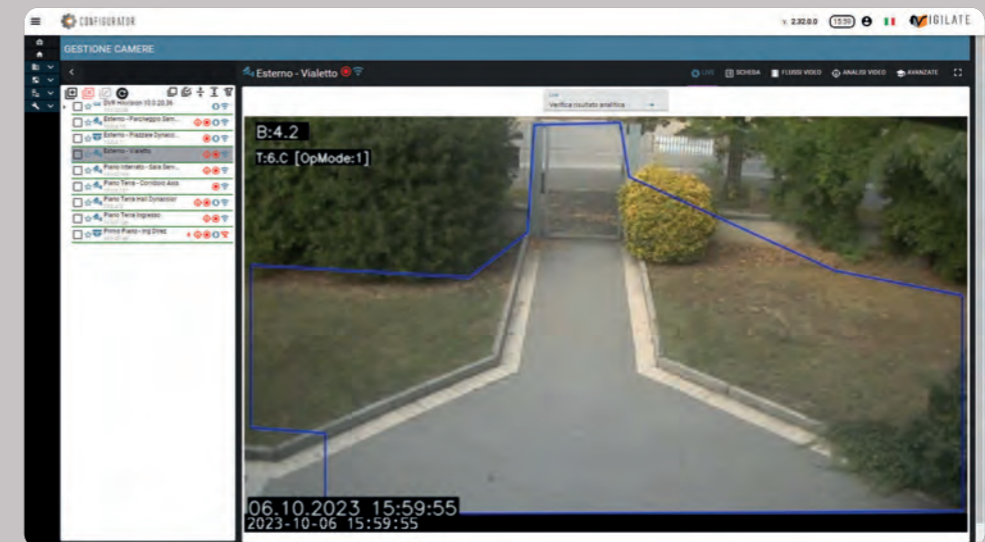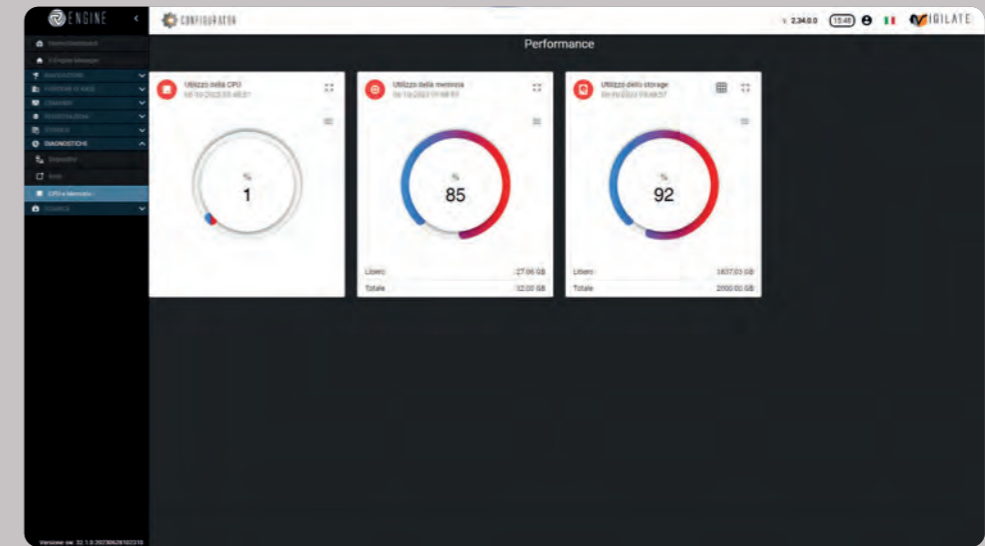
v-SUITE platform VMS, PSIM, ITS and much more

The universal platform for Security & Traffic management: scalable, accessible, intelligent, cloud or private.
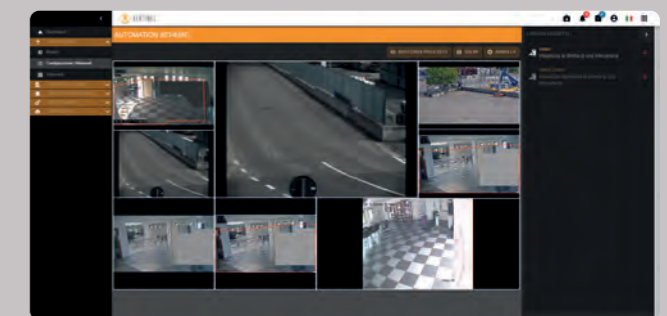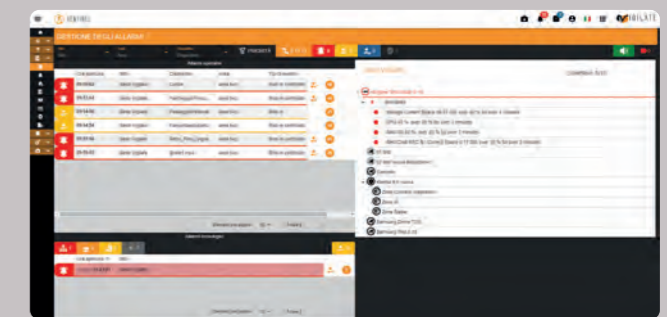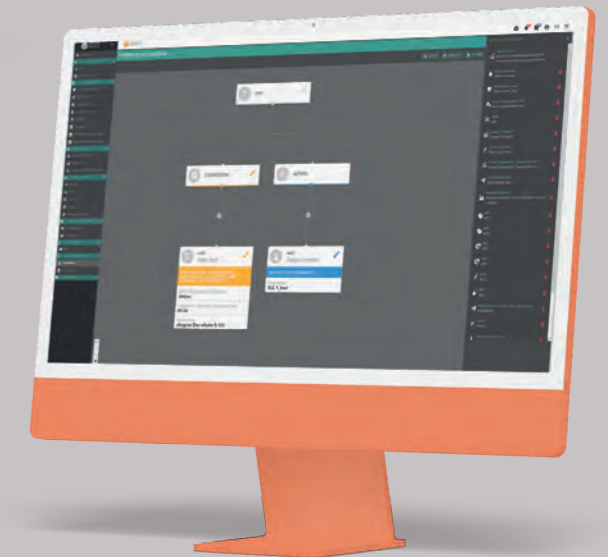
Integrated software management

The supervision and control software platform PSIM, acronym for Physical security information management, is scalable, accessible, intelligent, Cloud or Private.
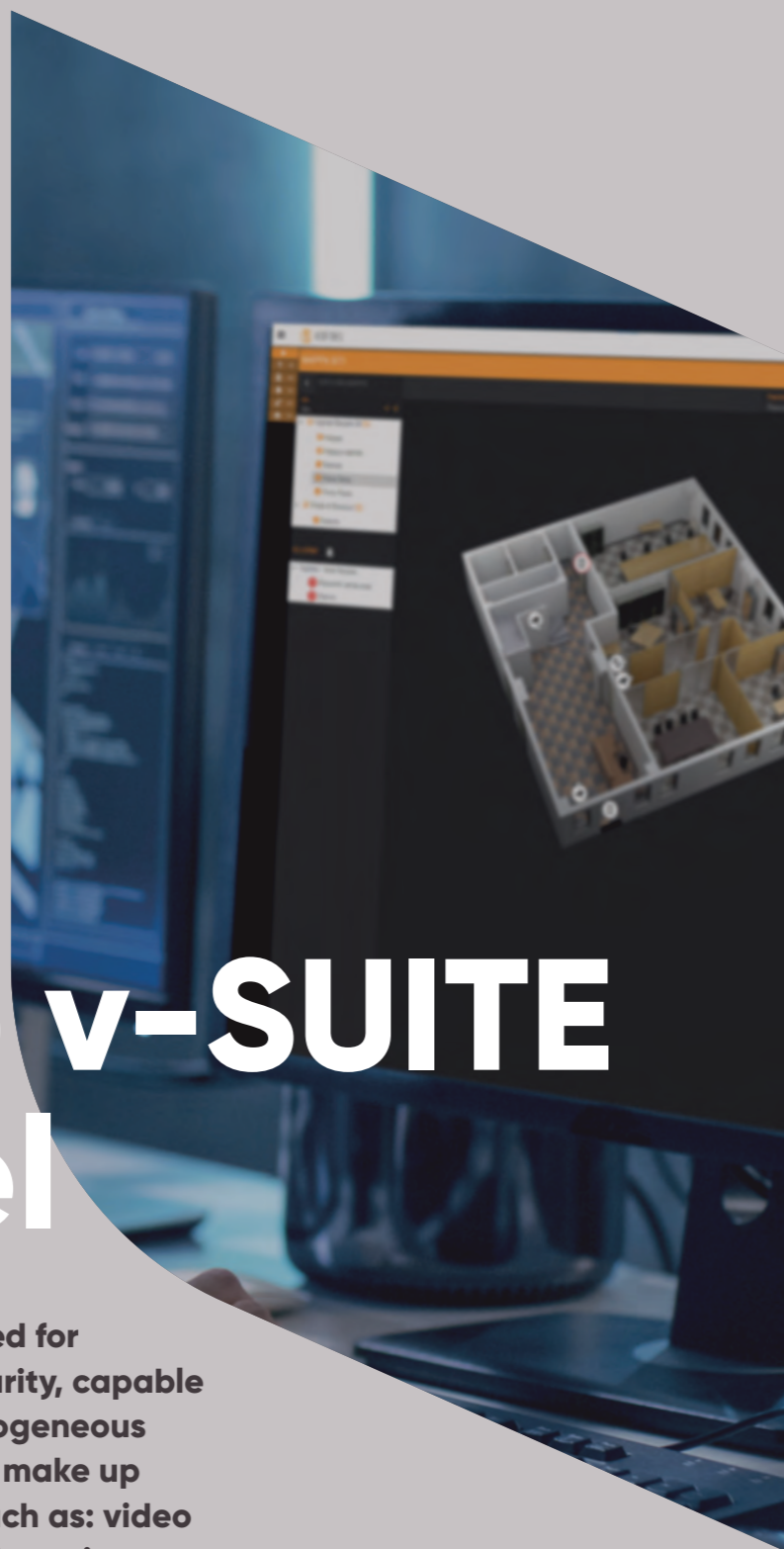A complete range of vertical applications dedicated to Security and Traffic professional management. Business and consumer software to allow industry partners to better manage and control their products and provide new services to their customers.
v-SUITE manages in a single graphic interface software environment, all the security and traffic control equipment installed in the systems.
With v-SUITE you can supervise your systems, its remote offices spread across the territory, it is possible to manage large infrastructures such as Smart Cities, Smart Roads, major communication routes, etc.
v-SUITE, thanks to its modularity in terms of application packages and distributed intelligence devices installed in the field or emulated at a central level, is able to manage heterogeneous systems ranging from security to traffic, from energy to Scada systems, from home automation to automatic safety communications between vehicles and C-V2x infrastructure.
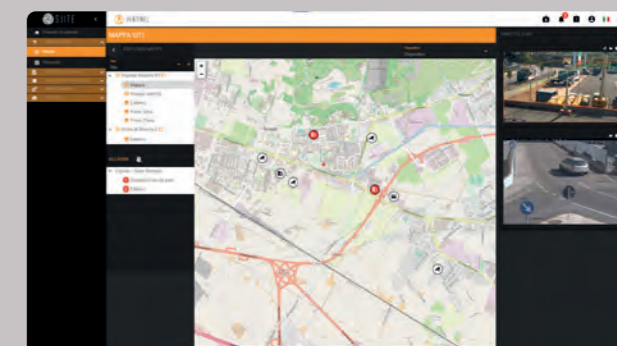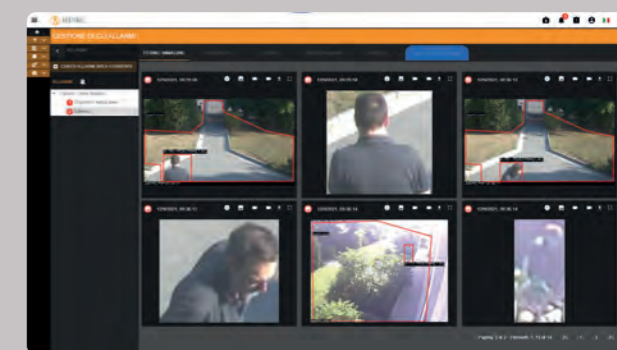
Xentinel allows you to manage, monitor and control the entire range of Vigilate products and thanks to its v-ENGINE intelligent NVR, it is able to access information from third-party products such as: IP cameras, anti-intrusion panels, field sensors, access control systems, fire systems, etc...
The combination of specialized field products and distributed platform software consolidates the meaning of physical security information management and makes Vigilate the ideal partner for industry professionals looking for original and proposed solutions
and services and services.

There are numerous resources to manage a complete security audit: area sensors, video surveillance cameras and live video surveillance, reports and alarms from burglar alarms, fire and anti-intrusion systems, ANPR cameras; Xentinel, with its numerous features, presents itself as the ideal partner to manage all this.
Aware that a security strategy cannot exist without information sharing, Vigilate offers a platform capable of offering stability in operational centers with complex, intelligent and scalable CCTV cameras, with speed of access to information through a uniform web version for all subjects involved in the management of the system.

Modulo v-SUITE Xentinel

Xentinel is the v-SUITE module used for integrated, modern, scalable security, capable of managing in a simple and homogeneous way the devices and systems that make up modern security infrastructures such as: video surveillance, access control, anti-intrusion systems, fire prevention systems.

CCTV control
Realtime video supervision and historical videos

Alarm management
Alarm events, management procedures, event history

Supervision of connected systems
Anti-intrusion control units, access control, remote I/O, external DVRs

Graphical interaction with systems
Nested maps and graphical representation of devices recording and sensors

Simultaneous management and supervision of multiple systems
Remote control of multiple connected systems for installations distributed across

UNI CEI EN 50518 compliant

Xentinel General Features

Features

- Nested and geographic bitmap maps management
- Multiple sites management
- Graphical layout of all devices with coverage area
- Graphical display of the hardware status of the system with reporting of any anomalies
- User permissions management
- Graphical alarm management
- Visualization and historical search of events/alarms
- CCTV: live viewing of IP or analog cameras
- CCTV: Historical video viewing, remote playback
- CCTV: Download recording portions in standard video format (H264)
- CCTV: Video wall module with various formats
- CCTV: pan, tilt, zoom, preset, and tour management for dome cameras
- CCTV: definition and execution of virtual patrol operations
- XWall client module for local PC for simultaneous opening of a large number of video streams (fixed guardian)
- Anti-intrusion: real-time sensor status
- Anti-intrusion: enabling and disabling areas
- Anti-intrusion: automatic and manual exclusion of non working sensors
- Anti-intrusion: calendar management for automatic activation/deactivation
- Anti-intrusion: alarm management with online management procedures
- Anti-intrusion: definition of logic to be applied in case of alarm (output activation, video recording start, etc.)
- Access control: the real-time display of the status of the gates
- Access control: logging of transits and possible generation of alarms
- Automation: remote control of I/O and external peripherals
- Integrated management of security products of the Vigilate range
- Real-time notifications of alarm, warning, info, and log
- Email notifications about alarms and system diagnostics
- Operational procedures manager
- Assets manager
- Tickets manager

Analytics

Security data analysis, Traffic and IoT

Analytics is the software application that allows you to analyze the data coming from the various systems connected to the v-SUITE, both security and traffic. Having all the plant information in a single environment allows the Analytics application to perform complex data aggregations and searches in order to make strategic decisions in the management of large structures and systems.
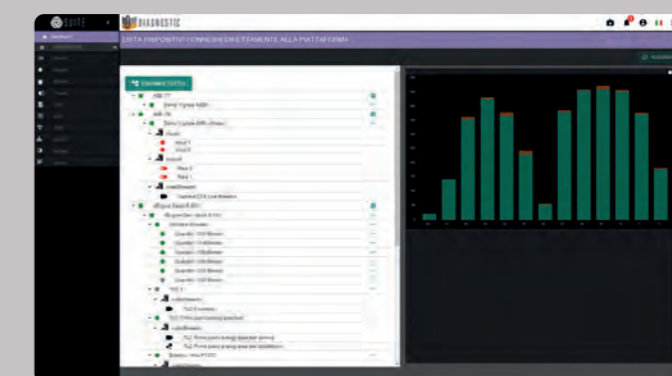
Diagnostic

The software used for technical supervision e Supervised product maintenance

v-Diagnostic is an application dedicated to managing the functional aspect of the products and devices present in the systems connected to the platform, it allows you to be constantly informed on the correct functioning of the devices and intervene promptly in the event of technical unexpected events.

Xwall is the advanced camera supervision software, installed in the control room of companies or municipalities and is a valid tool for viewing dangerous or alarm situations in real time. Thanks to its characteristics, Xwall is not a common VideoWall software but an intelligent system to automatically or semi-automatically manage information coming from field devices.
In the event of an alarm, Xwall displays not only the videos of the area affected by the alarm but also those of neighboring devices.
The VideoWall automatically reacts to the device in alarm by presenting a SmartView on the screen with images of the devices in the area surrounding the alarmed device.

Modulo v-SUITE Xwall

Vigilate's smart video wall, automatic, predictive, intelligent, ideal for small, medium and large control centers

Customizable

Dynamic mode with automatic opening of each camera in alarm state

Automatic opening of context videos in proximity to the alarm

Real-time display of alarms

Vigilate is a "tech company" specialized in the production of devices and software platforms for security and traffic control.

Traffic

- **Parking**
- **Homeland Security**
- **Highway & Tolling**
- **Enforcement**
- **Smart Road**

Safety

- **Companies, shops, hotels, car parks**
- **Critical infrastructures**
- **Banks**
- **Retail, Fashion, GDO**
- **Control Room**
- **Logistics**

VIGILATE