

# Video, Security and Data Intelligence Platform with Sensor Fusion Engine

The Senstar Symphony Common Operating Platform includes enterprise-grade video management, video analytics, security management, access control, and data intelligence modules. Powering the platform is the sensor fusion engine, which intelligently combines low-level sensor data with video analytics to achieve the highest levels of performance, far beyond that of the individual sensors.

A scalable, open platform that can unify separate security functions under a shared common operating interface is critical to maximize the effectiveness of today's increasingly sophisticated systems while reducing operator overload, training requirements, and system complexity.

Senstar Symphony takes system unification another step further with the introduction of its new sensor fusion engine. The sensor fusion engine increases security by leveraging the strengths of different intrusion detection technologies while avoiding their individual frustrations, like nuisance alarms caused by weather conditions, or nearby authorized activity.

For additional information about Senstar Symphony, including a detailed list of supported features, visit senstar.com

# **Features and Benefits**

#### **Common Operating Platform**

- Unified platform for video management, video analytics, security management, access control, and data intelligence functions
- Improve situational awareness while reducing IT complexity and training requirements

#### **Sensor Fusion Engine**

- Synthesize raw data to intelligently characterize potential risks
- Reduce false alarms and notifications while maximizing the abilities of individual systems

## Scalable, High-Performance Architecture

- · Scales to support thousands of cameras
- Simple per-camera/device licensing (no client or server limitations)
- Built-in server, database and storage failover (no Windows® Clustering software required)

## **Open Ecosystem**

- Multi-vendor camera support
- ONVIF Profiles S and T (H.265 & metadata)
- RESTful API

## **Intelligent Video Analytics**

- Native video analytics for alarm generation and business intelligence
- Moveable between cameras

## Cybersecurity and Privacy

- · Privacy controls with granular permissions
- TLS 1.2 encryption

# Video Management

An open platform, Senstar Symphony supports cameras from all major vendors and easily scales to any size. With intuitive operator clients, simple per-camera licensing, and built-in high availability, Senstar Symphony is the ideal high-performance video management solution.

## SCALABLE, HIGH-PERFORMANCE **ARCHITECTURE**

Senstar Symphony uses a high-performance architecture that simplifies deployment planning, protects initial investment, and is easily scalable:

- Optimized for all video management functions (video, storage, management, and analytics), Senstar Symphony does not require dedicated servers for specific functions.
- Maximize uptime with built-in server redundancy and automatic failover. Senstar Symphony supports PostgreSQL databases, eliminating the need for costly and complex Windows® Clustering.
- · Support additional cameras by adding server resources - no reconfiguration or licensing schema changes required.

#### **OPEN ECOSYSTEM**

Senstar Symphony installs on off-the-shelf hardware. It supports thousands of network devices as well as industry standards, including ONVIF profiles S and T. Out-of-box integrations with PSIM, intrusion, and access control products improve operator efficiency by delivering a seamless view of events. A RESTful API prevents vendor lock-in while the Senstar Symphony ONVIF server (Profiles S and T) enables it to stream video and ONVIF alerts to third-party video systems.

#### EASY TO USE OPERATOR INTERFACES

Senstar Symphony includes several options for viewing video:

- Windows® Operator Client A full-featured, intuitive video and alarm management client. Controls are displayed based on device capability and user permissions, including PTZ controls, access control, intrusion sensors, two-way audio, and general I/O.
- Web Interface An HTML5-compliant web interface replicates key VMS functionality, including video playback, camera control, event timeline, and reports.
- Mobile Apps (iOS and Android) Support live video and playback, video analytics, PTZ control, and alarm management. Each app can connect to multiple servers, enabling a user to remotely monitor several deployments.
- Video wall Included with an enterprise license, enables a highly customizable layout driven by

video analytic rules, manual configuration, and camera drag-and-drop.

## **BROWSER-BASED** ADMINISTRATOR CLIENT

Administration is handled via a browser-based client, eliminating the need to install and maintain a separate Windows® management application. The client can be accessed anywhere on the network. Reusable templates and rules speed up the configuration of large deployments.

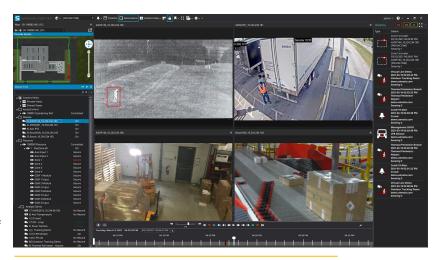
#### CENTRALIZED CLOUD MANAGEMENT

Through the use of Senstar Enterprise Manager, Senstar Symphony can be managed centrally, which significantly reduces the administrative burden typical in multi-site deployments.

Centralized software configuration and health monitoring ensures a secure and up-to-date video deployment while limiting downtime and operation costs.

#### PRIVACY AND SECURITY

Senstar Symphony was designed from the outset with data privacy and security in mind. Fine-tuned user permissions, along with intelligent people and vehicle masking, assists Senstar Symphony operators to meet data privacy regulations. All client-server communications are encrypted using industry best-practices.



Senstar Symphony Windows® Client video management interface

# **Video Analytics**

Senstar Symphony has been developed from the ground up to support video analytics. Server-based and Senstar Edge Platform analytics are seamlessly supported, as well as third-party applications via the dynamic ONVIF events engine.

Built-in analytic applications include motion tracking, auto-PTZ tracking, face recognition, license plate recognition, left/removed object detection, and people counting.

#### INTELLIGENT SEARCH AND INVESTIGATION

Senstar Symphony includes a graphical timeline and intelligent search capabilities. By leveraging events and metadata generated by its video analytics, operators can quickly find, review, and export video containing specific events or people.

Comprehensive reports, including operator activity, event history, and video analytic results, can also be generated and exported.

#### MOVEABLE BETWEEN CAMERAS

Senstar video analytics are licensed individually and can be moved from one camera to another as required to adapt to hardware upgrades or changing security requirements.

#### **FUTURE-PROOF WITH EDGE ANALYTICS**

Senstar Symphony supports ONVIF alerts, enabling it to take advantage of the latest third-party edge-based video analytics.

Automatic License Plate Recognition (ALPR)	Read license plates, regional information, and other vehicle markings, and seamlessly integrate the data into the site's security and operational processes. ALPR can be used for automating vehicle access systems such as gates, flag vehicle in/out times, notify customer management systems of client arrivals, and track vehicles crossing checkpoints.	
Face Recognition	Identify known and unknown individuals. Using a combination of patented 2D to 3D pose correction technology, this analytic is designed for fast, reliable identification under real-world challenges, including lighting, angles, facial hair, glasses, and motion.	
Crowd Detection	Estimate the number of people within a given area in real time and trigger an alarm when a specified number or percentage of people is reached. Ideal for public surveillance applications where the volume of people needs to be monitored for public safety or quality of service.	ŤŤŤ
Indoor People Tracking	Detect and monitor the movement of people within indoor environments.  Typical applications include intrusion detection, wrong-way detection, people counting and customer behavior analysis. This analytic retains its extremely high accuracy even in the presence of changing light conditions and shadows. Use tracked events to trigger alarms and direct operators to specific concerns,	İ
Outdoor People and Vehicle Tracking	Optimized for detecting and monitoring the movement of vehicles and people in outdoor environments. Typical applications include perimeter intrusion detection, parking lot monitoring, public safety, and wrong-way detection. The analytic retains its extremely high tracking and object classification accuracy even in the presence of challenging weather and lighting conditions.	
Left and Removed Object Detection	The analytic is optimized for indoor environments and is designed to detect the addition of new objects as well as the removal of existing ones.	
PTZ Auto-Tracking	Enables pan-tilt-zoom (PTZ) cameras to automatically zoom in and follow a person or vehicle within the field of view. Improve response capabilities during a security event by enabling the operator to focus on what is happening rather than being distracted with camera control.	PTZ

# Security Management

A full-featured security management system (SMS), Senstar Symphony delivers a consolidated view of incidents from any source, including intrusion sensors, video analytics, access control, and other security devices. Its visual, map-based interface provides a streamlined user experience for operators handling everything from daily routines to crisis situations.

#### STREAMLINED MAP-CENTRIC INTERFACE

Senstar Symphony includes a map-based display to streamline information for operators, letting them focus on the job at hand and avoid unnecessary distractions or complexity. Alarms and events are graphically displayed on site-specific maps, along with camera locations and field-of-view.

With sensors supporting ranging, the precise reported location is shown on the map. Markers indicate previously reported positions, helping the operator determine intruder movements.

#### COMPLETE SENSOR INTEGRATION

Senstar Symphony provides seamless integration with any sensors managed by Senstar's Network Manager software. This includes, but is not limited to, FlexZone®, Senstar LM100™, FiberPatrol®, OmniTrax®, UltraLink<sup>™</sup>, UltraWave<sup>™</sup>, XField<sup>®</sup>, and the Senstar Alarm Logic Engine. Senstar Symphony works with Senstar sensors out-of-the-box – no integration required. Senstar Symphony can be installed and configured before the physical sensor installation, making it ready to go live as soon as the rest of the work is complete.

Senstar Symphony displays all the key information obtained from the sensor. If the sensor supports ranging, for example, the system will display the location of alarm events on the map. If part of a sensor goes offline (such as in the case of a fence sensor cable cut) the system visually indicates which sections are down so the operator can dispatch personnel to the area while continuing to monitor the other areas.

In addition, the system will continue to provide alarm management for the unaffected zones.

Sensors are routable to individual workstations or groups of workstations. Perimeter sensors, for example, can be displayed on one set of workstations and internal site sensors on another.

#### COMPLETE ALARM AND EVENT MANAGEMENT

During an event, Senstar Symphony displays onscreen procedural information. All actions and response times are logged for future analysis. The operator may also document each alarm event with time stamped notes.

Each sensor or alarm is configurable with a different priority level. Highest priority alarms (like personal duress, for example), can be set so that they appear at the top of the event list.

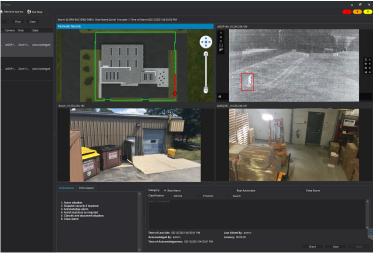
Senstar Symphony provides full alarm management, including the ability to acknowledge, close, and temporarily mask alarms. All events are logged and are accessible directly from built-in reporting mechanisms.

The operator interface is highly configurable and can be configured to prevent interface changes or accidental shutdown.

#### CUSTOMIZABLE FOR YOUR ENVIRONMENT

Senstar Symphony is customizable to the requirements of your site. Configurable options include:

- Using the Senstar Alarm Logic Engine to combine multiple discreet sensors into logical units.
- · Assigning roles and privilege levels to each user (for example, operators, managers, administrators, and view-only workstations).
- · Configuring screen layouts to optimize monitoring and incident response workflows.
- Defining event and schedule-based rules to perform specific tasks, such as alarm masking.



Senstar Symphony security management interface

# **Access Control**

A complete access control system, Senstar Symphony supports industry-leading hardware and fully integrates access control events with video and alarm management.

#### INTEGRATED OPERATOR INTERFACE

Access control events are displayed within the Senstar Symphony Windows® client, simplifying routine operations. Events from access control devices may be linked to specific camera feeds as well as on-screen controls, enabling operators to quickly assess key locations and respond accordingly.

Common operator actions such as momentarily unlocking a door can be performed via controls overlaid on the video panel, while access to a full list of device commands is available from the device tree (when permitted by operator security settings).

#### VIEW CARDHOLDER HISTORIES

A historical record of door and other access control events is directly accessible from the operator interface, enabling fast ad hoc reporting and investigation.

#### INDUSTRY STANDARD HARDWARE

Senstar Symphony supports industry-leading controllers, readers, and credentials from HID Global. The readers support Wiegand or OSDP (encrypted) interfaces and physical/mobile credentials. The controllers integrate with industry-standard HVAC and elevator control panels via I/O controller panels. Multiple hardware controllers may be used within the same deployment, appearing together in a hierarchical list that expands to show connected devices such as door contacts, strikes, and readers, as well as input/outputs which are commonly used for integration to other systems.

#### ACCESS ZONES, LEVELS, AND SCHEDULES

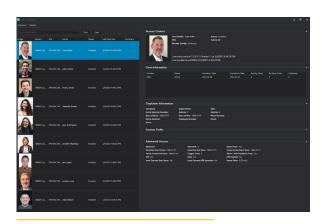
Senstar Symphony enables site owners to divide the building into logical access zones and enable/disable access based on user access levels. Access can also be controlled based on business schedules as well as first card unlock feature where the first authorized user of the day automatically unlocks a door for public access.

#### FULL-FEATURED ADMINISTRATION CLIENT

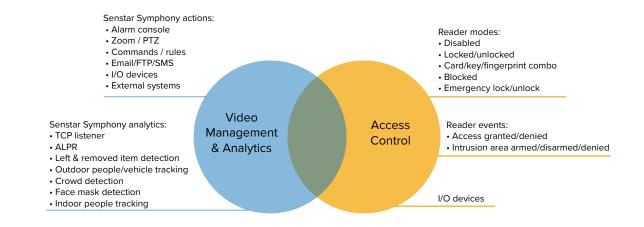
A separate administration client, Senstar Symphony AC, provides a full feature set for configuring and administering the system to meet your requirements.

#### UNIFIED, SEAMLESS INTEGRATION

A common operating platform, Senstar Symphony enables any access control event to be used to trigger rules alongside other security functions. Rules may also be used to control the status of any managed Senstar product whether it's a PIDS security sensor or access control panel.



Senstar Symphony Card Holder window



Integrate access control events with video analytics and Senstar Symphony rules

# Data Intelligence

Senstar Symphony enables organizations to leverage their existing surveillance infrastructure to obtain operational intelligence. By combining video surveillance with analytics, security sensors, and data from manufacturing or logistics systems, organizations can monitor operations, detect abnormalities, and implement corrective actions.

#### MONITOR TRUCKS AND OTHER VEHICLES

The Senstar Automatic License Plate Recognition (ALPR) video analytic enables organizations to track the entry and depart times of shipping trucks and other vehicles. In addition to using license plate results to trigger immediate actions (such as opening a barrier), Senstar Symphony can make the data available to third-party business intelligence platforms and dashboards.

#### TRACK PACKAGES AND CONTAINERS

Optical character recognition (OCR) video analytics enable Senstar Symphony to generate package metadata and link it to specific cameras. Intelligent video search with cross-camera integrated timelines enables operators to quickly find visual records of packages and containers as they move through a facility.

#### LINK VIDEO TO PROCESS EVENTS

Senstar Symphony supports Open Platform Communications (OPC), enabling it to receive events from a wide range of devices. A TCP Listener module listens for incoming metadata over a TCP socket and associates it with an image or video, enabling organizations to use data like barcodes or serial numbers when searching for photos and recorded video. A return-on-investment (ROI) can be gained by reducing the amount of time it takes to conduct quality assurance investigations and reduce warranty claims.

#### **MONITOR OPERATIONS**

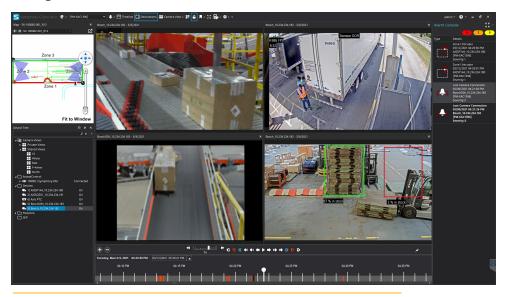
Reduce internal theft and monitor employee productivity by tracking people and inventory movements. Senstar's Left and Removed Object Detection analytic can generate events when inventory is added or removed from shelves, while heat maps can reveal activity trends and identify bottlenecks.

#### **EMPOWER EMPLOYEES**

Keep workers safe and improve productivity by providing employees with access to personalized video feeds of relevant activity. Senstar Symphony can provide centralized control of the Senstar Thin Client, a compact video display appliance can be mounted on the back of any monitor and used to display live video of activity on production lines, loading docks, or in warehouses.

#### **ACTIVITY HEAT MAPS**

Senstar's Indoor People Tracking analytic can be used to generate visual heat maps of employee or customer movement and behavior. Use heat maps to find physical bottlenecks, understand customer behavior, or optimize layout and operations.



Use video and associated metadata to provide insight into business processes