Sentient®
Security Management System (SMS)

DESCRIPTION – Sentient is a Security Management System (SMS) designed to display and manage alarm and status information for applications where ease-of-use, integration with a diverse array of security equipment, and meeting the reliability requirements of high-security environments are paramount. Sentient comes pre-integrated with a range of Senstar sensors so the work of adapting Sentient to a specific site – adding maps, assigning zone and sensor icons to maps, etc., can begin immediately without a software integration exercise.

Sentient is the ideal solution for managing perimeter security systems based on Senstar's wide array of perimeter intrusion detection sensors.

Features

- Modular architecture allows flexibility in system size – starting with a single operator workstation and scaling to practically unlimited numbers of workstations and servers

- Windows®-based, allowing Sentient to be implemented on widely available PC hardware

- Out-of-the-box integration with Senstar sensors and third-party systems

- Optional hot-standby redundancy

- Interactive "drag-and-drop" project file editing

- One-button toggling between design-mode and run-mode speeds up project file development

- Video from video management subsystems can be integrated onto Sentient desktop

- Each Sentient workstation's desktop can include the full range of monitors as supported by the operating system

- Supports alarm prioritization and queuing so security operators can focus on the highest-priority alarm

- Map partitioning allows security operators to independently monitor and control different parts of a large facility's security system

- Multi-lingual capable - on-screen text can be changed quickly for multi-lingual working environments

- Standard S100 Graphical User Interface (GUI) with a full set of operator, supervisor and maintainer level security management functions

Benefits

- Ready-to-go – Sentient is integrated with the sensors and security equipment for your application needs

- Proceed with confidence – Sentient is backed by Senstar, a leading global perimeter security company that can provide training, technical services, and post-sales support wherever and whenever required

- Future needs– as your requirements change, Sentient grows with you
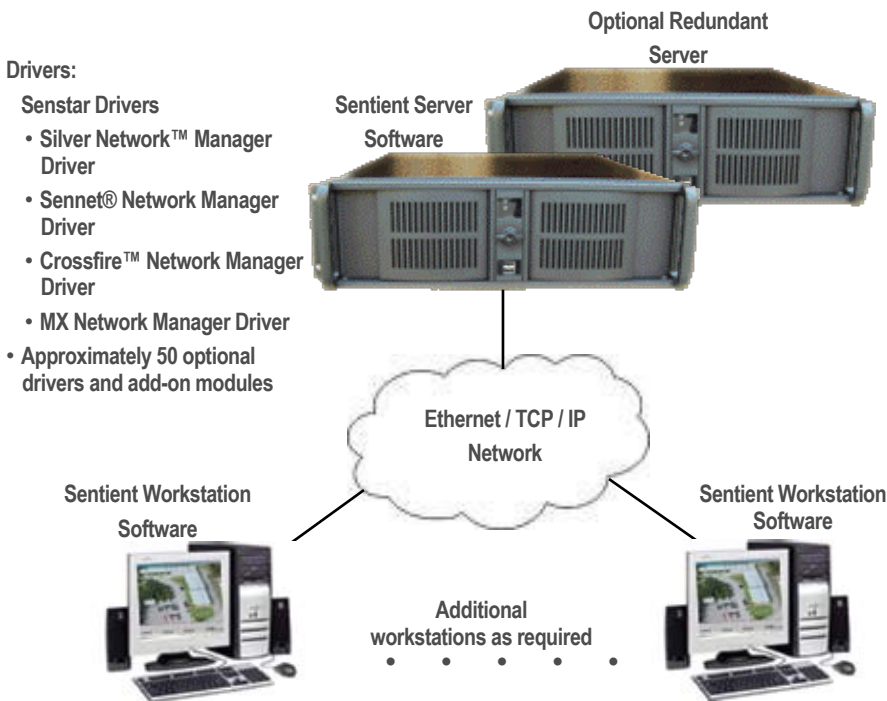
Markets

- Correctional facilities

- Military installations

- VIP residences

- Critical commercial / industrial assets

- Utilities

- Petrochemical

- Nuclear power plants

- Nuclear materials storage

- Airports

- Government agencies and laboratories

- Important historic / cultural sites
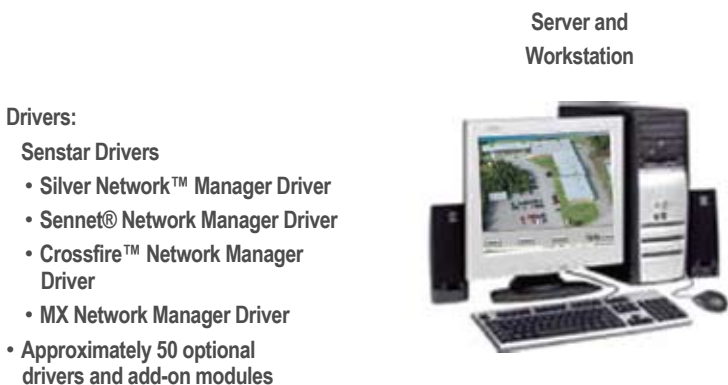
- Communications sites

Sentient
Security Management System (SMS)

SENTIENT FULL CONFIGURATION

Drivers:

Senstar Drivers
- Silver Network™ Manager Driver
- Sennet® Network Manager Driver
- Crossfire™ Network Manager Driver
- MX Network Manager Driver
- Approximately 50 optional drivers and add-on modules

Optional Redundant Server

Sentient Server Software

Ethernet / TCP / IP Network

Sentient Workstation Software

Sentient Workstation Software

Additional workstations as required

SENTIENT LITE CONFIGURATION

Server and Workstation

Drivers:

Senstar Drivers
- Silver Network™ Manager Driver
- Sennet® Network Manager Driver
- Crossfire™ Network Manager Driver
- MX Network Manager Driver
- Approximately 50 optional drivers and add-on modules

Architecture

Sentient's inherent flexibility is derived from a design comprised of three modular elements:

- Sentient server – the core software module that manages the Sentient project file that controls all aspects of the system's behavior
- Sentient workstation – manages the user interface to Sentient
- Sentient driver services – manages the interaction between Sentient server and user hardware devices

Sentient's software modules communicate via the open-architecture TCP / IP protocol, allowing configuration flexibility including the following:

- Server, workstation, and driver services all co-located on one PC (Sentient Lite configuration)
- Server and driver services with multiple workstation modules running on separate PCs connected via local LAN or VPN (full server / workstation configuration)
- Functionally separate and independent servers with connected workstations, sharing selected event and status information (Enterprise Operations configuration)

Redundancy

To provide fault tolerance Sentient servers can be configured in redundant pairs with a primary and standby server acting as a hot standby being continuously updated with complete system status. On primary server failure, the standby server takes over without loss of data or control. Workstations automatically connect to the standby server with no user intervention or action required.

Alarm processing and display capabilities

Sentient accepts alarm and event information from security sensors and sub-systems, displays a GUI that indicates the status of alarms and events, and accepts operator input to control the system. Sentient provides a visual drag-and-drop design mode that allows Sentient to be adapted to the specific requirements of any installation. Using the Sentient design mode, a site developer can program the precise response to any given system event such as what the screen displays (alarm icon, pop-up dialog box, pop-up video, etc.), what outputs are generated (siren or lights turned on, gates opened or closed, audio message broadcast, etc.), and what is recorded in the master history log.

Sentient's tools for developing site-specific project files:

- Action lists - for each physical or logical control point within the system, a list of actions can be defined when the control point changes state. Example actions: setting another control point high or low, switching display screens, playing a sound clip, displaying a video stream, etc.
- Programmable screen objects – Sentient's programmable screen objects (icons) are the core mechanism for visually displaying system status. For every screen object, multiple states can be defined, with each state having distinct

visual properties such as color, overlay image, text label, and text properties

- Scheduling tools – Sentient allows any number of scheduled events to be defined – both one-time and reoccurring. Zones can be accessed / secured, doors locked / unlocked, lights turned on, etc., according to schedules that can be entered by security operators at run-time

- Boolean expression capability – Sentient's Automation Objects allow the state of a logical control point to be determined by a combination of inputs

- Timers – Sentient can create, maintain, and execute timer-based functional relationships with a duration of anywhere from 100 millisecond to 23 hours

- Counters – Site developers use Sentient's counters to trigger other actions or displays as required. Counter inputs can be user or I/O initiated

- Constructs – Sentient's Alarm Zone, Door Control, and Cell Call constructs simplify the site development process by organizing in one place the inputs, outputs, states, and actions associated with a physical alarm zone, door, or cell call device

- Standard queue interface – Site developers can display and control system activity through Sentient's built-in queue interface. Multiple queues can be defined for different categories of system events – perimeter alarms, cell calls, card swipes, etc.

- Image and sound files – Sentient comes with a library of graphic icons and sounds for use by the site developer. Sentient can import bit-mapped image files in a wide range of formats including .gif, .tif, .ico, .cur, .tga, .eps, .psd, .png, .ras, .wpg, .pic, .jpg, and .bmp. Sentient can also import vector-based .wmf image files and .wav sound files

- Priorities – Sentient allows alarms to be assigned priorities so alarms of higher priority (intrusion, personnel duress, etc.) can be brought to the security operator's attention ahead of alarms of lower priority (intercom call, door call, etc.), reducing the response time to critical events

- Routing levels – in multi-workstation configurations, Sentient's routing levels allow the site developer to manage operator workload by routing alarms and events to specific workstations

- Text-to-speech – Sentient's text-to-speech modules allow site developers to enter any desired text and have it converted to speech as a programmed action. English is standard, options for other languages are available

- E-mail notification – Sentient can send event notification via e-mail to a pre-defined list of addressees

- Graphics toolbar – Sentient's graphics toolbar allows creation of graphic images that can be incorporated into a Sentient project file. Floor plan images, site elevations, and mechanical representations can be imported and combined with the graphics
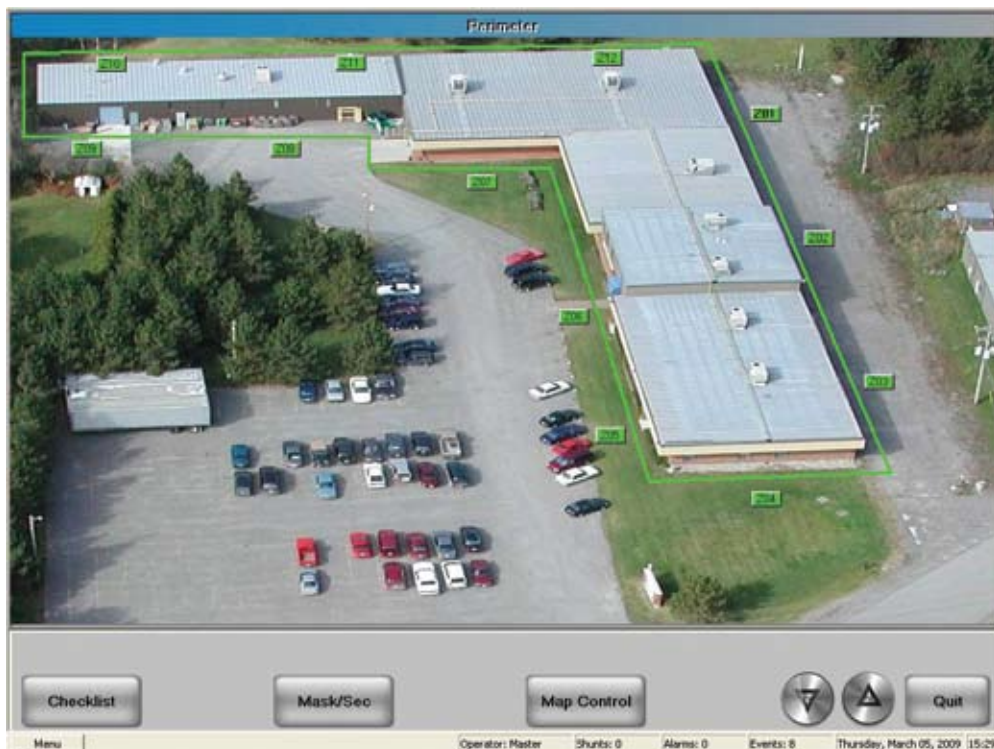
Sentient workstation software screen shot with S100 GUI

- Guard tours – Sentient's guard tour feature allows guard tour control points and time intervals to be easily programmed. Guard tours can be defined with a random or sequenced series of tour points

- Export / import – once configured, various parts of a project file can be exported for use in other project files, saving site developer time

- Rapid data entry – for larger sites, screen object replication, reprogramming, and replace-all features speed data entry

- Language tailoring - all Sentient user-screen terms can be replaced by the site developer to use alternative English terms (i.e., "zone" to "sector", "secure" to "armed") and / or to one or more languages. The security operator can select the desired language by a soft-key in real-time. Reports are generated using the currently selected language

Activity logging and recording

Sentient records all selected system activity (alarms, operator actions, etc.) in daily text-based log files (see Sentient database section for other logging and reporting options). Sentient includes a report generator tool to allow users with the appropriate access level to generate activity reports in standard RPT (Crystal Reports) format. A set of standard reports is provided; other reports can be developed by the site developer. Reports can be viewed on-screen, printed, stored to archival media, and exported to pdf, Excel, and Word formats. Using various 3rd-party tools, the RPT format reports can be manipulated to produce charts, graphs, etc.

Sentient can be configured to automatically save the daily log files to archival storage and delete the log files from the local Sentient server.

Sentient database

Sentient incorporates Microsoft Data Engine (MSDE) to provide consolidated reporting and automated event processing for all system devices. The Sentient database can be linked to external databases utilizing industry standard Open Database Connectivity (ODBC) drivers and Structured Query Language (SQL) routines. Additionally, Sentient can be configured to support multiple user-defined databases simultaneously to provide enterprise-wide systems integration.

Video integration

Sentient can accept IP-video streams from a wide range of Digital Video Recorder (DVR) / Network Video Recorder (NVR) equipment and display the video directly on-screen or alternatively send camera and monitor-control commands to the video management system. Sentient can provide logical control over an unlimited number of cameras and monitors, calling them up upon alarm conditions. Each Sentient workstation's desktop can include the full range of monitors as supported by the operating system, allowing video to be presented as "pop-ups" on map screens or on monitors dedicated to video display.

Optional Sentient modules

- Card access control module with support for video badging and card record management
- MS-SQL database option
- Multi-database module for asset and personnel tracking
- RFID asset tracking module

Standard S100 GUI

Sentient site developers have the option to select Senstar's standard S100 GUI, a simple yet powerful map-based GUI designed for applications where speed and ease-of-use are paramount. It is ideally suited for the management of perimeter intrusion detection systems in large-scale high-security applications. With the S100 GUI, a security operator with little training can respond quickly and accurately to alarm conditions, even in the face of multiple simultaneous alarms. The S100 GUI defines separate operator, supervisor, and maintenance level functionality.

S100 operator features

- Alarms presented to the operator in priority order, appropriate map and camera views are shown
- Prompt line provides alarm details and / or brief instructions
- Alarm cause list presented to operator upon clearing alarm
- Map control allows scrolling or timed map stepping
- Alarm zones can be grouped so that operator input (access, secure) acts on the entire group at once
- Detailed checklist available
- Rapid screen language selection (when so configured)

S100 supervisor features

- Customize alarm prompts for each alarm
- Create operator checklist
- Customize alarm causes list
- Schedule alarm zone access / secure times
- Run activity reports
- Generate simulated alarms using training mode

S100 maintenance features

- Access to pre-installed and authorized user programs (for equipment setup and calibration)
- Run equipment configuration reports

Supported equipment

Sentient supports a wide-range of electronic security components and sub-systems including perimeter intrusion detection systems, video management systems, personnel and duress alarms, intercom and paging systems, and more.

Sentient includes as a standard feature drivers for the Senstar security equipment shown in Table 1.

Drivers for 3rd-party security equipment are sold individually – see separate Sentient Supported Equipment List document for the latest list of supported drivers.

Configurations

Sentient is licensed in two main configurations:

- Sentient Lite – licenses a combination server and workstation configuration providing standalone operation on a single PC. Includes drivers for Senstar security equipment. Additional drivers can be purchased as required. Sentient Lite does NOT support redundancy or add-on workstations
- Sentient Full Package – includes the full set of features of the Lite version plus the ability to add an unlimited number of workstations and a redundant server (each licensed separately)

Software requirements

- Windows® XP Professional or Windows® Server 2003 (all 32-bit x86 editions), requires the current Windows® service packs
- Internet Explorer 6.0 or later

Recommended minimum hardware capability

- CPU: Pentium® 4-class 2 GHz Processor (or equivalent)
- RAM: 2 GB
- Free disk space: 20 GB
- Monitor: minimum 17-inch 1024 x 768 resolution, touch screen optional - 1024 x 768 resolution recommended for projects using the standard S100 GUI
- Network & protocols: Ethernet 10 / 100 Network Interface Card (NIC) with Windows TCP / IP
- Sound: Windows®-compatible sound system
- Input devices: mouse and keyboard
- USB: 4 ports (for rack-mounted PCs at least two front-panel accessible ports recommended)
- 24X CD drive

Table 1 - Senstar sensors and transponders supported by Sentient			
Network Type	Network Control Software	Network Control Hardware	Supported Sensors and Transponders
Silver Network	Silver Network Manager	Silver Network Interface Unit (SNIU)	• OmniTrax® with Silver Network card (RS-422, MMFO, SMFO) • XField® with Silver Network card (RS-422, MMFO, SMFO) • 8-input module for OmniTrax and XField • 8-relay output module form OmniTrax and XField • 16I / 16O transponder with Silver Network card (RS-422, MMFO, SMFO) • MPS-4100 with Silver Network card (RS-422, MMFO)
Crossfire	Crossfire Network Manager	Crossfire redundant Switcher / Data Converter	• Intelli-FLEX™, Crossfire™ network versions (RS-422, MMFO) • IntelliFIBER™, Crossfire network versions (RS-422, MMFO) • MPS-4100 with Crossfire network card (RS-422, MMFO) • "PLC" transponders (RS-422)
Sennet	Sennet Network Manager	Sennet Network Controller	• Perimitrax® (RS-485) • Transponder unit and large transponder unit (RS-485) • Intelli-FLEX, Sennet® Network versions (RS-422, MMFO) • IntelliFIBER, Sennet Network versions (RS-422, MMFO)
MX	MX Network Manager	MX-5000, MXF-5500, MX-7000, Data Control Unit (DCU)	• FPS-2-2M • FPS-3 • FPS-5

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Senstar is represented by dealers in over 80 countries.

www.senstar.com