

SENTRY



Sentry is CAE's new **web-based software** designed to **manage alerts** using the **standard CAP! format**.

The system is used to set thresholds and to configure alarms upon the occurrence of certain conditions, even complex. It also activates local alert devices, for example to inhibit traffic in the risk area, and disseminates alert messages according to the availability of the persons to be contacted. The software is equipped with a logging system intended to track the operation of the software, events, the forwarding of alarm notification and much more besides.

CHARACTERISTICS

Sentry is designed to ensure maximum interoperability, which is reflected in several aspects:

- it's **cross-platform**: it works on different operating systems;
- it's **database independent** thanks to the ORM technology;
- it interfaces with standard systems through the **CAP! protocol**. (Common Alerting Protocol): a standard that the world uses for the **dissemination of alerts** and allows Sentry to be powered and to issue incoming alerts received **from standard systems** that communicate through the afore-mentioned protocol.



The software is equipped with a **modular structure** thanks to a **microservices** architecture that, among other aspects, is used to add in a streamlined manner many different **means of communication** for the sending of **alerts**, including the increasingly used **messaging apps**, depending on the requirements of the customer.

It is therefore an extremely **flexible** product, which can also be used easily in multi-vendor networks.

SECTIONS AND FUNCTIONALITIES

Address Book

This section defines contacts, contact groups, their availability and association with the means of dissemination, with the relative addresses. It is the basis for the management of alert send-outs.

Contacts: these are the people who can be alerted by Sentry, and for this purpose they are included in the list of contacts and associated with one or more dissemination profiles. For each contact, the means of communication available to them must be recorded with the relevant addresses. It is possible to import and export from/to VCF file.

Availability: this represents a set of availability periods that repeat over time (days, weeks, months), also distinguishing weekdays from holidays.

Groups: these consist of a list of contacts and are directly associated with a dissemination profile instead of associating the contacts individually.

External processes: this is a list of processes (executables, batches, etc.) that can be included in a



dissemination profile as if they were contacts.

Dissemination profile: it defines how information concerning an alarm instance is propagated to an audience of recipients. This instance can come either from a CAE network or from third-party systems that communicate with messages in CAP! standard.

Reports and simulations

This section can be used to consult **reports**, relating to events that occurred in the plant and to the use of Sentry, and to launch **simulation** procedures to verify the operations performed by a specific dissemination profile.

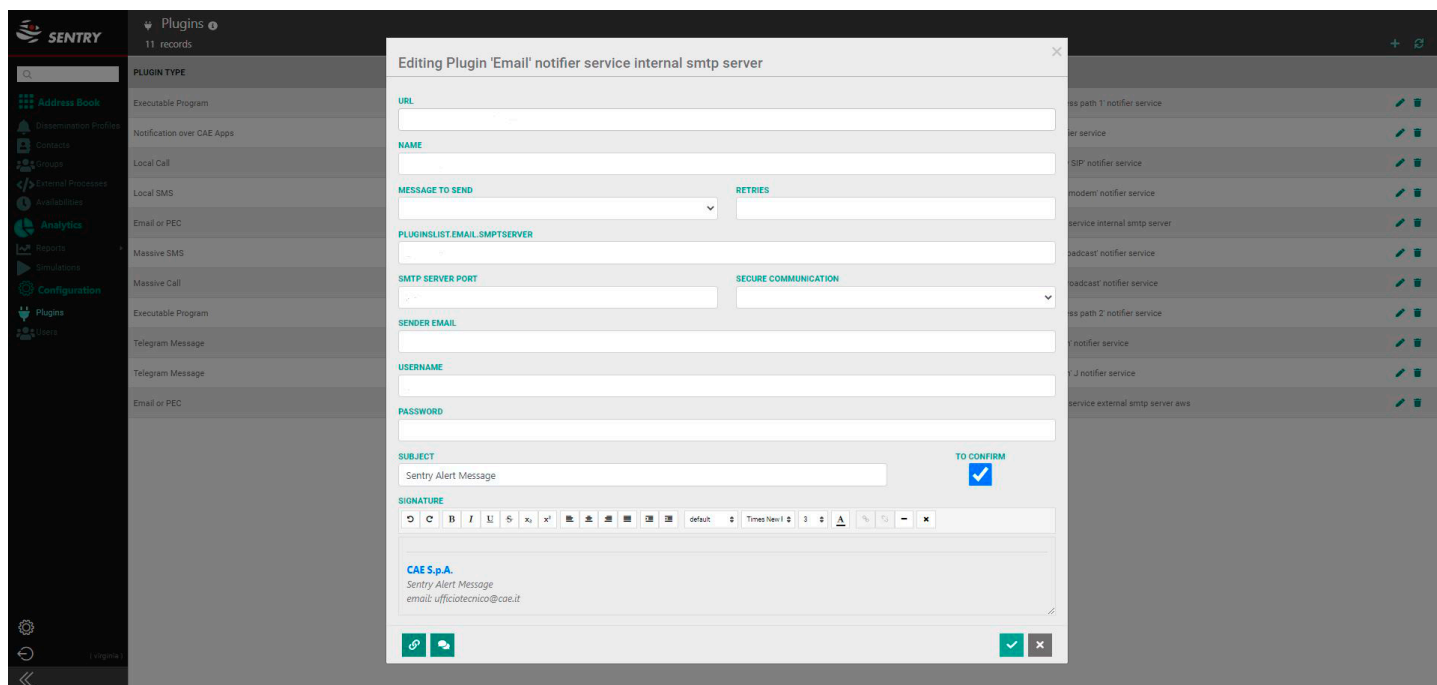
The reports are divided into:

- **Audit Log:** this refers to all configuration changes made through the application, access logs, receiving of requests from external systems, plugin diagnostics, Sentry configurations, etc.
- **Event Log:** this refers to all operations related to the receipt of a dissemination instance until its completion. Event Logs are then used for the generation of dedicated reports, easy to consult, exportable and historicised.

Plugin configuration and user profiles

Plugin: a section for the configuration and management of plugins used for the dissemination of alerts by **e-mail, SMS, Telegram, massive voice calls, apps**, etc. The software architecture is used to introduce other means of communication and alert without impacting on the rest of the system. Periodically, an **automatic check of the status of the plugins** is carried out and, in case of errors, an e-mail notification is sent to the administrator, continuously guaranteeing correct functioning of the system.

Users: it allows the creation and configuration of the different types of Sentry users.



The screenshot displays the Sentry web application interface. On the left is a dark sidebar with navigation icons and labels: Address Book, Dissemination Profiles, Contacts, Groups, External Processes, Availabilities, Analytics, Reports, Simulations, Configuration, Plugins, and Users. The main area shows a list of plugins under the 'Plugins' header. A modal dialog titled 'Editing Plugin "Email" notifier service internal smtp server' is open, containing the following fields and options:

- URL:** Text input field.
- NAME:** Text input field.
- MESSAGE TO SEND:** Dropdown menu.
- RETRIES:** Text input field.
- PLUGINS LIST EMAIL SMTP SERVER:** Text input field.
- SMTP SERVER PORT:** Text input field.
- SECURE COMMUNICATION:** Dropdown menu.
- SENDER EMAIL:** Text input field.
- USERNAME:** Text input field.
- PASSWORD:** Text input field.
- SUBJECT:** Text input field with the value 'Sentry Alert Message'.
- SIGNATURE:** Rich text editor with a toolbar and the signature 'CAE S.p.A. Sentry Alert Message email: ufficiotecnico@cae.it'.
- TO CONFIRM:** A blue checkmark icon.

At the bottom of the dialog are three buttons: a green checkmark, a green 'X', and a grey 'X'.



innovation for a safer world.

CAE S.p.A-Via Colunga 20

40068 San Lazzaro di Savena (BO) - Italy
tel.: +39 051 4992711|fax: +39 051 4992709

www.cae.it