COOP2REACT

A system to cooperate between rescuers

In rescue, cooperation between services is key, and the first step to achieve it is to assure fast and effective information exchange. To this aim, the Corpo Nazionale dei Vigili del Fuoco has developed a system (named "COOP2REACT") which allows the exchange of data between Control Centres of the many services which cooperate in rescuing citizens (firemen, ambulance, Police, Carabinieri, Local Police, Civil Protection,…).

The system uses **open standard and protocols (CAP Common Alerting Protocol and Atom Feed)** so as to respect the different services and their institutional tasks. Every service will be able to exchange info with firemen **for free and without changing their systems and procedures** and, with minor changes to the systems, they will be able to extend the data exchange at will.

How it works?

The system has three functions: 1) the **generator** (sender-side), which "writes" CAP messages into the 2) **Router**, which attaches it to an "envelop" (Feed), protected by password and publish it into the web. 3) The **aggregator** (recipient-side) accedes to the al Feed, extracts the CAP message and makes it usable. The Italian Fire Corps has two generators: the **CAP Generator**, a software with web interface allowing free access to rescue services which have to "write" to the Italian Fire Corps and **SO115**, the management software of eighty-seven Provincial Fire Corps Control Centres, which has been upgraded with CAP generating functionalities, so as to allow the "output" of rescue data with a simple click by the operators.

Through the **CAP Reader** of the Italian Fire Corps, the recipient services will be able to access to the messages addressed to them and aggregate them with those coming from two other useful "channels": MeteoAlarm and United States Geographical Survey, which publish real-time data and location of weather and earthquake alerts.

How to access

All the documents are accessible from the web-site of the Italian Fire Corps (http://www.vigilfuoco.it/) clicking on the banner "Standard Interoperabilità Comunicazioni in Emergenza". The Decree 17.06.08 through which the Corpo Nazionale dei Vigili del Fuoco has adopted the CAP protocol is available on that webpage, shortly complemented with a further Decree (under publication) in which the version of the CAP protocol is updated, the Atom Feed is selected as the preferred distribution mechanism and the "Profilo CAP Vigili del Fuoco" (Italian Fire Corps profile) is officially published. Following such "cookbook" all services are empowerd to adapt their systems, making them able to exchange data using standard formats at will. In the meantime, **the Italian Fire Corps give free web-access to their software to exchange data with other Control Centres**. It is possible to access such software by any computer connected to the internet. Usernames and passwords are granted by the Italian Fire Corps Provincial HQs as soon as an **Agreement** is signed to formalise the way of use. The system is now in "trial stage" in the province of Venezia. Soon it will be available all over Italy.