



June 2, 2011

TO WHOM IT MAY CONCERN:

I am pleased to write this letter in response to a request by the Sahana Software Foundation to describe how we use Sahana software at the U.S. National Library of Medicine (NLM). NLM, at the National Institutes of Health (NIH), has the mission to make biomedical resources and tools available to scientists, clinicians, and the public in the US and worldwide (see MedlinePlus and PubMed online services at <http://www.nlm.nih.gov>).

Part of this mission is to provide information and resources related to national emergency preparedness, response, and recovery efforts. In addressing this goal, NLM partners with three nearby hospitals (the National Naval Medical Center, the NIH Clinical Center, and Suburban Hospital-Johns Hopkins Medicine) to improve emergency response to mass disasters impacting the hospitals. This is being done through several R&D projects, one of which is the LOST PERSON FINDER (LPF), a project conceived and conducted by NLM's Communications Engineering Branch. The goal of this project is to develop and deploy technologies for family reunification in the event of a mass casualty incident. Systems developed are for both hospital-centered operations as well as for large-scale community-wide events (e.g., earthquakes, floods.)

We found Sahana's open source software, particularly the Missing Person Registry, to be an excellent starting point for the LPF project, and compatible with our design objectives. This software was substantially customized and extended by our R&D staff as well as outside collaborators. For example, students participating in Google's Summer of Code program, mentored by our staff, contributed to these software developments. These student programmers came to us through our association with Sahana Software Foundation.

The *community-wide* version of our system, called People Locator (PL), has been deployed in several large-scale disasters beginning with the Haiti earthquake of January 2010, and most recently with the Japanese earthquake and tsunami. By adhering to standards, notably the Person Finder Exchange Format (PFIF), we achieved interoperability with other sites, in particular with Google's People Finder, to exchange photo and metadata records sent to each. As a result, the public could go to either site to report and look for missing people.

The *hospital-centered* version of LPF is designed to fit within the workflow of triage operations conducted by hospitals. This system has been tested during multi-agency drills with the Navy and Suburban hospitals in Bethesda in 2009 and 2010. Photo and metadata records for simulated 'victims' entered into our database could be browsed or searched, and displayed in a user-friendly interface.

We continue to use the Sahana-derived code and our effort is now known as Agasti Vesuvius. A brief description about NLM's role and how our "product" fits within the Sahana family of

offerings may be found under “Vesuvius and People Locator” at [Agasti 2011], with a fuller description of capabilities and recent work at [Vesuvius 2011].

We also continue to work with the Sahana Software Foundation, along with other organizations, in fine tuning interoperability standards, and participating in exercises and conferences. Examples of these are the US Naval Postgraduate School’s “Camp Roberts East” event in February 2011, and the ISCRAM 2011 simulation session and InterOp Workshop in early May 2011. On the national and state front, we are working with DHS/FEMA and the State of Maryland/MIEMSS toward exchanging data on disaster victims using the new Tracking Emergency Patients protocol over the FEMA IPAWS-Open Web-service backbone.

Disaster preparedness is an increasingly important concern in government with many agencies actively pursuing initiatives. At the NLM we have recognized this need and have put in place units to disseminate critical medical information during emergencies, as well as to create tools to mitigate crises as they develop. The Sahana Software Foundation is a valuable partner in these efforts.



George R. Thoma, PhD
Chief, Communications Engineering Branch
Lister Hill National Center for Biomedical Communications
US National Library of Medicine

REFERENCES:

[Agasti 2011] <http://wiki.sahanafoundation.org/doku.php/agasti:start>

[Vesuvius 2011] <http://wiki.sahanafoundation.org/doku.php/agasti:vesuvius:start>

ATTACHMENT:

NIH Report article on Lost Person Finder