SAHANA

A Case Study of a Disaster Management System


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"No innovation matters more than that which saves lives"

Avelino J. Cruz, Jr., Secretary of National Defense, Philippines on the use of Sahana that was deployed in the aftermath of the disastrous mudslides in the Phillipines

Problem: Aftermath of Disasters

- The Trauma caused by waiting to be found or find the next of kin

- Coordinating all aid groups and helping them to operate effectively as one

- Managing the multitude of requests from the affected region and matching them effectively to the pledges of assistance

- Tracking the location of all temporary shelters, camps etc
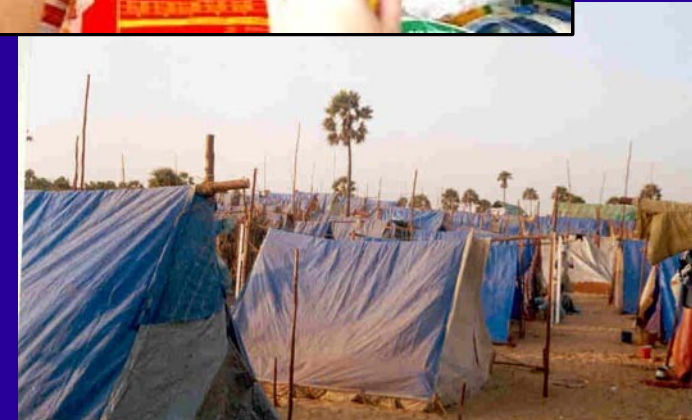
Solution: Sahana

- A Disaster Management System

- A Web based portal

  - with sub-applications ...

  - built to address the common disaster coordination and collaboration problems in disasters

  - between civil society, Gov, private sector, volunteers and the victims themselves

- A system to manage Disaster Aftermath
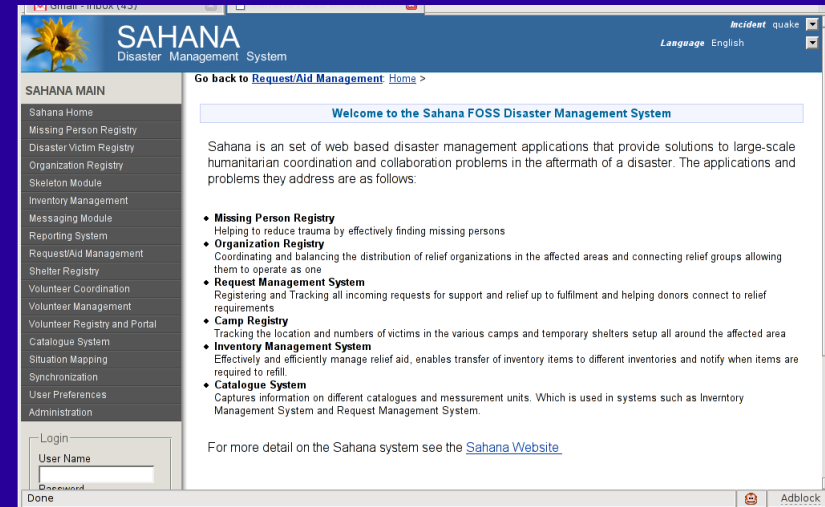
Core Modules

- ## Organization Registry

  – Helps maintain data (contact, services, region, etc) of organizations, groups and volunteers working in the disaster

- ## Missing Persons / Disaster Victim Registry

  – Helps track and find missing, deceased, injured and displaced people and families

Core Modules

- Request Management System
  - Tracks all requests and helps match pledges for support, aid and supplies to fullfilment

- Shelter Registry
  - Tracks data on all temporary shelters setup following the Disaster
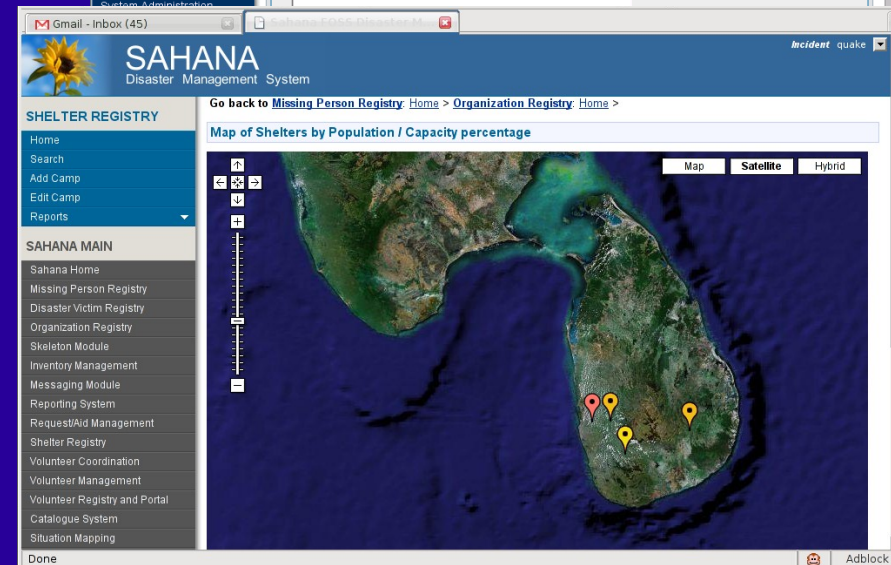
Technology and Features

- FOSS
- Synchronization
- Web Services
- Messaging
  - XAMPP, CAPS
- Localization
- Spatially enabled (GIS)
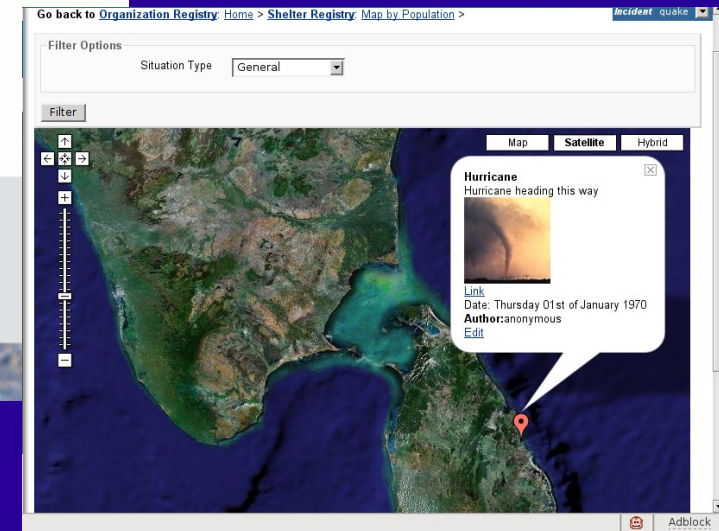- PDA/Mobile Accesibility
- LiveCD, LiveUSB
  - Sahana Live
  - Sahana on a Stick

IOSN-Asia Source II

http://sahana.lk/

Deployment Vision
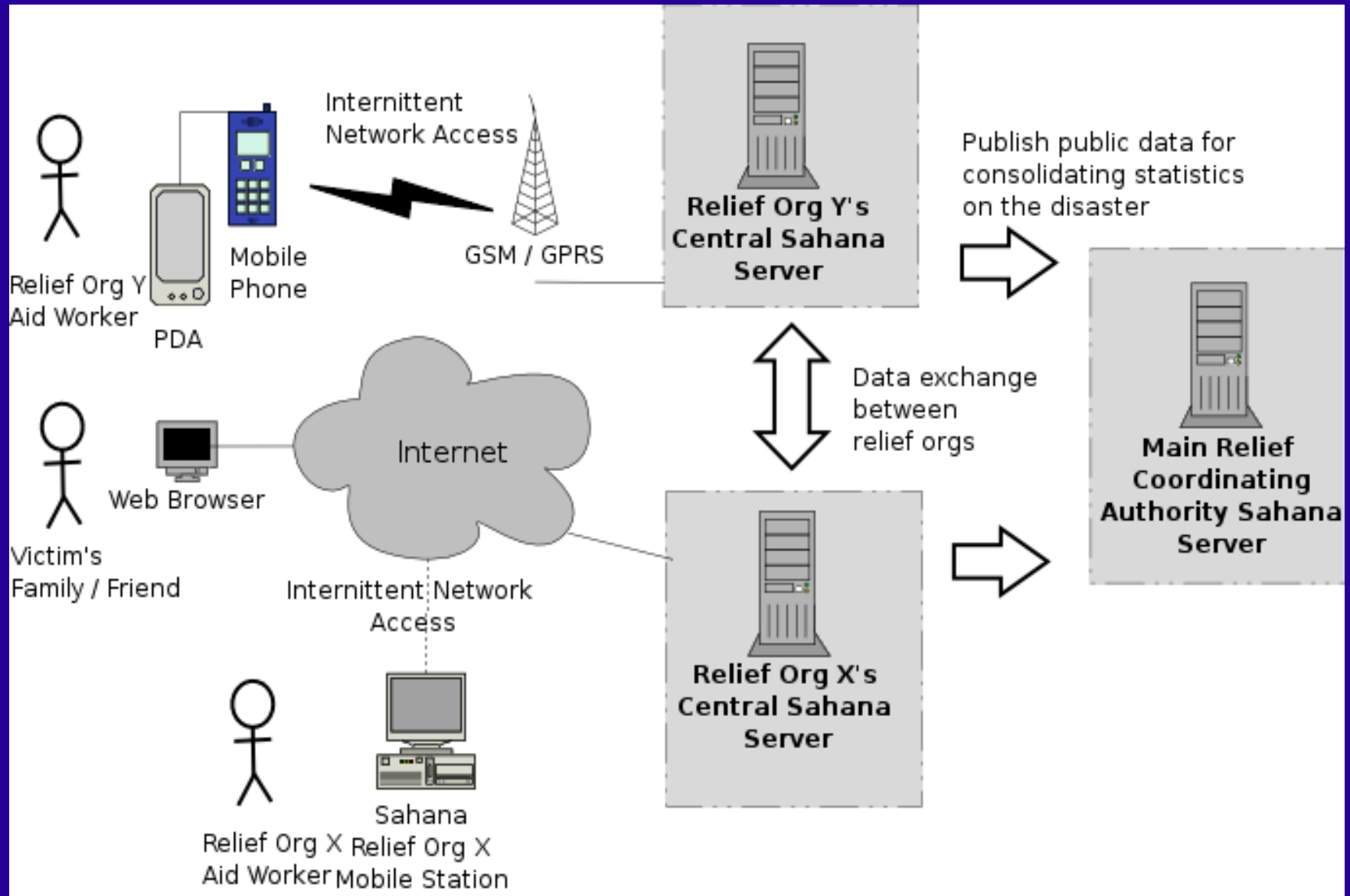
Deployments

- CNO, for Tsunami in Sri Lanka – 2005
  - Officially deployed and tracked ~ 26000 families
- NADRA, for Asian Quake in Pakistan – 2005
  - Officially deployed and integrated to NADRA (Pakistan Government) to track all victims
- For Guinsaugon Mudslide disaster in Philippines– 2005
  - Officially deployment to track all victims,orgs,camps by Government

Deployments ...

- Pre-deployment in Sarvodaya, Sri Lanka
  - Customization for Sahana requirements
- Pre-deployed independently in Australia
- Yogjakarta Earthquake, Indonesia – 2006
  - Deployed by ACS, Indonesian Reliefsource
- Pre-deployment for Red Cross, Sri Lanka

Recognition

- User Award from Redhat Summit
- ICTA Awards to contributors
- Software 2006 CA, USA, Good Samaritan Award
- Free Software Foundation (FSF) award for Social Benefit inspired by Sahana
- Sourceforge Project of the Month, June, 2006
- Used for many Research Projects, University Courses in many Universities Globally.

Conclusion

- ICT can bring significant efficiencies to the coordination/collaboration effort in a large disaster

- Sahana is a success example of the application of FOSS to build public ICT good in the humanitarian domain

- An example of a successful global partnership of practitioners and volunteers working together to provide a solution for the common good

Q&A

"The NDCC and OCD value SAHANA's contribution to the relief and rehabilitation phases of the Southern Leyte landslides and recognize the tremendous boost to our preparedness for future disasters"
Official, Govt. of Philliphines

http://sahana.lk/
http://sourceforge.net/projects/sahana/