Sahana Eden
Open Source
Disaster Management Platform
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Overview

• Introduction
• What is Sahana Eden
• How you can get involved in Sahana Eden
• Tomorrow's Workshop
Introduction Myself

Michael Howden
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• Software Engineer from New Zealand
• Worked for NGOs in
  – Indonesia  - Pakistan - Uganda
  – India      - UK      - Thailand
• Sahana Eden Project Management Committee
• Co-founder AidIQ
2004 Asian Tsunami

- At least **226,000** dead in **14 countries**.
- Up to **5 million** people lost homes, or access to food and water
- **1 million** people left without a means to make a living
- At least **$7.5 billion** in the cost of damages
Problems

- 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.
How Can IT Help?

- Live Situational Awareness
- Scalable
- Automatic Collation, Processing and Analysis
- Efficient Distribution

Technology can address many of the data management challenges and requirements by providing solutions that are scalable, efficient, automatic and by providing live data and situational awareness to both emergency managers and the community.

All of these support better, quicker decisions
Sahana Applications

- Organisation List
- Inventory/Warehouse Management
- Incident Reporting
- Request Management
- Assessments
- Project Tracking
- and more…
History

2005  - Developed in Sri Lanka (Tsunami)
      - Pakistan (Earthquake)
2006  - Phase II (Agasti)
2007  - New York City (Preparedness)
      - Philippines (Typhoons/Landslides)
2008  - Sahana Eden Founded
      - Sichuan (Earthquake)
2010  - Haiti (Earthquake)
      - Pakistan (Floods)
      - Disaster Risk Reduction Project Portal
Technologies

- Python
- Web2Py
  - Open Source Web Application Framework
  - REST Controller
  - Open Data Standards
- JavaScript Library – for usability
  - jQuery
  - Sencha
Sahana Eden - Haiti
Project 4636 – Haiti
Sahana integrating with other systems
World Food Program (WFP) Food Request Portal – Haiti
Built with Sahana Eden
Sahana Eden - Pakistan
Disaster Risk Reduction Website
Built with Sahana Eden
Disaster Risk Reduction Website

Geographic data such as the cyclone tracks can be imported from other systems
Sahana being used as part of a session on IT in the Asian Disaster Preparedness Center’s Disaster Management Course
Gap Analysis Map – Decision Support Tool
Sahana Platform

Rapid Application Development Platform

- Mapping and GIS
- Messaging
  - Email - SMS
  - Twitter - Chat
- Open\Flexible Data Input / Output
  - XML - JSON - EDXL
  - KML - RSS - XSLT
  - XLS - PDF
Sahana Eden’s Community

- Sahana Software Foundation
- IBM
- Google
- AidIQ
- Asian Disaster Preparedness Center (ADPC)
- Sahana Taiwan
- iWay

- Trinity College
- North Carolina State University (NCSU)
- Rensselaer Polytechnic Institute (RPI)
- University of Wisconsin
- CrisisCommons
SahanaCamps

• 1.0 Delhi, India – July 2010
• 1.1 Taipei, Taiwan – August 2010
• 1.2 Hanoi, Vietnam – November 2010
• Indonesia?
• Thailand?
• Africa?
SahanaCamp 1.2- Hanoi. IBM’s Offices.
Google Student Programs

Get paid to work with Sahana!

• Google Summer of Code
  – University Students
  – May-August
  – $5000

• Google Code In
  – High School Students
  – November – January
  – Up to $500
Tomorrow’s Workshop

- Learn how to use Sahana Eden
- Install a Development Environment for Sahana Eden
- Help with Testing
- Translation to Vietnamese
- Experimenting with prototype designs for Sahana.