



UNITED STATES SOUTHERN COMMAND TECHNOLOGY APPROACHES FOR ENABLING MULTI- NATIONAL ACTIVITIES

**US Southern Command
Science, Technology & Experimentation Division
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UNITED STATES SOUTHERN COMMAND
PARTNERSHIP FOR THE AMERICAS



Mission

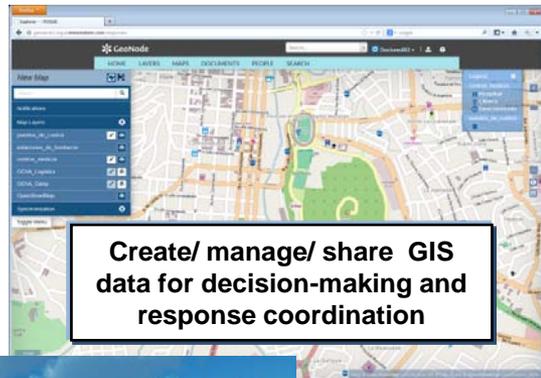
United States Southern Command's Science, Technology & Experimentation Division investigates, coordinates, executes, and reports on Science and Technology activities in support of the Command's missions; transforming plans, programs, and processes to improve their effectiveness and efficiency. It is responsible for the theater's Science and Technology program, Joint Capability Technology Demonstrations, International Research and Development activities, and Joint Experimentation Program.

SOUTHCOM S&T is focused on enabling partners to achieve more effective, collective mission effects in a multi-national, cross organizational environment.



Sharing and Collaboration in a Multinational, Unclassified Information Environment

Create-Share-Enhance Communication & Collaboration

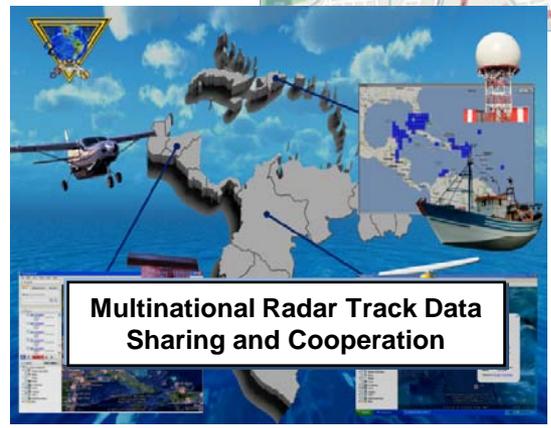


Mobile APPs create/ share "ground truth" GIS information

Create/ manage/ share GIS data for decision-making and response coordination



Work with international partners to understand requirements and develop sharable solutions



Multinational Radar Track Data Sharing and Cooperation



Haiti Earthquake



UNITY

RDA

ROGUE

2010

2011

2012

2013

2014





Enabling Technologies for Multi-national Activities

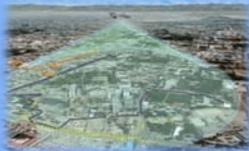
ISR



Space-based Imagery



Persistent Surveillance



Wide Area Sensing



Geospatial Mapping & Visualization



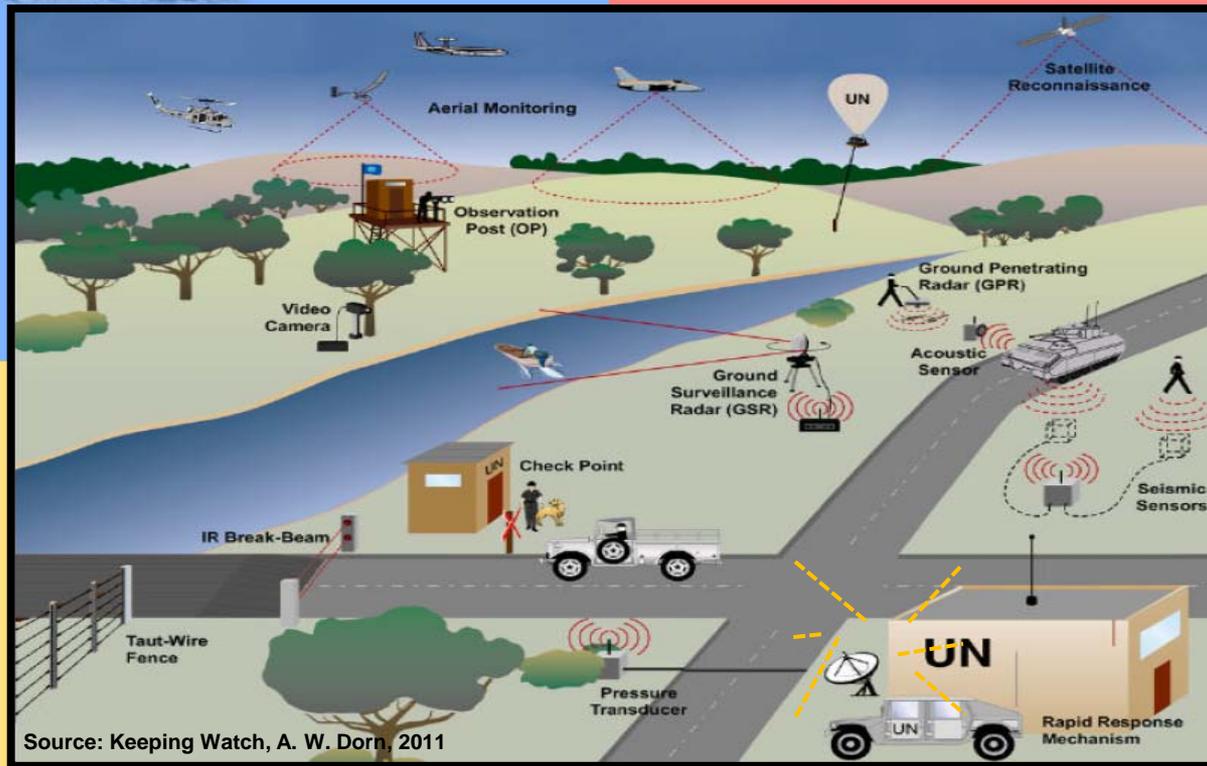
Shared Situational Awareness



C4/SA



Tactical Comms / Data Networks



Small UAS



Armored Vehicles

Force Protection



Unattended Ground Sensors



Counter-IED



Non-Lethal Systems

Protection of Civilians



Water Purification / Renewable Energy



Rapid Open Geospatial User-driven Enterprise "ROGUE"



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Challenge

Events, such as the earthquake in Haiti in 2010, demonstrated the need for fast, accurate location information in order to deliver supplies and needed assistance to the right place, at the right time

- Where are the groups of people needing help?
- Who is in the area/coming to the area to help?
- What help is available and where is it located?
- What is the trafficability of the roads/bridges?



How can we get help to those in need?



ROGUE Charter

Collaboratively develop geographic feature data, with traditional and non-traditional partners, by improving the ability of the **OpenGeo Suite to **ingest, update** and **distribute** non-propriety feature data utilizing **open source** software and **open standards**.**

Initial Context

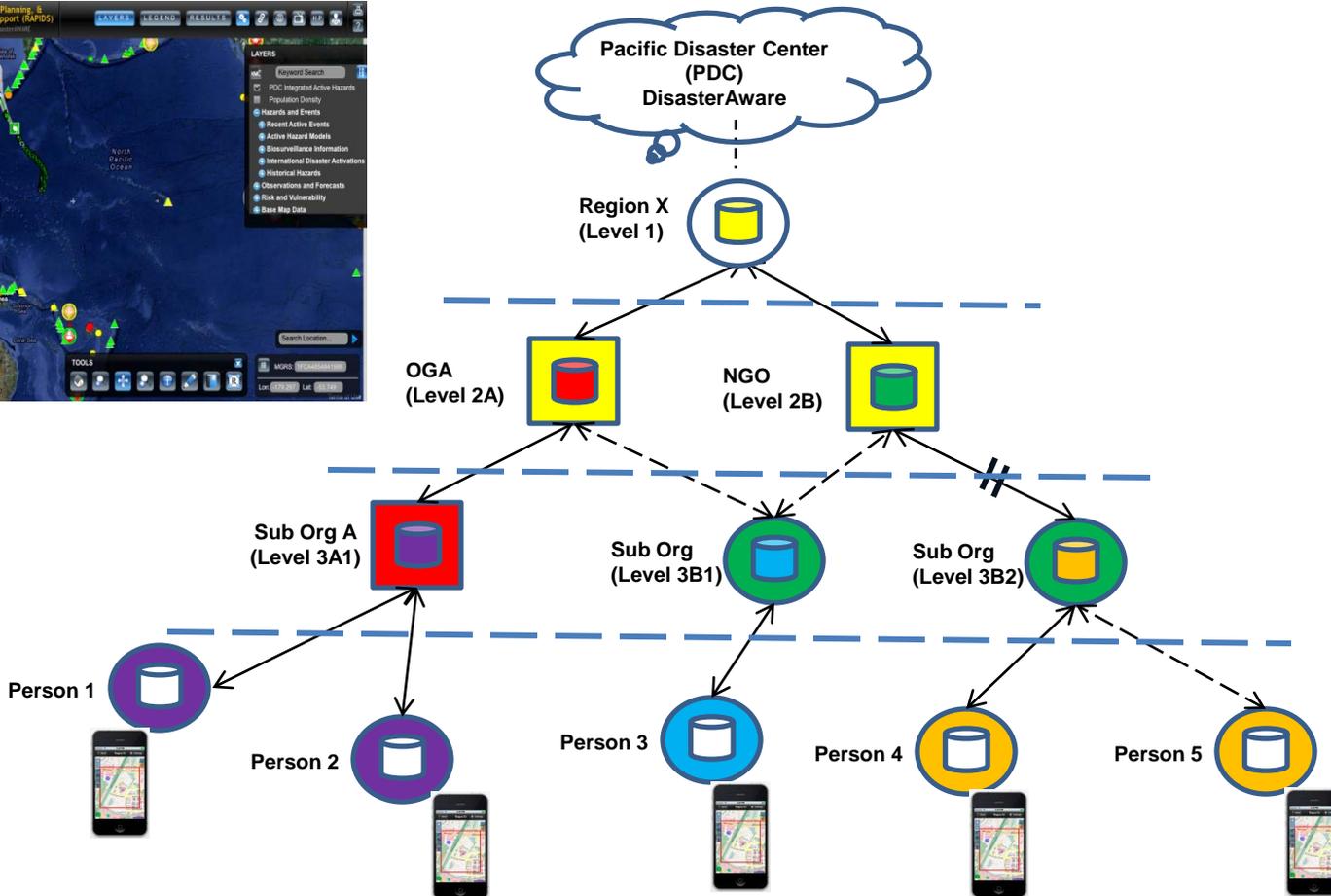
- Humanitarian Assistance & Disaster Relief (HA/DR)

Problem Set

- Numerous partners: military, inter-agency, non-governmental, international
- Common situational awareness of the environment is critical
- Responding organizations both need, and can provide a great deal of information



Concept



Solution

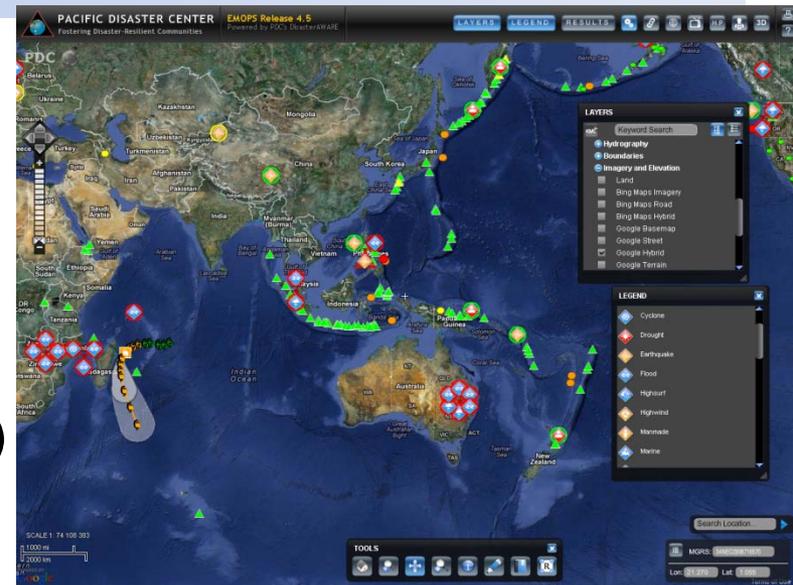


PDC Transition



Pacific Disaster Center (PDC) DisasterAWARE

- Platform for Emergency Operations (EMOPS)
 - Worldwide hazard tracking & alerts
- ROGUE capabilities will augment DisasterAWARE
 - Enable use of Volunteered Geographic Information (VGI) with existing authoritative PDC information
 - Enable sharing among organizations
 - Provide open source option to lower cost of DisasterAWARE deployments to other countries





Questions?



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