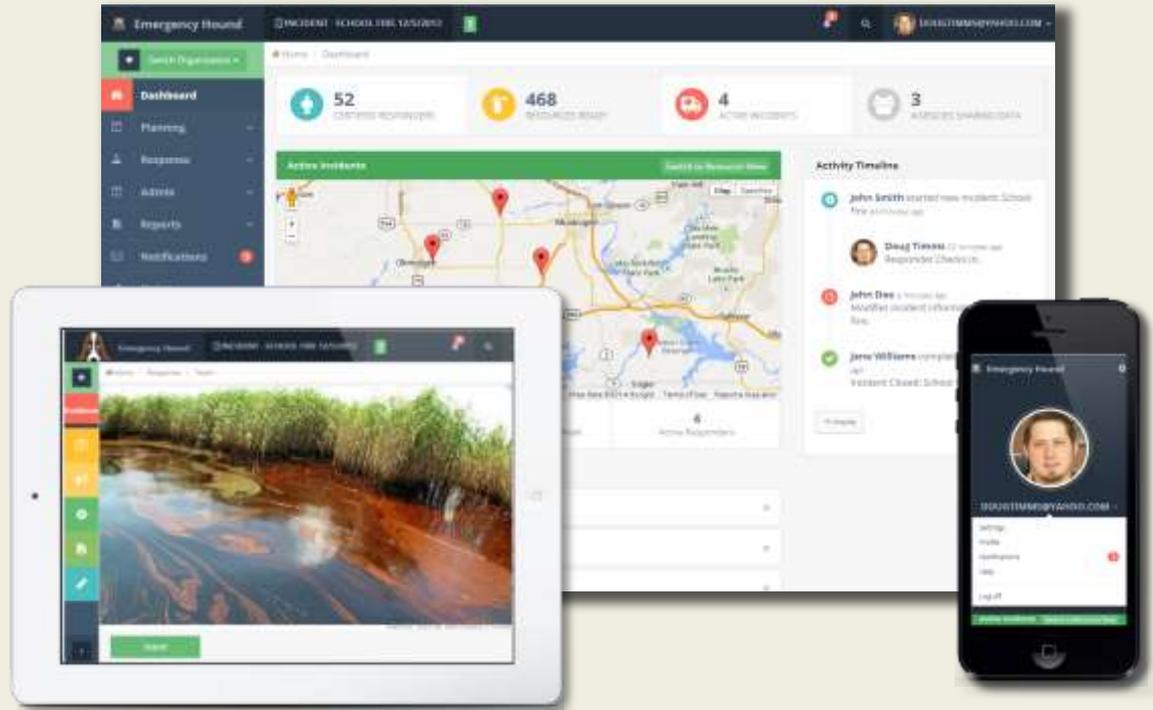


Tribal Emergency Response Project



Frank Harjo – Muscogee Creek Nation
Doug Timms – Open Environment
EN2014 – Philadelphia, PA

Project Background

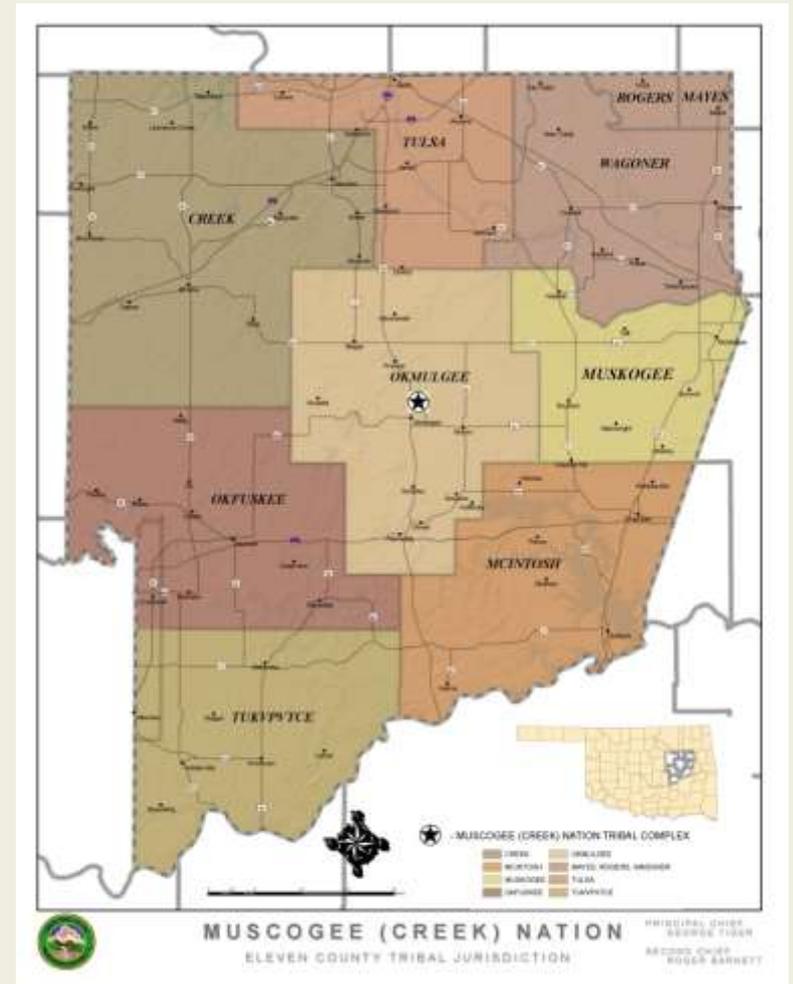
- 2013 Exchange Network Grant awarded to Muscogee (Creek Nation) to develop:
 1. Tribal emergency management standards that address Incident Management and Resource management
 2. Mobile application to allow updates in the field and back to tribal partners via EN web services
 3. A geospatial data viewer to display partners' emergency response info along with pertinent environmental data

Project Background

- Project Partners:
 - Muscogee (Creek) Nation - Lead
 - Seminole Nation
 - Citizen Potawatomi Nation
 - Kickapoo Tribe
 - Inter-Tribal Emergency Management Coalition
- In coordination with:
 - Oklahoma - Office of Homeland Security

Muscogee (Creek) Nation

- Tribal Complex in Okmulgee, OK
- Over 70,000 Tribal citizens
- Encompasses part or all of 11 counties / 4,867 sq. miles



Current Problems

- Access to important information is limited to emergency responders
- Not having standardized information limits sharing and data collection opportunities
- Need for a standards-based system to allow secure computer-to-computer interaction

How do we get information to help us answer questions and provide for better planning?

Tribal EM Data Standards

Why:

- Tribes have traditionally had little input in emergency management standards development
- Majority of the conversation has been state/federal agencies
- Tribes need a mechanism to collaborate with a system that best fits their needs

Tribal EM Data Standards

Approach:

- Data Standard Development will concentrate on Incident Management & Resource Management
 - Look at existing schema's and reuse. (e.g. EN Environmental Incidents, NIEM, NIMS model)
 - Help tribes understand that their existing data management system can still be used even if tribes capture more comprehensive information.
 - Standards-based development is foundation for building tools

Tribal EM Data Standards

Incident Management:

- The Tribal Incident Management data standard can be more comprehensive and capture incidents that tribes encounter on a regular basis (Wildfires, etc.)
- Tribes can utilize the incident management system to manage incidents within the tribe
 - EM Personnel
 - Lighthouse
 - Risk Management
 - Communications
 - Facilities
 - Administration

Tribal EM Data Standards

Resource Management:

- The Tribal Resource Management data standard will address resources of the tribal government
- Because tribes are unique and operate several aspects of tribal government, resources may vary from tribe to tribe.
 - Resources can range from facilities to personnel/teams
 - Being able to document and manage resources using data standards allows information to be streamlined

Proposed Solution – Mobile Application

- Complete end-to-end Emergency Management Tracking solution that can be used in the field or at the office
- Provide emergency management professionals with tools to:
 - Plan for emergencies
 - Respond to emergencies
 - Communicate with emergency responders
- One solution that supports multiple tribal organizations
 - Each participating tribe will have their own portal which they will administer and maintain
 - Each partner tribe manages and administers their users. Decides on which information is shared
 - Tribes have total control of their information

Mobile Application – Incident Preparation

- Develop and maintain inventory of resources
- Maintain listing of emergency responders & updated credentials
 - (In coordination with OK Department of Homeland Security NIMS Credentialing Standards)



Mobile Application– Incident Response

- Log initial incident information
- Identify potential environmental concerns in the surrounding area
 - Integration with EN web services
- Organize Incident Command Team:
 - Credential validation
 - Check-in / check-out
- Text (SMS) notifications
- Onsite picture/video logging



Mobile Application – Post Incident Analysis

- Review Incident Timeline
- Generate various reports



Open Source Solution

- **Free redistribution:** no restrictions for any party to give away or sell the software
- **Source code:** source code will be publicly available [via GitHub]
- **Derived works:** allowed
- **No discrimination:** license available to all (e.g. no restrictions for gov't agencies or commercial vendors)



open source

System Prototype

Emergency Hound | INCIDENT - SCHOOL FIRE 12/5/2013 | DOUG.TIMMS@OPEN-ENVIR

Home / Dashboard

52 CERTIFIED RESPONDERS

468 RESOURCES READY

3 AGENCIES SHARING DATA

Active Incidents

4 Active Incidents | **39** Status Updates This Week | **4** Active Responders

Todos

- Resources required
- Incidents

You have 2 notifications

- Shelter #4 at full capacity** 20 minutes ago
- 4 buildings destroyed 2nd St. Beggs** 3 hour ago

Timeline

- John Smith** started new incident: School Fire 20 minutes ago
- Doug Timms** 22 minutes ago Responder Checks In.
- John Doe** 5 minutes ago Modifies incident information: School Fire.
- Jane Williams** completed a task 1 minute ago Incident Closed: School Fire.

Map data ©2014 Google, Weather ©2014 weather.com

Technologies

UI Tier

Desktop



jquery.js
bootstrap.js
knockout.js
parsley.js
appear.js
smoothscroll.js
slimscroll.js
modernizer.js
animate.js

Mobile



Business Tier

REST Web Services

+



iOS-Specific
Controllers



Android-Specific
Controllers

Data Tier



Synchronization
for offline use



Project Schedule – Key Dates

- **March - May 2014:** 3 regional requirements gathering / design meetings held across OK
- **Spring 2014:** Data Standard & Phase A (System Prototype) Development
- **Fall 2014:** Phase B (Complete System without synchronization) Development
- **Spring 2015:** Phase C (Complete System)
- **Summer 2015:** Regional Training / Outreach Sessions

For More Information

Newsletter:

- <http://www.emergencyhound.com>

Sign up for
project updates

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