

Stories of Agile Acquisition

PlugFest – Results Operationally Measured Acquisition

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Stories

- Paul's story (the engineer)
- Jeff's Story (the advocate)
- Chris' Story (the validator)
- Mike's Story (the collaborator)

Real Solutions: West 2014 PlugFest Technology Team



Cyber



Ship
Positions



Application
Development



Real-time



Crisis
Communication



Foundation Data
Geospatial Viz & Analysis
Presentation



Enterprise
Solutions



Workflow
Development



Emergency
Management



Presentation &
Modeling

PlugFest Events Summary

(Over 1200 visitors/300 Collaborators)

Challenge	Sponsor	Event
Emergency Response -Haiti	AFCEA SPAWAR	AFCEA SD C4ISR Symposium
Opposed Maritime BattleGroup Transit	AFCEA SPAWAR	AFCEA SD C4ISR Symposium
Find, Fix, Finish Adversary	AFCEA Director USMC Intelligence	AFCEA Technet Southwest
Counter Narcotics	AFCEA DEA/DoD	AFCEA Technet South
Indications and warning of Cyber Threat	AFCEA US Army Cyber Command	AFCEA Technet East
Emergency Response for Bomb at Public Event	AFCEA USNI Los Angeles Sherriff's Dept Red Cross San Diego Police USMC	West 2013

PlugFest Events Summary

(Multiple Organizations)

Challenge	Sponsor	Event
Intelligent Common Operational Picture	Security Network	Security Summit
DI2E Architecture	OSD(I)/DI2E	DI2E PlugFest
Operational Cyber Logistics	AFCEA US Cyber Command	AFCEA Cyber Symposium
Army Common Map API	DI2E GMU	GMU Academic PlugFest
Basic Cyber Attack on U.S. Ports	InterAgency Board	IAB Meeting
Advanced Cyber Attack on U.S. Ports	AFCEA USNI InterAgency Board SPAWAR	West 2014
Common Map API	OSD(I)/DI2E	DI2E PlugFest
Sustained Communications	AFCEA US Army	AFCEA Technet Augusta

PlugFest Consortium
(*Transitional* Organization)

Non-profit collaboration that
believes that Government,
Industry, and Academia working
on the same problem, at the
same time, together can deliver
some technical capability
better, faster and cheaper.

PlugFest Consortium Action (Transitional Organization)

Investigate, Test, and Educate,
agile Verification and Validation
methods.

Facilitate and train others to
Facilitate Agile V&V Events.

Find a permanent home for these
functions.

Stories

- **Mark's Story (the educator)**

Your Story

Agile is to Development, as PlugFest is to V&V

- ✓What can I do today deliver better stuff faster?
- ✓What will I do today that is outside of my comfort zone?
- ✓What will I do to help teach others?
 - ❑Place to discover and test theories, best practices, programs (virtual, scalable PlugFest lab)
 - ❑Place to teach (virtual classroom)
 - ❑Place to respond (virtual center of excellence)

Quote

“I must have heard “cool” a thousand times!”

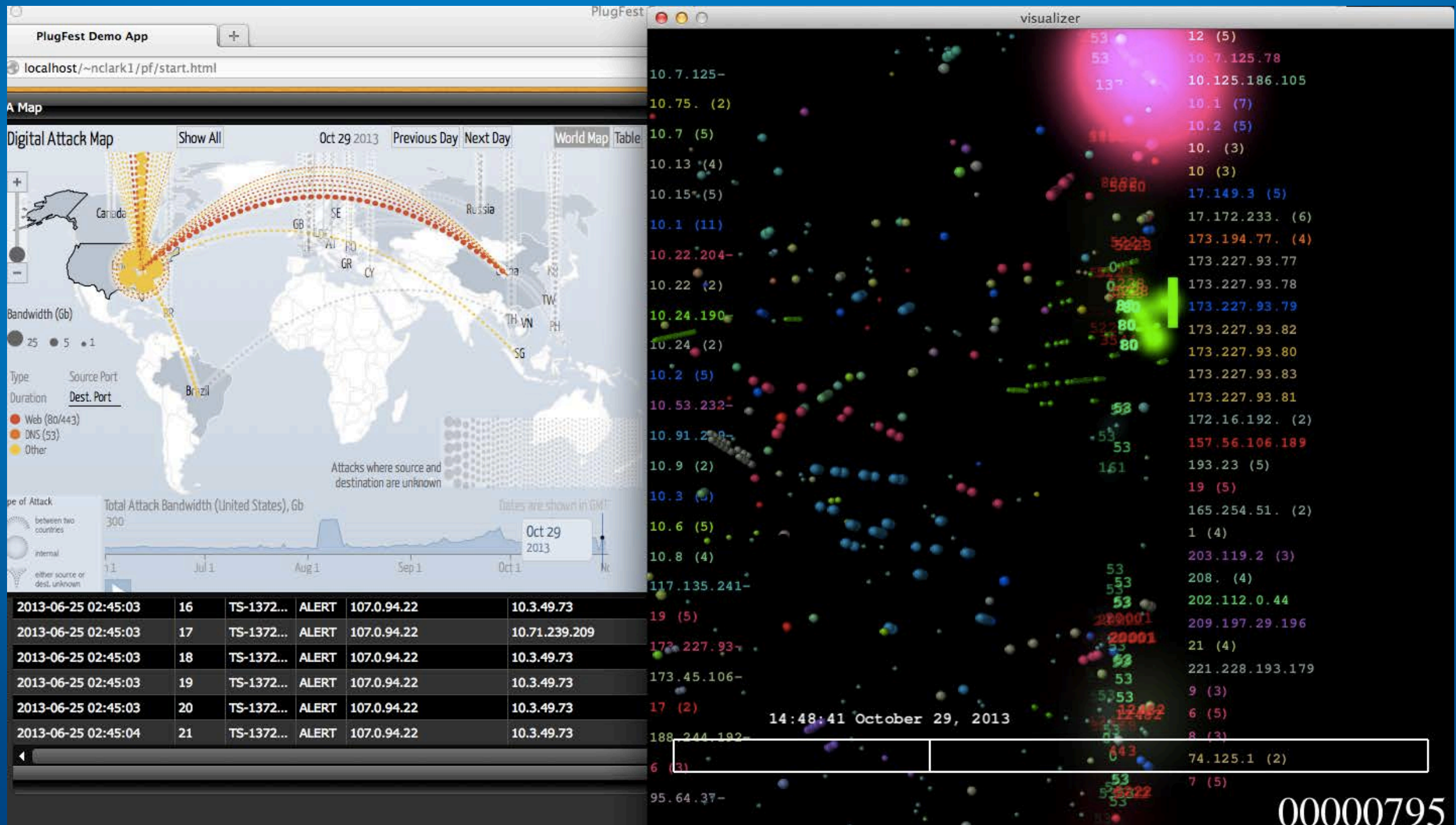


Government Provided Problem: Cyber Attack on the Ports of Los Angeles & Long Beach



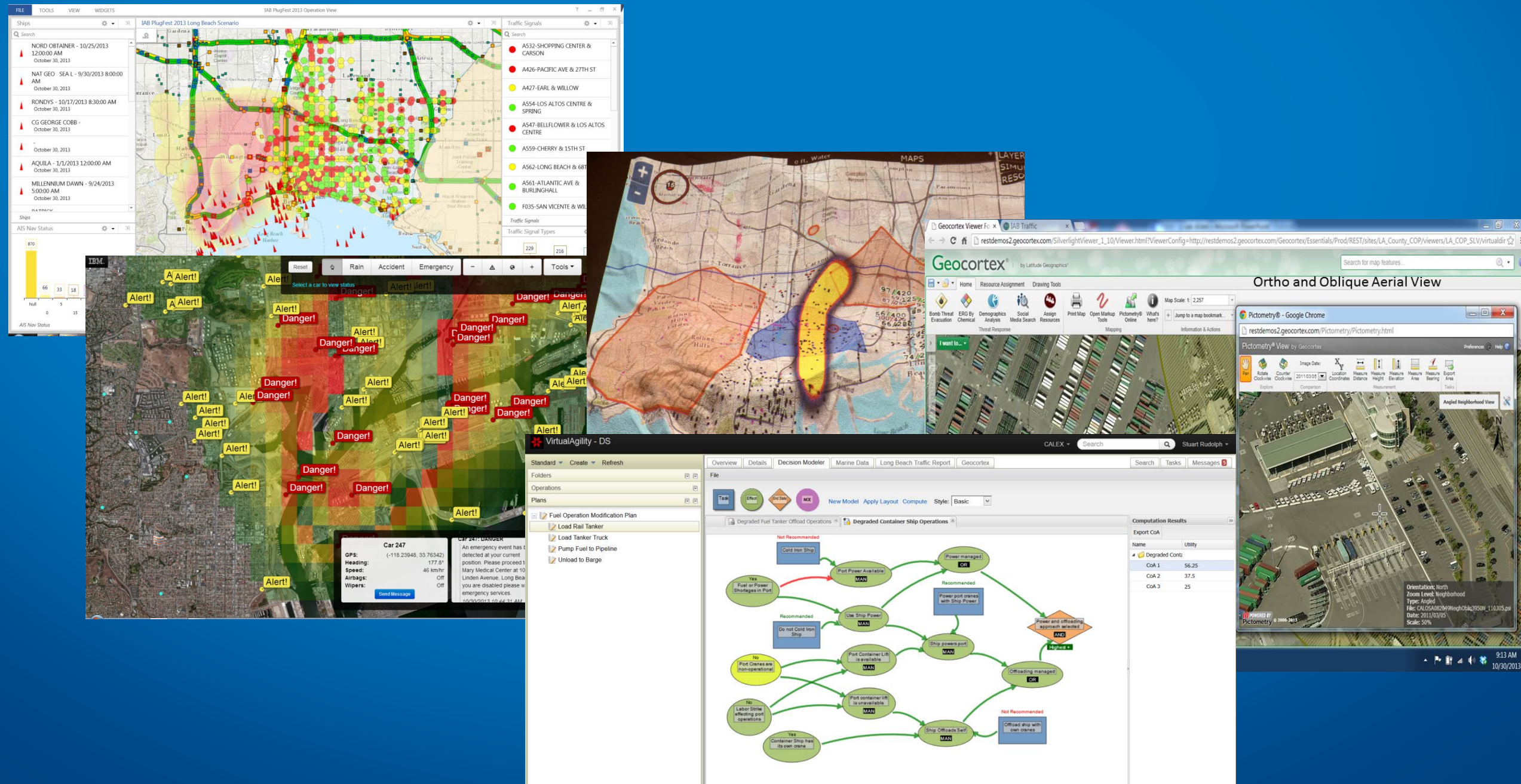
Hacker Goal: **Disrupt** 40% of the containerized cargo and material that enter the U.S.

Real Cyber Data (Real Attacker, Anonymized Victim)



Every Application is part of the Common Operational Picture

The COP is shared awareness delivered



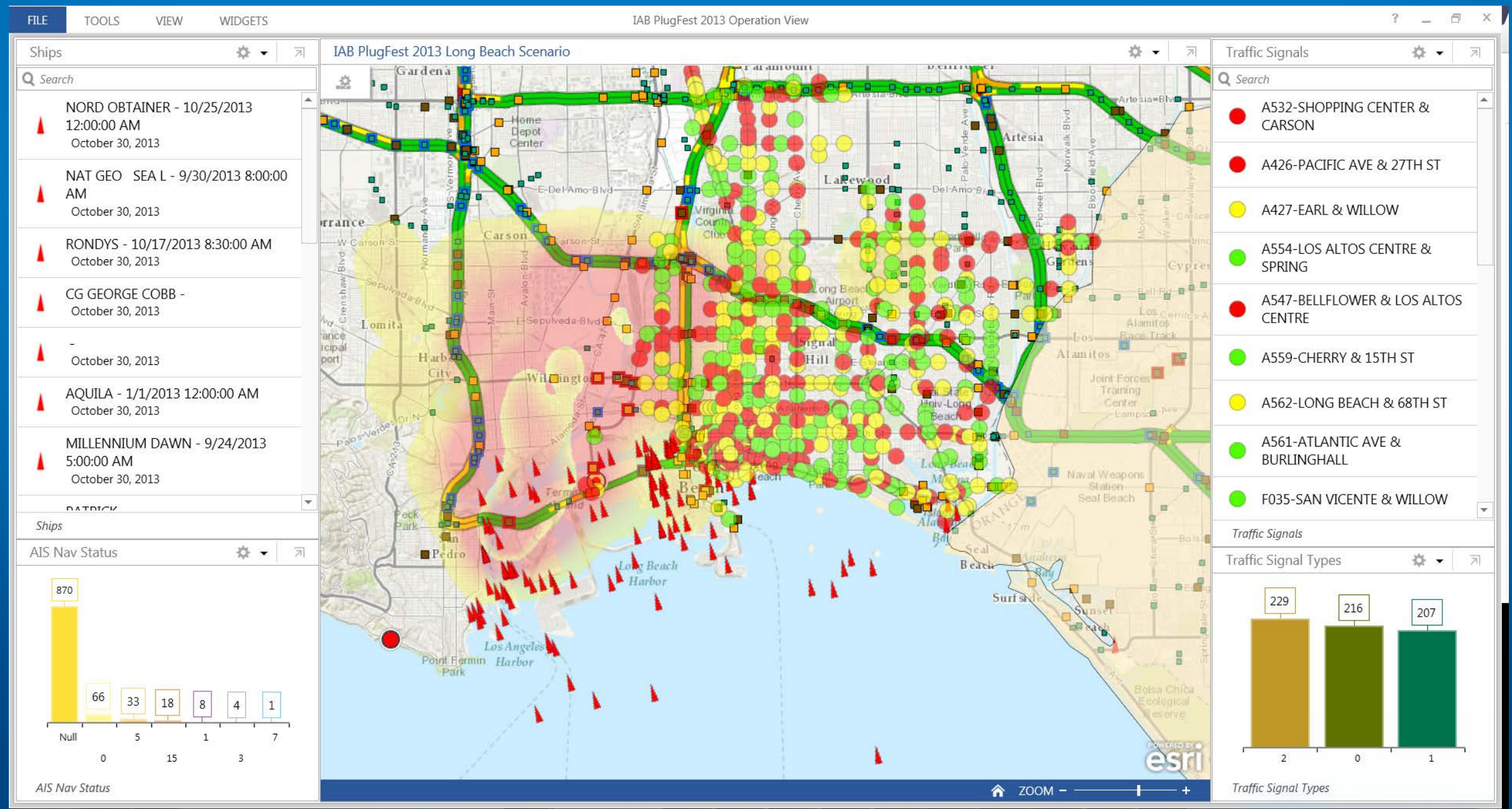
Question: What would take out loading capability at Ports of LA and Long Beach?

- Loading/Unloading Ships SCADA DoS Attack
Crude Oil, Chlorine, Xylenol spills

Question: What is the most immediate impact?

Chlorine Plume

Fused, updating picture on PowerPoint, Excel, and Operations Dashboard

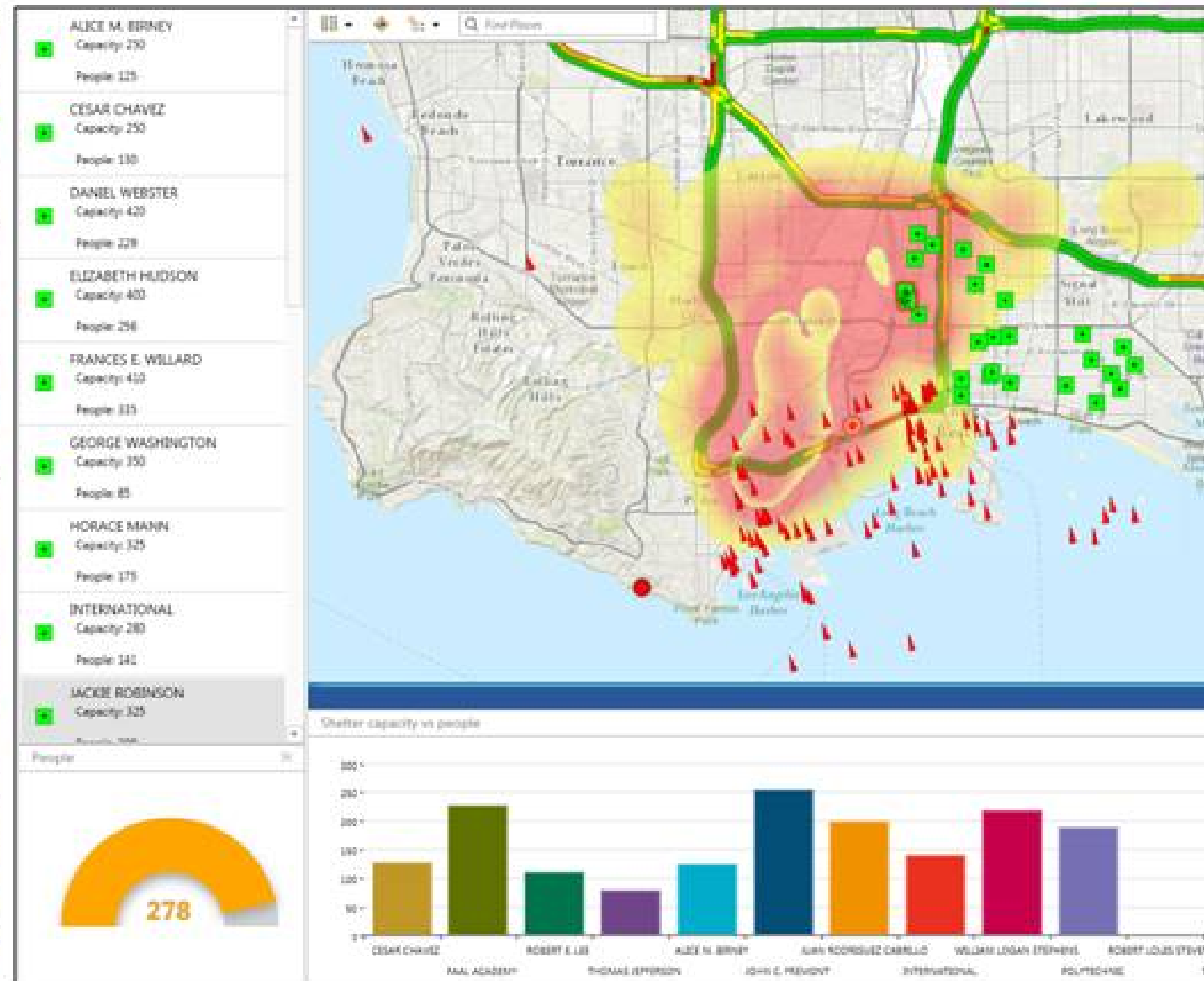
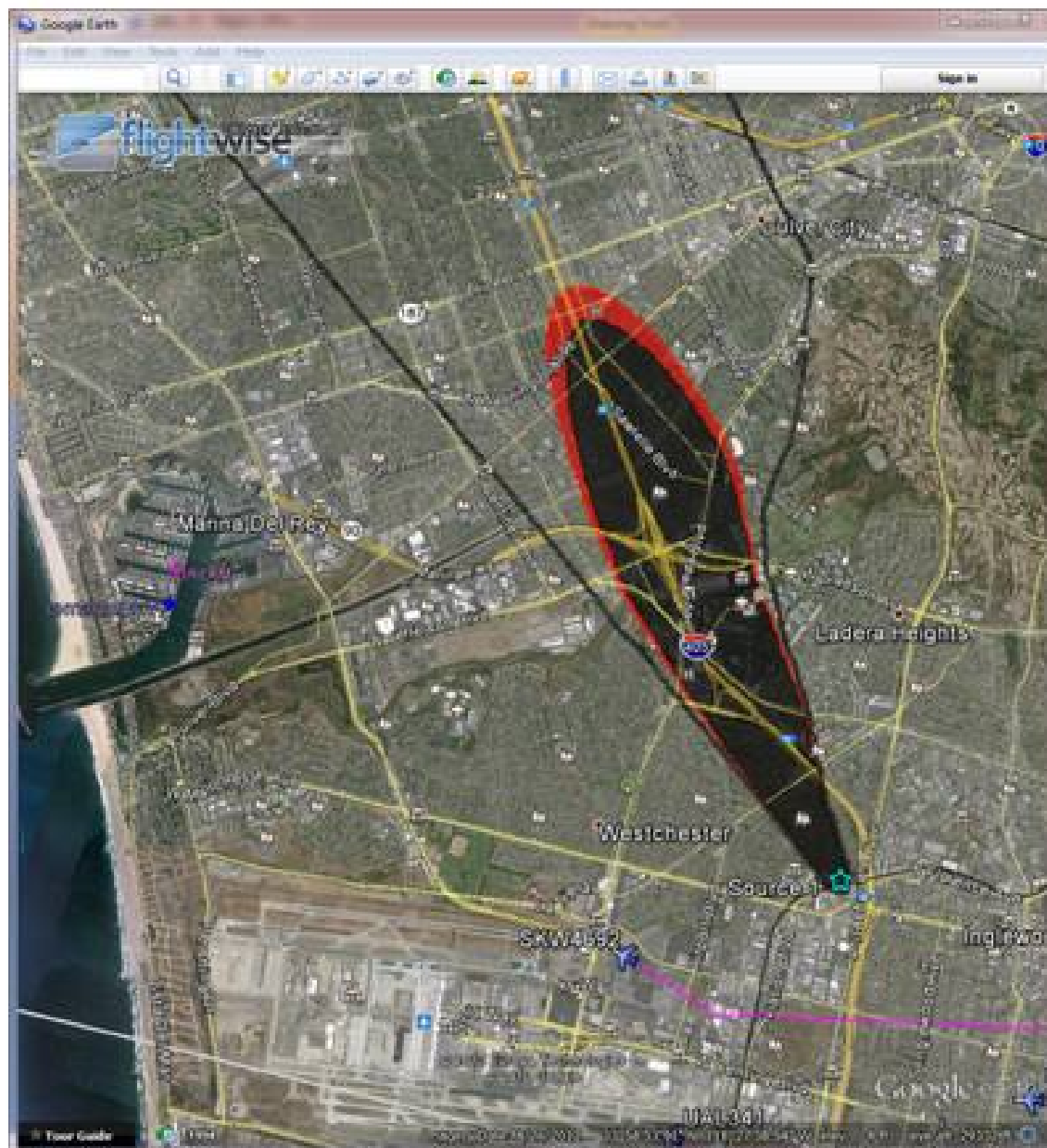


MARINE CORPS TACTICAL SYSTEMS SUPPORT ACTIVITY

Technical Excellence...Tactical Value

How to maintain Situational Awareness?

The ability to display relevant information rapidly and efficiently.

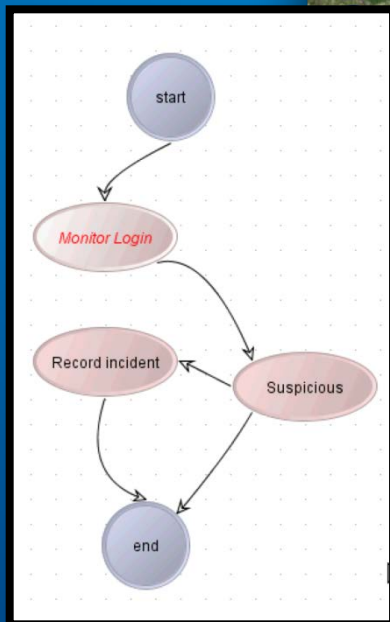
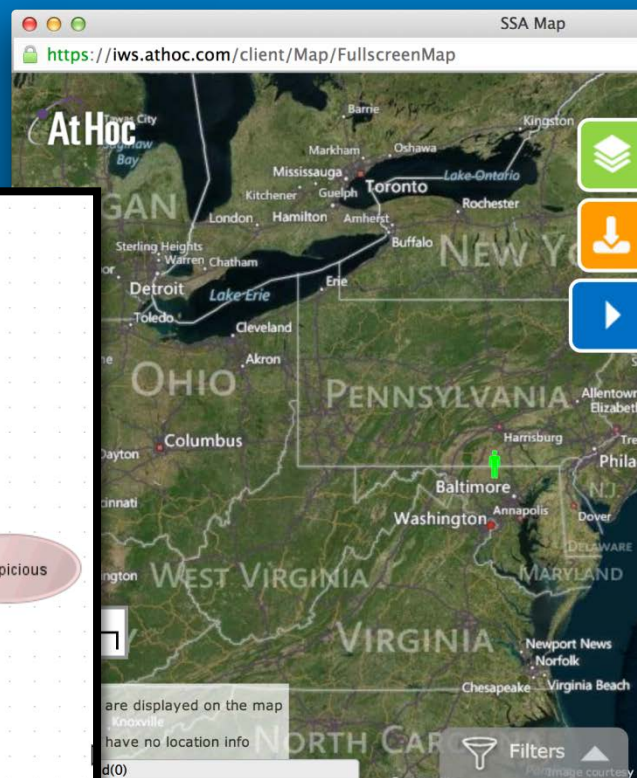


Question: How do we detect and defend sophisticated cyber-attacks against systems (including CIKR)?

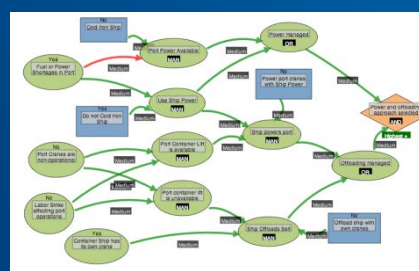
Leverage Complex Event Processing to correlate data in real-time from a variety of monitoring sensors, providing alerts and automated responses



Monitor hacktivists via social media
Coordinate key personnel

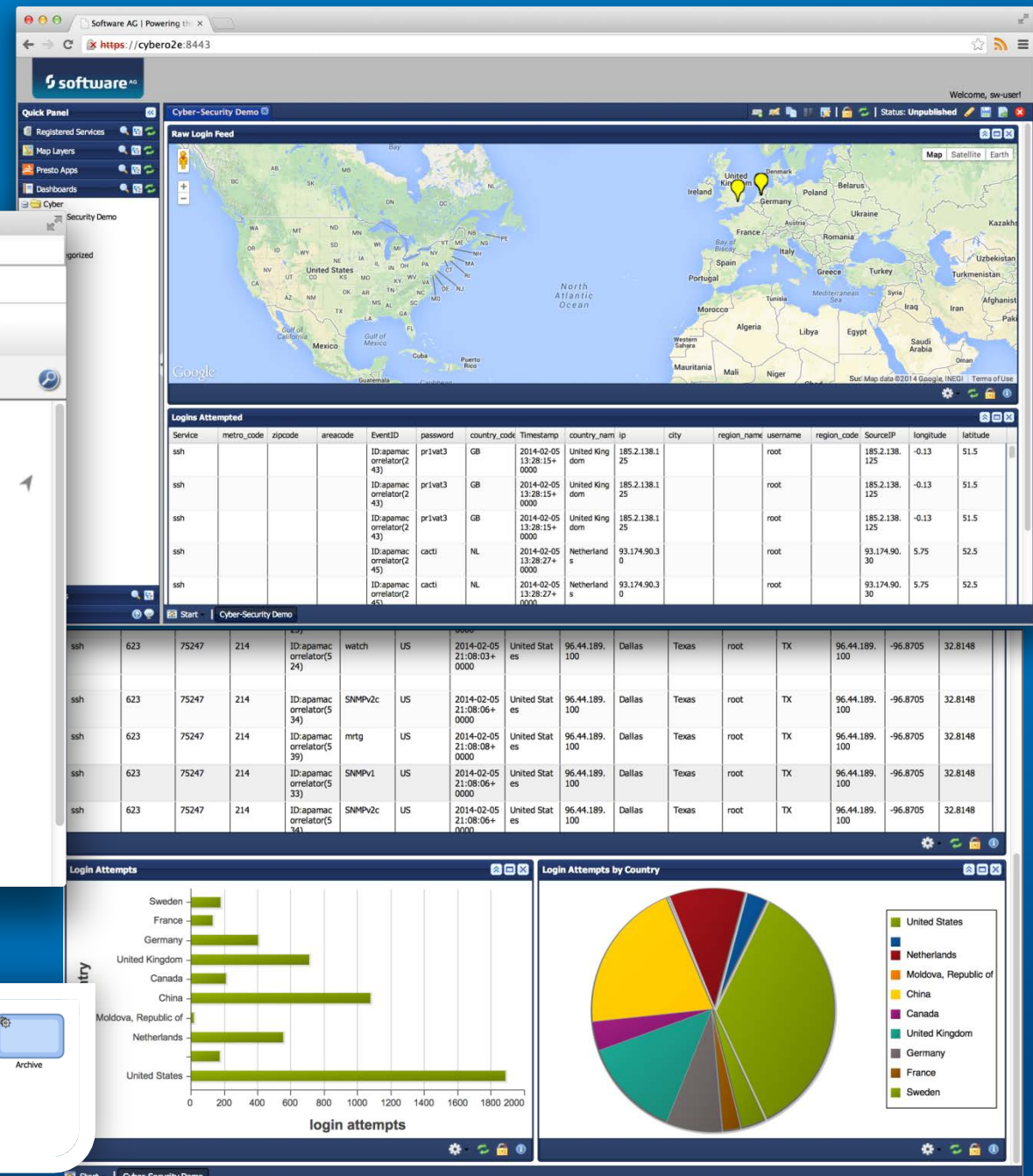
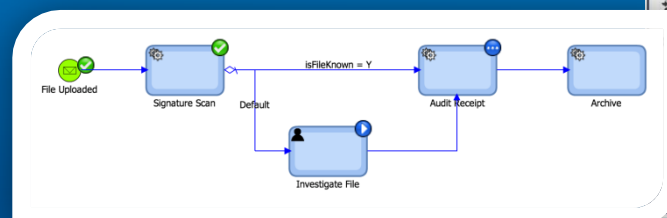


stateful behavioral analysis



response plans

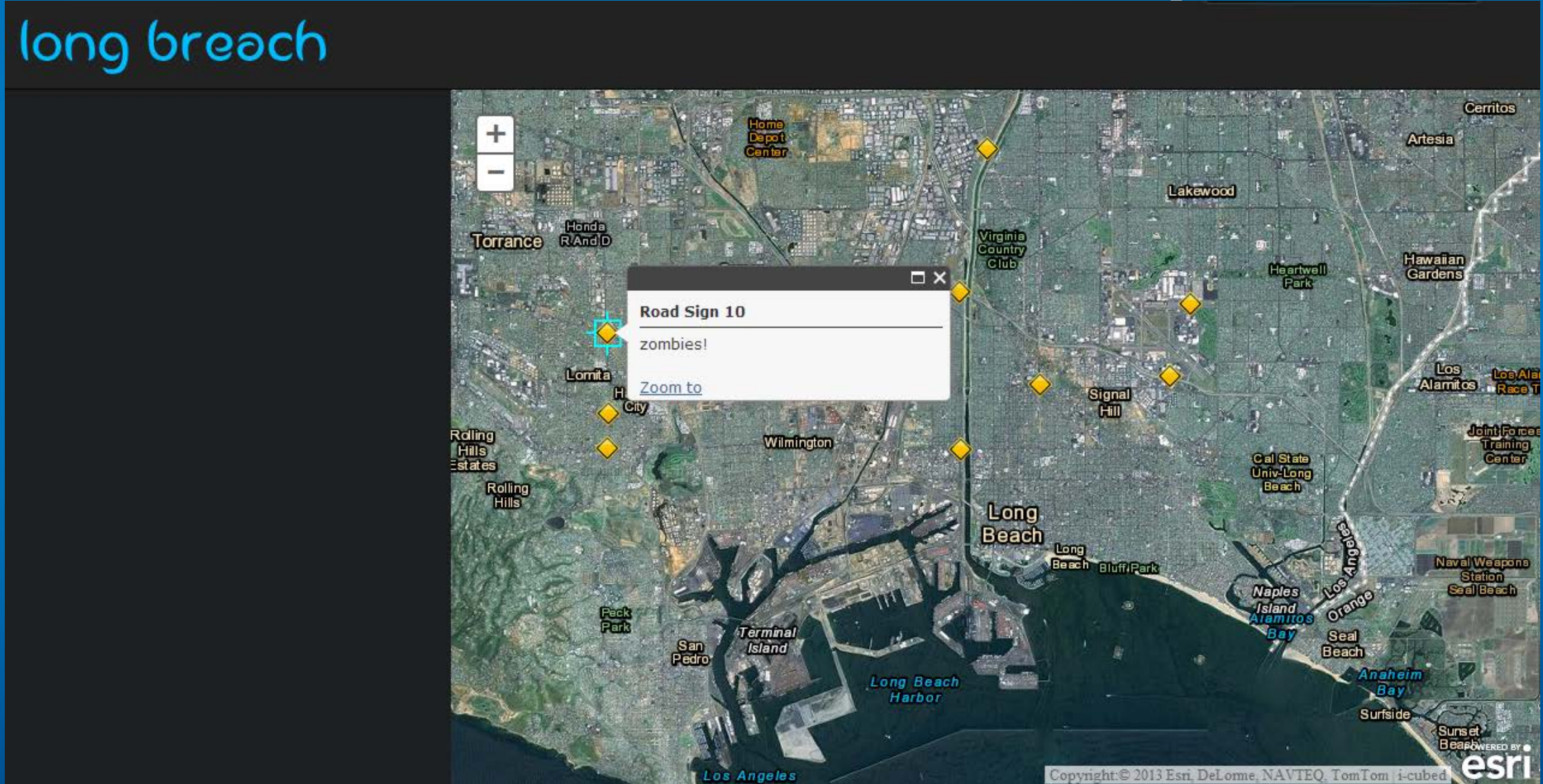
malware file processing



COP / dashboards

Question: How does the public know where to go to be safe?

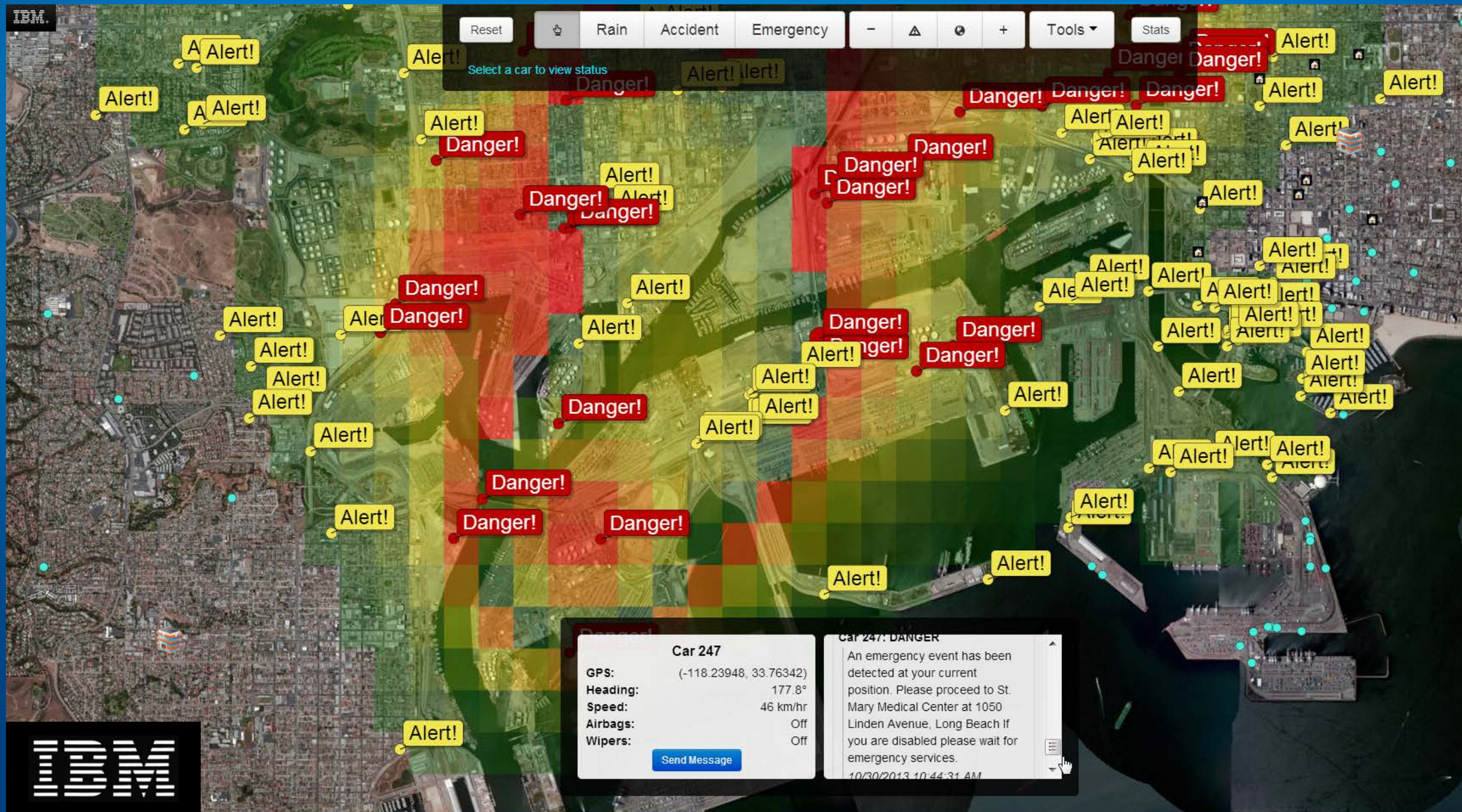
Interactive Tactical Map



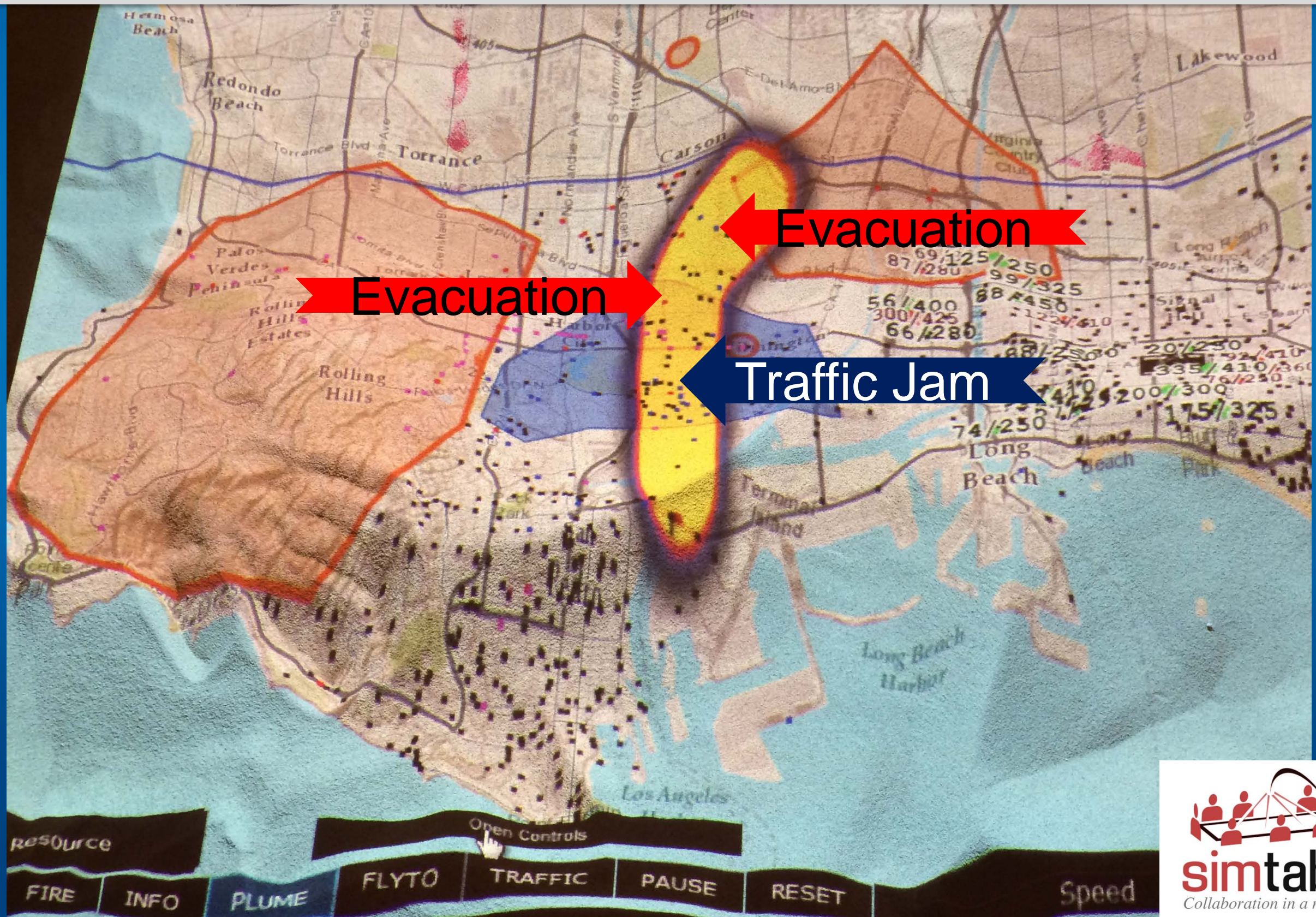
SAN DIEGO STATE
UNIVERSITY



Question: How do we alert medical threat (red) in the plume, and evacuation (yellow) ahead of the plume?



Question: Attack on responders: how is response prevented? (EAS & ITS Attacks)



Question: How do you develop and implement courses of actions against cyber attack?

VirtualAgility - DS

CALEX

Standard Create Refresh

Folders

Operations

Plans

- Cyber Attack on CIKR Response
 - Notification to Agencies
 - Port of Long Beach Response
- Fuel Operation Modification Plan
- test
- Contact Emergency Response
- Verify Incident

Overview Details Decision Modeler Marine Data Long Beach Traffic Report Geocortex

Update automatically every: Never

Name: Incident at Pier
Date & Time: 8/20/2013
Status: Major Disaster
Incident Type:
[Additional Information]

Legend: ♦ Major Disaster | ♦ Mass Emergency | ♦ Standby to Assist | ♦ Under Control | ♦ Unknown

- ☒ Gerald Desmond Bridge
- ☒ Rail Bridge
- ☒ Commodore Schuyler F. Helm Bridge- Terminal Island Freeway
- ☒ HI- Sand Island Access Bridge
- ☒ Bridge- Shoreline Drive
- ☐ Vessels
- ☒ Alaskan Legend
- ☒ Tula
- ☒ Hella Enterprise
- ☐ Hospitals
- ☐ Fire
- ☐ Police
- ☒ Shelters
 - ☒ HORACE MANN
 - ☒ THOMAS A. EDISON
 - ☒ ELIZABETH HUDSON
 - ☒ PETER H BURNETT



Question: How do we assign restoral tools across multiple platforms simultaneously?

