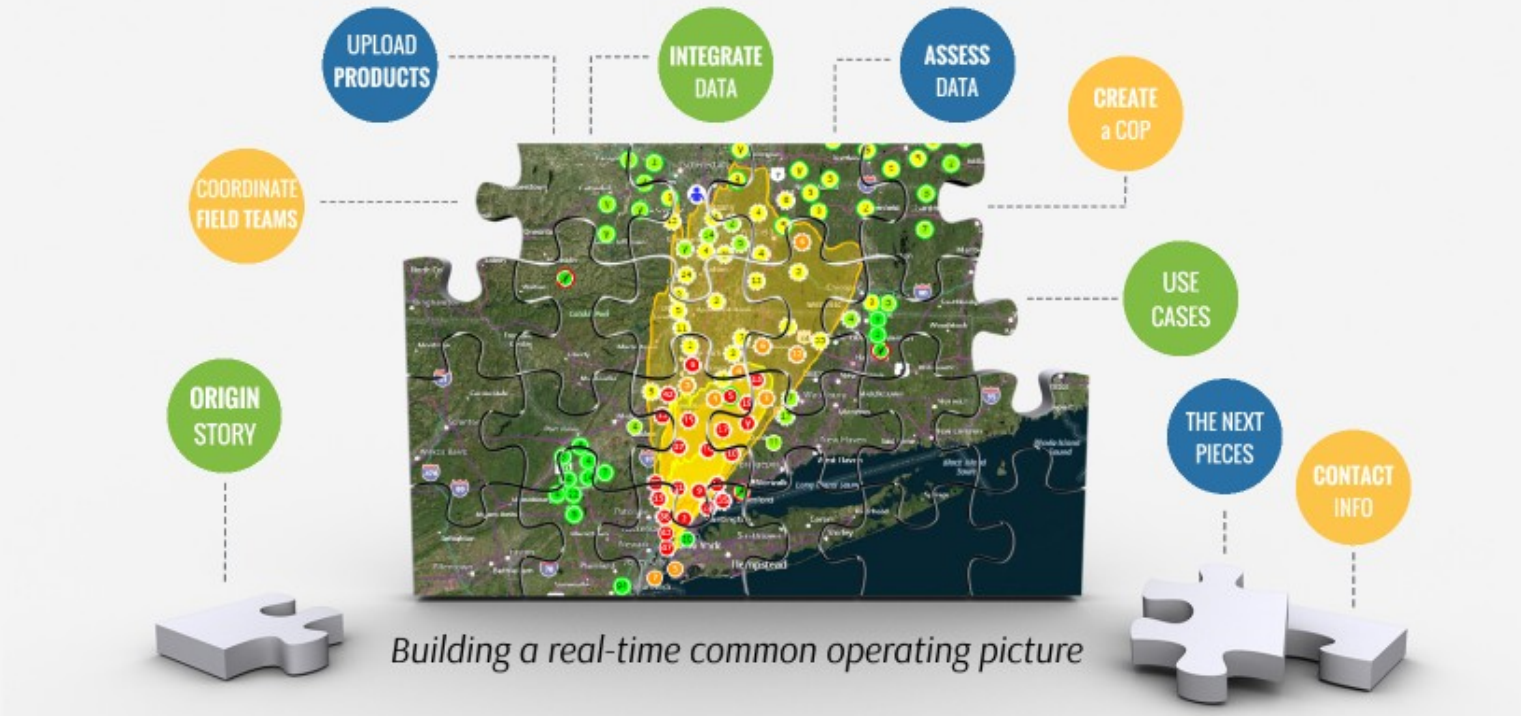
RadResponder Network



In the beginning...

There was only pencil and paper.

Fukushima Daiichi Disaster

March 11, 2011

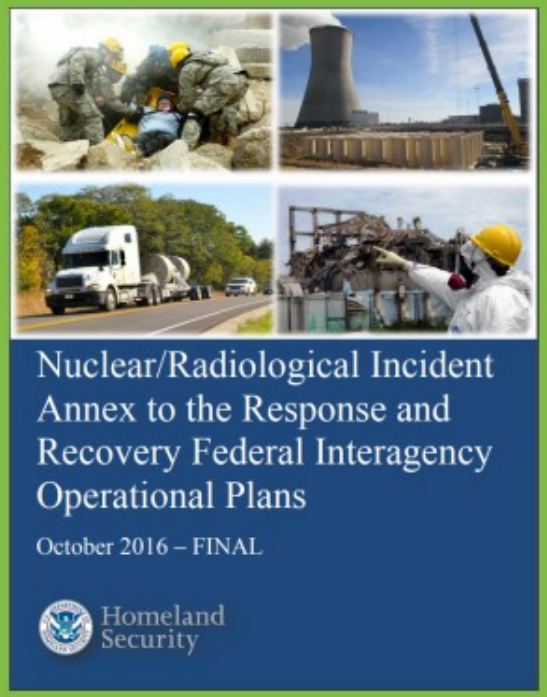
Funded by FEMA's Nuclear Incident Response Team Program

Partnered with the Conference of Radiation Control Program Directors (CRCPD), and the National Association of City and County Health Officials (NACCHO)

Sponsored by FEMA, DOE/NNSA, and the EPA

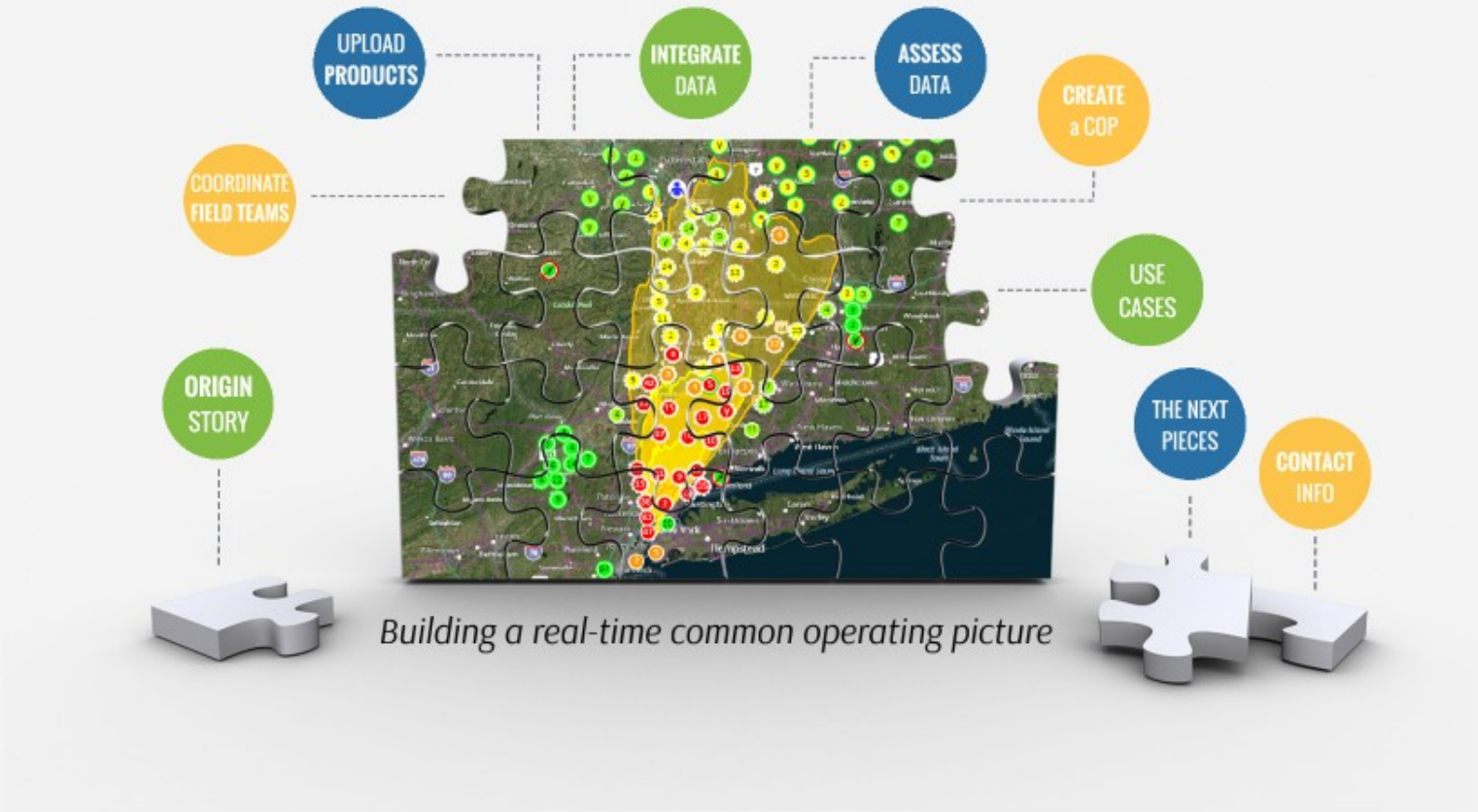
FEMA

October 2016



"The National Standard and Whole Community Solution for the management of radiological data''

RadResponder Network



Coordinate Field Team Operations

Coordinate Field Team Operations

Upload
Equipment
&
Manage
Personnel

Coordinate Field Team Operations

Upload
Equipment
&
Manage
Personnel

Assign
Field Teams

Coordinate Field Team Operations

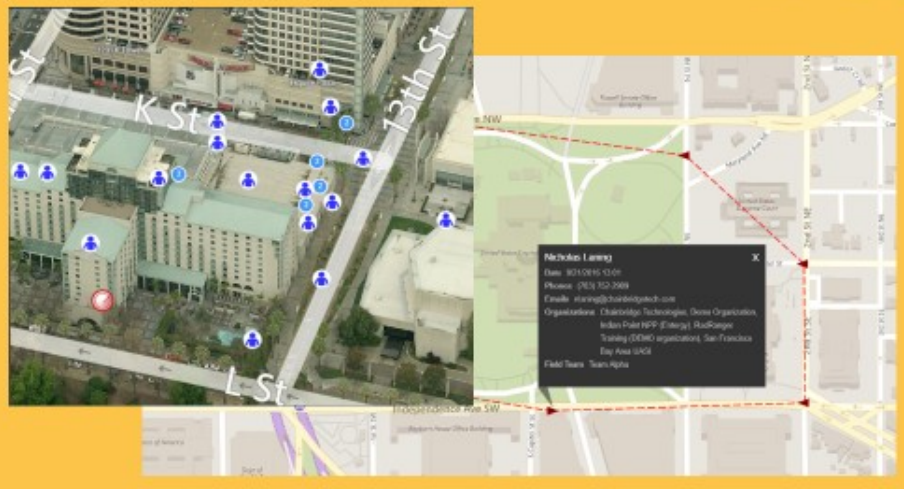
Upload
Equipment
&
Manage
Personnel

→

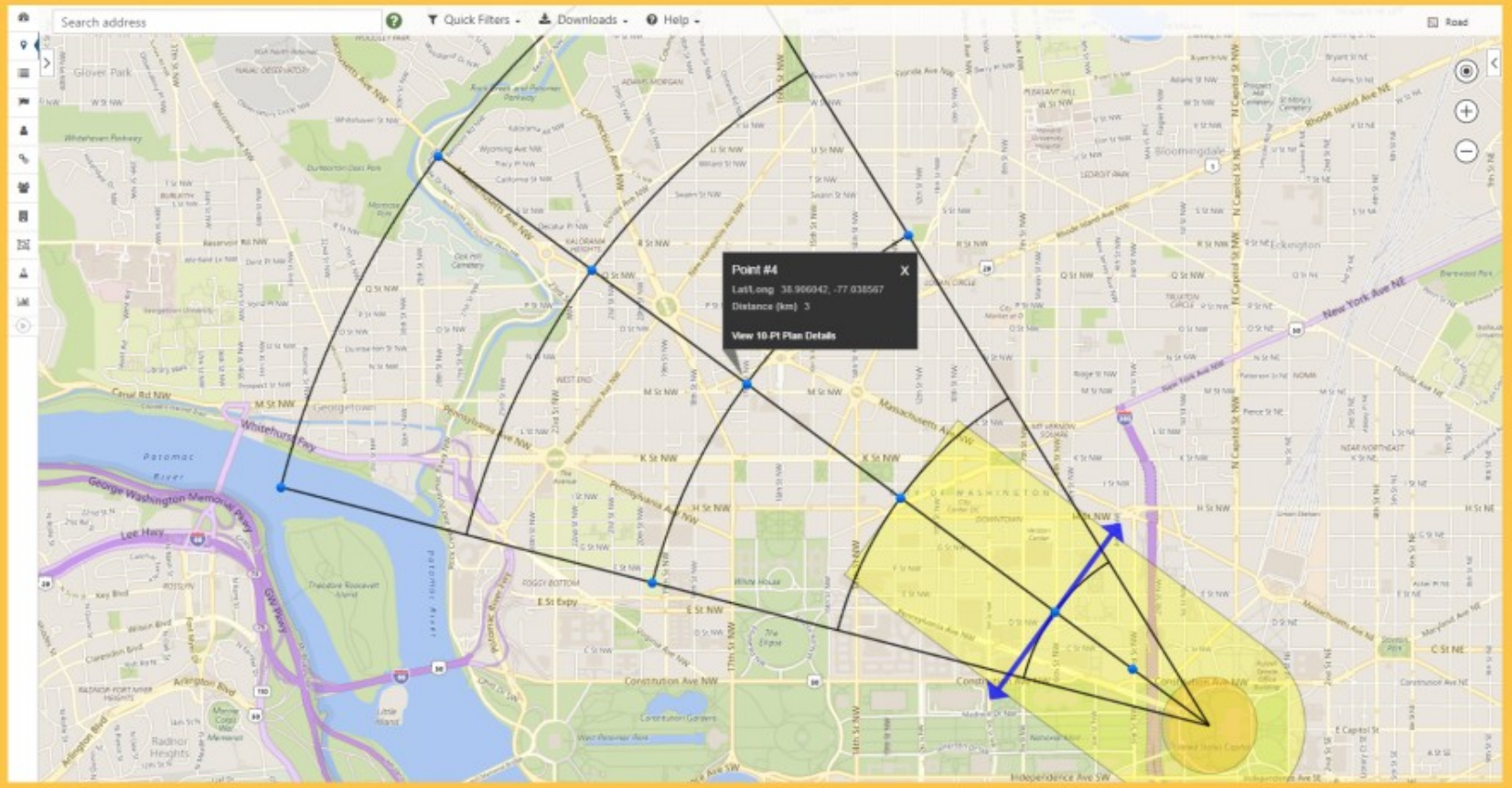
Assign
Field Teams

→

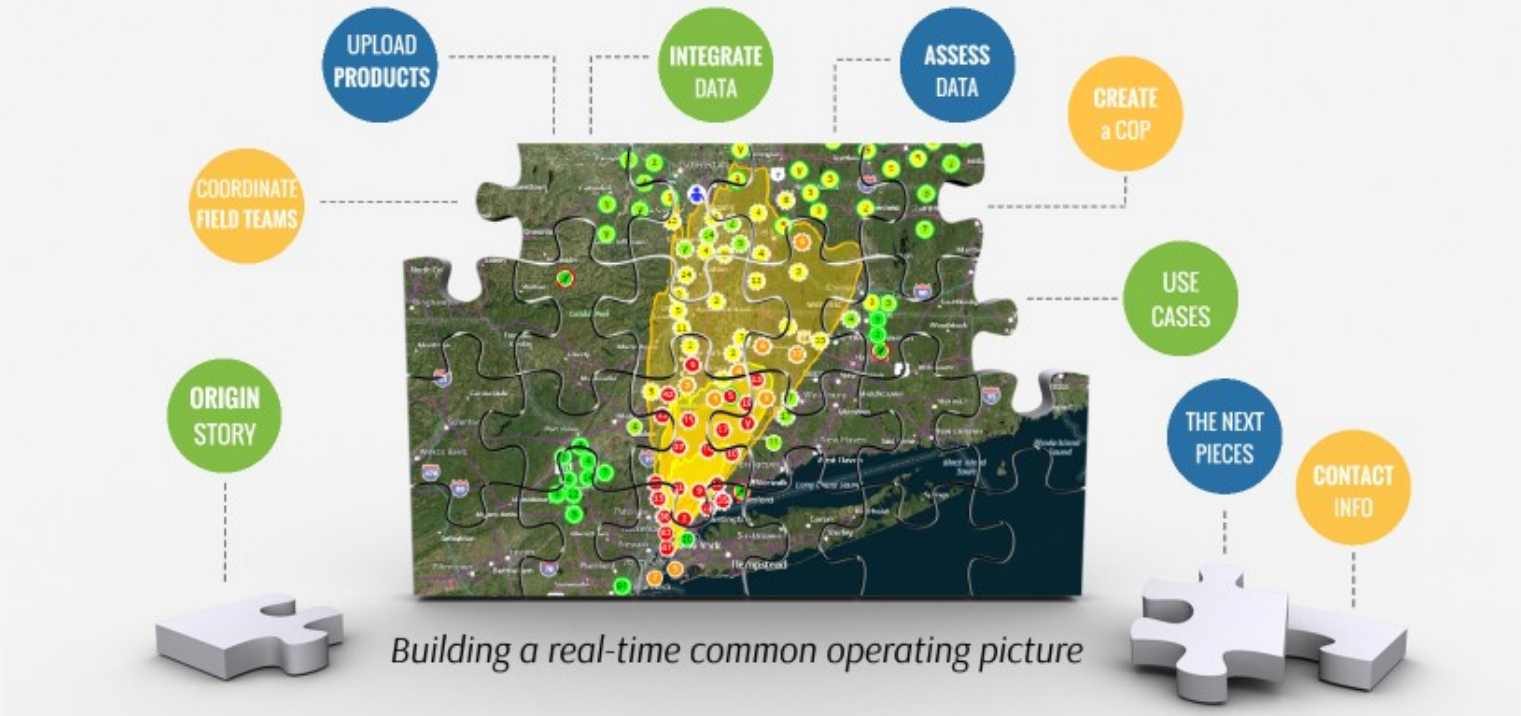
Track
Responders
in the Field



Use Existing Guidance to Direct Data Collection



RadResponder Network



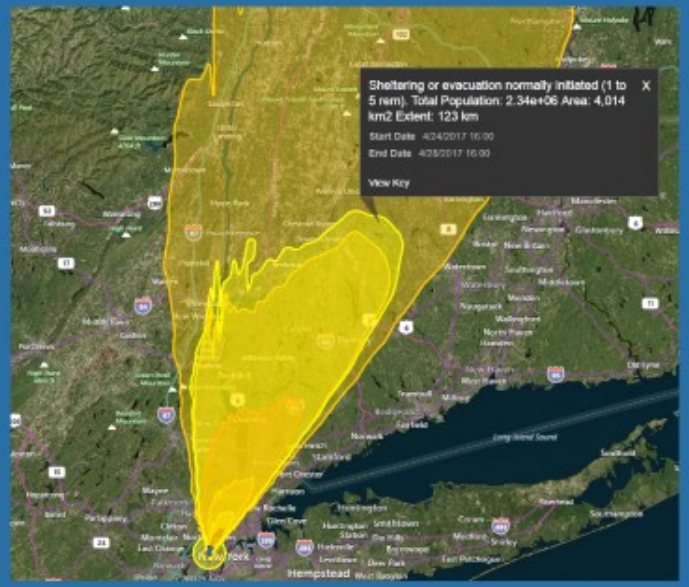
GIS Files

Get NARAC initial prediction models or products pushed directly to the RadResponder event map

- Includes briefing products (PDFs), legends, and NARAC's ability to archive outdated products

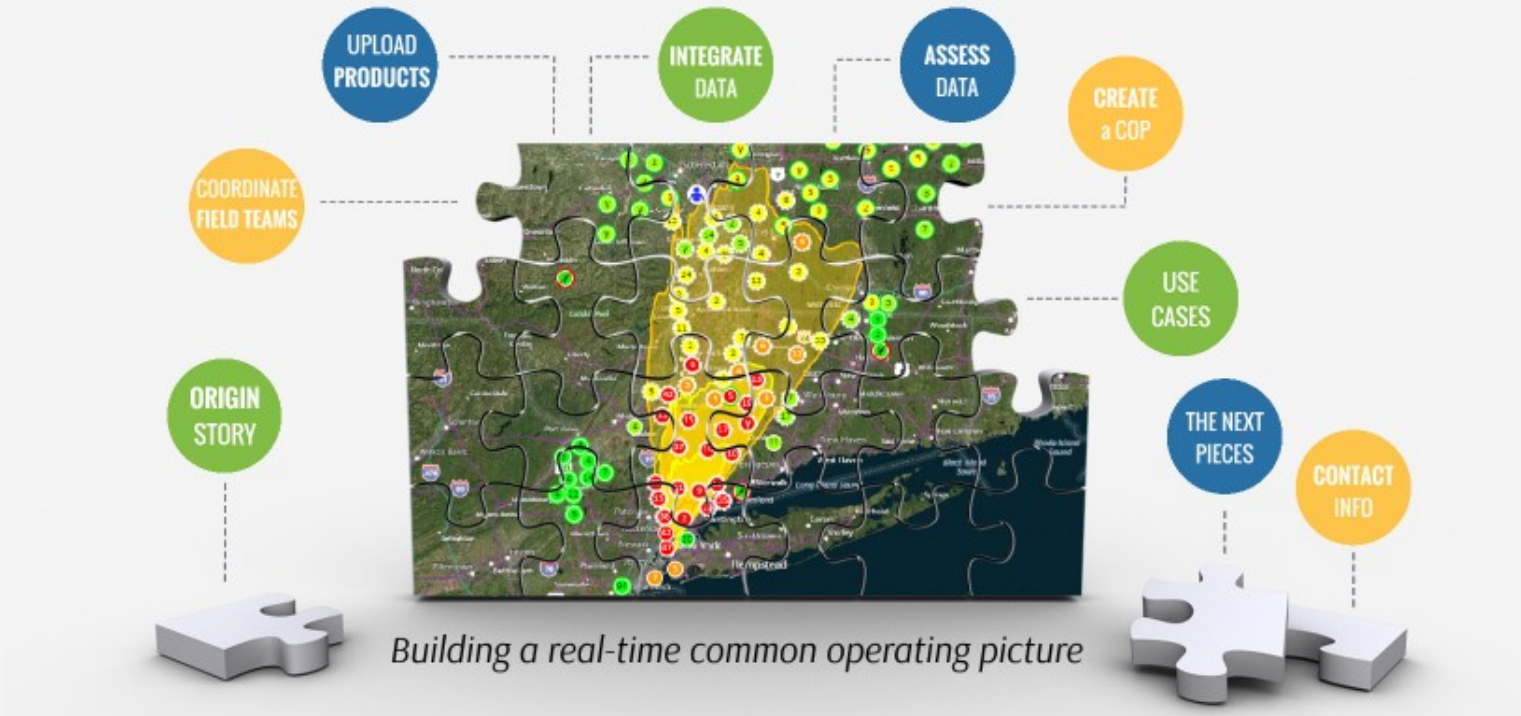
Upload your own GIS files (KML, KMZ, or Shape files)

- Aloha or DTRA products
- Critical infrastructure
- Weather



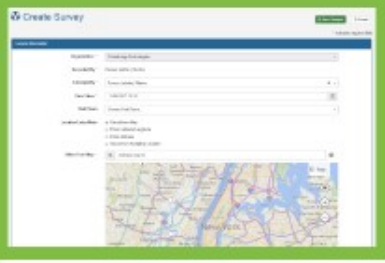
NARAC Initial Prediction Model (Exercise)

RadResponder Network

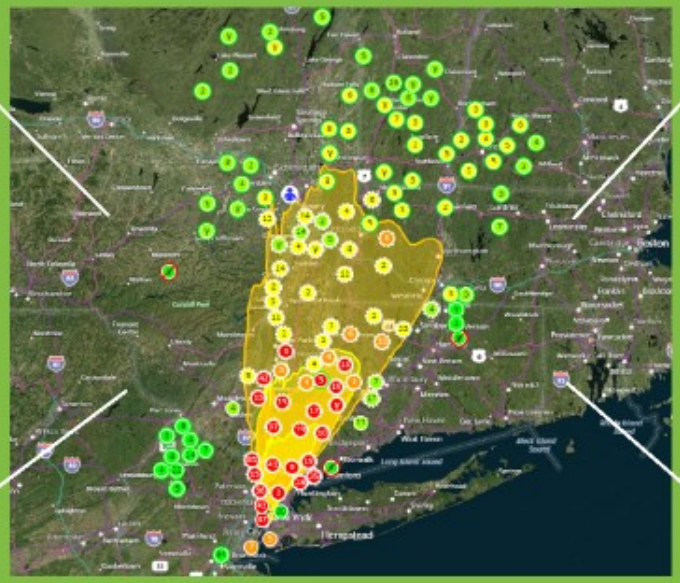


Integrate Raw Data

Mobile application uploads data in real-time, saves data locally when no connection is detected



Enter individual records or bulk upload data via the **website**



Thermo SCIENTIFIC

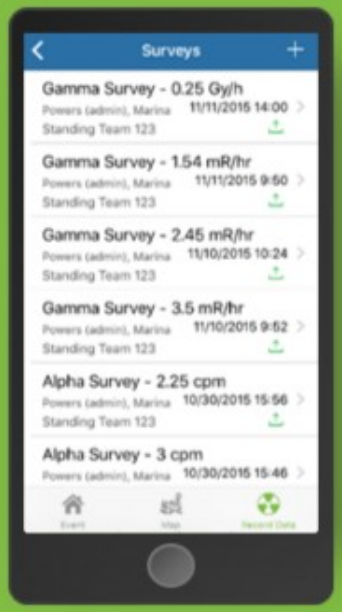
LUDLUM MEASUREMENTS, INC.

BNC

POLIMASTER®

Integrated **Bluetooth-enabled equipment** can telemeter data directly to the website

Integrate **fixed monitoring sensors** to stream minute-by-minute data



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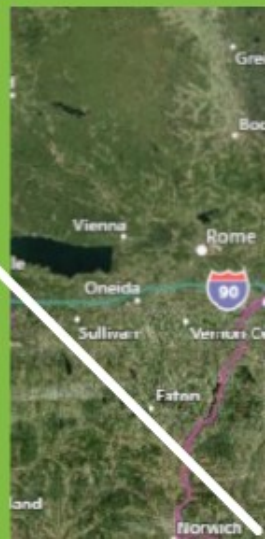

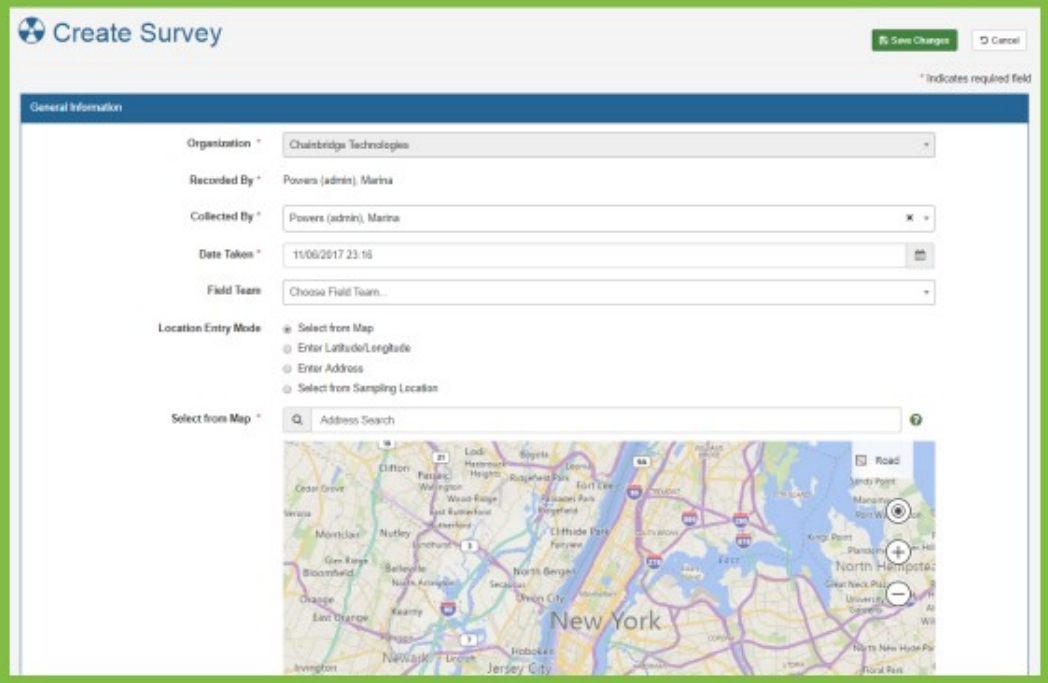

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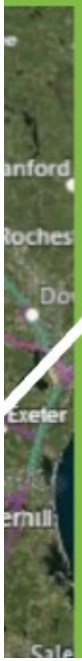
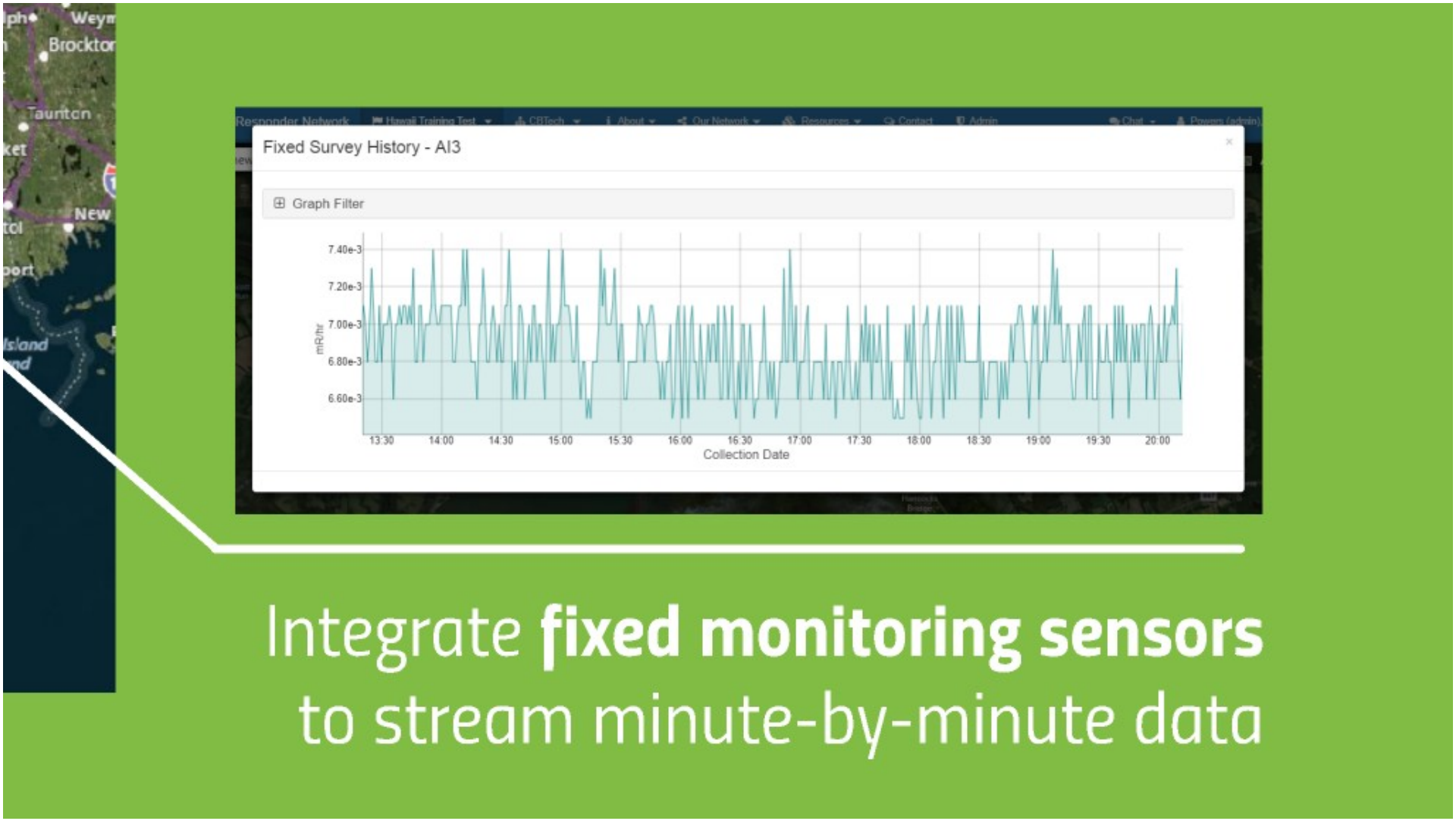


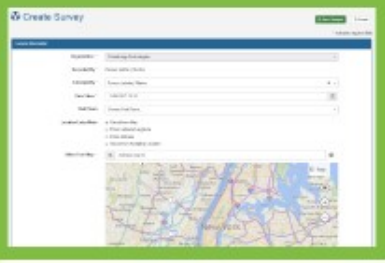
Integrated **Bluetooth-enabled equipment** can telemeter data directly to the website



Integrate **fixed monitoring sensors**
to stream minute-by-minute data

Integrate Raw Data

Mobile application uploads data in real-time, saves data locally when no connection is detected



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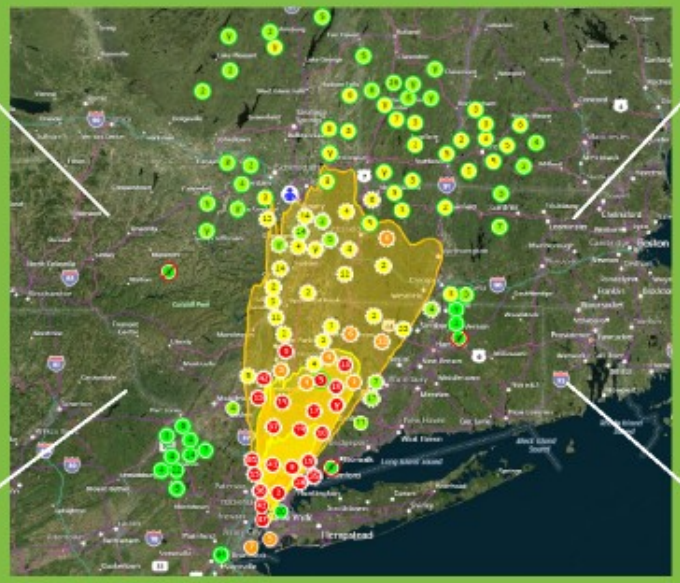

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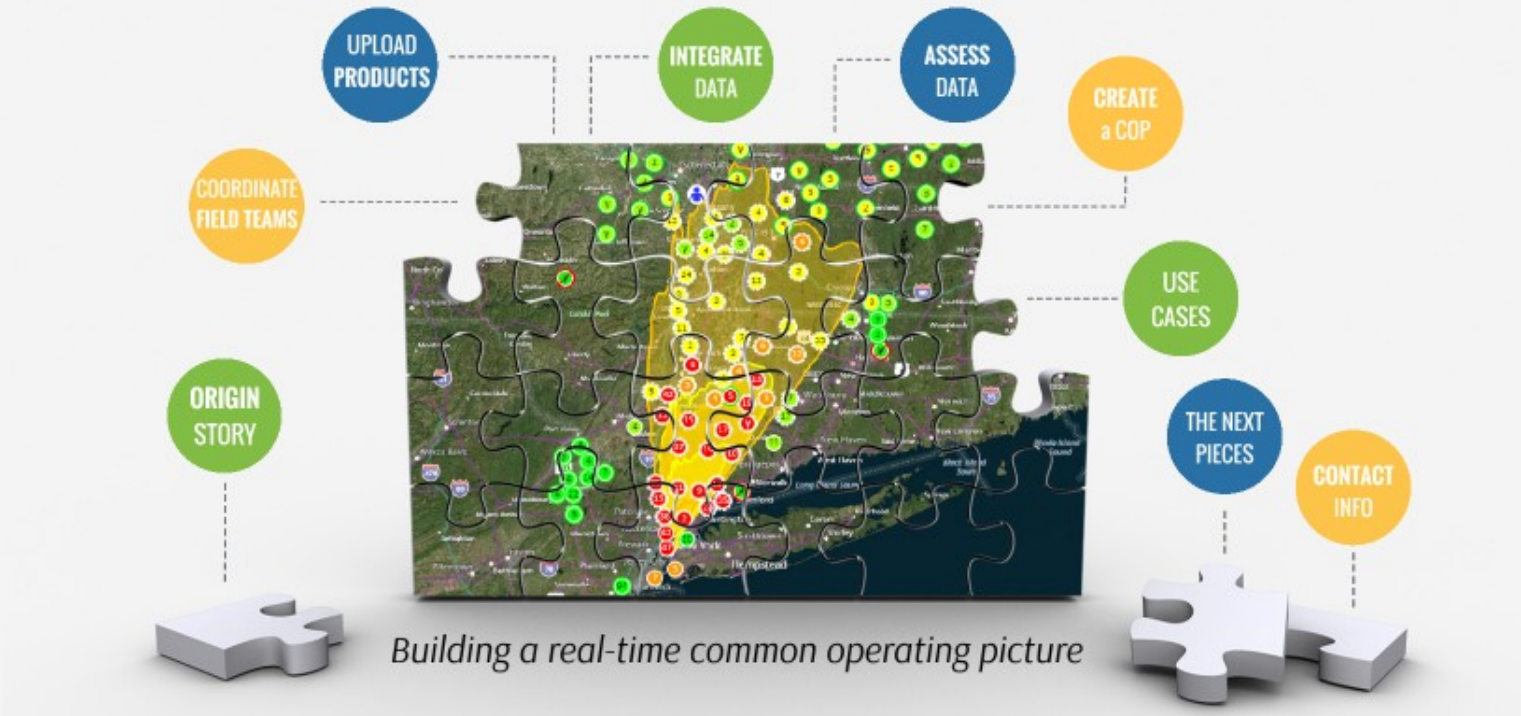
RadResponder Network



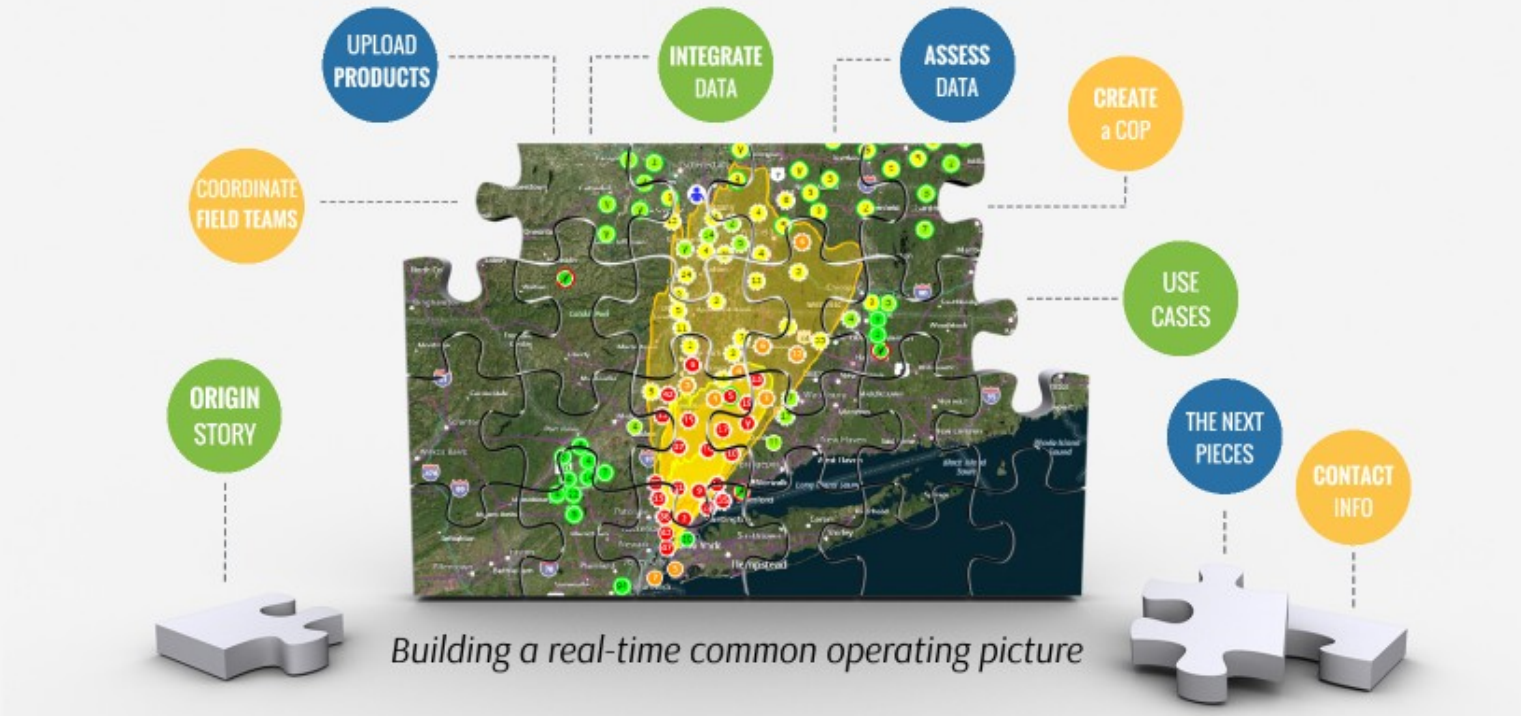
Assess Data

Approve and reject data

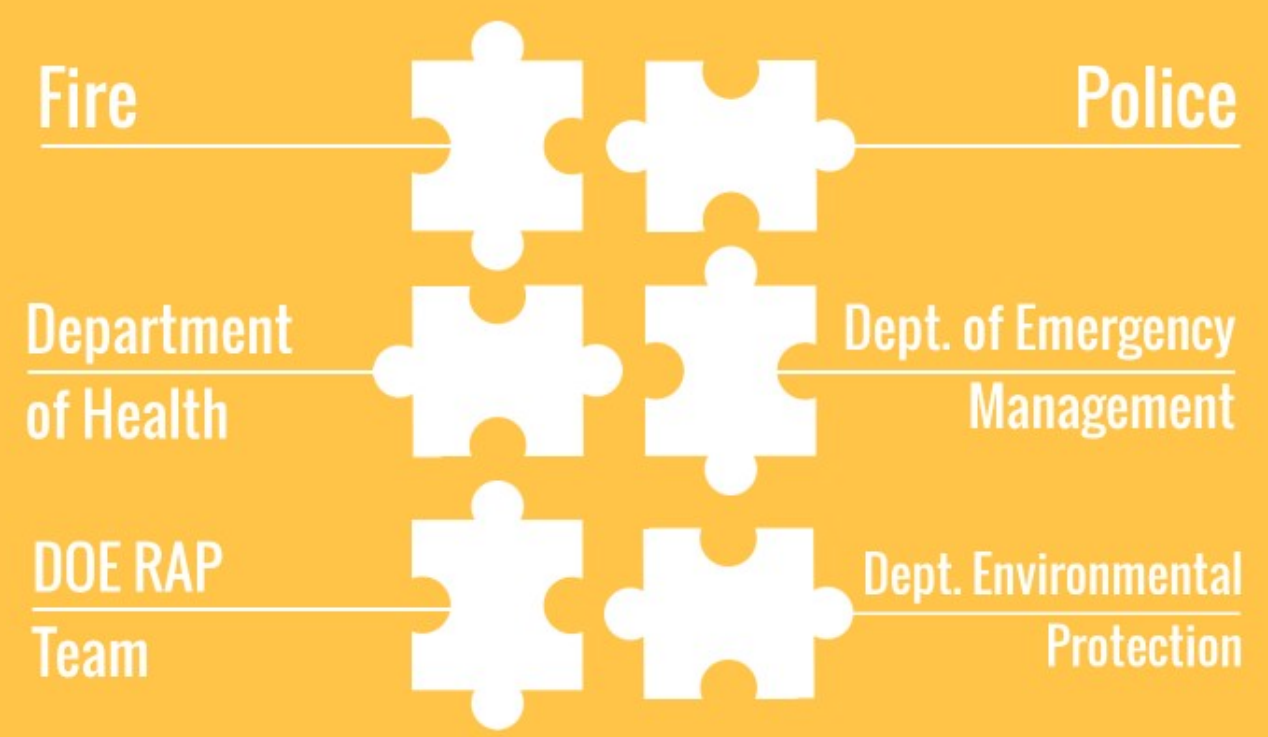
Choose to share only **approved** data with select partners

Enable sharing with FRMAC to allow FRMAC to sync data to their system for assessment

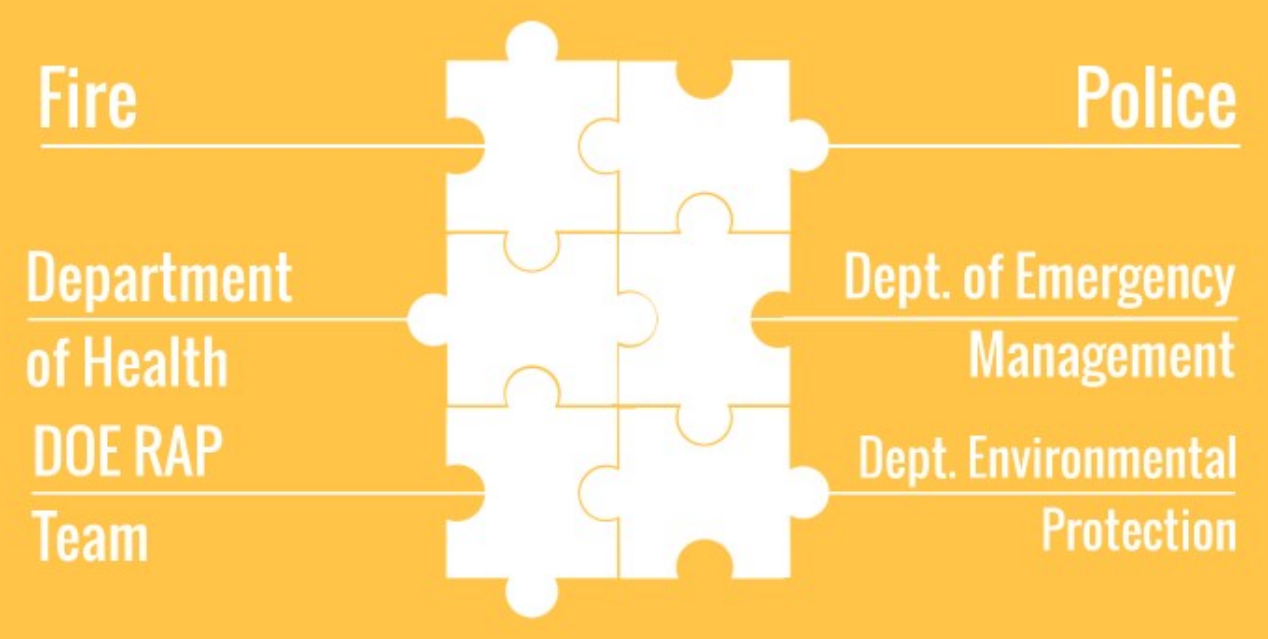
RadResponder Network



Establish Default Partnerships...



...To Share Data in Real-Time...

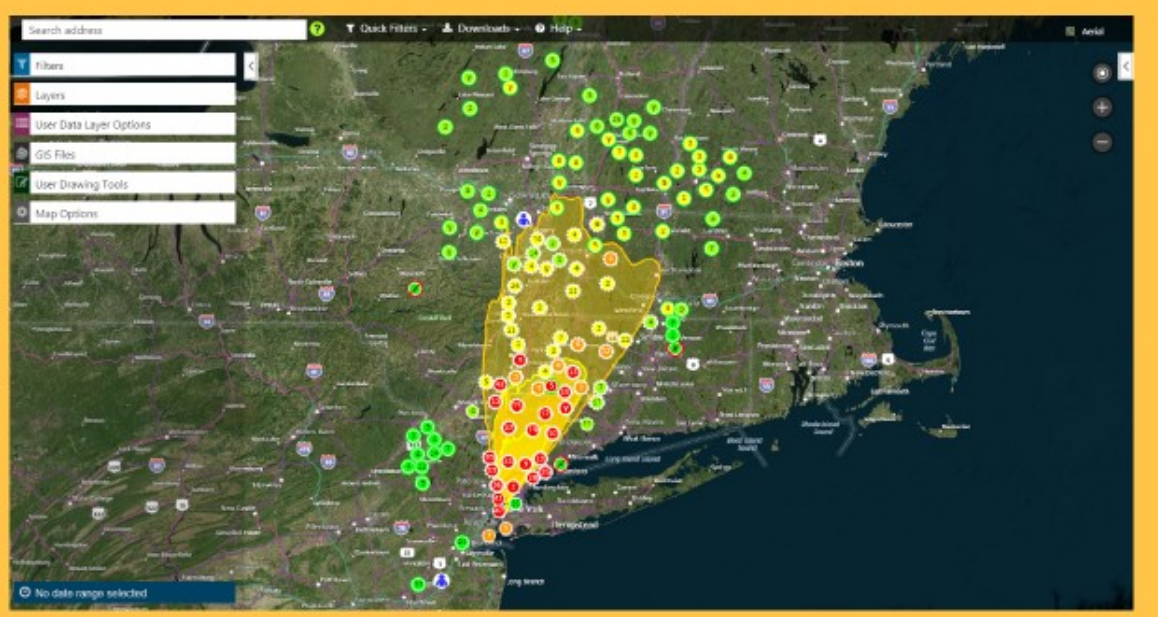


...and Enable Decision-Making

Gotham Shield 2017

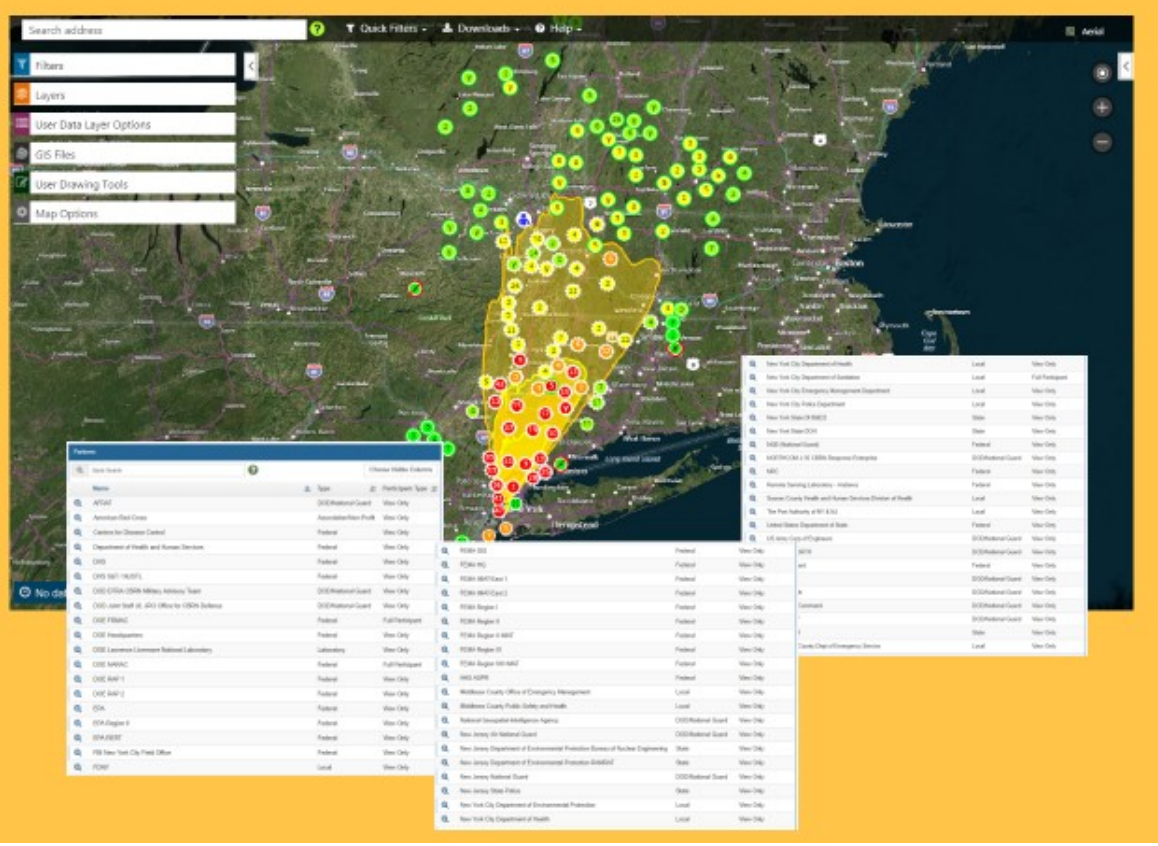
Gotham Shield 2017

- **>1000** Measurements Uploaded



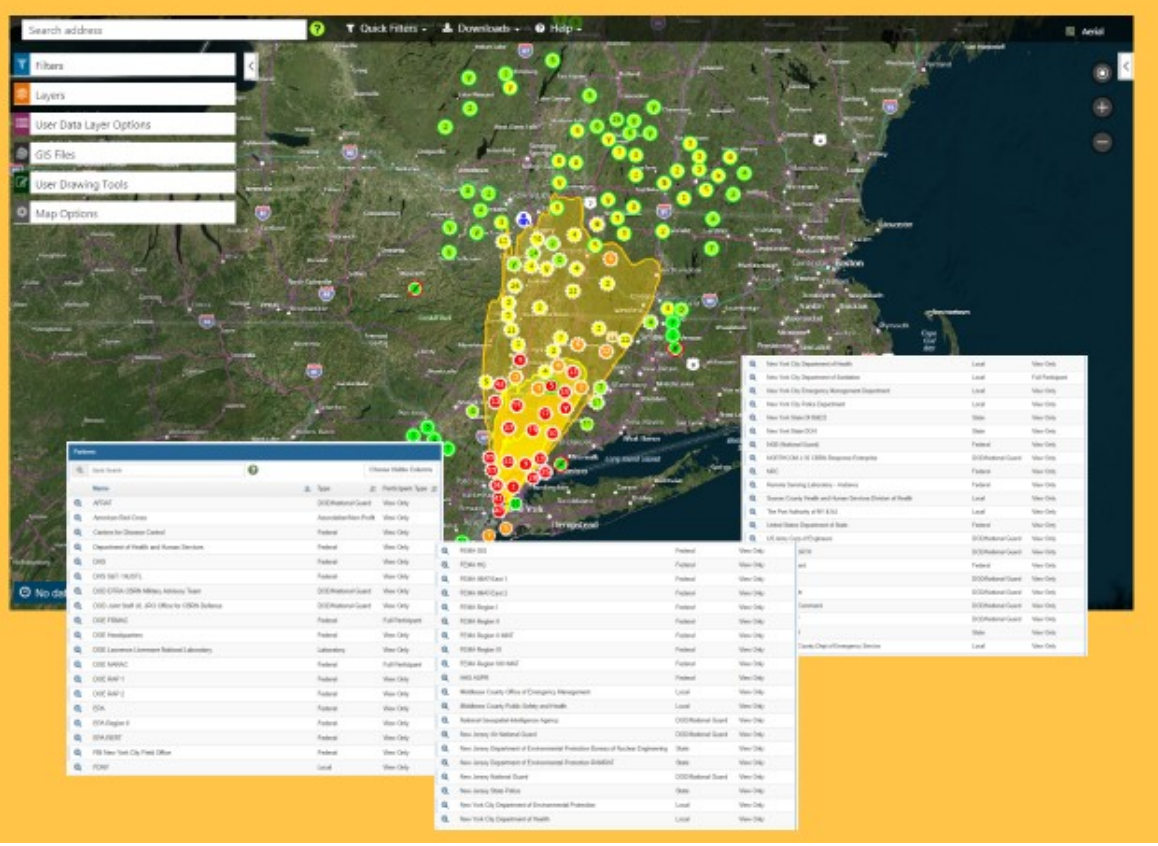
Gotham Shield 2017

- **>1000** Measurements Uploaded
- **60** Partner Organizations



Gotham Shield 2017

- **>1000** Measurements Uploaded
- **60** Partner Organizations
- Product -> Raw Data -> FRMAC Assessment -> New Product...



Gotham Shield 2017

- **>1000** Measurements Uploaded
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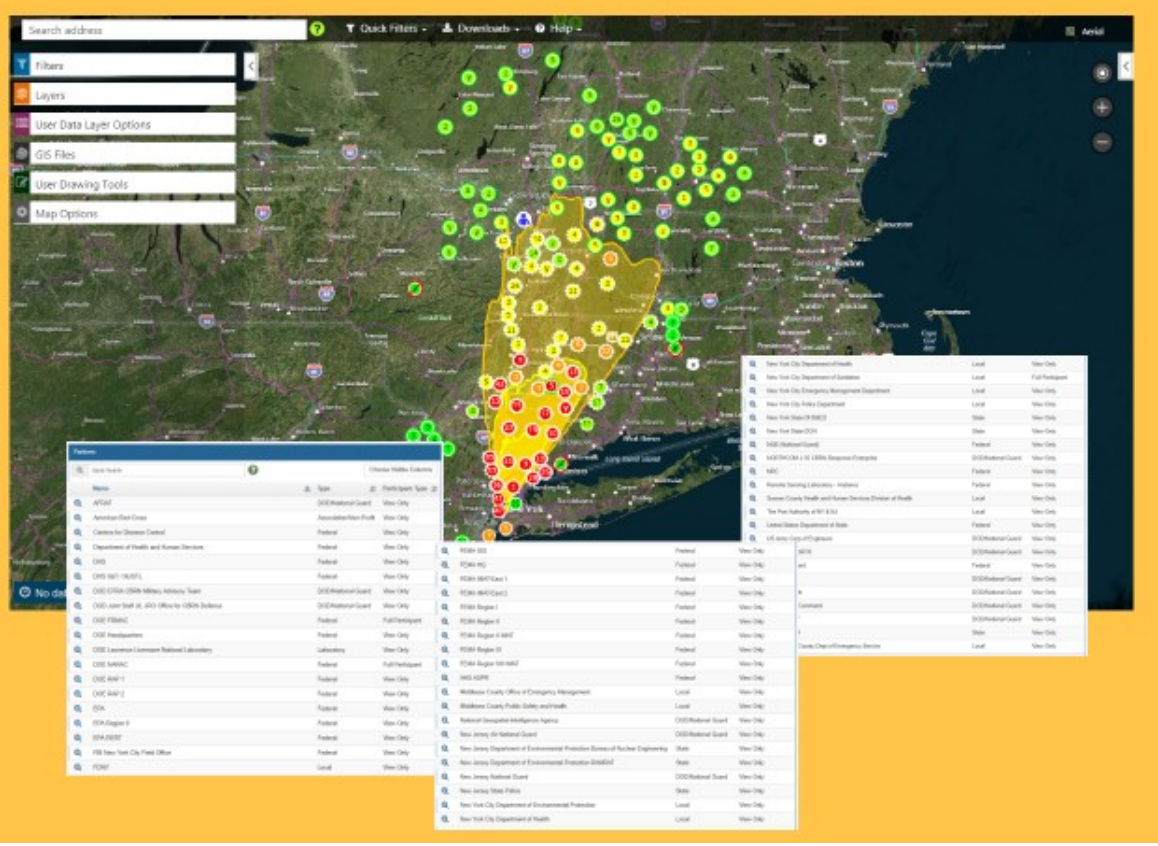
x 5



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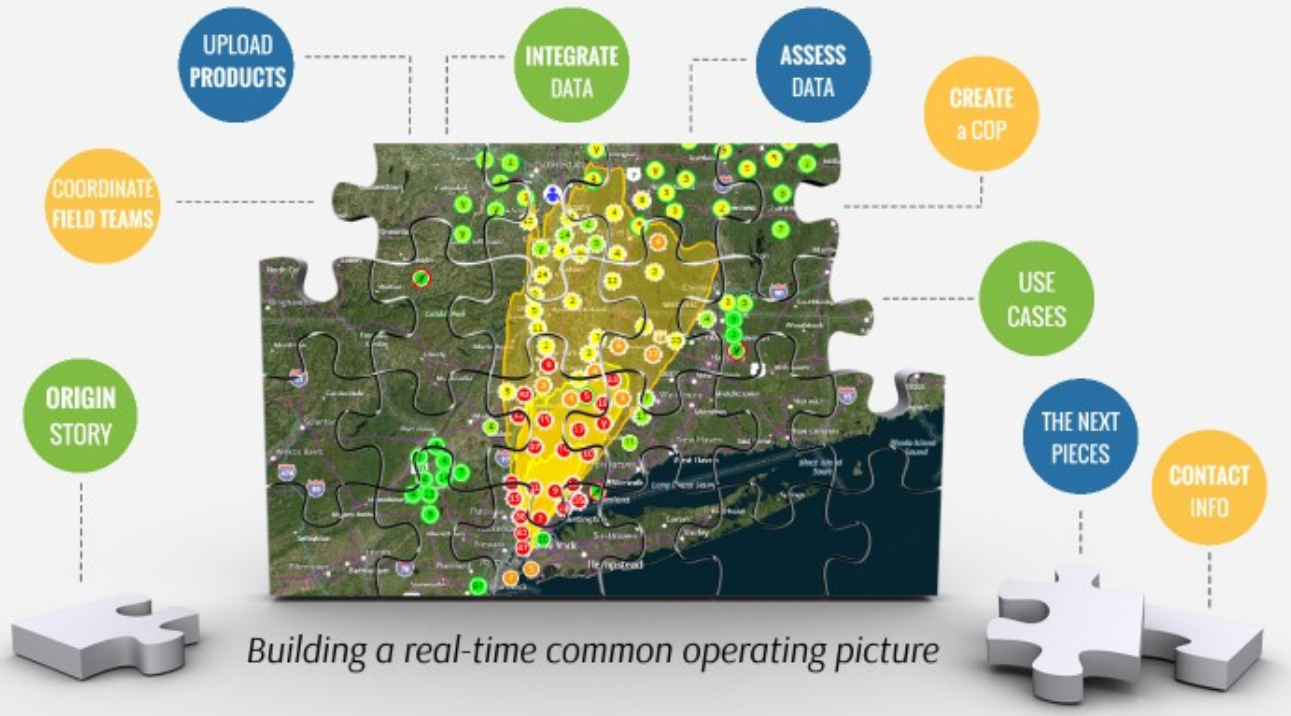
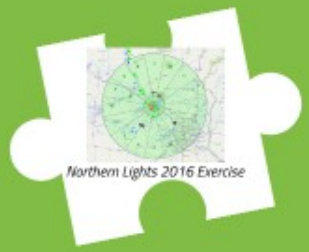


Use Cases

RDD Exercise,
NE Regional Training

Radiological Dispersal Device



Northern Lights 2016 Exercise

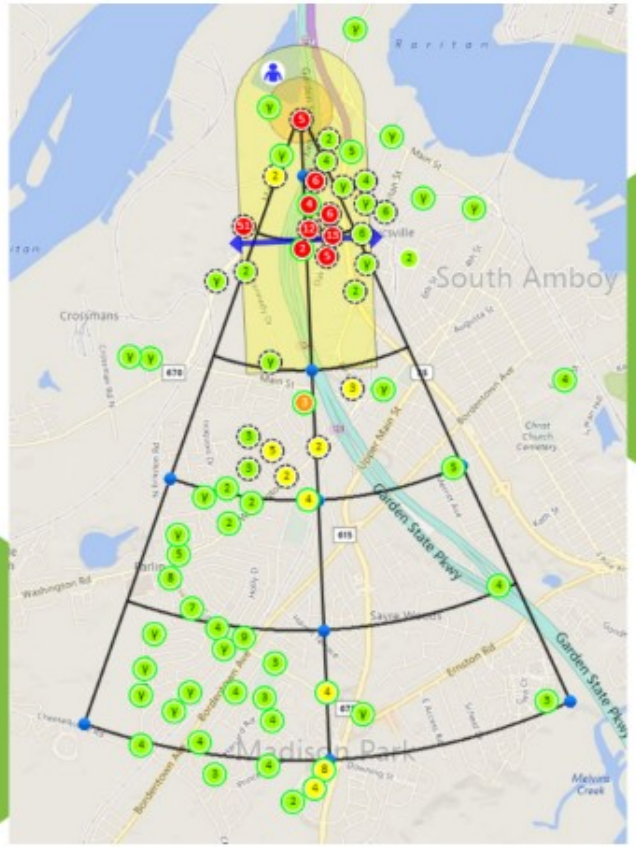
Nuclear Power Plant Release

Kansas Background Radiation Study

Routine Monitoring/ Background Mapping

Colorado State PRND Exercise

PRND/Special Event Monitoring



RDD Exercise,
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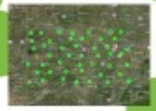

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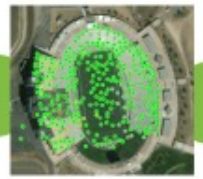

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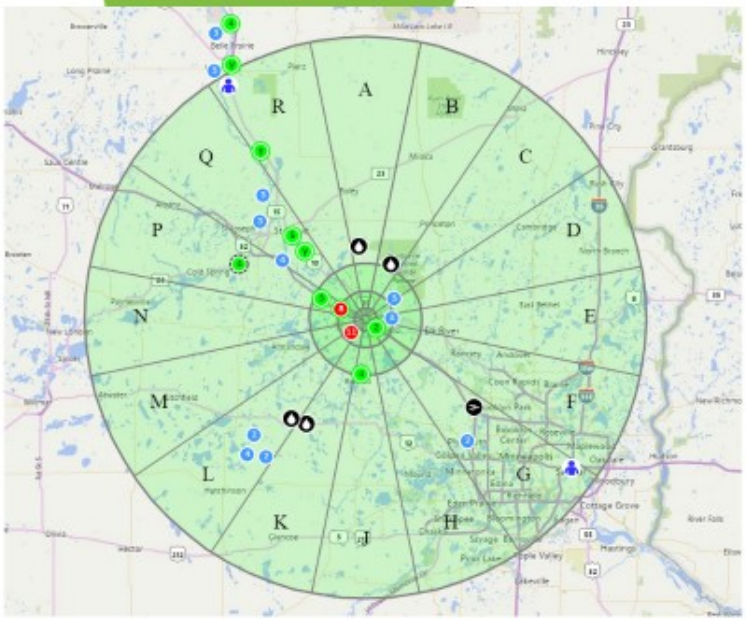
PRND/Special Event Monitoring



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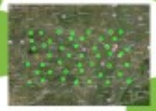

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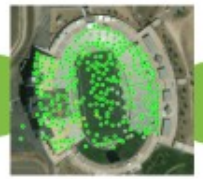

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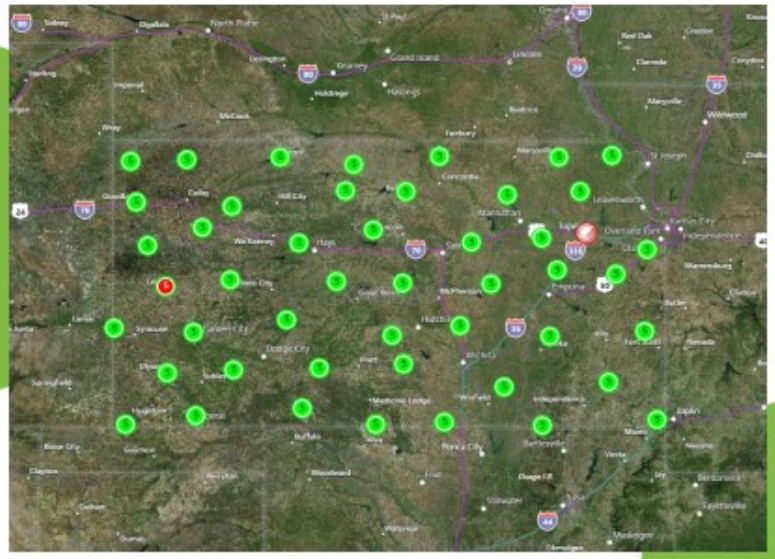

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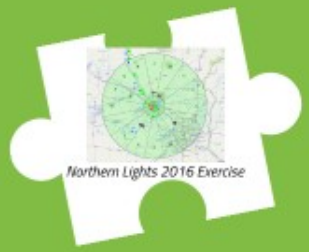

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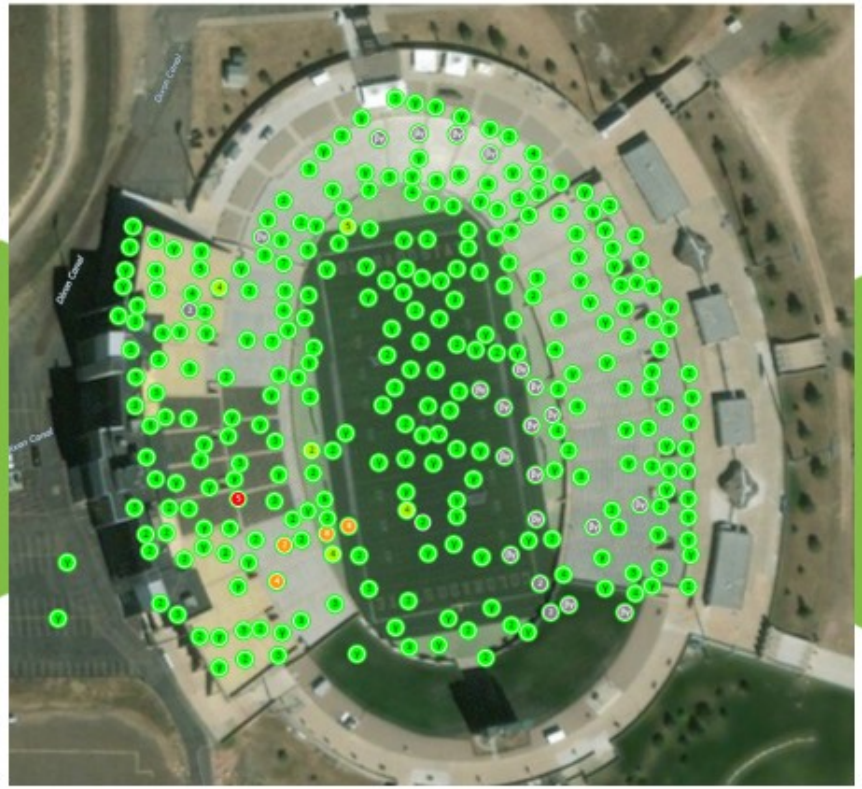

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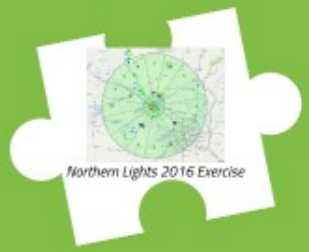

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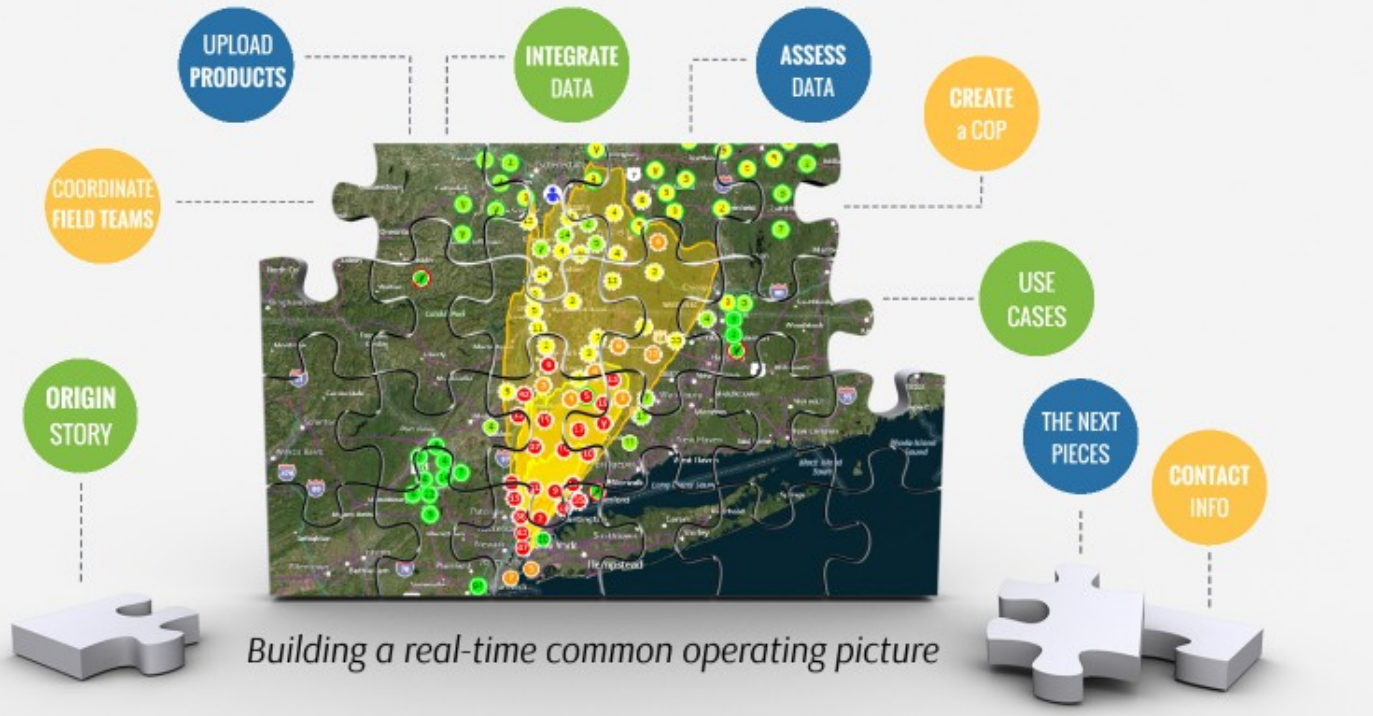
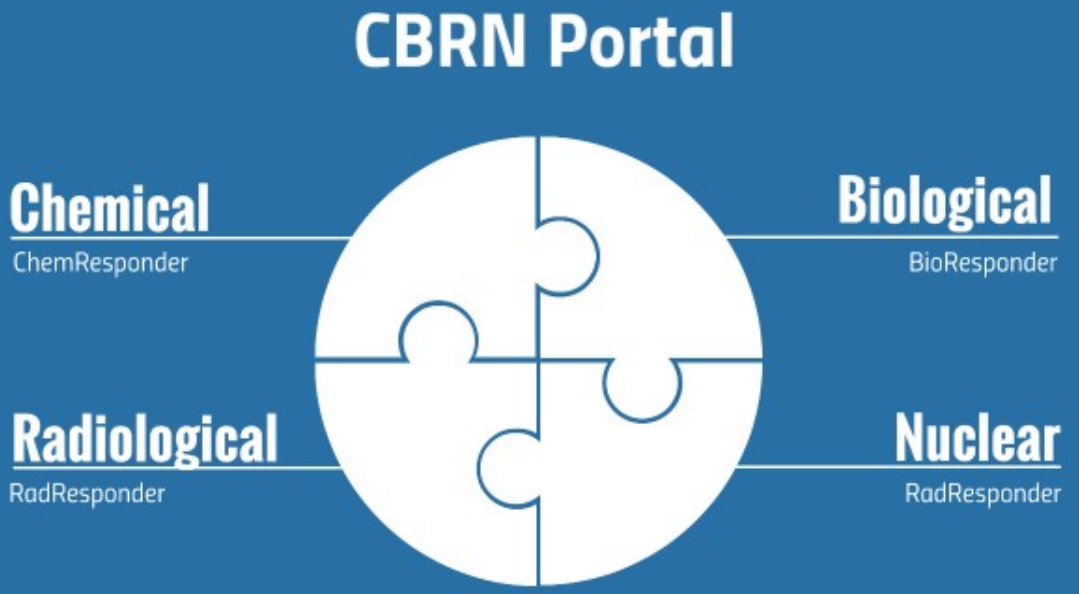


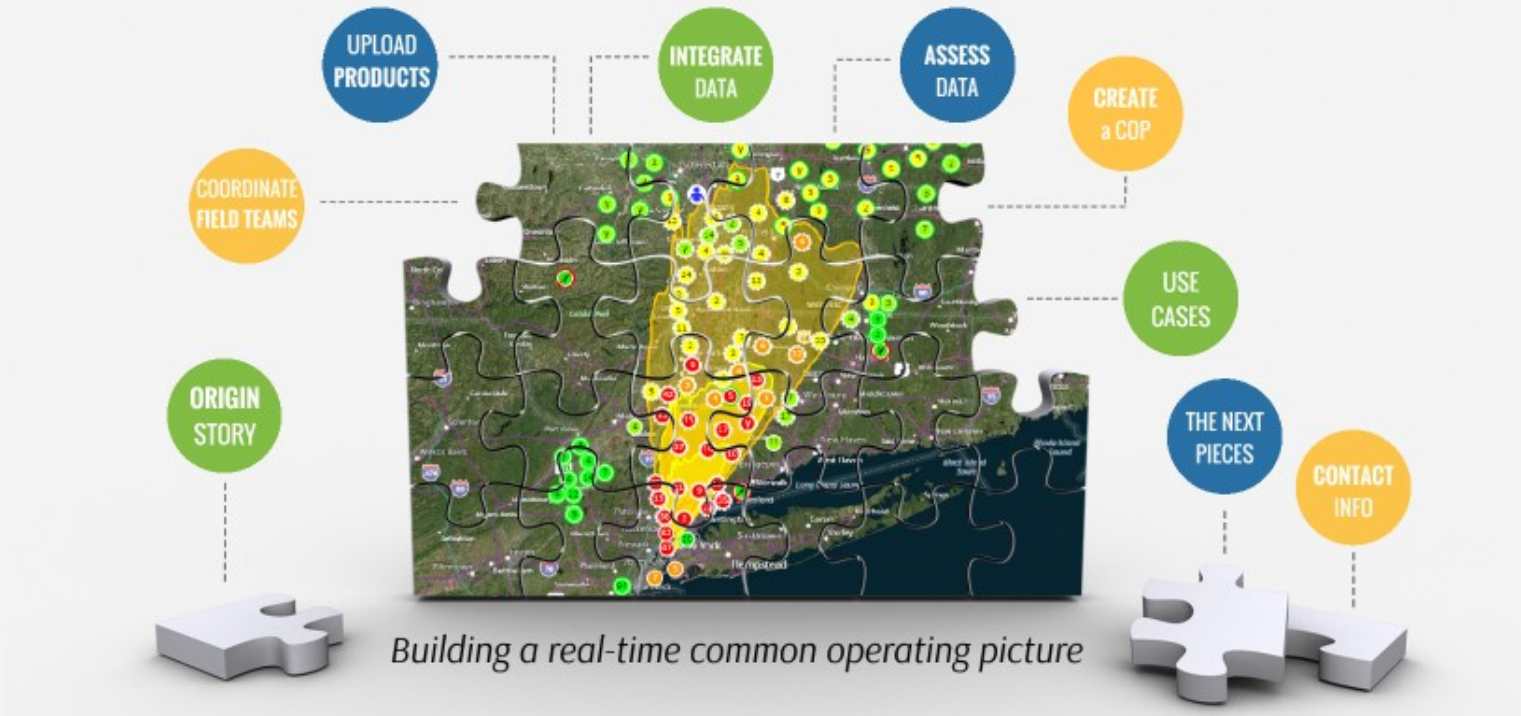
What's Next?

- Dispatching field teams
- Mobile mapping
- New Windows Application
- Alerts on survey thresholds
- Integrating UAS data
- Create-Your-Own Simulation

The Vision:


CBRN Portal
Chemical
ChemResponder
Biological
BioResponder
Radiological
RadResponder
Nuclear
RadResponder

RadResponder Network



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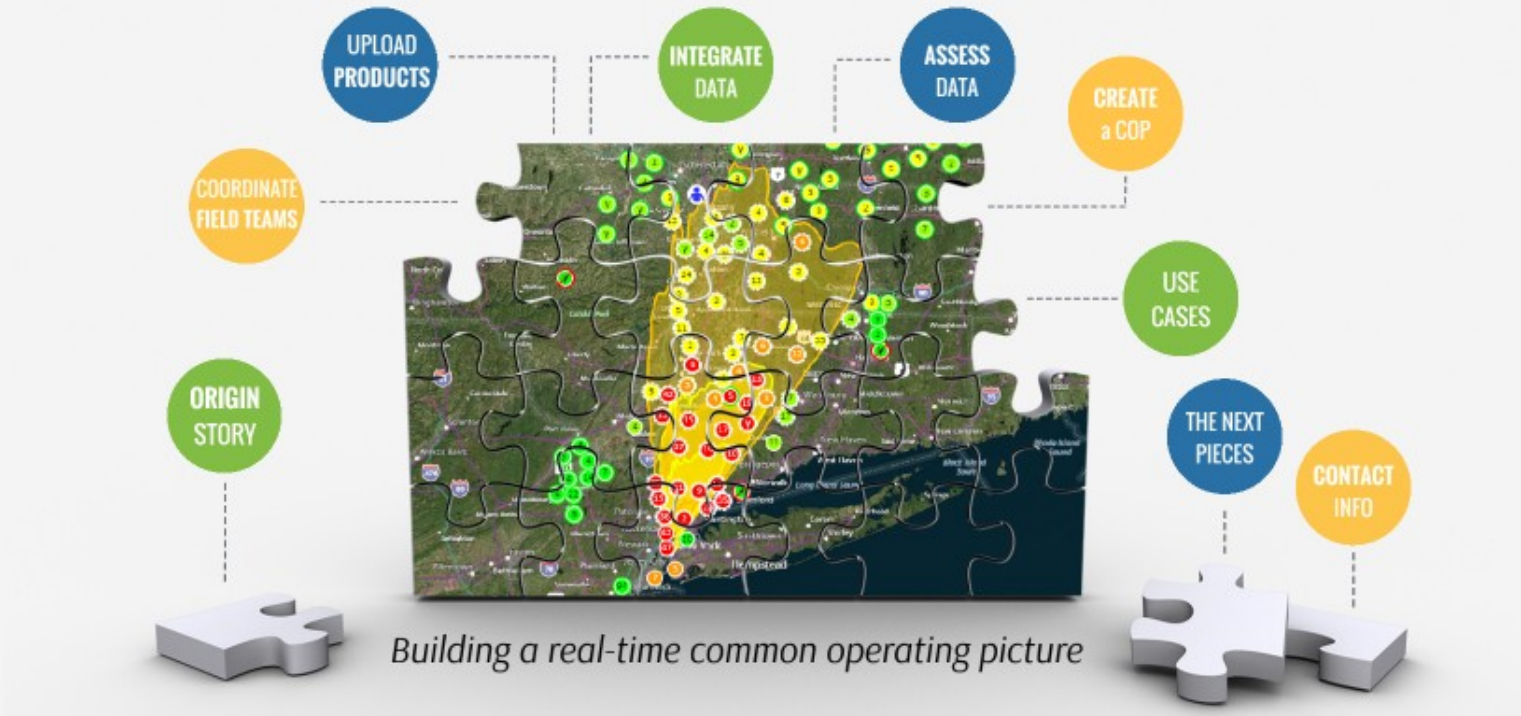
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