



Red Hat Day Events

January 28, Montreal

OpenShift
The Platform for Big Ideas



Red Hat

How to architect a cloud-native and reactive application environment

An Interactive demo session

Syed M Shaaf

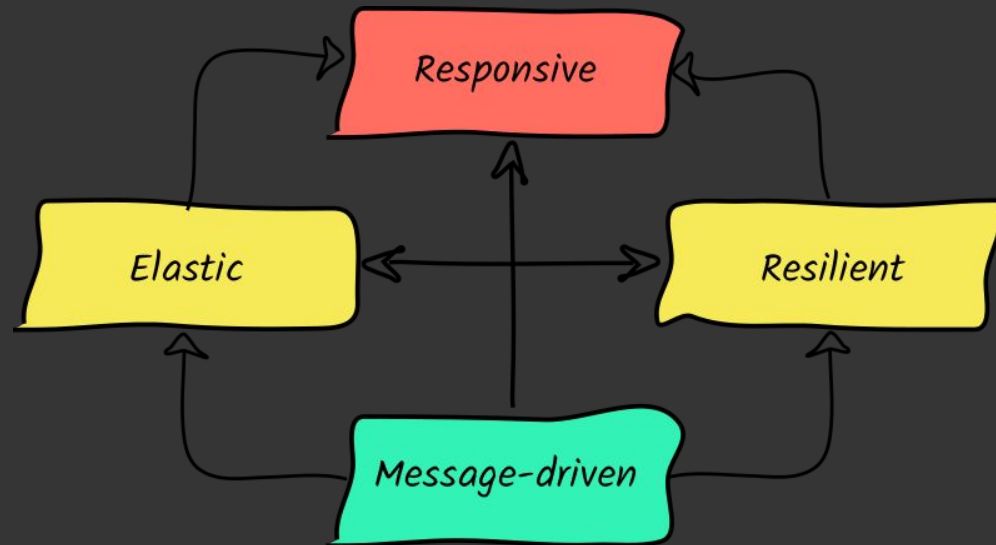
Sr. Principal Product Marketing Manager

@syshaaf

Reactive all things?

Message Resilience Back-Pressure
Elasticity System Streams
Manifesto Scalability Data Flows
Asynchrony Actor eXtensions Asynchronous
Programming Observable
Events Spreadsheets Reactor Spring RX Java

Reactive Manifesto



Async Execution



Just the evolution of Software

Distributed

*Massively
distributed*

*Dynamic
Environment*

Users

*No
Downtime*

Reply fast

Push vs. Pull

Data

*Increasing
amount of data*

Data in motion

Data Rivers

Some use cases

Edge

*High
Concurrency*

*Orchestration
of backend
services*

Interactive

*Bi-Directional
communication*

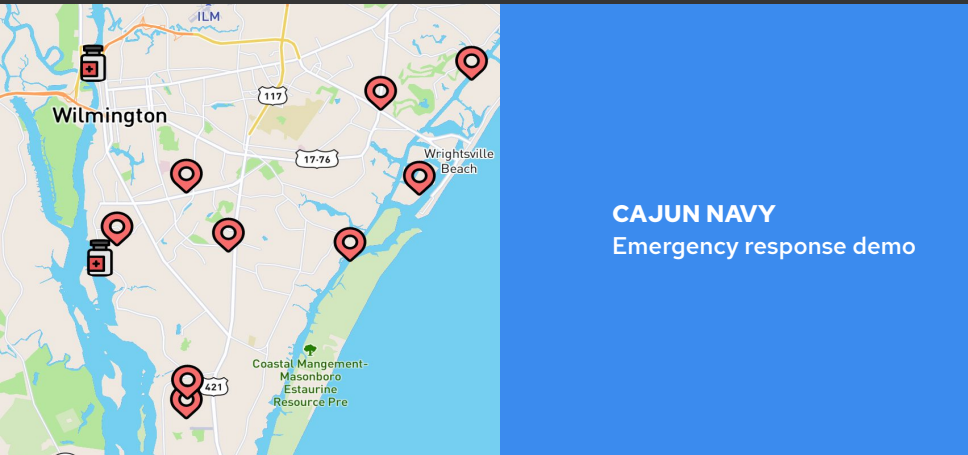
Push-first

Data

*Process data on
the fly*

*React on data
changes*

Goal: Create a greenfield solution



- Community-Powered Disaster Response Solution
- Inspired by the Cajun Navy response from Hurricane Harvey
- As people are stranded need help, responders want to help
- We want to make it easy to engage the community to organize people who can help out
- Want to make it easy to engage the community that needs help

Requirements for a new application



CONTAINER CAPABILITIES



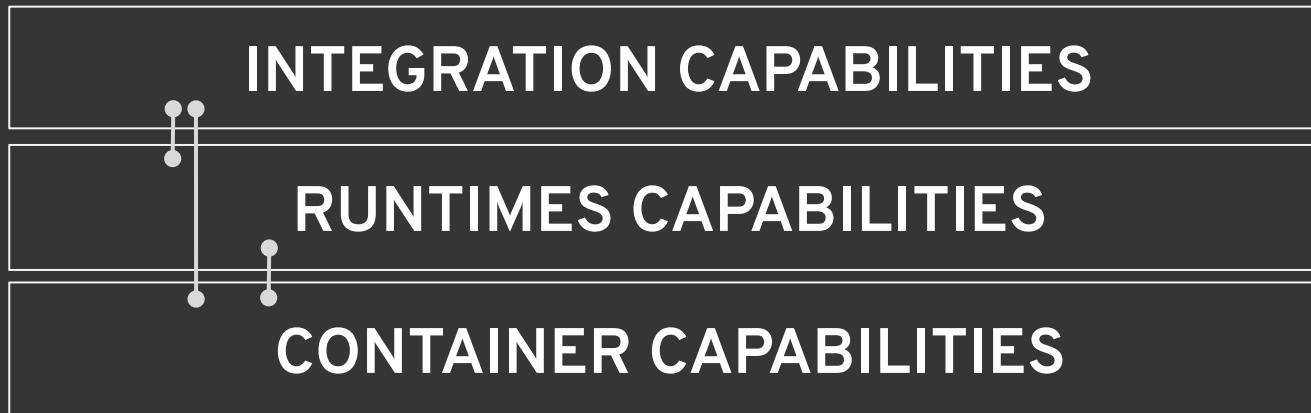
OPERATOR
LIFECYCLE MANAGER



Requirements for a new application



Requirements for a new application



Red Hat
Fuse

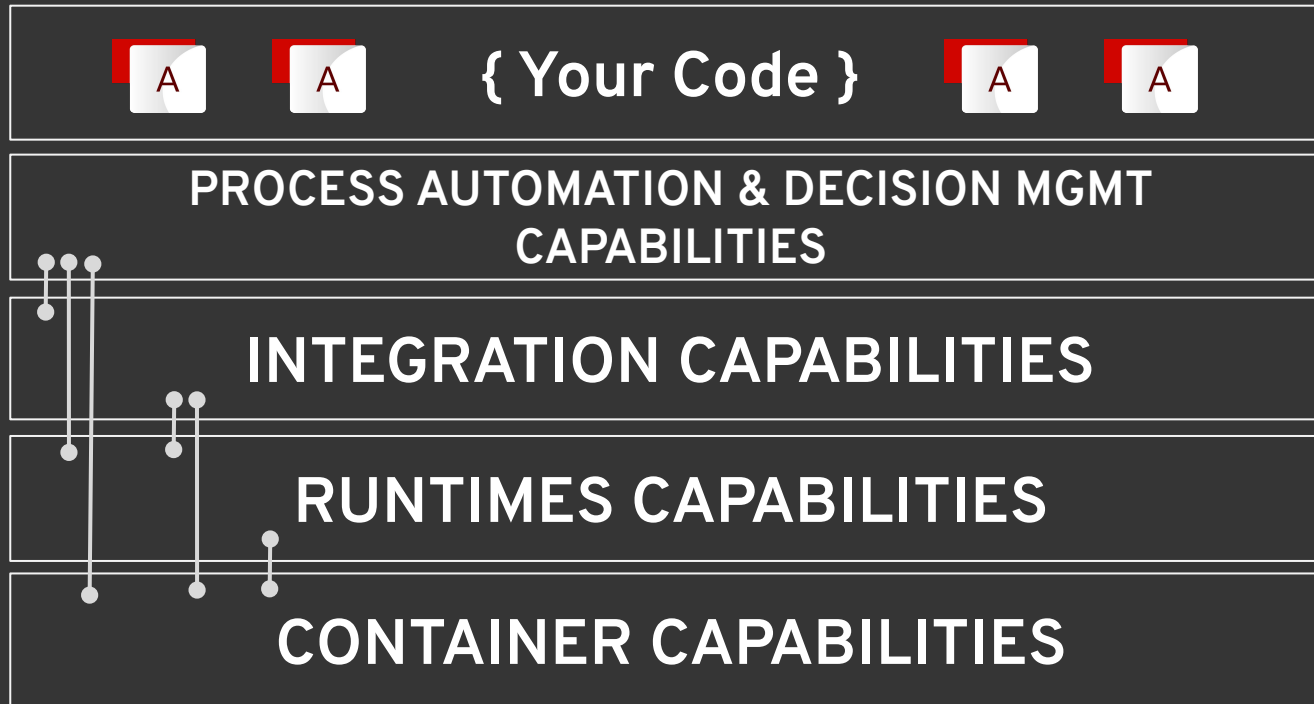


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AMQ



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3scale API
Management

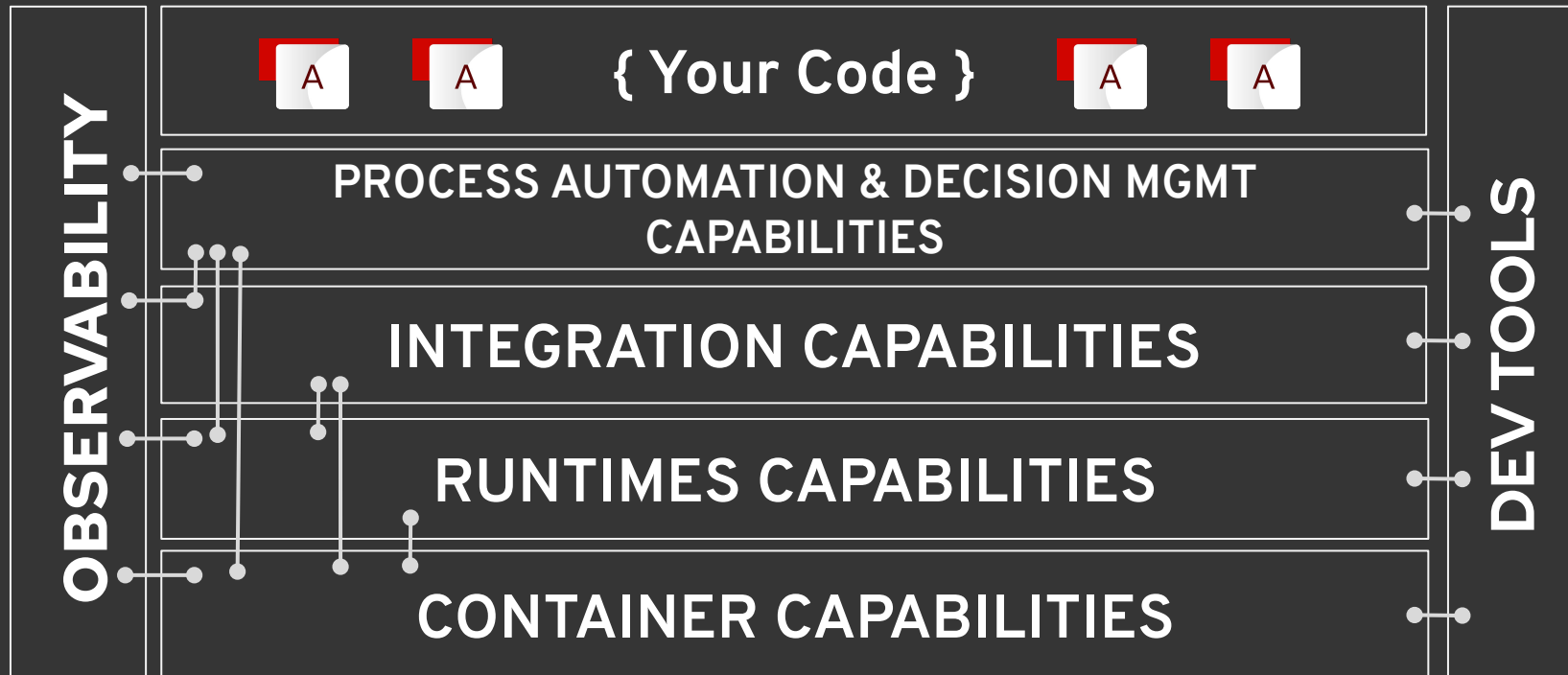
Requirements for a new application



 **Red Hat**
Decision
Manager

 **Red Hat**
Process
Automation

Requirements for a new application



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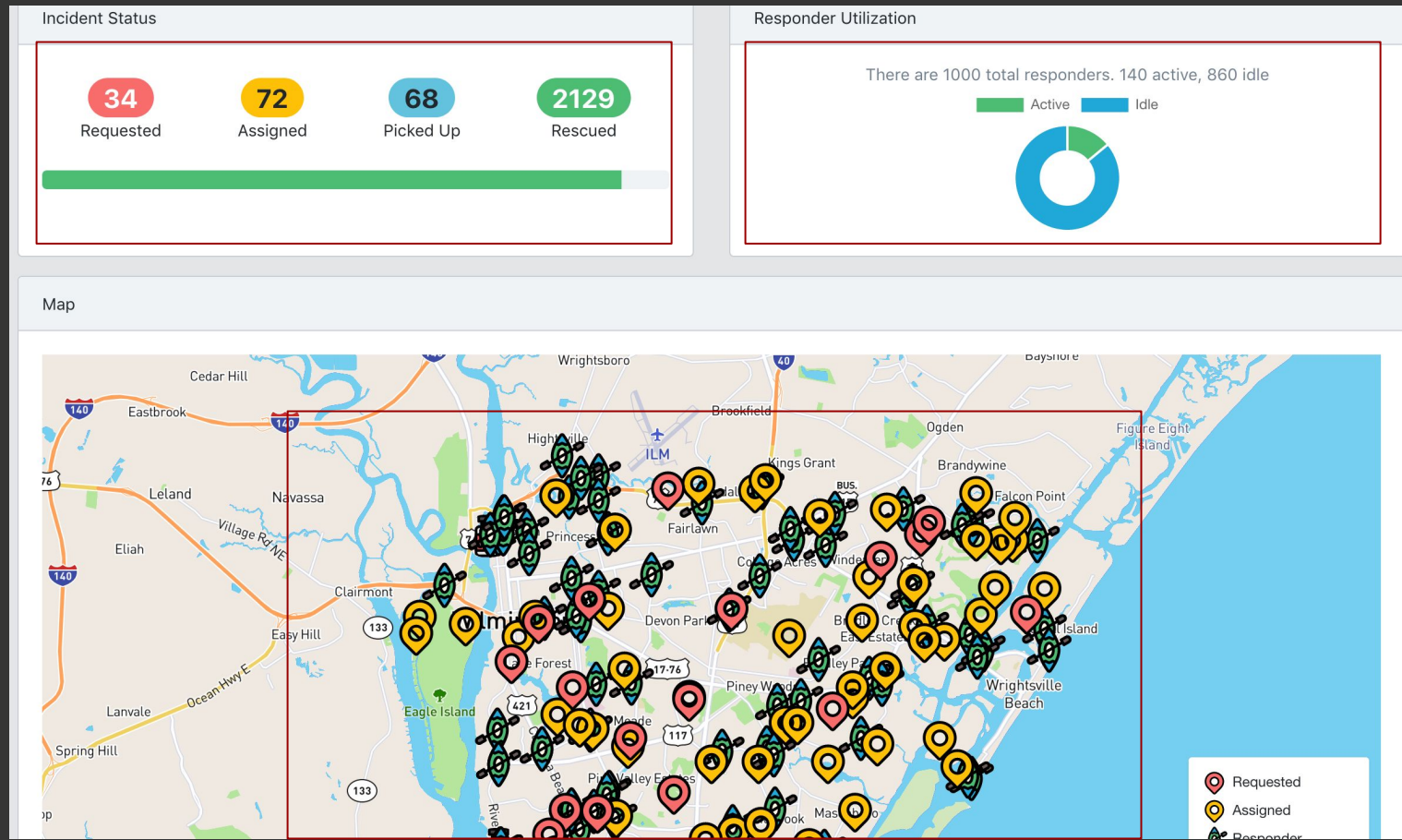
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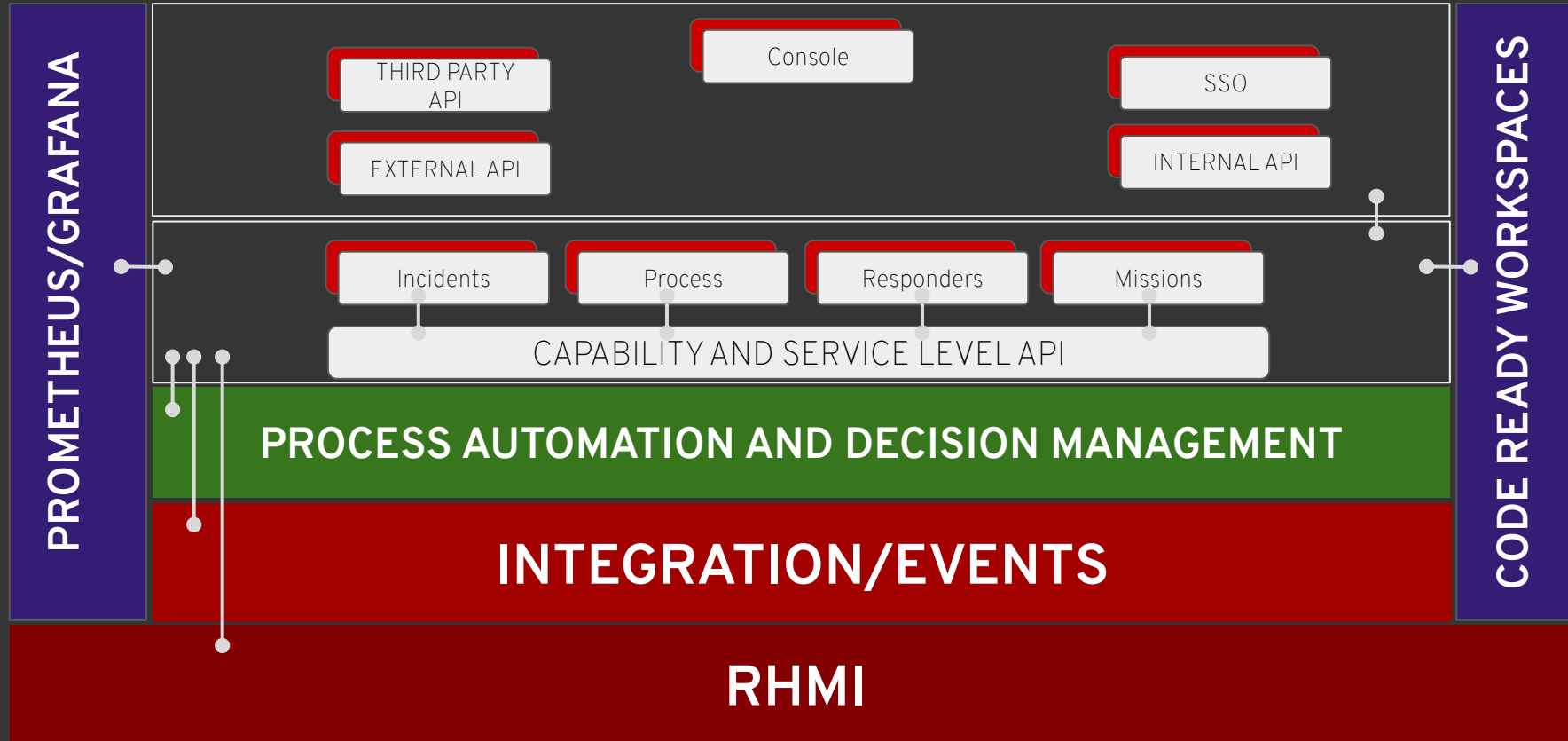
 elasticsearch  kibana

 Prometheus  Grafana

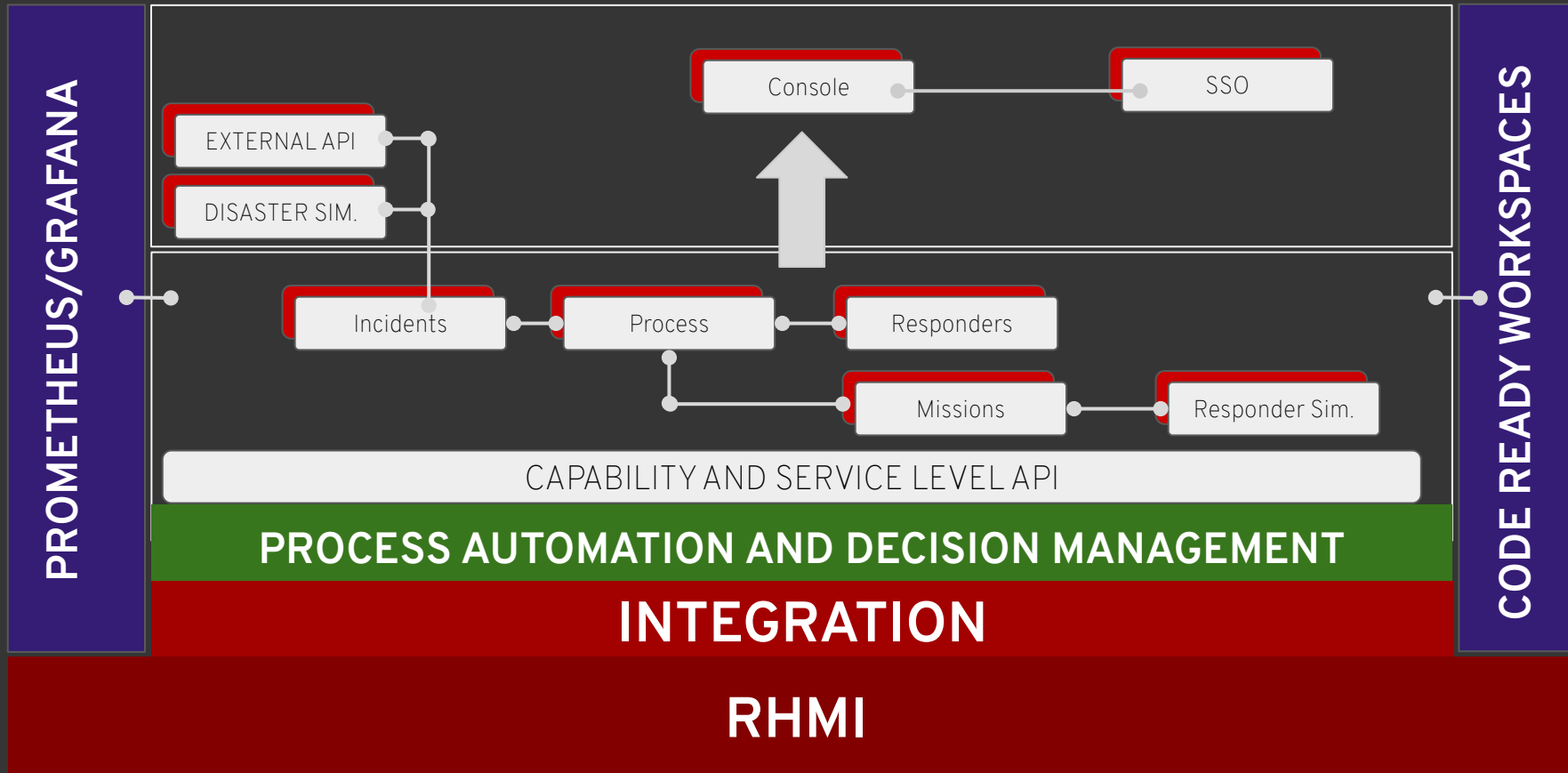
Live events, reactive services



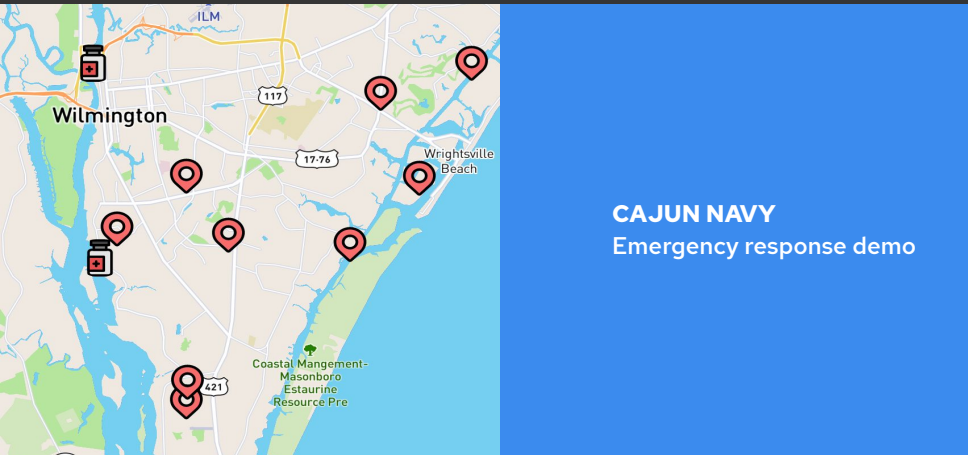
Defining capabilities



Flow of Events



Demo



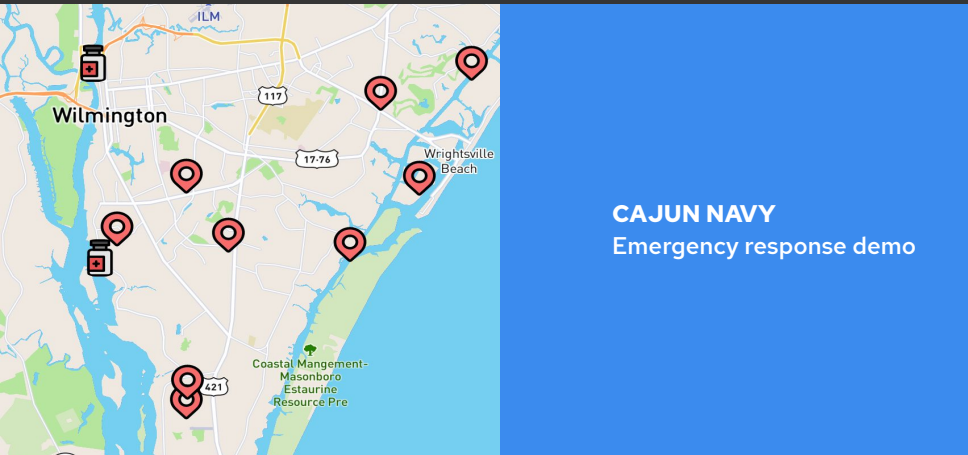
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<http://bit.ly/erdemo-montreal>

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Resources



- More info: www.erdemo.io
- **PRs are welcomed!**
Github:
<https://github.com/Emergency-Response-Demo>
- Red Hat Developers -
<https://developers.redhat.com>
- Red Hat Middleware -
<https://www.redhat.com/en/products/middleware>

Thank you

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