CONFIDENTIAL designator

Red Hat Day Events

January 30, Vancouver

OpenShift
The Platform for Big Ideas

Red Hat

How to architect a cloud-native and reactive application environment

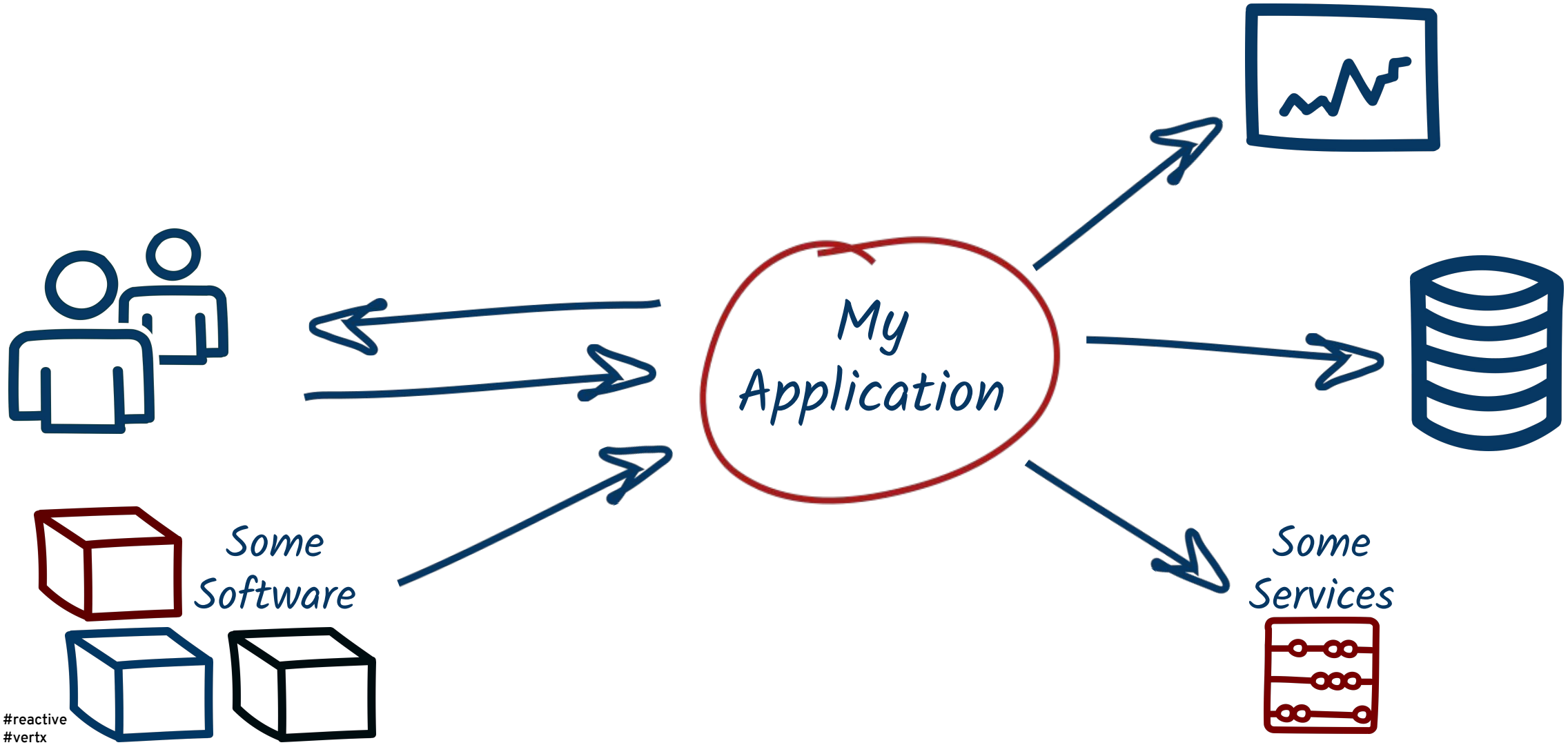
An Interactive demo session

Syed M Shaaf
Sr. Principal Product Marketing Manager
@syshaaf

Red Hat

Mind the step...

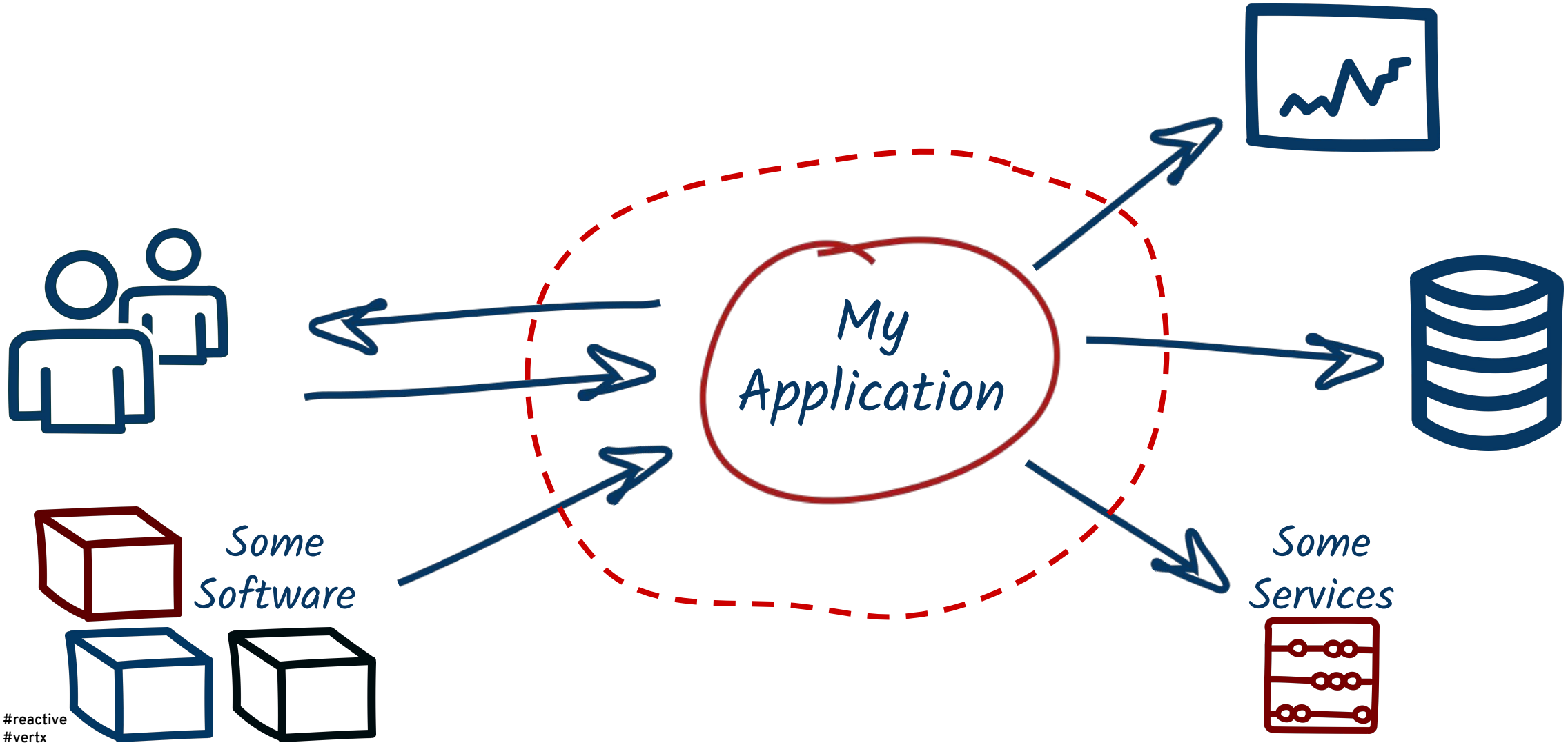
Why my simple application is such a mess...



#reactive
#vertx
#quarkus

Red Hat

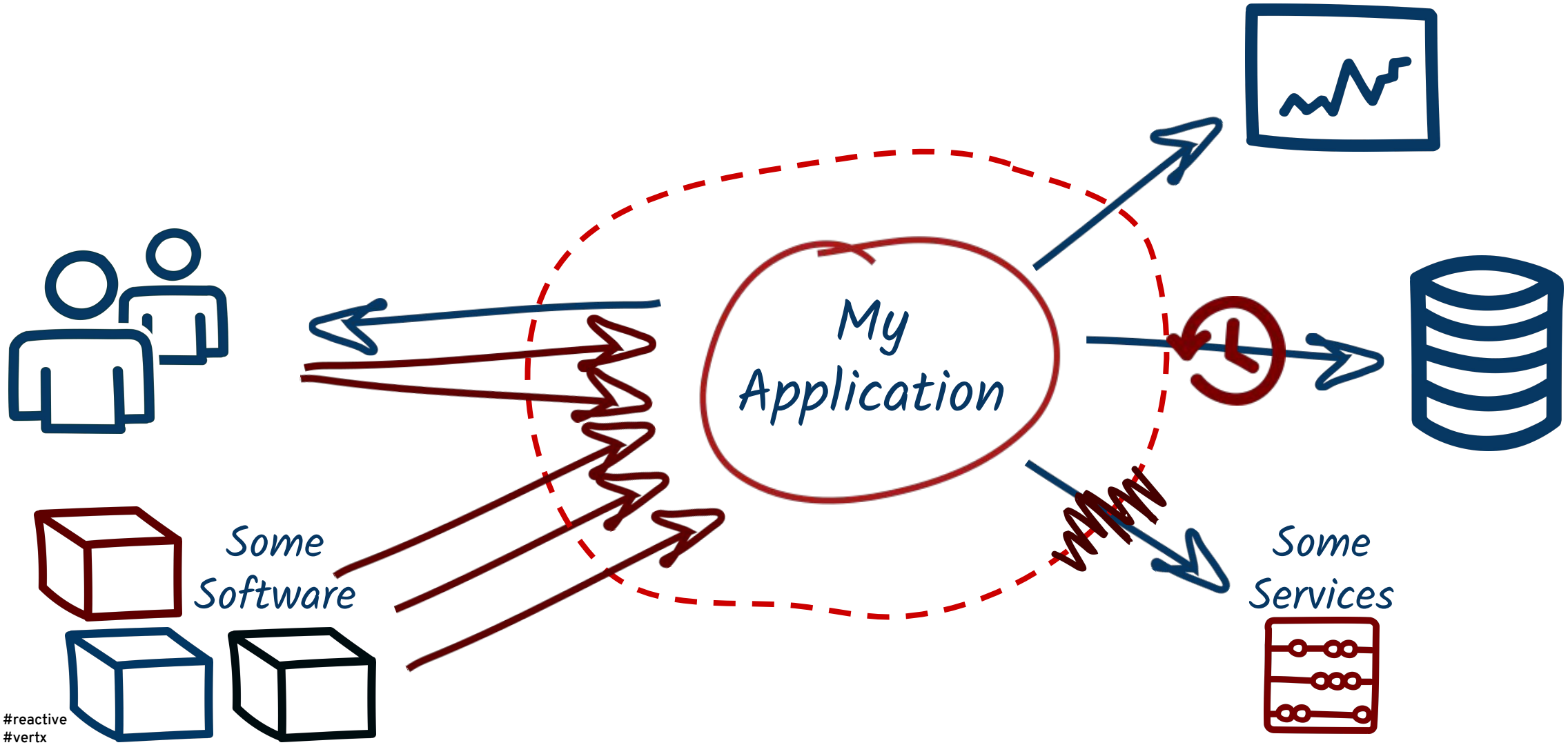
Modern software is distributed…



#reactive
#vertx
#quarkus

Red Hat

Modern software is distributed…

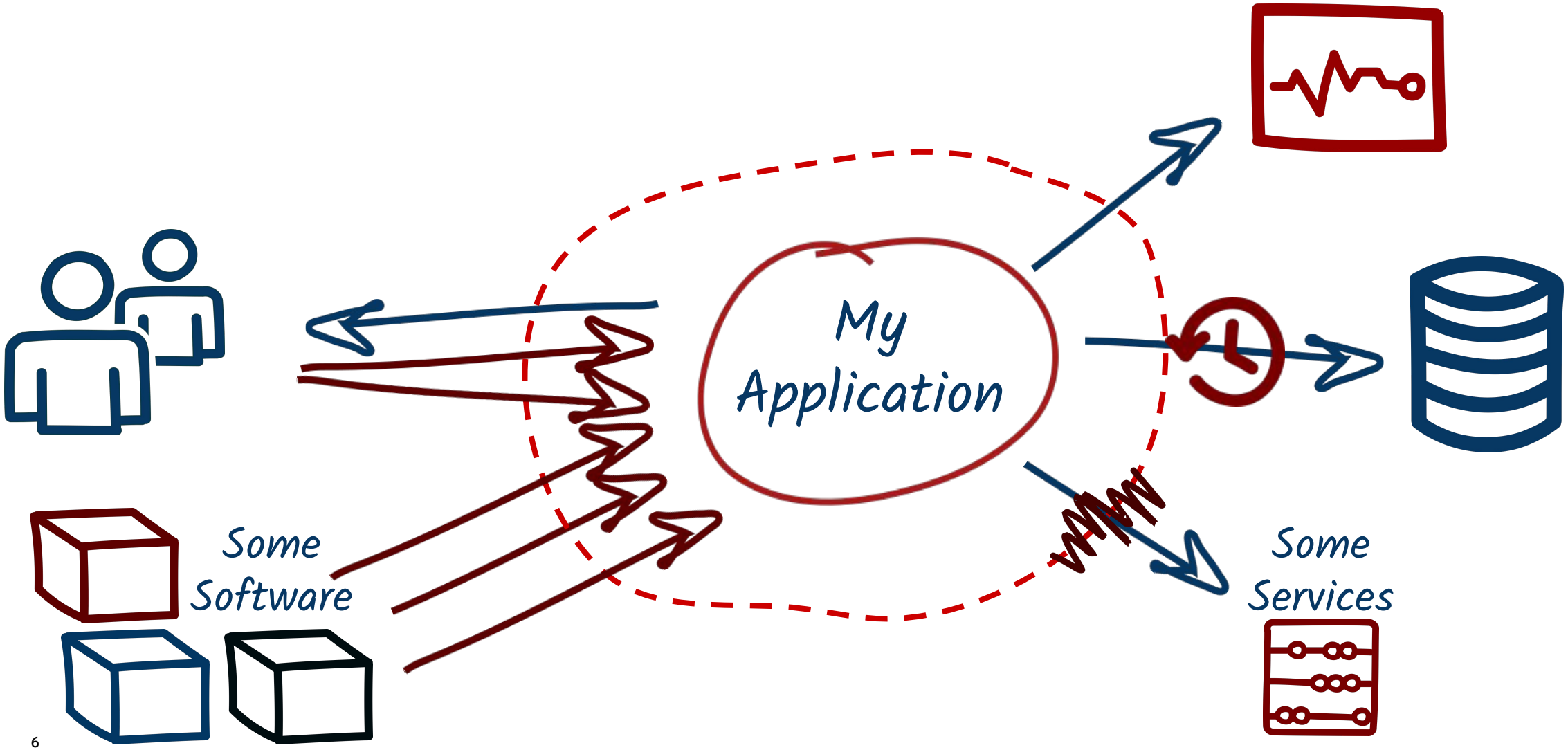


#reactive
#vertx
#quarkus

Red Hat

Distributed systems fail

How to stay responsive in face of failures, under varying workload



Red Hat

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

Red Hat

SOME USE CASES

Edge

High Concurrency

Orchestration of backend services

Interactive

Bi-Directional communication

Push-first

Data

Process data on the fly

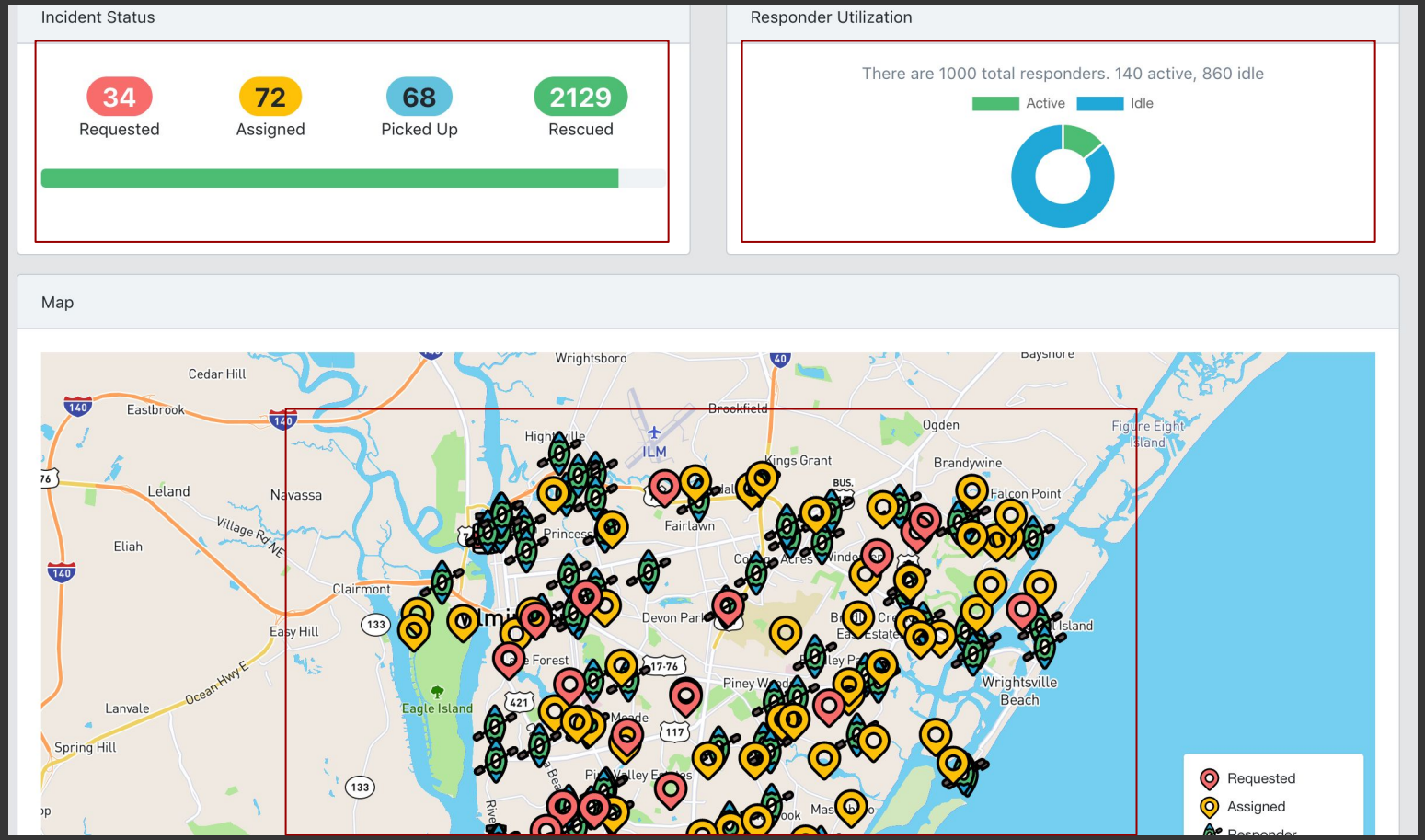
React on data changes

Red Hat

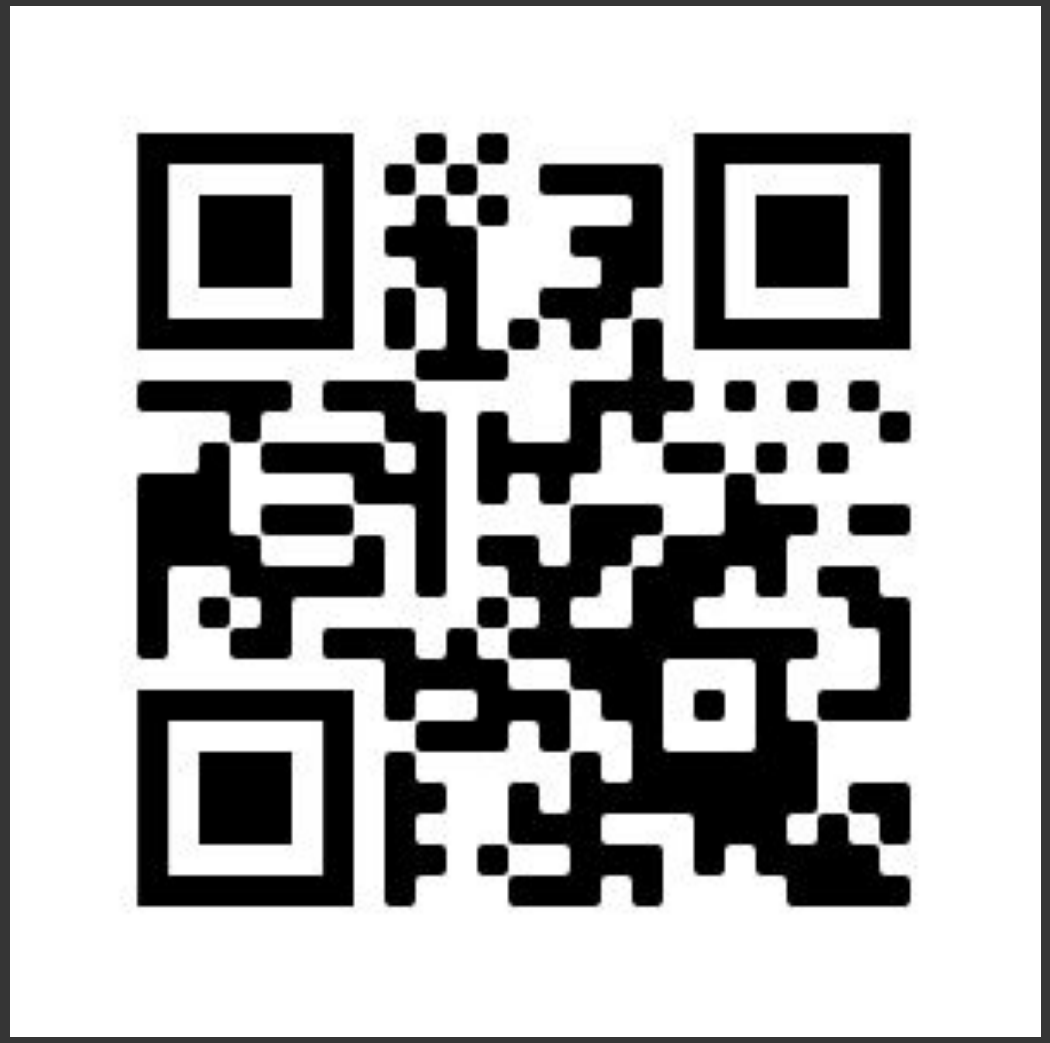
- Community-Powered Disaster Response Solution
- Inspired by the Cajun Navy response from Hurricane Harvey
- As people are stranded need help, responders want to help
- We want to make it easy to engage the community to organize people who can help out
- Want to make it easy to engage the community that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

Red Hat

Live events, reactive services



Red Hat



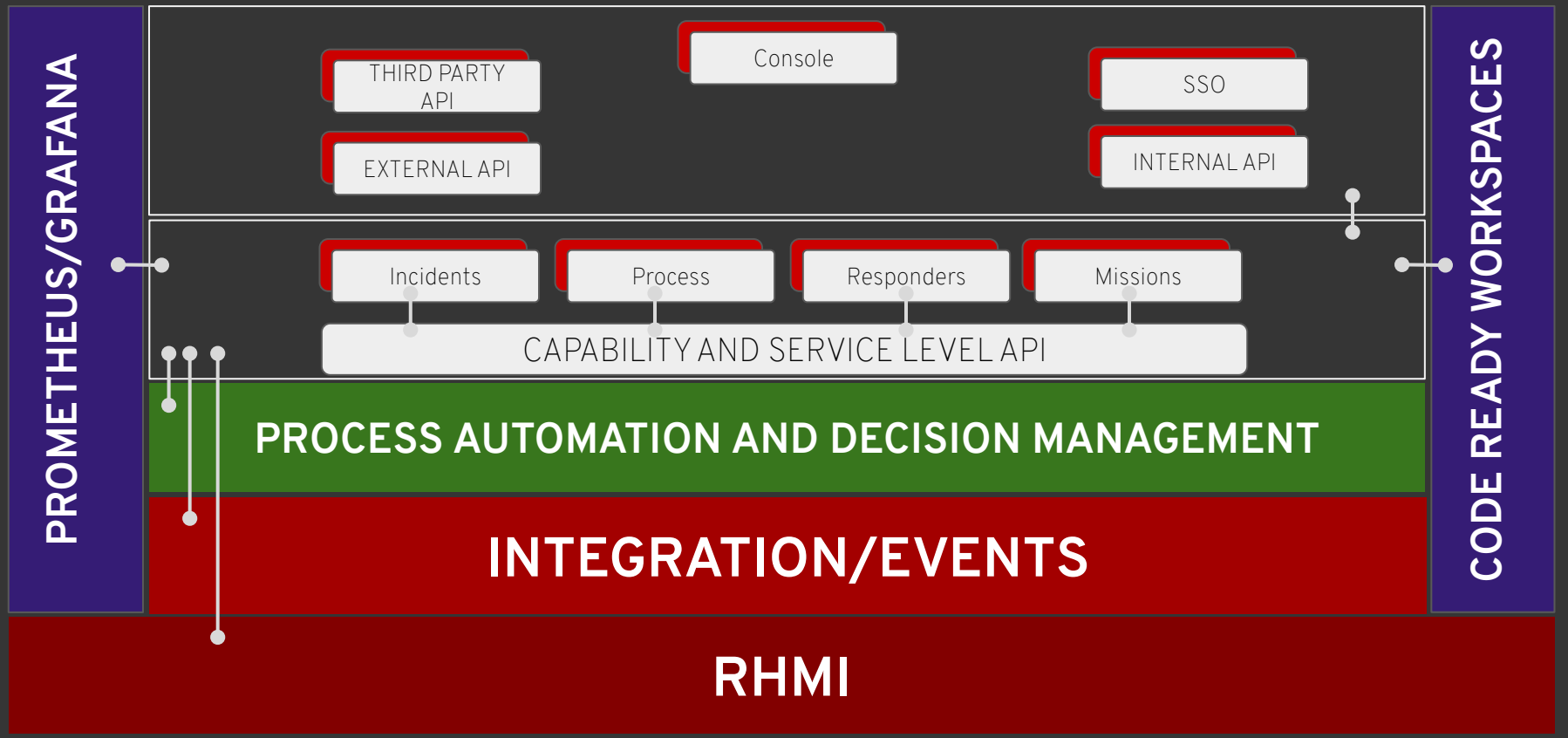
http://bit.ly/erdemo-vancouver

DEMO

- 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

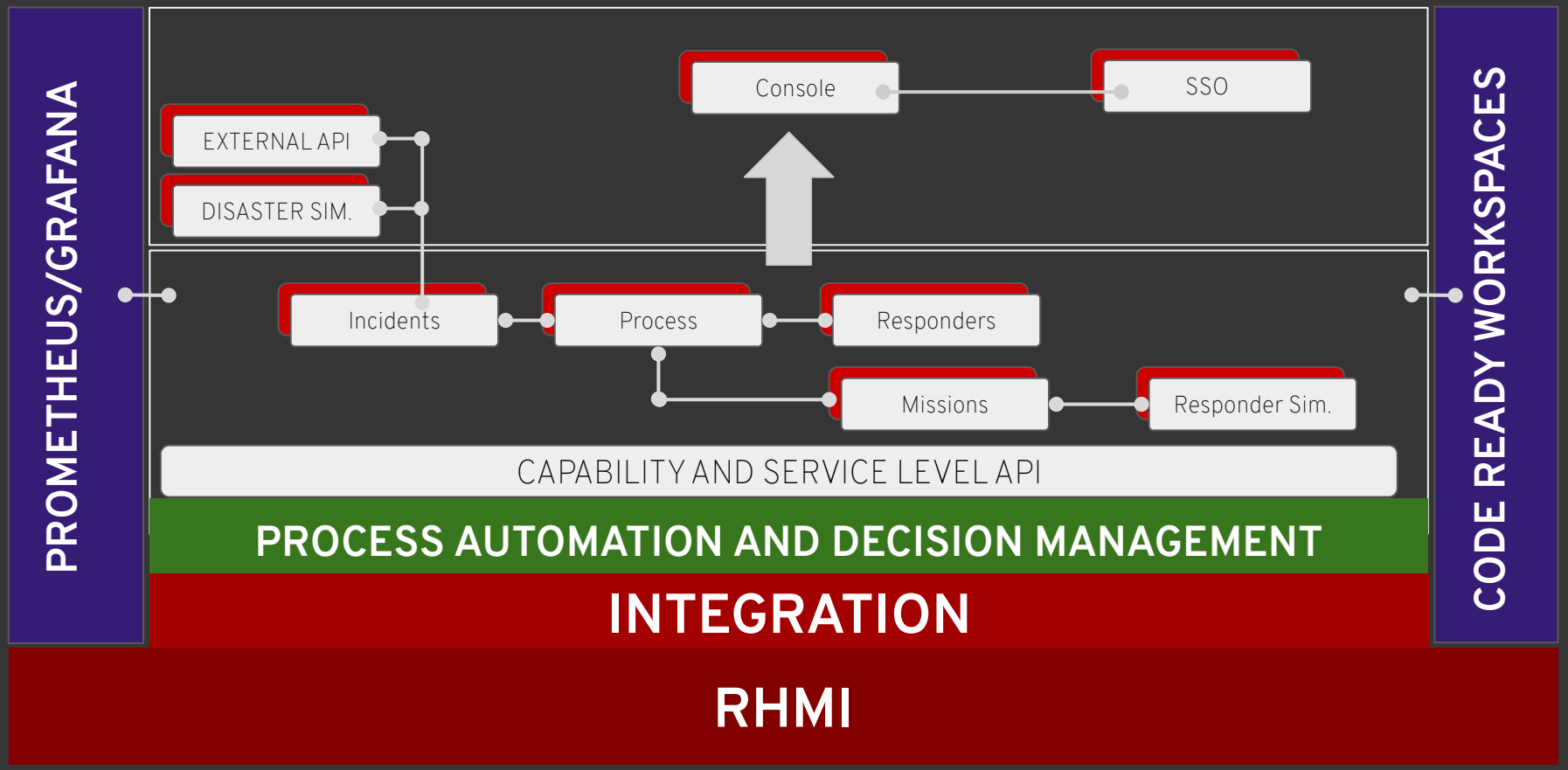
Red Hat

Defining capabilities



Red Hat

Flow of Events



Red Hat

Requirements for a new application

CONTAINER CAPABILITIES

Red Hat OpenShift

kiali

TEKTON

OPERATOR
LIFECYCLE MANAGER

deploy pod svc crd

Red Hat

Requirements for a new application

Red Hat Runtimes

VERT.X
THORNTAIL
MICROPROFILE
node
Java EE
ReactiveX

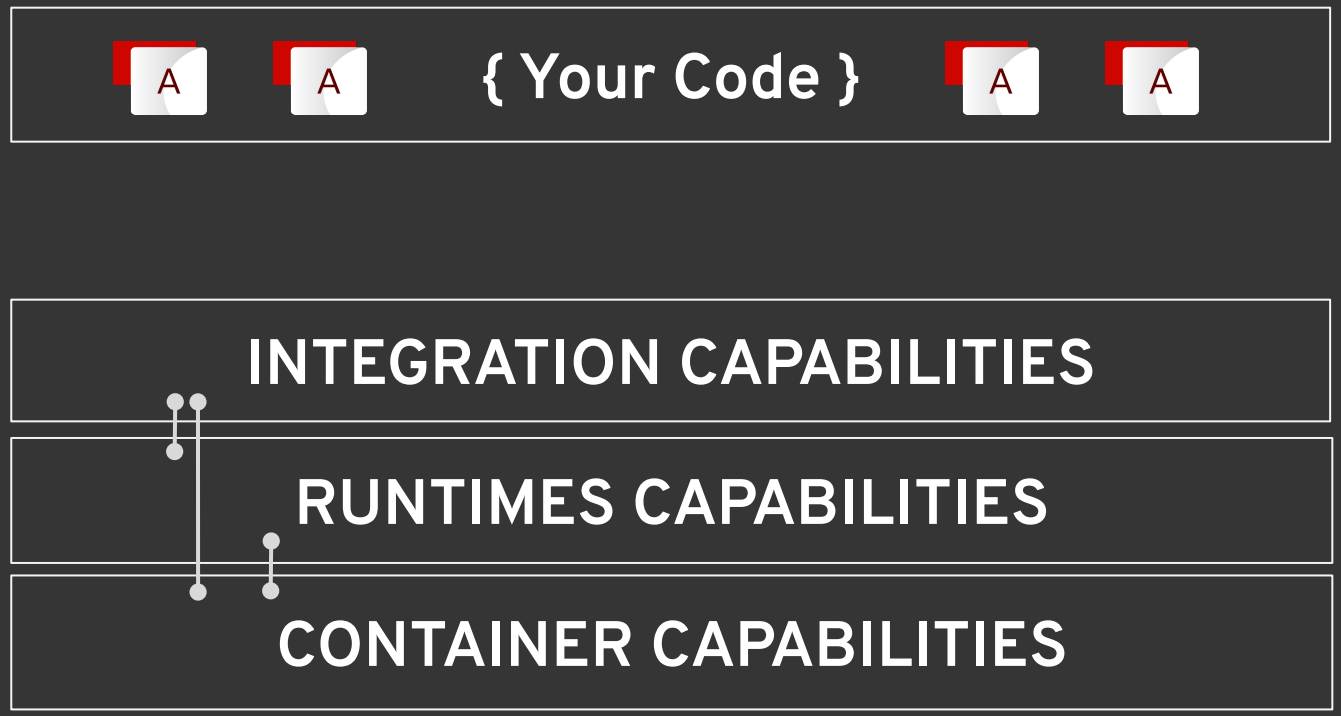
Red Hat Data Grid

Red Hat JBoss Web Server

Red Hat JBoss Enterprise Application Platform

Red Hat

Requirements for a new application



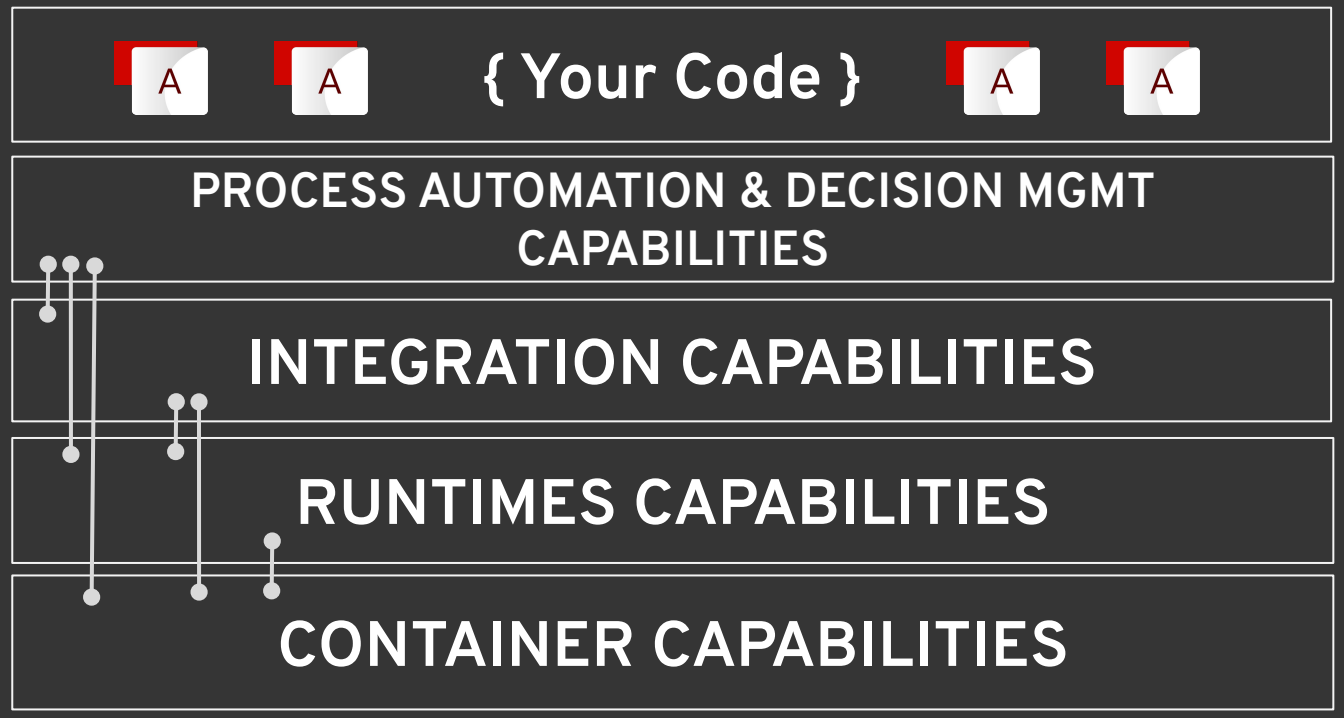
Red Hat Fuse

Red Hat AMQ

Red Hat 3scale API Management

Red Hat

Requirements for a new application

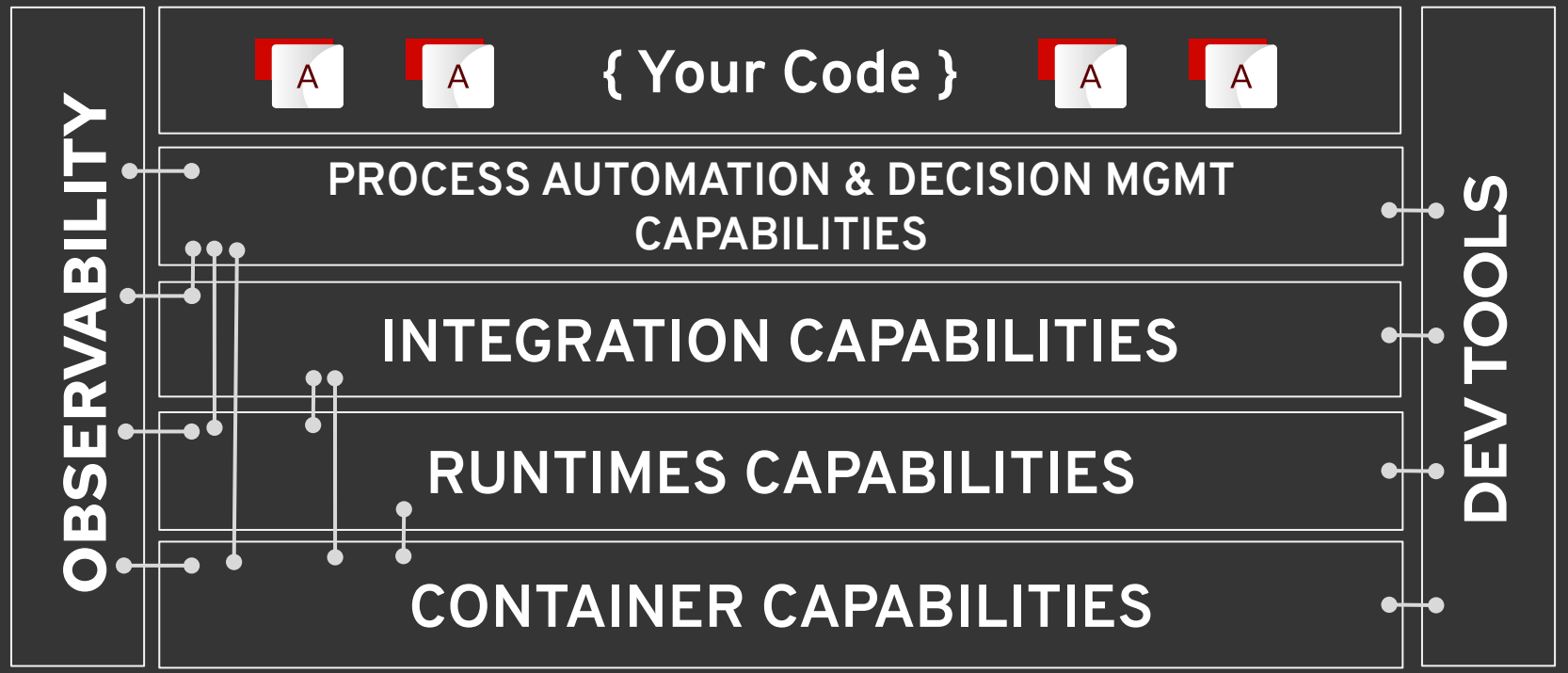


Red Hat Decision Manager

Red Hat Process Automation

Red Hat

Requirements for a new application



RED HAT® CODEREADY

RED HAT® DEVELOPER

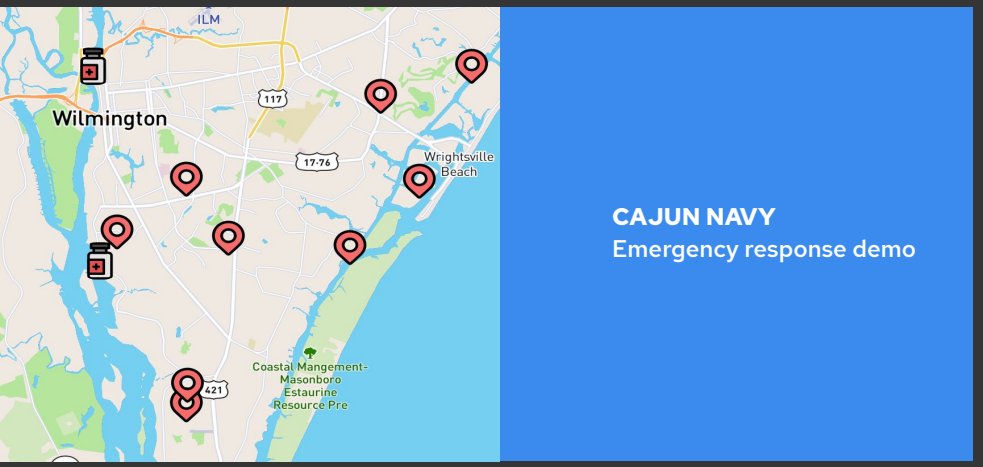
OPERATOR LIFECYCLE MANAGER

elasticsearch kibana

Prometheus Grafana

Red Hat

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

Red Hat

Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.

linkedin.com/company/red-hat

youtube.com/user/RedHatVideos

facebook.com/redhatinc

twitter.com/RedHat

Red Hat

CONFIDENTIAL designator

Red Hat Day Events

January 30, Vancouver

OpenShift
The Platform for Big Ideas

Red Hat