



# Apps + Data + Cloud: What Does It All Mean?

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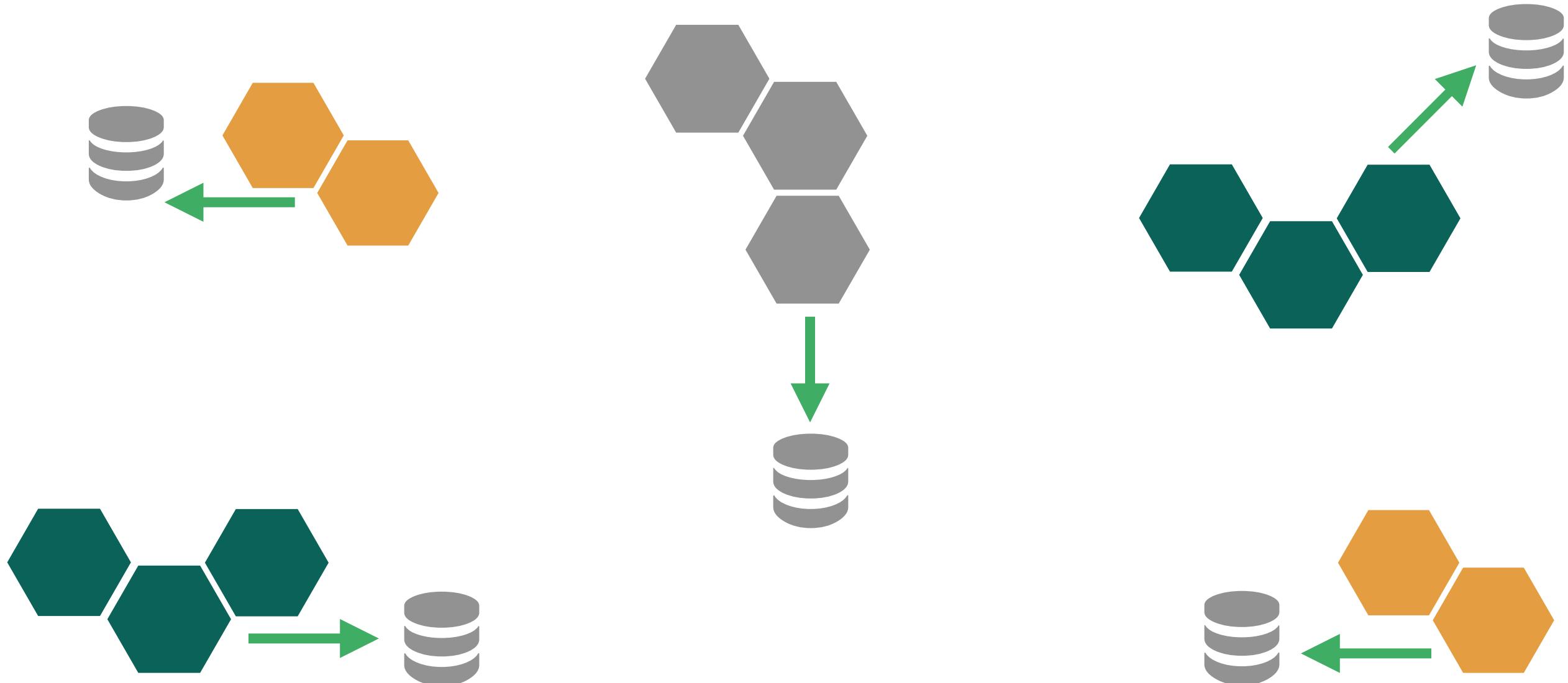
This could be  
“Microservices Part Two”

# WHY?

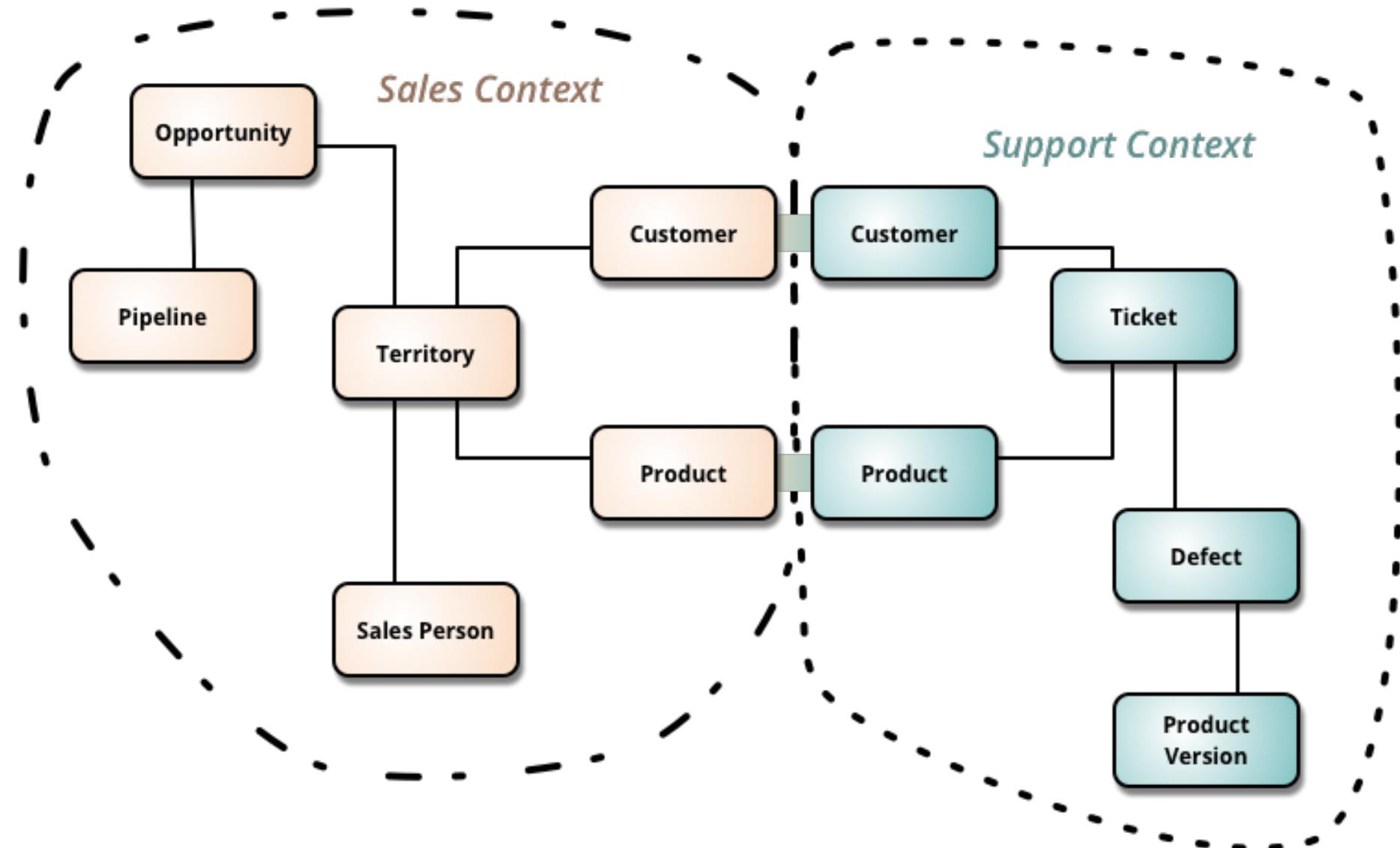
# This won't work...



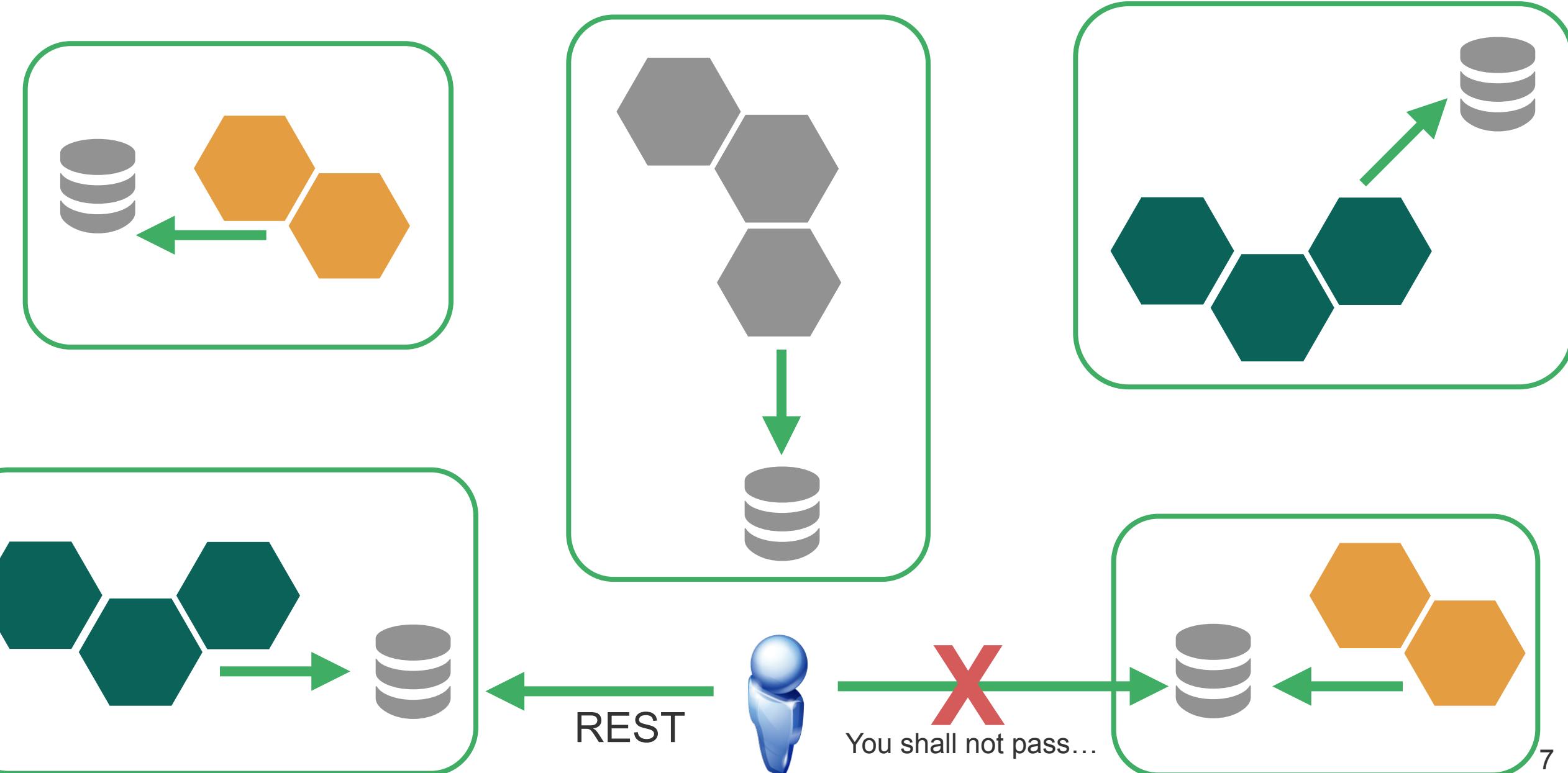
# Instead!



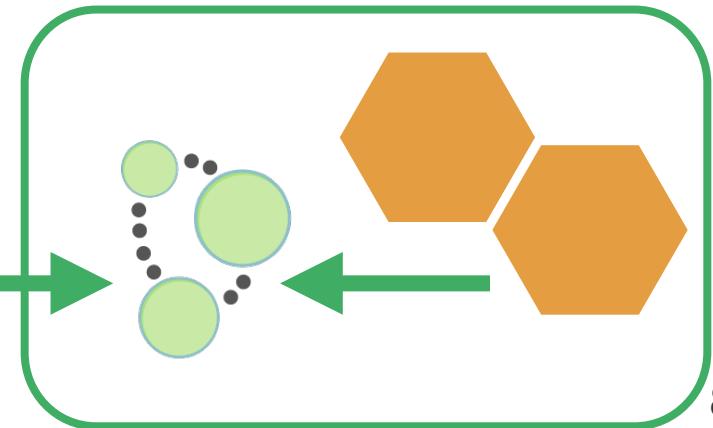
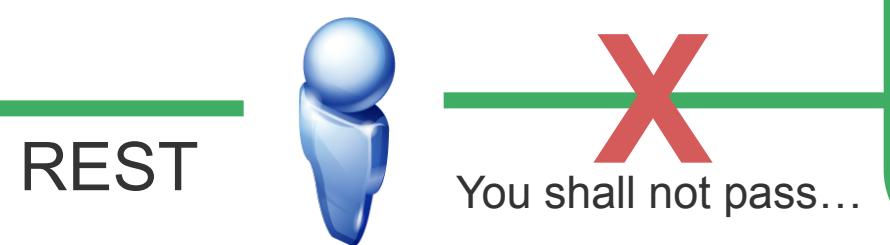
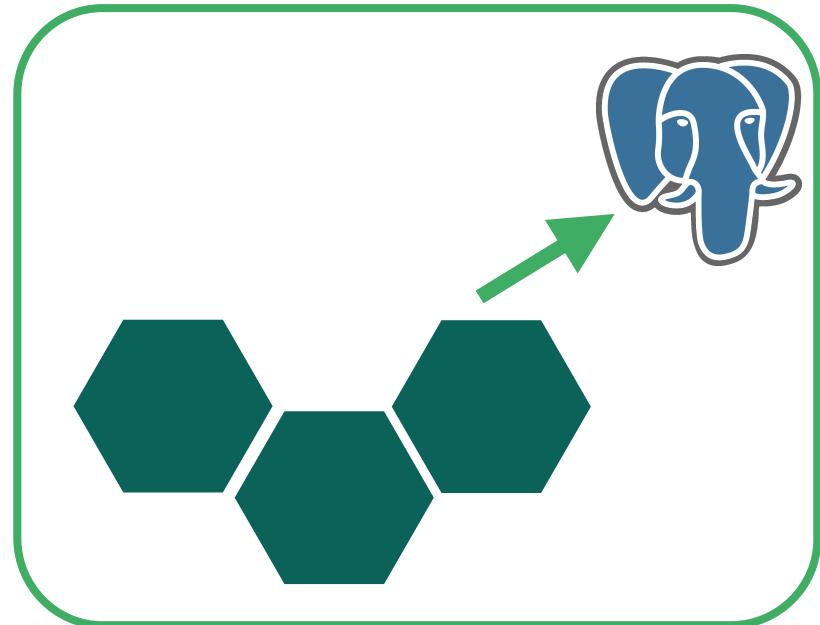
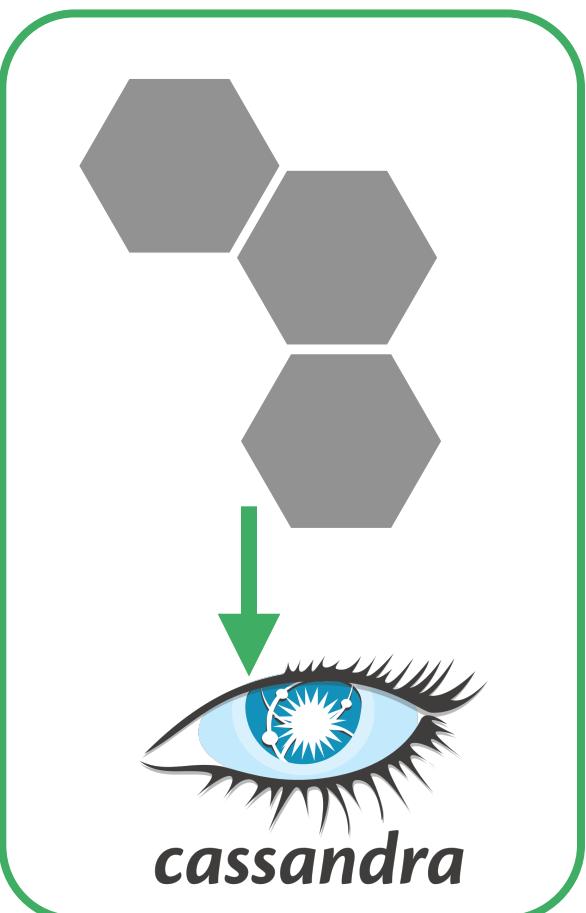
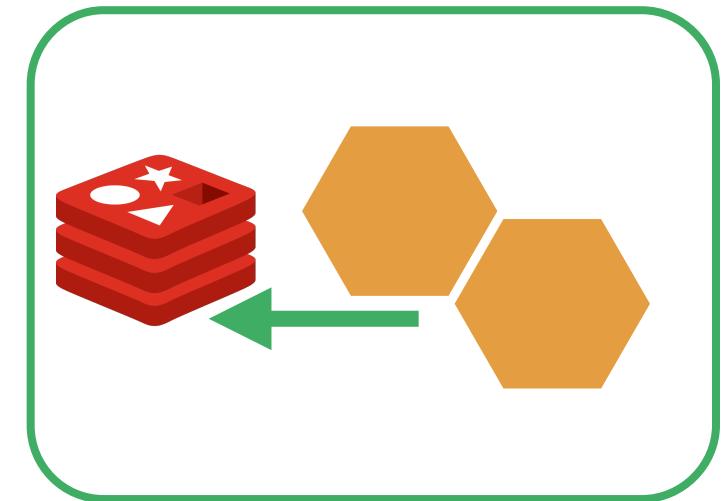
# Bounded Contexts!



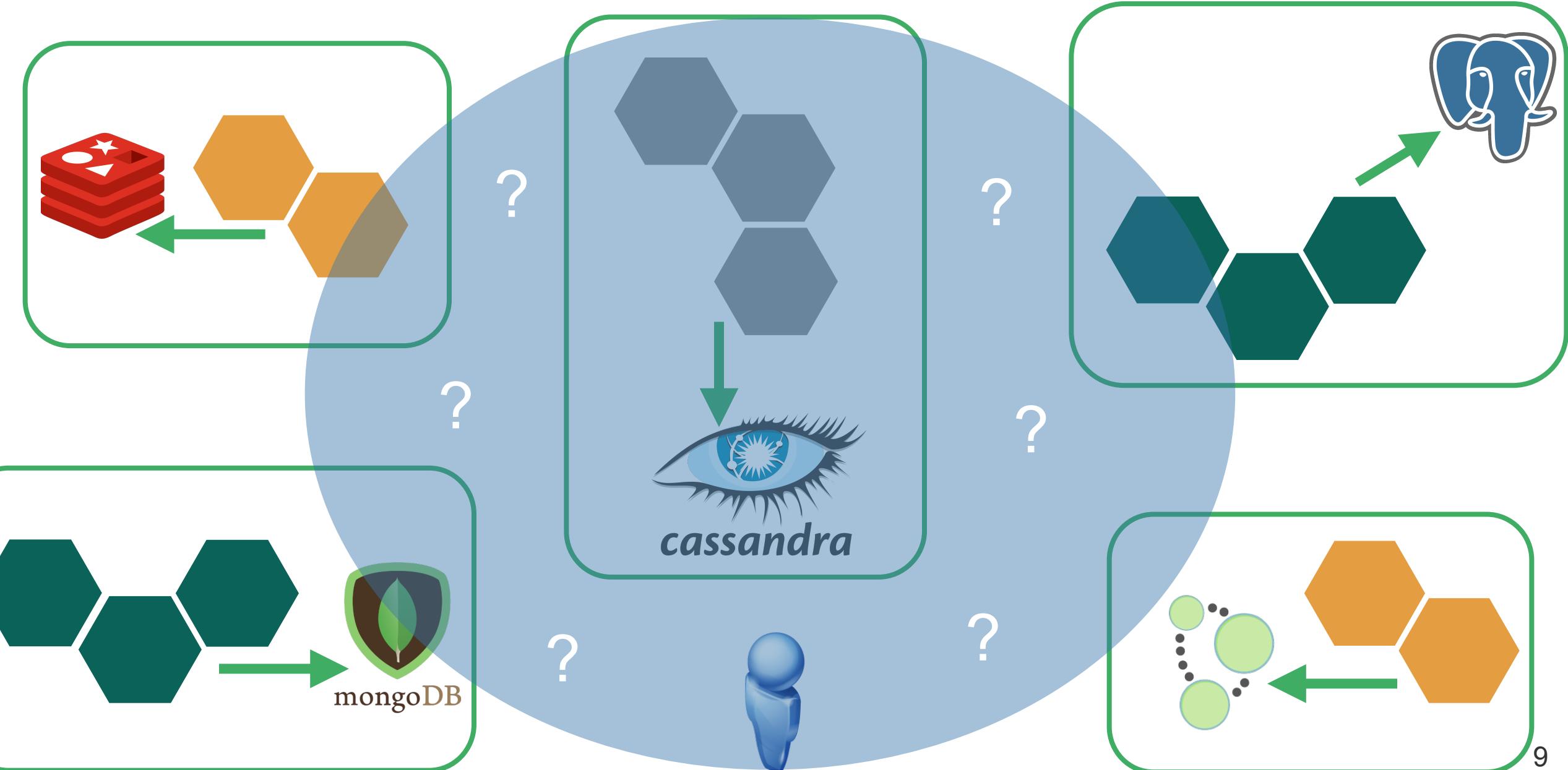
# Bounded Contexts



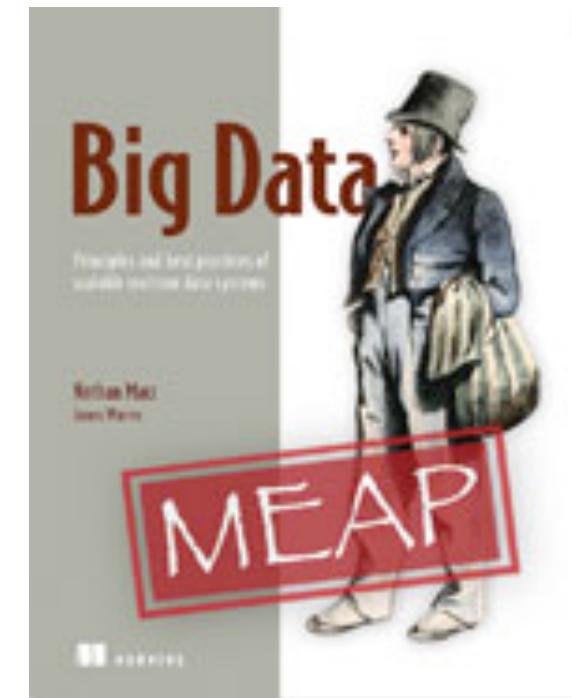
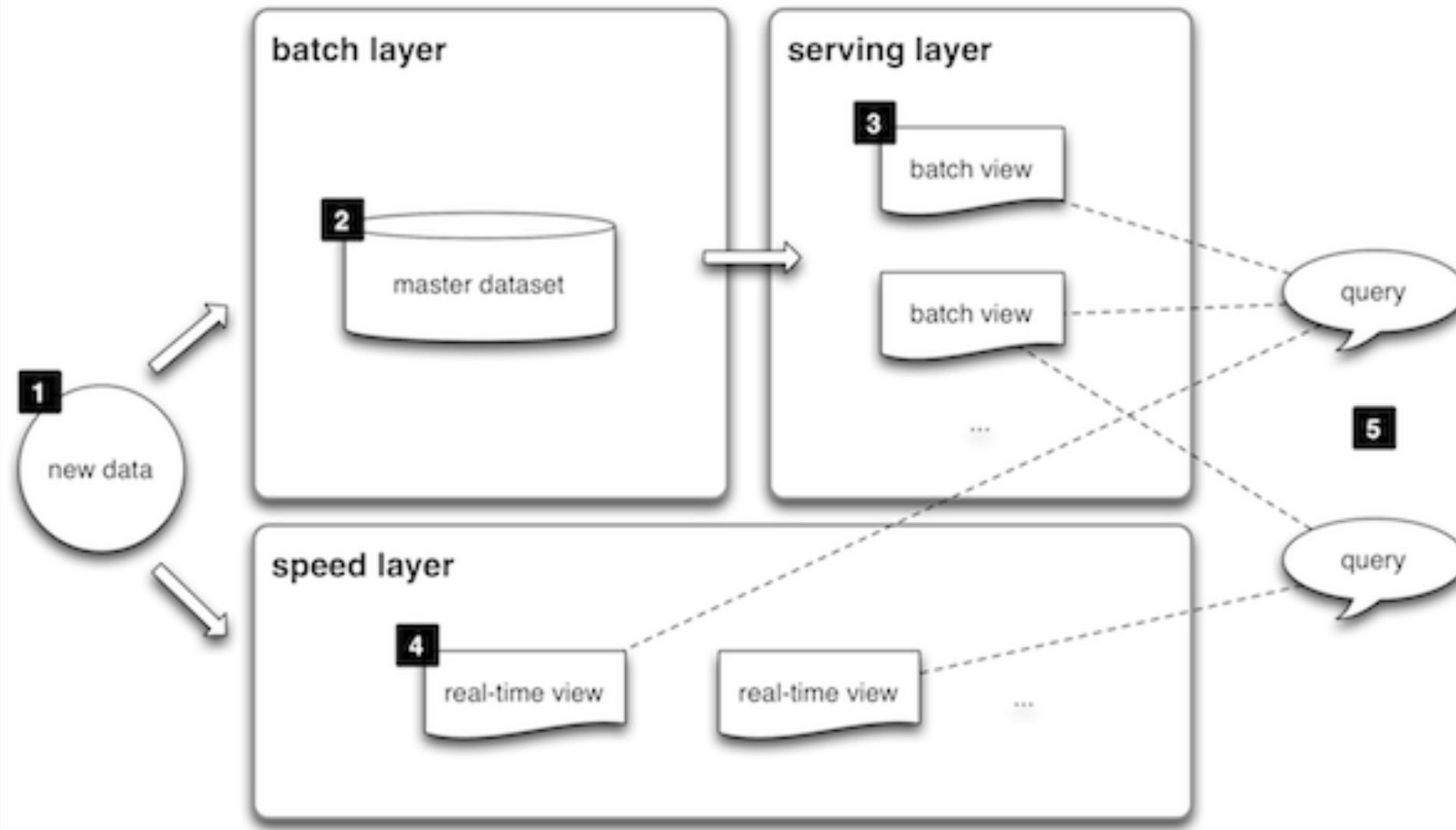
# Polyglot Persistence!



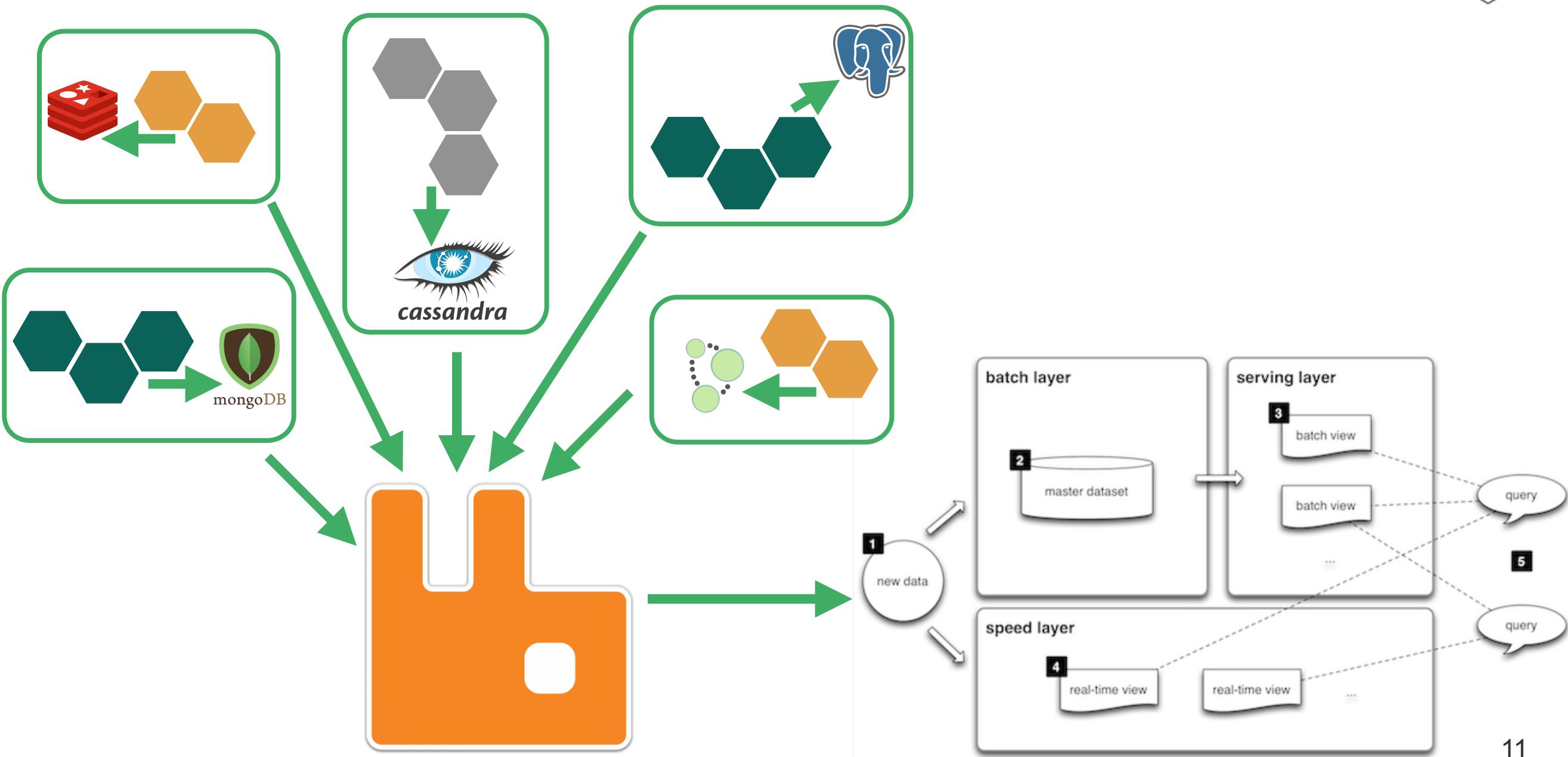
# But I have a question!



# Lambda Architecture



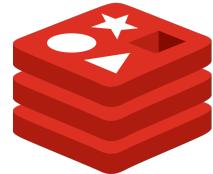
# Join via Events!







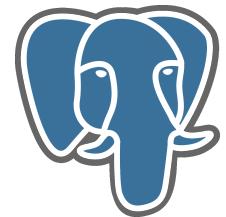
# It's gonna take a platform...



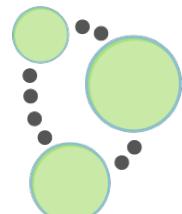
# CLOUD FOUNDRY™



mongoDB



cassandra



<http://run.pivot.io>

The screenshot shows the Pivotal Web Services homepage. At the top, there's a navigation bar with links for FEATURES, PRICING, MARKETPLACE, SUPPORT, DOCS, and LOG IN. The main headline reads "The Agile Platform for the Agile Team" followed by "Powered by Cloud Foundry". A prominent teal button says "SIGN UP FOR FREE". Below it, a message states "60 day free trial. No credit card required". A tablet inset displays the "Example Org" dashboard, showing metrics for 4 Spaces, 6 Domains, and 26 Members. It highlights three spaces: development (12 apps, 8 services), dev-hr (6 apps, 14 services), and staging (2 apps, 2 services). The sidebar lists "development", "dev-hr", "staging", "testing", "Docs", "Support", "Tools", "Blog", and "Status".

# Gimme some data services...

P Pivotal Web Services

platform-eng > Marketplace

## Services Marketplace

Get started with our free marketplace services. Upgrade to gain access to premium service plans.

 <b>Searchify</b> Custom search you control	 <b>BlazeMeter</b> The JMeter Load Testing Cloud
 <b>Redis Cloud</b> Enterprise-Class Redis for Developers	 <b>ClearDB MySQL Database</b> Highly available MySQL for your Apps.
 <b>CloudAMQP</b> Managed HA RabbitMQ servers in the cloud	 <b>ElephantSQL</b> PostgreSQL as a Service
 <b>SendGrid</b> Email Delivery. Simplified.	 <b>MongoLab</b> Fully-managed MongoDB-as-a-Service

ORG

platform-eng

SPACES

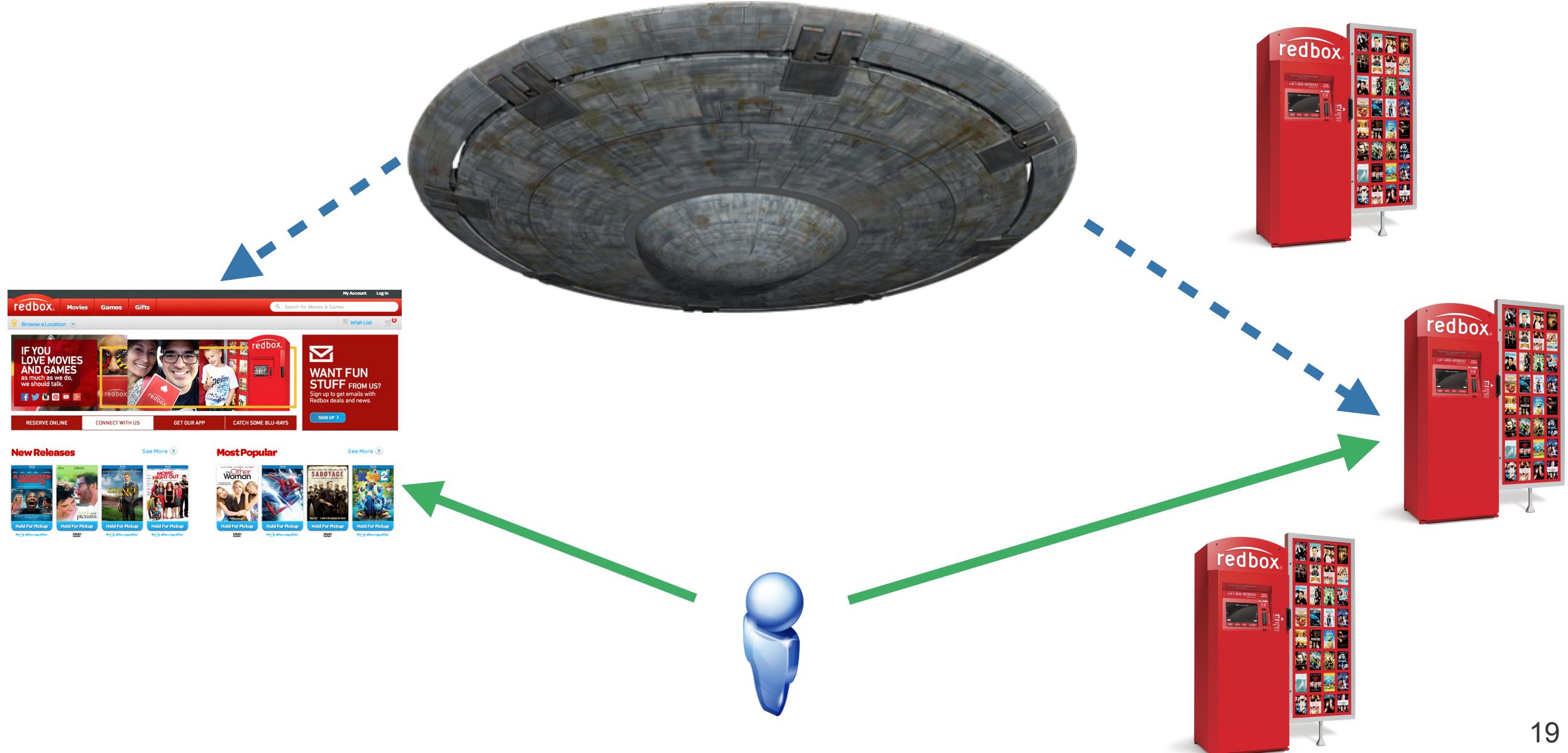
- development
- epicscale
- frodenas
- mstine
- mstine-springone
- myspace
- production
- sabha
- sfrederick
- staging

Marketplace

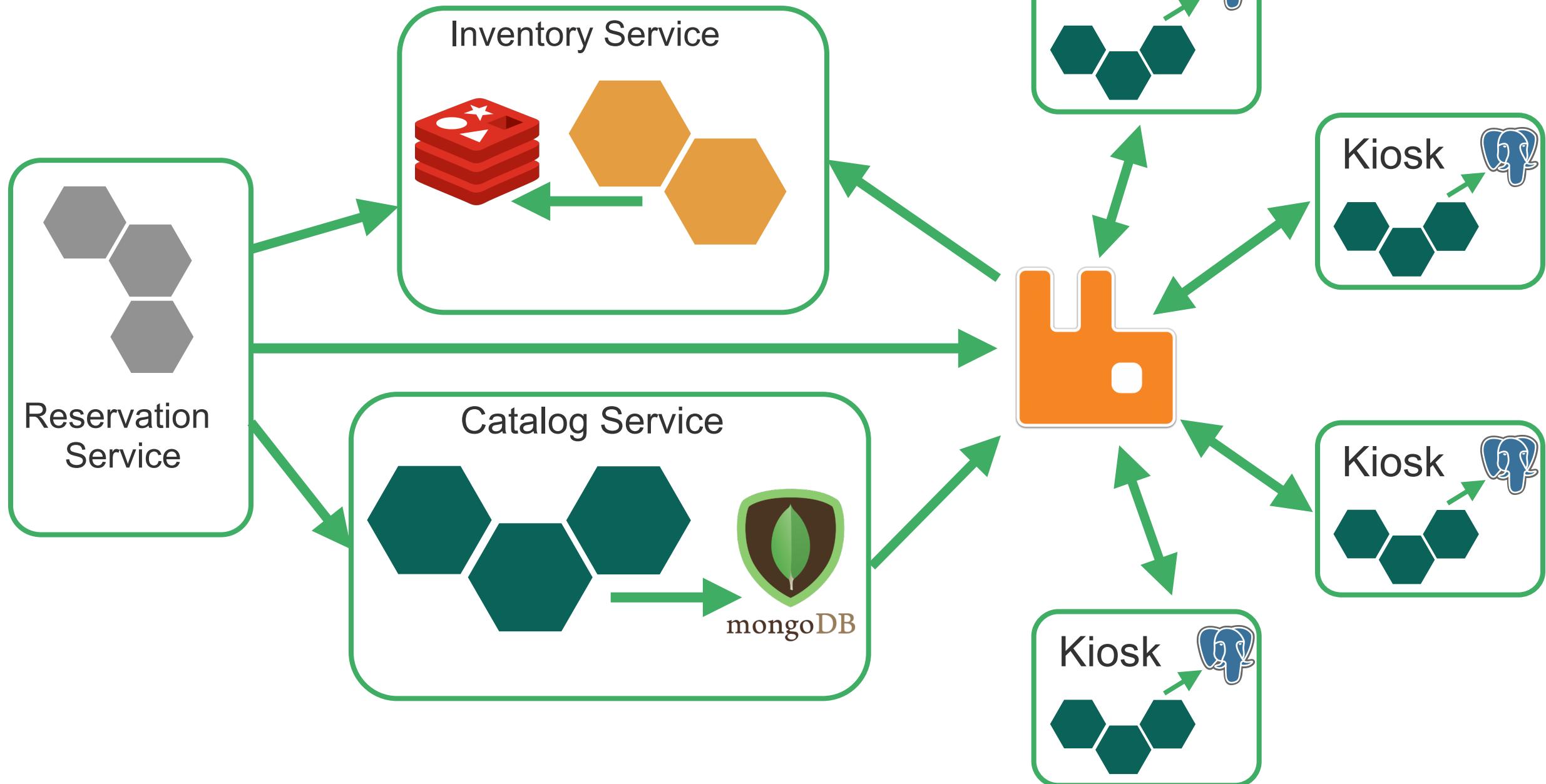
# So let's build something...



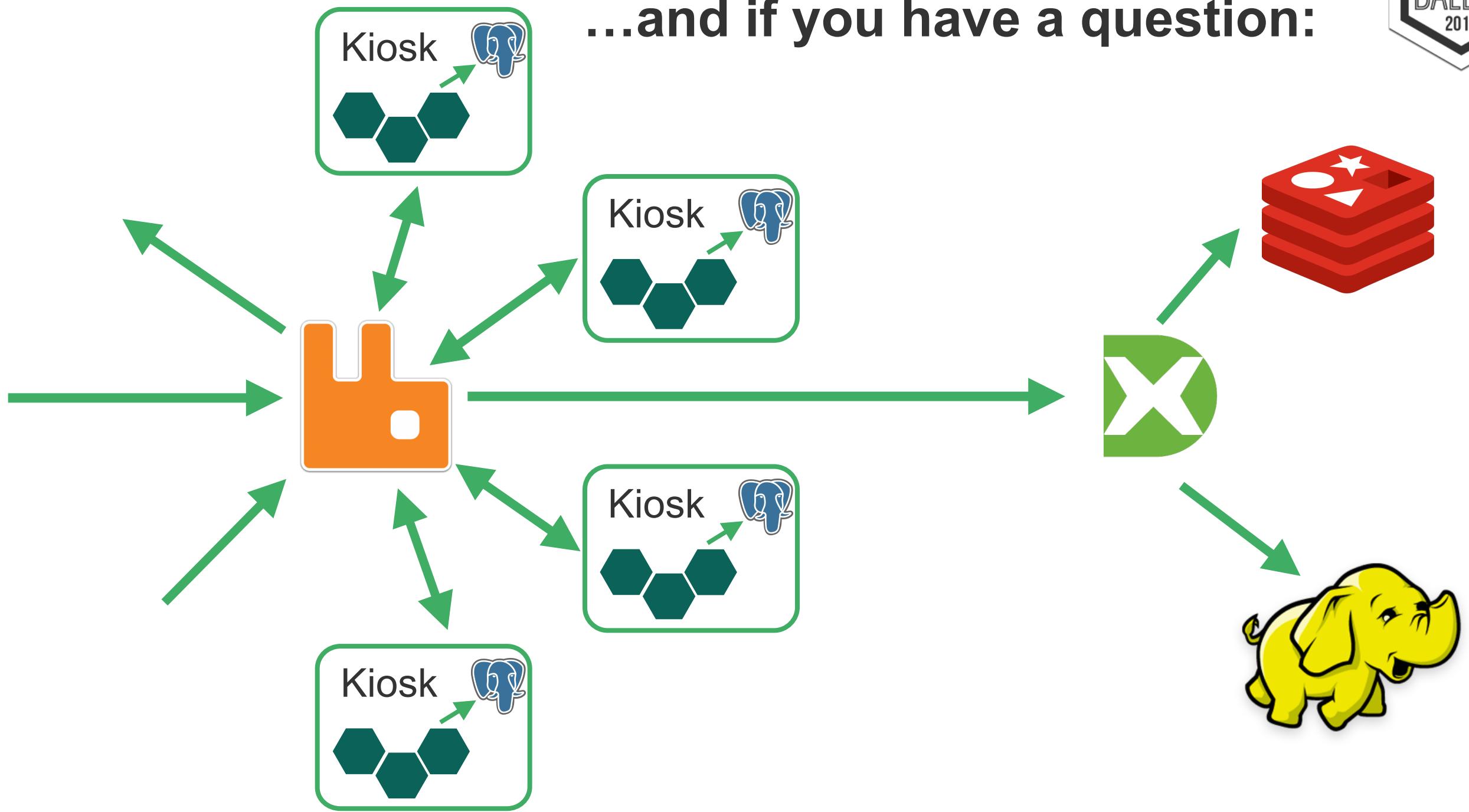
# Redbox Conceptual Workflow



# SpringBox Microservices



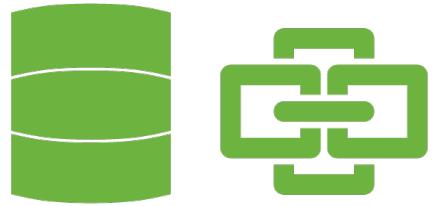
...and if you have a question:



# KEY PLAYERS



Spring Boot — Foundation of All Microservices Development



Spring Data + Spring Data REST — Facilitate Polyglot Persistence



Spring AMQP + Spring Integration — Facilitate Event Handling



Spring XD — Facilitate Lambda Architecture

Pivotal Web Services

platform-eng > mstine-springone

ORG

platform-eng

SPACES

development

epicscale

frodenas

mstine

**mstine-springone**

myspace

production

sabha

sfrederick

staging

Marketplace

SPACE

## mstine-springone

APPLICATIONS [Learn More](#)

STATUS	APP	INSTANCES	MEMORY
100%	springbox-catalog <a href="#">springbox-catalog.cfap...</a>	1	512MB <a href="#">&gt;</a>
100%	springbox-inventory <a href="#">springbox-inventory.cfap...</a>	1	512MB <a href="#">&gt;</a>
100%	springbox-kiosk-1 <a href="#">springbox-kiosk-1.cfap...</a>	1	512MB <a href="#">&gt;</a>
100%	springbox-kiosk-2 <a href="#">springbox-kiosk-2.cfap...</a>	1	512MB <a href="#">&gt;</a>
100%	springbox-kiosk-3 <a href="#">springbox-kiosk-3.cfap...</a>	1	512MB <a href="#">&gt;</a>
100%	springbox-kiosk-4 <a href="#">springbox-kiosk-4.cfap...</a>	1	512MB <a href="#">&gt;</a>
100%	springbox-kiosk-5 <a href="#">springbox-kiosk-5.cfap...</a>	1	512MB <a href="#">&gt;</a>



	SERVICE INSTANCE	SERVICE PLAN	BOUND APPS
Tools			
Blog	spring-xd-rabbit <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	CloudAMQP Big Bunny	6
Status	spring-xd-redis <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	Redis Cloud 25MB	0
	spring-xd-postgres <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	ElephantSQL Tiny Turtle	0
	inventory-redis <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	Redis Cloud 25MB	1
	catalog-mongo <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	MongoLab Sandbox	1
	kiosk-1 <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	ElephantSQL Tiny Turtle	1
	kiosk-2 <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	ElephantSQL Tiny Turtle	1
	kiosk-3 <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	ElephantSQL Tiny Turtle	1
	kiosk-4 <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	ElephantSQL Tiny Turtle	1
	kiosk-5 <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	ElephantSQL Tiny Turtle	1
	spring-xd-redis-upgrade <a href="#">Manage</a>   <a href="#">Documentation</a>   <a href="#">Support</a>   <a href="#">Delete</a>	Redis Cloud 100MB	0

# <http://grouplens.org/datasets/movielens/>

grouplens

about    **datasets**    publications    blog

## MovieLens

GroupLens Research has collected and made available rating data sets from the MovieLens web site (<http://movielens.org>). The data sets were collected over various periods of time, depending on the size of the set. Before using these data sets, please review their README files for the usage licenses and other details.

### MovieLens 100k

100,000 ratings from 1000 users on 1700 movies.

- [README.txt](#)
- [ml-100k.zip](#)
- [Index of unzipped files](#)

### MovieLens 1M

1 million ratings from 6000 users on 4000 movies.

- [README.txt](#)
- [ml-1m.zip](#)

## Datasets

[MovieLens](#)

[HetRec 2011](#)

[WikiLens](#)

[Book-Crossing](#)

[Jester](#)

[EachMovie](#)

# Let's Look at Some Code!



<https://github.com/cf-platform-eng/springbox-datacloud>

This repository Search Explore Gist Blog Help mstine + ⌂ ⚙ ⌂

cf-platform-eng / **springbox-datacloud** Unwatch 9 Star 0 Fork 0

SpringOne Demos WIP — Edit

11 commits 1 branch 0 releases 1 contributor

branch: master + springbox-datacloud / +

final draft before session

mstine authored 20 seconds ago latest commit 1a4a346b18

File	Message	Time
scripts	reconcile data models	12 hours ago
springbox-catalog/src/main/java/...	add spring cloud, spring io platform, cf deployment for catalog	10 hours ago
springbox-inventory/src/main	final draft before session	19 seconds ago
springbox-kiosk/src	final draft before session	19 seconds ago
springbox-xd/streams	initial commit	15 hours ago
.gitignore	initial commit	15 hours ago
build.gradle	final draft before session	20 seconds ago
manifest.yml	final draft before session	20 seconds ago
settings.gradle	initial commit	15 hours ago

Code Issues Pull Requests Wiki Pulse Graphs Settings

HTTPS clone URL <https://github.com/cf-platform-eng/springbox-datacloud>

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# Thank You!



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<http://mattstine.com>



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