

Pivotal

A NEW PLATFORM FOR A NEW ERA

From Microservices to Data Microservices

Breaking the data monolith

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About Me



Fred Melo



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About Me



Fred Melo



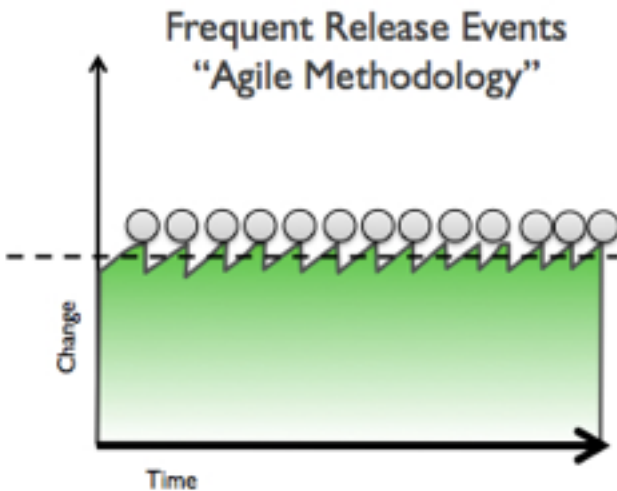
Mountain View, CA



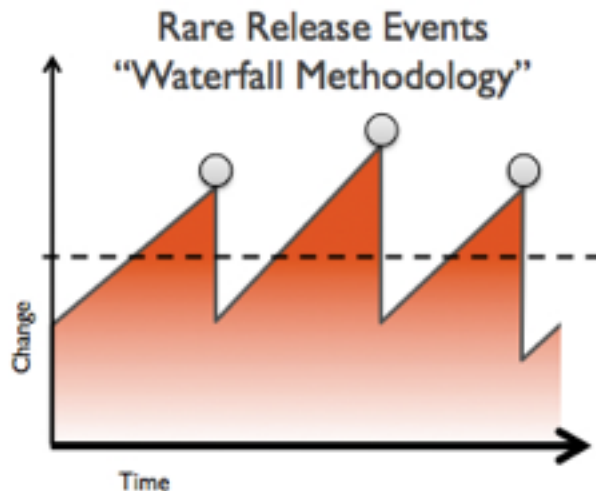
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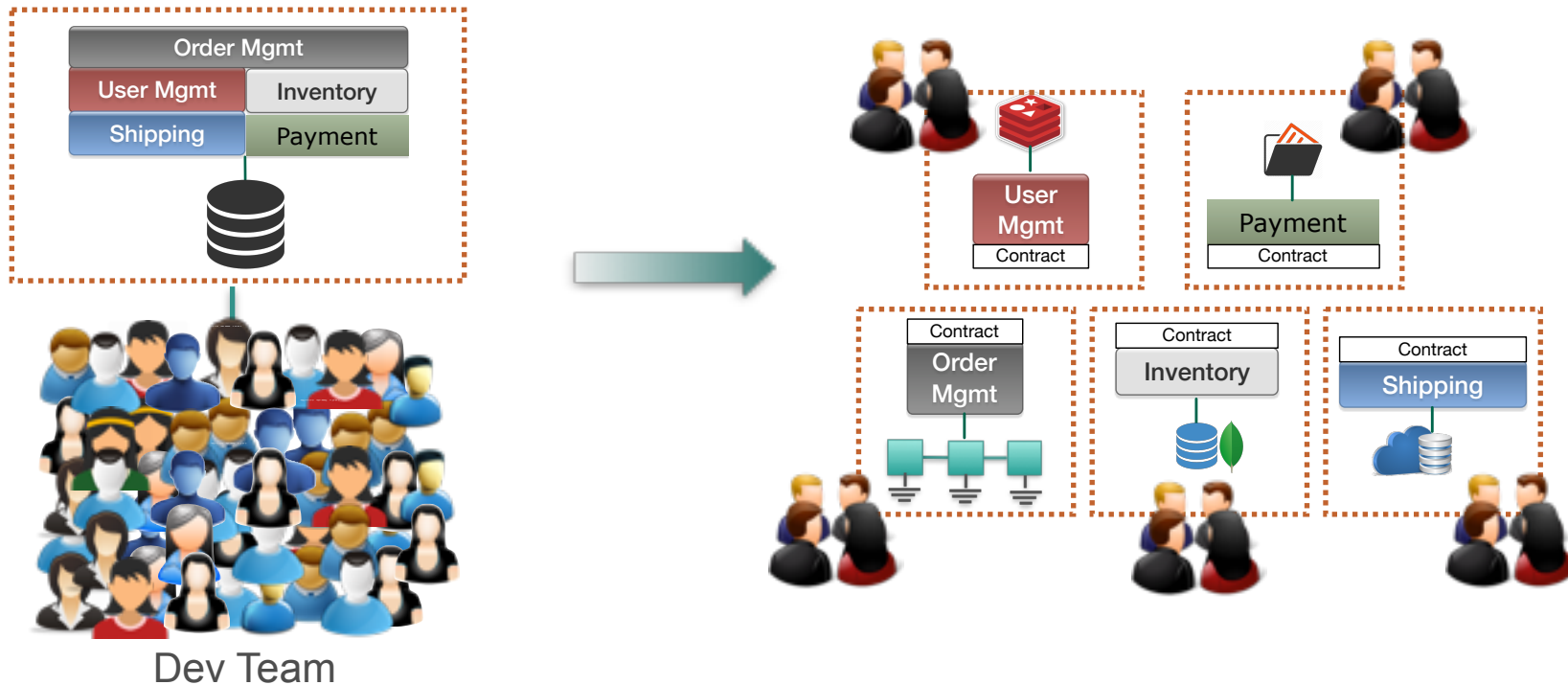
Smoother Effort
Less Risk



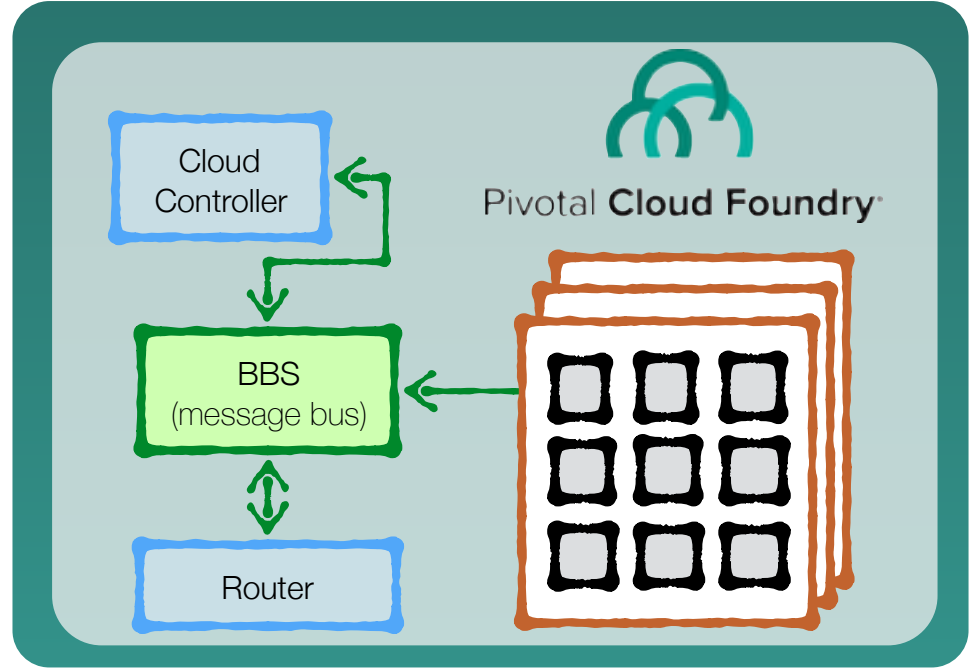
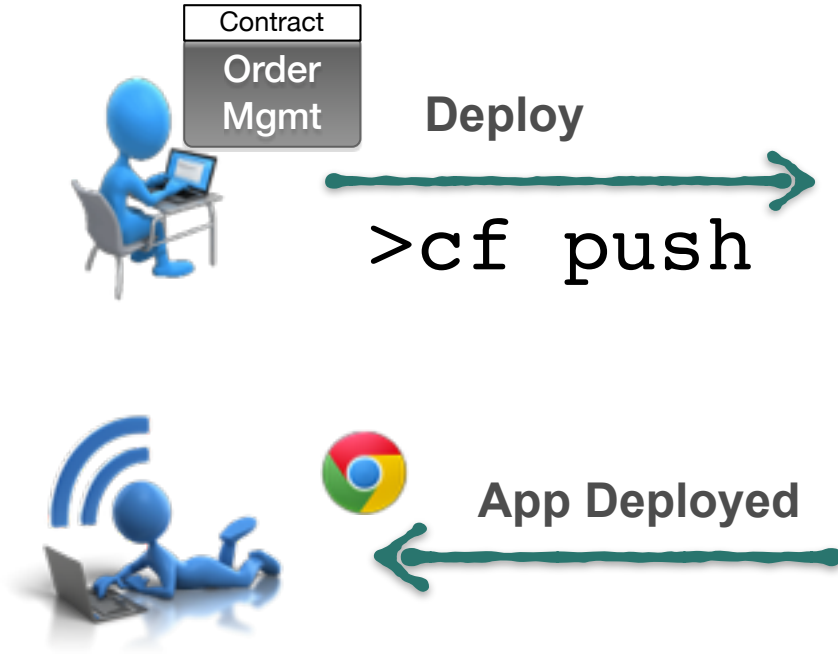
Effort Peaks
High Risk

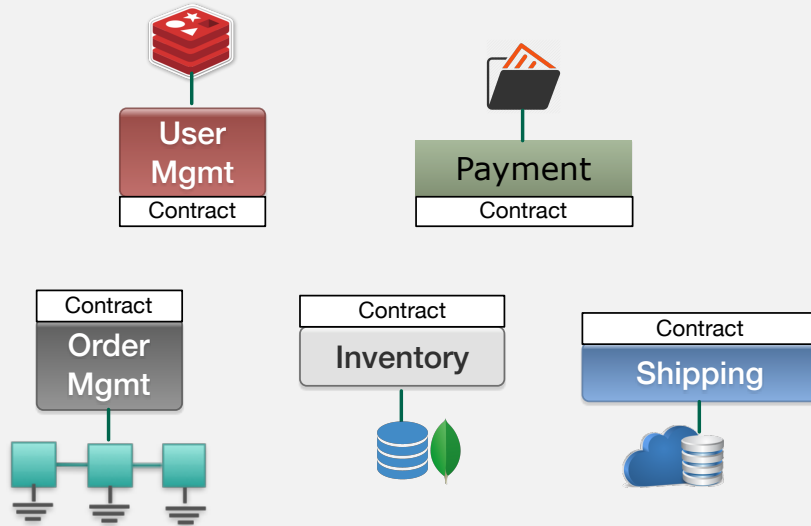
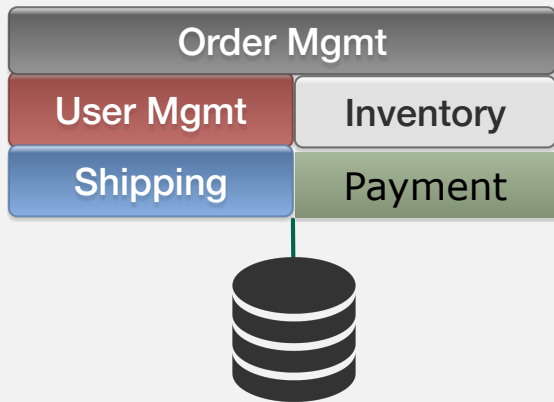
Going Agile - Breaking the monolith

Conway's Law and Microservices



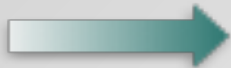
Automating through the Platform





One Size Fits All

"RDBMs is the king"



Polyglot Persistence

"The right tool for each job"

One Size Fits All

RDBMs only

Disk-based HA

Scale-up only

Specific hardware



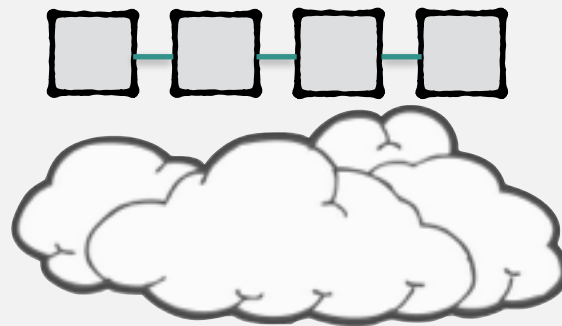
Polyglot Persistence

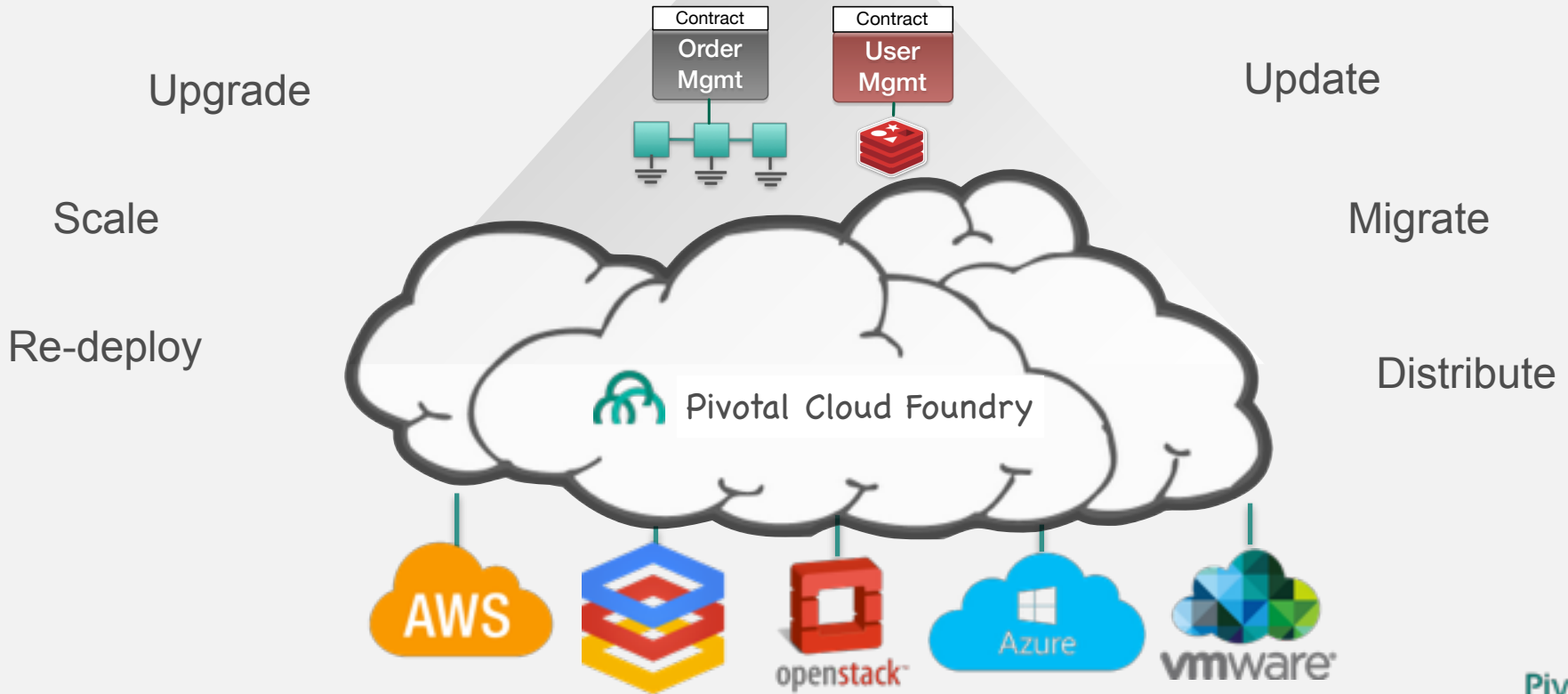
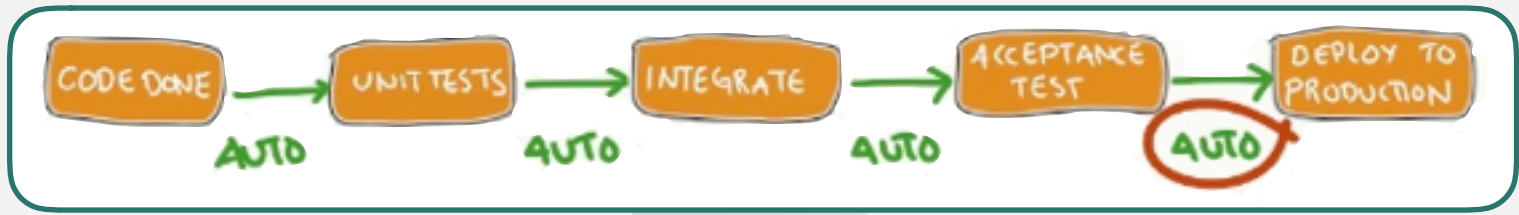
IMDGs, K-V Stores, Document stores, ...

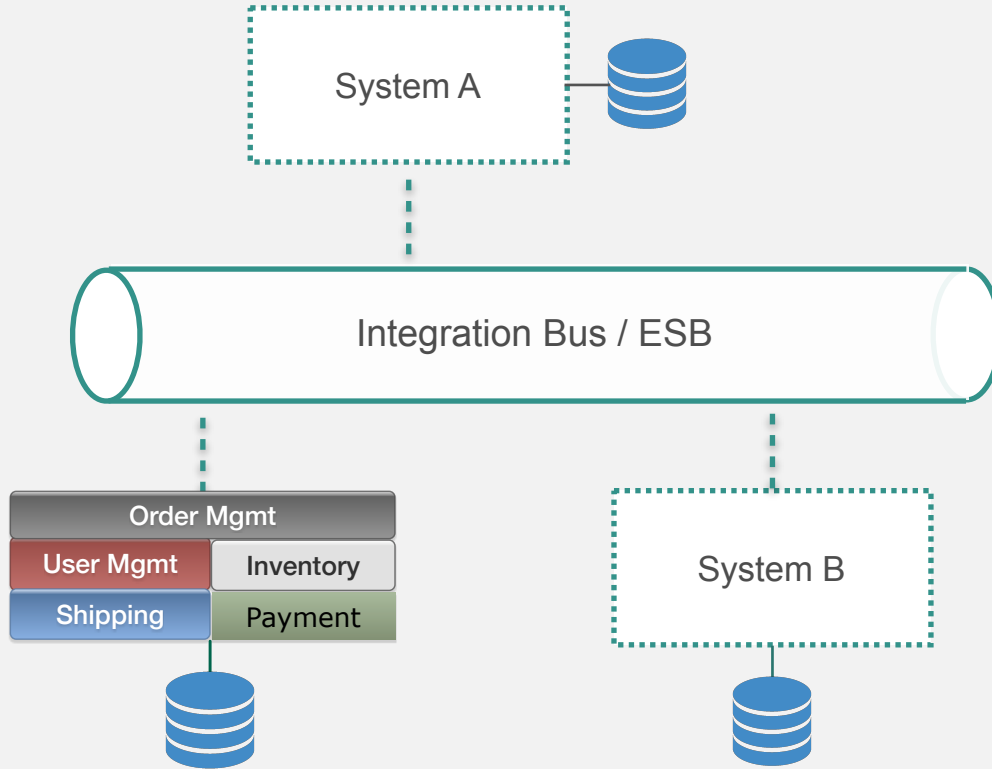
Grid-based HA

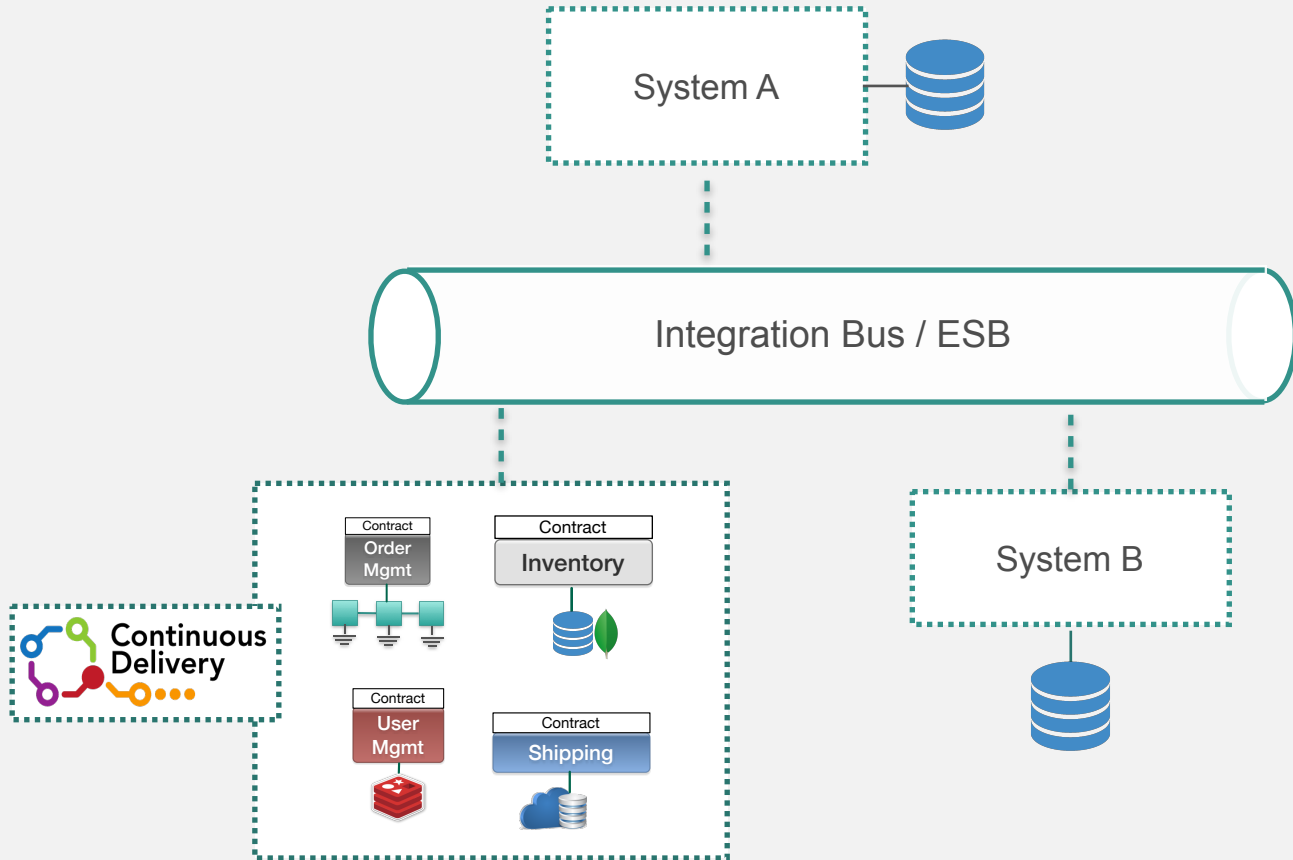
Scale-out

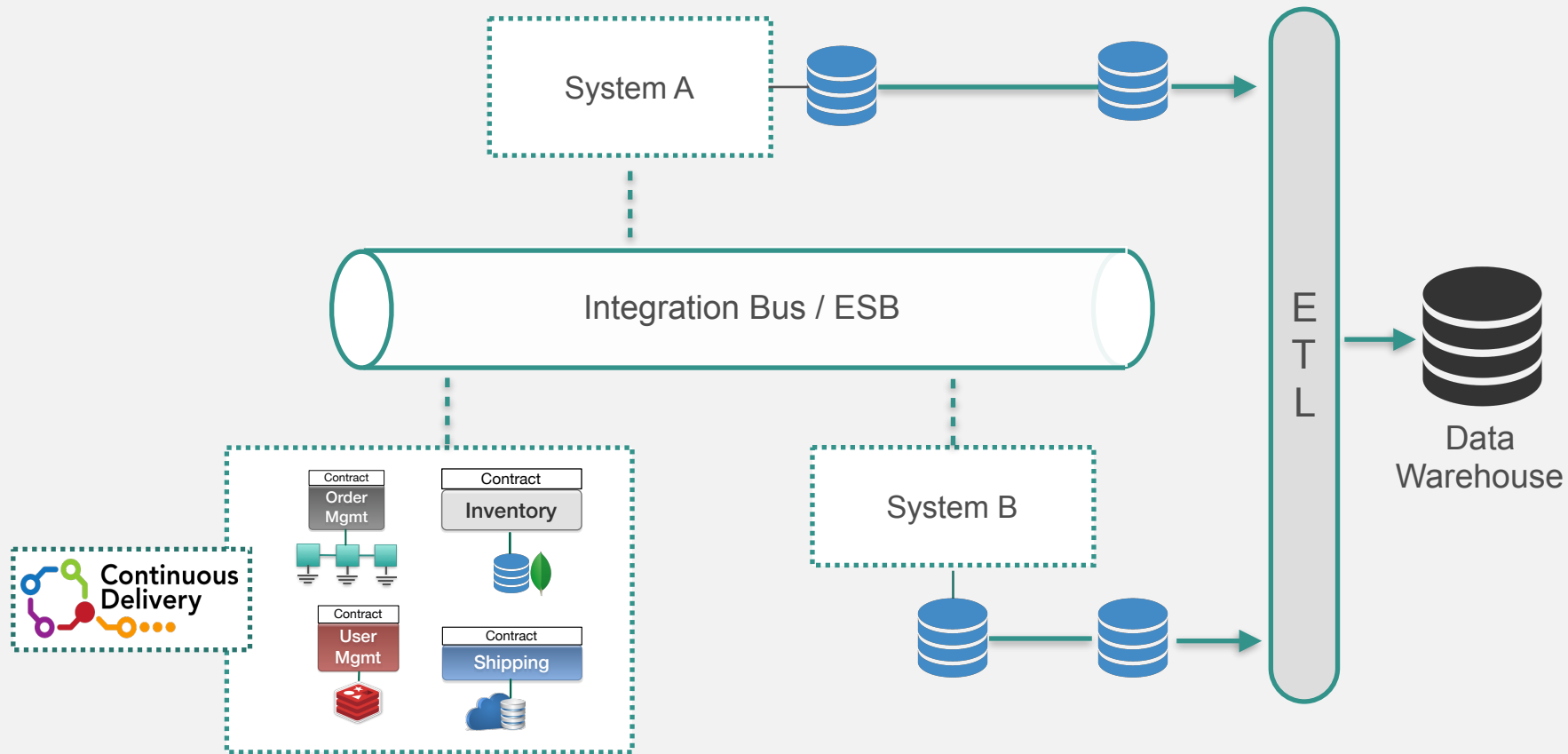
Containerized

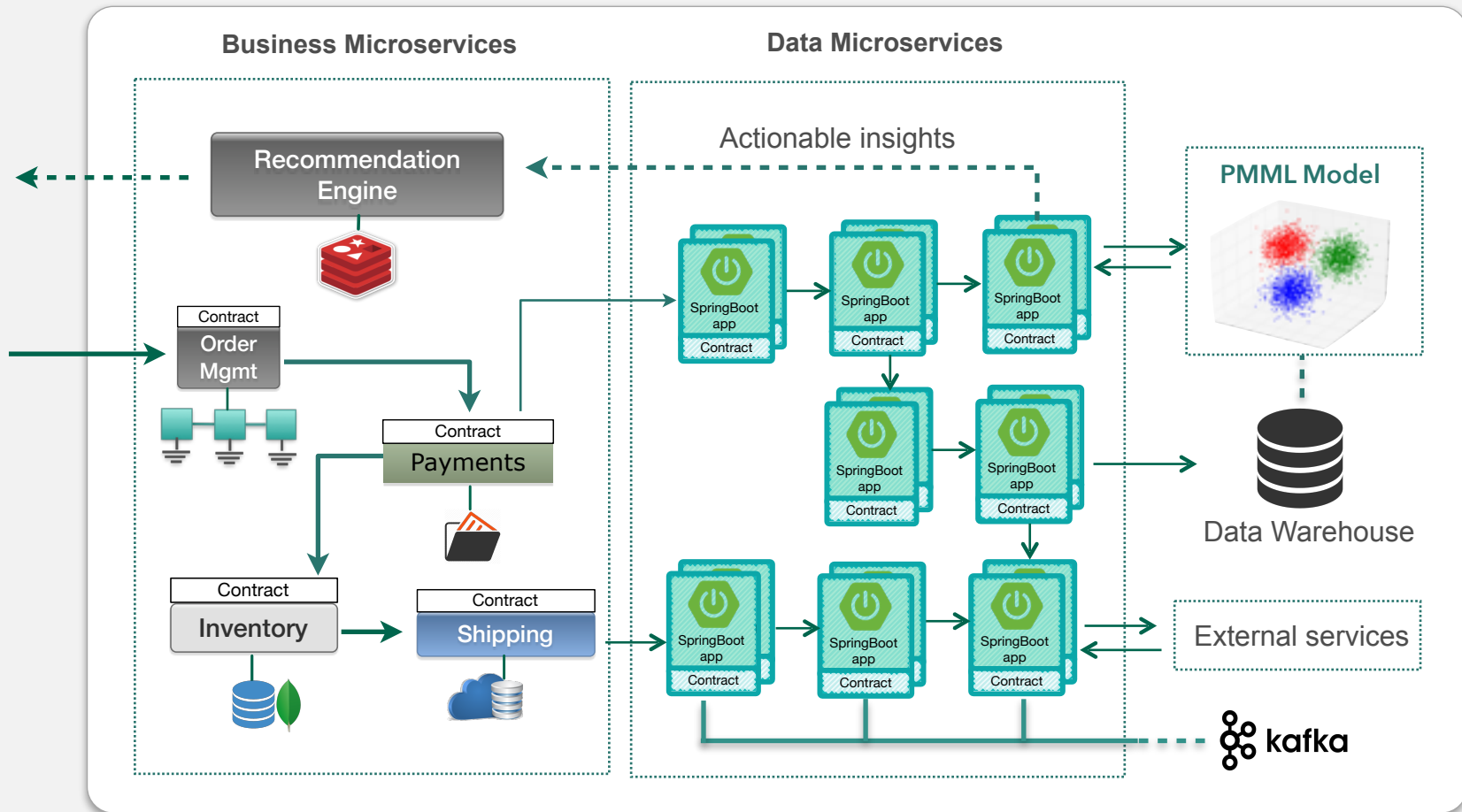


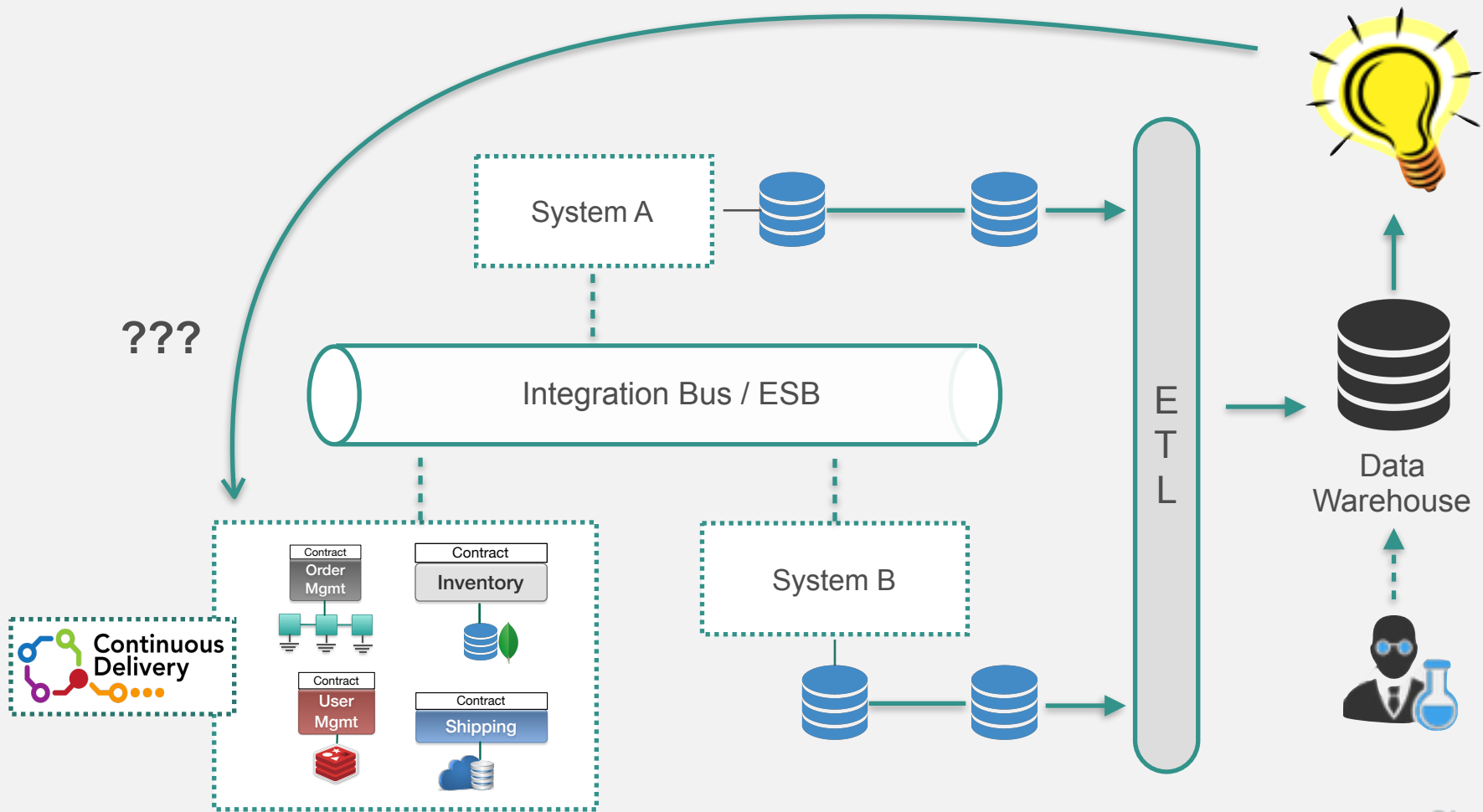




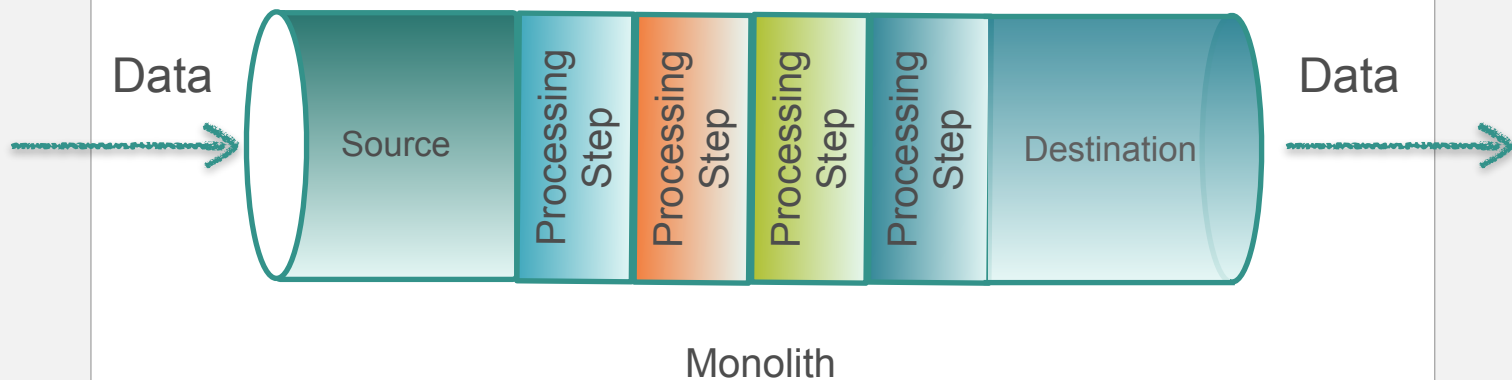








Anatomy of a typical Data Pipeline





Upgrade

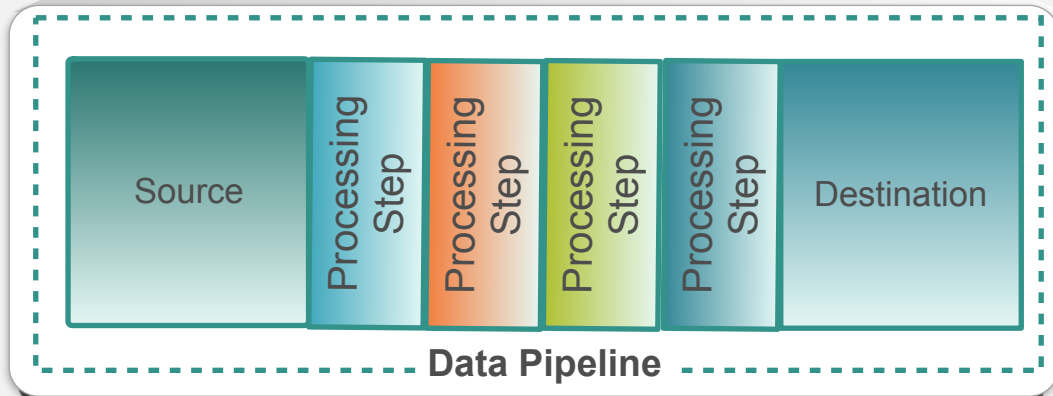
Scale

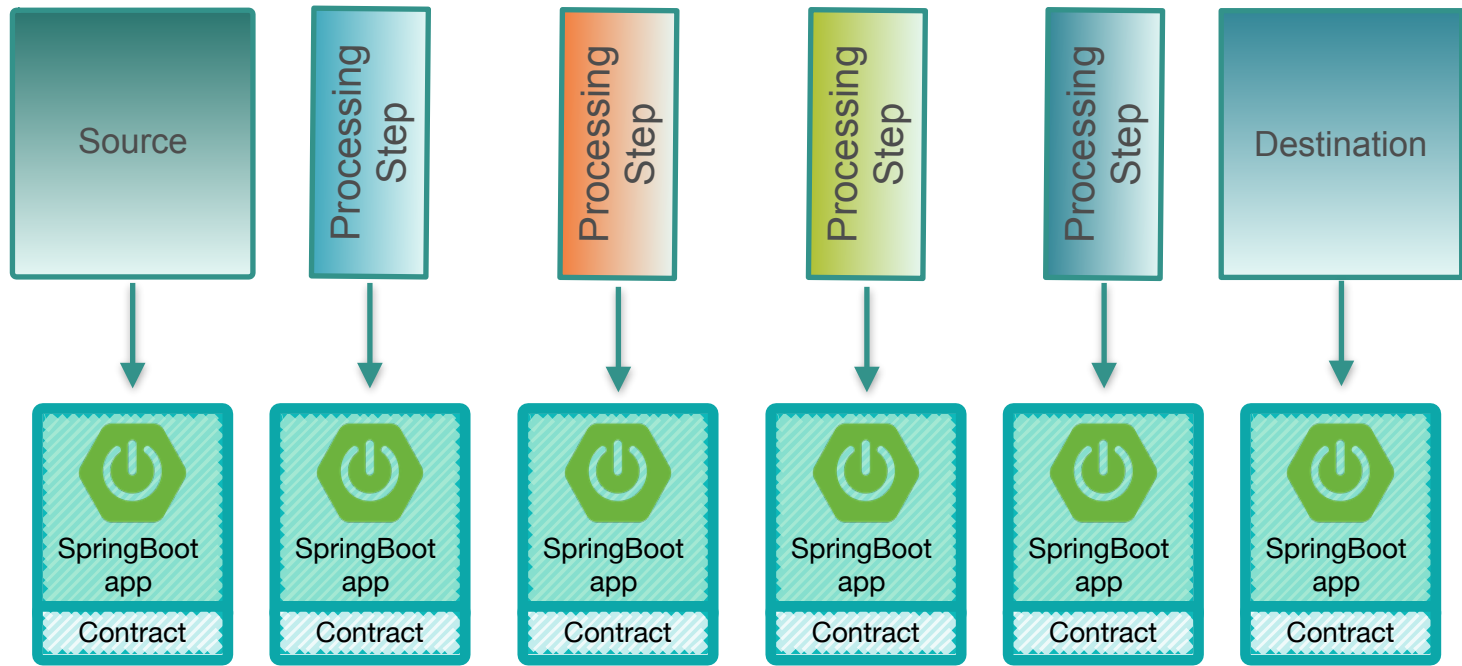
Re-deploy

Update

Migrate

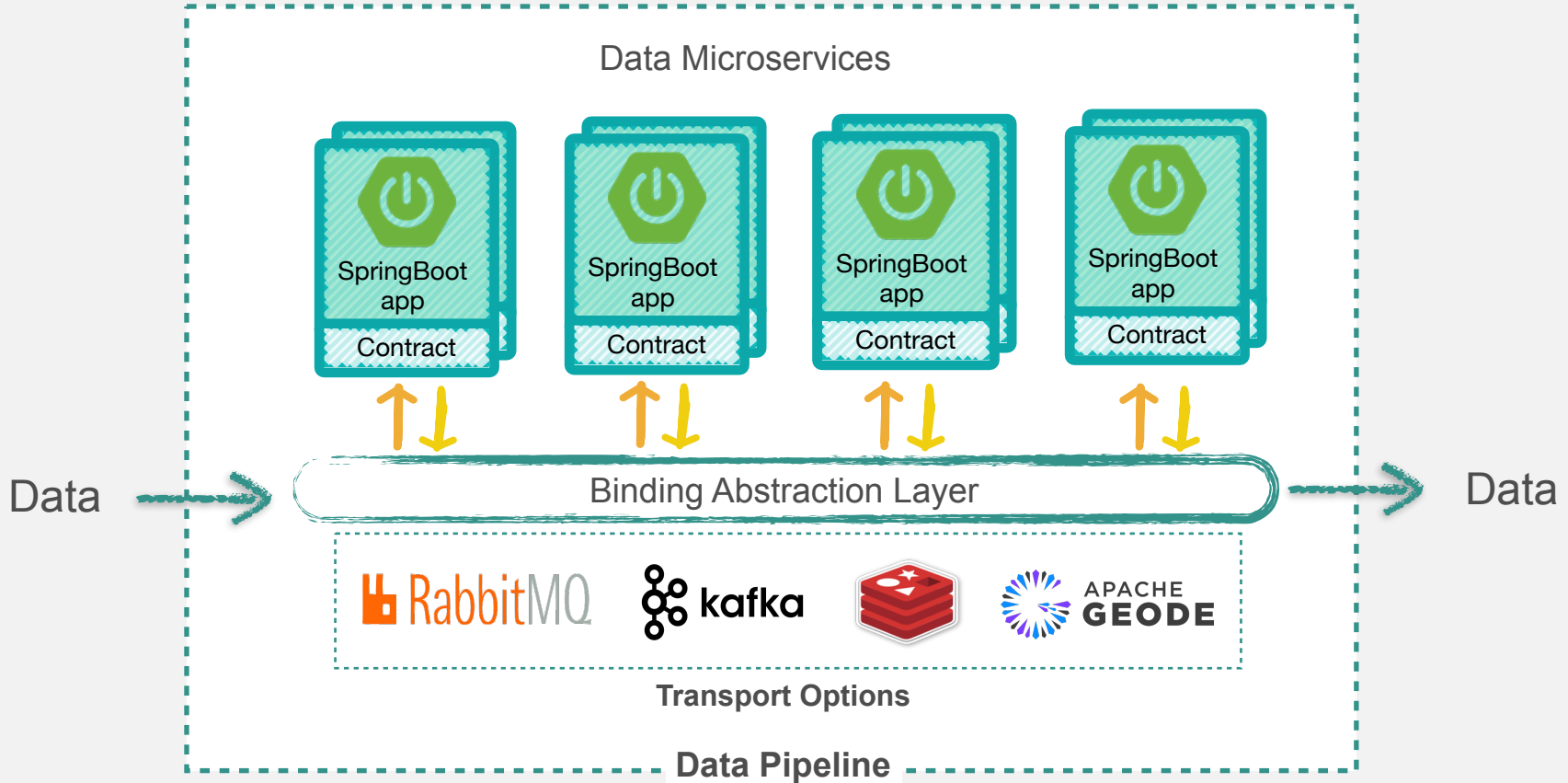
Distribute

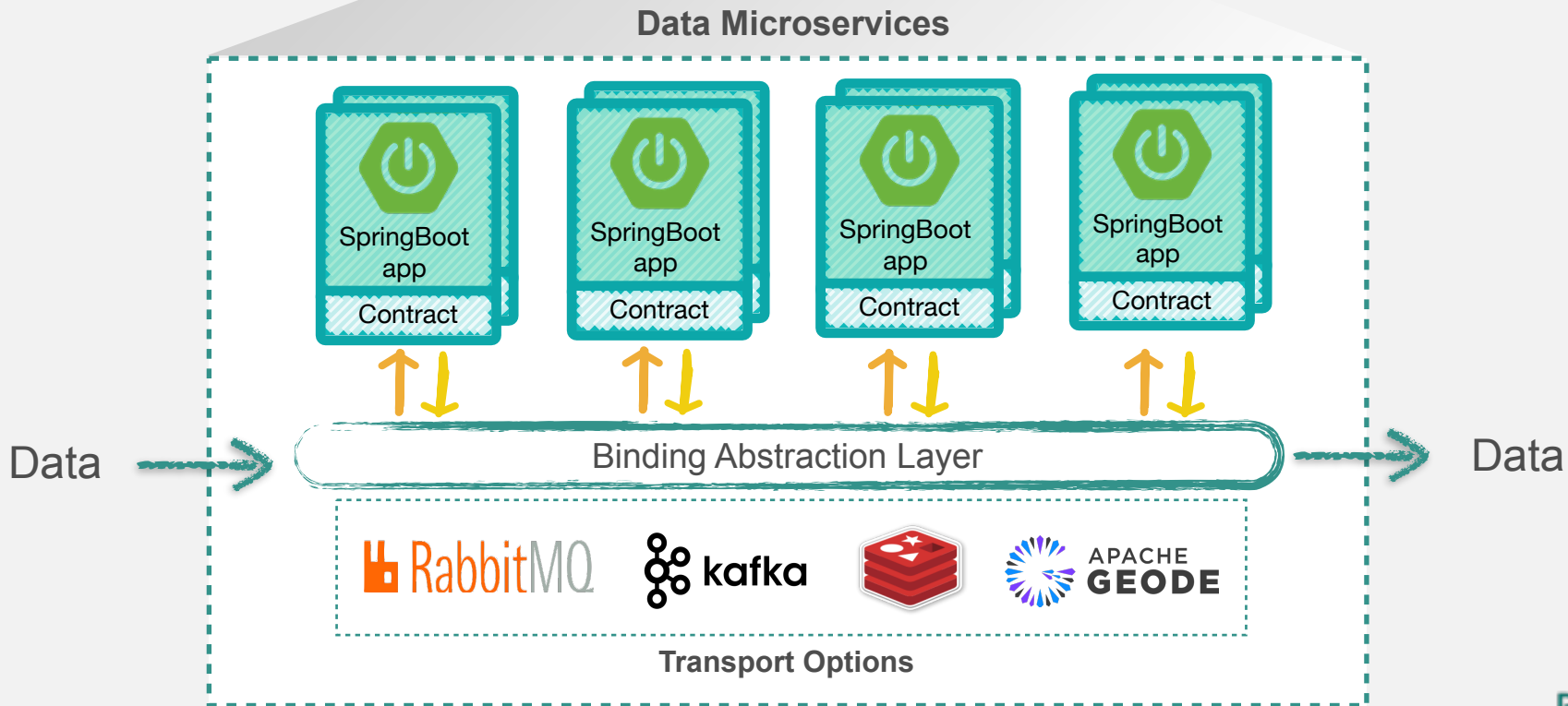




Data Pipeline

Spring Cloud Stream







AUTO

```
@EnableBinding(Processor.class)
public class EnrichProcessor {
```

```
@Transformer(inputChannel = Processor.INPUT, outputChannel = Processor.OUTPUT)
public Object transform(Message<?> message) throws Exception{
```

```
    String input = properties.getExpression().getValue(message).toString();
```

```
    Map<String, Object> objects = parseJson(input);
```

```
    Long customerId = Long.parseLong(objects.get("customerId").toString());
```

```
    Long productId = Long.parseLong(objects.get("productId").toString());
```

```
    CustomerPortfolio portfolio = retrievePortfolio(customerId);
    portfolio.add(productId);
```

```
    return portfolio;
```

```
}
```

Data



RabbitMQ



kafka



APACHE
GEODE

Transport Options

Infrastructure
Transparency

Transport
Transparency

Data Pipeline
Visual Design

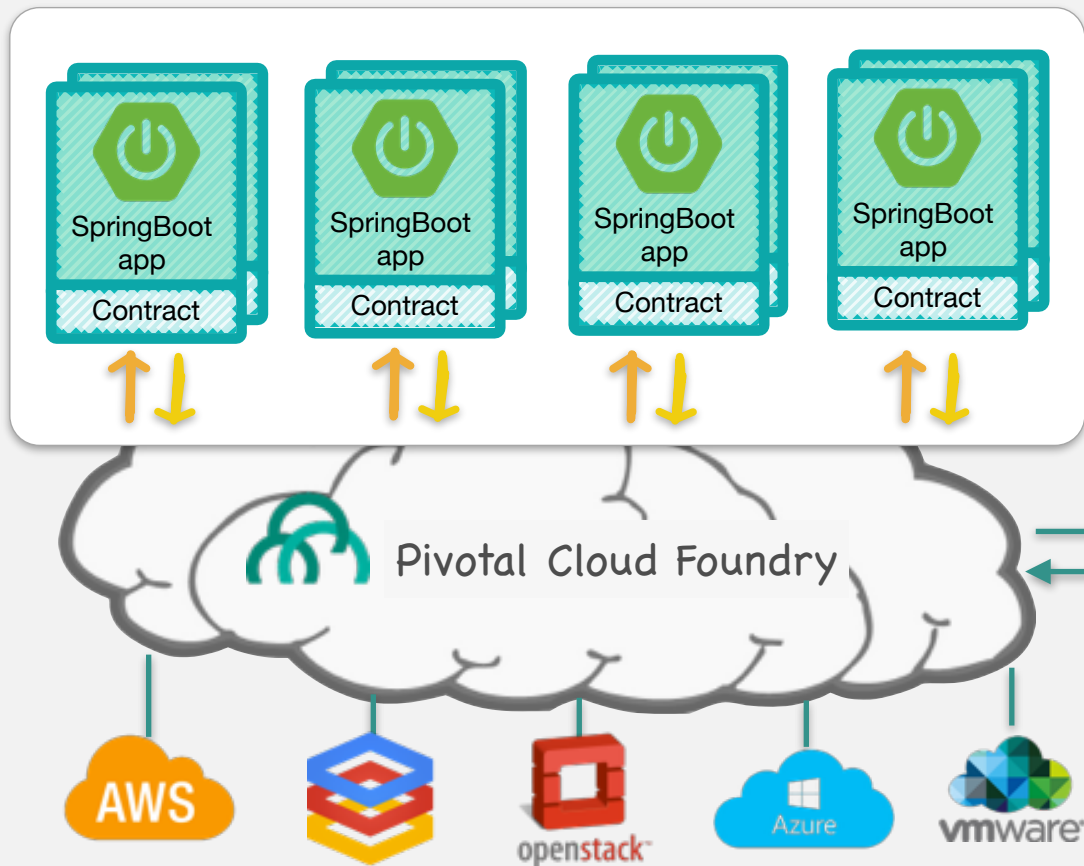
Integrated
Metrics

Integrated
Monitoring

Aggregated
Logging

Auto Healing

Auto Scaling



Cloud Services

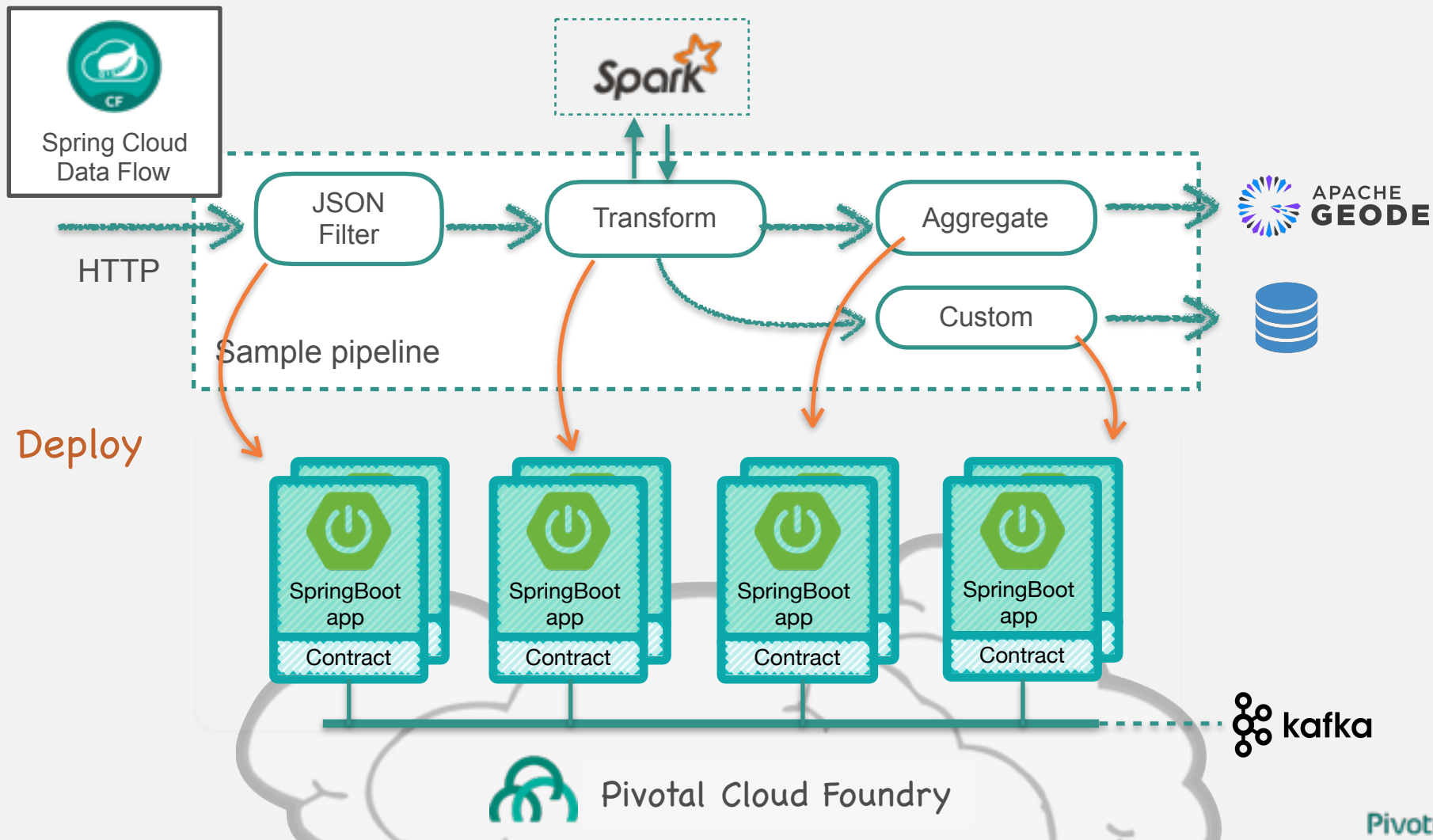
RabbitMQ

kafka

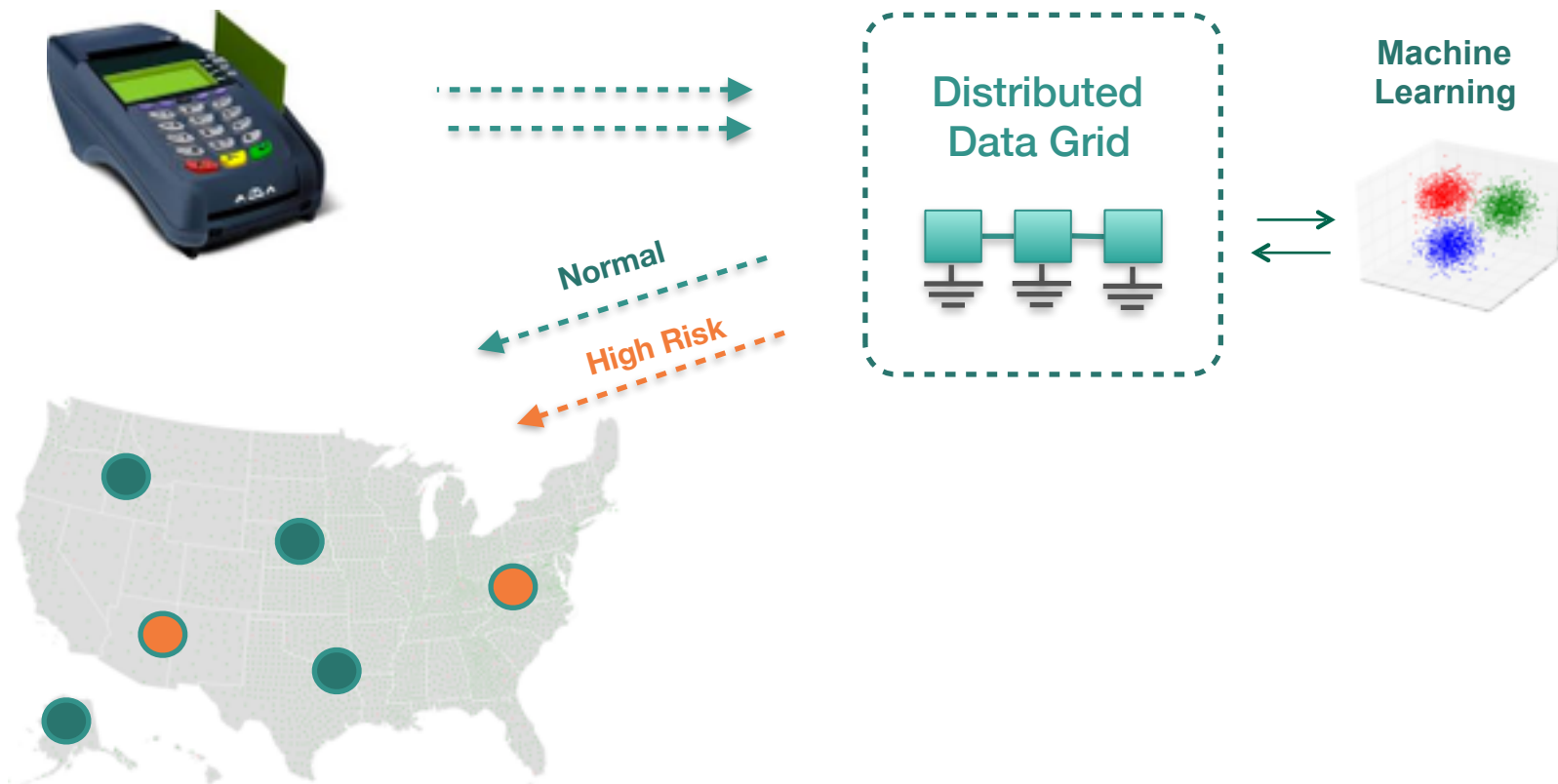


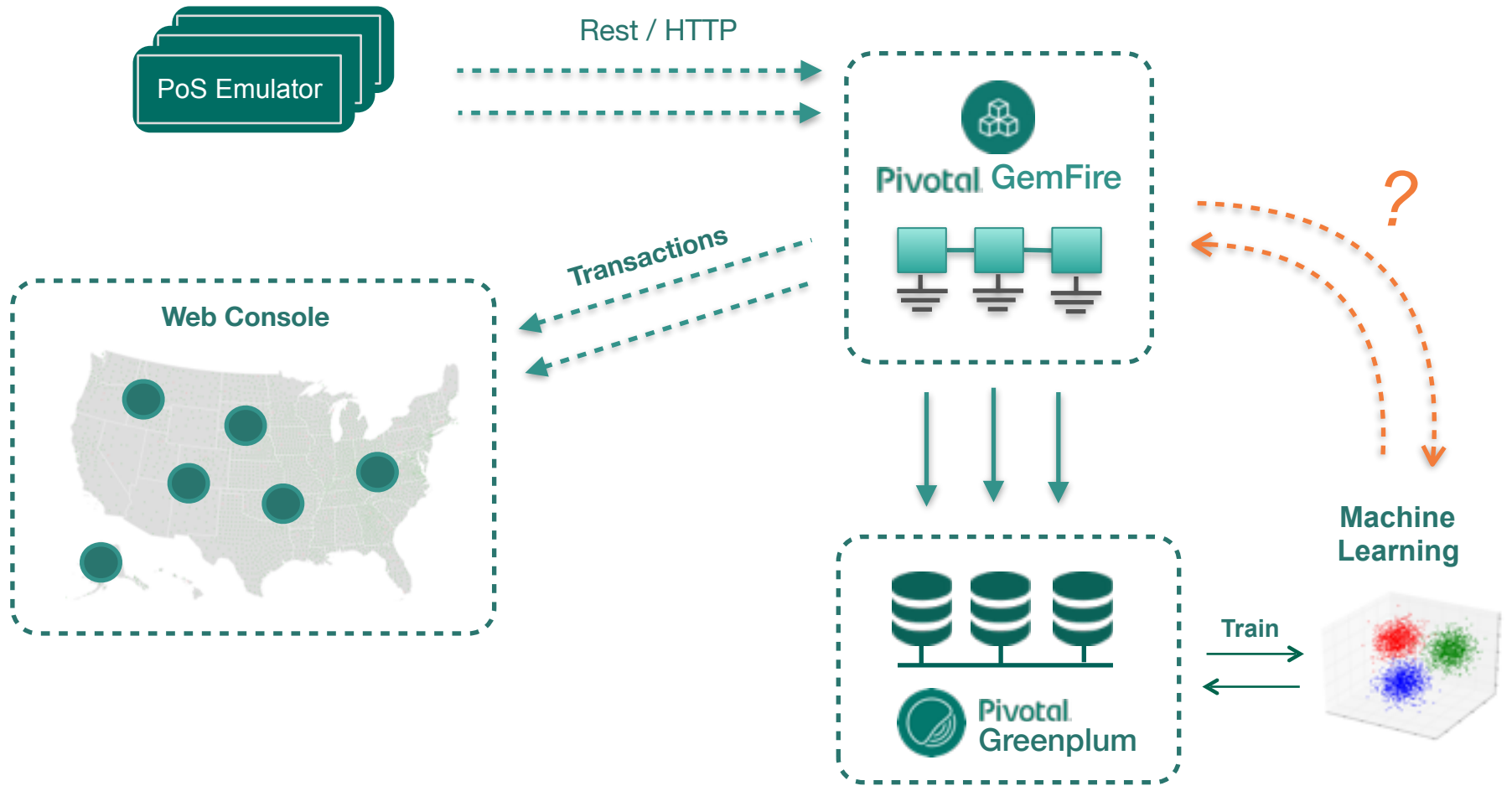
APACHE
GEODE

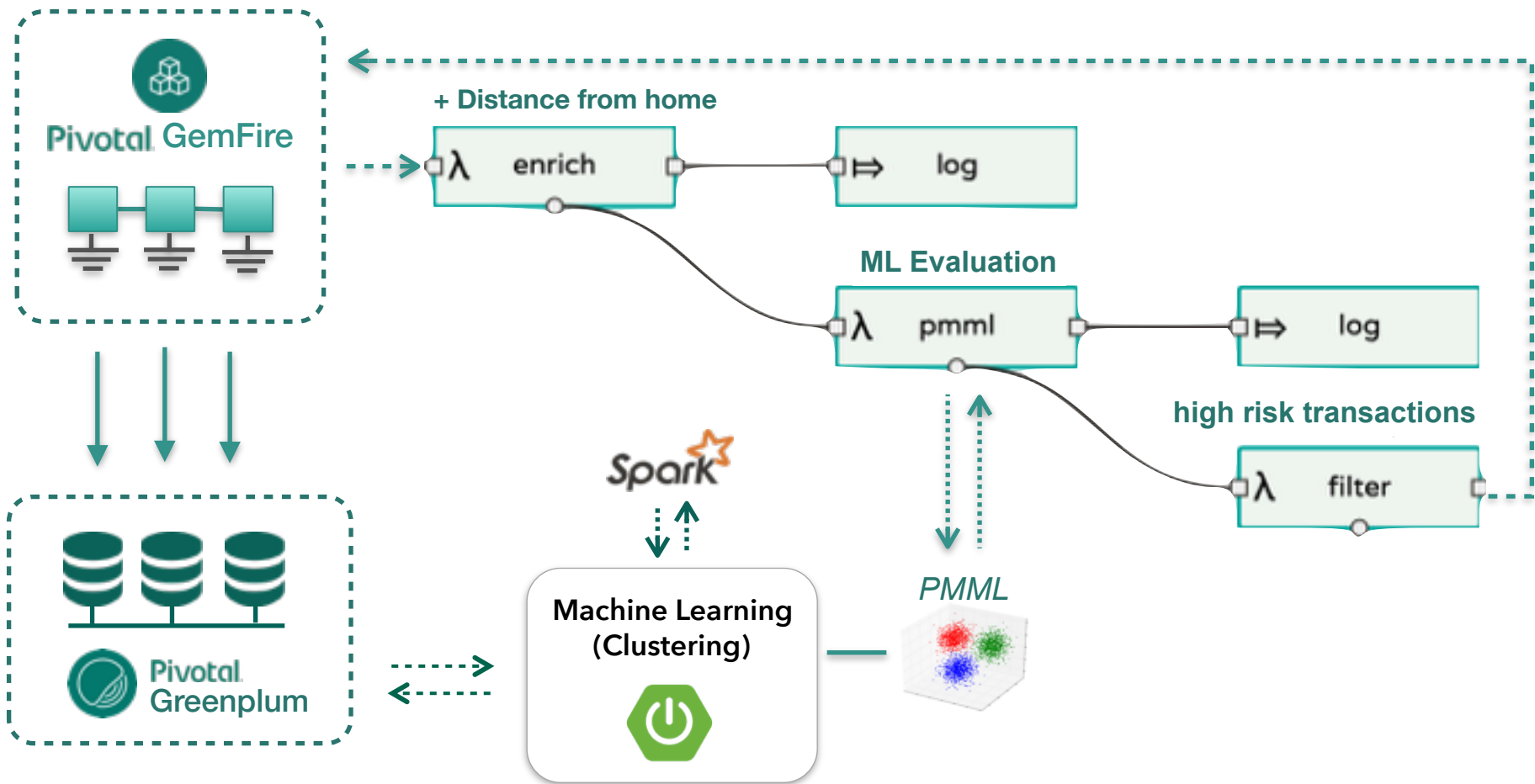
Transport Options

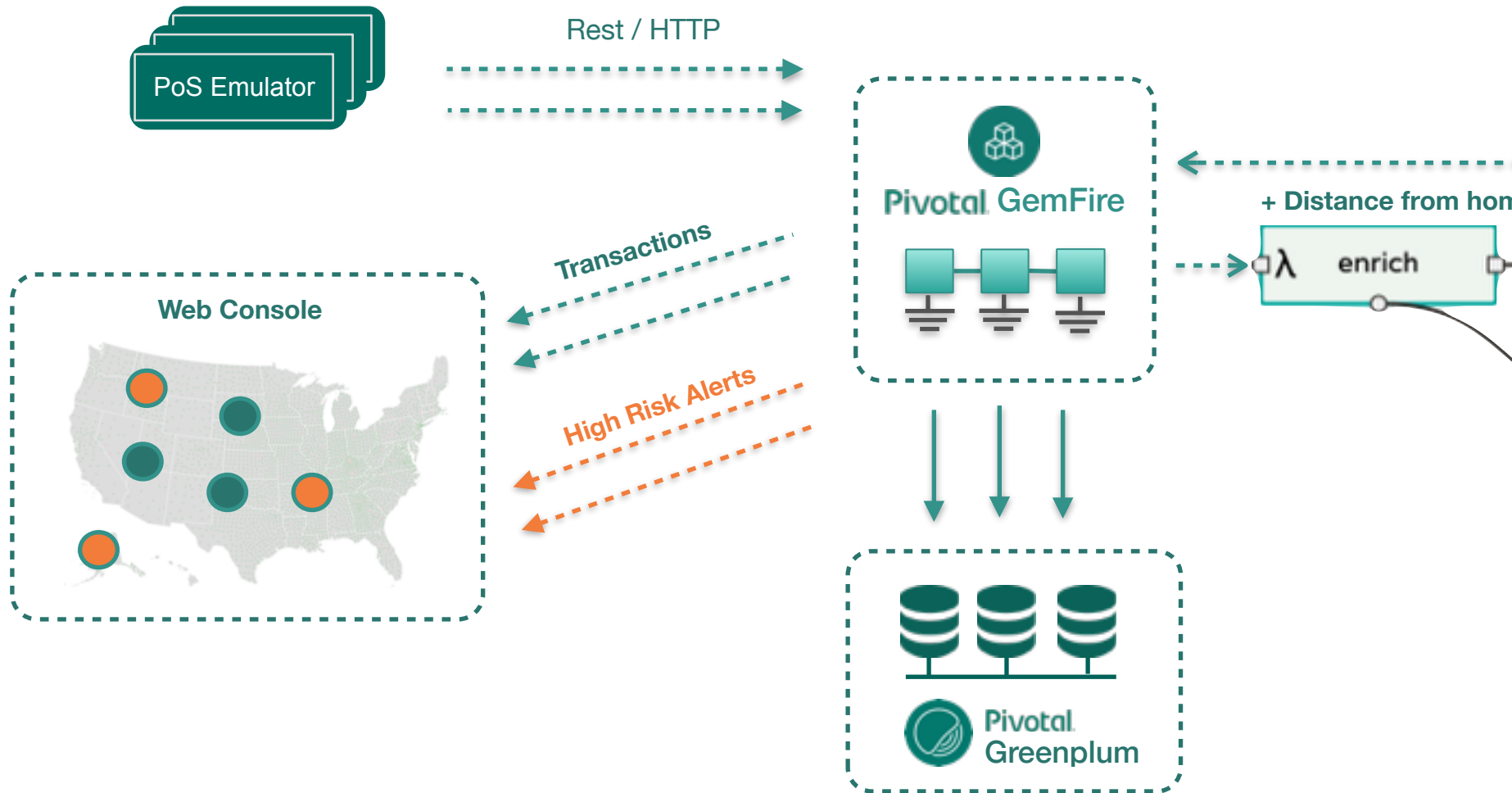


DEMO









AUGUST 1-4, 2016

SpringOne Platform

ARIA • LAS VEGAS



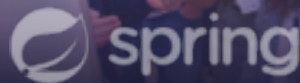
4 days



2,000+ cloud native
developers, operators,
architects, and executives



200+ presentations,
technical deep dives, and
workshops



Pivotal
Cloud Foundry

SpringOnePlatform.io

Pivotal

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