Learning Knative with AWS Lambda

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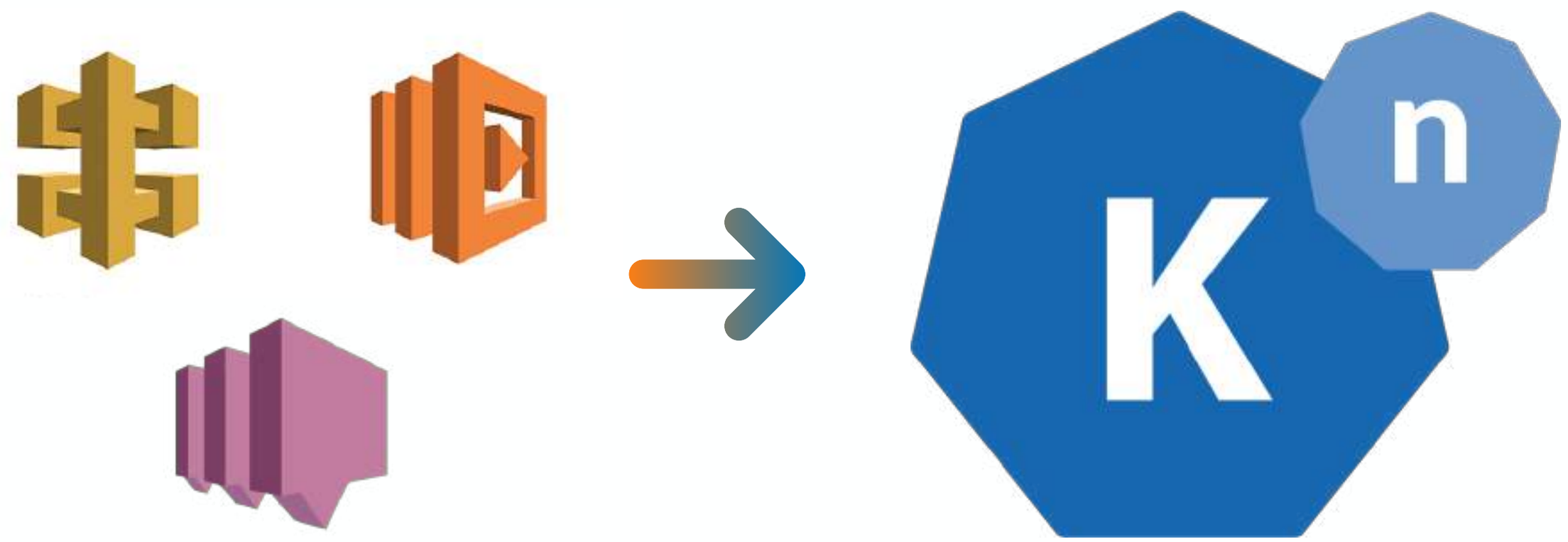
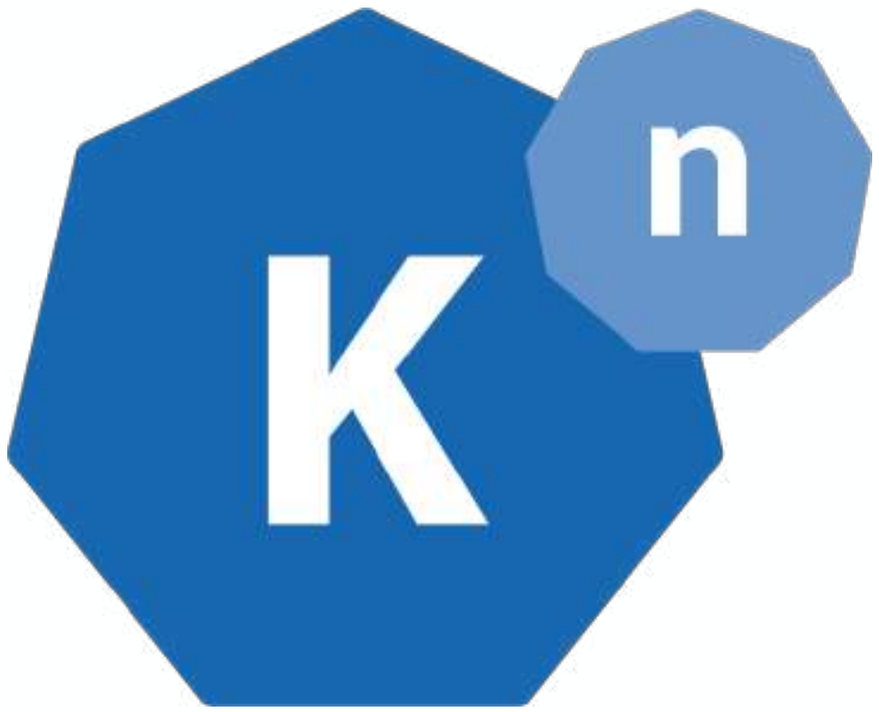
Cloud Native Engineer @ Container Solutions

@jonatasbaldin





open source **Serverless**
on top of **Kubernetes**

building blocks **or** a platform

powers many Serverless offerings

Google Cloud Run

Red Hat Open Shift Serverless

Managed Knative IBM Kubernetes Services

Pivotal Function Service

TriggerMesh Cloud

a note about **self-hosted**

a note about **self-hosted**

platform team

development team
end users

Knative **Core**

Serving **Eventing**

Knative **Core**

Serving

HTTP Workloads

Function == Container

Scales to Zero

Traffic Splitting

Eventing

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Traffic Splitting

API Gateway

Amazon Lambda

Eventing

Knative **Core**

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HTTP Workloads

Function == Container

Scales to Zero

Traffic Splitting

API Gateway

Amazon Lambda

Eventing

Event-Driven System

Interacts with **Serving**

Custom Event Sources

CloudEvents Standard

Knative **Core**

Serving

HTTP Workloads

Function == Container

Scales to Zero

Traffic Splitting

API Gateway

Amazon Lambda

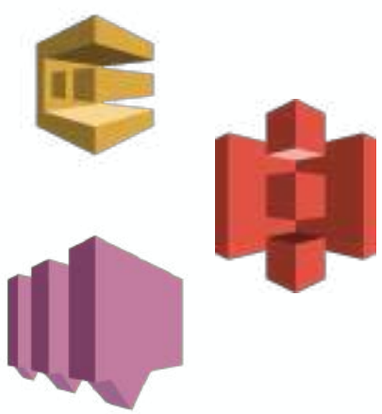
Eventing

Event-Driven System

Interacts with **Serving**

Custom Event Sources

CloudEvents Standard



Amazon Lambda

built on top of many technologies

uilt on f many chnologies

kubernetes

Grafana

docker

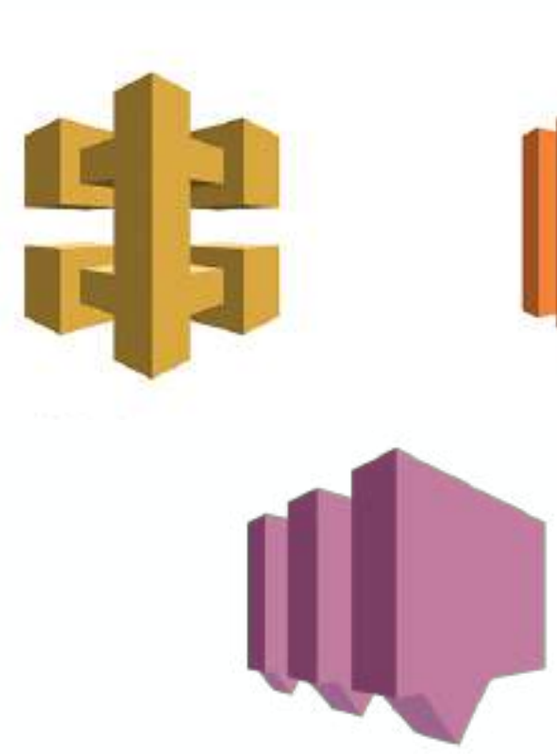
kafka

Gloo

fluentd

Istio

Stack



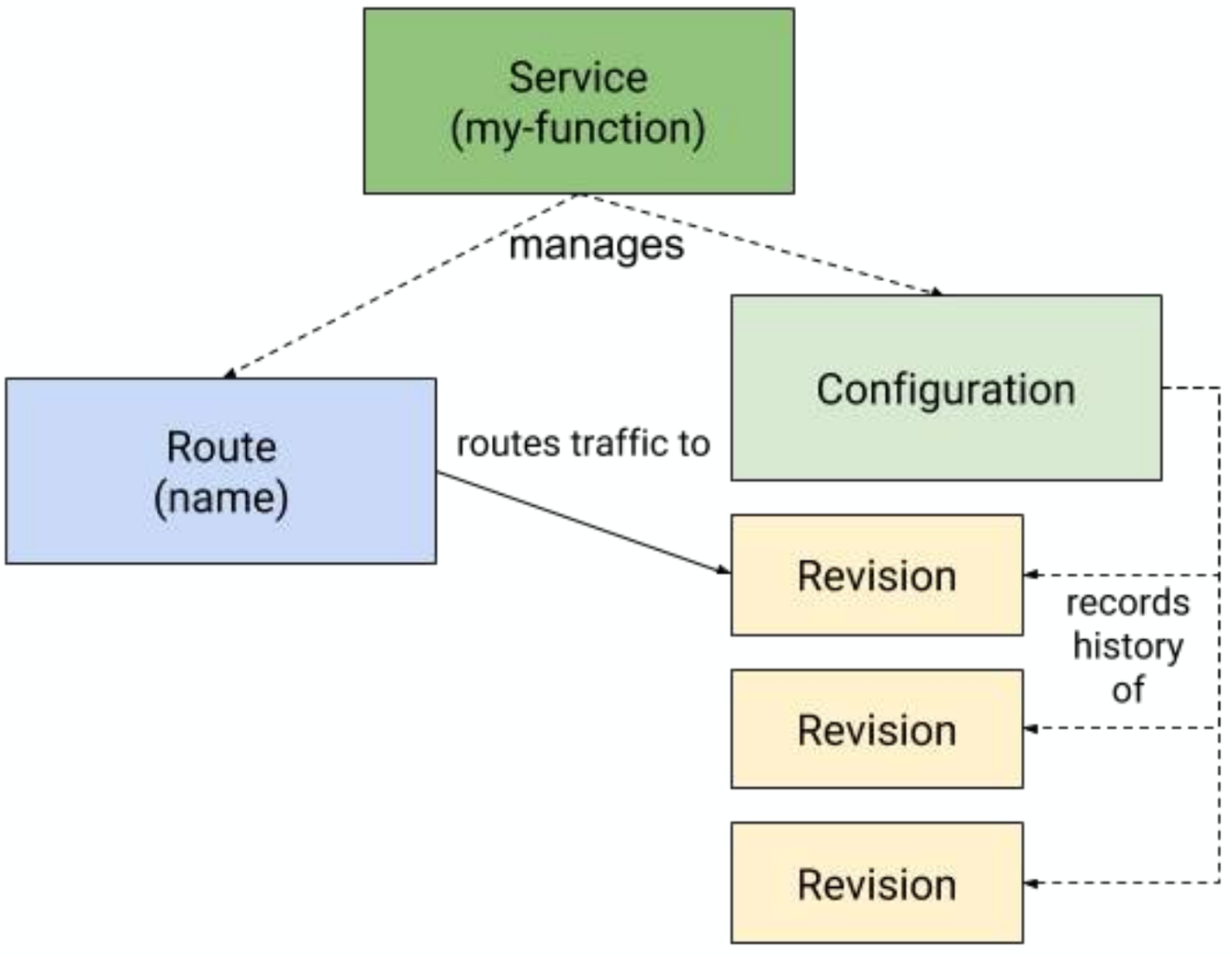
API Gateway + Lambda

SQS + Lambda

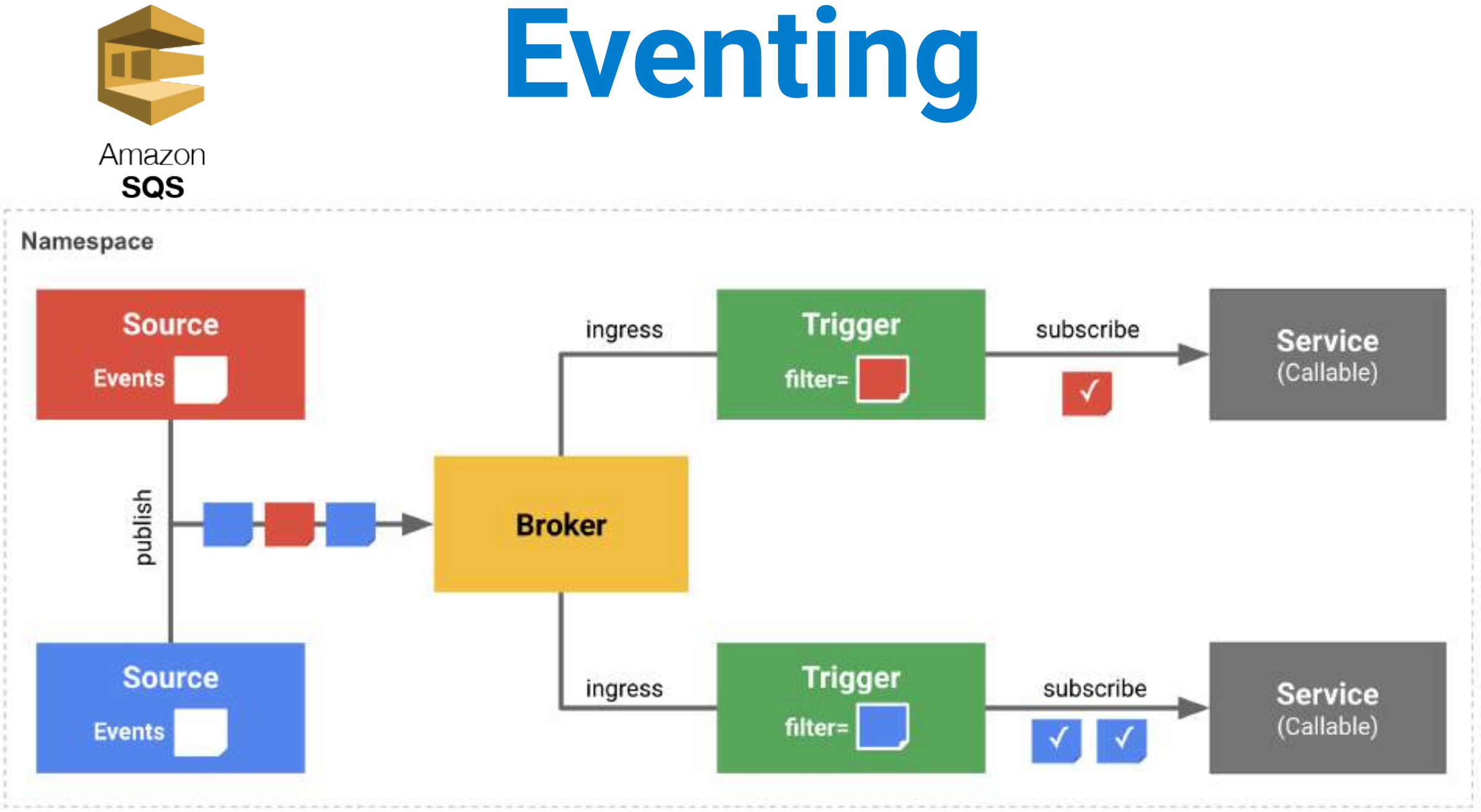
Google Kubernetes Engine

HTTPS Certificates + Domain

Serving

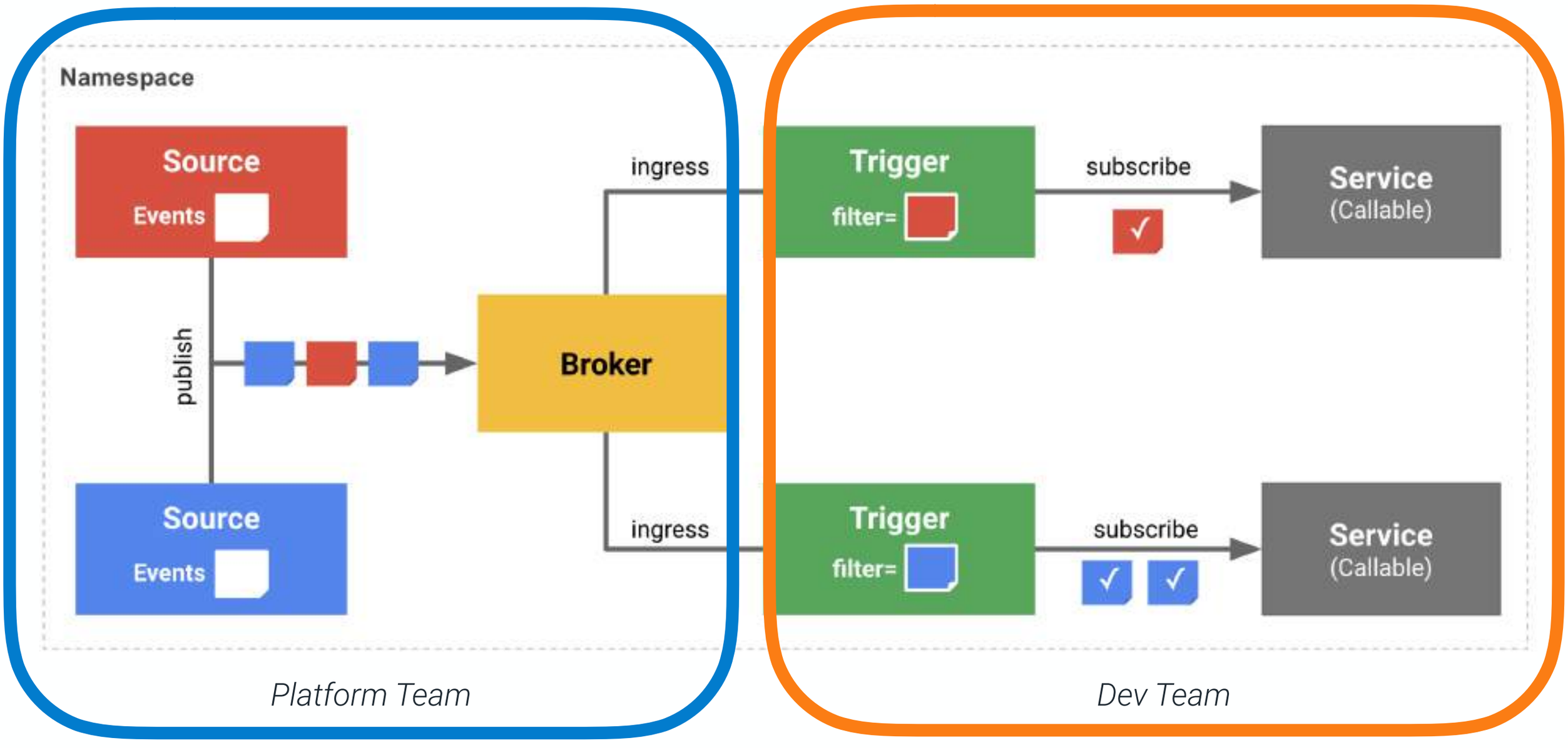

Service
(my-function)
manages
Route
(name)
routes traffic to
Configuration
Revision
Revision
Revision
records
history
of

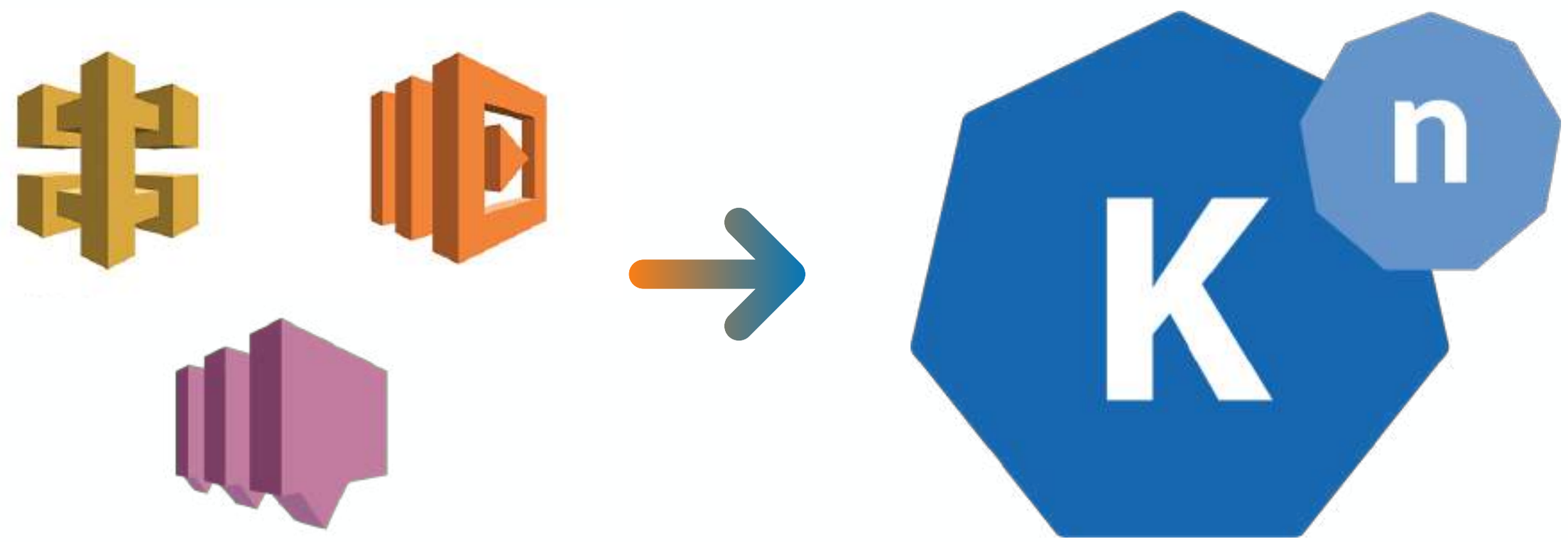
Eventing



Mark Chmarny, Announcing Knative v0.5 Release

Eventing


Namespace
Source
Events
publish
Broker
ingress
Source
Events
ingress
Trigger
filter=
subscribe
Service
(Callable)
Trigger
filter=
subscribe
Service
(Callable)
Platform Team
Dev Team



the **improvements** list

Developer Experience

Eventing is a bit rough on the edeges

Education / Content

Server Management 🤷‍♀️

the **awesome** list

Backed by Big Players

Runs on Kubernetes

Observability

“Avoid lock-in”

Fine-grained Scalability

CloudEvents

the **more stuff** list

Traffic Splitting

Tracing

Sequence / Parallel

resources

knative.dev

github.com/knative

slack.knative.dev

twitter.com/KnativeProject

github.com/jonatasbaldin/knative-lamba

thanks ❤️

@jonatasbaldin