



# Vishal Biyani

CTO & Founder @ InfraCloud Technologies

[www.infracloud.io](http://www.infracloud.io)



Fission Maintainer

<https://github.com/fission/fission>

## Let's Connect



Kubernetes Pune Meetup Organizer

<https://www.meetup.com/Kubernetes-Pune/>



[@vishal\\_biyani](https://twitter.com/vishal_biyani)



<https://www.linkedin.com/in/vishalbiyani>



<https://www.vishalbiyani.com>

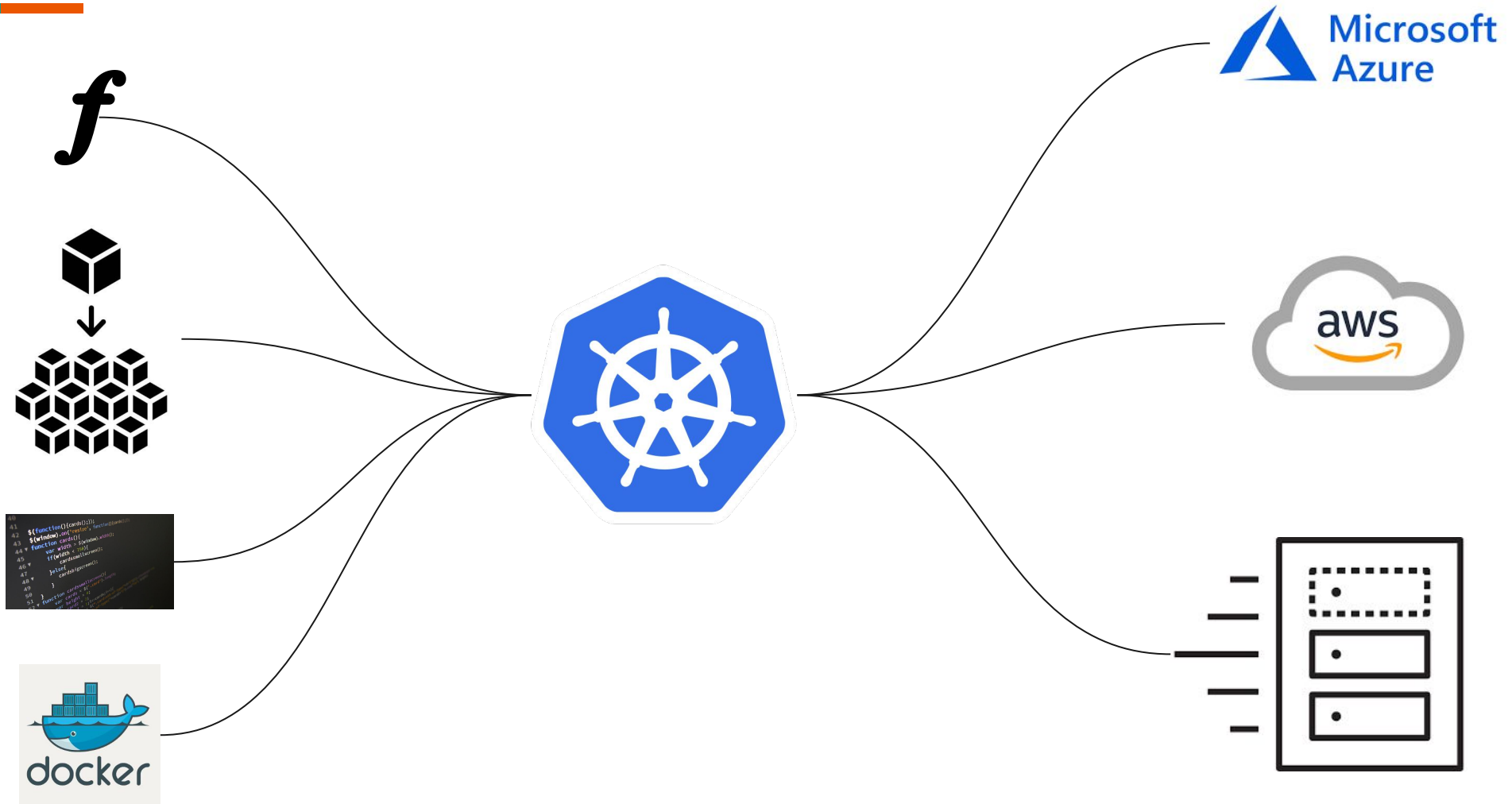


# Building event driven apps on Kubernetes with **fission**

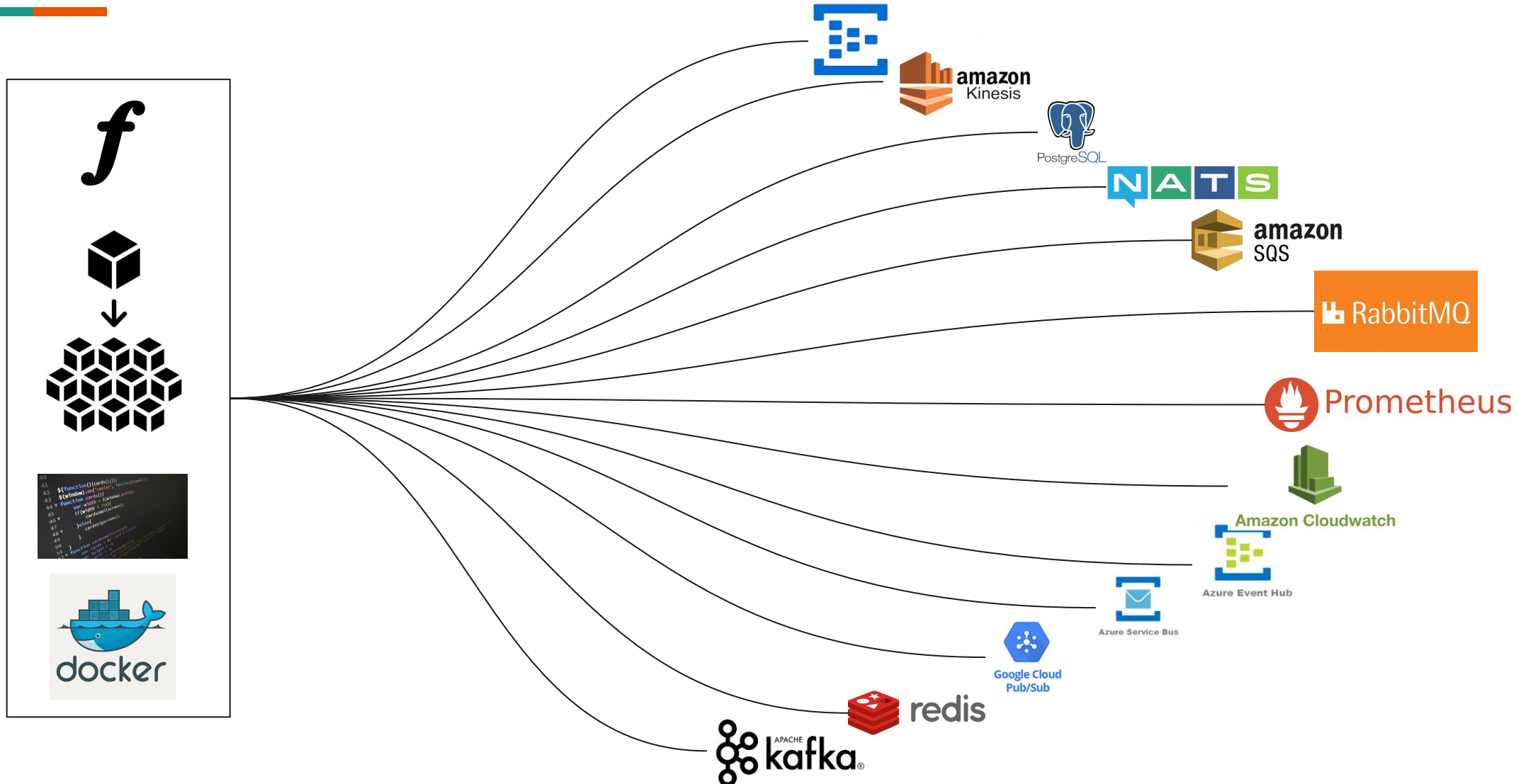
March 2021

Github Satellite

# Why FaaS On Kubernetes ?



# Why FaaS On Kubernetes ?



# Why FaaS On Kubernetes ?

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- Control of runtime & underlying infrastructure. (Regulatory or otherwise)
- Fine grained Scaling Controls
- No limits on timeouts etc.
- Any cloud or on premise - same experience
- Increased developer productivity
- Developer focuses on code, operator on making it scale!
- Use it alongside microservices in same cluster

# When **NOT** to do FaaS On Kubernetes?

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- The cost of function execution is much less than maintaining a K8S cluster
- You are on single cloud & don't plan to move in near future.
- The workload is all static and you don't expect variation
- Workload is not event driven at all.

# Introducing Fission - Faas for Kubernetes

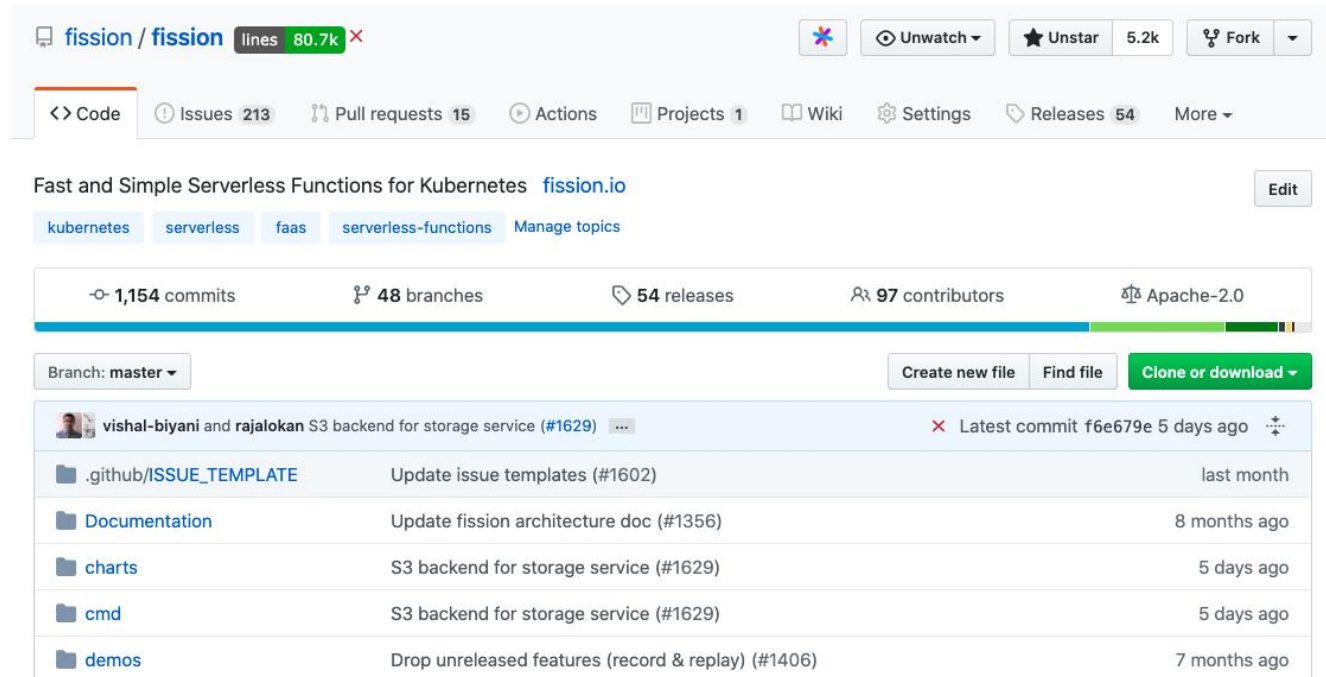


- Fast & Simple Functions for Kubernetes
- Kubernetes Native Serverless Framework
- You only write code - Docker & Kubernetes is abstracted for you
- Performance - 100ms Cold Start with warm pool
- Code can be built in the cluster
- Supports integration with various “event sources”

# Fission on GitHub: Star & Show

You can Star & show  here

<https://github.com/fission/fission>



The screenshot shows the GitHub repository page for `fission/fission`. At the top, there are buttons for `Unwatch`, `Unstar` (with 5.2k stars), and `Fork`. Below these are tabs for `Code`, `Issues` (213), `Pull requests` (15), `Actions`, `Projects` (1), `Wiki`, `Settings`, `Releases` (54), and `More`. The repository description is "Fast and Simple Serverless Functions for Kubernetes" with a link to `fission.io`. Below this are tags for `kubernetes`, `serverless`, `faas`, and `serverless-functions`. A progress bar shows 1,154 commits, 48 branches, 54 releases, 97 contributors, and Apache-2.0 license. The `Clone or download` button is visible. The commit history table shows the latest commit by `vishal-biyani` and `rajalokan` for the "S3 backend for storage service" 5 days ago.

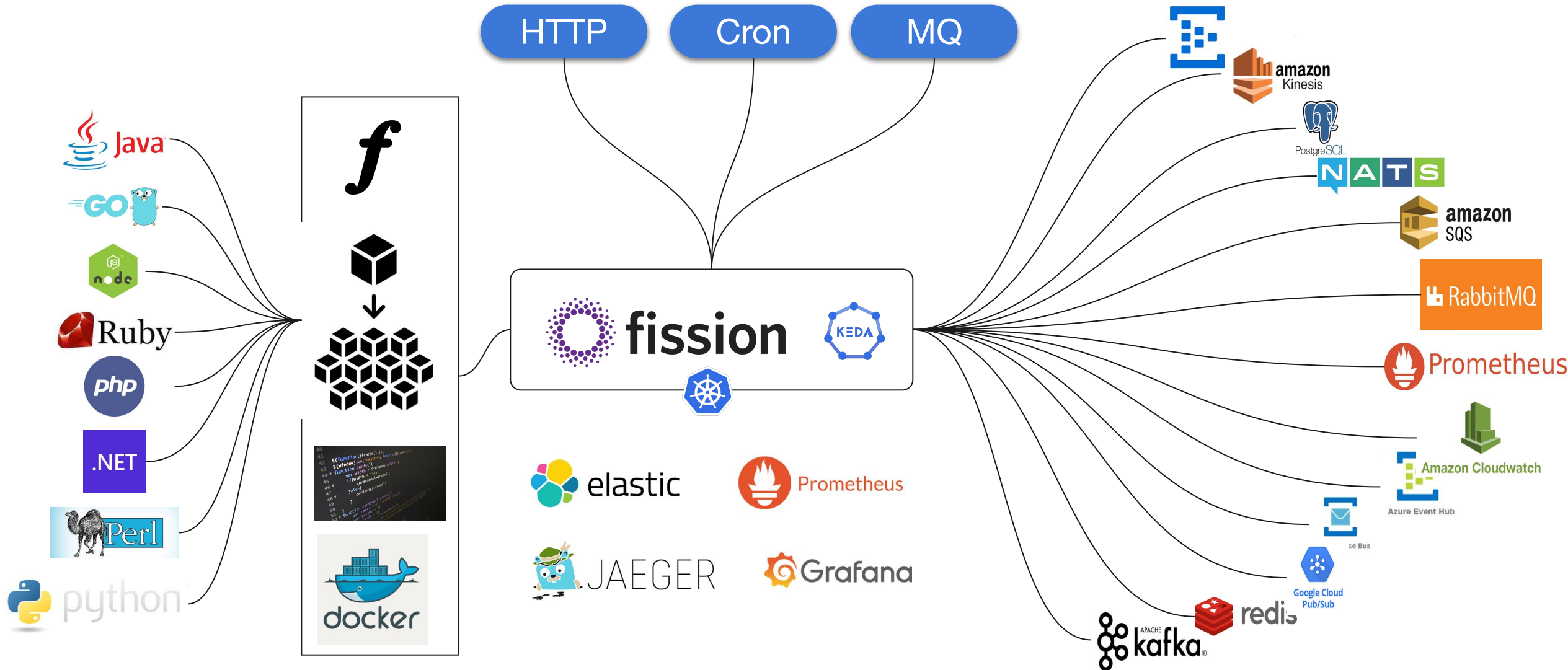
Commit	Message	Time
<code>f6e679e</code>	S3 backend for storage service (#1629)	5 days ago
<code>...</code>	Drop unreleased features (record & replay) (#1406)	7 months ago
<code>...</code>	S3 backend for storage service (#1629)	5 days ago
<code>...</code>	S3 backend for storage service (#1629)	5 days ago
<code>...</code>	Update fission architecture doc (#1356)	8 months ago
<code>...</code>	Update issue templates (#1602)	last month

<https://docs.fission.io/docs/>

<https://blog.fission.io>



# Fission - What can you do?



# Demo

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# “Hello World” - Fission version



```
$ fission env create --name nodejs --image fission/node-env
```

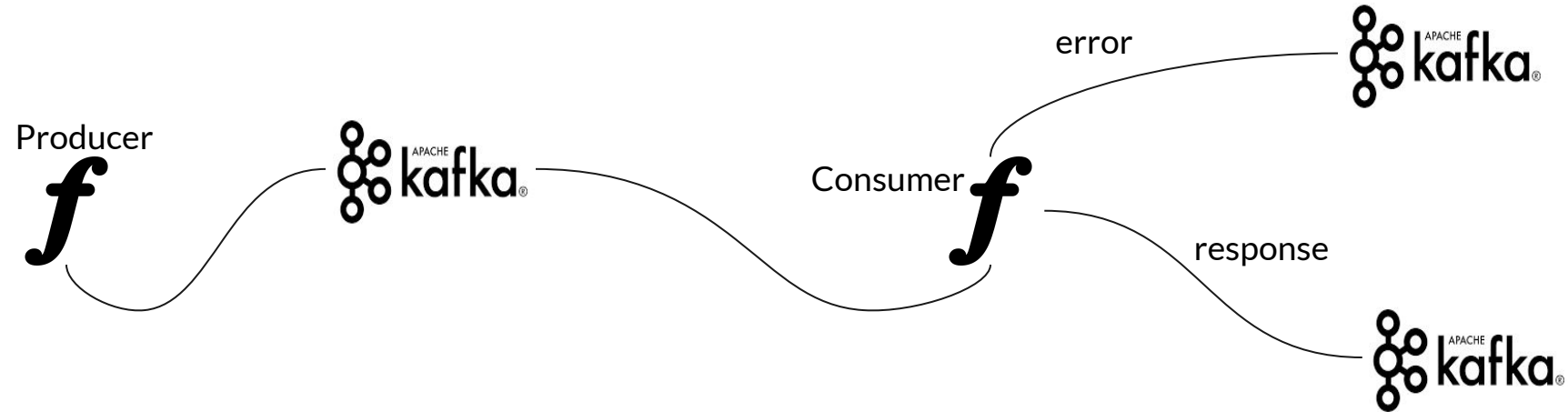
```
$ fission fn create --name hellojs --env nodejs --code
```

```
https://raw.githubusercontent.com/fission/fission/master/ex  
amples/nodejs/hello.js
```

```
$ fission function test --name hello
```

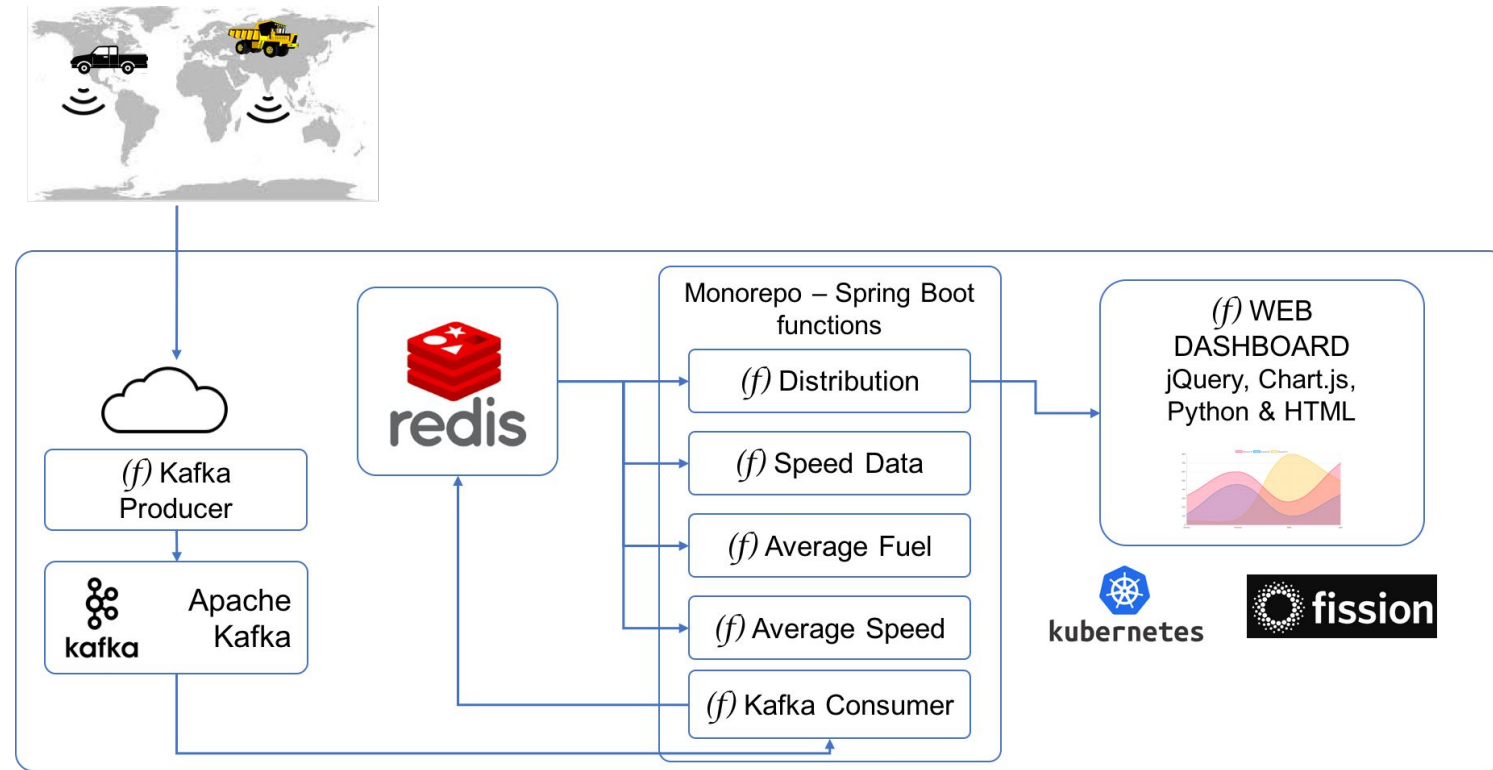
```
Hello, world!
```

# A simple event driven App



# Another real world example (Try on your own)

- 6 functions covering
  - A function for UI
  - Function for MQT
  - Reading/Writing to DB
  - Multiple Languages

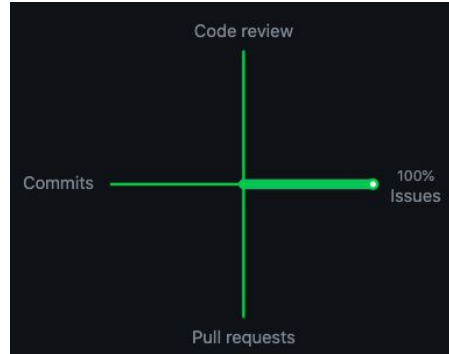


<https://github.com/fission/fission-kafka-sample>

# Contributing

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# My journey - Software & Open Source



2004-10

2010-11

2012-14

2015-16

2017-now

## Learning Software Engineering

- Mechanical Engineer by education
- Enterprise for initial years

## Discovery!

Discovered CloudFoundry, open source & systems engineering!

## Watching from sidelines

Raise small PRs and issues in repos

## Baby steps

Small utilities, tutorials & self projects on Github.

## Fission

Learnt Go on job, started with small issues & features in Fission - to being a maintainer today

# Start open source contribution journey



Start here <https://docs.fission.io/docs/contributing>

Ask Questions on Slack

Work with a friendly and helpful community



<http://botkube.io/>



## BOTKUBE

BotKube can be integrated with multiple messaging platforms like - Slack, Mattermost to help you monitor your Kubernetes cluster(s), debug critical deployments and gives recommendations for standard practices by running checks on the Kubernetes resources.



InfraCloud's open source ChatOps platform for Kubernetes



Provides access to Kubernetes cluster across teams



Comes with built-in health checks and cluster scanners

[Botkube](#)

[GitHub](#)

<https://github.com/infraclaudio/botkube>

# Questions?

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આભાર!

ધન્યવાદ!

Dank je!

Kiitos!

ધન્યવાદ!

Grazie!

Je vous remercie!

あらがうございました！

ਤੁਹਾਡਾ ਧੰਨਵਾਦ!

நன்றி!

ధన్యవాదాలు!

നന്ദി!

THANK YOU!