



Composing Microservices into Reviewable and Testable Applications

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aixigo AG

@schrieveslaach  

Intro
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Agenda

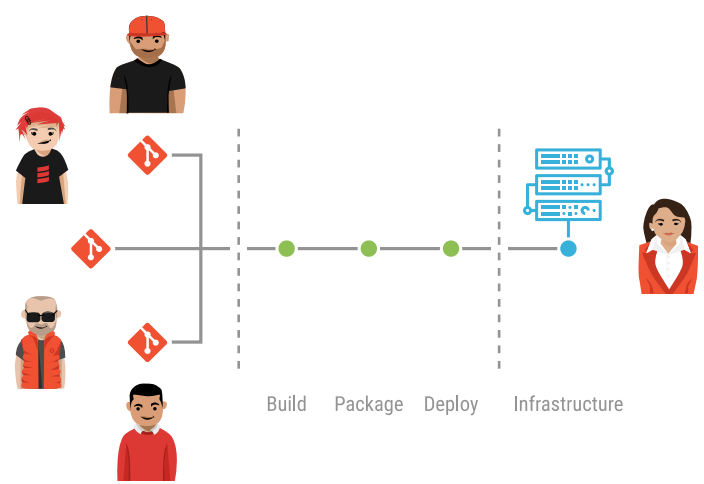
- ✓ Introduction
- ✓ PREvant in a nutshell
- ✓ Demo
- ✓ How does it work
- ✓ Q&A

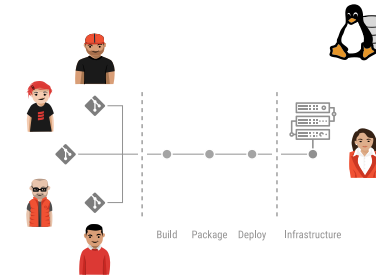
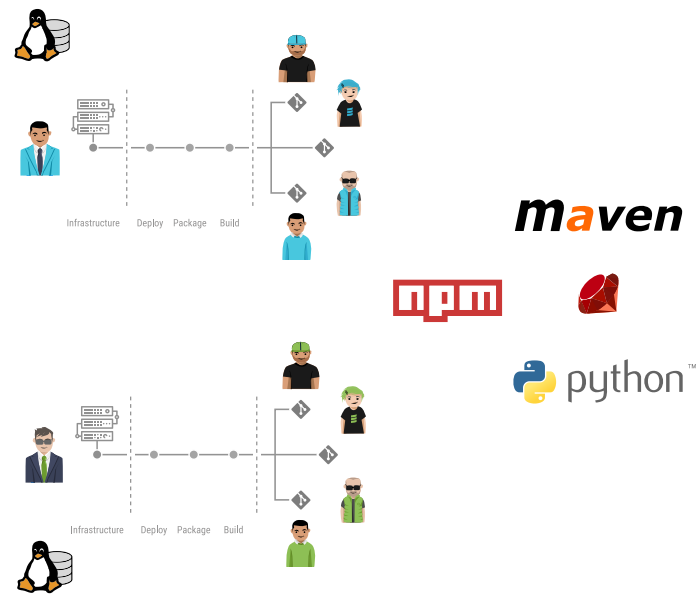
Why do we use Microservices?

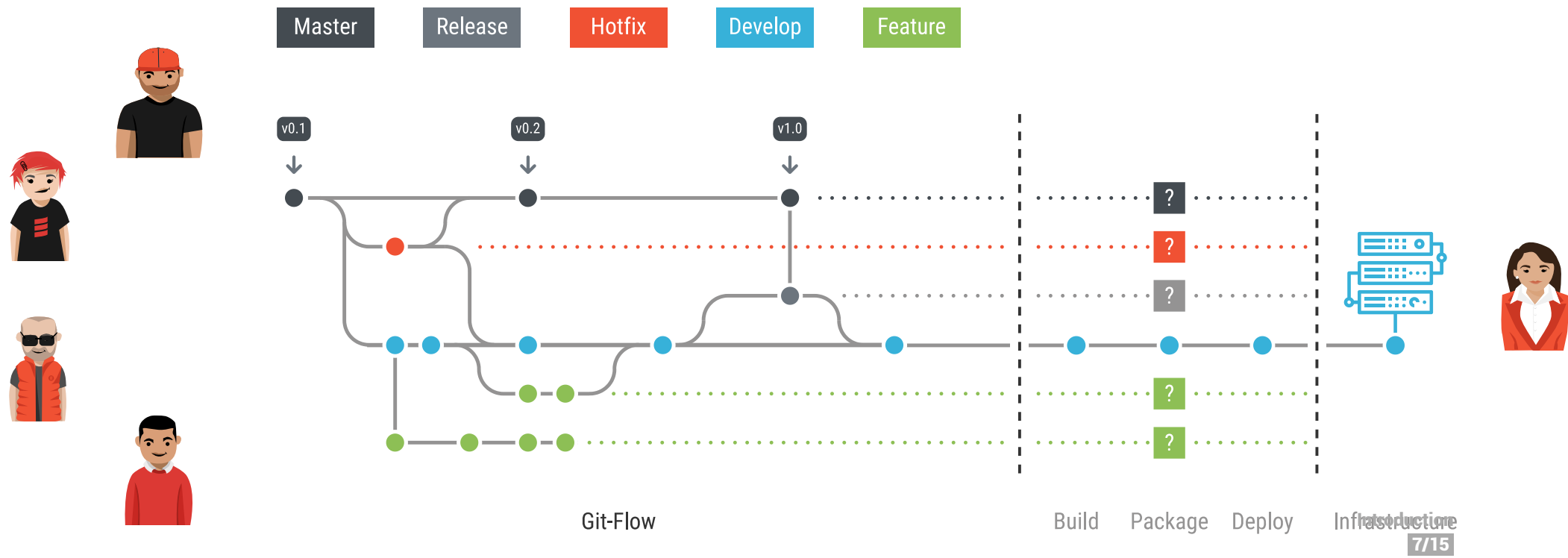
- ✓ Scalable (make use of Conway's law)
- ✓ Fast deployment cycle
- ✓ Superior quality, greater flexibility, ...

At aixigo we are in the migration phase.

How did we start developing Microservices?

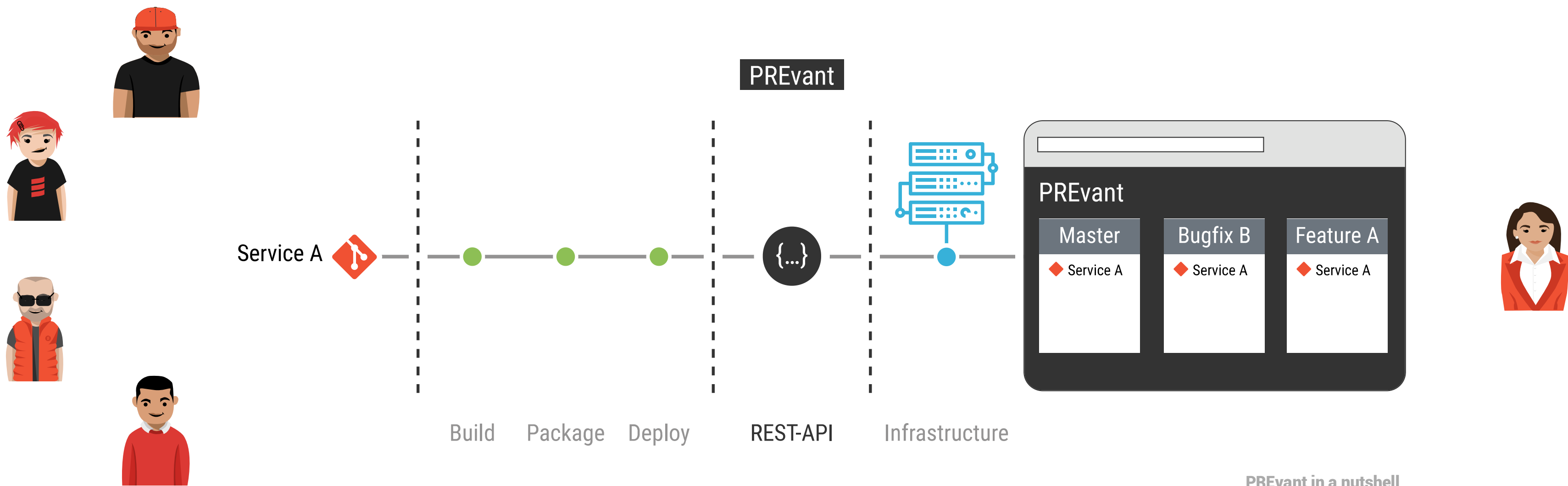


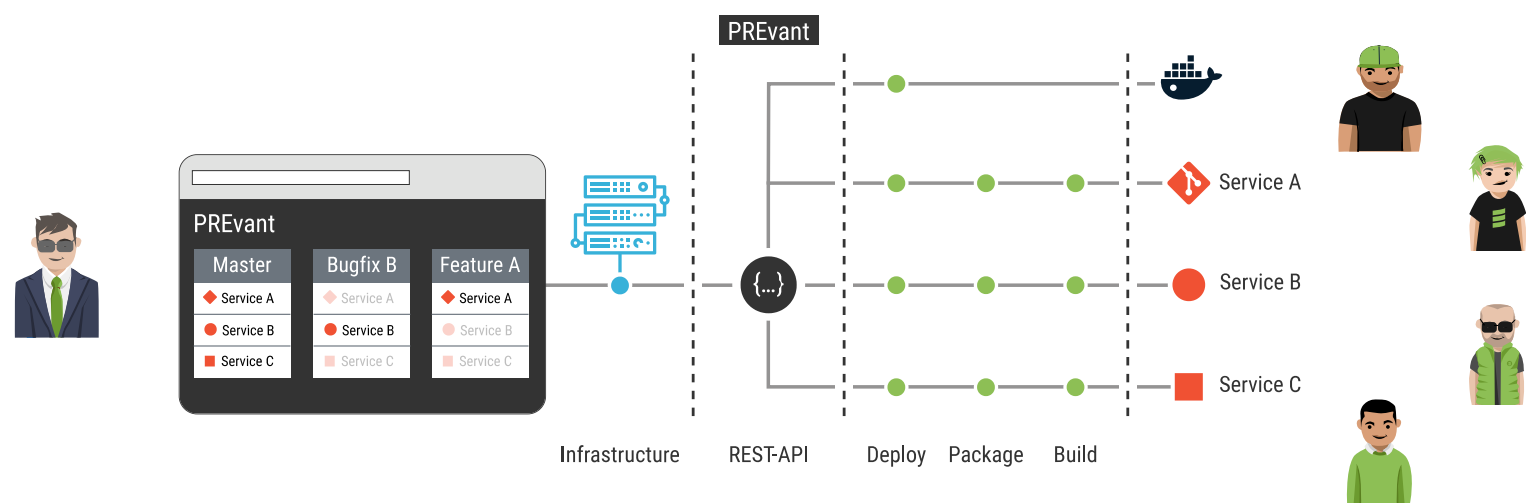
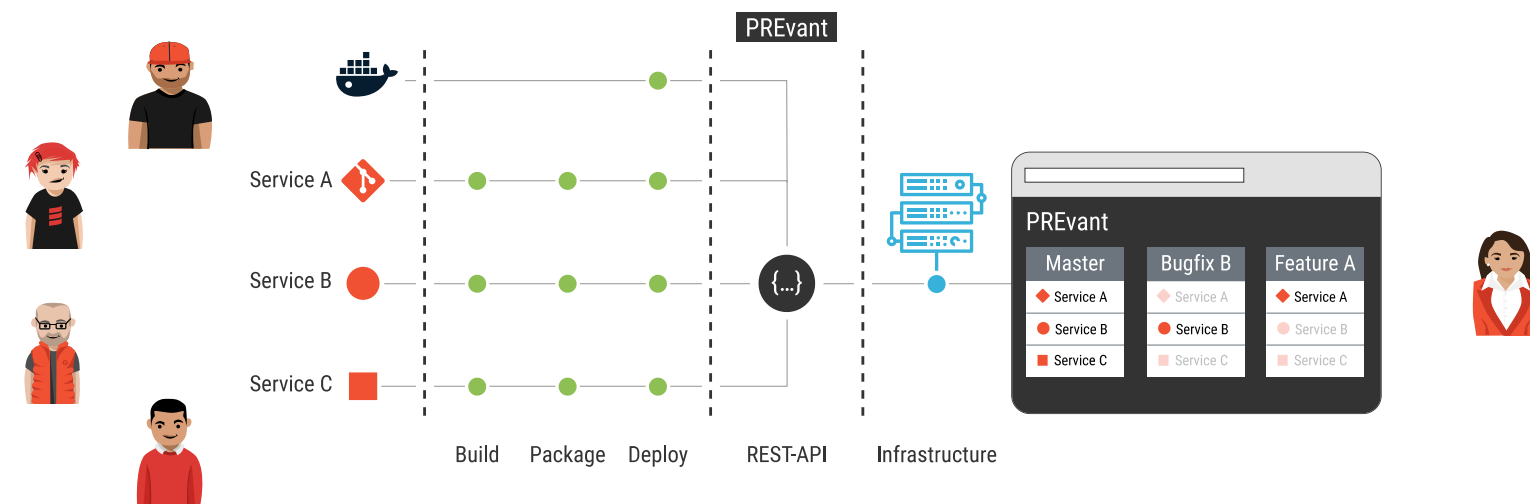
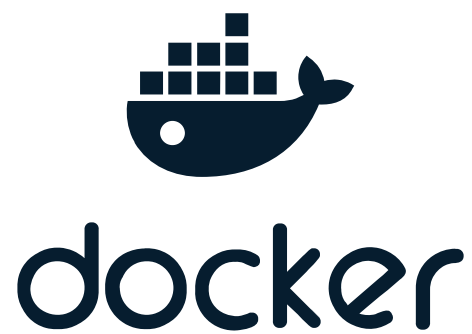
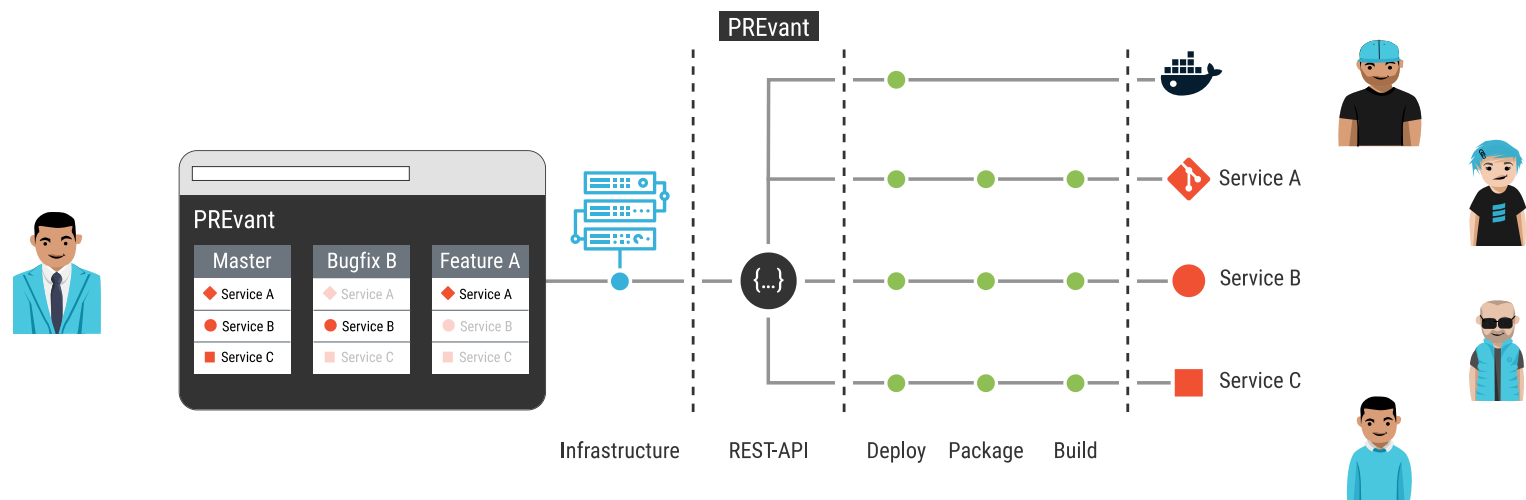




How to simplify preview deployment and quality assurance?

PREvant in a nutshell





PREvant in a nutshell
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Demo

PREvant

Search Apps

</> CODE

>_ API

Previews

master

INSTANCE

Logs

INSTANCE

API Documentation Logs

18.2.2019, 14:26:37

5e44b3e...

INSTANCE

API Documentation Logs

18.2.2019, 15:39:06

0c7a277...

INSTANCE

API Documentation Logs

18.2.2019, 13:54:23

7beb15c...

INSTANCE

API Documentation Logs

18.2.2019, 15:37:52

aea53f0...

INSTANCE

API Documentation Logs

7.12.2018, 14:22:10

7a4b8fa...

master-1.x

INSTANCE

Logs

INSTANCE

API Documentation Logs

14.2.2019, 15:42:40

b40b29c...

INSTANCE

API Documentation Logs

14.2.2019, 16:14:16

5d6dc51...

INSTANCE

API Documentation Logs

14.2.2019, 14:07:27

51c1372...

REPLICA

API Documentation Logs

11.2.2019, 14:39:12

d56ae8b...

REPLICA

API Documentation Logs

7.12.2018, 14:22:10

7a4b8fa...

How does it work?

- ✓ **Provides a RESTful API to abstract microservice deployment**
- ✓ **Services of multiple repository are combined into one application**
- ✓ **Replication is usefult for Git-flow based development**
- ✓ **Companions are useful for infrastructure services**

It is just a Docker setup

```
version: "3"
services:
  prevant:
    image: aixigo/prevant
    labels:
      traefik.frontend.rule: 'PathPrefix:/,/index.html,/init.css,/app.js,/openapi.yaml,/api'
      traefik.frontend.priority: -100
    volumes:
      - /var/run/docker.sock:/var/run/docker.sock
      - ./PREvant-config.toml:/app/config.toml

traefik:
  image: traefik:alpine
  command: --api --docker
  network_mode: "bridge"
  ports:
    - "80:80"
    - "8080:8080"
  volumes:
    - /var/run/docker.sock:/var/run/docker.sock
```

How does it work

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Companions

```
[[companions]]
# A database for each service
[companions.mariadb]
type = 'service'
image = 'mariadb:10.3'
serviceName = '{{service.name}}-db'
env = [ 'MYSQL_DATABASE={{service.name}}', 'MYSQL_ALLOW_EMPTY_PASSWORD=yes'

# A OpenID provide for the application
[companions.openid]
type = 'application'
image = 'registry.example.com/org/openid-provider:latest'
serviceName = 'openid'
```

How does it work

Thank you for your attention.

Any questions?



<https://github.com/aixigo/PREvant>

Q&A
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