## Tame your microservices with Ortelius



Juan Peredo



# The humble pizza





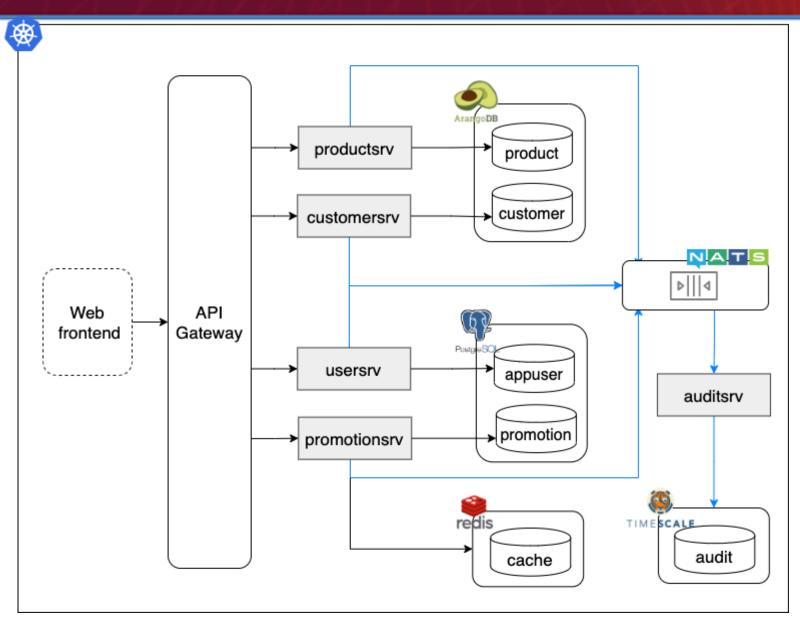
## The ingredients

#### Secret to a good Pizza:

- Ingredient quality
- Ingredient management
- · Ingredient mix



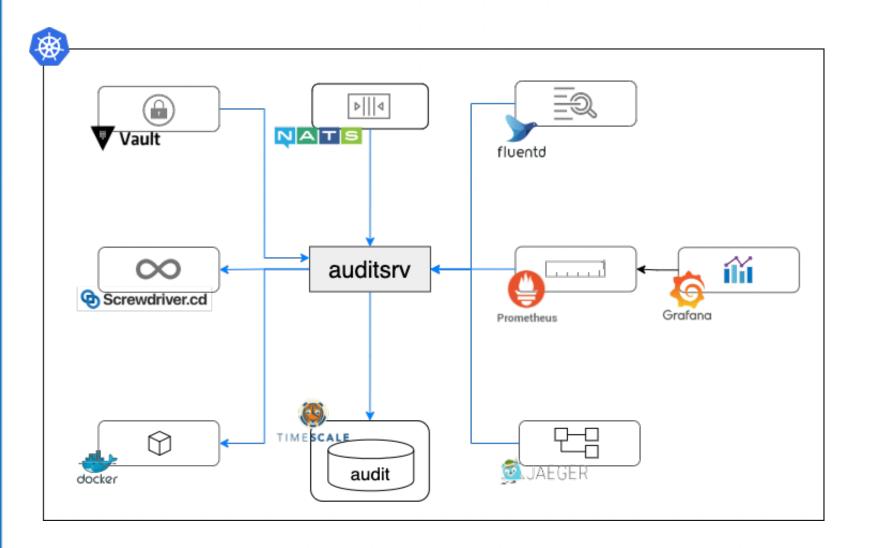
### Microservices applications



- Loose coupling of microservices
- Additional dependencies
- Potentially multiple tech stacks
- Independent deployments



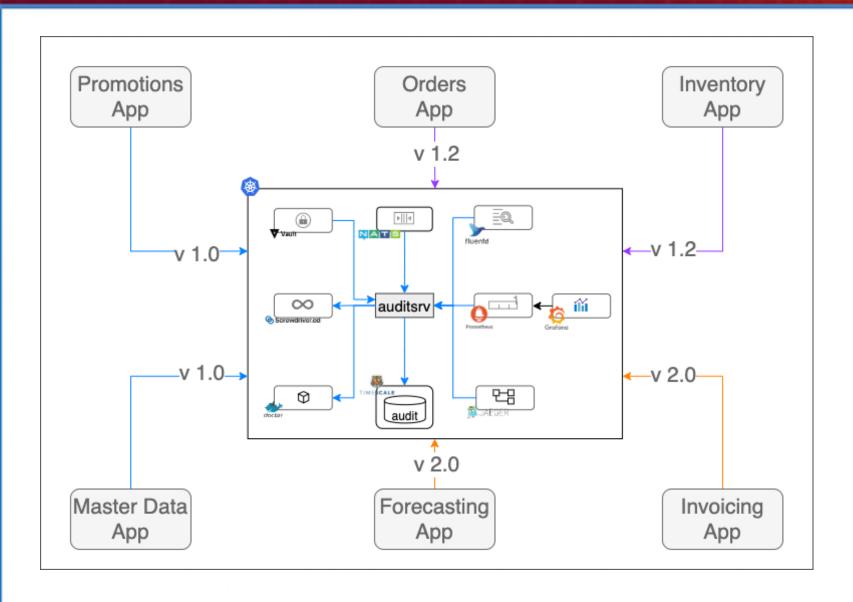
#### Audit microservice



 Service itself is loose coupling of multiple technologies



## Audit microservice usage



- Service used by multiple applications
- There could be multiple versions of a microservice active at any one time



## What could go wrong?



- Modern apps have lots of moving parts
- Very hard to:
  - Keep track of the app components
  - Update individual components
  - Determine source of failure



# Software management



Move from application management to microservice management



## Your transformation guide



Tech consultant / architect / developer and everything in between.

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juanperedotech



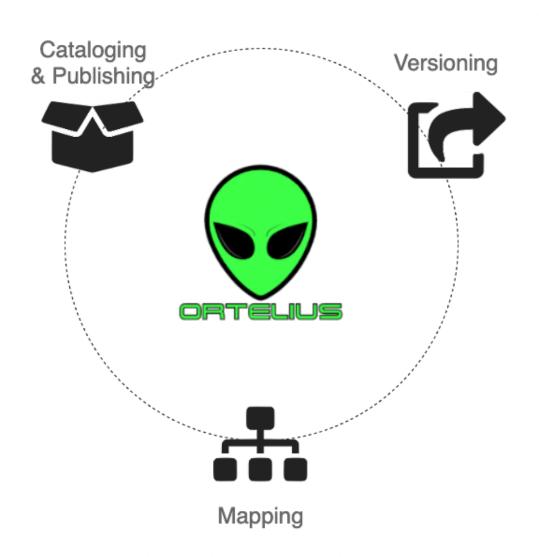
# Day 2 management

Application View	<ul> <li>Which microservices are used ?</li> <li>Which version of a microservice is used ?</li> <li>What are the dependencies of each microservice ?</li> </ul>
Microservice View	<ul> <li>Which applications use the microservice?</li> <li>What is the upgrade blast radius?</li> <li>When to sunset a version?</li> <li>What are the dependencies?</li> <li>Which environment contains which microservice?</li> </ul>

Crucial Information to manage hundreds of microservices



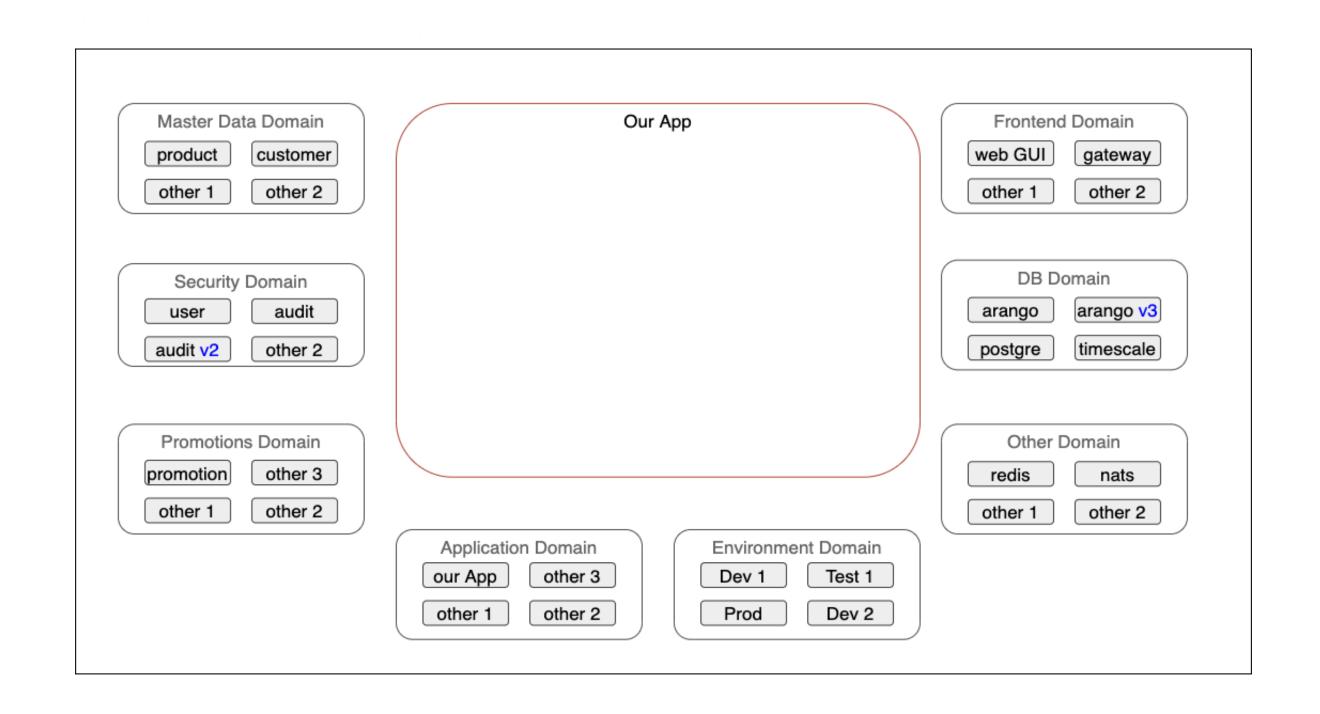
#### Ortelius



- Open source project
- Started on: December 2020
- Part of the CD foundation
- Project home: Ortelius.io
- Documentation: docs.ortelius.io/guides/

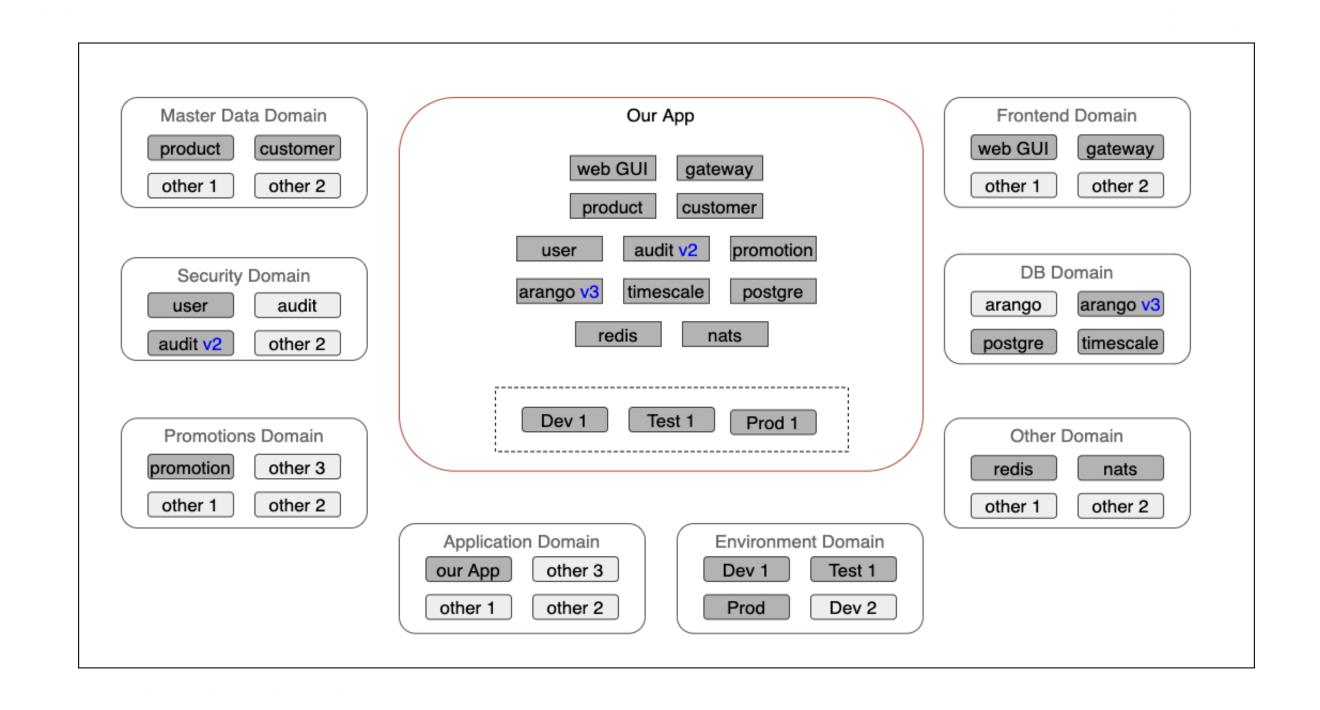


# Domain Catalog





# Domain Catalog



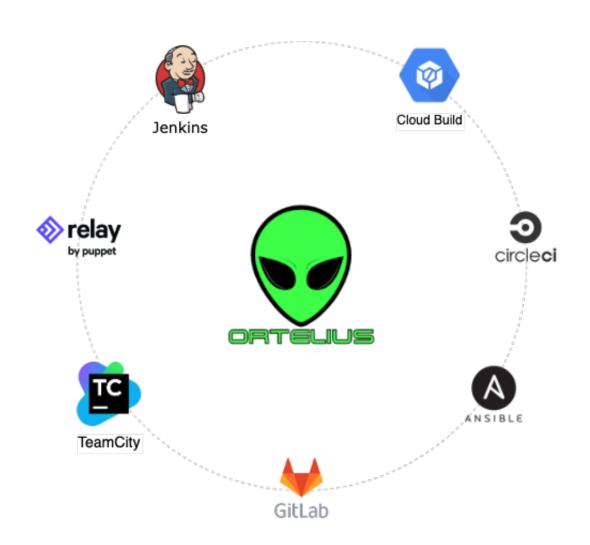


#### Demo

```
mport routes from 'routes'
  port httpService from 'services/core/httpService'
 su 5 months ago | 1 author (You)
class UserService {
   public getUser(id) {
       return httpService.get(`${routes.api.user}/$(id)`);
   public update = (property, config) => {
       user[property].map(item \Rightarrow {
           if (item.id == config.id) {
              config.data.forEach(field ⇒ {
                   if (field.key.includes('['
```



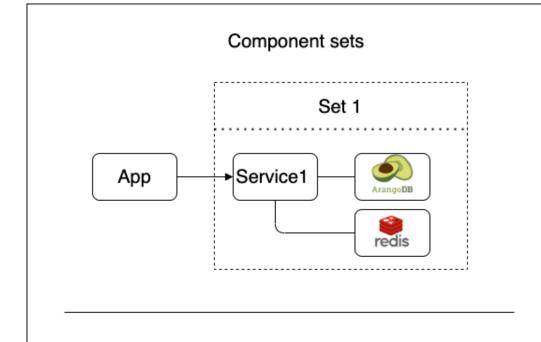




- Use CI/CD to automate catalog maintenance
  - Creation of new app/component versions
  - Records/executes deployments of new versions
- Ortelius provides:
  - Internal deployment capabilities
  - Integration with external CI/CD tools



#### Ortelius future enhancements



#### Component usage summary

Component	Version	Application	Environment
Service 1	1.0	App1	Prod
	1.3	App1	Dev
	1.3	App2	Dev2

- Component sets
- Component usage summary
- Additional CI/CD integrations
- Dynamic Service discovery
- Integration with Open Telemetry
  - What changed that caused an error?



# Key take aways





# Questions?



Thanks to the cdCon & all the conference sponsors



Appendix



### Photos





- · Image by Gerd Altmann from Pixabay
- Photo by Juan Encalada on Unsplash
- · Photo by Sebastian Herrmann on Unsplash