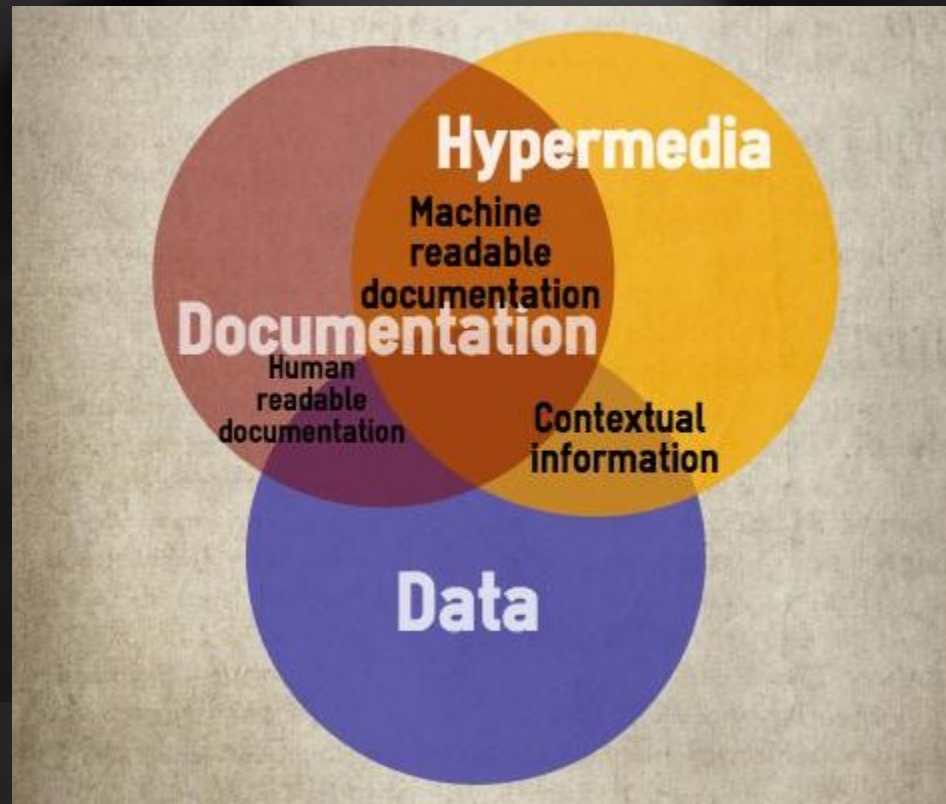# Documented and Tested Microservices For Fun And Profit

👤 Oliver Trosien, ePages GmbH
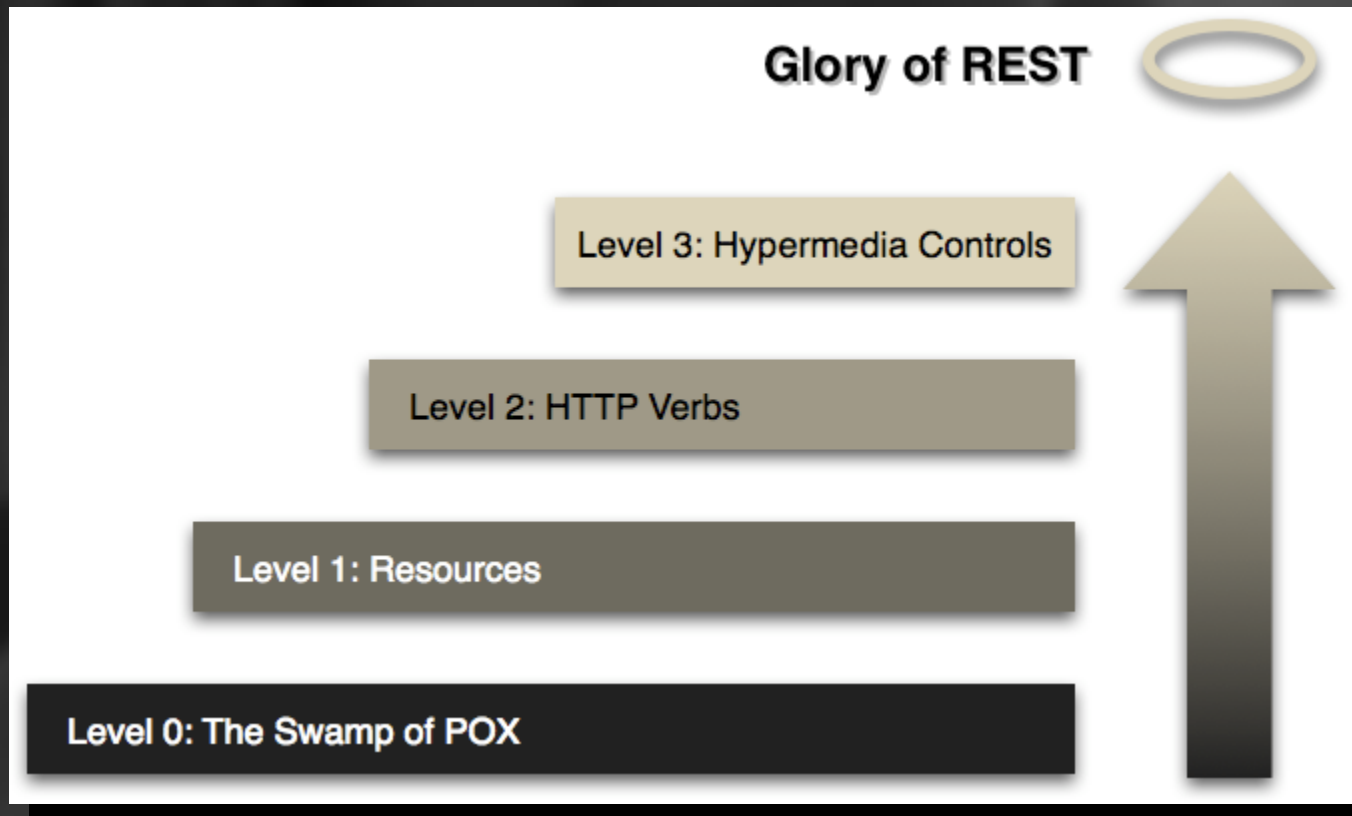
WTF is a "REST endpoint"?
- Roy Fielding

Documenting REST APIs

How RESTful are you?

How RESTful do you want to be?

Interface Description Languages

WSDL (2001) | WADL (2009) | Swagger (2009) | RESTdesc (2010) | I/O Docs (2011) | JSON Home (2012) | RAML (2013) | API Blueprint (2013) | JSON Hyper-Schema (2013) | Hydra (2014, draft) | ALPS (2014, draft) | UBER (2015, draft) | CPHL (2015, brain-storming) ..

Media Types

Plain-old XML | Proprietary JSON | HAL (2011) | JSON-LD (2011) | Collection+JSON (2011) | JSON API (2013) | Hydra (2014) | Mason (2014, draft) | SIREN (2015, draft) ..

HAL

```json
{
  "_links": {
    "self": {
      "href": "http://otrosien:8081/pizzas"
    }
  },
  "_embedded": {
    "pizzas": [
      {
        "name": "Pizza Salami",
        "description": "The classic"
      }
    ]
  }
}
```

Spring-Data-REST

Spring WebMVC ➕ Spring-Data ➕ Spring-HATEOAS

👍 Repositories as resources with CRUD operations
👍 Supports HAL + ALPS + JSON Schema
👎 Ties your REST API to your data model

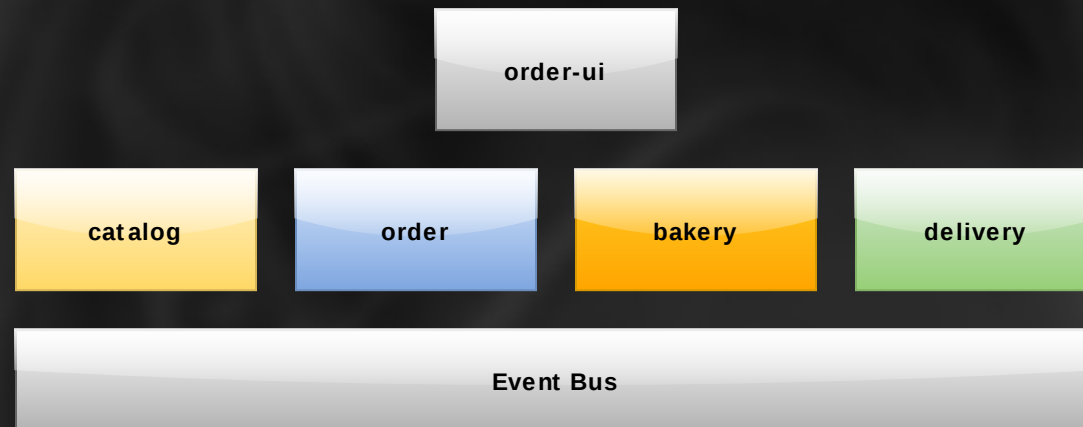olivergierke/spring-restbucks

Follow your nose API

⚓ Single well-known entry point

🔗 Resources discoverable via link relations

Documentation style

- 👍 Focus on problem domain
- 👍 Focus on relations
- 👍 Be consistent
- 👎 Focus on URIs
- 👎 Repeating the obvious

The ePizza system

order-ui

catalog | order | bakery | delivery

Event Bus

ePages-de/rnd-microservices-handson

Demo

Learnings

🎓 IDL standards are still evolving

🎓 Tool-support (usually) still poor

🎓 Be correct, complete and current

Thank you!

For more info, feel free to contact us

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