GraphQL and Microservices

Integration Strategies

Oliver Sturm • @olivers • oliver@oliversturm.com



Oliver Sturm

- Training Director at DevExpress
- Consultant, trainer, author, software architect and developer for over 25 years
- Contact: oliver@oliversturm.com

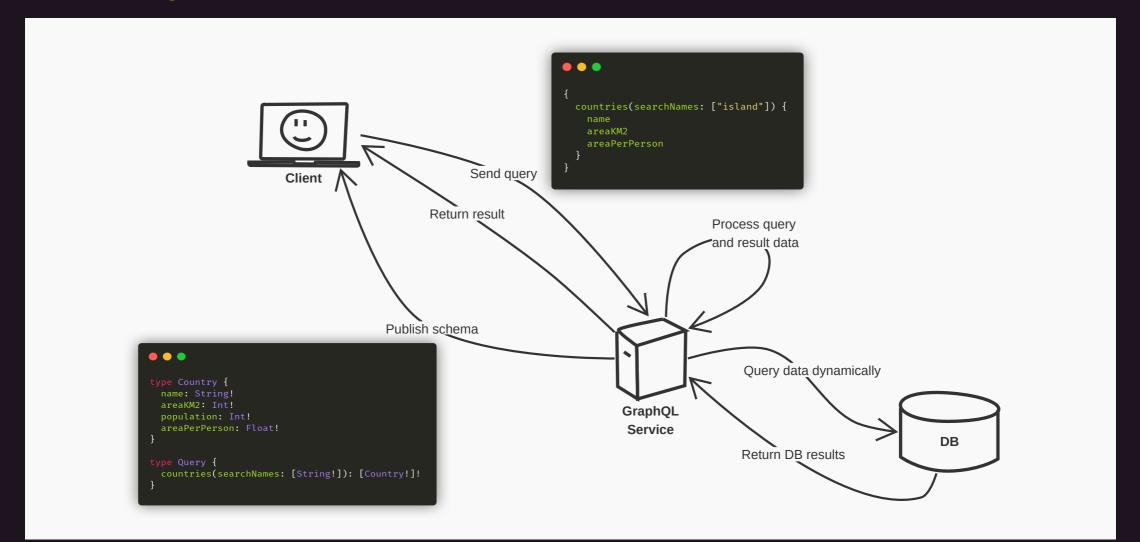
GraphQL and Microservices 2 / 1.

Agenda

- Leveling the playing field -- what's GraphQL anyway?
- The diffculty of interating with service architectures
- Solution proposals

GraphQL and Microservices 3 / 15

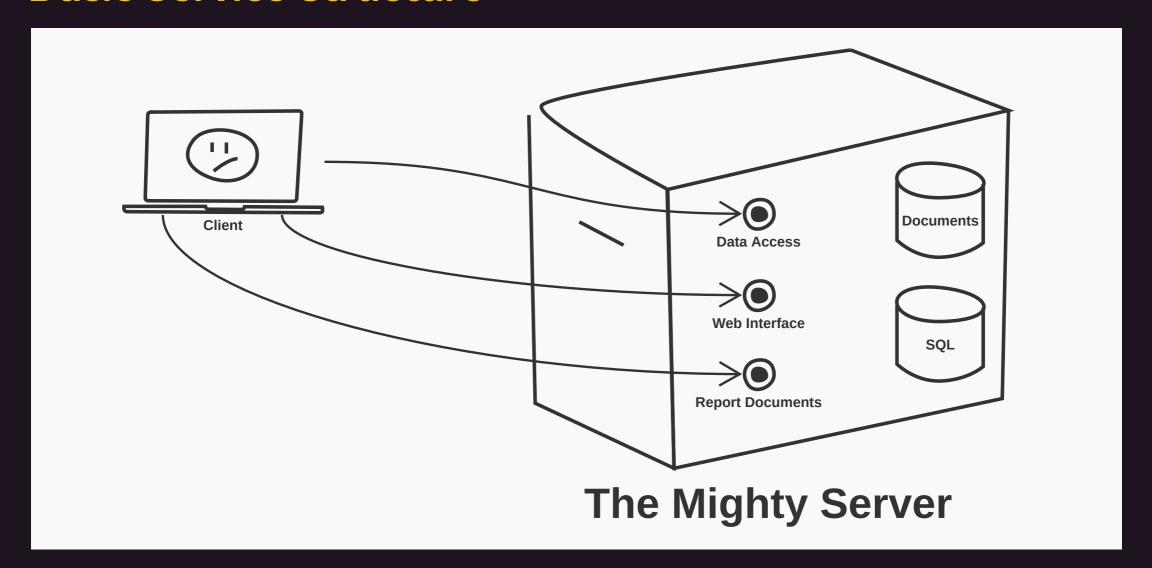
GraphQL



GraphQL and Microservices 4 / 15

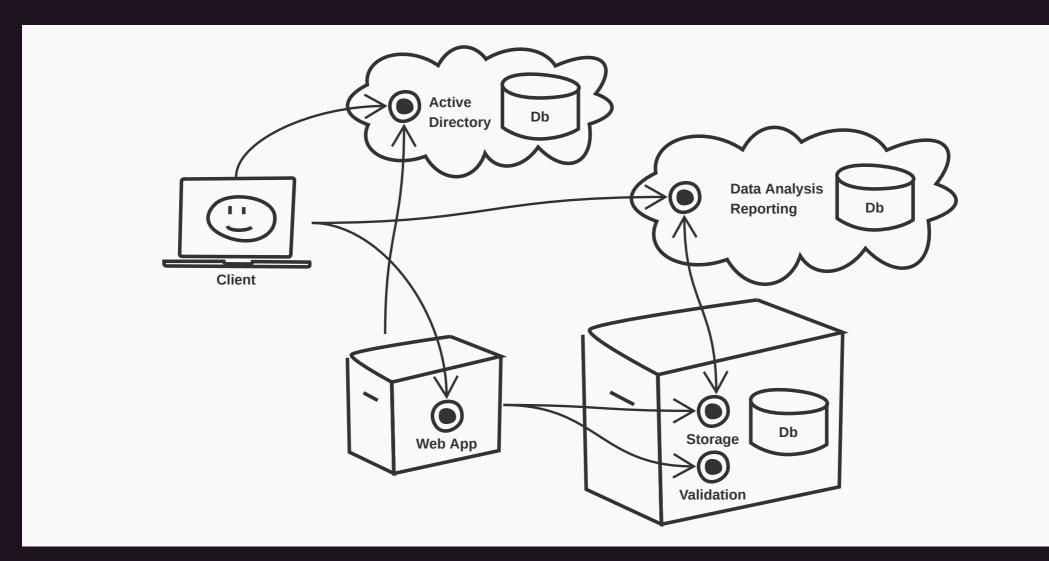
DEMO

Basic Service Structure



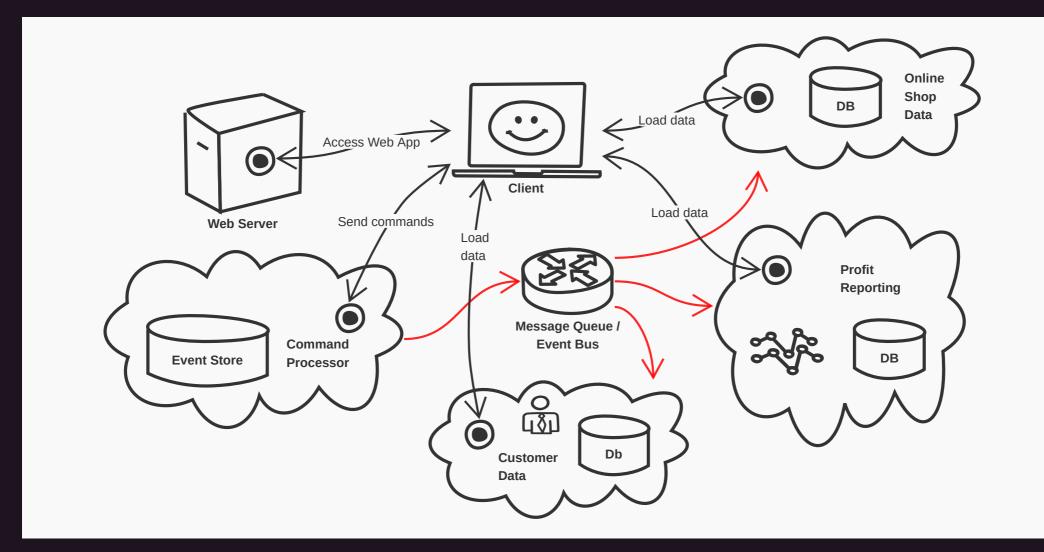
GraphQL and Microservices 6 / 15

Microservices Structure



GraphQL and Microservices 7 / 15

CQRS/ES Structure



GraphQL and Microservices 8 / 15

GraphQL Integration In Service Architectures

There are two integration options.

1. Provide an extra read model endpoint that understands GraphQL queries

GraphQL and Microservices 9 / 1.

GraphQL Integration In Service Architectures

There are two integration options.

1. Provide an extra read model endpoint that understands GraphQL queries

Of course it is possible to create a special read model for this purpose, instead of using an existing one

GraphQL and Microservices 9 / 15

GraphQL Integration In Service Architectures

There are two integration options.

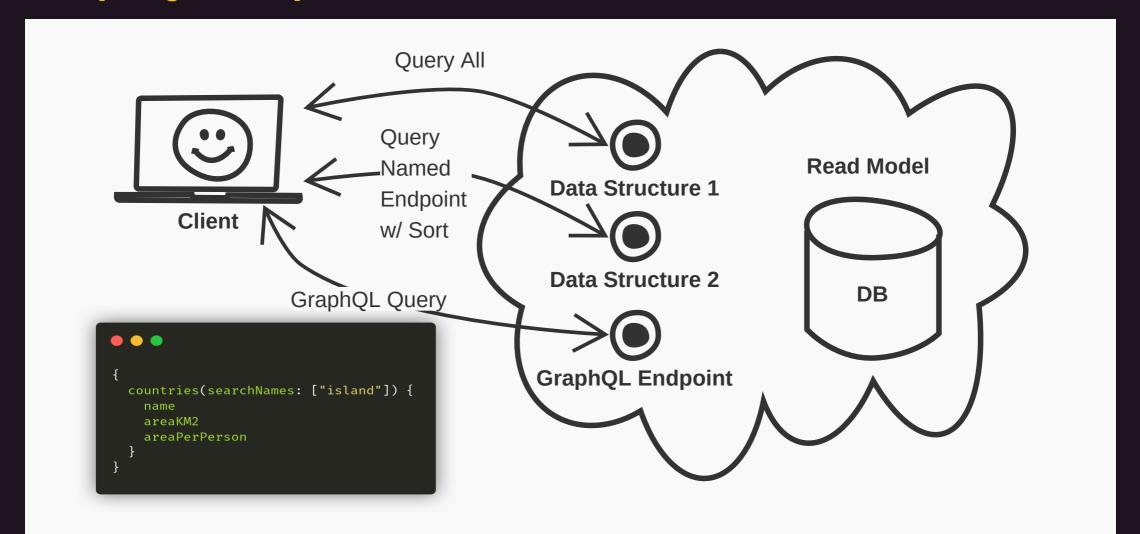
1. Provide an extra read model endpoint that understands GraphQL queries

Of course it is possible to create a special read model for this purpose, instead of using an existing one

2. Create an accumulation service for dynamic GraphQL queries

GraphQL and Microservices 9 / 1.

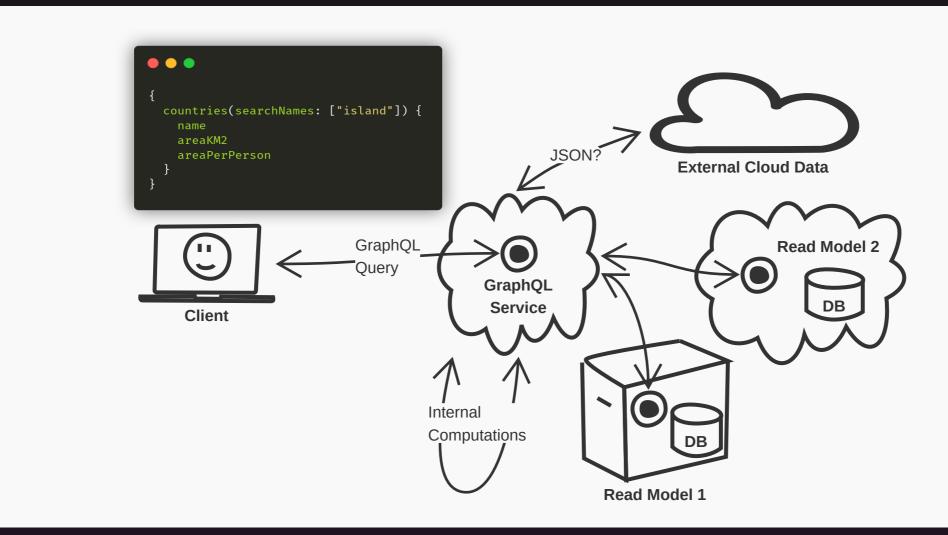
GraphQL Endpoint In The Read Model



GraphQL and Microservices 10 / 15

DEMO

Proxy/Facade/Mash GraphQL Service



GraphQL and Microservices 12 / 15

DEMO

Sources

- This presentation:
 - https://oliversturm.github.io/graphql-and-microservices
 - PDF download:
 https://oliversturm.github.io/graphql-and-microservices/slides.pdf
- Source code: https://github.com/oliversturm/graphql-and-microservices

GraphQL and Microservices 14/15

Thank You

Please feel free to contact me about the content anytime.

Oliver Sturm • @olivers • oliver@oliversturm.com

