Microservice Research

What is microservice architecture?

In the microservice architecture an application is split up into smaller services. These services are modular and usually developed by separate teams. (What are Microservices? | AWS, n.d.)

What is a microservice?

A microservice or service is a piece of software that runs independently and can communicate with other services making use of APIs.

Best Practices

Database per Service

microservices best practice,

Pros:

- Data is separated, changes to one database doesn't impact another
- Each service could use a different database whichever fits the service
- Each database can be scaled independently, which results in more efficient scaling
- Prevent concurrency conflicts

Cons

- Challenging
- Higher Costs

(Pattern: Database per service, n.d.)

Single responsibility

Microservices best practice

Deploy in containers

This is always a good idea to make sure your services are able to run independently outside your pc.

API Gateway

API gateway sits between the frontend and the backend. It provides an easier way to route requests, provides security by making use of authentication, authorization and load balancing. An API gateway does not have any drawbacks other than adding a little latency. But it helps with Scalability and Security, which is very good. (Ma, 2024)

See

- IP – API Gateway Research
- IP – What API Gateway should I use Research

Setting up a CI/CD

HTTP vs Messaging

See

- IP - HTTP vs AMQP research.

Bibliography

Ma, W. (2024, January 25). *18 Essential Microservice Best Practices*. Retrieved from Medium: https://www.devskillbuilder.com/18-essential-microservice-best-practices-655fd4d20ee6

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What are Microservices? | AWS. (n.d.). Retrieved from Amazon Web Services, Inc.: https://aws.amazon.com/microservices/