
Node.js Microservices

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What are microservices?

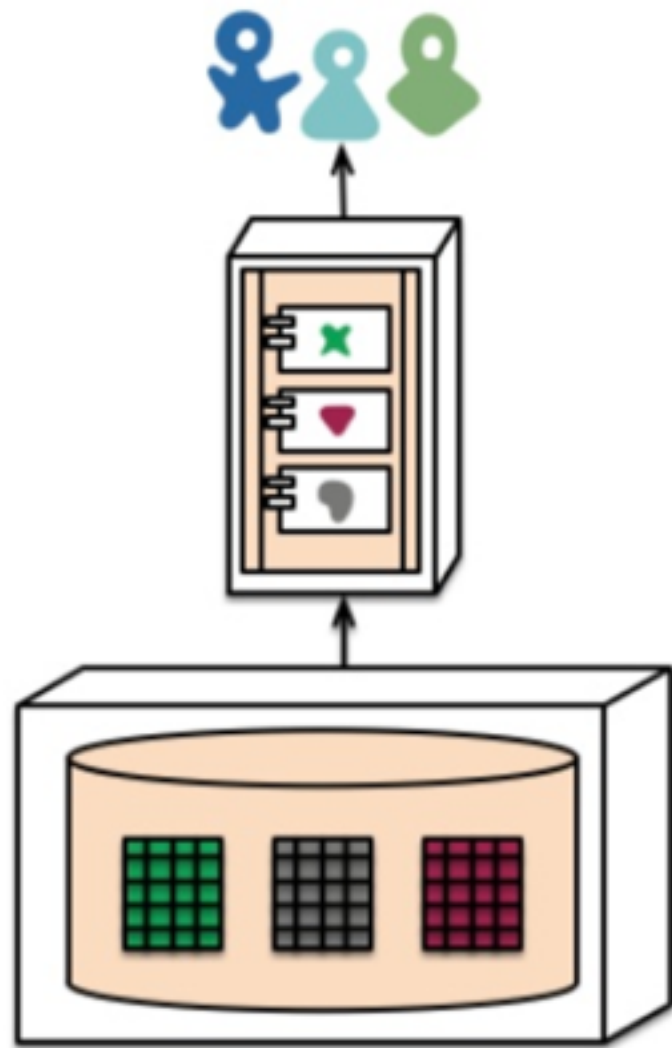
Monolithic vs Microservices



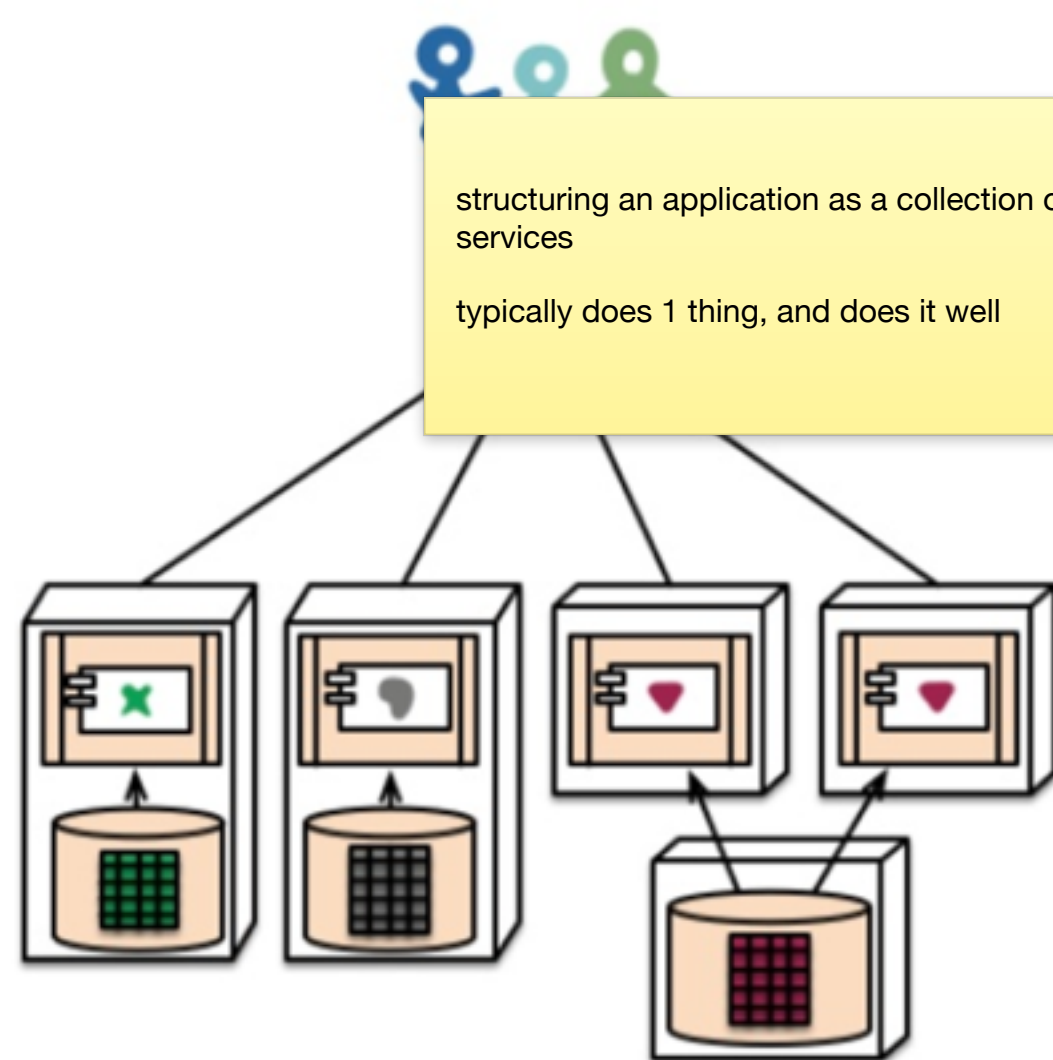
Monolithic



Microservices



monolith - single database



microservices - application databases

Monolith vs Microservice

Source: Martin Fowler blog

Benefits of Microservices

- ❖ Developer independence
- ❖ Scalability
- ❖ Right tech stack for each service
- ❖ Fault isolation
- ❖ Easier for a developer to understand
- ❖ Not working -> rewrite it!

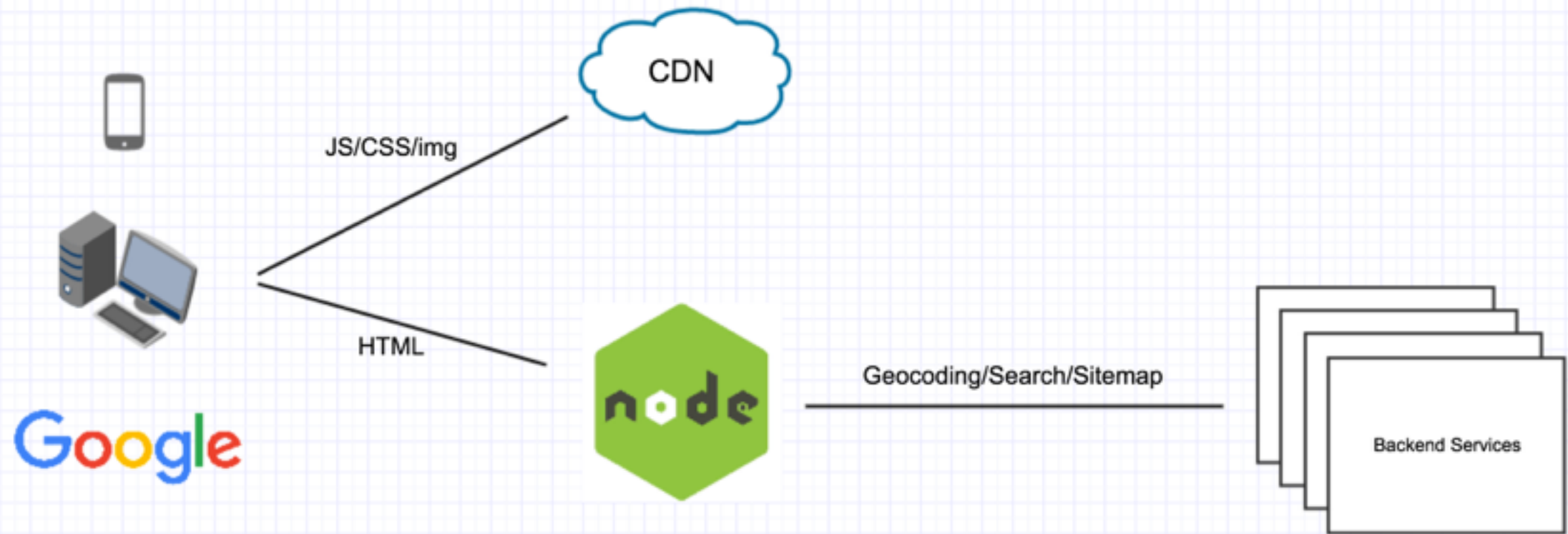
Advantages Node.js?

- ❖ Event-driven, non-blocking - great for async calls
- ❖ Lightweight and efficient
- ❖ 400,000+ packages available on npm
- ❖ Everyone knows a little JavaScript

Successful Node.js Microservices

Insurance Locator

- ❖ Find an agent near me
- ❖ SEO
- ❖ over 1 million pageviews/month



Insurance Locator

- ❖ Template and routing engine
- ❖ Assets served from CDN
- ❖ AWS Elastic Beanstalk

Workflow Automation Utility

- ❖ Needed a services that transitioned and tagged Jira tickets.
- ❖ Sits idle most of the time

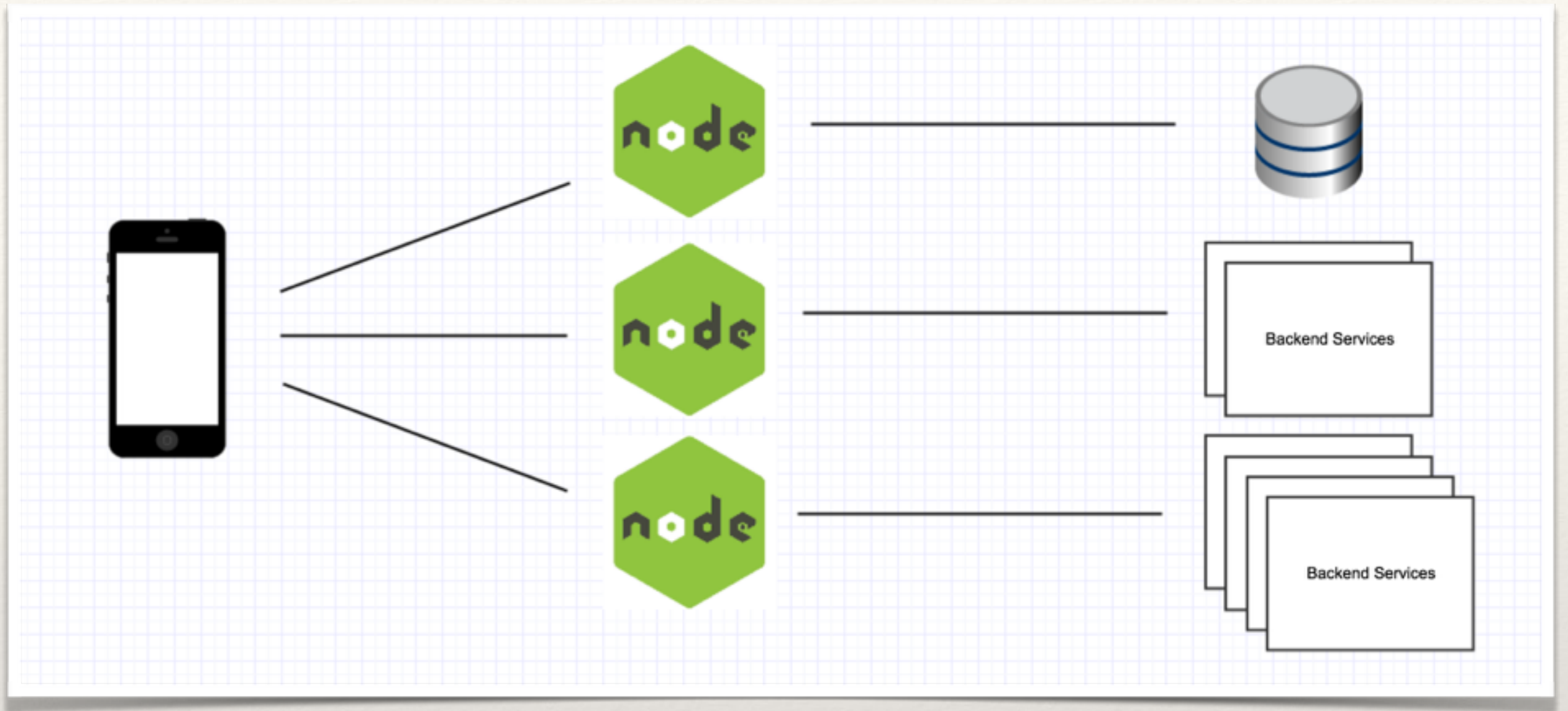


Workflow Automation Utility

- ❖ AWS Lambda
- ❖ npm jira module

Energy Company App

- ❖ API aggregator of backend enterprise services
- ❖ Changes can be made easier than deploying a new app to App Store / Google Play



Energy Company App

- ❖ Business Logic
- ❖ Security

Challenges with Microservices

- ❖ Operations and Infrastructure
- ❖ Fault Tolerance
- ❖ Monitoring
- ❖ Security
- ❖ Dev Environments

What works for you?

Learn more about microservices at Denver
Microservices Meetup:
[meetup.com/DenverMicroservices](https://www.meetup.com/DenverMicroservices)