AWS 5 U M M I T

Going Cloud Native in an Enterprise Environment

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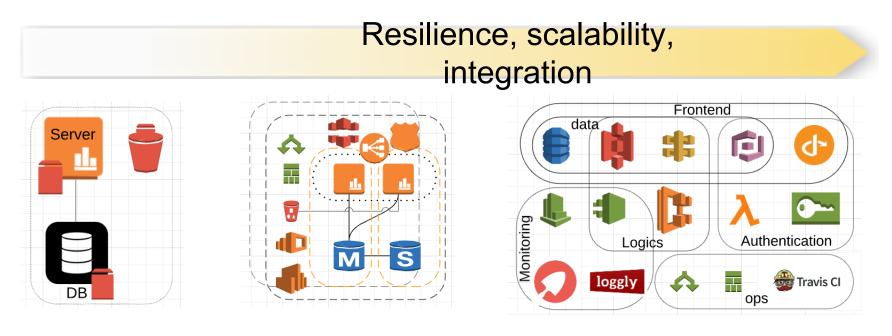
On Cloud Native Applications





Wait what's Cloud Native?

Short answer: We see it as a matter of citizenship, sort of.



Cloud Native



Cloud Native Ecosystem(s)

Brace yourselves: Buzzwords coming!

Cloud Resources

- ♦ Dyanamodb
- ♦ Cognito
- ♦ Lambda
- ♦ ECS
- \Diamond S3
- Content DistributedSystems

Pattern & Industry Standards

- ♦ 12+ factor apps
- ♦ Microservices
- ♦ P/F/C-aaS
- ♦ Event Driven Architecture
- ♦ Continuous Deployment
- Service Discovery
- ♦ Open ID
- ♦ ReST
- Immutable Infrastructure.

Tooling & Integrated Services

- Cloudformation / Ansible / OpsWorks ...
- ♦ Loggly, Travis-ci, Sysdig, Datadog, ...
- Docker, App Frameworks.
- ♦ Etcd, CoreOS.



Practical example

Context: Microservices application Component: Service discovery.

Cloud resources:

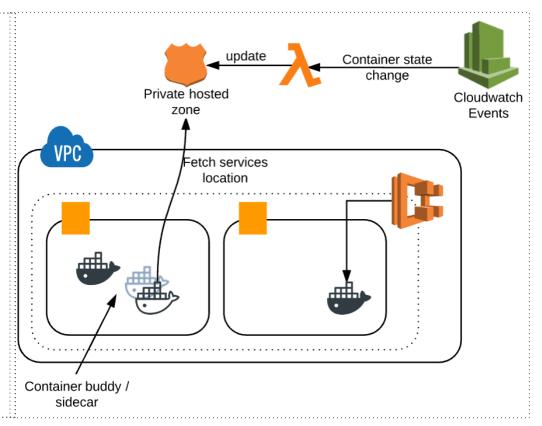
- Cloudwatch, Lambda, ECS

Patterns:

- Container sidecar
- Client side service discovery.

Tooling:

- Docker, cloudformation.





VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY



Short company portrait

Volkswagen Financial Services

- Largest provider of automobile financial services in Europe
- > 17 million contracts worldwide
- Operating result EUR 2,1 billion
- 15,324 employees in 51 countries
- Headquartered in Germany (Braunschweig)
- Security and trust extremely important to us



Our journey towards the cloud

- Very traditional financial products, dealer-based network
- "One contract equals a tree"
- Customer journey had to change drastically
- First mobile apps, then smaller products
- New approach for digitizing our core products
- Cloud/AWS is now seen as a crucial technology



Being cloud native is a no-brainer – or?

- New environment
- New technologies
- New skills

New culture





Put together ...



What we've learned.

- Anxiety over "security" often get you take bad decisions:
 - Understand the security model.
 - Define your safe space (trusted zone) and expand it.
- Understanding the real benefits:
 - · Let you focus more on adding business value.
 - Continuous deployment / automation are key for more secure software.
- Adapting the mindsets and the processes can take time.
- Understand your patterns.





