


Spring Cloud Logo

Motivation


A light gray rectangular box containing the text "Spring Cloud Logo" in a dark gray, sans-serif font.

Spring Cloud Logo

Spring Cloud

Spring Cloud?

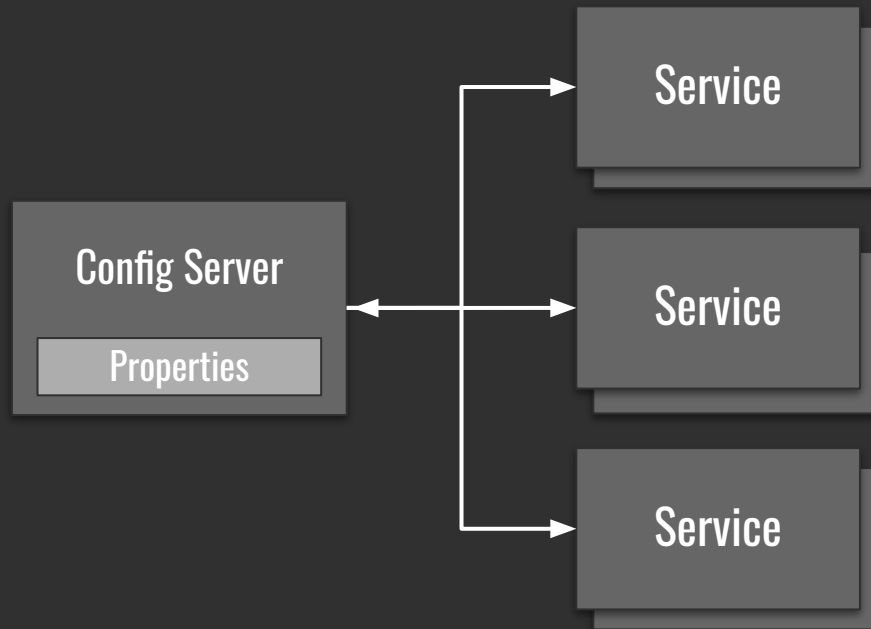
- Unterprojekt des Spring Teams
- SDK nicht Cloud Lösung
- Essentielle Bibliotheken für Cloud Anwendungen
- Spring typische Entwicklung
- Lauffähig Lokal und Cloud
- Unterstützung von Cloud Anbietern
- Anwendbar auf bereits existierende Services

A light gray rectangular box containing the text "Spring Cloud Logo".

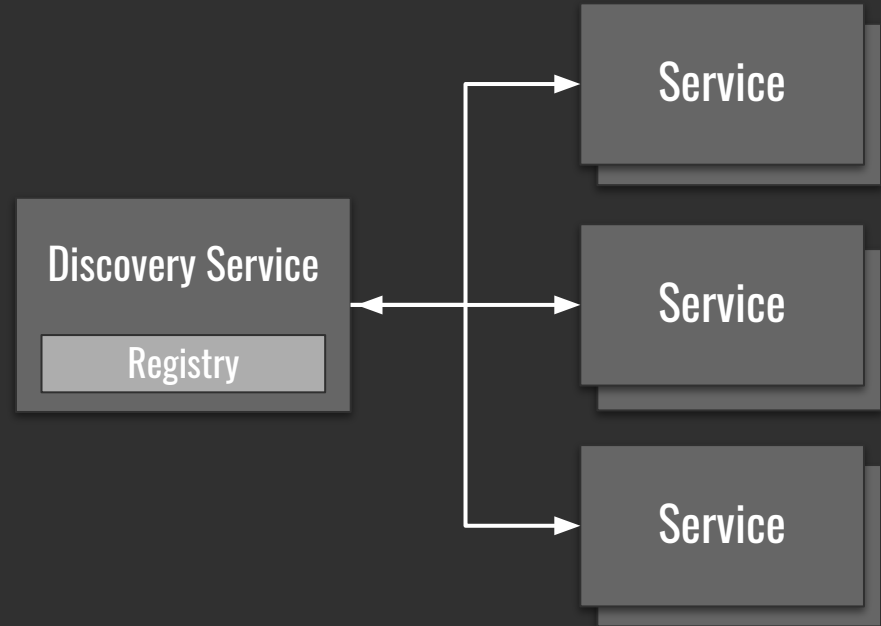
Spring Cloud Logo

Spring Cloud Komponenten

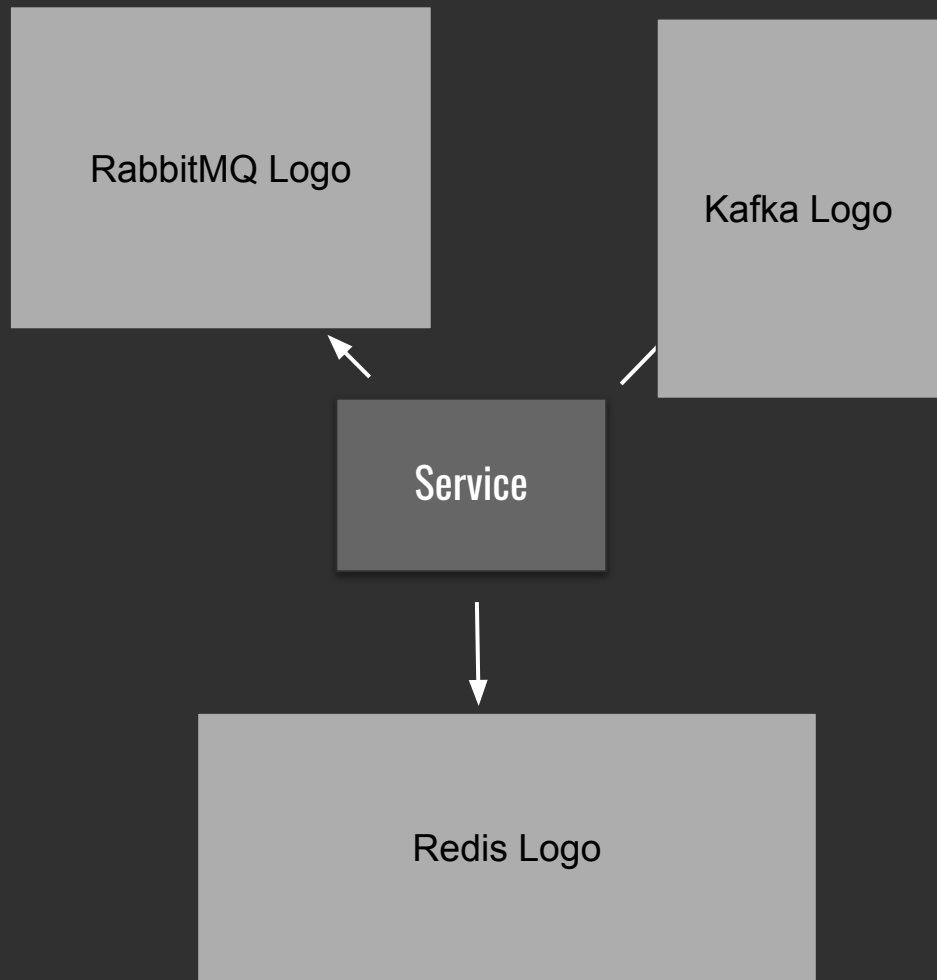
Distributed Configuration



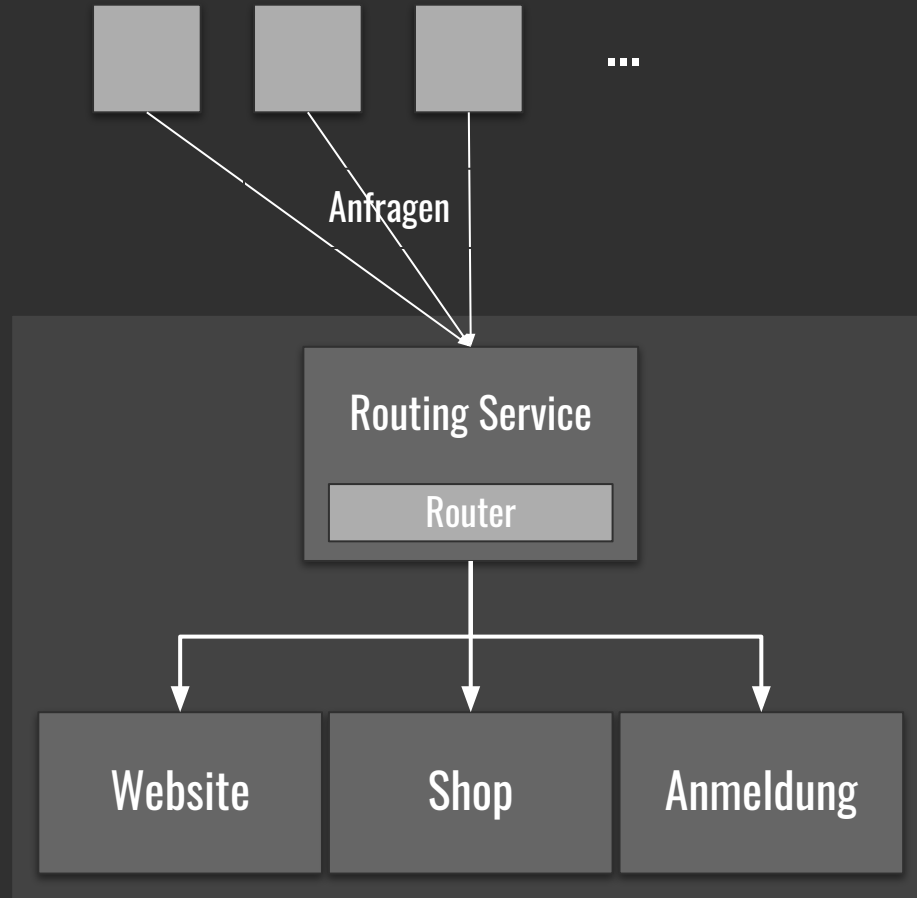
Service registration & discovery



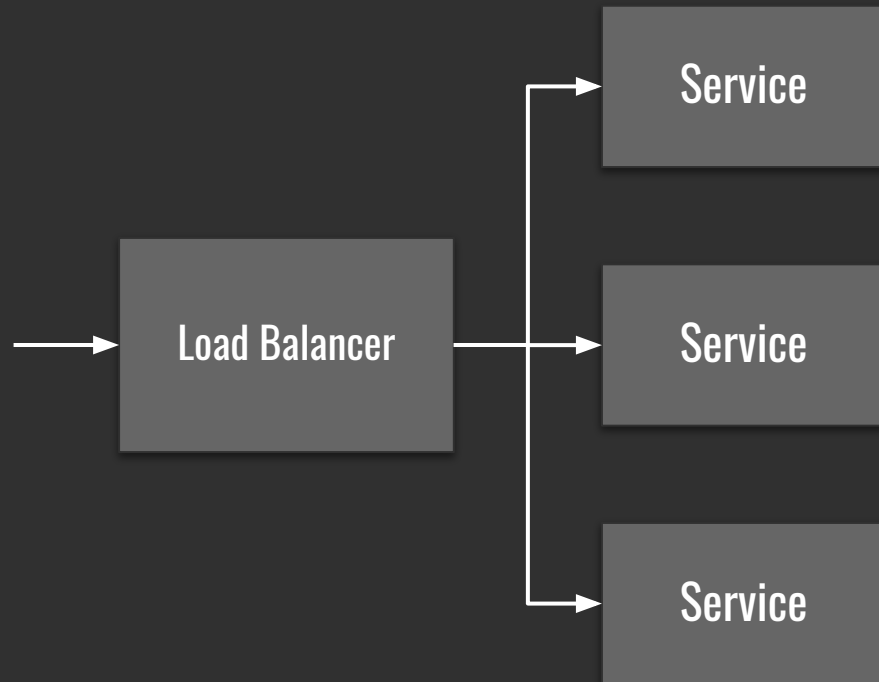
Distributed Messaging



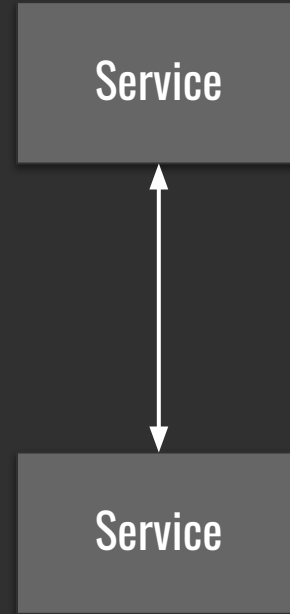
Routing



Load Balancing



Service to Service calls



Security



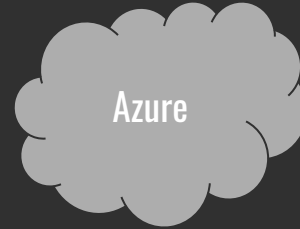
Service

Global locks leadership election and cluster state

Cluster

Cluster

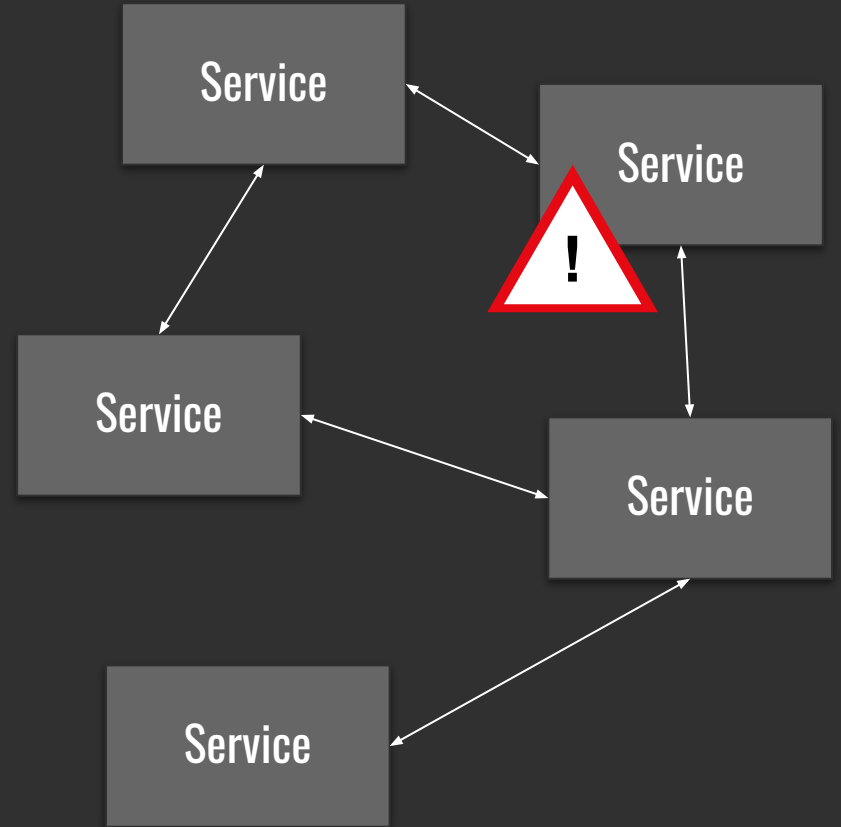
Cloud Support



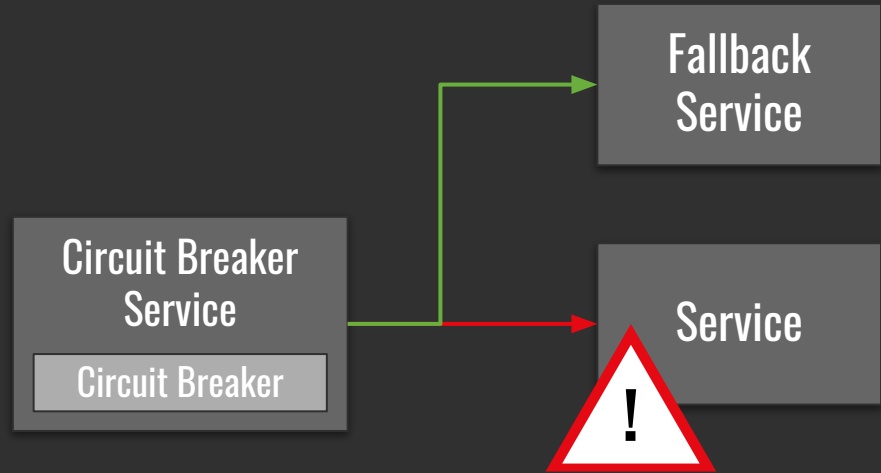
Big Data Support



Distributed Tracing



Circuit Breakers



Implementierungen der Komponenten

Distributed configuration	Config	Spring Cloud Bus	Netflix Archaius
Service registration and discovery	Netflix Eureka	Consul	Netflix ZooKeeper
Distributed messaging	Streams		
Routing	Netflix Zuul		
Load balancing	Netflix Ribbon		
Service to service calls	Netflix Feign		
Security	Security		
Global locks leadership election and cluster state	Cluster		
Cloud Support	Connectors	AWS	Cloud Foundry
Big data support	Data Flow		
Distributed tracing	Sleuth		
Circuit breakers	Netflix Hystrix		

Distributed configuration	Config	Spring Cloud Bus	Netflix Archaius
Service registration and discovery	Netflix Eureka	Consul	Netflix ZooKeeper
Distributed messaging	Streams		
Routing	Netflix Zuul		
Load balancing	Netflix Ribbon		
Service to service calls	Netflix Feign		
Security	Security		
Global locks leadership election and cluster state	Cluster		
Cloud Support	Connectors	AWS	Cloud Foundry
Big data support	Data Flow		
Distributed tracing	Sleuth		
Circuit breakers	Netflix Hystrix		

Spring Cloud Logo



Netflix Logo

Spring Cloud Netflix

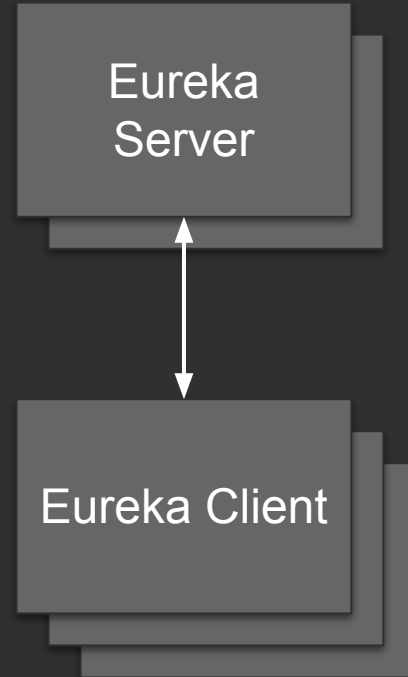
- Komponenten im Netflix OSS (Open Source Center)
- Maintenance Mode

A large, light gray rectangular area containing the text "Netflix OSS Logo" centered within it.

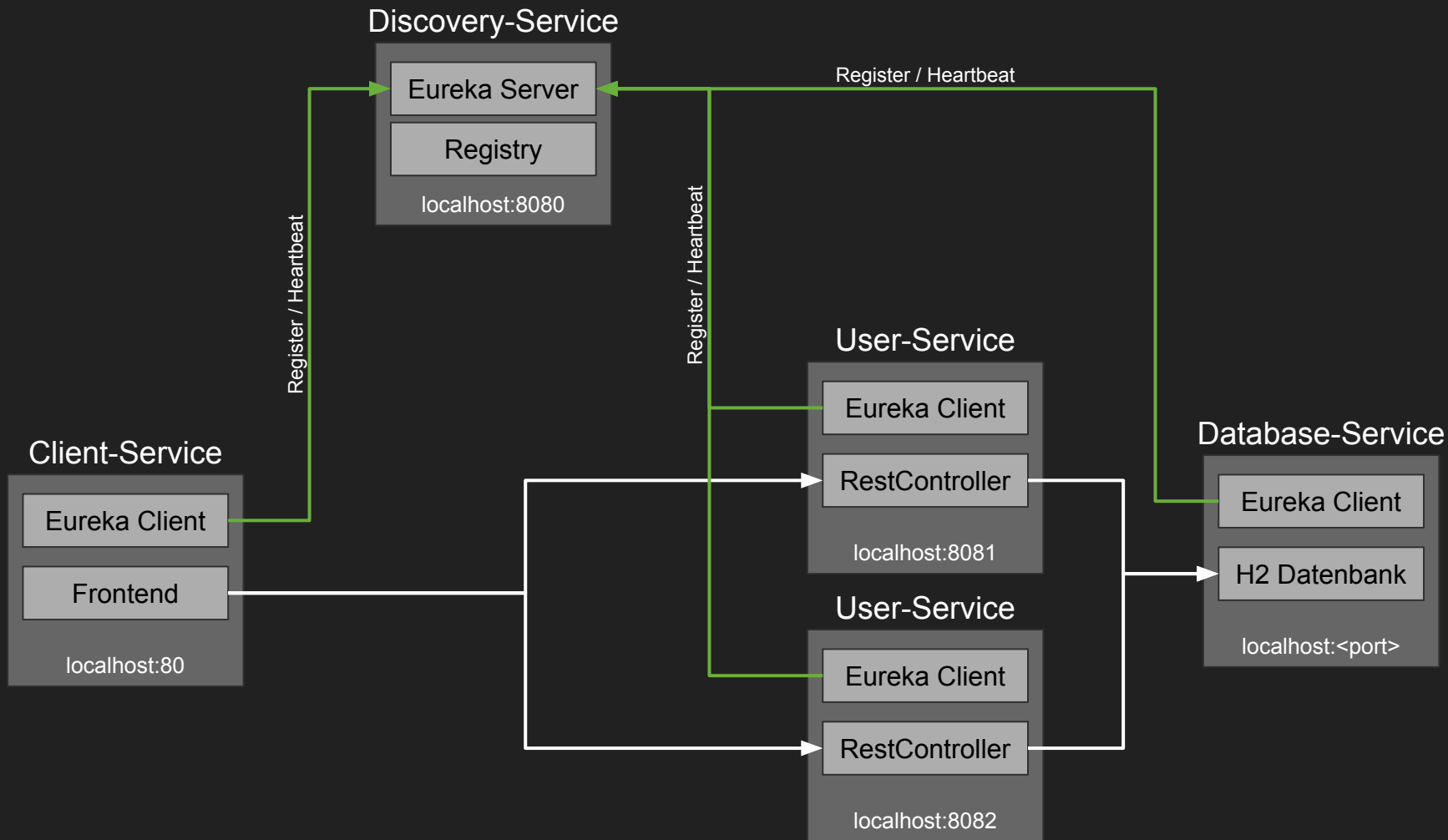
Netflix OSS Logo

Netflix Eureka

- Service Registration & Discovery
- Arbeitet mit REST Schnittstellen
- Eureka Server (Statische ip)
- Eureka Client (Dynamische ip)
- Logischer Name
- Heartbeat alle 30 Sekunden
- Registry
- Registry Cache
- Peer Awareness



DEMO



Stärken & Schwächen

Stärken

- Java Welt
- Gute Spring integration
- Gute Zusammenarbeit unterschiedlicher Spring Cloud Komponenten
- Entwickler fokussiert

Schwächen

- Java Welt
- viele Teile ersetzbar durch Kubernetes
- Java Entwickler muss sich um viel kümmern
- Keine Automatischen Deployments
- Kein Ressourcenmanagement
- ...

Fazit

A light gray rectangular box containing the text "Spring Cloud Logo".

Spring Cloud Logo

Vielen Dank für Ihre Aufmerksamkeit

Quellen

- Spring Cloud Logo: <https://spring.io/img/homepage/icon-spring-cloud.svg>
- Netflix Logo: <https://brand.netflix.com/en/assets/brand-symbol/>
- Netflix OSS Logo: <https://github.com/Netflix/eureka>
- Icons: <https://icons8.com/icon/new-icons>
- Weitere Quellen siehe Seminararbeit

Problem - Peer Awareness

