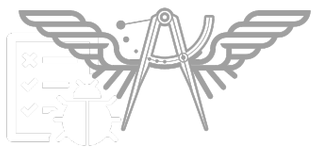
สยามชำนาญกิจ
SIAM CHAMNAN KIT

Microservices workshop



Somkiat Puisungnoen

Somkiat | Home

Somkiat Puisungnoen

Update Info 1 | View Activity Log 10+ | ...

Timeline | About | Friends 3,138 | Photos | More

When did you work at Opendream?

22 Pending Items

Intro

Software Craftsmanship

Software Practitioner at สยามชำนาญกิจ พ.ศ. 2556

Agile Practitioner and Technical at SPRINT3r

Post | Photo/Video | Live Video | Life Event

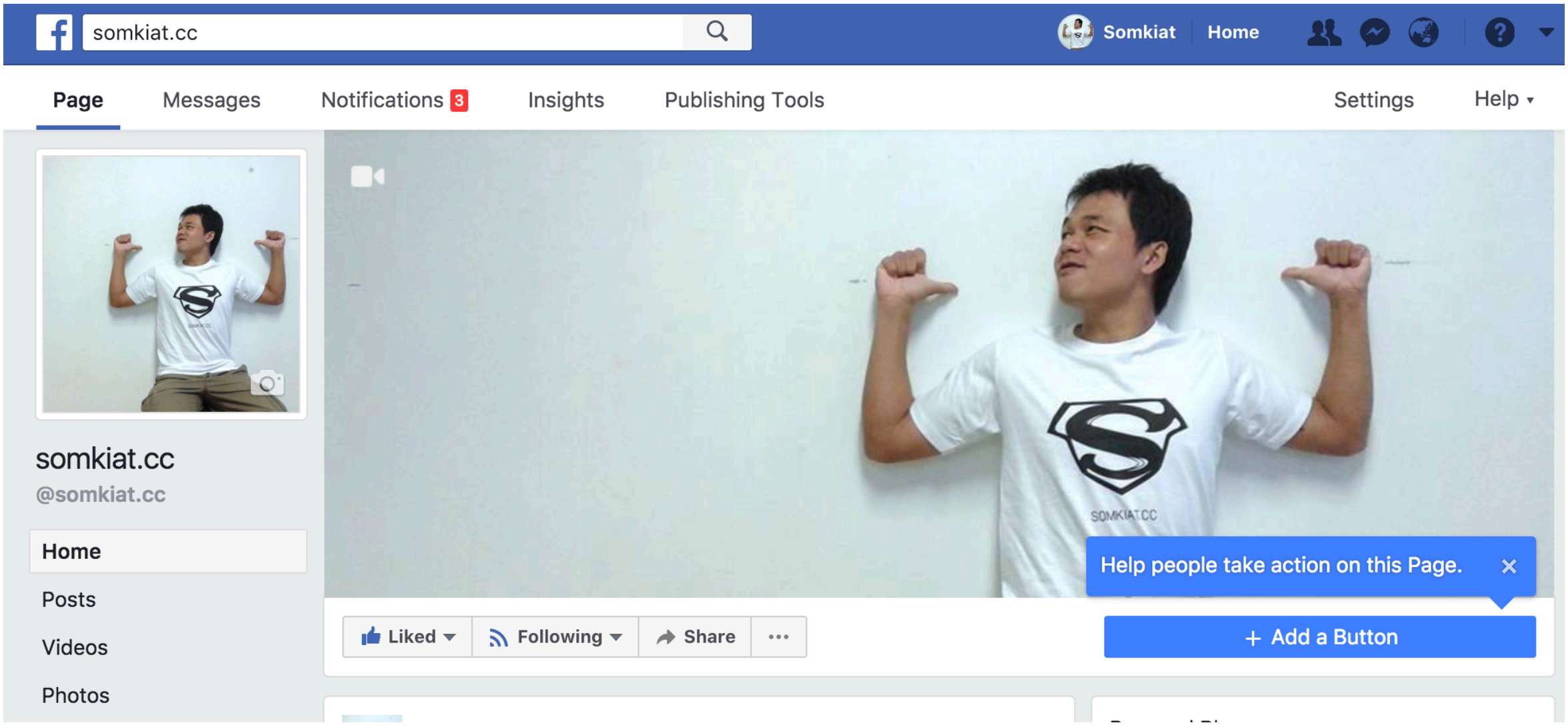
What's on your mind?

Public | Post

Somkiat Puisungnoen

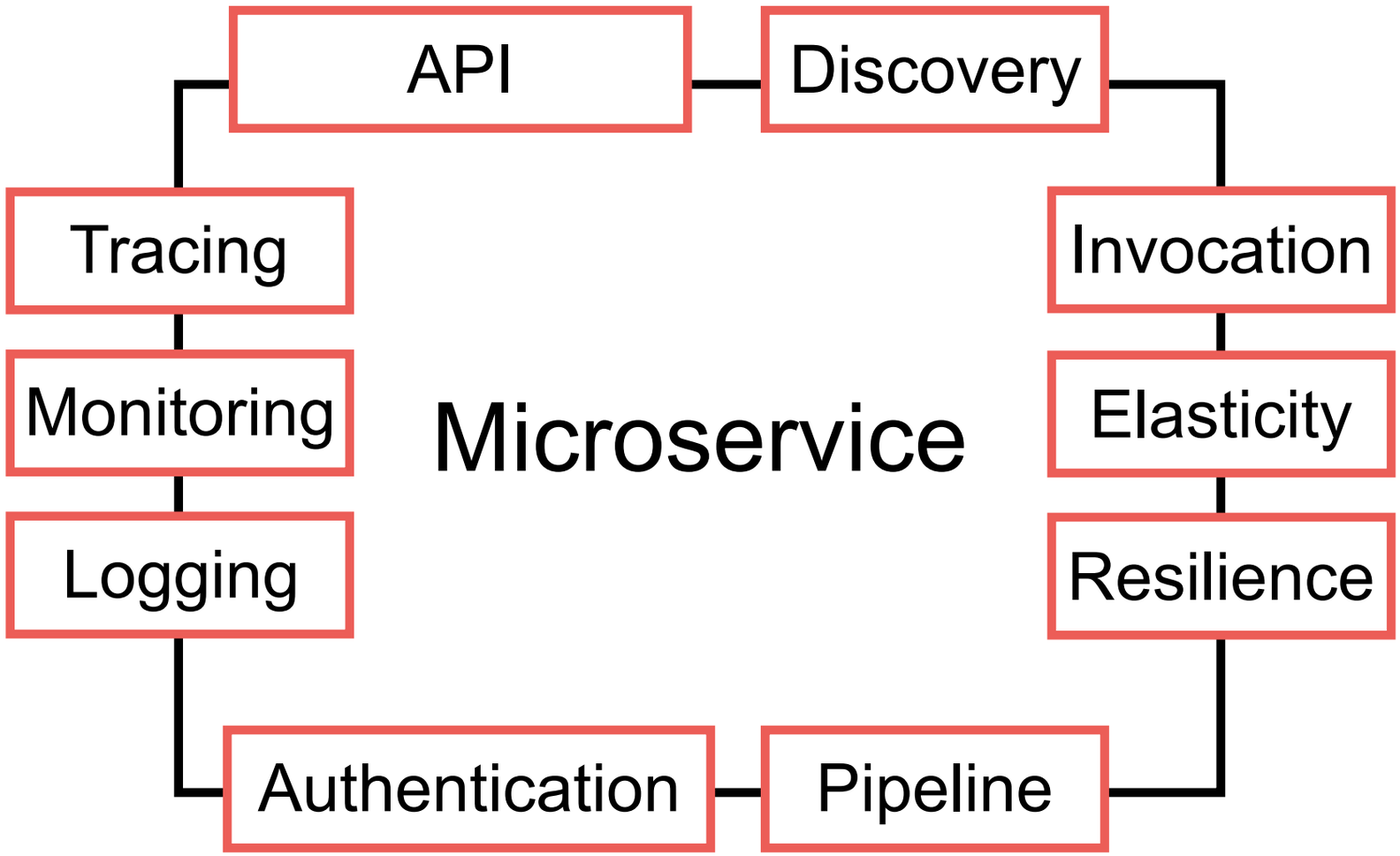
15 mins · Bangkok ·

Java and Bigdata



Develop Microservice

Properties of Microservice

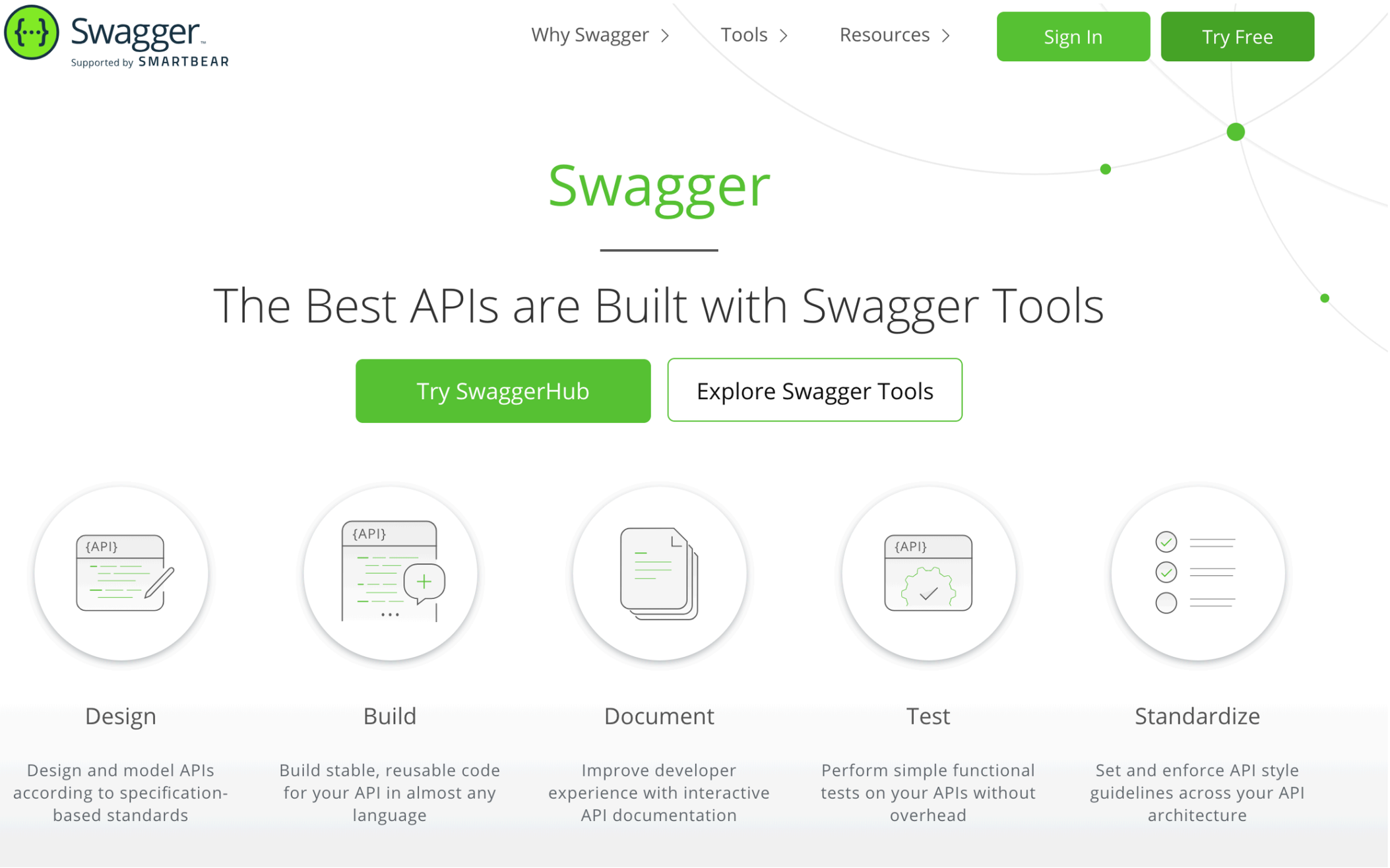


Workshop
Microservice with NodeJS

API/service document

00-api-document

Swagger



https://swagger.io/

API document with Swagger

swagger /api-docs Explore

Swagger sample app 0.0.1

[Base url: localhost:3001/]
/api-docs

Microservices training Swagger Example

Schemes
HTTP

sample Sample API

GET /sample

POST /sample

GET /sample/{id}

PUT /sample/{id}

DELETE /sample/{id}

Create Simple Services

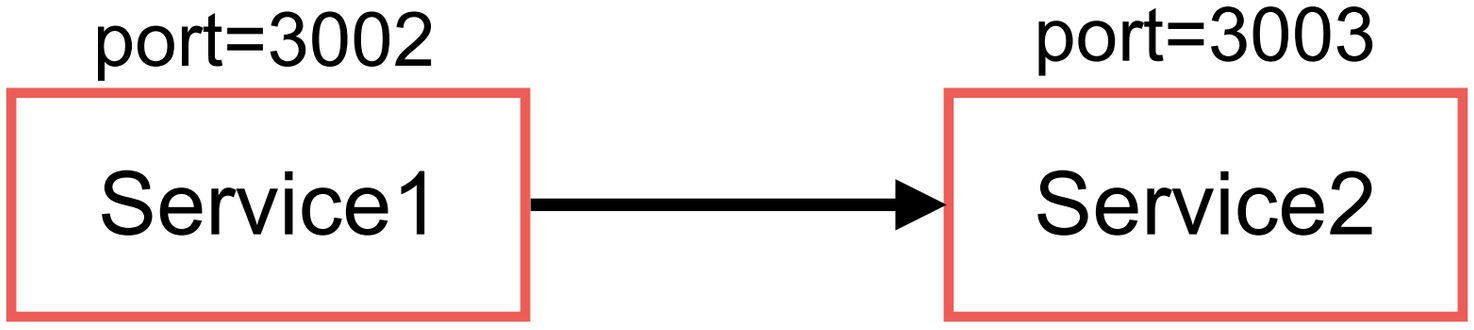
01-starter

Create Simple services

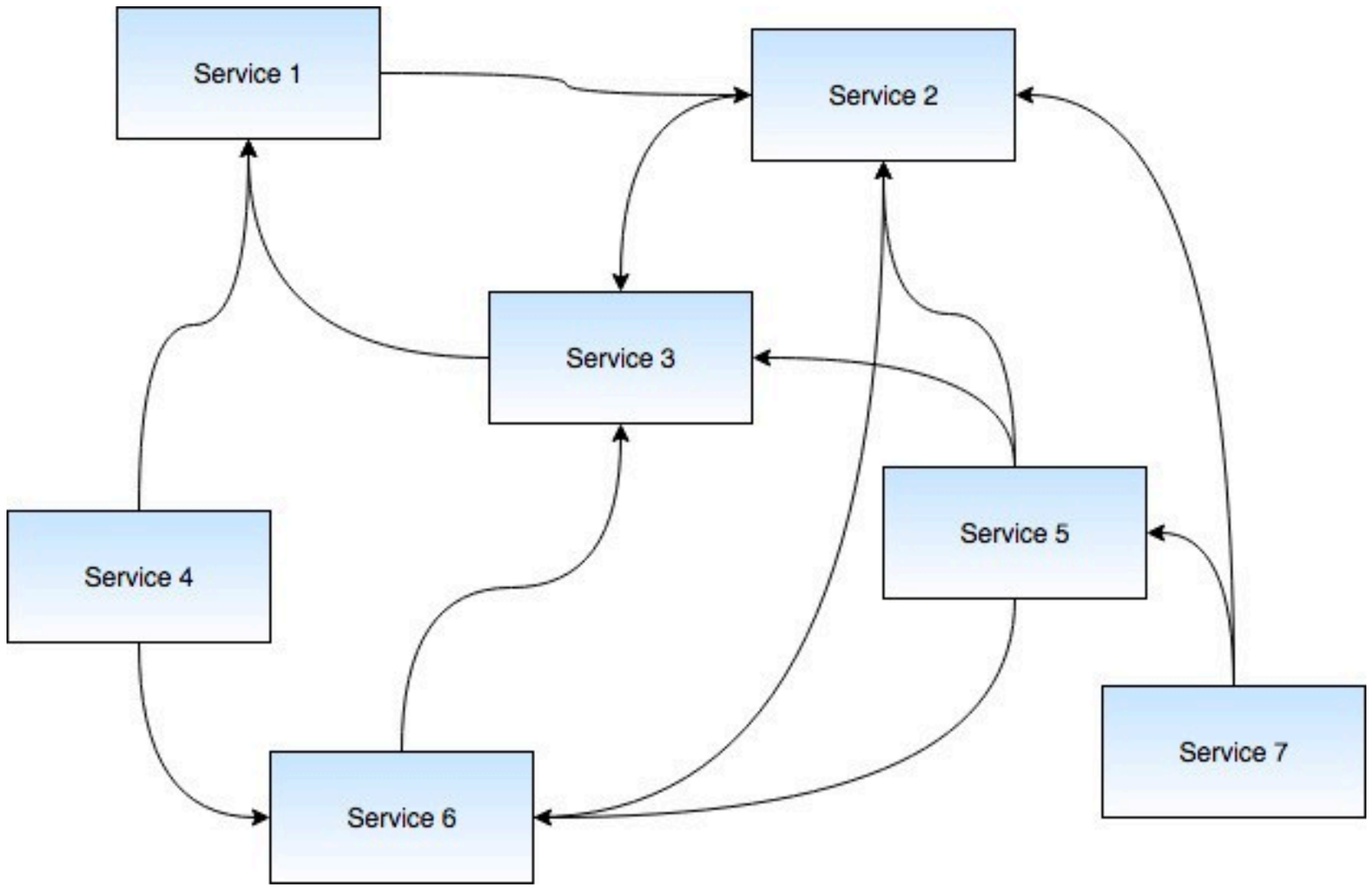
Communication between services

02-connect

Communication between services



Many services !!



Using service discovery

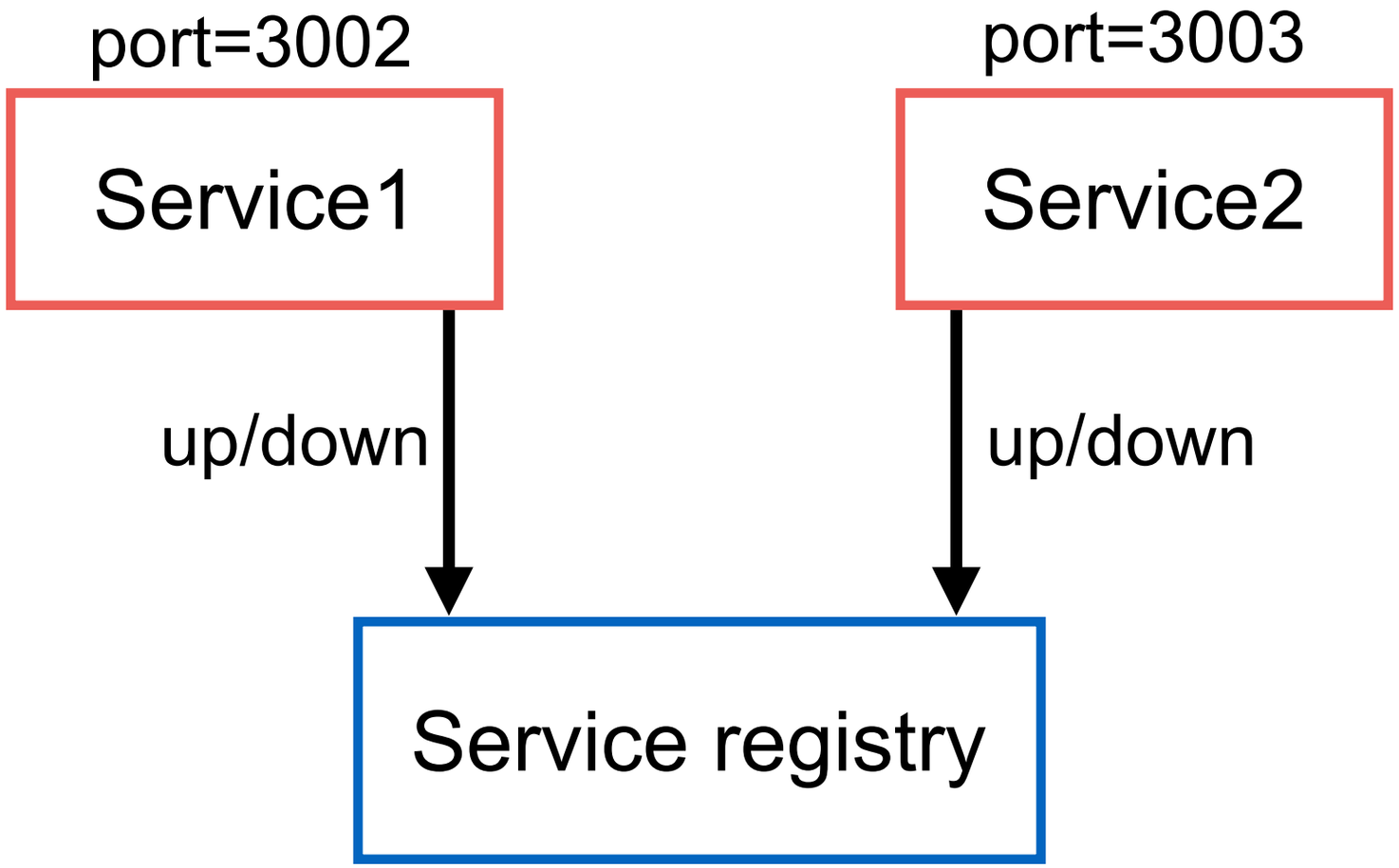
service-discovery-with-consul

Communication between services

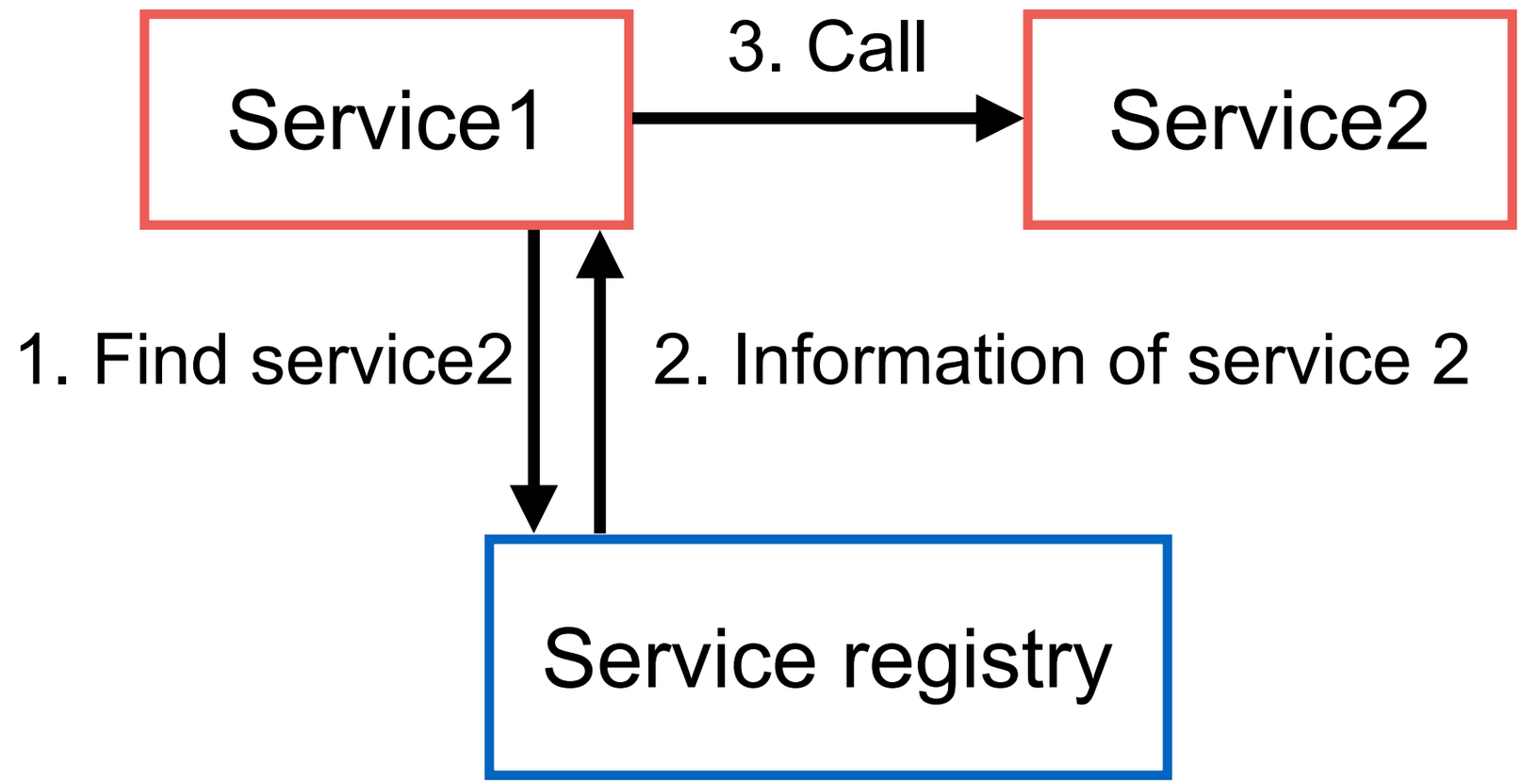
Service Registry

Database to keep data of services
How to register services ?
How to discover services ?

1. Service register



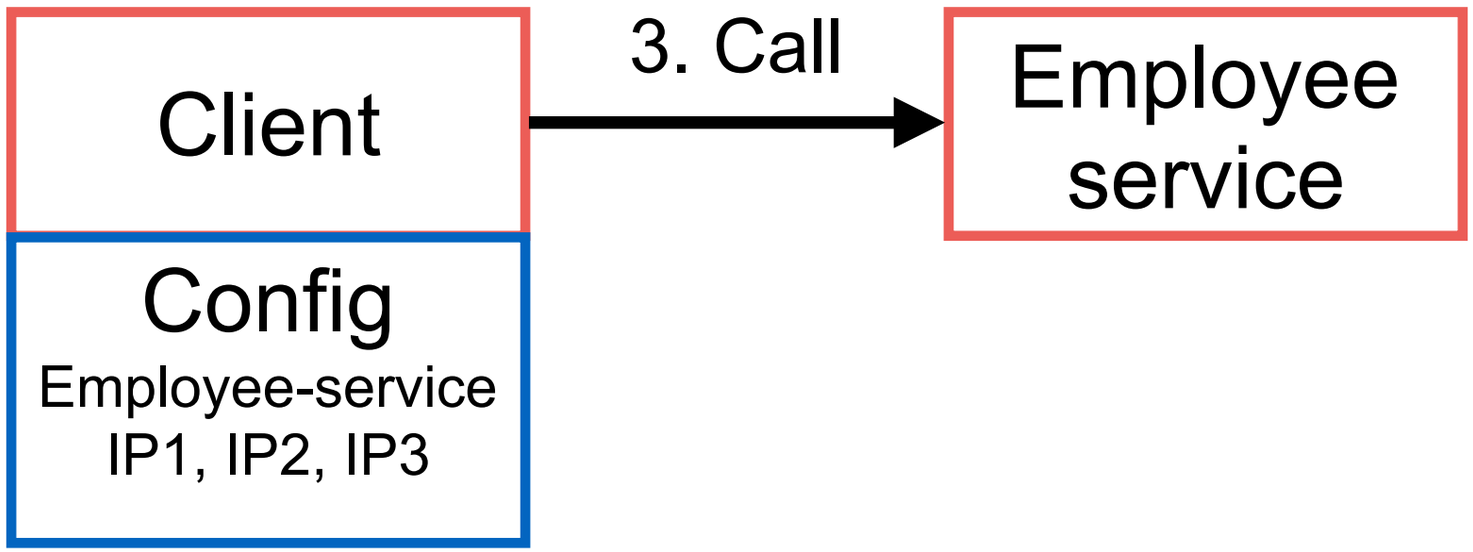
2. Service Discovery



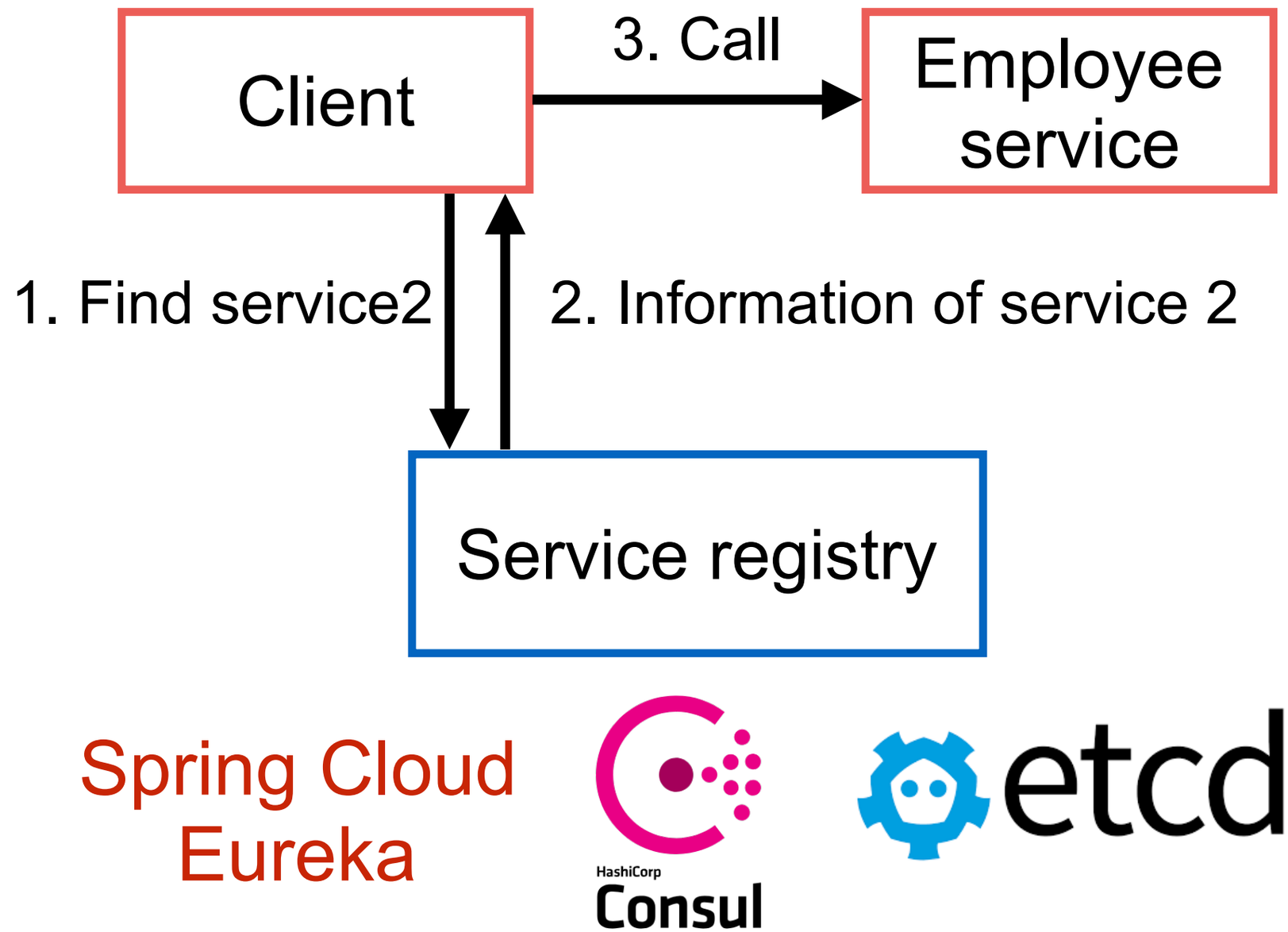
Service Registry

Client-side
Server-side

Client-side



Server-side



Spring Cloud Eureka

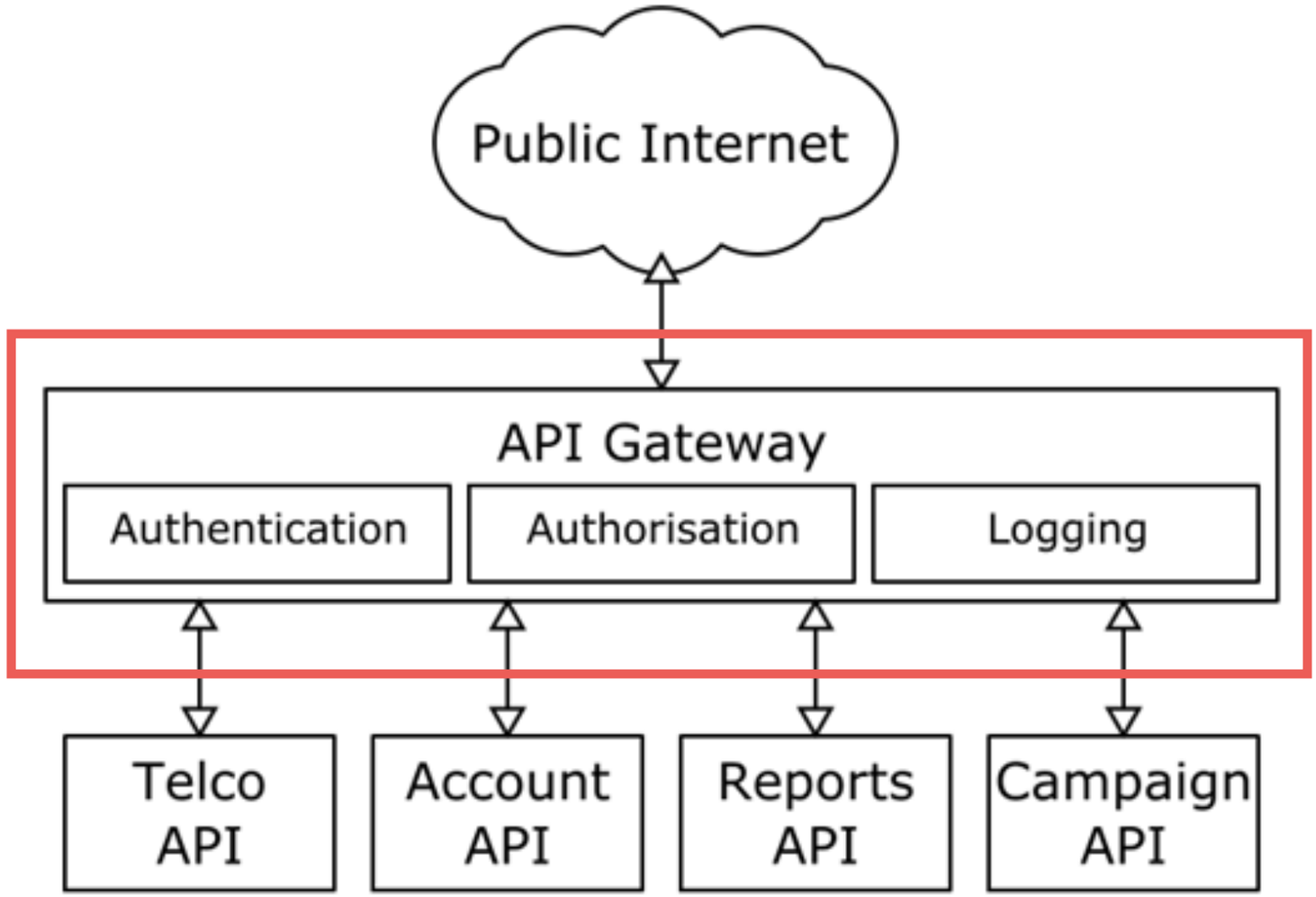
HashiCorp Consul

etcd

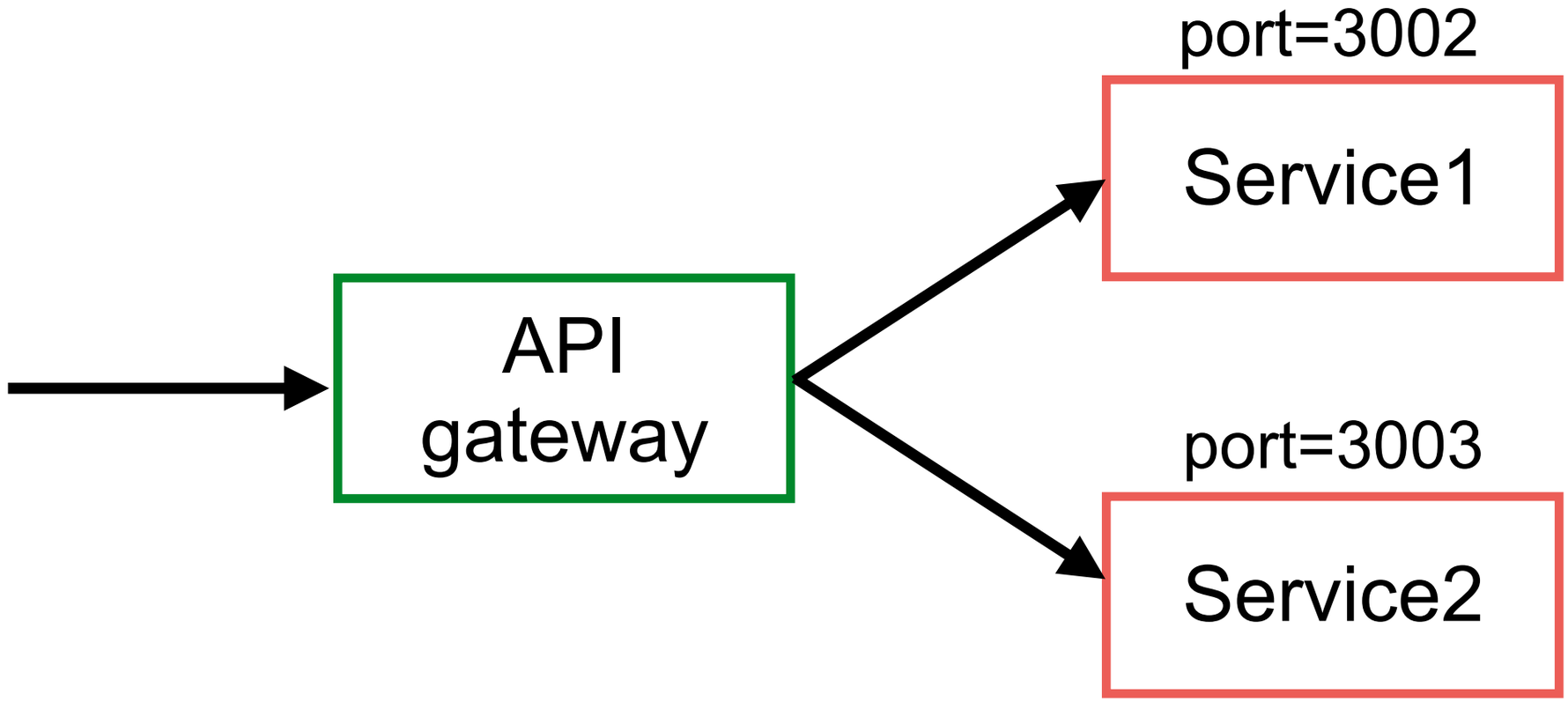
API gateway

03-api-gateway

API gateway



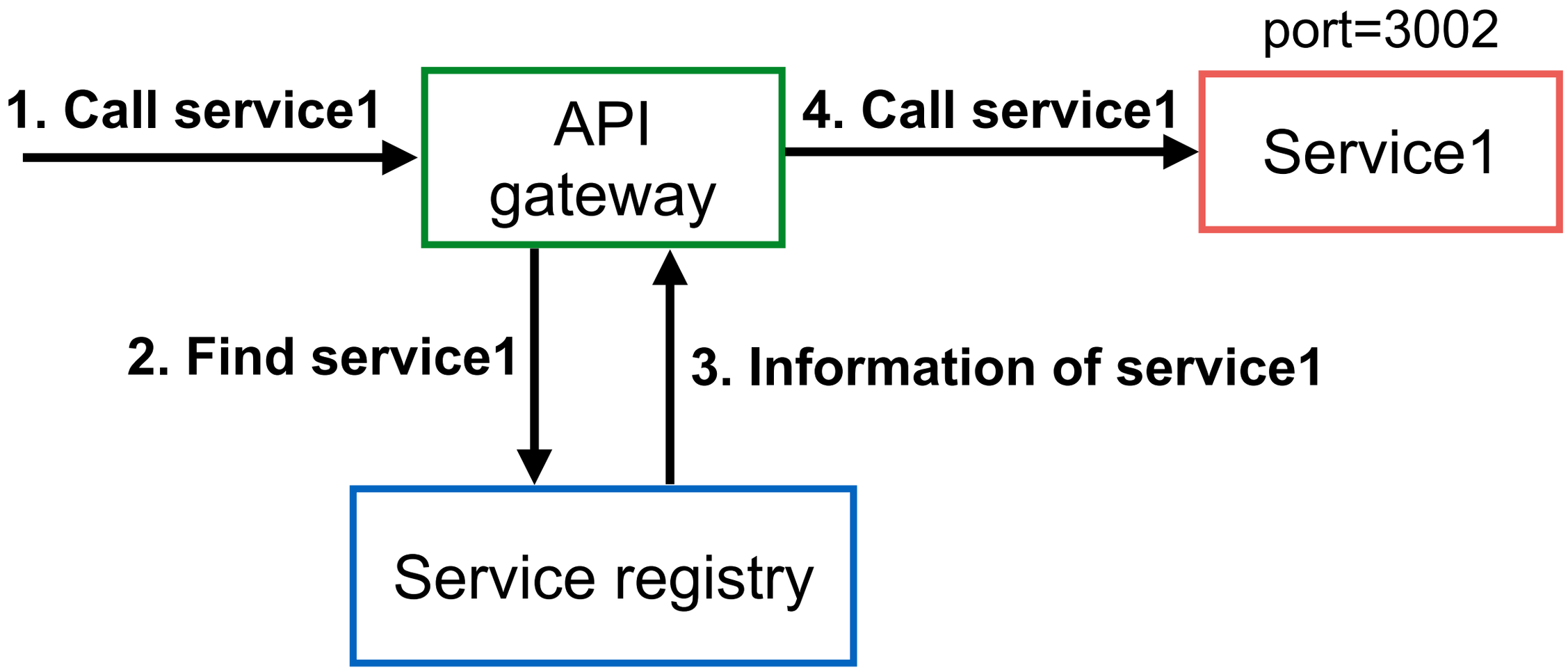
API gateway



API gateway + Service registry

05-server-side-service-discovery

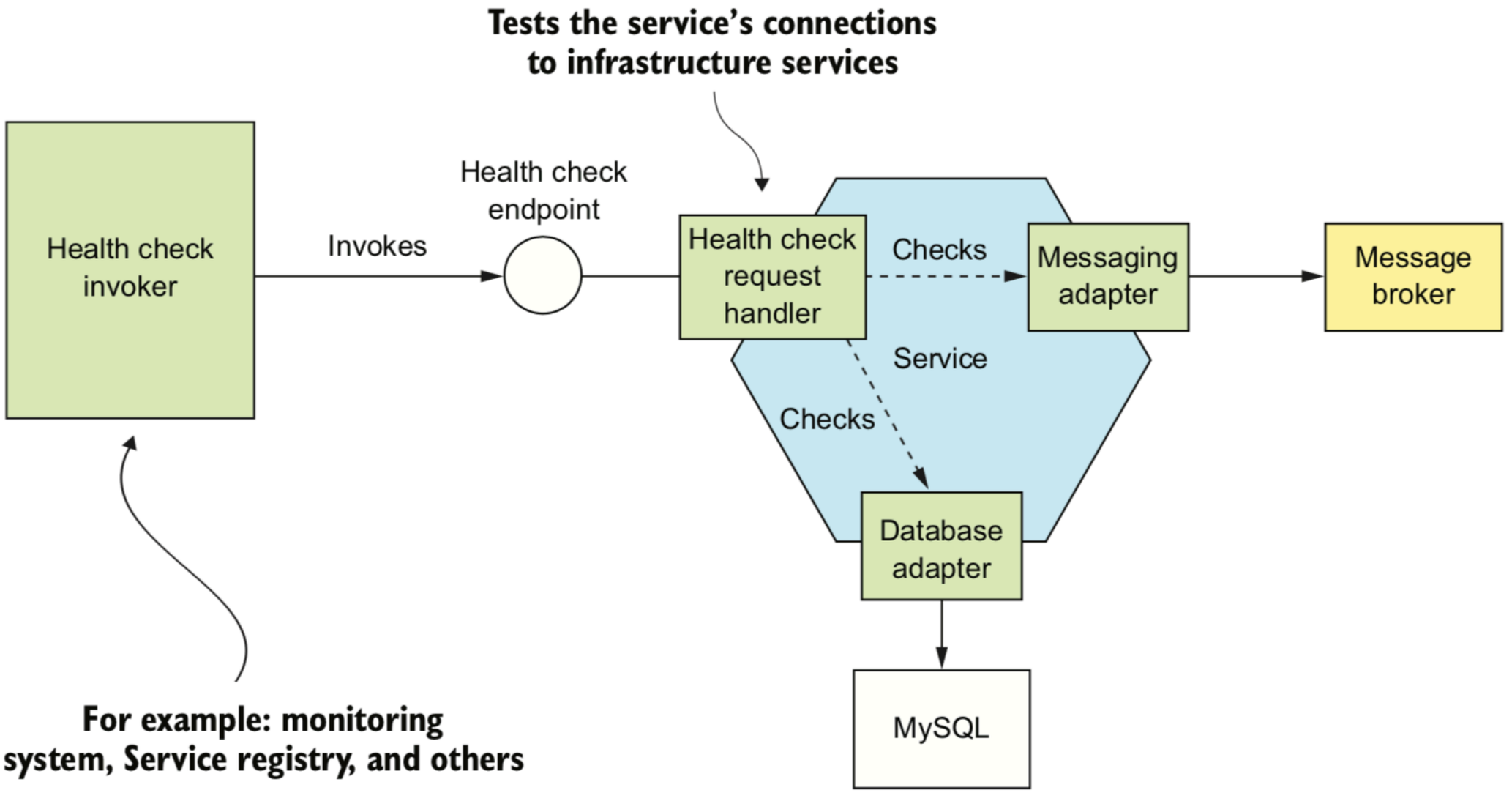
Server-side discovery



Health check API

06-health-check-api

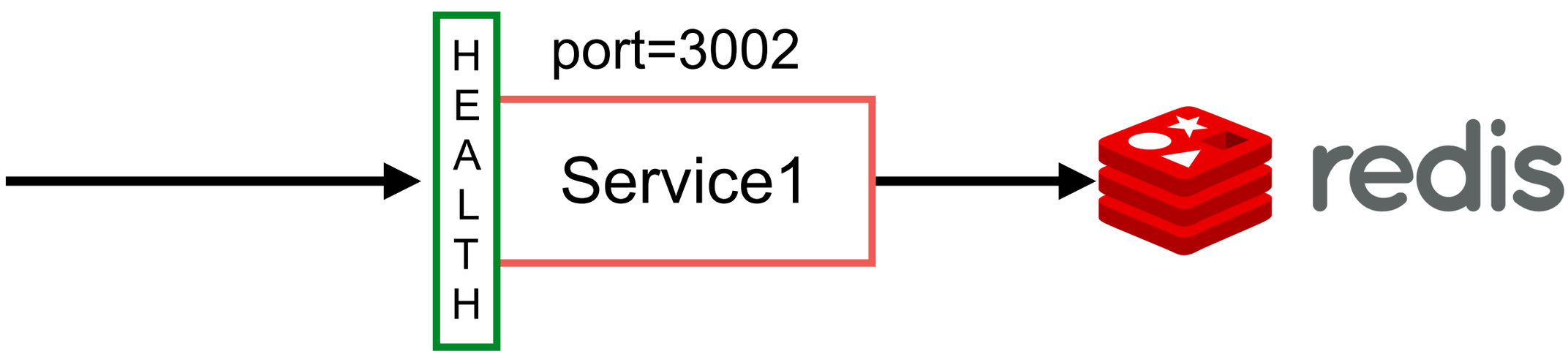
Health check API



Health check API

Liveness
Readiness

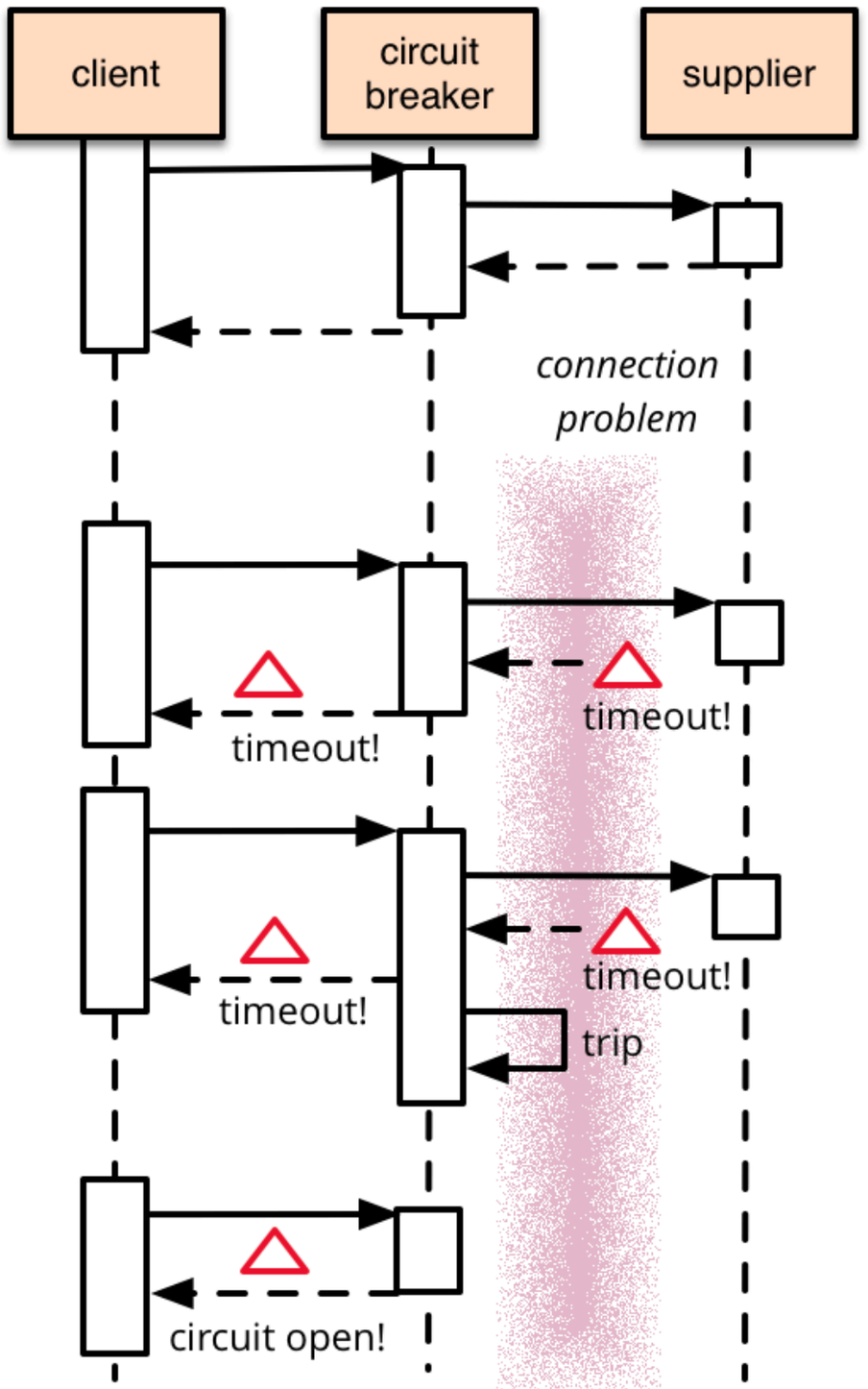
Health check API



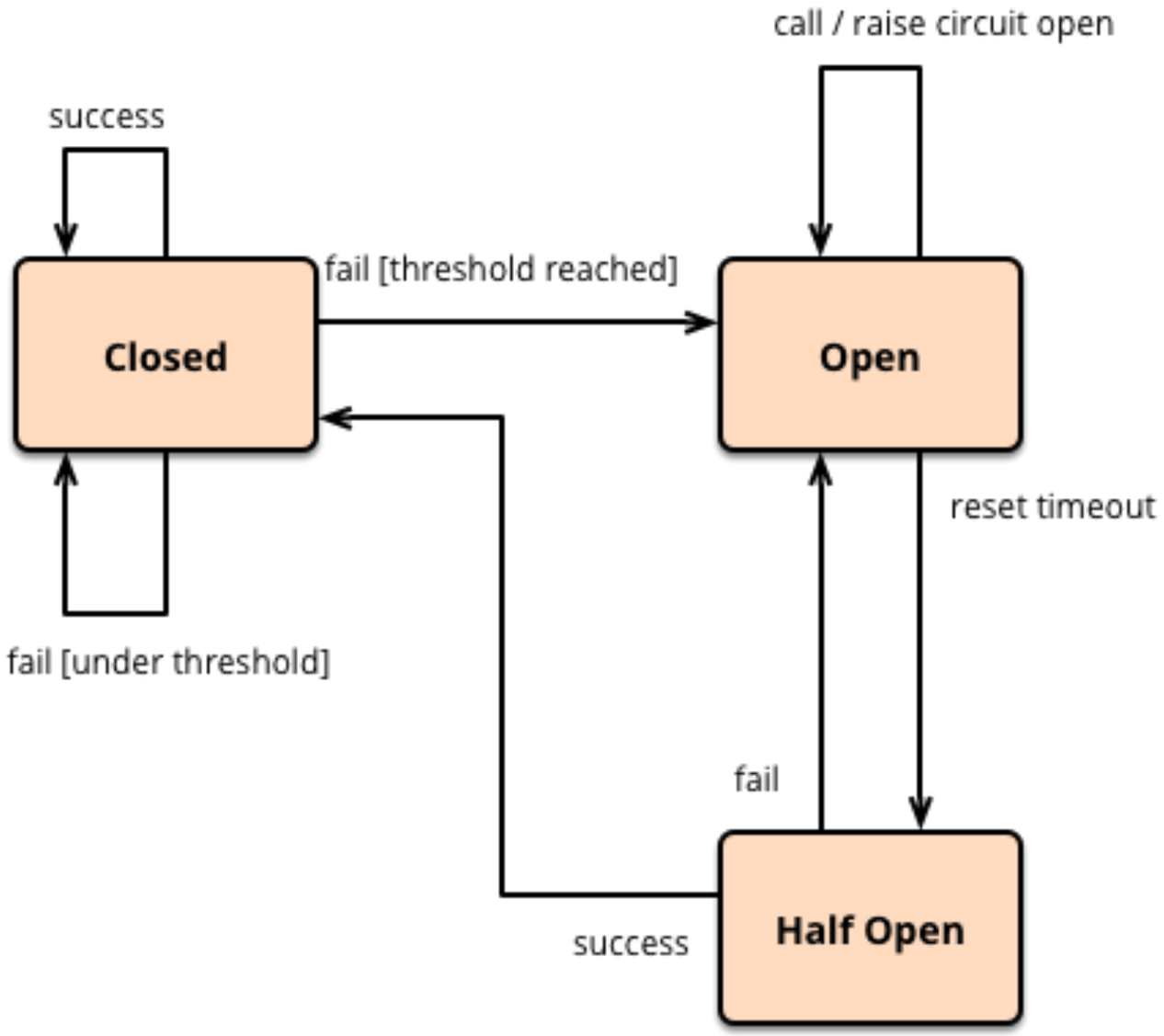
Circuit breaker

07-circuit-breaker

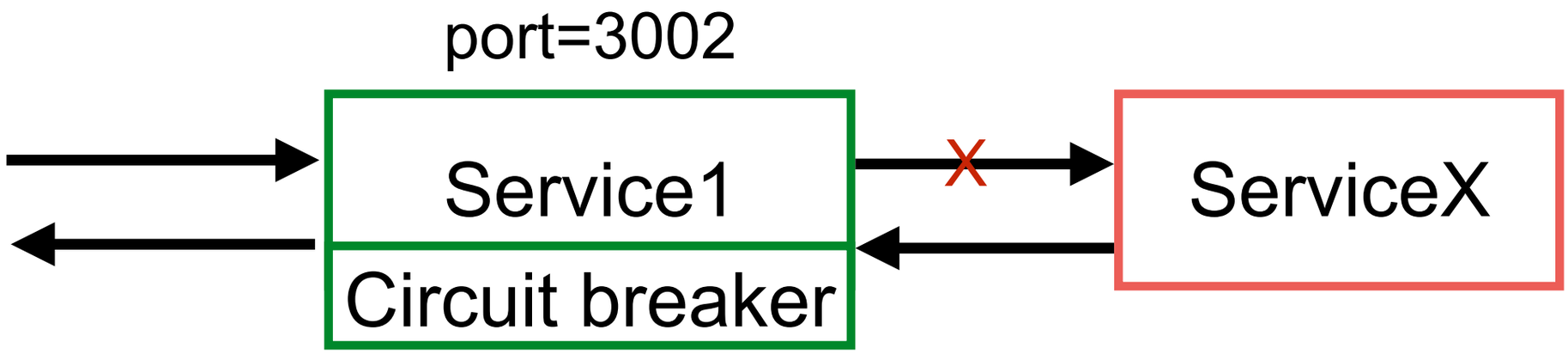
Circuit breaker



Circuit breaker



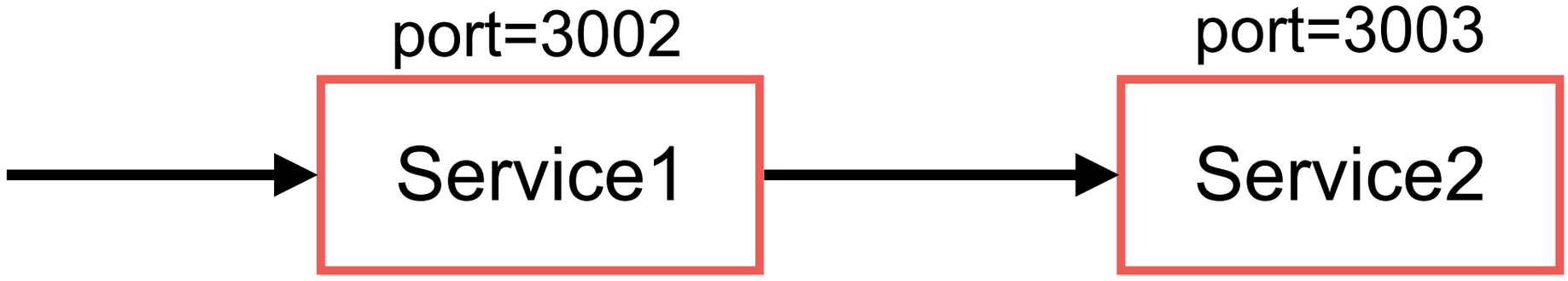
Circuit breaker



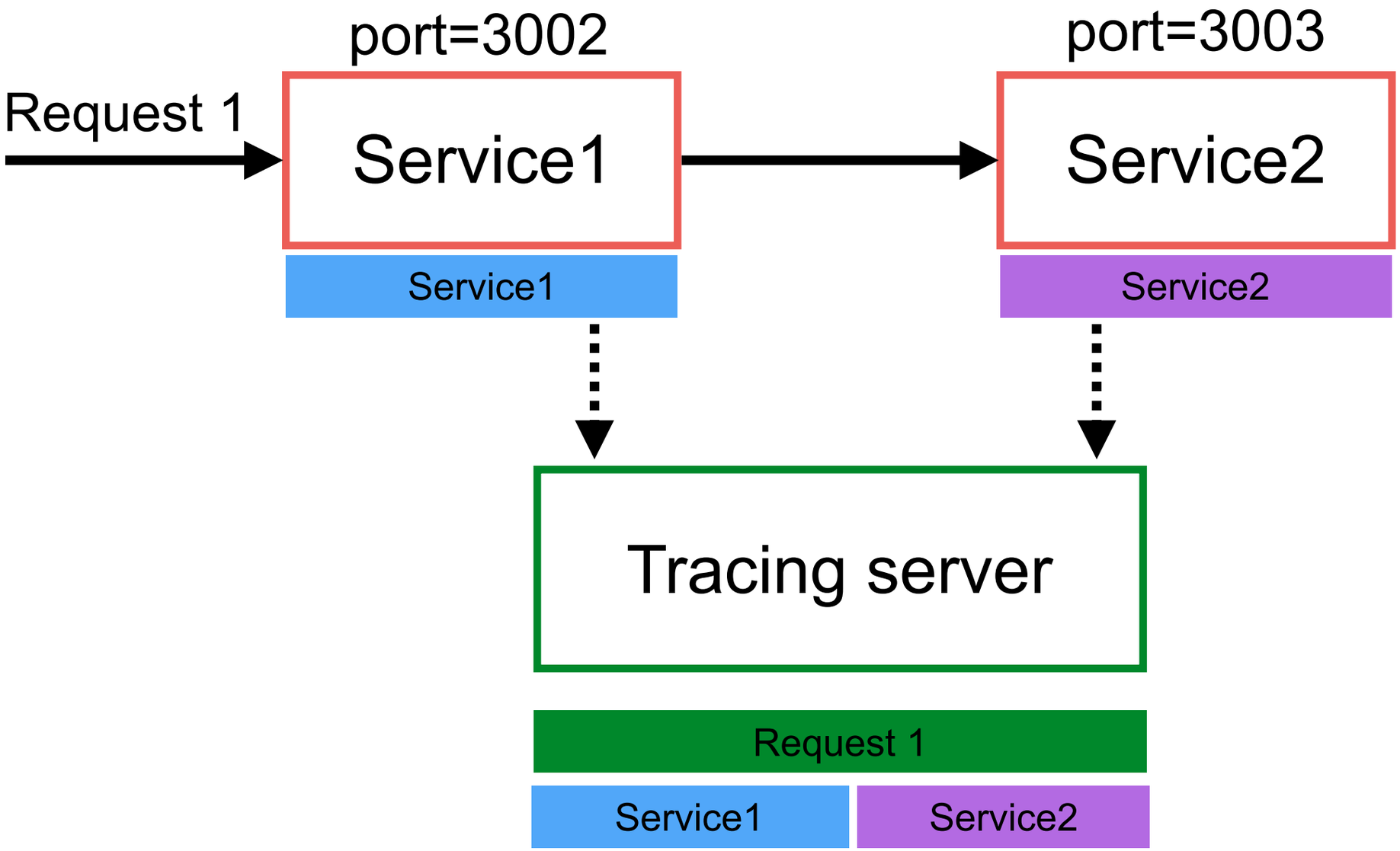
Distributed tracing

08-tracing

Communication between services

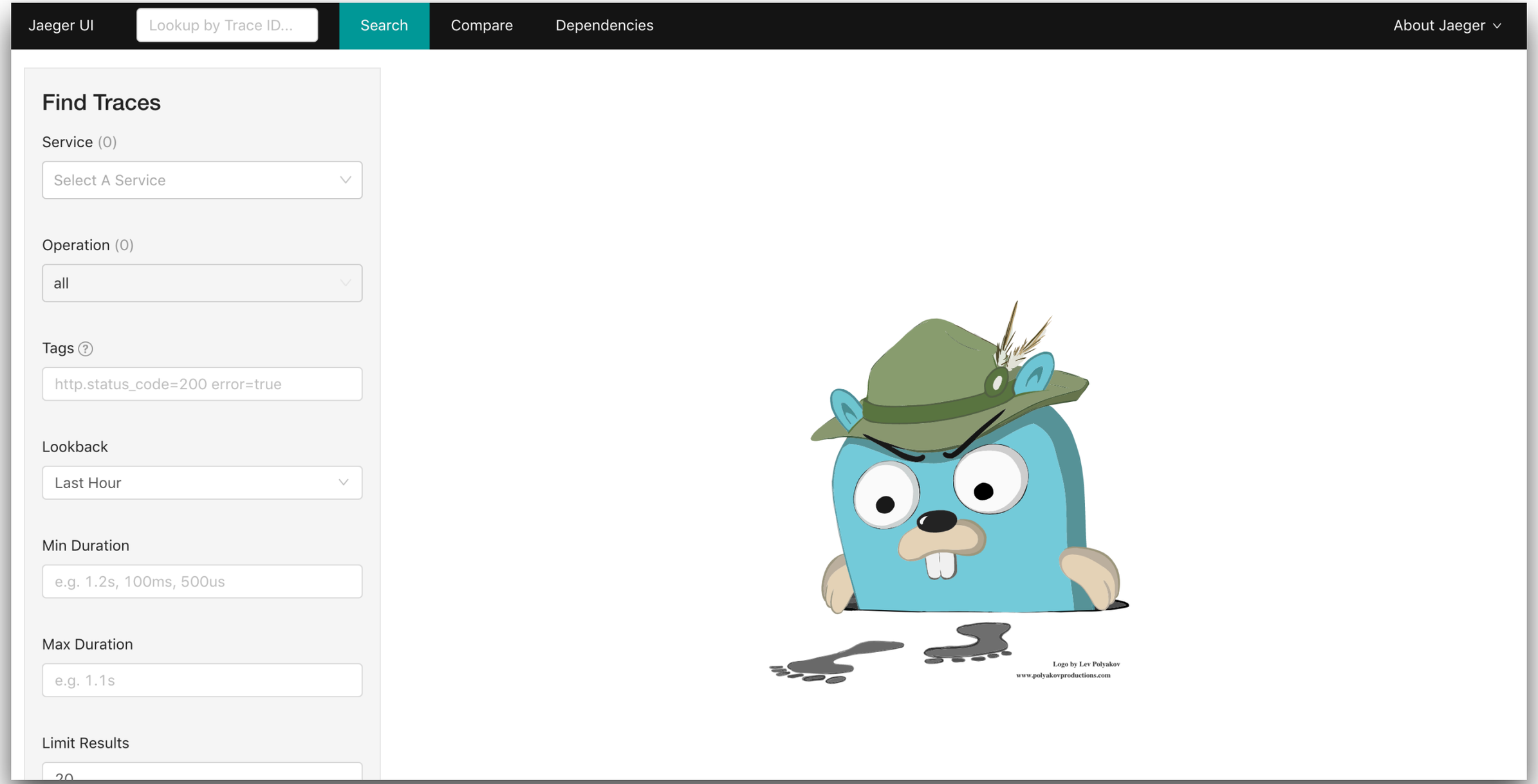


Distributed tracing

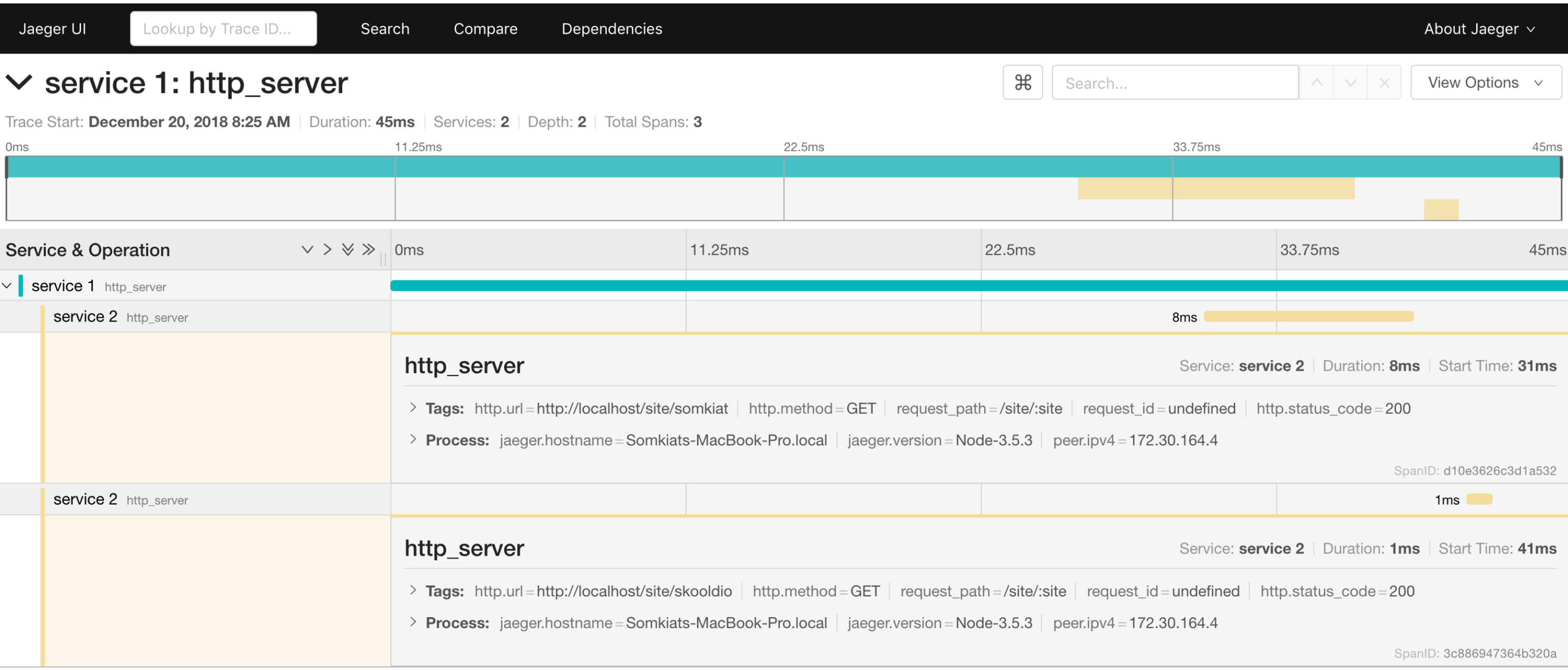


Jaeger dashboard

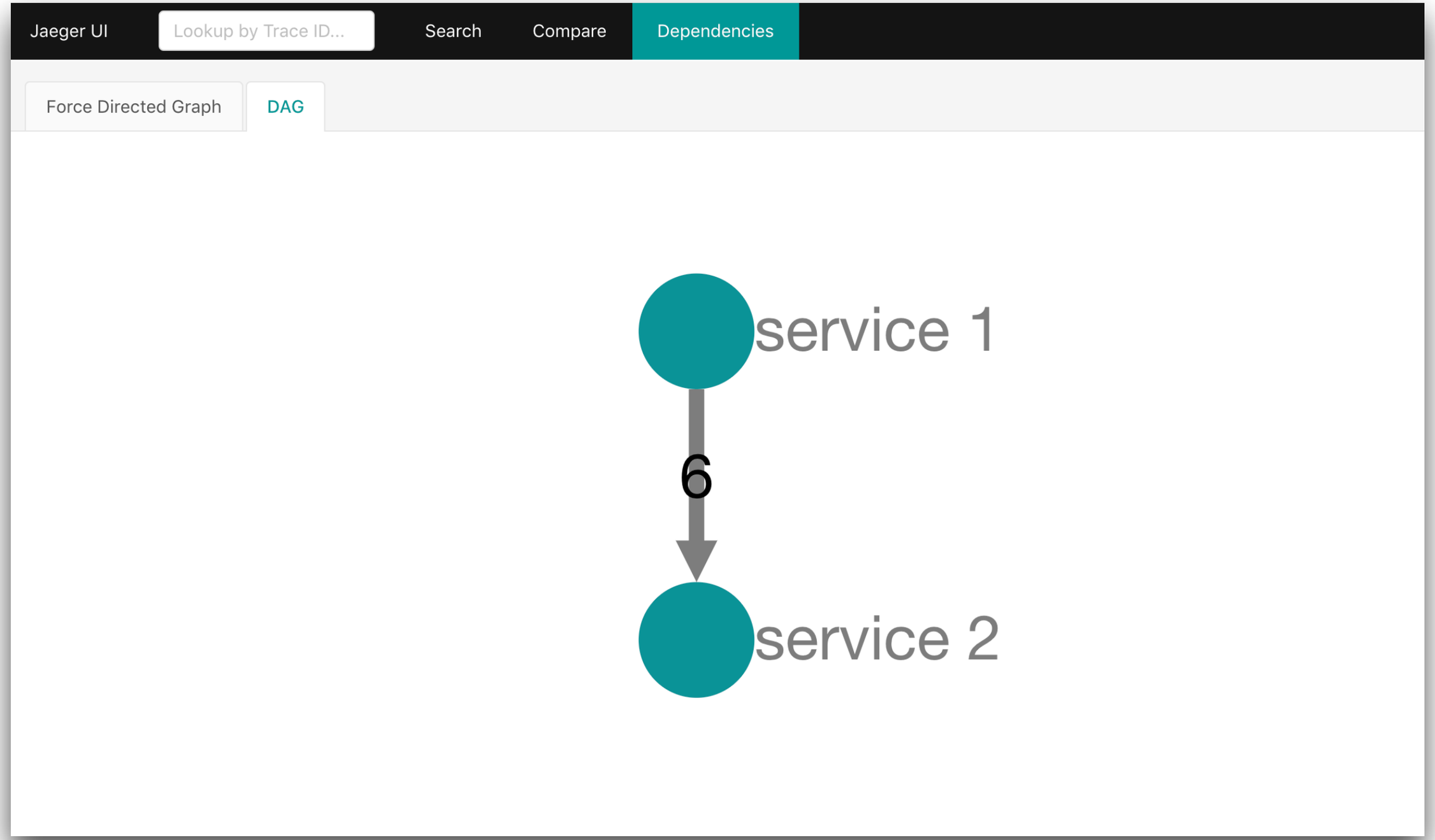
http://localhost:16686



See detail in each request



Dependencies of services



Monitoring

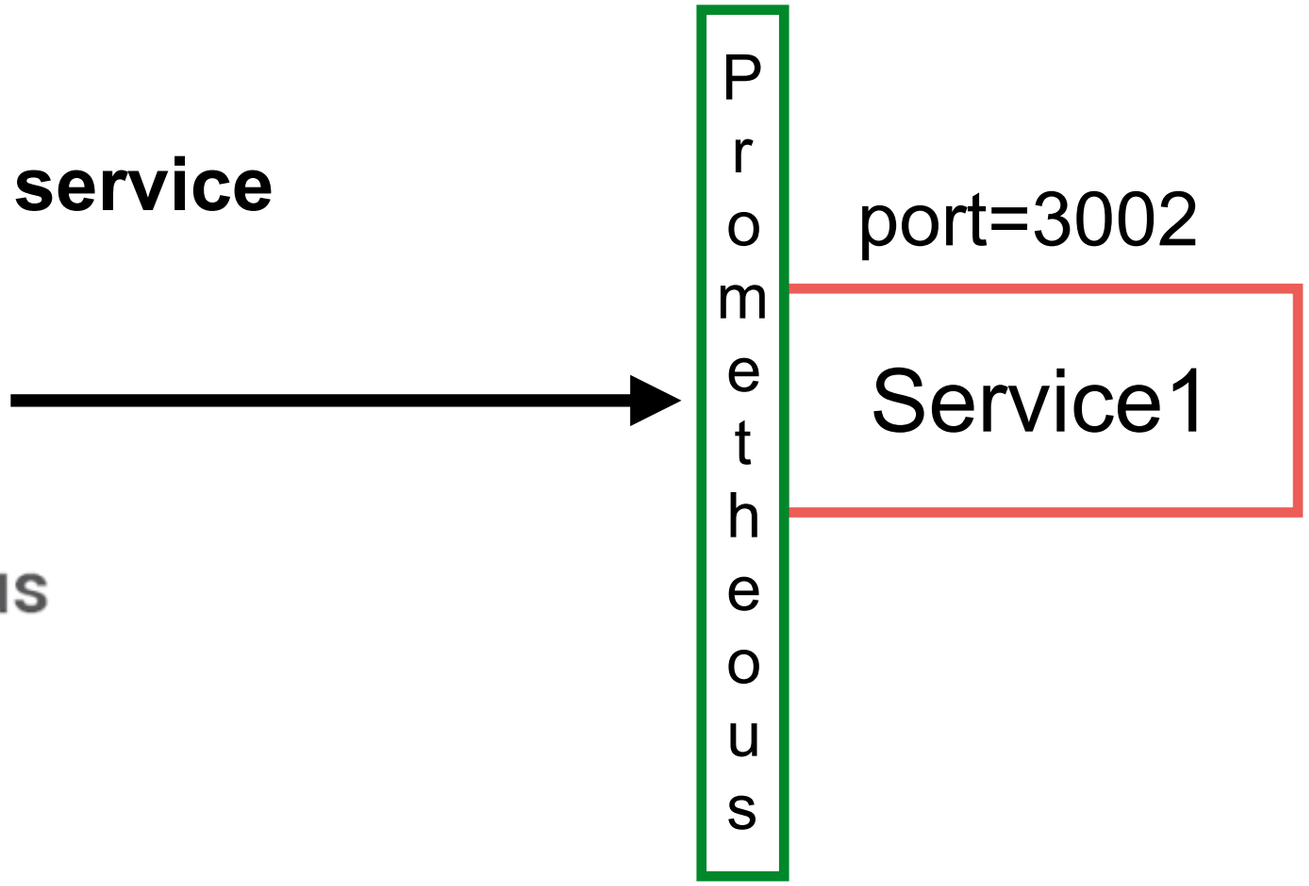
09-monitoring

Monitoring with Prometheus

Keep data from service

Prometheus

Visualize data



Logging

10-logging

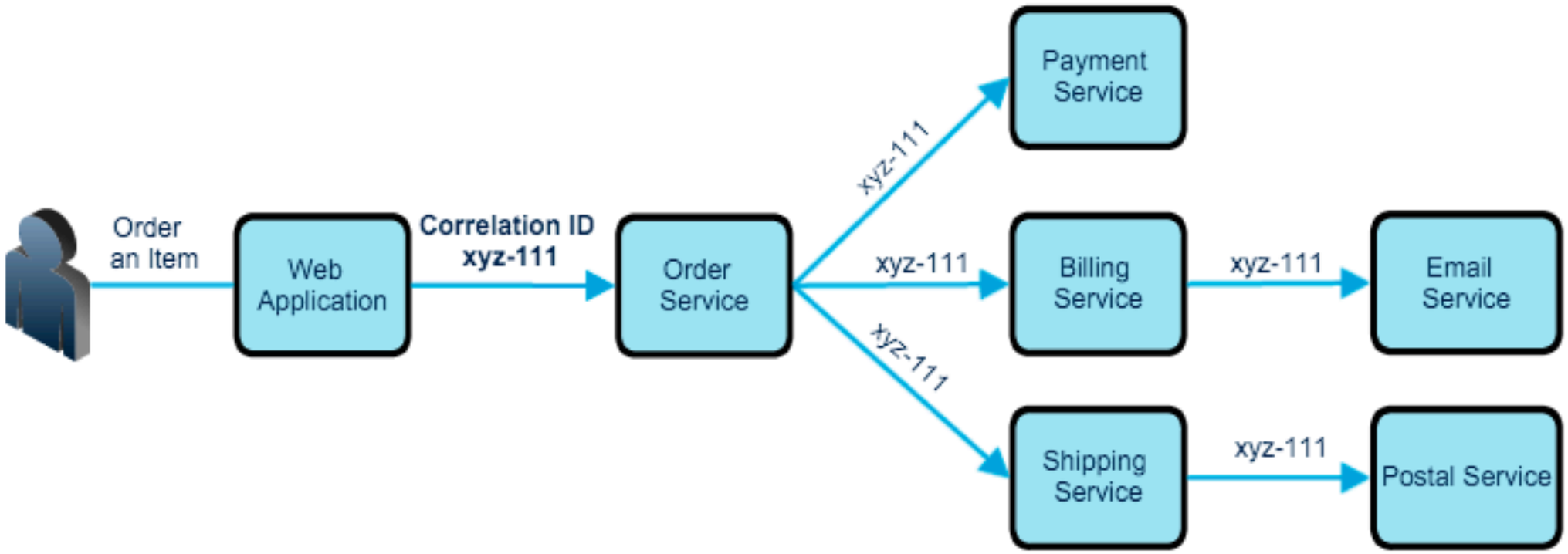
Logging

Timestamps
Logging format
Log destinations (standard output/error)
Log levels

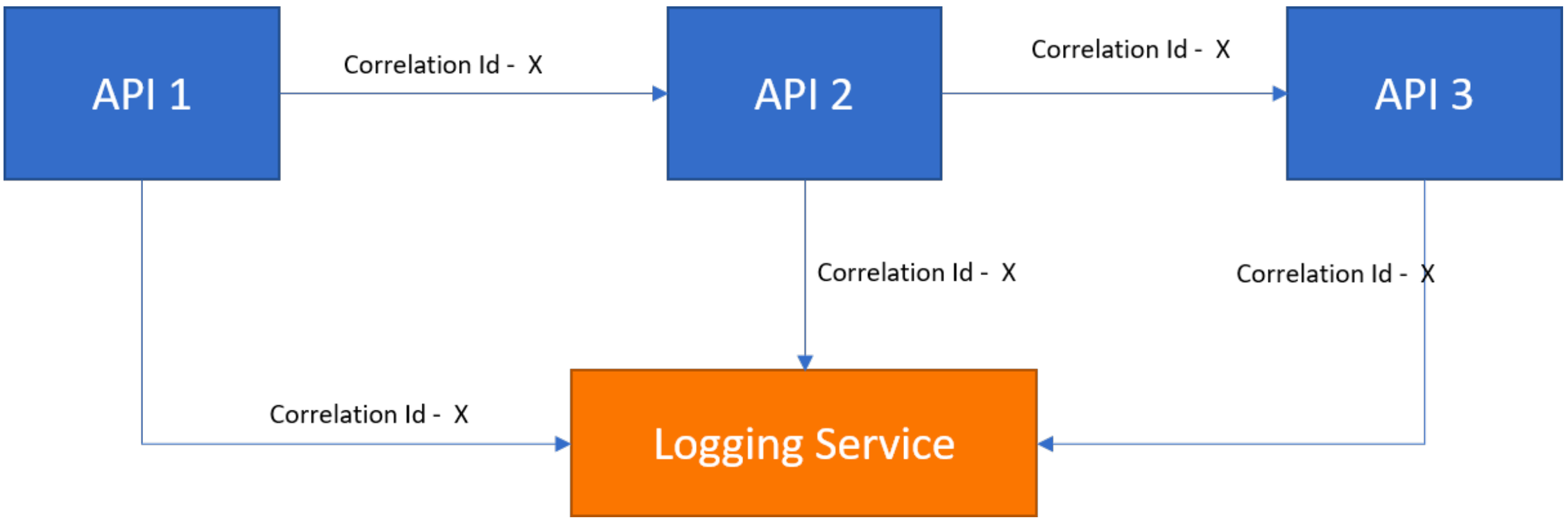
Logging in distributed system

Timestamps
Logging format
Log destinations (standard output/error)
Log levels
Correlation ID (UUID)

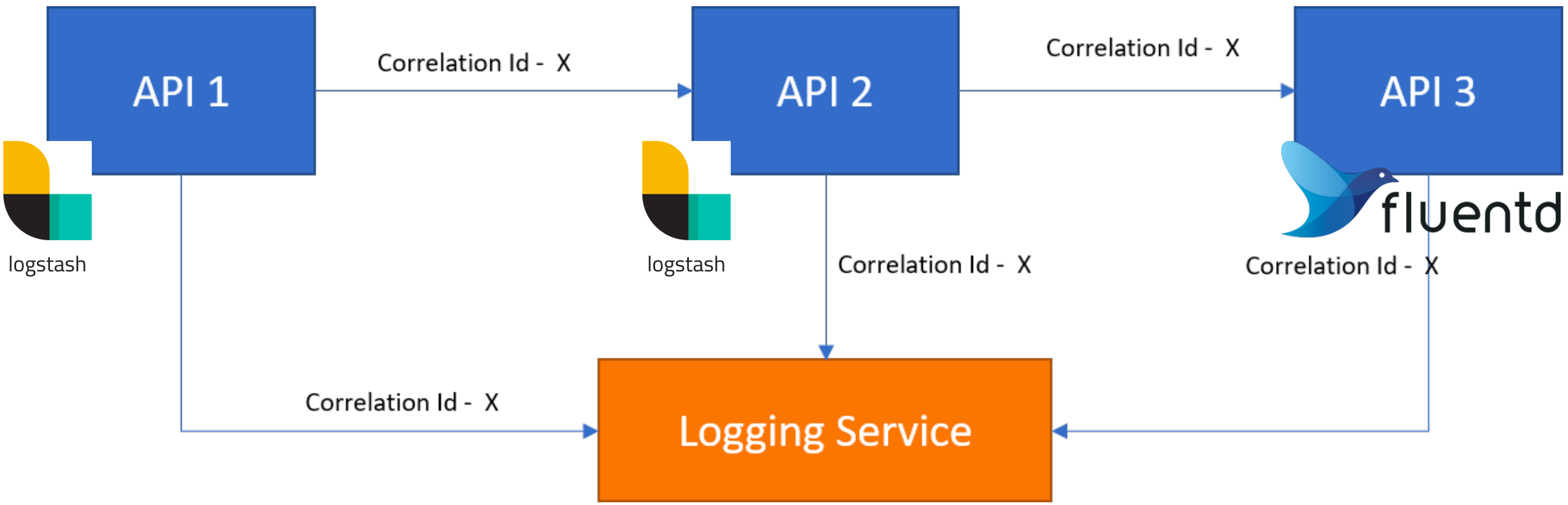
Logging in distributed system



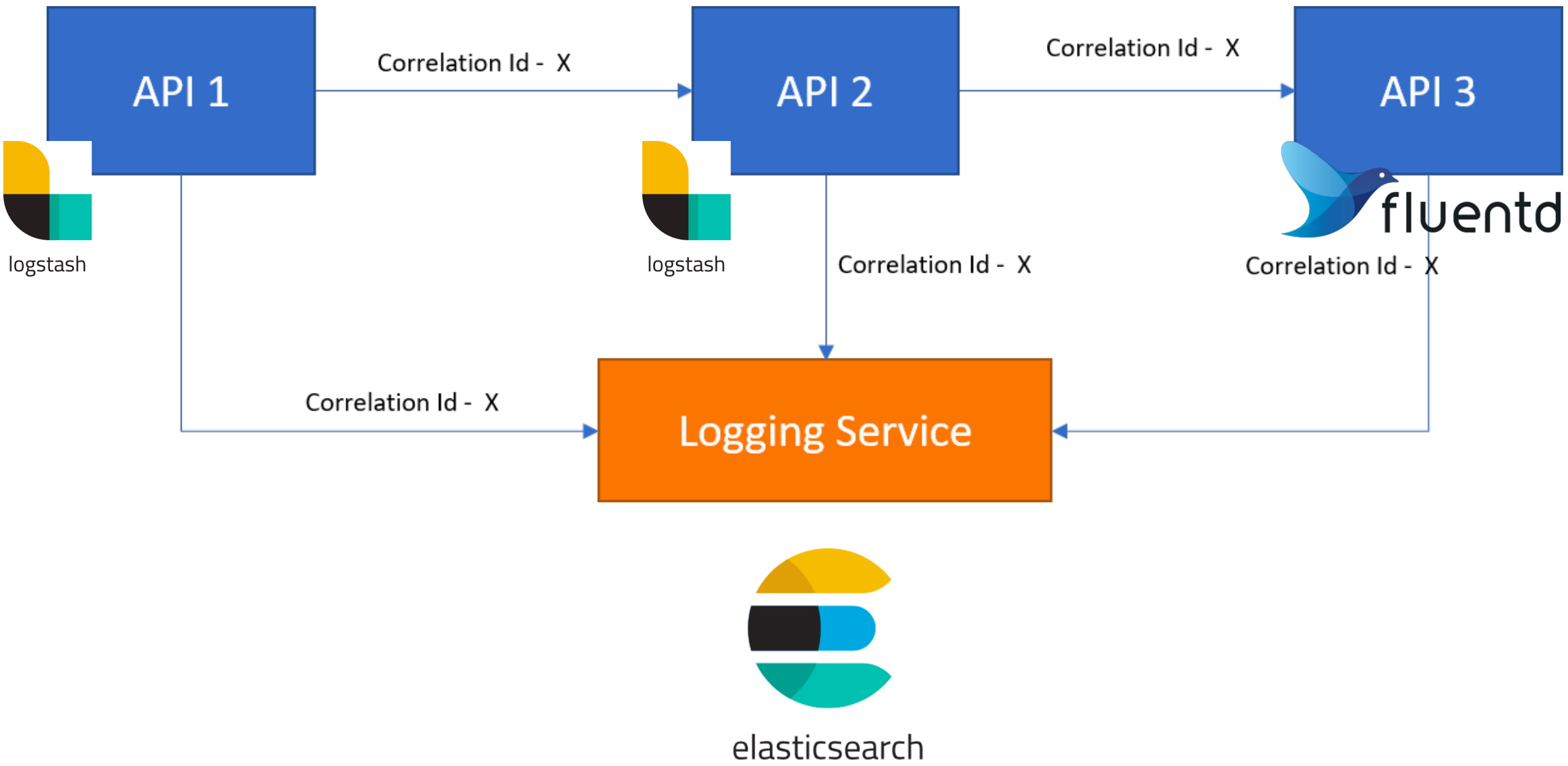
Logging in distributed system



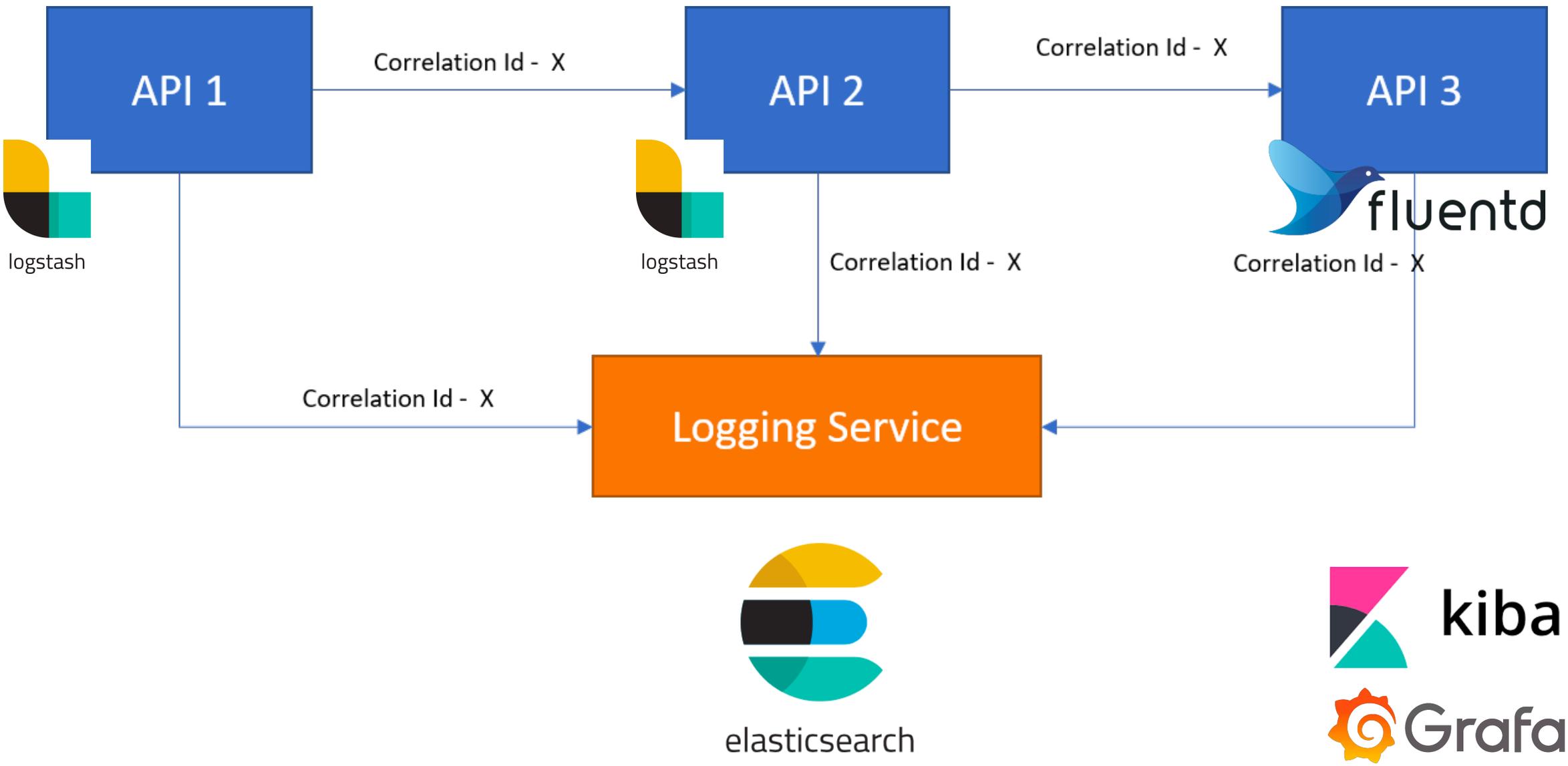
Logging in distributed system



Logging in distributed system



Logging in distributed system



CQRS

11-cqrs

CQRS