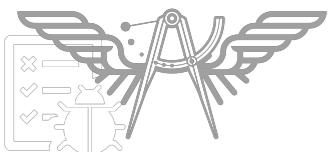


Microservices workshop





Somkiat Puisungnoen

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

Post Photo/Video Live Video Life Event

What's on your mind?

Public Post

Intro
Software Craftsmanship

Software Practitioner at สยามชัมนาภิกิจ พ.ศ. 2556

Agile Practitioner and Technical at SPRINT3r

Somkiat Puisungnoen 15 mins · Bangkok · ⚙️

Java and Bigdata



Page

Messages

Notifications 3

Insights

Publishing Tools

Settings

Help ▾



somkiat.cc

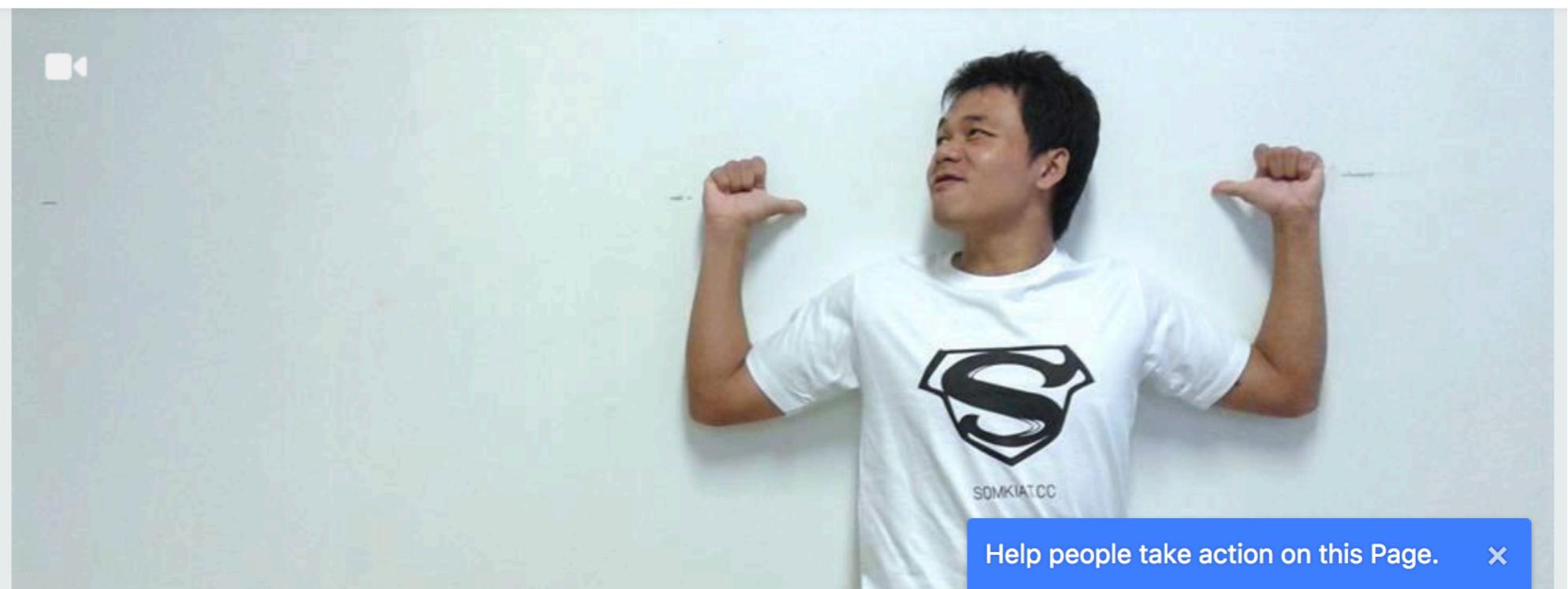
@somkiat.cc

Home

Posts

Videos

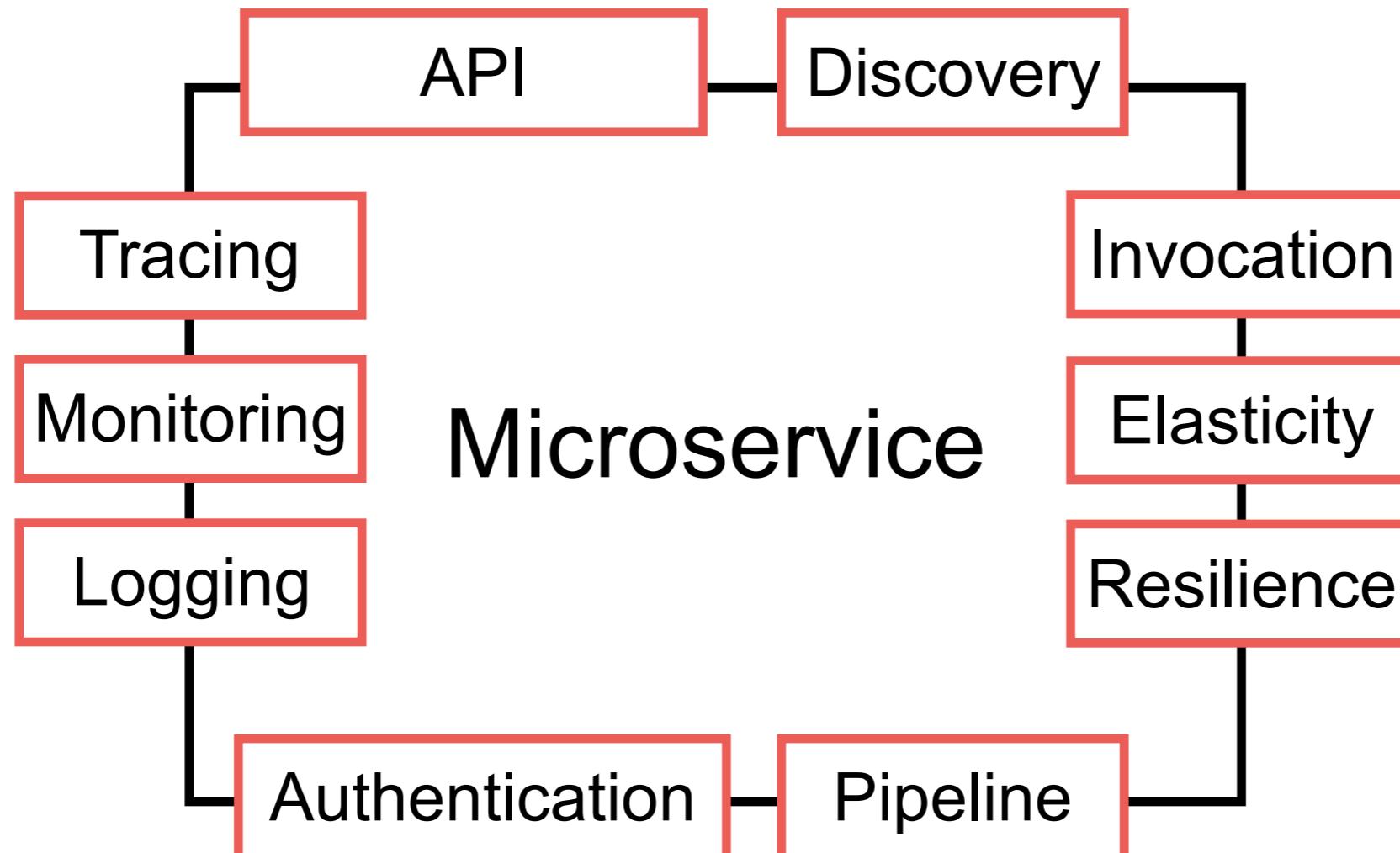
Photos



Develop Microservice



Properties of Microservice



Workshop

Microservice with NodeJS



Create Simple Services

01-starter



Create Simple services

port=3002

Service1

port=3003

Service2

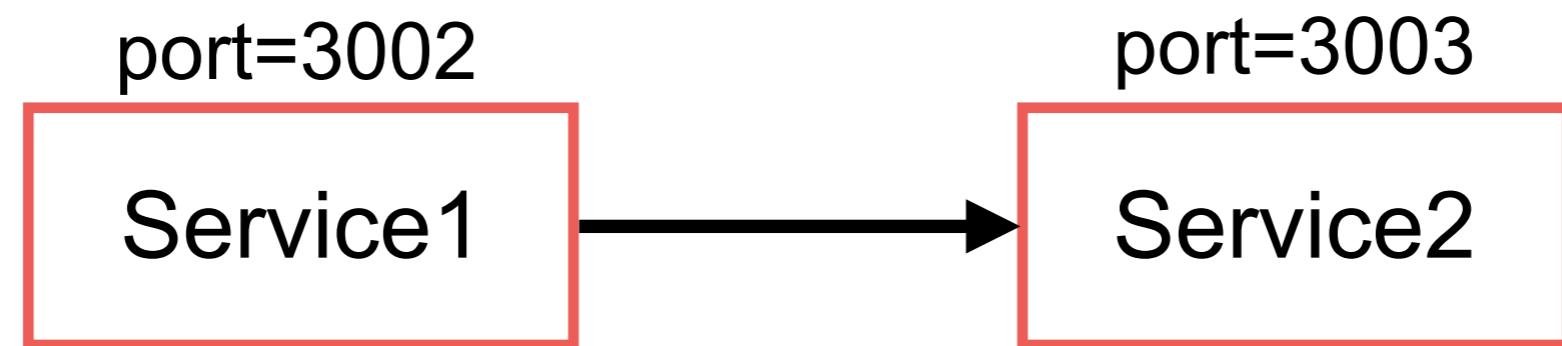


Communication between services

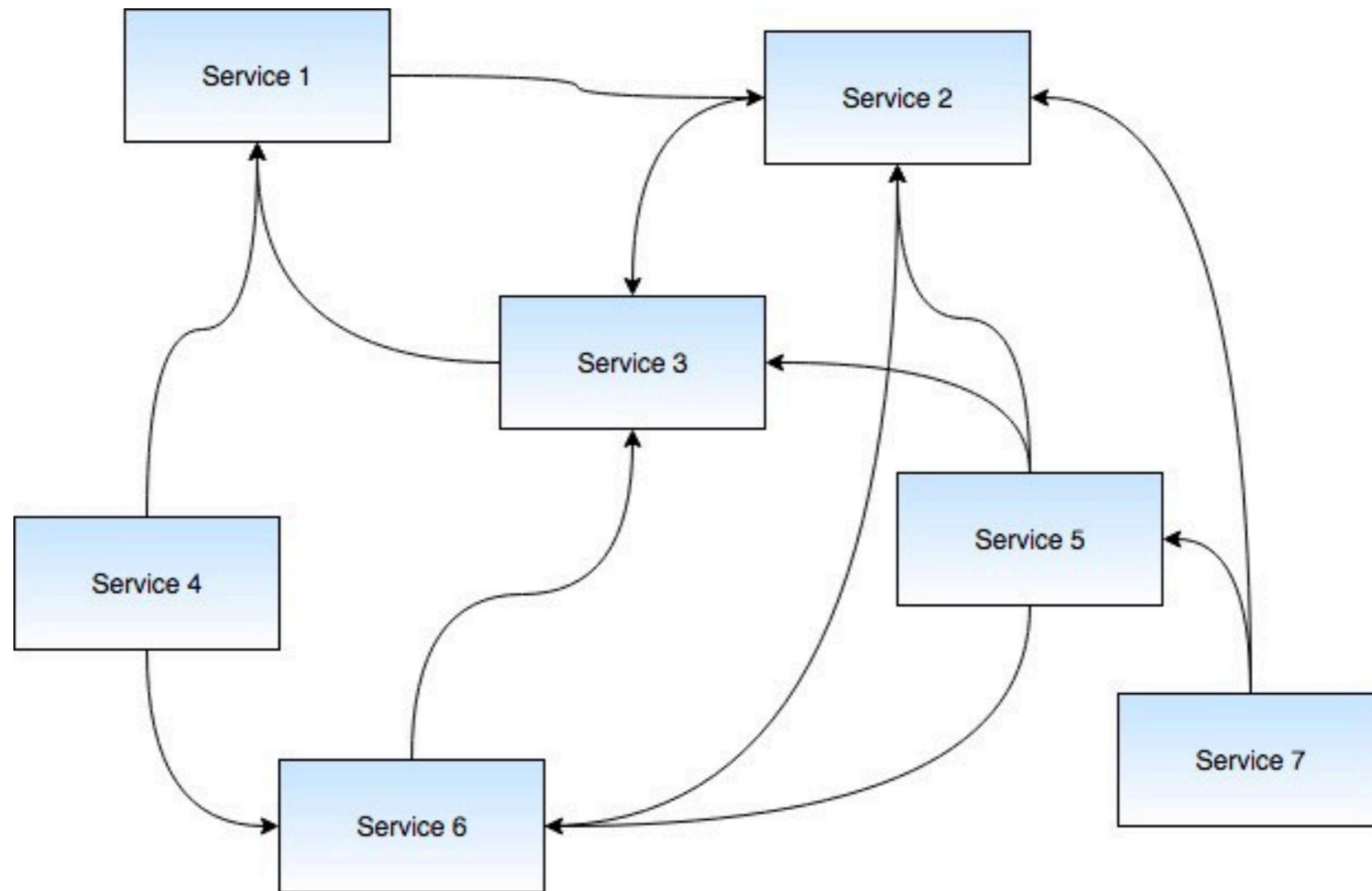
02-connect



Communication between services



Many services !!

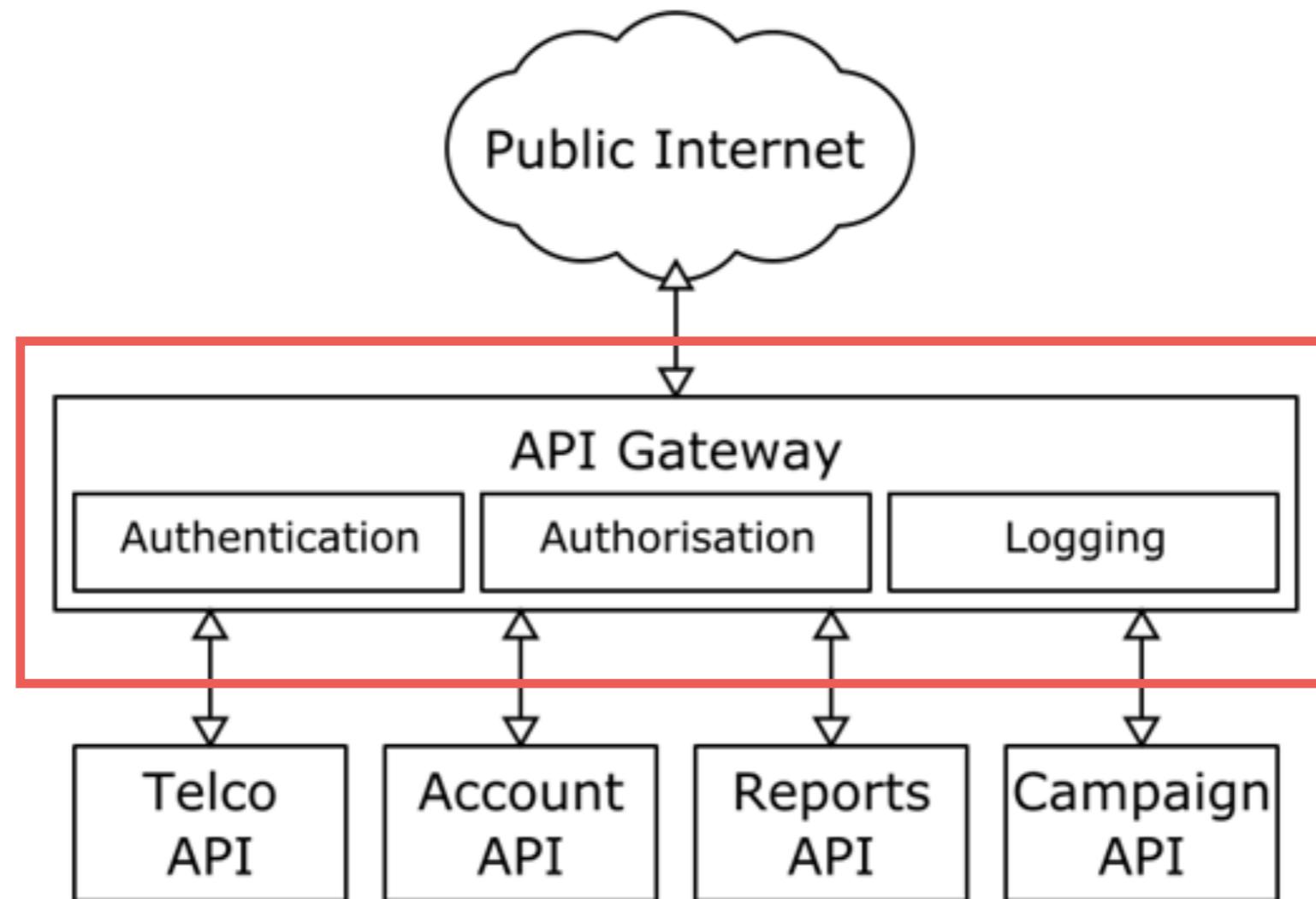


API gateway

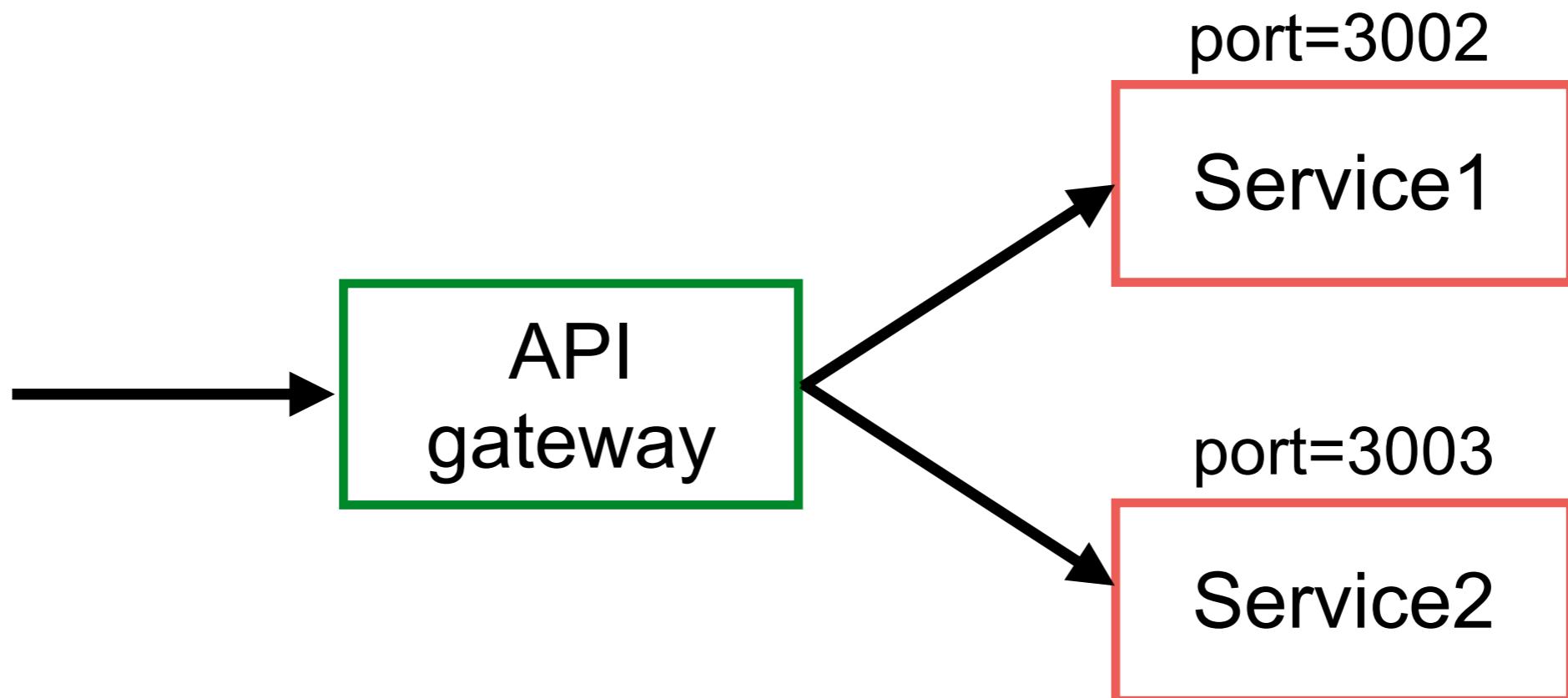
03-api-gateway



API gateway



API gateway



Using service discovery

04-service-discovery



Communication between services



Service Registry

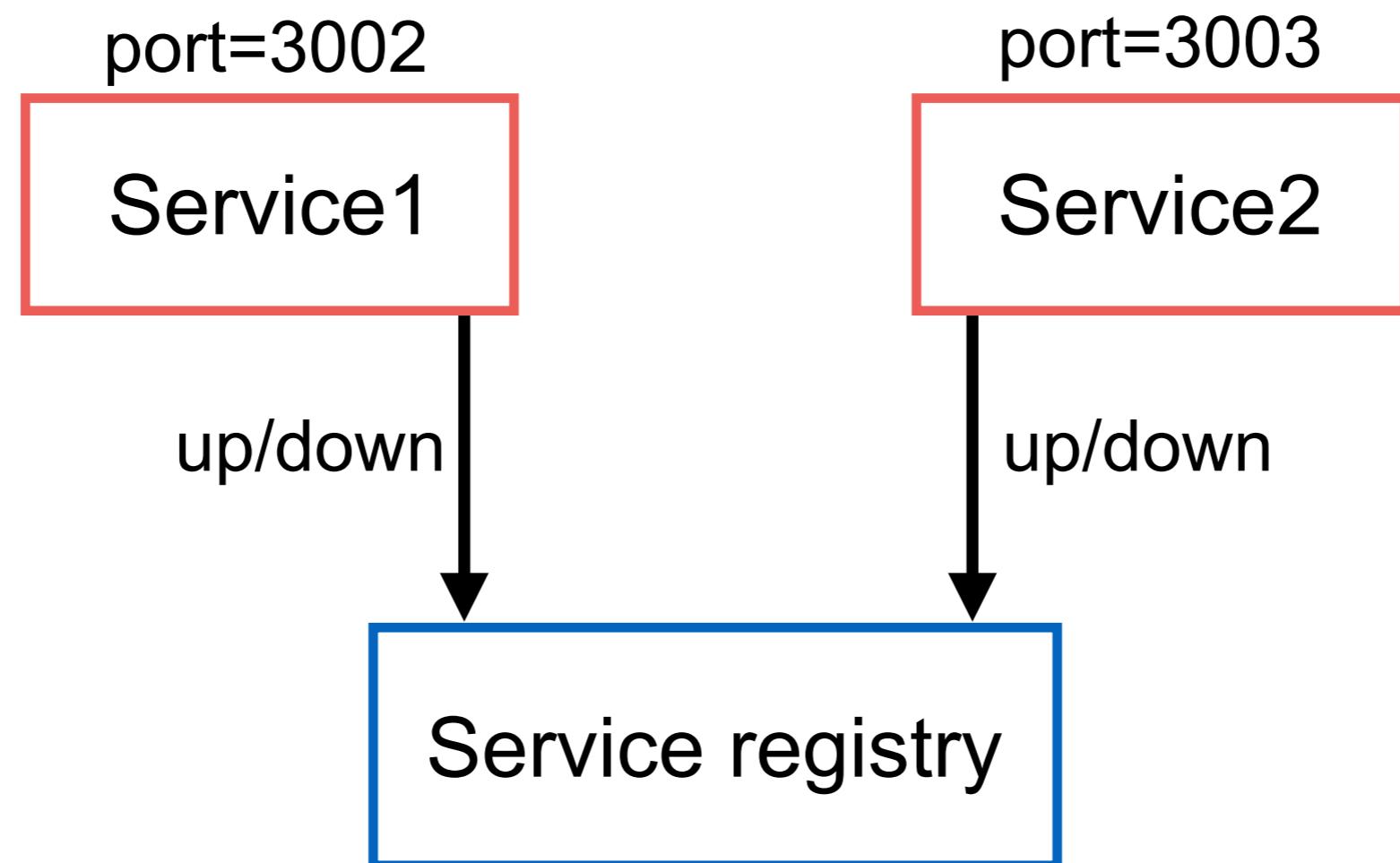
Database to keep data of services

How to register services ?

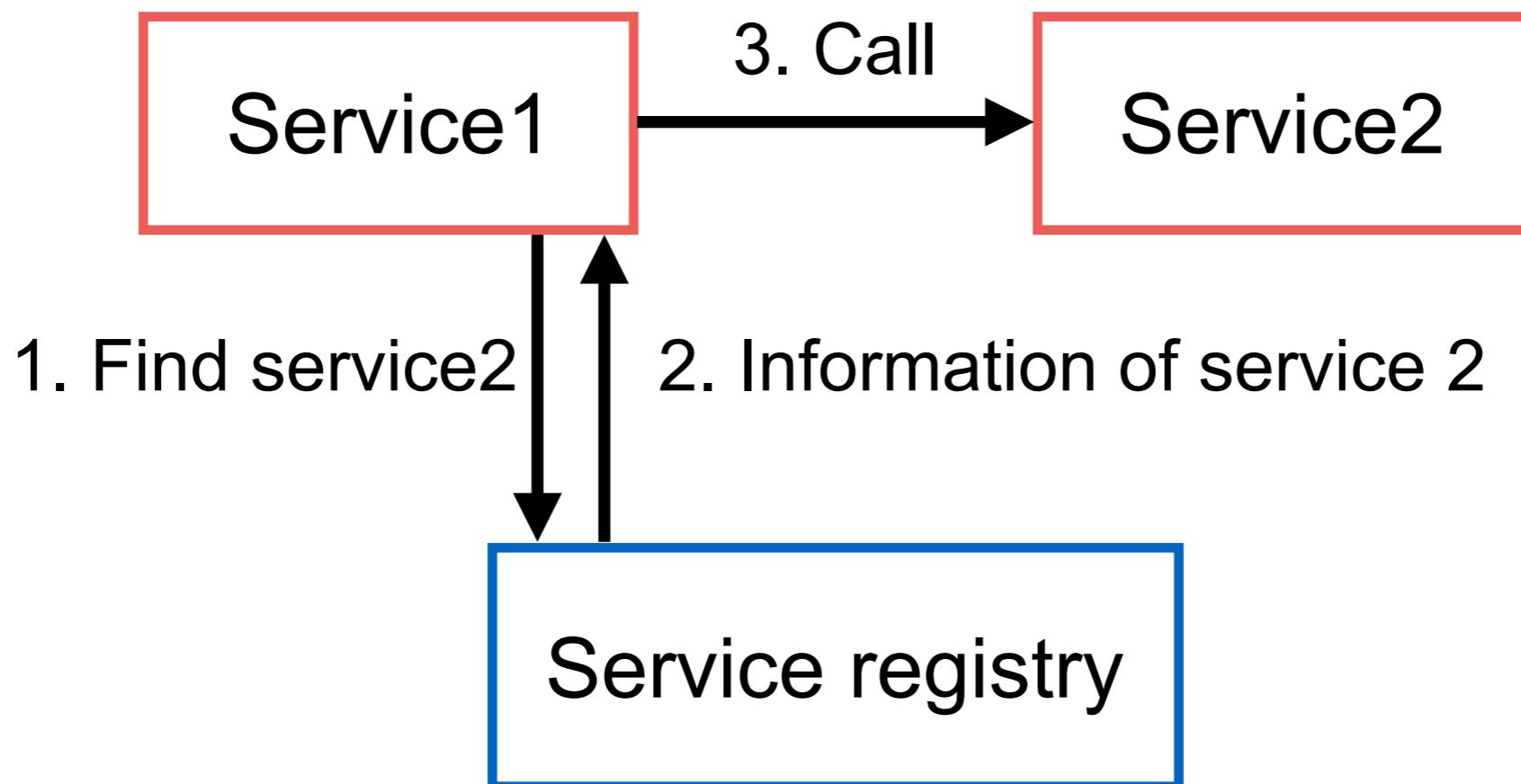
How to discover services ?



1. Service register



2. Service Discovery

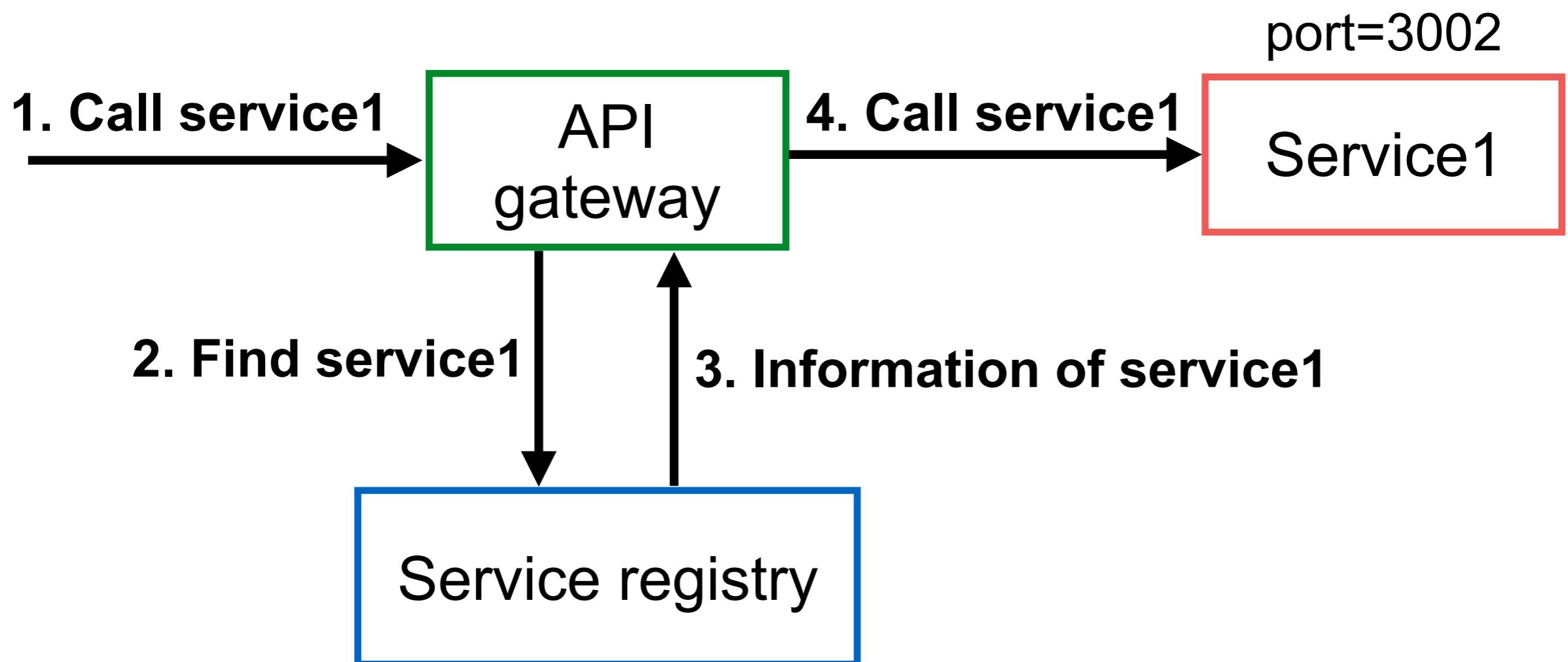


API gateway + Service registry

05-server-side-service-discovery



Server-side discovery

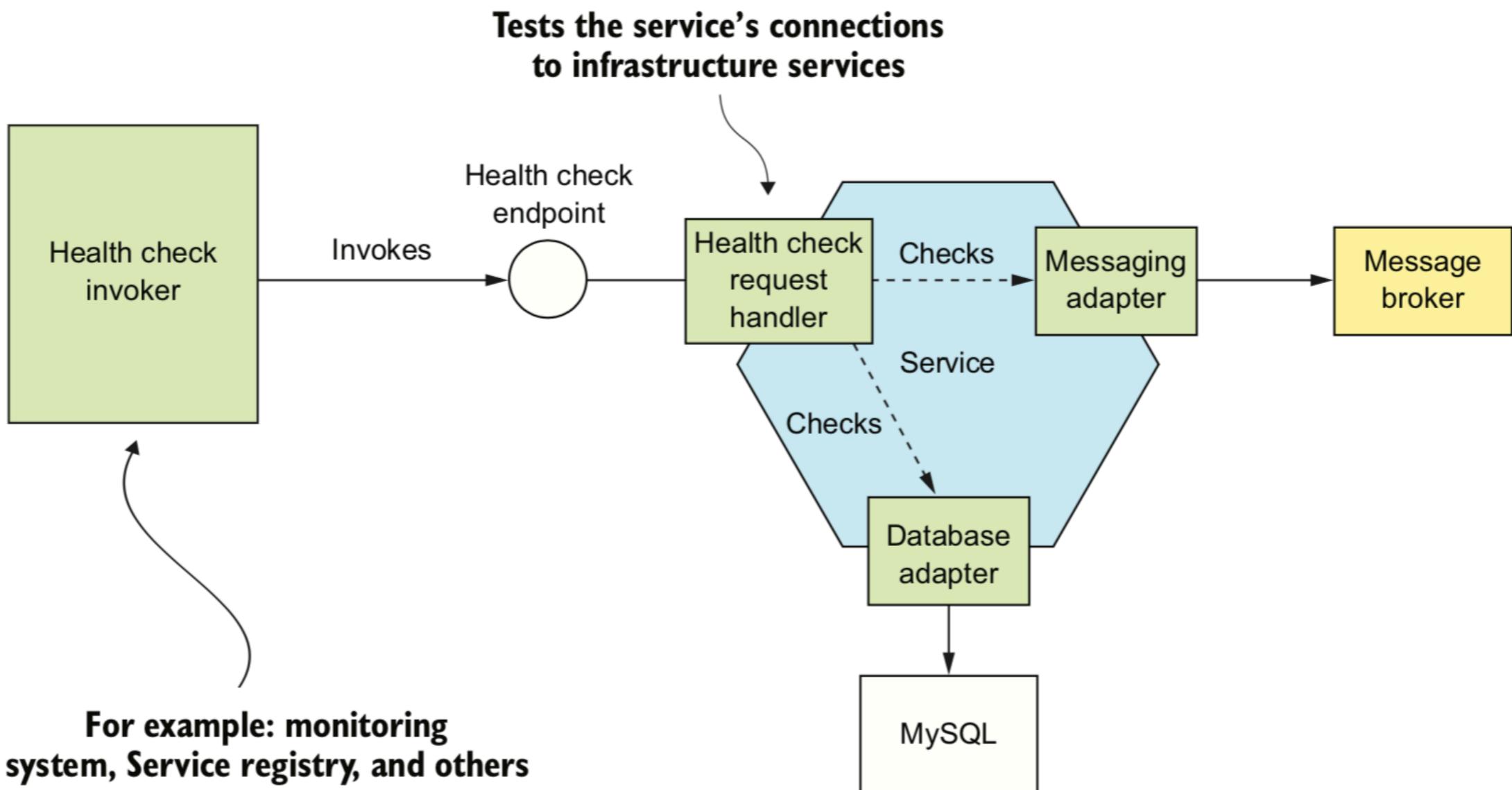


Health check API

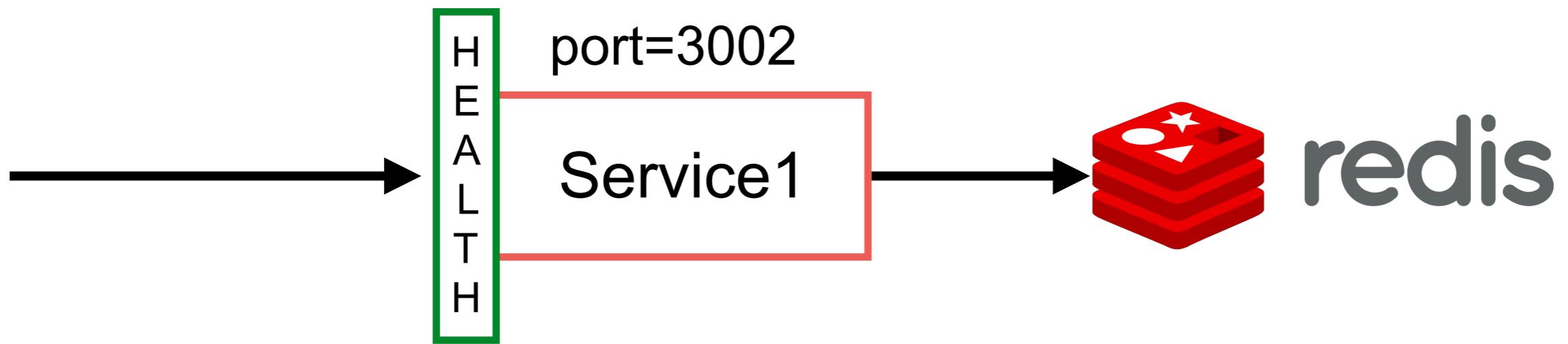
06-health-check-api



Health check API



Health check API

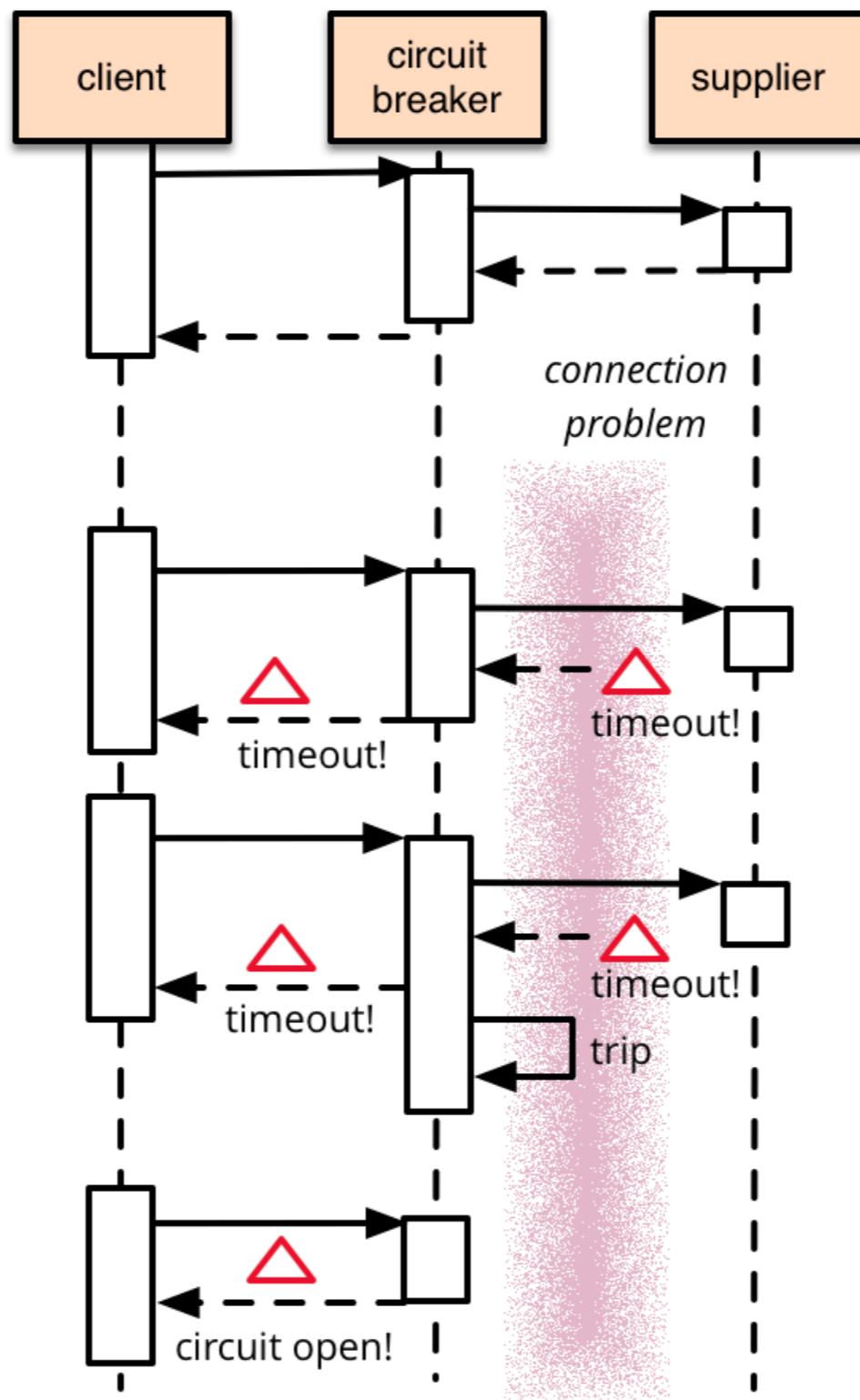


Circuit breaker

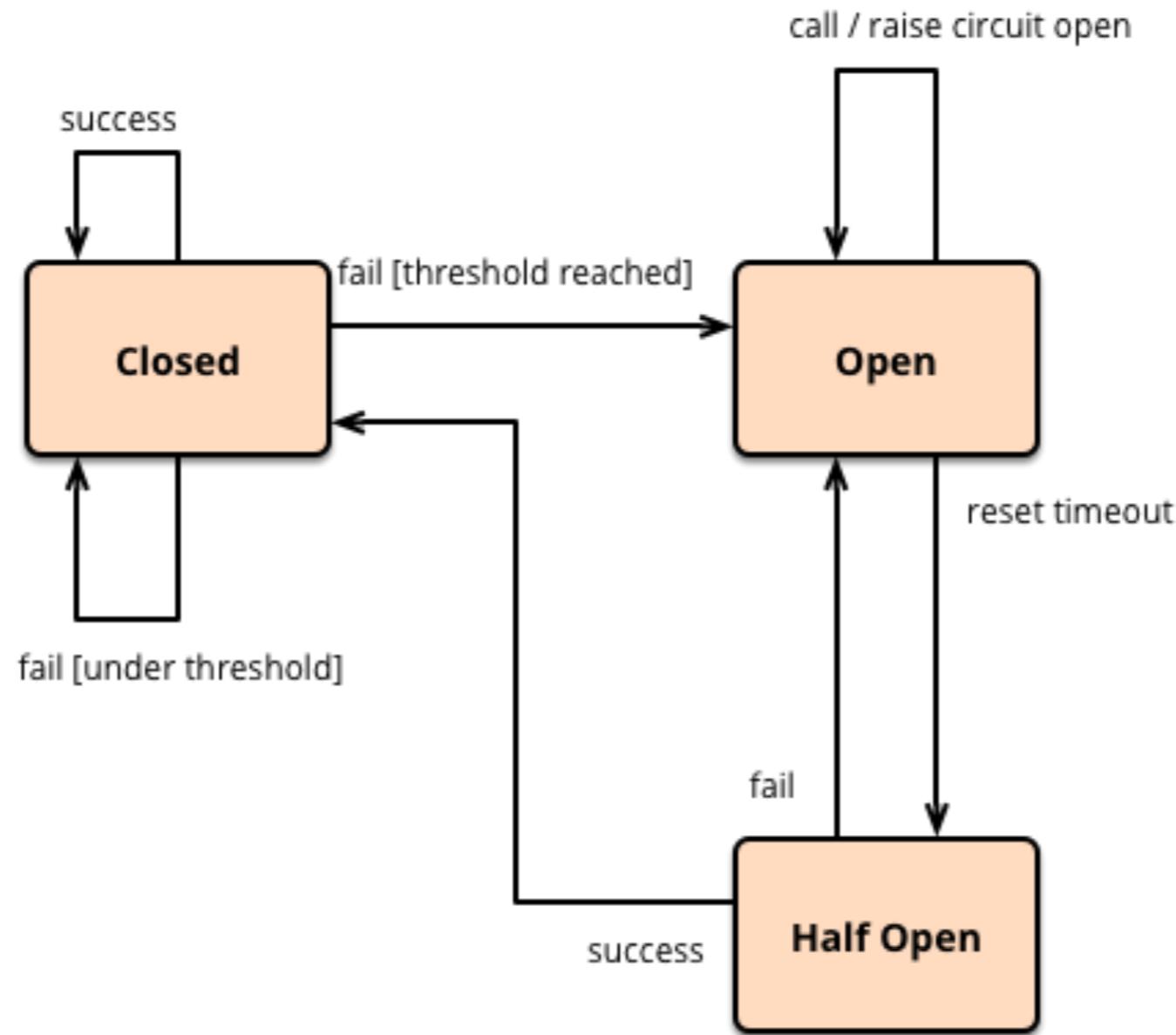
07-circuit-breaker



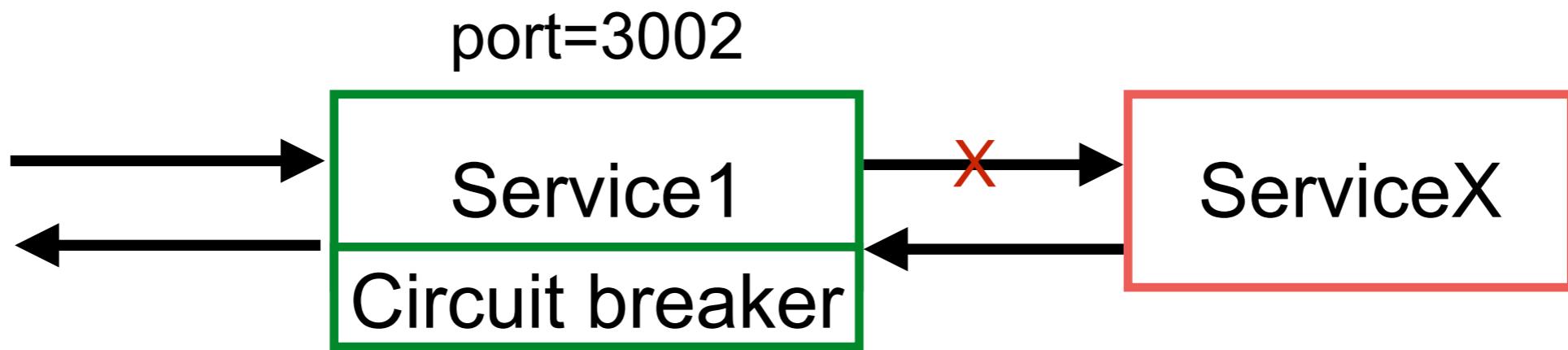
Circuit breaker



Circuit breaker



Circuit breaker

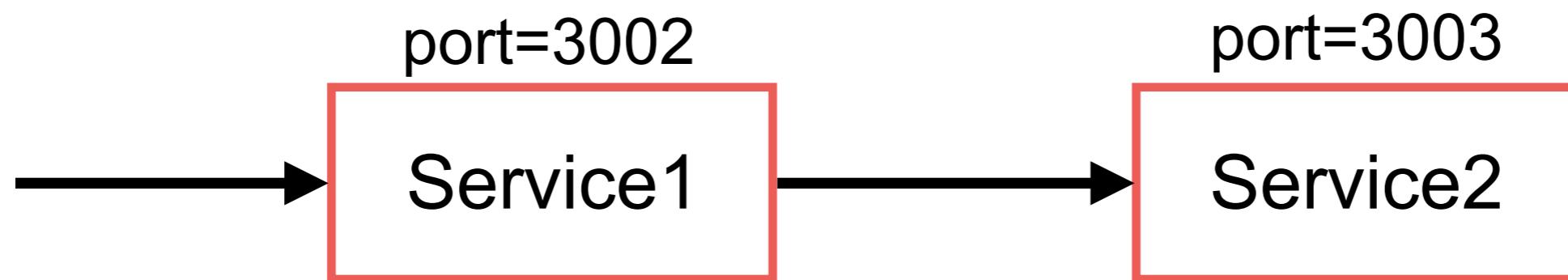


Distributed tracing

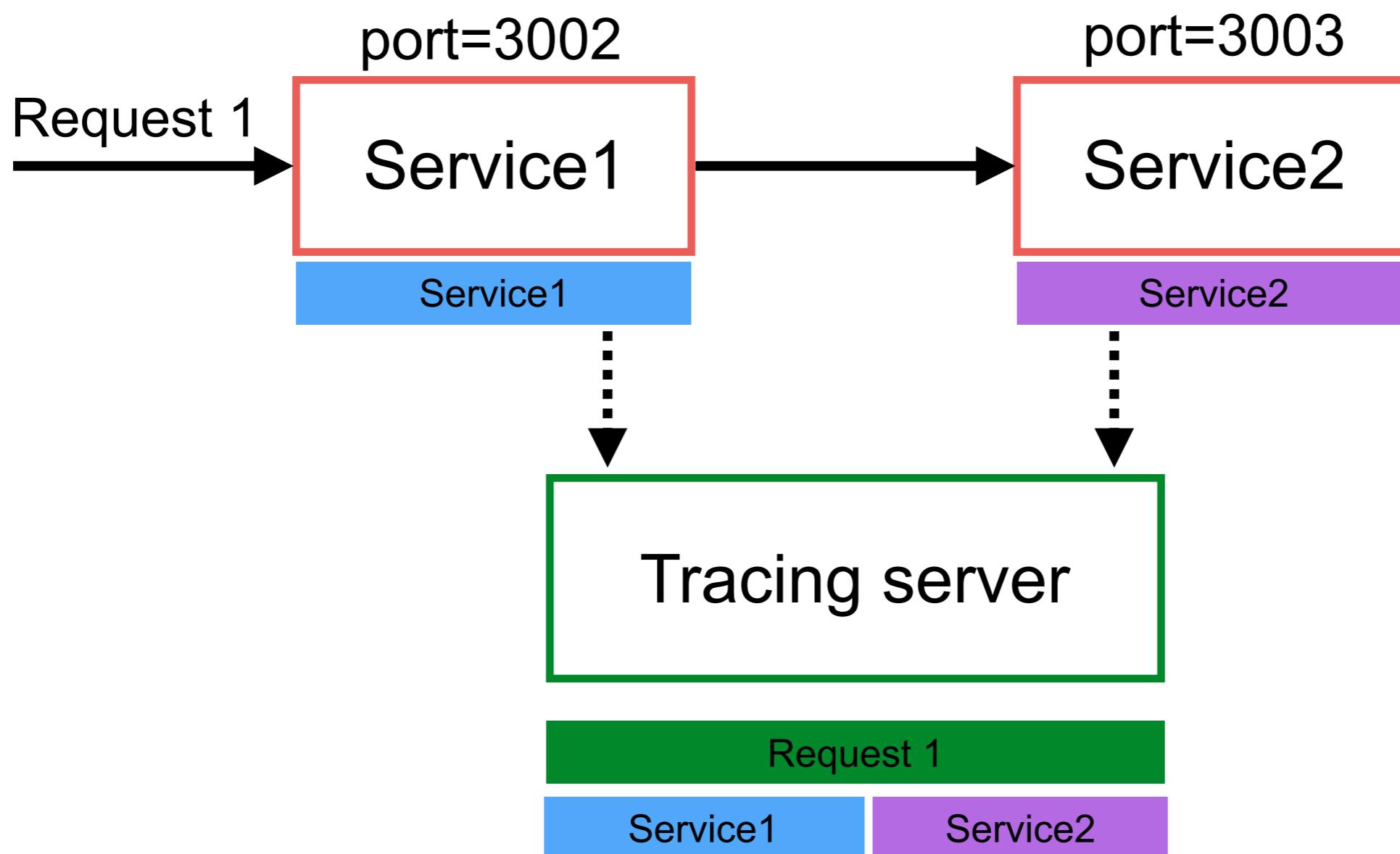
08-tracing



Communication between services



Distributed tracing



Jaeger dashboard

http://localhost:16686

Jaeger UI [Lookup by Trace ID...](#) [Search](#) [Compare](#) [Dependencies](#) [About Jaeger ▾](#)

Find Traces

Service (0)

Select A Service

Operation (0)

all

Tags ⓘ

http.status_code=200 error=true

Lookback

Last Hour

Min Duration

e.g. 1.2s, 100ms, 500us

Max Duration

e.g. 1.1s

Limit Results

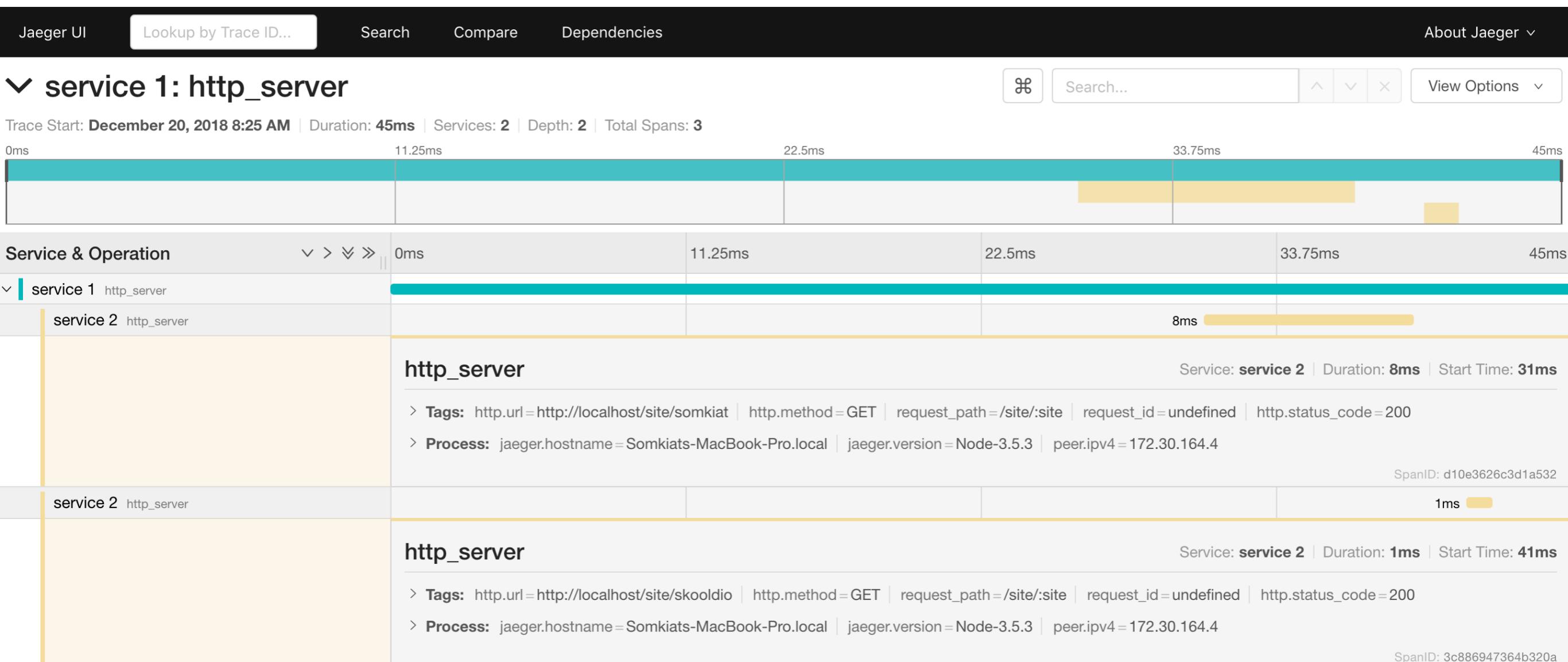
20



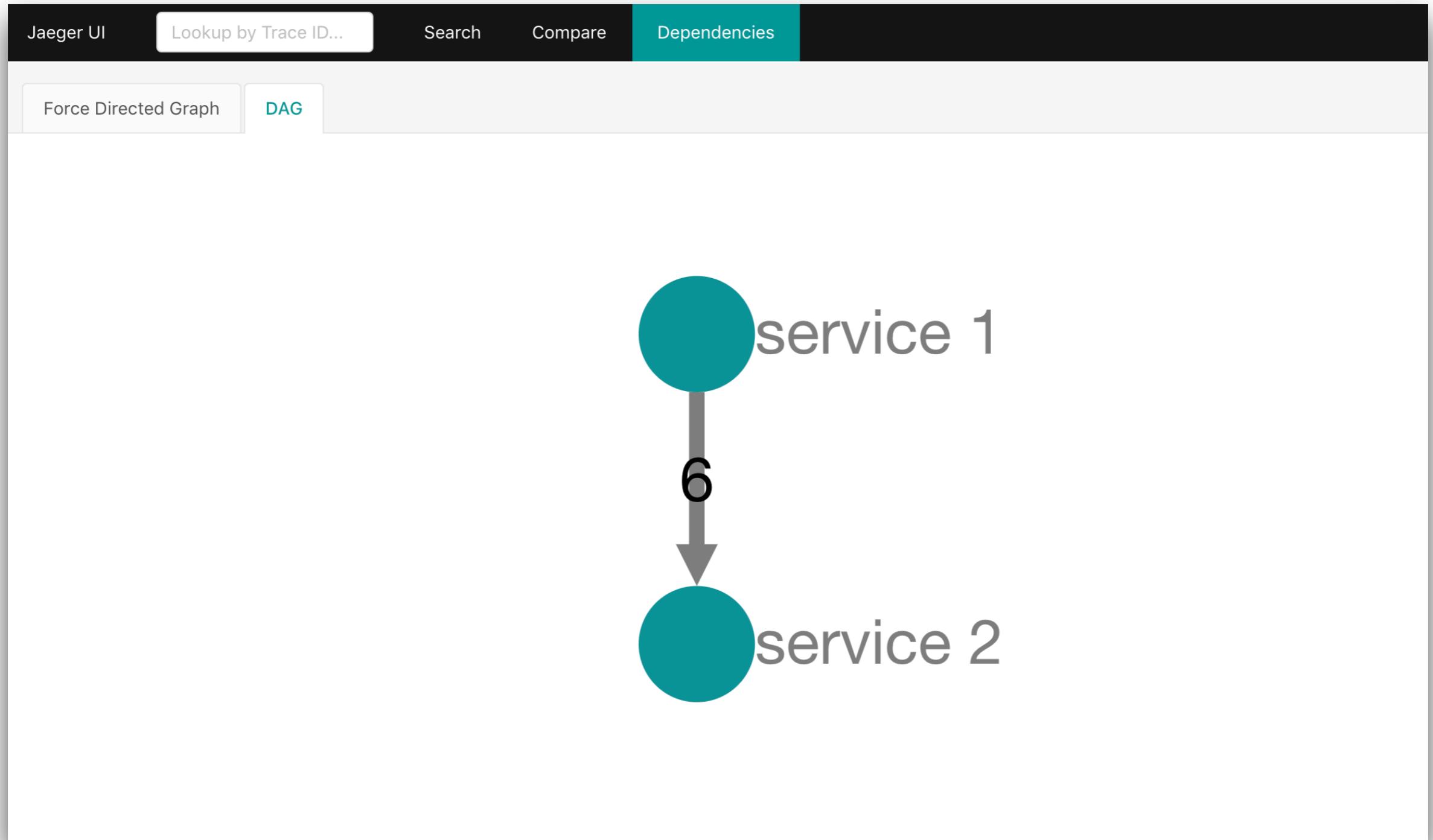
Logo by Lev Polyakov
www.polyakovproductions.com



See detail in each request



Dependencies of services



Monitoring

09-monitoring

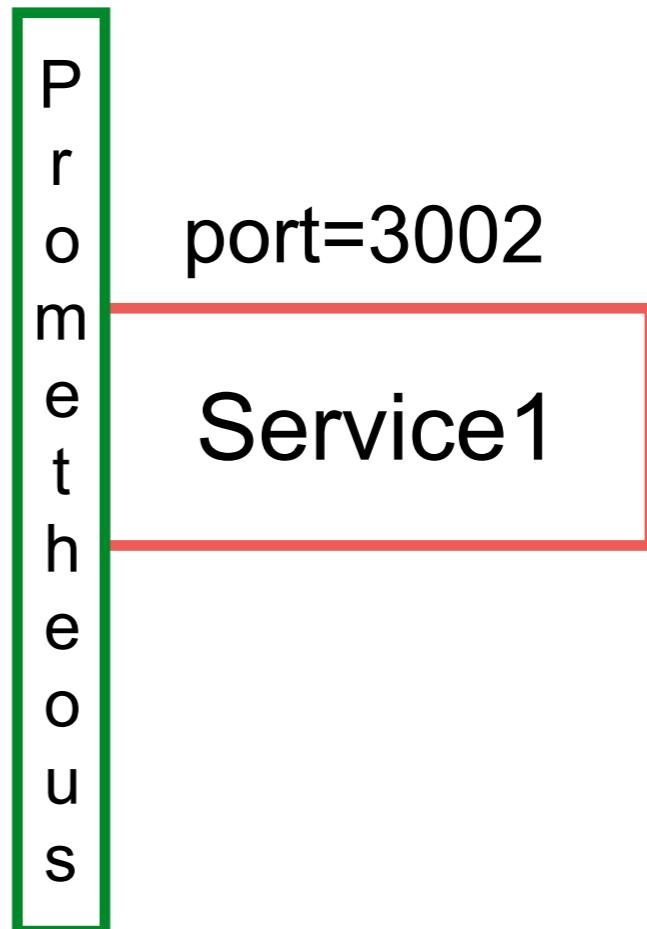


Monitoring with Prometheus

Keep data from service



Prometheus



Visualize data



CQRS

10-cqrs-reporting

