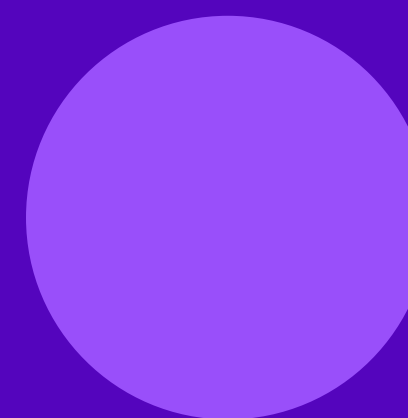
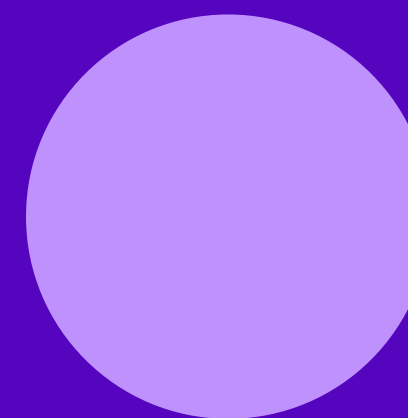
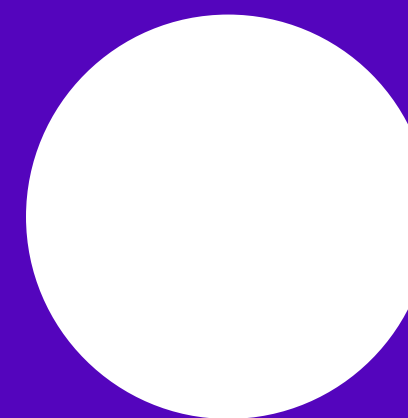


Spring Cloud



What is Spring cloud?

- Is a framework for building robust cloud applications.
- Common patterns in distributed systems.
 - Configuration management, service discovery, circuit breakers, intelligent routing, micro-proxy, control bus.
- The easiest way to get started is visit start.spring.io.
 - Select your Spring Boot version and the Spring Cloud projects you want to use.
- [Cloud Foundry](#), AWS, etc

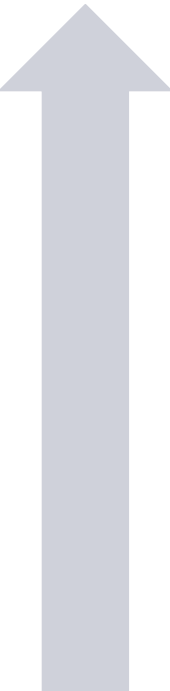
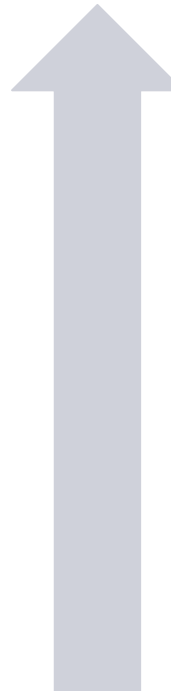
Agenda

- Configuration Server
- Service Discovery
- Declarative Rest Client
- Client Load Balance
- Api Gateway
- Distributed Trace

Cloud Configuration Server

Bootiful Configuration

- Spring boot improves configuration things considerably:
- Automatically load properties from a well-known hierarchy:
 - PropertySource order designed to allow sensible overriding of values, properties are considered in the following order:

- 
- 1. Command line arguments (--server.port=9000)**
 - 2. Java system properties (System.getProperties)**
 - 3. OS environment variables**
 - 4. @PropertySource annotation on your @Configuration classes,**
 - 5. Application Properties outside of you package jar**
 - 6. Application Properties inside your jar.**
 - 7. Default properties (specified using SpringApplication.setDefaultProperties)**
- 

Beautiful Configuration

- Profiles:

- `spring.application.profiles.active=aws,prod,etc`
- `@org.springframework.context.annotation.Profile({"aws", "prod", "etc"})`

- Annotations:

- `@Configuration`
- `@ConfigurationProperties`
- `@Value`
- `@ConditionalOnX`
- `@PropertySource`, etc...

- Actuator

- `curl -X GET 'http://127.0.0.1:8081/actuator/configprops' | jq .`

Missing answers

- **Server Downtown**

- *Changes to an application's configuration, as configured, would require a restart.*

- **There is no traceability**

- How do we determine what changes were introduced into production and, if necessary, rollback those changes?

- **Configuration is decentralized**

- Is not immediately understandable where to go to change what.

- **Encryption and Decryption**

- There is no out-of-the-box support for encryption and decryption for security.
 - We may have a common set of properties for each of your microservices. For example, database properties (username, password)..

Solution: Cloud Config Server

- **Rest API**, which our client clients will connect to draw their configurations
- It manages a **version-controlled repository**
- It sits in **between our clients and the repository** of configuration
 - Is in an enviable position to interpose security on the communication from clients to the service and on the communication from the service to the version-controlled repository of configuration.

▲ *Technologies spring cloud config server are important, but they will add cost to your operational overhead. Ideally, this competency should be managed by the platform, and automated. **If you are using Cloud Foundry, there is a Config Server service, in the service catalog.***

Implementation key Points

- **Configuration Server**

- Github integration
- Local system
- Cloud Bus

- **Downstream service**

- Bootstrap
- @RefreshScope
- Actuator

<< *show example* >>

Service Register & Service Discovery

Service Register

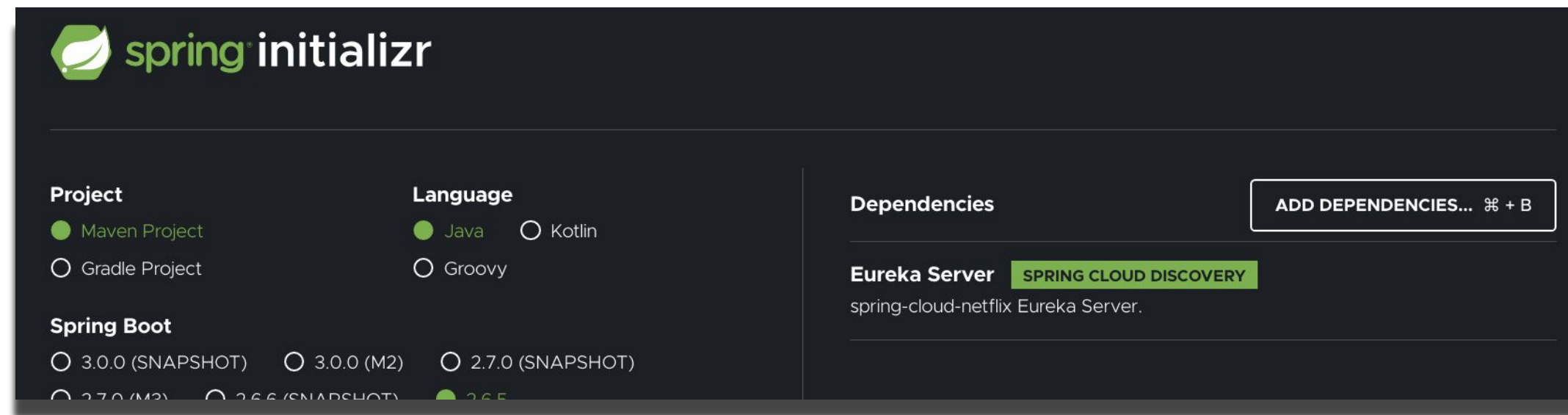
🤔 We want a logical mapping from a service's **ID** to the **Hosts** and **Ports** on which that service is available.

🚀 A Service Register is a good fit.

- Spring Cloud **DiscoverClient** abstraction:
 - Make it easy for clients to work with different types of service registries:
 - Apache Zookeeper
 - Hashicorp
 - Consul
 - Netflix Eureka

Eureka Server

- Using [spring initializr](#), create Eureka Server



- Apply the annotation `@EnableEurekaServer`
- Configuration

```
server:
  port: 8761
eureka:
  client:
    fetch-registry: false
    register-with-eureka: false
```

Talking to the Registry

- Dependencies:
 - Netflix-eureka-client
 - Actuator
- Configuration
 - eureka.client.register-with-eureka=true
 - eureka.client.fetch-registry=true
 - eureka.client.service-url.defaultZone=<http://127.0.0.1:8761/eureka>
 - eureka.client.healthcheck.enabled=true
- Enable DiscoveryClient abstraction
 - @EnableDiscoveryClient
- Links
 - curl -L -X GET <http://localhost:8761/eureka/apps>
 - <http://localhost:8761>

<< *show example* >>

Declarative Rest Client


OpenFeign

- Is a REST Client to make rest call from our spring application.
 - Microservice
 - Third-part service
- Clean alternative to **RestTemplate** and **WebClient** with some advantage:
 - Providing a declarative way.
 - Make our life very easy
 - Cloud CircuitBreaker Support
 - OAuth2 Support

<< *show example* >>

Client Load balance

Client Load Balancer

 **spring**initializr

Project

☒ Maven Project ☐ Gradle Project

Language

☒ Java ☐ Kotlin ☐ Groovy

Spring Boot

☐ 3.0.0 (SNAPSHOT) ☐ 3.0.0 (M2) ☐ 2.7.0 (SNAPSHOT) ☐ 2.7.0 (M3)

☐ 2.6.6 (SNAPSHOT) ☒ 2.6.5 ☐ 2.5.12 (SNAPSHOT) ☐ 2.5.11

☐ 5.0.0 (SNAPSHOT) ☒ 5.0.2 ☐ 5.2.12 (SNAPSHOT) ☐ 5.2.11

☐ 3.0.0 (SNAPSHOT) ☐ 3.0.0 (M5) ☐ 5.1.0 (SNAPSHOT) ☐ 5.1.0 (M3)

Dependencies

Cloud LoadBalancer

SPRING CLOUD ROUTING

Client-side load-balancing with Spring Cloud LoadBalancer.

ADD DEPENDENCIES... ⌘ + B

`org.springframework.cloud:spring-cloud-starter-loadbalancer`

Client Load Balancer - Configuration

```
    @Bean
    @LoadBalanced
    public RestTemplate restTemplate(RestTemplateBuilder restTemplateBuilder) {
        return restTemplateBuilder.build();
    }
}
```

```
    @Bean
    @LoadBalanced
    public WebClient.Builder webClient() {
        return WebClient.builder();
    }
}
```

Client Load Balancer - Configuration

```
@LoadBalancerClients({
    .....@LoadBalancerClient(value = "routingms")
})
public class CargoRoutingOpenFeignLoadBalancerConfig {

    .....@Bean
    .....@LoadBalanced
    .....public Feign.Builder feignBuilder() { return Feign.builder(); }

}
}
```

```
@FeignClient(
    .....name = "routingms",
    .....contextId = "routingmsOpenfeign",
    .....decode404 = true)
public interface CargoRoutingOpenfeign {

    .....@GetMapping(path = "/routing", produces = MediaType.APPLICATION_JSON_VALUE)
    .....TransitPath findOptimalRoute();
}
}
```

<< *show example* >>

API Gateway

API Gateway

 [Spring cloud api gateway documentation](#)

- Top-Level context for request into a system
 - Geolocation
 - Cookie propagation
 - Token decryption
 - Authentication
 - CORS (Cross-Origin Resource Sharing)
- Ideal place to address routing from the client to downstream services

API Gateway

- **Netflix Zuul - @Deprecated**

*The spring team has stopped supporting **Netflix Zuul**, this project has been replaced in Spring-cloud framework by the new **Spring-api-gateway** implementation.*

- **Spring Cloud Api-gateway**

- **Communicate with Eureka**
- **Redirect the HTTP requests to the right services**
- **Load balance**
 - **Load balance can be made in the api-gateway instead of in the downstream microservices.**
- **Rate-Lime**
- **Authorization**

<< *show example* >>

Distributed Trace

Distributed Tracing

- Is a method of observing requests as they propagate through distributed cloud environments
- Distributed tracing follows an interaction by tagging it with a unique identifier.
 - This identifier stays with the transaction as it interacts with microservices, containers, and infrastructure.
 - The unique identifier offers real-time visibility into user experience, from the top of the stack to the application layer and the infrastructure beneath.

Problem

- When we work with microservice by default any microservice store each log files. So we could have a requisition passing in multiple microservices, but we are not able to trace the flow between the microservices.
- How to trace the flow of one requisition?
 - Consulting every log file of each service a each replicas.
- How to identify high service latence?

Benefits

- helps teams get to the bottom of application performance issues faster.
- Upon discovering an issue, the organization can rapidly identify the root cause and address it.
- Improves developer productivity and output:
 - by making it easy to understand the behavior of distributed systems. Distributed tracing tools are easy to setup and they will help you and your team drastically reduce time spent debugging and troubleshooting issues with your systems.
- works across multiple applications, programming languages, and transports.
- Most importantly, distributed tracing facilitates excellent cross-team communication and cooperation. It eliminates costly data silos that could otherwise hinder developers' ability to quickly locate and fix sources of error.

Spring Cloud Sleuth

- Auto Configuration
- Integrates with [Open Zipkin Brave](#)
- Trace Request with unique identifier
- Export the tracing information to an external system to visualize latency.

Spring Cloud Sleuth supports [OpenZipkin](#) compatible systems directly.

Terminology

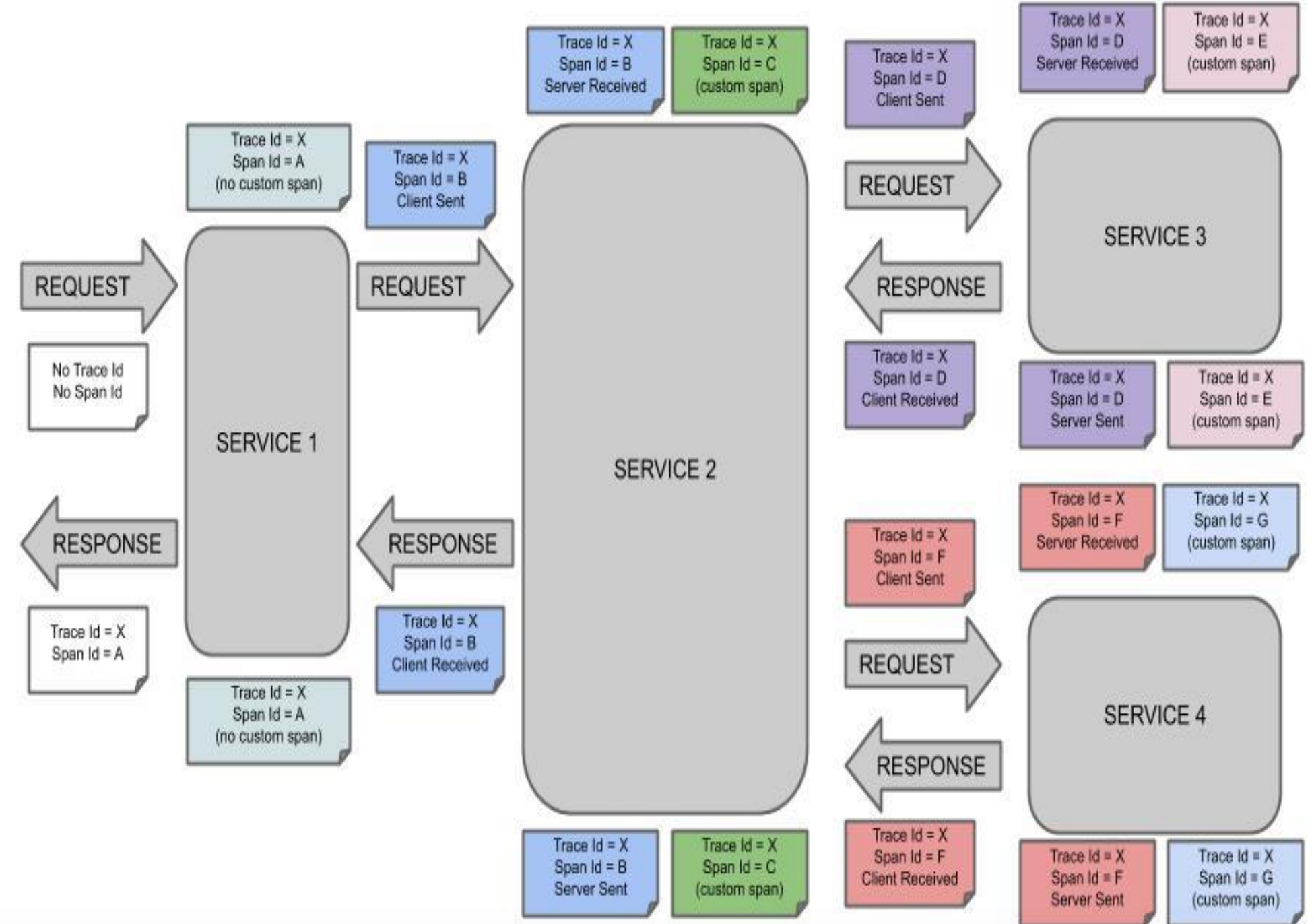
 [Official documentation](#)

- **Trace-Id**

- Transaction-id
- Propagated for each downstream microservice

- **Span**

- Unique over each microservice request

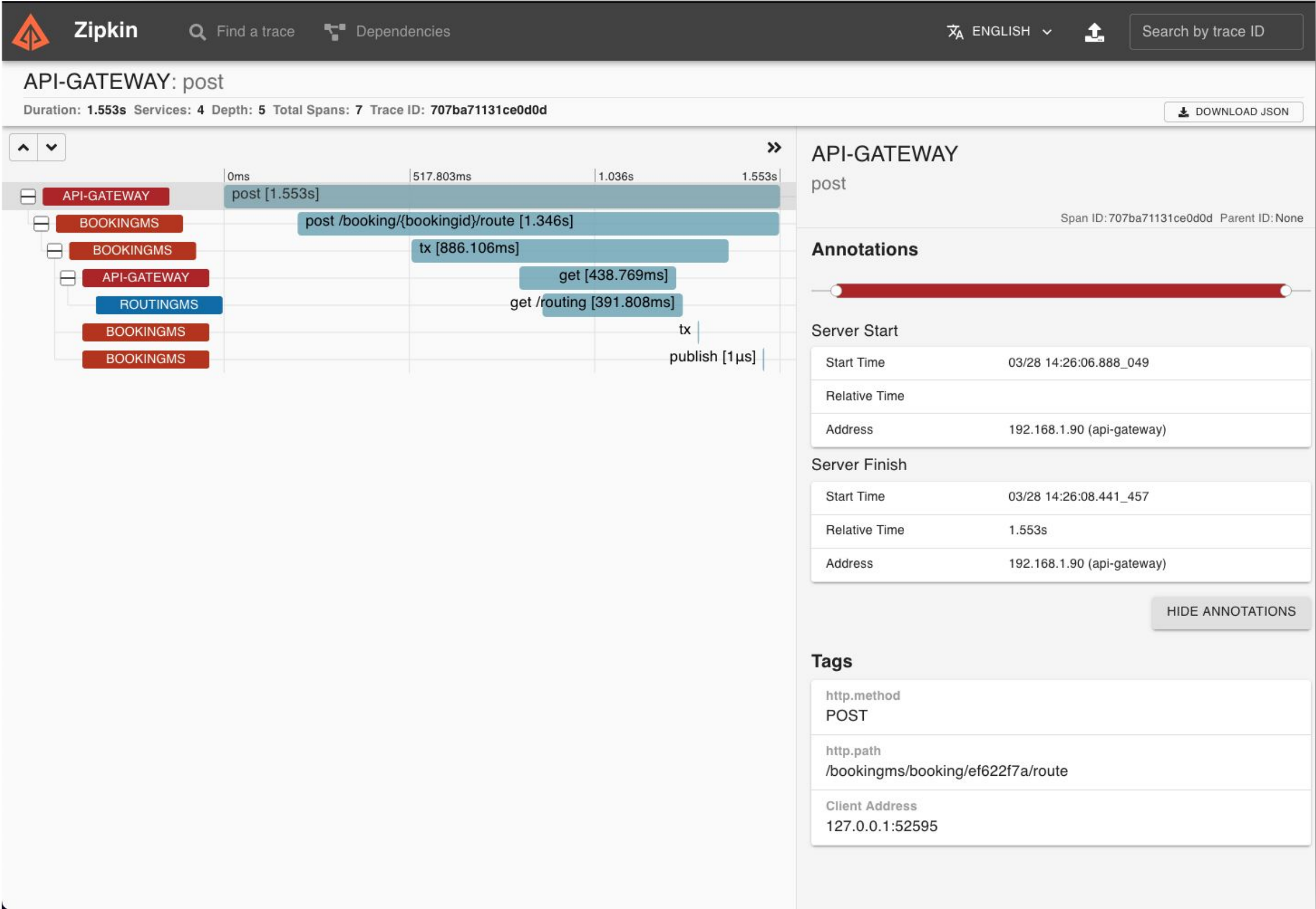


```
DEBUG [bookingms,223d69674c7f0fea,5b6b0d0702387430] 36284 --- [nio-8081-exec-1] POST "/booking/ef622f7a/route", parameters={}
```


```
DEBUG [routingms,223d69674c7f0fea,3d33319c40aec234] 36288 --- [nio-8082-exec-1] GET "/routing?origin=ABC&destination=DEF&deadline=2022-04-01T21%3A23%3A43.598697Z"
```

```
DEBUG [bookingms,223d69674c7f0fea,5b6b0d0702387430] 36284 --- [nio-8081-exec-1] Completed 200 OK
```

Distributed Tracing - zipkin



Distributed Tracing - centralized logger



Papertrail

Dashboard

Events

Alerts


Settings

Support

Give Feedback

🔍

⌵



Oldest event reached

Need to search events before Mar 26 at 1:39 PM UTC?
[Download archives](#) (or to retain logs longer, [change plans](#))

Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway	🚩	2022-03-28 14:26:06.894	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.f.WeightCalculatorWebFilter : Weights attr: {}
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.907	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.h.p.PathRoutePredicateFactory : Pattern "[/api-gateway/**]" does not match again...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.907	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.h.p.PathRoutePredicateFactory : Pattern "[/routingms/**]" does not match against...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.907	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.h.p.PathRoutePredicateFactory : Pattern "[/bookings/**]" matches against value "/...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.908	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.h.RoutePredicateHandlerMapping : Route matched: ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.912	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.h.RoutePredicateHandlerMapping : Mapping [Exchange: POST http://localhost:9090/b...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.912	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.h.RoutePredicateHandlerMapping : [186a7289-1] Mapped to org.springframework.clou...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.913	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.handler.FilteringWebHandler : Sorted gatewayFilterFactories: [[GatewayFilterAdap...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.923	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.filter.RouteToRequestUrlFilter : RouteToRequestUrlFilter start
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.924	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	s.c.g.f.ReactiveLoadBalancerClientFilter : ReactiveLoadBalancerClientFilter url before: ...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.981	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.983	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.984	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition matched: ReactiveCompositeDiscov...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.985	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.986	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.987	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition matched: ReactiveCompositeDiscov...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.987	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.989	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:06.990	DEBUG	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition matched: ReactiveCompositeDiscov...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.017	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	s.c.g.f.ReactiveLoadBalancerClientFilter : LoadBalancerClientFilter url chosen: http://p...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.019	INFO	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	i.g.j.apigateway.filters.CustomFilter : Pre-Filter Header Authorization: GOAT
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.040	INFO	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	LoggingFilter : [5f130786-1] REGISTERED
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.103	INFO	[api-gateway,,]	11054	---	[ctor-http-nio-4]	LoggingFilter : [5f130786-1, L:/192.168.1.74:52596 - R:pt-360597-mbp16in4.lan/192.168.1.74:8081] WRITE: 501B POST /bookin...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.108	INFO	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	LoggingFilter : [5f130786-1, L:/192.168.1.74:52596 - R:pt-360597-mbp16in4.lan/192.168.1.7...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.108	INFO	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	LoggingFilter : [5f130786-1, L:/192.168.1.74:52596 - R:pt-360597-mbp16in4.lan/192.168.1.7...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway	🚩	2022-03-28 14:26:07.280	DEBUG	[bookingsms,707ba71131ce0d0d,17ab6023a4584c46]	11050	---	[nio-8081-exec-1]	o.s.web.servlet.DispatcherServlet : POST "/booking/ef622f7a/route", parameters={}
Mar 28 13:26:07Z	PT-360597-MBP16IN4	bookingsms		2022-03-28 14:26:07.397	INFO	[bookingsms,707ba71131ce0d0d,17ab6023a4584c46]	11050	---	[nio-8081-exec-1]	i.g.j.c.b.i.rest.CargoRoutingController : [GOAT - xl] Cargo Routing Id <RouteCargoResource(bo...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway	🚩	2022-03-28 14:26:07.731	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.f.WeightCalculatorWebFilter : Weights attr: {}
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.733	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.h.p.PathRoutePredicateFactory : Pattern "[/api-gateway/**]" does not match again...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.733	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.h.p.PathRoutePredicateFactory : Pattern "[/routingms/**]" matches against value "/...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.733	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.h.RoutePredicateHandlerMapping : Route matched: ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.733	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.h.RoutePredicateHandlerMapping : Mapping [Exchange: GET http://pt-360597-mbp16in...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.733	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.h.RoutePredicateHandlerMapping : [9ad82be8-2] Mapped to org.springframework.clou...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.734	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.handler.FilteringWebHandler : Sorted gatewayFilterFactories: [[GatewayFilterAdap...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.734	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.filter.RouteToRequestUrlFilter : RouteToRequestUrlFilter start
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.735	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	s.c.g.f.ReactiveLoadBalancerClientFilter : ReactiveLoadBalancerClientFilter url before: ...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.759	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.760	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.761	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition matched: ReactiveCompositeDiscov...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.762	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.762	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.764	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition matched: ReactiveCompositeDiscov...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.764	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.766	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition ReactiveCompositeDiscoveryClient...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.767	DEBUG	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.r.RouteDefinitionRouteLocator : RouteDefinition matched: ReactiveCompositeDiscov...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.769	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	s.c.g.f.ReactiveLoadBalancerClientFilter : LoadBalancerClientFilter url chosen: http://p...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.769	INFO	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	i.g.j.apigateway.filters.CustomFilter : Pre-Filter Header Authorization: GOAT
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.771	INFO	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	LoggingFilter : [924c8db8-1] REGISTERED
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.779	INFO	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	LoggingFilter : [924c8db8-1, L:/192.168.1.74:52598 - R:pt-360597-mbp16in4.lan/192.168.1.7...
Mar 28 13:26:07Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:07.779	INFO	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	LoggingFilter : [924c8db8-1, L:/192.168.1.74:52598 - R:pt-360597-mbp16in4.lan/192.168.1.7...
Mar 28 13:26:08Z	PT-360597-MBP16IN4	routingms		2022-03-28 14:26:08.028	DEBUG	[routingms,707ba71131ce0d0d,fb8a90d81fe55c8d]	11045	---	[nio-8082-exec-1]	o.s.web.servlet.DispatcherServlet : GET "/routing?origin=ABC&destination=DEF&deadline=2022-0...
Mar 28 13:26:08Z	PT-360597-MBP16IN4	routingms		2022-03-28 14:26:08.103	INFO	[routingms,707ba71131ce0d0d,fb8a90d81fe55c8d]	11045	---	[nio-8082-exec-1]	i.g.j.c.r.i.rest.CargoRoutingController : [GOAT - xl] Find Optimal Route origin <ABC>, destin...
Mar 28 13:26:08Z	PT-360597-MBP16IN4	routingms		2022-03-28 14:26:08.132	DEBUG	[routingms,707ba71131ce0d0d,fb8a90d81fe55c8d]	11045	---	[nio-8082-exec-1]	o.s.web.servlet.DispatcherServlet : Completed 200 OK
Mar 28 13:26:08Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:08.135	INFO	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	i.g.j.apigateway.filters.CustomFilter : Post-Filter Status Code: 200
Mar 28 13:26:08Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:08.135	TRACE	[api-gateway,707ba71131ce0d0d,ba90293fbba85f35]	11054	---	[ctor-http-nio-5]	o.s.c.g.filter.NettyWriteResponseFilter : NettyWriteResponseFilter start inbound: 924c8d...
Mar 28 13:26:08Z	PT-360597-MBP16IN4	bookingsms		2022-03-28 14:26:08.422	DEBUG	[bookingsms,707ba71131ce0d0d,17ab6023a4584c46]	11050	---	[nio-8081-exec-1]	o.s.web.servlet.DispatcherServlet : Completed 200 OK
Mar 28 13:26:08Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:08.435	INFO	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	i.g.j.apigateway.filters.CustomFilter : Post-Filter Status Code: 200
Mar 28 13:26:08Z	PT-360597-MBP16IN4	api-gateway		2022-03-28 14:26:08.435	TRACE	[api-gateway,707ba71131ce0d0d,707ba71131ce0d0d]	11054	---	[ctor-http-nio-4]	o.s.c.g.filter.NettyWriteResponseFilter : NettyWriteResponseFilter start inbound: 5f1307...

PT-360597-MBP16IN4

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<< *show example* >>



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Thank you!