Spring Boot Microservices

Beginner to Guru

Spring Cloud Circuit Breaker

The Circuit Breaker Pattern

- The Circuit Breaker Pattern is a simple concept which allows you to recover from errors

- If a service is unavailable or has unrecoverable errors, via the Circuit Breaker Pattern you can specify an alternative action.

- For example, we wish to always have inventory for potential orders.

  - If the inventory service is down, we can provide a fallback service to respond with inventory

Spring Cloud Circuit Breaker

- Spring Cloud Circuit Breaker is a project which provides abstractions across several circuit breaker implementations

  - Thus your source code is not tied to a specific implementation (like SLF4J)

- Supported:

  - Netflix Hystrix

  - Resilience4J

  - Sentinel

  - Spring Retry

Spring Cloud Gateway Circuit Breakers

• Spring Cloud Gateway supports Netflix Hystrix and Resilience4J

• Gateway Filters are used on top the the Spring Cloud Circuit Breaker APIs

• Netflix has placed Hystrix into maintenance mode, Spring suggests using Resilience4J

Coming Up

- Create Inventory Failover service

- Configure Spring Cloud Gateway to use circuit breaker for failover

- Configure Feign to use Circuit Breaker

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