

**Naming service**

Service registration

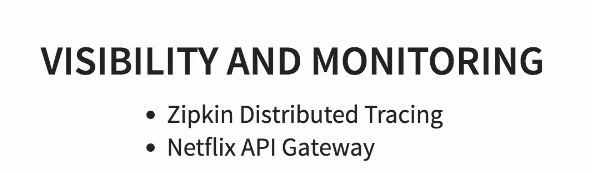
Service discovery

**Ribbon**

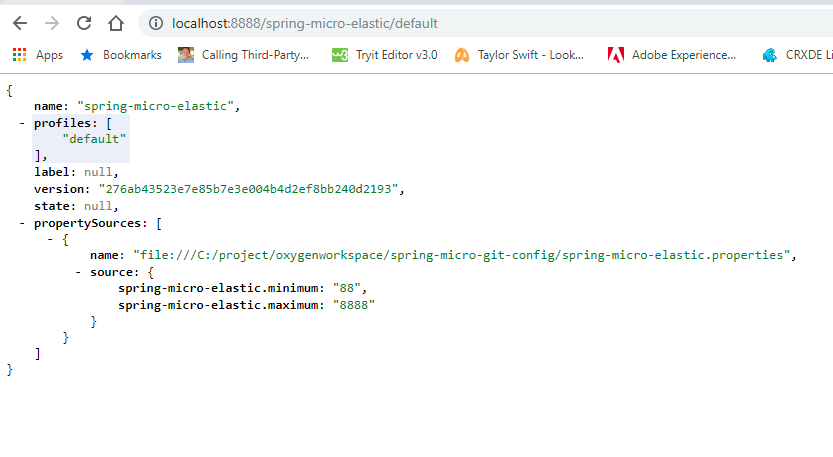
client side load balancing

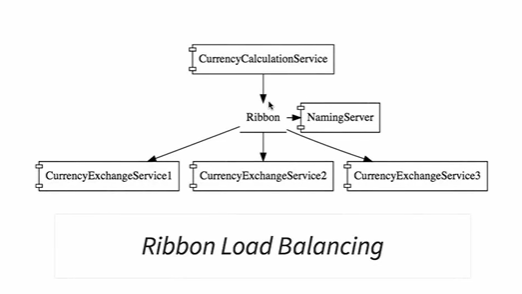
**Feign Client**

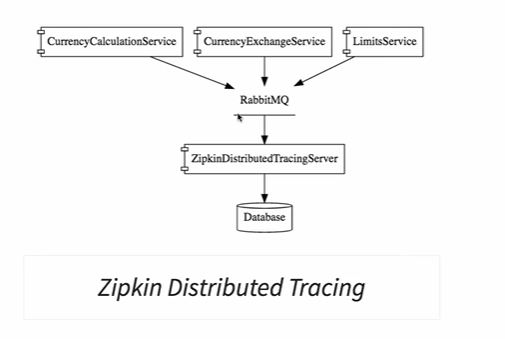
Rest client

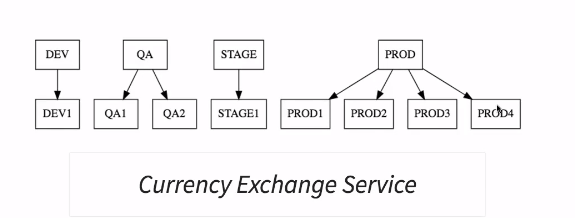


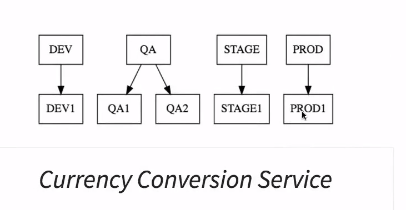








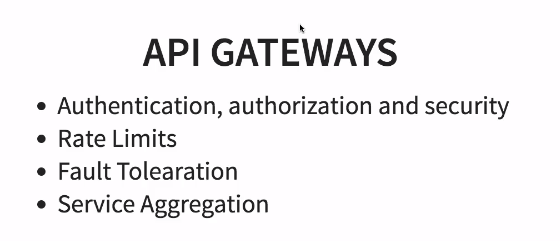




Ribbon helps in accessing services in load balanced way

Naming server is useful we need auto scale up or down. All the micro services will register themselves with the naming server (service registration) service1 contacts with naming server to find out how many instances of service2 are running currently.(this is called service discovery)

These should be done at api gateway level



**Starting Cassandra NoSQL db**

C:\project\softwares\apache-cassandra-3.11.4\bin>cassandra –f

Updates to Step 40 : Use spring-cloud-starter-zipkin and spring-rabbit

*The dependencies are ever changing with Spring Cloud and Spring Boot.*

If you are using Spring Boot Release >= 2.1.\*, you would need to use spring-cloud-starter-zipkin and spring-rabbit instead of spring-cloud-sleuth-zipkin and spring-cloud-starter-bus-amqp.

You would need to make this change in THREE pom.xmls - in currency-conversion-service, currency-exchange-service and zuul-api-gateway projects

**New Dependencies**

1. <dependency>
2. <groupId>org.springframework.cloud</groupId>
3. <artifactId>spring-cloud-starter-zipkin</artifactId>
4. </dependency>
5. <dependency>
6. <groupId>org.springframework.amqp</groupId>
7. <artifactId>spring-rabbit</artifactId>
8. </dependency>

**OLD Dependencies to be Replaced**

1. <dependency>
2. <groupId>org.springframework.cloud</groupId>
3. <artifactId>spring-cloud-sleuth-zipkin</artifactId>
4. </dependency>
6. <dependency>
7. <groupId>org.springframework.cloud</groupId>
8. <artifactId>spring-cloud-starter-bus-amqp</artifactId>
9. </dependency>