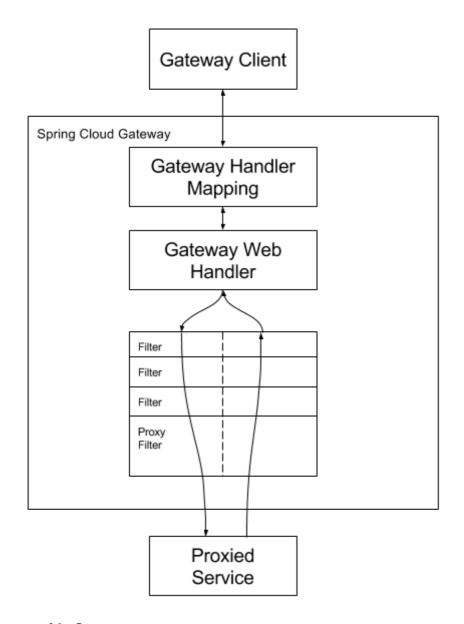
# Spring Cloud Gateway 服务路由

Spring Cloud Gateway 作为 Spring Cloud 生态系统中的网关,目标是替代 Netflix Zuul,其不仅提供统一的路由方式,并且基于 Filter 链的方式提供了网关基本的功能,例如:安全,监控/指标,和限流。

## 相关概念

- Route (路由) : 这是网关的基本构建块。它由一个 ID, 一个目标 URI, 一组断言和一组过滤器定义。如果断言为真,则路由匹配。
- Predicate (断言): 这是一个 Java 8 的 Predicate。输入类型是一个 ServerWebExchange。我们可以使用它来匹配来自 HTTP 请求的任何内容,例如 headers 或参数。
- Filter (过滤器) : 这是 org.springframework.cloud.gateway.filter.GatewayFilter的实例,我们可以使用它修改请求和响应。

## 工作流程



## Gateway 整合 Nacos Discovery

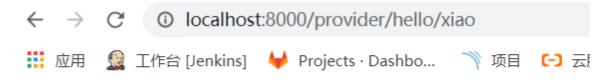
```
<?xml version="1.0" encoding="UTF-8"?>
project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
   <modelVersion>4.0.0</modelVersion>
    <parent>
       <groupId>org.springframework.boot</groupId>
       <artifactId>spring-boot-starter-parent</artifactId>
       <version>2.3.2.RELEASE
       <relativePath/> <!-- lookup parent from repository -->
   </parent>
   <groupId>me.guopop</groupId>
   <artifactId>gateway</artifactId>
   <version>0.0.1-SNAPSHOT</version>
   <name>gateway</name>
   <description>Demo project for Spring Boot</description>
   cproperties>
       <java.version>1.8</java.version>
   </properties>
   <dependencies>
       <dependency>
           <groupId>com.alibaba.cloud
           <artifactId>spring-cloud-starter-alibaba-nacos-
discovery</artifactId>
           <version>2.2.5.RELEASE
       </dependency>
       <dependency>
           <groupId>org.springframework.cloud
           <artifactId>spring-cloud-starter-gateway</artifactId>
           <version>2.2.5.RELEASE
       </dependency>
       <dependency>
           <groupId>org.projectlombok</groupId>
           <artifactId>lombok</artifactId>
           <optional>true</optional>
       </dependency>
       <dependency>
           <groupId>org.springframework.boot
           <artifactId>spring-boot-starter-test</artifactId>
           <scope>test</scope>
       </dependency>
   </dependencies>
    <build>
       <plugins>
               <groupId>org.springframework.boot</groupId>
               <artifactId>spring-boot-maven-plugin</artifactId>
               <configuration>
                   <excludes>
                           <groupId>org.projectlombok</groupId>
                           <artifactId>lombok</artifactId>
                       </exclude>
```

application.yml

```
server:
  port: 8000
spring:
  application:
    name: gateway
  cloud:
    nacos:
      discovery:
        server-addr: 39.105.47.81:8848
        username: nacos
        password: nacos
    gateway:
      routes:
        - id: nacos-discovery-provider
          uri: lb://nacos-discovery-provider
          predicates:
            - Path=/provider/**
          filters:
           - StripPrefix=1
```

#### 重启项目

访问<a href="http://localhost:8000/provider/hello/xiao">http://localhost:8000/provider/hello/xiao</a>实际访问的是<a href="http://localhost:8002/hello/xiao">http://localhost:8002/hello/xiao</a>。也就是<a href="http://localhost:8002/hello/xiao">http://localhost:8002/hello/xiao</a>



### [echo] xiao

路由转发成功!!!

## 路由规则

