Pom.xml:

<dependencies>

<!-- Spring Cloud Gateway -->

<dependency>

<groupId>org.springframework.cloud</groupId>

<artifactId>spring-cloud-starter-gateway</artifactId>

</dependency>

<!-- LoadBalancer for client-side load balancing -->

<dependency>

<groupId>org.springframework.cloud</groupId>

<artifactId>spring-cloud-starter-loadbalancer</artifactId>

</dependency>

</dependencies>

application.properties:

spring.application.name=api-gateway

# Define the route with a LoadBalancer URI

spring.cloud.gateway.routes[0].id=load\_balanced\_route

spring.cloud.gateway.routes[0].uri=lb://example-service

spring.cloud.gateway.routes[0].predicates[0]=Path=/loadbalanced/\*\*

Configure Custom Load Balancer:

@Configuration

public class LoadBalancerConfiguration {

@Bean

public ReactorLoadBalancer<ServiceInstance> randomLoadBalancer(

Environment environment,

LoadBalancerClientFactory factory) {

String name = environment.getProperty(LoadBalancerClientFactory.PROPERTY\_NAME);

return new RandomLoadBalancer(factory.getLazyProvider(name, ServiceInstanceListSupplier.class), name);

}

}