

# Day9 CSE实战之服务治理

## 1 打卡任务

作业：

- 1、在服务治理页面配置provider对consumer服务限流，通过edge分别调用consumer和provider，观察效果

打卡：

- 1、截图consumer调用provider时报429状态码的日志

打卡任务基于Day9的demo项目：



Demo-Day9.zip

## 2 准备工作

- 1、正常运行Day9的demo

## 3 体验限流策略

- 1、启动edge、consumer、provider服务，通过edge调用consumer、provider成功



- 2、在治理页面上配置provider服务对consumer服务限流，限制流量为3QPS



### 3、通过edge连续调用consumer，观察consumer的日志



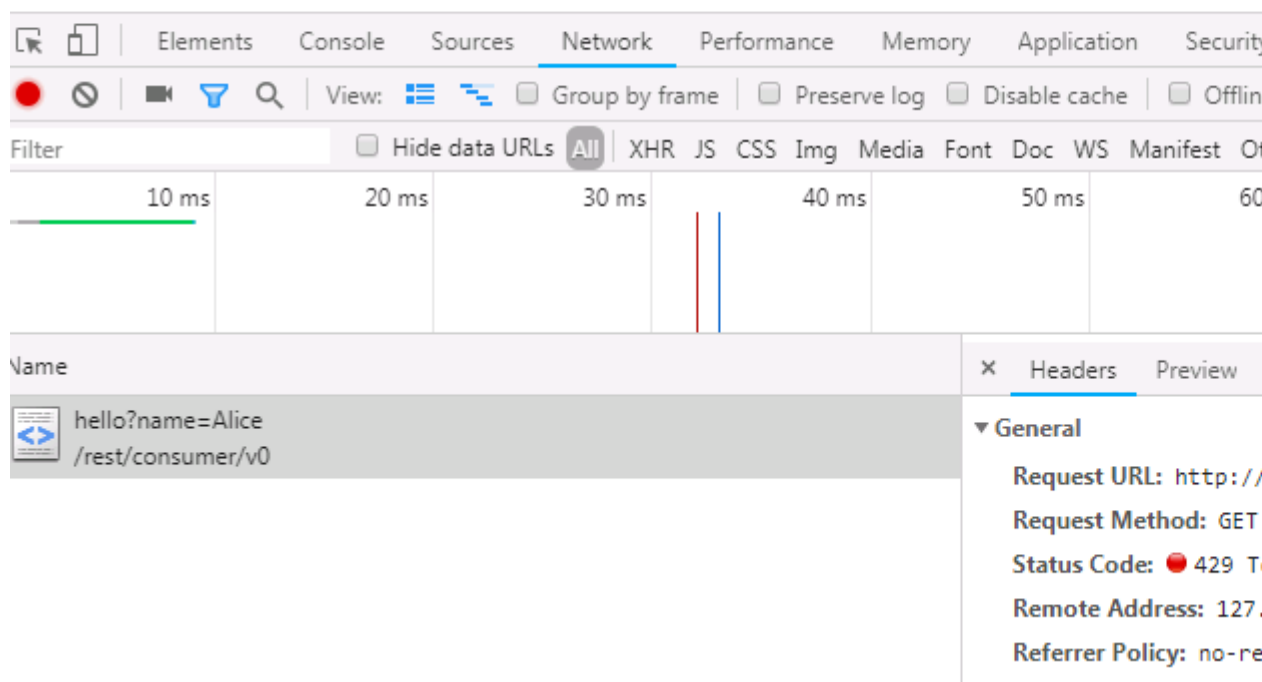
```
2019-03-02 15:39:13,396 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:13 CST /consumer/v
2019-03-02 15:39:13,533 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:13 CST /consumer/v
2019-03-02 15:39:13,672 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:13 CST /consumer/v
2019-03-02 15:39:13,838 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:13 CST /consumer/v
2019-03-02 15:39:13,977 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:13 CST /consumer/v
2019-03-02 15:39:14,114 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:14,257 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:14,403 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:14,533 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:14,686 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:14,846 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:14,975 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:14 CST /consumer/v
2019-03-02 15:39:15,103 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:15,270 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:15,424 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:15,572 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:15,725 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:15,857 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:15,997 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:15 CST /consumer/v
2019-03-02 15:39:16,163 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:16 CST /consumer/v
2019-03-02 15:39:16,309 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:16 CST /consumer/v
2019-03-02 15:39:16,443 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:16 CST /consumer/v
2019-03-02 15:39:16,613 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:16 CST /consumer/v
2019-03-02 15:39:16,765 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:16 CST /consumer/v
2019-03-02 15:39:16,914 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:16 CST /consumer/v
2019-03-02 15:39:17,070 [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 15:39:17 CST /consumer/v
```

通过日志可以看出每秒钟只能有三次请求成功，其他调用都会返回429 Too Many

Requests错误

← → ↻ ⓘ 127.0.0.1:8000/rest/consumer/v0/hello?name=Alice

```
{"message": "rejected by qps flowcontrol"}
```



4、通过edge连续调用provider，观察edge的日志

```
2019-03-02 15:46:17,909 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:17 CST /rest/provider
2019-03-02 15:46:18,071 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:18 CST /rest/provider
2019-03-02 15:46:18,247 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:18 CST /rest/provider
2019-03-02 15:46:18,417 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:18 CST /rest/provider
2019-03-02 15:46:18,608 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:18 CST /rest/provider
2019-03-02 15:46:18,805 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:18 CST /rest/provider
2019-03-02 15:46:18,962 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:18 CST /rest/provider
2019-03-02 15:46:19,122 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:19 CST /rest/provider
2019-03-02 15:46:19,307 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:19 CST /rest/provider
2019-03-02 15:46:19,464 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:19 CST /rest/provider
2019-03-02 15:46:19,656 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:19 CST /rest/provider
2019-03-02 15:46:19,853 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:19 CST /rest/provider
2019-03-02 15:46:20,014 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:20 CST /rest/provider
2019-03-02 15:46:20,217 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:20 CST /rest/provider
2019-03-02 15:46:20,414 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:20 CST /rest/provider
2019-03-02 15:46:20,588 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:20 CST /rest/provider
2019-03-02 15:46:20,752 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:20 CST /rest/provider
2019-03-02 15:46:20,920 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:20 CST /rest/provider
2019-03-02 15:46:21,108 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:21 CST /rest/provider
2019-03-02 15:46:21,274 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:21 CST /rest/provider
2019-03-02 15:46:21,457 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:21 CST /rest/provider
2019-03-02 15:46:21,639 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:21 CST /rest/provider
2019-03-02 15:46:21,809 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:21 CST /rest/provider
2019-03-02 15:46:21,970 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 15:46:21 CST /rest/provider
```

从以上日志可以看出通过edge直接调用provider时，即使流量大于3QPS也不会触发限流，说明我们在治理页面配置的provider服务限流策略只对consumer生效，不对edge起作用。

## 4 打卡截图

- 1、Consumer服务的日志展示的限流策略效果如下图：



2019-03-02 15:39:13,396	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:13 CST	/consumer/v
2019-03-02 15:39:13,533	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:13 CST	/consumer/v
2019-03-02 15:39:13,672	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:13 CST	/consumer/v
2019-03-02 15:39:13,838	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:13 CST	/consumer/v
2019-03-02 15:39:13,977	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:13 CST	/consumer/v
2019-03-02 15:39:14,114	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:14,257	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:14,403	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:14,533	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:14,686	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:14,846	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:14,975	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:14 CST	/consumer/v
2019-03-02 15:39:15,103	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:15,270	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:15,424	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:15,572	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:15,725	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:15,857	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:15,997	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:15 CST	/consumer/v
2019-03-02 15:39:16,163	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:16 CST	/consumer/v
2019-03-02 15:39:16,309	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:16 CST	/consumer/v
2019-03-02 15:39:16,443	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:16 CST	/consumer/v
2019-03-02 15:39:16,613	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:16 CST	/consumer/v
2019-03-02 15:39:16,765	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:16 CST	/consumer/v
2019-03-02 15:39:16,914	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:16 CST	/consumer/v
2019-03-02 15:39:17,070	[INFO]	192.168.0.45	-	-	Sat, 02 Mar 2019 15:39:17 CST	/consumer/v