

文档名称 文档密级

Day8 CSE实战之负载均衡

1 打卡任务

作业:

- 1、启动edge、consumer、provider实例各一个,通过edge调用consumer。然后启动另一个 provider,观察consumer日志中刷新provider实例列表的日志。
- 2、连续调用consumer,退出一个provider,观察调用consumer的结果情况。

打卡:

- 1、 截图consumer中刷新provider实例列表的特征日志
- 2、 截图provider服务的一个实例退出并且连续调用consumer服务时, edge服务的日志

打卡任务基于Day7的demo项目:

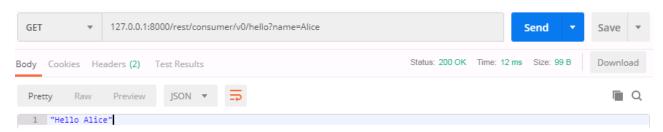


2 准备工作

1、正常运行Day7的demo

3 观察 consumer 刷新 provider 实例列表的日志

1、启动edge、consumer、provider服务的实例各一个,通过edge调用consumer服务成功:



2、启动第二个provider实例,此时sc中有1个edge实例、1个consumer实例、2个provider实



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例:



3、当consumer的定时查询微服务实例任务从sc查询到provider的新实例时,会打印如下日志:

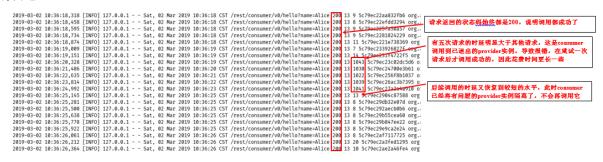
[INFO] find instances[2] from service center success. service=Training21Days-HelloWorld/provider/0.0.0+, old revision=90131437abf15221a355628215105f8f85bc05c9, new revision=bb751686ea4772b0c92a012e7404de46c6d6b2f1 org.a [INFO] service id=8a3eefaca25baeb05ebf98737d678b680f50c92, instance id=adb613e83c8f11e9900e0255ac105166, endpoints=[rest://192.168.0.45:8080] org.apache.servicecomb.serviceregistry.registry.AbstractServiceRegistry.find [INFO] service id=8a3eefaca25baeb05ebf98737d678b680f50c92, instance id=bcc3fbba3c8f11e9900e0255ac105166, endpoints=[rest://192.168.0.45:8081] org.apache.servicecomb.serviceregistry.registry.AbstractServiceRegistry.find

TIPS: 启动第一个provider实例后,一定要先调用一次consumer,让它去查询provider服务,再启动第二个provider服务的实例。

由于consumer服务查询provider服务信息是懒加载的,如果一直不触发consumer调用provider的话,则consumer一直不会去sc查询和刷新provider服务信息。

4 观察重试和实例隔离

1、完成上一步的操作后,现在应该有1个edge实例、1个consumer实例、2个provider实例在 线。我们一边连续调用consumer服务,一边停止一个provider服务的实例,观察edge服务 的日志:



2、观察consumer服务的日志

当已下线的provider实例还没有被consumer隔离时,consumer会调用到有问题的provider实例上出错,然后在另一个provider实例上重试才成功,有类似于下面的日志内容:

2019-03-02 10:36:24,974 [ERROR] [Invoke server failed. Operation CONSUMER rest provider.hello.sayHello; server rest://192.168.0.45:8081; 0-0 msg cause:InvocationException,message:InvocationException: code=490;msg=CommonExceptionData [message=C You can add fallback logic by catching this exception.

info: operation=provider.hello.sayHello.graps:InvocationException,message:CommonException: code=49g;msg=CommonExceptionData [message=Cse Internal Bad Request];cause:AnnotatedConnectException,message:Commection refused: no further inform 2019-03-02 10:36:24,999 [ERROR] [Invoke server success]. Operation COMSUMER rest provider.hello.sayHello; Server rest://192.168.0.45:8880 org.apache.servicecomb.loadbalanceHandler\$3.onExecutionSuccess(LoadbalanceHandler.java:306)

之后consumer将provider问题实例隔离时会打印如下日志:



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```
[INFO] 192.168.0.45 - - Sat, 02 Mar 2019 10:36:23 CST./consumer/v0/hello?name=Alice 200 13 1037 5c79ec27a2a4a910 [WARN] Isolate service provider's instance bcc3fbba3c8f11e9900e0255ac105166. org.apache.servicecomb.loadbalance.f [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 10:36:25 CST./consumer/v0/hello?name=Alice 200 13 9 5c79ec2904c87588 org [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 10:36:25 CST./consumer/v0/hello?name=Alice 200 13 5 5c79ec29db32e07d org [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 10:36:25 CST./consumer/v0/hello?name=Alice 200 13 5 5c79ec29db32e07d org [INFO] 192.168.0.45 - - Sat, 02 Mar 2019 10:36:25 CST./consumer/v0/hello?name=Alice 200 13 5 5c79ec292aecb0b6 org
```

5 打卡截图

1、Consumer刷新provider实例记录的日志:

[INFO] find instances[2] from service center success. service=Training2lDays-HelloWorld/provider/0.0.0+, old revision=90131437abf15221a355628215105f8f85bc05c9, new revision=bb751686ea4772b0c92a012e7404de46cdd6b2f1 org.a [INFO] service id=8a3eefaca25baebb5ebfb98737d678b68bf50c92, instance id=adb613e83c8f11e9900e0255ac105166, endpoints=[rest://192.168.0.45:8080] org.apache.servicecomb.serviceregistry.registry.AbstractServiceRegistry.find [INFO] service id=8a3eefaca25baebb05ebfb98737d678b68bf50c92, instance id=bcc3fbba3c8f11e9900e0255ac105166, endpoints=[rest://192.168.0.45:8081] org.apache.servicecomb.serviceregistry.registry.AbstractServiceRegistry.find

2、通过edge连续调用consumer,并且下线一个provider实例时,edge服务的日志:

```
2019-03-02 10:36:18,318 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:18 CST /rest/consumer/v0/hello?name=Alice 200 13 9 5c79ec22aa832fb6 org.: 2019-03-02 10:36:18,458 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:18 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec22efdd3294 org.:
2019-03-02 10:36:18,595 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:18 CST /rest/consumer/v0/hello?name=Alice 200 13 9 5c79ec225fa50a57 org.: 2019-03-02 10:36:18,734 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:18 CST /rest/consumer/v0/hello?name=Alice 200 13 9 5c79ec2281824229 org.:
2019-03-02 10:36:18,874 [INFO] 127.0.0.1 -
                                                           Sat, 02 Mar 2019 10:36:18 CST /rest/consumer/v0/hello?name=Alice 200 13 11 5c79ec221e738369 org
2019-03-02 10:36:19,009 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:19 CST /rest/consumer/v0/hello?name=Alice 200 13 7 5c79ec233926827f org. 2019-03-02 10:36:19,151 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:19 CST /rest/consumer/v0/hello?name=Alice 200 13 14 5c79ec231f4722f5 org
2019-03-02 10:36:20,328 [INFO] 127.0.0.1 -
                                                           Sat, 02 Mar 2019.10:36:19.CST./rest/consumer/v0/hello?name=Alice.200.13.1043.5c79ec23c02dc5d6.00
2019-03-02.10:36:21,486.[INFO].127.0.0.1.-.-
                                                           Sat, 02 Mar 2019 10:36:20 CST /rest/consumer/v0/hello?name=Alice 200 13 1030 5c79ec24700e3b61 or
2019-03-02 10:36:22.635 [INFO] 127.0.0.1 - -
                                                          Sat, 02 Mar 2019 10:36:21 CST./rest/consumer/v0/hello?name=Alice 200.13.1022.5c79ec256f8b1037.0
                                                           Sat, 02 Mar 2019 10:36:22 CST /rest/consumer/v0/hello?name=Alice 200 13 1039 5c79ec26ac3b7395 0:
2019-03-02 10:36:23.814 [INFO] 127.0.0.1 -
2019-03-02 10:36:24,992 [INFO] 127.0.0.1 - -
                                                           Sat, 02 Mar 2019 10:36:23 CST /rest/consumer/v0/hello?name=Alice 200 13 1041 5c79ec27a2a4a910 o
2019-03-02 10:36:25,145 [INFO] 127.0.0.1 - -
                                                           Sat, 02 Mar 2019 10:36:25 CST /rest/consumer/v0/hello?name=Alice 200 13 13 5c79ec2904c87588 org
2019-03-02 10:36:25,281 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:25 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec29db32e07d org. 2019-03-02 10:36:25,500 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:25 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec292aecb0b6 org.
2019-03-02 10:36:25,638 [INFO] 127.0.0.1 - - -
                                                           Sat, 02 Mar 2019 10:36:25 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec29b55cea60 org.
2019-03-02 10:36:25,778 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:25 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec29b847ee22 org.: 2019-03-02 10:36:25,922 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:25 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec29e9ca2e24 org.:
2019-03-02 10:36:26,061 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:26 CST /rest/consumer/v0/hello?name=Alice 200 13 8 5c79ec2af7117725 org.
2019-03-02 10:36:26,212 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:26 CST /rest/consumer/v0/hello?name=Alice 200 13 20 5c79ec2a3fed1295 org
2019-03-02 10:36:26,364 [INFO] 127.0.0.1 - - Sat, 02 Mar 2019 10:36:26 CST /rest/consumer/v0/hello?name=Alice 200 13 10 5c79ec2ae2a46fe4 org
```