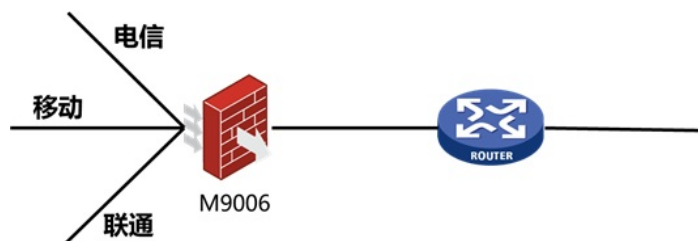


知 某局点M9K配置出方向链路负载均衡导致网银类应用不正常问题处理案例

outbound链路负载均衡 持续性 王鸿渐 2019-07-31 发表

组网及说明

拓扑如下



问题描述

某局点在出口部署M9K防火墙，并配置了对三条运营商出口的出方向链路负载均衡，导致部分网银类应用访问时提示“IP地址改变”等错误。

过程分析

首先检查链路组配置

```
loadbalance link-group chinatel
fail-action reset
transparent enable
probe chinatel
link chinatel
success-criteria at-least 1
probe chinatel
#
```

```
loadbalance link-group cmcc
transparent enable
success-criteria at-least 1
link cmcc
success-criteria at-least 1
probe cmcc
#
```

```
loadbalance link-group cnc
fail-action reset
transparent enable
probe cnc
success-criteria at-least 1
link cnc
success-criteria at-least 1
probe cnc
#
```

负载均衡配置

```
#
loadbalance class chinatel type link-generic
match 1 isp chinatel
#
loadbalance class cmcc type link-generic
match 1 isp cmcc
#
loadbalance class cnc type link-generic
match 1 isp cnc
#
loadbalance action default type link-generic
link-group any
#
```

```
loadbalance action chinatelpolicy link-generic
link-group chinatel
fallback-action continue
busy-action continue
#
loadbalance action cmccpolicy type link-generic
link-group cmcc
fallback-action continue
busy-action continue
#
loadbalance action cncpolicy type link-generic
link-group cnc
fallback-action continue
busy-action continue
#
loadbalance action default type link-generic
forward all
#
loadbalance policy lb type link-generic
class cmcc action cmccpolicy
class cnc action cncpolicy
class chinatel action chinatelpolicy
default-class action default
#
virtual-server lb type link-ip
virtual ip address 0.0.0.0 0
lb-policy lb
service enable
bandwidth busy-protection enable
bandwidth interface statistics enable
#
```

解决方法

检查配置发现现场未配置持续性组导致的，除此之外还建议将调度算法改为源地址HASH。
持续性组的作用在于根据某持续性方法将具有一定相关性的会话都分配给同一链路处理，这个分配规则就称为持续性表项。在一个会话中，当其首包通过持续性方法选择了同一链路之后，后续包都会沿用这个选择结果。也就是说该终端在地址不变的情况下，访问某个应用时均从某个运营商接口出去。而持续性组优先级大于LB策略大于调度算法，由于LB策略选路。