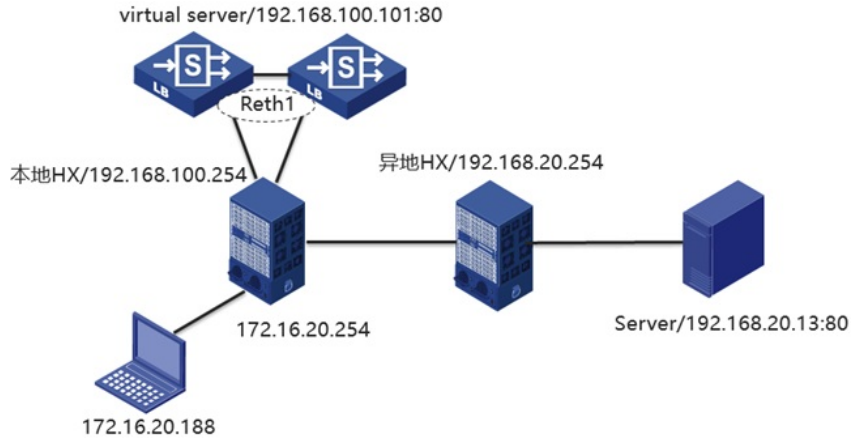


知 L1000-S(V7) 旁挂服务器负载均衡不生效的分析案例

四层服务器负载均衡 健康性检测 冗余口 李照 2021-08-26 发表

组网及说明

2台LB主备堆叠旁挂核心，做四层服务器负载，通过Reth1口（192.168.100.100）互联核心，客户端的流量过来做snat转换成192.168.100.101，LB上的虚服务器是192.168.100.101的80端口，实服务器是192.168.20.13的80端口。



问题描述

客户端172.16.20.188去telnet192.168.100.101的80端口不通，LB上无会话信息

过程分析

1、各路由均可达，LB的虚地址能ping通实服务器192.168.20.13地址，客户端能ping通LB上的虚地址192.168.100.101；客户端直接访问实服务器192.168.20.13的80端口能通；

```
GE2/0/13      down    down    --    --
GE2/0/16      down    down    --    --
GE2/0/17      down    down    --    --
GE2/0/18      down    down    --    --
GE2/0/19      down    down    --    --
GE2/0/20      down    down    --    --
GE2/0/21      down    down    --    --
GE2/0/22      down    down    --    --
GE2/0/23      down    down    --    --
Loop0         up      up(s)   172.10.253.1 --
Reth1         up      up      192.168.100.100 --
<MK_AD>ping -a 192.168.100.101 192.168.20.13
Ping 192.168.20.13 (192.168.20.13) from 192.168.100.101: 56 data bytes, press CTRL_C to break
56 bytes from 192.168.20.13: icmp_seq=0 ttl=126 time=0.495 ms
56 bytes from 192.168.20.13: icmp_seq=1 ttl=126 time=0.385 ms
56 bytes from 192.168.20.13: icmp_seq=2 ttl=126 time=0.341 ms
56 bytes from 192.168.20.13: icmp_seq=3 ttl=126 time=0.347 ms
56 bytes from 192.168.20.13: icmp_seq=4 ttl=126 time=0.383 ms

--- Ping statistics for 192.168.20.13 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 0.341/0.390/0.495/0.055 ms
<MK_AD>
```



2、服务组状态正常，虚服务也被调用，实服务器状态正常；

服务组状态正常

[BEGIN] 2021-7-29 15:26:18

<MK_AD>dis server-farm

Server farm: oa应用

Description:

Predictor: Round robin

Proximity: Disabled

NAT: Enabled

SNAT pool: 1

Failed action: Keep

Active threshold: Disabled

Slow-online: Disabled

Selected server: Disabled

Busy action: Drop

Probe information:

Probe success criteria: At least 1

Probe method:

t1

Total real server: 1

Active real server: 1

Real server list:

Name	State	VPN-instance	Address	Port	Weight	Priority
oa应用	Active		192.168.20.13	80	100	4

虚服务也被调用

修改服务类型为透明转发server，在实服务器里指定对应的80端口，就能做到类似nat server的Virtual-server: oa应用

```
Virtual-server: oa应用
Description:
#
virtual-server oa应用 type tcp
port 80
virtual ip address 172.10.253.1
default server-farm oa应用
service enable
connection-sync enable
sticky-sync enable

#
real-server oa应用
ip address 192.168.20.13
port 80
server-farm oa应用
probe icmp
success-criteria at-least 1
```

VPN instance Server farm
oa应用

文回到lb转化

```
loadbalance snat-pool 1
ip range start 192.168.100.101 end 192.168.100.101
server-farm oa应用
snat-pool 1
```

虚地址是起在出接口的子地址上相应arp报文:

```
#
interface Reth1
ip address 192.168.100.100 255.255.255.0
ip address 192.168.100.101 255.255.255.0 sub
member interface GigabitEthernet1/0/1 priority 100
member interface GigabitEthernet2/0/1 priority 50
```

但配置也存在如下问题

virtual-server里面调用的server-farm，里面配置的probe http是七层应用负载使用的探测，实服务组配置了transparent enable，出链路负载才使用，配置了地址就不会被转化成实服务器的ip

```
server-farm oa应用
transparent enable
probe http
success-criteria at-least 1

real-server跟virtual-server同理，选择了ip类型的负载
real-server oa应用
ip address 192.168.20.13
port 80
server-farm oa应用
probe http
success-criteria at-least 1
#
```

4、更改配置后依旧不通，查看会话，没有收到回包

3、看会话设备侧有收到，但是没回包