



CAS虚拟机二层网络不通

方正 2021-05-27 发表

组网及说明

CloudOS E5131P02

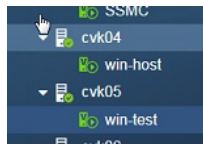
CAS E0710P06

无网络无安全方案

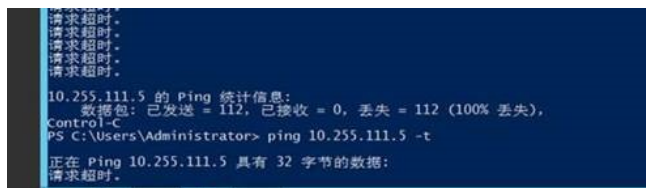
问题描述

现场部署了两台虚拟机在两台cvk上，两台虚拟机网段及vlan相同，故障现象为两台虚拟机二层互ping不通，但是分别ping三层的网关可以通

两台虚拟机ip分别为10.255.111.208和10.255.111.5



两台虚拟机互ping不通



过程分析

Ping网关10.255.111.1可以通

```
PS C:\Users\Administrator>
PS C:\Users\Administrator> ping 10.255.111.1

正在 Ping 10.255.111.1 具有 32 字节的数据:
来自 10.255.111.1 的回复: 字节=32 时间=2ms TTL=254
来自 10.255.111.1 的回复: 字节=32 时间<1ms TTL=254
来自 10.255.111.1 的回复: 字节=32 时间<1ms TTL=254
来自 10.255.111.1 的回复: 字节=32 时间<1ms TTL=254
```

互ping时在CVK4和CVK5上对业务网卡抓包都能够看到相应的arp请求和答复报文

```
[root@cvk04 network-scripts]# tcpdump -i eth5 host 10.255.111.5
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on eth5, link-type EN10MB (Ethernet), capture size 262144 bytes
15:24:23.889398 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 213, length 40
15:24:28.889611 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 214, length 40
15:24:33.889565 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 215, length 40
15:24:38.889534 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 216, length 40
15:24:43.874847 ARP, Request who-has 10.255.111.5 (fa:16:3e:cb:f0:06 (oui Unknown)) tell 10.255.111.208, length 28
15:24:43.875108 ARP, Reply 10.255.111.5 is-at fa:16:3e:cb:f0:06 (oui Unknown), length 46
15:24:43.889480 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 217, length 40
15:24:48.889360 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 218, length 40
15:24:53.889505 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 219, length 40
15:24:58.889525 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 220, length 40
15:25:03.889519 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 221, length 40
```

```
[root@cvk05 ~]#
[root@cvk05 ~]# tcpdump -i eth4 host 10.255.111.208
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on eth4, link-type EN10MB (Ethernet), capture size 262144 bytes
15:24:38.889578 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 216, length 40
15:24:43.874139 ARP, Request who-has 10.255.111.5 (fa:16:3e:cb:f0:06 (oui Unknown)) tell 10.255.111.208, length 46
15:24:43.875806 ARP, Reply 10.255.111.5 is-at fa:16:3e:cb:f0:06 (oui Unknown), length 28
15:24:43.889513 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 217, length 40
15:24:48.889408 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 218, length 40
15:24:53.889596 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 219, length 40
15:24:58.889570 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 220, length 40
15:25:03.889556 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 221, length 40
15:25:08.889580 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 222, length 40
15:25:13.874822 ARP, Request who-has 10.255.111.5 (fa:16:3e:cb:f0:06 (oui Unknown)) tell 10.255.111.208, length 46
15:25:13.874929 ARP, Reply 10.255.111.5 is-at fa:16:3e:cb:f0:06 (oui Unknown), length 28
15:25:13.889576 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 223, length 40
15:25:18.901026 IP 10.255.111.208 > 10.255.111.5: ICMP echo request, id 1, seq 224, length 40
```

业务网聚合模式如下

```
[root@cvk04 network-scripts]# ovs-appctl bond/show
---- yewu bond ----
bond_mode: balance-slb
bond may use recirculation: no, Recirc-ID : -1
bond-hash-basis: 0
updelay: 0 ms
downdelay: 0 ms
next rebalance: 7387 ms
lacp_status: negotiated
lacp_fallback_ab: true
active slave mac: f0:f2:1e:e1:5d:80(eth4)

slave eth4: enabled
active slave
may_enable: true

slave eth5: enabled
may_enable: true

---- vswitch0 bond ----
bond_mode: balance-slb
bond may use recirculation: no, Recirc-ID : -1
bond-hash-basis: 0
updelay: 0 ms
downdelay: 0 ms
next rebalance: 7387 ms
lacp_status: negotiated
lacp_fallback_ab: true
active slave mac: ec:eb:b8:97:68:b6(eth2)

slave eth2: enabled
active slave
may_enable: true
hash 0: 21 kB load

slave eth3: enabled
may_enable: true
[root@cvk04 network-scripts]#
```

解决方法

业务网eth4和eth5配置聚合模式为动态基本，抓包看了下两台虚拟机互ping的时候两台虚拟机所在的CVK均能够收到arp报文的request报文和reply报文，怀疑报文丢弃位置在cvk网卡到虚拟机内部这一段。

进一步查看虚拟机操作系统内部的防火墙未关闭导致，关闭系统自带防火墙功能之后可以实现虚拟机之间正常通信

