Subject: *SOLVED* gateway router cannot find VE
Posted by eatingorange on Tue, 19 Jun 2007 23:14:59 GMT
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I'm having a problem with an OpenVZ installation. We're seeing about 5 to 10 percent packet loss to the VE from outside. It looks like the gateway router does not like us. We're using venet.

You can see from this ping a gap of about 30 packets:

64 bytes from 10.80.5.71: icmp_seq=1025 ttl=54 time=7.16 ms
64 bytes from 10.80.5.71: icmp_seq=1026 ttl=54 time=7.17 ms
...
64 bytes from 10.80.5.71: icmp_seq=1055 ttl=54 time=43.1 ms
64 bytes from 10.80.5.71: icmp_seq=1056 ttl=54 time=7.12 ms

During this gap, tcpdump from HN's eth0 (it's gateway interface) shows this interesting ARP activity:

10:27:24.933754 arp who-has 10.80.5.71 tell 10.80.5.65
10:27:25.390579 arp reply 10.80.5.71 is-at 00:30:48:34:a6:d8
10:27:26.933402 arp who-has 10.80.5.71 tell 10.80.5.65
10:27:27.432327 arp reply 10.80.5.71 is-at 00:30:48:34:a6:d8
10:27:28.933049 arp who-has 10.80.5.71 tell 10.80.5.65
10:27:29.060066 arp reply 10.80.5.71 is-at 00:30:48:34:a6:d8
10:27:30.932697 arp who-has 10.80.5.71 tell 10.80.5.65
10:27:31.273031 arp reply 10.80.5.71 is-at 00:30:48:34:a6:d8
10:27:32.641380 arp who-has 10.80.5.71 tell 10.80.5.65
10:27:33.144759 arp reply 10.80.5.71 is-at 00:30:48:34:a6:d8
10:27:33.932293 arp who-has 10.80.5.71 tell 10.80.5.65
10:27:34.014636 arp reply 10.80.5.71 is-at 00:30:48:34:a6:d8

The gateway router is repeatedly asking about .71 but for whatever reason, is either not seeing the response or is just plain ignoring it. Unfortunately, it's a service provider's device and it's been pretty difficult to get the type of support I need in order to figure this out.

Could this be a config problem on my side or his router just braindead? It's a Summit Extreme.

Thanks in advance for any insight anyone may have.

Eric

Subject: Re: gateway router cannot find VE
Posted by rickb on Wed, 20 Jun 2007 04:25:16 GMT
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Hi. here is what I would do to narrow down the problem a bit

1) assign 10.80.5.71 as ethX:100 on your HN. duplicate the packet loss problem.

a) If no packet loss, come back to this forum and tell us as it is likely an openvz problem, and the devs will want to further analyze whats going on.

b) If the packet loss occurs again, reboot the HN into the non-vz kernel, turn up ethX:100 on 10.80.5.71. duplicate the packet loss problem. if the problem still occurs, its a problem on your network, possibly an ip conflict. if the problem does not occur, come back and post results on the forum as it may be an openvz related problem.

Rick Blundell

Subject: Re: gateway router cannot find VE
Posted by eatingorange on Fri, 22 Jun 2007 00:18:03 GMT
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Hi Rick,

Thank you for taking time to respond. I followed your advice and added the second IP as a sub-interface on eth0. This worked with the stock kernel but not with the OpenVZ kernel.

Static ARP entries on the Summit layer 3 switch provided us with a kludge but I'm still curious if we are the only folks who have encountered this issue.

Thanks.

Eric

Subject: Re: gateway router cannot find VE
Posted by rickb on Fri, 22 Jun 2007 03:40:23 GMT
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so, let me verify

you booted your server into openvz kernel version XXXX, eth0 is assigned IP YYYY, subnet ZZZZ, gateway AAAA. eth0:100 is assigned IP 10.80.5.71, subnet BBBB, gateway CCCC. you let a long running ping to addresses 10.80.5.71 and XXXX from network DDDD/EEEE and there are times when IP 10.80.5.71 reports unreachable but YYYY is reachable?

is this correct? if so, please fill in missing letter. I would say if 10.80.5.71 and YYYY are on the same vlan/subnet, this is a rather amazing problem.

Rick

Subject: Re: gateway router cannot find VE
Posted by eatingorange on Wed, 27 Jun 2007 16:40:23 GMT
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Hi Rick,

It turns out the stock kernel was also exhibiting this problem so it is not an OpenVZ problem. It's intermittent and so happened the problem did not appear right away on the stock kernel. In fact static arp on the Summit switch only partially fixed the problem.

This problem was actually a feature/bug with the Summit switch. Sorry for the confusion. Troubleshooting a problem that only appears for a few minutes every few hours requires more than my default level of patience. Coupled with a strong desire to "see it fixed" I believed it was fixed, when in fact, it wasn't.

The only way we could truly solve this was to get off that Summit switch. I installed a Cisco router and had the ISP route our network via a /30. Everything works fine now. I still find it odd that multiple IPs on the NIC work while virtualization doesn't. Strange.

Thanks again for your time.

Eric

Subject: Re: gateway router cannot find VE
Posted by rickb on Wed, 27 Jun 2007 17:12:40 GMT
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you are welcome. glad to hear it wasn't an openvz problem and that you could get it solved.

Rick