
Subject: *SOLVED* broken networking...

Posted by [wilf](#) on Wed, 17 Jan 2007 09:25:45 GMT

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Hi,

I pinched Kai's format for this message as it seemed so clear and well presented

I am running

Quote:VZHost~# uname -a

```
Linux vzhost.b.c.uk 2.6.18-028test010 #2 Sun Jan 14 10:13:12 GMT 2007 x86_64 AMD Athlon(tm) 64 Processor 3200+ AuthenticAMD GNU/Linux
```

VZHost~# vzctl --version

```
vzctl version 3.0.13
```

```
under Gentoo 2006.1 for amd64.
```

Installation went fine, can vzctl enter from the VZHost to the VPS.

Network is up and running on the VZHost, and can ping internal and external addresses successfully.

I can ping from the VZHost to the outside world

I can ping from the outside world to the VZHost

I can't ping from the VZHost to the VPS

I can't ping from the VPS to the VZHost (or anywhere else for that matter)

Here is some info:

ifconfig -a

VZHost

VZHost:~# ifconfig -a

```
eth0    Link encap:Ethernet HWaddr 00:61:71:24:FB:AA
        inet addr:x.y.z.31 Bcast:x.y.z.255 Mask:255.255.255.0
        inet6 addr: fe80::216:17ff:fe42:6948/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
        RX packets:1005904 errors:0 dropped:0 overruns:0 frame:0
        TX packets:1079156 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:294041256 (280.4 Mb) TX bytes:789113682 (752.5 Mb)
        Interrupt:16 Base address:0x4000
```

```
eth1    Link encap:Ethernet HWaddr 00:61:71:24:FB:AB
        inet addr:a.b.c.134 Bcast:a.b.c.135 Mask:255.255.255.252
        inet6 addr: fe80::216:17ff:fe42:6f08/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
        RX packets:1047700 errors:0 dropped:0 overruns:0 frame:0
        TX packets:966836 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:789674957 (753.0 Mb) TX bytes:286766768 (273.4 Mb)
        Interrupt:17 Base address:0x6000
```

```

lo    Link encap:Local Loopback
      inet addr:127.0.0.1  Mask:255.0.0.0
      inet6 addr: ::1/128 Scope:Host
      UP LOOPBACK RUNNING MTU:16436 Metric:1
      RX packets:25765 errors:0 dropped:0 overruns:0 frame:0
      TX packets:25765 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:0
      RX bytes:2885680 (2.7 Mb)  TX bytes:2885680 (2.7 Mb)

venet0  Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
        UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
        RX packets:12 errors:0 dropped:0 overruns:0 frame:0
        TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:1008 (1008.0 b)  TX bytes:0 (0.0 b)

```

VPS:

VZHost:~# vzctl exec 101 ifconfig -a

```

lo    Link encap:Local Loopback
      inet addr:127.0.0.1  Mask:255.0.0.0
      inet6 addr: ::1/128 Scope:Host
      UP LOOPBACK RUNNING MTU:16436 Metric:1
      RX packets:0 errors:0 dropped:0 overruns:0 frame:0
      TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:0
      RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

venet0  Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
        inet addr:x.y.z.80 P-t-P:x.y.z.80 Bcast:0.0.0.0 Mask:255.255.255.255
        UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

```

route -n
VZHost:

VZHost:~# route -n

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
x.y.z.80	0.0.0.0	255.255.255.255	UH 0	0	0	0	venet0
a.b.c.132	0.0.0.0	255.255.255.252	U 0	0	0	0	eth1
x.y.z.0	x.y.z.46	255.255.255.0	UG 0	0	0	0	eth0

```
x.y.z.0    0.0.0.0    255.255.255.0  U   0   0   0 eth0
127.0.0.0  0.0.0.0    255.0.0.0     U   0   0   0 lo
0.0.0.0    a.b.c.133  0.0.0.0       UG  0   0   0 eth1
```

VPS:

```
VZHost:~# vzctl exec 101 route -n
```

Kernel IP routing table

```
Destination Gateway      Genmask      Flags Metric Ref  Use Iface
191.255.255.0 0.0.0.0      255.255.255.0 U   0   0   0 venet0
127.0.0.0     127.0.0.1    255.0.0.0    UG  0   0   0 lo
0.0.0.0       191.255.255.1 0.0.0.0      UG  0   0   0 venet0
```

These are the VPSs on my VZHost:

```
VZHost:~# vzlist -a
```

```
VPSID   NPROC STATUS IP_ADDR   HOSTNAME
101     1 running -
```

I created a sh script to show what is happening and what is not happening:-

```
echo ----- VPS
vzctl exec 101 ifconfig -a
echo ----- VZHost
ifconfig -a
ping -c 5 x.y.z.80
echo ----- VPS
vzctl exec 101 ifconfig -a
echo ----- VZHost
ifconfig -a
echo ----- VPS
vzctl exec 101 ping -c 5 x.y.z.31
echo ----- VPS
vzctl exec 101 ifconfig -a
echo ----- VZHost
ifconfig -a
```

I ran the script as follows:-

```
2>&1 ~/netvpsstat | tee ~/netvps.txt
```

I have pruned the lo and eth interfaces from the following results in ~/netvps.txt for clarity (and hopefully I haven't removed the most important info).

Quote:----- VPS

```
venet0  Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
        inet addr:x.y.z.80 P-t-P:x.y.z.80 Bcast:0.0.0.0 Mask:255.255.255.255
        UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:25 errors:0 dropped:0 overruns:0 carrier:0
```

collisions:0 txqueuelen:0
RX bytes:0 (0.0 b) TX bytes:2100 (2.0 Kb)

----- VZHost

venet0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
RX packets:37 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:3108 (3.0 Kb) TX bytes:0 (0.0 b)

PING x.y.z.80 (x.y.z.80) 56(84) bytes of data.
From x.y.z.31 icmp_seq=1 Destination Host Unreachable
From x.y.z.31 icmp_seq=1 Destination Host Unreachable
From x.y.z.31 icmp_seq=1 Destination Host Unreachable
From x.y.z.31 icmp_seq=1 Destination Host Unreachable
From x.y.z.31 icmp_seq=1 Destination Host Unreachable

--- x.y.z.80 ping statistics ---
0 packets transmitted, 0 received, +5 errors

----- VPS

venet0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
inet addr:x.y.z.80 P-t-P:x.y.z.80 Bcast:0.0.0.0 Mask:255.255.255.255
UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:25 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 b) TX bytes:2100 (2.0 Kb)

----- VZHost

venet0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
RX packets:37 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:3108 (3.0 Kb) TX bytes:0 (0.0 b)

----- VPS

PING x.y.z.31 (x.y.z.31) 56(84) bytes of data.

--- x.y.z.31 ping statistics ---
5 packets transmitted, 0 received, 100% packet loss, time 3999ms

----- VPS

venet0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
inet addr:x.y.z.80 P-t-P:x.y.z.80 Bcast:0.0.0.0 Mask:255.255.255.255
UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1

RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:30 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 b) TX bytes:2520 (2.4 Kb)

----- VZHost

venet0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
RX packets:42 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:3528 (3.4 Kb) TX bytes:0 (0.0 b)

From this, I can see that

- o the VZHost is not sending packets to the VPS
- o the VPS is successfully sending packets to the VZHost - which is not responding.

Any help is appreciated,

Paul

Subject: Re: broken networking...
Posted by [rickb](#) on Wed, 17 Jan 2007 11:48:08 GMT
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simple, but its solved networking problems countless times on the forum. Is ip forwarding enabled?

```
cat /proc/net/ipv4/ip_forward
```

Subject: Re: broken networking...
Posted by [wilf](#) on Wed, 17 Jan 2007 12:27:23 GMT
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Hi RickB,

Sorry if this has been solved before.

```
VZHost~# cat /proc/net/ipv4/ip_forward  
cat: /proc/net/ipv4/ip_forward: No such file or directoryDoesn't find ip forwarding, but...  
VZHost~# cat /proc/sys/net/ipv4/ip_forward  
1does.
```

Looks like ip forwarding is enabled. I am running a firewall - which might be 'interfering'. I'll look into this (perhaps I am missing a rule) before I bother you again.

Thanks for taking the trouble to reply.

Best Regards, Paul.

Subject: Re: broken networking...

Posted by [rickb](#) on Wed, 17 Jan 2007 15:26:56 GMT

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Hi, yes I typed the path a bit too quick. First disable any firewalls on the HN for testing purposes. If still no joy, run tcpdump monitoring the venet and eth devices from the HN. Really the HN should always receive the packet from the VE unless the VE is running an outbound filtering firewall.

Subject: Re: broken networking...

Posted by [dev](#) on Thu, 18 Jan 2007 14:34:55 GMT

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as RickB mentioned, most likely it is due to firewall settings. traffic to VPS goes through iptables FORWARD chain, not INPUT one. So since most firewalls disable FORWARDING networkg in VPS doesn't work with them.

use `iptables -L` to see your firewall settings.

Subject: Re: broken networking...

Posted by [wilf](#) on Sat, 20 Jan 2007 20:56:25 GMT

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Hi Rick and Kirill,

Thanks for all the help.

It was all my fault Firewall was not configured up enough.

Done now, all is well.

Best Regards, Paul.
