
Subject: 2 nics, 1st nic is private lan - I can't connect to the internet from VEs

Posted by [Karateka](#) on Sat, 17 Feb 2007 21:21:06 GMT

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Hello,

I have 1 private lan and 1 public internet nic, my ISP gave me the following details:

eth0 (Private) Server address: 10.10.156.194

Gateway: N/A

Netmask: 255.255.255.192

eth1 (Public) Server address:X.Y.151.90

Gateway: X.Y.151.89

Netmask: 255.255.255.248

Secondary address: X.Y.152.160

My ISP told me that the DNS resolvers are on the private lan only (10.0.80.11 and 10.0.80.12)

My goal is to get internet access from a VE.

I run an out of the box Centos 4.4 installation, installed OpenVZ as per your wiki guide and added X.Y.152.160 to my VE.

I can ping from outside and the HN to X.Y.152.160.

I can only ping the own public IP of the VE from the VE. I can't ping the private lan or the public net.

I was advised by the ISP to use public resolvers, so I used these resolvers (by Cisco):

NAMESERVER="128.107.241.185 192.135.250.69"

That didn't help.

Here is some data for diagnostics:

On HN:

ip r

X.Y.152.160 dev venet0 scope link

X.Y.151.88/29 dev eth1 proto kernel scope link src X.Y.151.90

10.10.156.192/26 dev eth0 proto kernel scope link src 10.10.156.194

X.Y.152.0/24 dev eth1 proto kernel scope link src X.Y.152.160

169.254.0.0/16 dev eth1 scope link

10.0.0.0/8 via 10.10.156.193 dev eth0

default via 75.126.151.89 dev eth1

ifconfig

eth0 Link encap:Ethernet HWaddr 00:30:48:32:2C:D0

inet addr:10.10.156.194 Bcast:10.10.156.255 Mask:255.255.255.192

inet6 addr: fe80::230:48ff:fe32:2cd0/64 Scope:Link

UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1

RX packets:207 errors:0 dropped:0 overruns:0 frame:0

TX packets:691 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:29936 (29.2 KiB) TX bytes:48253 (47.1 KiB)
Base address:0x2000 Memory:d8000000-d8020000

eth1 Link encap:Ethernet HWaddr 00:30:48:32:2C:D1
inet addr:X.Y.151.90 Bcast:X.Y.151.95 Mask:255.255.255.248
inet6 addr: fe80::230:48ff:fe32:2cd1/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:168074 errors:0 dropped:0 overruns:0 frame:0
TX packets:107415 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:242067188 (230.8 MiB) TX bytes:9050879 (8.6 MiB)
Base address:0x2020 Memory:d8020000-d8040000

eth1:0 Link encap:Ethernet HWaddr 00:30:48:32:2C:D1
inet addr:X.Y.152.160 Bcast:X.Y.152.255 Mask:255.255.255.0
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
Base address:0x2020 Memory:d8020000-d8040000

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:14 errors:0 dropped:0 overruns:0 frame:0
TX packets:14 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:1064 (1.0 KiB) TX bytes:1064 (1.0 KiB)

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:421 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:31046 (30.3 KiB) TX bytes:0 (0.0 b)

On VE:

```
# ip r
192.0.2.0/24 dev venet0 scope host
169.254.0.0/16 dev venet0 scope link
default via 192.0.2.1 dev venet0
```

ifconfig

```
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:127.0.0.1 P-t-P:127.0.0.1 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:60 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 b) TX bytes:4506 (4.4 KiB)

venet0:0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
inet addr:X.Y.152.160 P-t-P:X.Y.152.160 Bcast:X.Y.152.160 Mask:255.255.255.255
UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1

Subject: Re: 2 nics, 1st nic is private lan - I can't connect to the internet from VEs
Posted by [Karateka](#) on Sat, 17 Feb 2007 21:35:21 GMT

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Some further diagnostics. I tried to ping yahoo.com from VE and ran this on the HN:

```
tcpdump -nni venet0
tcpdump: WARNING: arptype 65535 not supported by libpcap - falling back to cooked socket
tcpdump: WARNING: venet0: no IPv4 address assigned
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on venet0, link-type LINUX_SLL (Linux cooked), capture size 96 bytes
15:27:14.805958 IP X.Y.152.160.32849 > 128.107.241.185.53: 28376+ AAAA?
vps8.domain.com. (38)
15:27:19.804752 IP X.Y.152.160.32850 > 192.135.250.69.53: 28376+ AAAA? vps8.domain.com.
(38)
15:27:23.712328 IP X.Y.152.160.32851 > 128.107.241.185.53: 63647+ A? yahoo.com. (27)
15:27:24.804681 IP X.Y.152.160.32849 > 128.107.241.185.53: 28376+ AAAA?
vps8.domain.com. (38)
15:27:28.711669 IP X.Y.152.160.32852 > 192.135.250.69.53: 63647+ A? yahoo.com. (27)
```

Subject: Re: 2 nics, 1st nic is private lan - I can't connect to the internet from VEs
Posted by [Karateka](#) on Sat, 17 Feb 2007 21:43:51 GMT

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And the last bits of information which seem to be necessary for help:
gw8.domain.com (X.Y.151.89) at 00:1A:30:38:90:00 [ether] on eth1
? (10.10.156.193) at 00:1A:30:38:A8:00 [ether] on eth0
alpha.domain.com (X.Y.152.160) at * PERM PUP on eth1
alpha.domain.com (X.Y.152.160) at * PERM PUP on eth0

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
X.Y.152.160	0.0.0.0	255.255.255.255	UH	0	0	0	venet0
X.Y.151.88	0.0.0.0	255.255.255.248	U	0	0	0	eth1
10.10.156.192	0.0.0.0	255.255.255.192	U	0	0	0	eth0
X.Y.152.0	0.0.0.0	255.255.255.0	U	0	0	0	eth1
169.254.0.0	0.0.0.0	255.255.0.0	U	0	0	0	eth1
10.0.0.0	10.10.156.193	255.0.0.0	UG	0	0	0	eth0
0.0.0.0	X.Y.151.89	0.0.0.0	UG	0	0	0	eth1

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
192.0.2.0	0.0.0.0	255.255.255.0	U	0	0	0	venet0
169.254.0.0	0.0.0.0	255.255.0.0	U	0	0	0	venet0
0.0.0.0	192.0.2.1	0.0.0.0	UG	0	0	0	venet0

If anyone has any suggestions, please make sure to type out the code as well, as I might not really know what to do otherwise.

Subject: Re: 2 nics, 1st nic is private lan - I can't connect to the internet from VEs
Posted by [Alexandr Andreev](#) on Mon, 19 Feb 2007 11:11:31 GMT
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What about IP forwarding in HW node?

```
# cat /proc/sys/net/ipv4/ip_forward  
if it returns 0, do
```

```
# echo 1 > /proc/sys/net/ipv4/ip_forward
```

Subject: Re: 2 nics, 1st nic is private lan - I can't connect to the internet from VEs
Posted by [Vasily Tarasov](#) on Mon, 19 Feb 2007 11:14:44 GMT
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Hello,

At first, to avoid problems with DNS, we will ping by IP addresses, but not by server names. For example, yahoo.com have IP address 66.94.234.13, and we will use at first step.

I can see, that IP address X.Y.152.160 is ascribed to eth1:0 and to VEs venet0:0 interface. It is not right, you should delete it from eth1:0

After that, if it still not work, please, do the following and post the output here:

in VE:

```
# ping 66.94.234.13
# ip r get 66.94.234.13
# iptables -L -nv
# iptables -t nat -L -nv
```

on HN:

```
# ping X.Y.151.90
# ping 66.94.234.13
# ip r get 66.94.234.13
# ip r get X.Y.152.160
# iptables -L -nv
# iptables -t nat -L -nv
```

Thanks.

Subject: Re: 2 nics, 1st nic is private lan - I can't connect to the internet from VEs
Posted by [Alexandr Andreev](#) on Mon, 19 Feb 2007 11:36:19 GMT

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And:

inside HW: eth1:0 has X.Y.152.160

and

inside VE: venet0:1 has X.Y.152.160 - the same IP address???

See also articles about VE networking when there are several hw interfaces on HW node:

http://wiki.openvz.org/Multiple_Network_Interfaces

Also please check, that IP packets were really sent to internet:

```
# tcpdump -nni eth1
(not venet0)
```
