
Subject: *SOLVED* NAT doesn't seem to work
Posted by [duswil](#) on Tue, 08 Aug 2006 00:55:46 GMT
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I have followed the instructions at [Using_NAT_for_VE_with_private_IPs](#).

My kernel does *not* have loadable modules enabled. Even with that enabled it doesn't seem to work.

I'm trying to have a set of VEs that have only an internal IP address (172.16.*.*) that can access remote services (apt-get, ping, etc). I don't want these VEs to have public IP addresses. Eventually they will be accessed through a proxy server in a VE that does have a public IP. It is important that these non-public VEs have access to Internet services.

The hn has Red Hat Enterprise Linux ES 4 with a custom compiled kernel. Attached is my .config file.

```
[root@hn ~]# uname -a
Linux hn.fakedomainname.com 2.6.8-022stab078-up #15 Tue Aug 8 00:13:33 UTC 2006 i686
athlon i386 GNU/Linux
```

```
[root@hn ~]# cat /etc/modules.conf
options ip_contrack ip_contrack_enable_ve0=1
```

The 27.16.122.72 IP is fake, I used my real HN IP address in its place:
iptables -t nat -A POSTROUTING -s 172.16.0.0/16 -o eth0 -j SNAT --to 27.16.122.72

"testvps" has a private IP address:

```
testvps:~# ifconfig
```

```
lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        UP LOOPBACK RUNNING MTU:16436 Metric:1
        RX packets:1397 errors:0 dropped:0 overruns:0 frame:0
        TX packets:1397 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:111809 (109.1 KiB) TX bytes:111809 (109.1 KiB)
```

```
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:2 errors:0 dropped:0 overruns:0 frame:0
        TX packets:26 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:480 (480.0 b) TX bytes:2128 (2.0 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:172.16.4.1 P-t-P:172.16.4.1 Bcast:0.0.0.0 Mask:255.255.255.255
        UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500 Metric:1
```

Problem with pinging google.com from "testvps":
testvps:~# ping -w 10 google.com
PING google.com (64.233.167.99) 56(84) bytes of data.

--- google.com ping statistics ---
11 packets transmitted, 0 received, 100% packet loss, time 9998ms

"dns" has a public IP (replaced with a fake one):

dns:~# ifconfig

```
lo    Link encap:Local Loopback
      inet addr:127.0.0.1  Mask:255.0.0.0
      UP LOOPBACK RUNNING MTU:16436  Metric:1
      RX packets:1462 errors:0 dropped:0 overruns:0 frame:0
      TX packets:1462 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:0
      RX bytes:116801 (114.0 KiB)  TX bytes:116801 (114.0 KiB)
```

```
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:57 errors:0 dropped:0 overruns:0 frame:0
      TX packets:56 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:0
      RX bytes:12536 (12.2 KiB)  TX bytes:7094 (6.9 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:27.16.122.128  P-t-P:27.16.122.128  Bcast:0.0.0.0  Mask:255.255.255.255
      UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500  Metric:1
```

```
venet0:1  Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
      inet addr:172.16.1.1  P-t-P:172.16.1.1  Bcast:0.0.0.0  Mask:255.255.255.255
      UP BROADCAST POINTOPOINT RUNNING NOARP MTU:1500  Metric:1
```

No problem with pinging google.com from "dns":

dns:~# ping -w 2 google.com

PING google.com (64.233.187.99) 56(84) bytes of data.

64 bytes from 64.233.187.99: icmp_seq=1 ttl=239 time=37.9 ms

64 bytes from 64.233.187.99: icmp_seq=2 ttl=239 time=38.1 ms

--- google.com ping statistics ---

2 packets transmitted, 2 received, 0% packet loss, time 1000ms

rtt min/avg/max/mdev = 37.993/38.049/38.106/0.203 ms

Let me know what else might help track this problem down. I just can't seem figure it out on my own.

Thanks!

Dusty

File Attachments

1) [dot.config](#), downloaded 601 times
