
Subject: RTNETLINK answers: File exists for veth interface
Posted by [danielcamara](#) on Mon, 16 Jul 2007 15:18:16 GMT
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Ok I am doing something wrong but I don't know what.

My problem is that I need to run a multicast application, and the standard network interface (vnet) doesn't work. When I try to enable the virtual sistem using the veth interface the network doesn't work. I followed the how to from <http://wiki.openvz.org/Veth>,

Below I will list below all the steps, from the beginning even creating the image, I know it maybe overkill, but I really don't know if I made a mistake there also .

Two steps give me errors that I couldn't find any valuable reference on the Internet. The first one, that I think it is not the problem is when I try to say that the default device is the eth0 inside the virtual system.

```
virtual 104 #> /sbin/ip route add default dev eth0  
RTNETLINK answers: File exists
```

However, this error i think it is fine, because I use the route command to change the table. I still can't figure out what it means, but I think it is not the problem.

The problem I think it is when I attach the virtual interface to its IP at the server
host #> ip route add 192.168.12.104 dev veth104.0
RTNETLINK answers: No such device

I tried to find about this message on the Internet, but the references I found were not that useful , and after some one ask, yes the interface exists.

```
host #> ifconfig  
eth0    Link encap:Ethernet  HWaddr 00:0A:5E:52:B4:C8  
        inet addr:192.168.12.41  Bcast:192.168.12.255  Mask:255.255.255.0  
        inet6 addr: 2001:660:5502:12:20a:5eff:fe52:b4c8/64 Scope:Global  
        inet6 addr: fe80::20a:5eff:fe52:b4c8/64 Scope:Link  
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
        RX packets:6275718 errors:0 dropped:0 overruns:2 frame:0  
        TX packets:12603 errors:0 dropped:0 overruns:0 carrier:0  
        collisions:1062 txqueuelen:1000  
        RX bytes:620831686 (592.0 MiB)  TX bytes:1931914 (1.8 MiB)  
        Interrupt:5  
  
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:383 errors:0 dropped:0 overruns:0 frame:0
```

```
TX packets:383 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:19580 (19.1 KiB) TX bytes:19580 (19.1 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:11 errors:0 dropped:0 overruns:0 frame:0
TX packets:11 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:637 (637.0 b) TX bytes:1282 (1.2 KiB)
```

```
veth104.0 Link encap:Ethernet HWaddr 00:12:34:56:71:04
inet6 addr: fe80::212:34ff:fe56:7104/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:72 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:2448 (2.3 KiB) TX bytes:0 (0.0 b)
```

When inside the virtual machine I ping other machine, I can't see anything. However, some messages appear at the virtual interface at the real machine because I can see something with the tcpdump

```
# even if I ping the default gateway
virtual 104 #> ping 192.168.12.100
PING 192.168.12.100 (192.168.12.100) 56(84) bytes of data.
From 192.168.12.104 icmp_seq=2 Destination Host Unreachable
From 192.168.12.104 icmp_seq=3 Destination Host Unreachable
From 192.168.12.104 icmp_seq=4 Destination Host Unreachable
```

```
--- 192.168.12.100 ping statistics ---
6 packets transmitted, 0 received, +3 errors, 100% packet loss, time 4998ms
, pipe 3
```

```
# looking at the tcpdump output
# carne is the name of 192.168.12.100 machine
host #> tcpdump -v -i veth104.0
tcpdump: WARNING: veth104.0: no IPv4 address assigned
tcpdump: listening on veth104.0, link-type EN10MB (Ethernet), capture size 96 bytes
16:32:08.758121 arp who-has carne tell 192.168.12.104
16:32:09.757874 arp who-has carne tell 192.168.12.104
16:32:10.757664 arp who-has carne tell 192.168.12.104
16:32:13.758023 arp who-has carne tell 192.168.12.104
16:32:14.757816 arp who-has carne tell 192.168.12.104
16:32:15.757605 arp who-has carne tell 192.168.12.104
```

Below I am reproducing the WHOLE process I am doing. Please if any one have any idea... I am opened to suggestions .

Best regards...

Daniel Camara

The whole process step by step

Load module

host #> modprobe vzethdev

To create based on a template

host #> vzctl create 104 --ostemplate debian-4.0-i386-minimal

To verify if it was created

host #> vzlist -a

VEID	NPROC	STATUS	IP_ADDR	HOSTNAME
104	-	stopped	-	

Configuring network

host #> vzctl set 104 --ipadd 192.168.12.104 --save

Saved parameters for VE 104

host #> rvzctl set 104 --nameserver 192.168.12.100 --save

Saved parameters for VE 104

host #> vzctl set 104 --netif_add eth0,00:12:34:56:74:01,veth104.0,00:12:34:56:71:04 --save

Saved parameters for VE 104

host #> vzctl start 104

Starting VE ...

VE is mounted

Adding IP address(es): 192.168.12.104

Setting CPU units: 1000

File resolv.conf was modified

Configure veth devices: veth104.0

VE start in progress...

host #> ifconfig veth104.0 0

host #> echo 1 > /proc/sys/net/ipv4/conf/veth104.0/forwarding

host #> echo 1 > /proc/sys/net/ipv4/conf/veth104.0/proxy_arp

host #> echo 1 > /proc/sys/net/ipv4/conf/eth0/forwarding

host #> echo 1 > /proc/sys/net/ipv4/conf/eth0/proxy_arp

host #> vzctl enter 104

```

virtual 104 #> 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: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)

virtual 104 #> /sbin/ifconfig eth0 0
virtual 104 #> /sbin/ip addr add 192.168.12.104 dev eth0

## HERE the first error occur!!! I have no Idea, I tried to find about
## but none of the answers I found fit in my case
virtual 104 #> /sbin/ip route add default dev eth0
RTNETLINK answers: File exists

virtual 104 #> ifconfig
eth0    Link encap:Ethernet  HWaddr 00:12:34:56:74:01
        inet addr:192.168.12.104  Bcast:0.0.0.0  Mask:255.255.255.255
        inet6 addr: fe80::212:34ff:fe56:7401/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:6 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:0 (0.0 b)  TX bytes:384 (384.0 b)

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: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)
```

```
# on the host than gives me the second error
host #> ip route add 192.168.12.104 dev veth104.0
RTNETLINK answers: No such device
```

```
virtual 104 #> route
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
192.0.2.1 * 255.255.255.255 UH 0 0 0 venet0
default 192.0.2.1 0.0.0.0 UG 0 0 0 venet0
```

```
# Changing the route configuration, it is not in the how to, but it is needed
```

```
virtual 104 #> route del default gw 192.0.2.1
virtual 104 #> route del -host 192.0.2.1
virtual 104 #> route
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
192.168.12.0 * 255.255.255.0 U 0 0 0 eth0
default 192.168.12.100 0.0.0.0 UG 0 0 0 eth0
```

```
virtual 104 #> ping 192.168.12.100
PING 192.168.12.100 (192.168.12.100) 56(84) bytes of data.
From 192.168.12.104 icmp_seq=2 Destination Host Unreachable
From 192.168.12.104 icmp_seq=3 Destination Host Unreachable
From 192.168.12.104 icmp_seq=4 Destination Host Unreachable
```

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--- 192.168.12.100 ping statistics ---
6 packets transmitted, 0 received, +3 errors, 100% packet loss, time 4998ms
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# looking at the tcpdump output
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16:32:10.757664 arp who-has carne tell 192.168.12.104
16:32:13.758023 arp who-has carne tell 192.168.12.104
16:32:14.757816 arp who-has carne tell 192.168.12.104
16:32:15.757605 arp who-has carne tell 192.168.12.104
```