Subject: Awfully slow network performance w/ r8169 and openvz
Posted by felicitus on Fri, 19 Nov 2010 07:17:05 GMT
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Hi,

I'm currently setting up my first openvz server. It seems that my network speed is limited with the openvz kernel and r8169 (RTL8111/8168B PCI Express Gigabit Ethernet controller). I tried both 2.6.27-levitan.1 and 2.6.32-dzhanibekov.1.

I did not set up any containers so far; all things mentioned in here refer to VE0!

If I boot my server in a rescue system (stock debian system with stock kernel), I receive maximum speed (more than 10mbyte/s for a remote download). However with openvz, my performace is stuck at 400-600kbyte/s, and drops down to below 100kbyte/s for a download which takes a bit longer (let's say 100MB).

I have:
* Gentoo (current version), vzctl 3.0.23-r2
* No messages in the kernel log with errors or network issues
* No iptables set
* No special configuration like bandwidth limiting or such

Negotiation is OK:
arkus conf # mii-tool
eth0: no autonegotiation, 100baseTx-HD, link ok

No packet errors:
eth0 Link encap:Ethernet HWaddr 6c:62:6d:76:2f:2d
inet addr:hidden Bcast:hidden Mask:255.255.255.192
inet6 addr: hidden Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:111925 errors:0 dropped:0 overruns:0 frame:0
TX packets:90386 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:158226334 (150.8 MiB) TX bytes:6913452 (6.5 MiB)
Interrupt:249 Base address:0xc000

/proc/user_beancounters:

arkus conf # cat /proc/user_beancounters
Version: 2.5

uid	resource	held	maxheld	barrier	limit	failcnt
0:	kmemsize	7284234	13681307	9223372036854775807	9223372036854775807	0
	lockedpages	0	3075	9223372036854775807	9223372036854775807	0

```
        privvmpages          21592           92826  9223372036854775807
9223372036854775807                0
        shmpages              1310            1326  9223372036854775807
9223372036854775807                0
        dummy                    0               0  9223372036854775807  9223372036854775807
                0
        numproc                175             246  9223372036854775807
9223372036854775807                0
        physpages             4290           61920  9223372036854775807
9223372036854775807                0
        vmguarpages              0               0  9223372036854775807
9223372036854775807                0
        oomguarpages          4290           61920  9223372036854775807
9223372036854775807                0
        numtcpsock              16              19  9223372036854775807
9223372036854775807                0
        numflock                 2              18  9223372036854775807  9223372036854775807
                0
        numpty                   2               3  9223372036854775807  9223372036854775807
                0
        numsiginfo               2              56  9223372036854775807
9223372036854775807                0
        tcpsndbuf           628864          628864  9223372036854775807
9223372036854775807                0
        tcprcvbuf           262144          361368  9223372036854775807
9223372036854775807                0
        othersockbuf         30056          117152  9223372036854775807
9223372036854775807                0
        dgramrcvbuf              0            5648  9223372036854775807
9223372036854775807                0
        numothersock            57              78  9223372036854775807
9223372036854775807                0
        dcachesize           771540          872256  9223372036854775807
9223372036854775807                0
        numfile              3003            3998  9223372036854775807
9223372036854775807                0
        dummy                    0               0  9223372036854775807  9223372036854775807
                0
        dummy                    0               0  9223372036854775807  9223372036854775807
                0
        dummy                    0               0  9223372036854775807  9223372036854775807
                0
        numiptent                0               0  9223372036854775807  9223372036854775807
                0
```

Output of tc qdisc:

arkus ~ # tc qdisc
qdisc pfifo_fast 0: dev eth0 root bands 3 priomap 1 2 2 2 1 2 0 0 1 1 1 1 1 1 1 1

I'm not too sure if the issue is maybe related to bean counters; but as the fail count is 0, I assume everything is correct here?

arkus conf # uname -a
Linux arkus 2.6.27-openvz-levitan.1 #1 SMP Fri Nov 19 07:12:32 CET 2010 x86_64 Intel(R) Core(TM) i7 CPU 930 @ 2.80GHz GenuineIntel GNU/Linux

arkus ~ # tc class show dev eth0
<no output returned>

Anything I could check else?

Thanks
Felicitus

Subject: Re: Awfully slow network performance w/ r8169 and openvz
Posted by mmarkk on Wed, 10 Aug 2011 19:41:41 GMT
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How did you resolve this problem? I have exatly the same one, but in Centos 6 / x86_64 / Core i7.

Subject: Re: Awfully slow network performance w/ r8169 and openvz
Posted by mmarkk on Wed, 10 Aug 2011 19:54:56 GMT
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ethtool -s eth0 speed 100 duplex full autoneg off

will solve your (and my) problem

Subject: Re: Awfully slow network performance w/ r8169 and openvz
Posted by seanfulton on Tue, 30 Aug 2011 15:36:03 GMT
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I have a lot of machines with the 8168B card and have not had good luck with the r8169 driver.

You can go to RealTek's site and download the r8168 driver and build it as a module. Works great, and much better than the r8169 driver!

sean