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Subject: Re: \*SOLVED\* OpenVZ: No driver for NIC RTL8111/8168B [solved]  
Posted by [abdicar](#) on Sat, 03 Apr 2010 19:50:02 GMT  
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Ok, Here we go.

#### BEFORE KERNEL UPDATE

Quote:[root@22491 ~]# cat /proc/mdstat

Personalities : [raid1]

md1 : active raid1 sdb3[1] sda3[0]  
479998016 blocks [2/2] [UU]

md0 : active raid1 sdb1[1] sda1[0]  
4192832 blocks [2/2] [UU]

unused devices: <none>

[root@22491 ~]# free -m

	total	used	free	shared	buffers	cached
Mem:	2010	336	1674	0	20	180
-/+ buffers/cache:		134	1875			
Swap:	8189	0	8189			

[root@22491 ~]# cat /etc/redhat-release

CentOS release 5.4 (Final)

[root@22491 ~]# uname -a

Linux 22491.server.local 2.6.18-164.15.1.el5PAE #1 SMP Wed Mar 17 12:14:29 EDT 2010 i686  
i686 i386 GNU/Linux

[root@22491 ~]# df -h

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/md0	3.9G	1.3G	2.5G	35%	/
/dev/md1	444G	199M	421G	1%	/vz
tmpfs	1006M	0	1006M	0%	/dev/shm

[root@22491 ~]# cat /proc/cpuinfo

processor : 0  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 28  
model name : Intel(R) Atom(TM) CPU D510 @ 1.66GHz  
stepping : 10  
cpu MHz : 1666.746  
cache size : 512 KB  
physical id : 0  
siblings : 4  
core id : 0  
cpu cores : 2  
apicid : 0  
fdiv\_bug : no  
hlt\_bug : no

f00f\_bug : no  
coma\_bug : no  
fpu : yes  
fpu\_exception : yes  
cpuid level : 10  
wp : yes  
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush  
dts acpi mmx fxsr sse sse2 ss ht tm pbe nx lm constant\_tsc pni monitor ds\_cpl tm2 ssse3 cx16  
xtpr lahf\_lm  
bogomips : 3333.49

processor : 1  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 28  
model name : Intel(R) Atom(TM) CPU D510 @ 1.66GHz  
stepping : 10  
cpu MHz : 1666.746  
cache size : 512 KB  
physical id : 0  
siblings : 4  
core id : 0  
cpu cores : 2  
apicid : 1  
fdiv\_bug : no  
hlt\_bug : no  
f00f\_bug : no  
coma\_bug : no  
fpu : yes  
fpu\_exception : yes  
cpuid level : 10  
wp : yes  
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush  
dts acpi mmx fxsr sse sse2 ss ht tm pbe nx lm constant\_tsc pni monitor ds\_cpl tm2 ssse3 cx16  
xtpr lahf\_lm  
bogomips : 3466.70

processor : 2  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 28  
model name : Intel(R) Atom(TM) CPU D510 @ 1.66GHz  
stepping : 10  
cpu MHz : 1666.746  
cache size : 512 KB  
physical id : 0  
siblings : 4  
core id : 1

cpu cores : 2  
apicid : 2  
fdiv\_bug : no  
hlt\_bug : no  
f00f\_bug : no  
coma\_bug : no  
fpu : yes  
fpu\_exception : yes  
cpuid level : 10  
wp : yes  
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush  
dts acpi mmx fxsr sse sse2 ss ht tm pbe nx lm constant\_tsc pni monitor ds\_cpl tm2 ssse3 cx16  
xtpr lahf\_lm  
bogomips : 3333.19

processor : 3  
vendor\_id : GenuineIntel  
cpu family : 6  
model : 28  
model name : Intel(R) Atom(TM) CPU D510 @ 1.66GHz  
stepping : 10  
cpu MHz : 1666.746  
cache size : 512 KB  
physical id : 0  
siblings : 4  
core id : 1  
cpu cores : 2  
apicid : 3  
fdiv\_bug : no  
hlt\_bug : no  
f00f\_bug : no  
coma\_bug : no  
fpu : yes  
fpu\_exception : yes  
cpuid level : 10  
wp : yes  
flags : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush  
dts acpi mmx fxsr sse sse2 ss ht tm pbe nx lm constant\_tsc pni monitor ds\_cpl tm2 ssse3 cx16  
xtpr lahf\_lm  
bogomips : 3333.15

[root@22491 ~]#

Now the result from lspci -vv

Quote:01:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168B PCI Express  
Gigabit Ethernet controller (rev 03)  
Subsystem: Intel Corporation Unknown device d615

Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr- Stepping-  
 SERR- FastB2B-  
 Status: Cap+ 66MHz- UDF- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort- <MAbort-  
 >SERR- <PERR-  
 Latency: 0, Cache Line Size: 64 bytes  
 Interrupt: pin A routed to IRQ 58  
 Region 0: I/O ports at 1000 [size=256]  
 Region 2: Memory at e0004000 (64-bit, prefetchable) [size=4K]  
 Region 4: Memory at e0000000 (64-bit, prefetchable) [size=16K]  
 Expansion ROM at e0020000 [disabled] [size=128K]  
 Capabilities: [40] Power Management version 3  
 Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=375mA  
 PME(D0+,D1+,D2+,D3hot+,D3cold+)  
 Status: D0 PME-Enable- DSel=0 DScale=0 PME-  
 Capabilities: [50] Message Signalled Interrupts: 64bit+ Queue=0/0 Enable+  
 Address: 00000000fee03000 Data: 403a  
 Capabilities: [70] Express Endpoint IRQ 1  
 Device: Supported: MaxPayload 256 bytes, PhantFunc 0, ExtTag-  
 Device: Latency L0s <512ns, L1 <64us  
 Device: AtnBtn- AtnInd- PwrInd-  
 Device: Errors: Correctable- Non-Fatal- Fatal- Unsupported-  
 Device: RlxdOrd+ ExtTag- PhantFunc- AuxPwr- NoSnoop-  
 Device: MaxPayload 128 bytes, MaxReadReq 4096 bytes  
 Link: Supported Speed 2.5Gb/s, Width x1, ASPM L0s L1, Port 0  
 Link: Latency L0s <512ns, L1 <64us  
 Link: ASPM Disabled RCB 64 bytes CommClk- ExtSynch-  
 Link: Speed 2.5Gb/s, Width x1  
 Capabilities: [ac] MSI-X: Enable- Mask- TabSize=4  
 Vector table: BAR=4 offset=00000000  
 PBA: BAR=4 offset=00000800  
 Capabilities: [cc] Vital Product Data  
 Capabilities: [100] Advanced Error Reporting  
 Capabilities: [140] Virtual Channel  
 Capabilities: [160] Device Serial Number 00-e0-4c-68-00-00-00-03

Ok, now I'm going to install the ovzkernel.i686 0:2.6.18-164.15.1.el5.028stab068.9 and  
 ovzkernel-devel.i686 0:2.6.18-164.15.1.el5.028stab068.9.

Ok, both installed.

```
Quote:[root@22491 ~]# rpm -qa | grep ovz
ovzkernel-2.6.18-164.15.1.el5.028stab068.9
ovzkernel-devel-2.6.18-164.15.1.el5.028stab068.9
[root@22491 ~]#
```

Now I edit the /boot/grub/grub.conf.

```
Quote:# grub.conf generated by anaconda
```

```
#
# Note that you do not have to rerun grub after making changes to this file
# NOTICE: You do not have a /boot partition. This means that
#     all kernel and initrd paths are relative to /, eg.
#     root (hd0,0)
#     kernel /boot/vmlinuz-version ro root=/dev/md0
#     initrd /boot/initrd-version.img
#boot=/dev/sda
default=0
timeout=5
splashimage=(hd0,0)/boot/grub/splash.xpm.gz
hiddenmenu
title OpenVZ (2.6.18-164.15.1.el5.028stab068.9)
    root (hd0,0)
    kernel /boot/vmlinuz-2.6.18-164.15.1.el5.028stab068.9 ro root=/dev/md0
    initrd /boot/initrd-2.6.18-164.15.1.el5.028stab068.9.img
title CentOS (2.6.18-164.15.1.el5PAE)
    root (hd0,0)
    kernel /boot/vmlinuz-2.6.18-164.15.1.el5PAE ro root=/dev/md0
    initrd /boot/initrd-2.6.18-164.15.1.el5PAE.img
title CentOS (2.6.18-164.15.1.el5)
    root (hd0,0)
    kernel /boot/vmlinuz-2.6.18-164.15.1.el5 ro root=/dev/md0
    initrd /boot/initrd-2.6.18-164.15.1.el5.img
title CentOS (2.6.18-164.el5PAE)
    root (hd0,0)
    kernel /boot/vmlinuz-2.6.18-164.el5PAE ro root=/dev/md0
    initrd /boot/initrd-2.6.18-164.el5PAE.img
title CentOS-base (2.6.18-164.el5)
    root (hd0,0)
    kernel /boot/vmlinuz-2.6.18-164.el5 ro root=/dev/md0
    initrd /boot/initrd-2.6.18-164.el5.img
```

Now sysctl edited.

Quote:# Kernel sysctl configuration file for Red Hat Linux

```
#
# For binary values, 0 is disabled, 1 is enabled. See sysctl( and
# sysctl.conf(5) for more details.
```

```
# Controls IP packet forwarding
net.ipv4.ip_forward = 1
net.ipv6.conf.default.forwarding = 1
net.ipv6.conf.all.forwarding = 1
net.ipv4.conf.default.proxy_arp = 0
net.ipv4.conf.all.rp_filter = 1
```

```
# Controls source route verification
```

```
net.ipv4.conf.default.rp_filter = 1
```

```
# Do not accept source routing
```

```
net.ipv4.conf.default.accept_source_route = 0
```

```
# Controls the System Request debugging functionality of the kernel
```

```
kernel.sysrq = 1
```

```
# We do not want all our interfaces to send redirects
```

```
net.ipv4.conf.default.send_redirects = 1
```

```
net.ipv4.conf.all.send_redirects = 0
```

```
# Controls whether core dumps will append the PID to the core filename
```

```
# Useful for debugging multi-threaded applications
```

```
kernel.core_uses_pid = 1
```

```
# Controls the use of TCP syncookies
```

```
net.ipv4.tcp_syncookies = 1
```

```
# Controls the maximum size of a message, in bytes
```

```
kernel.msgmnb = 65536
```

```
# Controls the default maximum size of a message queue
```

```
kernel.msgmax = 65536
```

```
# Controls the maximum shared segment size, in bytes
```

```
kernel.shmmax = 4294967295
```

```
# Controls the maximum number of shared memory segments, in pages
```

```
kernel.shmall = 268435456
```

```
/etc/sysconfig/selinux
```

```
# This file controls the state of SELinux on the system.
```

```
# SELINUX= can take one of these three values:
```

```
#   enforcing - SELinux security policy is enforced.
```

```
#   permissive - SELinux prints warnings instead of enforcing.
```

```
#   disabled - SELinux is fully disabled.
```

```
SELINUX=disabled
```

```
# SELINUXTYPE= type of policy in use. Possible values are:
```

```
#   targeted - Only targeted network daemons are protected.
```

```
#   strict - Full SELinux protection.
```

```
SELINUXTYPE=targeted
```

```
# SETLOCALDEFS= Check local definition changes
```

```
SETLOCALDEFS=0
```

After all correct... Lets reboot.

Quote:[root@22491 ~]# reboot

Broadcast message from root (pts/1) (Sat Apr 3 21:37:11 2010):

The system is going down for reboot NOW!  
[root@22491 ~]#

Ok, after reboot, it come online fine...

lspci -vv

Quote:01:00.0 Ethernet controller: Realtek Semiconductor Co., Ltd. RTL8111/8168B PCI Express Gigabit Ethernet controller (rev 03)

Subsystem: Intel Corporation Unknown device d615

Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr- Stepping-  
SERR- FastB2B-

Status: Cap+ 66MHz- UDF- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort- <MAbort-  
>SERR- <PERR-

Latency: 0, Cache Line Size: 64 bytes

Interrupt: pin A routed to IRQ 58

Region 0: I/O ports at 1000 [size=256]

Region 2: Memory at e0004000 (64-bit, prefetchable) [size=4K]

Region 4: Memory at e0000000 (64-bit, prefetchable) [size=16K]

Expansion ROM at e0020000 [disabled] [size=128K]

Capabilities: [40] Power Management version 3

Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=375mA

PME(D0+,D1+,D2+,D3hot+,D3cold+)

Status: D0 PME-Enable- DSel=0 DScale=0 PME-

Capabilities: [50] Message Signalled Interrupts: 64bit+ Queue=0/0 Enable+

Address: 00000000fee03000 Data: 403a

Capabilities: [70] Express Endpoint IRQ 1

Device: Supported: MaxPayload 256 bytes, PhantFunc 0, ExtTag-

Device: Latency L0s <512ns, L1 <64us

Device: AtnBtn- AtnInd- PwrInd-

Device: Errors: Correctable- Non-Fatal- Fatal- Unsupported-

Device: RlxdOrd+ ExtTag- PhantFunc- AuxPwr- NoSnoop-

Device: MaxPayload 128 bytes, MaxReadReq 4096 bytes

Link: Supported Speed 2.5Gb/s, Width x1, ASPM L0s L1, Port 0

Link: Latency L0s <512ns, L1 <64us

Link: ASPM Disabled RCB 64 bytes CommClk- ExtSynch-

Link: Speed 2.5Gb/s, Width x1

Capabilities: [ac] MSI-X: Enable- Mask- TabSize=4

Vector table: BAR=4 offset=00000000

PBA: BAR=4 offset=00000800

and other test...

Quote:[root@22491 ~]# mii-tool

```
eth0: negotiated 10baseT-FD, link ok
[root@22491 ~]# eth
ether-wake ethtool
[root@22491 ~]# ethtool eth0
Settings for eth0:
    Supported ports: [ TP MII ]
    Supported link modes:  10baseT/Half 10baseT/Full
                          100baseT/Half 100baseT/Full
                          1000baseT/Half 1000baseT/Full
    Supports auto-negotiation: Yes
    Advertised link modes:  10baseT/Half 10baseT/Full
                          100baseT/Half 100baseT/Full
                          1000baseT/Half 1000baseT/Full
    Advertised auto-negotiation: Yes
    Speed: 10Mb/s
    Duplex: Full
    Port: MII
    PHYAD: 0
    Transceiver: internal
    Auto-negotiation: on
    Supports Wake-on: pumbg
    Wake-on: g
    Current message level: 0x00000033 (51)
    Link detected: yes
[root@22491 ~]#
```

Looks now the only different is that in the new kernel we lose this part:

```
Quote:Capabilities: [cc] Vital Product Data
Capabilities: [100] Advanced Error Reporting
Capabilities: [140] Virtual Channel
Capabilities: [160] Device Serial Number 00-e0-4c-68-00-00-00-03
```

Connection test:

```
Quote:[root@22491 ~]# ping yahoo.com
PING yahoo.com (67.195.160.76) 56(84) bytes of data.
64 bytes from ir1.fp.vip.ac4.yahoo.com (67.195.160.76): icmp_seq=1 ttl=55 time=86.2 ms
64 bytes from ir1.fp.vip.ac4.yahoo.com (67.195.160.76): icmp_seq=2 ttl=55 time=80.6 ms
```

```
[1]+  Stopped                  ping yahoo.com
[root@22491 ~]# host google.com
google.com has address 74.125.67.105
google.com has address 74.125.67.106
google.com has address 74.125.67.147
google.com has address 74.125.67.99
google.com has address 74.125.67.103
google.com has address 74.125.67.104
```



```
google.com mail is handled by 100 google.com.s9a1.psmtip.com.  
google.com mail is handled by 200 google.com.s9a2.psmtip.com.  
google.com mail is handled by 300 google.com.s9b1.psmtip.com.  
google.com mail is handled by 400 google.com.s9b2.psmtip.com.  
[root@22491 ~]#  
[root@22491 ~]# mii-tool  
eth0: negotiated 10baseT-FD, link ok  
[root@22491 ~]#
```

Ok, now I should install the rest of openvz or I should upgrade the driver by now?

I think I will install the openvz to test if the error is still there.

---