

# Re: em watchdog problem

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  - *Date:* Wed, 31 Oct 2007 15:39:31 +0800
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On 31/10/2007, Jack Vogel <[jfvogel@xxxxxxxxxxx](mailto:jfvogel@xxxxxxxxxxx)> wrote:

This morning I had an idea about what the source of the watchdog problem is. Also, we have repro'd at least one type of watchdog inhouse.

One question, is this problem only happening for those running STABLE with the 6.6.6 merged driver?

This doesn't happen for me on my local testing network with RELENG\_6 built from October 14 sources.

These boxes generally throw about 350mbit in/out of TCP between each other. I've recently upgraded one to RELENG\_7 to test so I can't provide a dmesg+interrupt count for it. Note that under load the interrupts are around 8000/sec for em0 but I haven't run the tests for a few days and thus the "rate" figure for em0 is a bit misleading.

```
wendy# vmstat -i
interrupt total rate
irq1: atkbd0 76 0
irq6: fdc0 1 0
irq15: ata1 46 0
irq17: em0 fwohci0 1503419876 1866
irq19: atapci1 766603 0
irq20: ohci0 ohci+ 0 0
cpu0: timer 1611280255 2000
Total 3115466857 3867
```

pciconf for the ethernet card:

```
em0@pci1:6:0: class=0x020000 card=0x13768086 chip=0x107c8086 rev=0x05 hdr=0x00
vendor = 'Intel Corporation'
device = 'PRO/1000 GT'
class = network
subclass = ethernet
```

Dmesg:

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FreeBSD 6.2–STABLE #6: Sun Oct 14 23:51:09 WST 2007  
adrian@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx:/usr/obj/usr/src/sys/WENDY  
Timecounter "i8254" frequency 1193182 Hz quality 0  
CPU: AMD Opteron(tm) Processor 140 (1400.01–MHz 686–class CPU)  
Origin = "AuthenticAMD" Id = 0xf58 Stepping = 8  
Features=0x78bfff<FPU,VME,DE,PSE,TSC,MSR,PAE,MCE,CX8,APIC,SEP,MTRR,PGE,MCA,CMOV,PAT,PSE3  
AMD Features=0xe0500800<SYSCALL,NX,MMX+,LM,3DNow!+,3DNow!>  
real memory = 2147221504 (2047 MB)  
avail memory = 2096099328 (1998 MB)  
ACPI APIC Table: <A M I OEMAPIC >  
ioapic0 <Version 1.1> irqs 0–23 on motherboard  
kbd1 at kbdmux0  
ath\_hal: 0.9.20.3 (AR5210, AR5211, AR5212, RF5111, RF5112, RF2413, RF5413)  
acpi0: <A M I OEMRSDT> on motherboard  
acpi0: Power Button (fixed)  
Timecounter "ACPI–fast" frequency 3579545 Hz quality 1000  
acpi\_timer0: <24–bit timer at 3.579545MHz> port 0x4008–0x400b on acpi0  
cpu0: <ACPI CPU> on acpi0  
pcib0: <ACPI Host–PCI bridge> port 0xcf8–0xcff on acpi0  
pci0: <ACPI PCI bus> on pcib0  
agp0: <NVIDIA nForce3 AGP Controller> mem 0xf0000000–0xf7ffffff at  
device 0.0 on pci0  
isab0: <PCI–ISA bridge> at device 1.0 on pci0  
isa0: <ISA bus> on isab0  
pci0: <serial bus, SMBus> at device 1.1 (no driver attached)  
ohci0: <nVidia nForce3 USB Controller> mem 0xfebfd000–0xfebfdfff irq  
20 at device 2.0 on pci0  
ohci0: [GIANT–LOCKED]  
usb0: OHCI version 1.0, legacy support  
usb0: SMM does not respond, resetting  
usb0: <nVidia nForce3 USB Controller> on ohci0  
usb0: USB revision 1.0  
uhub0: nVidia OHCI root hub, class 9/0, rev 1.00/1.00, addr 1  
uhub0: 3 ports with 3 removable, self powered  
ohci1: <nVidia nForce3 USB Controller> mem 0xfebfe000–0xfebfefff irq  
20 at device 2.1 on pci0  
ohci1: [GIANT–LOCKED]  
usb1: OHCI version 1.0, legacy support  
usb1: SMM does not respond, resetting  
usb1: <nVidia nForce3 USB Controller> on ohci1  
usb1: USB revision 1.0  
uhub1: nVidia OHCI root hub, class 9/0, rev 1.00/1.00, addr 1  
uhub1: 3 ports with 3 removable, self powered  
ehci0: <NVIDIA nForce3 USB 2.0 controller> mem 0xfebffc00–0xfebffcff  
irq 20 at device 2.2 on pci0  
ehci0: [GIANT–LOCKED]  
usb2: EHCI version 1.0

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usb2: companion controllers, 4 ports each: usb0 usb1  
usb2: <NVIDIA nForce3 USB 2.0 controller> on ehci0  
usb2: USB revision 2.0  
uhub2: nVidia EHCI root hub, class 9/0, rev 2.00/1.00, addr 1  
uhub2: 6 ports with 6 removable, self powered  
nve0: <NVIDIA nForce MCP3 Networking Adapter> port 0xec00–0xec07 mem  
0xfebfc000–0xfebfcfff irq 21 at device 5.0 on pci0  
nve0: Ethernet address 00:0c:6e:98:55:5c  
miibus0: <MII bus> on nve0  
r1phy0: <RTL8201L 10/100 media interface> on miibus0  
r1phy0: 10baseT, 10baseT–FDX, 100baseTX, 100baseTX–FDX, auto  
nve0: Ethernet address: 00:0c:6e:98:55:5c  
pci0: <multimedia, audio> at device 6.0 (no driver attached)  
atapci0: <nVidia nForce3 UDMA133 controller> port  
0x1f0–0x1f7,0x3f6,0x170–0x177,0x376,0xffa0–0xffaf at device 8.0 on  
pci0  
ata0: <ATA channel 0> on atapci0  
ata1: <ATA channel 1> on atapci0  
pcib1: <ACPI PCI–PCI bridge> at device 10.0 on pci0  
pci1: <ACPI PCI bus> on pcib1  
em0: <Intel(R) PRO/1000 Network Connection Version – 6.6.6> port  
0xdc00–0xdc3f mem 0xfc9e0000–0xfc9fffff,0xfc9c0000–0xfc9dffff irq 17  
at device 6.0 on pci1  
em0: Ethernet address: 00:0e:0c:b9:42:d8  
atapci1: <Promise PDC20378 SATA150 controller> port  
0xd800–0xd83f,0xd400–0xd40f,0xd000–0xd07f mem  
0xfc99f000–0xfc99ffff,0xfc960000–0xfc97ffff irq 19 at device 8.0 on  
pci1  
ata2: <ATA channel 0> on atapci1  
ata3: <ATA channel 1> on atapci1  
ata4: <ATA channel 2> on atapci1  
fwohci0: <Texas Instruments TSB43AB22/A> mem  
0xfc99e800–0xfc99efff,0xfc998000–0xfc99bfff irq 17 at device 9.0 on  
pci1  
fwohci0: OHCI version 1.10 (ROM=1)  
fwohci0: No. of Isochronous channels is 4.  
fwohci0: EUI64 00:e0:18:00:00:2e:05:96  
fwohci0: Phy 1394a available S400, 2 ports.  
fwohci0: Link S400, max\_rec 2048 bytes.  
firewire0: <IEEE1394(FireWire) bus> on fwohci0  
fwe0: <Ethernet over FireWire> on firewire0  
if\_fwe0: Fake Ethernet address: 02:e0:18:2e:05:96  
fwe0: Ethernet address: 02:e0:18:2e:05:96  
fwe0: if\_start running deferred for Giant  
sbp0: <SBP–2/SCSI over FireWire> on firewire0  
fwohci0: Initiate bus reset  
fwohci0: BUS reset  
fwohci0: node\_id=0xc000ffc0, gen=1, CYCLEMASTER mode  
firewire0: 1 nodes, maxhop <= 0, cable IRM = 0 (me)  
firewire0: bus manager 0 (me)  
pcib2: <ACPI PCI–PCI bridge> at device 11.0 on pci0

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pci2: <ACPI PCI bus> on pcib2  
pci2: <display, VGA> at device 0.0 (no driver attached)  
acpi\_button0: <Power Button> on acpi0  
fdc0: <floppy drive controller (FDE)> port 0x3f0-0x3f5,0x3f7 irq 6 drq  
2 on acpi0  
fdc0: [FAST]  
atkbdc0: <Keyboard controller (i8042)> port 0x60,0x64 irq 1 on acpi0  
atkbd0: <AT Keyboard> irq 1 on atkbdc0  
kbd0 at atkbd0  
atkbd0: [GIANT-LOCKED]  
sio0: <16550A-compatible COM port> port 0x3f8-0x3ff irq 4 flags 0x10 on acpi0  
sio0: type 16550A  
sio1: <16550A-compatible COM port> port 0x2f8-0x2ff irq 3 on acpi0  
sio1: type 16550A  
pmtimer0 on isa0  
orm0: <ISA Option ROMs> at iomem 0xc0000-0xcffff,0xd0000-0xd0fff on isa0  
ppc0: parallel port not found.  
sc0: <System console> at flags 0x100 on isa0  
sc0: VGA <16 virtual consoles, flags=0x300>  
vga0: <Generic ISA VGA> at port 0x3c0-0x3df iomem 0xa0000-0xbffff on isa0  
Timecounter "TSC" frequency 1400008080 Hz quality 800  
Timecounters tick every 1.000 msec  
ipfw2 (+ipv6) initialized, divert loadable, rule-based forwarding  
enabled, default to accept, logging disabled  
acd0: CDRW <MATSHITA CD-RW CW-7586/1A17> at ata1-master PIO4  
ad4: 76319MB <WDC WD800JD-00MSA1 10.01E01> at ata2-master SATA150  
hwpmc: TSC/1/0x20<REA> K8/4/0x1ff<INT,USR,SYS,EDG,THR,REA,WRI,INV,QUA>  
Trying to mount root from ufs:/dev/ad4s1a

HTH,

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