
Subject: *HW PROBLEM* Kernel Oops
Posted by [goeldi](#) on Wed, 29 Aug 2007 10:15:20 GMT
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Is this a hardware or a software problem?

Kernel is 2.6.18-ovz028stab039.1-smp
vzquota-3.0.11-1
vzctl-3.0.18-1

Kernel Oops follows:

```
Aug 29 02:00:43 vz kernel: BUG: unable to handle kernel paging request at virtual address ffff7fff
Aug 29 02:00:43 vz kernel: printing eip:
Aug 29 02:00:43 vz kernel: c020dd07
Aug 29 02:00:43 vz kernel: *pde = 00003067
Aug 29 02:00:43 vz kernel: Oops: 0002 [#1]
Aug 29 02:00:43 vz kernel: SMP
Aug 29 02:00:43 vz kernel: Modules linked in: loop simfs vzrst vzcpt vzdquota af_packet xt_length
ipt_ttl xt_tcpmss ipt_TCPMSS xt_multiport xt_limit ipt_tos e
eprom lm85 hwmon_vid i2c_isa vernetdev vzmon vzdev iptable_nat ip_nat iptable_mangle
ipt_REJECT xt_state ip_conntrack xt_tcpudp iptable_filter ip_tables x_tables
es thermal processor fan button battery asus_acpi ac uhci_hcd ehci_hcd usbcore shpchp i2c_i801
i2c_core eeepro100 e100 mii
Aug 29 02:00:43 vz kernel: CPU: 0, VCPU: 0.0
Aug 29 02:00:43 vz kernel: EIP: 0060:[<c020dd07>] Not tainted VLI
Aug 29 02:00:43 vz kernel: EFLAGS: 00010286 (2.6.18-ovz028stab039.1-smp #1)
Aug 29 02:00:43 vz kernel: EIP is at ext3_clear_inode+0x57/0xc0
Aug 29 02:00:43 vz kernel: eax: f70628c0 ebx: eb81d8e8 ecx: 00000000 edx: ffff7fff
Aug 29 02:00:43 vz kernel: esi: eb81d980 edi: 00000000 ebp: 00000029 esp: f7e16e14
Aug 29 02:00:43 vz kernel: ds: 007b es: 007b ss: 0068
Aug 29 02:00:43 vz kernel: Process kswapd0 (pid: 162, veid: 0, ti=f7e16000 task=f7e53400
task.ti=f7e16000)
Aug 29 02:00:43 vz kernel: Stack: eb81d980 eb81d980 f9003370 f7e16e64 c019dbca eb81d980
eb81d988 eb81d980
Aug 29 02:00:43 vz kernel: c019dca8 eb81d980 c055cd40 79d6def2 d3db9b94 02b63220
00000080 f7e16e64
Aug 29 02:00:43 vz kernel: c019e194 f7e16e64 00000000 00000080 eb81db94 ca3a7988
9c4612ab 000b2931
Aug 29 02:00:43 vz kernel: Call Trace:
Aug 29 02:00:43 vz kernel: [<f9003370>] vzquota_drop+0x0/0x20 [vzdquota]
Aug 29 02:00:43 vz kernel: [<c019dbca>] clear_inode+0xaa/0x170
Aug 29 02:00:43 vz kernel: [<c019dca8>] dispose_list+0x18/0xe0
Aug 29 02:00:43 vz kernel: [<c019e194>] prune_icache+0xd4/0x1d0
Aug 29 02:00:43 vz kernel: [<c019e2ea>] shrink_icache_memory+0x5a/0x150
Aug 29 02:00:43 vz kernel: [<c01645f6>] shrink_slab+0x156/0x1f0
Aug 29 02:00:43 vz kernel: [<c0165d5a>] balance_pgdat+0x22a/0x360
Aug 29 02:00:43 vz kernel: [<c0165f5a>] kswapd+0xca/0x130
```

Aug 29 02:00:43 vz kernel: [`<c013dd20>`] autoremove_wake_function+0x0/0x60
Aug 29 02:00:43 vz kernel: [`<c013dd20>`] autoremove_wake_function+0x0/0x60
Aug 29 02:00:43 vz kernel: [`<c0165e90>`] kswapd+0x0/0x130
Aug 29 02:00:43 vz kernel: [`<c013d7f6>`] kthread+0xc6/0x110
Aug 29 02:00:43 vz kernel: [`<c013d730>`] kthread+0x0/0x110
Aug 29 02:00:43 vz kernel: [`<c0101301>`] kernel_thread_helper+0x5/0x14
Aug 29 02:00:43 vz kernel: Code: f0 ff 0a 0f 94 c0 84 c0 74 0a 89 14 24 e8 a2 e4 f6 ff 89 f6 c7 43
6c ff ff ff ff 8b 53 70 85 d2 74 29 83 fa ff 74 24 85 d2 74
19 <f0> ff 0a 0f 94 c0 84 c0 90 74 0e 89 14 24 e8 76 e4 f6 ff 8d b6
Aug 29 02:00:43 vz kernel: EIP: [`<c020dd07>`] ext3_clear_inode+0x57/0xc0 SS:ESP
0068:f7e16e14

Subject: Re: Kernel Oops
Posted by [khorenko](#) on Wed, 29 Aug 2007 10:34:17 GMT
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goeldi wrote on Wed, 29 August 2007 14:15: Is this a hardware or a software problem?
Well, it's hard to say before the investigation, but could you please check the memory? In any case this is a good task. Just to be sure.

http://wiki.openvz.org/Hardware_testing

Subject: Re: Kernel Oops
Posted by [dev](#) on Wed, 29 Aug 2007 14:26:04 GMT
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this 99.9% looks like a HW fault, since the code in `ext3_clear_inode` check a pointer for -1 (0xffffffff) and if it is not - does a dereference of it.

In your case - it was 0xffff7fff which is 1 bit less than 0xffffffff. so looks like a 1 bit flip error.

Subject: Re: Kernel Oops
Posted by [goeldi](#) on Wed, 29 Aug 2007 14:29:39 GMT
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you mean HW fault in the RAM or disks?

Subject: Re: Kernel Oops
Posted by [dev](#) on Wed, 29 Aug 2007 14:33:08 GMT

it can be RAM or CPU or a bus (motherboard). most likely RAM.
test it according to the wiki page in another reply.
or live with it if faults don't happen that often.
