

EXT3 causes system crash using dvgrab...

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I have had a problem using ext3 when grabbing digital video over FireWire.

Eventually, the grabbing procedure quits with a "bus error". However, at that point nothing works any more — you can't even execute 'ls' or 'cat', etc. The console scrolls by very rapidly with a bunch of errors:

```
EXT3-fs: error device (ide1(22,6)) : ext3_get_inode_loc
EXT3-fs: error device (ide1(22,6)) : ext3_orphan_add
EXT3-fs: error device (ide1(22,6)) : ext3_write_inode_loc
```

(... something like that, I can't remember right off hand, and since it never appears in any log anywhere to copy it from...)

I've switched back to ext2, but that's not a very satisfying problem. No badblocks have been found, and the filesystems seem fine. There is plenty of memory and gigs of swap. The dvgrab only pulls in 5400 frames (up to a couple-hundred meg per file)...

Anyone have any ideas?

My kernel is pretty much plain-vanilla 2.4.22. dmesg gives me:

```
Linux version 2.4.22-1jdm (root@*****) (gcc version 3.2.2 (Mandrake
Linux 9.1 3.2.2-3mdk)) #4 Sun Sep 14 21:00:28 EDT 2003
```

```
BIOS-provided physical RAM map:
```

```
BIOS-e820: 0000000000000000 - 000000000009fc00 (usable)
BIOS-e820: 000000000009fc00 - 00000000000a0000 (reserved)
BIOS-e820: 00000000000f0000 - 0000000000100000 (reserved)
BIOS-e820: 0000000000100000 - 0000000001fff0000 (usable)
BIOS-e820: 0000000001fff0000 - 0000000001fff3000 (ACPI NVS)
BIOS-e820: 0000000001fff3000 - 0000000020000000 (ACPI data)
BIOS-e820: 00000000ffff0000 - 00000000100000000 (reserved)
```

```
0MB HIGHMEM available.
```

```
511MB LOWMEM available.
```

```
ACPI: have wakeup address 0xc0001000
```

```
On node 0 totalpages: 131056
```

```
zone(0): 4096 pages.
```

```
zone(1): 126960 pages.
```

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```
zone(2): 0 pages.
ACPI: RSDP (v000 761686 ) @ 0x000f5b30
ACPI: RSDT (v001 761686 AWRDACPI 0x42302e31 AWRD 0x00000000) @ 0x1fff3000
ACPI: FADT (v001 761686 AWRDACPI 0x42302e31 AWRD 0x00000000) @ 0x1fff3040
ACPI: DSDT (v001 761686 AWRDACPI 0x00001000 MSFT 0x0100000c) @ 0x00000000
ACPI: MADT not present
Kernel command line: BOOT_IMAGE=LinuxDV2 ro root=1602 quiet devfs=mount
hdb=ide-
scsi
ide_setup: hdb=ide-scsi
Local APIC disabled by BIOS --- reenabling.
Found and enabled local APIC!
Initializing CPU#0
Detected 1396.083 MHz processor.
Console: colour dummy device 80x25
Calibrating delay loop... 2785.28 BogoMIPS
Memory: 514676k/524224k available (1606k kernel code, 9160k reserved, 716k
data,
 148k init, 0k highmem)
Dentry cache hash table entries: 65536 (order: 7, 524288 bytes)
Inode cache hash table entries: 32768 (order: 6, 262144 bytes)
Mount cache hash table entries: 512 (order: 0, 4096 bytes)
Buffer cache hash table entries: 32768 (order: 5, 131072 bytes)
Page-cache hash table entries: 131072 (order: 7, 524288 bytes)
CPU: L1 I Cache: 64K (64 bytes/line), D cache 64K (64 bytes/line)
CPU: L2 Cache: 256K (64 bytes/line)
Intel machine check architecture supported.
Intel machine check reporting enabled on CPU#0.
CPU: After generic, caps: 0183fbff c1c7fbff 00000000 00000000
CPU: Common caps: 0183fbff c1c7fbff 00000000 00000000
CPU: AMD Athlon(tm) Processor stepping 04
Enabling fast FPU save and restore... done.
Checking 'hlt' instruction... OK.
POSIX conformance testing by UNIFIX
enabled ExtINT on CPU#0
ESR value before enabling vector: 00000000
ESR value after enabling vector: 00000000
Using local APIC timer interrupts.
calibrating APIC timer ...
..... CPU clock speed is 1396.0102 MHz.
..... host bus clock speed is 265.9067 MHz.
cpu: 0, clocks: 2659067, slice: 1329533
CPU0<T0:2659056,T1:1329520,D:3,S:1329533,C:2659067>
mtrr: v1.40 (20010327) Richard Gooch (rgooch@atnf.csiro.au)
mtrr: detected mtrr type: Intel
ACPI: Subsystem revision 20030813
PCI: PCI BIOS revision 2.10 entry at 0xfb5a0, last bus=2
PCI: Using configuration type 1
ACPI: Interpreter enabled
ACPI: Using PIC for interrupt routing
ACPI: System [ACPI] (supports S0 S1 S4 S5)
```

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```
ACPI: PCI Root Bridge [PCI0] (00:00)
PCI: Probing PCI hardware (bus 00)
ACPI: PCI Interrupt Routing Table [_SB_.PCI0._PRT]
ACPI: PCI Interrupt Link [LNKA] (IRQs 1 3 4 *5 6 7 10 11 12 14 15)
ACPI: PCI Interrupt Link [LNKB] (IRQs 1 3 4 5 6 7 10 *11 12 14 15)
ACPI: PCI Interrupt Link [LNKC] (IRQs 1 3 4 5 6 7 *10 11 12 14 15)
ACPI: PCI Interrupt Link [LNKD] (IRQs 1 3 4 5 6 7 10 *11 12 14 15)
PCI: Probing PCI hardware
ACPI: PCI Interrupt Link [LNKD] enabled at IRQ 10
ACPI: PCI Interrupt Link [LNKB] enabled at IRQ 5
ACPI: PCI Interrupt Link [LNKC] enabled at IRQ 10
ACPI: PCI Interrupt Link [LNKA] enabled at IRQ 5
PCI: Using ACPI for IRQ routing
PCI: if you experience problems, try using option 'pci=noacpi' or even
'acpi=off
'

PCI: Disabling Via external APIC routing
PCI: Via IRQ fixup for 00:07.2, from 11 to 10
PCI: Via IRQ fixup for 00:07.3, from 11 to 10
isapnp: Scanning for PnP cards...
isapnp: No Plug & Play device found
Linux NET4.0 for Linux 2.4
Based upon Swansea University Computer Society NET3.039
Initializing RT netlink socket
apm: BIOS version 1.2 Flags 0x07 (Driver version 1.16)
apm: overridden by ACPI.
Starting kswapd
VFS: Disk quotas v"6.5.1
devfs: v1.12c (20020818) Richard Gooch (rgooch@atnf.csiro.au)
devfs: boot_options: 0x1
vesafb: framebuffer at 0xd0000000, mapped to 0xe0806000, size 1875k
vesafb: mode is 800x600x16, linelength=1600, pages=3
vesafb: protected mode interface info at c000:0f03
vesafb: scrolling: redraw
vesafb: directcolor: size=0:5:6:5, shift=0:11:5:0
Console: switching to colour frame buffer device 100x37
fb0: VESA VGA frame buffer device
pty: 256 Unix98 ptys configured
Serial driver version 5.05c (2001-07-08) with HUB-6 MANY_PORTS MULTIPORT
SHARE_I
RQ SERIAL_PCI ISAPNP enabled
ttyS00 at 0x03f8 (irq = 4) is a 16550A
ttyS01 at 0x02f8 (irq = 3) is a 16550A
RAMDISK driver initialized: 16 RAM disks of 32000K size 1024 blocksize
Uniform Multi-Platform E-IDE driver Revision: 7.00beta4-2.4
ide: Assuming 33MHz system bus speed for PIO modes; override with idebus=xx
VP_IDE: IDE controller at PCI slot 00:07.1
VP_IDE: chipset revision 6
VP_IDE: not 100% native mode: will probe irqs later
VP_IDE: VIA vt82c686b (rev 40) IDE UDMA100 controller on pci00:07.1
ide0: BM-DMA at 0xd000-0xd007, BIOS settings: hda:DMA, hdb:DMA
```

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```
ide1: BM-DMA at 0xd008-0xd00f, BIOS settings: hdc:DMA, hdd:pio
hda: ST340824A, ATA DISK drive
hdb: _NEC CD-RW NR-7800A, ATAPI CD/DVD-ROM drive
blk: queue c039a180, I/O limit 4095Mb (mask 0xffffffff)
hdc: Maxtor 6Y120L0, ATA DISK drive
hdd: CONNER CTT8000-A, ATAPI TAPE drive
blk: queue c039a5d4, I/O limit 4095Mb (mask 0xffffffff)
ide0 at 0x1f0-0x1f7,0x3f6 on irq 14
ide1 at 0x170-0x177,0x376 on irq 15
hda: attached ide-disk driver.
hda: 78165360 sectors (40021 MB) w/2048KiB Cache, CHS=4865/255/63, UDMA(100)
hdc: attached ide-disk driver.
hdc: host protected area => 1
hdc: 240121728 sectors (122942 MB) w/2048KiB Cache, CHS=238216/16/63,
UDMA(100)
Partition check:
hdb: DMA disabled
ide0: reset: success
p1 p2 p3 < p5 >
/dev/ide/host0/bus1/target0/lun0: p1 p2 p3 p4 < p5 p6 p7 >
ide: late registration of driver.
ohci1394: $Rev$ Ben Collins <bcollins@debian.org>
ohci1394_0: OHCI-1394 1.0 (PCI): IRQ=[5] MMIO=[da003000-da0037ff] Max
Packet=[2048]
video1394: Installed video1394 module
raw1394: /dev/raw1394 device initialized
eth1394: $Rev$ Ben Collins <bcollins@debian.org>
eth1394: eth0: IEEE-1394 IPv4 over 1394 Ethernet (ohci1394)
ieee1394: Loaded AMDTP driver
ieee1394: Loaded CMP driver
md: md driver 0.90.0 MAX_MD_DEVS=256, MD_SB_DISKS=27
md: Autodetecting RAID arrays.
md: autorun ...
md: ... autorun DONE.
Initializing Cryptographic API
NET4: Linux TCP/IP 1.0 for NET4.0
IP Protocols: ICMP, UDP, TCP, IGMP
IP: routing cache hash table of 4096 buckets, 32Kbytes
TCP: Hash tables configured (established 32768 bind 65536)
Linux IP multicast router 0.06 plus PIM-SM
NET4: Unix domain sockets 1.0/SMP for Linux NET4.0.
RAMDISK: Compressed image found at block 0
Freeing initrd memory: 217k freed
VFS: Mounted root (ext2 filesystem).
Mounted devfs on /dev
SCSI subsystem driver Revision: 1.00
Journalled Block Device driver loaded
EXT3-fs: INFO: recovery required on readonly filesystem.
EXT3-fs: write access will be enabled during recovery.
ieee1394: Host added: ID:BUS[0-00:1023] GUID[000108003701714a]
kjournald starting. Commit interval 5 seconds
```

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```
EXT3-fs: recovery complete.
EXT3-fs: mounted filesystem with ordered data mode.
Mounted devfs on /dev
Freeing unused kernel memory: 148k freed
Real Time Clock Driver v1.10e
usb.c: registered new driver usbdevfs
usb.c: registered new driver hub
usb-uhci.c: $Revision: 1.275 $ time 21:25:14 Sep 14 2003
usb-uhci.c: High bandwidth mode enabled
usb-uhci.c: USB UHCI at I/O 0xd400, IRQ 10
usb-uhci.c: Detected 2 ports
usb.c: new USB bus registered, assigned bus number 1
hub.c: USB hub found
hub.c: 2 ports detected
usb-uhci.c: USB UHCI at I/O 0xd800, IRQ 10
usb-uhci.c: Detected 2 ports
usb.c: new USB bus registered, assigned bus number 2
hub.c: USB hub found
hub.c: 2 ports detected
usb-uhci.c: v1.275:USB Universal Host Controller Interface driver
usbdevfs: remount parameter error
hub.c: new USB device 00:07.2-1, assigned address 2
hub.c: USB hub found
hub.c: 3 ports detected
EXT3 FS 2.4-0.9.19, 19 August 2002 on ide1(22,2), internal journal
Adding Swap: 522104k swap-space (priority -1)
Adding Swap: 767584k swap-space (priority -2)
hdd: attached ide-scsi driver.
hdb: attached ide-scsi driver.
scsi0 : SCSI host adapter emulation for IDE ATAPI devices
  Vendor: CONNER Model: CTT8000-A Rev: 2.08
  Type: Sequential-Access ANSI SCSI revision: 02
  Vendor: _NEC Model: NR-7800A Rev: 1.07
  Type: CD-ROM ANSI SCSI revision: 02
st: Version 20030406, bufsize 32768, max init. bufs 4, s/g segs 16
Attached scsi tape st0 at scsi0, channel 0, id 0, lun 0
Attached scsi CD-ROM sr0 at scsi0, channel 0, id 1, lun 0
sr0: scsi3-mmc drive: 20x/20x writer cd/rw xa/form2 cdda tray
Uniform CD-ROM driver Revision: 3.12
MSDOS FS: IO charset utf8
8139too Fast Ethernet driver 0.9.26
eth1: D-Link DFE-538TX (RealTek RTL8139) at 0xe0b30000, 00:50:ba:5a:46:c2,
IRQ 10
eth1: Identified 8139 chip type 'RTL-8139C'
inserting floppy driver for 2.4.22-1jdm
Floppy drive(s): fd0 is 1.44M
FDC 0 is a post-1991 82077
eth1: Setting 100mbps full-duplex based on auto-negotiated partner ability
45e1.
Installing knfsd (copyright (C) 1996 okir@monad.swb.de).
es1371: version v0.32 time 21:23:39 Sep 14 2003
```

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```
es1371: found chip, vendor id 0x1274 device id 0x5880 revision 0x02
es1371: found es1371 rev 2 at io 0xe800 irq 5
es1371: features: joystick 0x0
ac97_codec: AC97 Audio codec, id: 0x8384:0x7609 (SigmaTel STAC9721/23)
0: nvidia: loading NVIDIA Linux x86 nvidia.o Kernel Module 1.0-4496 Wed
Jul 16
 19:03:09 PDT 2003
Linux agpgart interface v0.99 (c) Jeff Hartmann
agpgart: Maximum main memory to use for agp memory: 439M
agpgart: Detected AMD 761 chipset
agpgart: AGP aperture is 256M @ 0xc0000000
parport0: PC-style at 0x378 [PCSPP,TRISTATE,EPP]
parport0: Printer, Hewlett-Packard HP LaserJet 5L
parport_pc: Via 686A parallel port: io=0x378
lp0: using parport0 (polling).
```