

## DragonFlyBSD - Bug #3055

### HAMMER2 crash + LK\_RELEASE fail

09/14/2017 12:36 PM - arcade@b1t.name

<b>Status:</b>	In Progress	<b>Start date:</b>	09/14/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	dillon	<b>% Done:</b>	0%
<b>Category:</b>	VFS subsystem	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
This happens when 'cleanup' was too long ago.			
kern_rename actually happened hours before before the actual crash.			

#### History

##### #1 - 09/14/2017 12:37 PM - arcade@b1t.name

PS: This is without latest kern\_mutex.c changes.

##### #2 - 09/14/2017 01:36 PM - dillon

- Status changed from New to In Progress

- Assignee set to dillon

Was the filesystem full at the time this ran? There is an error path that is not being checked properly in hammer2\_chain\_indirect\_maintenance() for the situation where the filesystem has become full. I will commit error processing for that part of the code right now. If it still panics (verses just thowing an error on the kernel console), I'll need a backtrace from kgdb.

-Matt

##### #3 - 09/14/2017 02:41 PM - arcade@b1t.name

Filesystem was close to 90% full with 20% being "jettissonable". I'm not sure about this one actually as FS was created more then a few weeks ago and can contain some older discrepancies. I can recreate FS from scratch and retest if that would be required.

Anyway double "hammer cleanup" makes FS stable again. Without cleanup host can't even boot due to problems writing data:

```
strategy_xop_write: error 32 loff=0000000057480000
strategy_xop_write: error 32 loff=00000000583f0000
strategy_xop_write: error 32 loff=000000005a680000
strategy_xop_write: error 32 loff=0000000063f50000
strategy_xop_write: error 32 loff=00000000677c0000
strategy_xop_write: error 32 loff=000000006aa90000
strategy_xop_write: error 32 loff=0000000073020000
strategy_xop_write: error 32 loff=0000000076cf0000
strategy_xop_write: error 32 loff=000000007f660000
strategy_xop_write: error 32 loff=0000000084430000
strategy_xop_write: error 32 loff=0000000087450000
strategy_xop_write: error 32 loff=0000000088e00000
strategy_xop_write: error 32 loff=0000000093ac0000
strategy_xop_write: error 32 loff=0000000093b90000
```

Or just crashes again.

##### #4 - 09/18/2017 09:07 AM - arcade@b1t.name

- File core.txt.34 added

Happened again. Alas, my kernel was built without DEBUG so kgdb output is pretty useless. Will try replicating one more time.

##### #5 - 09/23/2017 02:52 PM - arcade@b1t.name

- File core.txt.38 added

Happened again. Pool was 93% full (9G free).

**#6 - 10/12/2017 01:12 AM - arcade@b1t.name**

- File core.txt.40 added

- File core.txt.39 added

A few more crashes. 7G free space reached...

**#7 - 10/14/2017 03:12 PM - dillon**

I think I see what is going on. I did not completely instrument error handling for some of these failure cases (when the media becomes full). Several calls to hammer2\_chain\_delete() are not processing the returned error code and that may be leading to these assertions.

I am working on instrumenting these and will commit an update this afternoon to master and release.

-Matt

**#8 - 10/17/2017 01:21 PM - arcade@b1t.name**

- File core.txt.44 added

Another crash...

**#9 - 10/28/2017 04:15 PM - arcade@b1t.name**

This situation was triggered a few times more, but there was no crash. Host was getting slow but was slowly gettin through.

**#10 - 11/01/2017 02:14 PM - arcade@b1t.name**

- File core.txt.46 added

I knew I can did it.

**#11 - 11/01/2017 08:22 PM - arcade@b1t.name**

- File core.txt.47 added

And here's something new:

panic: assertion "chain->bref.key == base[i].key" failed in hammer2\_combined\_find at /usr/src/sys/vfs/hammer2/hammer2\_chain.c:4968

**#12 - 11/28/2017 12:13 AM - arcade@b1t.name**

- File core.txt.51 added

- File core.txt.52 added

Fresh cores arrived.

**#13 - 06/18/2019 07:38 AM - liweitianux**

Hello. Is this issue resolved with the latest master/release? The HAMMER2 has gained significant improvements. Thank you.

**Files**

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core.txt.33	178 KB	09/14/2017	arcade@b1t.name
core.txt.34	179 KB	09/18/2017	arcade@b1t.name
core.txt.38	206 KB	09/23/2017	arcade@b1t.name
core.txt.39	282 KB	10/12/2017	arcade@b1t.name
core.txt.40	185 KB	10/12/2017	arcade@b1t.name
core.txt.44	213 KB	10/17/2017	arcade@b1t.name
core.txt.46	282 KB	11/01/2017	arcade@b1t.name
core.txt.47	215 KB	11/02/2017	arcade@b1t.name
core.txt.51	280 KB	11/28/2017	arcade@b1t.name
core.txt.52	295 KB	11/28/2017	arcade@b1t.name