
Subject: [Q] missing unused dentry in prune_dcache()?

Posted by [vaverin](#) on Wed, 25 Oct 2006 12:30:51 GMT

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Hello folks,

I would like to ask you clarify me one question in the the following patch:

<http://linux.bkbits.net:8080/linux-2.6/gnupatch@449b144ecSF1 rYskg3q-SeR2vf88zg>

ChangeSet

2006/06/22 15:05:57-07:00 neilb@suse.de

[PATCH] Fix dcache race during umount

If prune_dcache finds a dentry that it cannot free, it leaves it where it
is (at the tail of the list) and exits, on the assumption that some other
thread will be removing that dentry soon.

However as far as I see this comment is not correct: when we cannot take
s_umount rw_semaphore (for example because it was taken in do_remount) this
dentry is already extracted from dentry_unused list and we do not add it into
the list again. Therefore dentry will not be found by prune_dcache() and
shrink_dcache_sb() and will leave in memory very long time until the partition
will be unmounted.

Am I probably err?

The patch adds this dentry into tail of the dentry_unused list.

Signed-off-by: Vasily Averin <vv@sw.ru>

--- linux-2.6.19-rc3/fs/dcache.c.prdch 2006-10-25 16:09:19.000000000 +0400

+++ linux-2.6.19-rc3/fs/dcache.c 2006-10-25 16:08:20.000000000 +0400

@@ -477,6 +477,8 @@ static void prune_dcache(int count, stru

}
 up_read(s_umount);
}

+ list_add_tail(&dentry->d_lru, &dentry_unused);

+ dentry_stat.nr_unused++;

spin_unlock(&dentry->d_lock);

/* Cannot remove the first dentry, and it isn't appropriate
* to move it to the head of the list, so give up, and try