
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 <vvs@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
```