
Subject: [PATCH 10/25] sysfs: Rewrite sysfs_get_dentry in terms of
__sysfs_get_dentry

Posted by [ebiederm](#) on Tue, 07 Aug 2007 21:18:27 GMT

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This removes the last major user of s_dentry and makes
the locking in sysfs_get_dentry much simpler. Hopefully
leading to more readable and maintainable code.

Signed-off-by: Eric W. Biederman <ebiederm@xmission.com>

fs/sysfs/dir.c | 23 ++++++-----

1 files changed, 6 insertions(+), 17 deletions(-)

diff --git a/fs/sysfs/dir.c b/fs/sysfs/dir.c

index 59a9ce8..adb1b01 100644

--- a/fs/sysfs/dir.c

+++ b/fs/sysfs/dir.c

@@ -809,19 +809,15 @@ struct dentry *sysfs_get_dentry(struct sysfs_dirent *sd)
 struct dentry *parent_dentry, *dentry;
 int i, depth;

- /* Find the first parent which has valid s_dentry and get the

- * dentry.

+ /* Find the first parent which has valid dentry.

*/

mutex_lock(&sysfs_mutex);

- restart0:

- spin_lock(&sysfs_assoc_lock);

- restart1:

- spin_lock(&dcache_lock);

+ restart:

dentry = NULL;

depth = 0;

cur = sd;

- while (!cur->s_dentry || !cur->s_dentry->d_inode) {

+ while (!(dentry = __sysfs_get_dentry(sysfs_sb, cur))) {

if (cur->s_flags & SYSFS_FLAG_REMOVED) {

dentry = ERR_PTR(-ENOENT);

depth = 0;

@@ -830,11 +826,6 @@ struct dentry *sysfs_get_dentry(struct sysfs_dirent *sd)

cur = cur->s_parent;

depth++;

}

- if (!IS_ERR(dentry))

- dentry = dget_locked(cur->s_dentry);

-

```

- spin_unlock(&dcache_lock);
- spin_unlock(&sysfs_assoc_lock);

/* from the found dentry, look up depth times */
while (depth--) {
@@ -847,7 +838,7 @@ struct dentry *sysfs_get_dentry(struct sysfs_dirent *sd)
    */
    if (i != depth) {
        dput(dentry);
- goto restart0;
+ goto restart;
    }

    sysfs_get(cur);
@@ -866,18 +857,16 @@ struct dentry *sysfs_get_dentry(struct sysfs_dirent *sd)
    }

    mutex_lock(&sysfs_mutex);
- spin_lock(&sysfs_assoc_lock);

/* This, again, can happen if tree structure has
 * changed and we looked up the wrong thing. Restart.
 */
- if (cur->s_dentry != dentry) {
+ if (dentry->d_fsdata != cur) {
    dput(dentry);
    sysfs_put(cur);
- goto restart1;
+ goto restart;
    }

- spin_unlock(&sysfs_assoc_lock);

    sysfs_put(cur);
}
--
1.5.1.1.181.g2de0

```

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<https://lists.linux-foundation.org/mailman/listinfo/containers>
