
Subject: [PATCH 09/14] sysfs: Move all of sysfs_move_dir under sysfs_mutex
Posted by [ebiederm](#) on Tue, 31 Jul 2007 10:33:36 GMT

[View Forum Message](#) <> [Reply to Message](#)

This patch modifies sysfs_move_dir to perform all of it's operations under the sysfs_mutex. By looking for conflicts using sysfs_find_dirent we accidentally moving something onto a name that already exists but just not in the dcache right now.

Two s_dentry usages are killed.

And it has probably become unnecessary to grab i_mutex at all but I'm not brave enough to do that just yet.

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

```
---
fs/sysfs/dir.c | 24 ++++++++-----
1 files changed, 13 insertions(+), 11 deletions(-)

diff --git a/fs/sysfs/dir.c b/fs/sysfs/dir.c
index 8e614d3..ed2e6f3 100644
--- a/fs/sysfs/dir.c
+++ b/fs/sysfs/dir.c
@@ -897,7 +897,7 @@ int sysfs_move_dir(struct kobject *kobj, struct kobject *new_parent_kobj)
     error = PTR_ERR(old_dentry);
     goto out_dput;
 }
- old_parent = sd->s_parent->s_dentry;
+ old_parent = old_dentry->d_parent;

     new_parent = sysfs_get_dentry(new_parent_sd);
     if (IS_ERR(new_parent)) {
@@ -915,29 +915,31 @@ again:
     mutex_unlock(&old_parent->d_inode->i_mutex);
     goto again;
 }
+ mutex_lock(&sysfs_mutex);

- new_dentry = lookup_one_len(kobj->name, new_parent, strlen(kobj->name));
- if (IS_ERR(new_dentry)) {
-     error = PTR_ERR(new_dentry);
+ error = -EEXIST;
+ if (sysfs_find_dirent(new_parent_sd, kobj->name))
+     goto out_unlock;
- } else
-     error = 0;
+
+

```

```

+ error = -ENOMEM;
+ new_dentry = d_alloc_name(new_parent, kobj->name);
+ if (!new_dentry)
+ goto out_unlock;
+
+ error = 0;
+ d_add(new_dentry, NULL);
- d_move(sd->s_dentry, new_dentry);
+ d_move(old_dentry, new_dentry);
+ dput(new_dentry);

/* Remove from old parent's list and insert into new parent's list. */
- mutex_lock(&sysfs_mutex);
-
+ sysfs_unlink_sibling(sd);
+ sysfs_get(new_parent_sd);
+ sysfs_put(sd->s_parent);
+ sd->s_parent = new_parent_sd;
+ sysfs_link_sibling(sd);

- mutex_unlock(&sysfs_mutex);
-
+ out_unlock:
+ mutex_unlock(&sysfs_mutex);
+ mutex_unlock(&new_parent->d_inode->i_mutex);
+ mutex_unlock(&old_parent->d_inode->i_mutex);
+ out_dput:
--
1.5.1.1.181.g2de0

```

Containers mailing list
Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>
