

## [PATCH 02/27] allow hard links to directories, opt-in for any filesystem

---

*Source:* <http://linux.derkeiler.com/Mailing-Lists/Kernel/2006-02/msg09856.html>

---

- *From:* "Joshua Hudson" <[joshudson@xxxxxxxxx](mailto:joshudson@xxxxxxxxx)>
  - *Date:* Mon, 27 Feb 2006 22:04:01 -0800
- 

Patch seems to work, might want more testing.

It probably should not be applied without a discussion, especially as no filesystem in kernel tree wants this. I am working on a fs that does.

```
---
--- include/linux/fs.orig.h 2006-02-27 21:45:26.000000000 -0800
+++ include/linux/fs.h 2006-02-27 21:48:17.000000000 -0800
@@ -83,6 +83,8 @@
/* public flags for file_system_type */
#define FS_REQUIRES_DEV 1
#define FS_BINARY_MOUNTDATA 2
+#define FS_ALLOW_HLINK_DIR 4 /* FS will accept hard links to directories */
+#define FS_ALLOW_USER_HLINK_DIR 8 /* And it makes sense for regular users */
#define FS_REVAL_DOT 16384 /* Check the paths ".", ".." for staleness */
#define FS_ODD_RENAME 32768 /* Temporary stuff; will go away as soon
* as nfs_rename() will be cleaned up
--- fs/namei.c.orig 2006-02-27 21:55:26.000000000 -0800
+++ fs/namei.c 2006-02-27 22:08:27.000000000 -0800
@@ -2107,7 +2107,14 @@
if (!dir->i_op || !dir->i_op->link)
return -EPERM;
if (S_ISDIR(old_dentry->d_inode->i_mode))
- return -EPERM;
+ {
+ if (!(old_dentry->d_sb->s_type->fs_flags & FS_ALLOW_HLINK_DIR))
+ return -EPERM;
+ if (!(old_dentry->d_sb->s_type->fs_flags
+ & FS_ALLOW_USER_HLINK_DIR)
+ && !capable(CAP_SYS_ADMIN))
+ return -EPERM;
+ }

error = security_inode_link(old_dentry, dir, new_dentry);
if (error)
-
```

To unsubscribe from this list: send the line "unsubscribe linux-kernel" in the body of a message to [majordomo@xxxxxxxxxxxxxxxxx](mailto:majordomo@xxxxxxxxxxxxxxxxx)

More majordomo info at <http://vger.kernel.org/majordomo-info.html>

[PATCH 02/27] allow hard links to directories, opt-in for any filesystem

Please read the FAQ at <http://www.tux.org/lkml/>