
Subject: [PATCH v2] Allow access to /proc/\$PID/fd after setuid()

Posted by [adobriyan](#) on Fri, 02 Feb 2007 11:13:44 GMT

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crap, Pavel reminded that get_proc_task() can return NULL.

/proc/\$PID/fd has r-x----- permissions, so if process does setuid(), it will not be able to access /proc/*/fd/. This breaks fstatat() emulation in glibc.

```
open("foo", O_RDONLY|O_DIRECTORY)    = 4
setuid32(65534)                      = 0
stat64("/proc/self/fd/4/bar", 0xbfab298) = -1 EACCES (Permission denied)
```

Comment from Andrew Morton.

Signed-off-by: Alexey Dobriyan <adobriyan@openvz.org>

fs/proc/base.c | 23 ++++++++++++++++++++++
1 file changed, 23 insertions(+)

```
--- a/fs/proc/base.c
+++ b/fs/proc/base.c
@@ -1414,10 +1414,33 @@ static struct file_operations proc_fd_op
};

/*
+ * /proc/pid/fd needs a special permission handler so that a process can still
+ * access /proc/self/fd after it has executed a setuid().
+ */
+static int proc_fd_permission(struct inode *inode, int mask,
+ struct nameidata *nd)
+{
+ struct task_struct *tsk;
+ int rv;
+
+ rv = generic_permission(inode, mask, NULL);
+ if (rv == 0)
+ return 0;
+ tsk = get_proc_task(inode);
+ if (tsk) {
+ if (tsk == current)
+ rv = 0;
+ put_task_struct(tsk);
+ }
+ return rv;
+}
```

```
+
+/*
+ * proc directories can do almost nothing..
+ */
static struct inode_operations proc_fd_inode_operations = {
    .lookup = proc_lookupfd,
+ .permission = proc_fd_permission,
    .setattr = proc_setattr,
};
```
