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Subject: [PATCH v3] Allow access to /proc/\$PID/fd after setuid()

Posted by [adobriyan](#) on Fri, 09 Feb 2007 15:02:57 GMT

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/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)
```

Comments and suggestions from Andrew Morton and Oleg Nesterov.

Signed-off-by: Alexey Dobriyan <[adobriyan@openvz.org](mailto:adobriyan@openvz.org)>

---

fs/proc/base.c | 18 ++++++  
1 file changed, 18 insertions(+)

--- a/fs/proc/base.c

+++ b/fs/proc/base.c

```
@ @ -1414,10 +1414,28 @ @ 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)
```

```
+{
```

```
+ int rv;
```

```
+
```

```
+ rv = generic_permission(inode, mask, NULL);
```

```
+ if (rv == 0)
```

```
+ return 0;
```

```
+ if (task_pid(current) == proc_pid(inode))
```

```
+ rv = 0;
```

```
+ 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,  
};
```

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