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Subject: Re: [PATCH 1/9] namespaces: add nsproxy  
Posted by [serue](#) on Mon, 22 May 2006 12:39:19 GMT  
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Quoting Eric W. Biederman (ebiederm@xmission.com):

> Sam Vilain <sam@vilain.net> writes:

>

> > Serge E. Hallyn wrote:

> >

> >> @@ -1585,7 +1591,15 @@ asmlinkage long sys\_unshare(unsigned lon

> >>

> >> if (new\_fs || new\_ns || new\_sigh || new\_mm || new\_fd || new\_ulist) {

> >>

> >>+ old\_nsproxy = current->nsproxy;

> >>+ new\_nsproxy = dup\_namespaces(old\_nsproxy);

> >>+ if (!new\_nsproxy) {

> >>+ err = -ENOMEM;

> >>+ goto bad\_unshare\_cleanup\_semundo;

> >>+ }

> >>+

> >> task\_lock(current);

> >>

> >>

> >

> > We'll get lots of duplicate nsproxy structures before we move all of the

> > pointers for those subsystems into it. Do we need to dup namespaces on

> > all of those conditions?

>

> Ugh. Good catch. The new nsproxy needs to be just for the fs and the uts  
> namespace.

>

> I guess that means that test should be moved up a few lines.

Oh. Yeah. It didn't look odd to me bc it's about the number of  
namespaces we are \*going\* to have :)

Fix follows:

Subject: [PATCH] uts: copy nsproxy only when needed.

From: Serge Hallyn <serue@us.ibm.com>

The nsproxy was being copied in unshare() when anything was being  
unshared, even if it was something not referenced from nsproxy.  
This should end up in some cases with far more memory usage than  
necessary.

Signed-off-by: Serge Hallyn <serue@us.ibm.com>

---

kernel/fork.c | 20 ++++++-----  
1 files changed, 14 insertions(+), 6 deletions(-)

74d1068458c62302ac8ed38e38a57b692580662f

diff --git a/kernel/fork.c b/kernel/fork.c

index cdc549e..9278a68 100644

--- a/kernel/fork.c

+++ b/kernel/fork.c

```
@@ -1559,7 +1559,7 @@ asmlinkage long sys_unshare(unsigned lon
    struct mm_struct *mm, *new_mm = NULL, *active_mm = NULL;
    struct files_struct *fd, *new_fd = NULL;
    struct sem_undo_list *new_ulist = NULL;
- struct nsproxy *new_nsproxy, *old_nsproxy;
+ struct nsproxy *new_nsproxy = NULL, *old_nsproxy = NULL;
    struct uts_namespace *uts, *new_uts = NULL;
```

```
    check_unshare_flags(&unshare_flags);
```

```
@@ -1587,18 +1587,24 @@ asmlinkage long sys_unshare(unsigned lon
    if ((err = unshare_utsname(unshare_flags, &new_uts)))
        goto bad_unshare_cleanup_semundo;
```

```
- if (new_fs || new_ns || new_sigh || new_mm || new_fd || new_ulist ||
-     new_uts) {
- 
```

```
+ if (new_ns || new_uts) {
    old_nsproxy = current->nsproxy;
    new_nsproxy = dup_namespaces(old_nsproxy);
    if (!new_nsproxy) {
        err = -ENOMEM;
        goto bad_unshare_cleanup_uts;
    }
+ }
```

```
+
+ if (new_fs || new_ns || new_sigh || new_mm || new_fd || new_ulist ||
+     new_uts) {
```

```
    task_lock(current);
```

```
- current->nsproxy = new_nsproxy;
```

```
+
+ if (new_nsproxy) {
+     current->nsproxy = new_nsproxy;
+     new_nsproxy = old_nsproxy;
+ }
```

```
    if (new_fs) {
        fs = current->fs;
```

```
@@ -1640,9 +1646,11 @@ asmlinkage long sys_unshare(unsigned lon
}

task_unlock(current);
- put_nsproxy(old_nsproxy);
}

+ if (new_nsproxy)
+ put_nsproxy(new_nsproxy);
+
bad_unshare_cleanup_uts:
if (new_uts)
put_uts_ns(new_uts);
--
1.1.6
```

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