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Subject: Re: [PATCH 5/5] [V2] Move alloc\_pid() to copy\_process()  
Posted by [Pavel Emelianov](#) on Thu, 19 Jul 2007 07:44:47 GMT  
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sukadev@us.ibm.com wrote:

>  
> Subject: [PATCH 5/5] Move alloc\_pid call to copy\_process  
>  
> From: Sukadev Bhattiprolu <sukadev@us.ibm.com>  
>  
> Move alloc\_pid() into copy\_process(). This will keep all pid and pid  
> namespace code together and simplify error handling when we support  
> multiple pid namespaces.

I would add smth like this to the comment:

When a task creates a new pid namespace, its init (i.e. this task's child) will have pids with extra info inside - the new numerical id, that represent this new task in this new namespace. Thus, we have to allocate this new pid only after the namespace creation to find out which namespace this pid will live in.

Hope, I expressed my idea cleanly.

Acked-by: Pavel Emelyanov <xemul@openvz.org>

> Signed-off-by: Sukadev Bhattiprolu <sukadev@us.ibm.com>

>  
> Cc: Pavel Emelianov <xemul@openvz.org>  
> Cc: Eric W. Biederman <ebiederm@xmission.com>  
> Cc: Cedric Le Goater <clg@fr.ibm.com>  
> Cc: Dave Hansen <haveblue@us.ibm.com>  
> Cc: Serge Hallyn <serue@us.ibm.com>  
> Cc: Herbert Poetzel <herbert@13thfloor.at>

> ---

> kernel/fork.c | 19 ++++++++-----  
> 1 file changed, 13 insertions(+), 6 deletions(-)

>

> Index: lx26-22-rc6-mm1a/kernel/fork.c

> =====

> --- lx26-22-rc6-mm1a.orig/kernel/fork.c 2007-07-16 12:55:13.000000000 -0700

> +++ lx26-22-rc6-mm1a/kernel/fork.c 2007-07-17 10:08:12.000000000 -0700

> @@ -1029,6 +1029,12 @@ static struct task\_struct \*copy\_process(  
> if (p->binfmt && !try\_module\_get(p->binfmt->module))

> goto bad\_fork\_cleanup\_put\_domain;  
>

> + if (pid != &init\_struct\_pid) {  
> + pid = alloc\_pid();

```

> + if (!pid)
> + goto bad_fork_put_binfmt_module;
> + }
> +
> p->did_exec = 0;
> delayacct_tsk_init(p); /* Must remain after dup_task_struct() */
> copy_flags(clone_flags, p);
> @@ -1316,6 +1322,9 @@ bad_fork_cleanup_container:
> #endif
> container_exit(p, container_callbacks_done);
> delayacct_tsk_free(p);
> + if (pid != &init_struct_pid)
> + free_pid(pid);
> +bad_fork_put_binfmt_module:
> if (p->binfmt)
> module_put(p->binfmt->module);
> bad_fork_cleanup_put_domain:
> @@ -1380,19 +1389,16 @@ long do_fork(unsigned long clone_flags,
> {
> struct task_struct *p;
> int trace = 0;
> - struct pid *pid = alloc_pid();
> long nr;
>
> - if (!pid)
> - return -EAGAIN;
> - nr = pid->nr;
> if (unlikely(current->ptrace)) {
> trace = fork_traceflag (clone_flags);
> if (trace)
> clone_flags |= CLONE_PTRACE;
> }
>
> - p = copy_process(clone_flags, stack_start, regs, stack_size, parent_tidptr, child_tidptr, pid);
> + p = copy_process(clone_flags, stack_start, regs, stack_size,
> + parent_tidptr, child_tidptr, NULL);
> /*
> * Do this prior waking up the new thread - the thread pointer
> * might get invalid after that point, if the thread exits quickly.
> @@ -1400,6 +1406,8 @@ long do_fork(unsigned long clone_flags,
> if (!IS_ERR(p)) {
> struct completion vfork;
>
> + nr = pid_nr(task_pid(p));
> +
> if (clone_flags & CLONE_VFORK) {
> p->vfork_done = &vfork;
> init_completion(&vfork);

```

```
> @@ -1433,7 +1441,6 @@ long do_fork(unsigned long clone_flags,  
> }  
> }  
> } else {  
> - free_pid(pid);  
> nr = PTR_ERR(p);  
> }  
> return nr;  
>
```

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

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