
Subject: Re: [PATCH] vt: Rework the console spawning variables.

Posted by [Oleg Nesterov](#) on Sun, 10 Sep 2006 14:29:42 GMT

[View Forum Message](#) <> [Reply to Message](#)

On 09/09, Eric W. Biederman wrote:

>

> This patch does several things.

> - The variables used are moved into a structure and declared in vt_kern.h

> - A spinlock is added so we don't have SMP races updating the values.

> - Instead of raw pid_t value a struct_pid is used to guard against

> pid wrap around issues, if the daemon to spawn a new console dies.

I am not arguing against this patch, but it's a pity we can't use 'struct pid' lockless. What do you think about this:

```
void delayed_free_pid(struct rcu_head *rhp)
{
    struct pid *pid = container_of(rhp, struct pid, rcu);
    kmem_cache_free(pid_cache, pid);
}
```

```
void put_pid_rcu(struct pid *pid)
{
    if (atomic_dec_and_test(&pid->count))
        // this can happen only if delayed_put_pid()
        // was already fired, we can re-use pid->rcu
        call_rcu(&pid->rcu, delayed_free_pid);
}
```

Now,

```
update_pid()
{
    // still needs some locking
    put_pid_rcu(pid);
    pid = get_pid(...);
}
```

```
use_pid()
{
    rcu_read_lock();
    do_something(pid);
    rcu_read_unlock();
}
```

Thoughts?

Oleg.

Containers mailing list
Containers@lists.osdl.org
<https://lists.osdl.org/mailman/listinfo/containers>
