
Subject: Re: [PATCH 19/20] Changes to show virtual ids to user
Posted by [Andrew Morton](#) on Tue, 14 Aug 2007 20:12:02 GMT
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On Fri, 10 Aug 2007 15:48:28 +0400
xemul@openvz.org wrote:

> This is the largest patch in the set. Make all (I hope) the places where
> the pid is shown to or get from user operate on the virtual pids.
>
> The idea is:
> - all in-kernel data structures must store either struct pid itself
> or the pid's global nr, obtained with pid_nr() call;
> - when seeking the task from kernel code with the stored id one
> should use find_task_by_pid() call that works with global pids;
> - when showing pid's numerical value to the user the virtual one
> should be used, but however when one shows task's pid outside this
> task's namespace the global one is to be used;
> - when getting the pid from userspace one need to consider this as
> the virtual one and use appropriate task/pid-searching functions.
>
> ...
>
> - si.si_pid = current->pid;
> + si.si_pid = task_pid_vnr(current);

This is going to be an ongoing maintenance problem: people will sneak new references to current->pid into the tree and nobody will notice.

It'd be best to rename task_struct.pid to something else to catch such problems and to force people to use the right accessors. Is that feasible?

Generally this is a tactic which should be used whenever things like this are virtualised.
