
Subject: Re: Pid namespaces approaches testing results
Posted by [Pavel Emelianov](#) on Wed, 30 May 2007 08:13:25 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dave Hansen wrote:

> On Tue, 2007-05-29 at 15:45 +0400, Pavel Emelianov wrote:

>> The detailed results are the following:

>> Test name: spawn execl shell ps (sys time)

>> 1(no ns) : 579.1 618.3 1623.2 3.052s

>> 2(suka's): 570.7 610.8 1600.2 3.107s

>> Slowdown : 1.5% 1.3% 1.4% 1.8%

>>

>> 3(no ns) : 580.6 616.0 1633.8 3.050s

>> 4(flat) : 580.8 615.1 1632.2 3.054s

>> Slowdown : 0% 0.1% <0.1% 0.1%

>> 5(multi) : 576.9 611.0 1618.8 3.065s

>> Slowdown : 0.6% 0.8% 0.9% 0.5%

>

> Wow, thanks so much for running those. You're a step ahead of us,
> there!

Thanks :) Maybe we shall cooperate then and make three series
of patches like

1. * The Kconfig options;

* The API. I.e. calls like task_pid_nr(), task_session_nr_ns() etc;
This part is rather important as I found that some places in kernel
where I had to lookup the hash in multilevel model were just pid->vpid
dereference in flat model. This is a good optimization.

* The changes in the generic code that intruduce a bunch of
#ifdef CONFIG_PID_NS

...

#else

#ifdef CONFIG_PID_NS_FLAT

#endif

#ifdef CONFIG_PID_NS_MULTILEVEL

#endif

#endif

code in pid.c, sched.c, fork.c etc

This patchset will have to make kernel prepared for namespaces injections
and (!) not to break normal kernel operation with CONFIG_PID_NS=n.

2. The flat pid namespaces (my part)

3. The multilevel pid namespaces (suka's part)

> Did you happen to collect any profiling information during your runs?

Unfortunately no :(My intention was to prove that hierarchy has performance implications and should be considered carefully.

> -- Dave

>

>

Containers mailing list

Containers@lists.linux-foundation.org

<https://lists.linux-foundation.org/mailman/listinfo/containers>
