Subject: Re: Pid namespaces approaches testing results
Posted by Dave Hansen on Tue, 29 May 2007 15:22:05 GMT
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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!

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

-- Dave

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

Subject: Re: Pid namespaces approaches testing results
Posted by Pavel Emelianov on Wed, 30 May 2007 08:13:25 GMT
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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)
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>> 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
>
>