Subject: Re: [RFC][PATCH 0/5] uts namespaces: Introduction
Posted by dev on Tue, 11 Apr 2006 12:27:45 GMT
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Serge,

> This patchset is based on Kirill Korotaev's Mar 24 submission, taking
> comments (in particular from James Morris and Eric Biederman) into
> account.
thanks a lot for doing this!

> Some performance results are attached. I was mainly curious whether
> it would be worth putting the task_struct->uts_ns pointer inside
> a #ifdef CONFIG_UTS_NS. The result show that leaving it in when
> CONFIG_UTS_NS=n has negligable performance impact, so that is the
> approach this patch takes.
Serge, your testing approach looks really strange for me.
First of all, you selected the worst namespace to check performance
overhead on.
1) uts_ns is rarely used and never used on hot paths,
2) also all these test suites below doesn't test the code paths you
modified.

So I wonder what was the goal of these tests, especially dbench?!

Thanks,
Kirill

>
> -serge
>
> Performance testing was done on a 2-cpu hyperthreaded
> x86 box with 16G ram. The following tests were run:
> dbench (20 times, four clients, on reiser fs non-isolated partition)
> tbench (20 times, 5 connections)
> kernbench (20 times)
> reaim (20 times ranging from 1 to 15 users)
>
> They were run on 2.6.17-rc1:
> pristine
> patched, but with !CONFIG_UTS_NS ("disabled")
> patched with CONFIG_UTS_NS=y ("enabled")
>
> All results are presented as means +/- 95% confidence interval.
>
> Dbench results:
> pristine: 387.080727 +/- 9.344585
> patched disabled: 389.524364 +/- 9.574921

> patched enabled: 370.155600 +/- 30.127808
>
> Tbench results:
> pristine: 388.940100 +/- 18.095104
> patched disabled: 389.173700 +/- 23.658035
> patched enabled: 394.333200 +/- 25.813393
>
> Kernbench results:
> pristine: 70.317500 +/- 0.210833
> patched, disabled: 70.860000 +/- 0.179292
> patched, enabled: 70.346500 +/- 0.184784
>
> Reaim results:
> pristine:
>   Nclients   Mean   95% CI
>   1   106080.000000 11327.896029
>   3   236057.142000 18205.544810
>   5   247867.136000 23536.800062
>   7   265370.000000 21284.335743
>   9   262969.936000 18225.497529
>   11   278256.000000 6230.342816
>   13   284288.016000 8924.589388
>   15   286987.170000 7881.034658
>
> patched, disabled:
>   Nclients   Mean   95% CI
>   1   105400.000000 8739.978241
>   3   229500.000000 0.000000
>   5   252325.176667 16685.663423
>   7   265125.000000 6747.777319
>   9   271258.645000 11715.635212
>   11   280662.608333 7775.229351
>   13   277719.706667 8173.390359
>   15   278515.421667 10963.211450
>
> patched, enabled:
>   Nclients   Mean   95% CI
>   1   102000.000000 0.000000
>   3   224400.000000 14159.870036
>   5   242963.288000 40529.490781
>   7   255150.000000 8745.802081
>   9   270154.284000 8918.863136
>   11   283134.260000 12239.361252
>   13   288497.540000 11336.550964
>   15   280022.728000 8804.882369
>
>