

---

Subject: Re: [PATCH 0/9] namespaces: Introduction  
Posted by [serue](#) on Sun, 21 May 2006 16:27:59 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Quoting Eric W. Biederman (ebiederm@xmission.com):

> "Serge E. Hallyn" <serue@us.ibm.com> writes:

>

> > This patchset introduces a per-process utsname namespace. These can  
> > be used by openvz, vserver, and application migration to virtualize and  
> > isolate utsname info (i.e. hostname). More resources will follow, until  
> > hopefully most or all vserver and openvz functionality can be implemented  
> > by controlling resource namespaces from userspace.

> >

> > Previous utsname submissions placed a pointer to the utsname namespace  
> > straight in the task\_struct. This patchset (and the last one) moves  
> > it and the filesystem namespace pointer into struct nsproxy, which is  
> > shared by processes sharing all namespaces. The intent is to keep  
> > the taskstruct smaller as the number of namespaces grows.

>

>

> Previously you mentioned:

> > BTW - a first set of comparison results showed nsproxy to have better  
> > dbench and tbench throughput, and worse kernbench performance. Which  
> > may make sense given that nsproxy results in lower memory usage but  
> > likely increased cache misses due to extra pointer dereference.

>

> Is this still true? Or did our final reference counting tweak fix  
> the kernbench numbers?

>

> I just want to be certain that we don't add an optimization,  
> that reduces performance.

Here are the numbers with the basic patchsets. But I guess I should  
do another round with adding 7 more void\*'s to represent additional  
namespaces.

(intervals are for 95% CI, tests were each run 15 times)

	with nsproxy	without nsproxy
kernbench	68.90 +/- 0.21	69.06 +/- 0.22
dbench	386.0 +/- 26.6	388.4 +/- 21.0
tbench	391.6 +/- 8.00	389.4 +/- 10.95

reaim with nsproxy

1 115600.000000 5512.441557  
3 246985.712000 9375.780582  
5 272309.092000 8029.833742  
7 290020.000000 7288.367116

9 298591.580000 5557.531915  
11 nan nan  
13 nan nan  
15 nan nan

reaim without nsproxy

1 110160.000000 5728.697311  
3 246985.712000 9375.780582  
5 262204.197333 11138.510652  
7 288660.000000 6880.898412  
9 300631.580000 4351.926692  
11 nan nan  
13 nan nan  
15 nan nan

---