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Subject: Re: [RFC] Virtualization steps

Posted by [Bill Davidsen](#) on Tue, 28 Mar 2006 04:28:12 GMT

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Dave Hansen wrote:

> On Sat, 2006-03-25 at 04:33 +1100, Nick Piggin wrote:

>> Oh, after you come to an agreement and start posting patches, can you

>> also outline why we want this in the kernel (what it does that low

>> level virtualization doesn't, etc, etc)

>

> Can you wait for an OLS paper? ;)

>

> I'll summarize it this way: low-level virtualization uses resource

> inefficiently.

>

> With this higher-level stuff, you get to share all of the Linux caching,

> and can do things like sharing libraries pretty naturally.

>

> They are also much lighter-weight to create and destroy than full

> virtual machines. We were planning on doing some performance

> comparisons versus some hypervisors like Xen and the ppc64 one to show

> scaling with the number of virtualized instances. Creating 100 of these

> Linux containers is as easy as a couple of shell scripts, but we still

> can't find anybody crazy enough to go create 100 Xen VMs.

But these require a modified O/S, do they not? Or do I read that incorrectly? Is this going to be real virtualization able to run any O/S?

Frankly I don't see running 100 VMs as a realistic goal, being able to run Linux, Windows, Solaris and BEOS unmodified in 4-5 VMs would be far more useful.

>

> Anyway, those are the things that came to my mind first. I'm sure the

> others involved have their own motivations.

>

> -- Dave

>

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