
Subject: Re: [RFC] Virtualization steps

Posted by [Dave Hansen](#) on Fri, 24 Mar 2006 19:25:39 GMT

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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.

Anyway, those are the things that came to my mind first. I'm sure the others involved have their own motivations.

-- Dave
