Subject: Re: [patch 2/6] [Network namespace] Network device sharing by view
Posted by Herbert Poetzl on Mon, 26 Jun 2006 22:54:40 GMT
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On Mon, Jun 26, 2006 at 03:13:17PM -0700, Ben Greear wrote:
> Eric W. Biederman wrote:
>
> >Basically it is just a matter of:
> >if (dest_mac == my_mac1) it is for device 1.
> >If (dest_mac == my_mac2) it is for device 2.
> >etc.
> >
> >At a small count of macs it is trivial to understand it will go
> >fast for a larger count of macs it only works with a good data
> >structure. We don't hit any extra cache lines of the packet,
> >and the above test can be collapsed with other routing lookup tests.
>
> I think you should do this at the layer-2 level, well before you get
> to routing. That will make the virtual mac-vlan work with arbitrary
> protocols and appear very much like a regular ethernet interface.
> This approach worked well with .1q vlans, and with my version of the
> mac-vlan module.

yes, that sounds good to me, any numbers how that
affects networking in general (performance wise and
memory wise, i.e. caches and hashes) ...

> Using the mac-vlan and source-based routing tables, I can give a
> unique 'interface' to each process and have each process able to bind
> to the same IP port, for instance. Using source-based routing (by
> binding to a local IP explicitly and adding a route table for that
> source IP), I can give unique default routes to each interface as
> well. Since we cannot have more than 256 routing tables, this approach
> is currently limitted to around 250 virtual interfaces, but that is
> still a substantial amount.

an typically that would be sufficient IMHO, but
of course, a more 'general' hash tag would be
better in the long run ...

> My mac-vlan patch, redirect-device patch, and other hackings are
> consolidated in this patch:
>
> http://www.candelatech.com/oss/candela_2.6.16.patch

great! thanks!

best,

Herbert

> Thanks,
> Ben
>
> --
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