Subject: Re: Re: network namespace ipv6 perfs Posted by Benjamin Thery on Mon, 03 Mar 2008 17:27:50 GMT

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Benjamin Thery wrote:

- > On Mon, Mar 3, 2008 at 3:55 PM, Pavel Emelyanov <xemul@openvz.org> wrote:
- >> Benjamin Thery wrote:
- >> > Daniel Lezcano wrote:
- >> >> Hi.
- >> >>
- >> >> Some performance tests was made by Benjamin to watch out the impact of
- >> >> the network namespace. The good news is there is no impact when used
- >> >> with or without namespaces. That has been checked using a real network
- >> >> device inside a network namespace.
- >> >>
- >> >> These results are consistent with the ones previously made for ipv4.
- >> >>
- >> >> http://lxc.sourceforge.net/network/bench_ipv6_graph.php
- >> >>
- >> >> Thanks to Benjamin who did all the performance tests :)
- >> >
- >> > In these results, may be, there is one thing that should be explained.
- >> > It is the CPU utilization overhead in the 'veth' case.
- >> >
- >> > Compared to physical devices or macvlan, veth interfaces don't benefit
- >> > from hardware offloading mechanisms: i.e. checksums have to be computed
- >> > by the soft. That explains the big overhead in CPU utilization when
- >>
- >> You can tune the veth devices not to account checksum when unnecessary.
- > > Oh. This is interesting.
- > You mean with ethtool -K rx/tx?
- > I will give it a try.

Pavel,

I had no luck with "ethtool -K veth0 rx on tx on". On my testbed, with these options TCP drops packets (trying to establish a ssh connection between init and child namespace).

Then, I tested "ethtool -K veth0 rx on tx off".

This time TCP (and netperf) work, but I see no difference in CPU load compared to the case without offloading.

Can I tune veth differently?

(BTW, I run netperf between a child namespace on host A and netserv on host B. The stream goes through the following interface: veth1 on A -> veth0 on A -> eth1 on A -> ("real network") -> eth1 on B)

Benjamin

```
>> > susing this kind of virtual interface.
>> > > Benjamin
>> > > > Regards
>> > -- Daniel
>> >>
>> To unsubscribe from this list: send the line "unsubscribe netdev" in
>> the body of a message to majordomo@vger.kernel.org
>> More majordomo info at http://vger.kernel.org/majordomo-info.html
>> >
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