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

>
>>
>> > using this kind of virtual interface.
>> >
>> > Benjamin
>> >
>> >> Regards
>> >>   -- Daniel
>> >>
>
>> --
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>> the body of a message to majordomo@vger.kernel.org
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