## Subject: Re: Re: network namespace ipv6 perfs Posted by Pavel Emelianov on Wed, 05 Mar 2008 12:39:02 GMT

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Benjamin Thery wrote:
> 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?
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Yup. You may try turn tso and sg on as well.
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> (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
>>> More majordomo info at http://vger.kernel.org/majordomo-info.html
>>>
>>
>
>
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