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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 They wrote:

> Benjamin They wrote:

>> On Mon, Mar 3, 2008 at 3:55 PM, Pavel Emelyanov <xemul@openvz.org> wrote:

>>> Benjamin They 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](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?

Yup. You may try turn tso and sg on as well.

> (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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>>> More majordomo info at <http://vger.kernel.org/majordomo-info.html>  
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