

# Re: Ethernet over Kernel Sockets

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*Source:* <http://linux.derkeiler.com/Mailing-Lists/Kernel/2008-03/msg00342.html>

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- *From:* Pavel Machek <[pavel@xxxxxx](mailto:pavel@xxxxxx)>
  - *Date:* Sun, 2 Mar 2008 11:46:50 +0100
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On Fri 2008-02-29 21:54:21, Lukas Razik wrote:

Hello all!

As you know, some network cards doesn't have a 'eth' interface under linux. Because of that I'm developing a net\_device based driver which doesn't transmit and receive directly through a real network card but through UDP kernel sockets.

What is it good for?

So the eth1 interfaces are based on sockets which use the eth0 (Gigabit) interfaces for the communication. Now, if I measure the transmission between 192.168.0.1 and 192.168.0.2 then I get transmission rates that are normal for Gigabit-Ethernet (~25µsec (PingPong) and ~900Mbit/s).

If I measure the transmission through the eth1 interfaces between 192.168.1.1 and 192.168.1.2 then I only get ~1msec (PingPong) and only about ~400Mbit/s.

The interesting thing is, that I always get PingPongs of 1ms (= one jiffie). Although if I measure with 100MBit- or other non-Ethernet cards.

Try increasing HZ :-)... or maybe it is a gigabit interrupt mitigation issue?

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(english) <http://www.livejournal.com/~pavelmachek>  
(cesky, pictures) <http://atrey.karlin.mff.cuni.cz/~pavel/picture/horses/blog.html>

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