

---

Subject: Re: Network virtualization/isolation  
Posted by [ebiederm](#) on Sat, 25 Nov 2006 23:16:06 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

"Leonid Grossman" <Leonid.Grossman@neterion.com> writes:

> I did not mean kernel bypass, just L2 hw channels that for  
> all practical purposes act as separate NICs -  
> different MAC addresses, no blocking, independent reset, etc.

Yes. Nearly all of what you need for safe kernel bypass.

>> In the worst case I might need someone to go as far as the  
>> Grand Unified Lookup to remove all of the overheads. Except  
>> for distributing the work load more evenly across the machine  
>> with separate interrupts and the like I see no need for  
>> separate hardware channels to make things go fast for my needs.

>>  
>> Despite the title of this thread there is no virtualization  
>> or emulation of the hardware involved. Just enhancements to  
>> the existing hardware abstractions.

>  
> Right, I was just trying to say that IOV support (likely, from multiple  
> vendors since  
> virtualization is expected to be widely used) would provide an option to  
> export multiple  
> independent L2 interfaces from a single NIC - even if only a subset of  
> IOV functionality would be used in this case.

Agreed, and I think I understood that. My basic point was that it  
doesn't look to me like I need the hardware support, just that I can  
use it when it is there.

The core advantage I see of the multiple queues, is in being able to  
split the processing of network traffic and interrupts among multiple  
cores.

Eric

---

Containers mailing list  
Containers@lists.osdl.org  
<https://lists.osdl.org/mailman/listinfo/containers>

---