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Subject: Re: [PATCH 0/12] L2 network namespace (v3)  
Posted by [Daniel Lezcano](#) on Wed, 17 Jan 2007 16:10:51 GMT  
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Dmitry Mishin wrote:

> This is an update of L2 network namespaces patches. They are applicable  
> to Cedric's 2.6.20-rc4-mm1-lxc2 tree.  
>  
> Changes:  
> - updated to 2.6.20-rc4-mm1-lxc2  
> - current network context is per-CPU now  
> - fixed compilation without CONFIG\_NET\_NS  
>  
> Changed current context definition should fix all mentioned by Cedric issues:  
> - the nsproxy backpointer is unnecessary now - thus removed;  
> - the push\_net\_ns() and pop\_net\_ns() use per-CPU variable now;  
> - there is no race on ->nsproxy between push\_net\_ns() and  
> exit\_task\_namespaces() because they deals with different pointers.  
>  
> =====  
> L2 network namespaces  
>  
> The most straightforward concept of network virtualization is complete  
> separation of namespaces, covering device list, routing tables, netfilter  
> tables, socket hashes, and everything else.  
>  
> On input path, each packet is tagged with namespace right from the  
> place where it appears from a device, and is processed by each layer  
> in the context of this namespace.  
> Non-root namespaces communicate with the outside world in two ways: by  
> owning hardware devices, or receiving packets forwarded them by their parent  
> namespace via pass-through device.  
>  
> This complete separation of namespaces is very useful for at least two  
> purposes:  
> - allowing users to create and manage by their own various tunnels and  
> VPNs, and  
> - enabling easier and more straightforward live migration of groups of  
> processes with their environment.

Great ! Thanks Dmitry.

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Containers mailing list  
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