Subject: veth and IPv6
Posted by Benoit Branciard on Thu, 24 Jan 2008 10:38:13 GMT
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Hello,

sorry for the noise, but I'm starting with openVZ and have some trouble setting up things.

I plan to virtualize a server which hosts (among other network services) a dhcpd server. As stated from various docs, I need to setup a veth device to account for dhcpd broadcasts. But this server should also have an IPv6 address due to other services which are not easily moveable to another VS due to publicly-known IP address and name constraints.

I'm working on Debian Etch with debian-systs packages: vzctl 3.0.22-1dso1, fzakernel-2.6.18-686 028stab051.1.

For now I got an IPv4 veth working, loosely inspired from http://wiki.openvz.org/Veth :

- enabled IPv4 forwarding and proxy_arp on hardware node for both physical interface (ethX) and virtual one (vethXXX.0)
- configured virtual eth0 by manually editing /etc/network/interfaces file in VS tree
- added routes to vethXXX.0 on hardware node at VS startup with vznetaddroute script and VETH_IP_ADDRESS in /etc/vz/conf/XXX.conf.

In this manner, all IPv4 pings work correctly (I didn't yet tested with a real dhcpd however).
But for IPv6, virtual server and hardware node can't even ping eachother !

Activating IPv6 forwarding doesn't seem to help, and has the annoying side effect to switch devices in "router" mode, disabling router sollicitations and default route and prefix advertisement acceptance.

I also read various docs about veth and IPv6, some of them implying bridging:
http://forum.openvz.org/index.php?t=msg&goto=14622&&srch=veth+IPv6#msg_14622.

Questions :

- is veth with IPv6 really supported ?
- which is the correct way to setup a veth with IPv4 and IPv6 ?
- is bridging required ?
- anyway, is veth the correct way to run a dhcpd server in a VS ? on http://forum.openvz.org/index.php?t=msg&goto=14982&&srch=dhcpd#msg_14982 it seems necessary to setup a dhcp relay on hardware node...

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Ce message a ete verifie par MailScanner
pour des virus ou des polluriels et rien de
suspect n'a ete trouve.

Subject: Re: veth and IPv6
Posted by Vitaliy Gusev on Thu, 24 Jan 2008 12:21:17 GMT
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On 24 January 2008 13:38:13 Benoit Branciard wrote:
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> http://forum.openvz.org/index.php?t=msg&goto=14622&&srch=veth+IPv6#msg_1462
>2.

>
> Questions :
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> - is veth with IPv6 really supported ?

Yes, it is supported.

> - which is the correct way to setup a veth with IPv4 and IPv6 ?
> - is bridging required ?

Using veth with bridge is preferable. If you don't want use veth + bridge try
to play with venet . You can setup IPv4, IPv6 in any order.

> - anyway, is veth the correct way to run a dhcpd server in a VS ? on
> http://forum.openvz.org/index.php?t=msg&goto=14982&&srch=dhcpd#msg_14982
> it seems necessary to setup a dhcp relay on hardware node...

veth allows passing network broadcast traffic to VPS, also don't mind about IP
address in VPS. veth was designed for with cases.

Please read with article:
http://wiki.openvz.org/Differences_between_venet_and_veth

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Thanks,
Vitaliy Gusev