Subject: *SOLVED* Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 07:27:05 GMT
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I need to support IPv6, and am playing with Unbuntu as a VE. I've used it as itself naturally, and IPv6 wasn't a problem to configure. My other VEs (not debian based: centos, fedora, trixbox) configure and use IPv6 happily (yay!).

I'm able to configure the IP with vzctl, and once the VE is up and entered, /etc/network/interfaces has an IPv6 config (IP changed for posterity):

```
iface venet0 inet6 static
        address ::1
        netmask 128
        up ifconfig venet0 add a:b:c::d
```

However ifconfig output shows nothing configured:

```
venet0    Link encap:UNSPEC  HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
          inet addr:127.0.0.1  P-t-P:127.0.0.1  Bcast:0.0.0.0  Mask:255.255.255.255
          UP BROADCAST POINTOPOINT RUNNING NOARP  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)
```

I'm looking for this to come up correctly when the VE is started (like the other VEs), and am wondering if the syntax isn't generated correctly or if I'm overlooking something. I don't have access to a non-virutalized ubuntu box to muck with, or spare equipment to blast it onto (zomg, a reason for virtualization!!1!1).

And searching for IPv6 + (any distro) results in "omg what the hell is ipv6, and how do I get rid of it because it takes me an extra 30 seconds for dns lookups to time out because it found a AAAA record and my computer/ISP isn't cool enough to have tunneled/native IPv6 connectivity" posts.

Subject: Re: Ubuntu VE + working IPv6
Posted by curx on Fri, 21 Dec 2007 07:51:12 GMT
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Hi,

can you please post some information, too:

* distr. of your hardware node
* is IPv6 enabled in /etc/vz/vz.conf ?
* what vzctl version and which version of ve os template is used ?

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 09:05:26 GMT
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curx wrote on Thu, 20 December 2007 23:51Hi,

can you please post some information, too:

* distr. of your hardware node
* is IPv6 enabled in /etc/vz/vz.conf ?
* what vzctl version and which version of ve os template is used ?

Distro used for "HN" is CentOS 5.1

Yes, IPv6 is enabled in vz.conf (otherwise my other VE's wouldn't have working IPv6 connectivity)

vzctl version 3.0.18

I grabbed the unbuntu 7.10 precreated template cache: ubuntu-7.10-i386-minimal
http://openvz-mirror1.rapidvps.com/template/precreated/ubunt u-7.10-i386-minimal.tar.gz

Again, the other VEs I'm running, which are essentially RedHat based (centos, fedora) have 100% native IPv6 connectivity using the same command that isn't working for the ubuntu VE:

vzctl set VEID --ipadd x.x.x.x --save
vzctl set VEID --ipadd a:b:c::d --save
(where x.x.x.x is a real ipv4 address and a:b:c::d is a real ipv6 address)

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 10:31:23 GMT
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I've been scouring forums, and saw the mention of vzctl needing to be 3.0.19 for ubuntu to "work". I've had no problems with it working with 3.0.18, including IPv4 networking, but I'm grabbing a copy of 3.0.22 and will update if that fixed my issue of IPv6 not working.

{EDIT}

No luck. It took a moment when applying the IP addresses, fired up the VE, and after logging in, exact same /etc/network/interfaces configuration and output from ifconfig showing no inet6 address configured on venet0

Subject: Re: Ubuntu VE + working IPv6
Posted by curx on Fri, 21 Dec 2007 11:29:28 GMT
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Hi,

please enter the VE,

and exec:

/etc/init.d/networking restart

and post the output ...

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 11:40:41 GMT
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* Reconfiguring network interfaces...
SIOCADDRT: File exists
Failed to bring up venet0.
[OK]

Subject: Re: Ubuntu VE + working IPv6
Posted by curx on Fri, 21 Dec 2007 11:50:02 GMT
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Have you added the IPv6 Support, while the VE is running ?
so please (Re-)Start the VE.

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 12:23:23 GMT
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curx wrote on Fri, 21 December 2007 03:50Have you added the IPv6 Support, while the VE is running ?
so please (Re-)Start the VE.

Ok, clarifications:

IPv6 support was set in vz.conf before any VE was created.

I've restarted the Ubuntu VE several times, to no avail.
I've restarted the overall service a few times as well (/etc/init.d/vz).

IPv6 is working in the 3 RedHat based VEs.

IPv6 is not working in the Debian based Ubuntu VE.

It isn't an ip6tables issue because the ipv6 address isn't being applied to the interface.

I can manually configure the ipv6 address on the interface using ifconfig, without errors. However routing is another issue and I need to read more on the whole venet device a bit more to figure out what specific route statement was done under the RedHat based VEs, as it is working.

FC8 VE:

route -A inet6
Kernel IPv6 routing table

Destination	Next Hop	Flags	Metric	Ref	Use	Iface
fe80::/64	*	U	256	0	0	venet0
*/0	*	U	1	0	0	venet0
::1/128	*	U	0	1	1	lo
a:b:c::d/128	*	U	0	19	1	lo
ff00::/8	*	U	256	0	0	venet0

Ubuntu 7.10 VE (with manual configuration of address onto venet0):

route -A inet6
Kernel IPv6 routing table

Destination	Next Hop	Flags	Metric	Ref	Use	Iface
fe80::/64	::	U	256	0	0	venet0
::1/128	::	U	0	9	1	lo
a:b:c::d/128	::	U	0	0	1	lo
ff00::/8	::	U	256	0	0	venet0

Subject: Re: Ubuntu VE + working IPv6
Posted by kir on Fri, 21 Dec 2007 12:27:19 GMT
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Can you try to do this with some Debian template?

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 12:39:38 GMT
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kir wrote on Fri, 21 December 2007 04:27Can you try to do this with some Debian template?

As requested, I used debian-4.0-i386-minimal

Different valid IPs both v4/v6 from the Ubuntu VE

Survey says.....working!

/etc/network/interfaces is line for line (excluding the IPs), exactly the same in both debian-4 and ubuntu-7.10, just that debian-4 works.

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Fri, 21 Dec 2007 19:56:16 GMT
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6 hours later, and a nap.....

I grabbed the ubuntu-6.06-i386-minimal template from contrib, created a whole new VE, and after launching:

- didn't have IPv6 configured on venet0
- venet0:0 wasn't created with the IPv4 IP either

So I ran: /etc/init.d/network restart

got the following output:

```
 * Reconfiguring network interfaces...
SIOCSIFADDR: File exists
Failed to bring up venet0.
                                                    [ ok ]
```

And despite errors:

- venet0 had the IPv6 address
- venet0:0 was created with the IPv4 address
- I have working IPv4/6 connectivity

So I tried the ubuntu-7.10-i386-minimal template also out of contrib, but it has the same behavior as the other 7.10 template I've been trying.

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Sat, 22 Dec 2007 00:19:08 GMT
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I went through the wiki steps for installing under a Debian environment and then rolling your own Gutsy template (which are awesome resources, thanks to those that wrote them up):

http://wiki.openvz.org/Installation_on_Debian
http://wiki.openvz.org/Ubuntu_Gutsy_template_creation

After creating a brand new VE based on an installation of Ubuntu-7.10-server-i386, still no IPv6 love under the VE.

Of course on that brand new 7.10 server I installed, IPv6 works without issue.

So I suppose I could try 7.0.4-server-i386 since I just found the cd in my stack, and see if its an issue with the 7.x branch seeing as Debian-4.0 and Ubuntu-6.0.6 both supported IPv6 as a VE.

{EDIT}

No luck with Ubuntu-7.0.4-server-i386 (feisty) either. And I had even tried /etc/init.d/network restart in all my attempts

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Subject: Re: Ubuntu VE + working IPv6
Posted by curx on Sat, 22 Dec 2007 09:58:51 GMT
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Hi,

i found the error :

on ifup with an IPv6 adress, invoke by /etc/init.d/networking, the command start a "modprobe -Q ipv6", fails in VE so with a "fake-modprobe-script"

ln -s /bin/true /sbin/modprobe

the error is gone and IPv6 is ready to connect

Subject: Re: Ubuntu VE + working IPv6
Posted by broquea on Sat, 22 Dec 2007 18:14:00 GMT
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curx wrote on Sat, 22 December 2007 01:58Hi,

i found the error :

on ifup with an IPv6 adress, invoke by /etc/init.d/networking, the command start a "modprobe -Q ipv6", fails in VE so with a "fake-modprobe-script"

ln -s /bin/true /sbin/modprobe

the error is gone and IPv6 is ready to connect

Awesome, it is working now. I just had to stop/start the entire VE for it to pick up the IPv6 address.

Cheers!