
Subject: *SOLVED* Multiple IP - Speed?

Posted by [chinaman](#) on Wed, 06 Sep 2006 09:05:27 GMT

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Hello,

I am a newbie in server virtualisation. Thanks for the fine ware, so far I followed the howtos and it's runnin fine.

But I got some problems and questions about IPs and LAN Speed.

I will try to explain my configuration and my problems.

I am running Openvz on a Debian HWNode with Debian VPS.

I need to use different IPs out of different Networks all with it's own gateway.

So far I've got it running using the instructions about source based routing with different tables.

But I had to use 1 Ip out of each Net inside the HWNode. Then I could use another IP inside the VPS too.

Question:

Is it possible to use one IP out of Network one inside the HWNode and an IP out of another network inside the VPS?

It seems there is a speedproblem with Network inside the VPS. When I ping to a certain host I get a response time of 25ms out of the HWNode. If I ping out of the VPS the response time is around 350ms !

Is this usual? are there any settings to switch? How can I debug to come closer to the reason?

Thanks for your help, I hope my explanations are clear enough.

Thomas

Subject: Re: Multiple IP - Speed?

Posted by [Vasily Tarasov](#) on Wed, 06 Sep 2006 10:16:11 GMT

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Quote:Question:

Is it possible to use one IP out of Network one inside the HWNode and an IP out of another network inside the VPS?

If I understand you right, then you have two interfaces on HW?

Then you can move one interface inside VPS using --netdeth_add option of vzctl.

Does it pass for you?

Quote:When I ping to a certain host I get a response time of 25ms out of the HWNode. If I ping out of the VPS the response time is around 350ms!

Hmm...
What interface do you use? (veth or venet)
While pinging the host does SNAT/DNAT rule work?

Thanks.

Subject: Re: Multiple IP - Speed?
Posted by [chinaman](#) on Wed, 06 Sep 2006 10:29:34 GMT
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vass wrote on Wed, 06 September 2006 06:16 then you have two interfaces on HW?
Then you can move one interface inside VPS using --netdeth_add
option of vzctl.
Does it pass for you?

I've got several virtual interfaces on HW. eth0, eth0:0, ...
One for each Network.
Do I need to set one interface for each IP and then move it into VPS? Is this possible if I will get
10 ... eth0:10 ?

vass wrote on Wed, 06 September 2006 06:16
What interface do you use? (veth or venet)

venet

vass wrote on Wed, 06 September 2006 06:16
While pinging the host does SNAT/DNAT rule work?

What do you mean? Could you explain, I don't know SNAT/DNAT.

Thanks.

Subject: Re: Multiple IP - Speed?
Posted by [Vasily Tarasov](#) on Wed, 06 Sep 2006 11:06:57 GMT
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Now I understand, that you're not using DNAT/SNAT (Destination Network Address
Translation/Source Network Address Translation). =)

Thus you're using virtual eth0:0, eth0:1,... you can't use --netdev_add. The other way to save IPs is bridging. Andrey will tell you how to set up such configuration in few minutes.

Quote:When I ping to a certain host I get a response time of 25ms out of the HWNode. If I ping out of the VPS the response time is around 350ms !

Can you traceroute packages from VE and from HN? May be they go through different routes?

Thanks.

Subject: Re: Multiple IP - Speed?

Posted by [Andrey Mirkin](#) on Wed, 06 Sep 2006 11:19:07 GMT

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So, you have one ethernet interface on HW node and you want to use minimal set of IP addresses.

Next veth with bridge configuration can help you:

1. Create veth device for your VPS (See http://wiki.openvz.org/Virtual_Ethernet_device#Simple_configuration_with_virtual_ethernet_device)
2. Join veth and eth0 device in one bridge on HW node
3. Assign HW node IP address to created bridge and change all routes on HW node accordingly
4. Assign appropriate IP address to eth0 in VPS

In this configuration you will use only 2 IP addresses. And you will not need to configure source based routing with different tables at all.

Feel free to ask any question if you will have some difficulties with such configuration.

Subject: Re: Multiple IP - Speed?

Posted by [chinaman](#) on Wed, 06 Sep 2006 11:40:23 GMT

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Andrey Mirkin wrote on Wed, 06 September 2006 07:19: In this configuration you will use only 2 IP addresses.

Pls. let me doublecheck if I am clear with your suggestion:

Let's say I am using 3 Networks on one physical NIC. I would like to have following configuration:

HW: NET1

VPS1: NET1, NET2

VPS2: NET2, NET3

...

I don't mind if every VPS use it's own IPs, but but i don't wanna waste the IPs for HW, bcs. I just need it for configuration y ssh. All services are running inside VPS.

Is this possible by using bridged eth ?

Sorry for stupid question, but I would like to make sure before I start working this out.

Thanks.

Subject: Re: Multiple IP - Speed?

Posted by [Andrey Mirkin](#) on Wed, 06 Sep 2006 11:48:01 GMT

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chinaman wrote on Wed, 06 September 2006 07:40Pls. let me doublechek if I am clear with your suggestion:

Let's say I am using 3 Networks on one physical NIC. I would like to have follwing configuration:

HW: NET1

VPS1: NET1, NET2

VPS2: NET2, NET3

...

Is this possible by using bridged eth ?

Yes, it is possible to create such configuration with veth devices and bridge.

1. VPS1: create 2 veth devices with IP addresses from NET1 and NET2
2. VPS2: create 2 veth devices with IP addresses from NET2 and NET3
3. create bridge on HW node and add 4 veth devices and eth0 device in it, assign IP address from NET1 to created bridge

Subject: Re: Multiple IP - Speed?

Posted by [chinaman](#) on Thu, 07 Sep 2006 13:37:44 GMT

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Thanks for the instructions.

After installing new kernel with veth support veth devices are running now. So far I can see the speed is the same as HW now.

But due to veth there are some new questions now:

1. I add veth and eth0 device to bridge in HW node. I had to set a route to IP of VPS to veth device, otherwise I couldn't reach the VPS. Is this correct? I thought there is no routing necessary bcs. of the bridge.

2. How can I automatically assign IP to eth0 device in VPS? If i use /etc/network/interfaces the file is empty after restarting VPS.

3. After restarting the VPS the veth dev in HW was down. I had to do the whole procedure (adding to bridge ...) manually again. Is it possible to do this automatically?

Thanks.

Subject: Re: Multiple IP - Speed?

Posted by [Andrey Mirkin](#) on Thu, 07 Sep 2006 15:04:44 GMT

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chinaman wrote on Thu, 07 September 2006 09:371. I add veth and eth0 device to bridge in HW node. I had to set a route to IP of VPS to veth device, otherwise I couldn't reach the VPS. Is this correct? I thought there is no routing necessary bcs. of the bridge.

You couldn't reach VPS from HW node? Just add route to this VPS via bridge interface (veth in bridge, so everything should work fine).

chinaman wrote on Thu, 07 September 2006 09:372. How can I automatically assign IP to eth0 device in VPS? If i use /etc/network/interfaces the file is empty after restarting VPS. You can use DHCP daemon to assign IP addresses for VPSes.

chinaman wrote on Thu, 07 September 2006 09:373. After restarting the VPS the veth dev in HW was down. I had to do the whole procedure (adding to bridge ...) manually again. Is it possible to do this automatically? Unfortunately it is not yet automated. But you can add necessary commands to <VEID>.start script, so veth device will be configured on VPS start.

Subject: Re: Multiple IP - Speed?

Posted by [chinaman](#) on Thu, 07 Sep 2006 17:02:53 GMT

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Andrey Mirkin wrote on Thu, 07 September 2006 11:04 chinaman wrote on Thu, 07 September 2006 09:371. I add veth and eth0 device to bridge in HW node. I had to set a route to IP of VPS to veth device, otherwise I couldn't reach the VPS. Is this correct? I thought there is no routing necessary bcs. of the bridge.

Just add route to this VPS via bridge interface (veth in bridge, so everything should work fine).

Yes, you are right, now it's working fine. Propably i did something wrong before.

Andrey Mirkin wrote on Thu, 07 September 2006 11:04

chinaman wrote on Thu, 07 September 2006 09:372. How can I automatically assign IP to eth0

device in VPS? If i use /etc/network/interfaces the file is empty after restarting VPS.You can use DHCP daemon to assign IP addresses for VPSes.

I tried a bit and I used the config start filed <VEID>.start to handle this problem. The file has to be located in /etc/vz/conf (just latest version of vzctl)

In the file i used:

```
ifconfig eth0 0
ip addr add 192.168.0.1/32 dev eth0
```

Andrey Mirkin wrote on Thu, 07 September 2006 11:04

chinaman wrote on Thu, 07 September 2006 09:37. After restarting the VPS the veth dev in HW was down. I had to do the whole procedure (adding to bridge ...) manually again. Is it possible to do this automatically?Unfortunately it is not yet automated. But you can add necessary commands to <VEID>.start script, so veth device will be configured on VPS start.

I tried, but the configuration of the veth device in HW isn't working with <VEID>.start. It seems this file is running inside the starting VPS. So i used it to set the IP. (see above)

It would be nice if there would be a script running inside the HW like <VEID>.start is running inside the VPS.

Thanks for all the help!

I would say the problem is solved.