Subject: HN Network Connectivity loss when VE stopped
Posted by nimbus4321 on Mon, 28 Jan 2008 20:27:03 GMT
View Forum Message <> Reply to Message

Hi,

I've got a HN set-up with two VEs, each using veth for network access. The veth interfaces and the HN interface (eth0) are bridged using a bridge vzbr0. The bridge is assigned the HN's IP, and all traffic is routed via the bridge.
Networking all works fine to the VEs and HN, including (importantly for me) multicast between all nodes.

However, if I stop one of the VEs using "vzctl stop", I lose all network connectivity (i.e. including unicast) to the HN and to the other VE from external nodes. Connectivity to both returns after a couple of minutes.

I've tried removing the route for the VE (via the bridge) before stopping the VE, but this makes no difference.

Has anyone seen this behaviour before ? Does anyone have any suggestions on what might be wrong ? I will investigate further, but would be grateful for any help.

Thanks in advance for any suggestions.

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by dietmar on Tue, 29 Jan 2008 05:38:33 GMT
View Forum Message <> Reply to Message

Yes, I also see that behaviour here. After vzctl stop network is unavailable, but gets back a few minute later.

- Dietmar

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by nimbus4321 on Tue, 29 Jan 2008 09:37:27 GMT
View Forum Message <> Reply to Message

Hi Dietmar,

Do you have a similar set-up to the one described above - i.e. with all interfaces (VE and HN) being bridged ?

I ask this because the connectivity loss only started happening when I added the HN's interface (eth0) to the bridge (vzbr0). Before this, when the VE interfaces were bridged but not the HN

interface, stopping a VE had no effect on network connectivity. So, seems to be some interaction between the bridge and the HN interface. At any rate, will investigate more today.

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by dietmar on Wed, 30 Jan 2008 06:38:20 GMT
View Forum Message <> Reply to Message

yes, same setup

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by dietmar on Wed, 30 Jan 2008 08:15:54 GMT
View Forum Message <> Reply to Message

I just tried another network card (r8169 Gigabit Ethernet driver), and that works without those problems. Seems that my eth1000_ich9 driver causes those delays.

- Dietmar

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by swindmill on Mon, 09 Jun 2008 13:21:25 GMT
View Forum Message <> Reply to Message

This is related to a linux bridge inheriting it's mac address from the bridged devices it contains.

I've seen reference on this forum to the bridge inheriting the "lowest" mac address of the bridged devices.

Since your bridge includes eth0 or your physical network device, other machines on the network communicate with your machine now using the bridge's mac, which isn't necessarily the same as eth0.

When you add a veth device into the bridge, the mac address of the bridge can change. This seems to be handled properly, even on remote machines that are connected at the time of the container with the veth starting. Perhaps an arpsend -U is being ran?

When you stop the container, and the veth is removed from the bridge, the bridge's mac address can change again. This can lead to a loss of connectivity because other machines on the network are still trying to access the machine using the old mac address. I have verified this on a Windows XP machine, I briefly lose connectivity but can restore it using arp -d IP.

I'm not sure how to best tackle this one, any ideas?

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by dietmar on Wed, 11 Jun 2008 07:00:28 GMT
View Forum Message <> Reply to Message

This post:

https://lists.linux-foundation.org/pipermail/bridge/2008-Jan uary/005686.html

indicates that they changed the behavoiur, by my 2.6.24 still uses the lowest mac - bad :-/

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by dietmar on Thu, 12 Jun 2008 05:21:58 GMT
View Forum Message <> Reply to Message

see also: https://lists.linux-foundation.org/pipermail/bridge/2008-Jun e/005895.html

Subject: Re: HN Network Connectivity loss when VE stopped
Posted by swindmill on Thu, 12 Jun 2008 14:35:30 GMT
View Forum Message <> Reply to Message

I seem to have been able to resolve this issue for myself by modifying the custom network script I use to add the veth devices created by vzctl into my bridge (containing eth0) at the VE start.

I manually set br0's mac address to that of eth0 after adding the veth device, and I also added a VEID.umount script that does the same when the VE is shutdown.

This seems to allow me to start and stop the VE without causing any network connectivity issues.

The command I'm using is:

/sbin/ifconfig br0 hw ether $(ifconfig eth0 | awk '{print $5; exit}')