Subject: NFS Performance

Posted by dlight on Thu, 22 Sep 2011 18:14:15 GMT

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First and foremost, this is my first foray into OpenVZ and I have to say I'm loving it so far. (Coming from Solaris Containers) That being said, I'm not that versed in the nuances yet.

What I have is what I believe to be a very straightforward config from a networking and resource perspective. I didn't set any VZ limits and haven't hit a single "failcnt" in user\_beancounters.

I have a veth device assigned to the VZ instance and that virtual device interface is joined to a bridge on the HW node. (1Gb/Full HW link speed) Networking works just fine...

However, when conducting very basic Bandwidth tests over NFS I am getting some horrible numbers while using `cp`, but not with other utilities (dd, rsync, etc). And this only occurs when running a `cp` in a VZ instance.

Ex Data:

VZ:

NFS Mount Options:

rw,nfsvers=3,rsize=32768,wsize=32768,acregmin=0,acregmax=0,acdirmin=0,acdirmax=0,hard,proto=tcp,timeo=600,retrans=2,addr=na1

[root@VZ /]# time cp /s55/test/1GB ./ real 1m12.103s user 0m0.269s sys 0m23.979s

[root@VZ /]# time rsync -vpa /s55/test/1GB ./ building file list ... done 1GB

sent 1024125088 bytes received 42 bytes 81930010.40 bytes/sec total size is 1024000000 speedup is 1.00

real 0m11.772s user 0m12.355s sys 0m7.454s

HW Node:

**NFS Mount Options:** 

rw,nfsvers=3,rsize=32768,wsize=32768,acregmin=0,acregmax=0,acdirmin=0,acdirmax=0,hard,proto=tcp,timeo=600,retrans=2,addr=na1

[root@HWNODE /]# time cp /s55/test/1GB ./

real 0m9.543s user 0m0.006s sys 0m0.941s

[root@HWNODE /]# time rsync -vpa /s55/test/1GB ./ building file list ... done 1GB

sent 100884596 bytes received 42 bytes 67256425.33 bytes/sec total size is 100872192 speedup is 1.00

real 0m1.147s user 0m1.179s sys 0m0.657s

I get similar results to rsync while using dd....

So what am I missing about "how" `cp` moves data, or do I need to configure a different scheduler?

All in all, I wouldn't care to much about `cp` performance, but I am seeing very similar behavior in Oracle to what I am seeing with cp. (I can't obviously switch out Oracle for rsync no matter how nice it sounds...)

Anyone have any ideas for me?