
Subject: *SOLVED* NFS problems
Posted by [commy](#) on Mon, 14 Aug 2006 06:51:07 GMT
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Hi!

Sorry, that the topic is not more specific, but I have in fact two problems regarding NFS-space provided by a VE.

I have an OpenVZ Kernel (2.6.8-022.077) running under Gentoo with a number of VEs under Debian.

The first problem is, that I obviously can not export directories within the VE. I use the nfs-user-server (as the kernel-server seems not to work in a VE) and when I am exporting a directory based within the VE, I always get a "permission denied" error, when trying to mount that directory from a client.

The interesting part is, when mounting a directory with --bind on the HN into the VE, I am able to export that directory without any problems.

The second problem is, that I would like to use the exported directories for backup purposes. So I have made a crypted disk-image which is mounted into the VE and exported via NFS there. Then I use Apple Backup to upload the information onto the NFS-space, but Backup fails at 2 GB (I am unable to specify that in detail). There is enough disk space available on the image. Apple Backup gives an Mac OS error -36, which corresponds to the message "I/O error (bummers)". As I have done that before on a not virtualized system, the client-side should be OK.

Does anyone have any idea about that problems?

Greetings,

Matthias

Subject: Re: NFS problems
Posted by [dev](#) on Tue, 15 Aug 2006 11:31:46 GMT
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1) it would be nice to strace NFS server to get the idea why it fails on VE exported directories. Maybe NFS server thinks that it is not ext3 partition and refuses?

2) check that NFS server is compiled with large file support.
does it try to create a single file with size > 2GB or it is just a total disk space used?

Subject: Re: NFS problems

Posted by [commy](#) on Wed, 16 Aug 2006 18:53:53 GMT

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Hello!

dev wrote on Tue, 15 August 2006 13:311) it would be nice to strace NFS server to get the idea why it fails on VE exported directories. Maybe NFS server thinks that it is not ext3 partition and refuses?

Unfortunately I did not have time to try an strace, but I will come to that.

Quote:

2) check that NFS server is compiled with large file support.

does it try to create a single file with size > 2GB or it is just a total disk space used?

Obviously the user-space NFS server at least on debian doesn't support large files, so that seems to be the problem.

So I have two options here.

1) Getting the kernel-server to run (is that possible in a VE?, It seems the nfs-kernel-server needs one or more devices, but I am unable to discover which devices I have to make available inside the VE)

2) Getting a user-space server that supports large files. I tried the debian-source but there was no corresponding configure parameter.

Matthias

Subject: Re: NFS problems

Posted by [dev](#) on Thu, 17 Aug 2006 06:56:33 GMT

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1) theoretically it's not very very hard to get it working in VE, but this requires kernel changes and time to investigate :/

2) can you provide the link to the sources of NFS user space server?

maybe it is faster to find the way to fix it....

I will definitely ask Vasily to check this next week and find a possible way to do it.

Subject: Re: NFS problems

Posted by [commy](#) on Thu, 17 Aug 2006 07:16:04 GMT

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dev wrote on Thu, 17 August 2006 08:562) can you provide the link to the sources of NFS user space server?

maybe it is faster to find the way to fix it...

I will definitely ask Vasily to check this next week and find a possible way to do it.

Sure: http://ftp.debian.org/debian/pool/main/n/nfs-user-server/nfs-user-server_2.2beta47.orig.tar.gz

Matthias

Subject: Re: NFS problems

Posted by [Vasily Tarasov](#) on Wed, 23 Aug 2006 13:15:19 GMT

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Hello, Commy,

I've done some experiments with user-space nfsd.

Quote:The first problem is, that I obviously can not export directories within the VE. I use the nfs-user-server (as the kernel-server seems not to work in a VE) and when I am exporting a directory based within the VE, I always get a "permission denied" error, when trying to mount that directory from a client.

The problem is that rpc.mountd, rpc.nfsd check for mounted nfs partition on server using major number of device. For simfs major also (like nfs) equals zero - so while checking this they think that nfs is mounted already and don't grant access.

The workaround here is to run rpc.mountd and rpc.nfsd with -r option:

```
# rpc.mountd -r
# rpc.nfsd -r
```

Quote:... but Backup fails at 2 GB ...

user-nfsd implements NFSv2 and this standart version limits size of files to 2 GB! =)

So just use unfs3 (<http://unfs3.sourceforge.net/>) user-space server, that implements NFSv3.

Good luck! =)

Subject: Re: NFS problems [SOLVED:unfs3]

Posted by [mike](#) on Fri, 22 Sep 2006 14:43:17 GMT

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ACK, unfs3 Just Works (TM). Had to figure out that LTSP did put the directory it was lazy to create into /etc/exports (and nfsd refused to export anything while complaining loudly in a log); after fixing that up, things went bright. Well, there was another patch needed to fix LTSP's terminal image startx script, but that's their lapse at sanitizing input...

Thanks for the tip.
