
Subject: Re: Bind Mount + User Quotas: Is it possible?
Posted by [morrizon](#) on Wed, 10 Dec 2014 20:25:03 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm using proxmox[1] and OpenVZ with multiple bind mounts[2] and quotas. This is possible because the quotas are managed by other containers.

For example, I want have a LAMP server with two bind mounts, one for the web files (100GB) and another for the MySQL (50GB). I do the following steps:

1. Create 3 containers:
 - a) webserver101 (id 101): disk 4GB
 - b) storage102 (id 102): disk 100GB
 - c) storage103 (id 103): disk 50GB
2. Start all the containers.
3. Generate the folders to mount if doesn't exist. I want mount folders with the name of the container to folders with the of the service:

```
root@host:~# mkdir /var/lib/vz/root/101/home/www
root@host:~# mkdir /var/lib/vz/root/101/home/mysql
root@host:~# mkdir /var/lib/vz/root/102/home/storage102
root@host:~# mkdir /var/lib/vz/root/103/home/storage103
```

4. Generate the bind mounts[2] for webserver101 in the host:

```
root@host:~# cat /etc/vz/conf/101.mount
#!/bin/bash
. /etc/vz/vz.conf
. ${VE_CONFFILE}
SRC1=/var/lib/vz/private/102/home/storage102
DST1=/home/www
SRC2=/var/lib/vz/private/103/home/storage103
DST2=/home/mysql

mount -n -t simfs ${SRC1} ${VE_ROOT}${DST1} -o ${SRC1}
mount -n -t simfs ${SRC2} ${VE_ROOT}${DST2} -o ${SRC2}
```

5. Restart the container webserver101. It's very important start first the storage containers because they manage the quotas.

The bind mounts in the host:

```

root@ns398468:~# df -h|grep vz
/dev/mapper/pve-data          1.8T 323G 1.4T 19% /var/lib/vz
/var/lib/vz/private/102      100G 603M 100G  1% /var/lib/vz/root/102
none                        256M 4.0K 256M  1% /var/lib/vz/root/102/dev
none                        52M 1.0M  51M  2% /var/lib/vz/root/102/run
none                        5.0M   0 5.0M  0% /var/lib/vz/root/102/run/lock
none                        256M   0 256M  0% /var/lib/vz/root/102/run/shm
/var/lib/vz/private/103      50G 603M  50G  2% /var/lib/vz/root/103
none                        256M 4.0K 256M  1% /var/lib/vz/root/103/dev
none                        52M 1.0M  51M  2% /var/lib/vz/root/103/run
none                        5.0M   0 5.0M  0% /var/lib/vz/root/103/run/lock
none                        256M   0 256M  0% /var/lib/vz/root/103/run/shm
/var/lib/vz/private/101      4.0G 603M 3.5G 15% /var/lib/vz/root/101
/var/lib/vz/private/102/home/storage102 100G 603M 100G  1%
/var/lib/vz/root/101/home/www
/var/lib/vz/private/103/home/storage103  50G 603M  50G  2%
/var/lib/vz/root/101/home/mysql
none                        2.0G 4.0K 2.0G  1% /var/lib/vz/root/101/dev
none                        410M 1.0M 409M  1% /var/lib/vz/root/101/run
none                        5.0M   0 5.0M  0% /var/lib/vz/root/101/run/lock
none                        2.0G   0 2.0G  0% /var/lib/vz/root/101/run/shm

```

The bind mounts in the container:

```

root@ns398468:~# vzctl enter 101
entered into CT 101
root@webserver101:/# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/simfs      4.0G 603M 3.5G 15% /
/dev/simfs      100G 603M 100G  1% /home/www
/dev/simfs       50G 603M  50G  2% /home/mysql
none            2.0G 4.0K 2.0G  1% /dev
none            410M 1.0M 409M  1% /run
none            5.0M   0 5.0M  0% /run/lock
none            2.0G   0 2.0G  0% /run/shm

```

I'm sure there is a better solution that don't need to create storage containers and waste disk space and memory but this work for me

[1] See proxmox DOT com

[2] See article of jamescoyle DOT net -> search in google

525-proxmox-bind-mount-mount-storage-in-a-container (sorry, cannot use links because limit of the forum)