

Enter Your Query:	Search	
Us	se '%' for wildcards and quotes for "exact phrases"	

## Top Level » System Level » File System

Setting up quotas on an XFS partition

The xfs file system is different than the previous ext3/ext4 file systems.

This guide will be closely related to the standard quota setup guide, except that xfs may have a few extra steps that require more manual intervention.

If you need quotas setup on the /home partition, then the guide should be very similar to the standard quota setup guide. However, if you need quotas setup on /, where directory under /), then extra steps are required.

As well, we replace the grpquota with pquota (project quotas), which will allow DA to setup directoy quotas, for things like enforcement of per-domain disk quotas.

To confirm what setup you have, run the df commmand, eg:

```
[root@es7-64 ~]# df -h
Filesystem
                          Size
                                Used Avail Use% Mounted on
/dev/mapper/centos-root
                           14G
                                       12G
                                             17% /
                                2.3G
devtmpfs
                          915M
                                   0
                                       915M
                                              0%
                                                 /dev
tmpfs
                          921M
                                 24K
                                       921M
                                              1% /dev/shm
                                              1% /run
tmpfs
                          921M
                                8.5M
                                       912M
tmpfs
                          921M
                                       921M
                                              0%
                                                 /sys/fs/cgroup
/dev/sda1
                          497M 125M
                                      372M
                                             26% /boot
[root@es7-64 ~]#
```

as you can see, /home is not a partition, so it falls under the / partition, so we must ensure that quotas are functional on the / partition.

**0)** Next confirm that / is actually using the xfs file system:

```
[root@es7-64 ~]# mount | grep ' / '
/dev/mapper/centos-root on / type xfs (rw,relatime,attr2,inode64,noquota) [root@es7-64 \sim]#
```

if you see the "noquota" option, then you need to go to step 1, below.

If you don't see noquota, then you should be able to follow the standard quota setup quide, but adding uquota, pquota to the /etc/fsab, after the default option.

## If you see "noquota" in the xfs mount options for the / partition

1) Because "noquota" is a default kernel mounting option, we must change it in the kernel boot options. Edit the file:

/etc/default/grub

2) Find the line with the variable "GRUB\_CMDLINE\_LINUX", that might look like this (it may not look exactly the same, don't worry):

GRUB CMDLINE LINUX="rd.lvm.lv=centos/swap vconsole.font=latarcyrheb-sun16 rd.lvm.lv=centos/root crashkernel=auto vconsole.keym

- 3) We're going to put a "rootflags=" variable at the end of the line
- And add uguota,pquota as the values

It might look something like this:

GRUB CMDLINE LINUX="rd.lvm.lv=centos/swap vconsole.font=latarcyrheb-sun16 rd.lvm.lv=centos/root crashkernel=auto

4) Now, based on that setup, we'll backup, then create a new grub.cfg file:

```
cp /boot/grub2/grub.cfg /boot/grub2/grub.cfg.orig
grub2-mkconfig -o /boot/grub2/grub.cfg
```

The path on some OSs has been changed to

/boot/efi/EFI/centos/grub.cfg

5) Lastly, we must reboot the box in order for the kernel to see these new options

6) We keep our fingers crossed that the box comes back, and login again. Go back to step 0) to check the mounting options to ensure that "noquota" is gone, eg:

```
root@es7-64 ~] # mount | grep ' / '
/dev/mapper/centos-root on / type xfs (rw,relatime,attr2,inode64,usrquota,prjquota) [root@es7-64 ~]#
```

Once it's gone, we want to see usrquota, priguota (or uquota, pquota, they're the same thing). If you don't see, them, then add them to the / partition with the standard quota setup guide.

7) Ensure that DirectAdmin has xfs quotas enabled in the directadmin.conf:

cd /usr/local/directadmin
./directadmin c | grep use\_xfs\_quota

8) If there are already Users created in DA, then you'll also want to reset their quota limits:

echo "action=rewrite&value=quota" >> /usr/local/directadmin/data/task.queue

to ensure their upper disk usage limits are enforced.

## CloudLinux / DigitalOcean

Report that /etc/default/grub may be ignored for these setups. The file /etc/rc.d/init.d/kexec applies instead (untested): https://docs.cloudlinux.com/index.html?digitalocean.html

where you'd add the rootflags = uquota, pquota to the end of the line that start with kexec - l

Related Helpfiles

Disk Usage is showing 0.00 or is too low

xfs quota: cannot set limits: Function not implemented

© 2018 JBMC Software, Suite 173 3-11 Bellerose Drive, St Albert, AB T8N 1P7 Canada. Mon-Fri 9AM-5PM MST