

# IT 4100: File Systems

## Linux quotas

Due according to date on Canvas

### Assignment

In this assignment, you will experiment with quotas on a linux filesystem (ext4). To begin, you should create an EC2 instance and attach a volume to it. You will only be enabling quotas on the volume NOT on the boot volume.

The standard EC2 kernel does not support volumes, you will have to delete the kernel, something like:

- apt-get remove linux-image-aws
  - you may have to look at `/boot/` to see what aws kernel is installed in order to run the above command.
  - my actual command was `apt remove linux-image-4.4.0-1117-aws`
  - Say `no` when the windows pops up.
- install the generic kernel
  - `apt-get -y install linux-image-generic`
  - `apt-get -y install linux-headers-generic`
- reboot
- make sure the quota module will load
  - `modprobe quota_v2`
  - `modprobe quota_v1`
- If the above commands were successful, you can then
  - `echo quota_v1 >> /etc/modules`
  - `echo quota_v2 >> /etc/modules`

### The real quota stuff

- Now, you should be able to mount your volume. Use the fstab method. The remaining tasks should be done on the volume.
- You should create 3 users and put them in a group. (chown the volume mount to be owned by the group you create)
- Add some files for each user. (on the mounted volume)
- Add a quota for each user and for the group.
- Do you get a warning message when you try to go over the hard limit?

### Submission and Passoff

In a single pdf:

- Screenshots of your `repquota` command