# IT 4100: File Systems

# LVM 1

Due according to date on Canvas

#### **Assignment**

The following should be done on an AWS ec2 ubuntu instance (18.04). Begin by creating a 4 1G volumes and attaching them. You can re-use your raid setup, but you will have to delete any raid configs on them. (A command like sudo mdadm --zero-superblock /dev/xvdf might help if you do need to delete the raid array)

#### **Create Physical Volume**

Create a physical volume that uses all your EBS volumes.

#### **Create Volume Group**

Create a volume group that uses all your devices. Your volume group should be named mastergroup. (Hint: after you create it, the size should be about 3.98g)

#### **Create Logical Volumes**

Create the following logical volumes:

Name	Size	MountPoint	Special
volume1	504M	/dirs/v1	Should be set up with -type of raid5
volume2	352M	/dirs/v2	Should be set up with -type of raid1
volume3	500M	/dirs/v3	
volume4	1500M	/dirs/v4	

#### **Mount Logical Volumes**

Put entries in <code>/etc/fstab</code> so that these directories will automatically be mounted at boot time. Make sure it actually works. Just use the default options for each.

## **Submission File Format**

Take print screens that show you have done all of the above. The most useful commands to capture will be pvs, 'vgs, lvs, and df -h. Place all screen captures in pdf file and submit.

## **Submission and Passoff**

Submit to the correct location in Canvas.