

## **Lab 2: Storage Management**

### **Create physical volume on disk**

- pvcreate /dev/sdb

### **Create volume group on physical volume**

- vgcreate new /dev/sdb
- vgs(to check)

### **Create each of the logical volumes under that group**

- lvcreate -n home -L 4g new
- lvcreate -n tmp -L 1g new
- lvs(to check)

### **Make the file systems on each lv**

- mkfs.xfs /dev/new/home
- mkfs.xfs /dev/new/tmp

### **Make the mount directories and mount to them**

- mkdir /mnt\_home
- mkdir /mnt\_tmp
- mount -t xfs /dev/new/home /mnt\_home
- mount -t xfs /dev/new/tmp /mnt\_tmp

### **Copy over the contents of home and tmp, free up the disk blocks in the original filesystem**

- cp /home/\* /mnt\_home)
- cp /tmp/\* /mnt\_tmp)
- rm -rf /home
- rm -rf /tmp

### **For the mounts to persist across reboots, edit /etc/fstab**

- blkid(shows the UUIDs for the lvs)
- vi /etc/fstab

```
/etc/fstab" 13L, 610C written
root@machinee /l#
root@machinee /l#
root@machinee /l# cat /etc/fstab
```

```
/etc/fstab
Created by anaconda on Sun Mar 22 18:53:23 2015

# Accessible filesystems, by reference, are maintained under
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8)
#
/dev/mapper/centos-root / xfs defa
UUID=71438877-2589-4eb2-9c1d-dd119fb7b77f /boot
/dev/mapper/centos-swap swap defa
UUID="947c20e6-e2f9-4dd6-b635-779b6c72d74d" /mnt_home
UUID="153c4658-f9b3-4247-a8b8-fde8e162ba94" /mnt_tmp
[root@machinee /l#
[root@machinee /l# vi /etc/fstab
```