Chris Golpashin

March 1, 2016

UNIX/Linux Administration

Creating a LVM

First Find out if the Storage devices are connected

Type: sudo su

You need to find out what they are listed as in /dev

Type: pvs (This shows you information about the physical volumes)

Type: fdisk –l or gdisk –l

Creating physical volumes and putting the directories for them.

Type: pvcreate /dev/sdb

Type: pvcreate /dev/sdc

Type: pvcreate /dev/sdd

Type: pvdisplay (displays current physical volumes)

Creating volume groups to store the created physical volumes

Type: vgcreate vg00 /dev/sdb /dev/sdc

Type: vgcreate vg01 /dev/sdd

Type: vgdisplay

Type: lvcreate –L 2GB –n extra1 vg00

Type: lvcreate –L 1.9GB –n extra2 vg00

Type: lvcreate –L 1.9GB –n extra3 vg01

Type: lvdisplay

Type: mke2fs –t ext4 /dev/vg00/extra1

Type: mke2fs –t ext4 /dev/vg00/extra2

Type: mke2fs –t ext4 /dev/vg01/extra3

Type: mkdir extra1

Type: mkdir extra2

Type: mkdir extra3

Type: mount /dev/vg00/extra1 extra1

Type: mount /dev/vg00/extra2 extra2

Type: mount /dev/vg01/extra3 extra3

You don’t need to actually use all of the volume group to create a LV. You can create a VG that contains 4 GB total, but a LV that contains only 2 GB. You can than extend the LV using the remain in the VG when you need it. You can also add more storage to the storage pool and extend your LV.