24-04 - */ dev/sdb1 - / etc/dumpdates*

*25-04 - / dev/sdb1*

*fsck frequency*

To permanently mount a device make an entry in / etc/fstab

device mountpoint filesystem mount options dump-freq fsck-freq

/ dev/sdb1 /data1 ext4 defaults 0 0

Undo permanent mounting and removing partition

comment the line in / etc/fstab

unmount filesystem

delete the partition

Booting Sequence

BIOS

MBR (MBR consists of an executable GRUB, 4 partition information, end of mbr)

GRUB ( GRand Unified Bootloader )

- Loads 2 files in memory

- kernel

- initial ram disk

GRUB locate vmlinuz and initrd using / boot/grub/grub.cfg

kernel loads the device drivers and starts a process call / sbin/init using initial ram disk

*/ sbin/init – symbolic link to / lib/systemd/systemd*

*systemd gets the default target and starts all the services to relevent to each targets*

*default*

*multi-user*

*basic*

*Logical Volume Management*

*Efficient storage management*

*/ / home / data1 / data2*

*25 25 25 25*

*Physical Partitions -> Physical Volume -> Volume Group (1 or more physical volumes) -> Logical Volume*

*LV*

*VG*

*PV PV*

*PP PP pp PP*

*create physical volume from a physical partition / dev/sdb1 and / dev/sdb1*

*sudo pvcreate / dev/sdb1*

*sudo pvcreate / dev/sdb2*

*Create a Volume Group with name vg0 from physical volumes / dev/sdb1 and / dev/sdb2*

*vgcreate vg0 / dev/sdb1 / dev/sdb2*

*Create a Logical Volume with size 500M*

*lvcreate -L 500M -n lvm0 vg0*

*Create filesystem and mount the logical volume on ‘/lvmshare’*

*sudo mkfs.ext4 / dev/vg0/lvm0*

*sudo mount / dev/vg0/lvm0 / lvmshare*

*Extend the logical volume by another 500M*

*sudo lvextend -L 1000M / dev/vg0/lvm0*

*Create filesystem on the extended portion*

*sudo resize2fs / dev/vg0/lvm0*

*Text Processing*

*cat - dumps the content to stdout*

*less – pager displays upto monitor size and rest of the content can be viewed by user intervention*

*head –* *displays content from beginning of a file ( default 10 lines)*

*tail - displays content from end of a file ( default 10 lines)*

*grep – pattern matcher*

*cut – extract information column wise*

*sort – sort the content*

*Hard Link*

*ln source destination*

*1. Hard link can not be created across file system*

*2. Hard link can not be created for directory*

*3. Data can be retrieved even after deleting the source*

*Soft Link*

*ln -s source destination*

*1. Soft link can be created across file system*

*2. Hard link can be created for directory*

*3. Data can not be retrieved even after deleting the source*