

## Class 21

### Quota management

Gmail ID = 15GB

It is use to give limitation to user and group on storage use

2 type

1. Soft quota = it give the warning after given limit but we can save the data .
2. Hard quota = we can upload till given limit , after it we can't .

2 way to apply the quota

1. Block wise = in this type we set quota according to size
  2. Inode wise = In this type we set quota according to inode .
- 

Partition , format it and mounting

/dev/sda1 = 5GB = ext4

Mounting

Temporary mounting

Mount -o usrquota,grpquota /dev/sda1 /mnt

Permanent mounting

Vim /etc/fstab

```
/dev/sda1 /mnt ext4 defaults,usrquota,grpquota 0 0
```

:wq

Quotacheck -ugmv /mnt (-u = user , -g = group , -m =make , -v = verbose) = activate the quota

On the quota

Quotaon -v /mnt

Off the quota

Quotaoff -v /mnt

---

Apply the quota to a user

Useradd harsil

Edquota -u harshil

Filesystem	blocks	soft	hard	inodes	soft	hard
/dev/sda1	0	0	0	0	3	5

Filesystem	blocks	soft	hard	inodes	soft	hard
------------	--------	------	------	--------	------	------

/dev/sda1	0	100	200	0	0	0
-----------	---	-----	-----	---	---	---

Size in kb

:wq

---

Apply the quota on the group

Groupadd hr = 100 member

Edquota -g hr

---

Copy the quota policies from 1 user to 2 user

Edquota -p username1 username2

Copy the quota policies from 1 group to another group

Edquota -g -p group1 group2

---

ACL (Access control list) =it is the way to apply the partial permission for user and group

/data = aa bb cc

Nonprivilege user = aa bb cc

Chmod 744 /data

7 = root

4= non-privilege

4= system user

Aa ,bb ,cc = see the data

Aa = rwx

Bb = r-x

Cc = --x

---

Mkdir /data = touch aa bb cc

User = aa ,bb ,cc

See the acl

Getfacl /data

Apply the acl

Setfacl -m u:aa:rwx /data (-m = modify)

To apply the acl inside also

Setfacl -R -m u:aa:rwx /data (-R -recursive)

Setfacl -m u:bb:rx /data

Setfacl -m u:cc:x /data

Apply the acl in group

Group -hr

Setfacl -m g:hr:rwx /data

---

Remove a single use from acl

Setfacl -x u:aa /data (-x =exclude)

Remove all from acl

Setfacl -b /data (-b =all remove )

---

Quota , acl

RAID

---

Home directory

User = xyz = /home/xyz

/abc

Xyz-sh)\$

/skel

Cp -rvf /skel/\* /abc