

RAID 0

Add 2 hard drive at 1GB from VM settings.

lsblk → list block devices connected to system

yum clean all

yum update

yum install mdadm

mdadm --create --verbose /dev/md0 --level=0
--raid-devices=2 /dev/sdb /dev/sdc → create RAID 0

cat /proc/mdstat Device

mdadm --examine /dev/sdb

mdadm --examine /dev/sdc

mdadm --detail /dev/md0

fdisk /dev/md0 → Enter n, then Enter p, the 3 time Ent
→ Enter w

fdisk -l

mkfs.ext4 /dev/md0

~~mount~~ /dev/md0 /mnt/raid0

mount /dev/md0 /mnt/raid0

data is added alterately in hard drive, if incase any disk fails whole harddrive (both) will get failed.

RAID 1

(write)

Add 2 hard drive of 20 GB from VM setting

```
# yum clean all
```

```
# yum install mdadm
```

```
# mdadm --create --verbose /dev/md0 --level=1  
--raid-devices=2 /dev/sdb /dev/sdc
```

↳ create RAID 1 Device

```
# mdadm --examine /dev/sdb
```

```
# mdadm --examine /dev/sdc
```

```
# mdadm --detail /dev/md0
```

```
# fdisk -l
```

```
# mkdir /mnt/raid1
```

```
# mount /dev/md0 /mnt/raid1
```

```
# mdadm --detail /dev/md0
```

```
# blkid
```

↳ copy /dev/md0 "UUID=-----"

```
# vi /etc/fstab
```

↳ paste it

```
UUID=ceo----- /mnt/raid1 ext4 defaults 0 0
```

RAID 5

Add 4 hard drive of 1GB from VM setting

```
# yum clean all
```

```
# yum install mdadm
```

```
# mdadm --create --verbose /dev/md0 --level=5  
--raid-devices=3 /dev/sdb /dev/sdc /dev/sdd  
--spare-devices=1 /dev/sde
```

```
# fdisk /dev/md0
```

↳ n → p → enter → enter → enter → w

```
# mkfs.ext4 /dev/md0
```

```
# mkdir /mnt/raid5
```

```
# mount /dev/md0 /mnt/raid5/
```

```
# cd /mnt/raid5/
```

```
# dd if=/dev/zero of=100m.file bs=1024  
count=1800033
```

```
# mdadm --detail /dev/md0
```

active sync /dev/sdb

active sync /dev/sdc

active sync /dev/sdd

spare /dev/sde

```
# mdadm --fail /dev/md0 /dev/sdd
```

↳ disk /sdd will fail & spare disk /sde will take place at the place of /sdd drive

```
# mdadm --detail /dev/md0
```

active sync /dev/sdb

active sync /dev/sdc

active sync /dev/sde

faulty /dev/sdd