RAID 0 CONFIGURATION COMMAND: Add 2 extra disks of 20 GB other than boot disk.

1. **[root@localhost ~]# lsblk**

NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT

sda 8:0 0 20G 0 disk

├─sda1 8:1 0 1G 0 part /boot

└─sda2 8:2 0 19G 0 part

├─centos-root 253:0 0 17G 0 lvm /

└─centos-swap 253:1 0 2G 0 lvm [SWAP]

sdb 8:16 0 20G 0 disk

sdc 8:32 0 20G 0 disk

sr0 11:0 1 973M 0 rom

1. **[root@localhost ~]# yum install mdadm –y**
2. **[root@localhost ~]# mdadm --create --verbose /dev/md0 --level=0 --raid-devices=2 /dev/sdb /dev/sdc**

mdadm: chunk size defaults to 512K

mdadm: Defaulting to version 1.2 metadata

mdadm: array /dev/md0 started.

1. [root@localhost raid0]# blkid /dev/md0

/dev/md0: UUID="92609716-9785-44bf-8a66-52bcdff62965" TYPE="ext4"

1. [root@localhost raid0]# cat /etc/fstab

#

# /etc/fstab

# Created by anaconda on Sun Nov 27 00:26:18 2022

#

# Accessible filesystems, by reference, are maintained under '/dev/disk'

# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info

#

/dev/mapper/centos-root / xfs defaults 0 0

UUID=fbf76286-7b82-442d-abd8-5369f4f56909 /boot xfs defaults 0 0

/dev/mapper/centos-swap swap swap defaults 0 0

UUID="92609716-9785-44bf-8a66-52bcdff62965" /mnt/raid0 ext4 defaults 0 0

1. **[root@localhost ~]# cat /proc/mdstat**

Personalities : [raid0]

md0 : active raid0 sdc[1] sdb[0]

41908224 blocks super 1.2 512k chunks

unused devices: <none>

1. **[root@localhost ~]# mdadm --examine /dev/sdc**
2. **[root@localhost ~]# mdadm --examine /dev/sdb**
3. **[root@localhost ~]# mdadm --detail /dev/md0**
4. **[root@localhost ~]# fdisk /dev/md0**

Welcome to fdisk (util-linux 2.23.2).

Changes will remain in memory only, until you decide to write them.

Be careful before using the write command.

Device does not contain a recognized partition table

Building a new DOS disklabel with disk identifier 0xdd9f00cf.

Command (m for help):

Command (m for help): n

Partition type:

p primary (0 primary, 0 extended, 4 free)

e extended

Select (default p): p

Partition number (1-4, default 1): press enter key

First sector (2048-83816447, default 2048): press enter key

Using default value 2048

Last sector, +sectors or +size{K,M,G} (2048-83816447, default 83816447):

Using default value 83816447

Partition 1 of type Linux and of size 40 GiB is set

Command (m for help): w

The partition table has been altered!

Calling ioctl() to re-read partition table.

Syncing disks.

1. [root@localhost ~]# mkfs.ext4 /dev/md0

mke2fs 1.42.9 (28-Dec-2013)

Filesystem label=

OS type: Linux

Block size=4096 (log=2)

Fragment size=4096 (log=2)

Stride=128 blocks, Stripe width=256 blocks

2621440 inodes, 10477056 blocks

523852 blocks (5.00%) reserved for the super user

First data block=0

Maximum filesystem blocks=2157969408

320 block groups

32768 blocks per group, 32768 fragments per group

8192 inodes per group

Superblock backups stored on blocks:

32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,

4096000, 7962624

Allocating group tables: done

Writing inode tables: done

Creating journal (32768 blocks): done

Writing superblocks and filesystem accounting information: done

1. **[root@localhost ~]# mkdir /mnt/raid0**
2. **[root@localhost ~]# mount /dev/md0 /mnt/raid0**
3. **[root@localhost ~]# cd /mnt/raid0/**
4. **[root@localhost raid0]# ls**

lost+found

1. **[root@localhost raid0]# touch test**
2. **[root@localhost raid0]# ls**

lost+found test

1. [root@localhost raid0]# df -h

Filesystem Size Used Avail Use% Mounted on

devtmpfs 475M 0 475M 0% /dev

tmpfs 487M 0 487M 0% /dev/shm

tmpfs 487M 7.7M 479M 2% /run

tmpfs 487M 0 487M 0% /sys/fs/cgroup

/dev/mapper/centos-root 17G 1.5G 16G 9% /

/dev/sda1 1014M 138M 877M 14% /boot

tmpfs 98M 0 98M 0% /run/user/0

/dev/md0 40G 49M 38G 1% /mnt/raid0

1. [root@localhost raid0]# dd if=/dev/zero of=shrusti.file bs=1024 count=500000

500000+0 records in

500000+0 records out

512000000 bytes (512 MB) copied, 3.15731 s, 162 MB/s

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