mdadm Cheat Sheet

mdadm is a GNU/Linux utility used to manage and monitor <u>software RAID</u> devices. It is used in modern GNU/Linux distributions in place of older software RAID utilities such as raidtools2 or raidtools.

Glossary:

md: multiple devices

`cat /proc/mdstat` : show status of all raids

`mdadm --detail /dev/md0` : detailed status of raid md0

`mdadm --create /dev/md0 -n2 -l1 /dev/sda1 /dev/sdb1` : new raid */dev/md0* with 2 disks, raid level 1 on */dev/sda1* and */dev/sda2*

`mdadm --fail /dev/md0 /dev/sda1 ; mdadm --remove /dev/md0 /dev/sda1` : remove */dev/sda1* from */dev/md0*

`mdadm --add /dev/md0 /dev/sda1` : add /dev/sda1 to /dev/md0

`mdadm --grow /dev/md0 -n3` : use 3 disks in raid /dev/md0 (e.g. add an additional disk, so a damaged drive can be removed later-on)

`mdadm --assemble /dev/md0` : Assemble /dev/md0 (e.g. when running live system)

`mdadm --detail --scan >> /etc/mdadm/mdadm.conf` : Update list of arrays in /etc/mdadm/mdadm.conf ; you should remove old list by hand first!

`mdadm --examine /dev/sda1` : What is this disk / partition?

`sysctl -w dev.raid.speed_liit_min=10000` : Set minimum raid rebuilding speed to 10000 kiB/s (default 1000)

`sfdisk -d /dev/sda | sfdisk /dev/sdb` : Copy partition table from sda to sdb

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To boot a machine even with a degraded array, modify `/etc/initramfs-tools/conf.d/mdadm` and run `update-initramfs -c -kall` (Use with caution!)