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MDADM + install Lubuntu Alternate on RAID0

Mdadm is useful package for making software disk array software controller. Please refer to user manual (#man mdadm). Please refer to these commands for providing non system-bootable disk for separate data IO, or swap area:

1) install mdadm package:

#sudo aptitude install mdadm

2) cut every disk to constant size with Gparted Graphical User Interface:

#sudo aptitude install gparted && sudo gparted

Device->Create Partition Table -> msdos

Partition->New->#ConstantSizeOnEachDisk

#sudo mdadm --create --verbose /dev/md0 --level=0 --raid-devices=X /dev/sdx /dev/sdy /dev/sdz …

install Lubuntu Alternate on software RAID0

RAID 0 is non-disk-failure-robust disk array implementation providing simplest and fastest solution for multiple disk utilization. One can configure and install system on such solution. Most motherboard supports up to 2-3GBps throughput for all peripheral ports. In such system software disk array provides quite good results with capacity, price, real Read/Write throughput, and kIOps/GB. On the other hand it would be cheaper to use efficiently M.2 disks – but this technology is not popular, and still expensive nowadays. At beginning of 2018y. capacity optimal are: used 3.5'' SATA(4 – 6 pieces)/PATA(4 pieces) HDD's, 7.2krpm, 8MB SRAM cache, 80-250GB (for example 6x160GB) via 512B/disk sequential accesses. Pseudo random access optimal is usage of 2.5'' SATA(2 – 4 pieces) SSD's, 120GB via 4kB/disk sequential accesses.

1) download Lubuntu Alternate, and make bootable pendrive via Startup Disk Creator, or UNetBootIn:

https://lubuntu.net/downloads/

2) install in an ordinary way (please refer to: "https://www.youtube.com/watch?v=cNQq53bbgQI&t=169s"). Set on each disk two partitions with CONSTANT SIZE. Firstly delete every past partition on disks (please make sure, that data is copied, and there are connected, disk meant only for erasing).

Raid space1:

Use as: "physical volume for RAID"

Type for Swap: "primary"

From beginning

Raid space2:

Use as: "physical volume for RAID"

Type for operating system: "logical"

beginning

Configure software RAID->Create MD Device -> RAID 0, and check with space:

space1 disk partitions Raid 0 – for boot

space2 disk partitions Raid 0 – for swap

space3 disk partitions Raid 0 – for operating system

Created RAID 0 disks set to:

space1 Raid 0 Use as: "EFI"

space2 Raid 0 Use as: "swap area"

space3 Raid 0 Use as: "Ext4 journaling file system";

Mount point: "/ - the root file system"

DUALBOOT

Dual boot configuration could not be detected with usage of "update-grub" command. It is connected with RAID configuration. To enable this edit "/etc/defatult/grub" and add:

GRUB_DISABLE_OS_PROBER=false

and execute:

sudo os-prober && sudo update-grub

Post Scriptum: if one is not sure, he or she should physically disconnect essential disk devices.