SNAPRAID AND MERGERFS

BY
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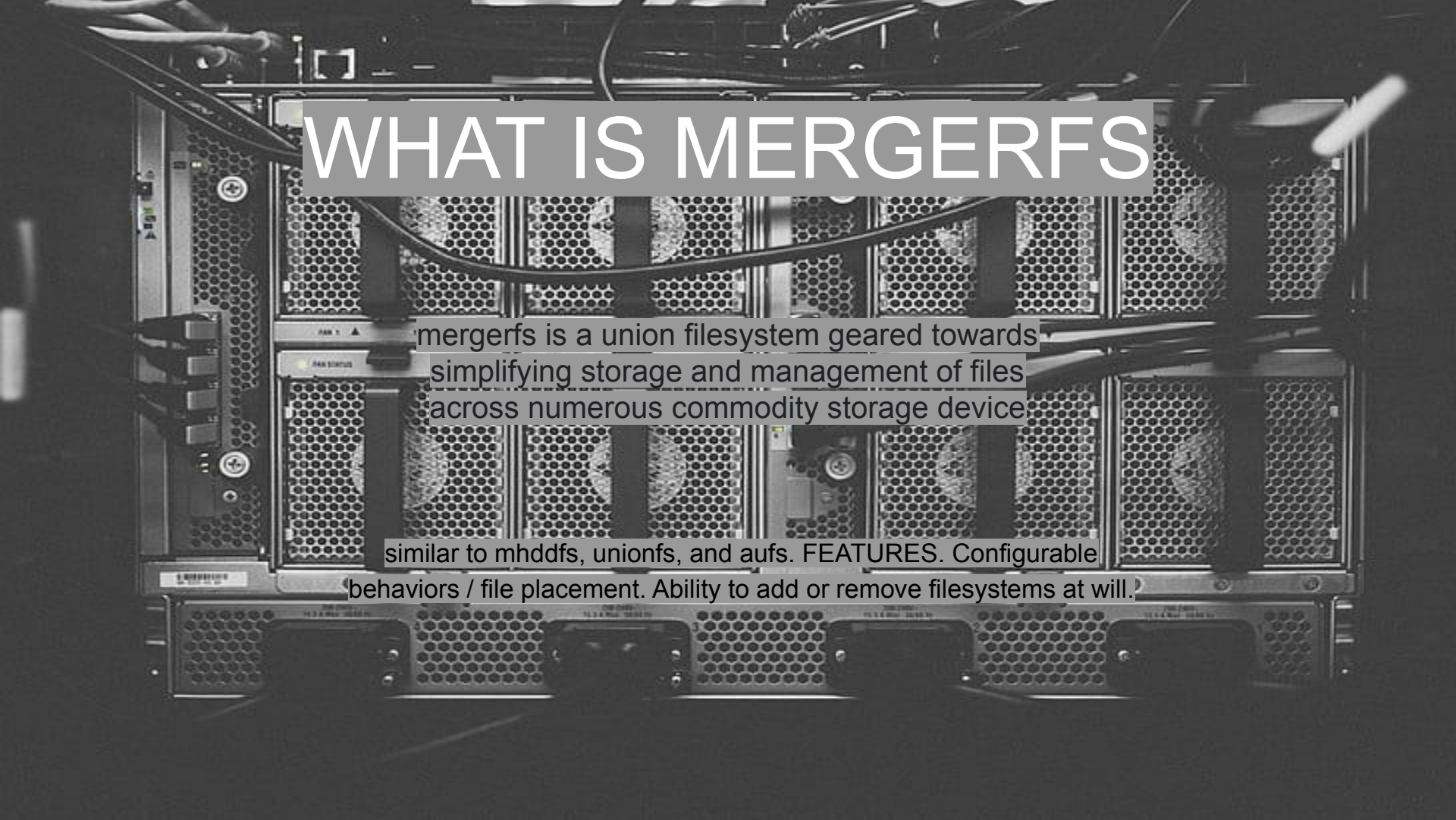
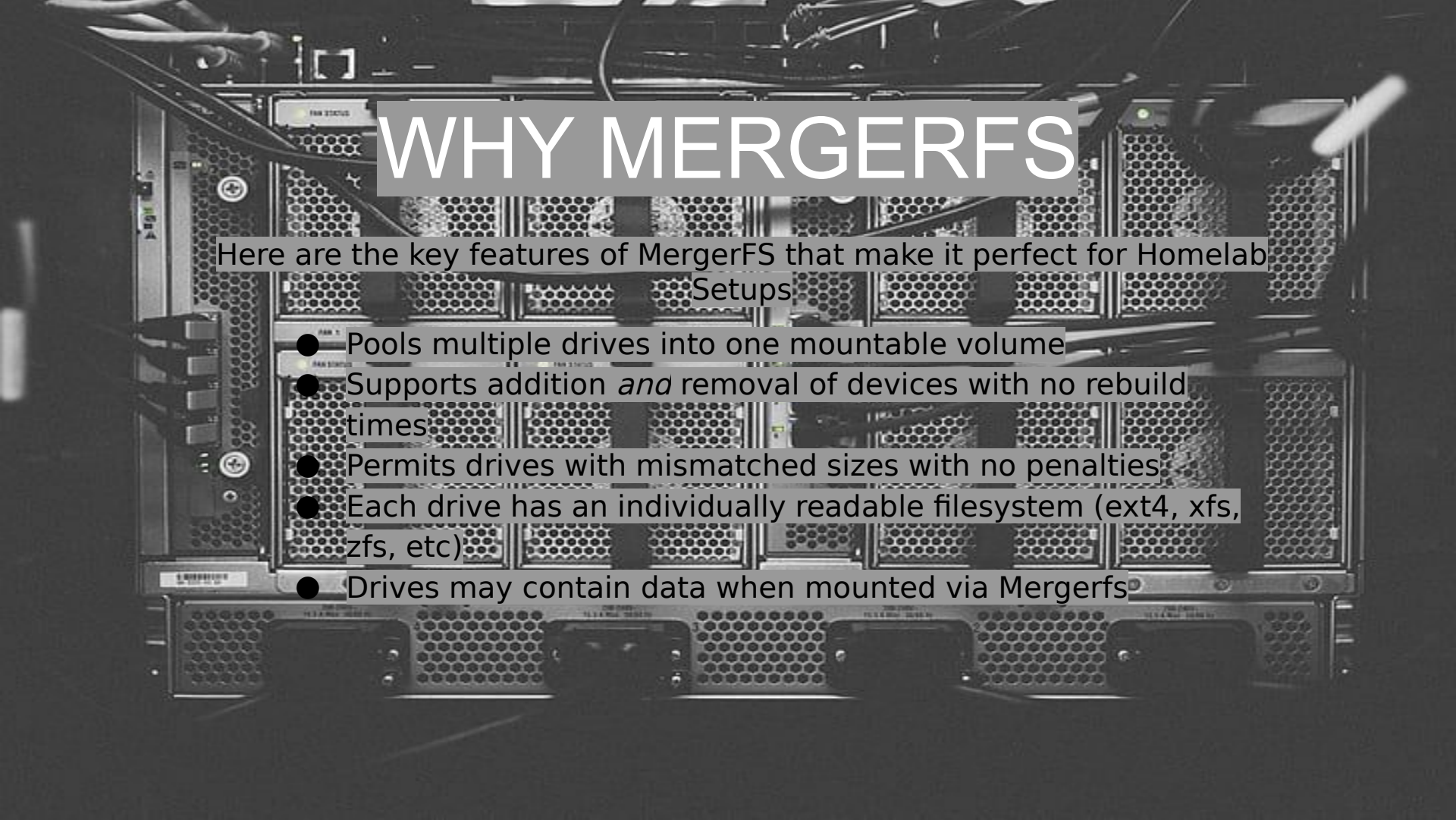


WHAT IS MERGERFS

mergerfs is a union filesystem geared towards simplifying storage and management of files across numerous commodity storage device

similar to mhddfs, unionfs, and aufs. FEATURES. Configurable behaviors / file placement. Ability to add or remove filesystems at will.

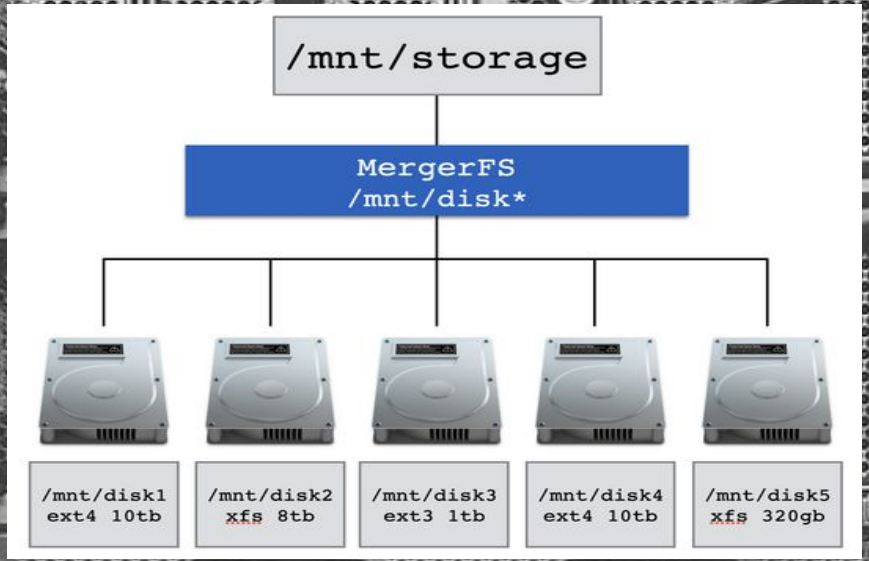


WHY MERGERFS

Here are the key features of MergerFS that make it perfect for Homelab Setups

- Pools multiple drives into one mountable volume
- Supports addition *and* removal of devices with no rebuild times
- Permits drives with mismatched sizes with no penalties
- Each drive has an individually readable filesystem (ext4, xfs, zfs, etc)
- Drives may contain data when mounted via Mergerfs

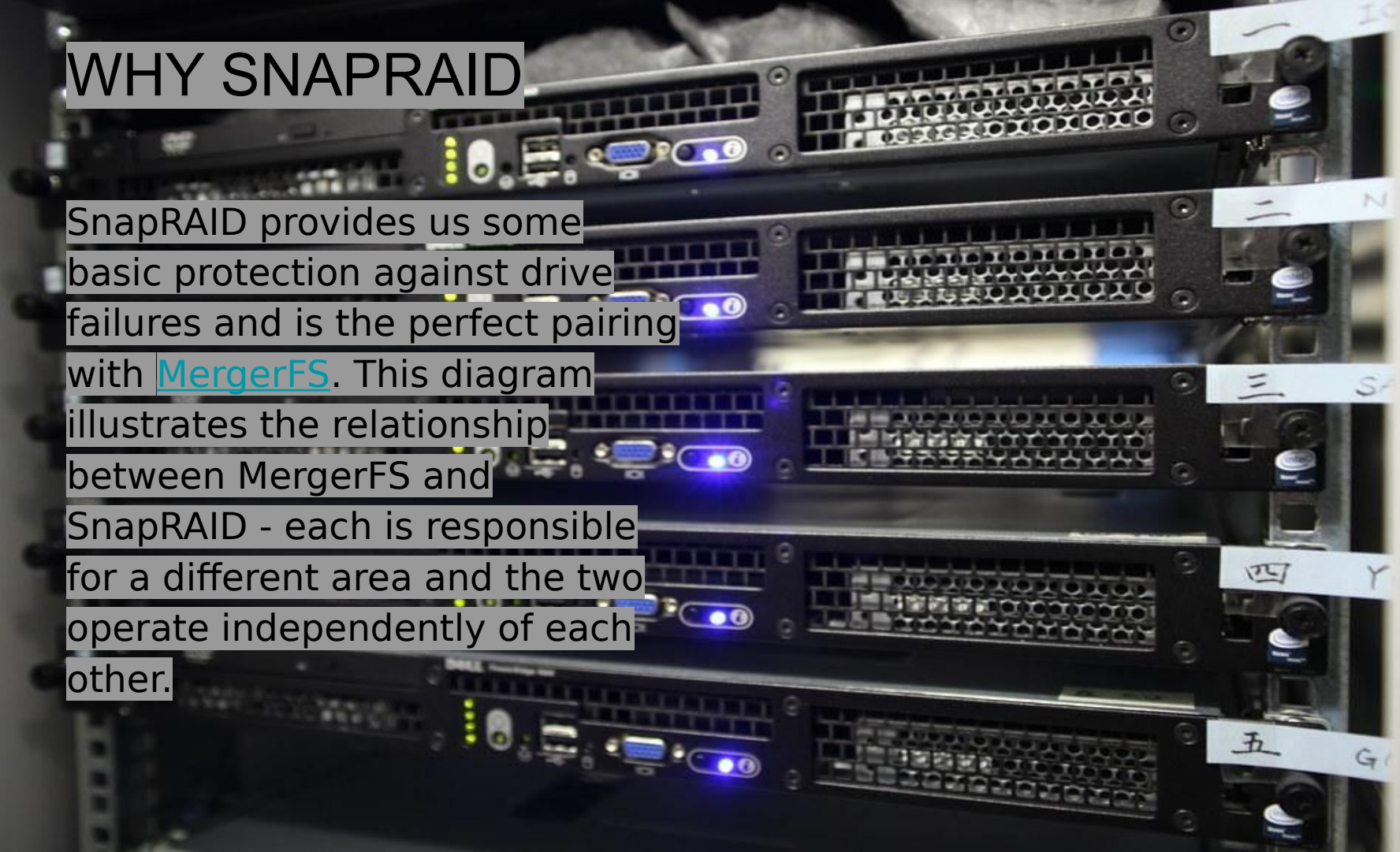
HOW TO USE



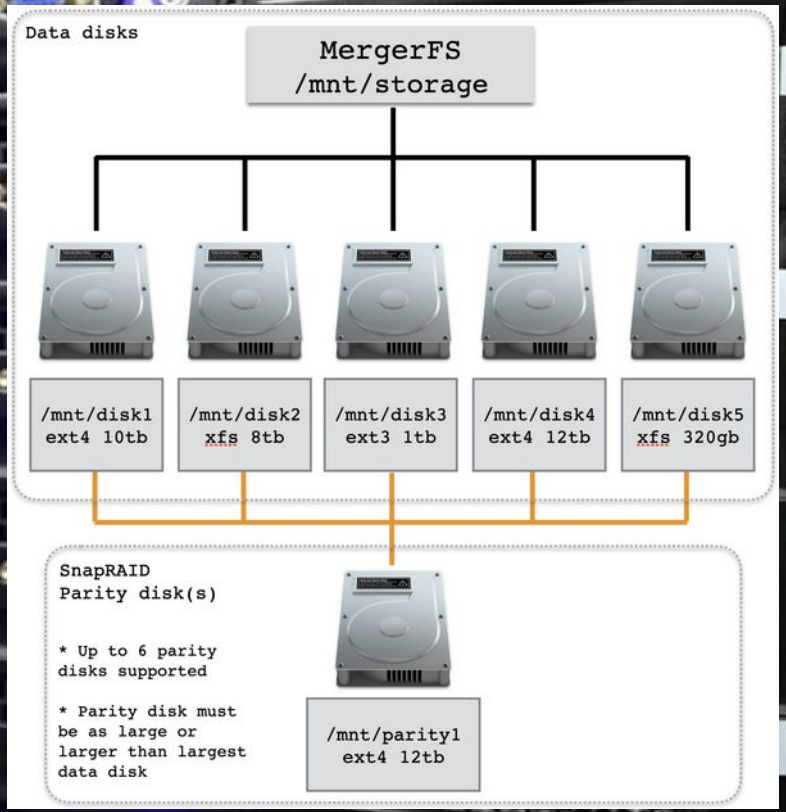
/mnt/disk* /mnt/storage fuse.mergerfs defaults,nonempty,allow_other,use_ino,cache.files=off,moveonenospc=true,category.create=mfs,dropcacheonclose=true,minfreespace=250G,fsname=mergerfs 0 0

WHY SNAPRAID

SnapRAID provides us some basic protection against drive failures and is the perfect pairing with MergerFS. This diagram illustrates the relationship between MergerFS and SnapRAID - each is responsible for a different area and the two operate independently of each other.



HOW TO USE SNAPRAID



SNAPRAID TOOLS

Scruding

To periodically check the data and parity for errors, you can run the "scrub" command.

Status

Prints a summary of the state of the disk array.

Sync

Updates the parity information. All the modified files in the disk array are read, and the corresponding parity data is updated.

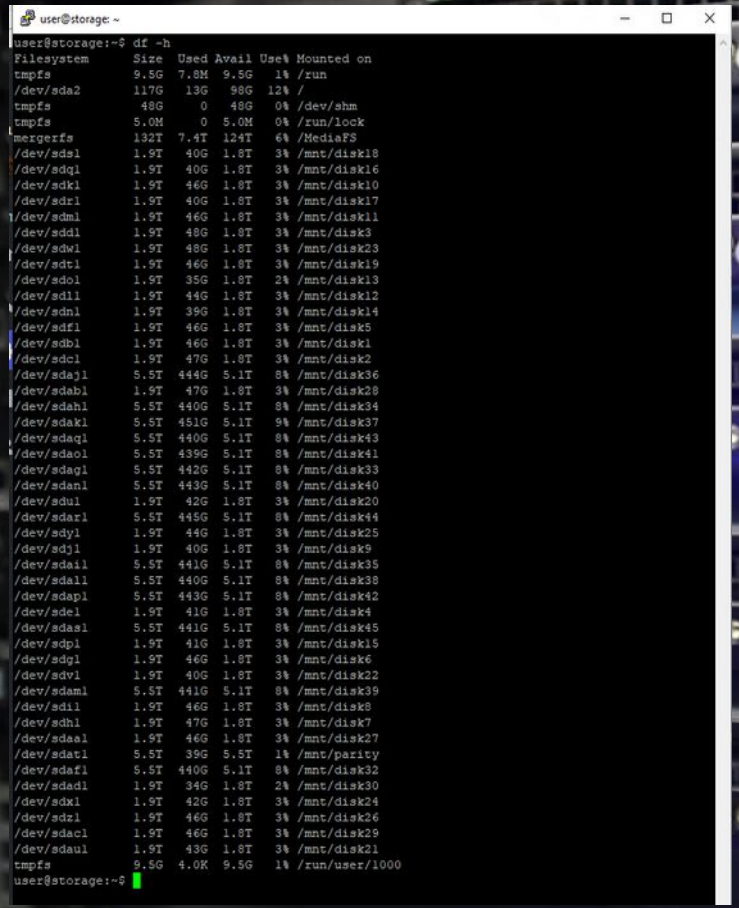
DUP

Lists all the duplicate files. Two files are assumed equal if their hashes are matching. The file data is not read, but only the pre-computed hashes are used.

EXTRA INFO

DF -H

A cmd used to list disks and space used on them



FSTAB LIST

FSTAD
Is used to mount your drives at boot