

STORAGE SOLUTIONS

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Popular Technology

- Blu-Ray
- Hard Disk Drive
- Solid State Disk
- Tape



Drive Specifications

Access Time

UBER

Read/Write Speed

Cache

Cost

3

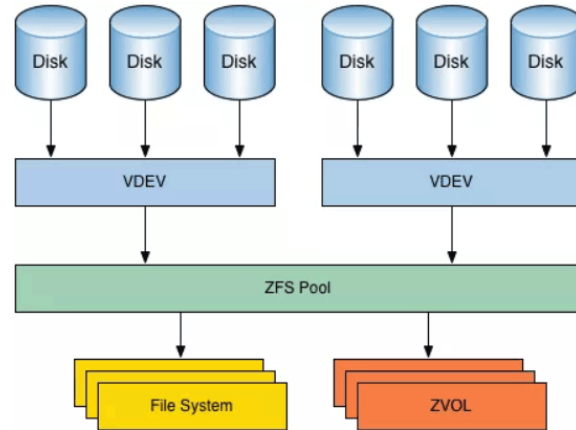
Technology Comparison

	Access Time	UBER	Speed	Cache	Cost
3.6 TB Tape	50-60 s	1 in 10E19	360 MB/s	-	\$20
1 TB HDD	9-15 ms	1 in 10E15	150 MB/s	64 MB	\$70
1 TB SSD	25-100 us	-	3000 MB/s	1 GB	\$170

4

Storage Virtualization

RAID
Storage
snapRAID
Filesystem
ZFS
Filesystem



Backup Strategies



3-2-1 Rule
3 Copies of Data
2 Copies on
Different Media
1 Off-site

Dashboard



- <https://mauteam.org/infrastructure/the-best-cloud-file-system-was-created-before-the-cloud-existed/>
- <https://wiki.archlinux.org/index.php/SnapRAID>
- <https://mywwwu.wallawalla.edu/>
- <https://www.starwindsoftware.com/blog/3-2-1-backup-strategy-why-your-data-always-survives>
- <https://www.reviewgeek.com/6416/is-it-better-to-watch-a-4k-movie-on-blu-ray-or-through-streaming/>
- <https://www.ontrack.com/au/blog/2015/09/04/data-storage-reliability/>
- <https://tekhattan.com/blog/hardware/ssd-vs-hdd-speed-lifespan-and-reliability/>



SOURCES