# 1 CheatSheet: Linux Disk

LINUX

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- PDF Link: cheatsheet-disk-A4.pdf, Category: linux
- Blog URL: https://cheatsheet.dennyzhang.com/cheatsheet-disk-A4
- Related posts: CheatSheet: Linux Process, CheatSheet: Linux Networking, #denny-cheatsheets

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## 1.1 Summary

Name	Comment
df	Show information about the file system.
du	Summarize disk usage of each FILE, recursively for directories.
$\mathrm{d}\mathrm{d}$	Copy a file, converting and formatting according to the operands.
$\operatorname{mount}$	Mount file systems.
lsblk	List information about all available or the specified block devices.
Reference	CheatSheet: Linux Process, CheatSheet: Linux Networking, CheatSheet: Linux Disk

#### 1.2 du

Name	Comment
Show the disk usage of current folder	du -sh
Show disk usage for a given folder	du -h -d 2 /data/elasticsearch/
Sort directories/files by size	GitHub: sort-disk-size.sh

### 1.3 df

Name	Comment
List all disks with humanreadable format	df -h

### 1.4 dd

Name	Comment
Create a file with fixed size and random context	dd if=/dev/urandom of=/tmp/random.txt count=3 bs=256
Create a file with fixed size and empty context	dd if=/dev/zero of=/tmp/random.txt count=3 bs=256

#### 1.5 mount

Name	Comment
Mount an ISO to a folder	mount -o loop my-disk.iso /mnt/disk
Mount NFS	<pre>mount -t nfs 192.168.1.1:/usr/share /mnt/share</pre>
Remount rootfs as read-write in repair mode	mount -o remount rw /

#### 1.6 lsblk

Name	Comment
List all available block devices	lsblk
List all scsi devices	lsblkscsi
Show a specific device	lsblk /dev/sda
List block devices with filesystem info	lsblkfs

end each output line with 0 byte rather than newline

### 1.7 Online Help Usage

```
> du --help
```

-0, --null

Usage: du [OPTION]... [FILE]...
or: du [OPTION]... --filesO-from=F

Summarize disk usage of each FILE, recursively for directories.

Mandatory arguments to long options are mandatory for short options too.

GitHub: https://github.com/dennyzhang/cheatsheet.dennyzhang.com/tree/master/cheatsheet-disk-A4

```
write counts for all files, not just directories
-a, --all
    --apparent-size
                      print apparent sizes, rather than disk usage; although
                        the apparent size is usually smaller, it may be
                        larger due to holes in ('sparse') files, internal
                        fragmentation, indirect blocks, and the like
-B, --block-size=SIZE scale sizes by SIZE before printing them; e.g.,
                         '-BM' prints sizes in units of 1,048,576 bytes;
                         see SIZE format below
-b, --bytes
                      equivalent to '--apparent-size --block-size=1'
-c, --total
                      produce a grand total
-D, --dereference-args
                       dereference only symlinks that are listed on the
                        command line
                      print the total for a directory (or file, with --all)
-d, --max-depth=N
                        only if it is N or fewer levels below the command
                        line argument; --max-depth=0 is the same as
                        --summarize
   --files0-from=F
                      summarize disk usage of the
                        NUL-terminated file names specified in file F;
                        if F is -, then read names from standard input
                      equivalent to --dereference-args (-D)
-H
-h, --human-readable
                      print sizes in human readable format (e.g., 1K 234M 2G)
    --inodes
                      list inode usage information instead of block usage
                      like --block-size=1K
-k
                      dereference all symbolic links
-L, --dereference
-1, --count-links
                      count sizes many times if hard linked
                      like --block-size=1M
-P, --no-dereference don't follow any symbolic links (this is the default)
                      for directories do not include size of subdirectories
-S, --separate-dirs
    --si
                      like -h, but use powers of 1000 not 1024
-s, --summarize
                      display only a total for each argument
-t, --threshold=SIZE exclude entries smaller than SIZE if positive,
                        or entries greater than SIZE if negative
                      show time of the last modification of any file in the
    --time
                        directory, or any of its subdirectories
    --time=WORD
                      show time as WORD instead of modification time:
                        atime, access, use, ctime or status
   --time-style=STYLE show times using STYLE, which can be:
                          full-iso, long-iso, iso, or +FORMAT;
                          FORMAT is interpreted like in 'date'
-X, --exclude-from=FILE exclude files that match any pattern in FILE
    --exclude=PATTERN
                         exclude files that match PATTERN
-x, --one-file-system
                         skip directories on different file systems
               display this help and exit
    --version output version information and exit
```

Display values are in units of the first available SIZE from --block-size, and the DU\_BLOCK\_SIZE, BLOCK\_SIZE and BLOCKSIZE environment variables. Otherwise, units default to 1024 bytes (or 512 if POSIXLY\_CORRECT is set).

SIZE is an integer and optional unit (example: 10M is 10\*1024\*1024). Units are K, M, G, T, P, E, Z, Y (powers of 1024) or KB, MB, ... (powers of 1000).

GNU coreutils online help: <a href="http://www.gnu.org/software/coreutils/">http://www.gnu.org/software/coreutils/</a>>
For complete documentation, run: info coreutils 'du invocation'

#### 1.8 More Resources

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