1 CheatSheet: Linux Disk LINUX

- 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.
dd	Copy a file, converting and formatting according to the operands.
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	`mount -t nfs 192.168.1.1:/usr/share /mnt/share`
Remount rootfs as read-write in repair mode	`mount -o remount,rw /`

1.6 dd

Name	Comment
List all available block devices	`lsblk`
List all scsi devices	`lsblk --scsi`
Show a specific device	`lsblk /dev/sda`
List block devices with filesystem info	`lsblk --fs`

1.7 Online Help Usage

```
> du --help
Usage: du [OPTION]... [FILE]...
  or:  du [OPTION]... --files0-from=F
Summarize disk usage of each FILE, recursively for directories.

Mandatory arguments to long options are mandatory for short options too.
  -0, --null            end each output line with 0 byte rather than newline
```

```
  -a, --all             write counts for all files, not just directories
      --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
  -d, --max-depth=N     print the total for a directory (or file, with --all)
                          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
  -H                    equivalent to --dereference-args (-D)
  -h, --human-readable  print sizes in human readable format (e.g., 1K 234M 2G)
      --inodes          list inode usage information instead of block usage
  -k                    like --block-size=1K
  -L, --dereference     dereference all symbolic links
  -l, --count-links     count sizes many times if hard linked
  -m                    like --block-size=1M
  -P, --no-dereference  don't follow any symbolic links (this is the default)
  -S, --separate-dirs   for directories do not include size of subdirectories
      --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
      --time            show time of the last modification of any file in the
                          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
      --help     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: <http://www.gnu.org/software/coreutils/>
For complete documentation, run: info coreutils 'du invocation'
```

1.8 More Resources