

Practical Linux

Commands Cheat Sheet

Info about other commands

`man [command]`

Shows a user manual for the mentioned `command`.

Navigate through the filesystem

`pwd [option]...`

Prints the absolute path of the current/working directory.

`ls [option]... [directory]...`

Lists information about the `directory` in alphanumeric order.

If no `directory` is specified the `working directory` is assumed.

Some options:

- `-l` (long)
Long listing: type, permissions, owner, group, size, and date.
- `-S` (size)
Biggest files first.
- `-h, --human-readable`
With `-l` and/or `-s` prints human readable sizes.
- `-r, --reverse`
Reverses the sort order.

`cd [directory]`

Change working directory to the provided `directory`.

Shortcuts:

- `cd` with no arguments defaults to your home directory.
- `cd ~username` points to the home directory of the `username`.
- `cd -` return to the previous working directory.

Manipulate files and folders

`mkdir [option].. [directory]...`

Create new `directories`.

An option:

- `-p, --parents`
Make parent directories if needed.

`cp [option]... [source]... [destination]`

Copies the `source` to the `destination`.

Some options:

- `-r, -R, --recursive`
Copy directories recursively, i.e, copy entire directory structure.
- `-i, --interactive`
Prompt before overwrite. (Overrides a previous `-n` option).

- **-n, --no-clobber**
Do not overwrite an existing file. (Overrides a previous **-i** option).
- **-v, --verbose**
Explain what is being done.

mv [option]... [source]... [destination]

Move or rename **source** to **destination**.

Some options:

- **-u, --update**
Move only when the **source** is newer than the **destination** or when the **destination** is missing.
- **-i, --interactive**
Prompt before overwrite. (Overrides a previous **-n** option).
- **-n, --no-clobber**
Do not overwrite existing files. (Overrides a previous **-i** option).

rm [options]... [file/directory]...

Remove specified **files** or **directories**.

Some options:

- **-r, -R, --recursive**
Remove directories and their contents recursively.
By default, **rm** does not remove directories.
- **-i, --interactive**
Prompt before overwrite. (Overrides a previous **-n** option).
- **-n, --no-clobber**
Do not overwrite an existing file. (Overrides a previous **-i** option).

Inspect Files

cat [option]... [file]...

View the entire content of the input **files**.

less [file]...

View the **file** with scrolling allowed. While viewing press **h** to get help, **/** followed by typed text and return (enter) key to search in the file, and **q** to exit.

head [option]... [file]...

Print the first 10 lines of each **file**. If more than one **file**, each is preceded with a name header.

An option:

- **-n, --lines=[-]<number>**
Print the first **<number>** lines instead of the first 10.
With the leading **'-'**, print all but the last **<number>** lines of each file.

tail [option]... [file]... Print the last 10 lines of each **file**.

If more than one **file**, each is preceded with a name header.

An option:

- **-n, --lines=[+<number>**
Print the last **<number>** lines instead of the first 10.
With the leading **'+'**, print all but the first **<number>** lines of each file.

Edit files

`nano file`

Open `file` to edit.

Note that all keystrokes enter text into the file being edited with the following exceptions:

- Control (`Ctrl`, shown as `^`).
- Meta (`Alt` or `Cmd`, shown as `M-`).

Highlithing, copying, cutting, and pasting:

- `Ctrl-^`: enter/exit highlight mode; use arrow keys next.
- `Meta-^`: copy (once highlighted).
- `Ctrl-k`: cut (once highlighted or cuts entire line if not).
- `Ctrl-u`: paste.

Search, undo, and redo:

- `Ctrl-w`: search for keyword.
- `Meta-u`/`Meta-e`: undo / redo.

Help, save, and exit:

- `Ctrl-g`: nano help; press `Ctrl-x` to exit the help mode.
- `Ctrl-o`: save file (write out).
- `Ctrl-x`: exit nano.

Disk usage

`du [option]... [file/directory]...` Summarize disk usage of the set of `files/directories`.

Some options:

- `-c, --total`
Produce a grand total.
- `-h, --human-readable`
Print sizes in human readable format (e.g., 1K 234M 2G).

Search and count

`locate [option]... [pattern]`

Outputs every path that contains the provided `pattern`.

`find [path]... [option]... [expression]`

Search for files and directories based on the given `expression`.

Many options and ways to specify the `expression` - check the manual page.

`grep [option]... [pattern] [file/directory]...`

Search text `files` for the `pattern` occurrence and output any line containing a match.

Some options:

- `-r, --recursive`
Search recursively in all files of the provided `directory`.
- `-i, --ignore-case`
Do not distinguish between upper and lower case characters.
- `-v, --invert-match`
Invert the sense of matching to select non-matching lines.
- `-c, --count`
Suppress normal output. Instead print the number of matches.

`wc [option]... [file]...`

Print the number of lines, words, and characters for each `file`.

Output redirection operators

`command > file`

Redirect the `command` output to the specified `file`.

If `file` already exists it will be overwritten.

`command >> file`

Redirect the `command` output to the specified `file`.

If `file` already exists the `command` output will be appended to the `file`.

User environment

`chmod option file/directory`

Change `file/directory` permissions.

Examples:

- `chmod g+r info.txt`
Add read access for group users to file `test`.
- `chmod u-x test`
Remove completely the access for directory `test`.