

# CLI Magic Tricks for Docs Projects

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# Why, why, why .... CLI?

Command line is a great interface choice:

- use the same tools everywhere
- transferrable CLI-wrangling skills
- command names are searchable
- scripts to save and replay commands

# Reusable magic

# Redirect operator

Take the output and put it in a file.

```
ls *.md > files_list.txt
```

Capture output to share or use later

# Pipe operator

Send output of one command as input to another.

```
grep -Ri Flamingo * | wc -l
```

Tools each do one thing well. We combine them as we please.

# Regular expressions

"RegEx" is a way to describe complex and flexible character matching.

```
/h.*p # matches "hip" "hoop" and "hippo camp"  
/^The # only matches The (or Theatre, etc) after a newline  
s/=/-/g # replace all = with -
```

# Project structure

# ls

List command.

```
ls  
ls *.md  
ls **/*.md  
ls -l  
ls -lt  
ls -ltr
```

Use with `cd` to change directory.



# tree

Representation of files/folders

```
tree  
tree -L 1 keys
```

Also a good visualisation tool for including in docs.

# WC

Word count: counts lines (and words/bytes).

```
wc -l index.md  
wc -w index.md  
wc *.md  
wc guides/*.md
```

# Content wrangling

# grep

Find things (it's a verb: to grep for ...)

```
grep -R png  
grep -Ri png | grep -v jetbrains  
grep -Ril png | grep -v jetbrains > files.txt
```

```
grep -R '^##' *
```

```
grep '[1]' *
```

```
grep '\[1\' *
```

```
grep '^\[ [0-9]\' *
```

# sed

Find and replace in multiple files.

```
sed -i 's/Vale\b/VALE/g' styles.md
```

see also: vim macros, or IDE find/replace with regex.

# Managing changes

# diff

Choose a diff tool to work with versions of content.

```
cp index.md myindex.md  
vim myindex.md # make changes  
diff index.md myindex.md  
vimdiff index.md myindex.md
```

Your Editor/IDE may have this feature.

# git diff(tool)

Git can show diffs in nice tools too

```
git diff  
git difftool
```

Configure it:

```
git config diff.tool vimdiff
```



# Content conversion

# pandoc

Pandoc is a document format conversion multitool.

```
pandoc install.md -o install.pdf  
pandoc install.md -o install.html  
pandoc install.md -o install.rst
```

Styles and templates can be adjusted.

# convert

Part of the ImageMagick library: converts images.

- `convert action.png -resize 10% action-new.png`
- Resize
- Reduce file size (compress)
- Change image format

Also `identify` to check the properties of an image.

# Scripting

# Scripts are repeatable

Write a shell script to use exactly the same commands every time.

```
#!/bin/bash  
  
convert action.png -resize 10% action-new.png  
convert error.png -resize 10% error-new.png
```

Scripts can accept input too

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# Resources

- <https://lornajane.net>
- <https://wizardzines.com>
- <https://www.writethedocs.org>

# Extra

jq

tee

xargs

gh