



Take back control of your Bash by becoming a CLI ninja! 🤪

David Aparicio | 30 September 2022 | 11h00 | Lyon (WebEx)



Why use the CLI ?

```

Search
metallica
Help
Type ?

Library
Made For You
Recently Played
Liked Songs
Albums
Artists
Podcasts

Songs
Enter Sandman - Metallica
Nothing Else Matters - Metallica
Master Of Puppets - Metallica
One - Metallica
For Whom The Bell Tolls - Remastered - Metallica
Whiskey In The Jar - Metallica
The Unforgiven - Metallica
Sad But True - Metallica
Fade To Black - Remastered - Metallica
Seek & Destroy - Remastered - Metallica
Fuel - Metallica
Wherever I May Roam - Metallica
Battery - Metallica
Hardwired - Metallica

Artists
Metallica
Spartan Metallican Visionary
Metallicash
Metallica: Burton
Metallica Tribute Band
Made famous by Metallica

Playlists
Jewish
Classical
Baroque
Foul
Sacred
Bluegrass Covers
Synthwave / Retro Electro (
Essence of the Renaissance
san andreas bom demais
Liked from Radio
Guided Meditation
Bass House 2019 Moksi TAKEO
Lord Of The Rings - Full OS
Discover Weekly

Albums
Metallica - Metallica
Master Of Puppets (Remastered) - Metallica
Garage Inc. - Metallica
Metallica Through The Never (Music From The Motion Pictur
... And Justice For All - Metallica
Ride The Lightning (Remastered) - Metallica
Ride The Lightning (Deluxe / Remastered) - Metallica
Reload - Metallica
Kill 'Em All (Remastered) - Metallica
Hardwired...To Self-Destruct - Metallica
Death Magnetic - Metallica
Load - Metallica
S&M - Metallica
Hardwired...To Self-Destruct (Deluxe) - Metallica

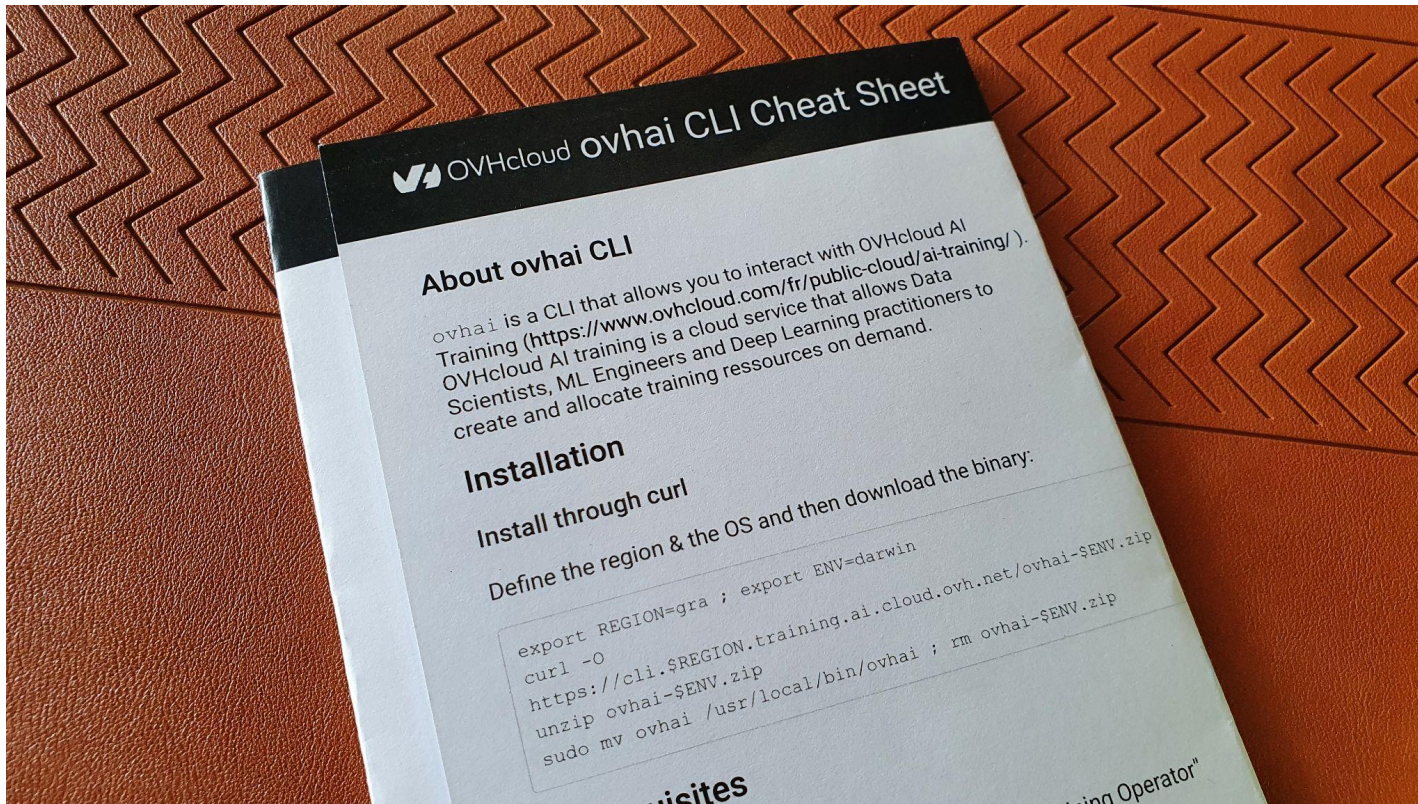
Playlists
Metallica Greatest Hits
Metallica: Essentials
This Is Metallica
Metallica: Complete
METALLICA live
Metallica: Studio Albums
Metallica- Live Seattle '89
Metallica: Best Of The Best
Metallica - Whisky in the jar
metallica ballads
Metallica S&M2 Setlist 2019
Metallica Radio Playlist
Metallica Covers (The Good Ones)
Metallica Chile 15 Abril 2020 - Estadio Nacional

Playing (Alexander's MacBook Pro | Shuffle: Off | Repeat: Off | Volume: 100%)
Find You
Signal Void, King Protea

0:56/4:204 (-3:07)
    
```



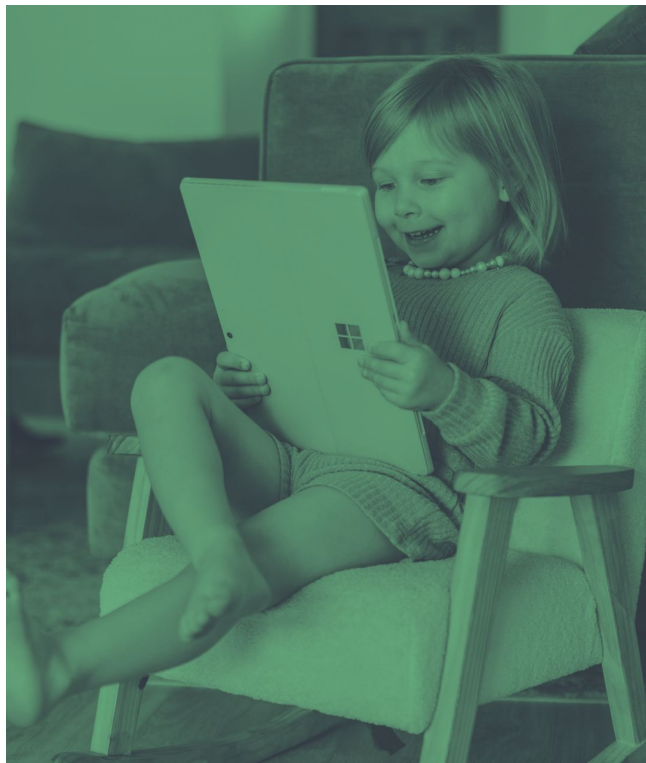
CLI, simple & fast



[ovhai CLI Cheat Sheet](#)



Disclaimer



- - Bash
- + Configuration
- + Commands
- Available directly in your IDE
- Find a tool for your computer



Website to help you choose

→ ↻ libhunt.com/compare-zoxide-vs-autojump ☆ 📄 📱 ⚙️ 👤

zoxide

A smarter cd command. Supports all major shells. (by ajeetdsouza)

#Z #Command-line #Rust #Zsh #Autojump #Bash #Powershell #Shell #Fish

#Xonsh #Xontrib #Fzf #Fasd #Jump #Command Line Tool #CLI #nushell #elvish

#fish-shell #HacktoberFest

[Source Code](#)

autojump

A cd command that learns - easily navigate directories from the command line (by wting)

#Autojump #Python #Filesystem #Command Line Tool

[Source Code](#)

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[Scout APM](#) - Less time debugging, more time building

[SaaSHub](#) - Software Alternatives and Reviews

	zoxide		autojump
		Project	
	54	@ Mentions	27
	5,847	☆ Stars	13,629
	-	📈 Growth	-
	8.5	⚡ Activity	0.0
	4 days ago	Latest Commit	8 days ago
	Rust	<> Language	Python
	MIT License	License	GNU General Public License v3.0 or later

Roadmap

- Intro: Terminal & Shell
- Development
- Network & Perfs
- Tips
- Conclusion



Tool of choice



- Command interpreter (cmd)
- System interface (shell)
- Software infrastructure (framework)
- Extensions / Themes (plugins)
- Windows / tabs manager



Command interpreter



- Terminal / Konsole
- Terminator
- iTerm2
- Alacritty / Warp
- Cmd / Cmler
- Windows Terminal



System interface

```
Toms PowerShell www.thomasmaurer.ch
Try the new cross-platform PowerShell https://aka.ms/pscore6
Version: 10.0.18334.1
Loading personal and system profiles took 538ms.
PS C:\> iex "& { $(irm https://aka.ms/install-powershell.ps1)

Directory: C:\Users\thmaure\AppData\Local\Temp

Mode                LastWriteTime         Length Name
----                -
d-----          2/20/2019   5:36 PM          cmv0gpok.qo0
VERBOSE: About to download package from
'https://github.com/PowerShell/PowerShell/releases/download/v

Directory: C:\Users\thmaure\AppData\Local\Temp\cmv0gpok.q

Mode                LastWriteTime         Length Name
----                -
d-----          2/20/2019   5:37 PM          new

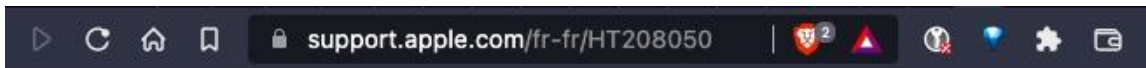
PS C:\>
```

- Bash
- Zsh
- Fish
- Ksh
- Tcsh
- MS-DOS / Powershell
- MinGW / WSL2

<https://hyperpolyglot.org/unix-shells>



By default, it depends



Utiliser zsh comme shell par défaut sur votre Mac

À partir de macOS Catalina, le Mac utilise zsh comme shell d'accès par défaut et shell interactif. Vous pouvez également définir zsh comme valeur par défaut dans les versions antérieures de macOS.

Par défaut, votre Mac utilise zsh ou bash comme interpréteur de ligne de commande pour le shell d'accès et le shell interactif :

- **zsh** (Z shell) est le shell par défaut pour tous les comptes d'utilisateur nouvellement créés, à partir de macOS Catalina.
- **bash** est le shell par défaut sous [macOS Mojave et versions antérieures](#).

zsh est hautement compatible avec le shell Bourne (sh) et globalement compatible avec bash, avec quelques différences. Pour plus d'informations sur zsh et son système exhaustif de complétion de ligne de commande, saisissez `man zsh` dans Terminal.



Software infrastructure, Plugins

```
Agnoster ZSH Theme
Glyphs required:

Sample code set in PragmataPro™

~> cd testproject
~/testproject ~ master gco detached-head-sta
~/testproject ~ fdffaf6 touch dirty-working-
~/testproject ~ fdffaf6± cd
~> ssh milly
Welcome to Ubuntu 11.04 (GNU/Linux 2.6.18-308.8.3
~> sudo -s
Password:
# root@Arya ~> top &
[1] + 34523 suspended (tty output) top
# root@Arya ~> kill %%
[1] + 34523 terminated top
```

- Oh My Zsh / Oh-My-Fish (OMF)
- Spaceship 🇺🇦 / Spacefish †
- Starship (Cross/Rust)

```
rocket on 🇺🇦 master via 🦀 v1.36.0
> sudo -s

root in rocket on 🇺🇦 master via 🦀 v1.36.0
> exit

rocket on 🇺🇦 master via 🦀 v1.36.0 took 4s
> vim ~/.config/starship.toml
```



Bonus: everything on the keyboard

```

tmux

 1 [|||] 4.3% Tasks: 123, 362 thr; 2 runnin
 2 [|||] 3.3% Load average: 0.40 0.40 0.30
 3 [|||] 4.7% Uptime: 3 days, 04:44:37
 4 [|||] 1.4%
 Mem[|||||] 1907/7847MB
 Swp[|] 0/0MB

PID USER PRI NI VIRT RES SHR S CPU% MEM% TIME+ Command
20136 ham 20 0 298M 31396 21400 S 4.3 0.4 0:00.36 /usr/bir
 964 ham 20 0 1757M 227M 67600 S 3.8 2.9 7:03.93 /usr/bir
 895 ham 20 0 326M 63060 37040 S 3.8 0.8 8:07.97 /usr/lib
19149 ham 20 0 15808 3464 2620 R 0.5 0.0 0:04.49 htop
13720 ham 20 0 471M 41444 24216 S 0.5 0.5 1:17.20 /usr/lib
 599 gdm 20 0 1322M 131M 56328 S 0.5 1.7 2:10.14 gnome-sh

F1Help F2Setup F3SearchF4FilterF5Tree F6SortByF7Nice -F8Nice +F9Kill

Content-Type: text/html; charset=UTF-8
Content-Length: 1850
Via: 1.1 vegur

hamvocke git/master
> cowsay "Hello folks" | lolcat
< Hello folks >

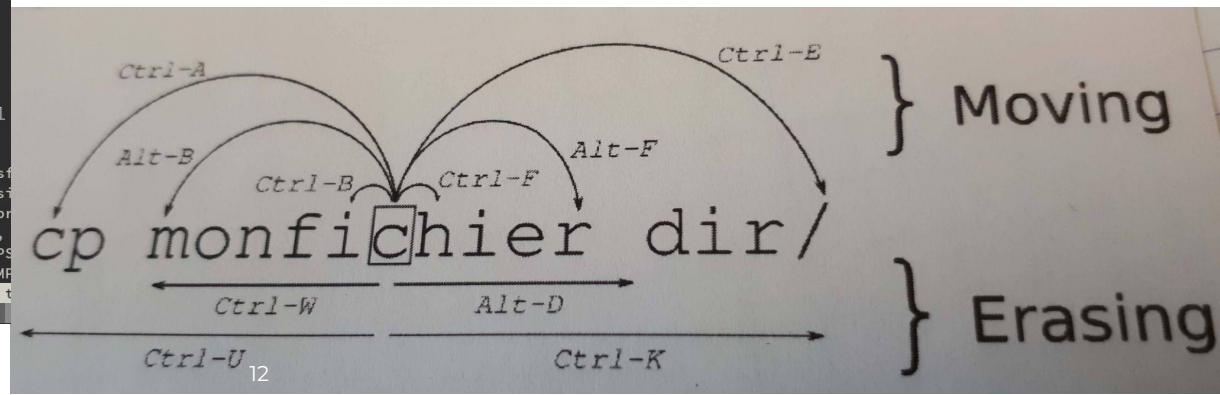
hamvocke git/master
1:debug+ 2:dev- 16/08
  
```

Windows

- i3wm / xmonad
- rectangle
- amethyst / yabai
- amethyst Windows v2 / win3wm / bug.n

Tabs

- screen / tmux
- byobu / zellij

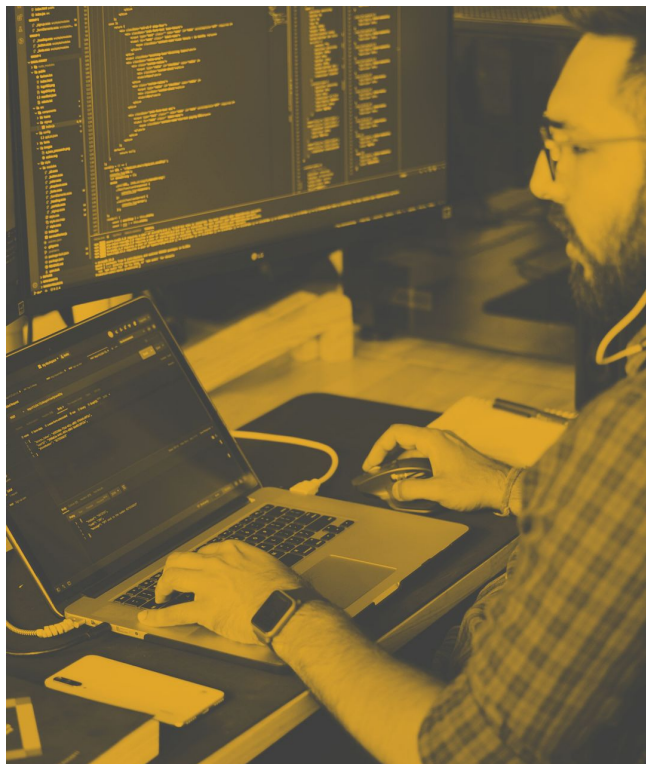




Let's Code



Workspace



- Folder selection, with the classicals `cd / ls`
- `Exa`, `lsd`, `colorls (ls)`
- `Zoxide`, `autojump (cd)`

```
~  
→ z 2022  
  
2022etmoi on 🍯 prod is 📦 v0.0.1 via 🟢 v17.8.0  
→ pwd  
/Users/daparicio/code/github.com/2022etmoi/2022etmoi  
~  
→ z website  
  
website on 🍯 master [!?] via 🐼 v1.18 on 🧪 v20.10.13  
→ pwd  
/Users/daparicio/code/gitlab.com/davidaparicio/website
```



Vim or Emacs ?

The screenshot shows the Lapce editor interface. The left sidebar displays a file tree with folders like .git, .github, .vscode, core, and src. The main editor area shows a Rust file named editor.rs with code lines 270 through 291. A code completion menu is open at line 278, listing various completion items such as self, serde, self.set_cursor(...), Self, Send, Selection, SelRegion, sled, and self.update_global.

- Rust offers a promising list
- Lapce
- Ox
- Xi
- Kiro
- Bat (cat)
- Delta / Diftastic (diff)



Example: bat / cat

```
→ bat internal.go
```

```
File: internal.go
```

```
1 package internal
```

```
2
```

```
3 import "unicode/utf8"
```

```
4
```

```
5 func IsLongEnough(username string, minLength int) bool {
```

```
6     return utf8.RuneCountInString(username) ≥ minLength
```

```
7 }
```




Example: git diff

```
Binary files a/scripts/qrcode/qrcode.png and b/scripts/qrcode/qrcode.png differ
```

```
diff --git a/scripts/qrcode/qrcode_gen.py b/scripts/qrcode/qrcode_gen.py
```

```
index 81966bc..ea2b55a 100644
```

```
--- a/scripts/qrcode/qrcode_gen.py
```

```
+++ b/scripts/qrcode/qrcode_gen.py
```

```
@@ -1,7 +1,7 @@
```

```
import qrcode
```

```
-websiteurl = 'https://davidaparcio.gitlab.io/website/'
```

```
-filename = 'website.png'
```

```
+websiteurl = 'https://s.42l.fr/devoxxcastor'
```

```
+filename = 'qrcode.png'
```

```
versions = 1 #1 to 40
```

```
boxsize = 10 #nb of pixels
```

```
~/c/g/d/website >>> git config --global diff.external difft
```

```
~/c/g/d/website >>> git diff
```

```
scripts/qrcode/qrcode.png --- binary
```

```
Binary contents changed.
```

```
scripts/qrcode/qrcode_gen.py --- Python
```

```
1 import qrcode
```

```
2
```

```
3 websiteurl = 'https://davidaparcio.gitlab.io/website/'
```

```
4 filename = 'website.png'
```

```
5
```

```
6 versions = 1 #1 to 40
```

```
7 boxsize = 10 #nb of pixels
```

```
1 import qrcode
```

```
2
```

```
3 websiteurl = 'https://s.42l.fr/devoxxcastor'
```

```
4 filename = 'qrcode.png'
```

```
5
```

```
6 versions = 1 #1 to 40
```

```
7 boxsize = 10 #nb of pixels
```



To-do list: Task Warrior

```
website on ? master via 🐙 v1.18.2 took 4s
→ task add Prepare the first draft of the proposal due:today priority:H
Created task 3.
```

```
website on ? master via 🐙 v1.18.2
→ task add Prepare the slides due:tomorrow priority:L
Created task 4.
```

```
website on ? master via 🐙 v1.18.2
→ task list
```

ID	Age	P	Due	Description	Urg
1	24s	H	2022-05-25	Prepare the first draft of the proposal	15
2	5s	L	2022-05-26	Prepare the slides	10.4

2 tasks

```
website on ? master via 🐙 v1.18.2
→ task done 1
Completed task 1 'Prepare the first draft of the proposal'.
Completed 1 task.
```

```
website on ? master via 🐙 v1.18.2
→ task add Update website due:2022-06-01
Created task 3.
```

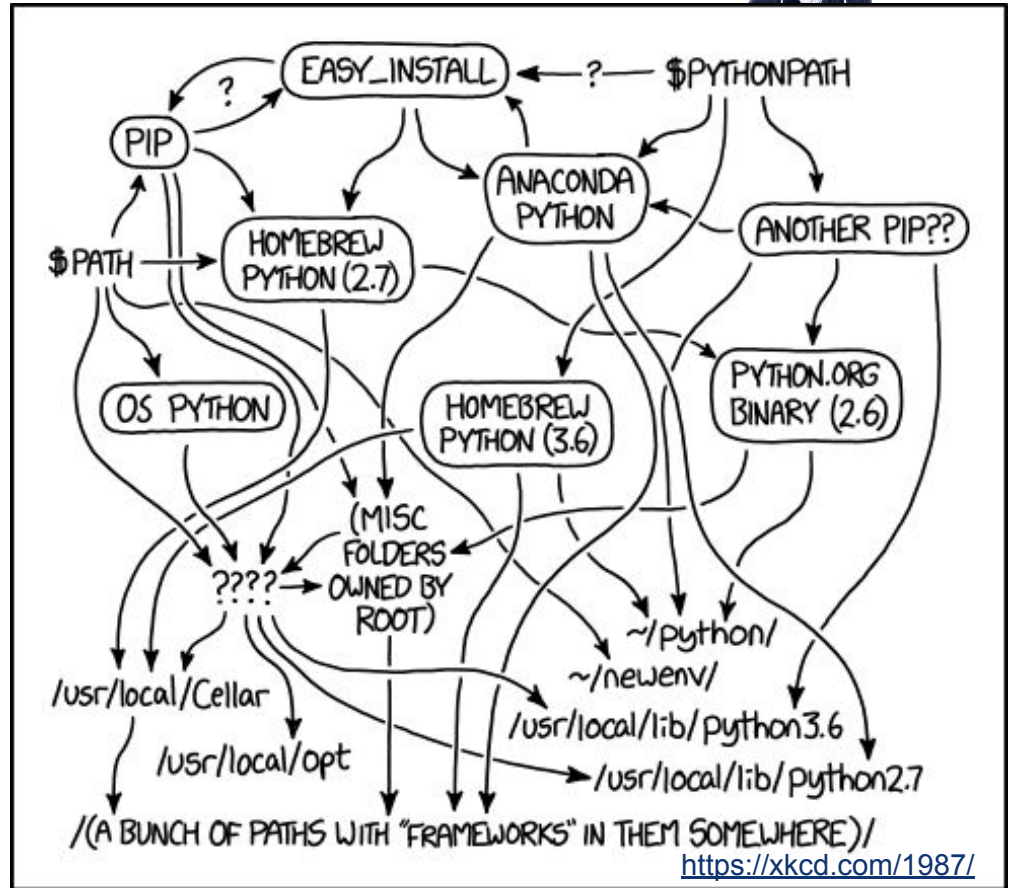
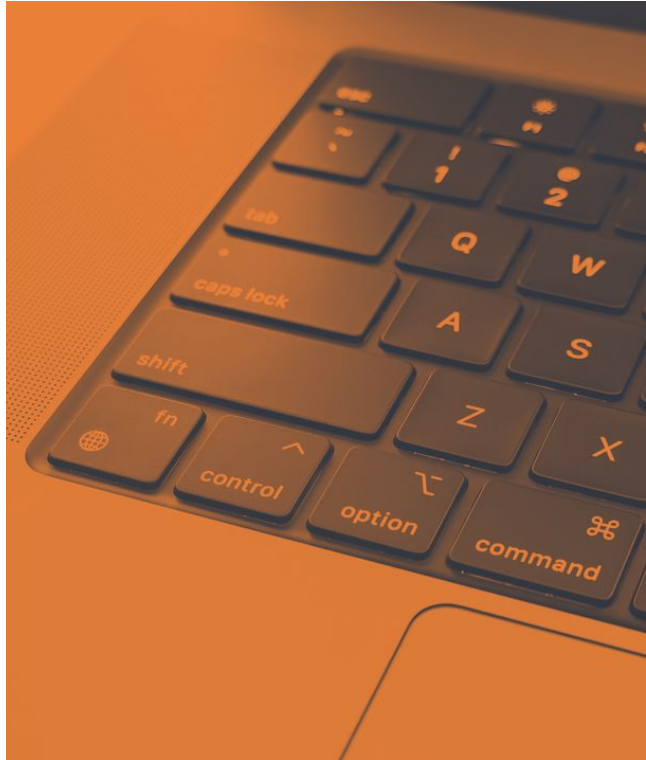
```
website on ? master via 🐙 v1.18.2
→ task list
```

ID	Age	P	Due	Description	Urg
1	1min	L	2022-05-26	Prepare the slides	10.4
2	4s		2022-06-01	Update website	5.84

2 tasks

```
website on ? master via 🐙 v1.18.2
→ task delete 1,2
This command will alter 2 tasks.
Delete task 1 'Prepare the slides'? (yes/no/all/
Deleting task 1 'Prepare the slides'.
Deleting task 2 'Update website'.
Deleted 2 tasks.
```

Version man



<https://xkcd.com/1987/>

MY PYTHON ENVIRONMENT HAS BECOME SO DEGRADED THAT MY LAPTOP HAS BEEN DECLARED A SUPERFUND SITE.



tldr / tealdeer

```
daniLo@x2000:~$ tldr strace
```

```
Troubleshooting tool for tracing system calls.
```

```
Start tracing a specific process by its PID:
```

```
strace -p pid
```

```
Trace a process and filter output by system call:
```

```
strace -p pid -e system call name
```

```
Count time, calls, and errors for each system call and report a summary on program exit:
```

```
strace -p pid -c
```

```
Show the time spent in every system call:
```

```
strace -p pid -T
```

```
Start tracing a program by executing it:
```

```
strace program
```

```
Start tracing file operations of a program:
```

```
strace -e trace=file program
```

```
daniLo@x2000:~$ █
```





Let's Debug



An issue ? A solution `dstp`

```
main:6:zsh - "Yagzs-MacBook-Pro.local"
main 1 zsh 2 zsh 3 zsh 4 zsh 5 zsh 6 zsh Thu 2021-11-11 18:50 Yagzs-MacBook-Pro

→ ~ dstp https://cloudflare.com/
Ping: 14.282ms
DNS: resolving 104.16.132.229
SystemDNS: resolving 104.16.132.229, 104.16.133.229, 2606:4700::6810:84e5, 2606:4700::6810:85e5
TLS: certificate is valid for 204 more days
HTTPS: got 200 OK

→ ~ dstp 8.8.8.8
Ping: 42.874334ms
DNS: resolving 8.8.8.8
SystemDNS: resolving 8.8.8.8
TLS: certificate is valid for 60 more days
HTTPS: got 200 OK

→ ~ dstp https://jvns.ca
Ping: 69.652ms
DNS: resolving 172.67.179.90
SystemDNS: resolving 172.67.179.90, 104.21.91.206, 2606:4700:3033::6815:5bce, 2606:4700:3031::ac43:b35a
TLS: certificate is valid for 225 more days
HTTPS: got 200 OK

→ ~ █
```



Specific tests on API: httpie

```
>>> http PUT httpbin.org/put hello=world
```

```
HTTP/1.1 200 OK
Access-Control-Allow-Credentials: true
Access-Control-Allow-Origin: *
Connection: keep-alive
Content-Length: 495
Content-Type: application/json
Date: Sat, 16 Apr 2022 14:54:38 GMT
Server: gunicorn/19.9.0
```

```
{
  "args": {},
  "data": "{\"hello\": \"world\"}",
  "files": {},
  "form": {},
  "headers": {
    "Accept": "application/json, */*;q=0.5",
    "Accept-Encoding": "gzip, deflate",
    "Content-Length": "18",
    "Content-Type": "application/json",
    "Host": "httpbin.org",
    "User-Agent": "HTTPie/3.1.0",
    "X-Amzn-Trace-Id": "Root=1-625ad8ae-5540"
  },
  "json": {
    "hello": "world"
  },
}
```

```
>>> https httpbin.org/status/418
```

```
HTTP/1.1 418 I'M A TEAPOT
Access-Control-Allow-Credentials: true
Access-Control-Allow-Origin: *
Connection: keep-alive
Content-Length: 135
Date: Sat, 16 Apr 2022 14:53:41 GMT
Server: gunicorn/19.9.0
x-more-info: http://tools.ietf.org/html/rfc2324
```

```
--[ teapot ]=-
```





Specific tests on GRPC: gRPCurl

```
Windows PowerShell
C:\> grpcurl -d '{"name": "World"}' localhost:5001 greet.Greeter/SayHello
{
  "message": "Hello World"
}
C:\>

all-things-microservices on master [?] via v1.13.8 on v19.03.9 ()
→ grpcurl --plaintext -d '{
  "Base": "EUR",
  "Destination": "EUR"
}' localhost:9092 Currency/GetRate
{
  "rate": 23.12
}
```



Perfs: ab / hey

```
>>> hey -n 100 -c 50 -a user:pass 'https://google.com' | pr -2 -t -o 5
```

Summary:

```
Total:          0.9536 secs
Slowest:         0.8645 secs
Fastest:         0.0692 secs
Average:         0.4553 secs
Requests/sec:   104.8625
```

Latency distribution:

```
10% in 0.0784 secs
25% in 0.0824 secs
50% in 0.7404 secs
75% in 0.8332 secs
90% in 0.8559 secs
95% in 0.8590 secs
99% in 0.8645 secs
```

Response time histogram:

```
0.069 [1]      |■
0.149 [49]    |■■■■■■■?
0.228 [0]     |
0.308 [0]     |
0.387 [0]     |
0.467 [0]     |
0.546 [0]     |
0.626 [0]     |
0.705 [0]     |
0.785 [4]     |■■■■
0.865 [46]    |■■■■■■■?
```

Details (average, fastest, slowest)

```
DNS+diapup:   0.1860 secs, 0.069
DNS-lookup:   0.0005 secs, 0.000
req write:    0.0001 secs, 0.000
resp wait:    0.0539 secs, 0.044
resp read:    0.0063 secs, 0.000
```

Status code distribution:

```
[200] 100 responses
```



Perfs: hyperfine

```
▶ hyperfine --warmup 3 'fd -e jpg -uu' 'find -iname "*.jpg"'
```



Logs: Inav / multitail / GoAccess

```
Thu Mar 20 23:01:23 PDT /private/tmp/demo/access_log: access_log LOG
192.0.2.33 - - [19/Mar/2014:14:37:17 +0000] "GET /features.html HTTP/1.1" 500 263049 "-" "Apache-HttpClient/4.2.3
192.0.2.55 - - [19/Mar/2014:14:37:17 +0000] "PUT /features.html HTTP/1.1" 200 422671 "-" "-"
192.0.2.33 - - [19/Mar/2014:14:37:18 +0000] "GET /index.html HTTP/1.1" 200 318902 "-" "-"
Mar 19 14:37:18 frontend3 server[121]: Received packet from 192.0.2.55
Mar 19 14:37:19 frontend3 server[123]: Received packet from 192.0.2.55
Mar 19 14:37:19 frontend3 server[123]: Handling request 9efcf643-ac89-4125-a69d-ec3203047a19
192.0.2.33 - - [19/Mar/2014:14:37:19 +0000] "PUT /index.html HTTP/1.0" 200 871988 "-" "-"
192.0.2.55 - - [19/Mar/2014:14:37:20 +0000] "GET /index.html HTTP/1.0" 200 400613 "-" "-"
192.0.2.55 - - [19/Mar/2014:14:37:21 +0000] "GET /obj/1235?foo=bar HTTP/1.0" 200 841360 "-" "Apache-HttpClient/4.
Mar 19 14:37:21 frontend3 worker[61456]: Handling request 9efcf643-ac89-4125-a69d-ec3203047a19
Mar 19 14:37:22 frontend3 worker[61456]: Successfully started helper
192.0.2.33 - - [19/Mar/2014:14:37:22 +0000] "PUT /index.html HTTP/1.0" 200 944322 "-" "Apache-HttpClient/4.2.3 (j
Mar 19 14:37:23 frontend3 worker[61456]: Received packet from 192.0.2.55
Mar 19 14:37:23 frontend3 server[123]: Handling request 9efcf643-ac89-4125-a69d-ec3203047a19
Mar 19 14:37:24 frontend3 server[124]: Received packet from 192.0.2.55
Mar 19 14:37:24 frontend3 worker[61456]: Handling request 70430eff-159e-4818-a0e7-f21a7d4ad892
Mar 19 14:37:25 frontend3 server[121]: Handling request 9ed6455c-0edf-4623-b3bc-5f65ce81825f
192.0.2.55 - bob@example.com [19/Mar/2014:14:37:25 +0000] "GET /images/compass.jpg HTTP/1.0" 200 4509 "-" "-"
192.0.2.55 - - [19/Mar/2014:14:37:25 +0000] "GET /obj/1235?foo=bar HTTP/1.1" 200 420858 "-" "Apache-HttpClient/4.
192.0.2.33 - - [19/Mar/2014:14:37:26 +0000] "PUT /features.html HTTP/1.1" 500 741005 "-" "-"
Mar 19 14:37:27 frontend3 worker[61456]: Successfully started helper
Mar 19 14:37:27 frontend3 server[123]: Received packet from 192.0.2.55
Mar 19 14:37:27 frontend3 server[121]: Handling request 70430eff-159e-4818-a0e7-f21a7d4ad892
192.0.2.55 - - [19/Mar/2014:14:37:28 +0000] "GET /index.html HTTP/1.0" 200 299909 "-" "Apache-HttpClient/4.2.3 (j
192.0.2.55 - - [19/Mar/2014:14:37:28 +0000] "GET /index.html HTTP/1.0" 200 731434 "http://inav.org/download.html"
Mar 19 14:37:29 frontend3 worker[61456]: Reading from device: /dev/hda
192.0.2.55 - bob@example.com [19/Mar/2014:14:37:30 +0000] "GET /obj/1234 HTTP/1.0" 200 763899 "-" "-"
192.0.2.55 - - [19/Mar/2014:14:37:30 +0000] "GET /obj/1236?search=demo&start=1 HTTP/1.0" 200 1014909 "-" "-"
Mar 19 14:37:31 frontend3 server[124]: Reading from device: /dev/hda
192.0.2.55 - - [19/Mar/2014:14:37:31 +0000] "GET /images/compass.jpg HTTP/1.0" 200 60044 "-" "-"
Mar 19 14:37:32 frontend3 server[121]: Received packet from 192.0.2.55
Mar 19 14:37:32 frontend3 worker[61457]: Reading from device: /dev/hda
L69 56% 9 hits ? :View Help
search: 70430eff-159e-4818-a0e7-f21a7d4ad892 Press n/N to move forward/backward through search results
```



vd: VisiData

name	county	job title	grade	#	bas	Complaint Type	count	#	percent	%	histogram
ALVAREZ, JUAN M	FRESNO	GENERAL EDUCATION ...	12			HEAT/HOT WATER	10207		0.46		*****
BOYD, CLAUDE A	DISTRICT OF COLUMB...	OFC AUTOMATION CLE...	4			Animal in a Park	54		0.00		
BRITT, ROBERT E	DISTRICT OF COLUMB...	MISCELLANEOUS CLER...	5			PAINT/PLASTER	2664		0.12		*****
CASTRO, JESSICA	DISTRICT OF COLUMB...	ADMIN AND OFFICE S...	7			Sanitation Condi...	1030		0.05		****
CHASTANG, LINDA EAR...	DISTRICT OF COLUMB...	MISCELLANEOUS ADMI...	14			Other Enforcement	293		0.01		*
CHAVEZ, CHRISTINE	DISTRICT OF COLUMB...	MISCELLANEOUS ADMI...	13			Street Light Condi...	4326		0.19		*****
CLIFFORD, CAROL L	DISTRICT OF COLUMB...	MISCELLANEOUS ADMI...	0			PLUMBING	2200		0.10		*****
CORTEZ, SANDRA A	DISTRICT OF COLUMB...	GENERAL EDUCATION ...	13			Noise - Commercial	2456		0.11		*****
DE LA GARZA, RUBY S	HIDALGO	GENERAL EDUCATION ...	12			Noise - Residential	9163		0.40		*****
DIAZ, VLADIMIR A	MIAMI-DADE	GENERAL EDUCATION ...	12			Noise - Street/Sid...	1778		0.08		*****
DOUGLAS, WALTER W	LEXINGTON	MISCELLANEOUS ADMI...	14			Water System	2335		0.11		*****
FLORES, MARILOU	DISTRICT OF COLUMB...	MISCELLANEOUS ADMI...	12			Graffiti	423		0.02		**
GARDNER, KURT J	MADISON	MISCELLANEOUS ADMI...	13			Noise - Vehicle	844		0.04		***
GOLDBERG, MARIA	DISTRICT OF COLUMB...	MISCELLANEOUS ADMI...	15			Maintenance or Fac...	332		0.01		*
GONZALEZ, ROBERTO JR	IMPERIAL	GENERAL EDUCATION ...	12			General Constructi...	1343		0.06		*****
GUY, DWIGHT N	LOGAN	MISCELLANEOUS ADMI...	13			Drinking	64		0.00		
HARTSFIELD, LARRY D	GUILFORD	MISCELLANEOUS ADMI...	13			DOOR/WINDOW	1655		0.07		*****
HODGE, HORACE D	WALLER	MISCELLANEOUS ADMI...	12			Homeless Person As...	1879		0.08		*****
JAMES, KRISTEN	DISTRICT OF COLUMB...	MISCELLANEOUS CLER...	4			Dirty Conditions	1446		0.06		*****
JOHNSON, ALLISON C	EAST BATON ROUGE	MISCELLANEOUS ADMI...	13			Blocked Driveway	4910		0.22		*****
KOZISKI, STEPHANIE ...	DISTRICT OF COLUMB...	MANAGEMENT AND PRO...	13			Animal Abuse	397		0.02		*
MARTIN, KARLA A	DISTRICT OF COLUMB...	MISCELLANEOUS ADMI...	14			Lead	1934		0.09		*****
MC LAREN, ANTONIO A	PETERSBURG	MISCELLANEOUS ADMI...	13								
MILLER, PIA M	DISTRICT OF COLUMB...	GENERAL BUSINESS A...	12								

FederalEmployeeSalaries-2012|

311_Service_Requests_from_2010_to_Present_Complaint F 180 4% grouping



A typo = A solution

```
nvbn@nvbn-desktop: ~/exp/thefuck 76x18  
→ thefuck git:(master) X
```



A typo, shell configuration

```
~ >>> tldr hey
zsh: correct tldr to tldr [nyae]? y
Warning: The cache hasn't been updated for 52 days.
You should probably run `tldr --update` soon.
Warning: Page `hey` not found in cache.
Try updating with `tldr --update`, or submit a pull request to:
https://github.com/tldr-pages/tldr
```

Example of a default configuration by Zsh



A SSH access, think MOSH

```
[mosh]
mosh: Last contact 10 seconds ago. [To quit: Ctrl-^ .]
Mosh Web site ideas
* What should it look like?
** Ideas
*** Boring free software Web site,..
*** Old-timey newspaper: "Amazing remote shell program sweeps nation!!!"
*** Make it look like a fake startup company, <-- Let's go with this.
* Benefits of Mosh
** Roam across Wi-Fi networks or to cell without dropping connection.
** More pleasant to type -- intelligent local echo is instant.
** No need to be superuser to install.
** Mosh doesn't fill up buffers, so Ctrl-C works quickly on runaways.
** Designed from scratch for Unicode; fixes bugs in SSH, other terminals.
** Free / open-source software.
-UU-:***--F1 All L19 (Org)-----
```

- Remote or Travel
- Intermittent connection (3G/4G/Wifi)
- Persistence during changes



Alias Bash

```
alias cat="bat -pp" #less: --style=grid
alias ls="exa"
alias cd="z" #eval "$(zoxide init zsh)"
alias du="dust"
alias grep="ripgrep"
alias ps="procs"
alias find="fd" #fselect
alias sed="sd"
alias top="gotop" #"ytop"
alias sysup='brew update && \
brew upgrade; brew cleanup'
```



Alias Bash (cont.)

```
~ >>> echo $SHELL
/bin/zsh
~ >>> ls -larth
exa: Option --time (-t) has no "h" setting (choices: modifi
~ >>> bat test.sh
```

	File: test.sh
	Size: 22 B

1	echo \$SHELL
2	ls -larth

```
~ >>> ./test.sh
/bin/zsh
total 23808
drwxr-xr-x+  4 daparici  staff  128B Jun 28  2019 Public
```

Tips



Keep a bash on hand

```
daparicio@macair: ~
Last login: Sun Apr 10 09:52:02 on console
~
→ echo $SHELL
/bin/zsh
~
→ zsh --version
zsh 5.8 (x86_64-apple-darwin20.0)

daparicio — bash — 92x24
Last login: Sun Apr 10 10:28:08 on ttys001
~
[→ bash

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
[bash-3.2$ bash --version
GNU bash, version 3.2.57(1)-release (x86_64-apple-darwin20)
Copyright (C) 2007 Free Software Foundation, Inc.
[bash-3.2$ echo $SHELL
/bin/zsh _
```

- In order to test, beforehand, your deployment and configuration scripts on a new infra
- Recent Bash >= 4.2 (February 2011)
- And a glance at the lib "ammlib"

set -x

```
PS4='(${BASH_SOURCE##*/}):$LINENO
${FUNCNAME[0]:-main} '
```

Assemble your commands

```
curl -s  
https://presidentielle2022.conseil-constitutionnel.fr/telechargement/parrainagestotal.json | jq -r -s '[] | group_by(.Candidat) | map({"Candidat·e": .[0].Candidat, Nombre: length}) | sort_by(.Nombre) | .[]'
```

```
{  
  "Candidat·e": "HIDALGO Anne",  
  "Nombre": 1440  
}  
{  
  "Candidat·e": "MACRON Emmanuel",  
  "Nombre": 2098  
}
```

Compose your commands

```
du -x --max-depth=1 | sort -rn | awk -F / -v c=$COLUMNS  
'NR==1{t=$1} NR>1{r=int($1/t*c+.5); b="\033[1;31m"; for (i=0; i<r;  
i++) b=b"#"; printf " %5.2f%% %s\033[0m %s\n", $1/t*100, b,  
$2}' | tac
```

```
pi@raspberrypi:~$ du -x --max-depth=1 | sort -rn | awk -F / -v c=$COLUMNS 'NR==1{t=$1} NR>1{r=int($1/t*c+.5); b="\033[1;31m"; for (i=0; i<r; i++) b=b"#";  
printf " %5.2f%% %s\033[0m %s\n", $1/t*100, b, $2}' | tac  
0.00% media  
0.00% mnt  
0.00% srv  
0.00% lost+found  
0.14% tmp  
0.26% etc  
0.51% # root  
2.51% ### opt  
4.42% ##### boot  
17.40% ##### home  
29.50% ##### var  
45.26% ##### usr
```

Do you talk to strangers?

So why do you accept to do :

```
curl -s <randomURL> | (sudo) bash
```



Save your .dotfiles

(aka your configuration files)

```
vcsh init vim
vcsh vim add ~/.vimrc ~/.vim
vcsh vim commit -m 'Initial commit of my Vim configuration'
# optionally push your files to a remote
vcsh vim remote add origin <remote>
vcsh vim push -u origin master
# from now on you can push additional commits like this
vcsh vim push
# If all that looks a lot like standard git,
# that's no coincidence; it's a design feature.
```


Bonus: mac aficionados

- Remove desktop icons 🖼️

```
defaults write com.apple.finder CreateDesktop false && killall Finder
```

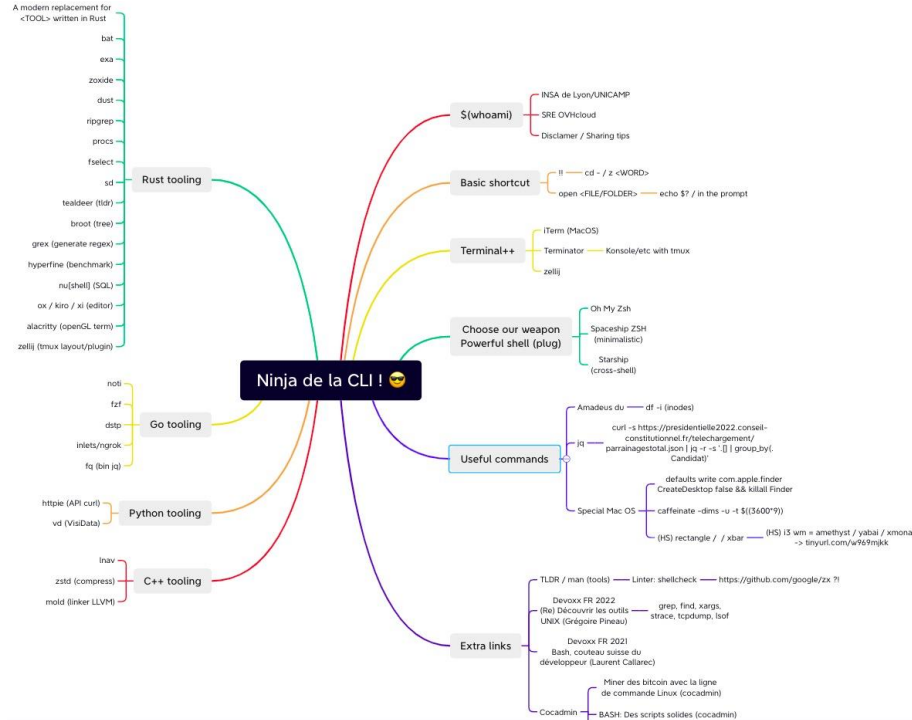
- Prevent automatic sleep mode 🌙

```
caffeinate -dims -u -t $((3600*9))
```

Conclusion



The mega-list



Mindmap



For further information

- Installed tools via homebrew / chocolatey / apt / dnf...
- ShellCheck (linter)
- Devovx FR 2022: (Re) Découvrir les outils UNIX (Grégoire Pineau)
- Devovx FR 2021: Bash, couteau suisse du développeur (Laurent Callarec)
- Cocadmin: tmux, 10 astuces CLI
- Wizard Zines de Julia Evans
- Understanding X in a visual way, de Aurélie Vache
- Rewritten in Rust: Modern Alternatives of Command-Line Tools (zaiste.net)

find

`find` searches a directory for files

```
find /tmp -type d -print
```

↑ directory to search ↑ which files ↑ action to do with the files

here are my favourite find arguments!

`-name`/`-iname`
case insensitive
the filename! eg
`-name '*.txt'`

`-path` / `-ipath`
search the full path!
`-path '/home/*//*.go'`

`-size 0`
find empty files!
Useful to find files you created by accident

`-print 0`
print null-separated file names
Use with xargs -0!

`-exec COMMAND`
action: run COMMAND on every file found

`-delete`
action: delete all files found



A list of new(ish) command line tools

(12 April 2022)

Julia Evans

ABOUT
TALKS
PROJECTS
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FAVORITES ★ ZINES ★ RSS

A list of new(ish) command line tools

Hello! Today I asked [on twitter](#) about newer command line tools, like `ripgrep` and `fd` and `fzf` and `exa` and `bat`.

I got a bunch of replies with tools I hadn't heard of, so I thought I'd make a list here. A lot of people also pointed at the [modern-unix](#) list.

replacements for standard tools

<https://jvns.ca/blog/2022/04/12/a-list-of-new-ish--command-line-tools/>



Liste de nouveaux outils en CLI

(19 June 2022)

https://davidaparicio.gitlab.io/website/fr/post/cli

David Aparicio

Une liste de nouveaux outils en ligne de commande

Quels sont vos nouveaux outils en ligne de commande préférés ?

David Aparicio (VF), Julia Evans (VO)

Dernière mise à jour le 19 Jun 2022 · 4 min de lecture · Veille Techno, Blog



Crédits photographiques: Philipp Katzenberger

Publié originalement en anglais par @b0rk à l'adresse <https://jvns.ca/blog/2022/04/12/a-list-of-new-ish-command-line-tools/>.

Traduit et publié le 19 juin 2022 par @dadideo.

<https://davidaparicio.gitlab.io/website/fr/post/cli/>

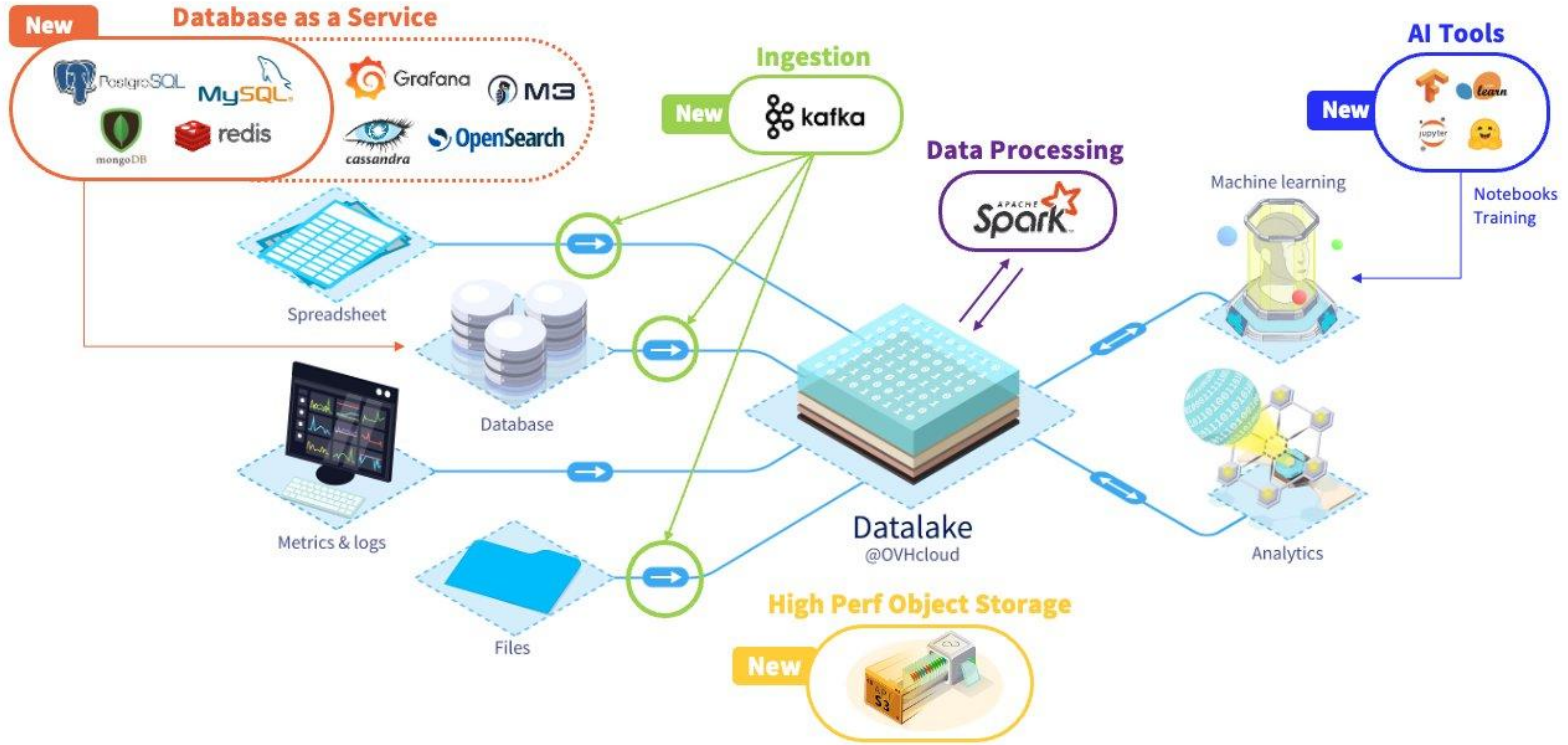


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- 2015 INSA de Lyon / UNICAMP
- Facebook Open Academy / MIT AppInventor
- 2017 Dev(Sec)Ops @ AMADEUS (Nice, 2 ans)
- 2019 Data(Sec)Ops @ OVHcloud (Lyon, 3 ans)

GIS-DATA



careers.ovhcloud.com



Thank a lot 🎉

I need your feedback & tools

<https://openfeedback.io/cA67UrN9jU6glxRGVmmW>

Link to the slides in the comments