



# Reprenez le contrôle de votre bash en devenant un ninja de la CLI ! 😎

David Aparicio | 16 Juin 2022 | 19h00 | Lyon (EPITECH)



# Pourquoi la CLI ?

Search: metallica

Help: Type ?

Library

- Made For You
- Recently Played
- Liked Songs
- Albums
- Artists
- Podcasts

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

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

Albums

- Metallica - Metallica
- Master Of Puppets (Remastered) - Metallica**
- Garage Inc. - Metallica
- Metallica Through The Never (Music From The Motion Picture)
- ... 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%)

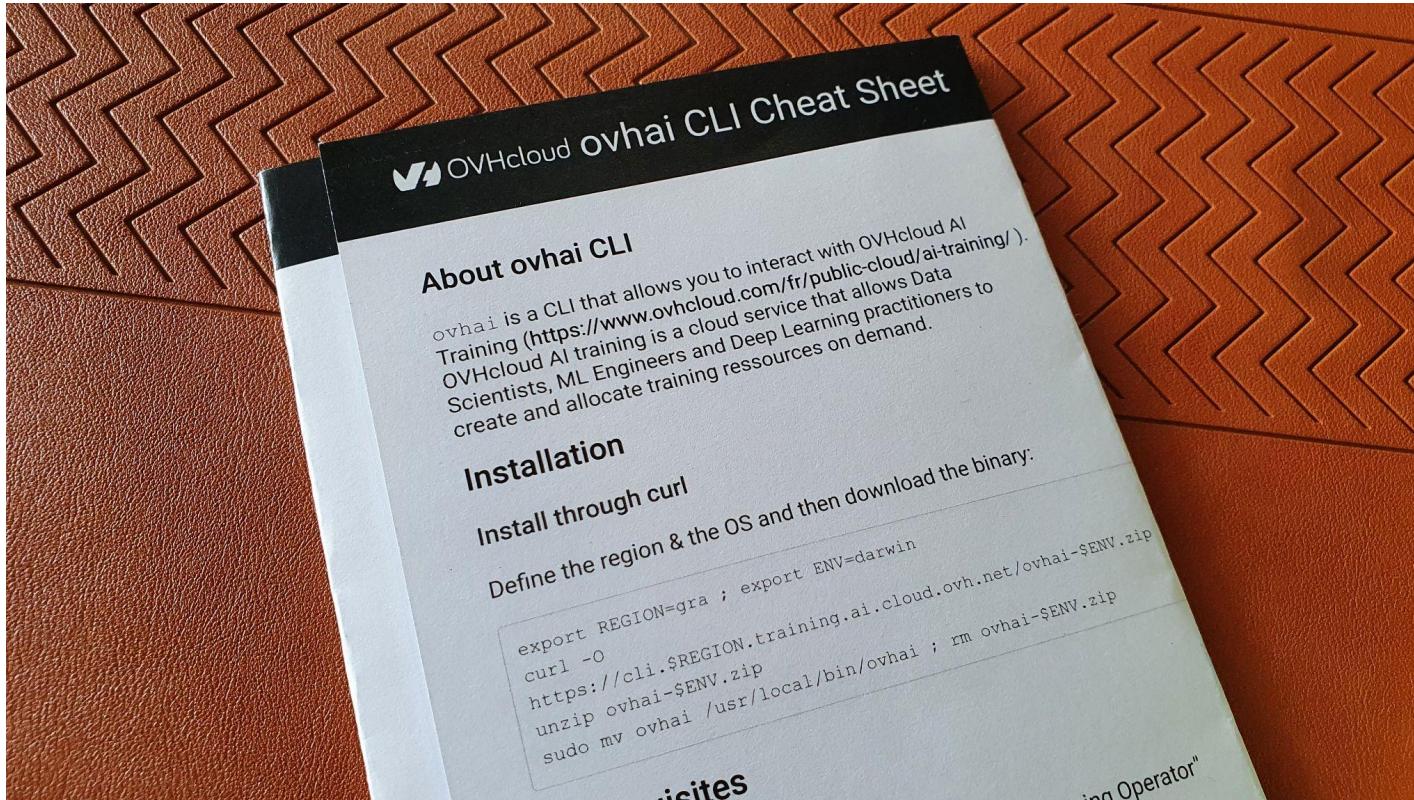
Find You

Signal Void, King Protea

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



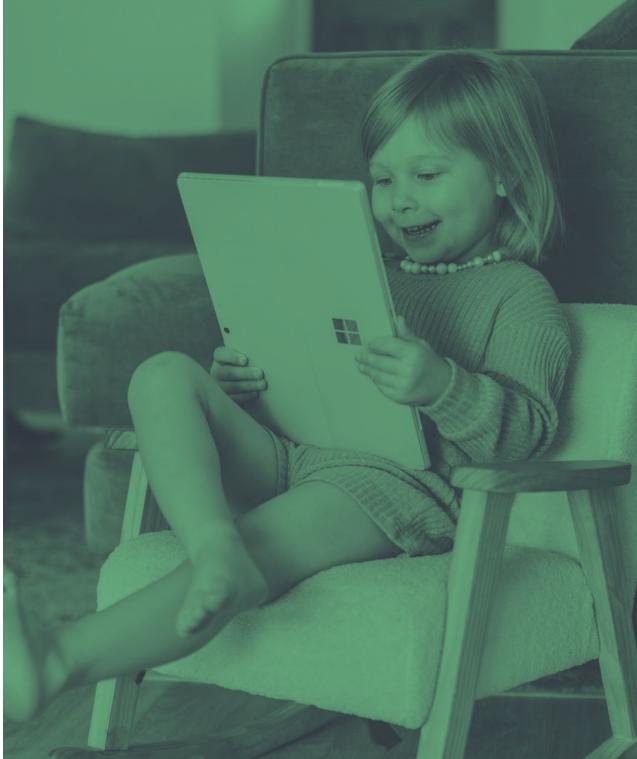
# CLI, simple et rapide



[ovhai CLI Cheat Sheet](#)



# Disclaimer



- - Bash
- + Configuration
- + Commandes
- Disponible directement dans vos IDE
- Trouver outil à son ordi



# Site pour vous aider à choisir

→ C 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](#)

SonarLint - Deliver Cleaner and Safer Code - Right in Your IDE of Choice!  
Scout APM - Less time debugging, more time building  
SaaSHub - Software Alternatives and Reviews

## autojump

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

#Autojump #Python #Filesystem #Command Line Tool

[Source Code](#)

	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

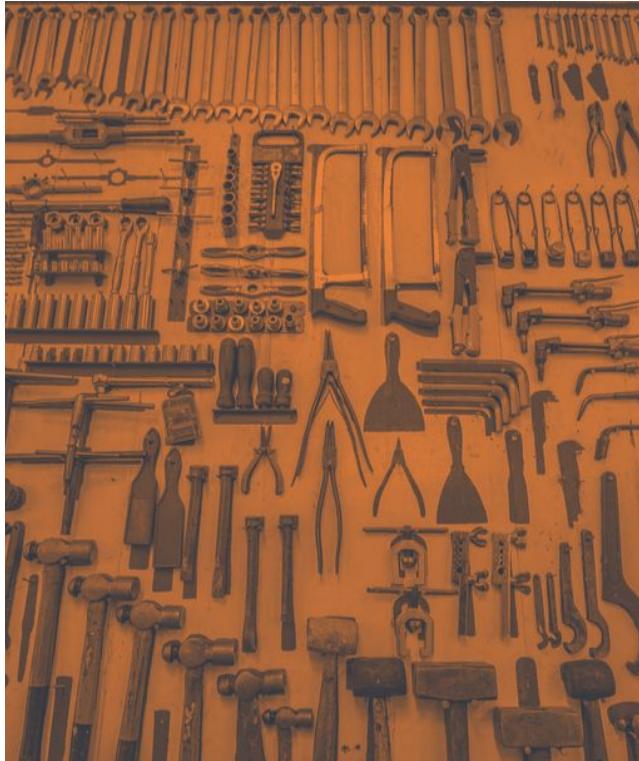
# Programme

---

- Intro: Terminal & Shell
- Développement
- Réseau & Perfs
- Astuces
- Conclusion



# Outil de préférence



- Interpréteur de commande (cmd)
- Interface système (shell)
- Infrastructure logicielle (framework)
- Extensions / Thèmes (plugins)
- Gestionnaire de fenêtres / onglets



# Interpréteur de commande



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



# Interface système

```
PS 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           0 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

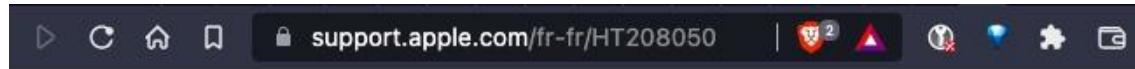
Mode                LastWriteTime        Length Name
----                -              -          -
d----       2/20/2019   5:37 PM           0 new
PS C:\>
```

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

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



# Par défaut, ça dépend



## 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.



# Infrastructure logicielle, 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
[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: tout au clavier

```
tmux

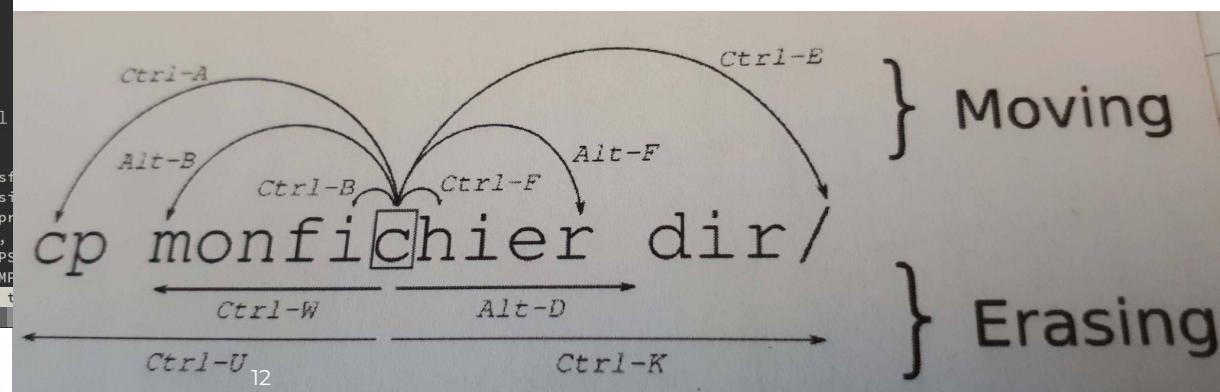
1 [|||          4.3%] Tasks: 123, 362 thr; 2 runnin
2 [|||          3.3%] Load average: 0.40 0.40 0.30
3 [|||          4.7%] Uptime: 3 days, 04:44:37
4 [|||          1.4%]
Mem[||||| 1907/7847MB]
Swp[ 0/0MB]

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/bin/
964 ham 20 0 1757M 227M 67600 S 3.8 2.9 7:03.93 /usr/bin/
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 F3Search F4Filter F5Tree F6SortByF7Nice F8Nice F9Kill

Content-Type: text/html; charset=UTF-8 curl(1)      Curl Manual
Content-Length: 1850
Via: 1.1 vegur

hamvocke git/master
> cowsay "Hello folks" | lolcat
< Hello folks >
-----
\   ^__^
 \  (oo)\----)
  (__)\       )\/\
   ||----w |
    ||     ||

hamvocke git/master
>
1:debug* 2:dev-
```

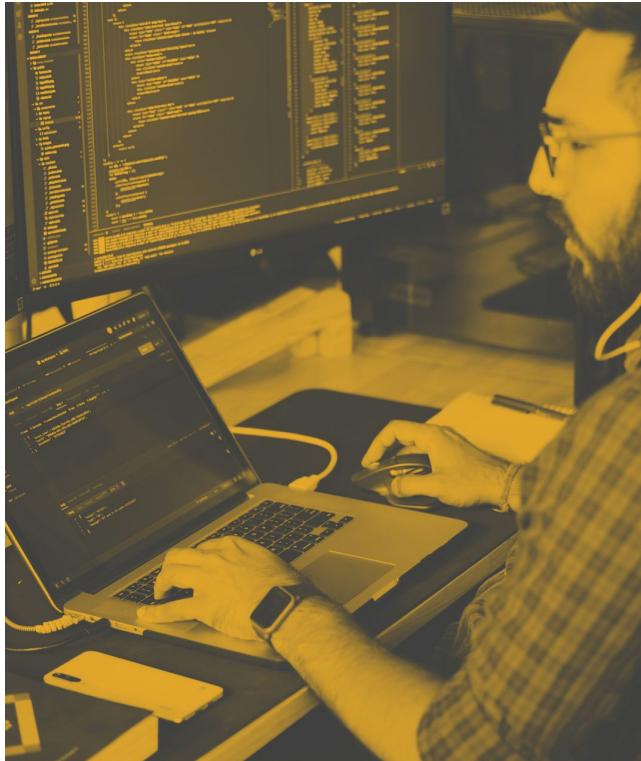




# Let's Code



# Espace de travail



- Choix du dossier, avec 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 ou Emacs ?

- Rust propose une liste prometteuse
- Lapce
- Ox
- Xi
- Kiro
- Bat (cat)
- Delta / Difftastic (diff)



# Exemple: bat / cat

```
→ bat internal.go
```

```
File: internal.go
```

```
1 package internal
2
3 import "unicode/utf8"
4
5 func IsLongEnough(username string, minLen int) bool {
6     return utf8.RuneCountInString(username) ≥ minLen
7 }
```



# Exemple: 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://davidaparicio.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://davidaparicio.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 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 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

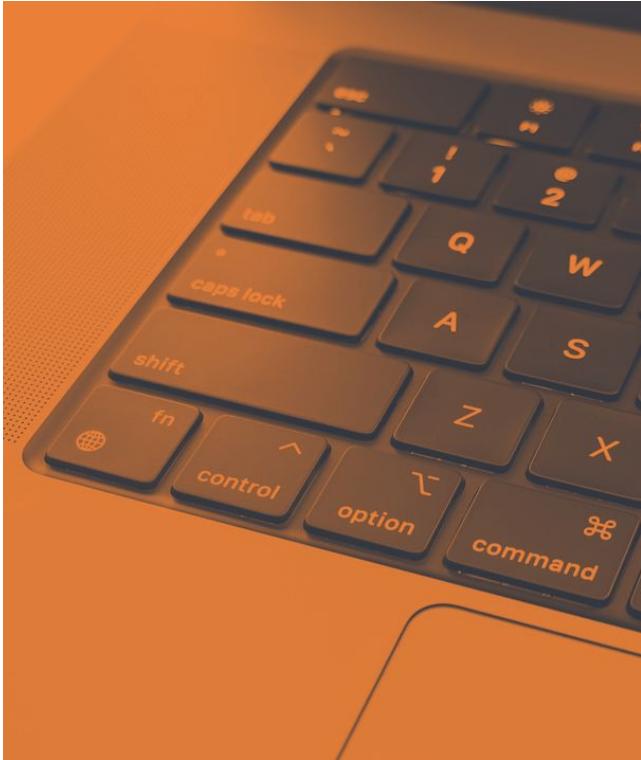
ID Age P Due Description Urg_
1 1min L 2022-05-26 Prepare the slides 10.4
2 4s 2022-06-01 Update website 5.84

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.
```



# Gestion de versions



- pyenv / conda
- nvm / fnm / volta



# 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:~$ []
```



# navi

■



# Let's Debug



# Problème ? Une 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

→ ~ |
```



# Test spécifique: 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 ]-
```





# Test spécifique: 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
```

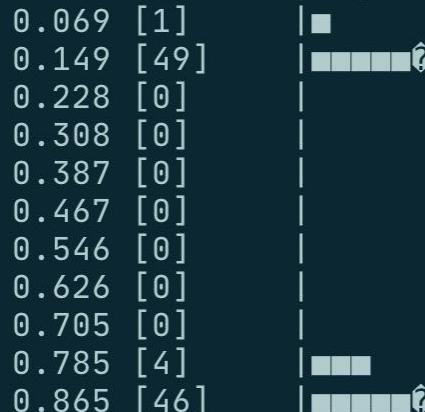
## Summary:

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:



## Details (average, fastest, slowest)

DNS+dialup:	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: lnav / 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://lnav.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 #	ba	Complaint Type	count	%	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 Conditi...	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					



# Une typo = Une solution



A screenshot of a terminal window titled "nvbn@nvbn-desktop: ~/exp/thefuck 76x18". The command "thefuck git:(master) X" is being typed, with the cursor positioned at the end of the command. The background of the terminal is dark.



# Une typo, configuration du shell

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

Exemple d'une configuration par défaut de Zsh



# Un accès SSH, pensez MOSH

The screenshot shows a terminal window titled '[mosh]'. The window displays a list of features and benefits of Mosh, a remote shell program. The text is color-coded in blue and white on a black background. Key points include:

- 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.

At the bottom of the terminal window, there is some Org mode syntax: "-UU-:\*\*\*--F1 All L19 (Org)-----".

- En remote ou en voyage
- Connexion intermittente (3G/4G/Wifi)
- Persistance durant les changements



# 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: <b>test.sh</b>
	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
```



# Astuces



# Gardez un bash sous la main

```
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
```

- Afin de tester, au préalable, vos scripts de déploiement, de configuration, sur une nouvelle infra
- Bash récent >= 4.2 (Février 2011)
- Et un coup d'oeil à la lib "ammlib"

set -x

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

# Assemblez vos commandes

```
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
}
```

# Composez vos commandes

```
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@raspberry:/# 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
```

# Parlez-vous aux inconnus ?

---

Alors pourquoi acceptez-vous de faire :

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



# Sauvegardez vos .dotfiles

(aka vos fichiers de configurations)

```
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

- Enlever les icônes du bureau 

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

- Empêcher la mise en veille automatique 

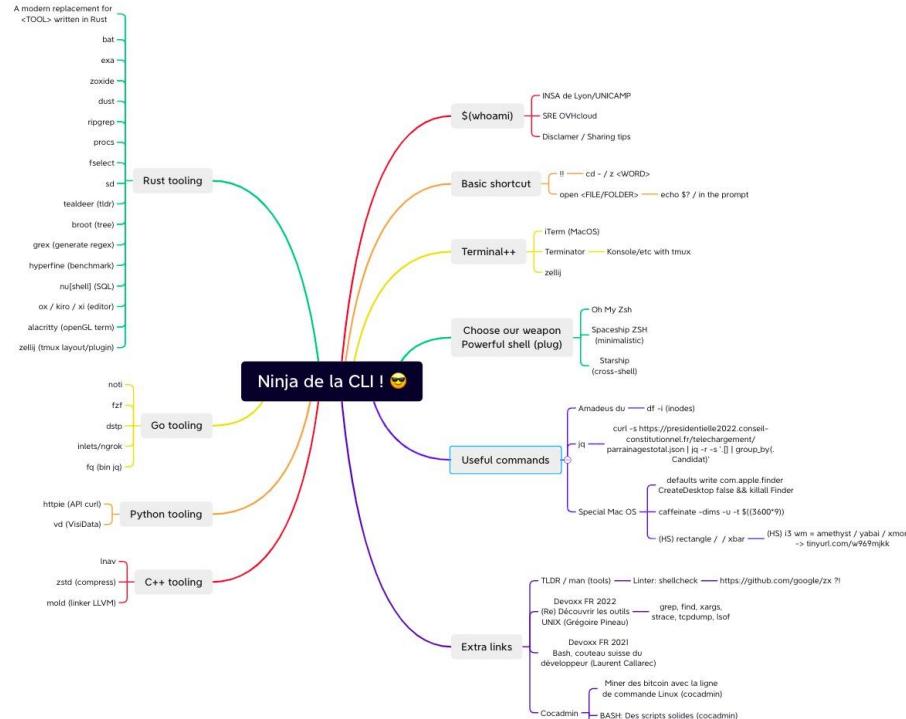
```
caffeinate -dms -u -t $((3600*9))
```



# Conclusion



# La méga-liste



# Mindmap



# Pour aller plus loin

- Outils installables via homebrew / chocolatey / apt / dnf...
- ShellCheck (linter)
- Devoxx FR 2022: (Re) Découvrir les outils UNIX (Grégoire Pineau)
- Devoxx 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** searches a directory for files

`find /tmp -type d -print`

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

here are my favourite find arguments!

<b>-name/-iname</b> case insensitive the filename! eg -name '*.txt'	<b>-path/-ipath</b> search the full path! -path '/home/*/*.go'
<b>-size 0</b> find empty files! Useful to find files you created by accident	<b>-print 0</b> print null-separated filenames Use with xargs -0!
<b>-exec COMMAND</b> action: run COMMAND on every file found	<b>-delete</b> action: delete all files found



# A list of new(ish) command line tools

(12 Avril 2022)

# Julia Evans

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## 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/>

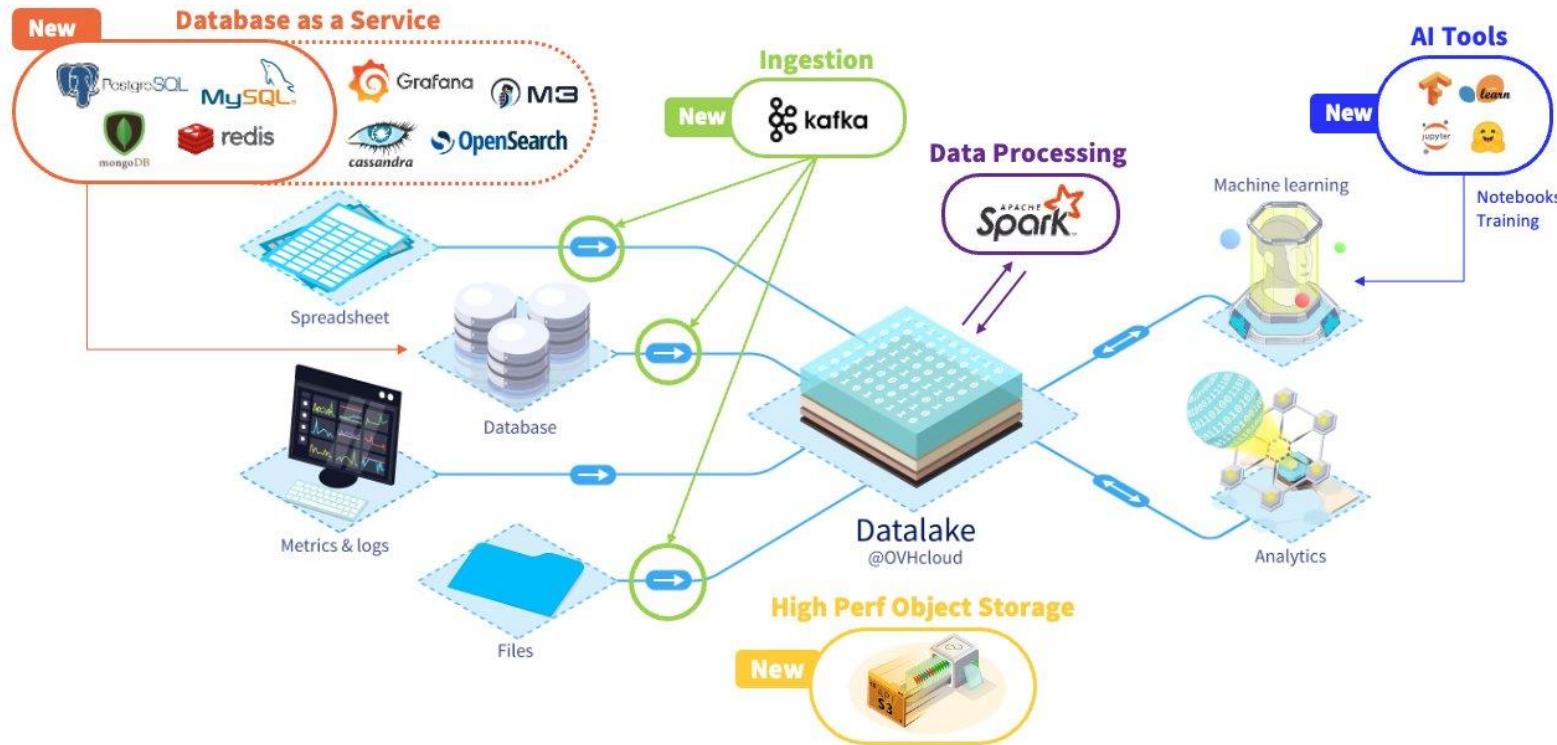


# David Aparicio (@dadideo)



- 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](https://careers.ovhcloud.com)

# Voulez-vous travailler avec David ?



Voici 3 offres dans l'équipe GIS :



IT Technical Leader



Développeur Python



Manager  
Database OpenSource



Dans les autres équipes :



Software Engineer Python  
Object Storage



Senior C/C++  
Software Engineer  
Public Cloud



Développeur Python  
Storage

**[careers.ovhcloud.com](https://careers.ovhcloud.com)**



# Merci 😊

J'ai besoin de vos retours & vos outils  
<https://s.42l.fr/cafedevlyon>

Lien des slides dans les commentaires

