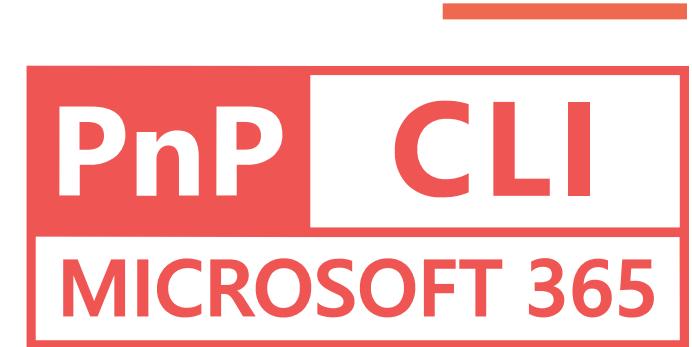




CLI FOR MICROSOFT 365





OVER MIJ



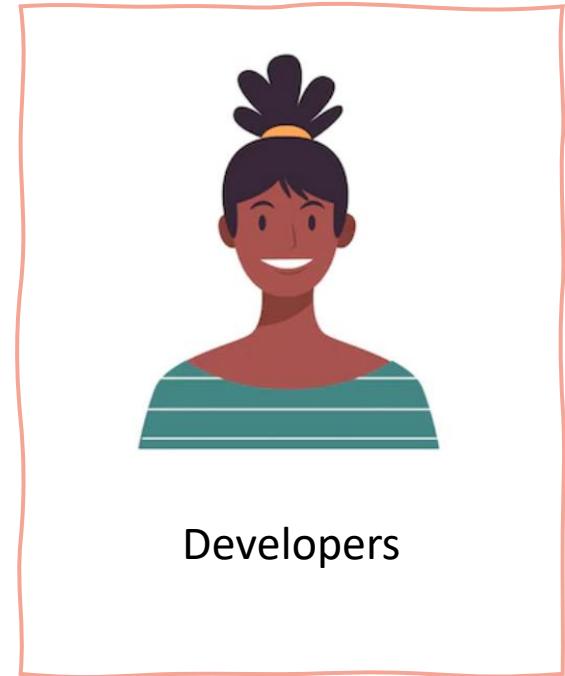
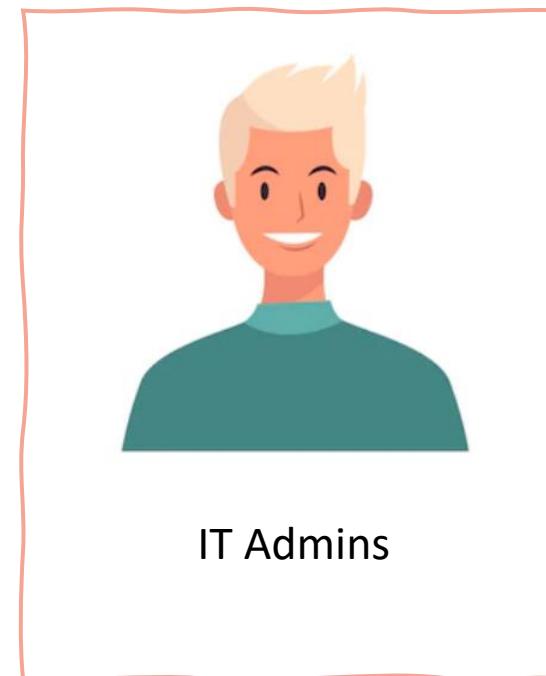
Martin Lingstuyl
MVP | Microsoft 365 Architect



- I4-YOU Business Solutions
- Family man 
- Cycling  
- **Twitter:** @martinlingstuyl
- **GitHub:** @martinlingstuyl
- **Blog:** <https://www.blimped.nl> 



BEDOELED VOOR?



How can they share theirs?



“Let nobody tell you you’re not technical”

· Scott Hanselman ·

“Je typt wat,
je drukt op
enter en er
gebeurt wat”



TERMINOLOGIE

Command line interface

Let's be trendy, let's ask ChatGPT

⟳ Reset Thread

🌙 Dark Mode

🤖 OpenAI Discord

✉️ FAQ

➡️ Log out



What is a command line interface?



A command line interface (CLI) is a type of user interface that allows users to interact with a computer or device by entering commands through a text-based interface. In a CLI, the user types in commands and receives feedback from the system in the form of text-based output. CLI's are often used in programming and system administration tasks, and offer a more efficient way to interact with a system compared to graphical user interfaces (GUI).



⟳ Try again



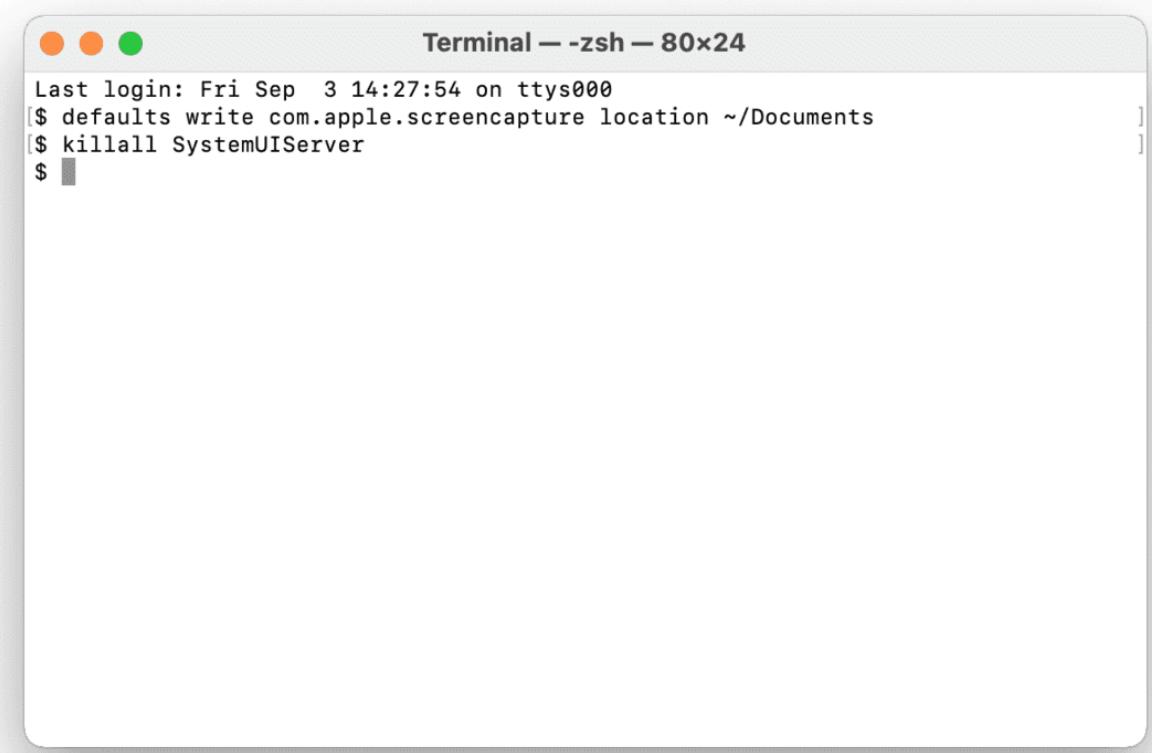
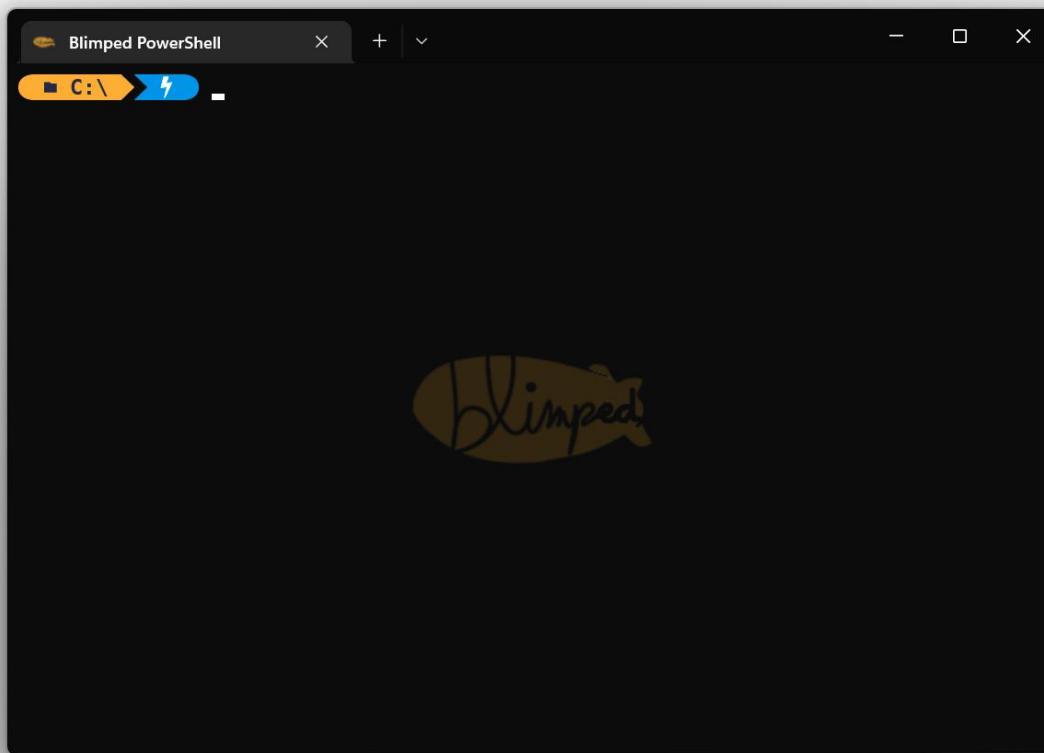
“Je typt wat,
je drukt op
enter en er
gebeurt wat”



TERMINOLOGIE

Terminal

De wrapper applicatie die je gebruikt voor command line.



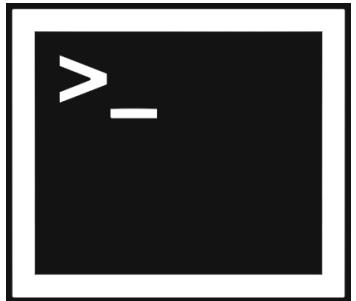
What used
to be called
a Computer
Terminal



TERMINOLOGIE

Shell

Het programma dat je bedoelingen probeert te vertalen naar instructies



Windows CMD



PowerShell



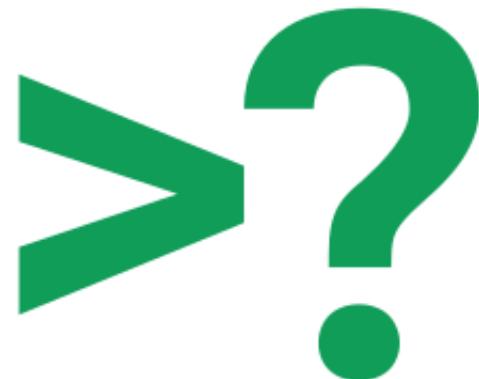
Bash
(Aka bourne again shell)



Z-shell / zsh
(Aka Extended Bourne Shell)

TERMINOLOGIE

The command line... de begrippen worden door elkaar heen gebruikt



“Je typt wat,
je drukt op
enter en er
gebeurt wat”



WHY

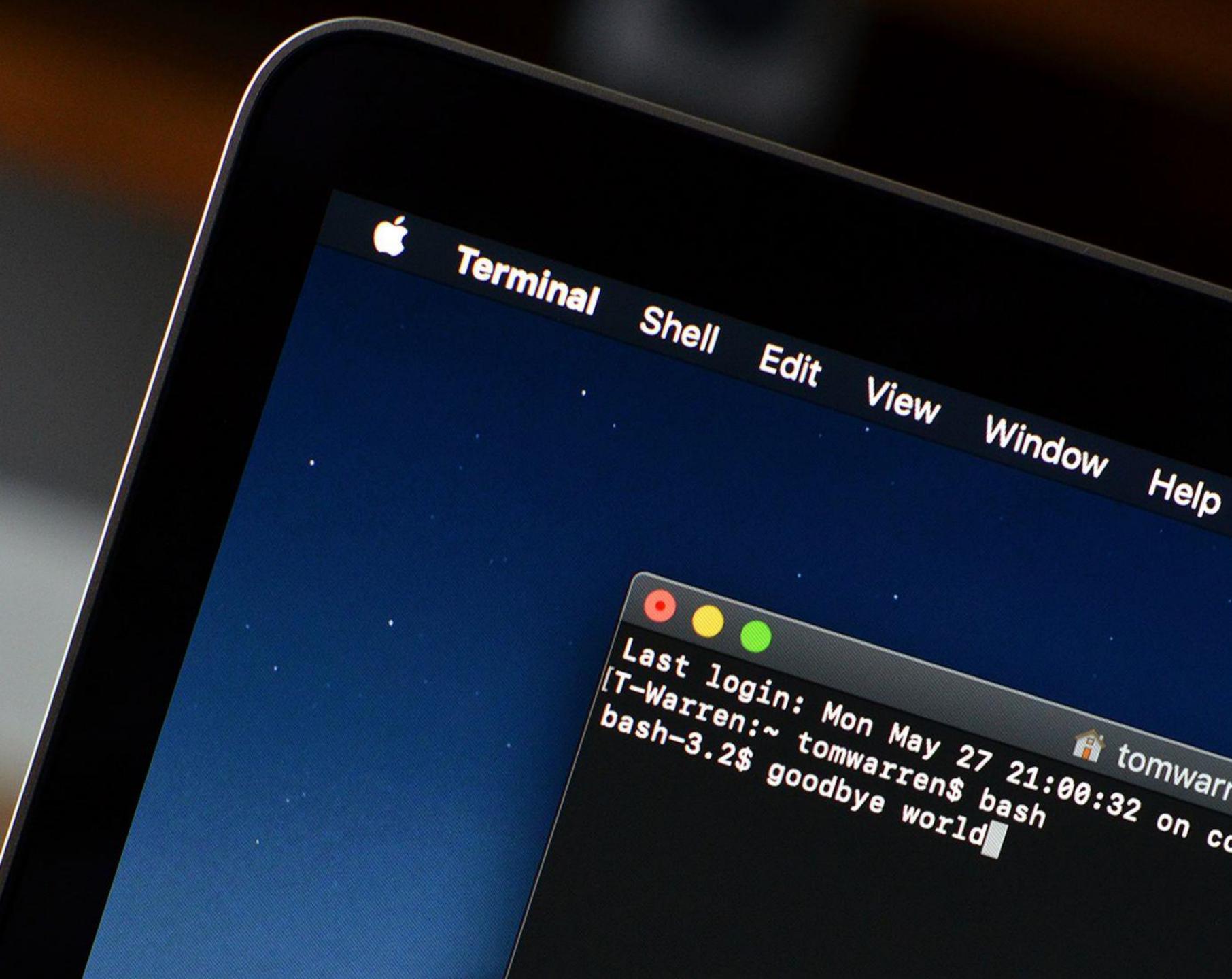
Ooit was
alles
command
line



Maar toen
kwam de
zon op...

(de zon van de GUI verdreef
het duister van de
commandline)





Anno 2022: de
commandline is
more alive
than ever

WHY

Komt het door
de mooie kleurtjes?

The terminal window displays the following themes:

- Theme: larserikfinholt**
MartinLingstuyl ➤ C:\ ➤ 0ms
- Theme: M365Princess**
MartinLingstuyl ➤ C:\ ➤ 14:13
- Theme: marcduiker**
C:\ ➤ ⚡
- Theme: markbull**
MartinLingstuyl@MSI ➤ C:\ ➤ 0ms
\$
- Theme: material**
C:\ 14:13
- Theme: microverse-power**

CLI VS GUI



CLI's zijn goed voor
herhalende taken



CLI's zijn snel
(als je weet wat je doet)



CLI's zijn stabiel
(API's veranderen vaak minder snel)

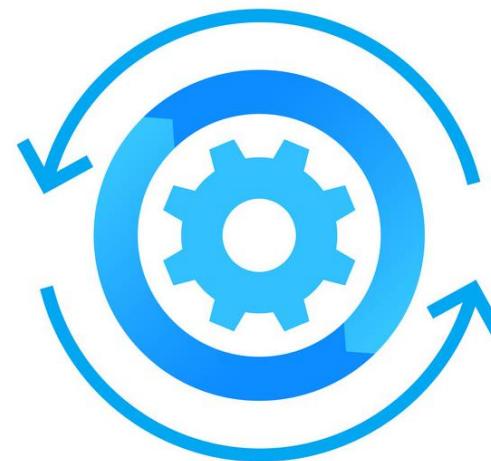


CLI's ontsluiten de
kracht van scripting

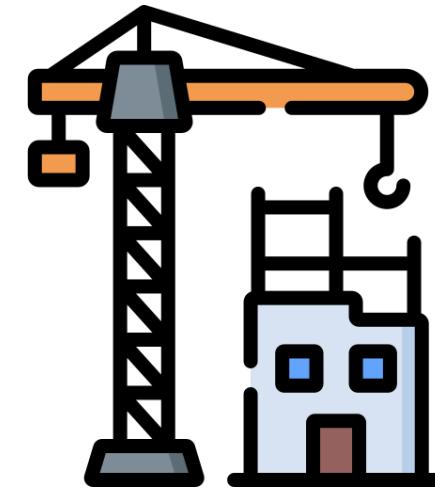
TOEPASSINGEN



Reports



Automation



Provisioning &
Configuration

CLI FOR MICROSOFT 365



SharePoint



Teams



OneDrive



Exchange



Power Apps



Power Automate



Planner



To Do



Azure AD



Bookings



Yammer



OneNote



Graph



Purview

SPFx



OPEN SOURCE

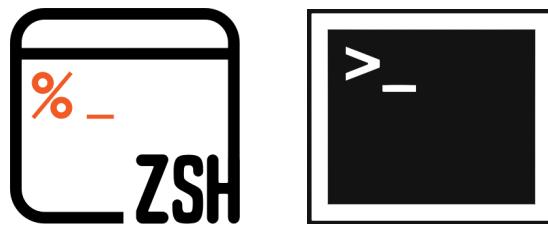
*De kracht van Open Source: gevormd door vraag en aanbod
en gebouwd door de tech community.*



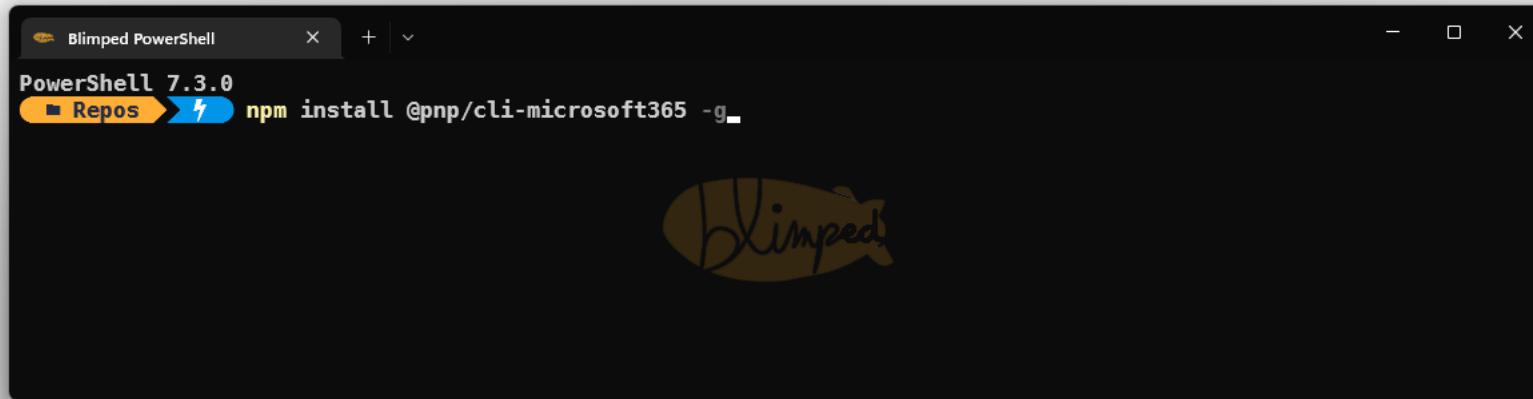
The screenshot shows a website for 'CLI for Microsoft 365'. The top navigation bar includes links for 'Home', 'User Guide', 'Commands', 'Concepts', 'Sample Scripts', and 'About'. A prominent red banner features the text 'Join our brand new community Discord server' with a link icon. Below the banner, there's a logo for 'PnP CLI' and 'MICROSOFT 365'. The main content area displays several upgrade guidance links: 'Home', 'CLI for Microsoft 365', 'v6 Upgrade Guidance', 'v5 Upgrade Guidance', 'v4 Upgrade Guidance', and 'v3 Upgrade Guidance'. At the bottom right, there's a terminal-like interface showing a command prompt: 'root@DESKTOP-SPARO75:~# m365' followed by the instruction 'To sign in, use a web browser'.

CROSS PLATFORM

Echt Cross-platform. (Meer nog dan PowerShell Core)

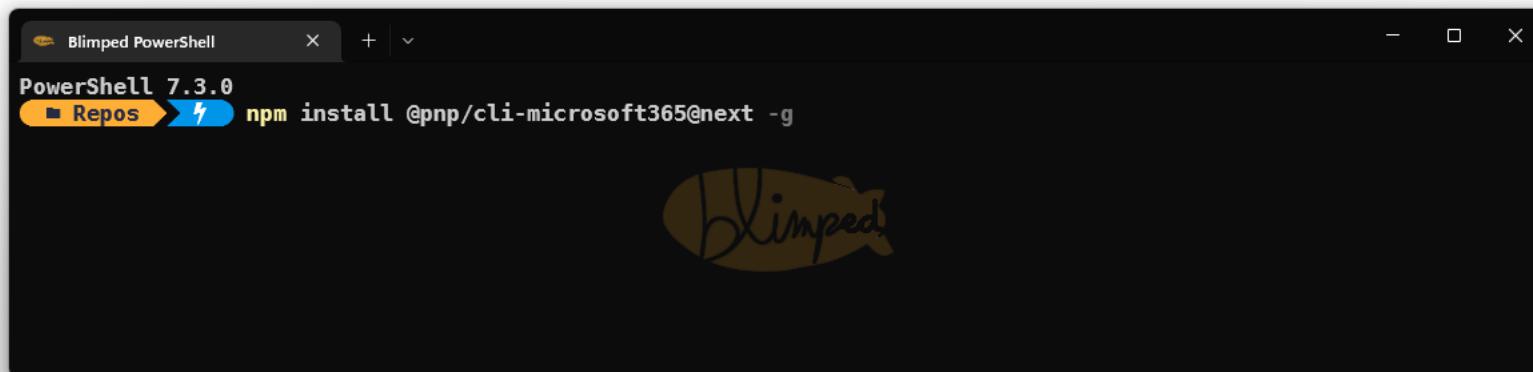


INSTALLEREN



A screenshot of a Windows-style terminal window titled "Blimped PowerShell". The title bar includes standard window controls (minimize, maximize, close). The window has a dark background. At the top left, it says "PowerShell 7.3.0" and "Repos". A blue arrow icon with a lightning bolt is positioned next to the "Repos" text. Below the title bar, the command "npm install @pnp/cli-microsoft365 -g" is typed into the terminal. In the center of the window, there is a watermark or logo for "blimped" inside an oval shape.

De laatste release

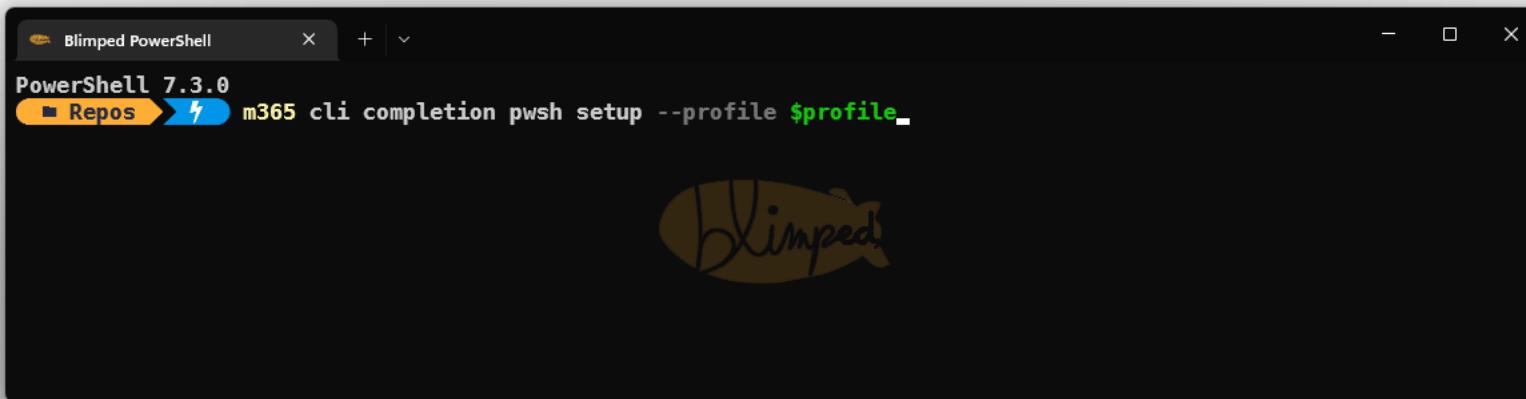


A screenshot of a Windows-style terminal window titled "Blimped PowerShell". The title bar includes standard window controls (minimize, maximize, close). The window has a dark background. At the top left, it says "PowerShell 7.3.0" and "Repos". A blue arrow icon with a lightning bolt is positioned next to the "Repos" text. Below the title bar, the command "npm install @pnp/cli-microsoft365@next -g" is typed into the terminal. In the center of the window, there is a watermark or logo for "blimped" inside an oval shape.

De beta versie

CONFIGUREREN

Auto-completion aanzetten



A screenshot of a dark-themed PowerShell window titled "Blimped PowerShell". The title bar includes standard window controls (minimize, maximize, close) and a tab indicator. The main area shows the PowerShell prompt "PowerShell 7.3.0" followed by a command line: "m365 cli completion pwsh setup --profile \$profile_". Below the command line, there is a watermark or logo for "blimped" featuring a stylized yellow and brown oval shape.

Demo: Basic Operations



SUMMARY

- Anders dan PowerShell
- CommandLets VS workload, command en subcommands
- --opties met dubbele streepjes, -o shorts met enkel streepje.
- Output als json/text. Geen .NET
- Subcommands per workload
- Standaard CRUD verbs per workload:
list, get, add, set, remove



Demo: Reports



SUMMARY

- Output eenvoudig exporteren naar CSV
- Combineren met andere gegevens via scripting
- Eenvoudig in te laden in Power BI.



Demo: Provisioning



SUMMARY

- Als voorbeeld: Site template en site script aanmaken en toepassen op x nieuwe sites.
- File tokens om gegevens uit bestanden te laden.
- Gebruiken wat voor command je ook nodig hebt.
- Combineren met scripting



Demo: Automation



SUMMARY

- Op een Azure PowerShell Function het CLI draaien.
- Installeer het CLI lokaal (zonder –g) via Kudo.
- Path bijwerken zodat je m365 aan kunt reopen.
- Node.JS versie instellen in de Function config.
- Managed Identity gebruiken



Demo: SPFx Development



SUMMARY

- Een aantal commands om je development flow te verbeteren.
- Je development omgeving doorlichten om te kijken of je de juiste tools hebt.
- Je project doorlichten.
- Eenvoudig je SPFx oplossing upgraden met instructies van het CLI
- Project hernoemen.



DEPLOYMENT VIA PIPELINE



PSREADLINE + PREDICTOR



```
Repos ➤ m365_
> m365 aad approleassignment add --appObjectId "232ff4d2-07de-4de4-a1c4-19d742fa1b06" -... [History]
> m365 spo sitescript list [History]
> m365 spo sitescript remove --id "085811f8-c993-4c7d-832b-c04ee93e9f27" [History]
> m365 login [CLI for M365]
> m365 logout [CLI for M365]
> m365 status [CLI for M365]
> m365 version [CLI for M365]
> m365 aad app add --name 'My AAD app' [CLI for M365]
> m365 aad app role add --appObjectId d75be2e1-0204-4f95-857d-51a37cf40be8 --name ... [CLI for M365]
> m365 aad app role delete --appObjectId d75be2e1-0204-4f95-857d-51a37cf40be8 --na... [CLI for M365]
```

By Anoop Tatti



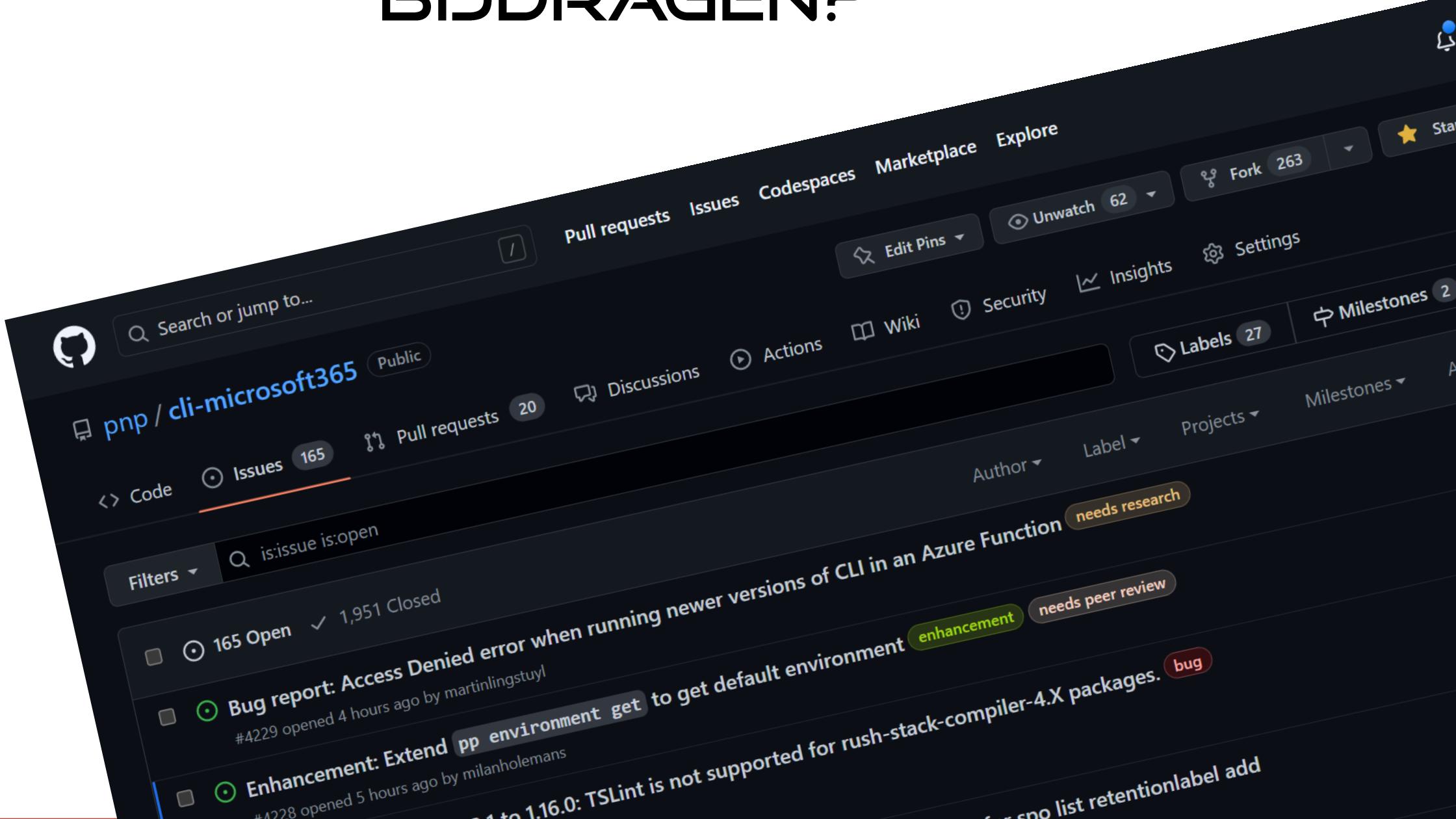
SAMPLE SCRIPTS

The screenshot shows a website for the "CLI for Microsoft 365". The header features a red bar with the "PnP CLI" logo and the text "MICROSOFT 365". Below the header, there's a navigation menu with links for Home, User Guide, Commands, Concepts, Sample Scripts, and About. A search bar is also present. The main content area displays a sample script titled "Flow runs day summary report". The script is categorized under "adaptivecards", "flows", and "reports". It includes author information ("Author: Adam") and a description: "This script creates a report of all flow runs from current day and sends the report as an adaptive card to the provided url". A PowerShell code snippet is shown at the bottom:

```
m365Status = m365 status --output text
if(m365Status -eq "Logged Out") {
```

On the right side of the page, there are GitHub integration icons showing 677 stars and 263 forks.

BIJDRAGEN?



RESOURCES, QUESTIONS?

- **CLI for Microsoft 365**
<https://pnp.github.io/cli-microsoft365>
- **Bijdragen?**
<https://github.com/pnp/cli-microsoft365>
- **Running the CLI on Azure Functions**
<https://www.blimped.nl/how-to-run-the-cli-for-microsoft365-on-an-azure-function/>
- **CLI predictor voor PSReadline**
<https://github.com/anoopt/CLI.Microsoft365.PowerShell.Predictor>

