



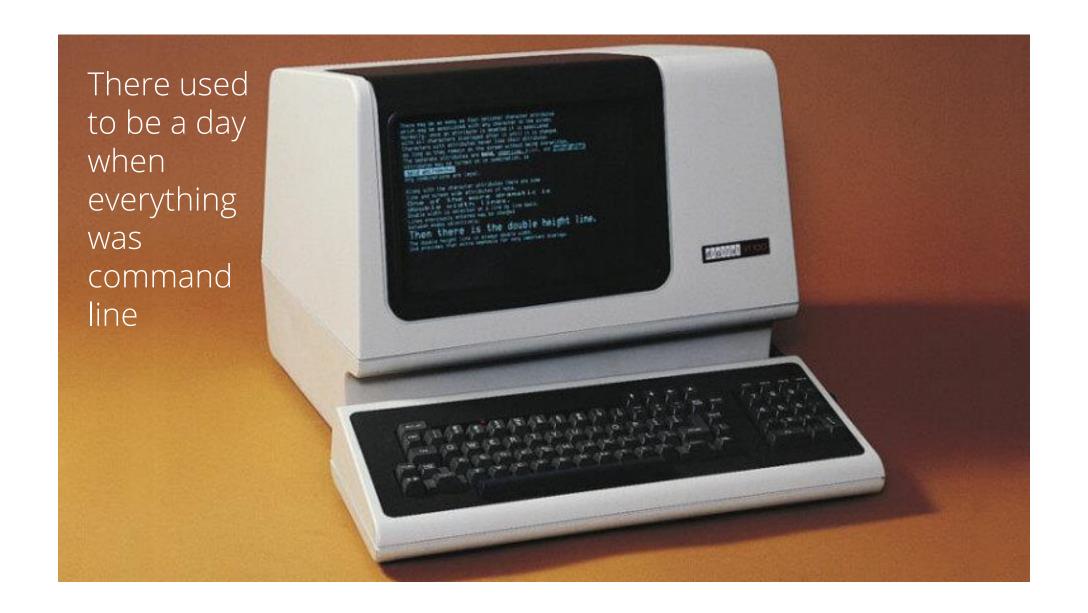
## **How to Manage Your** Microsoft 365 Tenant and **SharePoint Framework Projects from Any Platform**

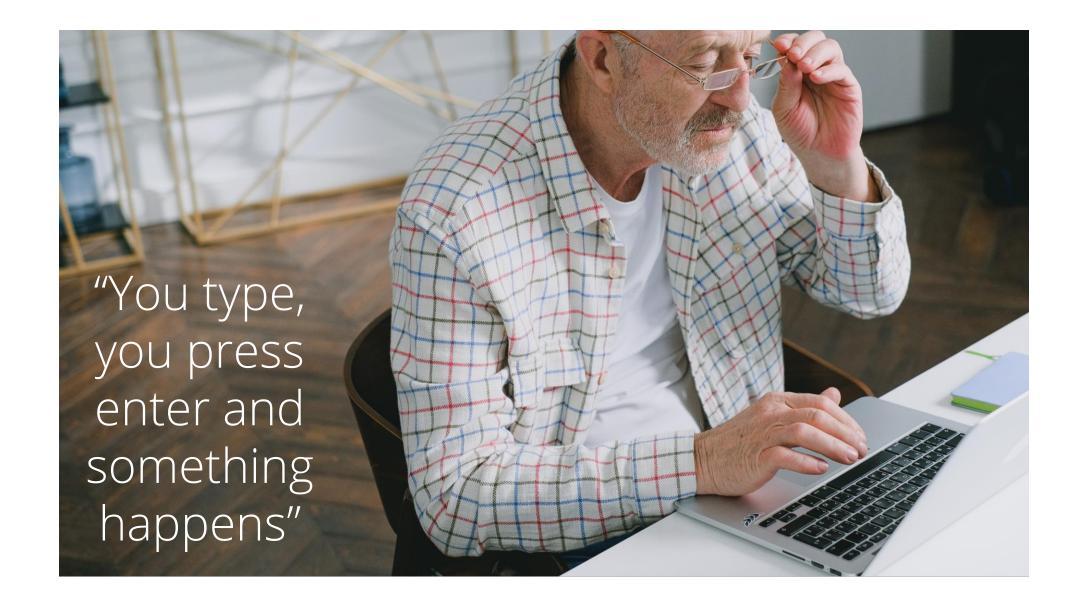
#### **Martin Lingstuyl**

MVP, Microsoft 365 Architect, [14-YOU, The Netherlands

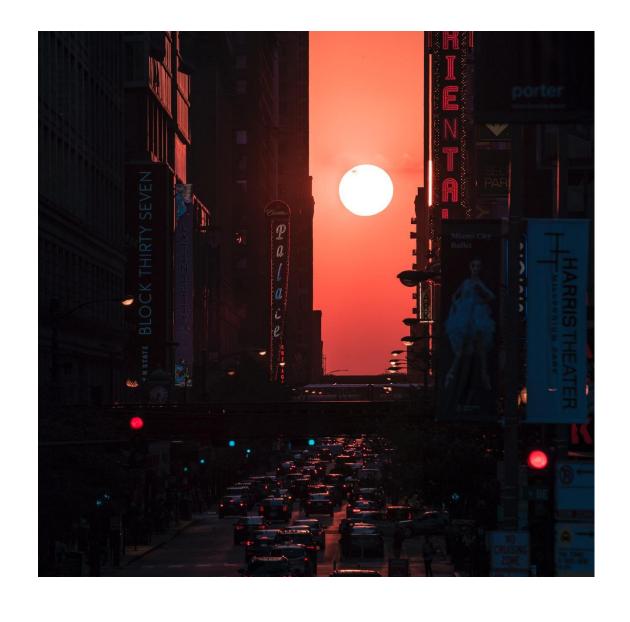


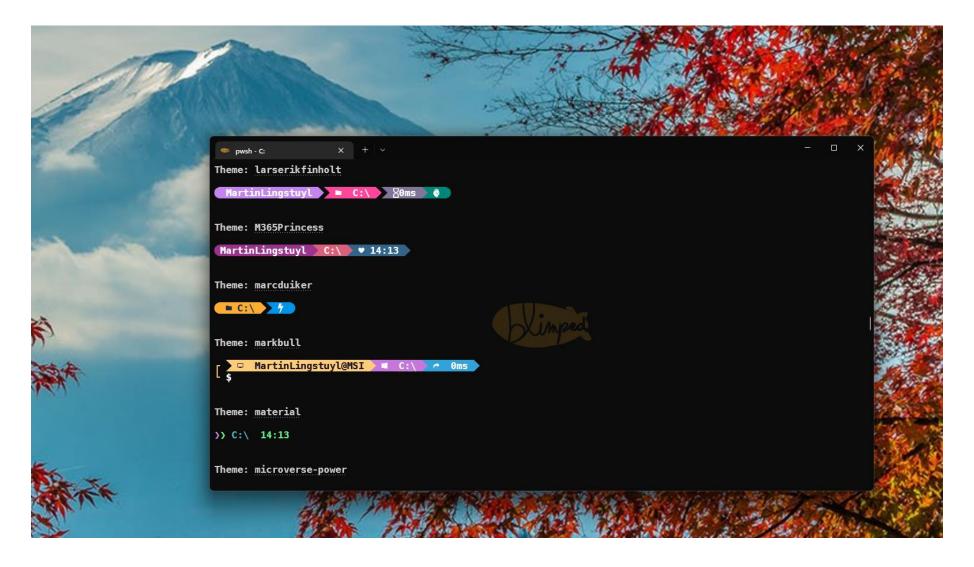






But then the sun of the GUI dawned...





And yet... the command line is more alive than ever

#### Agenda

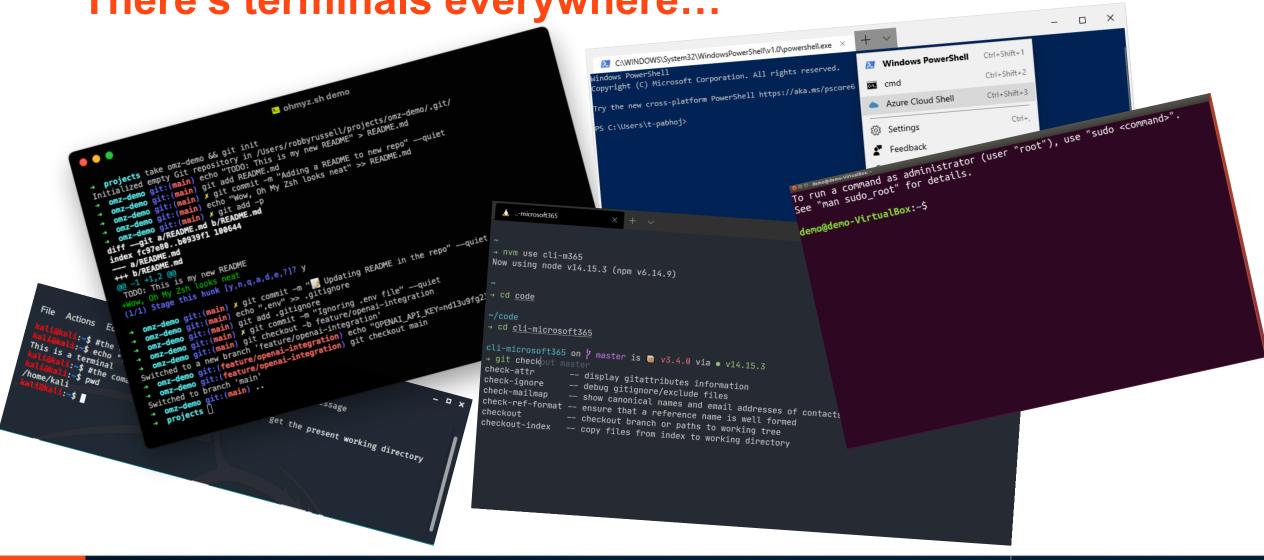
- What is it, what does it do?
- Installing, Configuring, Using
- Reporting on usage
- Managing your tenant
- Supporting Developer tasks
- Automating your work



## CLI for Microsoft 365 What is it and what does it do?



There's terminals everywhere...



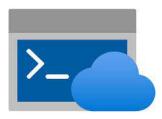
## A cross platform command line tool...

Install and run everywhere











As long as the node.js runtime is installed



#### Manage Microsoft 365 and SPFx projects

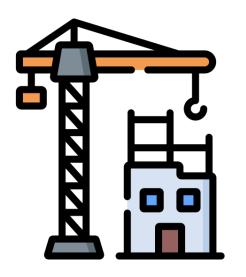




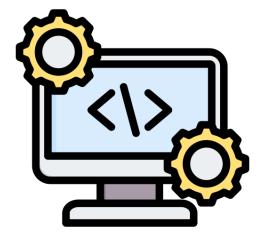
#### **Applications**







Provisioning & Configuration



Developer support

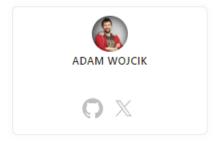


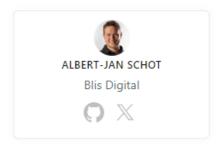
#### **Open source**

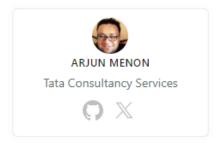
- Microsoft 365 Platform community
- Build by the tech community

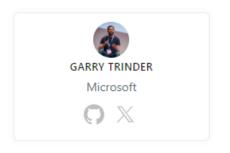


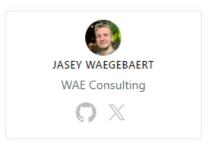
#### The team



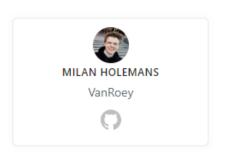


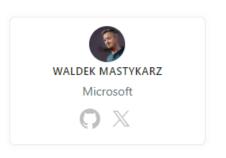










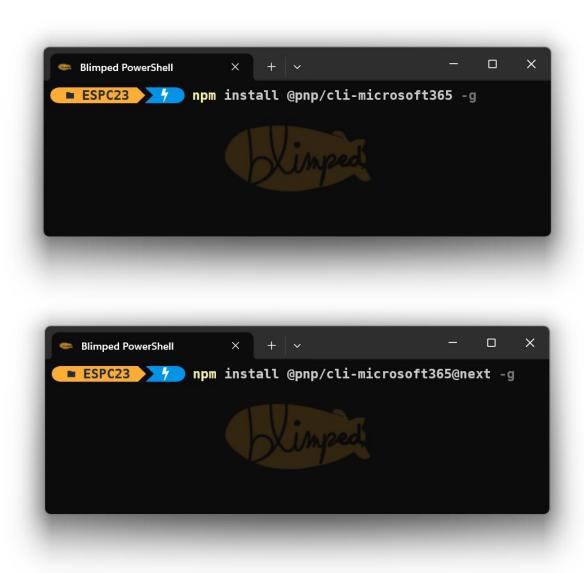


### Installing, Configuring, Using



#### Installing

- Latest VS beta release
- Release cadence
  - Monthly minor version
  - Yearly major version



#### Two modes – Interactive VS Scripting

```
Blimped PowerShell
 ■ ESPC23
                 m365 aad app get
  Please specify one of the following options:
 Option to use: (Use arrow keys)
> appId
 objectId
 name
```

```
x =

∠ ESPC23

                                                          ▷ 嘡 □ …
      scripting-example.ps1 X
      scripting-example.ps1 > ...
            $deletedSites = m365 spo tenant recyclebinitem list -o json | ConvertFrom-Json
            $deletedSites | Format-Table Url
            if ($deletedSites.Count -eq 0) { break }
            Read-Host -Prompt "Press Enter to start deleting (CTRL + C to exit)"
            $progress = 0
R
            $total = $deletedSites.Count
       10
       11
            foreach ($deletedSite in $deletedSites)
12
       13
              $progress++
              Write-Host $progress / $total":" $deletedSite.Url
              m365 spo tenant recyclebinitem remove -u $deletedSite.Url --force
       16
   ⊗ 0 <u>A</u> 0 (<u>w</u>) 0
```

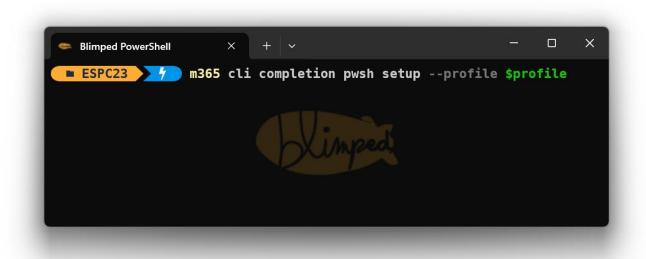
#### Configuration

- Wizard-style 'setup' command
- Further customization:
   'config' commands



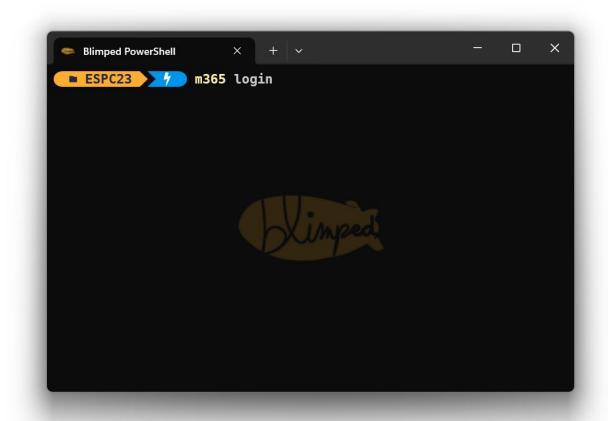
#### Configuration

Configure autocomplete



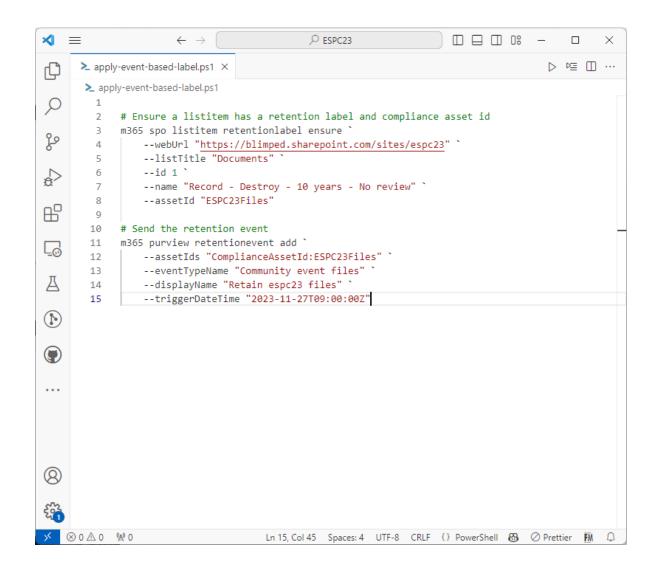
#### Logging in

- User VS Application
- User: DeviceCode, Browser, Password
- Application: Secret,
   Certificate, Managed Identity
- Consent / PnP Management Shell / Custom App



#### Input

- 'm365 <workload><commandgroup><command> <verb>'
- Basic CRUD-verbs per command: list, get, add, set, remove.
- Options with double dashes + shorts with single dashes



#### **Output**

- JSON / text / csv / md / none

### Demo – Custom Reports



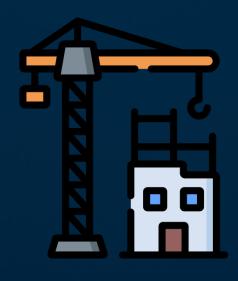
Reports



#### **Custom Reports**

- Get user signins
- Get user signins and compare with application permissions
- Get all Power Platform apps and flow across the tenant

## Demo – Provisioning & Configuration

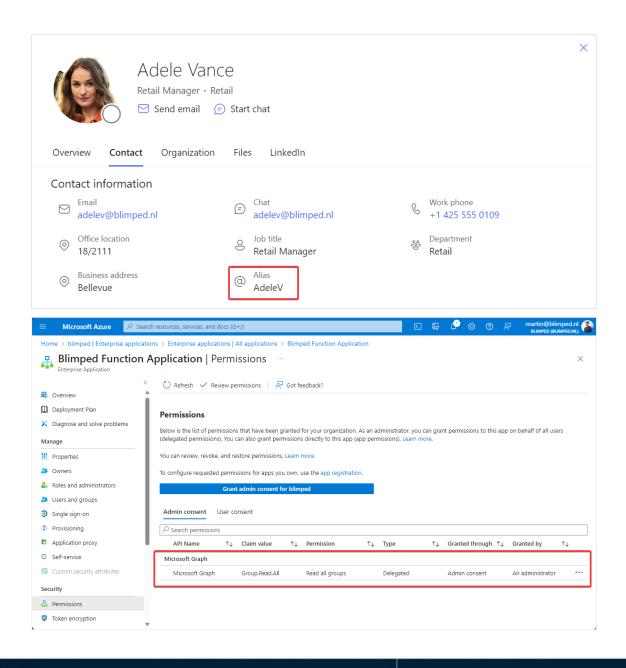


Provisioning & Configuration



## Provisioning & Configuration

- Managing people cards profile properties
- Creating Entra Application registrations
- Assigning permissions to Managed Identities



## Demo – Developer support



Developer support



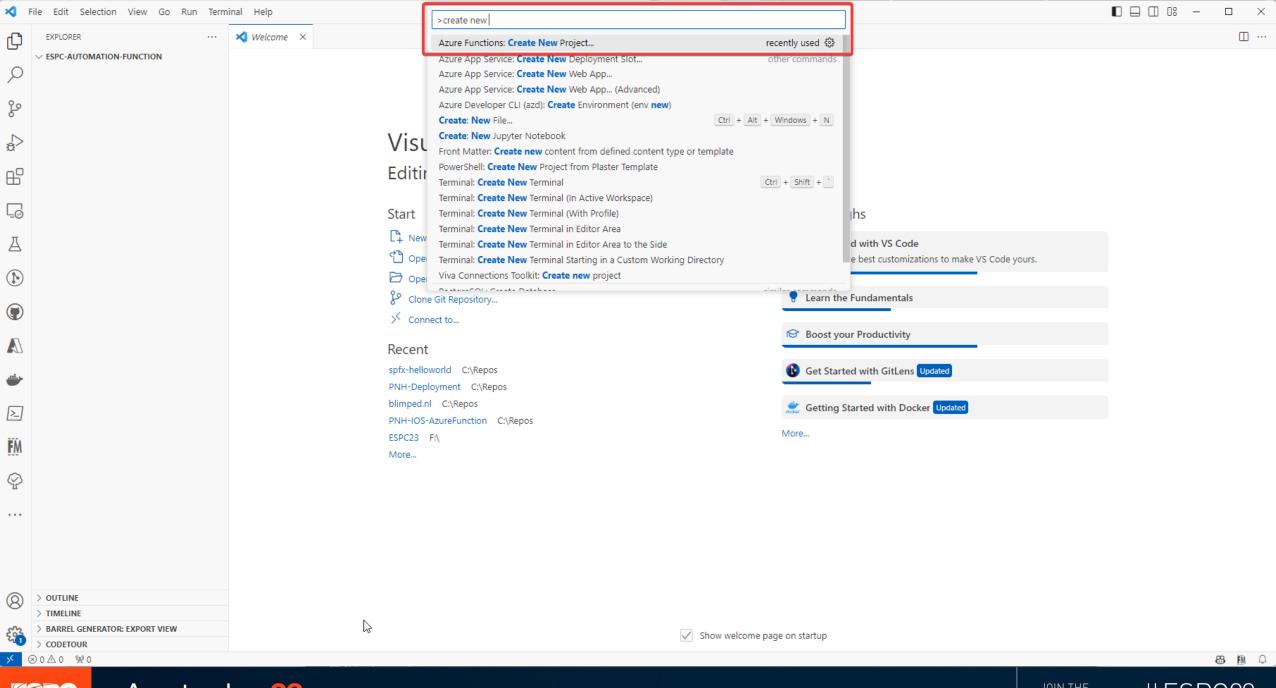
#### **Developer support**

- Verify environment
- Verify project
- Upgrade project
- Rename project
- Add Github Deployment workflow
- Easy-grant web api permissions

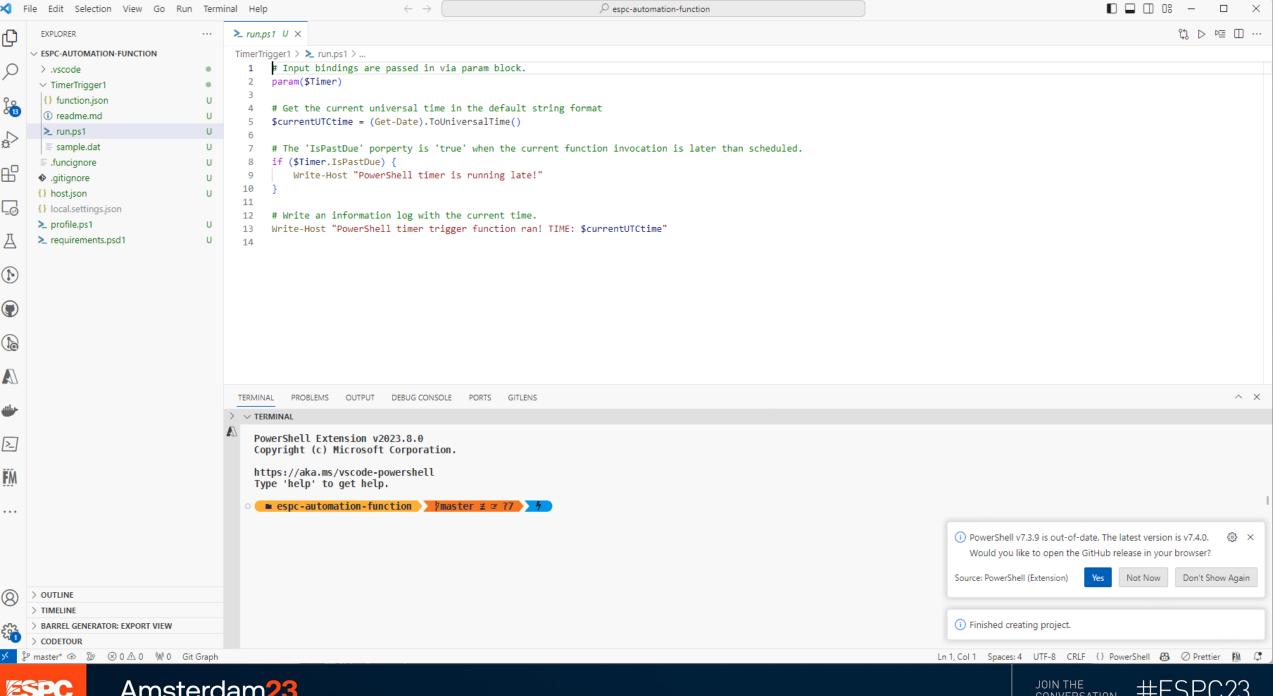
```
Blimped PowerShell
                                            m365 spfx doctor -o text
  ■ spfx-helloworld
CLI for Microsoft 365 SharePoint Framework doctor
Verifying configuration of your system for working with the SharePoint Framework
 SharePoint Framework v1.17.4
  Node v18.18.2 found, v>=16.13.0 <17.0.0 required
  yo not found
  gulp-cli not found
  typescript v4.5.5 installed in the project
Recommended fixes:
 Install Node.js >=16.13.0 <17.0.0
  npm i -q vo@4
  npm i -g gulp-cli@2
  npm un typescript
 spfx-helloworld > △ /main ≡ □ ?3 > /
```

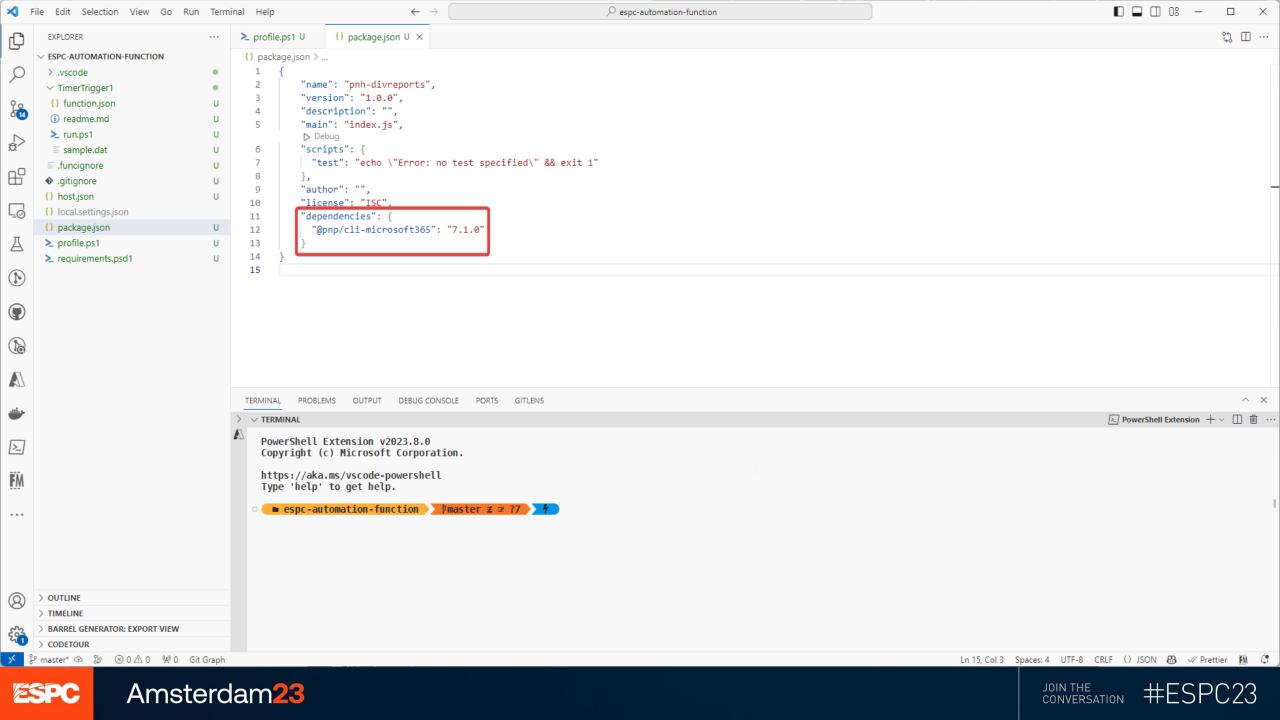
Click through — Automation

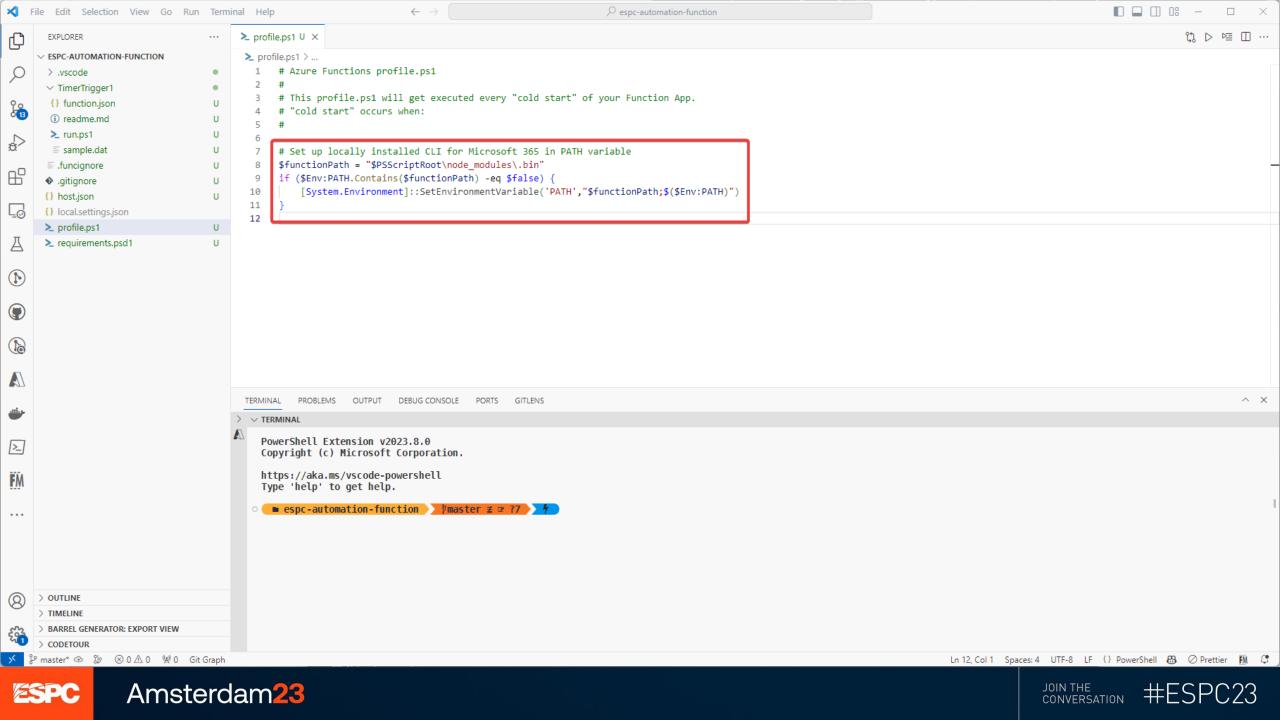


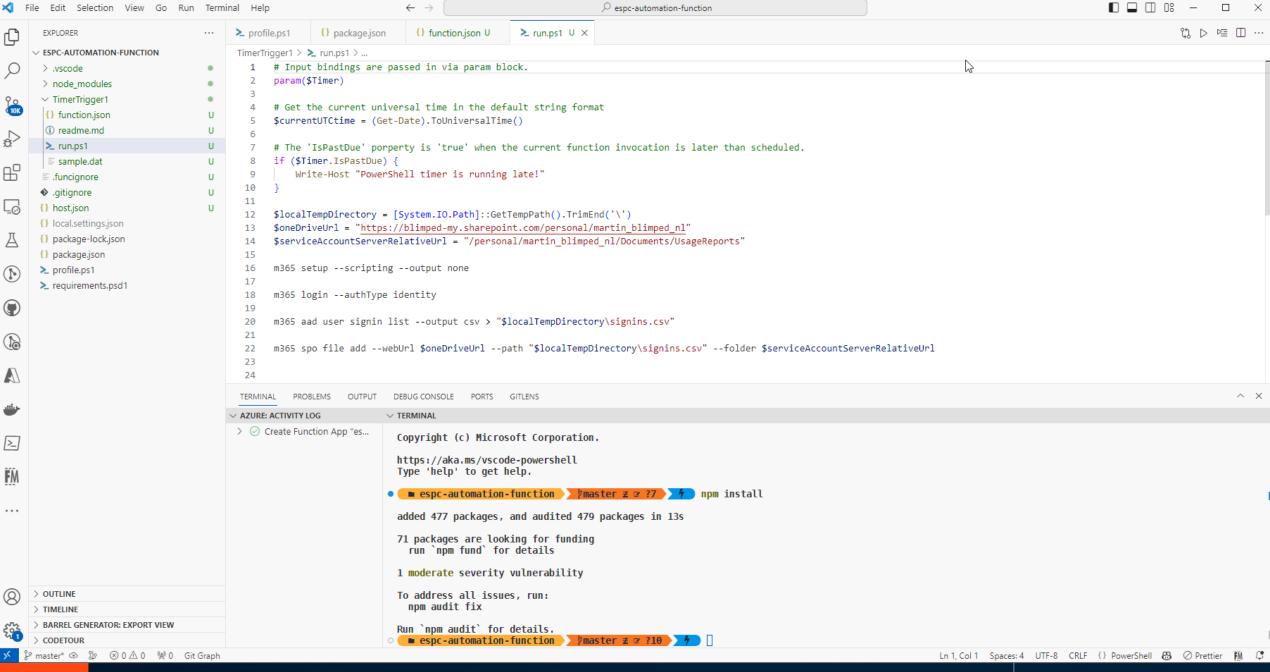


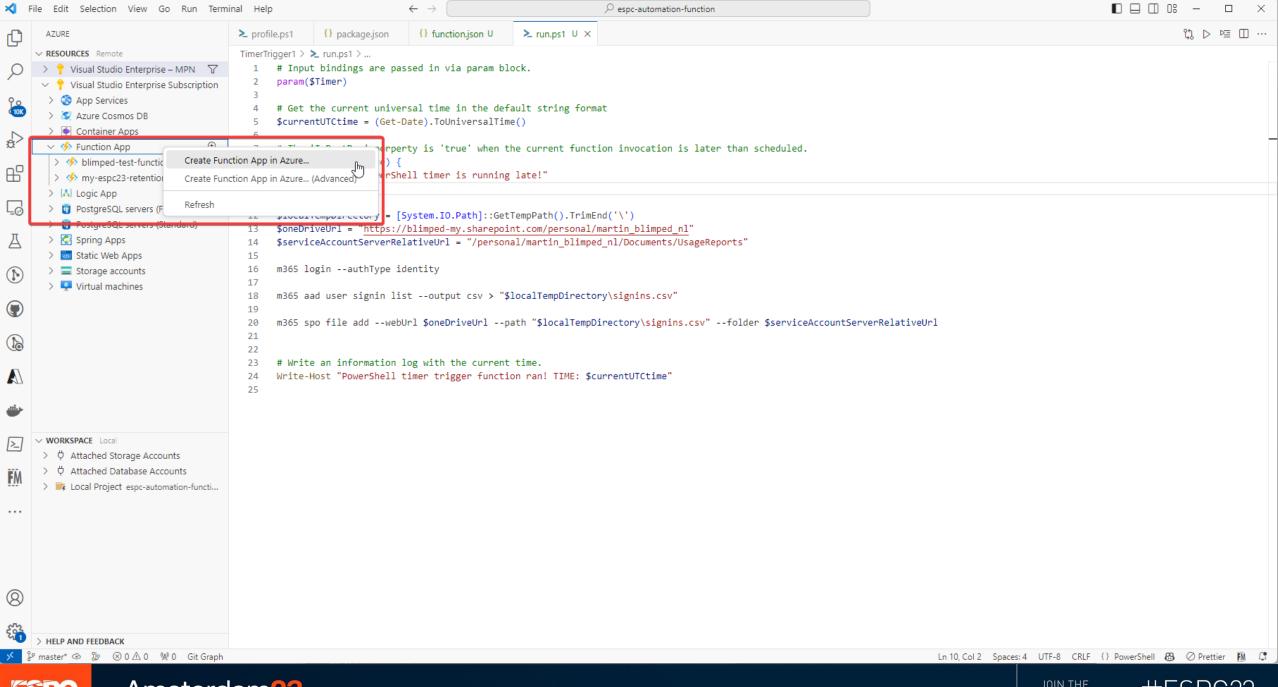
Amsterdam23

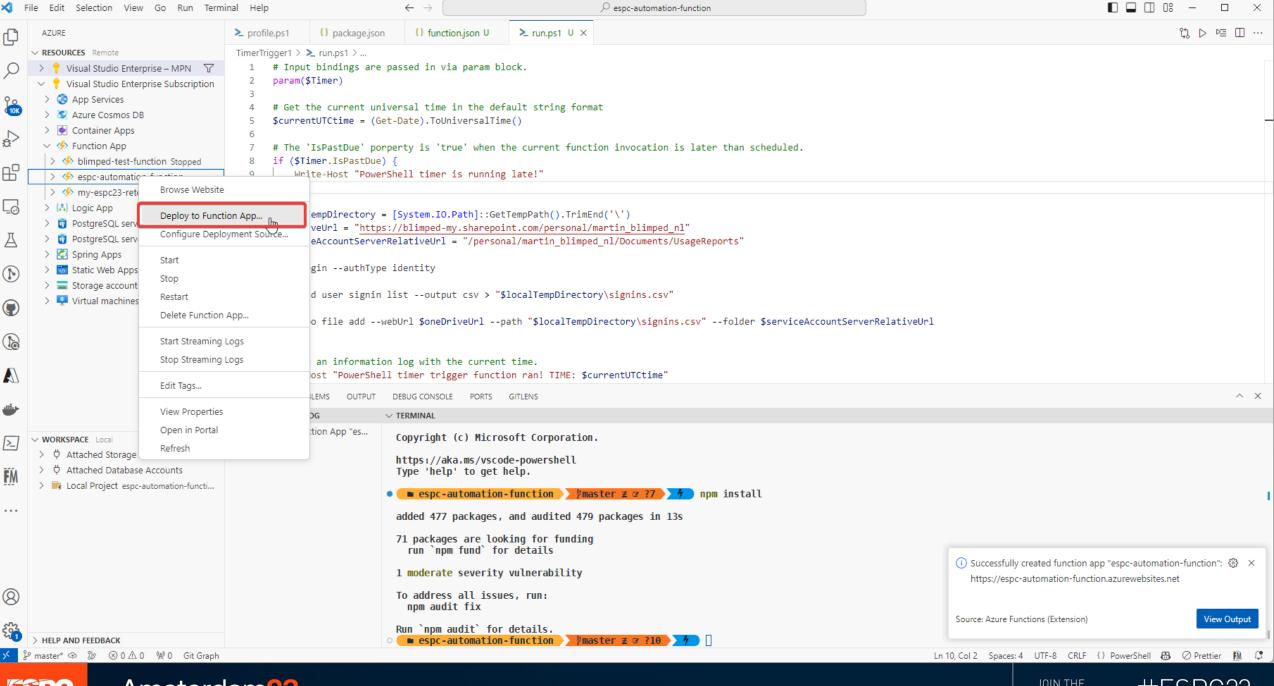






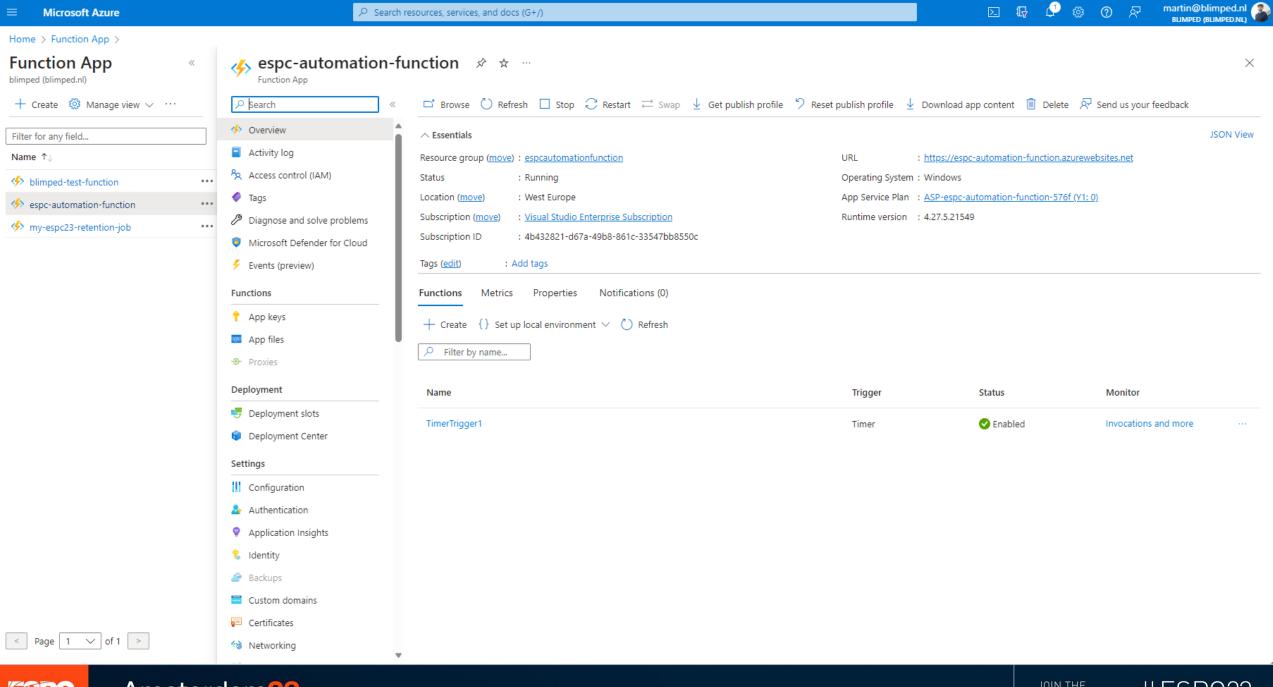






P espc-automation-function

File Edit Selection View Go Run Terminal Help



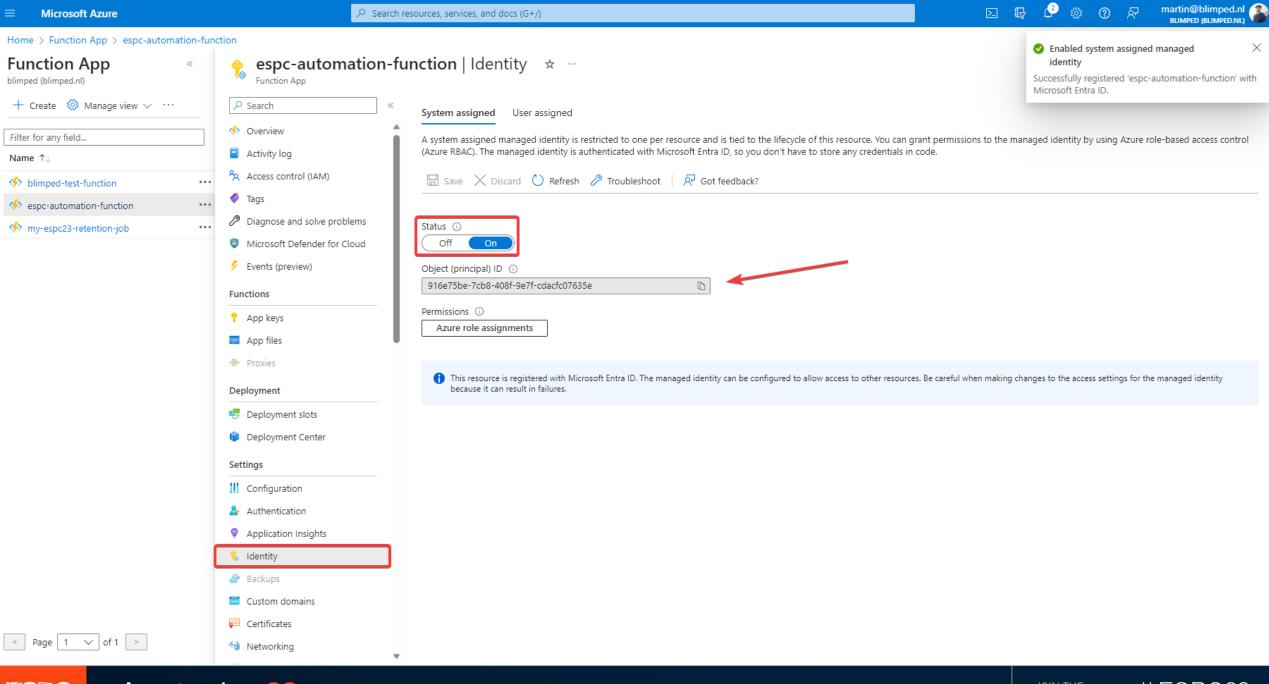
Amsterdam23



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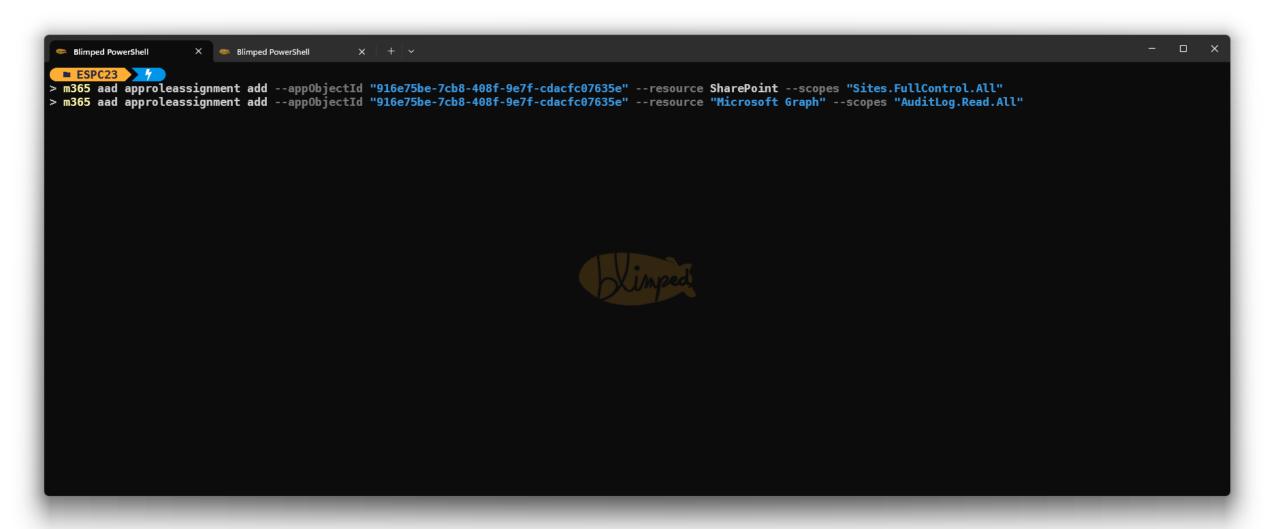
Amsterdam23

♦ Networking



ESPC

Amsterdam23



INFORMATION: PowerShell timer trigger function ran! TIME: 11/17/2023

Executed 'Functions.TimerTrigger1' (Succeeded, Id=00635878-195f-4eb1-

11:03:42

2023-11-17T11:03:48Z

2023-11-17T11:04:16Z

2023-11-17T11:04:16Z [Information]

a9b2-51135c8f572b, Duration=33768ms)

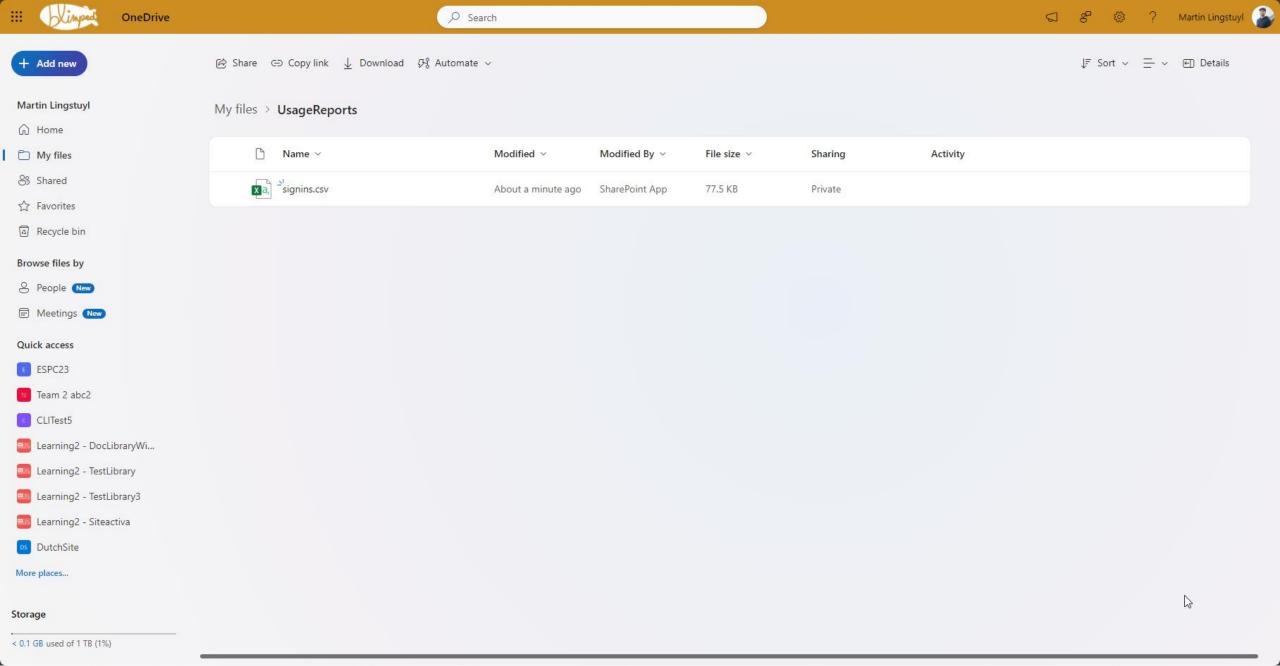
OUTPUT: }

[Information]

[Information]

Run

Close





### In conclusion

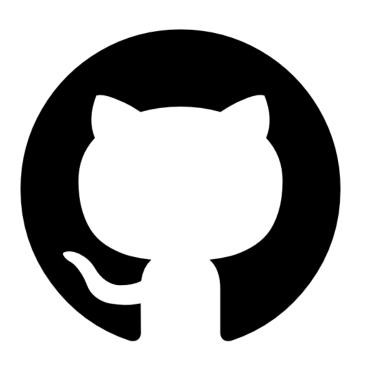


#### Links

- Website: <a href="https://pnp.github.io/cli-microsoft365">https://pnp.github.io/cli-microsoft365</a>
- Contribute: <a href="https://github.com/pnp/cli-microsoft365">https://github.com/pnp/cli-microsoft365</a>
- Blogs:
  - Automation: <a href="https://www.blimped.nl/how-to-run-the-cli-for-microsoft365-on-an-azure-function/">https://www.blimped.nl/how-to-run-the-cli-for-microsoft365-on-an-azure-function/</a>
  - CI/CD: <u>https://www.blimped.nl/deploying-spfx-apps-with-azure-devops-pipelines-all-yaml/</u>

#### How to engage?

- Feedback
- 🚯 Report bugs
- Contribute samples
- E Contribute new features





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