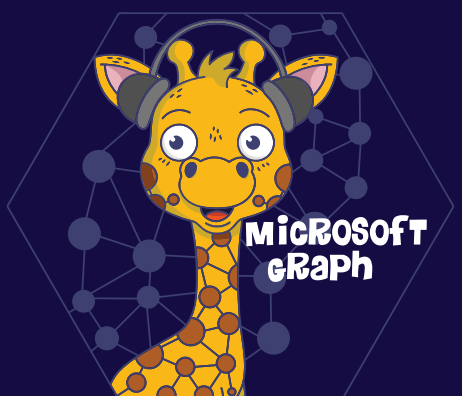




# MICROSOFT GRAPH DEV DAY<sub>2023</sub>

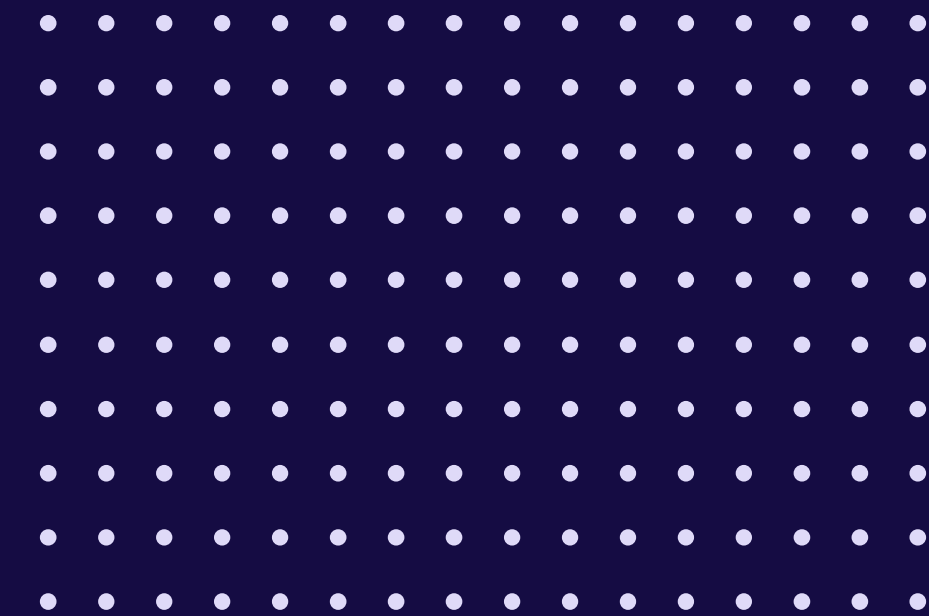




# PowerShell and MS Graph

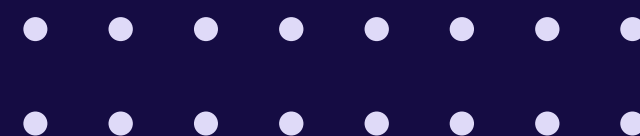
## API demystified

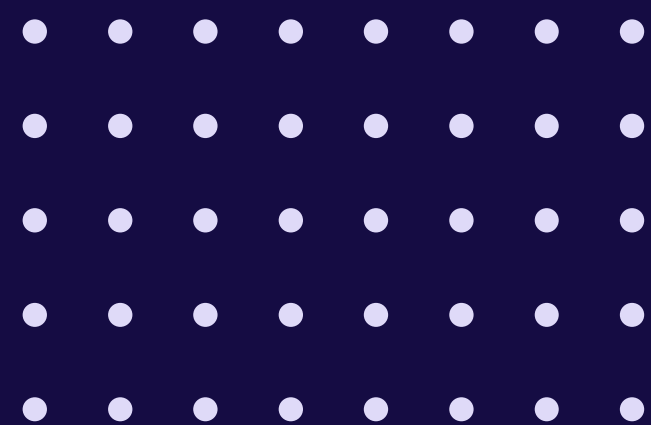
Michael Seidl



# Michael Seidl

- Microsoft MVP (since 2015)
- Automation Consultant (10+ Years)
- Founder, CEO | au2mator
  - Self-Service Portal for Microsoft Automation
- Blog: [www.techguy.at](http://www.techguy.at) | [www.au2mator.com](http://www.au2mator.com)
- GitHub: [github/seidlm](https://github.com/seidlm) | [github/au2mator](https://github.com/au2mator)
- LinkedIn/SeidlM





# Agenda



Microsoft®  
Most Valuable  
Professional



- ✓ Introduction
- MS Graph API
- WHAT, WHY, HOW
- Authenticate
- Examples, Demo, Scripting
- Q&A, END

# ONE API to the Cloud.



## Microsoft 365 Platform



### Extend Microsoft 365 experiences



Documents



Conversations



Portals



Timeline



Search



### Build your experience



Web apps



Bots & agents



Device & native



Daemon apps



Workflow automation

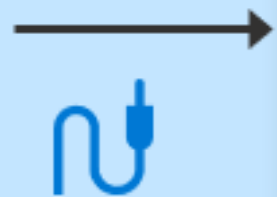


Analytics apps



Microsoft Graph  
REST APIs and webhooks

External data



Connectors

## Microsoft Graph

Microsoft 365

Windows 10

Enterprise Mobility + Security

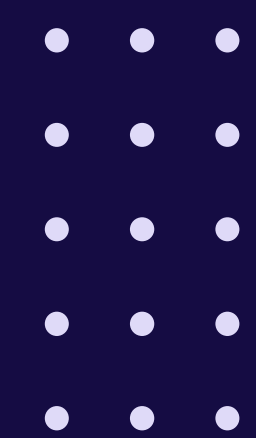
Azure AI platform



Microsoft Graph  
Data Connect

Microsoft Identity





# WHY use MS Graph API

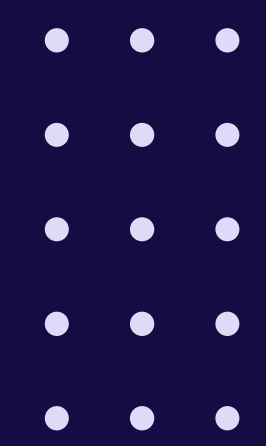


Microsoft®  
Most Valuable  
Professional



- ✓ No PowerShell Module
- ✓ OnPrem/Cloud
- ✓ More Functionality over PS-Module (delay)
- ✓ Easy language
- ✓ Unlimited Platforms
- ✓ One API to all Cloud Services (Future)

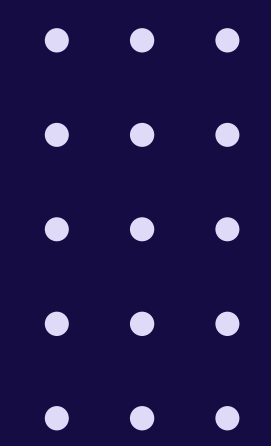




# HOW to use MS Graph API



- REST Call, HTTP, WEB URL
- <https://graph.microsoft.com/v1.0/>
  - Users | Groups | Teams | ToDo | Azure App ...
- GET, POST, PUT, PATCH, DELETE
- Graph Explorer
- JSON



# HOW to Authenticate

- ✓ Azure APP Registration
- ✓ Client Secret or Certificate
- ✓ Delegate or Application Permission





# HOW to Authenticate



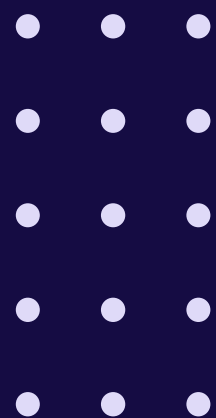
## Delegate

- Signed In User
- Effective permission (User, APP)
- User/Admin Consent



## Application

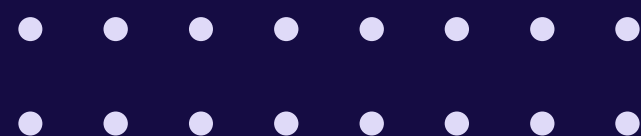
- No User
- App Permissions only
- Admin Consent only

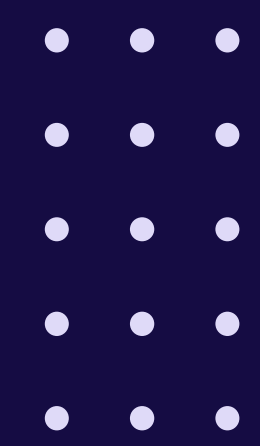


Microsoft®  
Most Valuable  
Professional



# DEMO TIME

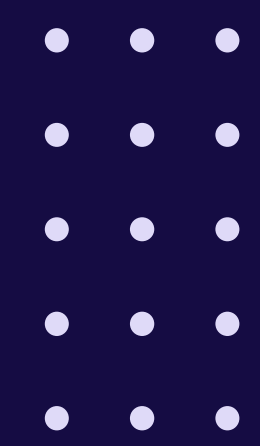




# MORE

- ✓ Teams Management
- ✓ Endpoint Management
- ✓ Send Mail
- ✓ Azure App Reg, Permissions
- ✓ Entra ID User, Group, Org Management
- ✓ Audit Logs
- ✓ SharePoint
- ✓ Patches
- ✓ ...

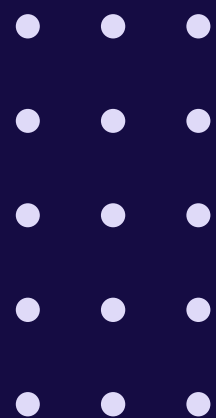




# END is near



- Examples on GitHub  
[github.com/Seidlm/Events](https://github.com/Seidlm/Events)
- Use MS Graph API, and soon deprecated Modules
- Q&A
- Contact  
[LinkedIn/seidlm](https://www.linkedin.com/in/seidlm)



# THANK YOU

