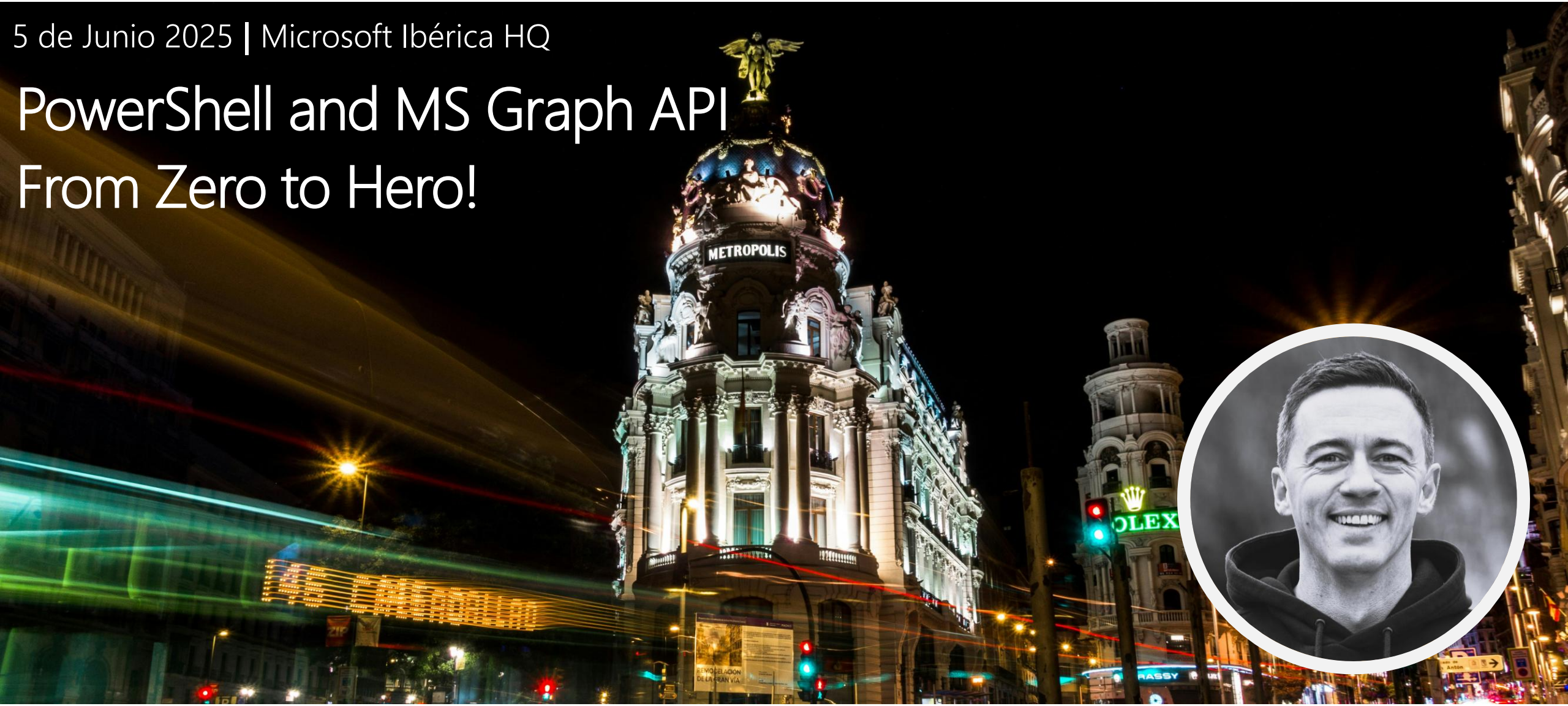
collabdays

5 de Junio 2025 | Microsoft Ibérica HQ

PowerShell and MS Graph API From Zero to Hero!



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Collaborator

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Podcast: Get Sh*t done in IT

Github.com/seidlm/events

Microsoft MVP

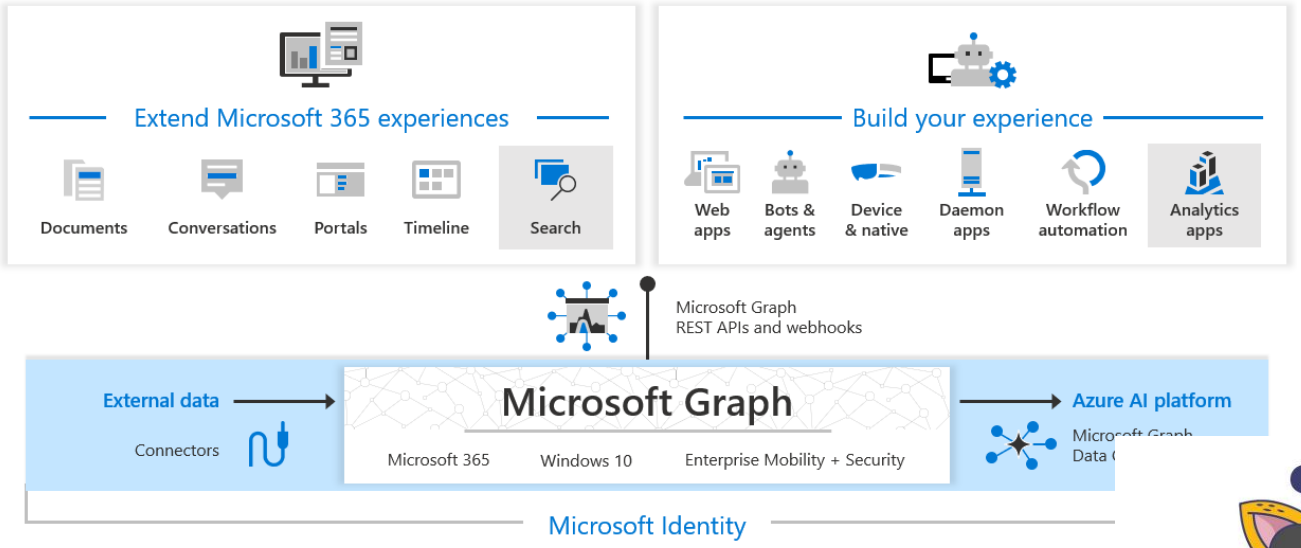
Social Networks

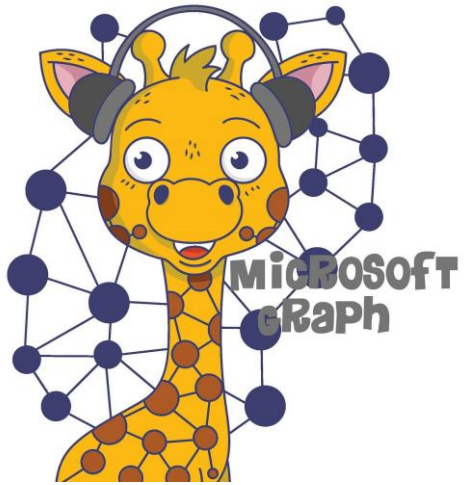
Agenda

- ✓ INTRO
- GRAPH API BASICS AND AUTHENTICATION
- PAGING
- FILTER / SEARCH
- SELECT
- BATCH
- END

ONE API to the Cloud

Microsoft 365 Platform





WHY use MS GRAPH API

- ✓ **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, HTTPS, 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**
- ✓ **System / User - Assigned Identity**

HOW to Authenticate

Delegate

- **Signed In User**
- **Effective permission**
- **User/Admin Consent**

Application

- **No User**
- **App Permissions only**
- **Admin Consent only**

TIME to be a GRAPH API HERO

- ✓ INTRO
- ✓ GRAPH API BASICS AND AUTHENTICATION
- PAGING
- FILTER / SEARCH
- SELECT
- BATCH
- END

PAGING

- Subset of Result
- Performance and Load
- Implement Paging from the Beginning

PAGING

DEMO

FILTER & SEARCH

- FILTER or SEARCH
- SEARCH only for some Endpoints
  - Endpoints
    - Outlook: Mail or Event
    - SharePoint, OneDrive: driveitem, list, site, drive..
    - Person: mainly User Object
    - Graph Connector Content
    - Admin Search
  - More Properties at once
- FILTER
  - Know the property
  - All Endpoints

FILTER & SEARCH

DEMO

SELECT

- Get what you want and need
- Performance and Load
- Additional Properties

SELECT

DEMO

BATCH

- SuperPower of Performance, Read and Write
- Buy 1, get 20
- Sequence
- Throttling and Limits

BATCH

DEMO

Thank you!

Questions?