Power BI and PowerShell

A Match Made in Heaven

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sqlrelay.co.uk/feedback

Thank you

Photo by Glenn Carstens-Peters on Unsplash

What we'll cover

- Why do we need to manage Power BI?
- What can we do with PowerShell?
- API vs PowerShell Module(s);
- Not an admin? There are still options
- Put it into practice.

Why do we need to manage Power BI?

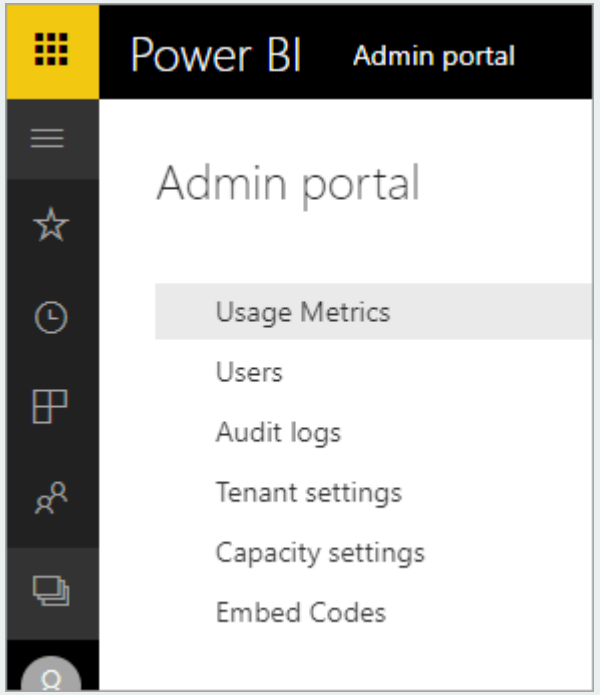
Error Handling

Manage Content

Control Security

Data

The Power BI Admin Portal



View Usage metrics and Audit logs

Change tenant wide Power BI Features

Manage “Organisation” custom visuals

What can we do with PowerShell?

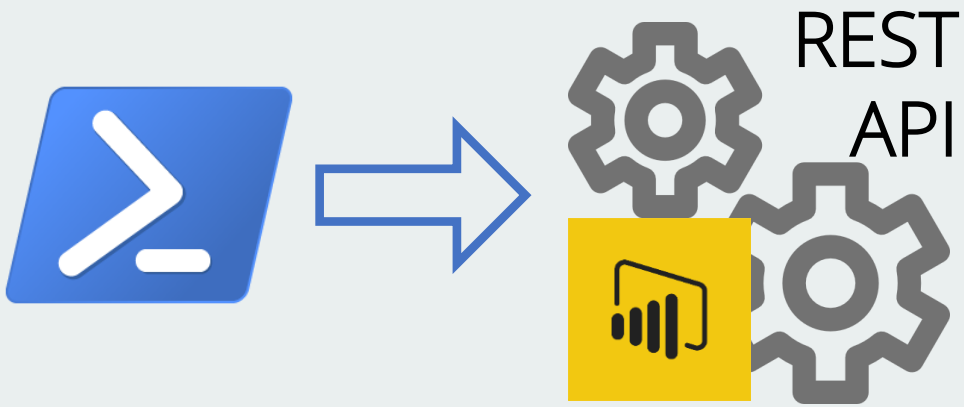
- Manage Workspaces, Reports, Datasets
- Refresh datasets and view history
- Control and audit Permissions
- Track User and Tenant Licenses
- Circumvent license restrictions ;)

Automation

API vs PowerShell Modules

PowerShell Modules

- msOnline (v1)
- AzureAD (v2)



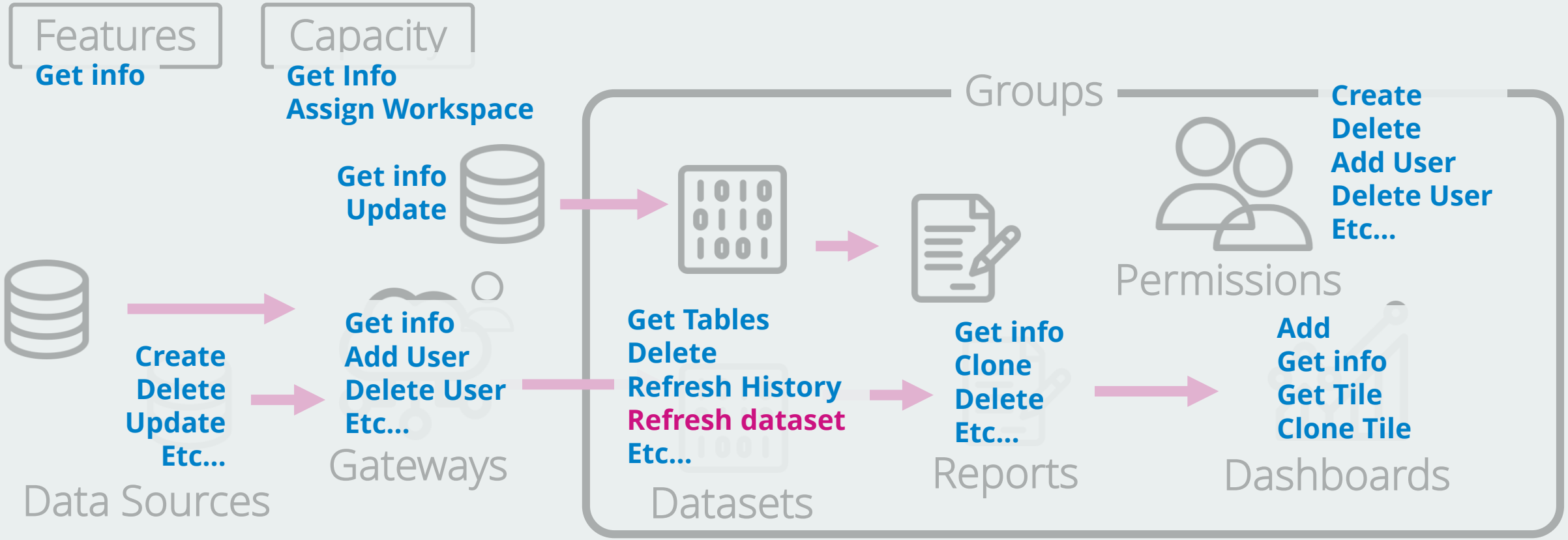
Power BI REST API

- Using Invoke-RESTMethod
- **MicrosoftPowerBIMgmt**

NEW

DEMO

REST API Capabilities



https://docs.microsoft.com/en-us/rest/api/power-bi/

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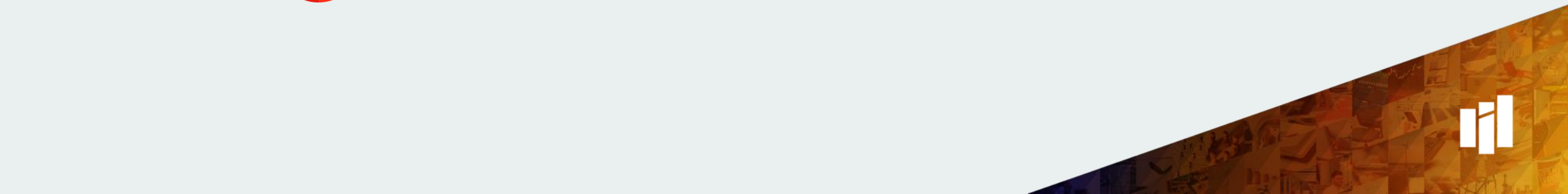
What can’t we do with PowerShell

- Read Data
- Create Dashboards
- Publish or Update Apps
- Author Reports



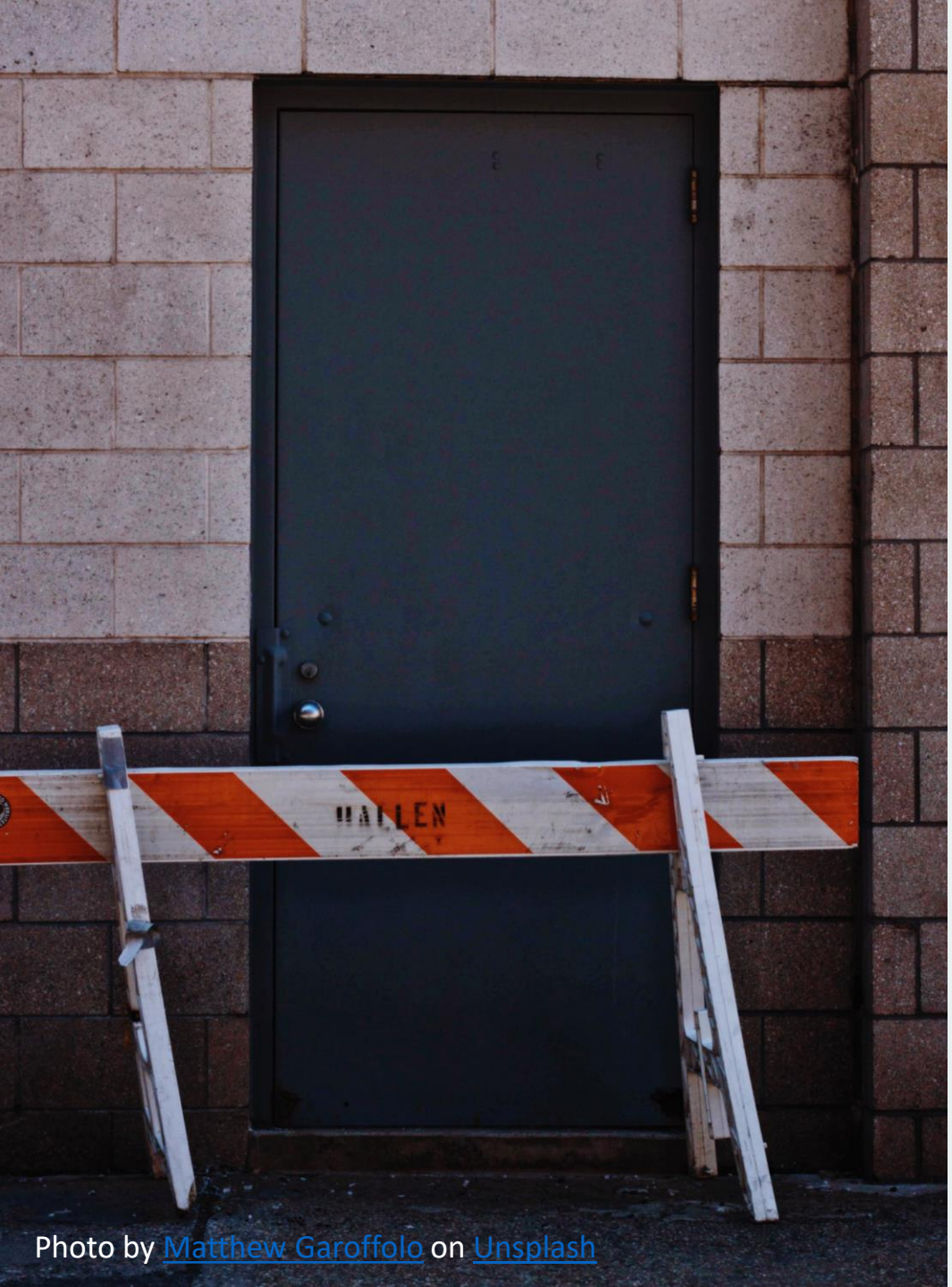


Photo by Matthew Garoffolo on Unsplash

Not an admin? All is not lost!

- Restricted to Workspaces you are a member of.
- Read and start dataset refreshes
- View and update security*
- Track user and tenant licenses
- You can still use the Power BI Mgmt module

Photo by Adam Birkett on Unsplash

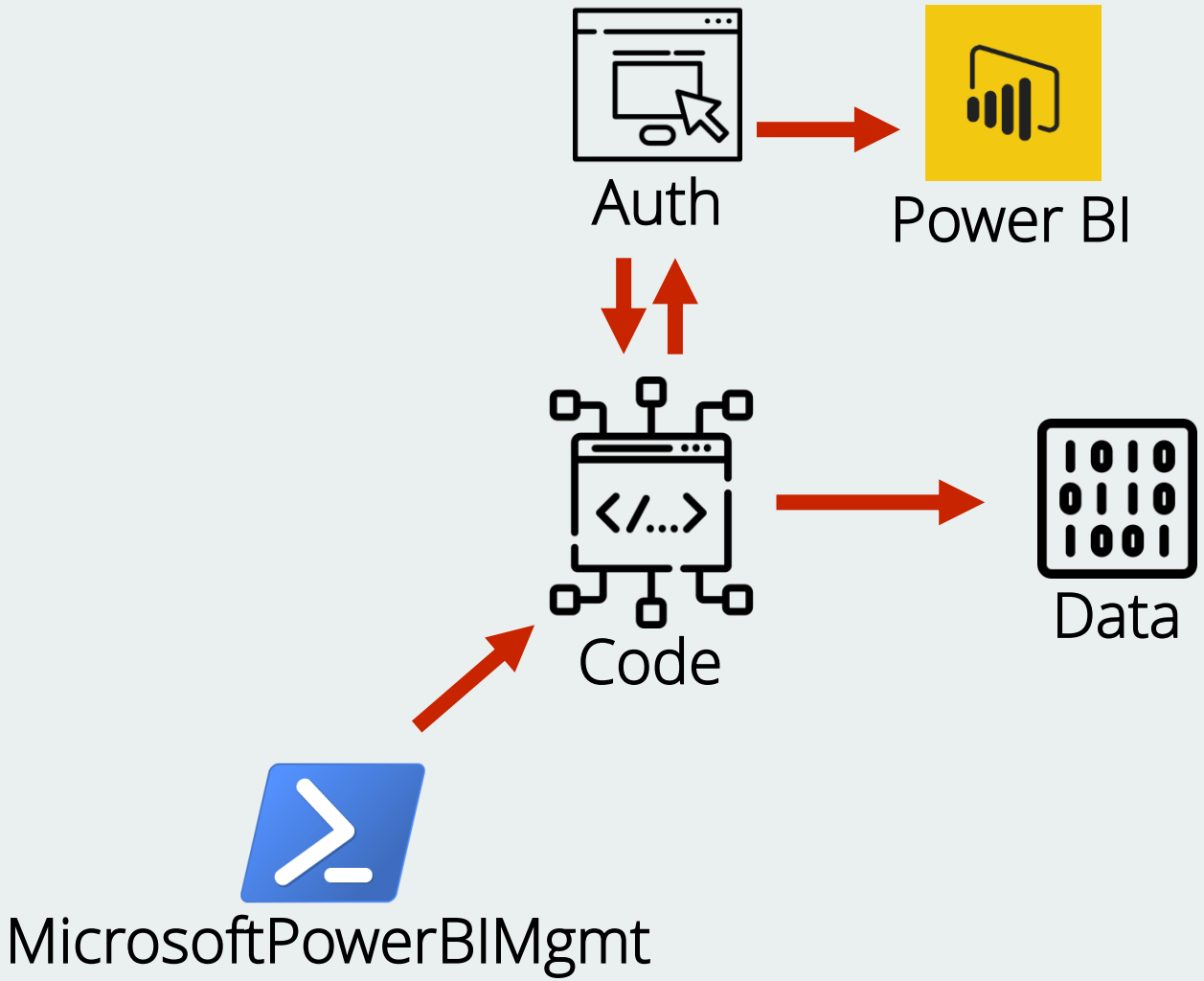
Piecing it all together

- Authentication options
- Set up an application to call the Power BI API

https://dev.powerbi.com/apps

- Build something!

Prompted Authentication



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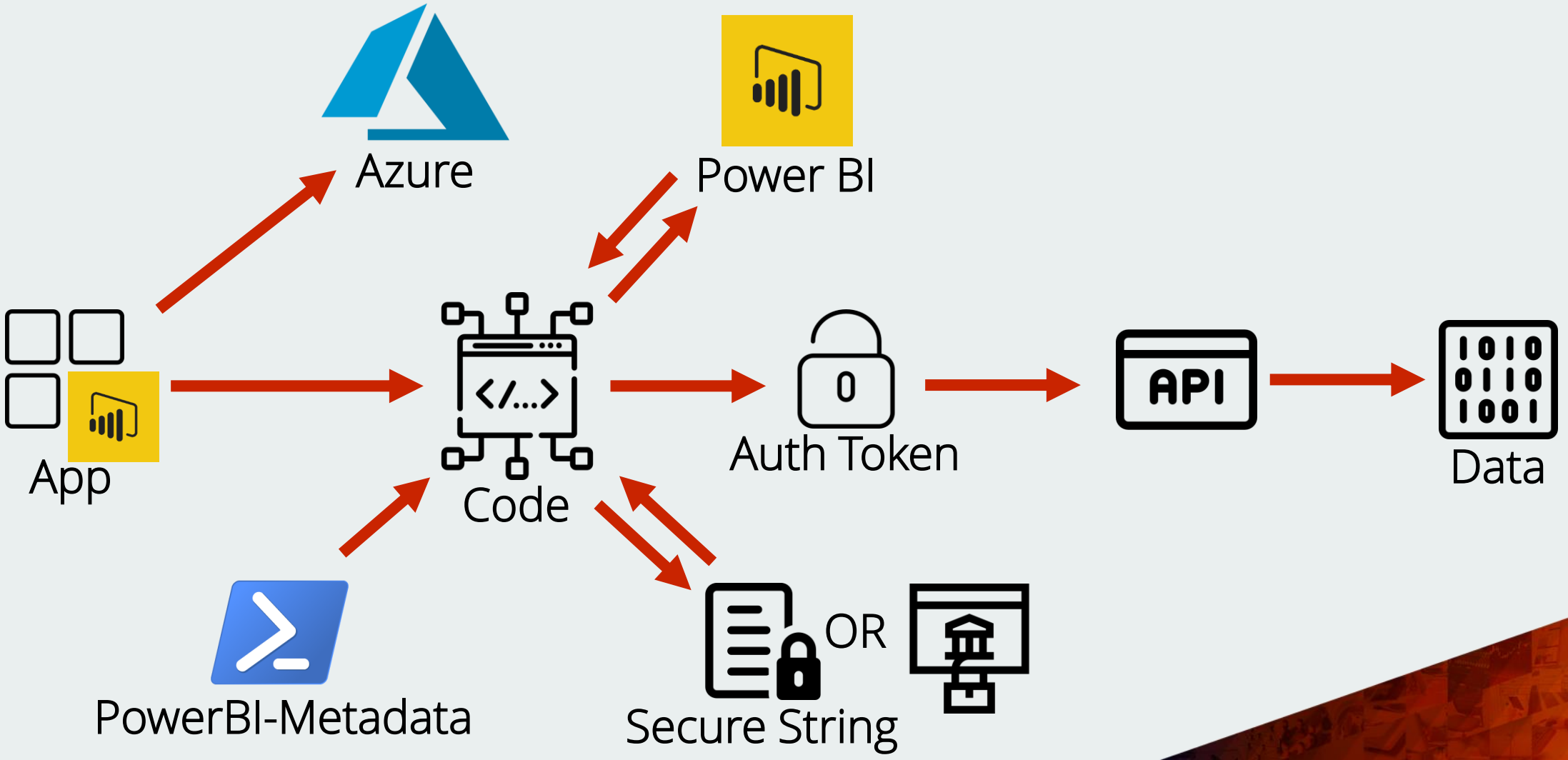
Unattended Authentication



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PowerShell Power BI

- But…
- Unattended Authentication isn't "Official"
- 2FA is not compatible with the unattended method
- Automation isn't currently easy! ☹
- Modules are a work in progress – Contribute!

Photo by Matt Jones on Unsplash

Questions?

https://github.com/cporteou/Presentations