Extending Azure Data Studio with PowerShell

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PASS USER GROUP – OCT 2020

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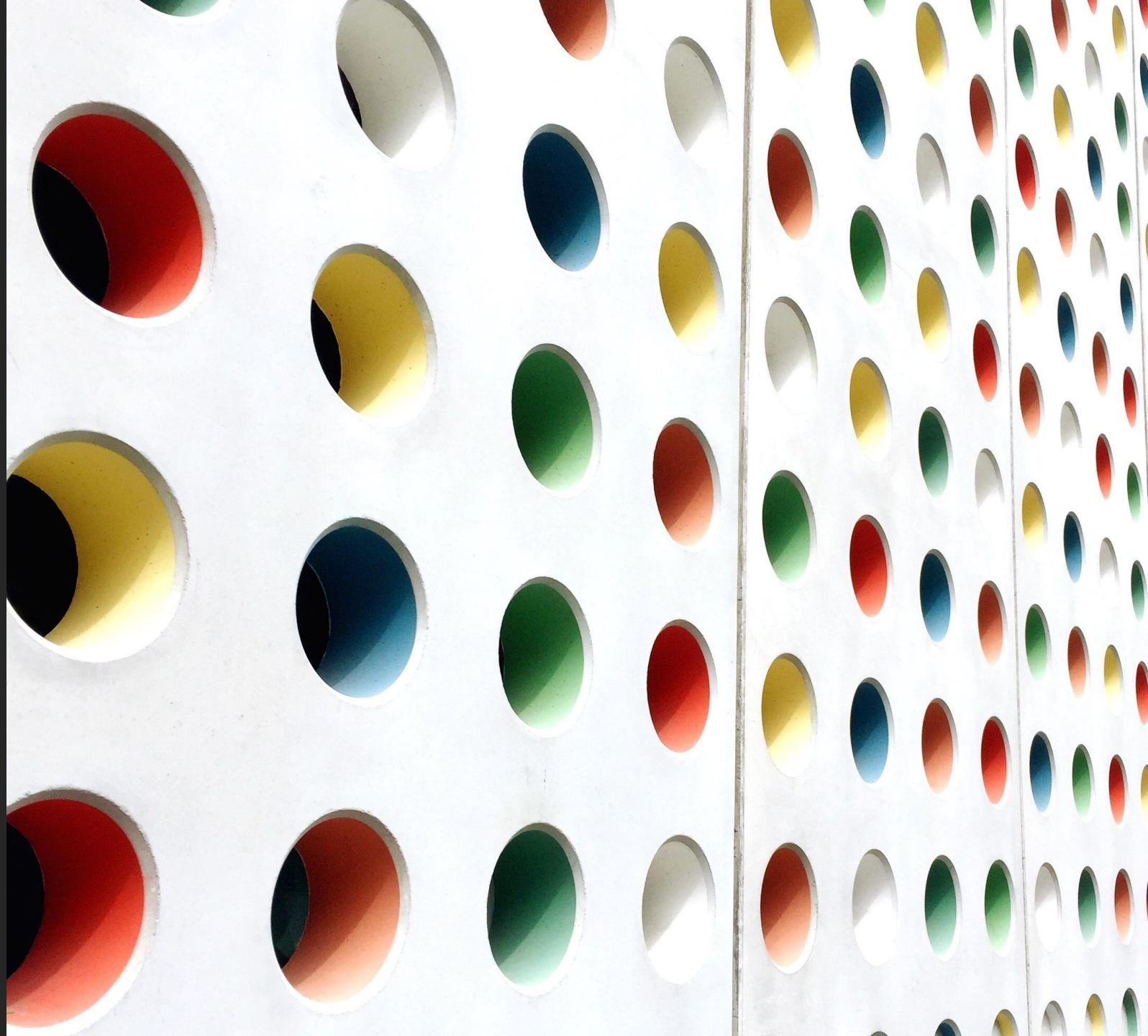
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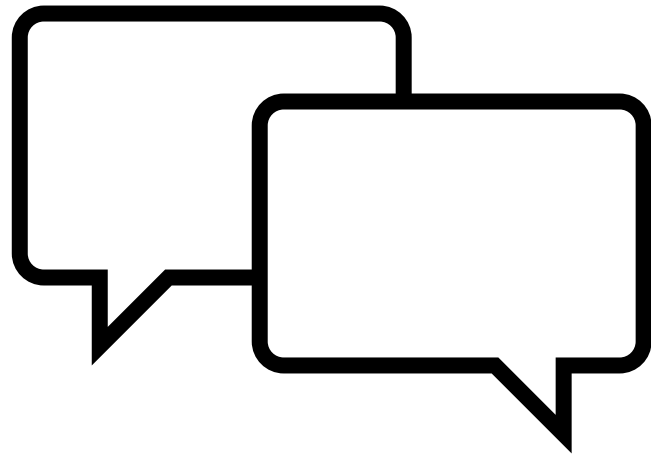
@mikenelsonio

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https://mikenelson.io

Discuss

What ADS is

vs SSMS and beyond

Extensions --> PowerShell

Demos

What it is…

...What it is

Electron
jS, HTML, CSS

On-Prem, Hybrid, Cloud

Lightweight

Shortcuts

Open Source

Integrated terminals

And much more… TSQL editor & query results view, task history, management dashboard, extensions, workspaces, object explorer, connection management …

vs SSMS

- Heavy
- Not really keyboard friendly
- No intellisense
- No easily extendable
- No source control
- Theming
- Exports of CSV, jSON, XLXS
- Notebooks

```
SELECT REPLACE('Use SSMS','SSMS','ADS');
GO
```

ADS vs SSMS comparison chart - https://docs.microsoft.com/en-us/sql/azure-data-studio/what-is
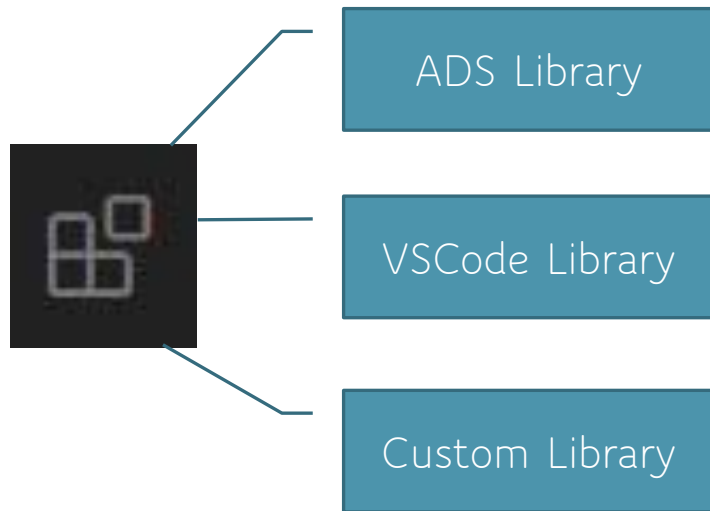
Choices

Use Azure Data Studio if you:
• Need to run on macOS or Linux
• Are connecting to a SQL Server 2019 big data cluster
• Spend most of your time editing or executing queries
• Need the ability to quickly chart and visualize result sets
• Can execute most administrative tasks via the integrated terminal using sqlcmd or Powershell
• Have minimal need for wizard experiences
• Don't need to do deep administrative configuration

Use SQL Server Management Studio if you:
• Spend most of your time on database administration tasks
• Are doing deep administrative configuration
• Are doing security management, including user management, vulnerability assessment, and configuration of security features
• Make use of the Reports for SQL Server Query Store
• Need to make use of performance tuning advisors and dashboards
• Are doing Import/Export of DACPACs
• Need access to Registered Servers and want to control SQL Server services on Windows
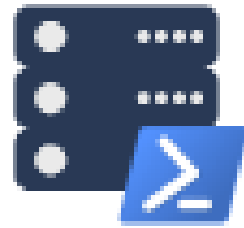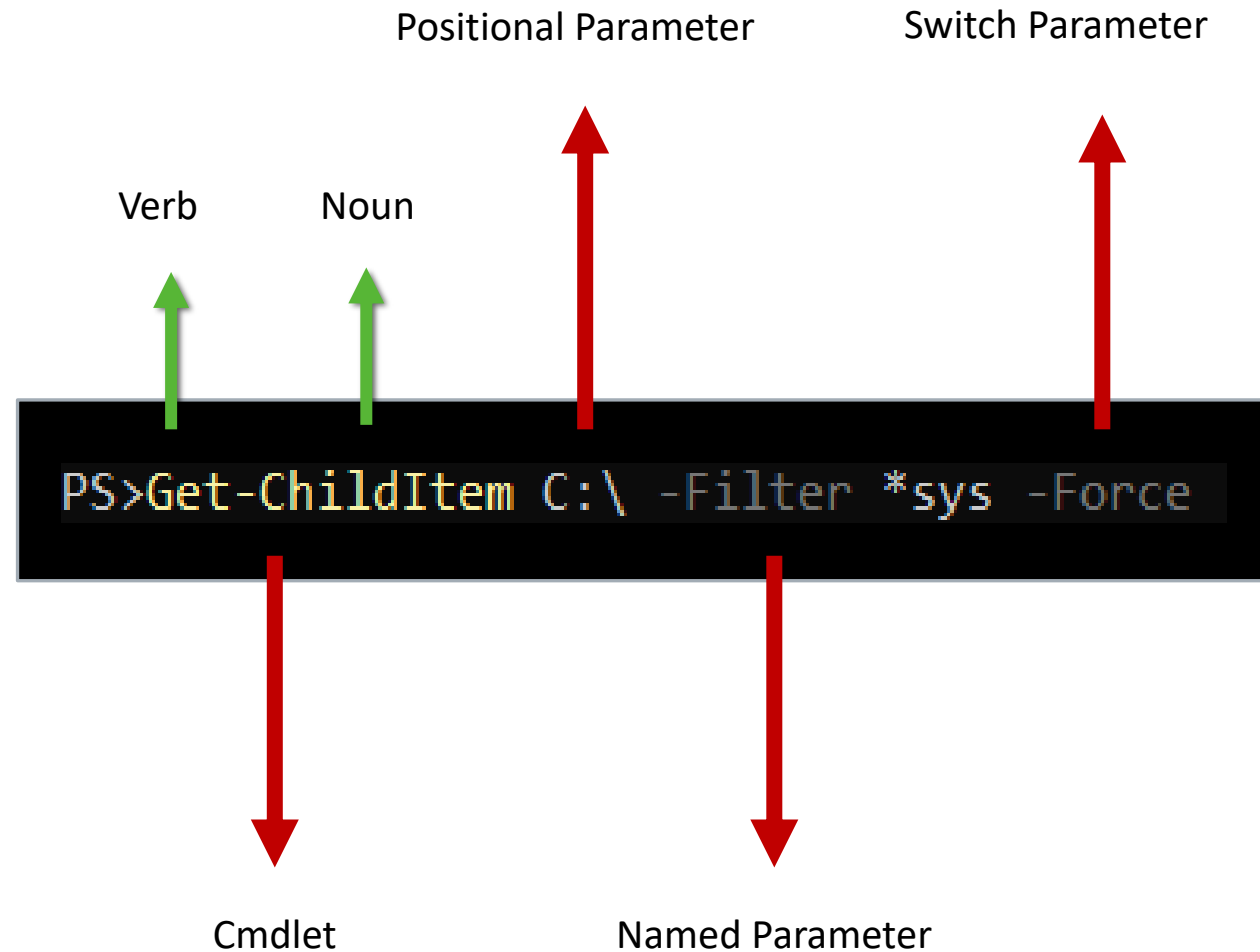
Extensions

ADS Library

VSCode Library

Custom Library

Defacto Standard

 >500 cmdlets!

 SQLServer & SQLPS

SYNTAX

Verb   Noun   Positional Parameter   Switch Parameter

`PS>Get-ChildItem C:\ -Filter *sys -Force`

Cmdlet   Named Parameter

COMMANDS TO LEARN

Get-Help

Update-Help

Get-Command

Get-Member

[Show-Command]

[Resource]

Github – https://github.com/Microsoft/azuredatastudio

FAQ – https://docs.Microsoft.com/en-us/sql/azure-data-studio/faq

VSCode Keyboard Shortcut Cheat Sheets – https://code.visualstudio.com/docs/getstarted/keybindings

demos