


SQL Server Scripting using PowerShell

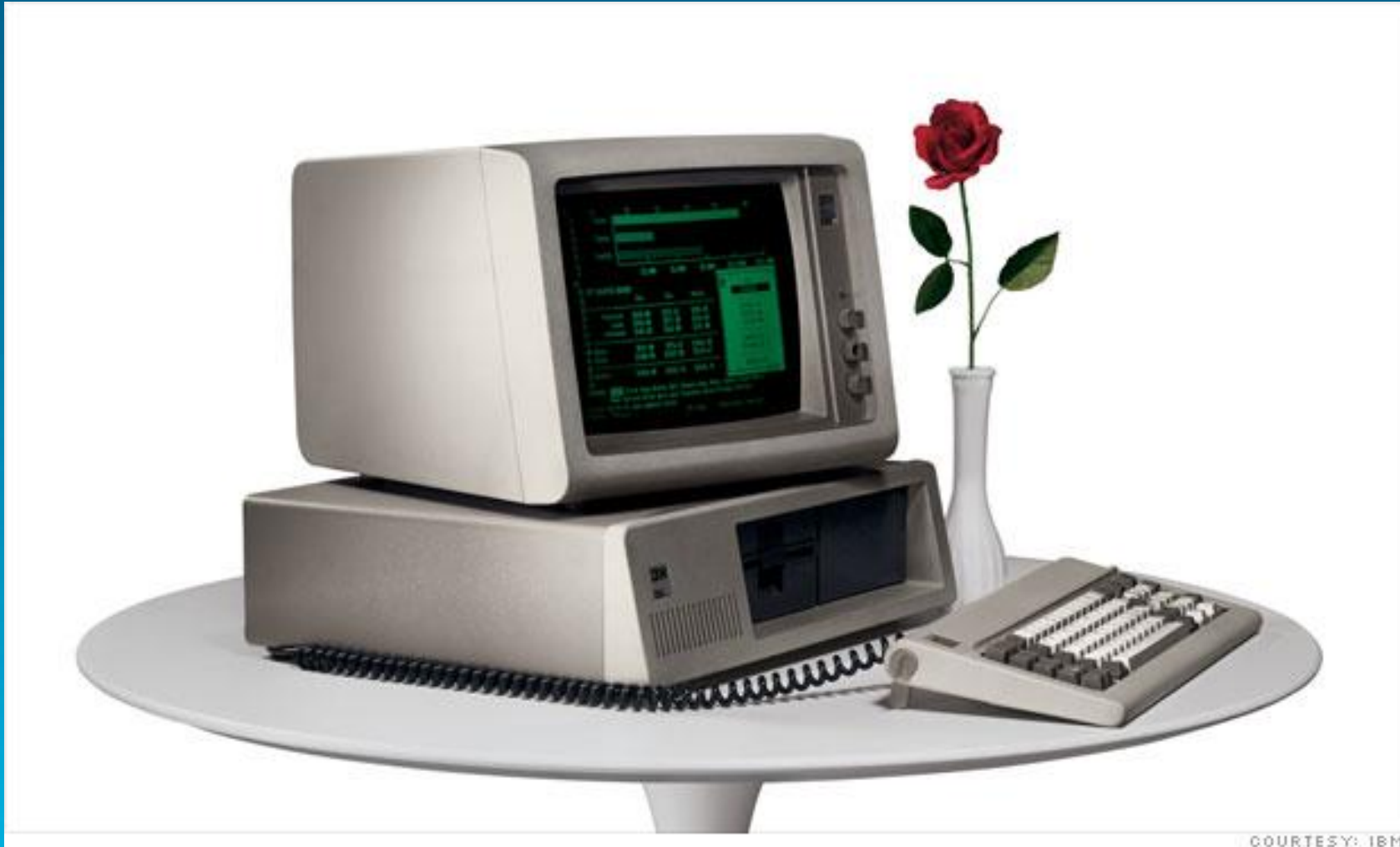
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About the Speaker

- ▶ From Richmond, VA
- ▶ Patient First - Urgent Care Centers in VA/MD/DC/PA/NJ
- ▶ Using SQL Server since Foxpro ruled the Earth
- ▶ Owned an original low-serial-number 5150 

IBM 5150 – Circa 1981



Powershell and SQL Server



Powershell and SQL Server



The Tech we are going to learn today is:

- ▶ Powershell
- ▶ T-SQL
- ▶ WMI
- ▶ SMO

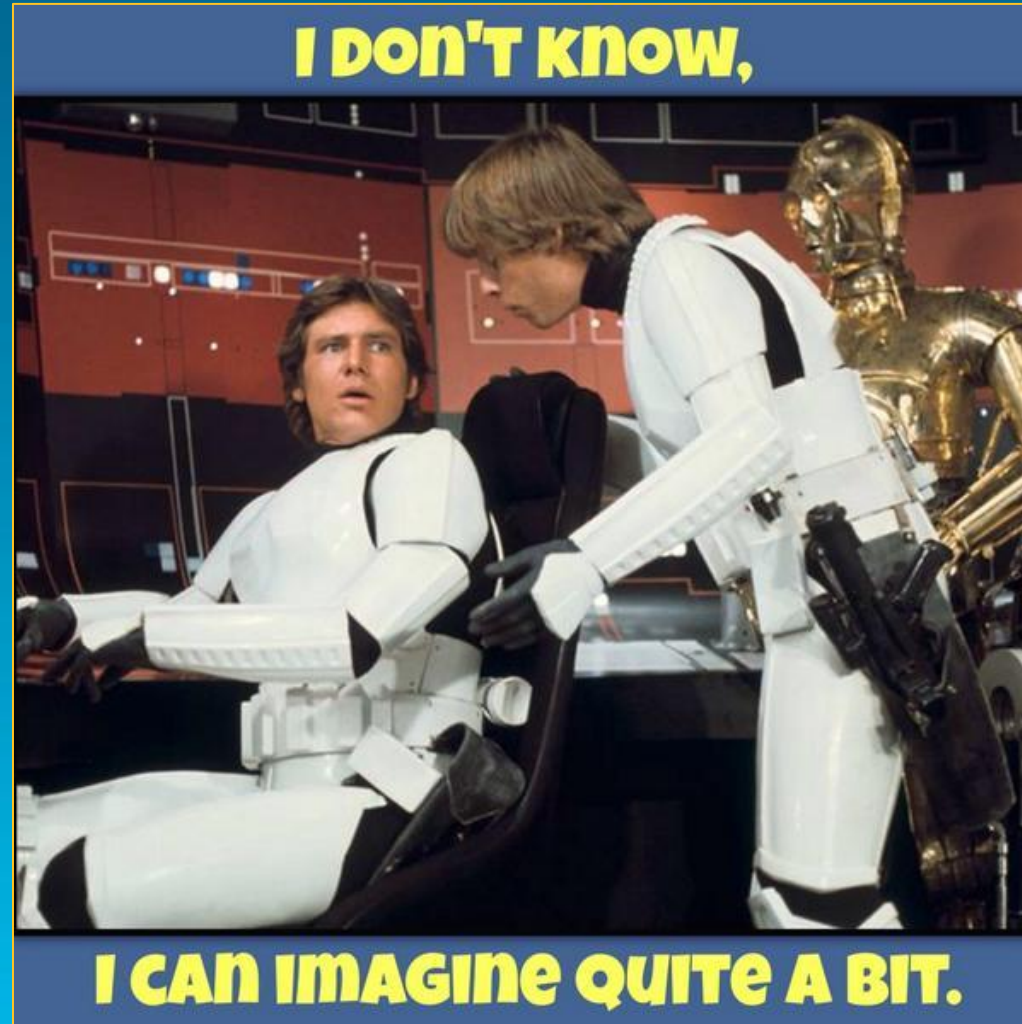
Why Script out your SQL Servers?

- ▶ Documentation - Wiki, Version Control, Check In
- ▶ Disaster Recovery - The Queen is Dead, Long Live...
- ▶ Server Migrations, Upgrades - Win/SQL 2008 are Retired
- ▶ Environmental Consistency - Same Alerts on all Servers
- ▶ Dev-Test-UAT-Stage-Prod - Granular object control
- ▶ Security Auditing – I can never get enough security
- ▶ Migrate Databases to Azure
- ▶ Impress the Boss, Pad the Resume
- ▶ To learn PowerShell

Documentation

For all you
Agile/Scrum
grunts:

What is your
'Definition of
Done'?



My Definition of Done:

- ▶ Server-Level Objects - AMAICF
- ▶ SSIS Objects
- ▶ SSAS Objects
- ▶ SSRS Objects
- ▶ SQL Security Infrastructure
- ▶ Output format: Easy to Check-In and Diff
- ▶ Works with vNext (SQL 2021 or Azure V14)
- ▶ Easy-to-use SQL Objects (Load up in SSMS, Press F5)
- ▶ Everything SSMS and SSDT can't get

Powershell Code Breakdown

- ▶ Scripts are compatible with: SQL 2005-2019, Azure*
- ▶ Win/SQL Authentication
- ▶ Supports Named Instances
- ▶ SQL Express

Script-Out: Requirements

- ▶ Powershell 3/4/5/6
- ▶ SQL CLR Types, SMO, PowerShell Tools, RSAT
- ▶ AKA: “Feature Pack” for 2012/14/16/17/19, SSDT, SSMS

Demo

- ▶ Reach for Live Demo and Open Can...



Source Code

- ▶ <https://github.com/gwalkey>
- ▶ “SQLTranscriptase”



- ▶ Make out your Speaker Evaluations
- ▶ Visit the Vendor Tables
- ▶ Give me feedback – or else
- ▶ Kidding, but let me know how these help!