



Salt Lake City Collab Days

Gathering Database Ops Data with PowerShell

Ben Miller, SQL Server Database Architect



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Ben has been a PASS Community member since 1999 and has been using SQL Server since version 4.2. He is a Microsoft Certified Master in SQL Server and loves using PowerShell in his every day work as a DBA. He loves to Bowl and even has bowled a 300 game putting him in the Bowlers Hall of Fame. He lives in Utah and does anything he can to educate those wanting to get more done in the same amount of time with PowerShell.



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SQL Server Certified Master

The first MCM in Utah. Has been working with SQL Server since 4.2, even on O/S2.

Microsoft Data Platform MVP

Microsoft MVP Awardee since 2009 for SQL Server. Contributes to Experts-Exchange and SQLServerCentral forums. Speaker at many SQL Saturdays around the country.

PowerShell DBA

Using PowerShell since 1.0 and using it to get ahead in automating jobs and tasks that are more repeatable by computer than by clicking. On the Quest to become a PowerShell DBA.



Agenda

- Why Gather Data?
- Why PowerShell?
- Data to Gather
- Methods of Gathering

PowerShell Environment

- PowerShell Version
 - 4.0 but works in 5.1 and 7.0 (Windows 10 or WinRM 5.1 and install)
- DBAtools Module
 - Install-Module dbatools
- ImportExcel Module
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- IDE (VSCode, Azure Data Studio, ISE (deprecated), etc.)
- Basic PowerShell skills

Why Gather Data?

- Watch trends across the data intervals
- Alerting for Key Changes
- We don't have enough to do!
- Trending is a key reason
- Monitoring Changes across data points

Why PowerShell?

- You are using multiple Servers right?
- Centralizing the Data Store
- Parallel runs with PowerShell
- Exists on every Windows Server
- Pretty easy to use and there are tricks to make it easier

Data to Gather

- Database Metadata
- Latency across files
- Latency across disks
- Disk Space
- Database Space
- Configuration Data

Methods to Gather Information

- TSQL is going to be the focus here
- SMO (an option)
 - Through the Objects Properties
 - No need to know the TSQL behind it
- Modules (an option)
 - DBAtools

Show Me The Data!!!



Demo

Review

- Why Gather Data?
- Why PowerShell?
- Data to Gather
- Methods of Gathering

Thank You For Attending !!!



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Questions?