

Dr. DMV's Troubleshooting Toolkit

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Author

Numerous articles, and blog posts

Blog: <https://bit.ly/2Rk30Oy>

Course author

Sixteen SQL Server related courses on

Pluralsight <https://bit.ly/2hbg5SW>

Beer brewer

I do all-grain beer brewing with a stainless steel, three vessel system

I Know How to Brew Beer



Some Examples...



Some Competition Results





Agenda

- Diagnostic query structure
- Diagnostic query history
- Diagnostic query use cases
- Diagnostic query demos
- Diagnostic query interpretation



Introduction

- Database server performance
 - People tend to notice database performance issues!
- What does DBA stand for?
 - Default Blame Acceptor
- What is actually wrong?
 - Database is guilty until proven innocent
 - Often, it is not a database problem



DMV Queries to the Rescue!

- Introduced in SQL Server 2005
 - Additions and improvements in each new version of SQL Server
 - Also applicable to Azure SQL Database and SQL Managed Instance
- Lots of very useful information
 - Configuration settings
 - Workload information
 - Performance information



DMV Diagnostic Query Structure

- Instance-level queries
 - Instance-wide
 - Doesn't matter which database you are connected to
- Database-level queries
 - Database-specific
 - Make sure you are connected to a database you care about

DMV Diagnostic Query Instructions

- One method is to run them manually
 - This can help you diagnose a problem
- You can use dbatools.io to automate
 - Use [invoke-dbadiagnosticquery](https://dbatools.io/Invoke-DbDiagnosticQuery)
- You can use SQL Notebooks in ADS
 - These can be used to run the queries and save the results



DMV Diagnostic Query History

- First released in April 2009
 - Monthly updates and enhancements
- Separate scripts for each SQL Server version
 - Make sure you have the correct script for your version
- Azure support
 - Separate scripts for Azure SQL Database and for SQL Managed Instance



Demo: SQL Server 2019 Diagnostic Information Queries





Thank you very much for your attention.
Vielen Dank für Eure Aufmerksamkeit.