

# SQL Server 2017: Diagnosing Performance Issues with DMVs

---

## INTRODUCTION



**Glenn Berry**

PRINCIPAL CONSULTANT - [SQLSKILLS.COM](http://SQLSKILLS.COM)

[@GlennAlanBerry](https://twitter.com/GlennAlanBerry)

[www.sqlskills.com/blogs/glenn](http://www.sqlskills.com/blogs/glenn)



# Module Overview



**What are DMV performance queries?**

**Benefits of DMV performance queries**

**Course objectives and structure**



# DMV Performance Queries

DMV queries  
added in  
SQL Server 2005

Improvements and  
additions in each  
new version of  
SQL Server

Most DMV/DMO  
queries are  
lightweight

VIEW SERVER  
STATE permission

Very easy to use  
and understand

Can diagnose many  
performance issues



# Diagnosing Performance Issues

Most SQL Server  
instances have  
performance issues

Instance-level  
issues

Database-level  
issues

Activity-related  
issues

Memory and  
storage issues

CPU issues



DMV queries are extremely useful!



# Benefits of DMV Performance Queries

**Relatively quick and  
easy to use**

**Do not require any special  
preparation to run**

**Provide a lot of very useful  
performance information**

**Help get you closer to the  
root cause of many problems**



## COURSE OBJECTIVE

Provide a thorough understanding of how to use DMV performance queries and act on their results

**Understand capabilities, benefits, and limitations of DMV performance queries**

**Understand how to detect and diagnose instance and database-level performance issues**

**Understand how to alleviate common instance and database-level performance issues**



# Course Focus and Structure



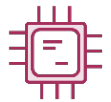
**Diagnosing Activity-related Instance Issues**



**Diagnosing Storage-related Instance Issues**



**Diagnosing Memory-related Instance Issues**



**Diagnosing CPU-related Instance Issues**



**Diagnosing Activity-related Database Issues**



**Diagnosing Storage and Memory-related Database Issues**





# What We Covered



**What are DMV performance queries?**

**Benefits of DMV performance queries**

**Course objectives and structure**

