## Azure SQL Database: Diagnosing Configuration and Performance Issues with DMVs

#### INTRODUCTION



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### Module Overview



What are DMV queries?

Benefits of DMV queries

Course objectives and structure



### DMV Queries

DMV/DMFs added in SQL Server 2005 Azure SQL
Database supports
a subset of
DMV/DMFs

Most DMV/DMO queries are lightweight

VIEW DATABASE STATE permission

Very easy to use and understand

Can detect many issues



### Diagnosing Configuration Issues

Azure SQL Databases can have configuration issues

Database-level configuration

Storage configuration

Logical instance-level configuration



### Diagnosing Performance Issues

Azure SQL
Databases can also
have performance
issues

Logical instance-level issues

Database-level issues

Activity-related issues

Memory and storage issues

**CPU** issues



# DMV queries are extremely useful!



#### Benefits of DMV Queries

Relatively quick and easy to use

Do not require any special preparation to run

Provide a lot of very useful configuration information

Help get you closer to the root cause of many problems



#### COURSE OBJECTIVE

Provide a thorough understanding of how to use DMV diagnostic queries with Azure SQL Database

Understand capabilities, benefits, and limitations of DMV diagnostic queries

Understand how to check and correct your configuration

Understand how to check for and alleviate performance issues



### Course Focus and Structure



Diagnosing configuration issues



Diagnosing CPU-related issues



Diagnosing activity-related issues



Diagnosing storage and memory-related issues



# What We Covered



What are DMV queries?

Benefits of DMV queries

Course objectives and structure

