DP-203 Microsoft Azure Data Engineer

Azure SQL / MSSQL Server

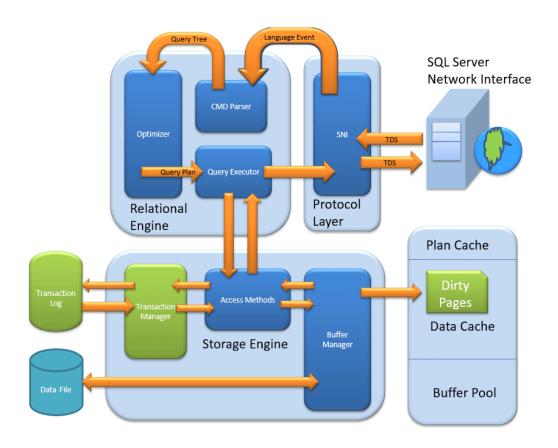
26th Jul 2021

Lakshay Datwani



Sql Server Arhitecture

- Protocol Layer-SNI
 - Shared Memory
 - TCP/IP
 - Named Pipes
 - What is TDS?
- Relational Engine
 - CMD Parser
 - Optimizer
 - Query Executer
- Storage Engine
 - File types
 - Access Method
 - Buffer Manager
 - Plan Cache
 - Data Parsing: Buffer cache & Data Storage
 - Transaction Manager





Why Sql Server In Azure?



Fully Managed



Predictable performance and pricing



Elastic pool for unpredictable workloads



99.99% availability built-in



Geo-replication and restore services



Supports existing SQL Server tools, libraries,

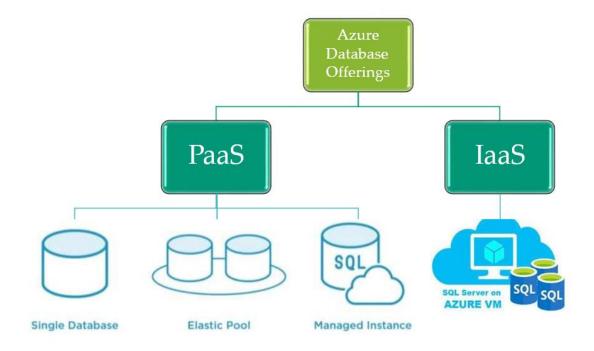




Secure and compliant for your sensitive data

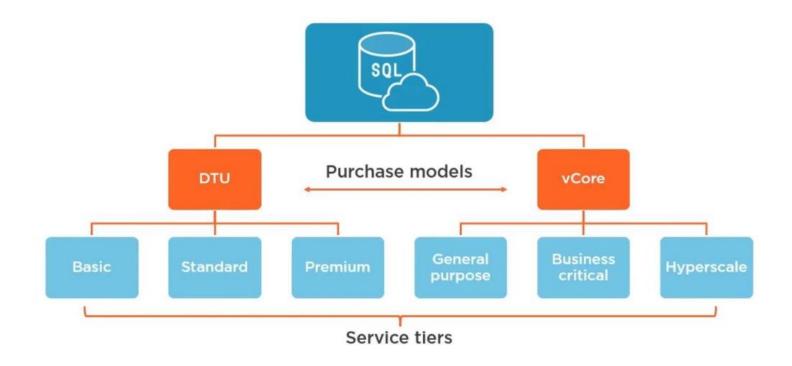


Azure Database Deployment Options





Azure Sql Database Service tiers





Vcore-based vs Dtu-based Model

V-core based

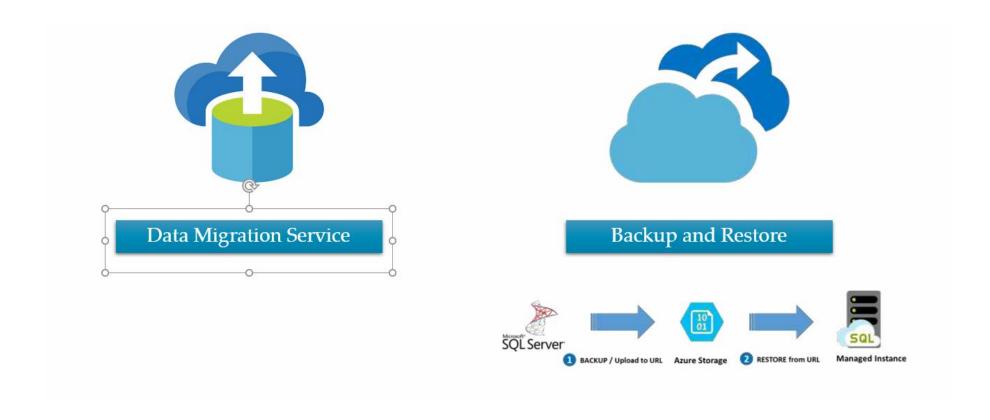
- For Single Database, elastic pool and Managed Instance
- Best for Customers who need flexibility,control and Transparency.
- Straightforward way to translate onpremises workload to Cloud
- Microsot recommends vCore based model

Dtu-based

- Only for Single database and Elastic pool.
- Best for customers who want single, preconfigured resource option.
- Might need to calculate amount of dtu before the migration
- If it meets our Business and performance requirement we should go for this



Migration Options





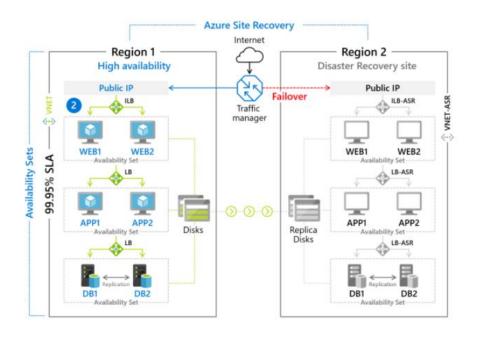
Security



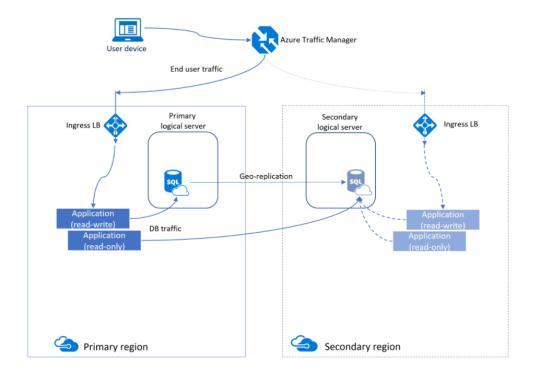


High Availability / Disaster Recovery

Azure Site Recovery



Geo Replication





Thank you!