Day 3: SQL

Wednesday, August 30, 2023 9:31 AM

SQL deployment options on Azure SQL creation page

SQL Databases: Single databases, managed by users mostly
SQL instances: Managed by Azure by providing extra help; Lift and shift ready
SQL Virtual machines: Best for OS level access; Lift and shift ready

Resource type (Option available on SQL Databases and SQL instances)

Single database: fixed resources
Elastic pool: two databases use the same resource pool and manage it according to their needs (for example split can be 10:90, 40:60, 50:50 etc.)

Creation of Azure SQL Server

Go to SQL Databases

- After selecting single db, enter new resource name, database name
- Then create new server, choose unique name, East US location, Authentication method: 1. User 2. Both 3. Use SQL auth.
- Select Use SQL Auth, set id password
- No elastic pool
- Dev environment or production (can change when you get to testing phase)
- Basic storage
- Back-up storage redundancy: local, zone, geo: each gets more expensive as you go down, select local.

Go to Networking

- Connectivity method: private for shell related but we are using public today
- Allow azure to access? Yes
- Add current client IP? No (will give error)
- Connection policy: Default, Proxy, Redirect:- Choose default.
- Minimum TLS: no change

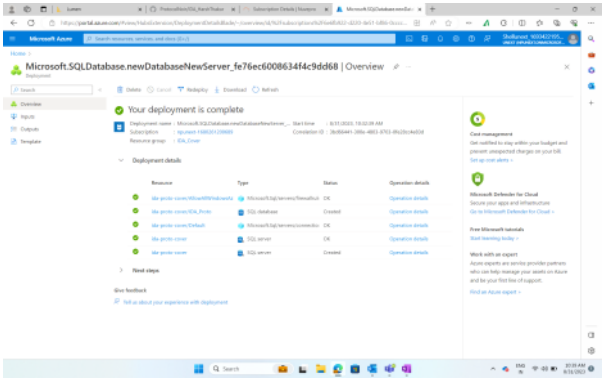
Go to Security

- Start free trial? Not now
- Ledger: no change
- Server identity? No change
- Server level key: No change

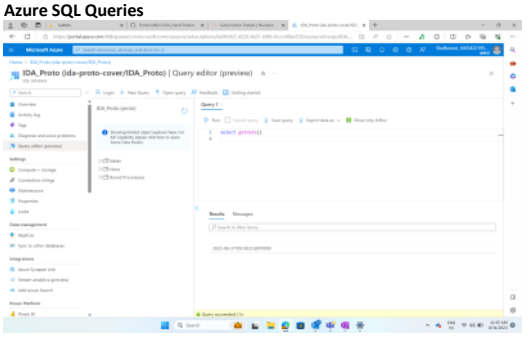
Go to Additional Settings: No changes

Go to Tags: No changes

Deployment Success Screenshot



Azure SQL Queries



View

A view also has rows and columns as they are in a real table in the database. We can create a view by selecting fields from one or more tables present in the database. A View can either have all the rows of a table or specific rows based on certain condition

SQL Languages

DDL: language for describing data and its relationships in a database. Example: Create, Truncate, Drop etc.
DML: represents a collection of programming languages explicitly used to make changes to the database. Example: Insert, Select, Update and Delete etc.
DCL: includes commands such as GRANT and REVOKE which mainly deal with the rights, permissions, and other controls of the database system.

Creating and altering tables