EX-26. Create a SQL storage service and perform a basic query using any Public Cloud Service Provider (Azure/GCP/AWS) to demonstrate Database as a Service (DaaS) using Azure.

Aim

To create a **SQL Storage Service using Microsoft Azure SQL Database** and perform basic SQL queries to demonstrate **Database as a Service (DaaS)**.

Procedure

Step 1: Create an Azure Account

1. Open a web browser and log in to the **Azure Portal**.
2. If not registered, create a new Azure account.

Step 2: Create an Azure SQL Database

1. In the Azure Portal, click **Create a resource**.
2. Select **Databases → SQL Database**.
3. Enter the following details:
    - **Database Name**: StudentDB
    - **Server**: Create a new SQL server
    - **Authentication**: SQL authentication
    - **Username & Password**: Set admin credentials
4. Choose **Basic / DTU-based pricing**.
5. Click **Review + Create → Create**.

Create SQL Database

Microsoft

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * : Azure for Students

Resource group * : resource_group

Create new

Database details

Enter required settings for this database, including picking a logical server and configuring the compute and storage resources

Database name * : historydata

Server * : (new) webser (Central India)

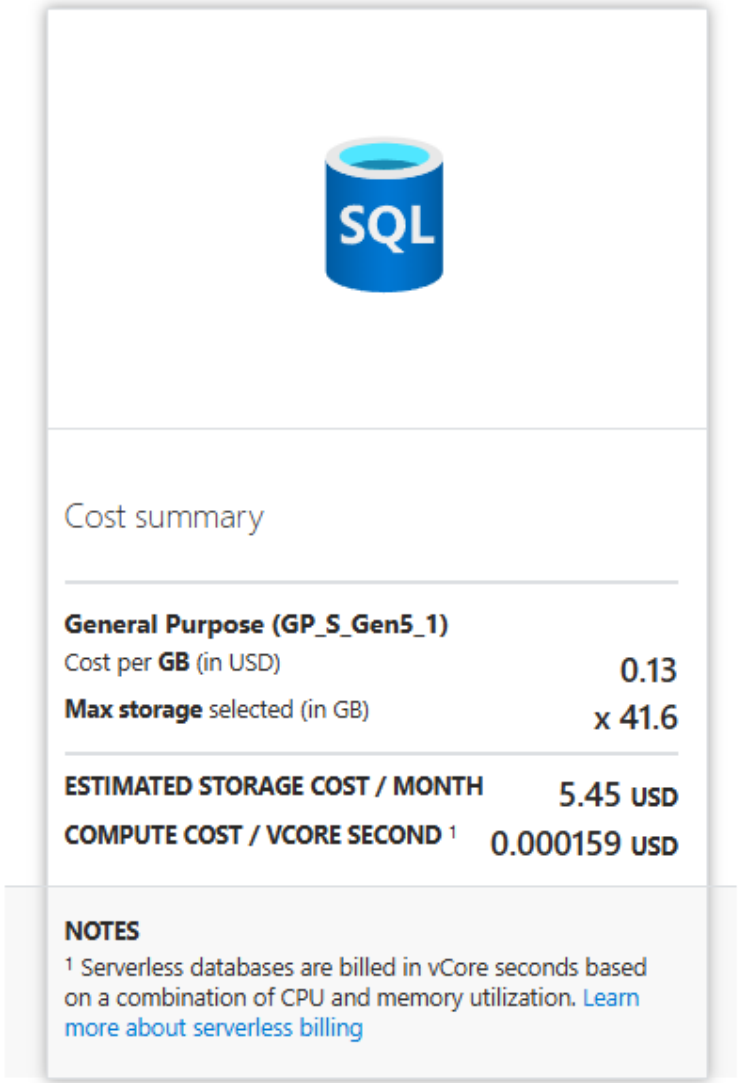
Create new

Want to use SQL elastic pool? : ○ Yes ◉ No

Workload environment : ◉ Development ○ Production

Default settings provided for Development workloads. Configurations can

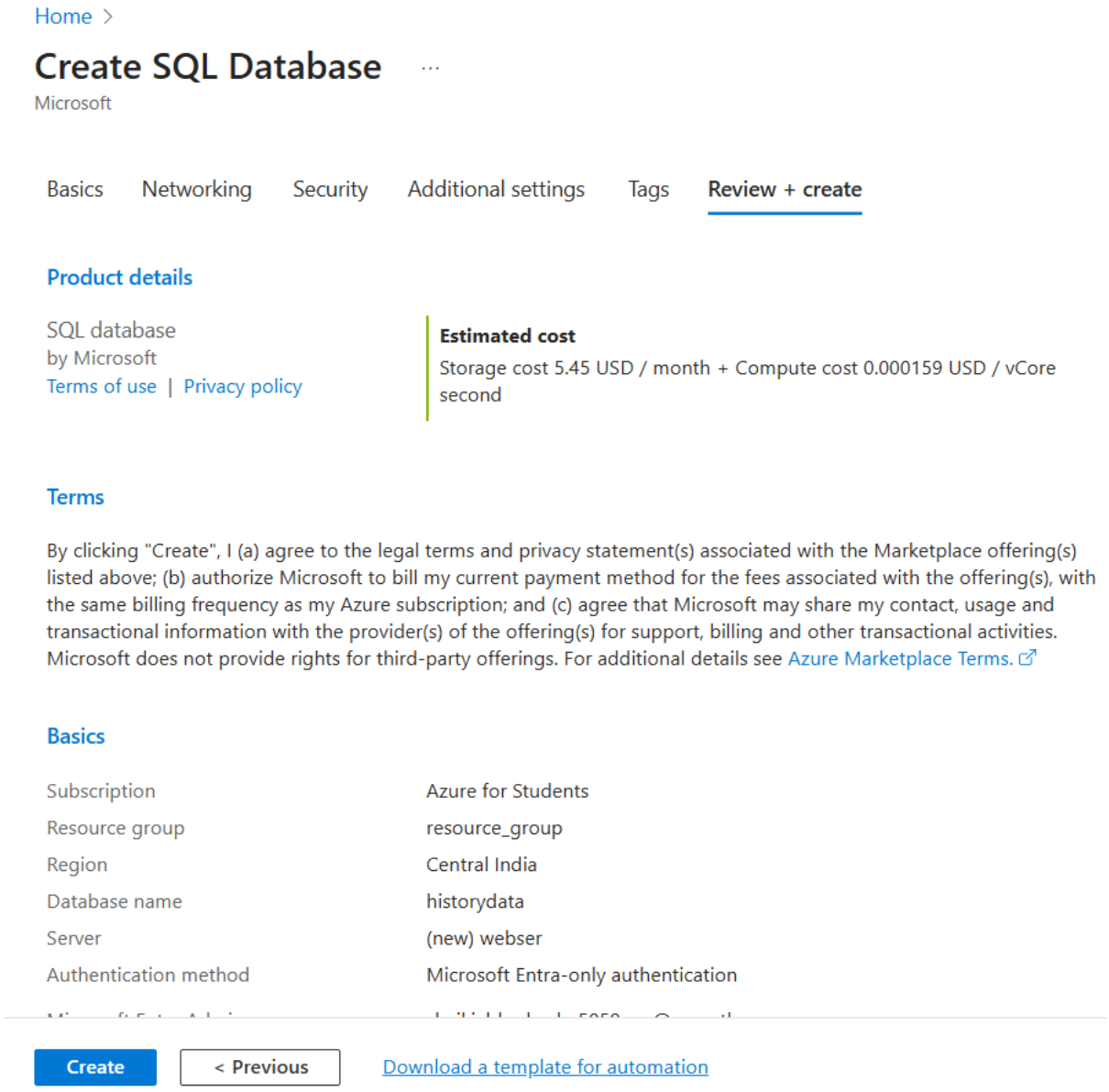
Review + create | Next : Networking >



Step 3: Configure Firewall Settings

1. Open the SQL Server resource.

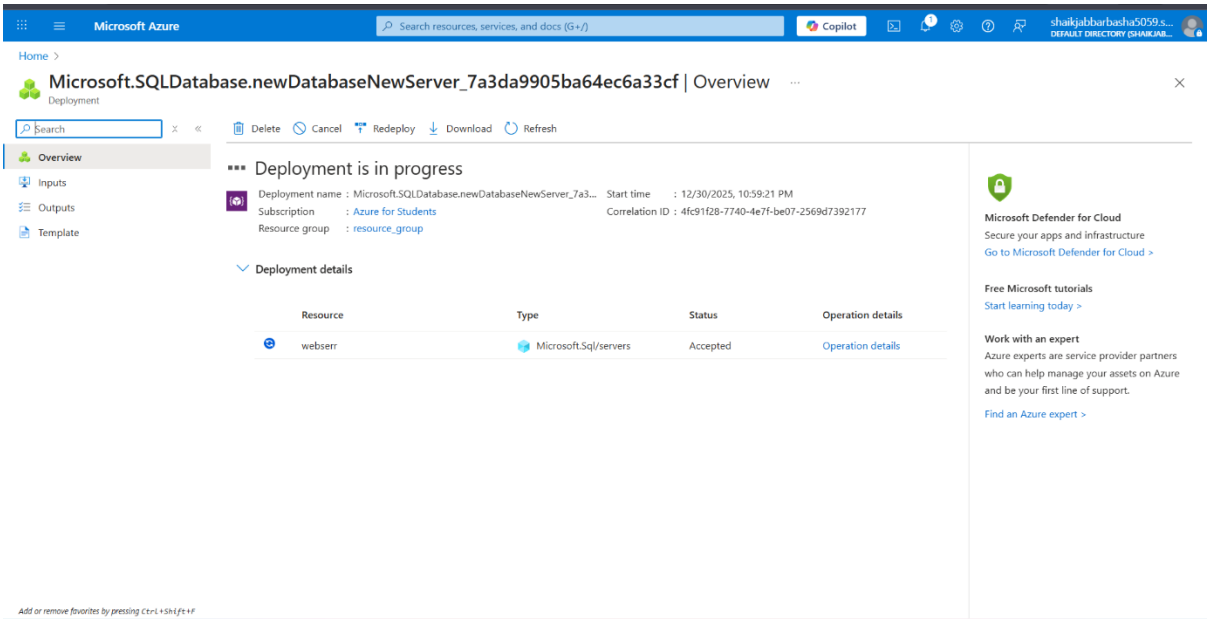
2. Select **Networking**.
3. Enable:
    - *Allow Azure services and resources to access this server*
4. Add your client IP address.
5. Save the settings.



Step 4: Connect to Azure SQL Database

1. Open **Query Editor (Preview)** in the Azure Portal
   (or use SQL Server Management Studio).

2. Log in using SQL admin credentials.
3. Select the database StudentDB.



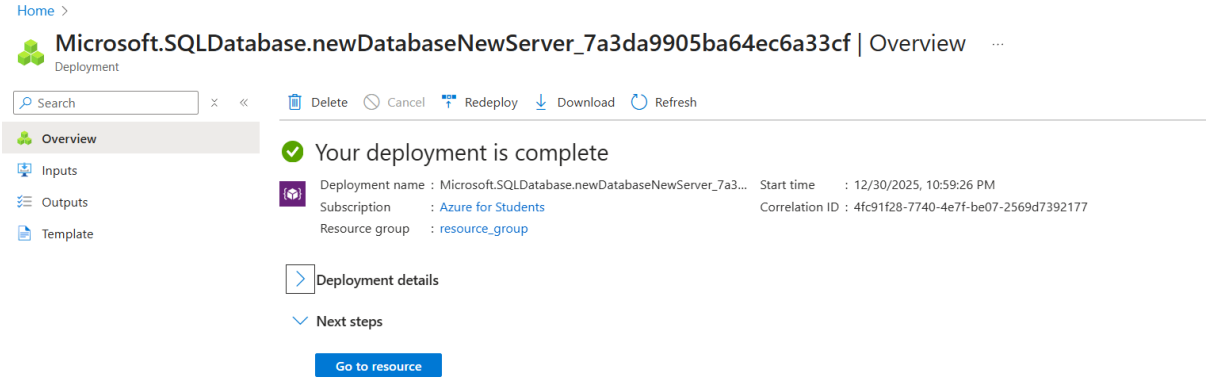
Observe DaaS Features

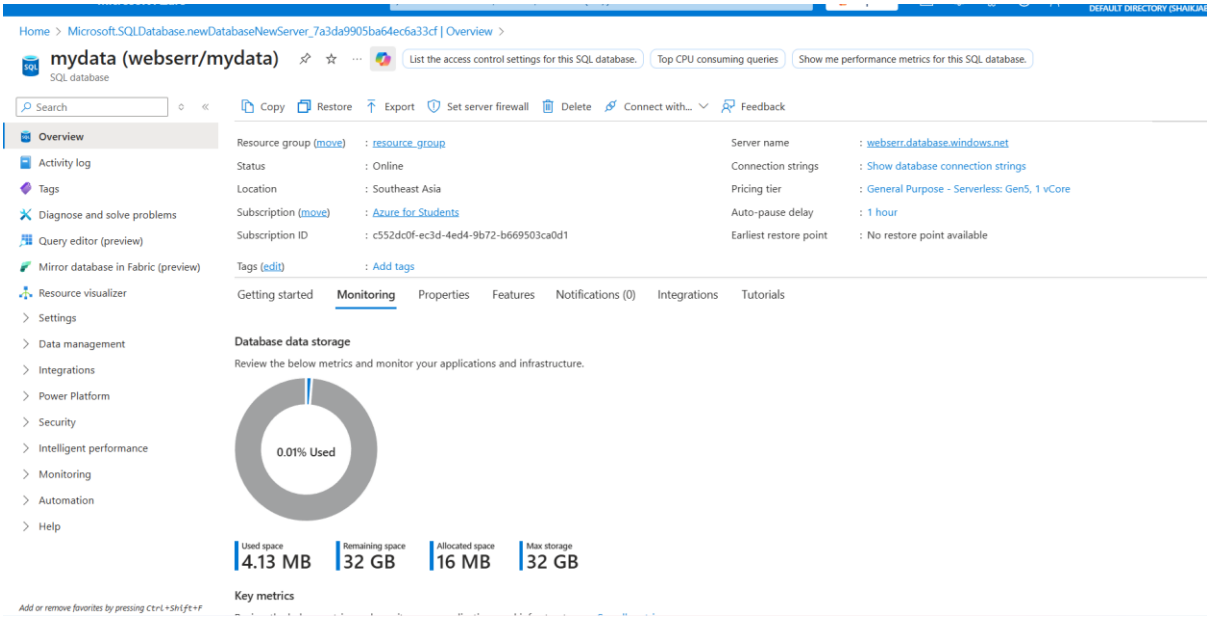
1. Azure automatically manages:
    - Database server
    - Backup and recovery
    - Security
    - Scaling
2. Users interact only with data and queries.

Result

A **SQL storage service** was successfully created using **Azure SQL Database**, and basic SQL queries were executed, demonstrating **Database as a Service (DaaS)**.

Outputs:


Home
Microsoft.SQLDatabase.newDatabaseNewServer_7a3da9905ba64ec6a33cf | Overview
Deployment
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh
Your deployment is complete
Deployment name : Microsoft.SQLDatabase.newDatabaseNewServer_7a3...
Subscription : Azure for Students
Resource group : resource_group
Start time : 12/30/2025, 10:59:26 PM
Correlation ID : 4fc91f28-7740-4e7f-be07-2569d7392177
Deployment details
Next steps
Go to resource


Home
Microsoft.SQLDatabase.newDatabaseNewServer_7a3da9905ba64ec6a33cf | Overview
mydata (webserr/mydata)
SQL database
List the access control settings for this SQL database.
Top CPU consuming queries
Show me performance metrics for this SQL database.
Search
Copy
Restore
Export
Set server firewall
Delete
Connect with...
Feedback
Overview
Activity log
Tags
Diagnose and solve problems
Query editor (preview)
Mirror database in Fabric (preview)
Resource visualizer
Settings
Data management
Integrations
Power Platform
Security
Intelligent performance
Monitoring
Automation
Help
Resource group (move) : resource_group
Status : Online
Location : Southeast Asia
Subscription (move) : Azure for Students
Subscription ID : c552dc0f-ec3d-4ed4-9b72-b669503ca0d1
Tags (edit) : Add tags
Server name : webserr.database.windows.net
Connection strings : Show database connection strings
Pricing tier : General Purpose - Serverless: Gen5, 1 vCore
Auto-pause delay : 1 hour
Earliest restore point : No restore point available
Getting started
Monitoring
Properties
Features
Notifications (0)
Integrations
Tutorials
Database data storage
Review the below metrics and monitor your applications and infrastructure.
0.01% Used
Used space 4.13 MB
Remaining space 32 GB
Allocated space 16 MB
Max storage 32 GB
Key metrics
Add or remove favorites by pressing Ctrl+Shift+F