

Open the Azure Portal.

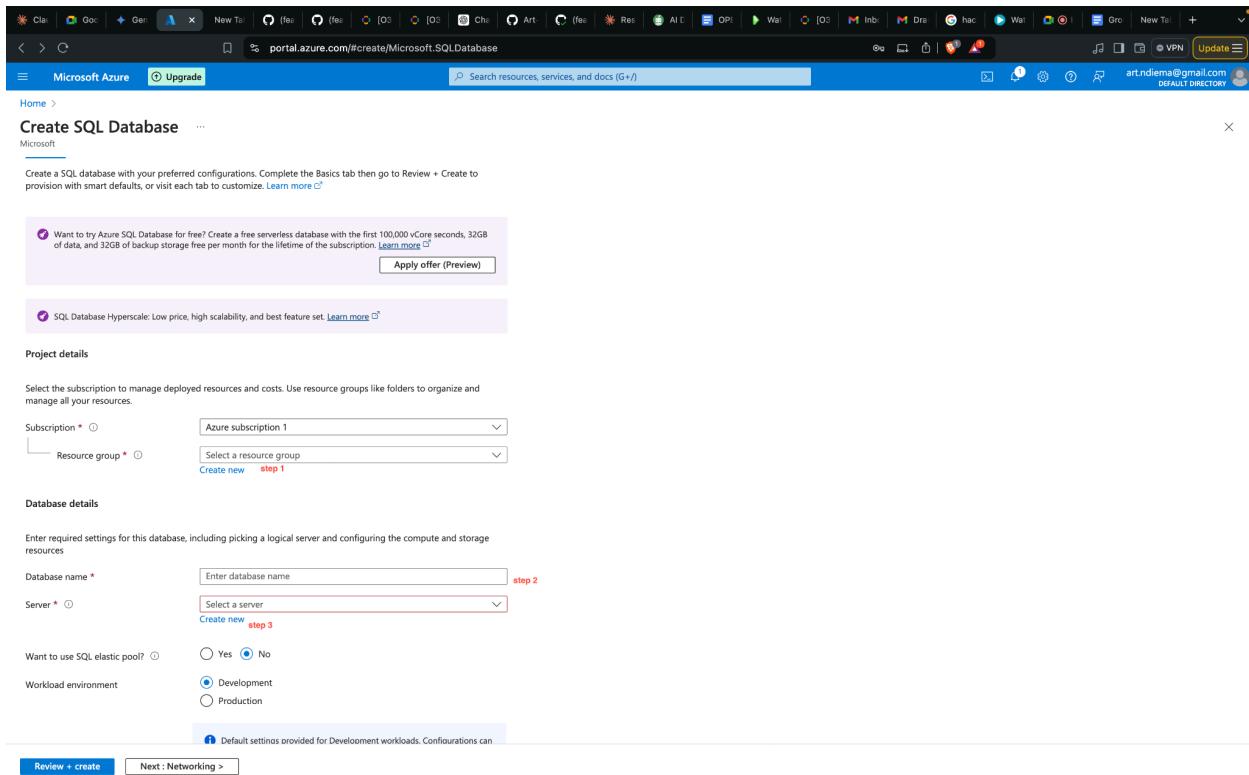
The screenshot shows the Microsoft Azure portal homepage. At the top, it greets the user with "Hi Grace, see what more you can get from your Azure free account." Below this, there are four cards: "Take a free online course on Microsoft Learn", "Watch a demo and attend a live Q&A", "Start a project with Quickstart Center", and "Explore support resources". Under these cards, there's a section titled "Azure services" with icons for "Create a resource", "Quickstart Center", "Azure AI services", "Kubernetes services", "Virtual machines", "App Services", "Storage accounts", "SQL databases", "Azure Cosmos DB", and "More services". Below this, there's a "Resources" section showing "Recent" and "Favorite" items: "MyVM" (Virtual machine) was last viewed 5 days ago, and "LearnCloudSecurity" (Resource group) was last viewed 2 weeks ago. At the bottom, there's a "Navigate" bar with links for "Subscriptions", "Resource groups", "All resources", and "Dashboard".

1. Click on create a Resource
2. Under the category, select Databases

The screenshot shows the Azure Marketplace page for databases. On the left, there's a sidebar with categories like "Get Started", "Recently created", and a "Categories" section where "Databases" is selected. The main content area has two sections: "Popular Azure services" (with links to SQL Database, Azure SQL, Azure Cosmos DB, Azure Synapse Analytics, Azure Database for PostgreSQL, Azure Database for MySQL, Azure SQL Managed Instance, SQL server (logical server), and Azure Database for PostgreSQL Flexible Server) and "Popular Marketplace products" (with links to Free SQL Server License: SQL 2019 Developer on Windows Server 2019, MongoDB Atlas (pay-as-you-go), SQL Server 2019 Enterprise on Windows Server 2022, Free SQL Server License: SQL Server 2022 Developer on Windows Server 2022, Azure Cost Management plan, SQL Server 2016 SP2 Enterprise on Windows Server 2016, SQL Server 2017 Enterprise Windows Server 2016, Azure SQL Edge Developer, Usage-based plan, and SQL Server 2017 Enterprise Windows Server 2019). At the bottom right, there's a "Give feedback" link.

3. Then **create SQL Databases**

4. Move to the project details and do step 1,2 and 3



Want to try Azure SQL Database for free? Create a free serverless database with the first 100,000 vCore seconds, 32GB of data, and 32GB of backup storage free per month for the lifetime of the subscription. [Learn more](#)

Apply offer (Preview)

SQL Database Hyperscale: Low price, high scalability, and best feature set. [Learn more](#)

Project details

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

Subscription *

Resource group * [Create new](#) **step 1**

Database details

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

Database name * **step 2**

Server * [Create new](#) **step 3**

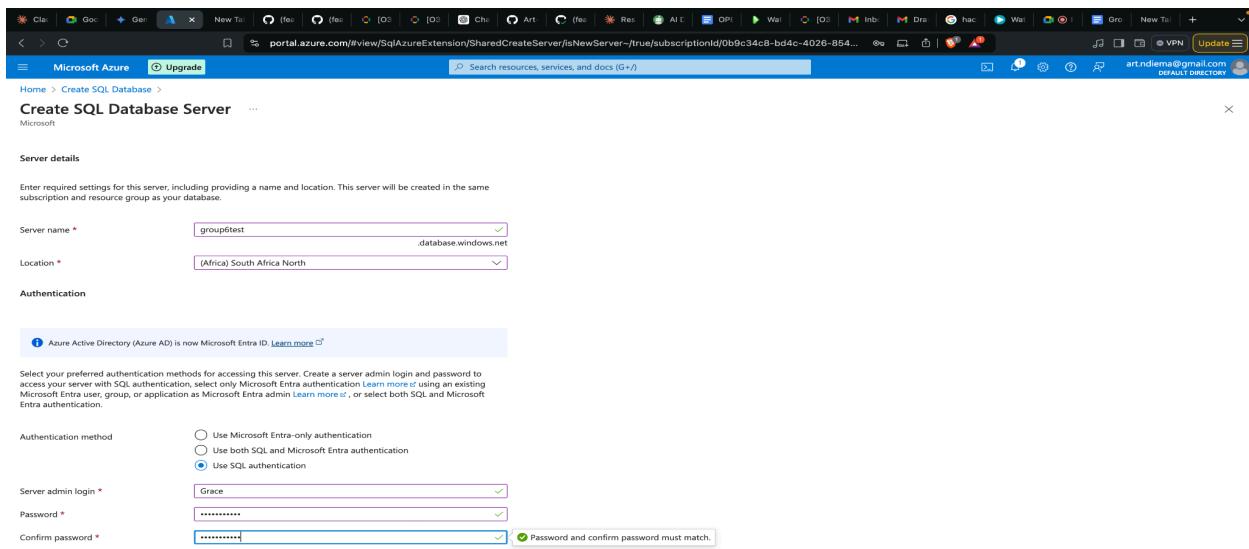
Want to use SQL elastic pool? Yes No

Workload environment Development Production

Default settings provided for Development workloads. Configurations can

Review + create **Next : Networking >**

At step 3 Create a database server



Server details

Enter required settings for this server, including providing a name and location. This server will be created in the same subscription and resource group as your database.

Server name * .database.windows.net

Location *

Authentication

Azure Active Directory (Azure AD) is now Microsoft Entra ID. [Learn more](#)

Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Microsoft Entra authentication [Learn more](#) using an existing Microsoft Entra user, group, or application as Microsoft Entra admin [Learn more](#), or select both SQL and Microsoft Entra authentication.

Authentication method Use Microsoft Entra-only authentication
 Use both SQL and Microsoft Entra authentication
 Use SQL authentication

Server admin login *

Password *

Confirm password * >Password and confirm password must match.

OK

Leave the rest under basics at default

⚠️ Changing Basic options may reset selections you have made. Review all options prior to creating the resource.

Create new

Database details

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

Database name * test1

Server * (new) group6test (South Africa North)

Create new

Want to use SQL elastic pool? * Yes No

Workload environment Development Production

Default settings provided for Development workloads. Configurations can be modified as needed.

Compute + storage * General Purpose - Serverless
Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled

[Configure database](#)

Backup storage redundancy

Choose how your PITR and LTR backups are replicated. Geo restore or ability to recover from regional outage is only available when geo-redundant storage is selected.

Backup storage redundancy Locally-redundant backup storage Zone-redundant backup storage Geo-redundant backup storage

Selected value for backup storage redundancy is Geo-redundant backup

[Review + create](#) [Next : Networking >](#)

Under **Networking**, select **Public endpoint**, allow **azure services and resources** to access this server and add **current client IP address**

Create SQL Database

Networking

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'group6test' and all databases it manages. [Learn more](#)

Network connectivity

Choose an option for configuring connectivity to your server via public endpoint or private endpoint. Choosing no access creates with defaults and you can configure connection method after server creation. [Learn more](#)

Connectivity method * No access Public endpoint Private endpoint

Firewall rules

Setting 'Allow Azure services and resources to access this server' to Yes allows communications from all resources inside the Azure boundary, that may or may not be part of your subscription. [Learn more](#)
Setting 'Add current client IP address' to Yes will add an entry for your client IP address to the server firewall.

Allow Azure services and resources to access this server * No Yes

Add current client IP address * No Yes

Connection policy

Configure how clients communicate with your SQL database server. [Learn more](#)

Connection policy Default - Uses Redirect policy for all client connections originating inside of Azure (except Private Endpoint connections) and Proxy for all client connections originating outside Azure

Proxy - All connections are proxied via the Azure SQL Database gateways

Redirect - Clients establish connections directly to the node hosting the database

Encrypted connections

This server supports encrypted connections using Transport Layer Security (TLS). For information on TLS version and certificates, refer to connecting with TLS/SSL. [Learn more](#)

Cost summary	
General Purpose (GP_S_Gen5_1)	
Cost per GB (in 10GB)	0.15
Max storage selected (in GB)	x 41.6
ESTIMATED STORAGE COST / MONTH	6.41 USD
COMPUTE COST / VCORE SECOND ¹	0.000194 USD

NOTES
1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#)

[Review + create](#) [< Previous](#) [Next : Security >](#)

Under Additional settings, select sample database

Cost summary

General Purpose (GP_S_Gen5_1)	0.15
Cost per GB (in USD)	x 41.6
Max storage selected (in GB)	
ESTIMATED STORAGE COST / MONTH	6.41 USD
COMPUTE COST / vCORE SECOND	0.000194 USD

NOTES
1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. Learn more about serverless billing

Leave the rest of the fields at default then click on **create**

Review + create < Previous Next : Tags >

Authentication method: SQL authentication

Server admin login: Grace

Compute + storage: General Purpose - Serverless: Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled

Backup storage redundancy: Geo-redundant backup storage

Networking

- Allow Azure services and resources to access this server: Yes
- Add current client IP address: 10.2.11.145.43
- Private endpoint: None
- Minimum TLS version: 1.2
- Connection Policy: Default

Security

- Identity: Not enabled
- Transparent data encryption (Server level): Service-managed key selected
- Database level customer-managed key: Not configured
- Database level user assigned managed identity: Not configured
- Advanced data security: Start free trial
- Always encrypted with secure enclaves: Not configured
- SqL Ledger(Database): Disabled
- Digest Storage: Disabled

Additional settings

- Use existing data: Sample
- Collation: SQL_Latin1_General_CI_AS

Tags

Create < Previous Download a template for automation

After deployment is complete click on Go to resources

The screenshot shows the Microsoft Azure portal with a completed deployment for a new database. The deployment name is "Microsoft.SQLDatabase.newDatabaseNewServer_45a8f7d6937347db8ace9". The status is "Your deployment is complete". The deployment details show it was started on 8/12/2024 at 2:06:39 PM. The "Go to resource" button is highlighted with a red oval.

Select Query editor (preview)

The screenshot shows the Microsoft Azure portal with the "Query editor (preview)" section selected for a database named "test1". The "Configure access" section is visible, showing network configuration details. The URL for this page is <https://portal.azure.com/#@arndiemagmail.onmicrosoft.com/resource/subscriptions/0b9c34c8-bd4c-4026-854e-64127acd4c49/resourceGroups/test/providers/Microsoft.Sql/servers/group6test/databases/test/queryEditor>.

Login the database

The screenshot shows the Microsoft Azure SQL Database Query editor (preview) interface. On the left, a sidebar menu includes 'Overview', 'Activity log', 'Tags', 'Diagnose and solve problems', and 'Query editor (preview)' (which is selected). The main area displays a 'Welcome to SQL Database Query Editor' message and a login form. The login form has fields for 'Login' (set to 'Grace') and 'Password'. It also includes options for 'Microsoft Entra authentication' (with a 'Continue as art.ndiema@gmail.com' button) and 'OK' buttons.

You can preview the database

The screenshot shows the Microsoft Azure SQL Database Query editor (preview) interface. The sidebar menu is identical to the previous screenshot. The main area shows a query editor with two tabs: 'Query 1' and 'Query 2'. The 'Query 1' tab contains a single line of SQL code: '1 SELECT TOP (1000) * FROM [SalesLT].[Customer]'. Below the code, the 'Results' tab is active, displaying a table of customer data. The table has columns: CustomerID, NameStyle, Title, FirstName, MiddleName, and LastName. The data is as follows:

CustomerID	NameStyle	Title	FirstName	MiddleName	LastName
1	False	Mr.	Orlando	N.	Gee
2	False	Mr.	Keith		Harris
3	False	Ms.	Donna	F.	Carreras
4	False	Ms.	Janet	M.	Gates
5	False	Mr.	Lucy		Harrington
6	False	Ms.	Rosmarie	J.	Carroll
7	False	Mr.	Dominic	P.	Gash
10	False	Ms.	Kathleen	M.	Garza
11	False	Ms.	Katherine		Harding
12	False	Mr.	Johnny	A.	Caprio

At the bottom of the results table, it says 'Query succeeded | 0s'.

Create a User

```
CREATE USER group_6 WITH PASSWORD = 'BERgraAsu#=P234word';
```

(This statement creates a new user account named 'group_6' in the database system, with the password 'BERgraAsu#=P234word'.)

```
ALTER ROLE db_datareader ADD MEMBER group_6;
```

(This statement adds the newly created user 'group_6' to an existing database role called 'db_datareader'.)

The screenshot shows the Microsoft Azure portal interface for a SQL database named 'test1'. On the left, the 'Query editor (preview)' section is selected, showing a tree view of database objects like Tables, Views, and Stored Procedures. In the main query editor area, two T-SQL statements are run:

```
1 CREATE USER group_6 WITH PASSWORD = 'BERgraAsu#=P234word';
2 ALTER ROLE db_datareader ADD MEMBER group_6;
```

The 'Messages' tab at the bottom indicates that the queries were successful: 'Query succeeded: Affected rows: 0'. A status bar at the bottom right says 'Query succeeded | 0s'.

Go to **Security** and under select **Dynamic Data Masking**