

## Create a single database in Azure SQL Database using the Azure portal

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Creating a [single database](#) is the quickest and simplest deployment option for creating a database in Azure SQL Database. This document shows you how to create and then query a single database using the Azure portal.

### Create a single database

To create a single database containing the AdventureWorksLT sample data:

Create your resource group and single database using the Azure portal:


1. Select **Azure SQL** in the left-hand menu of the [Azure portal](#). If **Azure SQL** is not in the list, select **All services**, then type *Azure SQL* in the search box. (Optional) Select the star next to **Azure SQL** to favorite it and add it as an item in the left-hand navigation.
2. Select **+ Add** to open the **Select SQL deployment option** page. You can view additional information about the different databases by selecting **Show details** on the **Databases** tile.
3. Select **Create**:

Dashboard > Azure SQL resources > Select SQL deployment option

### Select SQL deployment option

Microsoft


**How do you plan to use the service?**



**SQL databases**  
Best for modern cloud applications. Hyperscale and serverless options are available.

Resource type  
Single database


**Create** Hide details



**SQL managed instances**  
Best for most migrations to the cloud. Lift-and-shift ready.

Resource type  
Single instance


**Create** Show details



**SQL virtual machines**  
Best for migrations and applications requiring OS-level access. Lift-and-shift ready.

Image  
Please select an offer


Create Show details



**Single database**  
Single databases are a great fit for modern, cloud-born applications that need a fully managed database with predictable performance.

**Featured capabilities:**


- ✓ Hyperscale storage (up to 100TB)
- ✓ Serverless compute
- ✓ Easy management



**Elastic pool**  
Elastic pools provide a cost-effective solution for managing the performance of multiple databases with variable usage patterns.

**Featured capabilities:**

- ✓ Resource sharing for cost optimization
- ✓ Simplified performance management



**Database server**  
Database servers are used to manage groups of single databases and elastic pools.

**Featured capabilities:**

- ✓ Access management
- ✓ Backup management
- ✓ Business continuity management

- On the **Basics** tab, in the **Project Details** section, type or select the following values:
  - Subscription:** Drop down and select the correct subscription, if it doesn't appear.
  - Resource group:** Select **Create new**, type myResourceGroup, and select **OK**.

Home > Azure SQL resources > Select SQL deployment option > Create SQL Database

### Create SQL Database

Microsoft

**Warning:** Changing basic options may reset selections you have made. Please review all options prior to creating the database.

**Basics** Additional settings Tags Review + Create

Create a SQL database with your preferred configurations. Complete the Basics tab then go to Review + Create to provision with smart defaults, or visit each tab to customize. [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.

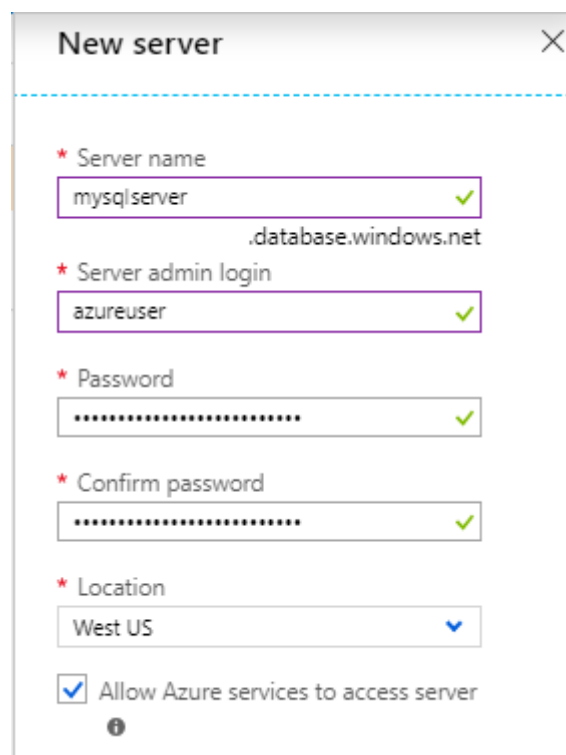
\* Subscription ⓘ

\* Resource group ⓘ

[Create new](#)

- In the **Database Details** section, type or select the following values:

- **Database name:** Enter mySampleDatabase.
- **Server:** Select **Create new**, enter the following values and then select **Select**.
  - **Server name:** Type mysqlserver; along with some numbers for uniqueness.
  - **Server admin login:** Type azureuser.
  - **Password:** Type a complex password that meets password requirements.
  - **Location:** Choose a location from the drop-down, such as West US.



The screenshot shows a 'New server' configuration window. It contains the following fields and values:

- Server name:** mysqlserver (with a green checkmark)
- Server admin login:** azureuser (with a green checkmark)
- Password:** (masked with dots, with a green checkmark)
- Confirm password:** (masked with dots, with a green checkmark)
- Location:** West US (with a blue dropdown arrow)
- Allow Azure services to access server:** ☒ (with an information icon below it)

- Important
- Remember to record the server admin login and password so you can log in to the server and database. If you forget your login or password, you can get the login name or reset the password on the **SQL server**

page. To open the **SQL server** page, select the server name on the database **Overview** page after database creation.

- **Want to use SQL elastic pool:** Select the **No** option.
- **Compute + storage:** Select **Configure database**.

**DATABASE DETAILS**

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

* Database name	mySampleDatabase ✓
* Server ⓘ	(new) mysqlserver ( West US ) <a href="#">Create new</a>
* Want to use SQL elastic pool? ⓘ	<input type="radio"/> Yes <input checked="" type="radio"/> No
* Compute + storage ⓘ	<b>Standard S0</b> 10 DTUs, 1 GB storage <b>Configure database</b>
* Resource group ⓘ	(New) myResourceGroup <a href="#">Create new</a>

- Select **Provisioned** and **Gen5**.

Home > Azure SQL resources > Select SQL deployment option > Create SQL Database > Configure

## Configure

[Feedback](#)

### Compute tier

**Provisioned** ✓  
 Compute resources are pre-allocated  
 Billed per hour based on vCores configured

**Serverless**  
 Compute resources are auto-scaled  
 Billed per second based on vCores used

### Compute Generation ⓘ

**Gen4**  
 up to 24 vCores  
 up to 168 GB memory

**Gen5** ✓  
 up to 80 vCores  
 up to 408 GB memory

### Save money

Save up to 55% with a license you already own. Already have a SQL Server license? ⓘ

☐ Yes ☒ No


vCores [How do vCores compare with DTUs? ↗](#)

4 6 8 10 12 14 16 18 20 24 32 40 80

Data max size ⓘ

32 GB 1 TB

9.6 GB LOG SPACE ALLOCATED



### Cost summary

**Gen4 - General Purpose (GP\_Gen4\_1)**  
 Cost per vCore (in USD)  
 vCores selected  
 Cost per GB (in USD)  
 Max storage selected (in GB)  
**ESTIMATED COST / MONTH**

- Review the settings for **Max vCores**, **Min vCores**, **Autopause delay**, and **Data max size**. Change these as desired.
  - Accept the preview terms and click **OK**.
  - Select **Apply**.
6. Select the **Additional settings** tab.
  7. In the **Data source** section, under **Use existing data**, select Sample.

Home > Azure SQL resources > Select SQL deployment option > Create SQL Database

Create SQL Database

Microsoft

Basics Additional settings Tags Review + create

Customize additional configuration parameters including collation & sample data.

Data source

Start with a blank database, restore from a backup or select sample data to populate your new database.

\* Use existing data

None Backup Sample

AdventureWorksLT will be created as the sample database.

Database Collation

Database collation defines the rules that sort and compare data, and cannot be changed after database creation. The default database collation is SQL\_Latin1\_General\_CP1\_CI\_AS. [Learn more](#)

\* Collation

SQL\_Latin1\_General\_CP1\_CI\_AS

Advanced Data Security

Protect your data using Advanced Data Security, a unified security package including Data Classification, Vulnerability Assessment and Advanced Threat Protection for your server. [Learn more](#)

\* Enable Advanced Data Security

Enable Not now

## Important

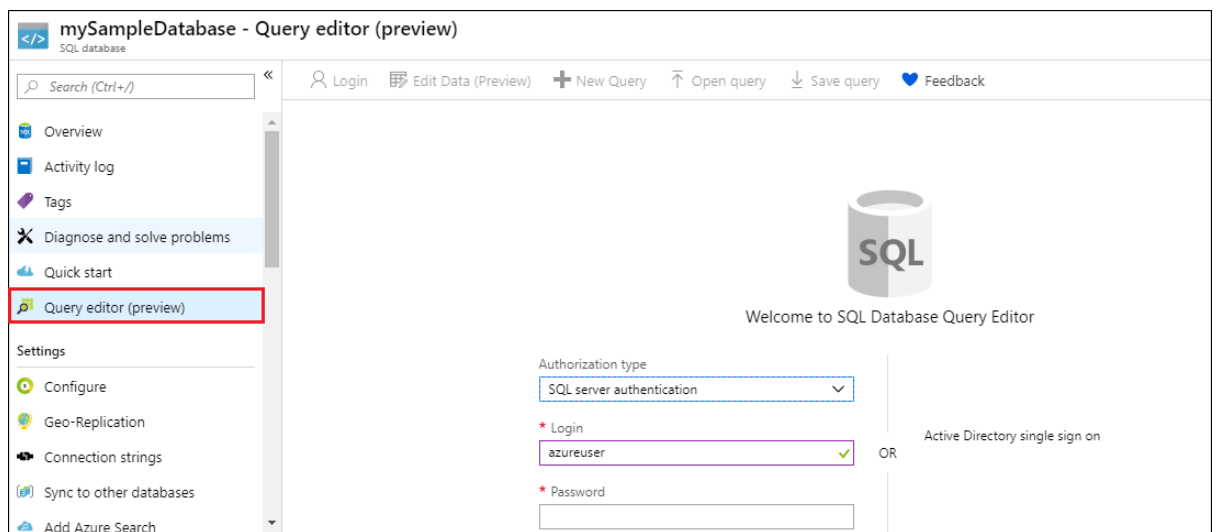
Make sure to select the **Sample (AdventureWorksLT)** data so you can follow easily this Azure SQL Database guide that uses this data.

- Leave the rest of the values as default and select **Review + Create** at the bottom of the form.
- Review the final settings and select **Create**.
- On the **SQL Database** form, select **Create** to deploy and provision the resource group, server, and database.

## Query the database

Now that you've created the database, use the built-in query tool in the Azure portal to connect to the database and query the data.

1. On the **SQL Database** page for your database, select **Query editor (preview)** in the left menu.

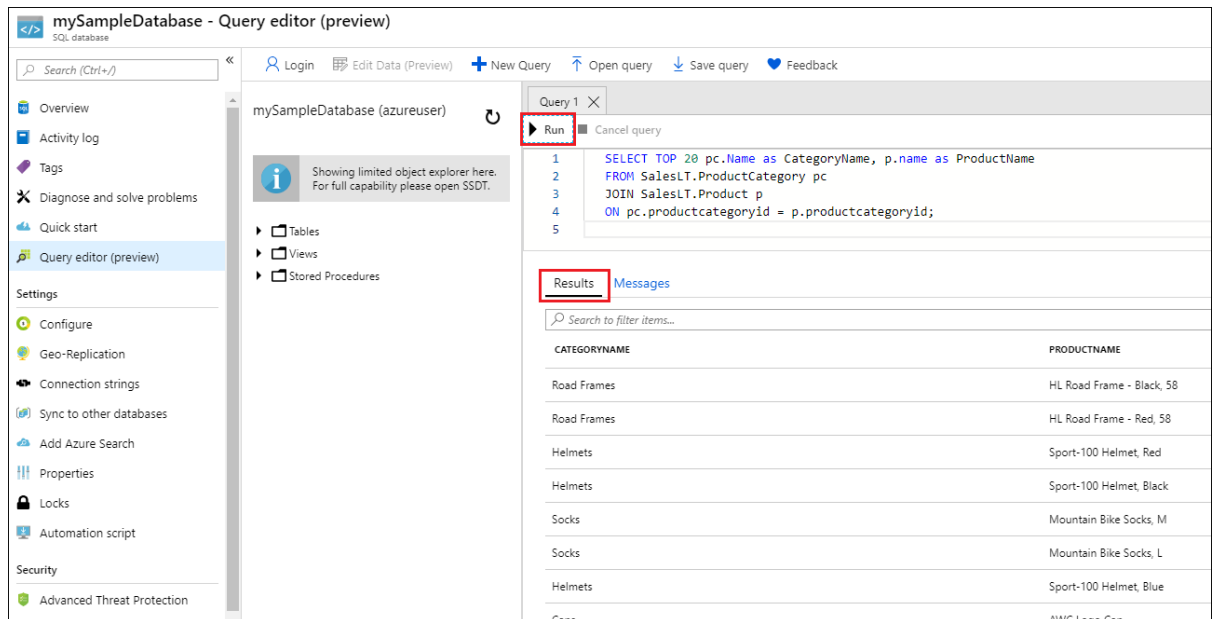


2. Enter your login information, and select **OK**.
3. Enter the following query in the **Query editor** pane.

SQLCopy

```
SELECT TOP 20 pc.Name as CategoryName, p.name as ProductName
FROM SalesLT.ProductCategory pc
JOIN SalesLT.Product p
ON pc.productcategoryid = p.productcategoryid;
```

4. Select **Run**, and then review the query results in the **Results** pane.



5. Close the **Query editor** page, and select **OK** when prompted to discard your unsaved edits.

## Clean up resources

When you're finished using these resources, you can delete them as follows:

1. From the left menu in the Azure portal, select **Resource groups**, and then select **myResourceGroup**.
2. On your resource group page, select **Delete resource group**.
3. Enter *myResourceGroup* in the field, and then select **Delete**.