

Quickstart: Create a single database - Azure SQL Database

Article • 01/13/2023 • 13 minutes to read

In this quickstart, you create a [single database](#) in Azure SQL Database using either the Azure portal, a PowerShell script, or an Azure CLI script. You then query the database using [Query editor](#) in the Azure portal.

Prerequisites

- An active Azure subscription. If you don't have one, [create a free account](#) .
- The latest version of either [Azure PowerShell](#) or [Azure CLI](#).

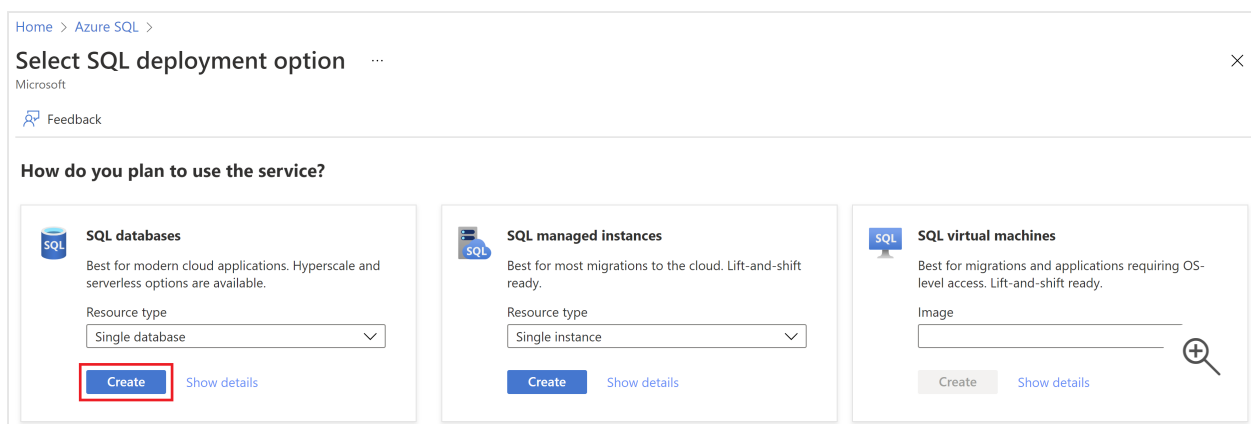
Create a single database

This quickstart creates a single database in the [serverless compute tier](#).

Portal

To create a single database in the Azure portal, this quickstart starts at the Azure SQL page.

1. Browse to the [Select SQL Deployment option](#) page.
2. Under **SQL databases**, leave **Resource type** set to **Single database**, and select **Create**.




Home > Azure SQL >


Select SQL deployment option


Microsoft

Feedback

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 Show 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

Create Show details

3. On the **Basics** tab of the **Create SQL Database** form, under **Project details**, select the desired Azure **Subscription**.
4. For **Resource group**, select **Create new**, enter *myResourceGroup*, and select **OK**.
5. For **Database name**, enter *mySampleDatabase*.
6. For **Server**, select **Create new**, and fill out the **New server** form with the following values:

- **Server name:** Enter *mysqlserver*, and add some characters for uniqueness. We can't

- **Location:** Select a location from the dropdown list.
- **Authentication method:** Select **Use SQL authentication**.
- **Server admin login:** Enter *azureuser*.
- **Password:** Enter a password that meets requirements, and enter it again in the **Confirm password** field.

7. Leave **Want to use SQL elastic pool** set to **No**.

9. This quickstart uses a serverless database, so leave **Service tier** set to **General Purpose (Scalable compute and storage options)** and set **Compute tier** to **Serverless**. Select **Apply**.

10. Under **Backup storage redundancy**, choose a redundancy option for the storage account where your backups will be saved. To learn more, see [backup storage redundancy](#).

11. Select **Next: Networking** at the bottom of the page.

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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](#)

Database details

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

Database name *

Server * ⓘ

[Create new](#)

Want to use SQL elastic pool? * ⓘ ☐ Yes ☒ No

Compute + storage * ⓘ

General Purpose - Serverless
Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled
[Configure database](#)

[Review + create](#)

[Next : Networking >](#)

12. On the **Networking** tab, for **Connectivity method**, select **Public endpoint**.

13. For **Firewall rules**, set **Add current client IP address** to **Yes**. Leave **Allow Azure services and resources to access this server** set to **No**.

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Basics **Networking** Security Additional settings Tags Review + create

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'mysqlserver' 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

14. Under **Connection policy**, choose the **Default connection policy**, and leave the **Minimum TLS version** at the default of TLS 1.2.

15. Select **Next: Security** at the bottom of the page.

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 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](#)

Minimum TLS version

TLS 1.2

Review + create

< Previous

Next : Security >

16. On the **Security** page, you can choose to start a free trial of **Microsoft Defender for SQL**, as well as configure **Ledger**, **Managed identities** and **Transparent data encryption (TDE)** if you desire. Select **Next: Additional settings** at the bottom of the page.

17. On the **Additional settings** tab, in the **Data source** section, for **Use existing data**, select

17. On the **Additional settings** tab, in the **Data source** section, for **Use existing data**, select **Sample**. This creates an AdventureWorksLT sample database so there's some tables and data to query and experiment with, as opposed to an empty blank database. You can also configure [database collation](#) and a [maintenance window](#).

18. Select **Review + create** at the bottom of the page:

Home > SQL databases >

Create SQL Database

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Basics Networking Security **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

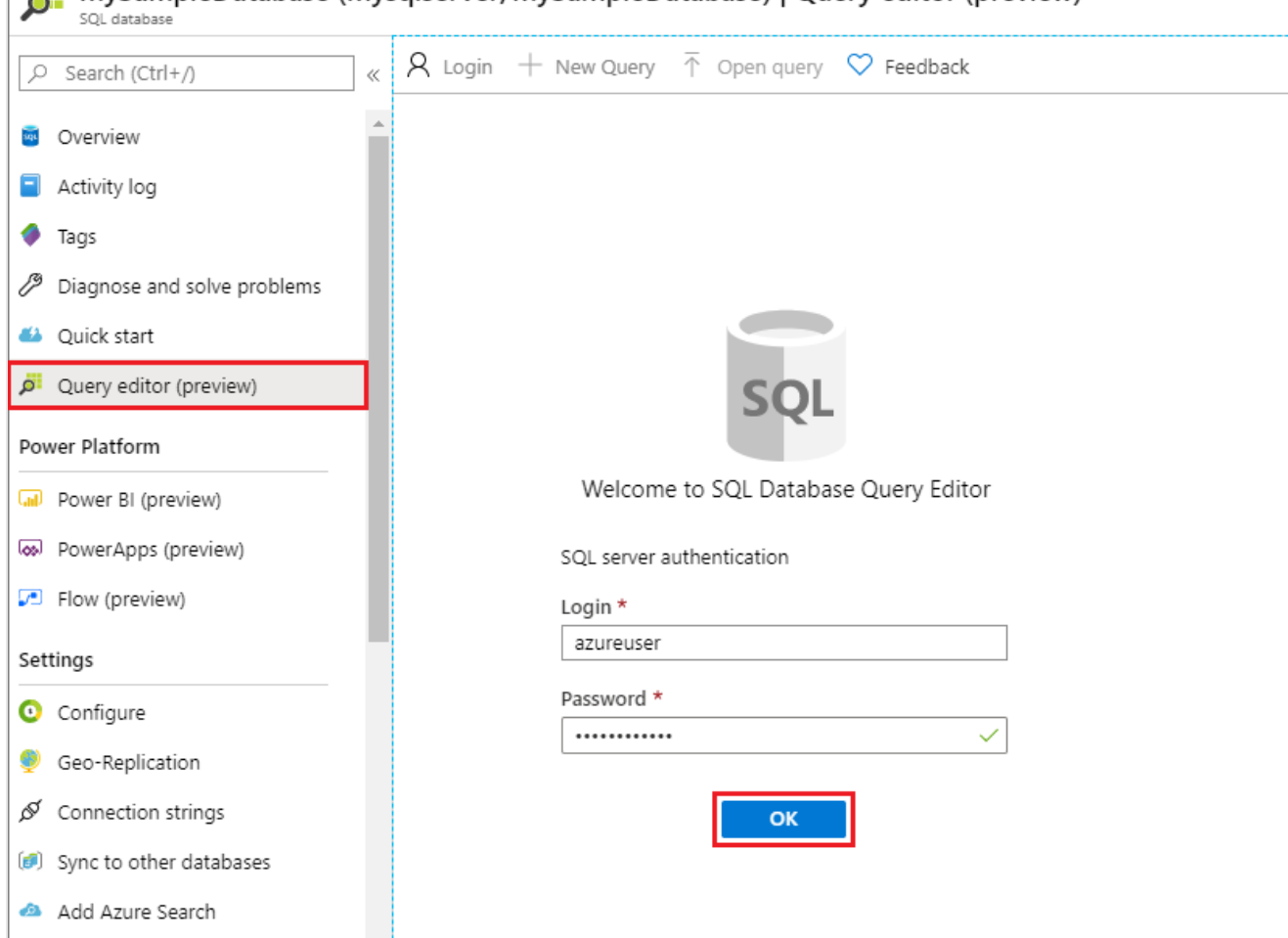
Review + create < Previous Next : Tags >

19. On the **Review + create** page, after reviewing, select **Create**.

Query the database

Once your database is created, you can use the **Query editor (preview)** in the Azure portal to connect to the database and query data.

1. In the portal, search for and select **SQL databases**, and then select your database from the list.
2. On the page for your database, select **Query editor (preview)** in the left menu.
3. Enter your server admin login information, and select **OK**.

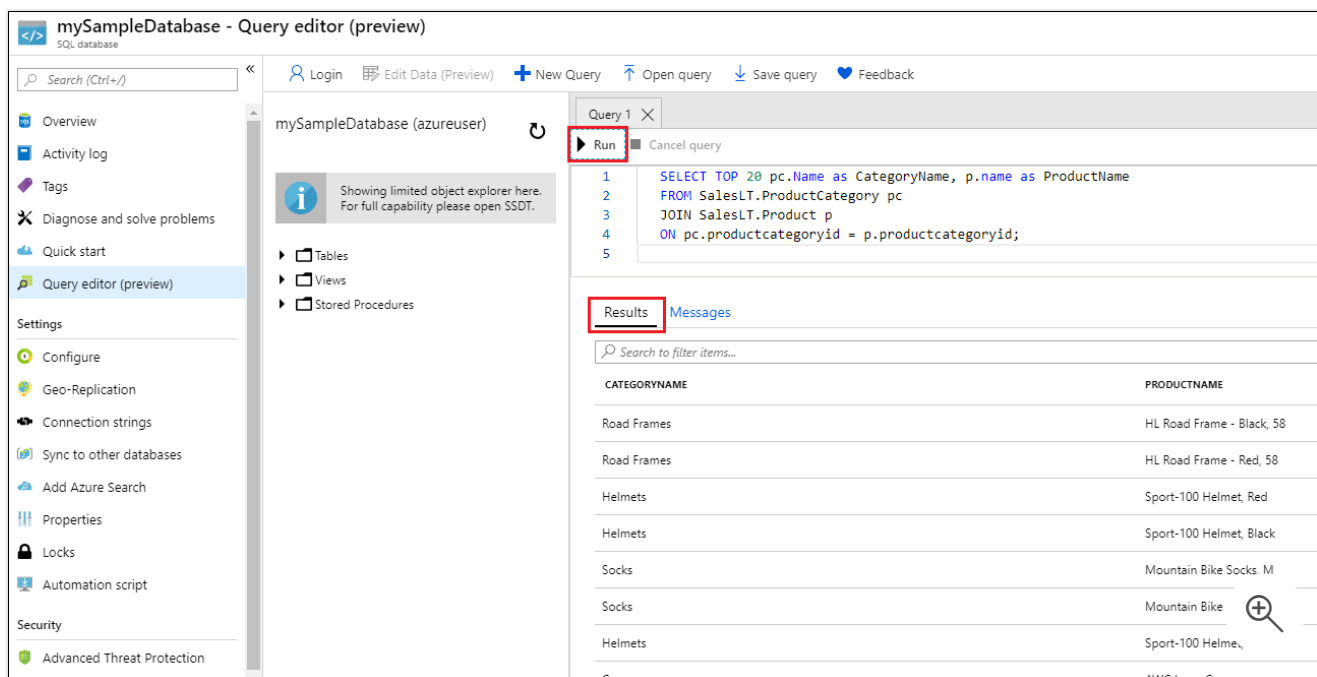


4. Enter the following query in the **Query editor** pane.

```
SQL

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

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



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

c. Close the [Query editor](#) page, and select **OK** when prompted to discard your unsaved edits.

Clean up resources

Keep the resource group, server, and single database to go on to the next steps, and learn how to connect and query your database with different methods.

When you're finished using these resources, you can delete the resource group you created, which will also delete the server and single database within it.

Portal

To delete **myResourceGroup** and all its resources using the Azure portal:

1. In the portal, search for and select **Resource groups**, and then select **myResourceGroup** from the list.
2. On the resource group page, select **Delete resource group**.
3. Under **Type the resource group name**, enter *myResourceGroup*, and then select **Delete**.

Next steps

[Connect and query](#) your database using different tools and languages:

Connect and query using SQL Server Management Studio

Connect and query using Azure Data Studio

Want to optimize and save on your cloud spending?

Start analyzing costs with Cost Management