06 - Create a SQL database (5 min)

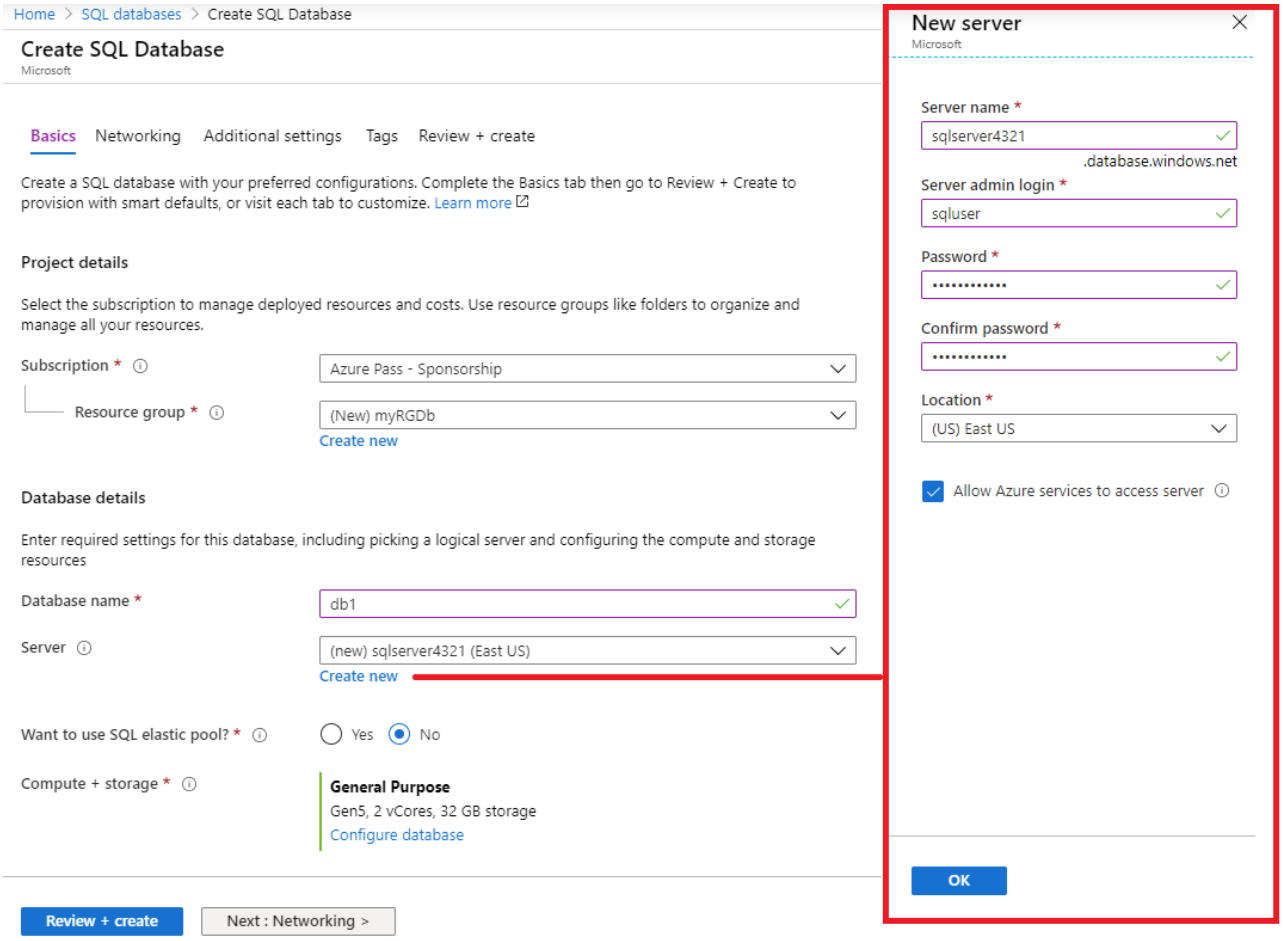
In this walkthrough, we will create a SQL database in Azure and then query the data in that database.

Task 1: Create the database

In this task, we will create a SQL database based on the AdventureWorksLT sample database.

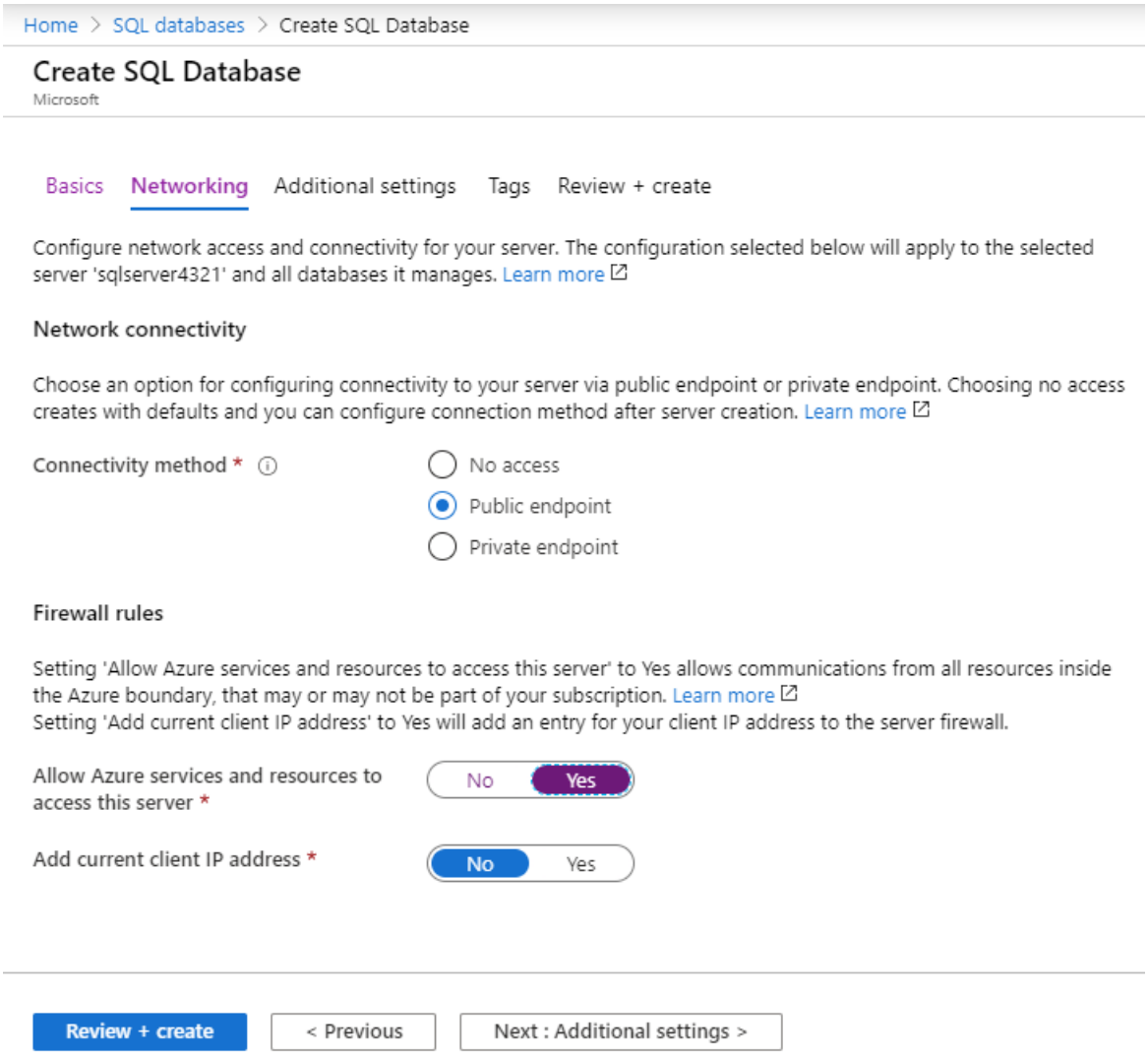
1. Sign in to the Azure portal at **https://portal.azure.com**.
2. From the **All services** blade, search for and select **SQL databases**, and then click **+ Add, + Create, + New**.
3. On the **Basics** tab, fill in this information.

Setting	Value
Subscription	**Use default supplied**
Resource group	**Create new resource group**
Database name	**db1**
Server	Select **Create new** (A new sidebar will open on the right)
Server name	**sqlserverxxxx** (must be unique)
Location	**(US) East US**
Authentication method	**Use SQL authentication**
Server admin login	**sqluser**
Password	**Pa$$w0rd1234**
Click	**OK**



4. On the **Networking** tab and configure the following settings (leave others with their defaults)

Setting	Value
Connectivity method	**Public endpoint**
Allow Azure services and resources to access this server	**Yes**
Add current client IP address	**No**

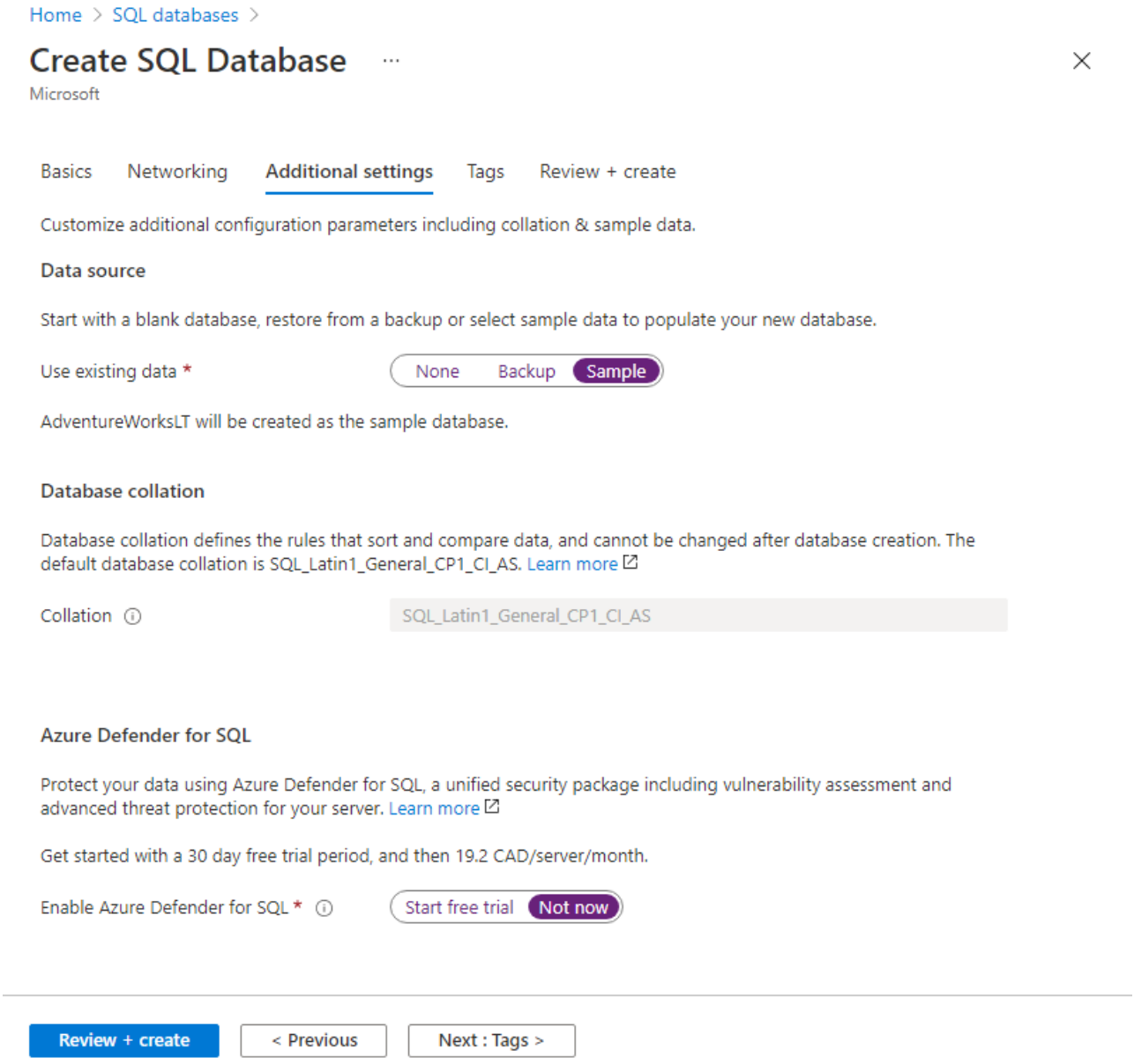


5. On the **Security** tab.

Setting	Value
Microsoft Defender for SQL	**Not now**

6. Move to the **Additional settings** tab. We will be using the AdventureWorksLT sample database.

Setting	Value
Use existing data	**Sample**

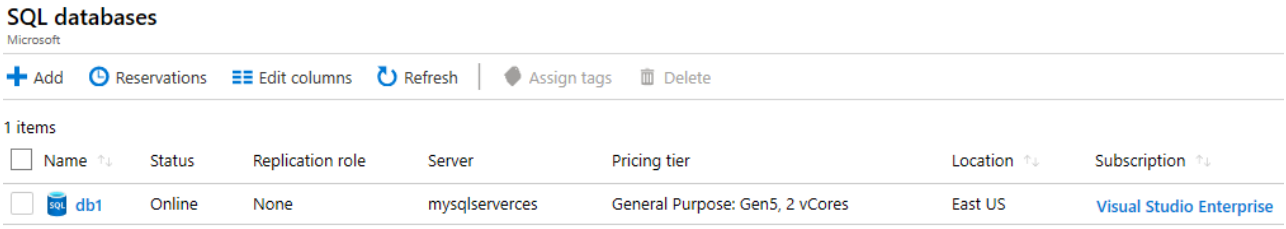


7. Click **Review + create** and then click **Create** to deploy and provision the resource group, server, and database. It can take approx. 2 to 5 minutes to deploy.

Task 2: Test the database.

In this task, we will configure the SQL server and run a SQL query.

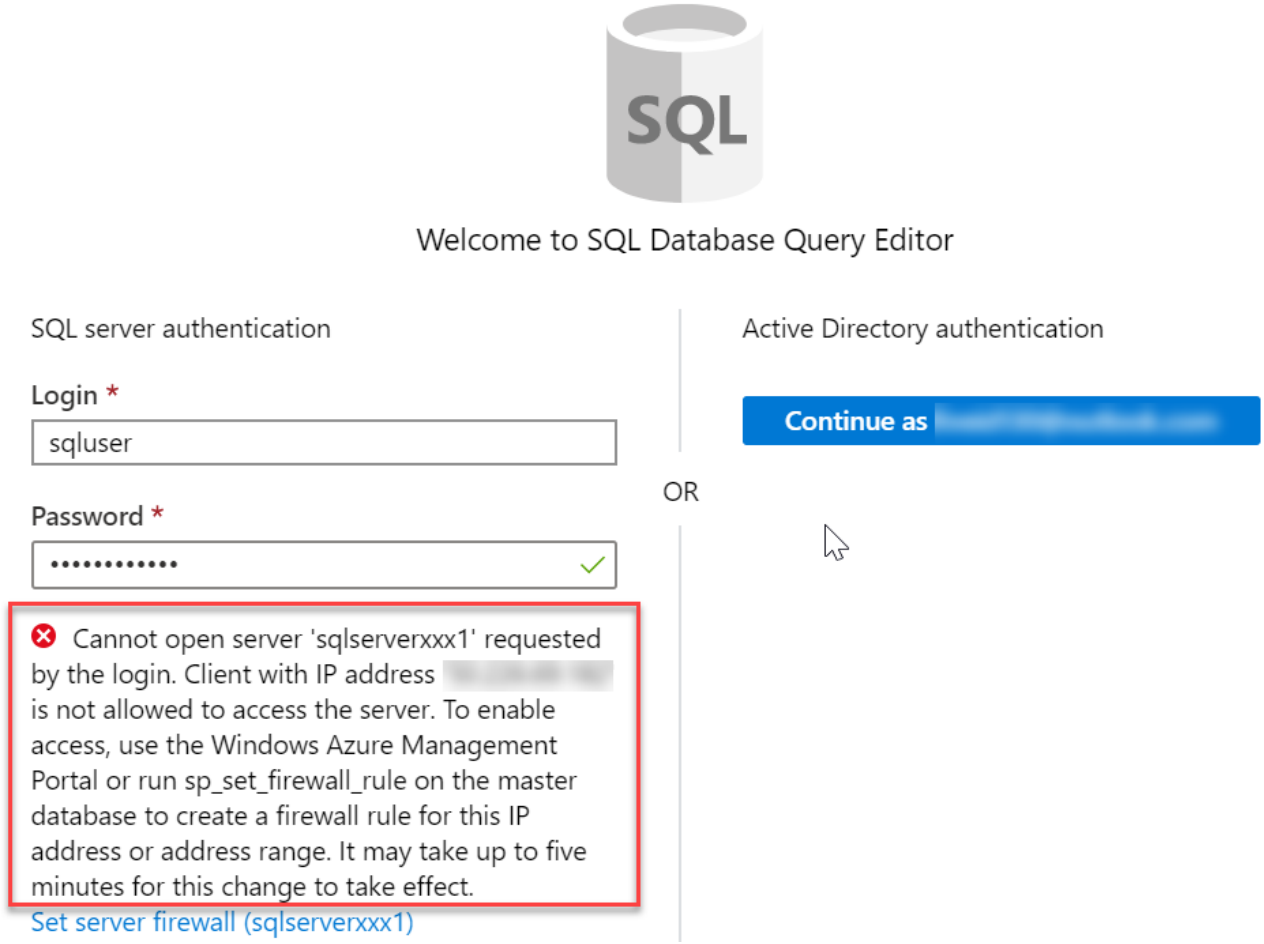
1. When the deployment has completed, clickGo to resourcefrom the deployment blade. Alternatively, from the **All Resources** blade, search and select **Databases**, then **SQL databases** ensure your new database was created. You may need to **Refresh** the page.



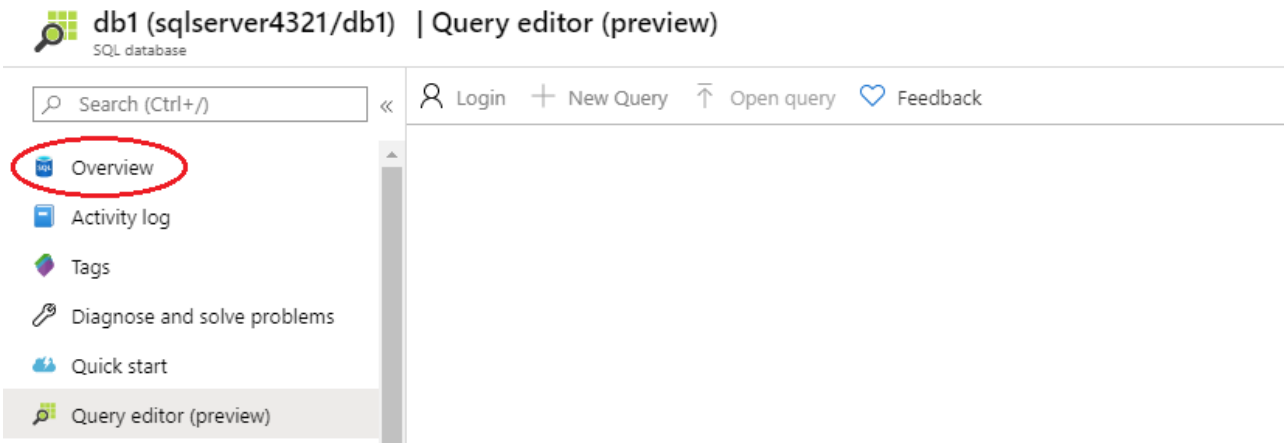
2. Click the **db1** entry representing the SQL database you created. On the db1 blade click **Query editor (preview)**.

3. Login as **sqluser** with the password **Pa$$w0rd1234**.

4. You will not be able to login. Read the error closely and make note of the IP address that needs to be allowed through the firewall.

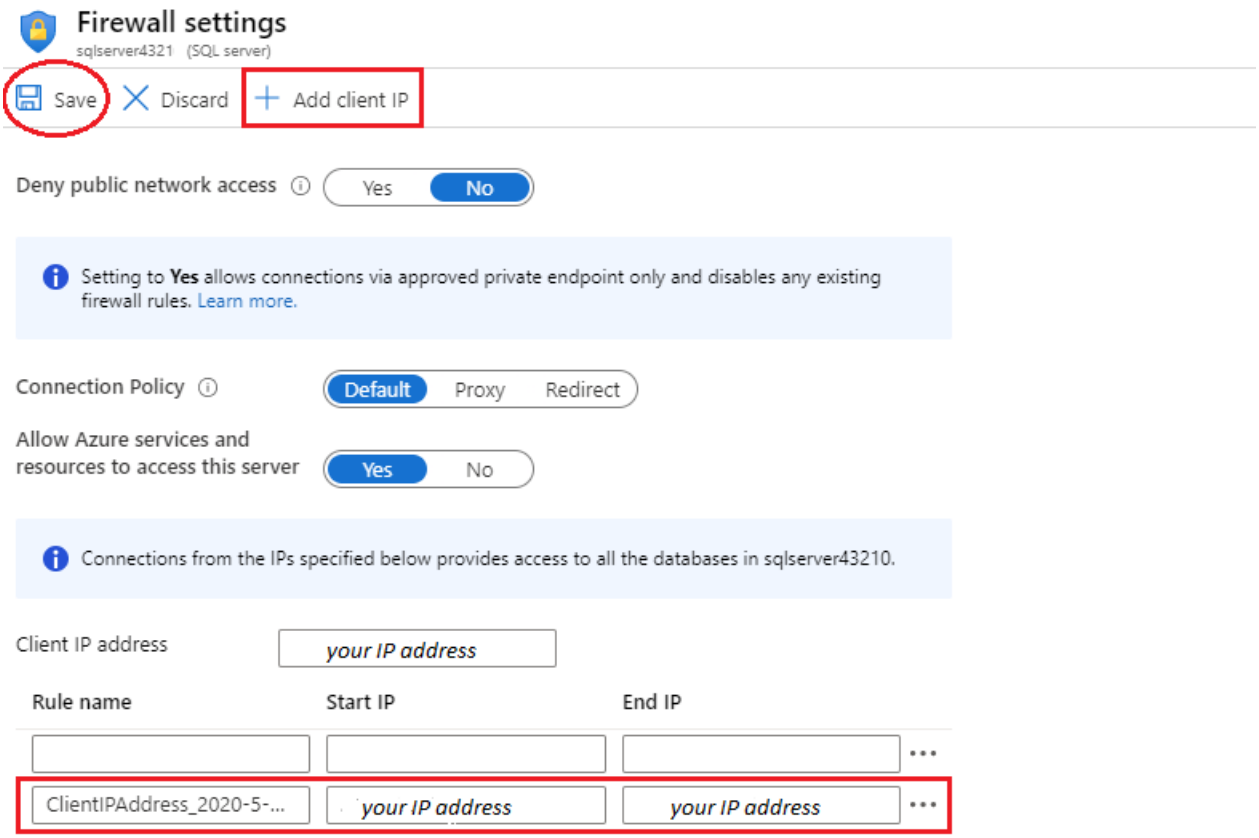


5. Back on the **db1** blade, click **Overview**.



6. From the db1 **Overview** blade, click **Set server firewall** Located on the top center of the overview screen.

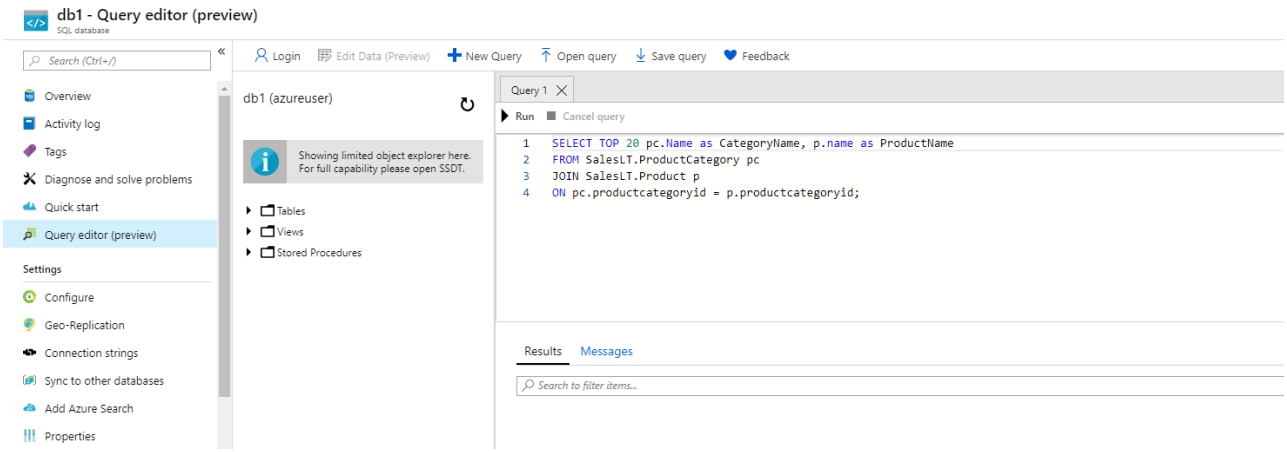
7. Click **+ Add client IP** (top menu bar) to add the IP address referenced in the error. (it may have autofilled for you - if not paste it into the IP address fields). Be sure to **Save** your changes.



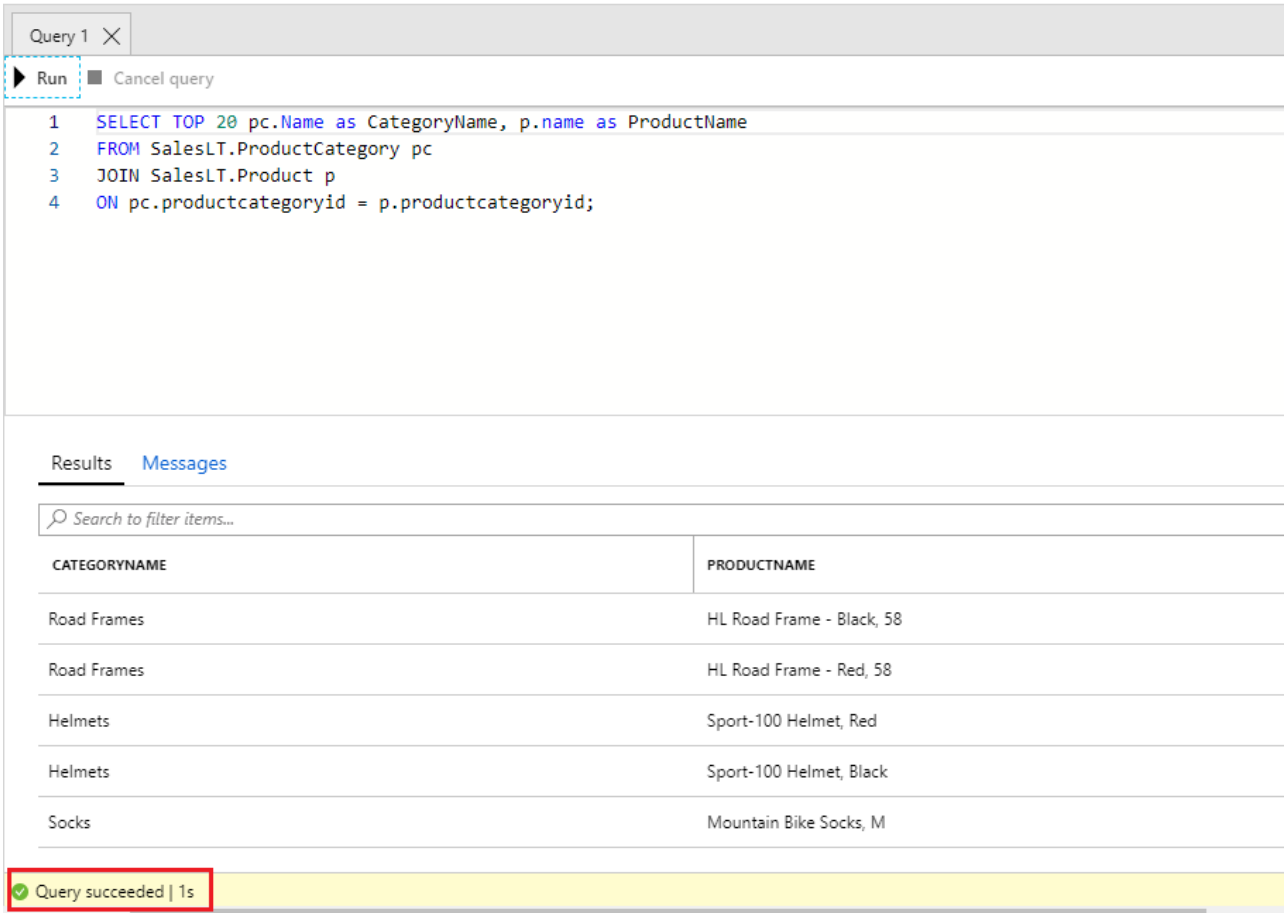
8. Return to your SQL database (slide the bottom toggle bar to the left) and click on **Query Editor (Preview)**. Try to login again as **sqluser** with the password **Pa$$w0rd1234**. This time you should succeed. Note that it may take a couple of minutes for the new firewall rule to be deployed.

9. Once you log in successfully, the query pane appears. Enter the following query into the editor pane.

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



10. Click **Run**, and then review the query results in the **Results** pane. The query should run successfully.



Congratulations! You have created a SQL database in Azure and successfully queried the data in that database.

Note: To avoid additional costs, you can optionally remove this resource group. Search for resource groups, click your resource group, and then click **Delete resource group**. Verify the name of the resource group and then click **Delete**. Monitor the **Notifications** to see how the delete is proceeding.