

# Add a connection to Azure SQL Database

With Visual Studio, you can connect any of the following to Azure SQL Database by using the **Connected Services** feature:

- .NET Framework console app
- ASP.NET MVC (.NET Framework)
- ASP.NET Core
- .NET Core (including console app, WPF, Windows Forms, class library)
- .NET Core Worker Role
- Azure Functions
- Universal Windows Platform App
- Xamarin
- Cordova

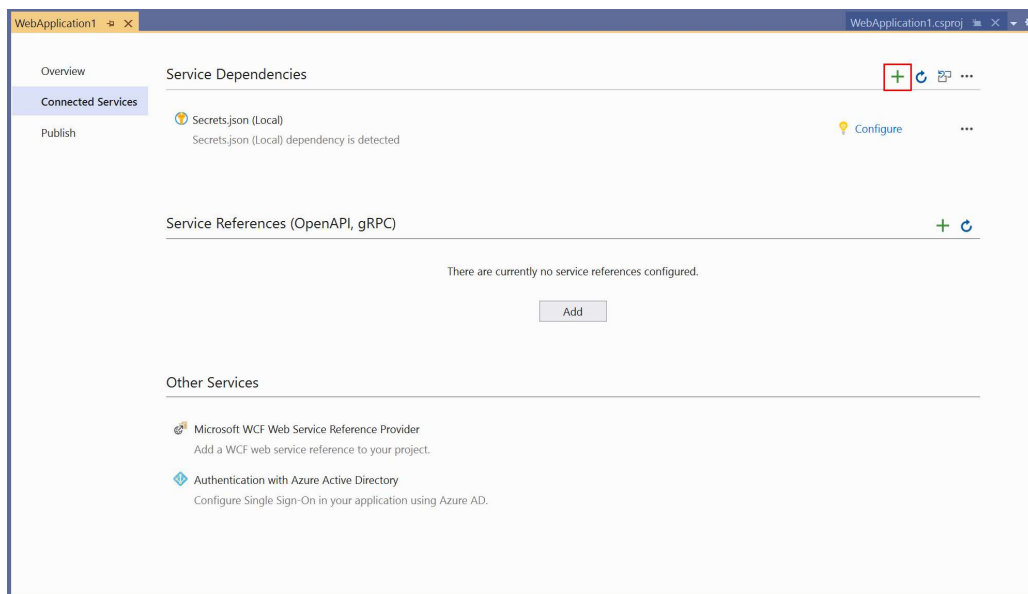
The connected service functionality adds all the needed references and connection code to your project, and modifies your configuration files appropriately.

## Prerequisites

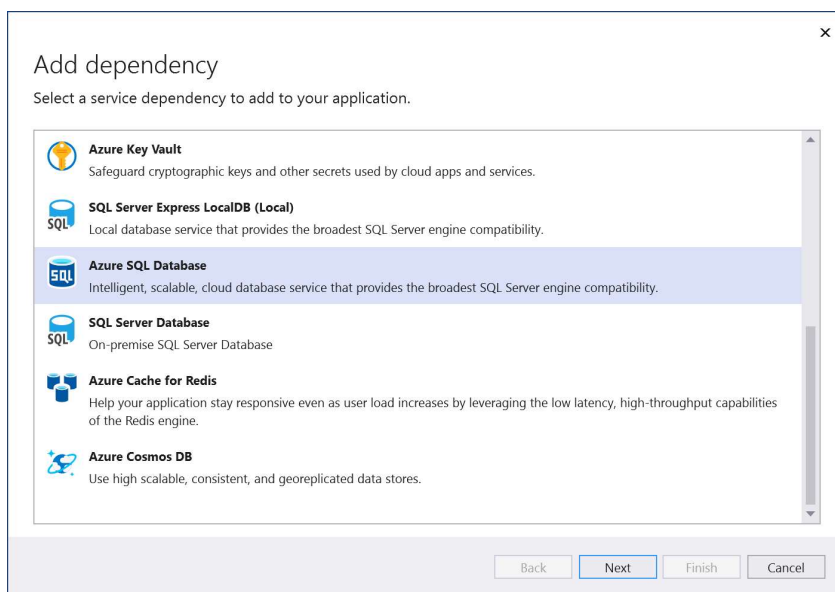
- Visual Studio with the Azure workload installed.
- A project of one of the supported types

# Connect to Azure SQL Database using Connected Services

1. Open your project in Visual Studio.
2. In **Solution Explorer**, right-click the **Connected Services** node, and, from the context menu, select **Add Connected Service**.
3. In the **Connected Services** tab, select the + icon for **Service Dependencies**.



4. In the **Add Dependency** page, select **Azure SQL Database**.



If you aren't signed in already, sign into your Azure account. If you don't have an Azure account, you can sign up for a [free trial](#).

5. In the **Configure Azure SQL Database** screen, select an existing Azure SQL Database, and select **Next**.

If you need to create a new component, go to the next step. Otherwise, skip to step 7.

Configure Azure SQL Database

Select a service dependency to add to your application.

Subscription: VS Azure Tools Content

Name	Resource group	Location	Server name
WebApplication3_db	cloud-shell-storage-west	North Europe	webapplication3dbserve
WebApplication8_db	cloud-shell-storage-west	North Europe	webapplication3dbserve

+ Create a SQL Database Refresh

Back Next Finish Cancel

6. To create an Azure SQL Database:
  - a. Select **Create a SQL Database** at the bottom of the screen.
  - b. Fill out the **Azure SQL Database: Create new** screen, and select **Create**.

Azure SQL Database

Create new

Database name: WebApplication8\_db

Subscription: VS Azure Tools Content

Resource group: cloud-shell-storage-westus (West US) New...

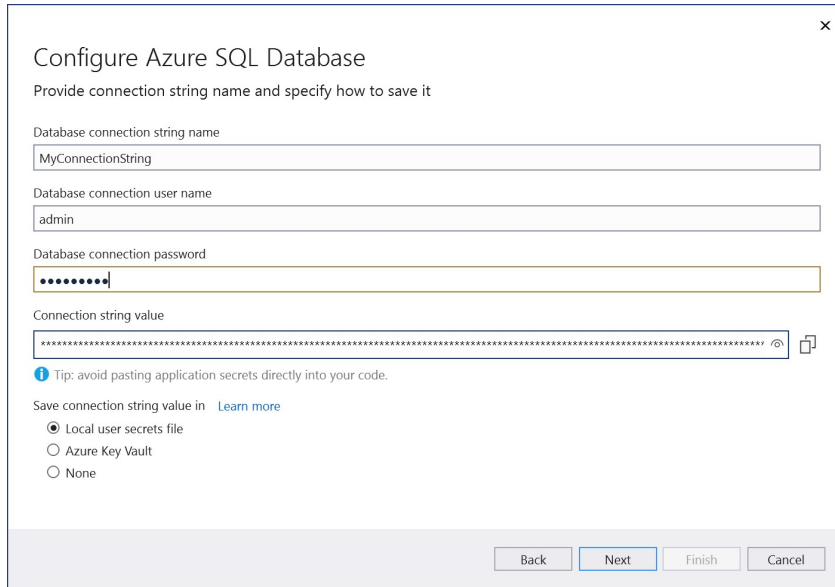
Database server: webapplication3dbserverxyz2 (North Europe) New...

Database administrator username (must have permissions to create): admin1

Database administrator password: <Required>

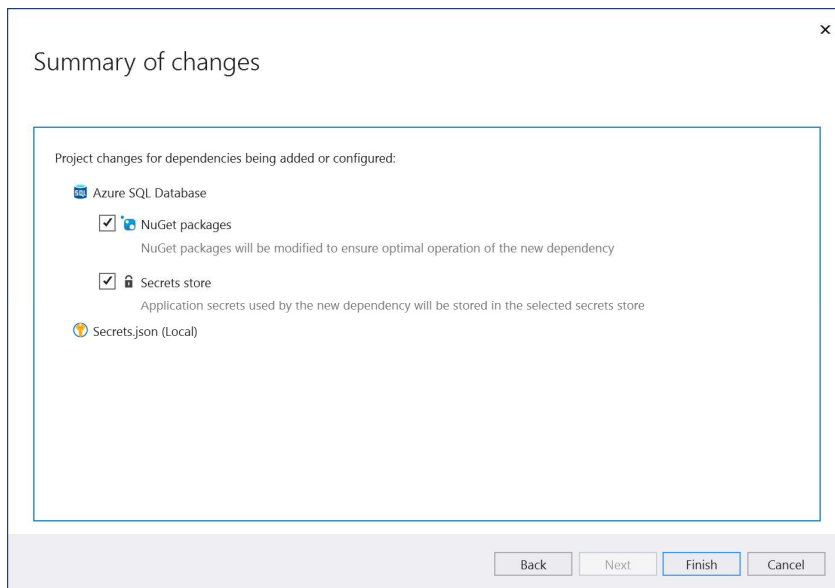
Export... Create Cancel

- c. When the **Configure Azure SQL Database** screen is displayed, the new database appears in the list. Select the new database in the list, and select **Next**.
7. Enter a connection string name, or choose the default, and choose whether you want the connection string stored in a local secrets file, or in [Azure Key Vault](#).



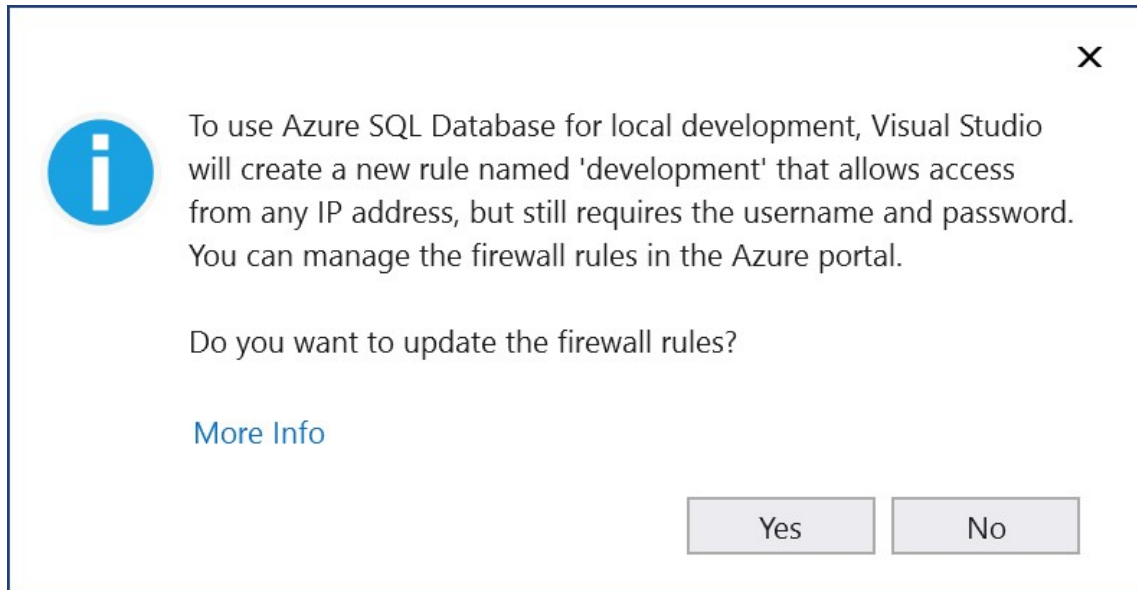
The screenshot shows a dialog box titled "Configure Azure SQL Database" with a subtitle "Provide connection string name and specify how to save it". It contains four input fields: "Database connection string name" (with "MyConnectionString" entered), "Database connection user name" (with "admin" entered), "Database connection password" (with masked characters "••••••••"), and "Connection string value" (with a long masked string "\*\*\*\*\*" and a copy icon). Below the fields is a tip: "Tip: avoid pasting application secrets directly into your code." and a section "Save connection string value in" with three radio buttons: "Local user secrets file" (selected), "Azure Key Vault", and "None". At the bottom are "Back", "Next", "Finish", and "Cancel" buttons.

8. The **Summary of changes** screen shows all the modifications that will be made to your project if you complete the process. If the changes look OK, choose **Finish**.



The screenshot shows a dialog box titled "Summary of changes". It contains a section "Project changes for dependencies being added or configured:" with three items: "Azure SQL Database" (with a checkbox for "NuGet packages" checked and the text "NuGet packages will be modified to ensure optimal operation of the new dependency"), "Secrets store" (with a checkbox checked and the text "Application secrets used by the new dependency will be stored in the selected secrets store"), and "Secrets.json (Local)". At the bottom are "Back", "Next", "Finish", and "Cancel" buttons.

If prompted to set a firewall rules, choose **Yes**.



9. The connection appears under the **Service Dependencies** section of the **Connected Services** tab.

