

Setup *WideWorldImporters* with Docker in MacOS

1. Pull and run Azure SQL Edge image from Docker

- a. Open a terminal window and type in the following command (make sure Docker is running):

```
docker pull mcr.microsoft.com/azure-sql-edge
```

- b. Create a folder named "SQL_Server" or any name (recommended without spaces).
- c. Create a file named "docker-compose.yml" and save it with the following:

```
version: "3"
services:
  sqlserver:
    container_name: azure_sqlserver_db
    image: mcr.microsoft.com/azure-sql-edge:latest
    platform: linux/arm64
    ports:
      - "1433:1433"
    environment:
      MSSQL_SA_PASSWORD: strong$P@ssw0rd!
      ACCEPT_EULA: Y
    volumes:
      - ./mssql_data:/var/opt/mssql/data
    user: 0:0
```

Note: If you are using a M1 Macbook make sure to specify the platform *linux/arm64*. If you are using an intel Macbook you can delete the platform line or specify *linux/amd64*.

Also make sure to specify some strong password.

- d. Inside SQL_Server folder create a new folder named "mssql_data" or any other name. If you choose another name, make sure to change it in the docker-compose.yml file at the volumes section:

```
volumes:
  - ./<your_folder_name>:/var/opt/mssql/data
```

- e. Go to the terminal and move to the SQL_Server directory:

```
cd /Users/<username>/<path>/<to>/SQL_Server
```

- f. Run the docker image:

docker-compose up -d

2. Download WideWorldImporters

- a. Download: <https://github.com/Microsoft/sql-server-samples/releases/download/wide-world-importers-v1.0/WideWorldImporters-Full.bak>
- b. Save this file to the "mssql_data" folder.

3. Download and Install Azure Data Studio

- a. Using homebrew: *brew install --cask azure-data-studio*
- b. Downloading from Microsoft: <https://learn.microsoft.com/en-us/sql/azure-data-studio/download-azure-data-studio?view=sql-server-ver16&tabs=redhat-install%2Credhat-uninstall>

Note: For this specific case, I feel better performance downloading and installing from Microsoft.

4. Connect with Data Studio

- a. Select New Connection
- b. Fill in with the following values (use the password from the docker-compose.yml file). And connect.

Connection Details	
Connection type	Microsoft SQL Server ▼
	<input checked="" type="radio"/> Parameters <input type="radio"/> Connection String
Server *	localhost
Authentication type	SQL Login ▼
User name *	sa
Password
	<input checked="" type="checkbox"/> Remember password
Database	<Default> ▼
Encrypt ⓘ	False ▼

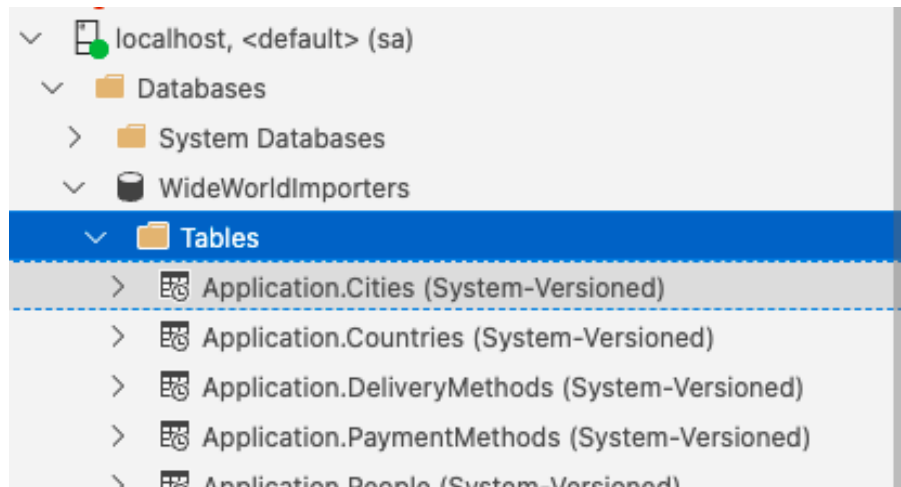
5. Import database

- Right click on the connection created and select “Manage”
- In the “Home” section, select the “Restore” tab
- Fill with the following values:

General	Files	Options
Source		
Restore from	Backup file	
Backup file path	/var/opt/mssql/data/WideWorldImporters-Full.bak	
Database	WideWorldImporters	
Destination		
Target database	WideWorldImporters	

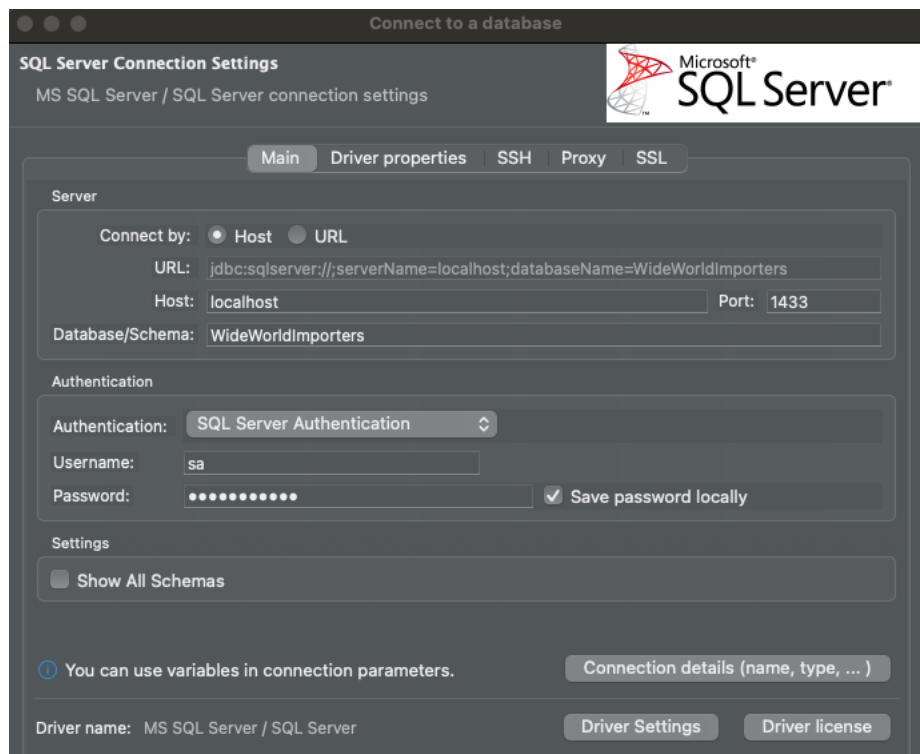
- Click “Restore”

- e. After success, you should see the following:

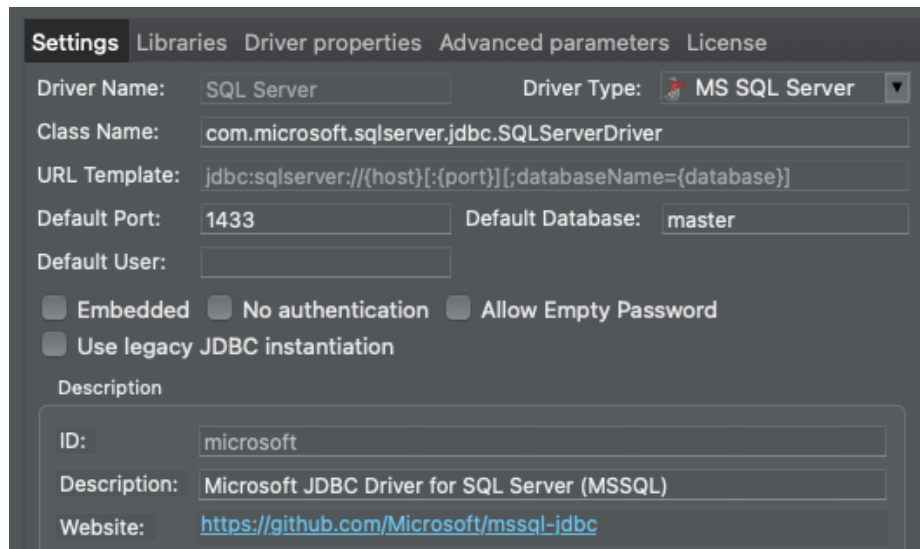


6. Connect with DBeaver

- If you prefer, you can use DBeaver
- Create a new connection and Select SQL Server (Not Azure SQL Server).
- Fill with the following values:



- d. Make sure to download the JDBC driver for SQL Server. Click in Driver Settings and save with the following values:



The screenshot shows the 'Settings' tab of a JDBC driver configuration window. The 'Driver Name' is 'SQL Server' and the 'Driver Type' is 'MS SQL Server'. The 'Class Name' is 'com.microsoft.sqlserver.jdbc.SQLServerDriver'. The 'URL Template' is 'jdbc:sqlserver://{host}[:{port}];databaseName={database}'. The 'Default Port' is '1433' and the 'Default Database' is 'master'. The 'Default User' field is empty. There are three unchecked checkboxes: 'Embedded', 'No authentication', and 'Allow Empty Password'. There is one checked checkbox: 'Use legacy JDBC instantiation'. The 'Description' section contains the following fields: 'ID' is 'microsoft', 'Description' is 'Microsoft JDBC Driver for SQL Server (MSSQL)', and 'Website' is 'https://github.com/Microsoft/mssql-jdbc'.

Settings	Libraries	Driver properties	Advanced parameters	License
Driver Name:	SQL Server	Driver Type:	MS SQL Server	
Class Name:	com.microsoft.sqlserver.jdbc.SQLServerDriver			
URL Template:	jdbc:sqlserver://{host}[:{port}];databaseName={database}			
Default Port:	1433	Default Database:	master	
Default User:				
<input type="checkbox"/> Embedded <input type="checkbox"/> No authentication <input type="checkbox"/> Allow Empty Password				
<input checked="" type="checkbox"/> Use legacy JDBC instantiation				
Description				
ID:	microsoft			
Description:	Microsoft JDBC Driver for SQL Server (MSSQL)			
Website:	https://github.com/Microsoft/mssql-jdbc			

7. Data Warehouse

- a. Follow the steps 2 and 5 to setup the DW using the following download link:
<https://github.com/Microsoft/sql-server-samples/releases/download/wide-world-importers-v1.0/WideWorldImportersDW-Full.bak>

8. Setup in Windows with SQL Server Management Studio

- a. Download <https://github.com/Microsoft/sql-server-samples/releases/download/wide-world-importers-v1.0/WideWorldImporters-Full.bak>
- b. Open SQL Server Management Studio and connect to the target SQL Server instance (localhost).
- c. Right-click on the Databases node, and select Restore Database.
- d. Select Device and click on the button ...
- e. In the dialog Select backup devices, click Add, navigate to the database backup in the filesystem of the server, and select the backup. Click OK.
- f. If needed, change the target location for the data and log files, in the Files pane. Note that it is best practice to place data and log files on different drives.
- g. Click OK. This will initiate the database restore. After it completes, you will have the database WideWorldImporters installed on your SQL Server instance.