

Lesson 5: Data Persistence and Manipulation

-EF (database-First using LocalDB)

Entity Framework (EF) is an object-relational mapper that enables .NET developers to work with relational data using domain-specific objects. It eliminates the need for most of the data-access code that developers usually need to write.

LocalDB is created specifically for developers. It is very easy to install and requires no management, yet it offers the same T-SQL language, programming surface and client-side providers as the regular SQL Server Express.

We have seen this approach in [Create Entity Data Model](#) where we created the EDM, context and entity classes from an existing database. So, when you generate EDMX from an existing database then it is a Database First approach.

Steps to connect LocalDB to Visual Studio Server Explorer

1. Open command prompt
2. Run `SqlLocalDB.exe start v11.0`
3. Run `SqlLocalDB.exe info v11.0`
4. Copy the **Instance pipe name** that starts with `np:\...`
5. In Visual Studio select **TOOLS > Connect to Database...**
6. For Server Name enter `(localdb)\v11.0`. If it didn't work, use the **Instance pipe name** that you copied earlier. You can also use this to connect with SQL Management Studio.

7. Select the database on next dropdown list
8. Click OK