

Code-first Entity Framework with Legacy Databases

Introduction and Project Overview



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Module Overview



- What is reverse engineering
- What code-first means
- Entity Framework Prerequisites
- Installation into a new project
- Why not use the Microsoft Generator?
- Demo

What Is Reverse Engineering?

- Take a database
- Read information
- Generate code first
 - Database context
 - POCO Classes
 - Configuration mappings
 - Stored procedure mappings
 - Table valued function mappings



Entity Framework Prerequisites

- Install Entity Framework 6 Tools for Visual Studio available here:
 - <http://bit.ly/1BGHwqM>
 - <https://www.microsoft.com/en-us/download/details.aspx?id=40762>
- You only need to do this once

What Code-First Means

- Code-First is a bad name
- “Code-based modelling” is clearer
- EF7 will support Code-First only
- Code-First is better
 - Source control merging, conflicts, and code reviews
 - Developers know how to write and debug code

Installation into a New Project

- Visual studio extension and not a NuGet package
- Install EntityFramework by running the following command in the Package Manager Console

```
PM> Install-Package EntityFramework
```

- Install the generator via
 - Download VSIX installer via
 - <http://www.ReversePOCO.com>
 - <https://efreversepoco.codeplex.com/releases>
 - Visual Studio: Tools → Extensions and Updates...
 - Visual Studio: Add New Item...

[Extensions](#) > [Templates](#) > EntityFramework Reverse POCO Generator

EntityFramework Reverse POCO Generator



Free

Reverse engineers an existing database and generates EntityFramework Code First POCO classes, Configuration mappings and DbContext.

CREATED BY

[Simon Hughes](#)

UPDATED

9/7/2015

REVIEWS

★★★★★ (60) [Review](#)

VERSION

2.15.2

SUPPORTS

Visual Studio 2015, 2013, 2012

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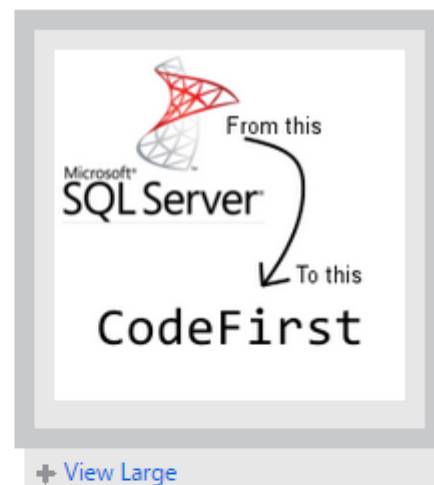
TAGS

[Data](#), [Entity Framework](#), [Code Generator](#), [Database](#), [reverse engineering](#), [C#](#), [SQL Server](#), [VSIX](#), [POCO](#), [Code First](#), [CodeFirst](#), [reverse poco](#)

DESCRIPTION

[REVIEWS \(60\)](#)[Q AND A \(168\)](#)

Reverse engineers an existing database and generates EntityFramework Code First POCO classes, Configuration mappings and DbContext. Includes support for WCF. Works for **SQL Server** and **SQL Server Compact 4.0**

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EntityFramework Reverse POCO Code First Generator

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Project Description

Reverse engineers an existing database and generates EntityFramework Code First POCO classes, DbContext and Configuration mappings. Works for **SQL Server** and **SQL Server Compact 4.0**

This has now been made into a visual studio extension. See documentation tab for further details.

Head over to here to watch a video on how it works. <http://www.reversepoco.com>

Highly customisable output

This generator was designed to be customisable from the very beginning, and not fixed and rigid like other generators.

Full control over the generated code

» Specify additional base interfaces for your DB context interface. E.g. IDisposable

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CURRENT 2.15.2

DATE Mon Sep 7, 2015 at 8:00 AM

STATUS Stable

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RATING ★★★★★ 0 ratings

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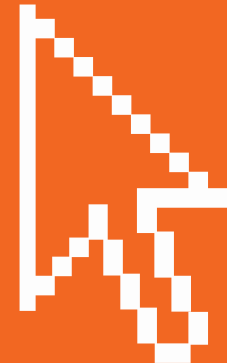
Why Not Use the Microsoft Generator?

- Microsoft generator is rigid
- Generate beautiful code
- Automatically re-generate the code
- Speed
- Consistency
- Flexibility

Demo

Reverse Engineer Northwind Database

<https://northwinddatabase.codeplex.com>



Summary



Installed EntityFramework Tools

Installed EntityFramework

Installed EntityFramework Reverse POCO Generator

Reverse engineered the Northwind database

Retrieved data and display it