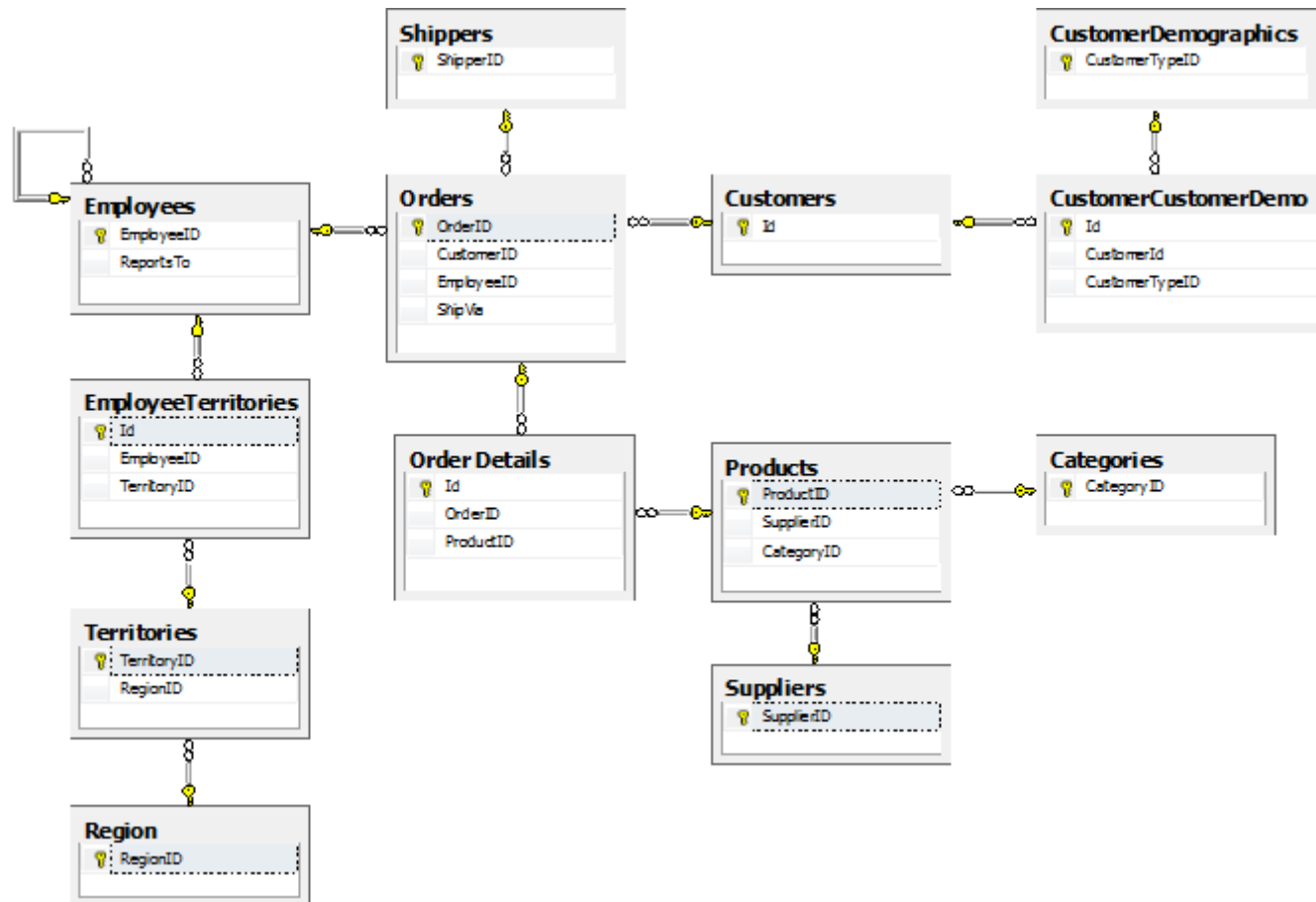


Elements FX and Code Generator Rapid Application Development

Northwind Traders
nTier Web application

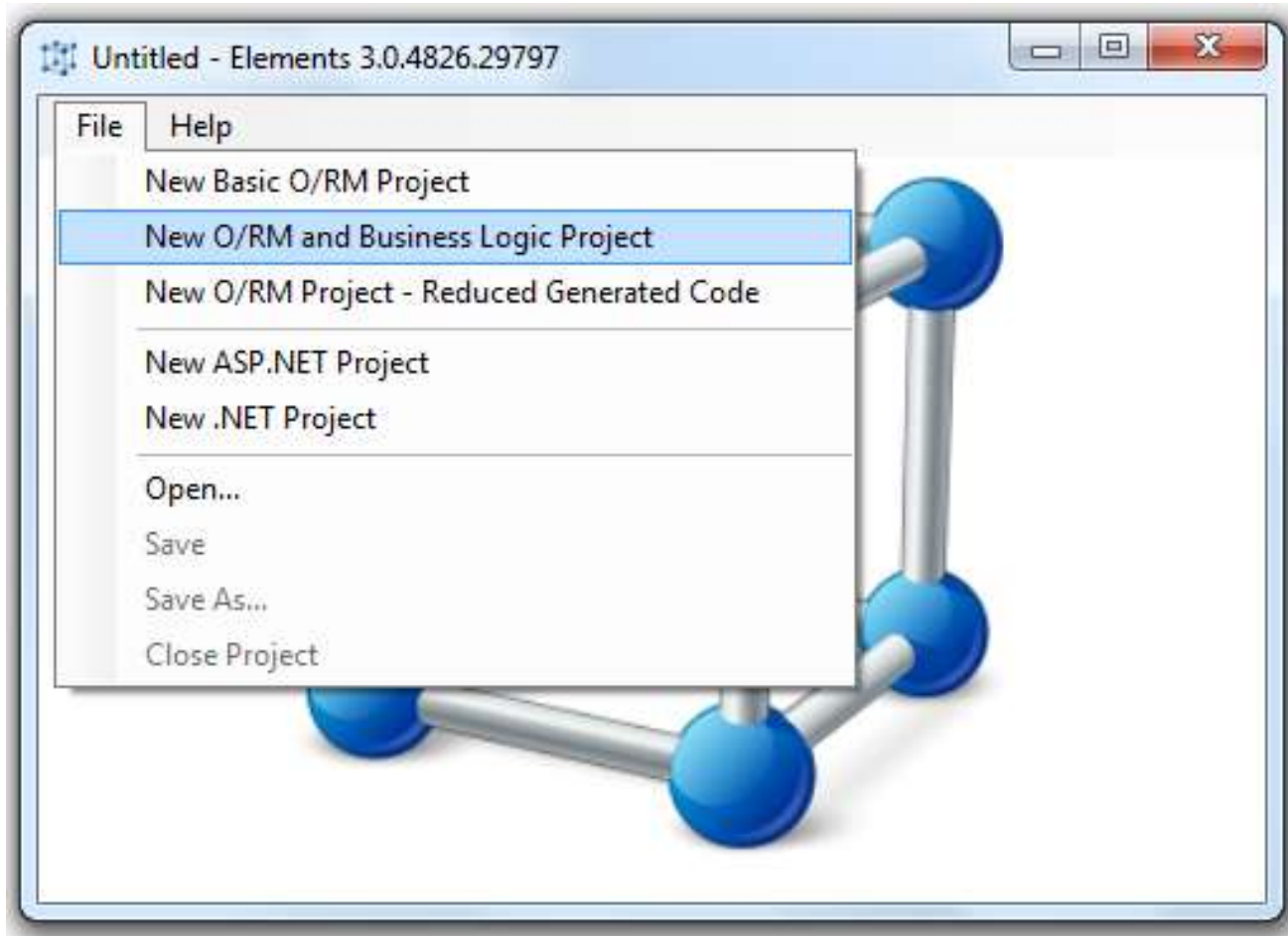
Database Model



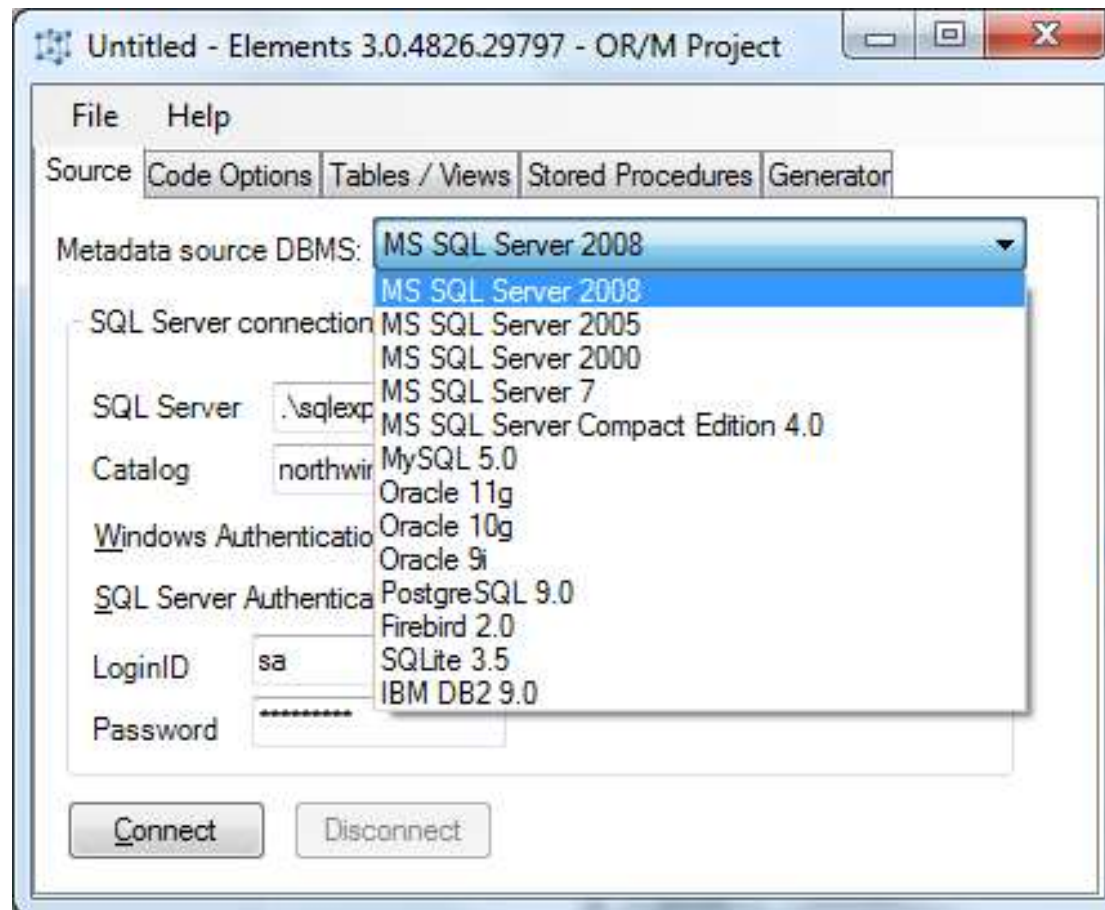
#1 Prepare solution

- Prerequisite:
 - Install PostSharp 2.1 Starter Edition. Free license is available at <http://www.sharpcrafters.com/>
 - PostSharp is free library that enables developers to use concepts defined by Aspect Oriented Paradigm (AOP).
- Unzip “MySolution - All Required Files For New Wep Application.zip” to “c:\ElementsDemo” or some other target directory. Contents:
 - Libraries – contains assemblies required by generated code.
 - MySolution.Web – contains scripts, styles, skins, RESX files and empty web forms.

#2 OR/M and Business Logic Layers



Enter connection parameters



Use default code options

Untitled - Elements 3.0.4826.29797 - OR/M Project

File Help

Source Code Options Tables / Views Stored Procedures Generator

SP wrapper class - Generates SP class.

C:\Program Files (x86)\Elements Framework\Templates\SP.SP.elttemplate

C# solution namespace prefix used by all layers MySolution

Catalog class name Catalog

----- _Catalog.cs

Data (transfer) object and descriptor class - Generates entity class derived from DataObjectBase. Requires BizElements.BusinessLayer library. Same performance and more fea

C:\Program Files (x86)\Elements Framework\Templates\DataObject.ORM.elttemplate

C# solution namespace prefix used by all layers MySolution

Parent members - semicolon delimited tablename prefixes to be removed

Parent suffix Parent

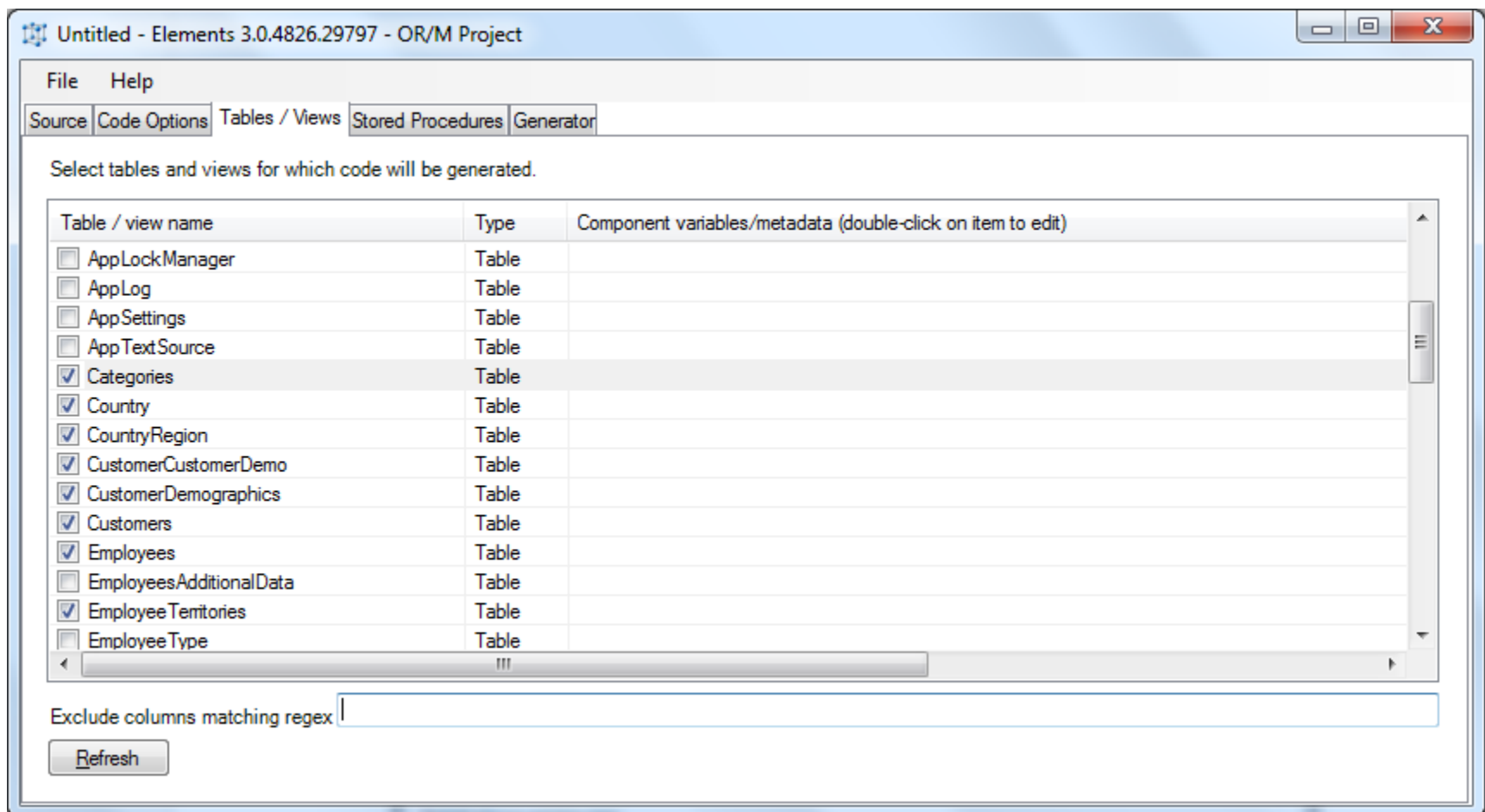
Recursive parent suffix Prior

Parallel parent suffix

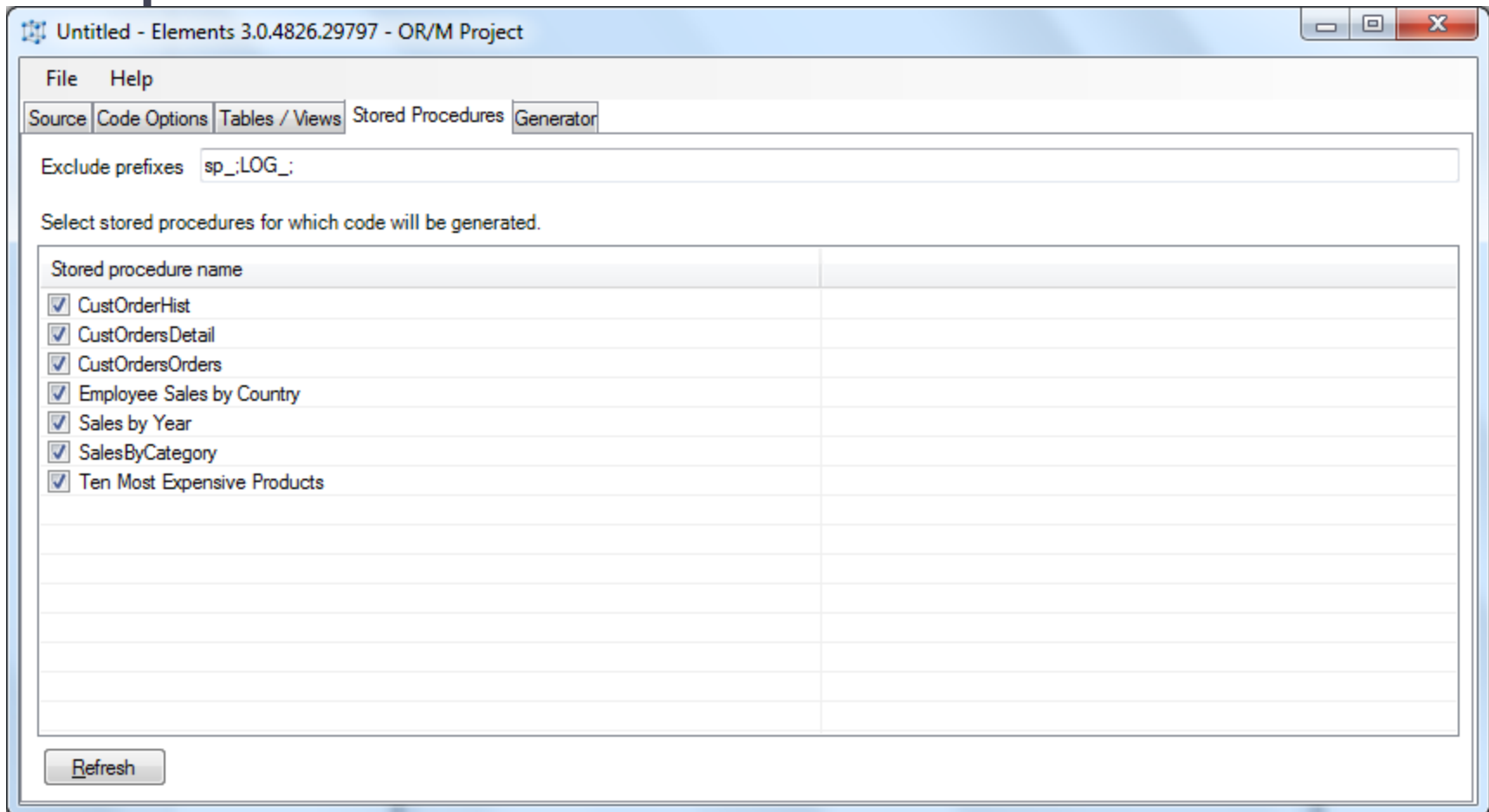
Semicolon delimited rules for table name suffix replacement, eg: "ies"->"y";"s"->"

Generate XML serialization attributes No

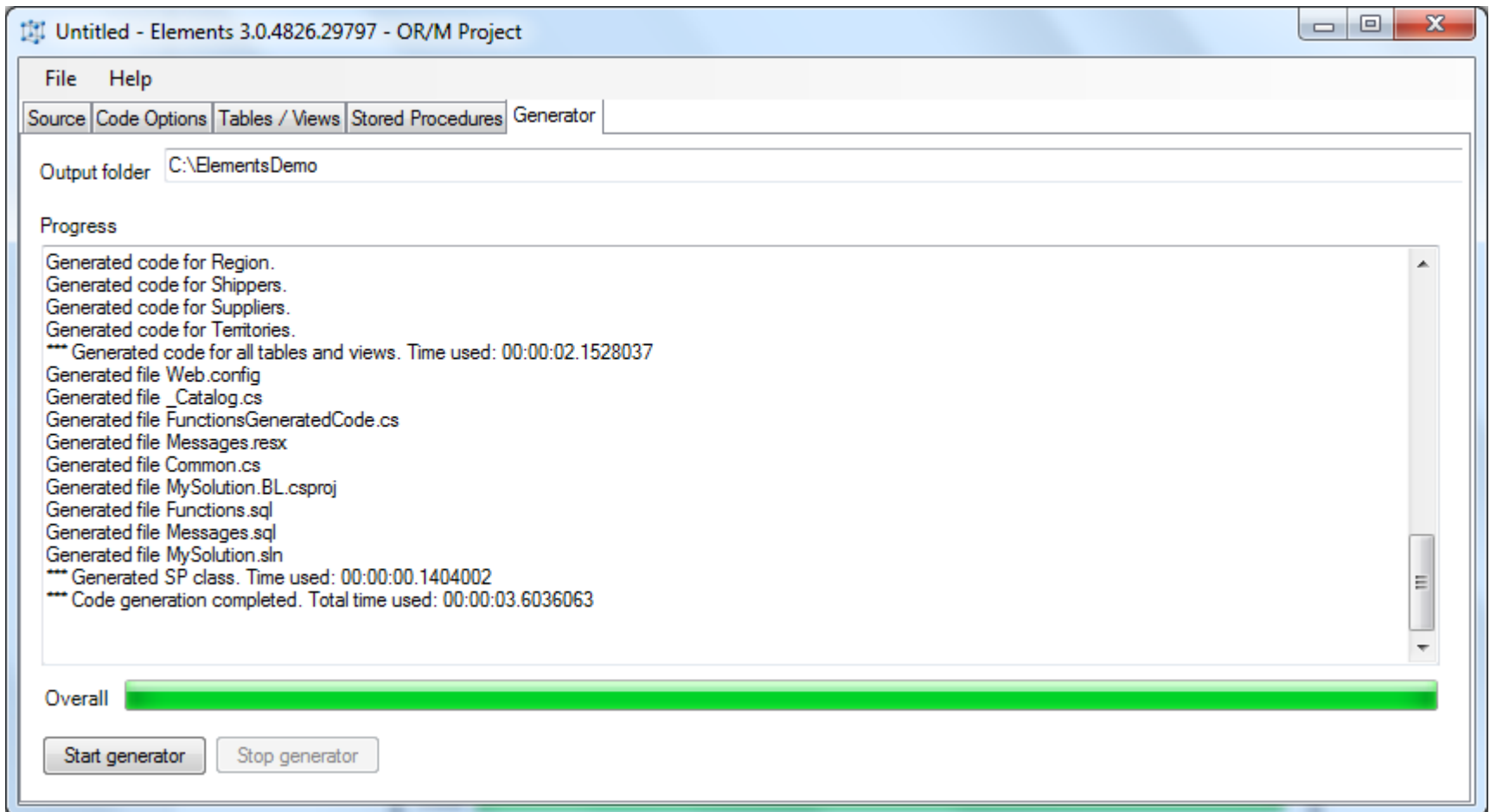
Select tables and views to map



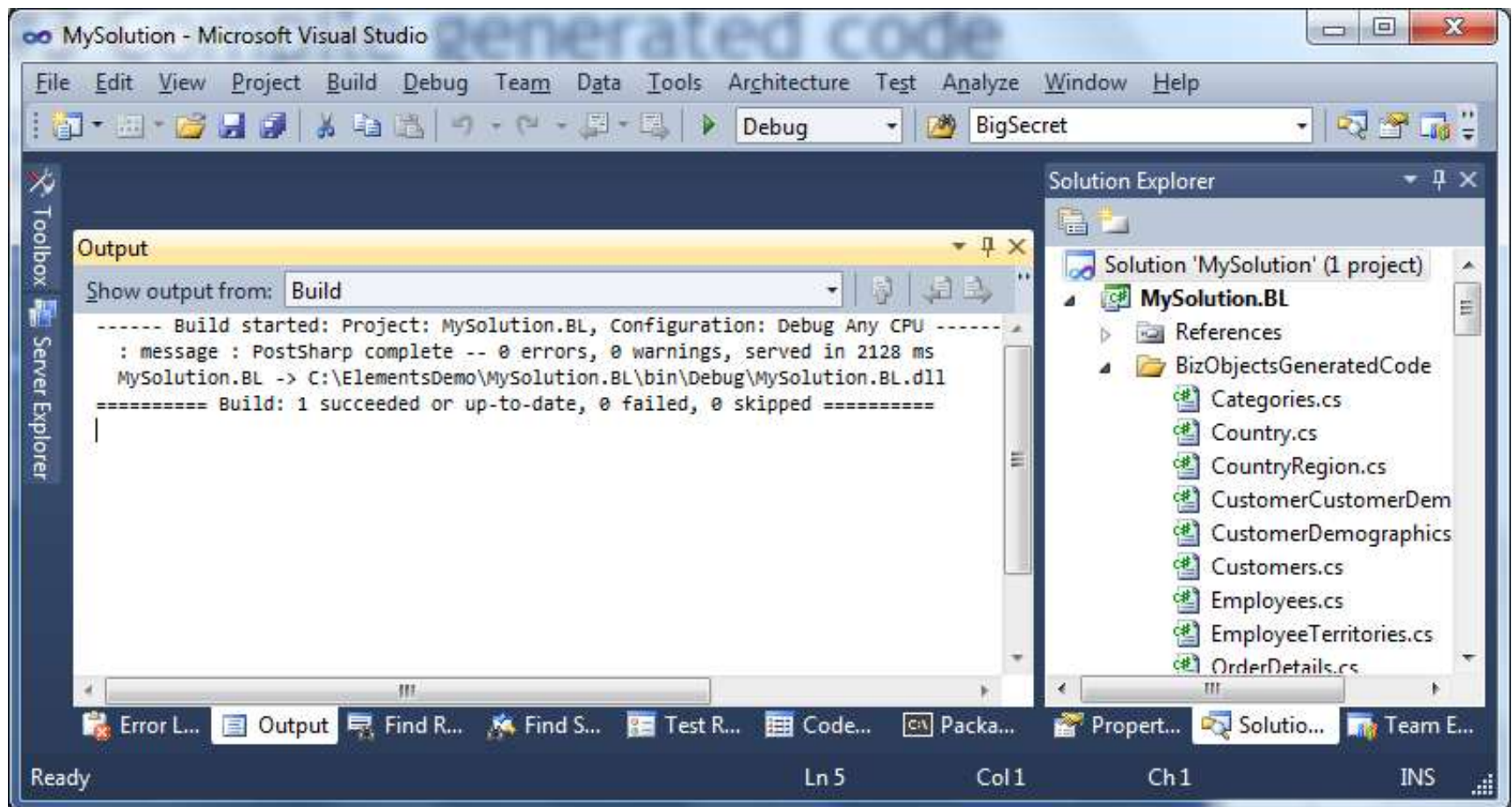
Select stored procedures to wrap in helper methods



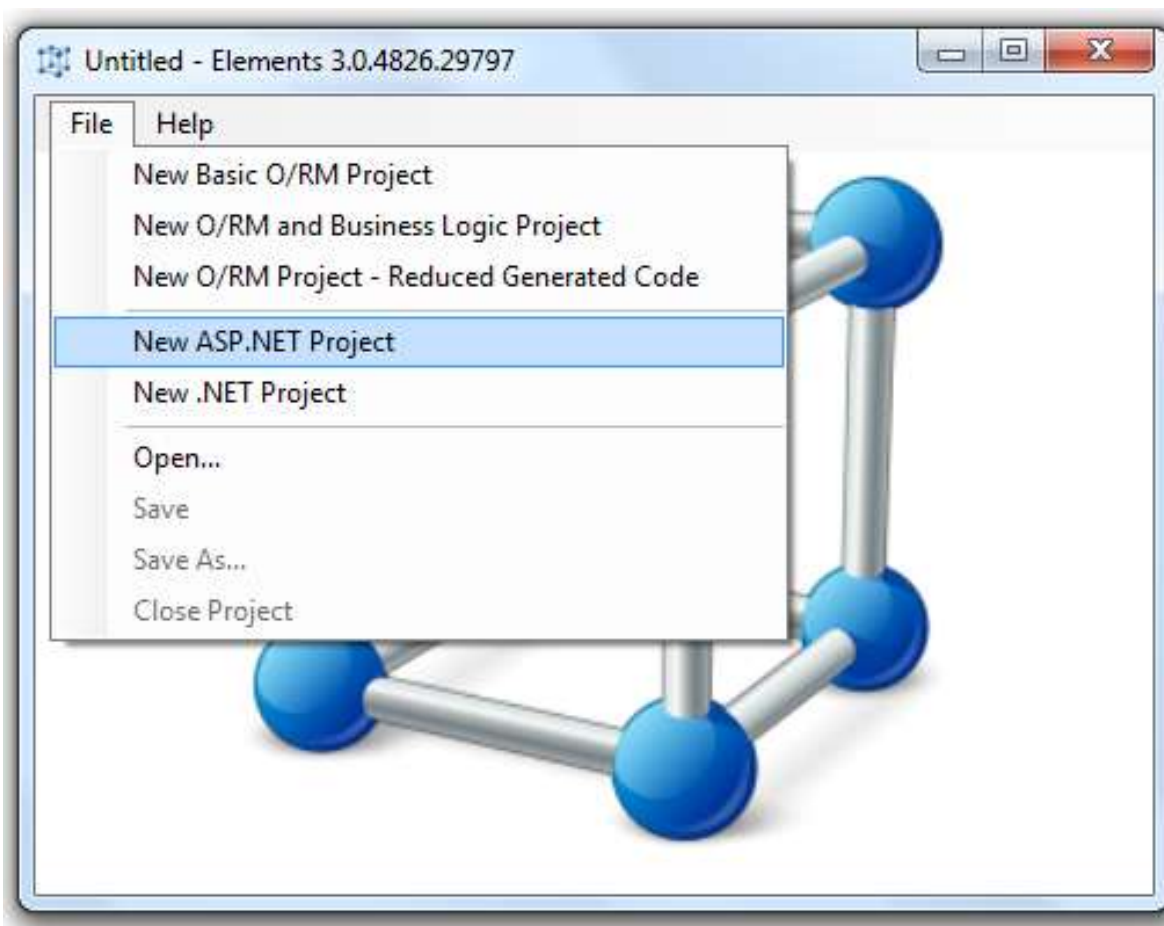
Generate code!



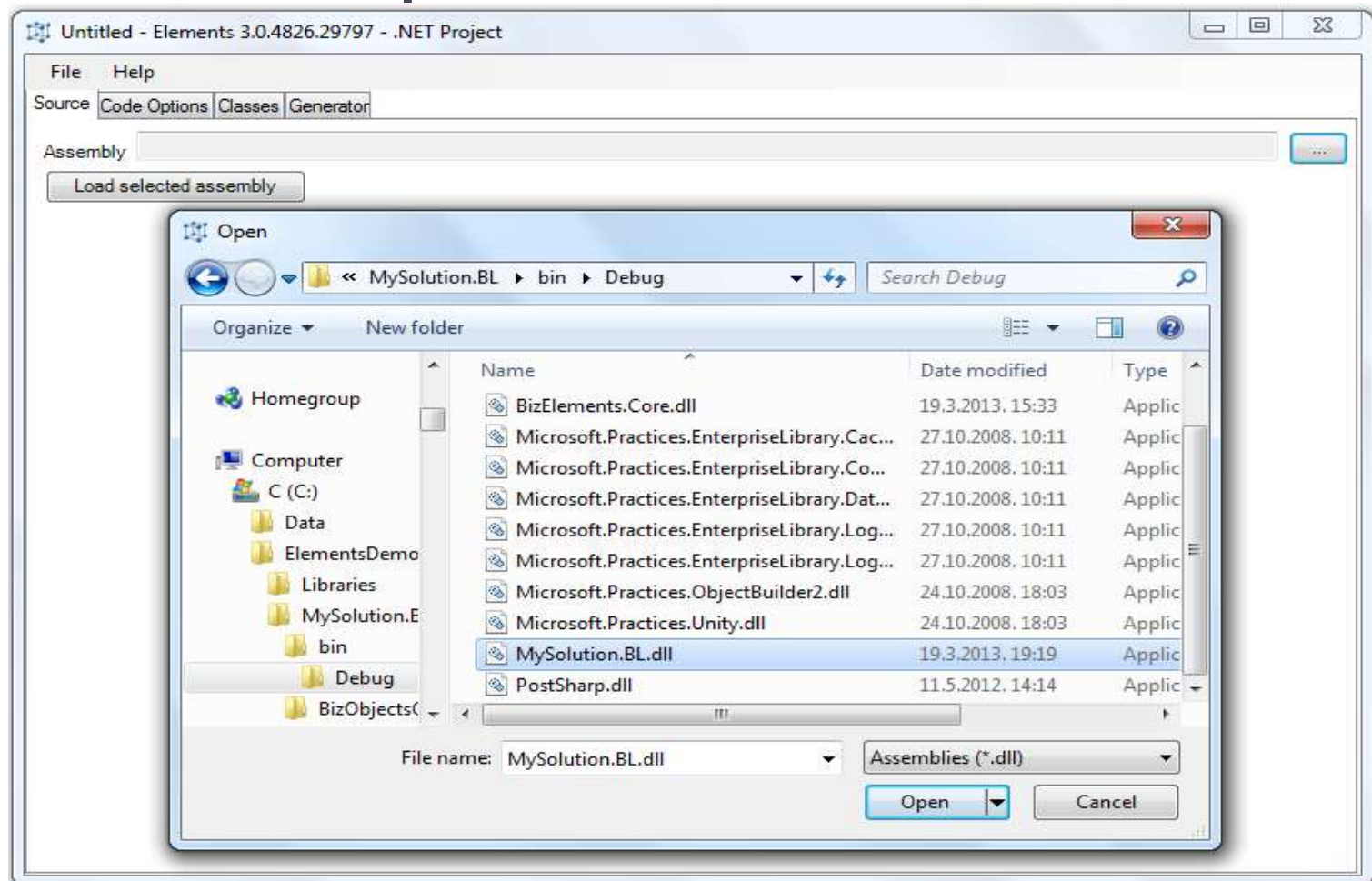
#3 Compile generated code



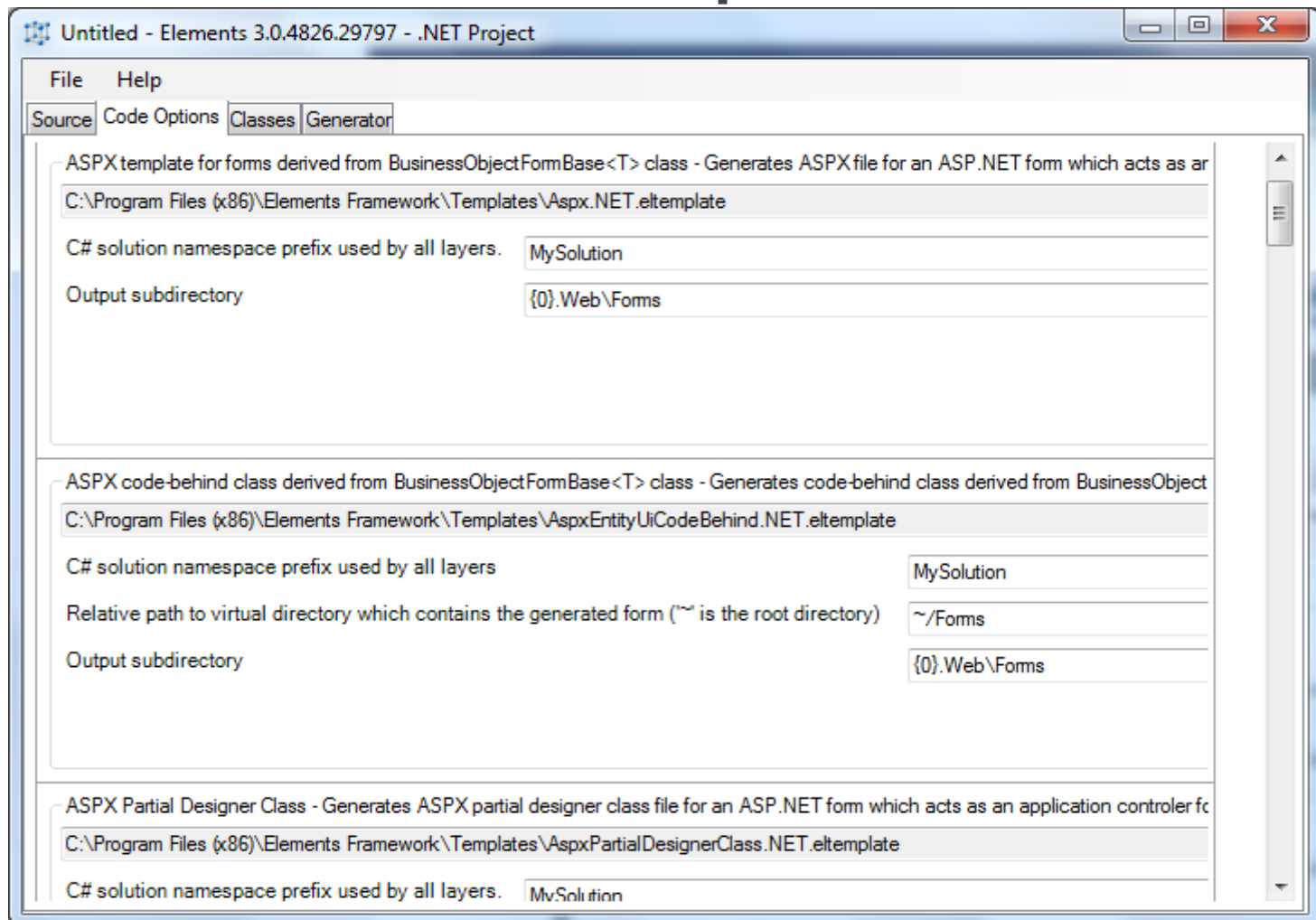
#4 Web layer - ASP.NET project



Open MySolution.BL.dll compiled in previous step



Use default code options



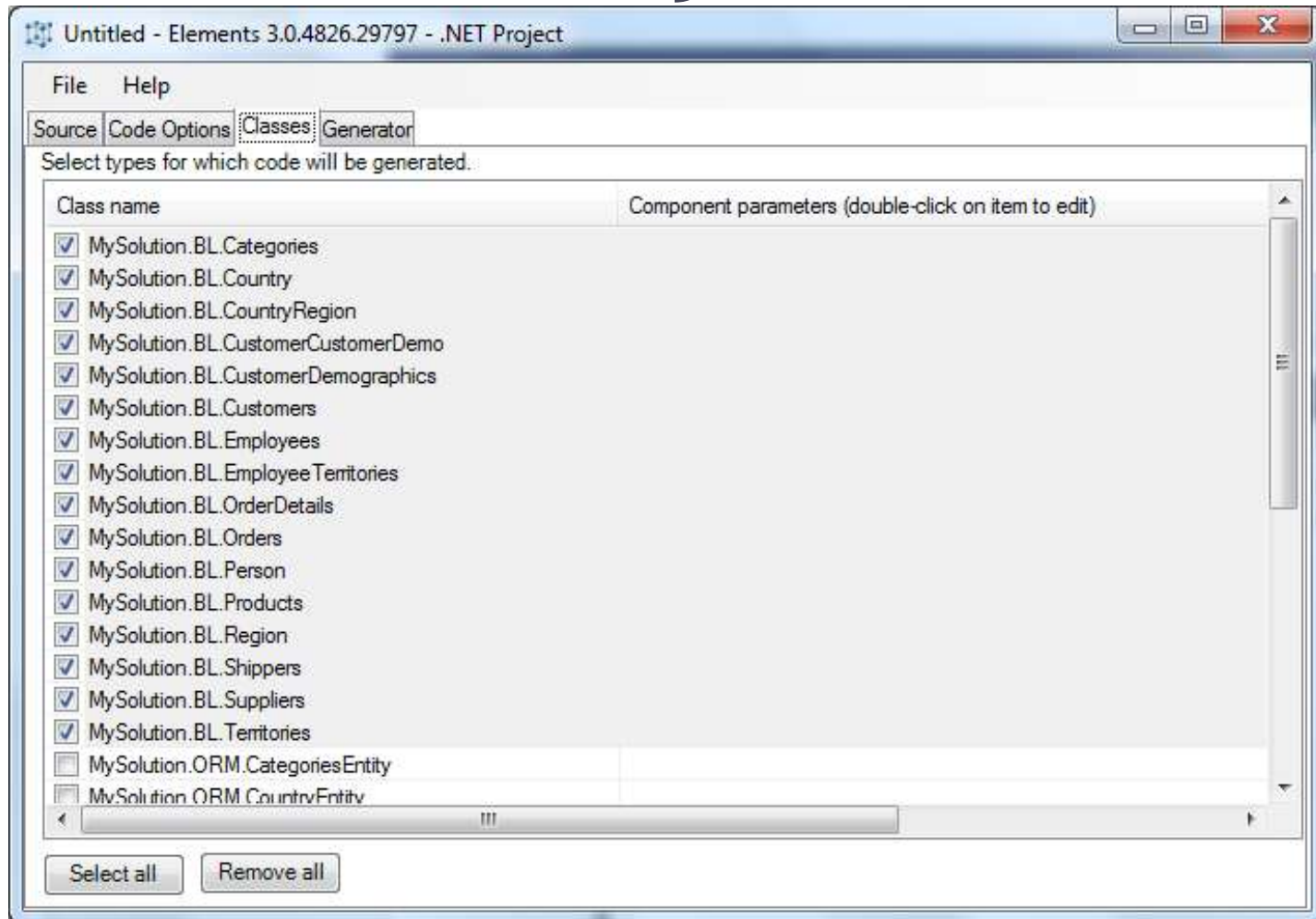
The screenshot shows the 'Code Options' dialog in the Elements IDE. The dialog has a title bar 'Untitled - Elements 3.0.4826.29797 - .NET Project' and a menu bar with 'File' and 'Help'. Below the menu bar are four tabs: 'Source', 'Code Options' (selected), 'Classes', and 'Generator'. The 'Code Options' tab contains three sections, each with a description, a template path, and configuration fields.

Section 1: ASPX template for forms derived from `BusinessObjectFormBase<T>` class - Generates ASPX file for an ASP.NET form which acts as ar
C:\Program Files (x86)\Elements Framework\Templates\Aspx.NET.eltemplate
C# solution namespace prefix used by all layers.
Output subdirectory

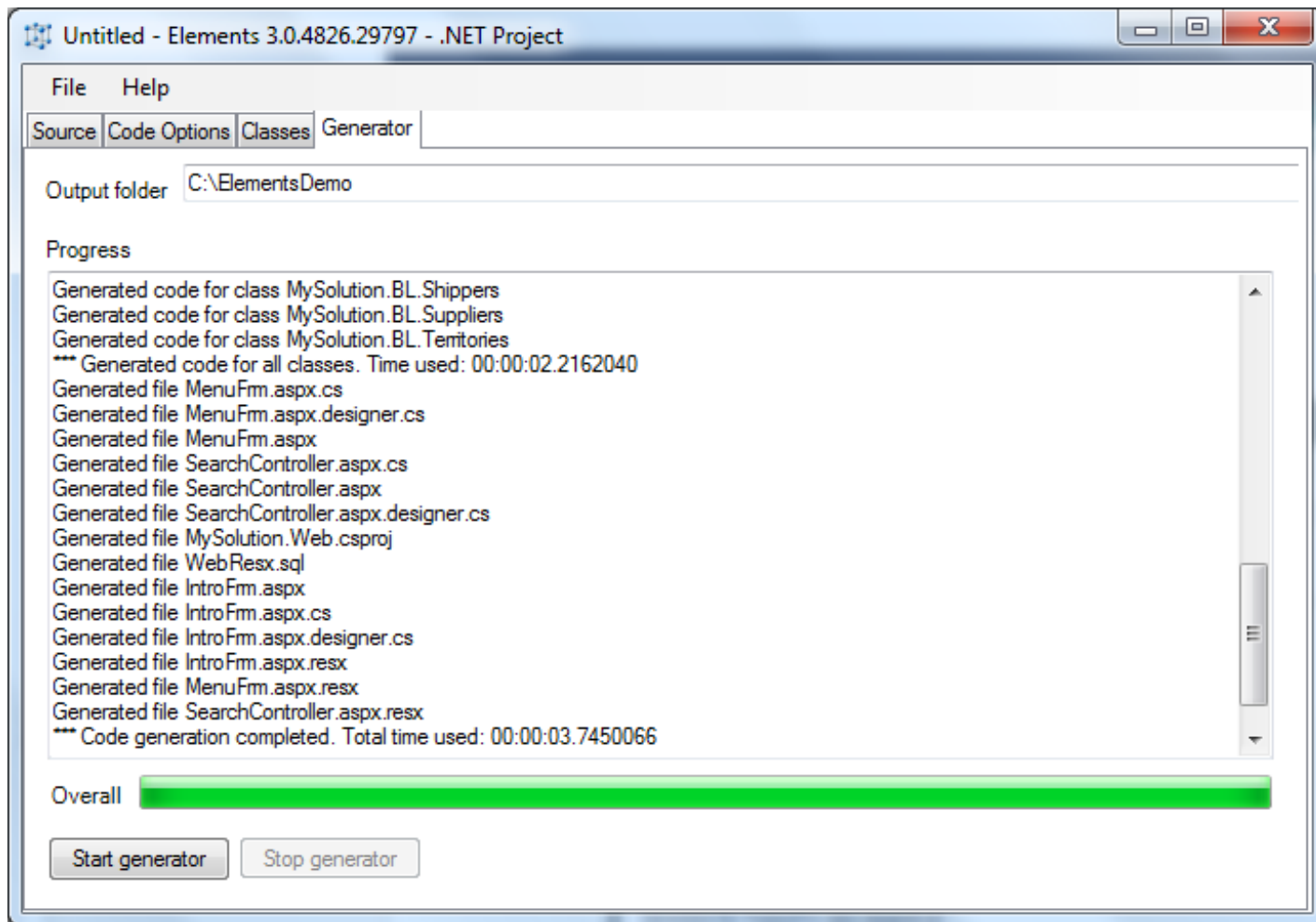
Section 2: ASPX code-behind class derived from `BusinessObjectFormBase<T>` class - Generates code-behind class derived from `BusinessObject`
C:\Program Files (x86)\Elements Framework\Templates\AspxEntityUiCodeBehind.NET.eltemplate
C# solution namespace prefix used by all layers
Relative path to virtual directory which contains the generated form (~ is the root directory)
Output subdirectory

Section 3: ASPX Partial Designer Class - Generates ASPX partial designer class file for an ASP.NET form which acts as an application controller fc
C:\Program Files (x86)\Elements Framework\Templates\AspxPartialDesignerClass.NET.eltemplate
C# solution namespace prefix used by all layers.

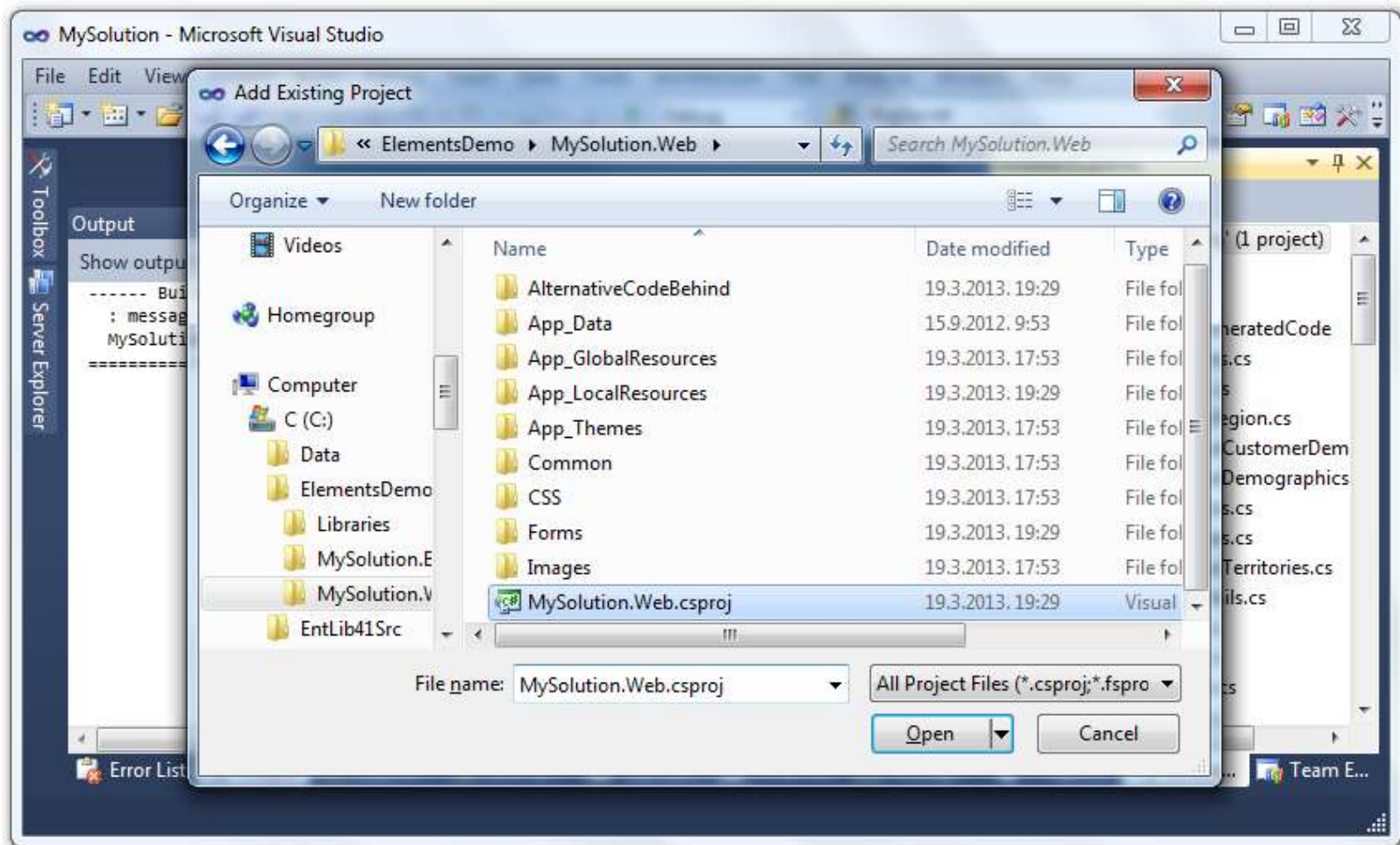
Select domain objects



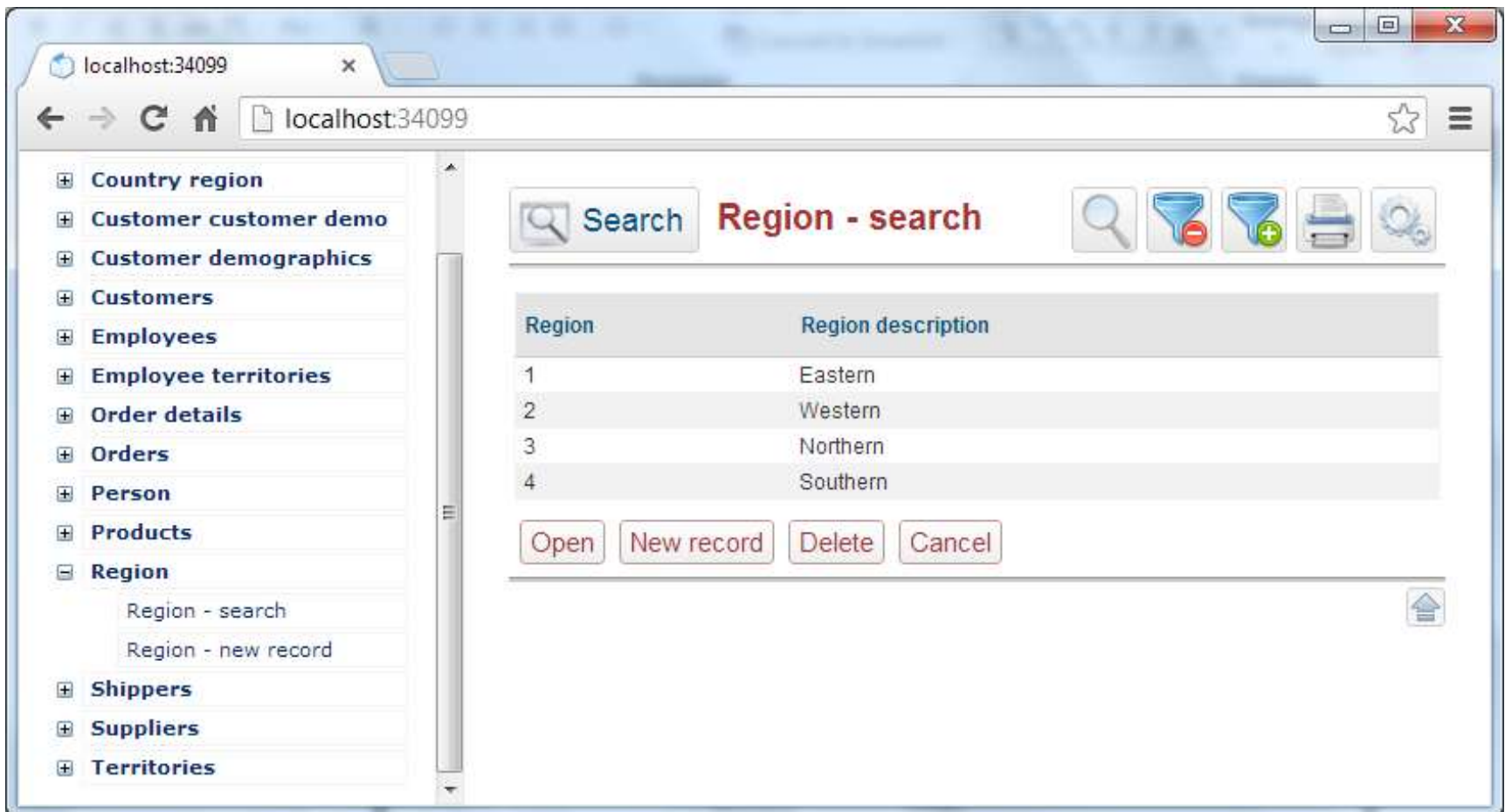
Generate code!



#5 Add generated Web project to VS solution



Set Web as StartUp project, Default.aspx as start page and press F5 😊



Suppliers - Tokyo Traders (ID: 4)

Company name*	Tokyo Traders
Contact name	Yoshi Nagase
Contact title	Marketing Manager
Address	9-8 Sekimai Musashino
City	Tokyo
Region	
Postal code	100
Country	Japan
Phone	(03) 3555-5011
Fax	
Home page	

Products items

Products items

Product name	Category	Quantity per unit	Unit price	Units in stock	Units on order	Reorder level	Discontinued
Chai	Confections	10 boxes x 20 bags	18,99	39	0	5	<input type="checkbox"/>
Mishi Kobe Niku	Meat/Poultry	18 - 500 g pkgs.	97,00	29	0	0	<input checked="" type="checkbox"/>
Ikura	Seafood	12 - 200 ml jars	31,00	31	0	0	<input type="checkbox"/>
Longlife Tofu	Produce	5 kg pkg.	10,00	4	20	5	<input type="checkbox"/>

New record

Edit

Delete

Details...

Save

Delete

Cancel

Conclusion

- Not a single line of code was written to create a running prototype.

Where do I go from here?

- Explore bundled samples to learn how to use Elements, apply different software architectures and customize generated code.
- Check out examples in the manual. Start with objects in BizElements.Core namespace:
 - SQL statement classes (Select, Update, Delete)
 - IEntity
 - IEntityDAO