Removing the dependency on Settings.Settings for connection Strings

# Problem

By default, when you generate datasets with the dataset designer, the designer stores the ConnectionString for the database in the App.Config. This is good. However, this value is not used at runtime when your DataTier is run as part of a larger website (just as you do for an n-Tier Architecture).

*WORSE*, when the runtime cannot find the connection string (remember the App.config is ignored) it uses a **default value** that is hard coded into the generated C# code (Remember the dataset designer’s sole job is to automatically generate C# code to access the database).

This means if you try to run your application on another computer, the connection string will not be found and the default (unchangeable) value will be used – which will be wrong (as it is out of date).

To fix the default value, the Settings.Settings file needs to be regenerated. This does not happen automatically or when the solution is built. This is not ideal.

# Solution

Instead, we will disable the default value (yay) and copy the connection string to the correct location in the *web.config*.

## Steps

1. Open your assignment
2. Disable the default value attribute for the connection string
   1. Locate your DataAccess/DataTier project
   2. Expand the *Properties* sub folder
   3. Double click on the *Settings.Settings* file
   4. Select the row, in the designer, with the connection string you want to change.
   5. In the *Properties* pane
      1. Change *GenerateDefaultValueInCode* to **False**
   6. Save the *Settings.Settings* file and close it
3. Copy the connection string to the correct location in the *web.config*
   1. In your DataAccess/DataTier
   2. Open the *App.config* file
   3. Locate the *connectionStrings* element. It looks similar to this:

<connectionStrings>

<add name="DataAccess.Properties.Settings.SouthwindConnectionString"

connectionString="Data Source=polydomy;Initial Catalog=Southwind;Integrated Security=True"

providerName="System.Data.SqlClient" />

</connectionStrings>

* 1. Copy the entire XML element
  2. Open the *web.config* in your PresentationTier
  3. Inside the *configuration* element, paste the block you copied from the *App.config*
  4. The end result should look like this:

<?xml version="1.0"?>

<!--

For more information on how to configure your ASP.NET application, please visit

http://go.microsoft.com/fwlink/?LinkId=169433

-->

<configuration>

<connectionStrings>

<add name="DataAccess.Properties.Settings.SouthwindConnectionString"

connectionString="Data Source=polydomy;Initial Catalog=Southwind;Integrated Security=True"

providerName="System.Data.SqlClient" />

</connectionStrings>

<system.web>

<compilation debug="true" targetFramework="4.5" />

<httpRuntime targetFramework="4.5" />

</system.web>

</configuration>

1. PROFIT!

# Closing Notes

Now when you move your application you just need to change the connection string in the *web.config*. No rebuild or code regeneration is required.

Be aware, the DataSet designer will always use the connection string from the *App.config* in the DataAccess Tier – so don’t delete it!

Special thanks to Aden who first pointed out the complexity of this problem this semester.