Sage 300 Web Screens SDK

Web Subclassing Compilation and Deployment Wizard

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1. Overview

This document is intended to serve as a guide for illustrating how to use the Web Subclassing Compilation and Deployment Wizard which is an executable.

The Web Subclassing Compilation and Deployment Wizard is a partner facing wizard for the consumption, or not, of subclassing configurations that will add extended properties to Sage 300 MVC models and then deploy the compiled assemblies to the local installation.

This wizard will determine which compiler to use and will prevent the wizard from continuing if no compiler is detected.

1. Accessing the Wizard

The Sage.CA.SBS.ERP.Sage300.SubclassCompilationDeploymentWizard.exe is in the SDK’s bin/wizards folder.

A screenshot of a computer

Description automatically generated

Since the wizard will be compiling, it MUST be **Run As Administrator**

1. Compilers

A bit now on compilers on a developer machine, and maybe eventually a client machine if this wizard is to be moved the application like the Configurations wizard:

* Visual Studio uses the ***msbuild*** utility for compiling and it can also be driven outside of the Visual Studio IDE.
* The .NET SDK uses the ***dotnet build*** utility (which is really a wrapper around the underlying msbuild utility) for compiling

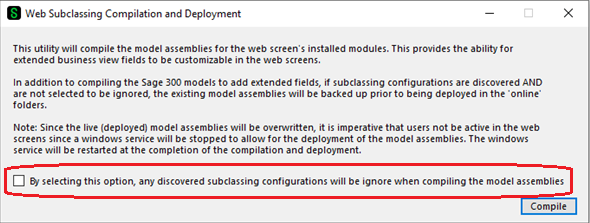
The .NET Framework delivers the ***msbuild*** utility and it was originally assumed that this utility could be used for all cases, but was soon discovered that the msbuild utility in the .NET Framework is ONLY there for compatibility and is only version 5.0. Our utility because of the .NET Framework version we are using (4.8) requires version 6+. Therefore, this *msbuild* utility is not an option.

Therefore, upon discovery, the wizard will use the Visual Studio ***msbuild*** first if it is compatible otherwise the wizard will use the .NET SDK ***dotnet build*** if it is compatible and abort the utility if no compatible compilers are found.

1. Using the Wizard

When the wizard first loads, it will scan the system for compatible compilers and will be prevented from continuing if no compatible compilers are discovered.

* 1. Ignore Configurations Option



As noted in the screenshot above, the partner also can regenerate the model assemblies AND not include any configurations.

This is a particularly useful option when wanting to “reset” and remove any subclassed fields from the model assemblies.

Therefore, by selecting this option, the model assemblies will be regenerated without any subclassed properties.

* 1. Compiling and Deploying

When the Compile button is selected, the following will occur:

* The module zip files are copied down to and unzipped in the user’s **temp + “Sage300Projects”** folder and that’s where the compiler will pick up the csproj file and its files
* A backup folder will be created in the user’s **temp + “Sage300Backups” + now()** folder as this become the location to copy any existing model assemblies that will be overwritten in the **...\Online\Web\bin** folder
* A build folder will be created in the user’s **temp + “Sage300Build”** folder as this is where the compiler will compile the model projects
* The projects will be iterated
  + If configurations exist for a module AND they have not been chosen to be excluded, the model’s class source file will be modified to include the specified prooperties in the configuration files. The below screenshot is an example of a configuration used in this document:

A screenshot of a computer

Description automatically generated

* + The model project will be compiled
  + The model assembly will be backed up from the **...\Online\Web\bin** folder and copied to the backup folder.

Note that only the **...\Online\Web\bin** version of the assembly needs to be backed up since the other versions in the **WebApi**, **Worker**, etc. folders are the same copies.

* + The model assembly will be copied to the **...\Online\Web\bin** folder and optionally to **Worker**, **WebAPI**, **WebFR**, etc. IF a version of the file to be copied exists in these other areas.

The worker service is also stopped on the first assembly copied and re-started when the compilation and deployment is complete. Therefore, running this wizard as “Administrator” ensures that valid permissons are given to the task to be able to stop and start the windows service.

* When the wizard is complete and before exiting, the wizard will remove the source created to build the assemblies from the temp folder.
  + In the wizard’s build folder, this is where the partner will gather the model assemblies for deployment to their customer’s .../Online/Web/bin, .../Online/Worker, .../Online/WebApi/bin folders as applicable.
  + In the future, if this wizard were to be part of the application, the partner would need to simply deliver the configuration files since the client or customer (administrator) could compile and deploy as needed.