

# C# to ActionScript tutorial

In this tutorial you will learn what must be done to start developing actionscript applications in c# with the jsc compiler. Jsc enables you to write your code in c# and it will be compiled into actionscript for you.

Post your questions at [google groups](#).

Read my blog at [wordpress](#).

Visit [jsc homepage](#).

View [the result](#) of this tutorial.

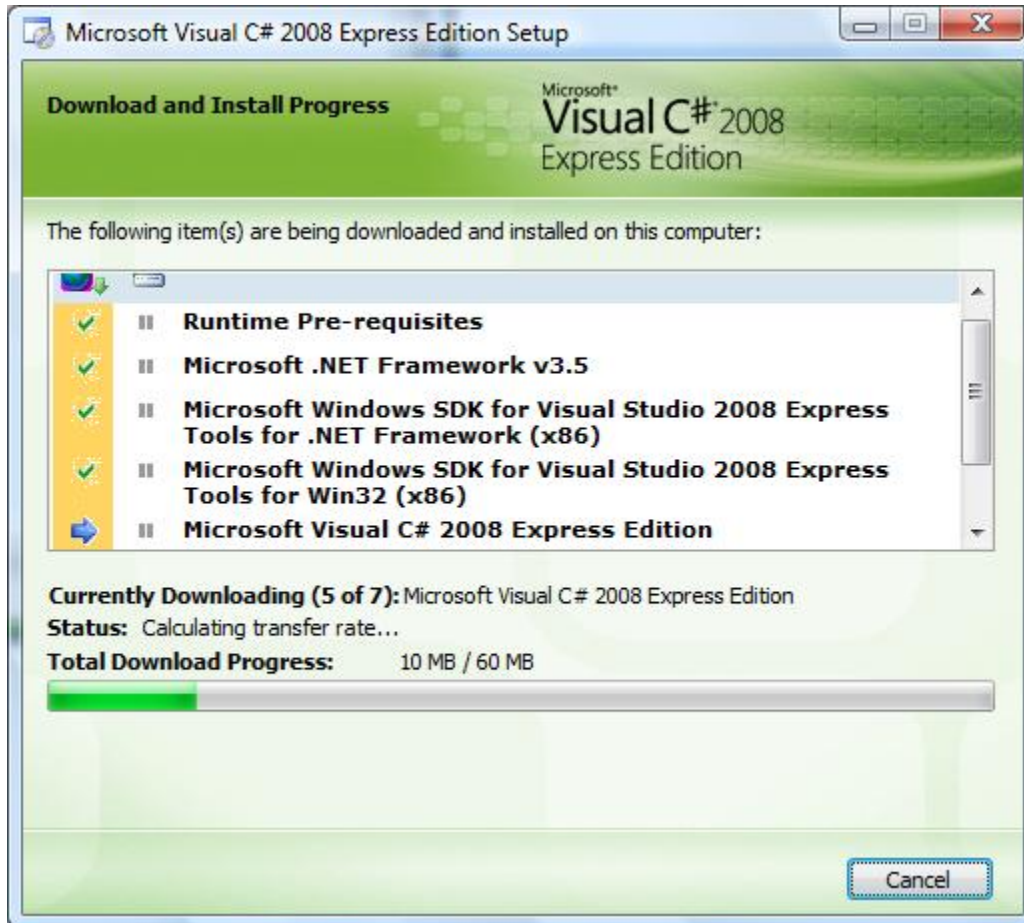
Written by Arvo Sulakatko 2008 April.

You can skip some steps if you have already installed the software needed.

## Step 1: Visual Studio

Install [Visual Studio 2008 C# Express Edition](#). ~60mb





## Step 2: Flex

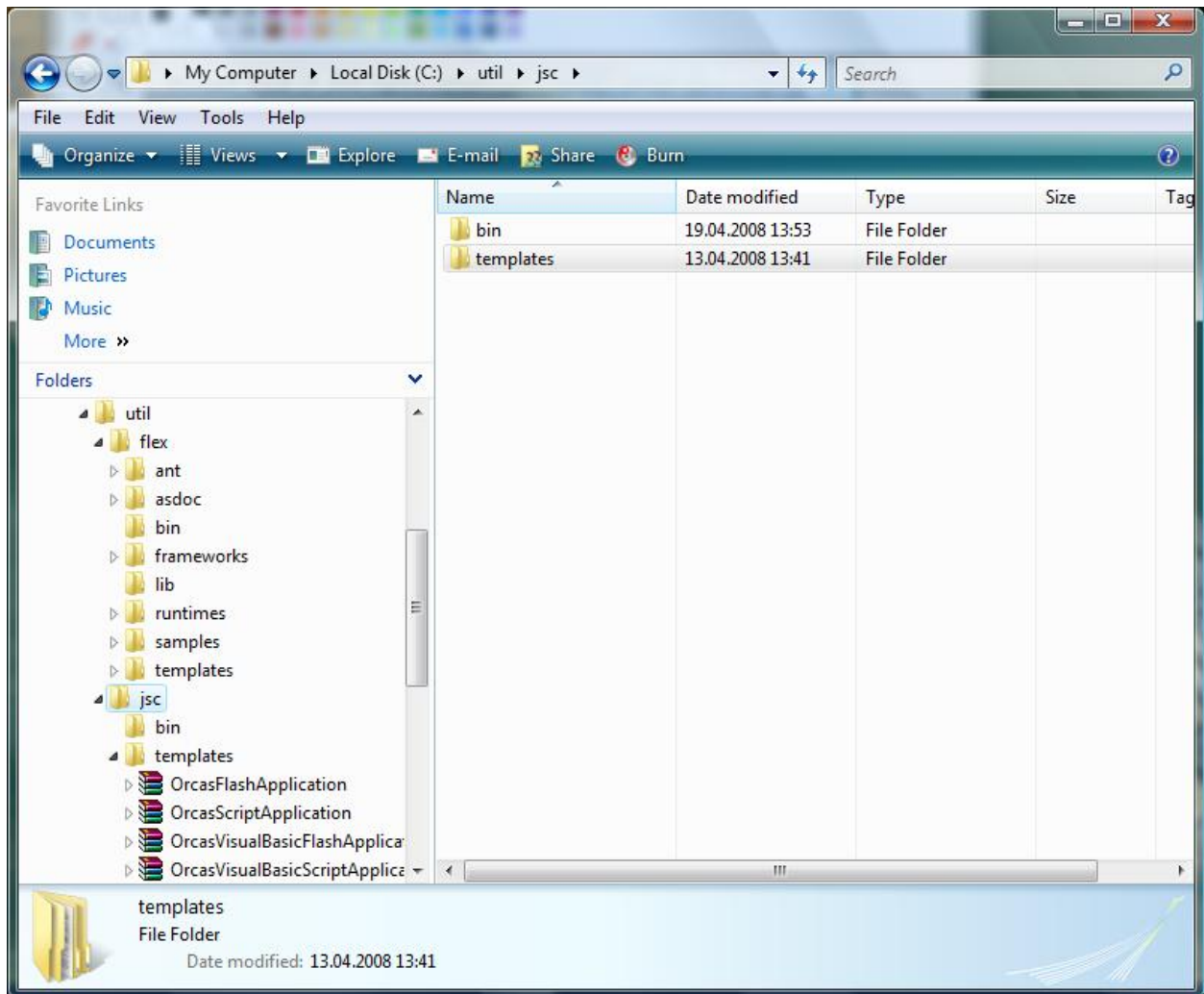
Download [Free Adobe Flex SDK](#). ~75mb

Choose `c:\util\flex\` as the target location.

## Step 3: jsc

Download [jsc](#). ~2mb

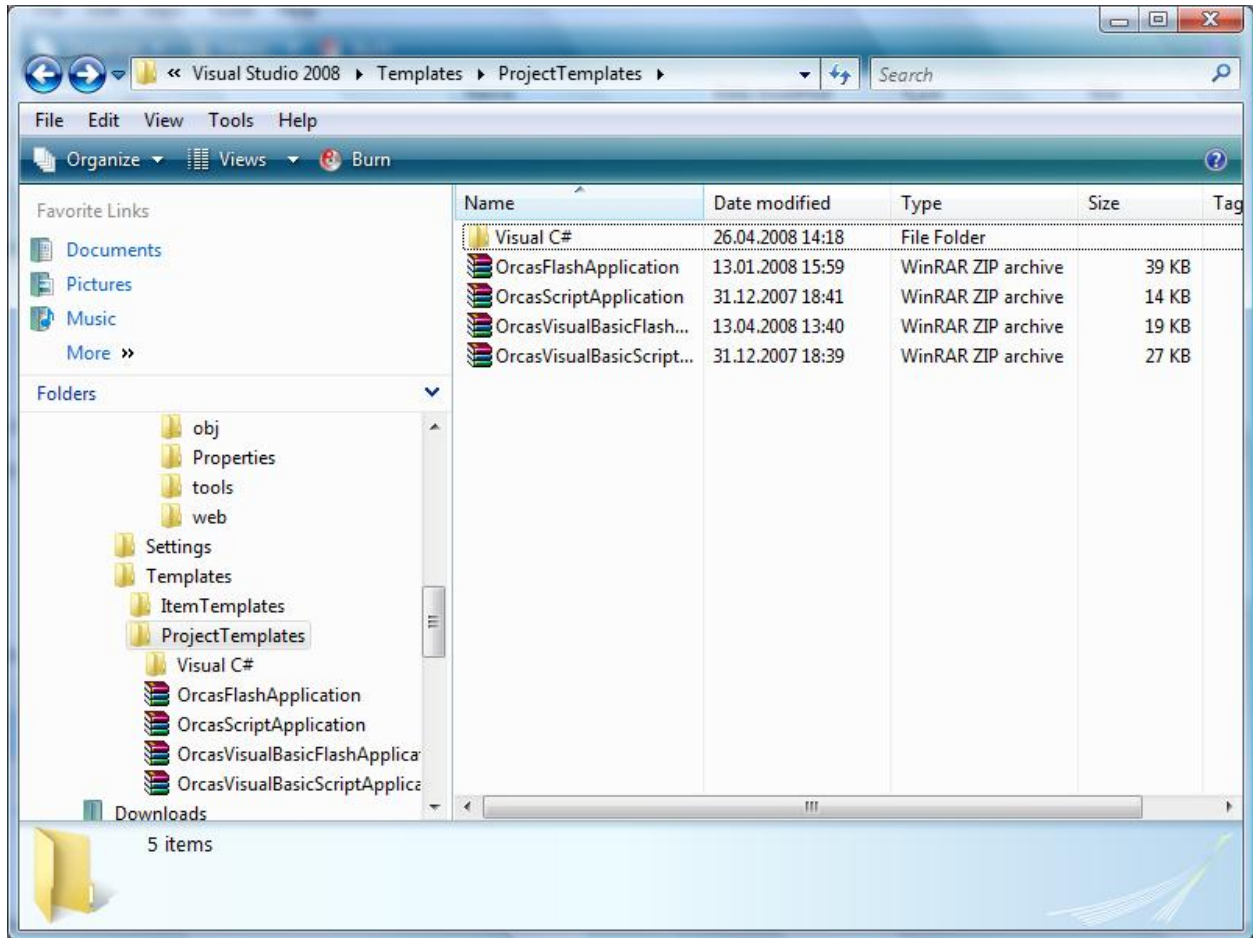
Choose `c:\util\jsc\` as the target location.



## Step 4: Project Templates

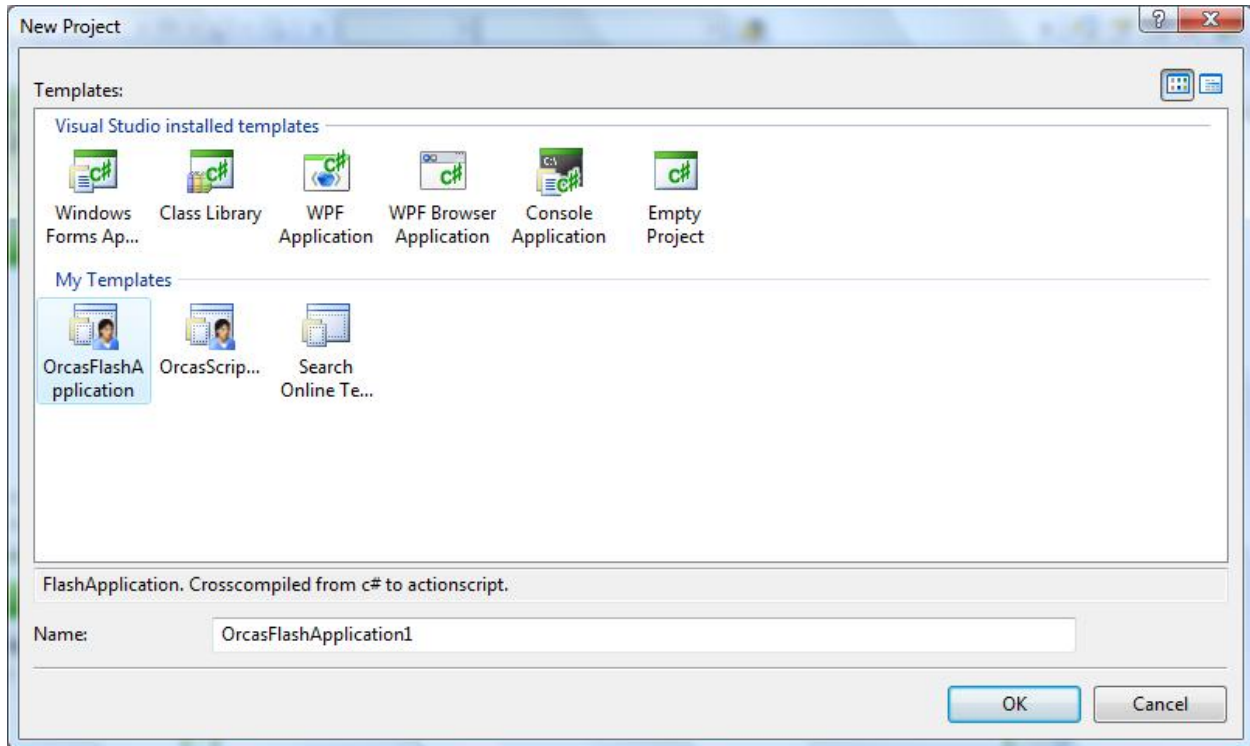
Copy the project templates from **C:\util\jsc\templates\** to **My Documents\Visual Studio 2008\Templates\ProjectTemplates\**.

In this tutorial we only need **OrcasFlashApplication** template.



## Step 5: New Project

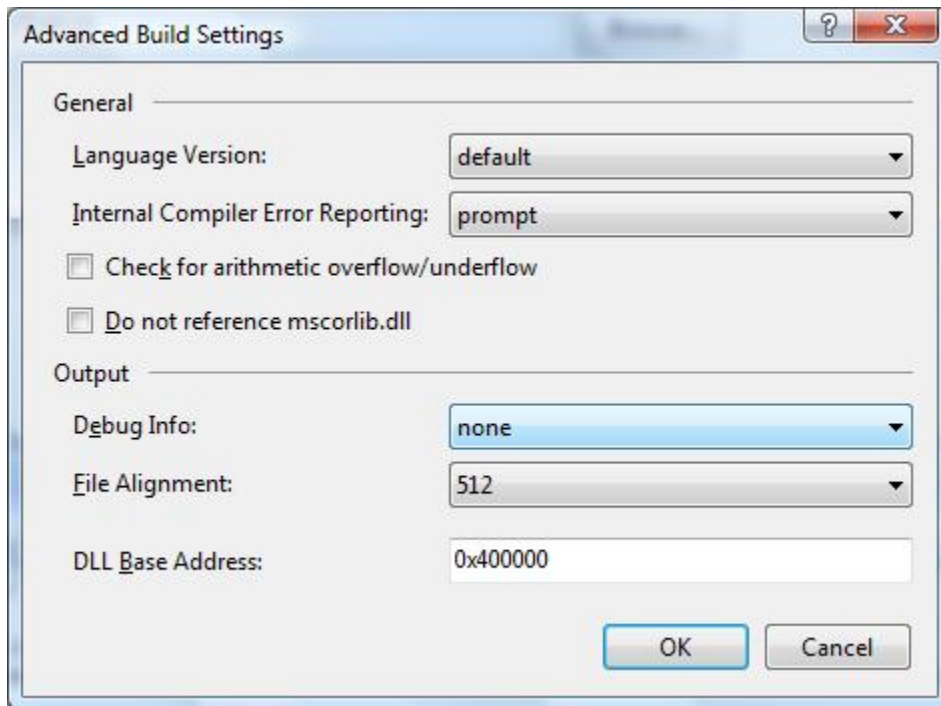
Run **Microsoft Visual C# 2008 Express Edition** and open the new project dialog and create a new project.



## Step 6: Debug Interface Access SDK

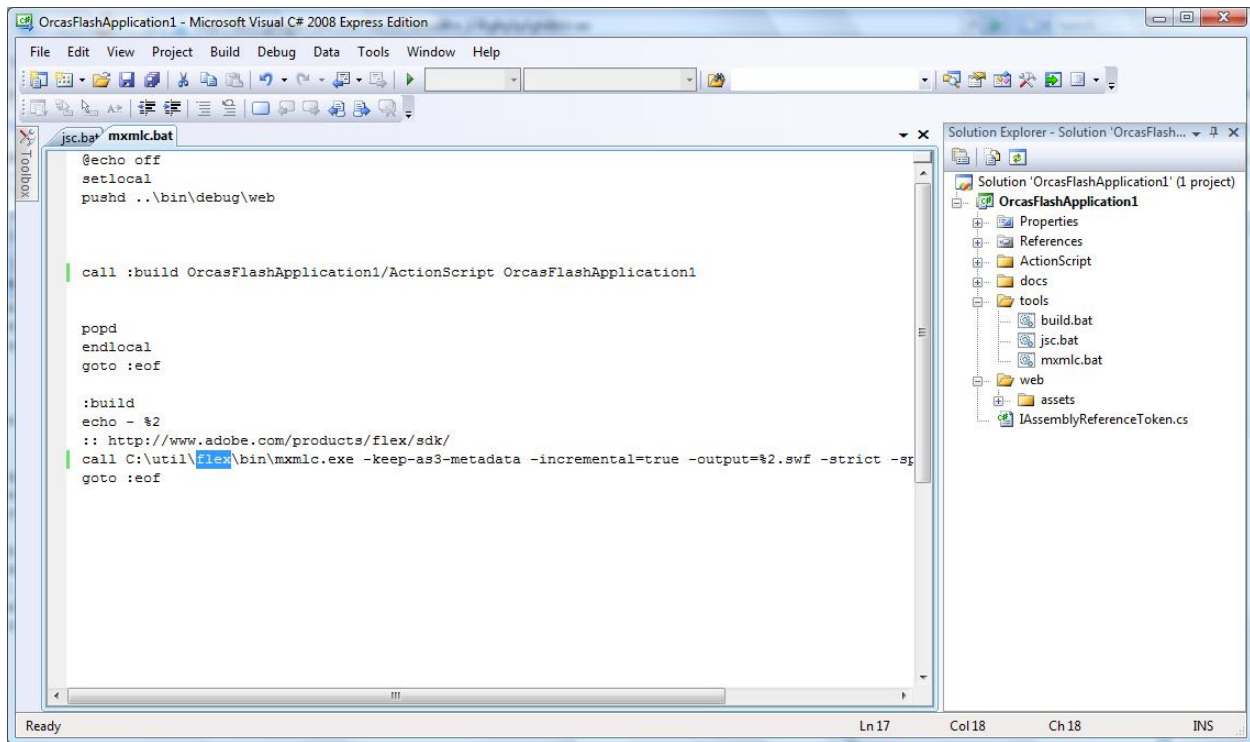
More about DIA [here](#).

As there seems to be no public download, you should delete all **.pdb** files at **c:\util\jsc\bin\** and disable debug info output. Otherwise jsc will try to load DIA to get variable names and if you do not have DIA installed it will crash.

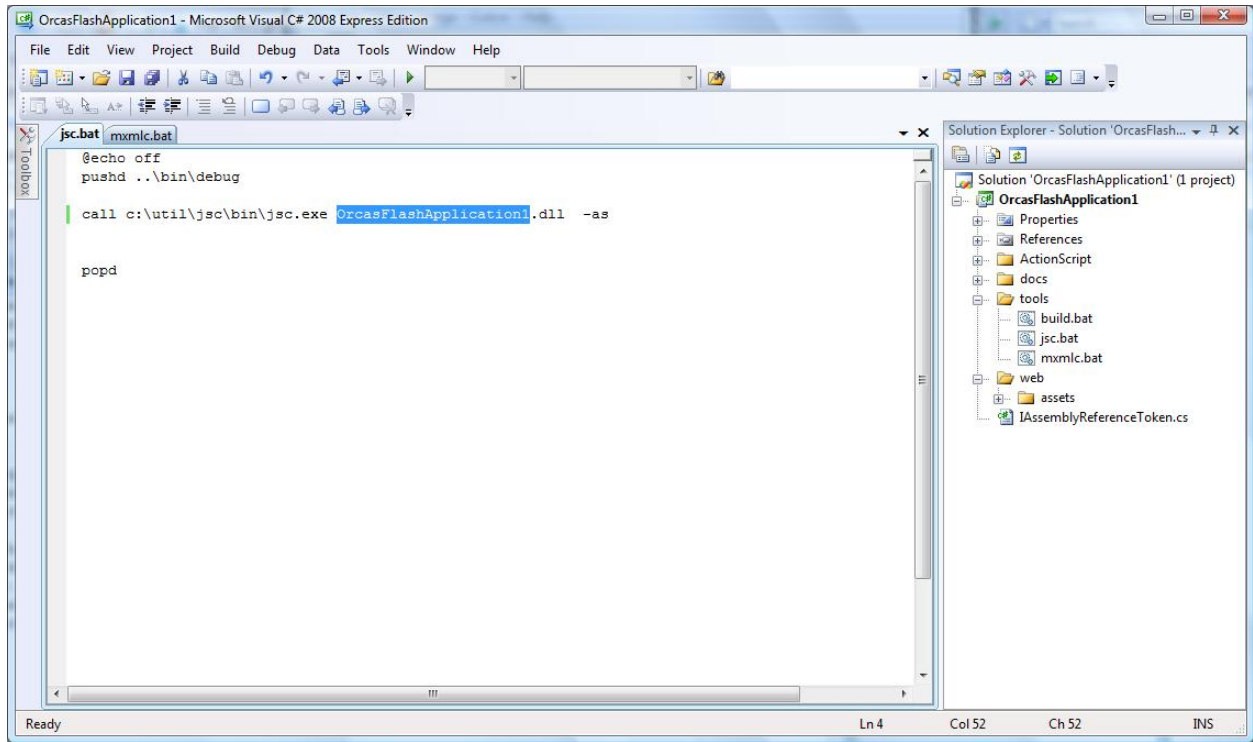


## Step 7: Some fixups

We need to change the **tools/mxmlc.bat** file to target the installed flex SDK.

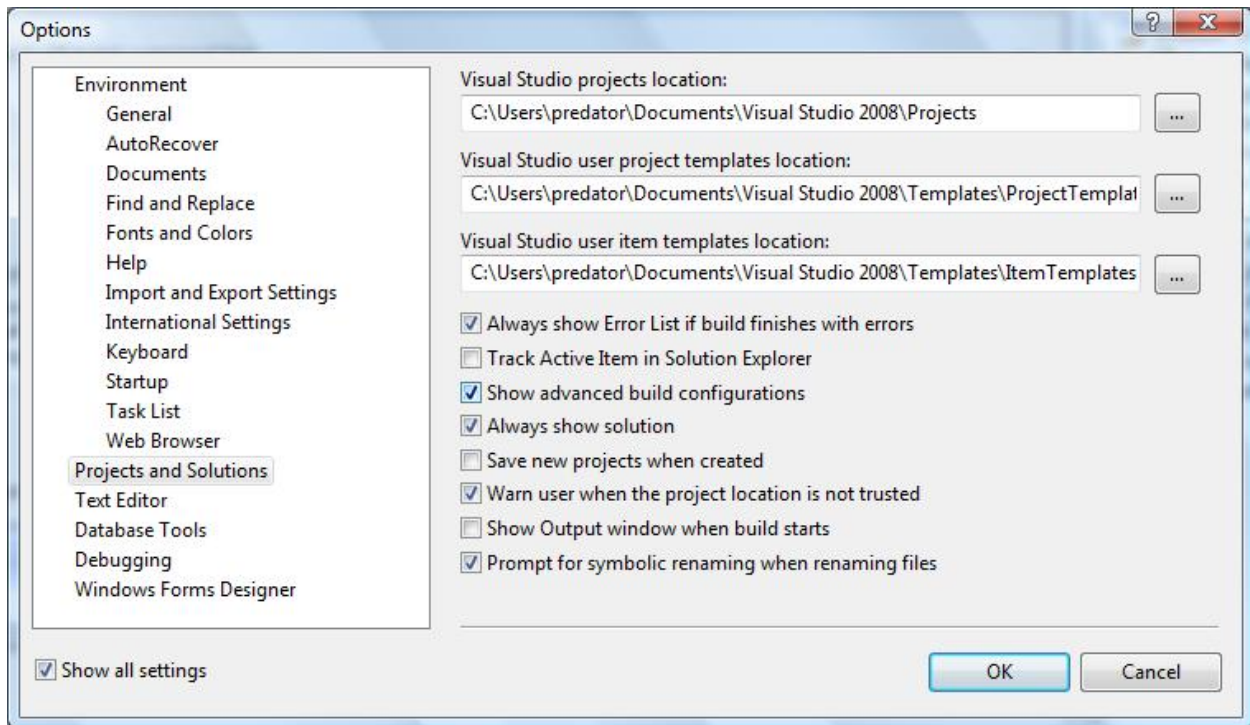


We need to change the **tools/jsc.bat** file to target current project.

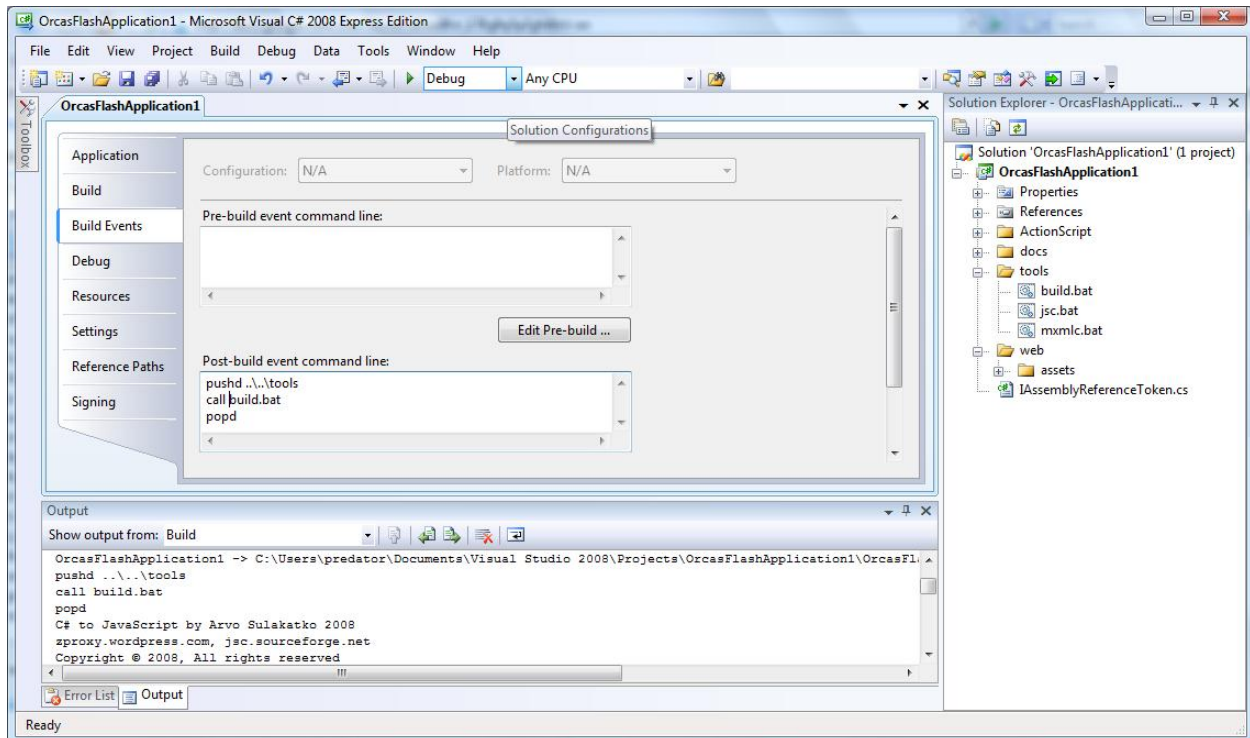


Enable **Show advanced build configurations** option.





Select the **Debug** build and add a post build event.



## Step 8: Build

Build the project.

My output looks like this:

```
----- Rebuild All started: Project: OrcasFlashApplication1, Configuration:
Debug Any CPU -----
C:\Windows\Microsoft.NET\Framework\v3.5\Csc.exe /noconfig /nowarn:1701,1702
/errorreport:prompt /warn:4 /define:DEBUG;TRACE
/reference:..\..\..\..\..\util\jsc\bin\ScriptCoreLib.dll
/reference:..\..\..\..\..\util\jsc\bin\ScriptCoreLib.Query.dll
/reference:..\..\..\..\..\util\jsc\bin\ScriptCoreLibA.dll
/reference:"C:\Program Files\Reference
Assemblies\Microsoft\Framework\v3.5\System.Core.dll"
/reference:C:\Windows\Microsoft.NET\Framework\v2.0.50727\System.Data.dll
/reference:C:\Windows\Microsoft.NET\Framework\v2.0.50727\System.dll
/reference:C:\Windows\Microsoft.NET\Framework\v2.0.50727\System.Xml.dll
```

```
/debug- /filealign:512 /optimize- /out:obj\Debug\OrcasFlashApplication1.dll
/resource:web\assets\AlphaTest\Preview.png,OrcasFlashApplication1.web.assets.AlphaTest.Pre
/resource:web\assets\AlphaTest\rain_1.mp3,OrcasFlashApplication1.web.assets.AlphaTest.rain
/target:library ActionScript\Assets.cs ActionScript\OrcasFlashApplication.cs
ActionScript\Extensions.cs Properties\AssemblyInfo.cs
IAssemblyReferenceToken.cs
```

```
Compile complete -- 0 errors, 0 warnings
OrcasFlashApplication1 -> C:\Users\predator\Documents\Visual Studio
2008\Projects\OrcasFlashApplication1\OrcasFlashApplication1\bin\Debug\OrcasFlashApplicatio
pushd ..\..\tools
call build.bat
popd
C# to JavaScript by Arvo Sulakatko 2008
zproxy.wordpress.com, jsc.sourceforge.net
Copyright © 2008, All rights reserved
```

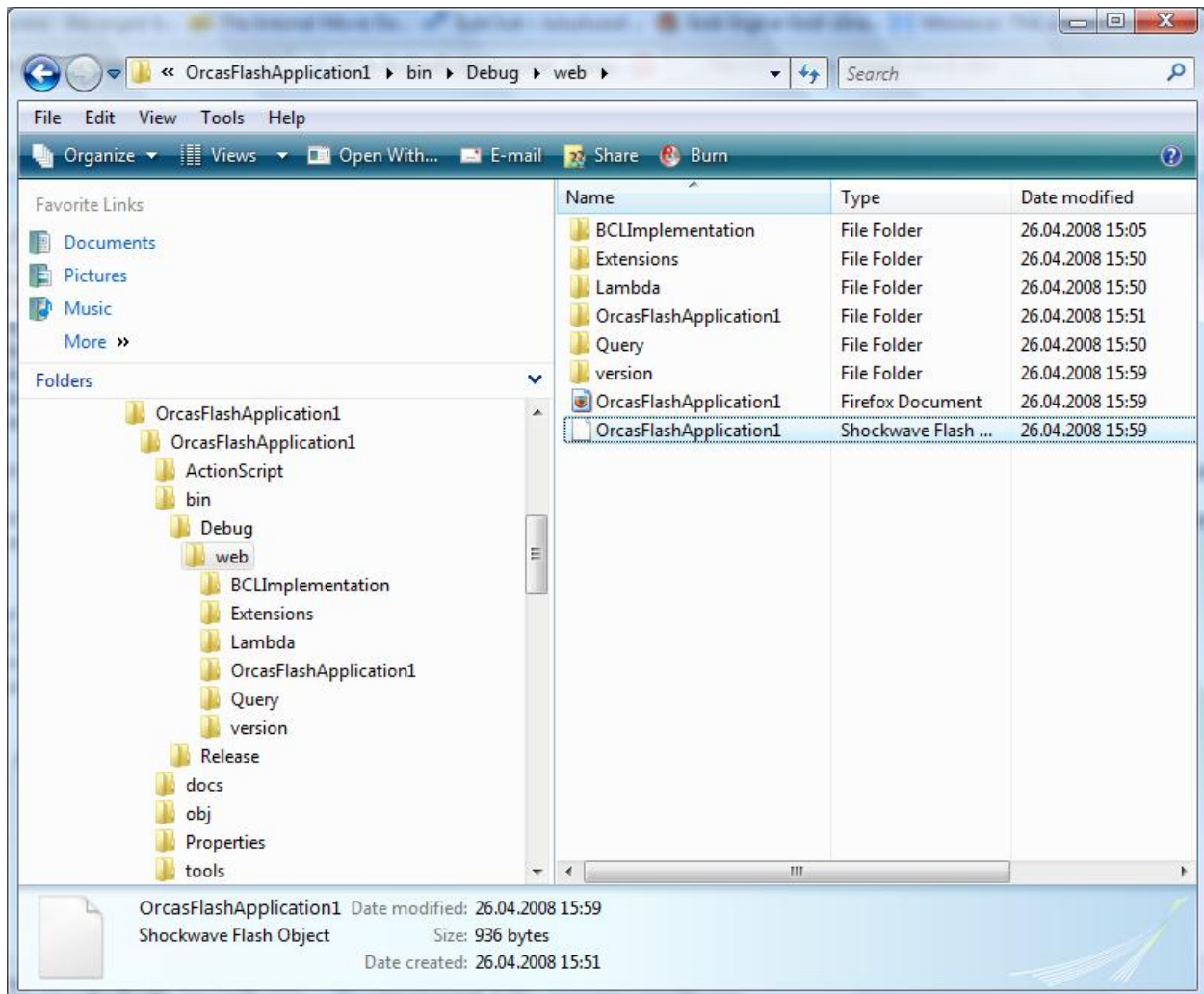
```
Current Path: C:\Users\predator\Documents\Visual Studio
2008\Projects\OrcasFlashApplication1\OrcasFlashApplication1\bin\Debug
assembly: file:///c:/util/jsc/bin/ScriptCoreLib.DLL
assembly: file:///c:/util/jsc/bin/ScriptCoreLib.Query.DLL
assembly: file:///C:/Users/predator/Documents/Visual Studio 2008/Projects/
OrcasFlashApplication1/OrcasFlashApplication1/bin/Debug/
OrcasFlashApplication1.dll
will compile 'c:\util\jsc\bin\ScriptCoreLib.dll'
found 103 types to be compiled
ScriptCoreLib.ActionScript.Extensions.flash.events.__EventDispatcher ->
Extensions.flash.events.__EventDispatcher
ScriptCoreLib.ActionScript.BCLImplementation.System.__Object ->
BCLImplementation.System.__Object
ScriptCoreLib.ActionScript.BCLImplementation.System.__Exception ->
BCLImplementation.System.__Exception
ScriptCoreLib.ActionScript.BCLImplementation.System.__NotSupportedException
-> BCLImplementation.System.__NotSupportedException
ScriptCoreLib.ActionScript.BCLImplementation.System.__Math ->
BCLImplementation.System.__Math
ScriptCoreLib.ActionScript.Query.InternalSequenceImplementation ->
Query.InternalSequenceImplementation
pdb not found c:\util\jsc\bin\ScriptCoreLib.pdb
ScriptCoreLib.ActionScript.BCLImplementation.System.__String ->
BCLImplementation.System.__String
ScriptCoreLib.ActionScript.BCLImplementation.System.__NotImplementedException
-> BCLImplementation.System.__NotImplementedException
ScriptCoreLib.ActionScript.BCLImplementation.System.__ArgumentNullException
```

```
-> BCLImplementation.System.__ArgumentNullException
ScriptCoreLib.Shared.Query.SZArrayEnumerator`1 -> Query.SZArrayEnumerator`1
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.__IEnumerable
-> BCLImplementation.System.Collections.__IEnumerable
ScriptCoreLib.ActionScript.BCLImplementation.System.__Random ->
BCLImplementation.System.__Random
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.Generic.__ICollection`1
-> BCLImplementation.System.Collections.Generic.__ICollection`1
ScriptCoreLib.ActionScript.Extensions.flash.text.__TextField ->
Extensions.flash.text.__TextField
ScriptCoreLib.ActionScript.BCLImplementation.System.__Action ->
BCLImplementation.System.__Action
ScriptCoreLib.ActionScript.BCLImplementation.System.__Action`1 ->
BCLImplementation.System.__Action`1
ScriptCoreLib.ActionScript.BCLImplementation.System.__Action`2 ->
BCLImplementation.System.__Action`2
ScriptCoreLib.ActionScript.BCLImplementation.System.__Action`3 ->
BCLImplementation.System.__Action`3
ScriptCoreLib.ActionScript.Extensions.flash.ui.__ContextMenuItem ->
Extensions.flash.ui.__ContextMenuItem
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.Generic.__IEnumerable`1
-> BCLImplementation.System.Collections.Generic.__IEnumerable`1
ScriptCoreLib.ActionScript.BCLImplementation.System.Text.__StringBuilder ->
BCLImplementation.System.Text.__StringBuilder
ScriptCoreLib.ActionScript.BCLImplementation.System.__Delegate ->
BCLImplementation.System.__Delegate
ScriptCoreLib.ActionScript.BCLImplementation.System.__IntPtr ->
BCLImplementation.System.__IntPtr
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.Generic.__List`1
-> BCLImplementation.System.Collections.Generic.__List`1
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.Generic.__List`1+__Enumera
-> BCLImplementation.System.Collections.Generic.__List`1+__Enumerator
ScriptCoreLib.ActionScript.Extensions.flash.display.__DisplayObject ->
Extensions.flash.display.__DisplayObject
ScriptCoreLib.ActionScript.BCLImplementation.System.__MulticastDelegate ->
BCLImplementation.System.__MulticastDelegate
ScriptCoreLib.ActionScript.BCLImplementation.System.__Convert ->
BCLImplementation.System.__Convert
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.__IEnumerator
-> BCLImplementation.System.Collections.__IEnumerator
ScriptCoreLib.ActionScript.Extensions.flash.util.__Timer ->
Extensions.flash.util.__Timer
ScriptCoreLib.ActionScript.Extensions.CommonExtensions ->
Extensions.CommonExtensions
```

```
ScriptCoreLib.ActionScript.Extensions.CommonExtensions+IFill_Dispose ->
Extensions.CommonExtensions+IFill_Dispose
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.Generic.__IList`1
-> BCLImplementation.System.Collections.Generic.__IList`1
ScriptCoreLib.ActionScript.BCLImplementation.System.Collections.Generic.__IEnumerator`1
-> BCLImplementation.System.Collections.Generic.__IEnumerator`1
ScriptCoreLib.ActionScript.Extensions.flash.display.__InteractiveObject ->
Extensions.flash.display.__InteractiveObject
ScriptCoreLib.ActionScript.BCLImplementation.System.__IDisposable ->
BCLImplementation.System.__IDisposable
actionscript type compiler - 3973ms
will compile 'c:\util\jsc\bin\ScriptCoreLib.Query.dll'
found 137 types to be compiled
ScriptCoreLib.ActionScript.Query DefinedError -> Query DefinedError
pdb not found c:\util\jsc\bin\ScriptCoreLib.Query.pdb
ScriptCoreLib.ActionScript.Query.__Enumerable -> Query.__Enumerable
ScriptCoreLib.ActionScript.Query.__Enumerable+_SelectIterator_d__b`2 ->
Query.__Enumerable+_SelectIterator_d__b`2
ScriptCoreLib.ActionScript.Query.__Enumerable+_SelectManyIterator_d__37`3 ->
Query.__Enumerable+_SelectManyIterator_d__37`3
ScriptCoreLib.ActionScript.Query.__Enumerable+_SelectManyIterator_d__16`2 ->
Query.__Enumerable+_SelectManyIterator_d__16`2
ScriptCoreLib.ActionScript.Query.__Enumerable+_RangeIterator_d__91 ->
Query.__Enumerable+_RangeIterator_d__91
ScriptCoreLib.ActionScript.Query.__Enumerable+_WhereIterator_d__0`1 ->
Query.__Enumerable+_WhereIterator_d__0`1
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions -> Lambda.LambdaExtensions
ScriptCoreLib.ActionScript.Lambda.YFunc`2 -> Lambda.YFunc`2
ScriptCoreLib.ActionScript.Lambda.YFunc`3 -> Lambda.YFunc`3
ScriptCoreLib.ActionScript.Lambda.YAction`1 -> Lambda.YAction`1
ScriptCoreLib.ActionScript.Lambda.YAction`2 -> Lambda.YAction`2
ScriptCoreLib.ActionScript.BCLImplementation.System.__Func`1 ->
BCLImplementation.System.__Func`1
ScriptCoreLib.ActionScript.BCLImplementation.System.__Func`2 ->
BCLImplementation.System.__Func`2
ScriptCoreLib.ActionScript.BCLImplementation.System.__Func`3 ->
BCLImplementation.System.__Func`3
ScriptCoreLib.ActionScript.BCLImplementation.System.__Func`4 ->
BCLImplementation.System.__Func`4
ScriptCoreLib.ActionScript.BCLImplementation.System.__Func`5 ->
BCLImplementation.System.__Func`5
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass1 ->
Lambda.LambdaExtensions+<>c__DisplayClass1
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass4`1 ->
```

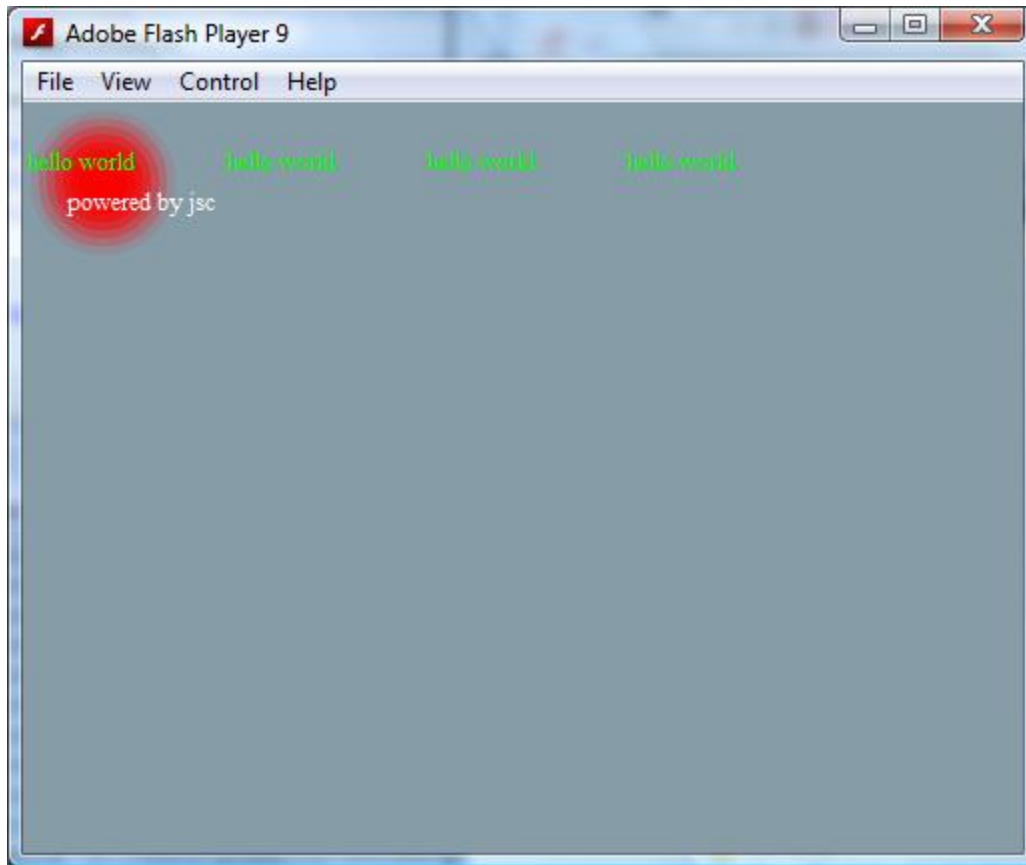
```
Lambda.LambdaExtensions+<>c__DisplayClass4`1
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass7`2 ->
Lambda.LambdaExtensions+<>c__DisplayClass7`2
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClassa`3 ->
Lambda.LambdaExtensions+<>c__DisplayClassa`3
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClassd`3 ->
Lambda.LambdaExtensions+<>c__DisplayClassd`3
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass10`2 ->
Lambda.LambdaExtensions+<>c__DisplayClass10`2
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass13`3 ->
Lambda.LambdaExtensions+<>c__DisplayClass13`3
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass16`2 ->
Lambda.LambdaExtensions+<>c__DisplayClass16`2
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass19`4 ->
Lambda.LambdaExtensions+<>c__DisplayClass19`4
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass1c`3 ->
Lambda.LambdaExtensions+<>c__DisplayClass1c`3
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass1f`2 ->
Lambda.LambdaExtensions+<>c__DisplayClass1f`2
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass22 ->
Lambda.LambdaExtensions+<>c__DisplayClass22
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass25`1 ->
Lambda.LambdaExtensions+<>c__DisplayClass25`1
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass28`2 ->
Lambda.LambdaExtensions+<>c__DisplayClass28`2
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass2b`3 ->
Lambda.LambdaExtensions+<>c__DisplayClass2b`3
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass2e`1 ->
Lambda.LambdaExtensions+<>c__DisplayClass2e`1
ScriptCoreLib.ActionScript.Lambda.LambdaExtensions+<>c__DisplayClass31`2 ->
Lambda.LambdaExtensions+<>c__DisplayClass31`2
actionscript type compiler - 3511ms
will compile 'C:\Users\predator\Documents\Visual Studio
2008\Projects\OrcasFlashApplication1\OrcasFlashApplication1\bin\Debug\OrcasFlashApplicatio
found 138 types to be compiled
pdb not found C:\Users\predator\Documents\Visual Studio
2008\Projects\OrcasFlashApplication1\OrcasFlashApplication1\bin\Debug\OrcasFlashApplicatio
OrcasFlashApplication1.ActionScript.OrcasFlashApplication1
actionscript type compiler - 176ms
- OrcasFlashApplication1
Loading configuration file C:\util\flex\frameworks\flex-config.xml
Recompile: C:\Users\predator\Documents\Visual Studio
2008\Projects\OrcasFlashApplication1\OrcasFlashApplication1\bin\Debug\web\OrcasFlashApplic
Reason: The source file or one of the included files has been updated.
```

```
Files changed: 1 Files affected: 0
OrcasFlashApplication1.swf (936 bytes)
===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====
```



## Step 9: Test with flash player

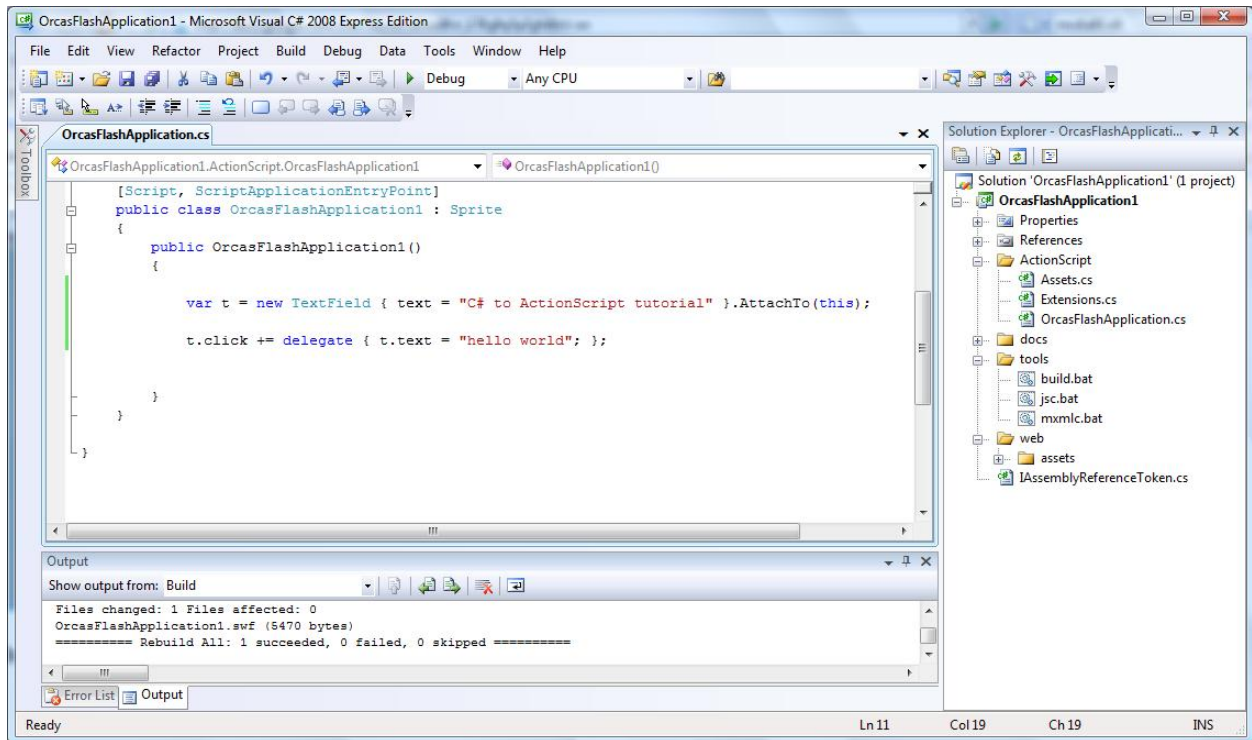
Open your **OrcasFlashApplication1.swf** with  
**C:\util\flex\runtimes\player\win\FlexPlayer.exe.**



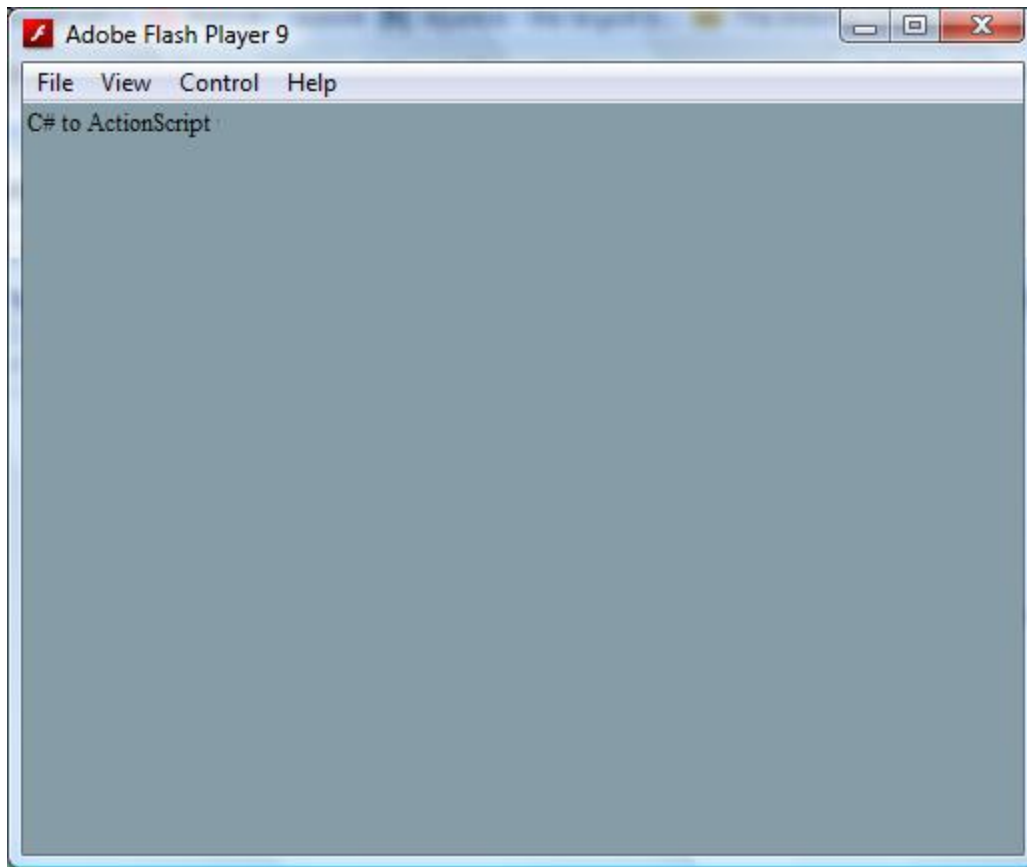
## Step 10: Write Some New Code

Create just a textfield and attach an event which will display *hello world*. Then build your project.

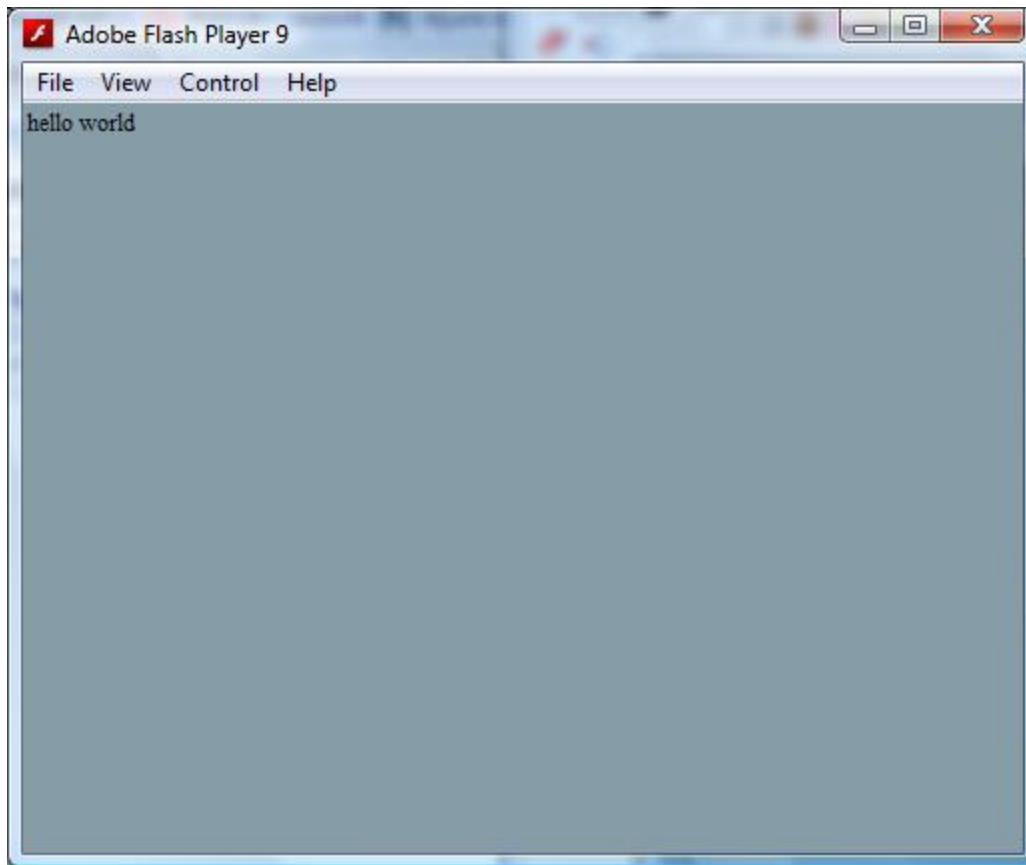




Test it with flash player.



Click on the text.



Watch it online [here](#).