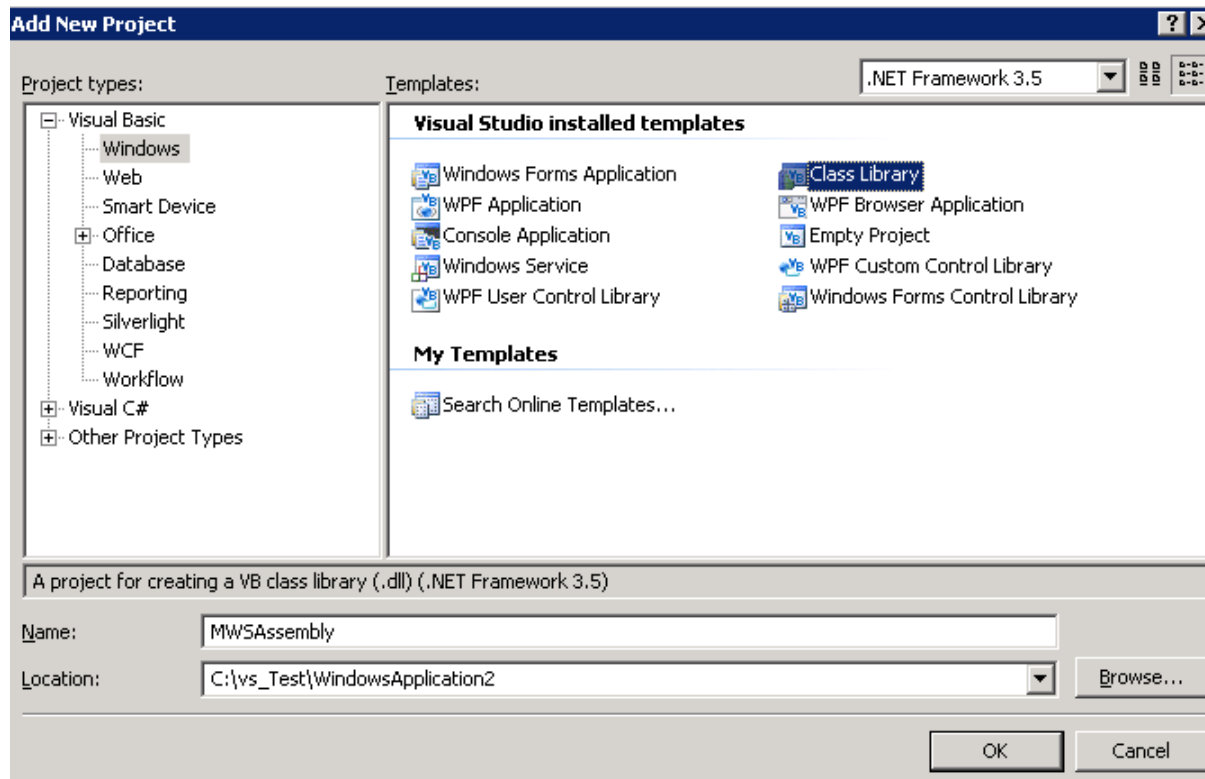


Sometimes using MWS scripting possibilities might be not enough for you. You may call your custom assembly directly from within MWS.

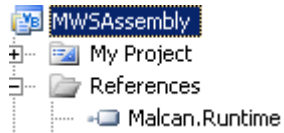
Below are the guidelines on how to proceed (VB.Net, not a problem to discover for C# programmers)

- First we start with creating our own external assembly (DLL Class)



- Adding Malcan.Runtime reference to the project

- You need to extract Malcan.Runtime.dll from Malcan.Workflow.forSharePoint.wsp file by copying this file and renaming it to cab and then extracting.
- You need to browse the file to reference it



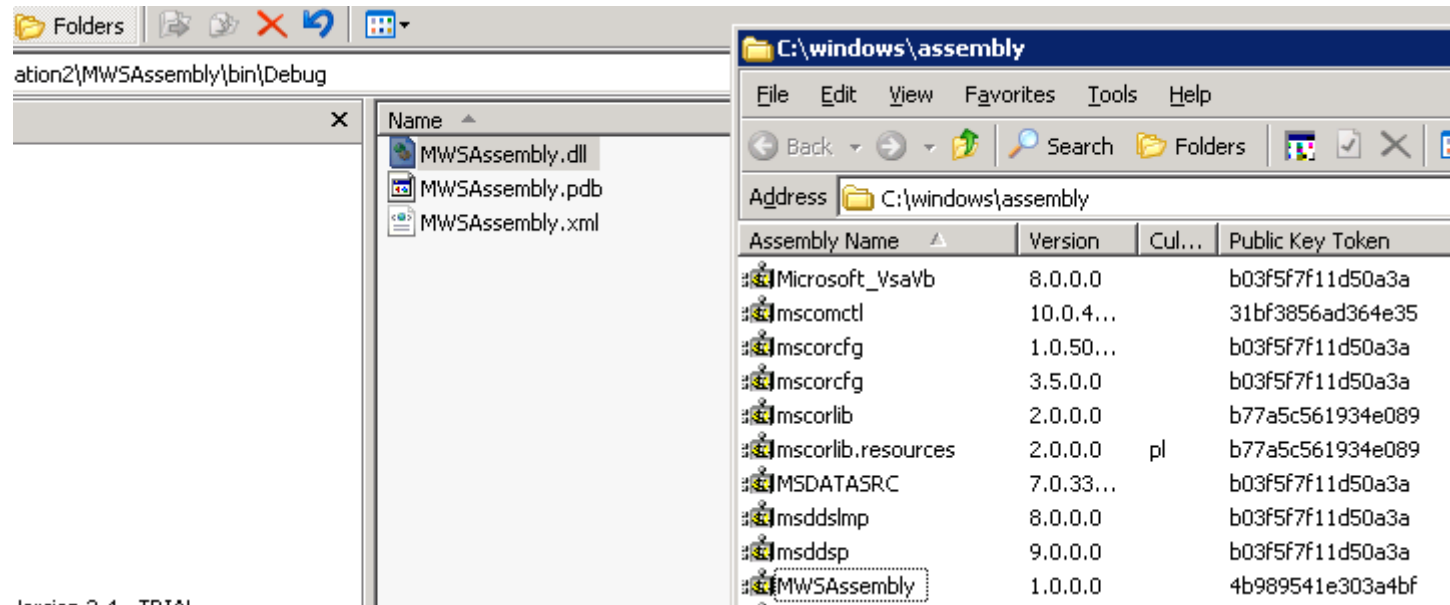
- Now you can write your code implementing mrExternalAssembly (there is only one function for implementation)
  - In this example we simply return string concatenations

```

1 Imports Malcan.Runtime
2
3 Public Class Class1
4     Implements mrExternalAssembly
5
6     Public Function mwsIsCalling(ByVal str1 As String, ByVal str2 As String, ByVal str3 As String, ByVal str4 As String) As String Implements mrExternalAssembly.mwsIsCalling
7         mwsIsCalling = str1 & str2 & str3 & str4
8     End Function
9 End Class

```

- Now sign your assembly and publish it into GAC (you may just drag your DLL to your c:\windows\assembly folder)
  - Remember the full name of the assembly in a format "MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf"
  - Remember your class name of the assembly in a format "MWSAssembly.Class1"



- Test it!
  - In the example below we have action ADDING that just assigns Title calling the same title in all arguments

On Action Script	Syntax Check
<pre>set value("Title") = CallDLL(value("Title"), value("Title"), value("Title"), value("Title"), "MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf", "MWSAssembly.Class1")</pre>	OK: regardless any state, without changes to state

- If you make any mistake in the assembly or class names Syntax Check will help you

On Action Script	Syntax Check
<pre>set value("Title") = CallDLL(value("Title"), value("Title"), value("Title"), value("Title"), "???MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf", "MWSAssembly.Class1")</pre>	<p>ERROR: Script: Cannot find or initiate properly external assembly. Assembly name (in GAC) should be in a example form of 'MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf', class name (implementing mrExternalAssembly) should be in an example form of 'TempMWSAssembly.Class1' System.IO.FileNotFoundException: Could not load file or assembly '???MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf' or one of its dependencies. The filename, directory name, or volume label syntax is incorrect. File name: '???MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf'</p>

- Or error mail to WorkflowOwner when error occurs within runtime

Event type: **Adding**

System.Exception: **Cannot find or initiate properly external assembly. Assembly name (in GAC) should be in a example form of 'MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf', class name (implementing mrExternalAssembly) should be in an example form of 'TempMWSAssembly.Class1'**System.NullReferenceException: **Object reference not set to an instance of an object.**

**at Malcan.Runtime.mrvGlobal.callMethod(String& methodStr, msArray`1& argList) Next characters are (the end of script)**

### **Error running Script:**

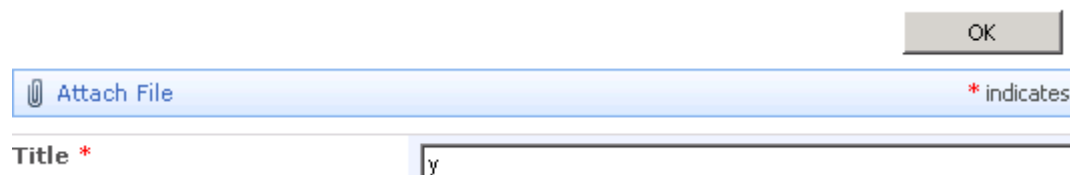
```
set value("Title") = CallDLL(value("Title"), value("Title"), value("Title"), value("Title"), "MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf", "MWSAssembly.Class1")
```

### **Runtime Track**

SET:

---> System.Exception: Cannot find or initiate properly external assembly. Assembly name (in GAC) should be in a example form of 'MWSAssembly, Version=1.0.0.0, Culture=neutral, PublicKeyToken=4b989541e303a4bf', class name (implementing mrExternalAssembly) should be in an example form of 'TempMWSAssembly.Class1' System.NullReferenceException: Object reference not set to an instance of an object.





- o Finally if everything works fine you may add new item to your list/library. We are putting “y” in Title, and resulting with 4 times “y” => “yyyy”. What was expected to be done by our external code.



The screenshot shows a dialog box with a blue header bar containing an "Attach File" button and a "\* indicates" label. Below the header is a form field labeled "Title \*" with the text "y" entered. An "OK" button is located at the top right of the dialog box.

l1: yyyy

Close

 New Item |  Edit Item |  Delete Item |  Manage Permissions | Alert Me

Title	yyyy
-------	------