ZWCAD COM Automation Developing Guide

CONTENT

Operating environments

CAD platform: ZWCAD
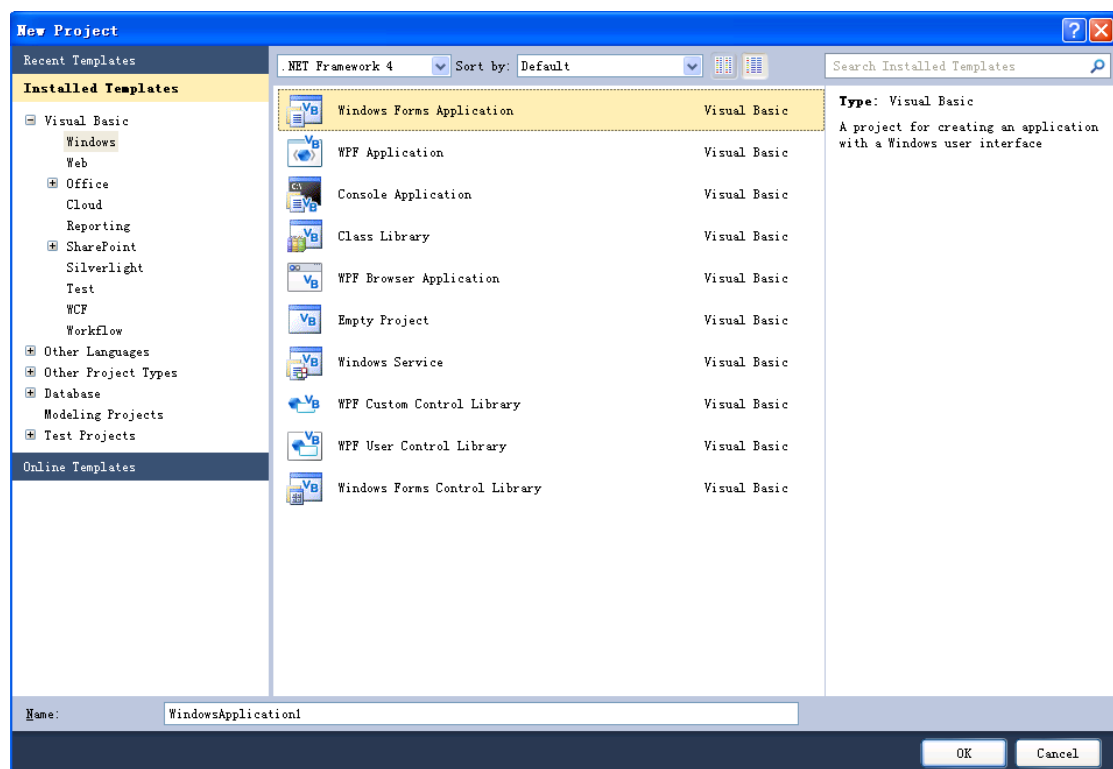
IDE: Visual studio 2010

.NET framework: .NET Framework 4.0

Development language: VB.NET or C# etc.
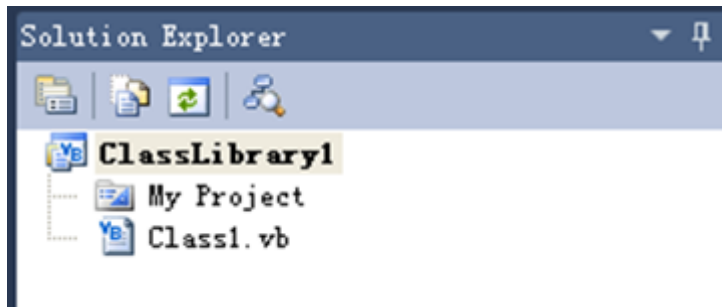
Create a project and set properties

1. Create a project

Start Visual studio 2010. Go to menu File, and then select **File**-> **New Project**. Here you can select **Windows Forms Application** to produce a stand alone .exe file that allows your application to automate ZWCAD.
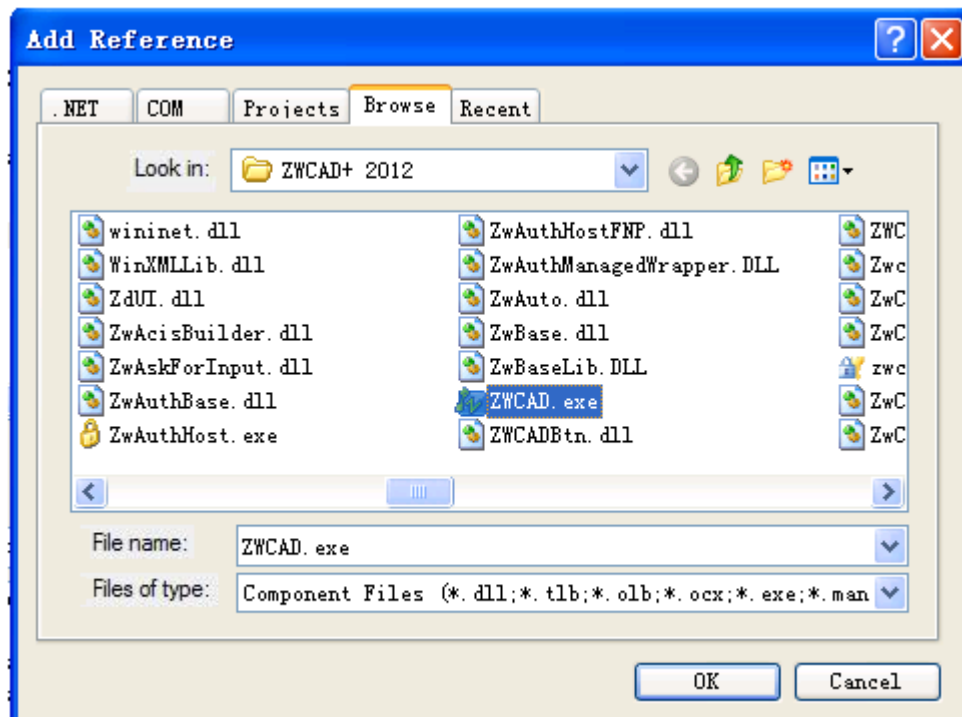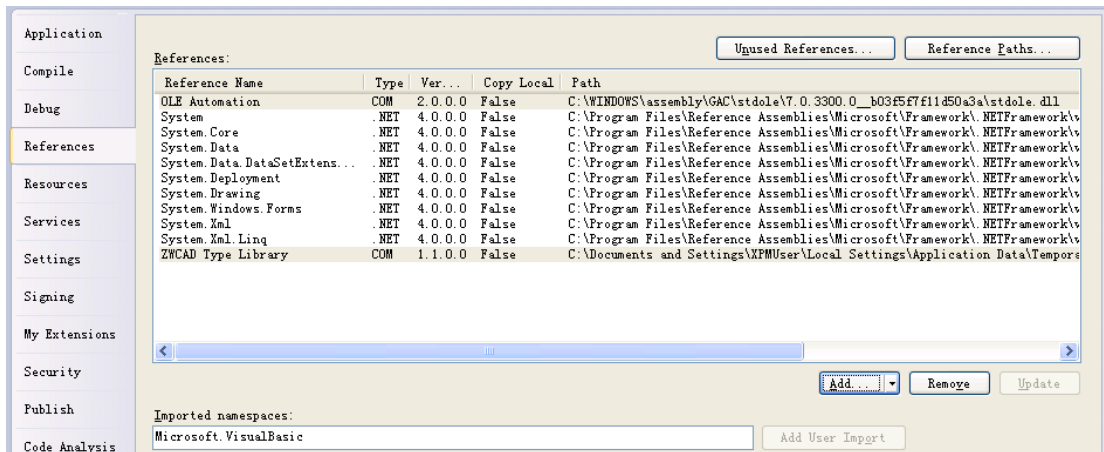
2. Add reference

Now, at the **Solution Explorer** window, double click the project's name to go to project properties.

Select the "**References**" tab and click on "**Add**" from the project properties, and select "**Browse**". Add reference to **ZWCAD.exe** at the installation folder of ZWCAD, like the image below.

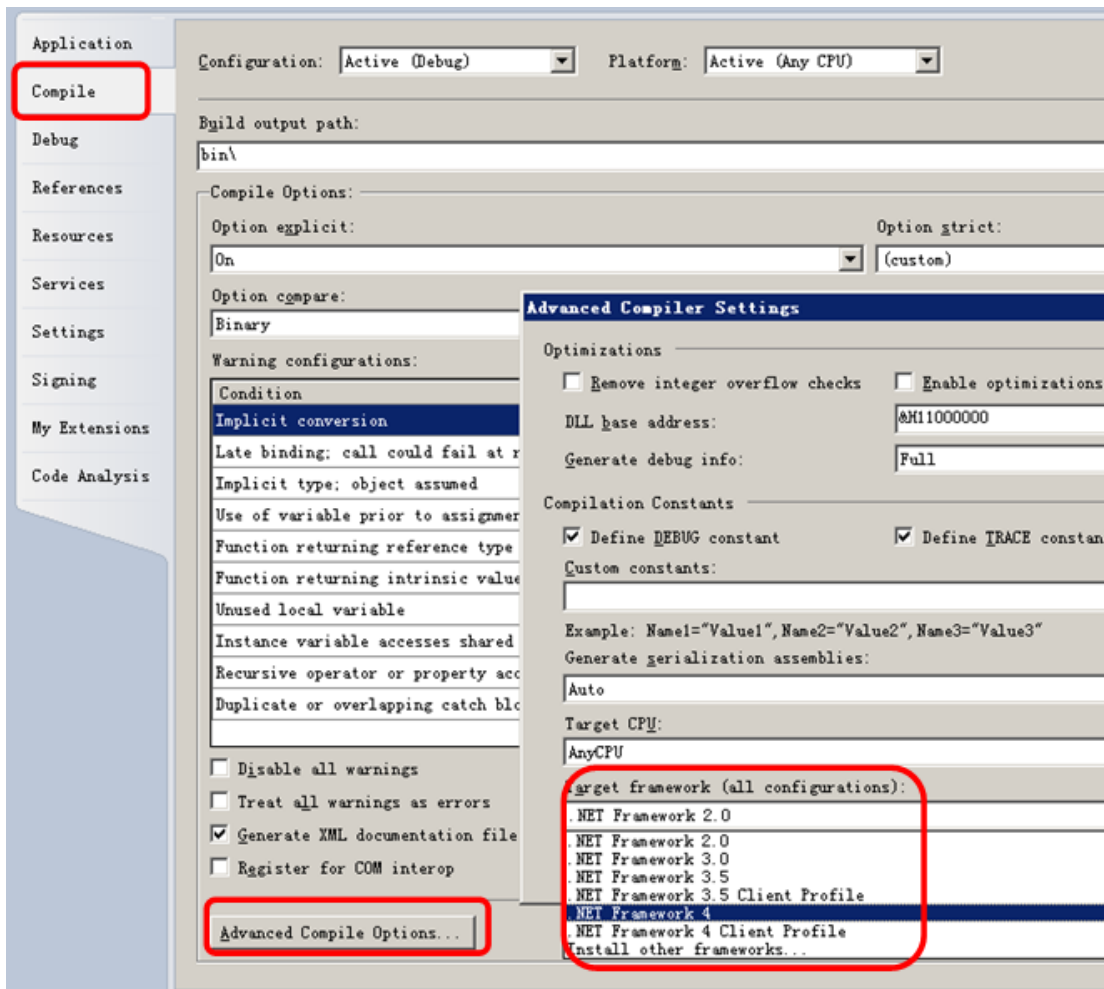The result should be like in the following image.

We need to import the namespace we want to use. The code inside class1.vb will look like the following code:

Imports ZWCAD

3. Specify the version of framework

Select the "Compile" tab and click on "Advance Compile Options" from the project properties. Specify the version of framework from "Target framework (all configurations)" option at the "Advanced Compiler Settings" window.

Sample code

The following example program is launching ZWCAD application automatically and then creating a line in the drawing.

Steps:

1. Follow the steps above to create a project and add reference. And then add a button control to the Form1.

2. Copy and paste the bellow codes to the Class1.vb file. Overwrite the original code.

```vb
Imports ZWCAD

Public Class Form1
    Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
        Dim myDoc As ZcadDocument
        Dim ss As ZcadApplication
        Dim myspace As ZcadModelSpace
        ss = CreateObject("ZWCAD.application")
        myDoc = ss.ActiveDocument
        myspace = myDoc.ModelSpace
        ss.Visible = True
        Dim myline As ZcadLine
        Dim startpoint(2) As Double
        startpoint(0) = 0 : startpoint(1) = 0 : startpoint(2) = 0
        Dim endpoint(2) As Double
        endpoint(0) = 10 : endpoint(1) = 200 : endpoint(2) = 0
        myline = myspace.AddLine(startpoint, endpoint)
        myline.Update()
        ss.ZoomExtents()

    End Sub
End Class
```
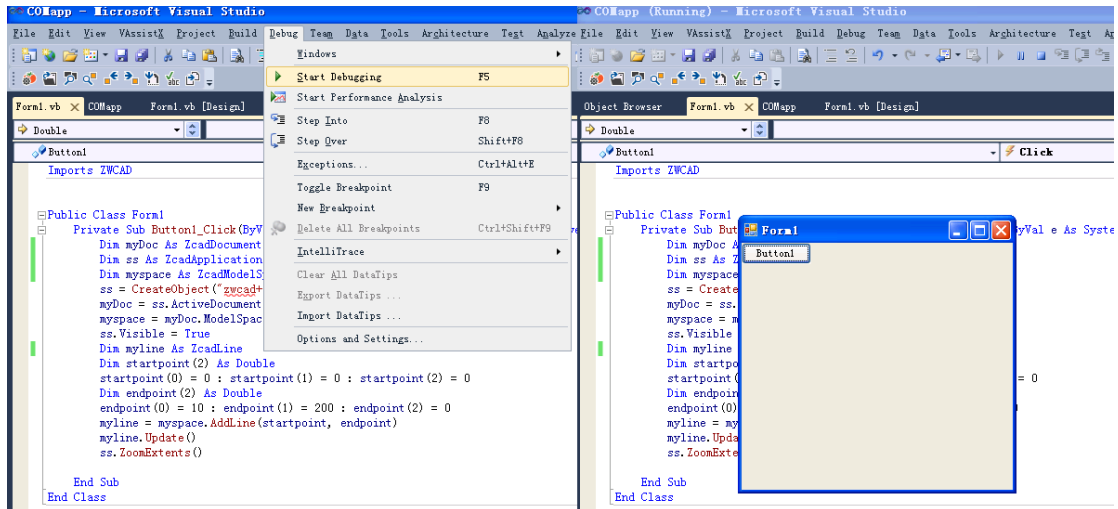
3. Go to menu File, and then select **Debug**->**Start Debugging** to debug the project.

4. ZWCAD application will be launched after clicking the button on the window.