

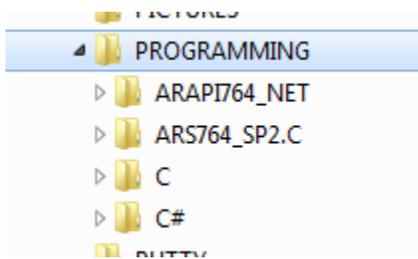
## Migrating 32 Bit WinXP + VS 2005 Express to 64 Bit Windows 7 + VS 2010 Express

I was recently upgraded from the 32 Bit WinXP operating system to the 64 Bit Windows 7. With the new OS, I figured it was probably time up move from VS 2005 Express to VS2010 Express, both of which are the C# flavour.

First, none of my existing application would run on Windows 7. Ok, even using the XP compatibility mode wouldn't work. The easy solution I figured was I would just have to recompile and magically everything would work fine. When I attempted to load my existing vs2005 projects into vs2010, the projects were successfully converted over by the wizard. Running/debugging the newly converted project resulted in some additional errors. Slowly each error was resolved and I finally had a solution that worked and was repeatable across all the small utilities I had (30 in total for 7.6.04. The other 57 applications for 7.1.x will probably never see an upgrade). Presented below are my steps that I have used.

There are a number of documents and sites out there that will tell you how to install the .NET API for Remedy (ARSystem), but that gets thrown out the door with 64 Bit.

You will need to locate and download the "ARAPI764\_NET" zip file and extract its contents out to a folder. Below is the format that I have used to help keep everything organized. I have another folder (not shown below) called "Remedy Utilities" where the same sets of files are stored, but I also drop into this folder, all the executable files that I build. This way I have many applications all sharing the same set of library files.



You will not be able to register the BMC DLL files with the regasm for the 4.x Framework. This is due to the security changes made in this version. You're running under 64 Bit, which again won't work well with the BMC DLL files as they were compiled for 32 Bit.

Once your directories are setup, you just need to start converting over your VS2005 projects to VS2010. Below is the process that I have used successfully.

The first thing you need to do is open your old project:



## Welcome to the Visual Studio Conversion Wizard

The solution or project you are opening must be converted. It was either created in a previous version of Visual Studio, or it relies on an older version of a program that you have installed on your computer. After a solution or any of its projects has been converted, it may no longer be possible to edit, build, or run in previous versions.

Make sure to back up your original project:

Do you want to create a backup before converting? Only loadable projects will be backed up.

No

Yes, create a backup before converting

Location for backup:

edy\7\_6\_04\_API\APPLICATIONS\Gather Object Details\BACKUP

Once finished:

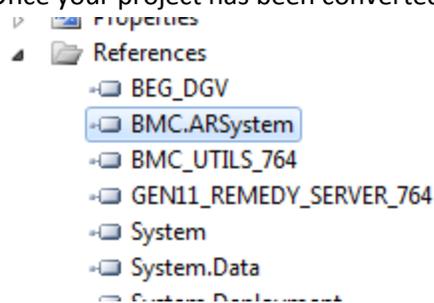


## Conversion Complete

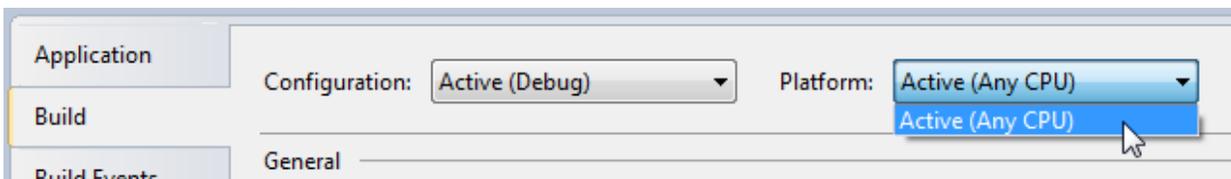
All projects converted successfully. Please see the conversion log for complete information.

Show the conversion log when the wizard is closed.

Once your project has been converted, you may need to update your project references:



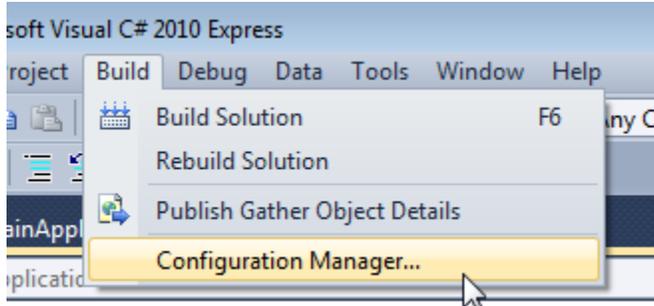
If you go into your Project properties, you will notice that all the tabs where the "Platform" is listed, you only see the option to select "Active (Any CPU)":



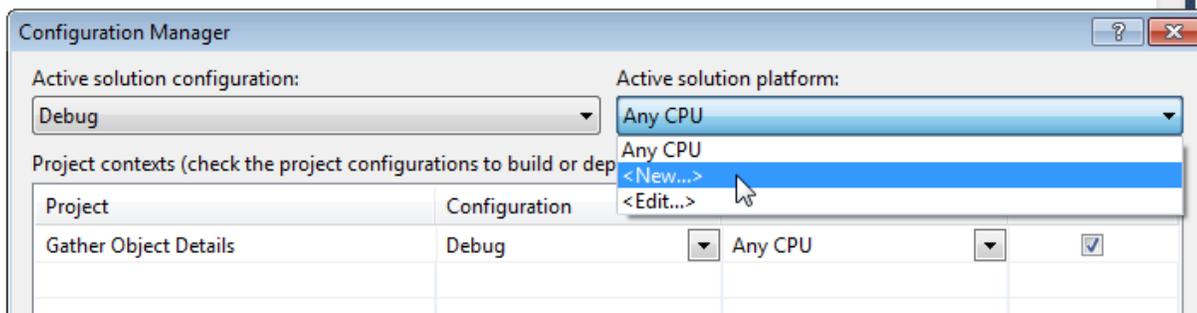
The Vista and Windows 7 64 Bit OS systems with C# Express Edition by default only shows “Active (Any CPU)” as a valid selection for the Platform selection. You will find that VS2005 Express and prior, runs only in 32 Bit mode. VS2008 Standard and above all run in the mode of the host operating system.

You will need to force 32 Bit compilation (BMC.ARSystem.dll does not support 64 Bit applications).

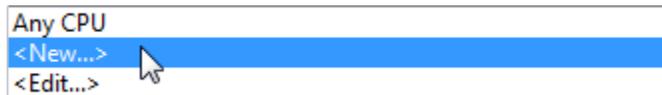
To do this, go to the “Build” menu and select “Configuration Manager...”:



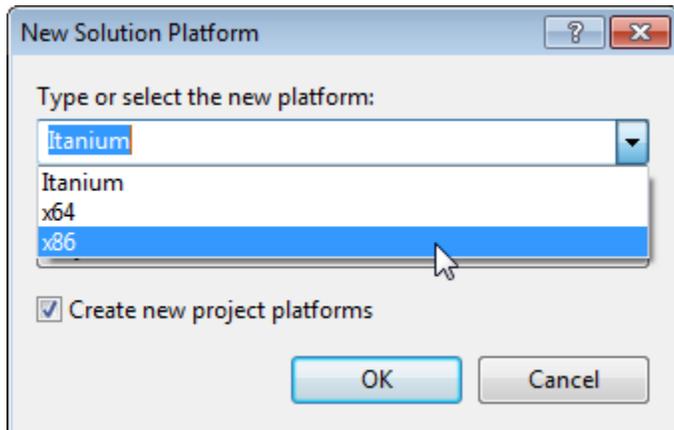
Under the “Active solution platform”, you will see that you only have the “Any CPU” option you saw earlier:



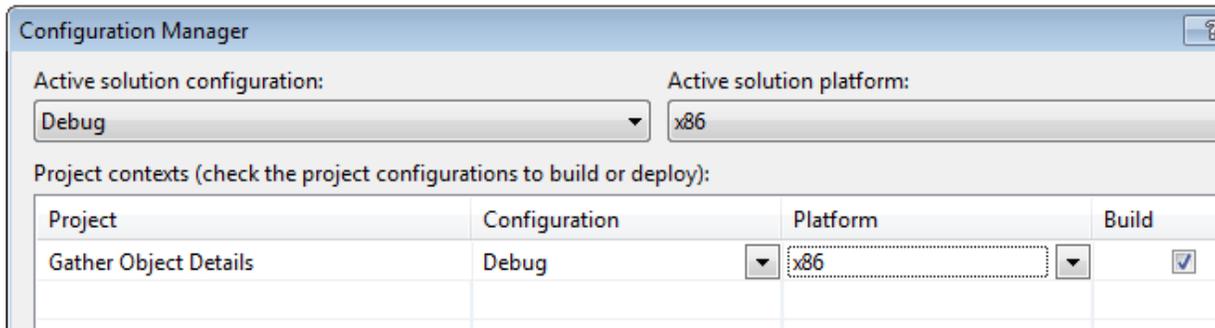
Click the “New”:



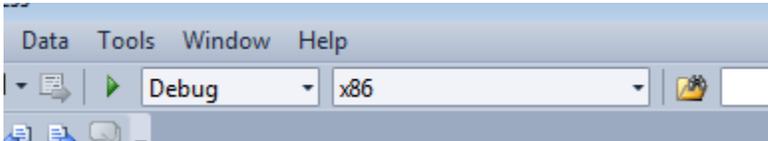
For the platform, select “x86” and select the OK button:



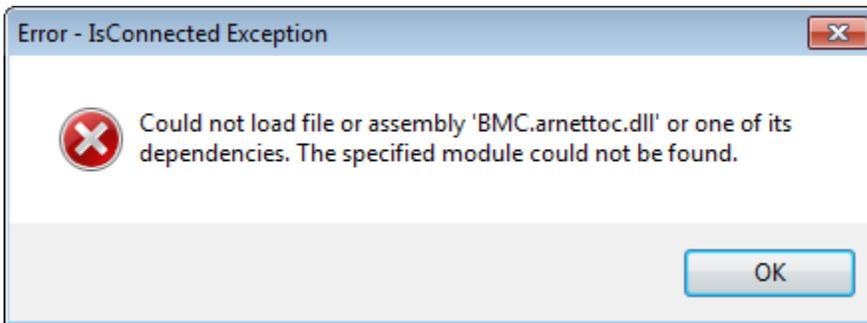
Back on the Configuration Manager window, you should now see the “x86” as a selectable value:



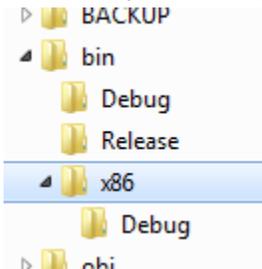
Your Toolbar should also show “x86”:



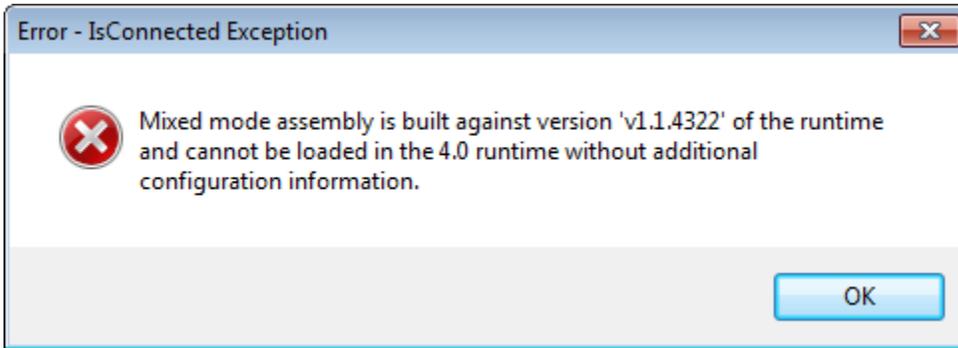
For my projects, I get the following error when I attempt to log into the Remedy environment. This is because I have not registered the BMC library with the “regasm” command. You cannot do this with version 4.x Framework. My solution for now is to just drop all the BMC library files into the same debug directory as the project file is using. So far this has solved all my problems:



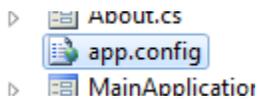
Note that your “Debug” folder will be in a new folder called “x86”:



Now when you attempt to log into the Remedy environment, you get yet another error. You need to add an app.Config file and set useLegacyV2RuntimeActivationPolicy to true. This is required to use mixed mode CLR 2 assemblies in .NET 4 applications:



The fix for this is relatively easy to do. Under the Solution Explorer, look for the “app.config” file and open it up:



This is basically an XML File. Within the “<configuration>” section you can past in the required details:

```
app.config X
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <configSections>...</configSections>
  <userSettings>...</userSettings>
  <startup useLegacyV2RuntimeActivationPolicy="true">
    <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.0"/>
  </startup>
</configuration>
```

Add the following three lines and then save the changes:

```
<startup useLegacyV2RuntimeActivationPolicy="true">
  <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.0"/>
</startup>
```

Now recompile and run your application. You should find that it now runs under the 64 Bit version of Windows 7.

If you move your newly compiled EXE application to a common Remedy Utility directory (where all your BMC library files sit), you will also need to copy the xxx.exe.config file (the xxx is the name of your application.exe). This is required so that Windows 7 knows how to integrate the 32 and 64 Bit parts together.

Name	Date modified	Type	Size
Gather Object Details.exe	07/01/2013 11:40 ...	Application	385 KB
Gather Object Details.exe.config	07/01/2013 11:37 ...	XML Configuratio...	2 KB
Full Incident Data.exe	07/01/2013 11:42 AM	Application	394 KB

If you don't copy this file along with your executable, you will get the following error when you attempt to connect to the Remedy environment:

