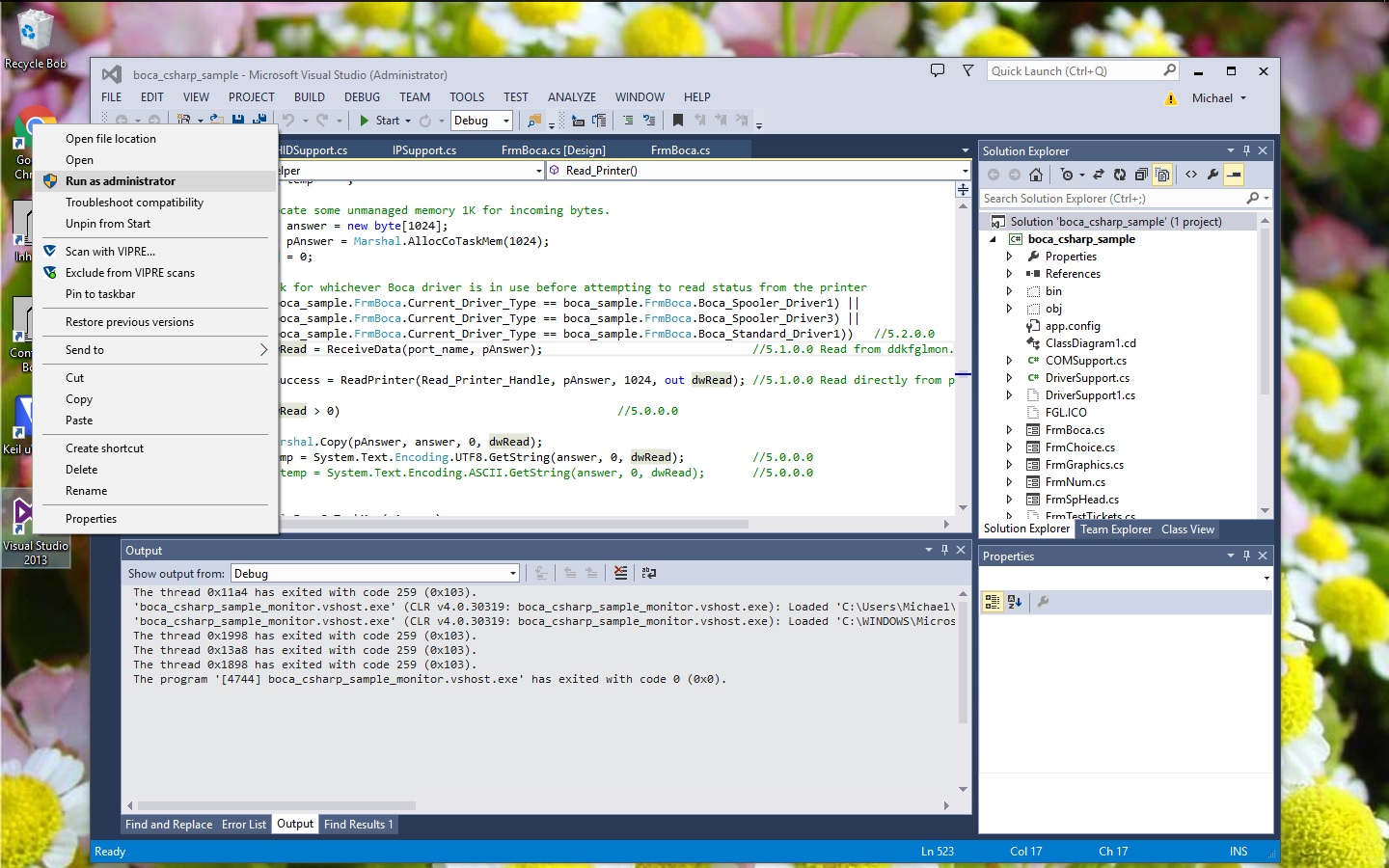
**Boca Systems Sample Windows Program**

This sample project is written in C Sharp using Microsoft Visual Studio 2013. It attempts to demonstrate the low level functions needed to communicate with a Boca Systems printer through a printer driver or without a driver, directly through whichever interface (USB, Serial, Parallel, Ethernet, Wi-Fi or Bluetooth) is selected.

Personal computers and operating systems are currently in a period of transition from 32 bit PCs to 64 bit PCs. Standalone applications can be built to run on “Any CPU”, 32 or 64 bit. However running the MS Visual Studio 2013 **debugger** **tool** with most application is not as friendly. This will be explained below.

**First,** when running MS Visual Studio 2013 under Windows 8 & 10, it is important to **“Run as Administrator”** as shown below. This is not usually necessary under Windows 7, since all the new security access and privilege was added to Windows operating system in Windows 8 & 10. When this is done “(Administrator)” is displayed at the top of the editor window as shown below.



**Second,** when using the debugger to execute an application for testing it is important to build the application according to the host platform bit size (32 or 64 bit). This is not necessary for all functions provided in this sample project, but for some. A prime example occurs when using full bidirectional support while using a printer driver/spooler. This program uses a port/print monitor file named ddkfglmon.dll. This file (32 or 64 bit version) is installed into the c:\windows\system32 folder when the Boca Systems printer driver package is installed. Special access is needed when writing/reading from temporary files in this system folder.

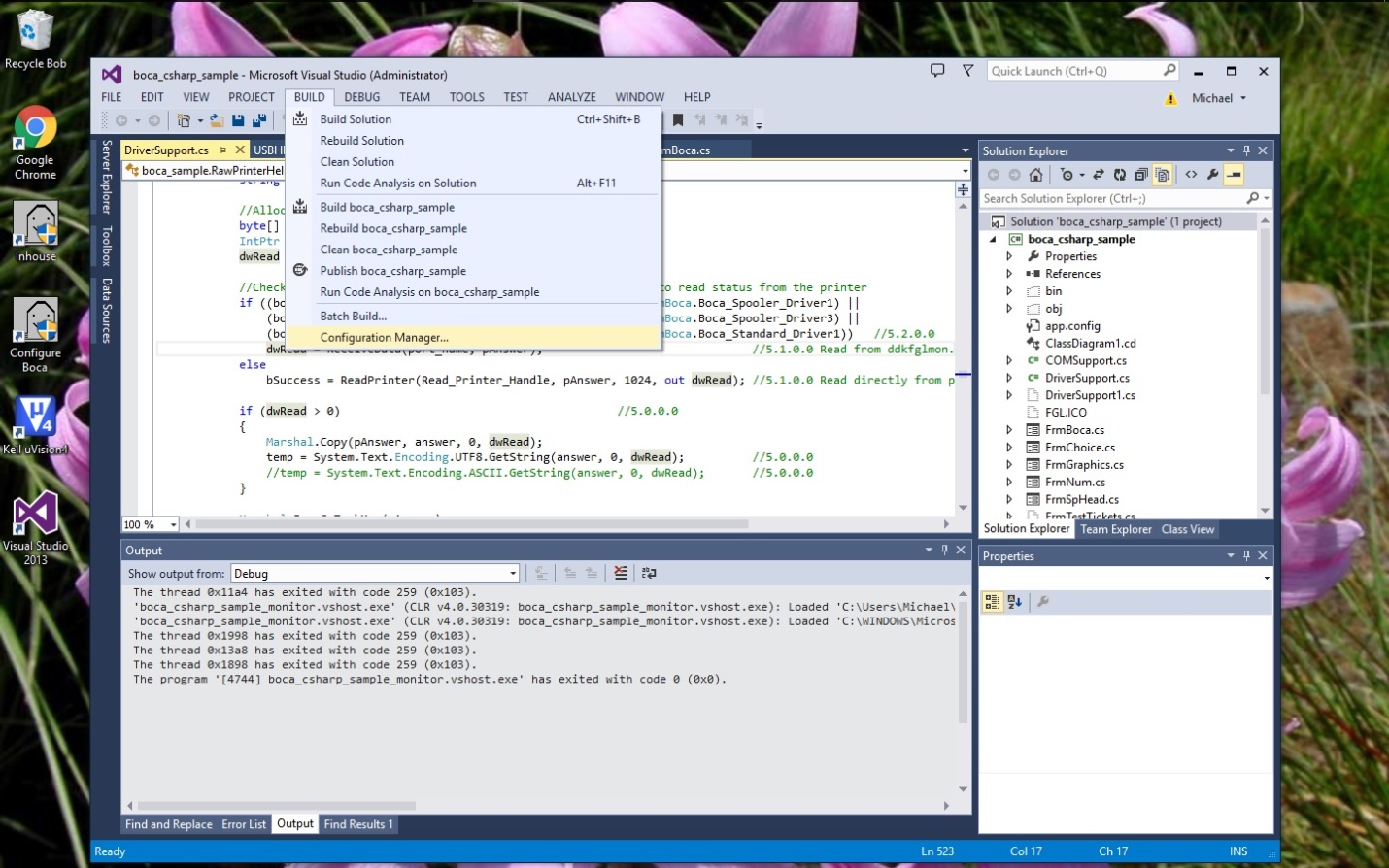
In an attempt to handle both worlds, two Debug builds are provided in:

**Visual Studio 2013\Projects\boca\_csharp\_sample\customer\_interfaces\bin\Debug**

And

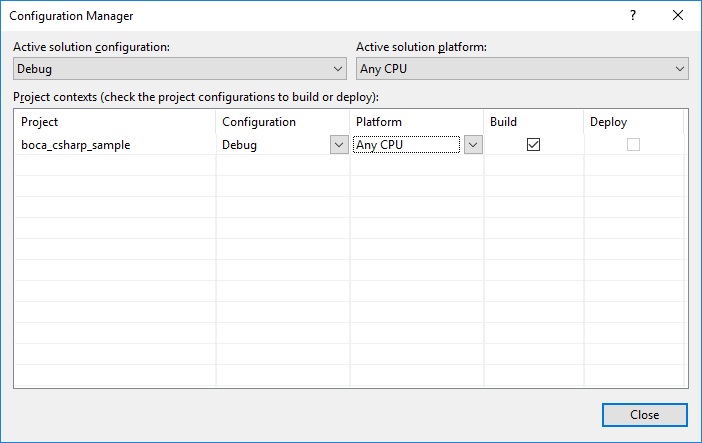
**Visual Studio 2013\Projects\boca\_csharp\_sample\customer\_interfaces\bin\x64\Debug**

Depending on your environment and the functions used, it may be necessary to rebuild the project. If that is the case the Configuration manager settings may need to be altered as shown below.



Once the Configuration Manager is selected, it can be set one of the two ways displayed below. **Once completed, the project can then be rebuilt for the specific environment.**

**For 32 bit builds**



**For 64 bit builds**