Resolutions to problems in the sample application built with VS 2008

UAC execution level in VS2008 for VC++ Sample

A new feature of Windows Vista, User Access Control (UAC) causes processes to run as "standard" user. This occurs even if the Vista PC is logged in with a user that is the member of the "Administrator" group. As a result of this issue inherent only to this operating system type, the iData SDK Sample applications may have compatibility issues with UAC in Windows Vista.

To make the sample applications compatible with UAC in Windows Vista, the application is marked with 'Require Administrator' execution level so that the system will automatically ask for approval from the user to launch the application with full privileges. This is done by specifying the execution level 'Require Administrator' in a manifest file and attaching it to the executable.

As 'Visual Studio 2003' does not have a built-in mechanism to add manifest to the executable, the manifest to enforce 'Require Administrator' execution level is kept in the resource file (as in the screen shot below) in VC++ sample application, and it is attached (linked) to the executable during build time.
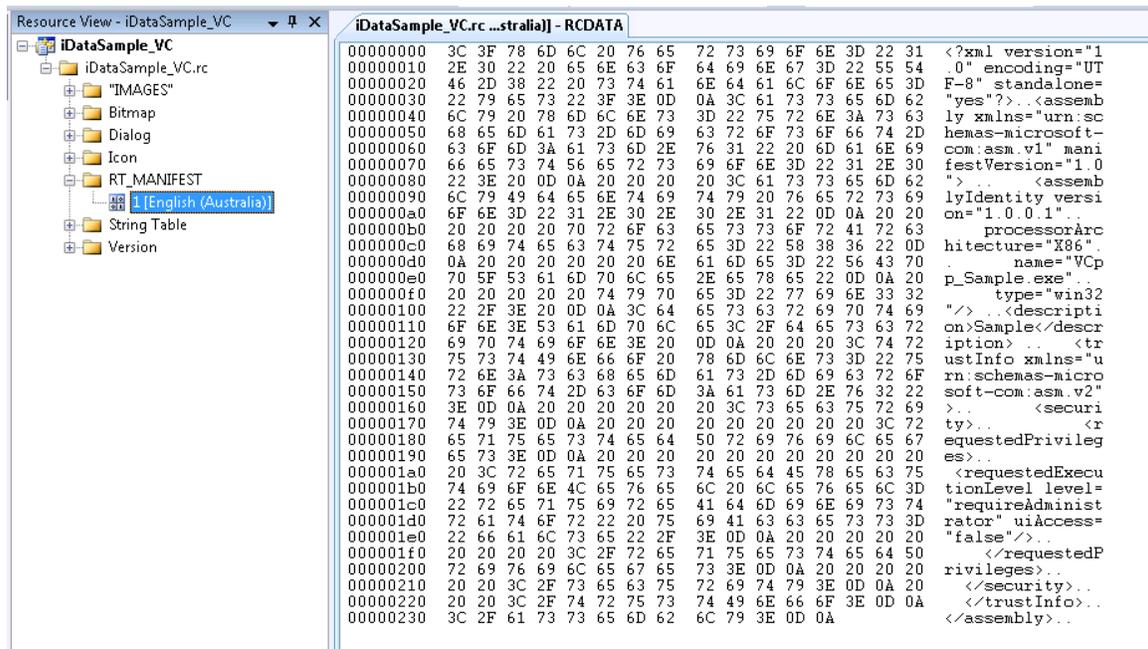

Fig. 1

The same mechanism is applicable for 'Visual Studio 2005' also. But 'Visual Studio 2008' built-in support to add manifest to the executable that overrides the manifest information kept in the resource file. The figure 1 shows the default manifest settings in VS 2008.
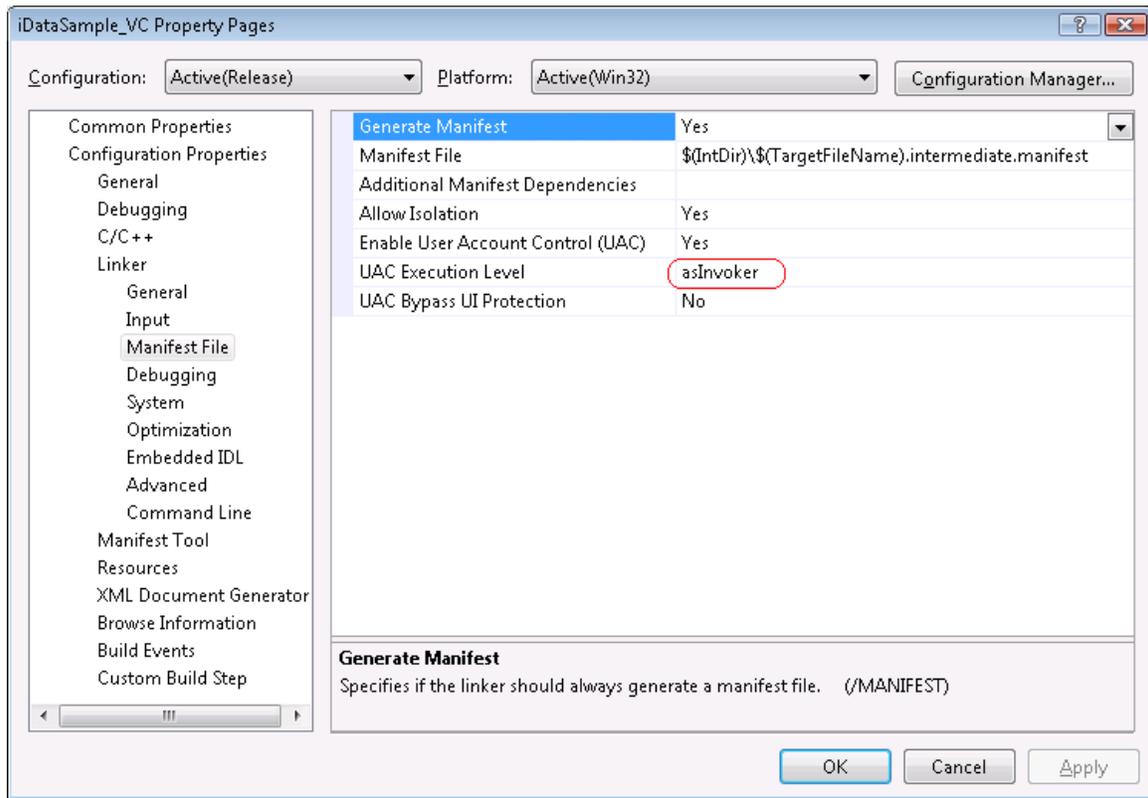
Fig. 2

By default, the UAC execution level is marked as 'asInvoker' and it has to be changed to 'requireAdministrator' as shown in figure 2.

*Note: Detailed information on User Access Control (UAC) settings for Windows Vista can be found directly from Microsoft at:

Link: http://technet.microsoft.com/en-us/library/cc709691(WS.10).aspx

Platform Target in VS 2005 / VS2008 for C# Sample

For building sample application in VS 2008, 'Platform target' configuration (under 'Build' tab) has to be explicitly set as 'x86' (appropriate to the processor type) instead of using the default setting 'Any CPU' as shown in figure 3.

Fig. 3

Simply marking 'Platform Target' of an assembly as Any CPU does not guarantee that it will run on both 32-bit and 64-bit Windows. In fact, since Any CPU is the default setting, there are likely many applications that actually depend upon 32-bit processing but are not marked as such.   These assemblies will fail under 64-bit Windows when they are run from a 64-bit process.

iData SDK v1.05.01 Release Compatibility Test Report

The following test report indicates a working or non-applicable compatibility when using various combinations of operating system, and DEP compatibility in conjunction with all variations of the sample application programming language type. View the chart for compatibility when preparing to use the iData SDK.

*Note: Please refer the link below for more information on **SetProcessDEPPolicy** function.

Link: http://msdn.microsoft.com/en-us/library/bb736299(VS.85).aspx

Sample App (VS 2003 -- installed)	XP 32		Vista 32		Win7 32		Win7 64	
	No DEP	DEP	No DEP	DEP	No DEP	DEP	No DEP	DEP
VC	Working	Working	Working	Working	Working	Working	Working	Working
VB	Working	Working	Working	Working	Working	Working	Working	Working
C#	Working	Working	Working	Working	Working	Working	Working	Working

Visual Basic 20005 & 2008 Compatibility

The following chart indicates a working or non-applicable compatibility when using various combinations of operating system, and Visual Basic versions in conjunction with all variations of the sample application programming language type. View the chart for compatibility when preparing to use the iData SDK.

Sample App	XP 32		Vista 32		Win7 32		Win7 64	
	2005	2008	2005	2008	2005	2008	2005	2008
VC	Working	Working	Working	Working	Working	Working	Working	Working
VB	NA	NA	NA	NA	NA	NA	NA	NA
C#	Working	Working	Working	Working	Working	Working	Working	Working

Technical Support

Additional Information and Technical assistance is available on the IRIS ID Systems, Inc. support web site at www.irisid.com, click on Support & Service then Technical Support.