Frequently Asked Questions

Title: Porting applications from 32bit to 64bit
Date: 20 Aug 2020
Card/Board/Module: all
Operating System: Windows

Question:

I am porting an application from 32bit to 64bit Windows, using the **same compiler**. I get compiler errors &/or errors in running the program on 64bit Windows. Yet this exact same code compiled and ran OK 32bit Windows.

What is the source of the problem ?

Answer:

We have seen this problem. It is important to verify that the compiler options are set the same on the 64bit Windows machine as on the 32bit Windows machine. The default options may be different, and very critical for successful compilation & running.

For example, if a structure has an odd number of bytes or words, the compiler may default to a data alignment that adds extra bytes/words to the structure. This might not be compatible with our DLL and its compilation options.

For instance, here are some changes that you should make to your Borland C++ Builder (5) Project, in order to work well with our DLLs.

Project > Options > Advanced Compiler:
- **Data Alignment** should be BYTE (not Quad word)
- **Calling convention** should be STANDARD CALL (not C)

Note that the size of an **int** may be different across compilers and operating systems.