Frequently Asked Questions

Title: 32bit and 64bit API issues
Date: 08 Nov 2021
Card/Board/Module: All current cards & modules
Operating System: All

Question:

(a) Is the Excalibur module software API compatible between old & new cards?
(b) I sometimes need to work with a 32bit application, and sometimes a 64bit application. How do I manage this with the module's API drivers ?

Answer:

(a) Our software API supports all current modules of the same type. So, the same software tools installation is applicable for the M4K and the M8K modules on their respective cards. M4K modules sit on 2000 & 4000 family cards and on the first generation UNET; M8K modules sit on 8000 family cards and on the UNET2.

(b) There is a base card dll (called Exc4000Ms.dll) which contains API functions for all the base card families: 2000, 4000, 8000, UNET, UNET2.

There is a module level dll (called Exc**Protocol**Ms.dll, where the word protocol is replaced with the actual protocol name of the module). In addition, there are lower level dlls (ExcUnetMs.dll, ftd2xx.dll, ftd3xx.dll) with calls that are used for extracting packets from the cards/modules.

A full set of dlls is required for use with all cards (even for non-UNET cards). After installing your software tools, the set of dlls is available at folder
"**C:\Excalibur\Protocol Software Tools\Source\lib\excMSVisual**". Here you will find subfolders **Win32/x64** and, for each of these, **Debug/Release**. Select the folder that matches your compiler settings, and take the full set of dlls.

For 32bit Windows, copy the dlls to the folder of your EXE, or to C:\Windows\System32.

For 64bit Windows, copy the dlls to the folder of your EXE, or to C:\Windows\SysWOW64. You can use either the 32bit set of dlls, libs & exes, or the 64bit set.

The software tools package comes with folders **Manuals** which contains hardware & software manuals, and **Source** which contains source code for the dll, compiled dlls & libs for 32bit/64bit (subfolders **DllProtocolSource, lib**), and demo programs (source code + EXEs) compiled for 32bit (in folder **Source\demos_protocol\bin**) and for 64bit (in folder **Source\demos_protocol\bin64**).

The API for the base card level functions is found starting at folder **"C:\Excalibur\4000PCI Software Tools"**.