Subject: Compiling a DLL? Posted by wclift01 on Sun, 29 Apr 2007 20:49:47 GMT

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All,

I am attempting to create a dll under 6.3 running under XP SP2. My compiler is MS VC version 8 (the free express edition). As my test case I am using the source code to Rick Towler's RHTgrCamera and Ronn Kling's book "Calling C from IDL" as a reference.

My first problem is that I cannot find export.h in my \RSI \IDL63\external folder but I did see references elsewhere to IDL_export.h so with not a little trepidation I used that instead: Here's the not so reassuring note at the beginning of IDL_export.h:

/* idl_export.h */
/*

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- * Reproduction by any means whatsoever is prohibited without express
- * written permission.

*/

* NOTICE OF INTENT. PLEASE READ:

^

- * This file is intended to supply the external definitions
- * required to write and link code against IDL, either to extend
- * IDL (CALL EXTERNAL, Dynamically loadable modules, LINKIMAGE) or
- * to use IDL to extend your own program (Callable IDL). Our goal

is

- * that including this file in your program will enable your program
- * to access the public interfaces described in the IDL documentation,
- * especially the External Development Guide.

..

- * NOT EVERYTHING IN THIS FILE IS A STABLE PUBLIC INTERFACE.
- * For various technical reasons, there are things in this file that
- * are considered to be private to Research Systems and subject to
- * immediate change without notice. Anything in this file that is not
- explicitly documented elsewhere falls into this category. You should
- * not use such interfaces, as they are not publically supported and
- may change or disappear without warning.

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- * Examples of such interfaces are:
- Types and constants that are not discussed in the

documentation.

- Functions that are not discussed elsewhere.
- * Fields of structures that are not discussed in the documentation
- * even though the structure itself *is* documented.

*/

The date 2003 and disclaimer notwithstanding, I press ahead since I can't find anything more current.

So, at the command line compiler:

cl -D_DLL -DWIN32 -D_MT -I RHTgrCamera" -nologo /c RHTgrCamera.c" / Fo"RHTgrCamera.obj"

creates a RHTgrCamera.obj file OK

Then at the linker:

link /out:"RHTgrCamera.dll" /nologo /nodefaultlib /dll
"RHTgrCamera.obj" /def:"RHTgrCamera.def" \RSI\IDL63\bin
\bin.x86\idl.lib msvcrt.lib kernel32.lib

At first this would fail because the .def file could not be found to I just created one (thanks to Haje's post):

LIBRARY "RHTgrCamera"

EXPORTS IDL_Load @1

Once the def file is created the linker finishes with no errors and .dll, .dll.manifest, .exp, .lib files are created. I then put the .dll and .dlm files in the /bin/bin.x86/ folder. At this point I thought I may have pulled it off but when I try to run an application that uses the .dll I get "This application has failed to start because MSVCR80.dll was not found. Re-installing the application may fix this problem" However, MSVCR80.dll is in my C:\WINDOWS\WinSxS \x86_Microsoft.VC80.CRT_1fc8b3b9a1e18e3b_8.0.50727.42_x-ww_0 de06acd folder (and another folder with an equally messy path).

Am I way off here? Any guidance would be *greatly* appreciated.

Thanks, Bill