Subject: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by Dolphin on Thu, 05 May 2011 07:16:56 GMT

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Hello there,

currently I'm trying to build up a development environment on Windows for building apps that base on U++.

I want to use Visual C++ 2010 Express as development IDE. Since there are no VC++ project files to build U++ from source, I currently setting up a CMake build environment to build the VC++ project and solution files automatically.

So far I have managed to build the HelloWorld example and the necessary dependencies in U++. But when I run the HelloWorld app, I have strange graphical errors, especially in the menu, menu bar and status bar. The background is black and I can only read the menu item texts, when I hover over them with the mouse cursor. The background color of the Window is different too (light gray vs. dark gray).

If I build the HelloWorld app with TheIDE I don't have this error.

What I'm doing wrong here (beside on not using TheIDE)? Currently I have no clue how to fix it.

File Attachments

1) appearance_error_helloworld_msvc10.png, downloaded 597 times

Subject: Re: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by dolik.rce on Thu, 05 May 2011 09:01:30 GMT

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Dolphin wrote on Thu, 05 May 2011 09:16 Hi Dolhin,

Welcome to the forum! You have chosen quite a hard task

What I'm doing wrong here (beside on not using TheIDE)? Currently I have no clue how to fix it. I've already seen this few times Typically this happens when you link the object files in incorrect order. Have a look at the order used in theide (Setup>Be verbose & recompile). The most important thing is to list first the objects created from *.icpp files, before anything else. IIRC, the reason is that icpp files initialize some static variables (e.g. some GUI colors), so if they are listed

in wrong order, some variables might have weird, uninitialized values (e.g. showing up as black background).

Best regards, Honza

Subject: Re: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by mr_ped on Thu, 05 May 2011 09:02:19 GMT View Forum Message <> Reply to Message

Do a clean build in TheIDE with verbose ON, and save the log... Do the same with MSVC++ .. check for differences.

Or wait, maybe somebody will give you some clue where the problem may be. I have no idea, sorry.

edit: and what Honza said.. (didn't see his post when I was writing my answer)

Subject: Re: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by Dolphin on Thu, 05 May 2011 10:06:33 GMT

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Thanks for the fast replies. I'll try what you proposed.

So I'm back to hell for a while...

Subject: Re: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by mr_ped on Thu, 05 May 2011 11:13:58 GMT View Forum Message <> Reply to Message

You know, that's sort of the reason why to replicate TheIDE's build system is not trivial. Once you will understand it fully, it's pretty straightforward and logical, but it's not just basic "cc hello.c", it handles much more, just search for "icpp" in forums to learn more about this feature.

Subject: Re: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by Dolphin on Thu, 05 May 2011 12:29:50 GMT View Forum Message <> Reply to Message

Ok, I fixed the problem. The cause was, that the object files that are created by ICPP files cannot be linked into a LIB.

My current solution simply adds the ICCP files of U++ to the source files of the application in the CMake build step. Then the ICPPs get compiled to object files and are directly linked with the rest of the application. Surely not the best method, but for now it works.

For reference: This thread describes the same problem.

P.S. I was searching the forum for nearly an hour, but I couldn't find a thread similar to my problem. Should have searched for "LNK4221". But at the time of searching I wasn't really aware of that being the cause of the problems ...

Subject: Re: Appearance errors in HelloWorld app build with MSVC++ 10 Posted by dolik.rce on Thu, 05 May 2011 13:13:47 GMT View Forum Message <> Reply to Message

Dolphin wrote on Thu, 05 May 2011 14:29My current solution simply adds the ICCP files of U++ to the source files of the application in the CMake build step. Then the ICPPs get compiled to object files and are directly linked with the rest of the application. Surely not the best method, but for now it works.

This is in fact the same approach as is used by theide and all other build systems. Also it is probably the only possible solution. The code in icpp files is often not referenced from anywhere else, so linker can mistakenly throw it away, if linked in any other way.

Honza