



LMS7Suite Software

- Compilation guide -

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Revision History

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Myriad RE

1

Introduction

The scope of this document is compilation of the LMS7 Suite using CMake under MS Windows OS and Linux OS. Because wxWidgets library is used for user interface, wxWidgets library set-up and compilation is discussed first. Then detailed procedure of LMS7 Suite compilation is provided.

wxWidgets 3.0.0 library is used in this description (wxWidgets-3.0.0.zip).

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Windows OS

This chapter contains instructions for installation and compilation of WxWidgets library, installation of Cypress USB SDK and compiling LMS7 Suite on Windows operating system. Compiling is done using Microsoft Visual Studio 2013.

2.1 wxWidgets installation

Step by step instruction how to install, prepare and compile wxWidgets library is provided below:

1. Go to <http://wxwidgets.org/downloads/> and download source code for Windows.
2. Install wxWidgets library to the C:\libraries\wxWidgets-3.0.0\ directory.
3. Go to C:\libraries\wxWidgets-3.0.0\build\msw directory and open wx_vc10.sln project file.
4. Change project configuration to Release as shown in Figure 1

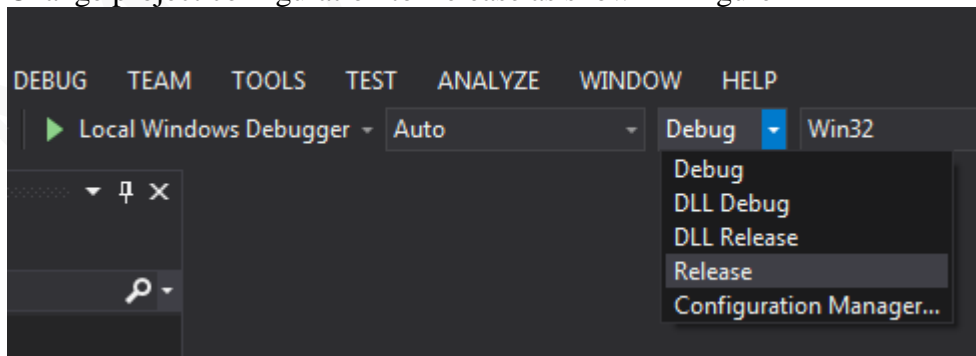


Figure 1 wxWidgets build configuration

5. In Visual Studio top menu select BUILD->Build Solution as shown in Figure 2.

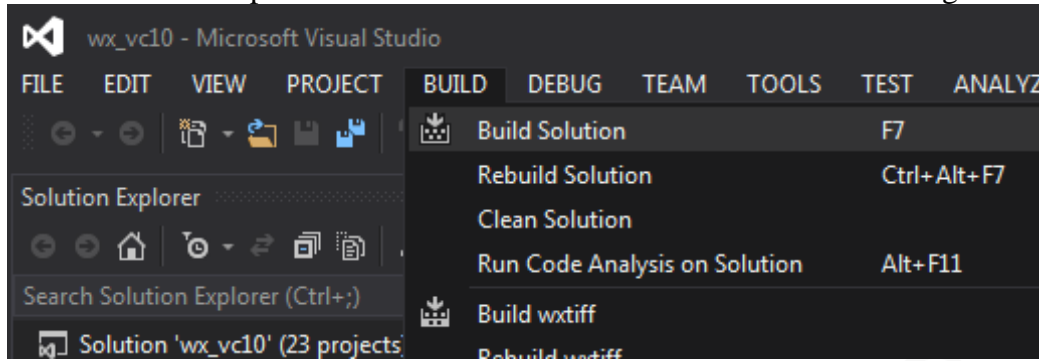


Figure 2 Compiling wxWidgets

6. Compilation process will start right now. It will take some time to compile the library wait until this process is complete, please.

2.2 Cypress EZ-USB FX3 SDK installation

1. Go to <http://www.cypress.com/?rID=57990> and download EZ-USB FX3 SDK for Windows.
2. Install SDK into desired directory.

2.3 Compiling LMS7 Suite

1. Extract the source code into desired directory (e.g. C:/lms7suite)
2. Launch CMake-gui.
3. Browse where the source code is located, and create directory inside where to build binaries as shown in Figure 3.

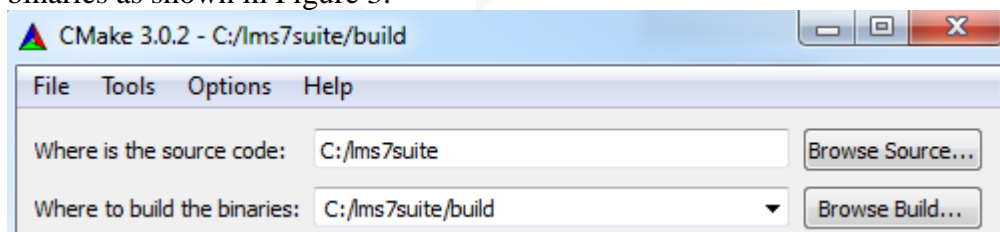


Figure 3 Selecting project source

4. Click Configure button
5. If wxWidgets installation directory is not detected CMake will return error as shown in Figure 4.

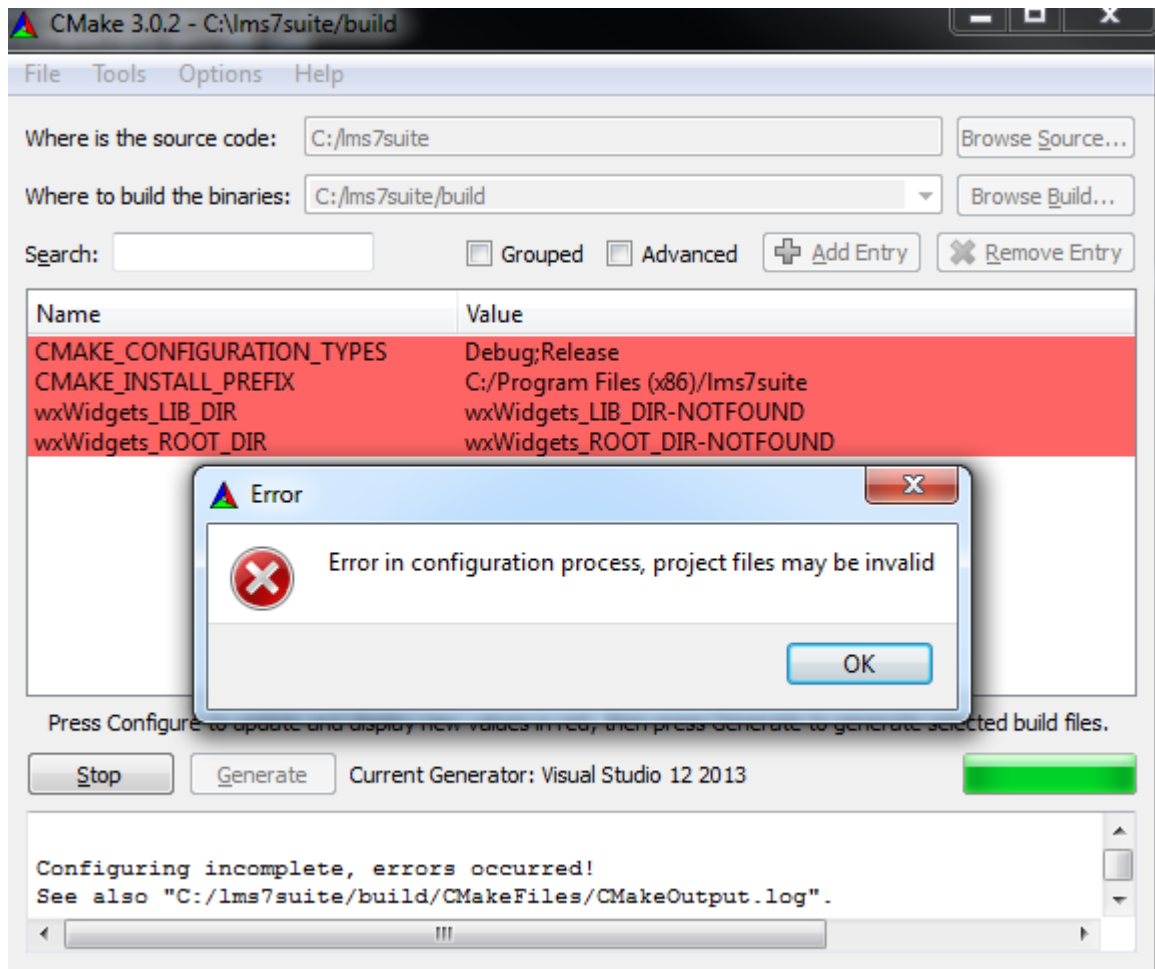


Figure 4 CMake can't find wxWidgets

6. Select and replace wxWidgets_ROOT_DIR-NOTFOUND value with path to your wxWidgets installation directory (e.g. D:/Libraries/wxWidgets-3.0.0)
7. Click Configure button again
8. Click Generate button
9. Go to C:\lms7suite\build\ directory and open lms7suite.sln project file.
10. Change project configuration to Release as shown in Figure 5.

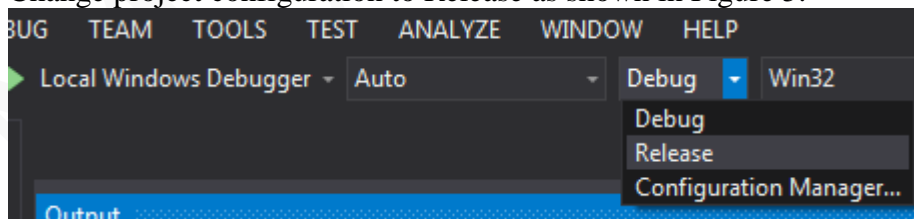


Figure 5 LMS7Suite build configurations

11. In Visual Studio top menu select BUILD->Build Solution.
12. Compilation process will start right now. It will take some time to compile the software, please wait until this process is complete.
13. LMS7Suite binary file can be found in C:/lms7suite/build/bin/Release directory.

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Linux OS

This chapter contains instructions for installation and compilation of WxWidgets library and compiling LMS7 Suite on Linux operating system. Compiling is done using CMake and GCC tools.

3.1 Required libraries

This is a list of required libraries to compile wxWidgets and LMS7Suite.

1. Libusb-1.0
2. libgtk2.0-dev

To install these libraries execute the following command in terminal:

“sudo apt-get install libusb-1.0 libgtk2.0-dev”

3.2 wxWidgets installation on Linux

Step by step instruction how to install, prepare and compile wxWidgets library is provided bellow. In this example the user home directory will be used as /home/linuxuser

3. Download wxWidgets source code from <http://wxwidgets.org/downloads/> (wxWidgets-3.0.0.tar.bz)
4. Create “libraries” directory in your home directory
5. Extract wxWidgets-3.0.0 archive to /home/linuxuser/libraries directory
6. Open terminal and navigate to /home/linuxuser/libraries/wxWidgets-3.0.0 directory
7. Execute command “./configure”
8. Execute command “make”
9. Compilation process will start right now. It will take some time to compile the library, please wait until this process is complete.
10. Execute command “sudo make install” and enter administrator password. This command will install and configure library paths.
11. Now wxWidgets are installed and can be used for LMS7Suite project.

3.3 Compiling LMS7 Suite

1. Extract the source code into desired directory (e.g. /home/linuxuser/lms7suite)
2. Open command line and go to directory where the source code is located (/home/linuxuser/lms7suite/build)
3. Inside the build directory execute command “cmake ..”
4. Inside the build directory execute command “cmake --build .”
5. Wait for the compilation process to complete
6. LMS7Suite binary file can be found in /home/linuxuser/lms7suite/build/bin directory