
Installing wxWidgets in a MinGW / MSYS environment

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Note

This document is a so-called one-shot document. It is here to describe the installation of wxWidgets with MingW / MSYS for a certain version at a certain time (Spring 2006).

This document is not maintained. I will not answer support questions. I will not make changes or provide additional information.

If you feel like you would like to maintain this document, please let me know and I will provide you with the source files.

Prerequisites

You must have a working installation of MinGW and MSYS. MinGW must be installed with support for g++.

Obtaining wxWidgets

The current wxWidgets distribution can be downloaded from the wxWidgets website [<http://www.wxwidgets.org>]. In the left column, click on download. Then, under *stable releases* click on windows. In the *sourceforge* section, click on the installable version, at the time of this writing (Apr 06) called `wxMSW-2.6.3-Setup-1.exe`. Select a sourceforge mirror and wait for the download (approx. 17.5 MB).

Installing wxWidgets

Installing wxWidgets is easy and doesn't take long. Unfortunately you'll have to compile it afterwards, which takes a while. Here are some screenshots from the installation

Figure 1. wxWidgets asking if it should install

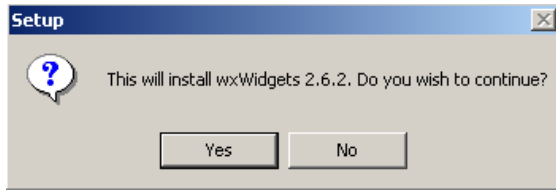


Figure 2. the wxWidgets license



When wxWidgets asks for an installation path, you may chose any path you like, but make sure it does not contain any spaces, as they will break some of the scripts. I would recommend the default setting.

Figure 3. where it should be installed

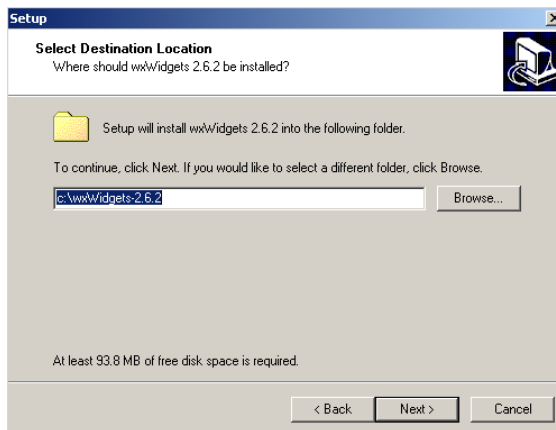
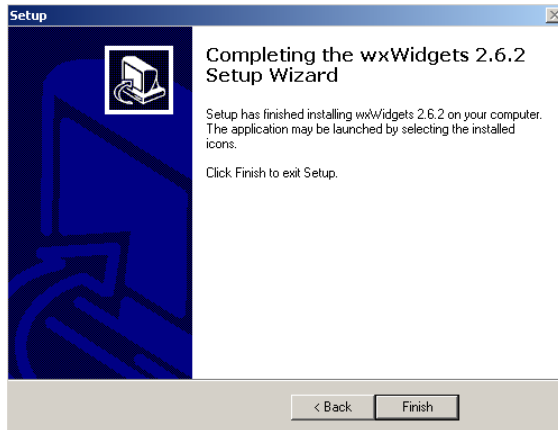


Figure 4. and thats it!



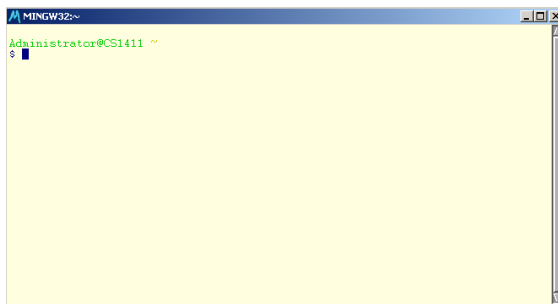
The installation will set the WXWIN environment variable for you. You will have to log out and log back in to ensure that it is actually set for every program. (Rebooting works equally well).

Compiling wxWidgets

After you have downloaded wxWidgets, you need to compile it for your environment. This takes a while, so start it and then go get lunch.

You will have to use the MSYS window. You can find it in (Start / Programs / MSys / MSYS). This is a Unix-like environment in your windows computer.

Figure 5. The MSYS window



Change to your wxWidgets directory:

```
cd $WXWIN
```

The yellow/orange part should show something like: `/c/wxWidgets-2.6.3`. If that is not the case, make sure you've logged out and back in.

Next, configure wxWidgets for your system. Type (all in one line!):

```
./configure --enable-optimise --enable-stl --enable-unicode  
--disable-threads --enable-static --disable-shared --enable-monolithic
```

This takes a short while (on current computers about 5 minutes). So only grab a quick coke. It displays a lot, including warnings. It is very safe to just ignore those. When it is done it should show something like this (your output may be slightly different):

Configured wxWidgets 2.6.3 for `i686-pc-mingw32`

```
Which GUI toolkit should wxWidgets use?          msw
Should wxWidgets be compiled into single library?  yes
Should wxWidgets be compiled in debug mode?       no
Should wxWidgets be linked as a shared library?   no
Should wxWidgets be compiled in Unicode mode?     yes
What level of wxWidgets compatibility should be enabled?
wxWidgets 2.2                                     no
wxWidgets 2.4                                     yes
Which libraries should wxWidgets use?
jpeg                                               builtin
png                                                builtin
regex                                              builtin
tiff                                               builtin
zlib                                               builtin
odbc                                               no
expat                                              builtin
libmspack                                         no
sdl                                                no
gnomeprint                                        no
hildon                                             no
```

Now compile wxWidgets by running make:

```
make
```

This takes a long time (between 20 minutes and 1 hour on modern systems) and has lots of output. Don't wait for it. Go do something else in the mean time.

Optimizing wxWidgets

Saving space

To save disk space, you may now delete the compiled object files. This does no harm, since they will be recreated if you compile again. In MSYS, type

```
cd $WXWIN
rm *.o
```

Improving compile time

You can "precompile" the wxWidgets header. This will save you compile time if - and only if - the **#include <wx/wx.h>** line is the first code line in your source file. To do that, type the following in MSYS:

```
cd $WXWIN
cd include/wx
g++ $(../../wx-config --cxxflags) wx.h
```

Further Examples

For a quickstart example and further information how to program wxWidgets using eclipse see my wxWidgets using Eclipse and the CDT [<http://max.berger.name/howto/wxWidgets/eclipse/>] [HowTo](#).