GLroboop - Installation Guide

February 8, 2007

1 Introduction

The program GLroboop requires wxWidgets and ROBOOP. You have to download the latest stable version (2.6.X) of wxWidgets, ROBOOP and GLroboop.

2 MS Windows

Under MS Windows, you need to set the environment variable `WXWIN` to the location of wxWidgets. You need the following subdirectories to be located in same the directory:

- `roboop`: the ROBOOP directory;
- `GLroboop`: the GLroboop directory.

For MS Visual C++, you also need to have in the same directory

- `wx`: the wxWidgets directory;

You need to enable OpenGL support in wxWidgets. To do so, in the wxWidgets directory edit the file:

`include\wx\msw\setup.h`

to have (line 854 in the 2.6.3 release)

```
#define wxUSE_GLCANVAS       1
```

2.1 MS Visual C++ 6.0 and .NET

In the wxWidgets directory, open the workspace:

`build\msw\wx.dsw`

Using the `Build -> Batch Build` menu option, select the following targets:

- wxregex - Win32 Unicode Release, wxregex - Win32 Unicode Debug,
- wxzlib - Win32 Unicode Release, wxzlib - Win32 Unicode Debug.
- wxpng - Win32 Unicode Release, wxpng - Win32 Unicode Debug,
- wxjpeg - Win32 Unicode Release, wxjpeg - Win32 Unicode Debug,
- wxtiff - Win32 Unicode Release, wxtiff - Win32 Unicode Debug,
- wxexpat - Win32 Unicode Release, wxexpat - Win32 Unicode Debug,
- base - Win32 Unicode Release, base - Win32 Unicode Debug,
- core - Win32 Unicode Release, core - Win32 Unicode Debug,
- adv - Win32 Unicode Release, adv - Win32 Unicode Debug,
- gl - Win32 Unicode Release, gl - Win32 Unicode Debug.

Do not select the `DLL` targets. Then, build the libraries. Be patient, depending on your computer, this process can take a while !

In the ROBOOP directory, open the workspace:

`roboop.dsw`

Using the `Build -> Batch Build` menu option, select all the targets. Then, build the targets.

Finally, in the GLroboop directory, open the workspace:

`Glroboop.dsw`

Using the `Build -> Batch Build` menu option, select all the targets. Then, build the targets.

You can now run the program !

2.2 Borland C++ 4.5/5.0/5.5

After you have modified the `setup.h` file, go to the `build/msw` subdirectory in the the wxWidgets directory and execute:

```
make -f makefile.bcc USE_OPENGL=1 UNICODE=1
```

This will build a DEBUG version of the library. To obtain a non-DEBUG version, run the following commands:

```
make -f makefile.bcc USE_OPENGL=1 UNICODE=1 BUILD=release
```

Then, in the ROBOOP, run the command:

```
make -f makefile.bc5
```

Finally, in the GLroboop directory, execute:

```
make -f makefile.b32
```

This will build a DEBUG version of the program. To obtain a non-DEBUG version, run the following commands:

```
make -f makefile.b32 BUILD=release
```

3 Linux

Under Linux, you need the following subdirectories to be located in same the directory:

- `roboop`: the ROBOOP directory;
- `GLroboop`: the GLroboop directory.

3.1 RPM based systems

Under Fedora Core, SUSE and other RPM based systems, you can install wxWidgets using yum (pirut or other equivalent install systems). For example, under Fedora Core, use the following:

```
yum install wxGTK-devel
```

3.2 Debian

Under Debian, the package `wxwidgets2.6-dev` and its dependencies are needed to compile GLroboop.

3.3 Gentoo

Install the package wxGTK.

3.4 Other distribution

Please check if a pre-build package is available.

3.5 Install from source

If your distribution does not have a pre-build package, you can install from source. First, download the wxWidgets sources (for example the sources of wxWidgets for GTK+). Extract the sources from the archive and enter the following commands for the GTK+ version (for shared libraries):

```
./configure --with-gtk --with-opengl --enable-unicode
make
su <type root password>
make install
ldconfig
exit
```

Be sure that your `LD_LIBRARY_PATH` or equivalent variable (`/etc/ld.so.conf` under some Linux distribution) contains the path to the wxWidgets libraries that have just been installed (`/usr/local/lib` by default).

To obtain static libraries, replace the first command by

```
./configure --with-gtk --with-opengl --disable-shared --enable-unicode
```

and omit the command

```
ldconfig
```

3.6 Compiling GLroboop

In the ROBOOP directory, enter the following command:

```
make -f makefile.gcc
```

Then, in the GLroboop directory, enter the following command:

```
make -f makefile.gcc
```

Now, you can run the program:

```
./GLroboop
```