

How to compile SDL_bgi programs with Dev-C++

These instructions show how to compile an `SDL_bgi` program using Dev-C++; we will use `fern.c`, provided in the `test/` directory.

Let's assume that Dev-C++ is installed in `C:\Dev-Cpp`, and that the SDL2 development libraries (MinGW) are installed in `C:\SDL2-2.0.10`. If you installed the software in different directories, change the following instructions accordingly.

The procedure was tested with Orwell Dev-Cpp 5.11, TDM-GCC 5.1.0-3, and SDL2-devel-2.0.10-mingw.

Links:

<https://sourceforge.net/projects/orwelldvcpp/>

<http://tdm-gcc.tdragon.net/download>

<https://libsdl.org/download-2.0.php>

Upgrading Dev-C++'s Compiler

By default, Dev-C++ ships with TDM-GCC 4.9.2; this is an old version that is not compatible with current SDL2 development libraries. To compile `SDL_bgi` programs, you must upgrade TDM-GCC to the latest release.

- remove the directory `C:\Dev-Cpp\MinGW64`, or rename it as `C:\Dev-Cpp\MinGW64_old`
- install TDM-GCC (32 bit) in `C:\Dev-Cpp\MinGW64`
- start Dev-C++. A window will appear, informing that a suitable compiler was not found. Click on **No**
- from menu **Tools/Compiler Options.../Compiler set to configure**, click on the **++** icon (Find and automatically configure compilers)
- when asked to **Clear current compiler list?**, click on **Yes**
- select "TDM-GCC 5.1.0 64-bit release" as the "Compiler set to configure"
- restart Dev-C++. A window will appear, informing that `gdb` was not found. From menu **Tools/Compiler Options...** select the tab **Programs** and replace `gdb.exe` with `gdb32.exe`
- test Dev-C++ and make sure that you can compile programs.

Compiling SDL_bgi Programs

- copy `SDL_bgi.dll` to `C:\Dev-Cpp\MinGW64\lib`
- copy `SDL_bgi.h` to
`C:\SDL2-2.0.10\i686-w64-mingw32\include\SDL2`
- copy `graphics.h` to `C:\SDL2-2.0.10\i686-w64-mingw32\include`
- Run Dev-C++ and start an empty project called **Fern**: menu **File/New/Project...**, tick “C Project”, select “Empty Project”, insert the name “Fern”, click on **Ok**, save the project file
- in the left-hand pane, click on tab **Project**, remove **Untitled**, right click on **Fern**, click on **Add to project...**, pick `fern.c`
- menu **Project/Project options...**, tab **Parameters**, tab **Linker**: add the string `-lmingw32 -lSDL_bgi -lSDL2main -lSDL2 -mwindows`
- tab **Directories**, tab **Include Directories**: add
`C:\SDL2-2.0.10\i686-w64-mingw32\include\SDL2` and
`C:\SDL2-2.0.10\i686-w64-mingw32\include`
- tab **Library Directories**: add `C:\SDL2-2.0.10\i686-w64-mingw32\lib`
then click on **Ok**
- compile the program: menu **Execute/Compile**
- copy `SDL2.dll` and `SDL_bgi.dll` to the same directory as `fern.exe`
- run it: menu **Execute/Run**.

Note 1: if you release your compiled program, you must also provide `SDL2.dll` and `SDL_bgi.dll` in the same directory.

Note 2: if your code uses functions provided by `stdio.h` (e.g. `printf()`, `scanf()`, etc.) you must also run a terminal. Remove the option `-mwindows` from the linker parameters.