

Run C++ in command prompt - Windows

I know that everyone uses an IDE nowadays, but I just find it simpler to write my code in notepad++, compile it using a command prompt command, and run it from there too. At least that works for Java and Python. I've tried to get my head around how to do that with C++, and haven't been able to find anything good. Is there any compiler (like Java's JDK) that I can stick into my path and use the C++ equivalent of `javac` and `java` to run and compile my code from CMD?

Note: please don't post answers and comments about how IDEs are better - I know they are. I'm just used to doing it the old way :D

[c++](#) [windows](#) [compiler-construction](#) [command-line](#)

edited Jul 6 '12 at 16:31

asked Jul 6 '12 at 16:07



[Bluefire](#)

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3 Sure, what operating system are you using? – [cha0site](#) Jul 6 '12 at 16:08

Probably windows ... install the free version of visual studio and you can use the "cl" command. – [nisah](#) Jul 6 '12 at 16:10

3 @Bluefire: also, what C++ compilers do you have installed on your system? – [Mooing Duck](#) Jul 6 '12 at 16:16

5 Answers

It depends on what compiler you're using.

For example, if you are using Visual C++ .NET 2010 Express, run Visual C++ 2010 Express Command Prompt from the start menu, and you can simply compile and run the code.

```
> cl /EHsc mycode.cpp
> mycode.exe
```

or from the regular command line, you can run `vcvars32.bat` first to set up the environment. Alternatively search for `setvcvars.cmd` (part of a FLOSS project) and use that to even locate the installed VS and have it call `vcvars32.bat` for you.

Please check your compiler's manual for command lines.

edited Jul 6 '12 at 16:26



OxC0000022L

12.5k 3 42 76

answered Jul 6 '12 at 16:17



Rango

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Steps to perform the task:

1. Yes, first install a compiler: [Download from here](#)
2. Then type the C program, save it.
3. Then open the command line and change directory, using 'cd' to the particular directory where the source file is stored.

like: `cd C:\Documents and Settings...`

4. Then to compile/run type in the command prompt,

`"gcc sourcefile_name.c" or "gcc -o outputfile.exe"`

edited Jul 6 '12 at 16:32

answered Jul 6 '12 at 16:19



codeDEXTER

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- 1 If you mention `cd`, you should mention that he should probably put gcc on the path first. – [Mooing Duck](#) Jul 6 '12 at 16:24

@MooingDuck MinGW installer do it for you – [Gigi](#) Jul 6 '12 at 16:25

- 2 @Gigi: I normally use mingw-w64 which doesn't touch the path, alright then. – [Mooing Duck](#) Jul 6 '12 at 16:35

I really don't see what your problem is, the question is rather unspecific. Given Notepad++ I assume you use Windows.

You have so many options here, from the MinGW (using the GCC tool chain and GNU `make`) to using a modern MSVC. You can use the [WDK](#) (`ddkbuild.bat/.cmd` or plain `build.exe`), the [Windows SDK](#) (`nmake.exe`), other tools such as [premake](#) and [CMake](#), or `msbuild` that comes with MSVC and the Windows SDK.

I mean the compiler names will differ, `cl.exe` for MSVC and the WDK and Windows SDK, `gcc.exe` for MinGW, but even from the console it is customary to organize your project in some way. This is what `make` and friends were invented for after all.

So to know the command line switches of your particular compiler consult the manual of that very compiler. To find ways to automate your build (i.e. the ability to run a simple command instead of a complex command line), you could sift through the [list on Wikipedia](#) or pick one of the tools I mentioned above and go with that.

Side-note: it isn't necessary to ask people not to mention IDEs. Most professional developers have automated their builds to run from a command line and not from within the IDE (as during the development cycle for example), because there are so many advantages to that approach.

edited Jul 6 '12 at 16:31

answered Jul 6 '12 at 16:13



[0xC0000022L](#)

12.5k 3 42 76

Does the Windows SDK come preinstalled with the platform? – [Bluefire](#) Jul 6 '12 at 16:15

- 1 @Bluefire: no, but the current versions of it can be downloaded for free and still contain a compiler (though not an optimizing one, unless you have a qualifying product such as MSVC Pro or higher). However, MS announced that they want to drop the compiler from WDK and SDK starting with Windows 8. – [0xC0000022L](#) Jul 6 '12 at 16:16

Sure, it's how most compilers got started. [GCC](#) is probably the most popular (comes with most flavors of *nix). Syntax is just `gcc my_source_code.cpp`, or `gcc -o my_executable.exe`

my_source_code.cpp . It gets more complicated, of course, when you have multiple source files (as in implementation; anything `#include` d works automatically as long as GCC can find it).

MinGW appears to be a version of GCC for Windows, if that's what you're using. I haven't tried it though.

Pretty sure most IDEs also include a command line interface. I know Visual Studio does, though I have never used it.

answered Jul 6 '12 at 16:15



KRyan

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If you're running windows then make use of this:

```
g++ -o program program.cpp
```

g++ is the name of the compiler and -o is the command for creating a .o file. program (without .cpp suffix) is the exe file and program.cpp is your file that you want to compile.

```
g++ -o program program.cpp&program.exe
```

Use this shortcut to run the .exe file of the program. This may run in Ubuntu but you may have to use .out suffix instead of .exe. Use this handy batch script I made to execute your programs on windows:

```
@echo off&&cls
set /p pathName=Enter The Path where the file is located:=%%
cd %pathName%
REM set /p exec=Enter The Name of the executable you want to make:=%%
set /p file=Enter The Name of the file you want to compile:=%%
g++ -o %file% %file%.cpp
%file%.exe
```

save it as cppExecutor.bat

Also you could use the following commands on unix (Linux and Mac) os:

```
CC program.cc
```

If you want to use gcc:

```
gcc -o program program.cpp
```

With the shortcut:

```
gcc -o program program.cpp&program.exe
```

[edited May 31 '16 at 14:03](#)

[answered May 31 '16 at 13:56](#)



[JedaiCoder](#)

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