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## Compile a single file under CMake project?

I'm developing a C++ project which is going to be enclosed on a bigger one.

I've seen that on the bigger project (is a Qt application and it's being generated from qmake) I am able to compile a single file from the linux command line, just entering the relative path to the specific file as an argument to make.

On the other hand, I'm using CMake for my own project. When I modify some code for a compilation unit and I have to modify its header file, I have to wait a long time to compile its dependencies and then its own source file. But there are some situations in which I would prefer to check whether the source code in the \*.cc file is compilable without errors.

Is there a way to generate a Makefile from CMake the way qmake does this? Switching to qmake is not an option anymore.

c++ makefile compilation cmake qmake

edited Jul 13 '16 at 8:16

asked Jul 8 '16 at 16:21



**pacorrop**  
145 6

Try `make help` on your current CMake-generated makefile. I'm pretty sure that will list how to build just a single object file. – [John](#) Jul 8 '16 at 19:30

### 3 Answers

No, CMake does not offer built-in support to compile single files.

You have to add a target for each object file, maybe by a function iterating over all files of a directory.

answered Jul 8 '16 at 20:14



**usr1234567**  
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Not out-of-the box. CMake does not expose those "internal" makefile rules in the main makefile.

You can do this only if you consider what kind of file structure CMake uses internally. You can e.g. for compiling a single \*.obj files using CMake generated makefiles call

```
make -f CMakeFiles/myProg.dir/build.make CMakeFiles/myProg.dir/main.cc.obj
```

when you have something like