

# DOWNLOADING GTEST USING CMAKE/BASH/ in windows

## Procedures

1. Download and install CMake binaries (<https://cmake.org/download/>)
  - Choose to either add Cmake to the path for all users or just your account.
2. **(Windows 10)** Make sure you are using MinGW **64** not **32**!
  - Get it from <http://mingw-w64.org/doku.php/download/mingw-builds>
  - Add the installation directory to your path
  - (Optional) Create an alias/link for make (e.g. in Git Bash run `ln mingw32-make.exe make`)
  - ^ For the optional step make sure you have Git installed then launch Git Bash then change directory to where mingw32-make.exe is before running that command: [https://git-scm.com/downloads\\_](https://git-scm.com/downloads_)
3. Download the latest version (currently 1.10) of gtest from <https://github.com/google/googletest/releases> and unpack it.

**Note: It is important to add cmake and mingw64 paths to the environment variables paths**

Open a command terminal in the extracted directory (or `cd` into it).

Execute following commands:

- **NOTE:** If you have MinGW or CMake installed in your C:/ProgramFiles directory the following cmake command might not work. To solve this you can run the MinGW command prompt as administrator, by first right clicking on it and then clicking "run as administrator". As C:/ProgramFiles is not in the users folder, it might not know which users have permissions and hence we get this error.
  - `cd xxx/gtest-x.x.x` (if not already there)
  - `cmake -G "MinGW Makefiles"`
  - `make`
    - **(Windows 10)** If you get an error about `crtDBG.h` missing, you are using MinGW**32** not MinGW**64**. Upgrade using <http://mingw-w64.org/doku.php/download/mingw-builds>
    - If make doesn't work, try `mingw32-make.exe` instead.
4. Copy the following two folders into your MinGW `include` directory (`x86_64-w64-mingw32/include`):
    - `googletest/include/gtest`
    - `googlemock/include/gmock`
  5. Copy the library files in `lib` into your MinGW `lib` folder
    - There should be four libs -- two for gtest and two for gmocked
    - Put the libs in `<Install Dir>\x86_64-w64-mingw32\lib`