

Gtest manual

This is a manual for running gtests.

Recommended OS - Ubuntu 20.04

Makefile commands are supposed to be run on wsl.

1. in terminal use this command to download googletest:

```
sudo apt-get install libgtest-dev
```

2. then download and install cmake:

```
sudo apt-get install cmake
```

3. then move yourself into the directory where gtest is located:

```
cd /usr/src/gtest
```

if there are any problems with locating gtest try this command to find it:

```
whereis gtest
```

4. in the gtest directory create CMakeLists.txt file:

```
sudo cmake CMakeLists.txt
```

5. use this command to build googletest

```
sudo make
```

Here you can see an example of the process:

```
root@kali:~# sudo apt-get install libgtest-dev
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  cmake-data libjsoncpp1 librhash0
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  googletest
The following NEW packages will be installed:
  googletest libgtest-dev
0 upgraded, 2 newly installed, 0 to remove and 278 not upgraded.
Need to get 0 B/2207 kB of archives.
After this operation, 21.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Selecting previously unselected package googletest.
(Reading database ... 40238 files and directories currently installed.)
Preparing to unpack .../googletest_1.10.0-2_all.deb ...
Unpacking googletest (1.10.0-2) ...
Selecting previously unselected package libgtest-dev:amd64.
Preparing to unpack .../libgtest-dev_1.10.0-2_amd64.deb ...
Unpacking libgtest-dev:amd64 (1.10.0-2) ...
Setting up googletest (1.10.0-2) ...
Setting up libgtest-dev:amd64 (1.10.0-2) ...
root@kali:~#
```

```
root@kali:~# sudo apt-get install cmake
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  cmake-doc ninja-build
The following NEW packages will be installed:
  cmake
0 upgraded, 1 newly installed, 0 to remove and 278 not upgraded.
Need to get 0 B/3669 kB of archives.
After this operation, 19.2 MB of additional disk space will be used.
Selecting previously unselected package cmake.
(Reading database ... 40546 files and directories currently installed.)
Preparing to unpack .../cmake_3.16.3-1ubuntu1_amd64.deb ...
Unpacking cmake (3.16.3-1ubuntu1) ...
Setting up cmake (3.16.3-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
root@kali:~#
```

```
root@kali:~# cd /usr/src/gtest && sudo cmake CMakeLists.txt && sudo make
CMake Warning at CMakeLists.txt:54 (project):
  VERSION keyword not followed by a value or was followed by a value that
  expanded to nothing.

-- Configuring done
-- Generating done
-- Build files have been written to: /usr/src/gtest/build
[ 50%] Built target gtest
[100%] Built target gtest_main
root@kali:~#
```

Note: on 3rd picture step 3., 4., and 5. are executed at once