

# GoogleTest

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This page explains how to install the Google Test framework on Ubuntu.

## Install dependencies and tools

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First, install GCC, GNU Make and Git if you haven't already.

```
$ sudo apt update
$ sudo apt install gcc g++ make git
```

## Download, build and install

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```
1  #!/usr/bin/env bash
2
3  # Script to download and install GoogleTest
4
5  set -ex
6
7  version="release-1.10.0" # Release tag on GitHub
8  builddir="/tmp"
9  prefix="$HOME/.local"
10
11 cd /tmp
12 # Download
13 git --single-branch --depth=1 --branch $version \
14     clone https://github.com/google/googletest.git
15 mkdir googletest/build && cd $_
16 # Configure
17 cmake .. -DCMAKE_INSTALL_PREFIX=$HOME/.local -DCMAKE_BUILD_TYPE=Release
18 # Build
19 make -j$(nproc)
20 # Install
21 make install
```

## Usage

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To use GoogleTest in your project, you can use the following CMake snippet:

```
1  enable_testing()
2  find_package(GTest REQUIRED)
3  include(GoogleTest)
4
5  add_executable(test-exe test.cpp)
6  target_link_libraries(test-exe PUBLIC GTest::gtest_main)
7
8  if(NOT CMAKE_CROSSCOMPILING)
9      gtest_discover_tests(test-exe)
10 endif()
```

CMake has to find GoogleTest, so you need to make sure that `$HOME/.local` is in its search paths. See [Installing Locally](#).

## Tested on

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- Ubuntu 19.10 - GoogleTest 1.10.0