

HalfaGeek



POSTED BY

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POSTED ON

AUGUST 27, 2016

POSTED UNDER

UBUNTU

COMMENTS

5 COMMENTS

Install and Configure OpenCV in Code Blocks

First install dependency packages

Install Code Blocks IDE

```
sudo apt-get install codeblocks
```

Required packages

```
sudo apt-get install build-essential  
sudo apt-get install cmake git libgtk2.0-dev pkg-config libavcodec-dev libavformat-dev libswscale-dev
```

Optional packages

```
sudo apt-get install python-dev python-numpy libtbb2 libtbb-dev libjpeg-dev libpng-dev libtiff-dev libjasper-dev libd
```



Clone the latest OpenCV from github

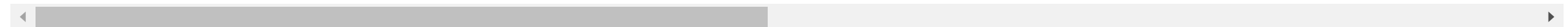
```
git clone https://github.com/opencv/opencv.git
```

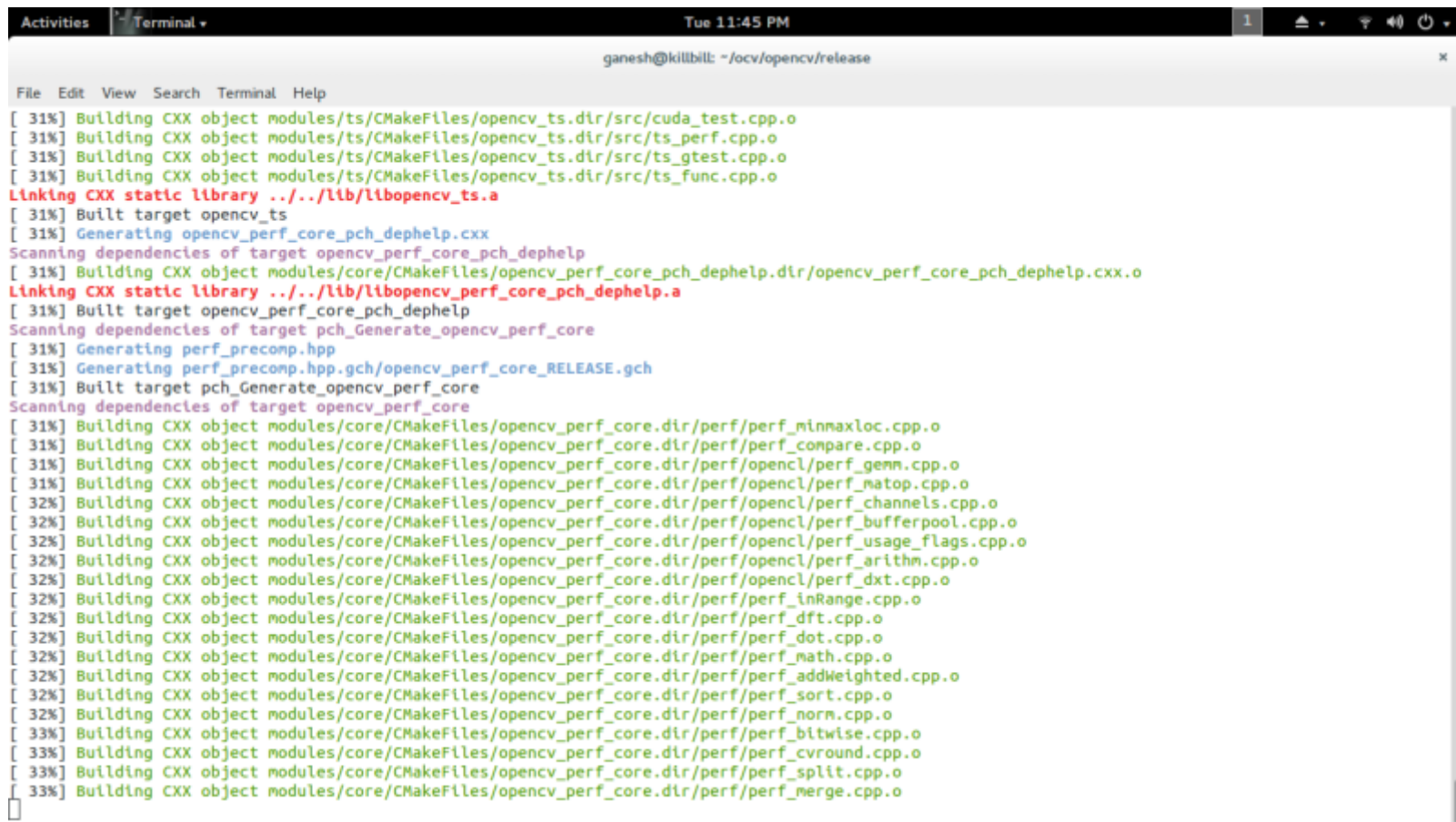
Compile and Install

```
cd ~/opencv  
mkdir release  
cd release  
cmake -D CMAKE_BUILD_TYPE=RELEASE -D CMAKE_INSTALL_PREFIX=/usr/local ..  
make
```

For using with QT and OpenGL and for sample code snippets use this cmake

```
cmake -D CMAKE_BUILD_TYPE=RELEASE -D CMAKE_INSTALL_PREFIX=/usr/local -D WITH_TBB=ON -D BUILD_NEW_PYTHON_SUPPORT=ON -D
```





```
ganesh@killbill: ~/opencv/release
File Edit View Search Terminal Help
[ 31%] Building CXX object modules/ts/CMakeFiles/opencv_ts.dir/src/cuda_test.cpp.o
[ 31%] Building CXX object modules/ts/CMakeFiles/opencv_ts.dir/src/ts_perf.cpp.o
[ 31%] Building CXX object modules/ts/CMakeFiles/opencv_ts.dir/src/ts_gtest.cpp.o
[ 31%] Building CXX object modules/ts/CMakeFiles/opencv_ts.dir/src/ts_func.cpp.o
Linking CXX static library ../../lib/libopencv_ts.a
[ 31%] Built target opencv_ts
[ 31%] Generating opencv_perf_core_pch_dephelp.cxx
Scanning dependencies of target opencv_perf_core_pch_dephelp
[ 31%] Building CXX object modules/core/CMakeFiles/opencv_perf_core_pch_dephelp.dir/opencv_perf_core_pch_dephelp.cxx.o
Linking CXX static library ../../lib/libopencv_perf_core_pch_dephelp.a
[ 31%] Built target opencv_perf_core_pch_dephelp
Scanning dependencies of target pch_Generate_opencv_perf_core
[ 31%] Generating perf_precomp.hpp
[ 31%] Generating perf_precomp.hpp.gch/opencv_perf_core_RELEASE.gch
[ 31%] Built target pch_Generate_opencv_perf_core
Scanning dependencies of target opencv_perf_core
[ 31%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_minmaxloc.cpp.o
[ 31%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_compare.cpp.o
[ 31%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_gemm.cpp.o
[ 31%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_matop.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_channels.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_bufferpool.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_usage_flags.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_arithm.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/opencv/perf_dxt.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_inRange.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_dft.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_dot.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_math.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_addWeighted.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_sort.cpp.o
[ 32%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_norm.cpp.o
[ 33%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_bitwise.cpp.o
[ 33%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_cvround.cpp.o
[ 33%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_split.cpp.o
[ 33%] Building CXX object modules/core/CMakeFiles/opencv_perf_core.dir/perf/perf_merge.cpp.o
```

(<https://importgeek.wordpress.com/2016/08/27/install-and-configure-opencv-in-code-blocks/screenshot-from-2016-08-02-234546/#main>).

```

ganesh@killbill: ~/ocv/opencv/release

File Edit View Search Terminal Help

Linking CXX shared library ../../lib/libopencv_videostab.so
[ 98%] Built target opencv_videostab
[ 98%] Generating pyopencv_generated_include.h, pyopencv_generated_funcs.h, pyopencv_generated_types.h, pyopencv_generated_type_reg.h, pyopencv_generated_ns_reg.h
Scanning dependencies of target opencv_python2
[ 98%] Building CXX object modules/python2/CMakeFiles/opencv_python2.dir/__/src2/cv2.cpp.o
Linking CXX shared module ../../lib/cv2.so
[ 98%] Built target opencv_python2
Scanning dependencies of target opencv_traincascade
[ 98%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/lbpfeatures.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/features.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/imagestorage.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/cascadeclassifier.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/traincascade.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/old_ml_boost.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/boost.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/haarfeatures.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/old_ml_inner_functions.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/old_ml_tree.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/HOGfeatures.cpp.o
[100%] Building CXX object apps/traincascade/CMakeFiles/opencv_traincascade.dir/old_ml_data.cpp.o
Linking CXX executable ../../bin/opencv_traincascade
[100%] Built target opencv_traincascade
Scanning dependencies of target opencv_createsamples
[100%] Building CXX object apps/createsamples/CMakeFiles/opencv_createsamples.dir/utility.cpp.o
[100%] Building CXX object apps/createsamples/CMakeFiles/opencv_createsamples.dir/createsamples.cpp.o
Linking CXX executable ../../bin/opencv_createsamples
[100%] Built target opencv_createsamples
Scanning dependencies of target opencv_annotation
[100%] Building CXX object apps/annotation/CMakeFiles/opencv_annotation.dir/opencv_annotation.cpp.o
Linking CXX executable ../../bin/opencv_annotation
[100%] Built target opencv_annotation
Scanning dependencies of target opencv_visualisation
[100%] Building CXX object apps/visualisation/CMakeFiles/opencv_visualisation.dir/opencv_visualisation.cpp.o
Linking CXX executable ../../bin/opencv_visualisation
[100%] Built target opencv_visualisation
ganesh@killbill:~/ocv/opencv/release$

```

sudo make install

```

ganesh@killbill: ~/ocv/opencv/release
File Edit View Search Terminal Help
-- Installing: /usr/local/include/opencv2/videostab/fast_marching_inl.hpp
-- Installing: /usr/local/include/opencv2/videostab/optical_flow.hpp
-- Installing: /usr/local/include/opencv2/videostab/wobble_suppression.hpp
-- Installing: /usr/local/include/opencv2/videostab/global_motion.hpp
-- Installing: /usr/local/include/opencv2/videostab/motion_stabilizing.hpp
-- Installing: /usr/local/lib/python2.7/dist-packages/cv2.so
-- Set runtime path of "/usr/local/lib/python2.7/dist-packages/cv2.so" to "/usr/local/lib"
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_upperbody.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_frontalface_alt.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_eye_tree_eyeglasses.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_frontalface_alt_tree.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_frontalface_alt2.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_righteye_2splits.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_smile.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_russian_plate_number.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_frontalcatface.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_frontalcatface_extended.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_frontalface_default.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_licence_plate_rus_16stages.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_eye.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_lowerbody.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_profileface.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_fullbody.xml
-- Installing: /usr/local/share/OpenCV/haarcascades/haarcascade_lefteye_2splits.xml
-- Installing: /usr/local/share/OpenCV/lbpcascades/lbpcascade_frontalface.xml
-- Installing: /usr/local/share/OpenCV/lbpcascades/lbpcascade_frontalcatface.xml
-- Installing: /usr/local/share/OpenCV/lbpcascades/lbpcascade_silverware.xml
-- Installing: /usr/local/share/OpenCV/lbpcascades/lbpcascade_profileface.xml
-- Installing: /usr/local/bin/opencv_traincascade
-- Set runtime path of "/usr/local/bin/opencv_traincascade" to "/usr/local/lib"
-- Installing: /usr/local/bin/opencv_createsamples
-- Set runtime path of "/usr/local/bin/opencv_createsamples" to "/usr/local/lib"
-- Installing: /usr/local/bin/opencv_annotation
-- Set runtime path of "/usr/local/bin/opencv_annotation" to "/usr/local/lib"
-- Installing: /usr/local/bin/opencv_visualisation
-- Set runtime path of "/usr/local/bin/opencv_visualisation" to "/usr/local/lib"
ganesh@killbill:~/ocv/opencv/release$

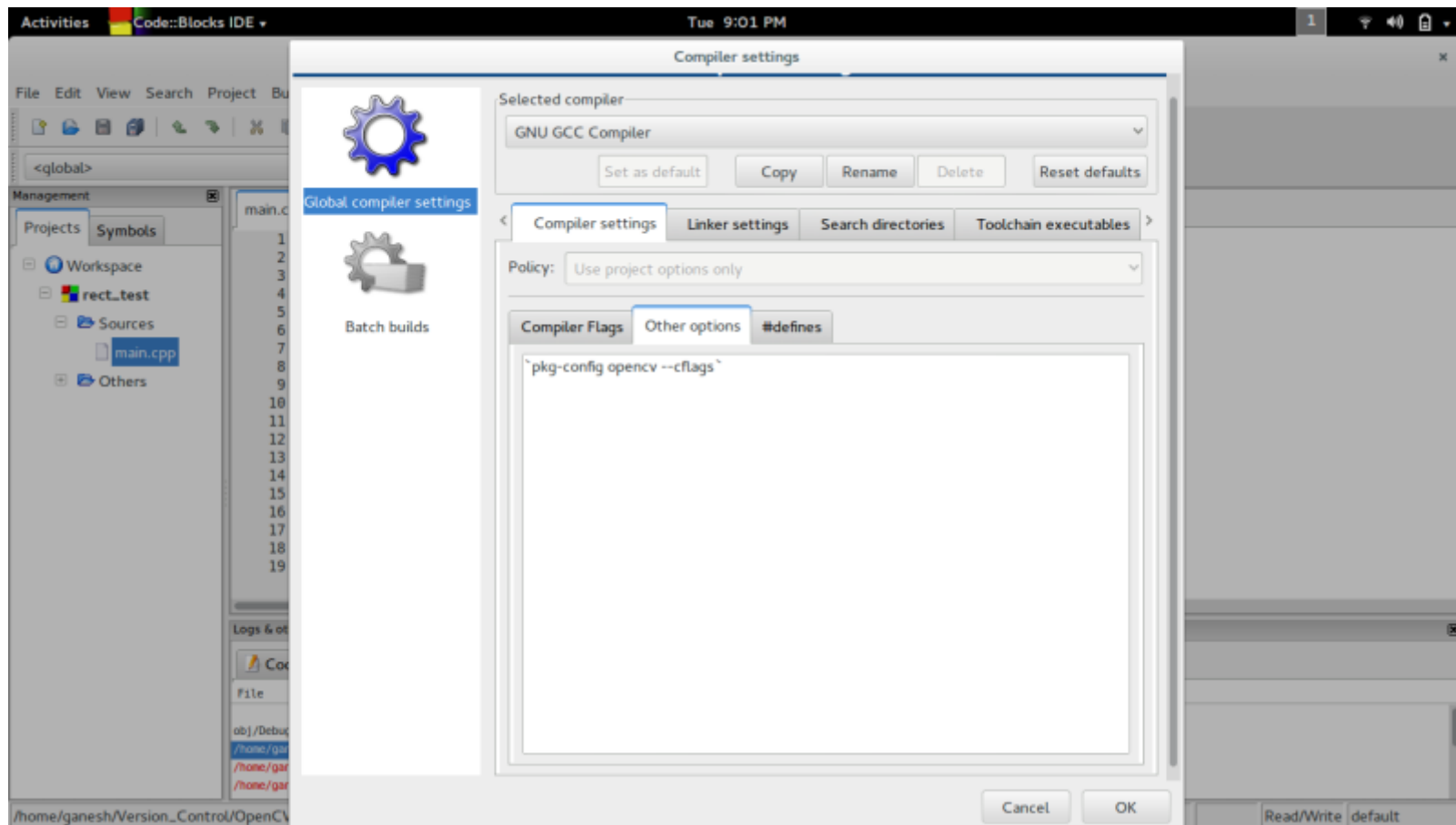
```

(<https://importgeek.wordpress.com/2016/08/27/install-and-configure-opencv-in-code-blocks/screenshot-from-2016-08-03-001758/#main>).

Now open CodeBlocks. Now go to settings → compiler

Under the compiler settings tab select the other options tab and copy the following command into the pane.

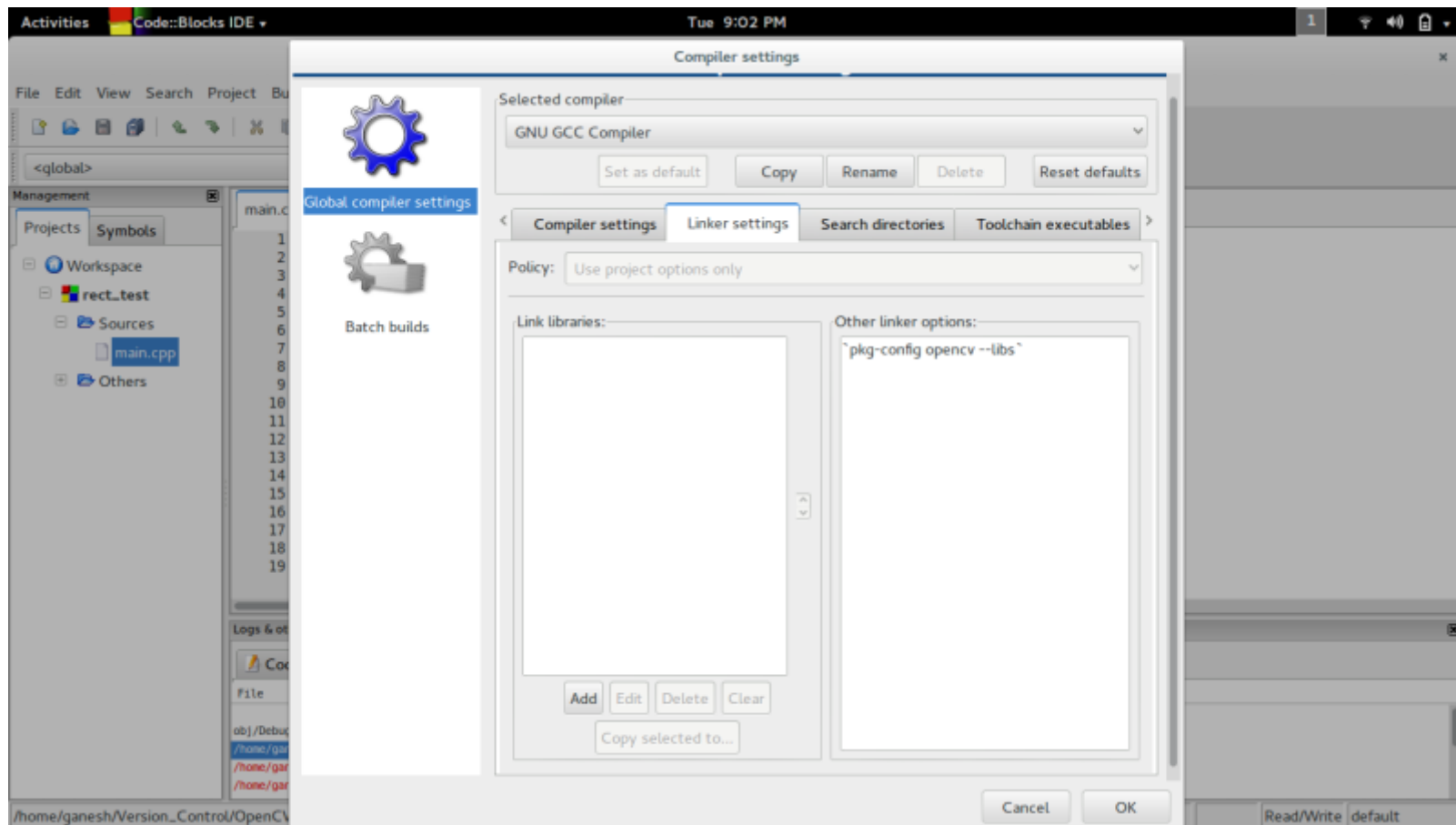
```
`pkg-config opencv --cflags`
```



(<https://importgeek.wordpress.com/2016/08/27/install-and-configure-opencv-in-code-blocks/screenshot-from-2016-08-09-210157/#main>).

Now open the Linker Settings Tab and copy the following command into the other linker options pane:

```
`pkg-config opencv --libs`
```

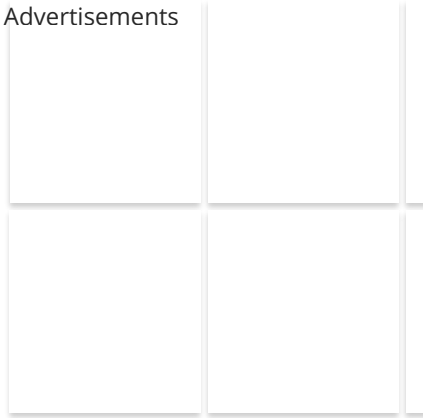


(<https://importgeek.wordpress.com/2016/08/27/install-and-configure-opencv-in-code-blocks/screenshot-from-2016-08-09-210248/#main>).

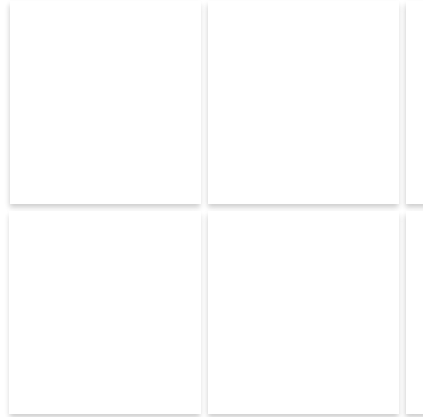
Click OK to save the settings.

Happy Hacking 😊

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- [opencv](https://importgeek.wordpress.com/tag/opencv/) (<https://importgeek.wordpress.com/tag/opencv/>).
- [Ubuntu](https://importgeek.wordpress.com/tag/ubuntu/) (<https://importgeek.wordpress.com/tag/ubuntu/>).

5 thoughts on “Install and Configure OpenCV in Code Blocks”

Asim says:

May 25, 2017 at 1:05 pm

Hello thanks for this tutorial. I did every single step. It compiled the sources ok. I followed the procedure for codeblocks but it won't compile/link the project under codeblocks. Some help would be much appreciated. Thanks

Reply

ganeshredcobra says:

May 31, 2017 at 4:01 pm

Hi Asim, What was the issue? Can you share me the code snippet which you tried?

2. Reply

Marco says:

October 30, 2017 at 2:50 pm

único que deu certo vlw!!:)

3. Reply

Marcel Mougenot says:

March 7, 2018 at 8:48 pm

deu certo mesmooo!

Muito bom! Já tinha tentado conforme diversas indicações e só neste tutorial deu certo!

It worked!

Very good! I had tried according to several indications and only this tutorial worked!

4. Reply

Hero Hunters hack says:

March 20, 2018 at 9:16 pm

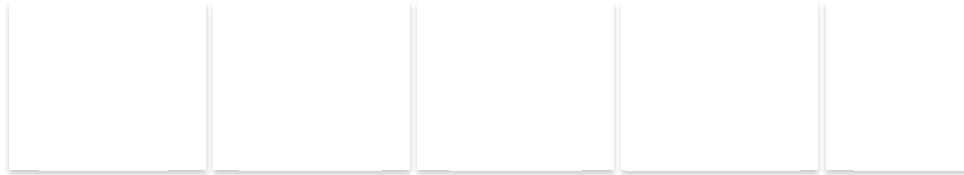
Thank you for the good writeup. If truth be told

was a enjoyment account it. Glance complex to more brought

agreeable from you! However, how can we keep in touch?

Reply

[Blog at WordPress.com.](#)



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