



# OpenCV 2.3.1 for Visual C++ 2010

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## Info

I am using Microsoft Visual C++ 2010 Express (x86) on a Windows 7 (x64)

## Installation

Run *"cmake-2.6.4-win32-x86.exe"*

When prompted, choose *"Add CMake to the system PATH for current user"*

Run *"cmake-2.8.2-win32-x86.exe"*

When prompted, choose *"Add CMake to the system PATH for current user"*

Run *"OpenCV-2.3.1-win-superpack.exe"*

Extract to *"C:\\"*

## Build

Explorer → Navigate to *C:\opencv* → New folder *"build"*

Start → Programs → CMake 2.8 → CMake (cmake gui)

Where is the source code: *"C:/opencv"*

Where to build the binaries: *"C:/opencv/build"*

Configure

Specify the generator for this project: *"Visual Studio 10"*

Use default native compilers

Configure (text appears *"Configuring done"*)

Generate (text appears *"Generating done"*)

Start → Programs → Microsoft Visual Studio 2010 Express → Microsoft Visual C++ 2010 Express

File → Open → Project/Solution... *"C:\opencv\build\OpenCV.sln"*

Wait for Visual C++ to become ready (see bottom left corner)

Debug → Build Solution

Wait till Visual C++ has completed building

Extract *"tbb30\_20110427oss\_win.zip"* to *"C:\opencv\build\common"*

## Global configuration

Start → My Computer (right click) → Properties → Advanced system settings → Environment Variables

PATH (select) → Edit *"C:\opencv\build\x86\vc10\bin;*

*C:\opencv\build\common\tbb\ia32\vc10"*

Restart your computer

### Test program

Copy "funny-pictures-cat-goes-pew.jpg" to the directory where you saved your project (e.g.: "C:\Users\%USERNAME%\Documents\Visual Studio 2010\Projects\test\test")

Start → Programs → Microsoft Visual Studio 2010 Express → Microsoft Visual C++ 2010 Express

File → New → Project...

Win32 Console Application

Name: "test"

Next

Console Application

Empty Project

Finish

Source Files (right click) → Add → New item...

C++ File (.cpp)

Name: "main"

Paste the following code:

```
#include "cv.h"
#include "highgui.h"

int main()
{
    IplImage *img = cvLoadImage("funny-pictures-cat-goes-pew.jpg");
    cvNamedWindow("image popup", CV_WINDOW_AUTOSIZE );

    cvShowImage("image popup", img);
    cvWaitKey(0);

    cvDestroyWindow("image popup");
    cvReleaseImage(&img);

    return 0;
}
```

The following steps should be repeated for every project that uses OpenCV!

Project → test Properties...

Configuration Properties → VC++ Directories

Include Directories <Edit...>

C:\opencv\build\common\tbb30\_20110427oss\include;

C:\opencv\build\include\opencv;

C:\opencv\build\include\opencv2;

C:\opencv\build\include;

Library Directories <Edit...>

C:\opencv\build\common\tbb30\_20110427oss\lib\ia32\vc10;

C:\opencv\build\x86\vc10\lib;

Linker → Input

Additional Dependencies <Edit...>

opencv\_calib3d231d.lib;

opencv\_contrib231d.lib;

opencv\_core231d.lib;

opencv\_features2d231d.lib;

opencv\_flann231d.lib;

opencv\_gpu231d.lib;

opencv\_haartraining\_engined.lib;

opencv\_highgui231d.lib;

*opencv\_imgproc231d.lib;*  
*opencv\_legacy231d.lib;*  
*opencv\_ml231d.lib;*  
*opencv\_objdetect231d.lib;*  
*opencv\_ts231d.lib;*  
*opencv\_video231d.lib;*  
*tbb\_debug.lib;*

You are now ready to test your program by pressing F5 (debug)