



Compiling GnuCOBOL with MS Visual Studio 2012 Express Edition

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<https://www.facebook.com/wortfee>

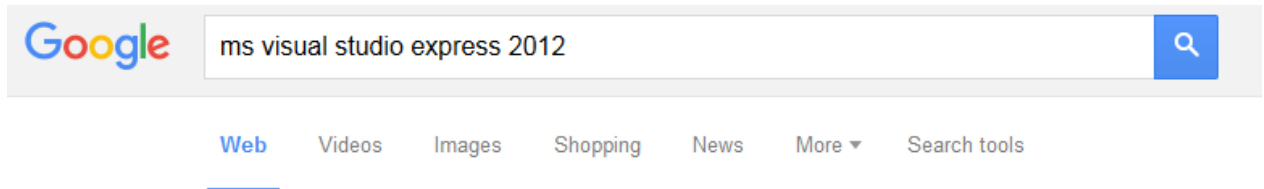
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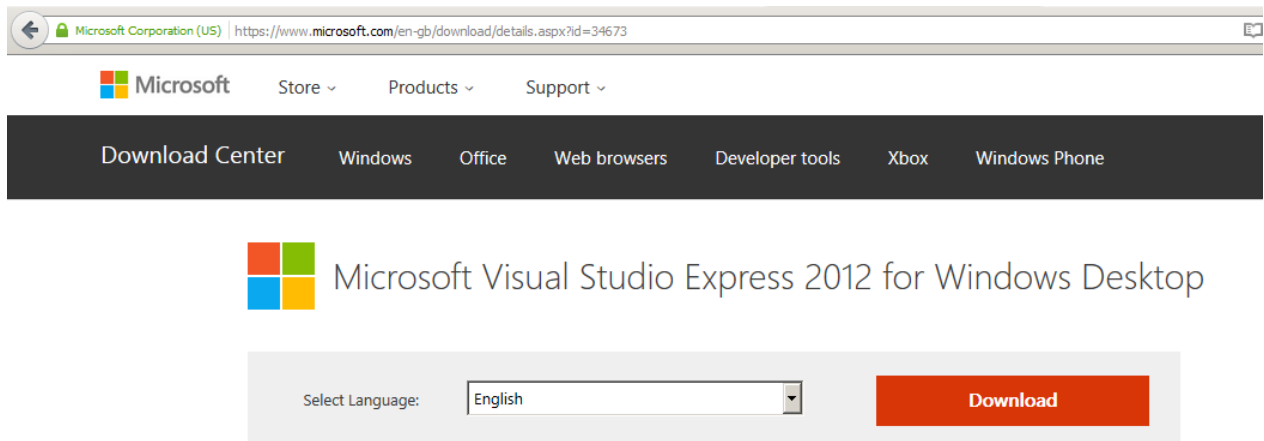
1. Download and install MS Visual Studio 2012 Express Edition

1.1. Search in Google

Remember later, the express edition is a win32 bit version!

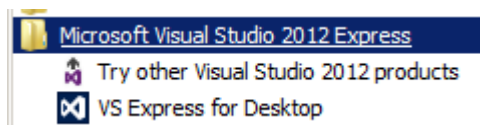


1.2. Download and install Microsoft Visual Studio Express 2012 for Windows Desktop



You can use Visual Studio Express 2012 for Windows Desktop to build powerful desktop apps in C#, Visual Basic, and C++. You can target client technologies such as Windows Presentation Foundation (WPF), Windows Forms, and Win32.

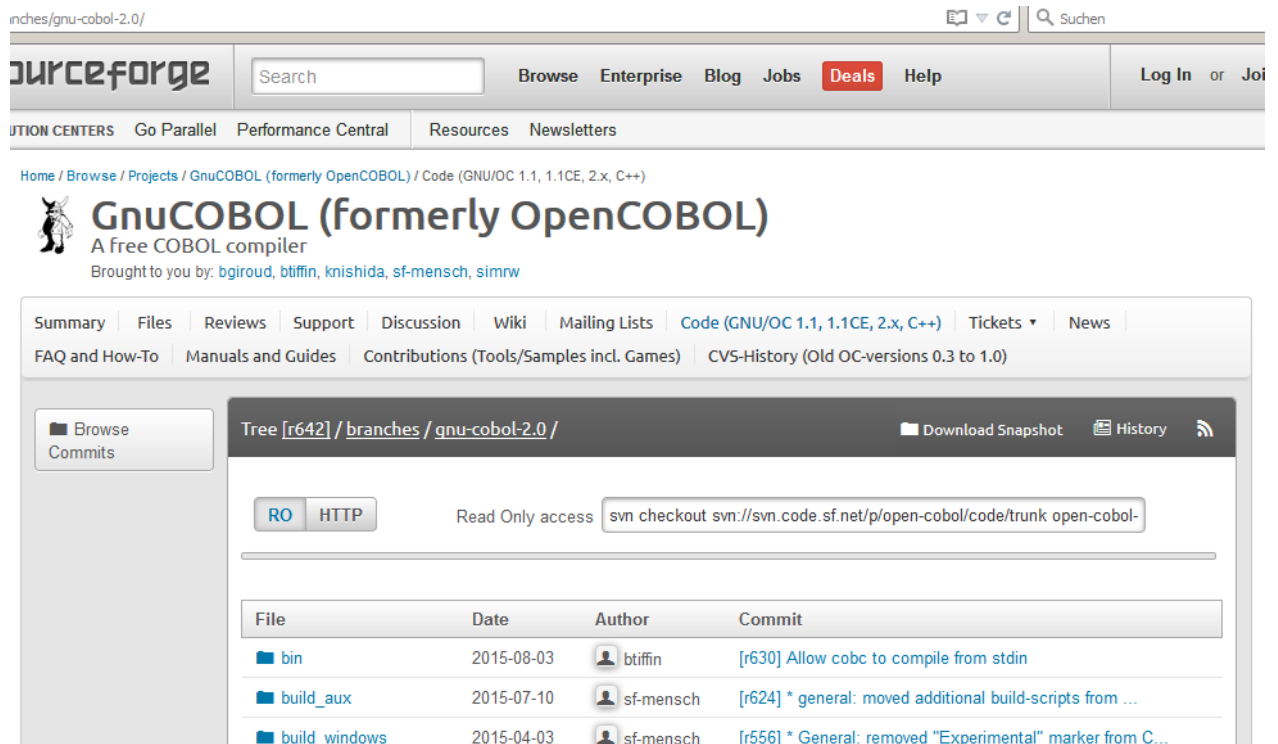
1.3. After it you have this in your windows start menu



2. Download GnuCOBOL 2.0

2.1. Go to in GnuCOBOL branches

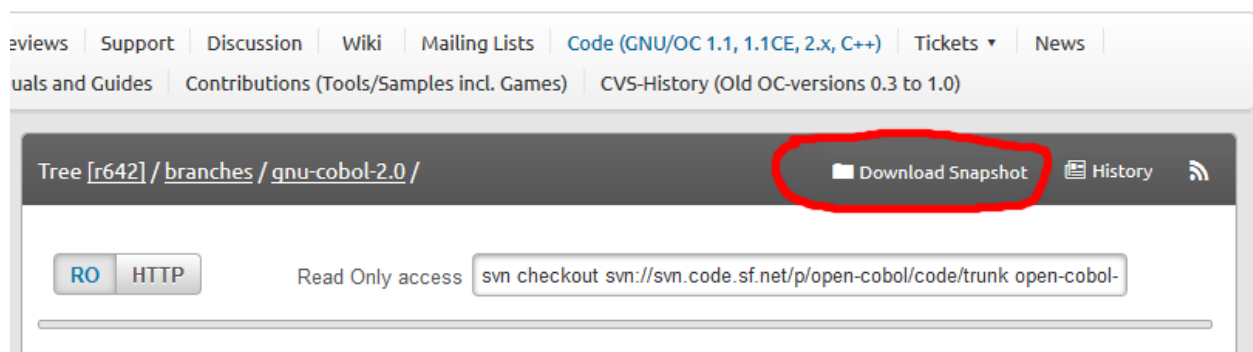
<http://sourceforge.net/p/open-cobol/code/HEAD/tree/branches/gnu-cobol-2.0>



The screenshot shows the SourceForge interface for the GnuCOBOL project. The page title is "GnuCOBOL (formerly OpenCOBOL)" and it is described as "A free COBOL compiler". The page is for the "branches/gnu-cobol-2.0" directory. A table lists recent commits:

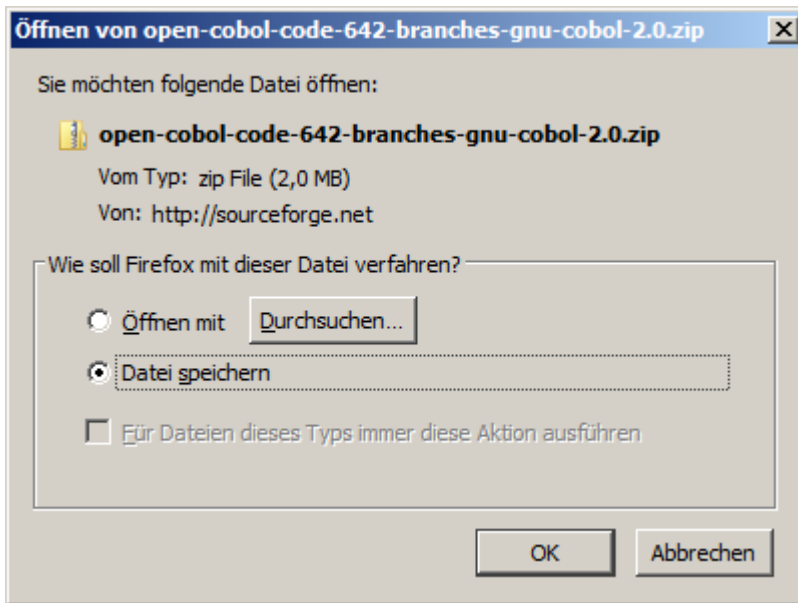
| File | Date | Author | Commit |
|---------------|------------|-----------|---|
| bin | 2015-08-03 | btiffin | [r630] Allow cobc to compile from stdin |
| build_aux | 2015-07-10 | sf-mensch | [r624] * general: moved additional build-scripts from ... |
| build_windows | 2015-04-03 | sf-mensch | [r556] * General: removed "Experimental" marker from C... |

2.2. Click on the button "Download Snapshot"



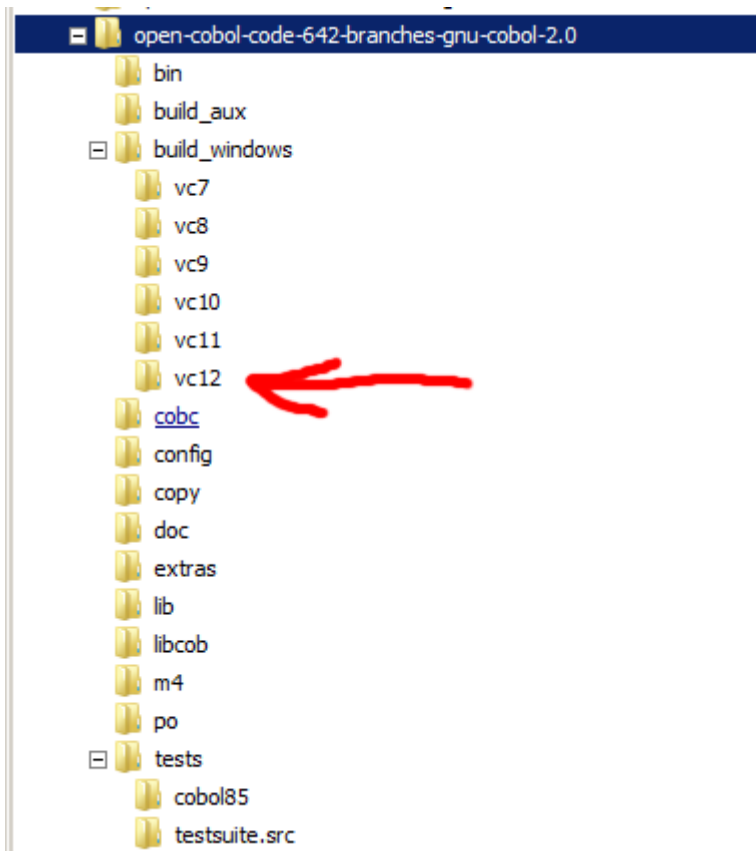
The screenshot shows the same SourceForge page as above, but with the "Download Snapshot" button highlighted in red. The button is located in the top right corner of the page, next to the "History" and "RSS" icons.

2.3. Download the zip file



2.4. Directory structure after unzip

For Microsoft Visual Studio Express 2012 you have to use the "vc12" directory.



3. Download windows prerequisites for GnuCOBOL

3.1. Go to this page

http://sourceforge.net/projects/open-cobol/files/win_prerequisites

Home / Browse / Development / Software Development / GnuCOBOL (formerly OpenCOBOL) / Files



GnuCOBOL (formerly OpenCOBOL)

A free COBOL compiler

Brought to you by: [bgiroud](#), [btiffin](#), [knishida](#), [sf-mensch](#), [simrw](#)

Summary | **Files** | Reviews | Support | Discussion | Wiki | Mailing Lists | Code (GNU/OC 1.1, 1.1C)
FAQ and How-To | Manuals and Guides | Contributions (Tools/Samples incl. Games) | CVS-History

Looking for the latest version? [Download gnu-cobol-1.1.tar.gz \(1.0 MB\)](#)

Home / win_prerequisites

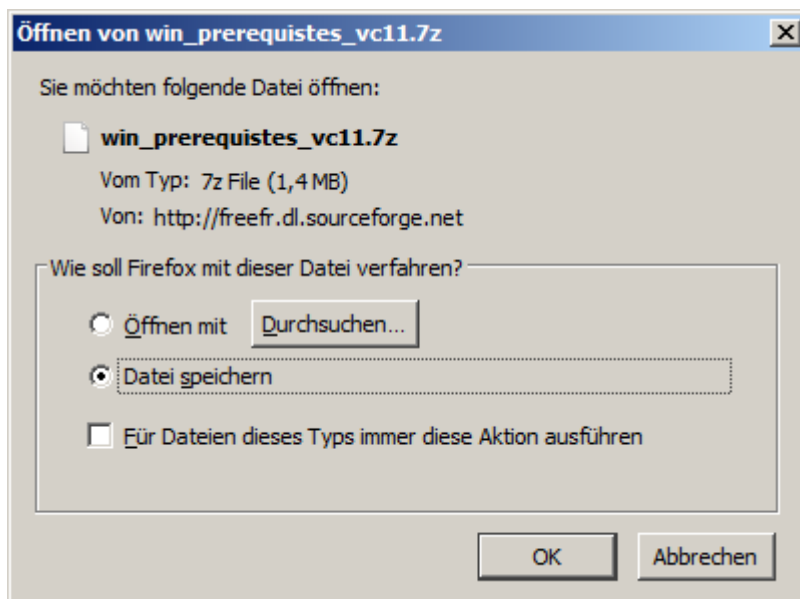
| Name ▾ | Modified ▾ | Size ▾ | Downloads / Week ▾ |
|---|----------------------------|--------|--------------------|
| ↑ Parent folder | | | |
| win_prerequisites_vc11.7z | 2014-08-27 | 1.5 MB | 27 |
| Totals: 1 Item | | 1.5 MB | 27 |

GNU Cobol

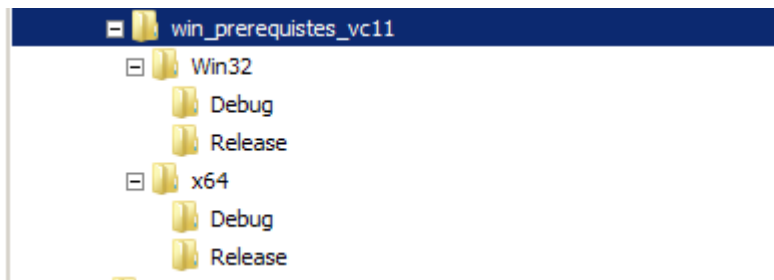
<http://www.opencobol.org/>

<http://sourceforge.net/projects/open-cobol/>

3.2. Download the file "win_prerequisites_vc11.7z"



3.3. Directory structure after unzip



3.4. Files under win_prerequisites_vc11

| Name ^ | Änderungsdatum | Typ | Größe |
|-------------|------------------|-------------|--------|
| Win32 | 27.08.2014 21:48 | Dateiordner | |
| x64 | 27.08.2014 22:30 | Dateiordner | |
| curses.h | 10.02.2014 15:25 | H-Datei | 49 KB |
| gmp.h | 10.02.2014 15:39 | H-Datei | 94 KB |
| gmpxx.h | 10.02.2014 15:31 | H-Datei | 117 KB |
| vbdecimal.h | 20.06.2014 16:31 | H-Datei | 3 KB |
| vbisam.h | 20.06.2014 16:31 | H-Datei | 11 KB |

4. Copy the "win_prerequisites_vc11" under GnuCOBOL

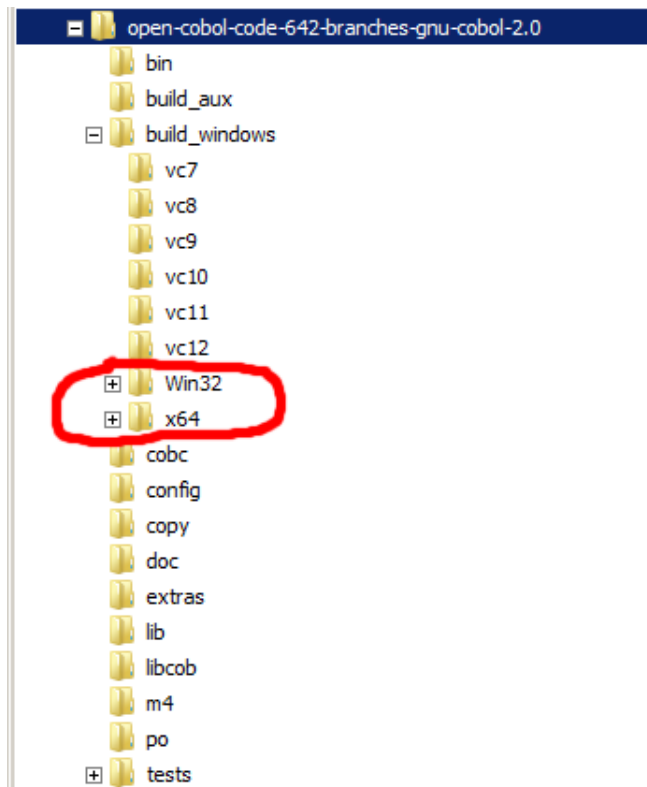
4.1. Copy the header files

In the directory "win_prerequisites_vc11" there are some header files. Copy these header files in "C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows".

| Name ^ | Änderungsdatum | Typ | Größe |
|-------------|------------------|-------------|--------|
| Win32 | 27.08.2014 21:48 | Dateiordner | |
| x64 | 27.08.2014 22:30 | Dateiordner | |
| curses.h | 10.02.2014 15:25 | H-Datei | 49 KB |
| gmp.h | 10.02.2014 15:39 | H-Datei | 94 KB |
| gmpxx.h | 10.02.2014 15:31 | H-Datei | 117 KB |
| vbdecimal.h | 20.06.2014 16:31 | H-Datei | 3 KB |
| vbisam.h | 20.06.2014 16:31 | H-Datei | 11 KB |


























4.2. Copy the directories "Win32" and "x64"

Copy the directories "Win32" and "x64" also in "C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows". After it you have this directory structure.



4.3. Files and directories in "build_windows".

Files and directories in "C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows".













| Name ^ | Änderungsdatum | Typ | Größe |
|---|------------------|--------------------|--------|
|  vc7 | 15.09.2015 22:31 | Dateiordner | |
|  vc8 | 15.09.2015 22:31 | Dateiordner | |
|  vc9 | 15.09.2015 22:31 | Dateiordner | |
|  vc10 | 15.09.2015 22:31 | Dateiordner | |
|  vc11 | 15.09.2015 22:31 | Dateiordner | |
|  vc12 | 15.09.2015 22:31 | Dateiordner | |
|  Win32 | 15.09.2015 23:45 | Dateiordner | |
|  x64 | 15.09.2015 23:45 | Dateiordner | |
|  config.h.bdb.win | 03.04.2015 15:08 | WIN-Datei | 12 KB |
|  config.h.vb.win | 03.04.2015 15:08 | WIN-Datei | 12 KB |
|  curses.h | 10.02.2014 15:25 | H-Datei | 49 KB |
|  gmp.h | 10.02.2014 15:39 | H-Datei | 94 KB |
|  gmpxx.h | 10.02.2014 15:31 | H-Datei | 117 KB |
|  makedist.bat | 23.06.2014 17:18 | Windows-Batchdatei | 4 KB |
|  README | 23.06.2014 17:18 | Datei | 1 KB |
|  resource.h | 20.06.2014 16:39 | H-Datei | 1 KB |
|  set_env_vs.bat | 23.06.2014 17:18 | Windows-Batchdatei | 3 KB |
|  set_env_vs_dist.bat | 23.06.2014 17:18 | Windows-Batchdatei | 4 KB |
|  set_env_vs_dist_x64.bat | 23.06.2014 17:18 | Windows-Batchdatei | 4 KB |
|  set_env_vs_x64.bat | 23.06.2014 17:18 | Windows-Batchdatei | 3 KB |
|  vbdecimal.h | 20.06.2014 16:31 | H-Datei | 3 KB |
|  vbisam.h | 20.06.2014 16:31 | H-Datei | 11 KB |
|  version_cobc.rc | 20.06.2014 16:39 | RC-Datei | 3 KB |
|  version_cobcrun.rc | 20.06.2014 16:39 | RC-Datei | 3 KB |
|  version_libcob.rc | 20.06.2014 16:39 | RC-Datei | 3 KB |

5. Compile GnuCOBOL

5.1. The solution file "GNU Cobol.sln"

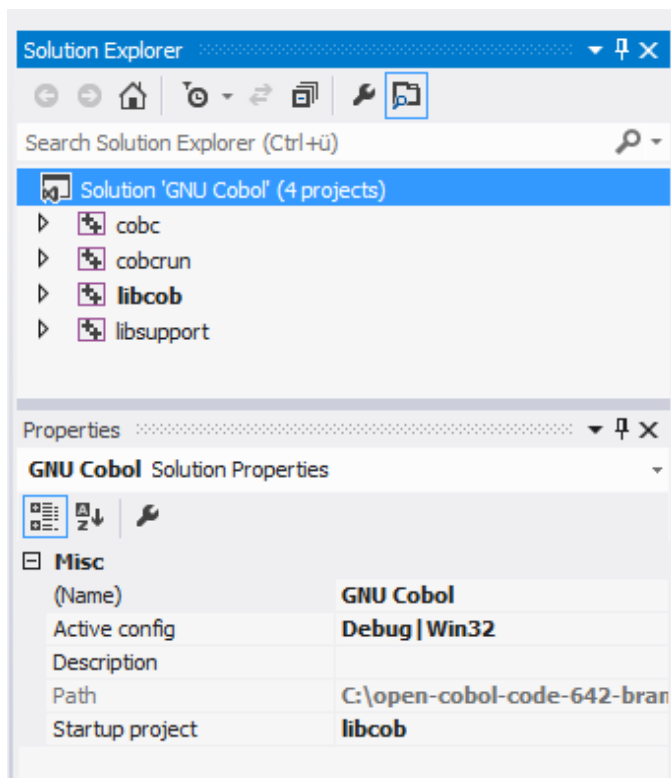
Files in C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows\vc12.

Double click on the solution file "GNU Cobol.sln". (Or start Visual Studio and open the solution file.)

| Name ^ | Änderungsdatum | Typ | Größe |
|---|------------------|-------------------------|-------|
|  cobc.vcxproj | 27.02.2015 10:20 | VC++ Project | 19 KB |
|  cobc.vcxproj.filters | 27.02.2015 10:20 | VC++ Project Filter... | 5 KB |
|  cobcrun.vcxproj | 27.02.2015 10:20 | VC++ Project | 11 KB |
|  cobcrun.vcxproj.filters | 27.02.2015 10:20 | VC++ Project Filter... | 2 KB |
|  config.h | 03.04.2015 15:08 | H-Datei | 12 KB |
|  defaults.h | 20.06.2014 16:39 | H-Datei | 2 KB |
|  GNU Cobol.sln  | 20.06.2014 16:39 | Microsoft Visual Stu... | 4 KB |
|  libcob.vcxproj | 27.02.2015 10:20 | VC++ Project | 13 KB |
|  libcob.vcxproj.filters | 27.02.2015 10:20 | VC++ Project Filter... | 3 KB |
|  libsupport.vcxproj | 27.02.2015 10:20 | VC++ Project | 10 KB |
|  libsupport.vcxproj.filters | 23.06.2014 06:52 | VC++ Project Filter... | 1 KB |

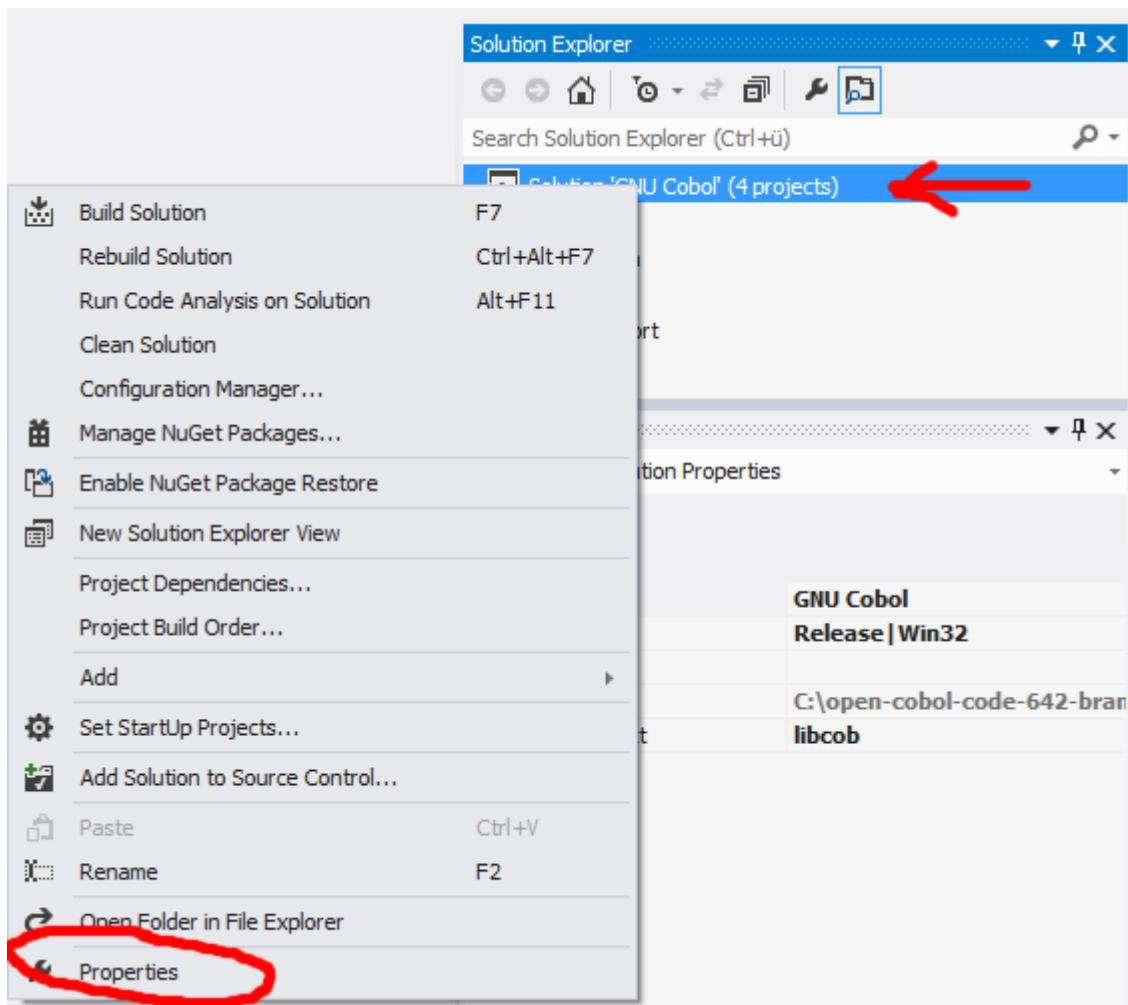
5.2. The solution Explorer

There are four projects in the solution explorer.

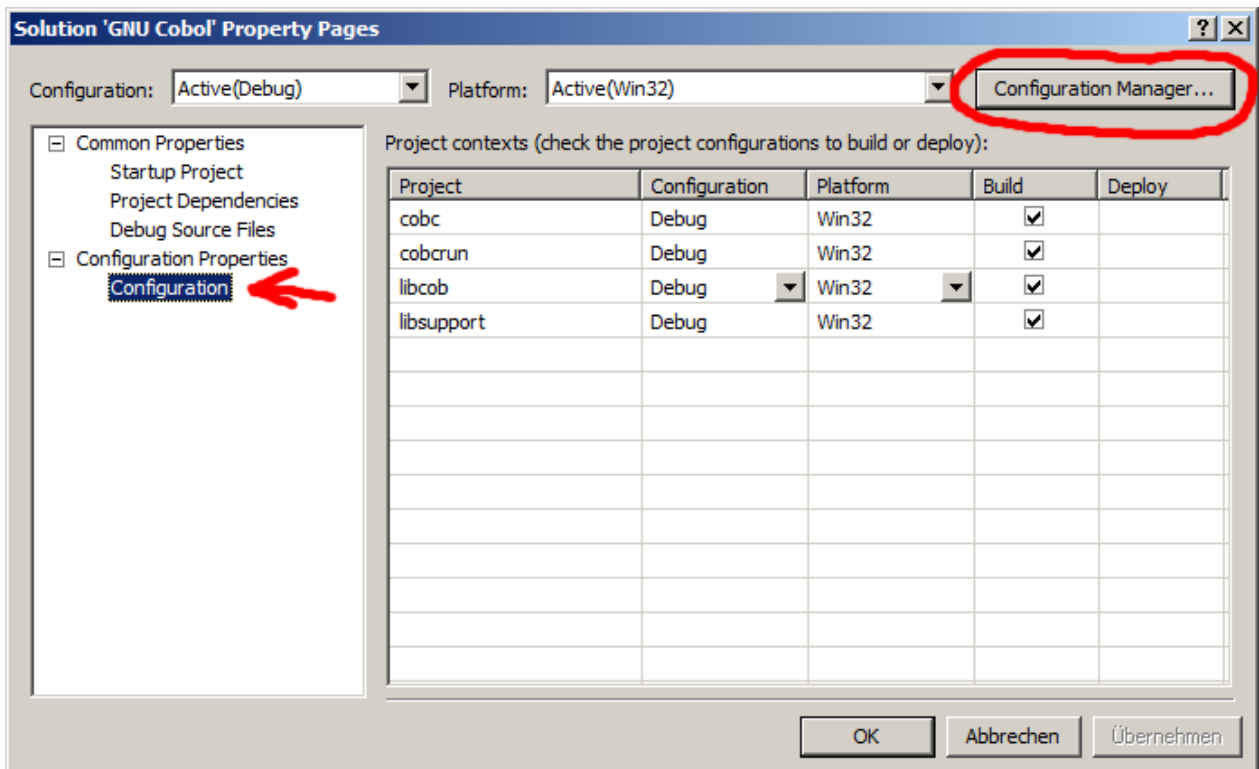


5.3. Change properties for the Solution “GNU Cobol”

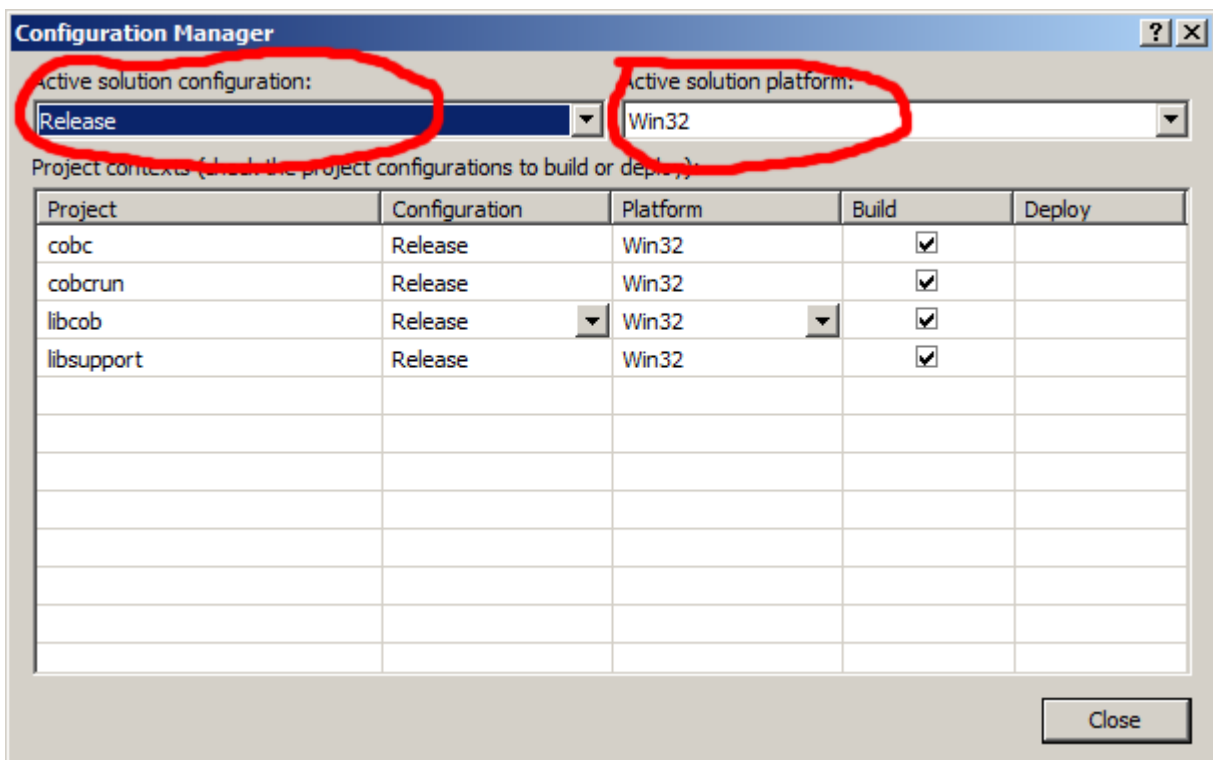
Right click on Solution “GNU Cobol”, and select properties.



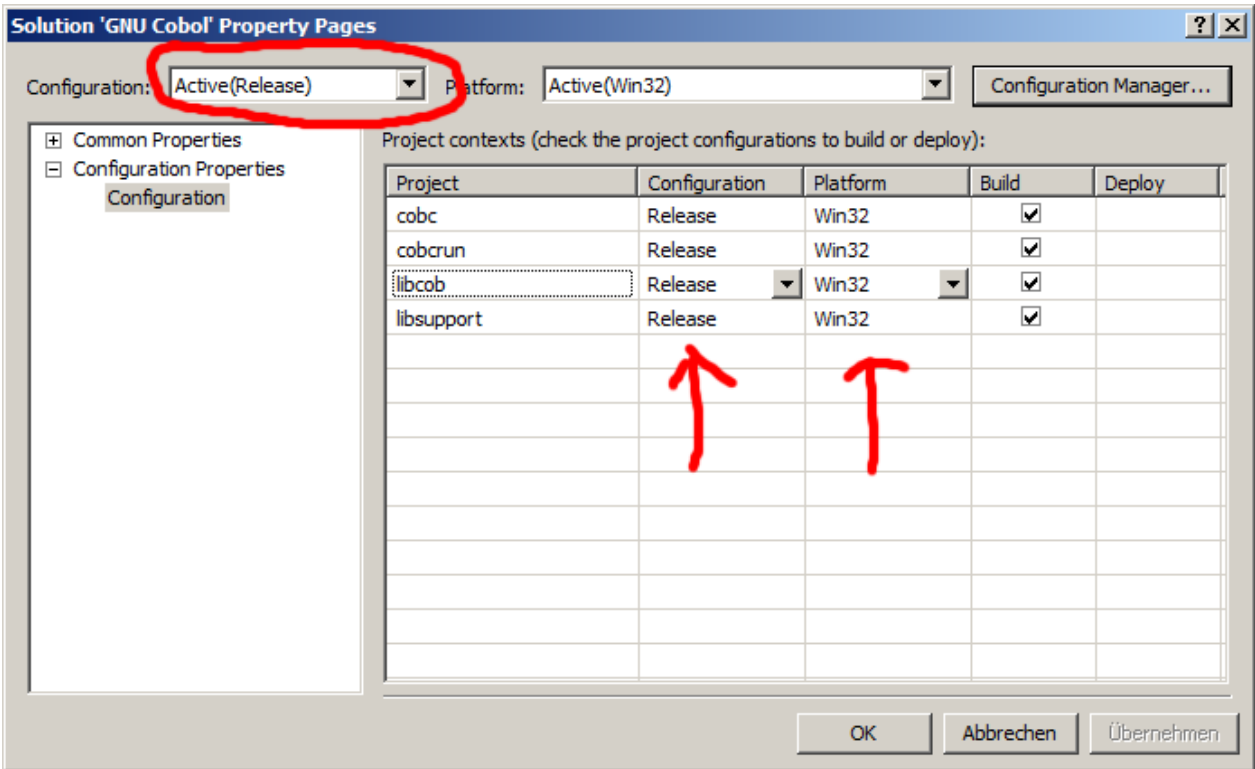
Select „Configuration“, and click on the button „Configuration Manager...“.



Select „Release“ and „Win32“.

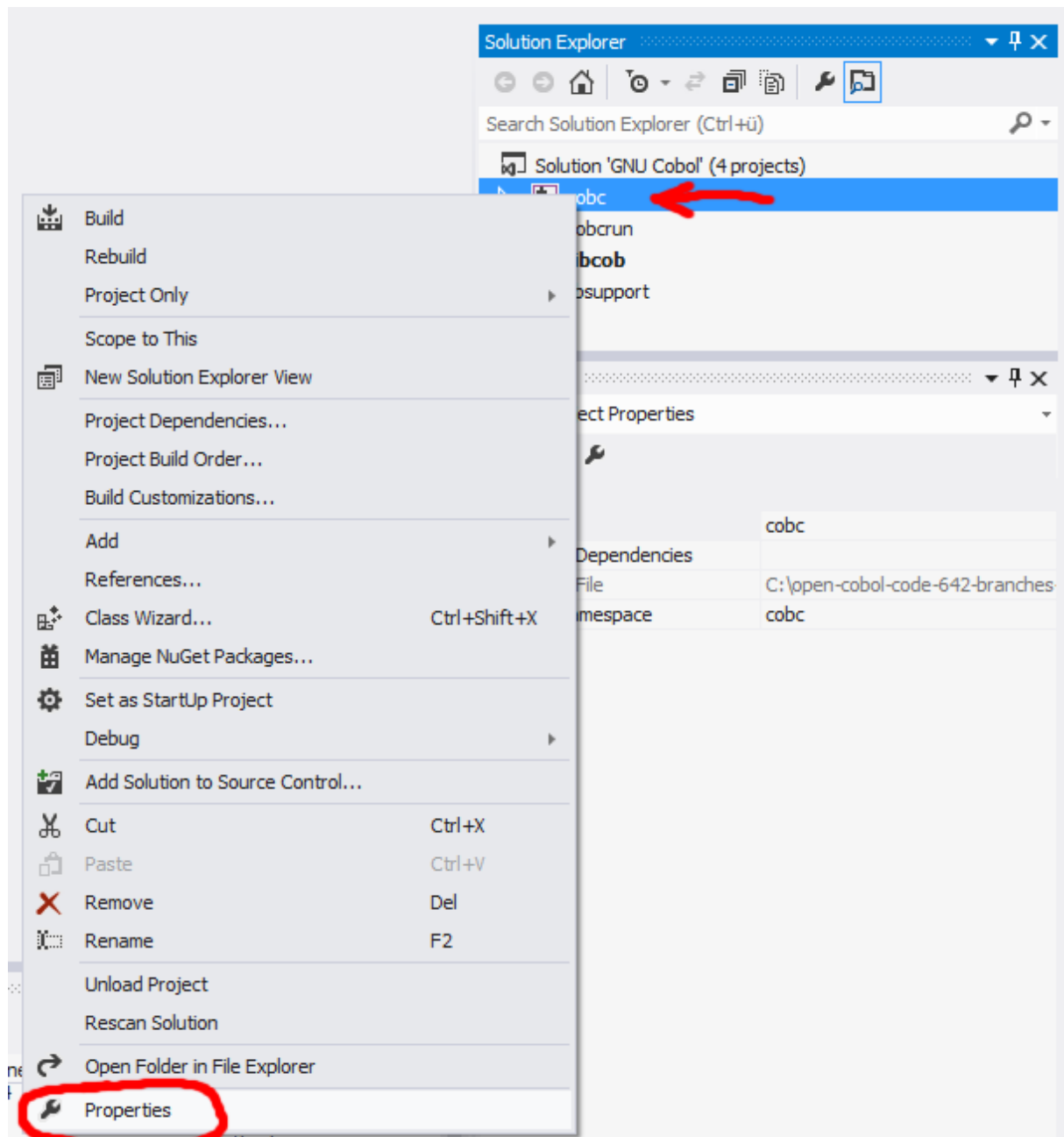


The "Solution "GNU Cobol" properties after settings.

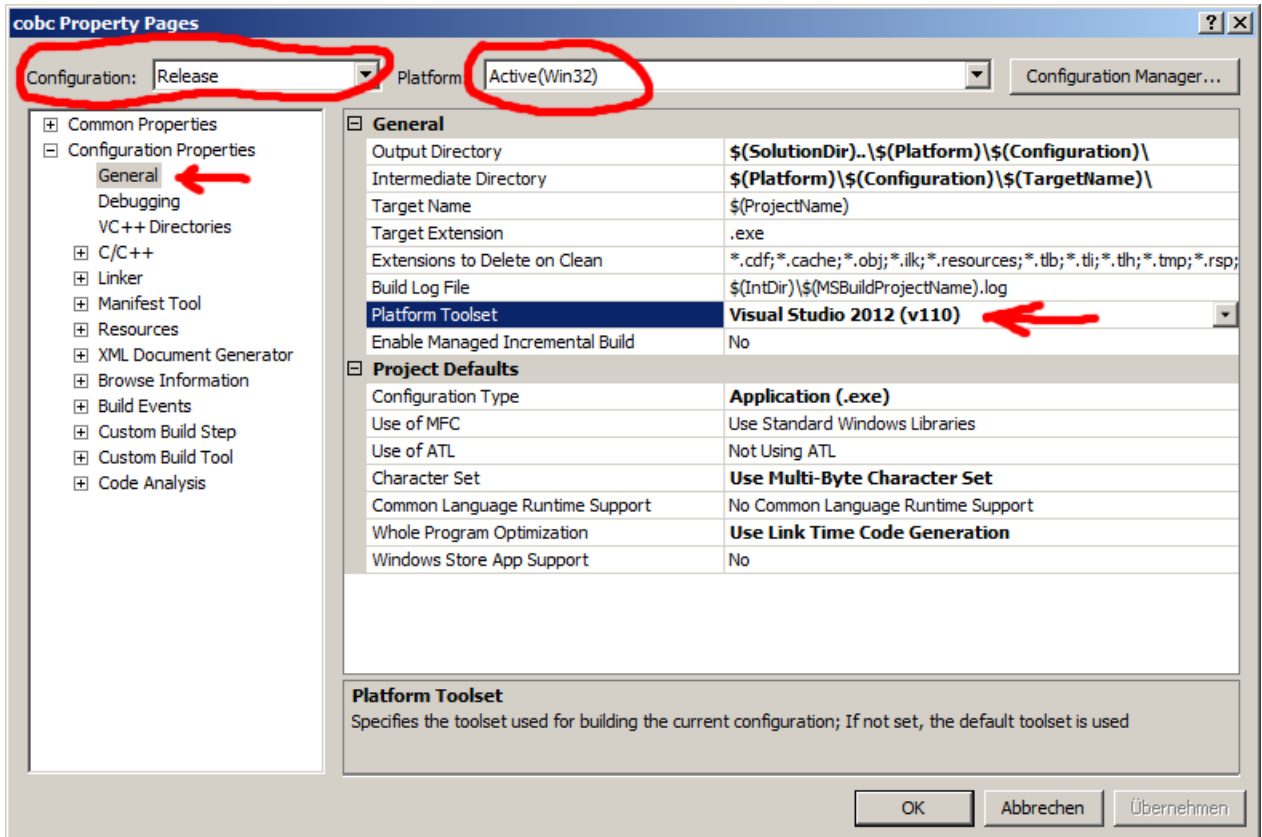


5.4. Change properties for the “cobc” project

Right click on “cobc” project, and select properties.

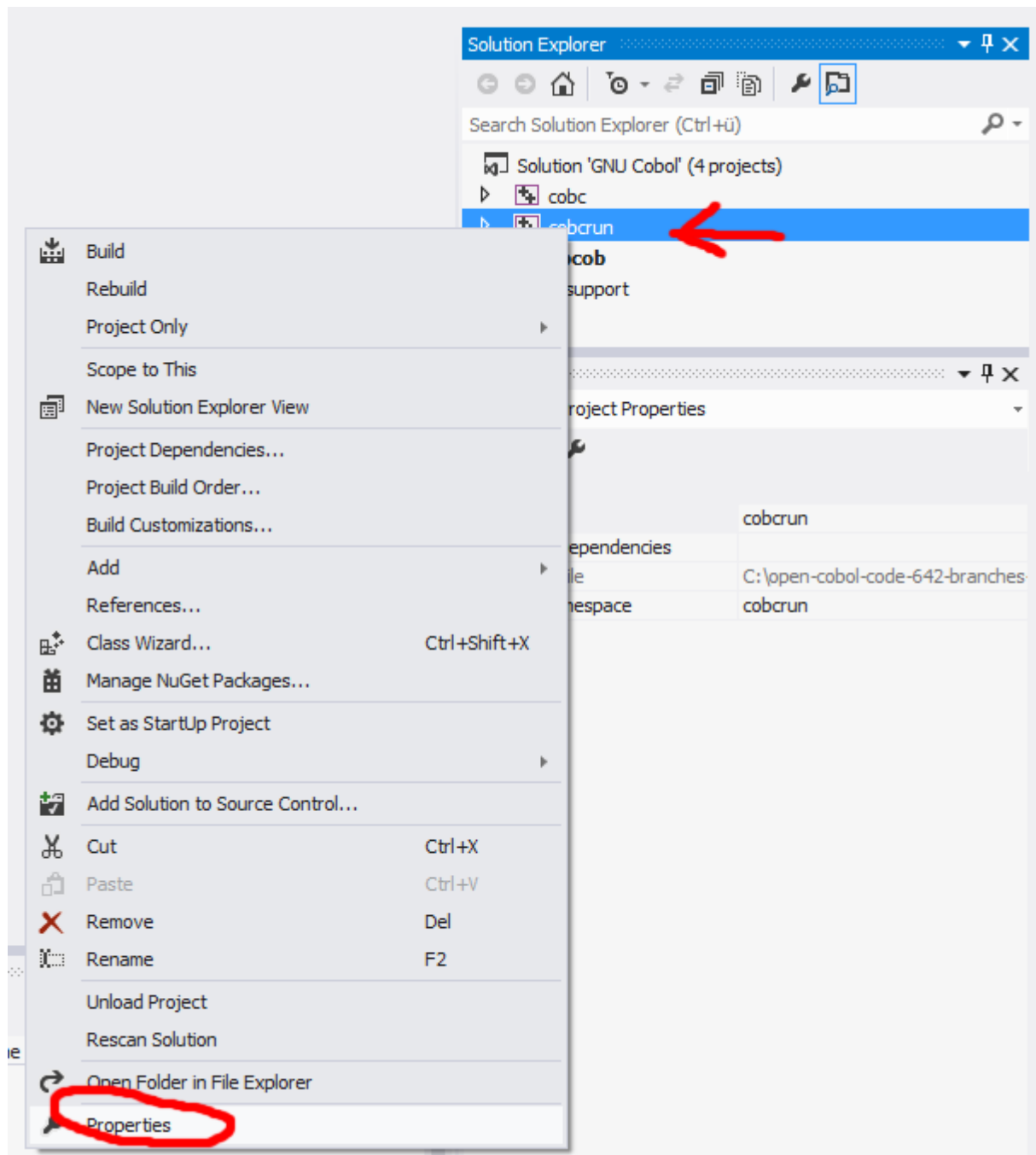


Set Configuration to Release, Platform to Active (Win32), Platform Toolset (under General) to Visual Studio 2012 (v110). Save these settings.

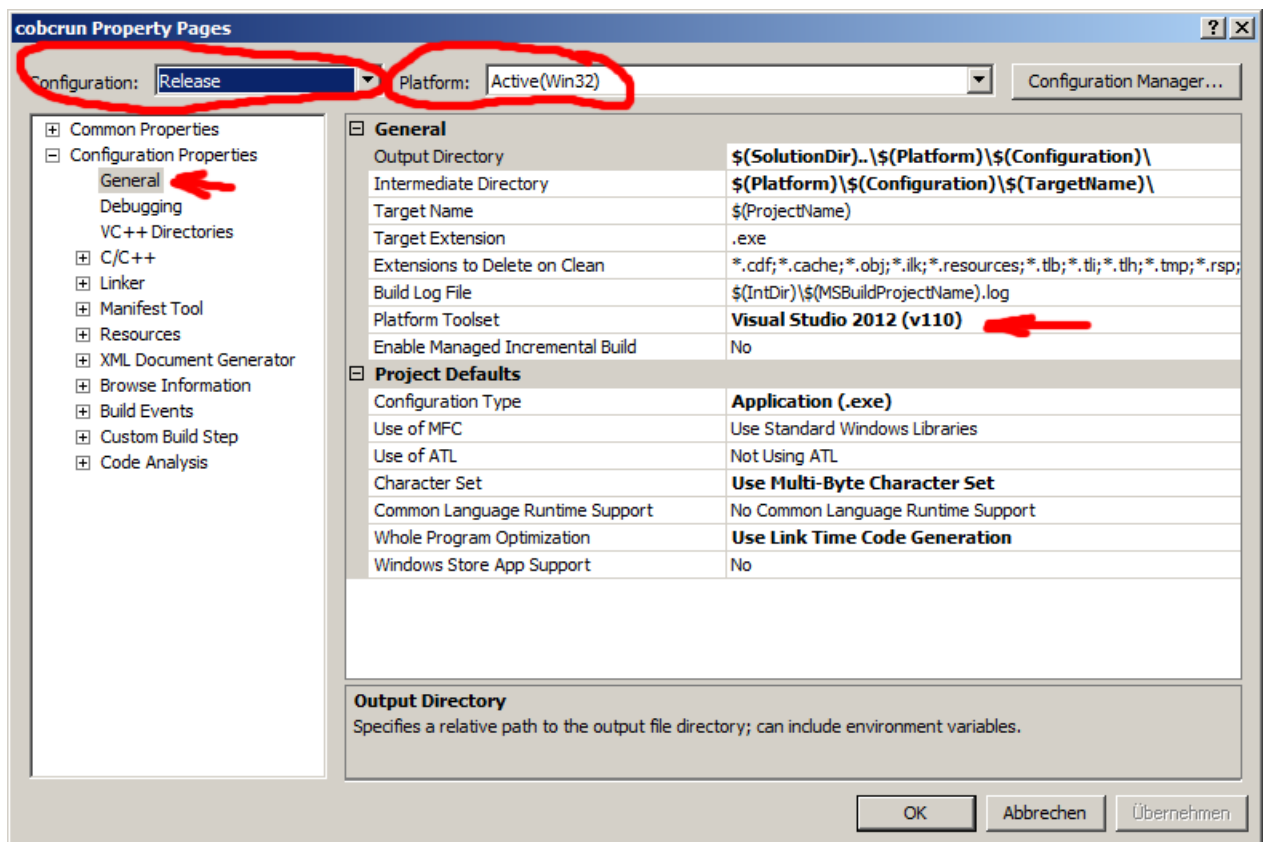


5.5. Change properties for the “cobcrun” project

Right click on “cobcrun” project, and select properties.

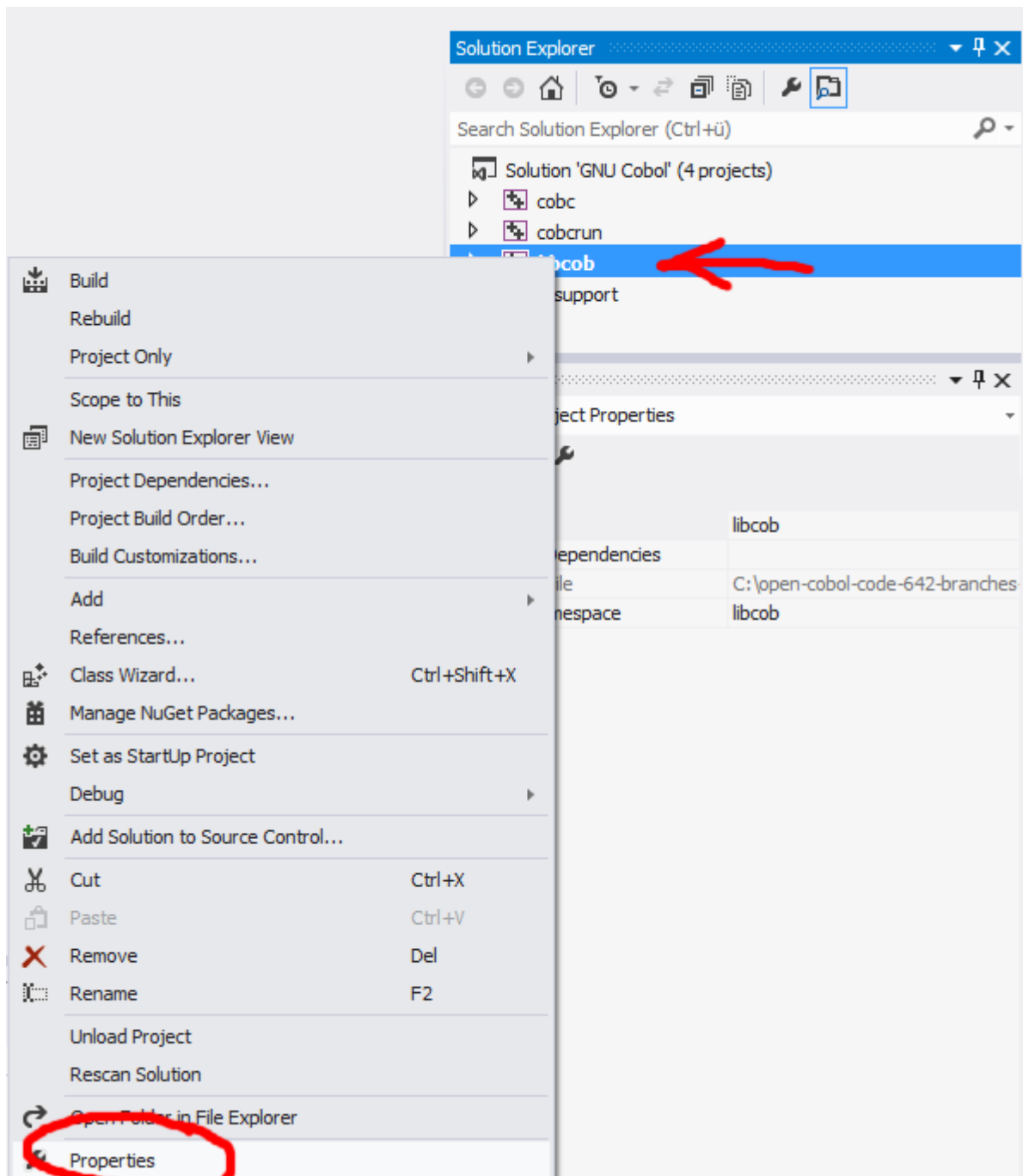


Set Configuration to Release, Platform to Active (Win32), Platform Toolset (under General) to Visual Studio 2012 (v110). Save these settings.

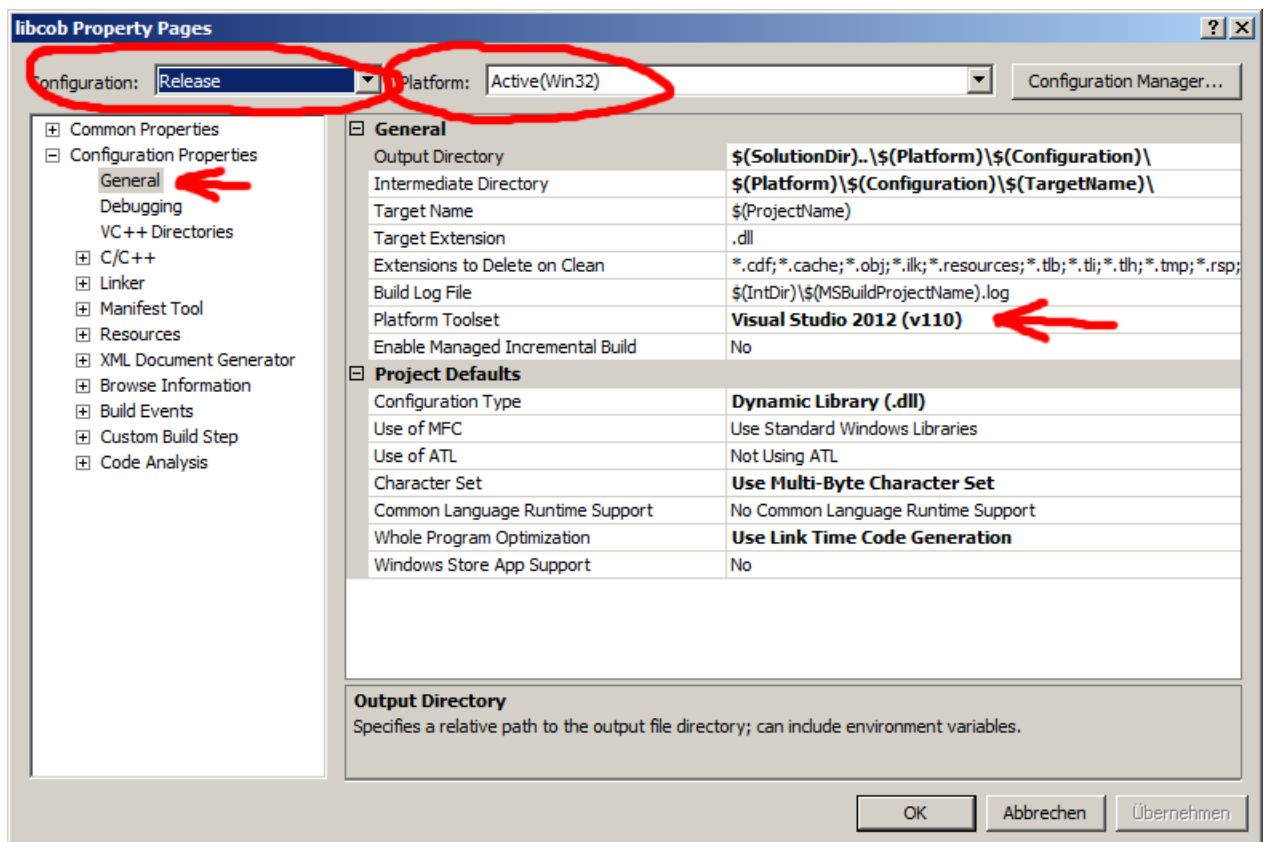


5.6. Change properties for the “libcob” project

Right click on “libcob” project, and select properties.

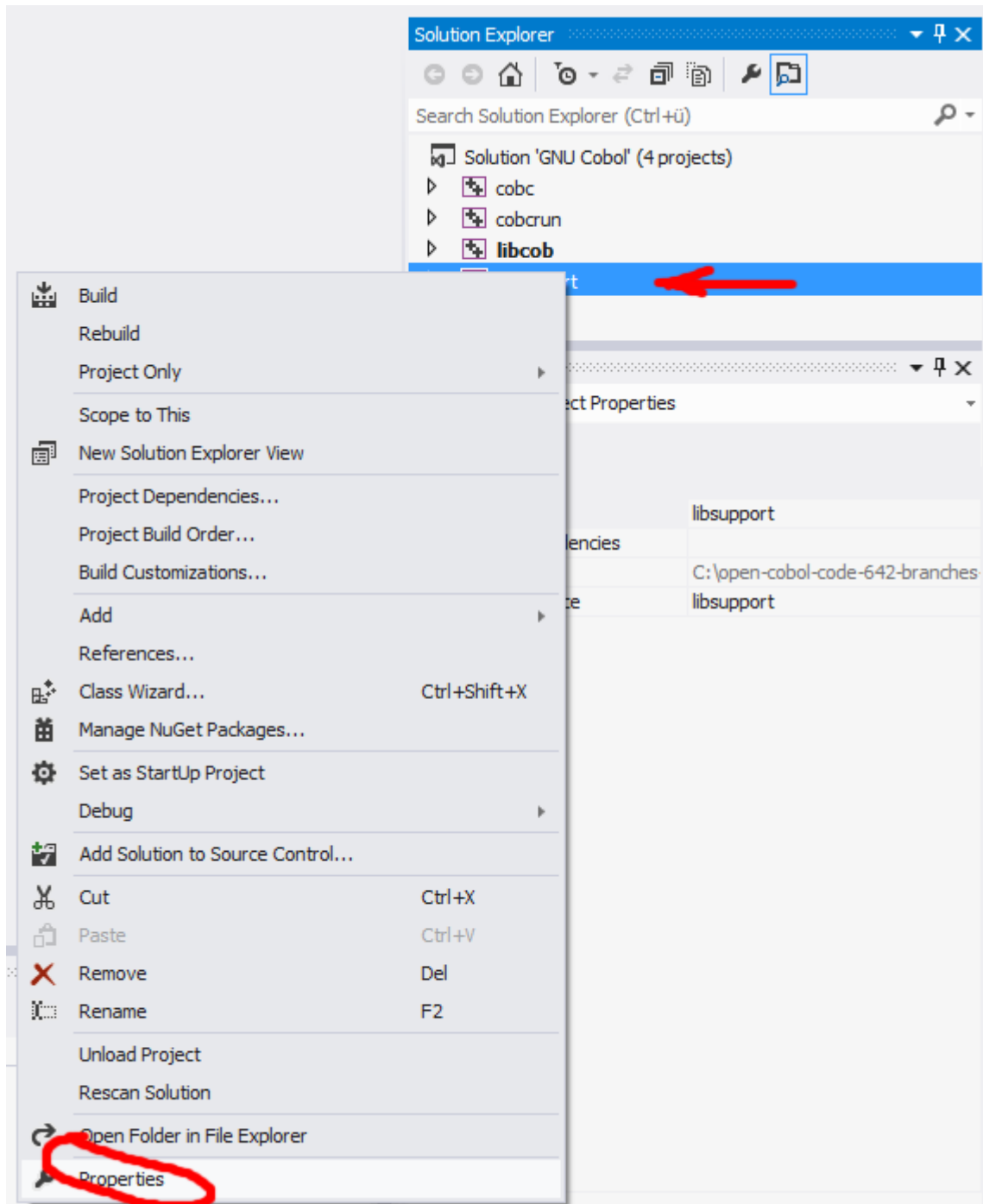


Set Configuration to Release, Platform to Active (Win32), Platform Toolset (under General) to Visual Studio 2012 (v110). Save these settings.

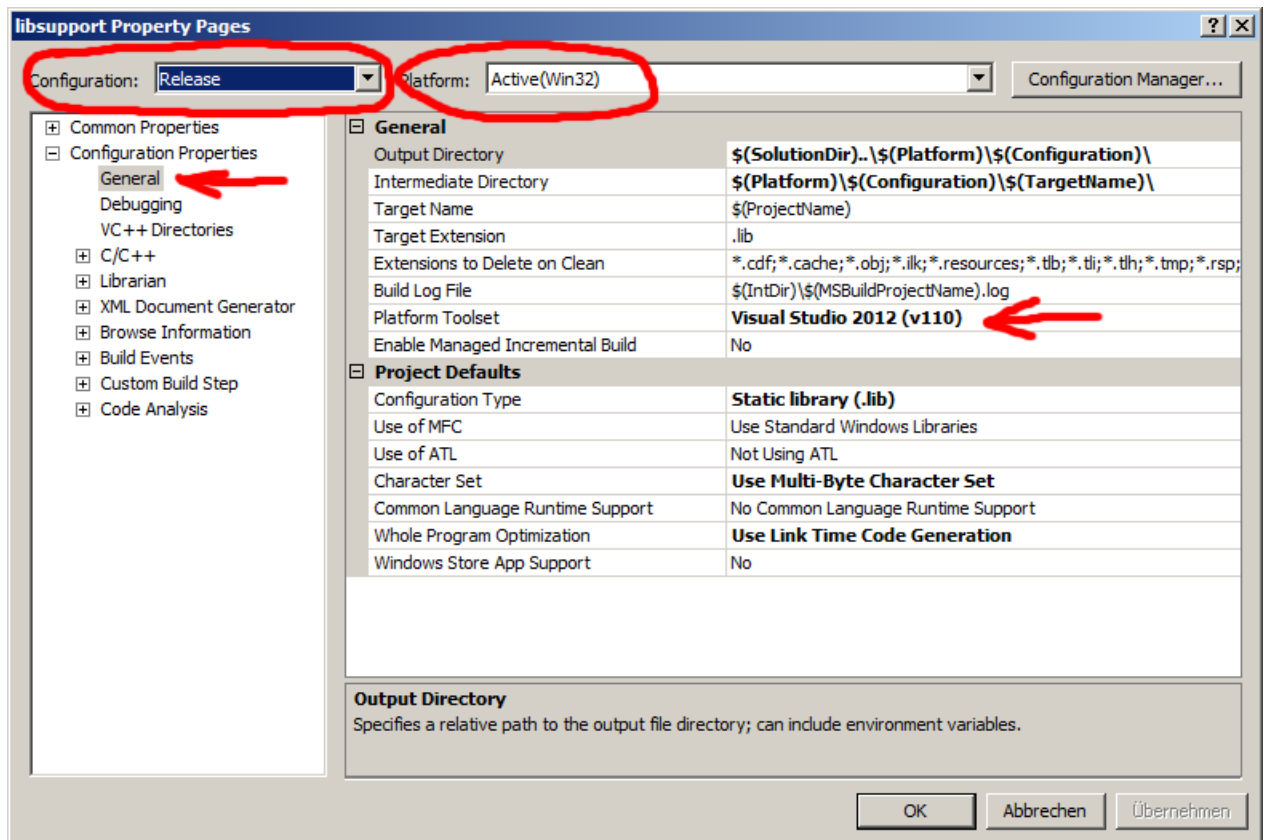


5.7. Change properties for the “libsupport” project

Right click on “libsupport” project, and select properties.

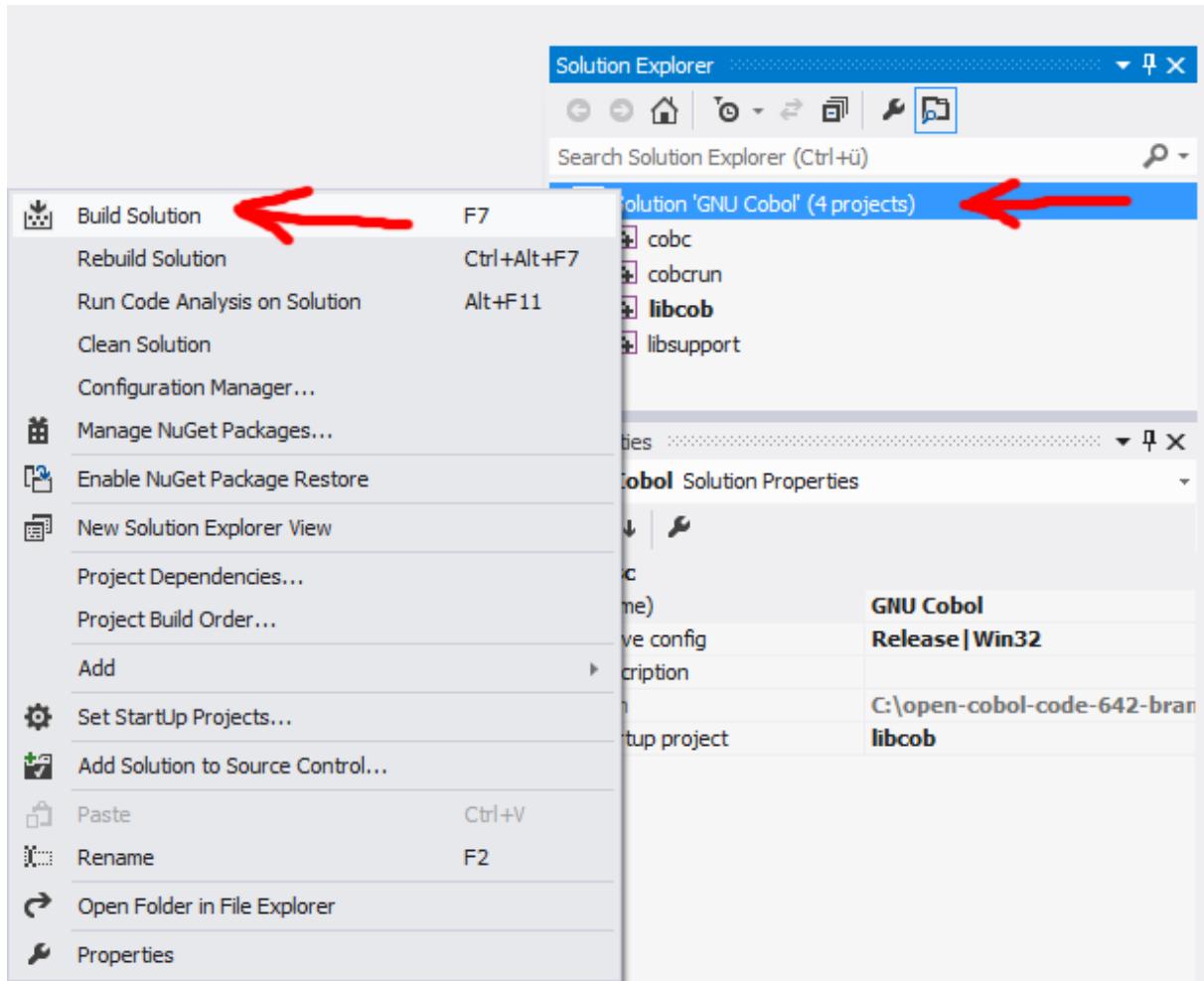


Set Configuration to Release, Platform to Active (Win32), Platform Toolset (under General) to Visual Studio 2012 (v110). Save these settings.



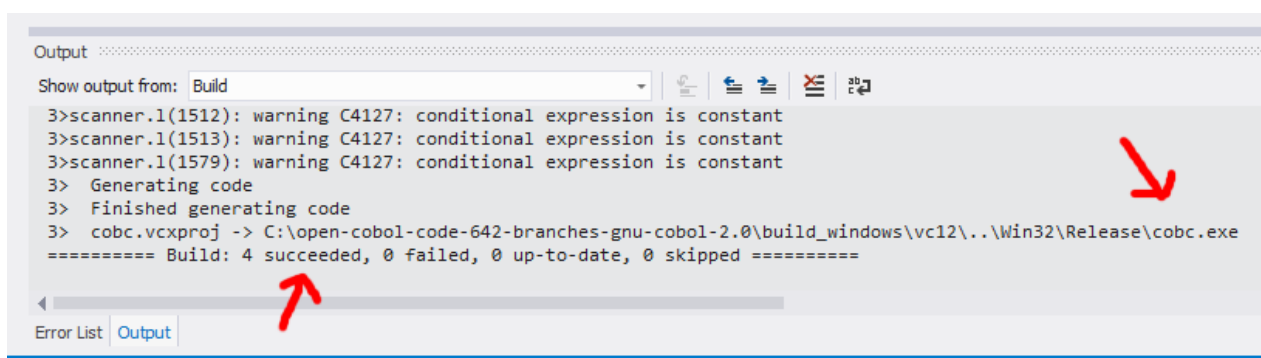
5.8. Build the Solution (compile GnuCobol)

Right click on the Solution “GNU Cobol”, and select Build Solution. (Or you can also find this function in the BUILD menu.)



You get some warnings, but these are not important. At the end you have to get this:

```
===== Build: 4 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
```



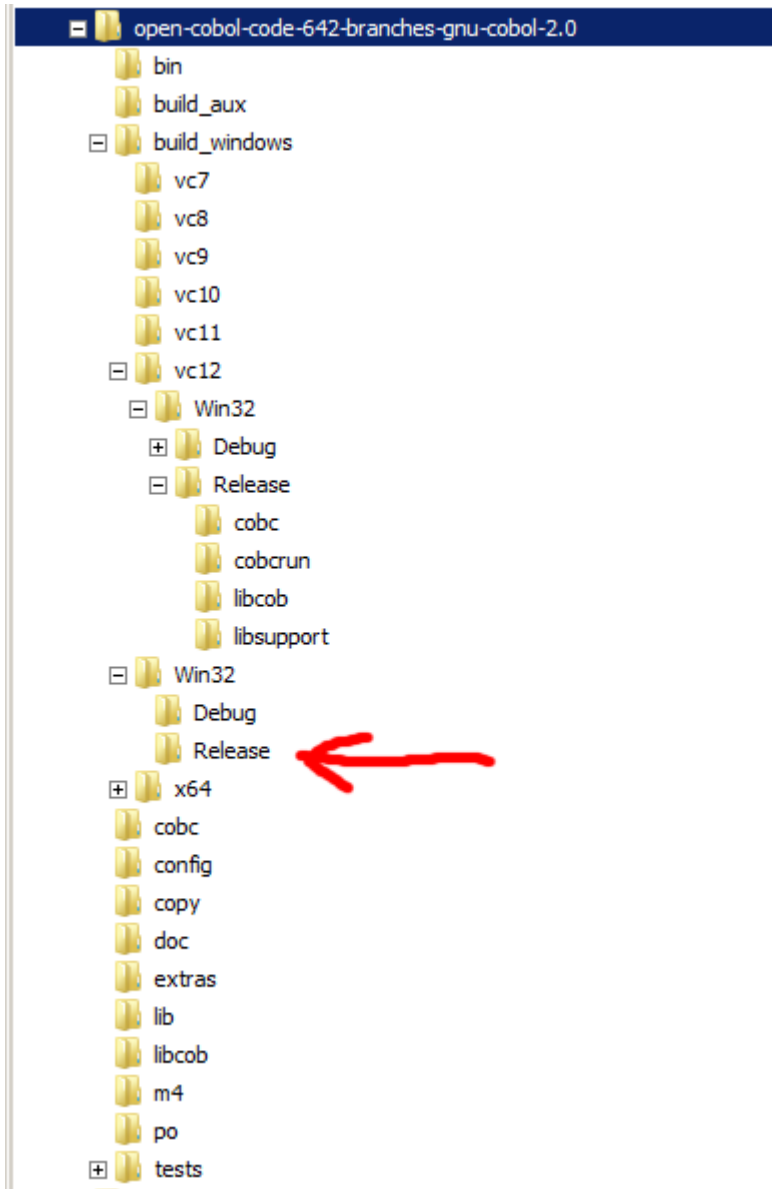
5.9. Result Exe files after compile

Under this directory there are the four projects, they are only working directories:

C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows\vc12\Win32\Release












You can find the result files under:

C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows\Win32\Release



Files in the directory:

C:\open-cobol-code-642-branches-gnu-cobol-2.0\build_windows\Win32\Release

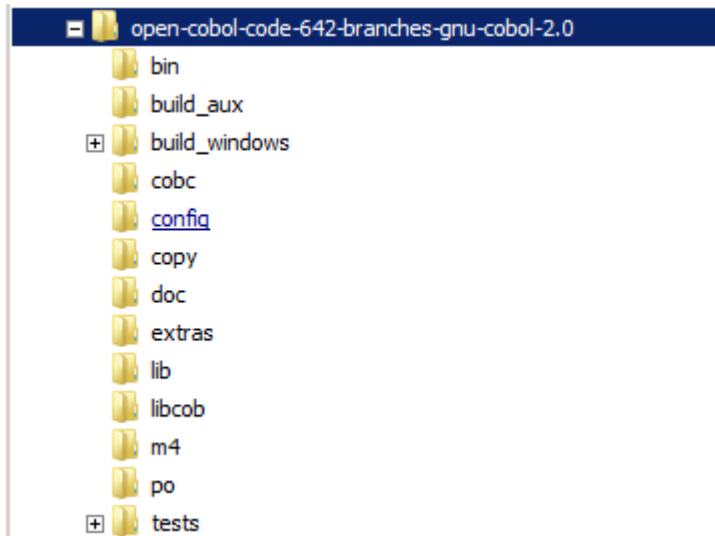
| Name ^ | Änderungsdatum | Typ | Größe |
|---|------------------|-----------------------|----------|
|  cobc.exe | 16.09.2015 01:17 | Anwendung | 538 KB |
|  cobc.pdb | 16.09.2015 01:17 | Source Browser Dat... | 1.299 KB |
|  cobcrun.exe | 16.09.2015 01:17 | Anwendung | 10 KB |
|  cobcrun.pdb | 16.09.2015 01:17 | Source Browser Dat... | 203 KB |
|  libcob.dll | 16.09.2015 01:17 | Anwendungserweit... | 200 KB |
|  libcob.exp | 16.09.2015 01:17 | Source Browser Dat... | 43 KB |
|  libcob.lib | 16.09.2015 01:17 | Source Browser Dat... | 71 KB |
|  libcob.pdb | 16.09.2015 01:17 | Source Browser Dat... | 755 KB |
|  libvbisam.dll | 20.06.2014 16:34 | Anwendungserweit... | 77 KB |
|  mpir.dll | 27.08.2014 21:45 | Anwendungserweit... | 452 KB |
|  pdcurses.dll | 27.08.2014 22:32 | Anwendungserweit... | 151 KB |

6. Copy your working directory into C:\GnuCobol

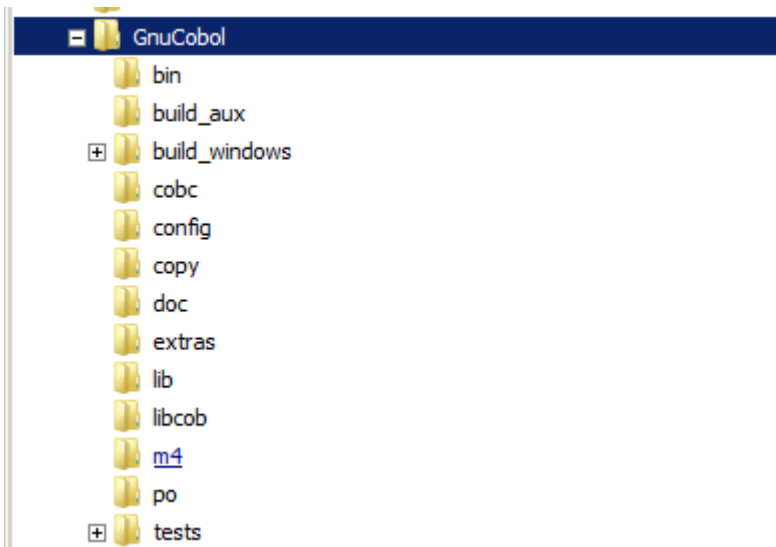
6.1. Copy the new compiled GnuCOBOL directory into C:\GnuCobol.

This step is important, because of the configuration files!

Until yet you have this:



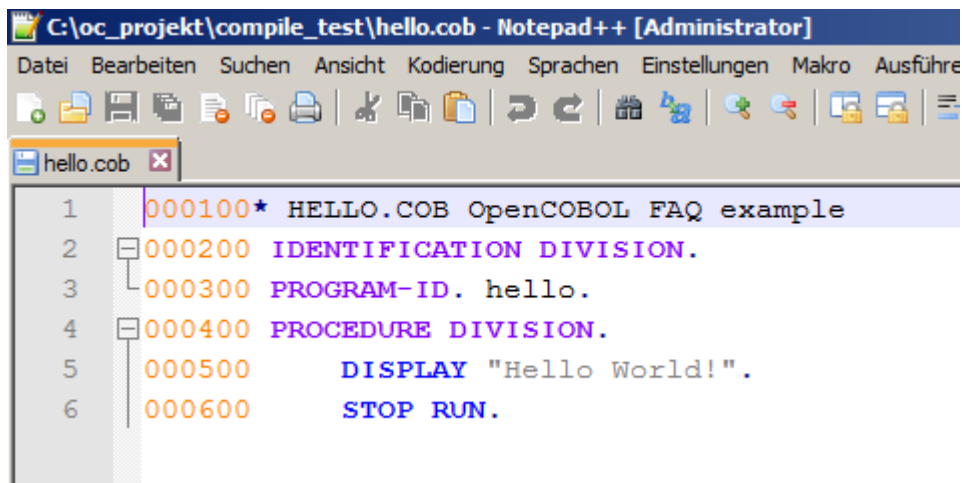
After the copy into **C:\GnuCobol**:



7. Compile Hello World

7.1. Create a "hello.cob" program file in your favorite directory

```
000100* HELLO.COB OpenCOBOL FAQ example
000200 IDENTIFICATION DIVISION.
000300 PROGRAM-ID. hello.
000400 PROCEDURE DIVISION.
000500     DISPLAY "Hello World!".
000600     STOP RUN.
```

A screenshot of a Notepad++ window titled "C:\oc_projekt\compile_test\hello.cob - Notepad++ [Administrator]". The window shows a COBOL program file named "hello.cob" with the following code:

```
1 | 000100* HELLO.COB OpenCOBOL FAQ example
2 | 000200 IDENTIFICATION DIVISION.
3 | 000300 PROGRAM-ID. hello.
4 | 000400 PROCEDURE DIVISION.
5 | 000500     DISPLAY "Hello World!".
6 | 000600     STOP RUN.
```

The code is displayed with line numbers on the left and syntax highlighting. The window's menu bar includes "Datei", "Bearbeiten", "Suchen", "Ansicht", "Kodierung", "Sprachen", "Einstellungen", "Makro", and "Ausfuehre". The toolbar contains various icons for file operations and editing.

7.2. Create a “comp_hello.bat” compile script

```
rem go into your directory
cd C:\oc_projekt\compile_test

rem clean old exe file
del hello.exe

rem add cobc to path
PATH=%PATH%;C:\GnuCobol\build_windows\Win32\Release

rem set environment for MS Visual Studio
call "C:\Program Files (x86)\Microsoft Visual Studio 11.0\VC\vcvarsall.bat"

rem compile
cobc -x hello.cob

rem exec program
hello.exe

pause
```




```

C:\oc_projekt\compile_test\comp_hello.bat - Notepad++ [Administrator]
Datei Bearbeiten Suchen Ansicht Kodierung Sprachen Einstellungen Makro Ausführen TextFX Erweiterungen Fenster ?
comp_hello.bat x
1 rem go into your directory
2 cd C:\oc_projekt\compile_test
3
4 rem clean old exe file
5 del hello.exe
6
7 rem add cobc to path
8 PATH=%PATH%;C:\GnuCobol\build_windows\Win32\Release
9
10 rem set environment for MS Visual Studio
11 call "C:\Program Files (x86)\Microsoft Visual Studio 11.0\VC\vcvarsall.bat"
12
13 rem compile
14 cobc -x hello.cob
15
16 rem exec program
17 hello.exe
18
19 pause
20





```

7.3. Start the "comp_hello.bat" compile script

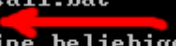
Double click on "comp_hello.bat".

| Name ^ | Änderungsdatum | Typ | Größe |
|--|------------------|--------------------|-------|
|  comp_hello.bat  | 16.09.2015 02:22 | Windows-Batchdatei | 1 KB |
|  hello.cob | 16.09.2015 02:23 | COB-Datei | 1 KB |

7.4. Compilation and execution result

| Name ^ | Änderungsdatum | Typ | Größe |
|---|------------------|--------------------|-------|
|  comp_hello.bat | 16.09.2015 02:22 | Windows-Batchdatei | 1 KB |
|  hello.cob | 16.09.2015 02:23 | COB-Datei | 1 KB |
|  hello.exe  | 16.09.2015 02:31 | Anwendung | 8 KB |

```

C:\oc_projekt\compile_test>rem set environment for MS Visual Studio
C:\oc_projekt\compile_test>call "C:\Program Files (x86)\Microsoft Visual Studio
11.0\VC\vcvarsall.bat"
Hello World! 
Drücken Sie eine beliebige Taste . . .

```