DELFT3D Version 9180

1. Downloading the Source Code

2. Installing the Required Software for Compiling the Source Code

3. Compiling the Source Code

4. Test the Example Case

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Downloading the Delft3D Source Code

1. Do the registration
https://oss.deltares.nl/web/delft3d/get-started
Make sure to remember your screen name and password

2. Download and Install Tortoise SVN
https://tortoisesvn.net/downloads.html

3. Open this link and login using you screen name and password
https://svn.oss.deltares.nl/repos/delft3d/tags/delft3dfm/9180/
This link will directed you to the Delft3D source code version 9180
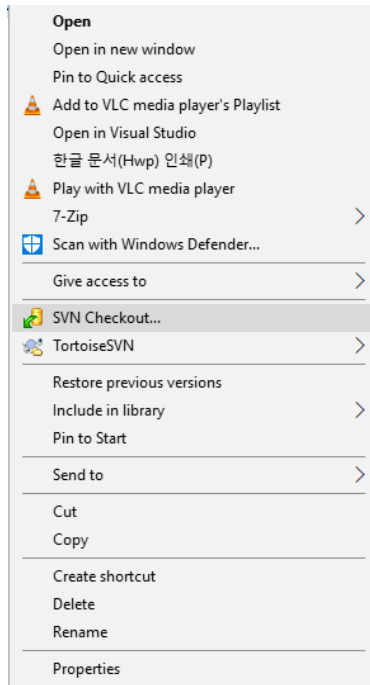
4. Create a folder for saving the source code
D://delft3d_9180
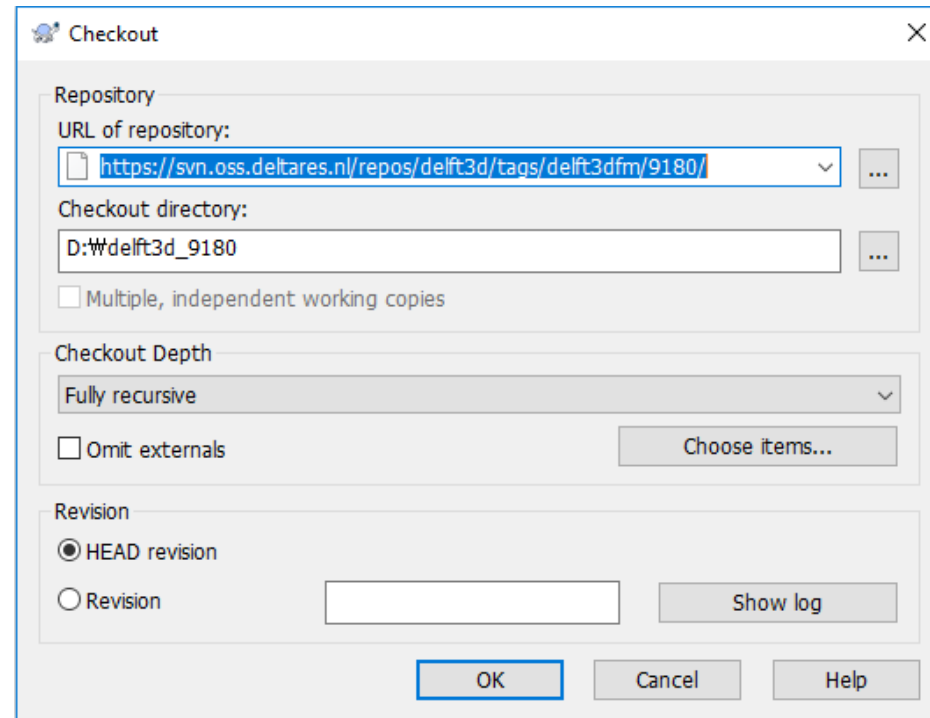Avoid make a directory (folder name) with space
I created a folder in Drive **D** and I gave the folder name as **delft3d_9180**

Downloading the Delft3D Source Code

5. Right click on the folder and select the SVN Checkout…

Open	
Open in new window	
Pin to Quick access	
⚠ Add to VLC media player's Playlist	
Open in Visual Studio	
한글 문서(Hwp) 인쇄(P)	
⚠ Play with VLC media player	
7-Zip	>
🛡 Scan with Windows Defender…	
Give access to	>
🗃 SVN Checkout…	
🐢 TortoiseSVN	>
Restore previous versions	
Include in library	>
Pin to Start	
Send to	>
Cut	
Copy	
Create shortcut	
Delete	
Rename	
Properties	

6. Paste the link in the **URL of repository:** and the **Checkout directory:** is the folder just you make.
Then click OK

Checkout ✕

Repository

URL of repository:
`https://svn.oss.deltares.nl/repos/delft3d/tags/delft3dfm/9180/` ⌄ …

Checkout directory:
`D:\delft3d_9180` …

☐ Multiple, independent working copies

Checkout Depth

Fully recursive ⌄

☐ Omit externals   Choose items…

Revision

◉ HEAD revision

○ Revision [   ]   Show log

OK   Cancel   Help

7. The source code will automatically downloaded into the selected folder

PREREQUISITES - REQUIRED SOFTWARE

Microsoft Visual Studio (MVS) 2015 Professional Edition
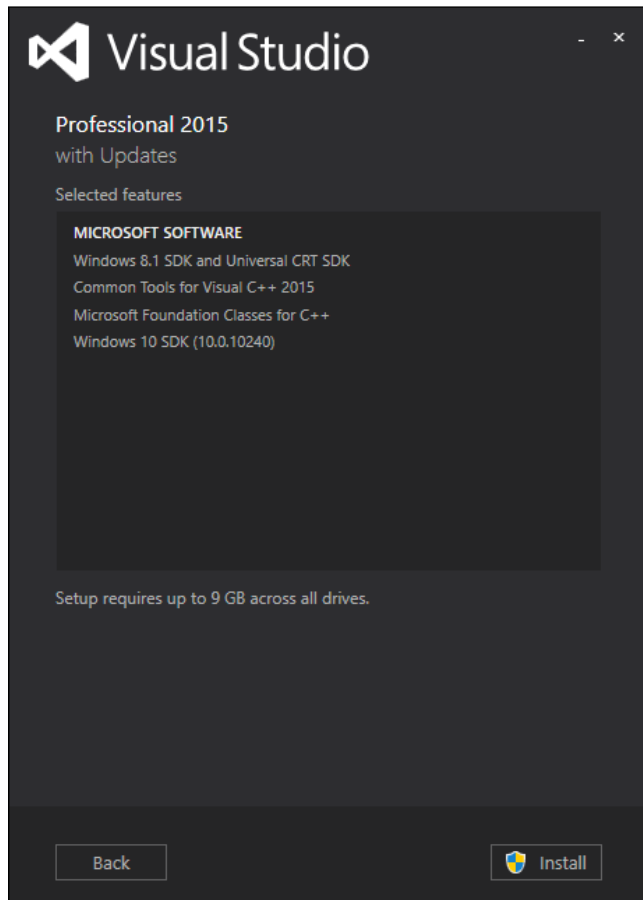Intel Parallel Studio 2016 update 4
Python 2.7.14

These software is needed for compiling the Delft3D source code

Microsoft Visual Studio (MVS) 2015 Professional Edition

1. Download the MVS 2015 Professional Edition (.iso file):

https://stackoverflow.com/questions/44290672/how-to-download-visual-studio-community-edition-2015-not-2017

2. Select this following module/feature of MVS to be installed on your computer and then click install

Intel Parallel Studio XE 2016 update 4

1. Go to the Intel Parallel Studio Website and register
https://software.intel.com/en-us/parallel-studio-xe

2. Click choose to download

Intel Parallel Studio XE 2016 update 4

3. Click Windows

Intel Parallel Studio XE 2016 update 4

4. Click Free Trial

Intel Parallel Studio XE 2016 update 4

5. Select Profession as student and select the development Language C/C++ and Fortran. Then click Submit

Intel Parallel Studio XE 2016 update 4

5. Choose a Version is 2016 Update 4. Click the check box and download the Full Package

Intel Parallel Studio XE 2016 update 4

6. Once it downloaded, just double click the installer and install the program.
Install all the packages

Python 2.7.14

1. Open this link to download the Python version 2.7.14
https://www.python.org/downloads/release/python-2714/

2. Select the Windows x86 MSI
Installer

3. Then Install

Compiling the Source Code

1. Go to the directory:
D://delft3d_9180/src/
And double click the file "prepare_sln.cmd"

2. The command prom window will appear and please following this setting.
Click apply

3. This process will create Microsoft Visual Studio file: "delft3d_open.sln"
Double click on that file to open it in the Microsoft Visual Studio 2015

C:\WINDOWS\system32\cmd.exe

D:\del

choose IDE and compiler

Visual Studio Version:	.Net Framwork Version:	IFORT Version:
○ VS 2017 (not tested yet)	○ .Net Framework 4.8	○ IFORT18: (not tested yet)
◉ VS 2015, Update 3	○ .Net Framework 4.7	○ IFORT17: (NOT Recommended)
○ VS 2013	◉ .Net Framework 4.6	◉ IFORT16: Intel Parallel Studio XE 2016 Update 4
○ VS 2012	○ .Net Framework 4.5	○ IFORT15: Intel Parallel Studio XE 2015 Update 6
○ VS 2010	○ .Net Framework 4.4	○ IFORT14: Intel Visual Fortran Composer XE 2014
	○ .Net Framework 4.3	○ IFORT13: Intel Visual Fortran Composer XE 2013
	○ .Net Framework 4.2	○ IFORT12: Intel Visual Fortran Composer XE 2011

Choose your Visual Studio version, .Net Framework version and IFORT version and click 'Apply'

Apply   Exit

4. In the Visual Studio 2015, Tools -> Options -> Projects and Solutions -> Build and Run, set the "maximum number of parallel project builds" to 4
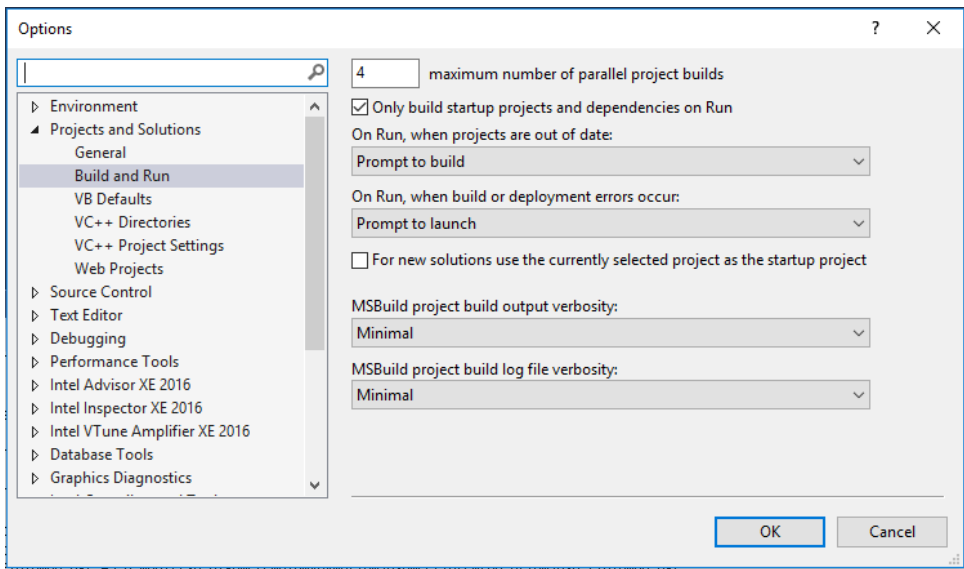
5. Set the Solutions Configurations as Release and set the Solution Platforms as x64

6. On the solution Explorer window, delete the "vs" folder under "tool_gpl" folder. In this picture I already deleted the "vs" folder.

7. And build the solution

File   Edit   View   Project   Build   Debug   Team   Tools   Test   Analyze   Window   Help

Release   x64   Local Windows Debugger

Output

Show output from: Build

```
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\default\dioconfig.ini -> D:\delft3d_9180\src\bin\x64\dflow2d3d\default\dioconfig.ini
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\default\files.def -> D:\delft3d_9180\src\bin\x64\dflow2d3d\default\files.def
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\default\Makefile.am -> D:\delft3d_9180\src\bin\x64\dflow2d3d\default\Makefile.am
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\default\tabmom -> D:\delft3d_9180\src\bin\x64\dflow2d3d\default\tabmom
86>  4 File(s) copied
86>  D:\delft3d_9180\src\utils_lgpl\delftonline\lib\x64\Release\dynamic\delftonline.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\delftonline.dll
86>  1 File(s) copied
86>  D:\delft3d_9180\src\utils_lgpl\delftonline\lib\x64\Release\dynamic\delftonline.dll -> D:\delft3d_9180\src\bin\x64\plugins\bin\delftonline.dll
86>  1 File(s) copied
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\scripts\run_dflow2d3d.bat -> D:\delft3d_9180\src\bin\x64\dflow2d3d\scripts\run_dflow2d3d.bat
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\scripts\run_dflow2d3d_dwaves.bat -> D:\delft3d_9180\src\bin\x64\dflow2d3d\scripts\run_dflow2d3d_dwaves.bat
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\scripts\run_dflow2d3d_fluidmud.bat -> D:\delft3d_9180\src\bin\x64\dflow2d3d\scripts\run_dflow2d3d_fluidmud.bat
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\scripts\run_dflow2d3d_parallel.bat -> D:\delft3d_9180\src\bin\x64\dflow2d3d\scripts\run_dflow2d3d_parallel.bat
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\scripts\run_dflow2d3d_parallel_dwaves.bat -> D:\delft3d_9180\src\bin\x64\dflow2d3d\scripts\run_dflow2d3d_parallel_dwaves.bat
86>  D:\delft3d_9180\src\engines_gpl\flow2d3d\scripts\run_mormerge.bat -> D:\delft3d_9180\src\bin\x64\dflow2d3d\scripts\run_mormerge.bat
86>  6 File(s) copied
86>  D:\delft3d_9180\src\third_party_open\tcl\bin\win64\tclkitsh852.exe -> D:\delft3d_9180\src\bin\x64\share\bin\tclkitsh852.exe
86>  1 File(s) copied
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\cilkrts20.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\cilkrts20.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\ifdlg100.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\ifdlg100.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libchkp.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libchkp.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libgfxoffload.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libgfxoffload.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libicaf.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libicaf.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libifcoremd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libifcoremd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libifcoremdd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libifcoremdd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libifcorert.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libifcorert.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libifcorertd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libifcorertd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libifportmd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libifportmd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libiomp5md.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libiomp5md.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libiompstubs5md.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libiompstubs5md.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libirngmd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libirngmd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libmmd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libmmd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libmmdd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libmmdd.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\libmpx.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\libmpx.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\liboffload.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\liboffload.dll
86>  C:\Program Files (x86)\IntelSWTools\compilers_and_libraries_2016.4.246\windows\redist\intel64\compiler\svml_dispmd.dll -> D:\delft3d_9180\src\bin\x64\dflow2d3d\bin\svml_dispmd.dll
86>  18 File(s) copied
87>------ Skipped Build: Project: flow2d3d_openda, Configuration: Release x64 ------
87>Project not selected to build for this solution configuration
========== Build: 78 succeeded, 0 failed, 0 up-to-date, 9 skipped ==========
```
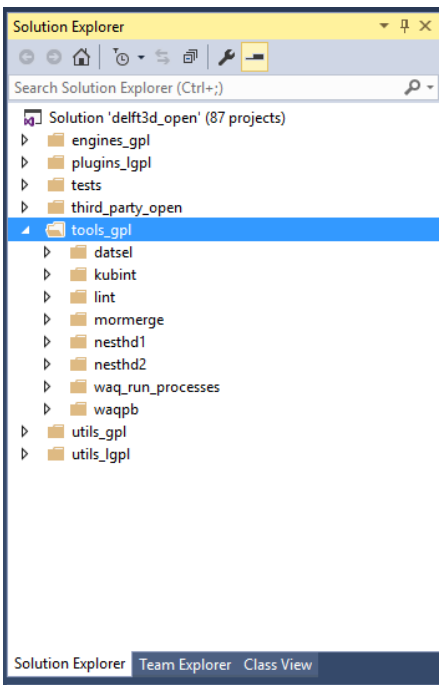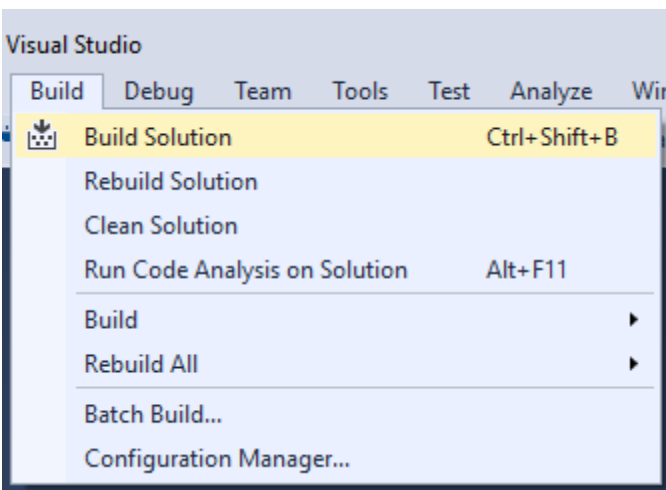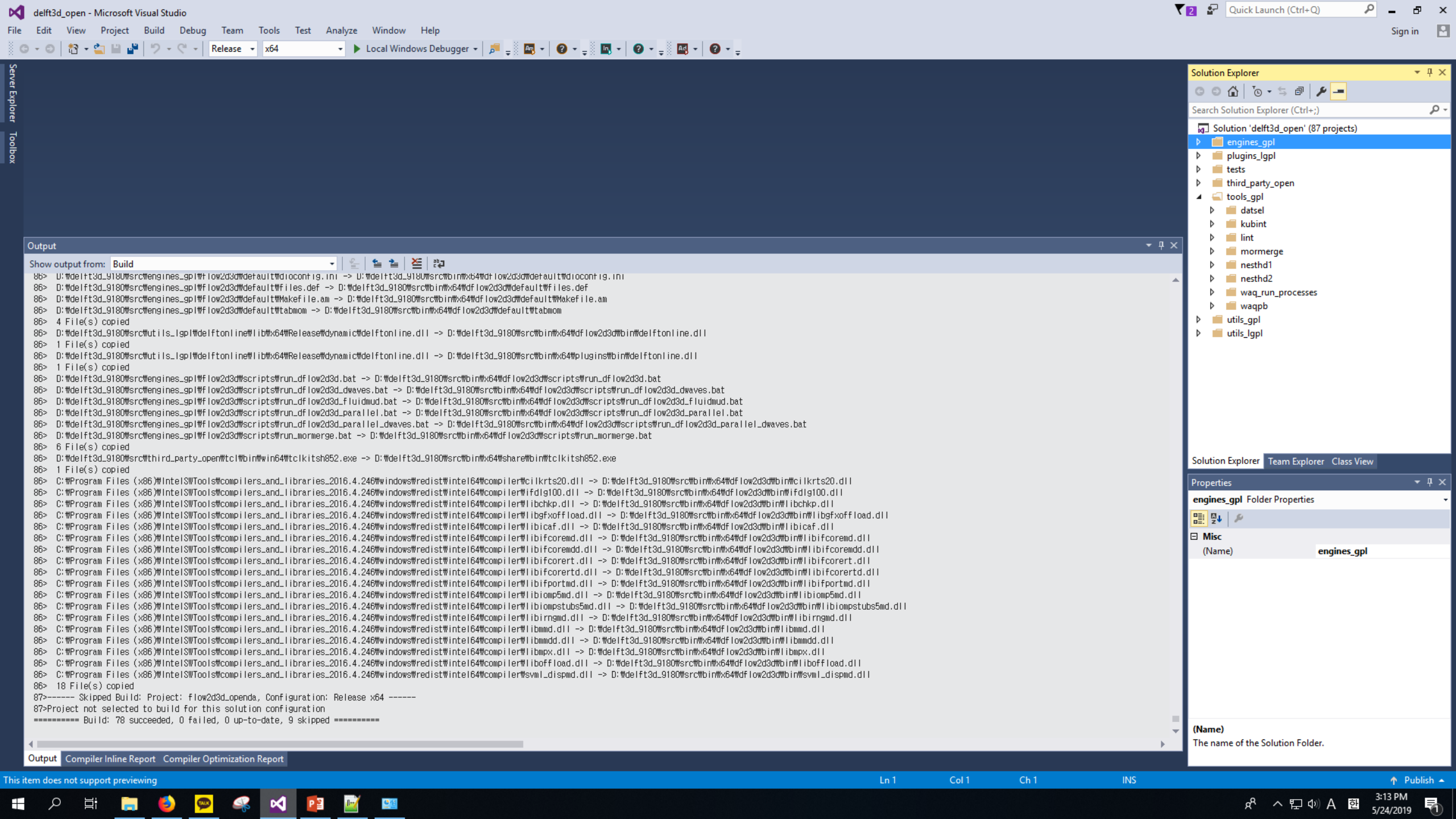
Output   Compiler Inline Report   Compiler Optimization Report

This item does not support previewing

Ln 1   Col 1   Ch 1   INS

Solution Explorer

Search Solution Explorer (Ctrl+;)

- Solution 'delft3d_open' (87 projects)
  - engines_gpl
  - plugins_lgpl
  - tests
  - third_party_open
  - tools_gpl
    - datsel
    - kubint
    - lint
    - mormerge
    - nesthd1
    - nesthd2
    - waq_run_processes
    - waqpb
  - utils_gpl
  - utils_lgpl

Solution Explorer   Team Explorer   Class View

Properties

engines_gpl Folder Properties

Misc
(Name)   engines_gpl

(Name)
The name of the Solution Folder.

Test the Example Case

Go to the Examples folder and then test all example case by double click the "run.bat" file inside of each folder (01_standard – 12_dflowfm)