

# Configuration of VS2015 to develop with OpenCascade

**Date** Sunday 22 July 2018

**Author** John Bijmens

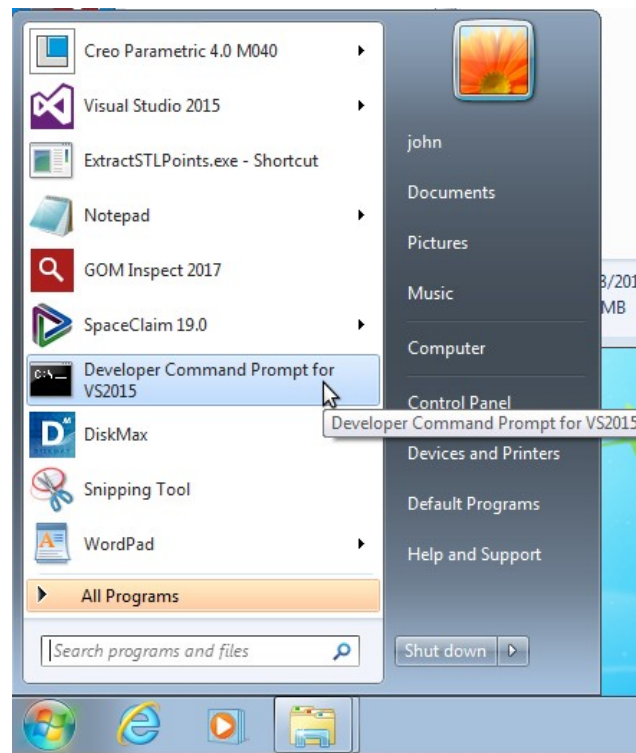
**Version** 1.0

## 1 COMPILING LIBRARIES OPENCASCADE

### 1.1 Setting of environment variables

#### STEP 1

Open a Developer Command Prompt for VS2015



#### Step 2

[https://www.opencascade.com/doc/occt-7.2.0/overview/html/occt\\_dev\\_guides\\_\\_building\\_msvc.html](https://www.opencascade.com/doc/occt-7.2.0/overview/html/occt_dev_guides__building_msvc.html)

In the Developer Command Prompt issue the following commands :

- `cd C:\OpenCASCADE-7.2.0-vc10-64\opencascade-7.2.0`
- `genconf.bat`  
This command updates *custom.bat* according your system.  
*custom.bat* contains all the environment variables that sets all the paths to:
  - the third-party packages you want to include
  - the header files you need
  - the library files for the linker
- `custom.bat`  
This command sets the environment variables according to the configuration that was specified using *genconf.bat*
- `devenv`  
This command opens VisualStudio. All the environment variables that were set using the procedure described earlier can be used.

## 1.2 Compiling the libraries

After installing OpenCascade using the Windows installer and configuring the environment everything is set-up by default to create libraries (so-called .lib files) that can be used for static linking.

After the VisualStudio IDE is started with *devenv*, open the solution file  
C:\OpenCASCADE-7.3.0-vc10-64\opencascade-7.3.0\adm\msvc\vc14\OCCT.sln

Build solution for Release x64 and Debug x64.

# 2 CONFIGURING VISUALSTUDIO FOR OWN DEVELOPMENT WITH OPENCASCADE

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Configuration project properties. These are stored in so-called vcxproj files.

<https://stackoverflow.com/questions/7133796/what-are-sln-and-vcproj-files-and-what-do-they-contain>

A project file (.vcproj / .vcxproj ) contains settings on how to compile your code into a DLL or a binary file, or something else that the linker can assemble into one unit. A project file is just an xml file that contains compiler settings, linker settings, and describes which files you want to compile.

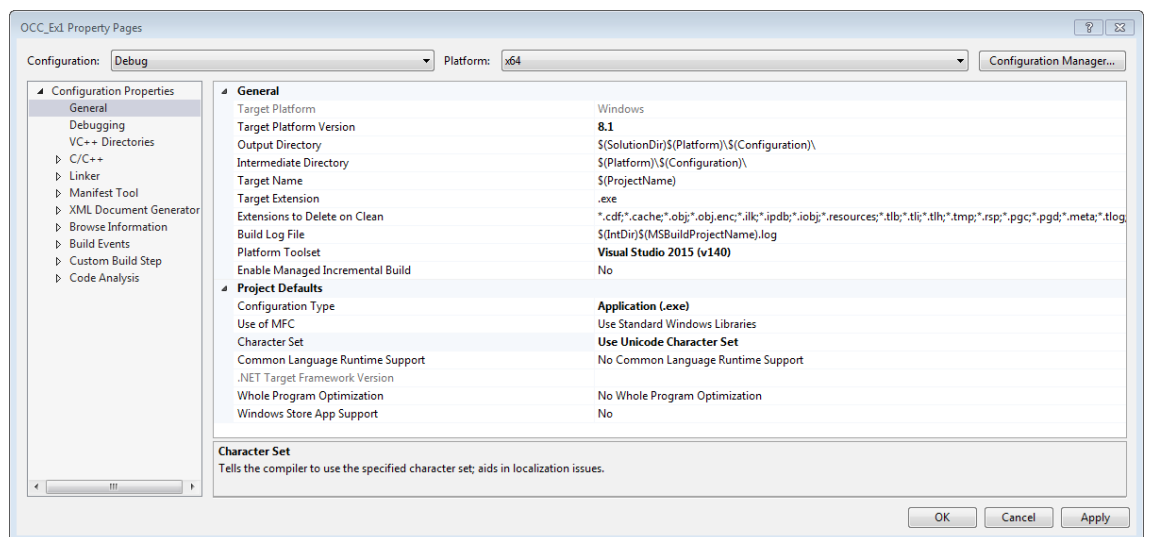
A solution file is a text file that groups together multiple project files.

So if you think of it like a tree, then you have got a good mental picture of it like this:

```
.sln
  .vcproj
    .h
    .h
    .cpp
    .cpp
  .vcxproj
    .h
    .h
    .cpp
    .cpp
  .csproj
    .cs
```

## 2.1 Step 4

### Unicode



### Include / Libraries / Executables (OpenCascade)

C/C++ : General → Additional include directories

\$(CSF\_OCCTIncludePath)

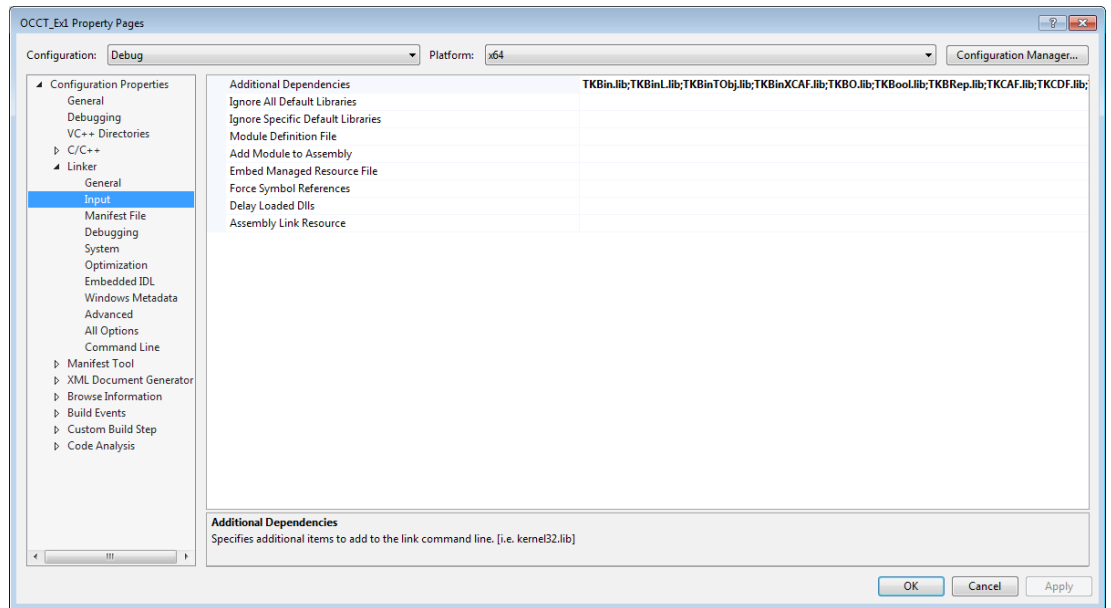
Linker : General

\$(CSF\_OCCTLibPath)

## Linker : Input

Additional dependencies: all the lib files that can be found in the folder that is specified by \$(CSF\_OCCTLibPath).

In this case that is: C:\OpenCASCADE-7.3.0-vc10-64\opencascade-7.3.0\win64\vc14\lib



## Include / Libraries / Executables (third party software, if necessary)

C/C++ : General → Additional include directories

\$(CSF\_OPT\_INC)

Linker : General → Additional library directories

\$(CSF\_OPT\_LIB64)

Linker : Input

Additional dependencies: all the lib files of the particular third party software you want to use)

Executables

\$(CSF\_OPT\_BIN64)