IFC++

ifcquery.com

Build IFC++, library only (windows)

- Download IFC++ from github: https://github.com/ifcquery/ifcplusplus
- Unpack it in a local folder like D:\work\ifcplusplus
- Download boost, if you don't have it yet.
- Set "BOOST_DIR=D:\lib\boost\1_70_0" with your path to boost as environment variable (you can use the script set_devenv_2017.cmd further down).
- Open IfcPlusPlus.sln, hit F7 to compile. Done :)

Build the example application (windows)

- Create this file set_devenv_2017.cmd:

```
set LIB_DIR=D:\lib
set OSG_DIR=%LIB_DIR%\OSG\3.6.3
set OSG_LIBRARY_PATH=%OSG_DIR%\bin
set OSG_PLUGINS_LIB=%OSG_DIR%\lib\osgPlugins-3.6.3
set FREETYPE_DIR=%LIB_DIR%\freetype\2.10.0

set BOOST_DIR=%LIB_DIR%\boost\1_70_0
set BOOST_ROOT=%LIB_DIR%\boost\1_70_0

rem set COINDIR=%LIB_DIR%\Coin3D

set QMAKESPEC=win32-msvc
set QMAKE_TARGET.arch=x86_64
set QTDIR=%LIB_DIR%\Qt\Qt5.12.3\5.12.3\msvc2017_64

set IFCPPDIR=D:\work\IfcPlusPlus

call "C:\Program Files (x86)\Microsoft Visual Studio\2017\Professional\VC\Auxiliary\Build\vcvarsall.bat" amd64
 rem x86

cd /D c:\work\

devenv
```

- Download OpenSceneGraph (OSG, https://github.com/openscenegraph/OpenSceneGraph), and unpack it in your local library folder (for example D:\lib\), so that it matches to the above script.
- Download and install Cmake, if you don't have it yet.

- Open the OSG folder with cmake, run "configure" and "create".
- Open VS using the above script. In VS, open OpenSceneGraph.sln and compile it.
- Download and install Qt, so that it matches the path in the above script.
- Download and install Qt visual studio plugin.
- Open "Carve.sln" in IfcPlusPlus/external/Carve, and compile it.
- Open "SimpleViewerExampleQt.sln" in VS, and compile it.