PCL & VISUAL STUDIO 2010

Please be aware that the paths, file & folder names may not be the same in every computer!

If your VS can create 64bit applications, then:

1. Open VS and create a project [Debug, x64] and add a .cpp file

2. You have to add the include directories to your project at the *Project Properties / Configuration Properties / C++ /All/ Include Directories* field - here you specify the path to your PCL/include directory and to all 3rd party include directories

```
C:\Program Files\OpenNI\Include;C:\Program Files\VTK 5.8.0\include\vtk-5.8;C:\Program
Files\qhull\include\libqhullcpp;C:\Program Files\flann\include;C:\Program
Files %28x86%29\Eigen\include;C:\Program Files\Boost\include;C:\Program Files\PCL 1.7\include\pcl-
1.7;%(AdditionalIncludeDirectories)
```

3. You have to add the lib directories to your project at the *Project Properties / Configuration Properties / Linker /All/ Lib Directories* field - here you specify the path to your PCL/lib directory and to all 3rd party include directories

```
C:\Program Files\OpenNI\Lib64;C:\Program Files\VTK 5.8.0\lib\vtk-5.8;C:\Program Files\qhull\lib;C:\Program
Files\flann\lib;C:\Program Files\Boost\lib;C:\Program Files\PCL 1.7\lib
```

4. You have to tell the linker, which libs you will use. This can be done on *Project Properties / Configuration Properties / Linker / Input / Additional Dependencies* field. Add all the libs you are using. Most likely, you will need pcl_common, pcl_io, pcl_visualization and some others if you are using any functionalities other than the basics. Be aware to add the _release libs to your release configuration and _debug libs to your debug configuration (which should be a 64bit configuration in your case).

```
pcl_common_debug.lib
pcl_features_debug.lib
pcl_filters_debug.lib
pcl_io_debug.lib
pcl_io_ply_debug.lib
pcl_kdtree_debug.lib
pcl_keypoints_debug.lib
pcl_octree_debug.lib
pcl_outofcore_debug.lib
pcl_people_debug.lib
pcl_recognition_debug.lib
pcl_registration_debug.lib
pcl_sample_consensus_debug.lib
pcl_search_debug.lib
pcl_segmentation_debug.lib
pcl_surface_debug.lib
pcl_tracking_debug.lib
pcl_visualization_debug.lib
flann-gd.lib
flann_s-gd.lib
flann_cpp_s-gd.lib
```

```
qhull6_d.lib
qhullcpp_d.lib
qhullstatic_d.lib
qhullstatic_p_d.lib
openNI64.lib
OpenNI.jni64.lib
NiSampleModule64.lib
NiSampleExtensionModule64.lib
MapReduceMPI-gd.lib
mpistubs-gd.lib
vtkalglib-gd.lib
vtkCharts-gd.lib
vtkCommon-gd.lib
vtkDICOMParser-gd.lib
vtkexoIIc-gd.lib
vtkexpat-gd.lib
vtkFiltering-gd.lib
vtkfreetype-gd.lib
vtkftgl-gd.lib
vtkGenericFiltering-gd.lib
vtkGeovis-gd.lib
vtkGraphics-gd.lib
vtkhdf5-gd.lib
vtkHybrid-gd.lib
vtkImaging-gd.lib
vtkInfovis-gd.lib
vtkIO-gd.lib
vtkjpeg-gd.lib
vtklibxml2-gd.lib
vtkmetaio-gd.lib
vtkNetCDF-gd.lib
vtkNetCDF_cxx-gd.lib
vtkpng-gd.lib
vtkproj4-gd.lib
vtkRendering-gd.lib
vtksqlite-gd.lib
vtksys-gd.lib
vtktiff-gd.lib
vtkverdict-gd.lib
vtkViews-gd.lib
vtkVolumeRendering-gd.lib
vtkWidgets-gd.lib
vtkzlib-gd.lib
opengl32.lib
```

5. Do the above twice, if you plan to use both configurations (Debug and Release)
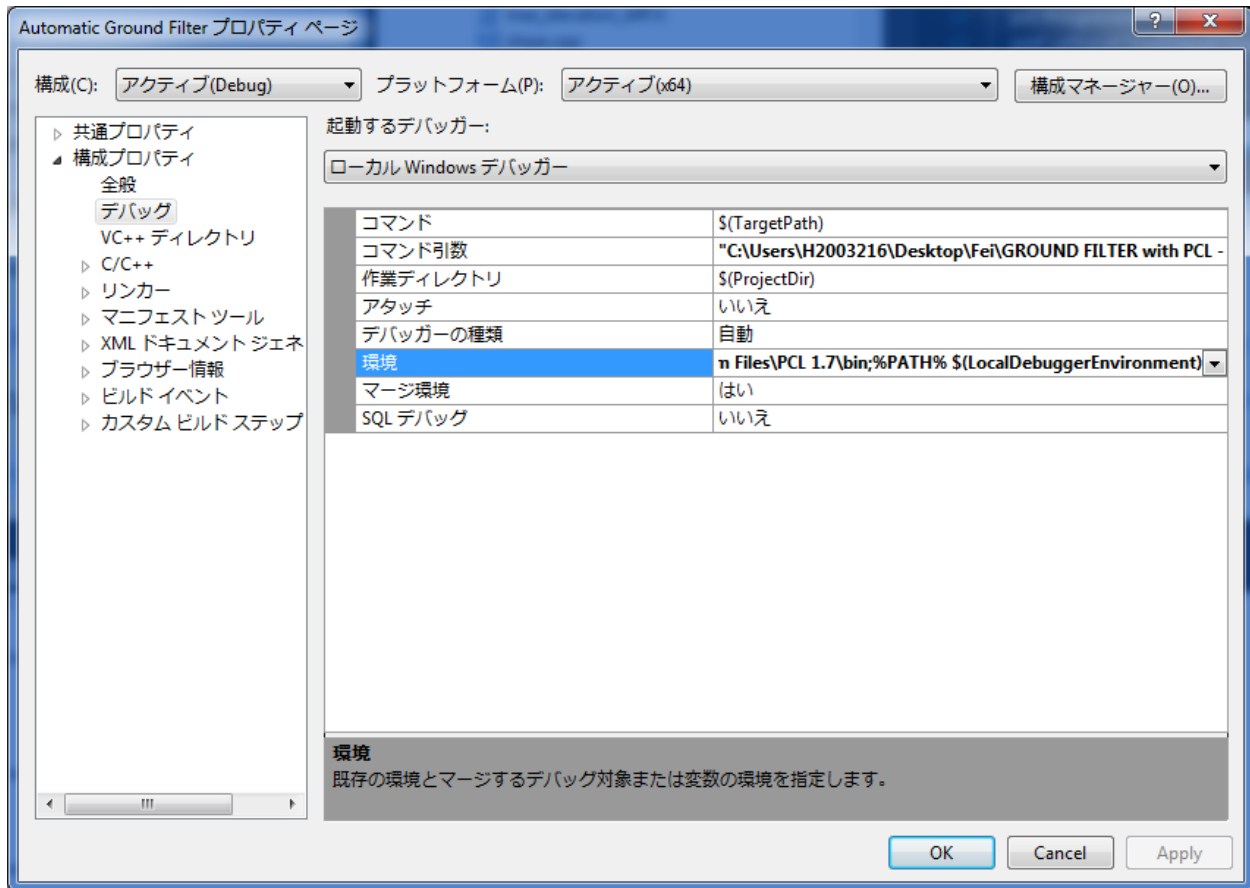
6. Add the Be PCL/bin folder to your system path variable (you don't need to add specific dll files, just the folder).

7. *Project Properties / Configuration Properties / Linker/ System / Subsystem / SUBSYSTEM: CONSOLE*

8. Set the path variable:

"configuration properties -> debugging -> environment" and set the PATH variable in run-time

```
PATH=C:\Program Files\PCL 1.7\bin;%PATH% $(LocalDebuggerEnvironment)
```


9. Copy and paste the OpenNI64.dll inside the following folder:

C:\....\Visual Studio\XX_Project\x64\Debug