Setup VTK for QT compiling with MSVC12

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1 Intro

1. Download and install Visual Studio 2013 from: Visual Studio 2013
2. Download and install Qt version 5.4.2 from: Qt 5.4.2
3. Add a new environment variable named

   `QT_ROOT`

   with path

   `C:\Qt\Qt5.4.2`

   (or wherever the installation is)
4. Download and install CMake from here: CMake 3.5.1
5. Download VTK version 6.1.0 (or newer) from: VTK 6.1.0

2 CMake

1. "Where is the source code" → your VTK-X.X.X folder.
2. "Where to build the binaries" → a new folder outside the source folder (*bin*).
3. Press Configure.
4. Select MSVC 12.
5. Now in this order:
   (a) In the CMAKE_INSTALL_PREFIX insert the path of your final installation folder (basically where the Qt compiler will look for the libraries).

(b) Add → CMAKE_PREFIX_PATH with your compiler path inside Qt (i.e. mine is: C:/Qt/Qt5.4.2/5.4/msvc2013_opengl)

(c) Configure.

(d) Check Advanced setting.

(e) Check Module_vtkGUISupportQt.

(f) Check Module_vtkGUISupportQtOpenGL.

(g) Check Module_vtkGUISupportQtSQL.

(h) Check Module_vtkGUISupportQtWebkit.

(i) Check Module_vtkRenderingQt.

(j) Check Module_vtkViewsQt.

(k) Check Module_vtkGUISupportQt.

(l) Check VTK_Group_Qt.

(m) Configure.

6. An error may occur, click ok and change the distribution of Qt from 4 to 5.

7. Configure.

8. Generate.

3 Visual Studio 2013

1. Inside the *bin* folder open the **VTK.sln** file with Visual Studio 2013.

2. In the top part of the Visual Studio window select **Reseale** instead of **Debug**.

3. In section build press **Build solution** (it may take a several minutes).

4. After completion of the build procedure right click on **INSTALL** and select **Project Only** and then **build Project Only**.

4 Final settings

1. Download and install Visual Studio SDK 2013 in order to allow the debug on QT from: VS SDK 2013

2. Open Qt → Tools → Options → Build & run → Compilers → Select Microsoft Visual C++ Compiler 12 (x86).

3. Open Qt → Tools → Options → Build & run → Debugger → Select GDC.

4. In your PRO file add INCLUDEPATH += "Path to the subfolder in your installation folder that contains the *.h* files)".

5. In your PRO file add INCLUDEPATH += "Path to the subfolder in your installation folder that contains the *.lib* files)".

6. In your PRO file add INCLUDEPATH += "Path to the subfolder in your installation folder that contains the *.dll* files)".

7. Copy **QVTKWidgetPlugin.dll** from $$(your VTK installation folder)/plugins/designer to C:/Dev/Qt/Qt_Version/Tools/QtCreator/bin/plugins/designer.

8. The Qt application that uses VTK may crash, in my case it was enough to copy all the .dll dynamic libraries into the Release folder of the application.