

## QGIS Application - Bug report #7289

### Add JOM CMake option to enable building with Qt JOM

2013-03-07 10:12 PM - Nathan Woodrow

<b>Status:</b>	Closed	
<b>Priority:</b>	Normal	
<b>Assignee:</b>	Larry Shaffer	
<b>Category:</b>	Build/Install	
<b>Affected QGIS version:</b>	master	<b>Regression?:</b> No
<b>Operating System:</b>	Windows	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	Yes	<b>Resolution:</b> fixed
<b>Crashes QGIS or corrupts data:</b>	No	<b>Copied to github as #:</b> 16298
<b>Description</b>		
Don't set		
ADD_DEFINITIONS( /W4 )		
ADD_DEFINITIONS( /FR )		
if JOM is enabled as it causes issues building		

#### History

##### #1 - 2013-03-08 07:06 PM - Larry Shaffer

- Status changed from Open to In Progress

Working setup: <https://github.com/qgis/Quantum-GIS/pull/464>

Tested on two different Win 7 VMs, with no errors.

The errors with qgis\_help and qbrowser were fixed by updating Visual Studio Express to SP1:

Get MS VS2008 w/ SP1 iso here (~750 MB):

<http://search.msdn.microsoft.com/search/en-US/default.aspx?query=visual%20studio%20express%202008%20download&#38;refinement=111&#38;ac4>

or directly (maybe):

<http://download.microsoft.com/download/E/8/E/E8EEB394-7F42-4963-A2D8-29559B738298/VS2008ExpressWithSP1ENUX1504728.iso>

Will add more about the QtCreator and .batch file configurations in followup post.

##### #2 - 2013-03-11 12:35 PM - Larry Shaffer

- File qgis-qtc-install-start.bat added
- File qgis-qtc-build-start.bat added
- File qgis-qtc-start.bat added
- File qtc-cmake-options.txt added
- File qbrowser-qtc-build-start.bat added
- File qgis-qtc-cmake-gui.bat added
- File qgis-build-shell.bat added
- File qbrowser-qtc-install-start.bat added

So here are my results/notes so far for setting up Qt Creator and NMake with jom:

- Windows 7 Home **64-bit**
- 4 GB RAM
- 6 CPUs
- Two different Parallels 7 virtual machines (running under Mac OS X 10.7.5)
- [Visual Studio Express with SP1](#) (as noted above)
- [Windows 7 SDK](#) for debugging in QtCreator

The following differs from current INSTALL notes:

- Microsoft Platform SDK for Windows Server 2003 R2 install doesn't appear to be necessary (at least I couldn't find any CMake options that utilized anything from that install). SetupAPI appears to be useable from: C:/Program Files/Microsoft SDKs/Windows/v6.0A/Lib/SetupAPI.Lib, though I can't say I know what it is used for exactly.
- I installed the GNU tools, flex and bison, in C:/GnuWin32. Using Progra~1 or Progra~2 (for 64bit) still produced path-with-spaces problems for the tools.
- The general shell environment batch file setup I used (though I don't use this shell env anymore once QtCreator was setup):  
attachment:qgis-build-shell.bat

I used a separate virtual hard drive for source files and build directory at **Q:\Quantum-GIS** and **Q:\build-qtc**. There seemed to be an issue with having only the build directory being on a separate HDD, which was mitigated when I placed the source files there as well. The installed app goes into my home folder: C:/Users/me/QGIS/QGIS\_Apps-Qtc

The INSTALL notes should include the info about generally creating a CMake project, like opening the top-level CMakeLists.txt and inputting default options.

Since Qt Creator works better when passing in CMake options via options dialog (rather than using CMake-GUI, etc), I keep a text file handy with the default options I pass in, for initial project setup and for whenever Creator randomly asks for them. (These are just my choices for initial options):  
attachment:qtc-cmake-options.txt

The project build steps are as follows (-j option may be unnecessary unless you want jom to NOT automatically use all of your available CPU cores):

```
jom.exe -j6  
jom.exe -j6 staged-plugins (optional, unless running from build dir)  
jom.exe -j6 install (optional)
```

For launching Creator I use the following batch file: attachment:qgis-qtc-start.bat

Once built and installed, I use the following to launch QGIS from build dir and install dir, respectively: attachment:qgis-qtc-build-start.bat and attachment:qgis-qtc-install-start.bat

And similarly for the qbrowser application: attachment:qbrowser-qtc-build-start.bat and attachment:qbrowser-qtc-install-start.bat

For running CMake-GUI (if needed): attachment:qgis-qtc-cmake-gui.bat

It is best to run CMake-GUI while Creator is open, otherwise, you may be prompted with the default CMake options dialog on Qt Creator launch after using CMake-GUI. Likewise, any changes done with CMake-GUI will be reverted if they are not reflected in future inputted options to Qt Creator's CMake options dialog. Generally, I avoid using CMake-GUI to change CMakeCache.txt when using Qt Creator, and only use it to browse current settings.

For debugging, I installed Windows 7 SDK (just Developer Tools) and set the path to CDB debugger manually in Options->Build-n-Run->Kits->Desktop (it

#3 - 2013-05-10 08:37 PM - Nathan Woodrow

- Resolution set to fixed
- Status changed from In Progress to Closed

Files

qgis-qt-cmake-gui.bat	624 Bytes	2013-03-11	Larry Shaffer
qbrowse-qt-build-start.bat	307 Bytes	2013-03-11	Larry Shaffer
qbrowse-qt-install-start.bat	329 Bytes	2013-03-11	Larry Shaffer
qgis-build-shell.bat	764 Bytes	2013-03-11	Larry Shaffer
qt-cmake-options.txt	263 Bytes	2013-03-11	Larry Shaffer
qgis-qt-start.bat	626 Bytes	2013-03-11	Larry Shaffer
qgis-qt-build-start.bat	295 Bytes	2013-03-11	Larry Shaffer
qgis-qt-install-start.bat	317 Bytes	2013-03-11	Larry Shaffer