# GMlib setup guide

This guide assumes that you have installed Qt and Qt Creator, downloaded an appropriate compiler, and that you have GMlib and the demo application already available in a project folder. The setup is done for Windows 64-bit, so for Windows 32-bit and Linux the paths in the example will have to be changed accordingly.

### Glew

Go to <a href="http://glew.sourceforge.net/">http://glew.sourceforge.net/</a> and download Glew binaries for Windows 32-bit and 64-bit

Unzip it to a place where it is easy to find later.

### **GMlib**

In Qt Creator:

- 1. Create a new session:
  - a. File → Session Manager
  - b. New → "Give it a name" → Create and Open
- 2. Open the GMlib project:
  - a. File → Open File or Project
  - b. Navigate to <GMlib source folder>
  - c. Select CMakeLists.txt → Open
- 3. Configure the project:
  - a. Select the kit to build with
  - b. Expand the selected kit tab
  - c. Choose the build type/types you want and select a build folder for it
  - d. Configure project
- 4. Let the compiler know where Glew is:
  - a. Navigate to the Projects pane
  - b. Select the Build Settings for your selected kit
  - c. Under CMake configuration: Add → Directory
    - i. Key: GLEW LIBRARY
    - ii. Value: <Path to glew/lib/Release/x64/glew32s.lib>
    - iii. Apply Configuration Changes
  - d. Check that the other Glew keys are set:
    - i. Tick the Advanced option for Cmake configure
    - ii. Navigate down to GLEW
    - iii. Set the values for GLEW\_INCLUDE\_DIR and GLEW\_PATH\_WIN32:
      - 1. -GLEW\_INCLUDE\_DIR: <Path to glew/include>

- 2. -GLEW\_PATH\_WIN32: <Path to glew>
- iv. Make sure that the GM\_BUILD\_SHARED option is off
  - 1. With the Advanced option on, navigate to GM
  - 2. Set GM\_BUILD\_SHARED to OFF
  - 3. Apply Configuration Changes
- 5. Build

## **Demo application**

#### In Qt Creator:

- 1. Open the demo application:
  - a. File → Open File or Project
  - b. Navigate to <Demo Application source folder>
  - c. Select CMakeLists.txt → Open
- 2. Configure the application:
  - a. Select the kit to build with
  - b. Expand the selected kit tab
  - c. Choose the build type/types you want and select a build folder for it
  - d. Configure project
- 3. Let the compiler know where GMlib is:
  - a. Navigate to the Projects pane
  - b. Select the Build Settings for your selected kit
  - c. Under CMake configuration: Add → Directory
    - i. Key: GMLIB DIR
    - ii. Value: <Path to GMlib build folder>
    - iii. Apply Configuration Changes
- 4. Add dependencies:
  - a. Make the Demo Application depend on GMlib:
  - b. In the Projects pane for the Demo Application go to Dependencies under Project Settings
  - c. Tick the GMlib option
- 5. Build
- 6. Run