

# Set up the openPASS development environment

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## 1 Set up Qt

1. Install Qt 5.4.1 with MinGW 4.9.1 32bit from:  
[https://download.qt.io/official\\_releases/qt/5.4/5.4.1/qt-opensource-windows-x86-mingw491\\_opengl-5.4.1.exe](https://download.qt.io/official_releases/qt/5.4/5.4.1/qt-opensource-windows-x86-mingw491_opengl-5.4.1.exe)
2. Set environment variables:
  - a. Go to  
Control Panel\System\System\Advanced system settings  
> Advanced > Environment Variables > System variables
  - b. Edit the variable "Path" and add at the end:  
C:\Qt\Qt5.4.1\Tools\mingw491\_32\bin;c:\Qt\Qt5.4.1\5.4\mingw491\_32\bin\;
3. Start Qt Creator
4. Modify options:
  - a. Set Tools > Options > Build & Run > General > Projects Directory to "Current Directory"
  - b. Set Tools > Options > Build & Run > General > Build & Run > Default build directory to "c:/Build/TEMP/{CurrentProject:Name}"

## 2 Set up source code

1. Copy the source code to c:\OpenPASS\ (path must be short to avoid compilation issues)
2. Define libraries build folders in c:\OpenPASS\Global.pri:
  - a. DIR\_DEBUG = "c:\Build\DEBUG"
  - b. DIR\_RELEASE = "c:\Build\RELEASE"
3. Delete all \*.pro.user files
4. Start Qt Creator
5. Start a new session File > Session Manager > New (give it a name)
6. Open all needed \*.pro sequentially and click "Configure"
7. Mind build configuration: either all projects in Debug or all projects in Release mode

## 3 Prepare configuration files

1. Choose set of configuration files
2. Optionally, change configuration files, e.g.
  - a. Configuration of output path and output file name(s) can be changed in runConfiguration.xml in the settings for <Observations>
  - b. Physical properties of agents can be changed in runConfiguration.xml in the settings for <Agents>

## 4 Run simulation

1. Build all projects in Debug or Release mode (see DIR\_DEBUG and DIR\_RELEASE)
2. Copy configuration files (agentConfiguration.xml, frameworkConfiguration.xml, runConfiguration.xml, sceneryConfiguration.xml) to the build target folder (see DIR\_DEBUG and DIR\_RELEASE)
3. Execute either OpenPassMaster.exe or OpenPassSlave.exe

## 5 Simulation results

1. Simulation results are to be found in the directory specified in runConfiguration.xml. Default: same directory as dll-files.