Set up the openPASS development environment

1 Set up Qt

1. Install Qt 5.6.1 with MinGW 4.9.2 32bit from:
   https://www.qt.io/download/
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\Qt5.6.3\Tools\mingw492_32\bin\;c:\Qt\Qt5.6.2\5.6\mingw49_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 "OpenPass_PCM.pro"
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.