



openPASS 0.8 Installation

A User's point of view

Installation process



1

Standard procedure

Available on the openPASS website

Core + GUI?

2

Conan procedure

Available on the openPASS website

Core + GUI

3

Pre-built package

Available on the ci.Eclipse project

Non-customized Core + GUI



🏠 openPASS



0.8.0

INSTALLATION GUIDE

- Getting Started
- Installing Prerequisites
- Installing OpenPASS**
- Further Guidance
- Building with Conan

USER GUIDES

- Overview

🏠 » Installing OpenPASS

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Installing OpenPASS

This section describes how compile and run **openPASS**. Please make sure that all prerequisites have been properly installed according to section [Installing Prerequisites](#). If you have strictly followed the instructions, the installed source packages should be located on your machine under `C:\OpenPASS\thirdParty` for **Windows** and `~/OpenPASS/thirdParty` for **Linux**. If there is a path deviation, the following commands must be adjusted.

To keep the installation process of **openPASS** as simple as possible, we again recommend a specific folder structure. If you have strictly followed and will follow the recommended paths of this guide, no command modifications are necessary.

Notes for Windows

Notes for Linux

- Recommended checkout path of **openPASS** repository: `C:\simopenpass`

1) Standard Procedure

- Using the **latest version of the libraries in the prerequisites** and the **tested versions**
 - Issue during installation of sphinx:
 - Could not find function xmlCheckVersion in library libxml2. Is libxml2 installed?
Resolved installing *lxml*, *libxml2-dev* and *libxslt1-dev*

After that we arrived at the end of the installation guide and even though there were no error raised, the last command

```
cp /C/OpenPASS/bin/core/bin/* /C/OpenPASS/bin/core
```

didn't worked since nothing (the core) has been built in the first directory and nowhere else.

The image shows a Windows File Explorer window with two panes. The left pane shows the path: Questo PC > Windows (C:) > OpenPASS. The right pane shows the path: Questo PC > Windows (C:) > OpenPASS > bin > core. The left pane contains a table of files and folders:

Nome	Ultima modifica
bin	11/02/2022
thirdParty	16/02/2022

The right pane shows a list of files and folders:

- openpass
- profiles
- OneDrive
- OneDrive - Person
- Questo PC
- Desktop
- Documenti
- Download
- Immagini
- Musica
- Oggetti 3D
- Video

At the bottom of the right pane, it says "0 elementi".

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2) Conan procedure

- \$ yes | pacman -Syu (repeat until no additional packages where installed)
- navigate with "cd" to script folder
- sh 10_prepare_msys2.sh
- \$ sh 15_prepare_mingw.sh
- \$ sh 20_build.sh
- Add "c:\msys64\mingw64\bin" (your Msys2 Installation path) to your PATH environment variables.

Just one addition to this guide: you need to change line 58 in the "openPASS recipe" to "WITH_GUI: ON" which is the CMAKE command to build the GUI and is default off.

2) Conan procedure

Two attempts:

1. Successful installation with tested libraries – not working
2. Unsuccessful installation with latest releases



2) Conan procedure

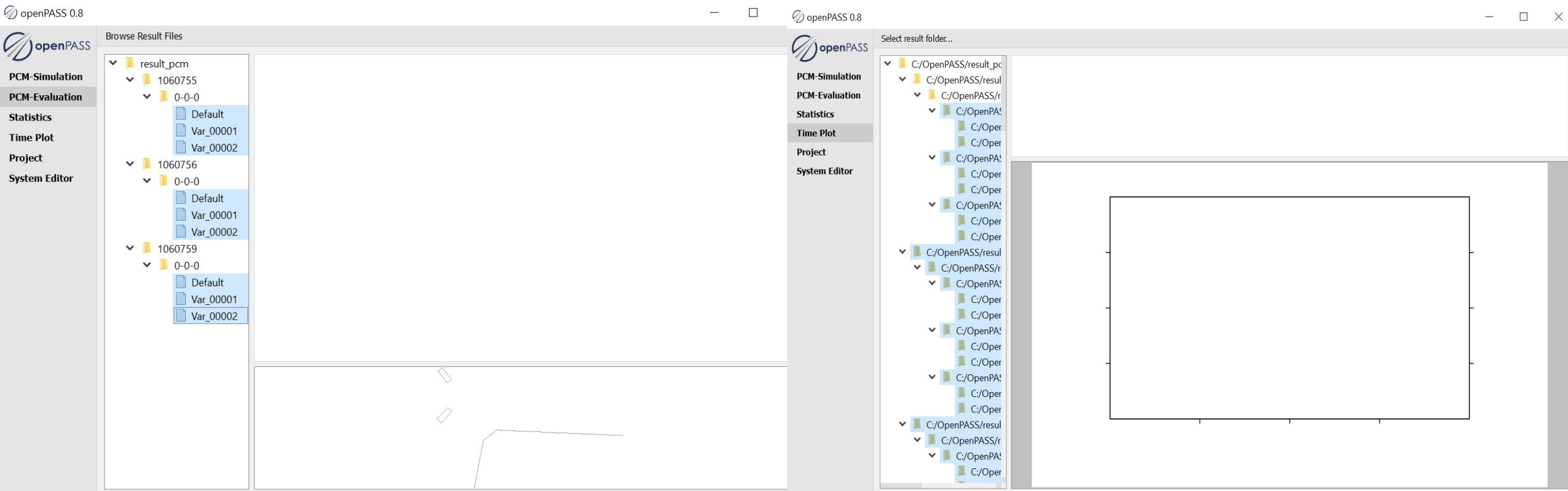
Successful installation with tested libraries – not working

The screenshot shows the openPASS software interface. On the left, a sidebar lists various simulation components, with 'System Editor' highlighted. A list of IDs (1060724 to 1060797) is visible. The main window displays configuration options for a simulation, including 'Input' (PCM Database selected, PCM File: ../Users/fch0933/Desktop/200130_GIDAS_PCM_4.0_2019_2_TOYOTA.mdb), 'Output' (Result Folder: result_pcm), 'System Configuration Files' (Car1: Agent_Follow.xml, Car2: Agent_Follow.xml, Other: Agent_Copy.xml), and 'Variation' (Random Seed: using case number, Variation Count: 2). A 'General' tab at the bottom shows 'Simulation Manager Config: opSimulationManager'. An 'Information' dialog box in the foreground states 'Simulation successfully finished.' with an 'OK' button. A red box on the right side of the image contains the text 'Missing Files'.

Missing Files

2) Conan procedure

Successful installation with tested libraries – not working



2) Conan procedure

Unsuccessful installation with latest releases

Two different errors in two different attempts:

1. ERROR: Package '..' build failed
2. ERROR: Compiler not defined for compiler.libcxx

1

```


/c/simopenpass/utils/ci/conan/script
ace-config-version.cmake, open_simulation_interface_targets.cmake
openpass/0.8 imports(): Copied 2 '.dll' files: libfmlib_shared.dll, libopen_sim
ulation_interface.dll
openpass/0.8: Calling build()
-- The C compiler identification is GNU 11.2.0
-- The CXX compiler identification is GNU 11.2.0
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working C compiler: C:/msys64/mingw64/bin/gcc.exe - skipped
-- Detecting C compile features
-- Detecting C compile features - done
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Check for working CXX compiler: C:/msys64/mingw64/bin/g++.exe - skipped
-- Detecting CXX compile features
-- Detecting CXX compile features - done
CMake Warning at CMakeLists.txt:17 (message):
  It seems you are using a build environment different from MSYS. This is
  not officially supported by the openPASS project.

-- Found Protobuf: C:/msys64/mingw64/lib/libprotobuf.dll.a (found version "3.16.
0")
-- Found OSI: C:/conan/79da20/1/ThirdParty/lib/osi3/libopen_simulation_interfac
e.dll.a
-- Found Boost: C:/msys64/mingw64/include (found version "1.78.0") found compone
nts: filesystem
-- Found FMILibrary: C:/conan/79da20/1/ThirdParty/lib/libfmlib_shared.dll.a
-- Found Sphinx: C:/msys64/mingw64/bin/sphinx-build.exe
-- Collecting runtime library paths...
CMake Error at cmake/install_deps.cmake:17 (find_program):
  Could not find CYGPATH using the following names: cygpath
Call Stack (most recent call first):
  CMakeLists.txt:77 (include)

-- Configuring incomplete, errors occurred!
See also "C:/conan/79da20/1/CMakeFiles/CMakeOutput.log".
openpass/0.8:
openpass/0.8: ERROR: Package '2da45343793248dd21053ec733f9dab6b572be91' build fa
iled
openpass/0.8: WARN: Build folder C:/conan/79da20/1
ERROR: openpass/0.8: Error in build() method, line 56
  cmake.configure(defs={"CMAKE_PREFIX_PATH": "ThirdParty",
  ConanException: Error 1 while executing cd C:/conan/79da20/1 && cmake -
G "MinGW Makefiles" -DCMAKE_BUILD_TYPE="Release" -DCONAN_IN_LOCAL_CACHE="ON" -DC
ONAN_COMPILER="gcc" -DCONAN_COMPILER_VERSION="9" -DCONAN_CXX_FLAGS="-m64" -DCONA
N_SHARED_LINKER_FLAGS="-m64" -DCONAN_C_FLAGS="-m64" -DCONAN_LIBCXX="libstdc++11"
-DBUILD_SHARED_LIBS="ON" -DCMAKE_INSTALL_PREFIX="C:/conan/12d41d/1" -DCMAKE_IN
STALL_BINDIR="bin" -DCMAKE_INSTALL_SBINDIR="bin" -DCMAKE_INSTALL_LIBEXECDIR="bin
" -DCMAKE_INSTALL_LIBDIR="lib" -DCMAKE_INSTALL_INCLUDEDIR="include" -DCMAKE_INST
ALL_OLDINCLUDEDIR="include" -DCMAKE_INSTALL_DATAROOTDIR="share" -DCMAKE_EXPORT_N
O_PACKAGE_REGISTRY="ON" -DCONAN_EXPORTED="1" -Wno-dev -DCMAKE_PREFIX_PATH="Third
Party" -DCMAKE_INSTALL_PREFIX="temp-deploy" -DWITH_GUI="ON" -DWITH_TESTS="OFF" -
DINSTALL_EXTRA_RUNTIME_DEPS="ON" C:/conan/79da20/1

```

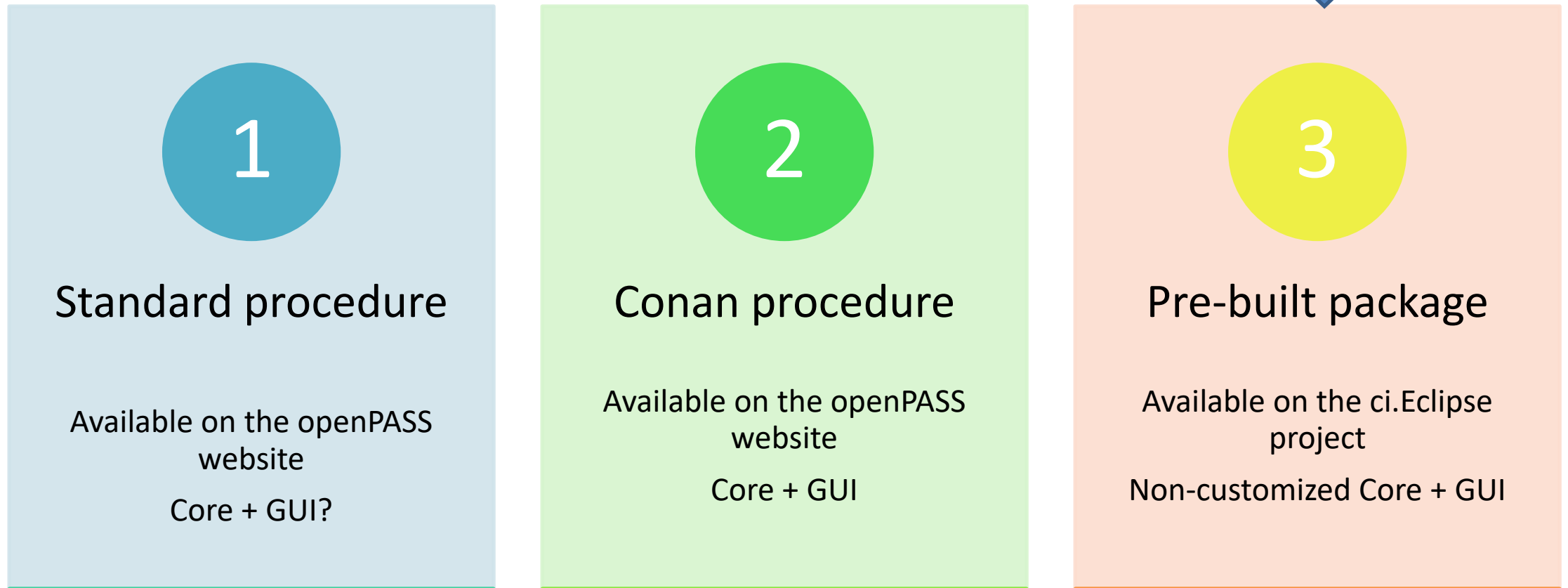
2

 /c/simopenpass/utils/ci/conan/script

```
openpass/0.8 exports_sources: Copied 1 '.xsd' file: ProfilesCatalog.xsd
openpass/0.8 exports_sources: Copied 35 '.xodr' files
openpass/0.8 exports_sources: Copied 4 '.pdf' files: Glossary.pdf, openPASS_Setup_PCM_Win7x64.pdf, Tutorial_openPass_GUI.pdf, openPASS_Setup_StepByStep.pdf
openpass/0.8 exports_sources: Copied 3 '.chm' files: GUI-DeveloperDocumentation.chm, openPASS_Developer_Docu.chm, openPASS_Function_Docu.chm
openpass/0.8 exports_sources: Copied 1 '.pptx' file: Doxygen_Framework.pptx
openpass/0.8 exports_sources: Copied 3 '.doxy' files: Common.doxy, Developer.doxy, Function.doxy
openpass/0.8 exports_sources: Copied 2 '.bat' files: genDeveloper.bat, genFunction.bat
openpass/0.8 exports_sources: Copied 21 '.sh' files
openpass/0.8 exports_sources: Copied 1 '.dox' file: mainpage.dox
openpass/0.8 exports_sources: Copied 1 '.ini' file: pytest.ini
openpass/0.8 exports_sources: Copied 3 '.xlsx' files: UT_Design2TM.xlsx, UT_Design2TM_tire.xlsx, UT_Design2TM_tire_TME.xlsx
openpass/0.8: The stored package has not changed
openpass/0.8: Exported revision: 2b8910c54ca1f04869253762a271a9c1
mkdir: cannot create directory '../install_file/openpass/build': File exists
ERROR: compiler not defined for compiler.libcxx
Please define compiler value first too

Fernando Chirici@LAPTOP-EUORDF37 MSYS /c/simopenpass/utils/ci/conan/script
$
```

Installation process





Up



Status



Changes



Full Stage View



Branch



Build History

trend














Filter builds...

Branch master

Full project name: openPASS_simulator_build/master



Last Successful Artifacts

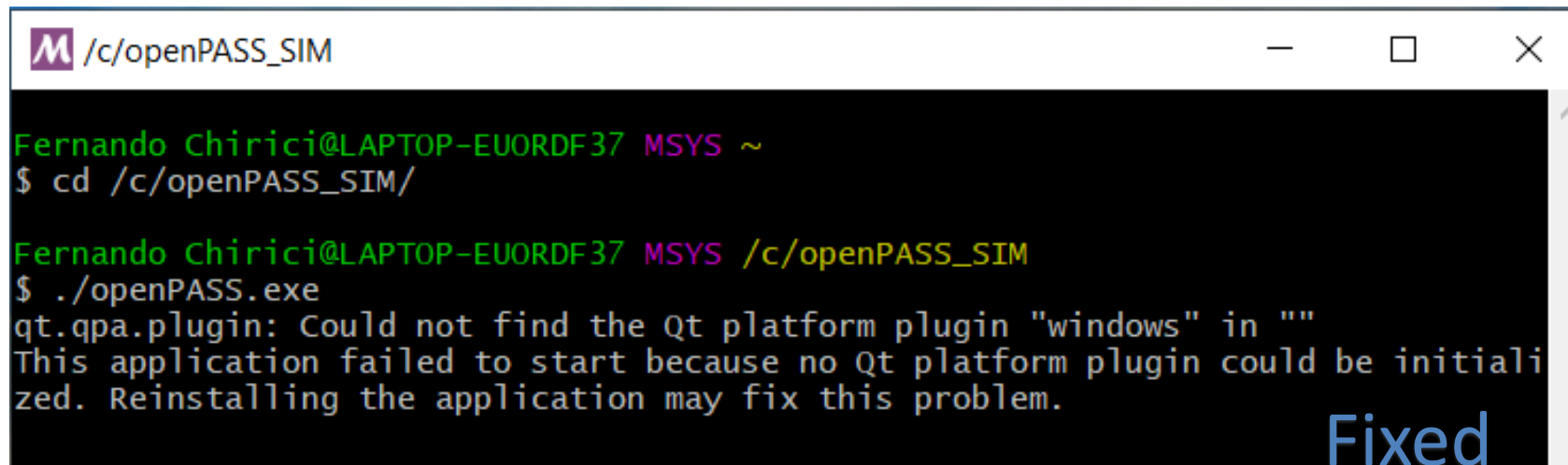
 openPASS_EndToEndTests.tar.gz	41.51 MB  view
 openPASS_EndToEndTests.zip	40.90 MB  view
 openPASS_SIM.tar.gz	9.87 MB  view
 openPASS_SIM.zip	46.64 MB  view
 report.css	2.05 KB  view
 report.html	13.24 KB  view



Recent Changes

3) Pre-built Package

- The openPASS core was correctly working immediately after the installation
- The GUI wasn't working



```
M /c/openPASS_SIM
Fernando Chirici@LAPTOP-EUORDF37 MSYS ~
$ cd /c/openPASS_SIM/
Fernando Chirici@LAPTOP-EUORDF37 MSYS /c/openPASS_SIM
$ ./openPASS.exe
qt.qpa.plugin: Could not find the Qt platform plugin "windows" in ""
This application failed to start because no Qt platform plugin could be initialized. Reinstalling the application may fix this problem.
```

Fixed

3) Pre-built Package

GUI issue fix

Add two environment variables (so navigate to Control Panel -> System -> Advanced system settings -> Environment Variables) and add the following **System Variables**:

1)

Name: QT_PLUGIN_PATH

Value: C:\msys64\mingw64\share\qt5\plugins

2)

Name: QT_QPA_PLATFORM_PLUGIN_PATH

Value: C:\msys64\mingw64\share\qt5\plugins\platforms

[Note: Assuming that's the position of your msys64]



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