openPASS AC Workshop - 22.10.2019

Dienstag, 22. Oktober 2019   09:00

Date: 23.10.2019 09:00
Location: Petuelring 130, Munich
Participants

- ☑ Das Arun, FG-461
- ☑ EG-342 Platzer Thomas (Thomas.Platzer@bmw.de)
- ☑ Manel Hammouda (Manel.Hammouda@bmw.de)
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- ☑ Daniel.Schmidt6@de.bosch.com
- ☑ Stark, Lukas (K-GERT/A) (on behalf of VW GoA)
- ☑ Schoenawa, Stefan, Dr. (K-GERT/A) (on behalf of VW GoA)
- ☑ rene.paris@in-tech.com (intech on behalf of BMW)
- ☑ Biegel, Reinhard (intech on behalf of BMW)
- ☑ Gottwald, Fabian (EDAG on behalf of VW GoA)

Simulation core for scenario based simulation:
- Presentation on the execution process of a simulation (-> 20191022 _Simulation_ExecutionFlow.pdf)
- Optimizations in the scheduler (-> 20191022_Scheduler.pdf)
    - Queuing is not created from scratch in each time step. Instead, there are lists that remain static and others that need to be adjusted upon certain events, Lists from previous time step can be reused in following time steps.
    - Individual cycle times can now be used for each component.
    - There is currently no possibility to dynamically change the cycle time of a component during runtime (e.g. when a collision happens, the dynamics are updated with a higher cycle rate). This would be a new requirement for the scheduler.
    - Currently the cycle time is restricted to >= 1ms. Higher update rates are currently not possible.
- Testing
    - Intech presented how unit tests are setup up (Demo in the source code).
    - Gtest / Gmock Framework is used for testing.
    - There is a separate project for unit tests, where the tests for each component are collected.
    - For each component a separate test project exists (only exception: the scheduler is not tested in the slave tests but has a separate test project).
    - Code coverage can be measured and visualized with gcov and lcov (guide or script for generating the report will be provided).
- Documentation
    - The structure is not self-explanatory yet. A clear distinction should be made between Framework and agent modules (e.g. ADAS and scheduler not included in the modules sections).
    - Restructuring of the Docu should be included in the high level targets.
    - There are also other minor mistakes (e.g. C++11 instead of C++17). This bugs need to be tracked somehow. Suggestion: Use Bugzilla.
    - More links within the docu can help to support the user.
    - Subrepository "doc" has been generated. A ready built documentation in *.chm format

has to be commited there.
  - ○ Naming: We are currently not consistent with the use of the terms Components and Modules
  - ○ There should be one glossary for the whole openPASS project.

GUI:
- A live demo has been shown.
- Currently, the GUI already supports all features to create the example configs for the AEB use case.
- A new project plugin has been created to define paths and parameterize the openPASS master (masterConfig.xml).

V0.6 opentopics:
- systemConfigBlueprint cannot be shown in the system editor yet. The usage of the id-tag is different than it is in classic system configs (with id and title). This will be investigated and discussed in the next agent creation requirement refinement meeting.

```
<component>

    <id>Parameters_Vehicle</id>

    <id>1</id>
    <title>Parameters_Vehicle</title>

    <schedule>
```

- BMW will also provide example configs for the usage of an agent with static configuration (i.e. systemConfig).
- Results plugin: BMW will send an example of the cyclics.csv to Daimler / ITK
- Results plugin: License issue with Qtables will be discussed by ITK and Daimler. Update in the next SC.
- All necessary CQs are approved (-> 20191022_Status_EclipseIPZilla_CQs.pdf).

CQs und official release check by Eclipse:
- Who manages the CQs? -> Product Manager (track current status, organize updates where necessary).
- Where do we maintain and summarize the third party dependencies and corresponding CQ status? -> Tuan will check how other Eclipse projects handle this.
- CQs for new commits have to be requested by the committer. However, new dependencies for our project should be discussed and approved by the AC prior to their implementation.
- Gerrit allows to create custom labels for approving a commit. A separate label for license topics (besides CI check, manual review, etc.) can therefore be established. The Qt project itself has multiple labels created, so it serves as a good example.

Naming conventions:
- Intech and BMW proposed some naming conventions (-> 20191022 _Proposal_NamingConventions.pdf)
- The naming conventions are included in a high level target and will be discussed in a working group working-group to define the final rules.

GUI - Summary of Requirement refinement meetings:
- Presentation by EDAG and VW (-> 20191022_Summary_GUI_Refinement_Meetings.pdf)
- The meetings will continue. More participants are welcome to take a look at the overall goals before we go into detail again.

- Use cases for agent setup will be collected in order to identify the requirements for the agent configuration. VW will provide the use cases we have so far and possibly also a catalog with question to answer by each member.

Sum Up:
- The next workshop will be on December 4th in Sindelfingen.
- A live demo of how to setup and change the simulation configs manually is moved to the next AC meeting.