# Requirement Refinement Meeting
# openPASS

12.02.2020 – René Paris, Reinhard Biegel on behalf of BMW AG

## Design Premise

- Try to follow best practices of open source
- Apply DRY principle on paths
  - or keep paths short - the old windows issue
  - no more *openpass_this/openpass_that/algorithm_this/algorithm_this_and_that/...*
- Reflect architectural changes
  - or simply moving stuff around

## Cleanup Directory Structure

root (.)

- doc
- gui
- sim

- *license.md*
- *notes.md*
- *codeofconduct.md*
- *readme.md*

common items gui/sim

- doc

- *changelog.md*

- Split into USER / DEV
- USER doc goes here
- Integration within hosted services (e.g. ReadTheDocs)

- DEV Doc goes there

- Focus on sim right now

- [ ] Discussion about splitting
- [ ] What does Eclipse really need?
- [ ] Requirements GUI?

# Cleanup Directory Structure

## Proposed Structure

intech

./sim

- docs
- deps
- include
- src
- tests

- contrib
  - templates
  - examples

- *changelog.md*
- *.clang-format*
- *.gitignore*

- External dependencies (aka ThirdParty)
- Reference only

- The big public interfaces (e.g. WorldInterface)

- Former openpass_source_code see following slides

- Former openpass_resources
- Potential helper scripts
- Not real code, but related

☐ Does this make sense for everybody?

☐ Shall we simply propose a format?

# Cleanup Directory Structure

## Proposed Structure

./sim/src

- common
- components
- core
  - common
  - master
  - slave

- ~~CoreModules~~
- ~~Interfaces~~
  - fakes/gmock?

- See Class Name Discussion
  - AlgorithmAutonomousEmergencyBrakingImplementation

- Former CoreShare

- Former OpenPassSlave
- see next slides

- Integrated into slave
- see next slides

☐ Discussion CoreModules

☐ How do we integrate fakes/mocks in the future?

# Cleanup Directory Structure

## Proposed Structure

./sim/src/core/slave

- common
- bindings
- framework
- importer
- modelElements

- modules
  - eventDetector
  - manipulator
  - spawnpoint
  - observer
  - world
  - stochastic

- Former Interfaces
- Dynamic Library Interfacing stuff
- Often confused with C++ interfaces

- A discussion on its own, but right (now) where it belongs

- Right now mixture of *Networks*, *Single Instances* and *Factory Classes*

/modules/eventDetector

- common
- collisionDetector
- conditionalEventDetector

/modules/spawnpoint

- common
- preRuntimeSpawnPoint
- runtimeSpawnPoint

/modules/observer

- common
- observation_log

# Cleanup Directory Structure

## Proposed Structure

./sim

- tests
  - common
  - contrib
  - fakes
    - gmock
  - unitTests
  - integrationTests
  - endToEndTests

- Class Level Tests
- Mirroring the src structure
  E.g. /core/slave/commandLineParser_Tests.cpp

- Everything, which needs external resources (e.g. import example.xml)

- Clamping the whole simulator without GUI

# Cleanup Directory Structure

## Proposed Structure

intech

**ExampleComponent v3:**

**algorithmComp**

- *algorithmComp.xml*
- *algorithmComp.pro*
- *algorithmComp.cpp*
- *algorithmComp.h*
- ~~*algorithmCompGlobal.h*~~

- **src/** *comp.cpp*
- **src/** *comp.h*

- DLL Interface
- Metainfo

- The Implementation (DRY)

- [ ] Is it ok if we integrate *global in the header?
- [ ] Do we really need that?

```
#if defined(ALGORITHM_COMP1_LIBRARY)
#  define ALGORITHM_COMP1_SHARED_EXPORT Q_DECL_EXPORT
#else
#  define ALGORITHM_COMP1_SHARED_EXPORT Q_DECL_IMPORT
#endif
```

# Class Names

## Proposed Structure

# Continous Integration

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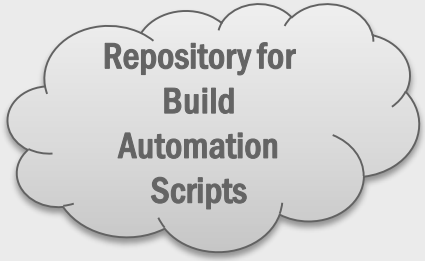
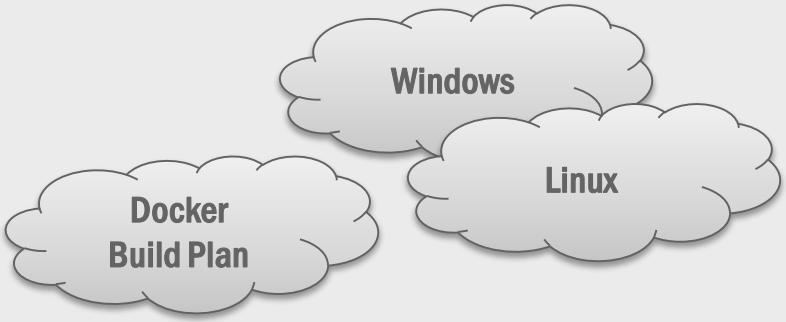
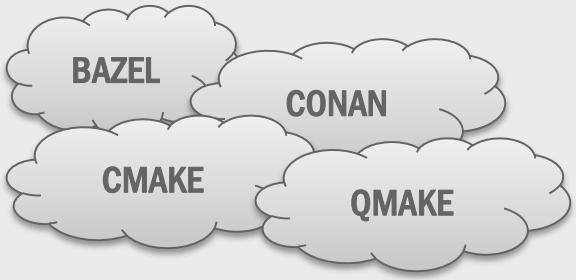
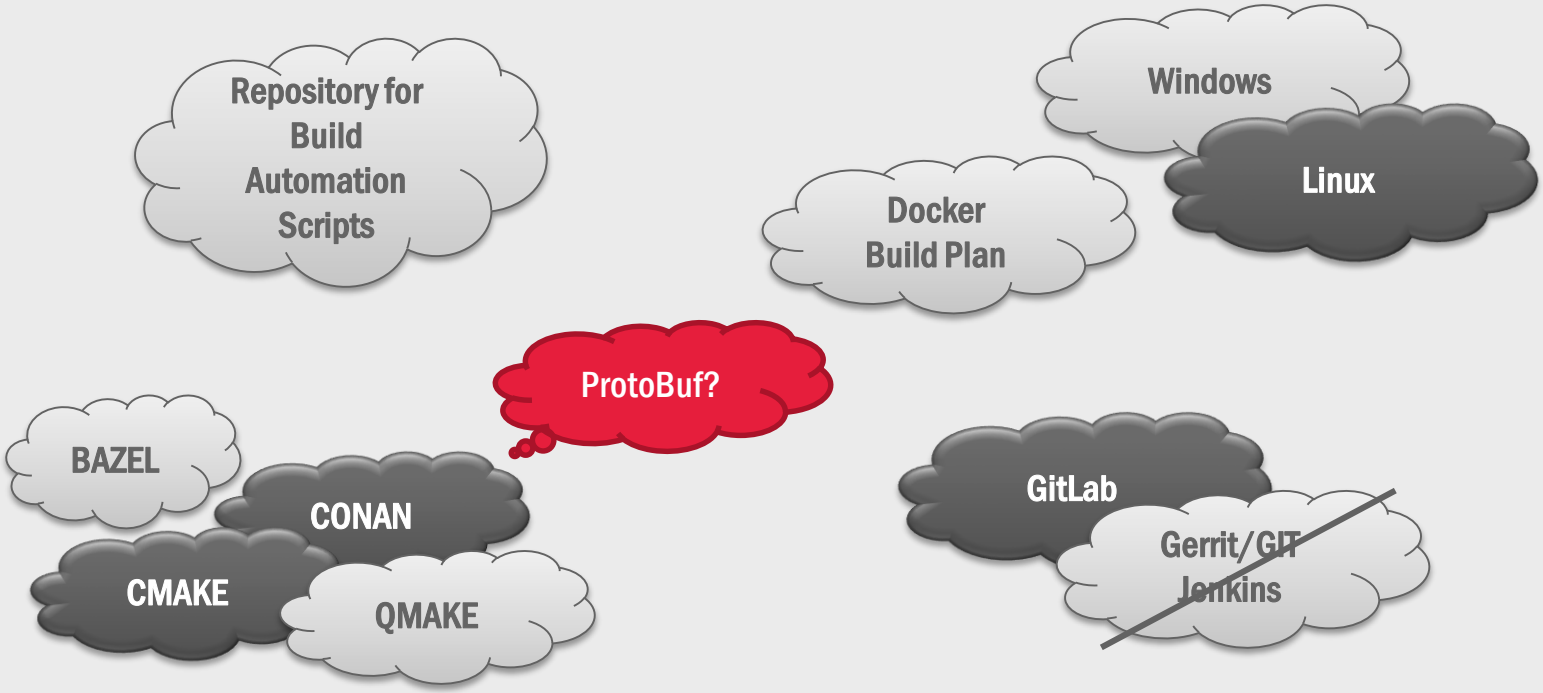




## Points of Discussion




## Current View