VOLKSWAGEN

AKTIENGESELLSCHAFT

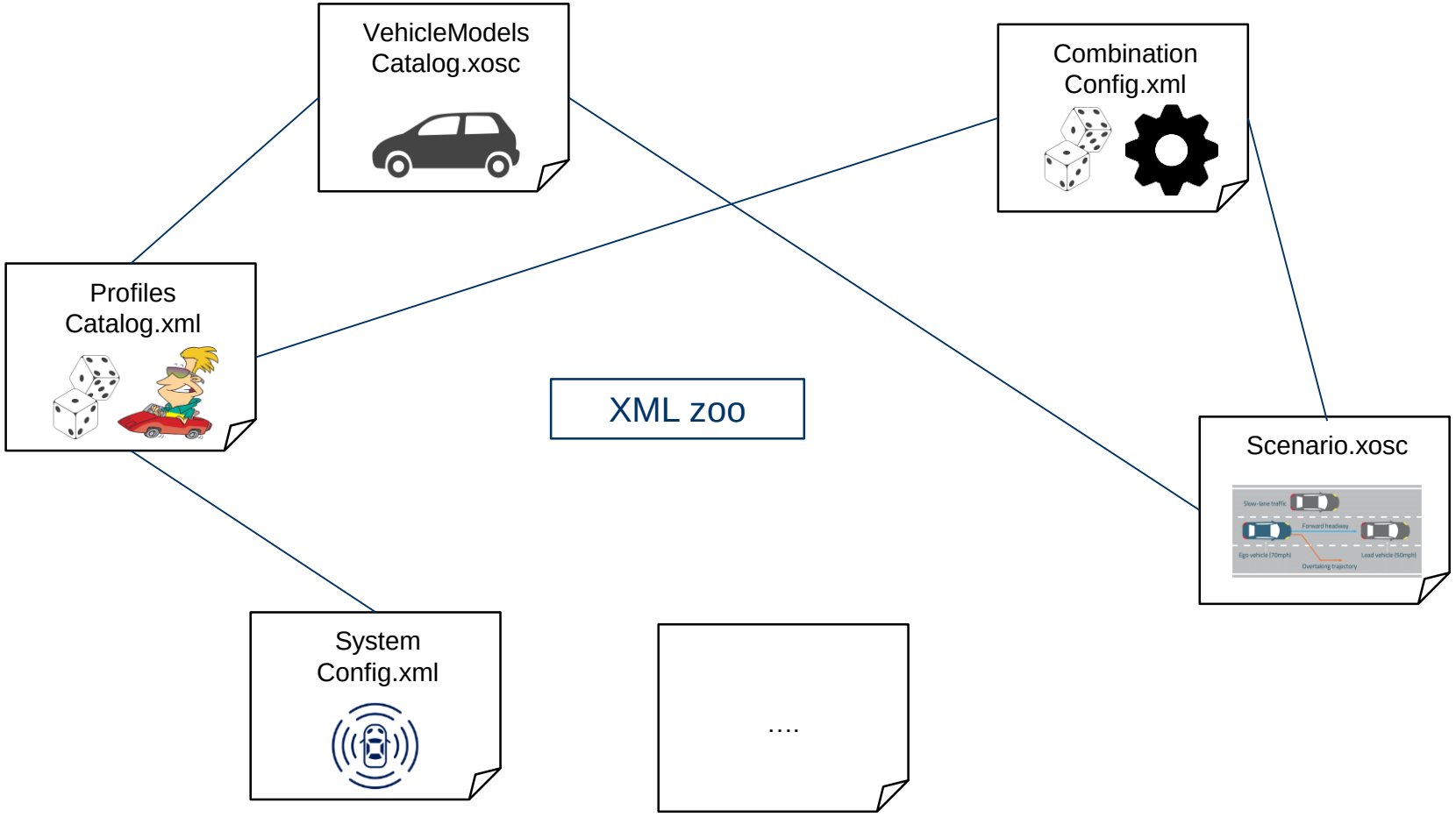
KONZERNFORSCHUNG

SIM@OPENPASS ARCHITECTURE COMMITTEE

GUI - SESSION

OPENPASS GUI - DEMO

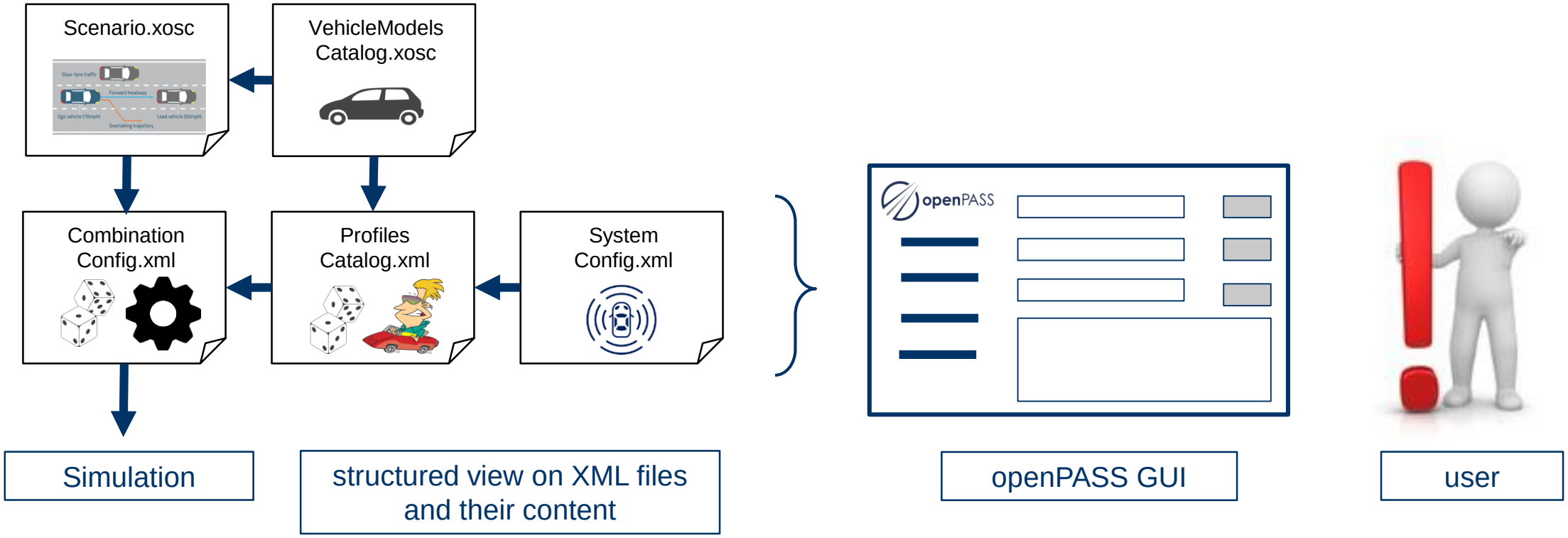
WHAT HAS TO BE CONFIGURED BEFORE STARTING A SIMULATION?



user

OPENPASS GUI - DEMO

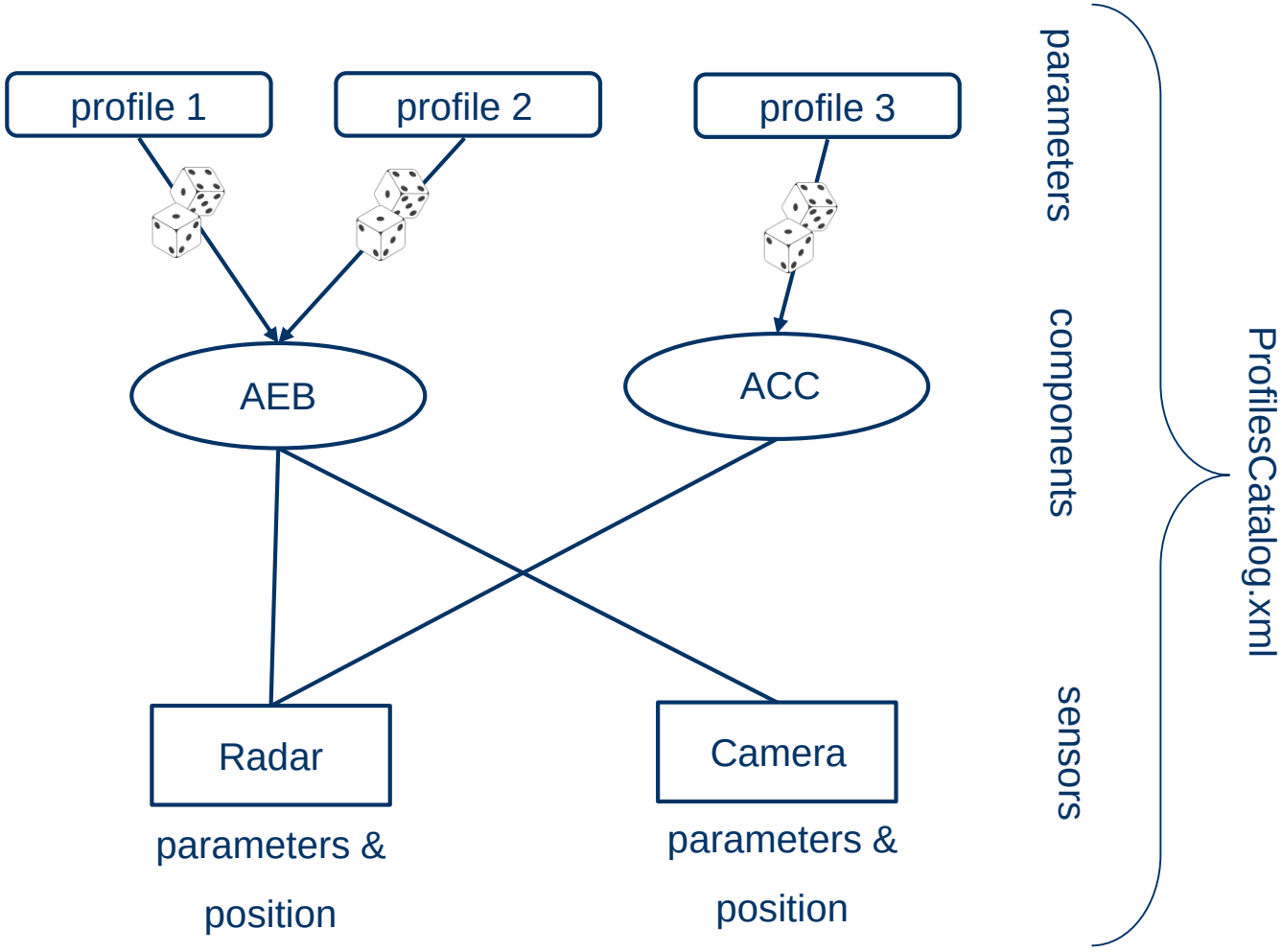
WHAT HAS TO BE CONFIGURED BEFORE STARTING A SIMULATION?



HOW TO EQUIP VEHICLE PROFILES WITH ADAS?

PROFILE-BASED ANSATZ (CURRENT STATE)

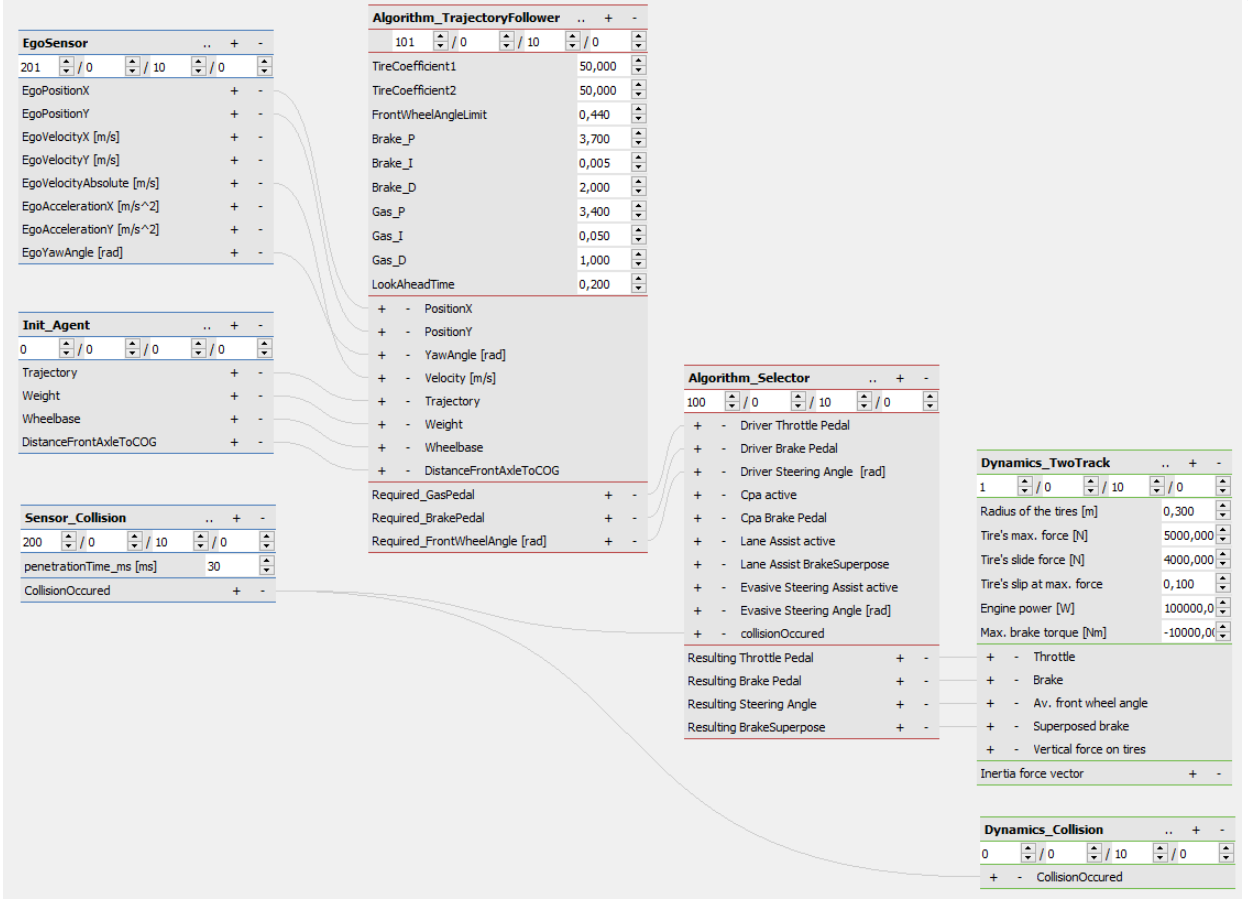
- incorporate algorithm dll‘s (components) of specific types into vehicle
- connect algorithms to sensors with specific parameters and positions in the vehicle
- parameterisations (profiles) can be assigned to components with given probabilities
- **limitation:** 1 algo + n sensors per ADAS
- **advantage:** flexible parameterization and optimized instantiation



HOW TO EQUIP VEHICLE PROFILES WITH ADAS?

SYSTEMCONFIG (CURRENT STATE)

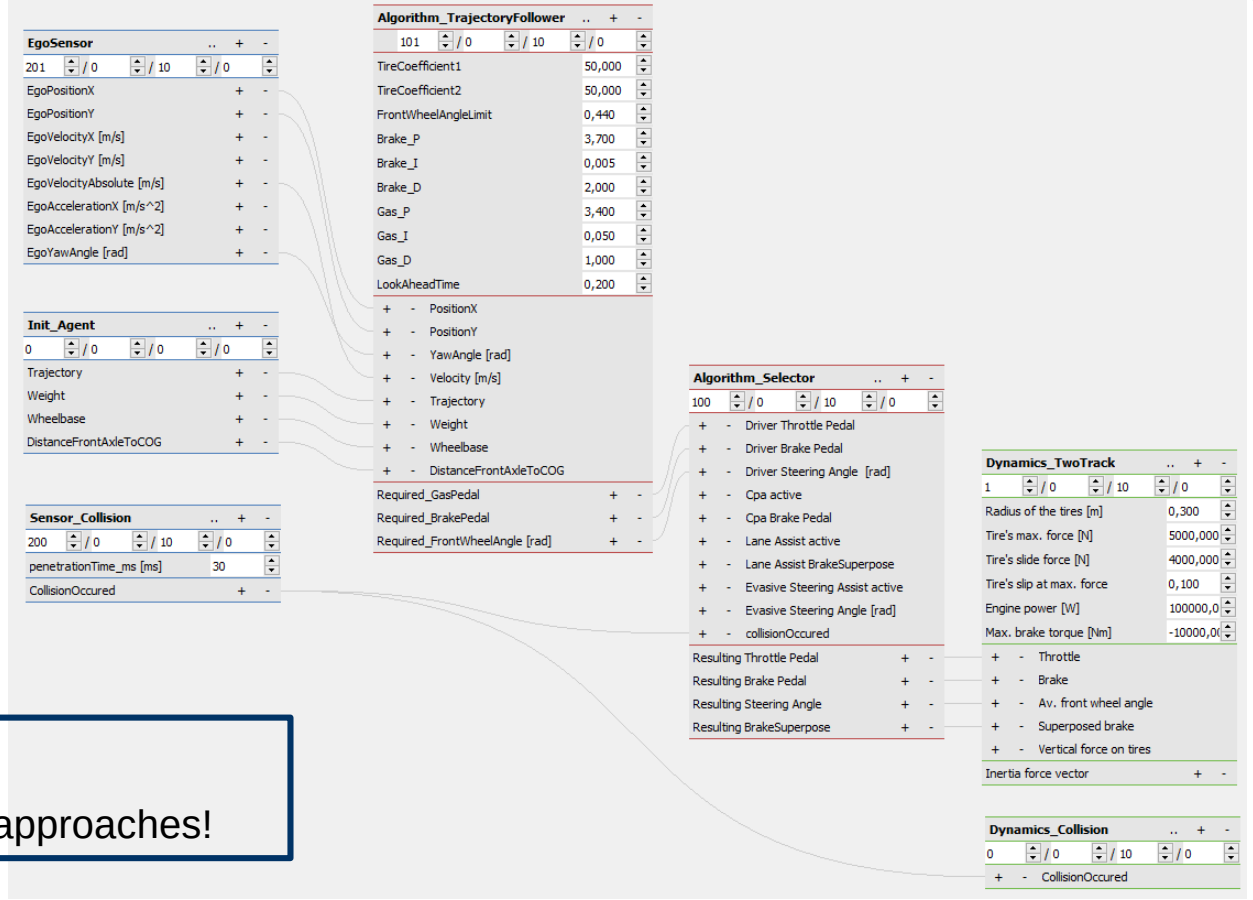
- reference a system from the systemConfig
- **advantage:** connect arbitrarily many components of different types (Algo, Sensor, Actuator, Misc, Logical, …) → high complexity
- **limitation:** fixed parameterisation in each system, no probabilities & repeated instantiation



HOW TO EQUIP VEHICLE PROFILES WITH ADAS?

SYSTEMCONFIG (CURRENT STATE)

- reference a system from the systemConfig
- **advantage:** connect arbitrarily many components of different types (Algo, Sensor, Actuator, Misc, Logical, …) → high complexity
- **limitation:** fixed parameterisation in each system, no probabilities & repeated instantiation

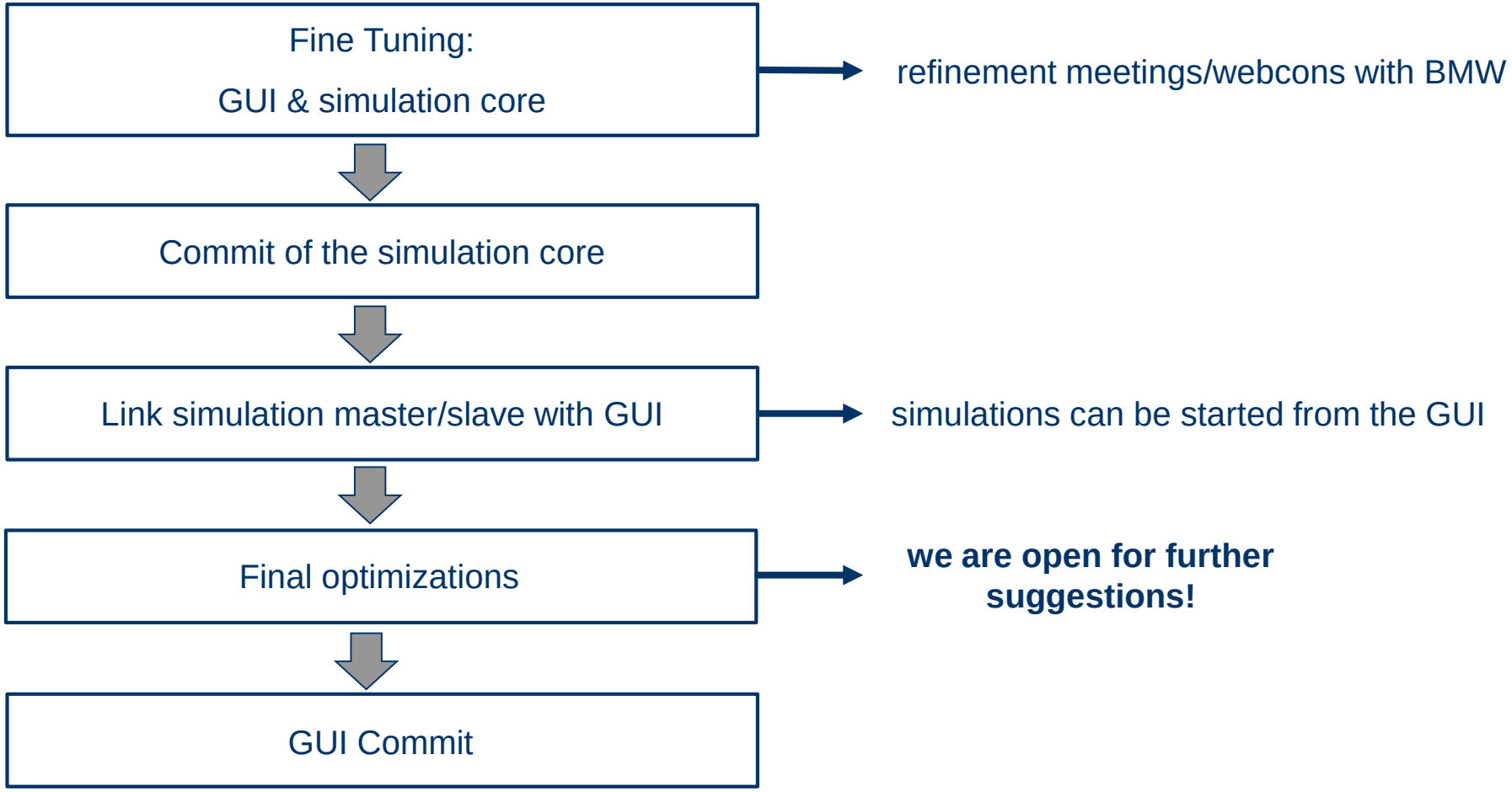


Long-term Goal

Unified pathway utilizing advantages of both approaches!

GUI PULL REQUEST

ROADMAP – GUI SUPPORT FOR SCENARIO-BASED SIMULATIONS



GUI BUG REPORTS

CURRENT STATUS – COMMITTED SOON

- Bug #989: Component priorities not shown when loading a system → **fixed**
- Bug #990: System name not shown → **fixed** (in hierarchical system editor)
- Bug #977: start-button not visible when starting openpass.exe (in fact the whole action menu) → **fixed**
- Bug #1075: „start simulation“-button disabled in simulation plugin even if all files are selected → **fixed**
  (Simulation plugin can now be used to simulate current OSI Use Case)
- Bug #980: Add units to meta data xml of PCM components → **please re-assign!**
- Bug #981: Re-organizatzion of ressources → **addressed** by using the subfolder „gui“ for GUI plugins. We propose a subfolder „components“ for both xml- and dll-files of components as well (To-Do for sim-part).
- Bug #1003: strong dependence on Project Plugin → **to discuss**

NEXT STEPS FOR RELEASE > 0.6

SUGGESTIONS

- **XML workshop:** gain better understanding of the file structures and, possibly, find optimizations
- **Generic ADAS equipment:** think about unified pathway combining systemConfig and profile-based ansatz
- **Visualisation of simulation results:** Who can do it?