



PROJECT OR MASTER THESIS

Analyzing and Visualizing the communication behavior between tasks with APP4MC

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Motivation

The automotive industry permanently faces new challenges stemming from new environmental laws, safety aspects, and demand for more drivers and passengers comfort in new vehicles. Most of all innovations in these fields are driven by software. Therefore, automotive software engineering has to deal with several key issues that need to be solved. The public European ITEA research projects AMALTHEA and its successor AMALTHEA4public address these issues by establishing a de-facto standard for a tool chain infrastructure for embedded multi- and many-core software development. Eclipse APP4MC brings this tool-chain into the community by providing a platform for engineering embedded multi- and many-core software systems. The platform enables the creation and management of complex tool chains including simulation and validation. As an open platform, proven in the automotive sector by Bosch and their partners, it supports interoperability and extensibility and unifies data exchange in cross-organizational projects.

Goal

The overall goal of this thesis is to develop and implement an eclipse plugin for analyzing and visualizing the communication behavior of automotive applications. These applications will be provided in terms of APP4MC models. Outstanding projects will get the opportunity to contribute their results under an EPL2.0 license to the official APP4MC repository.

Further Information

- Eclipse APP4MC Download: <https://projects.eclipse.org/projects/technology.app4mc/downloads>
- Eclipse APP4MC Examples Model Repo: <http://git.eclipse.org/c/app4mc/org.eclipse.app4mc.examples.git>
- Eclipse APP4MC Help: <https://www.eclipse.org/app4mc/documentation/>

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