Installation Guide

For

Vehicular Architectural Blended Modeling in EAST-ADL Supporting Software Product Lines

(Variability Resolution for Timing Constraints - Version 1)

1. Prerequisites

- Eclipse IDE for Java Developers (we utilized version: 4.21.0.20210910-1200, build id: 20210910-1417)
- EATOP tool for EAST-ADL graphical modeling

  You can download EATOP tool at: http://synligare.eu/Tooling.html

2. Download Instructions

EAST-ADL Software Product Line (SPL) repository is available on GitHub: https://github.com/MDH-BUMBLE/EASTADL-SPL

There are four files as shown in **Figure 1**. The description of each file is as follows:

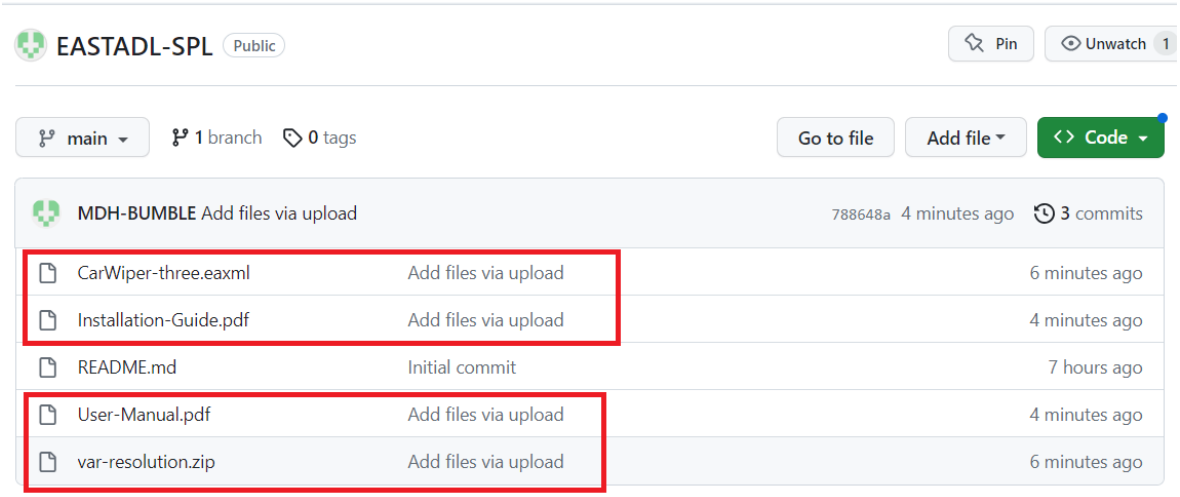

Figure 1: EAST-ADL SPL repository on GitHub

- **CarWiper-three.eaxml** is a sample case study model of car wiper with three variants i.e., AutomaticWiperWithRainSensor, RearWiper and WithStalks. This model can be visualized and modified in EATOP as described in Section 2.2.
- **Installation-Guide.pdf** refers to this installation guide.
- **User-Manual.pdf** contains steps to reproduce results - how to perform experimentation.
- **Var-resolution.zip** is the main Eclipse project archive file containing the implementation (source code) of timing-aware variability resolution algorithm. This project archive file can be imported in Eclipse as described in subsequent section.

2.1 Import Project in Eclipse

You can import variability resolution algorithm archive file in eclipse like: - open file menu and navigate to “import” and select “project from folder or archive” and select the path of project archive zip file. Subsequently, variability resolution project is imported successfully into Eclipse as shown in **Figure 2**.

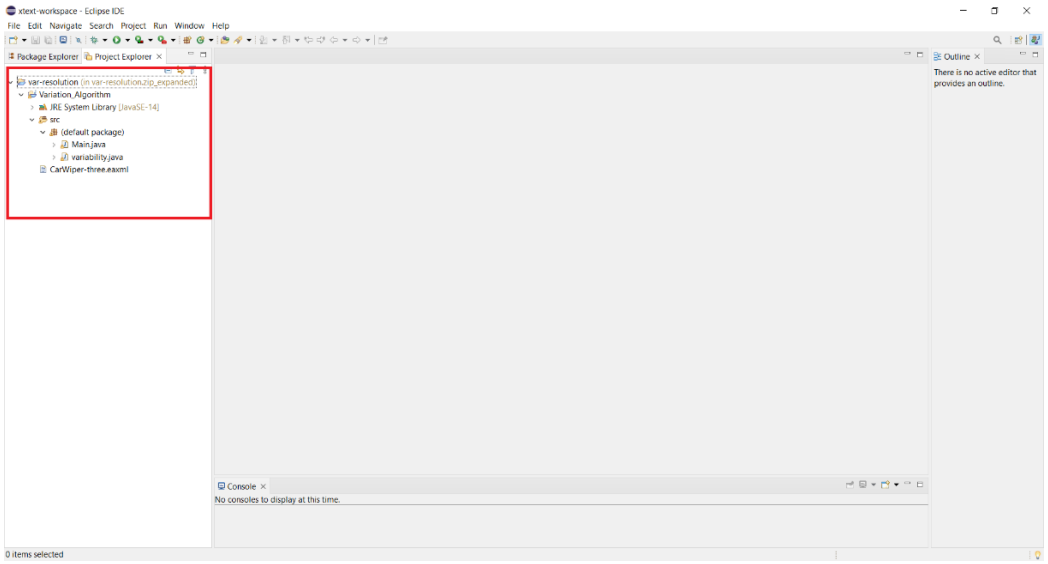

Figure 2: Variability Resolution Algorithm Project in Eclipse

2.2 Import / Open Wiper Case Study in EATOP

You can create a new project in EATOP – File--New—"EAST-ADL project”. Subsequently, drag / drop EAXML file (CarWiper-three.eaxml) on project (name) and click “link” to associate it with project. Wiper case study will be opened in EATOP as shown in **Figure 3**.

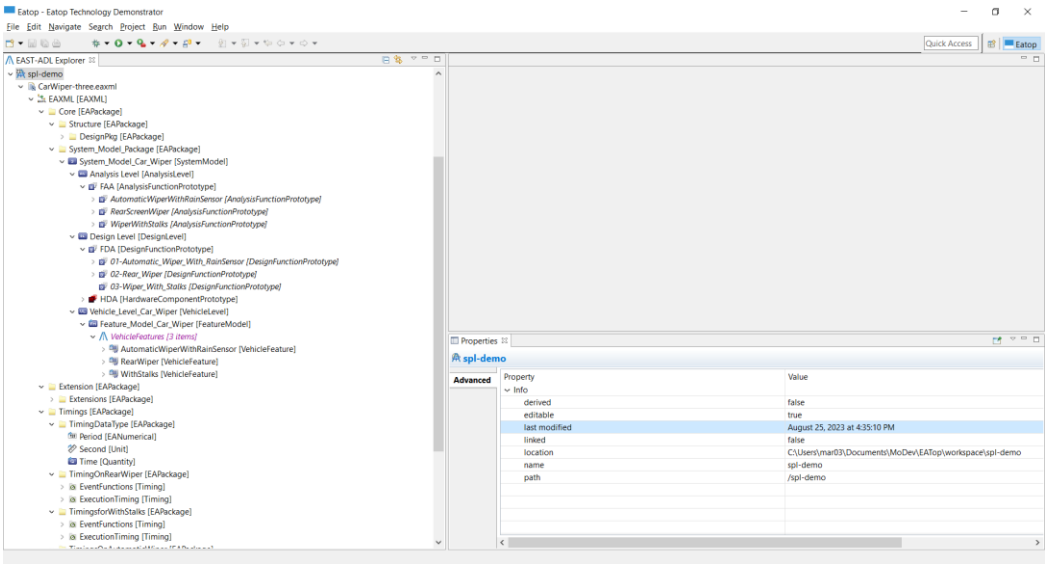

Figure 3: Wiper case study with three variants in EATOP

Please note that this document only provides installation guidelines. The working of variability resolution algorithm and steps to reproduce results – how to perform experimentation can be found in the user manual.