Instructions for Installing Pre-Analysis Guided Abstract SPL Analyzer

1 Introduction

We have implemented pre-analysis guided abstract SPL analyzes on top of an existing SPL data-flow analyzer, which is based on the SOOT framework for analyzing Java programs. Along with this document we have also provided the companion document with that tool, which describes how that tool is implemented and installed. However, here we summarize all steps needed to reproduce experiments with our tool. The experiment itself is an Eclipse plug-in.

2 Running The Experiment

To reproduce the experiment, you need to install:

- Eclipse (Helios) 3.6.2

- CIDE, Antenna Preprocessor, AJDT plug-ins for Eclipse.

- Import in your Eclipse the source code for our tool (unzip the *cide_ei_rmk*) that is provided along with this document.

- Enable the preprocessor for *cide_ei_rmk* by right-clicking it and checking Antenna Preprocessor.

- Enable METRICS, LAZY, and FEATUREMODEL features for *cide_ei_rmk* by right-clicking it, clicking on Properties and then Antenna Preprocessor. On the Defines field, write METRICS, LAZY, FEATUREMODEL and then click OK.

- Right-click the *cide_ei_rmk* project and click *RunAs → EclipseApplication*.

- After the new Eclipse spawns, import the benchmarks you want to run the analysis on. Three of them: GPL, BerkeleyDB, and Preveyler are available along with this document. NOTE: When Preveyler benchmark is evaluated, then the FEATUREMODEL feature for *cide_ei_rmk* should be disabled.

- Right-click on one of them and choose $Run\,FSA$ (FSA means Feature Sensitive Analysis). The analyses will execute and the components collect several metrics and dump into an Excel file (you can find it in C:\Results directory – if you do not have such directory then create one).