



Exercise 4 - Metrics

Pre-Preparations:

1. **Eclipse:** Install and prepare Eclipse Modelling Tools (Version: Mars), if you not already done so. Link: <https://www.eclipse.org/downloads/>
2. **Project Usus:** Install the Project Usus from the Eclipse Marketplace: <http://marketplace.eclipse.org/node/1089>. For instructions see the project page: <http://www.projectusus.org/>

Task:

- a) Grab the code "example_for_code_metrics.zip" from OPAL. Compute the cyclomatic complexity of the Methods `Transition.Observer.update()` and `Transition.fire()` from the "model" package.
- b) Install "Project Usus" into an Eclipse installation using the following instructions: <https://code.google.com/p/projectusus/wiki/InstallationInstructions> if you not already have done this.
- c) Inspect the example code with Usus. Are the metrics values ok? What are the hotspots in the code?
- d) Use Project Usus to check the code of the real-world software library "Desmo-J" (a copy is in OPAL). For example, inspect the method with the highest cyclomatic complexity. What do you notice?