

2.2 Project and Component Lifecycle

ID: XXX

Component: MOSKitt4ME

Service name: Project and Component Lifecycle

Domain: Open Source

Partner: UPV

Actions / Dates

Date	Action
Does not apply	Does not apply

Description:

Since there was not a clear component lifecycle defined in Polarsys, in this document we explain the lifecycle that is proposed to build and execute CASE tools by using the MOSKitt4ME component.

Introduction

MOSKitt4ME has been conceived as a CAME environment where it is possible to generate, from a process method description, a CASE tool including project management support. Therefore, the lifecycle in MOSKitt4ME comprises mainly three phases played by the method engineering stake holder. These phases are Software Production Method (SPM) design, SPM configuration, and SPM implementation.

Phase 1: SPM Design

The method engineer builds the *Method Model* by identifying all the elements (tasks, products, etc.) involved in the process of the SPM. These elements can be defined from scratch or selected from a *method base* repository, which contains reusable elements that were specified in other SPM. This first version of the model constitutes a *generic description* where no specific languages or notations are specified for the elements of the model.

Phase 2: SPM Configuration

The method engineer associates the elements of the *Method Model* built in the previous phase with assets stored in an *asset base* repository. This repository contains models, metamodels, transformations, etc., which have been built either in other SPM or ad-hoc for the SPM under construction (the method engineer can use the tools provided in our CAME environment for this purpose). These assets turn the generic elements into specific ones where languages and notations are specified. The partition of the SPM specification in two phases (*method design* and *method configuration*) allows the method engineer to take generic descriptions and perform different configurations according to each particular target project or development team.

Phase 3: SPM Implementation

During this phase a set of model transformations is executed to automatically obtain either the complete CASE tool or part of it when the generation cannot be fully automated. In the latter situation, the method engineer can take part in the process and complete the tool by using the tools provided in our CAME environment for this purpose.