

Adapting Open Source Software for Establishing Product Line Infrastructures

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Extended Abstract

One important activity in product line engineering is product line production planning, during which stakeholders of a product line determine what and how product line assets are developed and used for product development. Moreover, decisions on which assets should be developed as in-house assets, purchased as COTS, or adapted from open source software (OSS) are made.

In [1], we proposed a feature-based approach to identifying product line assets and determining their development strategies during product line production planning. The approach is an extension of [2], and a feature model [3], which captures commonality and variability information of a product line, is used as primary input to the strategy selection. The approach could provide asset developers with a way to identify core assets, and determine asset types (in-house, COTS, or OSS) with technical and business/management considerations.

While we're exploring two research projects (i.e., a system for virtual office of the future [4] and an ambient intelligent system for assistant living [5]), we could adapt OSS (workflow engine [6] and middleware platform [7]) to build product line infrastructures of the systems. Our experiences from both projects show that the product line architectures of the target systems played a key role for the adaptation of OSS. During the seminar, our experiences and questions arose from the projects will be discussed.

* This work is done while Jaejoon Lee was with Fraunhofer IESE.

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