

Software product line evolution: A systematic literature review

Marques, Maíra

Simmonds, Jocelyn

Rossel, Pedro O.

Bastarrica, María Cecilia

© 2018 Elsevier B.V. Context: Software Product Lines (SPL) evolve when there are changes in the requirements, product structure or the technology being used. Different approaches have been proposed for managing SPL assets and some also address how evolution affects these assets. Existing mapping studies have focused on specific aspects of SPL evolution, but there is no cohesive body of work that gives an overview of the area as a whole. Objective: The goals of this work are to review the characteristics of the approaches reported as supporting SPL evolution, and to synthesize the evidence provided by primary studies about the nature of their processes, as well as how they are reported and validated. Method: We conducted a systematic literature review, considering six research questions formulated to evaluate evolution approaches for SPL. We considered journal, conference and workshop papers published up until March 2017 in leading digital libraries for computer science. Results: After