

Heterogeneous Artifacts Construction for Software Evolution Control

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Abstract : The software evolution control requires a deep understanding of the changes and their impact on different system heterogeneous artifacts. And an understanding of descriptive knowledge of the developed software artifacts is a prerequisite condition for the success of the evolutionary process. The implementation of an evolutionary process is to make changes more or less important to many heterogeneous software artifacts such as source code, analysis and design models, unit testing, XML deployment descriptors, user guides, and others. These changes can be a source of degradation in functional, qualitative or behavioral terms of modified software. Hence the need for a unified approach for extraction and representation of different heterogeneous artifacts in order to ensure a unified and detailed description of heterogeneous software artifacts, exploitable by several software tools and allowing to responsible for the evolution of carry out the reasoning change concerned.

Keywords : heterogeneous software artifacts, software evolution control, unified approach, meta model, software architecture

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