Traceability and Fine-Grained Constraints in Interactive Inconsistency Management

Written by pvgorp Tuesday, 18 July 2006 15:55

In Tor Neple, Jon Oldevik and Jan Aagedal, editors, *Second ECMDA Traceability Workshop.* (ECMDA-TR 2006

). Bilbao, Spain. 10/7/2006.

Abstract.

Software engineering is the multi-person activity of creating multi-version software. In the model-driven methodology, software artifacts are expressed in a variety of languages with a variety of tools. To manage the inconsistencies that can arise within and between software models, one needs a means to describe consistency constraints, detect violations of these and correct the models accordingly. This paper presents some lessons learned from building and using a platform for the development of interactive consistency maintenance software. Based on an established requirements engineering case study, the paper illustrates the need for developer interaction and the controlled tolerance of inconsistencies. This motivates the use of fine grained consistency constraints and a detailed traceability metamodel.