Abstract

Embedded systems are becoming more complex by integrating multiple features. They require a lot of resources to improve execution performances. Their developments are a real challenge due to both their complexity and their quality of service requirements. To manage this complexity, a model driven approach focuses on the design of these systems by raising the level of the specification abstraction. For this reason the number of modeling languages (metamodels) is increasing (scientific publications, industrial projects). However, there is currently little use and dissemination of good practice to define metamodels (metamodeling) and transforming these metamodels for verification, validation and code generation. However, the identification of a string of well-structured model transformation and formalization of metamodeling patterns should be an important practice in the sense that it should speed up the metamodels writing, facilitate their reuse, teaching and finally processing for code generation. The research below suggests a structure of a model transformations chain by defining an intermediate language.
References


Index Terms

Computer Science

Embedded

Keywords
Metamodel  Model  Models' transformation  Intermediate language