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Optimal model transformation of BPMN to DEVS (Conference Paper)

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Abstract

Business process 'BP' modeling and simulation is performed on different levels. For each level, a set of formalisms or languages are more suitable. BPMN 'Business Process Modeling Notation' is a less formal language used at the conceptual phase of BPs modeling. However, models in BPMN cannot be executed directly. They need to be transformed to another language. In this paper, we present a BPMN models transformation into DEVS 'Discrete Event System Specification' which is a formal tool for modeling of complex systems. The transformation is formalized by rules and simplifications in the purpose to enhance the modularity and make easy check and verification. © 2015 IEEE.

Author keywords

BPMN; Business Process; DEVS; Model Transformation; Verification

Indexed keywords

Engineering controlled terms: Computational linguistics; Formal languages; Modeling languages; Specifications; Systems engineering; Verification

BPMN; Business Process; Business process modeling notations; DEVS; Discrete event system specification; Model and simulation; Model transformation; Models transformations

Engineering main heading: Discrete event simulation

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