



A Software Product Line-based approach for the configuration and reconfiguration of IaaS cloud environments

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Abstract:

The objective of the research is to define a software-product line-based framework, which also makes use of model-driven (MDD) and prediction techniques to automate the generation of scripts for the configuration and reconfiguration of IaaS cloud environments. The proposed systematic way is intended to reduce the burden of manually configure and optimally setup such environments. Its proactive design (achieved through the use of prediction techniques) diminishes possible application performance degradations by providing required resource in an anticipated manner. On the other hand, usage of MDD is intended to provide task systematization and platform independence through the use of models. This because models provide higher abstraction levels compared to other development paradigms.