

Scalability in System Design and Management, the MONDO Approach in an Industrial Project

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Abstract. The current system designs and management technologies are being stressed to their limits in terms of collaborative development, efficient management and persistence of large and complex models. As such, a new line of research is imperative in order to achieve scalability across the system design space. Scalability in system design has different dimensions: domains, team localizations, number of engineers, size and management of the engineering artefacts, interoperability and complexity of languages used. This paper depicts how the MONDO FP7 EU project (<http://www.mondo-project.org/>) aims to comprehensively tackle the challenge of scalability in system design and management by developing the theoretical foundations and an open-source implementation of a platform for scalable modelling and model management. An industrial case study is also presented. The system designed in this case study is distributed among several and dependent units, domains, and languages.

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