Limitations of Model Repositories

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Abstract: In today’s era of data sharing, immediate communication and world-wide distribution of participants, at a time when teams are asked to be ever more agile, the traditional approach of model repositories no longer meets expectations. Centralized organization has become inconsistent with the way in which the world and its companies function.

In today’s world, it is virtually impossible to set up a model repository for different enterprise entities, large-scale systems or projects, which can be accessed by all participants (readers, contributors, partners, and so on). Standard techniques based on a centralized repository with a designated manager come up against a vast variety of situations, with participants who neither want nor are able to conform to uniform rules and management.

This does not allow model-based knowledge management at an enterprise or global level. It inhibits agility and open team cooperation. We believe that this is a major hurdle to the dissemination of model-based approaches; the reality of heavyweight model management hinders the most appealing of model-based approaches.

Based on the latest technologies and research for model repositories, this talk will explain why current model repository technologies are a major drawback and will present a way of supporting highly decentralized organizations, and agile and open team cooperation. Scaling up and widening the scope of model repositories will enable modeling support to be applied to the "extended enterprise", which incorporates its eco-system (providers, partners, and so on).

BRIEF BIOGRAPHY

Philippe Desfray is involved since 17 years in model driven development research, standardization, and tooling. Co-founder of the SOFTEAM company (650 people in 2013), he has been precursor to OO Modeling (inventor of the Class Relation OO model, 1990, supported already at that time by a case tool), to MDA (1994, Addison Welsey book on the matter, dedicated tool), one of the main contributor in the UML standardization team at the OMG since the origin, and contributing to many modeling language standardization efforts (BPMN, SOA, ...). Philippe serves as VP for R&D at SOFTEAM, is one key expert in the modeling and methodology fields, is driving international R&D projects and leading the Modelio UML/MDA case tool development team (www.modeliosoft.com; www.modelio.org).