# AMOR
Adaptable Model Versioning

A Commitment to Model Versioning

Problem

Like in conventional software engineering, also in model-driven engineering the development of complex software systems requires support for parallel working by multiple modelers in terms of version control systems (VCS). Conventional VCS cannot handle the rich semantics of models and suffer from three main deficiencies:

- erroneous conflict detection

- less supportive conflict resolution

- no flexibility with respect to domain-specific modeling languages (DSMLs) and associated tools
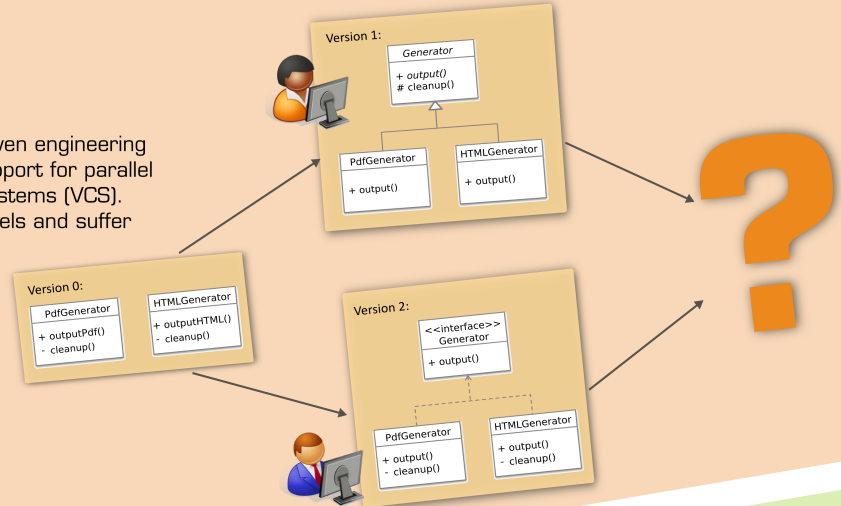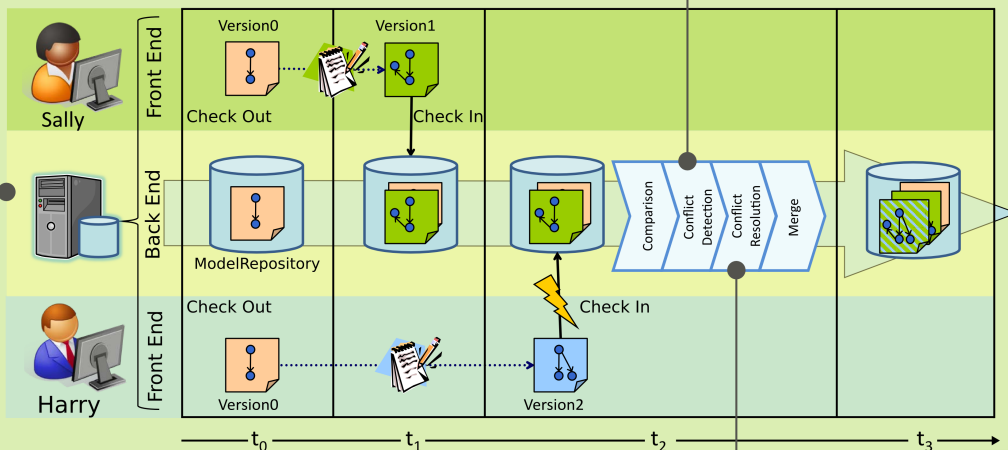
Solution

Adaptable Versioning Framework

The generic framework is modeling language independent and provides extension points for defining language specific characteristics [1].

Precise Conflict Detection

To avoid the detection of false-positives, language specific refactoring patterns can be defined by end users utilizing the example driven operation recorder [2].

Smart Conflict Resolution

The Conflict Resolution Reasoner is a learning-based extension to conventional VCS and provides decision support for common merge problems [3].

References

[1] Altmanninger et al., AMOR - Towards Adaptable Model Versioning. *1st Int. Workshop on Model Co-Evolution and Consistency Management, in conjunction with Models'08, 2008.*

[2] Brosch et al., Towards End-User Adaptable Model Versioning: The By-Example Operation Recorder. In *Proceedings of the Int. Workshop on Comparison and Versioning of Software Models, in conjunction with ICSE'09, 2009.*

[3] Brosch, Improving Conflict Resolution in Model Versioning. In *Proceedings of the 31st Int. Conference on Software Engineering, Companion Volume, 2009.*