UNIVERSITY
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Department of Computer Science
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Temporarily Title

Solutions to Data and Version Migration for Virtual Test-bed Systems

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Abstract

This thesis is about migration strategies for models of an engine test-bed automation system named FACE. The underlying system is divided into three levels: metamodel, model and application. First I developed a prototype for the (horizontal) transformation of a model to a special file format. Next the existing basic concepts of FACE and metamodel migration have been analyzed. Finally I transformed successfully a model to another versioned model (migration) where the representation was differing. The motivation was reviewing existing concepts if there are any overlooked weaknesses in the context of the migration. This thesis results in a detailed description of the transformation processes, including how migration could be arranged, discussing different problems which arose when having designed the implementations, and making generalizations to easily write new version converters in future. Mapping this process onto a practical solution I created a framework for horizontal transformation. Overall the existing architecture of FACE matches the proposed migration strategies.

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