Model-Driven Generation and Optimization of Complex Integration Processes

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Abstract

As the scope of data management changes towards the management of distributed and heterogeneous data, the optimization of integration processes is still one of the main open research challenges in the area of data engineering. Different levels of integration approaches result in a large number of different integration systems. Due to this high number of possibilities and the lack of a standard for data-intensive integration processes, the model-driven development — following the paradigm of the Model-Driven Architecture (MDA) — is advantageous. Within this talk, I will present our research project GCIP. The GCIP Framework allows for modeling of platform-independent integration process as well as the generation and optimization of platform-specific models. In this talk the general model-driven approach, the two main optimization perspectives, first prototypical implementations as well as the overall vision and research agenda of our approach are discussed.