An On-Demand System Based on Model Driven Architecture

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Abstract: This case details the development of Model Driven Architecture (MDA) at a start-up company. The growing market in on-demand software provides the company with tremendous opportunities to succeed. A new on-demand system is aimed at facilitating the automation of cross-department collaboration, which connects the company's Web applications to other Application Service Providers (ASPs) and Enterprise Resource Planning (ERP) systems. However, it is challenging to dynamically integrate multiple autonomous software systems. To create an extensible solution, a project was initiated to design the on-demand system based on MDA. For this project Unified Modeling Language (UML) was used to model enterprise business processes and their departmental functions. The models are abstract views of complex enterprise systems; they allow good communication to push new services to subscribers. After the implementation of such models, the management team can further address many issues such as cost effectiveness, reliability and data security of software-supported business processes.

Keywords: Model Driven Architecture, Application Service Providers, Unified Modeling Language