基于SPEM的CMM软件过程元模型

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Abstract

In applications of CMM (capability maturity model for software), it is a sticking point to implement enforceable software process models, which reflect the characteristics of organizations and their software processes, by transforming CMM software process model. Model driven architecture (MDA) supports model transformation and can be used in CMM practices, but the first step is to build a software process metamodel for CMM. This paper presents a software process metamodel for CMM based on SPEM(software process engineering metamodel), named SPM-CMM. SPM-CMM provides abstract syntaxes and rule semantics for CMM software process, and also supports of modeling of CMM integration with UML CASE tools.

摘要

软件企业在实施CMM(capability maturity model for software)的过程中面临最主要的障碍是如何将CMM软件过程模型转换成可实施的、体现组织过程特征的CMM实施过程模型.可以利用模型驱动架构MDA来支持CMM模型转换,其首要问题是建立CMM软件过程元模型.通过分析CMM软件过程,给出了面向CMM的软件过程工程元模型SPEM的扩展策略,提出了一个基于SPEM的CMM软件过程元模型——SPM-CMM.该元模型既支持CMM软件过程的抽象语法和规则语义,也支持利用UML CASE工具操作CMM软件过程模型.

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