

研发、设计、测试

## 模型驱动的自动化测试架构

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**摘要** 如何在确保软件质量的前提下有效缩短上市周期的问题日益显得重要。在实际工作中基于MDT的思路研究出了一种基于模型驱动的自动化测试架构。该架构通过算法直接将UML系统设计模型转换成U2TP测试设计模型, 然后由测试设计模型根据测试策略和测试工程方法自动生成测试用例, 实现了测试资源重利用和测试活动的前移从而有效缩短了测试周期。

**关键词** [统一建模语言](#) [基于模型驱动测试](#) [被测系统](#) [测试用例](#) [测试逻辑](#) [系统设计模型](#) [测试设计模型](#)

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## Testing architecture based on model driven

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### Abstract

Today, many software company want to cut down the development cycle but it usually makes the software has a poor quality. So, how to solve this problem has become very important. In this paper, an automation testing architecture based on model driven is recommended according to MDT. By using a serials algorithms, the architecture transforms the UML system design model into U2TP testing design model directly. Then, the U2TP testing model can be used to generate test case automatically based on some testing strategy and software testing engineering method. Experiment results demonstrate that the architecture make it became possible to reuse testing resource and design testing case in the early of a project. So, it's fairly efficient for solving "how to cut down the development cycle" problem.

**Key words** [Unified Modeling Language \(UML\)](#) [Model Driven Testing \(MDT\)](#) [system under testing](#) [test case](#) [test logic](#) [system design model](#) [testing design model](#)

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