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## 面向Java的分布式程序测试系统

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### Abstract

Because the program is running in a distributed way, both the concurrent features and the runtime environments should be taken into account when testing a distributed program. A Java oriented distributed program test system is put forward in this paper, which is called JDPT (Java-oriented distributed program testing system). JDPT defines events based on the runtime environments, records execution processes of the distributed program as event sequences, and defines event sequencing constraints to check the validity of those feasible set of event sequences. By the technology, the JDPT can effectively estimate the correctness of concurrent executions of the tested program within distributed environments, and can be used to test Java programs running upon multiple platforms.

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### 摘要

由于程序的分布运行,测试分布式程序必须同时考虑并发特性和运行环境.介绍了一个面向Java语言的分布式程序测试系统JDPT(Java-oriented distributed program testing system).JDPT基于运行环境定义事件,通过事件序列记录分布式程序的运行过程,并定义事件约束检测可行事件序列集的有效性.通过该技术,JDPT可以有效地判断程序在运行环境中并发执行的正确性,适用于跨平台的Java程序测试.

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