P.O.Box 8718, Beijing 100080, China	Journal of Software March 2003,14(3):606-611
E-mail: jos@iscas.ac.cn	ISSN 1000-9825, CODEN RUXUEW, CN 11-2560/TP
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并发TTCN测试执行机的设计与实现

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Received 2001-09-13; Accepted 2002-04-10

Abstract
The method of designing a common-used concurrent TTCN test executor is proposed in this paper. When testing an implementation of concurrent protocol, the problem of executing concurrent test cases by FIFO scheduling algorithm is solved and the PTI (packet transmitting interface) part based on the abstract I/O queue theory is proposed. The PTI part offers the test executor the independency on implementations of a given protocol. What's more, the test executor provides a visual interface to trace the executing of test cases, which makes the locating of faults easier. Banding with corresponding PTI part, the test executor can start a testing. Now it is already in use.

Zhang WX, Jiang F. Design and implementation of test executor for concurrent TTCN. *Journal of Software*, 2003,14(3):606~611.
http://www.jos.org.cn/1000-9825/14/606.htm

摘要
提出了一种通用并发TTCN测试执行机的设计方法.在测试并发协议实现时,采用FIFO调度算法解决了并发测试例的执行问题,并在借鉴抽象I/O队列思想的基础上提出了PTI(packet transmitting interface)部分,使得执行机与特定的协议实现无关,而且提供了可视化的测试执行跟踪界面,使错误定位变得更加容易.实现的执行机在附加上相应的PTI部分之后就可以进行测试,目前已投入使用.

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