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移动Agent系统的主动通信机制

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Abstract

The issue of reliable communication resulting from Agent moving is studied in the paper. Based on analyzing current solutions to the issue, a mechanism called Active Communication Mechanism (ACM) is proposed, which can provide reliable and efficient communication for mobile Agents. The detailed analysis regarding the reliability and efficiency of ACM is also presented. ACM can reliably and efficiently deliver the sender's message to receiver allowing the free migration of both them and guaranteeing the exactly-once semantics for message delivery. ACM can serve as the basis of high-level communication mechanisms such as Agent communication language.

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摘要

解决由Agent移动产生的可靠性通信问题.在分析已有方法的基础上,提出一种保证移动Agent之间可靠、高效通信的"主动通信"机制,并给出它的可靠性分析和通信效率分析.它能够在通信双方自由移动的情况下,将消息可靠、高效地从发送方提交给接收方,并承诺消息传递的exactly-once语义,为Agent通信语言等高层通信方式奠定了可靠的基础.

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