云计算平台虚拟机迁移能耗研究

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摘 要：对云计算平台进行IPv4/IPv6过渡前期、中期、后期虚拟机迁移能耗研究. 对测试节点CPU频率、CPU使用率进行监测，并用监测数据研究了其数学关系，最终得出云计算平台能耗测试数学模型. 文中进行了IPv4/IPv6同构云计算平台虚拟机迁移能耗实验，用两个云计算平台能耗测试数学模型进行计算取其均值作为最终计算迁移能耗值，为进一步进行能耗优化打下基础.

关键词：云计算；虚拟机迁移；能耗模型；迁移能耗
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Research on Cloud Computing Platform Virtual Machine Migration Energy Consumption

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Abstract: This paper research virtual machine migration energy consumption on IPv4 / IPv6 transition prior-period, mid-period, last-period for cloud computing platform. In this paper, it monitoring the test node CPU frequency, CPU usage, and using monitoring data to study the mathematical relation, finally drawing the cloud computing platform test energy consumption the mathematical model. The paper conducted a IPv4 / IPv6 isomorphic cloud computing platform virtual machine migration energy consumption experiments, and using two cloud computing platform energy consumption test mathematical model to mean value calculate, and use it as the final calculation of the migration energy consumption. This study is to lay the foundation for further energy consumption optimization.

Key words: cloud computing; virtual machine migration; energy consumption model; migration energy consumption

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