云计算环境下基于评价可信度的动态信任评估模型

Dynamic trust evaluation model based on evaluationcredibility in cloud computing

投稿时间：　2013-06-26

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中文摘要：

　　针对云用户如何选取可信的云服务提供商问题，提出了基于评价可信度的动态信任评估模型。该模型将云服务提供商的服务能力和云用户所需求的服务能力分别划分等级，有效地解决了云服务提供商服务能力动态变化对模型存在的潜在破坏问题。建立了信任度随时间窗变化的动态信任机制，在计算信誉度时，将用户的评价可信度作为其评价证据的可信权重，通过引入评价可信度和评价相似度提高了计算推荐行为可信度的准确率。仿真结果表明，该模型的评估结果更贴近云服务提供商的真实信任度，同时能有效抵御恶意云用户的攻击。

英文摘要：

　　Considering the problem that cloud users will select a trusted cloud service provider, a dynamic trust evaluation model based on evaluation credibility was proposed.This model divides the ability of cloud service provider and the one of the user's requirments into many ranks, which can effectively solve the potential damage caused by the dynamic change in the ability of cloud service providers. A dynamic mechanism of trust changing about time-window was established. During the calculation of credibility, the user's evaluation credibility was used as the trust weight. The calculating accuracy of the recommended behavior credibility was improved by introducing the evaluation credibility and evaluation similarity. Simulation results show that the model results are closer to the cloud service provider's actual trust value, and can resist the attack of malicious cloud users effectively.

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