

## 云计算环境下基于用户行为信任评价研究

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**摘 要:** 针对云计算开放环境下的安全问题, 为有效分析用户不可信行为和异常行为, 实现用户行为信任的科学量化评估, 综合考虑信任评估的动态性, 提出一种基于相对熵的组合赋权法用户行为信任评估, 结合主客观赋权法的权重信息, 通过相对熵计算各主客观赋权法权重的贴近度, 从而确定各赋权法权重在组合权重中的加权系数, 最后对组合权重运用模糊综合评价得到用户的信用度, 验证结果实现了模型的具体化, 表明了组合赋权法的科学性和可操作性, 并对用户的信用度做出了客观评价。

**关键词:** 云计算; 用户行为; 相对熵; 组合权重

**中图分类号:** TP391

**文献标识码:** A

**文章编号:** 1000-7180(2015)11-0147-05

## Trust Evaluation Based on User Behavior in Cloud Computing

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**Abstract:** Aim at the security issues in cloud computing, a method based on Combination Weighting Approach of Relative Entropy is proposed to evaluate user's behavior trust to analyze the untrust and abnormal behavior effectively, so as to achieve the scientific quantitative evaluation for user's behavior trust. Combined with the Weighting factor of weighting method which is both subjective and objective, relative entropy is applied to compute the approach degree of weights. Which are set by subjective and objective weighting method, thus the weighting efficient of each weighting method's weight in combination weight can be determined. Finally, fuzzy comprehensive assessment is made for combination weight to get user's trust value. Implementation and verification of the model shows that combination weighting method and the model are scientific and operability, and making objective evaluation for the user's credit.

**Key words:** cloud computing user's behavior; relative entropy; combination weighting

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收稿日期: 2015-01-20; 修回日期: 2015-03-09

基金项目: 国家自然科学基金(61462069); 内蒙古自然科学基金(2012ms0912, 2014ms0622)