

网络、通信、安全

网格环境下基于灰预测的信任评估模型

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摘要 提出了一种基于灰预测的信任评估模型, 利用灰预测相关理论, 根据实体历史信任信息的变化特性建立GM(1, 1)预测模型, 并利用模型预测出实体下一次交互时的信任值。结合预测信任值给出了交互结束后实体信任值的更新机制。实例表明, 该模型计算简便、预测精度高, 是解决网格环境下信任评估问题的一种较好方案。

关键词 [灰色预测](#) [GM\(1,1\)模型](#) [信任评估](#)

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Trust evaluation model based on grey predication in grid

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Abstract

A kind of trust evaluation model based on grey predication is proposed. Using the correlative methods of grey predication and according to the variety character of the entity's historic trust information, this paper puts forward GM(1, 1) predication model and employs it to forecast the trust value during entities' interaction in the next time. Integrated with the predication value, an update mechanism of entities' trust value which is in the end of the interaction is presented. The examples indicate that the model, which is good at calculating and predicts accurately, is a preferable way to solve trust evaluation problem in grid.

Key words [grey predication](#) [GM\(1,1\) model](#) [trust evaluation](#)

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