

Using Game-theory for Intelligent Modelling of User Behaviour and Requirements in Large Scale Distributed Systems

講師

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実施日時

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会場

大分大学工学部知能情報システム工学科
知能情報システム演習室

主催・共催

電子情報通信学会九州支部主催
大分大学工学部知能情報システム工学科共催

講演概要

Large scale distributed systems, such as Computational Grids and P2P systems virtually combine geographically distributed IT resources from many different administrative domains into one single customized computational infrastructure. The objective is to enable users to perform computational tasks and data storage capabilities in a transparent and secure manner. On the one hand, in such systems, users can have different interests and can behave differently such as cooperatively, selfishly, etc. On the other hand, the multi-administrative nature and the hierarchical nature of such large scale systems impose different access and usage policies on resources.

In the talk, we present and analyze new features appearing in users' behaviour, such as dynamic, selfish, cooperative, trustful, symmetric and asymmetric behaviours. Then, we show how game theory can be used to efficiently model user requirements and behaviours and to support decision-making processes. Finally, we present some computational results for Genetic Algorithms to solve the optimization problem arising in the game-theory model.

お問い合わせ

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