Scheduling Meetings by Agents

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Abstract

The Scheduling of Meetings of multiple users is a real world problem that was studied intensively in recent years. The present paper proposes a realistic model for representing and solving meetings scheduling problems (MSPs) and the use of constraints optimization algorithms to solve MSPs. A central component of the proposed model of MSPs is a mechanism to balance the trade-off between competitive and cooperative environments. Agents solve the problem by balancing the global (e.g., cooperative) optimum against typical self-interests of users. These are represented in the model by the quality of the resulting personal schedule. The experimental evaluation of the features of the proposed model uses a Local Search Algorithm which produces a high quality solution in a reasonable time.

Keywords: Distributed Scheduling; Meetings scheduling; Multi-Agents Systems; Distributed Optimization