

Process matchmaking on a P2P environment

[Celebi, R](#) (Celebi, Remzi); [Ellezer, H](#) (Ellezer, Huseyin); [Baylam, C](#) (Baylam, Cemi); [Cereci, I](#) (Cereci, Ibrahim); [Kilic, M](#) (Kilic, Hurevreni)

Abstract

A process matchmaking environment based on P2P architecture and Gnutella protocol is established. Java Agent Development Framework (JADE) is used as middleware. The processes are modeled as one-input transition systems augmented by goal state descriptions. A polynomial-time algorithm for handling matchmaking of peer process encounters is developed. The environment can easily be customized to a specific application domain by simple user-interface modifications and through the development of related state ontologies.