

QoS-aware service selection based on swarm particle optimization

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Abstract

The growing number of web service over the internet urges us to conceive an efficient selection approach, especially for composite requests. In general, we can find a set of services that provide the same functionality (inputs/outputs), but differ in QOS criteria, in this situation we must select the best ones, by applying some optimization algorithm. In this paper, we propose a reactive multi-agent solution, based on swarm particle optimization. The proposed system adopts a set of particle's groups, which explore the space search in order to maximize a single objective function. The obtained results show a high rate of optimality and merit to be continued.