Abstract

Services are the basic amass that aims to support the building of business application in a more flexible and interoperable manner for enterprise collaboration. Satisfying the needs of service consumer and to become accustomed to changing needs, service composition is performed to compose the various capabilities of available services. With the proliferation of services presenting similar functionalities around the web, the task of service selection for service composition is intricate. It is vital to provide systematic methodology for selecting required web services according to their non-functional characteristics or quality of service (QoS). Various heuristic and meta-heuristic algorithms are evolving to solve the QoS based service selection problem. One of the meta-heuristic algorithms is genetic algorithm. In this paper, the genetic algorithm is developed to maximize the non-functional Characteristic called the reliability of the composite web service and the performance of the developed algorithm is calculated.

References

- Huiyuan Zheng; Jian Yang; Weiliang Zhao; "QoS Analysis and Service

- Ping Wang, Kuo-Ming Chao, Chi-Chun Lo and Ray Farmer, "An evidence-based scheme for web service selection", Special Issue: Advances in E-Business Engineering, 2010


- Shangguang Wang; Zibin Zheng; Qibo Sun; Hua Zou; Fangchun Yang; "Cloud model for service selection", 2011 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), pp. 666 – 671, 2011


- Kellerer H, Pferschy and Pisinger, Knapsack Problems, springer-Verlag, 2004


**Index Terms**

Computer Science - Web Services
Keywords
Genetic Algorithm  Mmkp  Fitness