Accepted Manuscript

QoS-aware cloud service composition using eagle strategy

Gavvala Siva Kumar, Chandrashekar Jatoth, G.R. Gangadharan, Rajkumar Buyya

PII: S0167-739X(17)32063-0

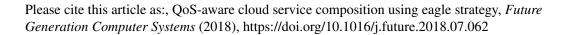
DOI: https://doi.org/10.1016/j.future.2018.07.062

Reference: FUTURE 4380

To appear in: Future Generation Computer Systems

Received date: 14 September 2017

Revised date: 1 June 2018 Accepted date: 28 July 2018



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

QoS-aware Cloud Service Composition using Eagle Strategy

Gavvala Siva Kumar^a, Chandrashekar Jatoth^b, G R Gangadharan^{c,*}, Rajkumar Buyya^d

^a University of Hyderabad, Hyderabad, India
^b Koneru Lakshmaiah Education Foundation, Hyderabad, India
^c National Institute of Technology, Tiruchirappalli, India
^d Cloud Computing and Distributed Systems (CLOUDS) Laboratory, University of Melbourne, Australia

Abstract

In recent years, several cloud services have proliferated that conspicuously result in providing similar services having same functionality by multiple service providers, but varying in Quality of Service (QoS) properties. Thus, providing a cloud service composition with optimal QoS values that satisfy the requirements of an user becomes complex and challenging in a cloud environment. Several metaheuristics proposed in solving this problem. However, many of them fail to maintain a suitable balance between exploration and exploitation. We propose a novel Eagle Strategy with Whale Optimization Algorithm (ESWOA) that ensures the proper balance between exploration and exploitation.

Keywords: Quality of Service (QoS), Cloud services, Service composition, Metaheuristic algorithm, Eagle strategy.

^{*}Corresponding author

Email addresses: siva.gavvala@gmail.com (Gavvala Siva Kumar), chandrashekar.jatoth@gmail.com (Chandrashekar Jatoth), ganga@nitt.edu.in (G R Gangadharan), rbuyya@unimelb.edu.au (Rajkumar Buyya)

Download English Version:

https://daneshyari.com/en/article/11002393

Download Persian Version:

https://daneshyari.com/article/11002393

<u>Daneshyari.com</u>