Applying Logical Scoring Preference Method for Semantic Web Service Selection

International Journal of Computer Applications
© 2013 by IJCA Journal

Volume 65 - Number 19
Year of Publication: 2013

Authors:
S. Maheswari
G. R. Karpagam

10.5120/11035-6259

Abstract

In today's scenario web services have become a magnificent paradigm as the Web is moving towards a collection of services that interoperate through the Internet. Pooled with Semantic Web technologies, Web Services can be definitely interpreted and selected based on the consumers' requirements. In this paper an attempt has been made to apply LSP (Logic Scoring Preference) method with OWA (Ordered Weighted Averaging) Operators for semantic web service selection. The proposed model consists of three components namely service repository, OWL-Converter and Multi service agent. Service repository maintains both functional and nonfunctional service profiles. Owl-converter helps in converting WSDL into Owl-S format. Multi service agent consists of two sub systems namely functional agent and QoS agent. Functional agent helps in discovery of relevant services where as QoS agent helps in ranking the discovered services based on QoS factors. The performance evaluation of the proposed framework is illustrated using online book purchase scenario.

References

- Bhuvaneswari. A, Dr. karpagam. G. R, Discovering Substitutable and Composable
Applying Logical Scoring Preference Method for Semantic Web Service Selection

- OASIS. Web Services Quality Description Language v1. 0;2008
- Hong Qing Yu1 and Hernán Molina2,A modified Logic Scoring Preference method for dynamic Web services evaluation and selection.
- owl. cs. manchester. ac. uk/tutorials/protegeowltutorial/ Precondition and effect matching using swrl - Volkan Özadal? B. S. protege. stanford. edu/plugins/owl.
- Umesh Bellur1, Harin Vadodaria2 and Amit Gupta. Semantic Matchmaking Algorithm;2008.
- Umesh Bellur, Roshan Kulkarni Improved Matchmaking Algorithm for Semantic Web Service Based on Bipartite Graph Matching. 2007

Index Terms

Computer Science

Information Sciences
Keywords
Semantic web service  OWL-S  Semantic description  Multi agent systems  QoS  LSP