## Service composition recovery using formal concept analyst & WordNet similarity

Ramadan Moawad .Mohamed Maher El Sabrout.Seror Haitham

## **Abstract**

The increased number of web services and the continuous need to integrate them into complex business processes have increased the need to enhance the web service discovery and selection processes. Service discovery based on semantics of web services is one of the main needs in service integration and composition. The main current approaches for semantic discovery of services are the keyword-based approach and the ontology-based approach. The plain simple keyword matching strategy is time-consuming and has inefficient recall and precision. The ontology-based strategy, on the other hand, is efficient, but may not be practical for the wide public use due to the lack of domain experts. In this paper, we propose a new approach that support semantic service discovery and service backing up in case of service unavailability. This approach is built using the FCA ( Formal concept analysis ) lattices and the WordNet. Keywords-Web Services, Semantic, Service Discovery, Formal Concept Analysis (FCA), WordNet.

2011 IEEE International Conference on Information Reuse & Integration 2011, January