A METHOD FOR SEMANTIC WEB SERVICE COMPOSITION
BASED ON PATTERN MATCHING

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Abstract: The composition of semantic web services is a very important and actual problem in the semantic web services research area. There are several semi-automatic approaches for this problem, but most of the results are related to automatic approaches. In this paper we present an automatic approach for the composition of semantic web services based on pattern matching. We consider a special type of semantic description, represented as a list of semantic descriptions corresponding to several semantic web services. The semantic description related to the semantic web service that we want to obtain is decomposed until all the parts of the semantic description correspond to semantic web services from a library. In the end, all the necessary semantic web services found in the library are composed in order to obtain the semantic web service that we wanted to construct.

Keywords: semantic web service composition, semantic description decomposition, pattern matching

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