

Web Services Orchestration and Interaction Patterns: an Aspect-Oriented Approach

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ABSTRACT

Web Service technologies offer a new and successful way for interoperability among web applications. However, there is not a unique and standard opinion as to how Web Services composition must be implemented, and services involved are generally strongly coupled, which raises problems at design, implementation, maintenance and evolution. This paper shows one approach to the implementation of orchestrations by using aspect-oriented techniques, thus improving modularity, scalability and flexibility in the compositions. Aspect-oriented programming will also allow us to reuse the interaction patterns described by the orchestrations in different contexts, as we will demonstrate in this research.