Web Services Transaction Coordination

P.A.S-D. Amarasekara

A Dissertation submitted in partial fulfillment of the requirements for the degree of Master of Science in computer science

Department of Computer Science & Engineering
University of Moratuwa
Srilanka

January 2007
Abstract

The work earned out during this research covets the transactional aspects of Web Services. A model and protocols that define Web Services Transactions are defined by OASIS in the Web Services Coordination. Web Services Atomic Transactions and Web Service Business Transactions specifications [7], [8], [9]. An attempt has been taken to design and implement a transaction coordination framework based on these specifications.

The transaction coordination framework discussed here is capable of supporting both Atomic Transactions and Business Activities as defined in respective specifications. The interoperability among the implementations of the aforementioned specifications is a major concern and a guided by the interoperability scenarios [10], [11] defined by OASIS. The transaction coordination framework discussed in this thesis is designed in such a way that it can be implemented in any of the major platforms. The design has been implemented in the Net environment and it confirms to the interoperability guidelines provided by the OASIS.