Abstract

Service Oriented Architecture (SOA) is a framework for building information systems by composing web services to form a business work flow. By introducing Aspect Oriented Programming in the logic of web service, it is possible to improve the quality attributes like maintainability, reusability and evolution. The functionalities modeled through the web services fuses the implementation of core and cross-cutting concerns. Business Process Execution Language (BPEL) is used for the composition of web services and models both core business logic and crosscutting functionalities. This paper address the evaluation of AO based SOA application for an application by using an experimental TestBed. The application developed for testing purpose is named as University Automation System. The services needed to model the
application are created and deployed in Axis2 framework. By introducing Aspect Oriented Programming in the web services, a case can be made that the process improves the quality properties of the SOA application. A TestBed is a platform for conducting experiments on large development projects and evaluation of concepts using measurements. The proposed metrics focuses tier on three different tiers of software namely, core business tier, interface tier and access tier.

References

Quantitative Evaluation of AO based SOA Application for University Automation using an Experimental TestBed


Index Terms

Computer Science  Artificial Intelligence

Keywords

Aop  Soa  Bpel  Testbed