Abstract

Over the last years most business processes changed on various dimensions (e.g. flexibility, interconnectivity, coordination style, autonomy) due to market conditions, organizational models, and usage scenarios of information systems. This trends lead to connected and integrated information systems increasingly based on Web services. Web services promise the realization of a "service-oriented architecture" for distributed and integrated information systems. Some people claim that after object-orientation and component-based software engineering, Web services require new development paradigms having considerable implications on software processes and products. Currently most organizations spend substantial amount of their resources to interconnect and glue information systems and to a far lesser degree on the underlying engineering principles and methodologies for Web services. This session is interested in issues that need to be addressed before Web services become a paradigm for distributed information systems and invites contributions on software processes, methodologies, and engineering principles for developing Web service based information systems.

Keywords: Web Services, Coordination

1 Introduction

Web Services are receiving increased attention from industry as well as research communities. This is the first session in a Euromicro conference dedicated to the emerging research area called Web services engineering.

In the paper by Kirda, Kerer, and Kurmanowitsch the authors argue that modeling and integration of higher level Web services has received less attention recently. The authors provide methodologies and present a toolset for composition of device-independent Web services. The Device-Independent Web Engineering Framework (DIWE) provides support for separation of layout, content and application logic and automatically generates Web services to provide access to content and functionality.

In the short paper by Patlak, Bener, and Haluk Bingöl the authors identify the challenges the financial services industry faces in the process of adopting Web services technologies and standards. The challenges and opportunities are illustrated in a case study scenario.

The paper by Piccinelli, Finkelstein, and Williams presents a proposed extension to traditional workflow that enables Web services to be composed into business solutions. The authors present the DySCo framework which allows modeling and composition of workflow based Web services.

The paper by van der Aalst, Dumas, and ter Hofstede analyses the current state of process and composition languages for Web services and argues for more critical reflections based on the multitude of experiences made in the workflow research area.

We would like to thank the authors of the papers for submitting their research to this new session at Euromicro.