

At Your Service

Service-Oriented Computing from an EU Perspective

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Preface

This book is about service-oriented computing (SOC). Service-oriented computing decomposes the logic of an information system into services, which are smaller units of functionality. These services can be used as building blocks in the composition of larger systems. The philosophy of SOC is to build software applications by connecting different building blocks of software (i.e. services) in a loosely coupled way. The services are made available for use by publishing their interfaces. They can be provided in-house or by external parties. Service-oriented computing holds the potential to be an effective solution to letting software systems work together, even when they are developed by different organizations and are spread across the world.

Service-oriented computing is a key topic in the European Community's Information Society Technologies (IST) programme. The European Community co-funds research and technology development via its Sixth Framework Programme (FP6), which includes the IST programme. Since the start of FP6 in 2002, more than 3.5 billion euros have been allocated to collaborative research projects in the IST programme.

This book presents the results of some of those collaborative research projects on service-oriented computing. The book aims to highlight the value of the research performed with respect to the issues that are currently considered challenging in service-oriented computing. Furthermore, it seeks to assess the achievements of European research in the area, and to identify new and remaining research challenges in the field.

Audience

The book is targeted at researchers and practitioners in the field of service-oriented computing. Researchers will find some of the latest thinking in the domain and many examples of the state-of-the-art in service-oriented computing. Both researchers who are just beginning in the field and researchers with experience in the domain should find topics of interest. The references at the end of each chapter point to background topics and more research results.

Furthermore, practitioners will find the theory related to service orientation, which is behind many existing models, tools, and standards. Many chapters contain case studies that provide useful information about challenges, pitfalls, and successful approaches in the practical use of service-oriented computing.

The chapters were written in such a way that they are interesting and understandable for both groups. They assume some background knowledge of the domain, but no specialist knowledge is required. It is possible to read each chapter on its own.

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