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Zoltán Ádám Mann · Volker Stolz (Eds.)

Advances in Service-Oriented and Cloud Computing

Workshops of ESOCC 2017
Oslo, Norway, September 27–29, 2017
Revised Selected Papers

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Preface

This volume contains the joint workshop proceedings of the events co-located with the 6th European Conference on Service-Oriented and Cloud Computing (ESOCC), held in Oslo, Norway, September 27–29, 2017. ESOCC 2017 was organized by the University of Oslo, Norway.

On the first day of the conference, the following workshops were held:

- The First International Workshop on Business Process Management in the Cloud (BPM@Cloud)
- The Third International Workshop on Cloud Adoption and Migration (CloudWays)
- The EU Projects Track

Each workshop submission was reviewed by at least three Program Committee members, and the authors contributed revised articles to this volume of proceedings, taking additional feedback during the workshop into account. Here, a brief description of each workshop is given.

The BPM@Cloud 2017 workshop focused on business process management in the cloud. Organizations are continuously thinking of moving to the cloud in order to reduce costs as well as allow a more flexible provisioning of their business processes (BPs) and services. As they do not possess the appropriate expertise, there is a need to support them via platforms able to realize the respective methods, techniques, and algorithms that concentrate on checking which parts of their BPs should be moved to the cloud, bridging the gap between the business and IT level, and supplying assistance to the four main life cycle activities of BP design, allocation, execution, and evaluation in the cloud. In this respect, the notion of BP as a service (BPaaS), i.e., a Web-based business process that runs in the cloud, arises, which is projected to become quite profitable for the organizations participating in its value chain. As such, BPaaS not only caters for migrating existing BPs in the cloud but can also become a novel exploitation product in the cloud stack that will further boost the adoption of cloud computing. The BPM@Cloud 2017 workshop brought together experts on business process management (BPM) and cloud computing from both academia and industry. It became a medium for thorough discussion and collaboration between its participants. It enabled its presenters to disseminate work that better promotes the notion of BPaaS while also fostering the multidisciplinary collaboration between different research areas in cloud computing and BPM to realize this notion. New challenges were also identified, which can direct the research to be conducted over BPM in the cloud in the near future. The first part of this volume includes all the technical papers of BPM@Cloud 2017.

The CloudWays 2017 workshop focused on cloud adoption and migration. Regardless of the benefits of cloud computing, many organizations still rely on business-critical applications in the form of legacy systems that have been developed over a long period of time using traditional development methods. Despite often serious maintainability issues, (on-premise) legacy systems are still crucial as they support core

business processes. Therefore, migrating legacy systems toward cloud-based platforms allows organizations to leverage their existing systems deployed and provided (using publicly available resources) as scalable cloud services. The CloudWays 2017 workshop brought together cloud migration experts from both academia and industry: to promote discussions and collaboration among participants; to help disseminate novel cloud adoption, migration, and software architecture practices and solutions; and to identify future cloud architecture challenges and dimensions. The second part of this volume includes all the technical papers of CloudWays 2017.

The EU Projects Track 2017 aimed at presenting the major running European-funded projects highlighting the main industrial and academic trends in terms of research and innovation in service-oriented and cloud computing-related domains. The third part of this volume includes all papers of the EU Projects Track 2017.

The contributions of the main conference are published as the 6th IFIP WG 2.14 European Conference ESOCC 2017 proceedings in LNCS vol. 10465 by Springer, 2017.

As workshop organization chairs, we would like to thank the individual workshop chairs for their efforts in publicizing the events and succeeding in bringing together participants and authors with contributions reflecting the state of the art. We would also like to thank all authors who presented their work at the events and are contributing here in this volume.

We are also grateful to the local organization team in Oslo that took care of most logistical aspects of organizing such an event, and to the general chair of ESOCC, Einar Broch Johnsen, for giving us the opportunity to hold these events together with the conference.

January 2018

Zoltán Ádám Mann
Volker Stolz

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