Preface

Proceedings of 2nd Workshop on
Continuous Requirements Engineering – CRE’16
March 14, 2015 Gothenburg, Sweden

In conjunction with REFSQ 2016

In 2015, we had organized the first workshop on Continuous Requirements Engineering during the 21st Working Conference on Requirements Engineering: Foundation for Software Engineering (REFSQ 2015) in Essen. After well attended event last year, we were very glad the REFSQ 2016 provided us the opportunity to organize the second version of the Continuous Requirements Engineering workshop.

Current engineering-based approaches are rooted in well elaborated systems models, enterprise architectures, ontologies, and information logistics representations. They provide transparency, reliability, and security in the whole lifecycle of the system. Currently such approaches are designed and mainly applied for large enterprises that have relatively long change cycles. In case such changes have to be performed more frequently, a much higher flexibility is required. For such systems, the engineering processes grow into continuous engineering that requires continuous requirements engineering (CR). CR can only be successful if it combines rigid engineering principles with agility, emergence, and spontaneity to support sustainability and viability of the systems under development.

Smaller scale enterprises also need new approaches, methods and tools to be capable to embrace the growing variety of opportunities and challenges offered by fast changing and hardly predictable environment. In this type of systems, continuous requirements engineering also can be a solution if integrated with management and design approaches applicable for smaller scale enterprises.

In the call for papers for the workshop, it was mentioned that the challenge is to support continuous requirements engineering approaches, methods, models, and tools for multi-scale fast changing enterprises and predictable and unpredictable configurations of enterprise networks.

It was asked for reports about new ideas and experience reports. Also welcomed were reports about continuous requirements engineering approaches that not yet have been applied to continuous engineering but have the potential for that. A cross-pollination of experiences in modeling and requirements management was assumed.

The selection of papers was based on the reviews of an international program committee that included the following scientists
CRE’16 Program Committee

- Robert Andrei Buchmann, Babes-Bolyai University of Cluj-Napoca, Rumania
- Neil Ernst, Carnegie Mellon University, United States of America
- Peter Forbrig, University of Rostock, Germany
- Steve Goschnik, Swinburne University, Australia
- Janis Grundspenkis, Riga Technical University, Latvia
- Stijn Hoppenbrouwers, University of Arnhem and Nijmegen, The Netherlands
- Marite Kirikova, Riga Technical University, Latvia
- Eric Knauss, University of Gothenburg, Sweden
- Kurt Sandkuhl, University of Rostock, Germany
- Ahmed Seffah, University of Lappeenranta, Finland
- Marcin Sikorski, University of Gdansk, Poland
- Chris Stary, Johannes Kepler University Linz, Austria
- Janis Stirna, Stockholm University, Sweden
- Michael Unterkalmsteiner, Blekinge Institute of Technology, Sweden

All of the members of the program committee provided very useful hints to the authors and submitted their reviews in time. Our special thanks go to all of them. From 12 submissions, the PC accepted 5 papers, 4 papers made it into the program with an updated shorter version. All papers together were organized in three session, namely: Requirements Quality, Requirements Engineering Process, and Requirements Engineering Framework.

The first session about requirements quality includes the paper entitled “Towards Continuous Information Security Audit”. This paper was submitted by Dmitrijs Kozlovs, Kristine Cjaputa, and Marite Kirikova. A short paper by Claude Reyterou has the title: “Requirements Quality in the Incremental Design Processes: Problems and Perspectives”. Finally, there is a report called “Towards Automated Requirements Checking throughout Development Processes of Interactive Systems” by Thiago Silva and Marco Winckler.

There are four papers assembled under the headline Requirements Engineering Process. The first paper has the title: “Towards a Task Driven Approach Enabling Continuous User Requirements Engineering” by Holger Fischer, Mirko Rose, and Enes Yigitbas. The second paper is called “Continuous Requirements Engineering and Human-Centered Agile Software Development” by Peter Forbrig. The third paper is
entitled: “Applying Layering Concept to the Software Requirements Analysis and Architectural Design”. It is written by Yunarso Anang and Yoshimichi Watanabe. Finally, there is a report by Anita Finke with the title “Requirements Inheritance in Continuous Requirements Engineering”.

In the third session there are two papers related to frameworks. The first one is called “Continuous Requirements Engineering in FREEDOM Framework: A Position Paper and is presented by Marite Kirikova. Finally, there is a paper by Andre Rusli and Osamu Shigo with the title: “Integrated Framework for Software Requirement Analysis”.

From our point of view, the accepted papers provide an excellent basis for interesting discussions during the workshop. Additionally, this CEUR publication allows scientists the opportunity to catch some interesting ideas and to contact authors for further discussions, even that they were not able to participate in the workshop in Gothenburg.

Our special thanks go to the authors for their excellent cooperation in preparing the papers. They provided the necessary documents perfectly in time.

Many thanks go to CRE’16 program committee members listed above. We are also grateful to the workshop organizers of REFSQ 2016 Andrea Herrmann and Andreas Opdahl. Both provided excellent services during the processes of preparing and organizing the workshop.

We hope that the discussions in CRE’16 will again promote fruitful follow-up activities, like it was with CRE’15.

Rostock, Riga, Lappeenranta, February 26, 2016

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