Guest Editorial Preface

Special Issue on Agile Secure Software Development

Juha Röning, Department of Computer Science and Engineering, University of Oulu, Oulu, Finland

Lotfi ben Othmane, Department Secure Software Engineering (SSE), Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

Martin Gilje Jaatun, Department of Software Engineering, Safety and Security, SINTEF ICT, Trondheim, Norway

Most organizations use the agile software development methods, such as Scrum and XP for developing their software. Agile software development methods are not well aligned with the traditional security-related development activities that were developed with waterfall in mind; they allow change of requirements, prefer frequent deliveries, use lightweight documentation, and their practices do not include security engineering activities. These characteristics limit their use for developing secure software. For instance, they do not consider conflicting security requirements that emerge in different iterations.

This special issue contains extended versions of the best papers accepted for publication in the First International Workshop on Agile Secure Software Development (ASSD 2015), organized in conjunction with The 10th International Conference on Availability, Reliability and Security (ARES 2015).

In the first contribution, Teichmann et al. explore how various software security methods could be selected and tailored for use with a given agile software development lifecycle in their paper "Agile Threat Assessment and Mitigation: An Approach for Method Selection and Tailoring". Oueslati et al. discussed the challenges of developing secure software that the authors found in the literature and the evaluated the validity of these challenges with respect to the agile values and principles and security practices. Finally, Pietikäinen et al. show how fuzz testing can be integrated in an agile development lifecycle.

Juha Röning
Lotfi ben Othmane
Martin Gilje Jaatun
Guest Editors
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Juha Röning is Professor of Embedded Systems in the Department of Computer Science and Engineering at the University of Oulu. He is principal investigator of the Biomimetics and Intelligent Systems Group (BISG). He is also leading Oulu University Secure Programming Group (OUSPG). There are two spin-off companies established from this research: Codenomicon and Clarified Networks. He has two patents and has published more than 300 papers in the areas of computer vision, robotics, intelligent signal analysis, and software security.

Lotfi ben Othmane is the head of the secure software engineering department at Fraunhofer SIT, Germany. Previously, he worked at Lero-The Irish Software Engineering Research Center, Ireland and at the Eindhoven University of Technology, The Netherlands, as a postdoctoral researcher. He received his PhD degree from Western Michigan University (WMU), USA, in 2010. He is currently investigating the development of secure evolving software.

Martin Gilje Jaatun is a senior scientist at SINTEF ICT, Trondheim. He graduated from the Norwegian Institute of Technology (NTH) in 1992, and received his Dr.Philos. degree from the University of Stavanger in 2015. His research interests include software security "for the rest of us", information security in critical infrastructure environments, and security in Cloud Computing. He is vice chairman of the Cloud Computing Association (cloudcom.org), vice president of Cloud Security Alliance Norway, and secretary of the IEEE CS STC on Cloud Computing.