Guest Editorial Preface

Special Issue on Agile Secure Software Development

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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.

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