



Tutorial: Security Requirements Engineering (T06)

Tuesday, September 13, 2016 (Full-day)

<http://re16.org/pages/conference/tutorials/#T06>

Security is a core issue in socio-technical systems, i.e., complex systems composed of human and technical (e.g., software) subsystems that interact in order to achieve their objectives. As such, *security requirements engineering* should consider not only technical concerns but also social and organizational aspects.

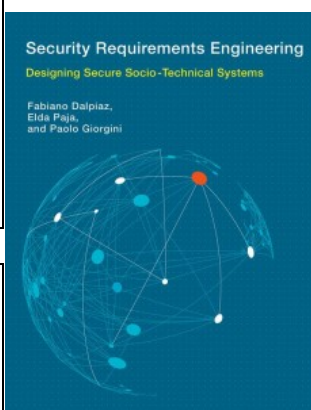
In this tutorial, we present STS: a comprehensive method that spans from the early phases of requirements engineering—where the security requirements are expressed—to the specification of secure business processes, where security mechanisms are chosen to fulfill the requirements.

Two types of models will be explained: STS-ml models to describe security requirements and SecBPMN2 models to explain how these requirements are operationalized into business processes. STS modeling is done via the STS-Tool that features reasoning techniques about consistency, conflicts, and compliance.

The tutorial will be *hands-on*: the participants will be learning while creating security requirements models using STS-Tool on their own laptop.



Mattia Salnitri is a post-doctoral researcher at department of Information Engineering and Computer Science of University of Trento, Italy. He received his PhD in computer science from University of Trento in 2016. His research interests cover security, privacy, business processes and socio-technical systems.



www.sts-tool.eu



Elda Paja is a post-doctoral researcher at the Dept. of Information Engineering and Computer Science of University of Trento, Italy. Her research interests include security requirements engineering and modeling, automated reasoning, privacy, and trust. She serves in the program committee of RE:Next!, REFSQ, ReLaw, P&D @RE, iStar.



Paolo Giorgini is an associate professor at the Department of Engineering and Computer Science of University of Trento. His research focuses on the development of requirements and design languages, and the application of agent and goal-oriented techniques to (security) software analysis.



Fabiano Dalpiaz is an assistant professor in the Dept. of Information and Computing Sciences of Utrecht University in the Netherlands. His research in RE focuses on security, automated reasoning, gamification, and agile requirements. He serves on the program committee of CAiSE, ER, RE:Next!, MODELS, AAMAS.