Using the UML/OCL Methodology to Improve the IT Security Development Process

Andrzej BIALAS
Research and Development Center for Electrical Engineering and Automation in Mining
ul. Leopolda 31, 40-189 Katowice, Poland
e-mail: ivision@pro.onet.pl
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Abstract. The paper presents a concept of deeper formalization of the Common Criteria compliant IT security development process, being a part of the IT product or system development. The concept encompasses a holistic IT security development framework consisting of all models of IT security development sub-processes, and the unified, semiformal specification language to specify security environment, objectives and functions. The framework is based on the UML/OCL methodology. It was implemented as a computer-aided tool for developers. The paper shows a general approach, selected issues concerning specification means, gained experience and future plans.

Key words: IT security development, Common Criteria, assurance, UML, OCL