

In the present work we study possibilities in the area of automatic construction of Schematron schemas from a conceptual model for XML and possibilities in reverse-engineering of Schematron schemas. The work introduces the reader to conceptual schemas for XML and to rule-based validation of XML documents. Existing techniques for mutual conversions between XML schema languages and conceptual model are also included. The main part of the work is a design and implementation of a new method for deriving Schematron schemas from conceptual schemas for XML. This method allows to get XML schemas, which in some respects outperforms the possibilities of other popular schema languages. The work also discusses the issue of Schematron schema reverse-engineering and shows possibilities in the area and establishing basis for further research.