

Abstract

In the present work we analyze the algorithm that was introduced in [4].

The algorithm performs a translation of a conceptual schema to an XML schema expressed in the XML Schema language. We look for limitations of the algorithm and try to discover parameters that can be potentially used to influence its behavior.

We propose solutions to the most serious limitations.

Also, we introduce a concept of a translation profiling. The concept is based on a configuration that contains a set of parameters. We modify the algorithm to use the user requirements specified in the configuration.

Thanks to the improvements, the new algorithm works with the concept of XML Namespaces, uses XML Schema designs and also, focuses on an elimination of redundancy.

The elimination of redundancy in an output of the algorithm is an important part of this work and we create a formal model that helps us to solve this task.