

Abstract

The aim of the research documented in the thesis was to design an ontology for the knowledge organization domain. Three requirements specifying areas of ontology use have been identified: making of statements for a knowledge base for knowledge organization, indexing of resources in the domain and interlinking with content-relevant ontologies. The design was elaborated by the method of reengineering the first version of ontology, created in the framework of the NAKI research project Knowledge base for subject area of knowledge organization in 2013-2015. The second version of ontology is based on the DOLCE foundational ontology, specifically on the reusing of its selected classes and predicates, including the axioms associated with them. The reengineering of the content of the first version of ontology was done by the domain and facet analysis methodology. The outcome is divided in two interlinked modules – axiomatized heavy-weight core ontology and light-weight terminological ontology. The ontology offers a solution to the compatibility of Czech and world terminology, it applies an extended concept of domain beyond the scope of memory institutions, and it presents a partial contribution to the development of the theory of knowledge organization. The content of the thesis is divided into five chapters. The first chapter presents an overview of the current state of the theory and practice of information ontologies, based on a literary survey. The second chapter describes the methods used to design the first and second versions of the knowledge organization ontology. The third chapter summarizes the course of the solution and the main results of the NAKI project. The fourth chapter documents the progress and outcomes of the domain knowledge analysis. The fifth chapter contains the documentation of the second version of the knowledge organization ontology.