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A Description Logics Based Approach for Building Multi-Viewpoints Ontologies

Authors: M. Hemam, M. Djezzar, T. Djouad

Abstract : We are interested in the problem of building an ontology in a heterogeneous organization, by taking into account different viewpoints and different terminologies of communities in the organization. Such ontology, that we call multi-viewpoint ontology, confers to the same universe of discourse, several partial descriptions, where each one is relative to a particular viewpoint. In addition, these partial descriptions share at global level, ontological elements constituent a consensus between the various viewpoints. In order to provide response elements to this problem we define a multi-viewpoints knowledge model based on viewpoint and ontology notions. The multi-viewpoints knowledge model is used to formalize the multi-viewpoints ontology in description logics language.

Keywords: description logic, knowledge engineering, ontology, viewpoint

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