

ABSTRACT: There are many interesting Knowledge Representation questions surrounding rule languages for the Semantic Web. The most basic one is of course: which kind of rules should be used and how do they integrate with existing Description Logics? Similar questions have already been addressed in the field of Logic Programming, where one particular answer has been provided by the language of FO(ID). FO(ID) is an extension of classical first-order logic with a rule-based representation for inductive definitions. By offering a general integration of first-order logic and Logic Programs, it also induces a particular way of extending Description Logics with rules. The goal of this paper is to investigate this integration and discover whether there are interesting extensions of DL with rules that can be arrived at by imposing appropriate restrictions on the highly expressive FO(ID).